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ATOM  31200  N   GLN H   1     140.726 136.667 218.018  1.00481.07
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ATOM  31201  CA  GLN H   1     141.321 136.802 216.656  1.00461.16
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ATOM  31202  CB  GLN H   1     141.311 135.453 215.930  1.00498.67
C
ATOM  31203  CG  GLN H   1     142.081 135.456 214.615  1.00520.94
C
ATOM  31204  CD  GLN H   1     141.934 134.177 213.822  1.00535.06
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ATOM  31205  OE1 GLN H   1     141.361 133.193 214.285  1.00538.06
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ATOM  31206  NE2 GLN H   1     142.461 134.185 212.609  1.00556.90
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ATOM  31207  C   GLN H   1     140.567 137.885 215.885  1.00425.34
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ATOM  31208  O   GLN H   1     141.013 139.031 215.834  1.00400.10
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ATOM  31209  N   VAL H   2     139.421 137.502 215.305  1.00391.00
N
ATOM  31210  CA  VAL H   2     138.606 138.399 214.499  1.00361.52
C
ATOM  31211  CB  VAL H   2     138.216 137.794 213.132  1.00313.43
C
ATOM  31212  CG1 VAL H   2     137.335 138.737 212.320  1.00268.87
C
ATOM  31213  CG2 VAL H   2     139.433 137.378 212.313  1.00228.03
C
ATOM  31214  C   VAL H   2     137.384 138.825 215.314  1.00368.19
C
ATOM  31215  O   VAL H   2     136.626 137.996 215.817  1.00314.88
O
ATOM  31216  N   GLN H   3     137.239 140.148 215.448  1.00376.29
N
ATOM  31217  CA  GLN H   3     136.095 140.774 216.088  1.00349.00
C
ATOM  31218  CB  GLN H   3     136.299 140.879 217.605  1.00266.62
C
ATOM  31219  CG  GLN H   3     137.641 141.471 218.026  1.00261.71
C
ATOM  31220  CD  GLN H   3     137.602 142.886 218.557  1.00268.20
C
ATOM  31221  OE1 GLN H   3     136.617 143.615 218.412  1.00260.30
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ATOM  31222  NE2 GLN H   3     138.697 143.285 219.190  1.00246.43
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ATOM  31223  C   GLN H   3     135.824 142.116 215.406  1.00379.27
C
ATOM  31224  O   GLN H   3     136.743 142.752 214.894  1.00382.77
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ATOM  31226  CA  LEU H   4     134.095 143.725 214.722  1.00336.88
C
ATOM  31227  CB  LEU H   4     133.255 143.334 213.498  1.00364.98
C
ATOM  31228  CG  LEU H   4     133.770 142.141 212.685  1.00402.15
C
ATOM  31229  CD1 LEU H   4     132.751 141.683 211.655  1.00430.71
C
ATOM  31230  CD2 LEU H   4     135.105 142.447 212.017  1.00407.89
C
ATOM  31231  C   LEU H   4     133.311 144.585 215.712  1.00312.18
C
ATOM  31232  O   LEU H   4     132.410 144.104 216.401  1.00350.20
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ATOM  31233  N   VAL H   5     133.692 145.861 215.803  1.00293.41
N
ATOM  31234  CA  VAL H   5     133.085 146.754 216.776  1.00332.83
C
ATOM  31235  CB  VAL H   5     134.137 147.411 217.703  1.00318.41
C
ATOM  31236  CG1 VAL H   5     133.623 148.670 218.397  1.00310.66
C
ATOM  31237  CG2 VAL H   5     134.697 146.429 218.737  1.00199.07
C
ATOM  31238  C   VAL H   5     132.200 147.750 216.028  1.00351.44
C
ATOM  31239  O   VAL H   5     132.609 148.313 215.014  1.00345.03
O
ATOM  31240  N   GLU H   6     130.969 147.906 216.531  1.00367.15
N
ATOM  31241  CA  GLU H   6     129.988 148.829 215.983  1.00362.47
C
ATOM  31242  CB  GLU H   6     128.667 148.095 215.738  1.00424.22
C
ATOM  31243  CG  GLU H   6     128.764 146.987 214.698  1.00498.22
C
ATOM  31244  CD  GLU H   6     129.334 145.659 215.174  1.00527.61
C
ATOM  31245  OE1 GLU H   6     129.420 145.451 216.408  1.00504.12
O
ATOM  31246  OE2 GLU H   6     129.685 144.830 214.314  1.00578.05
O
ATOM  31247  C   GLU H   6     129.840 149.985 216.967  1.00329.64
C
ATOM  31248  O   GLU H   6     129.840 149.762 218.178  1.00257.21
O
ATOM  31249  N   SER H   7     129.764 151.216 216.437  1.00356.84
N
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ATOM  31250  CA  SER H   7     129.656 152.414 217.256  1.00372.34
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ATOM  31251  CB  SER H   7     130.949 152.722 217.990  1.00359.11
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ATOM  31252  OG  SER H   7     132.055 152.768 217.103  1.00364.09
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ATOM  31253  C   SER H   7     129.153 153.608 216.441  1.00364.14
C
ATOM  31254  O   SER H   7     129.700 153.933 215.387  1.00308.49
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ATOM  31255  N   GLY H   8     128.108 154.262 216.968  1.00373.61
N
ATOM  31256  CA  GLY H   8     127.509 155.431 216.348  1.00379.24
C
ATOM  31257  C   GLY H   8     125.983 155.377 216.357  1.00365.37
C
ATOM  31258  O   GLY H   8     125.329 156.309 215.889  1.00340.80
O
ATOM  31259  N   GLY H   9     125.434 154.280 216.895  1.00347.25
N
ATOM  31260  CA  GLY H   9     123.997 154.084 216.986  1.00356.90
C
ATOM  31261  C   GLY H   9     123.396 154.810 218.189  1.00360.52
C
ATOM  31262  O   GLY H   9     123.880 154.666 219.310  1.00400.39
O
ATOM  31263  N   GLY H  10     122.340 155.596 217.936  1.00336.82
N
ATOM  31264  CA  GLY H  10     121.592 156.301 218.965  1.00270.58
C
ATOM  31265  C   GLY H  10     120.287 156.873 218.412  1.00307.03
C
ATOM  31266  O   GLY H  10     120.137 157.021 217.201  1.00340.45
O
ATOM  31267  N   VAL H  11     119.354 157.193 219.317  1.00334.58
N
ATOM  31268  CA  VAL H  11     118.054 157.764 218.977  1.00363.39
C
ATOM  31269  CB  VAL H  11     117.209 158.030 220.248  1.00333.72
C
ATOM  31270  CG1 VAL H  11     115.809 158.586 219.968  1.00234.71
C
ATOM  31271  CG2 VAL H  11     117.130 156.809 221.154  1.00327.80
C
ATOM  31272  C   VAL H  11     118.271 159.037 218.151  1.00380.43
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ATOM  31273  O   VAL H  11     119.102 159.873 218.511  1.00342.63
O
ATOM  31274  N   VAL H  12     117.527 159.159 217.039  1.00369.62
N
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ATOM  31275  CA  VAL H  12     117.637 160.300 216.138  1.00333.23
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ATOM  31276  CB  VAL H  12     118.718 160.061 215.064  1.00265.37
C
ATOM  31277  CG1 VAL H  12     118.240 159.213 213.895  1.00285.13
C
ATOM  31278  CG2 VAL H  12     119.340 161.361 214.588  1.00200.71
C
ATOM  31279  C   VAL H  12     116.250 160.654 215.579  1.00385.76
C
ATOM  31280  O   VAL H  12     115.298 159.901 215.780  1.00434.53
O
ATOM  31281  N   GLN H  13     116.135 161.824 214.920  1.00384.26
N
ATOM  31282  CA  GLN H  13     114.870 162.375 214.431  1.00349.51
C
ATOM  31283  CB  GLN H  13     114.817 163.895 214.638  1.00375.99
C
ATOM  31284  CG  GLN H  13     114.654 164.354 216.086  1.00380.40
C
ATOM  31285  CD  GLN H  13     113.246 164.286 216.635  1.00386.46
C
ATOM  31286  OE1 GLN H  13     112.269 164.153 215.901  1.00406.32
O
ATOM  31287  NE2 GLN H  13     113.134 164.384 217.952  1.00322.89
N
ATOM  31288  C   GLN H  13     114.696 162.080 212.937  1.00292.19
C
ATOM  31289  O   GLN H  13     115.671 162.152 212.188  1.00171.32
O
ATOM  31290  N   PRO H  14     113.458 161.788 212.437  1.00303.10
N
ATOM  31291  CA  PRO H  14     113.248 161.496 211.013  1.00286.75
C
ATOM  31292  CB  PRO H  14     111.718 161.599 210.835  1.00251.76
C
ATOM  31293  CG  PRO H  14     111.154 161.234 212.202  1.00240.16
C
ATOM  31294  CD  PRO H  14     112.192 161.727 213.201  1.00271.27
C
ATOM  31295  C   PRO H  14     114.007 162.472 210.112  1.00249.60
C
ATOM  31296  O   PRO H  14     114.280 163.601 210.505  1.00199.92
O
ATOM  31297  N   GLY H  15     114.389 162.022 208.916  1.00275.96
N
ATOM  31298  CA  GLY H  15     115.090 162.884 207.976  1.00272.27
C
ATOM  31299  C   GLY H  15     116.316 163.545 208.600  1.00261.33
C
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ATOM  31300  O   GLY H  15     116.566 164.730 208.387  1.00185.11
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ATOM  31301  N   ARG H  16     117.063 162.767 209.392  1.00307.28
N
ATOM  31302  CA  ARG H  16     118.310 163.236 209.975  1.00379.88
C
ATOM  31303  CB  ARG H  16     118.117 163.636 211.446  1.00381.01
C
ATOM  31304  CG  ARG H  16     117.108 164.754 211.697  1.00338.24
C
ATOM  31305  CD  ARG H  16     117.469 166.151 211.216  1.00320.56
C
ATOM  31306  NE  ARG H  16     118.833 166.538 211.549  1.00358.41
N
ATOM  31307  CZ  ARG H  16     119.486 167.561 211.006  1.00398.53
C
ATOM  31308  NH1 ARG H  16     118.892 168.318 210.099  1.00379.69
N
ATOM  31309  NH2 ARG H  16     120.730 167.824 211.369  1.00467.08
N
ATOM  31310  C   ARG H  16     119.383 162.167 209.765  1.00414.96
C
ATOM  31311  O   ARG H  16     119.129 160.982 209.984  1.00379.76
O
ATOM  31312  N   SER H  17     120.570 162.605 209.314  1.00425.11
N
ATOM  31313  CA  SER H  17     121.697 161.724 209.037  1.00366.32
C
ATOM  31314  CB  SER H  17     122.818 162.445 208.310  1.00329.90
C
ATOM  31315  OG  SER H  17     122.832 162.125 206.923  1.00287.32
O
ATOM  31316  C   SER H  17     122.184 161.051 210.321  1.00329.37
C
ATOM  31317  O   SER H  17     121.894 161.504 211.424  1.00325.41
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ATOM  31318  N   LEU H  18     122.895 159.935 210.157  1.00309.51
N
ATOM  31319  CA  LEU H  18     123.498 159.198 211.255  1.00296.84
C
ATOM  31320  CB  LEU H  18     122.498 158.122 211.698  1.00262.24
C
ATOM  31321  CG  LEU H  18     122.487 157.722 213.171  1.00233.58
C
ATOM  31322  CD1 LEU H  18     121.171 157.004 213.480  1.00172.10
C
ATOM  31323  CD2 LEU H  18     123.698 156.854 213.523  1.00186.91
C
ATOM  31324  C   LEU H  18     124.778 158.572 210.709  1.00317.25
C
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ATOM  31325  O   LEU H  18     124.906 158.402 209.496  1.00344.95
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ATOM  31326  N   ARG H  19     125.733 158.251 211.590  1.00288.63
N
ATOM  31327  CA  ARG H  19     126.938 157.578 211.131  1.00280.49
C
ATOM  31328  CB  ARG H  19     128.141 158.524 211.180  1.00260.10
C
ATOM  31329  CG  ARG H  19     129.202 158.214 210.134  1.00259.37
C
ATOM  31330  CD  ARG H  19     129.602 159.467 209.370  1.00267.69
C
ATOM  31331  NE  ARG H  19     130.747 159.371 208.469  1.00259.02
N
ATOM  31332  CZ  ARG H  19     131.843 158.645 208.685  1.00258.31
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ATOM  31333  NH1 ARG H  19     131.962 157.911 209.787  1.00209.85
N
ATOM  31334  NH2 ARG H  19     132.807 158.657 207.778  1.00233.29
N
ATOM  31335  C   ARG H  19     127.171 156.303 211.938  1.00269.42
C
ATOM  31336  O   ARG H  19     127.110 156.336 213.164  1.00286.21
O
ATOM  31337  N   LEU H  20     127.439 155.195 211.226  1.00256.95
N
ATOM  31338  CA  LEU H  20     127.685 153.871 211.793  1.00288.01
C
ATOM  31339  CB  LEU H  20     126.608 152.891 211.294  1.00260.98
C
ATOM  31340  CG  LEU H  20     125.554 152.364 212.282  1.00230.85
C
ATOM  31341  CD1 LEU H  20     125.747 150.904 212.692  1.00189.01
C
ATOM  31342  CD2 LEU H  20     125.341 153.274 213.482  1.00238.60
C
ATOM  31343  C   LEU H  20     129.079 153.375 211.388  1.00329.48
C
ATOM  31344  O   LEU H  20     129.287 152.970 210.235  1.00255.23
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ATOM  31345  N   SER H  21     129.994 153.332 212.376  1.00371.98
N
ATOM  31346  CA  SER H  21     131.419 153.074 212.201  1.00343.26
C
ATOM  31347  CB  SER H  21     132.248 154.077 212.978  1.00360.65
C
ATOM  31348  OG  SER H  21     131.582 155.329 213.094  1.00361.50
O
ATOM  31349  C   SER H  21     131.784 151.654 212.635  1.00282.51
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ATOM  31350  O   SER H  21     131.451 151.240 213.742  1.00292.61
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ATOM  31351  N   CYS H  22     132.516 150.940 211.779  1.00247.99
N
ATOM  31352  CA  CYS H  22     132.860 149.554 212.057  1.00317.34
C
ATOM  31353  CB  CYS H  22     132.336 148.656 210.946  1.00366.28
C
ATOM  31354  SG  CYS H  22     132.632 146.898 211.252  1.00439.44
S
ATOM  31355  C   CYS H  22     134.375 149.417 212.164  1.00323.16
C
ATOM  31356  O   CYS H  22     135.092 150.008 211.362  1.00349.71
O
ATOM  31357  N   ALA H  23     134.859 148.650 213.155  1.00307.85
N
ATOM  31358  CA  ALA H  23     136.293 148.506 213.386  1.00302.33
C
ATOM  31359  CB  ALA H  23     136.680 148.940 214.782  1.00267.28
C
ATOM  31360  C   ALA H  23     136.741 147.077 213.115  1.00322.27
C
ATOM  31361  O   ALA H  23     136.314 146.150 213.801  1.00344.16
O
ATOM  31362  N   ALA H  24     137.636 146.939 212.130  1.00376.16
N
ATOM  31363  CA  ALA H  24     138.145 145.655 211.673  1.00419.73
C
ATOM  31364  CB  ALA H  24     138.534 145.749 210.216  1.00426.56
C
ATOM  31365  C   ALA H  24     139.321 145.218 212.543  1.00397.36
C
ATOM  31366  O   ALA H  24     139.942 146.041 213.220  1.00388.17
O
ATOM  31367  N   SER H  25     139.592 143.910 212.526  1.00329.94
N
ATOM  31368  CA  SER H  25     140.706 143.305 213.236  1.00267.84
C
ATOM  31369  CB  SER H  25     140.564 143.515 214.709  1.00252.73
C
ATOM  31370  OG  SER H  25     139.209 143.320 215.081  1.00239.96
O
ATOM  31371  C   SER H  25     140.732 141.819 212.905  1.00280.32
C
ATOM  31372  O   SER H  25     139.674 141.192 212.814  1.00247.76
O
ATOM  31373  N   GLY H  26     141.951 141.301 212.709  1.00303.09
N
ATOM  31374  CA  GLY H  26     142.207 139.890 212.450  1.00294.73
C
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ATOM  31375  C   GLY H  26     142.544 139.602 210.987  1.00260.47
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ATOM  31376  O   GLY H  26     143.066 138.539 210.660  1.00230.31
O
ATOM  31377  N   PHE H  27     142.236 140.565 210.116  1.00239.61
N
ATOM  31378  CA  PHE H  27     142.354 140.381 208.685  1.00222.40
C
ATOM  31379  CB  PHE H  27     141.040 139.871 208.091  1.00208.92
C
ATOM  31380  CG  PHE H  27     139.894 140.792 208.412  1.00229.30
C
ATOM  31381  CD1 PHE H  27     139.115 140.554 209.534  1.00249.12
C
ATOM  31382  CE1 PHE H  27     138.082 141.413 209.868  1.00236.64
C
ATOM  31383  CZ  PHE H  27     137.831 142.520 209.081  1.00249.90
C
ATOM  31384  CD2 PHE H  27     139.643 141.924 207.641  1.00200.85
C
ATOM  31385  CE2 PHE H  27     138.614 142.789 207.976  1.00204.72
C
ATOM  31386  C   PHE H  27     142.567 141.737 208.046  1.00233.46
C
ATOM  31387  O   PHE H  27     142.210 142.788 208.589  1.00233.31
O
ATOM  31388  N   THR H  28     143.109 141.658 206.843  1.00238.59
N
ATOM  31389  CA  THR H  28     143.480 142.830 206.094  1.00236.29
C
ATOM  31390  CB  THR H  28     144.636 142.429 205.181  1.00249.02
C
ATOM  31391  OG1 THR H  28     144.246 141.136 204.716  1.00237.71
O
ATOM  31392  CG2 THR H  28     145.927 142.286 205.956  1.00254.04
C
ATOM  31393  C   THR H  28     142.217 143.377 205.447  1.00228.44
C
ATOM  31394  O   THR H  28     141.433 142.627 204.874  1.00196.36
O
ATOM  31395  N   PHE H  29     142.029 144.687 205.613  1.00243.36
N
ATOM  31396  CA  PHE H  29     140.950 145.437 205.005  1.00217.50
C
ATOM  31397  CB  PHE H  29     140.922 146.840 205.604  1.00228.20
C
ATOM  31398  CG  PHE H  29     139.552 147.398 205.863  1.00231.45
C
ATOM  31399  CD1 PHE H  29     139.112 148.505 205.150  1.00247.41
C
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ATOM  31400  CE1 PHE H  29     137.861 149.048 205.398  1.00324.05
C
ATOM  31401  CZ  PHE H  29     137.044 148.475 206.355  1.00338.87
C
ATOM  31402  CD2 PHE H  29     138.724 146.827 206.825  1.00203.34
C
ATOM  31403  CE2 PHE H  29     137.473 147.375 207.073  1.00266.53
C
ATOM  31404  C   PHE H  29     141.101 145.499 203.483  1.00181.55
C
ATOM  31405  O   PHE H  29     140.092 145.553 202.804  1.00189.15
O
ATOM  31406  N   SER H  30     142.331 145.494 202.940  1.00189.48
N
ATOM  31407  CA  SER H  30     142.572 145.747 201.515  1.00235.65
C
ATOM  31408  CB  SER H  30     144.028 146.074 201.230  1.00283.02
C
ATOM  31409  OG  SER H  30     144.624 145.107 200.363  1.00291.96
O
ATOM  31410  C   SER H  30     142.109 144.589 200.625  1.00226.08
C
ATOM  31411  O   SER H  30     141.829 144.767 199.431  1.00170.61
O
ATOM  31412  N   SER H  31     142.108 143.385 201.201  1.00232.25
N
ATOM  31413  CA  SER H  31     141.692 142.217 200.448  1.00239.84
C
ATOM  31414  CB  SER H  31     142.805 141.180 200.258  1.00263.75
C
ATOM  31415  OG  SER H  31     143.731 141.151 201.335  1.00278.42
O
ATOM  31416  C   SER H  31     140.402 141.648 201.035  1.00189.98
C
ATOM  31417  O   SER H  31     140.053 140.504 200.741  1.00201.99
O
ATOM  31418  N   TYR H  32     139.697 142.478 201.828  1.00131.90
N
ATOM  31419  CA  TYR H  32     138.386 142.136 202.387  1.00186.26
C
ATOM  31420  CB  TYR H  32     138.414 141.991 203.929  1.00181.82
C
ATOM  31421  CG  TYR H  32     138.730 140.572 204.314  1.00168.28
C
ATOM  31422  CD1 TYR H  32     137.796 139.730 204.897  1.00157.33
C
ATOM  31423  CE1 TYR H  32     138.099 138.387 205.112  1.00201.02
C
ATOM  31424  CZ  TYR H  32     139.333 137.867 204.722  1.00217.45
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ATOM  31425  OH  TYR H  32     139.742 136.565 204.851  1.00188.53
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ATOM  31426  CE2 TYR H  32     140.257 138.698 204.124  1.00238.70
C
ATOM  31427  CD2 TYR H  32     139.941 140.028 203.918  1.00222.74
C
ATOM  31428  C   TYR H  32     137.242 142.903 201.688  1.00191.30
C
ATOM  31429  O   TYR H  32     137.439 143.902 201.002  1.00154.66
O
ATOM  31430  N   ALA H  33     136.023 142.380 201.788  1.00200.95
N
ATOM  31431  CA  ALA H  33     134.880 143.154 201.350  1.00187.24
C
ATOM  31432  CB  ALA H  33     134.421 142.702 199.979  1.00196.01
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ATOM  31433  C   ALA H  33     133.815 143.071 202.444  1.00205.88
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ATOM  31434  O   ALA H  33     133.817 142.132 203.265  1.00143.62
O
ATOM  31435  N   MET H  34     132.912 144.064 202.420  1.00201.18
N
ATOM  31436  CA  MET H  34     132.206 144.519 203.601  1.00151.30
C
ATOM  31437  CB  MET H  34     132.900 145.805 204.027  1.00147.34
C
ATOM  31438  CG  MET H  34     134.346 145.524 204.399  1.00173.06
C
ATOM  31439  SD  MET H  34     134.474 144.086 205.523  1.00251.05
S
ATOM  31440  CE  MET H  34     136.017 144.432 206.371  1.00231.93
C
ATOM  31441  C   MET H  34     130.717 144.737 203.327  1.00144.75
C
ATOM  31442  O   MET H  34     130.371 145.413 202.336  1.00102.00
O
ATOM  31443  N   HIS H  35     129.885 144.128 204.219  1.00139.38
N
ATOM  31444  CA  HIS H  35     128.417 144.162 204.237  1.00169.18
C
ATOM  31445  CB  HIS H  35     127.813 142.759 204.236  1.00125.76
C
ATOM  31446  CG  HIS H  35     128.294 141.838 203.181  1.00168.82
C
ATOM  31447  ND1 HIS H  35     129.519 141.201 203.256  1.00238.74
N
ATOM  31448  CE1 HIS H  35     129.660 140.406 202.210  1.00274.82
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ATOM  31449  NE2 HIS H  35     128.545 140.493 201.465  1.00224.47
N
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ATOM  31450  CD2 HIS H  35     127.682 141.371 202.074  1.00184.21
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ATOM  31451  C   HIS H  35     127.812 144.775 205.514  1.00198.96
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ATOM  31452  O   HIS H  35     128.443 144.751 206.570  1.00186.42
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ATOM  31453  N   TRP H  36     126.528 145.207 205.421  1.00219.89
N
ATOM  31454  CA  TRP H  36     125.700 145.837 206.457  1.00156.07
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ATOM  31455  CB  TRP H  36     125.497 147.311 206.112  1.00145.33
C
ATOM  31456  CG  TRP H  36     126.609 148.188 206.566  1.00168.98
C
ATOM  31457  CD1 TRP H  36     127.335 149.056 205.811  1.00202.34
C
ATOM  31458  NE1 TRP H  36     128.262 149.693 206.592  1.00250.84
N
ATOM  31459  CE2 TRP H  36     128.165 149.240 207.882  1.00220.13
C
ATOM  31460  CD2 TRP H  36     127.127 148.280 207.903  1.00191.25
C
ATOM  31461  CE3 TRP H  36     126.827 147.645 209.110  1.00184.32
C
ATOM  31462  CZ3 TRP H  36     127.560 147.971 210.230  1.00183.66
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ATOM  31463  CH2 TRP H  36     128.584 148.921 210.186  1.00180.95
C
ATOM  31464  CZ2 TRP H  36     128.899 149.584 209.020  1.00186.89
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ATOM  31465  C   TRP H  36     124.310 145.195 206.544  1.00153.02
C
ATOM  31466  O   TRP H  36     123.485 145.335 205.634  1.00145.42
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ATOM  31467  N   VAL H  37     123.990 144.519 207.650  1.00136.89
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ATOM  31468  CA  VAL H  37     122.655 143.924 207.655  1.00201.00
C
ATOM  31469  CB  VAL H  37     122.629 142.379 207.546  1.00224.56
C
ATOM  31470  CG1 VAL H  37     121.214 141.793 207.533  1.00166.10
C
ATOM  31471  CG2 VAL H  37     123.391 141.881 206.327  1.00256.49
C
ATOM  31472  C   VAL H  37     121.916 144.430 208.888  1.00225.37
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ATOM  31473  O   VAL H  37     122.524 144.435 209.966  1.00161.23
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ATOM  31474  N   ARG H  38     120.630 144.815 208.681  1.00246.01
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ATOM  31475  CA  ARG H  38     119.738 145.472 209.641  1.00204.59
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ATOM  31476  CB  ARG H  38     119.467 146.940 209.272  1.00138.30
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ATOM  31477  CG  ARG H  38     118.136 147.156 208.559  1.00153.60
C
ATOM  31478  CD  ARG H  38     118.028 148.453 207.777  1.00211.69
C
ATOM  31479  NE  ARG H  38     116.833 148.643 206.947  1.00240.77
N
ATOM  31480  CZ  ARG H  38     116.669 149.574 205.995  1.00232.23
C
ATOM  31481  NH1 ARG H  38     117.629 150.435 205.695  1.00201.46
N
ATOM  31482  NH2 ARG H  38     115.531 149.645 205.329  1.00263.02
N
ATOM  31483  C   ARG H  38     118.396 144.736 209.775  1.00206.84
C
ATOM  31484  O   ARG H  38     117.613 144.648 208.825  1.00127.13
O
ATOM  31485  N   GLN H  39     118.093 144.300 211.007  1.00281.66
N
ATOM  31486  CA  GLN H  39     116.835 143.642 211.344  1.00318.49
C
ATOM  31487  CB  GLN H  39     117.101 142.203 211.802  1.00312.40
C
ATOM  31488  CG  GLN H  39     117.883 142.084 213.109  1.00308.83
C
ATOM  31489  CD  GLN H  39     117.007 141.984 214.335  1.00344.29
C
ATOM  31490  OE1 GLN H  39     115.868 141.519 214.279  1.00414.41
O
ATOM  31491  NE2 GLN H  39     117.534 142.427 215.463  1.00367.87
N
ATOM  31492  C   GLN H  39     116.047 144.451 212.383  1.00356.39
C
ATOM  31493  O   GLN H  39     116.618 144.934 213.363  1.00429.54
O
ATOM  31494  N   ALA H  40     114.725 144.590 212.170  1.00299.28
N
ATOM  31495  CA  ALA H  40     113.828 145.231 213.128  1.00281.83
C
ATOM  31496  CB  ALA H  40     112.526 145.597 212.456  1.00224.67
C
ATOM  31497  C   ALA H  40     113.574 144.273 214.288  1.00299.57
C
ATOM  31498  O   ALA H  40     113.355 143.093 214.044  1.00355.72
O
ATOM  31499  N   PRO H  41     113.604 144.712 215.573  1.00295.16
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ATOM  31500  CA  PRO H  41     113.415 143.775 216.693  1.00272.88
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ATOM  31501  CB  PRO H  41     113.554 144.680 217.938  1.00263.44
C
ATOM  31502  CG  PRO H  41     114.366 145.883 217.448  1.00233.32
C
ATOM  31503  CD  PRO H  41     113.912 146.089 216.016  1.00240.20
C
ATOM  31504  C   PRO H  41     112.215 142.812 216.580  1.00244.69
C
ATOM  31505  O   PRO H  41     111.053 143.226 216.479  1.00158.28
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ATOM  31506  N   GLY H  42     112.538 141.507 216.517  1.00251.54
N
ATOM  31507  CA  GLY H  42     111.588 140.429 216.262  1.00264.62
C
ATOM  31508  C   GLY H  42     111.212 140.224 214.786  1.00327.08
C
ATOM  31509  O   GLY H  42     110.208 139.569 214.510  1.00311.18
O
ATOM  31510  N   LYS H  43     112.023 140.743 213.843  1.00365.80
N
ATOM  31511  CA  LYS H  43     111.742 140.705 212.407  1.00333.33
C
ATOM  31512  CB  LYS H  43     111.560 142.138 211.888  1.00339.97
C
ATOM  31513  CG  LYS H  43     110.446 142.373 210.872  1.00316.99
C
ATOM  31514  CD  LYS H  43     109.087 142.609 211.501  1.00317.65
C
ATOM  31515  CE  LYS H  43     109.105 143.638 212.613  1.00286.50
C
ATOM  31516  NZ  LYS H  43     108.013 143.397 213.583  1.00250.34
N
ATOM  31517  C   LYS H  43     112.914 140.069 211.657  1.00300.12
C
ATOM  31518  O   LYS H  43     114.060 140.213 212.078  1.00323.70
O
ATOM  31519  N   GLY H  44     112.629 139.397 210.529  1.00253.52
N
ATOM  31520  CA  GLY H  44     113.669 138.842 209.673  1.00200.94
C
ATOM  31521  C   GLY H  44     114.753 139.872 209.356  1.00223.21
C
ATOM  31522  O   GLY H  44     114.649 141.044 209.717  1.00290.11
O
ATOM  31523  N   LEU H  45     115.794 139.422 208.660  1.00222.40
N
ATOM  31524  CA  LEU H  45     116.959 140.245 208.398  1.00197.14
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ATOM  31525  CB  LEU H  45     118.162 139.308 208.401  1.00196.17
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ATOM  31526  CG  LEU H  45     118.814 139.178 209.764  1.00144.79
C
ATOM  31527  CD1 LEU H  45     119.124 137.707 210.114  1.00108.60
C
ATOM  31528  CD2 LEU H  45     120.034 140.077 209.729  1.00127.31
C
ATOM  31529  C   LEU H  45     116.830 140.984 207.069  1.00180.93
C
ATOM  31530  O   LEU H  45     115.881 140.831 206.298  1.00133.68
O
ATOM  31531  N   GLU H  46     117.811 141.825 206.805  1.00175.02
N
ATOM  31532  CA  GLU H  46     117.686 142.659 205.636  1.00185.23
C
ATOM  31533  CB  GLU H  46     116.731 143.837 205.876  1.00258.38
C
ATOM  31534  CG  GLU H  46     116.505 144.736 204.660  1.00301.60
C
ATOM  31535  CD  GLU H  46     115.573 145.933 204.853  1.00270.95
C
ATOM  31536  OE1 GLU H  46     114.706 145.866 205.765  1.00194.91
O
ATOM  31537  OE2 GLU H  46     115.710 146.937 204.093  1.00226.49
O
ATOM  31538  C   GLU H  46     119.098 143.078 205.297  1.00161.51
C
ATOM  31539  O   GLU H  46     119.791 143.809 206.005  1.00135.99
O
ATOM  31540  N   TRP H  47     119.559 142.555 204.195  1.00160.23
N
ATOM  31541  CA  TRP H  47     120.832 143.127 203.870  1.00154.54
C
ATOM  31542  CB  TRP H  47     121.647 142.225 202.958  1.00171.73
C
ATOM  31543  CG  TRP H  47     122.574 143.100 202.198  1.00142.17
C
ATOM  31544  CD1 TRP H  47     123.648 143.776 202.708  1.00108.29
C
ATOM  31545  NE1 TRP H  47     124.206 144.553 201.728  1.00105.06
N
ATOM  31546  CE2 TRP H  47     123.474 144.414 200.569  1.00145.40
C
ATOM  31547  CD2 TRP H  47     122.416 143.500 200.826  1.00144.19
C
ATOM  31548  CE3 TRP H  47     121.526 143.129 199.805  1.00107.40
C
ATOM  31549  CZ3 TRP H  47     121.744 143.682 198.565  1.00134.87
C
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ATOM  31550  CH2 TRP H  47     122.789 144.589 198.326  1.00164.19
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ATOM  31551  CZ2 TRP H  47     123.673 144.982 199.308  1.00135.81
C
ATOM  31552  C   TRP H  47     120.580 144.493 203.253  1.00146.27
C
ATOM  31553  O   TRP H  47     119.697 144.660 202.400  1.00119.07
O
ATOM  31554  N   VAL H  48     121.463 145.403 203.656  1.00144.79
N
ATOM  31555  CA  VAL H  48     121.401 146.812 203.332  1.00172.53
C
ATOM  31556  CB  VAL H  48     121.602 147.527 204.661  1.00159.04
C
ATOM  31557  CG1 VAL H  48     120.764 148.791 204.682  1.00210.40
C
ATOM  31558  CG2 VAL H  48     121.192 146.544 205.756  1.00124.40
C
ATOM  31559  C   VAL H  48     122.460 147.238 202.309  1.00195.06
C
ATOM  31560  O   VAL H  48     122.143 147.660 201.188  1.00167.45
O
ATOM  31561  N   ALA H  49     123.728 147.181 202.734  1.00208.38
N
ATOM  31562  CA  ALA H  49     124.842 147.783 202.018  1.00193.43
C
ATOM  31563  CB  ALA H  49     125.417 148.892 202.874  1.00133.96
C
ATOM  31564  C   ALA H  49     125.894 146.724 201.674  1.00180.34
C
ATOM  31565  O   ALA H  49     126.102 145.778 202.429  1.00176.64
O
ATOM  31566  N   VAL H  50     126.566 146.883 200.530  1.00173.05
N
ATOM  31567  CA  VAL H  50     127.743 146.073 200.285  1.00148.78
C
ATOM  31568  CB  VAL H  50     127.412 144.763 199.556  1.00168.78
C
ATOM  31569  CG1 VAL H  50     126.806 145.011 198.168  1.00169.07
C
ATOM  31570  CG2 VAL H  50     128.626 143.828 199.537  1.00138.99
C
ATOM  31571  C   VAL H  50     128.844 146.869 199.584  1.00140.82
C
ATOM  31572  O   VAL H  50     128.617 147.704 198.670  1.00110.76
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ATOM  31573  N   ILE H  51     130.072 146.542 200.006  1.00103.84
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ATOM  31574  CA  ILE H  51     131.164 147.218 199.343  1.00133.69
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ATOM  31575  CB  ILE H  51     131.572 148.483 200.112  1.00126.43
C
ATOM  31576  CG1 ILE H  51     131.922 149.602 199.126  1.00112.27
C
ATOM  31577  CG2 ILE H  51     132.634 148.177 201.154  1.00117.56
C
ATOM  31578  CD1 ILE H  51     130.853 149.712 198.035  1.00 99.47
C
ATOM  31579  C   ILE H  51     132.312 146.254 199.060  1.00161.97
C
ATOM  31580  O   ILE H  51     132.609 145.400 199.896  1.00179.48
O
ATOM  31581  N   PRO H  52     132.984 146.356 197.876  1.00160.56
N
ATOM  31582  CA  PRO H  52     134.121 145.493 197.579  1.00121.02
C
ATOM  31583  CB  PRO H  52     133.973 145.396 196.051  1.00102.54
C
ATOM  31584  CG  PRO H  52     133.537 146.791 195.608  1.00106.86
C
ATOM  31585  CD  PRO H  52     132.715 147.310 196.772  1.00145.40
C
ATOM  31586  C   PRO H  52     135.368 146.235 198.065  1.00152.76
C
ATOM  31587  O   PRO H  52     135.382 147.474 198.137  1.00144.09
O
ATOM  31588  N   PHE H  53     136.404 145.458 198.418  1.00177.98
N
ATOM  31589  CA  PHE H  53     137.690 145.944 198.926  1.00203.74
C
ATOM  31590  CB  PHE H  53     138.718 144.805 199.040  1.00184.23
C
ATOM  31591  CG  PHE H  53     138.833 143.898 197.846  1.00188.29
C
ATOM  31592  CD1 PHE H  53     138.055 142.744 197.747  1.00220.96
C
ATOM  31593  CE1 PHE H  53     138.148 141.913 196.640  1.00213.44
C
ATOM  31594  CZ  PHE H  53     139.027 142.247 195.626  1.00224.73
C
ATOM  31595  CD2 PHE H  53     139.722 144.213 196.825  1.00146.66
C
ATOM  31596  CE2 PHE H  53     139.807 143.392 195.711  1.00178.97
C
ATOM  31597  C   PHE H  53     138.194 147.223 198.234  1.00171.16
C
ATOM  31598  O   PHE H  53     138.264 148.305 198.819  1.00148.71
O
ATOM  31599  N   ASP H  54     138.571 147.151 196.967  1.00160.74
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ATOM  31600  CA  ASP H  54     138.857 148.432 196.350  1.00225.61
C
ATOM  31601  CB  ASP H  54     139.220 148.303 194.860  1.00273.90
C
ATOM  31602  CG  ASP H  54     138.084 148.135 193.858  1.00247.86
C
ATOM  31603  OD1 ASP H  54     136.912 148.335 194.230  1.00256.25
O
ATOM  31604  OD2 ASP H  54     138.394 147.837 192.686  1.00202.40
O
ATOM  31605  C   ASP H  54     137.857 149.503 196.820  1.00259.11
C
ATOM  31606  O   ASP H  54     138.284 150.532 197.343  1.00277.80
O
ATOM  31607  N   GLY H  55     136.545 149.248 196.677  1.00268.52
N
ATOM  31608  CA  GLY H  55     135.501 150.180 197.087  1.00231.33
C
ATOM  31609  C   GLY H  55     134.849 150.861 195.886  1.00217.29
C
ATOM  31610  O   GLY H  55     133.738 151.375 196.001  1.00222.76
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ATOM  31611  N   ARG H  56     135.565 150.849 194.750  1.00168.77
N
ATOM  31612  CA  ARG H  56     135.140 151.458 193.502  1.00190.98
C
ATOM  31613  CB  ARG H  56     136.009 150.877 192.367  1.00178.64
C
ATOM  31614  CG  ARG H  56     135.489 151.110 190.946  1.00247.06
C
ATOM  31615  CD  ARG H  56     136.060 150.321 189.752  1.00242.10
C
ATOM  31616  NE  ARG H  56     135.200 149.397 188.991  1.00198.76
N
ATOM  31617  CZ  ARG H  56     135.595 148.462 188.102  1.00262.66
C
ATOM  31618  NH1 ARG H  56     134.690 147.703 187.508  1.00319.69
N
ATOM  31619  NH2 ARG H  56     136.871 148.287 187.791  1.00256.72
N
ATOM  31620  C   ARG H  56     133.596 151.447 193.404  1.00257.14
C
ATOM  31621  O   ARG H  56     132.970 152.512 193.521  1.00208.59
O
ATOM  31622  N   ASN H  57     132.970 150.248 193.272  1.00295.40
N
ATOM  31623  CA  ASN H  57     131.540 150.048 192.999  1.00225.45
C
ATOM  31624  CB  ASN H  57     131.191 148.778 192.205  1.00181.41
C
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ATOM  31625  CG  ASN H  57     131.596 148.810 190.747  1.00160.15
C
ATOM  31626  OD1 ASN H  57     131.941 147.784 190.162  1.00 92.98
O
ATOM  31627  ND2 ASN H  57     131.598 150.000 190.161  1.00207.01
N
ATOM  31628  C   ASN H  57     130.727 149.873 194.274  1.00193.68
C
ATOM  31629  O   ASN H  57     130.743 148.838 194.946  1.00137.79
O
ATOM  31630  N   LYS H  58     129.915 150.868 194.558  1.00205.02
N
ATOM  31631  CA  LYS H  58     129.028 150.652 195.677  1.00215.70
C
ATOM  31632  CB  LYS H  58     128.595 152.035 196.183  1.00299.46
C
ATOM  31633  CG  LYS H  58     129.684 152.875 196.858  1.00289.06
C
ATOM  31634  CD  LYS H  58     130.627 153.668 195.959  1.00243.01
C
ATOM  31635  CE  LYS H  58     131.458 154.633 196.778  1.00246.86
C
ATOM  31636  NZ  LYS H  58     131.938 153.999 198.032  1.00239.32
N
ATOM  31637  C   LYS H  58     127.937 149.687 195.207  1.00165.15
C
ATOM  31638  O   LYS H  58     127.689 149.594 193.999  1.00192.28
O
ATOM  31639  N   TYR H  59     127.293 148.961 196.135  1.00111.75
N
ATOM  31640  CA  TYR H  59     125.920 148.592 195.779  1.00163.98
C
ATOM  31641  CB  TYR H  59     125.950 147.474 194.746  1.00177.81
C
ATOM  31642  CG  TYR H  59     124.599 146.885 194.462  1.00190.36
C
ATOM  31643  CD1 TYR H  59     123.677 147.542 193.662  1.00154.87
C
ATOM  31644  CE1 TYR H  59     122.435 146.972 193.411  1.00202.22
C
ATOM  31645  CZ  TYR H  59     122.094 145.732 193.949  1.00212.13
C
ATOM  31646  OH  TYR H  59     120.869 145.135 193.736  1.00145.23
O
ATOM  31647  CE2 TYR H  59     123.010 145.081 194.755  1.00247.08
C
ATOM  31648  CD2 TYR H  59     124.245 145.659 195.004  1.00229.81
C
ATOM  31649  C   TYR H  59     124.962 148.245 196.939  1.00195.79
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ATOM  31650  O   TYR H  59     125.122 147.172 197.546  1.00136.19
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ATOM  31651  N   TYR H  60     123.898 149.088 197.128  1.00231.28
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ATOM  31652  CA  TYR H  60     122.901 149.116 198.220  1.00171.99
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ATOM  31653  CB  TYR H  60     122.556 150.545 198.695  1.00129.95
C
ATOM  31654  CG  TYR H  60     123.663 151.566 198.508  1.00169.65
C
ATOM  31655  CD1 TYR H  60     124.583 151.839 199.522  1.00146.38
C
ATOM  31656  CE1 TYR H  60     125.622 152.752 199.349  1.00149.46
C
ATOM  31657  CZ  TYR H  60     125.784 153.420 198.134  1.00174.10
C
ATOM  31658  OH  TYR H  60     126.799 154.343 197.928  1.00126.04
O
ATOM  31659  CE2 TYR H  60     124.884 153.146 197.108  1.00190.56
C
ATOM  31660  CD2 TYR H  60     123.842 152.238 197.297  1.00188.71
C
ATOM  31661  C   TYR H  60     121.592 148.465 197.774  1.00156.06
C
ATOM  31662  O   TYR H  60     121.363 148.341 196.561  1.00151.91
O
ATOM  31663  N   ALA H  61     120.741 148.072 198.751  1.00141.97
N
ATOM  31664  CA  ALA H  61     119.427 147.491 198.439  1.00189.66
C
ATOM  31665  CB  ALA H  61     118.752 146.732 199.593  1.00 98.28
C
ATOM  31666  C   ALA H  61     118.529 148.557 197.804  1.00230.32
C
ATOM  31667  O   ALA H  61     118.856 149.742 197.842  1.00299.70
O
ATOM  31668  N   ASP H  62     117.432 148.121 197.178  1.00258.08
N
ATOM  31669  CA  ASP H  62     116.567 149.028 196.447  1.00243.86
C
ATOM  31670  CB  ASP H  62     115.596 148.257 195.557  1.00267.39
C
ATOM  31671  CG  ASP H  62     114.502 147.609 196.387  1.00280.52
C
ATOM  31672  OD1 ASP H  62     114.844 146.837 197.312  1.00282.35
O
ATOM  31673  OD2 ASP H  62     113.328 147.927 196.149  1.00285.10
O
ATOM  31674  C   ASP H  62     115.791 149.891 197.439  1.00227.37
C
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ATOM  31675  O   ASP H  62     115.581 151.068 197.163  1.00270.71
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ATOM  31676  N   SER H  63     115.402 149.308 198.590  1.00197.64
N
ATOM  31677  CA  SER H  63     114.479 149.948 199.529  1.00209.07
C
ATOM  31678  CB  SER H  63     113.489 148.961 200.196  1.00189.20
C
ATOM  31679  OG  SER H  63     114.095 148.102 201.158  1.00170.89
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ATOM  31680  C   SER H  63     115.177 150.932 200.484  1.00188.70
C
ATOM  31681  O   SER H  63     114.563 151.384 201.461  1.00158.63
O
ATOM  31682  N   VAL H  64     116.436 151.291 200.143  1.00165.69
N
ATOM  31683  CA  VAL H  64     117.241 152.321 200.804  1.00175.65
C
ATOM  31684  CB  VAL H  64     117.962 151.845 202.108  1.00168.87
C
ATOM  31685  CG1 VAL H  64     117.174 150.885 203.001  1.00129.52
C
ATOM  31686  CG2 VAL H  64     119.372 151.314 201.897  1.00187.57
C
ATOM  31687  C   VAL H  64     118.185 153.036 199.809  1.00166.47
C
ATOM  31688  O   VAL H  64     119.089 153.743 200.243  1.00186.94
O
ATOM  31689  N   THR H  65     118.002 152.915 198.477  1.00160.69
N
ATOM  31690  CA  THR H  65     119.005 153.458 197.548  1.00215.57
C
ATOM  31691  CB  THR H  65     119.218 152.653 196.250  1.00242.00
C
ATOM  31692  OG1 THR H  65     120.324 153.203 195.522  1.00197.88
O
ATOM  31693  CG2 THR H  65     118.009 152.625 195.338  1.00270.86
C
ATOM  31694  C   THR H  65     118.824 154.958 197.285  1.00244.96
C
ATOM  31695  O   THR H  65     117.701 155.467 197.251  1.00259.01
O
ATOM  31696  N   GLY H  66     119.964 155.637 197.061  1.00230.98
N
ATOM  31697  CA  GLY H  66     120.089 157.087 197.040  1.00181.47
C
ATOM  31698  C   GLY H  66     119.669 157.731 198.364  1.00228.52
C
ATOM  31699  O   GLY H  66     119.375 158.920 198.364  1.00265.02
O
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ATOM  31700  N   ARG H  67     119.616 156.947 199.462  1.00276.02
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ATOM  31701  CA  ARG H  67     119.263 157.406 200.808  1.00275.66
C
ATOM  31702  CB  ARG H  67     117.955 156.789 201.332  1.00243.39
C
ATOM  31703  CG  ARG H  67     116.672 157.267 200.666  1.00193.50
C
ATOM  31704  CD  ARG H  67     115.461 156.803 201.459  1.00225.88
C
ATOM  31705  NE  ARG H  67     115.430 155.404 201.891  1.00243.63
N
ATOM  31706  CZ  ARG H  67     115.467 154.975 203.156  1.00232.79
C
ATOM  31707  NH1 ARG H  67     115.542 155.842 204.150  1.00185.69
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ATOM  31708  NH2 ARG H  67     115.421 153.681 203.421  1.00269.20
N
ATOM  31709  C   ARG H  67     120.383 157.095 201.808  1.00263.74
C
ATOM  31710  O   ARG H  67     120.576 157.829 202.773  1.00297.88
O
ATOM  31711  N   PHE H  68     121.085 155.976 201.605  1.00213.14
N
ATOM  31712  CA  PHE H  68     122.269 155.674 202.387  1.00161.07
C
ATOM  31713  CB  PHE H  68     122.266 154.216 202.834  1.00171.56
C
ATOM  31714  CG  PHE H  68     121.347 153.895 203.979  1.00172.19
C
ATOM  31715  CD1 PHE H  68     119.969 154.027 203.859  1.00163.38
C
ATOM  31716  CE1 PHE H  68     119.132 153.712 204.917  1.00194.14
C
ATOM  31717  CZ  PHE H  68     119.668 153.257 206.101  1.00245.61
C
ATOM  31718  CD2 PHE H  68     121.872 153.423 205.169  1.00186.77
C
ATOM  31719  CE2 PHE H  68     121.034 153.106 206.227  1.00234.74
C
ATOM  31720  C   PHE H  68     123.489 155.937 201.518  1.00172.39
C
ATOM  31721  O   PHE H  68     123.322 156.295 200.353  1.00142.08
O
ATOM  31722  N   THR H  69     124.678 155.793 202.129  1.00240.21
N
ATOM  31723  CA  THR H  69     126.003 155.910 201.523  1.00298.93
C
ATOM  31724  CB  THR H  69     126.508 157.369 201.516  1.00302.21
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ATOM  31725  OG1 THR H  69     125.521 158.274 201.019  1.00349.61
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ATOM  31726  CG2 THR H  69     127.775 157.596 200.716  1.00267.93
C
ATOM  31727  C   THR H  69     126.945 154.972 202.289  1.00286.84
C
ATOM  31728  O   THR H  69     126.934 154.976 203.522  1.00219.00
O
ATOM  31729  N   ILE H  70     127.732 154.156 201.556  1.00292.66
N
ATOM  31730  CA  ILE H  70     128.710 153.232 202.132  1.00238.49
C
ATOM  31731  CB  ILE H  70     128.343 151.746 201.886  1.00208.28
C
ATOM  31732  CG1 ILE H  70     129.204 150.800 202.739  1.00199.56
C
ATOM  31733  CG2 ILE H  70     128.400 151.407 200.400  1.00180.92
C
ATOM  31734  CD1 ILE H  70     128.625 149.404 203.002  1.00158.94
C
ATOM  31735  C   ILE H  70     130.130 153.578 201.667  1.00226.88
C
ATOM  31736  O   ILE H  70     130.453 153.487 200.477  1.00197.44
O
ATOM  31737  N   SER H  71     130.963 153.964 202.650  1.00206.83
N
ATOM  31738  CA  SER H  71     132.364 154.300 202.457  1.00202.01
C
ATOM  31739  CB  SER H  71     132.663 155.730 202.775  1.00187.90
C
ATOM  31740  OG  SER H  71     133.550 155.778 203.893  1.00186.04
O
ATOM  31741  C   SER H  71     133.223 153.447 203.377  1.00203.02
C
ATOM  31742  O   SER H  71     132.809 153.062 204.465  1.00185.94
O
ATOM  31743  N   ARG H  72     134.460 153.247 202.934  1.00231.98
N
ATOM  31744  CA  ARG H  72     135.473 152.508 203.653  1.00215.96
C
ATOM  31745  CB  ARG H  72     135.388 151.019 203.303  1.00243.55
C
ATOM  31746  CG  ARG H  72     135.048 150.719 201.843  1.00269.24
C
ATOM  31747  CD  ARG H  72     136.028 149.914 200.998  1.00214.95
C
ATOM  31748  NE  ARG H  72     136.778 148.977 201.832  1.00215.96
N
ATOM  31749  CZ  ARG H  72     136.428 147.720 202.143  1.00209.45
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ATOM  31750  NH1 ARG H  72     135.322 147.163 201.668  1.00190.33
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ATOM  31751  NH2 ARG H  72     137.218 147.008 202.926  1.00164.40
N
ATOM  31752  C   ARG H  72     136.802 153.051 203.169  1.00222.61
C
ATOM  31753  O   ARG H  72     136.913 153.528 202.042  1.00266.49
O
ATOM  31754  N   ASP H  73     137.787 152.989 204.052  1.00210.31
N
ATOM  31755  CA  ASP H  73     139.148 153.272 203.657  1.00249.94
C
ATOM  31756  CB  ASP H  73     139.564 154.654 204.168  1.00267.42
C
ATOM  31757  CG  ASP H  73     140.889 155.154 203.620  1.00280.58
C
ATOM  31758  OD1 ASP H  73     141.414 154.523 202.681  1.00229.25
O
ATOM  31759  OD2 ASP H  73     141.391 156.169 204.147  1.00347.50
O
ATOM  31760  C   ASP H  73     139.997 152.090 204.118  1.00303.05
C
ATOM  31761  O   ASP H  73     139.763 151.551 205.198  1.00320.17
O
ATOM  31762  N   ASN H  74     140.945 151.677 203.268  1.00373.64
N
ATOM  31763  CA  ASN H  74     141.821 150.539 203.523  1.00391.56
C
ATOM  31764  CB  ASN H  74     142.459 150.004 202.231  1.00402.56
C
ATOM  31765  CG  ASN H  74     141.463 149.636 201.145  1.00361.16
C
ATOM  31766  OD1 ASN H  74     140.288 149.405 201.423  1.00360.64
O
ATOM  31767  ND2 ASN H  74     141.920 149.585 199.900  1.00273.95
N
ATOM  31768  C   ASN H  74     142.868 150.903 204.582  1.00396.62
C
ATOM  31769  O   ASN H  74     143.232 150.066 205.410  1.00357.80
O
ATOM  31770  N   SER H  75     143.340 152.158 204.544  1.00376.68
N
ATOM  31771  CA  SER H  75     144.352 152.669 205.460  1.00297.38
C
ATOM  31772  CB  SER H  75     145.068 153.858 204.866  1.00310.17
C
ATOM  31773  OG  SER H  75     145.786 153.483 203.697  1.00352.70
O
ATOM  31774  C   SER H  75     143.741 153.002 206.822  1.00252.18
C
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ATOM  31775  O   SER H  75     144.456 153.053 207.819  1.00249.31
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ATOM  31776  N   LYS H  76     142.422 153.239 206.857  1.00250.65
N
ATOM  31777  CA  LYS H  76     141.689 153.487 208.092  1.00259.55
C
ATOM  31778  CB  LYS H  76     140.449 154.357 207.837  1.00313.92
C
ATOM  31779  CG  LYS H  76     140.688 155.861 207.697  1.00300.22
C
ATOM  31780  CD  LYS H  76     140.320 156.706 208.913  1.00254.52
C
ATOM  31781  CE  LYS H  76     141.273 157.860 209.154  1.00218.49
C
ATOM  31782  NZ  LYS H  76     142.335 157.518 210.136  1.00181.56
N
ATOM  31783  C   LYS H  76     141.305 152.160 208.757  1.00212.97
C
ATOM  31784  O   LYS H  76     141.177 152.054 209.977  1.00165.75
O
ATOM  31785  N   ASN H  77     141.091 151.119 207.958  1.00219.16
N
ATOM  31786  CA  ASN H  77     140.705 149.862 208.576  1.00289.85
C
ATOM  31787  CB  ASN H  77     141.853 149.300 209.434  1.00329.13
C
ATOM  31788  CG  ASN H  77     141.995 147.789 209.441  1.00357.11
C
ATOM  31789  OD1 ASN H  77     141.176 147.061 208.883  1.00369.65
O
ATOM  31790  ND2 ASN H  77     143.057 147.300 210.066  1.00325.46
N
ATOM  31791  C   ASN H  77     139.442 150.127 209.398  1.00286.97
C
ATOM  31792  O   ASN H  77     139.300 149.602 210.504  1.00301.13
O
ATOM  31793  N   THR H  78     138.567 150.999 208.867  1.00280.46
N
ATOM  31794  CA  THR H  78     137.227 151.222 209.400  1.00299.38
C
ATOM  31795  CB  THR H  78     137.170 152.333 210.460  1.00342.77
C
ATOM  31796  OG1 THR H  78     137.895 153.472 209.994  1.00391.06
O
ATOM  31797  CG2 THR H  78     137.674 151.909 211.825  1.00373.81
C
ATOM  31798  C   THR H  78     136.226 151.483 208.275  1.00242.94
C
ATOM  31799  O   THR H  78     136.493 152.269 207.362  1.00172.13
O
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ATOM  31800  N   LEU H  79     135.071 150.808 208.382  1.00227.62
N
ATOM  31801  CA  LEU H  79     133.965 150.964 207.453  1.00235.67
C
ATOM  31802  CB  LEU H  79     133.428 149.592 207.038  1.00166.69
C
ATOM  31803  CG  LEU H  79     132.068 149.652 206.340  1.00183.14
C
ATOM  31804  CD1 LEU H  79     132.201 150.121 204.896  1.00146.50
C
ATOM  31805  CD2 LEU H  79     131.326 148.328 206.425  1.00196.12
C
ATOM  31806  C   LEU H  79     132.861 151.822 208.074  1.00289.69
C
ATOM  31807  O   LEU H  79     132.415 151.583 209.202  1.00269.63
O
ATOM  31808  N   TYR H  80     132.408 152.796 207.273  1.00316.51
N
ATOM  31809  CA  TYR H  80     131.403 153.775 207.648  1.00268.88
C
ATOM  31810  CB  TYR H  80     131.973 155.193 207.500  1.00271.24
C
ATOM  31811  CG  TYR H  80     133.331 155.429 208.120  1.00315.02
C
ATOM  31812  CD1 TYR H  80     133.498 155.475 209.498  1.00359.10
C
ATOM  31813  CE1 TYR H  80     134.740 155.699 210.075  1.00374.15
C
ATOM  31814  CZ  TYR H  80     135.851 155.883 209.268  1.00345.87
C
ATOM  31815  OH  TYR H  80     137.091 156.117 209.793  1.00266.47
O
ATOM  31816  CE2 TYR H  80     135.705 155.844 207.892  1.00339.95
C
ATOM  31817  CD2 TYR H  80     134.457 155.620 207.331  1.00327.57
C
ATOM  31818  C   TYR H  80     130.137 153.553 206.816  1.00217.13
C
ATOM  31819  O   TYR H  80     130.200 153.190 205.641  1.00161.65
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ATOM  31820  N   LEU H  81     128.980 153.756 207.453  1.00215.55
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ATOM  31821  CA  LEU H  81     127.723 153.884 206.730  1.00255.03
C
ATOM  31822  CB  LEU H  81     126.798 152.728 207.141  1.00283.97
C
ATOM  31823  CG  LEU H  81     125.390 152.703 206.531  1.00275.24
C
ATOM  31824  CD1 LEU H  81     125.419 152.678 205.006  1.00243.06
C
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ATOM  31825  CD2 LEU H  81     124.568 151.538 207.072  1.00229.65
C
ATOM  31826  C   LEU H  81     127.108 155.255 207.025  1.00268.53
C
ATOM  31827  O   LEU H  81     127.239 155.773 208.136  1.00264.88
O
ATOM  31828  N   GLN H  82     126.451 155.843 206.014  1.00280.81
N
ATOM  31829  CA  GLN H  82     125.718 157.094 206.163  1.00317.47
C
ATOM  31830  CB  GLN H  82     126.328 158.164 205.249  1.00307.40
C
ATOM  31831  CG  GLN H  82     125.957 159.598 205.609  1.00298.11
C
ATOM  31832  CD  GLN H  82     126.555 160.108 206.900  1.00266.72
C
ATOM  31833  OE1 GLN H  82     127.772 160.087 207.119  1.00200.84
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ATOM  31834  NE2 GLN H  82     125.689 160.608 207.766  1.00251.82
N
ATOM  31835  C   GLN H  82     124.234 156.841 205.882  1.00349.49
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ATOM  31836  O   GLN H  82     123.897 156.205 204.886  1.00387.57
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ATOM  31837  N   MET H  83     123.355 157.339 206.768  1.00308.33
N
ATOM  31838  CA  MET H  83     121.916 157.121 206.670  1.00277.35
C
ATOM  31839  CB  MET H  83     121.375 156.400 207.912  1.00264.65
C
ATOM  31840  CG  MET H  83     122.172 155.178 208.337  1.00283.98
C
ATOM  31841  SD  MET H  83     121.333 154.147 209.579  1.00274.22
S
ATOM  31842  CE  MET H  83     122.754 153.402 210.378  1.00342.62
C
ATOM  31843  C   MET H  83     121.208 158.470 206.554  1.00309.63
C
ATOM  31844  O   MET H  83     121.441 159.352 207.376  1.00352.21
O
ATOM  31845  N   ASN H  84     120.341 158.626 205.537  1.00319.61
N
ATOM  31846  CA  ASN H  84     119.554 159.842 205.349  1.00297.50
C
ATOM  31847  CB  ASN H  84     120.008 160.688 204.152  1.00267.65
C
ATOM  31848  CG  ASN H  84     121.437 161.183 204.223  1.00244.48
C
ATOM  31849  OD1 ASN H  84     121.770 161.990 205.083  1.00210.86
O
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ATOM  31851  C   ASN H  84     118.083 159.498 205.121  1.00291.71
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ATOM  31852  O   ASN H  84     117.768 158.459 204.543  1.00326.35
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ATOM  31853  N   SER H  85     117.198 160.413 205.547  1.00254.96
N
ATOM  31854  CA  SER H  85     115.754 160.348 205.328  1.00282.17
C
ATOM  31855  CB  SER H  85     115.385 160.180 203.853  1.00282.66
C
ATOM  31856  OG  SER H  85     115.954 161.195 203.033  1.00260.79
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ATOM  31857  C   SER H  85     115.101 159.280 206.212  1.00272.48
C
ATOM  31858  O   SER H  85     114.049 158.740 205.849  1.00210.61
O
ATOM  31859  N   LEU H  86     115.714 159.038 207.388  1.00245.91
N
ATOM  31860  CA  LEU H  86     115.411 157.939 208.303  1.00256.81
C
ATOM  31861  CB  LEU H  86     116.252 158.108 209.574  1.00256.28
C
ATOM  31862  CG  LEU H  86     117.606 157.398 209.598  1.00307.27
C
ATOM  31863  CD1 LEU H  86     118.570 158.108 210.539  1.00277.37
C
ATOM  31864  CD2 LEU H  86     117.458 155.928 209.983  1.00314.83
C
ATOM  31865  C   LEU H  86     113.924 157.897 208.653  1.00240.79
C
ATOM  31866  O   LEU H  86     113.273 158.935 208.707  1.00254.04
O
ATOM  31867  N   ARG H  87     113.403 156.693 208.922  1.00259.14
N
ATOM  31868  CA  ARG H  87     111.990 156.507 209.220  1.00271.13
C
ATOM  31869  CB  ARG H  87     111.214 156.116 207.952  1.00265.77
C
ATOM  31870  CG  ARG H  87     110.666 157.273 207.122  1.00244.25
C
ATOM  31871  CD  ARG H  87     111.449 157.720 205.894  1.00215.26
C
ATOM  31872  NE  ARG H  87     112.109 156.615 205.208  1.00274.77
N
ATOM  31873  CZ  ARG H  87     111.627 155.962 204.151  1.00354.33
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ATOM  31874  NH1 ARG H  87     110.470 156.318 203.617  1.00390.83
N
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ATOM  31876  C   ARG H  87     111.833 155.473 210.337  1.00278.57
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ATOM  31877  O   ARG H  87     112.798 154.777 210.664  1.00210.06
O
ATOM  31878  N   ALA H  88     110.606 155.405 210.898  1.00312.83
N
ATOM  31879  CA  ALA H  88     110.242 154.585 212.050  1.00311.94
C
ATOM  31880  CB  ALA H  88     108.913 155.027 212.646  1.00193.92
C
ATOM  31881  C   ALA H  88     110.264 153.095 211.696  1.00348.36
C
ATOM  31882  O   ALA H  88     110.485 152.262 212.575  1.00417.02
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ATOM  31883  N   GLU H  89     110.030 152.773 210.415  1.00324.11
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ATOM  31884  CA  GLU H  89     110.200 151.419 209.906  1.00266.32
C
ATOM  31885  CB  GLU H  89     109.420 151.208 208.599  1.00256.85
C
ATOM  31886  CG  GLU H  89     109.750 152.196 207.484  1.00292.43
C
ATOM  31887  CD  GLU H  89     109.144 153.593 207.553  1.00291.27
C
ATOM  31888  OE1 GLU H  89     109.146 154.289 206.512  1.00256.03
O
ATOM  31889  OE2 GLU H  89     108.688 153.999 208.647  1.00309.36
O
ATOM  31890  C   GLU H  89     111.694 151.100 209.830  1.00271.07
C
ATOM  31891  O   GLU H  89     112.098 149.985 210.174  1.00226.18
O
ATOM  31892  N   ASP H  90     112.494 152.124 209.459  1.00281.40
N
ATOM  31893  CA  ASP H  90     113.933 152.053 209.215  1.00284.28
C
ATOM  31894  CB  ASP H  90     114.475 153.305 208.506  1.00251.12
C
ATOM  31895  CG  ASP H  90     113.996 153.582 207.078  1.00261.47
C
ATOM  31896  OD1 ASP H  90     113.754 152.624 206.289  1.00159.72
O
ATOM  31897  OD2 ASP H  90     113.891 154.778 206.740  1.00326.08
O
ATOM  31898  C   ASP H  90     114.701 151.866 210.527  1.00284.76
C
ATOM  31899  O   ASP H  90     115.925 152.006 210.549  1.00231.00
O
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ATOM  31900  N   THR H  91     113.960 151.591 211.618  1.00356.07
N
ATOM  31901  CA  THR H  91     114.462 151.303 212.959  1.00384.01
C
ATOM  31902  CB  THR H  91     113.388 151.585 214.032  1.00347.73
C
ATOM  31903  OG1 THR H  91     113.528 152.916 214.529  1.00374.47
O
ATOM  31904  CG2 THR H  91     113.385 150.643 215.221  1.00256.47
C
ATOM  31905  C   THR H  91     114.908 149.845 213.038  1.00401.34
C
ATOM  31906  O   THR H  91     114.094 148.934 212.892  1.00413.08
O
ATOM  31907  N   ALA H  92     116.199 149.632 213.306  1.00380.10
N
ATOM  31908  CA  ALA H  92     116.747 148.290 213.291  1.00350.01
C
ATOM  31909  CB  ALA H  92     117.073 147.903 211.869  1.00389.57
C
ATOM  31910  C   ALA H  92     117.977 148.230 214.187  1.00309.21
C
ATOM  31911  O   ALA H  92     118.267 149.202 214.888  1.00220.73
O
ATOM  31912  N   VAL H  93     118.625 147.052 214.187  1.00321.11
N
ATOM  31913  CA  VAL H  93     119.985 146.827 214.661  1.00295.36
C
ATOM  31914  CB  VAL H  93     120.068 145.626 215.639  1.00266.14
C
ATOM  31915  CG1 VAL H  93     121.313 145.646 216.534  1.00164.14
C
ATOM  31916  CG2 VAL H  93     118.816 145.503 216.502  1.00294.03
C
ATOM  31917  C   VAL H  93     120.861 146.653 213.417  1.00274.67
C
ATOM  31918  O   VAL H  93     120.489 145.925 212.498  1.00268.17
O
ATOM  31919  N   TYR H  94     121.998 147.364 213.379  1.00244.14
N
ATOM  31920  CA  TYR H  94     122.902 147.363 212.239  1.00232.83
C
ATOM  31921  CB  TYR H  94     123.338 148.785 211.903  1.00161.05
C
ATOM  31922  CG  TYR H  94     122.300 149.490 211.077  1.00208.46
C
ATOM  31923  CD1 TYR H  94     121.024 149.666 211.580  1.00236.25
C
ATOM  31924  CE1 TYR H  94     120.042 150.317 210.854  1.00263.45
C
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ATOM  31925  CZ  TYR H  94     120.330 150.795 209.589  1.00235.64
C
ATOM  31926  OH  TYR H  94     119.341 151.441 208.903  1.00247.91
O
ATOM  31927  CE2 TYR H  94     121.599 150.612 209.058  1.00202.87
C
ATOM  31928  CD2 TYR H  94     122.571 149.956 209.798  1.00214.42
C
ATOM  31929  C   TYR H  94     124.130 146.501 212.500  1.00296.07
C
ATOM  31930  O   TYR H  94     124.927 146.803 213.390  1.00342.41
O
ATOM  31931  N   TYR H  95     124.274 145.455 211.676  1.00274.76
N
ATOM  31932  CA  TYR H  95     125.390 144.537 211.785  1.00213.36
C
ATOM  31933  CB  TYR H  95     124.907 143.090 211.797  1.00169.16
C
ATOM  31934  CG  TYR H  95     123.830 142.727 212.783  1.00166.81
C
ATOM  31935  CD1 TYR H  95     124.125 142.126 214.006  1.00197.50
C
ATOM  31936  CE1 TYR H  95     123.122 141.761 214.898  1.00217.23
C
ATOM  31937  CZ  TYR H  95     121.790 141.979 214.568  1.00231.49
C
ATOM  31938  OH  TYR H  95     120.801 141.598 215.437  1.00197.57
O
ATOM  31939  CE2 TYR H  95     121.479 142.562 213.345  1.00226.09
C
ATOM  31940  CD2 TYR H  95     122.493 142.914 212.461  1.00180.91
C
ATOM  31941  C   TYR H  95     126.356 144.769 210.626  1.00232.35
C
ATOM  31942  O   TYR H  95     125.929 144.958 209.469  1.00153.32
O
ATOM  31943  N   CYS H  96     127.644 144.736 211.021  1.00237.37
N
ATOM  31944  CA  CYS H  96     128.838 144.837 210.198  1.00245.86
C
ATOM  31945  CB  CYS H  96     129.873 145.694 210.916  1.00278.28
C
ATOM  31946  SG  CYS H  96     131.357 146.022 209.935  1.00437.02
S
ATOM  31947  C   CYS H  96     129.404 143.443 209.913  1.00260.06
C
ATOM  31948  O   CYS H  96     129.562 142.620 210.830  1.00176.51
O
ATOM  31949  N   ALA H  97     129.732 143.231 208.622  1.00291.42
N
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ATOM  31950  CA  ALA H  97     130.002 141.928 208.027  1.00274.05
C
ATOM  31951  CB  ALA H  97     128.718 141.336 207.501  1.00321.20
C
ATOM  31952  C   ALA H  97     131.062 142.002 206.923  1.00226.40
C
ATOM  31953  O   ALA H  97     131.048 142.885 206.049  1.00120.88
O
ATOM  31954  N   SER H  98     131.948 140.999 206.961  1.00234.90
N
ATOM  31955  CA  SER H  98     133.056 140.886 206.035  1.00239.98
C
ATOM  31956  CB  SER H  98     134.365 140.808 206.769  1.00265.85
C
ATOM  31957  OG  SER H  98     134.607 142.018 207.470  1.00253.75
O
ATOM  31958  C   SER H  98     132.867 139.687 205.110  1.00229.69
C
ATOM  31959  O   SER H  98     132.030 138.811 205.356  1.00194.32
O
ATOM  31960  N   SER H  99     133.646 139.706 204.020  1.00196.89
N
ATOM  31961  CA  SER H  99     133.733 138.592 203.087  1.00205.71
C
ATOM  31962  CB  SER H  99     133.278 138.981 201.706  1.00190.70
C
ATOM  31963  OG  SER H  99     133.781 138.059 200.734  1.00139.88
O
ATOM  31964  C   SER H  99     135.162 138.073 203.011  1.00188.99
C
ATOM  31965  O   SER H  99     136.001 138.468 203.815  1.00183.83
O
ATOM  31966  N   SER H 100     135.380 137.167 202.040  1.00160.94
N
ATOM  31967  CA  SER H 100     136.684 136.734 201.549  1.00225.47
C
ATOM  31968  CB  SER H 100     136.723 135.229 201.450  1.00238.41
C
ATOM  31969  OG  SER H 100     135.685 134.755 200.599  1.00189.37
O
ATOM  31970  C   SER H 100     136.957 137.363 200.178  1.00231.62
C
ATOM  31971  O   SER H 100     138.092 137.666 199.792  1.00241.22
O
ATOM  31972  N   GLY H 101     135.879 137.484 199.415  1.00172.59
N
ATOM  31973  CA  GLY H 101     135.828 138.393 198.294  1.00141.33
C
ATOM  31974  C   GLY H 101     134.370 138.789 198.172  1.00155.25
C
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ATOM  31975  O   GLY H 101     133.534 138.301 198.941  1.00103.41
O
ATOM  31976  N   TYR H 102     134.112 139.637 197.178  1.00179.84
N
ATOM  31977  CA  TYR H 102     132.805 140.190 196.879  1.00162.24
C
ATOM  31978  CB  TYR H 102     132.872 140.899 195.526  1.00177.39
C
ATOM  31979  CG  TYR H 102     131.573 141.529 195.106  1.00188.37
C
ATOM  31980  CD1 TYR H 102     131.058 142.569 195.848  1.00207.20
C
ATOM  31981  CE1 TYR H 102     129.868 143.176 195.498  1.00196.83
C
ATOM  31982  CZ  TYR H 102     129.167 142.755 194.391  1.00129.71
C
ATOM  31983  OH  TYR H 102     128.006 143.424 194.192  1.00 85.53
O
ATOM  31984  CE2 TYR H 102     129.652 141.705 193.633  1.00161.12
C
ATOM  31985  CD2 TYR H 102     130.848 141.098 194.000  1.00185.41
C
ATOM  31986  C   TYR H 102     131.711 139.122 196.819  1.00146.18
C
ATOM  31987  O   TYR H 102     130.596 139.426 197.232  1.00173.71
O
ATOM  31988  N   LEU H 103     132.048 137.910 196.330  1.00100.89
N
ATOM  31989  CA  LEU H 103     131.094 137.026 195.682  1.00 72.91
C
ATOM  31990  CB  LEU H 103     131.488 136.719 194.225  1.00 91.47
C
ATOM  31991  CG  LEU H 103     130.637 137.344 193.112  1.00 88.65
C
ATOM  31992  CD1 LEU H 103     130.437 136.377 191.934  1.00 78.78
C
ATOM  31993  CD2 LEU H 103     129.295 137.743 193.686  1.00 85.79
C
ATOM  31994  C   LEU H 103     130.817 135.756 196.478  1.00 68.66
C
ATOM  31995  O   LEU H 103     129.787 135.185 196.151  1.00 86.95
O
ATOM  31996  N   PHE H 104     131.621 135.319 197.484  1.00 64.72
N
ATOM  31997  CA  PHE H 104     131.088 134.212 198.304  1.00 92.71
C
ATOM  31998  CB  PHE H 104     131.813 132.885 197.976  1.00111.21
C
ATOM  31999  CG  PHE H 104     131.888 131.834 199.078  1.00251.30
C
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ATOM  32000  CD1 PHE H 104     130.758 131.358 199.753  1.00276.97
C
ATOM  32001  CE1 PHE H 104     130.841 130.419 200.787  1.00222.99
C
ATOM  32002  CZ  PHE H 104     132.066 129.906 201.148  1.00234.47
C
ATOM  32003  CD2 PHE H 104     133.112 131.291 199.463  1.00331.90
C
ATOM  32004  CE2 PHE H 104     133.197 130.341 200.481  1.00330.73
C
ATOM  32005  C   PHE H 104     130.728 134.644 199.754  1.00 91.31
C
ATOM  32006  O   PHE H 104     131.028 135.789 200.082  1.00125.00
O
ATOM  32007  N   HIS H 105     130.050 133.798 200.604  1.00 76.70
N
ATOM  32008  CA  HIS H 105     130.456 133.598 202.015  1.00127.95
C
ATOM  32009  CB  HIS H 105     131.972 133.921 202.178  1.00227.51
C
ATOM  32010  CG  HIS H 105     132.606 134.097 203.536  1.00252.52
C
ATOM  32011  ND1 HIS H 105     132.873 135.353 204.091  1.00237.15
N
ATOM  32012  CE1 HIS H 105     133.508 135.207 205.238  1.00284.10
C
ATOM  32013  NE2 HIS H 105     133.711 133.894 205.430  1.00327.37
N
ATOM  32014  CD2 HIS H 105     133.180 133.199 204.370  1.00300.41
C
ATOM  32015  C   HIS H 105     129.802 134.638 202.884  1.00128.20
C
ATOM  32016  O   HIS H 105     129.207 135.546 202.340  1.00189.81
O
ATOM  32017  N   SER H 106     130.047 134.623 204.187  1.00136.56
N
ATOM  32018  CA  SER H 106     129.754 135.856 204.901  1.00153.17
C
ATOM  32019  CB  SER H 106     128.325 135.861 205.288  1.00155.40
C
ATOM  32020  OG  SER H 106     128.016 137.138 205.799  1.00185.53
O
ATOM  32021  C   SER H 106     130.632 136.034 206.132  1.00207.89
C
ATOM  32022  O   SER H 106     131.000 137.173 206.457  1.00137.09
O
ATOM  32023  N   ASP H 107     131.016 134.856 206.663  1.00307.74
N
ATOM  32024  CA  ASP H 107     131.326 134.396 208.015  1.00329.89
C
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ATOM  32025  CB  ASP H 107     132.381 133.286 208.011  1.00392.22
C
ATOM  32026  CG  ASP H 107     132.918 132.981 209.395  1.00414.64
C
ATOM  32027  OD1 ASP H 107     132.292 132.163 210.098  1.00519.35
O
ATOM  32028  OD2 ASP H 107     133.939 133.592 209.765  1.00402.63
O
ATOM  32029  C   ASP H 107     131.545 135.497 209.047  1.00321.37
C
ATOM  32030  O   ASP H 107     130.979 135.433 210.137  1.00411.08
O
ATOM  32031  N   TYR H 108     132.382 136.480 208.725  1.00254.31
N
ATOM  32032  CA  TYR H 108     132.729 137.476 209.719  1.00244.83
C
ATOM  32033  CB  TYR H 108     133.961 138.230 209.253  1.00260.06
C
ATOM  32034  CG  TYR H 108     135.203 137.394 209.333  1.00301.84
C
ATOM  32035  CD1 TYR H 108     135.327 136.399 210.288  1.00324.21
C
ATOM  32036  CE1 TYR H 108     136.476 135.633 210.378  1.00392.42
C
ATOM  32037  CZ  TYR H 108     137.527 135.875 209.512  1.00419.19
C
ATOM  32038  OH  TYR H 108     138.667 135.128 209.597  1.00498.97
O
ATOM  32039  CE2 TYR H 108     137.420 136.876 208.562  1.00402.48
C
ATOM  32040  CD2 TYR H 108     136.261 137.625 208.478  1.00338.78
C
ATOM  32041  C   TYR H 108     131.585 138.452 209.960  1.00254.49
C
ATOM  32042  O   TYR H 108     131.255 139.243 209.081  1.00239.30
O
ATOM  32043  N   TRP H 109     131.013 138.385 211.172  1.00248.55
N
ATOM  32044  CA  TRP H 109     129.891 139.211 211.585  1.00198.49
C
ATOM  32045  CB  TRP H 109     128.607 138.405 211.754  1.00190.47
C
ATOM  32046  CG  TRP H 109     127.748 138.576 210.554  1.00159.01
C
ATOM  32047  CD1 TRP H 109     128.185 138.761 209.278  1.00136.66
C
ATOM  32048  NE1 TRP H 109     127.125 138.872 208.428  1.00136.77
N
ATOM  32049  CE2 TRP H 109     125.967 138.756 209.139  1.00151.39
C
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ATOM  32050  CD2 TRP H 109     126.319 138.566 210.497  1.00170.76
C
ATOM  32051  CE3 TRP H 109     125.310 138.438 211.456  1.00180.16
C
ATOM  32052  CZ3 TRP H 109     124.005 138.496 211.021  1.00184.99
C
ATOM  32053  CH2 TRP H 109     123.680 138.693 209.673  1.00188.86
C
ATOM  32054  CZ2 TRP H 109     124.647 138.831 208.703  1.00149.81
C
ATOM  32055  C   TRP H 109     130.212 139.829 212.917  1.00199.73
C
ATOM  32056  O   TRP H 109     131.211 139.441 213.532  1.00194.43
O
ATOM  32057  N   GLY H 110     129.287 140.710 213.326  1.00181.69
N
ATOM  32058  CA  GLY H 110     129.454 141.537 214.505  1.00270.05
C
ATOM  32059  C   GLY H 110     128.459 141.202 215.610  1.00288.78
C
ATOM  32060  O   GLY H 110     127.750 140.194 215.532  1.00277.89
O
ATOM  32061  N   GLN H 111     128.485 142.046 216.650  1.00294.14
N
ATOM  32062  CA  GLN H 111     127.473 142.031 217.690  1.00320.57
C
ATOM  32063  CB  GLN H 111     128.088 142.159 219.086  1.00222.51
C
ATOM  32064  CG  GLN H 111     127.118 141.677 220.160  1.00292.72
C
ATOM  32065  CD  GLN H 111     126.281 140.480 219.759  1.00316.14
C
ATOM  32066  OE1 GLN H 111     126.784 139.363 219.623  1.00254.55
O
ATOM  32067  NE2 GLN H 111     124.988 140.698 219.572  1.00370.95
N
ATOM  32068  C   GLN H 111     126.362 143.029 217.349  1.00373.59
C
ATOM  32069  O   GLN H 111     125.187 142.671 217.395  1.00418.15
O
ATOM  32070  N   GLY H 112     126.743 144.274 217.017  1.00381.45
N
ATOM  32071  CA  GLY H 112     125.878 145.205 216.295  1.00341.85
C
ATOM  32072  C   GLY H 112     124.979 146.078 217.177  1.00289.51
C
ATOM  32073  O   GLY H 112     124.323 145.573 218.086  1.00230.04
O
ATOM  32074  N   THR H 113     124.882 147.368 216.809  1.00278.15
N
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ATOM  32075  CA  THR H 113     124.289 148.437 217.609  1.00328.41
C
ATOM  32076  CB  THR H 113     125.278 149.617 217.697  1.00288.73
C
ATOM  32077  OG1 THR H 113     124.706 150.777 218.305  1.00295.46
O
ATOM  32078  CG2 THR H 113     125.882 150.005 216.363  1.00236.17
C
ATOM  32079  C   THR H 113     122.883 148.789 217.099  1.00382.03
C
ATOM  32080  O   THR H 113     122.712 149.027 215.904  1.00447.58
O
ATOM  32081  N   LEU H 114     121.888 148.817 218.014  1.00356.93
N
ATOM  32082  CA  LEU H 114     120.496 149.197 217.753  1.00296.63
C
ATOM  32083  CB  LEU H 114     119.640 148.851 218.991  1.00257.72
C
ATOM  32084  CG  LEU H 114     118.200 149.386 219.074  1.00260.32
C
ATOM  32085  CD1 LEU H 114     117.205 148.512 218.308  1.00235.82
C
ATOM  32086  CD2 LEU H 114     117.753 149.554 220.531  1.00200.84
C
ATOM  32087  C   LEU H 114     120.444 150.689 217.408  1.00269.72
C
ATOM  32088  O   LEU H 114     121.067 151.478 218.117  1.00161.82
O
ATOM  32089  N   VAL H 115     119.746 151.037 216.302  1.00320.51
N
ATOM  32090  CA  VAL H 115     119.481 152.403 215.844  1.00366.14
C
ATOM  32091  CB  VAL H 115     119.996 152.656 214.402  1.00317.30
C
ATOM  32092  CG1 VAL H 115     119.390 153.896 213.745  1.00228.66
C
ATOM  32093  CG2 VAL H 115     121.517 152.710 214.333  1.00312.47
C
ATOM  32094  C   VAL H 115     117.978 152.678 215.975  1.00409.67
C
ATOM  32095  O   VAL H 115     117.172 151.988 215.349  1.00423.36
O
ATOM  32096  N   THR H 116     117.610 153.669 216.811  1.00406.72
N
ATOM  32097  CA  THR H 116     116.227 154.096 217.033  1.00324.84
C
ATOM  32098  CB  THR H 116     115.865 154.193 218.536  1.00250.50
C
ATOM  32099  OG1 THR H 116     116.490 153.254 219.419  1.00185.06
O
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ATOM  32100  CG2 THR H 116     114.377 154.151 218.829  1.00186.09
C
ATOM  32101  C   THR H 116     115.977 155.425 216.302  1.00345.63
C
ATOM  32102  O   THR H 116     116.778 156.355 216.405  1.00284.61
O
ATOM  32103  N   VAL H 117     114.860 155.499 215.557  1.00372.06
N
ATOM  32104  CA  VAL H 117     114.380 156.718 214.912  1.00330.12
C
ATOM  32105  CB  VAL H 117     114.282 156.570 213.374  1.00244.62
C
ATOM  32106  CG1 VAL H 117     113.875 157.859 212.688  1.00216.80
C
ATOM  32107  CG2 VAL H 117     115.568 156.053 212.752  1.00251.97
C
ATOM  32108  C   VAL H 117     113.040 157.095 215.552  1.00394.87
C
ATOM  32109  O   VAL H 117     112.035 156.407 215.362  1.00478.58
O
ATOM  32110  N   SER H 118     113.037 158.184 216.333  1.00364.24
N
ATOM  32111  CA  SER H 118     111.864 158.558 217.109  1.00339.19
C
ATOM  32112  CB  SER H 118     112.062 158.286 218.588  1.00316.10
C
ATOM  32113  OG  SER H 118     111.667 156.956 218.928  1.00228.75
O
ATOM  32114  C   SER H 118     111.433 159.994 216.819  1.00330.15
C
ATOM  32115  O   SER H 118     112.128 160.950 217.165  1.00314.05
O
ATOM  32116  N   SER H 119     110.267 160.097 216.175  1.00328.76
N
ATOM  32117  CA  SER H 119     109.526 161.327 215.960  1.00335.80
C
ATOM  32118  CB  SER H 119     108.231 160.981 215.293  1.00339.45
C
ATOM  32119  OG  SER H 119     107.620 159.891 215.976  1.00307.77
O
ATOM  32120  C   SER H 119     109.273 162.023 217.305  1.00340.57
C
ATOM  32121  O   SER H 119     108.721 161.353 218.222  1.00288.89
O
ATOM  32122  N   ALA H 120     108.942 160.365 218.111  1.00 59.82
N
ATOM  32123  CA  ALA H 120     109.126 160.537 219.543  1.00 53.84
C
ATOM  32124  C   ALA H 120     110.552 161.009 219.859  1.00 50.77
C
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ATOM  32125  O   ALA H 120     111.476 160.905 219.050  1.00 54.92
O
ATOM  32126  CB  ALA H 120     108.794 159.224 220.257  1.00 55.85
C
ATOM  32127  H   ALA H 120     108.887 159.550 217.844  1.00 71.82
H
ATOM  32128  HA  ALA H 120     108.529 161.220 219.885  1.00 64.64
H
ATOM  32129  HB1 ALA H 120     108.927 159.340 221.210  1.00 67.05
H
ATOM  32130  HB2 ALA H 120     107.869 158.992 220.077  1.00 67.05
H
ATOM  32131  HB3 ALA H 120     109.381 158.527 219.923  1.00 67.05
H
ATOM  32132  N   SER H 121     110.714 161.527 221.068  1.00 50.87
N
ATOM  32133  CA  SER H 121     111.928 162.173 221.540  1.00 51.40
C
ATOM  32134  C   SER H 121     112.471 161.435 222.742  1.00 57.00
C
ATOM  32135  O   SER H 121     111.707 160.855 223.523  1.00 59.47
O
ATOM  32136  CB  SER H 121     111.652 163.635 221.975  1.00 55.94
C
ATOM  32137  OG  SER H 121     111.070 164.364 220.915  1.00 76.46
O
ATOM  32138  H   SER H 121     110.097 161.515 221.667  1.00 61.07
H
ATOM  32139  HA  SER H 121     112.586 162.162 220.827  1.00 61.71
H
ATOM  32140  HB2 SER H 121     111.043 163.633 222.730  1.00 67.16
H
ATOM  32141  HB3 SER H 121     112.490 164.055 222.227  1.00 67.16
H
ATOM  32142  HG  SER H 121     111.055 165.182 221.102  1.00 91.78
H
ATOM  32143  N   THR H 122     113.778 161.533 222.946  1.00 51.07
N
ATOM  32144  CA  THR H 122     114.381 160.802 224.045  1.00 53.75
C
ATOM  32145  C   THR H 122     113.681 161.130 225.360  1.00 58.64
C
ATOM  32146  O   THR H 122     113.385 162.290 225.662  1.00 50.81
O
ATOM  32147  CB  THR H 122     115.873 161.118 224.104  1.00 46.46
C
ATOM  32148  OG1 THR H 122     116.443 160.716 222.859  1.00 57.24
O
ATOM  32149  CG2 THR H 122     116.520 160.363 225.187  1.00 50.27
C
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ATOM  32150  H   THR H 122     114.322 162.004 222.474  1.00 61.31
H
ATOM  32151  HA  THR H 122     114.288 159.847 223.904  1.00 64.53
H
ATOM  32152  HB  THR H 122     116.016 162.063 224.268  1.00 55.78
H
ATOM  32153  HG1 THR H 122     117.267 160.880 222.855  1.00 68.71
H
ATOM  32154 HG21 THR H 122     117.482 160.469 225.138  1.00 60.35
H
ATOM  32155 HG22 THR H 122     116.211 160.687 226.049  1.00 60.35
H
ATOM  32156 HG23 THR H 122     116.302 159.420 225.110  1.00 60.35
H
ATOM  32157  N   LYS H 123     113.381 160.084 226.140  1.00 57.97
N
ATOM  32158  CA  LYS H 123     112.633 160.265 227.373  1.00 50.67
C
ATOM  32159  C   LYS H 123     112.994 159.152 228.348  1.00 58.25
C
ATOM  32160  O   LYS H 123     113.069 157.976 227.966  1.00 52.44
O
ATOM  32161  CB  LYS H 123     111.129 160.283 227.081  1.00 60.22
C
ATOM  32162  CG  LYS H 123     110.265 160.699 228.276  1.00 59.44
C
ATOM  32163  CD  LYS H 123     108.795 160.727 227.887  1.00 72.83
C
ATOM  32164  CE  LYS H 123     107.888 161.128 229.056  1.00 83.09
C
ATOM  32165  NZ  LYS H 123     108.104 160.305 230.276  1.00 78.83
N
ATOM  32166  H   LYS H 123     113.601 159.271 225.971  1.00 69.59
H
ATOM  32167  HA  LYS H 123     112.875 161.105 227.794  1.00 60.83
H
ATOM  32168  HB2 LYS H 123     110.959 160.910 226.362  1.00 72.29
H
ATOM  32169  HB3 LYS H 123     110.854 159.390 226.816  1.00 72.29
H
ATOM  32170  HG2 LYS H 123     110.382 160.063 228.999  1.00 71.35
H
ATOM  32171  HG3 LYS H 123     110.523 161.587 228.569  1.00 71.35
H
ATOM  32172  HD2 LYS H 123     108.667 161.370 227.173  1.00 87.42
H
ATOM  32173  HD3 LYS H 123     108.528 159.843 227.588  1.00 87.42
H
ATOM  32174  HE2 LYS H 123     108.064 162.054 229.286  1.00 99.73
H
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ATOM  32175  HE3 LYS H 123     106.963 161.022 228.787  1.00 99.73
H
ATOM  32176  HZ1 LYS H 123     107.539 160.555 230.917  1.00 94.62
H
ATOM  32177  HZ2 LYS H 123     107.969 159.444 230.091  1.00 94.62
H
ATOM  32178  HZ3 LYS H 123     108.938 160.409 230.570  1.00 94.62
H
ATOM  32179  N   GLY H 124     113.262 159.535 229.589  1.00 59.78
N
ATOM  32180  CA  GLY H 124     113.535 158.600 230.660  1.00 60.58
C
ATOM  32181  C   GLY H 124     112.263 157.967 231.220  1.00 54.15
C
ATOM  32182  O   GLY H 124     111.154 158.520 231.123  1.00 49.37
O
ATOM  32183  H   GLY H 124     113.291 160.359 229.838  1.00 71.76
H
ATOM  32184  HA2 GLY H 124     114.108 157.893 230.328  1.00 72.72
H
ATOM  32185  HA3 GLY H 124     113.987 159.063 231.382  1.00 72.72
H
ATOM  32186  N   PRO H 125     112.400 156.770 231.794  1.00 55.69
N
ATOM  32187  CA  PRO H 125     111.217 156.034 232.258  1.00 55.38
C
ATOM  32188  C   PRO H 125     110.696 156.527 233.593  1.00 52.08
C
ATOM  32189  O   PRO H 125     111.450 156.950 234.466  1.00 54.17
O
ATOM  32190  CB  PRO H 125     111.737 154.601 232.392  1.00 54.30
C
ATOM  32191  CG  PRO H 125     113.159 154.795 232.783  1.00 53.37
C
ATOM  32192  CD  PRO H 125     113.636 155.990 231.999  1.00 53.25
C
ATOM  32193  HA  PRO H 125     110.511 156.089 231.595  1.00 66.49
H
ATOM  32194  HB2 PRO H 125     111.243 154.125 233.077  1.00 65.19
H
ATOM  32195  HB3 PRO H 125     111.663 154.133 231.544  1.00 65.19
H
ATOM  32196  HG2 PRO H 125     113.217 154.963 233.736  1.00 64.07
H
ATOM  32197  HG3 PRO H 125     113.673 154.005 232.553  1.00 64.07
H
ATOM  32198  HD2 PRO H 125     114.286 156.500 232.506  1.00 63.93
H
ATOM  32199  HD3 PRO H 125     114.017 155.718 231.150  1.00 63.93
H
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ATOM  32200  N   SER H 126     109.389 156.406 233.762  1.00 56.19
N
ATOM  32201  CA  SER H 126     108.798 156.353 235.092  1.00 57.48
C
ATOM  32202  C   SER H 126     108.773 154.904 235.606  1.00 58.74
C
ATOM  32203  O   SER H 126     108.402 153.995 234.866  1.00 59.19
O
ATOM  32204  CB  SER H 126     107.397 156.945 235.033  1.00 63.27
C
ATOM  32205  OG  SER H 126     107.471 158.313 234.663  1.00 65.78
O
ATOM  32206  H   SER H 126     108.819 156.354 233.120  1.00 67.46
H
ATOM  32207  HA  SER H 126     109.323 156.866 235.727  1.00 69.01
H
ATOM  32208  HB2 SER H 126     106.873 156.463 234.372  1.00 75.95
H
ATOM  32209  HB3 SER H 126     106.980 156.872 235.905  1.00 75.95
H
ATOM  32210  HG  SER H 126     106.701 158.611 234.510  1.00 78.96
H
ATOM  32211  N   VAL H 127     109.155 154.694 236.879  1.00 55.85
N
ATOM  32212  CA  VAL H 127     109.206 153.364 237.501  1.00 53.05
C
ATOM  32213  C   VAL H 127     108.130 153.263 238.595  1.00 55.51
C
ATOM  32214  O   VAL H 127     108.190 153.946 239.628  1.00 58.00
O
ATOM  32215  CB  VAL H 127     110.590 153.054 238.075  1.00 44.16
C
ATOM  32216  CG1 VAL H 127     110.648 151.610 238.582  1.00 50.27
C
ATOM  32217  CG2 VAL H 127     111.715 153.275 237.033  1.00 50.29
C
ATOM  32218  H   VAL H 127     109.397 155.324 237.412  1.00 67.04
H
ATOM  32219  HA  VAL H 127     108.985 152.713 236.817  1.00 63.69
H
ATOM  32220  HB  VAL H 127     110.740 153.663 238.813  1.00 53.01
H
ATOM  32221 HG11 VAL H 127     111.565 151.394 238.816  1.00 60.35
H
ATOM  32222 HG12 VAL H 127     110.078 151.525 239.360  1.00 60.35
H
ATOM  32223 HG13 VAL H 127     110.340 151.016 237.879  1.00 60.35
H
ATOM  32224 HG21 VAL H 127     112.559 152.982 237.414  1.00 60.37
H
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ATOM  32225 HG22 VAL H 127     111.515 152.757 236.238  1.00 60.37
H
ATOM  32226 HG23 VAL H 127     111.761 154.218 236.814  1.00 60.37
H
ATOM  32227  N   PHE H 128     107.158 152.389 238.388  1.00 50.97
N
ATOM  32228  CA  PHE H 128     106.054 152.184 239.317  1.00 45.49
C
ATOM  32229  C   PHE H 128     106.110 150.780 239.945  1.00 53.35
C
ATOM  32230  O   PHE H 128     106.448 149.809 239.258  1.00 47.44
O
ATOM  32231  CB  PHE H 128     104.710 152.354 238.600  1.00 46.17
C
ATOM  32232  CG  PHE H 128     104.535 153.699 237.898  1.00 54.15
C
ATOM  32233  CD1 PHE H 128     104.662 154.899 238.603  1.00 59.03
C
ATOM  32234  CD2 PHE H 128     104.210 153.756 236.544  1.00 54.17
C
ATOM  32235  CE1 PHE H 128     104.486 156.131 237.977  1.00 55.14
C
ATOM  32236  CE2 PHE H 128     104.012 154.997 235.893  1.00 53.69
C
ATOM  32237  CZ  PHE H 128     104.165 156.185 236.625  1.00 59.56
C
ATOM  32238  H   PHE H 128     107.110 151.885 237.693  1.00 61.19
H
ATOM  32239  HA  PHE H 128     106.112 152.835 240.033  1.00 54.62
H
ATOM  32240  HB2 PHE H 128     104.628 151.661 237.926  1.00 55.43
H
ATOM  32241  HB3 PHE H 128     103.998 152.269 239.252  1.00 55.43
H
ATOM  32242  HD1 PHE H 128     104.870 154.875 239.509  1.00 70.86
H
ATOM  32243  HD2 PHE H 128     104.119 152.967 236.061  1.00 65.03
H
ATOM  32244  HE1 PHE H 128     104.582 156.918 238.465  1.00 66.20
H
ATOM  32245  HE2 PHE H 128     103.784 155.025 234.992  1.00 64.46
H
ATOM  32246  HZ  PHE H 128     104.052 157.008 236.205  1.00 71.50
H
ATOM  32247  N   PRO H 129     105.815 150.636 241.245  1.00 50.51
N
ATOM  32248  CA  PRO H 129     105.782 149.293 241.842  1.00 54.17
C
ATOM  32249  C   PRO H 129     104.581 148.488 241.370  1.00 45.38
C
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ATOM  32250  O   PRO H 129     103.499 149.024 241.184  1.00 45.02
O
ATOM  32251  CB  PRO H 129     105.671 149.593 243.339  1.00 55.03
C
ATOM  32252  CG  PRO H 129     104.942 150.875 243.362  1.00 49.81
C
ATOM  32253  CD  PRO H 129     105.558 151.662 242.267  1.00 53.53
C
ATOM  32254  HA  PRO H 129     106.598 148.810 241.642  1.00 65.03
H
ATOM  32255  HB2 PRO H 129     105.173 148.894 243.789  1.00 66.06
H
ATOM  32256  HB3 PRO H 129     106.554 149.679 243.733  1.00 66.06
H
ATOM  32257  HG2 PRO H 129     103.998 150.726 243.197  1.00 59.80
H
ATOM  32258  HG3 PRO H 129     105.065 151.314 244.218  1.00 59.80
H
ATOM  32259  HD2 PRO H 129     104.946 152.337 241.936  1.00 64.26
H
ATOM  32260  HD3 PRO H 129     106.385 152.079 242.560  1.00 64.26
H
ATOM  32261  N   LEU H 130     104.808 147.210 241.120  1.00 45.88
N
ATOM  32262  CA  LEU H 130     103.758 146.193 241.032  1.00 51.06
C
ATOM  32263  C   LEU H 130     103.777 145.476 242.400  1.00 45.45
C
ATOM  32264  O   LEU H 130     104.609 144.591 242.662  1.00 49.05
O
ATOM  32265  CB  LEU H 130     104.001 145.243 239.852  1.00 46.42
C
ATOM  32266  CG  LEU H 130     104.184 145.882 238.467  1.00 41.17
C
ATOM  32267  CD1 LEU H 130     104.751 144.874 237.450  1.00 45.33
C
ATOM  32268  CD2 LEU H 130     102.869 146.498 237.992  1.00 47.62
C
ATOM  32269  H   LEU H 130     105.595 146.887 240.991  1.00 55.08
H
ATOM  32270  HA  LEU H 130     102.885 146.593 240.883  1.00 61.30
H
ATOM  32271  HB2 LEU H 130     104.807 144.737 240.039  1.00 55.74
H
ATOM  32272  HB3 LEU H 130     103.241 144.644 239.788  1.00 55.74
H
ATOM  32273  HG  LEU H 130     104.838 146.596 238.531  1.00 49.43
H
ATOM  32274 HD11 LEU H 130     104.839 145.311 236.589  1.00 54.42
H
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ATOM  32275 HD12 LEU H 130     105.618 144.570 237.759  1.00 54.42
H
ATOM  32276 HD13 LEU H 130     104.141 144.122 237.380  1.00 54.42
H
ATOM  32277 HD21 LEU H 130     103.007 146.905 237.121  1.00 57.17
H
ATOM  32278 HD22 LEU H 130     102.198 145.800 237.927  1.00 57.17
H
ATOM  32279 HD23 LEU H 130     102.587 147.171 238.629  1.00 57.17
H
ATOM  32280  N   ALA H 131     102.926 145.920 243.294  1.00 49.91
N
ATOM  32281  CA  ALA H 131     102.992 145.493 244.696  1.00 55.09
C
ATOM  32282  C   ALA H 131     102.337 144.119 244.906  1.00 52.53
C
ATOM  32283  O   ALA H 131     101.242 143.866 244.402  1.00 54.64
O
ATOM  32284  CB  ALA H 131     102.311 146.523 245.595  1.00 48.95
C
ATOM  32285  H   ALA H 131     102.289 146.474 243.127  1.00 59.92
H
ATOM  32286  HA  ALA H 131     103.924 145.412 244.951  1.00 66.13
H
ATOM  32287  HB1 ALA H 131     102.392 146.239 246.519  1.00 58.77
H
ATOM  32288  HB2 ALA H 131     102.744 147.383 245.475  1.00 58.77
H
ATOM  32289  HB3 ALA H 131     101.374 146.586 245.350  1.00 58.77
H
ATOM  32290  N   PRO H 132     102.953 143.240 245.695  1.00 59.50
N
ATOM  32291  CA  PRO H 132     102.275 141.988 246.080  1.00 60.19
C
ATOM  32292  C   PRO H 132     101.136 142.281 247.038  1.00 56.81
C
ATOM  32293  O   PRO H 132     101.086 143.341 247.660  1.00 66.04
O
ATOM  32294  CB  PRO H 132     103.383 141.175 246.759  1.00 57.06
C
ATOM  32295  CG  PRO H 132     104.301 142.193 247.365  1.00 54.06
C
ATOM  32296  CD  PRO H 132     104.232 143.426 246.421  1.00 56.64
C
ATOM  32297  HA  PRO H 132     101.951 141.502 245.306  1.00 72.25
H
ATOM  32298  HB2 PRO H 132     102.999 140.605 247.443  1.00 68.50
H
ATOM  32299  HB3 PRO H 132     103.847 140.638 246.100  1.00 68.50
H
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ATOM  32300  HG2 PRO H 132     103.996 142.422 248.257  1.00 64.90
H
ATOM  32301  HG3 PRO H 132     105.204 141.839 247.404  1.00 64.90
H
ATOM  32302  HD2 PRO H 132     104.220 144.251 246.932  1.00 68.00
H
ATOM  32303  HD3 PRO H 132     104.980 143.429 245.804  1.00 68.00
H
ATOM  32304  N   SER H 133     100.207 141.333 247.149  1.00 77.36
N
ATOM  32305  CA  SER H 133      99.077 141.451 248.101  1.00 88.04
C
ATOM  32306  C   SER H 133      99.469 141.659 249.593  1.00 84.43
C
ATOM  32307  O   SER H 133     100.276 140.913 250.172  1.00 71.71
O
ATOM  32308  CB  SER H 133      98.189 140.211 247.983  1.00 91.06
C
ATOM  32309  OG  SER H 133      97.372 140.304 246.831  1.00 94.19
O
ATOM  32310  H   SER H 133     100.199 140.607 246.687  1.00 92.86
H
ATOM  32311  HA  SER H 133      98.597 142.258 247.855  1.00105.68
H
ATOM  32312  HB2 SER H 133      98.751 139.423 247.912  1.00109.30
H
ATOM  32313  HB3 SER H 133      97.625 140.147 248.769  1.00109.30
H
ATOM  32314  HG  SER H 133      96.948 139.587 246.722  1.00113.05
H
ATOM  32315  N   SER H 136      97.508 135.671 251.037  1.00 96.13
N
ATOM  32316  CA  SER H 136      97.979 135.099 252.302  1.00115.22
C
ATOM  32317  C   SER H 136      99.499 135.153 252.360  1.00107.69
C
ATOM  32318  O   SER H 136     100.182 134.686 251.449  1.00102.58
O
ATOM  32319  CB  SER H 136      97.502 133.648 252.476  1.00104.93
C
ATOM  32320  OG  SER H 136      98.155 132.752 251.582  1.00 95.90
O
ATOM  32321  H   SER H 136      96.656 135.625 250.929  1.00115.38
H
ATOM  32322  HA  SER H 136      97.607 135.613 253.036  1.00138.29
H
ATOM  32323  HB2 SER H 136      97.690 133.368 253.387  1.00125.94
H
ATOM  32324  HB3 SER H 136      96.548 133.612 252.309  1.00125.94
H
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ATOM  32325  HG  SER H 136      98.982 132.752 251.730  1.00115.11
H
ATOM  32326  N   THR H 137     100.026 135.698 253.453  1.00101.01
N
ATOM  32327  CA  THR H 137     101.439 136.024 253.546  1.00101.00
C
ATOM  32328  C   THR H 137     102.208 135.078 254.481  1.00 93.10
C
ATOM  32329  O   THR H 137     103.438 135.183 254.581  1.00 75.03
O
ATOM  32330  CB  THR H 137     101.561 137.518 253.944  1.00110.21
C
ATOM  32331  OG1 THR H 137     102.915 137.994 253.783  1.00 82.93
O
ATOM  32332  CG2 THR H 137     101.014 137.799 255.372  1.00 97.98
C
ATOM  32333  H   THR H 137      99.577 135.888 254.161  1.00121.24
H
ATOM  32334  HA  THR H 137     101.882 135.929 252.688  1.00121.23
H
ATOM  32335  HB  THR H 137     101.002 138.034 253.340  1.00132.27
H
ATOM  32336  HG1 THR H 137     103.408 137.658 254.374  1.00 99.54
H
ATOM  32337 HG21 THR H 137     101.151 138.732 255.601  1.00117.60
H
ATOM  32338 HG22 THR H 137     100.065 137.603 255.408  1.00117.60
H
ATOM  32339 HG23 THR H 137     101.476 137.244 256.019  1.00117.60
H
ATOM  32340  N   SER H 138     101.536 134.099 255.099  1.00 95.38
N
ATOM  32341  CA  SER H 138     102.230 133.104 255.923  1.00 90.54
C
ATOM  32342  C   SER H 138     102.903 132.001 255.103  1.00 73.95
C
ATOM  32343  O   SER H 138     103.726 131.248 255.635  1.00 52.22
O
ATOM  32344  CB  SER H 138     101.248 132.455 256.899  1.00 86.85
C
ATOM  32345  OG  SER H 138     100.931 133.330 257.959  1.00 86.26
O
ATOM  32346  H   SER H 138     100.685 133.989 255.058  1.00114.49
H
ATOM  32347  HA  SER H 138     102.917 133.565 256.427  1.00108.67
H
ATOM  32348  HB2 SER H 138     100.434 132.228 256.423  1.00104.25
H
ATOM  32349  HB3 SER H 138     101.653 131.651 257.264  1.00104.25
H
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ATOM  32350  HG  SER H 138     100.351 132.981 258.456  1.00103.54
H
ATOM  32351  N   GLY H 139     102.553 131.869 253.839  1.00 69.28
N
ATOM  32352  CA  GLY H 139     103.089 130.802 253.024  1.00 63.91
C
ATOM  32353  C   GLY H 139     102.622 131.029 251.603  1.00 71.94
C
ATOM  32354  O   GLY H 139     101.802 131.910 251.326  1.00 77.08
O
ATOM  32355  H   GLY H 139     102.005 132.388 253.428  1.00 83.16
H
ATOM  32356  HA2 GLY H 139     104.060 130.809 253.051  1.00 76.72
H
ATOM  32357  HA3 GLY H 139     102.770 129.942 253.338  1.00 76.72
H
ATOM  32358  N   GLY H 140     103.141 130.212 250.707  1.00 67.44
N
ATOM  32359  CA  GLY H 140     102.795 130.350 249.314  1.00 61.46
C
ATOM  32360  C   GLY H 140     103.788 131.227 248.581  1.00 50.72
C
ATOM  32361  O   GLY H 140     104.937 131.427 249.001  1.00 46.02
O
ATOM  32362  H   GLY H 140     103.691 129.575 250.881  1.00 80.96
H
ATOM  32363  HA2 GLY H 140     102.784 129.476 248.894  1.00 73.78
H
ATOM  32364  HA3 GLY H 140     101.914 130.749 249.236  1.00 73.78
H
ATOM  32365  N   THR H 141     103.342 131.719 247.427  1.00 50.06
N
ATOM  32366  CA  THR H 141     104.212 132.404 246.474  1.00 47.54
C
ATOM  32367  C   THR H 141     103.620 133.782 246.204  1.00 49.72
C
ATOM  32368  O   THR H 141     102.409 133.913 246.008  1.00 49.52
O
ATOM  32369  CB  THR H 141     104.364 131.568 245.187  1.00 48.49
C
ATOM  32370  OG1 THR H 141     105.061 130.351 245.505  1.00 54.27
O
ATOM  32371  CG2 THR H 141     105.131 132.336 244.028  1.00 48.45
C
ATOM  32372  H   THR H 141     102.524 131.668 247.170  1.00 60.10
H
ATOM  32373  HA  THR H 141     105.104 132.533 246.833  1.00 57.07
H
ATOM  32374  HB  THR H 141     103.479 131.378 244.840  1.00 58.21
H
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ATOM  32375  HG1 THR H 141     105.332 129.983 244.800  1.00 65.15
H
ATOM  32376 HG21 THR H 141     105.275 131.742 243.274  1.00 58.17
H
ATOM  32377 HG22 THR H 141     104.612 133.100 243.735  1.00 58.17
H
ATOM  32378 HG23 THR H 141     105.994 132.647 244.351  1.00 58.17
H
ATOM  32379  N   ALA H 142     104.457 134.814 246.258  1.00 42.79
N
ATOM  32380  CA  ALA H 142     104.031 136.176 245.958  1.00 52.32
C
ATOM  32381  C   ALA H 142     104.724 136.626 244.674  1.00 46.22
C
ATOM  32382  O   ALA H 142     105.893 136.318 244.462  1.00 42.83
O
ATOM  32383  CB  ALA H 142     104.381 137.120 247.112  1.00 47.27
C
ATOM  32384  H   ALA H 142     105.289 134.749 246.469  1.00 51.38
H
ATOM  32385  HA  ALA H 142     103.070 136.215 245.828  1.00 62.81
H
ATOM  32386  HB1 ALA H 142     104.144 138.027 246.862  1.00 56.75
H
ATOM  32387  HB2 ALA H 142     103.885 136.855 247.902  1.00 56.75
H
ATOM  32388  HB3 ALA H 142     105.333 137.066 247.288  1.00 56.75
H
ATOM  32389  N   ALA H 143     104.018 137.344 243.803  1.00 45.92
N
ATOM  32390  CA  ALA H 143     104.680 137.984 242.681  1.00 43.45
C
ATOM  32391  C   ALA H 143     104.772 139.486 242.933  1.00 44.97
C
ATOM  32392  O   ALA H 143     103.886 140.087 243.542  1.00 44.10
O
ATOM  32393  CB  ALA H 143     103.955 137.665 241.382  1.00 45.95
C
ATOM  32394  H   ALA H 143     103.169 137.469 243.846  1.00 55.13
H
ATOM  32395  HA  ALA H 143     105.589 137.661 242.582  1.00 52.16
H
ATOM  32396  HB1 ALA H 143     104.378 138.150 240.657  1.00 55.17
H
ATOM  32397  HB2 ALA H 143     104.009 136.710 241.218  1.00 55.17
H
ATOM  32398  HB3 ALA H 143     103.028 137.934 241.464  1.00 55.17
H
ATOM  32399  N   LEU H 144     105.899 140.064 242.558  1.00 46.03
N
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ATOM  32400  CA  LEU H 144     106.060 141.500 242.650  1.00 53.60
C
ATOM  32401  C   LEU H 144     106.951 141.960 241.500  1.00 50.94
C
ATOM  32402  O   LEU H 144     107.648 141.160 240.865  1.00 43.91
O
ATOM  32403  CB  LEU H 144     106.617 141.919 244.015  1.00 47.16
C
ATOM  32404  CG  LEU H 144     107.825 141.212 244.552  1.00 52.52
C
ATOM  32405  CD1 LEU H 144     109.059 141.938 244.157  1.00 57.63
C
ATOM  32406  CD2 LEU H 144     107.741 141.085 246.067  1.00 54.49
C
ATOM  32407  H   LEU H 144     106.583 139.646 242.248  1.00 55.26
H
ATOM  32408  HA  LEU H 144     105.201 141.940 242.549  1.00 64.35
H
ATOM  32409  HB2 LEU H 144     106.852 142.859 243.957  1.00 56.62
H
ATOM  32410  HB3 LEU H 144     105.912 141.792 244.669  1.00 56.62
H
ATOM  32411  HG  LEU H 144     107.863 140.317 244.180  1.00 63.05
H
ATOM  32412 HD11 LEU H 144     109.826 141.493 244.551  1.00 69.19
H
ATOM  32413 HD12 LEU H 144     109.134 141.933 243.190  1.00 69.19
H
ATOM  32414 HD13 LEU H 144     109.006 142.851 244.481  1.00 69.19
H
ATOM  32415 HD21 LEU H 144     108.541 140.640 246.391  1.00 65.41
H
ATOM  32416 HD22 LEU H 144     107.676 141.973 246.454  1.00 65.41
H
ATOM  32417 HD23 LEU H 144     106.957 140.565 246.297  1.00 65.41
H
ATOM  32418  N   GLY H 145     106.894 143.258 241.213  1.00 51.60
N
ATOM  32419  CA  GLY H 145     107.733 143.755 240.146  1.00 51.84
C
ATOM  32420  C   GLY H 145     107.686 145.258 239.999  1.00 47.92
C
ATOM  32421  O   GLY H 145     107.209 145.971 240.875  1.00 45.33
O
ATOM  32422  H   GLY H 145     106.398 143.841 241.609  1.00 61.95
H
ATOM  32423  HA2 GLY H 145     108.653 143.497 240.320  1.00 62.23
H
ATOM  32424  HA3 GLY H 145     107.447 143.360 239.307  1.00 62.23
H
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ATOM  32425  N   CYS H 146     108.198 145.713 238.850  1.00 44.88
N
ATOM  32426  CA  CYS H 146     108.313 147.120 238.482  1.00 53.54
C
ATOM  32427  C   CYS H 146     107.781 147.308 237.074  1.00 49.54
C
ATOM  32428  O   CYS H 146     108.112 146.534 236.166  1.00 48.49
O
ATOM  32429  CB  CYS H 146     109.773 147.594 238.578  1.00 51.93
C
ATOM  32430  SG  CYS H 146     110.353 147.834 240.329  1.00 72.96
S
ATOM  32431  H   CYS H 146     108.501 145.193 238.235  1.00 53.89
H
ATOM  32432  HA  CYS H 146     107.777 147.663 239.082  1.00 64.27
H
ATOM  32433  HB2 CYS H 146     110.346 146.932 238.161  1.00 62.34
H
ATOM  32434  HB3 CYS H 146     109.859 148.444 238.117  1.00 62.34
H
ATOM  32435  N   LEU H 147     106.923 148.303 236.913  1.00 48.59
N
ATOM  32436  CA  LEU H 147     106.457 148.759 235.609  1.00 44.72
C
ATOM  32437  C   LEU H 147     107.342 149.925 235.184  1.00 51.18
C
ATOM  32438  O   LEU H 147     107.371 150.949 235.860  1.00 48.14
O
ATOM  32439  CB  LEU H 147     105.001 149.173 235.705  1.00 46.32
C
ATOM  32440  CG  LEU H 147     104.328 149.656 234.447  1.00 47.72
C
ATOM  32441  CD1 LEU H 147     104.277 148.524 233.493  1.00 54.16
C
ATOM  32442  CD2 LEU H 147     102.913 150.231 234.750  1.00 47.19
C
ATOM  32443  H   LEU H 147     106.582 148.747 237.567  1.00 58.33
H
ATOM  32444  HA  LEU H 147     106.535 148.052 234.948  1.00 53.69
H
ATOM  32445  HB2 LEU H 147     104.494 148.407 236.017  1.00 55.62
H
ATOM  32446  HB3 LEU H 147     104.940 149.896 236.349  1.00 55.62
H
ATOM  32447  HG  LEU H 147     104.826 150.385 234.047  1.00 57.29
H
ATOM  32448 HD11 LEU H 147     103.688 148.758 232.758  1.00 65.02
H
ATOM  32449 HD12 LEU H 147     105.171 148.351 233.161  1.00 65.02
H
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ATOM  32450 HD13 LEU H 147     103.936 147.740 233.952  1.00 65.02
H
ATOM  32451 HD21 LEU H 147     102.538 150.595 233.933  1.00 56.65
H
ATOM  32452 HD22 LEU H 147     102.346 149.516 235.082  1.00 56.65
H
ATOM  32453 HD23 LEU H 147     102.992 150.927 235.419  1.00 56.65
H
ATOM  32454  N   VAL H 148     108.110 149.741 234.108  1.00 48.34
N
ATOM  32455  CA  VAL H 148     109.049 150.731 233.606  1.00 48.84
C
ATOM  32456  C   VAL H 148     108.409 151.345 232.360  1.00 51.77
C
ATOM  32457  O   VAL H 148     108.430 150.754 231.273  1.00 50.25
O
ATOM  32458  CB  VAL H 148     110.415 150.116 233.319  1.00 53.30
C
ATOM  32459  CG1 VAL H 148     111.358 151.170 232.690  1.00 58.30
C
ATOM  32460  CG2 VAL H 148     111.020 149.486 234.592  1.00 43.12
C
ATOM  32461  H   VAL H 148     108.101 149.022 233.638  1.00 58.04
H
ATOM  32462  HA  VAL H 148     109.172 151.436 234.261  1.00 58.63
H
ATOM  32463  HB  VAL H 148     110.308 149.397 232.677  1.00 63.99
H
ATOM  32464 HG11 VAL H 148     112.240 150.780 232.582  1.00 69.99
H
ATOM  32465 HG12 VAL H 148     111.004 151.435 231.827  1.00 69.99
H
ATOM  32466 HG13 VAL H 148     111.407 151.941 233.278  1.00 69.99
H
ATOM  32467 HG21 VAL H 148     111.923 149.188 234.399  1.00 51.77
H
ATOM  32468 HG22 VAL H 148     111.035 150.151 235.298  1.00 51.77
H
ATOM  32469 HG23 VAL H 148     110.474 148.730 234.862  1.00 51.77
H
ATOM  32470  N   LYS H 149     107.818 152.538 232.516  1.00 50.76
N
ATOM  32471  CA  LYS H 149     106.857 153.053 231.559  1.00 53.24
C
ATOM  32472  C   LYS H 149     107.331 154.329 230.848  1.00 56.04
C
ATOM  32473  O   LYS H 149     108.040 155.163 231.408  1.00 50.87
O
ATOM  32474  CB  LYS H 149     105.530 153.312 232.257  1.00 53.91
C
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ATOM  32475  CG  LYS H 149     104.347 153.229 231.304  1.00 61.28
C
ATOM  32476  CD  LYS H 149     103.051 153.630 231.915  1.00 57.05
C
ATOM  32477  CE  LYS H 149     101.902 153.581 230.865  1.00 61.51
C
ATOM  32478  NZ  LYS H 149     101.898 154.769 229.976  1.00 74.07
N
ATOM  32479  H   LYS H 149     107.967 153.065 233.178  1.00 60.94
H
ATOM  32480  HA  LYS H 149     106.747 152.396 230.854  1.00 63.91
H
ATOM  32481  HB2 LYS H 149     105.403 152.651 232.954  1.00 64.72
H
ATOM  32482  HB3 LYS H 149     105.542 154.202 232.644  1.00 64.72
H
ATOM  32483  HG2 LYS H 149     104.513 153.817 230.550  1.00 73.57
H
ATOM  32484  HG3 LYS H 149     104.257 152.314 230.997  1.00 73.57
H
ATOM  32485  HD2 LYS H 149     102.832 153.023 232.640  1.00 68.48
H
ATOM  32486  HD3 LYS H 149     103.120 154.537 232.253  1.00 68.48
H
ATOM  32487  HE2 LYS H 149     102.011 152.791 230.312  1.00 73.83
H
ATOM  32488  HE3 LYS H 149     101.050 153.549 231.328  1.00 73.83
H
ATOM  32489  HZ1 LYS H 149     102.623 154.766 229.460  1.00 88.91
H
ATOM  32490  HZ2 LYS H 149     101.174 154.760 229.457  1.00 88.91
H
ATOM  32491  HZ3 LYS H 149     101.893 155.514 230.463  1.00 88.91
H
ATOM  32492  N   ASP H 150     106.896 154.479 229.597  1.00 55.51
N
ATOM  32493  CA  ASP H 150     107.019 155.726 228.828  1.00 56.59
C
ATOM  32494  C   ASP H 150     108.464 156.200 228.720  1.00 56.36
C
ATOM  32495  O   ASP H 150     108.805 157.322 229.104  1.00 57.82
O
ATOM  32496  CB  ASP H 150     106.169 156.848 229.435  1.00 52.53
C
ATOM  32497  CG  ASP H 150     104.682 156.580 229.357  1.00 58.88
C
ATOM  32498  OD1 ASP H 150     104.259 155.755 228.520  1.00 63.68
O
ATOM  32499  OD2 ASP H 150     103.927 157.234 230.129  1.00 62.32
O1-
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ATOM  32500  H   ASP H 150     106.510 153.852 229.152  1.00 66.64
H
ATOM  32501  HA  ASP H 150     106.698 155.522 227.935  1.00 67.93
H
ATOM  32502  HB2 ASP H 150     106.406 156.950 230.370  1.00 63.06
H
ATOM  32503  HB3 ASP H 150     106.349 157.672 228.954  1.00 63.06
H
ATOM  32504  N   TYR H 151     109.307 155.340 228.170  1.00 54.83
N
ATOM  32505  CA  TYR H 151     110.676 155.704 227.862  1.00 54.37
C
ATOM  32506  C   TYR H 151     110.931 155.560 226.362  1.00 48.70
C
ATOM  32507  O   TYR H 151     110.108 155.025 225.594  1.00 48.40
O
ATOM  32508  CB  TYR H 151     111.671 154.886 228.677  1.00 50.08
C
ATOM  32509  CG  TYR H 151     111.688 153.403 228.329  1.00 55.77
C
ATOM  32510  CD1 TYR H 151     110.836 152.523 228.969  1.00 50.72
C
ATOM  32511  CD2 TYR H 151     112.535 152.894 227.341  1.00 51.87
C
ATOM  32512  CE1 TYR H 151     110.833 151.174 228.668  1.00 43.43
C
ATOM  32513  CE2 TYR H 151     112.538 151.540 227.023  1.00 51.74
C
ATOM  32514  CZ  TYR H 151     111.657 150.672 227.706  1.00 50.86
C
ATOM  32515  OH  TYR H 151     111.574 149.317 227.430  1.00 51.35
O
ATOM  32516  H   TYR H 151     109.104 154.530 227.964  1.00 65.83
H
ATOM  32517  HA  TYR H 151     110.815 156.637 228.093  1.00 65.27
H
ATOM  32518  HB2 TYR H 151     112.563 155.235 228.520  1.00 60.12
H
ATOM  32519  HB3 TYR H 151     111.445 154.966 229.617  1.00 60.12
H
ATOM  32520  HD1 TYR H 151     110.252 152.846 229.618  1.00 60.89
H
ATOM  32521  HD2 TYR H 151     113.107 153.471 226.890  1.00 62.28
H
ATOM  32522  HE1 TYR H 151     110.264 150.601 229.129  1.00 52.15
H
ATOM  32523  HE2 TYR H 151     113.112 151.211 226.369  1.00 62.12
H
ATOM  32524  HH  TYR H 151     112.215 149.085 226.937  1.00 61.65
H
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ATOM  32525  N   PHE H 152     112.070 156.096 225.954  1.00 43.60
N
ATOM  32526  CA  PHE H 152     112.449 156.191 224.536  1.00 47.66
C
ATOM  32527  C   PHE H 152     113.885 156.669 224.421  1.00 44.26
C
ATOM  32528  O   PHE H 152     114.279 157.568 225.168  1.00 47.97
O
ATOM  32529  CB  PHE H 152     111.583 157.137 223.727  1.00 49.69
C
ATOM  32530  CG  PHE H 152     111.928 157.128 222.239  1.00 57.20
C
ATOM  32531  CD1 PHE H 152     111.211 156.345 221.362  1.00 51.68
C
ATOM  32532  CD2 PHE H 152     112.996 157.879 221.751  1.00 57.63
C
ATOM  32533  CE1 PHE H 152     111.525 156.317 220.024  1.00 51.84
C
ATOM  32534  CE2 PHE H 152     113.344 157.851 220.411  1.00 54.07
C
ATOM  32535  CZ  PHE H 152     112.605 157.082 219.543  1.00 61.50
C
ATOM  32536  H   PHE H 152     112.660 156.423 226.486  1.00 52.34
H
ATOM  32537  HA  PHE H 152     112.339 155.300 224.167  1.00 57.22
H
ATOM  32538  HB2 PHE H 152     110.655 156.873 223.820  1.00 59.66
H
ATOM  32539  HB3 PHE H 152     111.707 158.040 224.059  1.00 59.66
H
ATOM  32540  HD1 PHE H 152     110.504 155.830 221.678  1.00 62.04
H
ATOM  32541  HD2 PHE H 152     113.486 158.410 222.337  1.00 69.19
H
ATOM  32542  HE1 PHE H 152     111.028 155.793 219.437  1.00 62.23
H
ATOM  32543  HE2 PHE H 152     114.067 158.349 220.102  1.00 64.92
H
ATOM  32544  HZ  PHE H 152     112.817 157.067 218.639  1.00 73.83
H
ATOM  32545  N   PRO H 153     114.737 156.035 223.574  1.00 49.28
N
ATOM  32546  CA  PRO H 153     114.445 154.804 222.852  1.00 51.79
C
ATOM  32547  C   PRO H 153     114.684 153.568 223.767  1.00 55.82
C
ATOM  32548  O   PRO H 153     114.916 153.727 224.982  1.00 51.13
O
ATOM  32549  CB  PRO H 153     115.457 154.861 221.697  1.00 50.18
C
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ATOM  32550  CG  PRO H 153     116.694 155.426 222.380  1.00 43.11
C
ATOM  32551  CD  PRO H 153     116.178 156.361 223.458  1.00 49.04
C
ATOM  32552  HA  PRO H 153     113.547 154.774 222.486  1.00 62.18
H
ATOM  32553  HB2 PRO H 153     115.619 153.974 221.341  1.00 60.24
H
ATOM  32554  HB3 PRO H 153     115.138 155.447 220.992  1.00 60.24
H
ATOM  32555  HG2 PRO H 153     117.212 154.704 222.772  1.00 51.76
H
ATOM  32556  HG3 PRO H 153     117.234 155.909 221.736  1.00 51.76
H
ATOM  32557  HD2 PRO H 153     116.633 156.196 224.299  1.00 58.88
H
ATOM  32558  HD3 PRO H 153     116.298 157.286 223.191  1.00 58.88
H
ATOM  32559  N   GLU H 154     114.636 152.354 223.190  1.00 56.45
N
ATOM  32560  CA  GLU H 154     115.234 151.181 223.826  1.00 55.67
C
ATOM  32561  C   GLU H 154     116.723 151.410 223.994  1.00 47.10
C
ATOM  32562  O   GLU H 154     117.280 152.306 223.353  1.00 57.37
O
ATOM  32563  CB  GLU H 154     115.037 149.912 222.984  1.00 48.73
C
ATOM  32564  CG  GLU H 154     113.632 149.435 222.847  1.00 50.52
C
ATOM  32565  CD  GLU H 154     113.173 148.574 224.037  1.00 69.19
C
ATOM  32566  OE1 GLU H 154     112.466 147.568 223.769  1.00 67.29
O
ATOM  32567  OE2 GLU H 154     113.508 148.900 225.220  1.00 58.43
O1-
ATOM  32568  H   GLU H 154     114.264 152.189 222.433  1.00 67.77
H
ATOM  32569  HA  GLU H 154     114.807 151.045 224.686  1.00 66.83
H
ATOM  32570  HB2 GLU H 154     115.369 150.086 222.089  1.00 58.50
H
ATOM  32571  HB3 GLU H 154     115.545 149.193 223.392  1.00 58.50
H
ATOM  32572  HG2 GLU H 154     113.044 150.204 222.790  1.00 60.65
H
ATOM  32573  HG3 GLU H 154     113.557 148.899 222.042  1.00 60.65
H
ATOM  32574  N   PRO H 155     117.408 150.621 224.874  1.00 54.70
N
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ATOM  32575  CA  PRO H 155     116.907 149.695 225.898  1.00 51.37
C
ATOM  32576  C   PRO H 155     116.934 150.232 227.357  1.00 49.93
C
ATOM  32577  O   PRO H 155     117.568 151.227 227.676  1.00 50.37
O
ATOM  32578  CB  PRO H 155     117.877 148.539 225.774  1.00 48.82
C
ATOM  32579  CG  PRO H 155     119.235 149.297 225.654  1.00 50.84
C
ATOM  32580  CD  PRO H 155     118.888 150.559 224.819  1.00 48.76
C
ATOM  32581  HA  PRO H 155     115.996 149.443 225.684  1.00 61.68
H
ATOM  32582  HB2 PRO H 155     117.845 147.976 226.563  1.00 58.61
H
ATOM  32583  HB3 PRO H 155     117.687 148.012 224.982  1.00 58.61
H
ATOM  32584  HG2 PRO H 155     119.562 149.539 226.535  1.00 61.03
H
ATOM  32585  HG3 PRO H 155     119.889 148.744 225.199  1.00 61.03
H
ATOM  32586  HD2 PRO H 155     119.280 151.351 225.217  1.00 58.53
H
ATOM  32587  HD3 PRO H 155     119.193 150.459 223.905  1.00 58.53
H
ATOM  32588  N   VAL H 156     116.236 149.546 228.253  1.00 55.37
N
ATOM  32589  CA  VAL H 156     116.483 149.662 229.688  1.00 59.74
C
ATOM  32590  C   VAL H 156     117.086 148.355 230.167  1.00 51.84
C
ATOM  32591  O   VAL H 156     116.893 147.298 229.574  1.00 53.35
O
ATOM  32592  CB  VAL H 156     115.213 149.967 230.520  1.00 63.54
C
ATOM  32593  CG1 VAL H 156     114.712 151.353 230.265  1.00 53.10
C
ATOM  32594  CG2 VAL H 156     114.112 148.954 230.228  1.00 58.11
C
ATOM  32595  H   VAL H 156     115.604 148.997 228.054  1.00 66.47
H
ATOM  32596  HA  VAL H 156     117.105 150.394 229.819  1.00 71.72
H
ATOM  32597  HB  VAL H 156     115.453 149.901 231.458  1.00 76.27
H
ATOM  32598 HG11 VAL H 156     113.933 151.515 230.821  1.00 63.75
H
ATOM  32599 HG12 VAL H 156     115.412 151.987 230.483  1.00 63.75
H
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ATOM  32600 HG13 VAL H 156     114.472 151.433 229.328  1.00 63.75
H
ATOM  32601 HG21 VAL H 156     113.315 149.201 230.722  1.00 69.75
H
ATOM  32602 HG22 VAL H 156     113.925 148.958 229.276  1.00 69.75
H
ATOM  32603 HG23 VAL H 156     114.412 148.074 230.503  1.00 69.75
H
ATOM  32604  N   THR H 157     117.793 148.424 231.280  1.00 57.28
N
ATOM  32605  CA  THR H 157     118.198 147.217 231.979  1.00 56.75
C
ATOM  32606  C   THR H 157     117.504 147.216 233.332  1.00 51.76
C
ATOM  32607  O   THR H 157     117.192 148.268 233.889  1.00 52.99
O
ATOM  32608  CB  THR H 157     119.734 147.103 232.120  1.00 60.37
C
ATOM  32609  OG1 THR H 157     120.219 148.092 233.022  1.00 62.25
O
ATOM  32610  CG2 THR H 157     120.408 147.283 230.771  1.00 57.39
C
ATOM  32611  H   THR H 157     118.049 149.156 231.650  1.00 68.77
H
ATOM  32612  HA  THR H 157     117.930 146.425 231.489  1.00 68.13
H
ATOM  32613  HB  THR H 157     119.958 146.222 232.462  1.00 72.47
H
ATOM  32614  HG1 THR H 157     121.049 148.013 233.117  1.00 74.73
H
ATOM  32615 HG21 THR H 157     121.355 147.085 230.843  1.00 68.89
H
ATOM  32616 HG22 THR H 157     120.012 146.685 230.118  1.00 68.89
H
ATOM  32617 HG23 THR H 157     120.300 148.198 230.465  1.00 68.89
H
ATOM  32618  N   VAL H 158     117.156 146.028 233.798  1.00 54.15
N
ATOM  32619  CA  VAL H 158     116.534 145.850 235.105  1.00 50.23
C
ATOM  32620  C   VAL H 158     117.289 144.746 235.828  1.00 52.46
C
ATOM  32621  O   VAL H 158     117.475 143.646 235.286  1.00 50.77
O
ATOM  32622  CB  VAL H 158     115.040 145.491 235.013  1.00 48.63
C
ATOM  32623  CG1 VAL H 158     114.454 145.493 236.406  1.00 58.59
C
ATOM  32624  CG2 VAL H 158     114.289 146.447 234.154  1.00 56.23
C
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ATOM  32625  H   VAL H 158     117.271 145.292 233.367  1.00 65.01
H
ATOM  32626  HA  VAL H 158     116.609 146.679 235.603  1.00 60.30
H
ATOM  32627  HB  VAL H 158     114.956 144.613 234.609  1.00 58.38
H
ATOM  32628 HG11 VAL H 158     113.488 145.422 236.342  1.00 70.33
H
ATOM  32629 HG12 VAL H 158     114.808 144.737 236.899  1.00 70.33
H
ATOM  32630 HG13 VAL H 158     114.696 146.321 236.849  1.00 70.33
H
ATOM  32631 HG21 VAL H 158     113.348 146.206 234.163  1.00 67.50
H
ATOM  32632 HG22 VAL H 158     114.404 147.344 234.504  1.00 67.50
H
ATOM  32633 HG23 VAL H 158     114.634 146.398 233.249  1.00 67.50
H
ATOM  32634  N   SER H 159     117.769 145.050 237.016  1.00 53.58
N
ATOM  32635  CA  SER H 159     118.240 144.039 237.935  1.00 49.62
C
ATOM  32636  C   SER H 159     117.419 144.170 239.208  1.00 51.54
C
ATOM  32637  O   SER H 159     116.612 145.098 239.359  1.00 51.35
O
ATOM  32638  CB  SER H 159     119.712 144.206 238.219  1.00 49.73
C
ATOM  32639  OG  SER H 159     119.900 145.342 239.020  1.00 55.03
O
ATOM  32640  H   SER H 159     117.833 145.854 237.319  1.00 64.32
H
ATOM  32641  HA  SER H 159     118.124 143.149 237.567  1.00 59.57
H
ATOM  32642  HB2 SER H 159     120.042 143.423 238.689  1.00 59.70
H
ATOM  32643  HB3 SER H 159     120.192 144.317 237.383  1.00 59.70
H
ATOM  32644  HG  SER H 159     119.669 145.178 239.810  1.00 66.07
H
ATOM  32645  N   TRP H 160     117.624 143.212 240.109  1.00 50.76
N
ATOM  32646  CA  TRP H 160     116.898 143.117 241.373  1.00 52.98
C
ATOM  32647  C   TRP H 160     117.887 142.951 242.506  1.00 43.86
C
ATOM  32648  O   TRP H 160     118.809 142.136 242.408  1.00 48.78
O
ATOM  32649  CB  TRP H 160     115.928 141.936 241.392  1.00 49.32
C
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ATOM  32650  CG  TRP H 160     114.734 142.209 240.646  1.00 40.81
C
ATOM  32651  CD1 TRP H 160     114.520 141.912 239.358  1.00 47.74
C
ATOM  32652  CD2 TRP H 160     113.568 142.879 241.112  1.00 42.69
C
ATOM  32653  NE1 TRP H 160     113.280 142.356 238.966  1.00 46.33
N
ATOM  32654  CE2 TRP H 160     112.669 142.940 240.032  1.00 43.74
C
ATOM  32655  CE3 TRP H 160     113.182 143.415 242.347  1.00 51.84
C
ATOM  32656  CZ2 TRP H 160     111.410 143.499 240.138  1.00 43.87
C
ATOM  32657  CZ3 TRP H 160     111.921 143.980 242.456  1.00 50.51
C
ATOM  32658  CH2 TRP H 160     111.052 144.033 241.346  1.00 48.74
C
ATOM  32659  H   TRP H 160     118.202 142.584 240.008  1.00 60.95
H
ATOM  32660  HA  TRP H 160     116.394 143.936 241.496  1.00 63.61
H
ATOM  32661  HB2 TRP H 160     116.362 141.162 241.000  1.00 59.22
H
ATOM  32662  HB3 TRP H 160     115.676 141.745 242.309  1.00 59.22
H
ATOM  32663  HD1 TRP H 160     115.124 141.467 238.806  1.00 57.32
H
ATOM  32664  HE1 TRP H 160     112.945 142.278 238.178  1.00 55.62
H
ATOM  32665  HE3 TRP H 160     113.759 143.391 243.076  1.00 62.23
H
ATOM  32666  HZ2 TRP H 160     110.827 143.510 239.414  1.00 52.67
H
ATOM  32667  HZ3 TRP H 160     111.645 144.329 243.272  1.00 60.64
H
ATOM  32668  HH2 TRP H 160     110.220 144.440 241.436  1.00 58.52
H
ATOM  32669  N   ASN H 161     117.709 143.731 243.573  1.00 47.30
N
ATOM  32670  CA  ASN H 161     118.647 143.727 244.703  1.00 48.86
C
ATOM  32671  C   ASN H 161     120.101 143.778 244.227  1.00 52.93
C
ATOM  32672  O   ASN H 161     120.981 143.086 244.749  1.00 49.63
O
ATOM  32673  CB  ASN H 161     118.396 142.512 245.606  1.00 50.46
C
ATOM  32674  CG  ASN H 161     117.063 142.579 246.274  1.00 51.70
C
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ATOM  32675  OD1 ASN H 161     116.357 143.594 246.169  1.00 59.37
O
ATOM  32676  ND2 ASN H 161     116.693 141.519 246.986  1.00 51.53
N
ATOM  32677  H   ASN H 161     117.049 144.275 243.670  1.00 56.79
H
ATOM  32678  HA  ASN H 161     118.499 144.530 245.228  1.00 58.66
H
ATOM  32679  HB2 ASN H 161     118.425 141.704 245.070  1.00 60.57
H
ATOM  32680  HB3 ASN H 161     119.078 142.477 246.294  1.00 60.57
H
ATOM  32681 HD21 ASN H 161     115.935 141.515 247.387  1.00 61.86
H
ATOM  32682 HD22 ASN H 161     117.215 140.838 247.043  1.00 61.86
H
ATOM  32683  N   SER H 162     120.358 144.607 243.204  1.00 58.50
N
ATOM  32684  CA  SER H 162     121.715 144.856 242.730  1.00 60.93
C
ATOM  32685  C   SER H 162     122.392 143.559 242.278  1.00 59.08
C
ATOM  32686  O   SER H 162     123.560 143.331 242.558  1.00 58.77
O
ATOM  32687  CB  SER H 162     122.548 145.553 243.818  1.00 57.09
C
ATOM  32688  OG  SER H 162     122.037 146.855 244.099  1.00 72.73
O
ATOM  32689  H   SER H 162     119.753 145.037 242.769  1.00 70.23
H
ATOM  32690  HA  SER H 162     121.667 145.441 241.957  1.00 73.15
H
ATOM  32691  HB2 SER H 162     122.518 145.020 244.629  1.00 68.54
H
ATOM  32692  HB3 SER H 162     123.465 145.634 243.510  1.00 68.54
H
ATOM  32693  HG  SER H 162     122.589 147.286 244.562  1.00 87.30
H
ATOM  32694  N   GLY H 163     121.659 142.684 241.593  1.00 55.68
N
ATOM  32695  CA  GLY H 163     122.240 141.437 241.139  1.00 53.28
C
ATOM  32696  C   GLY H 163     122.094 140.251 242.072  1.00 49.54
C
ATOM  32697  O   GLY H 163     122.215 139.121 241.612  1.00 62.59
O
ATOM  32698  H   GLY H 163     120.832 142.794 241.383  1.00 66.84
H
ATOM  32699  HA2 GLY H 163     121.825 141.196 240.297  1.00 63.97
H
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ATOM  32700  HA3 GLY H 163     123.190 141.577 240.996  1.00 63.97
H
ATOM  32701  N   ALA H 164     121.794 140.459 243.357  1.00 56.25
N
ATOM  32702  CA  ALA H 164     121.759 139.345 244.290  1.00 54.25
C
ATOM  32703  C   ALA H 164     120.488 138.509 244.187  1.00 63.06
C
ATOM  32704  O   ALA H 164     120.382 137.485 244.882  1.00 62.91
O
ATOM  32705  CB  ALA H 164     121.895 139.856 245.731  1.00 57.33
C
ATOM  32706  H   ALA H 164     121.611 141.225 243.701  1.00 67.53
H
ATOM  32707  HA  ALA H 164     122.514 138.768 244.096  1.00 65.13
H
ATOM  32708  HB1 ALA H 164     121.815 139.106 246.341  1.00 68.82
H
ATOM  32709  HB2 ALA H 164     122.764 140.275 245.836  1.00 68.82
H
ATOM  32710  HB3 ALA H 164     121.193 140.501 245.904  1.00 68.82
H
ATOM  32711  N   LEU H 165     119.511 138.948 243.390  1.00 57.44
N
ATOM  32712  CA  LEU H 165     118.261 138.225 243.177  1.00 45.85
C
ATOM  32713  C   LEU H 165     118.109 138.052 241.671  1.00 49.44
C
ATOM  32714  O   LEU H 165     117.827 139.013 240.946  1.00 53.51
O
ATOM  32715  CB  LEU H 165     117.074 138.951 243.816  1.00 45.10
C
ATOM  32716  CG  LEU H 165     115.658 138.386 243.578  1.00 45.68
C
ATOM  32717  CD1 LEU H 165     115.541 136.917 244.015  1.00 45.35
C
ATOM  32718  CD2 LEU H 165     114.620 139.290 244.260  1.00 48.11
C
ATOM  32719  H   LEU H 165     119.554 139.686 242.949  1.00 68.96
H
ATOM  32720  HA  LEU H 165     118.294 137.346 243.586  1.00 55.04
H
ATOM  32721  HB2 LEU H 165     117.214 138.953 244.776  1.00 54.14
H
ATOM  32722  HB3 LEU H 165     117.070 139.860 243.479  1.00 54.14
H
ATOM  32723  HG  LEU H 165     115.470 138.383 242.626  1.00 54.84
H
ATOM  32724 HD11 LEU H 165     114.613 136.641 243.953  1.00 54.45
H
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ATOM  32725 HD12 LEU H 165     116.091 136.369 243.433  1.00 54.45
H
ATOM  32726 HD13 LEU H 165     115.848 136.835 244.932  1.00 54.45
H
ATOM  32727 HD21 LEU H 165     113.730 138.971 244.040  1.00 57.76
H
ATOM  32728 HD22 LEU H 165     114.756 139.259 245.220  1.00 57.76
H
ATOM  32729 HD23 LEU H 165     114.734 140.199 243.939  1.00 57.76
H
ATOM  32730  N   THR H 166     118.347 136.832 241.210  1.00 53.90
N
ATOM  32731  CA  THR H 166     118.199 136.462 239.821  1.00 55.85
C
ATOM  32732  C   THR H 166     117.224 135.319 239.603  1.00 48.03
C
ATOM  32733  O   THR H 166     116.580 135.274 238.553  1.00 51.48
O
ATOM  32734  CB  THR H 166     119.573 136.088 239.235  1.00 54.09
C
ATOM  32735  OG1 THR H 166     120.185 135.089 240.046  1.00 59.59
O
ATOM  32736  CG2 THR H 166     120.496 137.336 239.185  1.00 59.02
C
ATOM  32737  H   THR H 166     118.606 136.179 241.706  1.00 64.71
H
ATOM  32738  HA  THR H 166     117.863 137.220 239.317  1.00 67.05
H
ATOM  32739  HB  THR H 166     119.457 135.747 238.334  1.00 64.93
H
ATOM  32740  HG1 THR H 166     119.755 134.370 239.990  1.00 71.53
H
ATOM  32741 HG21 THR H 166     121.377 137.084 238.867  1.00 70.85
H
ATOM  32742 HG22 THR H 166     120.123 138.000 238.583  1.00 70.85
H
ATOM  32743 HG23 THR H 166     120.579 137.723 240.070  1.00 70.85
H
ATOM  32744  N   SER H 167     117.074 134.421 240.570  1.00 54.42
N
ATOM  32745  CA  SER H 167     116.170 133.288 240.423  1.00 52.69
C
ATOM  32746  C   SER H 167     114.731 133.760 240.434  1.00 46.80
C
ATOM  32747  O   SER H 167     114.337 134.531 241.314  1.00 52.02
O
ATOM  32748  CB  SER H 167     116.383 132.282 241.556  1.00 67.72
C
ATOM  32749  OG  SER H 167     115.633 131.105 241.301  1.00 70.61
O
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ATOM  32750  H   SER H 167     117.484 134.446 241.325  1.00 65.33
H
ATOM  32751  HA  SER H 167     116.355 132.847 239.579  1.00 63.25
H
ATOM  32752  HB2 SER H 167     117.324 132.056 241.610  1.00 81.29
H
ATOM  32753  HB3 SER H 167     116.086 132.674 242.392  1.00 81.29
H
ATOM  32754  HG  SER H 167     115.664 130.595 241.967  1.00 84.75
H
ATOM  32755  N   GLY H 168     113.951 133.324 239.437  1.00 52.29
N
ATOM  32756  CA  GLY H 168     112.546 133.679 239.357  1.00 49.34
C
ATOM  32757  C   GLY H 168     112.257 135.033 238.741  1.00 51.25
C
ATOM  32758  O   GLY H 168     111.089 135.451 238.702  1.00 48.94
O
ATOM  32759  H   GLY H 168     114.222 132.820 238.796  1.00 62.78
H
ATOM  32760  HA2 GLY H 168     112.087 133.009 238.825  1.00 59.24
H
ATOM  32761  HA3 GLY H 168     112.175 133.679 240.253  1.00 59.24
H
ATOM  32762  N   VAL H 169     113.270 135.710 238.226  1.00 49.38
N
ATOM  32763  CA  VAL H 169     113.101 137.021 237.614  1.00 45.79
C
ATOM  32764  C   VAL H 169     112.707 136.826 236.153  1.00 45.43
C
ATOM  32765  O   VAL H 169     113.383 136.112 235.408  1.00 47.79
O
ATOM  32766  CB  VAL H 169     114.400 137.844 237.745  1.00 48.51
C
ATOM  32767  CG1 VAL H 169     114.344 139.169 236.949  1.00 46.82
C
ATOM  32768  CG2 VAL H 169     114.666 138.148 239.177  1.00 45.36
C
ATOM  32769  H   VAL H 169     114.082 135.427 238.219  1.00 59.28
H
ATOM  32770  HA  VAL H 169     112.387 137.506 238.056  1.00 54.97
H
ATOM  32771  HB  VAL H 169     115.119 137.308 237.375  1.00 58.25
H
ATOM  32772 HG11 VAL H 169     115.112 139.712 237.187  1.00 56.21
H
ATOM  32773 HG12 VAL H 169     114.361 138.967 236.001  1.00 56.21
H
ATOM  32774 HG13 VAL H 169     113.526 139.638 237.174  1.00 56.21
H
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ATOM  32775 HG21 VAL H 169     115.545 138.553 239.255  1.00 54.46
H
ATOM  32776 HG22 VAL H 169     113.989 138.762 239.500  1.00 54.46
H
ATOM  32777 HG23 VAL H 169     114.635 137.323 239.686  1.00 54.46
H
ATOM  32778  N   HIS H 170     111.599 137.442 235.749  1.00 49.39
N
ATOM  32779  CA  HIS H 170     111.255 137.584 234.340  1.00 45.11
C
ATOM  32780  C   HIS H 170     111.157 139.063 233.989  1.00 51.91
C
ATOM  32781  O   HIS H 170     110.289 139.774 234.503  1.00 47.92
O
ATOM  32782  CB  HIS H 170     109.926 136.895 234.025  1.00 48.94
C
ATOM  32783  CG  HIS H 170     109.943 135.417 234.275  1.00 49.36
C
ATOM  32784  ND1 HIS H 170     110.878 134.578 233.711  1.00 56.74
N
ATOM  32785  CD2 HIS H 170     109.141 134.633 235.038  1.00 56.18
C
ATOM  32786  CE1 HIS H 170     110.655 133.339 234.112  1.00 63.82
C
ATOM  32787  NE2 HIS H 170     109.602 133.342 234.915  1.00 52.76
N
ATOM  32788  H   HIS H 170     111.024 137.792 236.282  1.00 59.29
H
ATOM  32789  HA  HIS H 170     111.958 137.181 233.807  1.00 54.16
H
ATOM  32790  HB2 HIS H 170     109.233 137.284 234.581  1.00 58.75
H
ATOM  32791  HB3 HIS H 170     109.717 137.036 233.088  1.00 58.75
H
ATOM  32792  HD2 HIS H 170     108.416 134.914 235.549  1.00 67.45
H
ATOM  32793  HE1 HIS H 170     111.153 132.592 233.871  1.00 76.61
H
ATOM  32794  HE2 HIS H 170     109.262 132.651 235.296  1.00 63.34
H
ATOM  32795  N   THR H 171     111.990 139.508 233.064  1.00 51.33
N
ATOM  32796  CA  THR H 171     111.907 140.863 232.535  1.00 44.91
C
ATOM  32797  C   THR H 171     111.426 140.766 231.098  1.00 47.80
C
ATOM  32798  O   THR H 171     112.044 140.107 230.268  1.00 46.19
O
ATOM  32799  CB  THR H 171     113.248 141.579 232.653  1.00 44.55
C
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ATOM  32800  OG1 THR H 171     113.604 141.643 234.047  1.00 45.39
O
ATOM  32801  CG2 THR H 171     113.157 142.990 232.074  1.00 52.68
C
ATOM  32802  H   THR H 171     112.622 139.038 232.721  1.00 61.62
H
ATOM  32803  HA  THR H 171     111.264 141.390 233.035  1.00 53.92
H
ATOM  32804  HB  THR H 171     113.931 141.102 232.155  1.00 53.49
H
ATOM  32805  HG1 THR H 171     114.429 141.518 234.139  1.00 54.49
H
ATOM  32806 HG21 THR H 171     113.996 143.458 232.208  1.00 63.24
H
ATOM  32807 HG22 THR H 171     112.969 142.948 231.123  1.00 63.24
H
ATOM  32808 HG23 THR H 171     112.447 143.484 232.513  1.00 63.24
H
ATOM  32809  N   PHE H 172     110.349 141.344 230.849  1.00 48.81
N
ATOM  32810  CA  PHE H 172     109.636 141.146 229.612  1.00 48.85
C
ATOM  32811  C   PHE H 172     110.144 142.080 228.517  1.00 59.44
C
ATOM  32812  O   PHE H 172     110.707 143.151 228.794  1.00 47.97
O
ATOM  32813  CB  PHE H 172     108.156 141.393 229.843  1.00 47.49
C
ATOM  32814  CG  PHE H 172     107.500 140.318 230.648  1.00 53.11
C
ATOM  32815  CD1 PHE H 172     107.459 140.397 232.045  1.00 52.08
C
ATOM  32816  CD2 PHE H 172     106.980 139.215 230.027  1.00 51.78
C
ATOM  32817  CE1 PHE H 172     106.870 139.407 232.789  1.00 54.94
C
ATOM  32818  CE2 PHE H 172     106.379 138.203 230.773  1.00 50.29
C
ATOM  32819  CZ  PHE H 172     106.338 138.304 232.154  1.00 45.98
C
ATOM  32820  H   PHE H 172     109.962 141.892 231.386  1.00 58.60
H
ATOM  32821  HA  PHE H 172     109.768 140.235 229.307  1.00 58.65
H
ATOM  32822  HB2 PHE H 172     108.047 142.232 230.319  1.00 57.01
H
ATOM  32823  HB3 PHE H 172     107.708 141.439 228.984  1.00 57.01
H
ATOM  32824  HD1 PHE H 172     107.837 141.131 232.474  1.00 62.52
H
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ATOM  32825  HD2 PHE H 172     107.028 139.139 229.102  1.00 62.17
H
ATOM  32826  HE1 PHE H 172     106.832 139.477 233.717  1.00 65.96
H
ATOM  32827  HE2 PHE H 172     106.009 137.464 230.346  1.00 60.37
H
ATOM  32828  HZ  PHE H 172     105.947 137.624 232.654  1.00 55.20
H
ATOM  32829  N   PRO H 173     109.941 141.695 227.258  1.00 59.71
N
ATOM  32830  CA  PRO H 173     110.306 142.583 226.139  1.00 51.41
C
ATOM  32831  C   PRO H 173     109.386 143.779 226.125  1.00 53.20
C
ATOM  32832  O   PRO H 173     108.187 143.658 226.389  1.00 47.77
O
ATOM  32833  CB  PRO H 173     110.095 141.714 224.893  1.00 54.05
C
ATOM  32834  CG  PRO H 173     110.000 140.294 225.384  1.00 61.36
C
ATOM  32835  CD  PRO H 173     109.475 140.366 226.801  1.00 55.42
C
ATOM  32836  HA  PRO H 173     111.236 142.855 226.187  1.00 61.72
H
ATOM  32837  HB2 PRO H 173     109.275 141.979 224.446  1.00 64.88
H
ATOM  32838  HB3 PRO H 173     110.849 141.820 224.291  1.00 64.88
H
ATOM  32839  HG2 PRO H 173     109.390 139.794 224.818  1.00 73.66
H
ATOM  32840  HG3 PRO H 173     110.880 139.884 225.366  1.00 73.66
H
ATOM  32841  HD2 PRO H 173     108.505 140.316 226.813  1.00 66.53
H
ATOM  32842  HD3 PRO H 173     109.851 139.659 227.346  1.00 66.53
H
ATOM  32843  N   ALA H 174     109.955 144.941 225.817  1.00 55.62
N
ATOM  32844  CA  ALA H 174     109.154 146.158 225.755  1.00 46.98
C
ATOM  32845  C   ALA H 174     108.102 146.035 224.681  1.00 46.31
C
ATOM  32846  O   ALA H 174     108.276 145.307 223.704  1.00 57.53
O
ATOM  32847  CB  ALA H 174     110.042 147.357 225.468  1.00 47.33
C
ATOM  32848  H   ALA H 174     110.789 145.049 225.640  1.00 66.77
H
ATOM  32849  HA  ALA H 174     108.715 146.300 226.607  1.00 56.40
H
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ATOM  32850  HB1 ALA H 174     109.516 148.167 225.557  1.00 56.82
H
ATOM  32851  HB2 ALA H 174     110.775 147.365 226.104  1.00 56.82
H
ATOM  32852  HB3 ALA H 174     110.388 147.285 224.565  1.00 56.82
H
ATOM  32853  N   VAL H 175     106.989 146.751 224.871  1.00 45.48
N
ATOM  32854  CA  VAL H 175     106.030 146.971 223.798  1.00 49.68
C
ATOM  32855  C   VAL H 175     106.044 148.457 223.470  1.00 60.67
C
ATOM  32856  O   VAL H 175     106.337 149.294 224.327  1.00 48.99
O
ATOM  32857  CB  VAL H 175     104.579 146.531 224.099  1.00 50.38
C
ATOM  32858  CG1 VAL H 175     104.534 145.093 224.680  1.00 60.74
C
ATOM  32859  CG2 VAL H 175     103.851 147.549 224.986  1.00 64.36
C
ATOM  32860  H   VAL H 175     106.773 147.119 225.617  1.00 54.60
H
ATOM  32861  HA  VAL H 175     106.326 146.434 223.047  1.00 59.64
H
ATOM  32862  HB  VAL H 175     104.090 146.505 223.262  1.00 60.49
H
ATOM  32863 HG11 VAL H 175     103.611 144.852 224.857  1.00 72.91
H
ATOM  32864 HG12 VAL H 175     104.919 144.480 224.036  1.00 72.91
H
ATOM  32865 HG13 VAL H 175     105.046 145.070 225.505  1.00 72.91
H
ATOM  32866 HG21 VAL H 175     103.076 147.123 225.386  1.00 77.26
H
ATOM  32867 HG22 VAL H 175     104.456 147.854 225.681  1.00 77.26
H
ATOM  32868 HG23 VAL H 175     103.570 148.300 224.440  1.00 77.26
H
ATOM  32869  N   LEU H 176     105.699 148.771 222.213  1.00 66.69
N
ATOM  32870  CA  LEU H 176     105.656 150.136 221.699  1.00 50.95
C
ATOM  32871  C   LEU H 176     104.237 150.665 221.863  1.00 58.05
C
ATOM  32872  O   LEU H 176     103.291 150.152 221.250  1.00 57.17
O
ATOM  32873  CB  LEU H 176     106.111 150.150 220.246  1.00 56.48
C
ATOM  32874  CG  LEU H 176     106.415 151.489 219.572  1.00 63.68
C
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ATOM  32875  CD1 LEU H 176     107.142 152.438 220.491  1.00 57.22
C
ATOM  32876  CD2 LEU H 176     107.289 151.254 218.349  1.00 61.61
C
ATOM  32877  H   LEU H 176     105.478 148.187 221.623  1.00 80.06
H
ATOM  32878  HA  LEU H 176     106.245 150.714 222.209  1.00 61.17
H
ATOM  32879  HB2 LEU H 176     106.928 149.626 220.192  1.00 67.80
H
ATOM  32880  HB3 LEU H 176     105.414 149.730 219.719  1.00 67.80
H
ATOM  32881  HG  LEU H 176     105.570 151.895 219.323  1.00 76.44
H
ATOM  32882 HD11 LEU H 176     107.427 153.215 219.984  1.00 68.69
H
ATOM  32883 HD12 LEU H 176     106.542 152.709 221.204  1.00 68.69
H
ATOM  32884 HD13 LEU H 176     107.915 151.986 220.864  1.00 68.69
H
ATOM  32885 HD21 LEU H 176     107.443 152.101 217.903  1.00 73.96
H
ATOM  32886 HD22 LEU H 176     108.134 150.872 218.635  1.00 73.96
H
ATOM  32887 HD23 LEU H 176     106.834 150.642 217.751  1.00 73.96
H
ATOM  32888  N   GLN H 177     104.066 151.674 222.702  1.00 55.07
N
ATOM  32889  CA  GLN H 177     102.717 152.197 222.850  1.00 56.55
C
ATOM  32890  C   GLN H 177     102.387 153.131 221.682  1.00 57.12
C
ATOM  32891  O   GLN H 177     103.268 153.560 220.924  1.00 54.39
O
ATOM  32892  CB  GLN H 177     102.578 152.907 224.194  1.00 55.00
C
ATOM  32893  CG  GLN H 177     103.000 152.017 225.443  1.00 58.74
C
ATOM  32894  CD  GLN H 177     103.204 152.841 226.709  1.00 70.50
C
ATOM  32895  OE1 GLN H 177     102.297 152.970 227.543  1.00 74.28
O
ATOM  32896  NE2 GLN H 177     104.396 153.418 226.852  1.00 61.77
N
ATOM  32897  H   GLN H 177     104.679 152.054 223.170  1.00 66.11
H
ATOM  32898  HA  GLN H 177     102.071 151.473 222.836  1.00 67.89
H
ATOM  32899  HB2 GLN H 177     103.144 153.695 224.189  1.00 66.03
H
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ATOM  32900  HB3 GLN H 177     101.651 153.165 224.315  1.00 66.03
H
ATOM  32901  HG2 GLN H 177     102.302 151.365 225.617  1.00 70.51
H
ATOM  32902  HG3 GLN H 177     103.834 151.564 225.242  1.00 70.51
H
ATOM  32903 HE21 GLN H 177     104.999 153.314 226.248  1.00 74.16
H
ATOM  32904 HE22 GLN H 177     104.563 153.894 227.549  1.00 74.16
H
ATOM  32905  N   SER H 178     101.099 153.468 221.540  1.00 56.69
N
ATOM  32906  CA  SER H 178     100.681 154.315 220.423  1.00 69.11
C
ATOM  32907  C   SER H 178     101.240 155.739 220.516  1.00 69.62
C
ATOM  32908  O   SER H 178     101.191 156.469 219.519  1.00 63.11
O
ATOM  32909  CB  SER H 178      99.154 154.354 220.339  1.00 60.22
C
ATOM  32910  OG  SER H 178      98.605 155.115 221.404  1.00 68.90
O
ATOM  32911  H   SER H 178     100.465 153.223 222.067  1.00 68.06
H
ATOM  32912  HA  SER H 178     101.013 153.926 219.598  1.00 82.96
H
ATOM  32913  HB2 SER H 178      98.895 154.759 219.497  1.00 72.29
H
ATOM  32914  HB3 SER H 178      98.812 153.448 220.391  1.00 72.29
H
ATOM  32915  HG  SER H 178      97.766 155.091 221.372  1.00 82.71
H
ATOM  32916  N   SER H 179     101.770 156.139 221.676  1.00 57.37
N
ATOM  32917  CA  SER H 179     102.409 157.432 221.867  1.00 62.55
C
ATOM  32918  C   SER H 179     103.821 157.497 221.299  1.00 61.19
C
ATOM  32919  O   SER H 179     104.445 158.562 221.383  1.00 51.43
O
ATOM  32920  CB  SER H 179     102.512 157.724 223.355  1.00 52.43
C
ATOM  32921  OG  SER H 179     103.345 156.733 223.965  1.00 57.19
O
ATOM  32922  H   SER H 179     101.770 155.658 222.389  1.00 68.87
H
ATOM  32923  HA  SER H 179     101.864 158.103 221.428  1.00 75.09
H
ATOM  32924  HB2 SER H 179     102.906 158.600 223.484  1.00 62.95
H
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ATOM  32925  HB3 SER H 179     101.629 157.694 223.752  1.00 62.95
H
ATOM  32926  HG  SER H 179     103.340 156.827 224.800  1.00 68.65
H
ATOM  32927  N   GLY H 180     104.361 156.366 220.828  1.00 53.09
N
ATOM  32928  CA  GLY H 180     105.751 156.218 220.432  1.00 46.69
C
ATOM  32929  C   GLY H 180     106.696 155.887 221.560  1.00 54.74
C
ATOM  32930  O   GLY H 180     107.923 155.818 221.351  1.00 46.05
O
ATOM  32931  H   GLY H 180     103.915 155.638 220.726  1.00 63.73
H
ATOM  32932  HA2 GLY H 180     105.813 155.509 219.773  1.00 56.05
H
ATOM  32933  HA3 GLY H 180     106.050 157.049 220.029  1.00 56.05
H
ATOM  32934  N   LEU H 181     106.186 155.671 222.750  1.00 55.51
N
ATOM  32935  CA  LEU H 181     107.050 155.431 223.892  1.00 51.72
C
ATOM  32936  C   LEU H 181     106.978 153.960 224.271  1.00 50.31
C
ATOM  32937  O   LEU H 181     105.960 153.306 224.045  1.00 52.37
O
ATOM  32938  CB  LEU H 181     106.630 156.333 225.035  1.00 52.73
C
ATOM  32939  CG  LEU H 181     106.673 157.831 224.745  1.00 56.52
C
ATOM  32940  CD1 LEU H 181     106.032 158.580 225.910  1.00 56.52
C
ATOM  32941  CD2 LEU H 181     108.115 158.284 224.528  1.00 51.76
C
ATOM  32942  H   LEU H 181     105.345 155.658 222.928  1.00 66.64
H
ATOM  32943  HA  LEU H 181     107.980 155.623 223.691  1.00 62.09
H
ATOM  32944  HB2 LEU H 181     105.717 156.113 225.277  1.00 63.31
H
ATOM  32945  HB3 LEU H 181     107.220 156.167 225.788  1.00 63.31
H
ATOM  32946  HG  LEU H 181     106.181 158.035 223.936  1.00 67.85
H
ATOM  32947 HD11 LEU H 181     106.021 159.529 225.707  1.00 67.85
H
ATOM  32948 HD12 LEU H 181     105.125 158.258 226.031  1.00 67.85
H
ATOM  32949 HD13 LEU H 181     106.551 158.420 226.713  1.00 67.85
H
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ATOM  32950 HD21 LEU H 181     108.128 159.248 224.411  1.00 62.14
H
ATOM  32951 HD22 LEU H 181     108.643 158.038 225.304  1.00 62.14
H
ATOM  32952 HD23 LEU H 181     108.465 157.849 223.735  1.00 62.14
H
ATOM  32953  N   TYR H 182     108.079 153.445 224.820  1.00 50.58
N
ATOM  32954  CA  TYR H 182     108.163 152.050 225.239  1.00 52.70
C
ATOM  32955  C   TYR H 182     107.717 151.876 226.687  1.00 54.21
C
ATOM  32956  O   TYR H 182     107.899 152.768 227.514  1.00 54.92
O
ATOM  32957  CB  TYR H 182     109.594 151.526 225.092  1.00 50.12
C
ATOM  32958  CG  TYR H 182     110.035 151.446 223.644  1.00 51.84
C
ATOM  32959  CD1 TYR H 182     109.687 150.373 222.846  1.00 49.35
C
ATOM  32960  CD2 TYR H 182     110.753 152.478 223.070  1.00 61.15
C
ATOM  32961  CE1 TYR H 182     110.084 150.298 221.516  1.00 54.61
C
ATOM  32962  CE2 TYR H 182     111.148 152.435 221.740  1.00 61.10
C
ATOM  32963  CZ  TYR H 182     110.815 151.352 220.969  1.00 59.09
C
ATOM  32964  OH  TYR H 182     111.246 151.326 219.676  1.00 55.19
O
ATOM  32965  H   TYR H 182     108.801 153.890 224.960  1.00 60.72
H
ATOM  32966  HA  TYR H 182     107.574 151.524 224.676  1.00 63.27
H
ATOM  32967  HB2 TYR H 182     110.199 152.122 225.559  1.00 60.18
H
ATOM  32968  HB3 TYR H 182     109.645 150.635 225.472  1.00 60.18
H
ATOM  32969  HD1 TYR H 182     109.177 149.684 223.207  1.00 59.25
H
ATOM  32970  HD2 TYR H 182     110.979 153.218 223.587  1.00 73.41
H
ATOM  32971  HE1 TYR H 182     109.865 149.557 220.999  1.00 65.56
H
ATOM  32972  HE2 TYR H 182     111.634 153.137 221.373  1.00 73.35
H
ATOM  32973  HH  TYR H 182     111.905 151.839 219.583  1.00 66.26
H
ATOM  32974  N   SER H 183     107.142 150.707 226.982  1.00 47.23
N
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ATOM  32975  CA  SER H 183     106.862 150.247 228.337  1.00 44.39
C
ATOM  32976  C   SER H 183     107.257 148.781 228.467  1.00 51.32
C
ATOM  32977  O   SER H 183     107.018 147.988 227.550  1.00 49.86
O
ATOM  32978  CB  SER H 183     105.383 150.419 228.662  1.00 58.81
C
ATOM  32979  OG  SER H 183     105.062 149.688 229.828  1.00 66.21
O
ATOM  32980  H   SER H 183     106.895 150.140 226.384  1.00 56.70
H
ATOM  32981  HA  SER H 183     107.389 150.754 228.976  1.00 53.29
H
ATOM  32982  HB2 SER H 183     105.196 151.359 228.812  1.00 70.60
H
ATOM  32983  HB3 SER H 183     104.852 150.088 227.920  1.00 70.60
H
ATOM  32984  HG  SER H 183     104.256 149.810 230.030  1.00 79.47
H
ATOM  32985  N   LEU H 184     107.869 148.411 229.597  1.00 50.22
N
ATOM  32986  CA  LEU H 184     108.055 147.001 229.927  1.00 53.46
C
ATOM  32987  C   LEU H 184     107.792 146.744 231.405  1.00 58.23
C
ATOM  32988  O   LEU H 184     107.715 147.664 232.226  1.00 48.73
O
ATOM  32989  CB  LEU H 184     109.463 146.486 229.596  1.00 47.95
C
ATOM  32990  CG  LEU H 184     110.690 146.923 230.382  1.00 53.77
C
ATOM  32991  CD1 LEU H 184     110.797 146.285 231.735  1.00 45.26
C
ATOM  32992  CD2 LEU H 184     111.911 146.587 229.563  1.00 53.22
C
ATOM  32993  H   LEU H 184     108.183 148.959 230.182  1.00 60.29
H
ATOM  32994  HA  LEU H 184     107.401 146.518 229.398  1.00 64.18
H
ATOM  32995  HB2 LEU H 184     109.432 145.519 229.679  1.00 57.57
H
ATOM  32996  HB3 LEU H 184     109.641 146.734 228.675  1.00 57.57
H
ATOM  32997  HG  LEU H 184     110.624 147.877 230.550  1.00 64.55
H
ATOM  32998 HD11 LEU H 184     111.726 146.294 232.017  1.00 54.34
H
ATOM  32999 HD12 LEU H 184     110.256 146.787 232.364  1.00 54.34
H
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ATOM  33000 HD13 LEU H 184     110.477 145.372 231.679  1.00 54.34
H
ATOM  33001 HD21 LEU H 184     112.695 146.632 230.131  1.00 63.90
H
ATOM  33002 HD22 LEU H 184     111.812 145.694 229.202  1.00 63.90
H
ATOM  33003 HD23 LEU H 184     111.990 147.230 228.840  1.00 63.90
H
ATOM  33004  N   SER H 185     107.738 145.448 231.749  1.00 50.45
N
ATOM  33005  CA  SER H 185     107.605 145.018 233.132  1.00 48.59
C
ATOM  33006  C   SER H 185     108.691 144.023 233.491  1.00 48.22
C
ATOM  33007  O   SER H 185     109.150 143.233 232.661  1.00 49.30
O
ATOM  33008  CB  SER H 185     106.204 144.402 233.401  1.00 58.04
C
ATOM  33009  OG  SER H 185     105.965 143.358 232.471  1.00 65.48
O
ATOM  33010  H   SER H 185     107.777 144.798 231.187  1.00 60.57
H
ATOM  33011  HA  SER H 185     107.721 145.786 233.712  1.00 58.33
H
ATOM  33012  HB2 SER H 185     106.179 144.044 234.302  1.00 69.68
H
ATOM  33013  HB3 SER H 185     105.527 145.088 233.297  1.00 69.68
H
ATOM  33014  HG  SER H 185     106.624 142.838 232.447  1.00 78.60
H
ATOM  33015  N   SER H 186     109.091 144.077 234.759  1.00 46.50
N
ATOM  33016  CA  SER H 186     110.001 143.126 235.369  1.00 46.05
C
ATOM  33017  C   SER H 186     109.349 142.581 236.641  1.00 53.80
C
ATOM  33018  O   SER H 186     108.871 143.361 237.484  1.00 43.80
O
ATOM  33019  CB  SER H 186     111.323 143.780 235.737  1.00 46.75
C
ATOM  33020  OG  SER H 186     112.220 142.785 236.213  1.00 49.12
O
ATOM  33021  H   SER H 186     108.832 144.686 235.308  1.00 55.82
H
ATOM  33022  HA  SER H 186     110.172 142.402 234.749  1.00 55.29
H
ATOM  33023  HB2 SER H 186     111.701 144.206 234.954  1.00 56.13
H
ATOM  33024  HB3 SER H 186     111.175 144.438 236.435  1.00 56.13
H
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ATOM  33025  HG  SER H 186     112.551 142.365 235.566  1.00 58.98
H
ATOM  33026  N   VAL H 187     109.348 141.255 236.787  1.00 44.56
N
ATOM  33027  CA  VAL H 187     108.680 140.586 237.893  1.00 44.79
C
ATOM  33028  C   VAL H 187     109.573 139.517 238.482  1.00 44.10
C
ATOM  33029  O   VAL H 187     110.456 138.972 237.818  1.00 46.68
O
ATOM  33030  CB  VAL H 187     107.350 139.900 237.505  1.00 47.64
C
ATOM  33031  CG1 VAL H 187     106.399 140.883 237.040  1.00 45.73
C
ATOM  33032  CG2 VAL H 187     107.626 138.749 236.458  1.00 45.97
C
ATOM  33033  H   VAL H 187     109.736 140.714 236.243  1.00 53.50
H
ATOM  33034  HA  VAL H 187     108.514 141.279 238.552  1.00 53.77
H
ATOM  33035  HB  VAL H 187     106.945 139.479 238.281  1.00 57.19
H
ATOM  33036 HG11 VAL H 187     105.553 140.444 236.862  1.00 54.90
H
ATOM  33037 HG12 VAL H 187     106.284 141.561 237.724  1.00 54.90
H
ATOM  33038 HG13 VAL H 187     106.739 141.289 236.226  1.00 54.90
H
ATOM  33039 HG21 VAL H 187     106.779 138.409 236.130  1.00 55.19
H
ATOM  33040 HG22 VAL H 187     108.145 139.109 235.722  1.00 55.19
H
ATOM  33041 HG23 VAL H 187     108.122 138.037 236.893  1.00 55.19
H
ATOM  33042  N   VAL H 188     109.263 139.159 239.738  1.00 47.16
N
ATOM  33043  CA  VAL H 188     109.948 138.069 240.433  1.00 46.15
C
ATOM  33044  C   VAL H 188     108.929 137.419 241.346  1.00 44.80
C
ATOM  33045  O   VAL H 188     108.065 138.093 241.927  1.00 44.74
O
ATOM  33046  CB  VAL H 188     111.193 138.565 241.203  1.00 42.75
C
ATOM  33047  CG1 VAL H 188     110.795 139.586 242.208  1.00 56.89
C
ATOM  33048  CG2 VAL H 188     111.915 137.412 241.888  1.00 47.85
C
ATOM  33049  H   VAL H 188     108.653 139.540 240.209  1.00 56.61
H
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ATOM  33050  HA  VAL H 188     110.258 137.410 239.793  1.00 55.41
H
ATOM  33051  HB  VAL H 188     111.807 138.965 240.567  1.00 51.33
H
ATOM  33052 HG11 VAL H 188     111.594 139.940 242.631  1.00 68.30
H
ATOM  33053 HG12 VAL H 188     110.315 140.300 241.760  1.00 68.30
H
ATOM  33054 HG13 VAL H 188     110.225 139.171 242.873  1.00 68.30
H
ATOM  33055 HG21 VAL H 188     112.745 137.740 242.266  1.00 57.44
H
ATOM  33056 HG22 VAL H 188     111.349 137.058 242.591  1.00 57.44
H
ATOM  33057 HG23 VAL H 188     112.101 136.722 241.231  1.00 57.44
H
ATOM  33058  N   THR H 189     109.000 136.107 241.447  1.00 43.93
N
ATOM  33059  CA  THR H 189     108.214 135.388 242.434  1.00 41.39
C
ATOM  33060  C   THR H 189     109.114 135.004 243.600  1.00 43.28
C
ATOM  33061  O   THR H 189     110.256 134.599 243.404  1.00 46.44
O
ATOM  33062  CB  THR H 189     107.567 134.143 241.844  1.00 47.53
C
ATOM  33063  OG1 THR H 189     108.532 133.387 241.142  1.00 50.59
O
ATOM  33064  CG2 THR H 189     106.454 134.502 240.909  1.00 44.33
C
ATOM  33065  H   THR H 189     109.499 135.607 240.955  1.00 52.75
H
ATOM  33066  HA  THR H 189     107.498 135.959 242.756  1.00 49.70
H
ATOM  33067  HB  THR H 189     107.196 133.611 242.566  1.00 57.06
H
ATOM  33068  HG1 THR H 189     108.167 132.726 240.774  1.00 60.74
H
ATOM  33069 HG21 THR H 189     106.073 133.697 240.523  1.00 53.22
H
ATOM  33070 HG22 THR H 189     105.759 134.979 241.389  1.00 53.22
H
ATOM  33071 HG23 THR H 189     106.788 135.068 240.196  1.00 53.22
H
ATOM  33072  N   VAL H 190     108.601 135.187 244.813  1.00 42.12
N
ATOM  33073  CA  VAL H 190     109.369 134.997 246.039  1.00 41.06
C
ATOM  33074  C   VAL H 190     108.465 134.278 247.027  1.00 45.23
C
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ATOM  33075  O   VAL H 190     107.248 134.232 246.833  1.00 44.03
O
ATOM  33076  CB  VAL H 190     109.842 136.338 246.636  1.00 43.28
C
ATOM  33077  CG1 VAL H 190     110.879 137.045 245.677  1.00 43.92
C
ATOM  33078  CG2 VAL H 190     108.617 137.233 246.899  1.00 41.80
C
ATOM  33079  H   VAL H 190     107.789 135.429 244.956  1.00 50.58
H
ATOM  33080  HA  VAL H 190     110.158 134.458 245.867  1.00 49.30
H
ATOM  33081  HB  VAL H 190     110.297 136.181 247.478  1.00 51.97
H
ATOM  33082 HG11 VAL H 190     110.932 137.985 245.907  1.00 52.73
H
ATOM  33083 HG12 VAL H 190     111.748 136.628 245.788  1.00 52.73
H
ATOM  33084 HG13 VAL H 190     110.580 136.945 244.759  1.00 52.73
H
ATOM  33085 HG21 VAL H 190     108.920 138.129 247.113  1.00 50.18
H
ATOM  33086 HG22 VAL H 190     108.063 137.253 246.102  1.00 50.18
H
ATOM  33087 HG23 VAL H 190     108.113 136.868 247.643  1.00 50.18
H
ATOM  33088  N   PRO H 191     109.015 133.695 248.088  1.00 42.39
N
ATOM  33089  CA  PRO H 191     108.106 133.150 249.104  1.00 46.52
C
ATOM  33090  C   PRO H 191     107.341 134.286 249.751  1.00 42.79
C
ATOM  33091  O   PRO H 191     107.919 135.282 250.168  1.00 42.92
O
ATOM  33092  CB  PRO H 191     109.030 132.436 250.097  1.00 45.77
C
ATOM  33093  CG  PRO H 191     110.311 132.242 249.352  1.00 46.07
C
ATOM  33094  CD  PRO H 191     110.423 133.361 248.367  1.00 46.71
C
ATOM  33095  HA  PRO H 191     107.498 132.494 248.727  1.00 55.86
H
ATOM  33096  HB2 PRO H 191     109.165 132.989 250.881  1.00 54.95
H
ATOM  33097  HB3 PRO H 191     108.645 131.582 250.354  1.00 54.95
H
ATOM  33098  HG2 PRO H 191     111.053 132.265 249.976  1.00 55.31
H
ATOM  33099  HG3 PRO H 191     110.290 131.388 248.893  1.00 55.31
H
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ATOM  33100  HD2 PRO H 191     110.889 134.119 248.754  1.00 56.07
H
ATOM  33101  HD3 PRO H 191     110.876 133.069 247.560  1.00 56.07
H
ATOM  33102  N   SER H 192     106.030 134.133 249.855  1.00 42.43
N
ATOM  33103  CA  SER H 192     105.262 135.257 250.365  1.00 44.64
C
ATOM  33104  C   SER H 192     105.665 135.608 251.788  1.00 49.22
C
ATOM  33105  O   SER H 192     105.570 136.778 252.174  1.00 49.77
O
ATOM  33106  CB  SER H 192     103.762 134.982 250.272  1.00 50.96
C
ATOM  33107  OG  SER H 192     103.505 133.634 250.061  1.00 71.68
O
ATOM  33108  H   SER H 192     105.583 133.428 249.648  1.00 50.95
H
ATOM  33109  HA  SER H 192     105.441 136.029 249.807  1.00 53.59
H
ATOM  33110  HB2 SER H 192     103.342 135.256 251.101  1.00 61.18
H
ATOM  33111  HB3 SER H 192     103.397 135.491 249.530  1.00 61.18
H
ATOM  33112  HG  SER H 192     102.698 133.467 250.228  1.00 86.05
H
ATOM  33113  N   SER H 193     106.133 134.623 252.583  1.00 51.30
N
ATOM  33114  CA  SER H 193     106.572 134.915 253.946  1.00 50.02
C
ATOM  33115  C   SER H 193     107.842 135.745 253.971  1.00 47.73
C
ATOM  33116  O   SER H 193     108.184 136.310 255.019  1.00 47.20
O
ATOM  33117  CB  SER H 193     106.806 133.626 254.726  1.00 49.37
C
ATOM  33118  OG  SER H 193     107.825 132.842 254.145  1.00 44.73
O
ATOM  33119  H   SER H 193     106.202 133.796 252.354  1.00 61.59
H
ATOM  33120  HA  SER H 193     105.866 135.411 254.389  1.00 60.05
H
ATOM  33121  HB2 SER H 193     107.065 133.853 255.633  1.00 59.28
H
ATOM  33122  HB3 SER H 193     105.983 133.114 254.734  1.00 59.28
H
ATOM  33123  HG  SER H 193     107.900 132.115 254.560  1.00 53.70
H
ATOM  33124  N   SER H 194     108.553 135.828 252.847  1.00 45.14
N
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ATOM  33125  CA  SER H 194     109.780 136.612 252.818  1.00 42.87
C
ATOM  33126  C   SER H 194     109.530 138.113 252.834  1.00 46.05
C
ATOM  33127  O   SER H 194     110.478 138.866 253.053  1.00 45.08
O
ATOM  33128  CB  SER H 194     110.619 136.257 251.586  1.00 49.30
C
ATOM  33129  OG  SER H 194     110.094 136.779 250.384  1.00 43.55
O
ATOM  33130  H   SER H 194     108.347 135.445 252.104  1.00 54.20
H
ATOM  33131  HA  SER H 194     110.294 136.381 253.607  1.00 51.47
H
ATOM  33132  HB2 SER H 194     111.512 136.616 251.711  1.00 59.19
H
ATOM  33133  HB3 SER H 194     110.658 135.292 251.510  1.00 59.19
H
ATOM  33134  HG  SER H 194     109.258 136.698 250.377  1.00 52.28
H
ATOM  33135  N   LEU H 195     108.295 138.565 252.606  1.00 44.51
N
ATOM  33136  CA  LEU H 195     108.041 140.000 252.580  1.00 44.16
C
ATOM  33137  C   LEU H 195     108.211 140.632 253.950  1.00 53.74
C
ATOM  33138  O   LEU H 195     108.550 141.824 254.031  1.00 49.68
O
ATOM  33139  CB  LEU H 195     106.653 140.262 252.043  1.00 43.18
C
ATOM  33140  CG  LEU H 195     106.420 139.702 250.615  1.00 49.53
C
ATOM  33141  CD1 LEU H 195     104.861 139.627 250.279  1.00 55.20
C
ATOM  33142  CD2 LEU H 195     107.202 140.546 249.632  1.00 53.14
C
ATOM  33143  H   LEU H 195     107.604 138.071 252.467  1.00 53.44
H
ATOM  33144  HA  LEU H 195     108.674 140.428 251.981  1.00 53.01
H
ATOM  33145  HB2 LEU H 195     106.008 139.845 252.635  1.00 51.85
H
ATOM  33146  HB3 LEU H 195     106.507 141.220 252.014  1.00 51.85
H
ATOM  33147  HG  LEU H 195     106.738 138.787 250.543  1.00 59.46
H
ATOM  33148 HD11 LEU H 195     104.748 139.267 249.387  1.00 66.27
H
ATOM  33149 HD12 LEU H 195     104.426 139.051 250.926  1.00 66.27
H
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ATOM  33150 HD13 LEU H 195     104.485 140.520 250.327  1.00 66.27
H
ATOM  33151 HD21 LEU H 195     106.911 140.332 248.732  1.00 63.80
H
ATOM  33152 HD22 LEU H 195     107.037 141.483 249.818  1.00 63.80
H
ATOM  33153 HD23 LEU H 195     108.146 140.350 249.731  1.00 63.80
H
ATOM  33154  N   GLY H 196     108.077 139.827 255.015  1.00 53.70
N
ATOM  33155  CA  GLY H 196     108.285 140.284 256.375  1.00 48.83
C
ATOM  33156  C   GLY H 196     109.728 140.435 256.793  1.00 50.01
C
ATOM  33157  O   GLY H 196     109.986 141.091 257.806  1.00 52.76
O
ATOM  33158  H   GLY H 196     107.861 138.995 254.967  1.00 64.47
H
ATOM  33159  HA2 GLY H 196     107.858 141.149 256.478  1.00 58.63
H
ATOM  33160  HA3 GLY H 196     107.868 139.652 256.980  1.00 58.63
H
ATOM  33161  N   THR H 197     110.678 139.844 256.054  1.00 51.02
N
ATOM  33162  CA  THR H 197     112.085 139.887 256.438  1.00 49.30
C
ATOM  33163  C   THR H 197     112.990 140.450 255.387  1.00 43.73
C
ATOM  33164  O   THR H 197     114.133 140.786 255.718  1.00 47.38
O
ATOM  33165  CB  THR H 197     112.680 138.493 256.784  1.00 50.70
C
ATOM  33166  OG1 THR H 197     112.385 137.553 255.756  1.00 53.68
O
ATOM  33167  CG2 THR H 197     112.168 137.964 258.074  1.00 52.75
C
ATOM  33168  H   THR H 197     110.527 139.411 255.326  1.00 61.25
H
ATOM  33169  HA  THR H 197     112.108 140.429 257.242  1.00 59.19
H
ATOM  33170  HB  THR H 197     113.641 138.601 256.867  1.00 60.86
H
ATOM  33171  HG1 THR H 197     112.951 136.932 255.762  1.00 64.44
H
ATOM  33172 HG21 THR H 197     112.565 137.098 258.259  1.00 63.33
H
ATOM  33173 HG22 THR H 197     112.392 138.573 258.796  1.00 63.33
H
ATOM  33174 HG23 THR H 197     111.204 137.867 258.033  1.00 63.33
H
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ATOM  33175  N   GLN H 198     112.554 140.528 254.136  1.00 46.05
N
ATOM  33176  CA  GLN H 198     113.452 140.775 253.025  1.00 43.51
C
ATOM  33177  C   GLN H 198     113.056 142.042 252.279  1.00 46.07
C
ATOM  33178  O   GLN H 198     111.872 142.359 252.123  1.00 48.40
O
ATOM  33179  CB  GLN H 198     113.459 139.559 252.071  1.00 47.85
C
ATOM  33180  CG  GLN H 198     114.473 139.583 250.940  1.00 51.79
C
ATOM  33181  CD  GLN H 198     115.914 139.581 251.417  1.00 59.36
C
ATOM  33182  OE1 GLN H 198     116.256 138.893 252.360  1.00 56.53
O
ATOM  33183  NE2 GLN H 198     116.748 140.395 250.789  1.00 71.87
N
ATOM  33184  H   GLN H 198     111.729 140.437 253.907  1.00 55.29
H
ATOM  33185  HA  GLN H 198     114.351 140.923 253.356  1.00 52.25
H
ATOM  33186  HB2 GLN H 198     113.641 138.766 252.599  1.00 57.45
H
ATOM  33187  HB3 GLN H 198     112.581 139.493 251.664  1.00 57.45
H
ATOM  33188  HG2 GLN H 198     114.343 138.797 250.386  1.00 62.18
H
ATOM  33189  HG3 GLN H 198     114.336 140.386 250.414  1.00 62.18
H
ATOM  33190 HE21 GLN H 198     116.464 140.891 250.146  1.00 86.28
H
ATOM  33191 HE22 GLN H 198     117.575 140.429 251.025  1.00 86.28
H
ATOM  33192  N   THR H 199     114.067 142.743 251.807  1.00 49.80
N
ATOM  33193  CA  THR H 199     113.903 143.965 251.031  1.00 56.46
C
ATOM  33194  C   THR H 199     114.020 143.659 249.533  1.00 49.64
C
ATOM  33195  O   THR H 199     114.950 142.977 249.103  1.00 46.83
O
ATOM  33196  CB  THR H 199     114.971 144.989 251.447  1.00 57.83
C
ATOM  33197  OG1 THR H 199     114.830 145.283 252.839  1.00 58.34
O
ATOM  33198  CG2 THR H 199     114.838 146.263 250.658  1.00 50.45
C
ATOM  33199  H   THR H 199     114.891 142.529 251.924  1.00 59.78
H
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ATOM  33200  HA  THR H 199     113.021 144.338 251.187  1.00 67.78
H
ATOM  33201  HB  THR H 199     115.850 144.618 251.273  1.00 69.42
H
ATOM  33202  HG1 THR H 199     115.517 145.674 253.121  1.00 70.04
H
ATOM  33203 HG21 THR H 199     115.394 146.956 251.050  1.00 60.57
H
ATOM  33204 HG22 THR H 199     115.116 146.117 249.741  1.00 60.57
H
ATOM  33205 HG23 THR H 199     113.915 146.562 250.662  1.00 60.57
H
ATOM  33206  N   TYR H 200     113.062 144.134 248.749  1.00 43.28
N
ATOM  33207  CA  TYR H 200     113.086 143.967 247.302  1.00 43.89
C
ATOM  33208  C   TYR H 200     113.155 145.329 246.623  1.00 47.93
C
ATOM  33209  O   TYR H 200     112.236 146.147 246.764  1.00 46.36
O
ATOM  33210  CB  TYR H 200     111.856 143.191 246.855  1.00 44.19
C
ATOM  33211  CG  TYR H 200     111.863 141.771 247.421  1.00 46.76
C
ATOM  33212  CD1 TYR H 200     112.646 140.792 246.864  1.00 45.34
C
ATOM  33213  CD2 TYR H 200     111.099 141.436 248.509  1.00 48.50
C
ATOM  33214  CE1 TYR H 200     112.664 139.488 247.365  1.00 50.15
C
ATOM  33215  CE2 TYR H 200     111.089 140.136 249.017  1.00 44.02
C
ATOM  33216  CZ  TYR H 200     111.890 139.177 248.435  1.00 46.38
C
ATOM  33217  OH  TYR H 200     111.913 137.900 248.907  1.00 47.54
O
ATOM  33218  H   TYR H 200     112.374 144.563 249.037  1.00 51.96
H
ATOM  33219  HA  TYR H 200     113.884 143.482 247.038  1.00 52.70
H
ATOM  33220  HB2 TYR H 200     111.058 143.643 247.171  1.00 53.05
H
ATOM  33221  HB3 TYR H 200     111.844 143.135 245.886  1.00 53.05
H
ATOM  33222  HD1 TYR H 200     113.178 141.002 246.131  1.00 54.44
H
ATOM  33223  HD2 TYR H 200     110.577 142.088 248.917  1.00 58.23
H
ATOM  33224  HE1 TYR H 200     113.201 138.840 246.969  1.00 60.21
H
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ATOM  33225  HE2 TYR H 200     110.547 139.919 249.740  1.00 52.85
H
ATOM  33226  HH  TYR H 200     111.454 137.844 249.607  1.00 57.08
H
ATOM  33227  N   ILE H 201     114.231 145.549 245.878  1.00 48.66
N
ATOM  33228  CA  ILE H 201     114.467 146.777 245.128  1.00 51.32
C
ATOM  33229  C   ILE H 201     114.793 146.415 243.685  1.00 48.96
C
ATOM  33230  O   ILE H 201     115.724 145.635 243.430  1.00 49.99
O
ATOM  33231  CB  ILE H 201     115.628 147.606 245.715  1.00 53.78
C
ATOM  33232  CG1 ILE H 201     115.364 147.993 247.183  1.00 53.43
C
ATOM  33233  CG2 ILE H 201     115.834 148.876 244.864  1.00 51.68
C
ATOM  33234  CD1 ILE H 201     116.616 148.455 247.887  1.00 51.20
C
ATOM  33235  H   ILE H 201     114.866 144.978 245.788  1.00 58.41
H
ATOM  33236  HA  ILE H 201     113.656 147.306 245.149  1.00 61.61
H
ATOM  33237  HB  ILE H 201     116.429 147.060 245.694  1.00 64.56
H
ATOM  33238 HG12 ILE H 201     114.717 148.715 247.210  1.00 64.15
H
ATOM  33239 HG13 ILE H 201     115.018 147.220 247.657  1.00 64.15
H
ATOM  33240 HG21 ILE H 201     116.356 149.515 245.374  1.00 62.05
H
ATOM  33241 HG22 ILE H 201     116.304 148.637 244.051  1.00 62.05
H
ATOM  33242 HG23 ILE H 201     114.968 149.254 244.646  1.00 62.05
H
ATOM  33243 HD11 ILE H 201     116.443 148.505 248.838  1.00 61.47
H
ATOM  33244 HD12 ILE H 201     117.328 147.819 247.712  1.00 61.47
H
ATOM  33245 HD13 ILE H 201     116.863 149.330 247.549  1.00 61.47
H
ATOM  33246  N   CYS H 202     114.079 147.026 242.735  1.00 49.98
N
ATOM  33247  CA  CYS H 202     114.464 146.891 241.338  1.00 55.44
C
ATOM  33248  C   CYS H 202     115.346 148.065 240.926  1.00 52.15
C
ATOM  33249  O   CYS H 202     115.109 149.201 241.340  1.00 56.41
O
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ATOM  33250  CB  CYS H 202     113.248 146.779 240.417  1.00 64.33
C
ATOM  33251  SG  CYS H 202     112.377 148.269 240.202  1.00 62.60
S
ATOM  33252  H   CYS H 202     113.385 147.512 242.878  1.00 60.00
H
ATOM  33253  HA  CYS H 202     114.970 146.072 241.226  1.00 66.55
H
ATOM  33254  HB2 CYS H 202     113.547 146.485 239.543  1.00 77.22
H
ATOM  33255  HB3 CYS H 202     112.634 146.131 240.792  1.00 77.22
H
ATOM  33256  N   ASN H 203     116.379 147.761 240.120  1.00 47.56
N
ATOM  33257  CA  ASN H 203     117.371 148.716 239.627  1.00 46.66
C
ATOM  33258  C   ASN H 203     117.148 148.889 238.134  1.00 50.22
C
ATOM  33259  O   ASN H 203     117.293 147.935 237.362  1.00 50.72
O
ATOM  33260  CB  ASN H 203     118.776 148.220 239.918  1.00 44.30
C
ATOM  33261  CG  ASN H 203     118.858 147.553 241.273  1.00 54.99
C
ATOM  33262  OD1 ASN H 203     119.092 146.341 241.370  1.00 59.93
O
ATOM  33263  ND2 ASN H 203     118.637 148.331 242.330  1.00 54.51
N
ATOM  33264  H   ASN H 203     116.527 146.965 239.834  1.00 57.09
H
ATOM  33265  HA  ASN H 203     117.261 149.578 240.059  1.00 56.01
H
ATOM  33266  HB2 ASN H 203     119.035 147.574 239.243  1.00 53.19
H
ATOM  33267  HB3 ASN H 203     119.390 148.971 239.911  1.00 53.19
H
ATOM  33268 HD21 ASN H 203     118.671 148.000 243.122  1.00 65.44
H
ATOM  33269 HD22 ASN H 203     118.459 149.166 242.220  1.00 65.44
H
ATOM  33270  N   VAL H 204     116.768 150.097 237.742  1.00 48.11
N
ATOM  33271  CA  VAL H 204     116.443 150.418 236.367  1.00 53.59
C
ATOM  33272  C   VAL H 204     117.469 151.395 235.837  1.00 58.48
C
ATOM  33273  O   VAL H 204     117.842 152.354 236.520  1.00 55.88
O
ATOM  33274  CB  VAL H 204     115.019 150.995 236.284  1.00 51.01
C
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ATOM  33275  CG1 VAL H 204     114.616 151.276 234.825  1.00 53.55
C
ATOM  33276  CG2 VAL H 204     114.046 150.028 236.981  1.00 45.72
C
ATOM  33277  H   VAL H 204     116.692 150.767 238.275  1.00 57.76
H
ATOM  33278  HA  VAL H 204     116.490 149.621 235.815  1.00 64.34
H
ATOM  33279  HB  VAL H 204     114.980 151.850 236.742  1.00 61.24
H
ATOM  33280 HG11 VAL H 204     113.704 151.606 234.806  1.00 64.29
H
ATOM  33281 HG12 VAL H 204     115.216 151.942 234.453  1.00 64.29
H
ATOM  33282 HG13 VAL H 204     114.680 150.453 234.315  1.00 64.29
H
ATOM  33283 HG21 VAL H 204     113.136 150.313 236.802  1.00 54.89
H
ATOM  33284 HG22 VAL H 204     114.187 149.133 236.635  1.00 54.89
H
ATOM  33285 HG23 VAL H 204     114.214 150.043 237.936  1.00 54.89
H
ATOM  33286  N   ASN H 205     117.912 151.155 234.608  1.00 62.52
N
ATOM  33287  CA  ASN H 205     118.870 152.015 233.936  1.00 61.41
C
ATOM  33288  C   ASN H 205     118.411 152.295 232.507  1.00 62.79
C
ATOM  33289  O   ASN H 205     118.108 151.369 231.737  1.00 48.95
O
ATOM  33290  CB  ASN H 205     120.264 151.382 233.937  1.00 67.42
C
ATOM  33291  CG  ASN H 205     121.360 152.359 233.504  1.00 83.73
C
ATOM  33292  OD1 ASN H 205     121.109 153.550 233.258  1.00 88.17
O
ATOM  33293  ND2 ASN H 205     122.586 151.858 233.425  1.00 88.86
N
ATOM  33294  H   ASN H 205     117.663 150.483 234.134  1.00 75.06
H
ATOM  33295  HA  ASN H 205     118.914 152.869 234.398  1.00 73.72
H
ATOM  33296  HB2 ASN H 205     120.471 151.077 234.834  1.00 80.93
H
ATOM  33297  HB3 ASN H 205     120.270 150.633 233.321  1.00 80.93
H
ATOM  33298 HD21 ASN H 205     123.242 152.361 233.187  1.00106.66
H
ATOM  33299 HD22 ASN H 205     122.724 151.031 233.612  1.00106.66
H
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ATOM  33300  N   HIS H 206     118.390 153.577 232.152  1.00 54.13
N
ATOM  33301  CA  HIS H 206     118.123 154.042 230.791  1.00 57.88
C
ATOM  33302  C   HIS H 206     119.296 154.925 230.386  1.00 59.98
C
ATOM  33303  O   HIS H 206     119.227 156.133 230.589  1.00 61.39
O
ATOM  33304  CB  HIS H 206     116.809 154.792 230.734  1.00 57.77
C
ATOM  33305  CG  HIS H 206     116.335 155.038 229.341  1.00 65.02
C
ATOM  33306  ND1 HIS H 206     115.896 156.269 228.905  1.00 49.03
N
ATOM  33307  CD2 HIS H 206     116.256 154.202 228.276  1.00 58.49
C
ATOM  33308  CE1 HIS H 206     115.528 156.168 227.642  1.00 54.91
C
ATOM  33309  NE2 HIS H 206     115.727 154.923 227.240  1.00 49.94
N
ATOM  33310  H   HIS H 206     118.533 154.222 232.702  1.00 64.99
H
ATOM  33311  HA  HIS H 206     118.075 153.286 230.185  1.00 69.49
H
ATOM  33312  HB2 HIS H 206     116.130 154.274 231.194  1.00 69.36
H
ATOM  33313  HB3 HIS H 206     116.920 155.653 231.168  1.00 69.36
H
ATOM  33314  HD2 HIS H 206     116.513 153.309 228.253  1.00 70.22
H
ATOM  33315  HE1 HIS H 206     115.186 156.859 227.121  1.00 65.92
H
ATOM  33316  HE2 HIS H 206     115.552 154.617 226.457  1.00 59.95
H
ATOM  33317  N   LYS H 207     120.376 154.331 229.874  1.00 60.95
N
ATOM  33318  CA  LYS H 207     121.537 155.124 229.450  1.00 68.23
C
ATOM  33319  C   LYS H 207     121.178 156.284 228.517  1.00 63.82
C
ATOM  33320  O   LYS H 207     121.623 157.414 228.778  1.00 68.93
O
ATOM  33321  CB  LYS H 207     122.577 154.209 228.789  1.00 67.73
C
ATOM  33322  CG  LYS H 207     123.129 153.108 229.715  1.00 71.94
C
ATOM  33323  CD  LYS H 207     124.181 152.186 229.021  1.00 94.35
C
ATOM  33324  CE  LYS H 207     123.631 151.334 227.839  1.00 95.10
C
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ATOM  33325  NZ  LYS H 207     122.812 150.120 228.241  1.00 92.69
N
ATOM  33326  H   LYS H 207     120.463 153.483 229.763  1.00 73.17
H
ATOM  33327  HA  LYS H 207     121.928 155.501 230.253  1.00 81.90
H
ATOM  33328  HB2 LYS H 207     122.168 153.773 228.025  1.00 81.30
H
ATOM  33329  HB3 LYS H 207     123.327 154.751 228.498  1.00 81.30
H
ATOM  33330  HG2 LYS H 207     123.557 153.525 230.479  1.00 86.35
H
ATOM  33331  HG3 LYS H 207     122.393 152.549 230.011  1.00 86.35
H
ATOM  33332  HD2 LYS H 207     124.893 152.743 228.670  1.00113.25
H
ATOM  33333  HD3 LYS H 207     124.535 151.571 229.683  1.00113.25
H
ATOM  33334  HE2 LYS H 207     123.065 151.898 227.292  1.00114.15
H
ATOM  33335  HE3 LYS H 207     124.384 151.013 227.318  1.00114.15
H
ATOM  33336  HZ1 LYS H 207     122.492 149.716 227.516  1.00111.25
H
ATOM  33337  HZ2 LYS H 207     123.320 149.547 228.693  1.00111.25
H
ATOM  33338  HZ3 LYS H 207     122.130 150.371 228.755  1.00111.25
H
ATOM  33339  N   PRO H 208     120.356 156.104 227.476  1.00 60.76
N
ATOM  33340  CA  PRO H 208     120.023 157.237 226.598  1.00 63.13
C
ATOM  33341  C   PRO H 208     119.521 158.491 227.313  1.00 71.86
C
ATOM  33342  O   PRO H 208     119.643 159.581 226.734  1.00 68.42
O
ATOM  33343  CB  PRO H 208     118.929 156.662 225.679  1.00 59.08
C
ATOM  33344  CG  PRO H 208     119.164 155.187 225.638  1.00 53.32
C
ATOM  33345  CD  PRO H 208     119.763 154.834 226.995  1.00 56.93
C
ATOM  33346  HA  PRO H 208     120.814 157.466 226.085  1.00 75.79
H
ATOM  33347  HB2 PRO H 208     118.055 156.859 226.046  1.00 70.93
H
ATOM  33348  HB3 PRO H 208     119.011 157.046 224.791  1.00 70.93
H
ATOM  33349  HG2 PRO H 208     118.322 154.723 225.502  1.00 64.01
H
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ATOM  33350  HG3 PRO H 208     119.781 154.970 224.923  1.00 64.01
H
ATOM  33351  HD2 PRO H 208     119.073 154.527 227.604  1.00 68.35
H
ATOM  33352  HD3 PRO H 208     120.447 154.153 226.900  1.00 68.35
H
ATOM  33353  N   SER H 209     118.928 158.385 228.510  1.00 61.23
N
ATOM  33354  CA  SER H 209     118.447 159.561 229.241  1.00 56.78
C
ATOM  33355  C   SER H 209     119.230 159.819 230.521  1.00 65.21
C
ATOM  33356  O   SER H 209     118.833 160.693 231.292  1.00 64.38
O
ATOM  33357  CB  SER H 209     116.954 159.455 229.576  1.00 62.85
C
ATOM  33358  OG  SER H 209     116.671 158.518 230.609  1.00 60.34
O
ATOM  33359  H   SER H 209     118.794 157.640 228.920  1.00 73.51
H
ATOM  33360  HA  SER H 209     118.556 160.322 228.648  1.00 68.16
H
ATOM  33361  HB2 SER H 209     116.642 160.328 229.861  1.00 75.45
H
ATOM  33362  HB3 SER H 209     116.480 159.179 228.775  1.00 75.45
H
ATOM  33363  HG  SER H 209     117.020 157.777 230.428  1.00 72.44
H
ATOM  33364  N   ASN H 210     120.350 159.111 230.734  1.00 58.35
N
ATOM  33365  CA  ASN H 210     121.091 159.102 232.007  1.00 70.77
C
ATOM  33366  C   ASN H 210     120.185 158.859 233.229  1.00 64.65
C
ATOM  33367  O   ASN H 210     120.454 159.357 234.319  1.00 68.40
O
ATOM  33368  CB  ASN H 210     121.893 160.401 232.186  1.00 79.60
C
ATOM  33369  CG  ASN H 210     122.891 160.637 231.060  1.00 90.91
C
ATOM  33370  OD1 ASN H 210     123.534 159.696 230.592  1.00 95.25
O
ATOM  33371  ND2 ASN H 210     123.011 161.899 230.606  1.00 89.85
N
ATOM  33372  H   ASN H 210     120.714 158.610 230.137  1.00 70.05
H
ATOM  33373  HA  ASN H 210     121.709 158.354 231.969  1.00 84.95
H
ATOM  33374  HB2 ASN H 210     121.280 161.151 232.205  1.00 95.55
H
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ATOM  33375  HB3 ASN H 210     122.388 160.355 233.019  1.00 95.55
H
ATOM  33376 HD21 ASN H 210     123.565 162.076 229.970  1.00107.85
H
ATOM  33377 HD22 ASN H 210     122.537 162.527 230.950  1.00107.85
H
ATOM  33378  N   THR H 211     119.117 158.075 233.088  1.00 60.51
N
ATOM  33379  CA  THR H 211     118.221 157.804 234.213  1.00 60.44
C
ATOM  33380  C   THR H 211     118.688 156.550 234.958  1.00 67.27
C
ATOM  33381  O   THR H 211     119.034 155.530 234.348  1.00 60.74
O
ATOM  33382  CB  THR H 211     116.770 157.650 233.736  1.00 66.84
C
ATOM  33383  OG1 THR H 211     116.474 158.662 232.769  1.00 67.74
O
ATOM  33384  CG2 THR H 211     115.695 157.765 234.896  1.00 57.27
C
ATOM  33385  H   THR H 211     118.890 157.689 232.354  1.00 72.64
H
ATOM  33386  HA  THR H 211     118.249 158.549 234.834  1.00 72.55
H
ATOM  33387  HB  THR H 211     116.694 156.759 233.362  1.00 80.24
H
ATOM  33388  HG1 THR H 211     117.050 158.652 232.159  1.00 81.32
H
ATOM  33389 HG21 THR H 211     114.802 157.671 234.531  1.00 68.76
H
ATOM  33390 HG22 THR H 211     115.841 157.067 235.553  1.00 68.76
H
ATOM  33391 HG23 THR H 211     115.768 158.629 235.331  1.00 68.76
H
ATOM  33392  N   LYS H 212     118.741 156.649 236.282  1.00 65.02
N
ATOM  33393  CA  LYS H 212     119.014 155.515 237.155  1.00 63.95
C
ATOM  33394  C   LYS H 212     118.046 155.609 238.318  1.00 66.89
C
ATOM  33395  O   LYS H 212     118.071 156.591 239.064  1.00 63.40
O
ATOM  33396  CB  LYS H 212     120.453 155.499 237.670  1.00 61.01
C
ATOM  33397  CG  LYS H 212     121.366 154.522 236.952  1.00 80.87
C
ATOM  33398  CD  LYS H 212     122.756 154.521 237.560  1.00 84.82
C
ATOM  33399  CE  LYS H 212     123.724 153.666 236.762  1.00 90.68
C
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ATOM  33400  NZ  LYS H 212     124.895 153.293 237.607  1.00 94.48
N
ATOM  33401  H   LYS H 212     118.620 157.385 236.709  1.00 78.05
H
ATOM  33402  HA  LYS H 212     118.875 154.691 236.663  1.00 76.77
H
ATOM  33403  HB2 LYS H 212     120.830 156.386 237.562  1.00 73.23
H
ATOM  33404  HB3 LYS H 212     120.443 155.254 238.608  1.00 73.23
H
ATOM  33405  HG2 LYS H 212     121.001 153.627 237.022  1.00 97.07
H
ATOM  33406  HG3 LYS H 212     121.442 154.777 236.020  1.00 97.07
H
ATOM  33407  HD2 LYS H 212     123.097 155.430 237.579  1.00101.82
H
ATOM  33408  HD3 LYS H 212     122.710 154.166 238.461  1.00101.82
H
ATOM  33409  HE2 LYS H 212     123.279 152.854 236.470  1.00108.84
H
ATOM  33410  HE3 LYS H 212     124.042 154.164 235.992  1.00108.84
H
ATOM  33411  HZ1 LYS H 212     125.409 152.711 237.174  1.00113.41
H
ATOM  33412  HZ2 LYS H 212     125.374 154.017 237.799  1.00113.41
H
ATOM  33413  HZ3 LYS H 212     124.616 152.922 238.367  1.00113.41
H
ATOM  33414  N   VAL H 213     117.187 154.610 238.448  1.00 59.41
N
ATOM  33415  CA  VAL H 213     116.184 154.551 239.498  1.00 56.76
C
ATOM  33416  C   VAL H 213     116.376 153.253 240.273  1.00 58.80
C
ATOM  33417  O   VAL H 213     116.607 152.188 239.682  1.00 52.61
O
ATOM  33418  CB  VAL H 213     114.756 154.629 238.917  1.00 57.85
C
ATOM  33419  CG1 VAL H 213     113.701 154.528 240.052  1.00 57.95
C
ATOM  33420  CG2 VAL H 213     114.586 155.888 238.161  1.00 60.78
C
ATOM  33421  H   VAL H 213     117.166 153.930 237.921  1.00 71.32
H
ATOM  33422  HA  VAL H 213     116.309 155.297 240.106  1.00 68.13
H
ATOM  33423  HB  VAL H 213     114.618 153.884 238.312  1.00 69.44
H
ATOM  33424 HG11 VAL H 213     112.820 154.693 239.680  1.00 69.57
H
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ATOM  33425 HG12 VAL H 213     113.735 153.639 240.437  1.00 69.57
H
ATOM  33426 HG13 VAL H 213     113.902 155.192 240.731  1.00 69.57
H
ATOM  33427 HG21 VAL H 213     113.669 155.947 237.846  1.00 72.96
H
ATOM  33428 HG22 VAL H 213     114.780 156.637 238.746  1.00 72.96
H
ATOM  33429 HG23 VAL H 213     115.194 155.890 237.406  1.00 72.96
H
ATOM  33430  N   ASP H 214     116.304 153.350 241.594  1.00 57.14
N
ATOM  33431  CA  ASP H 214     116.149 152.199 242.481  1.00 56.69
C
ATOM  33432  C   ASP H 214     114.802 152.368 243.173  1.00 61.42
C
ATOM  33433  O   ASP H 214     114.591 153.359 243.876  1.00 56.11
O
ATOM  33434  CB  ASP H 214     117.269 152.128 243.513  1.00 49.79
C
ATOM  33435  CG  ASP H 214     118.664 152.019 242.890  1.00 72.25
C
ATOM  33436  OD1 ASP H 214     118.827 151.464 241.774  1.00 74.14
O
ATOM  33437  OD2 ASP H 214     119.622 152.472 243.553  1.00 77.35
O1-
ATOM  33438  H   ASP H 214     116.345 154.097 242.018  1.00 68.59
H
ATOM  33439  HA  ASP H 214     116.171 151.372 241.974  1.00 68.05
H
ATOM  33440  HB2 ASP H 214     117.249 152.932 244.056  1.00 59.78
H
ATOM  33441  HB3 ASP H 214     117.132 151.348 244.072  1.00 59.78
H
ATOM  33442  N   LYS H 215     113.874 151.440 242.938  1.00 51.25
N
ATOM  33443  CA  LYS H 215     112.539 151.512 243.510  1.00 52.65
C
ATOM  33444  C   LYS H 215     112.295 150.294 244.401  1.00 55.15
C
ATOM  33445  O   LYS H 215     112.300 149.144 243.926  1.00 47.73
O
ATOM  33446  CB  LYS H 215     111.457 151.610 242.425  1.00 59.36
C
ATOM  33447  CG  LYS H 215     110.111 152.236 242.951  1.00 64.61
C
ATOM  33448  CD  LYS H 215     110.176 153.801 242.886  1.00 67.46
C
ATOM  33449  CE  LYS H 215     108.819 154.497 243.038  1.00 65.20
C
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ATOM  33450  NZ  LYS H 215     108.145 153.969 244.251  1.00 72.12
N
ATOM  33451  H   LYS H 215     114.001 150.748 242.443  1.00 61.53
H
ATOM  33452  HA  LYS H 215     112.486 152.308 244.063  1.00 63.21
H
ATOM  33453  HB2 LYS H 215     111.786 152.167 241.703  1.00 71.26
H
ATOM  33454  HB3 LYS H 215     111.264 150.719 242.093  1.00 71.26
H
ATOM  33455  HG2 LYS H 215     109.373 151.933 242.398  1.00 77.56
H
ATOM  33456  HG3 LYS H 215     109.965 151.970 243.872  1.00 77.56
H
ATOM  33457  HD2 LYS H 215     110.750 154.117 243.601  1.00 80.98
H
ATOM  33458  HD3 LYS H 215     110.543 154.060 242.027  1.00 80.98
H
ATOM  33459  HE2 LYS H 215     108.947 155.453 243.138  1.00 78.27
H
ATOM  33460  HE3 LYS H 215     108.265 154.314 242.264  1.00 78.27
H
ATOM  33461  HZ1 LYS H 215     107.353 154.363 244.353  1.00 86.58
H
ATOM  33462  HZ2 LYS H 215     108.024 153.091 244.175  1.00 86.58
H
ATOM  33463  HZ3 LYS H 215     108.642 154.132 244.971  1.00 86.58
H
ATOM  33464  N   ARG H 216     112.103 150.547 245.691  1.00 55.04
N
ATOM  33465  CA  ARG H 216     111.686 149.489 246.604  1.00 47.34
C
ATOM  33466  C   ARG H 216     110.219 149.150 246.359  1.00 49.80
C
ATOM  33467  O   ARG H 216     109.378 150.020 246.092  1.00 46.96
O
ATOM  33468  CB  ARG H 216     111.920 149.900 248.054  1.00 54.14
C
ATOM  33469  CG  ARG H 216     111.672 148.719 248.991  1.00 61.00
C
ATOM  33470  CD  ARG H 216     112.005 148.936 250.458  1.00 58.37
C
ATOM  33471  NE  ARG H 216     111.467 147.794 251.205  1.00 61.35
N
ATOM  33472  CZ  ARG H 216     111.410 147.687 252.525  1.00 56.46
C
ATOM  33473  NH1 ARG H 216     110.866 146.598 253.065  1.00 56.11
N
ATOM  33474  NH2 ARG H 216     111.912 148.641 253.297  1.00 63.79
N
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ATOM  33475  H   ARG H 216     112.207 151.316 246.061  1.00 66.07
H
ATOM  33476  HA  ARG H 216     112.215 148.692 246.451  1.00 56.84
H
ATOM  33477  HB2 ARG H 216     112.837 150.195 248.163  1.00 64.99
H
ATOM  33478  HB3 ARG H 216     111.311 150.616 248.290  1.00 64.99
H
ATOM  33479  HG2 ARG H 216     110.731 148.489 248.945  1.00 73.23
H
ATOM  33480  HG3 ARG H 216     112.212 147.972 248.685  1.00 73.23
H
ATOM  33481  HD2 ARG H 216     112.967 148.977 250.583  1.00 70.07
H
ATOM  33482  HD3 ARG H 216     111.595 149.754 250.779  1.00 70.07
H
ATOM  33483  HE  ARG H 216     111.162 147.134 250.744  1.00 73.64
H
ATOM  33484 HH11 ARG H 216     110.557 145.977 252.557  1.00 67.36
H
ATOM  33485 HH12 ARG H 216     110.823 146.518 253.919  1.00 67.36
H
ATOM  33486 HH21 ARG H 216     112.280 149.332 252.940  1.00 76.58
H
ATOM  33487 HH22 ARG H 216     111.874 148.568 254.152  1.00 76.58
H
ATOM  33488  N   VAL H 217     109.937 147.859 246.341  1.00 49.07
N
ATOM  33489  CA  VAL H 217     108.610 147.340 246.039  1.00 50.34
C
ATOM  33490  C   VAL H 217     108.095 146.642 247.281  1.00 47.15
C
ATOM  33491  O   VAL H 217     108.691 145.655 247.728  1.00 49.77
O
ATOM  33492  CB  VAL H 217     108.640 146.393 244.823  1.00 47.42
C
ATOM  33493  CG1 VAL H 217     107.255 145.869 244.566  1.00 52.55
C
ATOM  33494  CG2 VAL H 217     109.192 147.122 243.600  1.00 52.49
C
ATOM  33495  H   VAL H 217     110.514 147.243 246.507  1.00 58.92
H
ATOM  33496  HA  VAL H 217     108.006 148.071 245.835  1.00 60.43
H
ATOM  33497  HB  VAL H 217     109.225 145.639 245.003  1.00 56.94
H
ATOM  33498 HG11 VAL H 217     107.238 145.435 243.699  1.00 63.09
H
ATOM  33499 HG12 VAL H 217     107.025 145.231 245.260  1.00 63.09
H
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ATOM  33500 HG13 VAL H 217     106.629 146.611 244.578  1.00 63.09
H
ATOM  33501 HG21 VAL H 217     109.070 146.562 242.817  1.00 63.02
H
ATOM  33502 HG22 VAL H 217     108.712 147.956 243.487  1.00 63.02
H
ATOM  33503 HG23 VAL H 217     110.136 147.297 243.736  1.00 63.02
H
ATOM  33504  N   GLU H 218     107.004 147.156 247.844  1.00 48.80
N
ATOM  33505  CA  GLU H 218     106.419 146.678 249.087  1.00 51.58
C
ATOM  33506  C   GLU H 218     104.940 146.408 248.917  1.00 57.87
C
ATOM  33507  O   GLU H 218     104.301 146.983 248.038  1.00 52.51
O
ATOM  33508  CB  GLU H 218     106.565 147.688 250.233  1.00 57.03
C
ATOM  33509  CG  GLU H 218     107.977 148.020 250.601  1.00 69.57
C
ATOM  33510  CD  GLU H 218     108.060 148.697 251.961  1.00 79.31
C
ATOM  33511  OE1 GLU H 218     107.541 148.125 252.961  1.00 80.01
O
ATOM  33512  OE2 GLU H 218     108.638 149.800 252.019  1.00 67.54
O1-
ATOM  33513  H   GLU H 218     106.566 147.813 247.505  1.00 58.58
H
ATOM  33514  HA  GLU H 218     106.881 145.857 249.319  1.00 61.92
H
ATOM  33515  HB2 GLU H 218     106.130 148.515 249.971  1.00 68.46
H
ATOM  33516  HB3 GLU H 218     106.136 147.322 251.022  1.00 68.46
H
ATOM  33517  HG2 GLU H 218     108.499 147.203 250.635  1.00 83.51
H
ATOM  33518  HG3 GLU H 218     108.347 148.624 249.938  1.00 83.51
H
ATOM  33519  N   PRO H 219     104.354 145.556 249.764  1.00 58.61
N
ATOM  33520  CA  PRO H 219     102.889 145.445 249.777  1.00 63.20
C
ATOM  33521  C   PRO H 219     102.307 146.776 250.215  1.00 65.28
C
ATOM  33522  O   PRO H 219     102.963 147.552 250.905  1.00 69.85
O
ATOM  33523  CB  PRO H 219     102.605 144.328 250.792  1.00 58.82
C
ATOM  33524  CG  PRO H 219     103.980 143.752 251.192  1.00 63.59
C
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ATOM  33525  CD  PRO H 219     105.005 144.780 250.841  1.00 57.23
C
ATOM  33526  HA  PRO H 219     102.530 145.170 248.918  1.00 75.87
H
ATOM  33527  HB2 PRO H 219     102.150 144.698 251.564  1.00 70.61
H
ATOM  33528  HB3 PRO H 219     102.054 143.645 250.378  1.00 70.61
H
ATOM  33529  HG2 PRO H 219     103.990 143.575 252.147  1.00 76.33
H
ATOM  33530  HG3 PRO H 219     104.140 142.930 250.701  1.00 76.33
H
ATOM  33531  HD2 PRO H 219     105.202 145.347 251.603  1.00 68.70
H
ATOM  33532  HD3 PRO H 219     105.819 144.362 250.520  1.00 68.70
H
ATOM  33533  N   LYS H 220     101.089 147.070 249.765  1.00 85.37
N
ATOM  33534  CA  LYS H 220     100.442 148.322 250.146  1.00104.72
C
ATOM  33535  C   LYS H 220      99.708 148.166 251.483  1.00109.79
C
ATOM  33536  O   LYS H 220      99.191 147.094 251.809  1.00101.49
O
ATOM  33537  CB  LYS H 220      99.475 148.789 249.053  1.00103.62
C
ATOM  33538  CG  LYS H 220      99.123 150.278 249.121  1.00109.98
C
ATOM  33539  CD  LYS H 220      97.663 150.539 248.786  1.00110.03
C
ATOM  33540  CE  LYS H 220      97.363 150.289 247.315  1.00110.75
C
ATOM  33541  NZ  LYS H 220      97.935 151.337 246.406  1.00102.24
N
ATOM  33542  H   LYS H 220     100.623 146.568 249.245  1.00102.47
H
ATOM  33543  HA  LYS H 220     101.116 149.011 250.259  1.00125.70
H
ATOM  33544  HB2 LYS H 220      99.881 148.622 248.188  1.00124.37
H
ATOM  33545  HB3 LYS H 220      98.649 148.287 249.135  1.00124.37
H
ATOM  33546  HG2 LYS H 220      99.288 150.604 250.020  1.00132.00
H
ATOM  33547  HG3 LYS H 220      99.671 150.766 248.487  1.00132.00
H
ATOM  33548  HD2 LYS H 220      97.103 149.949 249.313  1.00132.06
H
ATOM  33549  HD3 LYS H 220      97.451 151.465 248.984  1.00132.06
H
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ATOM  33550  HE2 LYS H 220      97.741 149.432 247.058  1.00132.93
H
ATOM  33551  HE3 LYS H 220      96.402 150.277 247.189  1.00132.93
H
ATOM  33552  HZ1 LYS H 220      97.724 151.156 245.561  1.00122.71
H
ATOM  33553  HZ2 LYS H 220      97.610 152.137 246.620  1.00122.71
H
ATOM  33554  HZ3 LYS H 220      98.823 151.357 246.485  1.00122.71
H
ATOM  33555  N   SER H 221      99.680 149.266 252.256  1.00109.73
N
ATOM  33556  CA  SER H 221      99.052 149.293 253.580  1.00105.19
C
ATOM  33557  C   SER H 221      97.556 149.026 253.498  1.00104.03
C
ATOM  33558  O   SER H 221      96.811 149.823 252.920  1.00111.75
O
ATOM  33559  CB  SER H 221      99.279 150.657 254.222  1.00111.13
C
ATOM  33560  OG  SER H 221      98.364 151.598 253.674  1.00117.06
O
ATOM  33561  H   SER H 221     100.025 150.021 252.029  1.00131.70
H
ATOM  33562  HA  SER H 221      99.458 148.598 254.121  1.00126.25
H
ATOM  33563  HB2 SER H 221      99.135 150.588 255.178  1.00133.38
H
ATOM  33564  HB3 SER H 221     100.186 150.948 254.043  1.00133.38
H
ATOM  33565  HG  SER H 221      98.379 151.560 252.834  1.00140.50
H
ATOM  33566  N   CYS H 222      97.108 147.935 254.120  1.00105.85
N
ATOM  33567  CA  CYS H 222      95.694 147.538 254.077  1.00106.34
C
ATOM  33568  C   CYS H 222      94.832 148.593 254.766  1.00 92.76
C
ATOM  33569  O   CYS H 222      93.659 148.754 254.440  1.00 96.59
O
ATOM  33570  CB  CYS H 222      95.488 146.150 254.734  1.00 95.00
C
ATOM  33571  H   CYS H 222      97.604 147.402 254.579  1.00127.05
H
ATOM  33572  HA  CYS H 222      95.412 147.462 253.151  1.00127.64
H
ATOM  33573  HB2 CYS H 222      94.566 145.875 254.611  1.00114.02
H
ATOM  33574  HB3 CYS H 222      96.083 145.509 254.313  1.00114.02
H
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ATOM  33575  N   ASP L   1     111.917 138.893 191.671  1.00416.90
N
ATOM  33576  CA  ASP L   1     113.365 138.825 192.004  1.00324.05
C
ATOM  33577  CB  ASP L   1     113.775 140.004 192.889  1.00249.34
C
ATOM  33578  CG  ASP L   1     115.189 140.480 192.632  1.00278.94
C
ATOM  33579  OD1 ASP L   1     115.926 140.655 193.624  1.00339.29
O
ATOM  33580  OD2 ASP L   1     115.530 140.705 191.443  1.00256.99
O
ATOM  33581  C   ASP L   1     113.657 137.484 192.670  1.00319.83
C
ATOM  33582  O   ASP L   1     113.573 136.435 192.028  1.00424.63
O
ATOM  33583  N   ILE L   2     113.983 137.525 193.968  1.00198.35
N
ATOM  33584  CA  ILE L   2     114.353 136.276 194.605  1.00169.59
C
ATOM  33585  CB  ILE L   2     115.844 135.933 194.365  1.00144.80
C
ATOM  33586  CG1 ILE L   2     116.212 134.505 194.787  1.00151.49
C
ATOM  33587  CG2 ILE L   2     116.768 137.012 194.913  1.00116.33
C
ATOM  33588  CD1 ILE L   2     115.476 133.410 194.027  1.00144.77
C
ATOM  33589  C   ILE L   2     113.781 136.162 196.024  1.00138.55
C
ATOM  33590  O   ILE L   2     114.064 136.916 196.948  1.00111.27
O
ATOM  33591  N   GLN L   3     112.893 135.194 196.158  1.00138.34
N
ATOM  33592  CA  GLN L   3     112.117 135.034 197.361  1.00161.41
C
ATOM  33593  CB  GLN L   3     110.700 134.713 196.874  1.00217.07
C
ATOM  33594  CG  GLN L   3     109.677 134.438 197.964  1.00276.12
C
ATOM  33595  CD  GLN L   3     109.250 135.704 198.659  1.00305.73
C
ATOM  33596  OE1 GLN L   3     109.255 136.781 198.061  1.00259.48
O
ATOM  33597  NE2 GLN L   3     108.855 135.573 199.917  1.00376.81
N
ATOM  33598  C   GLN L   3     112.801 133.921 198.146  1.00161.41
C
ATOM  33599  O   GLN L   3     113.485 133.095 197.552  1.00170.58
O
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ATOM  33600  N   MET L   4     112.628 133.929 199.477  1.00210.32
N
ATOM  33601  CA  MET L   4     113.056 132.857 200.375  1.00256.47
C
ATOM  33602  CB  MET L   4     114.286 133.267 201.196  1.00255.73
C
ATOM  33603  CG  MET L   4     115.349 133.993 200.420  1.00200.38
C
ATOM  33604  SD  MET L   4     116.277 132.812 199.460  1.00224.34
S
ATOM  33605  CE  MET L   4     117.715 132.690 200.512  1.00175.21
C
ATOM  33606  C   MET L   4     111.937 132.499 201.364  1.00264.65
C
ATOM  33607  O   MET L   4     111.671 133.233 202.316  1.00266.12
O
ATOM  33608  N   THR L   5     111.286 131.346 201.176  1.00237.86
N
ATOM  33609  CA  THR L   5     110.364 130.867 202.191  1.00174.91
C
ATOM  33610  CB  THR L   5     109.080 130.283 201.596  1.00212.77
C
ATOM  33611  OG1 THR L   5     108.500 131.210 200.677  1.00282.47
O
ATOM  33612  CG2 THR L   5     108.098 129.894 202.682  1.00159.22
C
ATOM  33613  C   THR L   5     110.949 129.633 202.852  1.00169.82
C
ATOM  33614  O   THR L   5     111.521 128.775 202.186  1.00222.71
O
ATOM  33615  N   GLN L   6     110.741 129.515 204.158  1.00186.49
N
ATOM  33616  CA  GLN L   6     111.136 128.294 204.840  1.00214.18
C
ATOM  33617  CB  GLN L   6     112.105 128.592 205.984  1.00219.14
C
ATOM  33618  CG  GLN L   6     113.077 129.713 205.653  1.00223.72
C
ATOM  33619  CD  GLN L   6     114.042 130.028 206.768  1.00255.41
C
ATOM  33620  OE1 GLN L   6     114.385 131.188 206.994  1.00233.65
O
ATOM  33621  NE2 GLN L   6     114.496 128.994 207.466  1.00274.76
N
ATOM  33622  C   GLN L   6     109.897 127.490 205.242  1.00231.88
C
ATOM  33623  O   GLN L   6     108.795 128.029 205.385  1.00213.78
O
ATOM  33624  N   SER L   7     110.124 126.188 205.436  1.00237.39
N
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ATOM  33625  CA  SER L   7     109.113 125.145 205.399  1.00252.29
C
ATOM  33626  CB  SER L   7     109.117 124.426 204.024  1.00251.80
C
ATOM  33627  OG  SER L   7     110.074 124.733 202.979  1.00268.47
O
ATOM  33628  C   SER L   7     109.630 124.061 206.327  1.00288.56
C
ATOM  33629  O   SER L   7     110.556 123.349 205.950  1.00346.43
O
ATOM  33630  N   PRO L   8     109.090 123.864 207.543  1.00306.38
N
ATOM  33631  CA  PRO L   8     107.961 124.645 208.029  1.00300.85
C
ATOM  33632  CB  PRO L   8     107.455 123.799 209.203  1.00321.39
C
ATOM  33633  CG  PRO L   8     108.697 123.114 209.733  1.00307.31
C
ATOM  33634  CD  PRO L   8     109.573 122.877 208.521  1.00320.52
C
ATOM  33635  C   PRO L   8     108.453 125.983 208.557  1.00291.81
C
ATOM  33636  O   PRO L   8     109.620 126.123 208.921  1.00277.80
O
ATOM  33637  N   SER L   9     107.534 126.947 208.579  1.00281.19
N
ATOM  33638  CA  SER L   9     107.769 128.267 209.136  1.00303.50
C
ATOM  33639  CB  SER L   9     106.573 129.111 208.854  1.00290.80
C
ATOM  33640  OG  SER L   9     105.432 128.274 208.729  1.00271.99
O
ATOM  33641  C   SER L   9     108.028 128.164 210.637  1.00319.61
C
ATOM  33642  O   SER L   9     108.892 128.856 211.172  1.00306.31
O
ATOM  33643  N   THR L  10     107.251 127.303 211.301  1.00343.36
N
ATOM  33644  CA  THR L  10     107.434 126.991 212.709  1.00343.42
C
ATOM  33645  CB  THR L  10     106.276 127.551 213.554  1.00348.24
C
ATOM  33646  OG1 THR L  10     106.109 128.951 213.320  1.00322.00
O
ATOM  33647  CG2 THR L  10     106.454 127.328 215.041  1.00326.14
C
ATOM  33648  C   THR L  10     107.647 125.481 212.828  1.00333.55
C
ATOM  33649  O   THR L  10     106.904 124.700 212.230  1.00282.81
O
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ATOM  33650  N   LEU L  11     108.687 125.084 213.575  1.00348.74
N
ATOM  33651  CA  LEU L  11     108.959 123.673 213.804  1.00369.44
C
ATOM  33652  CB  LEU L  11     110.039 123.183 212.837  1.00325.97
C
ATOM  33653  CG  LEU L  11     110.255 121.672 212.855  1.00311.50
C
ATOM  33654  CD1 LEU L  11     108.926 120.939 212.678  1.00227.91
C
ATOM  33655  CD2 LEU L  11     111.252 121.255 211.787  1.00339.78
C
ATOM  33656  C   LEU L  11     109.369 123.407 215.253  1.00388.12
C
ATOM  33657  O   LEU L  11     110.433 123.836 215.697  1.00336.87
O
ATOM  33658  N   SER L  12     108.516 122.661 215.965  1.00396.99
N
ATOM  33659  CA  SER L  12     108.805 122.184 217.309  1.00340.59
C
ATOM  33660  CB  SER L  12     107.580 122.274 218.189  1.00340.39
C
ATOM  33661  OG  SER L  12     107.200 123.623 218.417  1.00317.84
O
ATOM  33662  C   SER L  12     109.300 120.745 217.223  1.00303.44
C
ATOM  33663  O   SER L  12     108.878 120.002 216.338  1.00266.56
O
ATOM  33664  N   ALA L  13     110.212 120.384 218.133  1.00288.70
N
ATOM  33665  CA  ALA L  13     110.695 119.020 218.319  1.00306.15
C
ATOM  33666  CB  ALA L  13     111.679 118.656 217.225  1.00227.42
C
ATOM  33667  C   ALA L  13     111.323 118.900 219.711  1.00341.59
C
ATOM  33668  O   ALA L  13     111.618 119.921 220.325  1.00435.22
O
ATOM  33669  N   SER L  14     111.524 117.663 220.205  1.00337.28
N
ATOM  33670  CA  SER L  14     112.102 117.412 221.524  1.00346.07
C
ATOM  33671  CB  SER L  14     111.515 116.168 222.163  1.00305.52
C
ATOM  33672  OG  SER L  14     110.155 116.360 222.533  1.00320.88
O
ATOM  33673  C   SER L  14     113.633 117.342 221.456  1.00381.87
C
ATOM  33674  O   SER L  14     114.189 117.191 220.371  1.00457.87
O
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ATOM  33675  N   VAL L  15     114.302 117.443 222.624  1.00407.22
N
ATOM  33676  CA  VAL L  15     115.758 117.495 222.762  1.00406.37
C
ATOM  33677  CB  VAL L  15     116.195 117.926 224.184  1.00413.70
C
ATOM  33678  CG1 VAL L  15     117.684 117.711 224.449  1.00368.39
C
ATOM  33679  CG2 VAL L  15     115.786 119.352 224.529  1.00412.35
C
ATOM  33680  C   VAL L  15     116.371 116.142 222.387  1.00378.65
C
ATOM  33681  O   VAL L  15     116.109 115.134 223.038  1.00367.78
O
ATOM  33682  N   GLY L  16     117.220 116.137 221.351  1.00377.17
N
ATOM  33683  CA  GLY L  16     117.907 114.934 220.900  1.00356.23
C
ATOM  33684  C   GLY L  16     117.432 114.438 219.531  1.00390.67
C
ATOM  33685  O   GLY L  16     118.010 113.497 218.988  1.00343.99
O
ATOM  33686  N   ASP L  17     116.401 115.095 218.971  1.00433.68
N
ATOM  33687  CA  ASP L  17     115.720 114.666 217.753  1.00391.56
C
ATOM  33688  CB  ASP L  17     114.263 115.138 217.701  1.00371.00
C
ATOM  33689  CG  ASP L  17     113.335 114.526 218.734  1.00352.92
C
ATOM  33690  OD1 ASP L  17     113.695 113.485 219.318  1.00433.45
O
ATOM  33691  OD2 ASP L  17     112.245 115.108 218.929  1.00244.23
O
ATOM  33692  C   ASP L  17     116.409 115.222 216.506  1.00361.67
C
ATOM  33693  O   ASP L  17     117.019 116.288 216.539  1.00346.48
O
ATOM  33694  N   ARG L  18     116.250 114.496 215.395  1.00343.22
N
ATOM  33695  CA  ARG L  18     116.762 114.862 214.082  1.00343.06
C
ATOM  33696  CB  ARG L  18     117.077 113.560 213.327  1.00307.54
C
ATOM  33697  CG  ARG L  18     117.886 113.701 212.046  1.00296.80
C
ATOM  33698  CD  ARG L  18     117.651 112.550 211.081  1.00270.23
C
ATOM  33699  NE  ARG L  18     117.789 112.985 209.691  1.00321.56
N
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ATOM  33700  CZ  ARG L  18     116.851 113.612 208.973  1.00342.78
C
ATOM  33701  NH1 ARG L  18     115.674 113.894 209.507  1.00353.29
N
ATOM  33702  NH2 ARG L  18     117.101 113.956 207.722  1.00362.42
N
ATOM  33703  C   ARG L  18     115.754 115.765 213.355  1.00350.09
C
ATOM  33704  O   ARG L  18     114.726 115.294 212.855  1.00272.75
O
ATOM  33705  N   VAL L  19     116.081 117.063 213.254  1.00362.36
N
ATOM  33706  CA  VAL L  19     115.166 118.063 212.721  1.00310.61
C
ATOM  33707  CB  VAL L  19     115.148 119.332 213.596  1.00349.50
C
ATOM  33708  CG1 VAL L  19     114.317 120.440 212.965  1.00355.03
C
ATOM  33709  CG2 VAL L  19     114.641 119.027 214.998  1.00318.95
C
ATOM  33710  C   VAL L  19     115.502 118.368 211.259  1.00271.21
C
ATOM  33711  O   VAL L  19     116.648 118.227 210.825  1.00236.40
O
ATOM  33712  N   THR L  20     114.479 118.786 210.502  1.00236.38
N
ATOM  33713  CA  THR L  20     114.653 119.081 209.087  1.00265.64
C
ATOM  33714  CB  THR L  20     114.163 117.918 208.206  1.00274.01
C
ATOM  33715  OG1 THR L  20     114.819 116.725 208.631  1.00283.36
O
ATOM  33716  CG2 THR L  20     114.425 118.107 206.727  1.00237.73
C
ATOM  33717  C   THR L  20     114.025 120.431 208.736  1.00241.46
C
ATOM  33718  O   THR L  20     112.813 120.610 208.824  1.00219.80
O
ATOM  33719  N   ILE L  21     114.868 121.378 208.312  1.00223.17
N
ATOM  33720  CA  ILE L  21     114.391 122.634 207.757  1.00228.13
C
ATOM  33721  CB  ILE L  21     114.956 123.854 208.534  1.00274.30
C
ATOM  33722  CG1 ILE L  21     114.909 123.695 210.057  1.00287.73
C
ATOM  33723  CG2 ILE L  21     114.286 125.154 208.111  1.00286.11
C
ATOM  33724  CD1 ILE L  21     115.400 124.929 210.797  1.00269.65
C
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ATOM  33725  C   ILE L  21     114.738 122.655 206.260  1.00211.60
C
ATOM  33726  O   ILE L  21     115.832 122.249 205.859  1.00157.48
O
ATOM  33727  N   THR L  22     113.790 123.144 205.442  1.00218.23
N
ATOM  33728  CA  THR L  22     113.894 123.226 203.989  1.00194.30
C
ATOM  33729  CB  THR L  22     112.939 122.201 203.351  1.00222.79
C
ATOM  33730  OG1 THR L  22     112.633 121.120 204.240  1.00209.22
O
ATOM  33731  CG2 THR L  22     113.421 121.675 202.016  1.00238.47
C
ATOM  33732  C   THR L  22     113.546 124.641 203.492  1.00202.49
C
ATOM  33733  O   THR L  22     112.476 125.164 203.797  1.00218.06
O
ATOM  33734  N   CYS L  23     114.442 125.266 202.708  1.00192.83
N
ATOM  33735  CA  CYS L  23     114.192 126.578 202.117  1.00192.96
C
ATOM  33736  CB  CYS L  23     115.475 127.397 202.061  1.00203.15
C
ATOM  33737  SG  CYS L  23     115.201 129.167 201.793  1.00236.25
S
ATOM  33738  C   CYS L  23     113.631 126.428 200.700  1.00207.63
C
ATOM  33739  O   CYS L  23     113.729 125.362 200.101  1.00219.09
O
ATOM  33740  N   ARG L  24     113.046 127.502 200.151  1.00231.26
N
ATOM  33741  CA  ARG L  24     112.388 127.428 198.849  1.00228.94
C
ATOM  33742  CB  ARG L  24     110.910 127.024 198.972  1.00236.46
C
ATOM  33743  CG  ARG L  24     110.213 126.667 197.657  1.00251.35
C
ATOM  33744  CD  ARG L  24     110.156 125.175 197.339  1.00234.31
C
ATOM  33745  NE  ARG L  24     110.714 124.627 198.586  1.00280.17
N
ATOM  33746  CZ  ARG L  24     111.190 123.399 198.747  1.00332.30
C
ATOM  33747  NH1 ARG L  24     111.154 122.559 197.715  1.00369.84
N
ATOM  33748  NH2 ARG L  24     111.676 122.987 199.935  1.00374.39
N
ATOM  33749  C   ARG L  24     112.481 128.762 198.111  1.00201.14
C
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ATOM  33750  O   ARG L  24     111.517 129.546 198.083  1.00139.31
O
ATOM  33751  N   ALA L  25     113.624 128.962 197.447  1.00162.99
N
ATOM  33752  CA  ALA L  25     113.796 130.149 196.630  1.00173.70
C
ATOM  33753  CB  ALA L  25     115.249 130.519 196.592  1.00170.59
C
ATOM  33754  C   ALA L  25     113.196 129.974 195.233  1.00182.81
C
ATOM  33755  O   ALA L  25     113.120 128.856 194.717  1.00189.18
O
ATOM  33756  N   SER L  26     112.847 131.118 194.622  1.00182.11
N
ATOM  33757  CA  SER L  26     111.937 131.229 193.488  1.00219.29
C
ATOM  33758  CB  SER L  26     111.294 132.588 193.481  1.00187.24
C
ATOM  33759  OG  SER L  26     112.258 133.569 193.151  1.00188.89
O
ATOM  33760  C   SER L  26     112.585 130.893 192.135  1.00251.49
C
ATOM  33761  O   SER L  26     111.900 130.416 191.229  1.00272.02
O
ATOM  33762  N   GLN L  27     113.887 131.161 191.965  1.00231.94
N
ATOM  33763  CA  GLN L  27     114.568 130.762 190.735  1.00205.14
C
ATOM  33764  CB  GLN L  27     114.881 131.957 189.829  1.00184.76
C
ATOM  33765  CG  GLN L  27     115.052 133.289 190.552  1.00170.24
C
ATOM  33766  CD  GLN L  27     115.987 134.220 189.808  1.00205.81
C
ATOM  33767  OE1 GLN L  27     116.093 134.185 188.574  1.00187.16
O
ATOM  33768  NE2 GLN L  27     116.676 135.070 190.558  1.00189.08
N
ATOM  33769  C   GLN L  27     115.720 129.797 191.042  1.00201.11
C
ATOM  33770  O   GLN L  27     115.663 129.103 192.055  1.00217.33
O
ATOM  33771  N   SER L  28     116.743 129.737 190.163  1.00169.01
N
ATOM  33772  CA  SER L  28     117.836 128.761 190.250  1.00187.92
C
ATOM  33773  CB  SER L  28     118.163 128.228 188.810  1.00171.51
C
ATOM  33774  OG  SER L  28     118.568 126.834 188.717  1.00128.25
O
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ATOM  33775  C   SER L  28     119.084 129.364 190.938  1.00151.82
C
ATOM  33776  O   SER L  28     119.854 129.996 190.210  1.00133.44
O
ATOM  33777  N   ILE L  29     119.349 129.122 192.265  1.00114.05
N
ATOM  33778  CA  ILE L  29     120.536 129.647 192.993  1.00166.49
C
ATOM  33779  CB  ILE L  29     120.220 130.385 194.333  1.00164.21
C
ATOM  33780  CG1 ILE L  29     120.139 129.477 195.575  1.00158.40
C
ATOM  33781  CG2 ILE L  29     119.024 131.321 194.209  1.00185.44
C
ATOM  33782  CD1 ILE L  29     119.750 130.175 196.886  1.00 88.16
C
ATOM  33783  C   ILE L  29     121.759 128.704 193.165  1.00196.21
C
ATOM  33784  O   ILE L  29     122.356 128.681 194.258  1.00168.17
O
ATOM  33785  N   SER L  30     122.246 128.065 192.070  1.00196.85
N
ATOM  33786  CA  SER L  30     123.176 126.929 192.085  1.00136.60
C
ATOM  33787  CB  SER L  30     124.575 127.215 191.565  1.00109.29
C
ATOM  33788  OG  SER L  30     124.596 128.018 190.401  1.00156.24
O
ATOM  33789  C   SER L  30     123.360 126.462 193.513  1.00147.09
C
ATOM  33790  O   SER L  30     122.430 126.046 194.205  1.00167.04
O
ATOM  33791  N   ASN L  31     124.591 126.667 193.953  1.00146.49
N
ATOM  33792  CA  ASN L  31     125.145 125.975 195.094  1.00161.71
C
ATOM  33793  CB  ASN L  31     126.373 125.192 194.621  1.00173.45
C
ATOM  33794  CG  ASN L  31     126.965 124.233 195.629  1.00149.22
C
ATOM  33795  OD1 ASN L  31     126.279 123.752 196.554  1.00118.73
O
ATOM  33796  ND2 ASN L  31     128.252 123.972 195.430  1.00113.83
N
ATOM  33797  C   ASN L  31     125.418 127.017 196.172  1.00141.95
C
ATOM  33798  O   ASN L  31     126.069 126.734 197.180  1.00134.80
O
ATOM  33799  N   TRP L  32     124.926 128.237 195.925  1.00128.08
N
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ATOM  33800  CA  TRP L  32     125.193 129.331 196.844  1.00128.88
C
ATOM  33801  CB  TRP L  32     125.486 130.661 196.117  1.00122.95
C
ATOM  33802  CG  TRP L  32     126.512 130.425 195.055  1.00127.94
C
ATOM  33803  CD1 TRP L  32     126.280 130.141 193.741  1.00148.22
C
ATOM  33804  NE1 TRP L  32     127.451 129.869 193.080  1.00106.72
N
ATOM  33805  CE2 TRP L  32     128.468 129.925 193.981  1.00101.42
C
ATOM  33806  CD2 TRP L  32     127.925 130.244 195.234  1.00114.80
C
ATOM  33807  CE3 TRP L  32     128.794 130.325 196.325  1.00150.96
C
ATOM  33808  CZ3 TRP L  32     130.149 130.127 196.154  1.00128.64
C
ATOM  33809  CH2 TRP L  32     130.657 129.820 194.901  1.00142.64
C
ATOM  33810  CZ2 TRP L  32     129.828 129.723 193.804  1.00142.42
C
ATOM  33811  C   TRP L  32     123.987 129.386 197.749  1.00122.48
C
ATOM  33812  O   TRP L  32     122.890 129.162 197.212  1.00103.03
O
ATOM  33813  N   LEU L  33     124.263 129.562 199.068  1.00113.34
N
ATOM  33814  CA  LEU L  33     123.329 129.582 200.196  1.00120.69
C
ATOM  33815  CB  LEU L  33     122.609 128.235 200.302  1.00 96.68
C
ATOM  33816  CG  LEU L  33     121.195 128.294 200.890  1.00107.02
C
ATOM  33817  CD1 LEU L  33     120.133 128.331 199.775  1.00 85.41
C
ATOM  33818  CD2 LEU L  33     120.948 127.136 201.856  1.00122.23
C
ATOM  33819  C   LEU L  33     124.081 129.741 201.509  1.00111.09
C
ATOM  33820  O   LEU L  33     125.126 129.134 201.652  1.00138.34
O
ATOM  33821  N   ALA L  34     123.486 130.389 202.515  1.00117.68
N
ATOM  33822  CA  ALA L  34     124.012 130.217 203.865  1.00120.31
C
ATOM  33823  CB  ALA L  34     124.744 131.468 204.299  1.00 97.55
C
ATOM  33824  C   ALA L  34     122.924 129.772 204.858  1.00156.51
C
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ATOM  33825  O   ALA L  34     121.719 129.934 204.597  1.00160.62
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ATOM  33826  N   TRP L  35     123.379 129.157 205.977  1.00149.84
N
ATOM  33827  CA  TRP L  35     122.574 128.927 207.177  1.00163.92
C
ATOM  33828  CB  TRP L  35     122.413 127.431 207.510  1.00126.07
C
ATOM  33829  CG  TRP L  35     121.428 126.763 206.595  1.00183.57
C
ATOM  33830  CD1 TRP L  35     121.722 125.856 205.621  1.00207.63
C
ATOM  33831  NE1 TRP L  35     120.588 125.463 204.960  1.00208.58
N
ATOM  33832  CE2 TRP L  35     119.516 126.132 205.478  1.00195.06
C
ATOM  33833  CD2 TRP L  35     120.000 126.974 206.510  1.00218.57
C
ATOM  33834  CE3 TRP L  35     119.077 127.767 207.205  1.00263.85
C
ATOM  33835  CZ3 TRP L  35     117.742 127.696 206.866  1.00247.33
C
ATOM  33836  CH2 TRP L  35     117.303 126.859 205.837  1.00232.28
C
ATOM  33837  CZ2 TRP L  35     118.172 126.063 205.124  1.00173.11
C
ATOM  33838  C   TRP L  35     123.095 129.746 208.362  1.00179.48
C
ATOM  33839  O   TRP L  35     124.286 129.749 208.649  1.00188.66
O
ATOM  33840  N   PHE L  36     122.196 130.462 209.043  1.00207.77
N
ATOM  33841  CA  PHE L  36     122.592 131.170 210.246  1.00175.00
C
ATOM  33842  CB  PHE L  36     122.561 132.686 210.067  1.00166.24
C
ATOM  33843  CG  PHE L  36     123.500 133.232 209.025  1.00182.83
C
ATOM  33844  CD1 PHE L  36     124.764 133.656 209.390  1.00180.14
C
ATOM  33845  CE1 PHE L  36     125.629 134.184 208.443  1.00232.65
C
ATOM  33846  CZ  PHE L  36     125.236 134.313 207.125  1.00234.20
C
ATOM  33847  CD2 PHE L  36     123.105 133.388 207.698  1.00214.62
C
ATOM  33848  CE2 PHE L  36     123.969 133.921 206.749  1.00209.63
C
ATOM  33849  C   PHE L  36     121.710 130.748 211.413  1.00204.60
C
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ATOM  33850  O   PHE L  36     120.637 130.156 211.268  1.00184.23
O
ATOM  33851  N   GLN L  37     122.217 131.076 212.589  1.00217.13
N
ATOM  33852  CA  GLN L  37     121.532 130.747 213.811  1.00225.61
C
ATOM  33853  CB  GLN L  37     122.255 129.565 214.447  1.00237.90
C
ATOM  33854  CG  GLN L  37     121.681 129.108 215.773  1.00238.08
C
ATOM  33855  CD  GLN L  37     122.676 128.197 216.448  1.00259.46
C
ATOM  33856  OE1 GLN L  37     123.886 128.302 216.248  1.00244.25
O
ATOM  33857  NE2 GLN L  37     122.171 127.297 217.274  1.00284.78
N
ATOM  33858  C   GLN L  37     121.526 132.022 214.633  1.00224.74
C
ATOM  33859  O   GLN L  37     122.546 132.691 214.794  1.00192.09
O
ATOM  33860  N   GLN L  38     120.332 132.403 215.061  1.00237.88
N
ATOM  33861  CA  GLN L  38     120.244 133.603 215.853  1.00252.31
C
ATOM  33862  CB  GLN L  38     119.519 134.691 215.072  1.00209.71
C
ATOM  33863  CG  GLN L  38     119.592 136.031 215.773  1.00218.04
C
ATOM  33864  CD  GLN L  38     119.103 137.127 214.868  1.00223.07
C
ATOM  33865  OE1 GLN L  38     118.793 136.875 213.699  1.00194.91
O
ATOM  33866  NE2 GLN L  38     119.067 138.342 215.410  1.00202.41
N
ATOM  33867  C   GLN L  38     119.563 133.250 217.164  1.00302.80
C
ATOM  33868  O   GLN L  38     118.451 132.724 217.170  1.00332.72
O
ATOM  33869  N   LYS L  39     120.271 133.514 218.263  1.00303.27
N
ATOM  33870  CA  LYS L  39     119.686 133.380 219.583  1.00289.78
C
ATOM  33871  CB  LYS L  39     120.598 132.548 220.481  1.00221.71
C
ATOM  33872  CG  LYS L  39     120.699 131.086 220.085  1.00199.64
C
ATOM  33873  CD  LYS L  39     121.684 130.358 220.967  1.00272.83
C
ATOM  33874  CE  LYS L  39     122.796 129.668 220.200  1.00317.34
C
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ATOM  33875  NZ  LYS L  39     123.810 129.059 221.099  1.00282.97
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ATOM  33876  C   LYS L  39     119.434 134.764 220.167  1.00318.01
C
ATOM  33877  O   LYS L  39     120.179 135.697 219.878  1.00373.42
O
ATOM  33878  N   PRO L  40     118.363 134.934 220.973  1.00311.89
N
ATOM  33879  CA  PRO L  40     118.097 136.208 221.653  1.00331.74
C
ATOM  33880  CB  PRO L  40     117.018 135.777 222.662  1.00338.50
C
ATOM  33881  CG  PRO L  40     116.241 134.694 221.925  1.00262.79
C
ATOM  33882  CD  PRO L  40     117.323 133.914 221.217  1.00238.93
C
ATOM  33883  C   PRO L  40     119.332 136.863 222.288  1.00353.56
C
ATOM  33884  O   PRO L  40     119.987 136.265 223.141  1.00441.42
O
ATOM  33885  N   GLY L  41     119.655 138.088 221.833  1.00288.23
N
ATOM  33886  CA  GLY L  41     120.807 138.847 222.304  1.00312.74
C
ATOM  33887  C   GLY L  41     122.120 138.394 221.663  1.00418.21
C
ATOM  33888  O   GLY L  41     123.192 138.868 222.042  1.00477.28
O
ATOM  33889  N   LYS L  42     122.022 137.461 220.703  1.00423.16
N
ATOM  33890  CA  LYS L  42     123.144 137.037 219.879  1.00340.56
C
ATOM  33891  CB  LYS L  42     123.354 135.514 219.943  1.00311.06
C
ATOM  33892  CG  LYS L  42     123.522 134.914 221.337  1.00301.59
C
ATOM  33893  CD  LYS L  42     124.854 135.214 222.004  1.00313.74
C
ATOM  33894  CE  LYS L  42     124.790 135.098 223.513  1.00311.53
C
ATOM  33895  NZ  LYS L  42     124.044 133.891 223.941  1.00284.28
N
ATOM  33896  C   LYS L  42     122.945 137.575 218.458  1.00272.94
C
ATOM  33897  O   LYS L  42     121.820 137.697 217.951  1.00189.63
O
ATOM  33898  N   ALA L  43     124.058 137.982 217.842  1.00208.21
N
ATOM  33899  CA  ALA L  43     124.045 138.289 216.423  1.00220.64
C
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ATOM  33900  CB  ALA L  43     125.027 139.388 216.141  1.00138.74
C
ATOM  33901  C   ALA L  43     124.348 137.006 215.639  1.00278.21
C
ATOM  33902  O   ALA L  43     125.153 136.191 216.096  1.00372.02
O
ATOM  33903  N   PRO L  44     123.742 136.786 214.439  1.00243.50
N
ATOM  33904  CA  PRO L  44     123.689 135.467 213.805  1.00205.71
C
ATOM  33905  CB  PRO L  44     122.549 135.548 212.783  1.00167.11
C
ATOM  33906  CG  PRO L  44     122.072 136.982 212.828  1.00147.21
C
ATOM  33907  CD  PRO L  44     123.102 137.793 213.589  1.00179.11
C
ATOM  33908  C   PRO L  44     124.962 135.078 213.061  1.00226.14
C
ATOM  33909  O   PRO L  44     125.460 135.828 212.215  1.00173.66
O
ATOM  33910  N   LYS L  45     125.448 133.874 213.402  1.00255.37
N
ATOM  33911  CA  LYS L  45     126.633 133.262 212.820  1.00229.44
C
ATOM  33912  CB  LYS L  45     127.435 132.409 213.815  1.00172.16
C
ATOM  33913  CG  LYS L  45     127.714 133.024 215.177  1.00185.75
C
ATOM  33914  CD  LYS L  45     126.510 133.010 216.114  1.00216.98
C
ATOM  33915  CE  LYS L  45     125.790 131.678 216.203  1.00255.77
C
ATOM  33916  NZ  LYS L  45     124.568 131.794 217.032  1.00260.34
N
ATOM  33917  C   LYS L  45     126.229 132.343 211.668  1.00241.82
C
ATOM  33918  O   LYS L  45     125.079 131.886 211.577  1.00158.89
O
ATOM  33919  N   LEU L  46     127.228 132.121 210.797  1.00277.56
N
ATOM  33920  CA  LEU L  46     127.240 131.111 209.748  1.00236.56
C
ATOM  33921  CB  LEU L  46     128.422 131.323 208.778  1.00194.69
C
ATOM  33922  CG  LEU L  46     128.467 130.445 207.516  1.00180.66
C
ATOM  33923  CD1 LEU L  46     127.192 130.584 206.711  1.00242.21
C
ATOM  33924  CD2 LEU L  46     129.645 130.787 206.612  1.00198.75
C
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ATOM  33925  C   LEU L  46     127.266 129.730 210.402  1.00199.02
C
ATOM  33926  O   LEU L  46     127.815 129.527 211.493  1.00126.05
O
ATOM  33927  N   LEU L  47     126.581 128.809 209.728  1.00229.28
N
ATOM  33928  CA  LEU L  47     126.516 127.418 210.122  1.00226.13
C
ATOM  33929  CB  LEU L  47     125.113 127.105 210.653  1.00225.61
C
ATOM  33930  CG  LEU L  47     124.943 127.116 212.175  1.00218.72
C
ATOM  33931  CD1 LEU L  47     125.558 128.357 212.850  1.00149.51
C
ATOM  33932  CD2 LEU L  47     123.473 126.935 212.548  1.00222.29
C
ATOM  33933  C   LEU L  47     126.890 126.536 208.930  1.00244.95
C
ATOM  33934  O   LEU L  47     127.295 125.395 209.146  1.00264.80
O
ATOM  33935  N   ILE L  48     126.762 127.061 207.689  1.00249.25
N
ATOM  33936  CA  ILE L  48     126.991 126.315 206.448  1.00210.85
C
ATOM  33937  CB  ILE L  48     125.751 125.470 206.037  1.00199.30
C
ATOM  33938  CG1 ILE L  48     124.622 125.390 207.085  1.00189.07
C
ATOM  33939  CG2 ILE L  48     126.160 124.125 205.438  1.00167.85
C
ATOM  33940  CD1 ILE L  48     124.748 124.320 208.162  1.00207.74
C
ATOM  33941  C   ILE L  48     127.354 127.259 205.290  1.00169.95
C
ATOM  33942  O   ILE L  48     126.509 128.053 204.895  1.00132.20
O
ATOM  33943  N   TYR L  49     128.557 127.112 204.686  1.00194.62
N
ATOM  33944  CA  TYR L  49     128.968 127.774 203.436  1.00183.38
C
ATOM  33945  CB  TYR L  49     130.406 128.333 203.497  1.00188.64
C
ATOM  33946  CG  TYR L  49     131.529 127.334 203.275  1.00267.83
C
ATOM  33947  CD1 TYR L  49     131.852 126.361 204.218  1.00297.95
C
ATOM  33948  CE1 TYR L  49     132.882 125.447 204.017  1.00299.50
C
ATOM  33949  CZ  TYR L  49     133.623 125.485 202.846  1.00317.37
C
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ATOM  33950  OH  TYR L  49     134.645 124.610 202.598  1.00345.28
O
ATOM  33951  CE2 TYR L  49     133.323 126.443 201.891  1.00290.28
C
ATOM  33952  CD2 TYR L  49     132.292 127.350 202.113  1.00267.19
C
ATOM  33953  C   TYR L  49     128.675 126.879 202.211  1.00132.14
C
ATOM  33954  O   TYR L  49     129.067 125.721 202.142  1.00136.09
O
ATOM  33955  N   GLU L  50     127.953 127.419 201.233  1.00103.79
N
ATOM  33956  CA  GLU L  50     127.553 126.726 200.021  1.00 97.86
C
ATOM  33957  CB  GLU L  50     128.785 126.189 199.315  1.00 99.60
C
ATOM  33958  CG  GLU L  50     129.662 127.272 198.737  1.00124.09
C
ATOM  33959  CD  GLU L  50     130.436 126.848 197.493  1.00181.68
C
ATOM  33960  OE1 GLU L  50     130.798 125.640 197.382  1.00211.89
O
ATOM  33961  OE2 GLU L  50     130.683 127.720 196.629  1.00167.81
O
ATOM  33962  C   GLU L  50     126.531 125.623 200.305  1.00122.77
C
ATOM  33963  O   GLU L  50     126.248 124.801 199.424  1.00102.44
O
ATOM  33964  N   ALA L  51     125.983 125.641 201.535  1.00181.21
N
ATOM  33965  CA  ALA L  51     124.923 124.772 202.042  1.00241.49
C
ATOM  33966  CB  ALA L  51     123.573 125.417 201.900  1.00280.82
C
ATOM  33967  C   ALA L  51     124.983 123.372 201.430  1.00275.75
C
ATOM  33968  O   ALA L  51     123.975 122.764 201.055  1.00285.22
O
ATOM  33969  N   SER L  52     126.215 122.874 201.339  1.00261.27
N
ATOM  33970  CA  SER L  52     126.476 121.471 201.099  1.00240.38
C
ATOM  33971  CB  SER L  52     126.786 121.221 199.650  1.00232.02
C
ATOM  33972  OG  SER L  52     127.744 122.161 199.191  1.00297.55
O
ATOM  33973  C   SER L  52     127.625 121.045 202.004  1.00223.78
C
ATOM  33974  O   SER L  52     127.892 119.851 202.122  1.00264.43
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ATOM  33975  N   SER L  53     128.243 122.031 202.678  1.00207.18
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ATOM  33976  CA  SER L  53     129.557 121.878 203.288  1.00204.49
C
ATOM  33977  CB  SER L  53     130.645 122.480 202.388  1.00212.23
C
ATOM  33978  OG  SER L  53     130.362 122.369 200.983  1.00138.87
O
ATOM  33979  C   SER L  53     129.608 122.511 204.681  1.00168.81
C
ATOM  33980  O   SER L  53     129.624 123.731 204.808  1.00119.09
O
ATOM  33981  N   LEU L  54     129.720 121.699 205.731  1.00176.22
N
ATOM  33982  CA  LEU L  54     130.018 122.313 207.013  1.00218.91
C
ATOM  33983  CB  LEU L  54     130.671 121.288 207.951  1.00228.11
C
ATOM  33984  CG  LEU L  54     130.334 121.407 209.439  1.00236.29
C
ATOM  33985  CD1 LEU L  54     128.915 121.917 209.643  1.00273.71
C
ATOM  33986  CD2 LEU L  54     130.502 120.045 210.100  1.00196.41
C
ATOM  33987  C   LEU L  54     130.906 123.548 206.803  1.00203.94
C
ATOM  33988  O   LEU L  54     131.649 123.688 205.816  1.00123.49
O
ATOM  33989  N   GLU L  55     130.737 124.487 207.732  1.00227.76
N
ATOM  33990  CA  GLU L  55     131.665 125.580 207.930  1.00234.49
C
ATOM  33991  CB  GLU L  55     130.877 126.895 208.007  1.00285.23
C
ATOM  33992  CG  GLU L  55     131.677 128.157 207.712  1.00304.97
C
ATOM  33993  CD  GLU L  55     132.852 128.042 206.758  1.00260.24
C
ATOM  33994  OE1 GLU L  55     133.803 127.297 207.115  1.00151.03
O
ATOM  33995  OE2 GLU L  55     132.816 128.703 205.671  1.00261.77
O
ATOM  33996  C   GLU L  55     132.521 125.217 209.147  1.00230.78
C
ATOM  33997  O   GLU L  55     132.183 124.296 209.908  1.00188.30
O
ATOM  33998  N   SER L  56     133.642 125.932 209.299  1.00215.61
N
ATOM  33999  CA  SER L  56     134.644 125.585 210.291  1.00242.53
C
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ATOM  34000  CB  SER L  56     136.023 125.925 209.798  1.00240.15
C
ATOM  34001  OG  SER L  56     136.996 125.227 210.559  1.00320.39
O
ATOM  34002  C   SER L  56     134.338 126.251 211.631  1.00234.55
C
ATOM  34003  O   SER L  56     133.937 127.412 211.683  1.00211.58
O
ATOM  34004  N   GLY L  57     134.551 125.498 212.718  1.00237.25
N
ATOM  34005  CA  GLY L  57     134.281 125.986 214.060  1.00242.09
C
ATOM  34006  C   GLY L  57     132.840 125.687 214.463  1.00259.43
C
ATOM  34007  O   GLY L  57     132.466 125.900 215.619  1.00224.99
O
ATOM  34008  N   VAL L  58     132.070 125.187 213.479  1.00271.85
N
ATOM  34009  CA  VAL L  58     130.670 124.800 213.599  1.00271.51
C
ATOM  34010  CB  VAL L  58     129.900 124.999 212.276  1.00239.60
C
ATOM  34011  CG1 VAL L  58     128.775 123.989 212.098  1.00156.13
C
ATOM  34012  CG2 VAL L  58     129.364 126.415 212.136  1.00312.91
C
ATOM  34013  C   VAL L  58     130.614 123.336 214.023  1.00271.31
C
ATOM  34014  O   VAL L  58     131.251 122.500 213.381  1.00222.59
O
ATOM  34015  N   PRO L  59     129.884 122.987 215.113  1.00286.01
N
ATOM  34016  CA  PRO L  59     129.690 121.585 215.492  1.00296.48
C
ATOM  34017  CB  PRO L  59     128.789 121.680 216.727  1.00281.27
C
ATOM  34018  CG  PRO L  59     129.194 123.011 217.320  1.00251.80
C
ATOM  34019  CD  PRO L  59     129.308 123.910 216.106  1.00276.31
C
ATOM  34020  C   PRO L  59     129.107 120.734 214.366  1.00327.10
C
ATOM  34021  O   PRO L  59     128.387 121.232 213.501  1.00360.22
O
ATOM  34022  N   SER L  60     129.441 119.439 214.398  1.00314.82
N
ATOM  34023  CA  SER L  60     129.319 118.570 213.237  1.00280.12
C
ATOM  34024  CB  SER L  60     130.351 117.470 213.255  1.00232.99
C
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ATOM  34025  OG  SER L  60     130.192 116.646 214.399  1.00255.31
O
ATOM  34026  C   SER L  60     127.904 118.016 213.082  1.00294.95
C
ATOM  34027  O   SER L  60     127.577 117.487 212.017  1.00293.48
O
ATOM  34028  N   ARG L  61     127.083 118.154 214.137  1.00274.19
N
ATOM  34029  CA  ARG L  61     125.702 117.695 214.139  1.00236.87
C
ATOM  34030  CB  ARG L  61     125.082 117.833 215.531  1.00228.25
C
ATOM  34031  CG  ARG L  61     125.350 119.177 216.193  1.00275.74
C
ATOM  34032  CD  ARG L  61     124.701 119.291 217.557  1.00320.48
C
ATOM  34033  NE  ARG L  61     125.147 120.484 218.264  1.00325.34
N
ATOM  34034  CZ  ARG L  61     125.836 120.485 219.405  1.00304.29
C
ATOM  34035  NH1 ARG L  61     126.152 119.341 219.995  1.00207.11
N
ATOM  34036  NH2 ARG L  61     126.196 121.629 219.963  1.00331.07
N
ATOM  34037  C   ARG L  61     124.903 118.394 213.034  1.00268.65
C
ATOM  34038  O   ARG L  61     124.116 117.733 212.357  1.00227.60
O
ATOM  34039  N   PHE L  62     125.133 119.713 212.855  1.00327.88
N
ATOM  34040  CA  PHE L  62     124.552 120.521 211.783  1.00327.37
C
ATOM  34041  CB  PHE L  62     124.787 122.024 211.995  1.00335.51
C
ATOM  34042  CG  PHE L  62     124.184 122.605 213.252  1.00319.68
C
ATOM  34043  CD1 PHE L  62     122.885 123.100 213.263  1.00313.07
C
ATOM  34044  CE1 PHE L  62     122.331 123.620 214.425  1.00282.45
C
ATOM  34045  CZ  PHE L  62     123.070 123.649 215.584  1.00257.58
C
ATOM  34046  CD2 PHE L  62     124.916 122.643 214.427  1.00253.04
C
ATOM  34047  CE2 PHE L  62     124.358 123.161 215.586  1.00254.42
C
ATOM  34048  C   PHE L  62     125.150 120.108 210.440  1.00277.69
C
ATOM  34049  O   PHE L  62     126.364 119.969 210.307  1.00296.25
O
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ATOM  34050  N   SER L  63     124.286 119.911 209.442  1.00224.39
N
ATOM  34051  CA  SER L  63     124.748 119.423 208.157  1.00241.05
C
ATOM  34052  CB  SER L  63     124.892 117.909 208.115  1.00232.86
C
ATOM  34053  OG  SER L  63     123.702 117.246 208.514  1.00255.89
O
ATOM  34054  C   SER L  63     123.854 119.950 207.045  1.00260.46
C
ATOM  34055  O   SER L  63     122.666 120.193 207.245  1.00271.35
O
ATOM  34056  N   GLY L  64     124.462 120.115 205.870  1.00311.67
N
ATOM  34057  CA  GLY L  64     123.807 120.754 204.744  1.00333.28
C
ATOM  34058  C   GLY L  64     123.569 119.782 203.597  1.00288.10
C
ATOM  34059  O   GLY L  64     124.228 118.748 203.487  1.00305.48
O
ATOM  34060  N   SER L  65     122.611 120.128 202.744  1.00207.48
N
ATOM  34061  CA  SER L  65     122.229 119.226 201.683  1.00208.85
C
ATOM  34062  CB  SER L  65     121.551 118.030 202.273  1.00260.21
C
ATOM  34063  OG  SER L  65     120.909 118.391 203.492  1.00297.65
O
ATOM  34064  C   SER L  65     121.294 119.986 200.760  1.00232.58
C
ATOM  34065  O   SER L  65     120.922 121.122 201.058  1.00193.10
O
ATOM  34066  N   GLY L  66     120.928 119.338 199.649  1.00257.19
N
ATOM  34067  CA  GLY L  66     120.113 119.965 198.623  1.00260.32
C
ATOM  34068  C   GLY L  66     120.916 120.935 197.753  1.00275.69
C
ATOM  34069  O   GLY L  66     122.014 121.356 198.118  1.00297.09
O
ATOM  34070  N   SER L  67     120.328 121.258 196.590  1.00237.08
N
ATOM  34071  CA  SER L  67     120.821 122.158 195.556  1.00243.44
C
ATOM  34072  CB  SER L  67     121.368 121.327 194.385  1.00222.32
C
ATOM  34073  OG  SER L  67     122.790 121.330 194.256  1.00179.22
O
ATOM  34074  C   SER L  67     119.629 123.003 195.084  1.00276.56
C
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ATOM  34075  O   SER L  67     118.500 122.751 195.502  1.00334.44
O
ATOM  34076  N   GLY L  68     119.867 123.988 194.205  1.00267.21
N
ATOM  34077  CA  GLY L  68     118.837 124.463 193.285  1.00217.07
C
ATOM  34078  C   GLY L  68     117.793 125.337 193.968  1.00194.58
C
ATOM  34079  O   GLY L  68     118.163 126.331 194.579  1.00186.02
O
ATOM  34080  N   THR L  69     116.514 124.937 193.859  1.00184.65
N
ATOM  34081  CA  THR L  69     115.415 125.652 194.495  1.00204.81
C
ATOM  34082  CB  THR L  69     114.153 125.640 193.631  1.00206.42
C
ATOM  34083  OG1 THR L  69     113.696 124.292 193.724  1.00228.08
O
ATOM  34084  CG2 THR L  69     114.406 126.025 192.191  1.00243.31
C
ATOM  34085  C   THR L  69     114.986 124.962 195.788  1.00229.35
C
ATOM  34086  O   THR L  69     113.900 125.250 196.299  1.00214.07
O
ATOM  34087  N   GLU L  70     115.840 124.058 196.298  1.00258.45
N
ATOM  34088  CA  GLU L  70     115.510 123.260 197.470  1.00242.74
C
ATOM  34089  CB  GLU L  70     114.819 121.974 197.034  1.00225.67
C
ATOM  34090  CG  GLU L  70     114.633 121.014 198.185  1.00275.16
C
ATOM  34091  CD  GLU L  70     113.717 119.858 197.839  1.00289.50
C
ATOM  34092  OE1 GLU L  70     113.471 119.634 196.614  1.00179.94
O
ATOM  34093  OE2 GLU L  70     113.234 119.193 198.785  1.00352.08
O
ATOM  34094  C   GLU L  70     116.727 122.951 198.351  1.00225.41
C
ATOM  34095  O   GLU L  70     117.522 122.057 198.073  1.00190.67
O
ATOM  34096  N   PHE L  71     116.807 123.637 199.490  1.00259.47
N
ATOM  34097  CA  PHE L  71     117.935 123.465 200.389  1.00267.74
C
ATOM  34098  CB  PHE L  71     118.721 124.774 200.481  1.00304.54
C
ATOM  34099  CG  PHE L  71     119.668 124.985 199.325  1.00356.45
C
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ATOM  34100  CD1 PHE L  71     119.306 125.749 198.222  1.00307.51
C
ATOM  34101  CE1 PHE L  71     120.188 125.938 197.165  1.00296.94
C
ATOM  34102  CZ  PHE L  71     121.435 125.353 197.196  1.00379.49
C
ATOM  34103  CD2 PHE L  71     120.926 124.397 199.334  1.00437.93
C
ATOM  34104  CE2 PHE L  71     121.806 124.584 198.279  1.00452.19
C
ATOM  34105  C   PHE L  71     117.471 122.868 201.716  1.00249.57
C
ATOM  34106  O   PHE L  71     116.332 123.066 202.135  1.00205.69
O
ATOM  34107  N   THR L  72     118.367 122.117 202.368  1.00270.84
N
ATOM  34108  CA  THR L  72     117.992 121.317 203.526  1.00265.75
C
ATOM  34109  CB  THR L  72     117.613 119.891 203.102  1.00257.96
C
ATOM  34110  OG1 THR L  72     116.619 120.069 202.086  1.00197.52
O
ATOM  34111  CG2 THR L  72     117.177 118.997 204.251  1.00201.07
C
ATOM  34112  C   THR L  72     119.041 121.377 204.641  1.00246.72
C
ATOM  34113  O   THR L  72     120.068 120.681 204.617  1.00176.12
O
ATOM  34114  N   LEU L  73     118.728 122.186 205.657  1.00208.22
N
ATOM  34115  CA  LEU L  73     119.464 122.142 206.904  1.00219.59
C
ATOM  34116  CB  LEU L  73     119.211 123.456 207.649  1.00184.77
C
ATOM  34117  CG  LEU L  73     119.995 123.647 208.949  1.00222.26
C
ATOM  34118  CD1 LEU L  73     121.307 124.389 208.726  1.00204.02
C
ATOM  34119  CD2 LEU L  73     119.152 124.389 209.970  1.00281.44
C
ATOM  34120  C   LEU L  73     118.987 120.920 207.691  1.00270.93
C
ATOM  34121  O   LEU L  73     117.788 120.648 207.733  1.00285.06
O
ATOM  34122  N   THR L  74     119.940 120.172 208.274  1.00318.79
N
ATOM  34123  CA  THR L  74     119.670 118.930 208.994  1.00289.43
C
ATOM  34124  CB  THR L  74     119.825 117.707 208.073  1.00298.93
C
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ATOM  34125  OG1 THR L  74     118.862 117.771 207.017  1.00272.84
O
ATOM  34126  CG2 THR L  74     119.710 116.386 208.805  1.00270.30
C
ATOM  34127  C   THR L  74     120.562 118.816 210.232  1.00239.85
C
ATOM  34128  O   THR L  74     121.786 118.767 210.123  1.00256.67
O
ATOM  34129  N   ILE L  75     119.925 118.755 211.406  1.00203.35
N
ATOM  34130  CA  ILE L  75     120.598 118.548 212.683  1.00278.38
C
ATOM  34131  CB  ILE L  75     119.933 119.406 213.796  1.00262.53
C
ATOM  34132  CG1 ILE L  75     119.945 120.915 213.507  1.00246.03
C
ATOM  34133  CG2 ILE L  75     120.497 119.100 215.177  1.00222.91
C
ATOM  34134  CD1 ILE L  75     119.387 121.765 214.642  1.00197.36
C
ATOM  34135  C   ILE L  75     120.520 117.049 212.982  1.00323.24
C
ATOM  34136  O   ILE L  75     119.449 116.460 212.852  1.00385.19
O
ATOM  34137  N   SER L  76     121.642 116.413 213.348  1.00334.27
N
ATOM  34138  CA  SER L  76     121.628 114.981 213.629  1.00315.27
C
ATOM  34139  CB  SER L  76     122.990 114.359 213.472  1.00292.75
C
ATOM  34140  OG  SER L  76     123.935 115.019 214.302  1.00275.67
O
ATOM  34141  C   SER L  76     121.031 114.705 215.008  1.00332.04
C
ATOM  34142  O   SER L  76     120.251 113.757 215.149  1.00253.10
O
ATOM  34143  N   SER L  77     121.406 115.556 215.985  1.00378.35
N
ATOM  34144  CA  SER L  77     120.939 115.567 217.367  1.00389.18
C
ATOM  34145  CB  SER L  77     121.907 114.837 218.272  1.00356.16
C
ATOM  34146  OG  SER L  77     121.934 115.416 219.572  1.00289.64
O
ATOM  34147  C   SER L  77     120.729 117.002 217.854  1.00419.21
C
ATOM  34148  O   SER L  77     121.644 117.821 217.792  1.00420.87
O
ATOM  34149  N   LEU L  78     119.525 117.275 218.378  1.00478.95
N
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ATOM  34150  CA  LEU L  78     119.140 118.581 218.891  1.00518.65
C
ATOM  34151  CB  LEU L  78     117.608 118.666 218.882  1.00633.78
C
ATOM  34152  CG  LEU L  78     116.993 120.061 218.742  1.00699.07
C
ATOM  34153  CD1 LEU L  78     117.584 120.813 217.559  1.00691.56
C
ATOM  34154  CD2 LEU L  78     115.481 119.968 218.602  1.00762.65
C
ATOM  34155  C   LEU L  78     119.709 118.769 220.298  1.00472.63
C
ATOM  34156  O   LEU L  78     119.926 117.794 221.022  1.00469.46
O
ATOM  34157  N   GLN L  79     119.976 120.032 220.661  1.00400.62
N
ATOM  34158  CA  GLN L  79     120.478 120.388 221.983  1.00363.19
C
ATOM  34159  CB  GLN L  79     121.994 120.600 221.960  1.00328.65
C
ATOM  34160  CG  GLN L  79     122.774 119.499 221.249  1.00348.51
C
ATOM  34161  CD  GLN L  79     123.162 118.316 222.106  1.00338.31
C
ATOM  34162  OE1 GLN L  79     123.183 117.175 221.647  1.00306.44
O
ATOM  34163  NE2 GLN L  79     123.513 118.575 223.357  1.00311.61
N
ATOM  34164  C   GLN L  79     119.765 121.646 222.484  1.00422.28
C
ATOM  34165  O   GLN L  79     119.194 122.393 221.693  1.00480.01
O
ATOM  34166  N   PRO L  80     119.770 121.908 223.814  1.00461.29
N
ATOM  34167  CA  PRO L  80     119.125 123.099 224.377  1.00519.28
C
ATOM  34168  CB  PRO L  80     119.374 122.961 225.890  1.00516.05
C
ATOM  34169  CG  PRO L  80     119.612 121.479 226.098  1.00462.78
C
ATOM  34170  CD  PRO L  80     120.356 121.045 224.854  1.00427.01
C
ATOM  34171  C   PRO L  80     119.673 124.425 223.844  1.00571.69
C
ATOM  34172  O   PRO L  80     118.956 125.426 223.834  1.00622.28
O
ATOM  34173  N   ASP L  81     120.938 124.416 223.399  1.00553.45
N
ATOM  34174  CA  ASP L  81     121.573 125.587 222.808  1.00507.25
C
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ATOM  34175  CB  ASP L  81     123.081 125.672 223.102  1.00402.75
C
ATOM  34176  CG  ASP L  81     123.857 124.360 223.118  1.00354.79
C
ATOM  34177  OD1 ASP L  81     123.266 123.320 223.489  1.00348.46
O
ATOM  34178  OD2 ASP L  81     125.066 124.392 222.789  1.00272.79
O
ATOM  34179  C   ASP L  81     121.206 125.707 221.327  1.00544.76
C
ATOM  34180  O   ASP L  81     121.296 126.793 220.756  1.00566.33
O
ATOM  34181  N   ASP L  82     120.763 124.592 220.726  1.00573.37
N
ATOM  34182  CA  ASP L  82     120.475 124.503 219.301  1.00556.86
C
ATOM  34183  CB  ASP L  82     120.352 123.052 218.827  1.00639.41
C
ATOM  34184  CG  ASP L  82     121.672 122.368 218.506  1.00721.31
C
ATOM  34185  OD1 ASP L  82     122.716 122.828 219.013  1.00817.92
O
ATOM  34186  OD2 ASP L  82     121.645 121.374 217.750  1.00737.60
O
ATOM  34187  C   ASP L  82     119.215 125.291 218.950  1.00486.46
C
ATOM  34188  O   ASP L  82     119.155 125.913 217.889  1.00515.86
O
ATOM  34189  N   PHE L  83     118.203 125.233 219.825  1.00407.05
N
ATOM  34190  CA  PHE L  83     116.964 125.962 219.613  1.00403.52
C
ATOM  34191  CB  PHE L  83     116.052 125.878 220.838  1.00511.93
C
ATOM  34192  CG  PHE L  83     115.609 124.490 221.222  1.00632.81
C
ATOM  34193  CD1 PHE L  83     114.610 123.839 220.513  1.00719.05
C
ATOM  34194  CE1 PHE L  83     114.199 122.566 220.874  1.00829.63
C
ATOM  34195  CZ  PHE L  83     114.779 121.932 221.951  1.00848.11
C
ATOM  34196  CD2 PHE L  83     116.177 123.843 222.309  1.00699.23
C
ATOM  34197  CE2 PHE L  83     115.768 122.568 222.669  1.00784.80
C
ATOM  34198  C   PHE L  83     117.282 127.424 219.317  1.00376.49
C
ATOM  34199  O   PHE L  83     117.763 128.152 220.188  1.00319.45
O
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ATOM  34200  N   ALA L  84     117.034 127.824 218.064  1.00365.08
N
ATOM  34201  CA  ALA L  84     117.219 129.198 217.625  1.00303.52
C
ATOM  34202  CB  ALA L  84     118.690 129.559 217.591  1.00253.24
C
ATOM  34203  C   ALA L  84     116.547 129.413 216.270  1.00255.23
C
ATOM  34204  O   ALA L  84     115.969 128.497 215.678  1.00203.03
O
ATOM  34205  N   THR L  85     116.614 130.659 215.802  1.00234.91
N
ATOM  34206  CA  THR L  85     116.111 130.989 214.482  1.00264.70
C
ATOM  34207  CB  THR L  85     115.578 132.425 214.423  1.00288.83
C
ATOM  34208  OG1 THR L  85     115.495 132.770 213.039  1.00268.98
O
ATOM  34209  CG2 THR L  85     116.435 133.411 215.194  1.00215.98
C
ATOM  34210  C   THR L  85     117.180 130.639 213.449  1.00254.21
C
ATOM  34211  O   THR L  85     118.376 130.671 213.744  1.00219.87
O
ATOM  34212  N   TYR L  86     116.720 130.288 212.241  1.00253.65
N
ATOM  34213  CA  TYR L  86     117.584 129.847 211.159  1.00210.95
C
ATOM  34214  CB  TYR L  86     117.462 128.338 210.972  1.00183.10
C
ATOM  34215  CG  TYR L  86     118.073 127.597 212.123  1.00193.40
C
ATOM  34216  CD1 TYR L  86     117.295 126.766 212.915  1.00190.99
C
ATOM  34217  CE1 TYR L  86     117.848 126.088 213.985  1.00223.13
C
ATOM  34218  CZ  TYR L  86     119.193 126.268 214.282  1.00267.35
C
ATOM  34219  OH  TYR L  86     119.738 125.602 215.338  1.00351.94
O
ATOM  34220  CE2 TYR L  86     119.981 127.116 213.516  1.00198.28
C
ATOM  34221  CD2 TYR L  86     119.411 127.787 212.451  1.00168.99
C
ATOM  34222  C   TYR L  86     117.166 130.491 209.848  1.00215.71
C
ATOM  34223  O   TYR L  86     116.102 130.169 209.324  1.00267.98
O
ATOM  34224  N   TYR L  87     118.047 131.346 209.309  1.00188.42
N
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ATOM  34225  CA  TYR L  87     117.777 132.104 208.092  1.00202.83
C
ATOM  34226  CB  TYR L  87     118.018 133.609 208.305  1.00215.55
C
ATOM  34227  CG  TYR L  87     117.180 134.229 209.399  1.00266.65
C
ATOM  34228  CD1 TYR L  87     115.956 134.818 209.116  1.00284.79
C
ATOM  34229  CE1 TYR L  87     115.172 135.374 210.114  1.00270.26
C
ATOM  34230  CZ  TYR L  87     115.608 135.340 211.424  1.00242.54
C
ATOM  34231  OH  TYR L  87     114.841 135.890 212.399  1.00305.23
O
ATOM  34232  CE2 TYR L  87     116.826 134.762 211.733  1.00258.33
C
ATOM  34233  CD2 TYR L  87     117.595 134.207 210.724  1.00280.64
C
ATOM  34234  C   TYR L  87     118.536 131.492 206.906  1.00169.43
C
ATOM  34235  O   TYR L  87     119.748 131.358 206.934  1.00115.60
O
ATOM  34236  N   CYS L  88     117.805 131.072 205.869  1.00180.76
N
ATOM  34237  CA  CYS L  88     118.415 130.707 204.602  1.00154.89
C
ATOM  34238  CB  CYS L  88     117.583 129.671 203.837  1.00211.22
C
ATOM  34239  SG  CYS L  88     115.830 130.075 203.552  1.00314.23
S
ATOM  34240  C   CYS L  88     118.628 131.981 203.788  1.00184.17
C
ATOM  34241  O   CYS L  88     117.676 132.647 203.372  1.00213.63
O
ATOM  34242  N   GLN L  89     119.902 132.324 203.606  1.00167.09
N
ATOM  34243  CA  GLN L  89     120.299 133.498 202.844  1.00170.79
C
ATOM  34244  CB  GLN L  89     121.271 134.311 203.715  1.00160.70
C
ATOM  34245  CG  GLN L  89     121.549 135.734 203.232  1.00157.17
C
ATOM  34246  CD  GLN L  89     123.001 136.020 202.920  1.00133.74
C
ATOM  34247  OE1 GLN L  89     123.882 135.889 203.777  1.00117.47
O
ATOM  34248  NE2 GLN L  89     123.261 136.437 201.689  1.00100.35
N
ATOM  34249  C   GLN L  89     120.912 132.975 201.548  1.00137.53
C
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ATOM  34250  O   GLN L  89     121.573 131.935 201.598  1.00100.91
O
ATOM  34251  N   GLN L  90     120.669 133.652 200.414  1.00104.73
N
ATOM  34252  CA  GLN L  90     121.321 133.214 199.194  1.00103.90
C
ATOM  34253  CB  GLN L  90     120.236 132.829 198.185  1.00 99.49
C
ATOM  34254  CG  GLN L  90     119.366 133.978 197.750  1.00105.79
C
ATOM  34255  CD  GLN L  90     120.187 135.018 197.026  1.00145.26
C
ATOM  34256  OE1 GLN L  90     121.097 134.716 196.236  1.00133.46
O
ATOM  34257  NE2 GLN L  90     119.870 136.273 197.312  1.00169.50
N
ATOM  34258  C   GLN L  90     122.341 134.264 198.745  1.00 90.78
C
ATOM  34259  O   GLN L  90     121.987 135.423 198.732  1.00103.80
O
ATOM  34260  N   TYR L  91     123.572 133.890 198.360  1.00 98.53
N
ATOM  34261  CA  TYR L  91     124.453 134.858 197.700  1.00137.80
C
ATOM  34262  CB  TYR L  91     125.853 134.858 198.313  1.00186.28
C
ATOM  34263  CG  TYR L  91     126.300 133.630 199.068  1.00171.41
C
ATOM  34264  CD1 TYR L  91     127.261 133.770 200.064  1.00194.17
C
ATOM  34265  CE1 TYR L  91     127.730 132.701 200.802  1.00181.19
C
ATOM  34266  CZ  TYR L  91     127.226 131.446 200.533  1.00218.33
C
ATOM  34267  OH  TYR L  91     127.734 130.425 201.291  1.00298.82
O
ATOM  34268  CE2 TYR L  91     126.264 131.282 199.535  1.00151.59
C
ATOM  34269  CD2 TYR L  91     125.802 132.361 198.803  1.00109.68
C
ATOM  34270  C   TYR L  91     124.552 134.660 196.184  1.00119.92
C
ATOM  34271  O   TYR L  91     125.617 134.781 195.561  1.00 99.48
O
ATOM  34272  N   ASN L  92     123.420 134.350 195.570  1.00 98.14
N
ATOM  34273  CA  ASN L  92     123.598 133.935 194.210  1.00102.66
C
ATOM  34274  CB  ASN L  92     122.516 133.000 193.695  1.00113.00
C
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ATOM  34275  CG  ASN L  92     122.862 132.547 192.292  1.00189.18
C
ATOM  34276  OD1 ASN L  92     122.064 131.910 191.615  1.00255.87
O
ATOM  34277  ND2 ASN L  92     124.049 132.894 191.820  1.00260.22
N
ATOM  34278  C   ASN L  92     123.754 135.207 193.409  1.00112.93
C
ATOM  34279  O   ASN L  92     124.811 135.442 192.844  1.00140.71
O
ATOM  34280  N   SER L  93     122.701 136.021 193.402  1.00138.80
N
ATOM  34281  CA  SER L  93     122.729 137.314 192.724  1.00161.10
C
ATOM  34282  CB  SER L  93     121.870 137.355 191.466  1.00143.85
C
ATOM  34283  OG  SER L  93     121.787 136.087 190.833  1.00152.47
O
ATOM  34284  C   SER L  93     122.250 138.391 193.685  1.00160.96
C
ATOM  34285  O   SER L  93     121.063 138.441 193.998  1.00190.80
O
ATOM  34286  N   TYR L  94     123.150 139.275 194.123  1.00134.97
N
ATOM  34287  CA  TYR L  94     122.669 140.423 194.870  1.00143.80
C
ATOM  34288  CB  TYR L  94     123.687 141.554 194.893  1.00118.12
C
ATOM  34289  CG  TYR L  94     124.706 141.335 195.954  1.00 90.68
C
ATOM  34290  CD1 TYR L  94     124.317 140.950 197.222  1.00 73.28
C
ATOM  34291  CE1 TYR L  94     125.291 140.690 198.175  1.00 94.26
C
ATOM  34292  CZ  TYR L  94     126.656 140.843 197.903  1.00111.28
C
ATOM  34293  OH  TYR L  94     127.652 140.590 198.846  1.00 74.75
O
ATOM  34294  CE2 TYR L  94     127.023 141.271 196.630  1.00112.44
C
ATOM  34295  CD2 TYR L  94     126.049 141.502 195.667  1.00 90.26
C
ATOM  34296  C   TYR L  94     121.440 141.022 194.198  1.00169.55
C
ATOM  34297  O   TYR L  94     121.270 140.880 192.982  1.00173.42
O
ATOM  34298  N   PRO L  95     120.583 141.750 194.961  1.00170.92
N
ATOM  34299  CA  PRO L  95     120.658 141.798 196.432  1.00148.57
C
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ATOM  34300  CB  PRO L  95     119.565 142.826 196.797  1.00198.80
C
ATOM  34301  CG  PRO L  95     118.649 142.930 195.583  1.00168.13
C
ATOM  34302  CD  PRO L  95     119.588 142.700 194.420  1.00154.06
C
ATOM  34303  C   PRO L  95     120.470 140.556 197.314  1.00131.41
C
ATOM  34304  O   PRO L  95     119.770 139.579 196.955  1.00 96.44
O
ATOM  34305  N   TRP L  96     121.035 140.644 198.530  1.00 87.87
N
ATOM  34306  CA  TRP L  96     121.116 139.432 199.333  1.00114.16
C
ATOM  34307  CB  TRP L  96     122.297 139.593 200.277  1.00110.56
C
ATOM  34308  CG  TRP L  96     123.609 138.911 199.976  1.00134.89
C
ATOM  34309  CD1 TRP L  96     124.215 138.558 198.787  1.00105.61
C
ATOM  34310  NE1 TRP L  96     125.466 138.023 199.008  1.00 70.15
N
ATOM  34311  CE2 TRP L  96     125.706 138.062 200.357  1.00100.90
C
ATOM  34312  CD2 TRP L  96     124.560 138.598 201.008  1.00133.22
C
ATOM  34313  CE3 TRP L  96     124.524 138.764 202.413  1.00115.67
C
ATOM  34314  CZ3 TRP L  96     125.612 138.374 203.150  1.00 96.11
C
ATOM  34315  CH2 TRP L  96     126.734 137.853 202.475  1.00155.99
C
ATOM  34316  CZ2 TRP L  96     126.828 137.709 201.094  1.00112.58
C
ATOM  34317  C   TRP L  96     119.867 139.063 200.156  1.00113.13
C
ATOM  34318  O   TRP L  96     119.884 139.311 201.356  1.00124.46
O
ATOM  34319  N   THR L  97     118.865 138.335 199.618  1.00103.56
N
ATOM  34320  CA  THR L  97     117.672 138.054 200.423  1.00116.73
C
ATOM  34321  CB  THR L  97     116.519 137.564 199.549  1.00143.01
C
ATOM  34322  OG1 THR L  97     116.684 136.146 199.543  1.00190.03
O
ATOM  34323  CG2 THR L  97     116.591 138.150 198.156  1.00135.70
C
ATOM  34324  C   THR L  97     118.010 137.155 201.622  1.00114.34
C
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ATOM  34325  O   THR L  97     119.179 137.046 201.965  1.00 94.60
O
ATOM  34326  N   PHE L  98     116.980 136.557 202.263  1.00143.88
N
ATOM  34327  CA  PHE L  98     117.009 135.795 203.516  1.00155.24
C
ATOM  34328  CB  PHE L  98     117.151 136.684 204.754  1.00147.63
C
ATOM  34329  CG  PHE L  98     118.540 137.053 205.186  1.00151.96
C
ATOM  34330  CD1 PHE L  98     119.265 136.201 206.010  1.00140.68
C
ATOM  34331  CE1 PHE L  98     120.536 136.571 206.417  1.00189.09
C
ATOM  34332  CZ  PHE L  98     121.063 137.792 206.037  1.00228.97
C
ATOM  34333  CD2 PHE L  98     119.069 138.285 204.826  1.00159.28
C
ATOM  34334  CE2 PHE L  98     120.335 138.655 205.246  1.00203.78
C
ATOM  34335  C   PHE L  98     115.603 135.318 203.881  1.00159.96
C
ATOM  34336  O   PHE L  98     114.629 136.018 203.617  1.00231.57
O
ATOM  34337  N   GLY L  99     115.500 134.189 204.589  1.00147.44
N
ATOM  34338  CA  GLY L  99     114.207 133.583 204.890  1.00169.10
C
ATOM  34339  C   GLY L  99     113.447 134.358 205.962  1.00213.12
C
ATOM  34340  O   GLY L  99     114.030 135.214 206.624  1.00237.42
O
ATOM  34341  N   GLN L 100     112.136 134.098 206.095  1.00236.88
N
ATOM  34342  CA  GLN L 100     111.384 134.633 207.220  1.00209.95
C
ATOM  34343  CB  GLN L 100     109.880 134.387 207.129  1.00180.95
C
ATOM  34344  CG  GLN L 100     109.510 132.910 207.039  1.00281.82
C
ATOM  34345  CD  GLN L 100     109.460 132.354 205.631  1.00363.71
C
ATOM  34346  OE1 GLN L 100     110.055 132.892 204.698  1.00369.17
O
ATOM  34347  NE2 GLN L 100     108.741 131.253 205.467  1.00409.88
N
ATOM  34348  C   GLN L 100     111.934 133.991 208.487  1.00227.70
C
ATOM  34349  O   GLN L 100     112.104 134.680 209.482  1.00286.81
O
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ATOM  34350  N   GLY L 101     112.235 132.687 208.429  1.00215.46
N
ATOM  34351  CA  GLY L 101     112.973 132.040 209.504  1.00241.89
C
ATOM  34352  C   GLY L 101     112.166 130.941 210.190  1.00260.97
C
ATOM  34353  O   GLY L 101     110.935 130.992 210.201  1.00270.50
O
ATOM  34354  N   THR L 102     112.881 129.941 210.726  1.00258.92
N
ATOM  34355  CA  THR L 102     112.290 128.870 211.514  1.00243.23
C
ATOM  34356  CB  THR L 102     112.442 127.484 210.860  1.00277.46
C
ATOM  34357  OG1 THR L 102     112.262 127.514 209.443  1.00302.89
O
ATOM  34358  CG2 THR L 102     111.528 126.447 211.477  1.00261.83
C
ATOM  34359  C   THR L 102     112.964 128.843 212.880  1.00208.13
C
ATOM  34360  O   THR L 102     114.186 128.784 212.974  1.00182.59
O
ATOM  34361  N   LYS L 103     112.148 128.891 213.935  1.00262.91
N
ATOM  34362  CA  LYS L 103     112.611 128.656 215.293  1.00309.35
C
ATOM  34363  CB  LYS L 103     112.072 129.740 216.239  1.00313.15
C
ATOM  34364  CG  LYS L 103     112.740 129.843 217.607  1.00285.66
C
ATOM  34365  CD  LYS L 103     112.309 131.045 218.437  1.00271.36
C
ATOM  34366  CE  LYS L 103     113.008 131.103 219.781  1.00280.27
C
ATOM  34367  NZ  LYS L 103     112.832 132.410 220.462  1.00260.48
N
ATOM  34368  C   LYS L 103     112.163 127.251 215.693  1.00330.83
C
ATOM  34369  O   LYS L 103     111.100 126.791 215.270  1.00331.80
O
ATOM  34370  N   VAL L 104     112.995 126.564 216.478  1.00307.69
N
ATOM  34371  CA  VAL L 104     112.621 125.260 216.991  1.00277.00
C
ATOM  34372  CB  VAL L 104     113.733 124.223 216.773  1.00245.72
C
ATOM  34373  CG1 VAL L 104     113.152 122.995 216.093  1.00265.87
C
ATOM  34374  CG2 VAL L 104     114.891 124.795 215.958  1.00220.35
C
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ATOM  34375  C   VAL L 104     112.255 125.404 218.465  1.00335.70
C
ATOM  34376  O   VAL L 104     112.929 126.127 219.198  1.00385.37
O
ATOM  34377  N   GLU L 105     111.175 124.724 218.881  1.00368.20
N
ATOM  34378  CA  GLU L 105     110.609 124.906 220.214  1.00421.76
C
ATOM  34379  CB  GLU L 105     109.191 125.477 220.131  1.00492.98
C
ATOM  34380  CG  GLU L 105     109.132 126.965 219.819  1.00535.38
C
ATOM  34381  CD  GLU L 105     108.896 127.340 218.364  1.00568.05
C
ATOM  34382  OE1 GLU L 105     108.814 126.427 217.515  1.00590.18
O
ATOM  34383  OE2 GLU L 105     108.789 128.552 218.083  1.00574.23
O
ATOM  34384  C   GLU L 105     110.606 123.591 220.995  1.00401.53
C
ATOM  34385  O   GLU L 105     110.312 122.543 220.416  1.00277.81
O
ATOM  34386  N   ILE L 106     110.874 123.700 222.317  1.00421.41
N
ATOM  34387  CA  ILE L 106     111.079 122.620 223.285  1.00395.31
C
ATOM  34388  CB  ILE L 106     111.719 123.149 224.607  1.00340.99
C
ATOM  34389  CG1 ILE L 106     112.927 124.078 224.392  1.00307.40
C
ATOM  34390  CG2 ILE L 106     112.031 122.018 225.590  1.00283.14
C
ATOM  34391  CD1 ILE L 106     113.769 124.395 225.632  1.00218.75
C
ATOM  34392  C   ILE L 106     109.756 121.885 223.550  1.00386.19
C
ATOM  34393  O   ILE L 106     108.844 122.459 224.152  1.00271.75
O
ATOM  34394  N   LYS L 107     109.657 120.611 223.120  1.00412.00
N
ATOM  34395  CA  LYS L 107     108.497 119.765 223.396  1.00353.30
C
ATOM  34396  CB  LYS L 107     108.027 118.964 222.170  1.00306.78
C
ATOM  34397  CG  LYS L 107     106.973 119.617 221.284  1.00265.54
C
ATOM  34398  CD  LYS L 107     106.063 120.591 222.006  1.00247.47
C
ATOM  34399  CE  LYS L 107     105.755 121.797 221.138  1.00259.82
C
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ATOM  34400  NZ  LYS L 107     105.124 122.915 221.877  1.00210.25
N
ATOM  34401  C   LYS L 107     108.814 118.795 224.541  1.00345.33
C
ATOM  34402  O   LYS L 107     107.962 118.695 225.448  1.00279.09
O
ATOM  34403  N   ARG L 108     107.767 120.179 225.710  1.00 66.50
N
ATOM  34404  CA  ARG L 108     107.697 119.698 227.083  1.00 64.85
C
ATOM  34405  C   ARG L 108     106.230 119.554 227.448  1.00 57.88
C
ATOM  34406  O   ARG L 108     105.338 119.830 226.636  1.00 64.30
O
ATOM  34407  CB  ARG L 108     108.443 120.631 228.032  1.00 56.65
C
ATOM  34408  CG  ARG L 108     107.834 122.026 228.150  1.00 65.58
C
ATOM  34409  CD  ARG L 108     107.946 122.594 229.570  1.00 58.24
C
ATOM  34410  NE  ARG L 108     106.932 122.071 230.494  1.00 65.12
N
ATOM  34411  CZ  ARG L 108     107.084 122.012 231.819  1.00 63.60
C
ATOM  34412  NH1 ARG L 108     108.217 122.418 232.374  1.00 63.29
N
ATOM  34413  NH2 ARG L 108     106.110 121.528 232.596  1.00 58.04
N
ATOM  34414  H   ARG L 108     107.045 120.544 225.418  1.00 79.83
H
ATOM  34415  HA  ARG L 108     108.112 118.824 227.146  1.00 77.85
H
ATOM  34416  HB2 ARG L 108     108.445 120.235 228.918  1.00 68.00
H
ATOM  34417  HB3 ARG L 108     109.354 120.734 227.714  1.00 68.00
H
ATOM  34418  HG2 ARG L 108     108.299 122.629 227.548  1.00 78.72
H
ATOM  34419  HG3 ARG L 108     106.894 121.984 227.915  1.00 78.72
H
ATOM  34420  HD2 ARG L 108     108.818 122.369 229.930  1.00 69.92
H
ATOM  34421  HD3 ARG L 108     107.841 123.557 229.532  1.00 69.92
H
ATOM  34422  HE  ARG L 108     106.194 121.783 230.161  1.00 78.18
H
ATOM  34423 HH11 ARG L 108     108.853 122.719 231.882  1.00 75.98
H
ATOM  34424 HH12 ARG L 108     108.314 122.381 233.228  1.00 75.98
H
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ATOM  34425 HH21 ARG L 108     105.376 121.251 232.243  1.00 69.68
H
ATOM  34426 HH22 ARG L 108     106.217 121.496 233.449  1.00 69.68
H
ATOM  34427  N   THR L 109     105.982 119.122 228.685  1.00 58.98
N
ATOM  34428  CA  THR L 109     104.618 118.817 229.100  1.00 66.78
C
ATOM  34429  C   THR L 109     103.828 120.085 229.386  1.00 60.95
C
ATOM  34430  O   THR L 109     104.381 121.138 229.712  1.00 62.07
O
ATOM  34431  CB  THR L 109     104.618 117.920 230.337  1.00 68.30
C
ATOM  34432  OG1 THR L 109     105.528 118.442 231.312  1.00 61.90
O
ATOM  34433  CG2 THR L 109     105.053 116.523 229.968  1.00 63.88
C
ATOM  34434  H   THR L 109     106.579 119.000 229.292  1.00 70.81
H
ATOM  34435  HA  THR L 109     104.175 118.345 228.377  1.00 80.17
H
ATOM  34436  HB  THR L 109     103.723 117.888 230.710  1.00 81.99
H
ATOM  34437  HG1 THR L 109     105.609 117.899 231.949  1.00 74.31
H
ATOM  34438 HG21 THR L 109     105.052 115.956 230.755  1.00 76.69
H
ATOM  34439 HG22 THR L 109     104.445 116.150 229.310  1.00 76.69
H
ATOM  34440 HG23 THR L 109     105.949 116.541 229.594  1.00 76.69
H
ATOM  34441  N   VAL L 110     102.509 119.967 229.260  1.00 59.59
N
ATOM  34442  CA  VAL L 110     101.643 121.075 229.620  1.00 59.50
C
ATOM  34443  C   VAL L 110     101.941 121.534 231.039  1.00 66.75
C
ATOM  34444  O   VAL L 110     102.215 120.733 231.940  1.00 55.47
O
ATOM  34445  CB  VAL L 110     100.161 120.702 229.492  1.00 59.58
C
ATOM  34446  CG1 VAL L 110      99.302 121.836 230.041  1.00 60.25
C
ATOM  34447  CG2 VAL L 110      99.826 120.396 228.041  1.00 65.27
C
ATOM  34448  H   VAL L 110     102.100 119.268 228.974  1.00 71.53
H
ATOM  34449  HA  VAL L 110     101.834 121.797 229.001  1.00 71.43
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ATOM  34450  HB  VAL L 110      99.969 119.904 230.010  1.00 71.52
H
ATOM  34451 HG11 VAL L 110      98.401 121.745 229.693  1.00 72.32
H
ATOM  34452 HG12 VAL L 110      99.290 121.783 231.009  1.00 72.32
H
ATOM  34453 HG13 VAL L 110      99.681 122.683 229.759  1.00 72.32
H
ATOM  34454 HG21 VAL L 110      98.883 120.174 227.974  1.00 78.35
H
ATOM  34455 HG22 VAL L 110     100.021 121.177 227.500  1.00 78.35
H
ATOM  34456 HG23 VAL L 110     100.364 119.645 227.744  1.00 78.35
H
ATOM  34457  N   ALA L 111     101.871 122.852 231.236  1.00 67.03
N
ATOM  34458  CA  ALA L 111     102.093 123.472 232.536  1.00 55.93
C
ATOM  34459  C   ALA L 111     101.220 124.710 232.548  1.00 57.10
C
ATOM  34460  O   ALA L 111     101.420 125.604 231.714  1.00 51.75
O
ATOM  34461  CB  ALA L 111     103.562 123.815 232.746  1.00 55.55
C
ATOM  34462  H   ALA L 111     101.694 123.420 230.615  1.00 80.46
H
ATOM  34463  HA  ALA L 111     101.839 122.880 233.262  1.00 67.14
H
ATOM  34464  HB1 ALA L 111     103.679 124.163 233.644  1.00 66.69
H
ATOM  34465  HB2 ALA L 111     104.093 123.012 232.629  1.00 66.69
H
ATOM  34466  HB3 ALA L 111     103.826 124.483 232.095  1.00 66.69
H
ATOM  34467  N   ALA L 112     100.240 124.742 233.463  1.00 51.93
N
ATOM  34468  CA  ALA L 112      99.282 125.836 233.541  1.00 59.60
C
ATOM  34469  C   ALA L 112      99.925 127.057 234.204  1.00 59.30
C
ATOM  34470  O   ALA L 112     100.841 126.924 235.020  1.00 51.71
O
ATOM  34471  CB  ALA L 112      98.041 125.416 234.320  1.00 54.49
C
ATOM  34472  H   ALA L 112     100.111 124.130 234.052  1.00 62.35
H
ATOM  34473  HA  ALA L 112      98.999 126.086 232.648  1.00 71.55
H
ATOM  34474  HB1 ALA L 112      97.380 126.122 234.265  1.00 65.42
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ATOM  34475  HB2 ALA L 112      97.689 124.599 233.934  1.00 65.42
H
ATOM  34476  HB3 ALA L 112      98.287 125.265 235.246  1.00 65.42
H
ATOM  34477  N   PRO L 113      99.492 128.259 233.840  1.00 57.69
N
ATOM  34478  CA  PRO L 113     100.103 129.456 234.436  1.00 59.04
C
ATOM  34479  C   PRO L 113      99.650 129.665 235.874  1.00 53.13
C
ATOM  34480  O   PRO L 113      98.518 129.349 236.248  1.00 51.84
O
ATOM  34481  CB  PRO L 113      99.607 130.601 233.541  1.00 57.07
C
ATOM  34482  CG  PRO L 113      98.283 130.079 232.981  1.00 63.65
C
ATOM  34483  CD  PRO L 113      98.502 128.589 232.793  1.00 50.32
C
ATOM  34484  HA  PRO L 113     101.071 129.399 234.399  1.00 70.87
H
ATOM  34485  HB2 PRO L 113      99.475 131.404 234.067  1.00 68.52
H
ATOM  34486  HB3 PRO L 113     100.246 130.770 232.830  1.00 68.52
H
ATOM  34487  HG2 PRO L 113      97.566 130.248 233.611  1.00 76.41
H
ATOM  34488  HG3 PRO L 113      98.087 130.512 232.134  1.00 76.41
H
ATOM  34489  HD2 PRO L 113      97.678 128.098 232.931  1.00 60.41
H
ATOM  34490  HD3 PRO L 113      98.858 128.402 231.911  1.00 60.41
H
ATOM  34491  N   SER L 114     100.557 130.212 236.675  1.00 51.27
N
ATOM  34492  CA  SER L 114     100.170 130.921 237.880  1.00 54.79
C
ATOM  34493  C   SER L 114      99.838 132.344 237.479  1.00 48.16
C
ATOM  34494  O   SER L 114     100.650 133.010 236.834  1.00 52.40
O
ATOM  34495  CB  SER L 114     101.291 130.937 238.921  1.00 55.36
C
ATOM  34496  OG  SER L 114     101.805 129.652 239.153  1.00 68.66
O
ATOM  34497  H   SER L 114     101.406 130.184 236.539  1.00 61.56
H
ATOM  34498  HA  SER L 114      99.410 130.480 238.293  1.00 65.78
H
ATOM  34499  HB2 SER L 114     102.007 131.507 238.600  1.00 66.46
H
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ATOM  34500  HB3 SER L 114     100.937 131.288 239.755  1.00 66.46
H
ATOM  34501  HG  SER L 114     102.582 129.706 239.469  1.00 82.42
H
ATOM  34502  N   VAL L 115      98.680 132.819 237.914  1.00 51.75
N
ATOM  34503  CA  VAL L 115      98.126 134.089 237.503  1.00 46.88
C
ATOM  34504  C   VAL L 115      98.150 135.053 238.676  1.00 57.97
C
ATOM  34505  O   VAL L 115      97.844 134.681 239.814  1.00 48.62
O
ATOM  34506  CB  VAL L 115      96.696 133.909 236.956  1.00 43.49
C
ATOM  34507  CG1 VAL L 115      96.161 135.207 236.463  1.00 47.53
C
ATOM  34508  CG2 VAL L 115      96.712 132.893 235.825  1.00 47.52
C
ATOM  34509  H   VAL L 115      98.179 132.402 238.474  1.00 62.13
H
ATOM  34510  HA  VAL L 115      98.680 134.470 236.804  1.00 56.29
H
ATOM  34511  HB  VAL L 115      96.119 133.588 237.668  1.00 52.21
H
ATOM  34512 HG11 VAL L 115      95.278 135.062 236.090  1.00 57.06
H
ATOM  34513 HG12 VAL L 115      96.110 135.829 237.205  1.00 57.06
H
ATOM  34514 HG13 VAL L 115      96.756 135.554 235.781  1.00 57.06
H
ATOM  34515 HG21 VAL L 115      95.827 132.848 235.429  1.00 57.05
H
ATOM  34516 HG22 VAL L 115      97.358 133.173 235.158  1.00 57.05
H
ATOM  34517 HG23 VAL L 115      96.958 132.025 236.182  1.00 57.05
H
ATOM  34518  N   PHE L 116      98.511 136.306 238.382  1.00 52.37
N
ATOM  34519  CA  PHE L 116      98.626 137.369 239.371  1.00 51.49
C
ATOM  34520  C   PHE L 116      98.170 138.680 238.740  1.00 52.58
C
ATOM  34521  O   PHE L 116      98.466 138.949 237.575  1.00 48.26
O
ATOM  34522  CB  PHE L 116     100.071 137.566 239.838  1.00 47.10
C
ATOM  34523  CG  PHE L 116     100.728 136.359 240.398  1.00 54.35
C
ATOM  34524  CD1 PHE L 116     101.408 135.459 239.580  1.00 49.99
C
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ATOM  34525  CD2 PHE L 116     100.756 136.167 241.782  1.00 51.46
C
ATOM  34526  CE1 PHE L 116     102.067 134.334 240.141  1.00 48.17
C
ATOM  34527  CE2 PHE L 116     101.404 135.070 242.342  1.00 47.54
C
ATOM  34528  CZ  PHE L 116     102.057 134.152 241.532  1.00 45.14
C
ATOM  34529  H   PHE L 116      98.701 136.568 237.586  1.00 62.87
H
ATOM  34530  HA  PHE L 116      98.067 137.147 240.133  1.00 61.81
H
ATOM  34531  HB2 PHE L 116     100.600 137.856 239.079  1.00 56.55
H
ATOM  34532  HB3 PHE L 116     100.079 138.246 240.529  1.00 56.55
H
ATOM  34533  HD1 PHE L 116     101.430 135.597 238.660  1.00 60.01
H
ATOM  34534  HD2 PHE L 116     100.334 136.782 242.337  1.00 61.78
H
ATOM  34535  HE1 PHE L 116     102.501 133.723 239.592  1.00 57.83
H
ATOM  34536  HE2 PHE L 116     101.400 134.953 243.264  1.00 57.07
H
ATOM  34537  HZ  PHE L 116     102.488 133.419 241.910  1.00 54.19
H
ATOM  34538  N   ILE L 117      97.512 139.517 239.512  1.00 52.90
N
ATOM  34539  CA  ILE L 117      96.983 140.786 239.023  1.00 52.39
C
ATOM  34540  C   ILE L 117      97.512 141.893 239.927  1.00 52.56
C
ATOM  34541  O   ILE L 117      97.655 141.703 241.143  1.00 42.01
O
ATOM  34542  CB  ILE L 117      95.439 140.820 238.976  1.00 49.34
C
ATOM  34543  CG1 ILE L 117      94.969 142.050 238.194  1.00 41.72
C
ATOM  34544  CG2 ILE L 117      94.863 140.845 240.382  1.00 49.94
C
ATOM  34545  CD1 ILE L 117      93.525 142.085 237.825  1.00 49.22
C
ATOM  34546  H   ILE L 117      97.351 139.374 240.344  1.00 63.51
H
ATOM  34547  HA  ILE L 117      97.301 140.930 238.118  1.00 62.89
H
ATOM  34548  HB  ILE L 117      95.126 140.017 238.527  1.00 59.24
H
ATOM  34549 HG12 ILE L 117      95.144 142.837 238.733  1.00 50.10
H
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ATOM  34550 HG13 ILE L 117      95.476 142.095 237.368  1.00 50.10
H
ATOM  34551 HG21 ILE L 117      93.909 140.678 240.335  1.00 59.95
H
ATOM  34552 HG22 ILE L 117      95.294 140.156 240.912  1.00 59.95
H
ATOM  34553 HG23 ILE L 117      95.028 141.717 240.774  1.00 59.95
H
ATOM  34554 HD11 ILE L 117      93.348 142.892 237.317  1.00 59.10
H
ATOM  34555 HD12 ILE L 117      93.318 141.304 237.288  1.00 59.10
H
ATOM  34556 HD13 ILE L 117      92.992 142.080 238.636  1.00 59.10
H
ATOM  34557  N   PHE L 118      97.827 143.038 239.321  1.00 48.28
N
ATOM  34558  CA  PHE L 118      98.455 144.142 240.036  1.00 55.48
C
ATOM  34559  C   PHE L 118      97.647 145.398 239.751  1.00 47.58
C
ATOM  34560  O   PHE L 118      97.485 145.761 238.571  1.00 47.96
O
ATOM  34561  CB  PHE L 118      99.905 144.356 239.595  1.00 47.29
C
ATOM  34562  CG  PHE L 118     100.818 143.203 239.863  1.00 46.69
C
ATOM  34563  CD1 PHE L 118     101.434 143.059 241.099  1.00 45.92
C
ATOM  34564  CD2 PHE L 118     101.107 142.292 238.865  1.00 52.54
C
ATOM  34565  CE1 PHE L 118     102.312 142.018 241.336  1.00 50.24
C
ATOM  34566  CE2 PHE L 118     101.964 141.232 239.097  1.00 51.03
C
ATOM  34567  CZ  PHE L 118     102.584 141.106 240.342  1.00 50.99
C
ATOM  34568  H   PHE L 118      97.683 143.199 238.488  1.00 57.96
H
ATOM  34569  HA  PHE L 118      98.446 143.943 240.985  1.00 66.60
H
ATOM  34570  HB2 PHE L 118      99.914 144.520 238.639  1.00 56.77
H
ATOM  34571  HB3 PHE L 118     100.258 145.126 240.067  1.00 56.77
H
ATOM  34572  HD1 PHE L 118     101.253 143.670 241.776  1.00 55.13
H
ATOM  34573  HD2 PHE L 118     100.718 142.393 238.025  1.00 63.08
H
ATOM  34574  HE1 PHE L 118     102.720 141.934 242.168  1.00 60.31
H
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ATOM  34575  HE2 PHE L 118     102.127 140.608 238.428  1.00 61.26
H
ATOM  34576  HZ  PHE L 118     103.179 140.409 240.499  1.00 61.21
H
ATOM  34577  N   PRO L 119      97.132 146.085 240.770  1.00 50.22
N
ATOM  34578  CA  PRO L 119      96.437 147.349 240.543  1.00 55.97
C
ATOM  34579  C   PRO L 119      97.435 148.429 240.185  1.00 51.00
C
ATOM  34580  O   PRO L 119      98.645 148.235 240.366  1.00 48.61
O
ATOM  34581  CB  PRO L 119      95.761 147.660 241.898  1.00 56.76
C
ATOM  34582  CG  PRO L 119      95.978 146.433 242.756  1.00 55.21
C
ATOM  34583  CD  PRO L 119      97.152 145.724 242.198  1.00 55.96
C
ATOM  34584  HA  PRO L 119      95.759 147.255 239.855  1.00 67.20
H
ATOM  34585  HB2 PRO L 119      96.176 148.439 242.301  1.00 68.14
H
ATOM  34586  HB3 PRO L 119      94.815 147.822 241.763  1.00 68.14
H
ATOM  34587  HG2 PRO L 119      96.146 146.704 243.671  1.00 66.28
H
ATOM  34588  HG3 PRO L 119      95.190 145.868 242.716  1.00 66.28
H
ATOM  34589  HD2 PRO L 119      97.970 146.032 242.620  1.00 67.18
H
ATOM  34590  HD3 PRO L 119      97.061 144.766 242.312  1.00 67.18
H
ATOM  34591  N   PRO L 120      96.964 149.583 239.731  1.00 46.07
N
ATOM  34592  CA  PRO L 120      97.874 150.712 239.516  1.00 57.30
C
ATOM  34593  C   PRO L 120      98.310 151.342 240.832  1.00 57.65
C
ATOM  34594  O   PRO L 120      97.559 151.398 241.809  1.00 52.94
O
ATOM  34595  CB  PRO L 120      97.043 151.688 238.677  1.00 57.17
C
ATOM  34596  CG  PRO L 120      95.632 151.350 238.959  1.00 55.96
C
ATOM  34597  CD  PRO L 120      95.596 149.871 239.289  1.00 52.43
C
ATOM  34598  HA  PRO L 120      98.654 150.431 239.016  1.00 68.79
H
ATOM  34599  HB2 PRO L 120      97.240 152.598 238.943  1.00 68.64
H
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ATOM  34600  HB3 PRO L 120      97.245 151.564 237.736  1.00 68.64
H
ATOM  34601  HG2 PRO L 120      95.317 151.874 239.713  1.00 67.18
H
ATOM  34602  HG3 PRO L 120      95.091 151.537 238.177  1.00 67.18
H
ATOM  34603  HD2 PRO L 120      94.962 149.691 240.001  1.00 62.95
H
ATOM  34604  HD3 PRO L 120      95.370 149.348 238.504  1.00 62.95
H
ATOM  34605  N   SER L 121      99.568 151.758 240.848  1.00 56.13
N
ATOM  34606  CA  SER L 121     100.138 152.428 241.996  1.00 56.23
C
ATOM  34607  C   SER L 121      99.539 153.816 242.143  1.00 60.28
C
ATOM  34608  O   SER L 121      99.145 154.467 241.170  1.00 57.57
O
ATOM  34609  CB  SER L 121     101.659 152.543 241.854  1.00 55.31
C
ATOM  34610  OG  SER L 121     102.007 153.475 240.840  1.00 55.50
O
ATOM  34611  H   SER L 121     100.119 151.661 240.196  1.00 67.39
H
ATOM  34612  HA  SER L 121      99.945 151.916 242.796  1.00 67.51
H
ATOM  34613  HB2 SER L 121     102.034 152.843 242.698  1.00 66.40
H
ATOM  34614  HB3 SER L 121     102.021 151.674 241.621  1.00 66.40
H
ATOM  34615  HG  SER L 121     102.843 153.550 240.793  1.00 66.62
H
ATOM  34616  N   ASP L 122      99.509 154.283 243.385  1.00 58.15
N
ATOM  34617  CA  ASP L 122      99.087 155.648 243.644  1.00 57.71
C
ATOM  34618  C   ASP L 122      99.930 156.653 242.868  1.00 55.67
C
ATOM  34619  O   ASP L 122      99.399 157.656 242.358  1.00 49.11
O
ATOM  34620  CB  ASP L 122      99.152 155.933 245.139  1.00 62.41
C
ATOM  34621  CG  ASP L 122      98.184 155.084 245.923  1.00 79.00
C
ATOM  34622  OD1 ASP L 122      98.565 154.677 247.044  1.00 95.20
O
ATOM  34623  OD2 ASP L 122      97.066 154.794 245.404  1.00 71.99
O1-
ATOM  34624  H   ASP L 122      99.723 153.834 244.086  1.00 69.81
H
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ATOM  34625  HA  ASP L 122      98.168 155.750 243.353  1.00 69.28
H
ATOM  34626  HB2 ASP L 122     100.046 155.744 245.460  1.00 74.92
H
ATOM  34627  HB3 ASP L 122      98.931 156.864 245.295  1.00 74.92
H
ATOM  34628  N   GLU L 123     101.240 156.403 242.765  1.00 58.85
N
ATOM  34629  CA  GLU L 123     102.132 157.353 242.115  1.00 65.97
C
ATOM  34630  C   GLU L 123     101.702 157.574 240.668  1.00 65.21
C
ATOM  34631  O   GLU L 123     101.538 158.717 240.224  1.00 63.23
O
ATOM  34632  CB  GLU L 123     103.574 156.852 242.212  1.00 65.49
C
ATOM  34633  CG  GLU L 123     104.652 157.768 241.600  1.00 83.91
C
ATOM  34634  CD  GLU L 123     106.050 157.098 241.524  1.00 99.44
C
ATOM  34635  OE1 GLU L 123     106.322 156.169 242.336  1.00 88.71
O
ATOM  34636  OE2 GLU L 123     106.867 157.501 240.649  1.00 89.26
O1-
ATOM  34637  H   GLU L 123     101.629 155.695 243.061  1.00 70.65
H
ATOM  34638  HA  GLU L 123     102.094 158.210 242.566  1.00 79.19
H
ATOM  34639  HB2 GLU L 123     103.792 156.741 243.151  1.00 78.61
H
ATOM  34640  HB3 GLU L 123     103.630 155.998 241.756  1.00 78.61
H
ATOM  34641  HG2 GLU L 123     104.386 158.006 240.698  1.00100.72
H
ATOM  34642  HG3 GLU L 123     104.733 158.567 242.144  1.00100.72
H
ATOM  34643  N   GLN L 124     101.436 156.481 239.942  1.00 60.17
N
ATOM  34644  CA  GLN L 124     100.986 156.608 238.560  1.00 62.64
C
ATOM  34645  C   GLN L 124      99.611 157.250 238.472  1.00 51.98
C
ATOM  34646  O   GLN L 124      99.315 157.935 237.494  1.00 57.06
O
ATOM  34647  CB  GLN L 124     100.964 155.238 237.864  1.00 51.24
C
ATOM  34648  CG  GLN L 124     100.677 155.365 236.406  1.00 55.25
C
ATOM  34649  CD  GLN L 124     100.309 154.070 235.703  1.00 58.65
C
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ATOM  34650  OE1 GLN L 124      99.917 153.094 236.321  1.00 51.27
O
ATOM  34651  NE2 GLN L 124     100.376 154.092 234.386  1.00 55.31
N
ATOM  34652  H   GLN L 124     101.509 155.673 240.226  1.00 72.24
H
ATOM  34653  HA  GLN L 124     101.620 157.169 238.089  1.00 75.20
H
ATOM  34654  HB2 GLN L 124     101.828 154.813 237.968  1.00 61.51
H
ATOM  34655  HB3 GLN L 124     100.272 154.688 238.265  1.00 61.51
H
ATOM  34656  HG2 GLN L 124      99.932 155.977 236.292  1.00 66.33
H
ATOM  34657  HG3 GLN L 124     101.466 155.719 235.968  1.00 66.33
H
ATOM  34658 HE21 GLN L 124     100.617 154.811 233.979  1.00 66.40
H
ATOM  34659 HE22 GLN L 124     100.178 153.388 233.933  1.00 66.40
H
ATOM  34660  N   LEU L 125      98.741 157.023 239.452  1.00 56.85
N
ATOM  34661  CA  LEU L 125      97.436 157.680 239.400  1.00 58.71
C
ATOM  34662  C   LEU L 125      97.551 159.200 239.571  1.00 60.63
C
ATOM  34663  O   LEU L 125      96.745 159.951 239.012  1.00 68.10
O
ATOM  34664  CB  LEU L 125      96.526 157.097 240.461  1.00 60.38
C
ATOM  34665  CG  LEU L 125      95.980 155.704 240.141  1.00 56.64
C
ATOM  34666  CD1 LEU L 125      95.457 155.073 241.427  1.00 63.51
C
ATOM  34667  CD2 LEU L 125      94.872 155.751 239.093  1.00 66.76
C
ATOM  34668  H   LEU L 125      98.875 156.514 240.133  1.00 68.25
H
ATOM  34669  HA  LEU L 125      97.037 157.512 238.531  1.00 70.48
H
ATOM  34670  HB2 LEU L 125      97.023 157.034 241.291  1.00 72.49
H
ATOM  34671  HB3 LEU L 125      95.766 157.690 240.572  1.00 72.49
H
ATOM  34672  HG  LEU L 125      96.696 155.163 239.771  1.00 68.00
H
ATOM  34673 HD11 LEU L 125      95.046 154.220 241.217  1.00 76.24
H
ATOM  34674 HD12 LEU L 125      96.199 154.941 242.037  1.00 76.24
H
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ATOM  34675 HD13 LEU L 125      94.802 155.667 241.825  1.00 76.24
H
ATOM  34676 HD21 LEU L 125      94.495 154.862 238.992  1.00 80.14
H
ATOM  34677 HD22 LEU L 125      94.186 156.369 239.386  1.00 80.14
H
ATOM  34678 HD23 LEU L 125      95.248 156.047 238.249  1.00 80.14
H
ATOM  34679  N   LYS L 126      98.538 159.671 240.327  1.00 57.53
N
ATOM  34680  CA  LYS L 126      98.727 161.107 240.458  1.00 74.89
C
ATOM  34681  C   LYS L 126      99.050 161.736 239.118  1.00 66.45
C
ATOM  34682  O   LYS L 126      98.712 162.898 238.883  1.00 75.38
O
ATOM  34683  CB  LYS L 126      99.845 161.417 241.459  1.00 73.74
C
ATOM  34684  CG  LYS L 126      99.376 161.574 242.894  1.00 81.22
C
ATOM  34685  CD  LYS L 126     100.357 162.397 243.747  1.00 91.18
C
ATOM  34686  CE  LYS L 126     101.761 161.774 243.830  1.00108.96
C
ATOM  34687  NZ  LYS L 126     101.874 160.592 244.757  1.00 91.69
N
ATOM  34688  H   LYS L 126      99.100 159.188 240.766  1.00 69.06
H
ATOM  34689  HA  LYS L 126      97.908 161.497 240.801  1.00 89.89
H
ATOM  34690  HB2 LYS L 126     100.488 160.691 241.438  1.00 88.51
H
ATOM  34691  HB3 LYS L 126     100.273 162.248 241.198  1.00 88.51
H
ATOM  34692  HG2 LYS L 126      98.518 162.027 242.900  1.00 97.49
H
ATOM  34693  HG3 LYS L 126      99.289 160.696 243.298  1.00 97.49
H
ATOM  34694  HD2 LYS L 126     100.446 163.280 243.359  1.00109.45
H
ATOM  34695  HD3 LYS L 126     100.008 162.464 244.650  1.00109.45
H
ATOM  34696  HE2 LYS L 126     102.017 161.474 242.944  1.00130.79
H
ATOM  34697  HE3 LYS L 126     102.381 162.451 244.145  1.00130.79
H
ATOM  34698  HZ1 LYS L 126     102.692 160.245 244.711  1.00110.05
H
ATOM  34699  HZ2 LYS L 126     101.714 160.847 245.595  1.00110.05
H
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ATOM  34700  HZ3 LYS L 126     101.283 159.968 244.528  1.00110.05
H
ATOM  34701  N   SER L 127      99.695 160.976 238.234  1.00 63.30
N
ATOM  34702  CA  SER L 127     100.129 161.404 236.909  1.00 59.45
C
ATOM  34703  C   SER L 127      99.043 161.306 235.849  1.00 55.36
C
ATOM  34704  O   SER L 127      99.308 161.665 234.697  1.00 59.06
O
ATOM  34705  CB  SER L 127     101.305 160.542 236.445  1.00 57.64
C
ATOM  34706  OG  SER L 127     102.300 160.530 237.443  1.00 70.15
O
ATOM  34707  H   SER L 127      99.905 160.157 238.389  1.00 75.99
H
ATOM  34708  HA  SER L 127     100.407 162.332 236.978  1.00 71.36
H
ATOM  34709  HB2 SER L 127     100.996 159.637 236.289  1.00 69.19
H
ATOM  34710  HB3 SER L 127     101.673 160.913 235.628  1.00 69.19
H
ATOM  34711  HG  SER L 127     102.931 160.026 237.212  1.00 84.21
H
ATOM  34712  N   GLY L 128      97.869 160.777 236.187  1.00 53.71
N
ATOM  34713  CA  GLY L 128      96.711 160.812 235.318  1.00 56.27
C
ATOM  34714  C   GLY L 128      96.477 159.585 234.464  1.00 64.46
C
ATOM  34715  O   GLY L 128      95.596 159.613 233.595  1.00 60.02
O
ATOM  34716  H   GLY L 128      97.719 160.382 236.936  1.00 64.47
H
ATOM  34717  HA2 GLY L 128      95.922 160.938 235.867  1.00 67.56
H
ATOM  34718  HA3 GLY L 128      96.804 161.569 234.718  1.00 67.56
H
ATOM  34719  N   THR L 129      97.204 158.505 234.696  1.00 61.53
N
ATOM  34720  CA  THR L 129      97.042 157.268 233.949  1.00 56.52
C
ATOM  34721  C   THR L 129      96.909 156.138 234.967  1.00 61.16
C
ATOM  34722  O   THR L 129      97.305 156.285 236.128  1.00 60.88
O
ATOM  34723  CB  THR L 129      98.238 157.066 232.985  1.00 59.94
C
ATOM  34724  OG1 THR L 129      98.173 158.032 231.918  1.00 69.77
O
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ATOM  34725  CG2 THR L 129      98.267 155.679 232.373  1.00 66.42
C
ATOM  34726  H   THR L 129      97.817 158.463 235.298  1.00 73.86
H
ATOM  34727  HA  THR L 129      96.240 157.263 233.402  1.00 67.86
H
ATOM  34728  HB  THR L 129      99.052 157.178 233.500  1.00 71.96
H
ATOM  34729  HG1 THR L 129      98.854 157.969 231.433  1.00 83.76
H
ATOM  34730 HG21 THR L 129      98.946 155.635 231.683  1.00 79.73
H
ATOM  34731 HG22 THR L 129      98.467 155.020 233.055  1.00 79.73
H
ATOM  34732 HG23 THR L 129      97.404 155.473 231.980  1.00 79.73
H
ATOM  34733  N   ALA L 130      96.320 155.012 234.542  1.00 56.38
N
ATOM  34734  CA  ALA L 130      96.260 153.792 235.352  1.00 51.58
C
ATOM  34735  C   ALA L 130      96.653 152.620 234.469  1.00 54.53
C
ATOM  34736  O   ALA L 130      96.027 152.371 233.438  1.00 47.77
O
ATOM  34737  CB  ALA L 130      94.875 153.548 235.952  1.00 50.75
C
ATOM  34738  H   ALA L 130      95.943 154.931 233.773  1.00 67.68
H
ATOM  34739  HA  ALA L 130      96.887 153.877 236.087  1.00 61.92
H
ATOM  34740  HB1 ALA L 130      94.884 152.707 236.435  1.00 60.93
H
ATOM  34741  HB2 ALA L 130      94.662 154.274 236.559  1.00 60.93
H
ATOM  34742  HB3 ALA L 130      94.222 153.513 235.237  1.00 60.93
H
ATOM  34743  N   SER L 131      97.726 151.949 234.835  1.00 49.72
N
ATOM  34744  CA  SER L 131      98.099 150.701 234.209  1.00 49.99
C
ATOM  34745  C   SER L 131      97.740 149.570 235.158  1.00 47.72
C
ATOM  34746  O   SER L 131      98.109 149.607 236.339  1.00 51.43
O
ATOM  34747  CB  SER L 131      99.584 150.684 233.877  1.00 53.09
C
ATOM  34748  OG  SER L 131      99.884 151.674 232.911  1.00 54.65
O
ATOM  34749  H   SER L 131      98.264 152.202 235.455  1.00 59.69
H
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ATOM  34750  HA  SER L 131      97.615 150.577 233.377  1.00 60.01
H
ATOM  34751  HB2 SER L 131     100.093 150.865 234.684  1.00 63.74
H
ATOM  34752  HB3 SER L 131      99.822 149.813 233.524  1.00 63.74
H
ATOM  34753  HG  SER L 131      99.183 152.084 232.695  1.00 65.61
H
ATOM  34754  N   VAL L 132      96.963 148.615 234.656  1.00 46.82
N
ATOM  34755  CA  VAL L 132      96.641 147.380 235.362  1.00 48.65
C
ATOM  34756  C   VAL L 132      97.409 146.259 234.695  1.00 46.43
C
ATOM  34757  O   VAL L 132      97.395 146.152 233.467  1.00 48.57
O
ATOM  34758  CB  VAL L 132      95.132 147.074 235.334  1.00 45.95
C
ATOM  34759  CG1 VAL L 132      94.786 146.073 236.416  1.00 44.50
C
ATOM  34760  CG2 VAL L 132      94.339 148.317 235.476  1.00 46.26
C
ATOM  34761  H   VAL L 132      96.598 148.662 233.878  1.00 56.21
H
ATOM  34762  HA  VAL L 132      96.918 147.463 236.287  1.00 58.40
H
ATOM  34763  HB  VAL L 132      94.902 146.683 234.477  1.00 55.17
H
ATOM  34764 HG11 VAL L 132      93.825 145.948 236.434  1.00 53.43
H
ATOM  34765 HG12 VAL L 132      95.226 145.230 236.220  1.00 53.43
H
ATOM  34766 HG13 VAL L 132      95.091 146.415 237.271  1.00 53.43
H
ATOM  34767 HG21 VAL L 132      93.417 148.084 235.673  1.00 55.54
H
ATOM  34768 HG22 VAL L 132      94.708 148.846 236.200  1.00 55.54
H
ATOM  34769 HG23 VAL L 132      94.383 148.817 234.646  1.00 55.54
H
ATOM  34770  N   VAL L 133      98.058 145.417 235.492  1.00 43.73
N
ATOM  34771  CA  VAL L 133      99.015 144.441 234.986  1.00 41.24
C
ATOM  34772  C   VAL L 133      98.569 143.036 235.394  1.00 49.29
C
ATOM  34773  O   VAL L 133      98.145 142.803 236.535  1.00 47.17
O
ATOM  34774  CB  VAL L 133     100.448 144.764 235.445  1.00 46.92
C
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ATOM  34775  CG1 VAL L 133     101.453 143.762 234.919  1.00 42.65
C
ATOM  34776  CG2 VAL L 133     100.877 146.148 234.909  1.00 47.79
C
ATOM  34777  H   VAL L 133      97.958 145.391 236.346  1.00 52.50
H
ATOM  34778  HA  VAL L 133      99.009 144.459 234.016  1.00 49.52
H
ATOM  34779  HB  VAL L 133     100.445 144.742 236.415  1.00 56.33
H
ATOM  34780 HG11 VAL L 133     102.341 144.022 235.209  1.00 51.21
H
ATOM  34781 HG12 VAL L 133     101.235 142.884 235.266  1.00 51.21
H
ATOM  34782 HG13 VAL L 133     101.412 143.754 233.949  1.00 51.21
H
ATOM  34783 HG21 VAL L 133     101.750 146.371 235.268  1.00 57.38
H
ATOM  34784 HG22 VAL L 133     100.918 146.112 233.939  1.00 57.38
H
ATOM  34785 HG23 VAL L 133     100.226 146.812 235.187  1.00 57.38
H
ATOM  34786  N   CYS L 134      98.627 142.111 234.445  1.00 51.75
N
ATOM  34787  CA  CYS L 134      98.269 140.712 234.667  1.00 49.10
C
ATOM  34788  C   CYS L 134      99.472 139.876 234.265  1.00 55.02
C
ATOM  34789  O   CYS L 134     100.030 140.077 233.187  1.00 47.29
O
ATOM  34790  CB  CYS L 134      97.034 140.321 233.861  1.00 59.57
C
ATOM  34791  SG  CYS L 134      96.307 138.672 234.235  1.00 59.94
S
ATOM  34792  H   CYS L 134      98.878 142.273 233.639  1.00 62.13
H
ATOM  34793  HA  CYS L 134      98.060 140.547 235.599  1.00 58.95
H
ATOM  34794  HB2 CYS L 134      96.343 140.981 234.029  1.00 71.52
H
ATOM  34795  HB3 CYS L 134      97.273 140.322 232.923  1.00 71.52
H
ATOM  34796  N   LEU L 135      99.925 139.014 235.172  1.00 48.66
N
ATOM  34797  CA  LEU L 135     101.083 138.168 234.959  1.00 48.54
C
ATOM  34798  C   LEU L 135     100.647 136.716 234.881  1.00 52.28
C
ATOM  34799  O   LEU L 135      99.932 136.239 235.761  1.00 49.55
O
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ATOM  34800  CB  LEU L 135     102.078 138.332 236.090  1.00 51.81
C
ATOM  34801  CG  LEU L 135     103.153 137.262 236.145  1.00 57.81
C
ATOM  34802  CD1 LEU L 135     104.045 137.279 234.898  1.00 53.91
C
ATOM  34803  CD2 LEU L 135     103.911 137.490 237.419  1.00 54.88
C
ATOM  34804  H   LEU L 135      99.564 138.902 235.944  1.00 58.42
H
ATOM  34805  HA  LEU L 135     101.507 138.410 234.122  1.00 58.28
H
ATOM  34806  HB2 LEU L 135     102.523 139.189 235.988  1.00 62.21
H
ATOM  34807  HB3 LEU L 135     101.597 138.307 236.931  1.00 62.21
H
ATOM  34808  HG  LEU L 135     102.773 136.369 236.146  1.00 69.39
H
ATOM  34809 HD11 LEU L 135     104.699 136.566 234.968  1.00 64.72
H
ATOM  34810 HD12 LEU L 135     103.493 137.145 234.112  1.00 64.72
H
ATOM  34811 HD13 LEU L 135     104.496 138.136 234.844  1.00 64.72
H
ATOM  34812 HD21 LEU L 135     104.630 136.842 237.480  1.00 65.88
H
ATOM  34813 HD22 LEU L 135     104.279 138.389 237.411  1.00 65.88
H
ATOM  34814 HD23 LEU L 135     103.307 137.387 238.170  1.00 65.88
H
ATOM  34815  N   LEU L 136     101.082 136.032 233.830  1.00 55.08
N
ATOM  34816  CA  LEU L 136     100.934 134.590 233.661  1.00 50.56
C
ATOM  34817  C   LEU L 136     102.306 133.987 233.759  1.00 46.41
C
ATOM  34818  O   LEU L 136     103.129 134.181 232.862  1.00 48.62
O
ATOM  34819  CB  LEU L 136     100.336 134.238 232.313  1.00 49.91
C
ATOM  34820  CG  LEU L 136      98.843 134.416 232.156  1.00 54.88
C
ATOM  34821  CD1 LEU L 136      98.493 135.865 232.409  1.00 52.27
C
ATOM  34822  CD2 LEU L 136      98.453 133.953 230.762  1.00 55.48
C
ATOM  34823  H   LEU L 136     101.486 136.401 233.166  1.00 66.12
H
ATOM  34824  HA  LEU L 136     100.355 134.252 234.361  1.00 60.70
H
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ATOM  34825  HB2 LEU L 136     100.759 134.798 231.644  1.00 59.93
H
ATOM  34826  HB3 LEU L 136     100.530 133.305 232.135  1.00 59.93
H
ATOM  34827  HG  LEU L 136      98.340 133.887 232.795  1.00 65.88
H
ATOM  34828 HD11 LEU L 136      97.656 136.070 231.964  1.00 62.75
H
ATOM  34829 HD12 LEU L 136      98.403 136.006 233.364  1.00 62.75
H
ATOM  34830 HD13 LEU L 136      99.201 136.428 232.057  1.00 62.75
H
ATOM  34831 HD21 LEU L 136      97.499 134.084 230.640  1.00 66.60
H
ATOM  34832 HD22 LEU L 136      98.944 134.475 230.107  1.00 66.60
H
ATOM  34833 HD23 LEU L 136      98.674 133.013 230.668  1.00 66.60
H
ATOM  34834  N   ASN L 137     102.571 133.270 234.848  1.00 45.37
N
ATOM  34835  CA  ASN L 137     103.915 132.789 235.110  1.00 44.93
C
ATOM  34836  C   ASN L 137     104.069 131.313 234.771  1.00 53.88
C
ATOM  34837  O   ASN L 137     103.228 130.484 235.153  1.00 50.66
O
ATOM  34838  CB  ASN L 137     104.305 133.013 236.563  1.00 51.74
C
ATOM  34839  CG  ASN L 137     105.686 133.495 236.685  1.00 53.33
C
ATOM  34840  OD1 ASN L 137     106.152 134.282 235.852  1.00 62.70
O
ATOM  34841  ND2 ASN L 137     106.379 133.037 237.694  1.00 60.13
N
ATOM  34842  H   ASN L 137     101.991 133.053 235.443  1.00 54.47
H
ATOM  34843  HA  ASN L 137     104.517 133.284 234.532  1.00 53.94
H
ATOM  34844  HB2 ASN L 137     103.715 133.679 236.953  1.00 62.11
H
ATOM  34845  HB3 ASN L 137     104.229 132.179 237.049  1.00 62.11
H
ATOM  34846 HD21 ASN L 137     107.193 133.290 237.808  1.00 72.19
H
ATOM  34847 HD22 ASN L 137     106.021 132.483 238.247  1.00 72.19
H
ATOM  34848  N   ASN L 138     105.157 131.005 234.055  1.00 48.61
N
ATOM  34849  CA  ASN L 138     105.716 129.659 233.893  1.00 51.13
C
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ATOM  34850  C   ASN L 138     104.690 128.654 233.353  1.00 54.09
C
ATOM  34851  O   ASN L 138     104.302 127.704 234.026  1.00 55.84
O
ATOM  34852  CB  ASN L 138     106.291 129.207 235.237  1.00 54.33
C
ATOM  34853  CG  ASN L 138     107.564 129.919 235.570  1.00 62.05
C
ATOM  34854  OD1 ASN L 138     107.748 131.076 235.210  1.00 59.36
O
ATOM  34855  ND2 ASN L 138     108.481 129.219 236.200  1.00 79.17
N
ATOM  34856  H   ASN L 138     105.615 131.595 233.630  1.00 58.35
H
ATOM  34857  HA  ASN L 138     106.416 129.695 233.223  1.00 61.39
H
ATOM  34858  HB2 ASN L 138     105.648 129.393 235.938  1.00 65.23
H
ATOM  34859  HB3 ASN L 138     106.477 128.255 235.201  1.00 65.23
H
ATOM  34860 HD21 ASN L 138     109.230 129.585 236.412  1.00 95.03
H
ATOM  34861 HD22 ASN L 138     108.333 128.395 236.399  1.00 95.03
H
ATOM  34862  N   PHE L 139     104.317 128.836 232.085  1.00 51.44
N
ATOM  34863  CA  PHE L 139     103.308 127.992 231.458  1.00 50.15
C
ATOM  34864  C   PHE L 139     103.815 127.448 230.130  1.00 55.87
C
ATOM  34865  O   PHE L 139     104.787 127.940 229.553  1.00 56.07
O
ATOM  34866  CB  PHE L 139     101.988 128.725 231.254  1.00 47.87
C
ATOM  34867  CG  PHE L 139     102.068 129.910 230.344  1.00 57.02
C
ATOM  34868  CD1 PHE L 139     101.849 129.767 228.985  1.00 56.39
C
ATOM  34869  CD2 PHE L 139     102.332 131.179 230.851  1.00 52.69
C
ATOM  34870  CE1 PHE L 139     101.922 130.855 228.128  1.00 60.83
C
ATOM  34871  CE2 PHE L 139     102.403 132.277 230.023  1.00 50.00
C
ATOM  34872  CZ  PHE L 139     102.202 132.117 228.632  1.00 59.86
C
ATOM  34873  H   PHE L 139     104.636 129.446 231.568  1.00 61.75
H
ATOM  34874  HA  PHE L 139     103.145 127.233 232.042  1.00 60.21
H
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ATOM  34875  HB2 PHE L 139     101.347 128.106 230.872  1.00 57.48
H
ATOM  34876  HB3 PHE L 139     101.673 129.040 232.116  1.00 57.48
H
ATOM  34877  HD1 PHE L 139     101.651 128.926 228.641  1.00 67.69
H
ATOM  34878  HD2 PHE L 139     102.464 131.286 231.766  1.00 63.26
H
ATOM  34879  HE1 PHE L 139     101.784 130.740 227.217  1.00 73.03
H
ATOM  34880  HE2 PHE L 139     102.583 133.119 230.376  1.00 60.03
H
ATOM  34881  HZ  PHE L 139     102.256 132.849 228.061  1.00 71.86
H
ATOM  34882  N   TYR L 140     103.139 126.397 229.667  1.00 53.27
N
ATOM  34883  CA  TYR L 140     103.445 125.719 228.416  1.00 53.11
C
ATOM  34884  C   TYR L 140     102.188 125.019 227.930  1.00 54.49
C
ATOM  34885  O   TYR L 140     101.511 124.358 228.725  1.00 60.52
O
ATOM  34886  CB  TYR L 140     104.571 124.703 228.559  1.00 55.03
C
ATOM  34887  CG  TYR L 140     105.038 124.174 227.202  1.00 66.31
C
ATOM  34888  CD1 TYR L 140     104.302 123.197 226.521  1.00 63.00
C
ATOM  34889  CD2 TYR L 140     106.192 124.669 226.588  1.00 59.28
C
ATOM  34890  CE1 TYR L 140     104.698 122.724 225.274  1.00 68.45
C
ATOM  34891  CE2 TYR L 140     106.606 124.186 225.337  1.00 68.90
C
ATOM  34892  CZ  TYR L 140     105.850 123.217 224.682  1.00 74.01
C
ATOM  34893  OH  TYR L 140     106.244 122.731 223.440  1.00 76.42
O
ATOM  34894  H   TYR L 140     102.470 126.046 230.077  1.00 63.95
H
ATOM  34895  HA  TYR L 140     103.719 126.384 227.766  1.00 63.76
H
ATOM  34896  HB2 TYR L 140     105.326 125.123 228.998  1.00 66.07
H
ATOM  34897  HB3 TYR L 140     104.257 123.950 229.086  1.00 66.07
H
ATOM  34898  HD1 TYR L 140     103.529 122.858 226.911  1.00 75.63
H
ATOM  34899  HD2 TYR L 140     106.692 125.328 227.014  1.00 71.16
H
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ATOM  34900  HE1 TYR L 140     104.192 122.076 224.839  1.00 82.17
H
ATOM  34901  HE2 TYR L 140     107.386 124.511 224.948  1.00 82.71
H
ATOM  34902  HH  TYR L 140     107.037 122.960 223.282  1.00 91.73
H
ATOM  34903  N   PRO L 141     101.862 125.105 226.645  1.00 62.35
N
ATOM  34904  CA  PRO L 141     102.619 125.775 225.573  1.00 64.80
C
ATOM  34905  C   PRO L 141     102.381 127.295 225.545  1.00 60.82
C
ATOM  34906  O   PRO L 141     101.640 127.795 226.423  1.00 51.47
O
ATOM  34907  CB  PRO L 141     102.094 125.085 224.306  1.00 63.96
C
ATOM  34908  CG  PRO L 141     100.690 124.734 224.628  1.00 59.37
C
ATOM  34909  CD  PRO L 141     100.631 124.473 226.134  1.00 59.32
C
ATOM  34910  HA  PRO L 141     103.572 125.614 225.650  1.00 77.78
H
ATOM  34911  HB2 PRO L 141     102.138 125.695 223.553  1.00 76.78
H
ATOM  34912  HB3 PRO L 141     102.618 124.289 224.120  1.00 76.78
H
ATOM  34913  HG2 PRO L 141     100.109 125.474 224.388  1.00 71.27
H
ATOM  34914  HG3 PRO L 141     100.434 123.939 224.134  1.00 71.27
H
ATOM  34915  HD2 PRO L 141      99.846 124.886 226.525  1.00 71.21
H
ATOM  34916  HD3 PRO L 141     100.632 123.521 226.319  1.00 71.21
H
ATOM  34917  N   ARG L 142     102.986 127.976 224.546  1.00 67.10
N
ATOM  34918  CA AARG L 142     102.958 129.436 224.525  0.50 63.74
C
ATOM  34919  CA BARG L 142     102.963 129.437 224.457  0.50 63.84
C
ATOM  34920  C   ARG L 142     101.547 129.984 224.368  1.00 60.54
C
ATOM  34921  O   ARG L 142     101.276 131.088 224.832  1.00 57.33
O
ATOM  34922  CB AARG L 142     103.849 129.995 223.403  0.50 65.57
C
ATOM  34923  CB BARG L 142     103.759 129.903 223.221  0.50 65.58
C
ATOM  34924  CG AARG L 142     103.817 131.558 223.266  0.50 60.92
C
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ATOM  34925  CG BARG L 142     104.890 130.918 223.479  0.50 64.03
C
ATOM  34926  CD AARG L 142     104.583 132.052 222.019  0.50 69.14
C
ATOM  34927  CD BARG L 142     105.300 131.770 222.239  0.50 67.41
C
ATOM  34928  NE AARG L 142     104.114 133.353 221.517  0.50 66.01
N
ATOM  34929  NE BARG L 142     104.855 131.210 220.958  0.50 63.87
N
ATOM  34930  CZ AARG L 142     104.846 134.465 221.467  0.50 57.27
C
ATOM  34931  CZ BARG L 142     105.545 130.334 220.229  0.50 67.38
C
ATOM  34932  NH1AARG L 142     104.308 135.572 220.982  0.50 59.51
N
ATOM  34933  NH1BARG L 142     105.045 129.884 219.077  0.50 69.30
N
ATOM  34934  NH2AARG L 142     106.106 134.484 221.885  0.50 61.37
N
ATOM  34935  NH2BARG L 142     106.727 129.909 220.641  0.50 61.82
N
ATOM  34936  H  AARG L 142     103.406 127.616 223.889  0.50 80.55
H
ATOM  34937  H  BARG L 142     103.419 127.604 223.904  0.50 80.55
H
ATOM  34938  HA AARG L 142     103.315 129.739 225.374  0.50 76.52
H
ATOM  34939  HA BARG L 142     103.382 129.790 225.257  0.50 76.63
H
ATOM  34940  HB2AARG L 142     104.766 129.735 223.580  0.50 78.71
H
ATOM  34941  HB2BARG L 142     104.163 129.122 222.811  0.50 78.72
H
ATOM  34942  HB3AARG L 142     103.553 129.620 222.559  0.50 78.71
H
ATOM  34943  HB3BARG L 142     103.139 130.318 222.601  0.50 78.72
H
ATOM  34944  HG2AARG L 142     102.896 131.853 223.191  0.50 73.13
H
ATOM  34945  HG2BARG L 142     104.601 131.532 224.172  0.50 76.87
H
ATOM  34946  HG3AARG L 142     104.230 131.955 224.050  0.50 73.13
H
ATOM  34947  HG3BARG L 142     105.678 130.434 223.773  0.50 76.87
H
ATOM  34948  HD2AARG L 142     105.522 132.141 222.245  0.50 82.99
H
ATOM  34949  HD2BARG L 142     104.909 132.654 222.325  0.50 80.92
H
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ATOM  34950  HD3AARG L 142     104.475 131.402 221.308  0.50 82.99
H
ATOM  34951  HD3BARG L 142     106.268 131.836 222.213  0.50 80.92
H
ATOM  34952  HE AARG L 142     103.305 133.398 221.232  0.50 79.24
H
ATOM  34953  HE BARG L 142     104.092 131.466 220.654  0.50 76.67
H
ATOM  34954 HH11AARG L 142     103.496 135.568 220.702  0.50 71.44
H
ATOM  34955 HH11BARG L 142     104.277 130.159 218.803  0.50 83.19
H
ATOM  34956 HH12AARG L 142     104.773 136.295 220.946  0.50 71.44
H
ATOM  34957 HH12BARG L 142     105.490 129.318 218.607  0.50 83.19
H
ATOM  34958 HH21AARG L 142     106.466 133.766 222.196  0.50 73.68
H
ATOM  34959 HH21BARG L 142     107.054 130.198 221.382  0.50 74.22
H
ATOM  34960 HH22AARG L 142     106.561 135.211 221.844  0.50 73.68
H
ATOM  34961 HH22BARG L 142     107.169 129.343 220.168  0.50 74.22
H
ATOM  34962  N   GLU L 143     100.642 129.261 223.735  1.00 63.67
N
ATOM  34963  CA  GLU L 143      99.346 129.867 223.440  1.00 59.73
C
ATOM  34964  C   GLU L 143      98.581 130.127 224.729  1.00 62.92
C
ATOM  34965  O   GLU L 143      98.356 129.215 225.520  1.00 55.20
O
ATOM  34966  CB  GLU L 143      98.520 128.978 222.508  1.00 78.12
C
ATOM  34967  CG  GLU L 143      99.050 128.846 221.069  1.00109.43
C
ATOM  34968  CD  GLU L 143     100.478 128.300 220.979  1.00 92.72
C
ATOM  34969  OE1 GLU L 143     101.343 129.017 220.423  1.00 82.30
O
ATOM  34970  OE2 GLU L 143     100.733 127.163 221.458  1.00 80.09
O1-
ATOM  34971  H   GLU L 143     100.742 128.449 223.474  1.00 76.43
H
ATOM  34972  HA  GLU L 143      99.493 130.712 222.987  1.00 71.71
H
ATOM  34973  HB2 GLU L 143      98.490 128.084 222.886  1.00 93.77
H
ATOM  34974  HB3 GLU L 143      97.624 129.345 222.452  1.00 93.77
H
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ATOM  34975  HG2 GLU L 143      98.471 128.242 220.578  1.00131.35
H
ATOM  34976  HG3 GLU L 143      99.044 129.723 220.654  1.00131.35
H
ATOM  34977  N   ALA L 144      98.162 131.369 224.929  1.00 69.04
N
ATOM  34978  CA  ALA L 144      97.309 131.724 226.056  1.00 62.58
C
ATOM  34979  C   ALA L 144      96.373 132.833 225.620  1.00 56.77
C
ATOM  34980  O   ALA L 144      96.677 133.585 224.690  1.00 62.69
O
ATOM  34981  CB  ALA L 144      98.141 132.168 227.265  1.00 50.28
C
ATOM  34982  H   ALA L 144      98.361 132.034 224.420  1.00 82.87
H
ATOM  34983  HA  ALA L 144      96.775 130.960 226.322  1.00 75.12
H
ATOM  34984  HB1 ALA L 144      97.547 132.336 228.013  1.00 60.37
H
ATOM  34985  HB2 ALA L 144      98.768 131.464 227.494  1.00 60.37
H
ATOM  34986  HB3 ALA L 144      98.623 132.979 227.037  1.00 60.37
H
ATOM  34987  N   LYS L 145      95.231 132.930 226.288  1.00 60.00
N
ATOM  34988  CA  LYS L 145      94.264 133.987 226.038  1.00 60.15
C
ATOM  34989  C   LYS L 145      94.041 134.771 227.330  1.00 71.02
C
ATOM  34990  O   LYS L 145      93.719 134.188 228.380  1.00 62.97
O
ATOM  34991  CB  LYS L 145      92.932 133.431 225.514  1.00 61.44
C
ATOM  34992  CG  LYS L 145      92.133 134.436 224.683  1.00 75.48
C
ATOM  34993  CD  LYS L 145      90.647 134.562 225.054  1.00 74.94
C
ATOM  34994  CE  LYS L 145      89.810 133.456 224.447  1.00 85.58
C
ATOM  34995  NZ  LYS L 145      88.330 133.659 224.734  1.00 88.40
N
ATOM  34996  H   LYS L 145      94.989 132.380 226.905  1.00 72.03
H
ATOM  34997  HA  LYS L 145      94.618 134.588 225.364  1.00 72.20
H
ATOM  34998  HB2 LYS L 145      93.113 132.660 224.953  1.00 73.75
H
ATOM  34999  HB3 LYS L 145      92.384 133.169 226.271  1.00 73.75
H
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ATOM  35000  HG2 LYS L 145      92.533 135.313 224.795  1.00 90.60
H
ATOM  35001  HG3 LYS L 145      92.178 134.168 223.753  1.00 90.60
H
ATOM  35002  HD2 LYS L 145      90.555 134.515 226.019  1.00 89.95
H
ATOM  35003  HD3 LYS L 145      90.308 135.410 224.729  1.00 89.95
H
ATOM  35004  HE2 LYS L 145      89.936 133.448 223.486  1.00102.72
H
ATOM  35005  HE3 LYS L 145      90.080 132.603 224.824  1.00102.72
H
ATOM  35006  HZ1 LYS L 145      87.864 132.959 224.444  1.00106.10
H
ATOM  35007  HZ2 LYS L 145      88.199 133.750 225.609  1.00106.10
H
ATOM  35008  HZ3 LYS L 145      88.038 134.391 224.321  1.00106.10
H
ATOM  35009  N   VAL L 146      94.200 136.093 227.242  1.00 66.02
N
ATOM  35010  CA  VAL L 146      93.975 137.018 228.350  1.00 62.82
C
ATOM  35011  C   VAL L 146      92.858 137.971 227.955  1.00 59.48
C
ATOM  35012  O   VAL L 146      92.948 138.654 226.933  1.00 71.55
O
ATOM  35013  CB  VAL L 146      95.256 137.795 228.707  1.00 64.13
C
ATOM  35014  CG1 VAL L 146      95.029 138.735 229.883  1.00 66.07
C
ATOM  35015  CG2 VAL L 146      96.346 136.826 229.030  1.00 59.15
C
ATOM  35016  H   VAL L 146      94.445 136.490 226.520  1.00 79.25
H
ATOM  35017  HA  VAL L 146      93.684 136.522 229.131  1.00 75.41
H
ATOM  35018  HB  VAL L 146      95.515 138.336 227.946  1.00 76.99
H
ATOM  35019 HG11 VAL L 146      95.871 139.158 230.115  1.00 79.31
H
ATOM  35020 HG12 VAL L 146      94.379 139.407 229.628  1.00 79.31
H
ATOM  35021 HG13 VAL L 146      94.697 138.223 230.636  1.00 79.31
H
ATOM  35022 HG21 VAL L 146      97.128 137.318 229.327  1.00 71.01
H
ATOM  35023 HG22 VAL L 146      96.043 136.232 229.734  1.00 71.01
H
ATOM  35024 HG23 VAL L 146      96.560 136.315 228.234  1.00 71.01
H
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ATOM  35025  N   GLN L 147      91.810 138.020 228.763  1.00 54.01
N
ATOM  35026  CA  GLN L 147      90.671 138.893 228.548  1.00 58.31
C
ATOM  35027  C   GLN L 147      90.507 139.804 229.761  1.00 58.74
C
ATOM  35028  O   GLN L 147      90.360 139.330 230.891  1.00 54.75
O
ATOM  35029  CB  GLN L 147      89.389 138.080 228.309  1.00 65.74
C
ATOM  35030  CG  GLN L 147      89.073 137.881 226.817  1.00 79.60
C
ATOM  35031  CD  GLN L 147      87.833 137.033 226.559  1.00 80.51
C
ATOM  35032  OE1 GLN L 147      87.135 136.609 227.483  1.00 81.46
O
ATOM  35033  NE2 GLN L 147      87.563 136.781 225.293  1.00 85.72
N
ATOM  35034  H   GLN L 147      91.734 137.538 229.472  1.00 64.84
H
ATOM  35035  HA  GLN L 147      90.833 139.447 227.768  1.00 69.99
H
ATOM  35036  HB2 GLN L 147      89.492 137.203 228.713  1.00 78.91
H
ATOM  35037  HB3 GLN L 147      88.640 138.545 228.713  1.00 78.91
H
ATOM  35038  HG2 GLN L 147      88.929 138.748 226.411  1.00 95.55
H
ATOM  35039  HG3 GLN L 147      89.825 137.437 226.396  1.00 95.55
H
ATOM  35040 HE21 GLN L 147      88.074 137.090 224.674  1.00102.89
H
ATOM  35041 HE22 GLN L 147      86.875 136.309 225.086  1.00102.89
H
ATOM  35042  N   TRP L 148      90.518 141.105 229.526  1.00 56.17
N
ATOM  35043  CA  TRP L 148      90.298 142.067 230.586  1.00 57.85
C
ATOM  35044  C   TRP L 148      88.819 142.365 230.729  1.00 57.57
C
ATOM  35045  O   TRP L 148      88.104 142.494 229.736  1.00 54.91
O
ATOM  35046  CB  TRP L 148      91.068 143.355 230.298  1.00 54.17
C
ATOM  35047  CG  TRP L 148      92.545 143.261 230.541  1.00 53.79
C
ATOM  35048  CD1 TRP L 148      93.522 143.079 229.608  1.00 51.83
C
ATOM  35049  CD2 TRP L 148      93.213 143.349 231.814  1.00 44.88
C
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ATOM  35050  NE1 TRP L 148      94.768 143.059 230.222  1.00 54.57
N
ATOM  35051  CE2 TRP L 148      94.594 143.215 231.575  1.00 49.06
C
ATOM  35052  CE3 TRP L 148      92.776 143.537 233.123  1.00 53.77
C
ATOM  35053  CZ2 TRP L 148      95.537 143.274 232.599  1.00 51.48
C
ATOM  35054  CZ3 TRP L 148      93.723 143.597 234.146  1.00 47.41
C
ATOM  35055  CH2 TRP L 148      95.073 143.470 233.877  1.00 46.46
C
ATOM  35056  H   TRP L 148      90.652 141.457 228.752  1.00 67.44
H
ATOM  35057  HA  TRP L 148      90.614 141.702 231.426  1.00 69.45
H
ATOM  35058  HB2 TRP L 148      90.939 143.590 229.365  1.00 65.04
H
ATOM  35059  HB3 TRP L 148      90.720 144.057 230.869  1.00 65.04
H
ATOM  35060  HD1 TRP L 148      93.376 142.982 228.694  1.00 62.22
H
ATOM  35061  HE1 TRP L 148      95.523 142.965 229.821  1.00 65.52
H
ATOM  35062  HE3 TRP L 148      91.869 143.622 233.311  1.00 64.55
H
ATOM  35063  HZ2 TRP L 148      96.445 143.184 232.425  1.00 61.81
H
ATOM  35064  HZ3 TRP L 148      93.442 143.725 235.023  1.00 56.92
H
ATOM  35065  HH2 TRP L 148      95.681 143.519 234.578  1.00 55.78
H
ATOM  35066  N   LYS L 149      88.359 142.470 231.977  1.00 54.66
N
ATOM  35067  CA  LYS L 149      86.978 142.829 232.259  1.00 55.02
C
ATOM  35068  C   LYS L 149      86.921 143.924 233.312  1.00 55.17
C
ATOM  35069  O   LYS L 149      87.593 143.845 234.343  1.00 62.27
O
ATOM  35070  CB  LYS L 149      86.195 141.594 232.687  1.00 62.83
C
ATOM  35071  CG  LYS L 149      86.046 140.609 231.535  1.00 67.53
C
ATOM  35072  CD  LYS L 149      85.167 139.407 231.897  1.00 76.10
C
ATOM  35073  CE  LYS L 149      85.631 138.161 231.136  1.00 75.41
C
ATOM  35074  NZ  LYS L 149      85.279 136.885 231.855  1.00 85.17
N
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ATOM  35075  H   LYS L 149      88.836 142.337 232.680  1.00 65.62
H
ATOM  35076  HA  LYS L 149      86.563 143.199 231.465  1.00 66.05
H
ATOM  35077  HB2 LYS L 149      86.665 141.151 233.412  1.00 75.42
H
ATOM  35078  HB3 LYS L 149      85.310 141.860 232.980  1.00 75.42
H
ATOM  35079  HG2 LYS L 149      85.641 141.062 230.779  1.00 81.07
H
ATOM  35080  HG3 LYS L 149      86.924 140.274 231.289  1.00 81.07
H
ATOM  35081  HD2 LYS L 149      85.231 139.232 232.849  1.00 91.35
H
ATOM  35082  HD3 LYS L 149      84.247 139.594 231.656  1.00 91.35
H
ATOM  35083  HE2 LYS L 149      85.206 138.144 230.264  1.00 90.52
H
ATOM  35084  HE3 LYS L 149      86.595 138.192 231.033  1.00 90.52
H
ATOM  35085  HZ1 LYS L 149      85.903 136.693 232.459  1.00102.23
H
ATOM  35086  HZ2 LYS L 149      84.494 136.975 232.268  1.00102.23
H
ATOM  35087  HZ3 LYS L 149      85.223 136.213 231.274  1.00102.23
H
ATOM  35088  N   VAL L 150      86.132 144.959 233.034  1.00 63.78
N
ATOM  35089  CA  VAL L 150      85.917 146.076 233.944  1.00 58.84
C
ATOM  35090  C   VAL L 150      84.434 146.107 234.287  1.00 67.06
C
ATOM  35091  O   VAL L 150      83.593 146.285 233.399  1.00 68.32
O
ATOM  35092  CB  VAL L 150      86.369 147.406 233.325  1.00 61.27
C
ATOM  35093  CG1 VAL L 150      86.134 148.519 234.305  1.00 68.18
C
ATOM  35094  CG2 VAL L 150      87.858 147.336 232.860  1.00 57.67
C
ATOM  35095  H   VAL L 150      85.696 145.037 232.298  1.00 76.56
H
ATOM  35096  HA  VAL L 150      86.420 145.936 234.761  1.00 70.63
H
ATOM  35097  HB  VAL L 150      85.844 147.590 232.530  1.00 73.55
H
ATOM  35098 HG11 VAL L 150      86.602 149.312 234.000  1.00 81.84
H
ATOM  35099 HG12 VAL L 150      85.182 148.698 234.359  1.00 81.84
H
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ATOM  35100 HG13 VAL L 150      86.471 148.251 235.175  1.00 81.84
H
ATOM  35101 HG21 VAL L 150      88.107 148.188 232.471  1.00 69.23
H
ATOM  35102 HG22 VAL L 150      88.419 147.143 233.628  1.00 69.23
H
ATOM  35103 HG23 VAL L 150      87.949 146.631 232.199  1.00 69.23
H
ATOM  35104  N   ASP L 151      84.116 145.925 235.574  1.00 74.55
N
ATOM  35105  CA  ASP L 151      82.735 145.756 236.033  1.00 72.64
C
ATOM  35106  C   ASP L 151      81.992 144.817 235.093  1.00 77.84
C
ATOM  35107  O   ASP L 151      80.851 145.089 234.713  1.00 73.61
O
ATOM  35108  CB  ASP L 151      81.999 147.091 236.123  1.00 65.01
C
ATOM  35109  CG  ASP L 151      82.440 147.939 237.317  1.00 63.41
C
ATOM  35110  OD1 ASP L 151      82.878 147.394 238.353  1.00 64.63
O
ATOM  35111  OD2 ASP L 151      82.335 149.172 237.217  1.00 74.31
O1-
ATOM  35112  H   ASP L 151      84.692 145.897 236.212  1.00 89.49
H
ATOM  35113  HA  ASP L 151      82.751 145.377 236.925  1.00 87.20
H
ATOM  35114  HB2 ASP L 151      82.170 147.599 235.315  1.00 78.04
H
ATOM  35115  HB3 ASP L 151      81.049 146.920 236.214  1.00 78.04
H
ATOM  35116  N   ASN L 152      82.656 143.733 234.694  1.00 80.33
N
ATOM  35117  CA  ASN L 152      82.157 142.629 233.866  1.00 85.93
C
ATOM  35118  C   ASN L 152      82.102 142.939 232.376  1.00 81.45
C
ATOM  35119  O   ASN L 152      81.706 142.052 231.607  1.00 74.50
O
ATOM  35120  CB  ASN L 152      80.764 142.148 234.295  1.00 91.33
C
ATOM  35121  CG  ASN L 152      80.816 140.844 235.037  1.00105.52
C
ATOM  35122  OD1 ASN L 152      80.987 139.782 234.435  1.00 85.42
O
ATOM  35123  ND2 ASN L 152      80.687 140.912 236.357  1.00121.37
N
ATOM  35124  H   ASN L 152      83.477 143.603 234.913  1.00 96.42
H
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ATOM  35125  HA  ASN L 152      82.793 141.904 233.972  1.00103.14
H
ATOM  35126  HB2 ASN L 152      80.364 142.812 234.879  1.00109.62
H
ATOM  35127  HB3 ASN L 152      80.213 142.024 233.506  1.00109.62
H
ATOM  35128 HD21 ASN L 152      80.711 140.194 236.828  1.00145.67
H
ATOM  35129 HD22 ASN L 152      80.580 141.674 236.739  1.00145.67
H
ATOM  35130  N   ALA L 153      82.499 144.136 231.936  1.00 81.48
N
ATOM  35131  CA  ALA L 153      82.471 144.501 230.523  1.00 75.44
C
ATOM  35132  C   ALA L 153      83.784 144.107 229.865  1.00 66.77
C
ATOM  35133  O   ALA L 153      84.851 144.571 230.285  1.00 61.82
O
ATOM  35134  CB  ALA L 153      82.244 146.003 230.363  1.00 84.00
C
ATOM  35135  H   ALA L 153      82.794 144.761 232.447  1.00 97.81
H
ATOM  35136  HA  ALA L 153      81.748 144.021 230.088  1.00 90.56
H
ATOM  35137  HB1 ALA L 153      82.224 146.220 229.418  1.00100.83
H
ATOM  35138  HB2 ALA L 153      81.399 146.241 230.776  1.00100.83
H
ATOM  35139  HB3 ALA L 153      82.969 146.480 230.797  1.00100.83
H
ATOM  35140  N   LEU L 154      83.712 143.278 228.820  1.00 73.45
N
ATOM  35141  CA  LEU L 154      84.918 142.966 228.061  1.00 65.69
C
ATOM  35142  C   LEU L 154      85.549 144.248 227.546  1.00 59.56
C
ATOM  35143  O   LEU L 154      84.869 145.232 227.256  1.00 71.93
O
ATOM  35144  CB  LEU L 154      84.629 142.023 226.895  1.00 68.78
C
ATOM  35145  CG  LEU L 154      84.858 140.539 227.198  1.00 75.37
C
ATOM  35146  CD1 LEU L 154      83.946 140.092 228.330  1.00 89.93
C
ATOM  35147  CD2 LEU L 154      84.637 139.687 225.953  1.00 75.83
C
ATOM  35148  H   LEU L 154      82.995 142.895 228.539  1.00 88.16
H
ATOM  35149  HA  LEU L 154      85.543 142.509 228.645  1.00 78.86
H
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ATOM  35150  HB2 LEU L 154      83.700 142.130 226.636  1.00 82.56
H
ATOM  35151  HB3 LEU L 154      85.209 142.263 226.155  1.00 82.56
H
ATOM  35152  HG  LEU L 154      85.777 140.410 227.479  1.00 90.47
H
ATOM  35153 HD11 LEU L 154      84.031 139.132 228.443  1.00107.94
H
ATOM  35154 HD12 LEU L 154      84.209 140.546 229.145  1.00107.94
H
ATOM  35155 HD13 LEU L 154      83.031 140.318 228.105  1.00107.94
H
ATOM  35156 HD21 LEU L 154      84.744 138.751 226.185  1.00 91.03
H
ATOM  35157 HD22 LEU L 154      83.740 139.843 225.618  1.00 91.03
H
ATOM  35158 HD23 LEU L 154      85.289 139.937 225.278  1.00 91.03
H
ATOM  35159  N   GLN L 155      86.874 144.247 227.491  1.00 65.32
N
ATOM  35160  CA  GLN L 155      87.640 145.381 227.013  1.00 64.40
C
ATOM  35161  C   GLN L 155      88.352 144.937 225.752  1.00 62.08
C
ATOM  35162  O   GLN L 155      88.654 143.754 225.594  1.00 65.42
O
ATOM  35163  CB  GLN L 155      88.656 145.865 228.052  1.00 59.61
C
ATOM  35164  CG  GLN L 155      88.060 146.224 229.383  1.00 56.62
C
ATOM  35165  CD  GLN L 155      87.448 147.635 229.437  1.00 59.35
C
ATOM  35166  OE1 GLN L 155      88.137 148.631 229.245  1.00 59.13
O
ATOM  35167  NE2 GLN L 155      86.149 147.710 229.728  1.00 60.46
N
ATOM  35168  H   GLN L 155      87.362 143.581 227.733  1.00 78.41
H
ATOM  35169  HA  GLN L 155      87.062 146.135 226.820  1.00 77.31
H
ATOM  35170  HB2 GLN L 155      89.305 145.159 228.202  1.00 71.56
H
ATOM  35171  HB3 GLN L 155      89.100 146.655 227.707  1.00 71.56
H
ATOM  35172  HG2 GLN L 155      87.355 145.591 229.590  1.00 67.97
H
ATOM  35173  HG3 GLN L 155      88.754 146.179 230.059  1.00 67.97
H
ATOM  35174 HE21 GLN L 155      85.697 146.992 229.874  1.00 72.58
H
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ATOM  35175 HE22 GLN L 155      85.761 148.478 229.770  1.00 72.58
H
ATOM  35176  N   SER L 156      88.620 145.883 224.851  1.00 63.50
N
ATOM  35177  CA  SER L 156      89.396 145.577 223.655  1.00 61.85
C
ATOM  35178  C   SER L 156      90.134 146.834 223.214  1.00 60.92
C
ATOM  35179  O   SER L 156      89.664 147.953 223.435  1.00 62.95
O
ATOM  35180  CB  SER L 156      88.501 145.043 222.507  1.00 62.06
C
ATOM  35181  OG  SER L 156      87.500 145.986 222.190  1.00 72.55
O
ATOM  35182  H   SER L 156      88.366 146.702 224.912  1.00 76.23
H
ATOM  35183  HA  SER L 156      90.053 144.893 223.861  1.00 74.25
H
ATOM  35184  HB2 SER L 156      89.050 144.885 221.724  1.00 74.50
H
ATOM  35185  HB3 SER L 156      88.081 144.215 222.790  1.00 74.50
H
ATOM  35186  HG  SER L 156      86.996 145.679 221.591  1.00 87.08
H
ATOM  35187  N   GLY L 157      91.307 146.642 222.599  1.00 63.44
N
ATOM  35188  CA  GLY L 157      92.072 147.748 222.056  1.00 60.39
C
ATOM  35189  C   GLY L 157      92.858 148.558 223.064  1.00 65.23
C
ATOM  35190  O   GLY L 157      93.661 149.410 222.657  1.00 64.27
O
ATOM  35191  H   GLY L 157      91.676 145.873 222.490  1.00 76.15
H
ATOM  35192  HA2 GLY L 157      92.701 147.397 221.407  1.00 72.49
H
ATOM  35193  HA3 GLY L 157      91.460 148.353 221.606  1.00 72.49
H
ATOM  35194  N   ASN L 158      92.669 148.332 224.365  1.00 60.04
N
ATOM  35195  CA  ASN L 158      93.356 149.118 225.377  1.00 60.55
C
ATOM  35196  C   ASN L 158      94.355 148.291 226.181  1.00 55.77
C
ATOM  35197  O   ASN L 158      94.729 148.693 227.291  1.00 54.18
O
ATOM  35198  CB  ASN L 158      92.331 149.812 226.294  1.00 53.00
C
ATOM  35199  CG  ASN L 158      91.360 148.850 226.962  1.00 61.03
C
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ATOM  35200  OD1 ASN L 158      91.246 147.665 226.605  1.00 54.60
O
ATOM  35201  ND2 ASN L 158      90.635 149.374 227.952  1.00 59.02
N
ATOM  35202  H   ASN L 158      92.145 147.727 224.680  1.00 72.07
H
ATOM  35203  HA  ASN L 158      93.866 149.815 224.937  1.00 72.69
H
ATOM  35204  HB2 ASN L 158      92.808 150.286 226.994  1.00 63.62
H
ATOM  35205  HB3 ASN L 158      91.811 150.438 225.766  1.00 63.62
H
ATOM  35206 HD21 ASN L 158      90.067 148.886 228.373  1.00 70.86
H
ATOM  35207 HD22 ASN L 158      90.736 150.201 228.168  1.00 70.86
H
ATOM  35208  N   SER L 159      94.822 147.163 225.639  1.00 47.27
N
ATOM  35209  CA  SER L 159      95.893 146.418 226.291  1.00 56.91
C
ATOM  35210  C   SER L 159      96.944 145.929 225.295  1.00 52.42
C
ATOM  35211  O   SER L 159      96.709 145.823 224.092  1.00 56.84
O
ATOM  35212  CB  SER L 159      95.348 145.212 227.087  1.00 62.43
C
ATOM  35213  OG  SER L 159      94.732 144.257 226.232  1.00 60.85
O
ATOM  35214  H   SER L 159      94.537 146.817 224.904  1.00 56.75
H
ATOM  35215  HA  SER L 159      96.341 147.035 226.891  1.00 68.32
H
ATOM  35216  HB2 SER L 159      96.083 144.786 227.553  1.00 74.95
H
ATOM  35217  HB3 SER L 159      94.689 145.529 227.725  1.00 74.95
H
ATOM  35218  HG  SER L 159      94.410 143.628 226.688  1.00 73.05
H
ATOM  35219  N   GLN L 160      98.122 145.625 225.836  1.00 52.86
N
ATOM  35220  CA  GLN L 160      99.250 145.099 225.093  1.00 56.04
C
ATOM  35221  C   GLN L 160      99.877 143.973 225.891  1.00 55.63
C
ATOM  35222  O   GLN L 160      99.876 144.005 227.124  1.00 53.51
O
ATOM  35223  CB  GLN L 160     100.312 146.162 224.822  1.00 53.05
C
ATOM  35224  CG  GLN L 160      99.762 147.348 224.035  1.00 59.03
C
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ATOM  35225  CD  GLN L 160     100.856 148.334 223.745  1.00 63.69
C
ATOM  35226  OE1 GLN L 160     101.134 149.251 224.533  1.00 65.54
O
ATOM  35227  NE2 GLN L 160     101.523 148.127 222.629  1.00 62.83
N
ATOM  35228  H   GLN L 160      98.296 145.723 226.673  1.00 63.47
H
ATOM  35229  HA  GLN L 160      98.936 144.757 224.242  1.00 67.28
H
ATOM  35230  HB2 GLN L 160     100.653 146.493 225.668  1.00 63.69
H
ATOM  35231  HB3 GLN L 160     101.032 145.766 224.306  1.00 63.69
H
ATOM  35232  HG2 GLN L 160      99.393 147.037 223.194  1.00 70.86
H
ATOM  35233  HG3 GLN L 160      99.075 147.793 224.556  1.00 70.86
H
ATOM  35234 HE21 GLN L 160     101.319 147.462 222.123  1.00 75.42
H
ATOM  35235 HE22 GLN L 160     102.163 148.657 222.405  1.00 75.42
H
ATOM  35236  N   GLU L 161     100.446 142.998 225.169  1.00 61.15
N
ATOM  35237  CA  GLU L 161     100.994 141.773 225.741  1.00 59.67
C
ATOM  35238  C   GLU L 161     102.441 141.622 225.330  1.00 48.12
C
ATOM  35239  O   GLU L 161     102.839 142.060 224.260  1.00 54.64
O
ATOM  35240  CB  GLU L 161     100.237 140.531 225.269  1.00 58.45
C
ATOM  35241  CG  GLU L 161      98.784 140.456 225.729  1.00 70.58
C
ATOM  35242  CD  GLU L 161      98.107 139.117 225.376  1.00 79.24
C
ATOM  35243  OE1 GLU L 161      98.791 138.210 224.839  1.00 74.55
O
ATOM  35244  OE2 GLU L 161      96.882 138.983 225.625  1.00 78.41
O1-
ATOM  35245  H   GLU L 161     100.527 143.031 224.313  1.00 73.40
H
ATOM  35246  HA  GLU L 161     100.930 141.829 226.707  1.00 71.63
H
ATOM  35247  HB2 GLU L 161     100.237 140.522 224.298  1.00 70.17
H
ATOM  35248  HB3 GLU L 161     100.692 139.746 225.608  1.00 70.17
H
ATOM  35249  HG2 GLU L 161      98.752 140.560 226.693  1.00 84.72
H
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ATOM  35250  HG3 GLU L 161      98.280 141.166 225.302  1.00 84.72
H
ATOM  35251  N   SER L 162     103.215 140.980 226.177  1.00 49.14
N
ATOM  35252  CA  SER L 162     104.589 140.615 225.881  1.00 53.33
C
ATOM  35253  C   SER L 162     104.862 139.243 226.484  1.00 53.79
C
ATOM  35254  O   SER L 162     104.310 138.900 227.534  1.00 52.78
O
ATOM  35255  CB  SER L 162     105.552 141.664 226.452  1.00 49.35
C
ATOM  35256  OG  SER L 162     106.828 141.514 225.923  1.00 66.02
O
ATOM  35257  H   SER L 162     102.961 140.733 226.962  1.00 59.00
H
ATOM  35258  HA  SER L 162     104.738 140.555 224.923  1.00 64.03
H
ATOM  35259  HB2 SER L 162     105.222 142.548 226.231  1.00 59.25
H
ATOM  35260  HB3 SER L 162     105.597 141.557 227.415  1.00 59.25
H
ATOM  35261  HG  SER L 162     107.359 142.051 226.293  1.00 79.25
H
ATOM  35262  N   VAL L 163     105.728 138.469 225.832  1.00 53.29
N
ATOM  35263  CA  VAL L 163     106.027 137.106 226.244  1.00 50.75
C
ATOM  35264  C   VAL L 163     107.529 136.909 226.278  1.00 49.48
C
ATOM  35265  O   VAL L 163     108.253 137.373 225.393  1.00 58.30
O
ATOM  35266  CB  VAL L 163     105.382 136.054 225.312  1.00 57.11
C
ATOM  35267  CG1 VAL L 163     105.606 134.676 225.861  1.00 59.18
C
ATOM  35268  CG2 VAL L 163     103.923 136.281 225.189  1.00 56.07
C
ATOM  35269  H   VAL L 163     106.162 138.720 225.133  1.00 63.98
H
ATOM  35270  HA  VAL L 163     105.680 136.981 227.141  1.00 60.92
H
ATOM  35271  HB  VAL L 163     105.790 136.135 224.435  1.00 68.55
H
ATOM  35272 HG11 VAL L 163     105.139 134.035 225.304  1.00 71.04
H
ATOM  35273 HG12 VAL L 163     106.556 134.487 225.859  1.00 71.04
H
ATOM  35274 HG13 VAL L 163     105.261 134.639 226.767  1.00 71.04
H
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ATOM  35275 HG21 VAL L 163     103.525 135.530 224.720  1.00 67.31
H
ATOM  35276 HG22 VAL L 163     103.539 136.355 226.076  1.00 67.31
H
ATOM  35277 HG23 VAL L 163     103.771 137.099 224.691  1.00 67.31
H
ATOM  35278  N   THR L 164     107.995 136.202 227.295  1.00 48.84
N
ATOM  35279  CA  THR L 164     109.392 135.834 227.409  1.00 49.81
C
ATOM  35280  C   THR L 164     109.744 134.746 226.395  1.00 54.59
C
ATOM  35281  O   THR L 164     108.882 134.118 225.774  1.00 58.51
O
ATOM  35282  CB  THR L 164     109.725 135.325 228.825  1.00 51.90
C
ATOM  35283  OG1 THR L 164     108.871 134.224 229.161  1.00 53.46
O
ATOM  35284  CG2 THR L 164     109.536 136.413 229.879  1.00 48.47
C
ATOM  35285  H   THR L 164     107.511 135.920 227.949  1.00 58.64
H
ATOM  35286  HA  THR L 164     109.927 136.623 227.232  1.00 59.80
H
ATOM  35287  HB  THR L 164     110.654 135.047 228.835  1.00 62.31
H
ATOM  35288  HG1 THR L 164     109.201 133.507 228.878  1.00 64.18
H
ATOM  35289 HG21 THR L 164     109.807 136.082 230.749  1.00 58.19
H
ATOM  35290 HG22 THR L 164     110.074 137.188 229.654  1.00 58.19
H
ATOM  35291 HG23 THR L 164     108.603 136.676 229.918  1.00 58.19
H
ATOM  35292  N   GLU L 165     111.046 134.557 226.223  1.00 52.00
N
ATOM  35293  CA  GLU L 165     111.585 133.366 225.608  1.00 60.52
C
ATOM  35294  C   GLU L 165     111.483 132.194 226.583  1.00 59.95
C
ATOM  35295  O   GLU L 165     111.201 132.365 227.766  1.00 57.17
O
ATOM  35296  CB  GLU L 165     113.042 133.593 225.215  1.00 65.67
C
ATOM  35297  CG  GLU L 165     113.243 134.594 224.059  1.00 72.00
C
ATOM  35298  CD  GLU L 165     112.439 134.236 222.809  1.00 81.50
C
ATOM  35299  OE1 GLU L 165     111.423 134.914 222.533  1.00 87.09
O
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ATOM  35300  OE2 GLU L 165     112.812 133.264 222.112  1.00 77.65
O1-
ATOM  35301  H   GLU L 165     111.650 135.121 226.463  1.00 62.42
H
ATOM  35302  HA  GLU L 165     111.083 133.151 224.806  1.00 72.65
H
ATOM  35303  HB2 GLU L 165     113.520 133.936 225.986  1.00 78.84
H
ATOM  35304  HB3 GLU L 165     113.424 132.745 224.938  1.00 78.84
H
ATOM  35305  HG2 GLU L 165     112.960 135.474 224.352  1.00 86.43
H
ATOM  35306  HG3 GLU L 165     114.181 134.611 223.815  1.00 86.43
H
ATOM  35307  N   GLN L 166     111.731 130.990 226.073  1.00 55.97
N
ATOM  35308  CA  GLN L 166     111.683 129.793 226.899  1.00 58.84
C
ATOM  35309  C   GLN L 166     112.711 129.866 228.009  1.00 56.24
C
ATOM  35310  O   GLN L 166     113.892 130.131 227.770  1.00 59.76
O
ATOM  35311  CB  GLN L 166     111.934 128.539 226.060  1.00 54.44
C
ATOM  35312  CG  GLN L 166     110.700 128.025 225.385  1.00 57.80
C
ATOM  35313  CD  GLN L 166     110.910 126.613 224.864  1.00 64.52
C
ATOM  35314  OE1 GLN L 166     111.914 126.345 224.231  1.00 59.09
O
ATOM  35315  NE2 GLN L 166     109.987 125.699 225.170  1.00 52.62
N
ATOM  35316  H   GLN L 166     111.930 130.840 225.250  1.00 67.19
H
ATOM  35317  HA  GLN L 166     110.797 129.730 227.290  1.00 70.64
H
ATOM  35318  HB2 GLN L 166     112.586 128.748 225.372  1.00 65.35
H
ATOM  35319  HB3 GLN L 166     112.273 127.838 226.638  1.00 65.35
H
ATOM  35320  HG2 GLN L 166     109.967 128.011 226.020  1.00 69.38
H
ATOM  35321  HG3 GLN L 166     110.479 128.600 224.635  1.00 69.38
H
ATOM  35322 HE21 GLN L 166     109.306 125.919 225.647  1.00 63.17
H
ATOM  35323 HE22 GLN L 166     110.074 124.890 224.891  1.00 63.17
H
ATOM  35324  N   ASP L 167     112.261 129.593 229.227  1.00 58.02
N
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ATOM  35325  CA  ASP L 167     113.175 129.596 230.359  1.00 63.39
C
ATOM  35326  C   ASP L 167     114.229 128.504 230.183  1.00 67.12
C
ATOM  35327  O   ASP L 167     113.950 127.415 229.669  1.00 57.84
O
ATOM  35328  CB  ASP L 167     112.392 129.404 231.649  1.00 59.93
C
ATOM  35329  CG  ASP L 167     113.264 129.510 232.890  1.00 80.31
C
ATOM  35330  OD1 ASP L 167     113.647 130.647 233.253  1.00 92.40
O
ATOM  35331  OD2 ASP L 167     113.547 128.459 233.512  1.00 68.67
O1-
ATOM  35332  H   ASP L 167     111.445 129.406 229.420  1.00 69.65
H
ATOM  35333  HA  ASP L 167     113.637 130.446 230.420  1.00 76.10
H
ATOM  35334  HB2 ASP L 167     111.705 130.085 231.707  1.00 71.94
H
ATOM  35335  HB3 ASP L 167     111.987 128.522 231.644  1.00 71.94
H
ATOM  35336  N   SER L 168     115.452 128.812 230.607  1.00 62.94
N
ATOM  35337  CA  SER L 168     116.565 127.891 230.443  1.00 72.32
C
ATOM  35338  C   SER L 168     116.454 126.688 231.370  1.00 81.69
C
ATOM  35339  O   SER L 168     117.022 125.625 231.079  1.00 83.37
O
ATOM  35340  CB  SER L 168     117.873 128.619 230.735  1.00 73.24
C
ATOM  35341  OG  SER L 168     118.028 128.714 232.146  1.00 78.44
O
ATOM  35342  H   SER L 168     115.664 129.551 230.994  1.00 75.56
H
ATOM  35343  HA  SER L 168     116.566 127.573 229.528  1.00 86.81
H
ATOM  35344  HB2 SER L 168     118.615 128.120 230.359  1.00 87.92
H
ATOM  35345  HB3 SER L 168     117.843 129.509 230.351  1.00 87.92
H
ATOM  35346  HG  SER L 168     118.777 129.046 232.331  1.00 94.15
H
ATOM  35347  N   LYS L 169     115.790 126.847 232.513  1.00 75.97
N
ATOM  35348  CA  LYS L 169     115.751 125.779 233.499  1.00 74.25
C
ATOM  35349  C   LYS L 169     114.585 124.820 233.284  1.00 75.07
C
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ATOM  35350  O   LYS L 169     114.755 123.615 233.496  1.00 70.14
O
ATOM  35351  CB  LYS L 169     115.704 126.366 234.924  1.00 78.31
C
ATOM  35352  CG  LYS L 169     117.096 126.851 235.442  1.00 89.29
C
ATOM  35353  CD  LYS L 169     117.308 126.657 236.957  1.00 89.69
C
ATOM  35354  CE  LYS L 169     118.810 126.545 237.343  1.00 85.59
C
ATOM  35355  NZ  LYS L 169     119.611 127.715 236.893  1.00 94.80
N
ATOM  35356  H   LYS L 169     115.359 127.557 232.735  1.00 91.19
H
ATOM  35357  HA  LYS L 169     116.568 125.261 233.424  1.00 89.12
H
ATOM  35358  HB2 LYS L 169     115.104 127.127 234.928  1.00 94.00
H
ATOM  35359  HB3 LYS L 169     115.382 125.684 235.534  1.00 94.00
H
ATOM  35360  HG2 LYS L 169     117.790 126.354 234.981  1.00107.18
H
ATOM  35361  HG3 LYS L 169     117.186 127.798 235.253  1.00107.18
H
ATOM  35362  HD2 LYS L 169     116.933 127.417 237.430  1.00107.65
H
ATOM  35363  HD3 LYS L 169     116.866 125.840 237.236  1.00107.65
H
ATOM  35364  HE2 LYS L 169     118.885 126.485 238.309  1.00102.73
H
ATOM  35365  HE3 LYS L 169     119.184 125.749 236.933  1.00102.73
H
ATOM  35366  HZ1 LYS L 169     120.446 127.646 237.194  1.00113.79
H
ATOM  35367  HZ2 LYS L 169     119.627 127.747 236.003  1.00113.79
H
ATOM  35368  HZ3 LYS L 169     119.253 128.467 237.202  1.00113.79
H
ATOM  35369  N   ASP L 170     113.410 125.323 232.837  1.00 71.22
N
ATOM  35370  CA  ASP L 170     112.196 124.511 232.782  1.00 63.76
C
ATOM  35371  C   ASP L 170     111.394 124.643 231.490  1.00 53.16
C
ATOM  35372  O   ASP L 170     110.313 124.047 231.384  1.00 53.03
O
ATOM  35373  CB  ASP L 170     111.291 124.817 234.004  1.00 68.71
C
ATOM  35374  CG  ASP L 170     110.625 126.201 233.969  1.00 69.93
C
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ATOM  35375  OD1 ASP L 170     110.548 126.865 232.913  1.00 71.93
O
ATOM  35376  OD2 ASP L 170     110.143 126.638 235.045  1.00 84.57
O1-
ATOM  35377  H   ASP L 170     113.302 126.131 232.563  1.00 85.49
H
ATOM  35378  HA  ASP L 170     112.459 123.579 232.836  1.00 76.54
H
ATOM  35379  HB2 ASP L 170     110.584 124.154 234.040  1.00 82.48
H
ATOM  35380  HB3 ASP L 170     111.830 124.772 234.808  1.00 82.48
H
ATOM  35381  N   SER L 171     111.872 125.392 230.507  1.00 56.68
N
ATOM  35382  CA  SER L 171     111.294 125.409 229.161  1.00 53.88
C
ATOM  35383  C   SER L 171     109.892 125.993 229.116  1.00 51.65
C
ATOM  35384  O   SER L 171     109.154 125.765 228.150  1.00 58.10
O
ATOM  35385  CB  SER L 171     111.275 124.001 228.533  1.00 52.15
C
ATOM  35386  OG  SER L 171     112.574 123.485 228.452  1.00 58.50
O
ATOM  35387  H   SER L 171     112.549 125.915 230.594  1.00 68.04
H
ATOM  35388  HA  SER L 171     111.863 125.979 228.620  1.00 64.69
H
ATOM  35389  HB2 SER L 171     110.734 123.413 229.085  1.00 62.60
H
ATOM  35390  HB3 SER L 171     110.899 124.056 227.641  1.00 62.60
H
ATOM  35391  HG  SER L 171     112.572 122.767 228.015  1.00 70.23
H
ATOM  35392  N   THR L 172     109.495 126.770 230.108  1.00 45.19
N
ATOM  35393  CA  THR L 172     108.204 127.444 230.049  1.00 49.99
C
ATOM  35394  C   THR L 172     108.340 128.891 229.593  1.00 52.46
C
ATOM  35395  O   THR L 172     109.439 129.445 229.447  1.00 49.61
O
ATOM  35396  CB  THR L 172     107.521 127.456 231.414  1.00 58.26
C
ATOM  35397  OG1 THR L 172     108.296 128.275 232.307  1.00 47.60
O
ATOM  35398  CG2 THR L 172     107.379 126.059 231.931  1.00 46.76
C
ATOM  35399  H   THR L 172     109.951 126.923 230.822  1.00 54.25
H
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ATOM  35400  HA  THR L 172     107.665 126.953 229.410  1.00 60.01
H
ATOM  35401  HB  THR L 172     106.626 127.825 231.357  1.00 69.94
H
ATOM  35402  HG1 THR L 172     109.088 127.998 232.336  1.00 57.15
H
ATOM  35403 HG21 THR L 172     106.869 126.061 232.757  1.00 56.14
H
ATOM  35404 HG22 THR L 172     106.918 125.509 231.278  1.00 56.14
H
ATOM  35405 HG23 THR L 172     108.253 125.678 232.103  1.00 56.14
H
ATOM  35406  N   TYR L 173     107.172 129.504 229.428  1.00 51.40
N
ATOM  35407  CA  TYR L 173     107.007 130.895 229.062  1.00 51.95
C
ATOM  35408  C   TYR L 173     106.343 131.662 230.188  1.00 56.58
C
ATOM  35409  O   TYR L 173     105.634 131.100 231.020  1.00 51.52
O
ATOM  35410  CB  TYR L 173     106.129 131.037 227.826  1.00 51.98
C
ATOM  35411  CG  TYR L 173     106.632 130.290 226.626  1.00 57.22
C
ATOM  35412  CD1 TYR L 173     106.133 129.016 226.314  1.00 59.78
C
ATOM  35413  CD2 TYR L 173     107.607 130.843 225.803  1.00 55.68
C
ATOM  35414  CE1 TYR L 173     106.595 128.315 225.209  1.00 65.55
C
ATOM  35415  CE2 TYR L 173     108.083 130.159 224.706  1.00 59.22
C
ATOM  35416  CZ  TYR L 173     107.574 128.896 224.408  1.00 71.64
C
ATOM  35417  OH  TYR L 173     108.028 128.230 223.301  1.00 64.48
O
ATOM  35418  H   TYR L 173     106.418 129.105 229.530  1.00 61.71
H
ATOM  35419  HA  TYR L 173     107.884 131.272 228.891  1.00 62.37
H
ATOM  35420  HB2 TYR L 173     105.245 130.698 228.034  1.00 62.41
H
ATOM  35421  HB3 TYR L 173     106.077 131.976 227.587  1.00 62.41
H
ATOM  35422  HD1 TYR L 173     105.480 128.635 226.856  1.00 71.76
H
ATOM  35423  HD2 TYR L 173     107.943 131.689 225.995  1.00 66.84
H
ATOM  35424  HE1 TYR L 173     106.256 127.473 225.006  1.00 78.69
H
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ATOM  35425  HE2 TYR L 173     108.739 130.538 224.166  1.00 71.09
H
ATOM  35426  HH  TYR L 173     108.622 128.683 222.918  1.00 77.41
H
ATOM  35427  N   SER L 174     106.518 132.971 230.152  1.00 53.46
N
ATOM  35428  CA  SER L 174     105.699 133.861 230.953  1.00 50.35
C
ATOM  35429  C   SER L 174     105.200 135.008 230.097  1.00 49.94
C
ATOM  35430  O   SER L 174     105.806 135.389 229.092  1.00 50.35
O
ATOM  35431  CB  SER L 174     106.483 134.367 232.175  1.00 59.05
C
ATOM  35432  OG  SER L 174     107.093 133.254 232.800  1.00 49.74
O
ATOM  35433  H   SER L 174     107.107 133.369 229.670  1.00 64.18
H
ATOM  35434  HA  SER L 174     104.910 133.398 231.281  1.00 60.45
H
ATOM  35435  HB2 SER L 174     107.165 134.995 231.888  1.00 70.89
H
ATOM  35436  HB3 SER L 174     105.876 134.798 232.798  1.00 70.89
H
ATOM  35437  HG  SER L 174     107.450 133.490 233.523  1.00 59.72
H
ATOM  35438  N   LEU L 175     104.053 135.510 230.472  1.00 44.82
N
ATOM  35439  CA  LEU L 175     103.381 136.528 229.705  1.00 49.35
C
ATOM  35440  C   LEU L 175     102.894 137.616 230.645  1.00 56.29
C
ATOM  35441  O   LEU L 175     102.375 137.341 231.738  1.00 48.56
O
ATOM  35442  CB  LEU L 175     102.224 135.934 228.941  1.00 46.74
C
ATOM  35443  CG  LEU L 175     101.296 136.860 228.178  1.00 52.43
C
ATOM  35444  CD1 LEU L 175     100.646 136.044 227.079  1.00 63.21
C
ATOM  35445  CD2 LEU L 175     100.241 137.513 229.023  1.00 54.18
C
ATOM  35446  H   LEU L 175     103.633 135.274 231.185  1.00 53.81
H
ATOM  35447  HA  LEU L 175     103.989 136.933 229.069  1.00 59.25
H
ATOM  35448  HB2 LEU L 175     102.593 135.317 228.288  1.00 56.12
H
ATOM  35449  HB3 LEU L 175     101.670 135.454 229.575  1.00 56.12
H
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ATOM  35450  HG  LEU L 175     101.822 137.596 227.826  1.00 62.95
H
ATOM  35451 HD11 LEU L 175     100.042 136.615 226.576  1.00 75.88
H
ATOM  35452 HD12 LEU L 175     101.337 135.697 226.492  1.00 75.88
H
ATOM  35453 HD13 LEU L 175     100.154 135.311 227.479  1.00 75.88
H
ATOM  35454 HD21 LEU L 175      99.523 137.822 228.448  1.00 65.04
H
ATOM  35455 HD22 LEU L 175      99.901 136.865 229.659  1.00 65.04
H
ATOM  35456 HD23 LEU L 175     100.634 138.265 229.494  1.00 65.04
H
ATOM  35457  N   SER L 176     103.036 138.853 230.184  1.00 46.56
N
ATOM  35458  CA  SER L 176     102.592 140.038 230.894  1.00 50.82
C
ATOM  35459  C   SER L 176     101.596 140.769 230.020  1.00 46.32
C
ATOM  35460  O   SER L 176     101.859 140.993 228.836  1.00 61.71
O
ATOM  35461  CB  SER L 176     103.787 140.939 231.233  1.00 50.52
C
ATOM  35462  OG  SER L 176     103.349 142.108 231.885  1.00 56.50
O
ATOM  35463  H   SER L 176     103.404 139.036 229.429  1.00 55.90
H
ATOM  35464  HA  SER L 176     102.154 139.798 231.724  1.00 61.01
H
ATOM  35465  HB2 SER L 176     104.392 140.457 231.820  1.00 60.65
H
ATOM  35466  HB3 SER L 176     104.243 141.185 230.414  1.00 60.65
H
ATOM  35467  HG  SER L 176     103.961 142.684 231.883  1.00 67.82
H
ATOM  35468  N   SER L 177     100.449 141.117 230.585  1.00 51.22
N
ATOM  35469  CA  SER L 177      99.460 141.921 229.891  1.00 51.85
C
ATOM  35470  C   SER L 177      99.163 143.188 230.680  1.00 55.16
C
ATOM  35471  O   SER L 177      98.931 143.130 231.889  1.00 52.07
O
ATOM  35472  CB  SER L 177      98.163 141.161 229.686  1.00 46.88
C
ATOM  35473  OG  SER L 177      97.165 142.088 229.313  1.00 53.81
O
ATOM  35474  H   SER L 177     100.221 140.899 231.384  1.00 61.49
H
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ATOM  35475  HA  SER L 177      99.825 142.166 229.027  1.00 62.24
H
ATOM  35476  HB2 SER L 177      98.278 140.504 228.981  1.00 56.29
H
ATOM  35477  HB3 SER L 177      97.909 140.721 230.511  1.00 56.29
H
ATOM  35478  HG  SER L 177      96.541 141.691 228.914  1.00 64.60
H
ATOM  35479  N   THR L 178      99.123 144.318 229.986  1.00 45.33
N
ATOM  35480  CA  THR L 178      98.866 145.612 230.602  1.00 50.36
C
ATOM  35481  C   THR L 178      97.619 146.241 230.010  1.00 54.28
C
ATOM  35482  O   THR L 178      97.513 146.428 228.792  1.00 53.45
O
ATOM  35483  CB  THR L 178     100.058 146.543 230.417  1.00 47.16
C
ATOM  35484  OG1 THR L 178     101.236 145.830 230.776  1.00 57.82
O
ATOM  35485  CG2 THR L 178      99.931 147.743 231.288  1.00 49.42
C
ATOM  35486  H   THR L 178      99.246 144.362 229.136  1.00 54.42
H
ATOM  35487  HA  THR L 178      98.704 145.474 231.549  1.00 60.46
H
ATOM  35488  HB  THR L 178     100.107 146.846 229.498  1.00 56.62
H
ATOM  35489  HG1 THR L 178     101.129 145.454 231.520  1.00 69.41
H
ATOM  35490 HG21 THR L 178     100.735 148.283 231.229  1.00 59.33
H
ATOM  35491 HG22 THR L 178      99.172 148.278 231.007  1.00 59.33
H
ATOM  35492 HG23 THR L 178      99.800 147.473 232.210  1.00 59.33
H
ATOM  35493  N   LEU L 179      96.683 146.572 230.870  1.00 49.79
N
ATOM  35494  CA  LEU L 179      95.539 147.384 230.503  1.00 49.56
C
ATOM  35495  C   LEU L 179      95.796 148.837 230.888  1.00 54.38
C
ATOM  35496  O   LEU L 179      96.095 149.128 232.047  1.00 56.98
O
ATOM  35497  CB  LEU L 179      94.311 146.842 231.210  1.00 47.15
C
ATOM  35498  CG  LEU L 179      93.003 147.600 231.197  1.00 57.86
C
ATOM  35499  CD1 LEU L 179      92.247 147.288 229.925  1.00 52.89
C
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ATOM  35500  CD2 LEU L 179      92.198 147.210 232.438  1.00 53.93
C
ATOM  35501  H   LEU L 179      96.684 146.332 231.696  1.00 59.77
H
ATOM  35502  HA  LEU L 179      95.392 147.368 229.544  1.00 59.50
H
ATOM  35503  HB2 LEU L 179      94.118 145.977 230.814  1.00 56.60
H
ATOM  35504  HB3 LEU L 179      94.546 146.734 232.145  1.00 56.60
H
ATOM  35505  HG  LEU L 179      93.153 148.558 231.221  1.00 69.46
H
ATOM  35506 HD11 LEU L 179      91.398 147.759 229.937  1.00 63.49
H
ATOM  35507 HD12 LEU L 179      92.775 147.580 229.164  1.00 63.49
H
ATOM  35508 HD13 LEU L 179      92.095 146.332 229.874  1.00 63.49
H
ATOM  35509 HD21 LEU L 179      91.303 147.576 232.364  1.00 64.74
H
ATOM  35510 HD22 LEU L 179      92.156 146.242 232.497  1.00 64.74
H
ATOM  35511 HD23 LEU L 179      92.637 147.569 233.226  1.00 64.74
H
ATOM  35512  N   THR L 180      95.661 149.757 229.938  1.00 49.89
N
ATOM  35513  CA  THR L 180      95.897 151.170 230.214  1.00 56.21
C
ATOM  35514  C   THR L 180      94.613 151.984 230.120  1.00 50.25
C
ATOM  35515  O   THR L 180      93.900 151.916 229.126  1.00 54.98
O
ATOM  35516  CB  THR L 180      96.944 151.734 229.255  1.00 58.71
C
ATOM  35517  OG1 THR L 180      98.174 151.043 229.460  1.00 65.25
O
ATOM  35518  CG2 THR L 180      97.164 153.217 229.515  1.00 67.82
C
ATOM  35519  H   THR L 180      95.433 149.586 229.128  1.00 59.89
H
ATOM  35520  HA  THR L 180      96.215 151.253 231.126  1.00 67.48
H
ATOM  35521  HB  THR L 180      96.642 151.624 228.340  1.00 70.48
H
ATOM  35522  HG1 THR L 180      98.797 151.441 229.061  1.00 78.33
H
ATOM  35523 HG21 THR L 180      98.022 153.492 229.156  1.00 81.41
H
ATOM  35524 HG22 THR L 180      96.464 153.736 229.088  1.00 81.41
H
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ATOM  35525 HG23 THR L 180      97.149 153.393 230.469  1.00 81.41
H
ATOM  35526  N   LEU L 181      94.344 152.777 231.148  1.00 46.27
N
ATOM  35527  CA  LEU L 181      93.186 153.640 231.195  1.00 50.15
C
ATOM  35528  C   LEU L 181      93.637 155.004 231.673  1.00 54.37
C
ATOM  35529  O   LEU L 181      94.693 155.157 232.293  1.00 51.03
O
ATOM  35530  CB  LEU L 181      92.070 153.136 232.123  1.00 56.98
C
ATOM  35531  CG  LEU L 181      91.420 151.793 231.834  1.00 66.61
C
ATOM  35532  CD1 LEU L 181      92.251 150.702 232.447  1.00 72.46
C
ATOM  35533  CD2 LEU L 181      90.030 151.729 232.439  1.00 70.12
C
ATOM  35534  H   LEU L 181      94.838 152.832 231.850  1.00 55.55
H
ATOM  35535  HA  LEU L 181      92.809 153.691 230.303  1.00 60.21
H
ATOM  35536  HB2 LEU L 181      92.442 153.074 233.017  1.00 68.40
H
ATOM  35537  HB3 LEU L 181      91.359 153.793 232.105  1.00 68.40
H
ATOM  35538  HG  LEU L 181      91.354 151.673 230.875  1.00 79.96
H
ATOM  35539 HD11 LEU L 181      91.783 149.857 232.351  1.00 86.98
H
ATOM  35540 HD12 LEU L 181      93.106 150.660 231.990  1.00 86.98
H
ATOM  35541 HD13 LEU L 181      92.387 150.899 233.388  1.00 86.98
H
ATOM  35542 HD21 LEU L 181      89.644 150.857 232.251  1.00 84.17
H
ATOM  35543 HD22 LEU L 181      90.096 151.861 233.398  1.00 84.17
H
ATOM  35544 HD23 LEU L 181      89.482 152.425 232.044  1.00 84.17
H
ATOM  35545  N   SER L 182      92.827 155.998 231.350  1.00 54.13
N
ATOM  35546  CA  SER L 182      93.009 157.301 231.962  1.00 58.07
C
ATOM  35547  C   SER L 182      92.559 157.221 233.406  1.00 59.66
C
ATOM  35548  O   SER L 182      91.706 156.403 233.763  1.00 58.43
O
ATOM  35549  CB  SER L 182      92.202 158.361 231.224  1.00 56.66
C
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ATOM  35550  OG  SER L 182      90.830 158.068 231.376  1.00 60.82
O
ATOM  35551  H   SER L 182      92.175 155.945 230.792  1.00 64.98
H
ATOM  35552  HA  SER L 182      93.940 157.571 231.920  1.00 69.71
H
ATOM  35553  HB2 SER L 182      92.392 159.235 231.601  1.00 68.01
H
ATOM  35554  HB3 SER L 182      92.435 158.349 230.283  1.00 68.01
H
ATOM  35555  HG  SER L 182      90.366 158.668 231.013  1.00 73.01
H
ATOM  35556  N   LYS L 183      93.129 158.082 234.241  1.00 58.74
N
ATOM  35557  CA  LYS L 183      92.725 158.087 235.643  1.00 60.93
C
ATOM  35558  C   LYS L 183      91.227 158.259 235.738  1.00 65.12
C
ATOM  35559  O   LYS L 183      90.571 157.654 236.597  1.00 65.00
O
ATOM  35560  CB  LYS L 183      93.435 159.204 236.400  1.00 59.30
C
ATOM  35561  CG  LYS L 183      93.052 159.375 237.874  1.00 63.64
C
ATOM  35562  CD  LYS L 183      93.827 160.577 238.417  1.00 73.30
C
ATOM  35563  CE  LYS L 183      93.844 160.646 239.929  1.00 83.55
C
ATOM  35564  NZ  LYS L 183      92.542 161.124 240.473  1.00 88.57
N
ATOM  35565  H   LYS L 183      93.733 158.656 234.030  1.00 70.52
H
ATOM  35566  HA  LYS L 183      92.982 157.248 236.056  1.00 73.15
H
ATOM  35567  HB2 LYS L 183      94.388 159.029 236.371  1.00 71.19
H
ATOM  35568  HB3 LYS L 183      93.237 160.043 235.954  1.00 71.19
H
ATOM  35569  HG2 LYS L 183      92.101 159.543 237.958  1.00 76.40
H
ATOM  35570  HG3 LYS L 183      93.294 158.583 238.378  1.00 76.40
H
ATOM  35571  HD2 LYS L 183      94.747 160.523 238.111  1.00 87.99
H
ATOM  35572  HD3 LYS L 183      93.417 161.392 238.087  1.00 87.99
H
ATOM  35573  HE2 LYS L 183      94.017 159.761 240.288  1.00100.28
H
ATOM  35574  HE3 LYS L 183      94.538 161.260 240.214  1.00100.28
H
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ATOM  35575  HZ1 LYS L 183      92.582 161.168 241.362  1.00106.31
H
ATOM  35576  HZ2 LYS L 183      92.356 161.933 240.152  1.00106.31
H
ATOM  35577  HZ3 LYS L 183      91.891 160.565 240.242  1.00106.31
H
ATOM  35578  N   ALA L 184      90.668 159.066 234.836  1.00 57.98
N
ATOM  35579  CA  ALA L 184      89.246 159.377 234.893  1.00 67.12
C
ATOM  35580  C   ALA L 184      88.413 158.134 234.617  1.00 64.42
C
ATOM  35581  O   ALA L 184      87.500 157.802 235.381  1.00 70.02
O
ATOM  35582  CB  ALA L 184      88.925 160.488 233.899  1.00 64.74
C
ATOM  35583  H   ALA L 184      91.086 159.442 234.186  1.00 69.60
H
ATOM  35584  HA  ALA L 184      89.020 159.698 235.780  1.00 80.57
H
ATOM  35585  HB1 ALA L 184      87.976 160.683 233.939  1.00 77.71
H
ATOM  35586  HB2 ALA L 184      89.436 161.279 234.134  1.00 77.71
H
ATOM  35587  HB3 ALA L 184      89.165 160.192 233.007  1.00 77.71
H
ATOM  35588  N   ASP L 185      88.739 157.420 233.543  1.00 62.86
N
ATOM  35589  CA  ASP L 185      88.037 156.178 233.238  1.00 72.35
C
ATOM  35590  C   ASP L 185      88.261 155.117 234.305  1.00 69.65
C
ATOM  35591  O   ASP L 185      87.387 154.276 234.527  1.00 72.03
O
ATOM  35592  CB  ASP L 185      88.483 155.649 231.880  1.00 78.07
C
ATOM  35593  CG  ASP L 185      87.932 156.462 230.731  1.00 80.51
C
ATOM  35594  OD1 ASP L 185      87.158 157.410 230.993  1.00 89.15
O
ATOM  35595  OD2 ASP L 185      88.271 156.151 229.568  1.00 84.50
O1-
ATOM  35596  H   ASP L 185      89.356 157.629 232.982  1.00 75.46
H
ATOM  35597  HA  ASP L 185      87.087 156.366 233.201  1.00 86.85
H
ATOM  35598  HB2 ASP L 185      89.452 155.678 231.831  1.00 93.71
H
ATOM  35599  HB3 ASP L 185      88.174 154.735 231.777  1.00 93.71
H
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ATOM  35600  N   TYR L 186      89.421 155.134 234.970  1.00 67.68
N
ATOM  35601  CA  TYR L 186      89.690 154.144 236.008  1.00 62.62
C
ATOM  35602  C   TYR L 186      88.789 154.339 237.212  1.00 68.87
C
ATOM  35603  O   TYR L 186      88.271 153.363 237.758  1.00 62.79
O
ATOM  35604  CB  TYR L 186      91.152 154.216 236.435  1.00 65.28
C
ATOM  35605  CG  TYR L 186      91.527 153.265 237.544  1.00 56.64
C
ATOM  35606  CD1 TYR L 186      91.611 151.906 237.320  1.00 56.56
C
ATOM  35607  CD2 TYR L 186      91.855 153.737 238.796  1.00 60.78
C
ATOM  35608  CE1 TYR L 186      91.989 151.027 238.334  1.00 56.44
C
ATOM  35609  CE2 TYR L 186      92.231 152.873 239.822  1.00 60.84
C
ATOM  35610  CZ  TYR L 186      92.282 151.520 239.584  1.00 59.14
C
ATOM  35611  OH  TYR L 186      92.657 150.674 240.599  1.00 58.77
O
ATOM  35612  H   TYR L 186      90.055 155.699 234.840  1.00 81.25
H
ATOM  35613  HA  TYR L 186      89.518 153.264 235.637  1.00 75.17
H
ATOM  35614  HB2 TYR L 186      91.709 154.006 235.670  1.00 78.36
H
ATOM  35615  HB3 TYR L 186      91.339 155.116 236.746  1.00 78.36
H
ATOM  35616  HD1 TYR L 186      91.412 151.571 236.478  1.00 67.90
H
ATOM  35617  HD2 TYR L 186      91.824 154.652 238.960  1.00 72.97
H
ATOM  35618  HE1 TYR L 186      92.042 150.114 238.166  1.00 67.76
H
ATOM  35619  HE2 TYR L 186      92.444 153.209 240.663  1.00 73.03
H
ATOM  35620  HH  TYR L 186      92.947 151.118 241.251  1.00 70.55
H
ATOM  35621  N   GLU L 187      88.599 155.586 237.653  1.00 73.82
N
ATOM  35622  CA  GLU L 187      87.820 155.865 238.859  1.00 69.60
C
ATOM  35623  C   GLU L 187      86.317 155.796 238.629  1.00 65.60
C
ATOM  35624  O   GLU L 187      85.556 155.858 239.603  1.00 71.40
O
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ATOM  35625  CB  GLU L 187      88.198 157.233 239.418  1.00 68.27
C
ATOM  35626  CG  GLU L 187      89.579 157.234 240.031  1.00 70.47
C
ATOM  35627  CD  GLU L 187      90.124 158.615 240.297  1.00 86.94
C
ATOM  35628  OE1 GLU L 187      89.608 159.592 239.702  1.00 90.02
O
ATOM  35629  OE2 GLU L 187      91.075 158.721 241.108  1.00 92.13
O1-
ATOM  35630  H   GLU L 187      88.913 156.290 237.269  1.00 88.61
H
ATOM  35631  HA  GLU L 187      88.040 155.200 239.529  1.00 83.55
H
ATOM  35632  HB2 GLU L 187      88.185 157.886 238.701  1.00 81.95
H
ATOM  35633  HB3 GLU L 187      87.561 157.483 240.107  1.00 81.95
H
ATOM  35634  HG2 GLU L 187      89.545 156.761 240.878  1.00 84.60
H
ATOM  35635  HG3 GLU L 187      90.189 156.786 239.425  1.00 84.60
H
ATOM  35636  N   LYS L 188      85.883 155.646 237.376  1.00 74.87
N
ATOM  35637  CA  LYS L 188      84.491 155.396 237.016  1.00 71.47
C
ATOM  35638  C   LYS L 188      84.061 153.943 237.203  1.00 72.44
C
ATOM  35639  O   LYS L 188      82.927 153.599 236.857  1.00 72.08
O
ATOM  35640  CB  LYS L 188      84.267 155.796 235.552  1.00 63.13
C
ATOM  35641  CG  LYS L 188      84.059 157.310 235.356  1.00 73.57
C
ATOM  35642  CD  LYS L 188      84.376 157.843 233.951  1.00 80.62
C
ATOM  35643  CE  LYS L 188      83.766 157.023 232.828  1.00 92.87
C
ATOM  35644  NZ  LYS L 188      84.002 157.667 231.484  1.00 95.92
N
ATOM  35645  H   LYS L 188      86.400 155.690 236.689  1.00 89.88
H
ATOM  35646  HA  LYS L 188      83.927 155.941 237.585  1.00 85.80
H
ATOM  35647  HB2 LYS L 188      85.042 155.534 235.032  1.00 75.78
H
ATOM  35648  HB3 LYS L 188      83.476 155.343 235.221  1.00 75.78
H
ATOM  35649  HG2 LYS L 188      83.129 157.518 235.540  1.00 88.31
H
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ATOM  35650  HG3 LYS L 188      84.634 157.780 235.981  1.00 88.31
H
ATOM  35651  HD2 LYS L 188      84.034 158.747 233.875  1.00 96.77
H
ATOM  35652  HD3 LYS L 188      85.339 157.842 233.826  1.00 96.77
H
ATOM  35653  HE2 LYS L 188      84.168 156.140 232.819  1.00111.47
H
ATOM  35654  HE3 LYS L 188      82.808 156.950 232.969  1.00111.47
H
ATOM  35655  HZ1 LYS L 188      83.639 158.478 231.468  1.00115.14
H
ATOM  35656  HZ2 LYS L 188      84.875 157.738 231.331  1.00115.14
H
ATOM  35657  HZ3 LYS L 188      83.635 157.172 230.842  1.00115.14
H
ATOM  35658  N   HIS L 189      84.926 153.069 237.702  1.00 71.35
N
ATOM  35659  CA  HIS L 189      84.601 151.652 237.749  1.00 66.75
C
ATOM  35660  C   HIS L 189      85.229 151.034 238.978  1.00 66.52
C
ATOM  35661  O   HIS L 189      86.204 151.552 239.539  1.00 65.86
O
ATOM  35662  CB  HIS L 189      85.079 150.886 236.519  1.00 64.05
C
ATOM  35663  CG  HIS L 189      84.511 151.390 235.232  1.00 77.97
C
ATOM  35664  ND1 HIS L 189      85.136 152.357 234.471  1.00 79.09
N
ATOM  35665  CD2 HIS L 189      83.374 151.063 234.572  1.00 74.70
C
ATOM  35666  CE1 HIS L 189      84.408 152.601 233.395  1.00 74.75
C
ATOM  35667  NE2 HIS L 189      83.341 151.822 233.428  1.00 69.79
N
ATOM  35668  H   HIS L 189      85.701 153.273 238.015  1.00 85.64
H
ATOM  35669  HA  HIS L 189      83.635 151.576 237.803  1.00 80.13
H
ATOM  35670  HB2 HIS L 189      86.044 150.959 236.463  1.00 76.88
H
ATOM  35671  HB3 HIS L 189      84.821 149.956 236.611  1.00 76.88
H
ATOM  35672  HD1 HIS L 189      85.880 152.740 234.665  1.00 94.94
H
ATOM  35673  HD2 HIS L 189      82.736 150.443 234.843  1.00 89.66
H
ATOM  35674  HE1 HIS L 189      84.613 153.215 232.727  1.00 89.73
H
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ATOM  35675  N   LYS L 190      84.672 149.888 239.363  1.00 66.16
N
ATOM  35676  CA  LYS L 190      84.994 149.247 240.626  1.00 68.94
C
ATOM  35677  C   LYS L 190      85.797 147.971 240.423  1.00 59.34
C
ATOM  35678  O   LYS L 190      86.895 147.854 240.953  1.00 58.80
O
ATOM  35679  CB  LYS L 190      83.679 148.984 241.393  1.00 75.98
C
ATOM  35680  CG  LYS L 190      83.829 148.322 242.765  1.00 91.91
C
ATOM  35681  CD  LYS L 190      82.484 148.314 243.519  1.00116.02
C
ATOM  35682  CE  LYS L 190      82.230 147.011 244.279  1.00111.54
C
ATOM  35683  NZ  LYS L 190      80.775 146.815 244.562  1.00140.03
N
ATOM  35684  H   LYS L 190      84.093 149.457 238.897  1.00 79.42
H
ATOM  35685  HA  LYS L 190      85.543 149.833 241.170  1.00 82.75
H
ATOM  35686  HB2 LYS L 190      83.233 149.834 241.532  1.00 91.21
H
ATOM  35687  HB3 LYS L 190      83.123 148.402 240.852  1.00 91.21
H
ATOM  35688  HG2 LYS L 190      84.124 147.404 242.651  1.00110.32
H
ATOM  35689  HG3 LYS L 190      84.477 148.813 243.293  1.00110.32
H
ATOM  35690  HD2 LYS L 190      82.479 149.041 244.161  1.00139.25
H
ATOM  35691  HD3 LYS L 190      81.764 148.432 242.880  1.00139.25
H
ATOM  35692  HE2 LYS L 190      82.540 146.263 243.746  1.00133.87
H
ATOM  35693  HE3 LYS L 190      82.703 147.035 245.125  1.00133.87
H
ATOM  35694  HZ1 LYS L 190      80.643 146.024 244.946  1.00168.07
H
ATOM  35695  HZ2 LYS L 190      80.482 147.454 245.107  1.00168.07
H
ATOM  35696  HZ3 LYS L 190      80.311 146.848 243.803  1.00168.07
H
ATOM  35697  N   VAL L 191      85.297 147.012 239.652  1.00 62.60
N
ATOM  35698  CA  VAL L 191      85.881 145.675 239.594  1.00 52.77
C
ATOM  35699  C   VAL L 191      86.758 145.545 238.365  1.00 56.77
C
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ATOM  35700  O   VAL L 191      86.292 145.753 237.234  1.00 55.86
O
ATOM  35701  CB  VAL L 191      84.795 144.589 239.586  1.00 59.52
C
ATOM  35702  CG1 VAL L 191      85.455 143.213 239.385  1.00 46.80
C
ATOM  35703  CG2 VAL L 191      83.995 144.650 240.892  1.00 62.73
C
ATOM  35704  H   VAL L 191      84.609 147.112 239.146  1.00 75.14
H
ATOM  35705  HA  VAL L 191      86.443 145.561 240.378  1.00 63.35
H
ATOM  35706  HB  VAL L 191      84.172 144.733 238.857  1.00 71.45
H
ATOM  35707 HG11 VAL L 191      84.835 142.521 239.661  1.00 56.19
H
ATOM  35708 HG12 VAL L 191      85.676 143.103 238.446  1.00 56.19
H
ATOM  35709 HG13 VAL L 191      86.262 143.168 239.921  1.00 56.19
H
ATOM  35710 HG21 VAL L 191      83.322 143.952 240.881  1.00 75.31
H
ATOM  35711 HG22 VAL L 191      84.599 144.514 241.638  1.00 75.31
H
ATOM  35712 HG23 VAL L 191      83.570 145.519 240.962  1.00 75.31
H
ATOM  35713  N   TYR L 192      88.016 145.160 238.588  1.00 47.97
N
ATOM  35714  CA  TYR L 192      88.992 144.941 237.536  1.00 47.39
C
ATOM  35715  C   TYR L 192      89.448 143.492 237.589  1.00 50.81
C
ATOM  35716  O   TYR L 192      89.826 143.002 238.656  1.00 56.49
O
ATOM  35717  CB  TYR L 192      90.160 145.930 237.706  1.00 52.25
C
ATOM  35718  CG  TYR L 192      89.709 147.360 237.417  1.00 55.63
C
ATOM  35719  CD1 TYR L 192      89.122 148.139 238.390  1.00 54.07
C
ATOM  35720  CD2 TYR L 192      89.864 147.911 236.161  1.00 51.99
C
ATOM  35721  CE1 TYR L 192      88.693 149.436 238.111  1.00 59.39
C
ATOM  35722  CE2 TYR L 192      89.430 149.184 235.874  1.00 49.29
C
ATOM  35723  CZ  TYR L 192      88.859 149.942 236.836  1.00 54.80
C
ATOM  35724  OH  TYR L 192      88.461 151.206 236.480  1.00 63.29
O
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ATOM  35725  H   TYR L 192      88.333 145.012 239.373  1.00 57.60
H
ATOM  35726  HA  TYR L 192      88.612 145.083 236.656  1.00 56.89
H
ATOM  35727  HB2 TYR L 192      90.488 145.888 238.618  1.00 62.72
H
ATOM  35728  HB3 TYR L 192      90.870 145.700 237.088  1.00 62.72
H
ATOM  35729  HD1 TYR L 192      89.011 147.795 239.247  1.00 64.91
H
ATOM  35730  HD2 TYR L 192      90.273 147.409 235.493  1.00 62.41
H
ATOM  35731  HE1 TYR L 192      88.302 149.955 238.776  1.00 71.29
H
ATOM  35732  HE2 TYR L 192      89.527 149.525 235.014  1.00 59.18
H
ATOM  35733  HH  TYR L 192      88.138 151.603 237.146  1.00 75.97
H
ATOM  35734  N   ALA L 193      89.423 142.808 236.446  1.00 49.34
N
ATOM  35735  CA  ALA L 193      89.787 141.396 236.414  1.00 54.95
C
ATOM  35736  C   ALA L 193      90.431 140.989 235.087  1.00 51.18
C
ATOM  35737  O   ALA L 193      90.055 141.506 234.027  1.00 57.91
O
ATOM  35738  CB  ALA L 193      88.520 140.545 236.687  1.00 54.14
C
ATOM  35739  H   ALA L 193      89.201 143.137 235.683  1.00 59.24
H
ATOM  35740  HA  ALA L 193      90.470 141.228 237.082  1.00 65.97
H
ATOM  35741  HB1 ALA L 193      88.778 139.615 236.775  1.00 64.99
H
ATOM  35742  HB2 ALA L 193      88.104 140.853 237.508  1.00 64.99
H
ATOM  35743  HB3 ALA L 193      87.905 140.648 235.946  1.00 64.99
H
ATOM  35744  N   CYS L 194      91.430 140.092 235.141  1.00 50.16
N
ATOM  35745  CA ACYS L 194      91.920 139.405 233.953  0.01 58.37
C
ATOM  35746  CA BCYS L 194      91.918 139.402 233.954  0.99 58.66
C
ATOM  35747  C   CYS L 194      91.513 137.940 234.032  1.00 58.95
C
ATOM  35748  O   CYS L 194      91.639 137.306 235.088  1.00 56.46
O
ATOM  35749  CB ACYS L 194      93.439 139.543 233.772  0.01 60.10
C
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ATOM  35750  CB BCYS L 194      93.434 139.507 233.743  0.99 60.49
C
ATOM  35751  SG ACYS L 194      94.528 139.083 235.148  0.01 67.47
S
ATOM  35752  SG BCYS L 194      94.455 139.029 235.073  0.99 70.75
S
ATOM  35753  H  ACYS L 194      91.837 139.869 235.865  0.01 60.22
H
ATOM  35754  H  BCYS L 194      91.839 139.871 235.865  0.99 60.22
H
ATOM  35755  HA ACYS L 194      91.514 139.804 233.168  0.01 70.07
H
ATOM  35756  HA BCYS L 194      91.507 139.825 233.184  0.99 70.43
H
ATOM  35757  HB2ACYS L 194      93.696 138.986 233.021  0.01 72.15
H
ATOM  35758  HB2BCYS L 194      93.670 138.942 232.990  0.99 72.62
H
ATOM  35759  HB3ACYS L 194      93.625 140.475 233.575  0.01 72.15
H
ATOM  35760  HB3BCYS L 194      93.644 140.431 233.543  0.99 72.62
H
ATOM  35761  N   GLU L 195      90.987 137.440 232.923  1.00 58.14
N
ATOM  35762  CA  GLU L 195      90.532 136.076 232.757  1.00 60.64
C
ATOM  35763  C   GLU L 195      91.503 135.408 231.809  1.00 57.40
C
ATOM  35764  O   GLU L 195      91.857 135.965 230.760  1.00 56.09
O
ATOM  35765  CB  GLU L 195      89.116 136.044 232.196  1.00 65.96
C
ATOM  35766  CG  GLU L 195      88.367 134.704 232.254  1.00 78.25
C
ATOM  35767  CD  GLU L 195      87.145 134.728 231.316  1.00 86.12
C
ATOM  35768  OE1 GLU L 195      87.326 135.037 230.109  1.00 82.51
O
ATOM  35769  OE2 GLU L 195      86.006 134.498 231.783  1.00 92.32
O1-
ATOM  35770  H   GLU L 195      90.875 137.906 232.210  1.00 69.79
H
ATOM  35771  HA  GLU L 195      90.518 135.597 233.601  1.00 72.80
H
ATOM  35772  HB2 GLU L 195      88.584 136.684 232.693  1.00 79.18
H
ATOM  35773  HB3 GLU L 195      89.160 136.300 231.262  1.00 79.18
H
ATOM  35774  HG2 GLU L 195      88.959 133.989 231.973  1.00 93.92
H
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ATOM  35775  HG3 GLU L 195      88.058 134.544 233.159  1.00 93.92
H
ATOM  35776  N   VAL L 196      91.963 134.243 232.198  1.00 50.56
N
ATOM  35777  CA  VAL L 196      93.025 133.550 231.510  1.00 59.68
C
ATOM  35778  C   VAL L 196      92.495 132.205 231.061  1.00 64.74
C
ATOM  35779  O   VAL L 196      91.937 131.447 231.864  1.00 60.75
O
ATOM  35780  CB  VAL L 196      94.248 133.411 232.425  1.00 54.81
C
ATOM  35781  CG1 VAL L 196      95.301 132.537 231.776  1.00 53.16
C
ATOM  35782  CG2 VAL L 196      94.769 134.832 232.783  1.00 56.70
C
ATOM  35783  H   VAL L 196      91.664 133.817 232.883  1.00 60.70
H
ATOM  35784  HA  VAL L 196      93.293 134.033 230.713  1.00 71.65
H
ATOM  35785  HB  VAL L 196      94.012 132.966 233.253  1.00 65.80
H
ATOM  35786 HG11 VAL L 196      96.146 132.671 232.234  1.00 63.82
H
ATOM  35787 HG12 VAL L 196      95.029 131.611 231.847  1.00 63.82
H
ATOM  35788 HG13 VAL L 196      95.387 132.787 230.843  1.00 63.82
H
ATOM  35789 HG21 VAL L 196      95.605 134.749 233.269  1.00 68.07
H
ATOM  35790 HG22 VAL L 196      94.912 135.332 231.964  1.00 68.07
H
ATOM  35791 HG23 VAL L 196      94.108 135.281 233.333  1.00 68.07
H
ATOM  35792  N   THR L 197      92.645 131.937 229.777  1.00 61.18
N
ATOM  35793  CA  THR L 197      92.311 130.660 229.184  1.00 57.37
C
ATOM  35794  C   THR L 197      93.591 129.997 228.696  1.00 61.72
C
ATOM  35795  O   THR L 197      94.443 130.641 228.072  1.00 62.72
O
ATOM  35796  CB  THR L 197      91.297 130.859 228.060  1.00 65.38
C
ATOM  35797  OG1 THR L 197      90.004 131.009 228.654  1.00 59.70
O
ATOM  35798  CG2 THR L 197      91.300 129.682 227.046  1.00 59.97
C
ATOM  35799  H   THR L 197      92.951 132.503 229.206  1.00 73.44
H
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ATOM  35800  HA  THR L 197      91.913 130.060 229.833  1.00 68.88
H
ATOM  35801  HB  THR L 197      91.525 131.650 227.546  1.00 78.48
H
ATOM  35802  HG1 THR L 197      89.432 131.172 228.061  1.00 71.66
H
ATOM  35803 HG21 THR L 197      90.503 129.717 226.495  1.00 71.99
H
ATOM  35804 HG22 THR L 197      92.082 129.740 226.473  1.00 71.99
H
ATOM  35805 HG23 THR L 197      91.320 128.837 227.520  1.00 71.99
H
ATOM  35806  N   HIS L 198      93.737 128.721 229.023  1.00 60.66
N
ATOM  35807  CA  HIS L 198      94.936 127.980 228.690  1.00 54.74
C
ATOM  35808  C   HIS L 198      94.607 126.504 228.747  1.00 55.03
C
ATOM  35809  O   HIS L 198      93.677 126.081 229.438  1.00 69.07
O
ATOM  35810  CB  HIS L 198      96.073 128.301 229.645  1.00 53.24
C
ATOM  35811  CG  HIS L 198      97.391 127.757 229.215  1.00 54.81
C
ATOM  35812  ND1 HIS L 198      97.930 126.599 229.738  1.00 58.53
N
ATOM  35813  CD2 HIS L 198      98.301 128.231 228.333  1.00 55.05
C
ATOM  35814  CE1 HIS L 198      99.122 126.391 229.203  1.00 55.98
C
ATOM  35815  NE2 HIS L 198      99.365 127.361 228.338  1.00 51.61
N
ATOM  35816  H   HIS L 198      93.146 128.259 229.444  1.00 72.82
H
ATOM  35817  HA  HIS L 198      95.220 128.206 227.791  1.00 65.72
H
ATOM  35818  HB2 HIS L 198      96.160 129.266 229.711  1.00 63.92
H
ATOM  35819  HB3 HIS L 198      95.868 127.925 230.514  1.00 63.92
H
ATOM  35820  HD2 HIS L 198      98.221 129.000 227.818  1.00 66.09
H
ATOM  35821  HE1 HIS L 198      99.691 125.682 229.399  1.00 67.20
H
ATOM  35822  HE2 HIS L 198     100.075 127.437 227.857  1.00 61.95
H
ATOM  35823  N   GLN L 199      95.420 125.731 228.044  1.00 62.13
N
ATOM  35824  CA  GLN L 199      95.206 124.293 227.932  1.00 67.14
C
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ATOM  35825  C   GLN L 199      95.305 123.596 229.294  1.00 67.93
C
ATOM  35826  O   GLN L 199      94.504 122.706 229.601  1.00 67.76
O
ATOM  35827  CB  GLN L 199      96.228 123.739 226.931  1.00 63.21
C
ATOM  35828  CG  GLN L 199      96.390 122.241 226.915  1.00 70.25
C
ATOM  35829  CD  GLN L 199      97.222 121.750 225.728  1.00 73.17
C
ATOM  35830  OE1 GLN L 199      97.564 122.509 224.807  1.00 71.21
O
ATOM  35831  NE2 GLN L 199      97.556 120.468 225.753  1.00 79.76
N
ATOM  35832  H   GLN L 199      96.111 126.013 227.615  1.00 74.58
H
ATOM  35833  HA  GLN L 199      94.313 124.108 227.602  1.00 80.59
H
ATOM  35834  HB2 GLN L 199      95.954 124.006 226.040  1.00 75.88
H
ATOM  35835  HB3 GLN L 199      97.094 124.120 227.140  1.00 75.88
H
ATOM  35836  HG2 GLN L 199      96.838 121.963 227.730  1.00 84.33
H
ATOM  35837  HG3 GLN L 199      95.516 121.827 226.860  1.00 84.33
H
ATOM  35838 HE21 GLN L 199      97.305 119.971 226.410  1.00 95.74
H
ATOM  35839 HE22 GLN L 199      98.022 120.132 225.114  1.00 95.74
H
ATOM  35840  N   GLY L 200      96.268 123.996 230.131  1.00 61.55
N
ATOM  35841  CA  GLY L 200      96.504 123.371 231.416  1.00 65.33
C
ATOM  35842  C   GLY L 200      95.498 123.734 232.488  1.00 65.84
C
ATOM  35843  O   GLY L 200      95.647 123.334 233.649  1.00 62.57
O
ATOM  35844  H   GLY L 200      96.805 124.647 229.965  1.00 73.88
H
ATOM  35845  HA2 GLY L 200      96.483 122.408 231.303  1.00 78.43
H
ATOM  35846  HA3 GLY L 200      97.383 123.632 231.734  1.00 78.43
H
ATOM  35847  N   LEU L 201      94.469 124.488 232.104  1.00 64.56
N
ATOM  35848  CA  LEU L 201      93.412 124.923 232.997  1.00 61.11
C
ATOM  35849  C   LEU L 201      92.091 124.331 232.524  1.00 70.48
C
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ATOM  35850  O   LEU L 201      91.648 124.614 231.404  1.00 68.88
O
ATOM  35851  CB  LEU L 201      93.312 126.447 233.029  1.00 66.51
C
ATOM  35852  CG  LEU L 201      94.500 127.225 233.573  1.00 65.94
C
ATOM  35853  CD1 LEU L 201      94.300 128.679 233.177  1.00 58.26
C
ATOM  35854  CD2 LEU L 201      94.648 127.062 235.093  1.00 55.37
C
ATOM  35855  H   LEU L 201      94.363 124.768 231.298  1.00 77.49
H
ATOM  35856  HA  LEU L 201      93.602 124.601 233.892  1.00 73.35
H
ATOM  35857  HB2 LEU L 201      93.171 126.753 232.119  1.00 79.83
H
ATOM  35858  HB3 LEU L 201      92.548 126.681 233.579  1.00 79.83
H
ATOM  35859  HG  LEU L 201      95.333 126.888 233.204  1.00 79.15
H
ATOM  35860 HD11 LEU L 201      95.039 129.203 233.520  1.00 69.93
H
ATOM  35861 HD12 LEU L 201      94.269 128.740 232.209  1.00 69.93
H
ATOM  35862 HD13 LEU L 201      93.466 128.996 233.555  1.00 69.93
H
ATOM  35863 HD21 LEU L 201      95.303 127.700 235.418  1.00 66.47
H
ATOM  35864 HD22 LEU L 201      93.789 127.227 235.514  1.00 66.47
H
ATOM  35865 HD23 LEU L 201      94.942 126.159 235.288  1.00 66.47
H
ATOM  35866  N   SER L 202      91.445 123.548 233.392  1.00 72.88
N
ATOM  35867  CA  SER L 202      90.171 122.926 233.026  1.00 75.35
C
ATOM  35868  C   SER L 202      89.116 123.968 232.707  1.00 73.07
C
ATOM  35869  O   SER L 202      88.259 123.745 231.848  1.00 77.28
O
ATOM  35870  CB  SER L 202      89.686 122.009 234.156  1.00 69.47
C
ATOM  35871  OG  SER L 202      89.741 122.698 235.390  1.00 73.84
O
ATOM  35872  H   SER L 202      91.717 123.364 234.188  1.00 87.48
H
ATOM  35873  HA  SER L 202      90.307 122.381 232.236  1.00 90.45
H
ATOM  35874  HB2 SER L 202      88.770 121.742 233.979  1.00 83.40
H
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ATOM  35875  HB3 SER L 202      90.258 121.227 234.201  1.00 83.40
H
ATOM  35876  HG  SER L 202      89.784 122.149 236.024  1.00 88.64
H
ATOM  35877  N   SER L 203      89.153 125.107 233.379  1.00 80.13
N
ATOM  35878  CA  SER L 203      88.299 126.214 232.964  1.00 78.19
C
ATOM  35879  C   SER L 203      89.042 127.532 233.179  1.00 77.88
C
ATOM  35880  O   SER L 203      90.119 127.541 233.794  1.00 75.80
O
ATOM  35881  CB  SER L 203      86.967 126.182 233.719  1.00 74.33
C
ATOM  35882  OG  SER L 203      87.149 126.135 235.120  1.00 63.86
O
ATOM  35883  H   SER L 203      89.652 125.262 234.062  1.00 96.18
H
ATOM  35884  HA  SER L 203      88.090 126.141 232.021  1.00 93.86
H
ATOM  35885  HB2 SER L 203      86.465 126.983 233.499  1.00 89.23
H
ATOM  35886  HB3 SER L 203      86.472 125.393 233.444  1.00 89.23
H
ATOM  35887  HG  SER L 203      86.441 126.366 235.510  1.00 76.65
H
ATOM  35888  N   PRO L 204      88.523 128.650 232.667  1.00 68.10
N
ATOM  35889  CA  PRO L 204      89.253 129.915 232.791  1.00 66.28
C
ATOM  35890  C   PRO L 204      89.457 130.314 234.249  1.00 68.07
C
ATOM  35891  O   PRO L 204      88.568 130.178 235.090  1.00 64.68
O
ATOM  35892  CB  PRO L 204      88.365 130.921 232.039  1.00 67.93
C
ATOM  35893  CG  PRO L 204      87.597 130.098 231.061  1.00 70.22
C
ATOM  35894  CD  PRO L 204      87.354 128.774 231.769  1.00 73.57
C
ATOM  35895  HA  PRO L 204      90.116 129.851 232.354  1.00 79.56
H
ATOM  35896  HB2 PRO L 204      87.769 131.367 232.663  1.00 81.55
H
ATOM  35897  HB3 PRO L 204      88.918 131.576 231.584  1.00 81.55
H
ATOM  35898  HG2 PRO L 204      86.757 130.535 230.846  1.00 84.30
H
ATOM  35899  HG3 PRO L 204      88.119 129.970 230.253  1.00 84.30
H
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ATOM  35900  HD2 PRO L 204      86.529 128.801 232.278  1.00 88.31
H
ATOM  35901  HD3 PRO L 204      87.329 128.042 231.134  1.00 88.31
H
ATOM  35902  N   VAL L 205      90.666 130.782 234.541  1.00 57.04
N
ATOM  35903  CA  VAL L 205      91.001 131.350 235.837  1.00 54.45
C
ATOM  35904  C   VAL L 205      90.809 132.863 235.787  1.00 60.22
C
ATOM  35905  O   VAL L 205      91.323 133.528 234.882  1.00 58.52
O
ATOM  35906  CB  VAL L 205      92.444 131.012 236.215  1.00 57.10
C
ATOM  35907  CG1 VAL L 205      92.829 131.828 237.423  1.00 66.54
C
ATOM  35908  CG2 VAL L 205      92.628 129.476 236.437  1.00 54.17
C
ATOM  35909  H   VAL L 205      91.325 130.781 233.989  1.00 68.48
H
ATOM  35910  HA  VAL L 205      90.402 130.985 236.507  1.00 65.37
H
ATOM  35911  HB  VAL L 205      93.046 131.243 235.490  1.00 68.54
H
ATOM  35912 HG11 VAL L 205      93.577 131.399 237.869  1.00 79.88
H
ATOM  35913 HG12 VAL L 205      93.084 132.719 237.134  1.00 79.88
H
ATOM  35914 HG13 VAL L 205      92.071 131.880 238.025  1.00 79.88
H
ATOM  35915 HG21 VAL L 205      93.567 129.288 236.589  1.00 65.03
H
ATOM  35916 HG22 VAL L 205      92.108 129.203 237.209  1.00 65.03
H
ATOM  35917 HG23 VAL L 205      92.320 129.003 235.647  1.00 65.03
H
ATOM  35918  N   THR L 206      90.099 133.418 236.765  1.00 56.84
N
ATOM  35919  CA  THR L 206      89.947 134.863 236.909  1.00 52.37
C
ATOM  35920  C   THR L 206      90.673 135.353 238.166  1.00 56.22
C
ATOM  35921  O   THR L 206      90.534 134.765 239.245  1.00 59.07
O
ATOM  35922  CB  THR L 206      88.462 135.264 236.966  1.00 69.53
C
ATOM  35923  OG1 THR L 206      87.787 134.852 235.765  1.00 67.93
O
ATOM  35924  CG2 THR L 206      88.316 136.798 237.110  1.00 58.48
C
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ATOM  35925  H   THR L 206      89.686 132.967 237.369  1.00 68.24
H
ATOM  35926  HA  THR L 206      90.355 135.295 236.143  1.00 62.87
H
ATOM  35927  HB  THR L 206      88.056 134.832 237.734  1.00 83.46
H
ATOM  35928  HG1 THR L 206      86.976 135.071 235.802  1.00 81.54
H
ATOM  35929 HG21 THR L 206      87.388 137.056 236.981  1.00 70.20
H
ATOM  35930 HG22 THR L 206      88.598 137.078 237.995  1.00 70.20
H
ATOM  35931 HG23 THR L 206      88.861 137.248 236.448  1.00 70.20
H
ATOM  35932  N   LYS L 207      91.435 136.442 238.037  1.00 55.44
N
ATOM  35933  CA  LYS L 207      91.957 137.181 239.190  1.00 54.50
C
ATOM  35934  C   LYS L 207      91.427 138.609 239.103  1.00 52.68
C
ATOM  35935  O   LYS L 207      91.396 139.198 238.020  1.00 52.80
O
ATOM  35936  CB  LYS L 207      93.505 137.188 239.254  1.00 57.29
C
ATOM  35937  CG  LYS L 207      94.201 135.817 239.342  1.00 52.32
C
ATOM  35938  CD  LYS L 207      93.965 135.107 240.708  1.00 56.67
C
ATOM  35939  CE  LYS L 207      94.720 133.737 240.792  1.00 54.75
C
ATOM  35940  NZ  LYS L 207      94.569 133.098 242.171  1.00 71.88
N
ATOM  35941  H   LYS L 207      91.669 136.775 237.279  1.00 66.56
H
ATOM  35942  HA  LYS L 207      91.654 136.761 240.011  1.00 65.43
H
ATOM  35943  HB2 LYS L 207      93.836 137.623 238.452  1.00 68.78
H
ATOM  35944  HB3 LYS L 207      93.771 137.692 240.038  1.00 68.78
H
ATOM  35945  HG2 LYS L 207      93.856 135.240 238.642  1.00 62.81
H
ATOM  35946  HG3 LYS L 207      95.157 135.939 239.230  1.00 62.81
H
ATOM  35947  HD2 LYS L 207      94.289 135.677 241.423  1.00 68.04
H
ATOM  35948  HD3 LYS L 207      93.017 134.939 240.822  1.00 68.04
H
ATOM  35949  HE2 LYS L 207      94.355 133.127 240.132  1.00 65.73
H
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ATOM  35950  HE3 LYS L 207      95.664 133.880 240.625  1.00 65.73
H
ATOM  35951  HZ1 LYS L 207      94.973 132.306 242.186  1.00 86.28
H
ATOM  35952  HZ2 LYS L 207      94.934 133.622 242.790  1.00 86.28
H
ATOM  35953  HZ3 LYS L 207      93.706 132.986 242.361  1.00 86.28
H
ATOM  35954  N   SER L 208      91.036 139.179 240.239  1.00 45.24
N
ATOM  35955  CA  SER L 208      90.411 140.492 240.250  1.00 49.72
C
ATOM  35956  C   SER L 208      90.807 141.266 241.497  1.00 52.79
C
ATOM  35957  O   SER L 208      91.421 140.735 242.417  1.00 59.49
O
ATOM  35958  CB  SER L 208      88.900 140.376 240.191  1.00 53.99
C
ATOM  35959  OG  SER L 208      88.468 139.869 241.428  1.00 62.82
O
ATOM  35960  H   SER L 208      91.121 138.823 241.017  1.00 54.32
H
ATOM  35961  HA  SER L 208      90.743 140.978 239.478  1.00 59.70
H
ATOM  35962  HB2 SER L 208      88.510 141.251 240.039  1.00 64.82
H
ATOM  35963  HB3 SER L 208      88.644 139.771 239.479  1.00 64.82
H
ATOM  35964  HG  SER L 208      87.635 139.763 241.421  1.00 75.41
H
ATOM  35965  N   PHE L 209      90.474 142.551 241.487  1.00 53.09
N
ATOM  35966  CA  PHE L 209      90.508 143.379 242.678  1.00 56.61
C
ATOM  35967  C   PHE L 209      89.391 144.398 242.549  1.00 58.18
C
ATOM  35968  O   PHE L 209      88.810 144.582 241.475  1.00 59.21
O
ATOM  35969  CB  PHE L 209      91.874 144.065 242.879  1.00 56.07
C
ATOM  35970  CG  PHE L 209      92.244 145.045 241.784  1.00 57.23
C
ATOM  35971  CD1 PHE L 209      91.844 146.363 241.854  1.00 53.36
C
ATOM  35972  CD2 PHE L 209      93.016 144.633 240.699  1.00 53.84
C
ATOM  35973  CE1 PHE L 209      92.173 147.266 240.866  1.00 52.83
C
ATOM  35974  CE2 PHE L 209      93.370 145.517 239.700  1.00 51.02
C
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ATOM  35975  CZ  PHE L 209      92.956 146.852 239.779  1.00 55.99
C
ATOM  35976  H   PHE L 209      90.220 142.975 240.784  1.00 63.74
H
ATOM  35977  HA  PHE L 209      90.353 142.831 243.462  1.00 67.96
H
ATOM  35978  HB2 PHE L 209      91.854 144.554 243.717  1.00 67.31
H
ATOM  35979  HB3 PHE L 209      92.562 143.383 242.908  1.00 67.31
H
ATOM  35980  HD1 PHE L 209      91.340 146.648 242.582  1.00 64.05
H
ATOM  35981  HD2 PHE L 209      93.297 143.748 240.647  1.00 64.63
H
ATOM  35982  HE1 PHE L 209      91.878 148.145 240.920  1.00 63.43
H
ATOM  35983  HE2 PHE L 209      93.880 145.227 238.979  1.00 61.25
H
ATOM  35984  HZ  PHE L 209      93.197 147.458 239.116  1.00 67.21
H
ATOM  35985  N   ASN L 210      89.102 145.066 243.658  1.00 56.44
N
ATOM  35986  CA  ASN L 210      88.136 146.156 243.709  1.00 67.21
C
ATOM  35987  C   ASN L 210      88.858 147.472 243.978  1.00 62.90
C
ATOM  35988  O   ASN L 210      89.648 147.570 244.918  1.00 68.29
O
ATOM  35989  CB  ASN L 210      87.089 145.879 244.787  1.00 75.68
C
ATOM  35990  CG  ASN L 210      86.440 144.532 244.608  1.00 72.30
C
ATOM  35991  OD1 ASN L 210      85.622 144.345 243.717  1.00 74.05
O
ATOM  35992  ND2 ASN L 210      86.834 143.573 245.423  1.00 87.77
N
ATOM  35993  H   ASN L 210      89.466 144.903 244.420  1.00 67.75
H
ATOM  35994  HA  ASN L 210      87.686 146.244 242.854  1.00 80.68
H
ATOM  35995  HB2 ASN L 210      87.517 145.896 245.657  1.00 90.84
H
ATOM  35996  HB3 ASN L 210      86.399 146.558 244.743  1.00 90.84
H
ATOM  35997 HD21 ASN L 210      86.492 142.787 245.359  1.00105.35
H
ATOM  35998 HD22 ASN L 210      87.434 143.735 246.018  1.00105.35
H
ATOM  35999  N   ARG L 211      88.614 148.474 243.140  1.00 67.50
N
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ATOM  36000  CA  ARG L 211      89.325 149.739 243.292  1.00 70.25
C
ATOM  36001  C   ARG L 211      89.112 150.307 244.693  1.00 75.40
C
ATOM  36002  O   ARG L 211      87.984 150.363 245.190  1.00 77.93
O
ATOM  36003  CB  ARG L 211      88.857 150.737 242.243  1.00 70.81
C
ATOM  36004  CG  ARG L 211      89.701 152.002 242.192  1.00 67.97
C
ATOM  36005  CD  ARG L 211      89.241 152.885 241.075  1.00 67.07
C
ATOM  36006  NE  ARG L 211      87.792 153.010 241.105  1.00 74.17
N
ATOM  36007  CZ  ARG L 211      87.142 153.766 241.978  1.00 73.98
C
ATOM  36008  NH1 ARG L 211      85.817 153.835 241.944  1.00 73.40
N
ATOM  36009  NH2 ARG L 211      87.830 154.451 242.880  1.00 72.22
N
ATOM  36010  H   ARG L 211      88.054 148.448 242.487  1.00 81.03
H
ATOM  36011  HA  ARG L 211      90.274 149.589 243.165  1.00 84.32
H
ATOM  36012  HB2 ARG L 211      88.898 150.316 241.370  1.00 85.00
H
ATOM  36013  HB3 ARG L 211      87.945 150.998 242.443  1.00 85.00
H
ATOM  36014  HG2 ARG L 211      89.615 152.486 243.026  1.00 81.59
H
ATOM  36015  HG3 ARG L 211      90.630 151.767 242.039  1.00 81.59
H
ATOM  36016  HD2 ARG L 211      89.633 153.767 241.174  1.00 80.51
H
ATOM  36017  HD3 ARG L 211      89.503 152.500 240.223  1.00 80.51
H
ATOM  36018  HE  ARG L 211      87.333 152.571 240.525  1.00 89.03
H
ATOM  36019 HH11 ARG L 211      85.378 153.389 241.353  1.00 88.11
H
ATOM  36020 HH12 ARG L 211      85.398 154.326 242.511  1.00 88.11
H
ATOM  36021 HH21 ARG L 211      88.688 154.402 242.894  1.00 86.69
H
ATOM  36022 HH22 ARG L 211      87.416 154.944 243.451  1.00 86.69
H
ATOM  36023  N   GLY L 212      90.202 150.700 245.342  1.00 83.50
N
ATOM  36024  CA  GLY L 212      90.118 151.178 246.713  1.00 86.98
C
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ATOM  36025  C   GLY L 212      90.127 150.075 247.747  1.00 99.59
C
ATOM  36026  O   GLY L 212      89.322 150.121 248.682  1.00105.53
O
ATOM  36027  H   GLY L 212      90.996 150.698 245.012  1.00100.22
H
ATOM  36028  HA2 GLY L 212      90.874 151.761 246.889  1.00104.41
H
ATOM  36029  HA3 GLY L 212      89.298 151.685 246.820  1.00104.41
H
ATOM  36030  N   GLU L 213      91.024 149.083 247.596  1.00108.00
N
ATOM  36031  CA  GLU L 213      91.158 147.929 248.493  1.00107.66
C
ATOM  36032  C   GLU L 213      89.820 147.526 249.102  1.00118.21
C
ATOM  36033  O   GLU L 213      89.629 147.633 250.317  1.00131.64
O
ATOM  36034  CB  GLU L 213      92.164 148.218 249.615  1.00115.92
C
ATOM  36035  CG  GLU L 213      92.476 147.027 250.544  1.00111.50
C
ATOM  36036  CD  GLU L 213      93.475 146.040 249.939  1.00113.86
C
ATOM  36037  OE1 GLU L 213      94.689 146.344 249.962  1.00 98.38
O
ATOM  36038  OE2 GLU L 213      93.049 144.973 249.436  1.00109.69
O1-
ATOM  36039  H   GLU L 213      91.593 149.057 246.952  1.00129.63
H
ATOM  36040  HA  GLU L 213      91.484 147.184 247.965  1.00129.22
H
ATOM  36041  HB2 GLU L 213      93.001 148.497 249.210  1.00139.13
H
ATOM  36042  HB3 GLU L 213      91.810 148.933 250.168  1.00139.13
H
ATOM  36043  HG2 GLU L 213      92.853 147.364 251.374  1.00133.83
H
ATOM  36044  HG3 GLU L 213      91.653 146.545 250.726  1.00133.83
H
ATOM  36045  N   CYS L 214      88.896 147.070 248.266  1.00114.23
N
ATOM  36046  CA  CYS L 214      87.564 146.663 248.714  1.00146.10
C
ATOM  36047  C   CYS L 214      87.323 145.212 248.306  1.00125.35
C
ATOM  36048  O   CYS L 214      86.383 144.571 248.765  1.00128.94
O
ATOM  36049  CB  CYS L 214      86.491 147.591 248.121  1.00142.25
C
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ATOM  36050  SG  CYS L 214      84.758 147.103 248.395  1.00137.27
S
ATOM  36051  H   CYS L 214      89.015 146.982 247.419  1.00137.11
H
ATOM  36052  HA  CYS L 214      87.490 146.733 249.678  1.00175.35
H
ATOM  36053  HB2 CYS L 214      86.604 148.471 248.512  1.00170.72
H
ATOM  36054  HB3 CYS L 214      86.627 147.635 247.162  1.00170.72
H
ATOM  36055  HG  CYS L 214      84.571 146.029 247.895  1.00164.75
H
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