-in

-path

-database minirosetta_database #this is where your database lives

-file

-s hSERT1.pdb #starting pdb. Note, you must have HETATM records in your pdb

-extra_res_fa LG.params #this is the params file you made for your ligand. You must have a params file for each ligand in your pdb

-out

-mute all #this will mute all output. If you are debugging, take this flag off

-nstruct 100 #(the number of pdb files you are wanting to create)

-docking

-uniform_trans 4 #This is the initial placement step. How far from the center of the ligand do you want to sample? Sphere of radius 4 Angstrom

-randomize2 #Use random conformation from your conformation library as initial placement

-packing # repacking rotamers around the ligand, not around the whole protein!

-extrachi_cutoff 1

-ex1

-ex1aro

-ex2

-ligand

-protocol abbrev2 #repack in cycles 1 and 4

-improve_orientation 1000 #This rotates/slides the ligand around in the pocket 1000 times then chooses the best position…powerful tool to use with rotamers

-minimize_ligand #minimize ligand rotatable bonds

-harmonic_torsions 10 #minimizes the ligand with one standard deviation equal to 10 degrees

-minimize_backbone #minimize backbone around ligand (stretches of residues w/in 6 Angstroms)

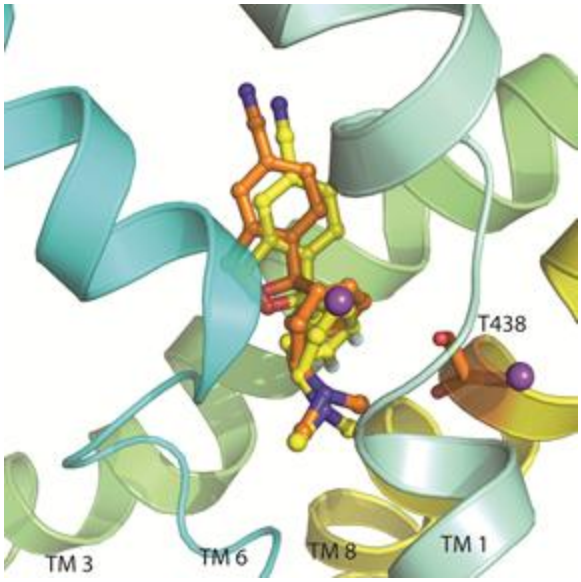
-harmonic_Calphas 0.3

-soft_rep #uses soft repulsive scoring during initial placement/searching of binding pocket. When minimizing, uses hard repulsive(high resolution scoring function)

-old_estat #only evaluate the Coulomb term between protein and ligand

-tether_ligand 0.1 #after initial placement, only allow the ligand to move by .1A

S1: Flags used for RosettaLigand docking. The command line used was: ligand_dock.linuxgccrelease @flags.txt



S2: S-citalopram/S438T-hSERT with Na+ present. Wild type hSERT complexed with S-citalopram is shown in yellow. Mutant S438T hSERT is shown in orange. Na+ ions are shown in purple. Na+ ion coordinates were taken from the LeuT crystal structure 2A65. The resulting S-citalopram/hSERT models with both NA+ ions present resulted in a 0.3 Å shift of the dimethyl-amine tail towards the Na+ two site. The resulting Rosetta score was -8.8 REU compared to the -8.1 REU for the original model. The increase in score is attributed to better packing of residues against S-citalopram. When the S438T mutation is introduced into the hSERT model including S-citalopram and Na+, the resulting energy is -8.0 REU (as compared to -8.8 REU WT with Na+ ions). The dimethyl-amine tail [c] is shifted away from residue T438. The shift of S-citalopram's dimethyl-amine tail [c] is the same result as seen without the Na+ present in the S-citalopram /hSERT S438T model. The conclusion is that the Na+ ions do not result in a significantly different docked position of S-citalopram.

S-citalopram/hSERT				Andersen's Model			
mutation	Upper	Ki	-ln(ki)	mutation	REU	Ki	-ln(ki)
A169D	-8.16441	103	-4.63473	A169D	-6.27268	103	-4.63473
A169I	-7.97825	9	-2.19722	A169I	-7.62365	9	-2.19722
A169S	-8.0122	26	-3.2581	A169S	-7.39255	26	-3.2581
A173G	-8.04718	7	-1.94591	A173G	-7.24725	7	-1.94591
A173I	-8.08233	31	-3.43399	A173I	-7.00635	31	-3.43399
A173S	-7.30289	7	-1.94591	A173S	-7.37286	7	-1.94591
A441G	-7.97508	12	-2.48491	A441G	-8.13865	12	-2.48491
C166I	-7.58802	34	-3.52636	C166I	-7.61337	34	-3.52636
F170L	-8.0881	22	-3.09104	F170L	-7.91533	22	-3.09104
F335A	-5.6068	30	-3.4012	F335A	-6.75377	30	-3.4012
F335E	-6.00514	16	-2.77259	F335E	-7.54129	16	-2.77259
F335H	-7.054	22	-3.09104	F335H	-7.58296	22	-3.09104
F335I	-6.12769	198	-5.28827	F335I	-7.06384	198	-5.28827
F335W	-6.57622	116	-4.75359	F335W	-6.9065	116	-4.75359
F335Y	-7.99716	21	-3.04452	F335Y	-7.5074	21	-3.04452
F341A	-8.04596	16	-2.77259	F341A	-6.8588	16	-2.77259
F341I	-8.25073	58	-4.06044	F341I	-6.94841	58	-4.06044
F341L	-8.01354	133	-4.89035	F341L	-7.82786	133	-4.89035
F341Y	-8.0535	1691	-7.43308	F341Y	-6.02449	1691	-7.43308
G100A	-7.15759	66	-4.18965	G100A	-7.61848	66	-4.18965
G442A	-6.66257	6	-1.79176	G442A	-6.69277	6	-1.79176
G445A	-8.13758	17	-2.83321	G445A	-7.67601	17	-2.83321
I165N	-7.46763	57	-4.04305	I165N	-7.07692	57	-4.04305
I165V	-7.99712	21	-3.04452	I165V	-7.7427	21	-3.04452
I172A	-8.08316	8	-2.07944	I172A	-6.71586	8	-2.07944
I172E	-7.67652	578	-6.35957	I172E	-7.23447	578	-6.35957
I172F	-8.64935	1687	-7.43071	I172F	-5.43139	1687	-7.43071
I172Q	-6.68379	77	-4.34381	I172Q	-6.70788	77	-4.34381
I172V	-7.36709	17	-2.83321	I172V	-7.12462	17	-2.83321
L443A	-7.966	30	-3.4012	L443A	-7.12112	30	-3.4012
L443F	-7.45638	30	-3.4012	L443F	-7.63919	30	-3.4012
L443G	-8.3491	8	-2.07944	L443G	-7.96099	8	-2.07944
L443M	-7.95557	8	-2.07944	L443M	-6.11128	8	-2.07944
L443V	-7.86685	8	-2.07944	L443V	-5.29498	8	-2.07944
N177A	-8.5494	158	-5.0626	N177A	-6.91581	158	-5.0626
N177E	-7.95533	15	-2.70805	N177E	-7.46134	15	-2.70805
N177S	-8.05422	332	-5.80513	N177S	-7.85973	332	-5.80513
S174F	-7.96368	23	-3.13549	S174F	-6.79934	23	-3.13549
S438A	-7.89379	89	-4.48864	S438A	-7.31585	89	-4.48864
S438T	-7.1424	7693	-8.94807	S438T	-7.54486	7693	-8.94807
T439A	-8.12008	4	-1.38629	T439A	-7.33229	4	-1.38629

T439S	-8.31658	35	-3.55535	T439S	-7.02994	35	-3.55535
T439V	-7.30897	20	-2.99573	T439V	-8.14342	20	-2.99573
V343N	-7.49659	8	-2.07944	V343N	-7.00492	8	-2.07944
V343S	-8.04836	7	-1.94591	V343S	-7.62298	7	-1.94591
Y175F	-7.80679	6	-1.79176	Y175F	-7.68673	6	-1.79176
Y176F	-7.72629	23	-3.13549	Y176F	-7.32217	23	-3.13549

S3: A comparison of mutations between the presented model and Andersen's models.

```
HETATM    1  C1  LG1 A   1       0.868  -1.527  -1.046  1.00  0.00
C
HETATM    2  N1  LG1 A   1      -0.462  -6.712  -1.597  1.00  0.00
N
HETATM    3  O1  LG1 A   1       2.722  -0.490  -0.074  1.00  0.00
O
HETATM    4  C2  LG1 A   1      -0.361  -1.854  -1.602  1.00  0.00
C
HETATM    5  N2  LG1 A   1       2.115   3.375   2.025  1.00  0.00
N
HETATM    6  C3  LG1 A   1      -0.696  -3.205  -1.747  1.00  0.00
C
HETATM    7  C4  LG1 A   1       0.194  -4.213  -1.332  1.00  0.00
C
HETATM    8  C5  LG1 A   1      -0.170  -5.595  -1.478  1.00  0.00
C
HETATM    9  C6  LG1 A   1       1.428  -3.869  -0.770  1.00  0.00
C
HETATM   10  C7  LG1 A   1       1.741  -2.523  -0.633  1.00  0.00
C
HETATM   11  C8  LG1 A   1       2.961  -1.916  -0.056  1.00  0.00
C
HETATM   12  C9  LG1 A   1       0.603   0.589   0.297  1.00  0.00
C
HETATM   13  C10 LG1 A   1       1.322   1.043   1.582  1.00  0.00
C
HETATM   14  C11 LG1 A   1       2.444   2.052   1.363  1.00  0.00
C
HETATM   15  C12 LG1 A   1       1.465  -0.175  -0.749  1.00  0.00
C
HETATM   16  C13 LG1 A   1       2.284   2.082  -4.375  1.00  0.00
C
HETATM   17  C14 LG1 A   1       0.993   1.649  -4.115  1.00  0.00
C
HETATM   18  C15 LG1 A   1       0.729   0.930  -2.946  1.00  0.00
C
HETATM   19  C16 LG1 A   1       1.756   0.623  -2.029  1.00  0.00
C
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HETATM   20  C17 LG1 A   1       3.053   1.095  -2.318  1.00  0.00
C
HETATM   21  C18 LG1 A   1       3.316   1.815  -3.487  1.00  0.00
C
HETATM   22  C19 LG1 A   1       1.782   4.423   0.995  1.00  0.00
C
HETATM   23  C20 LG1 A   1       3.190   3.864   2.959  1.00  0.00
C
HETATM   24  F1  LG1 A   1       2.537   2.771  -5.495  1.00  0.00
F
HETATM   25  H1  LG1 A   1      -1.062  -1.089  -1.920  1.00  0.00
H
HETATM   26  H2  LG1 A   1      -1.659  -3.466  -2.181  1.00  0.00
H
HETATM   27  H3  LG1 A   1       2.127  -4.633  -0.441  1.00  0.00
H
HETATM   28  H4  LG1 A   1       3.847  -2.129  -0.660  1.00  0.00
H
HETATM   29  H5  LG1 A   1       3.124  -2.224   0.981  1.00  0.00
H
HETATM   30  H6  LG1 A   1       0.086   1.444  -0.153  1.00  0.00
H
HETATM   31  H7  LG1 A   1      -0.199  -0.081   0.641  1.00  0.00
H
HETATM   32  H8  LG1 A   1       1.709   0.157   2.098  1.00  0.00
H
HETATM   33  H9  LG1 A   1       0.567   1.476   2.249  1.00  0.00
H
HETATM   34  H10 LG1 A   1       1.263   3.240   2.587  1.00  0.00
H
HETATM   35  H11 LG1 A   1       2.556   2.258   0.293  1.00  0.00
H
HETATM   36  H12 LG1 A   1       3.398   1.719   1.780  1.00  0.00
H
HETATM   37  H13 LG1 A   1       0.196   1.874  -4.818  1.00  0.00
H
HETATM   38  H14 LG1 A   1      -0.293   0.606  -2.762  1.00  0.00
H
HETATM   39  H15 LG1 A   1       3.881   0.918  -1.636  1.00  0.00
H
HETATM   40  H16 LG1 A   1       4.318   2.173  -3.705  1.00  0.00
H
HETATM   41  H17 LG1 A   1       0.940   4.061   0.400  1.00  0.00
H
HETATM   42  H18 LG1 A   1       2.663   4.589   0.369  1.00  0.00
H
HETATM   43  H19 LG1 A   1       1.495   5.339   1.520  1.00  0.00
H
HETATM   44  H20 LG1 A   1       4.126   3.952   2.399  1.00  0.00
H
HETATM   45  H21 LG1 A   1       3.286   3.154   3.783  1.00  0.00
H
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HETATM   46  H22 LG1 A   1       2.881   4.835   3.356  1.00  0.00
H
ATOM     47  N   MET X   1      29.616  -4.276   1.051  1.00  0.00
N
ATOM     48  CA  MET X   1      29.850  -4.037   2.470  1.00  0.00
C
ATOM     49  C   MET X   1      30.968  -4.924   3.001  1.00  0.00
C
ATOM     50  O   MET X   1      31.212  -6.012   2.478  1.00  0.00
O
ATOM     51  CB  MET X   1      28.566  -4.274   3.263  1.00  0.00
C
ATOM     52  CG  MET X   1      27.407  -3.368   2.871  1.00  0.00
C
ATOM     53  SD  MET X   1      27.696  -1.641   3.305  1.00  0.00
S
ATOM     54  CE  MET X   1      28.048  -0.942   1.694  1.00  0.00
C
ATOM     55 1H   MET X   1      28.720  -4.590   0.738  1.00  0.00
H
ATOM     56 2H   MET X   1      29.724  -3.530   0.394  1.00  0.00
H
ATOM     57 3H   MET X   1      30.164  -4.954   0.561  1.00  0.00
H
ATOM     58  HA  MET X   1      30.171  -3.008   2.625  1.00  0.00
H
ATOM     59 1HB  MET X   1      28.284  -5.314   3.107  1.00  0.00
H
ATOM     60 2HB  MET X   1      28.809  -4.116   4.315  1.00  0.00
H
ATOM     61 1HG  MET X   1      27.264  -3.448   1.794  1.00  0.00
H
ATOM     62 2HG  MET X   1      26.512  -3.721   3.382  1.00  0.00
H
ATOM     63 1HE  MET X   1      28.248   0.124   1.795  1.00  0.00
H
ATOM     64 2HE  MET X   1      28.921  -1.437   1.265  1.00  0.00
H
ATOM     65 3HE  MET X   1      27.190  -1.089   1.037  1.00  0.00
H
ATOM     66  N   GLU X   2      31.645  -4.453   4.043  1.00  0.00
N
ATOM     67  CA  GLU X   2      32.686  -5.236   4.695  1.00  0.00
C
ATOM     68  C   GLU X   2      32.145  -5.967   5.917  1.00  0.00
C
ATOM     69  O   GLU X   2      32.881  -6.665   6.614  1.00  0.00
O
ATOM     70  CB  GLU X   2      33.859  -4.339   5.099  1.00  0.00
C
ATOM     71  CG  GLU X   2      34.611  -3.723   3.928  1.00  0.00
C
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ATOM     72  CD  GLU X   2      35.731  -2.839   4.401  1.00  0.00
C
ATOM     73  OE1 GLU X   2      35.913  -2.728   5.589  1.00  0.00
O
ATOM     74  OE2 GLU X   2      36.475  -2.362   3.577  1.00  0.00
O
ATOM     75  H   GLU X   2      31.432  -3.529   4.391  1.00  0.00
H
ATOM     76  HA  GLU X   2      33.053  -6.004   4.013  1.00  0.00
H
ATOM     77 1HB  GLU X   2      33.450  -3.543   5.724  1.00  0.00
H
ATOM     78 2HB  GLU X   2      34.541  -4.951   5.687  1.00  0.00
H
ATOM     79 1HG  GLU X   2      35.004  -4.462   3.228  1.00  0.00
H
ATOM     80 2HG  GLU X   2      33.857  -3.117   3.428  1.00  0.00
H
ATOM     81  N   THR X   3      30.850  -5.802   6.173  1.00  0.00
N
ATOM     82  CA  THR X   3      30.196  -6.486   7.280  1.00  0.00
C
ATOM     83  C   THR X   3      30.401  -7.993   7.196  1.00  0.00
C
ATOM     84  O   THR X   3      29.971  -8.636   6.239  1.00  0.00
O
ATOM     85  CB  THR X   3      28.686  -6.187   7.316  1.00  0.00
C
ATOM     86  CG2 THR X   3      28.046  -6.824   8.541  1.00  0.00
C
ATOM     87  OG1 THR X   3      28.478  -4.769   7.356  1.00  0.00
O
ATOM     88  H   THR X   3      30.307  -5.186   5.584  1.00  0.00
H
ATOM     89  HA  THR X   3      30.639  -6.167   8.223  1.00  0.00
H
ATOM     90  HB  THR X   3      28.222  -6.588   6.415  1.00  0.00
H
ATOM     91  HG1 THR X   3      27.535  -4.585   7.379  1.00  0.00
H
ATOM     92 1HG2 THR X   3      26.979  -6.602   8.549  1.00  0.00
H
ATOM     93 2HG2 THR X   3      28.193  -7.903   8.507  1.00  0.00
H
ATOM     94 3HG2 THR X   3      28.507  -6.422   9.442  1.00  0.00
H
ATOM     95  N   THR X   4      31.063  -8.552   8.205  1.00  0.00
N
ATOM     96  CA  THR X   4      31.305  -9.988   8.260  1.00  0.00
C
ATOM     97  C   THR X   4      29.997 -10.765   8.312  1.00  0.00
C
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ATOM     98  O   THR X   4      29.699 -11.564   7.423  1.00  0.00
O
ATOM     99  CB  THR X   4      32.166 -10.371   9.477  1.00  0.00
C
ATOM    100  CG2 THR X   4      32.281 -11.884   9.595  1.00  0.00
C
ATOM    101  OG1 THR X   4      33.476  -9.805   9.336  1.00  0.00
O
ATOM    102  H   THR X   4      31.407  -7.965   8.952  1.00  0.00
H
ATOM    103  HA  THR X   4      31.820 -10.311   7.354  1.00  0.00
H
ATOM    104  HB  THR X   4      31.702  -9.972  10.379  1.00  0.00
H
ATOM    105  HG1 THR X   4      33.406  -8.849   9.283  1.00  0.00
H
ATOM    106 1HG2 THR X   4      32.893 -12.134  10.461  1.00  0.00
H
ATOM    107 2HG2 THR X   4      31.287 -12.315   9.713  1.00  0.00
H
ATOM    108 3HG2 THR X   4      32.745 -12.284   8.694  1.00  0.00
H
ATOM    109  N   PRO X   5      29.215 -10.529   9.362  1.00  0.00
N
ATOM    110  CA  PRO X   5      27.947 -11.228   9.546  1.00  0.00
C
ATOM    111  C   PRO X   5      27.095 -11.163   8.287  1.00  0.00
C
ATOM    112  O   PRO X   5      26.267 -12.043   8.041  1.00  0.00
O
ATOM    113  CB  PRO X   5      27.287 -10.502  10.729  1.00  0.00
C
ATOM    114  CG  PRO X   5      28.431  -9.948  11.532  1.00  0.00
C
ATOM    115  CD  PRO X   5      29.356  -9.388  10.274  1.00  0.00
C
ATOM    116  HA  PRO X   5      28.112 -12.185   9.764  1.00  0.00
H
ATOM    117 1HB  PRO X   5      26.899  -9.793  10.301  1.00  0.00
H
ATOM    118 2HB  PRO X   5      26.956 -11.171  11.171  1.00  0.00
H
ATOM    119 1HG  PRO X   5      28.741  -9.271  11.127  1.00  0.00
H
ATOM    120 2HG  PRO X   5      28.244 -10.109  12.437  1.00  0.00
H
ATOM    121 1HD  PRO X   5      29.672  -8.685   9.713  1.00  0.00
H
ATOM    122 2HD  PRO X   5      29.947  -9.721  10.942  1.00  0.00
H
ATOM    123  N   LEU X   6      27.298 -10.119   7.491  1.00  0.00
N
```

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ATOM    124  CA  LEU X   6      26.505  -9.905   6.285  1.00  0.00
C
ATOM    125  C   LEU X   6      26.978 -10.805   5.151  1.00  0.00
C
ATOM    126  O   LEU X   6      26.173 -11.447   4.477  1.00  0.00
O
ATOM    127  CB  LEU X   6      26.570  -8.431   5.863  1.00  0.00
C
ATOM    128  CG  LEU X   6      25.608  -8.033   4.736  1.00  0.00
C
ATOM    129  CD1 LEU X   6      24.170  -8.302   5.158  1.00  0.00
C
ATOM    130  CD2 LEU X   6      25.803  -6.562   4.397  1.00  0.00
C
ATOM    131  H   LEU X   6      28.021  -9.455   7.728  1.00  0.00
H
ATOM    132  HA  LEU X   6      25.466 -10.171   6.480  1.00  0.00
H
ATOM    133 1HB  LEU X   6      26.266  -7.964   6.797  1.00  0.00
H
ATOM    134 2HB  LEU X   6      27.588  -8.127   5.619  1.00  0.00
H
ATOM    135  HG  LEU X   6      25.879  -8.617   3.856  1.00  0.00
H
ATOM    136 1HD1 LEU X   6      23.494  -8.016   4.352  1.00  0.00
H
ATOM    137 2HD1 LEU X   6      24.047  -9.364   5.374  1.00  0.00
H
ATOM    138 3HD1 LEU X   6      23.938  -7.721   6.050  1.00  0.00
H
ATOM    139 1HD2 LEU X   6      25.120  -6.280   3.596  1.00  0.00
H
ATOM    140 2HD2 LEU X   6      25.600  -5.955   5.279  1.00  0.00
H
ATOM    141 3HD2 LEU X   6      26.831  -6.396   4.072  1.00  0.00
H
ATOM    142  N   ASN X   7      28.290 -10.843   4.943  1.00  0.00
N
ATOM    143  CA  ASN X   7      28.863 -11.545   3.801  1.00  0.00
C
ATOM    144  C   ASN X   7      28.994 -13.038   4.078  1.00  0.00
C
ATOM    145  O   ASN X   7      29.099 -13.842   3.154  1.00  0.00
O
ATOM    146  CB  ASN X   7      30.211 -10.964   3.414  1.00  0.00
C
ATOM    147  CG  ASN X   7      30.135  -9.560   2.883  1.00  0.00
C
ATOM    148  ND2 ASN X   7      31.239  -8.863   2.966  1.00  0.00
N
ATOM    149  OD1 ASN X   7      29.108  -9.136   2.336  1.00  0.00
O
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ATOM    150  H   ASN X   7      28.905 -10.375   5.592  1.00  0.00
H
ATOM    151  HA  ASN X   7      28.203 -11.448   2.938  1.00  0.00
H
ATOM    152 1HB  ASN X   7      31.068 -11.046   4.083  1.00  0.00
H
ATOM    153 2HB  ASN X   7      30.338 -11.649   2.576  1.00  0.00
H
ATOM    154 1HD2 ASN X   7      31.262  -7.920   2.631  1.00  0.00
H
ATOM    155 2HD2 ASN X   7      32.059  -9.272   3.364  1.00  0.00
H
ATOM    156  N   SER X   8      28.987 -13.399   5.357  1.00  0.00
N
ATOM    157  CA  SER X   8      29.140 -14.790   5.759  1.00  0.00
C
ATOM    158  C   SER X   8      27.828 -15.553   5.614  1.00  0.00
C
ATOM    159  O   SER X   8      26.817 -15.187   6.214  1.00  0.00
O
ATOM    160  CB  SER X   8      29.639 -14.868   7.189  1.00  0.00
C
ATOM    161  OG  SER X   8      29.608 -16.177   7.687  1.00  0.00
O
ATOM    162  H   SER X   8      28.871 -12.691   6.067  1.00  0.00
H
ATOM    163  HA  SER X   8      29.934 -15.311   5.223  1.00  0.00
H
ATOM    164 1HB  SER X   8      30.667 -14.502   7.219  1.00  0.00
H
ATOM    165 2HB  SER X   8      29.011 -14.234   7.813  1.00  0.00
H
ATOM    166  HG  SER X   8      30.165 -16.739   7.144  1.00  0.00
H
ATOM    167  N   GLN X   9      27.851 -16.613   4.817  1.00  0.00
N
ATOM    168  CA  GLN X   9      26.665 -17.430   4.590  1.00  0.00
C
ATOM    169  C   GLN X   9      26.212 -18.112   5.874  1.00  0.00
C
ATOM    170  O   GLN X   9      25.014 -18.287   6.106  1.00  0.00
O
ATOM    171  CB  GLN X   9      26.937 -18.483   3.513  1.00  0.00
C
ATOM    172  CG  GLN X   9      27.092 -17.916   2.112  1.00  0.00
C
ATOM    173  CD  GLN X   9      27.451 -18.981   1.093  1.00  0.00
C
ATOM    174  NE2 GLN X   9      27.538 -18.584  -0.171  1.00  0.00
N
ATOM    175  OE1 GLN X   9      27.655 -20.148   1.439  1.00  0.00
O
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ATOM    176  H   GLN X   9      28.714 -16.862   4.355  1.00  0.00
H
ATOM    177  HA  GLN X   9      25.839 -16.793   4.269  1.00  0.00
H
ATOM    178 1HB  GLN X   9      27.850 -19.002   3.804  1.00  0.00
H
ATOM    179 2HB  GLN X   9      26.101 -19.181   3.537  1.00  0.00
H
ATOM    180 1HG  GLN X   9      26.352 -17.256   1.658  1.00  0.00
H
ATOM    181 2HG  GLN X   9      27.991 -17.346   2.347  1.00  0.00
H
ATOM    182 1HE2 GLN X   9      27.773 -19.242  -0.888  1.00  0.00
H
ATOM    183 2HE2 GLN X   9      27.366 -17.627  -0.408  1.00  0.00
H
ATOM    184  N   LYS X  10      27.172 -18.497   6.705  1.00  0.00
N
ATOM    185  CA  LYS X  10      26.875 -19.157   7.971  1.00  0.00
C
ATOM    186  C   LYS X  10      26.123 -18.227   8.914  1.00  0.00
C
ATOM    187  O   LYS X  10      25.186 -18.643   9.595  1.00  0.00
O
ATOM    188  CB  LYS X  10      28.164 -19.648   8.634  1.00  0.00
C
ATOM    189  CG  LYS X  10      28.832 -20.815   7.922  1.00  0.00
C
ATOM    190  CD  LYS X  10      30.099 -21.250   8.640  1.00  0.00
C
ATOM    191  CE  LYS X  10      30.784 -22.398   7.913  1.00  0.00
C
ATOM    192  NZ  LYS X  10      32.041 -22.817   8.590  1.00  0.00
N
ATOM    193  H   LYS X  10      28.136 -18.328   6.454  1.00  0.00
H
ATOM    194  HA  LYS X  10      26.224 -20.015   7.796  1.00  0.00
H
ATOM    195 1HB  LYS X  10      28.849 -18.802   8.666  1.00  0.00
H
ATOM    196 2HB  LYS X  10      27.906 -19.945   9.651  1.00  0.00
H
ATOM    197 1HG  LYS X  10      28.129 -21.649   7.887  1.00  0.00
H
ATOM    198 2HG  LYS X  10      29.076 -20.507   6.905  1.00  0.00
H
ATOM    199 1HD  LYS X  10      30.779 -20.397   8.693  1.00  0.00
H
ATOM    200 2HD  LYS X  10      29.836 -21.566   9.649  1.00  0.00
H
ATOM    201 1HE  LYS X  10      30.094 -23.241   7.878  1.00  0.00
H
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ATOM    202 2HE  LYS X  10      31.010 -22.073   6.898  1.00  0.00
H
ATOM    203 1HZ  LYS X  10      32.463 -23.578   8.079  1.00  0.00
H
ATOM    204 2HZ  LYS X  10      32.683 -22.036   8.622  1.00  0.00
H
ATOM    205 3HZ  LYS X  10      31.833 -23.118   9.532  1.00  0.00
H
ATOM    206  N   GLN X  11      26.532 -16.964   8.943  1.00  0.00
N
ATOM    207  CA  GLN X  11      25.914 -15.976   9.821  1.00  0.00
C
ATOM    208  C   GLN X  11      24.530 -15.582   9.320  1.00  0.00
C
ATOM    209  O   GLN X  11      23.658 -15.213  10.106  1.00  0.00
O
ATOM    210  CB  GLN X  11      26.797 -14.732   9.933  1.00  0.00
C
ATOM    211  CG  GLN X  11      28.142 -14.979  10.596  1.00  0.00
C
ATOM    212  CD  GLN X  11      28.001 -15.557  11.991  1.00  0.00
C
ATOM    213  NE2 GLN X  11      28.786 -16.589  12.284  1.00  0.00
N
ATOM    214  OE1 GLN X  11      27.199 -15.080  12.798  1.00  0.00
O
ATOM    215  H   GLN X  11      27.291 -16.680   8.340  1.00  0.00
H
ATOM    216  HA  GLN X  11      25.773 -16.406  10.813  1.00  0.00
H
ATOM    217 1HB  GLN X  11      26.948 -14.360   8.919  1.00  0.00
H
ATOM    218 2HB  GLN X  11      26.234 -13.996  10.508  1.00  0.00
H
ATOM    219 1HG  GLN X  11      28.958 -15.502  10.097  1.00  0.00
H
ATOM    220 2HG  GLN X  11      28.391 -13.920  10.684  1.00  0.00
H
ATOM    221 1HE2 GLN X  11      28.738 -17.012  13.189  1.00  0.00
H
ATOM    222 2HE2 GLN X  11      29.424 -16.943  11.600  1.00  0.00
H
ATOM    223  N   LEU X  12      24.338 -15.660   8.009  1.00  0.00
N
ATOM    224  CA  LEU X  12      23.041 -15.370   7.406  1.00  0.00
C
ATOM    225  C   LEU X  12      22.011 -16.427   7.779  1.00  0.00
C
ATOM    226  O   LEU X  12      20.891 -16.103   8.175  1.00  0.00
O
ATOM    227  CB  LEU X  12      23.176 -15.271   5.881  1.00  0.00
C
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ATOM    228  CG  LEU X  12      23.906 -14.022   5.371  1.00  0.00
C
ATOM    229  CD1 LEU X  12      24.204 -14.162   3.885  1.00  0.00
C
ATOM    230  CD2 LEU X  12      23.055 -12.790   5.636  1.00  0.00
C
ATOM    231  H   LEU X  12      25.109 -15.926   7.413  1.00  0.00
H
ATOM    232  HA  LEU X  12      22.663 -14.423   7.789  1.00  0.00
H
ATOM    233 1HB  LEU X  12      23.780 -16.158   5.699  1.00  0.00
H
ATOM    234 2HB  LEU X  12      22.212 -15.378   5.384  1.00  0.00
H
ATOM    235  HG  LEU X  12      24.824 -13.924   5.952  1.00  0.00
H
ATOM    236 1HD1 LEU X  12      24.723 -13.272   3.532  1.00  0.00
H
ATOM    237 2HD1 LEU X  12      24.835 -15.037   3.721  1.00  0.00
H
ATOM    238 3HD1 LEU X  12      23.270 -14.279   3.336  1.00  0.00
H
ATOM    239 1HD2 LEU X  12      23.574 -11.904   5.273  1.00  0.00
H
ATOM    240 2HD2 LEU X  12      22.100 -12.889   5.119  1.00  0.00
H
ATOM    241 3HD2 LEU X  12      22.877 -12.694   6.708  1.00  0.00
H
ATOM    242  N   SER X  13      22.395 -17.692   7.650  1.00  0.00
N
ATOM    243  CA  SER X  13      21.493 -18.800   7.947  1.00  0.00
C
ATOM    244  C   SER X  13      21.425 -19.070   9.444  1.00  0.00
C
ATOM    245  O   SER X  13      20.572 -19.826   9.908  1.00  0.00
O
ATOM    246  CB  SER X  13      21.936 -20.046   7.205  1.00  0.00
C
ATOM    247  OG  SER X  13      23.150 -20.546   7.694  1.00  0.00
O
ATOM    248  H   SER X  13      23.335 -17.892   7.339  1.00  0.00
H
ATOM    249  HA  SER X  13      20.488 -18.659   7.549  1.00  0.00
H
ATOM    250 1HB  SER X  13      21.168 -20.810   7.316  1.00  0.00
H
ATOM    251 2HB  SER X  13      22.054 -19.802   6.151  1.00  0.00
H
ATOM    252  HG  SER X  13      23.053 -20.770   8.624  1.00  0.00
H
ATOM    253  N   ALA X  14      22.327 -18.446  10.194  1.00  0.00
N
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ATOM    254  CA  ALA X  14      22.359 -18.604  11.642  1.00  0.00
C
ATOM    255  C   ALA X  14      20.991 -18.332  12.257  1.00  0.00
C
ATOM    256  O   ALA X  14      20.643 -18.897  13.294  1.00  0.00
O
ATOM    257  CB  ALA X  14      23.408 -17.687  12.253  1.00  0.00
C
ATOM    258  H   ALA X  14      23.009 -17.848   9.749  1.00  0.00
H
ATOM    259  HA  ALA X  14      22.620 -19.636  11.876  1.00  0.00
H
ATOM    260 1HB  ALA X  14      23.419 -17.816  13.334  1.00  0.00
H
ATOM    261 2HB  ALA X  14      24.389 -17.936  11.847  1.00  0.00
H
ATOM    262 3HB  ALA X  14      23.169 -16.651  12.014  1.00  0.00
H
ATOM    263  N   CYS X  15      20.219 -17.467  11.611  1.00  0.00
N
ATOM    264  CA  CYS X  15      18.899 -17.096  12.106  1.00  0.00
C
ATOM    265  C   CYS X  15      17.985 -18.310  12.205  1.00  0.00
C
ATOM    266  O   CYS X  15      17.169 -18.412  13.122  1.00  0.00
O
ATOM    267  CB  CYS X  15      18.396 -16.129  11.034  1.00  0.00
C
ATOM    268  SG  CYS X  15      19.281 -14.552  10.972  1.00  0.00
S
ATOM    269  H   CYS X  15      20.556 -17.055  10.753  1.00  0.00
H
ATOM    270  HA  CYS X  15      18.927 -16.573  13.061  1.00  0.00
H
ATOM    271 1HB  CYS X  15      18.503 -16.575  10.045  1.00  0.00
H
ATOM    272 2HB  CYS X  15      17.350 -15.881  11.211  1.00  0.00
H
ATOM    273  HG  CYS X  15      18.575 -14.038   9.969  1.00  0.00
H
ATOM    274  N   GLU X  16      18.126 -19.228  11.255  1.00  0.00
N
ATOM    275  CA  GLU X  16      17.344 -20.459  11.259  1.00  0.00
C
ATOM    276  C   GLU X  16      18.035 -21.548  12.071  1.00  0.00
C
ATOM    277  O   GLU X  16      17.382 -22.329  12.764  1.00  0.00
O
ATOM    278  CB  GLU X  16      17.101 -20.943   9.827  1.00  0.00
C
ATOM    279  CG  GLU X  16      16.305 -22.237   9.728  1.00  0.00
C
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ATOM    280  CD  GLU X  16      16.038 -22.604   8.295  1.00  0.00
C
ATOM    281  OE1 GLU X  16      16.460 -21.879   7.426  1.00  0.00
O
ATOM    282  OE2 GLU X  16      15.509 -23.666   8.065  1.00  0.00
O
ATOM    283  H   GLU X  16      18.792 -19.069  10.512  1.00  0.00
H
ATOM    284  HA  GLU X  16      16.379 -20.282  11.734  1.00  0.00
H
ATOM    285 1HB  GLU X  16      16.566 -20.147   9.309  1.00  0.00
H
ATOM    286 2HB  GLU X  16      18.079 -21.082   9.368  1.00  0.00
H
ATOM    287 1HG  GLU X  16      16.779 -23.077  10.235  1.00  0.00
H
ATOM    288 2HG  GLU X  16      15.365 -21.998  10.223  1.00  0.00
H
ATOM    289  N   ASP X  17      19.361 -21.595  11.981  1.00  0.00
N
ATOM    290  CA  ASP X  17      20.141 -22.605  12.687  1.00  0.00
C
ATOM    291  C   ASP X  17      19.839 -22.587  14.179  1.00  0.00
C
ATOM    292  O   ASP X  17      19.611 -23.632  14.788  1.00  0.00
O
ATOM    293  CB  ASP X  17      21.638 -22.388  12.451  1.00  0.00
C
ATOM    294  CG  ASP X  17      22.106 -22.718  11.040  1.00  0.00
C
ATOM    295  OD1 ASP X  17      21.367 -23.352  10.322  1.00  0.00
O
ATOM    296  OD2 ASP X  17      23.122 -22.202  10.637  1.00  0.00
O
ATOM    297  H   ASP X  17      19.839 -20.915  11.409  1.00  0.00
H
ATOM    298  HA  ASP X  17      19.872 -23.599  12.327  1.00  0.00
H
ATOM    299 1HB  ASP X  17      21.981 -21.389  12.722  1.00  0.00
H
ATOM    300 2HB  ASP X  17      22.049 -23.117  13.150  1.00  0.00
H
ATOM    301  N   GLY X  18      19.844 -21.396  14.765  1.00  0.00
N
ATOM    302  CA  GLY X  18      19.585 -21.241  16.192  1.00  0.00
C
ATOM    303  C   GLY X  18      18.091 -21.182  16.475  1.00  0.00
C
ATOM    304  O   GLY X  18      17.304 -20.758  15.627  1.00  0.00
O
ATOM    305  H   GLY X  18      20.033 -20.574  14.208  1.00  0.00
H
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ATOM    306 1HA  GLY X  18      20.015 -22.089  16.726  1.00  0.00
H
ATOM    307 2HA  GLY X  18      20.050 -20.320  16.541  1.00  0.00
H
ATOM    308  N   GLU X  19      17.703 -21.608  17.673  1.00  0.00
N
ATOM    309  CA  GLU X  19      16.298 -21.622  18.065  1.00  0.00
C
ATOM    310  C   GLU X  19      15.803 -20.215  18.380  1.00  0.00
C
ATOM    311  O   GLU X  19      14.751 -19.797  17.895  1.00  0.00
O
ATOM    312  CB  GLU X  19      16.088 -22.537  19.275  1.00  0.00
C
ATOM    313  CG  GLU X  19      16.267 -24.020  18.979  1.00  0.00
C
ATOM    314  CD  GLU X  19      16.139 -24.845  20.230  1.00  0.00
C
ATOM    315  OE1 GLU X  19      15.979 -24.274  21.281  1.00  0.00
O
ATOM    316  OE2 GLU X  19      16.092 -26.047  20.122  1.00  0.00
O
ATOM    317  H   GLU X  19      18.400 -21.931  18.330  1.00  0.00
H
ATOM    318  HA  GLU X  19      15.687 -21.990  17.240  1.00  0.00
H
ATOM    319 1HB  GLU X  19      16.807 -22.230  20.034  1.00  0.00
H
ATOM    320 2HB  GLU X  19      15.076 -22.359  19.637  1.00  0.00
H
ATOM    321 1HG  GLU X  19      15.578 -24.397  18.224  1.00  0.00
H
ATOM    322 2HG  GLU X  19      17.288 -24.085  18.603  1.00  0.00
H
ATOM    323  N   ASP X  20      16.565 -19.492  19.192  1.00  0.00
N
ATOM    324  CA  ASP X  20      16.131 -18.196  19.695  1.00  0.00
C
ATOM    325  C   ASP X  20      16.977 -17.069  19.117  1.00  0.00
C
ATOM    326  O   ASP X  20      18.116 -16.854  19.535  1.00  0.00
O
ATOM    327  CB  ASP X  20      16.191 -18.167  21.224  1.00  0.00
C
ATOM    328  CG  ASP X  20      15.716 -16.862  21.848  1.00  0.00
C
ATOM    329  OD1 ASP X  20      15.419 -15.948  21.115  1.00  0.00
O
ATOM    330  OD2 ASP X  20      15.503 -16.836  23.037  1.00  0.00
O
ATOM    331  H   ASP X  20      17.468 -19.850  19.468  1.00  0.00
H
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ATOM    332  HA  ASP X  20      15.104 -18.004  19.383  1.00  0.00
H
ATOM    333 1HB  ASP X  20      15.674 -19.002  21.696  1.00  0.00
H
ATOM    334 2HB  ASP X  20      17.266 -18.271  21.376  1.00  0.00
H
ATOM    335  N   CYS X  21      16.414 -16.350  18.150  1.00  0.00
N
ATOM    336  CA  CYS X  21      17.159 -15.330  17.421  1.00  0.00
C
ATOM    337  C   CYS X  21      17.792 -14.324  18.371  1.00  0.00
C
ATOM    338  O   CYS X  21      18.954 -13.948  18.209  1.00  0.00
O
ATOM    339  CB  CYS X  21      16.076 -14.663  16.575  1.00  0.00
C
ATOM    340  SG  CYS X  21      15.319 -15.743  15.337  1.00  0.00
S
ATOM    341  H   CYS X  21      15.446 -16.515  17.915  1.00  0.00
H
ATOM    342  HA  CYS X  21      17.918 -15.741  16.756  1.00  0.00
H
ATOM    343 1HB  CYS X  21      15.261 -14.314  17.209  1.00  0.00
H
ATOM    344 2HB  CYS X  21      16.495 -13.820  16.024  1.00  0.00
H
ATOM    345  HG  CYS X  21      14.484 -14.832  14.850  1.00  0.00
H
ATOM    346  N   GLN X  22      17.024 -13.889  19.364  1.00  0.00
N
ATOM    347  CA  GLN X  22      17.490 -12.882  20.308  1.00  0.00
C
ATOM    348  C   GLN X  22      18.684 -13.388  21.110  1.00  0.00
C
ATOM    349  O   GLN X  22      19.534 -12.608  21.535  1.00  0.00
O
ATOM    350  CB  GLN X  22      16.362 -12.477  21.261  1.00  0.00
C
ATOM    351  CG  GLN X  22      15.254 -11.670  20.607  1.00  0.00
C
ATOM    352  CD  GLN X  22      14.107 -11.384  21.556  1.00  0.00
C
ATOM    353  NE2 GLN X  22      13.117 -10.638  21.080  1.00  0.00
N
ATOM    354  OE1 GLN X  22      14.109 -11.832  22.706  1.00  0.00
O
ATOM    355  H   GLN X  22      16.093 -14.267  19.467  1.00  0.00
H
ATOM    356  HA  GLN X  22      17.833 -12.002  19.764  1.00  0.00
H
ATOM    357 1HB  GLN X  22      15.951 -13.400  21.672  1.00  0.00
H
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ATOM    358 2HB  GLN X  22      16.818 -11.896  22.060  1.00  0.00
H
ATOM    359 1HG  GLN X  22      15.446 -10.763  20.032  1.00  0.00
H
ATOM    360 2HG  GLN X  22      14.951 -12.469  19.930  1.00  0.00
H
ATOM    361 1HE2 GLN X  22      12.332 -10.417  21.661  1.00  0.00
H
ATOM    362 2HE2 GLN X  22      13.154 -10.296  20.141  1.00  0.00
H
ATOM    363  N   GLU X  23      18.739 -14.699  21.312  1.00  0.00
N
ATOM    364  CA  GLU X  23      19.774 -15.303  22.142  1.00  0.00
C
ATOM    365  C   GLU X  23      21.082 -15.454  21.373  1.00  0.00
C
ATOM    366  O   GLU X  23      22.149 -15.619  21.964  1.00  0.00
O
ATOM    367  CB  GLU X  23      19.315 -16.665  22.667  1.00  0.00
C
ATOM    368  CG  GLU X  23      20.215 -17.262  23.739  1.00  0.00
C
ATOM    369  CD  GLU X  23      19.660 -18.559  24.259  1.00  0.00
C
ATOM    370  OE1 GLU X  23      18.580 -18.547  24.797  1.00  0.00
O
ATOM    371  OE2 GLU X  23      20.262 -19.579  24.016  1.00  0.00
O
ATOM    372  H   GLU X  23      18.046 -15.293  20.880  1.00  0.00
H
ATOM    373  HA  GLU X  23      19.990 -14.656  22.993  1.00  0.00
H
ATOM    374 1HB  GLU X  23      18.311 -16.528  23.071  1.00  0.00
H
ATOM    375 2HB  GLU X  23      19.274 -17.339  21.812  1.00  0.00
H
ATOM    376 1HG  GLU X  23      21.242 -17.413  23.409  1.00  0.00
H
ATOM    377 2HG  GLU X  23      20.197 -16.517  24.533  1.00  0.00
H
ATOM    378  N   ASN X  24      20.991 -15.395  20.048  1.00  0.00
N
ATOM    379  CA  ASN X  24      22.156 -15.583  19.191  1.00  0.00
C
ATOM    380  C   ASN X  24      23.068 -14.366  19.229  1.00  0.00
C
ATOM    381  O   ASN X  24      24.194 -14.403  18.727  1.00  0.00
O
ATOM    382  CB  ASN X  24      21.749 -15.888  17.761  1.00  0.00
C
ATOM    383  CG  ASN X  24      21.165 -17.262  17.578  1.00  0.00
C
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ATOM    384  ND2 ASN X  24      20.487 -17.446  16.475  1.00  0.00
N
ATOM    385  OD1 ASN X  24      21.390 -18.166  18.391  1.00  0.00
O
ATOM    386  H   ASN X  24      20.093 -15.216  19.624  1.00  0.00
H
ATOM    387  HA  ASN X  24      22.749 -16.425  19.552  1.00  0.00
H
ATOM    388 1HB  ASN X  24      21.166 -15.172  17.181  1.00  0.00
H
ATOM    389 2HB  ASN X  24      22.779 -15.893  17.401  1.00  0.00
H
ATOM    390 1HD2 ASN X  24      20.070 -18.334  16.286  1.00  0.00
H
ATOM    391 2HD2 ASN X  24      20.386 -16.697  15.820  1.00  0.00
H
ATOM    392  N   GLY X  25      22.581 -13.282  19.823  1.00  0.00
N
ATOM    393  CA  GLY X  25      23.357 -12.054  19.939  1.00  0.00
C
ATOM    394  C   GLY X  25      23.231 -11.202  18.685  1.00  0.00
C
ATOM    395  O   GLY X  25      24.142 -10.450  18.337  1.00  0.00
O
ATOM    396  H   GLY X  25      21.647 -13.310  20.205  1.00  0.00
H
ATOM    397 1HA  GLY X  25      22.994 -11.483  20.794  1.00  0.00
H
ATOM    398 2HA  GLY X  25      24.405 -12.308  20.092  1.00  0.00
H
ATOM    399  N   VAL X  26      22.094 -11.322  18.004  1.00  0.00
N
ATOM    400  CA  VAL X  26      21.856 -10.587  16.769  1.00  0.00
C
ATOM    401  C   VAL X  26      20.622  -9.703  16.884  1.00  0.00
C
ATOM    402  O   VAL X  26      20.424  -8.787  16.084  1.00  0.00
O
ATOM    403  CB  VAL X  26      21.686 -11.537  15.570  1.00  0.00
C
ATOM    404  CG1 VAL X  26      22.955 -12.349  15.348  1.00  0.00
C
ATOM    405  CG2 VAL X  26      20.497 -12.459  15.784  1.00  0.00
C
ATOM    406  H   VAL X  26      21.375 -11.941  18.353  1.00  0.00
H
ATOM    407  HA  VAL X  26      22.674  -9.898  16.554  1.00  0.00
H
ATOM    408  HB  VAL X  26      21.473 -10.946  14.677  1.00  0.00
H
ATOM    409 1HG1 VAL X  26      22.817 -13.013  14.495  1.00  0.00
H
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ATOM    410 2HG1 VAL X  26      23.788 -11.673  15.151  1.00  0.00
H
ATOM    411 3HG1 VAL X  26      23.168 -12.939  16.239  1.00  0.00
H
ATOM    412 1HG2 VAL X  26      20.391 -13.124  14.926  1.00  0.00
H
ATOM    413 2HG2 VAL X  26      20.655 -13.053  16.686  1.00  0.00
H
ATOM    414 3HG2 VAL X  26      19.590 -11.864  15.896  1.00  0.00
H
ATOM    415  N   LEU X  27      19.792  -9.982  17.884  1.00  0.00
N
ATOM    416  CA  LEU X  27      18.623  -9.155  18.165  1.00  0.00
C
ATOM    417  C   LEU X  27      18.535  -8.804  19.642  1.00  0.00
C
ATOM    418  O   LEU X  27      19.118  -9.486  20.487  1.00  0.00
O
ATOM    419  CB  LEU X  27      17.345  -9.872  17.711  1.00  0.00
C
ATOM    420  CG  LEU X  27      17.232 -10.108  16.199  1.00  0.00
C
ATOM    421  CD1 LEU X  27      16.014 -10.972  15.896  1.00  0.00
C
ATOM    422  CD2 LEU X  27      17.137  -8.772  15.479  1.00  0.00
C
ATOM    423  H   LEU X  27      19.975 -10.788  18.464  1.00  0.00
H
ATOM    424  HA  LEU X  27      18.707  -8.211  17.628  1.00  0.00
H
ATOM    425 1HB  LEU X  27      17.481 -10.820  18.228  1.00  0.00
H
ATOM    426 2HB  LEU X  27      16.451  -9.378  18.087  1.00  0.00
H
ATOM    427  HG  LEU X  27      18.153 -10.596  15.877  1.00  0.00
H
ATOM    428 1HD1 LEU X  27      15.942 -11.134  14.820  1.00  0.00
H
ATOM    429 2HD1 LEU X  27      16.114 -11.932  16.402  1.00  0.00
H
ATOM    430 3HD1 LEU X  27      15.115 -10.468  16.248  1.00  0.00
H
ATOM    431 1HD2 LEU X  27      17.057  -8.942  14.405  1.00  0.00
H
ATOM    432 2HD2 LEU X  27      16.257  -8.232  15.829  1.00  0.00
H
ATOM    433 3HD2 LEU X  27      18.030  -8.182  15.689  1.00  0.00
H
ATOM    434  N   GLN X  28      17.805  -7.740  19.952  1.00  0.00
N
ATOM    435  CA  GLN X  28      17.636  -7.300  21.332  1.00  0.00
C
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ATOM    436  C   GLN X  28      16.427  -7.964  21.978  1.00  0.00
C
ATOM    437  O   GLN X  28      15.440  -8.261  21.307  1.00  0.00
O
ATOM    438  CB  GLN X  28      17.483  -5.778  21.394  1.00  0.00
C
ATOM    439  CG  GLN X  28      16.135  -5.268  20.915  1.00  0.00
C
ATOM    440  CD  GLN X  28      15.896  -3.819  21.296  1.00  0.00
C
ATOM    441  NE2 GLN X  28      14.692  -3.328  21.028  1.00  0.00
N
ATOM    442  OE1 GLN X  28      16.784  -3.148  21.830  1.00  0.00
O
ATOM    443  H   GLN X  28      17.355  -7.221  19.212  1.00  0.00
H
ATOM    444  HA  GLN X  28      18.504  -7.598  21.919  1.00  0.00
H
ATOM    445 1HB  GLN X  28      17.640  -5.489  22.433  1.00  0.00
H
ATOM    446 2HB  GLN X  28      18.276  -5.357  20.777  1.00  0.00
H
ATOM    447 1HG  GLN X  28      15.780  -5.408  19.895  1.00  0.00
H
ATOM    448 2HG  GLN X  28      15.558  -5.901  21.589  1.00  0.00
H
ATOM    449 1HE2 GLN X  28      14.475  -2.378  21.257  1.00  0.00
H
ATOM    450 2HE2 GLN X  28      14.000  -3.908  20.596  1.00  0.00
H
ATOM    451  N   LYS X  29      16.514  -8.196  23.284  1.00  0.00
N
ATOM    452  CA  LYS X  29      15.437  -8.845  24.020  1.00  0.00
C
ATOM    453  C   LYS X  29      14.346  -7.850  24.395  1.00  0.00
C
ATOM    454  O   LYS X  29      14.634  -6.738  24.836  1.00  0.00
O
ATOM    455  CB  LYS X  29      15.980  -9.525  25.277  1.00  0.00
C
ATOM    456  CG  LYS X  29      16.901 -10.706  25.005  1.00  0.00
C
ATOM    457  CD  LYS X  29      17.378 -11.348  26.299  1.00  0.00
C
ATOM    458  CE  LYS X  29      18.324 -12.509  26.029  1.00  0.00
C
ATOM    459  NZ  LYS X  29      18.784 -13.156  27.286  1.00  0.00
N
ATOM    460  H   LYS X  29      17.349  -7.915  23.778  1.00  0.00
H
ATOM    461  HA  LYS X  29      14.964  -9.601  23.393  1.00  0.00
H
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ATOM    462 1HB  LYS X  29      16.522  -8.766  25.842  1.00  0.00
H
ATOM    463 2HB  LYS X  29      15.120  -9.862  25.856  1.00  0.00
H
ATOM    464 1HG  LYS X  29      16.355 -11.442  24.413  1.00  0.00
H
ATOM    465 2HG  LYS X  29      17.761 -10.352  24.436  1.00  0.00
H
ATOM    466 1HD  LYS X  29      17.891 -10.590  26.893  1.00  0.00
H
ATOM    467 2HD  LYS X  29      16.509 -11.710  26.848  1.00  0.00
H
ATOM    468 1HE  LYS X  29      17.802 -13.239  25.414  1.00  0.00
H
ATOM    469 2HE  LYS X  29      19.186 -12.125  25.482  1.00  0.00
H
ATOM    470 1HZ  LYS X  29      19.408 -13.919  27.063  1.00  0.00
H
ATOM    471 2HZ  LYS X  29      19.271 -12.479  27.856  1.00  0.00
H
ATOM    472 3HZ  LYS X  29      17.986 -13.512  27.793  1.00  0.00
H
ATOM    473  N   VAL X  30      13.095  -8.257  24.213  1.00  0.00
N
ATOM    474  CA  VAL X  30      11.958  -7.411  24.556  1.00  0.00
C
ATOM    475  C   VAL X  30      11.442  -7.722  25.955  1.00  0.00
C
ATOM    476  O   VAL X  30      11.203  -8.880  26.294  1.00  0.00
O
ATOM    477  CB  VAL X  30      10.806  -7.579  23.548  1.00  0.00
C
ATOM    478  CG1 VAL X  30       9.607  -6.738  23.964  1.00  0.00
C
ATOM    479  CG2 VAL X  30      11.263  -7.196  22.149  1.00  0.00
C
ATOM    480  H   VAL X  30      12.927  -9.175  23.828  1.00  0.00
H
ATOM    481  HA  VAL X  30      12.241  -6.359  24.590  1.00  0.00
H
ATOM    482  HB  VAL X  30      10.516  -8.629  23.510  1.00  0.00
H
ATOM    483 1HG1 VAL X  30       8.803  -6.868  23.240  1.00  0.00
H
ATOM    484 2HG1 VAL X  30       9.264  -7.055  24.948  1.00  0.00
H
ATOM    485 3HG1 VAL X  30       9.896  -5.687  24.001  1.00  0.00
H
ATOM    486 1HG2 VAL X  30      10.437  -7.319  21.449  1.00  0.00
H
ATOM    487 2HG2 VAL X  30      11.588  -6.155  22.146  1.00  0.00
H
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ATOM    488 3HG2 VAL X  30      12.091  -7.837  21.848  1.00  0.00
H
ATOM    489  N   VAL X  31      11.273  -6.682  26.762  1.00  0.00
N
ATOM    490  CA  VAL X  31      10.676  -6.826  28.084  1.00  0.00
C
ATOM    491  C   VAL X  31       9.256  -6.279  28.113  1.00  0.00
C
ATOM    492  O   VAL X  31       8.915  -5.365  27.359  1.00  0.00
O
ATOM    493  CB  VAL X  31      11.511  -6.111  29.163  1.00  0.00
C
ATOM    494  CG1 VAL X  31      12.888  -6.746  29.277  1.00  0.00
C
ATOM    495  CG2 VAL X  31      11.632  -4.628  28.847  1.00  0.00
C
ATOM    496  H   VAL X  31      11.567  -5.767  26.452  1.00  0.00
H
ATOM    497  HA  VAL X  31      10.575  -7.876  28.361  1.00  0.00
H
ATOM    498  HB  VAL X  31      10.994  -6.188  30.120  1.00  0.00
H
ATOM    499 1HG1 VAL X  31      13.464  -6.229  30.045  1.00  0.00
H
ATOM    500 2HG1 VAL X  31      12.784  -7.796  29.550  1.00  0.00
H
ATOM    501 3HG1 VAL X  31      13.406  -6.667  28.321  1.00  0.00
H
ATOM    502 1HG2 VAL X  31      12.225  -4.138  29.620  1.00  0.00
H
ATOM    503 2HG2 VAL X  31      12.121  -4.503  27.881  1.00  0.00
H
ATOM    504 3HG2 VAL X  31      10.639  -4.179  28.812  1.00  0.00
H
ATOM    505  N   PRO X  32       8.428  -6.845  28.984  1.00  0.00
N
ATOM    506  CA  PRO X  32       8.852  -7.940  29.846  1.00  0.00
C
ATOM    507  C   PRO X  32       8.807  -9.271  29.105  1.00  0.00
C
ATOM    508  O   PRO X  32       7.983  -9.468  28.212  1.00  0.00
O
ATOM    509  CB  PRO X  32       7.862  -7.898  31.022  1.00  0.00
C
ATOM    510  CG  PRO X  32       6.590  -7.344  30.440  1.00  0.00
C
ATOM    511  CD  PRO X  32       7.215  -6.182  29.484  1.00  0.00
C
ATOM    512  HA  PRO X  32       9.784  -7.787  30.161  1.00  0.00
H
ATOM    513 1HB  PRO X  32       7.721  -8.792  31.157  1.00  0.00
H
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ATOM    514 2HB  PRO X  32       8.216  -7.280  31.514  1.00  0.00
H
ATOM    515 1HG  PRO X  32       6.217  -7.951  29.983  1.00  0.00
H
ATOM    516 2HG  PRO X  32       6.252  -6.717  31.049  1.00  0.00
H
ATOM    517 1HD  PRO X  32       6.665  -6.095  28.708  1.00  0.00
H
ATOM    518 2HD  PRO X  32       7.555  -5.383  29.876  1.00  0.00
H
ATOM    519  N   THR X  33       9.696 -10.181  29.483  1.00  0.00
N
ATOM    520  CA  THR X  33       9.776 -11.488  28.841  1.00  0.00
C
ATOM    521  C   THR X  33       8.885 -12.505  29.542  1.00  0.00
C
ATOM    522  O   THR X  33       9.005 -12.721  30.747  1.00  0.00
O
ATOM    523  CB  THR X  33      11.221 -12.020  28.817  1.00  0.00
C
ATOM    524  CG2 THR X  33      11.283 -13.369  28.118  1.00  0.00
C
ATOM    525  OG1 THR X  33      12.064 -11.088  28.126  1.00  0.00
O
ATOM    526  H   THR X  33      10.335  -9.964  30.235  1.00  0.00
H
ATOM    527  HA  THR X  33       9.413 -11.417  27.815  1.00  0.00
H
ATOM    528  HB  THR X  33      11.577 -12.126  29.842  1.00  0.00
H
ATOM    529  HG1 THR X  33      11.748 -10.979  27.226  1.00  0.00
H
ATOM    530 1HG2 THR X  33      12.312 -13.727  28.111  1.00  0.00
H
ATOM    531 2HG2 THR X  33      10.652 -14.081  28.647  1.00  0.00
H
ATOM    532 3HG2 THR X  33      10.929 -13.263  27.093  1.00  0.00
H
ATOM    533  N   PRO X  34       7.991 -13.125  28.783  1.00  0.00
N
ATOM    534  CA  PRO X  34       7.084 -14.127  29.328  1.00  0.00
C
ATOM    535  C   PRO X  34       7.853 -15.261  29.996  1.00  0.00
C
ATOM    536  O   PRO X  34       9.005 -15.531  29.649  1.00  0.00
O
ATOM    537  CB  PRO X  34       6.283 -14.611  28.108  1.00  0.00
C
ATOM    538  CG  PRO X  34       6.384 -13.493  27.108  1.00  0.00
C
ATOM    539  CD  PRO X  34       7.877 -13.006  27.323  1.00  0.00
C
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ATOM    540  HA  PRO X  34       6.484 -13.713  30.007  1.00  0.00
H
ATOM    541 1HB  PRO X  34       6.824 -15.285  27.804  1.00  0.00
H
ATOM    542 2HB  PRO X  34       5.478 -14.607  28.426  1.00  0.00
H
ATOM    543 1HG  PRO X  34       7.157 -13.509  26.764  1.00  0.00
H
ATOM    544 2HG  PRO X  34       5.532 -13.370  26.736  1.00  0.00
H
ATOM    545 1HD  PRO X  34       8.780 -12.995  27.022  1.00  0.00
H
ATOM    546 2HD  PRO X  34       7.363 -12.210  27.214  1.00  0.00
H
ATOM    547  N   GLY X  35       7.212 -15.923  30.952  1.00  0.00
N
ATOM    548  CA  GLY X  35       7.808 -17.072  31.620  1.00  0.00
C
ATOM    549  C   GLY X  35       8.145 -18.175  30.623  1.00  0.00
C
ATOM    550  O   GLY X  35       7.403 -18.406  29.668  1.00  0.00
O
ATOM    551  H   GLY X  35       6.286 -15.621  31.223  1.00  0.00
H
ATOM    552 1HA  GLY X  35       8.722 -16.757  32.124  1.00  0.00
H
ATOM    553 2HA  GLY X  35       7.104 -17.462  32.355  1.00  0.00
H
ATOM    554  N   ASP X  36       9.266 -18.848  30.852  1.00  0.00
N
ATOM    555  CA  ASP X  36       9.695 -19.937  29.980  1.00  0.00
C
ATOM    556  C   ASP X  36       9.216 -21.285  30.506  1.00  0.00
C
ATOM    557  O   ASP X  36       9.627 -22.338  30.014  1.00  0.00
O
ATOM    558  CB  ASP X  36      11.218 -19.939  29.835  1.00  0.00
C
ATOM    559  CG  ASP X  36      11.974 -20.183  31.134  1.00  0.00
C
ATOM    560  OD1 ASP X  36      11.336 -20.320  32.152  1.00  0.00
O
ATOM    561  OD2 ASP X  36      13.162 -20.387  31.077  1.00  0.00
O
ATOM    562  H   ASP X  36       9.835 -18.600  31.648  1.00  0.00
H
ATOM    563  HA  ASP X  36       9.251 -19.816  28.991  1.00  0.00
H
ATOM    564 1HB  ASP X  36      11.581 -20.628  29.069  1.00  0.00
H
ATOM    565 2HB  ASP X  36      11.381 -18.913  29.506  1.00  0.00
H
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ATOM    566  N   LYS X  37       8.343 -21.248  31.508  1.00  0.00
N
ATOM    567  CA  LYS X  37       7.764 -22.463  32.065  1.00  0.00
C
ATOM    568  C   LYS X  37       6.324 -22.646  31.605  1.00  0.00
C
ATOM    569  O   LYS X  37       5.570 -23.428  32.187  1.00  0.00
O
ATOM    570  CB  LYS X  37       7.830 -22.437  33.593  1.00  0.00
C
ATOM    571  CG  LYS X  37       9.243 -22.430  34.162  1.00  0.00
C
ATOM    572  CD  LYS X  37       9.227 -22.433  35.683  1.00  0.00
C
ATOM    573  CE  LYS X  37      10.637 -22.392  36.253  1.00  0.00
C
ATOM    574  NZ  LYS X  37      10.637 -22.395  37.741  1.00  0.00
N
ATOM    575  H   LYS X  37       8.075 -20.354  31.894  1.00  0.00
H
ATOM    576  HA  LYS X  37       8.318 -23.332  31.708  1.00  0.00
H
ATOM    577 1HB  LYS X  37       7.303 -21.541  33.920  1.00  0.00
H
ATOM    578 2HB  LYS X  37       7.300 -23.320  33.951  1.00  0.00
H
ATOM    579 1HG  LYS X  37       9.766 -23.318  33.802  1.00  0.00
H
ATOM    580 2HG  LYS X  37       9.756 -21.538  33.806  1.00  0.00
H
ATOM    581 1HD  LYS X  37       8.669 -21.560  36.025  1.00  0.00
H
ATOM    582 2HD  LYS X  37       8.725 -23.339  36.024  1.00  0.00
H
ATOM    583 1HE  LYS X  37      11.178 -23.263  35.888  1.00  0.00
H
ATOM    584 2HE  LYS X  37      11.123 -21.484  35.894  1.00  0.00
H
ATOM    585 1HZ  LYS X  37      11.589 -22.366  38.078  1.00  0.00
H
ATOM    586 2HZ  LYS X  37      10.135 -21.586  38.080  1.00  0.00
H
ATOM    587 3HZ  LYS X  37      10.186 -23.235  38.075  1.00  0.00
H
ATOM    588  N   VAL X  38       5.947 -21.922  30.560  1.00  0.00
N
ATOM    589  CA  VAL X  38       4.587 -21.982  30.034  1.00  0.00
C
ATOM    590  C   VAL X  38       4.505 -22.893  28.816  1.00  0.00
C
ATOM    591  O   VAL X  38       5.244 -22.719  27.847  1.00  0.00
O
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ATOM    592  CB  VAL X  38       4.066 -20.583  29.652  1.00  0.00
C
ATOM    593  CG1 VAL X  38       2.648 -20.673  29.107  1.00  0.00
C
ATOM    594  CG2 VAL X  38       4.115 -19.650  30.851  1.00  0.00
C
ATOM    595  H   VAL X  38       6.619 -21.311  30.117  1.00  0.00
H
ATOM    596  HA  VAL X  38       3.901 -22.422  30.758  1.00  0.00
H
ATOM    597  HB  VAL X  38       4.721 -20.158  28.892  1.00  0.00
H
ATOM    598 1HG1 VAL X  38       2.296 -19.676  28.841  1.00  0.00
H
ATOM    599 2HG1 VAL X  38       2.639 -21.309  28.221  1.00  0.00
H
ATOM    600 3HG1 VAL X  38       1.992 -21.098  29.867  1.00  0.00
H
ATOM    601 1HG2 VAL X  38       3.745 -18.667  30.563  1.00  0.00
H
ATOM    602 2HG2 VAL X  38       3.494 -20.051  31.650  1.00  0.00
H
ATOM    603 3HG2 VAL X  38       5.145 -19.561  31.201  1.00  0.00
H
ATOM    604  N   GLU X  39       3.601 -23.866  28.873  1.00  0.00
N
ATOM    605  CA  GLU X  39       3.395 -24.782  27.756  1.00  0.00
C
ATOM    606  C   GLU X  39       2.320 -24.259  26.808  1.00  0.00
C
ATOM    607  O   GLU X  39       1.487 -23.439  27.192  1.00  0.00
O
ATOM    608  CB  GLU X  39       3.018 -26.174  28.267  1.00  0.00
C
ATOM    609  CG  GLU X  39       4.103 -26.858  29.086  1.00  0.00
C
ATOM    610  CD  GLU X  39       5.352 -27.062  28.276  1.00  0.00
C
ATOM    611  OE1 GLU X  39       5.267 -27.650  27.224  1.00  0.00
O
ATOM    612  OE2 GLU X  39       6.372 -26.533  28.651  1.00  0.00
O
ATOM    613  H   GLU X  39       3.043 -23.974  29.709  1.00  0.00
H
ATOM    614  HA  GLU X  39       4.312 -24.863  27.171  1.00  0.00
H
ATOM    615 1HB  GLU X  39       2.122 -26.057  28.878  1.00  0.00
H
ATOM    616 2HB  GLU X  39       2.785 -26.782  27.393  1.00  0.00
H
ATOM    617 1HG  GLU X  39       4.349 -26.329  30.006  1.00  0.00
H
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ATOM    618 2HG  GLU X  39       3.667 -27.827  29.330  1.00  0.00
H
ATOM    619  N   SER X  40       2.346 -24.742  25.570  1.00  0.00
N
ATOM    620  CA  SER X  40       1.308 -24.417  24.599  1.00  0.00
C
ATOM    621  C   SER X  40      -0.072 -24.780  25.129  1.00  0.00
C
ATOM    622  O   SER X  40      -0.297 -25.897  25.594  1.00  0.00
O
ATOM    623  CB  SER X  40       1.576 -25.133  23.290  1.00  0.00
C
ATOM    624  OG  SER X  40       0.571 -24.895  22.344  1.00  0.00
O
ATOM    625  H   SER X  40       3.104 -25.350  25.295  1.00  0.00
H
ATOM    626  HA  SER X  40       1.323 -23.374  24.283  1.00  0.00
H
ATOM    627 1HB  SER X  40       2.528 -24.783  22.891  1.00  0.00
H
ATOM    628 2HB  SER X  40       1.636 -26.203  23.482  1.00  0.00
H
ATOM    629  HG  SER X  40       0.778 -25.365  21.532  1.00  0.00
H
ATOM    630  N   GLY X  41      -0.998 -23.830  25.055  1.00  0.00
N
ATOM    631  CA  GLY X  41      -2.367 -24.055  25.502  1.00  0.00
C
ATOM    632  C   GLY X  41      -2.573 -23.539  26.921  1.00  0.00
C
ATOM    633  O   GLY X  41      -3.701 -23.484  27.413  1.00  0.00
O
ATOM    634  H   GLY X  41      -0.747 -22.927  24.677  1.00  0.00
H
ATOM    635 1HA  GLY X  41      -3.050 -23.534  24.831  1.00  0.00
H
ATOM    636 2HA  GLY X  41      -2.578 -25.123  25.478  1.00  0.00
H
ATOM    637  N   GLN X  42      -1.477 -23.164  27.575  1.00  0.00
N
ATOM    638  CA  GLN X  42      -1.545 -22.602  28.918  1.00  0.00
C
ATOM    639  C   GLN X  42      -1.565 -21.078  28.879  1.00  0.00
C
ATOM    640  O   GLN X  42      -1.195 -20.471  27.875  1.00  0.00
O
ATOM    641  CB  GLN X  42      -0.358 -23.080  29.758  1.00  0.00
C
ATOM    642  CG  GLN X  42      -0.236 -24.591  29.861  1.00  0.00
C
ATOM    643  CD  GLN X  42      -1.434 -25.224  30.540  1.00  0.00
C
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ATOM    644  NE2 GLN X  42      -2.039 -26.205  29.880  1.00  0.00
N
ATOM    645  OE1 GLN X  42      -1.812 -24.837  31.650  1.00  0.00
O
ATOM    646  H   GLN X  42      -0.577 -23.272  27.130  1.00  0.00
H
ATOM    647  HA  GLN X  42      -2.473 -22.912  29.397  1.00  0.00
H
ATOM    648 1HB  GLN X  42       0.541 -22.668  29.298  1.00  0.00
H
ATOM    649 2HB  GLN X  42      -0.483 -22.653  30.753  1.00  0.00
H
ATOM    650 1HG  GLN X  42       0.040 -25.220  29.014  1.00  0.00
H
ATOM    651 2HG  GLN X  42       0.590 -24.564  30.573  1.00  0.00
H
ATOM    652 1HE2 GLN X  42      -2.836 -26.660  30.278  1.00  0.00
H
ATOM    653 2HE2 GLN X  42      -1.699 -26.488  28.983  1.00  0.00
H
ATOM    654  N   ILE X  43      -2.004 -20.469  29.974  1.00  0.00
N
ATOM    655  CA  ILE X  43      -1.963 -19.020  30.115  1.00  0.00
C
ATOM    656  C   ILE X  43      -0.536 -18.528  30.329  1.00  0.00
C
ATOM    657  O   ILE X  43       0.117 -18.893  31.307  1.00  0.00
O
ATOM    658  CB  ILE X  43      -2.842 -18.540  31.284  1.00  0.00
C
ATOM    659  CG1 ILE X  43      -4.302 -18.937  31.050  1.00  0.00
C
ATOM    660  CG2 ILE X  43      -2.717 -17.035  31.460  1.00  0.00
C
ATOM    661  CD1 ILE X  43      -5.192 -18.725  32.254  1.00  0.00
C
ATOM    662  H   ILE X  43      -2.376 -21.025  30.730  1.00  0.00
H
ATOM    663  HA  ILE X  43      -2.287 -18.535  29.195  1.00  0.00
H
ATOM    664  HB  ILE X  43      -2.523 -19.041  32.198  1.00  0.00
H
ATOM    665 1HG1 ILE X  43      -4.672 -18.339  30.218  1.00  0.00
H
ATOM    666 2HG1 ILE X  43      -4.311 -19.990  30.772  1.00  0.00
H
ATOM    667 1HG2 ILE X  43      -3.345 -16.713  32.290  1.00  0.00
H
ATOM    668 2HG2 ILE X  43      -1.680 -16.777  31.670  1.00  0.00
H
ATOM    669 3HG2 ILE X  43      -3.036 -16.533  30.547  1.00  0.00
H
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ATOM    670 1HD1 ILE X  43      -6.211 -19.029  32.012  1.00  0.00
H
ATOM    671 2HD1 ILE X  43      -4.824 -19.325  33.089  1.00  0.00
H
ATOM    672 3HD1 ILE X  43      -5.185 -17.673  32.534  1.00  0.00
H
ATOM    673  N   SER X  44      -0.057 -17.698  29.408  1.00  0.00
N
ATOM    674  CA  SER X  44       1.283 -17.134  29.509  1.00  0.00
C
ATOM    675  C   SER X  44       1.273 -15.825  30.288  1.00  0.00
C
ATOM    676  O   SER X  44       0.359 -15.015  30.147  1.00  0.00
O
ATOM    677  CB  SER X  44       1.865 -16.920  28.126  1.00  0.00
C
ATOM    678  OG  SER X  44       3.133 -16.324  28.174  1.00  0.00
O
ATOM    679  H   SER X  44      -0.636 -17.451  28.619  1.00  0.00
H
ATOM    680  HA  SER X  44       2.011 -17.820  29.946  1.00  0.00
H
ATOM    681 1HB  SER X  44       1.945 -17.885  27.627  1.00  0.00
H
ATOM    682 2HB  SER X  44       1.193 -16.276  27.560  1.00  0.00
H
ATOM    683  HG  SER X  44       3.068 -15.470  28.607  1.00  0.00
H
ATOM    684  N   ASN X  45       2.295 -15.626  31.113  1.00  0.00
N
ATOM    685  CA  ASN X  45       2.467 -14.369  31.831  1.00  0.00
C
ATOM    686  C   ASN X  45       3.587 -13.533  31.219  1.00  0.00
C
ATOM    687  O   ASN X  45       4.153 -13.899  30.192  1.00  0.00
O
ATOM    688  CB  ASN X  45       2.732 -14.604  33.306  1.00  0.00
C
ATOM    689  CG  ASN X  45       4.026 -15.319  33.582  1.00  0.00
C
ATOM    690  ND2 ASN X  45       4.163 -15.792  34.794  1.00  0.00
N
ATOM    691  OD1 ASN X  45       4.858 -15.505  32.687  1.00  0.00
O
ATOM    692  H   ASN X  45       2.970 -16.364  31.246  1.00  0.00
H
ATOM    693  HA  ASN X  45       1.557 -13.771  31.752  1.00  0.00
H
ATOM    694 1HB  ASN X  45       2.607 -13.800  34.032  1.00  0.00
H
ATOM    695 2HB  ASN X  45       1.912 -15.314  33.407  1.00  0.00
H
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ATOM    696 1HD2 ASN X  45       4.998 -16.278  35.049  1.00  0.00
H
ATOM    697 2HD2 ASN X  45       3.432 -15.666  35.466  1.00  0.00
H
ATOM    698  N   GLY X  46       3.896 -12.411  31.858  1.00  0.00
N
ATOM    699  CA  GLY X  46       4.957 -11.532  31.387  1.00  0.00
C
ATOM    700  C   GLY X  46       4.633 -10.962  30.012  1.00  0.00
C
ATOM    701  O   GLY X  46       5.462 -10.997  29.102  1.00  0.00
O
ATOM    702  H   GLY X  46       3.383 -12.161  32.690  1.00  0.00
H
ATOM    703 1HA  GLY X  46       5.079 -10.710  32.092  1.00  0.00
H
ATOM    704 2HA  GLY X  46       5.887 -12.097  31.326  1.00  0.00
H
ATOM    705  N   TYR X  47       3.417 -10.441  29.864  1.00  0.00
N
ATOM    706  CA  TYR X  47       2.971  -9.891  28.592  1.00  0.00
C
ATOM    707  C   TYR X  47       3.867  -8.744  28.141  1.00  0.00
C
ATOM    708  O   TYR X  47       4.042  -7.761  28.855  1.00  0.00
O
ATOM    709  CB  TYR X  47       1.522  -9.412  28.695  1.00  0.00
C
ATOM    710  CG  TYR X  47       0.531 -10.515  28.999  1.00  0.00
C
ATOM    711  CD1 TYR X  47      -0.017 -10.650  30.266  1.00  0.00
C
ATOM    712  CD2 TYR X  47       0.148 -11.417  28.018  1.00  0.00
C
ATOM    713  CE1 TYR X  47      -0.921 -11.656  30.551  1.00  0.00
C
ATOM    714  CE2 TYR X  47      -0.756 -12.426  28.290  1.00  0.00
C
ATOM    715  CZ  TYR X  47      -1.288 -12.542  29.558  1.00  0.00
C
ATOM    716  OH  TYR X  47      -2.188 -13.545  29.834  1.00  0.00
O
ATOM    717  H   TYR X  47       2.788 -10.427  30.654  1.00  0.00
H
ATOM    718  HA  TYR X  47       3.031 -10.655  27.817  1.00  0.00
H
ATOM    719 1HB  TYR X  47       1.484  -8.662  29.487  1.00  0.00
H
ATOM    720 2HB  TYR X  47       1.266  -8.948  27.743  1.00  0.00
H
ATOM    721  HD1 TYR X  47       0.277  -9.946  31.045  1.00  0.00
H
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ATOM    722  HD2 TYR X  47       0.572 -11.320  27.019  1.00  0.00
H
ATOM    723  HE1 TYR X  47      -1.344 -11.750  31.551  1.00  0.00
H
ATOM    724  HE2 TYR X  47      -1.043 -13.126  27.506  1.00  0.00
H
ATOM    725  HH  TYR X  47      -2.496 -13.533  30.743  1.00  0.00
H
ATOM    726  N   SER X  48       4.435  -8.881  26.946  1.00  0.00
N
ATOM    727  CA  SER X  48       5.341  -7.872  26.408  1.00  0.00
C
ATOM    728  C   SER X  48       4.579  -6.798  25.644  1.00  0.00
C
ATOM    729  O   SER X  48       5.047  -5.667  25.509  1.00  0.00
O
ATOM    730  CB  SER X  48       6.376  -8.524  25.512  1.00  0.00
C
ATOM    731  OG  SER X  48       5.804  -9.061  24.351  1.00  0.00
O
ATOM    732  H   SER X  48       4.234  -9.705  26.398  1.00  0.00
H
ATOM    733  HA  SER X  48       5.973  -7.409  27.167  1.00  0.00
H
ATOM    734 1HB  SER X  48       7.114  -7.773  25.230  1.00  0.00
H
ATOM    735 2HB  SER X  48       6.865  -9.323  26.067  1.00  0.00
H
ATOM    736  HG  SER X  48       5.156  -9.726  24.591  1.00  0.00
H
ATOM    737  N   ALA X  49       3.399  -7.157  25.146  1.00  0.00
N
ATOM    738  CA  ALA X  49       2.571  -6.225  24.388  1.00  0.00
C
ATOM    739  C   ALA X  49       1.476  -5.632  25.260  1.00  0.00
C
ATOM    740  O   ALA X  49       0.940  -4.564  24.960  1.00  0.00
O
ATOM    741  CB  ALA X  49       1.972  -6.917  23.173  1.00  0.00
C
ATOM    742  H   ALA X  49       3.067  -8.099  25.297  1.00  0.00
H
ATOM    743  HA  ALA X  49       3.197  -5.401  24.046  1.00  0.00
H
ATOM    744 1HB  ALA X  49       1.357  -6.207  22.619  1.00  0.00
H
ATOM    745 2HB  ALA X  49       2.772  -7.283  22.530  1.00  0.00
H
ATOM    746 3HB  ALA X  49       1.355  -7.754  23.498  1.00  0.00
H
ATOM    747  N   VAL X  50       1.142  -6.329  26.340  1.00  0.00
N
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ATOM    748  CA  VAL X  50       0.052  -5.910  27.218  1.00  0.00
C
ATOM    749  C   VAL X  50       0.573  -5.527  28.597  1.00  0.00
C
ATOM    750  O   VAL X  50       1.305  -6.286  29.225  1.00  0.00
O
ATOM    751  CB  VAL X  50      -1.010  -7.016  27.369  1.00  0.00
C
ATOM    752  CG1 VAL X  50      -2.134  -6.553  28.284  1.00  0.00
C
ATOM    753  CG2 VAL X  50      -1.562  -7.414  26.009  1.00  0.00
C
ATOM    754  H   VAL X  50       1.655  -7.171  26.560  1.00  0.00
H
ATOM    755  HA  VAL X  50      -0.435  -5.009  26.843  1.00  0.00
H
ATOM    756  HB  VAL X  50      -0.539  -7.903  27.792  1.00  0.00
H
ATOM    757 1HG1 VAL X  50      -2.875  -7.347  28.379  1.00  0.00
H
ATOM    758 2HG1 VAL X  50      -1.728  -6.315  29.267  1.00  0.00
H
ATOM    759 3HG1 VAL X  50      -2.606  -5.666  27.860  1.00  0.00
H
ATOM    760 1HG2 VAL X  50      -2.309  -8.197  26.134  1.00  0.00
H
ATOM    761 2HG2 VAL X  50      -2.019  -6.546  25.534  1.00  0.00
H
ATOM    762 3HG2 VAL X  50      -0.750  -7.786  25.381  1.00  0.00
H
ATOM    763  N   PRO X  51       0.189  -4.341  29.059  1.00  0.00
N
ATOM    764  CA  PRO X  51       0.570  -3.877  30.389  1.00  0.00
C
ATOM    765  C   PRO X  51      -0.044  -4.750  31.473  1.00  0.00
C
ATOM    766  O   PRO X  51      -1.073  -5.391  31.258  1.00  0.00
O
ATOM    767  CB  PRO X  51       0.049  -2.431  30.448  1.00  0.00
C
ATOM    768  CG  PRO X  51      -1.107  -2.397  29.483  1.00  0.00
C
ATOM    769  CD  PRO X  51      -0.592  -3.337  28.325  1.00  0.00
C
ATOM    770  HA  PRO X  51       1.561  -3.902  30.490  1.00  0.00
H
ATOM    771 1HB  PRO X  51      -0.310  -2.414  31.288  1.00  0.00
H
ATOM    772 2HB  PRO X  51       0.707  -2.002  30.084  1.00  0.00
H
ATOM    773 1HG  PRO X  51      -1.768  -2.783  29.845  1.00  0.00
H
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ATOM    774 2HG  PRO X  51      -1.034  -1.605  28.987  1.00  0.00
H
ATOM    775 1HD  PRO X  51      -1.317  -3.836  27.958  1.00  0.00
H
ATOM    776 2HD  PRO X  51       0.046  -2.973  27.720  1.00  0.00
H
ATOM    777  N   SER X  52       0.593  -4.773  32.640  1.00  0.00
N
ATOM    778  CA  SER X  52       0.000  -5.382  33.823  1.00  0.00
C
ATOM    779  C   SER X  52       0.458  -4.677  35.095  1.00  0.00
C
ATOM    780  O   SER X  52       1.648  -4.655  35.413  1.00  0.00
O
ATOM    781  CB  SER X  52       0.349  -6.856  33.882  1.00  0.00
C
ATOM    782  OG  SER X  52      -0.168  -7.474  35.027  1.00  0.00
O
ATOM    783  H   SER X  52       1.511  -4.357  32.708  1.00  0.00
H
ATOM    784  HA  SER X  52      -1.089  -5.418  33.791  1.00  0.00
H
ATOM    785 1HB  SER X  52      -0.059  -7.346  32.999  1.00  0.00
H
ATOM    786 2HB  SER X  52       1.434  -6.959  33.885  1.00  0.00
H
ATOM    787  HG  SER X  52       0.190  -7.051  35.811  1.00  0.00
H
ATOM    788  N   PRO X  53      -0.493  -4.099  35.818  1.00  0.00
N
ATOM    789  CA  PRO X  53      -1.896  -4.152  35.422  1.00  0.00
C
ATOM    790  C   PRO X  53      -2.167  -3.245  34.230  1.00  0.00
C
ATOM    791  O   PRO X  53      -1.564  -2.182  34.093  1.00  0.00
O
ATOM    792  CB  PRO X  53      -2.659  -3.699  36.678  1.00  0.00
C
ATOM    793  CG  PRO X  53      -1.699  -2.805  37.414  1.00  0.00
C
ATOM    794  CD  PRO X  53      -0.321  -3.576  37.179  1.00  0.00
C
ATOM    795  HA  PRO X  53      -2.146  -5.083  35.172  1.00  0.00
H
ATOM    796 1HB  PRO X  53      -3.291  -3.154  36.306  1.00  0.00
H
ATOM    797 2HB  PRO X  53      -2.714  -4.442  37.118  1.00  0.00
H
ATOM    798 1HG  PRO X  53      -1.664  -2.060  37.014  1.00  0.00
H
ATOM    799 2HG  PRO X  53      -1.747  -3.028  38.324  1.00  0.00
H
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ATOM    800 1HD  PRO X  53       0.389  -2.946  37.094  1.00  0.00
H
ATOM    801 2HD  PRO X  53      -0.156  -4.363  37.690  1.00  0.00
H
ATOM    802  N   GLY X  54      -3.079  -3.677  33.362  1.00  0.00
N
ATOM    803  CA  GLY X  54      -3.424  -2.912  32.172  1.00  0.00
C
ATOM    804  C   GLY X  54      -4.764  -2.207  32.335  1.00  0.00
C
ATOM    805  O   GLY X  54      -5.267  -1.582  31.402  1.00  0.00
O
ATOM    806  H   GLY X  54      -3.543  -4.557  33.533  1.00  0.00
H
ATOM    807 1HA  GLY X  54      -2.650  -2.165  31.992  1.00  0.00
H
ATOM    808 2HA  GLY X  54      -3.480  -3.588  31.319  1.00  0.00
H
ATOM    809  N   ALA X  55      -5.337  -2.311  33.529  1.00  0.00
N
ATOM    810  CA  ALA X  55      -6.650  -1.735  33.803  1.00  0.00
C
ATOM    811  C   ALA X  55      -6.671  -0.242  33.500  1.00  0.00
C
ATOM    812  O   ALA X  55      -7.694   0.302  33.082  1.00  0.00
O
ATOM    813  CB  ALA X  55      -7.052  -1.992  35.248  1.00  0.00
C
ATOM    814  H   ALA X  55      -4.851  -2.801  34.267  1.00  0.00
H
ATOM    815  HA  ALA X  55      -7.383  -2.209  33.149  1.00  0.00
H
ATOM    816 1HB  ALA X  55      -8.033  -1.557  35.435  1.00  0.00
H
ATOM    817 2HB  ALA X  55      -7.090  -3.066  35.429  1.00  0.00
H
ATOM    818 3HB  ALA X  55      -6.321  -1.537  35.914  1.00  0.00
H
ATOM    819  N   GLY X  56      -5.538   0.416  33.714  1.00  0.00
N
ATOM    820  CA  GLY X  56      -5.439   1.858  33.522  1.00  0.00
C
ATOM    821  C   GLY X  56      -5.552   2.227  32.049  1.00  0.00
C
ATOM    822  O   GLY X  56      -5.953   3.337  31.704  1.00  0.00
O
ATOM    823  H   GLY X  56      -4.722  -0.096  34.018  1.00  0.00
H
ATOM    824 1HA  GLY X  56      -6.244   2.346  34.072  1.00  0.00
H
ATOM    825 2HA  GLY X  56      -4.479   2.204  33.903  1.00  0.00
H
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ATOM    826  N   ASP X  57      -5.190   1.286  31.182  1.00  0.00
N
ATOM    827  CA  ASP X  57      -5.222   1.519  29.742  1.00  0.00
C
ATOM    828  C   ASP X  57      -6.471   0.916  29.112  1.00  0.00
C
ATOM    829  O   ASP X  57      -6.874   1.300  28.018  1.00  0.00
O
ATOM    830  CB  ASP X  57      -3.969   0.945  29.076  1.00  0.00
C
ATOM    831  CG  ASP X  57      -2.669   1.614  29.501  1.00  0.00
C
ATOM    832  OD1 ASP X  57      -2.611   2.821  29.483  1.00  0.00
O
ATOM    833  OD2 ASP X  57      -1.802   0.927  29.987  1.00  0.00
O
ATOM    834  H   ASP X  57      -4.885   0.388  31.528  1.00  0.00
H
ATOM    835  HA  ASP X  57      -5.262   2.591  29.543  1.00  0.00
H
ATOM    836 1HB  ASP X  57      -3.874  -0.135  29.188  1.00  0.00
H
ATOM    837 2HB  ASP X  57      -4.178   1.187  28.034  1.00  0.00
H
ATOM    838  N   ASP X  58      -7.082  -0.033  29.816  1.00  0.00
N
ATOM    839  CA  ASP X  58      -8.284  -0.696  29.325  1.00  0.00
C
ATOM    840  C   ASP X  58      -9.541  -0.011  29.846  1.00  0.00
C
ATOM    841  O   ASP X  58      -9.469   0.893  30.678  1.00  0.00
O
ATOM    842  CB  ASP X  58      -8.285  -2.172  29.726  1.00  0.00
C
ATOM    843  CG  ASP X  58      -7.237  -3.017  29.014  1.00  0.00
C
ATOM    844  OD1 ASP X  58      -6.680  -2.551  28.049  1.00  0.00
O
ATOM    845  OD2 ASP X  58      -6.890  -4.054  29.528  1.00  0.00
O
ATOM    846  H   ASP X  58      -6.704  -0.301  30.713  1.00  0.00
H
ATOM    847  HA  ASP X  58      -8.323  -0.630  28.237  1.00  0.00
H
ATOM    848 1HB  ASP X  58      -8.209  -2.331  30.802  1.00  0.00
H
ATOM    849 2HB  ASP X  58      -9.279  -2.463  29.385  1.00  0.00
H
ATOM    850  N   THR X  59     -10.696  -0.447  29.351  1.00  0.00
N
ATOM    851  CA  THR X  59     -11.973   0.095  29.792  1.00  0.00
C
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ATOM    852  C   THR X  59     -12.464  -0.609  31.051  1.00  0.00
C
ATOM    853  O   THR X  59     -13.488  -0.237  31.623  1.00  0.00
O
ATOM    854  CB  THR X  59     -13.048  -0.026  28.697  1.00  0.00
C
ATOM    855  CG2 THR X  59     -12.625   0.732  27.448  1.00  0.00
C
ATOM    856  OG1 THR X  59     -13.246  -1.407  28.369  1.00  0.00
O
ATOM    857  H   THR X  59     -10.687  -1.175  28.650  1.00  0.00
H
ATOM    858  HA  THR X  59     -11.856   1.147  30.053  1.00  0.00
H
ATOM    859  HB  THR X  59     -13.984   0.388  29.071  1.00  0.00
H
ATOM    860  HG1 THR X  59     -13.916  -1.480  27.686  1.00  0.00
H
ATOM    861 1HG2 THR X  59     -13.397   0.635  26.686  1.00  0.00
H
ATOM    862 2HG2 THR X  59     -12.483   1.784  27.692  1.00  0.00
H
ATOM    863 3HG2 THR X  59     -11.689   0.318  27.073  1.00  0.00
H
ATOM    864  N   ARG X  60     -11.728  -1.630  31.476  1.00  0.00
N
ATOM    865  CA  ARG X  60     -12.071  -2.367  32.687  1.00  0.00
C
ATOM    866  C   ARG X  60     -11.611  -1.625  33.933  1.00  0.00
C
ATOM    867  O   ARG X  60     -10.485  -1.810  34.400  1.00  0.00
O
ATOM    868  CB  ARG X  60     -11.540  -3.793  32.661  1.00  0.00
C
ATOM    869  CG  ARG X  60     -11.935  -4.645  33.856  1.00  0.00
C
ATOM    870  CD  ARG X  60     -11.521  -6.068  33.758  1.00  0.00
C
ATOM    871  NE  ARG X  60     -11.905  -6.888  34.895  1.00  0.00
N
ATOM    872  CZ  ARG X  60     -11.797  -8.230  34.944  1.00  0.00
C
ATOM    873  NH1 ARG X  60     -11.353  -8.910  33.910  1.00  0.00
N
ATOM    874  NH2 ARG X  60     -12.172  -8.847  36.048  1.00  0.00
N
ATOM    875  H   ARG X  60     -10.911  -1.903  30.948  1.00  0.00
H
ATOM    876  HA  ARG X  60     -13.154  -2.463  32.766  1.00  0.00
H
ATOM    877 1HB  ARG X  60     -11.916  -4.256  31.750  1.00  0.00
H
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ATOM    878 2HB  ARG X  60     -10.453  -3.726  32.611  1.00  0.00
H
ATOM    879 1HG  ARG X  60     -11.475  -4.223  34.751  1.00  0.00
H
ATOM    880 2HG  ARG X  60     -13.020  -4.617  33.959  1.00  0.00
H
ATOM    881 1HD  ARG X  60     -11.973  -6.508  32.871  1.00  0.00
H
ATOM    882 2HD  ARG X  60     -10.434  -6.116  33.674  1.00  0.00
H
ATOM    883  HE  ARG X  60     -12.294  -6.611  35.787  1.00  0.00
H
ATOM    884 1HH1 ARG X  60     -11.086  -8.425  33.065  1.00  0.00
H
ATOM    885 2HH1 ARG X  60     -11.279  -9.916  33.965  1.00  0.00
H
ATOM    886 1HH2 ARG X  60     -12.529  -8.311  36.828  1.00  0.00
H
ATOM    887 2HH2 ARG X  60     -12.101  -9.853  36.111  1.00  0.00
H
ATOM    888  N   HIS X  61     -12.485  -0.784  34.473  1.00  0.00
N
ATOM    889  CA  HIS X  61     -12.169  -0.006  35.667  1.00  0.00
C
ATOM    890  C   HIS X  61     -13.039  -0.428  36.844  1.00  0.00
C
ATOM    891  O   HIS X  61     -13.981  -1.207  36.685  1.00  0.00
O
ATOM    892  CB  HIS X  61     -12.339   1.492  35.399  1.00  0.00
C
ATOM    893  CG  HIS X  61     -11.426   2.021  34.338  1.00  0.00
C
ATOM    894  CD2 HIS X  61     -11.658   2.360  33.048  1.00  0.00
C
ATOM    895  ND1 HIS X  61     -10.085   2.260  34.560  1.00  0.00
N
ATOM    896  CE1 HIS X  61      -9.533   2.720  33.452  1.00  0.00
C
ATOM    897  NE2 HIS X  61     -10.467   2.790  32.520  1.00  0.00
N
ATOM    898  H   HIS X  61     -13.394  -0.678  34.047  1.00  0.00
H
ATOM    899  HA  HIS X  61     -11.136  -0.193  35.962  1.00  0.00
H
ATOM    900 1HB  HIS X  61     -13.357   1.701  35.067  1.00  0.00
H
ATOM    901 2HB  HIS X  61     -12.128   2.062  36.304  1.00  0.00
H
ATOM    902  HD2 HIS X  61     -12.556   2.343  32.429  1.00  0.00
H
ATOM    903  HE1 HIS X  61      -8.473   2.970  33.422  1.00  0.00
H
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ATOM    904  HE2 HIS X  61     -10.334   3.109  31.570  1.00  0.00
H
ATOM    905  N   SER X  62     -12.717   0.088  38.026  1.00  0.00
N
ATOM    906  CA  SER X  62     -13.557  -0.107  39.201  1.00  0.00
C
ATOM    907  C   SER X  62     -14.913   0.567  39.028  1.00  0.00
C
ATOM    908  O   SER X  62     -15.862   0.273  39.754  1.00  0.00
O
ATOM    909  CB  SER X  62     -12.857   0.424  40.437  1.00  0.00
C
ATOM    910  OG  SER X  62     -12.701   1.816  40.397  1.00  0.00
O
ATOM    911  H   SER X  62     -11.869   0.630  38.112  1.00  0.00
H
ATOM    912  HA  SER X  62     -13.696  -1.157  39.464  1.00  0.00
H
ATOM    913 1HB  SER X  62     -13.448   0.158  41.313  1.00  0.00
H
ATOM    914 2HB  SER X  62     -11.875  -0.041  40.510  1.00  0.00
H
ATOM    915  HG  SER X  62     -12.255   2.111  41.195  1.00  0.00
H
ATOM    916  N   ILE X  63     -14.997   1.473  38.058  1.00  0.00
N
ATOM    917  CA  ILE X  63     -16.248   2.167  37.768  1.00  0.00
C
ATOM    918  C   ILE X  63     -16.709   1.889  36.345  1.00  0.00
C
ATOM    919  O   ILE X  63     -15.894   1.673  35.446  1.00  0.00
O
ATOM    920  CB  ILE X  63     -16.110   3.687  37.969  1.00  0.00
C
ATOM    921  CG1 ILE X  63     -15.018   4.250  37.057  1.00  0.00
C
ATOM    922  CG2 ILE X  63     -15.810   4.005  39.425  1.00  0.00
C
ATOM    923  CD1 ILE X  63     -14.963   5.760  37.029  1.00  0.00
C
ATOM    924  H   ILE X  63     -14.176   1.686  37.509  1.00  0.00
H
ATOM    925  HA  ILE X  63     -17.052   1.790  38.399  1.00  0.00
H
ATOM    926  HB  ILE X  63     -17.043   4.170  37.676  1.00  0.00
H
ATOM    927 1HG1 ILE X  63     -14.065   3.859  37.413  1.00  0.00
H
ATOM    928 2HG1 ILE X  63     -15.211   3.875  36.052  1.00  0.00
H
ATOM    929 1HG2 ILE X  63     -15.715   5.084  39.550  1.00  0.00
H
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ATOM    930 2HG2 ILE X  63     -16.621   3.638  40.053  1.00  0.00
H
ATOM    931 3HG2 ILE X  63     -14.876   3.524  39.718  1.00  0.00
H
ATOM    932 1HD1 ILE X  63     -14.165   6.084  36.361  1.00  0.00
H
ATOM    933 2HD1 ILE X  63     -15.916   6.152  36.672  1.00  0.00
H
ATOM    934 3HD1 ILE X  63     -14.770   6.136  38.032  1.00  0.00
H
ATOM    935  N   PRO X  64     -18.021   1.899  36.139  1.00  0.00
N
ATOM    936  CA  PRO X  64     -18.595   1.667  34.821  1.00  0.00
C
ATOM    937  C   PRO X  64     -18.031   2.643  33.795  1.00  0.00
C
ATOM    938  O   PRO X  64     -17.892   3.836  34.072  1.00  0.00
O
ATOM    939  CB  PRO X  64     -20.107   1.856  35.031  1.00  0.00
C
ATOM    940  CG  PRO X  64     -20.341   1.538  36.481  1.00  0.00
C
ATOM    941  CD  PRO X  64     -19.036   2.296  37.126  1.00  0.00
C
ATOM    942  HA  PRO X  64     -18.392   0.741  34.518  1.00  0.00
H
ATOM    943 1HB  PRO X  64     -20.179   2.764  34.946  1.00  0.00
H
ATOM    944 2HB  PRO X  64     -20.423   1.200  34.562  1.00  0.00
H
ATOM    945 1HG  PRO X  64     -20.066   2.189  36.948  1.00  0.00
H
ATOM    946 2HG  PRO X  64     -21.113   1.009  36.533  1.00  0.00
H
ATOM    947 1HD  PRO X  64     -18.640   3.036  37.578  1.00  0.00
H
ATOM    948 2HD  PRO X  64     -19.171   1.495  37.624  1.00  0.00
H
ATOM    949  N   ALA X  65     -17.717   2.135  32.609  1.00  0.00
N
ATOM    950  CA  ALA X  65     -17.199   2.968  31.532  1.00  0.00
C
ATOM    951  C   ALA X  65     -18.184   3.049  30.375  1.00  0.00
C
ATOM    952  O   ALA X  65     -18.889   2.083  30.076  1.00  0.00
O
ATOM    953  CB  ALA X  65     -15.854   2.439  31.052  1.00  0.00
C
ATOM    954  H   ALA X  65     -17.841   1.146  32.449  1.00  0.00
H
ATOM    955  HA  ALA X  65     -17.058   3.981  31.910  1.00  0.00
H
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ATOM    956 1HB  ALA X  65     -15.483   3.073  30.248  1.00  0.00
H
ATOM    957 2HB  ALA X  65     -15.145   2.446  31.879  1.00  0.00
H
ATOM    958 3HB  ALA X  65     -15.976   1.421  30.685  1.00  0.00
H
ATOM    959  N   THR X  66     -18.234   4.208  29.727  1.00  0.00
N
ATOM    960  CA  THR X  66     -19.146   4.423  28.610  1.00  0.00
C
ATOM    961  C   THR X  66     -18.394   4.853  27.357  1.00  0.00
C
ATOM    962  O   THR X  66     -18.978   5.427  26.438  1.00  0.00
O
ATOM    963  CB  THR X  66     -20.210   5.484  28.945  1.00  0.00
C
ATOM    964  CG2 THR X  66     -21.081   5.020  30.103  1.00  0.00
C
ATOM    965  OG1 THR X  66     -19.567   6.715  29.300  1.00  0.00
O
ATOM    966  H   THR X  66     -17.624   4.960  30.015  1.00  0.00
H
ATOM    967  HA  THR X  66     -19.651   3.489  28.361  1.00  0.00
H
ATOM    968  HB  THR X  66     -20.834   5.651  28.067  1.00  0.00
H
ATOM    969  HG1 THR X  66     -19.005   6.573  30.066  1.00  0.00
H
ATOM    970 1HG2 THR X  66     -21.827   5.784  30.325  1.00  0.00
H
ATOM    971 2HG2 THR X  66     -21.580   4.091  29.832  1.00  0.00
H
ATOM    972 3HG2 THR X  66     -20.458   4.854  30.981  1.00  0.00
H
ATOM    973  N   THR X  67     -17.095   4.577  27.329  1.00  0.00
N
ATOM    974  CA  THR X  67     -16.251   4.971  26.207  1.00  0.00
C
ATOM    975  C   THR X  67     -15.118   3.976  25.994  1.00  0.00
C
ATOM    976  O   THR X  67     -14.687   3.304  26.929  1.00  0.00
O
ATOM    977  CB  THR X  67     -15.657   6.376  26.414  1.00  0.00
C
ATOM    978  CG2 THR X  67     -14.691   6.378  27.589  1.00  0.00
C
ATOM    979  OG1 THR X  67     -14.960   6.784  25.229  1.00  0.00
O
ATOM    980  H   THR X  67     -16.681   4.080  28.105  1.00  0.00
H
ATOM    981  HA  THR X  67     -16.837   4.973  25.288  1.00  0.00
H
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ATOM    982  HB  THR X  67     -16.466   7.079  26.610  1.00  0.00
H
ATOM    983  HG1 THR X  67     -15.572   6.802  24.489  1.00  0.00
H
ATOM    984 1HG2 THR X  67     -14.281   7.380  27.721  1.00  0.00
H
ATOM    985 2HG2 THR X  67     -15.219   6.080  28.495  1.00  0.00
H
ATOM    986 3HG2 THR X  67     -13.881   5.677  27.395  1.00  0.00
H
ATOM    987  N   THR X  68     -14.641   3.890  24.759  1.00  0.00
N
ATOM    988  CA  THR X  68     -13.493   3.048  24.437  1.00  0.00
C
ATOM    989  C   THR X  68     -12.198   3.852  24.462  1.00  0.00
C
ATOM    990  O   THR X  68     -12.124   4.945  23.902  1.00  0.00
O
ATOM    991  CB  THR X  68     -13.646   2.385  23.057  1.00  0.00
C
ATOM    992  CG2 THR X  68     -12.507   1.410  22.803  1.00  0.00
C
ATOM    993  OG1 THR X  68     -14.895   1.682  22.997  1.00  0.00
O
ATOM    994  H   THR X  68     -15.084   4.421  24.023  1.00  0.00
H
ATOM    995  HA  THR X  68     -13.387   2.267  25.190  1.00  0.00
H
ATOM    996  HB  THR X  68     -13.639   3.159  22.288  1.00  0.00
H
ATOM    997  HG1 THR X  68     -15.616   2.299  23.137  1.00  0.00
H
ATOM    998 1HG2 THR X  68     -12.633   0.952  21.822  1.00  0.00
H
ATOM    999 2HG2 THR X  68     -11.558   1.944  22.835  1.00  0.00
H
ATOM   1000 3HG2 THR X  68     -12.515   0.636  23.569  1.00  0.00
H
ATOM   1001  N   THR X  69     -11.182   3.303  25.116  1.00  0.00
N
ATOM   1002  CA  THR X  69      -9.854   3.908  25.114  1.00  0.00
C
ATOM   1003  C   THR X  69      -9.407   4.248  23.699  1.00  0.00
C
ATOM   1004  O   THR X  69      -8.919   5.350  23.437  1.00  0.00
O
ATOM   1005  CB  THR X  69      -8.810   2.981  25.763  1.00  0.00
C
ATOM   1006  CG2 THR X  69      -7.432   3.624  25.731  1.00  0.00
C
ATOM   1007  OG1 THR X  69      -9.179   2.720  27.124  1.00  0.00
O
```

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ATOM   1008  H   THR X  69     -11.331   2.444  25.627  1.00  0.00
H
ATOM   1009  HA  THR X  69      -9.877   4.848  25.666  1.00  0.00
H
ATOM   1010  HB  THR X  69      -8.783   2.039  25.217  1.00  0.00
H
ATOM   1011  HG1 THR X  69      -8.526   2.142  27.527  1.00  0.00
H
ATOM   1012 1HG2 THR X  69      -6.708   2.954  26.193  1.00  0.00
H
ATOM   1013 2HG2 THR X  69      -7.144   3.813  24.696  1.00  0.00
H
ATOM   1014 3HG2 THR X  69      -7.457   4.566  26.278  1.00  0.00
H
ATOM   1015  N   LEU X  70      -9.574   3.299  22.786  1.00  0.00
N
ATOM   1016  CA  LEU X  70      -9.170   3.488  21.397  1.00  0.00
C
ATOM   1017  C   LEU X  70      -9.803   4.743  20.805  1.00  0.00
C
ATOM   1018  O   LEU X  70      -9.103   5.656  20.367  1.00  0.00
O
ATOM   1019  CB  LEU X  70      -9.546   2.256  20.563  1.00  0.00
C
ATOM   1020  CG  LEU X  70      -9.254   2.370  19.062  1.00  0.00
C
ATOM   1021  CD1 LEU X  70      -7.751   2.441  18.826  1.00  0.00
C
ATOM   1022  CD2 LEU X  70      -9.860   1.179  18.334  1.00  0.00
C
ATOM   1023  H   LEU X  70      -9.992   2.422  23.060  1.00  0.00
H
ATOM   1024  HA  LEU X  70      -8.092   3.633  21.347  1.00  0.00
H
ATOM   1025 1HB  LEU X  70      -8.882   1.524  21.019  1.00  0.00
H
ATOM   1026 2HB  LEU X  70     -10.582   1.959  20.727  1.00  0.00
H
ATOM   1027  HG  LEU X  70      -9.754   3.271  18.702  1.00  0.00
H
ATOM   1028 1HD1 LEU X  70      -7.553   2.522  17.758  1.00  0.00
H
ATOM   1029 2HD1 LEU X  70      -7.343   3.313  19.337  1.00  0.00
H
ATOM   1030 3HD1 LEU X  70      -7.280   1.539  19.215  1.00  0.00
H
ATOM   1031 1HD2 LEU X  70      -9.650   1.262  17.266  1.00  0.00
H
ATOM   1032 2HD2 LEU X  70      -9.423   0.258  18.719  1.00  0.00
H
ATOM   1033 3HD2 LEU X  70     -10.936   1.165  18.492  1.00  0.00
H
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ATOM   1034  N   VAL X  71     -11.131   4.782  20.797  1.00  0.00
N
ATOM   1035  CA  VAL X  71     -11.861   5.897  20.208  1.00  0.00
C
ATOM   1036  C   VAL X  71     -11.640   7.180  21.002  1.00  0.00
C
ATOM   1037  O   VAL X  71     -11.771   8.281  20.468  1.00  0.00
O
ATOM   1038  CB  VAL X  71     -13.370   5.605  20.129  1.00  0.00
C
ATOM   1039  CG1 VAL X  71     -14.034   5.869  21.473  1.00  0.00
C
ATOM   1040  CG2 VAL X  71     -14.022   6.448  19.042  1.00  0.00
C
ATOM   1041  H   VAL X  71     -11.649   4.019  21.210  1.00  0.00
H
ATOM   1042  HA  VAL X  71     -11.499   6.122  19.204  1.00  0.00
H
ATOM   1043  HB  VAL X  71     -13.516   4.562  19.851  1.00  0.00
H
ATOM   1044 1HG1 VAL X  71     -15.102   5.657  21.400  1.00  0.00
H
ATOM   1045 2HG1 VAL X  71     -13.589   5.223  22.232  1.00  0.00
H
ATOM   1046 3HG1 VAL X  71     -13.890   6.912  21.752  1.00  0.00
H
ATOM   1047 1HG2 VAL X  71     -15.087   6.229  19.000  1.00  0.00
H
ATOM   1048 2HG2 VAL X  71     -13.875   7.505  19.267  1.00  0.00
H
ATOM   1049 3HG2 VAL X  71     -13.565   6.215  18.080  1.00  0.00
H
ATOM   1050  N   ALA X  72     -11.304   7.029  22.278  1.00  0.00
N
ATOM   1051  CA  ALA X  72     -11.060   8.173  23.146  1.00  0.00
C
ATOM   1052  C   ALA X  72      -9.769   8.887  22.768  1.00  0.00
C
ATOM   1053  O   ALA X  72      -9.715  10.115  22.730  1.00  0.00
O
ATOM   1054  CB  ALA X  72     -11.019   7.735  24.603  1.00  0.00
C
ATOM   1055  H   ALA X  72     -11.217   6.096  22.656  1.00  0.00
H
ATOM   1056  HA  ALA X  72     -11.874   8.888  23.022  1.00  0.00
H
ATOM   1057 1HB  ALA X  72     -10.836   8.601  25.237  1.00  0.00
H
ATOM   1058 2HB  ALA X  72     -11.973   7.282  24.874  1.00  0.00
H
ATOM   1059 3HB  ALA X  72     -10.220   7.009  24.741  1.00  0.00
H
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ATOM   1060  N   GLU X  73      -8.728   8.109  22.486  1.00  0.00
N
ATOM   1061  CA  GLU X  73      -7.463   8.660  22.017  1.00  0.00
C
ATOM   1062  C   GLU X  73      -7.623   9.317  20.651  1.00  0.00
C
ATOM   1063  O   GLU X  73      -7.001  10.344  20.373  1.00  0.00
O
ATOM   1064  CB  GLU X  73      -6.393   7.568  21.954  1.00  0.00
C
ATOM   1065  CG  GLU X  73      -5.955   7.039  23.312  1.00  0.00
C
ATOM   1066  CD  GLU X  73      -4.987   5.898  23.167  1.00  0.00
C
ATOM   1067  OE1 GLU X  73      -4.725   5.504  22.057  1.00  0.00
O
ATOM   1068  OE2 GLU X  73      -4.423   5.494  24.157  1.00  0.00
O
ATOM   1069  H   GLU X  73      -8.816   7.109  22.599  1.00  0.00
H
ATOM   1070  HA  GLU X  73      -7.124   9.441  22.699  1.00  0.00
H
ATOM   1071 1HB  GLU X  73      -6.807   6.751  21.364  1.00  0.00
H
ATOM   1072 2HB  GLU X  73      -5.534   7.993  21.436  1.00  0.00
H
ATOM   1073 1HG  GLU X  73      -5.519   7.805  23.955  1.00  0.00
H
ATOM   1074 2HG  GLU X  73      -6.880   6.677  23.758  1.00  0.00
H
ATOM   1075  N   LEU X  74      -8.452   8.717  19.806  1.00  0.00
N
ATOM   1076  CA  LEU X  74      -8.762   9.294  18.502  1.00  0.00
C
ATOM   1077  C   LEU X  74      -9.487  10.626  18.645  1.00  0.00
C
ATOM   1078  O   LEU X  74      -9.234  11.562  17.890  1.00  0.00
O
ATOM   1079  CB  LEU X  74      -9.606   8.315  17.677  1.00  0.00
C
ATOM   1080  CG  LEU X  74      -8.879   7.040  17.234  1.00  0.00
C
ATOM   1081  CD1 LEU X  74      -9.868   6.068  16.603  1.00  0.00
C
ATOM   1082  CD2 LEU X  74      -7.774   7.398  16.252  1.00  0.00
C
ATOM   1083  H   LEU X  74      -8.879   7.841  20.073  1.00  0.00
H
ATOM   1084  HA  LEU X  74      -7.837   9.501  17.966  1.00  0.00
H
ATOM   1085 1HB  LEU X  74     -10.369   8.073  18.415  1.00  0.00
H
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ATOM   1086 2HB  LEU X  74     -10.071   8.805  16.821  1.00  0.00
H
ATOM   1087  HG  LEU X  74      -8.411   6.608  18.119  1.00  0.00
H
ATOM   1088 1HD1 LEU X  74      -9.342   5.164  16.292  1.00  0.00
H
ATOM   1089 2HD1 LEU X  74     -10.636   5.806  17.331  1.00  0.00
H
ATOM   1090 3HD1 LEU X  74     -10.331   6.534  15.735  1.00  0.00
H
ATOM   1091 1HD2 LEU X  74      -7.258   6.490  15.938  1.00  0.00
H
ATOM   1092 2HD2 LEU X  74      -8.207   7.890  15.380  1.00  0.00
H
ATOM   1093 3HD2 LEU X  74      -7.064   8.070  16.733  1.00  0.00
H
ATOM   1094  N   HIS X  75     -10.386  10.704  19.621  1.00  0.00
N
ATOM   1095  CA  HIS X  75     -11.132  11.932  19.877  1.00  0.00
C
ATOM   1096  C   HIS X  75     -10.207  13.049  20.344  1.00  0.00
C
ATOM   1097  O   HIS X  75     -10.359  14.201  19.941  1.00  0.00
O
ATOM   1098  CB  HIS X  75     -12.229  11.690  20.917  1.00  0.00
C
ATOM   1099  CG  HIS X  75     -13.399  10.919  20.390  1.00  0.00
C
ATOM   1100  CD2 HIS X  75     -13.803  10.665  19.123  1.00  0.00
C
ATOM   1101  ND1 HIS X  75     -14.314  10.297  21.215  1.00  0.00
N
ATOM   1102  CE1 HIS X  75     -15.231   9.697  20.478  1.00  0.00
C
ATOM   1103  NE2 HIS X  75     -14.943   9.905  19.206  1.00  0.00
N
ATOM   1104  H   HIS X  75     -10.557   9.894  20.200  1.00  0.00
H
ATOM   1105  HA  HIS X  75     -11.596  12.278  18.954  1.00  0.00
H
ATOM   1106 1HB  HIS X  75     -11.834  11.120  21.757  1.00  0.00
H
ATOM   1107 2HB  HIS X  75     -12.621  12.642  21.277  1.00  0.00
H
ATOM   1108  HD2 HIS X  75     -13.402  10.945  18.149  1.00  0.00
H
ATOM   1109  HE1 HIS X  75     -16.047   9.147  20.946  1.00  0.00
H
ATOM   1110  HE2 HIS X  75     -15.470   9.564  18.415  1.00  0.00
H
ATOM   1111  N   GLN X  76      -9.248  12.701  21.194  1.00  0.00
N
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ATOM   1112  CA  GLN X  76      -8.297  13.675  21.718  1.00  0.00
C
ATOM   1113  C   GLN X  76      -7.377  14.190  20.619  1.00  0.00
C
ATOM   1114  O   GLN X  76      -7.081  15.383  20.555  1.00  0.00
O
ATOM   1115  CB  GLN X  76      -7.463  13.058  22.843  1.00  0.00
C
ATOM   1116  CG  GLN X  76      -8.228  12.840  24.138  1.00  0.00
C
ATOM   1117  CD  GLN X  76      -7.405  12.105  25.179  1.00  0.00
C
ATOM   1118  NE2 GLN X  76      -7.964  11.956  26.376  1.00  0.00
N
ATOM   1119  OE1 GLN X  76      -6.280  11.673  24.912  1.00  0.00
O
ATOM   1120  H   GLN X  76      -9.176  11.737  21.485  1.00  0.00
H
ATOM   1121  HA  GLN X  76      -8.835  14.541  22.104  1.00  0.00
H
ATOM   1122 1HB  GLN X  76      -7.089  12.102  22.471  1.00  0.00
H
ATOM   1123 2HB  GLN X  76      -6.624  13.730  23.019  1.00  0.00
H
ATOM   1124 1HG  GLN X  76      -8.770  13.639  24.644  1.00  0.00
H
ATOM   1125 2HG  GLN X  76      -8.938  12.138  23.702  1.00  0.00
H
ATOM   1126 1HE2 GLN X  76      -7.469  11.478  27.102  1.00  0.00
H
ATOM   1127 2HE2 GLN X  76      -8.879  12.319  26.548  1.00  0.00
H
ATOM   1128  N   GLY X  77      -6.927  13.284  19.756  1.00  0.00
N
ATOM   1129  CA  GLY X  77      -6.057  13.649  18.645  1.00  0.00
C
ATOM   1130  C   GLY X  77      -6.790  14.524  17.636  1.00  0.00
C
ATOM   1131  O   GLY X  77      -6.203  15.433  17.046  1.00  0.00
O
ATOM   1132  H   GLY X  77      -7.196  12.318  19.873  1.00  0.00
H
ATOM   1133 1HA  GLY X  77      -5.197  14.195  19.032  1.00  0.00
H
ATOM   1134 2HA  GLY X  77      -5.715  12.742  18.148  1.00  0.00
H
ATOM   1135  N   GLU X  78      -8.072  14.244  17.441  1.00  0.00
N
ATOM   1136  CA  GLU X  78      -8.890  15.006  16.503  1.00  0.00
C
ATOM   1137  C   GLU X  78      -9.078  16.442  16.974  1.00  0.00
C
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ATOM   1138  O   GLU X  78      -9.346  16.686  18.154  1.00  0.00
O
ATOM   1139  CB  GLU X  78     -10.251  14.335  16.311  1.00  0.00
C
ATOM   1140  CG  GLU X  78     -11.135  14.993  15.262  1.00  0.00
C
ATOM   1141  CD  GLU X  78     -12.434  14.255  15.099  1.00  0.00
C
ATOM   1142  OE1 GLU X  78     -12.625  13.270  15.773  1.00  0.00
O
ATOM   1143  OE2 GLU X  78     -13.282  14.734  14.385  1.00  0.00
O
ATOM   1144  H   GLU X  78      -8.493  13.483  17.956  1.00  0.00
H
ATOM   1145  HA  GLU X  78      -8.388  15.060  15.536  1.00  0.00
H
ATOM   1146 1HB  GLU X  78     -10.057  13.300  16.025  1.00  0.00
H
ATOM   1147 2HB  GLU X  78     -10.757  14.356  17.277  1.00  0.00
H
ATOM   1148 1HG  GLU X  78     -11.339  16.044  15.464  1.00  0.00
H
ATOM   1149 2HG  GLU X  78     -10.552  14.906  14.345  1.00  0.00
H
ATOM   1150  N   ARG X  79      -8.936  17.389  16.053  1.00  0.00
N
ATOM   1151  CA  ARG X  79      -9.077  18.802  16.379  1.00  0.00
C
ATOM   1152  C   ARG X  79     -10.293  19.406  15.693  1.00  0.00
C
ATOM   1153  O   ARG X  79     -10.913  18.777  14.833  1.00  0.00
O
ATOM   1154  CB  ARG X  79      -7.812  19.590  16.068  1.00  0.00
C
ATOM   1155  CG  ARG X  79      -6.590  19.185  16.877  1.00  0.00
C
ATOM   1156  CD  ARG X  79      -5.369  19.975  16.578  1.00  0.00
C
ATOM   1157  NE  ARG X  79      -4.211  19.621  17.383  1.00  0.00
N
ATOM   1158  CZ  ARG X  79      -2.986  20.163  17.240  1.00  0.00
C
ATOM   1159  NH1 ARG X  79      -2.743  21.052  16.302  1.00  0.00
N
ATOM   1160  NH2 ARG X  79      -2.025  19.758  18.053  1.00  0.00
N
ATOM   1161  H   ARG X  79      -8.726  17.122  15.103  1.00  0.00
H
ATOM   1162  HA  ARG X  79      -9.235  18.919  17.451  1.00  0.00
H
ATOM   1163 1HB  ARG X  79      -7.604  19.451  15.008  1.00  0.00
H
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ATOM   1164 2HB  ARG X  79      -8.038  20.640  16.259  1.00  0.00
H
ATOM   1165 1HG  ARG X  79      -6.820  19.309  17.936  1.00  0.00
H
ATOM   1166 2HG  ARG X  79      -6.372  18.136  16.674  1.00  0.00
H
ATOM   1167 1HD  ARG X  79      -5.098  19.825  15.533  1.00  0.00
H
ATOM   1168 2HD  ARG X  79      -5.578  21.030  16.752  1.00  0.00
H
ATOM   1169  HE  ARG X  79      -4.131  18.955  18.139  1.00  0.00
H
ATOM   1170 1HH1 ARG X  79      -3.484  21.339  15.677  1.00  0.00
H
ATOM   1171 2HH1 ARG X  79      -1.817  21.446  16.210  1.00  0.00
H
ATOM   1172 1HH2 ARG X  79      -2.225  19.059  18.756  1.00  0.00
H
ATOM   1173 2HH2 ARG X  79      -1.098  20.146  17.965  1.00  0.00
H
ATOM   1174  N   GLU X  80     -10.634  20.633  16.075  1.00  0.00
N
ATOM   1175  CA  GLU X  80     -11.813  21.305  15.537  1.00  0.00
C
ATOM   1176  C   GLU X  80     -11.562  21.807  14.120  1.00  0.00
C
ATOM   1177  O   GLU X  80     -12.501  22.069  13.372  1.00  0.00
O
ATOM   1178  CB  GLU X  80     -12.224  22.469  16.441  1.00  0.00
C
ATOM   1179  CG  GLU X  80     -12.745  22.049  17.809  1.00  0.00
C
ATOM   1180  CD  GLU X  80     -13.075  23.244  18.658  1.00  0.00
C
ATOM   1181  OE1 GLU X  80     -12.898  24.346  18.196  1.00  0.00
O
ATOM   1182  OE2 GLU X  80     -13.609  23.060  19.727  1.00  0.00
O
ATOM   1183  H   GLU X  80     -10.062  21.113  16.756  1.00  0.00
H
ATOM   1184  HA  GLU X  80     -12.644  20.601  15.473  1.00  0.00
H
ATOM   1185 1HB  GLU X  80     -11.345  23.101  16.566  1.00  0.00
H
ATOM   1186 2HB  GLU X  80     -13.000  23.024  15.913  1.00  0.00
H
ATOM   1187 1HG  GLU X  80     -13.612  21.390  17.759  1.00  0.00
H
ATOM   1188 2HG  GLU X  80     -11.907  21.511  18.249  1.00  0.00
H
ATOM   1189  N   THR X  81     -10.291  21.939  13.762  1.00  0.00
N
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ATOM   1190  CA  THR X  81      -9.914  22.406  12.434  1.00  0.00
C
ATOM   1191  C   THR X  81      -8.578  21.821  12.001  1.00  0.00
C
ATOM   1192  O   THR X  81      -7.702  21.567  12.831  1.00  0.00
O
ATOM   1193  CB  THR X  81      -9.832  23.942  12.376  1.00  0.00
C
ATOM   1194  CG2 THR X  81      -8.728  24.451  13.291  1.00  0.00
C
ATOM   1195  OG1 THR X  81      -9.563  24.359  11.031  1.00  0.00
O
ATOM   1196  H   THR X  81      -9.566  21.711  14.427  1.00  0.00
H
ATOM   1197  HA  THR X  81     -10.649  22.069  11.702  1.00  0.00
H
ATOM   1198  HB  THR X  81     -10.787  24.360  12.693  1.00  0.00
H
ATOM   1199  HG1 THR X  81      -9.512  25.318  10.999  1.00  0.00
H
ATOM   1200 1HG2 THR X  81      -8.684  25.539  13.237  1.00  0.00
H
ATOM   1201 2HG2 THR X  81      -8.936  24.146  14.316  1.00  0.00
H
ATOM   1202 3HG2 THR X  81      -7.773  24.034  12.974  1.00  0.00
H
ATOM   1203  N   TRP X  82      -8.421  21.607  10.698  1.00  0.00
N
ATOM   1204  CA  TRP X  82      -7.195  21.036  10.155  1.00  0.00
C
ATOM   1205  C   TRP X  82      -6.051  22.042  10.203  1.00  0.00
C
ATOM   1206  O   TRP X  82      -6.241  23.192  10.600  1.00  0.00
O
ATOM   1207  CB  TRP X  82      -7.419  20.562   8.718  1.00  0.00
C
ATOM   1208  CG  TRP X  82      -7.952  21.632   7.813  1.00  0.00
C
ATOM   1209  CD1 TRP X  82      -9.263  21.928   7.586  1.00  0.00
C
ATOM   1210  CD2 TRP X  82      -7.190  22.544   7.013  1.00  0.00
C
ATOM   1211  CE2 TRP X  82      -8.103  23.365   6.330  1.00  0.00
C
ATOM   1212  CE3 TRP X  82      -5.818  22.745   6.811  1.00  0.00
C
ATOM   1213  NE1 TRP X  82      -9.365  22.969   6.696  1.00  0.00
N
ATOM   1214  CZ2 TRP X  82      -7.698  24.366   5.460  1.00  0.00
C
ATOM   1215  CZ3 TRP X  82      -5.412  23.750   5.942  1.00  0.00
C
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ATOM   1216  CH2 TRP X  82      -6.325  24.537   5.286  1.00  0.00
C
ATOM   1217  H   TRP X  82      -9.172  21.847  10.067  1.00  0.00
H
ATOM   1218  HA  TRP X  82      -6.886  20.182  10.759  1.00  0.00
H
ATOM   1219 1HB  TRP X  82      -6.479  20.224   8.281  1.00  0.00
H
ATOM   1220 2HB  TRP X  82      -8.141  19.748   8.699  1.00  0.00
H
ATOM   1221  HD1 TRP X  82     -10.002  21.330   8.117  1.00  0.00
H
ATOM   1222  HE1 TRP X  82     -10.228  23.374   6.363  1.00  0.00
H
ATOM   1223  HE3 TRP X  82      -5.052  22.151   7.308  1.00  0.00
H
ATOM   1224  HZ2 TRP X  82      -8.457  24.968   4.961  1.00  0.00
H
ATOM   1225  HZ3 TRP X  82      -4.342  23.895   5.791  1.00  0.00
H
ATOM   1226  HH2 TRP X  82      -5.964  25.315   4.613  1.00  0.00
H
ATOM   1227  N   GLY X  83      -4.864  21.600   9.800  1.00  0.00
N
ATOM   1228  CA  GLY X  83      -3.691  22.465   9.778  1.00  0.00
C
ATOM   1229  C   GLY X  83      -2.622  21.919   8.840  1.00  0.00
C
ATOM   1230  O   GLY X  83      -2.781  20.848   8.258  1.00  0.00
O
ATOM   1231  H   GLY X  83      -4.772  20.640   9.500  1.00  0.00
H
ATOM   1232 1HA  GLY X  83      -3.987  23.458   9.440  1.00  0.00
H
ATOM   1233 2HA  GLY X  83      -3.279  22.532  10.784  1.00  0.00
H
ATOM   1234  N   LYS X  84      -1.533  22.667   8.697  1.00  0.00
N
ATOM   1235  CA  LYS X  84      -0.468  22.299   7.774  1.00  0.00
C
ATOM   1236  C   LYS X  84       0.266  21.052   8.254  1.00  0.00
C
ATOM   1237  O   LYS X  84       0.368  20.061   7.527  1.00  0.00
O
ATOM   1238  CB  LYS X  84       0.515  23.458   7.602  1.00  0.00
C
ATOM   1239  CG  LYS X  84       1.630  23.194   6.598  1.00  0.00
C
ATOM   1240  CD  LYS X  84       2.484  24.433   6.381  1.00  0.00
C
ATOM   1241  CE  LYS X  84       3.602  24.169   5.382  1.00  0.00
C
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ATOM   1242  NZ  LYS X  84       4.450  25.371   5.166  1.00  0.00
N
ATOM   1243  H   LYS X  84      -1.441  23.512   9.243  1.00  0.00
H
ATOM   1244  HA  LYS X  84      -0.892  22.055   6.799  1.00  0.00
H
ATOM   1245 1HB  LYS X  84      -0.064  24.324   7.281  1.00  0.00
H
ATOM   1246 2HB  LYS X  84       0.950  23.657   8.581  1.00  0.00
H
ATOM   1247 1HG  LYS X  84       2.253  22.383   6.979  1.00  0.00
H
ATOM   1248 2HG  LYS X  84       1.181  22.892   5.653  1.00  0.00
H
ATOM   1249 1HD  LYS X  84       1.846  25.234   6.009  1.00  0.00
H
ATOM   1250 2HD  LYS X  84       2.917  24.729   7.337  1.00  0.00
H
ATOM   1251 1HE  LYS X  84       4.215  23.354   5.762  1.00  0.00
H
ATOM   1252 2HE  LYS X  84       3.149  23.870   4.435  1.00  0.00
H
ATOM   1253 1HZ  LYS X  84       5.177  25.155   4.497  1.00  0.00
H
ATOM   1254 2HZ  LYS X  84       3.882  26.127   4.811  1.00  0.00
H
ATOM   1255 3HZ  LYS X  84       4.871  25.648   6.041  1.00  0.00
H
ATOM   1256  N   LYS X  85       0.778  21.106   9.480  1.00  0.00
N
ATOM   1257  CA  LYS X  85       1.472  19.983  10.081  1.00  0.00
C
ATOM   1258  C   LYS X  85       0.480  18.874  10.410  1.00  0.00
C
ATOM   1259  O   LYS X  85       0.822  17.690  10.385  1.00  0.00
O
ATOM   1260  CB  LYS X  85       2.227  20.426  11.335  1.00  0.00
C
ATOM   1261  CG  LYS X  85       3.016  19.319  12.019  1.00  0.00
C
ATOM   1262  CD  LYS X  85       3.808  19.855  13.204  1.00  0.00
C
ATOM   1263  CE  LYS X  85       4.567  18.742  13.912  1.00  0.00
C
ATOM   1264  NZ  LYS X  85       5.367  19.256  15.057  1.00  0.00
N
ATOM   1265  H   LYS X  85       0.681  21.960  10.012  1.00  0.00
H
ATOM   1266  HA  LYS X  85       2.191  19.571   9.371  1.00  0.00
H
ATOM   1267 1HB  LYS X  85       2.905  21.224  11.034  1.00  0.00
H
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ATOM   1268 2HB  LYS X  85       1.484  20.825  12.029  1.00  0.00
H
ATOM   1269 1HG  LYS X  85       2.317  18.557  12.364  1.00  0.00
H
ATOM   1270 2HG  LYS X  85       3.700  18.881  11.293  1.00  0.00
H
ATOM   1271 1HD  LYS X  85       4.514  20.602  12.840  1.00  0.00
H
ATOM   1272 2HD  LYS X  85       3.114  20.321  13.903  1.00  0.00
H
ATOM   1273 1HE  LYS X  85       3.844  18.012  14.273  1.00  0.00
H
ATOM   1274 2HE  LYS X  85       5.231  18.269  13.189  1.00  0.00
H
ATOM   1275 1HZ  LYS X  85       5.854  18.489  15.497  1.00  0.00
H
ATOM   1276 2HZ  LYS X  85       6.039  19.933  14.722  1.00  0.00
H
ATOM   1277 3HZ  LYS X  85       4.751  19.694  15.727  1.00  0.00
H
ATOM   1278  N   VAL X  86      -0.749  19.271  10.733  1.00  0.00
N
ATOM   1279  CA  VAL X  86      -1.794  18.314  11.069  1.00  0.00
C
ATOM   1280  C   VAL X  86      -2.082  17.438   9.856  1.00  0.00
C
ATOM   1281  O   VAL X  86      -2.158  16.219   9.969  1.00  0.00
O
ATOM   1282  CB  VAL X  86      -3.081  19.020  11.533  1.00  0.00
C
ATOM   1283  CG1 VAL X  86      -4.212  18.015  11.694  1.00  0.00
C
ATOM   1284  CG2 VAL X  86      -2.841  19.765  12.837  1.00  0.00
C
ATOM   1285  H   VAL X  86      -0.962  20.259  10.744  1.00  0.00
H
ATOM   1286  HA  VAL X  86      -1.469  17.633  11.858  1.00  0.00
H
ATOM   1287  HB  VAL X  86      -3.362  19.767  10.789  1.00  0.00
H
ATOM   1288 1HG1 VAL X  86      -5.115  18.531  12.022  1.00  0.00
H
ATOM   1289 2HG1 VAL X  86      -4.401  17.524  10.740  1.00  0.00
H
ATOM   1290 3HG1 VAL X  86      -3.932  17.270  12.439  1.00  0.00
H
ATOM   1291 1HG2 VAL X  86      -3.761  20.260  13.149  1.00  0.00
H
ATOM   1292 2HG2 VAL X  86      -2.529  19.059  13.606  1.00  0.00
H
ATOM   1293 3HG2 VAL X  86      -2.060  20.512  12.691  1.00  0.00
H
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ATOM   1294  N   ASP X  87      -2.241  18.076   8.700  1.00  0.00
N
ATOM   1295  CA  ASP X  87      -2.508  17.342   7.475  1.00  0.00
C
ATOM   1296  C   ASP X  87      -1.311  16.513   7.061  1.00  0.00
C
ATOM   1297  O   ASP X  87      -1.460  15.371   6.627  1.00  0.00
O
ATOM   1298  CB  ASP X  87      -2.898  18.301   6.348  1.00  0.00
C
ATOM   1299  CG  ASP X  87      -4.304  18.875   6.470  1.00  0.00
C
ATOM   1300  OD1 ASP X  87      -5.050  18.399   7.290  1.00  0.00
O
ATOM   1301  OD2 ASP X  87      -4.567  19.882   5.856  1.00  0.00
O
ATOM   1302  H   ASP X  87      -2.173  19.083   8.673  1.00  0.00
H
ATOM   1303  HA  ASP X  87      -3.329  16.642   7.635  1.00  0.00
H
ATOM   1304 1HB  ASP X  87      -2.186  19.114   6.202  1.00  0.00
H
ATOM   1305 2HB  ASP X  87      -2.856  17.622   5.496  1.00  0.00
H
ATOM   1306  N   PHE X  88      -0.120  17.092   7.191  1.00  0.00
N
ATOM   1307  CA  PHE X  88       1.113  16.403   6.846  1.00  0.00
C
ATOM   1308  C   PHE X  88       1.214  15.089   7.606  1.00  0.00
C
ATOM   1309  O   PHE X  88       1.403  14.029   7.008  1.00  0.00
O
ATOM   1310  CB  PHE X  88       2.323  17.290   7.143  1.00  0.00
C
ATOM   1311  CG  PHE X  88       3.635  16.684   6.734  1.00  0.00
C
ATOM   1312  CD1 PHE X  88       4.112  16.836   5.441  1.00  0.00
C
ATOM   1313  CD2 PHE X  88       4.393  15.959   7.640  1.00  0.00
C
ATOM   1314  CE1 PHE X  88       5.320  16.278   5.062  1.00  0.00
C
ATOM   1315  CE2 PHE X  88       5.601  15.402   7.267  1.00  0.00
C
ATOM   1316  CZ  PHE X  88       6.064  15.561   5.976  1.00  0.00
C
ATOM   1317  H   PHE X  88      -0.071  18.039   7.539  1.00  0.00
H
ATOM   1318  HA  PHE X  88       1.114  16.156   5.783  1.00  0.00
H
ATOM   1319 1HB  PHE X  88       2.236  18.235   6.608  1.00  0.00
H
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ATOM   1320 2HB  PHE X  88       2.390  17.485   8.212  1.00  0.00
H
ATOM   1321  HD1 PHE X  88       3.524  17.403   4.719  1.00  0.00
H
ATOM   1322  HD2 PHE X  88       4.028  15.833   8.660  1.00  0.00
H
ATOM   1323  HE1 PHE X  88       5.683  16.405   4.043  1.00  0.00
H
ATOM   1324  HE2 PHE X  88       6.187  14.835   7.989  1.00  0.00
H
ATOM   1325  HZ  PHE X  88       7.014  15.120   5.679  1.00  0.00
H
ATOM   1326  N   LEU X  89       1.088  15.166   8.930  1.00  0.00
N
ATOM   1327  CA  LEU X  89       1.180  13.979   9.764  1.00  0.00
C
ATOM   1328  C   LEU X  89       0.050  12.995   9.505  1.00  0.00
C
ATOM   1329  O   LEU X  89       0.286  11.791   9.394  1.00  0.00
O
ATOM   1330  CB  LEU X  89       1.190  14.374  11.247  1.00  0.00
C
ATOM   1331  CG  LEU X  89       2.429  15.153  11.705  1.00  0.00
C
ATOM   1332  CD1 LEU X  89       2.239  15.639  13.137  1.00  0.00
C
ATOM   1333  CD2 LEU X  89       3.660  14.265  11.596  1.00  0.00
C
ATOM   1334  H   LEU X  89       0.926  16.064   9.361  1.00  0.00
H
ATOM   1335  HA  LEU X  89       2.100  13.442   9.534  1.00  0.00
H
ATOM   1336 1HB  LEU X  89       0.314  15.019  11.264  1.00  0.00
H
ATOM   1337 2HB  LEU X  89       1.021  13.513  11.894  1.00  0.00
H
ATOM   1338  HG  LEU X  89       2.559  15.990  11.018  1.00  0.00
H
ATOM   1339 1HD1 LEU X  89       3.123  16.192  13.454  1.00  0.00
H
ATOM   1340 2HD1 LEU X  89       1.368  16.291  13.187  1.00  0.00
H
ATOM   1341 3HD1 LEU X  89       2.092  14.783  13.794  1.00  0.00
H
ATOM   1342 1HD2 LEU X  89       4.539  14.822  11.922  1.00  0.00
H
ATOM   1343 2HD2 LEU X  89       3.532  13.385  12.227  1.00  0.00
H
ATOM   1344 3HD2 LEU X  89       3.792  13.953  10.559  1.00  0.00
H
ATOM   1345  N   LEU X  90      -1.175  13.499   9.410  1.00  0.00
N
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ATOM   1346  CA  LEU X  90      -2.316  12.626   9.163  1.00  0.00
C
ATOM   1347  C   LEU X  90      -2.227  11.930   7.801  1.00  0.00
C
ATOM   1348  O   LEU X  90      -2.701  10.803   7.653  1.00  0.00
O
ATOM   1349  CB  LEU X  90      -3.624  13.422   9.255  1.00  0.00
C
ATOM   1350  CG  LEU X  90      -4.906  12.586   9.170  1.00  0.00
C
ATOM   1351  CD1 LEU X  90      -4.937  11.562  10.298  1.00  0.00
C
ATOM   1352  CD2 LEU X  90      -6.118  13.502   9.241  1.00  0.00
C
ATOM   1353  H   LEU X  90      -1.317  14.494   9.510  1.00  0.00
H
ATOM   1354  HA  LEU X  90      -2.335  11.830   9.906  1.00  0.00
H
ATOM   1355 1HB  LEU X  90      -3.511  13.833  10.256  1.00  0.00
H
ATOM   1356 2HB  LEU X  90      -3.652  14.236   8.529  1.00  0.00
H
ATOM   1357  HG  LEU X  90      -4.912  12.099   8.194  1.00  0.00
H
ATOM   1358 1HD1 LEU X  90      -5.851  10.972  10.229  1.00  0.00
H
ATOM   1359 2HD1 LEU X  90      -4.073  10.902  10.213  1.00  0.00
H
ATOM   1360 3HD1 LEU X  90      -4.908  12.078  11.257  1.00  0.00
H
ATOM   1361 1HD2 LEU X  90      -7.029  12.905   9.180  1.00  0.00
H
ATOM   1362 2HD2 LEU X  90      -6.105  14.051  10.183  1.00  0.00
H
ATOM   1363 3HD2 LEU X  90      -6.091  14.207   8.410  1.00  0.00
H
ATOM   1364  N   SER X  91      -1.622  12.591   6.813  1.00  0.00
N
ATOM   1365  CA  SER X  91      -1.482  11.969   5.489  1.00  0.00
C
ATOM   1366  C   SER X  91      -0.557  10.765   5.609  1.00  0.00
C
ATOM   1367  O   SER X  91      -0.819   9.703   5.046  1.00  0.00
O
ATOM   1368  CB  SER X  91      -0.959  12.980   4.488  1.00  0.00
C
ATOM   1369  OG  SER X  91      -1.892  13.992   4.227  1.00  0.00
O
ATOM   1370  H   SER X  91      -1.260  13.520   6.974  1.00  0.00
H
ATOM   1371  HA  SER X  91      -2.436  11.692   5.037  1.00  0.00
H
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ATOM   1372 1HB  SER X  91      -0.053  13.431   4.891  1.00  0.00
H
ATOM   1373 2HB  SER X  91      -0.724  12.465   3.559  1.00  0.00
H
ATOM   1374  HG  SER X  91      -2.098  14.456   5.042  1.00  0.00
H
ATOM   1375  N   VAL X  92       0.539  10.935   6.345  1.00  0.00
N
ATOM   1376  CA  VAL X  92       1.489   9.847   6.553  1.00  0.00
C
ATOM   1377  C   VAL X  92       0.798   8.719   7.301  1.00  0.00
C
ATOM   1378  O   VAL X  92       1.017   7.544   6.994  1.00  0.00
O
ATOM   1379  CB  VAL X  92       2.732  10.303   7.342  1.00  0.00
C
ATOM   1380  CG1 VAL X  92       3.604   9.108   7.700  1.00  0.00
C
ATOM   1381  CG2 VAL X  92       3.528  11.321   6.540  1.00  0.00
C
ATOM   1382  H   VAL X  92       0.716  11.835   6.769  1.00  0.00
H
ATOM   1383  HA  VAL X  92       1.817   9.420   5.604  1.00  0.00
H
ATOM   1384  HB  VAL X  92       2.409  10.803   8.255  1.00  0.00
H
ATOM   1385 1HG1 VAL X  92       4.477   9.448   8.258  1.00  0.00
H
ATOM   1386 2HG1 VAL X  92       3.032   8.411   8.313  1.00  0.00
H
ATOM   1387 3HG1 VAL X  92       3.930   8.608   6.790  1.00  0.00
H
ATOM   1388 1HG2 VAL X  92       4.402  11.632   7.112  1.00  0.00
H
ATOM   1389 2HG2 VAL X  92       3.851  10.870   5.600  1.00  0.00
H
ATOM   1390 3HG2 VAL X  92       2.904  12.189   6.330  1.00  0.00
H
ATOM   1391  N   ILE X  93      -0.025   9.075   8.284  1.00  0.00
N
ATOM   1392  CA  ILE X  93      -0.761   8.079   9.053  1.00  0.00
C
ATOM   1393  C   ILE X  93      -1.693   7.314   8.117  1.00  0.00
C
ATOM   1394  O   ILE X  93      -1.831   6.105   8.236  1.00  0.00
O
ATOM   1395  CB  ILE X  93      -1.577   8.717  10.192  1.00  0.00
C
ATOM   1396  CG1 ILE X  93      -0.644   9.284  11.266  1.00  0.00
C
ATOM   1397  CG2 ILE X  93      -2.532   7.700  10.796  1.00  0.00
C
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ATOM   1398  CD1 ILE X  93      -1.342  10.154  12.285  1.00  0.00
C
ATOM   1399  H   ILE X  93      -0.142  10.054   8.501  1.00  0.00
H
ATOM   1400  HA  ILE X  93      -0.082   7.335   9.466  1.00  0.00
H
ATOM   1401  HB  ILE X  93      -2.145   9.557   9.796  1.00  0.00
H
ATOM   1402 1HG1 ILE X  93      -0.177   8.436  11.769  1.00  0.00
H
ATOM   1403 2HG1 ILE X  93       0.122   9.867  10.754  1.00  0.00
H
ATOM   1404 1HG2 ILE X  93      -3.100   8.165  11.600  1.00  0.00
H
ATOM   1405 2HG2 ILE X  93      -3.217   7.343  10.028  1.00  0.00
H
ATOM   1406 3HG2 ILE X  93      -1.964   6.859  11.196  1.00  0.00
H
ATOM   1407 1HD1 ILE X  93      -0.615  10.518  13.011  1.00  0.00
H
ATOM   1408 2HD1 ILE X  93      -1.807  11.002  11.783  1.00  0.00
H
ATOM   1409 3HD1 ILE X  93      -2.106   9.573  12.799  1.00  0.00
H
ATOM   1410  N   GLY X  94      -2.325   8.033   7.183  1.00  0.00
N
ATOM   1411  CA  GLY X  94      -3.225   7.405   6.222  1.00  0.00
C
ATOM   1412  C   GLY X  94      -2.455   6.499   5.284  1.00  0.00
C
ATOM   1413  O   GLY X  94      -2.934   5.443   4.871  1.00  0.00
O
ATOM   1414  H   GLY X  94      -2.175   9.031   7.142  1.00  0.00
H
ATOM   1415 1HA  GLY X  94      -3.968   6.818   6.761  1.00  0.00
H
ATOM   1416 2HA  GLY X  94      -3.725   8.181   5.644  1.00  0.00
H
ATOM   1417  N   TYR X  95      -1.244   6.932   4.935  1.00  0.00
N
ATOM   1418  CA  TYR X  95      -0.387   6.203   4.011  1.00  0.00
C
ATOM   1419  C   TYR X  95      -0.158   4.837   4.673  1.00  0.00
C
ATOM   1420  O   TYR X  95       0.021   3.818   3.999  1.00  0.00
O
ATOM   1421  CB  TYR X  95       0.931   6.936   3.751  1.00  0.00
C
ATOM   1422  CG  TYR X  95       0.787   8.165   2.882  1.00  0.00
C
ATOM   1423  CD1 TYR X  95      -0.449   8.540   2.375  1.00  0.00
C
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ATOM   1424  CD2 TYR X  95       1.889   8.950   2.573  1.00  0.00
C
ATOM   1425  CE1 TYR X  95      -0.585   9.662   1.581  1.00  0.00
C
ATOM   1426  CE2 TYR X  95       1.764  10.074   1.780  1.00  0.00
C
ATOM   1427  CZ  TYR X  95       0.525  10.427   1.285  1.00  0.00
C
ATOM   1428  OH  TYR X  95       0.395  11.546   0.496  1.00  0.00
O
ATOM   1429  H   TYR X  95      -0.907   7.800   5.326  1.00  0.00
H
ATOM   1430  HA  TYR X  95      -0.902   6.065   3.060  1.00  0.00
H
ATOM   1431 1HB  TYR X  95       1.338   7.222   4.722  1.00  0.00
H
ATOM   1432 2HB  TYR X  95       1.604   6.227   3.270  1.00  0.00
H
ATOM   1433  HD1 TYR X  95      -1.321   7.931   2.613  1.00  0.00
H
ATOM   1434  HD2 TYR X  95       2.865   8.665   2.966  1.00  0.00
H
ATOM   1435  HE1 TYR X  95      -1.562   9.944   1.189  1.00  0.00
H
ATOM   1436  HE2 TYR X  95       2.642  10.677   1.547  1.00  0.00
H
ATOM   1437  HH  TYR X  95       1.074  11.610  -0.180  1.00  0.00
H
ATOM   1438  N   ALA X  96       0.067   4.860   5.981  1.00  0.00
N
ATOM   1439  CA  ALA X  96       0.314   3.676   6.794  1.00  0.00
C
ATOM   1440  C   ALA X  96      -0.899   2.798   7.096  1.00  0.00
C
ATOM   1441  O   ALA X  96      -0.801   1.570   7.054  1.00  0.00
O
ATOM   1442  CB  ALA X  96       0.961   4.107   8.102  1.00  0.00
C
ATOM   1443  H   ALA X  96       0.202   5.773   6.391  1.00  0.00
H
ATOM   1444  HA  ALA X  96       1.005   3.023   6.260  1.00  0.00
H
ATOM   1445 1HB  ALA X  96       1.192   3.225   8.700  1.00  0.00
H
ATOM   1446 2HB  ALA X  96       1.881   4.653   7.892  1.00  0.00
H
ATOM   1447 3HB  ALA X  96       0.275   4.749   8.653  1.00  0.00
H
ATOM   1448  N   VAL X  97      -2.032   3.416   7.418  1.00  0.00
N
ATOM   1449  CA  VAL X  97      -3.215   2.656   7.797  1.00  0.00
C
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ATOM   1450  C   VAL X  97      -4.087   2.334   6.589  1.00  0.00
C
ATOM   1451  O   VAL X  97      -4.716   3.215   6.007  1.00  0.00
O
ATOM   1452  CB  VAL X  97      -4.060   3.415   8.837  1.00  0.00
C
ATOM   1453  CG1 VAL X  97      -5.312   2.624   9.186  1.00  0.00
C
ATOM   1454  CG2 VAL X  97      -3.241   3.693  10.089  1.00  0.00
C
ATOM   1455  H   VAL X  97      -2.072   4.425   7.400  1.00  0.00
H
ATOM   1456  HA  VAL X  97      -2.947   1.683   8.210  1.00  0.00
H
ATOM   1457  HB  VAL X  97      -4.346   4.383   8.423  1.00  0.00
H
ATOM   1458 1HG1 VAL X  97      -5.899   3.175   9.923  1.00  0.00
H
ATOM   1459 2HG1 VAL X  97      -5.909   2.473   8.287  1.00  0.00
H
ATOM   1460 3HG1 VAL X  97      -5.028   1.657   9.600  1.00  0.00
H
ATOM   1461 1HG2 VAL X  97      -3.854   4.231  10.813  1.00  0.00
H
ATOM   1462 2HG2 VAL X  97      -2.909   2.750  10.522  1.00  0.00
H
ATOM   1463 3HG2 VAL X  97      -2.373   4.299   9.829  1.00  0.00
H
ATOM   1464  N   ASP X  98      -4.113   1.064   6.218  1.00  0.00
N
ATOM   1465  CA  ASP X  98      -4.852   0.674   5.035  1.00  0.00
C
ATOM   1466  C   ASP X  98      -5.301  -0.768   5.078  1.00  0.00
C
ATOM   1467  O   ASP X  98      -5.322  -1.403   6.135  1.00  0.00
O
ATOM   1468  CB  ASP X  98      -4.005   0.913   3.782  1.00  0.00
C
ATOM   1469  CG  ASP X  98      -2.738   0.074   3.711  1.00  0.00
C
ATOM   1470  OD1 ASP X  98      -2.582  -0.804   4.527  1.00  0.00
O
ATOM   1471  OD2 ASP X  98      -2.012   0.208   2.755  1.00  0.00
O
ATOM   1472  H   ASP X  98      -3.621   0.367   6.761  1.00  0.00
H
ATOM   1473  HA  ASP X  98      -5.763   1.267   4.956  1.00  0.00
H
ATOM   1474 1HB  ASP X  98      -4.565   0.804   2.852  1.00  0.00
H
ATOM   1475 2HB  ASP X  98      -3.740   1.962   3.927  1.00  0.00
H
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ATOM   1476  N   LEU X  99      -5.673  -1.295   3.916  1.00  0.00
N
ATOM   1477  CA  LEU X  99      -6.146  -2.663   3.810  1.00  0.00
C
ATOM   1478  C   LEU X  99      -5.110  -3.643   4.359  1.00  0.00
C
ATOM   1479  O   LEU X  99      -5.448  -4.760   4.742  1.00  0.00
O
ATOM   1480  CB  LEU X  99      -6.482  -2.994   2.351  1.00  0.00
C
ATOM   1481  CG  LEU X  99      -7.653  -2.201   1.755  1.00  0.00
C
ATOM   1482  CD1 LEU X  99      -7.794  -2.513   0.271  1.00  0.00
C
ATOM   1483  CD2 LEU X  99      -8.933  -2.546   2.502  1.00  0.00
C
ATOM   1484  H   LEU X  99      -5.626  -0.728   3.081  1.00  0.00
H
ATOM   1485  HA  LEU X  99      -7.042  -2.786   4.417  1.00  0.00
H
ATOM   1486 1HB  LEU X  99      -5.548  -2.691   1.881  1.00  0.00
H
ATOM   1487 2HB  LEU X  99      -6.632  -4.063   2.204  1.00  0.00
H
ATOM   1488  HG  LEU X  99      -7.445  -1.145   1.919  1.00  0.00
H
ATOM   1489 1HD1 LEU X  99      -8.626  -1.945  -0.143  1.00  0.00
H
ATOM   1490 2HD1 LEU X  99      -6.875  -2.238  -0.248  1.00  0.00
H
ATOM   1491 3HD1 LEU X  99      -7.980  -3.577   0.140  1.00  0.00
H
ATOM   1492 1HD2 LEU X  99      -9.763  -1.982   2.079  1.00  0.00
H
ATOM   1493 2HD2 LEU X  99      -9.133  -3.613   2.409  1.00  0.00
H
ATOM   1494 3HD2 LEU X  99      -8.821  -2.288   3.555  1.00  0.00
H
ATOM   1495  N   GLY X 100      -3.852  -3.224   4.392  1.00  0.00
N
ATOM   1496  CA  GLY X 100      -2.827  -4.079   4.959  1.00  0.00
C
ATOM   1497  C   GLY X 100      -3.039  -4.320   6.448  1.00  0.00
C
ATOM   1498  O   GLY X 100      -2.816  -5.423   6.941  1.00  0.00
O
ATOM   1499  H   GLY X 100      -3.609  -2.315   4.024  1.00  0.00
H
ATOM   1500 1HA  GLY X 100      -2.843  -5.042   4.447  1.00  0.00
H
ATOM   1501 2HA  GLY X 100      -1.854  -3.610   4.820  1.00  0.00
H
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ATOM   1502  N   ASN X 101      -3.484  -3.289   7.156  1.00  0.00
N
ATOM   1503  CA  ASN X 101      -3.678  -3.372   8.603  1.00  0.00
C
ATOM   1504  C   ASN X 101      -4.961  -4.074   9.026  1.00  0.00
C
ATOM   1505  O   ASN X 101      -5.010  -4.733  10.070  1.00  0.00
O
ATOM   1506  CB  ASN X 101      -3.632  -1.989   9.229  1.00  0.00
C
ATOM   1507  CG  ASN X 101      -2.271  -1.350   9.190  1.00  0.00
C
ATOM   1508  ND2 ASN X 101      -2.175  -0.190   9.785  1.00  0.00
N
ATOM   1509  OD1 ASN X 101      -1.302  -1.935   8.691  1.00  0.00
O
ATOM   1510  H   ASN X 101      -3.695  -2.423   6.681  1.00  0.00
H
ATOM   1511  HA  ASN X 101      -2.875  -3.961   9.051  1.00  0.00
H
ATOM   1512 1HB  ASN X 101      -4.385  -1.239   8.982  1.00  0.00
H
ATOM   1513 2HB  ASN X 101      -3.814  -2.368  10.234  1.00  0.00
H
ATOM   1514 1HD2 ASN X 101      -1.299   0.294   9.798  1.00  0.00
H
ATOM   1515 2HD2 ASN X 101      -2.975   0.214  10.225  1.00  0.00
H
ATOM   1516  N   VAL X 102      -5.997  -3.922   8.208  1.00  0.00
N
ATOM   1517  CA  VAL X 102      -7.303  -4.481   8.519  1.00  0.00
C
ATOM   1518  C   VAL X 102      -7.704  -5.785   7.852  1.00  0.00
C
ATOM   1519  O   VAL X 102      -8.495  -6.547   8.414  1.00  0.00
O
ATOM   1520  CB  VAL X 102      -8.435  -3.494   8.182  1.00  0.00
C
ATOM   1521  CG1 VAL X 102      -8.284  -2.214   8.992  1.00  0.00
C
ATOM   1522  CG2 VAL X 102      -8.447  -3.182   6.693  1.00  0.00
C
ATOM   1523  H   VAL X 102      -5.874  -3.406   7.349  1.00  0.00
H
ATOM   1524  HA  VAL X 102      -7.379  -4.751   9.573  1.00  0.00
H
ATOM   1525  HB  VAL X 102      -9.394  -3.959   8.416  1.00  0.00
H
ATOM   1526 1HG1 VAL X 102      -9.093  -1.528   8.741  1.00  0.00
H
ATOM   1527 2HG1 VAL X 102      -8.324  -2.449  10.055  1.00  0.00
H
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ATOM   1528 3HG1 VAL X 102      -7.328  -1.747   8.758  1.00  0.00
H
ATOM   1529 1HG2 VAL X 102      -9.254  -2.483   6.474  1.00  0.00
H
ATOM   1530 2HG2 VAL X 102      -7.494  -2.738   6.408  1.00  0.00
H
ATOM   1531 3HG2 VAL X 102      -8.602  -4.102   6.131  1.00  0.00
H
ATOM   1532  N   TRP X 103      -7.150  -6.051   6.672  1.00  0.00
N
ATOM   1533  CA  TRP X 103      -7.462  -7.273   5.947  1.00  0.00
C
ATOM   1534  C   TRP X 103      -6.280  -8.223   5.845  1.00  0.00
C
ATOM   1535  O   TRP X 103      -6.391  -9.403   6.175  1.00  0.00
O
ATOM   1536  CB  TRP X 103      -7.968  -6.930   4.544  1.00  0.00
C
ATOM   1537  CG  TRP X 103      -8.510  -8.112   3.799  1.00  0.00
C
ATOM   1538  CD1 TRP X 103      -9.799  -8.557   3.801  1.00  0.00
C
ATOM   1539  CD2 TRP X 103      -7.778  -9.000   2.943  1.00  0.00
C
ATOM   1540  CE2 TRP X 103      -8.689  -9.957   2.461  1.00  0.00
C
ATOM   1541  CE3 TRP X 103      -6.441  -9.076   2.536  1.00  0.00
C
ATOM   1542  NE1 TRP X 103      -9.918  -9.666   3.001  1.00  0.00
N
ATOM   1543  CZ2 TRP X 103      -8.310 -10.976   1.601  1.00  0.00
C
ATOM   1544  CZ3 TRP X 103      -6.062 -10.096   1.672  1.00  0.00
C
ATOM   1545  CH2 TRP X 103      -6.969 -11.019   1.218  1.00  0.00
C
ATOM   1546  H   TRP X 103      -6.499  -5.391   6.272  1.00  0.00
H
ATOM   1547  HA  TRP X 103      -8.240  -7.826   6.471  1.00  0.00
H
ATOM   1548 1HB  TRP X 103      -8.775  -6.200   4.602  1.00  0.00
H
ATOM   1549 2HB  TRP X 103      -7.156  -6.526   3.941  1.00  0.00
H
ATOM   1550  HD1 TRP X 103     -10.511  -7.998   4.406  1.00  0.00
H
ATOM   1551  HE1 TRP X 103     -10.769 -10.185   2.837  1.00  0.00
H
ATOM   1552  HE3 TRP X 103      -5.680  -8.367   2.865  1.00  0.00
H
ATOM   1553  HZ2 TRP X 103      -9.063 -11.687   1.264  1.00  0.00
H
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ATOM   1554  HZ3 TRP X 103      -5.018 -10.144   1.364  1.00  0.00
H
ATOM   1555  HH2 TRP X 103      -6.631 -11.803   0.542  1.00  0.00
H
ATOM   1556  N   ARG X 104      -5.141  -7.706   5.391  1.00  0.00
N
ATOM   1557  CA  ARG X 104      -3.952  -8.534   5.200  1.00  0.00
C
ATOM   1558  C   ARG X 104      -3.337  -9.061   6.491  1.00  0.00
C
ATOM   1559  O   ARG X 104      -3.088 -10.259   6.613  1.00  0.00
O
ATOM   1560  CB  ARG X 104      -2.905  -7.809   4.367  1.00  0.00
C
ATOM   1561  CG  ARG X 104      -1.741  -8.675   3.910  1.00  0.00
C
ATOM   1562  CD  ARG X 104      -2.095  -9.679   2.874  1.00  0.00
C
ATOM   1563  NE  ARG X 104      -2.632  -9.113   1.647  1.00  0.00
N
ATOM   1564  CZ  ARG X 104      -1.886  -8.669   0.618  1.00  0.00
C
ATOM   1565  NH1 ARG X 104      -0.573  -8.686   0.676  1.00  0.00
N
ATOM   1566  NH2 ARG X 104      -2.509  -8.192  -0.446  1.00  0.00
N
ATOM   1567  H   ARG X 104      -5.097  -6.720   5.174  1.00  0.00
H
ATOM   1568  HA  ARG X 104      -4.212  -9.427   4.629  1.00  0.00
H
ATOM   1569 1HB  ARG X 104      -3.417  -7.404   3.496  1.00  0.00
H
ATOM   1570 2HB  ARG X 104      -2.524  -6.990   4.978  1.00  0.00
H
ATOM   1571 1HG  ARG X 104      -0.967  -8.026   3.498  1.00  0.00
H
ATOM   1572 2HG  ARG X 104      -1.346  -9.209   4.774  1.00  0.00
H
ATOM   1573 1HD  ARG X 104      -1.202 -10.245   2.609  1.00  0.00
H
ATOM   1574 2HD  ARG X 104      -2.847 -10.355   3.279  1.00  0.00
H
ATOM   1575  HE  ARG X 104      -3.595  -8.966   1.372  1.00  0.00
H
ATOM   1576 1HH1 ARG X 104      -0.112  -9.038   1.502  1.00  0.00
H
ATOM   1577 2HH1 ARG X 104      -0.030  -8.348  -0.107  1.00  0.00
H
ATOM   1578 1HH2 ARG X 104      -3.520  -8.169  -0.468  1.00  0.00
H
ATOM   1579 2HH2 ARG X 104      -1.975  -7.852  -1.231  1.00  0.00
H
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ATOM   1580  N   PHE X 105      -3.091  -8.176   7.452  1.00  0.00
N
ATOM   1581  CA  PHE X 105      -2.475  -8.589   8.707  1.00  0.00
C
ATOM   1582  C   PHE X 105      -3.171  -9.754   9.414  1.00  0.00
C
ATOM   1583  O   PHE X 105      -2.545 -10.778   9.680  1.00  0.00
O
ATOM   1584  CB  PHE X 105      -2.410  -7.412   9.683  1.00  0.00
C
ATOM   1585  CG  PHE X 105      -1.851  -7.772  11.030  1.00  0.00
C
ATOM   1586  CD1 PHE X 105      -0.490  -7.682  11.278  1.00  0.00
C
ATOM   1587  CD2 PHE X 105      -2.684  -8.202  12.052  1.00  0.00
C
ATOM   1588  CE1 PHE X 105       0.027  -8.013  12.517  1.00  0.00
C
ATOM   1589  CE2 PHE X 105      -2.172  -8.532  13.291  1.00  0.00
C
ATOM   1590  CZ  PHE X 105      -0.814  -8.437  13.523  1.00  0.00
C
ATOM   1591  H   PHE X 105      -3.334  -7.206   7.312  1.00  0.00
H
ATOM   1592  HA  PHE X 105      -1.460  -8.945   8.522  1.00  0.00
H
ATOM   1593 1HB  PHE X 105      -1.774  -6.626   9.281  1.00  0.00
H
ATOM   1594 2HB  PHE X 105      -3.410  -7.016   9.858  1.00  0.00
H
ATOM   1595  HD1 PHE X 105       0.176  -7.345  10.482  1.00  0.00
H
ATOM   1596  HD2 PHE X 105      -3.757  -8.277  11.868  1.00  0.00
H
ATOM   1597  HE1 PHE X 105       1.099  -7.937  12.698  1.00  0.00
H
ATOM   1598  HE2 PHE X 105      -2.837  -8.867  14.086  1.00  0.00
H
ATOM   1599  HZ  PHE X 105      -0.408  -8.700  14.500  1.00  0.00
H
ATOM   1600  N   PRO X 106      -4.472  -9.618   9.726  1.00  0.00
N
ATOM   1601  CA  PRO X 106      -5.181 -10.710  10.409  1.00  0.00
C
ATOM   1602  C   PRO X 106      -5.191 -12.006   9.608  1.00  0.00
C
ATOM   1603  O   PRO X 106      -5.965 -12.921   9.900  1.00  0.00
O
ATOM   1604  CB  PRO X 106      -6.605 -10.165  10.609  1.00  0.00
C
ATOM   1605  CG  PRO X 106      -6.456  -8.668  10.586  1.00  0.00
C
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ATOM   1606  CD  PRO X 106      -5.364  -8.496   9.423  1.00  0.00
C
ATOM   1607  HA  PRO X 106      -4.747 -10.903  11.285  1.00  0.00
H
ATOM   1608 1HB  PRO X 106      -6.992 -10.403   9.814  1.00  0.00
H
ATOM   1609 2HB  PRO X 106      -6.760 -10.400  11.428  1.00  0.00
H
ATOM   1610 1HG  PRO X 106      -6.340  -8.422   9.784  1.00  0.00
H
ATOM   1611 2HG  PRO X 106      -6.983  -8.323  11.280  1.00  0.00
H
ATOM   1612 1HD  PRO X 106      -5.153  -8.280   8.519  1.00  0.00
H
ATOM   1613 2HD  PRO X 106      -5.139  -7.860  10.095  1.00  0.00
H
ATOM   1614  N   TYR X 107      -5.820 -11.850   7.898  1.00  0.00
N
ATOM   1615  CA  TYR X 107      -5.801 -12.832   6.826  1.00  0.00
C
ATOM   1616  C   TYR X 107      -4.599 -13.763   6.962  1.00  0.00
C
ATOM   1617  O   TYR X 107      -4.753 -14.982   6.976  1.00  0.00
O
ATOM   1618  CB  TYR X 107      -5.780 -12.136   5.463  1.00  0.00
C
ATOM   1619  CG  TYR X 107      -5.732 -13.088   4.289  1.00  0.00
C
ATOM   1620  CD1 TYR X 107      -6.876 -13.740   3.854  1.00  0.00
C
ATOM   1621  CD2 TYR X 107      -4.544 -13.330   3.617  1.00  0.00
C
ATOM   1622  CE1 TYR X 107      -6.839 -14.612   2.782  1.00  0.00
C
ATOM   1623  CE2 TYR X 107      -4.494 -14.198   2.544  1.00  0.00
C
ATOM   1624  CZ  TYR X 107      -5.644 -14.837   2.128  1.00  0.00
C
ATOM   1625  OH  TYR X 107      -5.601 -15.700   1.059  1.00  0.00
O
ATOM   1626  H   TYR X 107      -6.237 -10.959   7.667  1.00  0.00
H
ATOM   1627  HA  TYR X 107      -6.691 -13.459   6.883  1.00  0.00
H
ATOM   1628 1HB  TYR X 107      -6.681 -11.525   5.399  1.00  0.00
H
ATOM   1629 2HB  TYR X 107      -4.903 -11.490   5.444  1.00  0.00
H
ATOM   1630  HD1 TYR X 107      -7.817 -13.556   4.373  1.00  0.00
H
ATOM   1631  HD2 TYR X 107      -3.637 -12.823   3.952  1.00  0.00
H
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ATOM   1632  HE1 TYR X 107      -7.746 -15.118   2.452  1.00  0.00
H
ATOM   1633  HE2 TYR X 107      -3.549 -14.376   2.031  1.00  0.00
H
ATOM   1634  HH  TYR X 107      -4.716 -16.023   0.872  1.00  0.00
H
ATOM   1635  N   ILE X 108      -3.404 -13.182   7.068  1.00  0.00
N
ATOM   1636  CA  ILE X 108      -2.191 -13.979   7.210  1.00  0.00
C
ATOM   1637  C   ILE X 108      -2.170 -14.734   8.534  1.00  0.00
C
ATOM   1638  O   ILE X 108      -1.901 -15.939   8.572  1.00  0.00
O
ATOM   1639  CB  ILE X 108      -0.926 -13.106   7.112  1.00  0.00
C
ATOM   1640  CG1 ILE X 108      -0.792 -12.518   5.704  1.00  0.00
C
ATOM   1641  CG2 ILE X 108       0.309 -13.915   7.474  1.00  0.00
C
ATOM   1642  CD1 ILE X 108       0.281 -11.459   5.586  1.00  0.00
C
ATOM   1643  H   ILE X 108      -3.338 -12.174   7.049  1.00  0.00
H
ATOM   1644  HA  ILE X 108      -2.152 -14.758   6.449  1.00  0.00
H
ATOM   1645  HB  ILE X 108      -1.024 -12.264   7.796  1.00  0.00
H
ATOM   1646 1HG1 ILE X 108      -0.566 -13.341   5.029  1.00  0.00
H
ATOM   1647 2HG1 ILE X 108      -1.759 -12.087   5.440  1.00  0.00
H
ATOM   1648 1HG2 ILE X 108       1.193 -13.283   7.399  1.00  0.00
H
ATOM   1649 2HG2 ILE X 108       0.214 -14.287   8.494  1.00  0.00
H
ATOM   1650 3HG2 ILE X 108       0.406 -14.757   6.789  1.00  0.00
H
ATOM   1651 1HD1 ILE X 108       0.315 -11.088   4.561  1.00  0.00
H
ATOM   1652 2HD1 ILE X 108       0.053 -10.632   6.260  1.00  0.00
H
ATOM   1653 3HD1 ILE X 108       1.246 -11.886   5.849  1.00  0.00
H
ATOM   1654  N   CYS X 109      -2.452 -14.026   9.621  1.00  0.00
N
ATOM   1655  CA  CYS X 109      -2.463 -14.643  10.941  1.00  0.00
C
ATOM   1656  C   CYS X 109      -3.503 -15.758  11.020  1.00  0.00
C
ATOM   1657  O   CYS X 109      -3.192 -16.865  11.465  1.00  0.00
O
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ATOM   1658  CB  CYS X 109      -2.849 -13.480  11.854  1.00  0.00
C
ATOM   1659  SG  CYS X 109      -2.877 -13.887  13.616  1.00  0.00
S
ATOM   1660  H   CYS X 109      -2.663 -13.042   9.531  1.00  0.00
H
ATOM   1661  HA  CYS X 109      -1.488 -15.020  11.252  1.00  0.00
H
ATOM   1662 1HB  CYS X 109      -2.139 -12.661  11.744  1.00  0.00
H
ATOM   1663 2HB  CYS X 109      -3.852 -13.128  11.611  1.00  0.00
H
ATOM   1664  HG  CYS X 109      -3.238 -12.677  14.033  1.00  0.00
H
ATOM   1665  N   TYR X 110      -4.722 -15.476  10.578  1.00  0.00
N
ATOM   1666  CA  TYR X 110      -5.793 -16.472  10.620  1.00  0.00
C
ATOM   1667  C   TYR X 110      -5.449 -17.762   9.872  1.00  0.00
C
ATOM   1668  O   TYR X 110      -5.783 -18.857  10.336  1.00  0.00
O
ATOM   1669  CB  TYR X 110      -7.086 -15.894  10.041  1.00  0.00
C
ATOM   1670  CG  TYR X 110      -8.249 -16.861  10.049  1.00  0.00
C
ATOM   1671  CD1 TYR X 110      -8.968 -17.100  11.211  1.00  0.00
C
ATOM   1672  CD2 TYR X 110      -8.624 -17.531   8.895  1.00  0.00
C
ATOM   1673  CE1 TYR X 110     -10.030 -17.984  11.226  1.00  0.00
C
ATOM   1674  CE2 TYR X 110      -9.686 -18.416   8.898  1.00  0.00
C
ATOM   1675  CZ  TYR X 110     -10.386 -18.639  10.064  1.00  0.00
C
ATOM   1676  OH  TYR X 110     -11.445 -19.518  10.072  1.00  0.00
O
ATOM   1677  H   TYR X 110      -4.914 -14.556  10.207  1.00  0.00
H
ATOM   1678  HA  TYR X 110      -5.979 -16.773  11.651  1.00  0.00
H
ATOM   1679 1HB  TYR X 110      -7.340 -15.015  10.633  1.00  0.00
H
ATOM   1680 2HB  TYR X 110      -6.872 -15.591   9.015  1.00  0.00
H
ATOM   1681  HD1 TYR X 110      -8.681 -16.577  12.124  1.00  0.00
H
ATOM   1682  HD2 TYR X 110      -8.067 -17.352   7.975  1.00  0.00
H
ATOM   1683  HE1 TYR X 110     -10.586 -18.160  12.146  1.00  0.00
H
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ATOM   1684  HE2 TYR X 110      -9.965 -18.933   7.980  1.00  0.00
H
ATOM   1685  HH  TYR X 110     -11.861 -19.598  10.934  1.00  0.00
H
ATOM   1686  N   GLN X 111      -4.792 -17.634   8.726  1.00  0.00
N
ATOM   1687  CA  GLN X 111      -4.413 -18.796   7.927  1.00  0.00
C
ATOM   1688  C   GLN X 111      -2.943 -19.139   8.119  1.00  0.00
C
ATOM   1689  O   GLN X 111      -2.358 -19.873   7.321  1.00  0.00
O
ATOM   1690  CB  GLN X 111      -4.694 -18.541   6.443  1.00  0.00
C
ATOM   1691  CG  GLN X 111      -6.164 -18.333   6.116  1.00  0.00
C
ATOM   1692  CD  GLN X 111      -6.386 -17.967   4.660  1.00  0.00
C
ATOM   1693  NE2 GLN X 111      -7.646 -17.787   4.282  1.00  0.00
N
ATOM   1694  OE1 GLN X 111      -5.435 -17.846   3.884  1.00  0.00
O
ATOM   1695  H   GLN X 111      -4.547 -16.710   8.399  1.00  0.00
H
ATOM   1696  HA  GLN X 111      -4.981 -19.666   8.255  1.00  0.00
H
ATOM   1697 1HB  GLN X 111      -4.125 -17.656   6.162  1.00  0.00
H
ATOM   1698 2HB  GLN X 111      -4.316 -19.406   5.898  1.00  0.00
H
ATOM   1699 1HG  GLN X 111      -6.939 -19.042   6.405  1.00  0.00
H
ATOM   1700 2HG  GLN X 111      -6.258 -17.427   6.717  1.00  0.00
H
ATOM   1701 1HE2 GLN X 111      -7.854 -17.544   3.334  1.00  0.00
H
ATOM   1702 2HE2 GLN X 111      -8.388 -17.893   4.945  1.00  0.00
H
ATOM   1703  N   ASN X 112      -2.346 -18.605   9.180  1.00  0.00
N
ATOM   1704  CA  ASN X 112      -0.919 -18.763   9.419  1.00  0.00
C
ATOM   1705  C   ASN X 112      -0.577 -20.201   9.791  1.00  0.00
C
ATOM   1706  O   ASN X 112       0.516 -20.686   9.492  1.00  0.00
O
ATOM   1707  CB  ASN X 112      -0.428 -17.811  10.495  1.00  0.00
C
ATOM   1708  CG  ASN X 112       1.065 -17.812  10.667  1.00  0.00
C
ATOM   1709  ND2 ASN X 112       1.502 -18.276  11.810  1.00  0.00
N
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ATOM   1710  OD1 ASN X 112       1.816 -17.465   9.748  1.00  0.00
O
ATOM   1711  H   ASN X 112      -2.898 -18.074   9.839  1.00  0.00
H
ATOM   1712  HA  ASN X 112      -0.365 -18.540   8.506  1.00  0.00
H
ATOM   1713 1HB  ASN X 112      -0.794 -16.785  10.540  1.00  0.00
H
ATOM   1714 2HB  ASN X 112      -0.875 -18.393  11.302  1.00  0.00
H
ATOM   1715 1HD2 ASN X 112       2.485 -18.305  11.994  1.00  0.00
H
ATOM   1716 2HD2 ASN X 112       0.853 -18.599  12.498  1.00  0.00
H
ATOM   1717  N   GLY X 113      -1.510 -20.877  10.431  1.00  0.00
N
ATOM   1718  CA  GLY X 113      -1.334 -22.283  10.781  1.00  0.00
C
ATOM   1719  C   GLY X 113      -1.041 -22.444  12.268  1.00  0.00
C
ATOM   1720  O   GLY X 113      -1.273 -23.509  12.843  1.00  0.00
O
ATOM   1721  H   GLY X 113      -2.369 -20.410  10.686  1.00  0.00
H
ATOM   1722 1HA  GLY X 113      -2.246 -22.828  10.537  1.00  0.00
H
ATOM   1723 2HA  GLY X 113      -0.503 -22.691  10.207  1.00  0.00
H
ATOM   1724  N   GLY X 114      -0.528 -21.386  12.884  1.00  0.00
N
ATOM   1725  CA  GLY X 114      -0.253 -21.392  14.316  1.00  0.00
C
ATOM   1726  C   GLY X 114      -1.055 -20.322  15.036  1.00  0.00
C
ATOM   1727  O   GLY X 114      -2.177 -19.998  14.642  1.00  0.00
O
ATOM   1728  H   GLY X 114      -0.323 -20.555  12.347  1.00  0.00
H
ATOM   1729 1HA  GLY X 114      -0.516 -22.368  14.724  1.00  0.00
H
ATOM   1730 2HA  GLY X 114       0.808 -21.207  14.475  1.00  0.00
H
ATOM   1731  N   GLY X 115      -0.479 -19.771  16.100  1.00  0.00
N
ATOM   1732  CA  GLY X 115      -1.143 -18.731  16.881  1.00  0.00
C
ATOM   1733  C   GLY X 115      -1.133 -17.398  16.143  1.00  0.00
C
ATOM   1734  O   GLY X 115      -2.179 -16.790  15.927  1.00  0.00
O
ATOM   1735  H   GLY X 115       0.443 -20.081  16.375  1.00  0.00
H
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ATOM   1736 1HA  GLY X 115      -2.176 -19.028  17.063  1.00  0.00
H
ATOM   1737 2HA  GLY X 115      -0.626 -18.615  17.833  1.00  0.00
H
ATOM   1738  N   ALA X 116       0.055 -16.950  15.759  1.00  0.00
N
ATOM   1739  CA  ALA X 116       0.209 -15.678  15.064  1.00  0.00
C
ATOM   1740  C   ALA X 116       1.650 -15.463  14.619  1.00  0.00
C
ATOM   1741  O   ALA X 116       2.552 -16.198  15.024  1.00  0.00
O
ATOM   1742  CB  ALA X 116      -0.251 -14.530  15.953  1.00  0.00
C
ATOM   1743  H   ALA X 116       0.876 -17.506  15.953  1.00  0.00
H
ATOM   1744  HA  ALA X 116      -0.409 -15.692  14.167  1.00  0.00
H
ATOM   1745 1HB  ALA X 116      -0.129 -13.587  15.419  1.00  0.00
H
ATOM   1746 2HB  ALA X 116      -1.300 -14.669  16.211  1.00  0.00
H
ATOM   1747 3HB  ALA X 116       0.348 -14.512  16.861  1.00  0.00
H
ATOM   1748  N   PHE X 117       1.862 -14.452  13.783  1.00  0.00
N
ATOM   1749  CA  PHE X 117       3.206 -14.059  13.376  1.00  0.00
C
ATOM   1750  C   PHE X 117       3.630 -12.767  14.056  1.00  0.00
C
ATOM   1751  O   PHE X 117       4.581 -12.111  13.626  1.00  0.00
O
ATOM   1752  CB  PHE X 117       3.281 -13.904  11.856  1.00  0.00
C
ATOM   1753  CG  PHE X 117       2.404 -12.810  11.317  1.00  0.00
C
ATOM   1754  CD1 PHE X 117       2.892 -11.520  11.167  1.00  0.00
C
ATOM   1755  CD2 PHE X 117       1.090 -13.069  10.955  1.00  0.00
C
ATOM   1756  CE1 PHE X 117       2.087 -10.512  10.671  1.00  0.00
C
ATOM   1757  CE2 PHE X 117       0.284 -12.064  10.457  1.00  0.00
C
ATOM   1758  CZ  PHE X 117       0.782 -10.784  10.314  1.00  0.00
C
ATOM   1759  H   PHE X 117       1.070 -13.942  13.419  1.00  0.00
H
ATOM   1760  HA  PHE X 117       3.923 -14.822  13.683  1.00  0.00
H
ATOM   1761 1HB  PHE X 117       4.300 -13.665  11.553  1.00  0.00
H
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ATOM   1762 2HB  PHE X 117       2.965 -14.825  11.369  1.00  0.00
H
ATOM   1763  HD1 PHE X 117       3.924 -11.305  11.448  1.00  0.00
H
ATOM   1764  HD2 PHE X 117       0.697 -14.078  11.069  1.00  0.00
H
ATOM   1765  HE1 PHE X 117       2.483  -9.504  10.559  1.00  0.00
H
ATOM   1766  HE2 PHE X 117      -0.747 -12.281  10.177  1.00  0.00
H
ATOM   1767  HZ  PHE X 117       0.148  -9.992   9.924  1.00  0.00
H
ATOM   1768  N   LEU X 118       2.926 -12.404  15.122  1.00  0.00
N
ATOM   1769  CA  LEU X 118       3.226 -11.188  15.860  1.00  0.00
C
ATOM   1770  C   LEU X 118       4.608 -11.076  16.494  1.00  0.00
C
ATOM   1771  O   LEU X 118       5.135  -9.970  16.623  1.00  0.00
O
ATOM   1772  CB  LEU X 118       2.201 -10.984  16.982  1.00  0.00
C
ATOM   1773  CG  LEU X 118       2.280  -9.631  17.701  1.00  0.00
C
ATOM   1774  CD1 LEU X 118       2.030  -8.500  16.711  1.00  0.00
C
ATOM   1775  CD2 LEU X 118       1.261  -9.593  18.830  1.00  0.00
C
ATOM   1776  H   LEU X 118       2.161 -12.988  15.427  1.00  0.00
H
ATOM   1777  HA  LEU X 118       3.187 -10.333  15.187  1.00  0.00
H
ATOM   1778 1HB  LEU X 118       1.285 -11.044  16.399  1.00  0.00
H
ATOM   1779 2HB  LEU X 118       2.225 -11.799  17.706  1.00  0.00
H
ATOM   1780  HG  LEU X 118       3.272  -9.556  18.144  1.00  0.00
H
ATOM   1781 1HD1 LEU X 118       2.087  -7.543  17.230  1.00  0.00
H
ATOM   1782 2HD1 LEU X 118       2.785  -8.531  15.925  1.00  0.00
H
ATOM   1783 3HD1 LEU X 118       1.041  -8.613  16.270  1.00  0.00
H
ATOM   1784 1HD2 LEU X 118       1.318  -8.630  19.339  1.00  0.00
H
ATOM   1785 2HD2 LEU X 118       0.259  -9.729  18.421  1.00  0.00
H
ATOM   1786 3HD2 LEU X 118       1.475 -10.392  19.539  1.00  0.00
H
ATOM   1787  N   LEU X 119       5.205 -12.192  16.896  1.00  0.00
N
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ATOM   1788  CA  LEU X 119       6.531 -12.107  17.500  1.00  0.00
C
ATOM   1789  C   LEU X 119       7.533 -11.610  16.458  1.00  0.00
C
ATOM   1790  O   LEU X 119       8.236 -10.624  16.685  1.00  0.00
O
ATOM   1791  CB  LEU X 119       6.945 -13.472  18.063  1.00  0.00
C
ATOM   1792  CG  LEU X 119       6.269 -13.866  19.383  1.00  0.00
C
ATOM   1793  CD1 LEU X 119       6.565 -15.323  19.707  1.00  0.00
C
ATOM   1794  CD2 LEU X 119       6.762 -12.955  20.498  1.00  0.00
C
ATOM   1795  H   LEU X 119       4.748 -13.086  16.785  1.00  0.00
H
ATOM   1796  HA  LEU X 119       6.516 -11.380  18.311  1.00  0.00
H
ATOM   1797 1HB  LEU X 119       6.589 -14.112  17.257  1.00  0.00
H
ATOM   1798 2HB  LEU X 119       8.027 -13.562  18.149  1.00  0.00
H
ATOM   1799  HG  LEU X 119       5.199 -13.695  19.263  1.00  0.00
H
ATOM   1800 1HD1 LEU X 119       6.081 -15.594  20.646  1.00  0.00
H
ATOM   1801 2HD1 LEU X 119       6.182 -15.959  18.907  1.00  0.00
H
ATOM   1802 3HD1 LEU X 119       7.640 -15.465  19.800  1.00  0.00
H
ATOM   1803 1HD2 LEU X 119       6.282 -13.236  21.435  1.00  0.00
H
ATOM   1804 2HD2 LEU X 119       7.844 -13.057  20.599  1.00  0.00
H
ATOM   1805 3HD2 LEU X 119       6.517 -11.921  20.259  1.00  0.00
H
ATOM   1806  N   PRO X 120       7.621 -12.288  15.302  1.00  0.00
N
ATOM   1807  CA  PRO X 120       8.562 -11.839  14.277  1.00  0.00
C
ATOM   1808  C   PRO X 120       8.124 -10.483  13.708  1.00  0.00
C
ATOM   1809  O   PRO X 120       8.938  -9.716  13.198  1.00  0.00
O
ATOM   1810  CB  PRO X 120       8.529 -12.957  13.221  1.00  0.00
C
ATOM   1811  CG  PRO X 120       7.234 -13.682  13.464  1.00  0.00
C
ATOM   1812  CD  PRO X 120       6.955 -13.541  14.928  1.00  0.00
C
ATOM   1813  HA  PRO X 120       9.474 -11.745  14.667  1.00  0.00
H
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ATOM   1814 1HB  PRO X 120       8.416 -12.466  12.457  1.00  0.00
H
ATOM   1815 2HB  PRO X 120       9.172 -13.466  13.498  1.00  0.00
H
ATOM   1816 1HG  PRO X 120       6.599 -13.208  13.164  1.00  0.00
H
ATOM   1817 2HG  PRO X 120       7.412 -14.601  13.410  1.00  0.00
H
ATOM   1818 1HD  PRO X 120       6.036 -13.380  15.130  1.00  0.00
H
ATOM   1819 2HD  PRO X 120       7.416 -14.190  15.451  1.00  0.00
H
ATOM   1820  N   TYR X 121       6.826 -10.202  13.807  1.00  0.00
N
ATOM   1821  CA  TYR X 121       6.267  -8.946  13.310  1.00  0.00
C
ATOM   1822  C   TYR X 121       6.880  -7.748  14.037  1.00  0.00
C
ATOM   1823  O   TYR X 121       7.356  -6.800  13.410  1.00  0.00
O
ATOM   1824  CB  TYR X 121       4.746  -8.937  13.469  1.00  0.00
C
ATOM   1825  CG  TYR X 121       4.091  -7.647  13.025  1.00  0.00
C
ATOM   1826  CD1 TYR X 121       3.795  -7.422  11.687  1.00  0.00
C
ATOM   1827  CD2 TYR X 121       3.767  -6.660  13.943  1.00  0.00
C
ATOM   1828  CE1 TYR X 121       3.198  -6.246  11.276  1.00  0.00
C
ATOM   1829  CE2 TYR X 121       3.169  -5.480  13.543  1.00  0.00
C
ATOM   1830  CZ  TYR X 121       2.886  -5.278  12.208  1.00  0.00
C
ATOM   1831  OH  TYR X 121       2.289  -4.105  11.804  1.00  0.00
O
ATOM   1832  H   TYR X 121       6.210 -10.876  14.238  1.00  0.00
H
ATOM   1833  HA  TYR X 121       6.507  -8.826  12.254  1.00  0.00
H
ATOM   1834 1HB  TYR X 121       4.354  -9.766  12.877  1.00  0.00
H
ATOM   1835 2HB  TYR X 121       4.530  -9.108  14.523  1.00  0.00
H
ATOM   1836  HD1 TYR X 121       4.045  -8.191  10.957  1.00  0.00
H
ATOM   1837  HD2 TYR X 121       3.994  -6.827  14.996  1.00  0.00
H
ATOM   1838  HE1 TYR X 121       2.972  -6.083  10.222  1.00  0.00
H
ATOM   1839  HE2 TYR X 121       2.924  -4.716  14.282  1.00  0.00
H
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ATOM   1840  HH  TYR X 121       2.138  -4.068  10.856  1.00  0.00
H
ATOM   1841  N   THR X 122       6.855  -7.794  15.364  1.00  0.00
N
ATOM   1842  CA  THR X 122       7.404  -6.709  16.172  1.00  0.00
C
ATOM   1843  C   THR X 122       8.905  -6.575  15.957  1.00  0.00
C
ATOM   1844  O   THR X 122       9.437  -5.468  15.942  1.00  0.00
O
ATOM   1845  CB  THR X 122       7.123  -6.923  17.671  1.00  0.00
C
ATOM   1846  CG2 THR X 122       7.759  -5.814  18.496  1.00  0.00
C
ATOM   1847  OG1 THR X 122       5.708  -6.930  17.898  1.00  0.00
O
ATOM   1848  H   THR X 122       6.449  -8.597  15.823  1.00  0.00
H
ATOM   1849  HA  THR X 122       6.960  -5.760  15.867  1.00  0.00
H
ATOM   1850  HB  THR X 122       7.536  -7.884  17.975  1.00  0.00
H
ATOM   1851  HG1 THR X 122       5.306  -7.642  17.393  1.00  0.00
H
ATOM   1852 1HG2 THR X 122       7.550  -5.983  19.553  1.00  0.00
H
ATOM   1853 2HG2 THR X 122       8.837  -5.814  18.335  1.00  0.00
H
ATOM   1854 3HG2 THR X 122       7.345  -4.853  18.193  1.00  0.00
H
ATOM   1855  N   ILE X 123       9.589  -7.703  15.793  1.00  0.00
N
ATOM   1856  CA  ILE X 123      11.027  -7.679  15.562  1.00  0.00
C
ATOM   1857  C   ILE X 123      11.344  -6.932  14.265  1.00  0.00
C
ATOM   1858  O   ILE X 123      12.227  -6.071  14.235  1.00  0.00
O
ATOM   1859  CB  ILE X 123      11.614  -9.100  15.496  1.00  0.00
C
ATOM   1860  CG1 ILE X 123      11.536  -9.775  16.868  1.00  0.00
C
ATOM   1861  CG2 ILE X 123      13.051  -9.061  14.999  1.00  0.00
C
ATOM   1862  CD1 ILE X 123      11.827 -11.258  16.837  1.00  0.00
C
ATOM   1863  H   ILE X 123       9.106  -8.590  15.829  1.00  0.00
H
ATOM   1864  HA  ILE X 123      11.532  -7.115  16.346  1.00  0.00
H
ATOM   1865  HB  ILE X 123      11.010  -9.701  14.816  1.00  0.00
H
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ATOM   1866 1HG1 ILE X 123      12.256  -9.276  17.515  1.00  0.00
H
ATOM   1867 2HG1 ILE X 123      10.528  -9.612  17.252  1.00  0.00
H
ATOM   1868 1HG2 ILE X 123      13.450 -10.074  14.959  1.00  0.00
H
ATOM   1869 2HG2 ILE X 123      13.080  -8.619  14.005  1.00  0.00
H
ATOM   1870 3HG2 ILE X 123      13.655  -8.459  15.681  1.00  0.00
H
ATOM   1871 1HD1 ILE X 123      11.752 -11.666  17.845  1.00  0.00
H
ATOM   1872 2HD1 ILE X 123      11.106 -11.759  16.189  1.00  0.00
H
ATOM   1873 3HD1 ILE X 123      12.834 -11.423  16.454  1.00  0.00
H
ATOM   1874  N   MET X 124      10.626  -7.258  13.197  1.00  0.00
N
ATOM   1875  CA  MET X 124      10.844  -6.590  11.916  1.00  0.00
C
ATOM   1876  C   MET X 124      10.410  -5.130  12.019  1.00  0.00
C
ATOM   1877  O   MET X 124      10.960  -4.254  11.345  1.00  0.00
O
ATOM   1878  CB  MET X 124      10.083  -7.313  10.808  1.00  0.00
C
ATOM   1879  CG  MET X 124      10.299  -6.736   9.415  1.00  0.00
C
ATOM   1880  SD  MET X 124      11.966  -7.031   8.792  1.00  0.00
S
ATOM   1881  CE  MET X 124      11.984  -5.964   7.356  1.00  0.00
C
ATOM   1882  H   MET X 124       9.920  -7.976  13.271  1.00  0.00
H
ATOM   1883  HA  MET X 124      11.906  -6.596  11.669  1.00  0.00
H
ATOM   1884 1HB  MET X 124      10.408  -8.352  10.825  1.00  0.00
H
ATOM   1885 2HB  MET X 124       9.023  -7.259  11.061  1.00  0.00
H
ATOM   1886 1HG  MET X 124       9.579  -7.198   8.741  1.00  0.00
H
ATOM   1887 2HG  MET X 124      10.119  -5.662   9.461  1.00  0.00
H
ATOM   1888 1HE  MET X 124      12.953  -6.035   6.860  1.00  0.00
H
ATOM   1889 2HE  MET X 124      11.199  -6.272   6.664  1.00  0.00
H
ATOM   1890 3HE  MET X 124      11.810  -4.933   7.666  1.00  0.00
H
ATOM   1891  N   ALA X 125       9.426  -4.867  12.869  1.00  0.00
N
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ATOM   1892  CA  ALA X 125       8.958  -3.498  13.043  1.00  0.00
C
ATOM   1893  C   ALA X 125      10.062  -2.649  13.678  1.00  0.00
C
ATOM   1894  O   ALA X 125      10.315  -1.522  13.254  1.00  0.00
O
ATOM   1895  CB  ALA X 125       7.691  -3.473  13.884  1.00  0.00
C
ATOM   1896  H   ALA X 125       9.000  -5.617  13.395  1.00  0.00
H
ATOM   1897  HA  ALA X 125       8.733  -3.078  12.062  1.00  0.00
H
ATOM   1898 1HB  ALA X 125       7.355  -2.444  14.004  1.00  0.00
H
ATOM   1899 2HB  ALA X 125       6.913  -4.054  13.388  1.00  0.00
H
ATOM   1900 3HB  ALA X 125       7.896  -3.904  14.863  1.00  0.00
H
ATOM   1901  N   ILE X 126      10.724  -3.205  14.690  1.00  0.00
N
ATOM   1902  CA  ILE X 126      11.791  -2.501  15.398  1.00  0.00
C
ATOM   1903  C   ILE X 126      13.069  -2.289  14.590  1.00  0.00
C
ATOM   1904  O   ILE X 126      13.647  -1.203  14.614  1.00  0.00
O
ATOM   1905  CB  ILE X 126      12.192  -3.234  16.692  1.00  0.00
C
ATOM   1906  CG1 ILE X 126      11.043  -3.200  17.701  1.00  0.00
C
ATOM   1907  CG2 ILE X 126      13.448  -2.616  17.286  1.00  0.00
C
ATOM   1908  CD1 ILE X 126      11.232  -4.138  18.873  1.00  0.00
C
ATOM   1909  H   ILE X 126      10.481  -4.142  14.978  1.00  0.00
H
ATOM   1910  HA  ILE X 126      11.485  -1.484  15.638  1.00  0.00
H
ATOM   1911  HB  ILE X 126      12.377  -4.283  16.461  1.00  0.00
H
ATOM   1912 1HG1 ILE X 126      10.960  -2.176  18.065  1.00  0.00
H
ATOM   1913 2HG1 ILE X 126      10.132  -3.468  17.166  1.00  0.00
H
ATOM   1914 1HG2 ILE X 126      13.716  -3.145  18.199  1.00  0.00
H
ATOM   1915 2HG2 ILE X 126      14.265  -2.691  16.570  1.00  0.00
H
ATOM   1916 3HG2 ILE X 126      13.263  -1.566  17.516  1.00  0.00
H
ATOM   1917 1HD1 ILE X 126      10.378  -4.057  19.547  1.00  0.00
H
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ATOM   1918 2HD1 ILE X 126      11.313  -5.162  18.511  1.00  0.00
H
ATOM   1919 3HD1 ILE X 126      12.141  -3.869  19.410  1.00  0.00
H
ATOM   1920  N   PHE X 127      13.514  -3.318  13.878  1.00  0.00
N
ATOM   1921  CA  PHE X 127      14.752  -3.216  13.112  1.00  0.00
C
ATOM   1922  C   PHE X 127      14.602  -2.977  11.614  1.00  0.00
C
ATOM   1923  O   PHE X 127      15.588  -2.698  10.930  1.00  0.00
O
ATOM   1924  CB  PHE X 127      15.596  -4.479  13.289  1.00  0.00
C
ATOM   1925  CG  PHE X 127      16.091  -4.685  14.693  1.00  0.00
C
ATOM   1926  CD1 PHE X 127      15.359  -5.439  15.598  1.00  0.00
C
ATOM   1927  CD2 PHE X 127      17.289  -4.125  15.110  1.00  0.00
C
ATOM   1928  CE1 PHE X 127      15.814  -5.630  16.890  1.00  0.00
C
ATOM   1929  CE2 PHE X 127      17.746  -4.315  16.400  1.00  0.00
C
ATOM   1930  CZ  PHE X 127      17.007  -5.068  17.291  1.00  0.00
C
ATOM   1931  H   PHE X 127      12.989  -4.181  13.866  1.00  0.00
H
ATOM   1932  HA  PHE X 127      15.332  -2.358  13.458  1.00  0.00
H
ATOM   1933 1HB  PHE X 127      15.010  -5.362  13.032  1.00  0.00
H
ATOM   1934 2HB  PHE X 127      16.478  -4.433  12.653  1.00  0.00
H
ATOM   1935  HD1 PHE X 127      14.416  -5.884  15.281  1.00  0.00
H
ATOM   1936  HD2 PHE X 127      17.873  -3.530  14.407  1.00  0.00
H
ATOM   1937  HE1 PHE X 127      15.229  -6.225  17.591  1.00  0.00
H
ATOM   1938  HE2 PHE X 127      18.689  -3.869  16.716  1.00  0.00
H
ATOM   1939  HZ  PHE X 127      17.366  -5.217  18.309  1.00  0.00
H
ATOM   1940  N   GLY X 128      13.377  -3.087  11.101  1.00  0.00
N
ATOM   1941  CA  GLY X 128      13.151  -2.884   9.673  1.00  0.00
C
ATOM   1942  C   GLY X 128      12.204  -1.732   9.377  1.00  0.00
C
ATOM   1943  O   GLY X 128      12.626  -0.684   8.895  1.00  0.00
O
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ATOM   1944  H   GLY X 128      12.600  -3.313  11.705  1.00  0.00
H
ATOM   1945 1HA  GLY X 128      14.103  -2.671   9.189  1.00  0.00
H
ATOM   1946 2HA  GLY X 128      12.723  -3.790   9.247  1.00  0.00
H
ATOM   1947  N   GLY X 129      10.921  -1.937   9.659  1.00  0.00
N
ATOM   1948  CA  GLY X 129       9.922  -0.921   9.384  1.00  0.00
C
ATOM   1949  C   GLY X 129      10.222   0.462   9.917  1.00  0.00
C
ATOM   1950  O   GLY X 129      10.336   1.423   9.150  1.00  0.00
O
ATOM   1951  H   GLY X 129      10.638  -2.815  10.070  1.00  0.00
H
ATOM   1952 1HA  GLY X 129       9.804  -0.820   8.305  1.00  0.00
H
ATOM   1953 2HA  GLY X 129       8.975  -1.225   9.826  1.00  0.00
H
ATOM   1954  N   ILE X 130      10.346   0.571  11.232  1.00  0.00
N
ATOM   1955  CA  ILE X 130      10.618   1.853  11.868  1.00  0.00
C
ATOM   1956  C   ILE X 130      11.909   2.505  11.372  1.00  0.00
C
ATOM   1957  O   ILE X 130      11.881   3.617  10.845  1.00  0.00
O
ATOM   1958  CB  ILE X 130      10.708   1.715  13.399  1.00  0.00
C
ATOM   1959  CG1 ILE X 130       9.345   1.337  13.983  1.00  0.00
C
ATOM   1960  CG2 ILE X 130      11.217   3.008  14.020  1.00  0.00
C
ATOM   1961  CD1 ILE X 130       9.399   0.908  15.433  1.00  0.00
C
ATOM   1962  H   ILE X 130      10.250  -0.255  11.807  1.00  0.00
H
ATOM   1963  HA  ILE X 130       9.846   2.578  11.615  1.00  0.00
H
ATOM   1964  HB  ILE X 130      11.391   0.902  13.643  1.00  0.00
H
ATOM   1965 1HG1 ILE X 130       8.698   2.207  13.886  1.00  0.00
H
ATOM   1966 2HG1 ILE X 130       8.948   0.521  13.378  1.00  0.00
H
ATOM   1967 1HG2 ILE X 130      11.274   2.894  15.102  1.00  0.00
H
ATOM   1968 2HG2 ILE X 130      12.206   3.235  13.626  1.00  0.00
H
ATOM   1969 3HG2 ILE X 130      10.533   3.822  13.777  1.00  0.00
H
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ATOM   1970 1HD1 ILE X 130       8.395   0.656  15.775  1.00  0.00
H
ATOM   1971 2HD1 ILE X 130      10.047   0.035  15.530  1.00  0.00
H
ATOM   1972 3HD1 ILE X 130       9.794   1.722  16.039  1.00  0.00
H
ATOM   1973  N   PRO X 131      13.059   1.823  11.516  1.00  0.00
N
ATOM   1974  CA  PRO X 131      14.308   2.434  11.044  1.00  0.00
C
ATOM   1975  C   PRO X 131      14.297   2.854   9.574  1.00  0.00
C
ATOM   1976  O   PRO X 131      14.848   3.898   9.221  1.00  0.00
O
ATOM   1977  CB  PRO X 131      15.372   1.350  11.287  1.00  0.00
C
ATOM   1978  CG  PRO X 131      14.835   0.527  12.425  1.00  0.00
C
ATOM   1979  CD  PRO X 131      13.259   0.436  11.947  1.00  0.00
C
ATOM   1980  HA  PRO X 131      14.509   3.254  11.572  1.00  0.00
H
ATOM   1981 1HB  PRO X 131      15.277   0.846  10.529  1.00  0.00
H
ATOM   1982 2HB  PRO X 131      16.026   1.825  11.595  1.00  0.00
H
ATOM   1983 1HG  PRO X 131      14.215   0.030  12.128  1.00  0.00
H
ATOM   1984 2HG  PRO X 131      15.544   0.361  13.014  1.00  0.00
H
ATOM   1985 1HD  PRO X 131      12.533  -0.031  11.544  1.00  0.00
H
ATOM   1986 2HD  PRO X 131      13.265   0.510  12.896  1.00  0.00
H
ATOM   1987  N   LEU X 132      13.660   2.065   8.713  1.00  0.00
N
ATOM   1988  CA  LEU X 132      13.604   2.428   7.301  1.00  0.00
C
ATOM   1989  C   LEU X 132      12.846   3.729   7.076  1.00  0.00
C
ATOM   1990  O   LEU X 132      13.243   4.539   6.247  1.00  0.00
O
ATOM   1991  CB  LEU X 132      12.958   1.300   6.489  1.00  0.00
C
ATOM   1992  CG  LEU X 132      13.836   0.060   6.282  1.00  0.00
C
ATOM   1993  CD1 LEU X 132      13.021  -1.056   5.643  1.00  0.00
C
ATOM   1994  CD2 LEU X 132      15.030   0.422   5.410  1.00  0.00
C
ATOM   1995  H   LEU X 132      13.215   1.218   9.036  1.00  0.00
H
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ATOM   1996  HA  LEU X 132      14.613   2.599   6.928  1.00  0.00
H
ATOM   1997 1HB  LEU X 132      12.125   1.061   7.147  1.00  0.00
H
ATOM   1998 2HB  LEU X 132      12.575   1.658   5.534  1.00  0.00
H
ATOM   1999  HG  LEU X 132      14.215  -0.236   7.260  1.00  0.00
H
ATOM   2000 1HD1 LEU X 132      13.653  -1.933   5.499  1.00  0.00
H
ATOM   2001 2HD1 LEU X 132      12.185  -1.315   6.293  1.00  0.00
H
ATOM   2002 3HD1 LEU X 132      12.641  -0.723   4.678  1.00  0.00
H
ATOM   2003 1HD2 LEU X 132      15.653  -0.460   5.264  1.00  0.00
H
ATOM   2004 2HD2 LEU X 132      14.679   0.783   4.443  1.00  0.00
H
ATOM   2005 3HD2 LEU X 132      15.615   1.200   5.899  1.00  0.00
H
ATOM   2006  N   PHE X 133      11.747   3.935   7.799  1.00  0.00
N
ATOM   2007  CA  PHE X 133      10.994   5.178   7.644  1.00  0.00
C
ATOM   2008  C   PHE X 133      11.902   6.350   8.025  1.00  0.00
C
ATOM   2009  O   PHE X 133      11.938   7.368   7.336  1.00  0.00
O
ATOM   2010  CB  PHE X 133       9.730   5.168   8.504  1.00  0.00
C
ATOM   2011  CG  PHE X 133       8.865   6.383   8.327  1.00  0.00
C
ATOM   2012  CD1 PHE X 133       9.298   7.455   7.559  1.00  0.00
C
ATOM   2013  CD2 PHE X 133       7.617   6.457   8.927  1.00  0.00
C
ATOM   2014  CE1 PHE X 133       8.504   8.573   7.395  1.00  0.00
C
ATOM   2015  CE2 PHE X 133       6.821   7.574   8.764  1.00  0.00
C
ATOM   2016  CZ  PHE X 133       7.265   8.633   7.997  1.00  0.00
C
ATOM   2017  H   PHE X 133      11.434   3.233   8.455  1.00  0.00
H
ATOM   2018  HA  PHE X 133      10.704   5.307   6.600  1.00  0.00
H
ATOM   2019 1HB  PHE X 133       9.113   4.307   8.254  1.00  0.00
H
ATOM   2020 2HB  PHE X 133       9.997   5.127   9.561  1.00  0.00
H
ATOM   2021  HD1 PHE X 133      10.278   7.407   7.082  1.00  0.00
H
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ATOM   2022  HD2 PHE X 133       7.266   5.621   9.534  1.00  0.00
H
ATOM   2023  HE1 PHE X 133       8.856   9.407   6.789  1.00  0.00
H
ATOM   2024  HE2 PHE X 133       5.841   7.621   9.241  1.00  0.00
H
ATOM   2025  HZ  PHE X 133       6.639   9.514   7.870  1.00  0.00
H
ATOM   2026  N   TYR X 134      12.649   6.202   9.120  1.00  0.00
N
ATOM   2027  CA  TYR X 134      13.543   7.276   9.534  1.00  0.00
C
ATOM   2028  C   TYR X 134      14.527   7.641   8.430  1.00  0.00
C
ATOM   2029  O   TYR X 134      14.798   8.816   8.193  1.00  0.00
O
ATOM   2030  CB  TYR X 134      14.306   6.880  10.800  1.00  0.00
C
ATOM   2031  CG  TYR X 134      13.425   6.715  12.018  1.00  0.00
C
ATOM   2032  CD1 TYR X 134      12.115   7.167  12.019  1.00  0.00
C
ATOM   2033  CD2 TYR X 134      13.908   6.103  13.167  1.00  0.00
C
ATOM   2034  CE1 TYR X 134      11.306   7.019  13.129  1.00  0.00
C
ATOM   2035  CE2 TYR X 134      13.110   5.950  14.283  1.00  0.00
C
ATOM   2036  CZ  TYR X 134      11.807   6.409  14.261  1.00  0.00
C
ATOM   2037  OH  TYR X 134      11.008   6.257  15.370  1.00  0.00
O
ATOM   2038  H   TYR X 134      12.595   5.351   9.661  1.00  0.00
H
ATOM   2039  HA  TYR X 134      12.967   8.177   9.743  1.00  0.00
H
ATOM   2040 1HB  TYR X 134      14.815   5.938  10.589  1.00  0.00
H
ATOM   2041 2HB  TYR X 134      15.044   7.658  10.988  1.00  0.00
H
ATOM   2042  HD1 TYR X 134      11.725   7.649  11.121  1.00  0.00
H
ATOM   2043  HD2 TYR X 134      14.938   5.743  13.179  1.00  0.00
H
ATOM   2044  HE1 TYR X 134      10.279   7.381  13.114  1.00  0.00
H
ATOM   2045  HE2 TYR X 134      13.508   5.468  15.176  1.00  0.00
H
ATOM   2046  HH  TYR X 134      11.454   5.821  16.099  1.00  0.00
H
ATOM   2047  N   MET X 135      15.059   6.633   7.752  1.00  0.00
N
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ATOM   2048  CA  MET X 135      15.996   6.876   6.672  1.00  0.00
C
ATOM   2049  C   MET X 135      15.340   7.674   5.542  1.00  0.00
C
ATOM   2050  O   MET X 135      15.888   8.669   5.079  1.00  0.00
O
ATOM   2051  CB  MET X 135      16.541   5.554   6.138  1.00  0.00
C
ATOM   2052  CG  MET X 135      17.501   5.696   4.966  1.00  0.00
C
ATOM   2053  SD  MET X 135      18.043   4.103   4.313  1.00  0.00
S
ATOM   2054  CE  MET X 135      16.546   3.543   3.505  1.00  0.00
C
ATOM   2055  H   MET X 135      14.809   5.684   7.992  1.00  0.00
H
ATOM   2056  HA  MET X 135      16.831   7.477   7.032  1.00  0.00
H
ATOM   2057 1HB  MET X 135      17.050   5.063   6.967  1.00  0.00
H
ATOM   2058 2HB  MET X 135      15.682   4.955   5.833  1.00  0.00
H
ATOM   2059 1HG  MET X 135      16.995   6.252   4.178  1.00  0.00
H
ATOM   2060 2HG  MET X 135      18.371   6.258   5.306  1.00  0.00
H
ATOM   2061 1HE  MET X 135      16.722   2.567   3.051  1.00  0.00
H
ATOM   2062 2HE  MET X 135      15.743   3.464   4.238  1.00  0.00
H
ATOM   2063 3HE  MET X 135      16.263   4.257   2.731  1.00  0.00
H
ATOM   2064  N   GLU X 136      14.153   7.256   5.108  1.00  0.00
N
ATOM   2065  CA  GLU X 136      13.493   7.983   4.027  1.00  0.00
C
ATOM   2066  C   GLU X 136      13.137   9.410   4.418  1.00  0.00
C
ATOM   2067  O   GLU X 136      13.214  10.323   3.589  1.00  0.00
O
ATOM   2068  CB  GLU X 136      12.226   7.248   3.582  1.00  0.00
C
ATOM   2069  CG  GLU X 136      12.482   6.027   2.710  1.00  0.00
C
ATOM   2070  CD  GLU X 136      11.197   5.470   2.160  1.00  0.00
C
ATOM   2071  OE1 GLU X 136      10.481   6.202   1.522  1.00  0.00
O
ATOM   2072  OE2 GLU X 136      10.987   4.285   2.281  1.00  0.00
O
ATOM   2073  H   GLU X 136      13.714   6.446   5.520  1.00  0.00
H
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ATOM   2074  HA  GLU X 136      14.166   8.067   3.173  1.00  0.00
H
ATOM   2075 1HB  GLU X 136      11.700   6.944   4.486  1.00  0.00
H
ATOM   2076 2HB  GLU X 136      11.617   7.965   3.031  1.00  0.00
H
ATOM   2077 1HG  GLU X 136      13.175   6.215   1.891  1.00  0.00
H
ATOM   2078 2HG  GLU X 136      12.922   5.308   3.400  1.00  0.00
H
ATOM   2079  N   LEU X 137      12.759   9.615   5.674  1.00  0.00
N
ATOM   2080  CA  LEU X 137      12.434  10.961   6.132  1.00  0.00
C
ATOM   2081  C   LEU X 137      13.661  11.844   5.936  1.00  0.00
C
ATOM   2082  O   LEU X 137      13.593  12.905   5.313  1.00  0.00
O
ATOM   2083  CB  LEU X 137      11.983  10.927   7.598  1.00  0.00
C
ATOM   2084  CG  LEU X 137      11.343  12.223   8.112  1.00  0.00
C
ATOM   2085  CD1 LEU X 137      10.547  11.944   9.381  1.00  0.00
C
ATOM   2086  CD2 LEU X 137      12.428  13.256   8.373  1.00  0.00
C
ATOM   2087  H   LEU X 137      12.695   8.837   6.314  1.00  0.00
H
ATOM   2088  HA  LEU X 137      11.628  11.369   5.523  1.00  0.00
H
ATOM   2089 1HB  LEU X 137      11.231  10.140   7.535  1.00  0.00
H
ATOM   2090 2HB  LEU X 137      12.786  10.610   8.260  1.00  0.00
H
ATOM   2091  HG  LEU X 137      10.702  12.607   7.319  1.00  0.00
H
ATOM   2092 1HD1 LEU X 137      10.096  12.870   9.739  1.00  0.00
H
ATOM   2093 2HD1 LEU X 137       9.762  11.220   9.165  1.00  0.00
H
ATOM   2094 3HD1 LEU X 137      11.210  11.544  10.147  1.00  0.00
H
ATOM   2095 1HD2 LEU X 137      11.972  14.178   8.740  1.00  0.00
H
ATOM   2096 2HD2 LEU X 137      13.123  12.874   9.122  1.00  0.00
H
ATOM   2097 3HD2 LEU X 137      12.966  13.461   7.448  1.00  0.00
H
ATOM   2098  N   ALA X 138      14.784  11.402   6.496  1.00  0.00
N
ATOM   2099  CA  ALA X 138      16.033  12.153   6.391  1.00  0.00
C
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ATOM   2100  C   ALA X 138      16.431  12.395   4.938  1.00  0.00
C
ATOM   2101  O   ALA X 138      16.842  13.497   4.571  1.00  0.00
O
ATOM   2102  CB  ALA X 138      17.150  11.428   7.127  1.00  0.00
C
ATOM   2103  H   ALA X 138      14.774  10.529   7.004  1.00  0.00
H
ATOM   2104  HA  ALA X 138      15.891  13.132   6.850  1.00  0.00
H
ATOM   2105 1HB  ALA X 138      18.074  12.001   7.039  1.00  0.00
H
ATOM   2106 2HB  ALA X 138      16.887  11.325   8.179  1.00  0.00
H
ATOM   2107 3HB  ALA X 138      17.293  10.441   6.689  1.00  0.00
H
ATOM   2108  N   LEU X 139      16.313  11.363   4.117  1.00  0.00
N
ATOM   2109  CA  LEU X 139      16.665  11.491   2.710  1.00  0.00
C
ATOM   2110  C   LEU X 139      15.869  12.609   2.051  1.00  0.00
C
ATOM   2111  O   LEU X 139      16.424  13.429   1.327  1.00  0.00
O
ATOM   2112  CB  LEU X 139      16.430  10.162   1.983  1.00  0.00
C
ATOM   2113  CG  LEU X 139      17.432   9.048   2.316  1.00  0.00
C
ATOM   2114  CD1 LEU X 139      16.955   7.725   1.732  1.00  0.00
C
ATOM   2115  CD2 LEU X 139      18.803   9.417   1.767  1.00  0.00
C
ATOM   2116  H   LEU X 139      15.976  10.479   4.471  1.00  0.00
H
ATOM   2117  HA  LEU X 139      17.717  11.760   2.620  1.00  0.00
H
ATOM   2118 1HB  LEU X 139      15.449   9.912   2.383  1.00  0.00
H
ATOM   2119 2HB  LEU X 139      16.358  10.298   0.904  1.00  0.00
H
ATOM   2120  HG  LEU X 139      17.510   8.996   3.402  1.00  0.00
H
ATOM   2121 1HD1 LEU X 139      17.673   6.941   1.973  1.00  0.00
H
ATOM   2122 2HD1 LEU X 139      15.984   7.470   2.156  1.00  0.00
H
ATOM   2123 3HD1 LEU X 139      16.868   7.815   0.649  1.00  0.00
H
ATOM   2124 1HD2 LEU X 139      19.514   8.626   2.005  1.00  0.00
H
ATOM   2125 2HD2 LEU X 139      18.741   9.539   0.685  1.00  0.00
H
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ATOM   2126 3HD2 LEU X 139      19.136  10.351   2.218  1.00  0.00
H
ATOM   2127  N   GLY X 140      14.562  12.648   2.309  1.00  0.00
N
ATOM   2128  CA  GLY X 140      13.733  13.683   1.720  1.00  0.00
C
ATOM   2129  C   GLY X 140      14.076  15.081   2.202  1.00  0.00
C
ATOM   2130  O   GLY X 140      14.048  16.044   1.428  1.00  0.00
O
ATOM   2131  H   GLY X 140      14.148  11.955   2.916  1.00  0.00
H
ATOM   2132 1HA  GLY X 140      13.855  13.664   0.637  1.00  0.00
H
ATOM   2133 2HA  GLY X 140      12.690  13.490   1.970  1.00  0.00
H
ATOM   2134  N   GLN X 141      14.398  15.205   3.485  1.00  0.00
N
ATOM   2135  CA  GLN X 141      14.734  16.507   4.038  1.00  0.00
C
ATOM   2136  C   GLN X 141      16.045  17.009   3.436  1.00  0.00
C
ATOM   2137  O   GLN X 141      16.247  18.213   3.272  1.00  0.00
O
ATOM   2138  CB  GLN X 141      14.843  16.428   5.564  1.00  0.00
C
ATOM   2139  CG  GLN X 141      13.511  16.250   6.275  1.00  0.00
C
ATOM   2140  CD  GLN X 141      12.569  17.416   6.041  1.00  0.00
C
ATOM   2141  NE2 GLN X 141      11.286  17.115   5.882  1.00  0.00
N
ATOM   2142  OE1 GLN X 141      12.991  18.575   6.007  1.00  0.00
O
ATOM   2143  H   GLN X 141      14.410  14.389   4.079  1.00  0.00
H
ATOM   2144  HA  GLN X 141      13.962  17.227   3.770  1.00  0.00
H
ATOM   2145 1HB  GLN X 141      15.498  15.587   5.790  1.00  0.00
H
ATOM   2146 2HB  GLN X 141      15.315  17.354   5.894  1.00  0.00
H
ATOM   2147 1HG  GLN X 141      12.930  15.331   6.213  1.00  0.00
H
ATOM   2148 2HG  GLN X 141      13.935  16.343   7.276  1.00  0.00
H
ATOM   2149 1HE2 GLN X 141      10.616  17.842   5.725  1.00  0.00
H
ATOM   2150 2HE2 GLN X 141      10.986  16.160   5.919  1.00  0.00
H
ATOM   2151  N   TYR X 142      16.928  16.073   3.104  1.00  0.00
N
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ATOM   2152  CA  TYR X 142      18.221  16.388   2.503  1.00  0.00
C
ATOM   2153  C   TYR X 142      18.042  16.822   1.044  1.00  0.00
C
ATOM   2154  O   TYR X 142      18.699  17.751   0.572  1.00  0.00
O
ATOM   2155  CB  TYR X 142      19.160  15.183   2.590  1.00  0.00
C
ATOM   2156  CG  TYR X 142      19.527  14.794   4.004  1.00  0.00
C
ATOM   2157  CD1 TYR X 142      19.329  15.672   5.060  1.00  0.00
C
ATOM   2158  CD2 TYR X 142      20.067  13.546   4.281  1.00  0.00
C
ATOM   2159  CE1 TYR X 142      19.663  15.322   6.354  1.00  0.00
C
ATOM   2160  CE2 TYR X 142      20.403  13.185   5.571  1.00  0.00
C
ATOM   2161  CZ  TYR X 142      20.199  14.076   6.605  1.00  0.00
C
ATOM   2162  OH  TYR X 142      20.532  13.720   7.893  1.00  0.00
O
ATOM   2163  H   TYR X 142      16.695  15.105   3.275  1.00  0.00
H
ATOM   2164  HA  TYR X 142      18.680  17.225   3.029  1.00  0.00
H
ATOM   2165 1HB  TYR X 142      18.659  14.347   2.100  1.00  0.00
H
ATOM   2166 2HB  TYR X 142      20.064  15.439   2.038  1.00  0.00
H
ATOM   2167  HD1 TYR X 142      18.905  16.656   4.853  1.00  0.00
H
ATOM   2168  HD2 TYR X 142      20.225  12.848   3.459  1.00  0.00
H
ATOM   2169  HE1 TYR X 142      19.503  16.022   7.172  1.00  0.00
H
ATOM   2170  HE2 TYR X 142      20.828  12.199   5.768  1.00  0.00
H
ATOM   2171  HH  TYR X 142      20.350  14.412   8.532  1.00  0.00
H
ATOM   2172  N   HIS X 143      17.151  16.141   0.329  1.00  0.00
N
ATOM   2173  CA  HIS X 143      16.911  16.491  -1.057  1.00  0.00
C
ATOM   2174  C   HIS X 143      16.288  17.865  -1.207  1.00  0.00
C
ATOM   2175  O   HIS X 143      16.672  18.639  -2.086  1.00  0.00
O
ATOM   2176  CB  HIS X 143      16.011  15.450  -1.730  1.00  0.00
C
ATOM   2177  CG  HIS X 143      16.613  14.081  -1.788  1.00  0.00
C
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ATOM   2178  CD2 HIS X 143      17.898  13.666  -1.686  1.00  0.00
C
ATOM   2179  ND1 HIS X 143      15.857  12.942  -1.972  1.00  0.00
N
ATOM   2180  CE1 HIS X 143      16.651  11.886  -1.982  1.00  0.00
C
ATOM   2181  NE2 HIS X 143      17.894  12.299  -1.809  1.00  0.00
N
ATOM   2182  H   HIS X 143      16.642  15.379   0.752  1.00  0.00
H
ATOM   2183  HA  HIS X 143      17.858  16.532  -1.594  1.00  0.00
H
ATOM   2184 1HB  HIS X 143      15.073  15.354  -1.183  1.00  0.00
H
ATOM   2185 2HB  HIS X 143      15.801  15.743  -2.758  1.00  0.00
H
ATOM   2186  HD2 HIS X 143      18.838  14.199  -1.535  1.00  0.00
H
ATOM   2187  HE1 HIS X 143      16.243  10.884  -2.117  1.00  0.00
H
ATOM   2188  HE2 HIS X 143      18.713  11.711  -1.773  1.00  0.00
H
ATOM   2189  N   ARG X 144      15.324  18.173  -0.344  1.00  0.00
N
ATOM   2190  CA  ARG X 144      14.634  19.458  -0.388  1.00  0.00
C
ATOM   2191  C   ARG X 144      14.002  19.697  -1.751  1.00  0.00
C
ATOM   2192  O   ARG X 144      13.807  20.840  -2.165  1.00  0.00
O
ATOM   2193  CB  ARG X 144      15.542  20.610   0.015  1.00  0.00
C
ATOM   2194  CG  ARG X 144      16.139  20.497   1.408  1.00  0.00
C
ATOM   2195  CD  ARG X 144      17.009  21.636   1.797  1.00  0.00
C
ATOM   2196  NE  ARG X 144      17.743  21.439   3.036  1.00  0.00
N
ATOM   2197  CZ  ARG X 144      18.619  22.322   3.554  1.00  0.00
C
ATOM   2198  NH1 ARG X 144      18.903  23.443   2.928  1.00  0.00
N
ATOM   2199  NH2 ARG X 144      19.206  22.020   4.700  1.00  0.00
N
ATOM   2200  H   ARG X 144      15.063  17.500   0.362  1.00  0.00
H
ATOM   2201  HA  ARG X 144      13.820  19.465   0.337  1.00  0.00
H
ATOM   2202 1HB  ARG X 144      16.345  20.654  -0.719  1.00  0.00
H
ATOM   2203 2HB  ARG X 144      14.945  21.520  -0.045  1.00  0.00
H
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ATOM   2204 1HG  ARG X 144      15.326  20.436   2.131  1.00  0.00
H
ATOM   2205 2HG  ARG X 144      16.736  19.585   1.456  1.00  0.00
H
ATOM   2206 1HD  ARG X 144      17.741  21.807   1.007  1.00  0.00
H
ATOM   2207 2HD  ARG X 144      16.394  22.526   1.920  1.00  0.00
H
ATOM   2208  HE  ARG X 144      17.724  20.660   3.679  1.00  0.00
H
ATOM   2209 1HH1 ARG X 144      18.460  23.651   2.045  1.00  0.00
H
ATOM   2210 2HH1 ARG X 144      19.562  24.091   3.335  1.00  0.00
H
ATOM   2211 1HH2 ARG X 144      18.991  21.145   5.158  1.00  0.00
H
ATOM   2212 2HH2 ARG X 144      19.868  22.663   5.109  1.00  0.00
H
ATOM   2213  N   ASN X 145      13.684  18.610  -2.451  1.00  0.00
N
ATOM   2214  CA  ASN X 145      13.074  18.701  -3.772  1.00  0.00
C
ATOM   2215  C   ASN X 145      12.592  17.336  -4.249  1.00  0.00
C
ATOM   2216  O   ASN X 145      12.893  16.312  -3.637  1.00  0.00
O
ATOM   2217  CB  ASN X 145      14.029  19.305  -4.785  1.00  0.00
C
ATOM   2218  CG  ASN X 145      13.354  20.176  -5.809  1.00  0.00
C
ATOM   2219  ND2 ASN X 145      14.154  20.911  -6.539  1.00  0.00
N
ATOM   2220  OD1 ASN X 145      12.132  20.127  -5.986  1.00  0.00
O
ATOM   2221  H   ASN X 145      13.869  17.699  -2.056  1.00  0.00
H
ATOM   2222  HA  ASN X 145      12.193  19.344  -3.730  1.00  0.00
H
ATOM   2223 1HB  ASN X 145      14.955  19.784  -4.461  1.00  0.00
H
ATOM   2224 2HB  ASN X 145      14.258  18.342  -5.239  1.00  0.00
H
ATOM   2225 1HD2 ASN X 145      13.775  21.515  -7.240  1.00  0.00
H
ATOM   2226 2HD2 ASN X 145      15.142  20.868  -6.396  1.00  0.00
H
ATOM   2227  N   GLY X 146      11.842  17.331  -5.346  1.00  0.00
N
ATOM   2228  CA  GLY X 146      11.380  16.087  -5.953  1.00  0.00
C
ATOM   2229  C   GLY X 146      12.533  15.332  -6.606  1.00  0.00
C
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ATOM   2230  O   GLY X 146      12.537  14.102  -6.644  1.00  0.00
O
ATOM   2231  H   GLY X 146      11.584  18.211  -5.771  1.00  0.00
H
ATOM   2232 1HA  GLY X 146      10.934  15.458  -5.181  1.00  0.00
H
ATOM   2233 2HA  GLY X 146      10.631  16.317  -6.710  1.00  0.00
H
ATOM   2234  N   CYS X 147      13.512  16.079  -7.111  1.00  0.00
N
ATOM   2235  CA  CYS X 147      14.685  15.479  -7.734  1.00  0.00
C
ATOM   2236  C   CYS X 147      15.788  15.230  -6.710  1.00  0.00
C
ATOM   2237  O   CYS X 147      15.662  15.609  -5.548  1.00  0.00
O
ATOM   2238  CB  CYS X 147      15.115  16.547  -8.740  1.00  0.00
C
ATOM   2239  SG  CYS X 147      15.794  18.049  -7.994  1.00  0.00
S
ATOM   2240  H   CYS X 147      13.440  17.085  -7.061  1.00  0.00
H
ATOM   2241  HA  CYS X 147      14.466  14.558  -8.275  1.00  0.00
H
ATOM   2242 1HB  CYS X 147      15.895  16.156  -9.395  1.00  0.00
H
ATOM   2243 2HB  CYS X 147      14.262  16.865  -9.339  1.00  0.00
H
ATOM   2244  HG  CYS X 147      16.029  18.678  -9.142  1.00  0.00
H
ATOM   2245  N   ILE X 148      16.864  14.592  -7.152  1.00  0.00
N
ATOM   2246  CA  ILE X 148      17.971  14.252  -6.266  1.00  0.00
C
ATOM   2247  C   ILE X 148      19.288  14.816  -6.785  1.00  0.00
C
ATOM   2248  O   ILE X 148      19.969  14.181  -7.592  1.00  0.00
O
ATOM   2249  CB  ILE X 148      18.110  12.728  -6.093  1.00  0.00
C
ATOM   2250  CG1 ILE X 148      16.792  12.124  -5.599  1.00  0.00
C
ATOM   2251  CG2 ILE X 148      19.242  12.403  -5.131  1.00  0.00
C
ATOM   2252  CD1 ILE X 148      16.807  10.615  -5.512  1.00  0.00
C
ATOM   2253  H   ILE X 148      16.918  14.334  -8.127  1.00  0.00
H
ATOM   2254  HA  ILE X 148      17.837  14.717  -5.289  1.00  0.00
H
ATOM   2255  HB  ILE X 148      18.316  12.279  -7.064  1.00  0.00
H
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ATOM   2256 1HG1 ILE X 148      16.592  12.544  -4.614  1.00  0.00
H
ATOM   2257 2HG1 ILE X 148      16.012  12.441  -6.291  1.00  0.00
H
ATOM   2258 1HG2 ILE X 148      19.325  11.321  -5.020  1.00  0.00
H
ATOM   2259 2HG2 ILE X 148      20.177  12.800  -5.521  1.00  0.00
H
ATOM   2260 3HG2 ILE X 148      19.034  12.851  -4.160  1.00  0.00
H
ATOM   2261 1HD1 ILE X 148      15.838  10.262  -5.154  1.00  0.00
H
ATOM   2262 2HD1 ILE X 148      17.004  10.194  -6.497  1.00  0.00
H
ATOM   2263 3HD1 ILE X 148      17.585  10.299  -4.819  1.00  0.00
H
ATOM   2264  N   SER X 149      19.639  16.008  -6.320  1.00  0.00
N
ATOM   2265  CA  SER X 149      20.943  16.592  -6.612  1.00  0.00
C
ATOM   2266  C   SER X 149      21.951  16.264  -5.517  1.00  0.00
C
ATOM   2267  O   SER X 149      23.143  16.519  -5.663  1.00  0.00
O
ATOM   2268  CB  SER X 149      20.818  18.093  -6.783  1.00  0.00
C
ATOM   2269  OG  SER X 149      20.443  18.729  -5.592  1.00  0.00
O
ATOM   2270  H   SER X 149      18.986  16.526  -5.749  1.00  0.00
H
ATOM   2271  HA  SER X 149      21.342  16.297  -7.583  1.00  0.00
H
ATOM   2272 1HB  SER X 149      21.779  18.487  -7.109  1.00  0.00
H
ATOM   2273 2HB  SER X 149      20.065  18.296  -7.545  1.00  0.00
H
ATOM   2274  HG  SER X 149      19.593  18.389  -5.303  1.00  0.00
H
ATOM   2275  N   ILE X 150      21.459  15.697  -4.419  1.00  0.00
N
ATOM   2276  CA  ILE X 150      22.312  15.350  -3.289  1.00  0.00
C
ATOM   2277  C   ILE X 150      23.183  14.139  -3.610  1.00  0.00
C
ATOM   2278  O   ILE X 150      24.369  14.117  -3.290  1.00  0.00
O
ATOM   2279  CB  ILE X 150      21.483  15.056  -2.025  1.00  0.00
C
ATOM   2280  CG1 ILE X 150      20.696  16.298  -1.602  1.00  0.00
C
ATOM   2281  CG2 ILE X 150      22.386  14.584  -0.896  1.00  0.00
C
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ATOM   2282  CD1 ILE X 150      21.565  17.492  -1.279  1.00  0.00
C
ATOM   2283  H   ILE X 150      20.470  15.501  -4.367  1.00  0.00
H
ATOM   2284  HA  ILE X 150      23.019  16.152  -3.080  1.00  0.00
H
ATOM   2285  HB  ILE X 150      20.751  14.282  -2.253  1.00  0.00
H
ATOM   2286 1HG1 ILE X 150      20.022  16.549  -2.421  1.00  0.00
H
ATOM   2287 2HG1 ILE X 150      20.112  16.027  -0.722  1.00  0.00
H
ATOM   2288 1HG2 ILE X 150      21.785  14.382  -0.009  1.00  0.00
H
ATOM   2289 2HG2 ILE X 150      22.903  13.674  -1.198  1.00  0.00
H
ATOM   2290 3HG2 ILE X 150      23.119  15.358  -0.667  1.00  0.00
H
ATOM   2291 1HD1 ILE X 150      20.935  18.333  -0.988  1.00  0.00
H
ATOM   2292 2HD1 ILE X 150      22.239  17.242  -0.461  1.00  0.00
H
ATOM   2293 3HD1 ILE X 150      22.149  17.766  -2.158  1.00  0.00
H
ATOM   2294  N   TRP X 151      22.585  13.139  -4.244  1.00  0.00
N
ATOM   2295  CA  TRP X 151      23.318  11.947  -4.655  1.00  0.00
C
ATOM   2296  C   TRP X 151      23.855  12.092  -6.071  1.00  0.00
C
ATOM   2297  O   TRP X 151      24.156  11.099  -6.736  1.00  0.00
O
ATOM   2298  CB  TRP X 151      22.422  10.711  -4.556  1.00  0.00
C
ATOM   2299  CG  TRP X 151      22.068  10.338  -3.148  1.00  0.00
C
ATOM   2300  CD1 TRP X 151      21.657  11.181  -2.160  1.00  0.00
C
ATOM   2301  CD2 TRP X 151      22.093   9.025  -2.573  1.00  0.00
C
ATOM   2302  CE2 TRP X 151      21.686   9.150  -1.233  1.00  0.00
C
ATOM   2303  CE3 TRP X 151      22.423   7.756  -3.064  1.00  0.00
C
ATOM   2304  NE1 TRP X 151      21.426  10.479  -1.004  1.00  0.00
N
ATOM   2305  CZ2 TRP X 151      21.599   8.063  -0.379  1.00  0.00
C
ATOM   2306  CZ3 TRP X 151      22.334   6.665  -2.208  1.00  0.00
C
ATOM   2307  CH2 TRP X 151      21.933   6.814  -0.903  1.00  0.00
C
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ATOM   2308  H   TRP X 151      21.598  13.205  -4.448  1.00  0.00
H
ATOM   2309  HA  TRP X 151      24.182  11.802  -4.006  1.00  0.00
H
ATOM   2310 1HB  TRP X 151      21.480  10.884  -5.079  1.00  0.00
H
ATOM   2311 2HB  TRP X 151      22.924   9.847  -4.992  1.00  0.00
H
ATOM   2312  HD1 TRP X 151      21.575  12.236  -2.416  1.00  0.00
H
ATOM   2313  HE1 TRP X 151      21.116  10.872  -0.128  1.00  0.00
H
ATOM   2314  HE3 TRP X 151      22.743   7.581  -4.090  1.00  0.00
H
ATOM   2315  HZ2 TRP X 151      21.276   8.226   0.650  1.00  0.00
H
ATOM   2316  HZ3 TRP X 151      22.593   5.682  -2.601  1.00  0.00
H
ATOM   2317  HH2 TRP X 151      21.877   5.931  -0.264  1.00  0.00
H
ATOM   2318  N   ARG X 152      23.975  13.332  -6.528  1.00  0.00
N
ATOM   2319  CA  ARG X 152      24.252  13.610  -7.933  1.00  0.00
C
ATOM   2320  C   ARG X 152      25.540  12.933  -8.384  1.00  0.00
C
ATOM   2321  O   ARG X 152      25.714  12.632  -9.567  1.00  0.00
O
ATOM   2322  CB  ARG X 152      24.272  15.102  -8.232  1.00  0.00
C
ATOM   2323  CG  ARG X 152      24.492  15.459  -9.692  1.00  0.00
C
ATOM   2324  CD  ARG X 152      24.342  16.905  -9.999  1.00  0.00
C
ATOM   2325  NE  ARG X 152      24.706  17.275 -11.356  1.00  0.00
N
ATOM   2326  CZ  ARG X 152      24.669  18.530 -11.844  1.00  0.00
C
ATOM   2327  NH1 ARG X 152      24.250  19.533 -11.103  1.00  0.00
N
ATOM   2328  NH2 ARG X 152      25.044  18.725 -13.096  1.00  0.00
N
ATOM   2329  H   ARG X 152      23.871  14.105  -5.886  1.00  0.00
H
ATOM   2330  HA  ARG X 152      23.453  13.203  -8.554  1.00  0.00
H
ATOM   2331 1HB  ARG X 152      23.315  15.505  -7.903  1.00  0.00
H
ATOM   2332 2HB  ARG X 152      25.073  15.534  -7.631  1.00  0.00
H
ATOM   2333 1HG  ARG X 152      25.502  15.160  -9.975  1.00  0.00
H
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ATOM   2334 2HG  ARG X 152      23.768  14.911 -10.295  1.00  0.00
H
ATOM   2335 1HD  ARG X 152      23.301  17.192  -9.851  1.00  0.00
H
ATOM   2336 2HD  ARG X 152      24.975  17.478  -9.322  1.00  0.00
H
ATOM   2337  HE  ARG X 152      25.029  16.693 -12.118  1.00  0.00
H
ATOM   2338 1HH1 ARG X 152      23.950  19.364 -10.153  1.00  0.00
H
ATOM   2339 2HH1 ARG X 152      24.230  20.465 -11.487  1.00  0.00
H
ATOM   2340 1HH2 ARG X 152      25.346  17.941 -13.658  1.00  0.00
H
ATOM   2341 2HH2 ARG X 152      25.025  19.656 -13.487  1.00  0.00
H
ATOM   2342  N   LYS X 153      26.444  12.700  -7.438  1.00  0.00
N
ATOM   2343  CA  LYS X 153      27.714  12.047  -7.735  1.00  0.00
C
ATOM   2344  C   LYS X 153      27.525  10.555  -7.969  1.00  0.00
C
ATOM   2345  O   LYS X 153      27.966  10.018  -8.985  1.00  0.00
O
ATOM   2346  CB  LYS X 153      28.714  12.279  -6.601  1.00  0.00
C
ATOM   2347  CG  LYS X 153      30.084  11.655  -6.834  1.00  0.00
C
ATOM   2348  CD  LYS X 153      31.048  12.005  -5.711  1.00  0.00
C
ATOM   2349  CE  LYS X 153      32.419  11.388  -5.944  1.00  0.00
C
ATOM   2350  NZ  LYS X 153      33.370  11.711  -4.847  1.00  0.00
N
ATOM   2351  H   LYS X 153      26.246  12.982  -6.488  1.00  0.00
H
ATOM   2352  HA  LYS X 153      28.131  12.456  -8.656  1.00  0.00
H
ATOM   2353 1HB  LYS X 153      28.820  13.358  -6.484  1.00  0.00
H
ATOM   2354 2HB  LYS X 153      28.273  11.858  -5.695  1.00  0.00
H
ATOM   2355 1HG  LYS X 153      29.967  10.573  -6.890  1.00  0.00
H
ATOM   2356 2HG  LYS X 153      30.477  12.027  -7.779  1.00  0.00
H
ATOM   2357 1HD  LYS X 153      31.142  13.091  -5.658  1.00  0.00
H
ATOM   2358 2HD  LYS X 153      30.638  11.632  -4.772  1.00  0.00
H
ATOM   2359 1HE  LYS X 153      32.300  10.309  -6.017  1.00  0.00
H
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ATOM   2360 2HE  LYS X 153      32.810  11.773  -6.887  1.00  0.00
H
ATOM   2361 1HZ  LYS X 153      34.266  11.284  -5.039  1.00  0.00
H
ATOM   2362 2HZ  LYS X 153      33.482  12.713  -4.780  1.00  0.00
H
ATOM   2363 3HZ  LYS X 153      33.009  11.355  -3.973  1.00  0.00
H
ATOM   2364  N   ILE X 154      26.867   9.893  -7.025  1.00  0.00
N
ATOM   2365  CA  ILE X 154      26.586   8.465  -7.146  1.00  0.00
C
ATOM   2366  C   ILE X 154      25.346   8.220  -7.998  1.00  0.00
C
ATOM   2367  O   ILE X 154      24.930   7.076  -8.184  1.00  0.00
O
ATOM   2368  CB  ILE X 154      26.389   7.808  -5.767  1.00  0.00
C
ATOM   2369  CG1 ILE X 154      26.450   6.283  -5.890  1.00  0.00
C
ATOM   2370  CG2 ILE X 154      25.068   8.244  -5.154  1.00  0.00
C
ATOM   2371  CD1 ILE X 154      26.640   5.572  -4.569  1.00  0.00
C
ATOM   2372  H   ILE X 154      26.555  10.389  -6.202  1.00  0.00
H
ATOM   2373  HA  ILE X 154      27.391   7.959  -7.677  1.00  0.00
H
ATOM   2374  HB  ILE X 154      27.209   8.103  -5.114  1.00  0.00
H
ATOM   2375 1HG1 ILE X 154      25.517   5.957  -6.347  1.00  0.00
H
ATOM   2376 2HG1 ILE X 154      27.281   6.044  -6.553  1.00  0.00
H
ATOM   2377 1HG2 ILE X 154      24.944   7.770  -4.182  1.00  0.00
H
ATOM   2378 2HG2 ILE X 154      25.061   9.327  -5.033  1.00  0.00
H
ATOM   2379 3HG2 ILE X 154      24.248   7.947  -5.807  1.00  0.00
H
ATOM   2380 1HD1 ILE X 154      26.673   4.495  -4.736  1.00  0.00
H
ATOM   2381 2HD1 ILE X 154      27.575   5.897  -4.111  1.00  0.00
H
ATOM   2382 3HD1 ILE X 154      25.810   5.809  -3.905  1.00  0.00
H
ATOM   2383  N   CYS X 155      24.764   9.296  -8.507  1.00  0.00
N
ATOM   2384  CA  CYS X 155      23.543   9.204  -9.301  1.00  0.00
C
ATOM   2385  C   CYS X 155      23.718   8.246 -10.472  1.00  0.00
C
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ATOM   2386  O   CYS X 155      22.969   7.279 -10.615  1.00  0.00
O
ATOM   2387  CB  CYS X 155      23.356  10.637  -9.800  1.00  0.00
C
ATOM   2388  SG  CYS X 155      22.220  10.801 -11.197  1.00  0.00
S
ATOM   2389  H   CYS X 155      25.176  10.203  -8.341  1.00  0.00
H
ATOM   2390  HA  CYS X 155      22.666   8.921  -8.717  1.00  0.00
H
ATOM   2391 1HB  CYS X 155      22.949  11.264  -9.005  1.00  0.00
H
ATOM   2392 2HB  CYS X 155      24.307  11.047 -10.135  1.00  0.00
H
ATOM   2393  HG  CYS X 155      22.332  12.120 -11.314  1.00  0.00
H
ATOM   2394  N   PRO X 156      24.709   8.523 -11.311  1.00  0.00
N
ATOM   2395  CA  PRO X 156      24.970   7.700 -12.487  1.00  0.00
C
ATOM   2396  C   PRO X 156      25.173   6.238 -12.105  1.00  0.00
C
ATOM   2397  O   PRO X 156      24.925   5.338 -12.905  1.00  0.00
O
ATOM   2398  CB  PRO X 156      26.237   8.317 -13.104  1.00  0.00
C
ATOM   2399  CG  PRO X 156      26.224   9.754 -12.659  1.00  0.00
C
ATOM   2400  CD  PRO X 156      25.748   9.539 -11.103  1.00  0.00
C
ATOM   2401  HA  PRO X 156      24.204   7.756 -13.121  1.00  0.00
H
ATOM   2402 1HB  PRO X 156      26.885   7.896 -12.615  1.00  0.00
H
ATOM   2403 2HB  PRO X 156      26.036   8.300 -13.945  1.00  0.00
H
ATOM   2404 1HG  PRO X 156      26.452   9.785 -11.844  1.00  0.00
H
ATOM   2405 2HG  PRO X 156      26.458  10.279 -13.399  1.00  0.00
H
ATOM   2406 1HD  PRO X 156      25.943   9.480 -10.172  1.00  0.00
H
ATOM   2407 2HD  PRO X 156      25.332  10.335 -11.419  1.00  0.00
H
ATOM   2408  N   ILE X 157      25.623   6.010 -10.873  1.00  0.00
N
ATOM   2409  CA  ILE X 157      25.838   4.658 -10.376  1.00  0.00
C
ATOM   2410  C   ILE X 157      24.520   4.009  -9.960  1.00  0.00
C
ATOM   2411  O   ILE X 157      24.287   2.831 -10.222  1.00  0.00
O
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ATOM   2412  CB  ILE X 157      26.809   4.642  -9.182  1.00  0.00
C
ATOM   2413  CG1 ILE X 157      28.212   5.061  -9.630  1.00  0.00
C
ATOM   2414  CG2 ILE X 157      26.840   3.263  -8.541  1.00  0.00
C
ATOM   2415  CD1 ILE X 157      29.167   5.313  -8.486  1.00  0.00
C
ATOM   2416  H   ILE X 157      25.819   6.795 -10.268  1.00  0.00
H
ATOM   2417  HA  ILE X 157      26.225   4.016 -11.167  1.00  0.00
H
ATOM   2418  HB  ILE X 157      26.481   5.378  -8.448  1.00  0.00
H
ATOM   2419 1HG1 ILE X 157      28.602   4.264 -10.260  1.00  0.00
H
ATOM   2420 2HG1 ILE X 157      28.106   5.971 -10.219  1.00  0.00
H
ATOM   2421 1HG2 ILE X 157      27.532   3.270  -7.698  1.00  0.00
H
ATOM   2422 2HG2 ILE X 157      25.844   3.004  -8.188  1.00  0.00
H
ATOM   2423 3HG2 ILE X 157      27.170   2.528  -9.274  1.00  0.00
H
ATOM   2424 1HD1 ILE X 157      30.141   5.606  -8.881  1.00  0.00
H
ATOM   2425 2HD1 ILE X 157      28.778   6.111  -7.853  1.00  0.00
H
ATOM   2426 3HD1 ILE X 157      29.276   4.403  -7.896  1.00  0.00
H
ATOM   2427  N   PHE X 158      23.664   4.791  -9.309  1.00  0.00
N
ATOM   2428  CA  PHE X 158      22.378   4.290  -8.840  1.00  0.00
C
ATOM   2429  C   PHE X 158      21.238   4.796  -9.713  1.00  0.00
C
ATOM   2430  O   PHE X 158      20.150   5.095  -9.221  1.00  0.00
O
ATOM   2431  CB  PHE X 158      22.145   4.694  -7.384  1.00  0.00
C
ATOM   2432  CG  PHE X 158      22.931   3.882  -6.395  1.00  0.00
C
ATOM   2433  CD1 PHE X 158      23.466   2.653  -6.755  1.00  0.00
C
ATOM   2434  CD2 PHE X 158      23.138   4.342  -5.104  1.00  0.00
C
ATOM   2435  CE1 PHE X 158      24.189   1.904  -5.846  1.00  0.00
C
ATOM   2436  CE2 PHE X 158      23.862   3.596  -4.194  1.00  0.00
C
ATOM   2437  CZ  PHE X 158      24.387   2.375  -4.566  1.00  0.00
C
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ATOM   2438  H   PHE X 158      23.910   5.755  -9.137  1.00  0.00
H
ATOM   2439  HA  PHE X 158      22.358   3.201  -8.906  1.00  0.00
H
ATOM   2440 1HB  PHE X 158      22.434   5.733  -7.232  1.00  0.00
H
ATOM   2441 2HB  PHE X 158      21.095   4.569  -7.123  1.00  0.00
H
ATOM   2442  HD1 PHE X 158      23.309   2.281  -7.768  1.00  0.00
H
ATOM   2443  HD2 PHE X 158      22.722   5.306  -4.809  1.00  0.00
H
ATOM   2444  HE1 PHE X 158      24.602   0.940  -6.142  1.00  0.00
H
ATOM   2445  HE2 PHE X 158      24.018   3.971  -3.182  1.00  0.00
H
ATOM   2446  HZ  PHE X 158      24.956   1.786  -3.849  1.00  0.00
H
ATOM   2447  N   LYS X 159      21.493   4.888 -11.015  1.00  0.00
N
ATOM   2448  CA  LYS X 159      20.466   5.286 -11.971  1.00  0.00
C
ATOM   2449  C   LYS X 159      19.338   4.263 -12.026  1.00  0.00
C
ATOM   2450  O   LYS X 159      18.183   4.584 -11.748  1.00  0.00
O
ATOM   2451  CB  LYS X 159      21.072   5.474 -13.362  1.00  0.00
C
ATOM   2452  CG  LYS X 159      20.078   5.913 -14.428  1.00  0.00
C
ATOM   2453  CD  LYS X 159      20.757   6.099 -15.776  1.00  0.00
C
ATOM   2454  CE  LYS X 159      21.153   4.763 -16.388  1.00  0.00
C
ATOM   2455  NZ  LYS X 159      21.727   4.923 -17.750  1.00  0.00
N
ATOM   2456  H   LYS X 159      22.422   4.677 -11.351  1.00  0.00
H
ATOM   2457  HA  LYS X 159      20.015   6.228 -11.657  1.00  0.00
H
ATOM   2458 1HB  LYS X 159      21.858   6.225 -13.269  1.00  0.00
H
ATOM   2459 2HB  LYS X 159      21.516   4.520 -13.650  1.00  0.00
H
ATOM   2460 1HG  LYS X 159      19.304   5.150 -14.513  1.00  0.00
H
ATOM   2461 2HG  LYS X 159      19.628   6.854 -14.116  1.00  0.00
H
ATOM   2462 1HD  LYS X 159      20.068   6.616 -16.446  1.00  0.00
H
ATOM   2463 2HD  LYS X 159      21.650   6.710 -15.635  1.00  0.00
H
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ATOM   2464 1HE  LYS X 159      21.890   4.295 -15.737  1.00  0.00
H
ATOM   2465 2HE  LYS X 159      20.264   4.135 -16.439  1.00  0.00
H
ATOM   2466 1HZ  LYS X 159      21.975   4.015 -18.120  1.00  0.00
H
ATOM   2467 2HZ  LYS X 159      21.044   5.356 -18.355  1.00  0.00
H
ATOM   2468 3HZ  LYS X 159      22.552   5.503 -17.704  1.00  0.00
H
ATOM   2469  N   GLY X 160      19.682   3.030 -12.386  1.00  0.00
N
ATOM   2470  CA  GLY X 160      18.706   1.950 -12.444  1.00  0.00
C
ATOM   2471  C   GLY X 160      18.075   1.702 -11.082  1.00  0.00
C
ATOM   2472  O   GLY X 160      16.989   1.133 -10.982  1.00  0.00
O
ATOM   2473  H   GLY X 160      20.645   2.838 -12.627  1.00  0.00
H
ATOM   2474 1HA  GLY X 160      17.923   2.215 -13.155  1.00  0.00
H
ATOM   2475 2HA  GLY X 160      19.202   1.039 -12.776  1.00  0.00
H
ATOM   2476  N   ILE X 161      18.762   2.137 -10.031  1.00  0.00
N
ATOM   2477  CA  ILE X 161      18.260   1.916  -8.676  1.00  0.00
C
ATOM   2478  C   ILE X 161      17.155   2.929  -8.419  1.00  0.00
C
ATOM   2479  O   ILE X 161      16.056   2.575  -7.996  1.00  0.00
O
ATOM   2480  CB  ILE X 161      19.382   2.047  -7.629  1.00  0.00
C
ATOM   2481  CG1 ILE X 161      20.499   1.040  -7.916  1.00  0.00
C
ATOM   2482  CG2 ILE X 161      18.827   1.846  -6.227  1.00  0.00
C
ATOM   2483  CD1 ILE X 161      20.027  -0.394  -7.975  1.00  0.00
C
ATOM   2484  H   ILE X 161      19.637   2.622 -10.169  1.00  0.00
H
ATOM   2485  HA  ILE X 161      17.800   0.933  -8.593  1.00  0.00
H
ATOM   2486  HB  ILE X 161      19.825   3.038  -7.706  1.00  0.00
H
ATOM   2487 1HG1 ILE X 161      20.945   1.316  -8.870  1.00  0.00
H
ATOM   2488 2HG1 ILE X 161      21.241   1.146  -7.123  1.00  0.00
H
ATOM   2489 1HG2 ILE X 161      19.632   1.941  -5.500  1.00  0.00
H
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ATOM   2490 2HG2 ILE X 161      18.066   2.599  -6.026  1.00  0.00
H
ATOM   2491 3HG2 ILE X 161      18.383   0.853  -6.151  1.00  0.00
H
ATOM   2492 1HD1 ILE X 161      20.876  -1.049  -8.181  1.00  0.00
H
ATOM   2493 2HD1 ILE X 161      19.581  -0.672  -7.018  1.00  0.00
H
ATOM   2494 3HD1 ILE X 161      19.288  -0.504  -8.765  1.00  0.00
H
ATOM   2495  N   GLY X 162      17.469   4.195  -8.689  1.00  0.00
N
ATOM   2496  CA  GLY X 162      16.513   5.267  -8.490  1.00  0.00
C
ATOM   2497  C   GLY X 162      15.234   5.095  -9.288  1.00  0.00
C
ATOM   2498  O   GLY X 162      14.190   5.610  -8.905  1.00  0.00
O
ATOM   2499  H   GLY X 162      18.391   4.413  -9.038  1.00  0.00
H
ATOM   2500 1HA  GLY X 162      16.243   5.313  -7.435  1.00  0.00
H
ATOM   2501 2HA  GLY X 162      16.968   6.211  -8.788  1.00  0.00
H
ATOM   2502  N   TYR X 163      15.315   4.382 -10.410  1.00  0.00
N
ATOM   2503  CA  TYR X 163      14.138   4.154 -11.251  1.00  0.00
C
ATOM   2504  C   TYR X 163      13.080   3.316 -10.530  1.00  0.00
C
ATOM   2505  O   TYR X 163      11.892   3.381 -10.852  1.00  0.00
O
ATOM   2506  CB  TYR X 163      14.540   3.468 -12.559  1.00  0.00
C
ATOM   2507  CG  TYR X 163      15.297   4.363 -13.514  1.00  0.00
C
ATOM   2508  CD1 TYR X 163      15.283   5.743 -13.361  1.00  0.00
C
ATOM   2509  CD2 TYR X 163      16.025   3.827 -14.566  1.00  0.00
C
ATOM   2510  CE1 TYR X 163      15.973   6.564 -14.231  1.00  0.00
C
ATOM   2511  CE2 TYR X 163      16.718   4.640 -15.442  1.00  0.00
C
ATOM   2512  CZ  TYR X 163      16.689   6.009 -15.272  1.00  0.00
C
ATOM   2513  OH  TYR X 163      17.379   6.823 -16.139  1.00  0.00
O
ATOM   2514  H   TYR X 163      16.205   3.992 -10.686  1.00  0.00
H
ATOM   2515  HA  TYR X 163      13.663   5.106 -11.490  1.00  0.00
H
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ATOM   2516 1HB  TYR X 163      15.161   2.610 -12.295  1.00  0.00
H
ATOM   2517 2HB  TYR X 163      13.624   3.119 -13.035  1.00  0.00
H
ATOM   2518  HD1 TYR X 163      14.715   6.174 -12.538  1.00  0.00
H
ATOM   2519  HD2 TYR X 163      16.042   2.745 -14.695  1.00  0.00
H
ATOM   2520  HE1 TYR X 163      15.952   7.646 -14.099  1.00  0.00
H
ATOM   2521  HE2 TYR X 163      17.284   4.199 -16.263  1.00  0.00
H
ATOM   2522  HH  TYR X 163      17.291   7.757 -15.930  1.00  0.00
H
ATOM   2523  N   ALA X 164      13.502   2.525  -9.551  1.00  0.00
N
ATOM   2524  CA  ALA X 164      12.559   1.703  -8.806  1.00  0.00
C
ATOM   2525  C   ALA X 164      11.594   2.563  -7.998  1.00  0.00
C
ATOM   2526  O   ALA X 164      10.568   2.080  -7.521  1.00  0.00
O
ATOM   2527  CB  ALA X 164      13.303   0.737  -7.895  1.00  0.00
C
ATOM   2528  H   ALA X 164      14.485   2.493  -9.322  1.00  0.00
H
ATOM   2529  HA  ALA X 164      11.964   1.125  -9.514  1.00  0.00
H
ATOM   2530 1HB  ALA X 164      12.584   0.130  -7.345  1.00  0.00
H
ATOM   2531 2HB  ALA X 164      13.941   0.088  -8.495  1.00  0.00
H
ATOM   2532 3HB  ALA X 164      13.915   1.300  -7.191  1.00  0.00
H
ATOM   2533  N   ILE X 165      11.924   3.849  -7.868  1.00  0.00
N
ATOM   2534  CA  ILE X 165      11.086   4.778  -7.130  1.00  0.00
C
ATOM   2535  C   ILE X 165       9.771   5.054  -7.830  1.00  0.00
C
ATOM   2536  O   ILE X 165       8.797   5.485  -7.209  1.00  0.00
O
ATOM   2537  CB  ILE X 165      11.812   6.116  -6.894  1.00  0.00
C
ATOM   2538  CG1 ILE X 165      12.995   5.921  -5.941  1.00  0.00
C
ATOM   2539  CG2 ILE X 165      10.848   7.155  -6.345  1.00  0.00
C
ATOM   2540  CD1 ILE X 165      13.906   7.120  -5.846  1.00  0.00
C
ATOM   2541  H   ILE X 165      12.778   4.185  -8.292  1.00  0.00
H
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ATOM   2542  HA  ILE X 165      10.791   4.351  -6.172  1.00  0.00
H
ATOM   2543  HB  ILE X 165      12.226   6.467  -7.839  1.00  0.00
H
ATOM   2544 1HG1 ILE X 165      12.585   5.697  -4.955  1.00  0.00
H
ATOM   2545 2HG1 ILE X 165      13.562   5.061  -6.300  1.00  0.00
H
ATOM   2546 1HG2 ILE X 165      11.378   8.094  -6.183  1.00  0.00
H
ATOM   2547 2HG2 ILE X 165      10.039   7.313  -7.058  1.00  0.00
H
ATOM   2548 3HG2 ILE X 165      10.435   6.805  -5.399  1.00  0.00
H
ATOM   2549 1HD1 ILE X 165      14.720   6.906  -5.153  1.00  0.00
H
ATOM   2550 2HD1 ILE X 165      14.319   7.344  -6.831  1.00  0.00
H
ATOM   2551 3HD1 ILE X 165      13.343   7.980  -5.485  1.00  0.00
H
ATOM   2552  N   CYS X 166       9.758   4.836  -9.143  1.00  0.00
N
ATOM   2553  CA  CYS X 166       8.587   5.097  -9.966  1.00  0.00
C
ATOM   2554  C   CYS X 166       8.112   3.752 -10.506  1.00  0.00
C
ATOM   2555  O   CYS X 166       6.911   3.513 -10.655  1.00  0.00
O
ATOM   2556  CB  CYS X 166       9.123   5.990 -11.086  1.00  0.00
C
ATOM   2557  SG  CYS X 166       9.853   7.546 -10.520  1.00  0.00
S
ATOM   2558  H   CYS X 166      10.591   4.475  -9.584  1.00  0.00
H
ATOM   2559  HA  CYS X 166       7.800   5.636  -9.441  1.00  0.00
H
ATOM   2560 1HB  CYS X 166       9.906   5.473 -11.640  1.00  0.00
H
ATOM   2561 2HB  CYS X 166       8.318   6.265 -11.767  1.00  0.00
H
ATOM   2562  HG  CYS X 166      10.175   7.996 -11.728  1.00  0.00
H
ATOM   2563  N   ILE X 167       9.070   2.874 -10.793  1.00  0.00
N
ATOM   2564  CA  ILE X 167       8.774   1.550 -11.342  1.00  0.00
C
ATOM   2565  C   ILE X 167       7.995   0.659 -10.380  1.00  0.00
C
ATOM   2566  O   ILE X 167       6.924   0.154 -10.726  1.00  0.00
O
ATOM   2567  CB  ILE X 167      10.060   0.806 -11.744  1.00  0.00
C
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ATOM   2568  CG1 ILE X 167      10.729   1.500 -12.933  1.00  0.00
C
ATOM   2569  CG2 ILE X 167       9.751  -0.647 -12.078  1.00  0.00
C
ATOM   2570  CD1 ILE X 167       9.982   1.336 -14.236  1.00  0.00
C
ATOM   2571  H   ILE X 167      10.033   3.129 -10.625  1.00  0.00
H
ATOM   2572  HA  ILE X 167       8.116   1.633 -12.207  1.00  0.00
H
ATOM   2573  HB  ILE X 167      10.768   0.847 -10.917  1.00  0.00
H
ATOM   2574 1HG1 ILE X 167      10.807   2.559 -12.689  1.00  0.00
H
ATOM   2575 2HG1 ILE X 167      11.730   1.078 -13.033  1.00  0.00
H
ATOM   2576 1HG2 ILE X 167      10.670  -1.159 -12.361  1.00  0.00
H
ATOM   2577 2HG2 ILE X 167       9.317  -1.134 -11.206  1.00  0.00
H
ATOM   2578 3HG2 ILE X 167       9.044  -0.688 -12.905  1.00  0.00
H
ATOM   2579 1HD1 ILE X 167      10.518   1.855 -15.032  1.00  0.00
H
ATOM   2580 2HD1 ILE X 167       9.905   0.276 -14.483  1.00  0.00
H
ATOM   2581 3HD1 ILE X 167       8.983   1.758 -14.140  1.00  0.00
H
ATOM   2582  N   ILE X 168       8.513   0.467  -9.170  1.00  0.00
N
ATOM   2583  CA  ILE X 168       7.820  -0.383  -8.208  1.00  0.00
C
ATOM   2584  C   ILE X 168       6.556   0.277  -7.666  1.00  0.00
C
ATOM   2585  O   ILE X 168       5.530  -0.383  -7.529  1.00  0.00
O
ATOM   2586  CB  ILE X 168       8.737  -0.750  -7.027  1.00  0.00
C
ATOM   2587  CG1 ILE X 168      10.038  -1.377  -7.536  1.00  0.00
C
ATOM   2588  CG2 ILE X 168       8.023  -1.696  -6.074  1.00  0.00
C
ATOM   2589  CD1 ILE X 168       9.833  -2.641  -8.337  1.00  0.00
C
ATOM   2590  H   ILE X 168       9.386   0.909  -8.917  1.00  0.00
H
ATOM   2591  HA  ILE X 168       7.464  -1.295  -8.688  1.00  0.00
H
ATOM   2592  HB  ILE X 168       9.014   0.160  -6.495  1.00  0.00
H
ATOM   2593 1HG1 ILE X 168      10.538  -0.631  -8.155  1.00  0.00
H
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ATOM   2594 2HG1 ILE X 168      10.655  -1.596  -6.665  1.00  0.00
H
ATOM   2595 1HG2 ILE X 168       8.686  -1.946  -5.244  1.00  0.00
H
ATOM   2596 2HG2 ILE X 168       7.125  -1.216  -5.688  1.00  0.00
H
ATOM   2597 3HG2 ILE X 168       7.747  -2.609  -6.605  1.00  0.00
H
ATOM   2598 1HD1 ILE X 168      10.800  -3.028  -8.663  1.00  0.00
H
ATOM   2599 2HD1 ILE X 168       9.335  -3.389  -7.719  1.00  0.00
H
ATOM   2600 3HD1 ILE X 168       9.217  -2.425  -9.209  1.00  0.00
H
ATOM   2601  N   ALA X 169       6.596   1.589  -7.358  1.00  0.00
N
ATOM   2602  CA  ALA X 169       5.343   2.243  -6.969  1.00  0.00
C
ATOM   2603  C   ALA X 169       4.248   2.162  -8.035  1.00  0.00
C
ATOM   2604  O   ALA X 169       3.109   1.831  -7.725  1.00  0.00
O
ATOM   2605  CB  ALA X 169       5.614   3.700  -6.617  1.00  0.00
C
ATOM   2606  H   ALA X 169       7.462   2.106  -7.396  1.00  0.00
H
ATOM   2607  HA  ALA X 169       4.945   1.739  -6.088  1.00  0.00
H
ATOM   2608 1HB  ALA X 169       4.684   4.177  -6.308  1.00  0.00
H
ATOM   2609 2HB  ALA X 169       6.336   3.749  -5.801  1.00  0.00
H
ATOM   2610 3HB  ALA X 169       6.014   4.217  -7.488  1.00  0.00
H
ATOM   2611  N   PHE X 170       4.597   2.444  -9.291  1.00  0.00
N
ATOM   2612  CA  PHE X 170       3.610   2.382 -10.367  1.00  0.00
C
ATOM   2613  C   PHE X 170       3.052   0.964 -10.494  1.00  0.00
C
ATOM   2614  O   PHE X 170       1.840   0.775 -10.608  1.00  0.00
O
ATOM   2615  CB  PHE X 170       4.226   2.833 -11.691  1.00  0.00
C
ATOM   2616  CG  PHE X 170       3.254   2.845 -12.839  1.00  0.00
C
ATOM   2617  CD1 PHE X 170       2.366   3.897 -13.004  1.00  0.00
C
ATOM   2618  CD2 PHE X 170       3.227   1.805 -13.753  1.00  0.00
C
ATOM   2619  CE1 PHE X 170       1.472   3.909 -14.059  1.00  0.00
C
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ATOM   2620  CE2 PHE X 170       2.335   1.814 -14.809  1.00  0.00
C
ATOM   2621  CZ  PHE X 170       1.457   2.868 -14.961  1.00  0.00
C
ATOM   2622  H   PHE X 170       5.550   2.701  -9.500  1.00  0.00
H
ATOM   2623  HA  PHE X 170       2.767   3.036 -10.134  1.00  0.00
H
ATOM   2624 1HB  PHE X 170       4.612   3.847 -11.600  1.00  0.00
H
ATOM   2625 2HB  PHE X 170       5.035   2.162 -11.976  1.00  0.00
H
ATOM   2626  HD1 PHE X 170       2.378   4.722 -12.292  1.00  0.00
H
ATOM   2627  HD2 PHE X 170       3.920   0.973 -13.632  1.00  0.00
H
ATOM   2628  HE1 PHE X 170       0.780   4.743 -14.177  1.00  0.00
H
ATOM   2629  HE2 PHE X 170       2.325   0.990 -15.521  1.00  0.00
H
ATOM   2630  HZ  PHE X 170       0.753   2.874 -15.792  1.00  0.00
H
ATOM   2631  N   TYR X 171       3.932  -0.035 -10.484  1.00  0.00
N
ATOM   2632  CA  TYR X 171       3.481  -1.415 -10.611  1.00  0.00
C
ATOM   2633  C   TYR X 171       2.470  -1.757  -9.520  1.00  0.00
C
ATOM   2634  O   TYR X 171       1.423  -2.346  -9.794  1.00  0.00
O
ATOM   2635  CB  TYR X 171       4.671  -2.375 -10.551  1.00  0.00
C
ATOM   2636  CG  TYR X 171       5.551  -2.341 -11.782  1.00  0.00
C
ATOM   2637  CD1 TYR X 171       5.245  -1.513 -12.854  1.00  0.00
C
ATOM   2638  CD2 TYR X 171       6.683  -3.135 -11.869  1.00  0.00
C
ATOM   2639  CE1 TYR X 171       6.045  -1.480 -13.980  1.00  0.00
C
ATOM   2640  CE2 TYR X 171       7.489  -3.108 -12.991  1.00  0.00
C
ATOM   2641  CZ  TYR X 171       7.163  -2.278 -14.045  1.00  0.00
C
ATOM   2642  OH  TYR X 171       7.962  -2.246 -15.165  1.00  0.00
O
ATOM   2643  H   TYR X 171       4.917   0.164 -10.388  1.00  0.00
H
ATOM   2644  HA  TYR X 171       2.972  -1.551 -11.565  1.00  0.00
H
ATOM   2645 1HB  TYR X 171       5.263  -2.102  -9.674  1.00  0.00
H
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ATOM   2646 2HB  TYR X 171       4.269  -3.380 -10.418  1.00  0.00
H
ATOM   2647  HD1 TYR X 171       4.357  -0.884 -12.796  1.00  0.00
H
ATOM   2648  HD2 TYR X 171       6.933  -3.788 -11.033  1.00  0.00
H
ATOM   2649  HE1 TYR X 171       5.793  -0.827 -14.814  1.00  0.00
H
ATOM   2650  HE2 TYR X 171       8.375  -3.739 -13.041  1.00  0.00
H
ATOM   2651  HH  TYR X 171       8.720  -2.831 -15.103  1.00  0.00
H
ATOM   2652  N   ILE X 172       2.768  -1.386  -8.282  1.00  0.00
N
ATOM   2653  CA  ILE X 172       1.857  -1.738  -7.208  1.00  0.00
C
ATOM   2654  C   ILE X 172       0.538  -1.000  -7.394  1.00  0.00
C
ATOM   2655  O   ILE X 172      -0.529  -1.604  -7.289  1.00  0.00
O
ATOM   2656  CB  ILE X 172       2.444  -1.405  -5.826  1.00  0.00
C
ATOM   2657  CG1 ILE X 172       3.705  -2.232  -5.570  1.00  0.00
C
ATOM   2658  CG2 ILE X 172       1.411  -1.650  -4.736  1.00  0.00
C
ATOM   2659  CD1 ILE X 172       4.501  -1.777  -4.367  1.00  0.00
C
ATOM   2660  H   ILE X 172       3.613  -0.866  -8.090  1.00  0.00
H
ATOM   2661  HA  ILE X 172       1.606  -2.798  -7.250  1.00  0.00
H
ATOM   2662  HB  ILE X 172       2.747  -0.359  -5.811  1.00  0.00
H
ATOM   2663 1HG1 ILE X 172       3.393  -3.266  -5.427  1.00  0.00
H
ATOM   2664 2HG1 ILE X 172       4.326  -2.161  -6.464  1.00  0.00
H
ATOM   2665 1HG2 ILE X 172       1.842  -1.411  -3.765  1.00  0.00
H
ATOM   2666 2HG2 ILE X 172       0.540  -1.019  -4.911  1.00  0.00
H
ATOM   2667 3HG2 ILE X 172       1.108  -2.700  -4.749  1.00  0.00
H
ATOM   2668 1HD1 ILE X 172       5.381  -2.411  -4.250  1.00  0.00
H
ATOM   2669 2HD1 ILE X 172       4.816  -0.744  -4.508  1.00  0.00
H
ATOM   2670 3HD1 ILE X 172       3.882  -1.849  -3.473  1.00  0.00
H
ATOM   2671  N   ALA X 173       0.600   0.291  -7.708  1.00  0.00
N
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ATOM   2672  CA  ALA X 173      -0.624   1.073  -7.840  1.00  0.00
C
ATOM   2673  C   ALA X 173      -1.533   0.475  -8.910  1.00  0.00
C
ATOM   2674  O   ALA X 173      -2.761   0.457  -8.772  1.00  0.00
O
ATOM   2675  CB  ALA X 173      -0.296   2.524  -8.161  1.00  0.00
C
ATOM   2676  H   ALA X 173       1.498   0.730  -7.855  1.00  0.00
H
ATOM   2677  HA  ALA X 173      -1.163   1.040  -6.893  1.00  0.00
H
ATOM   2678 1HB  ALA X 173      -1.222   3.091  -8.260  1.00  0.00
H
ATOM   2679 2HB  ALA X 173       0.306   2.949  -7.359  1.00  0.00
H
ATOM   2680 3HB  ALA X 173       0.259   2.572  -9.097  1.00  0.00
H
ATOM   2681  N   SER X 174      -0.923  -0.024  -9.981  1.00  0.00
N
ATOM   2682  CA  SER X 174      -1.676  -0.615 -11.080  1.00  0.00
C
ATOM   2683  C   SER X 174      -2.673  -1.697 -10.655  1.00  0.00
C
ATOM   2684  O   SER X 174      -3.789  -1.744 -11.183  1.00  0.00
O
ATOM   2685  CB  SER X 174      -0.705  -1.185 -12.096  1.00  0.00
C
ATOM   2686  OG  SER X 174      -1.362  -1.686 -13.229  1.00  0.00
O
ATOM   2687  H   SER X 174       0.086   0.009 -10.034  1.00  0.00
H
ATOM   2688  HA  SER X 174      -2.213   0.120 -11.682  1.00  0.00
H
ATOM   2689 1HB  SER X 174      -0.019  -0.395 -12.404  1.00  0.00
H
ATOM   2690 2HB  SER X 174      -0.142  -1.990 -11.627  1.00  0.00
H
ATOM   2691  HG  SER X 174      -0.714  -2.037 -13.846  1.00  0.00
H
ATOM   2692  N   TYR X 175      -2.302  -2.562  -9.714  1.00  0.00
N
ATOM   2693  CA  TYR X 175      -3.233  -3.592  -9.296  1.00  0.00
C
ATOM   2694  C   TYR X 175      -3.949  -3.230  -8.003  1.00  0.00
C
ATOM   2695  O   TYR X 175      -5.046  -3.714  -7.750  1.00  0.00
O
ATOM   2696  CB  TYR X 175      -2.501  -4.927  -9.131  1.00  0.00
C
ATOM   2697  CG  TYR X 175      -1.689  -5.027  -7.858  1.00  0.00
C
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ATOM   2698  CD1 TYR X 175      -2.294  -5.338  -6.650  1.00  0.00
C
ATOM   2699  CD2 TYR X 175      -0.320  -4.810  -7.870  1.00  0.00
C
ATOM   2700  CE1 TYR X 175      -1.557  -5.431  -5.485  1.00  0.00
C
ATOM   2701  CE2 TYR X 175       0.427  -4.898  -6.712  1.00  0.00
C
ATOM   2702  CZ  TYR X 175      -0.195  -5.209  -5.520  1.00  0.00
C
ATOM   2703  OH  TYR X 175       0.545  -5.299  -4.364  1.00  0.00
O
ATOM   2704  H   TYR X 175      -1.385  -2.500  -9.296  1.00  0.00
H
ATOM   2705  HA  TYR X 175      -4.014  -3.714 -10.048  1.00  0.00
H
ATOM   2706 1HB  TYR X 175      -3.256  -5.714  -9.141  1.00  0.00
H
ATOM   2707 2HB  TYR X 175      -1.845  -5.042  -9.991  1.00  0.00
H
ATOM   2708  HD1 TYR X 175      -3.370  -5.510  -6.629  1.00  0.00
H
ATOM   2709  HD2 TYR X 175       0.166  -4.564  -8.815  1.00  0.00
H
ATOM   2710  HE1 TYR X 175      -2.046  -5.677  -4.542  1.00  0.00
H
ATOM   2711  HE2 TYR X 175       1.504  -4.723  -6.742  1.00  0.00
H
ATOM   2712  HH  TYR X 175       1.481  -5.135  -4.503  1.00  0.00
H
ATOM   2713  N   TYR X 176      -3.340  -2.363  -7.198  1.00  0.00
N
ATOM   2714  CA  TYR X 176      -3.948  -1.960  -5.931  1.00  0.00
C
ATOM   2715  C   TYR X 176      -5.208  -1.124  -6.161  1.00  0.00
C
ATOM   2716  O   TYR X 176      -6.247  -1.369  -5.538  1.00  0.00
O
ATOM   2717  CB  TYR X 176      -2.945  -1.175  -5.082  1.00  0.00
C
ATOM   2718  CG  TYR X 176      -3.434  -0.867  -3.683  1.00  0.00
C
ATOM   2719  CD1 TYR X 176      -3.738  -1.886  -2.793  1.00  0.00
C
ATOM   2720  CD2 TYR X 176      -3.587   0.444  -3.257  1.00  0.00
C
ATOM   2721  CE1 TYR X 176      -4.185  -1.609  -1.516  1.00  0.00
C
ATOM   2722  CE2 TYR X 176      -4.033   0.732  -1.983  1.00  0.00
C
ATOM   2723  CZ  TYR X 176      -4.330  -0.298  -1.113  1.00  0.00
C
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ATOM   2724  OH  TYR X 176      -4.774  -0.016   0.158  1.00  0.00
O
ATOM   2725  H   TYR X 176      -2.446  -1.979  -7.465  1.00  0.00
H
ATOM   2726  HA  TYR X 176      -4.258  -2.842  -5.372  1.00  0.00
H
ATOM   2727 1HB  TYR X 176      -2.034  -1.772  -5.025  1.00  0.00
H
ATOM   2728 2HB  TYR X 176      -2.737  -0.245  -5.608  1.00  0.00
H
ATOM   2729  HD1 TYR X 176      -3.620  -2.922  -3.117  1.00  0.00
H
ATOM   2730  HD2 TYR X 176      -3.351   1.254  -3.949  1.00  0.00
H
ATOM   2731  HE1 TYR X 176      -4.421  -2.420  -0.828  1.00  0.00
H
ATOM   2732  HE2 TYR X 176      -4.148   1.770  -1.666  1.00  0.00
H
ATOM   2733  HH  TYR X 176      -4.956  -0.805   0.676  1.00  0.00
H
ATOM   2734  N   ASN X 177      -5.136  -0.142  -7.053  1.00  0.00
N
ATOM   2735  CA  ASN X 177      -6.319   0.665  -7.322  1.00  0.00
C
ATOM   2736  C   ASN X 177      -7.332  -0.143  -8.125  1.00  0.00
C
ATOM   2737  O   ASN X 177      -8.509   0.221  -8.187  1.00  0.00
O
ATOM   2738  CB  ASN X 177      -5.970   1.952  -8.046  1.00  0.00
C
ATOM   2739  CG  ASN X 177      -5.326   1.737  -9.387  1.00  0.00
C
ATOM   2740  ND2 ASN X 177      -4.726   2.782  -9.899  1.00  0.00
N
ATOM   2741  OD1 ASN X 177      -5.310   0.621  -9.919  1.00  0.00
O
ATOM   2742  H   ASN X 177      -4.270   0.043  -7.540  1.00  0.00
H
ATOM   2743  HA  ASN X 177      -6.802   0.937  -6.382  1.00  0.00
H
ATOM   2744 1HB  ASN X 177      -6.695   2.764  -8.124  1.00  0.00
H
ATOM   2745 2HB  ASN X 177      -5.199   2.224  -7.325  1.00  0.00
H
ATOM   2746 1HD2 ASN X 177      -4.276   2.712 -10.790  1.00  0.00
H
ATOM   2747 2HD2 ASN X 177      -4.717   3.648  -9.399  1.00  0.00
H
ATOM   2748  N   THR X 178      -6.898  -1.231  -8.751  1.00  0.00
N
ATOM   2749  CA  THR X 178      -7.870  -2.089  -9.426  1.00  0.00
C
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ATOM   2750  C   THR X 178      -8.715  -2.841  -8.392  1.00  0.00
C
ATOM   2751  O   THR X 178      -9.935  -2.930  -8.533  1.00  0.00
O
ATOM   2752  CB  THR X 178      -7.183  -3.097 -10.365  1.00  0.00
C
ATOM   2753  CG2 THR X 178      -8.212  -4.008 -11.016  1.00  0.00
C
ATOM   2754  OG1 THR X 178      -6.463  -2.390 -11.383  1.00  0.00
O
ATOM   2755  H   THR X 178      -5.914  -1.461  -8.760  1.00  0.00
H
ATOM   2756  HA  THR X 178      -8.556  -1.477 -10.014  1.00  0.00
H
ATOM   2757  HB  THR X 178      -6.480  -3.697  -9.786  1.00  0.00
H
ATOM   2758  HG1 THR X 178      -5.800  -1.829 -10.974  1.00  0.00
H
ATOM   2759 1HG2 THR X 178      -7.706  -4.713 -11.675  1.00  0.00
H
ATOM   2760 2HG2 THR X 178      -8.753  -4.555 -10.244  1.00  0.00
H
ATOM   2761 3HG2 THR X 178      -8.912  -3.408 -11.595  1.00  0.00
H
ATOM   2762  N   ILE X 179      -8.063  -3.448  -7.404  1.00  0.00
N
ATOM   2763  CA  ILE X 179      -8.781  -4.118  -6.321  1.00  0.00
C
ATOM   2764  C   ILE X 179      -9.768  -3.117  -5.706  1.00  0.00
C
ATOM   2765  O   ILE X 179     -10.940  -3.430  -5.513  1.00  0.00
O
ATOM   2766  CB  ILE X 179      -7.831  -4.653  -5.234  1.00  0.00
C
ATOM   2767  CG1 ILE X 179      -6.963  -5.783  -5.794  1.00  0.00
C
ATOM   2768  CG2 ILE X 179      -8.620  -5.132  -4.026  1.00  0.00
C
ATOM   2769  CD1 ILE X 179      -5.793  -6.150  -4.910  1.00  0.00
C
ATOM   2770  H   ILE X 179      -7.058  -3.355  -7.367  1.00  0.00
H
ATOM   2771  HA  ILE X 179      -9.386  -4.937  -6.710  1.00  0.00
H
ATOM   2772  HB  ILE X 179      -7.152  -3.856  -4.933  1.00  0.00
H
ATOM   2773 1HG1 ILE X 179      -7.607  -6.653  -5.924  1.00  0.00
H
ATOM   2774 2HG1 ILE X 179      -6.594  -5.457  -6.767  1.00  0.00
H
ATOM   2775 1HG2 ILE X 179      -7.933  -5.508  -3.268  1.00  0.00
H
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ATOM   2776 2HG2 ILE X 179      -9.195  -4.303  -3.615  1.00  0.00
H
ATOM   2777 3HG2 ILE X 179      -9.299  -5.930  -4.327  1.00  0.00
H
ATOM   2778 1HD1 ILE X 179      -5.225  -6.957  -5.373  1.00  0.00
H
ATOM   2779 2HD1 ILE X 179      -5.147  -5.281  -4.781  1.00  0.00
H
ATOM   2780 3HD1 ILE X 179      -6.159  -6.477  -3.938  1.00  0.00
H
ATOM   2781  N   MET X 180      -9.293  -1.909  -5.415  1.00  0.00
N
ATOM   2782  CA  MET X 180     -10.157  -0.883  -4.840  1.00  0.00
C
ATOM   2783  C   MET X 180     -11.351  -0.646  -5.781  1.00  0.00
C
ATOM   2784  O   MET X 180     -12.505  -0.579  -5.331  1.00  0.00
O
ATOM   2785  CB  MET X 180      -9.376   0.411  -4.610  1.00  0.00
C
ATOM   2786  CG  MET X 180     -10.228   1.583  -4.142  1.00  0.00
C
ATOM   2787  SD  MET X 180      -9.240   3.031  -3.712  1.00  0.00
S
ATOM   2788  CE  MET X 180      -8.479   3.402  -5.289  1.00  0.00
C
ATOM   2789  H   MET X 180      -8.322  -1.699  -5.594  1.00  0.00
H
ATOM   2790  HA  MET X 180     -10.554  -1.225  -3.885  1.00  0.00
H
ATOM   2791 1HB  MET X 180      -8.615   0.193  -3.863  1.00  0.00
H
ATOM   2792 2HB  MET X 180      -8.897   0.664  -5.556  1.00  0.00
H
ATOM   2793 1HG  MET X 180     -10.916   1.846  -4.944  1.00  0.00
H
ATOM   2794 2HG  MET X 180     -10.793   1.264  -3.267  1.00  0.00
H
ATOM   2795 1HE  MET X 180      -7.836   4.276  -5.187  1.00  0.00
H
ATOM   2796 2HE  MET X 180      -7.883   2.549  -5.615  1.00  0.00
H
ATOM   2797 3HE  MET X 180      -9.255   3.606  -6.027  1.00  0.00
H
ATOM   2798  N   ALA X 181     -11.087  -0.529  -7.080  1.00  0.00
N
ATOM   2799  CA  ALA X 181     -12.187  -0.308  -8.025  1.00  0.00
C
ATOM   2800  C   ALA X 181     -13.237  -1.416  -7.916  1.00  0.00
C
ATOM   2801  O   ALA X 181     -14.426  -1.136  -8.049  1.00  0.00
O
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ATOM   2802  CB  ALA X 181     -11.654  -0.215  -9.447  1.00  0.00
C
ATOM   2803  H   ALA X 181     -10.135  -0.591  -7.414  1.00  0.00
H
ATOM   2804  HA  ALA X 181     -12.679   0.632  -7.776  1.00  0.00
H
ATOM   2805 1HB  ALA X 181     -12.483  -0.050 -10.136  1.00  0.00
H
ATOM   2806 2HB  ALA X 181     -10.953   0.617  -9.520  1.00  0.00
H
ATOM   2807 3HB  ALA X 181     -11.146  -1.142  -9.706  1.00  0.00
H
ATOM   2808  N   TRP X 182     -12.823  -2.656  -7.651  1.00  0.00
N
ATOM   2809  CA  TRP X 182     -13.801  -3.736  -7.510  1.00  0.00
C
ATOM   2810  C   TRP X 182     -14.741  -3.429  -6.347  1.00  0.00
C
ATOM   2811  O   TRP X 182     -15.938  -3.712  -6.414  1.00  0.00
O
ATOM   2812  CB  TRP X 182     -13.092  -5.075  -7.299  1.00  0.00
C
ATOM   2813  CG  TRP X 182     -12.261  -5.503  -8.471  1.00  0.00
C
ATOM   2814  CD1 TRP X 182     -12.400  -5.091  -9.762  1.00  0.00
C
ATOM   2815  CD2 TRP X 182     -11.164  -6.424  -8.458  1.00  0.00
C
ATOM   2816  CE2 TRP X 182     -10.687  -6.522  -9.778  1.00  0.00
C
ATOM   2817  CE3 TRP X 182     -10.539  -7.176  -7.457  1.00  0.00
C
ATOM   2818  NE1 TRP X 182     -11.460  -5.698 -10.557  1.00  0.00
N
ATOM   2819  CZ2 TRP X 182      -9.621  -7.336 -10.123  1.00  0.00
C
ATOM   2820  CZ3 TRP X 182      -9.469  -7.992  -7.803  1.00  0.00
C
ATOM   2821  CH2 TRP X 182      -9.023  -8.069  -9.098  1.00  0.00
C
ATOM   2822  H   TRP X 182     -11.837  -2.849  -7.548  1.00  0.00
H
ATOM   2823  HA  TRP X 182     -14.410  -3.803  -8.412  1.00  0.00
H
ATOM   2824 1HB  TRP X 182     -12.418  -5.014  -6.445  1.00  0.00
H
ATOM   2825 2HB  TRP X 182     -13.824  -5.864  -7.130  1.00  0.00
H
ATOM   2826  HD1 TRP X 182     -13.195  -4.375  -9.968  1.00  0.00
H
ATOM   2827  HE1 TRP X 182     -11.353  -5.562 -11.551  1.00  0.00
H
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ATOM   2828  HE3 TRP X 182     -10.851  -7.150  -6.413  1.00  0.00
H
ATOM   2829  HZ2 TRP X 182      -9.298  -7.369 -11.165  1.00  0.00
H
ATOM   2830  HZ3 TRP X 182      -8.992  -8.574  -7.013  1.00  0.00
H
ATOM   2831  HH2 TRP X 182      -8.180  -8.723  -9.328  1.00  0.00
H
ATOM   2832  N   ALA X 183     -14.203  -2.871  -5.261  1.00  0.00
N
ATOM   2833  CA  ALA X 183     -15.050  -2.570  -4.113  1.00  0.00
C
ATOM   2834  C   ALA X 183     -16.073  -1.498  -4.469  1.00  0.00
C
ATOM   2835  O   ALA X 183     -17.215  -1.556  -4.009  1.00  0.00
O
ATOM   2836  CB  ALA X 183     -14.199  -2.137  -2.927  1.00  0.00
C
ATOM   2837  H   ALA X 183     -13.216  -2.659  -5.235  1.00  0.00
H
ATOM   2838  HA  ALA X 183     -15.597  -3.471  -3.837  1.00  0.00
H
ATOM   2839 1HB  ALA X 183     -14.846  -1.916  -2.079  1.00  0.00
H
ATOM   2840 2HB  ALA X 183     -13.511  -2.939  -2.660  1.00  0.00
H
ATOM   2841 3HB  ALA X 183     -13.633  -1.245  -3.192  1.00  0.00
H
ATOM   2842  N   LEU X 184     -15.686  -0.526  -5.291  1.00  0.00
N
ATOM   2843  CA  LEU X 184     -16.638   0.508  -5.692  1.00  0.00
C
ATOM   2844  C   LEU X 184     -17.728  -0.144  -6.546  1.00  0.00
C
ATOM   2845  O   LEU X 184     -18.909   0.182  -6.416  1.00  0.00
O
ATOM   2846  CB  LEU X 184     -15.915   1.629  -6.450  1.00  0.00
C
ATOM   2847  CG  LEU X 184     -16.824   2.730  -7.008  1.00  0.00
C
ATOM   2848  CD1 LEU X 184     -17.592   3.397  -5.876  1.00  0.00
C
ATOM   2849  CD2 LEU X 184     -15.984   3.750  -7.762  1.00  0.00
C
ATOM   2850  H   LEU X 184     -14.738  -0.502  -5.637  1.00  0.00
H
ATOM   2851  HA  LEU X 184     -17.114   0.929  -4.807  1.00  0.00
H
ATOM   2852 1HB  LEU X 184     -15.303   2.024  -5.639  1.00  0.00
H
ATOM   2853 2HB  LEU X 184     -15.268   1.234  -7.233  1.00  0.00
H
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ATOM   2854  HG  LEU X 184     -17.500   2.260  -7.723  1.00  0.00
H
ATOM   2855 1HD1 LEU X 184     -18.237   4.177  -6.282  1.00  0.00
H
ATOM   2856 2HD1 LEU X 184     -18.205   2.654  -5.364  1.00  0.00
H
ATOM   2857 3HD1 LEU X 184     -16.890   3.837  -5.169  1.00  0.00
H
ATOM   2858 1HD2 LEU X 184     -16.632   4.532  -8.159  1.00  0.00
H
ATOM   2859 2HD2 LEU X 184     -15.252   4.193  -7.085  1.00  0.00
H
ATOM   2860 3HD2 LEU X 184     -15.464   3.257  -8.584  1.00  0.00
H
ATOM   2861  N   TYR X 185     -17.323  -1.069  -7.413  1.00  0.00
N
ATOM   2862  CA  TYR X 185     -18.291  -1.754  -8.259  1.00  0.00
C
ATOM   2863  C   TYR X 185     -19.375  -2.428  -7.437  1.00  0.00
C
ATOM   2864  O   TYR X 185     -20.570  -2.317  -7.744  1.00  0.00
O
ATOM   2865  CB  TYR X 185     -17.591  -2.787  -9.144  1.00  0.00
C
ATOM   2866  CG  TYR X 185     -18.531  -3.792  -9.773  1.00  0.00
C
ATOM   2867  CD1 TYR X 185     -19.336  -3.441 -10.846  1.00  0.00
C
ATOM   2868  CD2 TYR X 185     -18.608  -5.091  -9.293  1.00  0.00
C
ATOM   2869  CE1 TYR X 185     -20.196  -4.353 -11.424  1.00  0.00
C
ATOM   2870  CE2 TYR X 185     -19.464  -6.013  -9.864  1.00  0.00
C
ATOM   2871  CZ  TYR X 185     -20.257  -5.641 -10.930  1.00  0.00
C
ATOM   2872  OH  TYR X 185     -21.111  -6.555 -11.502  1.00  0.00
O
ATOM   2873  H   TYR X 185     -16.342  -1.297  -7.484  1.00  0.00
H
ATOM   2874  HA  TYR X 185     -18.797  -1.033  -8.901  1.00  0.00
H
ATOM   2875 1HB  TYR X 185     -17.067  -2.239  -9.928  1.00  0.00
H
ATOM   2876 2HB  TYR X 185     -16.867  -3.309  -8.519  1.00  0.00
H
ATOM   2877  HD1 TYR X 185     -19.282  -2.421 -11.232  1.00  0.00
H
ATOM   2878  HD2 TYR X 185     -17.980  -5.379  -8.450  1.00  0.00
H
ATOM   2879  HE1 TYR X 185     -20.823  -4.062 -12.267  1.00  0.00
H
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ATOM   2880  HE2 TYR X 185     -19.512  -7.030  -9.470  1.00  0.00
H
ATOM   2881  HH  TYR X 185     -21.074  -7.418 -11.081  1.00  0.00
H
ATOM   2882  N   TYR X 186     -18.966  -3.139  -6.388  1.00  0.00
N
ATOM   2883  CA  TYR X 186     -19.925  -3.805  -5.515  1.00  0.00
C
ATOM   2884  C   TYR X 186     -20.755  -2.778  -4.745  1.00  0.00
C
ATOM   2885  O   TYR X 186     -21.961  -2.949  -4.568  1.00  0.00
O
ATOM   2886  CB  TYR X 186     -19.204  -4.743  -4.546  1.00  0.00
C
ATOM   2887  CG  TYR X 186     -18.547  -5.931  -5.215  1.00  0.00
C
ATOM   2888  CD1 TYR X 186     -17.173  -6.117  -5.146  1.00  0.00
C
ATOM   2889  CD2 TYR X 186     -19.302  -6.861  -5.913  1.00  0.00
C
ATOM   2890  CE1 TYR X 186     -16.568  -7.199  -5.757  1.00  0.00
C
ATOM   2891  CE2 TYR X 186     -18.708  -7.947  -6.526  1.00  0.00
C
ATOM   2892  CZ  TYR X 186     -17.340  -8.113  -6.445  1.00  0.00
C
ATOM   2893  OH  TYR X 186     -16.744  -9.193  -7.054  1.00  0.00
O
ATOM   2894  H   TYR X 186     -17.978  -3.219  -6.195  1.00  0.00
H
ATOM   2895  HA  TYR X 186     -20.623  -4.391  -6.113  1.00  0.00
H
ATOM   2896 1HB  TYR X 186     -18.447  -4.152  -4.027  1.00  0.00
H
ATOM   2897 2HB  TYR X 186     -19.944  -5.096  -3.827  1.00  0.00
H
ATOM   2898  HD1 TYR X 186     -16.571  -5.392  -4.600  1.00  0.00
H
ATOM   2899  HD2 TYR X 186     -20.382  -6.724  -5.973  1.00  0.00
H
ATOM   2900  HE1 TYR X 186     -15.488  -7.333  -5.694  1.00  0.00
H
ATOM   2901  HE2 TYR X 186     -19.319  -8.666  -7.072  1.00  0.00
H
ATOM   2902  HH  TYR X 186     -15.792  -9.213  -6.936  1.00  0.00
H
ATOM   2903  N   LEU X 187     -20.108  -1.714  -4.272  1.00  0.00
N
ATOM   2904  CA  LEU X 187     -20.825  -0.685  -3.531  1.00  0.00
C
ATOM   2905  C   LEU X 187     -21.937  -0.131  -4.420  1.00  0.00
C
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ATOM   2906  O   LEU X 187     -23.085   0.021  -3.982  1.00  0.00
O
ATOM   2907  CB  LEU X 187     -19.857   0.415  -3.080  1.00  0.00
C
ATOM   2908  CG  LEU X 187     -20.452   1.457  -2.125  1.00  0.00
C
ATOM   2909  CD1 LEU X 187     -19.357   2.388  -1.620  1.00  0.00
C
ATOM   2910  CD2 LEU X 187     -21.539   2.241  -2.842  1.00  0.00
C
ATOM   2911  H   LEU X 187     -19.114  -1.621  -4.427  1.00  0.00
H
ATOM   2912  HA  LEU X 187     -21.291  -1.127  -2.651  1.00  0.00
H
ATOM   2913 1HB  LEU X 187     -19.125  -0.198  -2.557  1.00  0.00
H
ATOM   2914 2HB  LEU X 187     -19.379   0.905  -3.929  1.00  0.00
H
ATOM   2915  HG  LEU X 187     -20.918   0.914  -1.302  1.00  0.00
H
ATOM   2916 1HD1 LEU X 187     -19.789   3.124  -0.942  1.00  0.00
H
ATOM   2917 2HD1 LEU X 187     -18.601   1.807  -1.091  1.00  0.00
H
ATOM   2918 3HD1 LEU X 187     -18.896   2.899  -2.465  1.00  0.00
H
ATOM   2919 1HD2 LEU X 187     -21.962   2.983  -2.161  1.00  0.00
H
ATOM   2920 2HD2 LEU X 187     -21.114   2.747  -3.709  1.00  0.00
H
ATOM   2921 3HD2 LEU X 187     -22.325   1.560  -3.169  1.00  0.00
H
ATOM   2922  N   ILE X 188     -21.603   0.168  -5.674  1.00  0.00
N
ATOM   2923  CA  ILE X 188     -22.595   0.694  -6.608  1.00  0.00
C
ATOM   2924  C   ILE X 188     -23.703  -0.328  -6.888  1.00  0.00
C
ATOM   2925  O   ILE X 188     -24.885   0.007  -6.831  1.00  0.00
O
ATOM   2926  CB  ILE X 188     -21.951   1.111  -7.942  1.00  0.00
C
ATOM   2927  CG1 ILE X 188     -21.026   2.314  -7.735  1.00  0.00
C
ATOM   2928  CG2 ILE X 188     -23.022   1.429  -8.974  1.00  0.00
C
ATOM   2929  CD1 ILE X 188     -20.127   2.602  -8.915  1.00  0.00
C
ATOM   2930  H   ILE X 188     -20.652   0.030  -5.982  1.00  0.00
H
ATOM   2931  HA  ILE X 188     -23.114   1.548  -6.175  1.00  0.00
H
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ATOM   2932  HB  ILE X 188     -21.327   0.295  -8.305  1.00  0.00
H
ATOM   2933 1HG1 ILE X 188     -21.659   3.180  -7.542  1.00  0.00
H
ATOM   2934 2HG1 ILE X 188     -20.416   2.106  -6.857  1.00  0.00
H
ATOM   2935 1HG2 ILE X 188     -22.549   1.723  -9.911  1.00  0.00
H
ATOM   2936 2HG2 ILE X 188     -23.640   0.547  -9.140  1.00  0.00
H
ATOM   2937 3HG2 ILE X 188     -23.645   2.246  -8.611  1.00  0.00
H
ATOM   2938 1HD1 ILE X 188     -19.501   3.466  -8.695  1.00  0.00
H
ATOM   2939 2HD1 ILE X 188     -19.491   1.737  -9.110  1.00  0.00
H
ATOM   2940 3HD1 ILE X 188     -20.734   2.810  -9.795  1.00  0.00
H
ATOM   2941  N   SER X 189     -23.330  -1.571  -7.178  1.00  0.00
N
ATOM   2942  CA  SER X 189     -24.336  -2.588  -7.466  1.00  0.00
C
ATOM   2943  C   SER X 189     -25.348  -2.764  -6.342  1.00  0.00
C
ATOM   2944  O   SER X 189     -26.540  -2.954  -6.601  1.00  0.00
O
ATOM   2945  CB  SER X 189     -23.666  -3.918  -7.751  1.00  0.00
C
ATOM   2946  OG  SER X 189     -22.911  -3.884  -8.932  1.00  0.00
O
ATOM   2947  H   SER X 189     -22.350  -1.811  -7.199  1.00  0.00
H
ATOM   2948  HA  SER X 189     -24.875  -2.412  -8.398  1.00  0.00
H
ATOM   2949 1HB  SER X 189     -23.009  -4.163  -6.917  1.00  0.00
H
ATOM   2950 2HB  SER X 189     -24.435  -4.683  -7.843  1.00  0.00
H
ATOM   2951  HG  SER X 189     -22.505  -4.742  -9.076  1.00  0.00
H
ATOM   2952  N   SER X 190     -24.892  -2.698  -5.091  1.00  0.00
N
ATOM   2953  CA  SER X 190     -25.823  -2.859  -3.982  1.00  0.00
C
ATOM   2954  C   SER X 190     -26.632  -1.591  -3.756  1.00  0.00
C
ATOM   2955  O   SER X 190     -27.821  -1.656  -3.444  1.00  0.00
O
ATOM   2956  CB  SER X 190     -25.072  -3.238  -2.721  1.00  0.00
C
ATOM   2957  OG  SER X 190     -24.480  -4.505  -2.821  1.00  0.00
O
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ATOM   2958  H   SER X 190     -23.911  -2.539  -4.914  1.00  0.00
H
ATOM   2959  HA  SER X 190     -26.494  -3.712  -4.099  1.00  0.00
H
ATOM   2960 1HB  SER X 190     -24.294  -2.497  -2.543  1.00  0.00
H
ATOM   2961 2HB  SER X 190     -25.770  -3.239  -1.885  1.00  0.00
H
ATOM   2962  HG  SER X 190     -23.859  -4.510  -3.553  1.00  0.00
H
ATOM   2963  N   PHE X 191     -25.986  -0.442  -3.917  1.00  0.00
N
ATOM   2964  CA  PHE X 191     -26.656   0.841  -3.753  1.00  0.00
C
ATOM   2965  C   PHE X 191     -27.840   0.974  -4.706  1.00  0.00
C
ATOM   2966  O   PHE X 191     -28.908   1.447  -4.321  1.00  0.00
O
ATOM   2967  CB  PHE X 191     -25.672   1.991  -3.974  1.00  0.00
C
ATOM   2968  CG  PHE X 191     -26.293   3.353  -3.850  1.00  0.00
C
ATOM   2969  CD1 PHE X 191     -26.526   3.912  -2.602  1.00  0.00
C
ATOM   2970  CD2 PHE X 191     -26.642   4.078  -4.979  1.00  0.00
C
ATOM   2971  CE1 PHE X 191     -27.099   5.164  -2.486  1.00  0.00
C
ATOM   2972  CE2 PHE X 191     -27.213   5.332  -4.865  1.00  0.00
C
ATOM   2973  CZ  PHE X 191     -27.442   5.874  -3.616  1.00  0.00
C
ATOM   2974  H   PHE X 191     -25.005  -0.459  -4.159  1.00  0.00
H
ATOM   2975  HA  PHE X 191     -27.061   0.921  -2.743  1.00  0.00
H
ATOM   2976 1HB  PHE X 191     -24.869   1.944  -3.240  1.00  0.00
H
ATOM   2977 2HB  PHE X 191     -25.249   1.933  -4.976  1.00  0.00
H
ATOM   2978  HD1 PHE X 191     -26.255   3.351  -1.708  1.00  0.00
H
ATOM   2979  HD2 PHE X 191     -26.463   3.649  -5.964  1.00  0.00
H
ATOM   2980  HE1 PHE X 191     -27.277   5.592  -1.500  1.00  0.00
H
ATOM   2981  HE2 PHE X 191     -27.484   5.891  -5.760  1.00  0.00
H
ATOM   2982  HZ  PHE X 191     -27.892   6.862  -3.526  1.00  0.00
H
ATOM   2983  N   THR X 192     -27.636   0.556  -5.949  1.00  0.00
N
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ATOM   2984  CA  THR X 192     -28.665   0.684  -6.977  1.00  0.00
C
ATOM   2985  C   THR X 192     -29.726  -0.403  -6.834  1.00  0.00
C
ATOM   2986  O   THR X 192     -30.721  -0.407  -7.556  1.00  0.00
O
ATOM   2987  CB  THR X 192     -28.062   0.613  -8.393  1.00  0.00
C
ATOM   2988  CG2 THR X 192     -27.064   1.742  -8.602  1.00  0.00
C
ATOM   2989  OG1 THR X 192     -27.399  -0.645  -8.570  1.00  0.00
O
ATOM   2990  H   THR X 192     -26.748   0.139  -6.190  1.00  0.00
H
ATOM   2991  HA  THR X 192     -29.183   1.637  -6.864  1.00  0.00
H
ATOM   2992  HB  THR X 192     -28.864   0.700  -9.125  1.00  0.00
H
ATOM   2993  HG1 THR X 192     -26.699  -0.733  -7.919  1.00  0.00
H
ATOM   2994 1HG2 THR X 192     -26.648   1.676  -9.608  1.00  0.00
H
ATOM   2995 2HG2 THR X 192     -27.566   2.701  -8.478  1.00  0.00
H
ATOM   2996 3HG2 THR X 192     -26.261   1.656  -7.871  1.00  0.00
H
ATOM   2997  N   ASP X 193     -29.502  -1.318  -5.900  1.00  0.00
N
ATOM   2998  CA  ASP X 193     -30.429  -2.426  -5.674  1.00  0.00
C
ATOM   2999  C   ASP X 193     -30.790  -2.548  -4.199  1.00  0.00
C
ATOM   3000  O   ASP X 193     -31.134  -3.628  -3.725  1.00  0.00
O
ATOM   3001  CB  ASP X 193     -29.825  -3.739  -6.178  1.00  0.00
C
ATOM   3002  CG  ASP X 193     -30.817  -4.891  -6.275  1.00  0.00
C
ATOM   3003  OD1 ASP X 193     -31.903  -4.675  -6.759  1.00  0.00
O
ATOM   3004  OD2 ASP X 193     -30.431  -6.005  -6.009  1.00  0.00
O
ATOM   3005  H   ASP X 193     -28.672  -1.247  -5.329  1.00  0.00
H
ATOM   3006  HA  ASP X 193     -31.361  -2.242  -6.208  1.00  0.00
H
ATOM   3007 1HB  ASP X 193     -29.294  -3.639  -7.126  1.00  0.00
H
ATOM   3008 2HB  ASP X 193     -29.111  -3.941  -5.381  1.00  0.00
H
ATOM   3009  N   GLN X 194     -30.716  -1.429  -3.482  1.00  0.00
N
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ATOM   3010  CA  GLN X 194     -31.009  -1.418  -2.055  1.00  0.00
C
ATOM   3011  C   GLN X 194     -32.511  -1.465  -1.804  1.00  0.00
C
ATOM   3012  O   GLN X 194     -32.955  -1.785  -0.701  1.00  0.00
O
ATOM   3013  CB  GLN X 194     -30.412  -0.173  -1.395  1.00  0.00
C
ATOM   3014  CG  GLN X 194     -31.067   1.130  -1.818  1.00  0.00
C
ATOM   3015  CD  GLN X 194     -30.450   2.336  -1.134  1.00  0.00
C
ATOM   3016  NE2 GLN X 194     -30.925   3.525  -1.492  1.00  0.00
N
ATOM   3017  OE1 GLN X 194     -29.560   2.202  -0.292  1.00  0.00
O
ATOM   3018  H   GLN X 194     -30.450  -0.568  -3.938  1.00  0.00
H
ATOM   3019  HA  GLN X 194     -30.588  -2.309  -1.589  1.00  0.00
H
ATOM   3020 1HB  GLN X 194     -30.518  -0.307  -0.318  1.00  0.00
H
ATOM   3021 2HB  GLN X 194     -29.354  -0.155  -1.656  1.00  0.00
H
ATOM   3022 1HG  GLN X 194     -31.242   1.391  -2.862  1.00  0.00
H
ATOM   3023 2HG  GLN X 194     -32.020   0.910  -1.336  1.00  0.00
H
ATOM   3024 1HE2 GLN X 194     -30.557   4.357  -1.074  1.00  0.00
H
ATOM   3025 2HE2 GLN X 194     -31.651   3.588  -2.179  1.00  0.00
H
ATOM   3026  N   LEU X 195     -33.290  -1.141  -2.831  1.00  0.00
N
ATOM   3027  CA  LEU X 195     -34.743  -1.152  -2.722  1.00  0.00
C
ATOM   3028  C   LEU X 195     -35.354  -2.218  -3.627  1.00  0.00
C
ATOM   3029  O   LEU X 195     -34.862  -2.468  -4.726  1.00  0.00
O
ATOM   3030  CB  LEU X 195     -35.311   0.230  -3.066  1.00  0.00
C
ATOM   3031  CG  LEU X 195     -34.892   1.362  -2.119  1.00  0.00
C
ATOM   3032  CD1 LEU X 195     -35.459   2.688  -2.607  1.00  0.00
C
ATOM   3033  CD2 LEU X 195     -35.382   1.053  -0.711  1.00  0.00
C
ATOM   3034  H   LEU X 195     -32.864  -0.881  -3.709  1.00  0.00
H
ATOM   3035  HA  LEU X 195     -35.030  -1.409  -1.703  1.00  0.00
H
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ATOM   3036 1HB  LEU X 195     -34.853   0.372  -4.043  1.00  0.00
H
ATOM   3037 2HB  LEU X 195     -36.396   0.205  -3.174  1.00  0.00
H
ATOM   3038  HG  LEU X 195     -33.804   1.380  -2.097  1.00  0.00
H
ATOM   3039 1HD1 LEU X 195     -35.157   3.486  -1.928  1.00  0.00
H
ATOM   3040 2HD1 LEU X 195     -35.077   2.900  -3.607  1.00  0.00
H
ATOM   3041 3HD1 LEU X 195     -36.547   2.630  -2.638  1.00  0.00
H
ATOM   3042 1HD2 LEU X 195     -35.083   1.858  -0.039  1.00  0.00
H
ATOM   3043 2HD2 LEU X 195     -36.468   0.965  -0.713  1.00  0.00
H
ATOM   3044 3HD2 LEU X 195     -34.943   0.114  -0.370  1.00  0.00
H
ATOM   3045  N   PRO X 196     -36.426  -2.842  -3.151  1.00  0.00
N
ATOM   3046  CA  PRO X 196     -37.090  -3.899  -3.903  1.00  0.00
C
ATOM   3047  C   PRO X 196     -37.632  -3.376  -5.230  1.00  0.00
C
ATOM   3048  O   PRO X 196     -37.910  -4.150  -6.145  1.00  0.00
O
ATOM   3049  CB  PRO X 196     -38.214  -4.376  -2.968  1.00  0.00
C
ATOM   3050  CG  PRO X 196     -37.751  -4.006  -1.586  1.00  0.00
C
ATOM   3051  CD  PRO X 196     -37.090  -2.570  -1.869  1.00  0.00
C
ATOM   3052  HA  PRO X 196     -36.450  -4.638  -4.094  1.00  0.00
H
ATOM   3053 1HB  PRO X 196     -38.880  -3.789  -3.189  1.00  0.00
H
ATOM   3054 2HB  PRO X 196     -38.143  -5.235  -3.047  1.00  0.00
H
ATOM   3055 1HG  PRO X 196     -37.851  -3.171  -1.484  1.00  0.00
H
ATOM   3056 2HG  PRO X 196     -37.934  -4.732  -1.022  1.00  0.00
H
ATOM   3057 1HD  PRO X 196     -37.144  -1.618  -1.836  1.00  0.00
H
ATOM   3058 2HD  PRO X 196     -36.524  -3.004  -1.239  1.00  0.00
H
ATOM   3059  N   TRP X 197     -37.774  -2.061  -5.322  1.00  0.00
N
ATOM   3060  CA  TRP X 197     -38.267  -1.428  -6.545  1.00  0.00
C
ATOM   3061  C   TRP X 197     -37.204  -0.531  -7.167  1.00  0.00
C
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ATOM   3062  O   TRP X 197     -36.237  -0.149  -6.505  1.00  0.00
O
ATOM   3063  CB  TRP X 197     -39.531  -0.617  -6.254  1.00  0.00
C
ATOM   3064  CG  TRP X 197     -39.320   0.486  -5.263  1.00  0.00
C
ATOM   3065  CD1 TRP X 197     -39.015   1.784  -5.540  1.00  0.00
C
ATOM   3066  CD2 TRP X 197     -39.400   0.387  -3.836  1.00  0.00
C
ATOM   3067  CE2 TRP X 197     -39.132   1.666  -3.314  1.00  0.00
C
ATOM   3068  CE3 TRP X 197     -39.675  -0.661  -2.948  1.00  0.00
C
ATOM   3069  NE1 TRP X 197     -38.899   2.502  -4.377  1.00  0.00
N
ATOM   3070  CZ2 TRP X 197     -39.126   1.927  -1.953  1.00  0.00
C
ATOM   3071  CZ3 TRP X 197     -39.671  -0.398  -1.583  1.00  0.00
C
ATOM   3072  CH2 TRP X 197     -39.405   0.859  -1.100  1.00  0.00
C
ATOM   3073  H   TRP X 197     -37.537  -1.482  -4.529  1.00  0.00
H
ATOM   3074  HA  TRP X 197     -38.504  -2.190  -7.286  1.00  0.00
H
ATOM   3075 1HB  TRP X 197     -39.899  -0.150  -7.168  1.00  0.00
H
ATOM   3076 2HB  TRP X 197     -40.305  -1.265  -5.843  1.00  0.00
H
ATOM   3077  HD1 TRP X 197     -38.913   2.052  -6.589  1.00  0.00
H
ATOM   3078  HE1 TRP X 197     -38.675   3.485  -4.311  1.00  0.00
H
ATOM   3079  HE3 TRP X 197     -39.894  -1.676  -3.277  1.00  0.00
H
ATOM   3080  HZ2 TRP X 197     -38.911   2.939  -1.612  1.00  0.00
H
ATOM   3081  HZ3 TRP X 197     -39.884  -1.222  -0.902  1.00  0.00
H
ATOM   3082  HH2 TRP X 197     -39.412   1.023  -0.021  1.00  0.00
H
ATOM   3083  N   THR X 198     -37.387  -0.202  -8.439  1.00  0.00
N
ATOM   3084  CA  THR X 198     -36.455   0.661  -9.150  1.00  0.00
C
ATOM   3085  C   THR X 198     -36.644   2.120  -8.760  1.00  0.00
C
ATOM   3086  O   THR X 198     -37.769   2.622  -8.719  1.00  0.00
O
ATOM   3087  CB  THR X 198     -36.611   0.526 -10.676  1.00  0.00
C
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ATOM   3088  CG2 THR X 198     -35.631   1.440 -11.396  1.00  0.00
C
ATOM   3089  OG1 THR X 198     -36.368  -0.832 -11.065  1.00  0.00
O
ATOM   3090  H   THR X 198     -38.196  -0.560  -8.927  1.00  0.00
H
ATOM   3091  HA  THR X 198     -35.431   0.401  -8.879  1.00  0.00
H
ATOM   3092  HB  THR X 198     -37.630   0.796 -10.953  1.00  0.00
H
ATOM   3093  HG1 THR X 198     -35.475  -1.082 -10.811  1.00  0.00
H
ATOM   3094 1HG2 THR X 198     -35.757   1.331 -12.473  1.00  0.00
H
ATOM   3095 2HG2 THR X 198     -35.822   2.474 -11.110  1.00  0.00
H
ATOM   3096 3HG2 THR X 198     -34.612   1.169 -11.120  1.00  0.00
H
ATOM   3097  N   SER X 199     -35.540   2.799  -8.469  1.00  0.00
N
ATOM   3098  CA  SER X 199     -35.580   4.210  -8.105  1.00  0.00
C
ATOM   3099  C   SER X 199     -35.574   5.098  -9.344  1.00  0.00
C
ATOM   3100  O   SER X 199     -34.713   5.964  -9.496  1.00  0.00
O
ATOM   3101  CB  SER X 199     -34.406   4.551  -7.206  1.00  0.00
C
ATOM   3102  OG  SER X 199     -34.441   3.835  -6.002  1.00  0.00
O
ATOM   3103  H   SER X 199     -34.649   2.325  -8.500  1.00  0.00
H
ATOM   3104  HA  SER X 199     -36.425   4.470  -7.466  1.00  0.00
H
ATOM   3105 1HB  SER X 199     -33.484   4.316  -7.733  1.00  0.00
H
ATOM   3106 2HB  SER X 199     -34.436   5.618  -6.985  1.00  0.00
H
ATOM   3107  HG  SER X 199     -35.250   4.042  -5.531  1.00  0.00
H
ATOM   3108  N   CYS X 200     -36.542   4.881 -10.226  1.00  0.00
N
ATOM   3109  CA  CYS X 200     -36.673   5.685 -11.435  1.00  0.00
C
ATOM   3110  C   CYS X 200     -37.394   6.995 -11.153  1.00  0.00
C
ATOM   3111  O   CYS X 200     -37.367   7.916 -11.967  1.00  0.00
O
ATOM   3112  CB  CYS X 200     -37.516   4.792 -12.344  1.00  0.00
C
ATOM   3113  SG  CYS X 200     -39.180   4.449 -11.724  1.00  0.00
S
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ATOM   3114  H   CYS X 200     -37.205   4.140 -10.055  1.00  0.00
H
ATOM   3115  HA  CYS X 200     -35.722   5.884 -11.929  1.00  0.00
H
ATOM   3116 1HB  CYS X 200     -37.649   5.262 -13.319  1.00  0.00
H
ATOM   3117 2HB  CYS X 200     -37.036   3.822 -12.471  1.00  0.00
H
ATOM   3118  HG  CYS X 200     -39.557   3.688 -12.747  1.00  0.00
H
ATOM   3119  N   LYS X 201     -38.037   7.071  -9.993  1.00  0.00
N
ATOM   3120  CA  LYS X 201     -38.816   8.248  -9.626  1.00  0.00
C
ATOM   3121  C   LYS X 201     -37.914   9.389  -9.180  1.00  0.00
C
ATOM   3122  O   LYS X 201     -38.361  10.529  -9.043  1.00  0.00
O
ATOM   3123  CB  LYS X 201     -39.815   7.905  -8.519  1.00  0.00
C
ATOM   3124  CG  LYS X 201     -40.907   6.932  -8.938  1.00  0.00
C
ATOM   3125  CD  LYS X 201     -41.854   6.631  -7.785  1.00  0.00
C
ATOM   3126  CE  LYS X 201     -42.955   5.670  -8.206  1.00  0.00
C
ATOM   3127  NZ  LYS X 201     -43.881   5.357  -7.085  1.00  0.00
N
ATOM   3128  H   LYS X 201     -37.985   6.294  -9.349  1.00  0.00
H
ATOM   3129  HA  LYS X 201     -39.369   8.611 -10.493  1.00  0.00
H
ATOM   3130 1HB  LYS X 201     -39.244   7.478  -7.695  1.00  0.00
H
ATOM   3131 2HB  LYS X 201     -40.270   8.843  -8.197  1.00  0.00
H
ATOM   3132 1HG  LYS X 201     -41.468   7.373  -9.764  1.00  0.00
H
ATOM   3133 2HG  LYS X 201     -40.438   6.007  -9.273  1.00  0.00
H
ATOM   3134 1HD  LYS X 201     -41.279   6.192  -6.968  1.00  0.00
H
ATOM   3135 2HD  LYS X 201     -42.301   7.567  -7.448  1.00  0.00
H
ATOM   3136 1HE  LYS X 201     -43.514   6.126  -9.021  1.00  0.00
H
ATOM   3137 2HE  LYS X 201     -42.488   4.749  -8.558  1.00  0.00
H
ATOM   3138 1HZ  LYS X 201     -44.593   4.717  -7.404  1.00  0.00
H
ATOM   3139 2HZ  LYS X 201     -43.363   4.933  -6.327  1.00  0.00
H
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ATOM   3140 3HZ  LYS X 201     -44.314   6.210  -6.758  1.00  0.00
H
ATOM   3141  N   ASN X 202     -36.643   9.082  -8.958  1.00  0.00
N
ATOM   3142  CA  ASN X 202     -35.680  10.076  -8.492  1.00  0.00
C
ATOM   3143  C   ASN X 202     -35.090  10.858  -9.658  1.00  0.00
C
ATOM   3144  O   ASN X 202     -33.886  10.794  -9.914  1.00  0.00
O
ATOM   3145  CB  ASN X 202     -34.573   9.437  -7.675  1.00  0.00
C
ATOM   3146  CG  ASN X 202     -35.035   8.889  -6.354  1.00  0.00
C
ATOM   3147  ND2 ASN X 202     -34.264   7.975  -5.820  1.00  0.00
N
ATOM   3148  OD1 ASN X 202     -36.037   9.340  -5.788  1.00  0.00
O
ATOM   3149  H   ASN X 202     -36.334   8.133  -9.115  1.00  0.00
H
ATOM   3150  HA  ASN X 202     -36.180  10.805  -7.853  1.00  0.00
H
ATOM   3151 1HB  ASN X 202     -33.878   8.731  -8.131  1.00  0.00
H
ATOM   3152 2HB  ASN X 202     -34.065  10.386  -7.504  1.00  0.00
H
ATOM   3153 1HD2 ASN X 202     -34.511   7.565  -4.942  1.00  0.00
H
ATOM   3154 2HD2 ASN X 202     -33.431   7.686  -6.292  1.00  0.00
H
ATOM   3155  N   SER X 203     -35.942  11.596 -10.362  1.00  0.00
N
ATOM   3156  CA  SER X 203     -35.505  12.394 -11.499  1.00  0.00
C
ATOM   3157  C   SER X 203     -34.758  13.643 -11.041  1.00  0.00
C
ATOM   3158  O   SER X 203     -34.226  14.395 -11.860  1.00  0.00
O
ATOM   3159  CB  SER X 203     -36.695  12.775 -12.357  1.00  0.00
C
ATOM   3160  OG  SER X 203     -37.568  13.644 -11.690  1.00  0.00
O
ATOM   3161  H   SER X 203     -36.918  11.605 -10.101  1.00  0.00
H
ATOM   3162  HA  SER X 203     -34.894  11.835 -12.209  1.00  0.00
H
ATOM   3163 1HB  SER X 203     -36.331  13.263 -13.261  1.00  0.00
H
ATOM   3164 2HB  SER X 203     -37.235  11.869 -12.628  1.00  0.00
H
ATOM   3165  HG  SER X 203     -37.101  14.449 -11.452  1.00  0.00
H
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ATOM   3166  N   TRP X 204     -34.719  13.854  -9.733  1.00  0.00
N
ATOM   3167  CA  TRP X 204     -33.925  14.935  -9.154  1.00  0.00
C
ATOM   3168  C   TRP X 204     -32.444  14.739  -9.437  1.00  0.00
C
ATOM   3169  O   TRP X 204     -31.659  15.687  -9.369  1.00  0.00
O
ATOM   3170  CB  TRP X 204     -34.166  15.024  -7.645  1.00  0.00
C
ATOM   3171  CG  TRP X 204     -35.559  15.442  -7.285  1.00  0.00
C
ATOM   3172  CD1 TRP X 204     -36.540  14.648  -6.770  1.00  0.00
C
ATOM   3173  CD2 TRP X 204     -36.126  16.752  -7.410  1.00  0.00
C
ATOM   3174  CE2 TRP X 204     -37.454  16.678  -6.953  1.00  0.00
C
ATOM   3175  CE3 TRP X 204     -35.636  17.982  -7.865  1.00  0.00
C
ATOM   3176  NE1 TRP X 204     -37.684  15.380  -6.568  1.00  0.00
N
ATOM   3177  CZ2 TRP X 204     -38.296  17.778  -6.938  1.00  0.00
C
ATOM   3178  CZ3 TRP X 204     -36.481  19.085  -7.848  1.00  0.00
C
ATOM   3179  CH2 TRP X 204     -37.774  18.986  -7.397  1.00  0.00
C
ATOM   3180  H   TRP X 204     -35.251  13.252  -9.120  1.00  0.00
H
ATOM   3181  HA  TRP X 204     -34.207  15.884  -9.608  1.00  0.00
H
ATOM   3182 1HB  TRP X 204     -34.000  14.053  -7.178  1.00  0.00
H
ATOM   3183 2HB  TRP X 204     -33.494  15.759  -7.202  1.00  0.00
H
ATOM   3184  HD1 TRP X 204     -36.290  13.602  -6.602  1.00  0.00
H
ATOM   3185  HE1 TRP X 204     -38.553  15.024  -6.198  1.00  0.00
H
ATOM   3186  HE3 TRP X 204     -34.618  18.117  -8.231  1.00  0.00
H
ATOM   3187  HZ2 TRP X 204     -39.316  17.654  -6.571  1.00  0.00
H
ATOM   3188  HZ3 TRP X 204     -36.088  20.037  -8.207  1.00  0.00
H
ATOM   3189  HH2 TRP X 204     -38.403  19.876  -7.401  1.00  0.00
H
ATOM   3190  N   ASN X 205     -32.062  13.509  -9.758  1.00  0.00
N
ATOM   3191  CA  ASN X 205     -30.663  13.171  -9.985  1.00  0.00
C
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ATOM   3192  C   ASN X 205     -30.513  12.186 -11.134  1.00  0.00
C
ATOM   3193  O   ASN X 205     -31.499  11.763 -11.738  1.00  0.00
O
ATOM   3194  CB  ASN X 205     -30.015  12.617  -8.731  1.00  0.00
C
ATOM   3195  CG  ASN X 205     -30.686  11.382  -8.198  1.00  0.00
C
ATOM   3196  ND2 ASN X 205     -31.163  11.478  -6.983  1.00  0.00
N
ATOM   3197  OD1 ASN X 205     -30.835  10.378  -8.904  1.00  0.00
O
ATOM   3198  H   ASN X 205     -32.762  12.786  -9.848  1.00  0.00
H
ATOM   3199  HA  ASN X 205     -30.108  14.066 -10.272  1.00  0.00
H
ATOM   3200 1HB  ASN X 205     -28.932  12.489  -8.670  1.00  0.00
H
ATOM   3201 2HB  ASN X 205     -30.314  13.470  -8.122  1.00  0.00
H
ATOM   3202 1HD2 ASN X 205     -31.624  10.695  -6.564  1.00  0.00
H
ATOM   3203 2HD2 ASN X 205     -31.069  12.334  -6.475  1.00  0.00
H
ATOM   3204  N   THR X 206     -29.270  11.822 -11.437  1.00  0.00
N
ATOM   3205  CA  THR X 206     -28.988  10.909 -12.539  1.00  0.00
C
ATOM   3206  C   THR X 206     -28.706   9.502 -12.029  1.00  0.00
C
ATOM   3207  O   THR X 206     -28.543   9.286 -10.824  1.00  0.00
O
ATOM   3208  CB  THR X 206     -27.791  11.390 -13.379  1.00  0.00
C
ATOM   3209  CG2 THR X 206     -28.019  12.812 -13.870  1.00  0.00
C
ATOM   3210  OG1 THR X 206     -26.598  11.348 -12.584  1.00  0.00
O
ATOM   3211  H   THR X 206     -28.502  12.186 -10.890  1.00  0.00
H
ATOM   3212  HA  THR X 206     -29.861  10.833 -13.188  1.00  0.00
H
ATOM   3213  HB  THR X 206     -27.669  10.727 -14.236  1.00  0.00
H
ATOM   3214  HG1 THR X 206     -25.852  11.649 -13.111  1.00  0.00
H
ATOM   3215 1HG2 THR X 206     -27.162  13.133 -14.462  1.00  0.00
H
ATOM   3216 2HG2 THR X 206     -28.919  12.843 -14.484  1.00  0.00
H
ATOM   3217 3HG2 THR X 206     -28.139  13.475 -13.015  1.00  0.00
H
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ATOM   3218  N   GLY X 207     -28.647   8.545 -12.950  1.00  0.00
N
ATOM   3219  CA  GLY X 207     -28.361   7.159 -12.596  1.00  0.00
C
ATOM   3220  C   GLY X 207     -26.865   6.876 -12.640  1.00  0.00
C
ATOM   3221  O   GLY X 207     -26.433   5.734 -12.469  1.00  0.00
O
ATOM   3222  H   GLY X 207     -28.805   8.783 -13.919  1.00  0.00
H
ATOM   3223 1HA  GLY X 207     -28.729   6.966 -11.588  1.00  0.00
H
ATOM   3224 2HA  GLY X 207     -28.868   6.499 -13.299  1.00  0.00
H
ATOM   3225  N   ASN X 208     -26.077   7.920 -12.868  1.00  0.00
N
ATOM   3226  CA  ASN X 208     -24.625   7.787 -12.926  1.00  0.00
C
ATOM   3227  C   ASN X 208     -23.953   8.631 -11.850  1.00  0.00
C
ATOM   3228  O   ASN X 208     -24.623   9.324 -11.082  1.00  0.00
O
ATOM   3229  CB  ASN X 208     -24.087   8.156 -14.297  1.00  0.00
C
ATOM   3230  CG  ASN X 208     -24.413   9.563 -14.716  1.00  0.00
C
ATOM   3231  ND2 ASN X 208     -25.023   9.680 -15.867  1.00  0.00
N
ATOM   3232  OD1 ASN X 208     -24.181  10.522 -13.972  1.00  0.00
O
ATOM   3233  H   ASN X 208     -26.493   8.831 -13.004  1.00  0.00
H
ATOM   3234  HA  ASN X 208     -24.340   6.752 -12.730  1.00  0.00
H
ATOM   3235 1HB  ASN X 208     -23.056   7.930 -14.570  1.00  0.00
H
ATOM   3236 2HB  ASN X 208     -24.759   7.470 -14.813  1.00  0.00
H
ATOM   3237 1HD2 ASN X 208     -25.270  10.587 -16.210  1.00  0.00
H
ATOM   3238 2HD2 ASN X 208     -25.242   8.866 -16.404  1.00  0.00
H
ATOM   3239  N   CYS X 209     -22.626   8.572 -11.802  1.00  0.00
N
ATOM   3240  CA  CYS X 209     -21.858   9.355 -10.840  1.00  0.00
C
ATOM   3241  C   CYS X 209     -20.888  10.293 -11.545  1.00  0.00
C
ATOM   3242  O   CYS X 209     -20.722  11.445 -11.144  1.00  0.00
O
ATOM   3243  CB  CYS X 209     -21.099   8.282 -10.060  1.00  0.00
C
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ATOM   3244  SG  CYS X 209     -22.157   7.110  -9.177  1.00  0.00
S
ATOM   3245  H   CYS X 209     -22.136   7.968 -12.447  1.00  0.00
H
ATOM   3246  HA  CYS X 209     -22.481   9.918 -10.145  1.00  0.00
H
ATOM   3247 1HB  CYS X 209     -20.486   7.687 -10.735  1.00  0.00
H
ATOM   3248 2HB  CYS X 209     -20.465   8.745  -9.304  1.00  0.00
H
ATOM   3249  HG  CYS X 209     -21.165   6.390  -8.660  1.00  0.00
H
ATOM   3250  N   THR X 210     -20.251   9.796 -12.599  1.00  0.00
N
ATOM   3251  CA  THR X 210     -19.249  10.569 -13.325  1.00  0.00
C
ATOM   3252  C   THR X 210     -19.467  10.481 -14.830  1.00  0.00
C
ATOM   3253  O   THR X 210     -20.228   9.639 -15.307  1.00  0.00
O
ATOM   3254  CB  THR X 210     -17.822  10.095 -12.996  1.00  0.00
C
ATOM   3255  CG2 THR X 210     -17.563  10.181 -11.500  1.00  0.00
C
ATOM   3256  OG1 THR X 210     -17.656   8.738 -13.429  1.00  0.00
O
ATOM   3257  H   THR X 210     -20.467   8.859 -12.906  1.00  0.00
H
ATOM   3258  HA  THR X 210     -19.335  11.623 -13.063  1.00  0.00
H
ATOM   3259  HB  THR X 210     -17.108  10.725 -13.525  1.00  0.00
H
ATOM   3260  HG1 THR X 210     -16.765   8.444 -13.223  1.00  0.00
H
ATOM   3261 1HG2 THR X 210     -16.550   9.842 -11.286  1.00  0.00
H
ATOM   3262 2HG2 THR X 210     -17.678  11.213 -11.170  1.00  0.00
H
ATOM   3263 3HG2 THR X 210     -18.276   9.549 -10.972  1.00  0.00
H
ATOM   3264  N   ASN X 211     -18.797  11.353 -15.574  1.00  0.00
N
ATOM   3265  CA  ASN X 211     -18.867  11.335 -17.029  1.00  0.00
C
ATOM   3266  C   ASN X 211     -18.264  10.055 -17.594  1.00  0.00
C
ATOM   3267  O   ASN X 211     -18.631   9.610 -18.679  1.00  0.00
O
ATOM   3268  CB  ASN X 211     -18.184  12.548 -17.632  1.00  0.00
C
ATOM   3269  CG  ASN X 211     -18.952  13.827 -17.455  1.00  0.00
C
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ATOM   3270  ND2 ASN X 211     -18.271  14.927 -17.650  1.00  0.00
N
ATOM   3271  OD1 ASN X 211     -20.166  13.817 -17.217  1.00  0.00
O
ATOM   3272  H   ASN X 211     -18.223  12.048 -15.119  1.00  0.00
H
ATOM   3273  HA  ASN X 211     -19.910  11.352 -17.349  1.00  0.00
H
ATOM   3274 1HB  ASN X 211     -17.124  12.739 -17.453  1.00  0.00
H
ATOM   3275 2HB  ASN X 211     -18.320  12.194 -18.655  1.00  0.00
H
ATOM   3276 1HD2 ASN X 211     -18.719  15.816 -17.548  1.00  0.00
H
ATOM   3277 2HD2 ASN X 211     -17.305  14.880 -17.898  1.00  0.00
H
ATOM   3278  N   TYR X 212     -17.335   9.464 -16.845  1.00  0.00
N
ATOM   3279  CA  TYR X 212     -16.674   8.237 -17.276  1.00  0.00
C
ATOM   3280  C   TYR X 212     -17.492   7.009 -16.890  1.00  0.00
C
ATOM   3281  O   TYR X 212     -17.143   5.885 -17.255  1.00  0.00
O
ATOM   3282  CB  TYR X 212     -15.270   8.145 -16.673  1.00  0.00
C
ATOM   3283  CG  TYR X 212     -14.286   9.135 -17.257  1.00  0.00
C
ATOM   3284  CD1 TYR X 212     -14.036  10.345 -16.627  1.00  0.00
C
ATOM   3285  CD2 TYR X 212     -13.610   8.854 -18.434  1.00  0.00
C
ATOM   3286  CE1 TYR X 212     -13.138  11.254 -17.156  1.00  0.00
C
ATOM   3287  CE2 TYR X 212     -12.710   9.754 -18.971  1.00  0.00
C
ATOM   3288  CZ  TYR X 212     -12.477  10.954 -18.330  1.00  0.00
C
ATOM   3289  OH  TYR X 212     -11.581  11.852 -18.860  1.00  0.00
O
ATOM   3290  H   TYR X 212     -17.082   9.874 -15.957  1.00  0.00
H
ATOM   3291  HA  TYR X 212     -16.588   8.226 -18.363  1.00  0.00
H
ATOM   3292 1HB  TYR X 212     -15.368   8.320 -15.601  1.00  0.00
H
ATOM   3293 2HB  TYR X 212     -14.911   7.132 -16.846  1.00  0.00
H
ATOM   3294  HD1 TYR X 212     -14.562  10.575 -15.700  1.00  0.00
H
ATOM   3295  HD2 TYR X 212     -13.799   7.906 -18.936  1.00  0.00
H
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ATOM   3296  HE1 TYR X 212     -12.952  12.201 -16.651  1.00  0.00
H
ATOM   3297  HE2 TYR X 212     -12.189   9.514 -19.900  1.00  0.00
H
ATOM   3298  HH  TYR X 212     -11.177  11.543 -19.676  1.00  0.00
H
ATOM   3299  N   PHE X 213     -18.573   7.231 -16.155  1.00  0.00
N
ATOM   3300  CA  PHE X 213     -19.389   6.136 -15.643  1.00  0.00
C
ATOM   3301  C   PHE X 213     -20.658   5.963 -16.470  1.00  0.00
C
ATOM   3302  O   PHE X 213     -21.294   4.910 -16.429  1.00  0.00
O
ATOM   3303  CB  PHE X 213     -19.745   6.376 -14.175  1.00  0.00
C
ATOM   3304  CG  PHE X 213     -20.493   5.239 -13.538  1.00  0.00
C
ATOM   3305  CD1 PHE X 213     -19.875   4.016 -13.323  1.00  0.00
C
ATOM   3306  CD2 PHE X 213     -21.817   5.390 -13.154  1.00  0.00
C
ATOM   3307  CE1 PHE X 213     -20.564   2.970 -12.738  1.00  0.00
C
ATOM   3308  CE2 PHE X 213     -22.508   4.346 -12.569  1.00  0.00
C
ATOM   3309  CZ  PHE X 213     -21.879   3.135 -12.362  1.00  0.00
C
ATOM   3310  H   PHE X 213     -18.838   8.182 -15.944  1.00  0.00
H
ATOM   3311  HA  PHE X 213     -18.838   5.198 -15.718  1.00  0.00
H
ATOM   3312 1HB  PHE X 213     -18.839   6.520 -13.586  1.00  0.00
H
ATOM   3313 2HB  PHE X 213     -20.378   7.257 -14.083  1.00  0.00
H
ATOM   3314  HD1 PHE X 213     -18.834   3.886 -13.620  1.00  0.00
H
ATOM   3315  HD2 PHE X 213     -22.314   6.347 -13.320  1.00  0.00
H
ATOM   3316  HE1 PHE X 213     -20.065   2.015 -12.575  1.00  0.00
H
ATOM   3317  HE2 PHE X 213     -23.548   4.479 -12.271  1.00  0.00
H
ATOM   3318  HZ  PHE X 213     -22.423   2.311 -11.902  1.00  0.00
H
ATOM   3319  N   SER X 214     -21.018   6.999 -17.216  1.00  0.00
N
ATOM   3320  CA  SER X 214     -22.196   6.953 -18.075  1.00  0.00
C
ATOM   3321  C   SER X 214     -21.940   6.111 -19.317  1.00  0.00
C
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ATOM   3322  O   SER X 214     -20.792   5.879 -19.695  1.00  0.00
O
ATOM   3323  CB  SER X 214     -22.612   8.358 -18.465  1.00  0.00
C
ATOM   3324  OG  SER X 214     -21.678   8.965 -19.314  1.00  0.00
O
ATOM   3325  H   SER X 214     -20.462   7.841 -17.189  1.00  0.00
H
ATOM   3326  HA  SER X 214     -23.091   6.598 -17.563  1.00  0.00
H
ATOM   3327 1HB  SER X 214     -23.575   8.306 -18.974  1.00  0.00
H
ATOM   3328 2HB  SER X 214     -22.712   8.956 -17.561  1.00  0.00
H
ATOM   3329  HG  SER X 214     -20.828   9.017 -18.872  1.00  0.00
H
ATOM   3330  N   GLU X 215     -23.015   5.656 -19.949  1.00  0.00
N
ATOM   3331  CA  GLU X 215     -22.911   4.872 -21.177  1.00  0.00
C
ATOM   3332  C   GLU X 215     -22.798   5.774 -22.397  1.00  0.00
C
ATOM   3333  O   GLU X 215     -22.145   5.423 -23.379  1.00  0.00
O
ATOM   3334  CB  GLU X 215     -24.116   3.940 -21.321  1.00  0.00
C
ATOM   3335  CG  GLU X 215     -24.200   2.853 -20.259  1.00  0.00
C
ATOM   3336  CD  GLU X 215     -25.441   2.019 -20.428  1.00  0.00
C
ATOM   3337  OE1 GLU X 215     -26.193   2.285 -21.334  1.00  0.00
O
ATOM   3338  OE2 GLU X 215     -25.579   1.048 -19.723  1.00  0.00
O
ATOM   3339  H   GLU X 215     -23.929   5.857 -19.570  1.00  0.00
H
ATOM   3340  HA  GLU X 215     -22.004   4.267 -21.153  1.00  0.00
H
ATOM   3341 1HB  GLU X 215     -25.007   4.564 -21.272  1.00  0.00
H
ATOM   3342 2HB  GLU X 215     -24.047   3.480 -22.306  1.00  0.00
H
ATOM   3343 1HG  GLU X 215     -23.327   2.201 -20.235  1.00  0.00
H
ATOM   3344 2HG  GLU X 215     -24.263   3.411 -19.326  1.00  0.00
H
ATOM   3345  N   ASP X 216     -23.431   6.939 -22.327  1.00  0.00
N
ATOM   3346  CA  ASP X 216     -23.453   7.870 -23.452  1.00  0.00
C
ATOM   3347  C   ASP X 216     -22.054   8.394 -23.756  1.00  0.00
C
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ATOM   3348  O   ASP X 216     -21.727   8.679 -24.908  1.00  0.00
O
ATOM   3349  CB  ASP X 216     -24.402   9.035 -23.166  1.00  0.00
C
ATOM   3350  CG  ASP X 216     -25.879   8.671 -23.217  1.00  0.00
C
ATOM   3351  OD1 ASP X 216     -26.192   7.605 -23.694  1.00  0.00
O
ATOM   3352  OD2 ASP X 216     -26.666   9.383 -22.643  1.00  0.00
O
ATOM   3353  H   ASP X 216     -23.910   7.187 -21.474  1.00  0.00
H
ATOM   3354  HA  ASP X 216     -23.794   7.356 -24.350  1.00  0.00
H
ATOM   3355 1HB  ASP X 216     -24.187   9.550 -22.228  1.00  0.00
H
ATOM   3356 2HB  ASP X 216     -24.159   9.690 -24.004  1.00  0.00
H
ATOM   3357  N   ASN X 217     -21.237   8.521 -22.721  1.00  0.00
N
ATOM   3358  CA  ASN X 217     -19.891   9.062 -22.867  1.00  0.00
C
ATOM   3359  C   ASN X 217     -18.839   7.967 -22.766  1.00  0.00
C
ATOM   3360  O   ASN X 217     -17.751   8.182 -22.233  1.00  0.00
O
ATOM   3361  CB  ASN X 217     -19.616  10.147 -21.842  1.00  0.00
C
ATOM   3362  CG  ASN X 217     -20.405  11.406 -22.066  1.00  0.00
C
ATOM   3363  ND2 ASN X 217     -20.589  12.154 -21.009  1.00  0.00
N
ATOM   3364  OD1 ASN X 217     -20.782  11.733 -23.198  1.00  0.00
O
ATOM   3365  H   ASN X 217     -21.556   8.235 -21.805  1.00  0.00
H
ATOM   3366  HA  ASN X 217     -19.777   9.508 -23.856  1.00  0.00
H
ATOM   3367 1HB  ASN X 217     -19.602   9.918 -20.777  1.00  0.00
H
ATOM   3368 2HB  ASN X 217     -18.595  10.306 -22.191  1.00  0.00
H
ATOM   3369 1HD2 ASN X 217     -21.106  13.007 -21.084  1.00  0.00
H
ATOM   3370 2HD2 ASN X 217     -20.211  11.873 -20.127  1.00  0.00
H
ATOM   3371  N   ILE X 218     -19.171   6.789 -23.283  1.00  0.00
N
ATOM   3372  CA  ILE X 218     -18.255   5.655 -23.256  1.00  0.00
C
ATOM   3373  C   ILE X 218     -16.913   6.013 -23.881  1.00  0.00
C
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ATOM   3374  O   ILE X 218     -16.846   6.834 -24.799  1.00  0.00
O
ATOM   3375  CB  ILE X 218     -18.844   4.437 -23.990  1.00  0.00
C
ATOM   3376  CG1 ILE X 218     -18.013   3.184 -23.699  1.00  0.00
C
ATOM   3377  CG2 ILE X 218     -18.911   4.699 -25.486  1.00  0.00
C
ATOM   3378  CD1 ILE X 218     -18.656   1.900 -24.170  1.00  0.00
C
ATOM   3379  H   ILE X 218     -20.080   6.677 -23.706  1.00  0.00
H
ATOM   3380  HA  ILE X 218     -18.016   5.379 -22.229  1.00  0.00
H
ATOM   3381  HB  ILE X 218     -19.847   4.243 -23.609  1.00  0.00
H
ATOM   3382 1HG1 ILE X 218     -17.050   3.312 -24.194  1.00  0.00
H
ATOM   3383 2HG1 ILE X 218     -17.861   3.140 -22.619  1.00  0.00
H
ATOM   3384 1HG2 ILE X 218     -19.329   3.828 -25.990  1.00  0.00
H
ATOM   3385 2HG2 ILE X 218     -19.544   5.566 -25.676  1.00  0.00
H
ATOM   3386 3HG2 ILE X 218     -17.909   4.893 -25.868  1.00  0.00
H
ATOM   3387 1HD1 ILE X 218     -18.008   1.057 -23.929  1.00  0.00
H
ATOM   3388 2HD1 ILE X 218     -19.619   1.771 -23.673  1.00  0.00
H
ATOM   3389 3HD1 ILE X 218     -18.807   1.943 -25.248  1.00  0.00
H
ATOM   3390  N   THR X 219     -15.782   5.589 -23.388  1.00  0.00
N
ATOM   3391  CA  THR X 219     -14.526   5.833 -24.087  1.00  0.00
C
ATOM   3392  C   THR X 219     -14.270   4.764 -25.141  1.00  0.00
C
ATOM   3393  O   THR X 219     -14.905   3.708 -25.139  1.00  0.00
O
ATOM   3394  CB  THR X 219     -13.336   5.875 -23.112  1.00  0.00
C
ATOM   3395  CG2 THR X 219     -13.544   6.957 -22.063  1.00  0.00
C
ATOM   3396  OG1 THR X 219     -13.201   4.603 -22.463  1.00  0.00
O
ATOM   3397  H   THR X 219     -15.776   5.086 -22.513  1.00  0.00
H
ATOM   3398  HA  THR X 219     -14.578   6.784 -24.617  1.00  0.00
H
ATOM   3399  HB  THR X 219     -12.425   6.085 -23.673  1.00  0.00
H
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ATOM   3400  HG1 THR X 219     -14.005   4.406 -21.977  1.00  0.00
H
ATOM   3401 1HG2 THR X 219     -12.692   6.970 -21.383  1.00  0.00
H
ATOM   3402 2HG2 THR X 219     -13.635   7.924 -22.552  1.00  0.00
H
ATOM   3403 3HG2 THR X 219     -14.453   6.746 -21.501  1.00  0.00
H
ATOM   3404  N   TRP X 220     -13.336   5.042 -26.046  1.00  0.00
N
ATOM   3405  CA  TRP X 220     -13.028   4.126 -27.138  1.00  0.00
C
ATOM   3406  C   TRP X 220     -12.133   2.989 -26.665  1.00  0.00
C
ATOM   3407  O   TRP X 220     -11.847   2.057 -27.415  1.00  0.00
O
ATOM   3408  CB  TRP X 220     -12.358   4.878 -28.289  1.00  0.00
C
ATOM   3409  CG  TRP X 220     -11.155   5.665 -27.870  1.00  0.00
C
ATOM   3410  CD1 TRP X 220     -11.110   6.999 -27.590  1.00  0.00
C
ATOM   3411  CD2 TRP X 220      -9.823   5.171 -27.684  1.00  0.00
C
ATOM   3412  CE2 TRP X 220      -9.024   6.260 -27.291  1.00  0.00
C
ATOM   3413  CE3 TRP X 220      -9.228   3.910 -27.813  1.00  0.00
C
ATOM   3414  NE1 TRP X 220      -9.833   7.367 -27.243  1.00  0.00
N
ATOM   3415  CZ2 TRP X 220      -7.670   6.131 -27.027  1.00  0.00
C
ATOM   3416  CZ3 TRP X 220      -7.871   3.781 -27.546  1.00  0.00
C
ATOM   3417  CH2 TRP X 220      -7.113   4.859 -27.164  1.00  0.00
C
ATOM   3418  H   TRP X 220     -12.827   5.911 -25.975  1.00  0.00
H
ATOM   3419  HA  TRP X 220     -13.946   3.668 -27.507  1.00  0.00
H
ATOM   3420 1HB  TRP X 220     -12.021   4.176 -29.053  1.00  0.00
H
ATOM   3421 2HB  TRP X 220     -13.057   5.585 -28.733  1.00  0.00
H
ATOM   3422  HD1 TRP X 220     -12.043   7.551 -27.677  1.00  0.00
H
ATOM   3423  HE1 TRP X 220      -9.539   8.298 -26.991  1.00  0.00
H
ATOM   3424  HE3 TRP X 220      -9.782   3.020 -28.109  1.00  0.00
H
ATOM   3425  HZ2 TRP X 220      -7.107   7.014 -26.726  1.00  0.00
H
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ATOM   3426  HZ3 TRP X 220      -7.419   2.792 -27.650  1.00  0.00
H
ATOM   3427  HH2 TRP X 220      -6.050   4.715 -26.964  1.00  0.00
H
ATOM   3428  N   THR X 221     -11.691   3.069 -25.414  1.00  0.00
N
ATOM   3429  CA  THR X 221     -10.719   2.122 -24.879  1.00  0.00
C
ATOM   3430  C   THR X 221     -11.364   0.766 -24.615  1.00  0.00
C
ATOM   3431  O   THR X 221     -10.675  -0.250 -24.533  1.00  0.00
O
ATOM   3432  CB  THR X 221     -10.082   2.640 -23.576  1.00  0.00
C
ATOM   3433  CG2 THR X 221      -9.460   4.011 -23.796  1.00  0.00
C
ATOM   3434  OG1 THR X 221     -11.083   2.732 -22.556  1.00  0.00
O
ATOM   3435  H   THR X 221     -12.038   3.805 -24.817  1.00  0.00
H
ATOM   3436  HA  THR X 221      -9.928   1.953 -25.610  1.00  0.00
H
ATOM   3437  HB  THR X 221      -9.311   1.940 -23.256  1.00  0.00
H
ATOM   3438  HG1 THR X 221     -11.772   3.340 -22.839  1.00  0.00
H
ATOM   3439 1HG2 THR X 221      -9.014   4.361 -22.865  1.00  0.00
H
ATOM   3440 2HG2 THR X 221      -8.690   3.942 -24.565  1.00  0.00
H
ATOM   3441 3HG2 THR X 221     -10.230   4.712 -24.117  1.00  0.00
H
ATOM   3442  N   LEU X 222     -12.687   0.760 -24.483  1.00  0.00
N
ATOM   3443  CA  LEU X 222     -13.417  -0.461 -24.176  1.00  0.00
C
ATOM   3444  C   LEU X 222     -13.579  -1.337 -25.409  1.00  0.00
C
ATOM   3445  O   LEU X 222     -13.787  -2.545 -25.306  1.00  0.00
O
ATOM   3446  CB  LEU X 222     -14.790  -0.123 -23.581  1.00  0.00
C
ATOM   3447  CG  LEU X 222     -14.830  -0.015 -22.051  1.00  0.00
C
ATOM   3448  CD1 LEU X 222     -13.703   0.884 -21.561  1.00  0.00
C
ATOM   3449  CD2 LEU X 222     -16.182   0.530 -21.614  1.00  0.00
C
ATOM   3450  H   LEU X 222     -13.197   1.624 -24.598  1.00  0.00
H
ATOM   3451  HA  LEU X 222     -12.855  -1.051 -23.452  1.00  0.00
H
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ATOM   3452 1HB  LEU X 222     -14.939   0.858 -24.027  1.00  0.00
H
ATOM   3453 2HB  LEU X 222     -15.563  -0.805 -23.934  1.00  0.00
H
ATOM   3454  HG  LEU X 222     -14.733  -1.026 -21.652  1.00  0.00
H
ATOM   3455 1HD1 LEU X 222     -13.739   0.953 -20.474  1.00  0.00
H
ATOM   3456 2HD1 LEU X 222     -12.743   0.462 -21.865  1.00  0.00
H
ATOM   3457 3HD1 LEU X 222     -13.816   1.877 -21.992  1.00  0.00
H
ATOM   3458 1HD2 LEU X 222     -16.209   0.604 -20.527  1.00  0.00
H
ATOM   3459 2HD2 LEU X 222     -16.335   1.517 -22.051  1.00  0.00
H
ATOM   3460 3HD2 LEU X 222     -16.972  -0.142 -21.951  1.00  0.00
H
ATOM   3461  N   HIS X 223     -13.489  -0.717 -26.583  1.00  0.00
N
ATOM   3462  CA  HIS X 223     -13.647  -1.436 -27.841  1.00  0.00
C
ATOM   3463  C   HIS X 223     -12.578  -1.027 -28.844  1.00  0.00
C
ATOM   3464  O   HIS X 223     -12.880  -0.455 -29.891  1.00  0.00
O
ATOM   3465  CB  HIS X 223     -15.040  -1.193 -28.431  1.00  0.00
C
ATOM   3466  CG  HIS X 223     -16.156  -1.666 -27.552  1.00  0.00
C
ATOM   3467  CD2 HIS X 223     -17.011  -0.986 -26.754  1.00  0.00
C
ATOM   3468  ND1 HIS X 223     -16.495  -2.998 -27.432  1.00  0.00
N
ATOM   3469  CE1 HIS X 223     -17.510  -3.116 -26.596  1.00  0.00
C
ATOM   3470  NE2 HIS X 223     -17.842  -1.911 -26.170  1.00  0.00
N
ATOM   3471  H   HIS X 223     -13.306   0.276 -26.602  1.00  0.00
H
ATOM   3472  HA  HIS X 223     -13.520  -2.504 -27.671  1.00  0.00
H
ATOM   3473 1HB  HIS X 223     -15.199  -0.127 -28.590  1.00  0.00
H
ATOM   3474 2HB  HIS X 223     -15.142  -1.721 -29.380  1.00  0.00
H
ATOM   3475  HD2 HIS X 223     -17.128   0.074 -26.526  1.00  0.00
H
ATOM   3476  HE1 HIS X 223     -17.928  -4.096 -26.364  1.00  0.00
H
ATOM   3477  HE2 HIS X 223     -18.585  -1.695 -25.520  1.00  0.00
H
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ATOM   3478  N   SER X 224     -11.323  -1.326 -28.520  1.00  0.00
N
ATOM   3479  CA  SER X 224     -10.200  -0.949 -29.373  1.00  0.00
C
ATOM   3480  C   SER X 224     -10.086  -1.868 -30.577  1.00  0.00
C
ATOM   3481  O   SER X 224     -10.847  -2.833 -30.709  1.00  0.00
O
ATOM   3482  CB  SER X 224      -8.911  -0.965 -28.575  1.00  0.00
C
ATOM   3483  OG  SER X 224      -8.558  -2.261 -28.172  1.00  0.00
O
ATOM   3484  H   SER X 224     -11.142  -1.826 -27.661  1.00  0.00
H
ATOM   3485  HA  SER X 224     -10.236   0.090 -29.703  1.00  0.00
H
ATOM   3486 1HB  SER X 224      -8.112  -0.557 -29.194  1.00  0.00
H
ATOM   3487 2HB  SER X 224      -9.038  -0.341 -27.691  1.00  0.00
H
ATOM   3488  HG  SER X 224      -9.256  -2.625 -27.623  1.00  0.00
H
ATOM   3489  N   THR X 225      -9.141  -1.568 -31.459  1.00  0.00
N
ATOM   3490  CA  THR X 225      -8.947  -2.354 -32.672  1.00  0.00
C
ATOM   3491  C   THR X 225      -7.883  -3.423 -32.473  1.00  0.00
C
ATOM   3492  O   THR X 225      -7.586  -4.200 -33.384  1.00  0.00
O
ATOM   3493  CB  THR X 225      -8.546  -1.465 -33.864  1.00  0.00
C
ATOM   3494  CG2 THR X 225      -9.623  -0.427 -34.140  1.00  0.00
C
ATOM   3495  OG1 THR X 225      -7.310  -0.800 -33.573  1.00  0.00
O
ATOM   3496  H   THR X 225      -8.541  -0.775 -31.285  1.00  0.00
H
ATOM   3497  HA  THR X 225      -9.869  -2.879 -32.922  1.00  0.00
H
ATOM   3498  HB  THR X 225      -8.414  -2.091 -34.746  1.00  0.00
H
ATOM   3499  HG1 THR X 225      -7.416  -0.254 -32.790  1.00  0.00
H
ATOM   3500 1HG2 THR X 225      -9.323   0.192 -34.986  1.00  0.00
H
ATOM   3501 2HG2 THR X 225     -10.563  -0.930 -34.373  1.00  0.00
H
ATOM   3502 3HG2 THR X 225      -9.757   0.202 -33.260  1.00  0.00
H
ATOM   3503  N   SER X 226      -7.306  -3.462 -31.273  1.00  0.00
N
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ATOM   3504  CA  SER X 226      -6.276  -4.443 -30.950  1.00  0.00
C
ATOM   3505  C   SER X 226      -6.878  -5.822 -30.724  1.00  0.00
C
ATOM   3506  O   SER X 226      -8.052  -5.948 -30.371  1.00  0.00
O
ATOM   3507  CB  SER X 226      -5.500  -4.000 -29.724  1.00  0.00
C
ATOM   3508  OG  SER X 226      -6.291  -4.016 -28.567  1.00  0.00
O
ATOM   3509  H   SER X 226      -7.588  -2.795 -30.569  1.00  0.00
H
ATOM   3510  HA  SER X 226      -5.485  -4.504 -31.698  1.00  0.00
H
ATOM   3511 1HB  SER X 226      -4.655  -4.674 -29.586  1.00  0.00
H
ATOM   3512 2HB  SER X 226      -5.134  -2.988 -29.889  1.00  0.00
H
ATOM   3513  HG  SER X 226      -7.035  -3.422 -28.681  1.00  0.00
H
ATOM   3514  N   PRO X 227      -6.070  -6.856 -30.931  1.00  0.00
N
ATOM   3515  CA  PRO X 227      -6.509  -8.229 -30.709  1.00  0.00
C
ATOM   3516  C   PRO X 227      -6.831  -8.471 -29.241  1.00  0.00
C
ATOM   3517  O   PRO X 227      -7.482  -9.460 -28.890  1.00  0.00
O
ATOM   3518  CB  PRO X 227      -5.327  -9.085 -31.192  1.00  0.00
C
ATOM   3519  CG  PRO X 227      -4.121  -8.198 -31.047  1.00  0.00
C
ATOM   3520  CD  PRO X 227      -4.691  -6.789 -31.431  1.00  0.00
C
ATOM   3521  HA  PRO X 227      -7.328  -8.418 -31.246  1.00  0.00
H
ATOM   3522 1HB  PRO X 227      -5.280  -9.704 -30.521  1.00  0.00
H
ATOM   3523 2HB  PRO X 227      -5.503  -9.151 -32.037  1.00  0.00
H
ATOM   3524 1HG  PRO X 227      -3.917  -8.155 -30.227  1.00  0.00
H
ATOM   3525 2HG  PRO X 227      -3.601  -8.302 -31.820  1.00  0.00
H
ATOM   3526 1HD  PRO X 227      -4.287  -6.108 -30.901  1.00  0.00
H
ATOM   3527 2HD  PRO X 227      -4.809  -6.616 -32.361  1.00  0.00
H
ATOM   3528  N   ALA X 228      -6.381  -7.566 -28.381  1.00  0.00
N
ATOM   3529  CA  ALA X 228      -6.553  -7.719 -26.940  1.00  0.00
C
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ATOM   3530  C   ALA X 228      -8.026  -7.829 -26.574  1.00  0.00
C
ATOM   3531  O   ALA X 228      -8.376  -8.416 -25.548  1.00  0.00
O
ATOM   3532  CB  ALA X 228      -5.905  -6.554 -26.204  1.00  0.00
C
ATOM   3533  H   ALA X 228      -5.907  -6.746 -28.734  1.00  0.00
H
ATOM   3534  HA  ALA X 228      -6.068  -8.643 -26.627  1.00  0.00
H
ATOM   3535 1HB  ALA X 228      -6.043  -6.684 -25.130  1.00  0.00
H
ATOM   3536 2HB  ALA X 228      -4.840  -6.527 -26.432  1.00  0.00
H
ATOM   3537 3HB  ALA X 228      -6.369  -5.622 -26.519  1.00  0.00
H
ATOM   3538  N   GLU X 229      -8.886  -7.264 -27.412  1.00  0.00
N
ATOM   3539  CA  GLU X 229     -10.325  -7.309 -27.183  1.00  0.00
C
ATOM   3540  C   GLU X 229     -10.869  -8.720 -27.370  1.00  0.00
C
ATOM   3541  O   GLU X 229     -11.886  -9.084 -26.787  1.00  0.00
O
ATOM   3542  CB  GLU X 229     -11.048  -6.338 -28.121  1.00  0.00
C
ATOM   3543  CG  GLU X 229     -10.604  -4.889 -27.988  1.00  0.00
C
ATOM   3544  CD  GLU X 229     -11.083  -4.286 -26.696  1.00  0.00
C
ATOM   3545  OE1 GLU X 229     -11.814  -4.942 -25.993  1.00  0.00
O
ATOM   3546  OE2 GLU X 229     -10.631  -3.219 -26.357  1.00  0.00
O
ATOM   3547  H   GLU X 229      -8.534  -6.790 -28.231  1.00  0.00
H
ATOM   3548  HA  GLU X 229     -10.545  -7.027 -26.152  1.00  0.00
H
ATOM   3549 1HB  GLU X 229     -10.862  -6.682 -29.139  1.00  0.00
H
ATOM   3550 2HB  GLU X 229     -12.111  -6.414 -27.899  1.00  0.00
H
ATOM   3551 1HG  GLU X 229      -9.526  -4.756 -28.072  1.00  0.00
H
ATOM   3552 2HG  GLU X 229     -11.097  -4.392 -28.824  1.00  0.00
H
ATOM   3553  N   GLU X 230     -10.181  -9.510 -28.187  1.00  0.00
N
ATOM   3554  CA  GLU X 230     -10.553 -10.906 -28.397  1.00  0.00
C
ATOM   3555  C   GLU X 230     -10.016 -11.792 -27.281  1.00  0.00
C
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ATOM   3556  O   GLU X 230     -10.719 -12.665 -26.776  1.00  0.00
O
ATOM   3557  CB  GLU X 230     -10.043 -11.399 -29.753  1.00  0.00
C
ATOM   3558  CG  GLU X 230     -10.687 -10.718 -30.953  1.00  0.00
C
ATOM   3559  CD  GLU X 230     -10.082 -11.199 -32.243  1.00  0.00
C
ATOM   3560  OE1 GLU X 230      -9.165 -11.983 -32.192  1.00  0.00
O
ATOM   3561  OE2 GLU X 230     -10.609 -10.872 -33.280  1.00  0.00
O
ATOM   3562  H   GLU X 230      -9.379  -9.136 -28.676  1.00  0.00
H
ATOM   3563  HA  GLU X 230     -11.639 -11.006 -28.376  1.00  0.00
H
ATOM   3564 1HB  GLU X 230      -8.966 -11.224 -29.771  1.00  0.00
H
ATOM   3565 2HB  GLU X 230     -10.238 -12.470 -29.796  1.00  0.00
H
ATOM   3566 1HG  GLU X 230     -11.769 -10.840 -30.991  1.00  0.00
H
ATOM   3567 2HG  GLU X 230     -10.446  -9.666 -30.809  1.00  0.00
H
ATOM   3568  N   PHE X 231      -8.762 -11.565 -26.905  1.00  0.00
N
ATOM   3569  CA  PHE X 231      -8.117 -12.359 -25.865  1.00  0.00
C
ATOM   3570  C   PHE X 231      -8.836 -12.202 -24.532  1.00  0.00
C
ATOM   3571  O   PHE X 231      -9.126 -13.186 -23.852  1.00  0.00
O
ATOM   3572  CB  PHE X 231      -6.648 -11.962 -25.722  1.00  0.00
C
ATOM   3573  CG  PHE X 231      -5.766 -12.496 -26.815  1.00  0.00
C
ATOM   3574  CD1 PHE X 231      -5.313 -11.667 -27.829  1.00  0.00
C
ATOM   3575  CD2 PHE X 231      -5.390 -13.832 -26.830  1.00  0.00
C
ATOM   3576  CE1 PHE X 231      -4.501 -12.158 -28.834  1.00  0.00
C
ATOM   3577  CE2 PHE X 231      -4.578 -14.325 -27.833  1.00  0.00
C
ATOM   3578  CZ  PHE X 231      -4.135 -13.488 -28.837  1.00  0.00
C
ATOM   3579  H   PHE X 231      -8.242 -10.823 -27.351  1.00  0.00
H
ATOM   3580  HA  PHE X 231      -8.167 -13.418 -26.123  1.00  0.00
H
ATOM   3581 1HB  PHE X 231      -6.547 -10.877 -25.746  1.00  0.00
H
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ATOM   3582 2HB  PHE X 231      -6.246 -12.341 -24.785  1.00  0.00
H
ATOM   3583  HD1 PHE X 231      -5.602 -10.616 -27.828  1.00  0.00
H
ATOM   3584  HD2 PHE X 231      -5.739 -14.493 -26.038  1.00  0.00
H
ATOM   3585  HE1 PHE X 231      -4.153 -11.496 -29.627  1.00  0.00
H
ATOM   3586  HE2 PHE X 231      -4.288 -15.376 -27.834  1.00  0.00
H
ATOM   3587  HZ  PHE X 231      -3.496 -13.877 -29.630  1.00  0.00
H
ATOM   3588  N   TYR X 232      -9.119 -10.958 -24.160  1.00  0.00
N
ATOM   3589  CA  TYR X 232      -9.832 -10.671 -22.921  1.00  0.00
C
ATOM   3590  C   TYR X 232     -11.154 -11.425 -22.861  1.00  0.00
C
ATOM   3591  O   TYR X 232     -11.477 -12.051 -21.852  1.00  0.00
O
ATOM   3592  CB  TYR X 232     -10.077  -9.167 -22.781  1.00  0.00
C
ATOM   3593  CG  TYR X 232     -10.949  -8.796 -21.602  1.00  0.00
C
ATOM   3594  CD1 TYR X 232     -10.504  -8.981 -20.300  1.00  0.00
C
ATOM   3595  CD2 TYR X 232     -12.212  -8.260 -21.793  1.00  0.00
C
ATOM   3596  CE1 TYR X 232     -11.295  -8.644 -19.220  1.00  0.00
C
ATOM   3597  CE2 TYR X 232     -13.014  -7.919 -20.720  1.00  0.00
C
ATOM   3598  CZ  TYR X 232     -12.550  -8.113 -19.435  1.00  0.00
C
ATOM   3599  OH  TYR X 232     -13.344  -7.773 -18.361  1.00  0.00
O
ATOM   3600  H   TYR X 232      -8.832 -10.191 -24.751  1.00  0.00
H
ATOM   3601  HA  TYR X 232      -9.242 -11.008 -22.069  1.00  0.00
H
ATOM   3602 1HB  TYR X 232      -9.102  -8.689 -22.677  1.00  0.00
H
ATOM   3603 2HB  TYR X 232     -10.550  -8.830 -23.703  1.00  0.00
H
ATOM   3604  HD1 TYR X 232      -9.511  -9.400 -20.139  1.00  0.00
H
ATOM   3605  HD2 TYR X 232     -12.572  -8.110 -22.811  1.00  0.00
H
ATOM   3606  HE1 TYR X 232     -10.932  -8.795 -18.204  1.00  0.00
H
ATOM   3607  HE2 TYR X 232     -14.005  -7.501 -20.891  1.00  0.00
H
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ATOM   3608  HH  TYR X 232     -12.925  -7.948 -17.515  1.00  0.00
H
ATOM   3609  N   THR X 233     -11.918 -11.356 -23.944  1.00  0.00
N
ATOM   3610  CA  THR X 233     -13.241 -11.970 -23.992  1.00  0.00
C
ATOM   3611  C   THR X 233     -13.148 -13.483 -23.851  1.00  0.00
C
ATOM   3612  O   THR X 233     -13.960 -14.104 -23.165  1.00  0.00
O
ATOM   3613  CB  THR X 233     -13.974 -11.630 -25.302  1.00  0.00
C
ATOM   3614  CG2 THR X 233     -15.300 -12.373 -25.380  1.00  0.00
C
ATOM   3615  OG1 THR X 233     -14.217 -10.219 -25.365  1.00  0.00
O
ATOM   3616  H   THR X 233     -11.575 -10.866 -24.757  1.00  0.00
H
ATOM   3617  HA  THR X 233     -13.842 -11.617 -23.153  1.00  0.00
H
ATOM   3618  HB  THR X 233     -13.347 -11.919 -26.145  1.00  0.00
H
ATOM   3619  HG1 THR X 233     -14.760  -9.955 -24.618  1.00  0.00
H
ATOM   3620 1HG2 THR X 233     -15.803 -12.121 -26.313  1.00  0.00
H
ATOM   3621 2HG2 THR X 233     -15.116 -13.447 -25.346  1.00  0.00
H
ATOM   3622 3HG2 THR X 233     -15.927 -12.085 -24.539  1.00  0.00
H
ATOM   3623  N   ARG X 234     -12.153 -14.074 -24.501  1.00  0.00
N
ATOM   3624  CA  ARG X 234     -11.933 -15.515 -24.427  1.00  0.00
C
ATOM   3625  C   ARG X 234     -11.663 -15.956 -22.993  1.00  0.00
C
ATOM   3626  O   ARG X 234     -12.195 -16.965 -22.533  1.00  0.00
O
ATOM   3627  CB  ARG X 234     -10.831 -15.976 -25.369  1.00  0.00
C
ATOM   3628  CG  ARG X 234     -11.216 -15.997 -26.840  1.00  0.00
C
ATOM   3629  CD  ARG X 234     -10.101 -16.342 -27.759  1.00  0.00
C
ATOM   3630  NE  ARG X 234     -10.460 -16.343 -29.169  1.00  0.00
N
ATOM   3631  CZ  ARG X 234      -9.597 -16.569 -30.178  1.00  0.00
C
ATOM   3632  NH1 ARG X 234      -8.319 -16.773 -29.944  1.00  0.00
N
ATOM   3633  NH2 ARG X 234     -10.064 -16.555 -31.414  1.00  0.00
N
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ATOM   3634  H   ARG X 234     -11.532 -13.510 -25.063  1.00  0.00
H
ATOM   3635  HA  ARG X 234     -12.830 -16.044 -24.752  1.00  0.00
H
ATOM   3636 1HB  ARG X 234      -9.988 -15.300 -25.227  1.00  0.00
H
ATOM   3637 2HB  ARG X 234     -10.547 -16.981 -25.059  1.00  0.00
H
ATOM   3638 1HG  ARG X 234     -12.006 -16.736 -26.982  1.00  0.00
H
ATOM   3639 2HG  ARG X 234     -11.587 -15.010 -27.116  1.00  0.00
H
ATOM   3640 1HD  ARG X 234      -9.298 -15.616 -27.629  1.00  0.00
H
ATOM   3641 2HD  ARG X 234      -9.733 -17.337 -27.514  1.00  0.00
H
ATOM   3642  HE  ARG X 234     -11.359 -16.187 -29.604  1.00  0.00
H
ATOM   3643 1HH1 ARG X 234      -7.974 -16.761 -28.994  1.00  0.00
H
ATOM   3644 2HH1 ARG X 234      -7.688 -16.939 -30.715  1.00  0.00
H
ATOM   3645 1HH2 ARG X 234     -11.046 -16.379 -31.578  1.00  0.00
H
ATOM   3646 2HH2 ARG X 234      -9.439 -16.721 -32.189  1.00  0.00
H
ATOM   3647  N   HIS X 235     -10.829 -15.193 -22.294  1.00  0.00
N
ATOM   3648  CA  HIS X 235     -10.483 -15.507 -20.912  1.00  0.00
C
ATOM   3649  C   HIS X 235     -11.699 -15.389 -20.000  1.00  0.00
C
ATOM   3650  O   HIS X 235     -11.980 -16.284 -19.206  1.00  0.00
O
ATOM   3651  CB  HIS X 235      -9.362 -14.587 -20.413  1.00  0.00
C
ATOM   3652  CG  HIS X 235      -7.998 -15.000 -20.870  1.00  0.00
C
ATOM   3653  CD2 HIS X 235      -7.049 -15.757 -20.272  1.00  0.00
C
ATOM   3654  ND1 HIS X 235      -7.477 -14.625 -22.091  1.00  0.00
N
ATOM   3655  CE1 HIS X 235      -6.263 -15.132 -22.221  1.00  0.00
C
ATOM   3656  NE2 HIS X 235      -5.981 -15.823 -21.132  1.00  0.00
N
ATOM   3657  H   HIS X 235     -10.427 -14.376 -22.730  1.00  0.00
H
ATOM   3658  HA  HIS X 235     -10.143 -16.540 -20.845  1.00  0.00
H
ATOM   3659 1HB  HIS X 235      -9.519 -13.572 -20.778  1.00  0.00
H
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ATOM   3660 2HB  HIS X 235      -9.340 -14.583 -19.324  1.00  0.00
H
ATOM   3661  HD2 HIS X 235      -7.007 -16.269 -19.310  1.00  0.00
H
ATOM   3662  HE1 HIS X 235      -5.679 -14.947 -23.123  1.00  0.00
H
ATOM   3663  HE2 HIS X 235      -5.121 -16.322 -20.952  1.00  0.00
H
ATOM   3664  N   VAL X 236     -12.416 -14.275 -20.121  1.00  0.00
N
ATOM   3665  CA  VAL X 236     -13.594 -14.032 -19.298  1.00  0.00
C
ATOM   3666  C   VAL X 236     -14.665 -15.090 -19.547  1.00  0.00
C
ATOM   3667  O   VAL X 236     -15.360 -15.511 -18.622  1.00  0.00
O
ATOM   3668  CB  VAL X 236     -14.192 -12.639 -19.565  1.00  0.00
C
ATOM   3669  CG1 VAL X 236     -15.524 -12.483 -18.847  1.00  0.00
C
ATOM   3670  CG2 VAL X 236     -13.224 -11.550 -19.126  1.00  0.00
C
ATOM   3671  H   VAL X 236     -12.136 -13.581 -20.799  1.00  0.00
H
ATOM   3672  HA  VAL X 236     -13.361 -14.113 -18.236  1.00  0.00
H
ATOM   3673  HB  VAL X 236     -14.341 -12.515 -20.639  1.00  0.00
H
ATOM   3674 1HG1 VAL X 236     -15.932 -11.491 -19.047  1.00  0.00
H
ATOM   3675 2HG1 VAL X 236     -16.222 -13.239 -19.206  1.00  0.00
H
ATOM   3676 3HG1 VAL X 236     -15.377 -12.604 -17.774  1.00  0.00
H
ATOM   3677 1HG2 VAL X 236     -13.660 -10.571 -19.322  1.00  0.00
H
ATOM   3678 2HG2 VAL X 236     -13.023 -11.652 -18.059  1.00  0.00
H
ATOM   3679 3HG2 VAL X 236     -12.290 -11.649 -19.683  1.00  0.00
H
ATOM   3680  N   LEU X 237     -14.796 -15.511 -20.800  1.00  0.00
N
ATOM   3681  CA  LEU X 237     -15.771 -16.531 -21.167  1.00  0.00
C
ATOM   3682  C   LEU X 237     -15.588 -17.790 -20.330  1.00  0.00
C
ATOM   3683  O   LEU X 237     -16.562 -18.358 -19.828  1.00  0.00
O
ATOM   3684  CB  LEU X 237     -15.655 -16.861 -22.660  1.00  0.00
C
ATOM   3685  CG  LEU X 237     -16.642 -17.917 -23.174  1.00  0.00
C
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ATOM   3686  CD1 LEU X 237     -18.072 -17.423 -23.001  1.00  0.00
C
ATOM   3687  CD2 LEU X 237     -16.349 -18.219 -24.635  1.00  0.00
C
ATOM   3688  H   LEU X 237     -14.206 -15.113 -21.517  1.00  0.00
H
ATOM   3689  HA  LEU X 237     -16.777 -16.167 -20.962  1.00  0.00
H
ATOM   3690 1HB  LEU X 237     -15.902 -15.884 -23.077  1.00  0.00
H
ATOM   3691 2HB  LEU X 237     -14.635 -17.126 -22.938  1.00  0.00
H
ATOM   3692  HG  LEU X 237     -16.466 -18.829 -22.604  1.00  0.00
H
ATOM   3693 1HD1 LEU X 237     -18.766 -18.179 -23.368  1.00  0.00
H
ATOM   3694 2HD1 LEU X 237     -18.267 -17.235 -21.945  1.00  0.00
H
ATOM   3695 3HD1 LEU X 237     -18.209 -16.501 -23.566  1.00  0.00
H
ATOM   3696 1HD2 LEU X 237     -17.051 -18.971 -24.999  1.00  0.00
H
ATOM   3697 2HD2 LEU X 237     -16.456 -17.308 -25.225  1.00  0.00
H
ATOM   3698 3HD2 LEU X 237     -15.331 -18.597 -24.733  1.00  0.00
H
ATOM   3699  N   GLN X 238     -14.343 -18.224 -20.184  1.00  0.00
N
ATOM   3700  CA  GLN X 238     -14.029 -19.403 -19.383  1.00  0.00
C
ATOM   3701  C   GLN X 238     -14.229 -19.124 -17.896  1.00  0.00
C
ATOM   3702  O   GLN X 238     -14.692 -19.986 -17.150  1.00  0.00
O
ATOM   3703  CB  GLN X 238     -12.588 -19.854 -19.637  1.00  0.00
C
ATOM   3704  CG  GLN X 238     -12.348 -20.412 -21.030  1.00  0.00
C
ATOM   3705  CD  GLN X 238     -10.890 -20.753 -21.273  1.00  0.00
C
ATOM   3706  NE2 GLN X 238     -10.602 -21.318 -22.440  1.00  0.00
N
ATOM   3707  OE1 GLN X 238     -10.030 -20.508 -20.422  1.00  0.00
O
ATOM   3708  H   GLN X 238     -13.593 -17.726 -20.640  1.00  0.00
H
ATOM   3709  HA  GLN X 238     -14.710 -20.213 -19.642  1.00  0.00
H
ATOM   3710 1HB  GLN X 238     -11.952 -18.984 -19.473  1.00  0.00
H
ATOM   3711 2HB  GLN X 238     -12.361 -20.617 -18.892  1.00  0.00
H
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ATOM   3712 1HG  GLN X 238     -12.954 -21.209 -21.460  1.00  0.00
H
ATOM   3713 2HG  GLN X 238     -12.572 -19.475 -21.539  1.00  0.00
H
ATOM   3714 1HE2 GLN X 238      -9.655 -21.564 -22.658  1.00  0.00
H
ATOM   3715 2HE2 GLN X 238     -11.329 -21.497 -23.102  1.00  0.00
H
ATOM   3716  N   ILE X 239     -13.874 -17.915 -17.473  1.00  0.00
N
ATOM   3717  CA  ILE X 239     -14.034 -17.512 -16.080  1.00  0.00
C
ATOM   3718  C   ILE X 239     -15.499 -17.535 -15.666  1.00  0.00
C
ATOM   3719  O   ILE X 239     -15.824 -17.854 -14.521  1.00  0.00
O
ATOM   3720  CB  ILE X 239     -13.458 -16.107 -15.829  1.00  0.00
C
ATOM   3721  CG1 ILE X 239     -11.934 -16.122 -15.957  1.00  0.00
C
ATOM   3722  CG2 ILE X 239     -13.876 -15.598 -14.457  1.00  0.00
C
ATOM   3723  CD1 ILE X 239     -11.313 -14.745 -16.027  1.00  0.00
C
ATOM   3724  H   ILE X 239     -13.485 -17.257 -18.134  1.00  0.00
H
ATOM   3725  HA  ILE X 239     -13.547 -18.227 -15.417  1.00  0.00
H
ATOM   3726  HB  ILE X 239     -13.833 -15.429 -16.597  1.00  0.00
H
ATOM   3727 1HG1 ILE X 239     -11.541 -16.654 -15.092  1.00  0.00
H
ATOM   3728 2HG1 ILE X 239     -11.691 -16.676 -16.864  1.00  0.00
H
ATOM   3729 1HG2 ILE X 239     -13.462 -14.605 -14.296  1.00  0.00
H
ATOM   3730 2HG2 ILE X 239     -14.964 -15.552 -14.402  1.00  0.00
H
ATOM   3731 3HG2 ILE X 239     -13.503 -16.276 -13.689  1.00  0.00
H
ATOM   3732 1HD1 ILE X 239     -10.231 -14.837 -16.116  1.00  0.00
H
ATOM   3733 2HD1 ILE X 239     -11.706 -14.212 -16.892  1.00  0.00
H
ATOM   3734 3HD1 ILE X 239     -11.554 -14.190 -15.121  1.00  0.00
H
ATOM   3735  N   HIS X 240     -16.381 -17.196 -16.601  1.00  0.00
N
ATOM   3736  CA  HIS X 240     -17.813 -17.178 -16.334  1.00  0.00
C
ATOM   3737  C   HIS X 240     -18.485 -18.443 -16.857  1.00  0.00
C
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ATOM   3738  O   HIS X 240     -19.714 -18.517 -16.933  1.00  0.00
O
ATOM   3739  CB  HIS X 240     -18.465 -15.942 -16.960  1.00  0.00
C
ATOM   3740  CG  HIS X 240     -18.127 -14.663 -16.257  1.00  0.00
C
ATOM   3741  CD2 HIS X 240     -17.532 -14.432 -15.063  1.00  0.00
C
ATOM   3742  ND1 HIS X 240     -18.408 -13.423 -16.791  1.00  0.00
N
ATOM   3743  CE1 HIS X 240     -18.000 -12.484 -15.955  1.00  0.00
C
ATOM   3744  NE2 HIS X 240     -17.465 -13.070 -14.900  1.00  0.00
N
ATOM   3745  H   HIS X 240     -16.049 -16.944 -17.521  1.00  0.00
H
ATOM   3746  HA  HIS X 240     -17.985 -17.158 -15.258  1.00  0.00
H
ATOM   3747 1HB  HIS X 240     -18.135 -15.824 -17.993  1.00  0.00
H
ATOM   3748 2HB  HIS X 240     -19.550 -16.035 -16.933  1.00  0.00
H
ATOM   3749  HD2 HIS X 240     -17.137 -15.094 -14.292  1.00  0.00
H
ATOM   3750  HE1 HIS X 240     -18.134 -11.431 -16.197  1.00  0.00
H
ATOM   3751  HE2 HIS X 240     -17.068 -12.602 -14.098  1.00  0.00
H
ATOM   3752  N   ARG X 241     -17.676 -19.438 -17.207  1.00  0.00
N
ATOM   3753  CA  ARG X 241     -18.190 -20.665 -17.805  1.00  0.00
C
ATOM   3754  C   ARG X 241     -19.131 -21.387 -16.855  1.00  0.00
C
ATOM   3755  O   ARG X 241     -20.105 -22.008 -17.285  1.00  0.00
O
ATOM   3756  CB  ARG X 241     -17.072 -21.579 -18.286  1.00  0.00
C
ATOM   3757  CG  ARG X 241     -17.540 -22.849 -18.982  1.00  0.00
C
ATOM   3758  CD  ARG X 241     -16.447 -23.660 -19.574  1.00  0.00
C
ATOM   3759  NE  ARG X 241     -16.884 -24.898 -20.196  1.00  0.00
N
ATOM   3760  CZ  ARG X 241     -16.059 -25.822 -20.729  1.00  0.00
C
ATOM   3761  NH1 ARG X 241     -14.758 -25.633 -20.752  1.00  0.00
N
ATOM   3762  NH2 ARG X 241     -16.594 -26.912 -21.249  1.00  0.00
N
ATOM   3763  H   ARG X 241     -16.682 -19.341 -17.056  1.00  0.00
H
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ATOM   3764  HA  ARG X 241     -18.771 -20.426 -18.696  1.00  0.00
H
ATOM   3765 1HB  ARG X 241     -16.458 -20.999 -18.972  1.00  0.00
H
ATOM   3766 2HB  ARG X 241     -16.483 -21.848 -17.408  1.00  0.00
H
ATOM   3767 1HG  ARG X 241     -18.062 -23.470 -18.254  1.00  0.00
H
ATOM   3768 2HG  ARG X 241     -18.225 -22.571 -19.782  1.00  0.00
H
ATOM   3769 1HD  ARG X 241     -15.944 -23.070 -20.341  1.00  0.00
H
ATOM   3770 2HD  ARG X 241     -15.734 -23.919 -18.793  1.00  0.00
H
ATOM   3771  HE  ARG X 241     -17.820 -25.258 -20.327  1.00  0.00
H
ATOM   3772 1HH1 ARG X 241     -14.367 -24.786 -20.366  1.00  0.00
H
ATOM   3773 2HH1 ARG X 241     -14.157 -26.338 -21.155  1.00  0.00
H
ATOM   3774 1HH2 ARG X 241     -17.598 -27.032 -21.239  1.00  0.00
H
ATOM   3775 2HH2 ARG X 241     -16.000 -27.619 -21.655  1.00  0.00
H
ATOM   3776  N   SER X 242     -18.842 -21.303 -15.562  1.00  0.00
N
ATOM   3777  CA  SER X 242     -19.643 -21.981 -14.552  1.00  0.00
C
ATOM   3778  C   SER X 242     -20.750 -21.076 -14.028  1.00  0.00
C
ATOM   3779  O   SER X 242     -21.545 -21.477 -13.178  1.00  0.00
O
ATOM   3780  CB  SER X 242     -18.760 -22.448 -13.411  1.00  0.00
C
ATOM   3781  OG  SER X 242     -18.194 -21.376 -12.711  1.00  0.00
O
ATOM   3782  H   SER X 242     -18.045 -20.755 -15.271  1.00  0.00
H
ATOM   3783  HA  SER X 242     -20.067 -22.925 -14.898  1.00  0.00
H
ATOM   3784 1HB  SER X 242     -19.362 -23.043 -12.724  1.00  0.00
H
ATOM   3785 2HB  SER X 242     -17.961 -23.066 -13.819  1.00  0.00
H
ATOM   3786  HG  SER X 242     -17.644 -21.712 -12.000  1.00  0.00
H
ATOM   3787  N   LYS X 243     -20.799 -19.851 -14.541  1.00  0.00
N
ATOM   3788  CA  LYS X 243     -21.831 -18.895 -14.150  1.00  0.00
C
ATOM   3789  C   LYS X 243     -23.082 -19.062 -15.003  1.00  0.00
C
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ATOM   3790  O   LYS X 243     -23.020 -19.566 -16.123  1.00  0.00
O
ATOM   3791  CB  LYS X 243     -21.305 -17.464 -14.260  1.00  0.00
C
ATOM   3792  CG  LYS X 243     -20.064 -17.184 -13.423  1.00  0.00
C
ATOM   3793  CD  LYS X 243     -20.364 -17.291 -11.935  1.00  0.00
C
ATOM   3794  CE  LYS X 243     -19.165 -16.875 -11.097  1.00  0.00
C
ATOM   3795  NZ  LYS X 243     -19.445 -16.968  -9.638  1.00  0.00
N
ATOM   3796  H   LYS X 243     -20.103 -19.574 -15.218  1.00  0.00
H
ATOM   3797  HA  LYS X 243     -22.132 -19.077 -13.118  1.00  0.00
H
ATOM   3798 1HB  LYS X 243     -21.082 -17.286 -15.312  1.00  0.00
H
ATOM   3799 2HB  LYS X 243     -22.112 -16.801 -13.943  1.00  0.00
H
ATOM   3800 1HG  LYS X 243     -19.295 -17.908 -13.692  1.00  0.00
H
ATOM   3801 2HG  LYS X 243     -19.712 -16.178 -13.651  1.00  0.00
H
ATOM   3802 1HD  LYS X 243     -21.211 -16.643 -11.704  1.00  0.00
H
ATOM   3803 2HD  LYS X 243     -20.625 -18.323 -11.707  1.00  0.00
H
ATOM   3804 1HE  LYS X 243     -18.329 -17.530 -11.347  1.00  0.00
H
ATOM   3805 2HE  LYS X 243     -18.908 -15.848 -11.353  1.00  0.00
H
ATOM   3806 1HZ  LYS X 243     -18.627 -16.684  -9.119  1.00  0.00
H
ATOM   3807 2HZ  LYS X 243     -20.220 -16.361  -9.406  1.00  0.00
H
ATOM   3808 3HZ  LYS X 243     -19.683 -17.920  -9.401  1.00  0.00
H
ATOM   3809  N   GLY X 244     -24.217 -18.635 -14.462  1.00  0.00
N
ATOM   3810  CA  GLY X 244     -25.470 -18.631 -15.213  1.00  0.00
C
ATOM   3811  C   GLY X 244     -25.636 -17.342 -16.005  1.00  0.00
C
ATOM   3812  O   GLY X 244     -26.695 -17.088 -16.580  1.00  0.00
O
ATOM   3813  H   GLY X 244     -24.213 -18.304 -13.508  1.00  0.00
H
ATOM   3814 1HA  GLY X 244     -25.475 -19.475 -15.904  1.00  0.00
H
ATOM   3815 2HA  GLY X 244     -26.303 -18.730 -14.517  1.00  0.00
H
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ATOM   3816  N   LEU X 245     -24.585 -16.529 -16.031  1.00  0.00
N
ATOM   3817  CA  LEU X 245     -24.595 -15.287 -16.791  1.00  0.00
C
ATOM   3818  C   LEU X 245     -24.774 -15.555 -18.280  1.00  0.00
C
ATOM   3819  O   LEU X 245     -24.131 -16.442 -18.843  1.00  0.00
O
ATOM   3820  CB  LEU X 245     -23.302 -14.502 -16.541  1.00  0.00
C
ATOM   3821  CG  LEU X 245     -23.107 -14.007 -15.102  1.00  0.00
C
ATOM   3822  CD1 LEU X 245     -21.724 -13.391 -14.945  1.00  0.00
C
ATOM   3823  CD2 LEU X 245     -24.189 -12.993 -14.761  1.00  0.00
C
ATOM   3824  H   LEU X 245     -23.757 -16.780 -15.509  1.00  0.00
H
ATOM   3825  HA  LEU X 245     -25.444 -14.676 -16.482  1.00  0.00
H
ATOM   3826 1HB  LEU X 245     -22.576 -15.279 -16.770  1.00  0.00
H
ATOM   3827 2HB  LEU X 245     -23.187 -13.678 -17.245  1.00  0.00
H
ATOM   3828  HG  LEU X 245     -23.236 -14.866 -14.443  1.00  0.00
H
ATOM   3829 1HD1 LEU X 245     -21.594 -13.042 -13.921  1.00  0.00
H
ATOM   3830 2HD1 LEU X 245     -20.965 -14.140 -15.171  1.00  0.00
H
ATOM   3831 3HD1 LEU X 245     -21.620 -12.549 -15.629  1.00  0.00
H
ATOM   3832 1HD2 LEU X 245     -24.050 -12.643 -13.738  1.00  0.00
H
ATOM   3833 2HD2 LEU X 245     -24.127 -12.148 -15.446  1.00  0.00
H
ATOM   3834 3HD2 LEU X 245     -25.171 -13.463 -14.853  1.00  0.00
H
ATOM   3835  N   GLN X 246     -25.649 -14.783 -18.916  1.00  0.00
N
ATOM   3836  CA  GLN X 246     -25.938 -14.958 -20.333  1.00  0.00
C
ATOM   3837  C   GLN X 246     -24.806 -14.421 -21.197  1.00  0.00
C
ATOM   3838  O   GLN X 246     -24.521 -14.957 -22.268  1.00  0.00
O
ATOM   3839  CB  GLN X 246     -27.248 -14.255 -20.704  1.00  0.00
C
ATOM   3840  CG  GLN X 246     -28.489 -14.902 -20.114  1.00  0.00
C
ATOM   3841  CD  GLN X 246     -29.755 -14.132 -20.444  1.00  0.00
C
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ATOM   3842  NE2 GLN X 246     -30.898 -14.675 -20.041  1.00  0.00
N
ATOM   3843  OE1 GLN X 246     -29.704 -13.060 -21.051  1.00  0.00
O
ATOM   3844  H   GLN X 246     -26.126 -14.055 -18.404  1.00  0.00
H
ATOM   3845  HA  GLN X 246     -26.024 -16.020 -20.560  1.00  0.00
H
ATOM   3846 1HB  GLN X 246     -27.164 -13.227 -20.350  1.00  0.00
H
ATOM   3847 2HB  GLN X 246     -27.311 -14.260 -21.791  1.00  0.00
H
ATOM   3848 1HG  GLN X 246     -28.707 -15.965 -20.220  1.00  0.00
H
ATOM   3849 2HG  GLN X 246     -28.216 -14.689 -19.081  1.00  0.00
H
ATOM   3850 1HE2 GLN X 246     -31.765 -14.213 -20.229  1.00  0.00
H
ATOM   3851 2HE2 GLN X 246     -30.892 -15.546 -19.549  1.00  0.00
H
ATOM   3852  N   ASP X 247     -24.162 -13.358 -20.725  1.00  0.00
N
ATOM   3853  CA  ASP X 247     -23.056 -12.746 -21.454  1.00  0.00
C
ATOM   3854  C   ASP X 247     -21.974 -12.256 -20.504  1.00  0.00
C
ATOM   3855  O   ASP X 247     -22.043 -12.492 -19.295  1.00  0.00
O
ATOM   3856  CB  ASP X 247     -23.559 -11.587 -22.319  1.00  0.00
C
ATOM   3857  CG  ASP X 247     -24.157 -10.428 -21.531  1.00  0.00
C
ATOM   3858  OD1 ASP X 247     -24.027 -10.422 -20.330  1.00  0.00
O
ATOM   3859  OD2 ASP X 247     -24.598  -9.486 -22.144  1.00  0.00
O
ATOM   3860  H   ASP X 247     -24.447 -12.963 -19.840  1.00  0.00
H
ATOM   3861  HA  ASP X 247     -22.587 -13.486 -22.103  1.00  0.00
H
ATOM   3862 1HB  ASP X 247     -22.810 -11.207 -23.013  1.00  0.00
H
ATOM   3863 2HB  ASP X 247     -24.349 -12.093 -22.875  1.00  0.00
H
ATOM   3864  N   LEU X 248     -20.971 -11.579 -21.051  1.00  0.00
N
ATOM   3865  CA  LEU X 248     -19.860 -11.075 -20.255  1.00  0.00
C
ATOM   3866  C   LEU X 248     -19.524  -9.637 -20.625  1.00  0.00
C
ATOM   3867  O   LEU X 248     -18.567  -9.060 -20.109  1.00  0.00
O
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ATOM   3868  CB  LEU X 248     -18.630 -11.973 -20.433  1.00  0.00
C
ATOM   3869  CG  LEU X 248     -18.100 -12.077 -21.869  1.00  0.00
C
ATOM   3870  CD1 LEU X 248     -17.228 -10.873 -22.192  1.00  0.00
C
ATOM   3871  CD2 LEU X 248     -17.314 -13.371 -22.029  1.00  0.00
C
ATOM   3872  H   LEU X 248     -20.979 -11.410 -22.047  1.00  0.00
H
ATOM   3873  HA  LEU X 248     -20.141 -11.065 -19.203  1.00  0.00
H
ATOM   3874 1HB  LEU X 248     -17.921 -11.428 -19.812  1.00  0.00
H
ATOM   3875 2HB  LEU X 248     -18.791 -12.967 -20.015  1.00  0.00
H
ATOM   3876  HG  LEU X 248     -18.966 -12.130 -22.531  1.00  0.00
H
ATOM   3877 1HD1 LEU X 248     -16.856 -10.955 -23.214  1.00  0.00
H
ATOM   3878 2HD1 LEU X 248     -17.816  -9.960 -22.095  1.00  0.00
H
ATOM   3879 3HD1 LEU X 248     -16.385 -10.838 -21.503  1.00  0.00
H
ATOM   3880 1HD2 LEU X 248     -16.938 -13.443 -23.051  1.00  0.00
H
ATOM   3881 2HD2 LEU X 248     -16.475 -13.375 -21.332  1.00  0.00
H
ATOM   3882 3HD2 LEU X 248     -17.964 -14.219 -21.821  1.00  0.00
H
ATOM   3883  N   GLY X 249     -20.318  -9.060 -21.524  1.00  0.00
N
ATOM   3884  CA  GLY X 249     -20.069  -7.709 -22.007  1.00  0.00
C
ATOM   3885  C   GLY X 249     -20.541  -6.668 -21.001  1.00  0.00
C
ATOM   3886  O   GLY X 249     -19.853  -5.682 -20.743  1.00  0.00
O
ATOM   3887  H   GLY X 249     -21.112  -9.572 -21.881  1.00  0.00
H
ATOM   3888 1HA  GLY X 249     -18.999  -7.581 -22.174  1.00  0.00
H
ATOM   3889 2HA  GLY X 249     -20.602  -7.562 -22.946  1.00  0.00
H
ATOM   3890  N   GLY X 250     -21.721  -6.897 -20.431  1.00  0.00
N
ATOM   3891  CA  GLY X 250     -22.309  -5.955 -19.488  1.00  0.00
C
ATOM   3892  C   GLY X 250     -21.506  -5.890 -18.198  1.00  0.00
C
ATOM   3893  O   GLY X 250     -21.364  -4.825 -17.595  1.00  0.00
O
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ATOM   3894  H   GLY X 250     -22.222  -7.743 -20.658  1.00  0.00
H
ATOM   3895 1HA  GLY X 250     -22.332  -4.964 -19.941  1.00  0.00
H
ATOM   3896 2HA  GLY X 250     -23.326  -6.271 -19.257  1.00  0.00
H
ATOM   3897  N   ILE X 251     -20.976  -7.036 -17.777  1.00  0.00
N
ATOM   3898  CA  ILE X 251     -20.080  -7.086 -16.631  1.00  0.00
C
ATOM   3899  C   ILE X 251     -18.813  -6.274 -16.882  1.00  0.00
C
ATOM   3900  O   ILE X 251     -18.419  -5.454 -16.055  1.00  0.00
O
ATOM   3901  CB  ILE X 251     -19.688  -8.534 -16.282  1.00  0.00
C
ATOM   3902  CG1 ILE X 251     -20.927  -9.342 -15.889  1.00  0.00
C
ATOM   3903  CG2 ILE X 251     -18.659  -8.552 -15.162  1.00  0.00
C
ATOM   3904  CD1 ILE X 251     -21.631  -8.821 -14.656  1.00  0.00
C
ATOM   3905  H   ILE X 251     -21.200  -7.892 -18.264  1.00  0.00
H
ATOM   3906  HA  ILE X 251     -20.541  -6.617 -15.762  1.00  0.00
H
ATOM   3907  HB  ILE X 251     -19.270  -9.012 -17.167  1.00  0.00
H
ATOM   3908 1HG1 ILE X 251     -21.613  -9.318 -16.735  1.00  0.00
H
ATOM   3909 2HG1 ILE X 251     -20.603 -10.368 -15.714  1.00  0.00
H
ATOM   3910 1HG2 ILE X 251     -18.394  -9.583 -14.928  1.00  0.00
H
ATOM   3911 2HG2 ILE X 251     -17.769  -8.012 -15.479  1.00  0.00
H
ATOM   3912 3HG2 ILE X 251     -19.078  -8.075 -14.275  1.00  0.00
H
ATOM   3913 1HD1 ILE X 251     -22.498  -9.444 -14.440  1.00  0.00
H
ATOM   3914 2HD1 ILE X 251     -20.947  -8.846 -13.807  1.00  0.00
H
ATOM   3915 3HD1 ILE X 251     -21.957  -7.796 -14.828  1.00  0.00
H
ATOM   3916  N   SER X 252     -18.186  -6.508 -18.027  1.00  0.00
N
ATOM   3917  CA  SER X 252     -16.950  -5.816 -18.377  1.00  0.00
C
ATOM   3918  C   SER X 252     -17.175  -4.313 -18.496  1.00  0.00
C
ATOM   3919  O   SER X 252     -16.324  -3.515 -18.100  1.00  0.00
O
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ATOM   3920  CB  SER X 252     -16.391  -6.371 -19.673  1.00  0.00
C
ATOM   3921  OG  SER X 252     -15.976  -7.702 -19.539  1.00  0.00
O
ATOM   3922  H   SER X 252     -18.573  -7.181 -18.673  1.00  0.00
H
ATOM   3923  HA  SER X 252     -16.131  -6.016 -17.685  1.00  0.00
H
ATOM   3924 1HB  SER X 252     -17.164  -6.315 -20.438  1.00  0.00
H
ATOM   3925 2HB  SER X 252     -15.539  -5.764 -19.973  1.00  0.00
H
ATOM   3926  HG  SER X 252     -15.290  -7.759 -18.869  1.00  0.00
H
ATOM   3927  N   TRP X 253     -18.327  -3.934 -19.039  1.00  0.00
N
ATOM   3928  CA  TRP X 253     -18.696  -2.527 -19.147  1.00  0.00
C
ATOM   3929  C   TRP X 253     -18.781  -1.872 -17.774  1.00  0.00
C
ATOM   3930  O   TRP X 253     -18.178  -0.824 -17.538  1.00  0.00
O
ATOM   3931  CB  TRP X 253     -20.030  -2.381 -19.880  1.00  0.00
C
ATOM   3932  CG  TRP X 253     -19.959  -2.746 -21.333  1.00  0.00
C
ATOM   3933  CD1 TRP X 253     -18.833  -2.838 -22.095  1.00  0.00
C
ATOM   3934  CD2 TRP X 253     -21.056  -3.066 -22.196  1.00  0.00
C
ATOM   3935  CE2 TRP X 253     -20.520  -3.344 -23.466  1.00  0.00
C
ATOM   3936  CE3 TRP X 253     -22.442  -3.147 -22.015  1.00  0.00
C
ATOM   3937  NE1 TRP X 253     -19.158  -3.197 -23.380  1.00  0.00
N
ATOM   3938  CZ2 TRP X 253     -21.313  -3.692 -24.548  1.00  0.00
C
ATOM   3939  CZ3 TRP X 253     -23.237  -3.499 -23.100  1.00  0.00
C
ATOM   3940  CH2 TRP X 253     -22.689  -3.763 -24.329  1.00  0.00
C
ATOM   3941  H   TRP X 253     -18.964  -4.637 -19.385  1.00  0.00
H
ATOM   3942  HA  TRP X 253     -17.931  -1.986 -19.704  1.00  0.00
H
ATOM   3943 1HB  TRP X 253     -20.782  -3.031 -19.433  1.00  0.00
H
ATOM   3944 2HB  TRP X 253     -20.373  -1.347 -19.836  1.00  0.00
H
ATOM   3945  HD1 TRP X 253     -17.885  -2.627 -21.603  1.00  0.00
H
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ATOM   3946  HE1 TRP X 253     -18.505  -3.329 -24.138  1.00  0.00
H
ATOM   3947  HE3 TRP X 253     -22.929  -2.950 -21.060  1.00  0.00
H
ATOM   3948  HZ2 TRP X 253     -20.837  -3.894 -25.507  1.00  0.00
H
ATOM   3949  HZ3 TRP X 253     -24.316  -3.557 -22.946  1.00  0.00
H
ATOM   3950  HH2 TRP X 253     -23.349  -4.036 -25.153  1.00  0.00
H
ATOM   3951  N   GLN X 254     -19.531  -2.495 -16.875  1.00  0.00
N
ATOM   3952  CA  GLN X 254     -19.716  -1.964 -15.529  1.00  0.00
C
ATOM   3953  C   GLN X 254     -18.383  -1.824 -14.805  1.00  0.00
C
ATOM   3954  O   GLN X 254     -18.132  -0.825 -14.135  1.00  0.00
O
ATOM   3955  CB  GLN X 254     -20.650  -2.867 -14.719  1.00  0.00
C
ATOM   3956  CG  GLN X 254     -22.096  -2.838 -15.181  1.00  0.00
C
ATOM   3957  CD  GLN X 254     -22.725  -1.465 -15.031  1.00  0.00
C
ATOM   3958  NE2 GLN X 254     -23.422  -1.018 -16.070  1.00  0.00
N
ATOM   3959  OE1 GLN X 254     -22.590  -0.816 -13.990  1.00  0.00
O
ATOM   3960  H   GLN X 254     -19.986  -3.360 -17.129  1.00  0.00
H
ATOM   3961  HA  GLN X 254     -20.144  -0.964 -15.586  1.00  0.00
H
ATOM   3962 1HB  GLN X 254     -20.257  -3.880 -14.800  1.00  0.00
H
ATOM   3963 2HB  GLN X 254     -20.588  -2.537 -13.684  1.00  0.00
H
ATOM   3964 1HG  GLN X 254     -22.420  -3.251 -16.138  1.00  0.00
H
ATOM   3965 2HG  GLN X 254     -22.459  -3.473 -14.373  1.00  0.00
H
ATOM   3966 1HE2 GLN X 254     -23.859  -0.117 -16.028  1.00  0.00
H
ATOM   3967 2HE2 GLN X 254     -23.508  -1.577 -16.893  1.00  0.00
H
ATOM   3968  N   LEU X 255     -17.532  -2.834 -14.946  1.00  0.00
N
ATOM   3969  CA  LEU X 255     -16.244  -2.840 -14.245  1.00  0.00
C
ATOM   3970  C   LEU X 255     -15.331  -1.719 -14.734  1.00  0.00
C
ATOM   3971  O   LEU X 255     -14.760  -0.976 -13.936  1.00  0.00
O
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ATOM   3972  CB  LEU X 255     -15.552  -4.198 -14.419  1.00  0.00
C
ATOM   3973  CG  LEU X 255     -16.201  -5.363 -13.662  1.00  0.00
C
ATOM   3974  CD1 LEU X 255     -15.575  -6.682 -14.096  1.00  0.00
C
ATOM   3975  CD2 LEU X 255     -16.031  -5.153 -12.164  1.00  0.00
C
ATOM   3976  H   LEU X 255     -17.776  -3.610 -15.545  1.00  0.00
H
ATOM   3977  HA  LEU X 255     -16.405  -2.659 -13.183  1.00  0.00
H
ATOM   3978 1HB  LEU X 255     -15.685  -4.328 -15.492  1.00  0.00
H
ATOM   3979 2HB  LEU X 255     -14.487  -4.140 -14.191  1.00  0.00
H
ATOM   3980  HG  LEU X 255     -17.268  -5.339 -13.883  1.00  0.00
H
ATOM   3981 1HD1 LEU X 255     -16.042  -7.502 -13.553  1.00  0.00
H
ATOM   3982 2HD1 LEU X 255     -15.728  -6.821 -15.166  1.00  0.00
H
ATOM   3983 3HD1 LEU X 255     -14.507  -6.666 -13.881  1.00  0.00
H
ATOM   3984 1HD2 LEU X 255     -16.495  -5.982 -11.627  1.00  0.00
H
ATOM   3985 2HD2 LEU X 255     -14.970  -5.109 -11.920  1.00  0.00
H
ATOM   3986 3HD2 LEU X 255     -16.511  -4.219 -11.871  1.00  0.00
H
ATOM   3987  N   ALA X 256     -15.191  -1.606 -16.050  1.00  0.00
N
ATOM   3988  CA  ALA X 256     -14.333  -0.581 -16.633  1.00  0.00
C
ATOM   3989  C   ALA X 256     -14.836   0.814 -16.295  1.00  0.00
C
ATOM   3990  O   ALA X 256     -14.048   1.733 -16.071  1.00  0.00
O
ATOM   3991  CB  ALA X 256     -14.238  -0.764 -18.141  1.00  0.00
C
ATOM   3992  H   ALA X 256     -15.688  -2.241 -16.659  1.00  0.00
H
ATOM   3993  HA  ALA X 256     -13.334  -0.679 -16.208  1.00  0.00
H
ATOM   3994 1HB  ALA X 256     -13.594   0.008 -18.561  1.00  0.00
H
ATOM   3995 2HB  ALA X 256     -13.820  -1.745 -18.364  1.00  0.00
H
ATOM   3996 3HB  ALA X 256     -15.231  -0.685 -18.580  1.00  0.00
H
ATOM   3997  N   LEU X 257     -16.156   0.970 -16.258  1.00  0.00
N
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ATOM   3998  CA  LEU X 257     -16.759   2.252 -15.923  1.00  0.00
C
ATOM   3999  C   LEU X 257     -16.430   2.626 -14.475  1.00  0.00
C
ATOM   4000  O   LEU X 257     -16.120   3.777 -14.181  1.00  0.00
O
ATOM   4001  CB  LEU X 257     -18.276   2.197 -16.146  1.00  0.00
C
ATOM   4002  CG  LEU X 257     -18.719   2.109 -17.612  1.00  0.00
C
ATOM   4003  CD1 LEU X 257     -20.214   1.836 -17.690  1.00  0.00
C
ATOM   4004  CD2 LEU X 257     -18.368   3.404 -18.328  1.00  0.00
C
ATOM   4005  H   LEU X 257     -16.752   0.182 -16.467  1.00  0.00
H
ATOM   4006  HA  LEU X 257     -16.336   3.030 -16.558  1.00  0.00
H
ATOM   4007 1HB  LEU X 257     -18.496   1.264 -15.631  1.00  0.00
H
ATOM   4008 2HB  LEU X 257     -18.786   3.019 -15.643  1.00  0.00
H
ATOM   4009  HG  LEU X 257     -18.145   1.305 -18.075  1.00  0.00
H
ATOM   4010 1HD1 LEU X 257     -20.519   1.776 -18.735  1.00  0.00
H
ATOM   4011 2HD1 LEU X 257     -20.440   0.894 -17.191  1.00  0.00
H
ATOM   4012 3HD1 LEU X 257     -20.757   2.646 -17.202  1.00  0.00
H
ATOM   4013 1HD2 LEU X 257     -18.681   3.339 -19.370  1.00  0.00
H
ATOM   4014 2HD2 LEU X 257     -18.877   4.238 -17.846  1.00  0.00
H
ATOM   4015 3HD2 LEU X 257     -17.290   3.565 -18.284  1.00  0.00
H
ATOM   4016  N   CYS X 258     -16.488   1.650 -13.570  1.00  0.00
N
ATOM   4017  CA  CYS X 258     -16.180   1.926 -12.174  1.00  0.00
C
ATOM   4018  C   CYS X 258     -14.676   2.149 -11.971  1.00  0.00
C
ATOM   4019  O   CYS X 258     -14.268   2.858 -11.050  1.00  0.00
O
ATOM   4020  CB  CYS X 258     -16.633   0.648 -11.469  1.00  0.00
C
ATOM   4021  SG  CYS X 258     -18.426   0.414 -11.424  1.00  0.00
S
ATOM   4022  H   CYS X 258     -16.745   0.715 -13.853  1.00  0.00
H
ATOM   4023  HA  CYS X 258     -16.740   2.768 -11.765  1.00  0.00
H
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ATOM   4024 1HB  CYS X 258     -16.228  -0.228 -11.976  1.00  0.00
H
ATOM   4025 2HB  CYS X 258     -16.305   0.653 -10.430  1.00  0.00
H
ATOM   4026  HG  CYS X 258     -18.401  -0.740 -10.765  1.00  0.00
H
ATOM   4027  N   ILE X 259     -13.849   1.563 -12.831  1.00  0.00
N
ATOM   4028  CA  ILE X 259     -12.404   1.775 -12.715  1.00  0.00
C
ATOM   4029  C   ILE X 259     -12.116   3.227 -13.091  1.00  0.00
C
ATOM   4030  O   ILE X 259     -11.372   3.926 -12.395  1.00  0.00
O
ATOM   4031  CB  ILE X 259     -11.617   0.806 -13.617  1.00  0.00
C
ATOM   4032  CG1 ILE X 259     -11.721  -0.624 -13.082  1.00  0.00
C
ATOM   4033  CG2 ILE X 259     -10.161   1.236 -13.716  1.00  0.00
C
ATOM   4034  CD1 ILE X 259     -11.266  -1.679 -14.066  1.00  0.00
C
ATOM   4035  H   ILE X 259     -14.216   0.972 -13.562  1.00  0.00
H
ATOM   4036  HA  ILE X 259     -12.078   1.654 -11.683  1.00  0.00
H
ATOM   4037  HB  ILE X 259     -12.064   0.803 -14.611  1.00  0.00
H
ATOM   4038 1HG1 ILE X 259     -11.110  -0.679 -12.182  1.00  0.00
H
ATOM   4039 2HG1 ILE X 259     -12.766  -0.797 -12.822  1.00  0.00
H
ATOM   4040 1HG2 ILE X 259      -9.620   0.539 -14.356  1.00  0.00
H
ATOM   4041 2HG2 ILE X 259     -10.105   2.237 -14.142  1.00  0.00
H
ATOM   4042 3HG2 ILE X 259      -9.713   1.238 -12.722  1.00  0.00
H
ATOM   4043 1HD1 ILE X 259     -11.371  -2.667 -13.615  1.00  0.00
H
ATOM   4044 2HD1 ILE X 259     -11.879  -1.625 -14.966  1.00  0.00
H
ATOM   4045 3HD1 ILE X 259     -10.222  -1.508 -14.325  1.00  0.00
H
ATOM   4046  N   MET X 260     -12.713   3.682 -14.190  1.00  0.00
N
ATOM   4047  CA  MET X 260     -12.552   5.066 -14.629  1.00  0.00
C
ATOM   4048  C   MET X 260     -13.227   5.996 -13.620  1.00  0.00
C
ATOM   4049  O   MET X 260     -12.797   7.131 -13.414  1.00  0.00
O
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ATOM   4050  CB  MET X 260     -13.138   5.248 -16.028  1.00  0.00
C
ATOM   4051  CG  MET X 260     -12.360   4.546 -17.132  1.00  0.00
C
ATOM   4052  SD  MET X 260     -12.955   4.972 -18.780  1.00  0.00
S
ATOM   4053  CE  MET X 260     -14.463   4.011 -18.856  1.00  0.00
C
ATOM   4054  H   MET X 260     -13.292   3.056 -14.732  1.00  0.00
H
ATOM   4055  HA  MET X 260     -11.495   5.326 -14.658  1.00  0.00
H
ATOM   4056 1HB  MET X 260     -14.156   4.861 -15.999  1.00  0.00
H
ATOM   4057 2HB  MET X 260     -13.161   6.320 -16.225  1.00  0.00
H
ATOM   4058 1HG  MET X 260     -11.313   4.832 -17.044  1.00  0.00
H
ATOM   4059 2HG  MET X 260     -12.457   3.470 -16.984  1.00  0.00
H
ATOM   4060 1HE  MET X 260     -14.948   4.169 -19.819  1.00  0.00
H
ATOM   4061 2HE  MET X 260     -14.227   2.952 -18.737  1.00  0.00
H
ATOM   4062 3HE  MET X 260     -15.135   4.324 -18.056  1.00  0.00
H
ATOM   4063  N   LEU X 261     -14.292   5.513 -12.988  1.00  0.00
N
ATOM   4064  CA  LEU X 261     -14.997   6.315 -11.995  1.00  0.00
C
ATOM   4065  C   LEU X 261     -14.080   6.626 -10.811  1.00  0.00
C
ATOM   4066  O   LEU X 261     -13.839   7.785 -10.495  1.00  0.00
O
ATOM   4067  CB  LEU X 261     -16.264   5.587 -11.527  1.00  0.00
C
ATOM   4068  CG  LEU X 261     -17.269   6.454 -10.760  1.00  0.00
C
ATOM   4069  CD1 LEU X 261     -18.436   5.600 -10.281  1.00  0.00
C
ATOM   4070  CD2 LEU X 261     -16.573   7.122  -9.584  1.00  0.00
C
ATOM   4071  H   LEU X 261     -14.618   4.580 -13.198  1.00  0.00
H
ATOM   4072  HA  LEU X 261     -15.282   7.272 -12.433  1.00  0.00
H
ATOM   4073 1HB  LEU X 261     -16.673   5.305 -12.495  1.00  0.00
H
ATOM   4074 2HB  LEU X 261     -16.023   4.688 -10.958  1.00  0.00
H
ATOM   4075  HG  LEU X 261     -17.605   7.238 -11.439  1.00  0.00
H
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ATOM   4076 1HD1 LEU X 261     -19.145   6.225  -9.738  1.00  0.00
H
ATOM   4077 2HD1 LEU X 261     -18.933   5.149 -11.139  1.00  0.00
H
ATOM   4078 3HD1 LEU X 261     -18.066   4.815  -9.623  1.00  0.00
H
ATOM   4079 1HD2 LEU X 261     -17.289   7.739  -9.040  1.00  0.00
H
ATOM   4080 2HD2 LEU X 261     -16.169   6.360  -8.918  1.00  0.00
H
ATOM   4081 3HD2 LEU X 261     -15.760   7.750  -9.951  1.00  0.00
H
ATOM   4082  N   ILE X 262     -13.566   5.587 -10.168  1.00  0.00
N
ATOM   4083  CA  ILE X 262     -12.676   5.771  -9.030  1.00  0.00
C
ATOM   4084  C   ILE X 262     -11.405   6.507  -9.448  1.00  0.00
C
ATOM   4085  O   ILE X 262     -10.803   7.224  -8.642  1.00  0.00
O
ATOM   4086  CB  ILE X 262     -12.296   4.425  -8.387  1.00  0.00
C
ATOM   4087  CG1 ILE X 262     -11.621   4.652  -7.033  1.00  0.00
C
ATOM   4088  CG2 ILE X 262     -11.386   3.631  -9.312  1.00  0.00
C
ATOM   4089  CD1 ILE X 262     -12.521   5.293  -6.001  1.00  0.00
C
ATOM   4090  H   ILE X 262     -13.795   4.652 -10.473  1.00  0.00
H
ATOM   4091  HA  ILE X 262     -13.138   6.414  -8.282  1.00  0.00
H
ATOM   4092  HB  ILE X 262     -13.204   3.855  -8.194  1.00  0.00
H
ATOM   4093 1HG1 ILE X 262     -11.286   3.681  -6.670  1.00  0.00
H
ATOM   4094 2HG1 ILE X 262     -10.755   5.292  -7.206  1.00  0.00
H
ATOM   4095 1HG2 ILE X 262     -11.128   2.683  -8.842  1.00  0.00
H
ATOM   4096 2HG2 ILE X 262     -11.901   3.441 -10.254  1.00  0.00
H
ATOM   4097 3HG2 ILE X 262     -10.478   4.200  -9.506  1.00  0.00
H
ATOM   4098 1HD1 ILE X 262     -11.973   5.423  -5.067  1.00  0.00
H
ATOM   4099 2HD1 ILE X 262     -12.856   6.266  -6.362  1.00  0.00
H
ATOM   4100 3HD1 ILE X 262     -13.386   4.655  -5.825  1.00  0.00
H
ATOM   4101  N   PHE X 263     -10.985   6.335 -10.695  1.00  0.00
N
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ATOM   4102  CA  PHE X 263      -9.792   7.029 -11.168  1.00  0.00
C
ATOM   4103  C   PHE X 263     -10.059   8.538 -11.161  1.00  0.00
C
ATOM   4104  O   PHE X 263      -9.220   9.324 -10.721  1.00  0.00
O
ATOM   4105  CB  PHE X 263      -9.406   6.538 -12.565  1.00  0.00
C
ATOM   4106  CG  PHE X 263      -8.673   5.227 -12.565  1.00  0.00
C
ATOM   4107  CD1 PHE X 263      -8.406   4.565 -11.376  1.00  0.00
C
ATOM   4108  CD2 PHE X 263      -8.248   4.653 -13.754  1.00  0.00
C
ATOM   4109  CE1 PHE X 263      -7.731   3.358 -11.376  1.00  0.00
C
ATOM   4110  CE2 PHE X 263      -7.576   3.447 -13.756  1.00  0.00
C
ATOM   4111  CZ  PHE X 263      -7.316   2.800 -12.564  1.00  0.00
C
ATOM   4112  H   PHE X 263     -11.493   5.722 -11.318  1.00  0.00
H
ATOM   4113  HA  PHE X 263      -8.960   6.838 -10.488  1.00  0.00
H
ATOM   4114 1HB  PHE X 263     -10.299   6.396 -13.172  1.00  0.00
H
ATOM   4115 2HB  PHE X 263      -8.751   7.262 -13.048  1.00  0.00
H
ATOM   4116  HD1 PHE X 263      -8.735   5.008 -10.436  1.00  0.00
H
ATOM   4117  HD2 PHE X 263      -8.453   5.166 -14.696  1.00  0.00
H
ATOM   4118  HE1 PHE X 263      -7.527   2.850 -10.434  1.00  0.00
H
ATOM   4119  HE2 PHE X 263      -7.247   3.007 -14.698  1.00  0.00
H
ATOM   4120  HZ  PHE X 263      -6.783   1.851 -12.566  1.00  0.00
H
ATOM   4121  N   THR X 264     -11.231   8.935 -11.642  1.00  0.00
N
ATOM   4122  CA  THR X 264     -11.585  10.351 -11.665  1.00  0.00
C
ATOM   4123  C   THR X 264     -11.560  10.961 -10.263  1.00  0.00
C
ATOM   4124  O   THR X 264     -11.128  12.101 -10.079  1.00  0.00
O
ATOM   4125  CB  THR X 264     -12.979  10.575 -12.278  1.00  0.00
C
ATOM   4126  CG2 THR X 264     -13.344  12.051 -12.248  1.00  0.00
C
ATOM   4127  OG1 THR X 264     -12.986  10.112 -13.636  1.00  0.00
O
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ATOM   4128  H   THR X 264     -11.885   8.251 -11.995  1.00  0.00
H
ATOM   4129  HA  THR X 264     -10.851  10.905 -12.251  1.00  0.00
H
ATOM   4130  HB  THR X 264     -13.713  10.007 -11.707  1.00  0.00
H
ATOM   4131  HG1 THR X 264     -12.774   9.176 -13.656  1.00  0.00
H
ATOM   4132 1HG2 THR X 264     -14.333  12.188 -12.686  1.00  0.00
H
ATOM   4133 2HG2 THR X 264     -13.351  12.402 -11.217  1.00  0.00
H
ATOM   4134 3HG2 THR X 264     -12.611  12.618 -12.820  1.00  0.00
H
ATOM   4135  N   VAL X 265     -12.032  10.207  -9.275  1.00  0.00
N
ATOM   4136  CA  VAL X 265     -12.045  10.698  -7.902  1.00  0.00
C
ATOM   4137  C   VAL X 265     -10.619  10.790  -7.367  1.00  0.00
C
ATOM   4138  O   VAL X 265     -10.280  11.733  -6.656  1.00  0.00
O
ATOM   4139  CB  VAL X 265     -12.887   9.791  -6.986  1.00  0.00
C
ATOM   4140  CG1 VAL X 265     -12.744  10.220  -5.533  1.00  0.00
C
ATOM   4141  CG2 VAL X 265     -14.349   9.819  -7.406  1.00  0.00
C
ATOM   4142  H   VAL X 265     -12.385   9.282  -9.477  1.00  0.00
H
ATOM   4143  HA  VAL X 265     -12.443  11.712  -7.848  1.00  0.00
H
ATOM   4144  HB  VAL X 265     -12.547   8.761  -7.096  1.00  0.00
H
ATOM   4145 1HG1 VAL X 265     -13.346   9.568  -4.900  1.00  0.00
H
ATOM   4146 2HG1 VAL X 265     -11.698  10.150  -5.235  1.00  0.00
H
ATOM   4147 3HG1 VAL X 265     -13.086  11.248  -5.422  1.00  0.00
H
ATOM   4148 1HG2 VAL X 265     -14.931   9.172  -6.749  1.00  0.00
H
ATOM   4149 2HG2 VAL X 265     -14.728  10.839  -7.338  1.00  0.00
H
ATOM   4150 3HG2 VAL X 265     -14.440   9.467  -8.432  1.00  0.00
H
ATOM   4151  N   ILE X 266      -9.781   9.811  -7.706  1.00  0.00
N
ATOM   4152  CA  ILE X 266      -8.387   9.843  -7.260  1.00  0.00
C
ATOM   4153  C   ILE X 266      -7.751  11.163  -7.706  1.00  0.00
C
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ATOM   4154  O   ILE X 266      -7.068  11.835  -6.929  1.00  0.00
O
ATOM   4155  CB  ILE X 266      -7.589   8.650  -7.816  1.00  0.00
C
ATOM   4156  CG1 ILE X 266      -8.039   7.348  -7.149  1.00  0.00
C
ATOM   4157  CG2 ILE X 266      -6.097   8.868  -7.613  1.00  0.00
C
ATOM   4158  CD1 ILE X 266      -7.539   6.102  -7.844  1.00  0.00
C
ATOM   4159  H   ILE X 266     -10.110   9.043  -8.275  1.00  0.00
H
ATOM   4160  HA  ILE X 266      -8.332   9.840  -6.172  1.00  0.00
H
ATOM   4161  HB  ILE X 266      -7.799   8.547  -8.880  1.00  0.00
H
ATOM   4162 1HG1 ILE X 266      -7.672   7.364  -6.124  1.00  0.00
H
ATOM   4163 2HG1 ILE X 266      -9.130   7.348  -7.144  1.00  0.00
H
ATOM   4164 1HG2 ILE X 266      -5.547   8.015  -8.011  1.00  0.00
H
ATOM   4165 2HG2 ILE X 266      -5.787   9.773  -8.132  1.00  0.00
H
ATOM   4166 3HG2 ILE X 266      -5.886   8.970  -6.548  1.00  0.00
H
ATOM   4167 1HD1 ILE X 266      -7.900   5.219  -7.314  1.00  0.00
H
ATOM   4168 2HD1 ILE X 266      -7.908   6.083  -8.871  1.00  0.00
H
ATOM   4169 3HD1 ILE X 266      -6.450   6.099  -7.850  1.00  0.00
H
ATOM   4170  N   TYR X 267      -7.990  11.541  -8.959  1.00  0.00
N
ATOM   4171  CA  TYR X 267      -7.438  12.778  -9.482  1.00  0.00
C
ATOM   4172  C   TYR X 267      -7.991  13.999  -8.743  1.00  0.00
C
ATOM   4173  O   TYR X 267      -7.228  14.870  -8.317  1.00  0.00
O
ATOM   4174  CB  TYR X 267      -7.728  12.902 -10.979  1.00  0.00
C
ATOM   4175  CG  TYR X 267      -7.417  14.266 -11.553  1.00  0.00
C
ATOM   4176  CD1 TYR X 267      -6.115  14.744 -11.589  1.00  0.00
C
ATOM   4177  CD2 TYR X 267      -8.426  15.072 -12.059  1.00  0.00
C
ATOM   4178  CE1 TYR X 267      -5.825  15.991 -12.112  1.00  0.00
C
ATOM   4179  CE2 TYR X 267      -8.149  16.319 -12.584  1.00  0.00
C
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ATOM   4180  CZ  TYR X 267      -6.846  16.775 -12.608  1.00  0.00
C
ATOM   4181  OH  TYR X 267      -6.565  18.017 -13.131  1.00  0.00
O
ATOM   4182  H   TYR X 267      -8.562  10.959  -9.554  1.00  0.00
H
ATOM   4183  HA  TYR X 267      -6.358  12.793  -9.335  1.00  0.00
H
ATOM   4184 1HB  TYR X 267      -7.125  12.148 -11.488  1.00  0.00
H
ATOM   4185 2HB  TYR X 267      -8.785  12.680 -11.122  1.00  0.00
H
ATOM   4186  HD1 TYR X 267      -5.314  14.120 -11.194  1.00  0.00
H
ATOM   4187  HD2 TYR X 267      -9.453  14.706 -12.037  1.00  0.00
H
ATOM   4188  HE1 TYR X 267      -4.798  16.353 -12.132  1.00  0.00
H
ATOM   4189  HE2 TYR X 267      -8.957  16.938 -12.977  1.00  0.00
H
ATOM   4190  HH  TYR X 267      -7.346  18.475 -13.448  1.00  0.00
H
ATOM   4191  N   PHE X 268      -9.309  14.046  -8.571  1.00  0.00
N
ATOM   4192  CA  PHE X 268      -9.946  15.182  -7.908  1.00  0.00
C
ATOM   4193  C   PHE X 268      -9.488  15.343  -6.458  1.00  0.00
C
ATOM   4194  O   PHE X 268      -9.454  16.455  -5.934  1.00  0.00
O
ATOM   4195  CB  PHE X 268     -11.469  15.038  -7.948  1.00  0.00
C
ATOM   4196  CG  PHE X 268     -12.066  15.297  -9.301  1.00  0.00
C
ATOM   4197  CD1 PHE X 268     -11.326  15.922 -10.294  1.00  0.00
C
ATOM   4198  CD2 PHE X 268     -13.368  14.915  -9.586  1.00  0.00
C
ATOM   4199  CE1 PHE X 268     -11.875  16.161 -11.540  1.00  0.00
C
ATOM   4200  CE2 PHE X 268     -13.918  15.150 -10.831  1.00  0.00
C
ATOM   4201  CZ  PHE X 268     -13.170  15.774 -11.809  1.00  0.00
C
ATOM   4202  H   PHE X 268      -9.880  13.283  -8.906  1.00  0.00
H
ATOM   4203  HA  PHE X 268      -9.670  16.109  -8.413  1.00  0.00
H
ATOM   4204 1HB  PHE X 268     -11.757  14.027  -7.667  1.00  0.00
H
ATOM   4205 2HB  PHE X 268     -11.930  15.751  -7.264  1.00  0.00
H
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ATOM   4206  HD1 PHE X 268     -10.301  16.227 -10.081  1.00  0.00
H
ATOM   4207  HD2 PHE X 268     -13.960  14.422  -8.813  1.00  0.00
H
ATOM   4208  HE1 PHE X 268     -11.282  16.653 -12.310  1.00  0.00
H
ATOM   4209  HE2 PHE X 268     -14.943  14.844 -11.042  1.00  0.00
H
ATOM   4210  HZ  PHE X 268     -13.604  15.962 -12.791  1.00  0.00
H
ATOM   4211  N   SER X 269      -9.141  14.234  -5.819  1.00  0.00
N
ATOM   4212  CA  SER X 269      -8.670  14.284  -4.439  1.00  0.00
C
ATOM   4213  C   SER X 269      -7.218  14.757  -4.390  1.00  0.00
C
ATOM   4214  O   SER X 269      -6.870  15.655  -3.632  1.00  0.00
O
ATOM   4215  CB  SER X 269      -8.815  12.923  -3.788  1.00  0.00
C
ATOM   4216  OG  SER X 269     -10.157  12.566  -3.607  1.00  0.00
O
ATOM   4217  H   SER X 269      -9.204  13.344  -6.293  1.00  0.00
H
ATOM   4218  HA  SER X 269      -9.293  14.902  -3.791  1.00  0.00
H
ATOM   4219 1HB  SER X 269      -8.333  12.179  -4.424  1.00  0.00
H
ATOM   4220 2HB  SER X 269      -8.321  12.944  -2.817  1.00  0.00
H
ATOM   4221  HG  SER X 269     -10.599  12.539  -4.459  1.00  0.00
H
ATOM   4222  N   ILE X 270      -6.372  14.155  -5.219  1.00  0.00
N
ATOM   4223  CA  ILE X 270      -4.953  14.501  -5.243  1.00  0.00
C
ATOM   4224  C   ILE X 270      -4.630  15.909  -5.727  1.00  0.00
C
ATOM   4225  O   ILE X 270      -3.686  16.540  -5.242  1.00  0.00
O
ATOM   4226  CB  ILE X 270      -4.151  13.533  -6.133  1.00  0.00
C
ATOM   4227  CG1 ILE X 270      -4.173  12.121  -5.540  1.00  0.00
C
ATOM   4228  CG2 ILE X 270      -2.720  14.023  -6.296  1.00  0.00
C
ATOM   4229  CD1 ILE X 270      -3.615  11.063  -6.465  1.00  0.00
C
ATOM   4230  H   ILE X 270      -6.718  13.443  -5.846  1.00  0.00
H
ATOM   4231  HA  ILE X 270      -4.539  14.495  -4.236  1.00  0.00
H
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ATOM   4232  HB  ILE X 270      -4.628  13.470  -7.110  1.00  0.00
H
ATOM   4233 1HG1 ILE X 270      -3.587  12.147  -4.622  1.00  0.00
H
ATOM   4234 2HG1 ILE X 270      -5.210  11.886  -5.302  1.00  0.00
H
ATOM   4235 1HG2 ILE X 270      -2.167  13.327  -6.927  1.00  0.00
H
ATOM   4236 2HG2 ILE X 270      -2.725  15.008  -6.761  1.00  0.00
H
ATOM   4237 3HG2 ILE X 270      -2.242  14.085  -5.319  1.00  0.00
H
ATOM   4238 1HD1 ILE X 270      -3.665  10.089  -5.976  1.00  0.00
H
ATOM   4239 2HD1 ILE X 270      -4.203  11.037  -7.384  1.00  0.00
H
ATOM   4240 3HD1 ILE X 270      -2.578  11.296  -6.703  1.00  0.00
H
ATOM   4241  N   TRP X 271      -5.404  16.398  -6.683  1.00  0.00
N
ATOM   4242  CA  TRP X 271      -5.169  17.718  -7.259  1.00  0.00
C
ATOM   4243  C   TRP X 271      -5.579  18.820  -6.291  1.00  0.00
C
ATOM   4244  O   TRP X 271      -6.742  19.215  -6.241  1.00  0.00
O
ATOM   4245  CB  TRP X 271      -5.929  17.868  -8.579  1.00  0.00
C
ATOM   4246  CG  TRP X 271      -5.567  19.105  -9.342  1.00  0.00
C
ATOM   4247  CD1 TRP X 271      -6.283  20.263  -9.404  1.00  0.00
C
ATOM   4248  CD2 TRP X 271      -4.401  19.310 -10.148  1.00  0.00
C
ATOM   4249  CE2 TRP X 271      -4.477  20.614 -10.669  1.00  0.00
C
ATOM   4250  CE3 TRP X 271      -3.297  18.514 -10.481  1.00  0.00
C
ATOM   4251  NE1 TRP X 271      -5.639  21.177 -10.200  1.00  0.00
N
ATOM   4252  CZ2 TRP X 271      -3.502  21.142 -11.500  1.00  0.00
C
ATOM   4253  CZ3 TRP X 271      -2.319  19.044 -11.313  1.00  0.00
C
ATOM   4254  CH2 TRP X 271      -2.417  20.320 -11.808  1.00  0.00
C
ATOM   4255  H   TRP X 271      -6.177  15.843  -7.023  1.00  0.00
H
ATOM   4256  HA  TRP X 271      -4.104  17.853  -7.453  1.00  0.00
H
ATOM   4257 1HB  TRP X 271      -5.716  17.023  -9.235  1.00  0.00
H
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ATOM   4258 2HB  TRP X 271      -7.001  17.918  -8.391  1.00  0.00
H
ATOM   4259  HD1 TRP X 271      -7.216  20.296  -8.843  1.00  0.00
H
ATOM   4260  HE1 TRP X 271      -5.964  22.109 -10.408  1.00  0.00
H
ATOM   4261  HE3 TRP X 271      -3.169  17.496 -10.114  1.00  0.00
H
ATOM   4262  HZ2 TRP X 271      -3.621  22.161 -11.870  1.00  0.00
H
ATOM   4263  HZ3 TRP X 271      -1.465  18.413 -11.565  1.00  0.00
H
ATOM   4264  HH2 TRP X 271      -1.627  20.696 -12.458  1.00  0.00
H
ATOM   4265  N   LYS X 272      -4.610  19.313  -5.523  1.00  0.00
N
ATOM   4266  CA  LYS X 272      -4.879  20.334  -4.516  1.00  0.00
C
ATOM   4267  C   LYS X 272      -5.109  21.693  -5.160  1.00  0.00
C
ATOM   4268  O   LYS X 272      -5.466  22.660  -4.485  1.00  0.00
O
ATOM   4269  CB  LYS X 272      -3.727  20.412  -3.513  1.00  0.00
C
ATOM   4270  CG  LYS X 272      -3.553  19.167  -2.655  1.00  0.00
C
ATOM   4271  CD  LYS X 272      -2.399  19.325  -1.676  1.00  0.00
C
ATOM   4272  CE  LYS X 272      -2.226  18.081  -0.816  1.00  0.00
C
ATOM   4273  NZ  LYS X 272      -1.089  18.215   0.135  1.00  0.00
N
ATOM   4274  H   LYS X 272      -3.666  18.973  -5.641  1.00  0.00
H
ATOM   4275  HA  LYS X 272      -5.794  20.087  -3.976  1.00  0.00
H
ATOM   4276 1HB  LYS X 272      -2.817  20.590  -4.085  1.00  0.00
H
ATOM   4277 2HB  LYS X 272      -3.922  21.272  -2.868  1.00  0.00
H
ATOM   4278 1HG  LYS X 272      -4.477  18.994  -2.103  1.00  0.00
H
ATOM   4279 2HG  LYS X 272      -3.359  18.320  -3.311  1.00  0.00
H
ATOM   4280 1HD  LYS X 272      -1.484  19.506  -2.243  1.00  0.00
H
ATOM   4281 2HD  LYS X 272      -2.603  20.183  -1.035  1.00  0.00
H
ATOM   4282 1HE  LYS X 272      -3.148  17.920  -0.259  1.00  0.00
H
ATOM   4283 2HE  LYS X 272      -2.049  17.232  -1.476  1.00  0.00
H
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ATOM   4284 1HZ  LYS X 272      -1.008  17.371   0.684  1.00  0.00
H
ATOM   4285 2HZ  LYS X 272      -0.234  18.364  -0.382  1.00  0.00
H
ATOM   4286 3HZ  LYS X 272      -1.254  19.001   0.747  1.00  0.00
H
ATOM   4287  N   GLY X 273      -4.897  21.766  -6.470  1.00  0.00
N
ATOM   4288  CA  GLY X 273      -5.178  22.982  -7.225  1.00  0.00
C
ATOM   4289  C   GLY X 273      -6.649  23.363  -7.126  1.00  0.00
C
ATOM   4290  O   GLY X 273      -7.018  24.519  -7.345  1.00  0.00
O
ATOM   4291  H   GLY X 273      -4.532  20.959  -6.955  1.00  0.00
H
ATOM   4292 1HA  GLY X 273      -4.572  23.796  -6.828  1.00  0.00
H
ATOM   4293 2HA  GLY X 273      -4.924  22.818  -8.272  1.00  0.00
H
ATOM   4294  N   VAL X 274      -7.490  22.388  -6.795  1.00  0.00
N
ATOM   4295  CA  VAL X 274      -8.915  22.634  -6.609  1.00  0.00
C
ATOM   4296  C   VAL X 274      -9.163  23.586  -5.446  1.00  0.00
C
ATOM   4297  O   VAL X 274      -8.550  23.460  -4.389  1.00  0.00
O
ATOM   4298  CB  VAL X 274      -9.687  21.324  -6.361  1.00  0.00
C
ATOM   4299  CG1 VAL X 274      -9.357  20.765  -4.984  1.00  0.00
C
ATOM   4300  CG2 VAL X 274     -11.184  21.553  -6.496  1.00  0.00
C
ATOM   4301  H   VAL X 274      -7.132  21.452  -6.669  1.00  0.00
H
ATOM   4302  HA  VAL X 274      -9.347  23.133  -7.477  1.00  0.00
H
ATOM   4303  HB  VAL X 274      -9.406  20.598  -7.123  1.00  0.00
H
ATOM   4304 1HG1 VAL X 274      -9.911  19.839  -4.825  1.00  0.00
H
ATOM   4305 2HG1 VAL X 274      -8.288  20.563  -4.919  1.00  0.00
H
ATOM   4306 3HG1 VAL X 274      -9.638  21.490  -4.220  1.00  0.00
H
ATOM   4307 1HG2 VAL X 274     -11.713  20.617  -6.319  1.00  0.00
H
ATOM   4308 2HG2 VAL X 274     -11.505  22.296  -5.767  1.00  0.00
H
ATOM   4309 3HG2 VAL X 274     -11.407  21.909  -7.502  1.00  0.00
H
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ATOM   4310  N   LYS X 275     -10.069  24.538  -5.652  1.00  0.00
N
ATOM   4311  CA  LYS X 275     -10.396  25.514  -4.621  1.00  0.00
C
ATOM   4312  C   LYS X 275     -11.652  25.109  -3.859  1.00  0.00
C
ATOM   4313  O   LYS X 275     -11.683  25.141  -2.629  1.00  0.00
O
ATOM   4314  CB  LYS X 275     -10.578  26.902  -5.236  1.00  0.00
C
ATOM   4315  CG  LYS X 275      -9.312  27.494  -5.841  1.00  0.00
C
ATOM   4316  CD  LYS X 275      -9.544  28.914  -6.333  1.00  0.00
C
ATOM   4317  CE  LYS X 275      -8.287  29.495  -6.963  1.00  0.00
C
ATOM   4318  NZ  LYS X 275      -8.545  30.810  -7.610  1.00  0.00
N
ATOM   4319  H   LYS X 275     -10.540  24.585  -6.544  1.00  0.00
H
ATOM   4320  HA  LYS X 275      -9.590  25.562  -3.888  1.00  0.00
H
ATOM   4321 1HB  LYS X 275     -11.341  26.812  -6.011  1.00  0.00
H
ATOM   4322 2HB  LYS X 275     -10.941  27.558  -4.445  1.00  0.00
H
ATOM   4323 1HG  LYS X 275      -8.532  27.496  -5.078  1.00  0.00
H
ATOM   4324 2HG  LYS X 275      -9.000  26.865  -6.675  1.00  0.00
H
ATOM   4325 1HD  LYS X 275     -10.347  28.899  -7.071  1.00  0.00
H
ATOM   4326 2HD  LYS X 275      -9.843  29.531  -5.486  1.00  0.00
H
ATOM   4327 1HE  LYS X 275      -7.538  29.617  -6.181  1.00  0.00
H
ATOM   4328 2HE  LYS X 275      -7.921  28.790  -7.710  1.00  0.00
H
ATOM   4329 1HZ  LYS X 275      -7.688  31.160  -8.015  1.00  0.00
H
ATOM   4330 2HZ  LYS X 275      -9.240  30.697  -8.337  1.00  0.00
H
ATOM   4331 3HZ  LYS X 275      -8.883  31.464  -6.919  1.00  0.00
H
ATOM   4332  N   THR X 276     -12.691  24.718  -4.589  1.00  0.00
N
ATOM   4333  CA  THR X 276     -13.961  24.321  -3.991  1.00  0.00
C
ATOM   4334  C   THR X 276     -13.773  23.152  -3.033  1.00  0.00
C
ATOM   4335  O   THR X 276     -14.118  23.241  -1.856  1.00  0.00
O
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ATOM   4336  CB  THR X 276     -14.995  23.932  -5.065  1.00  0.00
C
ATOM   4337  CG2 THR X 276     -16.300  23.496  -4.416  1.00  0.00
C
ATOM   4338  OG1 THR X 276     -15.242  25.053  -5.923  1.00  0.00
O
ATOM   4339  H   THR X 276     -12.599  24.695  -5.595  1.00  0.00
H
ATOM   4340  HA  THR X 276     -14.364  25.143  -3.400  1.00  0.00
H
ATOM   4341  HB  THR X 276     -14.594  23.111  -5.660  1.00  0.00
H
ATOM   4342  HG1 THR X 276     -15.886  24.809  -6.591  1.00  0.00
H
ATOM   4343 1HG2 THR X 276     -17.016  23.224  -5.191  1.00  0.00
H
ATOM   4344 2HG2 THR X 276     -16.117  22.636  -3.773  1.00  0.00
H
ATOM   4345 3HG2 THR X 276     -16.701  24.316  -3.822  1.00  0.00
H
ATOM   4346  N   SER X 277     -13.229  22.057  -3.549  1.00  0.00
N
ATOM   4347  CA  SER X 277     -13.018  20.857  -2.746  1.00  0.00
C
ATOM   4348  C   SER X 277     -11.827  21.022  -1.810  1.00  0.00
C
ATOM   4349  O   SER X 277     -10.937  21.834  -2.058  1.00  0.00
O
ATOM   4350  CB  SER X 277     -12.818  19.653  -3.647  1.00  0.00
C
ATOM   4351  OG  SER X 277     -13.958  19.374  -4.413  1.00  0.00
O
ATOM   4352  H   SER X 277     -12.953  22.054  -4.521  1.00  0.00
H
ATOM   4353  HA  SER X 277     -13.899  20.558  -2.176  1.00  0.00
H
ATOM   4354 1HB  SER X 277     -11.982  19.856  -4.316  1.00  0.00
H
ATOM   4355 2HB  SER X 277     -12.586  18.788  -3.029  1.00  0.00
H
ATOM   4356  HG  SER X 277     -13.791  18.609  -4.967  1.00  0.00
H
ATOM   4357  N   GLY X 278     -11.818  20.246  -0.729  1.00  0.00
N
ATOM   4358  CA  GLY X 278     -10.684  20.221   0.188  1.00  0.00
C
ATOM   4359  C   GLY X 278     -10.888  19.188   1.288  1.00  0.00
C
ATOM   4360  O   GLY X 278     -11.790  18.354   1.211  1.00  0.00
O
ATOM   4361  H   GLY X 278     -12.617  19.659  -0.539  1.00  0.00
H
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ATOM   4362 1HA  GLY X 278      -9.780  19.974  -0.369  1.00  0.00
H
ATOM   4363 2HA  GLY X 278     -10.571  21.205   0.641  1.00  0.00
H
ATOM   4364  N   LYS X 279     -10.044  19.249   2.311  1.00  0.00
N
ATOM   4365  CA  LYS X 279     -10.187  18.381   3.475  1.00  0.00
C
ATOM   4366  C   LYS X 279     -10.262  16.915   3.067  1.00  0.00
C
ATOM   4367  O   LYS X 279     -10.946  16.117   3.703  1.00  0.00
O
ATOM   4368  CB  LYS X 279     -11.429  18.766   4.280  1.00  0.00
C
ATOM   4369  CG  LYS X 279     -11.431  20.202   4.788  1.00  0.00
C
ATOM   4370  CD  LYS X 279     -12.683  20.502   5.598  1.00  0.00
C
ATOM   4371  CE  LYS X 279     -12.765  21.976   5.965  1.00  0.00
C
ATOM   4372  NZ  LYS X 279     -14.014  22.295   6.709  1.00  0.00
N
ATOM   4373  H   LYS X 279      -9.284  19.913   2.282  1.00  0.00
H
ATOM   4374  HA  LYS X 279      -9.311  18.480   4.117  1.00  0.00
H
ATOM   4375 1HB  LYS X 279     -12.292  18.609   3.631  1.00  0.00
H
ATOM   4376 2HB  LYS X 279     -11.486  18.083   5.128  1.00  0.00
H
ATOM   4377 1HG  LYS X 279     -10.549  20.351   5.412  1.00  0.00
H
ATOM   4378 2HG  LYS X 279     -11.385  20.872   3.930  1.00  0.00
H
ATOM   4379 1HD  LYS X 279     -13.556  20.225   5.004  1.00  0.00
H
ATOM   4380 2HD  LYS X 279     -12.659  19.902   6.507  1.00  0.00
H
ATOM   4381 1HE  LYS X 279     -11.902  22.223   6.582  1.00  0.00
H
ATOM   4382 2HE  LYS X 279     -12.734  22.559   5.045  1.00  0.00
H
ATOM   4383 1HZ  LYS X 279     -14.030  23.279   6.934  1.00  0.00
H
ATOM   4384 2HZ  LYS X 279     -14.816  22.067   6.138  1.00  0.00
H
ATOM   4385 3HZ  LYS X 279     -14.044  21.755   7.563  1.00  0.00
H
ATOM   4386  N   VAL X 280      -9.554  16.571   1.996  1.00  0.00
N
ATOM   4387  CA  VAL X 280      -9.512  15.194   1.515  1.00  0.00
C
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ATOM   4388  C   VAL X 280      -9.072  14.237   2.615  1.00  0.00
C
ATOM   4389  O   VAL X 280      -9.805  13.323   2.989  1.00  0.00
O
ATOM   4390  CB  VAL X 280      -8.562  15.045   0.311  1.00  0.00
C
ATOM   4391  CG1 VAL X 280      -8.391  13.577  -0.054  1.00  0.00
C
ATOM   4392  CG2 VAL X 280      -9.086  15.831  -0.881  1.00  0.00
C
ATOM   4393  H   VAL X 280      -9.031  17.280   1.502  1.00  0.00
H
ATOM   4394  HA  VAL X 280     -10.502  14.846   1.221  1.00  0.00
H
ATOM   4395  HB  VAL X 280      -7.593  15.470   0.569  1.00  0.00
H
ATOM   4396 1HG1 VAL X 280      -7.717  13.491  -0.906  1.00  0.00
H
ATOM   4397 2HG1 VAL X 280      -7.973  13.038   0.797  1.00  0.00
H
ATOM   4398 3HG1 VAL X 280      -9.361  13.152  -0.313  1.00  0.00
H
ATOM   4399 1HG2 VAL X 280      -8.404  15.714  -1.723  1.00  0.00
H
ATOM   4400 2HG2 VAL X 280     -10.072  15.456  -1.159  1.00  0.00
H
ATOM   4401 3HG2 VAL X 280      -9.160  16.886  -0.618  1.00  0.00
H
ATOM   4402  N   VAL X 281      -7.863  14.454   3.129  1.00  0.00
N
ATOM   4403  CA  VAL X 281      -7.310  13.593   4.166  1.00  0.00
C
ATOM   4404  C   VAL X 281      -7.955  13.873   5.518  1.00  0.00
C
ATOM   4405  O   VAL X 281      -8.195  12.953   6.304  1.00  0.00
O
ATOM   4406  CB  VAL X 281      -5.785  13.766   4.290  1.00  0.00
C
ATOM   4407  CG1 VAL X 281      -5.250  12.950   5.459  1.00  0.00
C
ATOM   4408  CG2 VAL X 281      -5.095  13.358   2.998  1.00  0.00
C
ATOM   4409  H   VAL X 281      -7.317  15.234   2.792  1.00  0.00
H
ATOM   4410  HA  VAL X 281      -7.525  12.543   3.966  1.00  0.00
H
ATOM   4411  HB  VAL X 281      -5.559  14.820   4.450  1.00  0.00
H
ATOM   4412 1HG1 VAL X 281      -4.170  13.084   5.532  1.00  0.00
H
ATOM   4413 2HG1 VAL X 281      -5.721  13.285   6.383  1.00  0.00
H
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ATOM   4414 3HG1 VAL X 281      -5.474  11.895   5.297  1.00  0.00
H
ATOM   4415 1HG2 VAL X 281      -4.018  13.487   3.103  1.00  0.00
H
ATOM   4416 2HG2 VAL X 281      -5.317  12.312   2.783  1.00  0.00
H
ATOM   4417 3HG2 VAL X 281      -5.456  13.982   2.179  1.00  0.00
H
ATOM   4418  N   TRP X 282      -8.236  15.143   5.784  1.00  0.00
N
ATOM   4419  CA  TRP X 282      -8.852  15.515   7.053  1.00  0.00
C
ATOM   4420  C   TRP X 282     -10.096  14.683   7.333  1.00  0.00
C
ATOM   4421  O   TRP X 282     -10.337  14.270   8.468  1.00  0.00
O
ATOM   4422  CB  TRP X 282      -9.208  17.004   7.057  1.00  0.00
C
ATOM   4423  CG  TRP X 282      -9.934  17.441   8.291  1.00  0.00
C
ATOM   4424  CD1 TRP X 282     -11.245  17.811   8.379  1.00  0.00
C
ATOM   4425  CD2 TRP X 282      -9.396  17.555   9.614  1.00  0.00
C
ATOM   4426  CE2 TRP X 282     -10.436  17.999  10.451  1.00  0.00
C
ATOM   4427  CE3 TRP X 282      -8.132  17.324  10.171  1.00  0.00
C
ATOM   4428  NE1 TRP X 282     -11.554  18.149   9.673  1.00  0.00
N
ATOM   4429  CZ2 TRP X 282     -10.254  18.217  11.808  1.00  0.00
C
ATOM   4430  CZ3 TRP X 282      -7.951  17.542  11.532  1.00  0.00
C
ATOM   4431  CH2 TRP X 282      -8.982  17.975  12.328  1.00  0.00
C
ATOM   4432  H   TRP X 282      -8.021  15.857   5.102  1.00  0.00
H
ATOM   4433  HA  TRP X 282      -8.159  15.321   7.872  1.00  0.00
H
ATOM   4434 1HB  TRP X 282      -8.304  17.608   6.997  1.00  0.00
H
ATOM   4435 2HB  TRP X 282      -9.857  17.237   6.213  1.00  0.00
H
ATOM   4436  HD1 TRP X 282     -11.826  17.786   7.459  1.00  0.00
H
ATOM   4437  HE1 TRP X 282     -12.459  18.458   9.999  1.00  0.00
H
ATOM   4438  HE3 TRP X 282      -7.280  16.977   9.587  1.00  0.00
H
ATOM   4439  HZ2 TRP X 282     -11.100  18.562  12.403  1.00  0.00
H
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ATOM   4440  HZ3 TRP X 282      -6.961  17.359  11.953  1.00  0.00
H
ATOM   4441  HH2 TRP X 282      -8.798  18.134  13.390  1.00  0.00
H
ATOM   4442  N   VAL X 283     -10.878  14.433   6.292  1.00  0.00
N
ATOM   4443  CA  VAL X 283     -12.100  13.644   6.415  1.00  0.00
C
ATOM   4444  C   VAL X 283     -11.827  12.167   6.140  1.00  0.00
C
ATOM   4445  O   VAL X 283     -12.057  11.302   6.991  1.00  0.00
O
ATOM   4446  CB  VAL X 283     -13.195  14.144   5.455  1.00  0.00
C
ATOM   4447  CG1 VAL X 283     -14.434  13.268   5.557  1.00  0.00
C
ATOM   4448  CG2 VAL X 283     -13.543  15.594   5.752  1.00  0.00
C
ATOM   4449  H   VAL X 283     -10.620  14.799   5.386  1.00  0.00
H
ATOM   4450  HA  VAL X 283     -12.491  13.674   7.432  1.00  0.00
H
ATOM   4451  HB  VAL X 283     -12.812  14.114   4.434  1.00  0.00
H
ATOM   4452 1HG1 VAL X 283     -15.198  13.635   4.870  1.00  0.00
H
ATOM   4453 2HG1 VAL X 283     -14.178  12.241   5.296  1.00  0.00
H
ATOM   4454 3HG1 VAL X 283     -14.819  13.300   6.576  1.00  0.00
H
ATOM   4455 1HG2 VAL X 283     -14.318  15.933   5.063  1.00  0.00
H
ATOM   4456 2HG2 VAL X 283     -13.907  15.677   6.777  1.00  0.00
H
ATOM   4457 3HG2 VAL X 283     -12.656  16.215   5.629  1.00  0.00
H
ATOM   4458  N   THR X 284     -11.330  11.887   4.942  1.00  0.00
N
ATOM   4459  CA  THR X 284     -11.059  10.519   4.526  1.00  0.00
C
ATOM   4460  C   THR X 284     -10.267   9.658   5.500  1.00  0.00
C
ATOM   4461  O   THR X 284     -10.537   8.464   5.631  1.00  0.00
O
ATOM   4462  CB  THR X 284     -10.290  10.474   3.192  1.00  0.00
C
ATOM   4463  CG2 THR X 284      -9.969   9.038   2.809  1.00  0.00
C
ATOM   4464  OG1 THR X 284     -11.083  11.075   2.160  1.00  0.00
O
ATOM   4465  H   THR X 284     -11.134  12.644   4.302  1.00  0.00
H
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ATOM   4466  HA  THR X 284     -11.998   9.977   4.405  1.00  0.00
H
ATOM   4467  HB  THR X 284      -9.363  11.037   3.299  1.00  0.00
H
ATOM   4468  HG1 THR X 284     -10.601  11.045   1.331  1.00  0.00
H
ATOM   4469 1HG2 THR X 284      -9.425   9.027   1.865  1.00  0.00
H
ATOM   4470 2HG2 THR X 284      -9.355   8.583   3.587  1.00  0.00
H
ATOM   4471 3HG2 THR X 284     -10.894   8.476   2.700  1.00  0.00
H
ATOM   4472  N   ALA X 285      -9.292  10.240   6.185  1.00  0.00
N
ATOM   4473  CA  ALA X 285      -8.483   9.441   7.097  1.00  0.00
C
ATOM   4474  C   ALA X 285      -9.139   9.186   8.449  1.00  0.00
C
ATOM   4475  O   ALA X 285      -8.680   8.333   9.203  1.00  0.00
O
ATOM   4476  CB  ALA X 285      -7.130  10.100   7.321  1.00  0.00
C
ATOM   4477  H   ALA X 285      -9.111  11.228   6.076  1.00  0.00
H
ATOM   4478  HA  ALA X 285      -8.323   8.458   6.652  1.00  0.00
H
ATOM   4479 1HB  ALA X 285      -6.539   9.490   8.005  1.00  0.00
H
ATOM   4480 2HB  ALA X 285      -6.606  10.189   6.370  1.00  0.00
H
ATOM   4481 3HB  ALA X 285      -7.274  11.088   7.751  1.00  0.00
H
ATOM   4482  N   THR X 286     -10.212   9.925   8.782  1.00  0.00
N
ATOM   4483  CA  THR X 286     -10.860   9.680  10.075  1.00  0.00
C
ATOM   4484  C   THR X 286     -12.140   8.878   9.854  1.00  0.00
C
ATOM   4485  O   THR X 286     -12.741   8.365  10.798  1.00  0.00
O
ATOM   4486  CB  THR X 286     -11.181  10.996  10.804  1.00  0.00
C
ATOM   4487  CG2 THR X 286      -9.909  11.792  11.054  1.00  0.00
C
ATOM   4488  OG1 THR X 286     -12.082  11.780  10.010  1.00  0.00
O
ATOM   4489  H   THR X 286     -10.564  10.634   8.155  1.00  0.00
H
ATOM   4490  HA  THR X 286     -10.206   9.079  10.707  1.00  0.00
H
ATOM   4491  HB  THR X 286     -11.656  10.767  11.757  1.00  0.00
H
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ATOM   4492  HG1 THR X 286     -11.673  11.976   9.164  1.00  0.00
H
ATOM   4493 1HG2 THR X 286     -10.155  12.720  11.571  1.00  0.00
H
ATOM   4494 2HG2 THR X 286      -9.226  11.203  11.667  1.00  0.00
H
ATOM   4495 3HG2 THR X 286      -9.432  12.022  10.101  1.00  0.00
H
ATOM   4496  N   PHE X 287     -12.549   8.769   8.594  1.00  0.00
N
ATOM   4497  CA  PHE X 287     -13.750   8.015   8.236  1.00  0.00
C
ATOM   4498  C   PHE X 287     -13.616   6.572   8.720  1.00  0.00
C
ATOM   4499  O   PHE X 287     -14.419   6.096   9.525  1.00  0.00
O
ATOM   4500  CB  PHE X 287     -13.979   8.064   6.725  1.00  0.00
C
ATOM   4501  CG  PHE X 287     -15.099   7.179   6.253  1.00  0.00
C
ATOM   4502  CD1 PHE X 287     -16.420   7.580   6.384  1.00  0.00
C
ATOM   4503  CD2 PHE X 287     -14.832   5.946   5.677  1.00  0.00
C
ATOM   4504  CE1 PHE X 287     -17.450   6.768   5.950  1.00  0.00
C
ATOM   4505  CE2 PHE X 287     -15.861   5.132   5.242  1.00  0.00
C
ATOM   4506  CZ  PHE X 287     -17.171   5.543   5.379  1.00  0.00
C
ATOM   4507  H   PHE X 287     -12.015   9.220   7.864  1.00  0.00
H
ATOM   4508  HA  PHE X 287     -14.620   8.445   8.735  1.00  0.00
H
ATOM   4509 1HB  PHE X 287     -14.231   9.078   6.415  1.00  0.00
H
ATOM   4510 2HB  PHE X 287     -13.082   7.738   6.199  1.00  0.00
H
ATOM   4511  HD1 PHE X 287     -16.641   8.549   6.834  1.00  0.00
H
ATOM   4512  HD2 PHE X 287     -13.798   5.622   5.570  1.00  0.00
H
ATOM   4513  HE1 PHE X 287     -18.484   7.095   6.061  1.00  0.00
H
ATOM   4514  HE2 PHE X 287     -15.638   4.166   4.792  1.00  0.00
H
ATOM   4515  HZ  PHE X 287     -17.984   4.903   5.039  1.00  0.00
H
ATOM   4516  N   PRO X 288     -12.595   5.888   8.218  1.00  0.00
N
ATOM   4517  CA  PRO X 288     -12.331   4.499   8.577  1.00  0.00
C
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ATOM   4518  C   PRO X 288     -12.200   4.351  10.097  1.00  0.00
C
ATOM   4519  O   PRO X 288     -12.595   3.335  10.670  1.00  0.00
O
ATOM   4520  CB  PRO X 288     -11.024   4.163   7.841  1.00  0.00
C
ATOM   4521  CG  PRO X 288     -11.002   5.079   6.649  1.00  0.00
C
ATOM   4522  CD  PRO X 288     -11.523   6.461   7.393  1.00  0.00
C
ATOM   4523  HA  PRO X 288     -13.077   3.917   8.263  1.00  0.00
H
ATOM   4524 1HB  PRO X 288     -10.407   4.487   8.434  1.00  0.00
H
ATOM   4525 2HB  PRO X 288     -11.194   3.364   7.554  1.00  0.00
H
ATOM   4526 1HG  PRO X 288     -10.800   5.858   6.913  1.00  0.00
H
ATOM   4527 2HG  PRO X 288     -10.724   4.574   5.910  1.00  0.00
H
ATOM   4528 1HD  PRO X 288     -11.359   7.312   7.791  1.00  0.00
H
ATOM   4529 2HD  PRO X 288     -11.898   6.445   6.517  1.00  0.00
H
ATOM   4530  N   TYR X 289     -11.648   5.372  10.750  1.00  0.00
N
ATOM   4531  CA  TYR X 289     -11.472   5.342  12.199  1.00  0.00
C
ATOM   4532  C   TYR X 289     -12.817   5.211  12.908  1.00  0.00
C
ATOM   4533  O   TYR X 289     -12.982   4.375  13.799  1.00  0.00
O
ATOM   4534  CB  TYR X 289     -10.742   6.601  12.675  1.00  0.00
C
ATOM   4535  CG  TYR X 289      -9.284   6.650  12.281  1.00  0.00
C
ATOM   4536  CD1 TYR X 289      -8.668   5.558  11.687  1.00  0.00
C
ATOM   4537  CD2 TYR X 289      -8.527   7.792  12.501  1.00  0.00
C
ATOM   4538  CE1 TYR X 289      -7.335   5.598  11.326  1.00  0.00
C
ATOM   4539  CE2 TYR X 289      -7.193   7.842  12.144  1.00  0.00
C
ATOM   4540  CZ  TYR X 289      -6.601   6.745  11.555  1.00  0.00
C
ATOM   4541  OH  TYR X 289      -5.274   6.790  11.195  1.00  0.00
O
ATOM   4542  H   TYR X 289     -11.345   6.185  10.231  1.00  0.00
H
ATOM   4543  HA  TYR X 289     -10.882   4.471  12.482  1.00  0.00
H
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ATOM   4544 1HB  TYR X 289     -11.264   7.457  12.246  1.00  0.00
H
ATOM   4545 2HB  TYR X 289     -10.827   6.630  13.760  1.00  0.00
H
ATOM   4546  HD1 TYR X 289      -9.255   4.657  11.507  1.00  0.00
H
ATOM   4547  HD2 TYR X 289      -8.999   8.656  12.966  1.00  0.00
H
ATOM   4548  HE1 TYR X 289      -6.865   4.733  10.859  1.00  0.00
H
ATOM   4549  HE2 TYR X 289      -6.614   8.748  12.326  1.00  0.00
H
ATOM   4550  HH  TYR X 289      -4.964   5.975  10.795  1.00  0.00
H
ATOM   4551  N   ILE X 290     -13.779   6.033  12.499  1.00  0.00
N
ATOM   4552  CA  ILE X 290     -15.107   6.014  13.105  1.00  0.00
C
ATOM   4553  C   ILE X 290     -15.872   4.731  12.803  1.00  0.00
C
ATOM   4554  O   ILE X 290     -16.533   4.171  13.684  1.00  0.00
O
ATOM   4555  CB  ILE X 290     -15.960   7.207  12.634  1.00  0.00
C
ATOM   4556  CG1 ILE X 290     -15.377   8.520  13.161  1.00  0.00
C
ATOM   4557  CG2 ILE X 290     -17.403   7.041  13.086  1.00  0.00
C
ATOM   4558  CD1 ILE X 290     -15.979   9.753  12.525  1.00  0.00
C
ATOM   4559  H   ILE X 290     -13.585   6.686  11.753  1.00  0.00
H
ATOM   4560  HA  ILE X 290     -15.034   6.027  14.192  1.00  0.00
H
ATOM   4561  HB  ILE X 290     -15.923   7.262  11.546  1.00  0.00
H
ATOM   4562 1HG1 ILE X 290     -15.552   8.544  14.235  1.00  0.00
H
ATOM   4563 2HG1 ILE X 290     -14.305   8.500  12.968  1.00  0.00
H
ATOM   4564 1HG2 ILE X 290     -17.992   7.892  12.745  1.00  0.00
H
ATOM   4565 2HG2 ILE X 290     -17.812   6.124  12.663  1.00  0.00
H
ATOM   4566 3HG2 ILE X 290     -17.439   6.987  14.174  1.00  0.00
H
ATOM   4567 1HD1 ILE X 290     -15.516  10.645  12.948  1.00  0.00
H
ATOM   4568 2HD1 ILE X 290     -15.803   9.731  11.449  1.00  0.00
H
ATOM   4569 3HD1 ILE X 290     -17.051   9.778  12.716  1.00  0.00
H
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ATOM   4570  N   ILE X 291     -15.788   4.262  11.563  1.00  0.00
N
ATOM   4571  CA  ILE X 291     -16.468   3.033  11.175  1.00  0.00
C
ATOM   4572  C   ILE X 291     -15.918   1.856  11.980  1.00  0.00
C
ATOM   4573  O   ILE X 291     -16.676   1.087  12.568  1.00  0.00
O
ATOM   4574  CB  ILE X 291     -16.313   2.752   9.669  1.00  0.00
C
ATOM   4575  CG1 ILE X 291     -16.965   3.867   8.848  1.00  0.00
C
ATOM   4576  CG2 ILE X 291     -16.918   1.403   9.315  1.00  0.00
C
ATOM   4577  CD1 ILE X 291     -18.453   4.005   9.079  1.00  0.00
C
ATOM   4578  H   ILE X 291     -15.245   4.767  10.878  1.00  0.00
H
ATOM   4579  HA  ILE X 291     -17.526   3.084  11.426  1.00  0.00
H
ATOM   4580  HB  ILE X 291     -15.254   2.753   9.416  1.00  0.00
H
ATOM   4581 1HG1 ILE X 291     -16.469   4.800   9.116  1.00  0.00
H
ATOM   4582 2HG1 ILE X 291     -16.780   3.647   7.797  1.00  0.00
H
ATOM   4583 1HG2 ILE X 291     -16.802   1.221   8.247  1.00  0.00
H
ATOM   4584 2HG2 ILE X 291     -16.412   0.619   9.875  1.00  0.00
H
ATOM   4585 3HG2 ILE X 291     -17.980   1.401   9.569  1.00  0.00
H
ATOM   4586 1HD1 ILE X 291     -18.845   4.816   8.463  1.00  0.00
H
ATOM   4587 2HD1 ILE X 291     -18.952   3.074   8.811  1.00  0.00
H
ATOM   4588 3HD1 ILE X 291     -18.641   4.228  10.129  1.00  0.00
H
ATOM   4589  N   LEU X 292     -14.594   1.730  12.007  1.00  0.00
N
ATOM   4590  CA  LEU X 292     -13.952   0.640  12.733  1.00  0.00
C
ATOM   4591  C   LEU X 292     -14.298   0.663  14.222  1.00  0.00
C
ATOM   4592  O   LEU X 292     -14.535  -0.379  14.828  1.00  0.00
O
ATOM   4593  CB  LEU X 292     -12.431   0.705  12.549  1.00  0.00
C
ATOM   4594  CG  LEU X 292     -11.927   0.340  11.147  1.00  0.00
C
ATOM   4595  CD1 LEU X 292     -10.438   0.639  11.034  1.00  0.00
C
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ATOM   4596  CD2 LEU X 292     -12.205  -1.129  10.871  1.00  0.00
C
ATOM   4597  H   LEU X 292     -14.023   2.403  11.515  1.00  0.00
H
ATOM   4598  HA  LEU X 292     -14.314  -0.315  12.354  1.00  0.00
H
ATOM   4599 1HB  LEU X 292     -12.275   1.765  12.741  1.00  0.00
H
ATOM   4600 2HB  LEU X 292     -11.907   0.119  13.305  1.00  0.00
H
ATOM   4601  HG  LEU X 292     -12.504   0.928  10.433  1.00  0.00
H
ATOM   4602 1HD1 LEU X 292     -10.090   0.378  10.035  1.00  0.00
H
ATOM   4603 2HD1 LEU X 292     -10.264   1.701  11.211  1.00  0.00
H
ATOM   4604 3HD1 LEU X 292      -9.893   0.053  11.773  1.00  0.00
H
ATOM   4605 1HD2 LEU X 292     -11.847  -1.386   9.874  1.00  0.00
H
ATOM   4606 2HD2 LEU X 292     -11.691  -1.743  11.611  1.00  0.00
H
ATOM   4607 3HD2 LEU X 292     -13.278  -1.314  10.930  1.00  0.00
H
ATOM   4608  N   SER X 293     -14.323   1.850  14.811  1.00  0.00
N
ATOM   4609  CA  SER X 293     -14.645   1.956  16.233  1.00  0.00
C
ATOM   4610  C   SER X 293     -16.012   1.326  16.499  1.00  0.00
C
ATOM   4611  O   SER X 293     -16.163   0.517  17.415  1.00  0.00
O
ATOM   4612  CB  SER X 293     -14.617   3.409  16.668  1.00  0.00
C
ATOM   4613  OG  SER X 293     -13.321   3.942  16.641  1.00  0.00
O
ATOM   4614  H   SER X 293     -14.118   2.682  14.277  1.00  0.00
H
ATOM   4615  HA  SER X 293     -13.886   1.521  16.883  1.00  0.00
H
ATOM   4616 1HB  SER X 293     -15.252   3.986  15.996  1.00  0.00
H
ATOM   4617 2HB  SER X 293     -15.008   3.478  17.681  1.00  0.00
H
ATOM   4618  HG  SER X 293     -12.973   3.890  15.749  1.00  0.00
H
ATOM   4619  N   VAL X 294     -17.001   1.681  15.686  1.00  0.00
N
ATOM   4620  CA  VAL X 294     -18.340   1.126  15.847  1.00  0.00
C
ATOM   4621  C   VAL X 294     -18.341  -0.384  15.621  1.00  0.00
C
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ATOM   4622  O   VAL X 294     -19.022  -1.130  16.327  1.00  0.00
O
ATOM   4623  CB  VAL X 294     -19.342   1.781  14.877  1.00  0.00
C
ATOM   4624  CG1 VAL X 294     -20.684   1.067  14.937  1.00  0.00
C
ATOM   4625  CG2 VAL X 294     -19.511   3.258  15.204  1.00  0.00
C
ATOM   4626  H   VAL X 294     -16.823   2.343  14.946  1.00  0.00
H
ATOM   4627  HA  VAL X 294     -18.704   1.258  16.866  1.00  0.00
H
ATOM   4628  HB  VAL X 294     -18.944   1.724  13.864  1.00  0.00
H
ATOM   4629 1HG1 VAL X 294     -21.381   1.544  14.246  1.00  0.00
H
ATOM   4630 2HG1 VAL X 294     -20.554   0.023  14.656  1.00  0.00
H
ATOM   4631 3HG1 VAL X 294     -21.082   1.125  15.950  1.00  0.00
H
ATOM   4632 1HG2 VAL X 294     -20.221   3.705  14.510  1.00  0.00
H
ATOM   4633 2HG2 VAL X 294     -19.882   3.364  16.223  1.00  0.00
H
ATOM   4634 3HG2 VAL X 294     -18.549   3.762  15.113  1.00  0.00
H
ATOM   4635  N   LEU X 295     -17.576  -0.838  14.630  1.00  0.00
N
ATOM   4636  CA  LEU X 295     -17.506  -2.262  14.338  1.00  0.00
C
ATOM   4637  C   LEU X 295     -16.936  -3.053  15.503  1.00  0.00
C
ATOM   4638  O   LEU X 295     -17.382  -4.162  15.781  1.00  0.00
O
ATOM   4639  CB  LEU X 295     -16.664  -2.503  13.078  1.00  0.00
C
ATOM   4640  CG  LEU X 295     -17.265  -1.957  11.777  1.00  0.00
C
ATOM   4641  CD1 LEU X 295     -16.264  -2.098  10.639  1.00  0.00
C
ATOM   4642  CD2 LEU X 295     -18.551  -2.704  11.457  1.00  0.00
C
ATOM   4643  H   LEU X 295     -17.039  -0.188  14.075  1.00  0.00
H
ATOM   4644  HA  LEU X 295     -18.511  -2.650  14.172  1.00  0.00
H
ATOM   4645 1HB  LEU X 295     -15.776  -1.934  13.348  1.00  0.00
H
ATOM   4646 2HB  LEU X 295     -16.401  -3.555  12.964  1.00  0.00
H
ATOM   4647  HG  LEU X 295     -17.522  -0.912  11.952  1.00  0.00
H
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ATOM   4648 1HD1 LEU X 295     -16.698  -1.707   9.720  1.00  0.00
H
ATOM   4649 2HD1 LEU X 295     -15.360  -1.536  10.879  1.00  0.00
H
ATOM   4650 3HD1 LEU X 295     -16.012  -3.149  10.504  1.00  0.00
H
ATOM   4651 1HD2 LEU X 295     -18.978  -2.314  10.532  1.00  0.00
H
ATOM   4652 2HD2 LEU X 295     -18.336  -3.767  11.339  1.00  0.00
H
ATOM   4653 3HD2 LEU X 295     -19.264  -2.569  12.271  1.00  0.00
H
ATOM   4654  N   LEU X 296     -15.945  -2.496  16.192  1.00  0.00
N
ATOM   4655  CA  LEU X 296     -15.372  -3.190  17.335  1.00  0.00
C
ATOM   4656  C   LEU X 296     -16.437  -3.345  18.419  1.00  0.00
C
ATOM   4657  O   LEU X 296     -16.566  -4.404  19.030  1.00  0.00
O
ATOM   4658  CB  LEU X 296     -14.147  -2.429  17.858  1.00  0.00
C
ATOM   4659  CG  LEU X 296     -12.929  -2.431  16.926  1.00  0.00
C
ATOM   4660  CD1 LEU X 296     -11.871  -1.468  17.447  1.00  0.00
C
ATOM   4661  CD2 LEU X 296     -12.369  -3.843  16.824  1.00  0.00
C
ATOM   4662  H   LEU X 296     -15.590  -1.590  15.922  1.00  0.00
H
ATOM   4663  HA  LEU X 296     -15.064  -4.192  17.036  1.00  0.00
H
ATOM   4664 1HB  LEU X 296     -14.572  -1.428  17.914  1.00  0.00
H
ATOM   4665 2HB  LEU X 296     -13.863  -2.760  18.857  1.00  0.00
H
ATOM   4666  HG  LEU X 296     -13.278  -2.138  15.936  1.00  0.00
H
ATOM   4667 1HD1 LEU X 296     -11.009  -1.476  16.778  1.00  0.00
H
ATOM   4668 2HD1 LEU X 296     -12.285  -0.460  17.490  1.00  0.00
H
ATOM   4669 3HD1 LEU X 296     -11.558  -1.775  18.445  1.00  0.00
H
ATOM   4670 1HD2 LEU X 296     -11.504  -3.843  16.160  1.00  0.00
H
ATOM   4671 2HD2 LEU X 296     -12.070  -4.189  17.814  1.00  0.00
H
ATOM   4672 3HD2 LEU X 296     -13.133  -4.509  16.424  1.00  0.00
H
ATOM   4673  N   VAL X 297     -17.204  -2.286  18.640  1.00  0.00
N
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ATOM   4674  CA  VAL X 297     -18.263  -2.300  19.648  1.00  0.00
C
ATOM   4675  C   VAL X 297     -19.294  -3.386  19.337  1.00  0.00
C
ATOM   4676  O   VAL X 297     -19.768  -4.081  20.239  1.00  0.00
O
ATOM   4677  CB  VAL X 297     -18.973  -0.936  19.743  1.00  0.00
C
ATOM   4678  CG1 VAL X 297     -20.192  -1.032  20.646  1.00  0.00
C
ATOM   4679  CG2 VAL X 297     -18.014   0.129  20.254  1.00  0.00
C
ATOM   4680  H   VAL X 297     -17.053  -1.447  18.098  1.00  0.00
H
ATOM   4681  HA  VAL X 297     -17.869  -2.557  20.632  1.00  0.00
H
ATOM   4682  HB  VAL X 297     -19.283  -0.629  18.745  1.00  0.00
H
ATOM   4683 1HG1 VAL X 297     -20.681  -0.059  20.702  1.00  0.00
H
ATOM   4684 2HG1 VAL X 297     -20.889  -1.765  20.241  1.00  0.00
H
ATOM   4685 3HG1 VAL X 297     -19.881  -1.336  21.646  1.00  0.00
H
ATOM   4686 1HG2 VAL X 297     -18.531   1.085  20.313  1.00  0.00
H
ATOM   4687 2HG2 VAL X 297     -17.654  -0.152  21.244  1.00  0.00
H
ATOM   4688 3HG2 VAL X 297     -17.169   0.216  19.571  1.00  0.00
H
ATOM   4689  N   ARG X 298     -19.641  -3.540  18.064  1.00  0.00
N
ATOM   4690  CA  ARG X 298     -20.612  -4.555  17.687  1.00  0.00
C
ATOM   4691  C   ARG X 298     -20.059  -5.954  17.947  1.00  0.00
C
ATOM   4692  O   ARG X 298     -20.767  -6.829  18.439  1.00  0.00
O
ATOM   4693  CB  ARG X 298     -21.083  -4.392  16.250  1.00  0.00
C
ATOM   4694  CG  ARG X 298     -21.962  -3.177  15.997  1.00  0.00
C
ATOM   4695  CD  ARG X 298     -22.413  -3.029  14.590  1.00  0.00
C
ATOM   4696  NE  ARG X 298     -23.259  -1.873  14.348  1.00  0.00
N
ATOM   4697  CZ  ARG X 298     -24.575  -1.812  14.634  1.00  0.00
C
ATOM   4698  NH1 ARG X 298     -25.205  -2.850  15.138  1.00  0.00
N
ATOM   4699  NH2 ARG X 298     -25.220  -0.689  14.375  1.00  0.00
N
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ATOM   4700  H   ARG X 298     -19.228  -2.950  17.356  1.00  0.00
H
ATOM   4701  HA  ARG X 298     -21.509  -4.453  18.299  1.00  0.00
H
ATOM   4702 1HB  ARG X 298     -20.191  -4.327  15.628  1.00  0.00
H
ATOM   4703 2HB  ARG X 298     -21.638  -5.295  15.992  1.00  0.00
H
ATOM   4704 1HG  ARG X 298     -22.848  -3.254  16.628  1.00  0.00
H
ATOM   4705 2HG  ARG X 298     -21.400  -2.283  16.267  1.00  0.00
H
ATOM   4706 1HD  ARG X 298     -21.538  -2.935  13.946  1.00  0.00
H
ATOM   4707 2HD  ARG X 298     -22.979  -3.915  14.304  1.00  0.00
H
ATOM   4708  HE  ARG X 298     -23.024  -0.974  13.949  1.00  0.00
H
ATOM   4709 1HH1 ARG X 298     -24.702  -3.708  15.315  1.00  0.00
H
ATOM   4710 2HH1 ARG X 298     -26.192  -2.785  15.347  1.00  0.00
H
ATOM   4711 1HH2 ARG X 298     -24.723   0.093  13.970  1.00  0.00
H
ATOM   4712 2HH2 ARG X 298     -26.205  -0.617  14.578  1.00  0.00
H
ATOM   4713  N   GLY X 299     -18.790  -6.166  17.613  1.00  0.00
N
ATOM   4714  CA  GLY X 299     -18.163  -7.469  17.820  1.00  0.00
C
ATOM   4715  C   GLY X 299     -18.026  -7.793  19.306  1.00  0.00
C
ATOM   4716  O   GLY X 299     -17.994  -8.963  19.693  1.00  0.00
O
ATOM   4717  H   GLY X 299     -18.250  -5.415  17.209  1.00  0.00
H
ATOM   4718 1HA  GLY X 299     -18.773  -8.237  17.346  1.00  0.00
H
ATOM   4719 2HA  GLY X 299     -17.172  -7.463  17.367  1.00  0.00
H
ATOM   4720  N   ALA X 300     -17.948  -6.755  20.127  1.00  0.00
N
ATOM   4721  CA  ALA X 300     -17.806  -6.929  21.570  1.00  0.00
C
ATOM   4722  C   ALA X 300     -18.971  -7.680  22.205  1.00  0.00
C
ATOM   4723  O   ALA X 300     -18.863  -8.163  23.331  1.00  0.00
O
ATOM   4724  CB  ALA X 300     -17.645  -5.579  22.254  1.00  0.00
C
ATOM   4725  H   ALA X 300     -17.988  -5.821  19.745  1.00  0.00
H
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ATOM   4726  HA  ALA X 300     -16.914  -7.526  21.764  1.00  0.00
H
ATOM   4727 1HB  ALA X 300     -17.540  -5.727  23.329  1.00  0.00
H
ATOM   4728 2HB  ALA X 300     -16.756  -5.080  21.868  1.00  0.00
H
ATOM   4729 3HB  ALA X 300     -18.521  -4.965  22.057  1.00  0.00
H
ATOM   4730  N   THR X 301     -20.084  -7.785  21.483  1.00  0.00
N
ATOM   4731  CA  THR X 301     -21.254  -8.498  21.977  1.00  0.00
C
ATOM   4732  C   THR X 301     -21.025 -10.005  21.970  1.00  0.00
C
ATOM   4733  O   THR X 301     -21.778 -10.758  22.590  1.00  0.00
O
ATOM   4734  CB  THR X 301     -22.507  -8.176  21.143  1.00  0.00
C
ATOM   4735  CG2 THR X 301     -22.756  -6.675  21.112  1.00  0.00
C
ATOM   4736  OG1 THR X 301     -22.328  -8.653  19.803  1.00  0.00
O
ATOM   4737  H   THR X 301     -20.118  -7.358  20.568  1.00  0.00
H
ATOM   4738  HA  THR X 301     -21.445  -8.220  23.015  1.00  0.00
H
ATOM   4739  HB  THR X 301     -23.368  -8.676  21.586  1.00  0.00
H
ATOM   4740  HG1 THR X 301     -23.111  -8.451  19.284  1.00  0.00
H
ATOM   4741 1HG2 THR X 301     -23.647  -6.467  20.517  1.00  0.00
H
ATOM   4742 2HG2 THR X 301     -22.905  -6.311  22.128  1.00  0.00
H
ATOM   4743 3HG2 THR X 301     -21.898  -6.174  20.668  1.00  0.00
H
ATOM   4744  N   LEU X 302     -19.985 -10.435  21.267  1.00  0.00
N
ATOM   4745  CA  LEU X 302     -19.665 -11.854  21.169  1.00  0.00
C
ATOM   4746  C   LEU X 302     -19.068 -12.377  22.468  1.00  0.00
C
ATOM   4747  O   LEU X 302     -18.290 -11.685  23.128  1.00  0.00
O
ATOM   4748  CB  LEU X 302     -18.700 -12.100  20.004  1.00  0.00
C
ATOM   4749  CG  LEU X 302     -19.257 -11.771  18.612  1.00  0.00
C
ATOM   4750  CD1 LEU X 302     -18.155 -11.883  17.568  1.00  0.00
C
ATOM   4751  CD2 LEU X 302     -20.405 -12.714  18.289  1.00  0.00
C
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ATOM   4752  H   LEU X 302     -19.402  -9.764  20.788  1.00  0.00
H
ATOM   4753  HA  LEU X 302     -20.578 -12.422  20.999  1.00  0.00
H
ATOM   4754 1HB  LEU X 302     -17.916 -11.392  20.269  1.00  0.00
H
ATOM   4755 2HB  LEU X 302     -18.295 -13.112  20.021  1.00  0.00
H
ATOM   4756  HG  LEU X 302     -19.660 -10.759  18.658  1.00  0.00
H
ATOM   4757 1HD1 LEU X 302     -18.561 -11.648  16.585  1.00  0.00
H
ATOM   4758 2HD1 LEU X 302     -17.355 -11.182  17.807  1.00  0.00
H
ATOM   4759 3HD1 LEU X 302     -17.760 -12.899  17.563  1.00  0.00
H
ATOM   4760 1HD2 LEU X 302     -20.801 -12.478  17.301  1.00  0.00
H
ATOM   4761 2HD2 LEU X 302     -20.046 -13.744  18.301  1.00  0.00
H
ATOM   4762 3HD2 LEU X 302     -21.194 -12.598  19.032  1.00  0.00
H
ATOM   4763  N   PRO X 303     -19.433 -13.600  22.834  1.00  0.00
N
ATOM   4764  CA  PRO X 303     -18.737 -14.326  23.891  1.00  0.00
C
ATOM   4765  C   PRO X 303     -17.387 -14.840  23.409  1.00  0.00
C
ATOM   4766  O   PRO X 303     -17.201 -15.102  22.219  1.00  0.00
O
ATOM   4767  CB  PRO X 303     -19.696 -15.471  24.253  1.00  0.00
C
ATOM   4768  CG  PRO X 303     -20.476 -15.739  22.997  1.00  0.00
C
ATOM   4769  CD  PRO X 303     -20.698 -14.245  22.459  1.00  0.00
C
ATOM   4770  HA  PRO X 303     -18.585 -13.728  24.674  1.00  0.00
H
ATOM   4771 1HB  PRO X 303     -19.106 -16.163  24.350  1.00  0.00
H
ATOM   4772 2HB  PRO X 303     -20.226 -15.074  24.812  1.00  0.00
H
ATOM   4773 1HG  PRO X 303     -19.977 -16.160  22.456  1.00  0.00
H
ATOM   4774 2HG  PRO X 303     -21.374 -15.850  23.240  1.00  0.00
H
ATOM   4775 1HD  PRO X 303     -20.680 -14.245  21.505  1.00  0.00
H
ATOM   4776 2HD  PRO X 303     -21.350 -13.700  22.889  1.00  0.00
H
ATOM   4777  N   GLY X 304     -16.448 -14.984  24.336  1.00  0.00
N
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ATOM   4778  CA  GLY X 304     -15.103 -15.438  24.002  1.00  0.00
C
ATOM   4779  C   GLY X 304     -14.068 -14.354  24.279  1.00  0.00
C
ATOM   4780  O   GLY X 304     -14.364 -13.161  24.180  1.00  0.00
O
ATOM   4781  H   GLY X 304     -16.670 -14.774  25.298  1.00  0.00
H
ATOM   4782 1HA  GLY X 304     -14.864 -16.317  24.601  1.00  0.00
H
ATOM   4783 2HA  GLY X 304     -15.067 -15.700  22.945  1.00  0.00
H
ATOM   4784  N   ALA X 305     -12.864 -14.708  24.767  1.00  0.00
N
ATOM   4785  CA  ALA X 305     -11.830 -13.706  24.991  1.00  0.00
C
ATOM   4786  C   ALA X 305     -10.910 -13.578  23.785  1.00  0.00
C
ATOM   4787  O   ALA X 305     -10.444 -12.486  23.458  1.00  0.00
O
ATOM   4788  CB  ALA X 305     -11.026 -14.043  26.239  1.00  0.00
C
ATOM   4789  H   ALA X 305     -12.676 -15.677  24.978  1.00  0.00
H
ATOM   4790  HA  ALA X 305     -12.307 -12.736  25.138  1.00  0.00
H
ATOM   4791 1HB  ALA X 305     -10.258 -13.285  26.392  1.00  0.00
H
ATOM   4792 2HB  ALA X 305     -11.689 -14.068  27.103  1.00  0.00
H
ATOM   4793 3HB  ALA X 305     -10.554 -15.016  26.115  1.00  0.00
H
ATOM   4794  N   TRP X 306     -10.651 -14.702  23.123  1.00  0.00
N
ATOM   4795  CA  TRP X 306      -9.709 -14.737  22.010  1.00  0.00
C
ATOM   4796  C   TRP X 306      -8.370 -14.133  22.405  1.00  0.00
C
ATOM   4797  O   TRP X 306      -7.790 -13.341  21.663  1.00  0.00
O
ATOM   4798  CB  TRP X 306     -10.282 -13.994  20.802  1.00  0.00
C
ATOM   4799  CG  TRP X 306     -11.386 -14.738  20.111  1.00  0.00
C
ATOM   4800  CD1 TRP X 306     -11.248 -15.802  19.269  1.00  0.00
C
ATOM   4801  CD2 TRP X 306     -12.791 -14.477  20.203  1.00  0.00
C
ATOM   4802  CE2 TRP X 306     -13.445 -15.422  19.390  1.00  0.00
C
ATOM   4803  CE3 TRP X 306     -13.560 -13.535  20.896  1.00  0.00
C
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ATOM   4804  NE1 TRP X 306     -12.480 -16.219  18.829  1.00  0.00
N
ATOM   4805  CZ2 TRP X 306     -14.822 -15.452  19.249  1.00  0.00
C
ATOM   4806  CZ3 TRP X 306     -14.942 -13.566  20.754  1.00  0.00
C
ATOM   4807  CH2 TRP X 306     -15.556 -14.498  19.954  1.00  0.00
C
ATOM   4808  H   TRP X 306     -11.120 -15.553  23.397  1.00  0.00
H
ATOM   4809  HA  TRP X 306      -9.513 -15.770  21.724  1.00  0.00
H
ATOM   4810 1HB  TRP X 306     -10.700 -13.035  21.112  1.00  0.00
H
ATOM   4811 2HB  TRP X 306      -9.504 -13.828  20.059  1.00  0.00
H
ATOM   4812  HD1 TRP X 306     -10.234 -16.150  19.076  1.00  0.00
H
ATOM   4813  HE1 TRP X 306     -12.649 -16.987  18.196  1.00  0.00
H
ATOM   4814  HE3 TRP X 306     -13.126 -12.776  21.545  1.00  0.00
H
ATOM   4815  HZ2 TRP X 306     -15.269 -16.209  18.603  1.00  0.00
H
ATOM   4816  HZ3 TRP X 306     -15.530 -12.826  21.299  1.00  0.00
H
ATOM   4817  HH2 TRP X 306     -16.643 -14.488  19.871  1.00  0.00
H
ATOM   4818  N   ARG X 307      -7.876 -14.515  23.581  1.00  0.00
N
ATOM   4819  CA  ARG X 307      -6.617 -13.981  24.092  1.00  0.00
C
ATOM   4820  C   ARG X 307      -5.500 -15.011  23.981  1.00  0.00
C
ATOM   4821  O   ARG X 307      -4.385 -14.785  24.452  1.00  0.00
O
ATOM   4822  CB  ARG X 307      -6.754 -13.456  25.514  1.00  0.00
C
ATOM   4823  CG  ARG X 307      -7.622 -12.216  25.657  1.00  0.00
C
ATOM   4824  CD  ARG X 307      -7.762 -11.723  27.051  1.00  0.00
C
ATOM   4825  NE  ARG X 307      -8.616 -10.556  27.194  1.00  0.00
N
ATOM   4826  CZ  ARG X 307      -8.936  -9.983  28.371  1.00  0.00
C
ATOM   4827  NH1 ARG X 307      -8.510 -10.485  29.508  1.00  0.00
N
ATOM   4828  NH2 ARG X 307      -9.713  -8.913  28.353  1.00  0.00
N
ATOM   4829  H   ARG X 307      -8.384 -15.192  24.132  1.00  0.00
H
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ATOM   4830  HA  ARG X 307      -6.310 -13.123  23.495  1.00  0.00
H
ATOM   4831 1HB  ARG X 307      -7.175 -14.262  26.113  1.00  0.00
H
ATOM   4832 2HB  ARG X 307      -5.747 -13.229  25.866  1.00  0.00
H
ATOM   4833 1HG  ARG X 307      -7.186 -11.416  25.059  1.00  0.00
H
ATOM   4834 2HG  ARG X 307      -8.620 -12.448  25.280  1.00  0.00
H
ATOM   4835 1HD  ARG X 307      -8.187 -12.516  27.666  1.00  0.00
H
ATOM   4836 2HD  ARG X 307      -6.776 -11.457  27.432  1.00  0.00
H
ATOM   4837  HE  ARG X 307      -9.084 -10.008  26.484  1.00  0.00
H
ATOM   4838 1HH1 ARG X 307      -7.932 -11.313  29.506  1.00  0.00
H
ATOM   4839 2HH1 ARG X 307      -8.763 -10.041  30.379  1.00  0.00
H
ATOM   4840 1HH2 ARG X 307     -10.047  -8.549  27.470  1.00  0.00
H
ATOM   4841 2HH2 ARG X 307      -9.970  -8.465  29.220  1.00  0.00
H
ATOM   4842  N   GLY X 308      -5.805 -16.145  23.355  1.00  0.00
N
ATOM   4843  CA  GLY X 308      -4.803 -17.171  23.097  1.00  0.00
C
ATOM   4844  C   GLY X 308      -3.626 -16.605  22.308  1.00  0.00
C
ATOM   4845  O   GLY X 308      -2.493 -17.059  22.457  1.00  0.00
O
ATOM   4846  H   GLY X 308      -6.755 -16.298  23.051  1.00  0.00
H
ATOM   4847 1HA  GLY X 308      -4.440 -17.561  24.048  1.00  0.00
H
ATOM   4848 2HA  GLY X 308      -5.260 -17.979  22.525  1.00  0.00
H
ATOM   4849  N   VAL X 309      -3.905 -15.616  21.468  1.00  0.00
N
ATOM   4850  CA  VAL X 309      -2.874 -14.993  20.647  1.00  0.00
C
ATOM   4851  C   VAL X 309      -1.756 -14.415  21.511  1.00  0.00
C
ATOM   4852  O   VAL X 309      -0.624 -14.259  21.055  1.00  0.00
O
ATOM   4853  CB  VAL X 309      -3.457 -13.875  19.761  1.00  0.00
C
ATOM   4854  CG1 VAL X 309      -3.949 -12.718  20.618  1.00  0.00
C
ATOM   4855  CG2 VAL X 309      -2.416 -13.389  18.763  1.00  0.00
C
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ATOM   4856  H   VAL X 309      -4.856 -15.286  21.396  1.00  0.00
H
ATOM   4857  HA  VAL X 309      -2.383 -15.724  20.004  1.00  0.00
H
ATOM   4858  HB  VAL X 309      -4.286 -14.278  19.182  1.00  0.00
H
ATOM   4859 1HG1 VAL X 309      -4.357 -11.938  19.977  1.00  0.00
H
ATOM   4860 2HG1 VAL X 309      -4.726 -13.074  21.295  1.00  0.00
H
ATOM   4861 3HG1 VAL X 309      -3.118 -12.315  21.197  1.00  0.00
H
ATOM   4862 1HG2 VAL X 309      -2.844 -12.600  18.145  1.00  0.00
H
ATOM   4863 2HG2 VAL X 309      -1.550 -13.001  19.301  1.00  0.00
H
ATOM   4864 3HG2 VAL X 309      -2.106 -14.219  18.128  1.00  0.00
H
ATOM   4865  N   LEU X 310      -2.083 -14.100  22.759  1.00  0.00
N
ATOM   4866  CA  LEU X 310      -1.102 -13.569  23.700  1.00  0.00
C
ATOM   4867  C   LEU X 310      -0.355 -14.693  24.408  1.00  0.00
C
ATOM   4868  O   LEU X 310       0.751 -14.492  24.912  1.00  0.00
O
ATOM   4869  CB  LEU X 310      -1.788 -12.656  24.722  1.00  0.00
C
ATOM   4870  CG  LEU X 310      -2.504 -11.435  24.131  1.00  0.00
C
ATOM   4871  CD1 LEU X 310      -3.256 -10.691  25.226  1.00  0.00
C
ATOM   4872  CD2 LEU X 310      -1.486 -10.523  23.462  1.00  0.00
C
ATOM   4873  H   LEU X 310      -3.037 -14.231  23.066  1.00  0.00
H
ATOM   4874  HA  LEU X 310      -0.353 -12.992  23.158  1.00  0.00
H
ATOM   4875 1HB  LEU X 310      -2.518 -13.357  25.125  1.00  0.00
H
ATOM   4876 2HB  LEU X 310      -1.104 -12.350  25.513  1.00  0.00
H
ATOM   4877  HG  LEU X 310      -3.183 -11.798  23.360  1.00  0.00
H
ATOM   4878 1HD1 LEU X 310      -3.762  -9.824  24.796  1.00  0.00
H
ATOM   4879 2HD1 LEU X 310      -3.995 -11.354  25.675  1.00  0.00
H
ATOM   4880 3HD1 LEU X 310      -2.555 -10.358  25.989  1.00  0.00
H
ATOM   4881 1HD2 LEU X 310      -1.996  -9.657  23.041  1.00  0.00
H
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ATOM   4882 2HD2 LEU X 310      -0.752 -10.193  24.199  1.00  0.00
H
ATOM   4883 3HD2 LEU X 310      -0.978 -11.069  22.665  1.00  0.00
H
ATOM   4884  N   PHE X 311      -0.964 -15.874  24.442  1.00  0.00
N
ATOM   4885  CA  PHE X 311      -0.338 -17.039  25.053  1.00  0.00
C
ATOM   4886  C   PHE X 311       0.783 -17.584  24.177  1.00  0.00
C
ATOM   4887  O   PHE X 311       1.616 -18.369  24.633  1.00  0.00
O
ATOM   4888  CB  PHE X 311      -1.380 -18.129  25.316  1.00  0.00
C
ATOM   4889  CG  PHE X 311      -2.492 -17.698  26.229  1.00  0.00
C
ATOM   4890  CD1 PHE X 311      -2.448 -16.466  26.864  1.00  0.00
C
ATOM   4891  CD2 PHE X 311      -3.583 -18.523  26.455  1.00  0.00
C
ATOM   4892  CE1 PHE X 311      -3.470 -16.068  27.704  1.00  0.00
C
ATOM   4893  CE2 PHE X 311      -4.607 -18.128  27.294  1.00  0.00
C
ATOM   4894  CZ  PHE X 311      -4.549 -16.898  27.919  1.00  0.00
C
ATOM   4895  H   PHE X 311      -1.884 -15.966  24.034  1.00  0.00
H
ATOM   4896  HA  PHE X 311       0.119 -16.758  26.003  1.00  0.00
H
ATOM   4897 1HB  PHE X 311      -1.846 -18.436  24.380  1.00  0.00
H
ATOM   4898 2HB  PHE X 311      -0.909 -18.992  25.785  1.00  0.00
H
ATOM   4899  HD1 PHE X 311      -1.594 -15.809  26.694  1.00  0.00
H
ATOM   4900  HD2 PHE X 311      -3.628 -19.494  25.961  1.00  0.00
H
ATOM   4901  HE1 PHE X 311      -3.424 -15.097  28.198  1.00  0.00
H
ATOM   4902  HE2 PHE X 311      -5.459 -18.785  27.462  1.00  0.00
H
ATOM   4903  HZ  PHE X 311      -5.355 -16.586  28.581  1.00  0.00
H
ATOM   4904  N   TYR X 312       0.796 -17.167  22.915  1.00  0.00
N
ATOM   4905  CA  TYR X 312       1.787 -17.649  21.960  1.00  0.00
C
ATOM   4906  C   TYR X 312       2.893 -16.624  21.751  1.00  0.00
C
ATOM   4907  O   TYR X 312       3.634 -16.687  20.766  1.00  0.00
O
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ATOM   4908  CB  TYR X 312       1.122 -17.985  20.622  1.00  0.00
C
ATOM   4909  CG  TYR X 312       0.078 -19.078  20.713  1.00  0.00
C
ATOM   4910  CD1 TYR X 312      -1.259 -18.807  20.468  1.00  0.00
C
ATOM   4911  CD2 TYR X 312       0.436 -20.375  21.044  1.00  0.00
C
ATOM   4912  CE1 TYR X 312      -2.216 -19.801  20.549  1.00  0.00
C
ATOM   4913  CE2 TYR X 312      -0.510 -21.377  21.129  1.00  0.00
C
ATOM   4914  CZ  TYR X 312      -1.837 -21.086  20.881  1.00  0.00
C
ATOM   4915  OH  TYR X 312      -2.784 -22.079  20.963  1.00  0.00
O
ATOM   4916  H   TYR X 312       0.103 -16.499  22.610  1.00  0.00
H
ATOM   4917  HA  TYR X 312       2.267 -18.549  22.345  1.00  0.00
H
ATOM   4918 1HB  TYR X 312       0.657 -17.069  20.254  1.00  0.00
H
ATOM   4919 2HB  TYR X 312       1.912 -18.293  19.938  1.00  0.00
H
ATOM   4920  HD1 TYR X 312      -1.551 -17.790  20.207  1.00  0.00
H
ATOM   4921  HD2 TYR X 312       1.486 -20.600  21.240  1.00  0.00
H
ATOM   4922  HE1 TYR X 312      -3.263 -19.574  20.353  1.00  0.00
H
ATOM   4923  HE2 TYR X 312      -0.209 -22.392  21.392  1.00  0.00
H
ATOM   4924  HH  TYR X 312      -2.412 -22.933  21.199  1.00  0.00
H
ATOM   4925  N   LEU X 313       3.005 -15.680  22.678  1.00  0.00
N
ATOM   4926  CA  LEU X 313       4.096 -14.712  22.661  1.00  0.00
C
ATOM   4927  C   LEU X 313       5.266 -15.188  23.510  1.00  0.00
C
ATOM   4928  O   LEU X 313       6.304 -14.531  23.580  1.00  0.00
O
ATOM   4929  CB  LEU X 313       3.600 -13.346  23.153  1.00  0.00
C
ATOM   4930  CG  LEU X 313       2.460 -12.729  22.331  1.00  0.00
C
ATOM   4931  CD1 LEU X 313       2.055 -11.387  22.924  1.00  0.00
C
ATOM   4932  CD2 LEU X 313       2.906 -12.569  20.885  1.00  0.00
C
ATOM   4933  H   LEU X 313       2.315 -15.631  23.414  1.00  0.00
H
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ATOM   4934  HA  LEU X 313       4.473 -14.605  21.646  1.00  0.00
H
ATOM   4935 1HB  LEU X 313       3.237 -13.634  24.138  1.00  0.00
H
ATOM   4936 2HB  LEU X 313       4.418 -12.635  23.262  1.00  0.00
H
ATOM   4937  HG  LEU X 313       1.631 -13.437  22.347  1.00  0.00
H
ATOM   4938 1HD1 LEU X 313       1.246 -10.958  22.335  1.00  0.00
H
ATOM   4939 2HD1 LEU X 313       1.718 -11.531  23.951  1.00  0.00
H
ATOM   4940 3HD1 LEU X 313       2.910 -10.713  22.913  1.00  0.00
H
ATOM   4941 1HD2 LEU X 313       2.095 -12.132  20.302  1.00  0.00
H
ATOM   4942 2HD2 LEU X 313       3.777 -11.915  20.844  1.00  0.00
H
ATOM   4943 3HD2 LEU X 313       3.164 -13.544  20.472  1.00  0.00
H
ATOM   4944  N   LYS X 314       5.093 -16.336  24.159  1.00  0.00
N
ATOM   4945  CA  LYS X 314       6.087 -16.845  25.097  1.00  0.00
C
ATOM   4946  C   LYS X 314       7.327 -17.338  24.370  1.00  0.00
C
ATOM   4947  O   LYS X 314       7.252 -17.786  23.226  1.00  0.00
O
ATOM   4948  CB  LYS X 314       5.494 -17.968  25.949  1.00  0.00
C
ATOM   4949  CG  LYS X 314       5.019 -19.177  25.153  1.00  0.00
C
ATOM   4950  CD  LYS X 314       4.087 -20.051  25.979  1.00  0.00
C
ATOM   4951  CE  LYS X 314       3.556 -21.220  25.162  1.00  0.00
C
ATOM   4952  NZ  LYS X 314       4.555 -22.317  25.044  1.00  0.00
N
ATOM   4953  H   LYS X 314       4.250 -16.870  23.997  1.00  0.00
H
ATOM   4954  HA  LYS X 314       6.414 -16.042  25.760  1.00  0.00
H
ATOM   4955 1HB  LYS X 314       6.267 -18.278  26.652  1.00  0.00
H
ATOM   4956 2HB  LYS X 314       4.654 -17.544  26.499  1.00  0.00
H
ATOM   4957 1HG  LYS X 314       4.495 -18.822  24.265  1.00  0.00
H
ATOM   4958 2HG  LYS X 314       5.890 -19.757  24.851  1.00  0.00
H
ATOM   4959 1HD  LYS X 314       4.639 -20.430  26.840  1.00  0.00
H
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ATOM   4960 2HD  LYS X 314       3.253 -19.441  26.323  1.00  0.00
H
ATOM   4961 1HE  LYS X 314       2.659 -21.599  25.650  1.00  0.00
H
ATOM   4962 2HE  LYS X 314       3.300 -20.854  24.167  1.00  0.00
H
ATOM   4963 1HZ  LYS X 314       4.165 -23.070  24.495  1.00  0.00
H
ATOM   4964 2HZ  LYS X 314       5.388 -21.966  24.588  1.00  0.00
H
ATOM   4965 3HZ  LYS X 314       4.791 -22.657  25.964  1.00  0.00
H
ATOM   4966  N   PRO X 315       8.472 -17.259  25.040  1.00  0.00
N
ATOM   4967  CA  PRO X 315       9.748 -17.598  24.421  1.00  0.00
C
ATOM   4968  C   PRO X 315       9.761 -19.045  23.944  1.00  0.00
C
ATOM   4969  O   PRO X 315      10.495 -19.398  23.021  1.00  0.00
O
ATOM   4970  CB  PRO X 315      10.784 -17.345  25.530  1.00  0.00
C
ATOM   4971  CG  PRO X 315      10.004 -17.423  26.814  1.00  0.00
C
ATOM   4972  CD  PRO X 315       8.622 -16.898  26.455  1.00  0.00
C
ATOM   4973  HA  PRO X 315       9.916 -17.007  23.636  1.00  0.00
H
ATOM   4974 1HB  PRO X 315      11.280 -18.111  25.477  1.00  0.00
H
ATOM   4975 2HB  PRO X 315      10.976 -16.513  25.389  1.00  0.00
H
ATOM   4976 1HG  PRO X 315       9.840 -18.237  26.978  1.00  0.00
H
ATOM   4977 2HG  PRO X 315      10.289 -16.716  27.359  1.00  0.00
H
ATOM   4978 1HD  PRO X 315       7.925 -17.382  26.890  1.00  0.00
H
ATOM   4979 2HD  PRO X 315       8.560 -15.947  26.441  1.00  0.00
H
ATOM   4980  N   ASN X 316       8.944 -19.880  24.577  1.00  0.00
N
ATOM   4981  CA  ASN X 316       8.860 -21.290  24.220  1.00  0.00
C
ATOM   4982  C   ASN X 316       8.231 -21.471  22.844  1.00  0.00
C
ATOM   4983  O   ASN X 316       8.662 -22.313  22.057  1.00  0.00
O
ATOM   4984  CB  ASN X 316       8.086 -22.080  25.259  1.00  0.00
C
ATOM   4985  CG  ASN X 316       8.843 -22.299  26.539  1.00  0.00
C
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ATOM   4986  ND2 ASN X 316       8.115 -22.626  27.577  1.00  0.00
N
ATOM   4987  OD1 ASN X 316      10.077 -22.245  26.572  1.00  0.00
O
ATOM   4988  H   ASN X 316       8.366 -19.529  25.327  1.00  0.00
H
ATOM   4989  HA  ASN X 316       9.862 -21.718  24.160  1.00  0.00
H
ATOM   4990 1HB  ASN X 316       7.051 -21.832  25.492  1.00  0.00
H
ATOM   4991 2HB  ASN X 316       8.114 -23.000  24.673  1.00  0.00
H
ATOM   4992 1HD2 ASN X 316       8.551 -22.784  28.463  1.00  0.00
H
ATOM   4993 2HD2 ASN X 316       7.124 -22.714  27.484  1.00  0.00
H
ATOM   4994  N   TRP X 317       7.208 -20.670  22.559  1.00  0.00
N
ATOM   4995  CA  TRP X 317       6.591 -20.660  21.235  1.00  0.00
C
ATOM   4996  C   TRP X 317       7.514 -20.029  20.202  1.00  0.00
C
ATOM   4997  O   TRP X 317       7.595 -20.490  19.064  1.00  0.00
O
ATOM   4998  CB  TRP X 317       5.257 -19.912  21.274  1.00  0.00
C
ATOM   4999  CG  TRP X 317       4.479 -20.010  19.997  1.00  0.00
C
ATOM   5000  CD1 TRP X 317       4.382 -19.058  19.027  1.00  0.00
C
ATOM   5001  CD2 TRP X 317       3.691 -21.121  19.551  1.00  0.00
C
ATOM   5002  CE2 TRP X 317       3.147 -20.771  18.302  1.00  0.00
C
ATOM   5003  CE3 TRP X 317       3.396 -22.380  20.088  1.00  0.00
C
ATOM   5004  NE1 TRP X 317       3.582 -19.504  18.005  1.00  0.00
N
ATOM   5005  CZ2 TRP X 317       2.324 -21.626  17.585  1.00  0.00
C
ATOM   5006  CZ3 TRP X 317       2.572 -23.237  19.368  1.00  0.00
C
ATOM   5007  CH2 TRP X 317       2.053 -22.871  18.151  1.00  0.00
C
ATOM   5008  H   TRP X 317       6.850 -20.054  23.274  1.00  0.00
H
ATOM   5009  HA  TRP X 317       6.407 -21.683  20.906  1.00  0.00
H
ATOM   5010 1HB  TRP X 317       4.620 -20.318  22.059  1.00  0.00
H
ATOM   5011 2HB  TRP X 317       5.427 -18.852  21.456  1.00  0.00
H
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ATOM   5012  HD1 TRP X 317       4.924 -18.129  19.192  1.00  0.00
H
ATOM   5013  HE1 TRP X 317       3.351 -18.986  17.169  1.00  0.00
H
ATOM   5014  HE3 TRP X 317       3.784 -22.722  21.047  1.00  0.00
H
ATOM   5015  HZ2 TRP X 317       1.933 -21.296  16.623  1.00  0.00
H
ATOM   5016  HZ3 TRP X 317       2.349 -24.214  19.797  1.00  0.00
H
ATOM   5017  HH2 TRP X 317       1.410 -23.573  17.620  1.00  0.00
H
ATOM   5018  N   GLN X 318       8.211 -18.971  20.604  1.00  0.00
N
ATOM   5019  CA  GLN X 318       9.049 -18.212  19.686  1.00  0.00
C
ATOM   5020  C   GLN X 318      10.077 -19.106  19.006  1.00  0.00
C
ATOM   5021  O   GLN X 318      10.353 -18.959  17.818  1.00  0.00
O
ATOM   5022  CB  GLN X 318       9.762 -17.076  20.427  1.00  0.00
C
ATOM   5023  CG  GLN X 318      10.564 -16.153  19.526  1.00  0.00
C
ATOM   5024  CD  GLN X 318      11.198 -15.006  20.288  1.00  0.00
C
ATOM   5025  NE2 GLN X 318      11.839 -14.096  19.564  1.00  0.00
N
ATOM   5026  OE1 GLN X 318      11.109 -14.936  21.518  1.00  0.00
O
ATOM   5027  H   GLN X 318       8.160 -18.687  21.572  1.00  0.00
H
ATOM   5028  HA  GLN X 318       8.432 -17.791  18.892  1.00  0.00
H
ATOM   5029 1HB  GLN X 318       8.992 -16.507  20.947  1.00  0.00
H
ATOM   5030 2HB  GLN X 318      10.423 -17.544  21.156  1.00  0.00
H
ATOM   5031 1HG  GLN X 318      11.294 -16.520  18.805  1.00  0.00
H
ATOM   5032 2HG  GLN X 318       9.691 -15.773  18.993  1.00  0.00
H
ATOM   5033 1HE2 GLN X 318      12.276 -13.316  20.012  1.00  0.00
H
ATOM   5034 2HE2 GLN X 318      11.885 -14.190  18.569  1.00  0.00
H
ATOM   5035  N   LYS X 319      10.640 -20.036  19.772  1.00  0.00
N
ATOM   5036  CA  LYS X 319      11.660 -20.939  19.254  1.00  0.00
C
ATOM   5037  C   LYS X 319      11.049 -21.998  18.344  1.00  0.00
C
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ATOM   5038  O   LYS X 319      11.758 -22.656  17.581  1.00  0.00
O
ATOM   5039  CB  LYS X 319      12.417 -21.607  20.403  1.00  0.00
C
ATOM   5040  CG  LYS X 319      13.276 -20.656  21.227  1.00  0.00
C
ATOM   5041  CD  LYS X 319      14.148 -21.415  22.216  1.00  0.00
C
ATOM   5042  CE  LYS X 319      13.331 -21.944  23.386  1.00  0.00
C
ATOM   5043  NZ  LYS X 319      14.189 -22.593  24.413  1.00  0.00
N
ATOM   5044  H   LYS X 319      10.354 -20.119  20.736  1.00  0.00
H
ATOM   5045  HA  LYS X 319      12.373 -20.380  18.647  1.00  0.00
H
ATOM   5046 1HB  LYS X 319      11.673 -22.074  21.047  1.00  0.00
H
ATOM   5047 2HB  LYS X 319      13.051 -22.377  19.963  1.00  0.00
H
ATOM   5048 1HG  LYS X 319      13.907 -20.082  20.549  1.00  0.00
H
ATOM   5049 2HG  LYS X 319      12.618 -19.978  21.771  1.00  0.00
H
ATOM   5050 1HD  LYS X 319      14.619 -22.248  21.693  1.00  0.00
H
ATOM   5051 2HD  LYS X 319      14.918 -20.740  22.588  1.00  0.00
H
ATOM   5052 1HE  LYS X 319      12.797 -21.108  23.834  1.00  0.00
H
ATOM   5053 2HE  LYS X 319      12.614 -22.669  23.001  1.00  0.00
H
ATOM   5054 1HZ  LYS X 319      13.610 -22.930  25.170  1.00  0.00
H
ATOM   5055 2HZ  LYS X 319      14.685 -23.370  23.998  1.00  0.00
H
ATOM   5056 3HZ  LYS X 319      14.853 -21.921  24.772  1.00  0.00
H
ATOM   5057  N   LEU X 320       9.734 -22.156  18.426  1.00  0.00
N
ATOM   5058  CA  LEU X 320       9.022 -23.100  17.578  1.00  0.00
C
ATOM   5059  C   LEU X 320       8.575 -22.447  16.276  1.00  0.00
C
ATOM   5060  O   LEU X 320       8.036 -23.110  15.389  1.00  0.00
O
ATOM   5061  CB  LEU X 320       7.812 -23.676  18.325  1.00  0.00
C
ATOM   5062  CG  LEU X 320       8.147 -24.460  19.601  1.00  0.00
C
ATOM   5063  CD1 LEU X 320       6.867 -24.847  20.328  1.00  0.00
C
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ATOM   5064  CD2 LEU X 320       8.959 -25.696  19.241  1.00  0.00
C
ATOM   5065  H   LEU X 320       9.214 -21.607  19.095  1.00  0.00
H
ATOM   5066  HA  LEU X 320       9.688 -23.916  17.300  1.00  0.00
H
ATOM   5067 1HB  LEU X 320       7.303 -22.749  18.579  1.00  0.00
H
ATOM   5068 2HB  LEU X 320       7.179 -24.272  17.669  1.00  0.00
H
ATOM   5069  HG  LEU X 320       8.776 -23.818  20.221  1.00  0.00
H
ATOM   5070 1HD1 LEU X 320       7.114 -25.402  21.232  1.00  0.00
H
ATOM   5071 2HD1 LEU X 320       6.314 -23.946  20.595  1.00  0.00
H
ATOM   5072 3HD1 LEU X 320       6.253 -25.470  19.677  1.00  0.00
H
ATOM   5073 1HD2 LEU X 320       9.197 -26.251  20.150  1.00  0.00
H
ATOM   5074 2HD2 LEU X 320       8.380 -26.328  18.570  1.00  0.00
H
ATOM   5075 3HD2 LEU X 320       9.883 -25.394  18.750  1.00  0.00
H
ATOM   5076  N   LEU X 321       8.807 -21.143  16.166  1.00  0.00
N
ATOM   5077  CA  LEU X 321       8.475 -20.406  14.952  1.00  0.00
C
ATOM   5078  C   LEU X 321       9.346 -20.849  13.785  1.00  0.00
C
ATOM   5079  O   LEU X 321      10.568 -20.914  13.900  1.00  0.00
O
ATOM   5080  CB  LEU X 321       8.626 -18.899  15.191  1.00  0.00
C
ATOM   5081  CG  LEU X 321       7.643 -18.296  16.203  1.00  0.00
C
ATOM   5082  CD1 LEU X 321       7.926 -16.810  16.384  1.00  0.00
C
ATOM   5083  CD2 LEU X 321       6.217 -18.517  15.722  1.00  0.00
C
ATOM   5084  H   LEU X 321       9.224 -20.651  16.942  1.00  0.00
H
ATOM   5085  HA  LEU X 321       7.444 -20.617  14.667  1.00  0.00
H
ATOM   5086 1HB  LEU X 321       9.636 -18.883  15.596  1.00  0.00
H
ATOM   5087 2HB  LEU X 321       8.600 -18.338  14.256  1.00  0.00
H
ATOM   5088  HG  LEU X 321       7.768 -18.840  17.139  1.00  0.00
H
ATOM   5089 1HD1 LEU X 321       7.225 -16.391  17.105  1.00  0.00
H
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ATOM   5090 2HD1 LEU X 321       8.944 -16.676  16.752  1.00  0.00
H
ATOM   5091 3HD1 LEU X 321       7.813 -16.299  15.429  1.00  0.00
H
ATOM   5092 1HD2 LEU X 321       5.520 -18.090  16.442  1.00  0.00
H
ATOM   5093 2HD2 LEU X 321       6.080 -18.037  14.753  1.00  0.00
H
ATOM   5094 3HD2 LEU X 321       6.027 -19.587  15.626  1.00  0.00
H
ATOM   5095  N   GLU X 322       8.708 -21.151  12.658  1.00  0.00
N
ATOM   5096  CA  GLU X 322       9.426 -21.579  11.462  1.00  0.00
C
ATOM   5097  C   GLU X 322       9.766 -20.394  10.569  1.00  0.00
C
ATOM   5098  O   GLU X 322       9.172 -19.325  10.691  1.00  0.00
O
ATOM   5099  CB  GLU X 322       8.602 -22.606  10.682  1.00  0.00
C
ATOM   5100  CG  GLU X 322       8.352 -23.910  11.426  1.00  0.00
C
ATOM   5101  CD  GLU X 322       7.539 -24.865  10.599  1.00  0.00
C
ATOM   5102  OE1 GLU X 322       7.097 -24.479   9.543  1.00  0.00
O
ATOM   5103  OE2 GLU X 322       7.452 -26.013  10.966  1.00  0.00
O
ATOM   5104  H   GLU X 322       7.700 -21.082  12.629  1.00  0.00
H
ATOM   5105  HA  GLU X 322      10.375 -22.037  11.744  1.00  0.00
H
ATOM   5106 1HB  GLU X 322       7.647 -22.135  10.445  1.00  0.00
H
ATOM   5107 2HB  GLU X 322       9.142 -22.814   9.758  1.00  0.00
H
ATOM   5108 1HG  GLU X 322       9.267 -24.403  11.754  1.00  0.00
H
ATOM   5109 2HG  GLU X 322       7.775 -23.601  12.297  1.00  0.00
H
ATOM   5110  N   THR X 323      10.728 -20.593   9.673  1.00  0.00
N
ATOM   5111  CA  THR X 323      11.159 -19.534   8.767  1.00  0.00
C
ATOM   5112  C   THR X 323       9.982 -18.971   7.982  1.00  0.00
C
ATOM   5113  O   THR X 323       9.922 -17.770   7.712  1.00  0.00
O
ATOM   5114  CB  THR X 323      12.229 -20.036   7.780  1.00  0.00
C
ATOM   5115  CG2 THR X 323      12.664 -18.914   6.850  1.00  0.00
C
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ATOM   5116  OG1 THR X 323      13.367 -20.516   8.508  1.00  0.00
O
ATOM   5117  H   THR X 323      11.172 -21.498   9.619  1.00  0.00
H
ATOM   5118  HA  THR X 323      11.573 -18.704   9.339  1.00  0.00
H
ATOM   5119  HB  THR X 323      11.813 -20.854   7.192  1.00  0.00
H
ATOM   5120  HG1 THR X 323      14.032 -20.828   7.892  1.00  0.00
H
ATOM   5121 1HG2 THR X 323      13.420 -19.288   6.159  1.00  0.00
H
ATOM   5122 2HG2 THR X 323      11.804 -18.556   6.286  1.00  0.00
H
ATOM   5123 3HG2 THR X 323      13.081 -18.096   7.436  1.00  0.00
H
ATOM   5124  N   GLY X 324       9.046 -19.841   7.618  1.00  0.00
N
ATOM   5125  CA  GLY X 324       7.853 -19.424   6.889  1.00  0.00
C
ATOM   5126  C   GLY X 324       7.127 -18.299   7.614  1.00  0.00
C
ATOM   5127  O   GLY X 324       6.658 -17.346   6.993  1.00  0.00
O
ATOM   5128  H   GLY X 324       9.163 -20.816   7.853  1.00  0.00
H
ATOM   5129 1HA  GLY X 324       8.145 -19.077   5.898  1.00  0.00
H
ATOM   5130 2HA  GLY X 324       7.180 -20.274   6.791  1.00  0.00
H
ATOM   5131  N   VAL X 325       7.033 -18.417   8.935  1.00  0.00
N
ATOM   5132  CA  VAL X 325       6.363 -17.399   9.730  1.00  0.00
C
ATOM   5133  C   VAL X 325       7.155 -16.098   9.695  1.00  0.00
C
ATOM   5134  O   VAL X 325       6.580 -15.012   9.594  1.00  0.00
O
ATOM   5135  CB  VAL X 325       6.177 -17.853  11.190  1.00  0.00
C
ATOM   5136  CG1 VAL X 325       5.633 -16.712  12.038  1.00  0.00
C
ATOM   5137  CG2 VAL X 325       5.250 -19.057  11.259  1.00  0.00
C
ATOM   5138  H   VAL X 325       7.432 -19.225   9.393  1.00  0.00
H
ATOM   5139  HA  VAL X 325       5.385 -17.153   9.315  1.00  0.00
H
ATOM   5140  HB  VAL X 325       7.141 -18.172  11.586  1.00  0.00
H
ATOM   5141 1HG1 VAL X 325       5.508 -17.052  13.066  1.00  0.00
H
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ATOM   5142 2HG1 VAL X 325       6.330 -15.877  12.013  1.00  0.00
H
ATOM   5143 3HG1 VAL X 325       4.669 -16.394  11.642  1.00  0.00
H
ATOM   5144 1HG2 VAL X 325       5.130 -19.364  12.298  1.00  0.00
H
ATOM   5145 2HG2 VAL X 325       4.277 -18.790  10.845  1.00  0.00
H
ATOM   5146 3HG2 VAL X 325       5.677 -19.879  10.685  1.00  0.00
H
ATOM   5147  N   TRP X 326       8.483 -16.206   9.775  1.00  0.00
N
ATOM   5148  CA  TRP X 326       9.336 -15.028   9.736  1.00  0.00
C
ATOM   5149  C   TRP X 326       9.218 -14.298   8.410  1.00  0.00
C
ATOM   5150  O   TRP X 326       9.228 -13.067   8.370  1.00  0.00
O
ATOM   5151  CB  TRP X 326      10.794 -15.417   9.987  1.00  0.00
C
ATOM   5152  CG  TRP X 326      11.007 -16.134  11.285  1.00  0.00
C
ATOM   5153  CD1 TRP X 326      10.205 -16.083  12.385  1.00  0.00
C
ATOM   5154  CD2 TRP X 326      12.091 -17.010  11.616  1.00  0.00
C
ATOM   5155  CE2 TRP X 326      11.881 -17.453  12.935  1.00  0.00
C
ATOM   5156  CE3 TRP X 326      13.221 -17.464  10.924  1.00  0.00
C
ATOM   5157  NE1 TRP X 326      10.723 -16.870  13.385  1.00  0.00
N
ATOM   5158  CZ2 TRP X 326      12.751 -18.320  13.575  1.00  0.00
C
ATOM   5159  CZ3 TRP X 326      14.093 -18.336  11.565  1.00  0.00
C
ATOM   5160  CH2 TRP X 326      13.865 -18.752  12.853  1.00  0.00
C
ATOM   5161  H   TRP X 326       8.902 -17.121   9.863  1.00  0.00
H
ATOM   5162  HA  TRP X 326       9.027 -14.322  10.506  1.00  0.00
H
ATOM   5163 1HB  TRP X 326      11.148 -16.083   9.200  1.00  0.00
H
ATOM   5164 2HB  TRP X 326      11.420 -14.525  10.016  1.00  0.00
H
ATOM   5165  HD1 TRP X 326       9.318 -15.456  12.319  1.00  0.00
H
ATOM   5166  HE1 TRP X 326      10.318 -17.001  14.300  1.00  0.00
H
ATOM   5167  HE3 TRP X 326      13.447 -17.168   9.900  1.00  0.00
H
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ATOM   5168  HZ2 TRP X 326      12.533 -18.627  14.598  1.00  0.00
H
ATOM   5169  HZ3 TRP X 326      14.968 -18.681  11.014  1.00  0.00
H
ATOM   5170  HH2 TRP X 326      14.573 -19.437  13.319  1.00  0.00
H
ATOM   5171  N   ILE X 327       9.116 -15.051   7.325  1.00  0.00
N
ATOM   5172  CA  ILE X 327       8.984 -14.452   6.008  1.00  0.00
C
ATOM   5173  C   ILE X 327       7.652 -13.703   5.938  1.00  0.00
C
ATOM   5174  O   ILE X 327       7.592 -12.567   5.472  1.00  0.00
O
ATOM   5175  CB  ILE X 327       9.063 -15.513   4.895  1.00  0.00
C
ATOM   5176  CG1 ILE X 327      10.461 -16.135   4.848  1.00  0.00
C
ATOM   5177  CG2 ILE X 327       8.705 -14.899   3.549  1.00  0.00
C
ATOM   5178  CD1 ILE X 327      10.553 -17.363   3.973  1.00  0.00
C
ATOM   5179  H   ILE X 327       9.129 -16.057   7.415  1.00  0.00
H
ATOM   5180  HA  ILE X 327       9.757 -13.700   5.850  1.00  0.00
H
ATOM   5181  HB  ILE X 327       8.368 -16.319   5.123  1.00  0.00
H
ATOM   5182 1HG1 ILE X 327      11.144 -15.371   4.477  1.00  0.00
H
ATOM   5183 2HG1 ILE X 327      10.733 -16.397   5.871  1.00  0.00
H
ATOM   5184 1HG2 ILE X 327       8.767 -15.661   2.774  1.00  0.00
H
ATOM   5185 2HG2 ILE X 327       7.690 -14.502   3.589  1.00  0.00
H
ATOM   5186 3HG2 ILE X 327       9.402 -14.091   3.321  1.00  0.00
H
ATOM   5187 1HD1 ILE X 327      11.573 -17.749   3.991  1.00  0.00
H
ATOM   5188 2HD1 ILE X 327       9.870 -18.128   4.345  1.00  0.00
H
ATOM   5189 3HD1 ILE X 327      10.284 -17.104   2.951  1.00  0.00
H
ATOM   5190  N   ASP X 328       6.591 -14.348   6.418  1.00  0.00
N
ATOM   5191  CA  ASP X 328       5.265 -13.740   6.416  1.00  0.00
C
ATOM   5192  C   ASP X 328       5.278 -12.395   7.139  1.00  0.00
C
ATOM   5193  O   ASP X 328       4.733 -11.405   6.643  1.00  0.00
O
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ATOM   5194  CB  ASP X 328       4.245 -14.678   7.067  1.00  0.00
C
ATOM   5195  CG  ASP X 328       3.841 -15.864   6.201  1.00  0.00
C
ATOM   5196  OD1 ASP X 328       4.146 -15.853   5.034  1.00  0.00
O
ATOM   5197  OD2 ASP X 328       3.374 -16.836   6.745  1.00  0.00
O
ATOM   5198  H   ASP X 328       6.708 -15.279   6.792  1.00  0.00
H
ATOM   5199  HA  ASP X 328       4.952 -13.539   5.392  1.00  0.00
H
ATOM   5200 1HB  ASP X 328       4.546 -15.032   8.052  1.00  0.00
H
ATOM   5201 2HB  ASP X 328       3.397 -13.998   7.168  1.00  0.00
H
ATOM   5202  N   ALA X 329       5.905 -12.365   8.309  1.00  0.00
N
ATOM   5203  CA  ALA X 329       5.994 -11.149   9.115  1.00  0.00
C
ATOM   5204  C   ALA X 329       6.757 -10.040   8.395  1.00  0.00
C
ATOM   5205  O   ALA X 329       6.356  -8.876   8.420  1.00  0.00
O
ATOM   5206  CB  ALA X 329       6.650 -11.448  10.455  1.00  0.00
C
ATOM   5207  H   ALA X 329       6.336 -13.211   8.653  1.00  0.00
H
ATOM   5208  HA  ALA X 329       4.987 -10.775   9.296  1.00  0.00
H
ATOM   5209 1HB  ALA X 329       6.709 -10.532  11.043  1.00  0.00
H
ATOM   5210 2HB  ALA X 329       6.057 -12.187  10.994  1.00  0.00
H
ATOM   5211 3HB  ALA X 329       7.653 -11.837  10.290  1.00  0.00
H
ATOM   5212  N   ALA X 330       7.862 -10.402   7.749  1.00  0.00
N
ATOM   5213  CA  ALA X 330       8.664  -9.425   7.024  1.00  0.00
C
ATOM   5214  C   ALA X 330       7.860  -8.826   5.875  1.00  0.00
C
ATOM   5215  O   ALA X 330       7.907  -7.616   5.637  1.00  0.00
O
ATOM   5216  CB  ALA X 330       9.947 -10.066   6.515  1.00  0.00
C
ATOM   5217  H   ALA X 330       8.150 -11.370   7.762  1.00  0.00
H
ATOM   5218  HA  ALA X 330       8.927  -8.614   7.703  1.00  0.00
H
ATOM   5219 1HB  ALA X 330      10.534  -9.324   5.975  1.00  0.00
H
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ATOM   5220 2HB  ALA X 330      10.525 -10.444   7.358  1.00  0.00
H
ATOM   5221 3HB  ALA X 330       9.700 -10.890   5.845  1.00  0.00
H
ATOM   5222  N   ALA X 331       7.125  -9.672   5.161  1.00  0.00
N
ATOM   5223  CA  ALA X 331       6.323  -9.191   4.053  1.00  0.00
C
ATOM   5224  C   ALA X 331       5.221  -8.265   4.538  1.00  0.00
C
ATOM   5225  O   ALA X 331       4.882  -7.293   3.864  1.00  0.00
O
ATOM   5226  CB  ALA X 331       5.737 -10.360   3.276  1.00  0.00
C
ATOM   5227  H   ALA X 331       7.125 -10.656   5.392  1.00  0.00
H
ATOM   5228  HA  ALA X 331       6.962  -8.613   3.385  1.00  0.00
H
ATOM   5229 1HB  ALA X 331       5.139  -9.981   2.446  1.00  0.00
H
ATOM   5230 2HB  ALA X 331       6.546 -10.981   2.887  1.00  0.00
H
ATOM   5231 3HB  ALA X 331       5.107 -10.955   3.933  1.00  0.00
H
ATOM   5232  N   GLN X 332       4.662  -8.573   5.704  1.00  0.00
N
ATOM   5233  CA  GLN X 332       3.605  -7.744   6.277  1.00  0.00
C
ATOM   5234  C   GLN X 332       4.129  -6.356   6.614  1.00  0.00
C
ATOM   5235  O   GLN X 332       3.459  -5.357   6.348  1.00  0.00
O
ATOM   5236  CB  GLN X 332       3.026  -8.399   7.535  1.00  0.00
C
ATOM   5237  CG  GLN X 332       1.922  -7.598   8.201  1.00  0.00
C
ATOM   5238  CD  GLN X 332       0.741  -7.360   7.280  1.00  0.00
C
ATOM   5239  NE2 GLN X 332       0.240  -6.129   7.267  1.00  0.00
N
ATOM   5240  OE1 GLN X 332       0.287  -8.271   6.582  1.00  0.00
O
ATOM   5241  H   GLN X 332       4.975  -9.394   6.203  1.00  0.00
H
ATOM   5242  HA  GLN X 332       2.809  -7.610   5.545  1.00  0.00
H
ATOM   5243 1HB  GLN X 332       2.645  -9.375   7.234  1.00  0.00
H
ATOM   5244 2HB  GLN X 332       3.855  -8.532   8.229  1.00  0.00
H
ATOM   5245 1HG  GLN X 332       1.531  -7.840   9.189  1.00  0.00
H
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ATOM   5246 2HG  GLN X 332       2.505  -6.678   8.259  1.00  0.00
H
ATOM   5247 1HE2 GLN X 332      -0.539  -5.912   6.678  1.00  0.00
H
ATOM   5248 2HE2 GLN X 332       0.640  -5.420   7.847  1.00  0.00
H
ATOM   5249  N   ILE X 333       5.322  -6.285   7.191  1.00  0.00
N
ATOM   5250  CA  ILE X 333       5.915  -4.991   7.519  1.00  0.00
C
ATOM   5251  C   ILE X 333       6.213  -4.201   6.242  1.00  0.00
C
ATOM   5252  O   ILE X 333       6.011  -2.991   6.197  1.00  0.00
O
ATOM   5253  CB  ILE X 333       7.209  -5.154   8.339  1.00  0.00
C
ATOM   5254  CG1 ILE X 333       6.893  -5.698   9.733  1.00  0.00
C
ATOM   5255  CG2 ILE X 333       7.948  -3.828   8.433  1.00  0.00
C
ATOM   5256  CD1 ILE X 333       6.105  -4.739  10.596  1.00  0.00
C
ATOM   5257  H   ILE X 333       5.826  -7.134   7.406  1.00  0.00
H
ATOM   5258  HA  ILE X 333       5.209  -4.375   8.074  1.00  0.00
H
ATOM   5259  HB  ILE X 333       7.847  -5.892   7.852  1.00  0.00
H
ATOM   5260 1HG1 ILE X 333       6.326  -6.618   9.603  1.00  0.00
H
ATOM   5261 2HG1 ILE X 333       7.844  -5.923  10.216  1.00  0.00
H
ATOM   5262 1HG2 ILE X 333       8.860  -3.961   9.017  1.00  0.00
H
ATOM   5263 2HG2 ILE X 333       8.204  -3.481   7.433  1.00  0.00
H
ATOM   5264 3HG2 ILE X 333       7.310  -3.090   8.922  1.00  0.00
H
ATOM   5265 1HD1 ILE X 333       5.920  -5.194  11.571  1.00  0.00
H
ATOM   5266 2HD1 ILE X 333       6.672  -3.818  10.730  1.00  0.00
H
ATOM   5267 3HD1 ILE X 333       5.153  -4.512  10.118  1.00  0.00
H
ATOM   5268  N   PHE X 334       6.691  -4.879   5.197  1.00  0.00
N
ATOM   5269  CA  PHE X 334       6.969  -4.191   3.940  1.00  0.00
C
ATOM   5270  C   PHE X 334       5.685  -3.605   3.368  1.00  0.00
C
ATOM   5271  O   PHE X 334       5.636  -2.453   2.924  1.00  0.00
O
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ATOM   5272  CB  PHE X 334       7.616  -5.143   2.931  1.00  0.00
C
ATOM   5273  CG  PHE X 334       9.087  -5.344   3.145  1.00  0.00
C
ATOM   5274  CD1 PHE X 334       9.618  -6.621   3.255  1.00  0.00
C
ATOM   5275  CD2 PHE X 334       9.944  -4.260   3.240  1.00  0.00
C
ATOM   5276  CE1 PHE X 334      10.974  -6.809   3.452  1.00  0.00
C
ATOM   5277  CE2 PHE X 334      11.300  -4.443   3.435  1.00  0.00
C
ATOM   5278  CZ  PHE X 334      11.815  -5.719   3.542  1.00  0.00
C
ATOM   5279  H   PHE X 334       6.861  -5.871   5.278  1.00  0.00
H
ATOM   5280  HA  PHE X 334       7.650  -3.356   4.116  1.00  0.00
H
ATOM   5281 1HB  PHE X 334       7.153  -6.127   2.994  1.00  0.00
H
ATOM   5282 2HB  PHE X 334       7.498  -4.753   1.920  1.00  0.00
H
ATOM   5283  HD1 PHE X 334       8.954  -7.482   3.183  1.00  0.00
H
ATOM   5284  HD2 PHE X 334       9.537  -3.251   3.156  1.00  0.00
H
ATOM   5285  HE1 PHE X 334      11.377  -7.818   3.537  1.00  0.00
H
ATOM   5286  HE2 PHE X 334      11.964  -3.582   3.505  1.00  0.00
H
ATOM   5287  HZ  PHE X 334      12.883  -5.866   3.698  1.00  0.00
H
ATOM   5288  N   PHE X 335       4.634  -4.410   3.388  1.00  0.00
N
ATOM   5289  CA  PHE X 335       3.337  -3.937   2.941  1.00  0.00
C
ATOM   5290  C   PHE X 335       2.854  -2.703   3.686  1.00  0.00
C
ATOM   5291  O   PHE X 335       2.513  -1.698   3.068  1.00  0.00
O
ATOM   5292  CB  PHE X 335       2.305  -5.057   3.079  1.00  0.00
C
ATOM   5293  CG  PHE X 335       0.926  -4.670   2.625  1.00  0.00
C
ATOM   5294  CD1 PHE X 335       0.585  -3.337   2.459  1.00  0.00
C
ATOM   5295  CD2 PHE X 335      -0.033  -5.639   2.367  1.00  0.00
C
ATOM   5296  CE1 PHE X 335      -0.684  -2.978   2.041  1.00  0.00
C
ATOM   5297  CE2 PHE X 335      -1.301  -5.284   1.949  1.00  0.00
C
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ATOM   5298  CZ  PHE X 335      -1.626  -3.951   1.787  1.00  0.00
C
ATOM   5299  H   PHE X 335       4.735  -5.361   3.716  1.00  0.00
H
ATOM   5300  HA  PHE X 335       3.393  -3.641   1.893  1.00  0.00
H
ATOM   5301 1HB  PHE X 335       2.600  -5.917   2.479  1.00  0.00
H
ATOM   5302 2HB  PHE X 335       2.215  -5.357   4.124  1.00  0.00
H
ATOM   5303  HD1 PHE X 335       1.331  -2.568   2.660  1.00  0.00
H
ATOM   5304  HD2 PHE X 335       0.224  -6.691   2.495  1.00  0.00
H
ATOM   5305  HE1 PHE X 335      -0.938  -1.927   1.914  1.00  0.00
H
ATOM   5306  HE2 PHE X 335      -2.045  -6.054   1.748  1.00  0.00
H
ATOM   5307  HZ  PHE X 335      -2.626  -3.671   1.460  1.00  0.00
H
ATOM   5308  N   SER X 336       2.837  -2.770   5.009  1.00  0.00
N
ATOM   5309  CA  SER X 336       2.195  -1.715   5.776  1.00  0.00
C
ATOM   5310  C   SER X 336       2.792  -0.324   5.598  1.00  0.00
C
ATOM   5311  O   SER X 336       2.056   0.658   5.515  1.00  0.00
O
ATOM   5312  CB  SER X 336       2.222  -2.093   7.246  1.00  0.00
C
ATOM   5313  OG  SER X 336       1.443  -1.227   8.026  1.00  0.00
O
ATOM   5314  H   SER X 336       3.268  -3.551   5.482  1.00  0.00
H
ATOM   5315  HA  SER X 336       1.123  -1.637   5.592  1.00  0.00
H
ATOM   5316 1HB  SER X 336       1.838  -3.107   7.352  1.00  0.00
H
ATOM   5317 2HB  SER X 336       3.252  -2.057   7.597  1.00  0.00
H
ATOM   5318  HG  SER X 336       0.547  -1.567   8.083  1.00  0.00
H
ATOM   5319  N   LEU X 337       4.115  -0.229   5.522  1.00  0.00
N
ATOM   5320  CA  LEU X 337       4.743   1.088   5.417  1.00  0.00
C
ATOM   5321  C   LEU X 337       5.335   1.352   4.029  1.00  0.00
C
ATOM   5322  O   LEU X 337       5.669   2.490   3.699  1.00  0.00
O
ATOM   5323  CB  LEU X 337       5.832   1.229   6.487  1.00  0.00
C
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ATOM   5324  CG  LEU X 337       5.343   1.118   7.936  1.00  0.00
C
ATOM   5325  CD1 LEU X 337       6.525   1.191   8.893  1.00  0.00
C
ATOM   5326  CD2 LEU X 337       4.346   2.232   8.223  1.00  0.00
C
ATOM   5327  H   LEU X 337       4.685  -1.063   5.537  1.00  0.00
H
ATOM   5328  HA  LEU X 337       3.993   1.863   5.570  1.00  0.00
H
ATOM   5329 1HB  LEU X 337       6.444   0.365   6.232  1.00  0.00
H
ATOM   5330 2HB  LEU X 337       6.417   2.139   6.351  1.00  0.00
H
ATOM   5331  HG  LEU X 337       4.817   0.168   8.027  1.00  0.00
H
ATOM   5332 1HD1 LEU X 337       6.168   1.110   9.919  1.00  0.00
H
ATOM   5333 2HD1 LEU X 337       7.213   0.372   8.685  1.00  0.00
H
ATOM   5334 3HD1 LEU X 337       7.040   2.140   8.763  1.00  0.00
H
ATOM   5335 1HD2 LEU X 337       3.997   2.151   9.253  1.00  0.00
H
ATOM   5336 2HD2 LEU X 337       4.828   3.199   8.077  1.00  0.00
H
ATOM   5337 3HD2 LEU X 337       3.496   2.144   7.545  1.00  0.00
H
ATOM   5338  N   GLY X 338       5.444   0.296   3.222  1.00  0.00
N
ATOM   5339  CA  GLY X 338       5.959   0.394   1.857  1.00  0.00
C
ATOM   5340  C   GLY X 338       7.318   1.080   1.840  1.00  0.00
C
ATOM   5341  O   GLY X 338       7.494   2.099   1.180  1.00  0.00
O
ATOM   5342  H   GLY X 338       5.157  -0.610   3.566  1.00  0.00
H
ATOM   5343 1HA  GLY X 338       6.058  -0.608   1.440  1.00  0.00
H
ATOM   5344 2HA  GLY X 338       5.259   0.971   1.252  1.00  0.00
H
ATOM   5345  N   PRO X 339       8.281   0.509   2.555  1.00  0.00
N
ATOM   5346  CA  PRO X 339       9.652   1.005   2.519  1.00  0.00
C
ATOM   5347  C   PRO X 339      10.265   0.843   1.137  1.00  0.00
C
ATOM   5348  O   PRO X 339      10.053  -0.176   0.467  1.00  0.00
O
ATOM   5349  CB  PRO X 339      10.385   0.163   3.578  1.00  0.00
C
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ATOM   5350  CG  PRO X 339       9.284  -0.437   4.408  1.00  0.00
C
ATOM   5351  CD  PRO X 339       8.099  -0.700   3.402  1.00  0.00
C
ATOM   5352  HA  PRO X 339       9.674   1.972   2.759  1.00  0.00
H
ATOM   5353 1HB  PRO X 339      11.004  -0.619   3.113  1.00  0.00
H
ATOM   5354 2HB  PRO X 339      11.055   0.782   4.192  1.00  0.00
H
ATOM   5355 1HG  PRO X 339       9.611  -1.371   4.888  1.00  0.00
H
ATOM   5356 2HG  PRO X 339       8.975   0.247   5.213  1.00  0.00
H
ATOM   5357 1HD  PRO X 339       8.229  -1.639   2.844  1.00  0.00
H
ATOM   5358 2HD  PRO X 339       7.126  -0.761   3.912  1.00  0.00
H
ATOM   5359  N   GLY X 340      11.023   1.850   0.722  1.00  0.00
N
ATOM   5360  CA  GLY X 340      11.731   1.771  -0.545  1.00  0.00
C
ATOM   5361  C   GLY X 340      10.881   2.145  -1.743  1.00  0.00
C
ATOM   5362  O   GLY X 340      11.365   2.126  -2.873  1.00  0.00
O
ATOM   5363  H   GLY X 340      11.108   2.680   1.292  1.00  0.00
H
ATOM   5364 1HA  GLY X 340      12.585   2.447  -0.518  1.00  0.00
H
ATOM   5365 2HA  GLY X 340      12.081   0.750  -0.693  1.00  0.00
H
ATOM   5366  N   PHE X 341       9.285   2.535  -1.305  1.00  0.00
N
ATOM   5367  CA  PHE X 341       8.776   2.788  -2.657  1.00  0.00
C
ATOM   5368  C   PHE X 341       8.847   4.270  -3.006  1.00  0.00
C
ATOM   5369  O   PHE X 341       8.351   4.693  -4.052  1.00  0.00
O
ATOM   5370  CB  PHE X 341       7.337   2.287  -2.790  1.00  0.00
C
ATOM   5371  CG  PHE X 341       7.164   0.837  -2.438  1.00  0.00
C
ATOM   5372  CD1 PHE X 341       7.863  -0.146  -3.122  1.00  0.00
C
ATOM   5373  CD2 PHE X 341       6.301   0.453  -1.423  1.00  0.00
C
ATOM   5374  CE1 PHE X 341       7.705  -1.480  -2.798  1.00  0.00
C
ATOM   5375  CE2 PHE X 341       6.141  -0.879  -1.096  1.00  0.00
C
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ATOM   5376  CZ  PHE X 341       6.844  -1.847  -1.786  1.00  0.00
C
ATOM   5377  H   PHE X 341       8.642   2.593  -0.529  1.00  0.00
H
ATOM   5378  HA  PHE X 341       9.395   2.267  -3.388  1.00  0.00
H
ATOM   5379 1HB  PHE X 341       6.681   2.850  -2.127  1.00  0.00
H
ATOM   5380 2HB  PHE X 341       6.995   2.400  -3.818  1.00  0.00
H
ATOM   5381  HD1 PHE X 341       8.545   0.145  -3.922  1.00  0.00
H
ATOM   5382  HD2 PHE X 341       5.745   1.218  -0.879  1.00  0.00
H
ATOM   5383  HE1 PHE X 341       8.261  -2.242  -3.344  1.00  0.00
H
ATOM   5384  HE2 PHE X 341       5.460  -1.168  -0.296  1.00  0.00
H
ATOM   5385  HZ  PHE X 341       6.718  -2.898  -1.531  1.00  0.00
H
ATOM   5386  N   GLY X 342       9.446   5.062  -2.118  1.00  0.00
N
ATOM   5387  CA  GLY X 342       9.530   6.497  -2.334  1.00  0.00
C
ATOM   5388  C   GLY X 342       8.332   7.243  -1.769  1.00  0.00
C
ATOM   5389  O   GLY X 342       8.311   8.473  -1.758  1.00  0.00
O
ATOM   5390  H   GLY X 342       9.846   4.659  -1.283  1.00  0.00
H
ATOM   5391 1HA  GLY X 342      10.430   6.877  -1.850  1.00  0.00
H
ATOM   5392 2HA  GLY X 342       9.583   6.693  -3.404  1.00  0.00
H
ATOM   5393  N   VAL X 343       7.334   6.502  -1.290  1.00  0.00
N
ATOM   5394  CA  VAL X 343       6.091   7.088  -0.807  1.00  0.00
C
ATOM   5395  C   VAL X 343       6.241   7.895   0.481  1.00  0.00
C
ATOM   5396  O   VAL X 343       5.382   8.715   0.801  1.00  0.00
O
ATOM   5397  CB  VAL X 343       5.031   5.995  -0.576  1.00  0.00
C
ATOM   5398  CG1 VAL X 343       4.598   5.384  -1.900  1.00  0.00
C
ATOM   5399  CG2 VAL X 343       5.569   4.919   0.354  1.00  0.00
C
ATOM   5400  H   VAL X 343       7.443   5.499  -1.260  1.00  0.00
H
ATOM   5401  HA  VAL X 343       5.695   7.816  -1.516  1.00  0.00
H
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ATOM   5402  HB  VAL X 343       4.167   6.438  -0.082  1.00  0.00
H
ATOM   5403 1HG1 VAL X 343       3.848   4.614  -1.717  1.00  0.00
H
ATOM   5404 2HG1 VAL X 343       4.173   6.159  -2.537  1.00  0.00
H
ATOM   5405 3HG1 VAL X 343       5.459   4.939  -2.396  1.00  0.00
H
ATOM   5406 1HG2 VAL X 343       4.807   4.155   0.507  1.00  0.00
H
ATOM   5407 2HG2 VAL X 343       6.456   4.465  -0.092  1.00  0.00
H
ATOM   5408 3HG2 VAL X 343       5.832   5.364   1.313  1.00  0.00
H
ATOM   5409  N   LEU X 344       7.313   7.649   1.224  1.00  0.00
N
ATOM   5410  CA  LEU X 344       7.552   8.406   2.450  1.00  0.00
C
ATOM   5411  C   LEU X 344       8.666   9.408   2.178  1.00  0.00
C
ATOM   5412  O   LEU X 344       8.601  10.563   2.605  1.00  0.00
O
ATOM   5413  CB  LEU X 344       7.920   7.474   3.612  1.00  0.00
C
ATOM   5414  CG  LEU X 344       6.845   6.449   3.992  1.00  0.00
C
ATOM   5415  CD1 LEU X 344       7.394   5.475   5.026  1.00  0.00
C
ATOM   5416  CD2 LEU X 344       5.621   7.172   4.531  1.00  0.00
C
ATOM   5417  H   LEU X 344       7.966   6.933   0.941  1.00  0.00
H
ATOM   5418  HA  LEU X 344       6.656   8.963   2.716  1.00  0.00
H
ATOM   5419 1HB  LEU X 344       8.778   6.970   3.170  1.00  0.00
H
ATOM   5420 2HB  LEU X 344       8.241   8.033   4.491  1.00  0.00
H
ATOM   5421  HG  LEU X 344       6.552   5.932   3.079  1.00  0.00
H
ATOM   5422 1HD1 LEU X 344       6.624   4.751   5.290  1.00  0.00
H
ATOM   5423 2HD1 LEU X 344       8.256   4.951   4.610  1.00  0.00
H
ATOM   5424 3HD1 LEU X 344       7.697   6.024   5.918  1.00  0.00
H
ATOM   5425 1HD2 LEU X 344       4.856   6.442   4.801  1.00  0.00
H
ATOM   5426 2HD2 LEU X 344       5.898   7.752   5.413  1.00  0.00
H
ATOM   5427 3HD2 LEU X 344       5.227   7.843   3.766  1.00  0.00
H
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ATOM   5428  N   LEU X 345       9.683   8.956   1.448  1.00  0.00
N
ATOM   5429  CA  LEU X 345      10.815   9.806   1.113  1.00  0.00
C
ATOM   5430  C   LEU X 345      10.344  11.040   0.358  1.00  0.00
C
ATOM   5431  O   LEU X 345      10.590  12.167   0.786  1.00  0.00
O
ATOM   5432  CB  LEU X 345      11.842   9.022   0.288  1.00  0.00
C
ATOM   5433  CG  LEU X 345      13.219   9.683   0.160  1.00  0.00
C
ATOM   5434  CD1 LEU X 345      14.202   8.721  -0.494  1.00  0.00
C
ATOM   5435  CD2 LEU X 345      13.096  10.962  -0.654  1.00  0.00
C
ATOM   5436  H   LEU X 345       9.668   8.001   1.119  1.00  0.00
H
ATOM   5437  HA  LEU X 345      11.290  10.158   2.029  1.00  0.00
H
ATOM   5438 1HB  LEU X 345      11.914   8.125   0.904  1.00  0.00
H
ATOM   5439 2HB  LEU X 345      11.454   8.757  -0.695  1.00  0.00
H
ATOM   5440  HG  LEU X 345      13.543   9.957   1.165  1.00  0.00
H
ATOM   5441 1HD1 LEU X 345      15.178   9.200  -0.581  1.00  0.00
H
ATOM   5442 2HD1 LEU X 345      14.293   7.823   0.118  1.00  0.00
H
ATOM   5443 3HD1 LEU X 345      13.841   8.451  -1.485  1.00  0.00
H
ATOM   5444 1HD2 LEU X 345      14.075  11.432  -0.745  1.00  0.00
H
ATOM   5445 2HD2 LEU X 345      12.712  10.726  -1.649  1.00  0.00
H
ATOM   5446 3HD2 LEU X 345      12.410  11.647  -0.155  1.00  0.00
H
ATOM   5447  N   ALA X 346       9.644  10.849  -0.755  1.00  0.00
N
ATOM   5448  CA  ALA X 346       9.186  12.009  -1.514  1.00  0.00
C
ATOM   5449  C   ALA X 346       8.245  12.909  -0.717  1.00  0.00
C
ATOM   5450  O   ALA X 346       8.304  14.133  -0.831  1.00  0.00
O
ATOM   5451  CB  ALA X 346       8.499  11.566  -2.797  1.00  0.00
C
ATOM   5452  H   ALA X 346       9.430   9.913  -1.071  1.00  0.00
H
ATOM   5453  HA  ALA X 346      10.051  12.620  -1.775  1.00  0.00
H
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ATOM   5454 1HB  ALA X 346       8.165  12.442  -3.352  1.00  0.00
H
ATOM   5455 2HB  ALA X 346       9.201  10.996  -3.410  1.00  0.00
H
ATOM   5456 3HB  ALA X 346       7.642  10.941  -2.554  1.00  0.00
H
ATOM   5457  N   PHE X 347       7.368  12.315   0.087  1.00  0.00
N
ATOM   5458  CA  PHE X 347       6.458  13.123   0.890  1.00  0.00
C
ATOM   5459  C   PHE X 347       7.254  13.978   1.873  1.00  0.00
C
ATOM   5460  O   PHE X 347       6.868  15.101   2.190  1.00  0.00
O
ATOM   5461  CB  PHE X 347       5.460  12.236   1.636  1.00  0.00
C
ATOM   5462  CG  PHE X 347       4.278  12.982   2.185  1.00  0.00
C
ATOM   5463  CD1 PHE X 347       3.306  13.492   1.335  1.00  0.00
C
ATOM   5464  CD2 PHE X 347       4.135  13.176   3.550  1.00  0.00
C
ATOM   5465  CE1 PHE X 347       2.218  14.179   1.839  1.00  0.00
C
ATOM   5466  CE2 PHE X 347       3.046  13.862   4.056  1.00  0.00
C
ATOM   5467  CZ  PHE X 347       2.088  14.364   3.199  1.00  0.00
C
ATOM   5468  H   PHE X 347       7.333  11.307   0.141  1.00  0.00
H
ATOM   5469  HA  PHE X 347       5.902  13.806   0.246  1.00  0.00
H
ATOM   5470 1HB  PHE X 347       5.063  11.472   0.968  1.00  0.00
H
ATOM   5471 2HB  PHE X 347       5.947  11.758   2.485  1.00  0.00
H
ATOM   5472  HD1 PHE X 347       3.409  13.344   0.261  1.00  0.00
H
ATOM   5473  HD2 PHE X 347       4.891  12.780   4.226  1.00  0.00
H
ATOM   5474  HE1 PHE X 347       1.463  14.574   1.161  1.00  0.00
H
ATOM   5475  HE2 PHE X 347       2.945  14.006   5.132  1.00  0.00
H
ATOM   5476  HZ  PHE X 347       1.231  14.907   3.596  1.00  0.00
H
ATOM   5477  N   ALA X 348       8.370  13.443   2.347  1.00  0.00
N
ATOM   5478  CA  ALA X 348       9.198  14.159   3.316  1.00  0.00
C
ATOM   5479  C   ALA X 348      10.012  15.273   2.674  1.00  0.00
C
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ATOM   5480  O   ALA X 348      10.684  16.043   3.370  1.00  0.00
O
ATOM   5481  CB  ALA X 348      10.123  13.192   4.039  1.00  0.00
C
ATOM   5482  H   ALA X 348       8.653  12.525   2.033  1.00  0.00
H
ATOM   5483  HA  ALA X 348       8.545  14.630   4.051  1.00  0.00
H
ATOM   5484 1HB  ALA X 348      10.732  13.741   4.756  1.00  0.00
H
ATOM   5485 2HB  ALA X 348       9.531  12.442   4.564  1.00  0.00
H
ATOM   5486 3HB  ALA X 348      10.772  12.700   3.314  1.00  0.00
H
ATOM   5487  N   SER X 349       9.967  15.364   1.341  1.00  0.00
N
ATOM   5488  CA  SER X 349      10.715  16.385   0.619  1.00  0.00
C
ATOM   5489  C   SER X 349       9.896  17.660   0.460  1.00  0.00
C
ATOM   5490  O   SER X 349      10.430  18.713   0.115  1.00  0.00
O
ATOM   5491  CB  SER X 349      11.141  15.860  -0.738  1.00  0.00
C
ATOM   5492  OG  SER X 349      10.056  15.728  -1.615  1.00  0.00
O
ATOM   5493  H   SER X 349       9.401  14.709   0.822  1.00  0.00
H
ATOM   5494  HA  SER X 349      11.679  16.618   1.073  1.00  0.00
H
ATOM   5495 1HB  SER X 349      11.864  16.552  -1.169  1.00  0.00
H
ATOM   5496 2HB  SER X 349      11.608  14.885  -0.604  1.00  0.00
H
ATOM   5497  HG  SER X 349      10.367  15.394  -2.461  1.00  0.00
H
ATOM   5498  N   TYR X 350       8.488  17.345   0.945  1.00  0.00
N
ATOM   5499  CA  TYR X 350       7.441  18.332   0.724  1.00  0.00
C
ATOM   5500  C   TYR X 350       7.259  19.228   1.945  1.00  0.00
C
ATOM   5501  O   TYR X 350       6.202  19.832   2.131  1.00  0.00
O
ATOM   5502  CB  TYR X 350       6.120  17.642   0.379  1.00  0.00
C
ATOM   5503  CG  TYR X 350       6.151  16.876  -0.926  1.00  0.00
C
ATOM   5504  CD1 TYR X 350       7.130  17.124  -1.875  1.00  0.00
C
ATOM   5505  CD2 TYR X 350       5.201  15.903  -1.201  1.00  0.00
C
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ATOM   5506  CE1 TYR X 350       7.163  16.427  -3.068  1.00  0.00
C
ATOM   5507  CE2 TYR X 350       5.224  15.199  -2.389  1.00  0.00
C
ATOM   5508  CZ  TYR X 350       6.208  15.465  -3.320  1.00  0.00
C
ATOM   5509  OH  TYR X 350       6.237  14.765  -4.505  1.00  0.00
O
ATOM   5510  H   TYR X 350       8.285  16.471   1.408  1.00  0.00
H
ATOM   5511  HA  TYR X 350       7.717  18.987  -0.103  1.00  0.00
H
ATOM   5512 1HB  TYR X 350       5.888  16.959   1.196  1.00  0.00
H
ATOM   5513 2HB  TYR X 350       5.355  18.417   0.325  1.00  0.00
H
ATOM   5514  HD1 TYR X 350       7.882  17.887  -1.668  1.00  0.00
H
ATOM   5515  HD2 TYR X 350       4.427  15.699  -0.462  1.00  0.00
H
ATOM   5516  HE1 TYR X 350       7.938  16.634  -3.805  1.00  0.00
H
ATOM   5517  HE2 TYR X 350       4.469  14.439  -2.588  1.00  0.00
H
ATOM   5518  HH  TYR X 350       6.959  15.028  -5.078  1.00  0.00
H
ATOM   5519  N   ASN X 351       8.294  19.305   2.773  1.00  0.00
N
ATOM   5520  CA  ASN X 351       8.235  20.092   4.000  1.00  0.00
C
ATOM   5521  C   ASN X 351       9.631  20.434   4.501  1.00  0.00
C
ATOM   5522  O   ASN X 351      10.257  19.644   5.208  1.00  0.00
O
ATOM   5523  CB  ASN X 351       7.448  19.377   5.082  1.00  0.00
C
ATOM   5524  CG  ASN X 351       7.135  20.238   6.273  1.00  0.00
C
ATOM   5525  ND2 ASN X 351       6.163  19.811   7.038  1.00  0.00
N
ATOM   5526  OD1 ASN X 351       7.813  21.237   6.538  1.00  0.00
O
ATOM   5527  H   ASN X 351       9.144  18.806   2.548  1.00  0.00
H
ATOM   5528  HA  ASN X 351       7.734  21.042   3.806  1.00  0.00
H
ATOM   5529 1HB  ASN X 351       6.570  18.778   4.831  1.00  0.00
H
ATOM   5530 2HB  ASN X 351       8.276  18.714   5.335  1.00  0.00
H
ATOM   5531 1HD2 ASN X 351       5.899  20.334   7.849  1.00  0.00
H
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ATOM   5532 2HD2 ASN X 351       5.685  18.963   6.813  1.00  0.00
H
ATOM   5533  N   LYS X 352      10.112  21.615   4.133  1.00  0.00
N
ATOM   5534  CA  LYS X 352      11.468  22.029   4.471  1.00  0.00
C
ATOM   5535  C   LYS X 352      11.546  22.555   5.901  1.00  0.00
C
ATOM   5536  O   LYS X 352      12.574  22.430   6.562  1.00  0.00
O
ATOM   5537  CB  LYS X 352      11.963  23.094   3.492  1.00  0.00
C
ATOM   5538  CG  LYS X 352      12.057  22.626   2.046  1.00  0.00
C
ATOM   5539  CD  LYS X 352      12.525  23.745   1.130  1.00  0.00
C
ATOM   5540  CE  LYS X 352      12.489  23.320  -0.331  1.00  0.00
C
ATOM   5541  NZ  LYS X 352      12.964  24.399  -1.237  1.00  0.00
N
ATOM   5542  H   LYS X 352       9.524  22.244   3.605  1.00  0.00
H
ATOM   5543  HA  LYS X 352      12.139  21.171   4.420  1.00  0.00
H
ATOM   5544 1HB  LYS X 352      11.269  23.933   3.557  1.00  0.00
H
ATOM   5545 2HB  LYS X 352      12.948  23.411   3.835  1.00  0.00
H
ATOM   5546 1HG  LYS X 352      12.763  21.795   1.996  1.00  0.00
H
ATOM   5547 2HG  LYS X 352      11.072  22.282   1.728  1.00  0.00
H
ATOM   5548 1HD  LYS X 352      11.873  24.608   1.273  1.00  0.00
H
ATOM   5549 2HD  LYS X 352      13.545  24.016   1.403  1.00  0.00
H
ATOM   5550 1HE  LYS X 352      13.124  22.443  -0.447  1.00  0.00
H
ATOM   5551 2HE  LYS X 352      11.462  23.059  -0.585  1.00  0.00
H
ATOM   5552 1HZ  LYS X 352      12.924  24.077  -2.193  1.00  0.00
H
ATOM   5553 2HZ  LYS X 352      12.373  25.213  -1.131  1.00  0.00
H
ATOM   5554 3HZ  LYS X 352      13.916  24.641  -1.002  1.00  0.00
H
ATOM   5555  N   PHE X 353      10.448  23.142   6.366  1.00  0.00
N
ATOM   5556  CA  PHE X 353      10.396  23.704   7.714  1.00  0.00
C
ATOM   5557  C   PHE X 353      10.566  22.622   8.769  1.00  0.00
C
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ATOM   5558  O   PHE X 353      11.437  22.718   9.635  1.00  0.00
O
ATOM   5559  CB  PHE X 353       9.077  24.449   7.931  1.00  0.00
C
ATOM   5560  CG  PHE X 353       8.918  25.004   9.317  1.00  0.00
C
ATOM   5561  CD1 PHE X 353       9.562  26.174   9.690  1.00  0.00
C
ATOM   5562  CD2 PHE X 353       8.123  24.358  10.251  1.00  0.00
C
ATOM   5563  CE1 PHE X 353       9.416  26.687  10.966  1.00  0.00
C
ATOM   5564  CE2 PHE X 353       7.973  24.869  11.526  1.00  0.00
C
ATOM   5565  CZ  PHE X 353       8.621  26.034  11.883  1.00  0.00
C
ATOM   5566  H   PHE X 353       9.631  23.201   5.776  1.00  0.00
H
ATOM   5567  HA  PHE X 353      11.219  24.406   7.854  1.00  0.00
H
ATOM   5568 1HB  PHE X 353       9.006  25.293   7.247  1.00  0.00
H
ATOM   5569 2HB  PHE X 353       8.237  23.777   7.766  1.00  0.00
H
ATOM   5570  HD1 PHE X 353      10.190  26.691   8.962  1.00  0.00
H
ATOM   5571  HD2 PHE X 353       7.611  23.437   9.970  1.00  0.00
H
ATOM   5572  HE1 PHE X 353       9.928  27.606  11.245  1.00  0.00
H
ATOM   5573  HE2 PHE X 353       7.344  24.351  12.251  1.00  0.00
H
ATOM   5574  HZ  PHE X 353       8.506  26.437  12.889  1.00  0.00
H
ATOM   5575  N   ASN X 354       9.730  21.593   8.695  1.00  0.00
N
ATOM   5576  CA  ASN X 354       9.767  20.505   9.665  1.00  0.00
C
ATOM   5577  C   ASN X 354      10.818  19.468   9.291  1.00  0.00
C
ATOM   5578  O   ASN X 354      10.633  18.695   8.349  1.00  0.00
O
ATOM   5579  CB  ASN X 354       8.407  19.845   9.811  1.00  0.00
C
ATOM   5580  CG  ASN X 354       8.360  18.781  10.871  1.00  0.00
C
ATOM   5581  ND2 ASN X 354       7.164  18.440  11.276  1.00  0.00
N
ATOM   5582  OD1 ASN X 354       9.392  18.223  11.265  1.00  0.00
O
ATOM   5583  H   ASN X 354       9.052  21.564   7.947  1.00  0.00
H
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ATOM   5584  HA  ASN X 354      10.049  20.892  10.646  1.00  0.00
H
ATOM   5585 1HB  ASN X 354       7.499  20.446   9.866  1.00  0.00
H
ATOM   5586 2HB  ASN X 354       8.465  19.365   8.834  1.00  0.00
H
ATOM   5587 1HD2 ASN X 354       7.056  17.737  11.982  1.00  0.00
H
ATOM   5588 2HD2 ASN X 354       6.358  18.879  10.882  1.00  0.00
H
ATOM   5589  N   ASN X 355      11.920  19.456  10.032  1.00  0.00
N
ATOM   5590  CA  ASN X 355      13.070  18.635   9.682  1.00  0.00
C
ATOM   5591  C   ASN X 355      13.804  18.153  10.927  1.00  0.00
C
ATOM   5592  O   ASN X 355      13.505  18.579  12.042  1.00  0.00
O
ATOM   5593  CB  ASN X 355      14.026  19.381   8.767  1.00  0.00
C
ATOM   5594  CG  ASN X 355      14.586  20.638   9.372  1.00  0.00
C
ATOM   5595  ND2 ASN X 355      14.243  21.752   8.778  1.00  0.00
N
ATOM   5596  OD1 ASN X 355      15.261  20.604  10.408  1.00  0.00
O
ATOM   5597  H   ASN X 355      11.962  20.032  10.861  1.00  0.00
H
ATOM   5598  HA  ASN X 355      12.739  17.740   9.152  1.00  0.00
H
ATOM   5599 1HB  ASN X 355      14.821  18.851   8.240  1.00  0.00
H
ATOM   5600 2HB  ASN X 355      13.241  19.650   8.062  1.00  0.00
H
ATOM   5601 1HD2 ASN X 355      14.580  22.627   9.126  1.00  0.00
H
ATOM   5602 2HD2 ASN X 355      13.646  21.727   7.979  1.00  0.00
H
ATOM   5603  N   ASN X 356      14.766  17.256  10.730  1.00  0.00
N
ATOM   5604  CA  ASN X 356      15.645  16.823  11.812  1.00  0.00
C
ATOM   5605  C   ASN X 356      14.841  16.390  13.031  1.00  0.00
C
ATOM   5606  O   ASN X 356      15.166  16.755  14.161  1.00  0.00
O
ATOM   5607  CB  ASN X 356      16.633  17.910  12.193  1.00  0.00
C
ATOM   5608  CG  ASN X 356      17.796  17.413  13.004  1.00  0.00
C
ATOM   5609  ND2 ASN X 356      18.274  18.258  13.883  1.00  0.00
N
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ATOM   5610  OD1 ASN X 356      18.210  16.254  12.889  1.00  0.00
O
ATOM   5611  H   ASN X 356      14.891  16.864   9.807  1.00  0.00
H
ATOM   5612  HA  ASN X 356      16.221  15.952  11.495  1.00  0.00
H
ATOM   5613 1HB  ASN X 356      16.995  18.622  11.448  1.00  0.00
H
ATOM   5614 2HB  ASN X 356      15.927  18.408  12.857  1.00  0.00
H
ATOM   5615 1HD2 ASN X 356      19.049  17.995  14.458  1.00  0.00
H
ATOM   5616 2HD2 ASN X 356      17.865  19.166  13.978  1.00  0.00
H
ATOM   5617  N   CYS X 357      13.791  15.611  12.796  1.00  0.00
N
ATOM   5618  CA  CYS X 357      12.906  15.172  13.870  1.00  0.00
C
ATOM   5619  C   CYS X 357      12.331  13.789  13.580  1.00  0.00
C
ATOM   5620  O   CYS X 357      11.568  13.612  12.632  1.00  0.00
O
ATOM   5621  CB  CYS X 357      11.803  16.230  13.851  1.00  0.00
C
ATOM   5622  SG  CYS X 357      10.506  15.982  15.087  1.00  0.00
S
ATOM   5623  H   CYS X 357      13.601  15.314  11.849  1.00  0.00
H
ATOM   5624  HA  CYS X 357      13.379  15.180  14.851  1.00  0.00
H
ATOM   5625 1HB  CYS X 357      12.222  17.217  14.046  1.00  0.00
H
ATOM   5626 2HB  CYS X 357      11.299  16.233  12.884  1.00  0.00
H
ATOM   5627  HG  CYS X 357       9.789  17.052  14.753  1.00  0.00
H
ATOM   5628  N   TYR X 358      12.706  12.817  14.401  1.00  0.00
N
ATOM   5629  CA  TYR X 358      12.254  11.444  14.217  1.00  0.00
C
ATOM   5630  C   TYR X 358      10.935  11.199  14.942  1.00  0.00
C
ATOM   5631  O   TYR X 358      10.209  10.256  14.627  1.00  0.00
O
ATOM   5632  CB  TYR X 358      13.318  10.460  14.711  1.00  0.00
C
ATOM   5633  CG  TYR X 358      13.345  10.291  16.215  1.00  0.00
C
ATOM   5634  CD1 TYR X 358      12.527   9.365  16.843  1.00  0.00
C
ATOM   5635  CD2 TYR X 358      14.191  11.059  17.001  1.00  0.00
C
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ATOM   5636  CE1 TYR X 358      12.547   9.206  18.215  1.00  0.00
C
ATOM   5637  CE2 TYR X 358      14.221  10.909  18.374  1.00  0.00
C
ATOM   5638  CZ  TYR X 358      13.397   9.981  18.978  1.00  0.00
C
ATOM   5639  OH  TYR X 358      13.423   9.829  20.344  1.00  0.00
O
ATOM   5640  H   TYR X 358      13.321  13.035  15.173  1.00  0.00
H
ATOM   5641  HA  TYR X 358      12.069  11.254  13.159  1.00  0.00
H
ATOM   5642 1HB  TYR X 358      13.109   9.497  14.242  1.00  0.00
H
ATOM   5643 2HB  TYR X 358      14.284  10.830  14.370  1.00  0.00
H
ATOM   5644  HD1 TYR X 358      11.857   8.755  16.234  1.00  0.00
H
ATOM   5645  HD2 TYR X 358      14.839  11.790  16.518  1.00  0.00
H
ATOM   5646  HE1 TYR X 358      11.898   8.473  18.695  1.00  0.00
H
ATOM   5647  HE2 TYR X 358      14.892  11.523  18.974  1.00  0.00
H
ATOM   5648  HH  TYR X 358      12.813   9.159  20.660  1.00  0.00
H
ATOM   5649  N   GLN X 359      10.628  12.056  15.907  1.00  0.00
N
ATOM   5650  CA  GLN X 359       9.460  11.835  16.750  1.00  0.00
C
ATOM   5651  C   GLN X 359       8.183  11.807  15.914  1.00  0.00
C
ATOM   5652  O   GLN X 359       7.294  10.995  16.156  1.00  0.00
O
ATOM   5653  CB  GLN X 359       9.356  12.924  17.820  1.00  0.00
C
ATOM   5654  CG  GLN X 359      10.433  12.851  18.888  1.00  0.00
C
ATOM   5655  CD  GLN X 359      10.369  14.017  19.857  1.00  0.00
C
ATOM   5656  NE2 GLN X 359      11.215  13.983  20.880  1.00  0.00
N
ATOM   5657  OE1 GLN X 359       9.570  14.941  19.684  1.00  0.00
O
ATOM   5658  H   GLN X 359      11.209  12.868  16.060  1.00  0.00
H
ATOM   5659  HA  GLN X 359       9.537  10.862  17.234  1.00  0.00
H
ATOM   5660 1HB  GLN X 359       9.414  13.882  17.302  1.00  0.00
H
ATOM   5661 2HB  GLN X 359       8.375  12.821  18.281  1.00  0.00
H
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ATOM   5662 1HG  GLN X 359      10.631  11.948  19.466  1.00  0.00
H
ATOM   5663 2HG  GLN X 359      11.256  13.024  18.193  1.00  0.00
H
ATOM   5664 1HE2 GLN X 359      11.219  14.724  21.552  1.00  0.00
H
ATOM   5665 2HE2 GLN X 359      11.848  13.215  20.981  1.00  0.00
H
ATOM   5666  N   ASP X 360       8.107  12.698  14.931  1.00  0.00
N
ATOM   5667  CA  ASP X 360       6.940  12.765  14.059  1.00  0.00
C
ATOM   5668  C   ASP X 360       6.664  11.429  13.396  1.00  0.00
C
ATOM   5669  O   ASP X 360       5.529  10.955  13.397  1.00  0.00
O
ATOM   5670  CB  ASP X 360       7.130  13.847  12.993  1.00  0.00
C
ATOM   5671  CG  ASP X 360       7.023  15.273  13.518  1.00  0.00
C
ATOM   5672  OD1 ASP X 360       6.530  15.448  14.606  1.00  0.00
O
ATOM   5673  OD2 ASP X 360       7.573  16.155  12.902  1.00  0.00
O
ATOM   5674  H   ASP X 360       8.872  13.341  14.786  1.00  0.00
H
ATOM   5675  HA  ASP X 360       6.054  13.005  14.647  1.00  0.00
H
ATOM   5676 1HB  ASP X 360       8.053  13.739  12.424  1.00  0.00
H
ATOM   5677 2HB  ASP X 360       6.277  13.633  12.348  1.00  0.00
H
ATOM   5678  N   ALA X 361       7.703  10.816  12.832  1.00  0.00
N
ATOM   5679  CA  ALA X 361       7.533   9.532  12.178  1.00  0.00
C
ATOM   5680  C   ALA X 361       7.161   8.437  13.159  1.00  0.00
C
ATOM   5681  O   ALA X 361       6.400   7.524  12.837  1.00  0.00
O
ATOM   5682  CB  ALA X 361       8.800   9.149  11.426  1.00  0.00
C
ATOM   5683  H   ALA X 361       8.616  11.247  12.859  1.00  0.00
H
ATOM   5684  HA  ALA X 361       6.713   9.610  11.464  1.00  0.00
H
ATOM   5685 1HB  ALA X 361       8.655   8.184  10.941  1.00  0.00
H
ATOM   5686 2HB  ALA X 361       9.017   9.906  10.671  1.00  0.00
H
ATOM   5687 3HB  ALA X 361       9.631   9.083  12.125  1.00  0.00
H
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ATOM   5688  N   LEU X 362       7.704   8.525  14.370  1.00  0.00
N
ATOM   5689  CA  LEU X 362       7.418   7.539  15.400  1.00  0.00
C
ATOM   5690  C   LEU X 362       5.932   7.523  15.739  1.00  0.00
C
ATOM   5691  O   LEU X 362       5.334   6.459  15.906  1.00  0.00
O
ATOM   5692  CB  LEU X 362       8.253   7.826  16.655  1.00  0.00
C
ATOM   5693  CG  LEU X 362       8.047   6.843  17.814  1.00  0.00
C
ATOM   5694  CD1 LEU X 362       8.404   5.431  17.371  1.00  0.00
C
ATOM   5695  CD2 LEU X 362       8.901   7.269  19.000  1.00  0.00
C
ATOM   5696  H   LEU X 362       8.329   9.292  14.578  1.00  0.00
H
ATOM   5697  HA  LEU X 362       7.664   6.544  15.032  1.00  0.00
H
ATOM   5698 1HB  LEU X 362       9.250   7.704  16.235  1.00  0.00
H
ATOM   5699 2HB  LEU X 362       8.126   8.852  16.998  1.00  0.00
H
ATOM   5700  HG  LEU X 362       7.001   6.912  18.115  1.00  0.00
H
ATOM   5701 1HD1 LEU X 362       8.254   4.740  18.202  1.00  0.00
H
ATOM   5702 2HD1 LEU X 362       7.766   5.139  16.538  1.00  0.00
H
ATOM   5703 3HD1 LEU X 362       9.446   5.401  17.058  1.00  0.00
H
ATOM   5704 1HD2 LEU X 362       8.753   6.570  19.823  1.00  0.00
H
ATOM   5705 2HD2 LEU X 362       9.952   7.272  18.709  1.00  0.00
H
ATOM   5706 3HD2 LEU X 362       8.610   8.271  19.317  1.00  0.00
H
ATOM   5707  N   VAL X 363       5.331   8.705  15.829  1.00  0.00
N
ATOM   5708  CA  VAL X 363       3.916   8.815  16.160  1.00  0.00
C
ATOM   5709  C   VAL X 363       3.056   8.131  15.098  1.00  0.00
C
ATOM   5710  O   VAL X 363       2.093   7.442  15.422  1.00  0.00
O
ATOM   5711  CB  VAL X 363       3.480  10.286  16.299  1.00  0.00
C
ATOM   5712  CG1 VAL X 363       1.967  10.383  16.424  1.00  0.00
C
ATOM   5713  CG2 VAL X 363       4.155  10.929  17.501  1.00  0.00
C
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ATOM   5714  H   VAL X 363       5.866   9.546  15.664  1.00  0.00
H
ATOM   5715  HA  VAL X 363       3.685   8.295  17.090  1.00  0.00
H
ATOM   5716  HB  VAL X 363       3.809  10.837  15.418  1.00  0.00
H
ATOM   5717 1HG1 VAL X 363       1.677  11.430  16.520  1.00  0.00
H
ATOM   5718 2HG1 VAL X 363       1.502   9.960  15.535  1.00  0.00
H
ATOM   5719 3HG1 VAL X 363       1.638   9.834  17.305  1.00  0.00
H
ATOM   5720 1HG2 VAL X 363       3.837  11.968  17.584  1.00  0.00
H
ATOM   5721 2HG2 VAL X 363       3.876  10.391  18.406  1.00  0.00
H
ATOM   5722 3HG2 VAL X 363       5.237  10.891  17.376  1.00  0.00
H
ATOM   5723  N   THR X 364       3.407   8.325  13.830  1.00  0.00
N
ATOM   5724  CA  THR X 364       2.646   7.699  12.755  1.00  0.00
C
ATOM   5725  C   THR X 364       2.823   6.188  12.835  1.00  0.00
C
ATOM   5726  O   THR X 364       1.897   5.425  12.557  1.00  0.00
O
ATOM   5727  CB  THR X 364       3.086   8.198  11.366  1.00  0.00
C
ATOM   5728  CG2 THR X 364       3.030   9.716  11.303  1.00  0.00
C
ATOM   5729  OG1 THR X 364       4.424   7.760  11.100  1.00  0.00
O
ATOM   5730  H   THR X 364       4.202   8.908  13.612  1.00  0.00
H
ATOM   5731  HA  THR X 364       1.584   7.911  12.883  1.00  0.00
H
ATOM   5732  HB  THR X 364       2.420   7.779  10.612  1.00  0.00
H
ATOM   5733  HG1 THR X 364       4.409   6.849  10.800  1.00  0.00
H
ATOM   5734 1HG2 THR X 364       3.343  10.050  10.313  1.00  0.00
H
ATOM   5735 2HG2 THR X 364       2.010  10.051  11.495  1.00  0.00
H
ATOM   5736 3HG2 THR X 364       3.697  10.135  12.055  1.00  0.00
H
ATOM   5737  N   SER X 365       4.017   5.757  13.226  1.00  0.00
N
ATOM   5738  CA  SER X 365       4.319   4.337  13.339  1.00  0.00
C
ATOM   5739  C   SER X 365       3.471   3.663  14.416  1.00  0.00
C
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ATOM   5740  O   SER X 365       3.014   2.535  14.237  1.00  0.00
O
ATOM   5741  CB  SER X 365       5.792   4.139  13.638  1.00  0.00
C
ATOM   5742  OG  SER X 365       6.605   4.542  12.569  1.00  0.00
O
ATOM   5743  H   SER X 365       4.735   6.431  13.452  1.00  0.00
H
ATOM   5744  HA  SER X 365       4.213   3.796  12.398  1.00  0.00
H
ATOM   5745 1HB  SER X 365       6.051   4.725  14.519  1.00  0.00
H
ATOM   5746 2HB  SER X 365       5.969   3.083  13.840  1.00  0.00
H
ATOM   5747  HG  SER X 365       7.526   4.400  12.796  1.00  0.00
H
ATOM   5748  N   VAL X 366       3.270   4.355  15.533  1.00  0.00
N
ATOM   5749  CA  VAL X 366       2.477   3.813  16.630  1.00  0.00
C
ATOM   5750  C   VAL X 366       1.029   3.626  16.221  1.00  0.00
C
ATOM   5751  O   VAL X 366       0.419   2.609  16.538  1.00  0.00
O
ATOM   5752  CB  VAL X 366       2.535   4.723  17.873  1.00  0.00
C
ATOM   5753  CG1 VAL X 366       1.542   4.251  18.924  1.00  0.00
C
ATOM   5754  CG2 VAL X 366       3.943   4.751  18.447  1.00  0.00
C
ATOM   5755  H   VAL X 366       3.675   5.275  15.623  1.00  0.00
H
ATOM   5756  HA  VAL X 366       2.819   2.817  16.912  1.00  0.00
H
ATOM   5757  HB  VAL X 366       2.293   5.743  17.575  1.00  0.00
H
ATOM   5758 1HG1 VAL X 366       1.596   4.905  19.795  1.00  0.00
H
ATOM   5759 2HG1 VAL X 366       0.533   4.281  18.511  1.00  0.00
H
ATOM   5760 3HG1 VAL X 366       1.783   3.232  19.222  1.00  0.00
H
ATOM   5761 1HG2 VAL X 366       3.966   5.398  19.323  1.00  0.00
H
ATOM   5762 2HG2 VAL X 366       4.239   3.741  18.733  1.00  0.00
H
ATOM   5763 3HG2 VAL X 366       4.636   5.132  17.695  1.00  0.00
H
ATOM   5764  N   VAL X 367       0.469   4.612  15.533  1.00  0.00
N
ATOM   5765  CA  VAL X 367      -0.908   4.509  15.072  1.00  0.00
C
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ATOM   5766  C   VAL X 367      -1.019   3.360  14.079  1.00  0.00
C
ATOM   5767  O   VAL X 367      -1.994   2.613  14.085  1.00  0.00
O
ATOM   5768  CB  VAL X 367      -1.385   5.822  14.422  1.00  0.00
C
ATOM   5769  CG1 VAL X 367      -2.759   5.636  13.795  1.00  0.00
C
ATOM   5770  CG2 VAL X 367      -1.417   6.945  15.448  1.00  0.00
C
ATOM   5771  H   VAL X 367       1.003   5.443  15.327  1.00  0.00
H
ATOM   5772  HA  VAL X 367      -1.583   4.261  15.892  1.00  0.00
H
ATOM   5773  HB  VAL X 367      -0.672   6.116  13.652  1.00  0.00
H
ATOM   5774 1HG1 VAL X 367      -3.081   6.575  13.339  1.00  0.00
H
ATOM   5775 2HG1 VAL X 367      -2.709   4.861  13.031  1.00  0.00
H
ATOM   5776 3HG1 VAL X 367      -3.474   5.343  14.563  1.00  0.00
H
ATOM   5777 1HG2 VAL X 367      -1.755   7.864  14.972  1.00  0.00
H
ATOM   5778 2HG2 VAL X 367      -2.101   6.680  16.254  1.00  0.00
H
ATOM   5779 3HG2 VAL X 367      -0.416   7.095  15.854  1.00  0.00
H
ATOM   5780  N   ASN X 368      -0.009   3.200  13.230  1.00  0.00
N
ATOM   5781  CA  ASN X 368      -0.057   2.117  12.264  1.00  0.00
C
ATOM   5782  C   ASN X 368      -0.255   0.783  12.960  1.00  0.00
C
ATOM   5783  O   ASN X 368      -1.136   0.009  12.592  1.00  0.00
O
ATOM   5784  CB  ASN X 368       1.191   2.082  11.403  1.00  0.00
C
ATOM   5785  CG  ASN X 368       1.171   1.007  10.350  1.00  0.00
C
ATOM   5786  ND2 ASN X 368       2.029   0.033  10.520  1.00  0.00
N
ATOM   5787  OD1 ASN X 368       0.338   1.022   9.435  1.00  0.00
O
ATOM   5788  H   ASN X 368       0.783   3.826  13.257  1.00  0.00
H
ATOM   5789  HA  ASN X 368      -0.912   2.252  11.599  1.00  0.00
H
ATOM   5790 1HB  ASN X 368       1.597   2.998  10.971  1.00  0.00
H
ATOM   5791 2HB  ASN X 368       1.826   1.756  12.225  1.00  0.00
H
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ATOM   5792 1HD2 ASN X 368       2.072  -0.716   9.858  1.00  0.00
H
ATOM   5793 2HD2 ASN X 368       2.640   0.039  11.310  1.00  0.00
H
ATOM   5794  N   CYS X 369       0.575   0.513  13.959  1.00  0.00
N
ATOM   5795  CA  CYS X 369       0.469  -0.746  14.680  1.00  0.00
C
ATOM   5796  C   CYS X 369      -0.760  -0.822  15.566  1.00  0.00
C
ATOM   5797  O   CYS X 369      -1.261  -1.917  15.836  1.00  0.00
O
ATOM   5798  CB  CYS X 369       1.732  -0.748  15.542  1.00  0.00
C
ATOM   5799  SG  CYS X 369       3.275  -0.886  14.610  1.00  0.00
S
ATOM   5800  H   CYS X 369       1.284   1.184  14.219  1.00  0.00
H
ATOM   5801  HA  CYS X 369       0.488  -1.621  14.029  1.00  0.00
H
ATOM   5802 1HB  CYS X 369       1.804   0.180  16.110  1.00  0.00
H
ATOM   5803 2HB  CYS X 369       1.717  -1.595  16.228  1.00  0.00
H
ATOM   5804  HG  CYS X 369       4.080  -0.853  15.668  1.00  0.00
H
ATOM   5805  N   MET X 370      -1.260   0.322  16.014  1.00  0.00
N
ATOM   5806  CA  MET X 370      -2.453   0.324  16.840  1.00  0.00
C
ATOM   5807  C   MET X 370      -3.621  -0.188  16.013  1.00  0.00
C
ATOM   5808  O   MET X 370      -4.299  -1.135  16.401  1.00  0.00
O
ATOM   5809  CB  MET X 370      -2.721   1.728  17.378  1.00  0.00
C
ATOM   5810  CG  MET X 370      -3.995   1.855  18.201  1.00  0.00
C
ATOM   5811  SD  MET X 370      -4.315   3.550  18.731  1.00  0.00
S
ATOM   5812  CE  MET X 370      -4.778   4.308  17.176  1.00  0.00
C
ATOM   5813  H   MET X 370      -0.809   1.195  15.778  1.00  0.00
H
ATOM   5814  HA  MET X 370      -2.321  -0.353  17.683  1.00  0.00
H
ATOM   5815 1HB  MET X 370      -1.863   2.000  17.993  1.00  0.00
H
ATOM   5816 2HB  MET X 370      -2.777   2.394  16.517  1.00  0.00
H
ATOM   5817 1HG  MET X 370      -4.828   1.507  17.593  1.00  0.00
H
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ATOM   5818 2HG  MET X 370      -3.896   1.218  19.081  1.00  0.00
H
ATOM   5819 1HE  MET X 370      -5.008   5.360  17.338  1.00  0.00
H
ATOM   5820 2HE  MET X 370      -3.953   4.219  16.467  1.00  0.00
H
ATOM   5821 3HE  MET X 370      -5.658   3.803  16.774  1.00  0.00
H
ATOM   5822  N   THR X 371      -3.845   0.441  14.865  1.00  0.00
N
ATOM   5823  CA  THR X 371      -4.942   0.042  13.989  1.00  0.00
C
ATOM   5824  C   THR X 371      -4.741  -1.388  13.500  1.00  0.00
C
ATOM   5825  O   THR X 371      -5.697  -2.083  13.160  1.00  0.00
O
ATOM   5826  CB  THR X 371      -5.069   0.984  12.777  1.00  0.00
C
ATOM   5827  CG2 THR X 371      -5.303   2.415  13.236  1.00  0.00
C
ATOM   5828  OG1 THR X 371      -3.868   0.927  11.996  1.00  0.00
O
ATOM   5829  H   THR X 371      -3.247   1.208  14.593  1.00  0.00
H
ATOM   5830  HA  THR X 371      -5.881   0.056  14.543  1.00  0.00
H
ATOM   5831  HB  THR X 371      -5.908   0.659  12.161  1.00  0.00
H
ATOM   5832  HG1 THR X 371      -3.122   1.200  12.537  1.00  0.00
H
ATOM   5833 1HG2 THR X 371      -5.390   3.065  12.366  1.00  0.00
H
ATOM   5834 2HG2 THR X 371      -6.222   2.462  13.821  1.00  0.00
H
ATOM   5835 3HG2 THR X 371      -4.464   2.740  13.851  1.00  0.00
H
ATOM   5836  N   SER X 372      -3.490  -1.833  13.477  1.00  0.00
N
ATOM   5837  CA  SER X 372      -3.182  -3.179  13.030  1.00  0.00
C
ATOM   5838  C   SER X 372      -3.648  -4.271  13.983  1.00  0.00
C
ATOM   5839  O   SER X 372      -4.408  -5.154  13.604  1.00  0.00
O
ATOM   5840  CB  SER X 372      -1.688  -3.325  12.809  1.00  0.00
C
ATOM   5841  OG  SER X 372      -1.344  -4.615  12.381  1.00  0.00
O
ATOM   5842  H   SER X 372      -2.740  -1.225  13.775  1.00  0.00
H
ATOM   5843  HA  SER X 372      -3.571  -3.405  12.037  1.00  0.00
H
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ATOM   5844 1HB  SER X 372      -1.376  -2.606  12.053  1.00  0.00
H
ATOM   5845 2HB  SER X 372      -1.174  -3.114  13.745  1.00  0.00
H
ATOM   5846  HG  SER X 372      -0.394  -4.666  12.252  1.00  0.00
H
ATOM   5847  N   PHE X 373      -3.199  -4.207  15.234  1.00  0.00
N
ATOM   5848  CA  PHE X 373      -3.551  -5.244  16.196  1.00  0.00
C
ATOM   5849  C   PHE X 373      -4.769  -4.959  17.059  1.00  0.00
C
ATOM   5850  O   PHE X 373      -5.303  -5.867  17.691  1.00  0.00
O
ATOM   5851  CB  PHE X 373      -2.375  -5.524  17.134  1.00  0.00
C
ATOM   5852  CG  PHE X 373      -2.460  -6.851  17.832  1.00  0.00
C
ATOM   5853  CD1 PHE X 373      -2.237  -8.031  17.137  1.00  0.00
C
ATOM   5854  CD2 PHE X 373      -2.761  -6.923  19.183  1.00  0.00
C
ATOM   5855  CE1 PHE X 373      -2.314  -9.254  17.779  1.00  0.00
C
ATOM   5856  CE2 PHE X 373      -2.838  -8.142  19.828  1.00  0.00
C
ATOM   5857  CZ  PHE X 373      -2.614  -9.309  19.124  1.00  0.00
C
ATOM   5858  H   PHE X 373      -2.611  -3.437  15.518  1.00  0.00
H
ATOM   5859  HA  PHE X 373      -3.805  -6.166  15.671  1.00  0.00
H
ATOM   5860 1HB  PHE X 373      -1.441  -5.525  16.575  1.00  0.00
H
ATOM   5861 2HB  PHE X 373      -2.330  -4.765  17.914  1.00  0.00
H
ATOM   5862  HD1 PHE X 373      -1.999  -7.987  16.075  1.00  0.00
H
ATOM   5863  HD2 PHE X 373      -2.938  -6.002  19.739  1.00  0.00
H
ATOM   5864  HE1 PHE X 373      -2.138 -10.172  17.221  1.00  0.00
H
ATOM   5865  HE2 PHE X 373      -3.075  -8.185  20.890  1.00  0.00
H
ATOM   5866  HZ  PHE X 373      -2.676 -10.272  19.629  1.00  0.00
H
ATOM   5867  N   VAL X 374      -5.223  -3.711  17.081  1.00  0.00
N
ATOM   5868  CA  VAL X 374      -6.384  -3.362  17.889  1.00  0.00
C
ATOM   5869  C   VAL X 374      -7.699  -3.372  17.110  1.00  0.00
C
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ATOM   5870  O   VAL X 374      -8.704  -3.904  17.582  1.00  0.00
O
ATOM   5871  CB  VAL X 374      -6.229  -1.969  18.529  1.00  0.00
C
ATOM   5872  CG1 VAL X 374      -7.471  -1.611  19.331  1.00  0.00
C
ATOM   5873  CG2 VAL X 374      -4.993  -1.924  19.415  1.00  0.00
C
ATOM   5874  H   VAL X 374      -4.760  -3.000  16.533  1.00  0.00
H
ATOM   5875  HA  VAL X 374      -6.549  -4.092  18.682  1.00  0.00
H
ATOM   5876  HB  VAL X 374      -6.079  -1.232  17.740  1.00  0.00
H
ATOM   5877 1HG1 VAL X 374      -7.344  -0.623  19.777  1.00  0.00
H
ATOM   5878 2HG1 VAL X 374      -8.339  -1.603  18.673  1.00  0.00
H
ATOM   5879 3HG1 VAL X 374      -7.619  -2.348  20.121  1.00  0.00
H
ATOM   5880 1HG2 VAL X 374      -4.898  -0.934  19.859  1.00  0.00
H
ATOM   5881 2HG2 VAL X 374      -5.086  -2.670  20.205  1.00  0.00
H
ATOM   5882 3HG2 VAL X 374      -4.109  -2.140  18.816  1.00  0.00
H
ATOM   5883  N   SER X 375      -7.698  -2.787  15.916  1.00  0.00
N
ATOM   5884  CA  SER X 375      -8.918  -2.730  15.121  1.00  0.00
C
ATOM   5885  C   SER X 375      -8.983  -3.826  14.060  1.00  0.00
C
ATOM   5886  O   SER X 375      -9.963  -4.574  13.995  1.00  0.00
O
ATOM   5887  CB  SER X 375      -9.046  -1.374  14.457  1.00  0.00
C
ATOM   5888  OG  SER X 375      -9.069  -0.329  15.392  1.00  0.00
O
ATOM   5889  H   SER X 375      -6.847  -2.378  15.558  1.00  0.00
H
ATOM   5890  HA  SER X 375      -9.828  -2.764  15.722  1.00  0.00
H
ATOM   5891 1HB  SER X 375      -8.198  -1.231  13.789  1.00  0.00
H
ATOM   5892 2HB  SER X 375      -9.970  -1.353  13.880  1.00  0.00
H
ATOM   5893  HG  SER X 375      -8.254  -0.338  15.900  1.00  0.00
H
ATOM   5894  N   GLY X 376      -7.944  -3.942  13.241  1.00  0.00
N
ATOM   5895  CA  GLY X 376      -7.948  -4.971  12.212  1.00  0.00
C
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ATOM   5896  C   GLY X 376      -7.954  -6.367  12.804  1.00  0.00
C
ATOM   5897  O   GLY X 376      -8.889  -7.146  12.590  1.00  0.00
O
ATOM   5898  H   GLY X 376      -7.155  -3.318  13.333  1.00  0.00
H
ATOM   5899 1HA  GLY X 376      -8.837  -4.852  11.592  1.00  0.00
H
ATOM   5900 2HA  GLY X 376      -7.058  -4.859  11.593  1.00  0.00
H
ATOM   5901  N   PHE X 377      -6.920  -6.686  13.564  1.00  0.00
N
ATOM   5902  CA  PHE X 377      -6.829  -8.006  14.168  1.00  0.00
C
ATOM   5903  C   PHE X 377      -8.080  -8.444  14.904  1.00  0.00
C
ATOM   5904  O   PHE X 377      -8.562  -9.557  14.688  1.00  0.00
O
ATOM   5905  CB  PHE X 377      -5.651  -8.069  15.141  1.00  0.00
C
ATOM   5906  CG  PHE X 377      -5.550  -9.369  15.887  1.00  0.00
C
ATOM   5907  CD1 PHE X 377      -4.997 -10.490  15.284  1.00  0.00
C
ATOM   5908  CD2 PHE X 377      -6.007  -9.474  17.191  1.00  0.00
C
ATOM   5909  CE1 PHE X 377      -4.902 -11.686  15.969  1.00  0.00
C
ATOM   5910  CE2 PHE X 377      -5.913 -10.669  17.879  1.00  0.00
C
ATOM   5911  CZ  PHE X 377      -5.361 -11.777  17.265  1.00  0.00
C
ATOM   5912  H   PHE X 377      -6.189  -6.009  13.726  1.00  0.00
H
ATOM   5913  HA  PHE X 377      -6.681  -8.759  13.393  1.00  0.00
H
ATOM   5914 1HB  PHE X 377      -4.713  -7.944  14.603  1.00  0.00
H
ATOM   5915 2HB  PHE X 377      -5.744  -7.286  15.892  1.00  0.00
H
ATOM   5916  HD1 PHE X 377      -4.633 -10.417  14.258  1.00  0.00
H
ATOM   5917  HD2 PHE X 377      -6.444  -8.601  17.675  1.00  0.00
H
ATOM   5918  HE1 PHE X 377      -4.466 -12.557  15.484  1.00  0.00
H
ATOM   5919  HE2 PHE X 377      -6.277 -10.739  18.904  1.00  0.00
H
ATOM   5920  HZ  PHE X 377      -5.288 -12.719  17.806  1.00  0.00
H
ATOM   5921  N   VAL X 378      -8.627  -7.574  15.749  1.00  0.00
N
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ATOM   5922  CA  VAL X 378      -9.814  -7.919  16.533  1.00  0.00
C
ATOM   5923  C   VAL X 378     -11.098  -8.178  15.747  1.00  0.00
C
ATOM   5924  O   VAL X 378     -11.992  -8.875  16.238  1.00  0.00
O
ATOM   5925  CB  VAL X 378     -10.153  -6.820  17.556  1.00  0.00
C
ATOM   5926  CG1 VAL X 378     -11.499  -7.099  18.211  1.00  0.00
C
ATOM   5927  CG2 VAL X 378      -9.061  -6.716  18.609  1.00  0.00
C
ATOM   5928  H   VAL X 378      -8.215  -6.658  15.851  1.00  0.00
H
ATOM   5929  HA  VAL X 378      -9.677  -8.860  17.066  1.00  0.00
H
ATOM   5930  HB  VAL X 378     -10.191  -5.858  17.044  1.00  0.00
H
ATOM   5931 1HG1 VAL X 378     -11.722  -6.313  18.932  1.00  0.00
H
ATOM   5932 2HG1 VAL X 378     -12.276  -7.124  17.449  1.00  0.00
H
ATOM   5933 3HG1 VAL X 378     -11.460  -8.060  18.725  1.00  0.00
H
ATOM   5934 1HG2 VAL X 378      -9.316  -5.934  19.323  1.00  0.00
H
ATOM   5935 2HG2 VAL X 378      -8.968  -7.668  19.132  1.00  0.00
H
ATOM   5936 3HG2 VAL X 378      -8.113  -6.471  18.128  1.00  0.00
H
ATOM   5937  N   ILE X 379     -11.206  -7.629  14.540  1.00  0.00
N
ATOM   5938  CA  ILE X 379     -12.417  -7.844  13.753  1.00  0.00
C
ATOM   5939  C   ILE X 379     -12.383  -9.116  12.895  1.00  0.00
C
ATOM   5940  O   ILE X 379     -13.231  -9.994  13.041  1.00  0.00
O
ATOM   5941  CB  ILE X 379     -12.700  -6.657  12.815  1.00  0.00
C
ATOM   5942  CG1 ILE X 379     -13.057  -5.409  13.626  1.00  0.00
C
ATOM   5943  CG2 ILE X 379     -13.818  -7.002  11.843  1.00  0.00
C
ATOM   5944  CD1 ILE X 379     -13.130  -4.146  12.801  1.00  0.00
C
ATOM   5945  H   ILE X 379     -10.454  -7.065  14.169  1.00  0.00
H
ATOM   5946  HA  ILE X 379     -13.275  -8.004  14.405  1.00  0.00
H
ATOM   5947  HB  ILE X 379     -11.794  -6.421  12.258  1.00  0.00
H
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ATOM   5948 1HG1 ILE X 379     -14.023  -5.593  14.096  1.00  0.00
H
ATOM   5949 2HG1 ILE X 379     -12.295  -5.295  14.398  1.00  0.00
H
ATOM   5950 1HG2 ILE X 379     -14.006  -6.153  11.188  1.00  0.00
H
ATOM   5951 2HG2 ILE X 379     -13.526  -7.864  11.244  1.00  0.00
H
ATOM   5952 3HG2 ILE X 379     -14.725  -7.239  12.400  1.00  0.00
H
ATOM   5953 1HD1 ILE X 379     -13.389  -3.305  13.444  1.00  0.00
H
ATOM   5954 2HD1 ILE X 379     -12.165  -3.959  12.331  1.00  0.00
H
ATOM   5955 3HD1 ILE X 379     -13.892  -4.257  12.031  1.00  0.00
H
ATOM   5956  N   PHE X 380     -11.388  -9.214  12.021  1.00  0.00
N
ATOM   5957  CA  PHE X 380     -11.259 -10.342  11.100  1.00  0.00
C
ATOM   5958  C   PHE X 380     -11.134 -11.735  11.709  1.00  0.00
C
ATOM   5959  O   PHE X 380     -11.916 -12.630  11.391  1.00  0.00
O
ATOM   5960  CB  PHE X 380     -10.046 -10.150  10.188  1.00  0.00
C
ATOM   5961  CG  PHE X 380      -9.935 -11.186   9.104  1.00  0.00
C
ATOM   5962  CD1 PHE X 380     -10.604 -11.024   7.900  1.00  0.00
C
ATOM   5963  CD2 PHE X 380      -9.160 -12.321   9.285  1.00  0.00
C
ATOM   5964  CE1 PHE X 380     -10.503 -11.976   6.902  1.00  0.00
C
ATOM   5965  CE2 PHE X 380      -9.055 -13.273   8.290  1.00  0.00
C
ATOM   5966  CZ  PHE X 380      -9.728 -13.099   7.096  1.00  0.00
C
ATOM   5967  H   PHE X 380     -10.693  -8.481  11.992  1.00  0.00
H
ATOM   5968  HA  PHE X 380     -12.153 -10.417  10.480  1.00  0.00
H
ATOM   5969 1HB  PHE X 380     -10.100  -9.183   9.691  1.00  0.00
H
ATOM   5970 2HB  PHE X 380      -9.128 -10.209  10.770  1.00  0.00
H
ATOM   5971  HD1 PHE X 380     -11.216 -10.136   7.746  1.00  0.00
H
ATOM   5972  HD2 PHE X 380      -8.629 -12.458  10.229  1.00  0.00
H
ATOM   5973  HE1 PHE X 380     -11.035 -11.837   5.962  1.00  0.00
H
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ATOM   5974  HE2 PHE X 380      -8.443 -14.160   8.446  1.00  0.00
H
ATOM   5975  HZ  PHE X 380      -9.648 -13.849   6.312  1.00  0.00
H
ATOM   5976  N   THR X 381     -10.140 -11.923  12.568  1.00  0.00
N
ATOM   5977  CA  THR X 381      -9.925 -13.227  13.186  1.00  0.00
C
ATOM   5978  C   THR X 381     -11.014 -13.629  14.179  1.00  0.00
C
ATOM   5979  O   THR X 381     -11.386 -14.799  14.250  1.00  0.00
O
ATOM   5980  CB  THR X 381      -8.577 -13.285  13.927  1.00  0.00
C
ATOM   5981  CG2 THR X 381      -7.433 -12.942  12.983  1.00  0.00
C
ATOM   5982  OG1 THR X 381      -8.586 -12.355  15.018  1.00  0.00
O
ATOM   5983  H   THR X 381      -9.525 -11.155  12.796  1.00  0.00
H
ATOM   5984  HA  THR X 381      -9.938 -14.004  12.421  1.00  0.00
H
ATOM   5985  HB  THR X 381      -8.432 -14.292  14.320  1.00  0.00
H
ATOM   5986  HG1 THR X 381      -8.727 -11.468  14.682  1.00  0.00
H
ATOM   5987 1HG2 THR X 381      -6.489 -12.991  13.526  1.00  0.00
H
ATOM   5988 2HG2 THR X 381      -7.417 -13.655  12.159  1.00  0.00
H
ATOM   5989 3HG2 THR X 381      -7.578 -11.937  12.591  1.00  0.00
H
ATOM   5990  N   VAL X 382     -11.538 -12.672  14.959  1.00  0.00
N
ATOM   5991  CA  VAL X 382     -12.589 -13.026  15.917  1.00  0.00
C
ATOM   5992  C   VAL X 382     -13.831 -13.583  15.223  1.00  0.00
C
ATOM   5993  O   VAL X 382     -14.395 -14.587  15.656  1.00  0.00
O
ATOM   5994  CB  VAL X 382     -13.004 -11.816  16.774  1.00  0.00
C
ATOM   5995  CG1 VAL X 382     -14.289 -12.117  17.534  1.00  0.00
C
ATOM   5996  CG2 VAL X 382     -11.892 -11.439  17.740  1.00  0.00
C
ATOM   5997  H   VAL X 382     -11.212 -11.718  14.887  1.00  0.00
H
ATOM   5998  HA  VAL X 382     -12.266 -13.828  16.582  1.00  0.00
H
ATOM   5999  HB  VAL X 382     -13.162 -10.957  16.122  1.00  0.00
H
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ATOM   6000 1HG1 VAL X 382     -14.568 -11.251  18.134  1.00  0.00
H
ATOM   6001 2HG1 VAL X 382     -15.087 -12.339  16.827  1.00  0.00
H
ATOM   6002 3HG1 VAL X 382     -14.132 -12.974  18.188  1.00  0.00
H
ATOM   6003 1HG2 VAL X 382     -12.201 -10.582  18.338  1.00  0.00
H
ATOM   6004 2HG2 VAL X 382     -11.680 -12.283  18.398  1.00  0.00
H
ATOM   6005 3HG2 VAL X 382     -10.993 -11.184  17.178  1.00  0.00
H
ATOM   6006  N   LEU X 383     -14.258 -12.942  14.137  1.00  0.00
N
ATOM   6007  CA  LEU X 383     -15.437 -13.421  13.422  1.00  0.00
C
ATOM   6008  C   LEU X 383     -15.140 -14.752  12.738  1.00  0.00
C
ATOM   6009  O   LEU X 383     -16.006 -15.624  12.650  1.00  0.00
O
ATOM   6010  CB  LEU X 383     -15.899 -12.375  12.399  1.00  0.00
C
ATOM   6011  CG  LEU X 383     -16.421 -11.063  12.999  1.00  0.00
C
ATOM   6012  CD1 LEU X 383     -16.604 -10.024  11.902  1.00  0.00
C
ATOM   6013  CD2 LEU X 383     -17.733 -11.321  13.722  1.00  0.00
C
ATOM   6014  H   LEU X 383     -13.765 -12.124  13.808  1.00  0.00
H
ATOM   6015  HA  LEU X 383     -16.244 -13.604  14.130  1.00  0.00
H
ATOM   6016 1HB  LEU X 383     -14.956 -12.201  11.885  1.00  0.00
H
ATOM   6017 2HB  LEU X 383     -16.625 -12.787  11.698  1.00  0.00
H
ATOM   6018  HG  LEU X 383     -15.691 -10.733  13.740  1.00  0.00
H
ATOM   6019 1HD1 LEU X 383     -16.974  -9.096  12.336  1.00  0.00
H
ATOM   6020 2HD1 LEU X 383     -15.647  -9.838  11.413  1.00  0.00
H
ATOM   6021 3HD1 LEU X 383     -17.321 -10.392  11.169  1.00  0.00
H
ATOM   6022 1HD2 LEU X 383     -18.104 -10.387  14.148  1.00  0.00
H
ATOM   6023 2HD2 LEU X 383     -18.467 -11.713  13.017  1.00  0.00
H
ATOM   6024 3HD2 LEU X 383     -17.574 -12.045  14.521  1.00  0.00
H
ATOM   6025  N   GLY X 384     -13.910 -14.907  12.251  1.00  0.00
N
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ATOM   6026  CA  GLY X 384     -13.506 -16.131  11.575  1.00  0.00
C
ATOM   6027  C   GLY X 384     -13.630 -17.352  12.494  1.00  0.00
C
ATOM   6028  O   GLY X 384     -14.131 -18.399  12.088  1.00  0.00
O
ATOM   6029  H   GLY X 384     -13.241 -14.157  12.354  1.00  0.00
H
ATOM   6030 1HA  GLY X 384     -14.143 -16.283  10.703  1.00  0.00
H
ATOM   6031 2HA  GLY X 384     -12.469 -16.036  11.255  1.00  0.00
H
ATOM   6032  N   TYR X 385     -13.173 -17.210  13.731  1.00  0.00
N
ATOM   6033  CA  TYR X 385     -13.227 -18.302  14.694  1.00  0.00
C
ATOM   6034  C   TYR X 385     -14.615 -18.426  15.309  1.00  0.00
C
ATOM   6035  O   TYR X 385     -15.078 -19.527  15.604  1.00  0.00
O
ATOM   6036  CB  TYR X 385     -12.183 -18.096  15.795  1.00  0.00
C
ATOM   6037  CG  TYR X 385     -10.758 -18.319  15.336  1.00  0.00
C
ATOM   6038  CD1 TYR X 385      -9.851 -17.271  15.297  1.00  0.00
C
ATOM   6039  CD2 TYR X 385     -10.326 -19.578  14.948  1.00  0.00
C
ATOM   6040  CE1 TYR X 385      -8.548 -17.470  14.879  1.00  0.00
C
ATOM   6041  CE2 TYR X 385      -9.026 -19.788  14.530  1.00  0.00
C
ATOM   6042  CZ  TYR X 385      -8.140 -18.730  14.497  1.00  0.00
C
ATOM   6043  OH  TYR X 385      -6.844 -18.935  14.081  1.00  0.00
O
ATOM   6044  H   TYR X 385     -12.778 -16.324  14.012  1.00  0.00
H
ATOM   6045  HA  TYR X 385     -13.024 -19.249  14.193  1.00  0.00
H
ATOM   6046 1HB  TYR X 385     -12.292 -17.073  16.156  1.00  0.00
H
ATOM   6047 2HB  TYR X 385     -12.420 -18.793  16.597  1.00  0.00
H
ATOM   6048  HD1 TYR X 385     -10.181 -16.278  15.600  1.00  0.00
H
ATOM   6049  HD2 TYR X 385     -11.031 -20.409  14.976  1.00  0.00
H
ATOM   6050  HE1 TYR X 385      -7.846 -16.637  14.852  1.00  0.00
H
ATOM   6051  HE2 TYR X 385      -8.705 -20.786  14.227  1.00  0.00
H
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ATOM   6052  HH  TYR X 385      -6.315 -18.133  14.098  1.00  0.00
H
ATOM   6053  N   MET X 386     -15.277 -17.287  15.503  1.00  0.00
N
ATOM   6054  CA  MET X 386     -16.655 -17.273  15.971  1.00  0.00
C
ATOM   6055  C   MET X 386     -17.560 -18.074  15.047  1.00  0.00
C
ATOM   6056  O   MET X 386     -18.415 -18.834  15.504  1.00  0.00
O
ATOM   6057  CB  MET X 386     -17.159 -15.836  16.085  1.00  0.00
C
ATOM   6058  CG  MET X 386     -18.559 -15.704  16.666  1.00  0.00
C
ATOM   6059  SD  MET X 386     -18.618 -16.081  18.429  1.00  0.00
S
ATOM   6060  CE  MET X 386     -19.250 -17.757  18.395  1.00  0.00
C
ATOM   6061  H   MET X 386     -14.810 -16.411  15.322  1.00  0.00
H
ATOM   6062  HA  MET X 386     -16.720 -17.744  16.951  1.00  0.00
H
ATOM   6063 1HB  MET X 386     -16.450 -15.302  16.716  1.00  0.00
H
ATOM   6064 2HB  MET X 386     -17.140 -15.412  15.080  1.00  0.00
H
ATOM   6065 1HG  MET X 386     -18.897 -14.680  16.509  1.00  0.00
H
ATOM   6066 2HG  MET X 386     -19.214 -16.390  16.131  1.00  0.00
H
ATOM   6067 1HE  MET X 386     -19.342 -18.133  19.414  1.00  0.00
H
ATOM   6068 2HE  MET X 386     -20.227 -17.767  17.912  1.00  0.00
H
ATOM   6069 3HE  MET X 386     -18.562 -18.393  17.835  1.00  0.00
H
ATOM   6070  N   ALA X 387     -17.368 -17.904  13.742  1.00  0.00
N
ATOM   6071  CA  ALA X 387     -18.139 -18.644  12.750  1.00  0.00
C
ATOM   6072  C   ALA X 387     -17.905 -20.145  12.879  1.00  0.00
C
ATOM   6073  O   ALA X 387     -18.837 -20.938  12.764  1.00  0.00
O
ATOM   6074  CB  ALA X 387     -17.793 -18.169  11.346  1.00  0.00
C
ATOM   6075  H   ALA X 387     -16.670 -17.244  13.430  1.00  0.00
H
ATOM   6076  HA  ALA X 387     -19.199 -18.464  12.925  1.00  0.00
H
ATOM   6077 1HB  ALA X 387     -18.376 -18.731  10.618  1.00  0.00
H
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ATOM   6078 2HB  ALA X 387     -18.023 -17.107  11.255  1.00  0.00
H
ATOM   6079 3HB  ALA X 387     -16.732 -18.327  11.160  1.00  0.00
H
ATOM   6080  N   GLU X 388     -16.652 -20.526  13.116  1.00  0.00
N
ATOM   6081  CA  GLU X 388     -16.297 -21.928  13.285  1.00  0.00
C
ATOM   6082  C   GLU X 388     -16.998 -22.531  14.496  1.00  0.00
C
ATOM   6083  O   GLU X 388     -17.395 -23.698  14.481  1.00  0.00
O
ATOM   6084  CB  GLU X 388     -14.781 -22.084  13.425  1.00  0.00
C
ATOM   6085  CG  GLU X 388     -14.000 -21.818  12.145  1.00  0.00
C
ATOM   6086  CD  GLU X 388     -12.519 -21.918  12.377  1.00  0.00
C
ATOM   6087  OE1 GLU X 388     -12.125 -22.117  13.501  1.00  0.00
O
ATOM   6088  OE2 GLU X 388     -11.785 -21.908  11.416  1.00  0.00
O
ATOM   6089  H   GLU X 388     -15.929 -19.824  13.180  1.00  0.00
H
ATOM   6090  HA  GLU X 388     -16.628 -22.501  12.418  1.00  0.00
H
ATOM   6091 1HB  GLU X 388     -14.458 -21.384  14.197  1.00  0.00
H
ATOM   6092 2HB  GLU X 388     -14.594 -23.105  13.758  1.00  0.00
H
ATOM   6093 1HG  GLU X 388     -14.284 -22.473  11.320  1.00  0.00
H
ATOM   6094 2HG  GLU X 388     -14.261 -20.790  11.895  1.00  0.00
H
ATOM   6095  N   MET X 389     -17.148 -21.729  15.547  1.00  0.00
N
ATOM   6096  CA  MET X 389     -17.821 -22.173  16.761  1.00  0.00
C
ATOM   6097  C   MET X 389     -19.336 -22.067  16.621  1.00  0.00
C
ATOM   6098  O   MET X 389     -20.081 -22.769  17.305  1.00  0.00
O
ATOM   6099  CB  MET X 389     -17.343 -21.357  17.959  1.00  0.00
C
ATOM   6100  CG  MET X 389     -15.886 -21.590  18.338  1.00  0.00
C
ATOM   6101  SD  MET X 389     -15.407 -20.707  19.836  1.00  0.00
S
ATOM   6102  CE  MET X 389     -15.456 -19.012  19.260  1.00  0.00
C
ATOM   6103  H   MET X 389     -16.786 -20.787  15.501  1.00  0.00
H
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ATOM   6104  HA  MET X 389     -17.600 -23.224  16.945  1.00  0.00
H
ATOM   6105 1HB  MET X 389     -17.489 -20.308  17.707  1.00  0.00
H
ATOM   6106 2HB  MET X 389     -17.982 -21.623  18.801  1.00  0.00
H
ATOM   6107 1HG  MET X 389     -15.740 -22.658  18.489  1.00  0.00
H
ATOM   6108 2HG  MET X 389     -15.262 -21.253  17.509  1.00  0.00
H
ATOM   6109 1HE  MET X 389     -15.183 -18.342  20.077  1.00  0.00
H
ATOM   6110 2HE  MET X 389     -14.752 -18.887  18.436  1.00  0.00
H
ATOM   6111 3HE  MET X 389     -16.464 -18.774  18.917  1.00  0.00
H
ATOM   6112  N   ARG X 390     -19.783 -21.189  15.734  1.00  0.00
N
ATOM   6113  CA  ARG X 390     -21.207 -20.950  15.541  1.00  0.00
C
ATOM   6114  C   ARG X 390     -21.885 -22.149  14.894  1.00  0.00
C
ATOM   6115  O   ARG X 390     -22.945 -22.588  15.338  1.00  0.00
O
ATOM   6116  CB  ARG X 390     -21.474 -19.672  14.759  1.00  0.00
C
ATOM   6117  CG  ARG X 390     -22.934 -19.424  14.418  1.00  0.00
C
ATOM   6118  CD  ARG X 390     -23.818 -19.251  15.600  1.00  0.00
C
ATOM   6119  NE  ARG X 390     -23.585 -18.029  16.353  1.00  0.00
N
ATOM   6120  CZ  ARG X 390     -23.987 -17.825  17.623  1.00  0.00
C
ATOM   6121  NH1 ARG X 390     -24.675 -18.739  18.271  1.00  0.00
N
ATOM   6122  NH2 ARG X 390     -23.694 -16.668  18.193  1.00  0.00
N
ATOM   6123  H   ARG X 390     -19.118 -20.672  15.177  1.00  0.00
H
ATOM   6124  HA  ARG X 390     -21.691 -20.804  16.507  1.00  0.00
H
ATOM   6125 1HB  ARG X 390     -21.100 -18.846  15.363  1.00  0.00
H
ATOM   6126 2HB  ARG X 390     -20.896 -19.738  13.837  1.00  0.00
H
ATOM   6127 1HG  ARG X 390     -23.001 -18.518  13.815  1.00  0.00
H
ATOM   6128 2HG  ARG X 390     -23.304 -20.272  13.842  1.00  0.00
H
ATOM   6129 1HD  ARG X 390     -24.855 -19.236  15.267  1.00  0.00
H
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ATOM   6130 2HD  ARG X 390     -23.667 -20.088  16.281  1.00  0.00
H
ATOM   6131  HE  ARG X 390     -23.111 -17.181  16.075  1.00  0.00
H
ATOM   6132 1HH1 ARG X 390     -24.906 -19.610  17.815  1.00  0.00
H
ATOM   6133 2HH1 ARG X 390     -24.967 -18.565  19.221  1.00  0.00
H
ATOM   6134 1HH2 ARG X 390     -23.180 -15.969  17.673  1.00  0.00
H
ATOM   6135 2HH2 ARG X 390     -23.984 -16.488  19.142  1.00  0.00
H
ATOM   6136  N   ASN X 391     -21.266 -22.676  13.843  1.00  0.00
N
ATOM   6137  CA  ASN X 391     -21.843 -23.783  13.090  1.00  0.00
C
ATOM   6138  C   ASN X 391     -21.943 -25.039  13.946  1.00  0.00
C
ATOM   6139  O   ASN X 391     -22.574 -26.022  13.556  1.00  0.00
O
ATOM   6140  CB  ASN X 391     -21.050 -24.068  11.829  1.00  0.00
C
ATOM   6141  CG  ASN X 391     -19.639 -24.513  12.088  1.00  0.00
C
ATOM   6142  ND2 ASN X 391     -18.708 -23.831  11.471  1.00  0.00
N
ATOM   6143  OD1 ASN X 391     -19.390 -25.415  12.897  1.00  0.00
O
ATOM   6144  H   ASN X 391     -20.373 -22.299  13.558  1.00  0.00
H
ATOM   6145  HA  ASN X 391     -22.862 -23.534  12.787  1.00  0.00
H
ATOM   6146 1HB  ASN X 391     -21.474 -24.675  11.028  1.00  0.00
H
ATOM   6147 2HB  ASN X 391     -21.037 -23.022  11.522  1.00  0.00
H
ATOM   6148 1HD2 ASN X 391     -17.745 -24.072  11.597  1.00  0.00
H
ATOM   6149 2HD2 ASN X 391     -18.960 -23.071  10.873  1.00  0.00
H
ATOM   6150  N   GLU X 392     -21.312 -25.003  15.117  1.00  0.00
N
ATOM   6151  CA  GLU X 392     -21.329 -26.138  16.031  1.00  0.00
C
ATOM   6152  C   GLU X 392     -22.665 -26.240  16.760  1.00  0.00
C
ATOM   6153  O   GLU X 392     -23.145 -27.335  17.041  1.00  0.00
O
ATOM   6154  CB  GLU X 392     -20.185 -26.027  17.043  1.00  0.00
C
ATOM   6155  CG  GLU X 392     -18.796 -26.183  16.441  1.00  0.00
C
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ATOM   6156  CD  GLU X 392     -17.726 -25.979  17.477  1.00  0.00
C
ATOM   6157  OE1 GLU X 392     -18.060 -25.669  18.595  1.00  0.00
O
ATOM   6158  OE2 GLU X 392     -16.584 -26.245  17.182  1.00  0.00
O
ATOM   6159  H   GLU X 392     -20.810 -24.168  15.379  1.00  0.00
H
ATOM   6160  HA  GLU X 392     -21.210 -27.066  15.471  1.00  0.00
H
ATOM   6161 1HB  GLU X 392     -20.270 -25.046  17.512  1.00  0.00
H
ATOM   6162 2HB  GLU X 392     -20.345 -26.803  17.792  1.00  0.00
H
ATOM   6163 1HG  GLU X 392     -18.644 -27.142  15.946  1.00  0.00
H
ATOM   6164 2HG  GLU X 392     -18.745 -25.383  15.704  1.00  0.00
H
ATOM   6165  N   ASP X 393     -23.258 -25.088  17.059  1.00  0.00
N
ATOM   6166  CA  ASP X 393     -24.454 -25.039  17.892  1.00  0.00
C
ATOM   6167  C   ASP X 393     -25.677 -24.645  17.074  1.00  0.00
C
ATOM   6168  O   ASP X 393     -26.755 -25.218  17.240  1.00  0.00
O
ATOM   6169  CB  ASP X 393     -24.260 -24.059  19.053  1.00  0.00
C
ATOM   6170  CG  ASP X 393     -23.123 -24.424  19.999  1.00  0.00
C
ATOM   6171  OD1 ASP X 393     -23.137 -25.514  20.521  1.00  0.00
O
ATOM   6172  OD2 ASP X 393     -22.176 -23.679  20.070  1.00  0.00
O
ATOM   6173  H   ASP X 393     -22.872 -24.227  16.701  1.00  0.00
H
ATOM   6174  HA  ASP X 393     -24.660 -26.028  18.302  1.00  0.00
H
ATOM   6175 1HB  ASP X 393     -24.148 -23.024  18.733  1.00  0.00
H
ATOM   6176 2HB  ASP X 393     -25.214 -24.182  19.567  1.00  0.00
H
ATOM   6177  N   VAL X 394     -25.506 -23.664  16.193  1.00  0.00
N
ATOM   6178  CA  VAL X 394     -26.593 -23.199  15.342  1.00  0.00
C
ATOM   6179  C   VAL X 394     -26.151 -23.118  13.885  1.00  0.00
C
ATOM   6180  O   VAL X 394     -25.524 -22.142  13.472  1.00  0.00
O
ATOM   6181  CB  VAL X 394     -27.114 -21.821  15.792  1.00  0.00
C
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ATOM   6182  CG1 VAL X 394     -28.320 -21.411  14.959  1.00  0.00
C
ATOM   6183  CG2 VAL X 394     -27.472 -21.843  17.270  1.00  0.00
C
ATOM   6184  H   VAL X 394     -24.597 -23.229  16.113  1.00  0.00
H
ATOM   6185  HA  VAL X 394     -27.426 -23.904  15.344  1.00  0.00
H
ATOM   6186  HB  VAL X 394     -26.320 -21.086  15.668  1.00  0.00
H
ATOM   6187 1HG1 VAL X 394     -28.674 -20.435  15.290  1.00  0.00
H
ATOM   6188 2HG1 VAL X 394     -28.035 -21.356  13.909  1.00  0.00
H
ATOM   6189 3HG1 VAL X 394     -29.116 -22.146  15.082  1.00  0.00
H
ATOM   6190 1HG2 VAL X 394     -27.837 -20.861  17.570  1.00  0.00
H
ATOM   6191 2HG2 VAL X 394     -28.247 -22.589  17.445  1.00  0.00
H
ATOM   6192 3HG2 VAL X 394     -26.586 -22.094  17.854  1.00  0.00
H
ATOM   6193  N   SER X 395     -26.487 -24.144  13.111  1.00  0.00
N
ATOM   6194  CA  SER X 395     -26.222 -24.143  11.678  1.00  0.00
C
ATOM   6195  C   SER X 395     -27.010 -23.042  10.975  1.00  0.00
C
ATOM   6196  O   SER X 395     -26.609 -22.557   9.917  1.00  0.00
O
ATOM   6197  CB  SER X 395     -26.560 -25.497  11.084  1.00  0.00
C
ATOM   6198  OG  SER X 395     -27.928 -25.781  11.165  1.00  0.00
O
ATOM   6199  H   SER X 395     -26.937 -24.946  13.528  1.00  0.00
H
ATOM   6200  HA  SER X 395     -25.162 -24.056  11.434  1.00  0.00
H
ATOM   6201 1HB  SER X 395     -26.257 -25.502  10.036  1.00  0.00
H
ATOM   6202 2HB  SER X 395     -26.005 -26.264  11.623  1.00  0.00
H
ATOM   6203  HG  SER X 395     -28.424 -25.111  10.685  1.00  0.00
H
ATOM   6204  N   GLU X 396     -28.132 -22.653  11.571  1.00  0.00
N
ATOM   6205  CA  GLU X 396     -29.010 -21.654  10.970  1.00  0.00
C
ATOM   6206  C   GLU X 396     -28.270 -20.351  10.711  1.00  0.00
C
ATOM   6207  O   GLU X 396     -28.323 -19.805   9.609  1.00  0.00
O
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ATOM   6208  CB  GLU X 396     -30.225 -21.399  11.866  1.00  0.00
C
ATOM   6209  CG  GLU X 396     -31.232 -20.412  11.294  1.00  0.00
C
ATOM   6210  CD  GLU X 396     -32.407 -20.237  12.215  1.00  0.00
C
ATOM   6211  OE1 GLU X 396     -32.435 -20.874  13.241  1.00  0.00
O
ATOM   6212  OE2 GLU X 396     -33.222 -19.383  11.950  1.00  0.00
O
ATOM   6213  H   GLU X 396     -28.383 -23.058  12.461  1.00  0.00
H
ATOM   6214  HA  GLU X 396     -29.362 -22.007   9.999  1.00  0.00
H
ATOM   6215 1HB  GLU X 396     -30.710 -22.361  12.026  1.00  0.00
H
ATOM   6216 2HB  GLU X 396     -29.846 -21.020  12.816  1.00  0.00
H
ATOM   6217 1HG  GLU X 396     -30.803 -19.438  11.064  1.00  0.00
H
ATOM   6218 2HG  GLU X 396     -31.563 -20.889  10.372  1.00  0.00
H
ATOM   6219  N   VAL X 397     -27.581 -19.857  11.732  1.00  0.00
N
ATOM   6220  CA  VAL X 397     -26.805 -18.629  11.609  1.00  0.00
C
ATOM   6221  C   VAL X 397     -25.652 -18.802  10.629  1.00  0.00
C
ATOM   6222  O   VAL X 397     -25.372 -17.915   9.819  1.00  0.00
O
ATOM   6223  CB  VAL X 397     -26.247 -18.174  12.971  1.00  0.00
C
ATOM   6224  CG1 VAL X 397     -25.305 -16.993  12.792  1.00  0.00
C
ATOM   6225  CG2 VAL X 397     -27.380 -17.812  13.917  1.00  0.00
C
ATOM   6226  H   VAL X 397     -27.593 -20.343  12.617  1.00  0.00
H
ATOM   6227  HA  VAL X 397     -27.407 -17.819  11.192  1.00  0.00
H
ATOM   6228  HB  VAL X 397     -25.706 -19.004  13.427  1.00  0.00
H
ATOM   6229 1HG1 VAL X 397     -24.917 -16.686  13.764  1.00  0.00
H
ATOM   6230 2HG1 VAL X 397     -24.474 -17.284  12.148  1.00  0.00
H
ATOM   6231 3HG1 VAL X 397     -25.844 -16.162  12.338  1.00  0.00
H
ATOM   6232 1HG2 VAL X 397     -26.966 -17.493  14.875  1.00  0.00
H
ATOM   6233 2HG2 VAL X 397     -27.967 -17.000  13.488  1.00  0.00
H
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ATOM   6234 3HG2 VAL X 397     -28.019 -18.681  14.071  1.00  0.00
H
ATOM   6235  N   ALA X 398     -24.983 -19.945  10.704  1.00  0.00
N
ATOM   6236  CA  ALA X 398     -23.858 -20.238   9.822  1.00  0.00
C
ATOM   6237  C   ALA X 398     -24.277 -20.184   8.360  1.00  0.00
C
ATOM   6238  O   ALA X 398     -23.520 -19.727   7.504  1.00  0.00
O
ATOM   6239  CB  ALA X 398     -23.263 -21.598  10.155  1.00  0.00
C
ATOM   6240  H   ALA X 398     -25.260 -20.632  11.391  1.00  0.00
H
ATOM   6241  HA  ALA X 398     -23.091 -19.477   9.969  1.00  0.00
H
ATOM   6242 1HB  ALA X 398     -22.426 -21.802   9.489  1.00  0.00
H
ATOM   6243 2HB  ALA X 398     -22.913 -21.600  11.188  1.00  0.00
H
ATOM   6244 3HB  ALA X 398     -24.022 -22.368  10.029  1.00  0.00
H
ATOM   6245  N   LYS X 399     -25.486 -20.656   8.079  1.00  0.00
N
ATOM   6246  CA  LYS X 399     -26.007 -20.664   6.718  1.00  0.00
C
ATOM   6247  C   LYS X 399     -26.411 -19.267   6.271  1.00  0.00
C
ATOM   6248  O   LYS X 399     -26.171 -18.877   5.130  1.00  0.00
O
ATOM   6249  CB  LYS X 399     -27.199 -21.617   6.605  1.00  0.00
C
ATOM   6250  CG  LYS X 399     -26.835 -23.094   6.681  1.00  0.00
C
ATOM   6251  CD  LYS X 399     -28.069 -23.974   6.566  1.00  0.00
C
ATOM   6252  CE  LYS X 399     -27.709 -25.450   6.665  1.00  0.00
C
ATOM   6253  NZ  LYS X 399     -28.905 -26.325   6.536  1.00  0.00
N
ATOM   6254  H   LYS X 399     -26.059 -21.019   8.828  1.00  0.00
H
ATOM   6255  HA  LYS X 399     -25.230 -20.997   6.028  1.00  0.00
H
ATOM   6256 1HB  LYS X 399     -27.883 -21.369   7.418  1.00  0.00
H
ATOM   6257 2HB  LYS X 399     -27.683 -21.412   5.650  1.00  0.00
H
ATOM   6258 1HG  LYS X 399     -26.146 -23.322   5.867  1.00  0.00
H
ATOM   6259 2HG  LYS X 399     -26.342 -23.279   7.634  1.00  0.00
H
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ATOM   6260 1HD  LYS X 399     -28.758 -23.714   7.371  1.00  0.00
H
ATOM   6261 2HD  LYS X 399     -28.546 -23.781   5.606  1.00  0.00
H
ATOM   6262 1HE  LYS X 399     -27.003 -25.682   5.868  1.00  0.00
H
ATOM   6263 2HE  LYS X 399     -27.236 -25.622   7.630  1.00  0.00
H
ATOM   6264 1HZ  LYS X 399     -28.623 -27.292   6.607  1.00  0.00
H
ATOM   6265 2HZ  LYS X 399     -29.560 -26.110   7.274  1.00  0.00
H
ATOM   6266 3HZ  LYS X 399     -29.344 -26.166   5.640  1.00  0.00
H
ATOM   6267  N   ASP X 400     -27.027 -18.518   7.179  1.00  0.00
N
ATOM   6268  CA  ASP X 400     -27.501 -17.173   6.872  1.00  0.00
C
ATOM   6269  C   ASP X 400     -26.337 -16.239   6.563  1.00  0.00
C
ATOM   6270  O   ASP X 400     -26.426 -15.391   5.678  1.00  0.00
O
ATOM   6271  CB  ASP X 400     -28.329 -16.618   8.033  1.00  0.00
C
ATOM   6272  CG  ASP X 400     -29.715 -17.234   8.168  1.00  0.00
C
ATOM   6273  OD1 ASP X 400     -30.138 -17.903   7.255  1.00  0.00
O
ATOM   6274  OD2 ASP X 400     -30.272 -17.165   9.237  1.00  0.00
O
ATOM   6275  H   ASP X 400     -27.171 -18.890   8.106  1.00  0.00
H
ATOM   6276  HA  ASP X 400     -28.126 -17.197   5.979  1.00  0.00
H
ATOM   6277 1HB  ASP X 400     -27.816 -16.665   8.994  1.00  0.00
H
ATOM   6278 2HB  ASP X 400     -28.425 -15.577   7.721  1.00  0.00
H
ATOM   6279  N   ALA X 401     -25.243 -16.400   7.300  1.00  0.00
N
ATOM   6280  CA  ALA X 401     -24.080 -15.535   7.148  1.00  0.00
C
ATOM   6281  C   ALA X 401     -23.315 -15.861   5.871  1.00  0.00
C
ATOM   6282  O   ALA X 401     -23.337 -16.999   5.398  1.00  0.00
O
ATOM   6283  CB  ALA X 401     -23.169 -15.654   8.361  1.00  0.00
C
ATOM   6284  H   ALA X 401     -25.218 -17.143   7.985  1.00  0.00
H
ATOM   6285  HA  ALA X 401     -24.420 -14.503   7.068  1.00  0.00
H
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ATOM   6286 1HB  ALA X 401     -22.305 -15.002   8.232  1.00  0.00
H
ATOM   6287 2HB  ALA X 401     -23.715 -15.359   9.257  1.00  0.00
H
ATOM   6288 3HB  ALA X 401     -22.832 -16.686   8.463  1.00  0.00
H
ATOM   6289  N   GLY X 402     -22.642 -14.860   5.316  1.00  0.00
N
ATOM   6290  CA  GLY X 402     -21.867 -15.041   4.094  1.00  0.00
C
ATOM   6291  C   GLY X 402     -20.824 -13.940   3.938  1.00  0.00
C
ATOM   6292  O   GLY X 402     -20.811 -12.971   4.696  1.00  0.00
O
ATOM   6293  H   GLY X 402     -22.668 -13.949   5.752  1.00  0.00
H
ATOM   6294 1HA  GLY X 402     -21.363 -16.007   4.132  1.00  0.00
H
ATOM   6295 2HA  GLY X 402     -22.541 -15.017   3.238  1.00  0.00
H
ATOM   6296  N   PRO X 403     -19.951 -14.095   2.946  1.00  0.00
N
ATOM   6297  CA  PRO X 403     -18.843 -13.169   2.752  1.00  0.00
C
ATOM   6298  C   PRO X 403     -19.337 -11.791   2.344  1.00  0.00
C
ATOM   6299  O   PRO X 403     -18.597 -10.810   2.412  1.00  0.00
O
ATOM   6300  CB  PRO X 403     -17.993 -13.827   1.651  1.00  0.00
C
ATOM   6301  CG  PRO X 403     -18.953 -14.701   0.892  1.00  0.00
C
ATOM   6302  CD  PRO X 403     -19.905 -15.224   2.006  1.00  0.00
C
ATOM   6303  HA  PRO X 403     -18.322 -13.077   3.596  1.00  0.00
H
ATOM   6304 1HB  PRO X 403     -17.817 -13.104   1.118  1.00  0.00
H
ATOM   6305 2HB  PRO X 403     -17.482 -14.344   2.121  1.00  0.00
H
ATOM   6306 1HG  PRO X 403     -19.434 -14.207   0.400  1.00  0.00
H
ATOM   6307 2HG  PRO X 403     -18.522 -15.519   0.732  1.00  0.00
H
ATOM   6308 1HD  PRO X 403     -20.800 -15.292   1.687  1.00  0.00
H
ATOM   6309 2HD  PRO X 403     -19.570 -15.935   2.545  1.00  0.00
H
ATOM   6310  N   SER X 404     -20.596 -11.720   1.920  1.00  0.00
N
ATOM   6311  CA  SER X 404     -21.190 -10.464   1.490  1.00  0.00
C
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ATOM   6312  C   SER X 404     -21.282  -9.473   2.645  1.00  0.00
C
ATOM   6313  O   SER X 404     -21.354  -8.264   2.434  1.00  0.00
O
ATOM   6314  CB  SER X 404     -22.565 -10.711   0.898  1.00  0.00
C
ATOM   6315  OG  SER X 404     -23.475 -11.171   1.857  1.00  0.00
O
ATOM   6316  H   SER X 404     -21.154 -12.562   1.895  1.00  0.00
H
ATOM   6317  HA  SER X 404     -20.671 -10.005   0.648  1.00  0.00
H
ATOM   6318 1HB  SER X 404     -22.934  -9.778   0.476  1.00  0.00
H
ATOM   6319 2HB  SER X 404     -22.475 -11.455   0.108  1.00  0.00
H
ATOM   6320  HG  SER X 404     -24.330 -11.315   1.443  1.00  0.00
H
ATOM   6321  N   LEU X 405     -21.279  -9.996   3.866  1.00  0.00
N
ATOM   6322  CA  LEU X 405     -21.353  -9.161   5.058  1.00  0.00
C
ATOM   6323  C   LEU X 405     -20.124  -9.345   5.937  1.00  0.00
C
ATOM   6324  O   LEU X 405     -19.588 -10.447   6.047  1.00  0.00
O
ATOM   6325  CB  LEU X 405     -22.628  -9.479   5.848  1.00  0.00
C
ATOM   6326  CG  LEU X 405     -23.943  -9.233   5.096  1.00  0.00
C
ATOM   6327  CD1 LEU X 405     -25.117  -9.742   5.919  1.00  0.00
C
ATOM   6328  CD2 LEU X 405     -24.090  -7.747   4.805  1.00  0.00
C
ATOM   6329  H   LEU X 405     -21.223 -10.999   3.972  1.00  0.00
H
ATOM   6330  HA  LEU X 405     -21.371  -8.112   4.768  1.00  0.00
H
ATOM   6331 1HB  LEU X 405     -22.480 -10.546   6.001  1.00  0.00
H
ATOM   6332 2HB  LEU X 405     -22.641  -8.972   6.814  1.00  0.00
H
ATOM   6333  HG  LEU X 405     -23.871  -9.754   4.141  1.00  0.00
H
ATOM   6334 1HD1 LEU X 405     -26.047  -9.563   5.376  1.00  0.00
H
ATOM   6335 2HD1 LEU X 405     -25.002 -10.811   6.095  1.00  0.00
H
ATOM   6336 3HD1 LEU X 405     -25.149  -9.217   6.872  1.00  0.00
H
ATOM   6337 1HD2 LEU X 405     -25.024  -7.573   4.270  1.00  0.00
H
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ATOM   6338 2HD2 LEU X 405     -24.100  -7.191   5.742  1.00  0.00
H
ATOM   6339 3HD2 LEU X 405     -23.254  -7.410   4.193  1.00  0.00
H
ATOM   6340  N   LEU X 406     -19.684  -8.261   6.566  1.00  0.00
N
ATOM   6341  CA  LEU X 406     -18.475  -8.284   7.379  1.00  0.00
C
ATOM   6342  C   LEU X 406     -18.726  -8.957   8.724  1.00  0.00
C
ATOM   6343  O   LEU X 406     -18.012  -9.884   9.107  1.00  0.00
O
ATOM   6344  CB  LEU X 406     -17.948  -6.858   7.586  1.00  0.00
C
ATOM   6345  CG  LEU X 406     -16.706  -6.746   8.480  1.00  0.00
C
ATOM   6346  CD1 LEU X 406     -15.538  -7.491   7.847  1.00  0.00
C
ATOM   6347  CD2 LEU X 406     -16.361  -5.279   8.687  1.00  0.00
C
ATOM   6348  H   LEU X 406     -20.201  -7.397   6.478  1.00  0.00
H
ATOM   6349  HA  LEU X 406     -17.710  -8.874   6.877  1.00  0.00
H
ATOM   6350 1HB  LEU X 406     -17.691  -6.614   6.557  1.00  0.00
H
ATOM   6351 2HB  LEU X 406     -18.731  -6.185   7.935  1.00  0.00
H
ATOM   6352  HG  LEU X 406     -16.966  -7.168   9.451  1.00  0.00
H
ATOM   6353 1HD1 LEU X 406     -14.662  -7.405   8.488  1.00  0.00
H
ATOM   6354 2HD1 LEU X 406     -15.799  -8.542   7.730  1.00  0.00
H
ATOM   6355 3HD1 LEU X 406     -15.318  -7.059   6.871  1.00  0.00
H
ATOM   6356 1HD2 LEU X 406     -15.478  -5.199   9.323  1.00  0.00
H
ATOM   6357 2HD2 LEU X 406     -16.158  -4.812   7.724  1.00  0.00
H
ATOM   6358 3HD2 LEU X 406     -17.199  -4.771   9.166  1.00  0.00
H
ATOM   6359  N   PHE X 407     -19.747  -8.486   9.432  1.00  0.00
N
ATOM   6360  CA  PHE X 407     -20.164  -9.112  10.680  1.00  0.00
C
ATOM   6361  C   PHE X 407     -21.378 -10.009  10.464  1.00  0.00
C
ATOM   6362  O   PHE X 407     -22.164  -9.796   9.540  1.00  0.00
O
ATOM   6363  CB  PHE X 407     -20.474  -8.050  11.734  1.00  0.00
C
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ATOM   6364  CG  PHE X 407     -19.250  -7.433  12.350  1.00  0.00
C
ATOM   6365  CD1 PHE X 407     -18.450  -6.567  11.618  1.00  0.00
C
ATOM   6366  CD2 PHE X 407     -18.897  -7.716  13.661  1.00  0.00
C
ATOM   6367  CE1 PHE X 407     -17.325  -5.998  12.184  1.00  0.00
C
ATOM   6368  CE2 PHE X 407     -17.773  -7.147  14.229  1.00  0.00
C
ATOM   6369  CZ  PHE X 407     -16.986  -6.288  13.489  1.00  0.00
C
ATOM   6370  H   PHE X 407     -20.245  -7.675   9.097  1.00  0.00
H
ATOM   6371  HA  PHE X 407     -19.366  -9.754  11.057  1.00  0.00
H
ATOM   6372 1HB  PHE X 407     -21.044  -7.235  11.290  1.00  0.00
H
ATOM   6373 2HB  PHE X 407     -21.045  -8.488  12.551  1.00  0.00
H
ATOM   6374  HD1 PHE X 407     -18.718  -6.337  10.587  1.00  0.00
H
ATOM   6375  HD2 PHE X 407     -19.519  -8.394  14.245  1.00  0.00
H
ATOM   6376  HE1 PHE X 407     -16.705  -5.320  11.596  1.00  0.00
H
ATOM   6377  HE2 PHE X 407     -17.506  -7.377  15.259  1.00  0.00
H
ATOM   6378  HZ  PHE X 407     -16.099  -5.841  13.934  1.00  0.00
H
ATOM   6379  N   ILE X 408     -21.524 -11.015  11.320  1.00  0.00
N
ATOM   6380  CA  ILE X 408     -22.680 -11.905  11.268  1.00  0.00
C
ATOM   6381  C   ILE X 408     -23.930 -11.214  11.800  1.00  0.00
C
ATOM   6382  O   ILE X 408     -23.938 -10.704  12.917  1.00  0.00
O
ATOM   6383  CB  ILE X 408     -22.436 -13.196  12.071  1.00  0.00
C
ATOM   6384  CG1 ILE X 408     -21.264 -13.980  11.477  1.00  0.00
C
ATOM   6385  CG2 ILE X 408     -23.693 -14.051  12.097  1.00  0.00
C
ATOM   6386  CD1 ILE X 408     -20.799 -15.131  12.341  1.00  0.00
C
ATOM   6387  H   ILE X 408     -20.817 -11.168  12.026  1.00  0.00
H
ATOM   6388  HA  ILE X 408     -22.922 -12.159  10.236  1.00  0.00
H
ATOM   6389  HB  ILE X 408     -22.154 -12.932  13.090  1.00  0.00
H
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ATOM   6390 1HG1 ILE X 408     -21.584 -14.360  10.507  1.00  0.00
H
ATOM   6391 2HG1 ILE X 408     -20.441 -13.278  11.337  1.00  0.00
H
ATOM   6392 1HG2 ILE X 408     -23.503 -14.959  12.669  1.00  0.00
H
ATOM   6393 2HG2 ILE X 408     -24.503 -13.492  12.564  1.00  0.00
H
ATOM   6394 3HG2 ILE X 408     -23.975 -14.316  11.079  1.00  0.00
H
ATOM   6395 1HD1 ILE X 408     -19.965 -15.639  11.855  1.00  0.00
H
ATOM   6396 2HD1 ILE X 408     -20.475 -14.752  13.311  1.00  0.00
H
ATOM   6397 3HD1 ILE X 408     -21.618 -15.835  12.481  1.00  0.00
H
ATOM   6398  N   THR X 409     -24.984 -11.204  10.988  1.00  0.00
N
ATOM   6399  CA  THR X 409     -26.214 -10.511  11.344  1.00  0.00
C
ATOM   6400  C   THR X 409     -27.084 -11.366  12.258  1.00  0.00
C
ATOM   6401  O   THR X 409     -27.503 -12.463  11.888  1.00  0.00
O
ATOM   6402  CB  THR X 409     -27.026 -10.123  10.096  1.00  0.00
C
ATOM   6403  CG2 THR X 409     -26.322  -9.017   9.324  1.00  0.00
C
ATOM   6404  OG1 THR X 409     -27.181 -11.267   9.248  1.00  0.00
O
ATOM   6405  H   THR X 409     -24.929 -11.689  10.104  1.00  0.00
H
ATOM   6406  HA  THR X 409     -25.979  -9.604  11.903  1.00  0.00
H
ATOM   6407  HB  THR X 409     -28.011  -9.777  10.407  1.00  0.00
H
ATOM   6408  HG1 THR X 409     -27.642 -11.959   9.726  1.00  0.00
H
ATOM   6409 1HG2 THR X 409     -26.911  -8.755   8.445  1.00  0.00
H
ATOM   6410 2HG2 THR X 409     -26.213  -8.140   9.963  1.00  0.00
H
ATOM   6411 3HG2 THR X 409     -25.338  -9.362   9.012  1.00  0.00
H
ATOM   6412  N   TYR X 410     -27.349 -10.859  13.457  1.00  0.00
N
ATOM   6413  CA  TYR X 410     -28.200 -11.560  14.414  1.00  0.00
C
ATOM   6414  C   TYR X 410     -29.537 -10.850  14.585  1.00  0.00
C
ATOM   6415  O   TYR X 410     -29.658  -9.656  14.303  1.00  0.00
O
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ATOM   6416  CB  TYR X 410     -27.495 -11.683  15.766  1.00  0.00
C
ATOM   6417  CG  TYR X 410     -26.298 -12.607  15.752  1.00  0.00
C
ATOM   6418  CD1 TYR X 410     -25.010 -12.104  15.642  1.00  0.00
C
ATOM   6419  CD2 TYR X 410     -26.460 -13.981  15.850  1.00  0.00
C
ATOM   6420  CE1 TYR X 410     -23.913 -12.944  15.627  1.00  0.00
C
ATOM   6421  CE2 TYR X 410     -25.371 -14.831  15.838  1.00  0.00
C
ATOM   6422  CZ  TYR X 410     -24.099 -14.309  15.726  1.00  0.00
C
ATOM   6423  OH  TYR X 410     -23.011 -15.151  15.714  1.00  0.00
O
ATOM   6424  H   TYR X 410     -26.951  -9.966  13.713  1.00  0.00
H
ATOM   6425  HA  TYR X 410     -28.424 -12.561  14.045  1.00  0.00
H
ATOM   6426 1HB  TYR X 410     -27.176 -10.680  16.056  1.00  0.00
H
ATOM   6427 2HB  TYR X 410     -28.230 -12.051  16.481  1.00  0.00
H
ATOM   6428  HD1 TYR X 410     -24.871 -11.027  15.565  1.00  0.00
H
ATOM   6429  HD2 TYR X 410     -27.467 -14.388  15.937  1.00  0.00
H
ATOM   6430  HE1 TYR X 410     -22.907 -12.536  15.540  1.00  0.00
H
ATOM   6431  HE2 TYR X 410     -25.519 -15.909  15.915  1.00  0.00
H
ATOM   6432  HH  TYR X 410     -22.176 -14.684  15.632  1.00  0.00
H
ATOM   6433  N   ALA X 411     -30.541 -11.590  15.047  1.00  0.00
N
ATOM   6434  CA  ALA X 411     -31.871 -11.033  15.255  1.00  0.00
C
ATOM   6435  C   ALA X 411     -31.809  -9.744  16.061  1.00  0.00
C
ATOM   6436  O   ALA X 411     -32.407  -8.735  15.688  1.00  0.00
O
ATOM   6437  CB  ALA X 411     -32.770 -12.049  15.944  1.00  0.00
C
ATOM   6438  H   ALA X 411     -30.377 -12.564  15.260  1.00  0.00
H
ATOM   6439  HA  ALA X 411     -32.303 -10.789  14.284  1.00  0.00
H
ATOM   6440 1HB  ALA X 411     -33.760 -11.616  16.091  1.00  0.00
H
ATOM   6441 2HB  ALA X 411     -32.853 -12.943  15.323  1.00  0.00
H
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ATOM   6442 3HB  ALA X 411     -32.343 -12.315  16.910  1.00  0.00
H
ATOM   6443  N   GLU X 412     -31.084  -9.781  17.175  1.00  0.00
N
ATOM   6444  CA  GLU X 412     -30.919  -8.609  18.021  1.00  0.00
C
ATOM   6445  C   GLU X 412     -30.038  -7.561  17.354  1.00  0.00
C
ATOM   6446  O   GLU X 412     -30.345  -6.371  17.383  1.00  0.00
O
ATOM   6447  CB  GLU X 412     -30.325  -9.006  19.375  1.00  0.00
C
ATOM   6448  CG  GLU X 412     -31.265  -9.807  20.264  1.00  0.00
C
ATOM   6449  CD  GLU X 412     -30.572 -10.272  21.514  1.00  0.00
C
ATOM   6450  OE1 GLU X 412     -29.395 -10.037  21.640  1.00  0.00
O
ATOM   6451  OE2 GLU X 412     -31.242 -10.761  22.393  1.00  0.00
O
ATOM   6452  H   GLU X 412     -30.636 -10.647  17.441  1.00  0.00
H
ATOM   6453  HA  GLU X 412     -31.886  -8.136  18.189  1.00  0.00
H
ATOM   6454 1HB  GLU X 412     -29.431  -9.594  19.171  1.00  0.00
H
ATOM   6455 2HB  GLU X 412     -30.045  -8.083  19.883  1.00  0.00
H
ATOM   6456 1HG  GLU X 412     -32.174  -9.267  20.531  1.00  0.00
H
ATOM   6457 2HG  GLU X 412     -31.525 -10.669  19.651  1.00  0.00
H
ATOM   6458  N   ALA X 413     -28.945  -8.015  16.751  1.00  0.00
N
ATOM   6459  CA  ALA X 413     -28.028  -7.119  16.053  1.00  0.00
C
ATOM   6460  C   ALA X 413     -28.729  -6.393  14.912  1.00  0.00
C
ATOM   6461  O   ALA X 413     -28.473  -5.216  14.659  1.00  0.00
O
ATOM   6462  CB  ALA X 413     -26.825  -7.892  15.535  1.00  0.00
C
ATOM   6463  H   ALA X 413     -28.743  -9.004  16.775  1.00  0.00
H
ATOM   6464  HA  ALA X 413     -27.678  -6.361  16.754  1.00  0.00
H
ATOM   6465 1HB  ALA X 413     -26.151  -7.209  15.016  1.00  0.00
H
ATOM   6466 2HB  ALA X 413     -26.299  -8.355  16.371  1.00  0.00
H
ATOM   6467 3HB  ALA X 413     -27.158  -8.664  14.844  1.00  0.00
H
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ATOM   6468  N   ILE X 414     -29.615  -7.104  14.223  1.00  0.00
N
ATOM   6469  CA  ILE X 414     -30.383  -6.522  13.130  1.00  0.00
C
ATOM   6470  C   ILE X 414     -31.351  -5.463  13.641  1.00  0.00
C
ATOM   6471  O   ILE X 414     -31.522  -4.410  13.029  1.00  0.00
O
ATOM   6472  CB  ILE X 414     -31.172  -7.595  12.358  1.00  0.00
C
ATOM   6473  CG1 ILE X 414     -30.217  -8.492  11.566  1.00  0.00
C
ATOM   6474  CG2 ILE X 414     -32.187  -6.945  11.432  1.00  0.00
C
ATOM   6475  CD1 ILE X 414     -30.862  -9.753  11.036  1.00  0.00
C
ATOM   6476  H   ILE X 414     -29.760  -8.075  14.463  1.00  0.00
H
ATOM   6477  HA  ILE X 414     -29.728  -5.988  12.442  1.00  0.00
H
ATOM   6478  HB  ILE X 414     -31.688  -8.238  13.070  1.00  0.00
H
ATOM   6479 1HG1 ILE X 414     -29.833  -7.902  10.734  1.00  0.00
H
ATOM   6480 2HG1 ILE X 414     -29.394  -8.756  12.231  1.00  0.00
H
ATOM   6481 1HG2 ILE X 414     -32.736  -7.717  10.893  1.00  0.00
H
ATOM   6482 2HG2 ILE X 414     -32.885  -6.348  12.018  1.00  0.00
H
ATOM   6483 3HG2 ILE X 414     -31.671  -6.302  10.717  1.00  0.00
H
ATOM   6484 1HD1 ILE X 414     -30.122 -10.337  10.487  1.00  0.00
H
ATOM   6485 2HD1 ILE X 414     -31.244 -10.343  11.869  1.00  0.00
H
ATOM   6486 3HD1 ILE X 414     -31.682  -9.490  10.370  1.00  0.00
H
ATOM   6487  N   ALA X 415     -31.988  -5.749  14.774  1.00  0.00
N
ATOM   6488  CA  ALA X 415     -32.818  -4.766  15.456  1.00  0.00
C
ATOM   6489  C   ALA X 415     -32.054  -3.468  15.689  1.00  0.00
C
ATOM   6490  O   ALA X 415     -32.632  -2.379  15.657  1.00  0.00
O
ATOM   6491  CB  ALA X 415     -33.329  -5.328  16.775  1.00  0.00
C
ATOM   6492  H   ALA X 415     -31.893  -6.673  15.171  1.00  0.00
H
ATOM   6493  HA  ALA X 415     -33.674  -4.531  14.823  1.00  0.00
H
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ATOM   6494 1HB  ALA X 415     -33.949  -4.581  17.272  1.00  0.00
H
ATOM   6495 2HB  ALA X 415     -33.925  -6.221  16.584  1.00  0.00
H
ATOM   6496 3HB  ALA X 415     -32.486  -5.582  17.413  1.00  0.00
H
ATOM   6497  N   ASN X 416     -30.754  -3.588  15.923  1.00  0.00
N
ATOM   6498  CA  ASN X 416     -29.907  -2.424  16.174  1.00  0.00
C
ATOM   6499  C   ASN X 416     -28.913  -2.206  15.040  1.00  0.00
C
ATOM   6500  O   ASN X 416     -27.792  -1.753  15.264  1.00  0.00
O
ATOM   6501  CB  ASN X 416     -29.172  -2.547  17.496  1.00  0.00
C
ATOM   6502  CG  ASN X 416     -30.081  -2.562  18.694  1.00  0.00
C
ATOM   6503  ND2 ASN X 416     -30.052  -3.655  19.412  1.00  0.00
N
ATOM   6504  OD1 ASN X 416     -30.743  -1.565  19.008  1.00  0.00
O
ATOM   6505  H   ASN X 416     -30.339  -4.509  15.927  1.00  0.00
H
ATOM   6506  HA  ASN X 416     -30.520  -1.524  16.223  1.00  0.00
H
ATOM   6507 1HB  ASN X 416     -28.389  -3.295  17.632  1.00  0.00
H
ATOM   6508 2HB  ASN X 416     -28.720  -1.560  17.410  1.00  0.00
H
ATOM   6509 1HD2 ASN X 416     -30.631  -3.736  20.223  1.00  0.00
H
ATOM   6510 2HD2 ASN X 416     -29.452  -4.411  19.148  1.00  0.00
H
ATOM   6511  N   MET X 417     -29.335  -2.537  13.821  1.00  0.00
N
ATOM   6512  CA  MET X 417     -28.478  -2.392  12.650  1.00  0.00
C
ATOM   6513  C   MET X 417     -29.300  -2.105  11.402  1.00  0.00
C
ATOM   6514  O   MET X 417     -30.361  -2.689  11.197  1.00  0.00
O
ATOM   6515  CB  MET X 417     -27.637  -3.652  12.453  1.00  0.00
C
ATOM   6516  CG  MET X 417     -26.702  -3.603  11.253  1.00  0.00
C
ATOM   6517  SD  MET X 417     -25.832  -5.160  10.986  1.00  0.00
S
ATOM   6518  CE  MET X 417     -24.653  -5.124  12.334  1.00  0.00
C
ATOM   6519  H   MET X 417     -30.272  -2.897  13.704  1.00  0.00
H
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ATOM   6520  HA  MET X 417     -27.808  -1.543  12.783  1.00  0.00
H
ATOM   6521 1HB  MET X 417     -27.053  -3.787  13.363  1.00  0.00
H
ATOM   6522 2HB  MET X 417     -28.332  -4.483  12.338  1.00  0.00
H
ATOM   6523 1HG  MET X 417     -27.296  -3.369  10.370  1.00  0.00
H
ATOM   6524 2HG  MET X 417     -25.973  -2.809  11.422  1.00  0.00
H
ATOM   6525 1HE  MET X 417     -24.039  -6.024  12.303  1.00  0.00
H
ATOM   6526 2HE  MET X 417     -24.015  -4.245  12.235  1.00  0.00
H
ATOM   6527 3HE  MET X 417     -25.188  -5.081  13.283  1.00  0.00
H
ATOM   6528  N   PRO X 418     -28.801  -1.198  10.567  1.00  0.00
N
ATOM   6529  CA  PRO X 418     -29.487  -0.834   9.332  1.00  0.00
C
ATOM   6530  C   PRO X 418     -29.502  -1.998   8.347  1.00  0.00
C
ATOM   6531  O   PRO X 418     -28.820  -3.002   8.546  1.00  0.00
O
ATOM   6532  CB  PRO X 418     -28.688   0.365   8.798  1.00  0.00
C
ATOM   6533  CG  PRO X 418     -27.283   0.143   9.284  1.00  0.00
C
ATOM   6534  CD  PRO X 418     -27.603  -0.380  10.798  1.00  0.00
C
ATOM   6535  HA  PRO X 418     -30.429  -0.576   9.527  1.00  0.00
H
ATOM   6536 1HB  PRO X 418     -28.688   0.184   7.901  1.00  0.00
H
ATOM   6537 2HB  PRO X 418     -29.028   1.012   9.263  1.00  0.00
H
ATOM   6538 1HG  PRO X 418     -26.927  -0.463   8.812  1.00  0.00
H
ATOM   6539 2HG  PRO X 418     -26.959   0.966   9.596  1.00  0.00
H
ATOM   6540 1HD  PRO X 418     -26.937  -1.015  11.047  1.00  0.00
H
ATOM   6541 2HD  PRO X 418     -27.895   0.240  11.459  1.00  0.00
H
ATOM   6542  N   ALA X 419     -30.284  -1.851   7.282  1.00  0.00
N
ATOM   6543  CA  ALA X 419     -30.367  -2.878   6.249  1.00  0.00
C
ATOM   6544  C   ALA X 419     -28.990  -3.433   5.911  1.00  0.00
C
ATOM   6545  O   ALA X 419     -28.031  -2.681   5.745  1.00  0.00
O
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ATOM   6546  CB  ALA X 419     -31.038  -2.320   5.002  1.00  0.00
C
ATOM   6547  H   ALA X 419     -30.833  -1.009   7.186  1.00  0.00
H
ATOM   6548  HA  ALA X 419     -30.968  -3.705   6.627  1.00  0.00
H
ATOM   6549 1HB  ALA X 419     -31.093  -3.099   4.241  1.00  0.00
H
ATOM   6550 2HB  ALA X 419     -32.045  -1.985   5.249  1.00  0.00
H
ATOM   6551 3HB  ALA X 419     -30.458  -1.482   4.621  1.00  0.00
H
ATOM   6552  N   SER X 420     -28.898  -4.757   5.811  1.00  0.00
N
ATOM   6553  CA  SER X 420     -27.622  -5.420   5.569  1.00  0.00
C
ATOM   6554  C   SER X 420     -26.997  -4.947   4.263  1.00  0.00
C
ATOM   6555  O   SER X 420     -25.775  -5.000   4.095  1.00  0.00
O
ATOM   6556  CB  SER X 420     -27.812  -6.923   5.551  1.00  0.00
C
ATOM   6557  OG  SER X 420     -28.599  -7.342   4.470  1.00  0.00
O
ATOM   6558  H   SER X 420     -29.732  -5.317   5.906  1.00  0.00
H
ATOM   6559  HA  SER X 420     -26.910  -5.301   6.386  1.00  0.00
H
ATOM   6560 1HB  SER X 420     -26.832  -7.397   5.478  1.00  0.00
H
ATOM   6561 2HB  SER X 420     -28.292  -7.227   6.479  1.00  0.00
H
ATOM   6562  HG  SER X 420     -28.695  -8.296   4.494  1.00  0.00
H
ATOM   6563  N   THR X 421     -27.833  -4.481   3.345  1.00  0.00
N
ATOM   6564  CA  THR X 421     -27.358  -3.942   2.076  1.00  0.00
C
ATOM   6565  C   THR X 421     -26.581  -2.649   2.288  1.00  0.00
C
ATOM   6566  O   THR X 421     -25.536  -2.436   1.671  1.00  0.00
O
ATOM   6567  CB  THR X 421     -28.521  -3.678   1.101  1.00  0.00
C
ATOM   6568  CG2 THR X 421     -28.005  -3.067  -0.192  1.00  0.00
C
ATOM   6569  OG1 THR X 421     -29.192  -4.911   0.810  1.00  0.00
O
ATOM   6570  H   THR X 421     -28.826  -4.500   3.529  1.00  0.00
H
ATOM   6571  HA  THR X 421     -26.667  -4.646   1.611  1.00  0.00
H
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ATOM   6572  HB  THR X 421     -29.227  -2.992   1.571  1.00  0.00
H
ATOM   6573  HG1 THR X 421     -29.536  -5.286   1.626  1.00  0.00
H
ATOM   6574 1HG2 THR X 421     -28.841  -2.888  -0.867  1.00  0.00
H
ATOM   6575 2HG2 THR X 421     -27.504  -2.123   0.025  1.00  0.00
H
ATOM   6576 3HG2 THR X 421     -27.300  -3.754  -0.661  1.00  0.00
H
ATOM   6577  N   PHE X 422     -27.096  -1.790   3.158  1.00  0.00
N
ATOM   6578  CA  PHE X 422     -26.416  -0.540   3.461  1.00  0.00
C
ATOM   6579  C   PHE X 422     -25.150  -0.851   4.269  1.00  0.00
C
ATOM   6580  O   PHE X 422     -24.150  -0.153   4.163  1.00  0.00
O
ATOM   6581  CB  PHE X 422     -27.349   0.404   4.222  1.00  0.00
C
ATOM   6582  CG  PHE X 422     -26.786   1.782   4.422  1.00  0.00
C
ATOM   6583  CD1 PHE X 422     -26.565   2.620   3.340  1.00  0.00
C
ATOM   6584  CD2 PHE X 422     -26.474   2.241   5.693  1.00  0.00
C
ATOM   6585  CE1 PHE X 422     -26.046   3.888   3.523  1.00  0.00
C
ATOM   6586  CE2 PHE X 422     -25.956   3.509   5.879  1.00  0.00
C
ATOM   6587  CZ  PHE X 422     -25.742   4.333   4.792  1.00  0.00
C
ATOM   6588  H   PHE X 422     -27.971  -2.006   3.615  1.00  0.00
H
ATOM   6589  HA  PHE X 422     -26.108  -0.052   2.535  1.00  0.00
H
ATOM   6590 1HB  PHE X 422     -28.285   0.526   3.679  1.00  0.00
H
ATOM   6591 2HB  PHE X 422     -27.555   0.005   5.215  1.00  0.00
H
ATOM   6592  HD1 PHE X 422     -26.806   2.268   2.336  1.00  0.00
H
ATOM   6593  HD2 PHE X 422     -26.642   1.592   6.552  1.00  0.00
H
ATOM   6594  HE1 PHE X 422     -25.878   4.536   2.663  1.00  0.00
H
ATOM   6595  HE2 PHE X 422     -25.716   3.859   6.883  1.00  0.00
H
ATOM   6596  HZ  PHE X 422     -25.333   5.332   4.936  1.00  0.00
H
ATOM   6597  N   PHE X 423     -25.204  -1.895   5.091  1.00  0.00
N
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ATOM   6598  CA  PHE X 423     -24.035  -2.281   5.877  1.00  0.00
C
ATOM   6599  C   PHE X 423     -22.934  -2.690   4.891  1.00  0.00
C
ATOM   6600  O   PHE X 423     -21.758  -2.367   5.079  1.00  0.00
O
ATOM   6601  CB  PHE X 423     -24.392  -3.409   6.845  1.00  0.00
C
ATOM   6602  CG  PHE X 423     -23.238  -3.871   7.691  1.00  0.00
C
ATOM   6603  CD1 PHE X 423     -22.818  -3.126   8.782  1.00  0.00
C
ATOM   6604  CD2 PHE X 423     -22.571  -5.050   7.395  1.00  0.00
C
ATOM   6605  CE1 PHE X 423     -21.756  -3.548   9.560  1.00  0.00
C
ATOM   6606  CE2 PHE X 423     -21.511  -5.475   8.172  1.00  0.00
C
ATOM   6607  CZ  PHE X 423     -21.103  -4.724   9.256  1.00  0.00
C
ATOM   6608  H   PHE X 423     -26.059  -2.426   5.172  1.00  0.00
H
ATOM   6609  HA  PHE X 423     -23.680  -1.426   6.455  1.00  0.00
H
ATOM   6610 1HB  PHE X 423     -25.171  -3.083   7.533  1.00  0.00
H
ATOM   6611 2HB  PHE X 423     -24.740  -4.281   6.292  1.00  0.00
H
ATOM   6612  HD1 PHE X 423     -23.336  -2.196   9.023  1.00  0.00
H
ATOM   6613  HD2 PHE X 423     -22.892  -5.644   6.540  1.00  0.00
H
ATOM   6614  HE1 PHE X 423     -21.436  -2.952  10.414  1.00  0.00
H
ATOM   6615  HE2 PHE X 423     -20.995  -6.404   7.929  1.00  0.00
H
ATOM   6616  HZ  PHE X 423     -20.265  -5.057   9.866  1.00  0.00
H
ATOM   6617  N   ALA X 424     -23.331  -3.405   3.840  1.00  0.00
N
ATOM   6618  CA  ALA X 424     -22.383  -3.817   2.816  1.00  0.00
C
ATOM   6619  C   ALA X 424     -21.819  -2.581   2.144  1.00  0.00
C
ATOM   6620  O   ALA X 424     -20.618  -2.490   1.884  1.00  0.00
O
ATOM   6621  CB  ALA X 424     -23.053  -4.746   1.815  1.00  0.00
C
ATOM   6622  H   ALA X 424     -24.303  -3.665   3.753  1.00  0.00
H
ATOM   6623  HA  ALA X 424     -21.564  -4.354   3.294  1.00  0.00
H
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ATOM   6624 1HB  ALA X 424     -22.332  -5.045   1.056  1.00  0.00
H
ATOM   6625 2HB  ALA X 424     -23.425  -5.632   2.332  1.00  0.00
H
ATOM   6626 3HB  ALA X 424     -23.886  -4.229   1.339  1.00  0.00
H
ATOM   6627  N   ILE X 425     -22.694  -1.624   1.849  1.00  0.00
N
ATOM   6628  CA  ILE X 425     -22.273  -0.371   1.242  1.00  0.00
C
ATOM   6629  C   ILE X 425     -21.191   0.273   2.109  1.00  0.00
C
ATOM   6630  O   ILE X 425     -20.180   0.742   1.601  1.00  0.00
O
ATOM   6631  CB  ILE X 425     -23.457   0.598   1.065  1.00  0.00
C
ATOM   6632  CG1 ILE X 425     -24.395   0.098  -0.036  1.00  0.00
C
ATOM   6633  CG2 ILE X 425     -22.956   1.998   0.748  1.00  0.00
C
ATOM   6634  CD1 ILE X 425     -25.693   0.867  -0.128  1.00  0.00
C
ATOM   6635  H   ILE X 425     -23.673  -1.770   2.050  1.00  0.00
H
ATOM   6636  HA  ILE X 425     -21.805  -0.551   0.275  1.00  0.00
H
ATOM   6637  HB  ILE X 425     -24.038   0.621   1.986  1.00  0.00
H
ATOM   6638 1HG1 ILE X 425     -23.858   0.177  -0.980  1.00  0.00
H
ATOM   6639 2HG1 ILE X 425     -24.609  -0.951   0.172  1.00  0.00
H
ATOM   6640 1HG2 ILE X 425     -23.806   2.670   0.624  1.00  0.00
H
ATOM   6641 2HG2 ILE X 425     -22.328   2.354   1.562  1.00  0.00
H
ATOM   6642 3HG2 ILE X 425     -22.375   1.977  -0.176  1.00  0.00
H
ATOM   6643 1HD1 ILE X 425     -26.306   0.454  -0.929  1.00  0.00
H
ATOM   6644 2HD1 ILE X 425     -26.232   0.788   0.817  1.00  0.00
H
ATOM   6645 3HD1 ILE X 425     -25.482   1.915  -0.337  1.00  0.00
H
ATOM   6646  N   ILE X 426     -21.415   0.292   3.417  1.00  0.00
N
ATOM   6647  CA  ILE X 426     -20.454   0.889   4.340  1.00  0.00
C
ATOM   6648  C   ILE X 426     -19.122   0.146   4.339  1.00  0.00
C
ATOM   6649  O   ILE X 426     -18.059   0.763   4.389  1.00  0.00
O
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ATOM   6650  CB  ILE X 426     -20.998   0.922   5.780  1.00  0.00
C
ATOM   6651  CG1 ILE X 426     -22.176   1.896   5.882  1.00  0.00
C
ATOM   6652  CG2 ILE X 426     -19.897   1.309   6.754  1.00  0.00
C
ATOM   6653  CD1 ILE X 426     -22.948   1.786   7.178  1.00  0.00
C
ATOM   6654  H   ILE X 426     -22.266  -0.114   3.781  1.00  0.00
H
ATOM   6655  HA  ILE X 426     -20.198   1.901   4.026  1.00  0.00
H
ATOM   6656  HB  ILE X 426     -21.382  -0.064   6.038  1.00  0.00
H
ATOM   6657 1HG1 ILE X 426     -21.775   2.903   5.783  1.00  0.00
H
ATOM   6658 2HG1 ILE X 426     -22.841   1.687   5.043  1.00  0.00
H
ATOM   6659 1HG2 ILE X 426     -20.299   1.329   7.768  1.00  0.00
H
ATOM   6660 2HG2 ILE X 426     -19.089   0.581   6.700  1.00  0.00
H
ATOM   6661 3HG2 ILE X 426     -19.514   2.297   6.497  1.00  0.00
H
ATOM   6662 1HD1 ILE X 426     -23.767   2.504   7.176  1.00  0.00
H
ATOM   6663 2HD1 ILE X 426     -23.352   0.776   7.276  1.00  0.00
H
ATOM   6664 3HD1 ILE X 426     -22.284   1.994   8.016  1.00  0.00
H
ATOM   6665  N   PHE X 427     -19.194  -1.182   4.305  1.00  0.00
N
ATOM   6666  CA  PHE X 427     -18.001  -2.030   4.275  1.00  0.00
C
ATOM   6667  C   PHE X 427     -17.139  -1.695   3.059  1.00  0.00
C
ATOM   6668  O   PHE X 427     -15.920  -1.531   3.165  1.00  0.00
O
ATOM   6669  CB  PHE X 427     -18.397  -3.508   4.262  1.00  0.00
C
ATOM   6670  CG  PHE X 427     -17.255  -4.438   3.964  1.00  0.00
C
ATOM   6671  CD1 PHE X 427     -16.235  -4.622   4.884  1.00  0.00
C
ATOM   6672  CD2 PHE X 427     -17.200  -5.129   2.762  1.00  0.00
C
ATOM   6673  CE1 PHE X 427     -15.184  -5.478   4.611  1.00  0.00
C
ATOM   6674  CE2 PHE X 427     -16.152  -5.985   2.487  1.00  0.00
C
ATOM   6675  CZ  PHE X 427     -15.142  -6.160   3.412  1.00  0.00
C
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ATOM   6676  H   PHE X 427     -20.104  -1.620   4.299  1.00  0.00
H
ATOM   6677  HA  PHE X 427     -17.390  -1.841   5.159  1.00  0.00
H
ATOM   6678 1HB  PHE X 427     -18.790  -3.800   5.235  1.00  0.00
H
ATOM   6679 2HB  PHE X 427     -19.152  -3.686   3.498  1.00  0.00
H
ATOM   6680  HD1 PHE X 427     -16.268  -4.084   5.831  1.00  0.00
H
ATOM   6681  HD2 PHE X 427     -17.997  -4.990   2.031  1.00  0.00
H
ATOM   6682  HE1 PHE X 427     -14.388  -5.614   5.342  1.00  0.00
H
ATOM   6683  HE2 PHE X 427     -16.121  -6.522   1.539  1.00  0.00
H
ATOM   6684  HZ  PHE X 427     -14.314  -6.832   3.195  1.00  0.00
H
ATOM   6685  N   PHE X 428     -17.765  -1.578   1.893  1.00  0.00
N
ATOM   6686  CA  PHE X 428     -16.991  -1.255   0.707  1.00  0.00
C
ATOM   6687  C   PHE X 428     -16.558   0.201   0.656  1.00  0.00
C
ATOM   6688  O   PHE X 428     -15.486   0.517   0.123  1.00  0.00
O
ATOM   6689  CB  PHE X 428     -17.786  -1.586  -0.557  1.00  0.00
C
ATOM   6690  CG  PHE X 428     -18.000  -3.058  -0.769  1.00  0.00
C
ATOM   6691  CD1 PHE X 428     -19.270  -3.609  -0.680  1.00  0.00
C
ATOM   6692  CD2 PHE X 428     -16.933  -3.895  -1.059  1.00  0.00
C
ATOM   6693  CE1 PHE X 428     -19.469  -4.963  -0.875  1.00  0.00
C
ATOM   6694  CE2 PHE X 428     -17.129  -5.248  -1.256  1.00  0.00
C
ATOM   6695  CZ  PHE X 428     -18.398  -5.782  -1.165  1.00  0.00
C
ATOM   6696  H   PHE X 428     -18.764  -1.712   1.832  1.00  0.00
H
ATOM   6697  HA  PHE X 428     -16.067  -1.835   0.699  1.00  0.00
H
ATOM   6698 1HB  PHE X 428     -18.774  -1.131  -0.508  1.00  0.00
H
ATOM   6699 2HB  PHE X 428     -17.261  -1.218  -1.436  1.00  0.00
H
ATOM   6700  HD1 PHE X 428     -20.117  -2.960  -0.453  1.00  0.00
H
ATOM   6701  HD2 PHE X 428     -15.929  -3.472  -1.132  1.00  0.00
H
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ATOM   6702  HE1 PHE X 428     -20.470  -5.382  -0.802  1.00  0.00
H
ATOM   6703  HE2 PHE X 428     -16.280  -5.894  -1.484  1.00  0.00
H
ATOM   6704  HZ  PHE X 428     -18.552  -6.850  -1.318  1.00  0.00
H
ATOM   6705  N   LEU X 429     -17.355   1.098   1.235  1.00  0.00
N
ATOM   6706  CA  LEU X 429     -16.967   2.502   1.256  1.00  0.00
C
ATOM   6707  C   LEU X 429     -15.690   2.591   2.097  1.00  0.00
C
ATOM   6708  O   LEU X 429     -14.752   3.308   1.754  1.00  0.00
O
ATOM   6709  CB  LEU X 429     -18.110   3.358   1.815  1.00  0.00
C
ATOM   6710  CG  LEU X 429     -17.853   4.870   1.812  1.00  0.00
C
ATOM   6711  CD1 LEU X 429     -17.571   5.348   0.393  1.00  0.00
C
ATOM   6712  CD2 LEU X 429     -19.059   5.593   2.394  1.00  0.00
C
ATOM   6713  H   LEU X 429     -18.224   0.806   1.659  1.00  0.00
H
ATOM   6714  HA  LEU X 429     -16.742   2.833   0.242  1.00  0.00
H
ATOM   6715 1HB  LEU X 429     -18.887   3.109   1.094  1.00  0.00
H
ATOM   6716 2HB  LEU X 429     -18.414   3.026   2.807  1.00  0.00
H
ATOM   6717  HG  LEU X 429     -17.004   5.058   2.468  1.00  0.00
H
ATOM   6718 1HD1 LEU X 429     -17.391   6.424   0.400  1.00  0.00
H
ATOM   6719 2HD1 LEU X 429     -16.691   4.836   0.005  1.00  0.00
H
ATOM   6720 3HD1 LEU X 429     -18.429   5.130  -0.242  1.00  0.00
H
ATOM   6721 1HD2 LEU X 429     -18.876   6.667   2.391  1.00  0.00
H
ATOM   6722 2HD2 LEU X 429     -19.941   5.373   1.792  1.00  0.00
H
ATOM   6723 3HD2 LEU X 429     -19.225   5.256   3.417  1.00  0.00
H
ATOM   6724  N   MET X 430     -15.671   1.855   3.206  1.00  0.00
N
ATOM   6725  CA  MET X 430     -14.500   1.812   4.077  1.00  0.00
C
ATOM   6726  C   MET X 430     -13.307   1.317   3.255  1.00  0.00
C
ATOM   6727  O   MET X 430     -12.227   1.906   3.296  1.00  0.00
O
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ATOM   6728  CB  MET X 430     -14.770   0.912   5.281  1.00  0.00
C
ATOM   6729  CG  MET X 430     -13.611   0.808   6.262  1.00  0.00
C
ATOM   6730  SD  MET X 430     -13.982  -0.265   7.664  1.00  0.00
S
ATOM   6731  CE  MET X 430     -14.006  -1.868   6.867  1.00  0.00
C
ATOM   6732  H   MET X 430     -16.487   1.313   3.451  1.00  0.00
H
ATOM   6733  HA  MET X 430     -14.267   2.813   4.436  1.00  0.00
H
ATOM   6734 1HB  MET X 430     -15.642   1.319   5.791  1.00  0.00
H
ATOM   6735 2HB  MET X 430     -15.006  -0.078   4.891  1.00  0.00
H
ATOM   6736 1HG  MET X 430     -12.747   0.412   5.727  1.00  0.00
H
ATOM   6737 2HG  MET X 430     -13.385   1.809   6.627  1.00  0.00
H
ATOM   6738 1HE  MET X 430     -14.222  -2.639   7.607  1.00  0.00
H
ATOM   6739 2HE  MET X 430     -14.774  -1.878   6.094  1.00  0.00
H
ATOM   6740 3HE  MET X 430     -13.033  -2.064   6.415  1.00  0.00
H
ATOM   6741  N   LEU X 431     -13.509   0.237   2.512  1.00  0.00
N
ATOM   6742  CA  LEU X 431     -12.423  -0.313   1.698  1.00  0.00
C
ATOM   6743  C   LEU X 431     -11.921   0.705   0.682  1.00  0.00
C
ATOM   6744  O   LEU X 431     -10.730   0.744   0.368  1.00  0.00
O
ATOM   6745  CB  LEU X 431     -12.889  -1.589   0.986  1.00  0.00
C
ATOM   6746  CG  LEU X 431     -12.547  -2.900   1.706  1.00  0.00
C
ATOM   6747  CD1 LEU X 431     -12.752  -2.740   3.206  1.00  0.00
C
ATOM   6748  CD2 LEU X 431     -13.417  -4.022   1.159  1.00  0.00
C
ATOM   6749  H   LEU X 431     -14.416  -0.209   2.508  1.00  0.00
H
ATOM   6750  HA  LEU X 431     -11.574  -0.554   2.337  1.00  0.00
H
ATOM   6751 1HB  LEU X 431     -13.965  -1.421   1.006  1.00  0.00
H
ATOM   6752 2HB  LEU X 431     -12.546  -1.623  -0.048  1.00  0.00
H
ATOM   6753  HG  LEU X 431     -11.509  -3.138   1.471  1.00  0.00
H
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ATOM   6754 1HD1 LEU X 431     -12.506  -3.677   3.708  1.00  0.00
H
ATOM   6755 2HD1 LEU X 431     -12.103  -1.948   3.579  1.00  0.00
H
ATOM   6756 3HD1 LEU X 431     -13.791  -2.483   3.405  1.00  0.00
H
ATOM   6757 1HD2 LEU X 431     -13.172  -4.953   1.671  1.00  0.00
H
ATOM   6758 2HD2 LEU X 431     -14.468  -3.781   1.323  1.00  0.00
H
ATOM   6759 3HD2 LEU X 431     -13.235  -4.138   0.090  1.00  0.00
H
ATOM   6760  N   ILE X 432     -12.822   1.533   0.164  1.00  0.00
N
ATOM   6761  CA  ILE X 432     -12.408   2.526  -0.816  1.00  0.00
C
ATOM   6762  C   ILE X 432     -11.525   3.609  -0.193  1.00  0.00
C
ATOM   6763  O   ILE X 432     -10.509   3.992  -0.775  1.00  0.00
O
ATOM   6764  CB  ILE X 432     -13.620   3.201  -1.484  1.00  0.00
C
ATOM   6765  CG1 ILE X 432     -14.370   2.199  -2.366  1.00  0.00
C
ATOM   6766  CG2 ILE X 432     -13.176   4.404  -2.300  1.00  0.00
C
ATOM   6767  CD1 ILE X 432     -15.737   2.675  -2.802  1.00  0.00
C
ATOM   6768  H   ILE X 432     -13.789   1.473   0.449  1.00  0.00
H
ATOM   6769  HA  ILE X 432     -11.779   2.071  -1.581  1.00  0.00
H
ATOM   6770  HB  ILE X 432     -14.318   3.523  -0.711  1.00  0.00
H
ATOM   6771 1HG1 ILE X 432     -13.753   2.013  -3.243  1.00  0.00
H
ATOM   6772 2HG1 ILE X 432     -14.474   1.277  -1.792  1.00  0.00
H
ATOM   6773 1HG2 ILE X 432     -14.044   4.871  -2.765  1.00  0.00
H
ATOM   6774 2HG2 ILE X 432     -12.685   5.126  -1.648  1.00  0.00
H
ATOM   6775 3HG2 ILE X 432     -12.479   4.082  -3.074  1.00  0.00
H
ATOM   6776 1HD1 ILE X 432     -16.208   1.912  -3.423  1.00  0.00
H
ATOM   6777 2HD1 ILE X 432     -16.357   2.860  -1.925  1.00  0.00
H
ATOM   6778 3HD1 ILE X 432     -15.637   3.594  -3.376  1.00  0.00
H
ATOM   6779  N   THR X 433     -11.909   4.116   0.974  1.00  0.00
N
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ATOM   6780  CA  THR X 433     -11.097   5.142   1.628  1.00  0.00
C
ATOM   6781  C   THR X 433      -9.764   4.564   2.075  1.00  0.00
C
ATOM   6782  O   THR X 433      -8.754   5.270   2.093  1.00  0.00
O
ATOM   6783  CB  THR X 433     -11.825   5.750   2.841  1.00  0.00
C
ATOM   6784  CG2 THR X 433     -13.108   6.438   2.403  1.00  0.00
C
ATOM   6785  OG1 THR X 433     -12.136   4.716   3.782  1.00  0.00
O
ATOM   6786  H   THR X 433     -12.760   3.793   1.410  1.00  0.00
H
ATOM   6787  HA  THR X 433     -10.873   5.940   0.919  1.00  0.00
H
ATOM   6788  HB  THR X 433     -11.168   6.477   3.319  1.00  0.00
H
ATOM   6789  HG1 THR X 433     -12.703   4.063   3.364  1.00  0.00
H
ATOM   6790 1HG2 THR X 433     -13.608   6.862   3.275  1.00  0.00
H
ATOM   6791 2HG2 THR X 433     -12.873   7.233   1.697  1.00  0.00
H
ATOM   6792 3HG2 THR X 433     -13.765   5.711   1.926  1.00  0.00
H
ATOM   6793  N   LEU X 434      -9.750   3.280   2.424  1.00  0.00
N
ATOM   6794  CA  LEU X 434      -8.511   2.627   2.835  1.00  0.00
C
ATOM   6795  C   LEU X 434      -7.584   2.539   1.619  1.00  0.00
C
ATOM   6796  O   LEU X 434      -6.376   2.759   1.727  1.00  0.00
O
ATOM   6797  CB  LEU X 434      -8.811   1.244   3.426  1.00  0.00
C
ATOM   6798  CG  LEU X 434      -9.484   1.255   4.803  1.00  0.00
C
ATOM   6799  CD1 LEU X 434      -9.998  -0.138   5.145  1.00  0.00
C
ATOM   6800  CD2 LEU X 434      -8.492   1.735   5.852  1.00  0.00
C
ATOM   6801  H   LEU X 434     -10.609   2.749   2.403  1.00  0.00
H
ATOM   6802  HA  LEU X 434      -8.012   3.234   3.591  1.00  0.00
H
ATOM   6803 1HB  LEU X 434      -9.506   0.877   2.672  1.00  0.00
H
ATOM   6804 2HB  LEU X 434      -7.923   0.611   3.441  1.00  0.00
H
ATOM   6805  HG  LEU X 434     -10.299   1.977   4.760  1.00  0.00
H
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ATOM   6806 1HD1 LEU X 434     -10.475  -0.121   6.124  1.00  0.00
H
ATOM   6807 2HD1 LEU X 434     -10.723  -0.451   4.394  1.00  0.00
H
ATOM   6808 3HD1 LEU X 434      -9.164  -0.839   5.160  1.00  0.00
H
ATOM   6809 1HD2 LEU X 434      -8.972   1.743   6.831  1.00  0.00
H
ATOM   6810 2HD2 LEU X 434      -7.632   1.065   5.875  1.00  0.00
H
ATOM   6811 3HD2 LEU X 434      -8.160   2.743   5.603  1.00  0.00
H
ATOM   6812  N   GLY X 435      -8.159   2.227   0.464  1.00  0.00
N
ATOM   6813  CA  GLY X 435      -7.347   2.136  -0.734  1.00  0.00
C
ATOM   6814  C   GLY X 435      -6.866   3.490  -1.229  1.00  0.00
C
ATOM   6815  O   GLY X 435      -5.737   3.619  -1.684  1.00  0.00
O
ATOM   6816  H   GLY X 435      -9.153   2.056   0.420  1.00  0.00
H
ATOM   6817 1HA  GLY X 435      -6.471   1.521  -0.524  1.00  0.00
H
ATOM   6818 2HA  GLY X 435      -7.933   1.673  -1.526  1.00  0.00
H
ATOM   6819  N   LEU X 436      -7.712   4.511  -1.121  1.00  0.00
N
ATOM   6820  CA  LEU X 436      -7.365   5.850  -1.589  1.00  0.00
C
ATOM   6821  C   LEU X 436      -6.198   6.486  -0.829  1.00  0.00
C
ATOM   6822  O   LEU X 436      -5.368   7.186  -1.416  1.00  0.00
O
ATOM   6823  CB  LEU X 436      -8.585   6.777  -1.494  1.00  0.00
C
ATOM   6824  CG  LEU X 436      -9.712   6.476  -2.492  1.00  0.00
C
ATOM   6825  CD1 LEU X 436     -10.943   7.304  -2.154  1.00  0.00
C
ATOM   6826  CD2 LEU X 436      -9.232   6.774  -3.906  1.00  0.00
C
ATOM   6827  H   LEU X 436      -8.619   4.355  -0.703  1.00  0.00
H
ATOM   6828  HA  LEU X 436      -7.037   5.801  -2.626  1.00  0.00
H
ATOM   6829 1HB  LEU X 436      -8.909   6.539  -0.482  1.00  0.00
H
ATOM   6830 2HB  LEU X 436      -8.299   7.827  -1.548  1.00  0.00
H
ATOM   6831  HG  LEU X 436      -9.922   5.408  -2.432  1.00  0.00
H
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ATOM   6832 1HD1 LEU X 436     -11.737   7.083  -2.868  1.00  0.00
H
ATOM   6833 2HD1 LEU X 436     -11.282   7.056  -1.148  1.00  0.00
H
ATOM   6834 3HD1 LEU X 436     -10.695   8.362  -2.204  1.00  0.00
H
ATOM   6835 1HD2 LEU X 436     -10.033   6.560  -4.614  1.00  0.00
H
ATOM   6836 2HD2 LEU X 436      -8.953   7.827  -3.981  1.00  0.00
H
ATOM   6837 3HD2 LEU X 436      -8.367   6.153  -4.137  1.00  0.00
H
ATOM   6838  N   ASP X 437      -6.137   6.250   0.477  1.00  0.00
N
ATOM   6839  CA  ASP X 437      -5.053   6.804   1.281  1.00  0.00
C
ATOM   6840  C   ASP X 437      -3.694   6.307   0.800  1.00  0.00
C
ATOM   6841  O   ASP X 437      -2.735   7.082   0.723  1.00  0.00
O
ATOM   6842  CB  ASP X 437      -5.249   6.450   2.757  1.00  0.00
C
ATOM   6843  CG  ASP X 437      -6.362   7.227   3.449  1.00  0.00
C
ATOM   6844  OD1 ASP X 437      -6.825   8.191   2.888  1.00  0.00
O
ATOM   6845  OD2 ASP X 437      -6.846   6.763   4.453  1.00  0.00
O
ATOM   6846  H   ASP X 437      -6.847   5.682   0.917  1.00  0.00
H
ATOM   6847  HA  ASP X 437      -5.039   7.890   1.183  1.00  0.00
H
ATOM   6848 1HB  ASP X 437      -5.388   5.383   2.933  1.00  0.00
H
ATOM   6849 2HB  ASP X 437      -4.285   6.763   3.159  1.00  0.00
H
ATOM   6850  N   SER X 438      -3.599   5.021   0.474  1.00  0.00
N
ATOM   6851  CA  SER X 438      -2.345   4.478  -0.031  1.00  0.00
C
ATOM   6852  C   SER X 438      -2.203   4.675  -1.528  1.00  0.00
C
ATOM   6853  O   SER X 438      -1.093   4.764  -2.037  1.00  0.00
O
ATOM   6854  CB  SER X 438      -2.241   3.004   0.313  1.00  0.00
C
ATOM   6855  OG  SER X 438      -1.999   2.798   1.678  1.00  0.00
O
ATOM   6856  H   SER X 438      -4.401   4.416   0.579  1.00  0.00
H
ATOM   6857  HA  SER X 438      -1.465   4.879   0.472  1.00  0.00
H
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ATOM   6858 1HB  SER X 438      -3.178   2.517   0.041  1.00  0.00
H
ATOM   6859 2HB  SER X 438      -1.426   2.568  -0.262  1.00  0.00
H
ATOM   6860  HG  SER X 438      -2.002   1.856   1.864  1.00  0.00
H
ATOM   6861  N   THR X 439      -3.116   4.669  -2.307  1.00  0.00
N
ATOM   6862  CA  THR X 439      -3.068   4.947  -3.733  1.00  0.00
C
ATOM   6863  C   THR X 439      -2.518   6.337  -4.029  1.00  0.00
C
ATOM   6864  O   THR X 439      -1.665   6.494  -4.908  1.00  0.00
O
ATOM   6865  CB  THR X 439      -4.462   4.815  -4.373  1.00  0.00
C
ATOM   6866  CG2 THR X 439      -4.412   5.192  -5.845  1.00  0.00
C
ATOM   6867  OG1 THR X 439      -4.924   3.463  -4.245  1.00  0.00
O
ATOM   6868  H   THR X 439      -3.998   4.484  -1.851  1.00  0.00
H
ATOM   6869  HA  THR X 439      -2.392   4.245  -4.224  1.00  0.00
H
ATOM   6870  HB  THR X 439      -5.155   5.476  -3.852  1.00  0.00
H
ATOM   6871  HG1 THR X 439      -5.612   3.298  -4.894  1.00  0.00
H
ATOM   6872 1HG2 THR X 439      -5.407   5.093  -6.279  1.00  0.00
H
ATOM   6873 2HG2 THR X 439      -4.072   6.223  -5.945  1.00  0.00
H
ATOM   6874 3HG2 THR X 439      -3.721   4.530  -6.366  1.00  0.00
H
ATOM   6875  N   PHE X 440      -2.966   7.353  -3.300  1.00  0.00
N
ATOM   6876  CA  PHE X 440      -2.457   8.692  -3.580  1.00  0.00
C
ATOM   6877  C   PHE X 440      -0.923   8.657  -3.498  1.00  0.00
C
ATOM   6878  O   PHE X 440      -0.238   8.958  -4.470  1.00  0.00
O
ATOM   6879  CB  PHE X 440      -3.035   9.715  -2.601  1.00  0.00
C
ATOM   6880  CG  PHE X 440      -4.530   9.848  -2.676  1.00  0.00
C
ATOM   6881  CD1 PHE X 440      -5.240   9.274  -3.719  1.00  0.00
C
ATOM   6882  CD2 PHE X 440      -5.228  10.550  -1.704  1.00  0.00
C
ATOM   6883  CE1 PHE X 440      -6.616   9.396  -3.789  1.00  0.00
C
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ATOM   6884  CE2 PHE X 440      -6.602  10.673  -1.771  1.00  0.00
C
ATOM   6885  CZ  PHE X 440      -7.296  10.095  -2.816  1.00  0.00
C
ATOM   6886  H   PHE X 440      -3.645   7.202  -2.567  1.00  0.00
H
ATOM   6887  HA  PHE X 440      -2.731   8.986  -4.594  1.00  0.00
H
ATOM   6888 1HB  PHE X 440      -2.798   9.430  -1.578  1.00  0.00
H
ATOM   6889 2HB  PHE X 440      -2.624  10.703  -2.807  1.00  0.00
H
ATOM   6890  HD1 PHE X 440      -4.702   8.720  -4.488  1.00  0.00
H
ATOM   6891  HD2 PHE X 440      -4.680  11.006  -0.881  1.00  0.00
H
ATOM   6892  HE1 PHE X 440      -7.161   8.939  -4.614  1.00  0.00
H
ATOM   6893  HE2 PHE X 440      -7.139  11.225  -1.001  1.00  0.00
H
ATOM   6894  HZ  PHE X 440      -8.379  10.194  -2.871  1.00  0.00
H
ATOM   6895  N   ALA X 441      -0.396   8.241  -2.351  1.00  0.00
N
ATOM   6896  CA  ALA X 441       1.049   8.070  -2.192  1.00  0.00
C
ATOM   6897  C   ALA X 441       1.674   7.194  -3.284  1.00  0.00
C
ATOM   6898  O   ALA X 441       2.751   7.520  -3.793  1.00  0.00
O
ATOM   6899  CB  ALA X 441       1.350   7.487  -0.818  1.00  0.00
C
ATOM   6900  H   ALA X 441      -1.006   8.038  -1.573  1.00  0.00
H
ATOM   6901  HA  ALA X 441       1.527   9.047  -2.267  1.00  0.00
H
ATOM   6902 1HB  ALA X 441       2.428   7.379  -0.698  1.00  0.00
H
ATOM   6903 2HB  ALA X 441       0.964   8.154  -0.047  1.00  0.00
H
ATOM   6904 3HB  ALA X 441       0.876   6.512  -0.725  1.00  0.00
H
ATOM   6905  N   GLY X 442       1.037   6.076  -3.636  1.00  0.00
N
ATOM   6906  CA  GLY X 442       1.624   5.242  -4.679  1.00  0.00
C
ATOM   6907  C   GLY X 442       1.715   5.926  -6.027  1.00  0.00
C
ATOM   6908  O   GLY X 442       2.532   5.552  -6.867  1.00  0.00
O
ATOM   6909  H   GLY X 442       0.169   5.813  -3.192  1.00  0.00
H
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ATOM   6910 1HA  GLY X 442       2.634   4.957  -4.382  1.00  0.00
H
ATOM   6911 2HA  GLY X 442       1.017   4.346  -4.803  1.00  0.00
H
ATOM   6912  N   LEU X 443       0.881   6.940  -6.250  1.00  0.00
N
ATOM   6913  CA  LEU X 443       0.950   7.649  -7.520  1.00  0.00
C
ATOM   6914  C   LEU X 443       1.953   8.791  -7.396  1.00  0.00
C
ATOM   6915  O   LEU X 443       2.655   9.120  -8.356  1.00  0.00
O
ATOM   6916  CB  LEU X 443      -0.435   8.174  -7.926  1.00  0.00
C
ATOM   6917  CG  LEU X 443      -1.494   7.095  -8.176  1.00  0.00
C
ATOM   6918  CD1 LEU X 443      -2.819   7.742  -8.554  1.00  0.00
C
ATOM   6919  CD2 LEU X 443      -1.019   6.159  -9.278  1.00  0.00
C
ATOM   6920  H   LEU X 443       0.210   7.214  -5.546  1.00  0.00
H
ATOM   6921  HA  LEU X 443       1.312   6.975  -8.296  1.00  0.00
H
ATOM   6922 1HB  LEU X 443      -0.681   8.739  -7.028  1.00  0.00
H
ATOM   6923 2HB  LEU X 443      -0.374   8.852  -8.776  1.00  0.00
H
ATOM   6924  HG  LEU X 443      -1.584   6.510  -7.259  1.00  0.00
H
ATOM   6925 1HD1 LEU X 443      -3.566   6.968  -8.730  1.00  0.00
H
ATOM   6926 2HD1 LEU X 443      -3.154   8.388  -7.742  1.00  0.00
H
ATOM   6927 3HD1 LEU X 443      -2.690   8.333  -9.459  1.00  0.00
H
ATOM   6928 1HD2 LEU X 443      -1.773   5.392  -9.454  1.00  0.00
H
ATOM   6929 2HD2 LEU X 443      -0.858   6.728 -10.195  1.00  0.00
H
ATOM   6930 3HD2 LEU X 443      -0.083   5.687  -8.976  1.00  0.00
H
ATOM   6931  N   GLU X 444       2.059   9.381  -6.205  1.00  0.00
N
ATOM   6932  CA  GLU X 444       2.947  10.527  -6.033  1.00  0.00
C
ATOM   6933  C   GLU X 444       4.377  10.312  -6.559  1.00  0.00
C
ATOM   6934  O   GLU X 444       4.979  11.249  -7.071  1.00  0.00
O
ATOM   6935  CB  GLU X 444       3.002  10.908  -4.551  1.00  0.00
C
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ATOM   6936  CG  GLU X 444       1.804  11.714  -4.065  1.00  0.00
C
ATOM   6937  CD  GLU X 444       2.018  12.219  -2.664  1.00  0.00
C
ATOM   6938  OE1 GLU X 444       2.161  11.413  -1.779  1.00  0.00
O
ATOM   6939  OE2 GLU X 444       2.149  13.410  -2.497  1.00  0.00
O
ATOM   6940  H   GLU X 444       1.524   9.034  -5.421  1.00  0.00
H
ATOM   6941  HA  GLU X 444       2.567  11.377  -6.599  1.00  0.00
H
ATOM   6942 1HB  GLU X 444       3.066   9.978  -3.985  1.00  0.00
H
ATOM   6943 2HB  GLU X 444       3.913  11.488  -4.404  1.00  0.00
H
ATOM   6944 1HG  GLU X 444       1.551  12.550  -4.716  1.00  0.00
H
ATOM   6945 2HG  GLU X 444       0.991  10.992  -4.069  1.00  0.00
H
ATOM   6946  N   GLY X 445       4.942   9.088  -6.442  1.00  0.00
N
ATOM   6947  CA  GLY X 445       6.297   8.919  -6.990  1.00  0.00
C
ATOM   6948  C   GLY X 445       6.351   9.178  -8.497  1.00  0.00
C
ATOM   6949  O   GLY X 445       7.374   9.618  -9.024  1.00  0.00
O
ATOM   6950  H   GLY X 445       4.454   8.323  -5.998  1.00  0.00
H
ATOM   6951 1HA  GLY X 445       6.971   9.619  -6.495  1.00  0.00
H
ATOM   6952 2HA  GLY X 445       6.633   7.900  -6.802  1.00  0.00
H
ATOM   6953  N   VAL X 446       5.254   8.892  -9.198  1.00  0.00
N
ATOM   6954  CA  VAL X 446       5.224   9.094 -10.643  1.00  0.00
C
ATOM   6955  C   VAL X 446       4.776  10.530 -10.933  1.00  0.00
C
ATOM   6956  O   VAL X 446       5.233  11.161 -11.889  1.00  0.00
O
ATOM   6957  CB  VAL X 446       4.282   8.102 -11.348  1.00  0.00
C
ATOM   6958  CG1 VAL X 446       4.276   8.348 -12.850  1.00  0.00
C
ATOM   6959  CG2 VAL X 446       4.693   6.670 -11.045  1.00  0.00
C
ATOM   6960  H   VAL X 446       4.437   8.532  -8.726  1.00  0.00
H
ATOM   6961  HA  VAL X 446       6.220   8.996 -11.078  1.00  0.00
H
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ATOM   6962  HB  VAL X 446       3.274   8.232 -10.955  1.00  0.00
H
ATOM   6963 1HG1 VAL X 446       3.604   7.638 -13.333  1.00  0.00
H
ATOM   6964 2HG1 VAL X 446       3.937   9.363 -13.051  1.00  0.00
H
ATOM   6965 3HG1 VAL X 446       5.285   8.216 -13.243  1.00  0.00
H
ATOM   6966 1HG2 VAL X 446       4.016   5.983 -11.550  1.00  0.00
H
ATOM   6967 2HG2 VAL X 446       5.711   6.502 -11.397  1.00  0.00
H
ATOM   6968 3HG2 VAL X 446       4.648   6.498  -9.968  1.00  0.00
H
ATOM   6969  N   ILE X 447       3.877  11.048 -10.102  1.00  0.00
N
ATOM   6970  CA  ILE X 447       3.419  12.424 -10.259  1.00  0.00
C
ATOM   6971  C   ILE X 447       4.618  13.374 -10.239  1.00  0.00
C
ATOM   6972  O   ILE X 447       4.679  14.325 -11.021  1.00  0.00
O
ATOM   6973  CB  ILE X 447       2.419  12.817  -9.155  1.00  0.00
C
ATOM   6974  CG1 ILE X 447       1.114  12.033  -9.314  1.00  0.00
C
ATOM   6975  CG2 ILE X 447       2.153  14.314  -9.189  1.00  0.00
C
ATOM   6976  CD1 ILE X 447       0.203  12.117  -8.111  1.00  0.00
C
ATOM   6977  H   ILE X 447       3.506  10.481  -9.353  1.00  0.00
H
ATOM   6978  HA  ILE X 447       2.954  12.565 -11.234  1.00  0.00
H
ATOM   6979  HB  ILE X 447       2.835  12.542  -8.187  1.00  0.00
H
ATOM   6980 1HG1 ILE X 447       0.600  12.432 -10.187  1.00  0.00
H
ATOM   6981 2HG1 ILE X 447       1.382  10.992  -9.496  1.00  0.00
H
ATOM   6982 1HG2 ILE X 447       1.445  14.575  -8.402  1.00  0.00
H
ATOM   6983 2HG2 ILE X 447       3.086  14.853  -9.028  1.00  0.00
H
ATOM   6984 3HG2 ILE X 447       1.737  14.589 -10.157  1.00  0.00
H
ATOM   6985 1HD1 ILE X 447      -0.701  11.536  -8.298  1.00  0.00
H
ATOM   6986 2HD1 ILE X 447       0.715  11.716  -7.236  1.00  0.00
H
ATOM   6987 3HD1 ILE X 447      -0.067  13.156  -7.928  1.00  0.00
H
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ATOM   6988  N   THR X 448       5.572  13.099  -9.352  1.00  0.00
N
ATOM   6989  CA  THR X 448       6.770  13.930  -9.230  1.00  0.00
C
ATOM   6990  C   THR X 448       7.575  13.934 -10.526  1.00  0.00
C
ATOM   6991  O   THR X 448       8.023  14.987 -10.981  1.00  0.00
O
ATOM   6992  CB  THR X 448       7.676  13.452  -8.080  1.00  0.00
C
ATOM   6993  CG2 THR X 448       8.940  14.294  -8.010  1.00  0.00
C
ATOM   6994  OG1 THR X 448       6.968  13.555  -6.837  1.00  0.00
O
ATOM   6995  H   THR X 448       5.467  12.296  -8.748  1.00  0.00
H
ATOM   6996  HA  THR X 448       6.485  14.965  -9.042  1.00  0.00
H
ATOM   6997  HB  THR X 448       7.943  12.409  -8.249  1.00  0.00
H
ATOM   6998  HG1 THR X 448       6.180  13.008  -6.872  1.00  0.00
H
ATOM   6999 1HG2 THR X 448       9.567  13.941  -7.192  1.00  0.00
H
ATOM   7000 2HG2 THR X 448       9.486  14.208  -8.950  1.00  0.00
H
ATOM   7001 3HG2 THR X 448       8.674  15.336  -7.840  1.00  0.00
H
ATOM   7002  N   ALA X 449       7.763  12.762 -11.122  1.00  0.00
N
ATOM   7003  CA  ALA X 449       8.508  12.699 -12.376  1.00  0.00
C
ATOM   7004  C   ALA X 449       7.805  13.535 -13.444  1.00  0.00
C
ATOM   7005  O   ALA X 449       8.454  14.246 -14.212  1.00  0.00
O
ATOM   7006  CB  ALA X 449       8.666  11.253 -12.826  1.00  0.00
C
ATOM   7007  H   ALA X 449       7.392  11.919 -10.710  1.00  0.00
H
ATOM   7008  HA  ALA X 449       9.500  13.124 -12.216  1.00  0.00
H
ATOM   7009 1HB  ALA X 449       9.224  11.224 -13.762  1.00  0.00
H
ATOM   7010 2HB  ALA X 449       9.207  10.692 -12.064  1.00  0.00
H
ATOM   7011 3HB  ALA X 449       7.684  10.809 -12.975  1.00  0.00
H
ATOM   7012  N   VAL X 450       6.481  13.436 -13.500  1.00  0.00
N
ATOM   7013  CA  VAL X 450       5.727  14.187 -14.498  1.00  0.00
C
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ATOM   7014  C   VAL X 450       5.930  15.690 -14.327  1.00  0.00
C
ATOM   7015  O   VAL X 450       6.218  16.386 -15.296  1.00  0.00
O
ATOM   7016  CB  VAL X 450       4.221  13.869 -14.426  1.00  0.00
C
ATOM   7017  CG1 VAL X 450       3.437  14.804 -15.334  1.00  0.00
C
ATOM   7018  CG2 VAL X 450       3.963  12.420 -14.805  1.00  0.00
C
ATOM   7019  H   VAL X 450       5.993  12.838 -12.848  1.00  0.00
H
ATOM   7020  HA  VAL X 450       6.080  13.970 -15.507  1.00  0.00
H
ATOM   7021  HB  VAL X 450       3.882  13.994 -13.397  1.00  0.00
H
ATOM   7022 1HG1 VAL X 450       2.374  14.567 -15.272  1.00  0.00
H
ATOM   7023 2HG1 VAL X 450       3.596  15.836 -15.021  1.00  0.00
H
ATOM   7024 3HG1 VAL X 450       3.775  14.681 -16.363  1.00  0.00
H
ATOM   7025 1HG2 VAL X 450       2.895  12.213 -14.749  1.00  0.00
H
ATOM   7026 2HG2 VAL X 450       4.313  12.243 -15.823  1.00  0.00
H
ATOM   7027 3HG2 VAL X 450       4.497  11.762 -14.118  1.00  0.00
H
ATOM   7028  N   LEU X 451       5.789  16.180 -13.096  1.00  0.00
N
ATOM   7029  CA  LEU X 451       5.974  17.599 -12.810  1.00  0.00
C
ATOM   7030  C   LEU X 451       7.352  18.076 -13.251  1.00  0.00
C
ATOM   7031  O   LEU X 451       7.478  19.092 -13.932  1.00  0.00
O
ATOM   7032  CB  LEU X 451       5.769  17.869 -11.314  1.00  0.00
C
ATOM   7033  CG  LEU X 451       5.642  19.348 -10.928  1.00  0.00
C
ATOM   7034  CD1 LEU X 451       5.098  19.473  -9.512  1.00  0.00
C
ATOM   7035  CD2 LEU X 451       7.002  20.022 -11.045  1.00  0.00
C
ATOM   7036  H   LEU X 451       5.547  15.554 -12.341  1.00  0.00
H
ATOM   7037  HA  LEU X 451       5.250  18.184 -13.377  1.00  0.00
H
ATOM   7038 1HB  LEU X 451       4.817  17.363 -11.171  1.00  0.00
H
ATOM   7039 2HB  LEU X 451       6.534  17.382 -10.707  1.00  0.00
H
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ATOM   7040  HG  LEU X 451       4.975  19.816 -11.653  1.00  0.00
H
ATOM   7041 1HD1 LEU X 451       5.011  20.528  -9.247  1.00  0.00
H
ATOM   7042 2HD1 LEU X 451       4.115  19.005  -9.458  1.00  0.00
H
ATOM   7043 3HD1 LEU X 451       5.776  18.980  -8.816  1.00  0.00
H
ATOM   7044 1HD2 LEU X 451       6.910  21.074 -10.771  1.00  0.00
H
ATOM   7045 2HD2 LEU X 451       7.710  19.533 -10.377  1.00  0.00
H
ATOM   7046 3HD2 LEU X 451       7.360  19.945 -12.073  1.00  0.00
H
ATOM   7047  N   ASP X 452       8.381  17.333 -12.856  1.00  0.00
N
ATOM   7048  CA  ASP X 452       9.756  17.786 -13.022  1.00  0.00
C
ATOM   7049  C   ASP X 452      10.154  17.815 -14.492  1.00  0.00
C
ATOM   7050  O   ASP X 452      10.884  18.704 -14.930  1.00  0.00
O
ATOM   7051  CB  ASP X 452      10.715  16.887 -12.237  1.00  0.00
C
ATOM   7052  CG  ASP X 452      10.662  17.081 -10.726  1.00  0.00
C
ATOM   7053  OD1 ASP X 452      10.070  18.039 -10.291  1.00  0.00
O
ATOM   7054  OD2 ASP X 452      11.076  16.192 -10.020  1.00  0.00
O
ATOM   7055  H   ASP X 452       8.206  16.434 -12.431  1.00  0.00
H
ATOM   7056  HA  ASP X 452       9.856  18.807 -12.653  1.00  0.00
H
ATOM   7057 1HB  ASP X 452      10.609  15.829 -12.470  1.00  0.00
H
ATOM   7058 2HB  ASP X 452      11.671  17.251 -12.615  1.00  0.00
H
ATOM   7059  N   GLU X 453       9.673  16.836 -15.251  1.00  0.00
N
ATOM   7060  CA  GLU X 453      10.013  16.724 -16.662  1.00  0.00
C
ATOM   7061  C   GLU X 453       9.046  17.515 -17.528  1.00  0.00
C
ATOM   7062  O   GLU X 453       9.223  17.615 -18.745  1.00  0.00
O
ATOM   7063  CB  GLU X 453      10.026  15.257 -17.096  1.00  0.00
C
ATOM   7064  CG  GLU X 453      11.123  14.420 -16.453  1.00  0.00
C
ATOM   7065  CD  GLU X 453      11.053  12.988 -16.902  1.00  0.00
C
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ATOM   7066  OE1 GLU X 453      10.150  12.658 -17.633  1.00  0.00
O
ATOM   7067  OE2 GLU X 453      11.962  12.248 -16.608  1.00  0.00
O
ATOM   7068  H   GLU X 453       9.055  16.152 -14.838  1.00  0.00
H
ATOM   7069  HA  GLU X 453      11.003  17.147 -16.838  1.00  0.00
H
ATOM   7070 1HB  GLU X 453       9.054  14.839 -16.835  1.00  0.00
H
ATOM   7071 2HB  GLU X 453      10.149  15.244 -18.179  1.00  0.00
H
ATOM   7072 1HG  GLU X 453      12.126  14.809 -16.634  1.00  0.00
H
ATOM   7073 2HG  GLU X 453      10.899  14.478 -15.388  1.00  0.00
H
ATOM   7074  N   PHE X 454       8.020  18.081 -16.902  1.00  0.00
N
ATOM   7075  CA  PHE X 454       6.935  18.724 -17.630  1.00  0.00
C
ATOM   7076  C   PHE X 454       7.463  19.804 -18.565  1.00  0.00
C
ATOM   7077  O   PHE X 454       7.248  19.748 -19.777  1.00  0.00
O
ATOM   7078  CB  PHE X 454       5.918  19.323 -16.656  1.00  0.00
C
ATOM   7079  CG  PHE X 454       4.892  20.199 -17.314  1.00  0.00
C
ATOM   7080  CD1 PHE X 454       3.886  19.649 -18.093  1.00  0.00
C
ATOM   7081  CD2 PHE X 454       4.930  21.576 -17.156  1.00  0.00
C
ATOM   7082  CE1 PHE X 454       2.941  20.453 -18.700  1.00  0.00
C
ATOM   7083  CE2 PHE X 454       3.986  22.384 -17.760  1.00  0.00
C
ATOM   7084  CZ  PHE X 454       2.991  21.822 -18.534  1.00  0.00
C
ATOM   7085  H   PHE X 454       7.993  18.065 -15.893  1.00  0.00
H
ATOM   7086  HA  PHE X 454       6.427  17.992 -18.259  1.00  0.00
H
ATOM   7087 1HB  PHE X 454       5.372  18.528 -16.149  1.00  0.00
H
ATOM   7088 2HB  PHE X 454       6.429  19.941 -15.917  1.00  0.00
H
ATOM   7089  HD1 PHE X 454       3.846  18.567 -18.224  1.00  0.00
H
ATOM   7090  HD2 PHE X 454       5.718  22.021 -16.547  1.00  0.00
H
ATOM   7091  HE1 PHE X 454       2.155  20.008 -19.310  1.00  0.00
H
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ATOM   7092  HE2 PHE X 454       4.028  23.465 -17.628  1.00  0.00
H
ATOM   7093  HZ  PHE X 454       2.248  22.457 -19.012  1.00  0.00
H
ATOM   7094  N   PRO X 455       8.153  20.785 -17.998  1.00  0.00
N
ATOM   7095  CA  PRO X 455       8.661  21.913 -18.773  1.00  0.00
C
ATOM   7096  C   PRO X 455       9.584  21.445 -19.889  1.00  0.00
C
ATOM   7097  O   PRO X 455       9.821  22.169 -20.855  1.00  0.00
O
ATOM   7098  CB  PRO X 455       9.400  22.778 -17.737  1.00  0.00
C
ATOM   7099  CG  PRO X 455       9.752  21.832 -16.623  1.00  0.00
C
ATOM   7100  CD  PRO X 455       8.583  20.839 -16.595  1.00  0.00
C
ATOM   7101  HA  PRO X 455       7.905  22.417 -19.181  1.00  0.00
H
ATOM   7102 1HB  PRO X 455      10.177  22.954 -18.187  1.00  0.00
H
ATOM   7103 2HB  PRO X 455       8.758  23.286 -17.457  1.00  0.00
H
ATOM   7104 1HG  PRO X 455      10.404  21.352 -16.873  1.00  0.00
H
ATOM   7105 2HG  PRO X 455       9.568  22.268 -15.813  1.00  0.00
H
ATOM   7106 1HD  PRO X 455       8.875  19.949 -16.411  1.00  0.00
H
ATOM   7107 2HD  PRO X 455       7.805  21.151 -16.145  1.00  0.00
H
ATOM   7108  N   HIS X 456      10.102  20.230 -19.751  1.00  0.00
N
ATOM   7109  CA  HIS X 456      11.084  19.703 -20.691  1.00  0.00
C
ATOM   7110  C   HIS X 456      10.404  18.996 -21.856  1.00  0.00
C
ATOM   7111  O   HIS X 456      10.840  19.104 -23.003  1.00  0.00
O
ATOM   7112  CB  HIS X 456      12.048  18.742 -19.985  1.00  0.00
C
ATOM   7113  CG  HIS X 456      12.874  19.395 -18.921  1.00  0.00
C
ATOM   7114  CD2 HIS X 456      12.908  19.210 -17.581  1.00  0.00
C
ATOM   7115  ND1 HIS X 456      13.808  20.372 -19.198  1.00  0.00
N
ATOM   7116  CE1 HIS X 456      14.380  20.761 -18.071  1.00  0.00
C
ATOM   7117  NE2 HIS X 456      13.853  20.071 -17.076  1.00  0.00
N
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ATOM   7118  H   HIS X 456       9.808  19.657 -18.973  1.00  0.00
H
ATOM   7119  HA  HIS X 456      11.659  20.523 -21.118  1.00  0.00
H
ATOM   7120 1HB  HIS X 456      11.492  17.941 -19.501  1.00  0.00
H
ATOM   7121 2HB  HIS X 456      12.746  18.316 -20.705  1.00  0.00
H
ATOM   7122  HD2 HIS X 456      12.359  18.551 -16.909  1.00  0.00
H
ATOM   7123  HE1 HIS X 456      15.150  21.532 -18.078  1.00  0.00
H
ATOM   7124  HE2 HIS X 456      14.097  20.156 -16.100  1.00  0.00
H
ATOM   7125  N   VAL X 457       9.387  18.193 -21.621  1.00  0.00
N
ATOM   7126  CA  VAL X 457       8.637  17.500 -22.660  1.00  0.00
C
ATOM   7127  C   VAL X 457       7.138  17.705 -22.487  1.00  0.00
C
ATOM   7128  O   VAL X 457       6.591  17.467 -21.410  1.00  0.00
O
ATOM   7129  CB  VAL X 457       8.942  15.990 -22.666  1.00  0.00
C
ATOM   7130  CG1 VAL X 457       8.141  15.290 -23.753  1.00  0.00
C
ATOM   7131  CG2 VAL X 457      10.430  15.747 -22.862  1.00  0.00
C
ATOM   7132  H   VAL X 457       9.110  18.049 -20.660  1.00  0.00
H
ATOM   7133  HA  VAL X 457       8.862  17.904 -23.648  1.00  0.00
H
ATOM   7134  HB  VAL X 457       8.677  15.572 -21.694  1.00  0.00
H
ATOM   7135 1HG1 VAL X 457       8.369  14.223 -23.742  1.00  0.00
H
ATOM   7136 2HG1 VAL X 457       7.076  15.436 -23.572  1.00  0.00
H
ATOM   7137 3HG1 VAL X 457       8.406  15.706 -24.725  1.00  0.00
H
ATOM   7138 1HG2 VAL X 457      10.627  14.676 -22.861  1.00  0.00
H
ATOM   7139 2HG2 VAL X 457      10.746  16.176 -23.813  1.00  0.00
H
ATOM   7140 3HG2 VAL X 457      10.985  16.218 -22.049  1.00  0.00
H
ATOM   7141  N   TRP X 458       6.479  18.143 -23.552  1.00  0.00
N
ATOM   7142  CA  TRP X 458       5.045  18.399 -23.517  1.00  0.00
C
ATOM   7143  C   TRP X 458       4.283  17.390 -24.367  1.00  0.00
C
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ATOM   7144  O   TRP X 458       4.145  17.564 -25.579  1.00  0.00
O
ATOM   7145  CB  TRP X 458       4.745  19.820 -23.996  1.00  0.00
C
ATOM   7146  CG  TRP X 458       5.047  20.873 -22.973  1.00  0.00
C
ATOM   7147  CD1 TRP X 458       5.367  20.670 -21.664  1.00  0.00
C
ATOM   7148  CD2 TRP X 458       5.059  22.292 -23.174  1.00  0.00
C
ATOM   7149  CE2 TRP X 458       5.393  22.885 -21.944  1.00  0.00
C
ATOM   7150  CE3 TRP X 458       4.818  23.118 -24.280  1.00  0.00
C
ATOM   7151  NE1 TRP X 458       5.576  21.872 -21.036  1.00  0.00
N
ATOM   7152  CZ2 TRP X 458       5.493  24.258 -21.783  1.00  0.00
C
ATOM   7153  CZ3 TRP X 458       4.919  24.495 -24.119  1.00  0.00
C
ATOM   7154  CH2 TRP X 458       5.248  25.048 -22.907  1.00  0.00
C
ATOM   7155  H   TRP X 458       6.985  18.303 -24.411  1.00  0.00
H
ATOM   7156  HA  TRP X 458       4.675  18.291 -22.498  1.00  0.00
H
ATOM   7157 1HB  TRP X 458       5.345  20.058 -24.875  1.00  0.00
H
ATOM   7158 2HB  TRP X 458       3.688  19.918 -24.242  1.00  0.00
H
ATOM   7159  HD1 TRP X 458       5.408  19.637 -21.321  1.00  0.00
H
ATOM   7160  HE1 TRP X 458       5.823  21.993 -20.065  1.00  0.00
H
ATOM   7161  HE3 TRP X 458       4.557  22.731 -25.264  1.00  0.00
H
ATOM   7162  HZ2 TRP X 458       5.756  24.655 -20.804  1.00  0.00
H
ATOM   7163  HZ3 TRP X 458       4.728  25.126 -24.986  1.00  0.00
H
ATOM   7164  HH2 TRP X 458       5.316  26.133 -22.823  1.00  0.00
H
ATOM   7165  N   ALA X 459       3.791  16.336 -23.726  1.00  0.00
N
ATOM   7166  CA  ALA X 459       2.995  15.326 -24.415  1.00  0.00
C
ATOM   7167  C   ALA X 459       1.645  15.887 -24.846  1.00  0.00
C
ATOM   7168  O   ALA X 459       1.205  15.667 -25.974  1.00  0.00
O
ATOM   7169  CB  ALA X 459       2.805  14.105 -23.528  1.00  0.00
C
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ATOM   7170  H   ALA X 459       3.973  16.230 -22.737  1.00  0.00
H
ATOM   7171  HA  ALA X 459       3.523  15.021 -25.319  1.00  0.00
H
ATOM   7172 1HB  ALA X 459       2.209  13.361 -24.057  1.00  0.00
H
ATOM   7173 2HB  ALA X 459       3.778  13.680 -23.280  1.00  0.00
H
ATOM   7174 3HB  ALA X 459       2.293  14.396 -22.612  1.00  0.00
H
ATOM   7175  N   LYS X 460       0.996  16.611 -23.941  1.00  0.00
N
ATOM   7176  CA  LYS X 460      -0.323  17.171 -24.213  1.00  0.00
C
ATOM   7177  C   LYS X 460      -0.686  18.246 -23.200  1.00  0.00
C
ATOM   7178  O   LYS X 460      -0.666  18.004 -21.993  1.00  0.00
O
ATOM   7179  CB  LYS X 460      -1.384  16.070 -24.213  1.00  0.00
C
ATOM   7180  CG  LYS X 460      -2.781  16.540 -24.595  1.00  0.00
C
ATOM   7181  CD  LYS X 460      -3.771  15.386 -24.599  1.00  0.00
C
ATOM   7182  CE  LYS X 460      -3.471  14.401 -25.720  1.00  0.00
C
ATOM   7183  NZ  LYS X 460      -4.352  13.204 -25.658  1.00  0.00
N
ATOM   7184  H   LYS X 460       1.425  16.777 -23.042  1.00  0.00
H
ATOM   7185  HA  LYS X 460      -0.323  17.655 -25.190  1.00  0.00
H
ATOM   7186 1HB  LYS X 460      -1.052  15.307 -24.917  1.00  0.00
H
ATOM   7187 2HB  LYS X 460      -1.406  15.647 -23.208  1.00  0.00
H
ATOM   7188 1HG  LYS X 460      -3.101  17.293 -23.874  1.00  0.00
H
ATOM   7189 2HG  LYS X 460      -2.736  16.986 -25.588  1.00  0.00
H
ATOM   7190 1HD  LYS X 460      -3.713  14.875 -23.638  1.00  0.00
H
ATOM   7191 2HD  LYS X 460      -4.775  15.791 -24.733  1.00  0.00
H
ATOM   7192 1HE  LYS X 460      -3.617  14.911 -26.671  1.00  0.00
H
ATOM   7193 2HE  LYS X 460      -2.430  14.091 -25.630  1.00  0.00
H
ATOM   7194 1HZ  LYS X 460      -4.120  12.578 -26.416  1.00  0.00
H
ATOM   7195 2HZ  LYS X 460      -4.216  12.731 -24.776  1.00  0.00
H
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ATOM   7196 3HZ  LYS X 460      -5.317  13.491 -25.742  1.00  0.00
H
ATOM   7197  N   ARG X 461      -1.017  19.435 -23.696  1.00  0.00
N
ATOM   7198  CA  ARG X 461      -1.305  20.572 -22.829  1.00  0.00
C
ATOM   7199  C   ARG X 461      -2.569  20.335 -22.009  1.00  0.00
C
ATOM   7200  O   ARG X 461      -2.714  20.872 -20.912  1.00  0.00
O
ATOM   7201  CB  ARG X 461      -1.382  21.879 -23.604  1.00  0.00
C
ATOM   7202  CG  ARG X 461      -0.049  22.392 -24.125  1.00  0.00
C
ATOM   7203  CD  ARG X 461      -0.145  23.633 -24.935  1.00  0.00
C
ATOM   7204  NE  ARG X 461       1.124  24.109 -25.463  1.00  0.00
N
ATOM   7205  CZ  ARG X 461       1.258  25.138 -26.322  1.00  0.00
C
ATOM   7206  NH1 ARG X 461       0.206  25.779 -26.780  1.00  0.00
N
ATOM   7207  NH2 ARG X 461       2.476  25.472 -26.710  1.00  0.00
N
ATOM   7208  H   ARG X 461      -1.069  19.554 -24.698  1.00  0.00
H
ATOM   7209  HA  ARG X 461      -0.492  20.706 -22.114  1.00  0.00
H
ATOM   7210 1HB  ARG X 461      -2.056  21.714 -24.443  1.00  0.00
H
ATOM   7211 2HB  ARG X 461      -1.814  22.622 -22.931  1.00  0.00
H
ATOM   7212 1HG  ARG X 461       0.603  22.596 -23.274  1.00  0.00
H
ATOM   7213 2HG  ARG X 461       0.400  21.618 -24.748  1.00  0.00
H
ATOM   7214 1HD  ARG X 461      -0.804  23.453 -25.783  1.00  0.00
H
ATOM   7215 2HD  ARG X 461      -0.560  24.429 -24.316  1.00  0.00
H
ATOM   7216  HE  ARG X 461       2.060  23.770 -25.289  1.00  0.00
H
ATOM   7217 1HH1 ARG X 461      -0.719  25.500 -26.487  1.00  0.00
H
ATOM   7218 2HH1 ARG X 461       0.328  26.549 -27.423  1.00  0.00
H
ATOM   7219 1HH2 ARG X 461       3.273  24.958 -26.360  1.00  0.00
H
ATOM   7220 2HH2 ARG X 461       2.606  26.240 -27.351  1.00  0.00
H
ATOM   7221  N   ARG X 462      -3.472  19.527 -22.549  1.00  0.00
N
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ATOM   7222  CA  ARG X 462      -4.731  19.227 -21.872  1.00  0.00
C
ATOM   7223  C   ARG X 462      -4.495  18.399 -20.614  1.00  0.00
C
ATOM   7224  O   ARG X 462      -5.291  18.439 -19.675  1.00  0.00
O
ATOM   7225  CB  ARG X 462      -5.735  18.558 -22.798  1.00  0.00
C
ATOM   7226  CG  ARG X 462      -6.296  19.457 -23.889  1.00  0.00
C
ATOM   7227  CD  ARG X 462      -7.206  18.769 -24.840  1.00  0.00
C
ATOM   7228  NE  ARG X 462      -7.733  19.623 -25.895  1.00  0.00
N
ATOM   7229  CZ  ARG X 462      -8.469  19.188 -26.935  1.00  0.00
C
ATOM   7230  NH1 ARG X 462      -8.738  17.909 -27.087  1.00  0.00
N
ATOM   7231  NH2 ARG X 462      -8.895  20.078 -27.814  1.00  0.00
N
ATOM   7232  H   ARG X 462      -3.285  19.109 -23.449  1.00  0.00
H
ATOM   7233  HA  ARG X 462      -5.206  20.153 -21.550  1.00  0.00
H
ATOM   7234 1HB  ARG X 462      -5.230  17.709 -23.256  1.00  0.00
H
ATOM   7235 2HB  ARG X 462      -6.554  18.199 -22.175  1.00  0.00
H
ATOM   7236 1HG  ARG X 462      -6.852  20.268 -23.420  1.00  0.00
H
ATOM   7237 2HG  ARG X 462      -5.463  19.869 -24.459  1.00  0.00
H
ATOM   7238 1HD  ARG X 462      -6.668  17.952 -25.321  1.00  0.00
H
ATOM   7239 2HD  ARG X 462      -8.058  18.370 -24.290  1.00  0.00
H
ATOM   7240  HE  ARG X 462      -7.642  20.622 -26.020  1.00  0.00
H
ATOM   7241 1HH1 ARG X 462      -8.390  17.239 -26.416  1.00  0.00
H
ATOM   7242 2HH1 ARG X 462      -9.292  17.604 -27.874  1.00  0.00
H
ATOM   7243 1HH2 ARG X 462      -8.663  21.054 -27.692  1.00  0.00
H
ATOM   7244 2HH2 ARG X 462      -9.447  19.778 -28.604  1.00  0.00
H
ATOM   7245  N   GLU X 463      -3.400  17.646 -20.606  1.00  0.00
N
ATOM   7246  CA  GLU X 463      -3.054  16.807 -19.461  1.00  0.00
C
ATOM   7247  C   GLU X 463      -2.495  17.643 -18.317  1.00  0.00
C
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ATOM   7248  O   GLU X 463      -1.823  18.649 -18.544  1.00  0.00
O
ATOM   7249  CB  GLU X 463      -2.045  15.733 -19.870  1.00  0.00
C
ATOM   7250  CG  GLU X 463      -2.599  14.677 -20.817  1.00  0.00
C
ATOM   7251  CD  GLU X 463      -1.554  13.656 -21.171  1.00  0.00
C
ATOM   7252  OE1 GLU X 463      -0.436  13.804 -20.737  1.00  0.00
O
ATOM   7253  OE2 GLU X 463      -1.898  12.670 -21.778  1.00  0.00
O
ATOM   7254  H   GLU X 463      -2.791  17.655 -21.411  1.00  0.00
H
ATOM   7255  HA  GLU X 463      -3.948  16.316 -19.078  1.00  0.00
H
ATOM   7256 1HB  GLU X 463      -1.211  16.244 -20.348  1.00  0.00
H
ATOM   7257 2HB  GLU X 463      -1.702  15.253 -18.954  1.00  0.00
H
ATOM   7258 1HG  GLU X 463      -3.485  14.170 -20.431  1.00  0.00
H
ATOM   7259 2HG  GLU X 463      -2.867  15.245 -21.706  1.00  0.00
H
ATOM   7260  N   ARG X 464      -2.774  17.217 -17.091  1.00  0.00
N
ATOM   7261  CA  ARG X 464      -2.191  17.849 -15.913  1.00  0.00
C
ATOM   7262  C   ARG X 464      -1.176  16.931 -15.242  1.00  0.00
C
ATOM   7263  O   ARG X 464      -1.000  15.784 -15.648  1.00  0.00
O
ATOM   7264  CB  ARG X 464      -3.252  18.319 -14.929  1.00  0.00
C
ATOM   7265  CG  ARG X 464      -4.219  19.355 -15.477  1.00  0.00
C
ATOM   7266  CD  ARG X 464      -3.642  20.718 -15.615  1.00  0.00
C
ATOM   7267  NE  ARG X 464      -4.599  21.741 -16.005  1.00  0.00
N
ATOM   7268  CZ  ARG X 464      -4.348  23.065 -16.007  1.00  0.00
C
ATOM   7269  NH1 ARG X 464      -3.186  23.533 -15.606  1.00  0.00
N
ATOM   7270  NH2 ARG X 464      -5.309  23.882 -16.399  1.00  0.00
N
ATOM   7271  H   ARG X 464      -3.405  16.438 -16.972  1.00  0.00
H
ATOM   7272  HA  ARG X 464      -1.649  18.749 -16.206  1.00  0.00
H
ATOM   7273 1HB  ARG X 464      -3.809  17.437 -14.616  1.00  0.00
H
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ATOM   7274 2HB  ARG X 464      -2.725  18.739 -14.071  1.00  0.00
H
ATOM   7275 1HG  ARG X 464      -4.552  19.032 -16.463  1.00  0.00
H
ATOM   7276 2HG  ARG X 464      -5.076  19.419 -14.807  1.00  0.00
H
ATOM   7277 1HD  ARG X 464      -3.215  21.019 -14.659  1.00  0.00
H
ATOM   7278 2HD  ARG X 464      -2.860  20.697 -16.373  1.00  0.00
H
ATOM   7279  HE  ARG X 464      -5.556  21.642 -16.321  1.00  0.00
H
ATOM   7280 1HH1 ARG X 464      -2.469  22.896 -15.291  1.00  0.00
H
ATOM   7281 2HH1 ARG X 464      -3.017  24.528 -15.614  1.00  0.00
H
ATOM   7282 1HH2 ARG X 464      -6.201  23.506 -16.687  1.00  0.00
H
ATOM   7283 2HH2 ARG X 464      -5.146  24.878 -16.411  1.00  0.00
H
ATOM   7284  N   PHE X 465      -0.509  17.445 -14.213  1.00  0.00
N
ATOM   7285  CA  PHE X 465       0.582  16.711 -13.578  1.00  0.00
C
ATOM   7286  C   PHE X 465       0.090  15.375 -13.040  1.00  0.00
C
ATOM   7287  O   PHE X 465       0.729  14.342 -13.236  1.00  0.00
O
ATOM   7288  CB  PHE X 465       1.202  17.543 -12.455  1.00  0.00
C
ATOM   7289  CG  PHE X 465       1.757  18.862 -12.910  1.00  0.00
C
ATOM   7290  CD1 PHE X 465       1.926  19.130 -14.261  1.00  0.00
C
ATOM   7291  CD2 PHE X 465       2.110  19.838 -11.992  1.00  0.00
C
ATOM   7292  CE1 PHE X 465       2.437  20.342 -14.683  1.00  0.00
C
ATOM   7293  CE2 PHE X 465       2.619  21.053 -12.410  1.00  0.00
C
ATOM   7294  CZ  PHE X 465       2.782  21.305 -13.758  1.00  0.00
C
ATOM   7295  H   PHE X 465      -0.761  18.359 -13.865  1.00  0.00
H
ATOM   7296  HA  PHE X 465       1.356  16.489 -14.314  1.00  0.00
H
ATOM   7297 1HB  PHE X 465       0.454  17.767 -11.696  1.00  0.00
H
ATOM   7298 2HB  PHE X 465       2.029  16.999 -11.998  1.00  0.00
H
ATOM   7299  HD1 PHE X 465       1.651  18.370 -14.993  1.00  0.00
H
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ATOM   7300  HD2 PHE X 465       1.982  19.639 -10.928  1.00  0.00
H
ATOM   7301  HE1 PHE X 465       2.564  20.539 -15.747  1.00  0.00
H
ATOM   7302  HE2 PHE X 465       2.893  21.812 -11.678  1.00  0.00
H
ATOM   7303  HZ  PHE X 465       3.186  22.261 -14.089  1.00  0.00
H
ATOM   7304  N   VAL X 466      -1.043  15.398 -12.346  1.00  0.00
N
ATOM   7305  CA  VAL X 466      -1.605  14.178 -11.786  1.00  0.00
C
ATOM   7306  C   VAL X 466      -2.434  13.430 -12.825  1.00  0.00
C
ATOM   7307  O   VAL X 466      -2.337  12.208 -12.936  1.00  0.00
O
ATOM   7308  CB  VAL X 466      -2.482  14.473 -10.556  1.00  0.00
C
ATOM   7309  CG1 VAL X 466      -3.057  13.183  -9.990  1.00  0.00
C
ATOM   7310  CG2 VAL X 466      -1.680  15.208  -9.492  1.00  0.00
C
ATOM   7311  H   VAL X 466      -1.520  16.277 -12.204  1.00  0.00
H
ATOM   7312  HA  VAL X 466      -0.822  13.477 -11.494  1.00  0.00
H
ATOM   7313  HB  VAL X 466      -3.297  15.134 -10.852  1.00  0.00
H
ATOM   7314 1HG1 VAL X 466      -3.676  13.410  -9.121  1.00  0.00
H
ATOM   7315 2HG1 VAL X 466      -3.667  12.692 -10.750  1.00  0.00
H
ATOM   7316 3HG1 VAL X 466      -2.245  12.522  -9.692  1.00  0.00
H
ATOM   7317 1HG2 VAL X 466      -2.316  15.409  -8.631  1.00  0.00
H
ATOM   7318 2HG2 VAL X 466      -0.835  14.592  -9.185  1.00  0.00
H
ATOM   7319 3HG2 VAL X 466      -1.314  16.151  -9.900  1.00  0.00
H
ATOM   7320  N   LEU X 467      -3.239  14.159 -13.591  1.00  0.00
N
ATOM   7321  CA  LEU X 467      -4.082  13.505 -14.587  1.00  0.00
C
ATOM   7322  C   LEU X 467      -3.294  12.615 -15.544  1.00  0.00
C
ATOM   7323  O   LEU X 467      -3.724  11.503 -15.839  1.00  0.00
O
ATOM   7324  CB  LEU X 467      -4.864  14.552 -15.390  1.00  0.00
C
ATOM   7325  CG  LEU X 467      -5.771  13.987 -16.491  1.00  0.00
C
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ATOM   7326  CD1 LEU X 467      -6.856  13.113 -15.876  1.00  0.00
C
ATOM   7327  CD2 LEU X 467      -6.384  15.134 -17.283  1.00  0.00
C
ATOM   7328  H   LEU X 467      -3.266  15.163 -13.484  1.00  0.00
H
ATOM   7329  HA  LEU X 467      -4.790  12.844 -14.088  1.00  0.00
H
ATOM   7330 1HB  LEU X 467      -5.466  14.976 -14.590  1.00  0.00
H
ATOM   7331 2HB  LEU X 467      -4.205  15.321 -15.797  1.00  0.00
H
ATOM   7332  HG  LEU X 467      -5.138  13.415 -17.171  1.00  0.00
H
ATOM   7333 1HD1 LEU X 467      -7.494  12.717 -16.666  1.00  0.00
H
ATOM   7334 2HD1 LEU X 467      -6.393  12.287 -15.335  1.00  0.00
H
ATOM   7335 3HD1 LEU X 467      -7.455  13.709 -15.189  1.00  0.00
H
ATOM   7336 1HD2 LEU X 467      -7.028  14.730 -18.065  1.00  0.00
H
ATOM   7337 2HD2 LEU X 467      -6.974  15.762 -16.615  1.00  0.00
H
ATOM   7338 3HD2 LEU X 467      -5.591  15.728 -17.736  1.00  0.00
H
ATOM   7339  N   ALA X 468      -2.151  13.089 -16.029  1.00  0.00
N
ATOM   7340  CA  ALA X 468      -1.353  12.264 -16.925  1.00  0.00
C
ATOM   7341  C   ALA X 468      -0.985  10.947 -16.269  1.00  0.00
C
ATOM   7342  O   ALA X 468      -0.897   9.926 -16.940  1.00  0.00
O
ATOM   7343  CB  ALA X 468      -0.103  13.012 -17.362  1.00  0.00
C
ATOM   7344  H   ALA X 468      -1.837  14.016 -15.777  1.00  0.00
H
ATOM   7345  HA  ALA X 468      -1.947  12.033 -17.809  1.00  0.00
H
ATOM   7346 1HB  ALA X 468       0.483  12.382 -18.031  1.00  0.00
H
ATOM   7347 2HB  ALA X 468      -0.388  13.927 -17.882  1.00  0.00
H
ATOM   7348 3HB  ALA X 468       0.496  13.264 -16.487  1.00  0.00
H
ATOM   7349  N   VAL X 469      -0.763  10.967 -14.956  1.00  0.00
N
ATOM   7350  CA  VAL X 469      -0.419   9.735 -14.261  1.00  0.00
C
ATOM   7351  C   VAL X 469      -1.633   8.805 -14.284  1.00  0.00
C
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ATOM   7352  O   VAL X 469      -1.508   7.613 -14.580  1.00  0.00
O
ATOM   7353  CB  VAL X 469       0.022  10.009 -12.811  1.00  0.00
C
ATOM   7354  CG1 VAL X 469       0.238   8.700 -12.065  1.00  0.00
C
ATOM   7355  CG2 VAL X 469       1.290  10.848 -12.789  1.00  0.00
C
ATOM   7356  H   VAL X 469      -0.832  11.835 -14.443  1.00  0.00
H
ATOM   7357  HA  VAL X 469       0.381   9.201 -14.774  1.00  0.00
H
ATOM   7358  HB  VAL X 469      -0.751  10.589 -12.308  1.00  0.00
H
ATOM   7359 1HG1 VAL X 469       0.551   8.911 -11.042  1.00  0.00
H
ATOM   7360 2HG1 VAL X 469      -0.691   8.132 -12.050  1.00  0.00
H
ATOM   7361 3HG1 VAL X 469       1.012   8.118 -12.567  1.00  0.00
H
ATOM   7362 1HG2 VAL X 469       1.588  11.032 -11.758  1.00  0.00
H
ATOM   7363 2HG2 VAL X 469       2.088  10.315 -13.308  1.00  0.00
H
ATOM   7364 3HG2 VAL X 469       1.106  11.799 -13.288  1.00  0.00
H
ATOM   7365  N   VAL X 470      -2.807   9.349 -13.985  1.00  0.00
N
ATOM   7366  CA  VAL X 470      -4.026   8.544 -13.987  1.00  0.00
C
ATOM   7367  C   VAL X 470      -4.267   7.949 -15.369  1.00  0.00
C
ATOM   7368  O   VAL X 470      -4.731   6.817 -15.491  1.00  0.00
O
ATOM   7369  CB  VAL X 470      -5.252   9.374 -13.562  1.00  0.00
C
ATOM   7370  CG1 VAL X 470      -6.532   8.580 -13.776  1.00  0.00
C
ATOM   7371  CG2 VAL X 470      -5.129   9.799 -12.107  1.00  0.00
C
ATOM   7372  H   VAL X 470      -2.858  10.331 -13.755  1.00  0.00
H
ATOM   7373  HA  VAL X 470      -3.936   7.687 -13.317  1.00  0.00
H
ATOM   7374  HB  VAL X 470      -5.285  10.286 -14.157  1.00  0.00
H
ATOM   7375 1HG1 VAL X 470      -7.388   9.182 -13.472  1.00  0.00
H
ATOM   7376 2HG1 VAL X 470      -6.628   8.322 -14.831  1.00  0.00
H
ATOM   7377 3HG1 VAL X 470      -6.500   7.668 -13.181  1.00  0.00
H
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ATOM   7378 1HG2 VAL X 470      -6.003  10.385 -11.823  1.00  0.00
H
ATOM   7379 2HG2 VAL X 470      -5.064   8.915 -11.474  1.00  0.00
H
ATOM   7380 3HG2 VAL X 470      -4.231  10.403 -11.980  1.00  0.00
H
ATOM   7381  N   ILE X 471      -3.934   8.713 -16.407  1.00  0.00
N
ATOM   7382  CA  ILE X 471      -4.113   8.259 -17.784  1.00  0.00
C
ATOM   7383  C   ILE X 471      -3.209   7.062 -18.081  1.00  0.00
C
ATOM   7384  O   ILE X 471      -3.647   6.079 -18.672  1.00  0.00
O
ATOM   7385  CB  ILE X 471      -3.819   9.383 -18.794  1.00  0.00
C
ATOM   7386  CG1 ILE X 471      -4.888  10.476 -18.702  1.00  0.00
C
ATOM   7387  CG2 ILE X 471      -3.742   8.824 -20.206  1.00  0.00
C
ATOM   7388  CD1 ILE X 471      -4.527  11.746 -19.438  1.00  0.00
C
ATOM   7389  H   ILE X 471      -3.547   9.631 -16.238  1.00  0.00
H
ATOM   7390  HA  ILE X 471      -5.127   7.891 -17.938  1.00  0.00
H
ATOM   7391  HB  ILE X 471      -2.869   9.852 -18.537  1.00  0.00
H
ATOM   7392 1HG1 ILE X 471      -5.808  10.065 -19.118  1.00  0.00
H
ATOM   7393 2HG1 ILE X 471      -5.035  10.698 -17.645  1.00  0.00
H
ATOM   7394 1HG2 ILE X 471      -3.535   9.632 -20.907  1.00  0.00
H
ATOM   7395 2HG2 ILE X 471      -2.947   8.083 -20.262  1.00  0.00
H
ATOM   7396 3HG2 ILE X 471      -4.694   8.356 -20.464  1.00  0.00
H
ATOM   7397 1HD1 ILE X 471      -5.333  12.472 -19.328  1.00  0.00
H
ATOM   7398 2HD1 ILE X 471      -3.607  12.160 -19.024  1.00  0.00
H
ATOM   7399 3HD1 ILE X 471      -4.380  11.527 -20.495  1.00  0.00
H
ATOM   7400  N   THR X 472      -1.944   7.154 -17.685  1.00  0.00
N
ATOM   7401  CA  THR X 472      -0.996   6.069 -17.919  1.00  0.00
C
ATOM   7402  C   THR X 472      -1.348   4.846 -17.077  1.00  0.00
C
ATOM   7403  O   THR X 472      -1.082   3.706 -17.478  1.00  0.00
O
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ATOM   7404  CB  THR X 472       0.448   6.501 -17.606  1.00  0.00
C
ATOM   7405  CG2 THR X 472       0.888   7.613 -18.546  1.00  0.00
C
ATOM   7406  OG1 THR X 472       0.527   6.965 -16.251  1.00  0.00
O
ATOM   7407  H   THR X 472      -1.632   7.991 -17.213  1.00  0.00
H
ATOM   7408  HA  THR X 472      -1.048   5.752 -18.962  1.00  0.00
H
ATOM   7409  HB  THR X 472       1.110   5.642 -17.725  1.00  0.00
H
ATOM   7410  HG1 THR X 472       1.429   7.234 -16.058  1.00  0.00
H
ATOM   7411 1HG2 THR X 472       1.910   7.904 -18.309  1.00  0.00
H
ATOM   7412 2HG2 THR X 472       0.840   7.258 -19.575  1.00  0.00
H
ATOM   7413 3HG2 THR X 472       0.229   8.471 -18.427  1.00  0.00
H
ATOM   7414  N   CYS X 473      -1.946   5.068 -15.906  1.00  0.00
N
ATOM   7415  CA  CYS X 473      -2.327   3.953 -15.042  1.00  0.00
C
ATOM   7416  C   CYS X 473      -3.443   3.127 -15.691  1.00  0.00
C
ATOM   7417  O   CYS X 473      -3.367   1.898 -15.744  1.00  0.00
O
ATOM   7418  CB  CYS X 473      -2.832   4.659 -13.783  1.00  0.00
C
ATOM   7419  SG  CYS X 473      -1.526   5.330 -12.726  1.00  0.00
S
ATOM   7420  H   CYS X 473      -2.138   6.016 -15.614  1.00  0.00
H
ATOM   7421  HA  CYS X 473      -1.491   3.310 -14.769  1.00  0.00
H
ATOM   7422 1HB  CYS X 473      -3.467   5.502 -14.052  1.00  0.00
H
ATOM   7423 2HB  CYS X 473      -3.395   3.962 -13.161  1.00  0.00
H
ATOM   7424  HG  CYS X 473      -2.340   5.828 -11.800  1.00  0.00
H
ATOM   7425  N   PHE X 474      -4.469   3.806 -16.195  1.00  0.00
N
ATOM   7426  CA  PHE X 474      -5.591   3.118 -16.839  1.00  0.00
C
ATOM   7427  C   PHE X 474      -5.129   2.346 -18.074  1.00  0.00
C
ATOM   7428  O   PHE X 474      -5.472   1.178 -18.250  1.00  0.00
O
ATOM   7429  CB  PHE X 474      -6.683   4.118 -17.220  1.00  0.00
C
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ATOM   7430  CG  PHE X 474      -7.851   3.498 -17.935  1.00  0.00
C
ATOM   7431  CD1 PHE X 474      -8.797   2.761 -17.239  1.00  0.00
C
ATOM   7432  CD2 PHE X 474      -8.004   3.651 -19.305  1.00  0.00
C
ATOM   7433  CE1 PHE X 474      -9.872   2.191 -17.896  1.00  0.00
C
ATOM   7434  CE2 PHE X 474      -9.077   3.082 -19.964  1.00  0.00
C
ATOM   7435  CZ  PHE X 474     -10.011   2.351 -19.257  1.00  0.00
C
ATOM   7436  H   PHE X 474      -4.476   4.814 -16.134  1.00  0.00
H
ATOM   7437  HA  PHE X 474      -6.016   2.382 -16.154  1.00  0.00
H
ATOM   7438 1HB  PHE X 474      -7.084   4.597 -16.326  1.00  0.00
H
ATOM   7439 2HB  PHE X 474      -6.280   4.879 -17.886  1.00  0.00
H
ATOM   7440  HD1 PHE X 474      -8.687   2.636 -16.162  1.00  0.00
H
ATOM   7441  HD2 PHE X 474      -7.265   4.227 -19.862  1.00  0.00
H
ATOM   7442  HE1 PHE X 474     -10.607   1.614 -17.337  1.00  0.00
H
ATOM   7443  HE2 PHE X 474      -9.185   3.208 -21.041  1.00  0.00
H
ATOM   7444  HZ  PHE X 474     -10.856   1.901 -19.777  1.00  0.00
H
ATOM   7445  N   PHE X 475      -4.350   2.998 -18.928  1.00  0.00
N
ATOM   7446  CA  PHE X 475      -3.848   2.340 -20.127  1.00  0.00
C
ATOM   7447  C   PHE X 475      -3.004   1.112 -19.773  1.00  0.00
C
ATOM   7448  O   PHE X 475      -3.209   0.015 -20.307  1.00  0.00
O
ATOM   7449  CB  PHE X 475      -3.028   3.319 -20.970  1.00  0.00
C
ATOM   7450  CG  PHE X 475      -3.845   4.411 -21.597  1.00  0.00
C
ATOM   7451  CD1 PHE X 475      -5.228   4.322 -21.646  1.00  0.00
C
ATOM   7452  CD2 PHE X 475      -3.232   5.531 -22.139  1.00  0.00
C
ATOM   7453  CE1 PHE X 475      -5.981   5.327 -22.222  1.00  0.00
C
ATOM   7454  CE2 PHE X 475      -3.983   6.537 -22.715  1.00  0.00
C
ATOM   7455  CZ  PHE X 475      -5.359   6.435 -22.757  1.00  0.00
C
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ATOM   7456  H   PHE X 475      -4.102   3.959 -18.744  1.00  0.00
H
ATOM   7457  HA  PHE X 475      -4.684   1.978 -20.729  1.00  0.00
H
ATOM   7458 1HB  PHE X 475      -2.275   3.806 -20.351  1.00  0.00
H
ATOM   7459 2HB  PHE X 475      -2.538   2.788 -21.785  1.00  0.00
H
ATOM   7460  HD1 PHE X 475      -5.720   3.446 -21.222  1.00  0.00
H
ATOM   7461  HD2 PHE X 475      -2.146   5.612 -22.106  1.00  0.00
H
ATOM   7462  HE1 PHE X 475      -7.067   5.244 -22.254  1.00  0.00
H
ATOM   7463  HE2 PHE X 475      -3.489   7.413 -23.136  1.00  0.00
H
ATOM   7464  HZ  PHE X 475      -5.952   7.227 -23.212  1.00  0.00
H
ATOM   7465  N   GLY X 476      -2.049   1.307 -18.873  1.00  0.00
N
ATOM   7466  CA  GLY X 476      -1.149   0.238 -18.455  1.00  0.00
C
ATOM   7467  C   GLY X 476      -1.865  -0.979 -17.891  1.00  0.00
C
ATOM   7468  O   GLY X 476      -1.443  -2.106 -18.121  1.00  0.00
O
ATOM   7469  H   GLY X 476      -1.942   2.224 -18.464  1.00  0.00
H
ATOM   7470 1HA  GLY X 476      -0.563  -0.090 -19.314  1.00  0.00
H
ATOM   7471 2HA  GLY X 476      -0.480   0.617 -17.683  1.00  0.00
H
ATOM   7472  N   SER X 477      -2.924  -0.736 -17.132  1.00  0.00
N
ATOM   7473  CA  SER X 477      -3.679  -1.824 -16.513  1.00  0.00
C
ATOM   7474  C   SER X 477      -4.423  -2.701 -17.516  1.00  0.00
C
ATOM   7475  O   SER X 477      -4.835  -3.805 -17.181  1.00  0.00
O
ATOM   7476  CB  SER X 477      -4.671  -1.266 -15.510  1.00  0.00
C
ATOM   7477  OG  SER X 477      -4.034  -0.704 -14.396  1.00  0.00
O
ATOM   7478  H   SER X 477      -3.215   0.218 -16.978  1.00  0.00
H
ATOM   7479  HA  SER X 477      -3.069  -2.468 -15.878  1.00  0.00
H
ATOM   7480 1HB  SER X 477      -5.269  -0.500 -16.003  1.00  0.00
H
ATOM   7481 2HB  SER X 477      -5.321  -2.074 -15.177  1.00  0.00
H
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ATOM   7482  HG  SER X 477      -3.510  -1.375 -13.956  1.00  0.00
H
ATOM   7483  N   LEU X 478      -4.605  -2.220 -18.738  1.00  0.00
N
ATOM   7484  CA  LEU X 478      -5.289  -2.989 -19.772  1.00  0.00
C
ATOM   7485  C   LEU X 478      -4.320  -3.887 -20.526  1.00  0.00
C
ATOM   7486  O   LEU X 478      -3.684  -3.461 -21.490  1.00  0.00
O
ATOM   7487  CB  LEU X 478      -6.009  -2.046 -20.744  1.00  0.00
C
ATOM   7488  CG  LEU X 478      -7.097  -1.165 -20.116  1.00  0.00
C
ATOM   7489  CD1 LEU X 478      -7.683  -0.230 -21.166  1.00  0.00
C
ATOM   7490  CD2 LEU X 478      -8.181  -2.048 -19.515  1.00  0.00
C
ATOM   7491  H   LEU X 478      -4.260  -1.297 -18.960  1.00  0.00
H
ATOM   7492  HA  LEU X 478      -6.025  -3.647 -19.310  1.00  0.00
H
ATOM   7493 1HB  LEU X 478      -5.165  -1.432 -21.053  1.00  0.00
H
ATOM   7494 2HB  LEU X 478      -6.404  -2.581 -21.608  1.00  0.00
H
ATOM   7495  HG  LEU X 478      -6.632  -0.608 -19.302  1.00  0.00
H
ATOM   7496 1HD1 LEU X 478      -8.455   0.390 -20.710  1.00  0.00
H
ATOM   7497 2HD1 LEU X 478      -6.894   0.408 -21.565  1.00  0.00
H
ATOM   7498 3HD1 LEU X 478      -8.119  -0.817 -21.972  1.00  0.00
H
ATOM   7499 1HD2 LEU X 478      -8.953  -1.421 -19.068  1.00  0.00
H
ATOM   7500 2HD2 LEU X 478      -8.622  -2.667 -20.296  1.00  0.00
H
ATOM   7501 3HD2 LEU X 478      -7.746  -2.688 -18.749  1.00  0.00
H
ATOM   7502  N   VAL X 479      -4.210  -5.136 -20.082  1.00  0.00
N
ATOM   7503  CA  VAL X 479      -3.205  -6.051 -20.605  1.00  0.00
C
ATOM   7504  C   VAL X 479      -3.827  -7.078 -21.542  1.00  0.00
C
ATOM   7505  O   VAL X 479      -4.873  -7.658 -21.236  1.00  0.00
O
ATOM   7506  CB  VAL X 479      -2.465  -6.787 -19.472  1.00  0.00
C
ATOM   7507  CG1 VAL X 479      -1.409  -7.721 -20.044  1.00  0.00
C
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ATOM   7508  CG2 VAL X 479      -1.830  -5.790 -18.515  1.00  0.00
C
ATOM   7509  H   VAL X 479      -4.842  -5.459 -19.362  1.00  0.00
H
ATOM   7510  HA  VAL X 479      -2.470  -5.526 -21.216  1.00  0.00
H
ATOM   7511  HB  VAL X 479      -3.187  -7.365 -18.895  1.00  0.00
H
ATOM   7512 1HG1 VAL X 479      -0.897  -8.232 -19.229  1.00  0.00
H
ATOM   7513 2HG1 VAL X 479      -1.886  -8.458 -20.691  1.00  0.00
H
ATOM   7514 3HG1 VAL X 479      -0.686  -7.144 -20.620  1.00  0.00
H
ATOM   7515 1HG2 VAL X 479      -1.313  -6.327 -17.721  1.00  0.00
H
ATOM   7516 2HG2 VAL X 479      -1.118  -5.168 -19.058  1.00  0.00
H
ATOM   7517 3HG2 VAL X 479      -2.606  -5.159 -18.080  1.00  0.00
H
ATOM   7518  N   THR X 480      -3.183  -7.304 -22.680  1.00  0.00
N
ATOM   7519  CA  THR X 480      -3.693  -8.233 -23.681  1.00  0.00
C
ATOM   7520  C   THR X 480      -4.184  -9.522 -23.037  1.00  0.00
C
ATOM   7521  O   THR X 480      -5.249 -10.036 -23.379  1.00  0.00
O
ATOM   7522  CB  THR X 480      -2.622  -8.574 -24.734  1.00  0.00
C
ATOM   7523  CG2 THR X 480      -3.178  -9.544 -25.765  1.00  0.00
C
ATOM   7524  OG1 THR X 480      -2.196  -7.373 -25.393  1.00  0.00
O
ATOM   7525  H   THR X 480      -2.316  -6.818 -22.858  1.00  0.00
H
ATOM   7526  HA  THR X 480      -4.554  -7.795 -24.188  1.00  0.00
H
ATOM   7527  HB  THR X 480      -1.766  -9.027 -24.235  1.00  0.00
H
ATOM   7528  HG1 THR X 480      -2.950  -6.963 -25.824  1.00  0.00
H
ATOM   7529 1HG2 THR X 480      -2.408  -9.773 -26.500  1.00  0.00
H
ATOM   7530 2HG2 THR X 480      -3.492 -10.462 -25.269  1.00  0.00
H
ATOM   7531 3HG2 THR X 480      -4.033  -9.091 -26.265  1.00  0.00
H
ATOM   7532  N   LEU X 481      -3.394 -10.046 -22.103  1.00  0.00
N
ATOM   7533  CA  LEU X 481      -3.763 -11.257 -21.380  1.00  0.00
C
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ATOM   7534  C   LEU X 481      -5.104 -11.093 -20.678  1.00  0.00
C
ATOM   7535  O   LEU X 481      -6.044 -11.843 -20.934  1.00  0.00
O
ATOM   7536  CB  LEU X 481      -2.673 -11.623 -20.366  1.00  0.00
C
ATOM   7537  CG  LEU X 481      -2.956 -12.872 -19.525  1.00  0.00
C
ATOM   7538  CD1 LEU X 481      -2.954 -14.111 -20.411  1.00  0.00
C
ATOM   7539  CD2 LEU X 481      -1.909 -12.994 -18.426  1.00  0.00
C
ATOM   7540  H   LEU X 481      -2.517  -9.594 -21.889  1.00  0.00
H
ATOM   7541  HA  LEU X 481      -3.882 -12.079 -22.084  1.00  0.00
H
ATOM   7542 1HB  LEU X 481      -1.849 -11.813 -21.053  1.00  0.00
H
ATOM   7543 2HB  LEU X 481      -2.420 -10.779 -19.722  1.00  0.00
H
ATOM   7544  HG  LEU X 481      -3.925 -12.728 -19.047  1.00  0.00
H
ATOM   7545 1HD1 LEU X 481      -3.156 -14.994 -19.805  1.00  0.00
H
ATOM   7546 2HD1 LEU X 481      -3.725 -14.011 -21.175  1.00  0.00
H
ATOM   7547 3HD1 LEU X 481      -1.980 -14.214 -20.889  1.00  0.00
H
ATOM   7548 1HD2 LEU X 481      -2.113 -13.883 -17.828  1.00  0.00
H
ATOM   7549 2HD2 LEU X 481      -0.920 -13.076 -18.874  1.00  0.00
H
ATOM   7550 3HD2 LEU X 481      -1.947 -12.112 -17.787  1.00  0.00
H
ATOM   7551  N   THR X 482      -5.186 -10.109 -19.792  1.00  0.00
N
ATOM   7552  CA  THR X 482      -6.426  -9.818 -19.081  1.00  0.00
C
ATOM   7553  C   THR X 482      -6.479  -8.359 -18.645  1.00  0.00
C
ATOM   7554  O   THR X 482      -5.538  -7.843 -18.040  1.00  0.00
O
ATOM   7555  CB  THR X 482      -6.593 -10.720 -17.844  1.00  0.00
C
ATOM   7556  CG2 THR X 482      -5.279 -10.836 -17.088  1.00  0.00
C
ATOM   7557  OG1 THR X 482      -7.592 -10.165 -16.977  1.00  0.00
O
ATOM   7558  H   THR X 482      -4.368  -9.547 -19.606  1.00  0.00
H
ATOM   7559  HA  THR X 482      -7.277  -9.973 -19.745  1.00  0.00
H
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ATOM   7560  HB  THR X 482      -6.915 -11.709 -18.169  1.00  0.00
H
ATOM   7561  HG1 THR X 482      -8.427 -10.109 -17.446  1.00  0.00
H
ATOM   7562 1HG2 THR X 482      -5.417 -11.478 -16.218  1.00  0.00
H
ATOM   7563 2HG2 THR X 482      -4.521 -11.269 -17.742  1.00  0.00
H
ATOM   7564 3HG2 THR X 482      -4.957  -9.850 -16.764  1.00  0.00
H
ATOM   7565  N   PHE X 483      -7.590  -7.697 -18.955  1.00  0.00
N
ATOM   7566  CA  PHE X 483      -7.783  -6.302 -18.576  1.00  0.00
C
ATOM   7567  C   PHE X 483      -8.013  -6.166 -17.076  1.00  0.00
C
ATOM   7568  O   PHE X 483      -7.450  -5.288 -16.426  1.00  0.00
O
ATOM   7569  CB  PHE X 483      -8.958  -5.697 -19.346  1.00  0.00
C
ATOM   7570  CG  PHE X 483      -8.730  -5.608 -20.828  1.00  0.00
C
ATOM   7571  CD1 PHE X 483      -7.470  -5.834 -21.366  1.00  0.00
C
ATOM   7572  CD2 PHE X 483      -9.771  -5.298 -21.689  1.00  0.00
C
ATOM   7573  CE1 PHE X 483      -7.259  -5.752 -22.728  1.00  0.00
C
ATOM   7574  CE2 PHE X 483      -9.564  -5.217 -23.051  1.00  0.00
C
ATOM   7575  CZ  PHE X 483      -8.306  -5.444 -23.572  1.00  0.00
C
ATOM   7576  H   PHE X 483      -8.320  -8.172 -19.466  1.00  0.00
H
ATOM   7577  HA  PHE X 483      -6.883  -5.728 -18.805  1.00  0.00
H
ATOM   7578 1HB  PHE X 483      -9.851  -6.304 -19.205  1.00  0.00
H
ATOM   7579 2HB  PHE X 483      -9.149  -4.683 -19.000  1.00  0.00
H
ATOM   7580  HD1 PHE X 483      -6.643  -6.080 -20.699  1.00  0.00
H
ATOM   7581  HD2 PHE X 483     -10.765  -5.118 -21.277  1.00  0.00
H
ATOM   7582  HE1 PHE X 483      -6.265  -5.932 -23.137  1.00  0.00
H
ATOM   7583  HE2 PHE X 483     -10.392  -4.973 -23.716  1.00  0.00
H
ATOM   7584  HZ  PHE X 483      -8.140  -5.378 -24.647  1.00  0.00
H
ATOM   7585  N   GLY X 484      -8.854  -7.043 -16.533  1.00  0.00
N
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ATOM   7586  CA  GLY X 484      -9.166  -7.025 -15.109  1.00  0.00
C
ATOM   7587  C   GLY X 484      -7.950  -7.401 -14.273  1.00  0.00
C
ATOM   7588  O   GLY X 484      -7.844  -7.019 -13.108  1.00  0.00
O
ATOM   7589  H   GLY X 484      -9.288  -7.738 -17.123  1.00  0.00
H
ATOM   7590 1HA  GLY X 484      -9.493  -6.024 -14.828  1.00  0.00
H
ATOM   7591 2HA  GLY X 484      -9.966  -7.737 -14.911  1.00  0.00
H
ATOM   7592  N   GLY X 485      -7.036  -8.152 -14.874  1.00  0.00
N
ATOM   7593  CA  GLY X 485      -5.832  -8.598 -14.182  1.00  0.00
C
ATOM   7594  C   GLY X 485      -6.084  -9.887 -13.412  1.00  0.00
C
ATOM   7595  O   GLY X 485      -5.699 -10.013 -12.249  1.00  0.00
O
ATOM   7596  H   GLY X 485      -7.177  -8.421 -15.837  1.00  0.00
H
ATOM   7597 1HA  GLY X 485      -5.043  -8.771 -14.914  1.00  0.00
H
ATOM   7598 2HA  GLY X 485      -5.515  -7.824 -13.483  1.00  0.00
H
ATOM   7599  N   ALA X 486      -6.864 -10.893 -14.093  1.00  0.00
N
ATOM   7600  CA  ALA X 486      -7.015 -12.186 -13.437  1.00  0.00
C
ATOM   7601  C   ALA X 486      -5.661 -12.773 -13.056  1.00  0.00
C
ATOM   7602  O   ALA X 486      -5.553 -13.536 -12.097  1.00  0.00
O
ATOM   7603  CB  ALA X 486      -7.781 -13.148 -14.333  1.00  0.00
C
ATOM   7604  H   ALA X 486      -7.289 -10.708 -14.990  1.00  0.00
H
ATOM   7605  HA  ALA X 486      -7.580 -12.047 -12.515  1.00  0.00
H
ATOM   7606 1HB  ALA X 486      -7.886 -14.108 -13.828  1.00  0.00
H
ATOM   7607 2HB  ALA X 486      -8.770 -12.739 -14.544  1.00  0.00
H
ATOM   7608 3HB  ALA X 486      -7.239 -13.286 -15.265  1.00  0.00
H
ATOM   7609  N   TYR X 487      -4.631 -12.414 -13.820  1.00  0.00
N
ATOM   7610  CA  TYR X 487      -3.281 -12.892 -13.555  1.00  0.00
C
ATOM   7611  C   TYR X 487      -2.347 -11.739 -13.204  1.00  0.00
C
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ATOM   7612  O   TYR X 487      -1.375 -11.913 -12.471  1.00  0.00
O
ATOM   7613  CB  TYR X 487      -2.738 -13.657 -14.764  1.00  0.00
C
ATOM   7614  CG  TYR X 487      -3.600 -14.825 -15.187  1.00  0.00
C
ATOM   7615  CD1 TYR X 487      -4.457 -14.722 -16.272  1.00  0.00
C
ATOM   7616  CD2 TYR X 487      -3.552 -16.030 -14.500  1.00  0.00
C
ATOM   7617  CE1 TYR X 487      -5.247 -15.786 -16.663  1.00  0.00
C
ATOM   7618  CE2 TYR X 487      -4.338 -17.100 -14.882  1.00  0.00
C
ATOM   7619  CZ  TYR X 487      -5.184 -16.974 -15.965  1.00  0.00
C
ATOM   7620  OH  TYR X 487      -5.968 -18.038 -16.351  1.00  0.00
O
ATOM   7621  H   TYR X 487      -4.790 -11.795 -14.601  1.00  0.00
H
ATOM   7622  HA  TYR X 487      -3.287 -13.560 -12.694  1.00  0.00
H
ATOM   7623 1HB  TYR X 487      -2.658 -12.947 -15.588  1.00  0.00
H
ATOM   7624 2HB  TYR X 487      -1.744 -14.017 -14.496  1.00  0.00
H
ATOM   7625  HD1 TYR X 487      -4.501 -13.780 -16.820  1.00  0.00
H
ATOM   7626  HD2 TYR X 487      -2.883 -16.122 -13.646  1.00  0.00
H
ATOM   7627  HE1 TYR X 487      -5.916 -15.690 -17.520  1.00  0.00
H
ATOM   7628  HE2 TYR X 487      -4.288 -18.038 -14.328  1.00  0.00
H
ATOM   7629  HH  TYR X 487      -6.517 -17.842 -17.113  1.00  0.00
H
ATOM   7630  N   VAL X 488      -2.652 -10.558 -13.729  1.00  0.00
N
ATOM   7631  CA  VAL X 488      -1.804  -9.389 -13.529  1.00  0.00
C
ATOM   7632  C   VAL X 488      -1.760  -8.986 -12.060  1.00  0.00
C
ATOM   7633  O   VAL X 488      -0.693  -8.697 -11.518  1.00  0.00
O
ATOM   7634  CB  VAL X 488      -2.286  -8.190 -14.366  1.00  0.00
C
ATOM   7635  CG1 VAL X 488      -1.484  -6.944 -14.023  1.00  0.00
C
ATOM   7636  CG2 VAL X 488      -2.177  -8.498 -15.853  1.00  0.00
C
ATOM   7637  H   VAL X 488      -3.494 -10.466 -14.281  1.00  0.00
H
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ATOM   7638  HA  VAL X 488      -0.767  -9.602 -13.792  1.00  0.00
H
ATOM   7639  HB  VAL X 488      -3.341  -8.013 -14.157  1.00  0.00
H
ATOM   7640 1HG1 VAL X 488      -1.838  -6.105 -14.624  1.00  0.00
H
ATOM   7641 2HG1 VAL X 488      -1.609  -6.710 -12.966  1.00  0.00
H
ATOM   7642 3HG1 VAL X 488      -0.429  -7.120 -14.235  1.00  0.00
H
ATOM   7643 1HG2 VAL X 488      -2.522  -7.641 -16.429  1.00  0.00
H
ATOM   7644 2HG2 VAL X 488      -1.138  -8.711 -16.103  1.00  0.00
H
ATOM   7645 3HG2 VAL X 488      -2.793  -9.367 -16.090  1.00  0.00
H
ATOM   7646  N   VAL X 489      -2.922  -8.970 -11.420  1.00  0.00
N
ATOM   7647  CA  VAL X 489      -3.045  -8.458 -10.061  1.00  0.00
C
ATOM   7648  C   VAL X 489      -2.252  -9.342  -9.093  1.00  0.00
C
ATOM   7649  O   VAL X 489      -1.513  -8.850  -8.240  1.00  0.00
O
ATOM   7650  CB  VAL X 489      -4.516  -8.390  -9.609  1.00  0.00
C
ATOM   7651  CG1 VAL X 489      -4.603  -8.079  -8.123  1.00  0.00
C
ATOM   7652  CG2 VAL X 489      -5.273  -7.347 -10.415  1.00  0.00
C
ATOM   7653  H   VAL X 489      -3.744  -9.323 -11.888  1.00  0.00
H
ATOM   7654  HA  VAL X 489      -2.608  -7.463  -9.970  1.00  0.00
H
ATOM   7655  HB  VAL X 489      -4.992  -9.352  -9.807  1.00  0.00
H
ATOM   7656 1HG1 VAL X 489      -5.649  -8.036  -7.821  1.00  0.00
H
ATOM   7657 2HG1 VAL X 489      -4.093  -8.860  -7.558  1.00  0.00
H
ATOM   7658 3HG1 VAL X 489      -4.129  -7.117  -7.924  1.00  0.00
H
ATOM   7659 1HG2 VAL X 489      -6.311  -7.312 -10.084  1.00  0.00
H
ATOM   7660 2HG2 VAL X 489      -4.812  -6.369 -10.269  1.00  0.00
H
ATOM   7661 3HG2 VAL X 489      -5.239  -7.609 -11.473  1.00  0.00
H
ATOM   7662  N   LYS X 490      -2.406 -10.654  -9.243  1.00  0.00
N
ATOM   7663  CA  LYS X 490      -1.731 -11.627  -8.390  1.00  0.00
C
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ATOM   7664  C   LYS X 490      -0.217 -11.631  -8.608  1.00  0.00
C
ATOM   7665  O   LYS X 490       0.560 -11.728  -7.659  1.00  0.00
O
ATOM   7666  CB  LYS X 490      -2.298 -13.026  -8.636  1.00  0.00
C
ATOM   7667  CG  LYS X 490      -3.745 -13.205  -8.193  1.00  0.00
C
ATOM   7668  CD  LYS X 490      -3.920 -12.865  -6.722  1.00  0.00
C
ATOM   7669  CE  LYS X 490      -3.304 -13.932  -5.828  1.00  0.00
C
ATOM   7670  NZ  LYS X 490      -3.389 -13.569  -4.388  1.00  0.00
N
ATOM   7671  H   LYS X 490      -3.013 -10.991  -9.976  1.00  0.00
H
ATOM   7672  HA  LYS X 490      -1.885 -11.369  -7.342  1.00  0.00
H
ATOM   7673 1HB  LYS X 490      -2.219 -13.220  -9.706  1.00  0.00
H
ATOM   7674 2HB  LYS X 490      -1.665 -13.727  -8.092  1.00  0.00
H
ATOM   7675 1HG  LYS X 490      -4.374 -12.550  -8.795  1.00  0.00
H
ATOM   7676 2HG  LYS X 490      -4.034 -14.243  -8.365  1.00  0.00
H
ATOM   7677 1HD  LYS X 490      -3.439 -11.906  -6.527  1.00  0.00
H
ATOM   7678 2HD  LYS X 490      -4.985 -12.785  -6.508  1.00  0.00
H
ATOM   7679 1HE  LYS X 490      -3.833 -14.868  -6.000  1.00  0.00
H
ATOM   7680 2HE  LYS X 490      -2.258 -14.051  -6.109  1.00  0.00
H
ATOM   7681 1HZ  LYS X 490      -2.970 -14.301  -3.831  1.00  0.00
H
ATOM   7682 2HZ  LYS X 490      -2.897 -12.701  -4.230  1.00  0.00
H
ATOM   7683 3HZ  LYS X 490      -4.358 -13.460  -4.126  1.00  0.00
H
ATOM   7684  N   LEU X 491       0.189 -11.541  -9.869  1.00  0.00
N
ATOM   7685  CA  LEU X 491       1.599 -11.530 -10.225  1.00  0.00
C
ATOM   7686  C   LEU X 491       2.308 -10.317  -9.625  1.00  0.00
C
ATOM   7687  O   LEU X 491       3.395 -10.438  -9.060  1.00  0.00
O
ATOM   7688  CB  LEU X 491       1.761 -11.544 -11.751  1.00  0.00
C
ATOM   7689  CG  LEU X 491       3.211 -11.521 -12.253  1.00  0.00
C
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ATOM   7690  CD1 LEU X 491       3.955 -12.753 -11.755  1.00  0.00
C
ATOM   7691  CD2 LEU X 491       3.222 -11.461 -13.773  1.00  0.00
C
ATOM   7692  H   LEU X 491      -0.501 -11.478 -10.603  1.00  0.00
H
ATOM   7693  HA  LEU X 491       2.087 -12.412  -9.811  1.00  0.00
H
ATOM   7694 1HB  LEU X 491       1.305 -12.508 -11.967  1.00  0.00
H
ATOM   7695 2HB  LEU X 491       1.181 -10.753 -12.226  1.00  0.00
H
ATOM   7696  HG  LEU X 491       3.669 -10.604 -11.879  1.00  0.00
H
ATOM   7697 1HD1 LEU X 491       4.983 -12.728 -12.116  1.00  0.00
H
ATOM   7698 2HD1 LEU X 491       3.953 -12.763 -10.665  1.00  0.00
H
ATOM   7699 3HD1 LEU X 491       3.463 -13.650 -12.128  1.00  0.00
H
ATOM   7700 1HD2 LEU X 491       4.253 -11.444 -14.126  1.00  0.00
H
ATOM   7701 2HD2 LEU X 491       2.712 -12.336 -14.176  1.00  0.00
H
ATOM   7702 3HD2 LEU X 491       2.709 -10.558 -14.105  1.00  0.00
H
ATOM   7703  N   LEU X 492       1.676  -9.161  -9.828  1.00  0.00
N
ATOM   7704  CA  LEU X 492       2.311  -7.939  -9.353  1.00  0.00
C
ATOM   7705  C   LEU X 492       2.319  -7.911  -7.834  1.00  0.00
C
ATOM   7706  O   LEU X 492       3.291  -7.482  -7.214  1.00  0.00
O
ATOM   7707  CB  LEU X 492       1.592  -6.705  -9.912  1.00  0.00
C
ATOM   7708  CG  LEU X 492       1.763  -6.477 -11.420  1.00  0.00
C
ATOM   7709  CD1 LEU X 492       0.895  -5.311 -11.873  1.00  0.00
C
ATOM   7710  CD2 LEU X 492       3.228  -6.213 -11.732  1.00  0.00
C
ATOM   7711  H   LEU X 492       0.756  -9.118 -10.245  1.00  0.00
H
ATOM   7712  HA  LEU X 492       3.351  -7.919  -9.678  1.00  0.00
H
ATOM   7713 1HB  LEU X 492       0.563  -6.984  -9.690  1.00  0.00
H
ATOM   7714 2HB  LEU X 492       1.851  -5.802  -9.359  1.00  0.00
H
ATOM   7715  HG  LEU X 492       1.477  -7.402 -11.921  1.00  0.00
H
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ATOM   7716 1HD1 LEU X 492       1.023  -5.157 -12.944  1.00  0.00
H
ATOM   7717 2HD1 LEU X 492      -0.151  -5.532 -11.661  1.00  0.00
H
ATOM   7718 3HD1 LEU X 492       1.192  -4.409 -11.339  1.00  0.00
H
ATOM   7719 1HD2 LEU X 492       3.348  -6.052 -12.803  1.00  0.00
H
ATOM   7720 2HD2 LEU X 492       3.561  -5.326 -11.191  1.00  0.00
H
ATOM   7721 3HD2 LEU X 492       3.827  -7.071 -11.425  1.00  0.00
H
ATOM   7722  N   GLU X 493       1.222  -8.368  -7.237  1.00  0.00
N
ATOM   7723  CA  GLU X 493       1.155  -8.491  -5.788  1.00  0.00
C
ATOM   7724  C   GLU X 493       2.354  -9.276  -5.273  1.00  0.00
C
ATOM   7725  O   GLU X 493       3.139  -8.778  -4.466  1.00  0.00
O
ATOM   7726  CB  GLU X 493      -0.147  -9.167  -5.360  1.00  0.00
C
ATOM   7727  CG  GLU X 493      -0.263  -9.417  -3.863  1.00  0.00
C
ATOM   7728  CD  GLU X 493      -1.553 -10.110  -3.522  1.00  0.00
C
ATOM   7729  OE1 GLU X 493      -1.770 -11.194  -4.009  1.00  0.00
O
ATOM   7730  OE2 GLU X 493      -2.271  -9.609  -2.689  1.00  0.00
O
ATOM   7731  H   GLU X 493       0.424  -8.633  -7.797  1.00  0.00
H
ATOM   7732  HA  GLU X 493       1.202  -7.502  -5.331  1.00  0.00
H
ATOM   7733 1HB  GLU X 493      -0.964  -8.520  -5.684  1.00  0.00
H
ATOM   7734 2HB  GLU X 493      -0.203 -10.116  -5.891  1.00  0.00
H
ATOM   7735 1HG  GLU X 493       0.572  -9.985  -3.453  1.00  0.00
H
ATOM   7736 2HG  GLU X 493      -0.266  -8.415  -3.434  1.00  0.00
H
ATOM   7737  N   GLU X 494       2.500 -10.508  -5.741  1.00  0.00
N
ATOM   7738  CA  GLU X 494       3.524 -11.371  -5.172  1.00  0.00
C
ATOM   7739  C   GLU X 494       4.945 -10.847  -5.359  1.00  0.00
C
ATOM   7740  O   GLU X 494       5.748 -10.858  -4.424  1.00  0.00
O
ATOM   7741  CB  GLU X 494       3.410 -12.772  -5.778  1.00  0.00
C
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ATOM   7742  CG  GLU X 494       2.184 -13.554  -5.330  1.00  0.00
C
ATOM   7743  CD  GLU X 494       2.036 -14.831  -6.109  1.00  0.00
C
ATOM   7744  OE1 GLU X 494       2.814 -15.052  -7.005  1.00  0.00
O
ATOM   7745  OE2 GLU X 494       1.216 -15.637  -5.738  1.00  0.00
O
ATOM   7746  H   GLU X 494       1.907 -10.843  -6.487  1.00  0.00
H
ATOM   7747  HA  GLU X 494       3.386 -11.446  -4.093  1.00  0.00
H
ATOM   7748 1HB  GLU X 494       3.387 -12.649  -6.860  1.00  0.00
H
ATOM   7749 2HB  GLU X 494       4.310 -13.316  -5.493  1.00  0.00
H
ATOM   7750 1HG  GLU X 494       2.179 -13.777  -4.263  1.00  0.00
H
ATOM   7751 2HG  GLU X 494       1.355 -12.886  -5.565  1.00  0.00
H
ATOM   7752  N   TYR X 495       5.263 -10.380  -6.564  1.00  0.00
N
ATOM   7753  CA  TYR X 495       6.587  -9.811  -6.803  1.00  0.00
C
ATOM   7754  C   TYR X 495       6.874  -8.494  -6.106  1.00  0.00
C
ATOM   7755  O   TYR X 495       7.850  -8.379  -5.365  1.00  0.00
O
ATOM   7756  CB  TYR X 495       6.796  -9.628  -8.308  1.00  0.00
C
ATOM   7757  CG  TYR X 495       8.076  -8.907  -8.666  1.00  0.00
C
ATOM   7758  CD1 TYR X 495       9.310  -9.527  -8.519  1.00  0.00
C
ATOM   7759  CD2 TYR X 495       8.048  -7.609  -9.152  1.00  0.00
C
ATOM   7760  CE1 TYR X 495      10.481  -8.873  -8.844  1.00  0.00
C
ATOM   7761  CE2 TYR X 495       9.215  -6.944  -9.481  1.00  0.00
C
ATOM   7762  CZ  TYR X 495      10.430  -7.580  -9.326  1.00  0.00
C
ATOM   7763  OH  TYR X 495      11.593  -6.924  -9.653  1.00  0.00
O
ATOM   7764  H   TYR X 495       4.589 -10.419  -7.314  1.00  0.00
H
ATOM   7765  HA  TYR X 495       7.354 -10.488  -6.425  1.00  0.00
H
ATOM   7766 1HB  TYR X 495       6.801 -10.623  -8.757  1.00  0.00
H
ATOM   7767 2HB  TYR X 495       5.945  -9.064  -8.684  1.00  0.00
H
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ATOM   7768  HD1 TYR X 495       9.343 -10.549  -8.138  1.00  0.00
H
ATOM   7769  HD2 TYR X 495       7.086  -7.112  -9.272  1.00  0.00
H
ATOM   7770  HE1 TYR X 495      11.443  -9.372  -8.724  1.00  0.00
H
ATOM   7771  HE2 TYR X 495       9.173  -5.924  -9.859  1.00  0.00
H
ATOM   7772  HH  TYR X 495      11.490  -5.969  -9.682  1.00  0.00
H
ATOM   7773  N   ALA X 496       6.030  -7.500  -6.339  1.00  0.00
N
ATOM   7774  CA  ALA X 496       6.292  -6.180  -5.791  1.00  0.00
C
ATOM   7775  C   ALA X 496       6.463  -6.196  -4.281  1.00  0.00
C
ATOM   7776  O   ALA X 496       7.402  -5.596  -3.748  1.00  0.00
O
ATOM   7777  CB  ALA X 496       5.172  -5.224  -6.182  1.00  0.00
C
ATOM   7778  H   ALA X 496       5.204  -7.659  -6.898  1.00  0.00
H
ATOM   7779  HA  ALA X 496       7.228  -5.807  -6.207  1.00  0.00
H
ATOM   7780 1HB  ALA X 496       5.384  -4.235  -5.778  1.00  0.00
H
ATOM   7781 2HB  ALA X 496       5.107  -5.167  -7.267  1.00  0.00
H
ATOM   7782 3HB  ALA X 496       4.229  -5.587  -5.779  1.00  0.00
H
ATOM   7783  N   THR X 497       5.567  -6.909  -3.601  1.00  0.00
N
ATOM   7784  CA  THR X 497       5.631  -7.012  -2.153  1.00  0.00
C
ATOM   7785  C   THR X 497       6.683  -7.893  -1.508  1.00  0.00
C
ATOM   7786  O   THR X 497       6.768  -7.943  -0.286  1.00  0.00
O
ATOM   7787  CB  THR X 497       4.265  -7.486  -1.621  1.00  0.00
C
ATOM   7788  CG2 THR X 497       3.149  -6.594  -2.146  1.00  0.00
C
ATOM   7789  OG1 THR X 497       4.029  -8.836  -2.039  1.00  0.00
O
ATOM   7790  H   THR X 497       4.829  -7.385  -4.100  1.00  0.00
H
ATOM   7791  HA  THR X 497       5.856  -6.035  -1.724  1.00  0.00
H
ATOM   7792  HB  THR X 497       4.277  -7.449  -0.533  1.00  0.00
H
ATOM   7793  HG1 THR X 497       3.177  -9.129  -1.705  1.00  0.00
H
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ATOM   7794 1HG2 THR X 497       2.193  -6.944  -1.760  1.00  0.00
H
ATOM   7795 2HG2 THR X 497       3.321  -5.568  -1.819  1.00  0.00
H
ATOM   7796 3HG2 THR X 497       3.137  -6.630  -3.234  1.00  0.00
H
ATOM   7797  N   GLY X 498       7.486  -8.581  -2.306  1.00  0.00
N
ATOM   7798  CA  GLY X 498       8.299  -9.666  -1.777  1.00  0.00
C
ATOM   7799  C   GLY X 498       9.728  -9.590  -2.308  1.00  0.00
C
ATOM   7800  O   GLY X 498      10.552  -8.850  -1.772  1.00  0.00
O
ATOM   7801  H   GLY X 498       7.534  -8.352  -3.289  1.00  0.00
H
ATOM   7802 1HA  GLY X 498       8.319  -9.597  -0.688  1.00  0.00
H
ATOM   7803 2HA  GLY X 498       7.859 -10.618  -2.072  1.00  0.00
H
ATOM   7804  N   PRO X 499      10.015 -10.334  -3.373  1.00  0.00
N
ATOM   7805  CA  PRO X 499      11.310 -10.237  -4.042  1.00  0.00
C
ATOM   7806  C   PRO X 499      11.719  -8.790  -4.269  1.00  0.00
C
ATOM   7807  O   PRO X 499      12.851  -8.398  -3.993  1.00  0.00
O
ATOM   7808  CB  PRO X 499      11.103 -10.990  -5.368  1.00  0.00
C
ATOM   7809  CG  PRO X 499      10.063 -12.032  -5.065  1.00  0.00
C
ATOM   7810  CD  PRO X 499       9.010 -11.006  -4.205  1.00  0.00
C
ATOM   7811  HA  PRO X 499      12.014 -10.675  -3.491  1.00  0.00
H
ATOM   7812 1HB  PRO X 499      10.691 -10.343  -5.867  1.00  0.00
H
ATOM   7813 2HB  PRO X 499      11.864 -11.394  -5.450  1.00  0.00
H
ATOM   7814 1HG  PRO X 499       9.308 -11.652  -5.018  1.00  0.00
H
ATOM   7815 2HG  PRO X 499      10.340 -12.831  -5.467  1.00  0.00
H
ATOM   7816 1HD  PRO X 499       8.240 -10.451  -4.125  1.00  0.00
H
ATOM   7817 2HD  PRO X 499       8.970 -11.878  -3.824  1.00  0.00
H
ATOM   7818  N   ALA X 500      10.779  -7.998  -4.780  1.00  0.00
N
ATOM   7819  CA  ALA X 500      11.052  -6.608  -5.068  1.00  0.00
C
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ATOM   7820  C   ALA X 500      11.351  -5.729  -3.873  1.00  0.00
C
ATOM   7821  O   ALA X 500      12.504  -5.348  -3.664  1.00  0.00
O
ATOM   7822  CB  ALA X 500       9.888  -5.985  -5.824  1.00  0.00
C
ATOM   7823  H   ALA X 500       9.860  -8.374  -4.969  1.00  0.00
H
ATOM   7824  HA  ALA X 500      11.944  -6.549  -5.691  1.00  0.00
H
ATOM   7825 1HB  ALA X 500      10.109  -4.938  -6.033  1.00  0.00
H
ATOM   7826 2HB  ALA X 500       9.736  -6.518  -6.762  1.00  0.00
H
ATOM   7827 3HB  ALA X 500       8.984  -6.051  -5.220  1.00  0.00
H
ATOM   7828  N   VAL X 501      10.330  -5.399  -3.086  1.00  0.00
N
ATOM   7829  CA  VAL X 501      10.546  -4.530  -1.934  1.00  0.00
C
ATOM   7830  C   VAL X 501      11.643  -5.008  -0.994  1.00  0.00
C
ATOM   7831  O   VAL X 501      12.249  -4.199  -0.296  1.00  0.00
O
ATOM   7832  CB  VAL X 501       9.248  -4.368  -1.120  1.00  0.00
C
ATOM   7833  CG1 VAL X 501       8.900  -5.666  -0.408  1.00  0.00
C
ATOM   7834  CG2 VAL X 501       9.386  -3.233  -0.117  1.00  0.00
C
ATOM   7835  H   VAL X 501       9.405  -5.750  -3.286  1.00  0.00
H
ATOM   7836  HA  VAL X 501      10.890  -3.542  -2.241  1.00  0.00
H
ATOM   7837  HB  VAL X 501       8.438  -4.096  -1.797  1.00  0.00
H
ATOM   7838 1HG1 VAL X 501       7.978  -5.534   0.162  1.00  0.00
H
ATOM   7839 2HG1 VAL X 501       8.761  -6.459  -1.143  1.00  0.00
H
ATOM   7840 3HG1 VAL X 501       9.709  -5.938   0.270  1.00  0.00
H
ATOM   7841 1HG2 VAL X 501       8.460  -3.132   0.448  1.00  0.00
H
ATOM   7842 2HG2 VAL X 501      10.207  -3.449   0.565  1.00  0.00
H
ATOM   7843 3HG2 VAL X 501       9.589  -2.302  -0.646  1.00  0.00
H
ATOM   7844  N   LEU X 502      11.912  -6.309  -0.963  1.00  0.00
N
ATOM   7845  CA  LEU X 502      12.965  -6.796  -0.074  1.00  0.00
C
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ATOM   7846  C   LEU X 502      14.317  -6.429  -0.679  1.00  0.00
C
ATOM   7847  O   LEU X 502      15.184  -5.875   0.001  1.00  0.00
O
ATOM   7848  CB  LEU X 502      12.826  -8.308   0.134  1.00  0.00
C
ATOM   7849  CG  LEU X 502      13.549  -8.868   1.366  1.00  0.00
C
ATOM   7850  CD1 LEU X 502      13.358 -10.376   1.444  1.00  0.00
C
ATOM   7851  CD2 LEU X 502      15.026  -8.514   1.293  1.00  0.00
C
ATOM   7852  H   LEU X 502      11.396  -6.953  -1.546  1.00  0.00
H
ATOM   7853  HA  LEU X 502      12.887  -6.298   0.891  1.00  0.00
H
ATOM   7854 1HB  LEU X 502      11.748  -8.370   0.273  1.00  0.00
H
ATOM   7855 2HB  LEU X 502      13.109  -8.867  -0.759  1.00  0.00
H
ATOM   7856  HG  LEU X 502      13.129  -8.369   2.241  1.00  0.00
H
ATOM   7857 1HD1 LEU X 502      13.874 -10.765   2.321  1.00  0.00
H
ATOM   7858 2HD1 LEU X 502      12.294 -10.605   1.517  1.00  0.00
H
ATOM   7859 3HD1 LEU X 502      13.768 -10.842   0.547  1.00  0.00
H
ATOM   7860 1HD2 LEU X 502      15.538  -8.911   2.170  1.00  0.00
H
ATOM   7861 2HD2 LEU X 502      15.460  -8.946   0.393  1.00  0.00
H
ATOM   7862 3HD2 LEU X 502      15.140  -7.430   1.267  1.00  0.00
H
ATOM   7863  N   THR X 503      14.485  -6.729  -1.963  1.00  0.00
N
ATOM   7864  CA  THR X 503      15.714  -6.390  -2.671  1.00  0.00
C
ATOM   7865  C   THR X 503      15.945  -4.880  -2.630  1.00  0.00
C
ATOM   7866  O   THR X 503      17.074  -4.418  -2.473  1.00  0.00
O
ATOM   7867  CB  THR X 503      15.674  -6.871  -4.133  1.00  0.00
C
ATOM   7868  CG2 THR X 503      16.921  -6.417  -4.877  1.00  0.00
C
ATOM   7869  OG1 THR X 503      15.597  -8.302  -4.167  1.00  0.00
O
ATOM   7870  H   THR X 503      13.744  -7.203  -2.460  1.00  0.00
H
ATOM   7871  HA  THR X 503      16.566  -6.856  -2.174  1.00  0.00
H
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ATOM   7872  HB  THR X 503      14.791  -6.457  -4.618  1.00  0.00
H
ATOM   7873  HG1 THR X 503      14.800  -8.589  -3.714  1.00  0.00
H
ATOM   7874 1HG2 THR X 503      16.874  -6.764  -5.909  1.00  0.00
H
ATOM   7875 2HG2 THR X 503      16.976  -5.329  -4.863  1.00  0.00
H
ATOM   7876 3HG2 THR X 503      17.804  -6.832  -4.393  1.00  0.00
H
ATOM   7877  N   VAL X 504      14.867  -4.108  -2.775  1.00  0.00
N
ATOM   7878  CA  VAL X 504      14.987  -2.655  -2.771  1.00  0.00
C
ATOM   7879  C   VAL X 504      15.410  -2.127  -1.405  1.00  0.00
C
ATOM   7880  O   VAL X 504      16.273  -1.257  -1.318  1.00  0.00
O
ATOM   7881  CB  VAL X 504      13.666  -1.978  -3.179  1.00  0.00
C
ATOM   7882  CG1 VAL X 504      13.750  -0.473  -2.964  1.00  0.00
C
ATOM   7883  CG2 VAL X 504      13.331  -2.290  -4.628  1.00  0.00
C
ATOM   7884  H   VAL X 504      13.958  -4.534  -2.888  1.00  0.00
H
ATOM   7885  HA  VAL X 504      15.773  -2.321  -3.450  1.00  0.00
H
ATOM   7886  HB  VAL X 504      12.857  -2.386  -2.572  1.00  0.00
H
ATOM   7887 1HG1 VAL X 504      12.807  -0.011  -3.257  1.00  0.00
H
ATOM   7888 2HG1 VAL X 504      13.945  -0.265  -1.912  1.00  0.00
H
ATOM   7889 3HG1 VAL X 504      14.556  -0.065  -3.573  1.00  0.00
H
ATOM   7890 1HG2 VAL X 504      12.393  -1.804  -4.899  1.00  0.00
H
ATOM   7891 2HG2 VAL X 504      14.129  -1.924  -5.273  1.00  0.00
H
ATOM   7892 3HG2 VAL X 504      13.229  -3.368  -4.755  1.00  0.00
H
ATOM   7893  N   ALA X 505      14.798  -2.646  -0.344  1.00  0.00
N
ATOM   7894  CA  ALA X 505      15.168  -2.211   0.993  1.00  0.00
C
ATOM   7895  C   ALA X 505      16.619  -2.584   1.265  1.00  0.00
C
ATOM   7896  O   ALA X 505      17.363  -1.828   1.895  1.00  0.00
O
ATOM   7897  CB  ALA X 505      14.234  -2.823   2.027  1.00  0.00
C
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ATOM   7898  H   ALA X 505      14.076  -3.341  -0.467  1.00  0.00
H
ATOM   7899  HA  ALA X 505      15.080  -1.126   1.044  1.00  0.00
H
ATOM   7900 1HB  ALA X 505      14.525  -2.487   3.022  1.00  0.00
H
ATOM   7901 2HB  ALA X 505      13.210  -2.510   1.823  1.00  0.00
H
ATOM   7902 3HB  ALA X 505      14.298  -3.909   1.977  1.00  0.00
H
ATOM   7903  N   LEU X 506      17.018  -3.756   0.790  1.00  0.00
N
ATOM   7904  CA  LEU X 506      18.389  -4.223   0.971  1.00  0.00
C
ATOM   7905  C   LEU X 506      19.346  -3.261   0.278  1.00  0.00
C
ATOM   7906  O   LEU X 506      20.334  -2.812   0.866  1.00  0.00
O
ATOM   7907  CB  LEU X 506      18.539  -5.649   0.427  1.00  0.00
C
ATOM   7908  CG  LEU X 506      19.952  -6.240   0.524  1.00  0.00
C
ATOM   7909  CD1 LEU X 506      20.376  -6.339   1.983  1.00  0.00
C
ATOM   7910  CD2 LEU X 506      19.977  -7.608  -0.140  1.00  0.00
C
ATOM   7911  H   LEU X 506      16.360  -4.338   0.292  1.00  0.00
H
ATOM   7912  HA  LEU X 506      18.637  -4.221   2.031  1.00  0.00
H
ATOM   7913 1HB  LEU X 506      17.869  -6.169   1.107  1.00  0.00
H
ATOM   7914 2HB  LEU X 506      18.161  -5.735  -0.593  1.00  0.00
H
ATOM   7915  HG  LEU X 506      20.617  -5.584  -0.039  1.00  0.00
H
ATOM   7916 1HD1 LEU X 506      21.380  -6.759   2.043  1.00  0.00
H
ATOM   7917 2HD1 LEU X 506      20.372  -5.346   2.431  1.00  0.00
H
ATOM   7918 3HD1 LEU X 506      19.681  -6.983   2.521  1.00  0.00
H
ATOM   7919 1HD2 LEU X 506      20.982  -8.027  -0.070  1.00  0.00
H
ATOM   7920 2HD2 LEU X 506      19.273  -8.271   0.362  1.00  0.00
H
ATOM   7921 3HD2 LEU X 506      19.698  -7.510  -1.188  1.00  0.00
H
ATOM   7922  N   ILE X 507      19.048  -2.943  -0.978  1.00  0.00
N
ATOM   7923  CA  ILE X 507      19.873  -2.031  -1.759  1.00  0.00
C
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ATOM   7924  C   ILE X 507      19.978  -0.649  -1.108  1.00  0.00
C
ATOM   7925  O   ILE X 507      21.061  -0.069  -1.048  1.00  0.00
O
ATOM   7926  CB  ILE X 507      19.330  -1.862  -3.189  1.00  0.00
C
ATOM   7927  CG1 ILE X 507      19.502  -3.160  -3.983  1.00  0.00
C
ATOM   7928  CG2 ILE X 507      20.032  -0.709  -3.892  1.00  0.00
C
ATOM   7929  CD1 ILE X 507      18.732  -3.187  -5.283  1.00  0.00
C
ATOM   7930  H   ILE X 507      18.225  -3.346  -1.403  1.00  0.00
H
ATOM   7931  HA  ILE X 507      20.902  -2.386  -1.801  1.00  0.00
H
ATOM   7932  HB  ILE X 507      18.261  -1.662  -3.142  1.00  0.00
H
ATOM   7933 1HG1 ILE X 507      20.565  -3.279  -4.186  1.00  0.00
H
ATOM   7934 2HG1 ILE X 507      19.164  -3.977  -3.344  1.00  0.00
H
ATOM   7935 1HG2 ILE X 507      19.636  -0.604  -4.902  1.00  0.00
H
ATOM   7936 2HG2 ILE X 507      19.859   0.212  -3.337  1.00  0.00
H
ATOM   7937 3HG2 ILE X 507      21.102  -0.909  -3.940  1.00  0.00
H
ATOM   7938 1HD1 ILE X 507      18.904  -4.138  -5.789  1.00  0.00
H
ATOM   7939 2HD1 ILE X 507      17.668  -3.070  -5.080  1.00  0.00
H
ATOM   7940 3HD1 ILE X 507      19.070  -2.373  -5.923  1.00  0.00
H
ATOM   7941  N   GLU X 508      18.858  -0.119  -0.625  1.00  0.00
N
ATOM   7942  CA  GLU X 508      18.891   1.198  -0.001  1.00  0.00
C
ATOM   7943  C   GLU X 508      19.653   1.154   1.318  1.00  0.00
C
ATOM   7944  O   GLU X 508      20.335   2.114   1.671  1.00  0.00
O
ATOM   7945  CB  GLU X 508      17.471   1.720   0.222  1.00  0.00
C
ATOM   7946  CG  GLU X 508      16.730   2.094  -1.052  1.00  0.00
C
ATOM   7947  CD  GLU X 508      15.326   2.543  -0.758  1.00  0.00
C
ATOM   7948  OE1 GLU X 508      14.937   2.502   0.385  1.00  0.00
O
ATOM   7949  OE2 GLU X 508      14.680   3.034  -1.654  1.00  0.00
O
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ATOM   7950  H   GLU X 508      17.988  -0.627  -0.690  1.00  0.00
H
ATOM   7951  HA  GLU X 508      19.422   1.899  -0.646  1.00  0.00
H
ATOM   7952 1HB  GLU X 508      16.922   0.935   0.744  1.00  0.00
H
ATOM   7953 2HB  GLU X 508      17.551   2.597   0.866  1.00  0.00
H
ATOM   7954 1HG  GLU X 508      17.238   2.856  -1.642  1.00  0.00
H
ATOM   7955 2HG  GLU X 508      16.701   1.162  -1.615  1.00  0.00
H
ATOM   7956  N   ALA X 509      19.552   0.040   2.038  1.00  0.00
N
ATOM   7957  CA  ALA X 509      20.252  -0.092   3.311  1.00  0.00
C
ATOM   7958  C   ALA X 509      21.763   0.014   3.110  1.00  0.00
C
ATOM   7959  O   ALA X 509      22.461   0.621   3.929  1.00  0.00
O
ATOM   7960  CB  ALA X 509      19.887  -1.409   3.981  1.00  0.00
C
ATOM   7961  H   ALA X 509      18.985  -0.724   1.698  1.00  0.00
H
ATOM   7962  HA  ALA X 509      19.949   0.727   3.963  1.00  0.00
H
ATOM   7963 1HB  ALA X 509      20.418  -1.491   4.931  1.00  0.00
H
ATOM   7964 2HB  ALA X 509      18.813  -1.438   4.163  1.00  0.00
H
ATOM   7965 3HB  ALA X 509      20.170  -2.237   3.335  1.00  0.00
H
ATOM   7966  N   VAL X 510      22.264  -0.578   2.031  1.00  0.00
N
ATOM   7967  CA  VAL X 510      23.690  -0.536   1.725  1.00  0.00
C
ATOM   7968  C   VAL X 510      24.046   0.687   0.891  1.00  0.00
C
ATOM   7969  O   VAL X 510      25.199   1.109   0.849  1.00  0.00
O
ATOM   7970  CB  VAL X 510      24.144  -1.803   0.976  1.00  0.00
C
ATOM   7971  CG1 VAL X 510      23.838  -3.047   1.796  1.00  0.00
C
ATOM   7972  CG2 VAL X 510      23.471  -1.886  -0.386  1.00  0.00
C
ATOM   7973  H   VAL X 510      21.642  -1.069   1.405  1.00  0.00
H
ATOM   7974  HA  VAL X 510      24.287  -0.437   2.632  1.00  0.00
H
ATOM   7975  HB  VAL X 510      25.217  -1.741   0.796  1.00  0.00
H
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ATOM   7976 1HG1 VAL X 510      24.165  -3.932   1.250  1.00  0.00
H
ATOM   7977 2HG1 VAL X 510      24.363  -2.992   2.748  1.00  0.00
H
ATOM   7978 3HG1 VAL X 510      22.764  -3.109   1.975  1.00  0.00
H
ATOM   7979 1HG2 VAL X 510      23.804  -2.784  -0.903  1.00  0.00
H
ATOM   7980 2HG2 VAL X 510      22.389  -1.920  -0.255  1.00  0.00
H
ATOM   7981 3HG2 VAL X 510      23.738  -1.010  -0.978  1.00  0.00
H
ATOM   7982  N   ALA X 511      23.042   1.255   0.230  1.00  0.00
N
ATOM   7983  CA  ALA X 511      23.240   2.452  -0.579  1.00  0.00
C
ATOM   7984  C   ALA X 511      23.649   3.638   0.285  1.00  0.00
C
ATOM   7985  O   ALA X 511      24.612   4.340  -0.027  1.00  0.00
O
ATOM   7986  CB  ALA X 511      21.979   2.774  -1.365  1.00  0.00
C
ATOM   7987  H   ALA X 511      22.119   0.847   0.289  1.00  0.00
H
ATOM   7988  HA  ALA X 511      24.051   2.268  -1.284  1.00  0.00
H
ATOM   7989 1HB  ALA X 511      22.143   3.671  -1.964  1.00  0.00
H
ATOM   7990 2HB  ALA X 511      21.735   1.940  -2.023  1.00  0.00
H
ATOM   7991 3HB  ALA X 511      21.153   2.945  -0.675  1.00  0.00
H
ATOM   7992  N   VAL X 512      22.916   3.857   1.367  1.00  0.00
N
ATOM   7993  CA  VAL X 512      23.220   4.940   2.299  1.00  0.00
C
ATOM   7994  C   VAL X 512      24.499   4.653   3.074  1.00  0.00
C
ATOM   7995  O   VAL X 512      25.178   5.573   3.532  1.00  0.00
O
ATOM   7996  CB  VAL X 512      22.067   5.171   3.293  1.00  0.00
C
ATOM   7997  CG1 VAL X 512      20.802   5.586   2.556  1.00  0.00
C
ATOM   7998  CG2 VAL X 512      21.815   3.917   4.116  1.00  0.00
C
ATOM   7999  H   VAL X 512      22.124   3.258   1.553  1.00  0.00
H
ATOM   8000  HA  VAL X 512      23.415   5.873   1.770  1.00  0.00
H
ATOM   8001  HB  VAL X 512      22.355   5.957   3.993  1.00  0.00
H
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ATOM   8002 1HG1 VAL X 512      19.998   5.745   3.274  1.00  0.00
H
ATOM   8003 2HG1 VAL X 512      20.988   6.511   2.009  1.00  0.00
H
ATOM   8004 3HG1 VAL X 512      20.514   4.802   1.857  1.00  0.00
H
ATOM   8005 1HG2 VAL X 512      20.997   4.098   4.814  1.00  0.00
H
ATOM   8006 2HG2 VAL X 512      21.549   3.095   3.451  1.00  0.00
H
ATOM   8007 3HG2 VAL X 512      22.715   3.658   4.673  1.00  0.00
H
ATOM   8008  N   SER X 513      24.827   3.374   3.216  1.00  0.00
N
ATOM   8009  CA  SER X 513      26.021   2.964   3.945  1.00  0.00
C
ATOM   8010  C   SER X 513      27.282   3.295   3.161  1.00  0.00
C
ATOM   8011  O   SER X 513      28.312   3.637   3.740  1.00  0.00
O
ATOM   8012  CB  SER X 513      25.962   1.479   4.252  1.00  0.00
C
ATOM   8013  OG  SER X 513      24.942   1.170   5.162  1.00  0.00
O
ATOM   8014  H   SER X 513      24.233   2.666   2.808  1.00  0.00
H
ATOM   8015  HA  SER X 513      26.084   3.389   4.948  1.00  0.00
H
ATOM   8016 1HB  SER X 513      25.784   0.940   3.323  1.00  0.00
H
ATOM   8017 2HB  SER X 513      26.918   1.173   4.673  1.00  0.00
H
ATOM   8018  HG  SER X 513      24.096   1.435   4.795  1.00  0.00
H
ATOM   8019  N   TRP X 514      27.197   3.189   1.839  1.00  0.00
N
ATOM   8020  CA  TRP X 514      28.346   3.439   0.975  1.00  0.00
C
ATOM   8021  C   TRP X 514      28.496   4.927   0.679  1.00  0.00
C
ATOM   8022  O   TRP X 514      29.611   5.445   0.614  1.00  0.00
O
ATOM   8023  CB  TRP X 514      28.214   2.653  -0.331  1.00  0.00
C
ATOM   8024  CG  TRP X 514      29.379   2.829  -1.257  1.00  0.00
C
ATOM   8025  CD1 TRP X 514      29.390   3.522  -2.430  1.00  0.00
C
ATOM   8026  CD2 TRP X 514      30.702   2.305  -1.086  1.00  0.00
C
ATOM   8027  CE2 TRP X 514      31.460   2.720  -2.194  1.00  0.00
C
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ATOM   8028  CE3 TRP X 514      31.316   1.525  -0.099  1.00  0.00
C
ATOM   8029  NE1 TRP X 514      30.635   3.461  -3.003  1.00  0.00
N
ATOM   8030  CZ2 TRP X 514      32.795   2.383  -2.349  1.00  0.00
C
ATOM   8031  CZ3 TRP X 514      32.657   1.189  -0.253  1.00  0.00
C
ATOM   8032  CH2 TRP X 514      33.375   1.606  -1.345  1.00  0.00
C
ATOM   8033  H   TRP X 514      26.315   2.929   1.421  1.00  0.00
H
ATOM   8034  HA  TRP X 514      29.261   3.126   1.477  1.00  0.00
H
ATOM   8035 1HB  TRP X 514      28.138   1.586  -0.123  1.00  0.00
H
ATOM   8036 2HB  TRP X 514      27.329   2.981  -0.877  1.00  0.00
H
ATOM   8037  HD1 TRP X 514      28.458   3.999  -2.730  1.00  0.00
H
ATOM   8038  HE1 TRP X 514      30.903   3.892  -3.877  1.00  0.00
H
ATOM   8039  HE3 TRP X 514      30.794   1.170   0.788  1.00  0.00
H
ATOM   8040  HZ2 TRP X 514      33.329   2.737  -3.232  1.00  0.00
H
ATOM   8041  HZ3 TRP X 514      33.123   0.579   0.521  1.00  0.00
H
ATOM   8042  HH2 TRP X 514      34.424   1.320  -1.428  1.00  0.00
H
ATOM   8043  N   PHE X 515      27.369   5.607   0.502  1.00  0.00
N
ATOM   8044  CA  PHE X 515      27.379   7.012   0.111  1.00  0.00
C
ATOM   8045  C   PHE X 515      27.371   7.922   1.334  1.00  0.00
C
ATOM   8046  O   PHE X 515      28.283   8.725   1.527  1.00  0.00
O
ATOM   8047  CB  PHE X 515      26.180   7.325  -0.786  1.00  0.00
C
ATOM   8048  CG  PHE X 515      26.140   8.746  -1.271  1.00  0.00
C
ATOM   8049  CD1 PHE X 515      26.946   9.159  -2.322  1.00  0.00
C
ATOM   8050  CD2 PHE X 515      25.297   9.675  -0.677  1.00  0.00
C
ATOM   8051  CE1 PHE X 515      26.910  10.466  -2.768  1.00  0.00
C
ATOM   8052  CE2 PHE X 515      25.259  10.981  -1.122  1.00  0.00
C
ATOM   8053  CZ  PHE X 515      26.067  11.378  -2.168  1.00  0.00
C
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ATOM   8054  H   PHE X 515      26.485   5.140   0.640  1.00  0.00
H
ATOM   8055  HA  PHE X 515      28.294   7.238  -0.439  1.00  0.00
H
ATOM   8056 1HB  PHE X 515      26.200   6.695  -1.673  1.00  0.00
H
ATOM   8057 2HB  PHE X 515      25.251   7.156  -0.243  1.00  0.00
H
ATOM   8058  HD1 PHE X 515      27.612   8.437  -2.796  1.00  0.00
H
ATOM   8059  HD2 PHE X 515      24.659   9.361   0.151  1.00  0.00
H
ATOM   8060  HE1 PHE X 515      27.549  10.777  -3.595  1.00  0.00
H
ATOM   8061  HE2 PHE X 515      24.591  11.699  -0.647  1.00  0.00
H
ATOM   8062  HZ  PHE X 515      26.039  12.409  -2.519  1.00  0.00
H
ATOM   8063  N   TYR X 516      26.336   7.793   2.158  1.00  0.00
N
ATOM   8064  CA  TYR X 516      26.165   8.660   3.317  1.00  0.00
C
ATOM   8065  C   TYR X 516      27.123   8.273   4.436  1.00  0.00
C
ATOM   8066  O   TYR X 516      27.639   9.134   5.149  1.00  0.00
O
ATOM   8067  CB  TYR X 516      24.721   8.605   3.818  1.00  0.00
C
ATOM   8068  CG  TYR X 516      24.364   9.715   4.783  1.00  0.00
C
ATOM   8069  CD1 TYR X 516      24.061  10.989   4.324  1.00  0.00
C
ATOM   8070  CD2 TYR X 516      24.329   9.485   6.150  1.00  0.00
C
ATOM   8071  CE1 TYR X 516      23.737  12.005   5.199  1.00  0.00
C
ATOM   8072  CE2 TYR X 516      24.005  10.493   7.036  1.00  0.00
C
ATOM   8073  CZ  TYR X 516      23.709  11.753   6.556  1.00  0.00
C
ATOM   8074  OH  TYR X 516      23.383  12.762   7.435  1.00  0.00
O
ATOM   8075  H   TYR X 516      25.649   7.075   1.976  1.00  0.00
H
ATOM   8076  HA  TYR X 516      26.401   9.690   3.046  1.00  0.00
H
ATOM   8077 1HB  TYR X 516      24.073   8.663   2.943  1.00  0.00
H
ATOM   8078 2HB  TYR X 516      24.585   7.642   4.308  1.00  0.00
H
ATOM   8079  HD1 TYR X 516      24.086  11.181   3.251  1.00  0.00
H
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ATOM   8080  HD2 TYR X 516      24.566   8.488   6.522  1.00  0.00
H
ATOM   8081  HE1 TYR X 516      23.501  13.002   4.825  1.00  0.00
H
ATOM   8082  HE2 TYR X 516      23.983  10.292   8.108  1.00  0.00
H
ATOM   8083  HH  TYR X 516      23.196  13.596   6.997  1.00  0.00
H
ATOM   8084  N   GLY X 517      27.357   6.976   4.591  1.00  0.00
N
ATOM   8085  CA  GLY X 517      28.314   6.480   5.573  1.00  0.00
C
ATOM   8086  C   GLY X 517      27.662   5.471   6.511  1.00  0.00
C
ATOM   8087  O   GLY X 517      26.642   5.759   7.138  1.00  0.00
O
ATOM   8088  H   GLY X 517      26.859   6.315   4.013  1.00  0.00
H
ATOM   8089 1HA  GLY X 517      29.143   5.999   5.052  1.00  0.00
H
ATOM   8090 2HA  GLY X 517      28.691   7.318   6.158  1.00  0.00
H
ATOM   8091  N   ILE X 518      28.264   4.292   6.605  1.00  0.00
N
ATOM   8092  CA  ILE X 518      27.654   3.179   7.328  1.00  0.00
C
ATOM   8093  C   ILE X 518      27.681   3.420   8.831  1.00  0.00
C
ATOM   8094  O   ILE X 518      26.926   2.798   9.582  1.00  0.00
O
ATOM   8095  CB  ILE X 518      28.360   1.848   7.017  1.00  0.00
C
ATOM   8096  CG1 ILE X 518      27.491   0.666   7.457  1.00  0.00
C
ATOM   8097  CG2 ILE X 518      29.719   1.795   7.697  1.00  0.00
C
ATOM   8098  CD1 ILE X 518      27.966  -0.670   6.935  1.00  0.00
C
ATOM   8099  H   ILE X 518      29.164   4.161   6.167  1.00  0.00
H
ATOM   8100  HA  ILE X 518      26.596   3.094   7.081  1.00  0.00
H
ATOM   8101  HB  ILE X 518      28.489   1.756   5.939  1.00  0.00
H
ATOM   8102 1HG1 ILE X 518      27.491   0.651   8.547  1.00  0.00
H
ATOM   8103 2HG1 ILE X 518      26.479   0.857   7.099  1.00  0.00
H
ATOM   8104 1HG2 ILE X 518      30.205   0.846   7.467  1.00  0.00
H
ATOM   8105 2HG2 ILE X 518      30.338   2.615   7.337  1.00  0.00
H
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ATOM   8106 3HG2 ILE X 518      29.590   1.884   8.776  1.00  0.00
H
ATOM   8107 1HD1 ILE X 518      27.300  -1.458   7.288  1.00  0.00
H
ATOM   8108 2HD1 ILE X 518      27.964  -0.657   5.844  1.00  0.00
H
ATOM   8109 3HD1 ILE X 518      28.977  -0.863   7.293  1.00  0.00
H
ATOM   8110  N   THR X 519      28.552   4.323   9.266  1.00  0.00
N
ATOM   8111  CA  THR X 519      28.664   4.660  10.682  1.00  0.00
C
ATOM   8112  C   THR X 519      27.731   5.806  11.048  1.00  0.00
C
ATOM   8113  O   THR X 519      27.586   6.144  12.225  1.00  0.00
O
ATOM   8114  CB  THR X 519      30.107   5.043  11.059  1.00  0.00
C
ATOM   8115  CG2 THR X 519      31.061   3.901  10.749  1.00  0.00
C
ATOM   8116  OG1 THR X 519      30.503   6.207  10.322  1.00  0.00
O
ATOM   8117  H   THR X 519      29.152   4.788   8.600  1.00  0.00
H
ATOM   8118  HA  THR X 519      28.358   3.807  11.289  1.00  0.00
H
ATOM   8119  HB  THR X 519      30.145   5.269  12.125  1.00  0.00
H
ATOM   8120  HG1 THR X 519      31.404   6.444  10.559  1.00  0.00
H
ATOM   8121 1HG2 THR X 519      32.075   4.191  11.023  1.00  0.00
H
ATOM   8122 2HG2 THR X 519      30.768   3.018  11.317  1.00  0.00
H
ATOM   8123 3HG2 THR X 519      31.023   3.676   9.684  1.00  0.00
H
ATOM   8124  N   GLN X 520      27.102   6.399  10.041  1.00  0.00
N
ATOM   8125  CA  GLN X 520      26.217   7.536  10.257  1.00  0.00
C
ATOM   8126  C   GLN X 520      24.824   7.083  10.670  1.00  0.00
C
ATOM   8127  O   GLN X 520      24.378   7.348  11.784  1.00  0.00
O
ATOM   8128  CB  GLN X 520      26.126   8.393   8.991  1.00  0.00
C
ATOM   8129  CG  GLN X 520      27.423   9.090   8.616  1.00  0.00
C
ATOM   8130  CD  GLN X 520      27.835  10.135   9.637  1.00  0.00
C
ATOM   8131  NE2 GLN X 520      29.091  10.077  10.066  1.00  0.00
N
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ATOM   8132  OE1 GLN X 520      27.034  10.984  10.033  1.00  0.00
O
ATOM   8133  H   GLN X 520      27.240   6.054   9.102  1.00  0.00
H
ATOM   8134  HA  GLN X 520      26.599   8.145  11.076  1.00  0.00
H
ATOM   8135 1HB  GLN X 520      25.816   7.730   8.184  1.00  0.00
H
ATOM   8136 2HB  GLN X 520      25.347   9.135   9.170  1.00  0.00
H
ATOM   8137 1HG  GLN X 520      28.317   8.549   8.313  1.00  0.00
H
ATOM   8138 2HG  GLN X 520      26.999   9.603   7.752  1.00  0.00
H
ATOM   8139 1HE2 GLN X 520      29.420  10.740  10.740  1.00  0.00
H
ATOM   8140 2HE2 GLN X 520      29.708   9.370   9.718  1.00  0.00
H
ATOM   8141  N   PHE X 521      24.140   6.391   9.765  1.00  0.00
N
ATOM   8142  CA  PHE X 521      22.782   5.923  10.024  1.00  0.00
C
ATOM   8143  C   PHE X 521      22.753   4.914  11.164  1.00  0.00
C
ATOM   8144  O   PHE X 521      21.736   4.758  11.841  1.00  0.00
O
ATOM   8145  CB  PHE X 521      22.178   5.306   8.761  1.00  0.00
C
ATOM   8146  CG  PHE X 521      21.532   6.307   7.846  1.00  0.00
C
ATOM   8147  CD1 PHE X 521      22.150   6.692   6.667  1.00  0.00
C
ATOM   8148  CD2 PHE X 521      20.303   6.865   8.164  1.00  0.00
C
ATOM   8149  CE1 PHE X 521      21.555   7.614   5.826  1.00  0.00
C
ATOM   8150  CE2 PHE X 521      19.705   7.785   7.326  1.00  0.00
C
ATOM   8151  CZ  PHE X 521      20.333   8.160   6.154  1.00  0.00
C
ATOM   8152  H   PHE X 521      24.570   6.183   8.875  1.00  0.00
H
ATOM   8153  HA  PHE X 521      22.155   6.759  10.335  1.00  0.00
H
ATOM   8154 1HB  PHE X 521      22.954   4.809   8.179  1.00  0.00
H
ATOM   8155 2HB  PHE X 521      21.408   4.585   9.028  1.00  0.00
H
ATOM   8156  HD1 PHE X 521      23.117   6.260   6.406  1.00  0.00
H
ATOM   8157  HD2 PHE X 521      19.807   6.570   9.090  1.00  0.00
H
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ATOM   8158  HE1 PHE X 521      22.053   7.909   4.902  1.00  0.00
H
ATOM   8159  HE2 PHE X 521      18.738   8.216   7.587  1.00  0.00
H
ATOM   8160  HZ  PHE X 521      19.864   8.886   5.493  1.00  0.00
H
ATOM   8161  N   CYS X 522      23.874   4.233  11.370  1.00  0.00
N
ATOM   8162  CA  CYS X 522      24.014   3.315  12.495  1.00  0.00
C
ATOM   8163  C   CYS X 522      23.713   4.010  13.816  1.00  0.00
C
ATOM   8164  O   CYS X 522      22.855   3.570  14.578  1.00  0.00
O
ATOM   8165  CB  CYS X 522      25.488   2.913  12.422  1.00  0.00
C
ATOM   8166  SG  CYS X 522      26.004   1.726  13.684  1.00  0.00
S
ATOM   8167  H   CYS X 522      24.648   4.353  10.732  1.00  0.00
H
ATOM   8168  HA  CYS X 522      23.403   2.418  12.400  1.00  0.00
H
ATOM   8169 1HB  CYS X 522      25.704   2.447  11.461  1.00  0.00
H
ATOM   8170 2HB  CYS X 522      26.123   3.788  12.555  1.00  0.00
H
ATOM   8171  HG  CYS X 522      27.271   1.648  13.292  1.00  0.00
H
ATOM   8172  N   ARG X 523      24.428   5.098  14.080  1.00  0.00
N
ATOM   8173  CA  ARG X 523      24.293   5.816  15.344  1.00  0.00
C
ATOM   8174  C   ARG X 523      22.996   6.612  15.392  1.00  0.00
C
ATOM   8175  O   ARG X 523      22.388   6.766  16.451  1.00  0.00
O
ATOM   8176  CB  ARG X 523      25.499   6.699  15.634  1.00  0.00
C
ATOM   8177  CG  ARG X 523      26.779   5.946  15.955  1.00  0.00
C
ATOM   8178  CD  ARG X 523      27.966   6.818  16.165  1.00  0.00
C
ATOM   8179  NE  ARG X 523      29.190   6.102  16.487  1.00  0.00
N
ATOM   8180  CZ  ARG X 523      30.407   6.671  16.577  1.00  0.00
C
ATOM   8181  NH1 ARG X 523      30.575   7.952  16.335  1.00  0.00
N
ATOM   8182  NH2 ARG X 523      31.434   5.902  16.891  1.00  0.00
N
ATOM   8183  H   ARG X 523      25.081   5.437  13.389  1.00  0.00
H
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ATOM   8184  HA  ARG X 523      24.251   5.105  16.170  1.00  0.00
H
ATOM   8185 1HB  ARG X 523      25.657   7.320  14.754  1.00  0.00
H
ATOM   8186 2HB  ARG X 523      25.233   7.332  16.482  1.00  0.00
H
ATOM   8187 1HG  ARG X 523      26.623   5.367  16.866  1.00  0.00
H
ATOM   8188 2HG  ARG X 523      27.001   5.271  15.127  1.00  0.00
H
ATOM   8189 1HD  ARG X 523      28.150   7.390  15.258  1.00  0.00
H
ATOM   8190 2HD  ARG X 523      27.760   7.500  16.990  1.00  0.00
H
ATOM   8191  HE  ARG X 523      29.329   5.120  16.685  1.00  0.00
H
ATOM   8192 1HH1 ARG X 523      29.783   8.524  16.078  1.00  0.00
H
ATOM   8193 2HH1 ARG X 523      31.497   8.360  16.407  1.00  0.00
H
ATOM   8194 1HH2 ARG X 523      31.290   4.915  17.058  1.00  0.00
H
ATOM   8195 2HH2 ARG X 523      32.358   6.302  16.965  1.00  0.00
H
ATOM   8196  N   ASP X 524      22.575   7.115  14.235  1.00  0.00
N
ATOM   8197  CA  ASP X 524      21.319   7.849  14.131  1.00  0.00
C
ATOM   8198  C   ASP X 524      20.138   6.976  14.539  1.00  0.00
C
ATOM   8199  O   ASP X 524      19.339   7.358  15.394  1.00  0.00
O
ATOM   8200  CB  ASP X 524      21.120   8.373  12.707  1.00  0.00
C
ATOM   8201  CG  ASP X 524      22.011   9.553  12.340  1.00  0.00
C
ATOM   8202  OD1 ASP X 524      22.605  10.120  13.227  1.00  0.00
O
ATOM   8203  OD2 ASP X 524      22.213   9.778  11.173  1.00  0.00
O
ATOM   8204  H   ASP X 524      23.140   6.985  13.408  1.00  0.00
H
ATOM   8205  HA  ASP X 524      21.329   8.697  14.816  1.00  0.00
H
ATOM   8206 1HB  ASP X 524      21.211   7.600  11.944  1.00  0.00
H
ATOM   8207 2HB  ASP X 524      20.084   8.707  12.769  1.00  0.00
H
ATOM   8208  N   VAL X 525      20.032   5.804  13.922  1.00  0.00
N
ATOM   8209  CA  VAL X 525      18.954   4.871  14.226  1.00  0.00
C
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ATOM   8210  C   VAL X 525      19.008   4.428  15.682  1.00  0.00
C
ATOM   8211  O   VAL X 525      17.978   4.341  16.352  1.00  0.00
O
ATOM   8212  CB  VAL X 525      19.008   3.629  13.319  1.00  0.00
C
ATOM   8213  CG1 VAL X 525      18.028   2.570  13.804  1.00  0.00
C
ATOM   8214  CG2 VAL X 525      18.708   4.009  11.877  1.00  0.00
C
ATOM   8215  H   VAL X 525      20.717   5.554  13.223  1.00  0.00
H
ATOM   8216  HA  VAL X 525      17.978   5.343  14.112  1.00  0.00
H
ATOM   8217  HB  VAL X 525      20.018   3.222  13.335  1.00  0.00
H
ATOM   8218 1HG1 VAL X 525      18.079   1.700  13.151  1.00  0.00
H
ATOM   8219 2HG1 VAL X 525      18.283   2.277  14.821  1.00  0.00
H
ATOM   8220 3HG1 VAL X 525      17.016   2.977  13.786  1.00  0.00
H
ATOM   8221 1HG2 VAL X 525      18.751   3.119  11.248  1.00  0.00
H
ATOM   8222 2HG2 VAL X 525      17.712   4.449  11.818  1.00  0.00
H
ATOM   8223 3HG2 VAL X 525      19.445   4.732  11.530  1.00  0.00
H
ATOM   8224  N   LYS X 526      20.211   4.149  16.170  1.00  0.00
N
ATOM   8225  CA  LYS X 526      20.404   3.753  17.558  1.00  0.00
C
ATOM   8226  C   LYS X 526      19.781   4.767  18.510  1.00  0.00
C
ATOM   8227  O   LYS X 526      19.062   4.399  19.442  1.00  0.00
O
ATOM   8228  CB  LYS X 526      21.893   3.589  17.867  1.00  0.00
C
ATOM   8229  CG  LYS X 526      22.216   3.427  19.346  1.00  0.00
C
ATOM   8230  CD  LYS X 526      22.881   4.674  19.907  1.00  0.00
C
ATOM   8231  CE  LYS X 526      23.413   4.434  21.313  1.00  0.00
C
ATOM   8232  NZ  LYS X 526      24.083   5.641  21.867  1.00  0.00
N
ATOM   8233  H   LYS X 526      21.015   4.214  15.560  1.00  0.00
H
ATOM   8234  HA  LYS X 526      19.903   2.803  17.743  1.00  0.00
H
ATOM   8235 1HB  LYS X 526      22.237   2.709  17.321  1.00  0.00
H
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ATOM   8236 2HB  LYS X 526      22.400   4.474  17.480  1.00  0.00
H
ATOM   8237 1HG  LYS X 526      21.287   3.237  19.883  1.00  0.00
H
ATOM   8238 2HG  LYS X 526      22.884   2.574  19.463  1.00  0.00
H
ATOM   8239 1HD  LYS X 526      23.706   4.953  19.249  1.00  0.00
H
ATOM   8240 2HD  LYS X 526      22.148   5.479  19.930  1.00  0.00
H
ATOM   8241 1HE  LYS X 526      22.575   4.158  21.952  1.00  0.00
H
ATOM   8242 2HE  LYS X 526      24.124   3.609  21.272  1.00  0.00
H
ATOM   8243 1HZ  LYS X 526      24.420   5.440  22.798  1.00  0.00
H
ATOM   8244 2HZ  LYS X 526      24.861   5.897  21.276  1.00  0.00
H
ATOM   8245 3HZ  LYS X 526      23.424   6.405  21.905  1.00  0.00
H
ATOM   8246  N   GLU X 527      20.066   6.043  18.279  1.00  0.00
N
ATOM   8247  CA  GLU X 527      19.567   7.108  19.142  1.00  0.00
C
ATOM   8248  C   GLU X 527      18.074   7.318  18.953  1.00  0.00
C
ATOM   8249  O   GLU X 527      17.347   7.591  19.907  1.00  0.00
O
ATOM   8250  CB  GLU X 527      20.318   8.413  18.871  1.00  0.00
C
ATOM   8251  CG  GLU X 527      21.776   8.402  19.310  1.00  0.00
C
ATOM   8252  CD  GLU X 527      22.470   9.682  18.935  1.00  0.00
C
ATOM   8253  OE1 GLU X 527      21.851  10.509  18.309  1.00  0.00
O
ATOM   8254  OE2 GLU X 527      23.579   9.883  19.369  1.00  0.00
O
ATOM   8255  H   GLU X 527      20.643   6.282  17.486  1.00  0.00
H
ATOM   8256  HA  GLU X 527      19.711   6.835  20.188  1.00  0.00
H
ATOM   8257 1HB  GLU X 527      20.266   8.595  17.797  1.00  0.00
H
ATOM   8258 2HB  GLU X 527      19.786   9.204  19.399  1.00  0.00
H
ATOM   8259 1HG  GLU X 527      21.906   8.219  20.376  1.00  0.00
H
ATOM   8260 2HG  GLU X 527      22.208   7.577  18.745  1.00  0.00
H
ATOM   8261  N   MET X 528      17.615   7.200  17.709  1.00  0.00
N
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ATOM   8262  CA  MET X 528      16.208   7.399  17.390  1.00  0.00
C
ATOM   8263  C   MET X 528      15.342   6.308  18.013  1.00  0.00
C
ATOM   8264  O   MET X 528      14.193   6.553  18.381  1.00  0.00
O
ATOM   8265  CB  MET X 528      16.010   7.429  15.876  1.00  0.00
C
ATOM   8266  CG  MET X 528      16.539   8.685  15.196  1.00  0.00
C
ATOM   8267  SD  MET X 528      16.435   8.599  13.397  1.00  0.00
S
ATOM   8268  CE  MET X 528      17.067  10.212  12.944  1.00  0.00
C
ATOM   8269  H   MET X 528      18.260   6.965  16.968  1.00  0.00
H
ATOM   8270  HA  MET X 528      15.863   8.345  17.806  1.00  0.00
H
ATOM   8271 1HB  MET X 528      16.520   6.556  15.472  1.00  0.00
H
ATOM   8272 2HB  MET X 528      14.938   7.343  15.692  1.00  0.00
H
ATOM   8273 1HG  MET X 528      15.955   9.533  15.549  1.00  0.00
H
ATOM   8274 2HG  MET X 528      17.582   8.815  15.488  1.00  0.00
H
ATOM   8275 1HE  MET X 528      17.066  10.312  11.858  1.00  0.00
H
ATOM   8276 2HE  MET X 528      16.436  10.986  13.382  1.00  0.00
H
ATOM   8277 3HE  MET X 528      18.086  10.321  13.317  1.00  0.00
H
ATOM   8278  N   LEU X 529      15.899   5.108  18.128  1.00  0.00
N
ATOM   8279  CA  LEU X 529      15.197   3.997  18.756  1.00  0.00
C
ATOM   8280  C   LEU X 529      15.458   3.954  20.257  1.00  0.00
C
ATOM   8281  O   LEU X 529      14.676   3.385  21.016  1.00  0.00
O
ATOM   8282  CB  LEU X 529      15.614   2.672  18.105  1.00  0.00
C
ATOM   8283  CG  LEU X 529      15.282   2.546  16.612  1.00  0.00
C
ATOM   8284  CD1 LEU X 529      15.787   1.212  16.076  1.00  0.00
C
ATOM   8285  CD2 LEU X 529      13.780   2.672  16.412  1.00  0.00
C
ATOM   8286  H   LEU X 529      16.832   4.962  17.771  1.00  0.00
H
ATOM   8287  HA  LEU X 529      14.123   4.128  18.633  1.00  0.00
H
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ATOM   8288 1HB  LEU X 529      16.691   2.738  18.243  1.00  0.00
H
ATOM   8289 2HB  LEU X 529      15.229   1.813  18.654  1.00  0.00
H
ATOM   8290  HG  LEU X 529      15.758   3.382  16.102  1.00  0.00
H
ATOM   8291 1HD1 LEU X 529      15.548   1.132  15.017  1.00  0.00
H
ATOM   8292 2HD1 LEU X 529      16.868   1.153  16.208  1.00  0.00
H
ATOM   8293 3HD1 LEU X 529      15.310   0.398  16.619  1.00  0.00
H
ATOM   8294 1HD2 LEU X 529      13.545   2.582  15.351  1.00  0.00
H
ATOM   8295 2HD2 LEU X 529      13.270   1.881  16.965  1.00  0.00
H
ATOM   8296 3HD2 LEU X 529      13.444   3.644  16.776  1.00  0.00
H
ATOM   8297  N   GLY X 530      16.564   4.558  20.676  1.00  0.00
N
ATOM   8298  CA  GLY X 530      16.939   4.582  22.084  1.00  0.00
C
ATOM   8299  C   GLY X 530      17.539   3.251  22.516  1.00  0.00
C
ATOM   8300  O   GLY X 530      17.243   2.747  23.601  1.00  0.00
O
ATOM   8301  H   GLY X 530      17.161   5.013  20.000  1.00  0.00
H
ATOM   8302 1HA  GLY X 530      17.675   5.371  22.244  1.00  0.00
H
ATOM   8303 2HA  GLY X 530      16.054   4.785  22.686  1.00  0.00
H
ATOM   8304  N   PHE X 531      18.380   2.683  21.661  1.00  0.00
N
ATOM   8305  CA  PHE X 531      19.063   1.431  21.972  1.00  0.00
C
ATOM   8306  C   PHE X 531      20.119   1.631  23.050  1.00  0.00
C
ATOM   8307  O   PHE X 531      20.843   2.626  23.044  1.00  0.00
O
ATOM   8308  CB  PHE X 531      19.702   0.844  20.713  1.00  0.00
C
ATOM   8309  CG  PHE X 531      18.728   0.142  19.810  1.00  0.00
C
ATOM   8310  CD1 PHE X 531      17.410  -0.041  20.198  1.00  0.00
C
ATOM   8311  CD2 PHE X 531      19.129  -0.338  18.571  1.00  0.00
C
ATOM   8312  CE1 PHE X 531      16.512  -0.689  19.368  1.00  0.00
C
ATOM   8313  CE2 PHE X 531      18.234  -0.984  17.741  1.00  0.00
C
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ATOM   8314  CZ  PHE X 531      16.924  -1.159  18.139  1.00  0.00
C
ATOM   8315  H   PHE X 531      18.553   3.129  20.772  1.00  0.00
H
ATOM   8316  HA  PHE X 531      18.348   0.708  22.368  1.00  0.00
H
ATOM   8317 1HB  PHE X 531      20.161   1.635  20.120  1.00  0.00
H
ATOM   8318 2HB  PHE X 531      20.459   0.110  20.985  1.00  0.00
H
ATOM   8319  HD1 PHE X 531      17.083   0.332  21.168  1.00  0.00
H
ATOM   8320  HD2 PHE X 531      20.163  -0.199  18.257  1.00  0.00
H
ATOM   8321  HE1 PHE X 531      15.479  -0.826  19.685  1.00  0.00
H
ATOM   8322  HE2 PHE X 531      18.562  -1.354  16.770  1.00  0.00
H
ATOM   8323  HZ  PHE X 531      16.218  -1.668  17.485  1.00  0.00
H
ATOM   8324  N   SER X 532      20.203   0.682  23.974  1.00  0.00
N
ATOM   8325  CA  SER X 532      21.176   0.750  25.057  1.00  0.00
C
ATOM   8326  C   SER X 532      22.590   0.495  24.545  1.00  0.00
C
ATOM   8327  O   SER X 532      22.798  -0.315  23.642  1.00  0.00
O
ATOM   8328  CB  SER X 532      20.820  -0.248  26.142  1.00  0.00
C
ATOM   8329  OG  SER X 532      19.599   0.057  26.757  1.00  0.00
O
ATOM   8330  H   SER X 532      19.574  -0.108  23.926  1.00  0.00
H
ATOM   8331  HA  SER X 532      21.146   1.691  25.608  1.00  0.00
H
ATOM   8332 1HB  SER X 532      20.755  -1.240  25.696  1.00  0.00
H
ATOM   8333 2HB  SER X 532      21.607  -0.240  26.896  1.00  0.00
H
ATOM   8334  HG  SER X 532      19.410  -0.596  27.437  1.00  0.00
H
ATOM   8335  N   PRO X 533      23.560   1.194  25.129  1.00  0.00
N
ATOM   8336  CA  PRO X 533      24.955   1.038  24.739  1.00  0.00
C
ATOM   8337  C   PRO X 533      25.358  -0.427  24.691  1.00  0.00
C
ATOM   8338  O   PRO X 533      26.146  -0.841  23.840  1.00  0.00
O
ATOM   8339  CB  PRO X 533      25.735   1.816  25.812  1.00  0.00
C
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ATOM   8340  CG  PRO X 533      24.791   2.892  26.273  1.00  0.00
C
ATOM   8341  CD  PRO X 533      23.414   1.929  26.394  1.00  0.00
C
ATOM   8342  HA  PRO X 533      25.104   1.432  23.837  1.00  0.00
H
ATOM   8343 1HB  PRO X 533      25.769   1.193  26.482  1.00  0.00
H
ATOM   8344 2HB  PRO X 533      26.348   2.193  25.332  1.00  0.00
H
ATOM   8345 1HG  PRO X 533      24.205   2.541  26.774  1.00  0.00
H
ATOM   8346 2HG  PRO X 533      25.284   3.687  26.344  1.00  0.00
H
ATOM   8347 1HD  PRO X 533      22.782   1.413  26.887  1.00  0.00
H
ATOM   8348 2HD  PRO X 533      23.150   2.797  26.105  1.00  0.00
H
ATOM   8349  N   GLY X 534      24.811  -1.215  25.611  1.00  0.00
N
ATOM   8350  CA  GLY X 534      25.161  -2.627  25.721  1.00  0.00
C
ATOM   8351  C   GLY X 534      24.849  -3.373  24.430  1.00  0.00
C
ATOM   8352  O   GLY X 534      25.642  -4.198  23.972  1.00  0.00
O
ATOM   8353  H   GLY X 534      24.134  -0.826  26.251  1.00  0.00
H
ATOM   8354 1HA  GLY X 534      26.227  -2.715  25.933  1.00  0.00
H
ATOM   8355 2HA  GLY X 534      24.592  -3.073  26.536  1.00  0.00
H
ATOM   8356  N   TRP X 535      23.691  -3.079  23.848  1.00  0.00
N
ATOM   8357  CA  TRP X 535      23.252  -3.753  22.630  1.00  0.00
C
ATOM   8358  C   TRP X 535      23.917  -3.152  21.400  1.00  0.00
C
ATOM   8359  O   TRP X 535      24.140  -3.841  20.405  1.00  0.00
O
ATOM   8360  CB  TRP X 535      21.730  -3.675  22.496  1.00  0.00
C
ATOM   8361  CG  TRP X 535      21.000  -4.589  23.432  1.00  0.00
C
ATOM   8362  CD1 TRP X 535      20.274  -4.226  24.526  1.00  0.00
C
ATOM   8363  CD2 TRP X 535      20.922  -6.018  23.353  1.00  0.00
C
ATOM   8364  CE2 TRP X 535      20.132  -6.453  24.433  1.00  0.00
C
ATOM   8365  CE3 TRP X 535      21.444  -6.973  22.472  1.00  0.00
C
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ATOM   8366  NE1 TRP X 535      19.749  -5.339  25.137  1.00  0.00
N
ATOM   8367  CZ2 TRP X 535      19.855  -7.791  24.659  1.00  0.00
C
ATOM   8368  CZ3 TRP X 535      21.164  -8.315  22.698  1.00  0.00
C
ATOM   8369  CH2 TRP X 535      20.391  -8.712  23.760  1.00  0.00
C
ATOM   8370  H   TRP X 535      23.100  -2.372  24.260  1.00  0.00
H
ATOM   8371  HA  TRP X 535      23.545  -4.802  22.662  1.00  0.00
H
ATOM   8372 1HB  TRP X 535      21.384  -2.665  22.713  1.00  0.00
H
ATOM   8373 2HB  TRP X 535      21.428  -3.953  21.487  1.00  0.00
H
ATOM   8374  HD1 TRP X 535      20.217  -3.162  24.748  1.00  0.00
H
ATOM   8375  HE1 TRP X 535      19.176  -5.338  25.968  1.00  0.00
H
ATOM   8376  HE3 TRP X 535      22.060  -6.712  21.612  1.00  0.00
H
ATOM   8377  HZ2 TRP X 535      19.237  -8.064  25.515  1.00  0.00
H
ATOM   8378  HZ3 TRP X 535      21.576  -9.047  22.005  1.00  0.00
H
ATOM   8379  HH2 TRP X 535      20.194  -9.776  23.900  1.00  0.00
H
ATOM   8380  N   PHE X 536      24.227  -1.862  21.471  1.00  0.00
N
ATOM   8381  CA  PHE X 536      24.841  -1.158  20.352  1.00  0.00
C
ATOM   8382  C   PHE X 536      26.293  -1.579  20.166  1.00  0.00
C
ATOM   8383  O   PHE X 536      26.785  -1.673  19.043  1.00  0.00
O
ATOM   8384  CB  PHE X 536      24.753   0.354  20.561  1.00  0.00
C
ATOM   8385  CG  PHE X 536      25.346   1.156  19.436  1.00  0.00
C
ATOM   8386  CD1 PHE X 536      24.759   1.156  18.180  1.00  0.00
C
ATOM   8387  CD2 PHE X 536      26.492   1.912  19.632  1.00  0.00
C
ATOM   8388  CE1 PHE X 536      25.303   1.892  17.145  1.00  0.00
C
ATOM   8389  CE2 PHE X 536      27.036   2.651  18.600  1.00  0.00
C
ATOM   8390  CZ  PHE X 536      26.442   2.640  17.354  1.00  0.00
C
ATOM   8391  H   PHE X 536      24.032  -1.355  22.324  1.00  0.00
H
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ATOM   8392  HA  PHE X 536      24.323  -1.413  19.426  1.00  0.00
H
ATOM   8393 1HB  PHE X 536      23.712   0.663  20.647  1.00  0.00
H
ATOM   8394 2HB  PHE X 536      25.293   0.640  21.463  1.00  0.00
H
ATOM   8395  HD1 PHE X 536      23.857   0.565  18.013  1.00  0.00
H
ATOM   8396  HD2 PHE X 536      26.962   1.921  20.616  1.00  0.00
H
ATOM   8397  HE1 PHE X 536      24.832   1.882  16.163  1.00  0.00
H
ATOM   8398  HE2 PHE X 536      27.938   3.241  18.768  1.00  0.00
H
ATOM   8399  HZ  PHE X 536      26.873   3.221  16.540  1.00  0.00
H
ATOM   8400  N   TRP X 537      26.979  -1.833  21.276  1.00  0.00
N
ATOM   8401  CA  TRP X 537      28.380  -2.226  21.240  1.00  0.00
C
ATOM   8402  C   TRP X 537      28.541  -3.667  20.771  1.00  0.00
C
ATOM   8403  O   TRP X 537      29.603  -4.061  20.297  1.00  0.00
O
ATOM   8404  CB  TRP X 537      29.019  -2.049  22.619  1.00  0.00
C
ATOM   8405  CG  TRP X 537      29.104  -0.621  23.061  1.00  0.00
C
ATOM   8406  CD1 TRP X 537      28.998   0.485  22.272  1.00  0.00
C
ATOM   8407  CD2 TRP X 537      29.311  -0.143  24.397  1.00  0.00
C
ATOM   8408  CE2 TRP X 537      29.320   1.262  24.340  1.00  0.00
C
ATOM   8409  CE3 TRP X 537      29.490  -0.771  25.635  1.00  0.00
C
ATOM   8410  NE1 TRP X 537      29.129   1.622  23.030  1.00  0.00
N
ATOM   8411  CZ2 TRP X 537      29.501   2.049  25.467  1.00  0.00
C
ATOM   8412  CZ3 TRP X 537      29.671   0.019  26.765  1.00  0.00
C
ATOM   8413  CH2 TRP X 537      29.675   1.388  26.683  1.00  0.00
C
ATOM   8414  H   TRP X 537      26.515  -1.752  22.169  1.00  0.00
H
ATOM   8415  HA  TRP X 537      28.919  -1.604  20.524  1.00  0.00
H
ATOM   8416 1HB  TRP X 537      28.437  -2.577  23.375  1.00  0.00
H
ATOM   8417 2HB  TRP X 537      30.039  -2.436  22.612  1.00  0.00
H
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ATOM   8418  HD1 TRP X 537      28.835   0.317  21.209  1.00  0.00
H
ATOM   8419  HE1 TRP X 537      29.090   2.570  22.683  1.00  0.00
H
ATOM   8420  HE3 TRP X 537      29.492  -1.854  25.758  1.00  0.00
H
ATOM   8421  HZ2 TRP X 537      29.497   3.134  25.357  1.00  0.00
H
ATOM   8422  HZ3 TRP X 537      29.808  -0.482  27.724  1.00  0.00
H
ATOM   8423  HH2 TRP X 537      29.819   1.971  27.593  1.00  0.00
H
ATOM   8424  N   ARG X 538      27.476  -4.447  20.916  1.00  0.00
N
ATOM   8425  CA  ARG X 538      27.486  -5.843  20.485  1.00  0.00
C
ATOM   8426  C   ARG X 538      27.062  -5.973  19.028  1.00  0.00
C
ATOM   8427  O   ARG X 538      27.729  -6.634  18.236  1.00  0.00
O
ATOM   8428  CB  ARG X 538      26.645  -6.730  21.391  1.00  0.00
C
ATOM   8429  CG  ARG X 538      27.166  -6.871  22.812  1.00  0.00
C
ATOM   8430  CD  ARG X 538      26.281  -7.649  23.714  1.00  0.00
C
ATOM   8431  NE  ARG X 538      26.800  -7.829  25.061  1.00  0.00
N
ATOM   8432  CZ  ARG X 538      26.176  -8.518  26.037  1.00  0.00
C
ATOM   8433  NH1 ARG X 538      24.996  -9.061  25.833  1.00  0.00
N
ATOM   8434  NH2 ARG X 538      26.772  -8.614  27.211  1.00  0.00
N
ATOM   8435  H   ARG X 538      26.639  -4.066  21.334  1.00  0.00
H
ATOM   8436  HA  ARG X 538      28.499  -6.241  20.551  1.00  0.00
H
ATOM   8437 1HB  ARG X 538      25.645  -6.300  21.415  1.00  0.00
H
ATOM   8438 2HB  ARG X 538      26.606  -7.714  20.924  1.00  0.00
H
ATOM   8439 1HG  ARG X 538      28.134  -7.372  22.779  1.00  0.00
H
ATOM   8440 2HG  ARG X 538      27.288  -5.873  23.237  1.00  0.00
H
ATOM   8441 1HD  ARG X 538      25.323  -7.135  23.801  1.00  0.00
H
ATOM   8442 2HD  ARG X 538      26.124  -8.640  23.289  1.00  0.00
H
ATOM   8443  HE  ARG X 538      27.661  -7.492  25.469  1.00  0.00
H
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ATOM   8444 1HH1 ARG X 538      24.545  -8.963  24.934  1.00  0.00
H
ATOM   8445 2HH1 ARG X 538      24.545  -9.572  26.577  1.00  0.00
H
ATOM   8446 1HH2 ARG X 538      27.672  -8.175  27.356  1.00  0.00
H
ATOM   8447 2HH2 ARG X 538      26.327  -9.124  27.960  1.00  0.00
H
ATOM   8448  N   ILE X 539      25.947  -5.336  18.679  1.00  0.00
N
ATOM   8449  CA  ILE X 539      25.456  -5.344  17.309  1.00  0.00
C
ATOM   8450  C   ILE X 539      25.185  -3.930  16.811  1.00  0.00
C
ATOM   8451  O   ILE X 539      24.726  -3.074  17.566  1.00  0.00
O
ATOM   8452  CB  ILE X 539      24.171  -6.179  17.174  1.00  0.00
C
ATOM   8453  CG1 ILE X 539      23.096  -5.666  18.137  1.00  0.00
C
ATOM   8454  CG2 ILE X 539      24.462  -7.649  17.432  1.00  0.00
C
ATOM   8455  CD1 ILE X 539      21.753  -6.340  17.970  1.00  0.00
C
ATOM   8456  H   ILE X 539      25.428  -4.834  19.385  1.00  0.00
H
ATOM   8457  HA  ILE X 539      26.215  -5.735  16.632  1.00  0.00
H
ATOM   8458  HB  ILE X 539      23.772  -6.060  16.167  1.00  0.00
H
ATOM   8459 1HG1 ILE X 539      23.462  -5.832  19.150  1.00  0.00
H
ATOM   8460 2HG1 ILE X 539      22.990  -4.596  17.962  1.00  0.00
H
ATOM   8461 1HG2 ILE X 539      23.542  -8.226  17.335  1.00  0.00
H
ATOM   8462 2HG2 ILE X 539      25.194  -8.008  16.710  1.00  0.00
H
ATOM   8463 3HG2 ILE X 539      24.858  -7.771  18.441  1.00  0.00
H
ATOM   8464 1HD1 ILE X 539      21.044  -5.922  18.684  1.00  0.00
H
ATOM   8465 2HD1 ILE X 539      21.386  -6.172  16.956  1.00  0.00
H
ATOM   8466 3HD1 ILE X 539      21.856  -7.409  18.145  1.00  0.00
H
ATOM   8467  N   CYS X 540      25.474  -3.696  15.537  1.00  0.00
N
ATOM   8468  CA  CYS X 540      25.027  -2.479  14.863  1.00  0.00
C
ATOM   8469  C   CYS X 540      23.787  -2.745  14.018  1.00  0.00
C
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ATOM   8470  O   CYS X 540      23.657  -3.801  13.402  1.00  0.00
O
ATOM   8471  CB  CYS X 540      26.221  -2.129  13.973  1.00  0.00
C
ATOM   8472  SG  CYS X 540      27.743  -1.754  14.875  1.00  0.00
S
ATOM   8473  H   CYS X 540      26.016  -4.375  15.021  1.00  0.00
H
ATOM   8474  HA  CYS X 540      24.844  -1.649  15.545  1.00  0.00
H
ATOM   8475 1HB  CYS X 540      26.459  -2.963  13.314  1.00  0.00
H
ATOM   8476 2HB  CYS X 540      25.999  -1.244  13.376  1.00  0.00
H
ATOM   8477  HG  CYS X 540      28.487  -1.515  13.800  1.00  0.00
H
ATOM   8478  N   TRP X 541      22.877  -1.776  13.993  1.00  0.00
N
ATOM   8479  CA  TRP X 541      21.697  -1.855  13.140  1.00  0.00
C
ATOM   8480  C   TRP X 541      22.081  -2.068  11.682  1.00  0.00
C
ATOM   8481  O   TRP X 541      21.456  -2.853  10.969  1.00  0.00
O
ATOM   8482  CB  TRP X 541      20.852  -0.587  13.279  1.00  0.00
C
ATOM   8483  CG  TRP X 541      19.701  -0.527  12.320  1.00  0.00
C
ATOM   8484  CD1 TRP X 541      18.505  -1.168  12.440  1.00  0.00
C
ATOM   8485  CD2 TRP X 541      19.638   0.215  11.096  1.00  0.00
C
ATOM   8486  CE2 TRP X 541      18.374  -0.024  10.528  1.00  0.00
C
ATOM   8487  CE3 TRP X 541      20.531   1.061  10.426  1.00  0.00
C
ATOM   8488  NE1 TRP X 541      17.700  -0.874  11.368  1.00  0.00
N
ATOM   8489  CZ2 TRP X 541      17.979   0.545   9.327  1.00  0.00
C
ATOM   8490  CZ3 TRP X 541      20.134   1.633   9.223  1.00  0.00
C
ATOM   8491  CH2 TRP X 541      18.895   1.384   8.689  1.00  0.00
C
ATOM   8492  H   TRP X 541      23.005  -0.965  14.580  1.00  0.00
H
ATOM   8493  HA  TRP X 541      21.089  -2.712  13.429  1.00  0.00
H
ATOM   8494 1HB  TRP X 541      20.426  -0.525  14.281  1.00  0.00
H
ATOM   8495 2HB  TRP X 541      21.463   0.294  13.089  1.00  0.00
H
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ATOM   8496  HD1 TRP X 541      18.367  -1.789  13.323  1.00  0.00
H
ATOM   8497  HE1 TRP X 541      16.765  -1.226  11.221  1.00  0.00
H
ATOM   8498  HE3 TRP X 541      21.525   1.296  10.805  1.00  0.00
H
ATOM   8499  HZ2 TRP X 541      16.986   0.319   8.940  1.00  0.00
H
ATOM   8500  HZ3 TRP X 541      20.839   2.289   8.710  1.00  0.00
H
ATOM   8501  HH2 TRP X 541      18.622   1.852   7.744  1.00  0.00
H
ATOM   8502  N   VAL X 542      23.117  -1.360  11.242  1.00  0.00
N
ATOM   8503  CA  VAL X 542      23.597  -1.476   9.869  1.00  0.00
C
ATOM   8504  C   VAL X 542      24.163  -2.863   9.600  1.00  0.00
C
ATOM   8505  O   VAL X 542      24.327  -3.266   8.449  1.00  0.00
O
ATOM   8506  CB  VAL X 542      24.676  -0.423   9.554  1.00  0.00
C
ATOM   8507  CG1 VAL X 542      24.075   0.975   9.569  1.00  0.00
C
ATOM   8508  CG2 VAL X 542      25.821  -0.519  10.552  1.00  0.00
C
ATOM   8509  H   VAL X 542      23.583  -0.725  11.875  1.00  0.00
H
ATOM   8510  HA  VAL X 542      22.782  -1.362   9.152  1.00  0.00
H
ATOM   8511  HB  VAL X 542      25.096  -0.627   8.569  1.00  0.00
H
ATOM   8512 1HG1 VAL X 542      24.852   1.707   9.346  1.00  0.00
H
ATOM   8513 2HG1 VAL X 542      23.289   1.041   8.818  1.00  0.00
H
ATOM   8514 3HG1 VAL X 542      23.657   1.181  10.554  1.00  0.00
H
ATOM   8515 1HG2 VAL X 542      26.574   0.232  10.315  1.00  0.00
H
ATOM   8516 2HG2 VAL X 542      25.441  -0.348  11.558  1.00  0.00
H
ATOM   8517 3HG2 VAL X 542      26.269  -1.512  10.496  1.00  0.00
H
ATOM   8518  N   ALA X 543      24.459  -3.593  10.668  1.00  0.00
N
ATOM   8519  CA  ALA X 543      24.983  -4.950  10.550  1.00  0.00
C
ATOM   8520  C   ALA X 543      23.860  -5.976  10.576  1.00  0.00
C
ATOM   8521  O   ALA X 543      23.932  -7.005   9.903  1.00  0.00
O
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ATOM   8522  CB  ALA X 543      25.989  -5.229  11.658  1.00  0.00
C
ATOM   8523  H   ALA X 543      24.318  -3.200  11.588  1.00  0.00
H
ATOM   8524  HA  ALA X 543      25.490  -5.047   9.589  1.00  0.00
H
ATOM   8525 1HB  ALA X 543      26.369  -6.245  11.556  1.00  0.00
H
ATOM   8526 2HB  ALA X 543      26.815  -4.522  11.587  1.00  0.00
H
ATOM   8527 3HB  ALA X 543      25.501  -5.121  12.625  1.00  0.00
H
ATOM   8528  N   ILE X 544      22.823  -5.693  11.356  1.00  0.00
N
ATOM   8529  CA  ILE X 544      21.711  -6.623  11.540  1.00  0.00
C
ATOM   8530  C   ILE X 544      20.620  -6.605  10.469  1.00  0.00
C
ATOM   8531  O   ILE X 544      20.234  -7.654   9.960  1.00  0.00
O
ATOM   8532  CB  ILE X 544      20.996  -6.390  12.882  1.00  0.00
C
ATOM   8533  CG1 ILE X 544      21.961  -6.617  14.049  1.00  0.00
C
ATOM   8534  CG2 ILE X 544      19.784  -7.300  13.006  1.00  0.00
C
ATOM   8535  CD1 ILE X 544      22.625  -7.975  14.036  1.00  0.00
C
ATOM   8536  H   ILE X 544      22.802  -4.806  11.837  1.00  0.00
H
ATOM   8537  HA  ILE X 544      22.060  -7.654  11.491  1.00  0.00
H
ATOM   8538  HB  ILE X 544      20.676  -5.348  12.939  1.00  0.00
H
ATOM   8539 1HG1 ILE X 544      22.723  -5.840  13.996  1.00  0.00
H
ATOM   8540 2HG1 ILE X 544      21.389  -6.501  14.970  1.00  0.00
H
ATOM   8541 1HG2 ILE X 544      19.290  -7.121  13.960  1.00  0.00
H
ATOM   8542 2HG2 ILE X 544      19.088  -7.091  12.194  1.00  0.00
H
ATOM   8543 3HG2 ILE X 544      20.103  -8.341  12.951  1.00  0.00
H
ATOM   8544 1HD1 ILE X 544      23.294  -8.061  14.893  1.00  0.00
H
ATOM   8545 2HD1 ILE X 544      21.863  -8.754  14.090  1.00  0.00
H
ATOM   8546 3HD1 ILE X 544      23.197  -8.093  13.117  1.00  0.00
H
ATOM   8547  N   SER X 545      20.127  -5.420  10.130  1.00  0.00
N
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ATOM   8548  CA  SER X 545      19.066  -5.308   9.135  1.00  0.00
C
ATOM   8549  C   SER X 545      19.365  -6.038   7.818  1.00  0.00
C
ATOM   8550  O   SER X 545      18.633  -6.950   7.430  1.00  0.00
O
ATOM   8551  CB  SER X 545      18.786  -3.848   8.833  1.00  0.00
C
ATOM   8552  OG  SER X 545      18.116  -3.212   9.887  1.00  0.00
O
ATOM   8553  H   SER X 545      20.491  -4.586  10.567  1.00  0.00
H
ATOM   8554  HA  SER X 545      18.094  -5.644   9.498  1.00  0.00
H
ATOM   8555 1HB  SER X 545      19.735  -3.340   8.659  1.00  0.00
H
ATOM   8556 2HB  SER X 545      18.173  -3.788   7.936  1.00  0.00
H
ATOM   8557  HG  SER X 545      17.278  -3.652  10.043  1.00  0.00
H
ATOM   8558  N   PRO X 546      20.450  -5.661   7.121  1.00  0.00
N
ATOM   8559  CA  PRO X 546      20.748  -6.352   5.858  1.00  0.00
C
ATOM   8560  C   PRO X 546      20.972  -7.860   6.016  1.00  0.00
C
ATOM   8561  O   PRO X 546      20.701  -8.632   5.100  1.00  0.00
O
ATOM   8562  CB  PRO X 546      22.020  -5.660   5.341  1.00  0.00
C
ATOM   8563  CG  PRO X 546      21.964  -4.270   5.912  1.00  0.00
C
ATOM   8564  CD  PRO X 546      21.474  -4.668   7.451  1.00  0.00
C
ATOM   8565  HA  PRO X 546      19.995  -6.235   5.217  1.00  0.00
H
ATOM   8566 1HB  PRO X 546      22.663  -6.111   5.811  1.00  0.00
H
ATOM   8567 2HB  PRO X 546      21.847  -5.603   4.495  1.00  0.00
H
ATOM   8568 1HG  PRO X 546      22.167  -4.307   6.734  1.00  0.00
H
ATOM   8569 2HG  PRO X 546      22.209  -3.675   5.230  1.00  0.00
H
ATOM   8570 1HD  PRO X 546      21.650  -4.827   8.375  1.00  0.00
H
ATOM   8571 2HD  PRO X 546      21.056  -3.846   7.215  1.00  0.00
H
ATOM   8572  N   LEU X 547      21.468  -8.272   7.180  1.00  0.00
N
ATOM   8573  CA  LEU X 547      21.708  -9.690   7.426  1.00  0.00
C
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ATOM   8574  C   LEU X 547      20.384 -10.439   7.309  1.00  0.00
C
ATOM   8575  O   LEU X 547      20.265 -11.407   6.558  1.00  0.00
O
ATOM   8576  CB  LEU X 547      22.349  -9.887   8.805  1.00  0.00
C
ATOM   8577  CG  LEU X 547      22.861 -11.304   9.091  1.00  0.00
C
ATOM   8578  CD1 LEU X 547      23.703 -11.309  10.360  1.00  0.00
C
ATOM   8579  CD2 LEU X 547      21.682 -12.255   9.223  1.00  0.00
C
ATOM   8580  H   LEU X 547      21.680  -7.596   7.899  1.00  0.00
H
ATOM   8581  HA  LEU X 547      22.379 -10.085   6.664  1.00  0.00
H
ATOM   8582 1HB  LEU X 547      23.187  -9.198   8.711  1.00  0.00
H
ATOM   8583 2HB  LEU X 547      21.691  -9.551   9.608  1.00  0.00
H
ATOM   8584  HG  LEU X 547      23.446 -11.617   8.225  1.00  0.00
H
ATOM   8585 1HD1 LEU X 547      24.063 -12.320  10.553  1.00  0.00
H
ATOM   8586 2HD1 LEU X 547      24.555 -10.640  10.233  1.00  0.00
H
ATOM   8587 3HD1 LEU X 547      23.098 -10.973  11.199  1.00  0.00
H
ATOM   8588 1HD2 LEU X 547      22.047 -13.263   9.425  1.00  0.00
H
ATOM   8589 2HD2 LEU X 547      21.041 -11.929  10.044  1.00  0.00
H
ATOM   8590 3HD2 LEU X 547      21.109 -12.257   8.296  1.00  0.00
H
ATOM   8591  N   PHE X 548      19.393  -9.967   8.060  1.00  0.00
N
ATOM   8592  CA  PHE X 548      18.060 -10.555   8.076  1.00  0.00
C
ATOM   8593  C   PHE X 548      17.473 -10.575   6.663  1.00  0.00
C
ATOM   8594  O   PHE X 548      16.886 -11.575   6.235  1.00  0.00
O
ATOM   8595  CB  PHE X 548      17.146  -9.783   9.029  1.00  0.00
C
ATOM   8596  CG  PHE X 548      15.729 -10.279   9.045  1.00  0.00
C
ATOM   8597  CD1 PHE X 548      15.383 -11.407   9.771  1.00  0.00
C
ATOM   8598  CD2 PHE X 548      14.739  -9.618   8.332  1.00  0.00
C
ATOM   8599  CE1 PHE X 548      14.078 -11.865   9.786  1.00  0.00
C
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ATOM   8600  CE2 PHE X 548      13.435 -10.073   8.346  1.00  0.00
C
ATOM   8601  CZ  PHE X 548      13.105 -11.198   9.075  1.00  0.00
C
ATOM   8602  H   PHE X 548      19.573  -9.164   8.646  1.00  0.00
H
ATOM   8603  HA  PHE X 548      18.117 -11.592   8.412  1.00  0.00
H
ATOM   8604 1HB  PHE X 548      17.515  -9.863  10.050  1.00  0.00
H
ATOM   8605 2HB  PHE X 548      17.106  -8.733   8.739  1.00  0.00
H
ATOM   8606  HD1 PHE X 548      16.152 -11.936  10.335  1.00  0.00
H
ATOM   8607  HD2 PHE X 548      15.001  -8.729   7.757  1.00  0.00
H
ATOM   8608  HE1 PHE X 548      13.820 -12.755  10.361  1.00  0.00
H
ATOM   8609  HE2 PHE X 548      12.666  -9.544   7.783  1.00  0.00
H
ATOM   8610  HZ  PHE X 548      12.077 -11.559   9.086  1.00  0.00
H
ATOM   8611  N   LEU X 549      17.643  -9.470   5.942  1.00  0.00
N
ATOM   8612  CA  LEU X 549      17.126  -9.353   4.581  1.00  0.00
C
ATOM   8613  C   LEU X 549      17.648 -10.449   3.656  1.00  0.00
C
ATOM   8614  O   LEU X 549      16.871 -11.099   2.958  1.00  0.00
O
ATOM   8615  CB  LEU X 549      17.478  -7.979   3.998  1.00  0.00
C
ATOM   8616  CG  LEU X 549      16.812  -6.784   4.694  1.00  0.00
C
ATOM   8617  CD1 LEU X 549      17.336  -5.481   4.107  1.00  0.00
C
ATOM   8618  CD2 LEU X 549      15.303  -6.878   4.535  1.00  0.00
C
ATOM   8619  H   LEU X 549      18.142  -8.691   6.347  1.00  0.00
H
ATOM   8620  HA  LEU X 549      16.042  -9.465   4.590  1.00  0.00
H
ATOM   8621 1HB  LEU X 549      18.550  -7.974   4.189  1.00  0.00
H
ATOM   8622 2HB  LEU X 549      17.300  -7.940   2.922  1.00  0.00
H
ATOM   8623  HG  LEU X 549      17.042  -6.861   5.757  1.00  0.00
H
ATOM   8624 1HD1 LEU X 549      16.859  -4.637   4.607  1.00  0.00
H
ATOM   8625 2HD1 LEU X 549      18.415  -5.423   4.253  1.00  0.00
H
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ATOM   8626 3HD1 LEU X 549      17.111  -5.444   3.041  1.00  0.00
H
ATOM   8627 1HD2 LEU X 549      14.832  -6.030   5.030  1.00  0.00
H
ATOM   8628 2HD2 LEU X 549      15.047  -6.869   3.475  1.00  0.00
H
ATOM   8629 3HD2 LEU X 549      14.946  -7.804   4.986  1.00  0.00
H
ATOM   8630  N   LEU X 550      18.964 -10.657   3.650  1.00  0.00
N
ATOM   8631  CA  LEU X 550      19.550 -11.681   2.795  1.00  0.00
C
ATOM   8632  C   LEU X 550      19.072 -13.066   3.224  1.00  0.00
C
ATOM   8633  O   LEU X 550      18.816 -13.931   2.387  1.00  0.00
O
ATOM   8634  CB  LEU X 550      21.081 -11.593   2.839  1.00  0.00
C
ATOM   8635  CG  LEU X 550      21.693 -10.448   2.024  1.00  0.00
C
ATOM   8636  CD1 LEU X 550      23.183 -10.337   2.315  1.00  0.00
C
ATOM   8637  CD2 LEU X 550      21.449 -10.690   0.542  1.00  0.00
C
ATOM   8638  H   LEU X 550      19.561 -10.100   4.244  1.00  0.00
H
ATOM   8639  HA  LEU X 550      19.217 -11.534   1.768  1.00  0.00
H
ATOM   8640 1HB  LEU X 550      21.218 -11.410   3.903  1.00  0.00
H
ATOM   8641 2HB  LEU X 550      21.546 -12.541   2.571  1.00  0.00
H
ATOM   8642  HG  LEU X 550      21.166  -9.534   2.303  1.00  0.00
H
ATOM   8643 1HD1 LEU X 550      23.609  -9.520   1.732  1.00  0.00
H
ATOM   8644 2HD1 LEU X 550      23.333 -10.140   3.377  1.00  0.00
H
ATOM   8645 3HD1 LEU X 550      23.677 -11.270   2.045  1.00  0.00
H
ATOM   8646 1HD2 LEU X 550      21.885  -9.875  -0.037  1.00  0.00
H
ATOM   8647 2HD2 LEU X 550      21.912 -11.633   0.247  1.00  0.00
H
ATOM   8648 3HD2 LEU X 550      20.378 -10.738   0.351  1.00  0.00
H
ATOM   8649  N   PHE X 551      18.950 -13.272   4.533  1.00  0.00
N
ATOM   8650  CA  PHE X 551      18.495 -14.554   5.059  1.00  0.00
C
ATOM   8651  C   PHE X 551      17.136 -14.907   4.459  1.00  0.00
C
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ATOM   8652  O   PHE X 551      16.925 -16.023   3.986  1.00  0.00
O
ATOM   8653  CB  PHE X 551      18.420 -14.509   6.586  1.00  0.00
C
ATOM   8654  CG  PHE X 551      17.594 -15.609   7.186  1.00  0.00
C
ATOM   8655  CD1 PHE X 551      18.079 -16.907   7.245  1.00  0.00
C
ATOM   8656  CD2 PHE X 551      16.330 -15.351   7.692  1.00  0.00
C
ATOM   8657  CE1 PHE X 551      17.318 -17.922   7.797  1.00  0.00
C
ATOM   8658  CE2 PHE X 551      15.567 -16.361   8.245  1.00  0.00
C
ATOM   8659  CZ  PHE X 551      16.064 -17.648   8.296  1.00  0.00
C
ATOM   8660  H   PHE X 551      19.178 -12.526   5.174  1.00  0.00
H
ATOM   8661  HA  PHE X 551      19.191 -15.342   4.769  1.00  0.00
H
ATOM   8662 1HB  PHE X 551      19.419 -14.600   7.013  1.00  0.00
H
ATOM   8663 2HB  PHE X 551      17.972 -13.570   6.912  1.00  0.00
H
ATOM   8664  HD1 PHE X 551      19.072 -17.123   6.851  1.00  0.00
H
ATOM   8665  HD2 PHE X 551      15.938 -14.332   7.651  1.00  0.00
H
ATOM   8666  HE1 PHE X 551      17.712 -18.936   7.836  1.00  0.00
H
ATOM   8667  HE2 PHE X 551      14.575 -16.143   8.639  1.00  0.00
H
ATOM   8668  HZ  PHE X 551      15.463 -18.447   8.731  1.00  0.00
H
ATOM   8669  N   ILE X 552      16.221 -13.942   4.485  1.00  0.00
N
ATOM   8670  CA  ILE X 552      14.878 -14.130   3.953  1.00  0.00
C
ATOM   8671  C   ILE X 552      14.922 -14.449   2.461  1.00  0.00
C
ATOM   8672  O   ILE X 552      14.181 -15.309   1.982  1.00  0.00
O
ATOM   8673  CB  ILE X 552      14.000 -12.886   4.180  1.00  0.00
C
ATOM   8674  CG1 ILE X 552      13.759 -12.669   5.675  1.00  0.00
C
ATOM   8675  CG2 ILE X 552      12.680 -13.025   3.437  1.00  0.00
C
ATOM   8676  CD1 ILE X 552      13.016 -13.803   6.345  1.00  0.00
C
ATOM   8677  H   ILE X 552      16.466 -13.049   4.888  1.00  0.00
H
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ATOM   8678  HA  ILE X 552      14.402 -14.998   4.409  1.00  0.00
H
ATOM   8679  HB  ILE X 552      14.531 -12.007   3.816  1.00  0.00
H
ATOM   8680 1HG1 ILE X 552      14.734 -12.544   6.146  1.00  0.00
H
ATOM   8681 2HG1 ILE X 552      13.185 -11.747   5.780  1.00  0.00
H
ATOM   8682 1HG2 ILE X 552      12.071 -12.138   3.609  1.00  0.00
H
ATOM   8683 2HG2 ILE X 552      12.871 -13.133   2.372  1.00  0.00
H
ATOM   8684 3HG2 ILE X 552      12.148 -13.904   3.802  1.00  0.00
H
ATOM   8685 1HD1 ILE X 552      12.882 -13.576   7.403  1.00  0.00
H
ATOM   8686 2HD1 ILE X 552      12.040 -13.927   5.875  1.00  0.00
H
ATOM   8687 3HD1 ILE X 552      13.588 -14.723   6.241  1.00  0.00
H
ATOM   8688  N   ILE X 553      15.793 -13.758   1.734  1.00  0.00
N
ATOM   8689  CA  ILE X 553      15.925 -13.965   0.302  1.00  0.00
C
ATOM   8690  C   ILE X 553      16.337 -15.393  -0.057  1.00  0.00
C
ATOM   8691  O   ILE X 553      15.770 -15.997  -0.968  1.00  0.00
O
ATOM   8692  CB  ILE X 553      16.951 -12.999  -0.317  1.00  0.00
C
ATOM   8693  CG1 ILE X 553      16.430 -11.561  -0.268  1.00  0.00
C
ATOM   8694  CG2 ILE X 553      17.269 -13.405  -1.748  1.00  0.00
C
ATOM   8695  CD1 ILE X 553      17.474 -10.521  -0.602  1.00  0.00
C
ATOM   8696  H   ILE X 553      16.378 -13.071   2.188  1.00  0.00
H
ATOM   8697  HA  ILE X 553      14.963 -13.838  -0.194  1.00  0.00
H
ATOM   8698  HB  ILE X 553      17.864 -13.022   0.278  1.00  0.00
H
ATOM   8699 1HG1 ILE X 553      15.606 -11.490  -0.978  1.00  0.00
H
ATOM   8700 2HG1 ILE X 553      16.054 -11.387   0.740  1.00  0.00
H
ATOM   8701 1HG2 ILE X 553      17.996 -12.713  -2.170  1.00  0.00
H
ATOM   8702 2HG2 ILE X 553      17.682 -14.413  -1.757  1.00  0.00
H
ATOM   8703 3HG2 ILE X 553      16.356 -13.382  -2.344  1.00  0.00
H
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ATOM   8704 1HD1 ILE X 553      17.030  -9.527  -0.545  1.00  0.00
H
ATOM   8705 2HD1 ILE X 553      18.298 -10.590   0.110  1.00  0.00
H
ATOM   8706 3HD1 ILE X 553      17.850 -10.692  -1.610  1.00  0.00
H
ATOM   8707  N   CYS X 554      17.320 -15.927   0.658  1.00  0.00
N
ATOM   8708  CA  CYS X 554      17.788 -17.285   0.397  1.00  0.00
C
ATOM   8709  C   CYS X 554      16.699 -18.294   0.743  1.00  0.00
C
ATOM   8710  O   CYS X 554      16.461 -19.246  -0.003  1.00  0.00
O
ATOM   8711  CB  CYS X 554      18.981 -17.419   1.344  1.00  0.00
C
ATOM   8712  SG  CYS X 554      20.415 -16.415   0.890  1.00  0.00
S
ATOM   8713  H   CYS X 554      17.750 -15.385   1.395  1.00  0.00
H
ATOM   8714  HA  CYS X 554      18.136 -17.434  -0.625  1.00  0.00
H
ATOM   8715 1HB  CYS X 554      18.700 -17.108   2.351  1.00  0.00
H
ATOM   8716 2HB  CYS X 554      19.330 -18.451   1.365  1.00  0.00
H
ATOM   8717  HG  CYS X 554      21.181 -16.800   1.905  1.00  0.00
H
ATOM   8718  N   SER X 555      16.038 -18.082   1.877  1.00  0.00
N
ATOM   8719  CA  SER X 555      14.974 -18.972   2.315  1.00  0.00
C
ATOM   8720  C   SER X 555      13.749 -18.808   1.421  1.00  0.00
C
ATOM   8721  O   SER X 555      12.940 -19.729   1.288  1.00  0.00
O
ATOM   8722  CB  SER X 555      14.627 -18.698   3.765  1.00  0.00
C
ATOM   8723  OG  SER X 555      14.043 -17.435   3.937  1.00  0.00
O
ATOM   8724  H   SER X 555      16.280 -17.285   2.448  1.00  0.00
H
ATOM   8725  HA  SER X 555      15.277 -20.019   2.360  1.00  0.00
H
ATOM   8726 1HB  SER X 555      13.928 -19.460   4.106  1.00  0.00
H
ATOM   8727 2HB  SER X 555      15.538 -18.750   4.358  1.00  0.00
H
ATOM   8728  HG  SER X 555      13.839 -17.302   4.865  1.00  0.00
H
ATOM   8729  N   PHE X 556      13.625 -17.636   0.809  1.00  0.00
N
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ATOM   8730  CA  PHE X 556      12.500 -17.345  -0.071  1.00  0.00
C
ATOM   8731  C   PHE X 556      12.568 -18.213  -1.324  1.00  0.00
C
ATOM   8732  O   PHE X 556      11.574 -18.813  -1.737  1.00  0.00
O
ATOM   8733  CB  PHE X 556      12.484 -15.862  -0.445  1.00  0.00
C
ATOM   8734  CG  PHE X 556      11.347 -15.477  -1.348  1.00  0.00
C
ATOM   8735  CD1 PHE X 556      10.073 -15.277  -0.835  1.00  0.00
C
ATOM   8736  CD2 PHE X 556      11.547 -15.316  -2.709  1.00  0.00
C
ATOM   8737  CE1 PHE X 556       9.026 -14.923  -1.666  1.00  0.00
C
ATOM   8738  CE2 PHE X 556      10.503 -14.961  -3.542  1.00  0.00
C
ATOM   8739  CZ  PHE X 556       9.241 -14.765  -3.018  1.00  0.00
C
ATOM   8740  H   PHE X 556      14.329 -16.927   0.957  1.00  0.00
H
ATOM   8741  HA  PHE X 556      11.564 -17.588   0.434  1.00  0.00
H
ATOM   8742 1HB  PHE X 556      12.391 -15.250   0.451  1.00  0.00
H
ATOM   8743 2HB  PHE X 556      13.401 -15.597  -0.969  1.00  0.00
H
ATOM   8744  HD1 PHE X 556       9.905 -15.400   0.234  1.00  0.00
H
ATOM   8745  HD2 PHE X 556      12.544 -15.473  -3.123  1.00  0.00
H
ATOM   8746  HE1 PHE X 556       8.030 -14.768  -1.250  1.00  0.00
H
ATOM   8747  HE2 PHE X 556      10.675 -14.837  -4.611  1.00  0.00
H
ATOM   8748  HZ  PHE X 556       8.414 -14.487  -3.673  1.00  0.00
H
ATOM   8749  N   LEU X 557      13.750 -18.271  -1.923  1.00  0.00
N
ATOM   8750  CA  LEU X 557      13.961 -19.049  -3.136  1.00  0.00
C
ATOM   8751  C   LEU X 557      14.389 -20.485  -2.860  1.00  0.00
C
ATOM   8752  O   LEU X 557      14.892 -21.167  -3.752  1.00  0.00
O
ATOM   8753  CB  LEU X 557      15.008 -18.369  -4.026  1.00  0.00
C
ATOM   8754  CG  LEU X 557      14.633 -16.965  -4.519  1.00  0.00
C
ATOM   8755  CD1 LEU X 557      15.788 -16.364  -5.310  1.00  0.00
C
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ATOM   8756  CD2 LEU X 557      13.378 -17.043  -5.373  1.00  0.00
C
ATOM   8757  H   LEU X 557      14.526 -17.762  -1.526  1.00  0.00
H
ATOM   8758  HA  LEU X 557      13.025 -19.125  -3.688  1.00  0.00
H
ATOM   8759 1HB  LEU X 557      15.832 -18.309  -3.318  1.00  0.00
H
ATOM   8760 2HB  LEU X 557      15.296 -19.002  -4.866  1.00  0.00
H
ATOM   8761  HG  LEU X 557      14.402 -16.364  -3.638  1.00  0.00
H
ATOM   8762 1HD1 LEU X 557      15.513 -15.368  -5.655  1.00  0.00
H
ATOM   8763 2HD1 LEU X 557      16.669 -16.296  -4.673  1.00  0.00
H
ATOM   8764 3HD1 LEU X 557      16.009 -16.998  -6.170  1.00  0.00
H
ATOM   8765 1HD2 LEU X 557      13.111 -16.044  -5.721  1.00  0.00
H
ATOM   8766 2HD2 LEU X 557      13.560 -17.690  -6.231  1.00  0.00
H
ATOM   8767 3HD2 LEU X 557      12.558 -17.449  -4.780  1.00  0.00
H
ATOM   8768  N   MET X 558      14.185 -20.946  -1.631  1.00  0.00
N
ATOM   8769  CA  MET X 558      14.573 -22.299  -1.245  1.00  0.00
C
ATOM   8770  C   MET X 558      13.690 -23.340  -1.915  1.00  0.00
C
ATOM   8771  O   MET X 558      14.175 -24.207  -2.638  1.00  0.00
O
ATOM   8772  CB  MET X 558      14.512 -22.452   0.274  1.00  0.00
C
ATOM   8773  CG  MET X 558      14.866 -23.843   0.781  1.00  0.00
C
ATOM   8774  SD  MET X 558      14.762 -23.975   2.577  1.00  0.00
S
ATOM   8775  CE  MET X 558      12.989 -23.912   2.819  1.00  0.00
C
ATOM   8776  H   MET X 558      13.748 -20.345  -0.946  1.00  0.00
H
ATOM   8777  HA  MET X 558      15.593 -22.501  -1.575  1.00  0.00
H
ATOM   8778 1HB  MET X 558      15.205 -21.725   0.694  1.00  0.00
H
ATOM   8779 2HB  MET X 558      13.494 -22.202   0.578  1.00  0.00
H
ATOM   8780 1HG  MET X 558      14.174 -24.554   0.329  1.00  0.00
H
ATOM   8781 2HG  MET X 558      15.882 -24.072   0.464  1.00  0.00
H
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ATOM   8782 1HE  MET X 558      12.763 -23.984   3.884  1.00  0.00
H
ATOM   8783 2HE  MET X 558      12.600 -22.970   2.427  1.00  0.00
H
ATOM   8784 3HE  MET X 558      12.521 -24.745   2.293  1.00  0.00
H
ATOM   8785  N   SER X 559      12.388 -23.249  -1.665  1.00  0.00
N
ATOM   8786  CA  SER X 559      11.432 -24.199  -2.231  1.00  0.00
C
ATOM   8787  C   SER X 559      11.155 -23.887  -3.698  1.00  0.00
C
ATOM   8788  O   SER X 559      11.276 -24.759  -4.559  1.00  0.00
O
ATOM   8789  CB  SER X 559      10.144 -24.184  -1.432  1.00  0.00
C
ATOM   8790  OG  SER X 559      10.261 -24.894  -0.230  1.00  0.00
O
ATOM   8791  H   SER X 559      12.050 -22.506  -1.069  1.00  0.00
H
ATOM   8792  HA  SER X 559      11.741 -25.240  -2.123  1.00  0.00
H
ATOM   8793 1HB  SER X 559       9.886 -23.148  -1.209  1.00  0.00
H
ATOM   8794 2HB  SER X 559       9.355 -24.630  -2.034  1.00  0.00
H
ATOM   8795  HG  SER X 559      10.952 -24.499   0.307  1.00  0.00
H
ATOM   8796  N   PRO X 560      10.783 -22.643  -3.977  1.00  0.00
N
ATOM   8797  CA  PRO X 560      10.494 -22.217  -5.341  1.00  0.00
C
ATOM   8798  C   PRO X 560      11.765 -22.148  -6.176  1.00  0.00
C
ATOM   8799  O   PRO X 560      12.871 -22.103  -5.639  1.00  0.00
O
ATOM   8800  CB  PRO X 560       9.837 -20.837  -5.172  1.00  0.00
C
ATOM   8801  CG  PRO X 560      10.397 -20.296  -3.884  1.00  0.00
C
ATOM   8802  CD  PRO X 560      10.438 -21.613  -2.988  1.00  0.00
C
ATOM   8803  HA  PRO X 560       9.866 -22.857  -5.774  1.00  0.00
H
ATOM   8804 1HB  PRO X 560      10.242 -20.372  -5.849  1.00  0.00
H
ATOM   8805 2HB  PRO X 560       9.014 -21.060  -5.027  1.00  0.00
H
ATOM   8806 1HG  PRO X 560      11.191 -20.040  -4.022  1.00  0.00
H
ATOM   8807 2HG  PRO X 560       9.686 -19.911  -3.408  1.00  0.00
H
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ATOM   8808 1HD  PRO X 560      11.197 -21.586  -2.411  1.00  0.00
H
ATOM   8809 2HD  PRO X 560       9.617 -21.933  -2.627  1.00  0.00
H
ATOM   8810  N   PRO X 561      11.601 -22.139  -7.496  1.00  0.00
N
ATOM   8811  CA  PRO X 561      12.732 -22.060  -8.410  1.00  0.00
C
ATOM   8812  C   PRO X 561      13.602 -20.844  -8.104  1.00  0.00
C
ATOM   8813  O   PRO X 561      13.099 -19.793  -7.703  1.00  0.00
O
ATOM   8814  CB  PRO X 561      12.084 -21.972  -9.803  1.00  0.00
C
ATOM   8815  CG  PRO X 561      10.736 -22.619  -9.645  1.00  0.00
C
ATOM   8816  CD  PRO X 561      10.313 -22.026  -8.194  1.00  0.00
C
ATOM   8817  HA  PRO X 561      13.295 -22.878  -8.331  1.00  0.00
H
ATOM   8818 1HB  PRO X 561      11.938 -21.071  -9.865  1.00  0.00
H
ATOM   8819 2HB  PRO X 561      12.585 -22.516 -10.254  1.00  0.00
H
ATOM   8820 1HG  PRO X 561      10.226 -22.081  -9.235  1.00  0.00
H
ATOM   8821 2HG  PRO X 561      10.600 -23.171 -10.390  1.00  0.00
H
ATOM   8822 1HD  PRO X 561       9.819 -21.407  -7.664  1.00  0.00
H
ATOM   8823 2HD  PRO X 561      10.007 -22.928  -8.222  1.00  0.00
H
ATOM   8824  N   GLN X 562      14.907 -20.992  -8.295  1.00  0.00
N
ATOM   8825  CA  GLN X 562      15.829 -19.866  -8.199  1.00  0.00
C
ATOM   8826  C   GLN X 562      15.512 -18.800  -9.239  1.00  0.00
C
ATOM   8827  O   GLN X 562      15.631 -19.041 -10.441  1.00  0.00
O
ATOM   8828  CB  GLN X 562      17.274 -20.340  -8.369  1.00  0.00
C
ATOM   8829  CG  GLN X 562      18.313 -19.249  -8.177  1.00  0.00
C
ATOM   8830  CD  GLN X 562      19.732 -19.784  -8.241  1.00  0.00
C
ATOM   8831  NE2 GLN X 562      20.701 -18.925  -7.944  1.00  0.00
N
ATOM   8832  OE1 GLN X 562      19.954 -20.958  -8.549  1.00  0.00
O
ATOM   8833  H   GLN X 562      15.272 -21.908  -8.513  1.00  0.00
H
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ATOM   8834  HA  GLN X 562      15.722 -19.388  -7.225  1.00  0.00
H
ATOM   8835 1HB  GLN X 562      17.433 -21.134  -7.641  1.00  0.00
H
ATOM   8836 2HB  GLN X 562      17.354 -20.750  -9.377  1.00  0.00
H
ATOM   8837 1HG  GLN X 562      18.288 -18.306  -8.721  1.00  0.00
H
ATOM   8838 2HG  GLN X 562      18.060 -19.070  -7.131  1.00  0.00
H
ATOM   8839 1HE2 GLN X 562      21.657 -19.221  -7.968  1.00  0.00
H
ATOM   8840 2HE2 GLN X 562      20.477 -17.983  -7.695  1.00  0.00
H
ATOM   8841  N   LEU X 563      15.109 -17.628  -8.772  1.00  0.00
N
ATOM   8842  CA  LEU X 563      14.728 -16.536  -9.664  1.00  0.00
C
ATOM   8843  C   LEU X 563      15.893 -15.588  -9.903  1.00  0.00
C
ATOM   8844  O   LEU X 563      15.758 -14.583 -10.604  1.00  0.00
O
ATOM   8845  CB  LEU X 563      13.531 -15.773  -9.086  1.00  0.00
C
ATOM   8846  CG  LEU X 563      12.282 -16.623  -8.818  1.00  0.00
C
ATOM   8847  CD1 LEU X 563      11.163 -15.750  -8.267  1.00  0.00
C
ATOM   8848  CD2 LEU X 563      11.847 -17.308 -10.105  1.00  0.00
C
ATOM   8849  H   LEU X 563      15.063 -17.485  -7.773  1.00  0.00
H
ATOM   8850  HA  LEU X 563      14.454 -16.939 -10.638  1.00  0.00
H
ATOM   8851 1HB  LEU X 563      13.967 -15.444  -8.145  1.00  0.00
H
ATOM   8852 2HB  LEU X 563      13.276 -14.903  -9.692  1.00  0.00
H
ATOM   8853  HG  LEU X 563      12.566 -17.399  -8.106  1.00  0.00
H
ATOM   8854 1HD1 LEU X 563      10.281 -16.362  -8.080  1.00  0.00
H
ATOM   8855 2HD1 LEU X 563      11.488 -15.288  -7.335  1.00  0.00
H
ATOM   8856 3HD1 LEU X 563      10.919 -14.972  -8.991  1.00  0.00
H
ATOM   8857 1HD2 LEU X 563      10.960 -17.913  -9.913  1.00  0.00
H
ATOM   8858 2HD2 LEU X 563      11.618 -16.555 -10.859  1.00  0.00
H
ATOM   8859 3HD2 LEU X 563      12.652 -17.949 -10.466  1.00  0.00
H
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ATOM   8860  N   ARG X 564      17.040 -15.906  -9.313  1.00  0.00
N
ATOM   8861  CA  ARG X 564      18.248 -15.112  -9.505  1.00  0.00
C
ATOM   8862  C   ARG X 564      18.722 -15.169 -10.951  1.00  0.00
C
ATOM   8863  O   ARG X 564      19.427 -14.274 -11.418  1.00  0.00
O
ATOM   8864  CB  ARG X 564      19.354 -15.510  -8.539  1.00  0.00
C
ATOM   8865  CG  ARG X 564      19.101 -15.141  -7.086  1.00  0.00
C
ATOM   8866  CD  ARG X 564      20.159 -15.590  -6.146  1.00  0.00
C
ATOM   8867  NE  ARG X 564      19.907 -15.260  -4.753  1.00  0.00
N
ATOM   8868  CZ  ARG X 564      20.616 -15.738  -3.713  1.00  0.00
C
ATOM   8869  NH1 ARG X 564      21.596 -16.595  -3.898  1.00  0.00
N
ATOM   8870  NH2 ARG X 564      20.285 -15.342  -2.496  1.00  0.00
N
ATOM   8871  H   ARG X 564      17.076 -16.720  -8.715  1.00  0.00
H
ATOM   8872  HA  ARG X 564      18.040 -14.065  -9.288  1.00  0.00
H
ATOM   8873 1HB  ARG X 564      19.475 -16.589  -8.620  1.00  0.00
H
ATOM   8874 2HB  ARG X 564      20.265 -15.018  -8.881  1.00  0.00
H
ATOM   8875 1HG  ARG X 564      19.024 -14.057  -7.013  1.00  0.00
H
ATOM   8876 2HG  ARG X 564      18.159 -15.593  -6.774  1.00  0.00
H
ATOM   8877 1HD  ARG X 564      20.255 -16.672  -6.213  1.00  0.00
H
ATOM   8878 2HD  ARG X 564      21.103 -15.123  -6.427  1.00  0.00
H
ATOM   8879  HE  ARG X 564      19.203 -14.655  -4.352  1.00  0.00
H
ATOM   8880 1HH1 ARG X 564      21.824 -16.902  -4.833  1.00  0.00
H
ATOM   8881 2HH1 ARG X 564      22.115 -16.943  -3.106  1.00  0.00
H
ATOM   8882 1HH2 ARG X 564      19.518 -14.697  -2.369  1.00  0.00
H
ATOM   8883 2HH2 ARG X 564      20.800 -15.686  -1.699  1.00  0.00
H
ATOM   8884  N   LEU X 565      18.329 -16.227 -11.654  1.00  0.00
N
ATOM   8885  CA  LEU X 565      18.785 -16.448 -13.023  1.00  0.00
C
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ATOM   8886  C   LEU X 565      18.328 -15.327 -13.946  1.00  0.00
C
ATOM   8887  O   LEU X 565      17.191 -14.867 -13.861  1.00  0.00
O
ATOM   8888  CB  LEU X 565      18.280 -17.802 -13.539  1.00  0.00
C
ATOM   8889  CG  LEU X 565      18.842 -19.028 -12.810  1.00  0.00
C
ATOM   8890  CD1 LEU X 565      18.155 -20.293 -13.310  1.00  0.00
C
ATOM   8891  CD2 LEU X 565      20.345 -19.108 -13.032  1.00  0.00
C
ATOM   8892  H   LEU X 565      17.699 -16.894 -11.230  1.00  0.00
H
ATOM   8893  HA  LEU X 565      19.874 -16.445 -13.051  1.00  0.00
H
ATOM   8894 1HB  LEU X 565      17.219 -17.690 -13.319  1.00  0.00
H
ATOM   8895 2HB  LEU X 565      18.419 -17.902 -14.615  1.00  0.00
H
ATOM   8896  HG  LEU X 565      18.669 -18.880 -11.744  1.00  0.00
H
ATOM   8897 1HD1 LEU X 565      18.561 -21.159 -12.787  1.00  0.00
H
ATOM   8898 2HD1 LEU X 565      17.084 -20.224 -13.120  1.00  0.00
H
ATOM   8899 3HD1 LEU X 565      18.330 -20.401 -14.379  1.00  0.00
H
ATOM   8900 1HD2 LEU X 565      20.744 -19.981 -12.513  1.00  0.00
H
ATOM   8901 2HD2 LEU X 565      20.552 -19.194 -14.099  1.00  0.00
H
ATOM   8902 3HD2 LEU X 565      20.819 -18.207 -12.642  1.00  0.00
H
ATOM   8903  N   PHE X 566      19.219 -14.889 -14.828  1.00  0.00
N
ATOM   8904  CA  PHE X 566      18.931 -13.779 -15.729  1.00  0.00
C
ATOM   8905  C   PHE X 566      17.676 -14.051 -16.548  1.00  0.00
C
ATOM   8906  O   PHE X 566      17.607 -15.028 -17.295  1.00  0.00
O
ATOM   8907  CB  PHE X 566      20.119 -13.519 -16.654  1.00  0.00
C
ATOM   8908  CG  PHE X 566      19.913 -12.370 -17.599  1.00  0.00
C
ATOM   8909  CD1 PHE X 566      19.922 -11.063 -17.138  1.00  0.00
C
ATOM   8910  CD2 PHE X 566      19.707 -12.594 -18.953  1.00  0.00
C
ATOM   8911  CE1 PHE X 566      19.731 -10.005 -18.005  1.00  0.00
C
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ATOM   8912  CE2 PHE X 566      19.518 -11.538 -19.823  1.00  0.00
C
ATOM   8913  CZ  PHE X 566      19.528 -10.243 -19.348  1.00  0.00
C
ATOM   8914  H   PHE X 566      20.123 -15.338 -14.876  1.00  0.00
H
ATOM   8915  HA  PHE X 566      18.735 -12.875 -15.150  1.00  0.00
H
ATOM   8916 1HB  PHE X 566      21.008 -13.285 -16.069  1.00  0.00
H
ATOM   8917 2HB  PHE X 566      20.314 -14.396 -17.270  1.00  0.00
H
ATOM   8918  HD1 PHE X 566      20.082 -10.875 -16.075  1.00  0.00
H
ATOM   8919  HD2 PHE X 566      19.697 -13.618 -19.327  1.00  0.00
H
ATOM   8920  HE1 PHE X 566      19.739  -8.982 -17.628  1.00  0.00
H
ATOM   8921  HE2 PHE X 566      19.358 -11.728 -20.884  1.00  0.00
H
ATOM   8922  HZ  PHE X 566      19.376  -9.409 -20.033  1.00  0.00
H
ATOM   8923  N   GLN X 567      16.683 -13.177 -16.408  1.00  0.00
N
ATOM   8924  CA  GLN X 567      15.412 -13.344 -17.102  1.00  0.00
C
ATOM   8925  C   GLN X 567      14.921 -14.782 -17.013  1.00  0.00
C
ATOM   8926  O   GLN X 567      14.808 -15.475 -18.025  1.00  0.00
O
ATOM   8927  CB  GLN X 567      15.546 -12.934 -18.571  1.00  0.00
C
ATOM   8928  CG  GLN X 567      15.822 -11.456 -18.782  1.00  0.00
C
ATOM   8929  CD  GLN X 567      15.879 -11.081 -20.252  1.00  0.00
C
ATOM   8930  NE2 GLN X 567      16.072  -9.797 -20.526  1.00  0.00
N
ATOM   8931  OE1 GLN X 567      15.754 -11.940 -21.130  1.00  0.00
O
ATOM   8932  H   GLN X 567      16.814 -12.377 -15.805  1.00  0.00
H
ATOM   8933  HA  GLN X 567      14.652 -12.726 -16.624  1.00  0.00
H
ATOM   8934 1HB  GLN X 567      16.359 -13.526 -18.991  1.00  0.00
H
ATOM   8935 2HB  GLN X 567      14.610 -13.208 -19.062  1.00  0.00
H
ATOM   8936 1HG  GLN X 567      15.276 -10.672 -18.259  1.00  0.00
H
ATOM   8937 2HG  GLN X 567      16.843 -11.503 -18.399  1.00  0.00
H
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ATOM   8938 1HE2 GLN X 567      16.118  -9.490 -21.479  1.00  0.00
H
ATOM   8939 2HE2 GLN X 567      16.170  -9.135 -19.784  1.00  0.00
H
ATOM   8940  N   TYR X 568      14.629 -15.229 -15.799  1.00  0.00
N
ATOM   8941  CA  TYR X 568      14.313 -16.633 -15.551  1.00  0.00
C
ATOM   8942  C   TYR X 568      13.098 -17.074 -16.356  1.00  0.00
C
ATOM   8943  O   TYR X 568      12.078 -16.387 -16.380  1.00  0.00
O
ATOM   8944  CB  TYR X 568      14.069 -16.872 -14.058  1.00  0.00
C
ATOM   8945  CG  TYR X 568      13.597 -18.271 -13.731  1.00  0.00
C
ATOM   8946  CD1 TYR X 568      14.475 -19.345 -13.759  1.00  0.00
C
ATOM   8947  CD2 TYR X 568      12.274 -18.513 -13.392  1.00  0.00
C
ATOM   8948  CE1 TYR X 568      14.049 -20.624 -13.461  1.00  0.00
C
ATOM   8949  CE2 TYR X 568      11.837 -19.790 -13.091  1.00  0.00
C
ATOM   8950  CZ  TYR X 568      12.728 -20.842 -13.127  1.00  0.00
C
ATOM   8951  OH  TYR X 568      12.298 -22.115 -12.827  1.00  0.00
O
ATOM   8952  H   TYR X 568      14.625 -14.581 -15.024  1.00  0.00
H
ATOM   8953  HA  TYR X 568      15.143 -17.262 -15.872  1.00  0.00
H
ATOM   8954 1HB  TYR X 568      15.010 -16.676 -13.542  1.00  0.00
H
ATOM   8955 2HB  TYR X 568      13.320 -16.150 -13.736  1.00  0.00
H
ATOM   8956  HD1 TYR X 568      15.517 -19.166 -14.024  1.00  0.00
H
ATOM   8957  HD2 TYR X 568      11.576 -17.678 -13.366  1.00  0.00
H
ATOM   8958  HE1 TYR X 568      14.750 -21.458 -13.488  1.00  0.00
H
ATOM   8959  HE2 TYR X 568      10.793 -19.960 -12.828  1.00  0.00
H
ATOM   8960  HH  TYR X 568      11.364 -22.155 -12.608  1.00  0.00
H
ATOM   8961  N   ASN X 569      13.218 -18.222 -17.016  1.00  0.00
N
ATOM   8962  CA  ASN X 569      12.103 -18.795 -17.759  1.00  0.00
C
ATOM   8963  C   ASN X 569      11.074 -19.417 -16.822  1.00  0.00
C
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ATOM   8964  O   ASN X 569      11.296 -20.495 -16.270  1.00  0.00
O
ATOM   8965  CB  ASN X 569      12.579 -19.822 -18.771  1.00  0.00
C
ATOM   8966  CG  ASN X 569      11.491 -20.330 -19.674  1.00  0.00
C
ATOM   8967  ND2 ASN X 569      11.892 -20.836 -20.812  1.00  0.00
N
ATOM   8968  OD1 ASN X 569      10.307 -20.333 -19.314  1.00  0.00
O
ATOM   8969  H   ASN X 569      14.103 -18.709 -17.002  1.00  0.00
H
ATOM   8970  HA  ASN X 569      11.583 -18.009 -18.309  1.00  0.00
H
ATOM   8971 1HB  ASN X 569      13.481 -19.648 -19.358  1.00  0.00
H
ATOM   8972 2HB  ASN X 569      12.782 -20.573 -18.007  1.00  0.00
H
ATOM   8973 1HD2 ASN X 569      11.222 -21.194 -21.464  1.00  0.00
H
ATOM   8974 2HD2 ASN X 569      12.866 -20.865 -21.031  1.00  0.00
H
ATOM   8975  N   TYR X 570       9.949 -18.736 -16.655  1.00  0.00
N
ATOM   8976  CA  TYR X 570       8.906 -19.167 -15.734  1.00  0.00
C
ATOM   8977  C   TYR X 570       8.061 -20.280 -16.340  1.00  0.00
C
ATOM   8978  O   TYR X 570       7.875 -20.339 -17.553  1.00  0.00
O
ATOM   8979  CB  TYR X 570       8.015 -17.986 -15.343  1.00  0.00
C
ATOM   8980  CG  TYR X 570       8.722 -16.932 -14.518  1.00  0.00
C
ATOM   8981  CD1 TYR X 570       9.295 -15.822 -15.120  1.00  0.00
C
ATOM   8982  CD2 TYR X 570       8.812 -17.051 -13.139  1.00  0.00
C
ATOM   8983  CE1 TYR X 570       9.941 -14.857 -14.371  1.00  0.00
C
ATOM   8984  CE2 TYR X 570       9.454 -16.093 -12.381  1.00  0.00
C
ATOM   8985  CZ  TYR X 570      10.018 -14.996 -13.001  1.00  0.00
C
ATOM   8986  OH  TYR X 570      10.659 -14.037 -12.249  1.00  0.00
O
ATOM   8987  H   TYR X 570       9.810 -17.887 -17.184  1.00  0.00
H
ATOM   8988  HA  TYR X 570       9.356 -19.577 -14.829  1.00  0.00
H
ATOM   8989 1HB  TYR X 570       7.649 -17.537 -16.267  1.00  0.00
H
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ATOM   8990 2HB  TYR X 570       7.176 -18.389 -14.777  1.00  0.00
H
ATOM   8991  HD1 TYR X 570       9.230 -15.718 -16.203  1.00  0.00
H
ATOM   8992  HD2 TYR X 570       8.365 -17.920 -12.656  1.00  0.00
H
ATOM   8993  HE1 TYR X 570      10.387 -13.990 -14.859  1.00  0.00
H
ATOM   8994  HE2 TYR X 570       9.515 -16.206 -11.298  1.00  0.00
H
ATOM   8995  HH  TYR X 570      11.013 -13.320 -12.779  1.00  0.00
H
ATOM   8996  N   PRO X 571       7.553 -21.163 -15.487  1.00  0.00
N
ATOM   8997  CA  PRO X 571       6.832 -22.346 -15.944  1.00  0.00
C
ATOM   8998  C   PRO X 571       5.480 -21.972 -16.537  1.00  0.00
C
ATOM   8999  O   PRO X 571       4.846 -22.778 -17.218  1.00  0.00
O
ATOM   9000  CB  PRO X 571       6.691 -23.210 -14.680  1.00  0.00
C
ATOM   9001  CG  PRO X 571       6.797 -22.242 -13.533  1.00  0.00
C
ATOM   9002  CD  PRO X 571       7.795 -21.185 -14.038  1.00  0.00
C
ATOM   9003  HA  PRO X 571       7.361 -22.821 -16.642  1.00  0.00
H
ATOM   9004 1HB  PRO X 571       5.811 -23.452 -14.737  1.00  0.00
H
ATOM   9005 2HB  PRO X 571       7.426 -23.666 -14.706  1.00  0.00
H
ATOM   9006 1HG  PRO X 571       6.070 -21.814 -13.474  1.00  0.00
H
ATOM   9007 2HG  PRO X 571       7.350 -22.633 -12.885  1.00  0.00
H
ATOM   9008 1HD  PRO X 571       7.554 -20.307 -13.753  1.00  0.00
H
ATOM   9009 2HD  PRO X 571       8.712 -21.434 -13.979  1.00  0.00
H
ATOM   9010  N   TYR X 572       5.041 -20.745 -16.272  1.00  0.00
N
ATOM   9011  CA  TYR X 572       3.734 -20.284 -16.728  1.00  0.00
C
ATOM   9012  C   TYR X 572       3.867 -19.110 -17.685  1.00  0.00
C
ATOM   9013  O   TYR X 572       4.725 -18.244 -17.508  1.00  0.00
O
ATOM   9014  CB  TYR X 572       2.859 -19.891 -15.536  1.00  0.00
C
ATOM   9015  CG  TYR X 572       2.510 -21.048 -14.625  1.00  0.00
C
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ATOM   9016  CD1 TYR X 572       3.299 -21.353 -13.526  1.00  0.00
C
ATOM   9017  CD2 TYR X 572       1.389 -21.830 -14.866  1.00  0.00
C
ATOM   9018  CE1 TYR X 572       2.984 -22.407 -12.691  1.00  0.00
C
ATOM   9019  CE2 TYR X 572       1.066 -22.886 -14.038  1.00  0.00
C
ATOM   9020  CZ  TYR X 572       1.866 -23.172 -12.950  1.00  0.00
C
ATOM   9021  OH  TYR X 572       1.547 -24.223 -12.122  1.00  0.00
O
ATOM   9022  H   TYR X 572       5.627 -20.117 -15.742  1.00  0.00
H
ATOM   9023  HA  TYR X 572       3.233 -21.079 -17.281  1.00  0.00
H
ATOM   9024 1HB  TYR X 572       3.405 -19.135 -14.970  1.00  0.00
H
ATOM   9025 2HB  TYR X 572       1.944 -19.456 -15.937  1.00  0.00
H
ATOM   9026  HD1 TYR X 572       4.181 -20.743 -13.325  1.00  0.00
H
ATOM   9027  HD2 TYR X 572       0.762 -21.598 -15.727  1.00  0.00
H
ATOM   9028  HE1 TYR X 572       3.614 -22.635 -11.830  1.00  0.00
H
ATOM   9029  HE2 TYR X 572       0.181 -23.491 -14.246  1.00  0.00
H
ATOM   9030  HH  TYR X 572       2.167 -24.334 -11.397  1.00  0.00
H
ATOM   9031  N   TRP X 573       3.010 -19.082 -18.701  1.00  0.00
N
ATOM   9032  CA  TRP X 573       3.017 -18.002 -19.678  1.00  0.00
C
ATOM   9033  C   TRP X 573       2.525 -16.697 -19.060  1.00  0.00
C
ATOM   9034  O   TRP X 573       3.059 -15.623 -19.343  1.00  0.00
O
ATOM   9035  CB  TRP X 573       2.152 -18.370 -20.886  1.00  0.00
C
ATOM   9036  CG  TRP X 573       1.908 -17.222 -21.819  1.00  0.00
C
ATOM   9037  CD1 TRP X 573       0.709 -16.640 -22.099  1.00  0.00
C
ATOM   9038  CD2 TRP X 573       2.888 -16.517 -22.593  1.00  0.00
C
ATOM   9039  CE2 TRP X 573       2.208 -15.523 -23.317  1.00  0.00
C
ATOM   9040  CE3 TRP X 573       4.275 -16.633 -22.740  1.00  0.00
C
ATOM   9041  NE1 TRP X 573       0.876 -15.618 -23.000  1.00  0.00
N
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ATOM   9042  CZ2 TRP X 573       2.862 -14.652 -24.176  1.00  0.00
C
ATOM   9043  CZ3 TRP X 573       4.931 -15.759 -23.599  1.00  0.00
C
ATOM   9044  CH2 TRP X 573       4.244 -14.797 -24.296  1.00  0.00
C
ATOM   9045  H   TRP X 573       2.336 -19.828 -18.797  1.00  0.00
H
ATOM   9046  HA  TRP X 573       4.036 -17.820 -20.021  1.00  0.00
H
ATOM   9047 1HB  TRP X 573       2.636 -19.151 -21.472  1.00  0.00
H
ATOM   9048 2HB  TRP X 573       1.174 -18.717 -20.555  1.00  0.00
H
ATOM   9049  HD1 TRP X 573      -0.167 -17.048 -21.596  1.00  0.00
H
ATOM   9050  HE1 TRP X 573       0.142 -15.033 -23.371  1.00  0.00
H
ATOM   9051  HE3 TRP X 573       4.868 -17.376 -22.210  1.00  0.00
H
ATOM   9052  HZ2 TRP X 573       2.278 -13.902 -24.710  1.00  0.00
H
ATOM   9053  HZ3 TRP X 573       6.010 -15.860 -23.706  1.00  0.00
H
ATOM   9054  HH2 TRP X 573       4.797 -14.130 -24.959  1.00  0.00
H
ATOM   9055  N   SER X 574       1.504 -16.797 -18.215  1.00  0.00
N
ATOM   9056  CA  SER X 574       0.910 -15.621 -17.590  1.00  0.00
C
ATOM   9057  C   SER X 574       1.909 -14.918 -16.679  1.00  0.00
C
ATOM   9058  O   SER X 574       1.770 -13.733 -16.383  1.00  0.00
O
ATOM   9059  CB  SER X 574      -0.329 -16.014 -16.810  1.00  0.00
C
ATOM   9060  OG  SER X 574      -0.025 -16.836 -15.716  1.00  0.00
O
ATOM   9061  H   SER X 574       1.130 -17.712 -18.001  1.00  0.00
H
ATOM   9062  HA  SER X 574       0.499 -14.910 -18.308  1.00  0.00
H
ATOM   9063 1HB  SER X 574      -0.815 -15.109 -16.449  1.00  0.00
H
ATOM   9064 2HB  SER X 574      -1.006 -16.547 -17.477  1.00  0.00
H
ATOM   9065  HG  SER X 574      -0.834 -17.061 -15.251  1.00  0.00
H
ATOM   9066  N   ILE X 575       2.921 -15.658 -16.237  1.00  0.00
N
ATOM   9067  CA  ILE X 575       3.948 -15.105 -15.360  1.00  0.00
C
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ATOM   9068  C   ILE X 575       5.097 -14.514 -16.162  1.00  0.00
C
ATOM   9069  O   ILE X 575       5.452 -13.346 -15.989  1.00  0.00
O
ATOM   9070  CB  ILE X 575       4.501 -16.170 -14.395  1.00  0.00
C
ATOM   9071  CG1 ILE X 575       3.402 -16.649 -13.442  1.00  0.00
C
ATOM   9072  CG2 ILE X 575       5.684 -15.618 -13.616  1.00  0.00
C
ATOM   9073  CD1 ILE X 575       3.827 -17.789 -12.545  1.00  0.00
C
ATOM   9074  H   ILE X 575       2.982 -16.627 -16.516  1.00  0.00
H
ATOM   9075  HA  ILE X 575       3.552 -14.269 -14.786  1.00  0.00
H
ATOM   9076  HB  ILE X 575       4.818 -17.039 -14.971  1.00  0.00
H
ATOM   9077 1HG1 ILE X 575       3.109 -15.795 -12.831  1.00  0.00
H
ATOM   9078 2HG1 ILE X 575       2.557 -16.964 -14.054  1.00  0.00
H
ATOM   9079 1HG2 ILE X 575       6.062 -16.383 -12.938  1.00  0.00
H
ATOM   9080 2HG2 ILE X 575       6.472 -15.326 -14.309  1.00  0.00
H
ATOM   9081 3HG2 ILE X 575       5.366 -14.748 -13.039  1.00  0.00
H
ATOM   9082 1HD1 ILE X 575       2.997 -18.073 -11.899  1.00  0.00
H
ATOM   9083 2HD1 ILE X 575       4.119 -18.643 -13.156  1.00  0.00
H
ATOM   9084 3HD1 ILE X 575       4.671 -17.475 -11.932  1.00  0.00
H
ATOM   9085  N   ILE X 576       5.676 -15.321 -17.042  1.00  0.00
N
ATOM   9086  CA  ILE X 576       6.781 -14.874 -17.883  1.00  0.00
C
ATOM   9087  C   ILE X 576       6.353 -13.729 -18.790  1.00  0.00
C
ATOM   9088  O   ILE X 576       7.181 -12.942 -19.248  1.00  0.00
O
ATOM   9089  CB  ILE X 576       7.335 -16.020 -18.747  1.00  0.00
C
ATOM   9090  CG1 ILE X 576       8.748 -15.689 -19.235  1.00  0.00
C
ATOM   9091  CG2 ILE X 576       6.413 -16.293 -19.925  1.00  0.00
C
ATOM   9092  CD1 ILE X 576       9.478 -16.865 -19.840  1.00  0.00
C
ATOM   9093  H   ILE X 576       5.342 -16.271 -17.133  1.00  0.00
H
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ATOM   9094  HA  ILE X 576       7.584 -14.458 -17.274  1.00  0.00
H
ATOM   9095  HB  ILE X 576       7.417 -16.918 -18.135  1.00  0.00
H
ATOM   9096 1HG1 ILE X 576       8.657 -14.896 -19.976  1.00  0.00
H
ATOM   9097 2HG1 ILE X 576       9.308 -15.317 -18.375  1.00  0.00
H
ATOM   9098 1HG2 ILE X 576       6.819 -17.106 -20.525  1.00  0.00
H
ATOM   9099 2HG2 ILE X 576       5.426 -16.573 -19.558  1.00  0.00
H
ATOM   9100 3HG2 ILE X 576       6.331 -15.397 -20.538  1.00  0.00
H
ATOM   9101 1HD1 ILE X 576      10.471 -16.552 -20.161  1.00  0.00
H
ATOM   9102 2HD1 ILE X 576       9.571 -17.658 -19.098  1.00  0.00
H
ATOM   9103 3HD1 ILE X 576       8.921 -17.237 -20.699  1.00  0.00
H
ATOM   9104  N   LEU X 577       5.052 -13.639 -19.047  1.00  0.00
N
ATOM   9105  CA  LEU X 577       4.505 -12.559 -19.862  1.00  0.00
C
ATOM   9106  C   LEU X 577       4.573 -11.225 -19.128  1.00  0.00
C
ATOM   9107  O   LEU X 577       5.133 -10.254 -19.635  1.00  0.00
O
ATOM   9108  CB  LEU X 577       3.058 -12.875 -20.261  1.00  0.00
C
ATOM   9109  CG  LEU X 577       2.333 -11.762 -21.027  1.00  0.00
C
ATOM   9110  CD1 LEU X 577       3.103 -11.414 -22.294  1.00  0.00
C
ATOM   9111  CD2 LEU X 577       0.918 -12.212 -21.361  1.00  0.00
C
ATOM   9112  H   LEU X 577       4.426 -14.336 -18.670  1.00  0.00
H
ATOM   9113  HA  LEU X 577       5.104 -12.445 -20.765  1.00  0.00
H
ATOM   9114 1HB  LEU X 577       3.237 -13.726 -20.916  1.00  0.00
H
ATOM   9115 2HB  LEU X 577       2.465 -13.196 -19.404  1.00  0.00
H
ATOM   9116  HG  LEU X 577       2.261 -10.903 -20.359  1.00  0.00
H
ATOM   9117 1HD1 LEU X 577       2.581 -10.622 -22.831  1.00  0.00
H
ATOM   9118 2HD1 LEU X 577       4.104 -11.072 -22.029  1.00  0.00
H
ATOM   9119 3HD1 LEU X 577       3.175 -12.295 -22.928  1.00  0.00
H
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ATOM   9120 1HD2 LEU X 577       0.404 -11.419 -21.906  1.00  0.00
H
ATOM   9121 2HD2 LEU X 577       0.959 -13.109 -21.979  1.00  0.00
H
ATOM   9122 3HD2 LEU X 577       0.378 -12.428 -20.441  1.00  0.00
H
ATOM   9123  N   GLY X 578       4.000 -11.187 -17.928  1.00  0.00
N
ATOM   9124  CA  GLY X 578       4.059  -9.972 -17.131  1.00  0.00
C
ATOM   9125  C   GLY X 578       5.499  -9.566 -16.851  1.00  0.00
C
ATOM   9126  O   GLY X 578       5.810  -8.378 -16.774  1.00  0.00
O
ATOM   9127  H   GLY X 578       3.524 -12.003 -17.570  1.00  0.00
H
ATOM   9128 1HA  GLY X 578       3.562  -9.166 -17.671  1.00  0.00
H
ATOM   9129 2HA  GLY X 578       3.548 -10.142 -16.184  1.00  0.00
H
ATOM   9130  N   TYR X 579       6.378 -10.547 -16.700  1.00  0.00
N
ATOM   9131  CA  TYR X 579       7.788 -10.257 -16.439  1.00  0.00
C
ATOM   9132  C   TYR X 579       8.403  -9.532 -17.628  1.00  0.00
C
ATOM   9133  O   TYR X 579       9.011  -8.472 -17.486  1.00  0.00
O
ATOM   9134  CB  TYR X 579       8.553 -11.549 -16.140  1.00  0.00
C
ATOM   9135  CG  TYR X 579      10.031 -11.343 -15.887  1.00  0.00
C
ATOM   9136  CD1 TYR X 579      10.491 -10.944 -14.641  1.00  0.00
C
ATOM   9137  CD2 TYR X 579      10.959 -11.549 -16.896  1.00  0.00
C
ATOM   9138  CE1 TYR X 579      11.838 -10.754 -14.404  1.00  0.00
C
ATOM   9139  CE2 TYR X 579      12.310 -11.362 -16.670  1.00  0.00
C
ATOM   9140  CZ  TYR X 579      12.745 -10.964 -15.423  1.00  0.00
C
ATOM   9141  OH  TYR X 579      14.090 -10.778 -15.193  1.00  0.00
O
ATOM   9142  H   TYR X 579       6.071 -11.507 -16.766  1.00  0.00
H
ATOM   9143  HA  TYR X 579       7.877  -9.594 -15.578  1.00  0.00
H
ATOM   9144 1HB  TYR X 579       8.094 -12.001 -15.259  1.00  0.00
H
ATOM   9145 2HB  TYR X 579       8.420 -12.208 -16.998  1.00  0.00
H
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ATOM   9146  HD1 TYR X 579       9.768 -10.779 -13.840  1.00  0.00
H
ATOM   9147  HD2 TYR X 579      10.610 -11.863 -17.879  1.00  0.00
H
ATOM   9148  HE1 TYR X 579      12.186 -10.439 -13.420  1.00  0.00
H
ATOM   9149  HE2 TYR X 579      13.025 -11.529 -17.476  1.00  0.00
H
ATOM   9150  HH  TYR X 579      14.282 -10.502 -14.293  1.00  0.00
H
ATOM   9151  N   CYS X 580       8.240 -10.114 -18.814  1.00  0.00
N
ATOM   9152  CA  CYS X 580       8.758  -9.517 -20.036  1.00  0.00
C
ATOM   9153  C   CYS X 580       8.205  -8.106 -20.202  1.00  0.00
C
ATOM   9154  O   CYS X 580       8.931  -7.180 -20.568  1.00  0.00
O
ATOM   9155  CB  CYS X 580       8.218 -10.448 -21.122  1.00  0.00
C
ATOM   9156  SG  CYS X 580       8.753 -10.034 -22.799  1.00  0.00
S
ATOM   9157  H   CYS X 580       7.744 -10.993 -18.868  1.00  0.00
H
ATOM   9158  HA  CYS X 580       9.847  -9.512 -20.089  1.00  0.00
H
ATOM   9159 1HB  CYS X 580       8.553 -11.471 -20.942  1.00  0.00
H
ATOM   9160 2HB  CYS X 580       7.129 -10.421 -21.136  1.00  0.00
H
ATOM   9161  HG  CYS X 580       8.103 -11.026 -23.401  1.00  0.00
H
ATOM   9162  N   ILE X 581       6.916  -7.940 -19.924  1.00  0.00
N
ATOM   9163  CA  ILE X 581       6.318  -6.628 -20.097  1.00  0.00
C
ATOM   9164  C   ILE X 581       6.913  -5.558 -19.190  1.00  0.00
C
ATOM   9165  O   ILE X 581       7.178  -4.445 -19.651  1.00  0.00
O
ATOM   9166  CB  ILE X 581       4.799  -6.662 -19.848  1.00  0.00
C
ATOM   9167  CG1 ILE X 581       4.096  -7.472 -20.941  1.00  0.00
C
ATOM   9168  CG2 ILE X 581       4.238  -5.250 -19.783  1.00  0.00
C
ATOM   9169  CD1 ILE X 581       2.661  -7.821 -20.616  1.00  0.00
C
ATOM   9170  H   ILE X 581       6.359  -8.716 -19.597  1.00  0.00
H
ATOM   9171  HA  ILE X 581       6.511  -6.246 -21.099  1.00  0.00
H
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ATOM   9172  HB  ILE X 581       4.605  -7.173 -18.905  1.00  0.00
H
ATOM   9173 1HG1 ILE X 581       4.129  -6.879 -21.854  1.00  0.00
H
ATOM   9174 2HG1 ILE X 581       4.669  -8.388 -21.083  1.00  0.00
H
ATOM   9175 1HG2 ILE X 581       3.163  -5.292 -19.605  1.00  0.00
H
ATOM   9176 2HG2 ILE X 581       4.717  -4.705 -18.971  1.00  0.00
H
ATOM   9177 3HG2 ILE X 581       4.430  -4.738 -20.725  1.00  0.00
H
ATOM   9178 1HD1 ILE X 581       2.230  -8.394 -21.437  1.00  0.00
H
ATOM   9179 2HD1 ILE X 581       2.627  -8.414 -19.703  1.00  0.00
H
ATOM   9180 3HD1 ILE X 581       2.088  -6.905 -20.474  1.00  0.00
H
ATOM   9181  N   GLY X 582       7.110  -5.865 -17.912  1.00  0.00
N
ATOM   9182  CA  GLY X 582       7.662  -4.845 -17.029  1.00  0.00
C
ATOM   9183  C   GLY X 582       9.162  -4.645 -17.221  1.00  0.00
C
ATOM   9184  O   GLY X 582       9.684  -3.585 -16.910  1.00  0.00
O
ATOM   9185  H   GLY X 582       6.882  -6.784 -17.561  1.00  0.00
H
ATOM   9186 1HA  GLY X 582       7.164  -3.895 -17.227  1.00  0.00
H
ATOM   9187 2HA  GLY X 582       7.487  -5.136 -15.994  1.00  0.00
H
ATOM   9188  N   THR X 583       9.856  -5.651 -17.751  1.00  0.00
N
ATOM   9189  CA  THR X 583      11.276  -5.473 -18.021  1.00  0.00
C
ATOM   9190  C   THR X 583      11.337  -4.475 -19.186  1.00  0.00
C
ATOM   9191  O   THR X 583      12.173  -3.569 -19.200  1.00  0.00
O
ATOM   9192  CB  THR X 583      11.958  -6.811 -18.359  1.00  0.00
C
ATOM   9193  CG2 THR X 583      13.424  -6.592 -18.699  1.00  0.00
C
ATOM   9194  OG1 THR X 583      11.860  -7.697 -17.236  1.00  0.00
O
ATOM   9195  H   THR X 583       9.403  -6.527 -17.964  1.00  0.00
H
ATOM   9196  HA  THR X 583      11.766  -5.042 -17.148  1.00  0.00
H
ATOM   9197  HB  THR X 583      11.452  -7.263 -19.212  1.00  0.00
H
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ATOM   9198  HG1 THR X 583      10.936  -7.853 -17.033  1.00  0.00
H
ATOM   9199 1HG2 THR X 583      13.889  -7.548 -18.935  1.00  0.00
H
ATOM   9200 2HG2 THR X 583      13.502  -5.927 -19.559  1.00  0.00
H
ATOM   9201 3HG2 THR X 583      13.931  -6.142 -17.846  1.00  0.00
H
ATOM   9202  N   SER X 584      10.438  -4.644 -20.150  1.00  0.00
N
ATOM   9203  CA  SER X 584      10.377  -3.732 -21.286  1.00  0.00
C
ATOM   9204  C   SER X 584      10.023  -2.337 -20.792  1.00  0.00
C
ATOM   9205  O   SER X 584      10.611  -1.347 -21.225  1.00  0.00
O
ATOM   9206  CB  SER X 584       9.369  -4.232 -22.303  1.00  0.00
C
ATOM   9207  OG  SER X 584       9.772  -5.435 -22.897  1.00  0.00
O
ATOM   9208  H   SER X 584       9.787  -5.415 -20.096  1.00  0.00
H
ATOM   9209  HA  SER X 584      11.292  -3.717 -21.879  1.00  0.00
H
ATOM   9210 1HB  SER X 584       8.414  -4.385 -21.801  1.00  0.00
H
ATOM   9211 2HB  SER X 584       9.252  -3.475 -23.078  1.00  0.00
H
ATOM   9212  HG  SER X 584       9.872  -6.108 -22.220  1.00  0.00
H
ATOM   9213  N   SER X 585       9.055  -2.251 -19.885  1.00  0.00
N
ATOM   9214  CA  SER X 585       8.663  -0.957 -19.338  1.00  0.00
C
ATOM   9215  C   SER X 585       9.831  -0.339 -18.571  1.00  0.00
C
ATOM   9216  O   SER X 585       9.947   0.880 -18.492  1.00  0.00
O
ATOM   9217  CB  SER X 585       7.448  -1.112 -18.447  1.00  0.00
C
ATOM   9218  OG  SER X 585       6.312  -1.504 -19.169  1.00  0.00
O
ATOM   9219  H   SER X 585       8.587  -3.089 -19.572  1.00  0.00
H
ATOM   9220  HA  SER X 585       8.289  -0.263 -20.093  1.00  0.00
H
ATOM   9221 1HB  SER X 585       7.664  -1.867 -17.691  1.00  0.00
H
ATOM   9222 2HB  SER X 585       7.248  -0.160 -17.959  1.00  0.00
H
ATOM   9223  HG  SER X 585       5.567  -1.591 -18.571  1.00  0.00
H
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ATOM   9224  N   PHE X 586      10.697  -1.174 -18.013  1.00  0.00
N
ATOM   9225  CA  PHE X 586      11.839  -0.641 -17.271  1.00  0.00
C
ATOM   9226  C   PHE X 586      12.836  -0.001 -18.234  1.00  0.00
C
ATOM   9227  O   PHE X 586      13.318   1.105 -17.993  1.00  0.00
O
ATOM   9228  CB  PHE X 586      12.510  -1.748 -16.453  1.00  0.00
C
ATOM   9229  CG  PHE X 586      13.692  -1.279 -15.654  1.00  0.00
C
ATOM   9230  CD1 PHE X 586      13.518  -0.709 -14.402  1.00  0.00
C
ATOM   9231  CD2 PHE X 586      14.980  -1.407 -16.152  1.00  0.00
C
ATOM   9232  CE1 PHE X 586      14.606  -0.278 -13.665  1.00  0.00
C
ATOM   9233  CE2 PHE X 586      16.068  -0.978 -15.418  1.00  0.00
C
ATOM   9234  CZ  PHE X 586      15.881  -0.412 -14.173  1.00  0.00
C
ATOM   9235  H   PHE X 586      10.569  -2.173 -18.100  1.00  0.00
H
ATOM   9236  HA  PHE X 586      11.505   0.141 -16.589  1.00  0.00
H
ATOM   9237 1HB  PHE X 586      11.801  -2.172 -15.744  1.00  0.00
H
ATOM   9238 2HB  PHE X 586      12.873  -2.533 -17.115  1.00  0.00
H
ATOM   9239  HD1 PHE X 586      12.511  -0.603 -14.000  1.00  0.00
H
ATOM   9240  HD2 PHE X 586      15.128  -1.854 -17.137  1.00  0.00
H
ATOM   9241  HE1 PHE X 586      14.455   0.169 -12.683  1.00  0.00
H
ATOM   9242  HE2 PHE X 586      17.076  -1.086 -15.821  1.00  0.00
H
ATOM   9243  HZ  PHE X 586      16.738  -0.072 -13.594  1.00  0.00
H
ATOM   9244  N   ILE X 587      13.140  -0.700 -19.327  1.00  0.00
N
ATOM   9245  CA  ILE X 587      14.081  -0.192 -20.326  1.00  0.00
C
ATOM   9246  C   ILE X 587      13.492   1.018 -21.040  1.00  0.00
C
ATOM   9247  O   ILE X 587      14.223   1.853 -21.577  1.00  0.00
O
ATOM   9248  CB  ILE X 587      14.446  -1.273 -21.359  1.00  0.00
C
ATOM   9249  CG1 ILE X 587      15.231  -2.406 -20.692  1.00  0.00
C
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ATOM   9250  CG2 ILE X 587      15.249  -0.669 -22.502  1.00  0.00
C
ATOM   9251  CD1 ILE X 587      15.394  -3.631 -21.563  1.00  0.00
C
ATOM   9252  H   ILE X 587      12.711  -1.603 -19.469  1.00  0.00
H
ATOM   9253  HA  ILE X 587      14.989   0.174 -19.848  1.00  0.00
H
ATOM   9254  HB  ILE X 587      13.531  -1.714 -21.751  1.00  0.00
H
ATOM   9255 1HG1 ILE X 587      16.212  -2.012 -20.431  1.00  0.00
H
ATOM   9256 2HG1 ILE X 587      14.696  -2.678 -19.782  1.00  0.00
H
ATOM   9257 1HG2 ILE X 587      15.498  -1.446 -23.223  1.00  0.00
H
ATOM   9258 2HG2 ILE X 587      14.657   0.103 -22.992  1.00  0.00
H
ATOM   9259 3HG2 ILE X 587      16.166  -0.228 -22.110  1.00  0.00
H
ATOM   9260 1HD1 ILE X 587      15.960  -4.391 -21.021  1.00  0.00
H
ATOM   9261 2HD1 ILE X 587      14.413  -4.027 -21.823  1.00  0.00
H
ATOM   9262 3HD1 ILE X 587      15.930  -3.362 -22.472  1.00  0.00
H
ATOM   9263  N   CYS X 588      12.167   1.111 -21.042  1.00  0.00
N
ATOM   9264  CA  CYS X 588      11.469   2.236 -21.658  1.00  0.00
C
ATOM   9265  C   CYS X 588      11.786   3.522 -20.884  1.00  0.00
C
ATOM   9266  O   CYS X 588      11.673   4.626 -21.410  1.00  0.00
O
ATOM   9267  CB  CYS X 588       9.998   1.845 -21.508  1.00  0.00
C
ATOM   9268  SG  CYS X 588       8.857   2.820 -22.516  1.00  0.00
S
ATOM   9269  H   CYS X 588      11.624   0.381 -20.604  1.00  0.00
H
ATOM   9270  HA  CYS X 588      11.690   2.355 -22.719  1.00  0.00
H
ATOM   9271 1HB  CYS X 588       9.852   0.806 -21.804  1.00  0.00
H
ATOM   9272 2HB  CYS X 588       9.678   1.979 -20.475  1.00  0.00
H
ATOM   9273  HG  CYS X 588       7.751   2.199 -22.114  1.00  0.00
H
ATOM   9274  N   ILE X 589      12.182   3.364 -19.625  1.00  0.00
N
ATOM   9275  CA  ILE X 589      12.507   4.515 -18.792  1.00  0.00
C
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ATOM   9276  C   ILE X 589      13.753   5.229 -19.302  1.00  0.00
C
ATOM   9277  O   ILE X 589      13.694   6.402 -19.664  1.00  0.00
O
ATOM   9278  CB  ILE X 589      12.725   4.105 -17.323  1.00  0.00
C
ATOM   9279  CG1 ILE X 589      11.446   3.496 -16.743  1.00  0.00
C
ATOM   9280  CG2 ILE X 589      13.171   5.302 -16.498  1.00  0.00
C
ATOM   9281  CD1 ILE X 589      10.247   4.414 -16.813  1.00  0.00
C
ATOM   9282  H   ILE X 589      12.259   2.434 -19.241  1.00  0.00
H
ATOM   9283  HA  ILE X 589      11.718   5.263 -18.845  1.00  0.00
H
ATOM   9284  HB  ILE X 589      13.489   3.330 -17.281  1.00  0.00
H
ATOM   9285 1HG1 ILE X 589      11.239   2.584 -17.301  1.00  0.00
H
ATOM   9286 2HG1 ILE X 589      11.649   3.246 -15.703  1.00  0.00
H
ATOM   9287 1HG2 ILE X 589      13.319   4.996 -15.463  1.00  0.00
H
ATOM   9288 2HG2 ILE X 589      14.105   5.693 -16.898  1.00  0.00
H
ATOM   9289 3HG2 ILE X 589      12.406   6.078 -16.539  1.00  0.00
H
ATOM   9290 1HD1 ILE X 589       9.379   3.914 -16.384  1.00  0.00
H
ATOM   9291 2HD1 ILE X 589      10.452   5.327 -16.254  1.00  0.00
H
ATOM   9292 3HD1 ILE X 589      10.041   4.666 -17.853  1.00  0.00
H
ATOM   9293  N   PRO X 590      14.880   4.528 -19.329  1.00  0.00
N
ATOM   9294  CA  PRO X 590      16.108   5.129 -19.829  1.00  0.00
C
ATOM   9295  C   PRO X 590      15.837   5.623 -21.253  1.00  0.00
C
ATOM   9296  O   PRO X 590      16.383   6.644 -21.675  1.00  0.00
O
ATOM   9297  CB  PRO X 590      17.140   3.991 -19.758  1.00  0.00
C
ATOM   9298  CG  PRO X 590      16.618   3.060 -18.698  1.00  0.00
C
ATOM   9299  CD  PRO X 590      15.041   3.097 -19.032  1.00  0.00
C
ATOM   9300  HA  PRO X 590      16.378   5.890 -19.246  1.00  0.00
H
ATOM   9301 1HB  PRO X 590      16.996   3.580 -20.563  1.00  0.00
H
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ATOM   9302 2HB  PRO X 590      17.824   4.406 -19.427  1.00  0.00
H
ATOM   9303 1HG  PRO X 590      15.970   2.622 -19.022  1.00  0.00
H
ATOM   9304 2HG  PRO X 590      17.345   2.805 -18.164  1.00  0.00
H
ATOM   9305 1HD  PRO X 590      14.270   2.695 -19.423  1.00  0.00
H
ATOM   9306 2HD  PRO X 590      15.114   3.084 -18.083  1.00  0.00
H
ATOM   9307  N   THR X 591      14.992   4.908 -21.986  1.00  0.00
N
ATOM   9308  CA  THR X 591      14.656   5.307 -23.351  1.00  0.00
C
ATOM   9309  C   THR X 591      13.999   6.690 -23.344  1.00  0.00
C
ATOM   9310  O   THR X 591      14.341   7.546 -24.157  1.00  0.00
O
ATOM   9311  CB  THR X 591      13.717   4.289 -24.024  1.00  0.00
C
ATOM   9312  CG2 THR X 591      13.317   4.767 -25.411  1.00  0.00
C
ATOM   9313  OG1 THR X 591      14.380   3.023 -24.132  1.00  0.00
O
ATOM   9314  H   THR X 591      14.576   4.075 -21.595  1.00  0.00
H
ATOM   9315  HA  THR X 591      15.565   5.389 -23.946  1.00  0.00
H
ATOM   9316  HB  THR X 591      12.824   4.170 -23.411  1.00  0.00
H
ATOM   9317  HG1 THR X 591      15.176   3.123 -24.662  1.00  0.00
H
ATOM   9318 1HG2 THR X 591      12.654   4.035 -25.870  1.00  0.00
H
ATOM   9319 2HG2 THR X 591      12.803   5.724 -25.331  1.00  0.00
H
ATOM   9320 3HG2 THR X 591      14.209   4.885 -26.026  1.00  0.00
H
ATOM   9321  N   TYR X 592      13.059   6.908 -22.426  1.00  0.00
N
ATOM   9322  CA  TYR X 592      12.395   8.207 -22.336  1.00  0.00
C
ATOM   9323  C   TYR X 592      13.343   9.295 -21.846  1.00  0.00
C
ATOM   9324  O   TYR X 592      13.187  10.465 -22.197  1.00  0.00
O
ATOM   9325  CB  TYR X 592      11.181   8.124 -21.409  1.00  0.00
C
ATOM   9326  CG  TYR X 592      10.007   7.376 -22.001  1.00  0.00
C
ATOM   9327  CD1 TYR X 592       9.974   7.053 -23.350  1.00  0.00
C
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ATOM   9328  CD2 TYR X 592       8.935   6.994 -21.209  1.00  0.00
C
ATOM   9329  CE1 TYR X 592       8.905   6.371 -23.896  1.00  0.00
C
ATOM   9330  CE2 TYR X 592       7.860   6.311 -21.744  1.00  0.00
C
ATOM   9331  CZ  TYR X 592       7.848   6.001 -23.089  1.00  0.00
C
ATOM   9332  OH  TYR X 592       6.781   5.320 -23.627  1.00  0.00
O
ATOM   9333  H   TYR X 592      12.803   6.170 -21.786  1.00  0.00
H
ATOM   9334  HA  TYR X 592      12.057   8.519 -23.325  1.00  0.00
H
ATOM   9335 1HB  TYR X 592      11.505   7.624 -20.495  1.00  0.00
H
ATOM   9336 2HB  TYR X 592      10.882   9.145 -21.177  1.00  0.00
H
ATOM   9337  HD1 TYR X 592      10.813   7.349 -23.981  1.00  0.00
H
ATOM   9338  HD2 TYR X 592       8.949   7.242 -20.147  1.00  0.00
H
ATOM   9339  HE1 TYR X 592       8.893   6.125 -24.957  1.00  0.00
H
ATOM   9340  HE2 TYR X 592       7.026   6.019 -21.105  1.00  0.00
H
ATOM   9341  HH  TYR X 592       6.104   5.113 -22.979  1.00  0.00
H
ATOM   9342  N   ILE X 593      14.319   8.913 -21.029  1.00  0.00
N
ATOM   9343  CA  ILE X 593      15.300   9.875 -20.519  1.00  0.00
C
ATOM   9344  C   ILE X 593      16.113  10.381 -21.708  1.00  0.00
C
ATOM   9345  O   ILE X 593      16.351  11.582 -21.851  1.00  0.00
O
ATOM   9346  CB  ILE X 593      16.214   9.239 -19.455  1.00  0.00
C
ATOM   9347  CG1 ILE X 593      15.401   8.837 -18.223  1.00  0.00
C
ATOM   9348  CG2 ILE X 593      17.331  10.199 -19.071  1.00  0.00
C
ATOM   9349  CD1 ILE X 593      14.728  10.000 -17.530  1.00  0.00
C
ATOM   9350  H   ILE X 593      14.386   7.942 -20.755  1.00  0.00
H
ATOM   9351  HA  ILE X 593      14.801  10.744 -20.095  1.00  0.00
H
ATOM   9352  HB  ILE X 593      16.645   8.323 -19.858  1.00  0.00
H
ATOM   9353 1HG1 ILE X 593      14.646   8.124 -18.550  1.00  0.00
H
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ATOM   9354 2HG1 ILE X 593      16.084   8.348 -17.529  1.00  0.00
H
ATOM   9355 1HG2 ILE X 593      17.967   9.735 -18.318  1.00  0.00
H
ATOM   9356 2HG2 ILE X 593      17.925  10.436 -19.951  1.00  0.00
H
ATOM   9357 3HG2 ILE X 593      16.900  11.114 -18.667  1.00  0.00
H
ATOM   9358 1HD1 ILE X 593      14.171   9.638 -16.666  1.00  0.00
H
ATOM   9359 2HD1 ILE X 593      15.482  10.715 -17.199  1.00  0.00
H
ATOM   9360 3HD1 ILE X 593      14.044  10.490 -18.222  1.00  0.00
H
ATOM   9361  N   ALA X 594      16.526   9.453 -22.567  1.00  0.00
N
ATOM   9362  CA  ALA X 594      17.274   9.787 -23.773  1.00  0.00
C
ATOM   9363  C   ALA X 594      16.426  10.750 -24.621  1.00  0.00
C
ATOM   9364  O   ALA X 594      16.927  11.756 -25.130  1.00  0.00
O
ATOM   9365  CB  ALA X 594      17.638   8.523 -24.537  1.00  0.00
C
ATOM   9366  H   ALA X 594      16.314   8.484 -22.378  1.00  0.00
H
ATOM   9367  HA  ALA X 594      18.194  10.295 -23.484  1.00  0.00
H
ATOM   9368 1HB  ALA X 594      18.196   8.790 -25.435  1.00  0.00
H
ATOM   9369 2HB  ALA X 594      18.251   7.879 -23.906  1.00  0.00
H
ATOM   9370 3HB  ALA X 594      16.728   7.995 -24.819  1.00  0.00
H
ATOM   9371  N   TYR X 595      15.140  10.442 -24.768  1.00  0.00
N
ATOM   9372  CA  TYR X 595      14.249  11.303 -25.547  1.00  0.00
C
ATOM   9373  C   TYR X 595      14.221  12.717 -24.981  1.00  0.00
C
ATOM   9374  O   TYR X 595      14.329  13.700 -25.715  1.00  0.00
O
ATOM   9375  CB  TYR X 595      12.835  10.720 -25.579  1.00  0.00
C
ATOM   9376  CG  TYR X 595      12.716   9.446 -26.385  1.00  0.00
C
ATOM   9377  CD1 TYR X 595      13.760   9.007 -27.183  1.00  0.00
C
ATOM   9378  CD2 TYR X 595      11.556   8.685 -26.344  1.00  0.00
C
ATOM   9379  CE1 TYR X 595      13.656   7.843 -27.923  1.00  0.00
C
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ATOM   9380  CE2 TYR X 595      11.441   7.520 -27.078  1.00  0.00
C
ATOM   9381  CZ  TYR X 595      12.493   7.102 -27.865  1.00  0.00
C
ATOM   9382  OH  TYR X 595      12.384   5.943 -28.597  1.00  0.00
O
ATOM   9383  H   TYR X 595      14.775   9.606 -24.336  1.00  0.00
H
ATOM   9384  HA  TYR X 595      14.615  11.384 -26.571  1.00  0.00
H
ATOM   9385 1HB  TYR X 595      12.541  10.526 -24.546  1.00  0.00
H
ATOM   9386 2HB  TYR X 595      12.182  11.481 -26.004  1.00  0.00
H
ATOM   9387  HD1 TYR X 595      14.676   9.597 -27.223  1.00  0.00
H
ATOM   9388  HD2 TYR X 595      10.728   9.020 -25.719  1.00  0.00
H
ATOM   9389  HE1 TYR X 595      14.486   7.510 -28.545  1.00  0.00
H
ATOM   9390  HE2 TYR X 595      10.521   6.936 -27.033  1.00  0.00
H
ATOM   9391  HH  TYR X 595      11.537   5.507 -28.487  1.00  0.00
H
ATOM   9392  N   ARG X 596      14.072  12.820 -23.662  1.00  0.00
N
ATOM   9393  CA  ARG X 596      14.040  14.121 -23.008  1.00  0.00
C
ATOM   9394  C   ARG X 596      15.356  14.866 -23.233  1.00  0.00
C
ATOM   9395  O   ARG X 596      15.358  16.078 -23.430  1.00  0.00
O
ATOM   9396  CB  ARG X 596      13.695  14.011 -21.530  1.00  0.00
C
ATOM   9397  CG  ARG X 596      13.599  15.340 -20.795  1.00  0.00
C
ATOM   9398  CD  ARG X 596      13.225  15.221 -19.363  1.00  0.00
C
ATOM   9399  NE  ARG X 596      14.220  14.566 -18.530  1.00  0.00
N
ATOM   9400  CZ  ARG X 596      15.331  15.161 -18.053  1.00  0.00
C
ATOM   9401  NH1 ARG X 596      15.611  16.410 -18.351  1.00  0.00
N
ATOM   9402  NH2 ARG X 596      16.145  14.447 -17.295  1.00  0.00
N
ATOM   9403  H   ARG X 596      13.980  11.982 -23.106  1.00  0.00
H
ATOM   9404  HA  ARG X 596      13.251  14.734 -23.444  1.00  0.00
H
ATOM   9405 1HB  ARG X 596      12.738  13.495 -21.464  1.00  0.00
H
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ATOM   9406 2HB  ARG X 596      14.470  13.401 -21.066  1.00  0.00
H
ATOM   9407 1HG  ARG X 596      14.570  15.836 -20.849  1.00  0.00
H
ATOM   9408 2HG  ARG X 596      12.849  15.956 -21.291  1.00  0.00
H
ATOM   9409 1HD  ARG X 596      13.064  16.219 -18.955  1.00  0.00
H
ATOM   9410 2HD  ARG X 596      12.302  14.646 -19.285  1.00  0.00
H
ATOM   9411  HE  ARG X 596      14.250  13.614 -18.190  1.00  0.00
H
ATOM   9412 1HH1 ARG X 596      14.987  16.937 -18.947  1.00  0.00
H
ATOM   9413 2HH1 ARG X 596      16.449  16.837 -17.984  1.00  0.00
H
ATOM   9414 1HH2 ARG X 596      15.922  13.482 -17.089  1.00  0.00
H
ATOM   9415 2HH2 ARG X 596      16.983  14.868 -16.925  1.00  0.00
H
ATOM   9416  N   LEU X 597      16.474  14.143 -23.196  1.00  0.00
N
ATOM   9417  CA  LEU X 597      17.770  14.779 -23.403  1.00  0.00
C
ATOM   9418  C   LEU X 597      17.948  15.213 -24.851  1.00  0.00
C
ATOM   9419  O   LEU X 597      18.901  15.926 -25.179  1.00  0.00
O
ATOM   9420  CB  LEU X 597      18.900  13.827 -22.990  1.00  0.00
C
ATOM   9421  CG  LEU X 597      18.958  13.494 -21.494  1.00  0.00
C
ATOM   9422  CD1 LEU X 597      20.000  12.412 -21.240  1.00  0.00
C
ATOM   9423  CD2 LEU X 597      19.284  14.753 -20.704  1.00  0.00
C
ATOM   9424  H   LEU X 597      16.425  13.149 -23.026  1.00  0.00
H
ATOM   9425  HA  LEU X 597      17.832  15.684 -22.799  1.00  0.00
H
ATOM   9426 1HB  LEU X 597      18.606  12.947 -23.558  1.00  0.00
H
ATOM   9427 2HB  LEU X 597      19.871  14.178 -23.340  1.00  0.00
H
ATOM   9428  HG  LEU X 597      17.962  13.161 -21.197  1.00  0.00
H
ATOM   9429 1HD1 LEU X 597      20.034  12.181 -20.175  1.00  0.00
H
ATOM   9430 2HD1 LEU X 597      19.734  11.513 -21.797  1.00  0.00
H
ATOM   9431 3HD1 LEU X 597      20.977  12.766 -21.566  1.00  0.00
H
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ATOM   9432 1HD2 LEU X 597      19.324  14.513 -19.640  1.00  0.00
H
ATOM   9433 2HD2 LEU X 597      20.248  15.144 -21.025  1.00  0.00
H
ATOM   9434 3HD2 LEU X 597      18.510  15.501 -20.878  1.00  0.00
H
ATOM   9435  N   ILE X 598      17.034  14.796 -25.718  1.00  0.00
N
ATOM   9436  CA  ILE X 598      17.116  15.188 -27.117  1.00  0.00
C
ATOM   9437  C   ILE X 598      16.080  16.276 -27.396  1.00  0.00
C
ATOM   9438  O   ILE X 598      16.288  17.134 -28.248  1.00  0.00
O
ATOM   9439  CB  ILE X 598      16.891  13.988 -28.055  1.00  0.00
C
ATOM   9440  CG1 ILE X 598      18.047  12.991 -27.932  1.00  0.00
C
ATOM   9441  CG2 ILE X 598      16.739  14.456 -29.494  1.00  0.00
C
ATOM   9442  CD1 ILE X 598      17.764  11.647 -28.564  1.00  0.00
C
ATOM   9443  H   ILE X 598      16.278  14.203 -25.406  1.00  0.00
H
ATOM   9444  HA  ILE X 598      18.084  15.641 -27.333  1.00  0.00
H
ATOM   9445  HB  ILE X 598      15.988  13.461 -27.747  1.00  0.00
H
ATOM   9446 1HG1 ILE X 598      18.916  13.441 -28.410  1.00  0.00
H
ATOM   9447 2HG1 ILE X 598      18.247  12.856 -26.870  1.00  0.00
H
ATOM   9448 1HG2 ILE X 598      16.582  13.596 -30.143  1.00  0.00
H
ATOM   9449 2HG2 ILE X 598      15.885  15.128 -29.569  1.00  0.00
H
ATOM   9450 3HG2 ILE X 598      17.642  14.983 -29.802  1.00  0.00
H
ATOM   9451 1HD1 ILE X 598      18.628  10.995 -28.436  1.00  0.00
H
ATOM   9452 2HD1 ILE X 598      16.894  11.194 -28.086  1.00  0.00
H
ATOM   9453 3HD1 ILE X 598      17.564  11.779 -29.627  1.00  0.00
H
ATOM   9454  N   ILE X 599      14.966  16.243 -26.669  1.00  0.00
N
ATOM   9455  CA  ILE X 599      13.932  17.258 -26.848  1.00  0.00
C
ATOM   9456  C   ILE X 599      14.394  18.555 -26.196  1.00  0.00
C
ATOM   9457  O   ILE X 599      14.058  19.649 -26.652  1.00  0.00
O
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ATOM   9458  CB  ILE X 599      12.588  16.806 -26.249  1.00  0.00
C
ATOM   9459  CG1 ILE X 599      12.013  15.634 -27.048  1.00  0.00
C
ATOM   9460  CG2 ILE X 599      11.605  17.965 -26.215  1.00  0.00
C
ATOM   9461  CD1 ILE X 599      10.862  14.934 -26.364  1.00  0.00
C
ATOM   9462  H   ILE X 599      14.835  15.510 -25.987  1.00  0.00
H
ATOM   9463  HA  ILE X 599      13.799  17.488 -27.904  1.00  0.00
H
ATOM   9464  HB  ILE X 599      12.756  16.443 -25.235  1.00  0.00
H
ATOM   9465 1HG1 ILE X 599      11.682  16.028 -28.008  1.00  0.00
H
ATOM   9466 2HG1 ILE X 599      12.825  14.923 -27.210  1.00  0.00
H
ATOM   9467 1HG2 ILE X 599      10.659  17.629 -25.790  1.00  0.00
H
ATOM   9468 2HG2 ILE X 599      12.011  18.770 -25.605  1.00  0.00
H
ATOM   9469 3HG2 ILE X 599      11.437  18.329 -27.229  1.00  0.00
H
ATOM   9470 1HD1 ILE X 599      10.508  14.115 -26.991  1.00  0.00
H
ATOM   9471 2HD1 ILE X 599      11.194  14.538 -25.403  1.00  0.00
H
ATOM   9472 3HD1 ILE X 599      10.049  15.643 -26.203  1.00  0.00
H
ATOM   9473  N   THR X 600      15.162  18.423 -25.119  1.00  0.00
N
ATOM   9474  CA  THR X 600      15.686  19.575 -24.396  1.00  0.00
C
ATOM   9475  C   THR X 600      16.406  20.507 -25.370  1.00  0.00
C
ATOM   9476  O   THR X 600      16.023  21.666 -25.539  1.00  0.00
O
ATOM   9477  CB  THR X 600      16.648  19.147 -23.273  1.00  0.00
C
ATOM   9478  CG2 THR X 600      17.457  20.338 -22.780  1.00  0.00
C
ATOM   9479  OG1 THR X 600      15.898  18.599 -22.180  1.00  0.00
O
ATOM   9480  H   THR X 600      15.388  17.494 -24.791  1.00  0.00
H
ATOM   9481  HA  THR X 600      14.864  20.141 -23.957  1.00  0.00
H
ATOM   9482  HB  THR X 600      17.325  18.384 -23.656  1.00  0.00
H
ATOM   9483  HG1 THR X 600      15.401  17.836 -22.485  1.00  0.00
H
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ATOM   9484 1HG2 THR X 600      18.131  20.015 -21.987  1.00  0.00
H
ATOM   9485 2HG2 THR X 600      18.038  20.749 -23.606  1.00  0.00
H
ATOM   9486 3HG2 THR X 600      16.782  21.102 -22.396  1.00  0.00
H
ATOM   9487  N   PRO X 601      17.453  19.991 -26.004  1.00  0.00
N
ATOM   9488  CA  PRO X 601      18.228  20.762 -26.966  1.00  0.00
C
ATOM   9489  C   PRO X 601      17.363  21.190 -28.146  1.00  0.00
C
ATOM   9490  O   PRO X 601      17.588  22.239 -28.744  1.00  0.00
O
ATOM   9491  CB  PRO X 601      19.359  19.807 -27.388  1.00  0.00
C
ATOM   9492  CG  PRO X 601      19.534  18.874 -26.222  1.00  0.00
C
ATOM   9493  CD  PRO X 601      17.955  18.618 -25.856  1.00  0.00
C
ATOM   9494  HA  PRO X 601      18.597  21.579 -26.531  1.00  0.00
H
ATOM   9495 1HB  PRO X 601      18.939  19.330 -28.046  1.00  0.00
H
ATOM   9496 2HB  PRO X 601      20.036  20.346 -27.398  1.00  0.00
H
ATOM   9497 1HG  PRO X 601      18.894  18.320 -26.223  1.00  0.00
H
ATOM   9498 2HG  PRO X 601      20.455  18.771 -26.080  1.00  0.00
H
ATOM   9499 1HD  PRO X 601      17.167  18.081 -25.888  1.00  0.00
H
ATOM   9500 2HD  PRO X 601      18.434  18.654 -25.034  1.00  0.00
H
ATOM   9501  N   GLY X 602      16.375  20.364 -28.479  1.00  0.00
N
ATOM   9502  CA  GLY X 602      15.481  20.661 -29.591  1.00  0.00
C
ATOM   9503  C   GLY X 602      14.588  21.857 -29.283  1.00  0.00
C
ATOM   9504  O   GLY X 602      14.081  22.514 -30.192  1.00  0.00
O
ATOM   9505  H   GLY X 602      16.242  19.513 -27.951  1.00  0.00
H
ATOM   9506 1HA  GLY X 602      16.076  20.883 -30.477  1.00  0.00
H
ATOM   9507 2HA  GLY X 602      14.853  19.792 -29.786  1.00  0.00
H
ATOM   9508  N   THR X 603      14.395  22.131 -27.999  1.00  0.00
N
ATOM   9509  CA  THR X 603      13.566  23.254 -27.577  1.00  0.00
C
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ATOM   9510  C   THR X 603      14.424  24.510 -27.463  1.00  0.00
C
ATOM   9511  O   THR X 603      14.002  25.598 -27.855  1.00  0.00
O
ATOM   9512  CB  THR X 603      12.870  22.969 -26.232  1.00  0.00
C
ATOM   9513  CG2 THR X 603      12.039  24.165 -25.797  1.00  0.00
C
ATOM   9514  OG1 THR X 603      12.021  21.822 -26.364  1.00  0.00
O
ATOM   9515  H   THR X 603      14.832  21.549 -27.299  1.00  0.00
H
ATOM   9516  HA  THR X 603      12.802  23.452 -28.329  1.00  0.00
H
ATOM   9517  HB  THR X 603      13.630  22.762 -25.478  1.00  0.00
H
ATOM   9518  HG1 THR X 603      11.588  21.644 -25.526  1.00  0.00
H
ATOM   9519 1HG2 THR X 603      11.555  23.945 -24.845  1.00  0.00
H
ATOM   9520 2HG2 THR X 603      12.684  25.036 -25.685  1.00  0.00
H
ATOM   9521 3HG2 THR X 603      11.278  24.371 -26.550  1.00  0.00
H
ATOM   9522  N   PHE X 604      15.629  24.353 -26.928  1.00  0.00
N
ATOM   9523  CA  PHE X 604      16.548  25.471 -26.768  1.00  0.00
C
ATOM   9524  C   PHE X 604      16.902  26.072 -28.122  1.00  0.00
C
ATOM   9525  O   PHE X 604      16.880  27.290 -28.298  1.00  0.00
O
ATOM   9526  CB  PHE X 604      17.814  25.023 -26.034  1.00  0.00
C
ATOM   9527  CG  PHE X 604      18.797  26.130 -25.789  1.00  0.00
C
ATOM   9528  CD1 PHE X 604      18.585  27.054 -24.777  1.00  0.00
C
ATOM   9529  CD2 PHE X 604      19.936  26.253 -26.571  1.00  0.00
C
ATOM   9530  CE1 PHE X 604      19.490  28.074 -24.550  1.00  0.00
C
ATOM   9531  CE2 PHE X 604      20.843  27.271 -26.347  1.00  0.00
C
ATOM   9532  CZ  PHE X 604      20.618  28.182 -25.335  1.00  0.00
C
ATOM   9533  H   PHE X 604      15.916  23.433 -26.625  1.00  0.00
H
ATOM   9534  HA  PHE X 604      16.071  26.262 -26.187  1.00  0.00
H
ATOM   9535 1HB  PHE X 604      17.556  24.612 -25.058  1.00  0.00
H
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ATOM   9536 2HB  PHE X 604      18.336  24.266 -26.617  1.00  0.00
H
ATOM   9537  HD1 PHE X 604      17.693  26.968 -24.155  1.00  0.00
H
ATOM   9538  HD2 PHE X 604      20.112  25.532 -27.371  1.00  0.00
H
ATOM   9539  HE1 PHE X 604      19.310  28.794 -23.751  1.00  0.00
H
ATOM   9540  HE2 PHE X 604      21.733  27.354 -26.968  1.00  0.00
H
ATOM   9541  HZ  PHE X 604      21.331  28.987 -25.159  1.00  0.00
H
ATOM   9542  N   LYS X 605      17.222  25.207 -29.081  1.00  0.00
N
ATOM   9543  CA  LYS X 605      17.577  25.646 -30.425  1.00  0.00
C
ATOM   9544  C   LYS X 605      16.479  26.518 -31.026  1.00  0.00
C
ATOM   9545  O   LYS X 605      16.762  27.500 -31.712  1.00  0.00
O
ATOM   9546  CB  LYS X 605      17.846  24.441 -31.329  1.00  0.00
C
ATOM   9547  CG  LYS X 605      18.265  24.802 -32.748  1.00  0.00
C
ATOM   9548  CD  LYS X 605      18.591  23.557 -33.561  1.00  0.00
C
ATOM   9549  CE  LYS X 605      19.002  23.915 -34.982  1.00  0.00
C
ATOM   9550  NZ  LYS X 605      19.313  22.707 -35.793  1.00  0.00
N
ATOM   9551  H   LYS X 605      17.219  24.219 -28.872  1.00  0.00
H
ATOM   9552  HA  LYS X 605      18.477  26.261 -30.388  1.00  0.00
H
ATOM   9553 1HB  LYS X 605      18.635  23.857 -30.855  1.00  0.00
H
ATOM   9554 2HB  LYS X 605      16.928  23.855 -31.361  1.00  0.00
H
ATOM   9555 1HG  LYS X 605      17.447  25.343 -33.224  1.00  0.00
H
ATOM   9556 2HG  LYS X 605      19.144  25.444 -32.697  1.00  0.00
H
ATOM   9557 1HD  LYS X 605      19.407  23.026 -33.069  1.00  0.00
H
ATOM   9558 2HD  LYS X 605      17.707  22.920 -33.589  1.00  0.00
H
ATOM   9559 1HE  LYS X 605      18.182  24.463 -35.446  1.00  0.00
H
ATOM   9560 2HE  LYS X 605      19.882  24.555 -34.932  1.00  0.00
H
ATOM   9561 1HZ  LYS X 605      19.580  22.988 -36.725  1.00  0.00
H
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ATOM   9562 2HZ  LYS X 605      20.073  22.199 -35.362  1.00  0.00
H
ATOM   9563 3HZ  LYS X 605      18.497  22.113 -35.839  1.00  0.00
H
ATOM   9564  N   GLU X 606      15.231  26.152 -30.762  1.00  0.00
N
ATOM   9565  CA  GLU X 606      14.091  26.955 -31.187  1.00  0.00
C
ATOM   9566  C   GLU X 606      14.098  28.320 -30.510  1.00  0.00
C
ATOM   9567  O   GLU X 606      13.855  29.345 -31.150  1.00  0.00
O
ATOM   9568  CB  GLU X 606      12.780  26.225 -30.888  1.00  0.00
C
ATOM   9569  CG  GLU X 606      12.532  24.997 -31.752  1.00  0.00
C
ATOM   9570  CD  GLU X 606      11.291  24.267 -31.320  1.00  0.00
C
ATOM   9571  OE1 GLU X 606      10.691  24.671 -30.353  1.00  0.00
O
ATOM   9572  OE2 GLU X 606      10.878  23.374 -32.021  1.00  0.00
O
ATOM   9573  H   GLU X 606      15.068  25.294 -30.254  1.00  0.00
H
ATOM   9574  HA  GLU X 606      14.149  27.141 -32.259  1.00  0.00
H
ATOM   9575 1HB  GLU X 606      12.813  25.929 -29.839  1.00  0.00
H
ATOM   9576 2HB  GLU X 606      11.974  26.943 -31.038  1.00  0.00
H
ATOM   9577 1HG  GLU X 606      12.469  25.221 -32.817  1.00  0.00
H
ATOM   9578 2HG  GLU X 606      13.404  24.372 -31.565  1.00  0.00
H
ATOM   9579  N   ARG X 607      14.374  28.327 -29.210  1.00  0.00
N
ATOM   9580  CA  ARG X 607      14.424  29.565 -28.442  1.00  0.00
C
ATOM   9581  C   ARG X 607      15.410  30.552 -29.049  1.00  0.00
C
ATOM   9582  O   ARG X 607      15.200  31.764 -29.011  1.00  0.00
O
ATOM   9583  CB  ARG X 607      14.720  29.317 -26.971  1.00  0.00
C
ATOM   9584  CG  ARG X 607      13.609  28.617 -26.203  1.00  0.00
C
ATOM   9585  CD  ARG X 607      13.940  28.317 -24.787  1.00  0.00
C
ATOM   9586  NE  ARG X 607      12.887  27.629 -24.056  1.00  0.00
N
ATOM   9587  CZ  ARG X 607      12.999  27.186 -22.788  1.00  0.00
C
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ATOM   9588  NH1 ARG X 607      14.123  27.322 -22.120  1.00  0.00
N
ATOM   9589  NH2 ARG X 607      11.954  26.589 -22.241  1.00  0.00
N
ATOM   9590  H   ARG X 607      14.554  27.450 -28.742  1.00  0.00
H
ATOM   9591  HA  ARG X 607      13.448  30.052 -28.463  1.00  0.00
H
ATOM   9592 1HB  ARG X 607      15.623  28.711 -26.925  1.00  0.00
H
ATOM   9593 2HB  ARG X 607      14.912  30.289 -26.517  1.00  0.00
H
ATOM   9594 1HG  ARG X 607      12.725  29.256 -26.215  1.00  0.00
H
ATOM   9595 2HG  ARG X 607      13.383  27.675 -26.704  1.00  0.00
H
ATOM   9596 1HD  ARG X 607      14.825  27.683 -24.756  1.00  0.00
H
ATOM   9597 2HD  ARG X 607      14.142  29.251 -24.265  1.00  0.00
H
ATOM   9598  HE  ARG X 607      11.952  27.380 -24.353  1.00  0.00
H
ATOM   9599 1HH1 ARG X 607      14.917  27.765 -22.558  1.00  0.00
H
ATOM   9600 2HH1 ARG X 607      14.186  26.984 -21.172  1.00  0.00
H
ATOM   9601 1HH2 ARG X 607      11.103  26.477 -22.775  1.00  0.00
H
ATOM   9602 2HH2 ARG X 607      12.012  26.248 -21.293  1.00  0.00
H
ATOM   9603  N   ILE X 608      16.492  30.026 -29.619  1.00  0.00
N
ATOM   9604  CA  ILE X 608      17.589  30.856 -30.099  1.00  0.00
C
ATOM   9605  C   ILE X 608      17.695  30.809 -31.614  1.00  0.00
C
ATOM   9606  O   ILE X 608      18.762  31.047 -32.181  1.00  0.00
O
ATOM   9607  CB  ILE X 608      18.935  30.426 -29.486  1.00  0.00
C
ATOM   9608  CG1 ILE X 608      19.265  28.985 -29.888  1.00  0.00
C
ATOM   9609  CG2 ILE X 608      18.900  30.564 -27.972  1.00  0.00
C
ATOM   9610  CD1 ILE X 608      20.717  28.613 -29.682  1.00  0.00
C
ATOM   9611  H   ILE X 608      16.555  29.023 -29.721  1.00  0.00
H
ATOM   9612  HA  ILE X 608      17.406  31.905 -29.868  1.00  0.00
H
ATOM   9613  HB  ILE X 608      19.727  31.054 -29.892  1.00  0.00
H
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ATOM   9614 1HG1 ILE X 608      18.633  28.328 -29.291  1.00  0.00
H
ATOM   9615 2HG1 ILE X 608      19.010  28.876 -30.941  1.00  0.00
H
ATOM   9616 1HG2 ILE X 608      19.858  30.255 -27.556  1.00  0.00
H
ATOM   9617 2HG2 ILE X 608      18.708  31.603 -27.706  1.00  0.00
H
ATOM   9618 3HG2 ILE X 608      18.108  29.934 -27.568  1.00  0.00
H
ATOM   9619 1HD1 ILE X 608      20.874  27.578 -29.989  1.00  0.00
H
ATOM   9620 2HD1 ILE X 608      21.350  29.269 -30.279  1.00  0.00
H
ATOM   9621 3HD1 ILE X 608      20.975  28.720 -28.630  1.00  0.00
H
ATOM   9622  N   ILE X 609      16.580  30.503 -32.272  1.00  0.00
N
ATOM   9623  CA  ILE X 609      16.568  30.317 -33.719  1.00  0.00
C
ATOM   9624  C   ILE X 609      17.040  31.574 -34.437  1.00  0.00
C
ATOM   9625  O   ILE X 609      17.462  31.518 -35.595  1.00  0.00
O
ATOM   9626  CB  ILE X 609      15.166  29.940 -34.229  1.00  0.00
C
ATOM   9627  CG1 ILE X 609      15.256  29.298 -35.616  1.00  0.00
C
ATOM   9628  CG2 ILE X 609      14.265  31.165 -34.265  1.00  0.00
C
ATOM   9629  CD1 ILE X 609      15.991  27.977 -35.629  1.00  0.00
C
ATOM   9630  H   ILE X 609      15.718  30.396 -31.756  1.00  0.00
H
ATOM   9631  HA  ILE X 609      17.279  29.545 -34.013  1.00  0.00
H
ATOM   9632  HB  ILE X 609      14.735  29.192 -33.565  1.00  0.00
H
ATOM   9633 1HG1 ILE X 609      14.237  29.152 -35.973  1.00  0.00
H
ATOM   9634 2HG1 ILE X 609      15.770  30.005 -36.268  1.00  0.00
H
ATOM   9635 1HG2 ILE X 609      13.278  30.881 -34.628  1.00  0.00
H
ATOM   9636 2HG2 ILE X 609      14.176  31.581 -33.262  1.00  0.00
H
ATOM   9637 3HG2 ILE X 609      14.695  31.913 -34.931  1.00  0.00
H
ATOM   9638 1HD1 ILE X 609      16.013  27.583 -36.647  1.00  0.00
H
ATOM   9639 2HD1 ILE X 609      17.011  28.122 -35.274  1.00  0.00
H
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ATOM   9640 3HD1 ILE X 609      15.478  27.268 -34.981  1.00  0.00
H
ATOM   9641  N   LYS X 610      16.971  32.706 -33.748  1.00  0.00
N
ATOM   9642  CA  LYS X 610      17.368  33.984 -34.327  1.00  0.00
C
ATOM   9643  C   LYS X 610      18.783  34.362 -33.914  1.00  0.00
C
ATOM   9644  O   LYS X 610      19.377  35.289 -34.471  1.00  0.00
O
ATOM   9645  CB  LYS X 610      16.390  35.086 -33.915  1.00  0.00
C
ATOM   9646  CG  LYS X 610      14.977  34.908 -34.455  1.00  0.00
C
ATOM   9647  CD  LYS X 610      14.074  36.056 -34.032  1.00  0.00
C
ATOM   9648  CE  LYS X 610      12.665  35.885 -34.582  1.00  0.00
C
ATOM   9649  NZ  LYS X 610      11.780  37.021 -34.206  1.00  0.00
N
ATOM   9650  H   LYS X 610      16.634  32.683 -32.797  1.00  0.00
H
ATOM   9651  HA  LYS X 610      17.372  33.911 -35.415  1.00  0.00
H
ATOM   9652 1HB  LYS X 610      16.363  35.098 -32.824  1.00  0.00
H
ATOM   9653 2HB  LYS X 610      16.799  36.029 -34.276  1.00  0.00
H
ATOM   9654 1HG  LYS X 610      15.026  34.864 -35.543  1.00  0.00
H
ATOM   9655 2HG  LYS X 610      14.576  33.970 -34.071  1.00  0.00
H
ATOM   9656 1HD  LYS X 610      14.038  36.088 -32.942  1.00  0.00
H
ATOM   9657 2HD  LYS X 610      14.499  36.988 -34.407  1.00  0.00
H
ATOM   9658 1HE  LYS X 610      12.728  35.818 -35.667  1.00  0.00
H
ATOM   9659 2HE  LYS X 610      12.254  34.958 -34.184  1.00  0.00
H
ATOM   9660 1HZ  LYS X 610      10.858  36.869 -34.589  1.00  0.00
H
ATOM   9661 2HZ  LYS X 610      11.720  37.083 -33.199  1.00  0.00
H
ATOM   9662 3HZ  LYS X 610      12.160  37.880 -34.575  1.00  0.00
H
ATOM   9663  N   SER X 611      19.323  33.640 -32.940  1.00  0.00
N
ATOM   9664  CA  SER X 611      20.695  33.852 -32.498  1.00  0.00
C
ATOM   9665  C   SER X 611      21.612  32.742 -32.996  1.00  0.00
C
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ATOM   9666  O   SER X 611      22.835  32.828 -32.871  1.00  0.00
O
ATOM   9667  CB  SER X 611      20.748  33.943 -30.985  1.00  0.00
C
ATOM   9668  OG  SER X 611      20.021  35.035 -30.497  1.00  0.00
O
ATOM   9669  H   SER X 611      18.767  32.925 -32.492  1.00  0.00
H
ATOM   9670  HA  SER X 611      21.098  34.824 -32.786  1.00  0.00
H
ATOM   9671 1HB  SER X 611      20.334  33.026 -30.567  1.00  0.00
H
ATOM   9672 2HB  SER X 611      21.788  34.043 -30.678  1.00  0.00
H
ATOM   9673  HG  SER X 611      19.100  34.950 -30.760  1.00  0.00
H
ATOM   9674  N   ILE X 612      21.017  31.702 -33.566  1.00  0.00
N
ATOM   9675  CA  ILE X 612      21.775  30.560 -34.069  1.00  0.00
C
ATOM   9676  C   ILE X 612      21.940  30.632 -35.582  1.00  0.00
C
ATOM   9677  O   ILE X 612      21.020  31.031 -36.294  1.00  0.00
O
ATOM   9678  CB  ILE X 612      21.102  29.226 -33.698  1.00  0.00
C
ATOM   9679  CG1 ILE X 612      22.117  28.083 -33.752  1.00  0.00
C
ATOM   9680  CG2 ILE X 612      19.929  28.947 -34.626  1.00  0.00
C
ATOM   9681  CD1 ILE X 612      21.607  26.784 -33.168  1.00  0.00
C
ATOM   9682  H   ILE X 612      20.011  31.700 -33.654  1.00  0.00
H
ATOM   9683  HA  ILE X 612      22.792  30.573 -33.679  1.00  0.00
H
ATOM   9684  HB  ILE X 612      20.746  29.282 -32.670  1.00  0.00
H
ATOM   9685 1HG1 ILE X 612      22.381  27.931 -34.798  1.00  0.00
H
ATOM   9686 2HG1 ILE X 612      23.001  28.406 -33.200  1.00  0.00
H
ATOM   9687 1HG2 ILE X 612      19.465  27.999 -34.350  1.00  0.00
H
ATOM   9688 2HG2 ILE X 612      19.198  29.749 -34.539  1.00  0.00
H
ATOM   9689 3HG2 ILE X 612      20.285  28.889 -35.655  1.00  0.00
H
ATOM   9690 1HD1 ILE X 612      22.382  26.021 -33.241  1.00  0.00
H
ATOM   9691 2HD1 ILE X 612      21.345  26.934 -32.120  1.00  0.00
H
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ATOM   9692 3HD1 ILE X 612      20.726  26.459 -33.719  1.00  0.00
H
ATOM   9693  N   THR X 613      23.114  30.242 -36.063  1.00  0.00
N
ATOM   9694  CA  THR X 613      23.419  30.313 -37.487  1.00  0.00
C
ATOM   9695  C   THR X 613      23.375  28.931 -38.127  1.00  0.00
C
ATOM   9696  O   THR X 613      23.604  27.921 -37.463  1.00  0.00
O
ATOM   9697  CB  THR X 613      24.802  30.942 -37.739  1.00  0.00
C
ATOM   9698  CG2 THR X 613      24.861  32.347 -37.163  1.00  0.00
C
ATOM   9699  OG1 THR X 613      25.815  30.134 -37.126  1.00  0.00
O
ATOM   9700  H   THR X 613      23.814  29.887 -35.427  1.00  0.00
H
ATOM   9701  HA  THR X 613      22.665  30.914 -37.997  1.00  0.00
H
ATOM   9702  HB  THR X 613      24.982  30.982 -38.814  1.00  0.00
H
ATOM   9703  HG1 THR X 613      26.676  30.528 -37.284  1.00  0.00
H
ATOM   9704 1HG2 THR X 613      25.847  32.775 -37.350  1.00  0.00
H
ATOM   9705 2HG2 THR X 613      24.099  32.967 -37.636  1.00  0.00
H
ATOM   9706 3HG2 THR X 613      24.682  32.307 -36.089  1.00  0.00
H
ATOM   9707  N   PRO X 614      23.073  28.894 -39.421  1.00  0.00
N
ATOM   9708  CA  PRO X 614      22.974  27.636 -40.149  1.00  0.00
C
ATOM   9709  C   PRO X 614      24.296  26.875 -40.117  1.00  0.00
C
ATOM   9710  O   PRO X 614      24.328  25.663 -40.330  1.00  0.00
O
ATOM   9711  CB  PRO X 614      22.584  28.057 -41.576  1.00  0.00
C
ATOM   9712  CG  PRO X 614      23.066  29.475 -41.708  1.00  0.00
C
ATOM   9713  CD  PRO X 614      22.859  30.059 -40.290  1.00  0.00
C
ATOM   9714  HA  PRO X 614      22.270  27.060 -39.743  1.00  0.00
H
ATOM   9715 1HB  PRO X 614      23.154  27.538 -42.067  1.00  0.00
H
ATOM   9716 2HB  PRO X 614      21.721  28.077 -41.512  1.00  0.00
H
ATOM   9717 1HG  PRO X 614      23.907  29.465 -41.806  1.00  0.00
H
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ATOM   9718 2HG  PRO X 614      22.388  29.964 -42.133  1.00  0.00
H
ATOM   9719 1HD  PRO X 614      23.563  30.655 -40.053  1.00  0.00
H
ATOM   9720 2HD  PRO X 614      21.967  30.318 -40.082  1.00  0.00
H
ATOM   9721  N   GLU X 615      25.380  27.593 -39.850  1.00  0.00
N
ATOM   9722  CA  GLU X 615      26.711  27.005 -39.861  1.00  0.00
C
ATOM   9723  C   GLU X 615      26.986  26.238 -38.574  1.00  0.00
C
ATOM   9724  O   GLU X 615      27.848  25.363 -38.530  1.00  0.00
O
ATOM   9725  CB  GLU X 615      27.774  28.087 -40.064  1.00  0.00
C
ATOM   9726  CG  GLU X 615      27.708  28.788 -41.413  1.00  0.00
C
ATOM   9727  CD  GLU X 615      28.749  29.867 -41.521  1.00  0.00
C
ATOM   9728  OE1 GLU X 615      29.487  30.048 -40.584  1.00  0.00
O
ATOM   9729  OE2 GLU X 615      28.880  30.434 -42.580  1.00  0.00
O
ATOM   9730  H   GLU X 615      25.278  28.574 -39.634  1.00  0.00
H
ATOM   9731  HA  GLU X 615      26.789  26.282 -40.674  1.00  0.00
H
ATOM   9732 1HB  GLU X 615      27.638  28.820 -39.268  1.00  0.00
H
ATOM   9733 2HB  GLU X 615      28.745  27.606 -39.953  1.00  0.00
H
ATOM   9734 1HG  GLU X 615      27.801  28.108 -42.260  1.00  0.00
H
ATOM   9735 2HG  GLU X 615      26.716  29.239 -41.419  1.00  0.00
H
ATOM   9736  N   THR X 616      26.242  26.573 -37.521  1.00  0.00
N
ATOM   9737  CA  THR X 616      26.490  26.011 -36.200  1.00  0.00
C
ATOM   9738  C   THR X 616      26.205  24.517 -36.167  1.00  0.00
C
ATOM   9739  O   THR X 616      25.085  24.085 -36.444  1.00  0.00
O
ATOM   9740  CB  THR X 616      25.637  26.706 -35.123  1.00  0.00
C
ATOM   9741  CG2 THR X 616      25.931  26.119 -33.749  1.00  0.00
C
ATOM   9742  OG1 THR X 616      25.928  28.109 -35.110  1.00  0.00
O
ATOM   9743  H   THR X 616      25.487  27.233 -37.643  1.00  0.00
H
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ATOM   9744  HA  THR X 616      27.543  26.127 -35.941  1.00  0.00
H
ATOM   9745  HB  THR X 616      24.583  26.564 -35.357  1.00  0.00
H
ATOM   9746  HG1 THR X 616      25.725  28.484 -35.970  1.00  0.00
H
ATOM   9747 1HG2 THR X 616      25.320  26.622 -33.002  1.00  0.00
H
ATOM   9748 2HG2 THR X 616      25.700  25.054 -33.753  1.00  0.00
H
ATOM   9749 3HG2 THR X 616      26.985  26.262 -33.513  1.00  0.00
H
ATOM   9750  N   PRO X 617      27.220  23.732 -35.833  1.00  0.00
N
ATOM   9751  CA  PRO X 617      27.149  22.283 -35.976  1.00  0.00
C
ATOM   9752  C   PRO X 617      25.970  21.711 -35.201  1.00  0.00
C
ATOM   9753  O   PRO X 617      25.571  22.250 -34.169  1.00  0.00
O
ATOM   9754  CB  PRO X 617      28.497  21.785 -35.427  1.00  0.00
C
ATOM   9755  CG  PRO X 617      29.435  22.950 -35.589  1.00  0.00
C
ATOM   9756  CD  PRO X 617      28.457  24.165 -35.171  1.00  0.00
C
ATOM   9757  HA  PRO X 617      27.043  22.039 -36.936  1.00  0.00
H
ATOM   9758 1HB  PRO X 617      28.305  21.724 -34.536  1.00  0.00
H
ATOM   9759 2HB  PRO X 617      28.710  21.192 -36.021  1.00  0.00
H
ATOM   9760 1HG  PRO X 617      29.259  23.521 -34.989  1.00  0.00
H
ATOM   9761 2HG  PRO X 617      30.246  22.616 -35.920  1.00  0.00
H
ATOM   9762 1HD  PRO X 617      28.161  24.803 -34.527  1.00  0.00
H
ATOM   9763 2HD  PRO X 617      28.987  24.482 -35.896  1.00  0.00
H
ATOM   9764  N   THR X 618      25.410  20.617 -35.709  1.00  0.00
N
ATOM   9765  CA  THR X 618      24.318  19.930 -35.026  1.00  0.00
C
ATOM   9766  C   THR X 618      24.697  19.572 -33.598  1.00  0.00
C
ATOM   9767  O   THR X 618      23.885  19.692 -32.680  1.00  0.00
O
ATOM   9768  CB  THR X 618      23.901  18.648 -35.772  1.00  0.00
C
ATOM   9769  CG2 THR X 618      22.803  17.922 -35.013  1.00  0.00
C
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ATOM   9770  OG1 THR X 618      23.428  18.988 -37.083  1.00  0.00
O
ATOM   9771  H   THR X 618      25.749  20.252 -36.588  1.00  0.00
H
ATOM   9772  HA  THR X 618      23.453  20.591 -34.958  1.00  0.00
H
ATOM   9773  HB  THR X 618      24.770  17.997 -35.868  1.00  0.00
H
ATOM   9774  HG1 THR X 618      23.169  18.187 -37.546  1.00  0.00
H
ATOM   9775 1HG2 THR X 618      22.524  17.018 -35.554  1.00  0.00
H
ATOM   9776 2HG2 THR X 618      23.164  17.653 -34.019  1.00  0.00
H
ATOM   9777 3HG2 THR X 618      21.934  18.573 -34.918  1.00  0.00
H
ATOM   9778  N   GLU X 619      25.938  19.135 -33.411  1.00  0.00
N
ATOM   9779  CA  GLU X 619      26.430  18.759 -32.091  1.00  0.00
C
ATOM   9780  C   GLU X 619      27.054  19.950 -31.378  1.00  0.00
C
ATOM   9781  O   GLU X 619      28.267  20.150 -31.425  1.00  0.00
O
ATOM   9782  CB  GLU X 619      27.446  17.620 -32.203  1.00  0.00
C
ATOM   9783  CG  GLU X 619      26.889  16.336 -32.802  1.00  0.00
C
ATOM   9784  CD  GLU X 619      27.973  15.313 -33.004  1.00  0.00
C
ATOM   9785  OE1 GLU X 619      29.115  15.631 -32.773  1.00  0.00
O
ATOM   9786  OE2 GLU X 619      27.649  14.182 -33.281  1.00  0.00
O
ATOM   9787  H   GLU X 619      26.557  19.062 -34.206  1.00  0.00
H
ATOM   9788  HA  GLU X 619      25.599  18.424 -31.468  1.00  0.00
H
ATOM   9789 1HB  GLU X 619      28.266  17.984 -32.823  1.00  0.00
H
ATOM   9790 2HB  GLU X 619      27.814  17.420 -31.196  1.00  0.00
H
ATOM   9791 1HG  GLU X 619      26.083  15.898 -32.214  1.00  0.00
H
ATOM   9792 2HG  GLU X 619      26.502  16.652 -33.769  1.00  0.00
H
ATOM   9793  N   ILE X 620      26.217  20.741 -30.721  1.00  0.00
N
ATOM   9794  CA  ILE X 620      26.681  21.931 -30.013  1.00  0.00
C
ATOM   9795  C   ILE X 620      27.172  21.581 -28.611  1.00  0.00
C
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ATOM   9796  O   ILE X 620      26.426  21.024 -27.804  1.00  0.00
O
ATOM   9797  CB  ILE X 620      25.573  22.995 -29.909  1.00  0.00
C
ATOM   9798  CG1 ILE X 620      25.086  23.398 -31.304  1.00  0.00
C
ATOM   9799  CG2 ILE X 620      26.074  24.211 -29.145  1.00  0.00
C
ATOM   9800  CD1 ILE X 620      23.840  24.252 -31.293  1.00  0.00
C
ATOM   9801  H   ILE X 620      25.233  20.516 -30.710  1.00  0.00
H
ATOM   9802  HA  ILE X 620      27.550  22.360 -30.510  1.00  0.00
H
ATOM   9803  HB  ILE X 620      24.717  22.567 -29.389  1.00  0.00
H
ATOM   9804 1HG1 ILE X 620      25.897  23.942 -31.785  1.00  0.00
H
ATOM   9805 2HG1 ILE X 620      24.890  22.478 -31.855  1.00  0.00
H
ATOM   9806 1HG2 ILE X 620      25.279  24.954 -29.082  1.00  0.00
H
ATOM   9807 2HG2 ILE X 620      26.373  23.914 -28.141  1.00  0.00
H
ATOM   9808 3HG2 ILE X 620      26.929  24.641 -29.665  1.00  0.00
H
ATOM   9809 1HD1 ILE X 620      23.557  24.496 -32.317  1.00  0.00
H
ATOM   9810 2HD1 ILE X 620      23.028  23.706 -30.812  1.00  0.00
H
ATOM   9811 3HD1 ILE X 620      24.035  25.172 -30.742  1.00  0.00
H
ATOM   9812  N   PRO X 621      28.426  21.913 -28.329  1.00  0.00
N
ATOM   9813  CA  PRO X 621      29.009  21.655 -27.019  1.00  0.00
C
ATOM   9814  C   PRO X 621      28.196  22.314 -25.915  1.00  0.00
C
ATOM   9815  O   PRO X 621      27.642  23.399 -26.099  1.00  0.00
O
ATOM   9816  CB  PRO X 621      30.429  22.239 -27.118  1.00  0.00
C
ATOM   9817  CG  PRO X 621      30.755  22.220 -28.586  1.00  0.00
C
ATOM   9818  CD  PRO X 621      29.331  22.676 -29.201  1.00  0.00
C
ATOM   9819  HA  PRO X 621      29.038  20.675 -26.844  1.00  0.00
H
ATOM   9820 1HB  PRO X 621      30.268  23.113 -26.896  1.00  0.00
H
ATOM   9821 2HB  PRO X 621      30.892  21.616 -26.737  1.00  0.00
H
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ATOM   9822 1HG  PRO X 621      30.334  22.851 -28.964  1.00  0.00
H
ATOM   9823 2HG  PRO X 621      31.635  21.911 -28.675  1.00  0.00
H
ATOM   9824 1HD  PRO X 621      28.772  23.350 -29.579  1.00  0.00
H
ATOM   9825 2HD  PRO X 621      29.677  22.008 -29.785  1.00  0.00
H
ATOM   9826  N   CYS X 622      28.126  21.654 -24.763  1.00  0.00
N
ATOM   9827  CA  CYS X 622      27.379  22.173 -23.624  1.00  0.00
C
ATOM   9828  C   CYS X 622      27.886  23.552 -23.218  1.00  0.00
C
ATOM   9829  O   CYS X 622      27.126  24.378 -22.710  1.00  0.00
O
ATOM   9830  CB  CYS X 622      27.675  21.146 -22.530  1.00  0.00
C
ATOM   9831  SG  CYS X 622      27.020  19.492 -22.856  1.00  0.00
S
ATOM   9832  H   CYS X 622      28.605  20.769 -24.675  1.00  0.00
H
ATOM   9833  HA  CYS X 622      26.302  22.205 -23.790  1.00  0.00
H
ATOM   9834 1HB  CYS X 622      28.753  21.027 -22.405  1.00  0.00
H
ATOM   9835 2HB  CYS X 622      27.233  21.465 -21.585  1.00  0.00
H
ATOM   9836  HG  CYS X 622      27.469  18.940 -21.734  1.00  0.00
H
ATOM   9837  N   GLY X 623      29.170  23.798 -23.447  1.00  0.00
N
ATOM   9838  CA  GLY X 623      29.780  25.076 -23.101  1.00  0.00
C
ATOM   9839  C   GLY X 623      29.193  26.209 -23.932  1.00  0.00
C
ATOM   9840  O   GLY X 623      29.149  27.355 -23.489  1.00  0.00
O
ATOM   9841  H   GLY X 623      29.740  23.081 -23.873  1.00  0.00
H
ATOM   9842 1HA  GLY X 623      29.603  25.280 -22.045  1.00  0.00
H
ATOM   9843 2HA  GLY X 623      30.853  25.020 -23.285  1.00  0.00
H
ATOM   9844  N   ASP X 624      28.742  25.882 -25.138  1.00  0.00
N
ATOM   9845  CA  ASP X 624      28.155  26.870 -26.032  1.00  0.00
C
ATOM   9846  C   ASP X 624      26.666  27.042 -25.762  1.00  0.00
C
ATOM   9847  O   ASP X 624      26.127  28.143 -25.884  1.00  0.00
O
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ATOM   9848  CB  ASP X 624      28.382  26.474 -27.493  1.00  0.00
C
ATOM   9849  CG  ASP X 624      29.816  26.638 -27.973  1.00  0.00
C
ATOM   9850  OD1 ASP X 624      30.576  27.297 -27.304  1.00  0.00
O
ATOM   9851  OD2 ASP X 624      30.184  25.980 -28.918  1.00  0.00
O
ATOM   9852  H   ASP X 624      28.808  24.921 -25.443  1.00  0.00
H
ATOM   9853  HA  ASP X 624      28.616  27.843 -25.861  1.00  0.00
H
ATOM   9854 1HB  ASP X 624      28.033  25.468 -27.730  1.00  0.00
H
ATOM   9855 2HB  ASP X 624      27.745  27.206 -27.991  1.00  0.00
H
ATOM   9856  N   ILE X 625      26.005  25.952 -25.387  1.00  0.00
N
ATOM   9857  CA  ILE X 625      24.577  25.979 -25.104  1.00  0.00
C
ATOM   9858  C   ILE X 625      24.274  26.871 -23.906  1.00  0.00
C
ATOM   9859  O   ILE X 625      23.389  27.726 -23.966  1.00  0.00
O
ATOM   9860  CB  ILE X 625      24.027  24.566 -24.835  1.00  0.00
C
ATOM   9861  CG1 ILE X 625      24.122  23.707 -26.100  1.00  0.00
C
ATOM   9862  CG2 ILE X 625      22.591  24.640 -24.344  1.00  0.00
C
ATOM   9863  CD1 ILE X 625      23.226  24.177 -27.223  1.00  0.00
C
ATOM   9864  H   ILE X 625      26.507  25.080 -25.296  1.00  0.00
H
ATOM   9865  HA  ILE X 625      24.030  26.429 -25.931  1.00  0.00
H
ATOM   9866  HB  ILE X 625      24.645  24.082 -24.080  1.00  0.00
H
ATOM   9867 1HG1 ILE X 625      25.158  23.728 -26.429  1.00  0.00
H
ATOM   9868 2HG1 ILE X 625      23.849  22.690 -25.819  1.00  0.00
H
ATOM   9869 1HG2 ILE X 625      22.216  23.632 -24.159  1.00  0.00
H
ATOM   9870 2HG2 ILE X 625      22.551  25.216 -23.420  1.00  0.00
H
ATOM   9871 3HG2 ILE X 625      21.971  25.124 -25.098  1.00  0.00
H
ATOM   9872 1HD1 ILE X 625      23.346  23.518 -28.085  1.00  0.00
H
ATOM   9873 2HD1 ILE X 625      22.185  24.156 -26.896  1.00  0.00
H
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ATOM   9874 3HD1 ILE X 625      23.497  25.193 -27.505  1.00  0.00
H
ATOM   9875  N   ARG X 626      25.008  26.665 -22.818  1.00  0.00
N
ATOM   9876  CA  ARG X 626      24.819  27.448 -21.606  1.00  0.00
C
ATOM   9877  C   ARG X 626      23.391  27.323 -21.083  1.00  0.00
C
ATOM   9878  O   ARG X 626      22.745  28.324 -20.771  1.00  0.00
O
ATOM   9879  CB  ARG X 626      25.215  28.906 -21.796  1.00  0.00
C
ATOM   9880  CG  ARG X 626      26.658  29.124 -22.226  1.00  0.00
C
ATOM   9881  CD  ARG X 626      27.017  30.546 -22.462  1.00  0.00
C
ATOM   9882  NE  ARG X 626      27.117  31.350 -21.254  1.00  0.00
N
ATOM   9883  CZ  ARG X 626      28.208  31.414 -20.465  1.00  0.00
C
ATOM   9884  NH1 ARG X 626      29.276  30.698 -20.730  1.00  0.00
N
ATOM   9885  NH2 ARG X 626      28.165  32.200 -19.403  1.00  0.00
N
ATOM   9886  H   ARG X 626      25.717  25.946 -22.832  1.00  0.00
H
ATOM   9887  HA  ARG X 626      25.471  27.071 -20.818  1.00  0.00
H
ATOM   9888 1HB  ARG X 626      24.549  29.320 -22.550  1.00  0.00
H
ATOM   9889 2HB  ARG X 626      25.045  29.408 -20.845  1.00  0.00
H
ATOM   9890 1HG  ARG X 626      27.315  28.737 -21.447  1.00  0.00
H
ATOM   9891 2HG  ARG X 626      26.830  28.576 -23.153  1.00  0.00
H
ATOM   9892 1HD  ARG X 626      27.983  30.589 -22.963  1.00  0.00
H
ATOM   9893 2HD  ARG X 626      26.258  31.002 -23.096  1.00  0.00
H
ATOM   9894  HE  ARG X 626      26.432  31.959 -20.827  1.00  0.00
H
ATOM   9895 1HH1 ARG X 626      29.287  30.088 -21.535  1.00  0.00
H
ATOM   9896 2HH1 ARG X 626      30.084  30.758 -20.125  1.00  0.00
H
ATOM   9897 1HH2 ARG X 626      27.327  32.731 -19.204  1.00  0.00
H
ATOM   9898 2HH2 ARG X 626      28.967  32.265 -18.795  1.00  0.00
H
ATOM   9899  N   LEU X 627      22.908  26.091 -20.994  1.00  0.00
N
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ATOM   9900  CA  LEU X 627      21.571  25.828 -20.474  1.00  0.00
C
ATOM   9901  C   LEU X 627      21.623  24.933 -19.245  1.00  0.00
C
ATOM   9902  O   LEU X 627      22.379  23.957 -19.206  1.00  0.00
O
ATOM   9903  CB  LEU X 627      20.695  25.189 -21.561  1.00  0.00
C
ATOM   9904  CG  LEU X 627      19.230  24.960 -21.166  1.00  0.00
C
ATOM   9905  CD1 LEU X 627      18.526  26.295 -20.972  1.00  0.00
C
ATOM   9906  CD2 LEU X 627      18.538  24.136 -22.243  1.00  0.00
C
ATOM   9907  H   LEU X 627      23.481  25.315 -21.294  1.00  0.00
H
ATOM   9908  HA  LEU X 627      21.113  26.764 -20.155  1.00  0.00
H
ATOM   9909 1HB  LEU X 627      20.760  25.969 -22.319  1.00  0.00
H
ATOM   9910 2HB  LEU X 627      21.134  24.270 -21.945  1.00  0.00
H
ATOM   9911  HG  LEU X 627      19.231  24.375 -20.247  1.00  0.00
H
ATOM   9912 1HD1 LEU X 627      17.486  26.122 -20.692  1.00  0.00
H
ATOM   9913 2HD1 LEU X 627      19.023  26.858 -20.182  1.00  0.00
H
ATOM   9914 3HD1 LEU X 627      18.561  26.864 -21.901  1.00  0.00
H
ATOM   9915 1HD2 LEU X 627      17.497  23.973 -21.961  1.00  0.00
H
ATOM   9916 2HD2 LEU X 627      18.578  24.670 -23.192  1.00  0.00
H
ATOM   9917 3HD2 LEU X 627      19.041  23.175 -22.345  1.00  0.00
H
ATOM   9918  N   ASN X 628      20.817  25.261 -18.243  1.00  0.00
N
ATOM   9919  CA  ASN X 628      20.744  24.466 -17.024  1.00  0.00
C
ATOM   9920  C   ASN X 628      20.431  23.007 -17.335  1.00  0.00
C
ATOM   9921  O   ASN X 628      21.031  22.096 -16.763  1.00  0.00
O
ATOM   9922  CB  ASN X 628      19.720  25.029 -16.056  1.00  0.00
C
ATOM   9923  CG  ASN X 628      20.156  26.302 -15.385  1.00  0.00
C
ATOM   9924  ND2 ASN X 628      19.213  26.964 -14.764  1.00  0.00
N
ATOM   9925  OD1 ASN X 628      21.345  26.642 -15.367  1.00  0.00
O
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ATOM   9926  H   ASN X 628      20.237  26.084 -18.327  1.00  0.00
H
ATOM   9927  HA  ASN X 628      21.711  24.473 -16.519  1.00  0.00
H
ATOM   9928 1HB  ASN X 628      18.670  25.114 -16.340  1.00  0.00
H
ATOM   9929 2HB  ASN X 628      19.838  24.203 -15.353  1.00  0.00
H
ATOM   9930 1HD2 ASN X 628      19.430  27.821 -14.295  1.00  0.00
H
ATOM   9931 2HD2 ASN X 628      18.277  26.614 -14.758  1.00  0.00
H
ATOM   9932  N   ALA X 629      19.485  22.791 -18.245  1.00  0.00
N
ATOM   9933  CA  ALA X 629      19.083  21.442 -18.628  1.00  0.00
C
ATOM   9934  C   ALA X 629      20.227  20.703 -19.317  1.00  0.00
C
ATOM   9935  O   ALA X 629      20.460  19.522 -19.055  1.00  0.00
O
ATOM   9936  CB  ALA X 629      17.858  21.490 -19.529  1.00  0.00
C
ATOM   9937  H   ALA X 629      19.034  23.582 -18.682  1.00  0.00
H
ATOM   9938  HA  ALA X 629      18.829  20.884 -17.726  1.00  0.00
H
ATOM   9939 1HB  ALA X 629      17.570  20.476 -19.805  1.00  0.00
H
ATOM   9940 2HB  ALA X 629      17.034  21.968 -18.998  1.00  0.00
H
ATOM   9941 3HB  ALA X 629      18.089  22.059 -20.428  1.00  0.00
H
ATOM   9942  N   VAL X 630      20.935  21.404 -20.195  1.00  0.00
N
ATOM   9943  CA  VAL X 630      22.018  20.801 -20.963  1.00  0.00
C
ATOM   9944  C   VAL X 630      23.336  20.872 -20.206  1.00  0.00
C
ATOM   9945  O   VAL X 630      24.299  20.185 -20.550  1.00  0.00
O
ATOM   9946  CB  VAL X 630      22.186  21.484 -22.333  1.00  0.00
C
ATOM   9947  CG1 VAL X 630      23.491  21.052 -22.986  1.00  0.00
C
ATOM   9948  CG2 VAL X 630      21.008  21.161 -23.239  1.00  0.00
C
ATOM   9949  OXT VAL X 630      23.447  21.604 -19.261  1.00  0.00
O
ATOM   9950  H   VAL X 630      20.718  22.380 -20.334  1.00  0.00
H
ATOM   9951  HA  VAL X 630      21.845  19.736 -21.123  1.00  0.00
H
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ATOM   9952  HB  VAL X 630      22.191  22.564 -22.192  1.00  0.00
H
ATOM   9953 1HG1 VAL X 630      23.594  21.544 -23.953  1.00  0.00
H
ATOM   9954 2HG1 VAL X 630      24.329  21.331 -22.346  1.00  0.00
H
ATOM   9955 3HG1 VAL X 630      23.487  19.971 -23.129  1.00  0.00
H
ATOM   9956 1HG2 VAL X 630      21.142  21.653 -24.202  1.00  0.00
H
ATOM   9957 2HG2 VAL X 630      20.947  20.083 -23.385  1.00  0.00
H
ATOM   9958 3HG2 VAL X 630      20.086  21.518 -22.777  1.00  0.00
H
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S4: *S*-citalopram docked into hSERT model.

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HETATM    1  C1  LG1 A   1      -2.073  -4.417  -0.862  1.00  0.00
C
HETATM    2  N1  LG1 A   1      -7.190  -6.066  -0.674  1.00  0.00
N
HETATM    3  O1  LG1 A   1      -0.369  -4.573   0.706  1.00  0.00
O
HETATM    4  C2  LG1 A   1      -2.862  -4.331  -2.003  1.00  0.00
C
HETATM    5  N2  LG1 A   1      -0.885  -8.467  -1.188  1.00  0.00
N
HETATM    6  C3  LG1 A   1      -4.191  -4.764  -1.946  1.00  0.00
C
HETATM    7  C4  LG1 A   1      -4.725  -5.270  -0.750  1.00  0.00
C
HETATM    8  C5  LG1 A   1      -6.089  -5.705  -0.714  1.00  0.00
C
HETATM    9  C6  LG1 A   1      -3.934  -5.339   0.400  1.00  0.00
C
HETATM   10  C7  LG1 A   1      -2.616  -4.911   0.320  1.00  0.00
C
HETATM   11  C8  LG1 A   1      -1.601  -4.858   1.396  1.00  0.00
C
HETATM   12  C9  LG1 A   1       0.363  -4.785  -1.550  1.00  0.00
C
HETATM   13  C10 LG1 A   1       0.332  -6.319  -1.619  1.00  0.00
C
HETATM   14  C11 LG1 A   1      -0.854  -6.973  -0.920  1.00  0.00
C
HETATM   15  C12 LG1 A   1      -0.636  -4.023  -0.632  1.00  0.00
C
HETATM   16  C13 LG1 A   1       0.132   0.235  -0.199  1.00  0.00
C
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HETATM   17  C14 LG1 A   1       0.775  -0.467  -1.208  1.00  0.00
C
HETATM   18  C15 LG1 A   1       0.533  -1.836  -1.366  1.00  0.00
C
HETATM   19  C16 LG1 A   1      -0.347  -2.522  -0.507  1.00  0.00
C
HETATM   20  C17 LG1 A   1      -0.999  -1.769   0.496  1.00  0.00
C
HETATM   21  C18 LG1 A   1      -0.758  -0.403   0.652  1.00  0.00
C
HETATM   22  C19 LG1 A   1      -2.120  -9.096  -0.593  1.00  0.00
C
HETATM   23  C20 LG1 A   1       0.357  -9.190  -0.735  1.00  0.00
C
HETATM   24  F1  LG1 A   1       0.368   1.544  -0.050  1.00  0.00
F
HETATM   25  H1  LG1 A   1      -2.484  -3.917  -2.931  1.00  0.00
H
HETATM   26  H2  LG1 A   1      -4.810  -4.696  -2.838  1.00  0.00
H
HETATM   27  H3  LG1 A   1      -4.333  -5.716   1.337  1.00  0.00
H
HETATM   28  H4  LG1 A   1      -1.494  -5.812   1.919  1.00  0.00
H
HETATM   29  H5  LG1 A   1      -1.806  -4.051   2.106  1.00  0.00
H
HETATM   30  H6  LG1 A   1       0.280  -4.403  -2.577  1.00  0.00
H
HETATM   31  H7  LG1 A   1       1.383  -4.502  -1.249  1.00  0.00
H
HETATM   32  H8  LG1 A   1       1.276  -6.717  -1.235  1.00  0.00
H
HETATM   33  H9  LG1 A   1       0.313  -6.595  -2.681  1.00  0.00
H
HETATM   34  H10 LG1 A   1      -0.964  -8.602  -2.206  1.00  0.00
H
HETATM   35  H11 LG1 A   1      -1.792  -6.566  -1.312  1.00  0.00
H
HETATM   36  H12 LG1 A   1      -0.821  -6.852   0.165  1.00  0.00
H
HETATM   37  H13 LG1 A   1       1.455   0.053  -1.877  1.00  0.00
H
HETATM   38  H14 LG1 A   1       1.042  -2.342  -2.181  1.00  0.00
H
HETATM   39  H15 LG1 A   1      -1.725  -2.246   1.153  1.00  0.00
H
HETATM   40  H16 LG1 A   1      -1.268   0.164   1.424  1.00  0.00
H
HETATM   41  H17 LG1 A   1      -2.994  -8.598  -1.019  1.00  0.00
H
HETATM   42  H18 LG1 A   1      -2.084  -8.970   0.494  1.00  0.00
H
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HETATM   43  H19 LG1 A   1      -2.129 -10.154  -0.866  1.00  0.00
H
HETATM   44  H20 LG1 A   1       0.497  -9.009   0.334  1.00  0.00
H
HETATM   45  H21 LG1 A   1       1.206  -8.822  -1.315  1.00  0.00
H
HETATM   46  H22 LG1 A   1       0.221 -10.257  -0.934  1.00  0.00
H
ATOM     47  N   MET X   1      23.152  -3.150  -5.682  1.00  0.00
N
ATOM     48  CA  MET X   1      24.196  -3.313  -4.676  1.00  0.00
C
ATOM     49  C   MET X   1      24.745  -4.734  -4.681  1.00  0.00
C
ATOM     50  O   MET X   1      25.896  -4.967  -4.309  1.00  0.00
O
ATOM     51  CB  MET X   1      23.656  -2.959  -3.292  1.00  0.00
C
ATOM     52  CG  MET X   1      24.710  -2.917  -2.195  1.00  0.00
C
ATOM     53  SD  MET X   1      23.999  -2.678  -0.556  1.00  0.00
S
ATOM     54  CE  MET X   1      23.313  -4.301  -0.243  1.00  0.00
C
ATOM     55 1H   MET X   1      22.229  -2.882  -5.406  1.00  0.00
H
ATOM     56 2H   MET X   1      23.264  -2.478  -6.414  1.00  0.00
H
ATOM     57 3H   MET X   1      22.890  -3.923  -6.260  1.00  0.00
H
ATOM     58  HA  MET X   1      25.035  -2.655  -4.902  1.00  0.00
H
ATOM     59 1HB  MET X   1      23.181  -1.983  -3.378  1.00  0.00
H
ATOM     60 2HB  MET X   1      22.903  -3.709  -3.043  1.00  0.00
H
ATOM     61 1HG  MET X   1      25.257  -3.860  -2.215  1.00  0.00
H
ATOM     62 2HG  MET X   1      25.394  -2.097  -2.413  1.00  0.00
H
ATOM     63 1HE  MET X   1      22.838  -4.313   0.738  1.00  0.00
H
ATOM     64 2HE  MET X   1      22.574  -4.537  -1.010  1.00  0.00
H
ATOM     65 3HE  MET X   1      24.111  -5.045  -0.268  1.00  0.00
H
ATOM     66  N   GLU X   2      23.916  -5.684  -5.103  1.00  0.00
N
ATOM     67  CA  GLU X   2      24.267  -7.097  -5.029  1.00  0.00
C
ATOM     68  C   GLU X   2      24.598  -7.506  -3.600  1.00  0.00
C
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ATOM     69  O   GLU X   2      25.576  -7.038  -3.020  1.00  0.00
O
ATOM     70  CB  GLU X   2      25.449  -7.404  -5.952  1.00  0.00
C
ATOM     71  CG  GLU X   2      25.839  -8.874  -6.004  1.00  0.00
C
ATOM     72  CD  GLU X   2      26.975  -9.105  -6.961  1.00  0.00
C
ATOM     73  OE1 GLU X   2      27.448  -8.151  -7.532  1.00  0.00
O
ATOM     74  OE2 GLU X   2      27.444 -10.215  -7.038  1.00  0.00
O
ATOM     75  H   GLU X   2      23.019  -5.420  -5.487  1.00  0.00
H
ATOM     76  HA  GLU X   2      23.417  -7.706  -5.337  1.00  0.00
H
ATOM     77 1HB  GLU X   2      25.168  -7.068  -6.950  1.00  0.00
H
ATOM     78 2HB  GLU X   2      26.294  -6.817  -5.595  1.00  0.00
H
ATOM     79 1HG  GLU X   2      26.096  -9.289  -5.030  1.00  0.00
H
ATOM     80 2HG  GLU X   2      24.942  -9.365  -6.380  1.00  0.00
H
ATOM     81  N   THR X   3      23.775  -8.386  -3.038  1.00  0.00
N
ATOM     82  CA  THR X   3      24.010  -8.904  -1.697  1.00  0.00
C
ATOM     83  C   THR X   3      24.973 -10.085  -1.721  1.00  0.00
C
ATOM     84  O   THR X   3      25.212 -10.679  -2.771  1.00  0.00
O
ATOM     85  CB  THR X   3      22.697  -9.341  -1.022  1.00  0.00
C
ATOM     86  CG2 THR X   3      21.712  -8.183  -0.969  1.00  0.00
C
ATOM     87  OG1 THR X   3      22.116 -10.425  -1.759  1.00  0.00
O
ATOM     88  H   THR X   3      22.966  -8.703  -3.553  1.00  0.00
H
ATOM     89  HA  THR X   3      24.479  -8.136  -1.082  1.00  0.00
H
ATOM     90  HB  THR X   3      22.915  -9.679  -0.009  1.00  0.00
H
ATOM     91  HG1 THR X   3      21.297 -10.696  -1.337  1.00  0.00
H
ATOM     92 1HG2 THR X   3      20.792  -8.511  -0.488  1.00  0.00
H
ATOM     93 2HG2 THR X   3      22.148  -7.362  -0.399  1.00  0.00
H
ATOM     94 3HG2 THR X   3      21.494  -7.846  -1.982  1.00  0.00
H
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ATOM     95  N   THR X   4      25.519 -10.421  -0.557  1.00  0.00
N
ATOM     96  CA  THR X   4      26.429 -11.553  -0.438  1.00  0.00
C
ATOM     97  C   THR X   4      25.860 -12.620   0.489  1.00  0.00
C
ATOM     98  O   THR X   4      25.077 -12.318   1.390  1.00  0.00
O
ATOM     99  CB  THR X   4      27.809 -11.117   0.084  1.00  0.00
C
ATOM    100  CG2 THR X   4      28.463 -10.144  -0.887  1.00  0.00
C
ATOM    101  OG1 THR X   4      27.662 -10.484   1.362  1.00  0.00
O
ATOM    102  H   THR X   4      25.298  -9.879   0.266  1.00  0.00
H
ATOM    103  HA  THR X   4      26.557 -12.026  -1.412  1.00  0.00
H
ATOM    104  HB  THR X   4      28.442 -11.997   0.195  1.00  0.00
H
ATOM    105  HG1 THR X   4      27.096  -9.713   1.273  1.00  0.00
H
ATOM    106 1HG2 THR X   4      29.439  -9.848  -0.500  1.00  0.00
H
ATOM    107 2HG2 THR X   4      28.587 -10.626  -1.856  1.00  0.00
H
ATOM    108 3HG2 THR X   4      27.833  -9.263  -0.997  1.00  0.00
H
ATOM    109  N   PRO X   5      26.258 -13.867   0.266  1.00  0.00
N
ATOM    110  CA  PRO X   5      25.865 -14.966   1.139  1.00  0.00
C
ATOM    111  C   PRO X   5      26.233 -14.676   2.588  1.00  0.00
C
ATOM    112  O   PRO X   5      27.358 -14.278   2.885  1.00  0.00
O
ATOM    113  CB  PRO X   5      26.627 -16.180   0.581  1.00  0.00
C
ATOM    114  CG  PRO X   5      26.849 -15.864  -0.873  1.00  0.00
C
ATOM    115  CD  PRO X   5      27.257 -14.278  -0.730  1.00  0.00
C
ATOM    116  HA  PRO X   5      24.881 -15.110   1.087  1.00  0.00
H
ATOM    117 1HB  PRO X   5      27.435 -16.080   0.998  1.00  0.00
H
ATOM    118 2HB  PRO X   5      26.019 -16.794   0.627  1.00  0.00
H
ATOM    119 1HG  PRO X   5      27.469 -15.290  -0.932  1.00  0.00
H
ATOM    120 2HG  PRO X   5      26.665 -16.643  -1.361  1.00  0.00
H
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ATOM    121 1HD  PRO X   5      27.909 -13.583  -0.701  1.00  0.00
H
ATOM    122 2HD  PRO X   5      26.740 -14.368  -1.525  1.00  0.00
H
ATOM    123  N   LEU X   6      25.275 -14.874   3.488  1.00  0.00
N
ATOM    124  CA  LEU X   6      25.496 -14.634   4.906  1.00  0.00
C
ATOM    125  C   LEU X   6      26.557 -15.573   5.466  1.00  0.00
C
ATOM    126  O   LEU X   6      27.225 -15.257   6.452  1.00  0.00
O
ATOM    127  CB  LEU X   6      24.182 -14.792   5.682  1.00  0.00
C
ATOM    128  CG  LEU X   6      24.240 -14.371   7.156  1.00  0.00
C
ATOM    129  CD1 LEU X   6      24.661 -12.911   7.266  1.00  0.00
C
ATOM    130  CD2 LEU X   6      22.880 -14.591   7.802  1.00  0.00
C
ATOM    131  H   LEU X   6      24.370 -15.200   3.179  1.00  0.00
H
ATOM    132  HA  LEU X   6      25.874 -13.622   5.051  1.00  0.00
H
ATOM    133 1HB  LEU X   6      23.560 -14.098   5.119  1.00  0.00
H
ATOM    134 2HB  LEU X   6      23.778 -15.801   5.590  1.00  0.00
H
ATOM    135  HG  LEU X   6      24.954 -15.028   7.653  1.00  0.00
H
ATOM    136 1HD1 LEU X   6      24.699 -12.622   8.316  1.00  0.00
H
ATOM    137 2HD1 LEU X   6      25.647 -12.783   6.819  1.00  0.00
H
ATOM    138 3HD1 LEU X   6      23.939 -12.284   6.743  1.00  0.00
H
ATOM    139 1HD2 LEU X   6      22.922 -14.291   8.849  1.00  0.00
H
ATOM    140 2HD2 LEU X   6      22.131 -13.993   7.282  1.00  0.00
H
ATOM    141 3HD2 LEU X   6      22.611 -15.644   7.737  1.00  0.00
H
ATOM    142  N   ASN X   7      26.714 -16.729   4.830  1.00  0.00
N
ATOM    143  CA  ASN X   7      27.667 -17.732   5.287  1.00  0.00
C
ATOM    144  C   ASN X   7      29.097 -17.320   4.956  1.00  0.00
C
ATOM    145  O   ASN X   7      30.055 -17.910   5.457  1.00  0.00
O
ATOM    146  CB  ASN X   7      27.362 -19.097   4.697  1.00  0.00
C
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ATOM    147  CG  ASN X   7      26.133 -19.745   5.272  1.00  0.00
C
ATOM    148  ND2 ASN X   7      25.635 -20.732   4.573  1.00  0.00
N
ATOM    149  OD1 ASN X   7      25.684 -19.403   6.373  1.00  0.00
O
ATOM    150  H   ASN X   7      26.158 -16.918   4.008  1.00  0.00
H
ATOM    151  HA  ASN X   7      27.613 -17.825   6.372  1.00  0.00
H
ATOM    152 1HB  ASN X   7      27.378 -19.255   3.618  1.00  0.00
H
ATOM    153 2HB  ASN X   7      28.243 -19.557   5.143  1.00  0.00
H
ATOM    154 1HD2 ASN X   7      24.818 -21.210   4.895  1.00  0.00
H
ATOM    155 2HD2 ASN X   7      26.073 -21.008   3.717  1.00  0.00
H
ATOM    156  N   SER X   8      29.235 -16.303   4.113  1.00  0.00
N
ATOM    157  CA  SER X   8      30.547 -15.839   3.678  1.00  0.00
C
ATOM    158  C   SER X   8      31.359 -15.306   4.855  1.00  0.00
C
ATOM    159  O   SER X   8      30.819 -14.660   5.751  1.00  0.00
O
ATOM    160  CB  SER X   8      30.395 -14.769   2.613  1.00  0.00
C
ATOM    161  OG  SER X   8      31.634 -14.253   2.208  1.00  0.00
O
ATOM    162  H   SER X   8      28.409 -15.839   3.763  1.00  0.00
H
ATOM    163  HA  SER X   8      31.120 -16.598   3.144  1.00  0.00
H
ATOM    164 1HB  SER X   8      29.894 -15.206   1.751  1.00  0.00
H
ATOM    165 2HB  SER X   8      29.789 -13.959   3.015  1.00  0.00
H
ATOM    166  HG  SER X   8      32.171 -14.964   1.847  1.00  0.00
H
ATOM    167  N   GLN X   9      32.658 -15.588   4.842  1.00  0.00
N
ATOM    168  CA  GLN X   9      33.565 -15.054   5.854  1.00  0.00
C
ATOM    169  C   GLN X   9      33.437 -13.541   5.962  1.00  0.00
C
ATOM    170  O   GLN X   9      33.638 -12.966   7.031  1.00  0.00
O
ATOM    171  CB  GLN X   9      35.013 -15.431   5.528  1.00  0.00
C
ATOM    172  CG  GLN X   9      35.340 -16.897   5.749  1.00  0.00
C
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ATOM    173  CD  GLN X   9      36.753 -17.246   5.320  1.00  0.00
C
ATOM    174  NE2 GLN X   9      37.142 -18.498   5.528  1.00  0.00
N
ATOM    175  OE1 GLN X   9      37.485 -16.398   4.801  1.00  0.00
O
ATOM    176  H   GLN X   9      33.027 -16.185   4.116  1.00  0.00
H
ATOM    177  HA  GLN X   9      33.301 -15.459   6.831  1.00  0.00
H
ATOM    178 1HB  GLN X   9      35.178 -15.168   4.483  1.00  0.00
H
ATOM    179 2HB  GLN X   9      35.649 -14.812   6.162  1.00  0.00
H
ATOM    180 1HG  GLN X   9      35.138 -17.412   6.686  1.00  0.00
H
ATOM    181 2HG  GLN X   9      34.649 -17.255   4.983  1.00  0.00
H
ATOM    182 1HE2 GLN X   9      38.063 -18.787   5.266  1.00  0.00
H
ATOM    183 2HE2 GLN X   9      36.514 -19.153   5.950  1.00  0.00
H
ATOM    184  N   LYS X  10      33.102 -12.898   4.848  1.00  0.00
N
ATOM    185  CA  LYS X  10      32.962 -11.446   4.813  1.00  0.00
C
ATOM    186  C   LYS X  10      31.848 -10.981   5.743  1.00  0.00
C
ATOM    187  O   LYS X  10      31.927  -9.899   6.325  1.00  0.00
O
ATOM    188  CB  LYS X  10      32.693 -10.968   3.385  1.00  0.00
C
ATOM    189  CG  LYS X  10      33.876 -11.115   2.439  1.00  0.00
C
ATOM    190  CD  LYS X  10      33.531 -10.627   1.039  1.00  0.00
C
ATOM    191  CE  LYS X  10      34.707 -10.788   0.089  1.00  0.00
C
ATOM    192  NZ  LYS X  10      34.373 -10.344  -1.291  1.00  0.00
N
ATOM    193  H   LYS X  10      32.940 -13.429   4.003  1.00  0.00
H
ATOM    194  HA  LYS X  10      33.881 -10.978   5.169  1.00  0.00
H
ATOM    195 1HB  LYS X  10      31.852 -11.550   3.006  1.00  0.00
H
ATOM    196 2HB  LYS X  10      32.407  -9.917   3.447  1.00  0.00
H
ATOM    197 1HG  LYS X  10      34.709 -10.531   2.832  1.00  0.00
H
ATOM    198 2HG  LYS X  10      34.159 -12.166   2.397  1.00  0.00
H
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ATOM    199 1HD  LYS X  10      32.682 -11.204   0.670  1.00  0.00
H
ATOM    200 2HD  LYS X  10      33.253  -9.574   1.098  1.00  0.00
H
ATOM    201 1HE  LYS X  10      35.538 -10.194   0.470  1.00  0.00
H
ATOM    202 2HE  LYS X  10      34.992 -11.840   0.072  1.00  0.00
H
ATOM    203 1HZ  LYS X  10      35.178 -10.466  -1.889  1.00  0.00
H
ATOM    204 2HZ  LYS X  10      33.604 -10.894  -1.646  1.00  0.00
H
ATOM    205 3HZ  LYS X  10      34.111  -9.368  -1.276  1.00  0.00
H
ATOM    206  N   GLN X  11      30.810 -11.800   5.874  1.00  0.00
N
ATOM    207  CA  GLN X  11      29.694 -11.485   6.755  1.00  0.00
C
ATOM    208  C   GLN X  11      29.929 -12.018   8.159  1.00  0.00
C
ATOM    209  O   GLN X  11      29.463 -11.440   9.142  1.00  0.00
O
ATOM    210  CB  GLN X  11      28.390 -12.065   6.196  1.00  0.00
C
ATOM    211  CG  GLN X  11      27.992 -11.508   4.841  1.00  0.00
C
ATOM    212  CD  GLN X  11      27.944  -9.991   4.830  1.00  0.00
C
ATOM    213  NE2 GLN X  11      28.566  -9.388   3.823  1.00  0.00
N
ATOM    214  OE1 GLN X  11      27.353  -9.368   5.716  1.00  0.00
O
ATOM    215  H   GLN X  11      30.794 -12.663   5.350  1.00  0.00
H
ATOM    216  HA  GLN X  11      29.596 -10.404   6.848  1.00  0.00
H
ATOM    217 1HB  GLN X  11      28.531 -13.143   6.126  1.00  0.00
H
ATOM    218 2HB  GLN X  11      27.611 -11.847   6.928  1.00  0.00
H
ATOM    219 1HG  GLN X  11      28.453 -11.835   3.910  1.00  0.00
H
ATOM    220 2HG  GLN X  11      26.969 -11.884   4.890  1.00  0.00
H
ATOM    221 1HE2 GLN X  11      28.569  -8.390   3.763  1.00  0.00
H
ATOM    222 2HE2 GLN X  11      29.033  -9.932   3.125  1.00  0.00
H
ATOM    223  N   LEU X  12      30.662 -13.123   8.254  1.00  0.00
N
ATOM    224  CA  LEU X  12      30.970 -13.732   9.541  1.00  0.00
C
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ATOM    225  C   LEU X  12      31.844 -12.815  10.388  1.00  0.00
C
ATOM    226  O   LEU X  12      31.675 -12.727  11.605  1.00  0.00
O
ATOM    227  CB  LEU X  12      31.660 -15.086   9.335  1.00  0.00
C
ATOM    228  CG  LEU X  12      30.774 -16.185   8.737  1.00  0.00
C
ATOM    229  CD1 LEU X  12      31.609 -17.422   8.432  1.00  0.00
C
ATOM    230  CD2 LEU X  12      29.651 -16.519   9.709  1.00  0.00
C
ATOM    231  H   LEU X  12      31.015 -13.552   7.411  1.00  0.00
H
ATOM    232  HA  LEU X  12      30.049 -13.885  10.102  1.00  0.00
H
ATOM    233 1HB  LEU X  12      32.423 -14.789   8.617  1.00  0.00
H
ATOM    234 2HB  LEU X  12      32.139 -15.438  10.249  1.00  0.00
H
ATOM    235  HG  LEU X  12      30.321 -15.781   7.832  1.00  0.00
H
ATOM    236 1HD1 LEU X  12      30.970 -18.198   8.008  1.00  0.00
H
ATOM    237 2HD1 LEU X  12      32.391 -17.166   7.717  1.00  0.00
H
ATOM    238 3HD1 LEU X  12      32.061 -17.789   9.353  1.00  0.00
H
ATOM    239 1HD2 LEU X  12      29.021 -17.300   9.282  1.00  0.00
H
ATOM    240 2HD2 LEU X  12      30.075 -16.867  10.650  1.00  0.00
H
ATOM    241 3HD2 LEU X  12      29.050 -15.628   9.890  1.00  0.00
H
ATOM    242  N   SER X  13      32.780 -12.133   9.738  1.00  0.00
N
ATOM    243  CA  SER X  13      33.667 -11.204  10.423  1.00  0.00
C
ATOM    244  C   SER X  13      32.986  -9.859  10.654  1.00  0.00
C
ATOM    245  O   SER X  13      33.441  -9.052  11.466  1.00  0.00
O
ATOM    246  CB  SER X  13      34.944 -11.018   9.628  1.00  0.00
C
ATOM    247  OG  SER X  13      34.716 -10.372   8.407  1.00  0.00
O
ATOM    248  H   SER X  13      32.880 -12.263   8.741  1.00  0.00
H
ATOM    249  HA  SER X  13      34.053 -11.591  11.367  1.00  0.00
H
ATOM    250 1HB  SER X  13      35.641 -10.423  10.220  1.00  0.00
H
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ATOM    251 2HB  SER X  13      35.381 -11.998   9.435  1.00  0.00
H
ATOM    252  HG  SER X  13      34.336  -9.504   8.571  1.00  0.00
H
ATOM    253  N   ALA X  14      31.892  -9.625   9.938  1.00  0.00
N
ATOM    254  CA  ALA X  14      31.170  -8.362  10.030  1.00  0.00
C
ATOM    255  C   ALA X  14      30.187  -8.374  11.195  1.00  0.00
C
ATOM    256  O   ALA X  14      29.688  -7.327  11.608  1.00  0.00
O
ATOM    257  CB  ALA X  14      30.446  -8.070   8.723  1.00  0.00
C
ATOM    258  H   ALA X  14      31.552 -10.342   9.313  1.00  0.00
H
ATOM    259  HA  ALA X  14      31.886  -7.562  10.217  1.00  0.00
H
ATOM    260 1HB  ALA X  14      29.911  -7.123   8.809  1.00  0.00
H
ATOM    261 2HB  ALA X  14      31.170  -8.005   7.912  1.00  0.00
H
ATOM    262 3HB  ALA X  14      29.736  -8.868   8.514  1.00  0.00
H
ATOM    263  N   CYS X  15      29.913  -9.563  11.717  1.00  0.00
N
ATOM    264  CA  CYS X  15      28.931  -9.721  12.784  1.00  0.00
C
ATOM    265  C   CYS X  15      29.587 -10.200  14.073  1.00  0.00
C
ATOM    266  O   CYS X  15      30.727 -10.666  14.066  1.00  0.00
O
ATOM    267  CB  CYS X  15      27.997 -10.795  12.227  1.00  0.00
C
ATOM    268  SG  CYS X  15      28.666 -12.474  12.280  1.00  0.00
S
ATOM    269  H   CYS X  15      30.396 -10.379  11.367  1.00  0.00
H
ATOM    270  HA  CYS X  15      28.351  -8.819  12.976  1.00  0.00
H
ATOM    271 1HB  CYS X  15      27.069 -10.822  12.798  1.00  0.00
H
ATOM    272 2HB  CYS X  15      27.773 -10.592  11.180  1.00  0.00
H
ATOM    273  HG  CYS X  15      27.607 -13.064  11.737  1.00  0.00
H
ATOM    274  N   GLU X  16      28.862 -10.082  15.178  1.00  0.00
N
ATOM    275  CA  GLU X  16      29.340 -10.579  16.465  1.00  0.00
C
ATOM    276  C   GLU X  16      29.014 -12.056  16.640  1.00  0.00
C
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ATOM    277  O   GLU X  16      28.084 -12.575  16.020  1.00  0.00
O
ATOM    278  CB  GLU X  16      28.735  -9.768  17.611  1.00  0.00
C
ATOM    279  CG  GLU X  16      29.141  -8.301  17.626  1.00  0.00
C
ATOM    280  CD  GLU X  16      28.538  -7.578  18.799  1.00  0.00
C
ATOM    281  OE1 GLU X  16      27.774  -8.180  19.513  1.00  0.00
O
ATOM    282  OE2 GLU X  16      28.926  -6.461  19.046  1.00  0.00
O
ATOM    283  H   GLU X  16      27.957  -9.638  15.129  1.00  0.00
H
ATOM    284  HA  GLU X  16      30.426 -10.495  16.514  1.00  0.00
H
ATOM    285 1HB  GLU X  16      27.652  -9.843  17.517  1.00  0.00
H
ATOM    286 2HB  GLU X  16      29.054 -10.241  18.541  1.00  0.00
H
ATOM    287 1HG  GLU X  16      30.221  -8.150  17.623  1.00  0.00
H
ATOM    288 2HG  GLU X  16      28.718  -7.909  16.701  1.00  0.00
H
ATOM    289  N   ASP X  17      29.783 -12.732  17.487  1.00  0.00
N
ATOM    290  CA  ASP X  17      29.529 -14.134  17.804  1.00  0.00
C
ATOM    291  C   ASP X  17      28.201 -14.303  18.528  1.00  0.00
C
ATOM    292  O   ASP X  17      27.723 -13.381  19.191  1.00  0.00
O
ATOM    293  CB  ASP X  17      30.667 -14.707  18.652  1.00  0.00
C
ATOM    294  CG  ASP X  17      31.961 -14.947  17.887  1.00  0.00
C
ATOM    295  OD1 ASP X  17      31.942 -14.862  16.682  1.00  0.00
O
ATOM    296  OD2 ASP X  17      32.987 -15.057  18.516  1.00  0.00
O
ATOM    297  H   ASP X  17      30.564 -12.263  17.922  1.00  0.00
H
ATOM    298  HA  ASP X  17      29.455 -14.713  16.883  1.00  0.00
H
ATOM    299 1HB  ASP X  17      30.879 -14.122  19.547  1.00  0.00
H
ATOM    300 2HB  ASP X  17      30.230 -15.665  18.935  1.00  0.00
H
ATOM    301  N   GLY X  18      27.611 -15.487  18.404  1.00  0.00
N
ATOM    302  CA  GLY X  18      26.361 -15.797  19.085  1.00  0.00
C
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ATOM    303  C   GLY X  18      26.497 -15.623  20.594  1.00  0.00
C
ATOM    304  O   GLY X  18      25.515 -15.379  21.291  1.00  0.00
O
ATOM    305  H   GLY X  18      28.040 -16.192  17.820  1.00  0.00
H
ATOM    306 1HA  GLY X  18      25.581 -15.129  18.720  1.00  0.00
H
ATOM    307 2HA  GLY X  18      26.083 -16.829  18.871  1.00  0.00
H
ATOM    308  N   GLU X  19      27.722 -15.747  21.087  1.00  0.00
N
ATOM    309  CA  GLU X  19      27.993 -15.601  22.514  1.00  0.00
C
ATOM    310  C   GLU X  19      27.951 -14.138  22.934  1.00  0.00
C
ATOM    311  O   GLU X  19      27.747 -13.826  24.108  1.00  0.00
O
ATOM    312  CB  GLU X  19      29.350 -16.212  22.866  1.00  0.00
C
ATOM    313  CG  GLU X  19      29.413 -17.728  22.729  1.00  0.00
C
ATOM    314  CD  GLU X  19      30.789 -18.247  23.043  1.00  0.00
C
ATOM    315  OE1 GLU X  19      31.648 -17.454  23.347  1.00  0.00
O
ATOM    316  OE2 GLU X  19      30.954 -19.443  23.088  1.00  0.00
O
ATOM    317  H   GLU X  19      28.487 -15.948  20.459  1.00  0.00
H
ATOM    318  HA  GLU X  19      27.222 -16.112  23.091  1.00  0.00
H
ATOM    319 1HB  GLU X  19      30.086 -15.757  22.202  1.00  0.00
H
ATOM    320 2HB  GLU X  19      29.569 -15.932  23.896  1.00  0.00
H
ATOM    321 1HG  GLU X  19      28.680 -18.249  23.343  1.00  0.00
H
ATOM    322 2HG  GLU X  19      29.192 -17.898  21.677  1.00  0.00
H
ATOM    323  N   ASP X  20      28.143 -13.244  21.969  1.00  0.00
N
ATOM    324  CA  ASP X  20      28.141 -11.813  22.241  1.00  0.00
C
ATOM    325  C   ASP X  20      26.767 -11.206  21.986  1.00  0.00
C
ATOM    326  O   ASP X  20      26.370 -10.248  22.645  1.00  0.00
O
ATOM    327  CB  ASP X  20      29.196 -11.103  21.388  1.00  0.00
C
ATOM    328  CG  ASP X  20      30.631 -11.510  21.696  1.00  0.00
C
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ATOM    329  OD1 ASP X  20      31.025 -11.410  22.834  1.00  0.00
O
ATOM    330  OD2 ASP X  20      31.270 -12.060  20.831  1.00  0.00
O
ATOM    331  H   ASP X  20      28.295 -13.566  21.023  1.00  0.00
H
ATOM    332  HA  ASP X  20      28.368 -11.637  23.293  1.00  0.00
H
ATOM    333 1HB  ASP X  20      29.017 -11.188  20.316  1.00  0.00
H
ATOM    334 2HB  ASP X  20      29.036 -10.072  21.704  1.00  0.00
H
ATOM    335  N   CYS X  21      26.046 -11.772  21.026  1.00  0.00
N
ATOM    336  CA  CYS X  21      24.713 -11.288  20.680  1.00  0.00
C
ATOM    337  C   CYS X  21      23.692 -11.691  21.738  1.00  0.00
C
ATOM    338  O   CYS X  21      23.759 -12.787  22.292  1.00  0.00
O
ATOM    339  CB  CYS X  21      24.428 -11.998  19.357  1.00  0.00
C
ATOM    340  SG  CYS X  21      25.476 -11.466  17.980  1.00  0.00
S
ATOM    341  H   CYS X  21      26.430 -12.558  20.521  1.00  0.00
H
ATOM    342  HA  CYS X  21      24.673 -10.211  20.515  1.00  0.00
H
ATOM    343 1HB  CYS X  21      24.589 -13.071  19.461  1.00  0.00
H
ATOM    344 2HB  CYS X  21      23.400 -11.813  19.044  1.00  0.00
H
ATOM    345  HG  CYS X  21      24.936 -12.277  17.075  1.00  0.00
H
ATOM    346  N   GLN X  22      22.754 -10.794  22.014  1.00  0.00
N
ATOM    347  CA  GLN X  22      21.729 -11.045  23.024  1.00  0.00
C
ATOM    348  C   GLN X  22      20.330 -10.912  22.437  1.00  0.00
C
ATOM    349  O   GLN X  22      20.088 -10.077  21.565  1.00  0.00
O
ATOM    350  CB  GLN X  22      21.888 -10.078  24.200  1.00  0.00
C
ATOM    351  CG  GLN X  22      23.246 -10.143  24.880  1.00  0.00
C
ATOM    352  CD  GLN X  22      23.467 -11.458  25.602  1.00  0.00
C
ATOM    353  NE2 GLN X  22      24.688 -11.977  25.523  1.00  0.00
N
ATOM    354  OE1 GLN X  22      22.554 -12.000  26.230  1.00  0.00
O
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ATOM    355  H   GLN X  22      22.748  -9.917  21.513  1.00  0.00
H
ATOM    356  HA  GLN X  22      21.816 -12.069  23.386  1.00  0.00
H
ATOM    357 1HB  GLN X  22      21.721  -9.075  23.808  1.00  0.00
H
ATOM    358 2HB  GLN X  22      21.105 -10.322  24.917  1.00  0.00
H
ATOM    359 1HG  GLN X  22      24.173  -9.880  24.372  1.00  0.00
H
ATOM    360 2HG  GLN X  22      23.009  -9.379  25.620  1.00  0.00
H
ATOM    361 1HE2 GLN X  22      24.894 -12.844  25.980  1.00  0.00
H
ATOM    362 2HE2 GLN X  22      25.401 -11.503  25.005  1.00  0.00
H
ATOM    363  N   GLU X  23      19.410 -11.739  22.920  1.00  0.00
N
ATOM    364  CA  GLU X  23      18.030 -11.702  22.456  1.00  0.00
C
ATOM    365  C   GLU X  23      17.163 -10.845  23.371  1.00  0.00
C
ATOM    366  O   GLU X  23      16.508 -11.356  24.279  1.00  0.00
O
ATOM    367  CB  GLU X  23      17.456 -13.118  22.363  1.00  0.00
C
ATOM    368  CG  GLU X  23      18.176 -14.024  21.376  1.00  0.00
C
ATOM    369  CD  GLU X  23      17.603 -15.414  21.393  1.00  0.00
C
ATOM    370  OE1 GLU X  23      16.701 -15.656  22.159  1.00  0.00
O
ATOM    371  OE2 GLU X  23      17.989 -16.204  20.563  1.00  0.00
O
ATOM    372  H   GLU X  23      19.675 -12.411  23.626  1.00  0.00
H
ATOM    373  HA  GLU X  23      17.983 -11.243  21.468  1.00  0.00
H
ATOM    374 1HB  GLU X  23      17.515 -13.551  23.362  1.00  0.00
H
ATOM    375 2HB  GLU X  23      16.410 -13.021  22.072  1.00  0.00
H
ATOM    376 1HG  GLU X  23      18.170 -13.643  20.355  1.00  0.00
H
ATOM    377 2HG  GLU X  23      19.199 -14.048  21.747  1.00  0.00
H
ATOM    378  N   ASN X  24      17.167  -9.539  23.126  1.00  0.00
N
ATOM    379  CA  ASN X  24      16.437  -8.599  23.969  1.00  0.00
C
ATOM    380  C   ASN X  24      15.085  -8.249  23.363  1.00  0.00
C
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ATOM    381  O   ASN X  24      14.500  -7.215  23.683  1.00  0.00
O
ATOM    382  CB  ASN X  24      17.241  -7.337  24.221  1.00  0.00
C
ATOM    383  CG  ASN X  24      18.425  -7.545  25.125  1.00  0.00
C
ATOM    384  ND2 ASN X  24      19.368  -6.642  25.036  1.00  0.00
N
ATOM    385  OD1 ASN X  24      18.450  -8.468  25.947  1.00  0.00
O
ATOM    386  H   ASN X  24      17.690  -9.189  22.335  1.00  0.00
H
ATOM    387  HA  ASN X  24      16.231  -9.056  24.939  1.00  0.00
H
ATOM    388 1HB  ASN X  24      17.532  -6.687  23.395  1.00  0.00
H
ATOM    389 2HB  ASN X  24      16.441  -6.866  24.792  1.00  0.00
H
ATOM    390 1HD2 ASN X  24      20.186  -6.716  25.607  1.00  0.00
H
ATOM    391 2HD2 ASN X  24      19.271  -5.880  24.396  1.00  0.00
H
ATOM    392  N   GLY X  25      14.593  -9.118  22.484  1.00  0.00
N
ATOM    393  CA  GLY X  25      13.313  -8.893  21.820  1.00  0.00
C
ATOM    394  C   GLY X  25      13.503  -8.193  20.482  1.00  0.00
C
ATOM    395  O   GLY X  25      12.532  -7.891  19.786  1.00  0.00
O
ATOM    396  H   GLY X  25      15.119  -9.953  22.270  1.00  0.00
H
ATOM    397 1HA  GLY X  25      12.825  -9.854  21.653  1.00  0.00
H
ATOM    398 2HA  GLY X  25      12.684  -8.273  22.459  1.00  0.00
H
ATOM    399  N   VAL X  26      14.756  -7.934  20.125  1.00  0.00
N
ATOM    400  CA  VAL X  26      15.082  -7.354  18.829  1.00  0.00
C
ATOM    401  C   VAL X  26      15.797  -8.359  17.938  1.00  0.00
C
ATOM    402  O   VAL X  26      15.534  -8.438  16.737  1.00  0.00
O
ATOM    403  CB  VAL X  26      15.961  -6.098  18.975  1.00  0.00
C
ATOM    404  CG1 VAL X  26      16.279  -5.508  17.609  1.00  0.00
C
ATOM    405  CG2 VAL X  26      15.273  -5.064  19.853  1.00  0.00
C
ATOM    406  H   VAL X  26      15.504  -8.144  20.771  1.00  0.00
H
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ATOM    407  HA  VAL X  26      14.181  -7.084  18.278  1.00  0.00
H
ATOM    408  HB  VAL X  26      16.889  -6.371  19.478  1.00  0.00
H
ATOM    409 1HG1 VAL X  26      16.902  -4.621  17.733  1.00  0.00
H
ATOM    410 2HG1 VAL X  26      16.813  -6.244  17.010  1.00  0.00
H
ATOM    411 3HG1 VAL X  26      15.353  -5.232  17.108  1.00  0.00
H
ATOM    412 1HG2 VAL X  26      15.907  -4.184  19.947  1.00  0.00
H
ATOM    413 2HG2 VAL X  26      14.321  -4.780  19.401  1.00  0.00
H
ATOM    414 3HG2 VAL X  26      15.092  -5.488  20.841  1.00  0.00
H
ATOM    415  N   LEU X  27      16.703  -9.129  18.533  1.00  0.00
N
ATOM    416  CA  LEU X  27      17.397 -10.190  17.815  1.00  0.00
C
ATOM    417  C   LEU X  27      16.662 -11.517  17.950  1.00  0.00
C
ATOM    418  O   LEU X  27      16.700 -12.154  19.006  1.00  0.00
O
ATOM    419  CB  LEU X  27      18.837 -10.322  18.326  1.00  0.00
C
ATOM    420  CG  LEU X  27      19.759 -11.196  17.465  1.00  0.00
C
ATOM    421  CD1 LEU X  27      21.214 -10.830  17.719  1.00  0.00
C
ATOM    422  CD2 LEU X  27      19.509 -12.664  17.781  1.00  0.00
C
ATOM    423  H   LEU X  27      16.916  -8.974  19.508  1.00  0.00
H
ATOM    424  HA  LEU X  27      17.421  -9.957  16.751  1.00  0.00
H
ATOM    425 1HB  LEU X  27      19.145  -9.279  18.261  1.00  0.00
H
ATOM    426 2HB  LEU X  27      18.869 -10.645  19.366  1.00  0.00
H
ATOM    427  HG  LEU X  27      19.483 -11.029  16.424  1.00  0.00
H
ATOM    428 1HD1 LEU X  27      21.861 -11.457  17.104  1.00  0.00
H
ATOM    429 2HD1 LEU X  27      21.375  -9.782  17.464  1.00  0.00
H
ATOM    430 3HD1 LEU X  27      21.451 -10.989  18.771  1.00  0.00
H
ATOM    431 1HD2 LEU X  27      20.163 -13.285  17.169  1.00  0.00
H
ATOM    432 2HD2 LEU X  27      19.714 -12.848  18.836  1.00  0.00
H
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ATOM    433 3HD2 LEU X  27      18.469 -12.911  17.566  1.00  0.00
H
ATOM    434  N   GLN X  28      15.995 -11.932  16.880  1.00  0.00
N
ATOM    435  CA  GLN X  28      15.296 -13.213  16.860  1.00  0.00
C
ATOM    436  C   GLN X  28      15.511 -13.937  15.538  1.00  0.00
C
ATOM    437  O   GLN X  28      15.239 -13.391  14.466  1.00  0.00
O
ATOM    438  CB  GLN X  28      13.798 -13.008  17.099  1.00  0.00
C
ATOM    439  CG  GLN X  28      13.456 -12.457  18.473  1.00  0.00
C
ATOM    440  CD  GLN X  28      13.696 -13.468  19.578  1.00  0.00
C
ATOM    441  NE2 GLN X  28      14.020 -12.975  20.768  1.00  0.00
N
ATOM    442  OE1 GLN X  28      13.586 -14.678  19.366  1.00  0.00
O
ATOM    443  H   GLN X  28      15.972 -11.347  16.057  1.00  0.00
H
ATOM    444  HA  GLN X  28      15.700 -13.862  17.638  1.00  0.00
H
ATOM    445 1HB  GLN X  28      13.447 -12.323  16.328  1.00  0.00
H
ATOM    446 2HB  GLN X  28      13.322 -13.980  16.964  1.00  0.00
H
ATOM    447 1HG  GLN X  28      13.809 -11.488  18.823  1.00  0.00
H
ATOM    448 2HG  GLN X  28      12.384 -12.404  18.280  1.00  0.00
H
ATOM    449 1HE2 GLN X  28      14.191 -13.594  21.536  1.00  0.00
H
ATOM    450 2HE2 GLN X  28      14.097 -11.988  20.897  1.00  0.00
H
ATOM    451  N   LYS X  29      15.998 -15.171  15.616  1.00  0.00
N
ATOM    452  CA  LYS X  29      16.225 -15.983  14.428  1.00  0.00
C
ATOM    453  C   LYS X  29      17.089 -15.245  13.413  1.00  0.00
C
ATOM    454  O   LYS X  29      16.786 -15.229  12.220  1.00  0.00
O
ATOM    455  CB  LYS X  29      14.894 -16.385  13.791  1.00  0.00
C
ATOM    456  CG  LYS X  29      13.966 -17.167  14.712  1.00  0.00
C
ATOM    457  CD  LYS X  29      14.575 -18.504  15.105  1.00  0.00
C
ATOM    458  CE  LYS X  29      13.645 -19.288  16.022  1.00  0.00
C
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ATOM    459  NZ  LYS X  29      14.280 -20.538  16.520  1.00  0.00
N
ATOM    460  H   LYS X  29      16.216 -15.557  16.524  1.00  0.00
H
ATOM    461  HA  LYS X  29      16.769 -16.888  14.698  1.00  0.00
H
ATOM    462 1HB  LYS X  29      14.401 -15.467  13.475  1.00  0.00
H
ATOM    463 2HB  LYS X  29      15.129 -16.992  12.916  1.00  0.00
H
ATOM    464 1HG  LYS X  29      13.787 -16.570  15.609  1.00  0.00
H
ATOM    465 2HG  LYS X  29      13.023 -17.334  14.194  1.00  0.00
H
ATOM    466 1HD  LYS X  29      14.762 -19.081  14.198  1.00  0.00
H
ATOM    467 2HD  LYS X  29      15.518 -18.320  15.619  1.00  0.00
H
ATOM    468 1HE  LYS X  29      13.383 -18.654  16.867  1.00  0.00
H
ATOM    469 2HE  LYS X  29      12.744 -19.537  15.461  1.00  0.00
H
ATOM    470 1HZ  LYS X  29      13.632 -21.028  17.121  1.00  0.00
H
ATOM    471 2HZ  LYS X  29      14.523 -21.128  15.736  1.00  0.00
H
ATOM    472 3HZ  LYS X  29      15.114 -20.309  17.039  1.00  0.00
H
ATOM    473  N   VAL X  30      18.166 -14.634  13.894  1.00  0.00
N
ATOM    474  CA  VAL X  30      19.031 -13.821  13.045  1.00  0.00
C
ATOM    475  C   VAL X  30      20.177 -14.645  12.477  1.00  0.00
C
ATOM    476  O   VAL X  30      20.875 -14.207  11.562  1.00  0.00
O
ATOM    477  CB  VAL X  30      19.609 -12.618  13.814  1.00  0.00
C
ATOM    478  CG1 VAL X  30      20.904 -12.146  13.170  1.00  0.00
C
ATOM    479  CG2 VAL X  30      18.597 -11.483  13.868  1.00  0.00
C
ATOM    480  H   VAL X  30      18.392 -14.735  14.872  1.00  0.00
H
ATOM    481  HA  VAL X  30      18.494 -13.449  12.172  1.00  0.00
H
ATOM    482  HB  VAL X  30      19.804 -12.917  14.845  1.00  0.00
H
ATOM    483 1HG1 VAL X  30      21.300 -11.296  13.727  1.00  0.00
H
ATOM    484 2HG1 VAL X  30      21.633 -12.957  13.181  1.00  0.00
H
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ATOM    485 3HG1 VAL X  30      20.710 -11.846  12.142  1.00  0.00
H
ATOM    486 1HG2 VAL X  30      19.023 -10.642  14.416  1.00  0.00
H
ATOM    487 2HG2 VAL X  30      18.352 -11.169  12.854  1.00  0.00
H
ATOM    488 3HG2 VAL X  30      17.694 -11.825  14.373  1.00  0.00
H
ATOM    489  N   VAL X  31      20.365 -15.843  13.021  1.00  0.00
N
ATOM    490  CA  VAL X  31      21.460 -16.712  12.600  1.00  0.00
C
ATOM    491  C   VAL X  31      21.081 -17.514  11.362  1.00  0.00
C
ATOM    492  O   VAL X  31      19.922 -17.886  11.182  1.00  0.00
O
ATOM    493  CB  VAL X  31      21.875 -17.682  13.722  1.00  0.00
C
ATOM    494  CG1 VAL X  31      22.328 -16.909  14.953  1.00  0.00
C
ATOM    495  CG2 VAL X  31      20.727 -18.615  14.073  1.00  0.00
C
ATOM    496  H   VAL X  31      19.735 -16.160  13.744  1.00  0.00
H
ATOM    497  HA  VAL X  31      22.334 -16.132  12.300  1.00  0.00
H
ATOM    498  HB  VAL X  31      22.693 -18.307  13.365  1.00  0.00
H
ATOM    499 1HG1 VAL X  31      22.618 -17.610  15.736  1.00  0.00
H
ATOM    500 2HG1 VAL X  31      23.180 -16.282  14.695  1.00  0.00
H
ATOM    501 3HG1 VAL X  31      21.510 -16.284  15.312  1.00  0.00
H
ATOM    502 1HG2 VAL X  31      21.036 -19.293  14.866  1.00  0.00
H
ATOM    503 2HG2 VAL X  31      19.873 -18.026  14.411  1.00  0.00
H
ATOM    504 3HG2 VAL X  31      20.444 -19.191  13.192  1.00  0.00
H
ATOM    505  N   PRO X  32      22.067 -17.776  10.510  1.00  0.00
N
ATOM    506  CA  PRO X  32      21.836 -18.535   9.285  1.00  0.00
C
ATOM    507  C   PRO X  32      21.200 -19.885   9.583  1.00  0.00
C
ATOM    508  O   PRO X  32      21.430 -20.472  10.643  1.00  0.00
O
ATOM    509  CB  PRO X  32      23.235 -18.680   8.665  1.00  0.00
C
ATOM    510  CG  PRO X  32      24.031 -17.535   9.227  1.00  0.00
C
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ATOM    511  CD  PRO X  32      23.493 -17.512  10.739  1.00  0.00
C
ATOM    512  HA  PRO X  32      21.229 -18.030   8.677  1.00  0.00
H
ATOM    513 1HB  PRO X  32      23.530 -19.438   9.086  1.00  0.00
H
ATOM    514 2HB  PRO X  32      23.069 -18.503   7.835  1.00  0.00
H
ATOM    515 1HG  PRO X  32      24.230 -17.715  10.030  1.00  0.00
H
ATOM    516 2HG  PRO X  32      24.528 -17.165   8.524  1.00  0.00
H
ATOM    517 1HD  PRO X  32      23.618 -17.724  11.659  1.00  0.00
H
ATOM    518 2HD  PRO X  32      23.586 -16.602  10.477  1.00  0.00
H
ATOM    519  N   THR X  33      20.397 -20.377   8.645  1.00  0.00
N
ATOM    520  CA  THR X  33      19.727 -21.659   8.806  1.00  0.00
C
ATOM    521  C   THR X  33      20.719 -22.813   8.731  1.00  0.00
C
ATOM    522  O   THR X  33      21.741 -22.722   8.049  1.00  0.00
O
ATOM    523  CB  THR X  33      18.635 -21.864   7.739  1.00  0.00
C
ATOM    524  CG2 THR X  33      17.478 -20.904   7.969  1.00  0.00
C
ATOM    525  OG1 THR X  33      19.188 -21.636   6.437  1.00  0.00
O
ATOM    526  H   THR X  33      20.249 -19.848   7.798  1.00  0.00
H
ATOM    527  HA  THR X  33      19.265 -21.713   9.792  1.00  0.00
H
ATOM    528  HB  THR X  33      18.273 -22.891   7.796  1.00  0.00
H
ATOM    529  HG1 THR X  33      18.506 -21.764   5.774  1.00  0.00
H
ATOM    530 1HG2 THR X  33      16.717 -21.063   7.206  1.00  0.00
H
ATOM    531 2HG2 THR X  33      17.048 -21.083   8.955  1.00  0.00
H
ATOM    532 3HG2 THR X  33      17.840 -19.879   7.911  1.00  0.00
H
ATOM    533  N   PRO X  34      20.416 -23.897   9.436  1.00  0.00
N
ATOM    534  CA  PRO X  34      21.250 -25.091   9.403  1.00  0.00
C
ATOM    535  C   PRO X  34      21.372 -25.641   7.988  1.00  0.00
C
ATOM    536  O   PRO X  34      22.412 -26.179   7.607  1.00  0.00
O
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ATOM    537  CB  PRO X  34      20.535 -26.074  10.345  1.00  0.00
C
ATOM    538  CG  PRO X  34      19.793 -25.206  11.323  1.00  0.00
C
ATOM    539  CD  PRO X  34      19.208 -24.086  10.251  1.00  0.00
C
ATOM    540  HA  PRO X  34      22.164 -24.879   9.738  1.00  0.00
H
ATOM    541 1HB  PRO X  34      19.910 -26.429   9.778  1.00  0.00
H
ATOM    542 2HB  PRO X  34      21.209 -26.424  10.763  1.00  0.00
H
ATOM    543 1HG  PRO X  34      19.110 -24.887  10.935  1.00  0.00
H
ATOM    544 2HG  PRO X  34      19.917 -25.574  12.176  1.00  0.00
H
ATOM    545 1HD  PRO X  34      18.509 -23.725   9.710  1.00  0.00
H
ATOM    546 2HD  PRO X  34      19.422 -23.630  11.059  1.00  0.00
H
ATOM    547  N   GLY X  35      20.303 -25.500   7.211  1.00  0.00
N
ATOM    548  CA  GLY X  35      20.302 -25.951   5.825  1.00  0.00
C
ATOM    549  C   GLY X  35      19.510 -24.999   4.934  1.00  0.00
C
ATOM    550  O   GLY X  35      19.368 -23.817   5.248  1.00  0.00
O
ATOM    551  H   GLY X  35      19.472 -25.071   7.591  1.00  0.00
H
ATOM    552 1HA  GLY X  35      21.330 -25.999   5.466  1.00  0.00
H
ATOM    553 2HA  GLY X  35      19.853 -26.941   5.773  1.00  0.00
H
ATOM    554  N   ASP X  36      18.997 -25.519   3.825  1.00  0.00
N
ATOM    555  CA  ASP X  36      18.074 -24.767   2.981  1.00  0.00
C
ATOM    556  C   ASP X  36      16.638 -24.929   3.461  1.00  0.00
C
ATOM    557  O   ASP X  36      15.701 -24.474   2.803  1.00  0.00
O
ATOM    558  CB  ASP X  36      18.196 -25.215   1.521  1.00  0.00
C
ATOM    559  CG  ASP X  36      17.787 -26.660   1.271  1.00  0.00
C
ATOM    560  OD1 ASP X  36      17.426 -27.327   2.211  1.00  0.00
O
ATOM    561  OD2 ASP X  36      17.688 -27.038   0.128  1.00  0.00
O
ATOM    562  H   ASP X  36      19.253 -26.460   3.559  1.00  0.00
H
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ATOM    563  HA  ASP X  36      18.304 -23.703   3.040  1.00  0.00
H
ATOM    564 1HB  ASP X  36      17.673 -24.563   0.823  1.00  0.00
H
ATOM    565 2HB  ASP X  36      19.272 -25.113   1.379  1.00  0.00
H
ATOM    566  N   LYS X  37      16.470 -25.578   4.607  1.00  0.00
N
ATOM    567  CA  LYS X  37      15.143 -25.827   5.160  1.00  0.00
C
ATOM    568  C   LYS X  37      14.821 -24.842   6.277  1.00  0.00
C
ATOM    569  O   LYS X  37      15.717 -24.311   6.930  1.00  0.00
O
ATOM    570  CB  LYS X  37      15.039 -27.262   5.676  1.00  0.00
C
ATOM    571  CG  LYS X  37      15.180 -28.330   4.600  1.00  0.00
C
ATOM    572  CD  LYS X  37      15.052 -29.728   5.187  1.00  0.00
C
ATOM    573  CE  LYS X  37      15.165 -30.794   4.108  1.00  0.00
C
ATOM    574  NZ  LYS X  37      14.999 -32.165   4.661  1.00  0.00
N
ATOM    575  H   LYS X  37      17.281 -25.908   5.109  1.00  0.00
H
ATOM    576  HA  LYS X  37      14.388 -25.679   4.387  1.00  0.00
H
ATOM    577 1HB  LYS X  37      15.824 -27.391   6.422  1.00  0.00
H
ATOM    578 2HB  LYS X  37      14.064 -27.359   6.156  1.00  0.00
H
ATOM    579 1HG  LYS X  37      14.401 -28.175   3.853  1.00  0.00
H
ATOM    580 2HG  LYS X  37      16.159 -28.221   4.132  1.00  0.00
H
ATOM    581 1HD  LYS X  37      15.843 -29.869   5.924  1.00  0.00
H
ATOM    582 2HD  LYS X  37      14.081 -29.810   5.677  1.00  0.00
H
ATOM    583 1HE  LYS X  37      14.394 -30.608   3.360  1.00  0.00
H
ATOM    584 2HE  LYS X  37      16.147 -30.707   3.645  1.00  0.00
H
ATOM    585 1HZ  LYS X  37      15.081 -32.842   3.916  1.00  0.00
H
ATOM    586 2HZ  LYS X  37      15.714 -32.339   5.354  1.00  0.00
H
ATOM    587 3HZ  LYS X  37      14.088 -32.247   5.090  1.00  0.00
H
ATOM    588  N   VAL X  38      13.530 -24.597   6.488  1.00  0.00
N
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ATOM    589  CA  VAL X  38      13.081 -23.765   7.597  1.00  0.00
C
ATOM    590  C   VAL X  38      12.999 -24.566   8.890  1.00  0.00
C
ATOM    591  O   VAL X  38      12.717 -25.763   8.872  1.00  0.00
O
ATOM    592  CB  VAL X  38      11.707 -23.132   7.308  1.00  0.00
C
ATOM    593  CG1 VAL X  38      11.783 -22.224   6.089  1.00  0.00
C
ATOM    594  CG2 VAL X  38      10.655 -24.211   7.103  1.00  0.00
C
ATOM    595  H   VAL X  38      12.845 -24.998   5.864  1.00  0.00
H
ATOM    596  HA  VAL X  38      13.794 -22.967   7.808  1.00  0.00
H
ATOM    597  HB  VAL X  38      11.396 -22.550   8.175  1.00  0.00
H
ATOM    598 1HG1 VAL X  38      10.803 -21.786   5.900  1.00  0.00
H
ATOM    599 2HG1 VAL X  38      12.507 -21.431   6.272  1.00  0.00
H
ATOM    600 3HG1 VAL X  38      12.093 -22.807   5.222  1.00  0.00
H
ATOM    601 1HG2 VAL X  38       9.692 -23.747   6.901  1.00  0.00
H
ATOM    602 2HG2 VAL X  38      10.941 -24.840   6.259  1.00  0.00
H
ATOM    603 3HG2 VAL X  38      10.582 -24.824   8.001  1.00  0.00
H
ATOM    604  N   GLU X  39      13.253 -23.898  10.012  1.00  0.00
N
ATOM    605  CA  GLU X  39      13.151 -24.532  11.319  1.00  0.00
C
ATOM    606  C   GLU X  39      11.695 -24.713  11.732  1.00  0.00
C
ATOM    607  O   GLU X  39      10.901 -23.776  11.671  1.00  0.00
O
ATOM    608  CB  GLU X  39      13.897 -23.712  12.374  1.00  0.00
C
ATOM    609  CG  GLU X  39      14.098 -24.428  13.702  1.00  0.00
C
ATOM    610  CD  GLU X  39      14.764 -23.533  14.709  1.00  0.00
C
ATOM    611  OE1 GLU X  39      15.003 -22.391  14.396  1.00  0.00
O
ATOM    612  OE2 GLU X  39      14.933 -23.955  15.829  1.00  0.00
O
ATOM    613  H   GLU X  39      13.523 -22.926   9.956  1.00  0.00
H
ATOM    614  HA  GLU X  39      13.588 -25.531  11.281  1.00  0.00
H
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ATOM    615 1HB  GLU X  39      14.869 -23.457  11.949  1.00  0.00
H
ATOM    616 2HB  GLU X  39      13.322 -22.801  12.536  1.00  0.00
H
ATOM    617 1HG  GLU X  39      13.176 -24.824  14.124  1.00  0.00
H
ATOM    618 2HG  GLU X  39      14.764 -25.252  13.451  1.00  0.00
H
ATOM    619  N   SER X  40      11.353 -25.923  12.158  1.00  0.00
N
ATOM    620  CA  SER X  40       9.993 -26.231  12.584  1.00  0.00
C
ATOM    621  C   SER X  40       9.729 -25.711  13.992  1.00  0.00
C
ATOM    622  O   SER X  40       8.585 -25.433  14.357  1.00  0.00
O
ATOM    623  CB  SER X  40       9.752 -27.726  12.517  1.00  0.00
C
ATOM    624  OG  SER X  40      10.535 -28.428  13.442  1.00  0.00
O
ATOM    625  H   SER X  40      12.054 -26.650  12.188  1.00  0.00
H
ATOM    626  HA  SER X  40       9.230 -25.858  11.900  1.00  0.00
H
ATOM    627 1HB  SER X  40       8.700 -27.918  12.726  1.00  0.00
H
ATOM    628 2HB  SER X  40       9.990 -28.074  11.514  1.00  0.00
H
ATOM    629  HG  SER X  40      10.353 -29.368  13.368  1.00  0.00
H
ATOM    630  N   GLY X  41      10.792 -25.584  14.780  1.00  0.00
N
ATOM    631  CA  GLY X  41      10.678 -25.086  16.145  1.00  0.00
C
ATOM    632  C   GLY X  41       9.870 -26.043  17.012  1.00  0.00
C
ATOM    633  O   GLY X  41      10.031 -27.259  16.932  1.00  0.00
O
ATOM    634  H   GLY X  41      11.703 -25.839  14.423  1.00  0.00
H
ATOM    635 1HA  GLY X  41      11.676 -24.979  16.570  1.00  0.00
H
ATOM    636 2HA  GLY X  41      10.185 -24.115  16.130  1.00  0.00
H
ATOM    637  N   GLN X  42       8.994 -25.485  17.843  1.00  0.00
N
ATOM    638  CA  GLN X  42       8.198 -26.280  18.769  1.00  0.00
C
ATOM    639  C   GLN X  42       6.842 -26.628  18.171  1.00  0.00
C
ATOM    640  O   GLN X  42       6.519 -26.213  17.060  1.00  0.00
O
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ATOM    641  CB  GLN X  42       8.004 -25.532  20.089  1.00  0.00
C
ATOM    642  CG  GLN X  42       9.299 -25.157  20.789  1.00  0.00
C
ATOM    643  CD  GLN X  42      10.145 -26.368  21.127  1.00  0.00
C
ATOM    644  NE2 GLN X  42      11.409 -26.340  20.719  1.00  0.00
N
ATOM    645  OE1 GLN X  42       9.669 -27.319  21.754  1.00  0.00
O
ATOM    646  H   GLN X  42       8.877 -24.482  17.833  1.00  0.00
H
ATOM    647  HA  GLN X  42       8.702 -27.226  18.964  1.00  0.00
H
ATOM    648 1HB  GLN X  42       7.434 -24.631  19.860  1.00  0.00
H
ATOM    649 2HB  GLN X  42       7.412 -26.180  20.735  1.00  0.00
H
ATOM    650 1HG  GLN X  42       9.964 -24.377  20.419  1.00  0.00
H
ATOM    651 2HG  GLN X  42       8.809 -24.812  21.700  1.00  0.00
H
ATOM    652 1HE2 GLN X  42      12.016 -27.112  20.914  1.00  0.00
H
ATOM    653 2HE2 GLN X  42      11.753 -25.548  20.215  1.00  0.00
H
ATOM    654  N   ILE X  43       6.051 -27.394  18.917  1.00  0.00
N
ATOM    655  CA  ILE X  43       4.731 -27.806  18.456  1.00  0.00
C
ATOM    656  C   ILE X  43       3.628 -27.049  19.183  1.00  0.00
C
ATOM    657  O   ILE X  43       3.846 -26.509  20.268  1.00  0.00
O
ATOM    658  CB  ILE X  43       4.514 -29.319  18.650  1.00  0.00
C
ATOM    659  CG1 ILE X  43       4.614 -29.687  20.133  1.00  0.00
C
ATOM    660  CG2 ILE X  43       5.520 -30.110  17.831  1.00  0.00
C
ATOM    661  CD1 ILE X  43       4.206 -31.111  20.436  1.00  0.00
C
ATOM    662  H   ILE X  43       6.372 -27.697  19.825  1.00  0.00
H
ATOM    663  HA  ILE X  43       4.594 -27.552  17.406  1.00  0.00
H
ATOM    664  HB  ILE X  43       3.503 -29.576  18.331  1.00  0.00
H
ATOM    665 1HG1 ILE X  43       5.650 -29.534  20.434  1.00  0.00
H
ATOM    666 2HG1 ILE X  43       3.971 -29.000  20.682  1.00  0.00
H
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ATOM    667 1HG2 ILE X  43       5.354 -31.177  17.979  1.00  0.00
H
ATOM    668 2HG2 ILE X  43       5.402 -29.869  16.775  1.00  0.00
H
ATOM    669 3HG2 ILE X  43       6.531 -29.855  18.150  1.00  0.00
H
ATOM    670 1HD1 ILE X  43       4.305 -31.298  21.506  1.00  0.00
H
ATOM    671 2HD1 ILE X  43       3.169 -31.264  20.136  1.00  0.00
H
ATOM    672 3HD1 ILE X  43       4.849 -31.799  19.890  1.00  0.00
H
ATOM    673  N   SER X  44       2.447 -27.010  18.577  1.00  0.00
N
ATOM    674  CA  SER X  44       1.347 -26.204  19.094  1.00  0.00
C
ATOM    675  C   SER X  44       0.993 -26.604  20.523  1.00  0.00
C
ATOM    676  O   SER X  44       0.894 -27.792  20.836  1.00  0.00
O
ATOM    677  CB  SER X  44       0.137 -26.335  18.193  1.00  0.00
C
ATOM    678  OG  SER X  44      -0.967 -25.624  18.686  1.00  0.00
O
ATOM    679  H   SER X  44       2.307 -27.552  17.736  1.00  0.00
H
ATOM    680  HA  SER X  44       1.537 -25.131  19.046  1.00  0.00
H
ATOM    681 1HB  SER X  44       0.394 -25.951  17.206  1.00  0.00
H
ATOM    682 2HB  SER X  44      -0.129 -27.388  18.114  1.00  0.00
H
ATOM    683  HG  SER X  44      -1.201 -25.960  19.553  1.00  0.00
H
ATOM    684  N   ASN X  45       0.807 -25.610  21.381  1.00  0.00
N
ATOM    685  CA  ASN X  45       0.482 -25.857  22.782  1.00  0.00
C
ATOM    686  C   ASN X  45      -0.561 -24.870  23.290  1.00  0.00
C
ATOM    687  O   ASN X  45      -0.473 -24.387  24.417  1.00  0.00
O
ATOM    688  CB  ASN X  45       1.721 -25.808  23.657  1.00  0.00
C
ATOM    689  CG  ASN X  45       1.521 -26.401  25.024  1.00  0.00
C
ATOM    690  ND2 ASN X  45       2.208 -25.842  25.988  1.00  0.00
N
ATOM    691  OD1 ASN X  45       0.700 -27.305  25.217  1.00  0.00
O
ATOM    692  H   ASN X  45       0.892 -24.657  21.056  1.00  0.00
H
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ATOM    693  HA  ASN X  45       0.044 -26.852  22.890  1.00  0.00
H
ATOM    694 1HB  ASN X  45       2.691 -26.123  23.268  1.00  0.00
H
ATOM    695 2HB  ASN X  45       1.698 -24.722  23.739  1.00  0.00
H
ATOM    696 1HD2 ASN X  45       2.125 -26.185  26.924  1.00  0.00
H
ATOM    697 2HD2 ASN X  45       2.815 -25.074  25.788  1.00  0.00
H
ATOM    698  N   GLY X  46      -1.545 -24.569  22.447  1.00  0.00
N
ATOM    699  CA  GLY X  46      -2.551 -23.567  22.772  1.00  0.00
C
ATOM    700  C   GLY X  46      -3.038 -22.852  21.518  1.00  0.00
C
ATOM    701  O   GLY X  46      -2.393 -22.905  20.469  1.00  0.00
O
ATOM    702  H   GLY X  46      -1.596 -25.047  21.559  1.00  0.00
H
ATOM    703 1HA  GLY X  46      -3.398 -24.057  23.255  1.00  0.00
H
ATOM    704 2HA  GLY X  46      -2.119 -22.836  23.454  1.00  0.00
H
ATOM    705  N   TYR X  47      -4.183 -22.185  21.629  1.00  0.00
N
ATOM    706  CA  TYR X  47      -4.754 -21.452  20.506  1.00  0.00
C
ATOM    707  C   TYR X  47      -5.133 -20.034  20.912  1.00  0.00
C
ATOM    708  O   TYR X  47      -5.300 -19.738  22.096  1.00  0.00
O
ATOM    709  CB  TYR X  47      -5.979 -22.185  19.955  1.00  0.00
C
ATOM    710  CG  TYR X  47      -5.676 -23.565  19.416  1.00  0.00
C
ATOM    711  CD1 TYR X  47      -5.762 -24.683  20.233  1.00  0.00
C
ATOM    712  CD2 TYR X  47      -5.308 -23.746  18.091  1.00  0.00
C
ATOM    713  CE1 TYR X  47      -5.484 -25.946  19.746  1.00  0.00
C
ATOM    714  CE2 TYR X  47      -5.029 -25.004  17.593  1.00  0.00
C
ATOM    715  CZ  TYR X  47      -5.120 -26.103  18.425  1.00  0.00
C
ATOM    716  OH  TYR X  47      -4.844 -27.358  17.933  1.00  0.00
O
ATOM    717  H   TYR X  47      -4.670 -22.186  22.515  1.00  0.00
H
ATOM    718  HA  TYR X  47      -4.015 -21.361  19.709  1.00  0.00
H
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ATOM    719 1HB  TYR X  47      -6.702 -22.262  20.768  1.00  0.00
H
ATOM    720 2HB  TYR X  47      -6.393 -21.566  19.158  1.00  0.00
H
ATOM    721  HD1 TYR X  47      -6.050 -24.553  21.275  1.00  0.00
H
ATOM    722  HD2 TYR X  47      -5.239 -22.874  17.440  1.00  0.00
H
ATOM    723  HE1 TYR X  47      -5.556 -26.815  20.399  1.00  0.00
H
ATOM    724  HE2 TYR X  47      -4.741 -25.125  16.550  1.00  0.00
H
ATOM    725  HH  TYR X  47      -4.600 -27.353  17.004  1.00  0.00
H
ATOM    726  N   SER X  48      -5.268 -19.156  19.921  1.00  0.00
N
ATOM    727  CA  SER X  48      -5.639 -17.768  20.174  1.00  0.00
C
ATOM    728  C   SER X  48      -7.088 -17.656  20.620  1.00  0.00
C
ATOM    729  O   SER X  48      -7.498 -16.638  21.181  1.00  0.00
O
ATOM    730  CB  SER X  48      -5.404 -16.932  18.932  1.00  0.00
C
ATOM    731  OG  SER X  48      -6.251 -17.302  17.879  1.00  0.00
O
ATOM    732  H   SER X  48      -5.110 -19.458  18.970  1.00  0.00
H
ATOM    733  HA  SER X  48      -4.990 -17.271  20.896  1.00  0.00
H
ATOM    734 1HB  SER X  48      -5.581 -15.885  19.178  1.00  0.00
H
ATOM    735 2HB  SER X  48      -4.369 -17.060  18.614  1.00  0.00
H
ATOM    736  HG  SER X  48      -6.071 -16.751  17.114  1.00  0.00
H
ATOM    737  N   ALA X  49      -7.862 -18.705  20.369  1.00  0.00
N
ATOM    738  CA  ALA X  49      -9.270 -18.729  20.752  1.00  0.00
C
ATOM    739  C   ALA X  49      -9.430 -18.964  22.247  1.00  0.00
C
ATOM    740  O   ALA X  49      -8.666 -19.718  22.851  1.00  0.00
O
ATOM    741  CB  ALA X  49     -10.017 -19.793  19.962  1.00  0.00
C
ATOM    742  H   ALA X  49      -7.467 -19.508  19.900  1.00  0.00
H
ATOM    743  HA  ALA X  49      -9.710 -17.758  20.527  1.00  0.00
H
ATOM    744 1HB  ALA X  49     -11.065 -19.797  20.260  1.00  0.00
H
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ATOM    745 2HB  ALA X  49      -9.944 -19.574  18.897  1.00  0.00
H
ATOM    746 3HB  ALA X  49      -9.578 -20.770  20.164  1.00  0.00
H
ATOM    747  N   VAL X  50     -10.427 -18.319  22.840  1.00  0.00
N
ATOM    748  CA  VAL X  50     -10.688 -18.453  24.269  1.00  0.00
C
ATOM    749  C   VAL X  50     -11.442 -19.738  24.572  1.00  0.00
C
ATOM    750  O   VAL X  50     -12.371 -20.112  23.853  1.00  0.00
O
ATOM    751  CB  VAL X  50     -11.494 -17.256  24.812  1.00  0.00
C
ATOM    752  CG1 VAL X  50     -12.982 -17.468  24.578  1.00  0.00
C
ATOM    753  CG2 VAL X  50     -11.212 -17.051  26.291  1.00  0.00
C
ATOM    754  H   VAL X  50     -11.021 -17.719  22.286  1.00  0.00
H
ATOM    755  HA  VAL X  50      -9.760 -18.533  24.836  1.00  0.00
H
ATOM    756  HB  VAL X  50     -11.171 -16.350  24.298  1.00  0.00
H
ATOM    757 1HG1 VAL X  50     -13.537 -16.614  24.967  1.00  0.00
H
ATOM    758 2HG1 VAL X  50     -13.173 -17.567  23.510  1.00  0.00
H
ATOM    759 3HG1 VAL X  50     -13.306 -18.373  25.091  1.00  0.00
H
ATOM    760 1HG2 VAL X  50     -11.789 -16.202  26.657  1.00  0.00
H
ATOM    761 2HG2 VAL X  50     -11.495 -17.947  26.843  1.00  0.00
H
ATOM    762 3HG2 VAL X  50     -10.149 -16.856  26.436  1.00  0.00
H
ATOM    763  N   PRO X  51     -11.037 -20.417  25.641  1.00  0.00
N
ATOM    764  CA  PRO X  51     -11.788 -21.559  26.152  1.00  0.00
C
ATOM    765  C   PRO X  51     -13.181 -21.144  26.608  1.00  0.00
C
ATOM    766  O   PRO X  51     -14.155 -21.867  26.400  1.00  0.00
O
ATOM    767  CB  PRO X  51     -10.930 -22.080  27.318  1.00  0.00
C
ATOM    768  CG  PRO X  51      -9.525 -21.663  26.983  1.00  0.00
C
ATOM    769  CD  PRO X  51      -9.836 -20.142  26.439  1.00  0.00
C
ATOM    770  HA  PRO X  51     -11.882 -22.252  25.443  1.00  0.00
H
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ATOM    771 1HB  PRO X  51     -11.213 -21.534  27.994  1.00  0.00
H
ATOM    772 2HB  PRO X  51     -10.987 -22.936  27.195  1.00  0.00
H
ATOM    773 1HG  PRO X  51      -9.449 -20.834  27.133  1.00  0.00
H
ATOM    774 2HG  PRO X  51      -8.964 -22.391  27.168  1.00  0.00
H
ATOM    775 1HD  PRO X  51      -9.858 -19.196  26.566  1.00  0.00
H
ATOM    776 2HD  PRO X  51      -9.137 -20.499  25.900  1.00  0.00
H
ATOM    777  N   SER X  52     -13.270 -19.974  27.232  1.00  0.00
N
ATOM    778  CA  SER X  52     -14.545 -19.459  27.717  1.00  0.00
C
ATOM    779  C   SER X  52     -14.506 -17.944  27.867  1.00  0.00
C
ATOM    780  O   SER X  52     -13.451 -17.363  28.129  1.00  0.00
O
ATOM    781  CB  SER X  52     -14.902 -20.110  29.038  1.00  0.00
C
ATOM    782  OG  SER X  52     -14.028 -19.733  30.065  1.00  0.00
O
ATOM    783  H   SER X  52     -12.432 -19.428  27.374  1.00  0.00
H
ATOM    784  HA  SER X  52     -15.394 -19.748  27.096  1.00  0.00
H
ATOM    785 1HB  SER X  52     -15.916 -19.814  29.310  1.00  0.00
H
ATOM    786 2HB  SER X  52     -14.862 -21.192  28.917  1.00  0.00
H
ATOM    787  HG  SER X  52     -14.289 -20.166  30.881  1.00  0.00
H
ATOM    788  N   PRO X  53     -15.656 -17.306  27.696  1.00  0.00
N
ATOM    789  CA  PRO X  53     -15.761 -15.858  27.824  1.00  0.00
C
ATOM    790  C   PRO X  53     -15.433 -15.403  29.239  1.00  0.00
C
ATOM    791  O   PRO X  53     -15.571 -16.166  30.194  1.00  0.00
O
ATOM    792  CB  PRO X  53     -17.219 -15.551  27.442  1.00  0.00
C
ATOM    793  CG  PRO X  53     -17.971 -16.820  27.733  1.00  0.00
C
ATOM    794  CD  PRO X  53     -16.942 -17.927  27.349  1.00  0.00
C
ATOM    795  HA  PRO X  53     -15.128 -15.412  27.197  1.00  0.00
H
ATOM    796 1HB  PRO X  53     -17.445 -14.956  28.099  1.00  0.00
H
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ATOM    797 2HB  PRO X  53     -17.153 -15.475  26.583  1.00  0.00
H
ATOM    798 1HG  PRO X  53     -18.073 -16.886  28.572  1.00  0.00
H
ATOM    799 2HG  PRO X  53     -18.556 -16.972  27.016  1.00  0.00
H
ATOM    800 1HD  PRO X  53     -17.005 -18.671  27.942  1.00  0.00
H
ATOM    801 2HD  PRO X  53     -16.846 -18.109  26.419  1.00  0.00
H
ATOM    802  N   GLY X  54     -14.996 -14.152  29.370  1.00  0.00
N
ATOM    803  CA  GLY X  54     -14.753 -13.560  30.677  1.00  0.00
C
ATOM    804  C   GLY X  54     -14.358 -12.095  30.552  1.00  0.00
C
ATOM    805  O   GLY X  54     -14.713 -11.427  29.580  1.00  0.00
O
ATOM    806  H   GLY X  54     -14.828 -13.600  28.540  1.00  0.00
H
ATOM    807 1HA  GLY X  54     -15.662 -13.633  31.276  1.00  0.00
H
ATOM    808 2HA  GLY X  54     -13.950 -14.104  31.171  1.00  0.00
H
ATOM    809  N   ALA X  55     -13.621 -11.598  31.539  1.00  0.00
N
ATOM    810  CA  ALA X  55     -13.258 -10.186  31.591  1.00  0.00
C
ATOM    811  C   ALA X  55     -12.067  -9.891  30.687  1.00  0.00
C
ATOM    812  O   ALA X  55     -10.963  -9.629  31.166  1.00  0.00
O
ATOM    813  CB  ALA X  55     -12.957  -9.770  33.024  1.00  0.00
C
ATOM    814  H   ALA X  55     -13.304 -12.215  32.273  1.00  0.00
H
ATOM    815  HA  ALA X  55     -14.098  -9.596  31.225  1.00  0.00
H
ATOM    816 1HB  ALA X  55     -12.689  -8.714  33.044  1.00  0.00
H
ATOM    817 2HB  ALA X  55     -13.841  -9.931  33.642  1.00  0.00
H
ATOM    818 3HB  ALA X  55     -12.130 -10.362  33.408  1.00  0.00
H
ATOM    819  N   GLY X  56     -12.299  -9.935  29.380  1.00  0.00
N
ATOM    820  CA  GLY X  56     -11.264  -9.606  28.408  1.00  0.00
C
ATOM    821  C   GLY X  56     -11.361  -8.148  27.976  1.00  0.00
C
ATOM    822  O   GLY X  56     -11.456  -7.848  26.786  1.00  0.00
O
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ATOM    823  H   GLY X  56     -13.216 -10.203  29.052  1.00  0.00
H
ATOM    824 1HA  GLY X  56     -10.286  -9.779  28.857  1.00  0.00
H
ATOM    825 2HA  GLY X  56     -11.381 -10.245  27.534  1.00  0.00
H
ATOM    826  N   ASP X  57     -11.333  -7.245  28.949  1.00  0.00
N
ATOM    827  CA  ASP X  57     -11.421  -5.815  28.671  1.00  0.00
C
ATOM    828  C   ASP X  57     -10.416  -5.398  27.604  1.00  0.00
C
ATOM    829  O   ASP X  57     -10.699  -4.536  26.774  1.00  0.00
O
ATOM    830  CB  ASP X  57     -11.197  -5.005  29.950  1.00  0.00
C
ATOM    831  CG  ASP X  57     -12.349  -5.065  30.943  1.00  0.00
C
ATOM    832  OD1 ASP X  57     -13.398  -5.544  30.579  1.00  0.00
O
ATOM    833  OD2 ASP X  57     -12.130  -4.778  32.096  1.00  0.00
O
ATOM    834  H   ASP X  57     -11.248  -7.555  29.906  1.00  0.00
H
ATOM    835  HA  ASP X  57     -12.409  -5.576  28.277  1.00  0.00
H
ATOM    836 1HB  ASP X  57     -10.265  -5.249  30.461  1.00  0.00
H
ATOM    837 2HB  ASP X  57     -11.130  -4.001  29.531  1.00  0.00
H
ATOM    838  N   ASP X  58      -9.239  -6.015  27.634  1.00  0.00
N
ATOM    839  CA  ASP X  58      -8.154  -5.636  26.739  1.00  0.00
C
ATOM    840  C   ASP X  58      -8.556  -5.820  25.280  1.00  0.00
C
ATOM    841  O   ASP X  58      -8.073  -5.105  24.400  1.00  0.00
O
ATOM    842  CB  ASP X  58      -6.896  -6.452  27.045  1.00  0.00
C
ATOM    843  CG  ASP X  58      -6.195  -6.065  28.339  1.00  0.00
C
ATOM    844  OD1 ASP X  58      -6.525  -5.039  28.888  1.00  0.00
O
ATOM    845  OD2 ASP X  58      -5.450  -6.865  28.851  1.00  0.00
O
ATOM    846  H   ASP X  58      -9.094  -6.765  28.294  1.00  0.00
H
ATOM    847  HA  ASP X  58      -7.922  -4.578  26.867  1.00  0.00
H
ATOM    848 1HB  ASP X  58      -7.064  -7.530  27.032  1.00  0.00
H
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ATOM    849 2HB  ASP X  58      -6.274  -6.170  26.195  1.00  0.00
H
ATOM    850  N   THR X  59      -9.437  -6.779  25.030  1.00  0.00
N
ATOM    851  CA  THR X  59      -9.919  -7.044  23.681  1.00  0.00
C
ATOM    852  C   THR X  59     -10.711  -5.859  23.138  1.00  0.00
C
ATOM    853  O   THR X  59     -10.769  -5.642  21.927  1.00  0.00
O
ATOM    854  CB  THR X  59     -10.803  -8.305  23.633  1.00  0.00
C
ATOM    855  CG2 THR X  59     -11.344  -8.524  22.230  1.00  0.00
C
ATOM    856  OG1 THR X  59     -10.031  -9.447  24.028  1.00  0.00
O
ATOM    857  H   THR X  59      -9.784  -7.340  25.795  1.00  0.00
H
ATOM    858  HA  THR X  59      -9.072  -7.184  23.008  1.00  0.00
H
ATOM    859  HB  THR X  59     -11.634  -8.181  24.328  1.00  0.00
H
ATOM    860  HG1 THR X  59     -10.584 -10.231  23.998  1.00  0.00
H
ATOM    861 1HG2 THR X  59     -11.965  -9.419  22.216  1.00  0.00
H
ATOM    862 2HG2 THR X  59     -11.940  -7.662  21.930  1.00  0.00
H
ATOM    863 3HG2 THR X  59     -10.512  -8.648  21.536  1.00  0.00
H
ATOM    864  N   ARG X  60     -11.319  -5.097  24.040  1.00  0.00
N
ATOM    865  CA  ARG X  60     -12.128  -3.949  23.650  1.00  0.00
C
ATOM    866  C   ARG X  60     -11.351  -2.649  23.805  1.00  0.00
C
ATOM    867  O   ARG X  60     -11.916  -1.559  23.704  1.00  0.00
O
ATOM    868  CB  ARG X  60     -13.452  -3.899  24.400  1.00  0.00
C
ATOM    869  CG  ARG X  60     -14.386  -5.068  24.129  1.00  0.00
C
ATOM    870  CD  ARG X  60     -15.644  -5.042  24.918  1.00  0.00
C
ATOM    871  NE  ARG X  60     -16.543  -3.949  24.582  1.00  0.00
N
ATOM    872  CZ  ARG X  60     -17.681  -3.666  25.243  1.00  0.00
C
ATOM    873  NH1 ARG X  60     -18.086  -4.412  26.248  1.00  0.00
N
ATOM    874  NH2 ARG X  60     -18.397  -2.630  24.838  1.00  0.00
N
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ATOM    875  H   ARG X  60     -11.219  -5.319  25.020  1.00  0.00
H
ATOM    876  HA  ARG X  60     -12.395  -4.027  22.597  1.00  0.00
H
ATOM    877 1HB  ARG X  60     -13.215  -3.866  25.462  1.00  0.00
H
ATOM    878 2HB  ARG X  60     -13.946  -2.971  24.109  1.00  0.00
H
ATOM    879 1HG  ARG X  60     -14.651  -5.063  23.072  1.00  0.00
H
ATOM    880 2HG  ARG X  60     -13.858  -5.993  24.366  1.00  0.00
H
ATOM    881 1HD  ARG X  60     -16.186  -5.973  24.750  1.00  0.00
H
ATOM    882 2HD  ARG X  60     -15.398  -4.951  25.974  1.00  0.00
H
ATOM    883  HE  ARG X  60     -16.471  -3.259  23.846  1.00  0.00
H
ATOM    884 1HH1 ARG X  60     -17.537  -5.211  26.533  1.00  0.00
H
ATOM    885 2HH1 ARG X  60     -18.943  -4.183  26.730  1.00  0.00
H
ATOM    886 1HH2 ARG X  60     -18.081  -2.078  24.054  1.00  0.00
H
ATOM    887 2HH2 ARG X  60     -19.254  -2.396  25.316  1.00  0.00
H
ATOM    888  N   HIS X  61     -10.048  -2.769  24.048  1.00  0.00
N
ATOM    889  CA  HIS X  61      -9.188  -1.604  24.208  1.00  0.00
C
ATOM    890  C   HIS X  61      -9.268  -0.689  22.992  1.00  0.00
C
ATOM    891  O   HIS X  61      -9.039  -1.120  21.863  1.00  0.00
O
ATOM    892  CB  HIS X  61      -7.737  -2.031  24.447  1.00  0.00
C
ATOM    893  CG  HIS X  61      -6.799  -0.884  24.660  1.00  0.00
C
ATOM    894  CD2 HIS X  61      -5.758  -0.433  23.920  1.00  0.00
C
ATOM    895  ND1 HIS X  61      -6.884  -0.047  25.753  1.00  0.00
N
ATOM    896  CE1 HIS X  61      -5.933   0.869  25.677  1.00  0.00
C
ATOM    897  NE2 HIS X  61      -5.238   0.656  24.575  1.00  0.00
N
ATOM    898  H   HIS X  61      -9.645  -3.692  24.122  1.00  0.00
H
ATOM    899  HA  HIS X  61      -9.524  -1.016  25.061  1.00  0.00
H
ATOM    900 1HB  HIS X  61      -7.670  -2.658  25.338  1.00  0.00
H
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ATOM    901 2HB  HIS X  61      -7.362  -2.584  23.587  1.00  0.00
H
ATOM    902  HD2 HIS X  61      -5.317  -0.769  22.982  1.00  0.00
H
ATOM    903  HE1 HIS X  61      -5.831   1.627  26.453  1.00  0.00
H
ATOM    904  HE2 HIS X  61      -4.450   1.201  24.256  1.00  0.00
H
ATOM    905  N   SER X  62      -9.593   0.578  23.232  1.00  0.00
N
ATOM    906  CA  SER X  62      -9.654   1.568  22.162  1.00  0.00
C
ATOM    907  C   SER X  62      -8.288   2.198  21.919  1.00  0.00
C
ATOM    908  O   SER X  62      -7.528   2.438  22.857  1.00  0.00
O
ATOM    909  CB  SER X  62     -10.677   2.635  22.496  1.00  0.00
C
ATOM    910  OG  SER X  62     -10.703   3.658  21.540  1.00  0.00
O
ATOM    911  H   SER X  62      -9.803   0.861  24.178  1.00  0.00
H
ATOM    912  HA  SER X  62     -10.052   1.171  21.227  1.00  0.00
H
ATOM    913 1HB  SER X  62     -11.662   2.171  22.543  1.00  0.00
H
ATOM    914 2HB  SER X  62     -10.431   3.064  23.467  1.00  0.00
H
ATOM    915  HG  SER X  62     -11.361   4.312  21.787  1.00  0.00
H
ATOM    916  N   ILE X  63      -7.981   2.465  20.652  1.00  0.00
N
ATOM    917  CA  ILE X  63      -6.719   3.095  20.287  1.00  0.00
C
ATOM    918  C   ILE X  63      -6.911   4.579  19.988  1.00  0.00
C
ATOM    919  O   ILE X  63      -7.735   4.950  19.156  1.00  0.00
O
ATOM    920  CB  ILE X  63      -6.079   2.411  19.064  1.00  0.00
C
ATOM    921  CG1 ILE X  63      -5.914   0.911  19.319  1.00  0.00
C
ATOM    922  CG2 ILE X  63      -4.738   3.051  18.738  1.00  0.00
C
ATOM    923  CD1 ILE X  63      -5.089   0.586  20.544  1.00  0.00
C
ATOM    924  H   ILE X  63      -8.639   2.225  19.925  1.00  0.00
H
ATOM    925  HA  ILE X  63      -6.020   3.069  21.123  1.00  0.00
H
ATOM    926  HB  ILE X  63      -6.748   2.513  18.210  1.00  0.00
H
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ATOM    927 1HG1 ILE X  63      -6.910   0.487  19.430  1.00  0.00
H
ATOM    928 2HG1 ILE X  63      -5.435   0.485  18.436  1.00  0.00
H
ATOM    929 1HG2 ILE X  63      -4.301   2.555  17.872  1.00  0.00
H
ATOM    930 2HG2 ILE X  63      -4.884   4.107  18.517  1.00  0.00
H
ATOM    931 3HG2 ILE X  63      -4.068   2.949  19.593  1.00  0.00
H
ATOM    932 1HD1 ILE X  63      -5.015  -0.496  20.659  1.00  0.00
H
ATOM    933 2HD1 ILE X  63      -4.089   1.007  20.433  1.00  0.00
H
ATOM    934 3HD1 ILE X  63      -5.565   1.010  21.426  1.00  0.00
H
ATOM    935  N   PRO X  64      -6.144   5.417  20.676  1.00  0.00
N
ATOM    936  CA  PRO X  64      -6.115   6.845  20.380  1.00  0.00
C
ATOM    937  C   PRO X  64      -5.746   7.099  18.925  1.00  0.00
C
ATOM    938  O   PRO X  64      -4.769   6.549  18.416  1.00  0.00
O
ATOM    939  CB  PRO X  64      -5.062   7.408  21.349  1.00  0.00
C
ATOM    940  CG  PRO X  64      -5.050   6.449  22.509  1.00  0.00
C
ATOM    941  CD  PRO X  64      -5.146   5.039  21.684  1.00  0.00
C
ATOM    942  HA  PRO X  64      -7.010   7.248  20.553  1.00  0.00
H
ATOM    943 1HB  PRO X  64      -4.296   7.256  20.874  1.00  0.00
H
ATOM    944 2HB  PRO X  64      -5.451   8.134  21.614  1.00  0.00
H
ATOM    945 1HG  PRO X  64      -4.640   5.747  22.272  1.00  0.00
H
ATOM    946 2HG  PRO X  64      -5.022   6.957  23.295  1.00  0.00
H
ATOM    947 1HD  PRO X  64      -4.738   4.257  21.320  1.00  0.00
H
ATOM    948 2HD  PRO X  64      -5.669   4.938  22.474  1.00  0.00
H
ATOM    949  N   ALA X  65      -6.537   7.932  18.255  1.00  0.00
N
ATOM    950  CA  ALA X  65      -6.317   8.230  16.846  1.00  0.00
C
ATOM    951  C   ALA X  65      -5.130   9.165  16.658  1.00  0.00
C
ATOM    952  O   ALA X  65      -4.463   9.136  15.626  1.00  0.00
O
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ATOM    953  CB  ALA X  65      -7.572   8.831  16.230  1.00  0.00
C
ATOM    954  H   ALA X  65      -7.310   8.370  18.736  1.00  0.00
H
ATOM    955  HA  ALA X  65      -6.084   7.302  16.324  1.00  0.00
H
ATOM    956 1HB  ALA X  65      -7.390   9.049  15.177  1.00  0.00
H
ATOM    957 2HB  ALA X  65      -8.395   8.124  16.317  1.00  0.00
H
ATOM    958 3HB  ALA X  65      -7.827   9.753  16.751  1.00  0.00
H
ATOM    959  N   THR X  66      -4.873   9.995  17.661  1.00  0.00
N
ATOM    960  CA  THR X  66      -3.731  10.900  17.638  1.00  0.00
C
ATOM    961  C   THR X  66      -3.222  11.186  19.044  1.00  0.00
C
ATOM    962  O   THR X  66      -3.967  11.083  20.017  1.00  0.00
O
ATOM    963  CB  THR X  66      -4.079  12.233  16.949  1.00  0.00
C
ATOM    964  CG2 THR X  66      -5.115  12.997  17.760  1.00  0.00
C
ATOM    965  OG1 THR X  66      -2.895  13.031  16.819  1.00  0.00
O
ATOM    966  H   THR X  66      -5.487  10.000  18.463  1.00  0.00
H
ATOM    967  HA  THR X  66      -2.904  10.435  17.101  1.00  0.00
H
ATOM    968  HB  THR X  66      -4.477  12.025  15.956  1.00  0.00
H
ATOM    969  HG1 THR X  66      -3.116  13.861  16.389  1.00  0.00
H
ATOM    970 1HG2 THR X  66      -5.348  13.935  17.257  1.00  0.00
H
ATOM    971 2HG2 THR X  66      -6.021  12.397  17.850  1.00  0.00
H
ATOM    972 3HG2 THR X  66      -4.717  13.205  18.752  1.00  0.00
H
ATOM    973  N   THR X  67      -1.945  11.546  19.142  1.00  0.00
N
ATOM    974  CA  THR X  67      -1.339  11.867  20.428  1.00  0.00
C
ATOM    975  C   THR X  67      -1.570  13.329  20.794  1.00  0.00
C
ATOM    976  O   THR X  67      -1.208  14.231  20.041  1.00  0.00
O
ATOM    977  CB  THR X  67       0.174  11.581  20.426  1.00  0.00
C
ATOM    978  CG2 THR X  67       0.793  11.972  21.760  1.00  0.00
C
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ATOM    979  OG1 THR X  67       0.399  10.185  20.190  1.00  0.00
O
ATOM    980  H   THR X  67      -1.383  11.599  18.306  1.00  0.00
H
ATOM    981  HA  THR X  67      -1.806  11.274  21.215  1.00  0.00
H
ATOM    982  HB  THR X  67       0.642  12.156  19.628  1.00  0.00
H
ATOM    983  HG1 THR X  67       1.343  10.009  20.189  1.00  0.00
H
ATOM    984 1HG2 THR X  67       1.861  11.763  21.739  1.00  0.00
H
ATOM    985 2HG2 THR X  67       0.634  13.035  21.937  1.00  0.00
H
ATOM    986 3HG2 THR X  67       0.326  11.398  22.558  1.00  0.00
H
ATOM    987  N   THR X  68      -2.174  13.555  21.954  1.00  0.00
N
ATOM    988  CA  THR X  68      -2.543  14.901  22.377  1.00  0.00
C
ATOM    989  C   THR X  68      -1.482  15.504  23.286  1.00  0.00
C
ATOM    990  O   THR X  68      -1.534  16.688  23.618  1.00  0.00
O
ATOM    991  CB  THR X  68      -3.897  14.912  23.111  1.00  0.00
C
ATOM    992  CG2 THR X  68      -4.996  14.366  22.211  1.00  0.00
C
ATOM    993  OG1 THR X  68      -3.809  14.108  24.294  1.00  0.00
O
ATOM    994  H   THR X  68      -2.385  12.774  22.560  1.00  0.00
H
ATOM    995  HA  THR X  68      -2.611  15.555  21.507  1.00  0.00
H
ATOM    996  HB  THR X  68      -4.137  15.936  23.396  1.00  0.00
H
ATOM    997  HG1 THR X  68      -3.129  14.464  24.873  1.00  0.00
H
ATOM    998 1HG2 THR X  68      -5.944  14.383  22.746  1.00  0.00
H
ATOM    999 2HG2 THR X  68      -5.072  14.983  21.316  1.00  0.00
H
ATOM   1000 3HG2 THR X  68      -4.756  13.343  21.926  1.00  0.00
H
ATOM   1001  N   THR X  69      -0.517  14.684  23.687  1.00  0.00
N
ATOM   1002  CA  THR X  69       0.534  15.123  24.597  1.00  0.00
C
ATOM   1003  C   THR X  69       1.663  15.814  23.844  1.00  0.00
C
ATOM   1004  O   THR X  69       2.702  16.134  24.419  1.00  0.00
O
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ATOM   1005  CB  THR X  69       1.114  13.944  25.401  1.00  0.00
C
ATOM   1006  CG2 THR X  69       0.025  13.269  26.219  1.00  0.00
C
ATOM   1007  OG1 THR X  69       1.696  12.989  24.503  1.00  0.00
O
ATOM   1008  H   THR X  69      -0.511  13.730  23.353  1.00  0.00
H
ATOM   1009  HA  THR X  69       0.134  15.859  25.295  1.00  0.00
H
ATOM   1010  HB  THR X  69       1.891  14.319  26.070  1.00  0.00
H
ATOM   1011  HG1 THR X  69       2.057  12.256  25.008  1.00  0.00
H
ATOM   1012 1HG2 THR X  69       0.454  12.440  26.781  1.00  0.00
H
ATOM   1013 2HG2 THR X  69      -0.410  13.990  26.911  1.00  0.00
H
ATOM   1014 3HG2 THR X  69      -0.749  12.893  25.552  1.00  0.00
H
ATOM   1015  N   LEU X  70       1.453  16.041  22.552  1.00  0.00
N
ATOM   1016  CA  LEU X  70       2.450  16.696  21.717  1.00  0.00
C
ATOM   1017  C   LEU X  70       2.423  18.207  21.905  1.00  0.00
C
ATOM   1018  O   LEU X  70       3.276  18.925  21.383  1.00  0.00
O
ATOM   1019  CB  LEU X  70       2.223  16.339  20.242  1.00  0.00
C
ATOM   1020  CG  LEU X  70       2.380  14.853  19.898  1.00  0.00
C
ATOM   1021  CD1 LEU X  70       2.024  14.614  18.437  1.00  0.00
C
ATOM   1022  CD2 LEU X  70       3.808  14.412  20.184  1.00  0.00
C
ATOM   1023  H   LEU X  70       0.579  15.751  22.137  1.00  0.00
H
ATOM   1024  HA  LEU X  70       3.446  16.367  22.011  1.00  0.00
H
ATOM   1025 1HB  LEU X  70       1.180  16.637  20.146  1.00  0.00
H
ATOM   1026 2HB  LEU X  70       2.837  16.950  19.581  1.00  0.00
H
ATOM   1027  HG  LEU X  70       1.720  14.295  20.563  1.00  0.00
H
ATOM   1028 1HD1 LEU X  70       2.138  13.556  18.202  1.00  0.00
H
ATOM   1029 2HD1 LEU X  70       0.991  14.914  18.262  1.00  0.00
H
ATOM   1030 3HD1 LEU X  70       2.686  15.200  17.802  1.00  0.00
H
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ATOM   1031 1HD2 LEU X  70       3.919  13.356  19.939  1.00  0.00
H
ATOM   1032 2HD2 LEU X  70       4.499  15.000  19.578  1.00  0.00
H
ATOM   1033 3HD2 LEU X  70       4.033  14.566  21.239  1.00  0.00
H
ATOM   1034  N   VAL X  71       1.434  18.687  22.655  1.00  0.00
N
ATOM   1035  CA  VAL X  71       1.287  20.117  22.905  1.00  0.00
C
ATOM   1036  C   VAL X  71       2.423  20.643  23.772  1.00  0.00
C
ATOM   1037  O   VAL X  71       3.007  19.908  24.568  1.00  0.00
O
ATOM   1038  CB  VAL X  71      -0.057  20.435  23.588  1.00  0.00
C
ATOM   1039  CG1 VAL X  71      -1.219  20.041  22.687  1.00  0.00
C
ATOM   1040  CG2 VAL X  71      -0.157  19.719  24.926  1.00  0.00
C
ATOM   1041  H   VAL X  71       0.768  18.044  23.062  1.00  0.00
H
ATOM   1042  HA  VAL X  71       1.350  20.690  21.980  1.00  0.00
H
ATOM   1043  HB  VAL X  71      -0.104  21.504  23.795  1.00  0.00
H
ATOM   1044 1HG1 VAL X  71      -2.160  20.273  23.184  1.00  0.00
H
ATOM   1045 2HG1 VAL X  71      -1.157  20.597  21.751  1.00  0.00
H
ATOM   1046 3HG1 VAL X  71      -1.173  18.972  22.479  1.00  0.00
H
ATOM   1047 1HG2 VAL X  71      -1.112  19.956  25.394  1.00  0.00
H
ATOM   1048 2HG2 VAL X  71      -0.088  18.644  24.769  1.00  0.00
H
ATOM   1049 3HG2 VAL X  71       0.655  20.047  25.576  1.00  0.00
H
ATOM   1050  N   ALA X  72       2.734  21.926  23.610  1.00  0.00
N
ATOM   1051  CA  ALA X  72       3.820  22.551  24.357  1.00  0.00
C
ATOM   1052  C   ALA X  72       3.463  22.694  25.831  1.00  0.00
C
ATOM   1053  O   ALA X  72       4.339  22.721  26.694  1.00  0.00
O
ATOM   1054  CB  ALA X  72       4.162  23.907  23.758  1.00  0.00
C
ATOM   1055  H   ALA X  72       2.205  22.482  22.953  1.00  0.00
H
ATOM   1056  HA  ALA X  72       4.700  21.911  24.296  1.00  0.00
H
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ATOM   1057 1HB  ALA X  72       4.974  24.361  24.327  1.00  0.00
H
ATOM   1058 2HB  ALA X  72       4.474  23.779  22.721  1.00  0.00
H
ATOM   1059 3HB  ALA X  72       3.288  24.554  23.797  1.00  0.00
H
ATOM   1060  N   GLU X  73       2.167  22.790  26.113  1.00  0.00
N
ATOM   1061  CA  GLU X  73       1.691  22.941  27.482  1.00  0.00
C
ATOM   1062  C   GLU X  73       0.369  22.209  27.690  1.00  0.00
C
ATOM   1063  O   GLU X  73      -0.422  22.060  26.760  1.00  0.00
O
ATOM   1064  CB  GLU X  73       1.534  24.422  27.834  1.00  0.00
C
ATOM   1065  CG  GLU X  73       0.543  25.176  26.957  1.00  0.00
C
ATOM   1066  CD  GLU X  73       0.571  26.651  27.245  1.00  0.00
C
ATOM   1067  OE1 GLU X  73       1.341  27.060  28.080  1.00  0.00
O
ATOM   1068  OE2 GLU X  73      -0.094  27.383  26.551  1.00  0.00
O
ATOM   1069  H   GLU X  73       1.495  22.756  25.360  1.00  0.00
H
ATOM   1070  HA  GLU X  73       2.406  22.494  28.174  1.00  0.00
H
ATOM   1071 1HB  GLU X  73       1.207  24.470  28.873  1.00  0.00
H
ATOM   1072 2HB  GLU X  73       2.520  24.879  27.742  1.00  0.00
H
ATOM   1073 1HG  GLU X  73       0.696  25.011  25.891  1.00  0.00
H
ATOM   1074 2HG  GLU X  73      -0.423  24.766  27.253  1.00  0.00
H
ATOM   1075  N   LEU X  74       0.138  21.751  28.917  1.00  0.00
N
ATOM   1076  CA  LEU X  74      -1.131  21.134  29.275  1.00  0.00
C
ATOM   1077  C   LEU X  74      -2.288  22.105  29.095  1.00  0.00
C
ATOM   1078  O   LEU X  74      -3.444  21.695  28.986  1.00  0.00
O
ATOM   1079  CB  LEU X  74      -1.084  20.625  30.723  1.00  0.00
C
ATOM   1080  CG  LEU X  74      -0.118  19.459  30.974  1.00  0.00
C
ATOM   1081  CD1 LEU X  74      -0.076  19.128  32.459  1.00  0.00
C
ATOM   1082  CD2 LEU X  74      -0.562  18.250  30.165  1.00  0.00
C
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ATOM   1083  H   LEU X  74       0.861  21.834  29.617  1.00  0.00
H
ATOM   1084  HA  LEU X  74      -1.328  20.293  28.612  1.00  0.00
H
ATOM   1085 1HB  LEU X  74      -0.717  21.526  31.215  1.00  0.00
H
ATOM   1086 2HB  LEU X  74      -2.078  20.386  31.098  1.00  0.00
H
ATOM   1087  HG  LEU X  74       0.861  19.766  30.607  1.00  0.00
H
ATOM   1088 1HD1 LEU X  74       0.613  18.300  32.627  1.00  0.00
H
ATOM   1089 2HD1 LEU X  74       0.267  20.001  33.016  1.00  0.00
H
ATOM   1090 3HD1 LEU X  74      -1.071  18.847  32.798  1.00  0.00
H
ATOM   1091 1HD2 LEU X  74       0.126  17.423  30.341  1.00  0.00
H
ATOM   1092 2HD2 LEU X  74      -1.569  17.958  30.465  1.00  0.00
H
ATOM   1093 3HD2 LEU X  74      -0.559  18.501  29.103  1.00  0.00
H
ATOM   1094  N   HIS X  75      -1.973  23.395  29.063  1.00  0.00
N
ATOM   1095  CA  HIS X  75      -2.986  24.430  28.887  1.00  0.00
C
ATOM   1096  C   HIS X  75      -3.429  24.530  27.435  1.00  0.00
C
ATOM   1097  O   HIS X  75      -4.435  25.170  27.124  1.00  0.00
O
ATOM   1098  CB  HIS X  75      -2.464  25.787  29.368  1.00  0.00
C
ATOM   1099  CG  HIS X  75      -2.217  25.848  30.844  1.00  0.00
C
ATOM   1100  CD2 HIS X  75      -1.066  25.889  31.555  1.00  0.00
C
ATOM   1101  ND1 HIS X  75      -3.240  25.873  31.769  1.00  0.00
N
ATOM   1102  CE1 HIS X  75      -2.728  25.926  32.986  1.00  0.00
C
ATOM   1103  NE2 HIS X  75      -1.411  25.938  32.883  1.00  0.00
N
ATOM   1104  H   HIS X  75      -1.006  23.667  29.163  1.00  0.00
H
ATOM   1105  HA  HIS X  75      -3.875  24.174  29.464  1.00  0.00
H
ATOM   1106 1HB  HIS X  75      -1.514  26.017  28.885  1.00  0.00
H
ATOM   1107 2HB  HIS X  75      -3.186  26.570  29.141  1.00  0.00
H
ATOM   1108  HD2 HIS X  75      -0.015  25.891  31.264  1.00  0.00
H
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ATOM   1109  HE1 HIS X  75      -3.376  25.954  33.861  1.00  0.00
H
ATOM   1110  HE2 HIS X  75      -0.756  25.976  33.651  1.00  0.00
H
ATOM   1111  N   GLN X  76      -2.675  23.893  26.547  1.00  0.00
N
ATOM   1112  CA  GLN X  76      -3.036  23.831  25.135  1.00  0.00
C
ATOM   1113  C   GLN X  76      -3.389  25.211  24.595  1.00  0.00
C
ATOM   1114  O   GLN X  76      -4.377  25.374  23.882  1.00  0.00
O
ATOM   1115  CB  GLN X  76      -4.216  22.877  24.925  1.00  0.00
C
ATOM   1116  CG  GLN X  76      -3.929  21.439  25.316  1.00  0.00
C
ATOM   1117  CD  GLN X  76      -5.126  20.530  25.101  1.00  0.00
C
ATOM   1118  NE2 GLN X  76      -5.021  19.293  25.573  1.00  0.00
N
ATOM   1119  OE1 GLN X  76      -6.135  20.939  24.520  1.00  0.00
O
ATOM   1120  H   GLN X  76      -1.828  23.438  26.857  1.00  0.00
H
ATOM   1121  HA  GLN X  76      -2.182  23.481  24.555  1.00  0.00
H
ATOM   1122 1HB  GLN X  76      -5.043  23.264  25.520  1.00  0.00
H
ATOM   1123 2HB  GLN X  76      -4.476  22.927  23.868  1.00  0.00
H
ATOM   1124 1HG  GLN X  76      -3.041  20.903  24.986  1.00  0.00
H
ATOM   1125 2HG  GLN X  76      -3.847  21.652  26.382  1.00  0.00
H
ATOM   1126 1HE2 GLN X  76      -5.781  18.650  25.461  1.00  0.00
H
ATOM   1127 2HE2 GLN X  76      -4.185  19.004  26.039  1.00  0.00
H
ATOM   1128  N   GLY X  77      -2.571  26.200  24.941  1.00  0.00
N
ATOM   1129  CA  GLY X  77      -2.769  27.562  24.451  1.00  0.00
C
ATOM   1130  C   GLY X  77      -2.564  27.642  22.946  1.00  0.00
C
ATOM   1131  O   GLY X  77      -3.081  28.541  22.284  1.00  0.00
O
ATOM   1132  H   GLY X  77      -1.794  26.004  25.556  1.00  0.00
H
ATOM   1133 1HA  GLY X  77      -3.783  27.882  24.689  1.00  0.00
H
ATOM   1134 2HA  GLY X  77      -2.056  28.224  24.942  1.00  0.00
H
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ATOM   1135  N   GLU X  78      -1.803  26.693  22.405  1.00  0.00
N
ATOM   1136  CA  GLU X  78      -1.497  26.673  20.982  1.00  0.00
C
ATOM   1137  C   GLU X  78      -2.501  25.823  20.215  1.00  0.00
C
ATOM   1138  O   GLU X  78      -2.156  24.767  19.680  1.00  0.00
O
ATOM   1139  CB  GLU X  78      -0.078  26.152  20.746  1.00  0.00
C
ATOM   1140  CG  GLU X  78       1.015  26.980  21.409  1.00  0.00
C
ATOM   1141  CD  GLU X  78       2.360  26.326  21.262  1.00  0.00
C
ATOM   1142  OE1 GLU X  78       2.431  25.286  20.653  1.00  0.00
O
ATOM   1143  OE2 GLU X  78       3.334  26.922  21.659  1.00  0.00
O
ATOM   1144  H   GLU X  78      -1.429  25.966  22.999  1.00  0.00
H
ATOM   1145  HA  GLU X  78      -1.569  27.682  20.574  1.00  0.00
H
ATOM   1146 1HB  GLU X  78      -0.045  25.132  21.133  1.00  0.00
H
ATOM   1147 2HB  GLU X  78       0.082  26.137  19.668  1.00  0.00
H
ATOM   1148 1HG  GLU X  78       1.066  28.003  21.041  1.00  0.00
H
ATOM   1149 2HG  GLU X  78       0.728  26.987  22.460  1.00  0.00
H
ATOM   1150  N   ARG X  79      -3.744  26.286  20.161  1.00  0.00
N
ATOM   1151  CA  ARG X  79      -4.806  25.561  19.469  1.00  0.00
C
ATOM   1152  C   ARG X  79      -4.452  25.336  18.006  1.00  0.00
C
ATOM   1153  O   ARG X  79      -4.505  24.209  17.511  1.00  0.00
O
ATOM   1154  CB  ARG X  79      -6.159  26.242  19.617  1.00  0.00
C
ATOM   1155  CG  ARG X  79      -7.318  25.516  18.955  1.00  0.00
C
ATOM   1156  CD  ARG X  79      -8.607  26.253  18.995  1.00  0.00
C
ATOM   1157  NE  ARG X  79      -8.617  27.489  18.229  1.00  0.00
N
ATOM   1158  CZ  ARG X  79      -8.735  27.559  16.889  1.00  0.00
C
ATOM   1159  NH1 ARG X  79      -8.816  26.468  16.159  1.00  0.00
N
ATOM   1160  NH2 ARG X  79      -8.744  28.753  16.324  1.00  0.00
N
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ATOM   1161  H   ARG X  79      -3.962  27.165  20.611  1.00  0.00
H
ATOM   1162  HA  ARG X  79      -4.930  24.574  19.915  1.00  0.00
H
ATOM   1163 1HB  ARG X  79      -6.353  26.333  20.685  1.00  0.00
H
ATOM   1164 2HB  ARG X  79      -6.063  27.237  19.180  1.00  0.00
H
ATOM   1165 1HG  ARG X  79      -7.065  25.337  17.910  1.00  0.00
H
ATOM   1166 2HG  ARG X  79      -7.462  24.560  19.462  1.00  0.00
H
ATOM   1167 1HD  ARG X  79      -9.392  25.615  18.594  1.00  0.00
H
ATOM   1168 2HD  ARG X  79      -8.838  26.508  20.029  1.00  0.00
H
ATOM   1169  HE  ARG X  79      -8.541  28.447  18.549  1.00  0.00
H
ATOM   1170 1HH1 ARG X  79      -8.790  25.563  16.606  1.00  0.00
H
ATOM   1171 2HH1 ARG X  79      -8.905  26.541  15.156  1.00  0.00
H
ATOM   1172 1HH2 ARG X  79      -8.663  29.581  16.898  1.00  0.00
H
ATOM   1173 2HH2 ARG X  79      -8.830  28.833  15.322  1.00  0.00
H
ATOM   1174  N   GLU X  80      -4.092  26.411  17.317  1.00  0.00
N
ATOM   1175  CA  GLU X  80      -3.865  26.358  15.877  1.00  0.00
C
ATOM   1176  C   GLU X  80      -2.670  25.477  15.539  1.00  0.00
C
ATOM   1177  O   GLU X  80      -2.709  24.709  14.576  1.00  0.00
O
ATOM   1178  CB  GLU X  80      -3.653  27.766  15.314  1.00  0.00
C
ATOM   1179  CG  GLU X  80      -4.903  28.636  15.312  1.00  0.00
C
ATOM   1180  CD  GLU X  80      -4.593  30.036  14.861  1.00  0.00
C
ATOM   1181  OE1 GLU X  80      -3.442  30.326  14.636  1.00  0.00
O
ATOM   1182  OE2 GLU X  80      -5.514  30.784  14.634  1.00  0.00
O
ATOM   1183  H   GLU X  80      -3.973  27.289  17.802  1.00  0.00
H
ATOM   1184  HA  GLU X  80      -4.728  25.911  15.383  1.00  0.00
H
ATOM   1185 1HB  GLU X  80      -2.883  28.241  15.926  1.00  0.00
H
ATOM   1186 2HB  GLU X  80      -3.288  27.651  14.295  1.00  0.00
H
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ATOM   1187 1HG  GLU X  80      -5.711  28.231  14.704  1.00  0.00
H
ATOM   1188 2HG  GLU X  80      -5.208  28.650  16.357  1.00  0.00
H
ATOM   1189  N   THR X  81      -1.614  25.588  16.336  1.00  0.00
N
ATOM   1190  CA  THR X  81      -0.438  24.744  16.168  1.00  0.00
C
ATOM   1191  C   THR X  81      -0.803  23.267  16.250  1.00  0.00
C
ATOM   1192  O   THR X  81      -0.400  22.472  15.400  1.00  0.00
O
ATOM   1193  CB  THR X  81       0.637  25.053  17.227  1.00  0.00
C
ATOM   1194  CG2 THR X  81       1.852  24.160  17.029  1.00  0.00
C
ATOM   1195  OG1 THR X  81       1.035  26.426  17.120  1.00  0.00
O
ATOM   1196  H   THR X  81      -1.625  26.275  17.077  1.00  0.00
H
ATOM   1197  HA  THR X  81      -0.009  24.901  15.178  1.00  0.00
H
ATOM   1198  HB  THR X  81       0.217  24.882  18.218  1.00  0.00
H
ATOM   1199  HG1 THR X  81       1.705  26.617  17.781  1.00  0.00
H
ATOM   1200 1HG2 THR X  81       2.600  24.394  17.786  1.00  0.00
H
ATOM   1201 2HG2 THR X  81       1.555  23.116  17.122  1.00  0.00
H
ATOM   1202 3HG2 THR X  81       2.271  24.332  16.040  1.00  0.00
H
ATOM   1203  N   TRP X  82      -1.571  22.906  17.272  1.00  0.00
N
ATOM   1204  CA  TRP X  82      -1.952  21.518  17.491  1.00  0.00
C
ATOM   1205  C   TRP X  82      -2.797  20.988  16.340  1.00  0.00
C
ATOM   1206  O   TRP X  82      -2.636  19.847  15.913  1.00  0.00
O
ATOM   1207  CB  TRP X  82      -2.716  21.378  18.810  1.00  0.00
C
ATOM   1208  CG  TRP X  82      -3.135  19.969  19.112  1.00  0.00
C
ATOM   1209  CD1 TRP X  82      -2.368  18.995  19.676  1.00  0.00
C
ATOM   1210  CD2 TRP X  82      -4.418  19.381  18.866  1.00  0.00
C
ATOM   1211  CE2 TRP X  82      -4.355  18.048  19.307  1.00  0.00
C
ATOM   1212  CE3 TRP X  82      -5.614  19.855  18.315  1.00  0.00
C
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ATOM   1213  NE1 TRP X  82      -3.091  17.835  19.797  1.00  0.00
N
ATOM   1214  CZ2 TRP X  82      -5.435  17.184  19.215  1.00  0.00
C
ATOM   1215  CZ3 TRP X  82      -6.698  18.989  18.224  1.00  0.00
C
ATOM   1216  CH2 TRP X  82      -6.610  17.691  18.661  1.00  0.00
C
ATOM   1217  H   TRP X  82      -1.900  23.613  17.914  1.00  0.00
H
ATOM   1218  HA  TRP X  82      -1.061  20.893  17.537  1.00  0.00
H
ATOM   1219 1HB  TRP X  82      -2.095  21.703  19.643  1.00  0.00
H
ATOM   1220 2HB  TRP X  82      -3.628  21.974  18.781  1.00  0.00
H
ATOM   1221  HD1 TRP X  82      -1.345  19.262  19.936  1.00  0.00
H
ATOM   1222  HE1 TRP X  82      -2.751  16.966  20.182  1.00  0.00
H
ATOM   1223  HE3 TRP X  82      -5.739  20.876  17.956  1.00  0.00
H
ATOM   1224  HZ2 TRP X  82      -5.323  16.159  19.575  1.00  0.00
H
ATOM   1225  HZ3 TRP X  82      -7.623  19.370  17.793  1.00  0.00
H
ATOM   1226  HH2 TRP X  82      -7.483  17.045  18.573  1.00  0.00
H
ATOM   1227  N   GLY X  83      -3.699  21.828  15.841  1.00  0.00
N
ATOM   1228  CA  GLY X  83      -4.498  21.486  14.671  1.00  0.00
C
ATOM   1229  C   GLY X  83      -3.612  21.165  13.472  1.00  0.00
C
ATOM   1230  O   GLY X  83      -3.866  20.211  12.737  1.00  0.00
O
ATOM   1231  H   GLY X  83      -3.834  22.726  16.284  1.00  0.00
H
ATOM   1232 1HA  GLY X  83      -5.113  20.616  14.901  1.00  0.00
H
ATOM   1233 2HA  GLY X  83      -5.142  22.328  14.421  1.00  0.00
H
ATOM   1234  N   LYS X  84      -2.568  21.968  13.283  1.00  0.00
N
ATOM   1235  CA  LYS X  84      -1.613  21.737  12.208  1.00  0.00
C
ATOM   1236  C   LYS X  84      -0.858  20.429  12.410  1.00  0.00
C
ATOM   1237  O   LYS X  84      -0.556  19.721  11.451  1.00  0.00
O
ATOM   1238  CB  LYS X  84      -0.627  22.903  12.107  1.00  0.00
C
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ATOM   1239  CG  LYS X  84      -1.239  24.205  11.610  1.00  0.00
C
ATOM   1240  CD  LYS X  84      -0.212  25.326  11.587  1.00  0.00
C
ATOM   1241  CE  LYS X  84      -0.833  26.639  11.130  1.00  0.00
C
ATOM   1242  NZ  LYS X  84       0.153  27.752  11.136  1.00  0.00
N
ATOM   1243  H   LYS X  84      -2.434  22.756  13.900  1.00  0.00
H
ATOM   1244  HA  LYS X  84      -2.142  21.647  11.258  1.00  0.00
H
ATOM   1245 1HB  LYS X  84      -0.211  23.056  13.104  1.00  0.00
H
ATOM   1246 2HB  LYS X  84       0.168  22.593  11.429  1.00  0.00
H
ATOM   1247 1HG  LYS X  84      -1.625  24.043  10.603  1.00  0.00
H
ATOM   1248 2HG  LYS X  84      -2.060  24.476  12.272  1.00  0.00
H
ATOM   1249 1HD  LYS X  84       0.195  25.446  12.592  1.00  0.00
H
ATOM   1250 2HD  LYS X  84       0.590  25.048  10.902  1.00  0.00
H
ATOM   1251 1HE  LYS X  84      -1.220  26.502  10.121  1.00  0.00
H
ATOM   1252 2HE  LYS X  84      -1.656  26.878  11.804  1.00  0.00
H
ATOM   1253 1HZ  LYS X  84      -0.299  28.603  10.829  1.00  0.00
H
ATOM   1254 2HZ  LYS X  84       0.510  27.882  12.072  1.00  0.00
H
ATOM   1255 3HZ  LYS X  84       0.913  27.532  10.513  1.00  0.00
H
ATOM   1256  N   LYS X  85      -0.554  20.116  13.666  1.00  0.00
N
ATOM   1257  CA  LYS X  85       0.132  18.889  14.015  1.00  0.00
C
ATOM   1258  C   LYS X  85      -0.726  17.685  13.641  1.00  0.00
C
ATOM   1259  O   LYS X  85      -0.226  16.687  13.121  1.00  0.00
O
ATOM   1260  CB  LYS X  85       0.471  18.870  15.507  1.00  0.00
C
ATOM   1261  CG  LYS X  85       1.618  19.791  15.902  1.00  0.00
C
ATOM   1262  CD  LYS X  85       1.833  19.789  17.409  1.00  0.00
C
ATOM   1263  CE  LYS X  85       3.040  20.631  17.796  1.00  0.00
C
ATOM   1264  NZ  LYS X  85       3.162  20.784  19.273  1.00  0.00
N
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ATOM   1265  H   LYS X  85      -0.811  20.757  14.404  1.00  0.00
H
ATOM   1266  HA  LYS X  85       1.059  18.810  13.447  1.00  0.00
H
ATOM   1267 1HB  LYS X  85      -0.432  19.163  16.043  1.00  0.00
H
ATOM   1268 2HB  LYS X  85       0.728  17.841  15.764  1.00  0.00
H
ATOM   1269 1HG  LYS X  85       2.526  19.448  15.405  1.00  0.00
H
ATOM   1270 2HG  LYS X  85       1.381  20.802  15.570  1.00  0.00
H
ATOM   1271 1HD  LYS X  85       0.940  20.193  17.889  1.00  0.00
H
ATOM   1272 2HD  LYS X  85       1.987  18.763  17.737  1.00  0.00
H
ATOM   1273 1HE  LYS X  85       3.934  20.146  17.408  1.00  0.00
H
ATOM   1274 2HE  LYS X  85       2.933  21.614  17.338  1.00  0.00
H
ATOM   1275 1HZ  LYS X  85       3.972  21.348  19.487  1.00  0.00
H
ATOM   1276 2HZ  LYS X  85       2.332  21.235  19.634  1.00  0.00
H
ATOM   1277 3HZ  LYS X  85       3.262  19.874  19.697  1.00  0.00
H
ATOM   1278  N   VAL X  86      -2.022  17.789  13.923  1.00  0.00
N
ATOM   1279  CA  VAL X  86      -2.956  16.711  13.617  1.00  0.00
C
ATOM   1280  C   VAL X  86      -3.042  16.538  12.106  1.00  0.00
C
ATOM   1281  O   VAL X  86      -3.060  15.419  11.603  1.00  0.00
O
ATOM   1282  CB  VAL X  86      -4.353  16.991  14.200  1.00  0.00
C
ATOM   1283  CG1 VAL X  86      -5.358  15.969  13.689  1.00  0.00
C
ATOM   1284  CG2 VAL X  86      -4.309  16.977  15.721  1.00  0.00
C
ATOM   1285  H   VAL X  86      -2.367  18.633  14.358  1.00  0.00
H
ATOM   1286  HA  VAL X  86      -2.602  15.756  14.007  1.00  0.00
H
ATOM   1287  HB  VAL X  86      -4.669  17.990  13.902  1.00  0.00
H
ATOM   1288 1HG1 VAL X  86      -6.341  16.182  14.111  1.00  0.00
H
ATOM   1289 2HG1 VAL X  86      -5.413  16.023  12.602  1.00  0.00
H
ATOM   1290 3HG1 VAL X  86      -5.045  14.969  13.989  1.00  0.00
H
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ATOM   1291 1HG2 VAL X  86      -5.305  17.178  16.116  1.00  0.00
H
ATOM   1292 2HG2 VAL X  86      -3.971  16.000  16.065  1.00  0.00
H
ATOM   1293 3HG2 VAL X  86      -3.620  17.745  16.072  1.00  0.00
H
ATOM   1294  N   ASP X  87      -3.102  17.660  11.393  1.00  0.00
N
ATOM   1295  CA  ASP X  87      -3.175  17.617   9.942  1.00  0.00
C
ATOM   1296  C   ASP X  87      -2.015  16.841   9.359  1.00  0.00
C
ATOM   1297  O   ASP X  87      -2.207  15.962   8.518  1.00  0.00
O
ATOM   1298  CB  ASP X  87      -3.205  19.034   9.365  1.00  0.00
C
ATOM   1299  CG  ASP X  87      -3.354  19.093   7.850  1.00  0.00
C
ATOM   1300  OD1 ASP X  87      -4.351  18.626   7.353  1.00  0.00
O
ATOM   1301  OD2 ASP X  87      -2.553  19.739   7.218  1.00  0.00
O
ATOM   1302  H   ASP X  87      -3.096  18.552  11.866  1.00  0.00
H
ATOM   1303  HA  ASP X  87      -4.082  17.097   9.633  1.00  0.00
H
ATOM   1304 1HB  ASP X  87      -3.954  19.677   9.828  1.00  0.00
H
ATOM   1305 2HB  ASP X  87      -2.208  19.376   9.643  1.00  0.00
H
ATOM   1306  N   PHE X  88      -0.804  17.179   9.795  1.00  0.00
N
ATOM   1307  CA  PHE X  88       0.399  16.502   9.327  1.00  0.00
C
ATOM   1308  C   PHE X  88       0.333  15.023   9.659  1.00  0.00
C
ATOM   1309  O   PHE X  88       0.560  14.175   8.796  1.00  0.00
O
ATOM   1310  CB  PHE X  88       1.645  17.139   9.947  1.00  0.00
C
ATOM   1311  CG  PHE X  88       2.928  16.467   9.552  1.00  0.00
C
ATOM   1312  CD1 PHE X  88       3.553  16.782   8.353  1.00  0.00
C
ATOM   1313  CD2 PHE X  88       3.515  15.519  10.376  1.00  0.00
C
ATOM   1314  CE1 PHE X  88       4.733  16.164   7.988  1.00  0.00
C
ATOM   1315  CE2 PHE X  88       4.696  14.901  10.014  1.00  0.00
C
ATOM   1316  CZ  PHE X  88       5.305  15.224   8.819  1.00  0.00
C
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ATOM   1317  H   PHE X  88      -0.717  17.925  10.471  1.00  0.00
H
ATOM   1318  HA  PHE X  88       0.470  16.583   8.242  1.00  0.00
H
ATOM   1319 1HB  PHE X  88       1.729  18.179   9.636  1.00  0.00
H
ATOM   1320 2HB  PHE X  88       1.589  17.089  11.033  1.00  0.00
H
ATOM   1321  HD1 PHE X  88       3.100  17.526   7.697  1.00  0.00
H
ATOM   1322  HD2 PHE X  88       3.032  15.263  11.319  1.00  0.00
H
ATOM   1323  HE1 PHE X  88       5.213  16.420   7.044  1.00  0.00
H
ATOM   1324  HE2 PHE X  88       5.146  14.157  10.672  1.00  0.00
H
ATOM   1325  HZ  PHE X  88       6.236  14.735   8.531  1.00  0.00
H
ATOM   1326  N   LEU X  89       0.029  14.717  10.918  1.00  0.00
N
ATOM   1327  CA  LEU X  89      -0.046  13.333  11.358  1.00  0.00
C
ATOM   1328  C   LEU X  89      -1.005  12.500  10.515  1.00  0.00
C
ATOM   1329  O   LEU X  89      -0.695  11.368  10.154  1.00  0.00
O
ATOM   1330  CB  LEU X  89      -0.469  13.267  12.831  1.00  0.00
C
ATOM   1331  CG  LEU X  89       0.576  13.773  13.834  1.00  0.00
C
ATOM   1332  CD1 LEU X  89      -0.043  13.890  15.221  1.00  0.00
C
ATOM   1333  CD2 LEU X  89       1.764  12.824  13.852  1.00  0.00
C
ATOM   1334  H   LEU X  89      -0.151  15.459  11.579  1.00  0.00
H
ATOM   1335  HA  LEU X  89       0.929  12.861  11.250  1.00  0.00
H
ATOM   1336 1HB  LEU X  89      -1.319  13.948  12.802  1.00  0.00
H
ATOM   1337 2HB  LEU X  89      -0.811  12.270  13.110  1.00  0.00
H
ATOM   1338  HG  LEU X  89       0.928  14.741  13.475  1.00  0.00
H
ATOM   1339 1HD1 LEU X  89       0.707  14.250  15.924  1.00  0.00
H
ATOM   1340 2HD1 LEU X  89      -0.876  14.592  15.188  1.00  0.00
H
ATOM   1341 3HD1 LEU X  89      -0.402  12.913  15.542  1.00  0.00
H
ATOM   1342 1HD2 LEU X  89       2.509  13.186  14.563  1.00  0.00
H
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ATOM   1343 2HD2 LEU X  89       1.432  11.829  14.147  1.00  0.00
H
ATOM   1344 3HD2 LEU X  89       2.209  12.778  12.857  1.00  0.00
H
ATOM   1345  N   LEU X  90      -2.171  13.065  10.208  1.00  0.00
N
ATOM   1346  CA  LEU X  90      -3.147  12.340   9.401  1.00  0.00
C
ATOM   1347  C   LEU X  90      -2.657  12.107   7.970  1.00  0.00
C
ATOM   1348  O   LEU X  90      -2.878  11.031   7.413  1.00  0.00
O
ATOM   1349  CB  LEU X  90      -4.482  13.095   9.377  1.00  0.00
C
ATOM   1350  CG  LEU X  90      -5.238  13.124  10.712  1.00  0.00
C
ATOM   1351  CD1 LEU X  90      -6.450  14.041  10.605  1.00  0.00
C
ATOM   1352  CD2 LEU X  90      -5.663  11.712  11.086  1.00  0.00
C
ATOM   1353  H   LEU X  90      -2.380  13.998  10.534  1.00  0.00
H
ATOM   1354  HA  LEU X  90      -3.310  11.351   9.827  1.00  0.00
H
ATOM   1355 1HB  LEU X  90      -4.117  14.091   9.133  1.00  0.00
H
ATOM   1356 2HB  LEU X  90      -5.133  12.740   8.578  1.00  0.00
H
ATOM   1357  HG  LEU X  90      -4.542  13.476  11.472  1.00  0.00
H
ATOM   1358 1HD1 LEU X  90      -6.980  14.057  11.557  1.00  0.00
H
ATOM   1359 2HD1 LEU X  90      -6.120  15.052  10.358  1.00  0.00
H
ATOM   1360 3HD1 LEU X  90      -7.115  13.676   9.823  1.00  0.00
H
ATOM   1361 1HD2 LEU X  90      -6.201  11.735  12.034  1.00  0.00
H
ATOM   1362 2HD2 LEU X  90      -6.314  11.310  10.309  1.00  0.00
H
ATOM   1363 3HD2 LEU X  90      -4.782  11.080  11.185  1.00  0.00
H
ATOM   1364  N   SER X  91      -1.999  13.102   7.377  1.00  0.00
N
ATOM   1365  CA  SER X  91      -1.479  12.934   6.013  1.00  0.00
C
ATOM   1366  C   SER X  91      -0.491  11.775   6.000  1.00  0.00
C
ATOM   1367  O   SER X  91      -0.455  10.976   5.065  1.00  0.00
O
ATOM   1368  CB  SER X  91      -0.834  14.222   5.539  1.00  0.00
C
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ATOM   1369  OG  SER X  91      -1.767  15.256   5.395  1.00  0.00
O
ATOM   1370  H   SER X  91      -1.857  13.973   7.867  1.00  0.00
H
ATOM   1371  HA  SER X  91      -2.261  12.794   5.266  1.00  0.00
H
ATOM   1372 1HB  SER X  91      -0.080  14.523   6.266  1.00  0.00
H
ATOM   1373 2HB  SER X  91      -0.355  14.039   4.577  1.00  0.00
H
ATOM   1374  HG  SER X  91      -2.190  15.427   6.240  1.00  0.00
H
ATOM   1375  N   VAL X  92       0.318  11.679   7.051  1.00  0.00
N
ATOM   1376  CA  VAL X  92       1.291  10.601   7.168  1.00  0.00
C
ATOM   1377  C   VAL X  92       0.555   9.292   7.415  1.00  0.00
C
ATOM   1378  O   VAL X  92       0.932   8.251   6.870  1.00  0.00
O
ATOM   1379  CB  VAL X  92       2.298  10.870   8.303  1.00  0.00
C
ATOM   1380  CG1 VAL X  92       3.157   9.638   8.555  1.00  0.00
C
ATOM   1381  CG2 VAL X  92       3.173  12.066   7.966  1.00  0.00
C
ATOM   1382  H   VAL X  92       0.257  12.369   7.785  1.00  0.00
H
ATOM   1383  HA  VAL X  92       1.844  10.463   6.237  1.00  0.00
H
ATOM   1384  HB  VAL X  92       1.750  11.122   9.209  1.00  0.00
H
ATOM   1385 1HG1 VAL X  92       3.862   9.845   9.359  1.00  0.00
H
ATOM   1386 2HG1 VAL X  92       2.518   8.801   8.838  1.00  0.00
H
ATOM   1387 3HG1 VAL X  92       3.705   9.385   7.648  1.00  0.00
H
ATOM   1388 1HG2 VAL X  92       3.878  12.241   8.778  1.00  0.00
H
ATOM   1389 2HG2 VAL X  92       3.722  11.868   7.045  1.00  0.00
H
ATOM   1390 3HG2 VAL X  92       2.547  12.948   7.833  1.00  0.00
H
ATOM   1391  N   ILE X  93      -0.488   9.346   8.239  1.00  0.00
N
ATOM   1392  CA  ILE X  93      -1.290   8.162   8.529  1.00  0.00
C
ATOM   1393  C   ILE X  93      -1.909   7.650   7.228  1.00  0.00
C
ATOM   1394  O   ILE X  93      -2.189   6.466   7.105  1.00  0.00
O
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ATOM   1395  CB  ILE X  93      -2.390   8.463   9.563  1.00  0.00
C
ATOM   1396  CG1 ILE X  93      -1.785   8.597  10.963  1.00  0.00
C
ATOM   1397  CG2 ILE X  93      -3.452   7.376   9.540  1.00  0.00
C
ATOM   1398  CD1 ILE X  93      -2.721   9.217  11.976  1.00  0.00
C
ATOM   1399  H   ILE X  93      -0.730  10.226   8.674  1.00  0.00
H
ATOM   1400  HA  ILE X  93      -0.659   7.352   8.895  1.00  0.00
H
ATOM   1401  HB  ILE X  93      -2.846   9.423   9.326  1.00  0.00
H
ATOM   1402 1HG1 ILE X  93      -1.505   7.597  11.292  1.00  0.00
H
ATOM   1403 2HG1 ILE X  93      -0.890   9.212  10.870  1.00  0.00
H
ATOM   1404 1HG2 ILE X  93      -4.222   7.605  10.277  1.00  0.00
H
ATOM   1405 2HG2 ILE X  93      -3.903   7.327   8.550  1.00  0.00
H
ATOM   1406 3HG2 ILE X  93      -2.997   6.415   9.779  1.00  0.00
H
ATOM   1407 1HD1 ILE X  93      -2.222   9.278  12.943  1.00  0.00
H
ATOM   1408 2HD1 ILE X  93      -3.001  10.219  11.649  1.00  0.00
H
ATOM   1409 3HD1 ILE X  93      -3.614   8.604  12.069  1.00  0.00
H
ATOM   1410  N   GLY X  94      -2.113   8.554   6.269  1.00  0.00
N
ATOM   1411  CA  GLY X  94      -2.693   8.181   4.986  1.00  0.00
C
ATOM   1412  C   GLY X  94      -1.791   7.203   4.260  1.00  0.00
C
ATOM   1413  O   GLY X  94      -2.235   6.423   3.415  1.00  0.00
O
ATOM   1414  H   GLY X  94      -1.860   9.517   6.436  1.00  0.00
H
ATOM   1415 1HA  GLY X  94      -3.666   7.720   5.156  1.00  0.00
H
ATOM   1416 2HA  GLY X  94      -2.819   9.076   4.379  1.00  0.00
H
ATOM   1417  N   TYR X  95      -0.506   7.258   4.587  1.00  0.00
N
ATOM   1418  CA  TYR X  95       0.500   6.399   3.975  1.00  0.00
C
ATOM   1419  C   TYR X  95       0.568   5.162   4.875  1.00  0.00
C
ATOM   1420  O   TYR X  95       0.716   4.027   4.409  1.00  0.00
O
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ATOM   1421  CB  TYR X  95       1.859   7.093   3.863  1.00  0.00
C
ATOM   1422  CG  TYR X  95       1.875   8.257   2.897  1.00  0.00
C
ATOM   1423  CD1 TYR X  95       1.681   9.556   3.344  1.00  0.00
C
ATOM   1424  CD2 TYR X  95       2.087   8.053   1.542  1.00  0.00
C
ATOM   1425  CE1 TYR X  95       1.694  10.623   2.466  1.00  0.00
C
ATOM   1426  CE2 TYR X  95       2.104   9.112   0.655  1.00  0.00
C
ATOM   1427  CZ  TYR X  95       1.907  10.396   1.121  1.00  0.00
C
ATOM   1428  OH  TYR X  95       1.923  11.455   0.242  1.00  0.00
O
ATOM   1429  H   TYR X  95      -0.213   7.924   5.288  1.00  0.00
H
ATOM   1430  HA  TYR X  95       0.177   6.105   2.976  1.00  0.00
H
ATOM   1431 1HB  TYR X  95       2.125   7.445   4.861  1.00  0.00
H
ATOM   1432 2HB  TYR X  95       2.578   6.341   3.539  1.00  0.00
H
ATOM   1433  HD1 TYR X  95       1.514   9.727   4.407  1.00  0.00
H
ATOM   1434  HD2 TYR X  95       2.242   7.037   1.180  1.00  0.00
H
ATOM   1435  HE1 TYR X  95       1.540  11.638   2.830  1.00  0.00
H
ATOM   1436  HE2 TYR X  95       2.271   8.931  -0.407  1.00  0.00
H
ATOM   1437  HH  TYR X  95       2.126  11.191  -0.659  1.00  0.00
H
ATOM   1438  N   ALA X  96       0.497   5.376   6.184  1.00  0.00
N
ATOM   1439  CA  ALA X  96       0.678   4.298   7.150  1.00  0.00
C
ATOM   1440  C   ALA X  96      -0.482   3.315   7.295  1.00  0.00
C
ATOM   1441  O   ALA X  96      -0.309   2.115   7.068  1.00  0.00
O
ATOM   1442  CB  ALA X  96       0.993   4.905   8.510  1.00  0.00
C
ATOM   1443  H   ALA X  96       0.465   6.330   6.515  1.00  0.00
H
ATOM   1444  HA  ALA X  96       1.524   3.686   6.838  1.00  0.00
H
ATOM   1445 1HB  ALA X  96       1.174   4.108   9.230  1.00  0.00
H
ATOM   1446 2HB  ALA X  96       1.881   5.532   8.432  1.00  0.00
H
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ATOM   1447 3HB  ALA X  96       0.150   5.509   8.842  1.00  0.00
H
ATOM   1448  N   VAL X  97      -1.655   3.810   7.679  1.00  0.00
N
ATOM   1449  CA  VAL X  97      -2.820   2.944   7.818  1.00  0.00
C
ATOM   1450  C   VAL X  97      -3.441   2.624   6.467  1.00  0.00
C
ATOM   1451  O   VAL X  97      -3.790   3.517   5.698  1.00  0.00
O
ATOM   1452  CB  VAL X  97      -3.890   3.581   8.724  1.00  0.00
C
ATOM   1453  CG1 VAL X  97      -5.158   2.739   8.724  1.00  0.00
C
ATOM   1454  CG2 VAL X  97      -3.362   3.743  10.141  1.00  0.00
C
ATOM   1455  H   VAL X  97      -1.741   4.798   7.875  1.00  0.00
H
ATOM   1456  HA  VAL X  97      -2.546   1.974   8.234  1.00  0.00
H
ATOM   1457  HB  VAL X  97      -4.117   4.582   8.355  1.00  0.00
H
ATOM   1458 1HG1 VAL X  97      -5.903   3.203   9.368  1.00  0.00
H
ATOM   1459 2HG1 VAL X  97      -5.550   2.671   7.708  1.00  0.00
H
ATOM   1460 3HG1 VAL X  97      -4.931   1.739   9.095  1.00  0.00
H
ATOM   1461 1HG2 VAL X  97      -4.132   4.195  10.767  1.00  0.00
H
ATOM   1462 2HG2 VAL X  97      -3.095   2.766  10.543  1.00  0.00
H
ATOM   1463 3HG2 VAL X  97      -2.481   4.384  10.129  1.00  0.00
H
ATOM   1464  N   ASP X  98      -3.581   1.337   6.187  1.00  0.00
N
ATOM   1465  CA  ASP X  98      -4.152   0.936   4.918  1.00  0.00
C
ATOM   1466  C   ASP X  98      -4.812  -0.426   4.981  1.00  0.00
C
ATOM   1467  O   ASP X  98      -5.052  -0.971   6.059  1.00  0.00
O
ATOM   1468  CB  ASP X  98      -3.073   0.938   3.831  1.00  0.00
C
ATOM   1469  CG  ASP X  98      -1.830   0.131   4.177  1.00  0.00
C
ATOM   1470  OD1 ASP X  98      -1.974  -0.956   4.682  1.00  0.00
O
ATOM   1471  OD2 ASP X  98      -0.758   0.536   3.792  1.00  0.00
O
ATOM   1472  H   ASP X  98      -3.291   0.638   6.855  1.00  0.00
H
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ATOM   1473  HA  ASP X  98      -4.939   1.634   4.629  1.00  0.00
H
ATOM   1474 1HB  ASP X  98      -3.443   0.633   2.852  1.00  0.00
H
ATOM   1475 2HB  ASP X  98      -2.823   1.999   3.811  1.00  0.00
H
ATOM   1476  N   LEU X  99      -5.109  -0.981   3.810  1.00  0.00
N
ATOM   1477  CA  LEU X  99      -5.779  -2.262   3.717  1.00  0.00
C
ATOM   1478  C   LEU X  99      -4.928  -3.368   4.343  1.00  0.00
C
ATOM   1479  O   LEU X  99      -5.437  -4.438   4.675  1.00  0.00
O
ATOM   1480  CB  LEU X  99      -6.096  -2.586   2.252  1.00  0.00
C
ATOM   1481  CG  LEU X  99      -7.195  -1.725   1.616  1.00  0.00
C
ATOM   1482  CD1 LEU X  99      -7.419  -2.149   0.171  1.00  0.00
C
ATOM   1483  CD2 LEU X  99      -8.478  -1.862   2.423  1.00  0.00
C
ATOM   1484  H   LEU X  99      -4.861  -0.496   2.961  1.00  0.00
H
ATOM   1485  HA  LEU X  99      -6.710  -2.227   4.281  1.00  0.00
H
ATOM   1486 1HB  LEU X  99      -5.131  -2.349   1.806  1.00  0.00
H
ATOM   1487 2HB  LEU X  99      -6.311  -3.644   2.109  1.00  0.00
H
ATOM   1488  HG  LEU X  99      -6.870  -0.686   1.678  1.00  0.00
H
ATOM   1489 1HD1 LEU X  99      -8.200  -1.533  -0.273  1.00  0.00
H
ATOM   1490 2HD1 LEU X  99      -6.494  -2.022  -0.393  1.00  0.00
H
ATOM   1491 3HD1 LEU X  99      -7.723  -3.196   0.141  1.00  0.00
H
ATOM   1492 1HD2 LEU X  99      -9.259  -1.249   1.970  1.00  0.00
H
ATOM   1493 2HD2 LEU X  99      -8.794  -2.905   2.432  1.00  0.00
H
ATOM   1494 3HD2 LEU X  99      -8.302  -1.528   3.446  1.00  0.00
H
ATOM   1495  N   GLY X 100      -3.637  -3.114   4.493  1.00  0.00
N
ATOM   1496  CA  GLY X 100      -2.793  -4.066   5.193  1.00  0.00
C
ATOM   1497  C   GLY X 100      -3.295  -4.351   6.601  1.00  0.00
C
ATOM   1498  O   GLY X 100      -3.222  -5.485   7.071  1.00  0.00
O
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ATOM   1499  H   GLY X 100      -3.241  -2.261   4.122  1.00  0.00
H
ATOM   1500 1HA  GLY X 100      -2.775  -5.002   4.636  1.00  0.00
H
ATOM   1501 2HA  GLY X 100      -1.783  -3.664   5.261  1.00  0.00
H
ATOM   1502  N   ASN X 101      -3.816  -3.329   7.265  1.00  0.00
N
ATOM   1503  CA  ASN X 101      -4.167  -3.418   8.680  1.00  0.00
C
ATOM   1504  C   ASN X 101      -5.456  -4.176   8.958  1.00  0.00
C
ATOM   1505  O   ASN X 101      -5.626  -4.779  10.025  1.00  0.00
O
ATOM   1506  CB  ASN X 101      -4.255  -2.034   9.297  1.00  0.00
C
ATOM   1507  CG  ASN X 101      -2.924  -1.354   9.452  1.00  0.00
C
ATOM   1508  ND2 ASN X 101      -2.971  -0.089   9.785  1.00  0.00
N
ATOM   1509  OD1 ASN X 101      -1.866  -1.984   9.345  1.00  0.00
O
ATOM   1510  H   ASN X 101      -3.975  -2.460   6.776  1.00  0.00
H
ATOM   1511  HA  ASN X 101      -3.395  -3.971   9.218  1.00  0.00
H
ATOM   1512 1HB  ASN X 101      -4.988  -1.310   8.938  1.00  0.00
H
ATOM   1513 2HB  ASN X 101      -4.570  -2.418  10.267  1.00  0.00
H
ATOM   1514 1HD2 ASN X 101      -2.123   0.428   9.905  1.00  0.00
H
ATOM   1515 2HD2 ASN X 101      -3.854   0.359   9.918  1.00  0.00
H
ATOM   1516  N   VAL X 102      -6.370  -4.140   7.994  1.00  0.00
N
ATOM   1517  CA  VAL X 102      -7.694  -4.707   8.169  1.00  0.00
C
ATOM   1518  C   VAL X 102      -8.146  -5.787   7.205  1.00  0.00
C
ATOM   1519  O   VAL X 102      -9.027  -6.591   7.538  1.00  0.00
O
ATOM   1520  CB  VAL X 102      -8.744  -3.582   8.121  1.00  0.00
C
ATOM   1521  CG1 VAL X 102      -8.482  -2.560   9.218  1.00  0.00
C
ATOM   1522  CG2 VAL X 102      -8.744  -2.909   6.757  1.00  0.00
C
ATOM   1523  H   VAL X 102      -6.136  -3.704   7.113  1.00  0.00
H
ATOM   1524  HA  VAL X 102      -7.780  -5.226   9.125  1.00  0.00
H
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ATOM   1525  HB  VAL X 102      -9.734  -4.016   8.259  1.00  0.00
H
ATOM   1526 1HG1 VAL X 102      -9.234  -1.773   9.169  1.00  0.00
H
ATOM   1527 2HG1 VAL X 102      -8.533  -3.049  10.190  1.00  0.00
H
ATOM   1528 3HG1 VAL X 102      -7.492  -2.124   9.081  1.00  0.00
H
ATOM   1529 1HG2 VAL X 102      -9.493  -2.118   6.741  1.00  0.00
H
ATOM   1530 2HG2 VAL X 102      -7.759  -2.483   6.563  1.00  0.00
H
ATOM   1531 3HG2 VAL X 102      -8.979  -3.646   5.988  1.00  0.00
H
ATOM   1532  N   TRP X 103      -7.538  -5.828   6.022  1.00  0.00
N
ATOM   1533  CA  TRP X 103      -7.844  -6.868   5.047  1.00  0.00
C
ATOM   1534  C   TRP X 103      -6.759  -7.928   4.944  1.00  0.00
C
ATOM   1535  O   TRP X 103      -7.049  -9.123   4.925  1.00  0.00
O
ATOM   1536  CB  TRP X 103      -8.077  -6.240   3.672  1.00  0.00
C
ATOM   1537  CG  TRP X 103      -8.490  -7.230   2.624  1.00  0.00
C
ATOM   1538  CD1 TRP X 103      -9.763  -7.563   2.275  1.00  0.00
C
ATOM   1539  CD2 TRP X 103      -7.627  -8.014   1.790  1.00  0.00
C
ATOM   1540  CE2 TRP X 103      -8.448  -8.798   0.961  1.00  0.00
C
ATOM   1541  CE3 TRP X 103      -6.236  -8.126   1.667  1.00  0.00
C
ATOM   1542  NE1 TRP X 103      -9.751  -8.506   1.278  1.00  0.00
N
ATOM   1543  CZ2 TRP X 103      -7.927  -9.683   0.025  1.00  0.00
C
ATOM   1544  CZ3 TRP X 103      -5.717  -9.010   0.729  1.00  0.00
C
ATOM   1545  CH2 TRP X 103      -6.539  -9.766  -0.069  1.00  0.00
C
ATOM   1546  H   TRP X 103      -6.850  -5.124   5.795  1.00  0.00
H
ATOM   1547  HA  TRP X 103      -8.748  -7.399   5.344  1.00  0.00
H
ATOM   1548 1HB  TRP X 103      -8.869  -5.494   3.726  1.00  0.00
H
ATOM   1549 2HB  TRP X 103      -7.161  -5.770   3.313  1.00  0.00
H
ATOM   1550  HD1 TRP X 103     -10.569  -7.060   2.810  1.00  0.00
H
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ATOM   1551  HE1 TRP X 103     -10.565  -8.919   0.847  1.00  0.00
H
ATOM   1552  HE3 TRP X 103      -5.538  -7.548   2.272  1.00  0.00
H
ATOM   1553  HZ2 TRP X 103      -8.617 -10.265  -0.588  1.00  0.00
H
ATOM   1554  HZ3 TRP X 103      -4.634  -9.088   0.644  1.00  0.00
H
ATOM   1555  HH2 TRP X 103      -6.091 -10.448  -0.792  1.00  0.00
H
ATOM   1556  N   ARG X 104      -5.505  -7.487   4.886  1.00  0.00
N
ATOM   1557  CA  ARG X 104      -4.386  -8.412   4.704  1.00  0.00
C
ATOM   1558  C   ARG X 104      -3.907  -9.081   5.985  1.00  0.00
C
ATOM   1559  O   ARG X 104      -3.816 -10.308   6.044  1.00  0.00
O
ATOM   1560  CB  ARG X 104      -3.225  -7.738   3.988  1.00  0.00
C
ATOM   1561  CG  ARG X 104      -2.069  -8.660   3.636  1.00  0.00
C
ATOM   1562  CD  ARG X 104      -2.456  -9.850   2.836  1.00  0.00
C
ATOM   1563  NE  ARG X 104      -1.337 -10.608   2.304  1.00  0.00
N
ATOM   1564  CZ  ARG X 104      -1.452 -11.655   1.464  1.00  0.00
C
ATOM   1565  NH1 ARG X 104      -2.634 -12.094   1.088  1.00  0.00
N
ATOM   1566  NH2 ARG X 104      -0.346 -12.244   1.045  1.00  0.00
N
ATOM   1567  H   ARG X 104      -5.322  -6.498   4.970  1.00  0.00
H
ATOM   1568  HA  ARG X 104      -4.690  -9.234   4.054  1.00  0.00
H
ATOM   1569 1HB  ARG X 104      -3.626  -7.298   3.076  1.00  0.00
H
ATOM   1570 2HB  ARG X 104      -2.864  -6.947   4.645  1.00  0.00
H
ATOM   1571 1HG  ARG X 104      -1.335  -8.093   3.062  1.00  0.00
H
ATOM   1572 2HG  ARG X 104      -1.613  -9.012   4.562  1.00  0.00
H
ATOM   1573 1HD  ARG X 104      -3.038 -10.524   3.464  1.00  0.00
H
ATOM   1574 2HD  ARG X 104      -3.063  -9.527   1.991  1.00  0.00
H
ATOM   1575  HE  ARG X 104      -0.343 -10.489   2.462  1.00  0.00
H
ATOM   1576 1HH1 ARG X 104      -3.470 -11.643   1.430  1.00  0.00
H
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ATOM   1577 2HH1 ARG X 104      -2.699 -12.879   0.458  1.00  0.00
H
ATOM   1578 1HH2 ARG X 104       0.554 -11.904   1.359  1.00  0.00
H
ATOM   1579 2HH2 ARG X 104      -0.403 -13.030   0.416  1.00  0.00
H
ATOM   1580  N   PHE X 105      -3.602  -8.290   7.009  1.00  0.00
N
ATOM   1581  CA  PHE X 105      -3.032  -8.840   8.233  1.00  0.00
C
ATOM   1582  C   PHE X 105      -3.984  -9.724   9.044  1.00  0.00
C
ATOM   1583  O   PHE X 105      -3.648 -10.863   9.367  1.00  0.00
O
ATOM   1584  CB  PHE X 105      -2.529  -7.696   9.115  1.00  0.00
C
ATOM   1585  CG  PHE X 105      -2.207  -8.112  10.523  1.00  0.00
C
ATOM   1586  CD1 PHE X 105      -1.014  -8.757  10.815  1.00  0.00
C
ATOM   1587  CD2 PHE X 105      -3.097  -7.859  11.555  1.00  0.00
C
ATOM   1588  CE1 PHE X 105      -0.717  -9.139  12.108  1.00  0.00
C
ATOM   1589  CE2 PHE X 105      -2.801  -8.239  12.849  1.00  0.00
C
ATOM   1590  CZ  PHE X 105      -1.609  -8.880  13.125  1.00  0.00
C
ATOM   1591  H   PHE X 105      -3.766  -7.296   6.937  1.00  0.00
H
ATOM   1592  HA  PHE X 105      -2.189  -9.490   7.991  1.00  0.00
H
ATOM   1593 1HB  PHE X 105      -1.616  -7.274   8.698  1.00  0.00
H
ATOM   1594 2HB  PHE X 105      -3.288  -6.917   9.186  1.00  0.00
H
ATOM   1595  HD1 PHE X 105      -0.307  -8.960  10.007  1.00  0.00
H
ATOM   1596  HD2 PHE X 105      -4.038  -7.353  11.338  1.00  0.00
H
ATOM   1597  HE1 PHE X 105       0.225  -9.645  12.324  1.00  0.00
H
ATOM   1598  HE2 PHE X 105      -3.507  -8.034  13.652  1.00  0.00
H
ATOM   1599  HZ  PHE X 105      -1.377  -9.183  14.145  1.00  0.00
H
ATOM   1600  N   PRO X 106      -5.181  -9.211   9.387  1.00  0.00
N
ATOM   1601  CA  PRO X 106      -6.164 -10.058  10.079  1.00  0.00
C
ATOM   1602  C   PRO X 106      -6.468 -11.356   9.335  1.00  0.00
C
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ATOM   1603  O   PRO X 106      -7.438 -12.046   9.648  1.00  0.00
O
ATOM   1604  CB  PRO X 106      -7.415  -9.169  10.185  1.00  0.00
C
ATOM   1605  CG  PRO X 106      -6.890  -7.763  10.239  1.00  0.00
C
ATOM   1606  CD  PRO X 106      -5.755  -7.923   8.992  1.00  0.00
C
ATOM   1607  HA  PRO X 106      -5.826 -10.305  10.984  1.00  0.00
H
ATOM   1608 1HB  PRO X 106      -7.775  -9.284   9.352  1.00  0.00
H
ATOM   1609 2HB  PRO X 106      -7.699  -9.374  10.977  1.00  0.00
H
ATOM   1610 1HG  PRO X 106      -6.642  -7.538   9.461  1.00  0.00
H
ATOM   1611 2HG  PRO X 106      -7.371  -7.306  10.902  1.00  0.00
H
ATOM   1612 1HD  PRO X 106      -5.463  -7.814   8.092  1.00  0.00
H
ATOM   1613 2HD  PRO X 106      -5.404  -7.327   9.647  1.00  0.00
H
ATOM   1614  N   TYR X 107      -6.648 -11.256   8.023  1.00  0.00
N
ATOM   1615  CA  TYR X 107      -6.943 -12.434   7.223  1.00  0.00
C
ATOM   1616  C   TYR X 107      -5.766 -13.404   7.223  1.00  0.00
C
ATOM   1617  O   TYR X 107      -5.927 -14.579   7.545  1.00  0.00
O
ATOM   1618  CB  TYR X 107      -7.295 -12.031   5.789  1.00  0.00
C
ATOM   1619  CG  TYR X 107      -7.471 -13.203   4.847  1.00  0.00
C
ATOM   1620  CD1 TYR X 107      -8.640 -13.951   4.852  1.00  0.00
C
ATOM   1621  CD2 TYR X 107      -6.470 -13.555   3.957  1.00  0.00
C
ATOM   1622  CE1 TYR X 107      -8.807 -15.022   3.997  1.00  0.00
C
ATOM   1623  CE2 TYR X 107      -6.625 -14.623   3.095  1.00  0.00
C
ATOM   1624  CZ  TYR X 107      -7.796 -15.354   3.116  1.00  0.00
C
ATOM   1625  OH  TYR X 107      -7.954 -16.418   2.259  1.00  0.00
O
ATOM   1626  H   TYR X 107      -6.579 -10.353   7.576  1.00  0.00
H
ATOM   1627  HA  TYR X 107      -7.790 -12.971   7.651  1.00  0.00
H
ATOM   1628 1HB  TYR X 107      -8.223 -11.458   5.832  1.00  0.00
H
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ATOM   1629 2HB  TYR X 107      -6.490 -11.393   5.426  1.00  0.00
H
ATOM   1630  HD1 TYR X 107      -9.435 -13.680   5.550  1.00  0.00
H
ATOM   1631  HD2 TYR X 107      -5.547 -12.973   3.946  1.00  0.00
H
ATOM   1632  HE1 TYR X 107      -9.730 -15.600   4.013  1.00  0.00
H
ATOM   1633  HE2 TYR X 107      -5.825 -14.885   2.403  1.00  0.00
H
ATOM   1634  HH  TYR X 107      -8.796 -16.864   2.366  1.00  0.00
H
ATOM   1635  N   ILE X 108      -4.583 -12.907   6.868  1.00  0.00
N
ATOM   1636  CA  ILE X 108      -3.392 -13.751   6.842  1.00  0.00
C
ATOM   1637  C   ILE X 108      -3.201 -14.484   8.165  1.00  0.00
C
ATOM   1638  O   ILE X 108      -2.815 -15.659   8.186  1.00  0.00
O
ATOM   1639  CB  ILE X 108      -2.125 -12.931   6.534  1.00  0.00
C
ATOM   1640  CG1 ILE X 108      -2.037 -12.625   5.038  1.00  0.00
C
ATOM   1641  CG2 ILE X 108      -0.883 -13.676   7.002  1.00  0.00
C
ATOM   1642  CD1 ILE X 108      -1.880 -13.851   4.171  1.00  0.00
C
ATOM   1643  H   ILE X 108      -4.509 -11.932   6.612  1.00  0.00
H
ATOM   1644  HA  ILE X 108      -3.499 -14.544   6.102  1.00  0.00
H
ATOM   1645  HB  ILE X 108      -2.189 -11.973   7.047  1.00  0.00
H
ATOM   1646 1HG1 ILE X 108      -2.950 -12.098   4.760  1.00  0.00
H
ATOM   1647 2HG1 ILE X 108      -1.181 -11.966   4.892  1.00  0.00
H
ATOM   1648 1HG2 ILE X 108       0.003 -13.083   6.776  1.00  0.00
H
ATOM   1649 2HG2 ILE X 108      -0.943 -13.845   8.076  1.00  0.00
H
ATOM   1650 3HG2 ILE X 108      -0.818 -14.633   6.488  1.00  0.00
H
ATOM   1651 1HD1 ILE X 108      -1.824 -13.553   3.124  1.00  0.00
H
ATOM   1652 2HD1 ILE X 108      -0.966 -14.378   4.446  1.00  0.00
H
ATOM   1653 3HD1 ILE X 108      -2.736 -14.511   4.313  1.00  0.00
H
ATOM   1654  N   CYS X 109      -3.466 -13.794   9.266  1.00  0.00
N
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ATOM   1655  CA  CYS X 109      -3.317 -14.397  10.584  1.00  0.00
C
ATOM   1656  C   CYS X 109      -4.453 -15.375  10.875  1.00  0.00
C
ATOM   1657  O   CYS X 109      -4.218 -16.467  11.391  1.00  0.00
O
ATOM   1658  CB  CYS X 109      -3.394 -13.189  11.517  1.00  0.00
C
ATOM   1659  SG  CYS X 109      -3.030 -13.557  13.251  1.00  0.00
S
ATOM   1660  H   CYS X 109      -3.776 -12.836   9.190  1.00  0.00
H
ATOM   1661  HA  CYS X 109      -2.356 -14.889  10.729  1.00  0.00
H
ATOM   1662 1HB  CYS X 109      -2.672 -12.430  11.212  1.00  0.00
H
ATOM   1663 2HB  CYS X 109      -4.397 -12.764  11.502  1.00  0.00
H
ATOM   1664  HG  CYS X 109      -3.197 -12.315  13.694  1.00  0.00
H
ATOM   1665  N   TYR X 110      -5.681 -14.991  10.534  1.00  0.00
N
ATOM   1666  CA  TYR X 110      -6.839 -15.853  10.778  1.00  0.00
C
ATOM   1667  C   TYR X 110      -6.700 -17.246  10.170  1.00  0.00
C
ATOM   1668  O   TYR X 110      -7.097 -18.237  10.783  1.00  0.00
O
ATOM   1669  CB  TYR X 110      -8.113 -15.202  10.235  1.00  0.00
C
ATOM   1670  CG  TYR X 110      -9.356 -16.048  10.407  1.00  0.00
C
ATOM   1671  CD1 TYR X 110      -9.907 -16.258  11.662  1.00  0.00
C
ATOM   1672  CD2 TYR X 110      -9.975 -16.633   9.312  1.00  0.00
C
ATOM   1673  CE1 TYR X 110     -11.040 -17.030  11.826  1.00  0.00
C
ATOM   1674  CE2 TYR X 110     -11.109 -17.406   9.463  1.00  0.00
C
ATOM   1675  CZ  TYR X 110     -11.640 -17.603  10.722  1.00  0.00
C
ATOM   1676  OH  TYR X 110     -12.769 -18.372  10.877  1.00  0.00
O
ATOM   1677  H   TYR X 110      -5.815 -14.090  10.099  1.00  0.00
H
ATOM   1678  HA  TYR X 110      -6.961 -16.015  11.849  1.00  0.00
H
ATOM   1679 1HB  TYR X 110      -8.243 -14.256  10.763  1.00  0.00
H
ATOM   1680 2HB  TYR X 110      -7.950 -15.008   9.175  1.00  0.00
H
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ATOM   1681  HD1 TYR X 110      -9.428 -15.803  12.530  1.00  0.00
H
ATOM   1682  HD2 TYR X 110      -9.551 -16.473   8.321  1.00  0.00
H
ATOM   1683  HE1 TYR X 110     -11.461 -17.187  12.819  1.00  0.00
H
ATOM   1684  HE2 TYR X 110     -11.580 -17.858   8.590  1.00  0.00
H
ATOM   1685  HH  TYR X 110     -13.104 -18.720  10.046  1.00  0.00
H
ATOM   1686  N   GLN X 111      -6.143 -17.321   8.962  1.00  0.00
N
ATOM   1687  CA  GLN X 111      -5.962 -18.598   8.283  1.00  0.00
C
ATOM   1688  C   GLN X 111      -4.485 -18.951   8.161  1.00  0.00
C
ATOM   1689  O   GLN X 111      -4.089 -19.702   7.271  1.00  0.00
O
ATOM   1690  CB  GLN X 111      -6.600 -18.561   6.892  1.00  0.00
C
ATOM   1691  CG  GLN X 111      -8.112 -18.417   6.905  1.00  0.00
C
ATOM   1692  CD  GLN X 111      -8.707 -18.433   5.509  1.00  0.00
C
ATOM   1693  NE2 GLN X 111      -9.997 -18.130   5.414  1.00  0.00
N
ATOM   1694  OE1 GLN X 111      -8.015 -18.712   4.527  1.00  0.00
O
ATOM   1695  H   GLN X 111      -5.840 -16.473   8.506  1.00  0.00
H
ATOM   1696  HA  GLN X 111      -6.423 -19.392   8.869  1.00  0.00
H
ATOM   1697 1HB  GLN X 111      -6.154 -17.717   6.364  1.00  0.00
H
ATOM   1698 2HB  GLN X 111      -6.324 -19.489   6.393  1.00  0.00
H
ATOM   1699 1HG  GLN X 111      -8.756 -19.013   7.550  1.00  0.00
H
ATOM   1700 2HG  GLN X 111      -8.099 -17.386   7.261  1.00  0.00
H
ATOM   1701 1HE2 GLN X 111     -10.445 -18.123   4.519  1.00  0.00
H
ATOM   1702 2HE2 GLN X 111     -10.522 -17.907   6.236  1.00  0.00
H
ATOM   1703  N   ASN X 112      -3.675 -18.406   9.064  1.00  0.00
N
ATOM   1704  CA  ASN X 112      -2.229 -18.575   8.997  1.00  0.00
C
ATOM   1705  C   ASN X 112      -1.833 -20.033   9.182  1.00  0.00
C
ATOM   1706  O   ASN X 112      -0.775 -20.464   8.719  1.00  0.00
O
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ATOM   1707  CB  ASN X 112      -1.521 -17.706  10.020  1.00  0.00
C
ATOM   1708  CG  ASN X 112      -0.028 -17.662   9.847  1.00  0.00
C
ATOM   1709  ND2 ASN X 112       0.668 -18.214  10.808  1.00  0.00
N
ATOM   1710  OD1 ASN X 112       0.484 -17.200   8.822  1.00  0.00
O
ATOM   1711  H   ASN X 112      -4.072 -17.861   9.817  1.00  0.00
H
ATOM   1712  HA  ASN X 112      -1.868 -18.280   8.010  1.00  0.00
H
ATOM   1713 1HB  ASN X 112      -1.884 -16.703  10.249  1.00  0.00
H
ATOM   1714 2HB  ASN X 112      -1.759 -18.375  10.848  1.00  0.00
H
ATOM   1715 1HD2 ASN X 112       1.667 -18.221  10.760  1.00  0.00
H
ATOM   1716 2HD2 ASN X 112       0.202 -18.628  11.589  1.00  0.00
H
ATOM   1717  N   GLY X 113      -2.682 -20.793   9.848  1.00  0.00
N
ATOM   1718  CA  GLY X 113      -2.452 -22.220  10.035  1.00  0.00
C
ATOM   1719  C   GLY X 113      -2.171 -22.544  11.494  1.00  0.00
C
ATOM   1720  O   GLY X 113      -2.477 -23.640  11.967  1.00  0.00
O
ATOM   1721  H   GLY X 113      -3.514 -20.375  10.238  1.00  0.00
H
ATOM   1722 1HA  GLY X 113      -3.337 -22.770   9.713  1.00  0.00
H
ATOM   1723 2HA  GLY X 113      -1.597 -22.525   9.432  1.00  0.00
H
ATOM   1724  N   GLY X 114      -1.588 -21.591  12.208  1.00  0.00
N
ATOM   1725  CA  GLY X 114      -1.308 -21.753  13.631  1.00  0.00
C
ATOM   1726  C   GLY X 114      -2.165 -20.815  14.469  1.00  0.00
C
ATOM   1727  O   GLY X 114      -3.241 -20.393  14.047  1.00  0.00
O
ATOM   1728  H   GLY X 114      -1.329 -20.727  11.753  1.00  0.00
H
ATOM   1729 1HA  GLY X 114      -1.519 -22.783  13.920  1.00  0.00
H
ATOM   1730 2HA  GLY X 114      -0.257 -21.534  13.814  1.00  0.00
H
ATOM   1731  N   GLY X 115      -1.679 -20.491  15.664  1.00  0.00
N
ATOM   1732  CA  GLY X 115      -2.399 -19.600  16.567  1.00  0.00
C
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ATOM   1733  C   GLY X 115      -2.295 -18.151  16.108  1.00  0.00
C
ATOM   1734  O   GLY X 115      -3.305 -17.511  15.808  1.00  0.00
O
ATOM   1735  H   GLY X 115      -0.790 -20.872  15.953  1.00  0.00
H
ATOM   1736 1HA  GLY X 115      -3.449 -19.891  16.593  1.00  0.00
H
ATOM   1737 2HA  GLY X 115      -1.974 -19.688  17.566  1.00  0.00
H
ATOM   1738  N   ALA X 116      -1.072 -17.639  16.053  1.00  0.00
N
ATOM   1739  CA  ALA X 116      -0.837 -16.256  15.653  1.00  0.00
C
ATOM   1740  C   ALA X 116       0.642 -16.001  15.398  1.00  0.00
C
ATOM   1741  O   ALA X 116       1.505 -16.681  15.955  1.00  0.00
O
ATOM   1742  CB  ALA X 116      -1.370 -15.301  16.711  1.00  0.00
C
ATOM   1743  H   ALA X 116      -0.283 -18.222  16.294  1.00  0.00
H
ATOM   1744  HA  ALA X 116      -1.365 -16.068  14.718  1.00  0.00
H
ATOM   1745 1HB  ALA X 116      -1.186 -14.273  16.396  1.00  0.00
H
ATOM   1746 2HB  ALA X 116      -2.442 -15.455  16.835  1.00  0.00
H
ATOM   1747 3HB  ALA X 116      -0.862 -15.486  17.656  1.00  0.00
H
ATOM   1748  N   PHE X 117       0.931 -15.015  14.555  1.00  0.00
N
ATOM   1749  CA  PHE X 117       2.304 -14.583  14.318  1.00  0.00
C
ATOM   1750  C   PHE X 117       2.521 -13.154  14.793  1.00  0.00
C
ATOM   1751  O   PHE X 117       3.365 -12.434  14.257  1.00  0.00
O
ATOM   1752  CB  PHE X 117       2.654 -14.705  12.833  1.00  0.00
C
ATOM   1753  CG  PHE X 117       1.892 -13.756  11.952  1.00  0.00
C
ATOM   1754  CD1 PHE X 117       2.367 -12.475  11.712  1.00  0.00
C
ATOM   1755  CD2 PHE X 117       0.699 -14.143  11.361  1.00  0.00
C
ATOM   1756  CE1 PHE X 117       1.667 -11.602  10.903  1.00  0.00
C
ATOM   1757  CE2 PHE X 117      -0.004 -13.273  10.550  1.00  0.00
C
ATOM   1758  CZ  PHE X 117       0.482 -12.000  10.321  1.00  0.00
C
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ATOM   1759  H   PHE X 117       0.180 -14.552  14.065  1.00  0.00
H
ATOM   1760  HA  PHE X 117       2.992 -15.208  14.890  1.00  0.00
H
ATOM   1761 1HB  PHE X 117       3.712 -14.492  12.679  1.00  0.00
H
ATOM   1762 2HB  PHE X 117       2.431 -15.708  12.477  1.00  0.00
H
ATOM   1763  HD1 PHE X 117       3.304 -12.161  12.172  1.00  0.00
H
ATOM   1764  HD2 PHE X 117       0.315 -15.148  11.543  1.00  0.00
H
ATOM   1765  HE1 PHE X 117       2.050 -10.598  10.724  1.00  0.00
H
ATOM   1766  HE2 PHE X 117      -0.940 -13.589  10.091  1.00  0.00
H
ATOM   1767  HZ  PHE X 117      -0.072 -11.313   9.683  1.00  0.00
H
ATOM   1768  N   LEU X 118       1.756 -12.743  15.796  1.00  0.00
N
ATOM   1769  CA  LEU X 118       1.857 -11.399  16.338  1.00  0.00
C
ATOM   1770  C   LEU X 118       3.175 -11.006  16.993  1.00  0.00
C
ATOM   1771  O   LEU X 118       3.517  -9.825  17.019  1.00  0.00
O
ATOM   1772  CB  LEU X 118       0.753 -11.161  17.376  1.00  0.00
C
ATOM   1773  CG  LEU X 118      -0.593 -10.700  16.806  1.00  0.00
C
ATOM   1774  CD1 LEU X 118      -0.905 -11.461  15.525  1.00  0.00
C
ATOM   1775  CD2 LEU X 118      -1.686 -10.916  17.841  1.00  0.00
C
ATOM   1776  H   LEU X 118       1.084 -13.384  16.194  1.00  0.00
H
ATOM   1777  HA  LEU X 118       1.746 -10.671  15.535  1.00  0.00
H
ATOM   1778 1HB  LEU X 118       0.664 -12.171  17.774  1.00  0.00
H
ATOM   1779 2HB  LEU X 118       1.083 -10.488  18.168  1.00  0.00
H
ATOM   1780  HG  LEU X 118      -0.516  -9.627  16.620  1.00  0.00
H
ATOM   1781 1HD1 LEU X 118      -1.863 -11.127  15.125  1.00  0.00
H
ATOM   1782 2HD1 LEU X 118      -0.122 -11.273  14.790  1.00  0.00
H
ATOM   1783 3HD1 LEU X 118      -0.955 -12.529  15.738  1.00  0.00
H
ATOM   1784 1HD2 LEU X 118      -2.643 -10.586  17.433  1.00  0.00
H
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ATOM   1785 2HD2 LEU X 118      -1.744 -11.974  18.094  1.00  0.00
H
ATOM   1786 3HD2 LEU X 118      -1.457 -10.340  18.738  1.00  0.00
H
ATOM   1787  N   LEU X 119       3.924 -11.968  17.526  1.00  0.00
N
ATOM   1788  CA  LEU X 119       5.193 -11.613  18.151  1.00  0.00
C
ATOM   1789  C   LEU X 119       6.191 -11.193  17.072  1.00  0.00
C
ATOM   1790  O   LEU X 119       6.741 -10.090  17.125  1.00  0.00
O
ATOM   1791  CB  LEU X 119       5.725 -12.794  18.974  1.00  0.00
C
ATOM   1792  CG  LEU X 119       4.998 -13.047  20.300  1.00  0.00
C
ATOM   1793  CD1 LEU X 119       5.481 -14.350  20.921  1.00  0.00
C
ATOM   1794  CD2 LEU X 119       5.241 -11.877  21.244  1.00  0.00
C
ATOM   1795  H   LEU X 119       3.618 -12.930  17.497  1.00  0.00
H
ATOM   1796  HA  LEU X 119       5.049 -10.759  18.811  1.00  0.00
H
ATOM   1797 1HB  LEU X 119       5.520 -13.604  18.276  1.00  0.00
H
ATOM   1798 2HB  LEU X 119       6.801 -12.719  19.137  1.00  0.00
H
ATOM   1799  HG  LEU X 119       3.931 -13.082  20.082  1.00  0.00
H
ATOM   1800 1HD1 LEU X 119       4.957 -14.521  21.862  1.00  0.00
H
ATOM   1801 2HD1 LEU X 119       5.276 -15.175  20.239  1.00  0.00
H
ATOM   1802 3HD1 LEU X 119       6.552 -14.289  21.107  1.00  0.00
H
ATOM   1803 1HD2 LEU X 119       4.723 -12.058  22.187  1.00  0.00
H
ATOM   1804 2HD2 LEU X 119       6.309 -11.776  21.431  1.00  0.00
H
ATOM   1805 3HD2 LEU X 119       4.863 -10.959  20.793  1.00  0.00
H
ATOM   1806  N   PRO X 120       6.443 -12.062  16.082  1.00  0.00
N
ATOM   1807  CA  PRO X 120       7.390 -11.693  15.029  1.00  0.00
C
ATOM   1808  C   PRO X 120       6.907 -10.436  14.297  1.00  0.00
C
ATOM   1809  O   PRO X 120       7.704  -9.653  13.785  1.00  0.00
O
ATOM   1810  CB  PRO X 120       7.434 -12.927  14.114  1.00  0.00
C
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ATOM   1811  CG  PRO X 120       7.058 -14.082  15.001  1.00  0.00
C
ATOM   1812  CD  PRO X 120       5.844 -13.379  15.845  1.00  0.00
C
ATOM   1813  HA  PRO X 120       8.287 -11.511  15.423  1.00  0.00
H
ATOM   1814 1HB  PRO X 120       6.713 -12.764  13.574  1.00  0.00
H
ATOM   1815 2HB  PRO X 120       8.282 -12.986  13.952  1.00  0.00
H
ATOM   1816 1HG  PRO X 120       6.222 -14.056  15.135  1.00  0.00
H
ATOM   1817 2HG  PRO X 120       7.641 -14.788  14.804  1.00  0.00
H
ATOM   1818 1HD  PRO X 120       4.915 -13.238  16.008  1.00  0.00
H
ATOM   1819 2HD  PRO X 120       6.319 -13.941  16.450  1.00  0.00
H
ATOM   1820  N   TYR X 121       5.586 -10.256  14.260  1.00  0.00
N
ATOM   1821  CA  TYR X 121       4.985  -9.100  13.596  1.00  0.00
C
ATOM   1822  C   TYR X 121       5.409  -7.799  14.274  1.00  0.00
C
ATOM   1823  O   TYR X 121       5.901  -6.875  13.626  1.00  0.00
O
ATOM   1824  CB  TYR X 121       3.459  -9.220  13.589  1.00  0.00
C
ATOM   1825  CG  TYR X 121       2.755  -8.047  12.942  1.00  0.00
C
ATOM   1826  CD1 TYR X 121       2.699  -7.924  11.561  1.00  0.00
C
ATOM   1827  CD2 TYR X 121       2.147  -7.067  13.713  1.00  0.00
C
ATOM   1828  CE1 TYR X 121       2.057  -6.855  10.965  1.00  0.00
C
ATOM   1829  CE2 TYR X 121       1.503  -5.995  13.128  1.00  0.00
C
ATOM   1830  CZ  TYR X 121       1.460  -5.893  11.752  1.00  0.00
C
ATOM   1831  OH  TYR X 121       0.819  -4.826  11.165  1.00  0.00
O
ATOM   1832  H   TYR X 121       4.985 -10.937  14.703  1.00  0.00
H
ATOM   1833  HA  TYR X 121       5.333  -9.042  12.564  1.00  0.00
H
ATOM   1834 1HB  TYR X 121       3.209 -10.135  13.051  1.00  0.00
H
ATOM   1835 2HB  TYR X 121       3.139  -9.307  14.626  1.00  0.00
H
ATOM   1836  HD1 TYR X 121       3.172  -8.689  10.944  1.00  0.00
H
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ATOM   1837  HD2 TYR X 121       2.186  -7.154  14.799  1.00  0.00
H
ATOM   1838  HE1 TYR X 121       2.021  -6.771   9.879  1.00  0.00
H
ATOM   1839  HE2 TYR X 121       1.033  -5.236  13.752  1.00  0.00
H
ATOM   1840  HH  TYR X 121       0.849  -4.854  10.206  1.00  0.00
H
ATOM   1841  N   THR X 122       5.203  -7.725  15.588  1.00  0.00
N
ATOM   1842  CA  THR X 122       5.561  -6.532  16.346  1.00  0.00
C
ATOM   1843  C   THR X 122       7.068  -6.369  16.427  1.00  0.00
C
ATOM   1844  O   THR X 122       7.583  -5.257  16.332  1.00  0.00
O
ATOM   1845  CB  THR X 122       4.980  -6.572  17.772  1.00  0.00
C
ATOM   1846  CG2 THR X 122       5.417  -5.348  18.561  1.00  0.00
C
ATOM   1847  OG1 THR X 122       3.548  -6.608  17.705  1.00  0.00
O
ATOM   1848  H   THR X 122       4.790  -8.511  16.069  1.00  0.00
H
ATOM   1849  HA  THR X 122       5.181  -5.645  15.840  1.00  0.00
H
ATOM   1850  HB  THR X 122       5.333  -7.473  18.273  1.00  0.00
H
ATOM   1851  HG1 THR X 122       3.270  -7.391  17.224  1.00  0.00
H
ATOM   1852 1HG2 THR X 122       4.997  -5.396  19.565  1.00  0.00
H
ATOM   1853 2HG2 THR X 122       6.504  -5.325  18.623  1.00  0.00
H
ATOM   1854 3HG2 THR X 122       5.063  -4.448  18.061  1.00  0.00
H
ATOM   1855  N   ILE X 123       7.782  -7.479  16.603  1.00  0.00
N
ATOM   1856  CA  ILE X 123       9.238  -7.429  16.671  1.00  0.00
C
ATOM   1857  C   ILE X 123       9.815  -6.857  15.376  1.00  0.00
C
ATOM   1858  O   ILE X 123      10.739  -6.045  15.404  1.00  0.00
O
ATOM   1859  CB  ILE X 123       9.839  -8.823  16.930  1.00  0.00
C
ATOM   1860  CG1 ILE X 123       9.489  -9.303  18.341  1.00  0.00
C
ATOM   1861  CG2 ILE X 123      11.349  -8.797  16.733  1.00  0.00
C
ATOM   1862  CD1 ILE X 123       9.776 -10.768  18.578  1.00  0.00
C
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ATOM   1863  H   ILE X 123       7.309  -8.367  16.690  1.00  0.00
H
ATOM   1864  HA  ILE X 123       9.563  -6.743  17.453  1.00  0.00
H
ATOM   1865  HB  ILE X 123       9.394  -9.536  16.236  1.00  0.00
H
ATOM   1866 1HG1 ILE X 123      10.067  -8.701  19.042  1.00  0.00
H
ATOM   1867 2HG1 ILE X 123       8.425  -9.111  18.493  1.00  0.00
H
ATOM   1868 1HG2 ILE X 123      11.756  -9.789  16.921  1.00  0.00
H
ATOM   1869 2HG2 ILE X 123      11.576  -8.499  15.711  1.00  0.00
H
ATOM   1870 3HG2 ILE X 123      11.793  -8.084  17.428  1.00  0.00
H
ATOM   1871 1HD1 ILE X 123       9.501 -11.033  19.599  1.00  0.00
H
ATOM   1872 2HD1 ILE X 123       9.196 -11.370  17.878  1.00  0.00
H
ATOM   1873 3HD1 ILE X 123      10.837 -10.960  18.428  1.00  0.00
H
ATOM   1874  N   MET X 124       9.266  -7.280  14.240  1.00  0.00
N
ATOM   1875  CA  MET X 124       9.739  -6.783  12.954  1.00  0.00
C
ATOM   1876  C   MET X 124       9.458  -5.286  12.849  1.00  0.00
C
ATOM   1877  O   MET X 124      10.225  -4.535  12.237  1.00  0.00
O
ATOM   1878  CB  MET X 124       9.070  -7.549  11.813  1.00  0.00
C
ATOM   1879  CG  MET X 124       9.582  -7.188  10.426  1.00  0.00
C
ATOM   1880  SD  MET X 124      11.296  -7.687  10.166  1.00  0.00
S
ATOM   1881  CE  MET X 124      11.753  -6.630   8.797  1.00  0.00
C
ATOM   1882  H   MET X 124       8.513  -7.953  14.270  1.00  0.00
H
ATOM   1883  HA  MET X 124      10.818  -6.916  12.878  1.00  0.00
H
ATOM   1884 1HB  MET X 124       9.243  -8.609  12.000  1.00  0.00
H
ATOM   1885 2HB  MET X 124       8.003  -7.337  11.872  1.00  0.00
H
ATOM   1886 1HG  MET X 124       8.949  -7.683   9.692  1.00  0.00
H
ATOM   1887 2HG  MET X 124       9.503  -6.108  10.307  1.00  0.00
H
ATOM   1888 1HE  MET X 124      12.789  -6.821   8.518  1.00  0.00
H
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ATOM   1889 2HE  MET X 124      11.103  -6.836   7.944  1.00  0.00
H
ATOM   1890 3HE  MET X 124      11.643  -5.585   9.091  1.00  0.00
H
ATOM   1891  N   ALA X 125       8.357  -4.849  13.450  1.00  0.00
N
ATOM   1892  CA  ALA X 125       8.016  -3.433  13.417  1.00  0.00
C
ATOM   1893  C   ALA X 125       9.059  -2.629  14.203  1.00  0.00
C
ATOM   1894  O   ALA X 125       9.445  -1.530  13.805  1.00  0.00
O
ATOM   1895  CB  ALA X 125       6.617  -3.212  13.971  1.00  0.00
C
ATOM   1896  H   ALA X 125       7.754  -5.500  13.932  1.00  0.00
H
ATOM   1897  HA  ALA X 125       8.038  -3.092  12.382  1.00  0.00
H
ATOM   1898 1HB  ALA X 125       6.376  -2.149  13.938  1.00  0.00
H
ATOM   1899 2HB  ALA X 125       5.895  -3.764  13.369  1.00  0.00
H
ATOM   1900 3HB  ALA X 125       6.573  -3.561  15.000  1.00  0.00
H
ATOM   1901  N   ILE X 126       9.517  -3.198  15.315  1.00  0.00
N
ATOM   1902  CA  ILE X 126      10.499  -2.537  16.172  1.00  0.00
C
ATOM   1903  C   ILE X 126      11.776  -2.089  15.461  1.00  0.00
C
ATOM   1904  O   ILE X 126      12.150  -0.919  15.536  1.00  0.00
O
ATOM   1905  CB  ILE X 126      10.927  -3.441  17.342  1.00  0.00
C
ATOM   1906  CG1 ILE X 126       9.761  -3.645  18.313  1.00  0.00
C
ATOM   1907  CG2 ILE X 126      12.126  -2.844  18.063  1.00  0.00
C
ATOM   1908  CD1 ILE X 126      10.029  -4.682  19.380  1.00  0.00
C
ATOM   1909  H   ILE X 126       9.175  -4.113  15.575  1.00  0.00
H
ATOM   1910  HA  ILE X 126      10.099  -1.603  16.564  1.00  0.00
H
ATOM   1911  HB  ILE X 126      11.188  -4.425  16.954  1.00  0.00
H
ATOM   1912 1HG1 ILE X 126       9.558  -2.684  18.784  1.00  0.00
H
ATOM   1913 2HG1 ILE X 126       8.896  -3.948  17.722  1.00  0.00
H
ATOM   1914 1HG2 ILE X 126      12.415  -3.496  18.888  1.00  0.00
H
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ATOM   1915 2HG2 ILE X 126      12.959  -2.750  17.367  1.00  0.00
H
ATOM   1916 3HG2 ILE X 126      11.865  -1.861  18.453  1.00  0.00
H
ATOM   1917 1HD1 ILE X 126       9.158  -4.771  20.030  1.00  0.00
H
ATOM   1918 2HD1 ILE X 126      10.230  -5.645  18.910  1.00  0.00
H
ATOM   1919 3HD1 ILE X 126      10.892  -4.381  19.973  1.00  0.00
H
ATOM   1920  N   PHE X 127      12.443  -3.013  14.779  1.00  0.00
N
ATOM   1921  CA  PHE X 127      13.696  -2.685  14.108  1.00  0.00
C
ATOM   1922  C   PHE X 127      13.630  -2.518  12.594  1.00  0.00
C
ATOM   1923  O   PHE X 127      14.595  -2.066  11.974  1.00  0.00
O
ATOM   1924  CB  PHE X 127      14.755  -3.749  14.402  1.00  0.00
C
ATOM   1925  CG  PHE X 127      14.442  -5.095  13.814  1.00  0.00
C
ATOM   1926  CD1 PHE X 127      14.725  -5.370  12.485  1.00  0.00
C
ATOM   1927  CD2 PHE X 127      13.862  -6.088  14.588  1.00  0.00
C
ATOM   1928  CE1 PHE X 127      14.437  -6.608  11.942  1.00  0.00
C
ATOM   1929  CE2 PHE X 127      13.573  -7.327  14.049  1.00  0.00
C
ATOM   1930  CZ  PHE X 127      13.861  -7.587  12.724  1.00  0.00
C
ATOM   1931  H   PHE X 127      12.079  -3.953  14.724  1.00  0.00
H
ATOM   1932  HA  PHE X 127      14.065  -1.721  14.463  1.00  0.00
H
ATOM   1933 1HB  PHE X 127      15.716  -3.446  13.991  1.00  0.00
H
ATOM   1934 2HB  PHE X 127      14.850  -3.893  15.478  1.00  0.00
H
ATOM   1935  HD1 PHE X 127      15.182  -4.596  11.867  1.00  0.00
H
ATOM   1936  HD2 PHE X 127      13.633  -5.883  15.635  1.00  0.00
H
ATOM   1937  HE1 PHE X 127      14.666  -6.811  10.896  1.00  0.00
H
ATOM   1938  HE2 PHE X 127      13.117  -8.099  14.669  1.00  0.00
H
ATOM   1939  HZ  PHE X 127      13.632  -8.562  12.298  1.00  0.00
H
ATOM   1940  N   GLY X 128      12.497  -2.880  11.991  1.00  0.00
N
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ATOM   1941  CA  GLY X 128      12.353  -2.764  10.547  1.00  0.00
C
ATOM   1942  C   GLY X 128      11.479  -1.594  10.123  1.00  0.00
C
ATOM   1943  O   GLY X 128      11.979  -0.586   9.630  1.00  0.00
O
ATOM   1944  H   GLY X 128      11.731  -3.239  12.543  1.00  0.00
H
ATOM   1945 1HA  GLY X 128      13.339  -2.627  10.101  1.00  0.00
H
ATOM   1946 2HA  GLY X 128      11.904  -3.677  10.159  1.00  0.00
H
ATOM   1947  N   GLY X 129      10.171  -1.736  10.315  1.00  0.00
N
ATOM   1948  CA  GLY X 129       9.237  -0.703   9.917  1.00  0.00
C
ATOM   1949  C   GLY X 129       9.504   0.680  10.476  1.00  0.00
C
ATOM   1950  O   GLY X 129       9.646   1.648   9.725  1.00  0.00
O
ATOM   1951  H   GLY X 129       9.823  -2.579  10.747  1.00  0.00
H
ATOM   1952 1HA  GLY X 129       9.252  -0.609   8.830  1.00  0.00
H
ATOM   1953 2HA  GLY X 129       8.237  -0.983  10.242  1.00  0.00
H
ATOM   1954  N   ILE X 130       9.566   0.776  11.798  1.00  0.00
N
ATOM   1955  CA  ILE X 130       9.800   2.052  12.458  1.00  0.00
C
ATOM   1956  C   ILE X 130      11.092   2.733  12.000  1.00  0.00
C
ATOM   1957  O   ILE X 130      11.056   3.848  11.482  1.00  0.00
O
ATOM   1958  CB  ILE X 130       9.858   1.895  13.988  1.00  0.00
C
ATOM   1959  CG1 ILE X 130       8.486   1.496  14.536  1.00  0.00
C
ATOM   1960  CG2 ILE X 130      10.341   3.183  14.638  1.00  0.00
C
ATOM   1961  CD1 ILE X 130       8.515   1.020  15.971  1.00  0.00
C
ATOM   1962  H   ILE X 130       9.448  -0.055  12.359  1.00  0.00
H
ATOM   1963  HA  ILE X 130       9.022   2.769  12.197  1.00  0.00
H
ATOM   1964  HB  ILE X 130      10.542   1.085  14.238  1.00  0.00
H
ATOM   1965 1HG1 ILE X 130       7.839   2.370  14.456  1.00  0.00
H
ATOM   1966 2HG1 ILE X 130       8.100   0.700  13.898  1.00  0.00
H
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ATOM   1967 1HG2 ILE X 130      10.374   3.055  15.719  1.00  0.00
H
ATOM   1968 2HG2 ILE X 130      11.337   3.426  14.270  1.00  0.00
H
ATOM   1969 3HG2 ILE X 130       9.655   3.994  14.390  1.00  0.00
H
ATOM   1970 1HD1 ILE X 130       7.507   0.755  16.289  1.00  0.00
H
ATOM   1971 2HD1 ILE X 130       9.162   0.146  16.052  1.00  0.00
H
ATOM   1972 3HD1 ILE X 130       8.897   1.815  16.611  1.00  0.00
H
ATOM   1973  N   PRO X 131      12.251   2.075  12.171  1.00  0.00
N
ATOM   1974  CA  PRO X 131      13.501   2.710  11.739  1.00  0.00
C
ATOM   1975  C   PRO X 131      13.548   3.077  10.255  1.00  0.00
C
ATOM   1976  O   PRO X 131      14.076   4.129   9.892  1.00  0.00
O
ATOM   1977  CB  PRO X 131      14.586   1.672  12.074  1.00  0.00
C
ATOM   1978  CG  PRO X 131      14.040   0.905  13.248  1.00  0.00
C
ATOM   1979  CD  PRO X 131      12.474   0.712  12.663  1.00  0.00
C
ATOM   1980  HA  PRO X 131      13.650   3.555  12.246  1.00  0.00
H
ATOM   1981 1HB  PRO X 131      14.524   1.120  11.348  1.00  0.00
H
ATOM   1982 2HB  PRO X 131      15.221   2.183  12.367  1.00  0.00
H
ATOM   1983 1HG  PRO X 131      13.442   0.376  12.967  1.00  0.00
H
ATOM   1984 2HG  PRO X 131      14.740   0.796  13.862  1.00  0.00
H
ATOM   1985 1HD  PRO X 131      11.783   0.205  12.241  1.00  0.00
H
ATOM   1986 2HD  PRO X 131      12.430   0.817  13.607  1.00  0.00
H
ATOM   1987  N   LEU X 132      12.986   2.232   9.393  1.00  0.00
N
ATOM   1988  CA  LEU X 132      12.994   2.541   7.970  1.00  0.00
C
ATOM   1989  C   LEU X 132      12.140   3.764   7.649  1.00  0.00
C
ATOM   1990  O   LEU X 132      12.500   4.554   6.786  1.00  0.00
O
ATOM   1991  CB  LEU X 132      12.505   1.333   7.161  1.00  0.00
C
ATOM   1992  CG  LEU X 132      13.488   0.158   7.084  1.00  0.00
C
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ATOM   1993  CD1 LEU X 132      12.822  -1.037   6.417  1.00  0.00
C
ATOM   1994  CD2 LEU X 132      14.729   0.583   6.313  1.00  0.00
C
ATOM   1995  H   LEU X 132      12.557   1.380   9.725  1.00  0.00
H
ATOM   1996  HA  LEU X 132      14.008   2.790   7.656  1.00  0.00
H
ATOM   1997 1HB  LEU X 132      11.640   1.057   7.762  1.00  0.00
H
ATOM   1998 2HB  LEU X 132      12.177   1.621   6.163  1.00  0.00
H
ATOM   1999  HG  LEU X 132      13.793  -0.076   8.105  1.00  0.00
H
ATOM   2000 1HD1 LEU X 132      13.528  -1.866   6.367  1.00  0.00
H
ATOM   2001 2HD1 LEU X 132      11.950  -1.339   6.998  1.00  0.00
H
ATOM   2002 3HD1 LEU X 132      12.510  -0.765   5.410  1.00  0.00
H
ATOM   2003 1HD2 LEU X 132      15.427  -0.253   6.259  1.00  0.00
H
ATOM   2004 2HD2 LEU X 132      14.446   0.886   5.305  1.00  0.00
H
ATOM   2005 3HD2 LEU X 132      15.206   1.421   6.823  1.00  0.00
H
ATOM   2006  N   PHE X 133      11.005   3.921   8.329  1.00  0.00
N
ATOM   2007  CA  PHE X 133      10.163   5.089   8.077  1.00  0.00
C
ATOM   2008  C   PHE X 133      10.975   6.346   8.385  1.00  0.00
C
ATOM   2009  O   PHE X 133      11.082   7.246   7.549  1.00  0.00
O
ATOM   2010  CB  PHE X 133       8.890   5.021   8.922  1.00  0.00
C
ATOM   2011  CG  PHE X 133       8.015   6.235   8.799  1.00  0.00
C
ATOM   2012  CD1 PHE X 133       8.401   7.309   8.009  1.00  0.00
C
ATOM   2013  CD2 PHE X 133       6.804   6.308   9.470  1.00  0.00
C
ATOM   2014  CE1 PHE X 133       7.598   8.427   7.894  1.00  0.00
C
ATOM   2015  CE2 PHE X 133       5.997   7.424   9.355  1.00  0.00
C
ATOM   2016  CZ  PHE X 133       6.396   8.485   8.567  1.00  0.00
C
ATOM   2017  H   PHE X 133      10.727   3.235   9.016  1.00  0.00
H
ATOM   2018  HA  PHE X 133       9.882   5.122   7.023  1.00  0.00
H
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ATOM   2019 1HB  PHE X 133       8.284   4.167   8.620  1.00  0.00
H
ATOM   2020 2HB  PHE X 133       9.145   4.929   9.977  1.00  0.00
H
ATOM   2021  HD1 PHE X 133       9.352   7.263   7.476  1.00  0.00
H
ATOM   2022  HD2 PHE X 133       6.490   5.470  10.093  1.00  0.00
H
ATOM   2023  HE1 PHE X 133       7.914   9.263   7.271  1.00  0.00
H
ATOM   2024  HE2 PHE X 133       5.049   7.468   9.888  1.00  0.00
H
ATOM   2025  HZ  PHE X 133       5.762   9.367   8.477  1.00  0.00
H
ATOM   2026  N   TYR X 134      11.555   6.415   9.583  1.00  0.00
N
ATOM   2027  CA  TYR X 134      12.355   7.583   9.935  1.00  0.00
C
ATOM   2028  C   TYR X 134      13.491   7.803   8.951  1.00  0.00
C
ATOM   2029  O   TYR X 134      13.787   8.935   8.574  1.00  0.00
O
ATOM   2030  CB  TYR X 134      12.918   7.439  11.351  1.00  0.00
C
ATOM   2031  CG  TYR X 134      13.809   8.584  11.777  1.00  0.00
C
ATOM   2032  CD1 TYR X 134      13.283   9.846  12.013  1.00  0.00
C
ATOM   2033  CD2 TYR X 134      15.173   8.400  11.943  1.00  0.00
C
ATOM   2034  CE1 TYR X 134      14.092  10.896  12.401  1.00  0.00
C
ATOM   2035  CE2 TYR X 134      15.990   9.443  12.332  1.00  0.00
C
ATOM   2036  CZ  TYR X 134      15.447  10.690  12.559  1.00  0.00
C
ATOM   2037  OH  TYR X 134      16.257  11.732  12.948  1.00  0.00
O
ATOM   2038  H   TYR X 134      11.442   5.661  10.246  1.00  0.00
H
ATOM   2039  HA  TYR X 134      11.737   8.481   9.895  1.00  0.00
H
ATOM   2040 1HB  TYR X 134      12.067   7.367  12.031  1.00  0.00
H
ATOM   2041 2HB  TYR X 134      13.484   6.508  11.381  1.00  0.00
H
ATOM   2042  HD1 TYR X 134      12.211  10.002  11.885  1.00  0.00
H
ATOM   2043  HD2 TYR X 134      15.596   7.413  11.761  1.00  0.00
H
ATOM   2044  HE1 TYR X 134      13.664  11.882  12.582  1.00  0.00
H
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ATOM   2045  HE2 TYR X 134      17.061   9.278  12.456  1.00  0.00
H
ATOM   2046  HH  TYR X 134      17.180  11.479  13.031  1.00  0.00
H
ATOM   2047  N   MET X 135      14.128   6.719   8.528  1.00  0.00
N
ATOM   2048  CA  MET X 135      15.220   6.821   7.575  1.00  0.00
C
ATOM   2049  C   MET X 135      14.777   7.547   6.308  1.00  0.00
C
ATOM   2050  O   MET X 135      15.463   8.451   5.834  1.00  0.00
O
ATOM   2051  CB  MET X 135      15.754   5.432   7.232  1.00  0.00
C
ATOM   2052  CG  MET X 135      16.981   5.433   6.331  1.00  0.00
C
ATOM   2053  SD  MET X 135      17.467   3.776   5.815  1.00  0.00
S
ATOM   2054  CE  MET X 135      17.907   3.046   7.389  1.00  0.00
C
ATOM   2055  H   MET X 135      13.850   5.811   8.872  1.00  0.00
H
ATOM   2056  HA  MET X 135      16.032   7.410   8.003  1.00  0.00
H
ATOM   2057 1HB  MET X 135      15.995   4.943   8.174  1.00  0.00
H
ATOM   2058 2HB  MET X 135      14.943   4.893   6.740  1.00  0.00
H
ATOM   2059 1HG  MET X 135      16.755   6.032   5.450  1.00  0.00
H
ATOM   2060 2HG  MET X 135      17.804   5.892   6.880  1.00  0.00
H
ATOM   2061 1HE  MET X 135      18.231   2.016   7.236  1.00  0.00
H
ATOM   2062 2HE  MET X 135      18.720   3.618   7.841  1.00  0.00
H
ATOM   2063 3HE  MET X 135      17.041   3.060   8.051  1.00  0.00
H
ATOM   2064  N   GLU X 136      13.620   7.182   5.761  1.00  0.00
N
ATOM   2065  CA  GLU X 136      13.164   7.847   4.545  1.00  0.00
C
ATOM   2066  C   GLU X 136      12.695   9.273   4.801  1.00  0.00
C
ATOM   2067  O   GLU X 136      12.914  10.160   3.974  1.00  0.00
O
ATOM   2068  CB  GLU X 136      12.033   7.051   3.890  1.00  0.00
C
ATOM   2069  CG  GLU X 136      12.461   5.707   3.315  1.00  0.00
C
ATOM   2070  CD  GLU X 136      11.295   4.977   2.708  1.00  0.00
C
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ATOM   2071  OE1 GLU X 136      10.300   4.827   3.375  1.00  0.00
O
ATOM   2072  OE2 GLU X 136      11.356   4.669   1.541  1.00  0.00
O
ATOM   2073  H   GLU X 136      13.064   6.452   6.182  1.00  0.00
H
ATOM   2074  HA  GLU X 136      13.990   7.928   3.836  1.00  0.00
H
ATOM   2075 1HB  GLU X 136      11.272   6.892   4.654  1.00  0.00
H
ATOM   2076 2HB  GLU X 136      11.625   7.674   3.094  1.00  0.00
H
ATOM   2077 1HG  GLU X 136      13.262   5.786   2.580  1.00  0.00
H
ATOM   2078 2HG  GLU X 136      12.820   5.160   4.183  1.00  0.00
H
ATOM   2079  N   LEU X 137      12.062   9.504   5.946  1.00  0.00
N
ATOM   2080  CA  LEU X 137      11.616  10.851   6.277  1.00  0.00
C
ATOM   2081  C   LEU X 137      12.833  11.770   6.303  1.00  0.00
C
ATOM   2082  O   LEU X 137      12.893  12.776   5.590  1.00  0.00
O
ATOM   2083  CB  LEU X 137      10.874  10.850   7.620  1.00  0.00
C
ATOM   2084  CG  LEU X 137      10.170  12.166   7.979  1.00  0.00
C
ATOM   2085  CD1 LEU X 137       8.867  11.879   8.711  1.00  0.00
C
ATOM   2086  CD2 LEU X 137      11.093  13.018   8.836  1.00  0.00
C
ATOM   2087  H   LEU X 137      11.888   8.744   6.588  1.00  0.00
H
ATOM   2088  HA  LEU X 137      10.943  11.214   5.501  1.00  0.00
H
ATOM   2089 1HB  LEU X 137      10.136  10.077   7.412  1.00  0.00
H
ATOM   2090 2HB  LEU X 137      11.519  10.528   8.437  1.00  0.00
H
ATOM   2091  HG  LEU X 137       9.992  12.702   7.046  1.00  0.00
H
ATOM   2092 1HD1 LEU X 137       8.374  12.818   8.961  1.00  0.00
H
ATOM   2093 2HD1 LEU X 137       8.213  11.287   8.069  1.00  0.00
H
ATOM   2094 3HD1 LEU X 137       9.078  11.324   9.624  1.00  0.00
H
ATOM   2095 1HD2 LEU X 137      10.592  13.954   9.089  1.00  0.00
H
ATOM   2096 2HD2 LEU X 137      11.343  12.479   9.750  1.00  0.00
H
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ATOM   2097 3HD2 LEU X 137      12.008  13.235   8.283  1.00  0.00
H
ATOM   2098  N   ALA X 138      13.799  11.422   7.148  1.00  0.00
N
ATOM   2099  CA  ALA X 138      15.018  12.219   7.280  1.00  0.00
C
ATOM   2100  C   ALA X 138      15.660  12.497   5.929  1.00  0.00
C
ATOM   2101  O   ALA X 138      15.966  13.646   5.596  1.00  0.00
O
ATOM   2102  CB  ALA X 138      16.010  11.521   8.199  1.00  0.00
C
ATOM   2103  H   ALA X 138      13.688  10.590   7.711  1.00  0.00
H
ATOM   2104  HA  ALA X 138      14.760  13.183   7.716  1.00  0.00
H
ATOM   2105 1HB  ALA X 138      16.911  12.128   8.286  1.00  0.00
H
ATOM   2106 2HB  ALA X 138      15.564  11.391   9.185  1.00  0.00
H
ATOM   2107 3HB  ALA X 138      16.267  10.547   7.785  1.00  0.00
H
ATOM   2108  N   LEU X 139      15.869  11.446   5.146  1.00  0.00
N
ATOM   2109  CA  LEU X 139      16.475  11.609   3.832  1.00  0.00
C
ATOM   2110  C   LEU X 139      15.729  12.654   3.010  1.00  0.00
C
ATOM   2111  O   LEU X 139      16.340  13.514   2.389  1.00  0.00
O
ATOM   2112  CB  LEU X 139      16.503  10.266   3.091  1.00  0.00
C
ATOM   2113  CG  LEU X 139      17.812   9.477   3.220  1.00  0.00
C
ATOM   2114  CD1 LEU X 139      18.391   9.652   4.617  1.00  0.00
C
ATOM   2115  CD2 LEU X 139      17.552   8.007   2.924  1.00  0.00
C
ATOM   2116  H   LEU X 139      15.605  10.525   5.465  1.00  0.00
H
ATOM   2117  HA  LEU X 139      17.495  11.972   3.943  1.00  0.00
H
ATOM   2118 1HB  LEU X 139      15.704   9.753   3.623  1.00  0.00
H
ATOM   2119 2HB  LEU X 139      16.228  10.378   2.043  1.00  0.00
H
ATOM   2120  HG  LEU X 139      18.495   9.855   2.458  1.00  0.00
H
ATOM   2121 1HD1 LEU X 139      19.320   9.087   4.699  1.00  0.00
H
ATOM   2122 2HD1 LEU X 139      18.592  10.708   4.799  1.00  0.00
H
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ATOM   2123 3HD1 LEU X 139      17.678   9.285   5.355  1.00  0.00
H
ATOM   2124 1HD2 LEU X 139      18.484   7.449   3.015  1.00  0.00
H
ATOM   2125 2HD2 LEU X 139      16.822   7.617   3.633  1.00  0.00
H
ATOM   2126 3HD2 LEU X 139      17.165   7.904   1.910  1.00  0.00
H
ATOM   2127  N   GLY X 140      14.397  12.579   3.020  1.00  0.00
N
ATOM   2128  CA  GLY X 140      13.612  13.539   2.265  1.00  0.00
C
ATOM   2129  C   GLY X 140      13.734  14.960   2.779  1.00  0.00
C
ATOM   2130  O   GLY X 140      13.599  15.922   2.012  1.00  0.00
O
ATOM   2131  H   GLY X 140      13.935  11.855   3.552  1.00  0.00
H
ATOM   2132 1HA  GLY X 140      13.942  13.531   1.226  1.00  0.00
H
ATOM   2133 2HA  GLY X 140      12.561  13.257   2.312  1.00  0.00
H
ATOM   2134  N   GLN X 141      13.993  15.107   4.071  1.00  0.00
N
ATOM   2135  CA  GLN X 141      14.120  16.436   4.654  1.00  0.00
C
ATOM   2136  C   GLN X 141      15.422  17.085   4.185  1.00  0.00
C
ATOM   2137  O   GLN X 141      15.523  18.310   4.117  1.00  0.00
O
ATOM   2138  CB  GLN X 141      14.082  16.356   6.183  1.00  0.00
C
ATOM   2139  CG  GLN X 141      12.709  16.049   6.756  1.00  0.00
C
ATOM   2140  CD  GLN X 141      11.679  17.099   6.384  1.00  0.00
C
ATOM   2141  NE2 GLN X 141      10.464  16.653   6.081  1.00  0.00
N
ATOM   2142  OE1 GLN X 141      11.970  18.298   6.370  1.00  0.00
O
ATOM   2143  H   GLN X 141      14.103  14.292   4.656  1.00  0.00
H
ATOM   2144  HA  GLN X 141      13.302  17.067   4.307  1.00  0.00
H
ATOM   2145 1HB  GLN X 141      14.787  15.577   6.475  1.00  0.00
H
ATOM   2146 2HB  GLN X 141      14.429  17.319   6.557  1.00  0.00
H
ATOM   2147 1HG  GLN X 141      12.237  15.072   6.666  1.00  0.00
H
ATOM   2148 2HG  GLN X 141      13.009  16.214   7.792  1.00  0.00
H
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ATOM   2149 1HE2 GLN X 141       9.743  17.300   5.828  1.00  0.00
H
ATOM   2150 2HE2 GLN X 141      10.271  15.672   6.107  1.00  0.00
H
ATOM   2151  N   TYR X 142      16.406  16.252   3.860  1.00  0.00
N
ATOM   2152  CA  TYR X 142      17.703  16.716   3.377  1.00  0.00
C
ATOM   2153  C   TYR X 142      17.626  17.079   1.892  1.00  0.00
C
ATOM   2154  O   TYR X 142      18.192  18.079   1.452  1.00  0.00
O
ATOM   2155  CB  TYR X 142      18.774  15.649   3.610  1.00  0.00
C
ATOM   2156  CG  TYR X 142      19.192  15.505   5.057  1.00  0.00
C
ATOM   2157  CD1 TYR X 142      18.848  14.378   5.789  1.00  0.00
C
ATOM   2158  CD2 TYR X 142      19.930  16.496   5.685  1.00  0.00
C
ATOM   2159  CE1 TYR X 142      19.227  14.241   7.111  1.00  0.00
C
ATOM   2160  CE2 TYR X 142      20.316  16.371   7.006  1.00  0.00
C
ATOM   2161  CZ  TYR X 142      19.962  15.241   7.716  1.00  0.00
C
ATOM   2162  OH  TYR X 142      20.344  15.111   9.032  1.00  0.00
O
ATOM   2163  H   TYR X 142      16.250  15.258   3.950  1.00  0.00
H
ATOM   2164  HA  TYR X 142      17.993  17.622   3.910  1.00  0.00
H
ATOM   2165 1HB  TYR X 142      18.368  14.701   3.253  1.00  0.00
H
ATOM   2166 2HB  TYR X 142      19.638  15.923   3.008  1.00  0.00
H
ATOM   2167  HD1 TYR X 142      18.268  13.592   5.305  1.00  0.00
H
ATOM   2168  HD2 TYR X 142      20.207  17.385   5.118  1.00  0.00
H
ATOM   2169  HE1 TYR X 142      18.951  13.352   7.674  1.00  0.00
H
ATOM   2170  HE2 TYR X 142      20.896  17.161   7.482  1.00  0.00
H
ATOM   2171  HH  TYR X 142      20.849  15.861   9.351  1.00  0.00
H
ATOM   2172  N   HIS X 143      16.925  16.254   1.119  1.00  0.00
N
ATOM   2173  CA  HIS X 143      16.793  16.526  -0.298  1.00  0.00
C
ATOM   2174  C   HIS X 143      15.912  17.732  -0.580  1.00  0.00
C
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ATOM   2175  O   HIS X 143      16.208  18.536  -1.461  1.00  0.00
O
ATOM   2176  CB  HIS X 143      16.231  15.306  -1.033  1.00  0.00
C
ATOM   2177  CG  HIS X 143      17.177  14.148  -1.093  1.00  0.00
C
ATOM   2178  CD2 HIS X 143      18.525  14.105  -1.234  1.00  0.00
C
ATOM   2179  ND1 HIS X 143      16.759  12.839  -1.001  1.00  0.00
N
ATOM   2180  CE1 HIS X 143      17.808  12.038  -1.084  1.00  0.00
C
ATOM   2181  NE2 HIS X 143      18.889  12.781  -1.226  1.00  0.00
N
ATOM   2182  H   HIS X 143      16.486  15.437   1.520  1.00  0.00
H
ATOM   2183  HA  HIS X 143      17.770  16.766  -0.717  1.00  0.00
H
ATOM   2184 1HB  HIS X 143      15.331  14.945  -0.532  1.00  0.00
H
ATOM   2185 2HB  HIS X 143      15.991  15.567  -2.064  1.00  0.00
H
ATOM   2186  HD2 HIS X 143      19.282  14.880  -1.342  1.00  0.00
H
ATOM   2187  HE1 HIS X 143      17.685  10.956  -1.033  1.00  0.00
H
ATOM   2188  HE2 HIS X 143      19.837  12.441  -1.314  1.00  0.00
H
ATOM   2189  N   ARG X 144      14.826  17.855   0.181  1.00  0.00
N
ATOM   2190  CA  ARG X 144      13.894  18.962   0.005  1.00  0.00
C
ATOM   2191  C   ARG X 144      13.389  19.037  -1.431  1.00  0.00
C
ATOM   2192  O   ARG X 144      13.022  20.105  -1.914  1.00  0.00
O
ATOM   2193  CB  ARG X 144      14.485  20.289   0.455  1.00  0.00
C
ATOM   2194  CG  ARG X 144      14.925  20.332   1.911  1.00  0.00
C
ATOM   2195  CD  ARG X 144      15.563  21.610   2.319  1.00  0.00
C
ATOM   2196  NE  ARG X 144      16.167  21.586   3.641  1.00  0.00
N
ATOM   2197  CZ  ARG X 144      16.835  22.616   4.198  1.00  0.00
C
ATOM   2198  NH1 ARG X 144      17.019  23.737   3.537  1.00  0.00
N
ATOM   2199  NH2 ARG X 144      17.320  22.460   5.415  1.00  0.00
N
ATOM   2200  H   ARG X 144      14.645  17.166   0.898  1.00  0.00
H
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ATOM   2201  HA  ARG X 144      13.016  18.809   0.634  1.00  0.00
H
ATOM   2202 1HB  ARG X 144      15.342  20.490  -0.185  1.00  0.00
H
ATOM   2203 2HB  ARG X 144      13.722  21.049   0.290  1.00  0.00
H
ATOM   2204 1HG  ARG X 144      14.050  20.178   2.542  1.00  0.00
H
ATOM   2205 2HG  ARG X 144      15.641  19.528   2.079  1.00  0.00
H
ATOM   2206 1HD  ARG X 144      16.350  21.856   1.606  1.00  0.00
H
ATOM   2207 2HD  ARG X 144      14.812  22.398   2.318  1.00  0.00
H
ATOM   2208  HE  ARG X 144      16.189  20.841   4.327  1.00  0.00
H
ATOM   2209 1HH1 ARG X 144      16.657  23.834   2.599  1.00  0.00
H
ATOM   2210 2HH1 ARG X 144      17.522  24.497   3.972  1.00  0.00
H
ATOM   2211 1HH2 ARG X 144      17.186  21.583   5.902  1.00  0.00
H
ATOM   2212 2HH2 ARG X 144      17.826  23.214   5.856  1.00  0.00
H
ATOM   2213  N   ASN X 145      13.382  17.895  -2.110  1.00  0.00
N
ATOM   2214  CA  ASN X 145      12.927  17.828  -3.492  1.00  0.00
C
ATOM   2215  C   ASN X 145      12.786  16.384  -3.958  1.00  0.00
C
ATOM   2216  O   ASN X 145      13.208  15.458  -3.269  1.00  0.00
O
ATOM   2217  CB  ASN X 145      13.855  18.590  -4.419  1.00  0.00
C
ATOM   2218  CG  ASN X 145      13.151  19.257  -5.568  1.00  0.00
C
ATOM   2219  ND2 ASN X 145      13.869  20.114  -6.249  1.00  0.00
N
ATOM   2220  OD1 ASN X 145      11.997  18.946  -5.880  1.00  0.00
O
ATOM   2221  H   ASN X 145      13.699  17.050  -1.656  1.00  0.00
H
ATOM   2222  HA  ASN X 145      11.937  18.279  -3.578  1.00  0.00
H
ATOM   2223 1HB  ASN X 145      14.610  19.269  -4.019  1.00  0.00
H
ATOM   2224 2HB  ASN X 145      14.340  17.683  -4.783  1.00  0.00
H
ATOM   2225 1HD2 ASN X 145      13.465  20.597  -7.028  1.00  0.00
H
ATOM   2226 2HD2 ASN X 145      14.819  20.286  -5.992  1.00  0.00
H
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ATOM   2227  N   GLY X 146      12.189  16.201  -5.131  1.00  0.00
N
ATOM   2228  CA  GLY X 146      12.061  14.878  -5.730  1.00  0.00
C
ATOM   2229  C   GLY X 146      13.375  14.429  -6.358  1.00  0.00
C
ATOM   2230  O   GLY X 146      13.513  13.279  -6.773  1.00  0.00
O
ATOM   2231  H   GLY X 146      11.813  17.001  -5.622  1.00  0.00
H
ATOM   2232 1HA  GLY X 146      11.774  14.164  -4.958  1.00  0.00
H
ATOM   2233 2HA  GLY X 146      11.291  14.908  -6.500  1.00  0.00
H
ATOM   2234  N   CYS X 147      14.335  15.347  -6.426  1.00  0.00
N
ATOM   2235  CA  CYS X 147      15.647  15.041  -6.977  1.00  0.00
C
ATOM   2236  C   CYS X 147      16.696  14.926  -5.879  1.00  0.00
C
ATOM   2237  O   CYS X 147      16.440  15.275  -4.726  1.00  0.00
O
ATOM   2238  CB  CYS X 147      15.931  16.250  -7.867  1.00  0.00
C
ATOM   2239  SG  CYS X 147      14.783  16.450  -9.251  1.00  0.00
S
ATOM   2240  H   CYS X 147      14.149  16.281  -6.088  1.00  0.00
H
ATOM   2241  HA  CYS X 147      15.658  14.143  -7.595  1.00  0.00
H
ATOM   2242 1HB  CYS X 147      15.865  17.171  -7.285  1.00  0.00
H
ATOM   2243 2HB  CYS X 147      16.925  16.168  -8.308  1.00  0.00
H
ATOM   2244  HG  CYS X 147      15.348  17.548  -9.742  1.00  0.00
H
ATOM   2245  N   ILE X 148      17.879  14.436  -6.242  1.00  0.00
N
ATOM   2246  CA  ILE X 148      18.951  14.233  -5.277  1.00  0.00
C
ATOM   2247  C   ILE X 148      20.072  15.246  -5.483  1.00  0.00
C
ATOM   2248  O   ILE X 148      20.700  15.288  -6.541  1.00  0.00
O
ATOM   2249  CB  ILE X 148      19.533  12.810  -5.369  1.00  0.00
C
ATOM   2250  CG1 ILE X 148      18.455  11.771  -5.049  1.00  0.00
C
ATOM   2251  CG2 ILE X 148      20.717  12.658  -4.428  1.00  0.00
C
ATOM   2252  CD1 ILE X 148      18.884  10.346  -5.313  1.00  0.00
C
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ATOM   2253  H   ILE X 148      18.036  14.197  -7.210  1.00  0.00
H
ATOM   2254  HA  ILE X 148      18.596  14.415  -4.263  1.00  0.00
H
ATOM   2255  HB  ILE X 148      19.855  12.623  -6.393  1.00  0.00
H
ATOM   2256 1HG1 ILE X 148      18.196  11.885  -3.998  1.00  0.00
H
ATOM   2257 2HG1 ILE X 148      17.585  12.007  -5.664  1.00  0.00
H
ATOM   2258 1HG2 ILE X 148      21.117  11.646  -4.504  1.00  0.00
H
ATOM   2259 2HG2 ILE X 148      21.492  13.375  -4.699  1.00  0.00
H
ATOM   2260 3HG2 ILE X 148      20.395  12.844  -3.403  1.00  0.00
H
ATOM   2261 1HD1 ILE X 148      18.066   9.668  -5.063  1.00  0.00
H
ATOM   2262 2HD1 ILE X 148      19.142  10.230  -6.365  1.00  0.00
H
ATOM   2263 3HD1 ILE X 148      19.750  10.107  -4.699  1.00  0.00
H
ATOM   2264  N   SER X 149      20.320  16.063  -4.463  1.00  0.00
N
ATOM   2265  CA  SER X 149      21.461  16.965  -4.468  1.00  0.00
C
ATOM   2266  C   SER X 149      22.354  16.732  -3.254  1.00  0.00
C
ATOM   2267  O   SER X 149      23.464  17.256  -3.175  1.00  0.00
O
ATOM   2268  CB  SER X 149      20.987  18.406  -4.505  1.00  0.00
C
ATOM   2269  OG  SER X 149      20.240  18.745  -3.370  1.00  0.00
O
ATOM   2270  H   SER X 149      19.702  16.056  -3.665  1.00  0.00
H
ATOM   2271  HA  SER X 149      22.055  16.908  -5.381  1.00  0.00
H
ATOM   2272 1HB  SER X 149      21.858  19.058  -4.564  1.00  0.00
H
ATOM   2273 2HB  SER X 149      20.369  18.547  -5.391  1.00  0.00
H
ATOM   2274  HG  SER X 149      19.960  19.661  -3.434  1.00  0.00
H
ATOM   2275  N   ILE X 150      21.862  15.936  -2.309  1.00  0.00
N
ATOM   2276  CA  ILE X 150      22.608  15.644  -1.089  1.00  0.00
C
ATOM   2277  C   ILE X 150      23.381  14.337  -1.217  1.00  0.00
C
ATOM   2278  O   ILE X 150      24.558  14.264  -0.865  1.00  0.00
O
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ATOM   2279  CB  ILE X 150      21.680  15.565   0.137  1.00  0.00
C
ATOM   2280  CG1 ILE X 150      20.882  16.863   0.286  1.00  0.00
C
ATOM   2281  CG2 ILE X 150      22.483  15.281   1.396  1.00  0.00
C
ATOM   2282  CD1 ILE X 150      21.742  18.097   0.425  1.00  0.00
C
ATOM   2283  H   ILE X 150      20.948  15.523  -2.439  1.00  0.00
H
ATOM   2284  HA  ILE X 150      23.372  16.401  -0.916  1.00  0.00
H
ATOM   2285  HB  ILE X 150      20.954  14.767  -0.020  1.00  0.00
H
ATOM   2286 1HG1 ILE X 150      20.249  16.957  -0.594  1.00  0.00
H
ATOM   2287 2HG1 ILE X 150      20.255  16.756   1.173  1.00  0.00
H
ATOM   2288 1HG2 ILE X 150      21.812  15.229   2.252  1.00  0.00
H
ATOM   2289 2HG2 ILE X 150      23.007  14.333   1.288  1.00  0.00
H
ATOM   2290 3HG2 ILE X 150      23.208  16.080   1.552  1.00  0.00
H
ATOM   2291 1HD1 ILE X 150      21.107  18.976   0.528  1.00  0.00
H
ATOM   2292 2HD1 ILE X 150      22.376  18.003   1.308  1.00  0.00
H
ATOM   2293 3HD1 ILE X 150      22.369  18.205  -0.460  1.00  0.00
H
ATOM   2294  N   TRP X 151      22.711  13.308  -1.727  1.00  0.00
N
ATOM   2295  CA  TRP X 151      23.347  12.014  -1.947  1.00  0.00
C
ATOM   2296  C   TRP X 151      23.936  11.925  -3.351  1.00  0.00
C
ATOM   2297  O   TRP X 151      24.140  10.832  -3.878  1.00  0.00
O
ATOM   2298  CB  TRP X 151      22.342  10.882  -1.726  1.00  0.00
C
ATOM   2299  CG  TRP X 151      22.035  10.626  -0.282  1.00  0.00
C
ATOM   2300  CD1 TRP X 151      21.832  11.563   0.686  1.00  0.00
C
ATOM   2301  CD2 TRP X 151      21.897   9.352   0.357  1.00  0.00
C
ATOM   2302  CE2 TRP X 151      21.610   9.594   1.712  1.00  0.00
C
ATOM   2303  CE3 TRP X 151      21.988   8.027  -0.087  1.00  0.00
C
ATOM   2304  NE1 TRP X 151      21.577  10.955   1.889  1.00  0.00
N
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ATOM   2305  CZ2 TRP X 151      21.416   8.569   2.626  1.00  0.00
C
ATOM   2306  CZ3 TRP X 151      21.792   7.000   0.828  1.00  0.00
C
ATOM   2307  CH2 TRP X 151      21.512   7.264   2.145  1.00  0.00
C
ATOM   2308  H   TRP X 151      21.738  13.426  -1.968  1.00  0.00
H
ATOM   2309  HA  TRP X 151      24.175  11.885  -1.251  1.00  0.00
H
ATOM   2310 1HB  TRP X 151      21.394  11.119  -2.209  1.00  0.00
H
ATOM   2311 2HB  TRP X 151      22.732   9.949  -2.132  1.00  0.00
H
ATOM   2312  HD1 TRP X 151      21.898  12.608   0.382  1.00  0.00
H
ATOM   2313  HE1 TRP X 151      21.395  11.429   2.763  1.00  0.00
H
ATOM   2314  HE3 TRP X 151      22.204   7.762  -1.122  1.00  0.00
H
ATOM   2315  HZ2 TRP X 151      21.196   8.824   3.663  1.00  0.00
H
ATOM   2316  HZ3 TRP X 151      21.867   5.974   0.469  1.00  0.00
H
ATOM   2317  HH2 TRP X 151      21.366   6.428   2.831  1.00  0.00
H
ATOM   2318  N   ARG X 152      24.203  13.080  -3.949  1.00  0.00
N
ATOM   2319  CA  ARG X 152      24.540  13.147  -5.367  1.00  0.00
C
ATOM   2320  C   ARG X 152      25.846  12.419  -5.654  1.00  0.00
C
ATOM   2321  O   ARG X 152      26.173  12.146  -6.809  1.00  0.00
O
ATOM   2322  CB  ARG X 152      24.573  14.580  -5.882  1.00  0.00
C
ATOM   2323  CG  ARG X 152      25.742  15.413  -5.379  1.00  0.00
C
ATOM   2324  CD  ARG X 152      25.707  16.834  -5.804  1.00  0.00
C
ATOM   2325  NE  ARG X 152      26.807  17.642  -5.300  1.00  0.00
N
ATOM   2326  CZ  ARG X 152      26.962  18.958  -5.540  1.00  0.00
C
ATOM   2327  NH1 ARG X 152      26.116  19.612  -6.307  1.00  0.00
N
ATOM   2328  NH2 ARG X 152      28.002  19.572  -5.004  1.00  0.00
N
ATOM   2329  H   ARG X 152      24.172  13.933  -3.409  1.00  0.00
H
ATOM   2330  HA  ARG X 152      23.768  12.647  -5.954  1.00  0.00
H
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ATOM   2331 1HB  ARG X 152      24.611  14.525  -6.969  1.00  0.00
H
ATOM   2332 2HB  ARG X 152      23.638  15.048  -5.574  1.00  0.00
H
ATOM   2333 1HG  ARG X 152      25.741  15.388  -4.289  1.00  0.00
H
ATOM   2334 2HG  ARG X 152      26.667  14.971  -5.752  1.00  0.00
H
ATOM   2335 1HD  ARG X 152      25.744  16.880  -6.894  1.00  0.00
H
ATOM   2336 2HD  ARG X 152      24.780  17.287  -5.454  1.00  0.00
H
ATOM   2337  HE  ARG X 152      27.589  17.373  -4.721  1.00  0.00
H
ATOM   2338 1HH1 ARG X 152      25.336  19.124  -6.723  1.00  0.00
H
ATOM   2339 2HH1 ARG X 152      26.252  20.599  -6.474  1.00  0.00
H
ATOM   2340 1HH2 ARG X 152      28.652  19.050  -4.432  1.00  0.00
H
ATOM   2341 2HH2 ARG X 152      28.143  20.556  -5.169  1.00  0.00
H
ATOM   2342  N   LYS X 153      26.590  12.108  -4.598  1.00  0.00
N
ATOM   2343  CA  LYS X 153      27.857  11.400  -4.735  1.00  0.00
C
ATOM   2344  C   LYS X 153      27.640   9.897  -4.859  1.00  0.00
C
ATOM   2345  O   LYS X 153      28.261   9.237  -5.691  1.00  0.00
O
ATOM   2346  CB  LYS X 153      28.769  11.701  -3.545  1.00  0.00
C
ATOM   2347  CG  LYS X 153      29.242  13.148  -3.466  1.00  0.00
C
ATOM   2348  CD  LYS X 153      30.177  13.360  -2.285  1.00  0.00
C
ATOM   2349  CE  LYS X 153      30.631  14.809  -2.189  1.00  0.00
C
ATOM   2350  NZ  LYS X 153      31.498  15.045  -1.003  1.00  0.00
N
ATOM   2351  H   LYS X 153      26.269  12.369  -3.676  1.00  0.00
H
ATOM   2352  HA  LYS X 153      28.360  11.717  -5.649  1.00  0.00
H
ATOM   2353 1HB  LYS X 153      28.210  11.454  -2.643  1.00  0.00
H
ATOM   2354 2HB  LYS X 153      29.633  11.042  -3.629  1.00  0.00
H
ATOM   2355 1HG  LYS X 153      29.764  13.393  -4.392  1.00  0.00
H
ATOM   2356 2HG  LYS X 153      28.371  13.792  -3.358  1.00  0.00
H
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ATOM   2357 1HD  LYS X 153      29.653  13.082  -1.370  1.00  0.00
H
ATOM   2358 2HD  LYS X 153      31.048  12.716  -2.411  1.00  0.00
H
ATOM   2359 1HE  LYS X 153      31.182  15.055  -3.096  1.00  0.00
H
ATOM   2360 2HE  LYS X 153      29.744  15.440  -2.121  1.00  0.00
H
ATOM   2361 1HZ  LYS X 153      31.775  16.016  -0.976  1.00  0.00
H
ATOM   2362 2HZ  LYS X 153      30.987  14.818  -0.162  1.00  0.00
H
ATOM   2363 3HZ  LYS X 153      32.319  14.462  -1.066  1.00  0.00
H
ATOM   2364  N   ILE X 154      26.752   9.362  -4.025  1.00  0.00
N
ATOM   2365  CA  ILE X 154      26.425   7.944  -4.065  1.00  0.00
C
ATOM   2366  C   ILE X 154      25.281   7.670  -5.034  1.00  0.00
C
ATOM   2367  O   ILE X 154      24.949   6.516  -5.308  1.00  0.00
O
ATOM   2368  CB  ILE X 154      26.042   7.413  -2.671  1.00  0.00
C
ATOM   2369  CG1 ILE X 154      25.953   5.885  -2.689  1.00  0.00
C
ATOM   2370  CG2 ILE X 154      24.728   8.021  -2.212  1.00  0.00
C
ATOM   2371  CD1 ILE X 154      25.888   5.261  -1.314  1.00  0.00
C
ATOM   2372  H   ILE X 154      26.293   9.955  -3.348  1.00  0.00
H
ATOM   2373  HA  ILE X 154      27.263   7.368  -4.455  1.00  0.00
H
ATOM   2374  HB  ILE X 154      26.830   7.672  -1.965  1.00  0.00
H
ATOM   2375 1HG1 ILE X 154      25.057   5.619  -3.251  1.00  0.00
H
ATOM   2376 2HG1 ILE X 154      26.834   5.514  -3.215  1.00  0.00
H
ATOM   2377 1HG2 ILE X 154      24.472   7.635  -1.226  1.00  0.00
H
ATOM   2378 2HG2 ILE X 154      24.826   9.106  -2.162  1.00  0.00
H
ATOM   2379 3HG2 ILE X 154      23.939   7.761  -2.919  1.00  0.00
H
ATOM   2380 1HD1 ILE X 154      25.826   4.175  -1.408  1.00  0.00
H
ATOM   2381 2HD1 ILE X 154      26.784   5.525  -0.751  1.00  0.00
H
ATOM   2382 3HD1 ILE X 154      25.008   5.629  -0.788  1.00  0.00
H
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ATOM   2383  N   CYS X 155      24.684   8.737  -5.554  1.00  0.00
N
ATOM   2384  CA  CYS X 155      23.546   8.616  -6.454  1.00  0.00
C
ATOM   2385  C   CYS X 155      23.888   7.749  -7.659  1.00  0.00
C
ATOM   2386  O   CYS X 155      23.209   6.757  -7.936  1.00  0.00
O
ATOM   2387  CB  CYS X 155      23.300  10.062  -6.883  1.00  0.00
C
ATOM   2388  SG  CYS X 155      22.132  10.250  -8.251  1.00  0.00
S
ATOM   2389  H   CYS X 155      25.028   9.657  -5.318  1.00  0.00
H
ATOM   2390  HA  CYS X 155      22.646   8.239  -5.967  1.00  0.00
H
ATOM   2391 1HB  CYS X 155      22.889  10.637  -6.053  1.00  0.00
H
ATOM   2392 2HB  CYS X 155      24.231  10.519  -7.217  1.00  0.00
H
ATOM   2393  HG  CYS X 155      22.198  11.577  -8.309  1.00  0.00
H
ATOM   2394  N   PRO X 156      24.939   8.128  -8.375  1.00  0.00
N
ATOM   2395  CA  PRO X 156      25.357   7.402  -9.567  1.00  0.00
C
ATOM   2396  C   PRO X 156      25.633   5.935  -9.252  1.00  0.00
C
ATOM   2397  O   PRO X 156      25.412   5.057 -10.085  1.00  0.00
O
ATOM   2398  CB  PRO X 156      26.620   8.141 -10.034  1.00  0.00
C
ATOM   2399  CG  PRO X 156      26.457   9.548  -9.529  1.00  0.00
C
ATOM   2400  CD  PRO X 156      25.879   9.199  -8.019  1.00  0.00
C
ATOM   2401  HA  PRO X 156      24.645   7.444 -10.262  1.00  0.00
H
ATOM   2402 1HB  PRO X 156      27.255   7.744  -9.508  1.00  0.00
H
ATOM   2403 2HB  PRO X 156      26.499   8.155 -10.892  1.00  0.00
H
ATOM   2404 1HG  PRO X 156      26.609   9.553  -8.695  1.00  0.00
H
ATOM   2405 2HG  PRO X 156      26.716  10.127 -10.217  1.00  0.00
H
ATOM   2406 1HD  PRO X 156      25.999   9.095  -7.079  1.00  0.00
H
ATOM   2407 2HD  PRO X 156      25.434   9.984  -8.324  1.00  0.00
H
ATOM   2408  N   ILE X 157      26.115   5.678  -8.040  1.00  0.00
N
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ATOM   2409  CA  ILE X 157      26.401   4.315  -7.604  1.00  0.00
C
ATOM   2410  C   ILE X 157      25.122   3.492  -7.503  1.00  0.00
C
ATOM   2411  O   ILE X 157      25.065   2.355  -7.968  1.00  0.00
O
ATOM   2412  CB  ILE X 157      27.124   4.297  -6.245  1.00  0.00
C
ATOM   2413  CG1 ILE X 157      28.518   4.917  -6.373  1.00  0.00
C
ATOM   2414  CG2 ILE X 157      27.216   2.875  -5.711  1.00  0.00
C
ATOM   2415  CD1 ILE X 157      29.191   5.184  -5.047  1.00  0.00
C
ATOM   2416  H   ILE X 157      26.289   6.444  -7.406  1.00  0.00
H
ATOM   2417  HA  ILE X 157      27.008   3.795  -8.344  1.00  0.00
H
ATOM   2418  HB  ILE X 157      26.569   4.916  -5.540  1.00  0.00
H
ATOM   2419 1HG1 ILE X 157      29.126   4.228  -6.958  1.00  0.00
H
ATOM   2420 2HG1 ILE X 157      28.406   5.854  -6.919  1.00  0.00
H
ATOM   2421 1HG2 ILE X 157      27.730   2.881  -4.750  1.00  0.00
H
ATOM   2422 2HG2 ILE X 157      26.214   2.469  -5.583  1.00  0.00
H
ATOM   2423 3HG2 ILE X 157      27.772   2.258  -6.416  1.00  0.00
H
ATOM   2424 1HD1 ILE X 157      30.174   5.624  -5.220  1.00  0.00
H
ATOM   2425 2HD1 ILE X 157      28.583   5.876  -4.463  1.00  0.00
H
ATOM   2426 3HD1 ILE X 157      29.305   4.249  -4.500  1.00  0.00
H
ATOM   2427  N   PHE X 158      24.097   4.073  -6.889  1.00  0.00
N
ATOM   2428  CA  PHE X 158      22.822   3.390  -6.713  1.00  0.00
C
ATOM   2429  C   PHE X 158      21.755   3.960  -7.637  1.00  0.00
C
ATOM   2430  O   PHE X 158      20.586   4.059  -7.268  1.00  0.00
O
ATOM   2431  CB  PHE X 158      22.361   3.487  -5.257  1.00  0.00
C
ATOM   2432  CG  PHE X 158      23.088   2.558  -4.328  1.00  0.00
C
ATOM   2433  CD1 PHE X 158      23.742   1.436  -4.817  1.00  0.00
C
ATOM   2434  CD2 PHE X 158      23.119   2.801  -2.963  1.00  0.00
C
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ATOM   2435  CE1 PHE X 158      24.412   0.580  -3.963  1.00  0.00
C
ATOM   2436  CE2 PHE X 158      23.789   1.948  -2.107  1.00  0.00
C
ATOM   2437  CZ  PHE X 158      24.435   0.836  -2.608  1.00  0.00
C
ATOM   2438  H   PHE X 158      24.205   5.013  -6.536  1.00  0.00
H
ATOM   2439  HA  PHE X 158      22.928   2.337  -6.976  1.00  0.00
H
ATOM   2440 1HB  PHE X 158      22.524   4.497  -4.878  1.00  0.00
H
ATOM   2441 2HB  PHE X 158      21.304   3.239  -5.181  1.00  0.00
H
ATOM   2442  HD1 PHE X 158      23.725   1.236  -5.888  1.00  0.00
H
ATOM   2443  HD2 PHE X 158      22.609   3.679  -2.567  1.00  0.00
H
ATOM   2444  HE1 PHE X 158      24.922  -0.296  -4.362  1.00  0.00
H
ATOM   2445  HE2 PHE X 158      23.807   2.151  -1.036  1.00  0.00
H
ATOM   2446  HZ  PHE X 158      24.962   0.161  -1.935  1.00  0.00
H
ATOM   2447  N   LYS X 159      22.166   4.334  -8.845  1.00  0.00
N
ATOM   2448  CA  LYS X 159      21.231   4.825  -9.853  1.00  0.00
C
ATOM   2449  C   LYS X 159      20.214   3.756 -10.227  1.00  0.00
C
ATOM   2450  O   LYS X 159      19.009   4.010 -10.240  1.00  0.00
O
ATOM   2451  CB  LYS X 159      21.986   5.293 -11.098  1.00  0.00
C
ATOM   2452  CG  LYS X 159      21.103   5.922 -12.168  1.00  0.00
C
ATOM   2453  CD  LYS X 159      21.901   6.254 -13.420  1.00  0.00
C
ATOM   2454  CE  LYS X 159      22.841   7.427 -13.183  1.00  0.00
C
ATOM   2455  NZ  LYS X 159      23.555   7.828 -14.424  1.00  0.00
N
ATOM   2456  H   LYS X 159      23.149   4.277  -9.071  1.00  0.00
H
ATOM   2457  HA  LYS X 159      20.664   5.666  -9.452  1.00  0.00
H
ATOM   2458 1HB  LYS X 159      22.728   6.021 -10.768  1.00  0.00
H
ATOM   2459 2HB  LYS X 159      22.491   4.421 -11.514  1.00  0.00
H
ATOM   2460 1HG  LYS X 159      20.308   5.219 -12.420  1.00  0.00
H
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ATOM   2461 2HG  LYS X 159      20.664   6.834 -11.764  1.00  0.00
H
ATOM   2462 1HD  LYS X 159      22.481   5.376 -13.705  1.00  0.00
H
ATOM   2463 2HD  LYS X 159      21.205   6.504 -14.221  1.00  0.00
H
ATOM   2464 1HE  LYS X 159      22.253   8.268 -12.815  1.00  0.00
H
ATOM   2465 2HE  LYS X 159      23.568   7.134 -12.425  1.00  0.00
H
ATOM   2466 1HZ  LYS X 159      24.167   8.607 -14.225  1.00  0.00
H
ATOM   2467 2HZ  LYS X 159      24.102   7.050 -14.766  1.00  0.00
H
ATOM   2468 3HZ  LYS X 159      22.882   8.101 -15.128  1.00  0.00
H
ATOM   2469  N   GLY X 160      20.704   2.559 -10.532  1.00  0.00
N
ATOM   2470  CA  GLY X 160      19.832   1.440 -10.873  1.00  0.00
C
ATOM   2471  C   GLY X 160      18.890   1.106  -9.726  1.00  0.00
C
ATOM   2472  O   GLY X 160      17.819   0.535  -9.934  1.00  0.00
O
ATOM   2473  H   GLY X 160      21.704   2.420 -10.525  1.00  0.00
H
ATOM   2474 1HA  GLY X 160      19.242   1.704 -11.752  1.00  0.00
H
ATOM   2475 2HA  GLY X 160      20.444   0.567 -11.096  1.00  0.00
H
ATOM   2476  N   ILE X 161      19.291   1.471  -8.512  1.00  0.00
N
ATOM   2477  CA  ILE X 161      18.475   1.164  -7.340  1.00  0.00
C
ATOM   2478  C   ILE X 161      17.358   2.193  -7.271  1.00  0.00
C
ATOM   2479  O   ILE X 161      16.184   1.847  -7.111  1.00  0.00
O
ATOM   2480  CB  ILE X 161      19.314   1.173  -6.049  1.00  0.00
C
ATOM   2481  CG1 ILE X 161      20.464   0.168  -6.152  1.00  0.00
C
ATOM   2482  CG2 ILE X 161      18.439   0.864  -4.844  1.00  0.00
C
ATOM   2483  CD1 ILE X 161      20.013  -1.253  -6.399  1.00  0.00
C
ATOM   2484  H   ILE X 161      20.165   1.964  -8.400  1.00  0.00
H
ATOM   2485  HA  ILE X 161      17.992   0.194  -7.452  1.00  0.00
H
ATOM   2486  HB  ILE X 161      19.766   2.157  -5.927  1.00  0.00
H
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ATOM   2487 1HG1 ILE X 161      21.106   0.492  -6.971  1.00  0.00
H
ATOM   2488 2HG1 ILE X 161      21.019   0.215  -5.216  1.00  0.00
H
ATOM   2489 1HG2 ILE X 161      19.047   0.874  -3.940  1.00  0.00
H
ATOM   2490 2HG2 ILE X 161      17.655   1.615  -4.761  1.00  0.00
H
ATOM   2491 3HG2 ILE X 161      17.987  -0.120  -4.965  1.00  0.00
H
ATOM   2492 1HD1 ILE X 161      20.884  -1.907  -6.461  1.00  0.00
H
ATOM   2493 2HD1 ILE X 161      19.372  -1.581  -5.581  1.00  0.00
H
ATOM   2494 3HD1 ILE X 161      19.458  -1.303  -7.337  1.00  0.00
H
ATOM   2495  N   GLY X 162      17.742   3.461  -7.400  1.00  0.00
N
ATOM   2496  CA  GLY X 162      16.782   4.548  -7.349  1.00  0.00
C
ATOM   2497  C   GLY X 162      15.705   4.449  -8.412  1.00  0.00
C
ATOM   2498  O   GLY X 162      14.569   4.860  -8.183  1.00  0.00
O
ATOM   2499  H   GLY X 162      18.721   3.671  -7.536  1.00  0.00
H
ATOM   2500 1HA  GLY X 162      16.293   4.546  -6.375  1.00  0.00
H
ATOM   2501 2HA  GLY X 162      17.305   5.493  -7.490  1.00  0.00
H
ATOM   2502  N   TYR X 163      16.053   3.920  -9.582  1.00  0.00
N
ATOM   2503  CA  TYR X 163      15.086   3.777 -10.672  1.00  0.00
C
ATOM   2504  C   TYR X 163      13.948   2.827 -10.297  1.00  0.00
C
ATOM   2505  O   TYR X 163      12.820   2.974 -10.773  1.00  0.00
O
ATOM   2506  CB  TYR X 163      15.780   3.277 -11.941  1.00  0.00
C
ATOM   2507  CG  TYR X 163      16.605   4.334 -12.644  1.00  0.00
C
ATOM   2508  CD1 TYR X 163      16.528   5.666 -12.266  1.00  0.00
C
ATOM   2509  CD2 TYR X 163      17.460   3.993 -13.681  1.00  0.00
C
ATOM   2510  CE1 TYR X 163      17.278   6.634 -12.905  1.00  0.00
C
ATOM   2511  CE2 TYR X 163      18.216   4.953 -14.327  1.00  0.00
C
ATOM   2512  CZ  TYR X 163      18.122   6.272 -13.936  1.00  0.00
C
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ATOM   2513  OH  TYR X 163      18.874   7.232 -14.575  1.00  0.00
O
ATOM   2514  H   TYR X 163      17.004   3.611  -9.721  1.00  0.00
H
ATOM   2515  HA  TYR X 163      14.622   4.741 -10.883  1.00  0.00
H
ATOM   2516 1HB  TYR X 163      16.425   2.447 -11.652  1.00  0.00
H
ATOM   2517 2HB  TYR X 163      15.001   2.918 -12.613  1.00  0.00
H
ATOM   2518  HD1 TYR X 163      15.859   5.944 -11.453  1.00  0.00
H
ATOM   2519  HD2 TYR X 163      17.529   2.949 -13.986  1.00  0.00
H
ATOM   2520  HE1 TYR X 163      17.208   7.678 -12.599  1.00  0.00
H
ATOM   2521  HE2 TYR X 163      18.882   4.666 -15.141  1.00  0.00
H
ATOM   2522  HH  TYR X 163      19.426   6.873 -15.274  1.00  0.00
H
ATOM   2523  N   ALA X 164      14.234   1.851  -9.446  1.00  0.00
N
ATOM   2524  CA  ALA X 164      13.202   0.908  -9.028  1.00  0.00
C
ATOM   2525  C   ALA X 164      12.112   1.606  -8.219  1.00  0.00
C
ATOM   2526  O   ALA X 164      11.002   1.092  -8.091  1.00  0.00
O
ATOM   2527  CB  ALA X 164      13.817  -0.228  -8.225  1.00  0.00
C
ATOM   2528  H   ALA X 164      15.173   1.760  -9.085  1.00  0.00
H
ATOM   2529  HA  ALA X 164      12.729   0.491  -9.918  1.00  0.00
H
ATOM   2530 1HB  ALA X 164      13.033  -0.921  -7.920  1.00  0.00
H
ATOM   2531 2HB  ALA X 164      14.550  -0.753  -8.838  1.00  0.00
H
ATOM   2532 3HB  ALA X 164      14.308   0.175  -7.341  1.00  0.00
H
ATOM   2533  N   ILE X 165      12.432   2.791  -7.700  1.00  0.00
N
ATOM   2534  CA  ILE X 165      11.481   3.563  -6.919  1.00  0.00
C
ATOM   2535  C   ILE X 165      10.377   4.152  -7.774  1.00  0.00
C
ATOM   2536  O   ILE X 165       9.294   4.480  -7.275  1.00  0.00
O
ATOM   2537  CB  ILE X 165      12.173   4.708  -6.158  1.00  0.00
C
ATOM   2538  CG1 ILE X 165      13.121   4.147  -5.095  1.00  0.00
C
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ATOM   2539  CG2 ILE X 165      11.140   5.626  -5.523  1.00  0.00
C
ATOM   2540  CD1 ILE X 165      14.031   5.185  -4.478  1.00  0.00
C
ATOM   2541  H   ILE X 165      13.359   3.162  -7.853  1.00  0.00
H
ATOM   2542  HA  ILE X 165      10.956   2.922  -6.210  1.00  0.00
H
ATOM   2543  HB  ILE X 165      12.787   5.279  -6.855  1.00  0.00
H
ATOM   2544 1HG1 ILE X 165      12.507   3.695  -4.318  1.00  0.00
H
ATOM   2545 2HG1 ILE X 165      13.725   3.375  -5.574  1.00  0.00
H
ATOM   2546 1HG2 ILE X 165      11.647   6.430  -4.988  1.00  0.00
H
ATOM   2547 2HG2 ILE X 165      10.505   6.051  -6.298  1.00  0.00
H
ATOM   2548 3HG2 ILE X 165      10.527   5.057  -4.824  1.00  0.00
H
ATOM   2549 1HD1 ILE X 165      14.674   4.712  -3.735  1.00  0.00
H
ATOM   2550 2HD1 ILE X 165      14.649   5.638  -5.257  1.00  0.00
H
ATOM   2551 3HD1 ILE X 165      13.431   5.957  -3.998  1.00  0.00
H
ATOM   2552  N   CYS X 166      10.666   4.322  -9.060  1.00  0.00
N
ATOM   2553  CA  CYS X 166       9.694   4.822 -10.023  1.00  0.00
C
ATOM   2554  C   CYS X 166       8.964   3.608 -10.593  1.00  0.00
C
ATOM   2555  O   CYS X 166       7.738   3.573 -10.644  1.00  0.00
O
ATOM   2556  CB  CYS X 166      10.576   5.510 -11.065  1.00  0.00
C
ATOM   2557  SG  CYS X 166      11.506   6.932 -10.440  1.00  0.00
S
ATOM   2558  H   CYS X 166      11.596   4.097  -9.382  1.00  0.00
H
ATOM   2559  HA  CYS X 166       9.009   5.560  -9.604  1.00  0.00
H
ATOM   2560 1HB  CYS X 166      11.317   4.811 -11.453  1.00  0.00
H
ATOM   2561 2HB  CYS X 166       9.966   5.887 -11.886  1.00  0.00
H
ATOM   2562  HG  CYS X 166      12.105   7.221 -11.591  1.00  0.00
H
ATOM   2563  N   ILE X 167       9.744   2.612 -11.010  1.00  0.00
N
ATOM   2564  CA  ILE X 167       9.197   1.396 -11.607  1.00  0.00
C
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ATOM   2565  C   ILE X 167       8.224   0.659 -10.687  1.00  0.00
C
ATOM   2566  O   ILE X 167       7.080   0.402 -11.065  1.00  0.00
O
ATOM   2567  CB  ILE X 167      10.312   0.411 -12.007  1.00  0.00
C
ATOM   2568  CG1 ILE X 167      11.178   1.010 -13.120  1.00  0.00
C
ATOM   2569  CG2 ILE X 167       9.716  -0.916 -12.446  1.00  0.00
C
ATOM   2570  CD1 ILE X 167      10.427   1.263 -14.407  1.00  0.00
C
ATOM   2571  H   ILE X 167      10.745   2.700 -10.911  1.00  0.00
H
ATOM   2572  HA  ILE X 167       8.593   1.635 -12.482  1.00  0.00
H
ATOM   2573  HB  ILE X 167      10.967   0.252 -11.151  1.00  0.00
H
ATOM   2574 1HG1 ILE X 167      11.584   1.947 -12.746  1.00  0.00
H
ATOM   2575 2HG1 ILE X 167      11.993   0.309 -13.307  1.00  0.00
H
ATOM   2576 1HG2 ILE X 167      10.518  -1.600 -12.727  1.00  0.00
H
ATOM   2577 2HG2 ILE X 167       9.143  -1.348 -11.627  1.00  0.00
H
ATOM   2578 3HG2 ILE X 167       9.061  -0.756 -13.303  1.00  0.00
H
ATOM   2579 1HD1 ILE X 167      11.107   1.685 -15.149  1.00  0.00
H
ATOM   2580 2HD1 ILE X 167      10.020   0.324 -14.784  1.00  0.00
H
ATOM   2581 3HD1 ILE X 167       9.613   1.963 -14.223  1.00  0.00
H
ATOM   2582  N   ILE X 168       8.666   0.323  -9.479  1.00  0.00
N
ATOM   2583  CA  ILE X 168       7.790  -0.390  -8.558  1.00  0.00
C
ATOM   2584  C   ILE X 168       6.630   0.480  -8.075  1.00  0.00
C
ATOM   2585  O   ILE X 168       5.481   0.041  -8.095  1.00  0.00
O
ATOM   2586  CB  ILE X 168       8.570  -0.907  -7.335  1.00  0.00
C
ATOM   2587  CG1 ILE X 168       9.558  -1.999  -7.754  1.00  0.00
C
ATOM   2588  CG2 ILE X 168       7.612  -1.429  -6.277  1.00  0.00
C
ATOM   2589  CD1 ILE X 168      10.549  -2.372  -6.676  1.00  0.00
C
ATOM   2590  H   ILE X 168       9.607   0.561  -9.200  1.00  0.00
H
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ATOM   2591  HA  ILE X 168       7.305  -1.226  -9.059  1.00  0.00
H
ATOM   2592  HB  ILE X 168       9.161  -0.091  -6.920  1.00  0.00
H
ATOM   2593 1HG1 ILE X 168       8.974  -2.877  -8.030  1.00  0.00
H
ATOM   2594 2HG1 ILE X 168      10.093  -1.632  -8.629  1.00  0.00
H
ATOM   2595 1HG2 ILE X 168       8.179  -1.792  -5.419  1.00  0.00
H
ATOM   2596 2HG2 ILE X 168       6.948  -0.626  -5.959  1.00  0.00
H
ATOM   2597 3HG2 ILE X 168       7.021  -2.247  -6.691  1.00  0.00
H
ATOM   2598 1HD1 ILE X 168      11.215  -3.152  -7.047  1.00  0.00
H
ATOM   2599 2HD1 ILE X 168      11.136  -1.496  -6.400  1.00  0.00
H
ATOM   2600 3HD1 ILE X 168      10.015  -2.739  -5.801  1.00  0.00
H
ATOM   2601  N   ALA X 169       6.899   1.729  -7.650  1.00  0.00
N
ATOM   2602  CA  ALA X 169       5.776   2.555  -7.192  1.00  0.00
C
ATOM   2603  C   ALA X 169       4.654   2.695  -8.224  1.00  0.00
C
ATOM   2604  O   ALA X 169       3.482   2.567  -7.881  1.00  0.00
O
ATOM   2605  CB  ALA X 169       6.285   3.933  -6.790  1.00  0.00
C
ATOM   2606  H   ALA X 169       7.844   2.086  -7.646  1.00  0.00
H
ATOM   2607  HA  ALA X 169       5.327   2.082  -6.318  1.00  0.00
H
ATOM   2608 1HB  ALA X 169       5.451   4.536  -6.431  1.00  0.00
H
ATOM   2609 2HB  ALA X 169       7.027   3.831  -5.998  1.00  0.00
H
ATOM   2610 3HB  ALA X 169       6.738   4.418  -7.651  1.00  0.00
H
ATOM   2611  N   PHE X 170       5.007   2.926  -9.487  1.00  0.00
N
ATOM   2612  CA  PHE X 170       3.996   3.043 -10.533  1.00  0.00
C
ATOM   2613  C   PHE X 170       3.217   1.734 -10.669  1.00  0.00
C
ATOM   2614  O   PHE X 170       1.986   1.738 -10.708  1.00  0.00
O
ATOM   2615  CB  PHE X 170       4.646   3.421 -11.866  1.00  0.00
C
ATOM   2616  CG  PHE X 170       3.695   3.419 -13.028  1.00  0.00
C
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ATOM   2617  CD1 PHE X 170       2.819   4.476 -13.228  1.00  0.00
C
ATOM   2618  CD2 PHE X 170       3.672   2.358 -13.921  1.00  0.00
C
ATOM   2619  CE1 PHE X 170       1.944   4.475 -14.298  1.00  0.00
C
ATOM   2620  CE2 PHE X 170       2.798   2.356 -14.991  1.00  0.00
C
ATOM   2621  CZ  PHE X 170       1.933   3.415 -15.179  1.00  0.00
C
ATOM   2622  H   PHE X 170       5.985   3.023  -9.723  1.00  0.00
H
ATOM   2623  HA  PHE X 170       3.274   3.816 -10.266  1.00  0.00
H
ATOM   2624 1HB  PHE X 170       5.065   4.426 -11.807  1.00  0.00
H
ATOM   2625 2HB  PHE X 170       5.439   2.714 -12.109  1.00  0.00
H
ATOM   2626  HD1 PHE X 170       2.830   5.315 -12.532  1.00  0.00
H
ATOM   2627  HD2 PHE X 170       4.354   1.522 -13.774  1.00  0.00
H
ATOM   2628  HE1 PHE X 170       1.263   5.311 -14.442  1.00  0.00
H
ATOM   2629  HE2 PHE X 170       2.790   1.516 -15.686  1.00  0.00
H
ATOM   2630  HZ  PHE X 170       1.242   3.412 -16.020  1.00  0.00
H
ATOM   2631  N   TYR X 171       3.931   0.612 -10.751  1.00  0.00
N
ATOM   2632  CA  TYR X 171       3.265  -0.677 -10.885  1.00  0.00
C
ATOM   2633  C   TYR X 171       2.356  -0.945  -9.689  1.00  0.00
C
ATOM   2634  O   TYR X 171       1.314  -1.593  -9.825  1.00  0.00
O
ATOM   2635  CB  TYR X 171       4.295  -1.799 -11.030  1.00  0.00
C
ATOM   2636  CG  TYR X 171       4.912  -1.891 -12.408  1.00  0.00
C
ATOM   2637  CD1 TYR X 171       4.255  -1.383 -13.518  1.00  0.00
C
ATOM   2638  CD2 TYR X 171       6.153  -2.485 -12.594  1.00  0.00
C
ATOM   2639  CE1 TYR X 171       4.813  -1.465 -14.778  1.00  0.00
C
ATOM   2640  CE2 TYR X 171       6.721  -2.571 -13.849  1.00  0.00
C
ATOM   2641  CZ  TYR X 171       6.047  -2.058 -14.940  1.00  0.00
C
ATOM   2642  OH  TYR X 171       6.609  -2.139 -16.193  1.00  0.00
O
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ATOM   2643  H   TYR X 171       4.940   0.655 -10.720  1.00  0.00
H
ATOM   2644  HA  TYR X 171       2.628  -0.674 -11.770  1.00  0.00
H
ATOM   2645 1HB  TYR X 171       5.078  -1.615 -10.292  1.00  0.00
H
ATOM   2646 2HB  TYR X 171       3.788  -2.734 -10.796  1.00  0.00
H
ATOM   2647  HD1 TYR X 171       3.280  -0.914 -13.384  1.00  0.00
H
ATOM   2648  HD2 TYR X 171       6.679  -2.889 -11.727  1.00  0.00
H
ATOM   2649  HE1 TYR X 171       4.286  -1.062 -15.641  1.00  0.00
H
ATOM   2650  HE2 TYR X 171       7.696  -3.042 -13.975  1.00  0.00
H
ATOM   2651  HH  TYR X 171       6.058  -1.753 -16.877  1.00  0.00
H
ATOM   2652  N   ILE X 172       2.733  -0.448  -8.523  1.00  0.00
N
ATOM   2653  CA  ILE X 172       1.871  -0.641  -7.369  1.00  0.00
C
ATOM   2654  C   ILE X 172       0.559   0.104  -7.585  1.00  0.00
C
ATOM   2655  O   ILE X 172      -0.514  -0.484  -7.442  1.00  0.00
O
ATOM   2656  CB  ILE X 172       2.534  -0.156  -6.067  1.00  0.00
C
ATOM   2657  CG1 ILE X 172       3.699  -1.076  -5.687  1.00  0.00
C
ATOM   2658  CG2 ILE X 172       1.513  -0.092  -4.941  1.00  0.00
C
ATOM   2659  CD1 ILE X 172       4.584  -0.520  -4.596  1.00  0.00
C
ATOM   2660  H   ILE X 172       3.603   0.056  -8.435  1.00  0.00
H
ATOM   2661  HA  ILE X 172       1.596  -1.689  -7.267  1.00  0.00
H
ATOM   2662  HB  ILE X 172       2.957   0.834  -6.232  1.00  0.00
H
ATOM   2663 1HG1 ILE X 172       3.272  -2.023  -5.361  1.00  0.00
H
ATOM   2664 2HG1 ILE X 172       4.291  -1.237  -6.588  1.00  0.00
H
ATOM   2665 1HG2 ILE X 172       1.999   0.252  -4.030  1.00  0.00
H
ATOM   2666 2HG2 ILE X 172       0.716   0.600  -5.211  1.00  0.00
H
ATOM   2667 3HG2 ILE X 172       1.092  -1.083  -4.775  1.00  0.00
H
ATOM   2668 1HD1 ILE X 172       5.387  -1.227  -4.381  1.00  0.00
H
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ATOM   2669 2HD1 ILE X 172       5.014   0.429  -4.921  1.00  0.00
H
ATOM   2670 3HD1 ILE X 172       3.993  -0.360  -3.695  1.00  0.00
H
ATOM   2671  N   ALA X 173       0.633   1.378  -7.960  1.00  0.00
N
ATOM   2672  CA  ALA X 173      -0.587   2.143  -8.193  1.00  0.00
C
ATOM   2673  C   ALA X 173      -1.457   1.459  -9.247  1.00  0.00
C
ATOM   2674  O   ALA X 173      -2.692   1.477  -9.165  1.00  0.00
O
ATOM   2675  CB  ALA X 173      -0.251   3.566  -8.614  1.00  0.00
C
ATOM   2676  H   ALA X 173       1.534   1.816  -8.083  1.00  0.00
H
ATOM   2677  HA  ALA X 173      -1.158   2.180  -7.266  1.00  0.00
H
ATOM   2678 1HB  ALA X 173      -1.174   4.121  -8.786  1.00  0.00
H
ATOM   2679 2HB  ALA X 173       0.323   4.053  -7.825  1.00  0.00
H
ATOM   2680 3HB  ALA X 173       0.336   3.547  -9.530  1.00  0.00
H
ATOM   2681  N   SER X 174      -0.810   0.852 -10.235  1.00  0.00
N
ATOM   2682  CA  SER X 174      -1.524   0.217 -11.338  1.00  0.00
C
ATOM   2683  C   SER X 174      -2.387  -0.978 -10.923  1.00  0.00
C
ATOM   2684  O   SER X 174      -3.577  -1.019 -11.247  1.00  0.00
O
ATOM   2685  CB  SER X 174      -0.543  -0.238 -12.401  1.00  0.00
C
ATOM   2686  OG  SER X 174       0.090   0.843 -13.029  1.00  0.00
O
ATOM   2687  H   SER X 174       0.199   0.828 -10.223  1.00  0.00
H
ATOM   2688  HA  SER X 174      -2.150   0.907 -11.902  1.00  0.00
H
ATOM   2689 1HB  SER X 174       0.214  -0.868 -11.931  1.00  0.00
H
ATOM   2690 2HB  SER X 174      -1.082  -0.817 -13.150  1.00  0.00
H
ATOM   2691  HG  SER X 174      -0.572   1.400 -13.447  1.00  0.00
H
ATOM   2692  N   TYR X 175      -1.822  -1.950 -10.212  1.00  0.00
N
ATOM   2693  CA  TYR X 175      -2.630  -3.082  -9.787  1.00  0.00
C
ATOM   2694  C   TYR X 175      -3.470  -2.754  -8.562  1.00  0.00
C
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ATOM   2695  O   TYR X 175      -4.507  -3.371  -8.345  1.00  0.00
O
ATOM   2696  CB  TYR X 175      -1.737  -4.291  -9.497  1.00  0.00
C
ATOM   2697  CG  TYR X 175      -0.974  -4.192  -8.194  1.00  0.00
C
ATOM   2698  CD1 TYR X 175      -1.638  -4.223  -6.975  1.00  0.00
C
ATOM   2699  CD2 TYR X 175       0.407  -4.070  -8.186  1.00  0.00
C
ATOM   2700  CE1 TYR X 175      -0.946  -4.132  -5.783  1.00  0.00
C
ATOM   2701  CE2 TYR X 175       1.108  -3.979  -7.001  1.00  0.00
C
ATOM   2702  CZ  TYR X 175       0.428  -4.012  -5.800  1.00  0.00
C
ATOM   2703  OH  TYR X 175       1.122  -3.923  -4.616  1.00  0.00
O
ATOM   2704  H   TYR X 175      -0.843  -1.903  -9.972  1.00  0.00
H
ATOM   2705  HA  TYR X 175      -3.334  -3.351 -10.575  1.00  0.00
H
ATOM   2706 1HB  TYR X 175      -2.383  -5.171  -9.473  1.00  0.00
H
ATOM   2707 2HB  TYR X 175      -1.035  -4.378 -10.324  1.00  0.00
H
ATOM   2708  HD1 TYR X 175      -2.722  -4.320  -6.970  1.00  0.00
H
ATOM   2709  HD2 TYR X 175       0.938  -4.044  -9.137  1.00  0.00
H
ATOM   2710  HE1 TYR X 175      -1.480  -4.158  -4.834  1.00  0.00
H
ATOM   2711  HE2 TYR X 175       2.196  -3.882  -7.016  1.00  0.00
H
ATOM   2712  HH  TYR X 175       2.002  -3.553  -4.723  1.00  0.00
H
ATOM   2713  N   TYR X 176      -3.038  -1.770  -7.776  1.00  0.00
N
ATOM   2714  CA  TYR X 176      -3.754  -1.419  -6.553  1.00  0.00
C
ATOM   2715  C   TYR X 176      -5.058  -0.675  -6.864  1.00  0.00
C
ATOM   2716  O   TYR X 176      -6.057  -0.837  -6.162  1.00  0.00
O
ATOM   2717  CB  TYR X 176      -2.866  -0.566  -5.641  1.00  0.00
C
ATOM   2718  CG  TYR X 176      -3.306  -0.556  -4.194  1.00  0.00
C
ATOM   2719  CD1 TYR X 176      -4.327  -1.384  -3.752  1.00  0.00
C
ATOM   2720  CD2 TYR X 176      -2.696   0.282  -3.271  1.00  0.00
C
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ATOM   2721  CE1 TYR X 176      -4.732  -1.377  -2.431  1.00  0.00
C
ATOM   2722  CE2 TYR X 176      -3.091   0.296  -1.949  1.00  0.00
C
ATOM   2723  CZ  TYR X 176      -4.111  -0.536  -1.533  1.00  0.00
C
ATOM   2724  OH  TYR X 176      -4.509  -0.526  -0.215  1.00  0.00
O
ATOM   2725  H   TYR X 176      -2.204  -1.261  -8.028  1.00  0.00
H
ATOM   2726  HA  TYR X 176      -4.034  -2.324  -6.014  1.00  0.00
H
ATOM   2727 1HB  TYR X 176      -1.854  -0.966  -5.711  1.00  0.00
H
ATOM   2728 2HB  TYR X 176      -2.883   0.450  -6.034  1.00  0.00
H
ATOM   2729  HD1 TYR X 176      -4.814  -2.047  -4.468  1.00  0.00
H
ATOM   2730  HD2 TYR X 176      -1.891   0.938  -3.607  1.00  0.00
H
ATOM   2731  HE1 TYR X 176      -5.536  -2.032  -2.100  1.00  0.00
H
ATOM   2732  HE2 TYR X 176      -2.600   0.962  -1.241  1.00  0.00
H
ATOM   2733  HH  TYR X 176      -4.253   0.275   0.248  1.00  0.00
H
ATOM   2734  N   ASN X 177      -5.060   0.137  -7.917  1.00  0.00
N
ATOM   2735  CA  ASN X 177      -6.290   0.822  -8.289  1.00  0.00
C
ATOM   2736  C   ASN X 177      -7.399  -0.195  -8.543  1.00  0.00
C
ATOM   2737  O   ASN X 177      -8.551   0.037  -8.174  1.00  0.00
O
ATOM   2738  CB  ASN X 177      -6.085   1.713  -9.500  1.00  0.00
C
ATOM   2739  CG  ASN X 177      -7.315   2.478  -9.904  1.00  0.00
C
ATOM   2740  ND2 ASN X 177      -7.849   2.125 -11.045  1.00  0.00
N
ATOM   2741  OD1 ASN X 177      -7.815   3.326  -9.156  1.00  0.00
O
ATOM   2742  H   ASN X 177      -4.215   0.276  -8.455  1.00  0.00
H
ATOM   2743  HA  ASN X 177      -6.622   1.458  -7.467  1.00  0.00
H
ATOM   2744 1HB  ASN X 177      -5.217   2.369  -9.571  1.00  0.00
H
ATOM   2745 2HB  ASN X 177      -5.958   0.868 -10.178  1.00  0.00
H
ATOM   2746 1HD2 ASN X 177      -8.671   2.592 -11.377  1.00  0.00
H
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ATOM   2747 2HD2 ASN X 177      -7.440   1.392 -11.584  1.00  0.00
H
ATOM   2748  N   THR X 178      -7.072  -1.315  -9.172  1.00  0.00
N
ATOM   2749  CA  THR X 178      -8.110  -2.321  -9.405  1.00  0.00
C
ATOM   2750  C   THR X 178      -8.634  -2.852  -8.071  1.00  0.00
C
ATOM   2751  O   THR X 178      -9.844  -3.013  -7.898  1.00  0.00
O
ATOM   2752  CB  THR X 178      -7.590  -3.497 -10.253  1.00  0.00
C
ATOM   2753  CG2 THR X 178      -8.681  -4.541 -10.444  1.00  0.00
C
ATOM   2754  OG1 THR X 178      -7.165  -3.016 -11.534  1.00  0.00
O
ATOM   2755  H   THR X 178      -6.123  -1.471  -9.485  1.00  0.00
H
ATOM   2756  HA  THR X 178      -8.955  -1.867  -9.921  1.00  0.00
H
ATOM   2757  HB  THR X 178      -6.738  -3.951  -9.744  1.00  0.00
H
ATOM   2758  HG1 THR X 178      -6.842  -3.751 -12.060  1.00  0.00
H
ATOM   2759 1HG2 THR X 178      -8.294  -5.363 -11.045  1.00  0.00
H
ATOM   2760 2HG2 THR X 178      -8.998  -4.917  -9.471  1.00  0.00
H
ATOM   2761 3HG2 THR X 178      -9.530  -4.089 -10.952  1.00  0.00
H
ATOM   2762  N   ILE X 179      -7.746  -3.122  -7.116  1.00  0.00
N
ATOM   2763  CA  ILE X 179      -8.210  -3.598  -5.816  1.00  0.00
C
ATOM   2764  C   ILE X 179      -9.219  -2.585  -5.263  1.00  0.00
C
ATOM   2765  O   ILE X 179     -10.317  -2.949  -4.848  1.00  0.00
O
ATOM   2766  CB  ILE X 179      -7.053  -3.785  -4.817  1.00  0.00
C
ATOM   2767  CG1 ILE X 179      -6.093  -4.871  -5.311  1.00  0.00
C
ATOM   2768  CG2 ILE X 179      -7.590  -4.132  -3.439  1.00  0.00
C
ATOM   2769  CD1 ILE X 179      -6.703  -6.254  -5.349  1.00  0.00
C
ATOM   2770  H   ILE X 179      -6.759  -2.999  -7.290  1.00  0.00
H
ATOM   2771  HA  ILE X 179      -8.752  -4.537  -5.921  1.00  0.00
H
ATOM   2772  HB  ILE X 179      -6.478  -2.860  -4.762  1.00  0.00
H
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ATOM   2773 1HG1 ILE X 179      -5.771  -4.589  -6.314  1.00  0.00
H
ATOM   2774 2HG1 ILE X 179      -5.232  -4.872  -4.641  1.00  0.00
H
ATOM   2775 1HG2 ILE X 179      -6.759  -4.262  -2.746  1.00  0.00
H
ATOM   2776 2HG2 ILE X 179      -8.234  -3.328  -3.086  1.00  0.00
H
ATOM   2777 3HG2 ILE X 179      -8.162  -5.058  -3.493  1.00  0.00
H
ATOM   2778 1HD1 ILE X 179      -5.963  -6.969  -5.708  1.00  0.00
H
ATOM   2779 2HD1 ILE X 179      -7.025  -6.538  -4.347  1.00  0.00
H
ATOM   2780 3HD1 ILE X 179      -7.561  -6.255  -6.018  1.00  0.00
H
ATOM   2781  N   MET X 180      -8.852  -1.305  -5.271  1.00  0.00
N
ATOM   2782  CA  MET X 180      -9.728  -0.268  -4.740  1.00  0.00
C
ATOM   2783  C   MET X 180     -11.097  -0.361  -5.436  1.00  0.00
C
ATOM   2784  O   MET X 180     -12.135  -0.513  -4.771  1.00  0.00
O
ATOM   2785  CB  MET X 180      -9.107   1.114  -4.939  1.00  0.00
C
ATOM   2786  CG  MET X 180      -9.899   2.255  -4.318  1.00  0.00
C
ATOM   2787  SD  MET X 180      -9.093   3.855  -4.527  1.00  0.00
S
ATOM   2788  CE  MET X 180     -10.360   4.957  -3.904  1.00  0.00
C
ATOM   2789  H   MET X 180      -7.952  -1.049  -5.651  1.00  0.00
H
ATOM   2790  HA  MET X 180      -9.889  -0.427  -3.674  1.00  0.00
H
ATOM   2791 1HB  MET X 180      -8.112   1.080  -4.498  1.00  0.00
H
ATOM   2792 2HB  MET X 180      -9.024   1.273  -6.015  1.00  0.00
H
ATOM   2793 1HG  MET X 180     -10.880   2.285  -4.791  1.00  0.00
H
ATOM   2794 2HG  MET X 180     -10.014   2.049  -3.254  1.00  0.00
H
ATOM   2795 1HE  MET X 180     -10.010   5.987  -3.967  1.00  0.00
H
ATOM   2796 2HE  MET X 180     -11.266   4.843  -4.501  1.00  0.00
H
ATOM   2797 3HE  MET X 180     -10.576   4.710  -2.864  1.00  0.00
H
ATOM   2798  N   ALA X 181     -11.114  -0.541  -6.757  1.00  0.00
N
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ATOM   2799  CA  ALA X 181     -12.326  -0.713  -7.565  1.00  0.00
C
ATOM   2800  C   ALA X 181     -13.110  -1.950  -7.124  1.00  0.00
C
ATOM   2801  O   ALA X 181     -14.336  -1.945  -7.194  1.00  0.00
O
ATOM   2802  CB  ALA X 181     -11.968  -0.803  -9.041  1.00  0.00
C
ATOM   2803  H   ALA X 181     -10.203  -0.610  -7.186  1.00  0.00
H
ATOM   2804  HA  ALA X 181     -12.972   0.152  -7.414  1.00  0.00
H
ATOM   2805 1HB  ALA X 181     -12.879  -0.931  -9.626  1.00  0.00
H
ATOM   2806 2HB  ALA X 181     -11.463   0.112  -9.351  1.00  0.00
H
ATOM   2807 3HB  ALA X 181     -11.310  -1.654  -9.206  1.00  0.00
H
ATOM   2808  N   TRP X 182     -12.430  -2.992  -6.647  1.00  0.00
N
ATOM   2809  CA  TRP X 182     -13.148  -4.184  -6.187  1.00  0.00
C
ATOM   2810  C   TRP X 182     -13.965  -3.843  -4.941  1.00  0.00
C
ATOM   2811  O   TRP X 182     -15.017  -4.429  -4.701  1.00  0.00
O
ATOM   2812  CB  TRP X 182     -12.173  -5.326  -5.891  1.00  0.00
C
ATOM   2813  CG  TRP X 182     -11.840  -6.157  -7.093  1.00  0.00
C
ATOM   2814  CD1 TRP X 182     -10.641  -6.217  -7.735  1.00  0.00
C
ATOM   2815  CD2 TRP X 182     -12.718  -7.047  -7.795  1.00  0.00
C
ATOM   2816  CE2 TRP X 182     -11.982  -7.610  -8.852  1.00  0.00
C
ATOM   2817  CE3 TRP X 182     -14.057  -7.420  -7.629  1.00  0.00
C
ATOM   2818  NE1 TRP X 182     -10.714  -7.086  -8.795  1.00  0.00
N
ATOM   2819  CZ2 TRP X 182     -12.534  -8.520  -9.740  1.00  0.00
C
ATOM   2820  CZ3 TRP X 182     -14.611  -8.334  -8.517  1.00  0.00
C
ATOM   2821  CH2 TRP X 182     -13.871  -8.869  -9.543  1.00  0.00
C
ATOM   2822  H   TRP X 182     -11.421  -2.961  -6.602  1.00  0.00
H
ATOM   2823  HA  TRP X 182     -13.847  -4.514  -6.954  1.00  0.00
H
ATOM   2824 1HB  TRP X 182     -11.229  -4.929  -5.514  1.00  0.00
H
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ATOM   2825 2HB  TRP X 182     -12.602  -6.004  -5.153  1.00  0.00
H
ATOM   2826  HD1 TRP X 182      -9.838  -5.599  -7.337  1.00  0.00
H
ATOM   2827  HE1 TRP X 182      -9.960  -7.304  -9.431  1.00  0.00
H
ATOM   2828  HE3 TRP X 182     -14.687  -7.029  -6.831  1.00  0.00
H
ATOM   2829  HZ2 TRP X 182     -11.910  -8.920 -10.539  1.00  0.00
H
ATOM   2830  HZ3 TRP X 182     -15.654  -8.615  -8.378  1.00  0.00
H
ATOM   2831  HH2 TRP X 182     -14.343  -9.583 -10.218  1.00  0.00
H
ATOM   2832  N   ALA X 183     -13.469  -2.910  -4.130  1.00  0.00
N
ATOM   2833  CA  ALA X 183     -14.212  -2.526  -2.937  1.00  0.00
C
ATOM   2834  C   ALA X 183     -15.536  -1.866  -3.320  1.00  0.00
C
ATOM   2835  O   ALA X 183     -16.570  -2.180  -2.730  1.00  0.00
O
ATOM   2836  CB  ALA X 183     -13.379  -1.598  -2.066  1.00  0.00
C
ATOM   2837  H   ALA X 183     -12.583  -2.473  -4.339  1.00  0.00
H
ATOM   2838  HA  ALA X 183     -14.442  -3.424  -2.364  1.00  0.00
H
ATOM   2839 1HB  ALA X 183     -13.951  -1.320  -1.182  1.00  0.00
H
ATOM   2840 2HB  ALA X 183     -12.464  -2.107  -1.762  1.00  0.00
H
ATOM   2841 3HB  ALA X 183     -13.125  -0.701  -2.630  1.00  0.00
H
ATOM   2842  N   LEU X 184     -15.515  -0.979  -4.310  1.00  0.00
N
ATOM   2843  CA  LEU X 184     -16.762  -0.349  -4.741  1.00  0.00
C
ATOM   2844  C   LEU X 184     -17.612  -1.394  -5.463  1.00  0.00
C
ATOM   2845  O   LEU X 184     -18.841  -1.358  -5.399  1.00  0.00
O
ATOM   2846  CB  LEU X 184     -16.464   0.859  -5.637  1.00  0.00
C
ATOM   2847  CG  LEU X 184     -17.694   1.663  -6.080  1.00  0.00
C
ATOM   2848  CD1 LEU X 184     -18.439   2.190  -4.862  1.00  0.00
C
ATOM   2849  CD2 LEU X 184     -17.254   2.808  -6.981  1.00  0.00
C
ATOM   2850  H   LEU X 184     -14.643  -0.741  -4.762  1.00  0.00
H
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ATOM   2851  HA  LEU X 184     -17.321  -0.012  -3.868  1.00  0.00
H
ATOM   2852 1HB  LEU X 184     -15.862   1.448  -4.946  1.00  0.00
H
ATOM   2853 2HB  LEU X 184     -15.859   0.582  -6.501  1.00  0.00
H
ATOM   2854  HG  LEU X 184     -18.322   0.995  -6.670  1.00  0.00
H
ATOM   2855 1HD1 LEU X 184     -19.310   2.759  -5.187  1.00  0.00
H
ATOM   2856 2HD1 LEU X 184     -18.763   1.354  -4.242  1.00  0.00
H
ATOM   2857 3HD1 LEU X 184     -17.780   2.837  -4.284  1.00  0.00
H
ATOM   2858 1HD2 LEU X 184     -18.130   3.377  -7.297  1.00  0.00
H
ATOM   2859 2HD2 LEU X 184     -16.574   3.460  -6.436  1.00  0.00
H
ATOM   2860 3HD2 LEU X 184     -16.749   2.405  -7.860  1.00  0.00
H
ATOM   2861  N   TYR X 185     -16.950  -2.330  -6.137  1.00  0.00
N
ATOM   2862  CA  TYR X 185     -17.670  -3.376  -6.847  1.00  0.00
C
ATOM   2863  C   TYR X 185     -18.598  -4.141  -5.917  1.00  0.00
C
ATOM   2864  O   TYR X 185     -19.798  -4.281  -6.190  1.00  0.00
O
ATOM   2865  CB  TYR X 185     -16.689  -4.343  -7.515  1.00  0.00
C
ATOM   2866  CG  TYR X 185     -17.349  -5.554  -8.136  1.00  0.00
C
ATOM   2867  CD1 TYR X 185     -17.697  -5.564  -9.480  1.00  0.00
C
ATOM   2868  CD2 TYR X 185     -17.619  -6.683  -7.379  1.00  0.00
C
ATOM   2869  CE1 TYR X 185     -18.300  -6.667 -10.052  1.00  0.00
C
ATOM   2870  CE2 TYR X 185     -18.220  -7.792  -7.941  1.00  0.00
C
ATOM   2871  CZ  TYR X 185     -18.560  -7.781  -9.279  1.00  0.00
C
ATOM   2872  OH  TYR X 185     -19.159  -8.883  -9.843  1.00  0.00
O
ATOM   2873  H   TYR X 185     -15.940  -2.315  -6.156  1.00  0.00
H
ATOM   2874  HA  TYR X 185     -18.301  -2.934  -7.618  1.00  0.00
H
ATOM   2875 1HB  TYR X 185     -16.158  -3.782  -8.286  1.00  0.00
H
ATOM   2876 2HB  TYR X 185     -15.984  -4.665  -6.750  1.00  0.00
H
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ATOM   2877  HD1 TYR X 185     -17.489  -4.682 -10.084  1.00  0.00
H
ATOM   2878  HD2 TYR X 185     -17.349  -6.687  -6.323  1.00  0.00
H
ATOM   2879  HE1 TYR X 185     -18.570  -6.661 -11.109  1.00  0.00
H
ATOM   2880  HE2 TYR X 185     -18.426  -8.671  -7.328  1.00  0.00
H
ATOM   2881  HH  TYR X 185     -19.353  -8.768 -10.778  1.00  0.00
H
ATOM   2882  N   TYR X 186     -18.048  -4.649  -4.816  1.00  0.00
N
ATOM   2883  CA  TYR X 186     -18.853  -5.376  -3.843  1.00  0.00
C
ATOM   2884  C   TYR X 186     -19.760  -4.419  -3.072  1.00  0.00
C
ATOM   2885  O   TYR X 186     -20.896  -4.762  -2.737  1.00  0.00
O
ATOM   2886  CB  TYR X 186     -17.955  -6.151  -2.875  1.00  0.00
C
ATOM   2887  CG  TYR X 186     -17.167  -7.265  -3.528  1.00  0.00
C
ATOM   2888  CD1 TYR X 186     -15.786  -7.197  -3.628  1.00  0.00
C
ATOM   2889  CD2 TYR X 186     -17.808  -8.383  -4.040  1.00  0.00
C
ATOM   2890  CE1 TYR X 186     -15.062  -8.212  -4.225  1.00  0.00
C
ATOM   2891  CE2 TYR X 186     -17.094  -9.403  -4.636  1.00  0.00
C
ATOM   2892  CZ  TYR X 186     -15.721  -9.314  -4.726  1.00  0.00
C
ATOM   2893  OH  TYR X 186     -15.004 -10.327  -5.319  1.00  0.00
O
ATOM   2894  H   TYR X 186     -17.058  -4.528  -4.653  1.00  0.00
H
ATOM   2895  HA  TYR X 186     -19.504  -6.083  -4.356  1.00  0.00
H
ATOM   2896 1HB  TYR X 186     -17.265  -5.432  -2.428  1.00  0.00
H
ATOM   2897 2HB  TYR X 186     -18.597  -6.566  -2.101  1.00  0.00
H
ATOM   2898  HD1 TYR X 186     -15.271  -6.322  -3.228  1.00  0.00
H
ATOM   2899  HD2 TYR X 186     -18.894  -8.448  -3.966  1.00  0.00
H
ATOM   2900  HE1 TYR X 186     -13.977  -8.145  -4.297  1.00  0.00
H
ATOM   2901  HE2 TYR X 186     -17.617 -10.274  -5.034  1.00  0.00
H
ATOM   2902  HH  TYR X 186     -15.540 -10.881  -5.892  1.00  0.00
H
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ATOM   2903  N   LEU X 187     -19.266  -3.219  -2.784  1.00  0.00
N
ATOM   2904  CA  LEU X 187     -20.068  -2.245  -2.058  1.00  0.00
C
ATOM   2905  C   LEU X 187     -21.389  -2.047  -2.804  1.00  0.00
C
ATOM   2906  O   LEU X 187     -22.471  -2.257  -2.244  1.00  0.00
O
ATOM   2907  CB  LEU X 187     -19.295  -0.927  -1.910  1.00  0.00
C
ATOM   2908  CG  LEU X 187     -19.898   0.075  -0.916  1.00  0.00
C
ATOM   2909  CD1 LEU X 187     -18.918   1.211  -0.662  1.00  0.00
C
ATOM   2910  CD2 LEU X 187     -21.212   0.608  -1.466  1.00  0.00
C
ATOM   2911  H   LEU X 187     -18.328  -2.981  -3.072  1.00  0.00
H
ATOM   2912  HA  LEU X 187     -20.302  -2.631  -1.066  1.00  0.00
H
ATOM   2913 1HB  LEU X 187     -18.354  -1.316  -1.525  1.00  0.00
H
ATOM   2914 2HB  LEU X 187     -19.123  -0.450  -2.875  1.00  0.00
H
ATOM   2915  HG  LEU X 187     -20.117  -0.472   0.001  1.00  0.00
H
ATOM   2916 1HD1 LEU X 187     -19.352   1.917   0.044  1.00  0.00
H
ATOM   2917 2HD1 LEU X 187     -17.992   0.809  -0.248  1.00  0.00
H
ATOM   2918 3HD1 LEU X 187     -18.703   1.723  -1.600  1.00  0.00
H
ATOM   2919 1HD2 LEU X 187     -21.639   1.320  -0.758  1.00  0.00
H
ATOM   2920 2HD2 LEU X 187     -21.032   1.107  -2.419  1.00  0.00
H
ATOM   2921 3HD2 LEU X 187     -21.908  -0.217  -1.614  1.00  0.00
H
ATOM   2922  N   ILE X 188     -21.300  -1.647  -4.070  1.00  0.00
N
ATOM   2923  CA  ILE X 188     -22.502  -1.436  -4.876  1.00  0.00
C
ATOM   2924  C   ILE X 188     -23.351  -2.707  -4.960  1.00  0.00
C
ATOM   2925  O   ILE X 188     -24.574  -2.649  -4.857  1.00  0.00
O
ATOM   2926  CB  ILE X 188     -22.150  -0.974  -6.303  1.00  0.00
C
ATOM   2927  CG1 ILE X 188     -21.566   0.440  -6.277  1.00  0.00
C
ATOM   2928  CG2 ILE X 188     -23.380  -1.030  -7.196  1.00  0.00
C
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ATOM   2929  CD1 ILE X 188     -20.976   0.880  -7.597  1.00  0.00
C
ATOM   2930  H   ILE X 188     -20.391  -1.487  -4.480  1.00  0.00
H
ATOM   2931  HA  ILE X 188     -23.154  -0.701  -4.407  1.00  0.00
H
ATOM   2932  HB  ILE X 188     -21.377  -1.627  -6.707  1.00  0.00
H
ATOM   2933 1HG1 ILE X 188     -22.371   1.118  -5.995  1.00  0.00
H
ATOM   2934 2HG1 ILE X 188     -20.792   0.457  -5.509  1.00  0.00
H
ATOM   2935 1HG2 ILE X 188     -23.116  -0.699  -8.200  1.00  0.00
H
ATOM   2936 2HG2 ILE X 188     -23.755  -2.052  -7.238  1.00  0.00
H
ATOM   2937 3HG2 ILE X 188     -24.154  -0.377  -6.792  1.00  0.00
H
ATOM   2938 1HD1 ILE X 188     -20.581   1.892  -7.501  1.00  0.00
H
ATOM   2939 2HD1 ILE X 188     -20.169   0.203  -7.880  1.00  0.00
H
ATOM   2940 3HD1 ILE X 188     -21.748   0.866  -8.364  1.00  0.00
H
ATOM   2941  N   SER X 189     -22.710  -3.860  -5.131  1.00  0.00
N
ATOM   2942  CA  SER X 189     -23.465  -5.107  -5.233  1.00  0.00
C
ATOM   2943  C   SER X 189     -24.457  -5.299  -4.087  1.00  0.00
C
ATOM   2944  O   SER X 189     -25.576  -5.770  -4.312  1.00  0.00
O
ATOM   2945  CB  SER X 189     -22.515  -6.288  -5.279  1.00  0.00
C
ATOM   2946  OG  SER X 189     -21.761  -6.313  -6.460  1.00  0.00
O
ATOM   2947  H   SER X 189     -21.701  -3.874  -5.191  1.00  0.00
H
ATOM   2948  HA  SER X 189     -23.995  -5.217  -6.179  1.00  0.00
H
ATOM   2949 1HB  SER X 189     -21.838  -6.226  -4.427  1.00  0.00
H
ATOM   2950 2HB  SER X 189     -23.098  -7.207  -5.212  1.00  0.00
H
ATOM   2951  HG  SER X 189     -21.175  -7.072  -6.450  1.00  0.00
H
ATOM   2952  N   SER X 190     -24.062  -4.939  -2.871  1.00  0.00
N
ATOM   2953  CA  SER X 190     -24.980  -5.100  -1.748  1.00  0.00
C
ATOM   2954  C   SER X 190     -25.733  -3.811  -1.462  1.00  0.00
C
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ATOM   2955  O   SER X 190     -26.779  -3.827  -0.815  1.00  0.00
O
ATOM   2956  CB  SER X 190     -24.220  -5.552  -0.515  1.00  0.00
C
ATOM   2957  OG  SER X 190     -23.292  -4.593  -0.087  1.00  0.00
O
ATOM   2958  H   SER X 190     -23.138  -4.558  -2.726  1.00  0.00
H
ATOM   2959  HA  SER X 190     -25.686  -5.921  -1.880  1.00  0.00
H
ATOM   2960 1HB  SER X 190     -24.936  -5.737   0.286  1.00  0.00
H
ATOM   2961 2HB  SER X 190     -23.692  -6.476  -0.748  1.00  0.00
H
ATOM   2962  HG  SER X 190     -22.657  -4.429  -0.787  1.00  0.00
H
ATOM   2963  N   PHE X 191     -25.202  -2.696  -1.950  1.00  0.00
N
ATOM   2964  CA  PHE X 191     -25.838  -1.398  -1.764  1.00  0.00
C
ATOM   2965  C   PHE X 191     -27.153  -1.315  -2.530  1.00  0.00
C
ATOM   2966  O   PHE X 191     -28.148  -0.796  -2.024  1.00  0.00
O
ATOM   2967  CB  PHE X 191     -24.899  -0.274  -2.205  1.00  0.00
C
ATOM   2968  CG  PHE X 191     -25.404   1.101  -1.873  1.00  0.00
C
ATOM   2969  CD1 PHE X 191     -25.128   1.680  -0.642  1.00  0.00
C
ATOM   2970  CD2 PHE X 191     -26.157   1.821  -2.788  1.00  0.00
C
ATOM   2971  CE1 PHE X 191     -25.590   2.945  -0.336  1.00  0.00
C
ATOM   2972  CE2 PHE X 191     -26.619   3.087  -2.485  1.00  0.00
C
ATOM   2973  CZ  PHE X 191     -26.337   3.649  -1.256  1.00  0.00
C
ATOM   2974  H   PHE X 191     -24.334  -2.749  -2.464  1.00  0.00
H
ATOM   2975  HA  PHE X 191     -26.083  -1.253  -0.711  1.00  0.00
H
ATOM   2976 1HB  PHE X 191     -23.933  -0.378  -1.715  1.00  0.00
H
ATOM   2977 2HB  PHE X 191     -24.764  -0.302  -3.285  1.00  0.00
H
ATOM   2978  HD1 PHE X 191     -24.536   1.123   0.087  1.00  0.00
H
ATOM   2979  HD2 PHE X 191     -26.380   1.377  -3.759  1.00  0.00
H
ATOM   2980  HE1 PHE X 191     -25.366   3.386   0.635  1.00  0.00
H
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ATOM   2981  HE2 PHE X 191     -27.210   3.642  -3.214  1.00  0.00
H
ATOM   2982  HZ  PHE X 191     -26.703   4.646  -1.015  1.00  0.00
H
ATOM   2983  N   THR X 192     -27.151  -1.834  -3.754  1.00  0.00
N
ATOM   2984  CA  THR X 192     -28.320  -1.753  -4.622  1.00  0.00
C
ATOM   2985  C   THR X 192     -29.538  -2.400  -3.970  1.00  0.00
C
ATOM   2986  O   THR X 192     -29.490  -3.560  -3.565  1.00  0.00
O
ATOM   2987  CB  THR X 192     -28.061  -2.426  -5.983  1.00  0.00
C
ATOM   2988  CG2 THR X 192     -29.279  -2.294  -6.885  1.00  0.00
C
ATOM   2989  OG1 THR X 192     -26.933  -1.810  -6.618  1.00  0.00
O
ATOM   2990  H   THR X 192     -26.319  -2.296  -4.091  1.00  0.00
H
ATOM   2991  HA  THR X 192     -28.581  -0.708  -4.794  1.00  0.00
H
ATOM   2992  HB  THR X 192     -27.844  -3.481  -5.821  1.00  0.00
H
ATOM   2993  HG1 THR X 192     -26.774  -2.232  -7.467  1.00  0.00
H
ATOM   2994 1HG2 THR X 192     -29.077  -2.776  -7.841  1.00  0.00
H
ATOM   2995 2HG2 THR X 192     -30.135  -2.773  -6.410  1.00  0.00
H
ATOM   2996 3HG2 THR X 192     -29.496  -1.240  -7.048  1.00  0.00
H
ATOM   2997  N   ASP X 193     -30.624  -1.643  -3.874  1.00  0.00
N
ATOM   2998  CA  ASP X 193     -31.853  -2.142  -3.270  1.00  0.00
C
ATOM   2999  C   ASP X 193     -33.081  -1.591  -3.982  1.00  0.00
C
ATOM   3000  O   ASP X 193     -32.962  -0.905  -4.998  1.00  0.00
O
ATOM   3001  CB  ASP X 193     -31.904  -1.786  -1.783  1.00  0.00
C
ATOM   3002  CG  ASP X 193     -31.895  -0.290  -1.494  1.00  0.00
C
ATOM   3003  OD1 ASP X 193     -32.055   0.474  -2.415  1.00  0.00
O
ATOM   3004  OD2 ASP X 193     -31.885   0.072  -0.341  1.00  0.00
O
ATOM   3005  H   ASP X 193     -30.597  -0.697  -4.227  1.00  0.00
H
ATOM   3006  HA  ASP X 193     -31.899  -3.227  -3.369  1.00  0.00
H
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ATOM   3007 1HB  ASP X 193     -32.735  -2.252  -1.253  1.00  0.00
H
ATOM   3008 2HB  ASP X 193     -30.965  -2.226  -1.448  1.00  0.00
H
ATOM   3009  N   GLN X 194     -34.256  -1.894  -3.446  1.00  0.00
N
ATOM   3010  CA  GLN X 194     -35.506  -1.387  -4.002  1.00  0.00
C
ATOM   3011  C   GLN X 194     -36.194  -0.438  -3.028  1.00  0.00
C
ATOM   3012  O   GLN X 194     -37.210   0.175  -3.359  1.00  0.00
O
ATOM   3013  CB  GLN X 194     -36.447  -2.545  -4.349  1.00  0.00
C
ATOM   3014  CG  GLN X 194     -35.927  -3.464  -5.440  1.00  0.00
C
ATOM   3015  CD  GLN X 194     -36.884  -4.603  -5.742  1.00  0.00
C
ATOM   3016  NE2 GLN X 194     -36.404  -5.594  -6.484  1.00  0.00
N
ATOM   3017  OE1 GLN X 194     -38.039  -4.592  -5.310  1.00  0.00
O
ATOM   3018  H   GLN X 194     -34.286  -2.492  -2.632  1.00  0.00
H
ATOM   3019  HA  GLN X 194     -35.297  -0.812  -4.904  1.00  0.00
H
ATOM   3020 1HB  GLN X 194     -36.601  -3.111  -3.431  1.00  0.00
H
ATOM   3021 2HB  GLN X 194     -37.391  -2.099  -4.662  1.00  0.00
H
ATOM   3022 1HG  GLN X 194     -35.537  -3.093  -6.387  1.00  0.00
H
ATOM   3023 2HG  GLN X 194     -35.104  -3.854  -4.838  1.00  0.00
H
ATOM   3024 1HE2 GLN X 194     -36.989  -6.373  -6.716  1.00  0.00
H
ATOM   3025 2HE2 GLN X 194     -35.461  -5.563  -6.813  1.00  0.00
H
ATOM   3026  N   LEU X 195     -35.639  -0.325  -1.827  1.00  0.00
N
ATOM   3027  CA  LEU X 195     -36.231   0.505  -0.786  1.00  0.00
C
ATOM   3028  C   LEU X 195     -35.469   1.813  -0.620  1.00  0.00
C
ATOM   3029  O   LEU X 195     -34.269   1.878  -0.880  1.00  0.00
O
ATOM   3030  CB  LEU X 195     -36.269  -0.261   0.544  1.00  0.00
C
ATOM   3031  CG  LEU X 195     -37.055  -1.579   0.516  1.00  0.00
C
ATOM   3032  CD1 LEU X 195     -36.963  -2.270   1.869  1.00  0.00
C
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ATOM   3033  CD2 LEU X 195     -38.505  -1.297   0.150  1.00  0.00
C
ATOM   3034  H   LEU X 195     -34.785  -0.827  -1.630  1.00  0.00
H
ATOM   3035  HA  LEU X 195     -37.249   0.775  -1.069  1.00  0.00
H
ATOM   3036 1HB  LEU X 195     -35.205  -0.463   0.663  1.00  0.00
H
ATOM   3037 2HB  LEU X 195     -36.613   0.370   1.363  1.00  0.00
H
ATOM   3038  HG  LEU X 195     -36.626  -2.195  -0.275  1.00  0.00
H
ATOM   3039 1HD1 LEU X 195     -37.525  -3.204   1.841  1.00  0.00
H
ATOM   3040 2HD1 LEU X 195     -35.919  -2.481   2.101  1.00  0.00
H
ATOM   3041 3HD1 LEU X 195     -37.382  -1.620   2.638  1.00  0.00
H
ATOM   3042 1HD2 LEU X 195     -39.063  -2.236   0.130  1.00  0.00
H
ATOM   3043 2HD2 LEU X 195     -38.945  -0.629   0.891  1.00  0.00
H
ATOM   3044 3HD2 LEU X 195     -38.548  -0.829  -0.833  1.00  0.00
H
ATOM   3045  N   PRO X 196     -36.176   2.853  -0.192  1.00  0.00
N
ATOM   3046  CA  PRO X 196     -35.567   4.166  -0.002  1.00  0.00
C
ATOM   3047  C   PRO X 196     -34.694   4.193   1.246  1.00  0.00
C
ATOM   3048  O   PRO X 196     -34.849   3.365   2.143  1.00  0.00
O
ATOM   3049  CB  PRO X 196     -36.765   5.123   0.109  1.00  0.00
C
ATOM   3050  CG  PRO X 196     -37.872   4.291   0.698  1.00  0.00
C
ATOM   3051  CD  PRO X 196     -37.642   2.908  -0.125  1.00  0.00
C
ATOM   3052  HA  PRO X 196     -35.000   4.397  -0.788  1.00  0.00
H
ATOM   3053 1HB  PRO X 196     -36.475   5.682   0.772  1.00  0.00
H
ATOM   3054 2HB  PRO X 196     -36.953   5.255  -0.725  1.00  0.00
H
ATOM   3055 1HG  PRO X 196     -37.720   4.186   1.525  1.00  0.00
H
ATOM   3056 2HG  PRO X 196     -38.656   4.491   0.225  1.00  0.00
H
ATOM   3057 1HD  PRO X 196     -37.872   2.173   0.439  1.00  0.00
H
ATOM   3058 2HD  PRO X 196     -37.899   2.860  -1.042  1.00  0.00
H
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ATOM   3059  N   TRP X 197     -33.772   5.150   1.293  1.00  0.00
N
ATOM   3060  CA  TRP X 197     -32.961   5.374   2.485  1.00  0.00
C
ATOM   3061  C   TRP X 197     -33.565   6.458   3.366  1.00  0.00
C
ATOM   3062  O   TRP X 197     -34.352   7.279   2.906  1.00  0.00
O
ATOM   3063  CB  TRP X 197     -31.531   5.753   2.094  1.00  0.00
C
ATOM   3064  CG  TRP X 197     -30.835   4.702   1.282  1.00  0.00
C
ATOM   3065  CD1 TRP X 197     -30.966   4.487  -0.057  1.00  0.00
C
ATOM   3066  CD2 TRP X 197     -29.900   3.727   1.755  1.00  0.00
C
ATOM   3067  CE2 TRP X 197     -29.505   2.954   0.648  1.00  0.00
C
ATOM   3068  CE3 TRP X 197     -29.356   3.432   3.013  1.00  0.00
C
ATOM   3069  NE1 TRP X 197     -30.172   3.438  -0.449  1.00  0.00
N
ATOM   3070  CZ2 TRP X 197     -28.599   1.909   0.755  1.00  0.00
C
ATOM   3071  CZ3 TRP X 197     -28.447   2.386   3.118  1.00  0.00
C
ATOM   3072  CH2 TRP X 197     -28.079   1.647   2.022  1.00  0.00
C
ATOM   3073  H   TRP X 197     -33.630   5.737   0.483  1.00  0.00
H
ATOM   3074  HA  TRP X 197     -32.928   4.466   3.086  1.00  0.00
H
ATOM   3075 1HB  TRP X 197     -31.532   6.661   1.492  1.00  0.00
H
ATOM   3076 2HB  TRP X 197     -30.925   5.908   2.986  1.00  0.00
H
ATOM   3077  HD1 TRP X 197     -31.646   5.145  -0.598  1.00  0.00
H
ATOM   3078  HE1 TRP X 197     -30.093   3.079  -1.390  1.00  0.00
H
ATOM   3079  HE3 TRP X 197     -29.610   3.988   3.914  1.00  0.00
H
ATOM   3080  HZ2 TRP X 197     -28.337   1.348  -0.142  1.00  0.00
H
ATOM   3081  HZ3 TRP X 197     -28.032   2.166   4.102  1.00  0.00
H
ATOM   3082  HH2 TRP X 197     -27.363   0.835   2.148  1.00  0.00
H
ATOM   3083  N   THR X 198     -33.188   6.453   4.642  1.00  0.00
N
ATOM   3084  CA  THR X 198     -33.652   7.467   5.582  1.00  0.00
C
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ATOM   3085  C   THR X 198     -33.046   8.828   5.265  1.00  0.00
C
ATOM   3086  O   THR X 198     -33.570   9.864   5.677  1.00  0.00
O
ATOM   3087  CB  THR X 198     -33.310   7.089   7.035  1.00  0.00
C
ATOM   3088  CG2 THR X 198     -33.905   5.734   7.388  1.00  0.00
C
ATOM   3089  OG1 THR X 198     -31.886   7.039   7.196  1.00  0.00
O
ATOM   3090  H   THR X 198     -32.565   5.728   4.968  1.00  0.00
H
ATOM   3091  HA  THR X 198     -34.733   7.583   5.496  1.00  0.00
H
ATOM   3092  HB  THR X 198     -33.715   7.848   7.704  1.00  0.00
H
ATOM   3093  HG1 THR X 198     -31.512   7.899   6.993  1.00  0.00
H
ATOM   3094 1HG2 THR X 198     -33.653   5.485   8.419  1.00  0.00
H
ATOM   3095 2HG2 THR X 198     -34.988   5.772   7.278  1.00  0.00
H
ATOM   3096 3HG2 THR X 198     -33.498   4.975   6.722  1.00  0.00
H
ATOM   3097  N   SER X 199     -31.937   8.822   4.528  1.00  0.00
N
ATOM   3098  CA  SER X 199     -31.247  10.052   4.174  1.00  0.00
C
ATOM   3099  C   SER X 199     -31.414  10.374   2.695  1.00  0.00
C
ATOM   3100  O   SER X 199     -31.023  11.448   2.232  1.00  0.00
O
ATOM   3101  CB  SER X 199     -29.775   9.945   4.526  1.00  0.00
C
ATOM   3102  OG  SER X 199     -29.130   8.939   3.793  1.00  0.00
O
ATOM   3103  H   SER X 199     -31.565   7.939   4.207  1.00  0.00
H
ATOM   3104  HA  SER X 199     -31.552  10.909   4.776  1.00  0.00
H
ATOM   3105 1HB  SER X 199     -29.296  10.900   4.315  1.00  0.00
H
ATOM   3106 2HB  SER X 199     -29.686   9.722   5.589  1.00  0.00
H
ATOM   3107  HG  SER X 199     -28.204   8.905   4.045  1.00  0.00
H
ATOM   3108  N   CYS X 200     -31.998   9.437   1.955  1.00  0.00
N
ATOM   3109  CA  CYS X 200     -32.222   9.618   0.525  1.00  0.00
C
ATOM   3110  C   CYS X 200     -33.419   8.806   0.051  1.00  0.00
C
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ATOM   3111  O   CYS X 200     -33.265   7.685  -0.439  1.00  0.00
O
ATOM   3112  CB  CYS X 200     -30.928   9.083  -0.090  1.00  0.00
C
ATOM   3113  SG  CYS X 200     -30.763   9.384  -1.866  1.00  0.00
S
ATOM   3114  H   CYS X 200     -32.293   8.578   2.394  1.00  0.00
H
ATOM   3115  HA  CYS X 200     -32.342  10.662   0.233  1.00  0.00
H
ATOM   3116 1HB  CYS X 200     -30.064   9.556   0.378  1.00  0.00
H
ATOM   3117 2HB  CYS X 200     -30.869   8.004   0.040  1.00  0.00
H
ATOM   3118  HG  CYS X 200     -29.577   8.799  -1.996  1.00  0.00
H
ATOM   3119  N   LYS X 201     -34.610   9.377   0.190  1.00  0.00
N
ATOM   3120  CA  LYS X 201     -35.844   8.669  -0.140  1.00  0.00
C
ATOM   3121  C   LYS X 201     -36.229   8.884  -1.595  1.00  0.00
C
ATOM   3122  O   LYS X 201     -36.745   7.979  -2.252  1.00  0.00
O
ATOM   3123  CB  LYS X 201     -36.981   9.120   0.777  1.00  0.00
C
ATOM   3124  CG  LYS X 201     -36.814   8.709   2.234  1.00  0.00
C
ATOM   3125  CD  LYS X 201     -37.998   9.159   3.076  1.00  0.00
C
ATOM   3126  CE  LYS X 201     -37.823   8.767   4.535  1.00  0.00
C
ATOM   3127  NZ  LYS X 201     -38.924   9.291   5.390  1.00  0.00
N
ATOM   3128  H   LYS X 201     -34.663  10.326   0.531  1.00  0.00
H
ATOM   3129  HA  LYS X 201     -35.699   7.595  -0.012  1.00  0.00
H
ATOM   3130 1HB  LYS X 201     -37.034  10.206   0.710  1.00  0.00
H
ATOM   3131 2HB  LYS X 201     -37.901   8.687   0.384  1.00  0.00
H
ATOM   3132 1HG  LYS X 201     -36.726   7.623   2.282  1.00  0.00
H
ATOM   3133 2HG  LYS X 201     -35.902   9.164   2.619  1.00  0.00
H
ATOM   3134 1HD  LYS X 201     -38.089  10.243   2.998  1.00  0.00
H
ATOM   3135 2HD  LYS X 201     -38.901   8.691   2.682  1.00  0.00
H
ATOM   3136 1HE  LYS X 201     -37.802   7.680   4.598  1.00  0.00
H
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ATOM   3137 2HE  LYS X 201     -36.872   9.169   4.884  1.00  0.00
H
ATOM   3138 1HZ  LYS X 201     -38.770   9.010   6.347  1.00  0.00
H
ATOM   3139 2HZ  LYS X 201     -38.944  10.300   5.332  1.00  0.00
H
ATOM   3140 3HZ  LYS X 201     -39.805   8.919   5.067  1.00  0.00
H
ATOM   3141  N   ASN X 202     -35.977  10.087  -2.099  1.00  0.00
N
ATOM   3142  CA  ASN X 202     -36.213  10.397  -3.503  1.00  0.00
C
ATOM   3143  C   ASN X 202     -35.033   9.968  -4.368  1.00  0.00
C
ATOM   3144  O   ASN X 202     -33.878  10.163  -3.997  1.00  0.00
O
ATOM   3145  CB  ASN X 202     -36.502  11.874  -3.704  1.00  0.00
C
ATOM   3146  CG  ASN X 202     -37.771  12.338  -3.045  1.00  0.00
C
ATOM   3147  ND2 ASN X 202     -37.635  13.317  -2.188  1.00  0.00
N
ATOM   3148  OD1 ASN X 202     -38.868  11.864  -3.361  1.00  0.00
O
ATOM   3149  H   ASN X 202     -35.611  10.806  -1.492  1.00  0.00
H
ATOM   3150  HA  ASN X 202     -37.080   9.841  -3.865  1.00  0.00
H
ATOM   3151 1HB  ASN X 202     -35.722  12.621  -3.548  1.00  0.00
H
ATOM   3152 2HB  ASN X 202     -36.683  11.757  -4.773  1.00  0.00
H
ATOM   3153 1HD2 ASN X 202     -38.438  13.677  -1.711  1.00  0.00
H
ATOM   3154 2HD2 ASN X 202     -36.732  13.707  -2.011  1.00  0.00
H
ATOM   3155  N   SER X 203     -35.334   9.385  -5.523  1.00  0.00
N
ATOM   3156  CA  SER X 203     -34.301   8.882  -6.418  1.00  0.00
C
ATOM   3157  C   SER X 203     -33.446  10.016  -6.965  1.00  0.00
C
ATOM   3158  O   SER X 203     -32.280   9.817  -7.309  1.00  0.00
O
ATOM   3159  CB  SER X 203     -34.930   8.099  -7.554  1.00  0.00
C
ATOM   3160  OG  SER X 203     -35.698   8.916  -8.394  1.00  0.00
O
ATOM   3161  H   SER X 203     -36.304   9.288  -5.788  1.00  0.00
H
ATOM   3162  HA  SER X 203     -33.664   8.125  -5.960  1.00  0.00
H
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ATOM   3163 1HB  SER X 203     -34.135   7.636  -8.140  1.00  0.00
H
ATOM   3164 2HB  SER X 203     -35.567   7.324  -7.133  1.00  0.00
H
ATOM   3165  HG  SER X 203     -36.403   9.324  -7.885  1.00  0.00
H
ATOM   3166  N   TRP X 204     -34.030  11.205  -7.045  1.00  0.00
N
ATOM   3167  CA  TRP X 204     -33.330  12.369  -7.574  1.00  0.00
C
ATOM   3168  C   TRP X 204     -32.587  13.116  -6.475  1.00  0.00
C
ATOM   3169  O   TRP X 204     -31.869  14.080  -6.740  1.00  0.00
O
ATOM   3170  CB  TRP X 204     -34.314  13.311  -8.272  1.00  0.00
C
ATOM   3171  CG  TRP X 204     -35.498  13.671  -7.428  1.00  0.00
C
ATOM   3172  CD1 TRP X 204     -36.728  13.084  -7.454  1.00  0.00
C
ATOM   3173  CD2 TRP X 204     -35.565  14.700  -6.432  1.00  0.00
C
ATOM   3174  CE2 TRP X 204     -36.865  14.677  -5.897  1.00  0.00
C
ATOM   3175  CE3 TRP X 204     -34.649  15.637  -5.941  1.00  0.00
C
ATOM   3176  NE1 TRP X 204     -37.558  13.683  -6.539  1.00  0.00
N
ATOM   3177  CZ2 TRP X 204     -37.274  15.553  -4.903  1.00  0.00
C
ATOM   3178  CZ3 TRP X 204     -35.058  16.513  -4.943  1.00  0.00
C
ATOM   3179  CH2 TRP X 204     -36.333  16.471  -4.438  1.00  0.00
C
ATOM   3180  H   TRP X 204     -34.984  11.305  -6.731  1.00  0.00
H
ATOM   3181  HA  TRP X 204     -32.579  12.053  -8.297  1.00  0.00
H
ATOM   3182 1HB  TRP X 204     -33.821  14.247  -8.533  1.00  0.00
H
ATOM   3183 2HB  TRP X 204     -34.705  12.842  -9.175  1.00  0.00
H
ATOM   3184  HD1 TRP X 204     -36.869  12.268  -8.161  1.00  0.00
H
ATOM   3185  HE1 TRP X 204     -38.521  13.433  -6.367  1.00  0.00
H
ATOM   3186  HE3 TRP X 204     -33.624  15.711  -6.304  1.00  0.00
H
ATOM   3187  HZ2 TRP X 204     -38.297  15.484  -4.530  1.00  0.00
H
ATOM   3188  HZ3 TRP X 204     -34.335  17.239  -4.571  1.00  0.00
H
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ATOM   3189  HH2 TRP X 204     -36.614  17.177  -3.655  1.00  0.00
H
ATOM   3190  N   ASN X 205     -32.761  12.661  -5.237  1.00  0.00
N
ATOM   3191  CA  ASN X 205     -32.054  13.244  -4.102  1.00  0.00
C
ATOM   3192  C   ASN X 205     -30.574  12.887  -4.136  1.00  0.00
C
ATOM   3193  O   ASN X 205     -29.768  13.487  -3.421  1.00  0.00
O
ATOM   3194  CB  ASN X 205     -32.671  12.811  -2.783  1.00  0.00
C
ATOM   3195  CG  ASN X 205     -32.221  13.632  -1.607  1.00  0.00
C
ATOM   3196  ND2 ASN X 205     -31.563  12.981  -0.682  1.00  0.00
N
ATOM   3197  OD1 ASN X 205     -32.403  14.855  -1.572  1.00  0.00
O
ATOM   3198  H   ASN X 205     -33.398  11.894  -5.079  1.00  0.00
H
ATOM   3199  HA  ASN X 205     -32.112  14.333  -4.149  1.00  0.00
H
ATOM   3200 1HB  ASN X 205     -33.742  12.626  -2.703  1.00  0.00
H
ATOM   3201 2HB  ASN X 205     -32.136  11.861  -2.774  1.00  0.00
H
ATOM   3202 1HD2 ASN X 205     -31.233  13.463   0.129  1.00  0.00
H
ATOM   3203 2HD2 ASN X 205     -31.389  12.002  -0.789  1.00  0.00
H
ATOM   3204  N   THR X 206     -30.220  11.914  -4.966  1.00  0.00
N
ATOM   3205  CA  THR X 206     -28.836  11.467  -5.082  1.00  0.00
C
ATOM   3206  C   THR X 206     -27.974  12.520  -5.762  1.00  0.00
C
ATOM   3207  O   THR X 206     -26.746  12.438  -5.738  1.00  0.00
O
ATOM   3208  CB  THR X 206     -28.733  10.147  -5.868  1.00  0.00
C
ATOM   3209  CG2 THR X 206     -29.556   9.059  -5.195  1.00  0.00
C
ATOM   3210  OG1 THR X 206     -29.210  10.345  -7.205  1.00  0.00
O
ATOM   3211  H   THR X 206     -30.929  11.471  -5.533  1.00  0.00
H
ATOM   3212  HA  THR X 206     -28.413  11.315  -4.089  1.00  0.00
H
ATOM   3213  HB  THR X 206     -27.689   9.839  -5.906  1.00  0.00
H
ATOM   3214  HG1 THR X 206     -28.678  11.017  -7.638  1.00  0.00
H
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ATOM   3215 1HG2 THR X 206     -29.471   8.134  -5.764  1.00  0.00
H
ATOM   3216 2HG2 THR X 206     -29.188   8.900  -4.182  1.00  0.00
H
ATOM   3217 3HG2 THR X 206     -30.601   9.367  -5.156  1.00  0.00
H
ATOM   3218  N   GLY X 207     -28.623  13.505  -6.374  1.00  0.00
N
ATOM   3219  CA  GLY X 207     -27.917  14.633  -6.972  1.00  0.00
C
ATOM   3220  C   GLY X 207     -27.626  15.708  -5.936  1.00  0.00
C
ATOM   3221  O   GLY X 207     -26.987  16.718  -6.238  1.00  0.00
O
ATOM   3222  H   GLY X 207     -29.631  13.473  -6.425  1.00  0.00
H
ATOM   3223 1HA  GLY X 207     -26.976  14.280  -7.393  1.00  0.00
H
ATOM   3224 2HA  GLY X 207     -28.532  15.057  -7.765  1.00  0.00
H
ATOM   3225  N   ASN X 208     -28.098  15.493  -4.715  1.00  0.00
N
ATOM   3226  CA  ASN X 208     -27.880  16.442  -3.628  1.00  0.00
C
ATOM   3227  C   ASN X 208     -27.373  15.737  -2.375  1.00  0.00
C
ATOM   3228  O   ASN X 208     -26.888  16.381  -1.444  1.00  0.00
O
ATOM   3229  CB  ASN X 208     -29.140  17.227  -3.314  1.00  0.00
C
ATOM   3230  CG  ASN X 208     -29.611  18.094  -4.449  1.00  0.00
C
ATOM   3231  ND2 ASN X 208     -30.776  17.779  -4.956  1.00  0.00
N
ATOM   3232  OD1 ASN X 208     -28.962  19.082  -4.814  1.00  0.00
O
ATOM   3233  H   ASN X 208     -28.623  14.650  -4.533  1.00  0.00
H
ATOM   3234  HA  ASN X 208     -27.109  17.159  -3.912  1.00  0.00
H
ATOM   3235 1HB  ASN X 208     -30.002  16.741  -2.855  1.00  0.00
H
ATOM   3236 2HB  ASN X 208     -28.641  17.855  -2.576  1.00  0.00
H
ATOM   3237 1HD2 ASN X 208     -31.152  18.312  -5.713  1.00  0.00
H
ATOM   3238 2HD2 ASN X 208     -31.290  17.005  -4.584  1.00  0.00
H
ATOM   3239  N   CYS X 209     -27.492  14.417  -2.355  1.00  0.00
N
ATOM   3240  CA  CYS X 209     -27.249  13.640  -1.147  1.00  0.00
C
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ATOM   3241  C   CYS X 209     -25.854  13.912  -0.590  1.00  0.00
C
ATOM   3242  O   CYS X 209     -25.704  14.355   0.546  1.00  0.00
O
ATOM   3243  CB  CYS X 209     -27.359  12.199  -1.646  1.00  0.00
C
ATOM   3244  SG  CYS X 209     -27.116  10.942  -0.367  1.00  0.00
S
ATOM   3245  H   CYS X 209     -27.759  13.936  -3.203  1.00  0.00
H
ATOM   3246  HA  CYS X 209     -27.998  13.798  -0.372  1.00  0.00
H
ATOM   3247 1HB  CYS X 209     -28.350  12.018  -2.062  1.00  0.00
H
ATOM   3248 2HB  CYS X 209     -26.604  12.004  -2.406  1.00  0.00
H
ATOM   3249  HG  CYS X 209     -27.283   9.894  -1.169  1.00  0.00
H
ATOM   3250  N   THR X 210     -24.837  13.639  -1.403  1.00  0.00
N
ATOM   3251  CA  THR X 210     -23.453  13.819  -0.981  1.00  0.00
C
ATOM   3252  C   THR X 210     -22.900  15.154  -1.469  1.00  0.00
C
ATOM   3253  O   THR X 210     -23.493  15.807  -2.326  1.00  0.00
O
ATOM   3254  CB  THR X 210     -22.552  12.682  -1.498  1.00  0.00
C
ATOM   3255  CG2 THR X 210     -23.077  11.333  -1.031  1.00  0.00
C
ATOM   3256  OG1 THR X 210     -22.520  12.708  -2.931  1.00  0.00
O
ATOM   3257  H   THR X 210     -25.029  13.298  -2.334  1.00  0.00
H
ATOM   3258  HA  THR X 210     -23.399  13.841   0.108  1.00  0.00
H
ATOM   3259  HB  THR X 210     -21.542  12.829  -1.117  1.00  0.00
H
ATOM   3260  HG1 THR X 210     -21.958  11.998  -3.250  1.00  0.00
H
ATOM   3261 1HG2 THR X 210     -22.428  10.541  -1.405  1.00  0.00
H
ATOM   3262 2HG2 THR X 210     -23.092  11.305   0.058  1.00  0.00
H
ATOM   3263 3HG2 THR X 210     -24.086  11.184  -1.413  1.00  0.00
H
ATOM   3264  N   ASN X 211     -21.764  15.552  -0.912  1.00  0.00
N
ATOM   3265  CA  ASN X 211     -21.124  16.809  -1.287  1.00  0.00
C
ATOM   3266  C   ASN X 211     -19.636  16.619  -1.544  1.00  0.00
C
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ATOM   3267  O   ASN X 211     -18.798  17.212  -0.864  1.00  0.00
O
ATOM   3268  CB  ASN X 211     -21.341  17.878  -0.234  1.00  0.00
C
ATOM   3269  CG  ASN X 211     -22.779  18.292  -0.077  1.00  0.00
C
ATOM   3270  ND2 ASN X 211     -23.356  17.917   1.037  1.00  0.00
N
ATOM   3271  OD1 ASN X 211     -23.336  19.005  -0.918  1.00  0.00
O
ATOM   3272  H   ASN X 211     -21.330  14.969  -0.211  1.00  0.00
H
ATOM   3273  HA  ASN X 211     -21.552  17.178  -2.220  1.00  0.00
H
ATOM   3274 1HB  ASN X 211     -20.885  17.790   0.755  1.00  0.00
H
ATOM   3275 2HB  ASN X 211     -20.817  18.642  -0.808  1.00  0.00
H
ATOM   3276 1HD2 ASN X 211     -24.313  18.156   1.208  1.00  0.00
H
ATOM   3277 2HD2 ASN X 211     -22.842  17.391   1.714  1.00  0.00
H
ATOM   3278  N   TYR X 212     -19.313  15.786  -2.529  1.00  0.00
N
ATOM   3279  CA  TYR X 212     -17.930  15.617  -2.965  1.00  0.00
C
ATOM   3280  C   TYR X 212     -17.853  15.382  -4.466  1.00  0.00
C
ATOM   3281  O   TYR X 212     -17.175  16.117  -5.187  1.00  0.00
O
ATOM   3282  CB  TYR X 212     -17.272  14.455  -2.217  1.00  0.00
C
ATOM   3283  CG  TYR X 212     -15.800  14.283  -2.524  1.00  0.00
C
ATOM   3284  CD1 TYR X 212     -14.847  15.091  -1.921  1.00  0.00
C
ATOM   3285  CD2 TYR X 212     -15.368  13.312  -3.414  1.00  0.00
C
ATOM   3286  CE1 TYR X 212     -13.503  14.940  -2.197  1.00  0.00
C
ATOM   3287  CE2 TYR X 212     -14.026  13.150  -3.699  1.00  0.00
C
ATOM   3288  CZ  TYR X 212     -13.096  13.967  -3.087  1.00  0.00
C
ATOM   3289  OH  TYR X 212     -11.757  13.810  -3.366  1.00  0.00
O
ATOM   3290  H   TYR X 212     -20.042  15.257  -2.987  1.00  0.00
H
ATOM   3291  HA  TYR X 212     -17.364  16.526  -2.763  1.00  0.00
H
ATOM   3292 1HB  TYR X 212     -17.401  14.643  -1.150  1.00  0.00
H
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ATOM   3293 2HB  TYR X 212     -17.809  13.548  -2.494  1.00  0.00
H
ATOM   3294  HD1 TYR X 212     -15.177  15.858  -1.218  1.00  0.00
H
ATOM   3295  HD2 TYR X 212     -16.108  12.672  -3.894  1.00  0.00
H
ATOM   3296  HE1 TYR X 212     -12.766  15.582  -1.716  1.00  0.00
H
ATOM   3297  HE2 TYR X 212     -13.706  12.382  -4.403  1.00  0.00
H
ATOM   3298  HH  TYR X 212     -11.199  14.428  -2.888  1.00  0.00
H
ATOM   3299  N   PHE X 213     -18.547  14.351  -4.938  1.00  0.00
N
ATOM   3300  CA  PHE X 213     -18.530  13.996  -6.354  1.00  0.00
C
ATOM   3301  C   PHE X 213     -19.157  15.091  -7.203  1.00  0.00
C
ATOM   3302  O   PHE X 213     -18.538  15.589  -8.144  1.00  0.00
O
ATOM   3303  CB  PHE X 213     -19.261  12.671  -6.581  1.00  0.00
C
ATOM   3304  CG  PHE X 213     -19.331  12.258  -8.024  1.00  0.00
C
ATOM   3305  CD1 PHE X 213     -18.245  11.659  -8.643  1.00  0.00
C
ATOM   3306  CD2 PHE X 213     -20.485  12.468  -8.765  1.00  0.00
C
ATOM   3307  CE1 PHE X 213     -18.309  11.279  -9.971  1.00  0.00
C
ATOM   3308  CE2 PHE X 213     -20.553  12.088 -10.090  1.00  0.00
C
ATOM   3309  CZ  PHE X 213     -19.462  11.493 -10.694  1.00  0.00
C
ATOM   3310  H   PHE X 213     -19.101  13.799  -4.299  1.00  0.00
H
ATOM   3311  HA  PHE X 213     -17.500  13.889  -6.696  1.00  0.00
H
ATOM   3312 1HB  PHE X 213     -18.752  11.866  -6.052  1.00  0.00
H
ATOM   3313 2HB  PHE X 213     -20.288  12.745  -6.227  1.00  0.00
H
ATOM   3314  HD1 PHE X 213     -17.333  11.489  -8.070  1.00  0.00
H
ATOM   3315  HD2 PHE X 213     -21.346  12.938  -8.287  1.00  0.00
H
ATOM   3316  HE1 PHE X 213     -17.448  10.809 -10.444  1.00  0.00
H
ATOM   3317  HE2 PHE X 213     -21.465  12.256 -10.662  1.00  0.00
H
ATOM   3318  HZ  PHE X 213     -19.514  11.194 -11.740  1.00  0.00
H
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ATOM   3319  N   SER X 214     -20.387  15.465  -6.867  1.00  0.00
N
ATOM   3320  CA  SER X 214     -21.145  16.418  -7.667  1.00  0.00
C
ATOM   3321  C   SER X 214     -21.755  17.509  -6.797  1.00  0.00
C
ATOM   3322  O   SER X 214     -22.896  17.922  -7.012  1.00  0.00
O
ATOM   3323  CB  SER X 214     -22.227  15.700  -8.449  1.00  0.00
C
ATOM   3324  OG  SER X 214     -23.042  14.917  -7.622  1.00  0.00
O
ATOM   3325  H   SER X 214     -20.809  15.076  -6.036  1.00  0.00
H
ATOM   3326  HA  SER X 214     -20.560  16.869  -8.471  1.00  0.00
H
ATOM   3327 1HB  SER X 214     -22.843  16.444  -8.953  1.00  0.00
H
ATOM   3328 2HB  SER X 214     -21.754  15.058  -9.191  1.00  0.00
H
ATOM   3329  HG  SER X 214     -22.506  14.256  -7.177  1.00  0.00
H
ATOM   3330  N   GLU X 215     -20.991  17.970  -5.813  1.00  0.00
N
ATOM   3331  CA  GLU X 215     -21.494  18.934  -4.840  1.00  0.00
C
ATOM   3332  C   GLU X 215     -22.250  20.063  -5.522  1.00  0.00
C
ATOM   3333  O   GLU X 215     -23.422  20.309  -5.224  1.00  0.00
O
ATOM   3334  CB  GLU X 215     -20.345  19.501  -4.005  1.00  0.00
C
ATOM   3335  CG  GLU X 215     -20.774  20.514  -2.953  1.00  0.00
C
ATOM   3336  CD  GLU X 215     -19.613  20.933  -2.094  1.00  0.00
C
ATOM   3337  OE1 GLU X 215     -18.532  20.435  -2.304  1.00  0.00
O
ATOM   3338  OE2 GLU X 215     -19.779  21.831  -1.303  1.00  0.00
O
ATOM   3339  H   GLU X 215     -20.038  17.645  -5.736  1.00  0.00
H
ATOM   3340  HA  GLU X 215     -22.205  18.447  -4.171  1.00  0.00
H
ATOM   3341 1HB  GLU X 215     -19.858  18.656  -3.517  1.00  0.00
H
ATOM   3342 2HB  GLU X 215     -19.648  19.971  -4.699  1.00  0.00
H
ATOM   3343 1HG  GLU X 215     -21.251  21.399  -3.373  1.00  0.00
H
ATOM   3344 2HG  GLU X 215     -21.493  19.966  -2.347  1.00  0.00
H
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ATOM   3345  N   ASP X 216     -21.577  20.753  -6.437  1.00  0.00
N
ATOM   3346  CA  ASP X 216     -22.208  21.810  -7.220  1.00  0.00
C
ATOM   3347  C   ASP X 216     -22.702  21.281  -8.562  1.00  0.00
C
ATOM   3348  O   ASP X 216     -22.176  20.299  -9.085  1.00  0.00
O
ATOM   3349  CB  ASP X 216     -21.234  22.970  -7.438  1.00  0.00
C
ATOM   3350  CG  ASP X 216     -20.959  23.803  -6.192  1.00  0.00
C
ATOM   3351  OD1 ASP X 216     -21.670  23.645  -5.229  1.00  0.00
O
ATOM   3352  OD2 ASP X 216     -19.953  24.469  -6.160  1.00  0.00
O
ATOM   3353  H   ASP X 216     -20.603  20.540  -6.595  1.00  0.00
H
ATOM   3354  HA  ASP X 216     -23.086  22.186  -6.693  1.00  0.00
H
ATOM   3355 1HB  ASP X 216     -20.288  22.665  -7.887  1.00  0.00
H
ATOM   3356 2HB  ASP X 216     -21.803  23.565  -8.153  1.00  0.00
H
ATOM   3357  N   ASN X 217     -23.718  21.939  -9.112  1.00  0.00
N
ATOM   3358  CA  ASN X 217     -24.215  21.605 -10.443  1.00  0.00
C
ATOM   3359  C   ASN X 217     -23.154  21.862 -11.506  1.00  0.00
C
ATOM   3360  O   ASN X 217     -23.157  21.231 -12.562  1.00  0.00
O
ATOM   3361  CB  ASN X 217     -25.483  22.373 -10.770  1.00  0.00
C
ATOM   3362  CG  ASN X 217     -26.694  21.885 -10.025  1.00  0.00
C
ATOM   3363  ND2 ASN X 217     -27.714  22.706 -10.006  1.00  0.00
N
ATOM   3364  OD1 ASN X 217     -26.733  20.750  -9.535  1.00  0.00
O
ATOM   3365  H   ASN X 217     -24.156  22.688  -8.596  1.00  0.00
H
ATOM   3366  HA  ASN X 217     -24.452  20.541 -10.493  1.00  0.00
H
ATOM   3367 1HB  ASN X 217     -25.488  23.463 -10.785  1.00  0.00
H
ATOM   3368 2HB  ASN X 217     -25.524  21.995 -11.792  1.00  0.00
H
ATOM   3369 1HD2 ASN X 217     -28.554  22.447  -9.528  1.00  0.00
H
ATOM   3370 2HD2 ASN X 217     -27.653  23.590 -10.469  1.00  0.00
H
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ATOM   3371  N   ILE X 218     -22.246  22.789 -11.221  1.00  0.00
N
ATOM   3372  CA  ILE X 218     -21.081  23.005 -12.064  1.00  0.00
C
ATOM   3373  C   ILE X 218     -19.798  22.616 -11.339  1.00  0.00
C
ATOM   3374  O   ILE X 218     -19.428  23.224 -10.338  1.00  0.00
O
ATOM   3375  CB  ILE X 218     -20.977  24.472 -12.521  1.00  0.00
C
ATOM   3376  CG1 ILE X 218     -22.219  24.870 -13.321  1.00  0.00
C
ATOM   3377  CG2 ILE X 218     -19.717  24.685 -13.347  1.00  0.00
C
ATOM   3378  CD1 ILE X 218     -22.297  26.347 -13.632  1.00  0.00
C
ATOM   3379  H   ILE X 218     -22.368  23.360 -10.396  1.00  0.00
H
ATOM   3380  HA  ILE X 218     -21.113  22.354 -12.937  1.00  0.00
H
ATOM   3381  HB  ILE X 218     -20.949  25.116 -11.643  1.00  0.00
H
ATOM   3382 1HG1 ILE X 218     -22.203  24.303 -14.252  1.00  0.00
H
ATOM   3383 2HG1 ILE X 218     -23.090  24.577 -12.735  1.00  0.00
H
ATOM   3384 1HG2 ILE X 218     -19.660  25.725 -13.661  1.00  0.00
H
ATOM   3385 2HG2 ILE X 218     -18.843  24.438 -12.745  1.00  0.00
H
ATOM   3386 3HG2 ILE X 218     -19.746  24.041 -14.226  1.00  0.00
H
ATOM   3387 1HD1 ILE X 218     -23.205  26.552 -14.201  1.00  0.00
H
ATOM   3388 2HD1 ILE X 218     -22.315  26.917 -12.702  1.00  0.00
H
ATOM   3389 3HD1 ILE X 218     -21.428  26.642 -14.219  1.00  0.00
H
ATOM   3390  N   THR X 219     -19.122  21.591 -11.855  1.00  0.00
N
ATOM   3391  CA  THR X 219     -17.859  21.141 -11.280  1.00  0.00
C
ATOM   3392  C   THR X 219     -16.670  21.776 -11.994  1.00  0.00
C
ATOM   3393  O   THR X 219     -16.833  22.449 -13.011  1.00  0.00
O
ATOM   3394  CB  THR X 219     -17.724  19.608 -11.344  1.00  0.00
C
ATOM   3395  CG2 THR X 219     -18.908  18.940 -10.663  1.00  0.00
C
ATOM   3396  OG1 THR X 219     -17.665  19.188 -12.713  1.00  0.00
O
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ATOM   3397  H   THR X 219     -19.494  21.114 -12.664  1.00  0.00
H
ATOM   3398  HA  THR X 219     -17.795  21.455 -10.238  1.00  0.00
H
ATOM   3399  HB  THR X 219     -16.802  19.312 -10.842  1.00  0.00
H
ATOM   3400  HG1 THR X 219     -18.469  19.457 -13.165  1.00  0.00
H
ATOM   3401 1HG2 THR X 219     -18.794  17.857 -10.717  1.00  0.00
H
ATOM   3402 2HG2 THR X 219     -18.949  19.249  -9.618  1.00  0.00
H
ATOM   3403 3HG2 THR X 219     -19.828  19.234 -11.164  1.00  0.00
H
ATOM   3404  N   TRP X 220     -15.476  21.557 -11.455  1.00  0.00
N
ATOM   3405  CA  TRP X 220     -14.264  22.115 -12.032  1.00  0.00
C
ATOM   3406  C   TRP X 220     -13.855  21.363 -13.294  1.00  0.00
C
ATOM   3407  O   TRP X 220     -13.179  20.338 -13.223  1.00  0.00
O
ATOM   3408  CB  TRP X 220     -13.124  22.083 -11.010  1.00  0.00
C
ATOM   3409  CG  TRP X 220     -11.876  22.761 -11.487  1.00  0.00
C
ATOM   3410  CD1 TRP X 220     -10.765  22.159 -11.996  1.00  0.00
C
ATOM   3411  CD2 TRP X 220     -11.610  24.170 -11.497  1.00  0.00
C
ATOM   3412  CE2 TRP X 220     -10.319  24.346 -12.026  1.00  0.00
C
ATOM   3413  CE3 TRP X 220     -12.342  25.299 -11.110  1.00  0.00
C
ATOM   3414  NE1 TRP X 220      -9.823  23.102 -12.323  1.00  0.00
N
ATOM   3415  CZ2 TRP X 220      -9.744  25.599 -12.179  1.00  0.00
C
ATOM   3416  CZ3 TRP X 220     -11.766  26.554 -11.262  1.00  0.00
C
ATOM   3417  CH2 TRP X 220     -10.504  26.698 -11.782  1.00  0.00
C
ATOM   3418  H   TRP X 220     -15.408  20.988 -10.623  1.00  0.00
H
ATOM   3419  HA  TRP X 220     -14.438  23.150 -12.327  1.00  0.00
H
ATOM   3420 1HB  TRP X 220     -13.425  22.591 -10.093  1.00  0.00
H
ATOM   3421 2HB  TRP X 220     -12.853  21.052 -10.783  1.00  0.00
H
ATOM   3422  HD1 TRP X 220     -10.782  21.073 -12.068  1.00  0.00
H
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ATOM   3423  HE1 TRP X 220      -8.912  22.913 -12.717  1.00  0.00
H
ATOM   3424  HE3 TRP X 220     -13.349  25.240 -10.694  1.00  0.00
H
ATOM   3425  HZ2 TRP X 220      -8.740  25.668 -12.595  1.00  0.00
H
ATOM   3426  HZ3 TRP X 220     -12.346  27.425 -10.957  1.00  0.00
H
ATOM   3427  HH2 TRP X 220     -10.088  27.702 -11.886  1.00  0.00
H
ATOM   3428  N   THR X 221     -14.266  21.880 -14.445  1.00  0.00
N
ATOM   3429  CA  THR X 221     -14.030  21.208 -15.716  1.00  0.00
C
ATOM   3430  C   THR X 221     -12.960  21.927 -16.530  1.00  0.00
C
ATOM   3431  O   THR X 221     -12.601  23.065 -16.230  1.00  0.00
O
ATOM   3432  CB  THR X 221     -15.321  21.110 -16.552  1.00  0.00
C
ATOM   3433  CG2 THR X 221     -16.388  20.331 -15.798  1.00  0.00
C
ATOM   3434  OG1 THR X 221     -15.808  22.427 -16.836  1.00  0.00
O
ATOM   3435  H   THR X 221     -14.755  22.764 -14.441  1.00  0.00
H
ATOM   3436  HA  THR X 221     -13.655  20.200 -15.535  1.00  0.00
H
ATOM   3437  HB  THR X 221     -15.096  20.605 -17.491  1.00  0.00
H
ATOM   3438  HG1 THR X 221     -15.995  22.885 -16.011  1.00  0.00
H
ATOM   3439 1HG2 THR X 221     -17.290  20.273 -16.405  1.00  0.00
H
ATOM   3440 2HG2 THR X 221     -16.023  19.325 -15.591  1.00  0.00
H
ATOM   3441 3HG2 THR X 221     -16.611  20.836 -14.860  1.00  0.00
H
ATOM   3442  N   LEU X 222     -12.458  21.254 -17.558  1.00  0.00
N
ATOM   3443  CA  LEU X 222     -11.423  21.825 -18.414  1.00  0.00
C
ATOM   3444  C   LEU X 222     -11.870  23.151 -19.011  1.00  0.00
C
ATOM   3445  O   LEU X 222     -11.195  24.172 -18.862  1.00  0.00
O
ATOM   3446  CB  LEU X 222     -11.050  20.839 -19.527  1.00  0.00
C
ATOM   3447  CG  LEU X 222      -9.977  21.333 -20.505  1.00  0.00
C
ATOM   3448  CD1 LEU X 222      -8.683  21.620 -19.756  1.00  0.00
C
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ATOM   3449  CD2 LEU X 222      -9.754  20.286 -21.587  1.00  0.00
C
ATOM   3450  H   LEU X 222     -12.799  20.324 -17.752  1.00  0.00
H
ATOM   3451  HA  LEU X 222     -10.535  22.039 -17.820  1.00  0.00
H
ATOM   3452 1HB  LEU X 222     -10.657  20.026 -18.919  1.00  0.00
H
ATOM   3453 2HB  LEU X 222     -11.931  20.493 -20.070  1.00  0.00
H
ATOM   3454  HG  LEU X 222     -10.365  22.232 -20.985  1.00  0.00
H
ATOM   3455 1HD1 LEU X 222      -7.926  21.971 -20.460  1.00  0.00
H
ATOM   3456 2HD1 LEU X 222      -8.860  22.388 -19.004  1.00  0.00
H
ATOM   3457 3HD1 LEU X 222      -8.333  20.709 -19.272  1.00  0.00
H
ATOM   3458 1HD2 LEU X 222      -8.991  20.638 -22.280  1.00  0.00
H
ATOM   3459 2HD2 LEU X 222      -9.425  19.353 -21.128  1.00  0.00
H
ATOM   3460 3HD2 LEU X 222     -10.686  20.116 -22.127  1.00  0.00
H
ATOM   3461  N   HIS X 223     -13.011  23.133 -19.691  1.00  0.00
N
ATOM   3462  CA  HIS X 223     -13.497  24.310 -20.402  1.00  0.00
C
ATOM   3463  C   HIS X 223     -14.620  24.993 -19.634  1.00  0.00
C
ATOM   3464  O   HIS X 223     -15.380  25.778 -20.199  1.00  0.00
O
ATOM   3465  CB  HIS X 223     -13.977  23.933 -21.808  1.00  0.00
C
ATOM   3466  CG  HIS X 223     -12.884  23.446 -22.707  1.00  0.00
C
ATOM   3467  CD2 HIS X 223     -12.572  22.203 -23.140  1.00  0.00
C
ATOM   3468  ND1 HIS X 223     -11.953  24.293 -23.271  1.00  0.00
N
ATOM   3469  CE1 HIS X 223     -11.116  23.591 -24.014  1.00  0.00
C
ATOM   3470  NE2 HIS X 223     -11.470  22.320 -23.951  1.00  0.00
N
ATOM   3471  H   HIS X 223     -13.556  22.283 -19.716  1.00  0.00
H
ATOM   3472  HA  HIS X 223     -12.694  25.041 -20.492  1.00  0.00
H
ATOM   3473 1HB  HIS X 223     -14.713  23.130 -21.750  1.00  0.00
H
ATOM   3474 2HB  HIS X 223     -14.423  24.798 -22.298  1.00  0.00
H
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ATOM   3475  HD2 HIS X 223     -13.016  21.223 -22.963  1.00  0.00
H
ATOM   3476  HE1 HIS X 223     -10.301  24.081 -24.546  1.00  0.00
H
ATOM   3477  HE2 HIS X 223     -11.010  21.553 -24.419  1.00  0.00
H
ATOM   3478  N   SER X 224     -14.717  24.693 -18.344  1.00  0.00
N
ATOM   3479  CA  SER X 224     -15.793  25.217 -17.516  1.00  0.00
C
ATOM   3480  C   SER X 224     -17.156  24.832 -18.076  1.00  0.00
C
ATOM   3481  O   SER X 224     -18.150  25.525 -17.848  1.00  0.00
O
ATOM   3482  CB  SER X 224     -15.675  26.724 -17.398  1.00  0.00
C
ATOM   3483  OG  SER X 224     -14.457  27.115 -16.827  1.00  0.00
O
ATOM   3484  H   SER X 224     -14.026  24.086 -17.927  1.00  0.00
H
ATOM   3485  HA  SER X 224     -15.721  24.913 -16.470  1.00  0.00
H
ATOM   3486 1HB  SER X 224     -15.754  27.158 -18.395  1.00  0.00
H
ATOM   3487 2HB  SER X 224     -16.493  27.091 -16.779  1.00  0.00
H
ATOM   3488  HG  SER X 224     -13.732  26.800 -17.373  1.00  0.00
H
ATOM   3489  N   THR X 225     -17.199  23.726 -18.809  1.00  0.00
N
ATOM   3490  CA  THR X 225     -18.452  23.209 -19.343  1.00  0.00
C
ATOM   3491  C   THR X 225     -18.536  21.695 -19.184  1.00  0.00
C
ATOM   3492  O   THR X 225     -17.522  21.001 -19.216  1.00  0.00
O
ATOM   3493  CB  THR X 225     -18.624  23.570 -20.830  1.00  0.00
C
ATOM   3494  CG2 THR X 225     -18.937  25.050 -20.987  1.00  0.00
C
ATOM   3495  OG1 THR X 225     -17.419  23.260 -21.541  1.00  0.00
O
ATOM   3496  H   THR X 225     -16.341  23.230 -19.001  1.00  0.00
H
ATOM   3497  HA  THR X 225     -19.291  23.625 -18.785  1.00  0.00
H
ATOM   3498  HB  THR X 225     -19.441  22.980 -21.245  1.00  0.00
H
ATOM   3499  HG1 THR X 225     -16.691  23.767 -21.171  1.00  0.00
H
ATOM   3500 1HG2 THR X 225     -19.055  25.285 -22.045  1.00  0.00
H
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ATOM   3501 2HG2 THR X 225     -19.860  25.284 -20.457  1.00  0.00
H
ATOM   3502 3HG2 THR X 225     -18.119  25.639 -20.573  1.00  0.00
H
ATOM   3503  N   SER X 226     -19.755  21.187 -19.015  1.00  0.00
N
ATOM   3504  CA  SER X 226     -19.971  19.760 -18.846  1.00  0.00
C
ATOM   3505  C   SER X 226     -19.711  19.004 -20.144  1.00  0.00
C
ATOM   3506  O   SER X 226     -18.825  18.152 -20.211  1.00  0.00
O
ATOM   3507  CB  SER X 226     -21.382  19.500 -18.357  1.00  0.00
C
ATOM   3508  OG  SER X 226     -21.571  19.931 -17.037  1.00  0.00
O
ATOM   3509  H   SER X 226     -20.550  21.810 -19.005  1.00  0.00
H
ATOM   3510  HA  SER X 226     -19.379  19.325 -18.039  1.00  0.00
H
ATOM   3511 1HB  SER X 226     -22.078  20.032 -19.006  1.00  0.00
H
ATOM   3512 2HB  SER X 226     -21.579  18.430 -18.413  1.00  0.00
H
ATOM   3513  HG  SER X 226     -21.404  20.876 -16.983  1.00  0.00
H
ATOM   3514  N   PRO X 227     -20.491  19.319 -21.172  1.00  0.00
N
ATOM   3515  CA  PRO X 227     -20.350  18.667 -22.468  1.00  0.00
C
ATOM   3516  C   PRO X 227     -18.887  18.597 -22.893  1.00  0.00
C
ATOM   3517  O   PRO X 227     -18.430  17.577 -23.404  1.00  0.00
O
ATOM   3518  CB  PRO X 227     -21.189  19.536 -23.419  1.00  0.00
C
ATOM   3519  CG  PRO X 227     -22.289  20.100 -22.561  1.00  0.00
C
ATOM   3520  CD  PRO X 227     -21.274  20.559 -21.257  1.00  0.00
C
ATOM   3521  HA  PRO X 227     -20.710  17.739 -22.425  1.00  0.00
H
ATOM   3522 1HB  PRO X 227     -20.606  20.221 -23.583  1.00  0.00
H
ATOM   3523 2HB  PRO X 227     -21.540  18.933 -23.932  1.00  0.00
H
ATOM   3524 1HG  PRO X 227     -21.966  20.717 -22.081  1.00  0.00
H
ATOM   3525 2HG  PRO X 227     -23.087  20.036 -23.049  1.00  0.00
H
ATOM   3526 1HD  PRO X 227     -20.765  21.185 -20.750  1.00  0.00
H
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ATOM   3527 2HD  PRO X 227     -22.122  20.298 -20.914  1.00  0.00
H
ATOM   3528  N   ALA X 228     -18.160  19.688 -22.681  1.00  0.00
N
ATOM   3529  CA  ALA X 228     -16.748  19.751 -23.034  1.00  0.00
C
ATOM   3530  C   ALA X 228     -15.937  18.746 -22.224  1.00  0.00
C
ATOM   3531  O   ALA X 228     -15.100  18.029 -22.770  1.00  0.00
O
ATOM   3532  CB  ALA X 228     -16.213  21.160 -22.831  1.00  0.00
C
ATOM   3533  H   ALA X 228     -18.598  20.497 -22.263  1.00  0.00
H
ATOM   3534  HA  ALA X 228     -16.639  19.487 -24.087  1.00  0.00
H
ATOM   3535 1HB  ALA X 228     -15.156  21.188 -23.099  1.00  0.00
H
ATOM   3536 2HB  ALA X 228     -16.766  21.855 -23.462  1.00  0.00
H
ATOM   3537 3HB  ALA X 228     -16.329  21.445 -21.786  1.00  0.00
H
ATOM   3538  N   GLU X 229     -16.188  18.703 -20.921  1.00  0.00
N
ATOM   3539  CA  GLU X 229     -15.515  17.757 -20.041  1.00  0.00
C
ATOM   3540  C   GLU X 229     -15.783  16.321 -20.464  1.00  0.00
C
ATOM   3541  O   GLU X 229     -14.892  15.473 -20.422  1.00  0.00
O
ATOM   3542  CB  GLU X 229     -15.957  17.967 -18.590  1.00  0.00
C
ATOM   3543  CG  GLU X 229     -15.205  17.121 -17.574  1.00  0.00
C
ATOM   3544  CD  GLU X 229     -13.761  17.529 -17.486  1.00  0.00
C
ATOM   3545  OE1 GLU X 229     -13.416  18.545 -18.040  1.00  0.00
O
ATOM   3546  OE2 GLU X 229     -13.025  16.889 -16.771  1.00  0.00
O
ATOM   3547  H   GLU X 229     -16.864  19.343 -20.530  1.00  0.00
H
ATOM   3548  HA  GLU X 229     -14.435  17.900 -20.100  1.00  0.00
H
ATOM   3549 1HB  GLU X 229     -15.811  19.023 -18.362  1.00  0.00
H
ATOM   3550 2HB  GLU X 229     -17.021  17.730 -18.543  1.00  0.00
H
ATOM   3551 1HG  GLU X 229     -15.649  17.140 -16.579  1.00  0.00
H
ATOM   3552 2HG  GLU X 229     -15.272  16.112 -17.980  1.00  0.00
H
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ATOM   3553  N   GLU X 230     -17.018  16.051 -20.877  1.00  0.00
N
ATOM   3554  CA  GLU X 230     -17.416  14.710 -21.278  1.00  0.00
C
ATOM   3555  C   GLU X 230     -16.692  14.272 -22.544  1.00  0.00
C
ATOM   3556  O   GLU X 230     -16.188  13.153 -22.627  1.00  0.00
O
ATOM   3557  CB  GLU X 230     -18.930  14.641 -21.488  1.00  0.00
C
ATOM   3558  CG  GLU X 230     -19.448  13.264 -21.878  1.00  0.00
C
ATOM   3559  CD  GLU X 230     -20.944  13.266 -22.031  1.00  0.00
C
ATOM   3560  OE1 GLU X 230     -21.542  14.293 -21.820  1.00  0.00
O
ATOM   3561  OE2 GLU X 230     -21.478  12.275 -22.466  1.00  0.00
O
ATOM   3562  H   GLU X 230     -17.699  16.796 -20.915  1.00  0.00
H
ATOM   3563  HA  GLU X 230     -17.139  13.995 -20.502  1.00  0.00
H
ATOM   3564 1HB  GLU X 230     -19.396  14.953 -20.553  1.00  0.00
H
ATOM   3565 2HB  GLU X 230     -19.176  15.356 -22.273  1.00  0.00
H
ATOM   3566 1HG  GLU X 230     -18.992  12.870 -22.785  1.00  0.00
H
ATOM   3567 2HG  GLU X 230     -19.171  12.637 -21.033  1.00  0.00
H
ATOM   3568  N   PHE X 231     -16.644  15.159 -23.529  1.00  0.00
N
ATOM   3569  CA  PHE X 231     -15.950  14.883 -24.783  1.00  0.00
C
ATOM   3570  C   PHE X 231     -14.460  14.672 -24.549  1.00  0.00
C
ATOM   3571  O   PHE X 231     -13.842  13.810 -25.171  1.00  0.00
O
ATOM   3572  CB  PHE X 231     -16.173  16.021 -25.779  1.00  0.00
C
ATOM   3573  CG  PHE X 231     -15.492  15.812 -27.102  1.00  0.00
C
ATOM   3574  CD1 PHE X 231     -16.035  14.957 -28.050  1.00  0.00
C
ATOM   3575  CD2 PHE X 231     -14.307  16.467 -27.400  1.00  0.00
C
ATOM   3576  CE1 PHE X 231     -15.409  14.764 -29.268  1.00  0.00
C
ATOM   3577  CE2 PHE X 231     -13.680  16.276 -28.616  1.00  0.00
C
ATOM   3578  CZ  PHE X 231     -14.232  15.423 -29.549  1.00  0.00
C
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ATOM   3579  H   PHE X 231     -17.101  16.051 -23.409  1.00  0.00
H
ATOM   3580  HA  PHE X 231     -16.331  13.959 -25.221  1.00  0.00
H
ATOM   3581 1HB  PHE X 231     -17.236  16.134 -25.991  1.00  0.00
H
ATOM   3582 2HB  PHE X 231     -15.785  16.955 -25.373  1.00  0.00
H
ATOM   3583  HD1 PHE X 231     -16.966  14.437 -27.826  1.00  0.00
H
ATOM   3584  HD2 PHE X 231     -13.871  17.141 -26.662  1.00  0.00
H
ATOM   3585  HE1 PHE X 231     -15.846  14.089 -30.002  1.00  0.00
H
ATOM   3586  HE2 PHE X 231     -12.749  16.798 -28.838  1.00  0.00
H
ATOM   3587  HZ  PHE X 231     -13.738  15.270 -30.508  1.00  0.00
H
ATOM   3588  N   TYR X 232     -13.889  15.467 -23.651  1.00  0.00
N
ATOM   3589  CA  TYR X 232     -12.489  15.315 -23.276  1.00  0.00
C
ATOM   3590  C   TYR X 232     -12.240  13.971 -22.608  1.00  0.00
C
ATOM   3591  O   TYR X 232     -11.436  13.167 -23.087  1.00  0.00
O
ATOM   3592  CB  TYR X 232     -12.057  16.451 -22.346  1.00  0.00
C
ATOM   3593  CG  TYR X 232     -10.634  16.327 -21.847  1.00  0.00
C
ATOM   3594  CD1 TYR X 232      -9.560  16.654 -22.662  1.00  0.00
C
ATOM   3595  CD2 TYR X 232     -10.369  15.885 -20.560  1.00  0.00
C
ATOM   3596  CE1 TYR X 232      -8.260  16.542 -22.212  1.00  0.00
C
ATOM   3597  CE2 TYR X 232      -9.071  15.770 -20.097  1.00  0.00
C
ATOM   3598  CZ  TYR X 232      -8.020  16.099 -20.927  1.00  0.00
C
ATOM   3599  OH  TYR X 232      -6.725  15.987 -20.472  1.00  0.00
O
ATOM   3600  H   TYR X 232     -14.440  16.195 -23.216  1.00  0.00
H
ATOM   3601  HA  TYR X 232     -11.863  15.339 -24.168  1.00  0.00
H
ATOM   3602 1HB  TYR X 232     -12.166  17.383 -22.901  1.00  0.00
H
ATOM   3603 2HB  TYR X 232     -12.740  16.450 -21.497  1.00  0.00
H
ATOM   3604  HD1 TYR X 232      -9.759  17.003 -23.677  1.00  0.00
H
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ATOM   3605  HD2 TYR X 232     -11.204  15.625 -19.908  1.00  0.00
H
ATOM   3606  HE1 TYR X 232      -7.427  16.802 -22.864  1.00  0.00
H
ATOM   3607  HE2 TYR X 232      -8.884  15.420 -19.082  1.00  0.00
H
ATOM   3608  HH  TYR X 232      -6.073  16.241 -21.129  1.00  0.00
H
ATOM   3609  N   THR X 233     -12.933  13.725 -21.501  1.00  0.00
N
ATOM   3610  CA  THR X 233     -12.798  12.469 -20.773  1.00  0.00
C
ATOM   3611  C   THR X 233     -13.036  11.276 -21.688  1.00  0.00
C
ATOM   3612  O   THR X 233     -12.480  10.198 -21.478  1.00  0.00
O
ATOM   3613  CB  THR X 233     -13.776  12.395 -19.587  1.00  0.00
C
ATOM   3614  CG2 THR X 233     -13.419  13.438 -18.536  1.00  0.00
C
ATOM   3615  OG1 THR X 233     -15.113  12.628 -20.050  1.00  0.00
O
ATOM   3616  H   THR X 233     -13.570  14.428 -21.155  1.00  0.00
H
ATOM   3617  HA  THR X 233     -11.781  12.370 -20.394  1.00  0.00
H
ATOM   3618  HB  THR X 233     -13.722  11.402 -19.144  1.00  0.00
H
ATOM   3619  HG1 THR X 233     -15.164  13.498 -20.452  1.00  0.00
H
ATOM   3620 1HG2 THR X 233     -14.122  13.371 -17.705  1.00  0.00
H
ATOM   3621 2HG2 THR X 233     -12.408  13.256 -18.174  1.00  0.00
H
ATOM   3622 3HG2 THR X 233     -13.475  14.431 -18.979  1.00  0.00
H
ATOM   3623  N   ARG X 234     -13.865  11.472 -22.711  1.00  0.00
N
ATOM   3624  CA  ARG X 234     -14.179  10.413 -23.661  1.00  0.00
C
ATOM   3625  C   ARG X 234     -12.910   9.832 -24.274  1.00  0.00
C
ATOM   3626  O   ARG X 234     -12.858   8.647 -24.612  1.00  0.00
O
ATOM   3627  CB  ARG X 234     -15.156  10.875 -24.732  1.00  0.00
C
ATOM   3628  CG  ARG X 234     -15.612   9.787 -25.693  1.00  0.00
C
ATOM   3629  CD  ARG X 234     -16.507  10.263 -26.777  1.00  0.00
C
ATOM   3630  NE  ARG X 234     -17.767  10.827 -26.316  1.00  0.00
N
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ATOM   3631  CZ  ARG X 234     -18.545  11.656 -27.038  1.00  0.00
C
ATOM   3632  NH1 ARG X 234     -18.180  12.052 -28.237  1.00  0.00
N
ATOM   3633  NH2 ARG X 234     -19.674  12.080 -26.500  1.00  0.00
N
ATOM   3634  H   ARG X 234     -14.289  12.381 -22.832  1.00  0.00
H
ATOM   3635  HA  ARG X 234     -14.679   9.592 -23.146  1.00  0.00
H
ATOM   3636 1HB  ARG X 234     -16.022  11.286 -24.217  1.00  0.00
H
ATOM   3637 2HB  ARG X 234     -14.659  11.664 -25.296  1.00  0.00
H
ATOM   3638 1HG  ARG X 234     -14.731   9.341 -26.155  1.00  0.00
H
ATOM   3639 2HG  ARG X 234     -16.148   9.026 -25.124  1.00  0.00
H
ATOM   3640 1HD  ARG X 234     -15.993  11.039 -27.345  1.00  0.00
H
ATOM   3641 2HD  ARG X 234     -16.744   9.428 -27.435  1.00  0.00
H
ATOM   3642  HE  ARG X 234     -18.243  10.699 -25.433  1.00  0.00
H
ATOM   3643 1HH1 ARG X 234     -17.304  11.733 -28.629  1.00  0.00
H
ATOM   3644 2HH1 ARG X 234     -18.777  12.674 -28.763  1.00  0.00
H
ATOM   3645 1HH2 ARG X 234     -19.929  11.780 -25.569  1.00  0.00
H
ATOM   3646 2HH2 ARG X 234     -20.275  12.703 -27.019  1.00  0.00
H
ATOM   3647  N   HIS X 235     -11.888  10.669 -24.412  1.00  0.00
N
ATOM   3648  CA  HIS X 235     -10.635  10.248 -25.026  1.00  0.00
C
ATOM   3649  C   HIS X 235      -9.579   9.945 -23.972  1.00  0.00
C
ATOM   3650  O   HIS X 235      -8.516   9.407 -24.283  1.00  0.00
O
ATOM   3651  CB  HIS X 235     -10.120  11.320 -25.992  1.00  0.00
C
ATOM   3652  CG  HIS X 235     -11.052  11.606 -27.128  1.00  0.00
C
ATOM   3653  CD2 HIS X 235     -11.771  12.710 -27.435  1.00  0.00
C
ATOM   3654  ND1 HIS X 235     -11.327  10.681 -28.114  1.00  0.00
N
ATOM   3655  CE1 HIS X 235     -12.177  11.207 -28.979  1.00  0.00
C
ATOM   3656  NE2 HIS X 235     -12.461  12.436 -28.590  1.00  0.00
N
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ATOM   3657  H   HIS X 235     -11.981  11.619 -24.083  1.00  0.00
H
ATOM   3658  HA  HIS X 235     -10.792   9.324 -25.581  1.00  0.00
H
ATOM   3659 1HB  HIS X 235      -9.974  12.263 -25.463  1.00  0.00
H
ATOM   3660 2HB  HIS X 235      -9.175  11.003 -26.433  1.00  0.00
H
ATOM   3661  HD2 HIS X 235     -11.874  13.684 -26.955  1.00  0.00
H
ATOM   3662  HE1 HIS X 235     -12.520  10.632 -29.838  1.00  0.00
H
ATOM   3663  HE2 HIS X 235     -13.085  13.078 -29.059  1.00  0.00
H
ATOM   3664  N   VAL X 236      -9.878  10.291 -22.726  1.00  0.00
N
ATOM   3665  CA  VAL X 236      -8.958  10.048 -21.622  1.00  0.00
C
ATOM   3666  C   VAL X 236      -8.976   8.584 -21.198  1.00  0.00
C
ATOM   3667  O   VAL X 236      -7.935   7.925 -21.164  1.00  0.00
O
ATOM   3668  CB  VAL X 236      -9.292  10.928 -20.403  1.00  0.00
C
ATOM   3669  CG1 VAL X 236      -8.446  10.524 -19.205  1.00  0.00
C
ATOM   3670  CG2 VAL X 236      -9.079  12.398 -20.732  1.00  0.00
C
ATOM   3671  H   VAL X 236     -10.766  10.734 -22.537  1.00  0.00
H
ATOM   3672  HA  VAL X 236      -7.925  10.239 -21.917  1.00  0.00
H
ATOM   3673  HB  VAL X 236     -10.348  10.810 -20.159  1.00  0.00
H
ATOM   3674 1HG1 VAL X 236      -8.696  11.157 -18.352  1.00  0.00
H
ATOM   3675 2HG1 VAL X 236      -8.646   9.483 -18.954  1.00  0.00
H
ATOM   3676 3HG1 VAL X 236      -7.390  10.644 -19.449  1.00  0.00
H
ATOM   3677 1HG2 VAL X 236      -9.320  13.006 -19.861  1.00  0.00
H
ATOM   3678 2HG2 VAL X 236      -8.037  12.560 -21.011  1.00  0.00
H
ATOM   3679 3HG2 VAL X 236      -9.724  12.683 -21.563  1.00  0.00
H
ATOM   3680  N   LEU X 237     -10.165   8.082 -20.879  1.00  0.00
N
ATOM   3681  CA  LEU X 237     -10.316   6.704 -20.426  1.00  0.00
C
ATOM   3682  C   LEU X 237     -11.032   5.857 -21.472  1.00  0.00
C
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ATOM   3683  O   LEU X 237     -12.068   6.255 -22.002  1.00  0.00
O
ATOM   3684  CB  LEU X 237     -11.075   6.663 -19.094  1.00  0.00
C
ATOM   3685  CG  LEU X 237     -10.410   7.423 -17.941  1.00  0.00
C
ATOM   3686  CD1 LEU X 237     -11.262   7.314 -16.684  1.00  0.00
C
ATOM   3687  CD2 LEU X 237      -9.017   6.862 -17.697  1.00  0.00
C
ATOM   3688  H   LEU X 237     -10.983   8.670 -20.952  1.00  0.00
H
ATOM   3689  HA  LEU X 237      -9.333   6.256 -20.286  1.00  0.00
H
ATOM   3690 1HB  LEU X 237     -11.991   7.170 -19.397  1.00  0.00
H
ATOM   3691 2HB  LEU X 237     -11.309   5.642 -18.794  1.00  0.00
H
ATOM   3692  HG  LEU X 237     -10.300   8.462 -18.256  1.00  0.00
H
ATOM   3693 1HD1 LEU X 237     -10.782   7.857 -15.869  1.00  0.00
H
ATOM   3694 2HD1 LEU X 237     -12.247   7.744 -16.873  1.00  0.00
H
ATOM   3695 3HD1 LEU X 237     -11.370   6.267 -16.407  1.00  0.00
H
ATOM   3696 1HD2 LEU X 237      -8.544   7.403 -16.878  1.00  0.00
H
ATOM   3697 2HD2 LEU X 237      -9.090   5.804 -17.441  1.00  0.00
H
ATOM   3698 3HD2 LEU X 237      -8.417   6.975 -18.600  1.00  0.00
H
ATOM   3699  N   GLN X 238     -10.471   4.690 -21.764  1.00  0.00
N
ATOM   3700  CA  GLN X 238     -11.062   3.779 -22.739  1.00  0.00
C
ATOM   3701  C   GLN X 238     -12.472   3.372 -22.330  1.00  0.00
C
ATOM   3702  O   GLN X 238     -13.294   3.017 -23.173  1.00  0.00
O
ATOM   3703  CB  GLN X 238     -10.192   2.529 -22.902  1.00  0.00
C
ATOM   3704  CG  GLN X 238      -8.869   2.780 -23.604  1.00  0.00
C
ATOM   3705  CD  GLN X 238      -8.060   1.510 -23.785  1.00  0.00
C
ATOM   3706  NE2 GLN X 238      -6.864   1.646 -24.348  1.00  0.00
N
ATOM   3707  OE1 GLN X 238      -8.502   0.418 -23.418  1.00  0.00
O
ATOM   3708  H   GLN X 238      -9.613   4.426 -21.299  1.00  0.00
H
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ATOM   3709  HA  GLN X 238     -11.152   4.283 -23.701  1.00  0.00
H
ATOM   3710 1HB  GLN X 238     -10.010   2.140 -21.900  1.00  0.00
H
ATOM   3711 2HB  GLN X 238     -10.779   1.809 -23.470  1.00  0.00
H
ATOM   3712 1HG  GLN X 238      -8.789   3.360 -24.524  1.00  0.00
H
ATOM   3713 2HG  GLN X 238      -8.440   3.350 -22.780  1.00  0.00
H
ATOM   3714 1HE2 GLN X 238      -6.284   0.843 -24.492  1.00  0.00
H
ATOM   3715 2HE2 GLN X 238      -6.544   2.550 -24.629  1.00  0.00
H
ATOM   3716  N   ILE X 239     -12.749   3.433 -21.030  1.00  0.00
N
ATOM   3717  CA  ILE X 239     -14.071   3.113 -20.512  1.00  0.00
C
ATOM   3718  C   ILE X 239     -15.115   4.098 -21.018  1.00  0.00
C
ATOM   3719  O   ILE X 239     -16.241   3.714 -21.345  1.00  0.00
O
ATOM   3720  CB  ILE X 239     -14.089   3.106 -18.973  1.00  0.00
C
ATOM   3721  CG1 ILE X 239     -13.213   1.972 -18.433  1.00  0.00
C
ATOM   3722  CG2 ILE X 239     -15.513   2.974 -18.458  1.00  0.00
C
ATOM   3723  CD1 ILE X 239     -12.897   2.092 -16.961  1.00  0.00
C
ATOM   3724  H   ILE X 239     -12.022   3.710 -20.385  1.00  0.00
H
ATOM   3725  HA  ILE X 239     -14.403   2.145 -20.882  1.00  0.00
H
ATOM   3726  HB  ILE X 239     -13.655   4.037 -18.608  1.00  0.00
H
ATOM   3727 1HG1 ILE X 239     -13.743   1.038 -18.617  1.00  0.00
H
ATOM   3728 2HG1 ILE X 239     -12.284   1.980 -19.006  1.00  0.00
H
ATOM   3729 1HG2 ILE X 239     -15.507   2.970 -17.368  1.00  0.00
H
ATOM   3730 2HG2 ILE X 239     -16.109   3.813 -18.814  1.00  0.00
H
ATOM   3731 3HG2 ILE X 239     -15.946   2.042 -18.820  1.00  0.00
H
ATOM   3732 1HD1 ILE X 239     -12.273   1.253 -16.651  1.00  0.00
H
ATOM   3733 2HD1 ILE X 239     -12.366   3.026 -16.776  1.00  0.00
H
ATOM   3734 3HD1 ILE X 239     -13.824   2.083 -16.387  1.00  0.00
H
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ATOM   3735  N   HIS X 240     -14.740   5.371 -21.081  1.00  0.00
N
ATOM   3736  CA  HIS X 240     -15.644   6.417 -21.545  1.00  0.00
C
ATOM   3737  C   HIS X 240     -15.908   6.293 -23.041  1.00  0.00
C
ATOM   3738  O   HIS X 240     -16.980   6.660 -23.522  1.00  0.00
O
ATOM   3739  CB  HIS X 240     -15.077   7.803 -21.225  1.00  0.00
C
ATOM   3740  CG  HIS X 240     -15.131   8.156 -19.772  1.00  0.00
C
ATOM   3741  CD2 HIS X 240     -16.056   7.884 -18.822  1.00  0.00
C
ATOM   3742  ND1 HIS X 240     -14.139   8.879 -19.144  1.00  0.00
N
ATOM   3743  CE1 HIS X 240     -14.453   9.038 -17.871  1.00  0.00
C
ATOM   3744  NE2 HIS X 240     -15.611   8.444 -17.650  1.00  0.00
N
ATOM   3745  H   HIS X 240     -13.802   5.621 -20.800  1.00  0.00
H
ATOM   3746  HA  HIS X 240     -16.609   6.312 -21.050  1.00  0.00
H
ATOM   3747 1HB  HIS X 240     -14.028   7.857 -21.520  1.00  0.00
H
ATOM   3748 2HB  HIS X 240     -15.642   8.571 -21.754  1.00  0.00
H
ATOM   3749  HD2 HIS X 240     -17.004   7.344 -18.845  1.00  0.00
H
ATOM   3750  HE1 HIS X 240     -13.791   9.587 -17.199  1.00  0.00
H
ATOM   3751  HE2 HIS X 240     -16.098   8.402 -16.767  1.00  0.00
H
ATOM   3752  N   ARG X 241     -14.927   5.773 -23.769  1.00  0.00
N
ATOM   3753  CA  ARG X 241     -14.989   5.740 -25.226  1.00  0.00
C
ATOM   3754  C   ARG X 241     -16.259   5.052 -25.706  1.00  0.00
C
ATOM   3755  O   ARG X 241     -16.770   5.362 -26.782  1.00  0.00
O
ATOM   3756  CB  ARG X 241     -13.747   5.112 -25.838  1.00  0.00
C
ATOM   3757  CG  ARG X 241     -12.478   5.938 -25.705  1.00  0.00
C
ATOM   3758  CD  ARG X 241     -11.268   5.303 -26.287  1.00  0.00
C
ATOM   3759  NE  ARG X 241     -10.043   6.065 -26.109  1.00  0.00
N
ATOM   3760  CZ  ARG X 241      -8.815   5.632 -26.456  1.00  0.00
C
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ATOM   3761  NH1 ARG X 241      -8.639   4.431 -26.963  1.00  0.00
N
ATOM   3762  NH2 ARG X 241      -7.787   6.436 -26.250  1.00  0.00
N
ATOM   3763  H   ARG X 241     -14.117   5.390 -23.302  1.00  0.00
H
ATOM   3764  HA  ARG X 241     -15.019   6.758 -25.616  1.00  0.00
H
ATOM   3765 1HB  ARG X 241     -13.601   4.150 -25.347  1.00  0.00
H
ATOM   3766 2HB  ARG X 241     -13.960   4.951 -26.896  1.00  0.00
H
ATOM   3767 1HG  ARG X 241     -12.631   6.894 -26.208  1.00  0.00
H
ATOM   3768 2HG  ARG X 241     -12.289   6.113 -24.645  1.00  0.00
H
ATOM   3769 1HD  ARG X 241     -11.119   4.331 -25.820  1.00  0.00
H
ATOM   3770 2HD  ARG X 241     -11.419   5.173 -27.358  1.00  0.00
H
ATOM   3771  HE  ARG X 241      -9.909   6.989 -25.721  1.00  0.00
H
ATOM   3772 1HH1 ARG X 241      -9.433   3.821 -27.100  1.00  0.00
H
ATOM   3773 2HH1 ARG X 241      -7.712   4.125 -27.218  1.00  0.00
H
ATOM   3774 1HH2 ARG X 241      -7.938   7.349 -25.842  1.00  0.00
H
ATOM   3775 2HH2 ARG X 241      -6.856   6.135 -26.500  1.00  0.00
H
ATOM   3776  N   SER X 242     -16.760   4.119 -24.908  1.00  0.00
N
ATOM   3777  CA  SER X 242     -17.896   3.295 -25.308  1.00  0.00
C
ATOM   3778  C   SER X 242     -18.938   3.222 -24.199  1.00  0.00
C
ATOM   3779  O   SER X 242     -19.746   2.296 -24.157  1.00  0.00
O
ATOM   3780  CB  SER X 242     -17.426   1.904 -25.686  1.00  0.00
C
ATOM   3781  OG  SER X 242     -16.753   1.272 -24.631  1.00  0.00
O
ATOM   3782  H   SER X 242     -16.343   3.975 -23.999  1.00  0.00
H
ATOM   3783  HA  SER X 242     -18.365   3.624 -26.236  1.00  0.00
H
ATOM   3784 1HB  SER X 242     -18.293   1.307 -25.961  1.00  0.00
H
ATOM   3785 2HB  SER X 242     -16.753   1.982 -26.538  1.00  0.00
H
ATOM   3786  HG  SER X 242     -15.985   1.792 -24.385  1.00  0.00
H
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ATOM   3787  N   LYS X 243     -18.914   4.205 -23.303  1.00  0.00
N
ATOM   3788  CA  LYS X 243     -19.848   4.245 -22.184  1.00  0.00
C
ATOM   3789  C   LYS X 243     -21.281   4.406 -22.665  1.00  0.00
C
ATOM   3790  O   LYS X 243     -22.228   4.188 -21.914  1.00  0.00
O
ATOM   3791  CB  LYS X 243     -19.487   5.381 -21.225  1.00  0.00
C
ATOM   3792  CG  LYS X 243     -19.778   6.776 -21.765  1.00  0.00
C
ATOM   3793  CD  LYS X 243     -19.405   7.849 -20.753  1.00  0.00
C
ATOM   3794  CE  LYS X 243     -19.590   9.244 -21.333  1.00  0.00
C
ATOM   3795  NZ  LYS X 243     -21.023   9.554 -21.592  1.00  0.00
N
ATOM   3796  H   LYS X 243     -18.231   4.942 -23.400  1.00  0.00
H
ATOM   3797  HA  LYS X 243     -19.809   3.303 -21.636  1.00  0.00
H
ATOM   3798 1HB  LYS X 243     -20.057   5.221 -20.310  1.00  0.00
H
ATOM   3799 2HB  LYS X 243     -18.423   5.291 -21.009  1.00  0.00
H
ATOM   3800 1HG  LYS X 243     -19.199   6.920 -22.679  1.00  0.00
H
ATOM   3801 2HG  LYS X 243     -20.840   6.844 -21.994  1.00  0.00
H
ATOM   3802 1HD  LYS X 243     -20.040   7.733 -19.874  1.00  0.00
H
ATOM   3803 2HD  LYS X 243     -18.363   7.711 -20.469  1.00  0.00
H
ATOM   3804 1HE  LYS X 243     -19.185   9.964 -20.624  1.00  0.00
H
ATOM   3805 2HE  LYS X 243     -19.032   9.303 -22.268  1.00  0.00
H
ATOM   3806 1HZ  LYS X 243     -21.102  10.485 -21.974  1.00  0.00
H
ATOM   3807 2HZ  LYS X 243     -21.398   8.886 -22.250  1.00  0.00
H
ATOM   3808 3HZ  LYS X 243     -21.540   9.500 -20.726  1.00  0.00
H
ATOM   3809  N   GLY X 244     -21.435   4.789 -23.930  1.00  0.00
N
ATOM   3810  CA  GLY X 244     -22.753   5.070 -24.493  1.00  0.00
C
ATOM   3811  C   GLY X 244     -23.609   3.811 -24.538  1.00  0.00
C
ATOM   3812  O   GLY X 244     -24.831   3.886 -24.666  1.00  0.00
O
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ATOM   3813  H   GLY X 244     -20.620   4.887 -24.517  1.00  0.00
H
ATOM   3814 1HA  GLY X 244     -23.251   5.818 -23.875  1.00  0.00
H
ATOM   3815 2HA  GLY X 244     -22.633   5.457 -25.503  1.00  0.00
H
ATOM   3816  N   LEU X 245     -22.960   2.655 -24.439  1.00  0.00
N
ATOM   3817  CA  LEU X 245     -23.652   1.376 -24.555  1.00  0.00
C
ATOM   3818  C   LEU X 245     -24.440   1.060 -23.291  1.00  0.00
C
ATOM   3819  O   LEU X 245     -23.960   1.274 -22.177  1.00  0.00
O
ATOM   3820  CB  LEU X 245     -22.648   0.254 -24.851  1.00  0.00
C
ATOM   3821  CG  LEU X 245     -21.900   0.386 -26.184  1.00  0.00
C
ATOM   3822  CD1 LEU X 245     -20.855  -0.716 -26.305  1.00  0.00
C
ATOM   3823  CD2 LEU X 245     -22.893   0.315 -27.334  1.00  0.00
C
ATOM   3824  H   LEU X 245     -21.963   2.663 -24.280  1.00  0.00
H
ATOM   3825  HA  LEU X 245     -24.377   1.425 -25.367  1.00  0.00
H
ATOM   3826 1HB  LEU X 245     -21.961   0.407 -24.021  1.00  0.00
H
ATOM   3827 2HB  LEU X 245     -23.107  -0.730 -24.768  1.00  0.00
H
ATOM   3828  HG  LEU X 245     -21.438   1.373 -26.201  1.00  0.00
H
ATOM   3829 1HD1 LEU X 245     -20.328  -0.615 -27.253  1.00  0.00
H
ATOM   3830 2HD1 LEU X 245     -20.141  -0.632 -25.485  1.00  0.00
H
ATOM   3831 3HD1 LEU X 245     -21.344  -1.688 -26.264  1.00  0.00
H
ATOM   3832 1HD2 LEU X 245     -22.358   0.408 -28.280  1.00  0.00
H
ATOM   3833 2HD2 LEU X 245     -23.417  -0.640 -27.305  1.00  0.00
H
ATOM   3834 3HD2 LEU X 245     -23.614   1.128 -27.243  1.00  0.00
H
ATOM   3835  N   GLN X 246     -25.652   0.547 -23.467  1.00  0.00
N
ATOM   3836  CA  GLN X 246     -26.508   0.196 -22.343  1.00  0.00
C
ATOM   3837  C   GLN X 246     -25.924  -0.970 -21.553  1.00  0.00
C
ATOM   3838  O   GLN X 246     -26.328  -1.224 -20.417  1.00  0.00
O
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ATOM   3839  CB  GLN X 246     -27.914  -0.162 -22.830  1.00  0.00
C
ATOM   3840  CG  GLN X 246     -28.701   1.016 -23.381  1.00  0.00
C
ATOM   3841  CD  GLN X 246     -30.073   0.611 -23.883  1.00  0.00
C
ATOM   3842  NE2 GLN X 246     -30.827   1.581 -24.389  1.00  0.00
N
ATOM   3843  OE1 GLN X 246     -30.452  -0.561 -23.821  1.00  0.00
O
ATOM   3844  H   GLN X 246     -25.990   0.397 -24.408  1.00  0.00
H
ATOM   3845  HA  GLN X 246     -26.570   1.038 -21.654  1.00  0.00
H
ATOM   3846 1HB  GLN X 246     -27.797  -0.920 -23.603  1.00  0.00
H
ATOM   3847 2HB  GLN X 246     -28.443  -0.591 -21.978  1.00  0.00
H
ATOM   3848 1HG  GLN X 246     -28.805   1.958 -22.845  1.00  0.00
H
ATOM   3849 2HG  GLN X 246     -28.047   1.160 -24.243  1.00  0.00
H
ATOM   3850 1HE2 GLN X 246     -31.742   1.375 -24.737  1.00  0.00
H
ATOM   3851 2HE2 GLN X 246     -30.479   2.519 -24.422  1.00  0.00
H
ATOM   3852  N   ASP X 247     -24.970  -1.669 -22.156  1.00  0.00
N
ATOM   3853  CA  ASP X 247     -24.332  -2.807 -21.510  1.00  0.00
C
ATOM   3854  C   ASP X 247     -23.570  -2.376 -20.262  1.00  0.00
C
ATOM   3855  O   ASP X 247     -23.433  -3.147 -19.310  1.00  0.00
O
ATOM   3856  CB  ASP X 247     -23.387  -3.516 -22.483  1.00  0.00
C
ATOM   3857  CG  ASP X 247     -24.091  -4.323 -23.567  1.00  0.00
C
ATOM   3858  OD1 ASP X 247     -25.274  -4.533 -23.450  1.00  0.00
O
ATOM   3859  OD2 ASP X 247     -23.478  -4.586 -24.574  1.00  0.00
O
ATOM   3860  H   ASP X 247     -24.680  -1.405 -23.088  1.00  0.00
H
ATOM   3861  HA  ASP X 247     -25.090  -3.518 -21.180  1.00  0.00
H
ATOM   3862 1HB  ASP X 247     -22.657  -2.850 -22.943  1.00  0.00
H
ATOM   3863 2HB  ASP X 247     -22.880  -4.196 -21.798  1.00  0.00
H
ATOM   3864  N   LEU X 248     -23.077  -1.143 -20.274  1.00  0.00
N
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ATOM   3865  CA  LEU X 248     -22.334  -0.603 -19.142  1.00  0.00
C
ATOM   3866  C   LEU X 248     -23.200  -0.559 -17.887  1.00  0.00
C
ATOM   3867  O   LEU X 248     -24.295   0.002 -17.899  1.00  0.00
O
ATOM   3868  CB  LEU X 248     -21.804   0.797 -19.475  1.00  0.00
C
ATOM   3869  CG  LEU X 248     -20.948   1.448 -18.381  1.00  0.00
C
ATOM   3870  CD1 LEU X 248     -19.665   0.654 -18.180  1.00  0.00
C
ATOM   3871  CD2 LEU X 248     -20.637   2.886 -18.767  1.00  0.00
C
ATOM   3872  H   LEU X 248     -23.219  -0.564 -21.089  1.00  0.00
H
ATOM   3873  HA  LEU X 248     -21.491  -1.255 -18.914  1.00  0.00
H
ATOM   3874 1HB  LEU X 248     -21.185   0.552 -20.337  1.00  0.00
H
ATOM   3875 2HB  LEU X 248     -22.605   1.470 -19.782  1.00  0.00
H
ATOM   3876  HG  LEU X 248     -21.547   1.470 -17.470  1.00  0.00
H
ATOM   3877 1HD1 LEU X 248     -19.063   1.124 -17.401  1.00  0.00
H
ATOM   3878 2HD1 LEU X 248     -19.910  -0.365 -17.881  1.00  0.00
H
ATOM   3879 3HD1 LEU X 248     -19.100   0.633 -19.111  1.00  0.00
H
ATOM   3880 1HD2 LEU X 248     -20.029   3.349 -17.989  1.00  0.00
H
ATOM   3881 2HD2 LEU X 248     -20.090   2.900 -19.711  1.00  0.00
H
ATOM   3882 3HD2 LEU X 248     -21.567   3.443 -18.880  1.00  0.00
H
ATOM   3883  N   GLY X 249     -22.702  -1.154 -16.807  1.00  0.00
N
ATOM   3884  CA  GLY X 249     -23.471  -1.271 -15.575  1.00  0.00
C
ATOM   3885  C   GLY X 249     -23.939  -2.705 -15.357  1.00  0.00
C
ATOM   3886  O   GLY X 249     -24.463  -3.042 -14.296  1.00  0.00
O
ATOM   3887  H   GLY X 249     -21.766  -1.534 -16.842  1.00  0.00
H
ATOM   3888 1HA  GLY X 249     -22.846  -0.967 -14.735  1.00  0.00
H
ATOM   3889 2HA  GLY X 249     -24.340  -0.618 -15.634  1.00  0.00
H
ATOM   3890  N   GLY X 250     -23.749  -3.546 -16.370  1.00  0.00
N
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ATOM   3891  CA  GLY X 250     -24.123  -4.951 -16.278  1.00  0.00
C
ATOM   3892  C   GLY X 250     -23.189  -5.714 -15.348  1.00  0.00
C
ATOM   3893  O   GLY X 250     -22.236  -5.149 -14.808  1.00  0.00
O
ATOM   3894  H   GLY X 250     -23.335  -3.202 -17.225  1.00  0.00
H
ATOM   3895 1HA  GLY X 250     -25.142  -5.023 -15.895  1.00  0.00
H
ATOM   3896 2HA  GLY X 250     -24.077  -5.397 -17.270  1.00  0.00
H
ATOM   3897  N   ILE X 251     -23.462  -7.001 -15.167  1.00  0.00
N
ATOM   3898  CA  ILE X 251     -22.644  -7.844 -14.304  1.00  0.00
C
ATOM   3899  C   ILE X 251     -21.184  -7.833 -14.745  1.00  0.00
C
ATOM   3900  O   ILE X 251     -20.278  -7.684 -13.924  1.00  0.00
O
ATOM   3901  CB  ILE X 251     -23.153  -9.296 -14.287  1.00  0.00
C
ATOM   3902  CG1 ILE X 251     -24.519  -9.374 -13.600  1.00  0.00
C
ATOM   3903  CG2 ILE X 251     -22.152 -10.202 -13.586  1.00  0.00
C
ATOM   3904  CD1 ILE X 251     -25.215 -10.707 -13.774  1.00  0.00
C
ATOM   3905  H   ILE X 251     -24.258  -7.406 -15.638  1.00  0.00
H
ATOM   3906  HA  ILE X 251     -22.627  -7.453 -13.288  1.00  0.00
H
ATOM   3907  HB  ILE X 251     -23.295  -9.636 -15.312  1.00  0.00
H
ATOM   3908 1HG1 ILE X 251     -24.362  -9.182 -12.540  1.00  0.00
H
ATOM   3909 2HG1 ILE X 251     -25.140  -8.584 -14.024  1.00  0.00
H
ATOM   3910 1HG2 ILE X 251     -22.526 -11.226 -13.581  1.00  0.00
H
ATOM   3911 2HG2 ILE X 251     -21.199 -10.169 -14.115  1.00  0.00
H
ATOM   3912 3HG2 ILE X 251     -22.008  -9.864 -12.560  1.00  0.00
H
ATOM   3913 1HD1 ILE X 251     -26.176 -10.684 -13.261  1.00  0.00
H
ATOM   3914 2HD1 ILE X 251     -25.374 -10.900 -14.835  1.00  0.00
H
ATOM   3915 3HD1 ILE X 251     -24.597 -11.498 -13.350  1.00  0.00
H
ATOM   3916  N   SER X 252     -20.961  -7.987 -16.046  1.00  0.00
N
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ATOM   3917  CA  SER X 252     -19.611  -8.067 -16.588  1.00  0.00
C
ATOM   3918  C   SER X 252     -19.030  -6.679 -16.821  1.00  0.00
C
ATOM   3919  O   SER X 252     -17.852  -6.538 -17.155  1.00  0.00
O
ATOM   3920  CB  SER X 252     -19.614  -8.862 -17.880  1.00  0.00
C
ATOM   3921  OG  SER X 252     -19.984 -10.198 -17.675  1.00  0.00
O
ATOM   3922  H   SER X 252     -21.748  -8.050 -16.676  1.00  0.00
H
ATOM   3923  HA  SER X 252     -18.932  -8.657 -15.972  1.00  0.00
H
ATOM   3924 1HB  SER X 252     -20.319  -8.402 -18.571  1.00  0.00
H
ATOM   3925 2HB  SER X 252     -18.614  -8.833 -18.310  1.00  0.00
H
ATOM   3926  HG  SER X 252     -19.974 -10.665 -18.515  1.00  0.00
H
ATOM   3927  N   TRP X 253     -19.857  -5.654 -16.643  1.00  0.00
N
ATOM   3928  CA  TRP X 253     -19.434  -4.278 -16.855  1.00  0.00
C
ATOM   3929  C   TRP X 253     -19.382  -3.510 -15.543  1.00  0.00
C
ATOM   3930  O   TRP X 253     -18.950  -2.356 -15.505  1.00  0.00
O
ATOM   3931  CB  TRP X 253     -20.372  -3.576 -17.837  1.00  0.00
C
ATOM   3932  CG  TRP X 253     -20.209  -4.034 -19.254  1.00  0.00
C
ATOM   3933  CD1 TRP X 253     -19.416  -3.470 -20.208  1.00  0.00
C
ATOM   3934  CD2 TRP X 253     -20.852  -5.156 -19.877  1.00  0.00
C
ATOM   3935  CE2 TRP X 253     -20.401  -5.207 -21.207  1.00  0.00
C
ATOM   3936  CE3 TRP X 253     -21.765  -6.119 -19.434  1.00  0.00
C
ATOM   3937  NE1 TRP X 253     -19.525  -4.165 -21.386  1.00  0.00
N
ATOM   3938  CZ2 TRP X 253     -20.830  -6.178 -22.099  1.00  0.00
C
ATOM   3939  CZ3 TRP X 253     -22.194  -7.094 -20.329  1.00  0.00
C
ATOM   3940  CH2 TRP X 253     -21.739  -7.121 -21.623  1.00  0.00
C
ATOM   3941  H   TRP X 253     -20.808  -5.836 -16.351  1.00  0.00
H
ATOM   3942  HA  TRP X 253     -18.425  -4.261 -17.267  1.00  0.00
H
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ATOM   3943 1HB  TRP X 253     -21.412  -3.763 -17.567  1.00  0.00
H
ATOM   3944 2HB  TRP X 253     -20.186  -2.502 -17.834  1.00  0.00
H
ATOM   3945  HD1 TRP X 253     -18.841  -2.594 -19.914  1.00  0.00
H
ATOM   3946  HE1 TRP X 253     -19.042  -3.948 -22.245  1.00  0.00
H
ATOM   3947  HE3 TRP X 253     -22.156  -6.145 -18.418  1.00  0.00
H
ATOM   3948  HZ2 TRP X 253     -20.443  -6.164 -23.118  1.00  0.00
H
ATOM   3949  HZ3 TRP X 253     -22.906  -7.839 -19.971  1.00  0.00
H
ATOM   3950  HH2 TRP X 253     -22.100  -7.903 -22.291  1.00  0.00
H
ATOM   3951  N   GLN X 254     -19.827  -4.152 -14.468  1.00  0.00
N
ATOM   3952  CA  GLN X 254     -19.912  -3.499 -13.169  1.00  0.00
C
ATOM   3953  C   GLN X 254     -18.541  -3.031 -12.695  1.00  0.00
C
ATOM   3954  O   GLN X 254     -18.365  -1.873 -12.317  1.00  0.00
O
ATOM   3955  CB  GLN X 254     -20.520  -4.445 -12.131  1.00  0.00
C
ATOM   3956  CG  GLN X 254     -20.690  -3.832 -10.752  1.00  0.00
C
ATOM   3957  CD  GLN X 254     -21.345  -4.786  -9.771  1.00  0.00
C
ATOM   3958  NE2 GLN X 254     -21.564  -4.317  -8.547  1.00  0.00
N
ATOM   3959  OE1 GLN X 254     -21.653  -5.932 -10.109  1.00  0.00
O
ATOM   3960  H   GLN X 254     -20.113  -5.117 -14.554  1.00  0.00
H
ATOM   3961  HA  GLN X 254     -20.532  -2.606 -13.249  1.00  0.00
H
ATOM   3962 1HB  GLN X 254     -21.490  -4.755 -12.519  1.00  0.00
H
ATOM   3963 2HB  GLN X 254     -19.861  -5.311 -12.069  1.00  0.00
H
ATOM   3964 1HG  GLN X 254     -19.884  -3.318 -10.231  1.00  0.00
H
ATOM   3965 2HG  GLN X 254     -21.436  -3.102 -11.073  1.00  0.00
H
ATOM   3966 1HE2 GLN X 254     -21.993  -4.900  -7.856  1.00  0.00
H
ATOM   3967 2HE2 GLN X 254     -21.300  -3.380  -8.316  1.00  0.00
H
ATOM   3968  N   LEU X 255     -17.573  -3.940 -12.718  1.00  0.00
N
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ATOM   3969  CA  LEU X 255     -16.224  -3.617 -12.245  1.00  0.00
C
ATOM   3970  C   LEU X 255     -15.609  -2.468 -13.034  1.00  0.00
C
ATOM   3971  O   LEU X 255     -15.064  -1.523 -12.457  1.00  0.00
O
ATOM   3972  CB  LEU X 255     -15.323  -4.855 -12.328  1.00  0.00
C
ATOM   3973  CG  LEU X 255     -13.893  -4.658 -11.808  1.00  0.00
C
ATOM   3974  CD1 LEU X 255     -13.918  -4.329 -10.323  1.00  0.00
C
ATOM   3975  CD2 LEU X 255     -13.079  -5.917 -12.070  1.00  0.00
C
ATOM   3976  H   LEU X 255     -17.769  -4.868 -13.066  1.00  0.00
H
ATOM   3977  HA  LEU X 255     -16.271  -3.284 -11.208  1.00  0.00
H
ATOM   3978 1HB  LEU X 255     -15.873  -5.520 -11.664  1.00  0.00
H
ATOM   3979 2HB  LEU X 255     -15.309  -5.278 -13.332  1.00  0.00
H
ATOM   3980  HG  LEU X 255     -13.448  -3.849 -12.387  1.00  0.00
H
ATOM   3981 1HD1 LEU X 255     -12.898  -4.190  -9.963  1.00  0.00
H
ATOM   3982 2HD1 LEU X 255     -14.486  -3.413 -10.162  1.00  0.00
H
ATOM   3983 3HD1 LEU X 255     -14.386  -5.147  -9.777  1.00  0.00
H
ATOM   3984 1HD2 LEU X 255     -12.063  -5.774 -11.701  1.00  0.00
H
ATOM   3985 2HD2 LEU X 255     -13.538  -6.761 -11.554  1.00  0.00
H
ATOM   3986 3HD2 LEU X 255     -13.051  -6.118 -13.141  1.00  0.00
H
ATOM   3987  N   ALA X 256     -15.691  -2.552 -14.358  1.00  0.00
N
ATOM   3988  CA  ALA X 256     -15.125  -1.517 -15.217  1.00  0.00
C
ATOM   3989  C   ALA X 256     -15.713  -0.154 -14.894  1.00  0.00
C
ATOM   3990  O   ALA X 256     -14.995   0.844 -14.810  1.00  0.00
O
ATOM   3991  CB  ALA X 256     -15.349  -1.863 -16.681  1.00  0.00
C
ATOM   3992  H   ALA X 256     -16.153  -3.346 -14.777  1.00  0.00
H
ATOM   3993  HA  ALA X 256     -14.052  -1.460 -15.033  1.00  0.00
H
ATOM   3994 1HB  ALA X 256     -14.920  -1.081 -17.309  1.00  0.00
H
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ATOM   3995 2HB  ALA X 256     -14.868  -2.815 -16.909  1.00  0.00
H
ATOM   3996 3HB  ALA X 256     -16.418  -1.940 -16.877  1.00  0.00
H
ATOM   3997  N   LEU X 257     -17.032  -0.110 -14.717  1.00  0.00
N
ATOM   3998  CA  LEU X 257     -17.710   1.133 -14.384  1.00  0.00
C
ATOM   3999  C   LEU X 257     -17.161   1.698 -13.068  1.00  0.00
C
ATOM   4000  O   LEU X 257     -16.913   2.894 -12.957  1.00  0.00
O
ATOM   4001  CB  LEU X 257     -19.224   0.903 -14.291  1.00  0.00
C
ATOM   4002  CG  LEU X 257     -20.051   2.143 -13.927  1.00  0.00
C
ATOM   4003  CD1 LEU X 257     -19.866   3.223 -14.984  1.00  0.00
C
ATOM   4004  CD2 LEU X 257     -21.517   1.757 -13.803  1.00  0.00
C
ATOM   4005  H   LEU X 257     -17.572  -0.957 -14.817  1.00  0.00
H
ATOM   4006  HA  LEU X 257     -17.512   1.875 -15.156  1.00  0.00
H
ATOM   4007 1HB  LEU X 257     -19.422   0.610 -15.320  1.00  0.00
H
ATOM   4008 2HB  LEU X 257     -19.466   0.075 -13.623  1.00  0.00
H
ATOM   4009  HG  LEU X 257     -19.711   2.484 -12.949  1.00  0.00
H
ATOM   4010 1HD1 LEU X 257     -20.456   4.099 -14.719  1.00  0.00
H
ATOM   4011 2HD1 LEU X 257     -18.812   3.500 -15.041  1.00  0.00
H
ATOM   4012 3HD1 LEU X 257     -20.193   2.844 -15.952  1.00  0.00
H
ATOM   4013 1HD2 LEU X 257     -22.105   2.639 -13.543  1.00  0.00
H
ATOM   4014 2HD2 LEU X 257     -21.869   1.352 -14.751  1.00  0.00
H
ATOM   4015 3HD2 LEU X 257     -21.631   1.004 -13.021  1.00  0.00
H
ATOM   4016  N   CYS X 258     -16.956   0.832 -12.076  1.00  0.00
N
ATOM   4017  CA  CYS X 258     -16.424   1.294 -10.799  1.00  0.00
C
ATOM   4018  C   CYS X 258     -14.957   1.720 -10.930  1.00  0.00
C
ATOM   4019  O   CYS X 258     -14.509   2.634 -10.241  1.00  0.00
O
ATOM   4020  CB  CYS X 258     -16.547   0.053  -9.912  1.00  0.00
C
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ATOM   4021  SG  CYS X 258     -18.248  -0.434  -9.538  1.00  0.00
S
ATOM   4022  H   CYS X 258     -17.171  -0.146 -12.209  1.00  0.00
H
ATOM   4023  HA  CYS X 258     -17.007   2.100 -10.353  1.00  0.00
H
ATOM   4024 1HB  CYS X 258     -16.086  -0.806 -10.401  1.00  0.00
H
ATOM   4025 2HB  CYS X 258     -16.063   0.228  -8.951  1.00  0.00
H
ATOM   4026  HG  CYS X 258     -17.929  -1.487  -8.793  1.00  0.00
H
ATOM   4027  N   ILE X 259     -14.212   1.076 -11.820  1.00  0.00
N
ATOM   4028  CA  ILE X 259     -12.814   1.469 -12.024  1.00  0.00
C
ATOM   4029  C   ILE X 259     -12.805   2.922 -12.504  1.00  0.00
C
ATOM   4030  O   ILE X 259     -12.002   3.734 -12.040  1.00  0.00
O
ATOM   4031  CB  ILE X 259     -12.111   0.547 -13.037  1.00  0.00
C
ATOM   4032  CG1 ILE X 259     -11.914  -0.849 -12.442  1.00  0.00
C
ATOM   4033  CG2 ILE X 259     -10.775   1.141 -13.458  1.00  0.00
C
ATOM   4034  CD1 ILE X 259     -11.502  -1.892 -13.456  1.00  0.00
C
ATOM   4035  H   ILE X 259     -14.608   0.317 -12.356  1.00  0.00
H
ATOM   4036  HA  ILE X 259     -12.270   1.452 -11.081  1.00  0.00
H
ATOM   4037  HB  ILE X 259     -12.748   0.429 -13.912  1.00  0.00
H
ATOM   4038 1HG1 ILE X 259     -11.149  -0.769 -11.670  1.00  0.00
H
ATOM   4039 2HG1 ILE X 259     -12.860  -1.142 -11.986  1.00  0.00
H
ATOM   4040 1HG2 ILE X 259     -10.291   0.479 -14.172  1.00  0.00
H
ATOM   4041 2HG2 ILE X 259     -10.940   2.114 -13.919  1.00  0.00
H
ATOM   4042 3HG2 ILE X 259     -10.138   1.259 -12.582  1.00  0.00
H
ATOM   4043 1HD1 ILE X 259     -11.383  -2.856 -12.959  1.00  0.00
H
ATOM   4044 2HD1 ILE X 259     -12.267  -1.974 -14.228  1.00  0.00
H
ATOM   4045 3HD1 ILE X 259     -10.557  -1.602 -13.912  1.00  0.00
H
ATOM   4046  N   MET X 260     -13.708   3.248 -13.428  1.00  0.00
N
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ATOM   4047  CA  MET X 260     -13.827   4.612 -13.931  1.00  0.00
C
ATOM   4048  C   MET X 260     -14.185   5.544 -12.774  1.00  0.00
C
ATOM   4049  O   MET X 260     -13.591   6.611 -12.611  1.00  0.00
O
ATOM   4050  CB  MET X 260     -14.877   4.675 -15.039  1.00  0.00
C
ATOM   4051  CG  MET X 260     -15.101   6.067 -15.616  1.00  0.00
C
ATOM   4052  SD  MET X 260     -16.190   7.075 -14.590  1.00  0.00
S
ATOM   4053  CE  MET X 260     -17.762   6.262 -14.865  1.00  0.00
C
ATOM   4054  H   MET X 260     -14.324   2.533 -13.789  1.00  0.00
H
ATOM   4055  HA  MET X 260     -12.871   4.943 -14.336  1.00  0.00
H
ATOM   4056 1HB  MET X 260     -14.543   4.004 -15.831  1.00  0.00
H
ATOM   4057 2HB  MET X 260     -15.810   4.303 -14.615  1.00  0.00
H
ATOM   4058 1HG  MET X 260     -14.133   6.559 -15.701  1.00  0.00
H
ATOM   4059 2HG  MET X 260     -15.543   5.956 -16.606  1.00  0.00
H
ATOM   4060 1HE  MET X 260     -18.541   6.773 -14.297  1.00  0.00
H
ATOM   4061 2HE  MET X 260     -18.009   6.296 -15.929  1.00  0.00
H
ATOM   4062 3HE  MET X 260     -17.696   5.224 -14.540  1.00  0.00
H
ATOM   4063  N   LEU X 261     -15.162   5.146 -11.967  1.00  0.00
N
ATOM   4064  CA  LEU X 261     -15.564   5.956 -10.826  1.00  0.00
C
ATOM   4065  C   LEU X 261     -14.374   6.216  -9.905  1.00  0.00
C
ATOM   4066  O   LEU X 261     -14.199   7.319  -9.402  1.00  0.00
O
ATOM   4067  CB  LEU X 261     -16.701   5.269 -10.059  1.00  0.00
C
ATOM   4068  CG  LEU X 261     -18.048   5.222 -10.793  1.00  0.00
C
ATOM   4069  CD1 LEU X 261     -19.031   4.351 -10.024  1.00  0.00
C
ATOM   4070  CD2 LEU X 261     -18.589   6.635 -10.951  1.00  0.00
C
ATOM   4071  H   LEU X 261     -15.632   4.270 -12.146  1.00  0.00
H
ATOM   4072  HA  LEU X 261     -15.910   6.929 -11.173  1.00  0.00
H
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ATOM   4073 1HB  LEU X 261     -16.282   4.267  -9.985  1.00  0.00
H
ATOM   4074 2HB  LEU X 261     -16.825   5.686  -9.061  1.00  0.00
H
ATOM   4075  HG  LEU X 261     -17.860   4.824 -11.790  1.00  0.00
H
ATOM   4076 1HD1 LEU X 261     -19.985   4.324 -10.551  1.00  0.00
H
ATOM   4077 2HD1 LEU X 261     -18.634   3.339  -9.942  1.00  0.00
H
ATOM   4078 3HD1 LEU X 261     -19.181   4.764  -9.027  1.00  0.00
H
ATOM   4079 1HD2 LEU X 261     -19.545   6.601 -11.473  1.00  0.00
H
ATOM   4080 2HD2 LEU X 261     -18.727   7.085  -9.968  1.00  0.00
H
ATOM   4081 3HD2 LEU X 261     -17.883   7.234 -11.527  1.00  0.00
H
ATOM   4082  N   ILE X 262     -13.548   5.199  -9.698  1.00  0.00
N
ATOM   4083  CA  ILE X 262     -12.377   5.339  -8.844  1.00  0.00
C
ATOM   4084  C   ILE X 262     -11.379   6.323  -9.444  1.00  0.00
C
ATOM   4085  O   ILE X 262     -10.775   7.122  -8.725  1.00  0.00
O
ATOM   4086  CB  ILE X 262     -11.679   3.986  -8.617  1.00  0.00
C
ATOM   4087  CG1 ILE X 262     -12.589   3.041  -7.829  1.00  0.00
C
ATOM   4088  CG2 ILE X 262     -10.357   4.184  -7.890  1.00  0.00
C
ATOM   4089  CD1 ILE X 262     -12.963   3.556  -6.458  1.00  0.00
C
ATOM   4090  H   ILE X 262     -13.735   4.310 -10.142  1.00  0.00
H
ATOM   4091  HA  ILE X 262     -12.652   5.771  -7.884  1.00  0.00
H
ATOM   4092  HB  ILE X 262     -11.495   3.513  -9.581  1.00  0.00
H
ATOM   4093 1HG1 ILE X 262     -13.494   2.893  -8.420  1.00  0.00
H
ATOM   4094 2HG1 ILE X 262     -12.064   2.091  -7.728  1.00  0.00
H
ATOM   4095 1HG2 ILE X 262      -9.878   3.218  -7.735  1.00  0.00
H
ATOM   4096 2HG2 ILE X 262      -9.706   4.820  -8.486  1.00  0.00
H
ATOM   4097 3HG2 ILE X 262     -10.540   4.655  -6.924  1.00  0.00
H
ATOM   4098 1HD1 ILE X 262     -13.610   2.833  -5.960  1.00  0.00
H
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ATOM   4099 2HD1 ILE X 262     -12.061   3.702  -5.864  1.00  0.00
H
ATOM   4100 3HD1 ILE X 262     -13.491   4.503  -6.554  1.00  0.00
H
ATOM   4101  N   PHE X 263     -11.194   6.270 -10.759  1.00  0.00
N
ATOM   4102  CA  PHE X 263     -10.272   7.202 -11.403  1.00  0.00
C
ATOM   4103  C   PHE X 263     -10.730   8.635 -11.117  1.00  0.00
C
ATOM   4104  O   PHE X 263      -9.918   9.509 -10.809  1.00  0.00
O
ATOM   4105  CB  PHE X 263     -10.202   6.931 -12.908  1.00  0.00
C
ATOM   4106  CG  PHE X 263      -9.197   5.882 -13.289  1.00  0.00
C
ATOM   4107  CD1 PHE X 263      -9.585   4.752 -13.990  1.00  0.00
C
ATOM   4108  CD2 PHE X 263      -7.860   6.025 -12.947  1.00  0.00
C
ATOM   4109  CE1 PHE X 263      -8.662   3.785 -14.342  1.00  0.00
C
ATOM   4110  CE2 PHE X 263      -6.934   5.061 -13.297  1.00  0.00
C
ATOM   4111  CZ  PHE X 263      -7.335   3.941 -13.996  1.00  0.00
C
ATOM   4112  H   PHE X 263     -11.691   5.585 -11.313  1.00  0.00
H
ATOM   4113  HA  PHE X 263      -9.273   7.085 -10.981  1.00  0.00
H
ATOM   4114 1HB  PHE X 263     -11.169   6.584 -13.271  1.00  0.00
H
ATOM   4115 2HB  PHE X 263      -9.921   7.840 -13.439  1.00  0.00
H
ATOM   4116  HD1 PHE X 263     -10.633   4.628 -14.265  1.00  0.00
H
ATOM   4117  HD2 PHE X 263      -7.543   6.911 -12.394  1.00  0.00
H
ATOM   4118  HE1 PHE X 263      -8.981   2.901 -14.893  1.00  0.00
H
ATOM   4119  HE2 PHE X 263      -5.887   5.186 -13.023  1.00  0.00
H
ATOM   4120  HZ  PHE X 263      -6.607   3.180 -14.272  1.00  0.00
H
ATOM   4121  N   THR X 264     -12.034   8.874 -11.197  1.00  0.00
N
ATOM   4122  CA  THR X 264     -12.570  10.202 -10.923  1.00  0.00
C
ATOM   4123  C   THR X 264     -12.290  10.635  -9.484  1.00  0.00
C
ATOM   4124  O   THR X 264     -11.891  11.775  -9.235  1.00  0.00
O
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ATOM   4125  CB  THR X 264     -14.089  10.261 -11.175  1.00  0.00
C
ATOM   4126  CG2 THR X 264     -14.631  11.642 -10.844  1.00  0.00
C
ATOM   4127  OG1 THR X 264     -14.359   9.962 -12.552  1.00  0.00
O
ATOM   4128  H   THR X 264     -12.663   8.125 -11.451  1.00  0.00
H
ATOM   4129  HA  THR X 264     -12.081  10.936 -11.563  1.00  0.00
H
ATOM   4130  HB  THR X 264     -14.581   9.517 -10.549  1.00  0.00
H
ATOM   4131  HG1 THR X 264     -14.035   9.083 -12.757  1.00  0.00
H
ATOM   4132 1HG2 THR X 264     -15.705  11.664 -11.029  1.00  0.00
H
ATOM   4133 2HG2 THR X 264     -14.437  11.866  -9.796  1.00  0.00
H
ATOM   4134 3HG2 THR X 264     -14.140  12.385 -11.472  1.00  0.00
H
ATOM   4135  N   VAL X 265     -12.512   9.731  -8.531  1.00  0.00
N
ATOM   4136  CA  VAL X 265     -12.272  10.050  -7.131  1.00  0.00
C
ATOM   4137  C   VAL X 265     -10.790  10.355  -6.911  1.00  0.00
C
ATOM   4138  O   VAL X 265     -10.445  11.232  -6.116  1.00  0.00
O
ATOM   4139  CB  VAL X 265     -12.711   8.899  -6.206  1.00  0.00
C
ATOM   4140  CG1 VAL X 265     -12.271   9.170  -4.776  1.00  0.00
C
ATOM   4141  CG2 VAL X 265     -14.218   8.707  -6.270  1.00  0.00
C
ATOM   4142  H   VAL X 265     -12.850   8.813  -8.782  1.00  0.00
H
ATOM   4143  HA  VAL X 265     -12.803  10.956  -6.835  1.00  0.00
H
ATOM   4144  HB  VAL X 265     -12.258   7.971  -6.557  1.00  0.00
H
ATOM   4145 1HG1 VAL X 265     -12.588   8.346  -4.135  1.00  0.00
H
ATOM   4146 2HG1 VAL X 265     -11.185   9.258  -4.739  1.00  0.00
H
ATOM   4147 3HG1 VAL X 265     -12.724  10.096  -4.425  1.00  0.00
H
ATOM   4148 1HG2 VAL X 265     -14.510   7.890  -5.613  1.00  0.00
H
ATOM   4149 2HG2 VAL X 265     -14.715   9.624  -5.955  1.00  0.00
H
ATOM   4150 3HG2 VAL X 265     -14.511   8.470  -7.293  1.00  0.00
H
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ATOM   4151  N   ILE X 266      -9.912   9.638  -7.613  1.00  0.00
N
ATOM   4152  CA  ILE X 266      -8.479   9.893  -7.483  1.00  0.00
C
ATOM   4153  C   ILE X 266      -8.184  11.326  -7.945  1.00  0.00
C
ATOM   4154  O   ILE X 266      -7.474  12.078  -7.275  1.00  0.00
O
ATOM   4155  CB  ILE X 266      -7.649   8.887  -8.302  1.00  0.00
C
ATOM   4156  CG1 ILE X 266      -7.753   7.487  -7.690  1.00  0.00
C
ATOM   4157  CG2 ILE X 266      -6.197   9.332  -8.377  1.00  0.00
C
ATOM   4158  CD1 ILE X 266      -7.234   6.388  -8.587  1.00  0.00
C
ATOM   4159  H   ILE X 266     -10.238   8.915  -8.238  1.00  0.00
H
ATOM   4160  HA  ILE X 266      -8.174   9.850  -6.438  1.00  0.00
H
ATOM   4161  HB  ILE X 266      -8.063   8.821  -9.307  1.00  0.00
H
ATOM   4162 1HG1 ILE X 266      -7.184   7.496  -6.760  1.00  0.00
H
ATOM   4163 2HG1 ILE X 266      -8.805   7.308  -7.467  1.00  0.00
H
ATOM   4164 1HG2 ILE X 266      -5.625   8.608  -8.958  1.00  0.00
H
ATOM   4165 2HG2 ILE X 266      -6.140  10.308  -8.856  1.00  0.00
H
ATOM   4166 3HG2 ILE X 266      -5.782   9.396  -7.371  1.00  0.00
H
ATOM   4167 1HD1 ILE X 266      -7.341   5.426  -8.085  1.00  0.00
H
ATOM   4168 2HD1 ILE X 266      -7.804   6.376  -9.517  1.00  0.00
H
ATOM   4169 3HD1 ILE X 266      -6.183   6.564  -8.809  1.00  0.00
H
ATOM   4170  N   TYR X 267      -8.741  11.700  -9.092  1.00  0.00
N
ATOM   4171  CA  TYR X 267      -8.528  13.039  -9.621  1.00  0.00
C
ATOM   4172  C   TYR X 267      -9.025  14.112  -8.650  1.00  0.00
C
ATOM   4173  O   TYR X 267      -8.351  15.118  -8.435  1.00  0.00
O
ATOM   4174  CB  TYR X 267      -9.225  13.197 -10.974  1.00  0.00
C
ATOM   4175  CG  TYR X 267      -8.990  14.538 -11.633  1.00  0.00
C
ATOM   4176  CD1 TYR X 267      -7.737  14.884 -12.118  1.00  0.00
C
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ATOM   4177  CD2 TYR X 267     -10.023  15.453 -11.771  1.00  0.00
C
ATOM   4178  CE1 TYR X 267      -7.516  16.107 -12.719  1.00  0.00
C
ATOM   4179  CE2 TYR X 267      -9.812  16.680 -12.372  1.00  0.00
C
ATOM   4180  CZ  TYR X 267      -8.558  17.003 -12.846  1.00  0.00
C
ATOM   4181  OH  TYR X 267      -8.344  18.222 -13.445  1.00  0.00
O
ATOM   4182  H   TYR X 267      -9.318  11.048  -9.602  1.00  0.00
H
ATOM   4183  HA  TYR X 267      -7.461  13.219  -9.757  1.00  0.00
H
ATOM   4184 1HB  TYR X 267      -8.854  12.402 -11.623  1.00  0.00
H
ATOM   4185 2HB  TYR X 267     -10.293  13.058 -10.804  1.00  0.00
H
ATOM   4186  HD1 TYR X 267      -6.918  14.170 -12.014  1.00  0.00
H
ATOM   4187  HD2 TYR X 267     -11.012  15.192 -11.394  1.00  0.00
H
ATOM   4188  HE1 TYR X 267      -6.526  16.365 -13.096  1.00  0.00
H
ATOM   4189  HE2 TYR X 267     -10.636  17.387 -12.469  1.00  0.00
H
ATOM   4190  HH  TYR X 267      -7.436  18.342 -13.736  1.00  0.00
H
ATOM   4191  N   PHE X 268     -10.191  13.884  -8.054  1.00  0.00
N
ATOM   4192  CA  PHE X 268     -10.775  14.859  -7.134  1.00  0.00
C
ATOM   4193  C   PHE X 268      -9.990  14.968  -5.828  1.00  0.00
C
ATOM   4194  O   PHE X 268      -9.861  16.058  -5.267  1.00  0.00
O
ATOM   4195  CB  PHE X 268     -12.229  14.500  -6.827  1.00  0.00
C
ATOM   4196  CG  PHE X 268     -13.167  14.733  -7.976  1.00  0.00
C
ATOM   4197  CD1 PHE X 268     -12.697  15.222  -9.185  1.00  0.00
C
ATOM   4198  CD2 PHE X 268     -14.522  14.463  -7.852  1.00  0.00
C
ATOM   4199  CE1 PHE X 268     -13.560  15.436 -10.244  1.00  0.00
C
ATOM   4200  CE2 PHE X 268     -15.387  14.676  -8.907  1.00  0.00
C
ATOM   4201  CZ  PHE X 268     -14.903  15.163 -10.105  1.00  0.00
C
ATOM   4202  H   PHE X 268     -10.683  13.021  -8.239  1.00  0.00
H
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ATOM   4203  HA  PHE X 268     -10.750  15.853  -7.583  1.00  0.00
H
ATOM   4204 1HB  PHE X 268     -12.309  13.445  -6.567  1.00  0.00
H
ATOM   4205 2HB  PHE X 268     -12.597  15.105  -5.997  1.00  0.00
H
ATOM   4206  HD1 PHE X 268     -11.634  15.437  -9.295  1.00  0.00
H
ATOM   4207  HD2 PHE X 268     -14.903  14.078  -6.903  1.00  0.00
H
ATOM   4208  HE1 PHE X 268     -13.177  15.821 -11.189  1.00  0.00
H
ATOM   4209  HE2 PHE X 268     -16.449  14.459  -8.796  1.00  0.00
H
ATOM   4210  HZ  PHE X 268     -15.585  15.333 -10.938  1.00  0.00
H
ATOM   4211  N   SER X 269      -9.466  13.851  -5.347  1.00  0.00
N
ATOM   4212  CA  SER X 269      -8.681  13.858  -4.118  1.00  0.00
C
ATOM   4213  C   SER X 269      -7.358  14.593  -4.339  1.00  0.00
C
ATOM   4214  O   SER X 269      -6.937  15.398  -3.515  1.00  0.00
O
ATOM   4215  CB  SER X 269      -8.440  12.438  -3.644  1.00  0.00
C
ATOM   4216  OG  SER X 269      -9.625  11.811  -3.239  1.00  0.00
O
ATOM   4217  H   SER X 269      -9.612  12.981  -5.838  1.00  0.00
H
ATOM   4218  HA  SER X 269      -9.215  14.281  -3.265  1.00  0.00
H
ATOM   4219 1HB  SER X 269      -7.998  11.869  -4.461  1.00  0.00
H
ATOM   4220 2HB  SER X 269      -7.747  12.464  -2.804  1.00  0.00
H
ATOM   4221  HG  SER X 269     -10.239  11.780  -3.976  1.00  0.00
H
ATOM   4222  N   ILE X 270      -6.712  14.320  -5.467  1.00  0.00
N
ATOM   4223  CA  ILE X 270      -5.428  14.935  -5.774  1.00  0.00
C
ATOM   4224  C   ILE X 270      -5.492  16.361  -6.309  1.00  0.00
C
ATOM   4225  O   ILE X 270      -4.808  17.256  -5.805  1.00  0.00
O
ATOM   4226  CB  ILE X 270      -4.640  14.111  -6.809  1.00  0.00
C
ATOM   4227  CG1 ILE X 270      -4.383  12.697  -6.281  1.00  0.00
C
ATOM   4228  CG2 ILE X 270      -3.328  14.800  -7.150  1.00  0.00
C
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ATOM   4229  CD1 ILE X 270      -3.813  11.752  -7.315  1.00  0.00
C
ATOM   4230  H   ILE X 270      -7.120  13.673  -6.126  1.00  0.00
H
ATOM   4231  HA  ILE X 270      -4.831  15.049  -4.870  1.00  0.00
H
ATOM   4232  HB  ILE X 270      -5.240  14.005  -7.712  1.00  0.00
H
ATOM   4233 1HG1 ILE X 270      -3.689  12.783  -5.445  1.00  0.00
H
ATOM   4234 2HG1 ILE X 270      -5.336  12.308  -5.922  1.00  0.00
H
ATOM   4235 1HG2 ILE X 270      -2.782  14.205  -7.881  1.00  0.00
H
ATOM   4236 2HG2 ILE X 270      -3.533  15.786  -7.566  1.00  0.00
H
ATOM   4237 3HG2 ILE X 270      -2.726  14.906  -6.247  1.00  0.00
H
ATOM   4238 1HD1 ILE X 270      -3.659  10.771  -6.867  1.00  0.00
H
ATOM   4239 2HD1 ILE X 270      -4.507  11.665  -8.151  1.00  0.00
H
ATOM   4240 3HD1 ILE X 270      -2.861  12.139  -7.675  1.00  0.00
H
ATOM   4241  N   TRP X 271      -6.310  16.572  -7.331  1.00  0.00
N
ATOM   4242  CA  TRP X 271      -6.428  17.882  -7.962  1.00  0.00
C
ATOM   4243  C   TRP X 271      -7.235  18.837  -7.089  1.00  0.00
C
ATOM   4244  O   TRP X 271      -8.464  18.853  -7.143  1.00  0.00
O
ATOM   4245  CB  TRP X 271      -7.076  17.753  -9.341  1.00  0.00
C
ATOM   4246  CG  TRP X 271      -6.965  18.995 -10.173  1.00  0.00
C
ATOM   4247  CD1 TRP X 271      -7.952  19.897 -10.429  1.00  0.00
C
ATOM   4248  CD2 TRP X 271      -5.799  19.470 -10.859  1.00  0.00
C
ATOM   4249  CE2 TRP X 271      -6.155  20.664 -11.508  1.00  0.00
C
ATOM   4250  CE3 TRP X 271      -4.487  18.998 -10.986  1.00  0.00
C
ATOM   4251  NE1 TRP X 271      -7.478  20.904 -11.231  1.00  0.00
N
ATOM   4252  CZ2 TRP X 271      -5.256  21.393 -12.272  1.00  0.00
C
ATOM   4253  CZ3 TRP X 271      -3.585  19.729 -11.750  1.00  0.00
C
ATOM   4254  CH2 TRP X 271      -3.958  20.894 -12.374  1.00  0.00
C
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ATOM   4255  H   TRP X 271      -6.866  15.806  -7.682  1.00  0.00
H
ATOM   4256  HA  TRP X 271      -5.440  18.326  -8.081  1.00  0.00
H
ATOM   4257 1HB  TRP X 271      -6.600  16.954  -9.909  1.00  0.00
H
ATOM   4258 2HB  TRP X 271      -8.141  17.541  -9.238  1.00  0.00
H
ATOM   4259  HD1 TRP X 271      -8.926  19.700  -9.982  1.00  0.00
H
ATOM   4260  HE1 TRP X 271      -8.014  21.694 -11.564  1.00  0.00
H
ATOM   4261  HE3 TRP X 271      -4.136  18.082 -10.510  1.00  0.00
H
ATOM   4262  HZ2 TRP X 271      -5.594  22.313 -12.749  1.00  0.00
H
ATOM   4263  HZ3 TRP X 271      -2.565  19.350 -11.840  1.00  0.00
H
ATOM   4264  HH2 TRP X 271      -3.220  21.436 -12.962  1.00  0.00
H
ATOM   4265  N   LYS X 272      -6.532  19.633  -6.288  1.00  0.00
N
ATOM   4266  CA  LYS X 272      -7.182  20.556  -5.365  1.00  0.00
C
ATOM   4267  C   LYS X 272      -7.927  21.652  -6.114  1.00  0.00
C
ATOM   4268  O   LYS X 272      -8.720  22.389  -5.528  1.00  0.00
O
ATOM   4269  CB  LYS X 272      -6.155  21.175  -4.415  1.00  0.00
C
ATOM   4270  CG  LYS X 272      -5.524  20.188  -3.443  1.00  0.00
C
ATOM   4271  CD  LYS X 272      -4.520  20.875  -2.530  1.00  0.00
C
ATOM   4272  CE  LYS X 272      -3.896  19.892  -1.551  1.00  0.00
C
ATOM   4273  NZ  LYS X 272      -2.905  20.549  -0.658  1.00  0.00
N
ATOM   4274  H   LYS X 272      -5.523  19.597  -6.320  1.00  0.00
H
ATOM   4275  HA  LYS X 272      -7.927  20.023  -4.773  1.00  0.00
H
ATOM   4276 1HB  LYS X 272      -5.378  21.623  -5.034  1.00  0.00
H
ATOM   4277 2HB  LYS X 272      -6.669  21.957  -3.854  1.00  0.00
H
ATOM   4278 1HG  LYS X 272      -6.314  19.738  -2.842  1.00  0.00
H
ATOM   4279 2HG  LYS X 272      -5.020  19.411  -4.018  1.00  0.00
H
ATOM   4280 1HD  LYS X 272      -3.738  21.321  -3.147  1.00  0.00
H
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ATOM   4281 2HD  LYS X 272      -5.035  21.659  -1.976  1.00  0.00
H
ATOM   4282 1HE  LYS X 272      -4.692  19.455  -0.951  1.00  0.00
H
ATOM   4283 2HE  LYS X 272      -3.402  19.106  -2.124  1.00  0.00
H
ATOM   4284 1HZ  LYS X 272      -2.515  19.864  -0.025  1.00  0.00
H
ATOM   4285 2HZ  LYS X 272      -2.164  20.954  -1.214  1.00  0.00
H
ATOM   4286 3HZ  LYS X 272      -3.361  21.276  -0.126  1.00  0.00
H
ATOM   4287  N   GLY X 273      -7.674  21.753  -7.414  1.00  0.00
N
ATOM   4288  CA  GLY X 273      -8.396  22.687  -8.269  1.00  0.00
C
ATOM   4289  C   GLY X 273      -9.895  22.440  -8.210  1.00  0.00
C
ATOM   4290  O   GLY X 273     -10.695  23.347  -8.451  1.00  0.00
O
ATOM   4291  H   GLY X 273      -6.959  21.166  -7.821  1.00  0.00
H
ATOM   4292 1HA  GLY X 273      -8.191  23.705  -7.939  1.00  0.00
H
ATOM   4293 2HA  GLY X 273      -8.056  22.564  -9.297  1.00  0.00
H
ATOM   4294  N   VAL X 274     -10.273  21.205  -7.897  1.00  0.00
N
ATOM   4295  CA  VAL X 274     -11.681  20.849  -7.750  1.00  0.00
C
ATOM   4296  C   VAL X 274     -12.315  21.570  -6.570  1.00  0.00
C
ATOM   4297  O   VAL X 274     -11.971  21.311  -5.417  1.00  0.00
O
ATOM   4298  CB  VAL X 274     -11.864  19.331  -7.565  1.00  0.00
C
ATOM   4299  CG1 VAL X 274     -13.339  18.985  -7.429  1.00  0.00
C
ATOM   4300  CG2 VAL X 274     -11.247  18.574  -8.732  1.00  0.00
C
ATOM   4301  H   VAL X 274      -9.568  20.495  -7.757  1.00  0.00
H
ATOM   4302  HA  VAL X 274     -12.263  21.167  -8.616  1.00  0.00
H
ATOM   4303  HB  VAL X 274     -11.331  19.017  -6.667  1.00  0.00
H
ATOM   4304 1HG1 VAL X 274     -13.449  17.908  -7.298  1.00  0.00
H
ATOM   4305 2HG1 VAL X 274     -13.754  19.498  -6.561  1.00  0.00
H
ATOM   4306 3HG1 VAL X 274     -13.870  19.297  -8.327  1.00  0.00
H
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ATOM   4307 1HG2 VAL X 274     -11.384  17.503  -8.585  1.00  0.00
H
ATOM   4308 2HG2 VAL X 274     -11.731  18.879  -9.659  1.00  0.00
H
ATOM   4309 3HG2 VAL X 274     -10.180  18.798  -8.788  1.00  0.00
H
ATOM   4310  N   LYS X 275     -13.236  22.478  -6.863  1.00  0.00
N
ATOM   4311  CA  LYS X 275     -13.918  23.243  -5.826  1.00  0.00
C
ATOM   4312  C   LYS X 275     -14.865  22.360  -5.023  1.00  0.00
C
ATOM   4313  O   LYS X 275     -15.126  22.622  -3.849  1.00  0.00
O
ATOM   4314  CB  LYS X 275     -14.687  24.414  -6.441  1.00  0.00
C
ATOM   4315  CG  LYS X 275     -13.804  25.511  -7.024  1.00  0.00
C
ATOM   4316  CD  LYS X 275     -14.638  26.631  -7.626  1.00  0.00
C
ATOM   4317  CE  LYS X 275     -13.755  27.732  -8.198  1.00  0.00
C
ATOM   4318  NZ  LYS X 275     -14.558  28.824  -8.811  1.00  0.00
N
ATOM   4319  H   LYS X 275     -13.473  22.645  -7.832  1.00  0.00
H
ATOM   4320  HA  LYS X 275     -13.188  23.640  -5.119  1.00  0.00
H
ATOM   4321 1HB  LYS X 275     -15.320  24.002  -7.229  1.00  0.00
H
ATOM   4322 2HB  LYS X 275     -15.314  24.834  -5.655  1.00  0.00
H
ATOM   4323 1HG  LYS X 275     -13.178  25.910  -6.224  1.00  0.00
H
ATOM   4324 2HG  LYS X 275     -13.171  25.072  -7.794  1.00  0.00
H
ATOM   4325 1HD  LYS X 275     -15.260  26.214  -8.419  1.00  0.00
H
ATOM   4326 2HD  LYS X 275     -15.276  27.046  -6.847  1.00  0.00
H
ATOM   4327 1HE  LYS X 275     -13.148  28.137  -7.390  1.00  0.00
H
ATOM   4328 2HE  LYS X 275     -13.107  27.290  -8.954  1.00  0.00
H
ATOM   4329 1HZ  LYS X 275     -13.937  29.532  -9.179  1.00  0.00
H
ATOM   4330 2HZ  LYS X 275     -15.122  28.449  -9.562  1.00  0.00
H
ATOM   4331 3HZ  LYS X 275     -15.159  29.235  -8.111  1.00  0.00
H
ATOM   4332  N   THR X 276     -15.374  21.307  -5.654  1.00  0.00
N
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ATOM   4333  CA  THR X 276     -16.306  20.389  -5.006  1.00  0.00
C
ATOM   4334  C   THR X 276     -15.578  19.445  -4.057  1.00  0.00
C
ATOM   4335  O   THR X 276     -16.210  18.700  -3.309  1.00  0.00
O
ATOM   4336  CB  THR X 276     -17.090  19.558  -6.038  1.00  0.00
C
ATOM   4337  CG2 THR X 276     -17.872  20.468  -6.973  1.00  0.00
C
ATOM   4338  OG1 THR X 276     -16.181  18.759  -6.804  1.00  0.00
O
ATOM   4339  H   THR X 276     -15.107  21.135  -6.613  1.00  0.00
H
ATOM   4340  HA  THR X 276     -17.015  20.951  -4.398  1.00  0.00
H
ATOM   4341  HB  THR X 276     -17.783  18.901  -5.511  1.00  0.00
H
ATOM   4342  HG1 THR X 276     -15.701  18.168  -6.218  1.00  0.00
H
ATOM   4343 1HG2 THR X 276     -18.421  19.863  -7.695  1.00  0.00
H
ATOM   4344 2HG2 THR X 276     -18.573  21.070  -6.393  1.00  0.00
H
ATOM   4345 3HG2 THR X 276     -17.181  21.126  -7.500  1.00  0.00
H
ATOM   4346  N   SER X 277     -14.253  19.484  -4.093  1.00  0.00
N
ATOM   4347  CA  SER X 277     -13.437  18.612  -3.253  1.00  0.00
C
ATOM   4348  C   SER X 277     -12.915  19.361  -2.032  1.00  0.00
C
ATOM   4349  O   SER X 277     -12.749  20.577  -2.061  1.00  0.00
O
ATOM   4350  CB  SER X 277     -12.286  18.040  -4.057  1.00  0.00
C
ATOM   4351  OG  SER X 277     -11.422  17.271  -3.265  1.00  0.00
O
ATOM   4352  H   SER X 277     -13.797  20.134  -4.716  1.00  0.00
H
ATOM   4353  HA  SER X 277     -13.955  17.703  -2.941  1.00  0.00
H
ATOM   4354 1HB  SER X 277     -12.692  17.414  -4.850  1.00  0.00
H
ATOM   4355 2HB  SER X 277     -11.724  18.862  -4.497  1.00  0.00
H
ATOM   4356  HG  SER X 277     -10.710  16.929  -3.810  1.00  0.00
H
ATOM   4357  N   GLY X 278     -12.660  18.619  -0.959  1.00  0.00
N
ATOM   4358  CA  GLY X 278     -12.050  19.189   0.236  1.00  0.00
C
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ATOM   4359  C   GLY X 278     -11.967  18.164   1.358  1.00  0.00
C
ATOM   4360  O   GLY X 278     -12.596  17.106   1.293  1.00  0.00
O
ATOM   4361  H   GLY X 278     -12.895  17.637  -0.972  1.00  0.00
H
ATOM   4362 1HA  GLY X 278     -11.043  19.531  -0.006  1.00  0.00
H
ATOM   4363 2HA  GLY X 278     -12.648  20.035   0.574  1.00  0.00
H
ATOM   4364  N   LYS X 279     -11.187  18.477   2.388  1.00  0.00
N
ATOM   4365  CA  LYS X 279     -11.100  17.628   3.570  1.00  0.00
C
ATOM   4366  C   LYS X 279     -10.857  16.171   3.184  1.00  0.00
C
ATOM   4367  O   LYS X 279     -11.359  15.258   3.836  1.00  0.00
O
ATOM   4368  CB  LYS X 279     -12.372  17.744   4.410  1.00  0.00
C
ATOM   4369  CG  LYS X 279     -12.658  19.149   4.928  1.00  0.00
C
ATOM   4370  CD  LYS X 279     -13.904  19.175   5.799  1.00  0.00
C
ATOM   4371  CE  LYS X 279     -14.240  20.591   6.243  1.00  0.00
C
ATOM   4372  NZ  LYS X 279     -15.505  20.643   7.025  1.00  0.00
N
ATOM   4373  H   LYS X 279     -10.640  19.326   2.352  1.00  0.00
H
ATOM   4374  HA  LYS X 279     -10.251  17.934   4.183  1.00  0.00
H
ATOM   4375 1HB  LYS X 279     -13.201  17.415   3.782  1.00  0.00
H
ATOM   4376 2HB  LYS X 279     -12.264  17.063   5.253  1.00  0.00
H
ATOM   4377 1HG  LYS X 279     -11.799  19.483   5.511  1.00  0.00
H
ATOM   4378 2HG  LYS X 279     -12.795  19.811   4.075  1.00  0.00
H
ATOM   4379 1HD  LYS X 279     -14.738  18.766   5.224  1.00  0.00
H
ATOM   4380 2HD  LYS X 279     -13.729  18.551   6.674  1.00  0.00
H
ATOM   4381 1HE  LYS X 279     -13.420  20.959   6.857  1.00  0.00
H
ATOM   4382 2HE  LYS X 279     -14.337  21.214   5.355  1.00  0.00
H
ATOM   4383 1HZ  LYS X 279     -15.691  21.597   7.301  1.00  0.00
H
ATOM   4384 2HZ  LYS X 279     -16.267  20.301   6.458  1.00  0.00
H
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ATOM   4385 3HZ  LYS X 279     -15.415  20.066   7.850  1.00  0.00
H
ATOM   4386  N   VAL X 280     -10.090  15.967   2.121  1.00  0.00
N
ATOM   4387  CA  VAL X 280      -9.754  14.625   1.664  1.00  0.00
C
ATOM   4388  C   VAL X 280      -9.067  13.824   2.763  1.00  0.00
C
ATOM   4389  O   VAL X 280      -9.511  12.732   3.120  1.00  0.00
O
ATOM   4390  CB  VAL X 280      -8.841  14.661   0.425  1.00  0.00
C
ATOM   4391  CG1 VAL X 280      -8.396  13.256   0.050  1.00  0.00
C
ATOM   4392  CG2 VAL X 280      -9.556  15.320  -0.745  1.00  0.00
C
ATOM   4393  H   VAL X 280      -9.729  16.763   1.615  1.00  0.00
H
ATOM   4394  HA  VAL X 280     -10.651  14.052   1.420  1.00  0.00
H
ATOM   4395  HB  VAL X 280      -7.967  15.272   0.646  1.00  0.00
H
ATOM   4396 1HG1 VAL X 280      -7.751  13.299  -0.829  1.00  0.00
H
ATOM   4397 2HG1 VAL X 280      -7.845  12.815   0.881  1.00  0.00
H
ATOM   4398 3HG1 VAL X 280      -9.270  12.644  -0.173  1.00  0.00
H
ATOM   4399 1HG2 VAL X 280      -8.897  15.338  -1.612  1.00  0.00
H
ATOM   4400 2HG2 VAL X 280     -10.458  14.756  -0.984  1.00  0.00
H
ATOM   4401 3HG2 VAL X 280      -9.829  16.341  -0.476  1.00  0.00
H
ATOM   4402  N   VAL X 281      -7.983  14.371   3.296  1.00  0.00
N
ATOM   4403  CA  VAL X 281      -7.215  13.696   4.335  1.00  0.00
C
ATOM   4404  C   VAL X 281      -7.945  13.735   5.673  1.00  0.00
C
ATOM   4405  O   VAL X 281      -7.948  12.754   6.416  1.00  0.00
O
ATOM   4406  CB  VAL X 281      -5.819  14.323   4.504  1.00  0.00
C
ATOM   4407  CG1 VAL X 281      -5.104  13.714   5.701  1.00  0.00
C
ATOM   4408  CG2 VAL X 281      -4.994  14.137   3.240  1.00  0.00
C
ATOM   4409  H   VAL X 281      -7.681  15.280   2.973  1.00  0.00
H
ATOM   4410  HA  VAL X 281      -7.094  12.635   4.113  1.00  0.00
H
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ATOM   4411  HB  VAL X 281      -5.929  15.397   4.655  1.00  0.00
H
ATOM   4412 1HG1 VAL X 281      -4.118  14.169   5.806  1.00  0.00
H
ATOM   4413 2HG1 VAL X 281      -5.685  13.896   6.604  1.00  0.00
H
ATOM   4414 3HG1 VAL X 281      -4.992  12.641   5.550  1.00  0.00
H
ATOM   4415 1HG2 VAL X 281      -4.011  14.587   3.377  1.00  0.00
H
ATOM   4416 2HG2 VAL X 281      -4.880  13.073   3.034  1.00  0.00
H
ATOM   4417 3HG2 VAL X 281      -5.499  14.618   2.401  1.00  0.00
H
ATOM   4418  N   TRP X 282      -8.560  14.873   5.970  1.00  0.00
N
ATOM   4419  CA  TRP X 282      -9.283  15.015   7.228  1.00  0.00
C
ATOM   4420  C   TRP X 282     -10.339  13.927   7.389  1.00  0.00
C
ATOM   4421  O   TRP X 282     -10.523  13.381   8.479  1.00  0.00
O
ATOM   4422  CB  TRP X 282      -9.937  16.394   7.316  1.00  0.00
C
ATOM   4423  CG  TRP X 282      -8.975  17.493   7.649  1.00  0.00
C
ATOM   4424  CD1 TRP X 282      -8.535  18.473   6.811  1.00  0.00
C
ATOM   4425  CD2 TRP X 282      -8.334  17.724   8.910  1.00  0.00
C
ATOM   4426  CE2 TRP X 282      -7.522  18.862   8.762  1.00  0.00
C
ATOM   4427  CE3 TRP X 282      -8.373  17.078  10.152  1.00  0.00
C
ATOM   4428  NE1 TRP X 282      -7.660  19.301   7.470  1.00  0.00
N
ATOM   4429  CZ2 TRP X 282      -6.754  19.366   9.801  1.00  0.00
C
ATOM   4430  CZ3 TRP X 282      -7.604  17.585  11.193  1.00  0.00
C
ATOM   4431  CH2 TRP X 282      -6.818  18.697  11.021  1.00  0.00
C
ATOM   4432  H   TRP X 282      -8.527  15.646   5.320  1.00  0.00
H
ATOM   4433  HA  TRP X 282      -8.593  14.903   8.065  1.00  0.00
H
ATOM   4434 1HB  TRP X 282     -10.393  16.656   6.360  1.00  0.00
H
ATOM   4435 2HB  TRP X 282     -10.700  16.399   8.094  1.00  0.00
H
ATOM   4436  HD1 TRP X 282      -8.920  18.461   5.794  1.00  0.00
H
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ATOM   4437  HE1 TRP X 282      -7.192  20.102   7.069  1.00  0.00
H
ATOM   4438  HE3 TRP X 282      -8.982  16.195  10.341  1.00  0.00
H
ATOM   4439  HZ2 TRP X 282      -6.142  20.252   9.622  1.00  0.00
H
ATOM   4440  HZ3 TRP X 282      -7.641  17.071  12.154  1.00  0.00
H
ATOM   4441  HH2 TRP X 282      -6.230  19.061  11.864  1.00  0.00
H
ATOM   4442  N   VAL X 283     -11.023  13.612   6.298  1.00  0.00
N
ATOM   4443  CA  VAL X 283     -12.057  12.585   6.310  1.00  0.00
C
ATOM   4444  C   VAL X 283     -11.451  11.194   6.132  1.00  0.00
C
ATOM   4445  O   VAL X 283     -11.579  10.321   6.994  1.00  0.00
O
ATOM   4446  CB  VAL X 283     -13.104  12.826   5.207  1.00  0.00
C
ATOM   4447  CG1 VAL X 283     -14.066  11.650   5.119  1.00  0.00
C
ATOM   4448  CG2 VAL X 283     -13.868  14.116   5.467  1.00  0.00
C
ATOM   4449  H   VAL X 283     -10.823  14.097   5.435  1.00  0.00
H
ATOM   4450  HA  VAL X 283     -12.568  12.548   7.273  1.00  0.00
H
ATOM   4451  HB  VAL X 283     -12.592  12.948   4.252  1.00  0.00
H
ATOM   4452 1HG1 VAL X 283     -14.799  11.836   4.334  1.00  0.00
H
ATOM   4453 2HG1 VAL X 283     -13.509  10.741   4.886  1.00  0.00
H
ATOM   4454 3HG1 VAL X 283     -14.579  11.528   6.073  1.00  0.00
H
ATOM   4455 1HG2 VAL X 283     -14.602  14.272   4.679  1.00  0.00
H
ATOM   4456 2HG2 VAL X 283     -14.375  14.050   6.429  1.00  0.00
H
ATOM   4457 3HG2 VAL X 283     -13.169  14.954   5.483  1.00  0.00
H
ATOM   4458  N   THR X 284     -10.780  10.999   5.002  1.00  0.00
N
ATOM   4459  CA  THR X 284     -10.185   9.709   4.677  1.00  0.00
C
ATOM   4460  C   THR X 284      -9.281   9.095   5.738  1.00  0.00
C
ATOM   4461  O   THR X 284      -9.307   7.882   5.943  1.00  0.00
O
ATOM   4462  CB  THR X 284      -9.345   9.783   3.388  1.00  0.00
C
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ATOM   4463  CG2 THR X 284      -8.687   8.441   3.102  1.00  0.00
C
ATOM   4464  OG1 THR X 284     -10.186  10.145   2.286  1.00  0.00
O
ATOM   4465  H   THR X 284     -10.679  11.765   4.350  1.00  0.00
H
ATOM   4466  HA  THR X 284     -10.970   8.964   4.541  1.00  0.00
H
ATOM   4467  HB  THR X 284      -8.574  10.544   3.512  1.00  0.00
H
ATOM   4468  HG1 THR X 284     -10.587  11.001   2.457  1.00  0.00
H
ATOM   4469 1HG2 THR X 284      -8.099   8.515   2.187  1.00  0.00
H
ATOM   4470 2HG2 THR X 284      -8.038   8.170   3.933  1.00  0.00
H
ATOM   4471 3HG2 THR X 284      -9.457   7.681   2.978  1.00  0.00
H
ATOM   4472  N   ALA X 285      -8.482   9.910   6.418  1.00  0.00
N
ATOM   4473  CA  ALA X 285      -7.576   9.353   7.412  1.00  0.00
C
ATOM   4474  C   ALA X 285      -8.213   9.127   8.777  1.00  0.00
C
ATOM   4475  O   ALA X 285      -7.586   8.548   9.663  1.00  0.00
O
ATOM   4476  CB  ALA X 285      -6.357  10.248   7.578  1.00  0.00
C
ATOM   4477  H   ALA X 285      -8.503  10.905   6.246  1.00  0.00
H
ATOM   4478  HA  ALA X 285      -7.243   8.373   7.072  1.00  0.00
H
ATOM   4479 1HB  ALA X 285      -5.690   9.819   8.325  1.00  0.00
H
ATOM   4480 2HB  ALA X 285      -5.832  10.331   6.626  1.00  0.00
H
ATOM   4481 3HB  ALA X 285      -6.674  11.238   7.905  1.00  0.00
H
ATOM   4482  N   THR X 286      -9.459   9.587   8.977  1.00  0.00
N
ATOM   4483  CA  THR X 286     -10.090   9.363  10.283  1.00  0.00
C
ATOM   4484  C   THR X 286     -11.368   8.546  10.092  1.00  0.00
C
ATOM   4485  O   THR X 286     -11.998   8.113  11.059  1.00  0.00
O
ATOM   4486  CB  THR X 286     -10.413  10.691  10.991  1.00  0.00
C
ATOM   4487  CG2 THR X 286      -9.143  11.500  11.212  1.00  0.00
C
ATOM   4488  OG1 THR X 286     -11.325  11.453  10.190  1.00  0.00
O
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ATOM   4489  H   THR X 286      -9.951  10.076   8.244  1.00  0.00
H
ATOM   4490  HA  THR X 286      -9.424   8.781  10.921  1.00  0.00
H
ATOM   4491  HB  THR X 286     -10.878  10.477  11.952  1.00  0.00
H
ATOM   4492  HG1 THR X 286     -10.927  11.636   9.336  1.00  0.00
H
ATOM   4493 1HG2 THR X 286      -9.391  12.435  11.713  1.00  0.00
H
ATOM   4494 2HG2 THR X 286      -8.452  10.927  11.830  1.00  0.00
H
ATOM   4495 3HG2 THR X 286      -8.678  11.715  10.251  1.00  0.00
H
ATOM   4496  N   PHE X 287     -11.744   8.337   8.835  1.00  0.00
N
ATOM   4497  CA  PHE X 287     -12.938   7.559   8.508  1.00  0.00
C
ATOM   4498  C   PHE X 287     -12.808   6.150   9.084  1.00  0.00
C
ATOM   4499  O   PHE X 287     -13.630   5.716   9.894  1.00  0.00
O
ATOM   4500  CB  PHE X 287     -13.147   7.513   6.993  1.00  0.00
C
ATOM   4501  CG  PHE X 287     -14.402   6.802   6.577  1.00  0.00
C
ATOM   4502  CD1 PHE X 287     -15.607   7.484   6.491  1.00  0.00
C
ATOM   4503  CD2 PHE X 287     -14.383   5.449   6.271  1.00  0.00
C
ATOM   4504  CE1 PHE X 287     -16.763   6.831   6.107  1.00  0.00
C
ATOM   4505  CE2 PHE X 287     -15.536   4.795   5.887  1.00  0.00
C
ATOM   4506  CZ  PHE X 287     -16.729   5.487   5.805  1.00  0.00
C
ATOM   4507  H   PHE X 287     -11.190   8.725   8.085  1.00  0.00
H
ATOM   4508  HA  PHE X 287     -13.815   8.017   8.967  1.00  0.00
H
ATOM   4509 1HB  PHE X 287     -13.213   8.523   6.593  1.00  0.00
H
ATOM   4510 2HB  PHE X 287     -12.320   6.988   6.517  1.00  0.00
H
ATOM   4511  HD1 PHE X 287     -15.634   8.548   6.727  1.00  0.00
H
ATOM   4512  HD2 PHE X 287     -13.441   4.903   6.336  1.00  0.00
H
ATOM   4513  HE1 PHE X 287     -17.702   7.380   6.042  1.00  0.00
H
ATOM   4514  HE2 PHE X 287     -15.507   3.731   5.649  1.00  0.00
H
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ATOM   4515  HZ  PHE X 287     -17.639   4.972   5.503  1.00  0.00
H
ATOM   4516  N   PRO X 288     -11.764   5.445   8.660  1.00  0.00
N
ATOM   4517  CA  PRO X 288     -11.503   4.083   9.117  1.00  0.00
C
ATOM   4518  C   PRO X 288     -11.376   4.040  10.640  1.00  0.00
C
ATOM   4519  O   PRO X 288     -11.788   3.075  11.280  1.00  0.00
O
ATOM   4520  CB  PRO X 288     -10.195   3.694   8.409  1.00  0.00
C
ATOM   4521  CG  PRO X 288     -10.174   4.519   7.151  1.00  0.00
C
ATOM   4522  CD  PRO X 288     -10.691   5.955   7.799  1.00  0.00
C
ATOM   4523  HA  PRO X 288     -12.248   3.481   8.842  1.00  0.00
H
ATOM   4524 1HB  PRO X 288      -9.579   4.063   8.976  1.00  0.00
H
ATOM   4525 2HB  PRO X 288     -10.365   2.876   8.184  1.00  0.00
H
ATOM   4526 1HG  PRO X 288      -9.973   5.316   7.356  1.00  0.00
H
ATOM   4527 2HG  PRO X 288      -9.894   3.960   6.452  1.00  0.00
H
ATOM   4528 1HD  PRO X 288     -10.525   6.832   8.136  1.00  0.00
H
ATOM   4529 2HD  PRO X 288     -11.064   5.879   6.926  1.00  0.00
H
ATOM   4530  N   TYR X 289     -10.805   5.092  11.221  1.00  0.00
N
ATOM   4531  CA  TYR X 289     -10.634   5.162  12.667  1.00  0.00
C
ATOM   4532  C   TYR X 289     -11.981   5.084  13.383  1.00  0.00
C
ATOM   4533  O   TYR X 289     -12.067   4.606  14.517  1.00  0.00
O
ATOM   4534  CB  TYR X 289      -9.901   6.448  13.059  1.00  0.00
C
ATOM   4535  CG  TYR X 289      -8.406   6.393  12.839  1.00  0.00
C
ATOM   4536  CD1 TYR X 289      -7.749   5.178  12.712  1.00  0.00
C
ATOM   4537  CD2 TYR X 289      -7.657   7.556  12.761  1.00  0.00
C
ATOM   4538  CE1 TYR X 289      -6.382   5.123  12.511  1.00  0.00
C
ATOM   4539  CE2 TYR X 289      -6.289   7.514  12.560  1.00  0.00
C
ATOM   4540  CZ  TYR X 289      -5.657   6.294  12.437  1.00  0.00
C
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ATOM   4541  OH  TYR X 289      -4.296   6.244  12.237  1.00  0.00
O
ATOM   4542  H   TYR X 289     -10.484   5.859  10.647  1.00  0.00
H
ATOM   4543  HA  TYR X 289     -10.047   4.310  13.012  1.00  0.00
H
ATOM   4544 1HB  TYR X 289     -10.327   7.256  12.462  1.00  0.00
H
ATOM   4545 2HB  TYR X 289     -10.109   6.628  14.113  1.00  0.00
H
ATOM   4546  HD1 TYR X 289      -8.329   4.257  12.771  1.00  0.00
H
ATOM   4547  HD2 TYR X 289      -8.163   8.517  12.860  1.00  0.00
H
ATOM   4548  HE1 TYR X 289      -5.879   4.161  12.413  1.00  0.00
H
ATOM   4549  HE2 TYR X 289      -5.718   8.440  12.502  1.00  0.00
H
ATOM   4550  HH  TYR X 289      -3.959   5.349  12.165  1.00  0.00
H
ATOM   4551  N   ILE X 290     -13.030   5.545  12.711  1.00  0.00
N
ATOM   4552  CA  ILE X 290     -14.370   5.537  13.288  1.00  0.00
C
ATOM   4553  C   ILE X 290     -15.133   4.249  12.983  1.00  0.00
C
ATOM   4554  O   ILE X 290     -15.843   3.723  13.844  1.00  0.00
O
ATOM   4555  CB  ILE X 290     -15.210   6.727  12.785  1.00  0.00
C
ATOM   4556  CG1 ILE X 290     -14.577   8.049  13.227  1.00  0.00
C
ATOM   4557  CG2 ILE X 290     -16.639   6.620  13.292  1.00  0.00
C
ATOM   4558  CD1 ILE X 290     -15.124   9.259  12.503  1.00  0.00
C
ATOM   4559  H   ILE X 290     -12.897   5.909  11.778  1.00  0.00
H
ATOM   4560  HA  ILE X 290     -14.321   5.563  14.376  1.00  0.00
H
ATOM   4561  HB  ILE X 290     -15.208   6.726  11.696  1.00  0.00
H
ATOM   4562 1HG1 ILE X 290     -14.756   8.154  14.297  1.00  0.00
H
ATOM   4563 2HG1 ILE X 290     -13.505   7.971  13.045  1.00  0.00
H
ATOM   4564 1HG2 ILE X 290     -17.218   7.470  12.927  1.00  0.00
H
ATOM   4565 2HG2 ILE X 290     -17.086   5.696  12.930  1.00  0.00
H
ATOM   4566 3HG2 ILE X 290     -16.640   6.623  14.382  1.00  0.00
H
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ATOM   4567 1HD1 ILE X 290     -14.627  10.158  12.870  1.00  0.00
H
ATOM   4568 2HD1 ILE X 290     -14.944   9.155  11.433  1.00  0.00
H
ATOM   4569 3HD1 ILE X 290     -16.195   9.338  12.684  1.00  0.00
H
ATOM   4570  N   ILE X 291     -14.984   3.746  11.765  1.00  0.00
N
ATOM   4571  CA  ILE X 291     -15.658   2.510  11.375  1.00  0.00
C
ATOM   4572  C   ILE X 291     -15.190   1.362  12.267  1.00  0.00
C
ATOM   4573  O   ILE X 291     -15.961   0.457  12.587  1.00  0.00
O
ATOM   4574  CB  ILE X 291     -15.398   2.166   9.897  1.00  0.00
C
ATOM   4575  CG1 ILE X 291     -15.863   3.310   8.994  1.00  0.00
C
ATOM   4576  CG2 ILE X 291     -16.097   0.868   9.522  1.00  0.00
C
ATOM   4577  CD1 ILE X 291     -17.292   3.737   9.235  1.00  0.00
C
ATOM   4578  H   ILE X 291     -14.397   4.224  11.097  1.00  0.00
H
ATOM   4579  HA  ILE X 291     -16.731   2.589  11.545  1.00  0.00
H
ATOM   4580  HB  ILE X 291     -14.323   2.059   9.741  1.00  0.00
H
ATOM   4581 1HG1 ILE X 291     -15.195   4.153   9.168  1.00  0.00
H
ATOM   4582 2HG1 ILE X 291     -15.754   2.971   7.962  1.00  0.00
H
ATOM   4583 1HG2 ILE X 291     -15.902   0.639   8.475  1.00  0.00
H
ATOM   4584 2HG2 ILE X 291     -15.719   0.058  10.146  1.00  0.00
H
ATOM   4585 3HG2 ILE X 291     -17.170   0.974   9.677  1.00  0.00
H
ATOM   4586 1HD1 ILE X 291     -17.549   4.551   8.556  1.00  0.00
H
ATOM   4587 2HD1 ILE X 291     -17.960   2.894   9.059  1.00  0.00
H
ATOM   4588 3HD1 ILE X 291     -17.401   4.077  10.264  1.00  0.00
H
ATOM   4589  N   LEU X 292     -13.921   1.406  12.669  1.00  0.00
N
ATOM   4590  CA  LEU X 292     -13.359   0.360  13.513  1.00  0.00
C
ATOM   4591  C   LEU X 292     -14.083   0.256  14.854  1.00  0.00
C
ATOM   4592  O   LEU X 292     -13.988  -0.758  15.538  1.00  0.00
O
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ATOM   4593  CB  LEU X 292     -11.863   0.613  13.744  1.00  0.00
C
ATOM   4594  CG  LEU X 292     -10.964   0.369  12.525  1.00  0.00
C
ATOM   4595  CD1 LEU X 292      -9.567   0.914  12.790  1.00  0.00
C
ATOM   4596  CD2 LEU X 292     -10.913  -1.120  12.219  1.00  0.00
C
ATOM   4597  H   LEU X 292     -13.338   2.180  12.384  1.00  0.00
H
ATOM   4598  HA  LEU X 292     -13.483  -0.607  13.027  1.00  0.00
H
ATOM   4599 1HB  LEU X 292     -11.897   1.676  13.977  1.00  0.00
H
ATOM   4600 2HB  LEU X 292     -11.489   0.063  14.608  1.00  0.00
H
ATOM   4601  HG  LEU X 292     -11.429   0.870  11.675  1.00  0.00
H
ATOM   4602 1HD1 LEU X 292      -8.936   0.737  11.919  1.00  0.00
H
ATOM   4603 2HD1 LEU X 292      -9.625   1.985  12.984  1.00  0.00
H
ATOM   4604 3HD1 LEU X 292      -9.139   0.410  13.656  1.00  0.00
H
ATOM   4605 1HD2 LEU X 292     -10.275  -1.291  11.352  1.00  0.00
H
ATOM   4606 2HD2 LEU X 292     -10.510  -1.655  13.080  1.00  0.00
H
ATOM   4607 3HD2 LEU X 292     -11.920  -1.482  12.005  1.00  0.00
H
ATOM   4608  N   SER X 293     -14.793   1.309  15.234  1.00  0.00
N
ATOM   4609  CA  SER X 293     -15.514   1.286  16.503  1.00  0.00
C
ATOM   4610  C   SER X 293     -16.645   0.262  16.436  1.00  0.00
C
ATOM   4611  O   SER X 293     -16.676  -0.694  17.214  1.00  0.00
O
ATOM   4612  CB  SER X 293     -16.046   2.668  16.827  1.00  0.00
C
ATOM   4613  OG  SER X 293     -16.735   2.694  18.047  1.00  0.00
O
ATOM   4614  H   SER X 293     -14.835   2.128  14.645  1.00  0.00
H
ATOM   4615  HA  SER X 293     -14.870   1.094  17.364  1.00  0.00
H
ATOM   4616 1HB  SER X 293     -15.207   3.361  16.879  1.00  0.00
H
ATOM   4617 2HB  SER X 293     -16.723   2.977  16.031  1.00  0.00
H
ATOM   4618  HG  SER X 293     -17.055   3.585  18.214  1.00  0.00
H
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ATOM   4619  N   VAL X 294     -17.563   0.444  15.495  1.00  0.00
N
ATOM   4620  CA  VAL X 294     -18.675  -0.484  15.338  1.00  0.00
C
ATOM   4621  C   VAL X 294     -18.175  -1.886  14.989  1.00  0.00
C
ATOM   4622  O   VAL X 294     -18.830  -2.884  15.286  1.00  0.00
O
ATOM   4623  CB  VAL X 294     -19.656  -0.012  14.247  1.00  0.00
C
ATOM   4624  CG1 VAL X 294     -18.996  -0.069  12.877  1.00  0.00
C
ATOM   4625  CG2 VAL X 294     -20.920  -0.858  14.265  1.00  0.00
C
ATOM   4626  H   VAL X 294     -17.489   1.240  14.877  1.00  0.00
H
ATOM   4627  HA  VAL X 294     -19.224  -0.607  16.271  1.00  0.00
H
ATOM   4628  HB  VAL X 294     -19.959   1.012  14.463  1.00  0.00
H
ATOM   4629 1HG1 VAL X 294     -19.704   0.268  12.119  1.00  0.00
H
ATOM   4630 2HG1 VAL X 294     -18.120   0.578  12.868  1.00  0.00
H
ATOM   4631 3HG1 VAL X 294     -18.695  -1.094  12.661  1.00  0.00
H
ATOM   4632 1HG2 VAL X 294     -21.602  -0.512  13.489  1.00  0.00
H
ATOM   4633 2HG2 VAL X 294     -20.661  -1.902  14.081  1.00  0.00
H
ATOM   4634 3HG2 VAL X 294     -21.403  -0.771  15.238  1.00  0.00
H
ATOM   4635  N   LEU X 295     -17.011  -1.960  14.354  1.00  0.00
N
ATOM   4636  CA  LEU X 295     -16.446  -3.250  13.978  1.00  0.00
C
ATOM   4637  C   LEU X 295     -16.007  -4.049  15.198  1.00  0.00
C
ATOM   4638  O   LEU X 295     -16.229  -5.252  15.264  1.00  0.00
O
ATOM   4639  CB  LEU X 295     -15.261  -3.051  13.023  1.00  0.00
C
ATOM   4640  CG  LEU X 295     -15.635  -2.609  11.602  1.00  0.00
C
ATOM   4641  CD1 LEU X 295     -14.376  -2.321  10.797  1.00  0.00
C
ATOM   4642  CD2 LEU X 295     -16.465  -3.695  10.934  1.00  0.00
C
ATOM   4643  H   LEU X 295     -16.512  -1.111  14.128  1.00  0.00
H
ATOM   4644  HA  LEU X 295     -17.206  -3.850  13.478  1.00  0.00
H
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ATOM   4645 1HB  LEU X 295     -14.749  -2.242  13.542  1.00  0.00
H
ATOM   4646 2HB  LEU X 295     -14.617  -3.928  12.992  1.00  0.00
H
ATOM   4647  HG  LEU X 295     -16.260  -1.721  11.693  1.00  0.00
H
ATOM   4648 1HD1 LEU X 295     -14.651  -2.008   9.790  1.00  0.00
H
ATOM   4649 2HD1 LEU X 295     -13.810  -1.525  11.281  1.00  0.00
H
ATOM   4650 3HD1 LEU X 295     -13.765  -3.221  10.743  1.00  0.00
H
ATOM   4651 1HD2 LEU X 295     -16.730  -3.380   9.925  1.00  0.00
H
ATOM   4652 2HD2 LEU X 295     -15.888  -4.618  10.886  1.00  0.00
H
ATOM   4653 3HD2 LEU X 295     -17.374  -3.866  11.511  1.00  0.00
H
ATOM   4654  N   LEU X 296     -15.373  -3.388  16.160  1.00  0.00
N
ATOM   4655  CA  LEU X 296     -14.945  -4.090  17.362  1.00  0.00
C
ATOM   4656  C   LEU X 296     -16.162  -4.367  18.245  1.00  0.00
C
ATOM   4657  O   LEU X 296     -16.314  -5.466  18.778  1.00  0.00
O
ATOM   4658  CB  LEU X 296     -13.888  -3.266  18.108  1.00  0.00
C
ATOM   4659  CG  LEU X 296     -12.990  -4.066  19.061  1.00  0.00
C
ATOM   4660  CD1 LEU X 296     -11.945  -3.152  19.686  1.00  0.00
C
ATOM   4661  CD2 LEU X 296     -13.845  -4.721  20.135  1.00  0.00
C
ATOM   4662  H   LEU X 296     -15.189  -2.400  16.058  1.00  0.00
H
ATOM   4663  HA  LEU X 296     -14.514  -5.052  17.089  1.00  0.00
H
ATOM   4664 1HB  LEU X 296     -13.307  -2.911  17.258  1.00  0.00
H
ATOM   4665 2HB  LEU X 296     -14.330  -2.416  18.626  1.00  0.00
H
ATOM   4666  HG  LEU X 296     -12.524  -4.860  18.477  1.00  0.00
H
ATOM   4667 1HD1 LEU X 296     -11.314  -3.728  20.361  1.00  0.00
H
ATOM   4668 2HD1 LEU X 296     -11.330  -2.713  18.901  1.00  0.00
H
ATOM   4669 3HD1 LEU X 296     -12.444  -2.359  20.244  1.00  0.00
H
ATOM   4670 1HD2 LEU X 296     -13.207  -5.291  20.812  1.00  0.00
H
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ATOM   4671 2HD2 LEU X 296     -14.376  -3.952  20.698  1.00  0.00
H
ATOM   4672 3HD2 LEU X 296     -14.566  -5.393  19.669  1.00  0.00
H
ATOM   4673  N   VAL X 297     -17.025  -3.372  18.379  1.00  0.00
N
ATOM   4674  CA  VAL X 297     -18.233  -3.507  19.195  1.00  0.00
C
ATOM   4675  C   VAL X 297     -19.084  -4.685  18.718  1.00  0.00
C
ATOM   4676  O   VAL X 297     -19.565  -5.482  19.526  1.00  0.00
O
ATOM   4677  CB  VAL X 297     -19.081  -2.222  19.167  1.00  0.00
C
ATOM   4678  CG1 VAL X 297     -20.444  -2.470  19.798  1.00  0.00
C
ATOM   4679  CG2 VAL X 297     -18.361  -1.092  19.884  1.00  0.00
C
ATOM   4680  H   VAL X 297     -16.845  -2.498  17.907  1.00  0.00
H
ATOM   4681  HA  VAL X 297     -17.987  -3.738  20.232  1.00  0.00
H
ATOM   4682  HB  VAL X 297     -19.213  -1.908  18.131  1.00  0.00
H
ATOM   4683 1HG1 VAL X 297     -21.030  -1.551  19.769  1.00  0.00
H
ATOM   4684 2HG1 VAL X 297     -20.965  -3.251  19.244  1.00  0.00
H
ATOM   4685 3HG1 VAL X 297     -20.313  -2.784  20.834  1.00  0.00
H
ATOM   4686 1HG2 VAL X 297     -18.974  -0.192  19.854  1.00  0.00
H
ATOM   4687 2HG2 VAL X 297     -18.183  -1.375  20.922  1.00  0.00
H
ATOM   4688 3HG2 VAL X 297     -17.408  -0.897  19.392  1.00  0.00
H
ATOM   4689  N   ARG X 298     -19.256  -4.809  17.406  1.00  0.00
N
ATOM   4690  CA  ARG X 298     -20.048  -5.909  16.873  1.00  0.00
C
ATOM   4691  C   ARG X 298     -19.486  -7.251  17.336  1.00  0.00
C
ATOM   4692  O   ARG X 298     -20.228  -8.126  17.776  1.00  0.00
O
ATOM   4693  CB  ARG X 298     -20.178  -5.843  15.360  1.00  0.00
C
ATOM   4694  CG  ARG X 298     -20.755  -7.092  14.711  1.00  0.00
C
ATOM   4695  CD  ARG X 298     -22.046  -7.543  15.294  1.00  0.00
C
ATOM   4696  NE  ARG X 298     -23.160  -6.637  15.064  1.00  0.00
N
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ATOM   4697  CZ  ARG X 298     -24.347  -6.709  15.697  1.00  0.00
C
ATOM   4698  NH1 ARG X 298     -24.593  -7.663  16.569  1.00  0.00
N
ATOM   4699  NH2 ARG X 298     -25.268  -5.810  15.401  1.00  0.00
N
ATOM   4700  H   ARG X 298     -18.837  -4.139  16.778  1.00  0.00
H
ATOM   4701  HA  ARG X 298     -21.069  -5.848  17.252  1.00  0.00
H
ATOM   4702 1HB  ARG X 298     -20.817  -4.991  15.132  1.00  0.00
H
ATOM   4703 2HB  ARG X 298     -19.179  -5.664  14.962  1.00  0.00
H
ATOM   4704 1HG  ARG X 298     -20.918  -6.890  13.652  1.00  0.00
H
ATOM   4705 2HG  ARG X 298     -20.035  -7.903  14.819  1.00  0.00
H
ATOM   4706 1HD  ARG X 298     -22.311  -8.505  14.860  1.00  0.00
H
ATOM   4707 2HD  ARG X 298     -21.928  -7.651  16.372  1.00  0.00
H
ATOM   4708  HE  ARG X 298     -23.231  -5.851  14.434  1.00  0.00
H
ATOM   4709 1HH1 ARG X 298     -23.885  -8.354  16.771  1.00  0.00
H
ATOM   4710 2HH1 ARG X 298     -25.489  -7.700  17.033  1.00  0.00
H
ATOM   4711 1HH2 ARG X 298     -25.069  -5.095  14.715  1.00  0.00
H
ATOM   4712 2HH2 ARG X 298     -26.167  -5.842  15.859  1.00  0.00
H
ATOM   4713  N   GLY X 299     -18.171  -7.417  17.231  1.00  0.00
N
ATOM   4714  CA  GLY X 299     -17.531  -8.660  17.646  1.00  0.00
C
ATOM   4715  C   GLY X 299     -17.666  -8.883  19.150  1.00  0.00
C
ATOM   4716  O   GLY X 299     -17.719 -10.025  19.613  1.00  0.00
O
ATOM   4717  H   GLY X 299     -17.605  -6.669  16.857  1.00  0.00
H
ATOM   4718 1HA  GLY X 299     -17.999  -9.493  17.122  1.00  0.00
H
ATOM   4719 2HA  GLY X 299     -16.474  -8.619  17.389  1.00  0.00
H
ATOM   4720  N   ALA X 300     -17.721  -7.792  19.900  1.00  0.00
N
ATOM   4721  CA  ALA X 300     -17.837  -7.869  21.355  1.00  0.00
C
ATOM   4722  C   ALA X 300     -19.164  -8.453  21.825  1.00  0.00
C
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ATOM   4723  O   ALA X 300     -19.287  -8.881  22.969  1.00  0.00
O
ATOM   4724  CB  ALA X 300     -17.645  -6.492  21.974  1.00  0.00
C
ATOM   4725  H   ALA X 300     -17.683  -6.886  19.456  1.00  0.00
H
ATOM   4726  HA  ALA X 300     -17.060  -8.532  21.733  1.00  0.00
H
ATOM   4727 1HB  ALA X 300     -17.734  -6.567  23.060  1.00  0.00
H
ATOM   4728 2HB  ALA X 300     -16.656  -6.113  21.718  1.00  0.00
H
ATOM   4729 3HB  ALA X 300     -18.405  -5.812  21.595  1.00  0.00
H
ATOM   4730  N   THR X 301     -20.158  -8.473  20.937  1.00  0.00
N
ATOM   4731  CA  THR X 301     -21.466  -9.024  21.267  1.00  0.00
C
ATOM   4732  C   THR X 301     -21.455 -10.546  21.200  1.00  0.00
C
ATOM   4733  O   THR X 301     -22.369 -11.207  21.695  1.00  0.00
O
ATOM   4734  CB  THR X 301     -22.560  -8.487  20.324  1.00  0.00
C
ATOM   4735  CG2 THR X 301     -22.566  -6.966  20.327  1.00  0.00
C
ATOM   4736  OG1 THR X 301     -22.320  -8.957  18.992  1.00  0.00
O
ATOM   4737  H   THR X 301     -20.001  -8.098  20.012  1.00  0.00
H
ATOM   4738  HA  THR X 301     -21.729  -8.762  22.292  1.00  0.00
H
ATOM   4739  HB  THR X 301     -23.529  -8.854  20.660  1.00  0.00
H
ATOM   4740  HG1 THR X 301     -22.334  -9.919  18.985  1.00  0.00
H
ATOM   4741 1HG2 THR X 301     -23.347  -6.606  19.657  1.00  0.00
H
ATOM   4742 2HG2 THR X 301     -22.762  -6.606  21.337  1.00  0.00
H
ATOM   4743 3HG2 THR X 301     -21.599  -6.599  19.990  1.00  0.00
H
ATOM   4744  N   LEU X 302     -20.414 -11.099  20.584  1.00  0.00
N
ATOM   4745  CA  LEU X 302     -20.288 -12.543  20.438  1.00  0.00
C
ATOM   4746  C   LEU X 302     -19.808 -13.188  21.733  1.00  0.00
C
ATOM   4747  O   LEU X 302     -19.017 -12.604  22.472  1.00  0.00
O
ATOM   4748  CB  LEU X 302     -19.329 -12.878  19.288  1.00  0.00
C
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ATOM   4749  CG  LEU X 302     -19.817 -12.471  17.893  1.00  0.00
C
ATOM   4750  CD1 LEU X 302     -18.665 -12.532  16.898  1.00  0.00
C
ATOM   4751  CD2 LEU X 302     -20.950 -13.390  17.462  1.00  0.00
C
ATOM   4752  H   LEU X 302     -19.692 -10.501  20.208  1.00  0.00
H
ATOM   4753  HA  LEU X 302     -21.264 -12.975  20.221  1.00  0.00
H
ATOM   4754 1HB  LEU X 302     -18.480 -12.262  19.581  1.00  0.00
H
ATOM   4755 2HB  LEU X 302     -19.037 -13.928  19.299  1.00  0.00
H
ATOM   4756  HG  LEU X 302     -20.219 -11.460  17.972  1.00  0.00
H
ATOM   4757 1HD1 LEU X 302     -19.021 -12.241  15.910  1.00  0.00
H
ATOM   4758 2HD1 LEU X 302     -17.875 -11.850  17.213  1.00  0.00
H
ATOM   4759 3HD1 LEU X 302     -18.273 -13.548  16.858  1.00  0.00
H
ATOM   4760 1HD2 LEU X 302     -21.296 -13.099  16.470  1.00  0.00
H
ATOM   4761 2HD2 LEU X 302     -20.595 -14.420  17.436  1.00  0.00
H
ATOM   4762 3HD2 LEU X 302     -21.774 -13.310  18.171  1.00  0.00
H
ATOM   4763  N   PRO X 303     -20.292 -14.396  22.004  1.00  0.00
N
ATOM   4764  CA  PRO X 303     -19.716 -15.237  23.047  1.00  0.00
C
ATOM   4765  C   PRO X 303     -18.235 -15.490  22.792  1.00  0.00
C
ATOM   4766  O   PRO X 303     -17.835 -15.848  21.683  1.00  0.00
O
ATOM   4767  CB  PRO X 303     -20.544 -16.531  22.987  1.00  0.00
C
ATOM   4768  CG  PRO X 303     -21.872 -16.115  22.418  1.00  0.00
C
ATOM   4769  CD  PRO X 303     -21.347 -15.089  21.252  1.00  0.00
C
ATOM   4770  HA  PRO X 303     -19.811 -14.796  23.934  1.00  0.00
H
ATOM   4771 1HB  PRO X 303     -20.105 -16.984  22.324  1.00  0.00
H
ATOM   4772 2HB  PRO X 303     -20.659 -16.694  23.829  1.00  0.00
H
ATOM   4773 1HG  PRO X 303     -21.780 -15.988  21.585  1.00  0.00
H
ATOM   4774 2HG  PRO X 303     -22.539 -16.545  22.916  1.00  0.00
H
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ATOM   4775 1HD  PRO X 303     -21.145 -14.896  20.342  1.00  0.00
H
ATOM   4776 2HD  PRO X 303     -22.145 -14.718  21.617  1.00  0.00
H
ATOM   4777  N   GLY X 304     -17.421 -15.299  23.827  1.00  0.00
N
ATOM   4778  CA  GLY X 304     -15.979 -15.475  23.710  1.00  0.00
C
ATOM   4779  C   GLY X 304     -15.242 -14.159  23.916  1.00  0.00
C
ATOM   4780  O   GLY X 304     -15.597 -13.142  23.318  1.00  0.00
O
ATOM   4781  H   GLY X 304     -17.813 -15.024  24.716  1.00  0.00
H
ATOM   4782 1HA  GLY X 304     -15.646 -16.189  24.464  1.00  0.00
H
ATOM   4783 2HA  GLY X 304     -15.747 -15.861  22.719  1.00  0.00
H
ATOM   4784  N   ALA X 305     -14.285 -14.084  24.857  1.00  0.00
N
ATOM   4785  CA  ALA X 305     -13.521 -12.857  25.043  1.00  0.00
C
ATOM   4786  C   ALA X 305     -12.250 -12.863  24.206  1.00  0.00
C
ATOM   4787  O   ALA X 305     -11.520 -11.872  24.159  1.00  0.00
O
ATOM   4788  CB  ALA X 305     -13.188 -12.659  26.515  1.00  0.00
C
ATOM   4789  H   ALA X 305     -14.093 -14.885  25.441  1.00  0.00
H
ATOM   4790  HA  ALA X 305     -14.126 -12.015  24.708  1.00  0.00
H
ATOM   4791 1HB  ALA X 305     -12.617 -11.738  26.636  1.00  0.00
H
ATOM   4792 2HB  ALA X 305     -14.110 -12.593  27.092  1.00  0.00
H
ATOM   4793 3HB  ALA X 305     -12.596 -13.501  26.869  1.00  0.00
H
ATOM   4794  N   TRP X 306     -11.990 -13.985  23.543  1.00  0.00
N
ATOM   4795  CA  TRP X 306     -10.759 -14.157  22.781  1.00  0.00
C
ATOM   4796  C   TRP X 306      -9.540 -13.793  23.618  1.00  0.00
C
ATOM   4797  O   TRP X 306      -8.779 -12.891  23.262  1.00  0.00
O
ATOM   4798  CB  TRP X 306     -10.795 -13.308  21.508  1.00  0.00
C
ATOM   4799  CG  TRP X 306      -9.990 -13.881  20.383  1.00  0.00
C
ATOM   4800  CD1 TRP X 306      -8.746 -13.489  19.988  1.00  0.00
C
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ATOM   4801  CD2 TRP X 306     -10.370 -14.950  19.507  1.00  0.00
C
ATOM   4802  CE2 TRP X 306      -9.309 -15.151  18.608  1.00  0.00
C
ATOM   4803  CE3 TRP X 306     -11.510 -15.757  19.400  1.00  0.00
C
ATOM   4804  NE1 TRP X 306      -8.327 -14.245  18.920  1.00  0.00
N
ATOM   4805  CZ2 TRP X 306      -9.348 -16.119  17.616  1.00  0.00
C
ATOM   4806  CZ3 TRP X 306     -11.549 -16.729  18.405  1.00  0.00
C
ATOM   4807  CH2 TRP X 306     -10.499 -16.904  17.540  1.00  0.00
C
ATOM   4808  H   TRP X 306     -12.662 -14.738  23.568  1.00  0.00
H
ATOM   4809  HA  TRP X 306     -10.643 -15.203  22.497  1.00  0.00
H
ATOM   4810 1HB  TRP X 306     -11.819 -13.218  21.146  1.00  0.00
H
ATOM   4811 2HB  TRP X 306     -10.392 -12.315  21.709  1.00  0.00
H
ATOM   4812  HD1 TRP X 306      -8.286 -12.675  20.546  1.00  0.00
H
ATOM   4813  HE1 TRP X 306      -7.442 -14.149  18.443  1.00  0.00
H
ATOM   4814  HE3 TRP X 306     -12.370 -15.662  20.062  1.00  0.00
H
ATOM   4815  HZ2 TRP X 306      -8.493 -16.223  16.949  1.00  0.00
H
ATOM   4816  HZ3 TRP X 306     -12.442 -17.350  18.331  1.00  0.00
H
ATOM   4817  HH2 TRP X 306     -10.570 -17.677  16.775  1.00  0.00
H
ATOM   4818  N   ARG X 307      -9.356 -14.497  24.729  1.00  0.00
N
ATOM   4819  CA  ARG X 307      -8.250 -14.224  25.636  1.00  0.00
C
ATOM   4820  C   ARG X 307      -7.092 -15.187  25.398  1.00  0.00
C
ATOM   4821  O   ARG X 307      -6.043 -15.081  26.029  1.00  0.00
O
ATOM   4822  CB  ARG X 307      -8.689 -14.228  27.091  1.00  0.00
C
ATOM   4823  CG  ARG X 307      -9.636 -13.103  27.478  1.00  0.00
C
ATOM   4824  CD  ARG X 307     -10.172 -13.201  28.861  1.00  0.00
C
ATOM   4825  NE  ARG X 307     -10.937 -14.408  29.126  1.00  0.00
N
ATOM   4826  CZ  ARG X 307     -11.370 -14.787  30.344  1.00  0.00
C
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ATOM   4827  NH1 ARG X 307     -11.084 -14.080  31.414  1.00  0.00
N
ATOM   4828  NH2 ARG X 307     -12.071 -15.905  30.438  1.00  0.00
N
ATOM   4829  H   ARG X 307     -10.000 -15.242  24.950  1.00  0.00
H
ATOM   4830  HA  ARG X 307      -7.863 -13.221  25.453  1.00  0.00
H
ATOM   4831 1HB  ARG X 307      -9.173 -15.185  27.277  1.00  0.00
H
ATOM   4832 2HB  ARG X 307      -7.783 -14.157  27.697  1.00  0.00
H
ATOM   4833 1HG  ARG X 307      -9.105 -12.156  27.391  1.00  0.00
H
ATOM   4834 2HG  ARG X 307     -10.480 -13.111  26.789  1.00  0.00
H
ATOM   4835 1HD  ARG X 307      -9.340 -13.181  29.564  1.00  0.00
H
ATOM   4836 2HD  ARG X 307     -10.826 -12.352  29.047  1.00  0.00
H
ATOM   4837  HE  ARG X 307     -11.257 -15.123  28.485  1.00  0.00
H
ATOM   4838 1HH1 ARG X 307     -10.533 -13.238  31.328  1.00  0.00
H
ATOM   4839 2HH1 ARG X 307     -11.418 -14.382  32.319  1.00  0.00
H
ATOM   4840 1HH2 ARG X 307     -12.268 -16.446  29.608  1.00  0.00
H
ATOM   4841 2HH2 ARG X 307     -12.407 -16.211  31.339  1.00  0.00
H
ATOM   4842  N   GLY X 308      -7.293 -16.128  24.479  1.00  0.00
N
ATOM   4843  CA  GLY X 308      -6.237 -17.054  24.089  1.00  0.00
C
ATOM   4844  C   GLY X 308      -4.961 -16.310  23.711  1.00  0.00
C
ATOM   4845  O   GLY X 308      -3.866 -16.688  24.123  1.00  0.00
O
ATOM   4846  H   GLY X 308      -8.201 -16.205  24.042  1.00  0.00
H
ATOM   4847 1HA  GLY X 308      -6.023 -17.722  24.922  1.00  0.00
H
ATOM   4848 2HA  GLY X 308      -6.573 -17.637  23.233  1.00  0.00
H
ATOM   4849  N   VAL X 309      -5.115 -15.245  22.929  1.00  0.00
N
ATOM   4850  CA  VAL X 309      -3.974 -14.451  22.488  1.00  0.00
C
ATOM   4851  C   VAL X 309      -3.326 -13.720  23.659  1.00  0.00
C
ATOM   4852  O   VAL X 309      -2.162 -13.333  23.593  1.00  0.00
O
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ATOM   4853  CB  VAL X 309      -4.382 -13.423  21.415  1.00  0.00
C
ATOM   4854  CG1 VAL X 309      -5.231 -12.321  22.030  1.00  0.00
C
ATOM   4855  CG2 VAL X 309      -3.150 -12.833  20.747  1.00  0.00
C
ATOM   4856  H   VAL X 309      -6.044 -14.981  22.633  1.00  0.00
H
ATOM   4857  HA  VAL X 309      -3.184 -15.084  22.082  1.00  0.00
H
ATOM   4858  HB  VAL X 309      -4.951 -13.931  20.638  1.00  0.00
H
ATOM   4859 1HG1 VAL X 309      -5.512 -11.603  21.258  1.00  0.00
H
ATOM   4860 2HG1 VAL X 309      -6.131 -12.754  22.465  1.00  0.00
H
ATOM   4861 3HG1 VAL X 309      -4.661 -11.811  22.808  1.00  0.00
H
ATOM   4862 1HG2 VAL X 309      -3.455 -12.110  19.992  1.00  0.00
H
ATOM   4863 2HG2 VAL X 309      -2.533 -12.338  21.496  1.00  0.00
H
ATOM   4864 3HG2 VAL X 309      -2.576 -13.630  20.272  1.00  0.00
H
ATOM   4865  N   LEU X 310      -4.089 -13.536  24.733  1.00  0.00
N
ATOM   4866  CA  LEU X 310      -3.580 -12.885  25.931  1.00  0.00
C
ATOM   4867  C   LEU X 310      -2.937 -13.889  26.877  1.00  0.00
C
ATOM   4868  O   LEU X 310      -2.119 -13.526  27.725  1.00  0.00
O
ATOM   4869  CB  LEU X 310      -4.709 -12.130  26.645  1.00  0.00
C
ATOM   4870  CG  LEU X 310      -5.363 -11.008  25.828  1.00  0.00
C
ATOM   4871  CD1 LEU X 310      -6.531 -10.413  26.600  1.00  0.00
C
ATOM   4872  CD2 LEU X 310      -4.326  -9.941  25.510  1.00  0.00
C
ATOM   4873  H   LEU X 310      -5.047 -13.857  24.717  1.00  0.00
H
ATOM   4874  HA  LEU X 310      -2.799 -12.177  25.658  1.00  0.00
H
ATOM   4875 1HB  LEU X 310      -5.412 -12.950  26.781  1.00  0.00
H
ATOM   4876 2HB  LEU X 310      -4.393 -11.758  27.618  1.00  0.00
H
ATOM   4877  HG  LEU X 310      -5.692 -11.444  24.884  1.00  0.00
H
ATOM   4878 1HD1 LEU X 310      -6.989  -9.617  26.012  1.00  0.00
H
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ATOM   4879 2HD1 LEU X 310      -7.272 -11.188  26.795  1.00  0.00
H
ATOM   4880 3HD1 LEU X 310      -6.174 -10.005  27.545  1.00  0.00
H
ATOM   4881 1HD2 LEU X 310      -4.791  -9.144  24.929  1.00  0.00
H
ATOM   4882 2HD2 LEU X 310      -3.931  -9.529  26.439  1.00  0.00
H
ATOM   4883 3HD2 LEU X 310      -3.513 -10.382  24.934  1.00  0.00
H
ATOM   4884  N   PHE X 311      -3.305 -15.157  26.725  1.00  0.00
N
ATOM   4885  CA  PHE X 311      -2.732 -16.223  27.538  1.00  0.00
C
ATOM   4886  C   PHE X 311      -1.279 -16.482  27.160  1.00  0.00
C
ATOM   4887  O   PHE X 311      -0.478 -16.909  27.992  1.00  0.00
O
ATOM   4888  CB  PHE X 311      -3.553 -17.507  27.391  1.00  0.00
C
ATOM   4889  CG  PHE X 311      -4.935 -17.411  27.967  1.00  0.00
C
ATOM   4890  CD1 PHE X 311      -5.268 -16.393  28.848  1.00  0.00
C
ATOM   4891  CD2 PHE X 311      -5.909 -18.341  27.631  1.00  0.00
C
ATOM   4892  CE1 PHE X 311      -6.540 -16.305  29.379  1.00  0.00
C
ATOM   4893  CE2 PHE X 311      -7.182 -18.254  28.159  1.00  0.00
C
ATOM   4894  CZ  PHE X 311      -7.498 -17.235  29.036  1.00  0.00
C
ATOM   4895  H   PHE X 311      -4.000 -15.387  26.029  1.00  0.00
H
ATOM   4896  HA  PHE X 311      -2.731 -15.928  28.589  1.00  0.00
H
ATOM   4897 1HB  PHE X 311      -3.670 -17.758  26.338  1.00  0.00
H
ATOM   4898 2HB  PHE X 311      -3.056 -18.328  27.907  1.00  0.00
H
ATOM   4899  HD1 PHE X 311      -4.511 -15.657  29.120  1.00  0.00
H
ATOM   4900  HD2 PHE X 311      -5.659 -19.146  26.940  1.00  0.00
H
ATOM   4901  HE1 PHE X 311      -6.787 -15.499  30.070  1.00  0.00
H
ATOM   4902  HE2 PHE X 311      -7.937 -18.991  27.885  1.00  0.00
H
ATOM   4903  HZ  PHE X 311      -8.501 -17.166  29.454  1.00  0.00
H
ATOM   4904  N   TYR X 312      -0.943 -16.222  25.901  1.00  0.00
N
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ATOM   4905  CA  TYR X 312       0.403 -16.471  25.398  1.00  0.00
C
ATOM   4906  C   TYR X 312       1.015 -15.200  24.818  1.00  0.00
C
ATOM   4907  O   TYR X 312       1.250 -15.111  23.611  1.00  0.00
O
ATOM   4908  CB  TYR X 312       0.383 -17.576  24.340  1.00  0.00
C
ATOM   4909  CG  TYR X 312      -0.330 -18.835  24.781  1.00  0.00
C
ATOM   4910  CD1 TYR X 312      -1.576 -19.167  24.269  1.00  0.00
C
ATOM   4911  CD2 TYR X 312       0.246 -19.689  25.709  1.00  0.00
C
ATOM   4912  CE1 TYR X 312      -2.232 -20.315  24.669  1.00  0.00
C
ATOM   4913  CE2 TYR X 312      -0.401 -20.840  26.117  1.00  0.00
C
ATOM   4914  CZ  TYR X 312      -1.641 -21.150  25.594  1.00  0.00
C
ATOM   4915  OH  TYR X 312      -2.287 -22.296  25.996  1.00  0.00
O
ATOM   4916  H   TYR X 312      -1.639 -15.841  25.275  1.00  0.00
H
ATOM   4917  HA  TYR X 312       1.052 -16.784  26.216  1.00  0.00
H
ATOM   4918 1HB  TYR X 312      -0.113 -17.169  23.456  1.00  0.00
H
ATOM   4919 2HB  TYR X 312       1.419 -17.812  24.099  1.00  0.00
H
ATOM   4920  HD1 TYR X 312      -2.037 -18.502  23.538  1.00  0.00
H
ATOM   4921  HD2 TYR X 312       1.224 -19.440  26.120  1.00  0.00
H
ATOM   4922  HE1 TYR X 312      -3.211 -20.562  24.257  1.00  0.00
H
ATOM   4923  HE2 TYR X 312       0.068 -21.499  26.849  1.00  0.00
H
ATOM   4924  HH  TYR X 312      -3.140 -22.413  25.570  1.00  0.00
H
ATOM   4925  N   LEU X 313       1.268 -14.221  25.679  1.00  0.00
N
ATOM   4926  CA  LEU X 313       1.961 -13.006  25.275  1.00  0.00
C
ATOM   4927  C   LEU X 313       3.472 -13.189  25.329  1.00  0.00
C
ATOM   4928  O   LEU X 313       4.229 -12.364  24.817  1.00  0.00
O
ATOM   4929  CB  LEU X 313       1.536 -11.832  26.164  1.00  0.00
C
ATOM   4930  CG  LEU X 313       0.056 -11.440  26.065  1.00  0.00
C
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ATOM   4931  CD1 LEU X 313      -0.269 -10.360  27.087  1.00  0.00
C
ATOM   4932  CD2 LEU X 313      -0.250 -10.958  24.654  1.00  0.00
C
ATOM   4933  H   LEU X 313       0.971 -14.323  26.639  1.00  0.00
H
ATOM   4934  HA  LEU X 313       1.715 -12.772  24.239  1.00  0.00
H
ATOM   4935 1HB  LEU X 313       1.743 -12.263  27.141  1.00  0.00
H
ATOM   4936 2HB  LEU X 313       2.171 -10.959  26.012  1.00  0.00
H
ATOM   4937  HG  LEU X 313      -0.531 -12.343  26.243  1.00  0.00
H
ATOM   4938 1HD1 LEU X 313      -1.322 -10.088  27.009  1.00  0.00
H
ATOM   4939 2HD1 LEU X 313      -0.064 -10.734  28.090  1.00  0.00
H
ATOM   4940 3HD1 LEU X 313       0.346  -9.481  26.894  1.00  0.00
H
ATOM   4941 1HD2 LEU X 313      -1.303 -10.682  24.585  1.00  0.00
H
ATOM   4942 2HD2 LEU X 313       0.371 -10.092  24.423  1.00  0.00
H
ATOM   4943 3HD2 LEU X 313      -0.037 -11.756  23.943  1.00  0.00
H
ATOM   4944  N   LYS X 314       3.910 -14.279  25.955  1.00  0.00
N
ATOM   4945  CA  LYS X 314       5.329 -14.513  26.181  1.00  0.00
C
ATOM   4946  C   LYS X 314       6.089 -14.603  24.865  1.00  0.00
C
ATOM   4947  O   LYS X 314       5.648 -15.263  23.925  1.00  0.00
O
ATOM   4948  CB  LYS X 314       5.538 -15.791  26.996  1.00  0.00
C
ATOM   4949  CG  LYS X 314       5.163 -17.073  26.265  1.00  0.00
C
ATOM   4950  CD  LYS X 314       5.438 -18.298  27.123  1.00  0.00
C
ATOM   4951  CE  LYS X 314       5.115 -19.584  26.372  1.00  0.00
C
ATOM   4952  NZ  LYS X 314       5.336 -20.790  27.215  1.00  0.00
N
ATOM   4953  H   LYS X 314       3.240 -14.961  26.281  1.00  0.00
H
ATOM   4954  HA  LYS X 314       5.759 -13.676  26.731  1.00  0.00
H
ATOM   4955 1HB  LYS X 314       6.593 -15.824  27.272  1.00  0.00
H
ATOM   4956 2HB  LYS X 314       4.931 -15.698  27.897  1.00  0.00
H
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ATOM   4957 1HG  LYS X 314       4.103 -17.033  26.015  1.00  0.00
H
ATOM   4958 2HG  LYS X 314       5.750 -17.131  25.348  1.00  0.00
H
ATOM   4959 1HD  LYS X 314       6.492 -18.297  27.404  1.00  0.00
H
ATOM   4960 2HD  LYS X 314       4.823 -18.240  28.019  1.00  0.00
H
ATOM   4961 1HE  LYS X 314       4.073 -19.544  26.060  1.00  0.00
H
ATOM   4962 2HE  LYS X 314       5.755 -19.634  25.491  1.00  0.00
H
ATOM   4963 1HZ  LYS X 314       5.112 -21.618  26.681  1.00  0.00
H
ATOM   4964 2HZ  LYS X 314       6.304 -20.827  27.504  1.00  0.00
H
ATOM   4965 3HZ  LYS X 314       4.743 -20.744  28.031  1.00  0.00
H
ATOM   4966  N   PRO X 315       7.235 -13.931  24.803  1.00  0.00
N
ATOM   4967  CA  PRO X 315       8.005 -13.845  23.568  1.00  0.00
C
ATOM   4968  C   PRO X 315       8.503 -15.216  23.132  1.00  0.00
C
ATOM   4969  O   PRO X 315       8.812 -15.432  21.961  1.00  0.00
O
ATOM   4970  CB  PRO X 315       9.163 -12.892  23.912  1.00  0.00
C
ATOM   4971  CG  PRO X 315       9.307 -12.981  25.405  1.00  0.00
C
ATOM   4972  CD  PRO X 315       7.859 -13.180  25.901  1.00  0.00
C
ATOM   4973  HA  PRO X 315       7.440 -13.470  22.837  1.00  0.00
H
ATOM   4974 1HB  PRO X 315       9.869 -13.347  23.552  1.00  0.00
H
ATOM   4975 2HB  PRO X 315       8.807 -12.125  23.729  1.00  0.00
H
ATOM   4976 1HG  PRO X 315       9.687 -13.714  25.595  1.00  0.00
H
ATOM   4977 2HG  PRO X 315       9.425 -12.111  25.730  1.00  0.00
H
ATOM   4978 1HD  PRO X 315       7.820 -13.781  26.640  1.00  0.00
H
ATOM   4979 2HD  PRO X 315       7.332 -12.388  25.943  1.00  0.00
H
ATOM   4980  N   ASN X 316       8.580 -16.143  24.082  1.00  0.00
N
ATOM   4981  CA  ASN X 316       9.040 -17.496  23.798  1.00  0.00
C
ATOM   4982  C   ASN X 316       7.971 -18.297  23.066  1.00  0.00
C
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ATOM   4983  O   ASN X 316       8.251 -19.361  22.512  1.00  0.00
O
ATOM   4984  CB  ASN X 316       9.461 -18.216  25.065  1.00  0.00
C
ATOM   4985  CG  ASN X 316      10.737 -17.692  25.664  1.00  0.00
C
ATOM   4986  ND2 ASN X 316      10.959 -18.032  26.908  1.00  0.00
N
ATOM   4987  OD1 ASN X 316      11.546 -17.048  24.986  1.00  0.00
O
ATOM   4988  H   ASN X 316       8.313 -15.904  25.027  1.00  0.00
H
ATOM   4989  HA  ASN X 316       9.907 -17.461  23.137  1.00  0.00
H
ATOM   4990 1HB  ASN X 316       8.744 -18.408  25.864  1.00  0.00
H
ATOM   4991 2HB  ASN X 316       9.678 -19.146  24.539  1.00  0.00
H
ATOM   4992 1HD2 ASN X 316      11.788 -17.718  27.372  1.00  0.00
H
ATOM   4993 2HD2 ASN X 316      10.300 -18.605  27.394  1.00  0.00
H
ATOM   4994  N   TRP X 317       6.746 -17.782  23.067  1.00  0.00
N
ATOM   4995  CA  TRP X 317       5.660 -18.388  22.307  1.00  0.00
C
ATOM   4996  C   TRP X 317       6.014 -18.503  20.830  1.00  0.00
C
ATOM   4997  O   TRP X 317       5.572 -19.425  20.146  1.00  0.00
O
ATOM   4998  CB  TRP X 317       4.374 -17.577  22.474  1.00  0.00
C
ATOM   4999  CG  TRP X 317       3.190 -18.181  21.782  1.00  0.00
C
ATOM   5000  CD1 TRP X 317       2.540 -17.682  20.693  1.00  0.00
C
ATOM   5001  CD2 TRP X 317       2.517 -19.398  22.129  1.00  0.00
C
ATOM   5002  CE2 TRP X 317       1.468 -19.573  21.208  1.00  0.00
C
ATOM   5003  CE3 TRP X 317       2.701 -20.358  23.132  1.00  0.00
C
ATOM   5004  NE1 TRP X 317       1.503 -18.510  20.342  1.00  0.00
N
ATOM   5005  CZ2 TRP X 317       0.609 -20.659  21.259  1.00  0.00
C
ATOM   5006  CZ3 TRP X 317       1.841 -21.448  23.181  1.00  0.00
C
ATOM   5007  CH2 TRP X 317       0.825 -21.594  22.270  1.00  0.00
C
ATOM   5008  H   TRP X 317       6.563 -16.950  23.609  1.00  0.00
H
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ATOM   5009  HA  TRP X 317       5.480 -19.402  22.663  1.00  0.00
H
ATOM   5010 1HB  TRP X 317       4.111 -17.499  23.529  1.00  0.00
H
ATOM   5011 2HB  TRP X 317       4.503 -16.578  22.058  1.00  0.00
H
ATOM   5012  HD1 TRP X 317       2.915 -16.747  20.281  1.00  0.00
H
ATOM   5013  HE1 TRP X 317       0.867 -18.361  19.571  1.00  0.00
H
ATOM   5014  HE3 TRP X 317       3.492 -20.292  23.879  1.00  0.00
H
ATOM   5015  HZ2 TRP X 317      -0.184 -20.736  20.515  1.00  0.00
H
ATOM   5016  HZ3 TRP X 317       1.995 -22.187  23.967  1.00  0.00
H
ATOM   5017  HH2 TRP X 317       0.172 -22.464  22.343  1.00  0.00
H
ATOM   5018  N   GLN X 318       6.819 -17.562  20.347  1.00  0.00
N
ATOM   5019  CA  GLN X 318       7.152 -17.496  18.929  1.00  0.00
C
ATOM   5020  C   GLN X 318       7.949 -18.716  18.490  1.00  0.00
C
ATOM   5021  O   GLN X 318       8.069 -18.995  17.297  1.00  0.00
O
ATOM   5022  CB  GLN X 318       7.948 -16.224  18.624  1.00  0.00
C
ATOM   5023  CG  GLN X 318       9.358 -16.220  19.190  1.00  0.00
C
ATOM   5024  CD  GLN X 318      10.365 -16.838  18.238  1.00  0.00
C
ATOM   5025  NE2 GLN X 318      11.412 -17.438  18.793  1.00  0.00
N
ATOM   5026  OE1 GLN X 318      10.201 -16.780  17.016  1.00  0.00
O
ATOM   5027  H   GLN X 318       7.209 -16.876  20.978  1.00  0.00
H
ATOM   5028  HA  GLN X 318       6.236 -17.497  18.338  1.00  0.00
H
ATOM   5029 1HB  GLN X 318       7.986 -16.128  17.539  1.00  0.00
H
ATOM   5030 2HB  GLN X 318       7.382 -15.391  19.043  1.00  0.00
H
ATOM   5031 1HG  GLN X 318       9.814 -15.336  19.632  1.00  0.00
H
ATOM   5032 2HG  GLN X 318       9.137 -16.945  19.975  1.00  0.00
H
ATOM   5033 1HE2 GLN X 318      12.109 -17.863  18.214  1.00  0.00
H
ATOM   5034 2HE2 GLN X 318      11.505 -17.464  19.789  1.00  0.00
H
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ATOM   5035  N   LYS X 319       8.490 -19.444  19.461  1.00  0.00
N
ATOM   5036  CA  LYS X 319       9.302 -20.618  19.177  1.00  0.00
C
ATOM   5037  C   LYS X 319       8.465 -21.729  18.558  1.00  0.00
C
ATOM   5038  O   LYS X 319       9.001 -22.666  17.962  1.00  0.00
O
ATOM   5039  CB  LYS X 319       9.983 -21.120  20.452  1.00  0.00
C
ATOM   5040  CG  LYS X 319      11.064 -20.196  20.993  1.00  0.00
C
ATOM   5041  CD  LYS X 319      11.708 -20.772  22.246  1.00  0.00
C
ATOM   5042  CE  LYS X 319      12.825 -19.874  22.758  1.00  0.00
C
ATOM   5043  NZ  LYS X 319      13.477 -20.434  23.972  1.00  0.00
N
ATOM   5044  H   LYS X 319       8.333 -19.176  20.422  1.00  0.00
H
ATOM   5045  HA  LYS X 319      10.073 -20.367  18.447  1.00  0.00
H
ATOM   5046 1HB  LYS X 319       9.202 -21.246  21.202  1.00  0.00
H
ATOM   5047 2HB  LYS X 319      10.421 -22.092  20.219  1.00  0.00
H
ATOM   5048 1HG  LYS X 319      11.824 -20.061  20.222  1.00  0.00
H
ATOM   5049 2HG  LYS X 319      10.610 -19.233  21.228  1.00  0.00
H
ATOM   5050 1HD  LYS X 319      10.942 -20.873  23.015  1.00  0.00
H
ATOM   5051 2HD  LYS X 319      12.114 -21.755  22.008  1.00  0.00
H
ATOM   5052 1HE  LYS X 319      13.566 -19.764  21.966  1.00  0.00
H
ATOM   5053 2HE  LYS X 319      12.398 -18.899  22.993  1.00  0.00
H
ATOM   5054 1HZ  LYS X 319      14.210 -19.811  24.279  1.00  0.00
H
ATOM   5055 2HZ  LYS X 319      12.792 -20.535  24.707  1.00  0.00
H
ATOM   5056 3HZ  LYS X 319      13.873 -21.338  23.754  1.00  0.00
H
ATOM   5057  N   LEU X 320       7.149 -21.621  18.700  1.00  0.00
N
ATOM   5058  CA  LEU X 320       6.234 -22.592  18.114  1.00  0.00
C
ATOM   5059  C   LEU X 320       5.976 -22.290  16.644  1.00  0.00
C
ATOM   5060  O   LEU X 320       5.374 -23.095  15.930  1.00  0.00
O
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ATOM   5061  CB  LEU X 320       4.912 -22.613  18.893  1.00  0.00
C
ATOM   5062  CG  LEU X 320       4.954 -23.369  20.227  1.00  0.00
C
ATOM   5063  CD1 LEU X 320       5.851 -22.636  21.215  1.00  0.00
C
ATOM   5064  CD2 LEU X 320       3.543 -23.504  20.778  1.00  0.00
C
ATOM   5065  H   LEU X 320       6.772 -20.847  19.228  1.00  0.00
H
ATOM   5066  HA  LEU X 320       6.682 -23.585  18.151  1.00  0.00
H
ATOM   5067 1HB  LEU X 320       4.796 -21.546  19.073  1.00  0.00
H
ATOM   5068 2HB  LEU X 320       4.087 -22.971  18.278  1.00  0.00
H
ATOM   5069  HG  LEU X 320       5.329 -24.372  20.020  1.00  0.00
H
ATOM   5070 1HD1 LEU X 320       5.875 -23.181  22.158  1.00  0.00
H
ATOM   5071 2HD1 LEU X 320       6.861 -22.571  20.811  1.00  0.00
H
ATOM   5072 3HD1 LEU X 320       5.461 -21.633  21.385  1.00  0.00
H
ATOM   5073 1HD2 LEU X 320       3.573 -24.044  21.727  1.00  0.00
H
ATOM   5074 2HD2 LEU X 320       3.116 -22.515  20.937  1.00  0.00
H
ATOM   5075 3HD2 LEU X 320       2.926 -24.057  20.069  1.00  0.00
H
ATOM   5076  N   LEU X 321       6.433 -21.125  16.195  1.00  0.00
N
ATOM   5077  CA  LEU X 321       6.297 -20.736  14.797  1.00  0.00
C
ATOM   5078  C   LEU X 321       7.491 -21.196  13.978  1.00  0.00
C
ATOM   5079  O   LEU X 321       8.596 -21.350  14.500  1.00  0.00
O
ATOM   5080  CB  LEU X 321       6.127 -19.215  14.685  1.00  0.00
C
ATOM   5081  CG  LEU X 321       4.915 -18.637  15.426  1.00  0.00
C
ATOM   5082  CD1 LEU X 321       4.985 -17.117  15.433  1.00  0.00
C
ATOM   5083  CD2 LEU X 321       3.636 -19.116  14.759  1.00  0.00
C
ATOM   5084  H   LEU X 321       6.886 -20.493  16.839  1.00  0.00
H
ATOM   5085  HA  LEU X 321       5.422 -21.223  14.367  1.00  0.00
H
ATOM   5086 1HB  LEU X 321       7.049 -18.899  15.171  1.00  0.00
H
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ATOM   5087 2HB  LEU X 321       6.131 -18.885  13.646  1.00  0.00
H
ATOM   5088  HG  LEU X 321       4.934 -19.039  16.440  1.00  0.00
H
ATOM   5089 1HD1 LEU X 321       4.120 -16.714  15.961  1.00  0.00
H
ATOM   5090 2HD1 LEU X 321       5.897 -16.795  15.936  1.00  0.00
H
ATOM   5091 3HD1 LEU X 321       4.985 -16.748  14.407  1.00  0.00
H
ATOM   5092 1HD2 LEU X 321       2.774 -18.705  15.288  1.00  0.00
H
ATOM   5093 2HD2 LEU X 321       3.618 -18.783  13.721  1.00  0.00
H
ATOM   5094 3HD2 LEU X 321       3.593 -20.205  14.792  1.00  0.00
H
ATOM   5095  N   GLU X 322       7.269 -21.418  12.686  1.00  0.00
N
ATOM   5096  CA  GLU X 322       8.332 -21.854  11.788  1.00  0.00
C
ATOM   5097  C   GLU X 322       9.109 -20.668  11.236  1.00  0.00
C
ATOM   5098  O   GLU X 322       8.609 -19.543  11.214  1.00  0.00
O
ATOM   5099  CB  GLU X 322       7.756 -22.686  10.639  1.00  0.00
C
ATOM   5100  CG  GLU X 322       7.066 -23.970  11.076  1.00  0.00
C
ATOM   5101  CD  GLU X 322       6.597 -24.768   9.892  1.00  0.00
C
ATOM   5102  OE1 GLU X 322       6.720 -24.289   8.791  1.00  0.00
O
ATOM   5103  OE2 GLU X 322       6.220 -25.902  10.077  1.00  0.00
O
ATOM   5104  H   GLU X 322       6.339 -21.281  12.317  1.00  0.00
H
ATOM   5105  HA  GLU X 322       9.050 -22.467  12.335  1.00  0.00
H
ATOM   5106 1HB  GLU X 322       7.043 -22.052  10.115  1.00  0.00
H
ATOM   5107 2HB  GLU X 322       8.586 -22.928   9.974  1.00  0.00
H
ATOM   5108 1HG  GLU X 322       7.686 -24.599  11.716  1.00  0.00
H
ATOM   5109 2HG  GLU X 322       6.205 -23.618  11.642  1.00  0.00
H
ATOM   5110  N   THR X 323      10.334 -20.925  10.788  1.00  0.00
N
ATOM   5111  CA  THR X 323      11.188 -19.876  10.246  1.00  0.00
C
ATOM   5112  C   THR X 323      10.494 -19.132   9.113  1.00  0.00
C
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ATOM   5113  O   THR X 323      10.661 -17.924   8.955  1.00  0.00
O
ATOM   5114  CB  THR X 323      12.523 -20.444   9.731  1.00  0.00
C
ATOM   5115  CG2 THR X 323      13.392 -19.333   9.161  1.00  0.00
C
ATOM   5116  OG1 THR X 323      13.221 -21.085  10.808  1.00  0.00
O
ATOM   5117  H   THR X 323      10.681 -21.873  10.825  1.00  0.00
H
ATOM   5118  HA  THR X 323      11.398 -19.135  11.019  1.00  0.00
H
ATOM   5119  HB  THR X 323      12.319 -21.181   8.955  1.00  0.00
H
ATOM   5120  HG1 THR X 323      13.393 -20.444  11.502  1.00  0.00
H
ATOM   5121 1HG2 THR X 323      14.330 -19.754   8.801  1.00  0.00
H
ATOM   5122 2HG2 THR X 323      12.870 -18.852   8.334  1.00  0.00
H
ATOM   5123 3HG2 THR X 323      13.597 -18.597   9.937  1.00  0.00
H
ATOM   5124  N   GLY X 324       9.714 -19.863   8.321  1.00  0.00
N
ATOM   5125  CA  GLY X 324       8.975 -19.271   7.216  1.00  0.00
C
ATOM   5126  C   GLY X 324       8.094 -18.126   7.695  1.00  0.00
C
ATOM   5127  O   GLY X 324       7.819 -17.185   6.949  1.00  0.00
O
ATOM   5128  H   GLY X 324       9.635 -20.856   8.490  1.00  0.00
H
ATOM   5129 1HA  GLY X 324       9.681 -18.891   6.477  1.00  0.00
H
ATOM   5130 2HA  GLY X 324       8.347 -20.034   6.757  1.00  0.00
H
ATOM   5131  N   VAL X 325       7.650 -18.209   8.945  1.00  0.00
N
ATOM   5132  CA  VAL X 325       6.803 -17.169   9.508  1.00  0.00
C
ATOM   5133  C   VAL X 325       7.571 -15.848   9.584  1.00  0.00
C
ATOM   5134  O   VAL X 325       7.019 -14.785   9.295  1.00  0.00
O
ATOM   5135  CB  VAL X 325       6.292 -17.554  10.909  1.00  0.00
C
ATOM   5136  CG1 VAL X 325       5.552 -16.386  11.544  1.00  0.00
C
ATOM   5137  CG2 VAL X 325       5.388 -18.774  10.829  1.00  0.00
C
ATOM   5138  H   VAL X 325       7.905 -19.005   9.512  1.00  0.00
H
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ATOM   5139  HA  VAL X 325       5.943 -16.968   8.867  1.00  0.00
H
ATOM   5140  HB  VAL X 325       7.142 -17.829  11.533  1.00  0.00
H
ATOM   5141 1HG1 VAL X 325       5.197 -16.675  12.534  1.00  0.00
H
ATOM   5142 2HG1 VAL X 325       6.226 -15.534  11.635  1.00  0.00
H
ATOM   5143 3HG1 VAL X 325       4.701 -16.111  10.921  1.00  0.00
H
ATOM   5144 1HG2 VAL X 325       5.036 -19.032  11.829  1.00  0.00
H
ATOM   5145 2HG2 VAL X 325       4.534 -18.553  10.189  1.00  0.00
H
ATOM   5146 3HG2 VAL X 325       5.946 -19.614  10.414  1.00  0.00
H
ATOM   5147  N   TRP X 326       8.839 -15.922   9.972  1.00  0.00
N
ATOM   5148  CA  TRP X 326       9.669 -14.727  10.065  1.00  0.00
C
ATOM   5149  C   TRP X 326       9.939 -14.129   8.698  1.00  0.00
C
ATOM   5150  O   TRP X 326      10.018 -12.913   8.548  1.00  0.00
O
ATOM   5151  CB  TRP X 326      10.992 -15.049  10.762  1.00  0.00
C
ATOM   5152  CG  TRP X 326      10.895 -15.056  12.257  1.00  0.00
C
ATOM   5153  CD1 TRP X 326      10.774 -16.149  13.061  1.00  0.00
C
ATOM   5154  CD2 TRP X 326      10.909 -13.917  13.126  1.00  0.00
C
ATOM   5155  CE2 TRP X 326      10.795 -14.395  14.443  1.00  0.00
C
ATOM   5156  CE3 TRP X 326      11.009 -12.536  12.917  1.00  0.00
C
ATOM   5157  NE1 TRP X 326      10.712 -15.764  14.378  1.00  0.00
N
ATOM   5158  CZ2 TRP X 326      10.775 -13.552  15.543  1.00  0.00
C
ATOM   5159  CZ3 TRP X 326      10.991 -11.689  14.019  1.00  0.00
C
ATOM   5160  CH2 TRP X 326      10.878 -12.183  15.294  1.00  0.00
C
ATOM   5161  H   TRP X 326       9.235 -16.821  10.206  1.00  0.00
H
ATOM   5162  HA  TRP X 326       9.150 -13.960  10.641  1.00  0.00
H
ATOM   5163 1HB  TRP X 326      11.342 -16.038  10.468  1.00  0.00
H
ATOM   5164 2HB  TRP X 326      11.745 -14.305  10.501  1.00  0.00
H
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ATOM   5165  HD1 TRP X 326      10.747 -17.121  12.571  1.00  0.00
H
ATOM   5166  HE1 TRP X 326      10.621 -16.385  15.169  1.00  0.00
H
ATOM   5167  HE3 TRP X 326      11.103 -12.091  11.926  1.00  0.00
H
ATOM   5168  HZ2 TRP X 326      10.683 -13.987  16.539  1.00  0.00
H
ATOM   5169  HZ3 TRP X 326      11.069 -10.616  13.841  1.00  0.00
H
ATOM   5170  HH2 TRP X 326      10.867 -11.484  16.130  1.00  0.00
H
ATOM   5171  N   ILE X 327      10.091 -14.987   7.696  1.00  0.00
N
ATOM   5172  CA  ILE X 327      10.341 -14.519   6.343  1.00  0.00
C
ATOM   5173  C   ILE X 327       9.115 -13.740   5.856  1.00  0.00
C
ATOM   5174  O   ILE X 327       9.246 -12.676   5.256  1.00  0.00
O
ATOM   5175  CB  ILE X 327      10.652 -15.686   5.388  1.00  0.00
C
ATOM   5176  CG1 ILE X 327      11.982 -16.343   5.765  1.00  0.00
C
ATOM   5177  CG2 ILE X 327      10.681 -15.203   3.947  1.00  0.00
C
ATOM   5178  CD1 ILE X 327      12.235 -17.657   5.059  1.00  0.00
C
ATOM   5179  H   ILE X 327      10.033 -15.979   7.877  1.00  0.00
H
ATOM   5180  HA  ILE X 327      11.168 -13.811   6.329  1.00  0.00
H
ATOM   5181  HB  ILE X 327       9.882 -16.450   5.500  1.00  0.00
H
ATOM   5182 1HG1 ILE X 327      12.774 -15.638   5.514  1.00  0.00
H
ATOM   5183 2HG1 ILE X 327      11.970 -16.506   6.842  1.00  0.00
H
ATOM   5184 1HG2 ILE X 327      10.902 -16.040   3.286  1.00  0.00
H
ATOM   5185 2HG2 ILE X 327       9.711 -14.781   3.686  1.00  0.00
H
ATOM   5186 3HG2 ILE X 327      11.451 -14.439   3.836  1.00  0.00
H
ATOM   5187 1HD1 ILE X 327      13.197 -18.062   5.376  1.00  0.00
H
ATOM   5188 2HD1 ILE X 327      11.444 -18.364   5.310  1.00  0.00
H
ATOM   5189 3HD1 ILE X 327      12.248 -17.496   3.982  1.00  0.00
H
ATOM   5190  N   ASP X 328       7.931 -14.281   6.135  1.00  0.00
N
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ATOM   5191  CA  ASP X 328       6.685 -13.633   5.732  1.00  0.00
C
ATOM   5192  C   ASP X 328       6.454 -12.350   6.534  1.00  0.00
C
ATOM   5193  O   ASP X 328       5.917 -11.371   6.013  1.00  0.00
O
ATOM   5194  CB  ASP X 328       5.503 -14.589   5.908  1.00  0.00
C
ATOM   5195  CG  ASP X 328       5.449 -15.717   4.887  1.00  0.00
C
ATOM   5196  OD1 ASP X 328       6.162 -15.647   3.914  1.00  0.00
O
ATOM   5197  OD2 ASP X 328       4.817 -16.709   5.161  1.00  0.00
O
ATOM   5198  H   ASP X 328       7.894 -15.157   6.635  1.00  0.00
H
ATOM   5199  HA  ASP X 328       6.742 -13.341   4.683  1.00  0.00
H
ATOM   5200 1HB  ASP X 328       5.427 -15.005   6.913  1.00  0.00
H
ATOM   5201 2HB  ASP X 328       4.674 -13.902   5.735  1.00  0.00
H
ATOM   5202  N   ALA X 329       6.861 -12.369   7.800  1.00  0.00
N
ATOM   5203  CA  ALA X 329       6.697 -11.219   8.682  1.00  0.00
C
ATOM   5204  C   ALA X 329       7.326  -9.953   8.101  1.00  0.00
C
ATOM   5205  O   ALA X 329       6.733  -8.876   8.153  1.00  0.00
O
ATOM   5206  CB  ALA X 329       7.291 -11.513  10.052  1.00  0.00
C
ATOM   5207  H   ALA X 329       7.298 -13.205   8.161  1.00  0.00
H
ATOM   5208  HA  ALA X 329       5.632 -11.018   8.801  1.00  0.00
H
ATOM   5209 1HB  ALA X 329       7.161 -10.645  10.699  1.00  0.00
H
ATOM   5210 2HB  ALA X 329       6.785 -12.372  10.491  1.00  0.00
H
ATOM   5211 3HB  ALA X 329       8.354 -11.732   9.948  1.00  0.00
H
ATOM   5212  N   ALA X 330       8.526 -10.086   7.547  1.00  0.00
N
ATOM   5213  CA  ALA X 330       9.210  -8.945   6.955  1.00  0.00
C
ATOM   5214  C   ALA X 330       8.367  -8.338   5.838  1.00  0.00
C
ATOM   5215  O   ALA X 330       8.188  -7.120   5.776  1.00  0.00
O
ATOM   5216  CB  ALA X 330      10.581  -9.359   6.439  1.00  0.00
C
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ATOM   5217  H   ALA X 330       8.972 -10.993   7.536  1.00  0.00
H
ATOM   5218  HA  ALA X 330       9.344  -8.182   7.721  1.00  0.00
H
ATOM   5219 1HB  ALA X 330      11.079  -8.494   6.000  1.00  0.00
H
ATOM   5220 2HB  ALA X 330      11.181  -9.743   7.264  1.00  0.00
H
ATOM   5221 3HB  ALA X 330      10.466 -10.133   5.682  1.00  0.00
H
ATOM   5222  N   ALA X 331       7.849  -9.188   4.958  1.00  0.00
N
ATOM   5223  CA  ALA X 331       7.028  -8.695   3.868  1.00  0.00
C
ATOM   5224  C   ALA X 331       5.734  -8.097   4.384  1.00  0.00
C
ATOM   5225  O   ALA X 331       5.231  -7.123   3.824  1.00  0.00
O
ATOM   5226  CB  ALA X 331       6.741  -9.810   2.874  1.00  0.00
C
ATOM   5227  H   ALA X 331       8.026 -10.178   5.048  1.00  0.00
H
ATOM   5228  HA  ALA X 331       7.571  -7.901   3.352  1.00  0.00
H
ATOM   5229 1HB  ALA X 331       6.124  -9.424   2.062  1.00  0.00
H
ATOM   5230 2HB  ALA X 331       7.680 -10.188   2.468  1.00  0.00
H
ATOM   5231 3HB  ALA X 331       6.211 -10.618   3.377  1.00  0.00
H
ATOM   5232  N   GLN X 332       5.198  -8.677   5.452  1.00  0.00
N
ATOM   5233  CA  GLN X 332       3.942  -8.196   6.018  1.00  0.00
C
ATOM   5234  C   GLN X 332       4.085  -6.769   6.522  1.00  0.00
C
ATOM   5235  O   GLN X 332       3.177  -5.954   6.356  1.00  0.00
O
ATOM   5236  CB  GLN X 332       3.482  -9.104   7.163  1.00  0.00
C
ATOM   5237  CG  GLN X 332       3.010 -10.477   6.717  1.00  0.00
C
ATOM   5238  CD  GLN X 332       1.744 -10.411   5.884  1.00  0.00
C
ATOM   5239  NE2 GLN X 332       1.644 -11.288   4.891  1.00  0.00
N
ATOM   5240  OE1 GLN X 332       0.862  -9.584   6.132  1.00  0.00
O
ATOM   5241  H   GLN X 332       5.668  -9.462   5.878  1.00  0.00
H
ATOM   5242  HA  GLN X 332       3.175  -8.179   5.244  1.00  0.00
H
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ATOM   5243 1HB  GLN X 332       4.329  -9.207   7.841  1.00  0.00
H
ATOM   5244 2HB  GLN X 332       2.671  -8.584   7.671  1.00  0.00
H
ATOM   5245 1HG  GLN X 332       3.674 -11.210   6.258  1.00  0.00
H
ATOM   5246 2HG  GLN X 332       2.744 -10.807   7.723  1.00  0.00
H
ATOM   5247 1HE2 GLN X 332       0.830 -11.293   4.308  1.00  0.00
H
ATOM   5248 2HE2 GLN X 332       2.381 -11.943   4.725  1.00  0.00
H
ATOM   5249  N   ILE X 333       5.225  -6.456   7.130  1.00  0.00
N
ATOM   5250  CA  ILE X 333       5.484  -5.086   7.566  1.00  0.00
C
ATOM   5251  C   ILE X 333       5.743  -4.181   6.355  1.00  0.00
C
ATOM   5252  O   ILE X 333       5.341  -3.021   6.350  1.00  0.00
O
ATOM   5253  CB  ILE X 333       6.685  -5.016   8.527  1.00  0.00
C
ATOM   5254  CG1 ILE X 333       6.390  -5.802   9.807  1.00  0.00
C
ATOM   5255  CG2 ILE X 333       7.025  -3.569   8.850  1.00  0.00
C
ATOM   5256  CD1 ILE X 333       5.186  -5.298  10.568  1.00  0.00
C
ATOM   5257  H   ILE X 333       5.919  -7.172   7.293  1.00  0.00
H
ATOM   5258  HA  ILE X 333       4.606  -4.665   8.052  1.00  0.00
H
ATOM   5259  HB  ILE X 333       7.545  -5.495   8.057  1.00  0.00
H
ATOM   5260 1HG1 ILE X 333       6.231  -6.840   9.522  1.00  0.00
H
ATOM   5261 2HG1 ILE X 333       7.274  -5.732  10.442  1.00  0.00
H
ATOM   5262 1HG2 ILE X 333       7.874  -3.537   9.533  1.00  0.00
H
ATOM   5263 2HG2 ILE X 333       7.275  -3.040   7.933  1.00  0.00
H
ATOM   5264 3HG2 ILE X 333       6.164  -3.091   9.322  1.00  0.00
H
ATOM   5265 1HD1 ILE X 333       5.040  -5.901  11.463  1.00  0.00
H
ATOM   5266 2HD1 ILE X 333       5.344  -4.257  10.856  1.00  0.00
H
ATOM   5267 3HD1 ILE X 333       4.300  -5.367   9.937  1.00  0.00
H
ATOM   5268  N   PHE X 334       6.410  -4.702   5.328  1.00  0.00
N
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ATOM   5269  CA  PHE X 334       6.661  -3.907   4.131  1.00  0.00
C
ATOM   5270  C   PHE X 334       5.346  -3.466   3.506  1.00  0.00
C
ATOM   5271  O   PHE X 334       5.207  -2.350   2.998  1.00  0.00
O
ATOM   5272  CB  PHE X 334       7.491  -4.700   3.119  1.00  0.00
C
ATOM   5273  CG  PHE X 334       8.869  -5.048   3.607  1.00  0.00
C
ATOM   5274  CD1 PHE X 334       9.470  -4.314   4.618  1.00  0.00
C
ATOM   5275  CD2 PHE X 334       9.568  -6.113   3.056  1.00  0.00
C
ATOM   5276  CE1 PHE X 334      10.737  -4.634   5.068  1.00  0.00
C
ATOM   5277  CE2 PHE X 334      10.834  -6.435   3.504  1.00  0.00
C
ATOM   5278  CZ  PHE X 334      11.418  -5.693   4.511  1.00  0.00
C
ATOM   5279  H   PHE X 334       6.744  -5.654   5.378  1.00  0.00
H
ATOM   5280  HA  PHE X 334       7.207  -3.001   4.396  1.00  0.00
H
ATOM   5281 1HB  PHE X 334       6.996  -5.641   2.882  1.00  0.00
H
ATOM   5282 2HB  PHE X 334       7.621  -4.120   2.206  1.00  0.00
H
ATOM   5283  HD1 PHE X 334       8.929  -3.475   5.060  1.00  0.00
H
ATOM   5284  HD2 PHE X 334       9.107  -6.699   2.260  1.00  0.00
H
ATOM   5285  HE1 PHE X 334      11.195  -4.048   5.864  1.00  0.00
H
ATOM   5286  HE2 PHE X 334      11.373  -7.273   3.063  1.00  0.00
H
ATOM   5287  HZ  PHE X 334      12.417  -5.945   4.864  1.00  0.00
H
ATOM   5288  N   PHE X 335       4.366  -4.355   3.554  1.00  0.00
N
ATOM   5289  CA  PHE X 335       3.038  -4.016   3.077  1.00  0.00
C
ATOM   5290  C   PHE X 335       2.566  -2.645   3.533  1.00  0.00
C
ATOM   5291  O   PHE X 335       2.077  -1.857   2.732  1.00  0.00
O
ATOM   5292  CB  PHE X 335       2.038  -5.081   3.530  1.00  0.00
C
ATOM   5293  CG  PHE X 335       2.284  -6.437   2.929  1.00  0.00
C
ATOM   5294  CD1 PHE X 335       3.298  -6.626   2.002  1.00  0.00
C
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ATOM   5295  CD2 PHE X 335       1.501  -7.524   3.288  1.00  0.00
C
ATOM   5296  CE1 PHE X 335       3.524  -7.872   1.448  1.00  0.00
C
ATOM   5297  CE2 PHE X 335       1.726  -8.771   2.737  1.00  0.00
C
ATOM   5298  CZ  PHE X 335       2.739  -8.944   1.815  1.00  0.00
C
ATOM   5299  H   PHE X 335       4.545  -5.278   3.926  1.00  0.00
H
ATOM   5300  HA  PHE X 335       3.035  -3.976   1.987  1.00  0.00
H
ATOM   5301 1HB  PHE X 335       2.085  -5.205   4.611  1.00  0.00
H
ATOM   5302 2HB  PHE X 335       1.027  -4.792   3.243  1.00  0.00
H
ATOM   5303  HD1 PHE X 335       3.919  -5.779   1.712  1.00  0.00
H
ATOM   5304  HD2 PHE X 335       0.700  -7.387   4.016  1.00  0.00
H
ATOM   5305  HE1 PHE X 335       4.325  -8.007   0.721  1.00  0.00
H
ATOM   5306  HE2 PHE X 335       1.105  -9.617   3.029  1.00  0.00
H
ATOM   5307  HZ  PHE X 335       2.917  -9.926   1.378  1.00  0.00
H
ATOM   5308  N   SER X 336       2.726  -2.356   4.820  1.00  0.00
N
ATOM   5309  CA  SER X 336       1.987  -1.246   5.408  1.00  0.00
C
ATOM   5310  C   SER X 336       2.585   0.133   5.163  1.00  0.00
C
ATOM   5311  O   SER X 336       1.889   1.033   4.693  1.00  0.00
O
ATOM   5312  CB  SER X 336       1.853  -1.480   6.900  1.00  0.00
C
ATOM   5313  OG  SER X 336       1.188  -0.426   7.540  1.00  0.00
O
ATOM   5314  H   SER X 336       3.357  -2.902   5.388  1.00  0.00
H
ATOM   5315  HA  SER X 336       0.942  -1.210   5.097  1.00  0.00
H
ATOM   5316 1HB  SER X 336       1.292  -2.401   7.059  1.00  0.00
H
ATOM   5317 2HB  SER X 336       2.848  -1.583   7.328  1.00  0.00
H
ATOM   5318  HG  SER X 336       0.323  -0.304   7.140  1.00  0.00
H
ATOM   5319  N   LEU X 337       3.752   0.132   5.442  1.00  0.00
N
ATOM   5320  CA  LEU X 337       4.395   1.418   5.188  1.00  0.00
C
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ATOM   5321  C   LEU X 337       4.846   1.577   3.734  1.00  0.00
C
ATOM   5322  O   LEU X 337       4.798   2.679   3.180  1.00  0.00
O
ATOM   5323  CB  LEU X 337       5.591   1.593   6.132  1.00  0.00
C
ATOM   5324  CG  LEU X 337       5.233   1.781   7.612  1.00  0.00
C
ATOM   5325  CD1 LEU X 337       6.495   1.745   8.463  1.00  0.00
C
ATOM   5326  CD2 LEU X 337       4.497   3.099   7.794  1.00  0.00
C
ATOM   5327  H   LEU X 337       4.249  -0.595   5.935  1.00  0.00
H
ATOM   5328  HA  LEU X 337       3.685   2.223   5.366  1.00  0.00
H
ATOM   5329 1HB  LEU X 337       6.077   0.630   5.984  1.00  0.00
H
ATOM   5330 2HB  LEU X 337       6.256   2.390   5.798  1.00  0.00
H
ATOM   5331  HG  LEU X 337       4.549   0.976   7.884  1.00  0.00
H
ATOM   5332 1HD1 LEU X 337       6.231   1.878   9.512  1.00  0.00
H
ATOM   5333 2HD1 LEU X 337       6.994   0.784   8.335  1.00  0.00
H
ATOM   5334 3HD1 LEU X 337       7.166   2.546   8.153  1.00  0.00
H
ATOM   5335 1HD2 LEU X 337       4.242   3.231   8.846  1.00  0.00
H
ATOM   5336 2HD2 LEU X 337       5.136   3.921   7.469  1.00  0.00
H
ATOM   5337 3HD2 LEU X 337       3.584   3.092   7.199  1.00  0.00
H
ATOM   5338  N   GLY X 338       5.269   0.472   3.122  1.00  0.00
N
ATOM   5339  CA  GLY X 338       5.807   0.477   1.761  1.00  0.00
C
ATOM   5340  C   GLY X 338       7.158   1.175   1.715  1.00  0.00
C
ATOM   5341  O   GLY X 338       7.337   2.146   0.984  1.00  0.00
O
ATOM   5342  H   GLY X 338       5.216  -0.406   3.618  1.00  0.00
H
ATOM   5343 1HA  GLY X 338       5.923  -0.551   1.420  1.00  0.00
H
ATOM   5344 2HA  GLY X 338       5.111   1.000   1.105  1.00  0.00
H
ATOM   5345  N   PRO X 339       8.113   0.672   2.491  1.00  0.00
N
ATOM   5346  CA  PRO X 339       9.475   1.181   2.446  1.00  0.00
C
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ATOM   5347  C   PRO X 339      10.101   0.985   1.075  1.00  0.00
C
ATOM   5348  O   PRO X 339       9.918  -0.060   0.439  1.00  0.00
O
ATOM   5349  CB  PRO X 339      10.210   0.378   3.536  1.00  0.00
C
ATOM   5350  CG  PRO X 339       9.111  -0.167   4.404  1.00  0.00
C
ATOM   5351  CD  PRO X 339       7.903  -0.480   3.410  1.00  0.00
C
ATOM   5352  HA  PRO X 339       9.484   2.155   2.656  1.00  0.00
H
ATOM   5353 1HB  PRO X 339      10.814  -0.432   3.101  1.00  0.00
H
ATOM   5354 2HB  PRO X 339      10.894   1.017   4.113  1.00  0.00
H
ATOM   5355 1HG  PRO X 339       9.435  -1.077   4.931  1.00  0.00
H
ATOM   5356 2HG  PRO X 339       8.813   0.561   5.173  1.00  0.00
H
ATOM   5357 1HD  PRO X 339       8.013  -1.457   2.916  1.00  0.00
H
ATOM   5358 2HD  PRO X 339       6.931  -0.489   3.925  1.00  0.00
H
ATOM   5359  N   GLY X 340      10.834   1.995   0.627  1.00  0.00
N
ATOM   5360  CA  GLY X 340      11.572   1.884  -0.620  1.00  0.00
C
ATOM   5361  C   GLY X 340      10.741   2.200  -1.853  1.00  0.00
C
ATOM   5362  O   GLY X 340      11.246   2.132  -2.971  1.00  0.00
O
ATOM   5363  H   GLY X 340      10.880   2.853   1.160  1.00  0.00
H
ATOM   5364 1HA  GLY X 340      12.412   2.579  -0.599  1.00  0.00
H
ATOM   5365 2HA  GLY X 340      11.946   0.866  -0.723  1.00  0.00
H
ATOM   5366  N   PHE X 341       9.470   2.543  -1.644  1.00  0.00
N
ATOM   5367  CA  PHE X 341       8.555   2.931  -2.721  1.00  0.00
C
ATOM   5368  C   PHE X 341       8.608   4.438  -2.972  1.00  0.00
C
ATOM   5369  O   PHE X 341       8.052   4.926  -3.956  1.00  0.00
O
ATOM   5370  CB  PHE X 341       7.124   2.504  -2.390  1.00  0.00
C
ATOM   5371  CG  PHE X 341       6.944   1.016  -2.280  1.00  0.00
C
ATOM   5372  CD1 PHE X 341       7.822   0.149  -2.915  1.00  0.00
C
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ATOM   5373  CD2 PHE X 341       5.899   0.481  -1.546  1.00  0.00
C
ATOM   5374  CE1 PHE X 341       7.658  -1.219  -2.816  1.00  0.00
C
ATOM   5375  CE2 PHE X 341       5.733  -0.886  -1.443  1.00  0.00
C
ATOM   5376  CZ  PHE X 341       6.614  -1.737  -2.080  1.00  0.00
C
ATOM   5377  H   PHE X 341       9.121   2.536  -0.695  1.00  0.00
H
ATOM   5378  HA  PHE X 341       8.854   2.448  -3.653  1.00  0.00
H
ATOM   5379 1HB  PHE X 341       6.819   2.926  -1.434  1.00  0.00
H
ATOM   5380 2HB  PHE X 341       6.442   2.842  -3.170  1.00  0.00
H
ATOM   5381  HD1 PHE X 341       8.648   0.560  -3.497  1.00  0.00
H
ATOM   5382  HD2 PHE X 341       5.202   1.154  -1.044  1.00  0.00
H
ATOM   5383  HE1 PHE X 341       8.355  -1.888  -3.320  1.00  0.00
H
ATOM   5384  HE2 PHE X 341       4.907  -1.294  -0.861  1.00  0.00
H
ATOM   5385  HZ  PHE X 341       6.484  -2.814  -2.002  1.00  0.00
H
ATOM   5386  N   GLY X 342       9.257   5.168  -2.068  1.00  0.00
N
ATOM   5387  CA  GLY X 342       9.368   6.608  -2.215  1.00  0.00
C
ATOM   5388  C   GLY X 342       8.156   7.345  -1.656  1.00  0.00
C
ATOM   5389  O   GLY X 342       8.122   8.575  -1.653  1.00  0.00
O
ATOM   5390  H   GLY X 342       9.676   4.715  -1.270  1.00  0.00
H
ATOM   5391 1HA  GLY X 342      10.256   6.953  -1.685  1.00  0.00
H
ATOM   5392 2HA  GLY X 342       9.461   6.851  -3.273  1.00  0.00
H
ATOM   5393  N   VAL X 343       7.171   6.595  -1.172  1.00  0.00
N
ATOM   5394  CA  VAL X 343       5.943   7.175  -0.639  1.00  0.00
C
ATOM   5395  C   VAL X 343       6.127   7.910   0.686  1.00  0.00
C
ATOM   5396  O   VAL X 343       5.282   8.718   1.070  1.00  0.00
O
ATOM   5397  CB  VAL X 343       4.866   6.089  -0.446  1.00  0.00
C
ATOM   5398  CG1 VAL X 343       4.662   5.309  -1.738  1.00  0.00
C
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ATOM   5399  CG2 VAL X 343       5.252   5.151   0.686  1.00  0.00
C
ATOM   5400  H   VAL X 343       7.276   5.590  -1.175  1.00  0.00
H
ATOM   5401  HA  VAL X 343       5.547   7.945  -1.302  1.00  0.00
H
ATOM   5402  HB  VAL X 343       3.931   6.565  -0.157  1.00  0.00
H
ATOM   5403 1HG1 VAL X 343       3.899   4.547  -1.586  1.00  0.00
H
ATOM   5404 2HG1 VAL X 343       4.342   5.988  -2.527  1.00  0.00
H
ATOM   5405 3HG1 VAL X 343       5.598   4.832  -2.026  1.00  0.00
H
ATOM   5406 1HG2 VAL X 343       4.481   4.391   0.808  1.00  0.00
H
ATOM   5407 2HG2 VAL X 343       6.203   4.670   0.451  1.00  0.00
H
ATOM   5408 3HG2 VAL X 343       5.350   5.718   1.612  1.00  0.00
H
ATOM   5409  N   LEU X 344       7.215   7.623   1.394  1.00  0.00
N
ATOM   5410  CA  LEU X 344       7.471   8.296   2.666  1.00  0.00
C
ATOM   5411  C   LEU X 344       8.539   9.357   2.431  1.00  0.00
C
ATOM   5412  O   LEU X 344       8.429  10.487   2.917  1.00  0.00
O
ATOM   5413  CB  LEU X 344       7.899   7.275   3.727  1.00  0.00
C
ATOM   5414  CG  LEU X 344       6.838   6.228   4.091  1.00  0.00
C
ATOM   5415  CD1 LEU X 344       7.425   5.202   5.051  1.00  0.00
C
ATOM   5416  CD2 LEU X 344       5.632   6.918   4.711  1.00  0.00
C
ATOM   5417  H   LEU X 344       7.869   6.935   1.051  1.00  0.00
H
ATOM   5418  HA  LEU X 344       6.565   8.799   3.002  1.00  0.00
H
ATOM   5419 1HB  LEU X 344       8.724   6.802   3.198  1.00  0.00
H
ATOM   5420 2HB  LEU X 344       8.276   7.762   4.627  1.00  0.00
H
ATOM   5421  HG  LEU X 344       6.514   5.760   3.161  1.00  0.00
H
ATOM   5422 1HD1 LEU X 344       6.664   4.462   5.302  1.00  0.00
H
ATOM   5423 2HD1 LEU X 344       8.271   4.703   4.578  1.00  0.00
H
ATOM   5424 3HD1 LEU X 344       7.759   5.701   5.960  1.00  0.00
H
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ATOM   5425 1HD2 LEU X 344       4.879   6.172   4.967  1.00  0.00
H
ATOM   5426 2HD2 LEU X 344       5.939   7.449   5.611  1.00  0.00
H
ATOM   5427 3HD2 LEU X 344       5.211   7.627   3.997  1.00  0.00
H
ATOM   5428  N   LEU X 345       9.566   8.987   1.674  1.00  0.00
N
ATOM   5429  CA  LEU X 345      10.650   9.904   1.359  1.00  0.00
C
ATOM   5430  C   LEU X 345      10.121  11.103   0.583  1.00  0.00
C
ATOM   5431  O   LEU X 345      10.308  12.246   0.998  1.00  0.00
O
ATOM   5432  CB  LEU X 345      11.744   9.180   0.565  1.00  0.00
C
ATOM   5433  CG  LEU X 345      13.097   9.897   0.513  1.00  0.00
C
ATOM   5434  CD1 LEU X 345      14.179   8.938   0.034  1.00  0.00
C
ATOM   5435  CD2 LEU X 345      12.999  11.104  -0.408  1.00  0.00
C
ATOM   5436  H   LEU X 345       9.595   8.045   1.308  1.00  0.00
H
ATOM   5437  HA  LEU X 345      11.081  10.290   2.281  1.00  0.00
H
ATOM   5438 1HB  LEU X 345      11.823   8.271   1.159  1.00  0.00
H
ATOM   5439 2HB  LEU X 345      11.408   8.924  -0.442  1.00  0.00
H
ATOM   5440  HG  LEU X 345      13.309  10.261   1.519  1.00  0.00
H
ATOM   5441 1HD1 LEU X 345      15.137   9.457   0.001  1.00  0.00
H
ATOM   5442 2HD1 LEU X 345      14.246   8.095   0.721  1.00  0.00
H
ATOM   5443 3HD1 LEU X 345      13.929   8.577  -0.964  1.00  0.00
H
ATOM   5444 1HD2 LEU X 345      13.962  11.615  -0.442  1.00  0.00
H
ATOM   5445 2HD2 LEU X 345      12.726  10.776  -1.410  1.00  0.00
H
ATOM   5446 3HD2 LEU X 345      12.241  11.790  -0.030  1.00  0.00
H
ATOM   5447  N   ALA X 346       9.436  10.860  -0.528  1.00  0.00
N
ATOM   5448  CA  ALA X 346       8.924  11.985  -1.306  1.00  0.00
C
ATOM   5449  C   ALA X 346       8.027  12.912  -0.488  1.00  0.00
C
ATOM   5450  O   ALA X 346       8.145  14.135  -0.581  1.00  0.00
O
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ATOM   5451  CB  ALA X 346       8.166  11.483  -2.526  1.00  0.00
C
ATOM   5452  H   ALA X 346       9.272   9.910  -0.831  1.00  0.00
H
ATOM   5453  HA  ALA X 346       9.767  12.588  -1.646  1.00  0.00
H
ATOM   5454 1HB  ALA X 346       7.791  12.333  -3.096  1.00  0.00
H
ATOM   5455 2HB  ALA X 346       8.834  10.893  -3.153  1.00  0.00
H
ATOM   5456 3HB  ALA X 346       7.329  10.865  -2.204  1.00  0.00
H
ATOM   5457  N   PHE X 347       7.128  12.345   0.308  1.00  0.00
N
ATOM   5458  CA  PHE X 347       6.256  13.181   1.125  1.00  0.00
C
ATOM   5459  C   PHE X 347       7.098  14.132   1.973  1.00  0.00
C
ATOM   5460  O   PHE X 347       6.790  15.314   2.090  1.00  0.00
O
ATOM   5461  CB  PHE X 347       5.356  12.314   2.006  1.00  0.00
C
ATOM   5462  CG  PHE X 347       4.460  13.101   2.919  1.00  0.00
C
ATOM   5463  CD1 PHE X 347       3.312  13.709   2.432  1.00  0.00
C
ATOM   5464  CD2 PHE X 347       4.764  13.239   4.265  1.00  0.00
C
ATOM   5465  CE1 PHE X 347       2.486  14.435   3.270  1.00  0.00
C
ATOM   5466  CE2 PHE X 347       3.940  13.963   5.106  1.00  0.00
C
ATOM   5467  CZ  PHE X 347       2.801  14.562   4.606  1.00  0.00
C
ATOM   5468  H   PHE X 347       7.049  11.339   0.348  1.00  0.00
H
ATOM   5469  HA  PHE X 347       5.624  13.795   0.482  1.00  0.00
H
ATOM   5470 1HB  PHE X 347       4.706  11.697   1.388  1.00  0.00
H
ATOM   5471 2HB  PHE X 347       5.964  11.673   2.644  1.00  0.00
H
ATOM   5472  HD1 PHE X 347       3.064  13.607   1.375  1.00  0.00
H
ATOM   5473  HD2 PHE X 347       5.664  12.768   4.659  1.00  0.00
H
ATOM   5474  HE1 PHE X 347       1.588  14.906   2.874  1.00  0.00
H
ATOM   5475  HE2 PHE X 347       4.190  14.063   6.162  1.00  0.00
H
ATOM   5476  HZ  PHE X 347       2.152  15.134   5.267  1.00  0.00
H
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ATOM   5477  N   ALA X 348       8.164  13.605   2.559  1.00  0.00
N
ATOM   5478  CA  ALA X 348       9.034  14.416   3.410  1.00  0.00
C
ATOM   5479  C   ALA X 348       9.753  15.510   2.630  1.00  0.00
C
ATOM   5480  O   ALA X 348      10.173  16.523   3.205  1.00  0.00
O
ATOM   5481  CB  ALA X 348      10.051  13.534   4.121  1.00  0.00
C
ATOM   5482  H   ALA X 348       8.379  12.629   2.416  1.00  0.00
H
ATOM   5483  HA  ALA X 348       8.421  14.917   4.161  1.00  0.00
H
ATOM   5484 1HB  ALA X 348      10.690  14.153   4.750  1.00  0.00
H
ATOM   5485 2HB  ALA X 348       9.529  12.804   4.740  1.00  0.00
H
ATOM   5486 3HB  ALA X 348      10.661  13.015   3.382  1.00  0.00
H
ATOM   5487  N   SER X 349       9.907  15.316   1.318  1.00  0.00
N
ATOM   5488  CA  SER X 349      10.587  16.289   0.473  1.00  0.00
C
ATOM   5489  C   SER X 349       9.738  17.537   0.278  1.00  0.00
C
ATOM   5490  O   SER X 349      10.263  18.637   0.100  1.00  0.00
O
ATOM   5491  CB  SER X 349      10.931  15.668  -0.867  1.00  0.00
C
ATOM   5492  OG  SER X 349      11.929  14.692  -0.754  1.00  0.00
O
ATOM   5493  H   SER X 349       9.542  14.472   0.900  1.00  0.00
H
ATOM   5494  HA  SER X 349      11.576  16.567   0.841  1.00  0.00
H
ATOM   5495 1HB  SER X 349      10.032  15.211  -1.280  1.00  0.00
H
ATOM   5496 2HB  SER X 349      11.278  16.454  -1.538  1.00  0.00
H
ATOM   5497  HG  SER X 349      12.117  14.326  -1.621  1.00  0.00
H
ATOM   5498  N   TYR X 350       8.289  17.127   0.500  1.00  0.00
N
ATOM   5499  CA  TYR X 350       7.236  18.085   0.182  1.00  0.00
C
ATOM   5500  C   TYR X 350       6.884  18.938   1.393  1.00  0.00
C
ATOM   5501  O   TYR X 350       5.819  19.557   1.442  1.00  0.00
O
ATOM   5502  CB  TYR X 350       5.990  17.358  -0.331  1.00  0.00
C
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ATOM   5503  CG  TYR X 350       6.236  16.507  -1.556  1.00  0.00
C
ATOM   5504  CD1 TYR X 350       7.303  16.768  -2.402  1.00  0.00
C
ATOM   5505  CD2 TYR X 350       5.402  15.443  -1.864  1.00  0.00
C
ATOM   5506  CE1 TYR X 350       7.534  15.994  -3.524  1.00  0.00
C
ATOM   5507  CE2 TYR X 350       5.622  14.662  -2.981  1.00  0.00
C
ATOM   5508  CZ  TYR X 350       6.690  14.941  -3.809  1.00  0.00
C
ATOM   5509  OH  TYR X 350       6.914  14.166  -4.923  1.00  0.00
O
ATOM   5510  H   TYR X 350       8.062  16.211   0.860  1.00  0.00
H
ATOM   5511  HA  TYR X 350       7.580  18.771  -0.592  1.00  0.00
H
ATOM   5512 1HB  TYR X 350       5.626  16.729   0.483  1.00  0.00
H
ATOM   5513 2HB  TYR X 350       5.244  18.120  -0.561  1.00  0.00
H
ATOM   5514  HD1 TYR X 350       7.967  17.602  -2.170  1.00  0.00
H
ATOM   5515  HD2 TYR X 350       4.559  15.229  -1.205  1.00  0.00
H
ATOM   5516  HE1 TYR X 350       8.376  16.212  -4.179  1.00  0.00
H
ATOM   5517  HE2 TYR X 350       4.953  13.831  -3.205  1.00  0.00
H
ATOM   5518  HH  TYR X 350       7.682  14.447  -5.427  1.00  0.00
H
ATOM   5519  N   ASN X 351       7.782  18.968   2.371  1.00  0.00
N
ATOM   5520  CA  ASN X 351       7.547  19.715   3.605  1.00  0.00
C
ATOM   5521  C   ASN X 351       8.861  20.096   4.274  1.00  0.00
C
ATOM   5522  O   ASN X 351       9.437  19.316   5.030  1.00  0.00
O
ATOM   5523  CB  ASN X 351       6.673  18.935   4.569  1.00  0.00
C
ATOM   5524  CG  ASN X 351       6.236  19.728   5.769  1.00  0.00
C
ATOM   5525  ND2 ASN X 351       5.195  19.259   6.407  1.00  0.00
N
ATOM   5526  OD1 ASN X 351       6.877  20.713   6.154  1.00  0.00
O
ATOM   5527  H   ASN X 351       8.649  18.461   2.260  1.00  0.00
H
ATOM   5528  HA  ASN X 351       7.032  20.650   3.378  1.00  0.00
H
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ATOM   5529 1HB  ASN X 351       5.831  18.342   4.206  1.00  0.00
H
ATOM   5530 2HB  ASN X 351       7.484  18.269   4.865  1.00  0.00
H
ATOM   5531 1HD2 ASN X 351       4.848  19.737   7.215  1.00  0.00
H
ATOM   5532 2HD2 ASN X 351       4.748  18.424   6.089  1.00  0.00
H
ATOM   5533  N   LYS X 352       9.332  21.311   3.992  1.00  0.00
N
ATOM   5534  CA  LYS X 352      10.618  21.766   4.495  1.00  0.00
C
ATOM   5535  C   LYS X 352      10.489  22.347   5.896  1.00  0.00
C
ATOM   5536  O   LYS X 352      11.442  22.339   6.674  1.00  0.00
O
ATOM   5537  CB  LYS X 352      11.224  22.806   3.550  1.00  0.00
C
ATOM   5538  CG  LYS X 352      11.589  22.266   2.174  1.00  0.00
C
ATOM   5539  CD  LYS X 352      12.280  23.328   1.330  1.00  0.00
C
ATOM   5540  CE  LYS X 352      11.300  24.397   0.873  1.00  0.00
C
ATOM   5541  NZ  LYS X 352      11.917  25.339  -0.101  1.00  0.00
N
ATOM   5542  H   LYS X 352       8.782  21.930   3.415  1.00  0.00
H
ATOM   5543  HA  LYS X 352      11.304  20.921   4.571  1.00  0.00
H
ATOM   5544 1HB  LYS X 352      10.493  23.606   3.444  1.00  0.00
H
ATOM   5545 2HB  LYS X 352      12.120  23.195   4.036  1.00  0.00
H
ATOM   5546 1HG  LYS X 352      12.256  21.413   2.302  1.00  0.00
H
ATOM   5547 2HG  LYS X 352      10.677  21.943   1.675  1.00  0.00
H
ATOM   5548 1HD  LYS X 352      13.069  23.787   1.927  1.00  0.00
H
ATOM   5549 2HD  LYS X 352      12.721  22.845   0.458  1.00  0.00
H
ATOM   5550 1HE  LYS X 352      10.447  23.904   0.410  1.00  0.00
H
ATOM   5551 2HE  LYS X 352      10.966  24.952   1.751  1.00  0.00
H
ATOM   5552 1HZ  LYS X 352      11.236  26.032  -0.378  1.00  0.00
H
ATOM   5553 2HZ  LYS X 352      12.708  25.797   0.328  1.00  0.00
H
ATOM   5554 3HZ  LYS X 352      12.226  24.826  -0.915  1.00  0.00
H
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ATOM   5555  N   PHE X 353       9.300  22.851   6.216  1.00  0.00
N
ATOM   5556  CA  PHE X 353       9.048  23.453   7.518  1.00  0.00
C
ATOM   5557  C   PHE X 353       9.211  22.434   8.639  1.00  0.00
C
ATOM   5558  O   PHE X 353       9.980  22.648   9.576  1.00  0.00
O
ATOM   5559  CB  PHE X 353       7.646  24.063   7.561  1.00  0.00
C
ATOM   5560  CG  PHE X 353       7.282  24.655   8.894  1.00  0.00
C
ATOM   5561  CD1 PHE X 353       7.768  25.898   9.271  1.00  0.00
C
ATOM   5562  CD2 PHE X 353       6.458  23.969   9.773  1.00  0.00
C
ATOM   5563  CE1 PHE X 353       7.435  26.443  10.496  1.00  0.00
C
ATOM   5564  CE2 PHE X 353       6.123  24.512  10.997  1.00  0.00
C
ATOM   5565  CZ  PHE X 353       6.612  25.751  11.359  1.00  0.00
C
ATOM   5566  H   PHE X 353       8.553  22.815   5.539  1.00  0.00
H
ATOM   5567  HA  PHE X 353       9.777  24.241   7.710  1.00  0.00
H
ATOM   5568 1HB  PHE X 353       7.562  24.866   6.831  1.00  0.00
H
ATOM   5569 2HB  PHE X 353       6.899  23.299   7.348  1.00  0.00
H
ATOM   5570  HD1 PHE X 353       8.417  26.446   8.588  1.00  0.00
H
ATOM   5571  HD2 PHE X 353       6.071  22.990   9.487  1.00  0.00
H
ATOM   5572  HE1 PHE X 353       7.822  27.421  10.780  1.00  0.00
H
ATOM   5573  HE2 PHE X 353       5.473  23.964  11.679  1.00  0.00
H
ATOM   5574  HZ  PHE X 353       6.350  26.180  12.326  1.00  0.00
H
ATOM   5575  N   ASN X 354       8.481  21.329   8.535  1.00  0.00
N
ATOM   5576  CA  ASN X 354       8.516  20.288   9.556  1.00  0.00
C
ATOM   5577  C   ASN X 354       9.690  19.343   9.339  1.00  0.00
C
ATOM   5578  O   ASN X 354       9.689  18.545   8.402  1.00  0.00
O
ATOM   5579  CB  ASN X 354       7.216  19.506   9.597  1.00  0.00
C
ATOM   5580  CG  ASN X 354       7.150  18.498  10.710  1.00  0.00
C
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ATOM   5581  ND2 ASN X 354       5.949  18.105  11.047  1.00  0.00
N
ATOM   5582  OD1 ASN X 354       8.179  18.024  11.207  1.00  0.00
O
ATOM   5583  H   ASN X 354       7.886  21.206   7.728  1.00  0.00
H
ATOM   5584  HA  ASN X 354       8.660  20.739  10.539  1.00  0.00
H
ATOM   5585 1HB  ASN X 354       6.255  20.018   9.522  1.00  0.00
H
ATOM   5586 2HB  ASN X 354       7.425  18.986   8.663  1.00  0.00
H
ATOM   5587 1HD2 ASN X 354       5.829  17.435  11.781  1.00  0.00
H
ATOM   5588 2HD2 ASN X 354       5.150  18.475  10.572  1.00  0.00
H
ATOM   5589  N   ASN X 355      10.691  19.440  10.208  1.00  0.00
N
ATOM   5590  CA  ASN X 355      11.944  18.719  10.015  1.00  0.00
C
ATOM   5591  C   ASN X 355      12.591  18.382  11.352  1.00  0.00
C
ATOM   5592  O   ASN X 355      12.129  18.816  12.407  1.00  0.00
O
ATOM   5593  CB  ASN X 355      12.908  19.505   9.145  1.00  0.00
C
ATOM   5594  CG  ASN X 355      13.304  20.832   9.727  1.00  0.00
C
ATOM   5595  ND2 ASN X 355      12.964  21.882   9.022  1.00  0.00
N
ATOM   5596  OD1 ASN X 355      13.845  20.910  10.835  1.00  0.00
O
ATOM   5597  H   ASN X 355      10.582  20.027  11.022  1.00  0.00
H
ATOM   5598  HA  ASN X 355      11.751  17.768   9.514  1.00  0.00
H
ATOM   5599 1HB  ASN X 355      13.787  19.025   8.714  1.00  0.00
H
ATOM   5600 2HB  ASN X 355      12.166  19.671   8.363  1.00  0.00
H
ATOM   5601 1HD2 ASN X 355      13.197  22.799   9.348  1.00  0.00
H
ATOM   5602 2HD2 ASN X 355      12.473  21.767   8.159  1.00  0.00
H
ATOM   5603  N   ASN X 356      13.670  17.606  11.300  1.00  0.00
N
ATOM   5604  CA  ASN X 356      14.473  17.330  12.486  1.00  0.00
C
ATOM   5605  C   ASN X 356      13.602  16.878  13.649  1.00  0.00
C
ATOM   5606  O   ASN X 356      13.687  17.420  14.751  1.00  0.00
O
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ATOM   5607  CB  ASN X 356      15.300  18.536  12.889  1.00  0.00
C
ATOM   5608  CG  ASN X 356      16.411  18.215  13.850  1.00  0.00
C
ATOM   5609  ND2 ASN X 356      16.717  19.164  14.697  1.00  0.00
N
ATOM   5610  OD1 ASN X 356      16.933  17.094  13.874  1.00  0.00
O
ATOM   5611  H   ASN X 356      13.940  17.197  10.417  1.00  0.00
H
ATOM   5612  HA  ASN X 356      15.165  16.510  12.282  1.00  0.00
H
ATOM   5613 1HB  ASN X 356      15.669  19.237  12.139  1.00  0.00
H
ATOM   5614 2HB  ASN X 356      14.480  18.993  13.441  1.00  0.00
H
ATOM   5615 1HD2 ASN X 356      17.447  19.020  15.367  1.00  0.00
H
ATOM   5616 2HD2 ASN X 356      16.222  20.031  14.676  1.00  0.00
H
ATOM   5617  N   CYS X 357      12.757  15.880  13.397  1.00  0.00
N
ATOM   5618  CA  CYS X 357      11.827  15.389  14.407  1.00  0.00
C
ATOM   5619  C   CYS X 357      11.355  13.978  14.082  1.00  0.00
C
ATOM   5620  O   CYS X 357      10.854  13.720  12.987  1.00  0.00
O
ATOM   5621  CB  CYS X 357      10.666  16.380  14.307  1.00  0.00
C
ATOM   5622  SG  CYS X 357       9.298  16.048  15.442  1.00  0.00
S
ATOM   5623  H   CYS X 357      12.760  15.451  12.483  1.00  0.00
H
ATOM   5624  HA  CYS X 357      12.229  15.422  15.420  1.00  0.00
H
ATOM   5625 1HB  CYS X 357      11.011  17.389  14.536  1.00  0.00
H
ATOM   5626 2HB  CYS X 357      10.240  16.360  13.305  1.00  0.00
H
ATOM   5627  HG  CYS X 357       8.546  17.074  15.057  1.00  0.00
H
ATOM   5628  N   TYR X 358      11.514  13.072  15.036  1.00  0.00
N
ATOM   5629  CA  TYR X 358      11.127  11.680  14.844  1.00  0.00
C
ATOM   5630  C   TYR X 358       9.803  11.374  15.532  1.00  0.00
C
ATOM   5631  O   TYR X 358       9.223  10.304  15.338  1.00  0.00
O
ATOM   5632  CB  TYR X 358      12.218  10.743  15.370  1.00  0.00
C
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ATOM   5633  CG  TYR X 358      12.458  10.857  16.859  1.00  0.00
C
ATOM   5634  CD1 TYR X 358      11.623  10.221  17.765  1.00  0.00
C
ATOM   5635  CD2 TYR X 358      13.521  11.597  17.354  1.00  0.00
C
ATOM   5636  CE1 TYR X 358      11.837  10.321  19.127  1.00  0.00
C
ATOM   5637  CE2 TYR X 358      13.746  11.704  18.712  1.00  0.00
C
ATOM   5638  CZ  TYR X 358      12.900  11.064  19.596  1.00  0.00
C
ATOM   5639  OH  TYR X 358      13.121  11.166  20.951  1.00  0.00
O
ATOM   5640  H   TYR X 358      11.914  13.353  15.920  1.00  0.00
H
ATOM   5641  HA  TYR X 358      10.979  11.479  13.783  1.00  0.00
H
ATOM   5642 1HB  TYR X 358      11.914   9.725  15.128  1.00  0.00
H
ATOM   5643 2HB  TYR X 358      13.137  10.986  14.835  1.00  0.00
H
ATOM   5644  HD1 TYR X 358      10.785   9.636  17.388  1.00  0.00
H
ATOM   5645  HD2 TYR X 358      14.184  12.100  16.650  1.00  0.00
H
ATOM   5646  HE1 TYR X 358      11.172   9.818  19.827  1.00  0.00
H
ATOM   5647  HE2 TYR X 358      14.587  12.292  19.082  1.00  0.00
H
ATOM   5648  HH  TYR X 358      13.886  11.705  21.166  1.00  0.00
H
ATOM   5649  N   GLN X 359       9.327  12.319  16.336  1.00  0.00
N
ATOM   5650  CA  GLN X 359       8.143  12.074  17.144  1.00  0.00
C
ATOM   5651  C   GLN X 359       6.909  11.893  16.264  1.00  0.00
C
ATOM   5652  O   GLN X 359       6.116  10.980  16.482  1.00  0.00
O
ATOM   5653  CB  GLN X 359       7.918  13.227  18.127  1.00  0.00
C
ATOM   5654  CG  GLN X 359       8.951  13.308  19.238  1.00  0.00
C
ATOM   5655  CD  GLN X 359       8.767  14.536  20.110  1.00  0.00
C
ATOM   5656  NE2 GLN X 359       9.561  14.633  21.170  1.00  0.00
N
ATOM   5657  OE1 GLN X 359       7.926  15.393  19.829  1.00  0.00
O
ATOM   5658  H   GLN X 359       9.792  13.215  16.386  1.00  0.00
H
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ATOM   5659  HA  GLN X 359       8.268  11.146  17.702  1.00  0.00
H
ATOM   5660 1HB  GLN X 359       7.931  14.146  17.542  1.00  0.00
H
ATOM   5661 2HB  GLN X 359       6.926  13.084  18.555  1.00  0.00
H
ATOM   5662 1HG  GLN X 359       9.182  12.466  19.891  1.00  0.00
H
ATOM   5663 2HG  GLN X 359       9.790  13.485  18.564  1.00  0.00
H
ATOM   5664 1HE2 GLN X 359       9.487  15.421  21.782  1.00  0.00
H
ATOM   5665 2HE2 GLN X 359      10.232  13.916  21.359  1.00  0.00
H
ATOM   5666  N   ASP X 360       6.765  12.760  15.271  1.00  0.00
N
ATOM   5667  CA  ASP X 360       5.632  12.687  14.357  1.00  0.00
C
ATOM   5668  C   ASP X 360       5.540  11.321  13.695  1.00  0.00
C
ATOM   5669  O   ASP X 360       4.477  10.697  13.699  1.00  0.00
O
ATOM   5670  CB  ASP X 360       5.731  13.781  13.290  1.00  0.00
C
ATOM   5671  CG  ASP X 360       5.464  15.188  13.805  1.00  0.00
C
ATOM   5672  OD1 ASP X 360       4.973  15.314  14.902  1.00  0.00
O
ATOM   5673  OD2 ASP X 360       5.894  16.122  13.172  1.00  0.00
O
ATOM   5674  H   ASP X 360       7.455  13.486  15.145  1.00  0.00
H
ATOM   5675  HA  ASP X 360       4.703  12.825  14.910  1.00  0.00
H
ATOM   5676 1HB  ASP X 360       6.674  13.768  12.742  1.00  0.00
H
ATOM   5677 2HB  ASP X 360       4.920  13.476  12.628  1.00  0.00
H
ATOM   5678  N   ALA X 361       6.654  10.855  13.136  1.00  0.00
N
ATOM   5679  CA  ALA X 361       6.662   9.557  12.485  1.00  0.00
C
ATOM   5680  C   ALA X 361       6.423   8.425  13.464  1.00  0.00
C
ATOM   5681  O   ALA X 361       5.768   7.432  13.140  1.00  0.00
O
ATOM   5682  CB  ALA X 361       7.979   9.339  11.752  1.00  0.00
C
ATOM   5683  H   ALA X 361       7.499  11.407  13.164  1.00  0.00
H
ATOM   5684  HA  ALA X 361       5.850   9.525  11.759  1.00  0.00
H
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ATOM   5685 1HB  ALA X 361       7.968   8.363  11.270  1.00  0.00
H
ATOM   5686 2HB  ALA X 361       8.107  10.115  10.996  1.00  0.00
H
ATOM   5687 3HB  ALA X 361       8.802   9.385  12.462  1.00  0.00
H
ATOM   5688  N   LEU X 362       6.950   8.570  14.673  1.00  0.00
N
ATOM   5689  CA  LEU X 362       6.781   7.557  15.702  1.00  0.00
C
ATOM   5690  C   LEU X 362       5.316   7.435  16.105  1.00  0.00
C
ATOM   5691  O   LEU X 362       4.813   6.328  16.311  1.00  0.00
O
ATOM   5692  CB  LEU X 362       7.650   7.889  16.922  1.00  0.00
C
ATOM   5693  CG  LEU X 362       7.631   6.843  18.043  1.00  0.00
C
ATOM   5694  CD1 LEU X 362       8.180   5.520  17.532  1.00  0.00
C
ATOM   5695  CD2 LEU X 362       8.448   7.347  19.223  1.00  0.00
C
ATOM   5696  H   LEU X 362       7.481   9.403  14.882  1.00  0.00
H
ATOM   5697  HA  LEU X 362       7.081   6.585  15.310  1.00  0.00
H
ATOM   5698 1HB  LEU X 362       8.629   7.906  16.443  1.00  0.00
H
ATOM   5699 2HB  LEU X 362       7.424   8.878  17.320  1.00  0.00
H
ATOM   5700  HG  LEU X 362       6.595   6.742  18.374  1.00  0.00
H
ATOM   5701 1HD1 LEU X 362       8.161   4.782  18.335  1.00  0.00
H
ATOM   5702 2HD1 LEU X 362       7.565   5.166  16.703  1.00  0.00
H
ATOM   5703 3HD1 LEU X 362       9.204   5.657  17.190  1.00  0.00
H
ATOM   5704 1HD2 LEU X 362       8.432   6.602  20.020  1.00  0.00
H
ATOM   5705 2HD2 LEU X 362       9.478   7.518  18.906  1.00  0.00
H
ATOM   5706 3HD2 LEU X 362       8.022   8.281  19.592  1.00  0.00
H
ATOM   5707  N   VAL X 363       4.627   8.567  16.204  1.00  0.00
N
ATOM   5708  CA  VAL X 363       3.223   8.570  16.594  1.00  0.00
C
ATOM   5709  C   VAL X 363       2.365   7.904  15.528  1.00  0.00
C
ATOM   5710  O   VAL X 363       1.505   7.081  15.839  1.00  0.00
O
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ATOM   5711  CB  VAL X 363       2.709  10.000  16.843  1.00  0.00
C
ATOM   5712  CG1 VAL X 363       1.193  10.004  16.985  1.00  0.00
C
ATOM   5713  CG2 VAL X 363       3.360  10.594  18.082  1.00  0.00
C
ATOM   5714  H   VAL X 363       5.087   9.444  16.005  1.00  0.00
H
ATOM   5715  HA  VAL X 363       3.061   7.980  17.497  1.00  0.00
H
ATOM   5716  HB  VAL X 363       2.997  10.632  16.002  1.00  0.00
H
ATOM   5717 1HG1 VAL X 363       0.848  11.023  17.159  1.00  0.00
H
ATOM   5718 2HG1 VAL X 363       0.742   9.620  16.071  1.00  0.00
H
ATOM   5719 3HG1 VAL X 363       0.906   9.375  17.826  1.00  0.00
H
ATOM   5720 1HG2 VAL X 363       2.986  11.604  18.242  1.00  0.00
H
ATOM   5721 2HG2 VAL X 363       3.120   9.976  18.948  1.00  0.00
H
ATOM   5722 3HG2 VAL X 363       4.442  10.625  17.947  1.00  0.00
H
ATOM   5723  N   THR X 364       2.597   8.253  14.266  1.00  0.00
N
ATOM   5724  CA  THR X 364       1.826   7.651  13.181  1.00  0.00
C
ATOM   5725  C   THR X 364       2.190   6.173  13.075  1.00  0.00
C
ATOM   5726  O   THR X 364       1.359   5.345  12.699  1.00  0.00
O
ATOM   5727  CB  THR X 364       2.085   8.363  11.841  1.00  0.00
C
ATOM   5728  CG2 THR X 364       1.683   9.827  11.928  1.00  0.00
C
ATOM   5729  OG1 THR X 364       3.477   8.272  11.510  1.00  0.00
O
ATOM   5730  H   THR X 364       3.309   8.939  14.057  1.00  0.00
H
ATOM   5731  HA  THR X 364       0.761   7.711  13.408  1.00  0.00
H
ATOM   5732  HB  THR X 364       1.503   7.872  11.062  1.00  0.00
H
ATOM   5733  HG1 THR X 364       3.728   7.350  11.436  1.00  0.00
H
ATOM   5734 1HG2 THR X 364       1.873  10.313  10.971  1.00  0.00
H
ATOM   5735 2HG2 THR X 364       0.622   9.899  12.167  1.00  0.00
H
ATOM   5736 3HG2 THR X 364       2.266  10.317  12.707  1.00  0.00
H
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ATOM   5737  N   SER X 365       3.431   5.845  13.420  1.00  0.00
N
ATOM   5738  CA  SER X 365       3.900   4.471  13.357  1.00  0.00
C
ATOM   5739  C   SER X 365       3.230   3.593  14.411  1.00  0.00
C
ATOM   5740  O   SER X 365       2.753   2.501  14.106  1.00  0.00
O
ATOM   5741  CB  SER X 365       5.406   4.426  13.526  1.00  0.00
C
ATOM   5742  OG  SER X 365       5.905   3.118  13.455  1.00  0.00
O
ATOM   5743  H   SER X 365       4.062   6.567  13.732  1.00  0.00
H
ATOM   5744  HA  SER X 365       3.778   4.016  12.374  1.00  0.00
H
ATOM   5745 1HB  SER X 365       5.862   5.022  12.736  1.00  0.00
H
ATOM   5746 2HB  SER X 365       5.663   4.852  14.495  1.00  0.00
H
ATOM   5747  HG  SER X 365       5.689   2.740  12.600  1.00  0.00
H
ATOM   5748  N   VAL X 366       3.205   4.073  15.650  1.00  0.00
N
ATOM   5749  CA  VAL X 366       2.590   3.324  16.742  1.00  0.00
C
ATOM   5750  C   VAL X 366       1.104   3.129  16.510  1.00  0.00
C
ATOM   5751  O   VAL X 366       0.589   2.028  16.669  1.00  0.00
O
ATOM   5752  CB  VAL X 366       2.799   4.027  18.095  1.00  0.00
C
ATOM   5753  CG1 VAL X 366       1.953   3.365  19.174  1.00  0.00
C
ATOM   5754  CG2 VAL X 366       4.268   4.007  18.487  1.00  0.00
C
ATOM   5755  H   VAL X 366       3.619   4.975  15.839  1.00  0.00
H
ATOM   5756  HA  VAL X 366       2.996   2.314  16.807  1.00  0.00
H
ATOM   5757  HB  VAL X 366       2.510   5.073  18.001  1.00  0.00
H
ATOM   5758 1HG1 VAL X 366       2.112   3.873  20.125  1.00  0.00
H
ATOM   5759 2HG1 VAL X 366       0.901   3.429  18.902  1.00  0.00
H
ATOM   5760 3HG1 VAL X 366       2.242   2.318  19.272  1.00  0.00
H
ATOM   5761 1HG2 VAL X 366       4.398   4.507  19.445  1.00  0.00
H
ATOM   5762 2HG2 VAL X 366       4.608   2.973  18.567  1.00  0.00
H
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ATOM   5763 3HG2 VAL X 366       4.853   4.524  17.726  1.00  0.00
H
ATOM   5764  N   VAL X 367       0.411   4.200  16.146  1.00  0.00
N
ATOM   5765  CA  VAL X 367      -1.016   4.106  15.874  1.00  0.00
C
ATOM   5766  C   VAL X 367      -1.242   3.115  14.737  1.00  0.00
C
ATOM   5767  O   VAL X 367      -2.173   2.315  14.775  1.00  0.00
O
ATOM   5768  CB  VAL X 367      -1.612   5.480  15.510  1.00  0.00
C
ATOM   5769  CG1 VAL X 367      -3.044   5.325  15.019  1.00  0.00
C
ATOM   5770  CG2 VAL X 367      -1.559   6.417  16.706  1.00  0.00
C
ATOM   5771  H   VAL X 367       0.878   5.091  16.056  1.00  0.00
H
ATOM   5772  HA  VAL X 367      -1.558   3.707  16.731  1.00  0.00
H
ATOM   5773  HB  VAL X 367      -1.006   5.932  14.725  1.00  0.00
H
ATOM   5774 1HG1 VAL X 367      -3.450   6.305  14.767  1.00  0.00
H
ATOM   5775 2HG1 VAL X 367      -3.059   4.689  14.135  1.00  0.00
H
ATOM   5776 3HG1 VAL X 367      -3.651   4.875  15.804  1.00  0.00
H
ATOM   5777 1HG2 VAL X 367      -1.983   7.383  16.432  1.00  0.00
H
ATOM   5778 2HG2 VAL X 367      -2.132   5.990  17.530  1.00  0.00
H
ATOM   5779 3HG2 VAL X 367      -0.522   6.552  17.017  1.00  0.00
H
ATOM   5780  N   ASN X 368      -0.382   3.155  13.727  1.00  0.00
N
ATOM   5781  CA  ASN X 368      -0.541   2.229  12.618  1.00  0.00
C
ATOM   5782  C   ASN X 368      -0.457   0.795  13.099  1.00  0.00
C
ATOM   5783  O   ASN X 368      -1.249  -0.054  12.695  1.00  0.00
O
ATOM   5784  CB  ASN X 368       0.485   2.483  11.530  1.00  0.00
C
ATOM   5785  CG  ASN X 368       0.372   1.546  10.360  1.00  0.00
C
ATOM   5786  ND2 ASN X 368       1.393   0.748  10.176  1.00  0.00
N
ATOM   5787  OD1 ASN X 368      -0.657   1.495   9.676  1.00  0.00
O
ATOM   5788  H   ASN X 368       0.376   3.823  13.728  1.00  0.00
H
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ATOM   5789  HA  ASN X 368      -1.529   2.352  12.172  1.00  0.00
H
ATOM   5790 1HB  ASN X 368       0.671   3.493  11.162  1.00  0.00
H
ATOM   5791 2HB  ASN X 368       1.321   2.165  12.155  1.00  0.00
H
ATOM   5792 1HD2 ASN X 368       1.387   0.097   9.415  1.00  0.00
H
ATOM   5793 2HD2 ASN X 368       2.176   0.788  10.793  1.00  0.00
H
ATOM   5794  N   CYS X 369       0.524   0.517  13.954  1.00  0.00
N
ATOM   5795  CA  CYS X 369       0.694  -0.832  14.461  1.00  0.00
C
ATOM   5796  C   CYS X 369      -0.408  -1.253  15.419  1.00  0.00
C
ATOM   5797  O   CYS X 369      -0.726  -2.440  15.516  1.00  0.00
O
ATOM   5798  CB  CYS X 369       2.025  -0.747  15.208  1.00  0.00
C
ATOM   5799  SG  CYS X 369       3.473  -0.565  14.139  1.00  0.00
S
ATOM   5800  H   CYS X 369       1.154   1.248  14.251  1.00  0.00
H
ATOM   5801  HA  CYS X 369       0.781  -1.582  13.676  1.00  0.00
H
ATOM   5802 1HB  CYS X 369       2.030   0.116  15.874  1.00  0.00
H
ATOM   5803 2HB  CYS X 369       2.190  -1.655  15.787  1.00  0.00
H
ATOM   5804  HG  CYS X 369       4.368  -0.531  15.121  1.00  0.00
H
ATOM   5805  N   MET X 370      -0.995  -0.293  16.123  1.00  0.00
N
ATOM   5806  CA  MET X 370      -2.076  -0.622  17.036  1.00  0.00
C
ATOM   5807  C   MET X 370      -3.332  -0.903  16.226  1.00  0.00
C
ATOM   5808  O   MET X 370      -4.129  -1.764  16.586  1.00  0.00
O
ATOM   5809  CB  MET X 370      -2.293   0.518  18.029  1.00  0.00
C
ATOM   5810  CG  MET X 370      -1.165   0.701  19.034  1.00  0.00
C
ATOM   5811  SD  MET X 370      -0.917  -0.752  20.074  1.00  0.00
S
ATOM   5812  CE  MET X 370       0.428  -1.559  19.209  1.00  0.00
C
ATOM   5813  H   MET X 370      -0.690   0.665  16.024  1.00  0.00
H
ATOM   5814  HA  MET X 370      -1.831  -1.527  17.592  1.00  0.00
H
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ATOM   5815 1HB  MET X 370      -2.411   1.430  17.444  1.00  0.00
H
ATOM   5816 2HB  MET X 370      -3.222   0.304  18.560  1.00  0.00
H
ATOM   5817 1HG  MET X 370      -0.248   0.907  18.482  1.00  0.00
H
ATOM   5818 2HG  MET X 370      -1.409   1.555  19.666  1.00  0.00
H
ATOM   5819 1HE  MET X 370       0.698  -2.477  19.733  1.00  0.00
H
ATOM   5820 2HE  MET X 370       0.117  -1.798  18.192  1.00  0.00
H
ATOM   5821 3HE  MET X 370       1.291  -0.894  19.178  1.00  0.00
H
ATOM   5822  N   THR X 371      -3.494  -0.179  15.122  1.00  0.00
N
ATOM   5823  CA  THR X 371      -4.664  -0.359  14.269  1.00  0.00
C
ATOM   5824  C   THR X 371      -4.835  -1.827  13.903  1.00  0.00
C
ATOM   5825  O   THR X 371      -5.934  -2.374  13.972  1.00  0.00
O
ATOM   5826  CB  THR X 371      -4.561   0.481  12.983  1.00  0.00
C
ATOM   5827  CG2 THR X 371      -5.763   0.229  12.085  1.00  0.00
C
ATOM   5828  OG1 THR X 371      -4.505   1.873  13.320  1.00  0.00
O
ATOM   5829  H   THR X 371      -2.796   0.507  14.870  1.00  0.00
H
ATOM   5830  HA  THR X 371      -5.563  -0.063  14.808  1.00  0.00
H
ATOM   5831  HB  THR X 371      -3.649   0.208  12.452  1.00  0.00
H
ATOM   5832  HG1 THR X 371      -4.441   2.394  12.517  1.00  0.00
H
ATOM   5833 1HG2 THR X 371      -5.673   0.831  11.181  1.00  0.00
H
ATOM   5834 2HG2 THR X 371      -5.800  -0.827  11.816  1.00  0.00
H
ATOM   5835 3HG2 THR X 371      -6.676   0.503  12.613  1.00  0.00
H
ATOM   5836  N   SER X 372      -3.739  -2.475  13.523  1.00  0.00
N
ATOM   5837  CA  SER X 372      -3.785  -3.878  13.150  1.00  0.00
C
ATOM   5838  C   SER X 372      -3.600  -4.835  14.321  1.00  0.00
C
ATOM   5839  O   SER X 372      -4.365  -5.775  14.488  1.00  0.00
O
ATOM   5840  CB  SER X 372      -2.727  -4.174  12.104  1.00  0.00
C
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ATOM   5841  OG  SER X 372      -1.433  -3.915  12.574  1.00  0.00
O
ATOM   5842  H   SER X 372      -2.858  -1.982  13.493  1.00  0.00
H
ATOM   5843  HA  SER X 372      -4.698  -4.156  12.622  1.00  0.00
H
ATOM   5844 1HB  SER X 372      -2.799  -5.224  11.825  1.00  0.00
H
ATOM   5845 2HB  SER X 372      -2.920  -3.554  11.229  1.00  0.00
H
ATOM   5846  HG  SER X 372      -0.798  -4.115  11.882  1.00  0.00
H
ATOM   5847  N   PHE X 373      -2.590  -4.588  15.144  1.00  0.00
N
ATOM   5848  CA  PHE X 373      -2.308  -5.484  16.255  1.00  0.00
C
ATOM   5849  C   PHE X 373      -3.379  -5.563  17.331  1.00  0.00
C
ATOM   5850  O   PHE X 373      -3.617  -6.631  17.884  1.00  0.00
O
ATOM   5851  CB  PHE X 373      -0.996  -5.093  16.937  1.00  0.00
C
ATOM   5852  CG  PHE X 373      -0.689  -5.897  18.168  1.00  0.00
C
ATOM   5853  CD1 PHE X 373      -0.218  -7.197  18.065  1.00  0.00
C
ATOM   5854  CD2 PHE X 373      -0.871  -5.356  19.432  1.00  0.00
C
ATOM   5855  CE1 PHE X 373       0.065  -7.940  19.197  1.00  0.00
C
ATOM   5856  CE2 PHE X 373      -0.587  -6.094  20.565  1.00  0.00
C
ATOM   5857  CZ  PHE X 373      -0.121  -7.388  20.446  1.00  0.00
C
ATOM   5858  H   PHE X 373      -2.013  -3.772  14.999  1.00  0.00
H
ATOM   5859  HA  PHE X 373      -2.219  -6.509  15.892  1.00  0.00
H
ATOM   5860 1HB  PHE X 373      -0.159  -5.237  16.255  1.00  0.00
H
ATOM   5861 2HB  PHE X 373      -1.032  -4.050  17.249  1.00  0.00
H
ATOM   5862  HD1 PHE X 373      -0.071  -7.635  17.077  1.00  0.00
H
ATOM   5863  HD2 PHE X 373      -1.240  -4.333  19.525  1.00  0.00
H
ATOM   5864  HE1 PHE X 373       0.434  -8.961  19.101  1.00  0.00
H
ATOM   5865  HE2 PHE X 373      -0.734  -5.656  21.552  1.00  0.00
H
ATOM   5866  HZ  PHE X 373       0.102  -7.971  21.339  1.00  0.00
H
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ATOM   5867  N   VAL X 374      -4.037  -4.446  17.617  1.00  0.00
N
ATOM   5868  CA  VAL X 374      -5.075  -4.446  18.643  1.00  0.00
C
ATOM   5869  C   VAL X 374      -6.490  -4.574  18.077  1.00  0.00
C
ATOM   5870  O   VAL X 374      -7.249  -5.454  18.490  1.00  0.00
O
ATOM   5871  CB  VAL X 374      -5.023  -3.167  19.499  1.00  0.00
C
ATOM   5872  CG1 VAL X 374      -6.146  -3.168  20.526  1.00  0.00
C
ATOM   5873  CG2 VAL X 374      -3.674  -3.041  20.188  1.00  0.00
C
ATOM   5874  H   VAL X 374      -3.819  -3.593  17.123  1.00  0.00
H
ATOM   5875  HA  VAL X 374      -4.981  -5.310  19.302  1.00  0.00
H
ATOM   5876  HB  VAL X 374      -5.128  -2.299  18.847  1.00  0.00
H
ATOM   5877 1HG1 VAL X 374      -6.096  -2.257  21.123  1.00  0.00
H
ATOM   5878 2HG1 VAL X 374      -7.107  -3.213  20.014  1.00  0.00
H
ATOM   5879 3HG1 VAL X 374      -6.041  -4.034  21.179  1.00  0.00
H
ATOM   5880 1HG2 VAL X 374      -3.654  -2.131  20.788  1.00  0.00
H
ATOM   5881 2HG2 VAL X 374      -3.513  -3.905  20.833  1.00  0.00
H
ATOM   5882 3HG2 VAL X 374      -2.884  -2.996  19.437  1.00  0.00
H
ATOM   5883  N   SER X 375      -6.848  -3.706  17.138  1.00  0.00
N
ATOM   5884  CA  SER X 375      -8.189  -3.749  16.566  1.00  0.00
C
ATOM   5885  C   SER X 375      -8.313  -4.746  15.419  1.00  0.00
C
ATOM   5886  O   SER X 375      -9.185  -5.619  15.441  1.00  0.00
O
ATOM   5887  CB  SER X 375      -8.595  -2.371  16.083  1.00  0.00
C
ATOM   5888  OG  SER X 375      -8.696  -1.452  17.137  1.00  0.00
O
ATOM   5889  H   SER X 375      -6.187  -3.012  16.819  1.00  0.00
H
ATOM   5890  HA  SER X 375      -8.968  -3.958  17.302  1.00  0.00
H
ATOM   5891 1HB  SER X 375      -7.847  -2.016  15.374  1.00  0.00
H
ATOM   5892 2HB  SER X 375      -9.560  -2.445  15.585  1.00  0.00
H
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ATOM   5893  HG  SER X 375      -7.845  -1.377  17.578  1.00  0.00
H
ATOM   5894  N   GLY X 376      -7.441  -4.635  14.419  1.00  0.00
N
ATOM   5895  CA  GLY X 376      -7.504  -5.557  13.299  1.00  0.00
C
ATOM   5896  C   GLY X 376      -7.594  -7.003  13.754  1.00  0.00
C
ATOM   5897  O   GLY X 376      -8.507  -7.736  13.371  1.00  0.00
O
ATOM   5898  H   GLY X 376      -6.738  -3.911  14.440  1.00  0.00
H
ATOM   5899 1HA  GLY X 376      -8.383  -5.328  12.697  1.00  0.00
H
ATOM   5900 2HA  GLY X 376      -6.608  -5.440  12.692  1.00  0.00
H
ATOM   5901  N   PHE X 377      -6.653  -7.411  14.591  1.00  0.00
N
ATOM   5902  CA  PHE X 377      -6.645  -8.780  15.075  1.00  0.00
C
ATOM   5903  C   PHE X 377      -7.936  -9.220  15.736  1.00  0.00
C
ATOM   5904  O   PHE X 377      -8.552 -10.196  15.302  1.00  0.00
O
ATOM   5905  CB  PHE X 377      -5.500  -8.989  16.067  1.00  0.00
C
ATOM   5906  CG  PHE X 377      -5.395 -10.396  16.583  1.00  0.00
C
ATOM   5907  CD1 PHE X 377      -4.833 -11.396  15.803  1.00  0.00
C
ATOM   5908  CD2 PHE X 377      -5.859 -10.724  17.848  1.00  0.00
C
ATOM   5909  CE1 PHE X 377      -4.735 -12.691  16.276  1.00  0.00
C
ATOM   5910  CE2 PHE X 377      -5.761 -12.017  18.324  1.00  0.00
C
ATOM   5911  CZ  PHE X 377      -5.199 -13.001  17.537  1.00  0.00
C
ATOM   5912  H   PHE X 377      -5.936  -6.768  14.895  1.00  0.00
H
ATOM   5913  HA  PHE X 377      -6.511  -9.468  14.238  1.00  0.00
H
ATOM   5914 1HB  PHE X 377      -4.546  -8.758  15.595  1.00  0.00
H
ATOM   5915 2HB  PHE X 377      -5.638  -8.349  16.938  1.00  0.00
H
ATOM   5916  HD1 PHE X 377      -4.464 -11.149  14.807  1.00  0.00
H
ATOM   5917  HD2 PHE X 377      -6.304  -9.946  18.471  1.00  0.00
H
ATOM   5918  HE1 PHE X 377      -4.291 -13.465  15.653  1.00  0.00
H
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ATOM   5919  HE2 PHE X 377      -6.129 -12.260  19.321  1.00  0.00
H
ATOM   5920  HZ  PHE X 377      -5.125 -14.021  17.909  1.00  0.00
H
ATOM   5921  N   VAL X 378      -8.367  -8.495  16.765  1.00  0.00
N
ATOM   5922  CA  VAL X 378      -9.582  -8.864  17.497  1.00  0.00
C
ATOM   5923  C   VAL X 378     -10.899  -8.729  16.732  1.00  0.00
C
ATOM   5924  O   VAL X 378     -11.899  -9.345  17.117  1.00  0.00
O
ATOM   5925  CB  VAL X 378      -9.740  -8.030  18.783  1.00  0.00
C
ATOM   5926  CG1 VAL X 378      -8.474  -8.096  19.621  1.00  0.00
C
ATOM   5927  CG2 VAL X 378     -10.078  -6.585  18.441  1.00  0.00
C
ATOM   5928  H   VAL X 378      -7.847  -7.676  17.046  1.00  0.00
H
ATOM   5929  HA  VAL X 378      -9.577  -9.921  17.767  1.00  0.00
H
ATOM   5930  HB  VAL X 378     -10.578  -8.422  19.357  1.00  0.00
H
ATOM   5931 1HG1 VAL X 378      -8.604  -7.502  20.525  1.00  0.00
H
ATOM   5932 2HG1 VAL X 378      -8.272  -9.132  19.894  1.00  0.00
H
ATOM   5933 3HG1 VAL X 378      -7.636  -7.701  19.046  1.00  0.00
H
ATOM   5934 1HG2 VAL X 378     -10.188  -6.010  19.361  1.00  0.00
H
ATOM   5935 2HG2 VAL X 378      -9.277  -6.158  17.840  1.00  0.00
H
ATOM   5936 3HG2 VAL X 378     -11.011  -6.553  17.880  1.00  0.00
H
ATOM   5937  N   ILE X 379     -10.919  -7.936  15.664  1.00  0.00
N
ATOM   5938  CA  ILE X 379     -12.156  -7.775  14.907  1.00  0.00
C
ATOM   5939  C   ILE X 379     -12.427  -8.906  13.908  1.00  0.00
C
ATOM   5940  O   ILE X 379     -13.449  -9.584  13.994  1.00  0.00
O
ATOM   5941  CB  ILE X 379     -12.172  -6.452  14.123  1.00  0.00
C
ATOM   5942  CG1 ILE X 379     -12.204  -5.261  15.085  1.00  0.00
C
ATOM   5943  CG2 ILE X 379     -13.363  -6.407  13.177  1.00  0.00
C
ATOM   5944  CD1 ILE X 379     -11.903  -3.934  14.427  1.00  0.00
C
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ATOM   5945  H   ILE X 379     -10.082  -7.446  15.379  1.00  0.00
H
ATOM   5946  HA  ILE X 379     -13.019  -7.815  15.570  1.00  0.00
H
ATOM   5947  HB  ILE X 379     -11.249  -6.366  13.550  1.00  0.00
H
ATOM   5948 1HG1 ILE X 379     -13.200  -5.229  15.528  1.00  0.00
H
ATOM   5949 2HG1 ILE X 379     -11.467  -5.456  15.866  1.00  0.00
H
ATOM   5950 1HG2 ILE X 379     -13.359  -5.464  12.631  1.00  0.00
H
ATOM   5951 2HG2 ILE X 379     -13.298  -7.234  12.471  1.00  0.00
H
ATOM   5952 3HG2 ILE X 379     -14.286  -6.491  13.750  1.00  0.00
H
ATOM   5953 1HD1 ILE X 379     -11.944  -3.140  15.172  1.00  0.00
H
ATOM   5954 2HD1 ILE X 379     -10.906  -3.965  13.985  1.00  0.00
H
ATOM   5955 3HD1 ILE X 379     -12.639  -3.738  13.648  1.00  0.00
H
ATOM   5956  N   PHE X 380     -11.499  -9.124  12.986  1.00  0.00
N
ATOM   5957  CA  PHE X 380     -11.649 -10.132  11.943  1.00  0.00
C
ATOM   5958  C   PHE X 380     -11.689 -11.592  12.377  1.00  0.00
C
ATOM   5959  O   PHE X 380     -12.568 -12.349  11.951  1.00  0.00
O
ATOM   5960  CB  PHE X 380     -10.520 -10.012  10.917  1.00  0.00
C
ATOM   5961  CG  PHE X 380     -10.730 -10.848   9.686  1.00  0.00
C
ATOM   5962  CD1 PHE X 380     -11.363 -10.319   8.571  1.00  0.00
C
ATOM   5963  CD2 PHE X 380     -10.293 -12.163   9.641  1.00  0.00
C
ATOM   5964  CE1 PHE X 380     -11.555 -11.088   7.439  1.00  0.00
C
ATOM   5965  CE2 PHE X 380     -10.484 -12.933   8.509  1.00  0.00
C
ATOM   5966  CZ  PHE X 380     -11.115 -12.394   7.407  1.00  0.00
C
ATOM   5967  H   PHE X 380     -10.655  -8.570  13.008  1.00  0.00
H
ATOM   5968  HA  PHE X 380     -12.602  -9.995  11.431  1.00  0.00
H
ATOM   5969 1HB  PHE X 380     -10.427  -8.981  10.581  1.00  0.00
H
ATOM   5970 2HB  PHE X 380      -9.579 -10.337  11.357  1.00  0.00
H
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ATOM   5971  HD1 PHE X 380     -11.709  -9.287   8.596  1.00  0.00
H
ATOM   5972  HD2 PHE X 380      -9.793 -12.589  10.512  1.00  0.00
H
ATOM   5973  HE1 PHE X 380     -12.056 -10.660   6.569  1.00  0.00
H
ATOM   5974  HE2 PHE X 380     -10.135 -13.965   8.487  1.00  0.00
H
ATOM   5975  HZ  PHE X 380     -11.269 -13.000   6.515  1.00  0.00
H
ATOM   5976  N   THR X 381     -10.734 -12.000  13.202  1.00  0.00
N
ATOM   5977  CA  THR X 381     -10.677 -13.383  13.655  1.00  0.00
C
ATOM   5978  C   THR X 381     -11.863 -13.798  14.525  1.00  0.00
C
ATOM   5979  O   THR X 381     -12.288 -14.951  14.484  1.00  0.00
O
ATOM   5980  CB  THR X 381      -9.392 -13.662  14.458  1.00  0.00
C
ATOM   5981  CG2 THR X 381      -8.163 -13.345  13.622  1.00  0.00
C
ATOM   5982  OG1 THR X 381      -9.382 -12.858  15.643  1.00  0.00
O
ATOM   5983  H   THR X 381     -10.036 -11.343  13.520  1.00  0.00
H
ATOM   5984  HA  THR X 381     -10.706 -14.054  12.797  1.00  0.00
H
ATOM   5985  HB  THR X 381      -9.375 -14.714  14.744  1.00  0.00
H
ATOM   5986  HG1 THR X 381      -8.579 -13.034  16.142  1.00  0.00
H
ATOM   5987 1HG2 THR X 381      -7.265 -13.549  14.206  1.00  0.00
H
ATOM   5988 2HG2 THR X 381      -8.163 -13.964  12.725  1.00  0.00
H
ATOM   5989 3HG2 THR X 381      -8.179 -12.293  13.337  1.00  0.00
H
ATOM   5990  N   VAL X 382     -12.409 -12.865  15.326  1.00  0.00
N
ATOM   5991  CA  VAL X 382     -13.549 -13.241  16.169  1.00  0.00
C
ATOM   5992  C   VAL X 382     -14.855 -13.306  15.374  1.00  0.00
C
ATOM   5993  O   VAL X 382     -15.642 -14.231  15.543  1.00  0.00
O
ATOM   5994  CB  VAL X 382     -13.736 -12.256  17.339  1.00  0.00
C
ATOM   5995  CG1 VAL X 382     -15.001 -12.586  18.116  1.00  0.00
C
ATOM   5996  CG2 VAL X 382     -12.524 -12.286  18.258  1.00  0.00
C
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ATOM   5997  H   VAL X 382     -12.041 -11.925  15.348  1.00  0.00
H
ATOM   5998  HA  VAL X 382     -13.429 -14.246  16.575  1.00  0.00
H
ATOM   5999  HB  VAL X 382     -13.808 -11.243  16.942  1.00  0.00
H
ATOM   6000 1HG1 VAL X 382     -15.117 -11.882  18.940  1.00  0.00
H
ATOM   6001 2HG1 VAL X 382     -15.864 -12.516  17.455  1.00  0.00
H
ATOM   6002 3HG1 VAL X 382     -14.929 -13.599  18.514  1.00  0.00
H
ATOM   6003 1HG2 VAL X 382     -12.673 -11.584  19.078  1.00  0.00
H
ATOM   6004 2HG2 VAL X 382     -12.397 -13.291  18.658  1.00  0.00
H
ATOM   6005 3HG2 VAL X 382     -11.634 -12.004  17.696  1.00  0.00
H
ATOM   6006  N   LEU X 383     -15.076 -12.329  14.500  1.00  0.00
N
ATOM   6007  CA  LEU X 383     -16.300 -12.330  13.697  1.00  0.00
C
ATOM   6008  C   LEU X 383     -16.346 -13.563  12.800  1.00  0.00
C
ATOM   6009  O   LEU X 383     -17.360 -14.263  12.740  1.00  0.00
O
ATOM   6010  CB  LEU X 383     -16.388 -11.045  12.864  1.00  0.00
C
ATOM   6011  CG  LEU X 383     -16.670  -9.766  13.662  1.00  0.00
C
ATOM   6012  CD1 LEU X 383     -16.504  -8.545  12.767  1.00  0.00
C
ATOM   6013  CD2 LEU X 383     -18.077  -9.827  14.238  1.00  0.00
C
ATOM   6014  H   LEU X 383     -14.399 -11.587  14.390  1.00  0.00
H
ATOM   6015  HA  LEU X 383     -17.168 -12.385  14.355  1.00  0.00
H
ATOM   6016 1HB  LEU X 383     -15.374 -11.022  12.467  1.00  0.00
H
ATOM   6017 2HB  LEU X 383     -17.097 -11.145  12.042  1.00  0.00
H
ATOM   6018  HG  LEU X 383     -15.970  -9.744  14.496  1.00  0.00
H
ATOM   6019 1HD1 LEU X 383     -16.707  -7.642  13.343  1.00  0.00
H
ATOM   6020 2HD1 LEU X 383     -15.483  -8.510  12.385  1.00  0.00
H
ATOM   6021 3HD1 LEU X 383     -17.203  -8.608  11.933  1.00  0.00
H
ATOM   6022 1HD2 LEU X 383     -18.277  -8.917  14.805  1.00  0.00
H
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ATOM   6023 2HD2 LEU X 383     -18.800  -9.914  13.425  1.00  0.00
H
ATOM   6024 3HD2 LEU X 383     -18.165 -10.690  14.896  1.00  0.00
H
ATOM   6025  N   GLY X 384     -15.246 -13.828  12.103  1.00  0.00
N
ATOM   6026  CA  GLY X 384     -15.172 -14.977  11.207  1.00  0.00
C
ATOM   6027  C   GLY X 384     -15.281 -16.296  11.971  1.00  0.00
C
ATOM   6028  O   GLY X 384     -16.048 -17.183  11.595  1.00  0.00
O
ATOM   6029  H   GLY X 384     -14.444 -13.222  12.196  1.00  0.00
H
ATOM   6030 1HA  GLY X 384     -15.987 -14.920  10.486  1.00  0.00
H
ATOM   6031 2HA  GLY X 384     -14.219 -14.955  10.678  1.00  0.00
H
ATOM   6032  N   TYR X 385     -14.523 -16.426  13.051  1.00  0.00
N
ATOM   6033  CA  TYR X 385     -14.536 -17.639  13.858  1.00  0.00
C
ATOM   6034  C   TYR X 385     -15.957 -18.019  14.256  1.00  0.00
C
ATOM   6035  O   TYR X 385     -16.401 -19.143  14.015  1.00  0.00
O
ATOM   6036  CB  TYR X 385     -13.670 -17.462  15.107  1.00  0.00
C
ATOM   6037  CG  TYR X 385     -13.678 -18.657  16.033  1.00  0.00
C
ATOM   6038  CD1 TYR X 385     -12.849 -19.746  15.800  1.00  0.00
C
ATOM   6039  CD2 TYR X 385     -14.511 -18.693  17.140  1.00  0.00
C
ATOM   6040  CE1 TYR X 385     -12.852 -20.840  16.642  1.00  0.00
C
ATOM   6041  CE2 TYR X 385     -14.523 -19.782  17.990  1.00  0.00
C
ATOM   6042  CZ  TYR X 385     -13.692 -20.855  17.738  1.00  0.00
C
ATOM   6043  OH  TYR X 385     -13.699 -21.940  18.582  1.00  0.00
O
ATOM   6044  H   TYR X 385     -13.919 -15.664  13.322  1.00  0.00
H
ATOM   6045  HA  TYR X 385     -14.141 -18.474  13.277  1.00  0.00
H
ATOM   6046 1HB  TYR X 385     -12.650 -17.271  14.767  1.00  0.00
H
ATOM   6047 2HB  TYR X 385     -14.045 -16.588  15.638  1.00  0.00
H
ATOM   6048  HD1 TYR X 385     -12.189 -19.727  14.932  1.00  0.00
H
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ATOM   6049  HD2 TYR X 385     -15.166 -17.843  17.333  1.00  0.00
H
ATOM   6050  HE1 TYR X 385     -12.197 -21.688  16.447  1.00  0.00
H
ATOM   6051  HE2 TYR X 385     -15.188 -19.790  18.855  1.00  0.00
H
ATOM   6052  HH  TYR X 385     -13.084 -22.628  18.314  1.00  0.00
H
ATOM   6053  N   MET X 386     -16.668 -17.076  14.866  1.00  0.00
N
ATOM   6054  CA  MET X 386     -18.034 -17.314  15.309  1.00  0.00
C
ATOM   6055  C   MET X 386     -18.978 -17.482  14.123  1.00  0.00
C
ATOM   6056  O   MET X 386     -19.937 -18.251  14.185  1.00  0.00
O
ATOM   6057  CB  MET X 386     -18.506 -16.167  16.200  1.00  0.00
C
ATOM   6058  CG  MET X 386     -17.829 -16.108  17.562  1.00  0.00
C
ATOM   6059  SD  MET X 386     -18.082 -17.608  18.530  1.00  0.00
S
ATOM   6060  CE  MET X 386     -19.840 -17.514  18.848  1.00  0.00
C
ATOM   6061  H   MET X 386     -16.249 -16.171  15.026  1.00  0.00
H
ATOM   6062  HA  MET X 386     -18.083 -18.242  15.878  1.00  0.00
H
ATOM   6063 1HB  MET X 386     -18.313 -15.243  15.658  1.00  0.00
H
ATOM   6064 2HB  MET X 386     -19.582 -16.291  16.335  1.00  0.00
H
ATOM   6065 1HG  MET X 386     -16.761 -15.959  17.404  1.00  0.00
H
ATOM   6066 2HG  MET X 386     -18.237 -15.257  18.107  1.00  0.00
H
ATOM   6067 1HE  MET X 386     -20.151 -18.376  19.440  1.00  0.00
H
ATOM   6068 2HE  MET X 386     -20.062 -16.598  19.397  1.00  0.00
H
ATOM   6069 3HE  MET X 386     -20.381 -17.509  17.902  1.00  0.00
H
ATOM   6070  N   ALA X 387     -18.700 -16.754  13.048  1.00  0.00
N
ATOM   6071  CA  ALA X 387     -19.573 -16.748  11.880  1.00  0.00
C
ATOM   6072  C   ALA X 387     -19.649 -18.131  11.242  1.00  0.00
C
ATOM   6073  O   ALA X 387     -20.646 -18.477  10.603  1.00  0.00
O
ATOM   6074  CB  ALA X 387     -19.094 -15.717  10.867  1.00  0.00
C
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ATOM   6075  H   ALA X 387     -17.861 -16.191  13.039  1.00  0.00
H
ATOM   6076  HA  ALA X 387     -20.580 -16.481  12.199  1.00  0.00
H
ATOM   6077 1HB  ALA X 387     -19.758 -15.725  10.002  1.00  0.00
H
ATOM   6078 2HB  ALA X 387     -19.104 -14.728  11.322  1.00  0.00
H
ATOM   6079 3HB  ALA X 387     -18.082 -15.962  10.550  1.00  0.00
H
ATOM   6080  N   GLU X 388     -18.594 -18.918  11.416  1.00  0.00
N
ATOM   6081  CA  GLU X 388     -18.571 -20.288  10.925  1.00  0.00
C
ATOM   6082  C   GLU X 388     -19.347 -21.220  11.846  1.00  0.00
C
ATOM   6083  O   GLU X 388     -19.760 -22.308  11.446  1.00  0.00
O
ATOM   6084  CB  GLU X 388     -17.129 -20.781  10.776  1.00  0.00
C
ATOM   6085  CG  GLU X 388     -16.315 -20.035   9.728  1.00  0.00
C
ATOM   6086  CD  GLU X 388     -14.901 -20.541   9.672  1.00  0.00
C
ATOM   6087  OE1 GLU X 388     -14.605 -21.495  10.351  1.00  0.00
O
ATOM   6088  OE2 GLU X 388     -14.146 -20.047   8.868  1.00  0.00
O
ATOM   6089  H   GLU X 388     -17.786 -18.556  11.903  1.00  0.00
H
ATOM   6090  HA  GLU X 388     -19.059 -20.341   9.951  1.00  0.00
H
ATOM   6091 1HB  GLU X 388     -16.653 -20.669  11.751  1.00  0.00
H
ATOM   6092 2HB  GLU X 388     -17.177 -21.837  10.513  1.00  0.00
H
ATOM   6093 1HG  GLU X 388     -16.754 -20.073   8.731  1.00  0.00
H
ATOM   6094 2HG  GLU X 388     -16.318 -19.006  10.085  1.00  0.00
H
ATOM   6095  N   MET X 389     -19.547 -20.785  13.089  1.00  0.00
N
ATOM   6096  CA  MET X 389     -20.268 -21.578  14.073  1.00  0.00
C
ATOM   6097  C   MET X 389     -21.750 -21.229  14.086  1.00  0.00
C
ATOM   6098  O   MET X 389     -22.596 -22.071  14.386  1.00  0.00
O
ATOM   6099  CB  MET X 389     -19.666 -21.370  15.462  1.00  0.00
C
ATOM   6100  CG  MET X 389     -18.251 -21.910  15.621  1.00  0.00
C
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ATOM   6101  SD  MET X 389     -17.514 -21.470  17.207  1.00  0.00
S
ATOM   6102  CE  MET X 389     -18.509 -22.451  18.327  1.00  0.00
C
ATOM   6103  H   MET X 389     -19.189 -19.878  13.355  1.00  0.00
H
ATOM   6104  HA  MET X 389     -20.201 -22.635  13.820  1.00  0.00
H
ATOM   6105 1HB  MET X 389     -19.669 -20.298  15.652  1.00  0.00
H
ATOM   6106 2HB  MET X 389     -20.325 -21.868  16.173  1.00  0.00
H
ATOM   6107 1HG  MET X 389     -18.289 -22.996  15.533  1.00  0.00
H
ATOM   6108 2HG  MET X 389     -17.639 -21.502  14.817  1.00  0.00
H
ATOM   6109 1HE  MET X 389     -18.175 -22.286  19.352  1.00  0.00
H
ATOM   6110 2HE  MET X 389     -19.556 -22.156  18.236  1.00  0.00
H
ATOM   6111 3HE  MET X 389     -18.405 -23.506  18.076  1.00  0.00
H
ATOM   6112  N   ARG X 390     -22.062 -19.975  13.760  1.00  0.00
N
ATOM   6113  CA  ARG X 390     -23.434 -19.491  13.810  1.00  0.00
C
ATOM   6114  C   ARG X 390     -24.130 -19.666  12.467  1.00  0.00
C
ATOM   6115  O   ARG X 390     -23.491 -19.622  11.414  1.00  0.00
O
ATOM   6116  CB  ARG X 390     -23.519 -18.053  14.296  1.00  0.00
C
ATOM   6117  CG  ARG X 390     -23.045 -17.830  15.723  1.00  0.00
C
ATOM   6118  CD  ARG X 390     -23.977 -18.339  16.763  1.00  0.00
C
ATOM   6119  NE  ARG X 390     -23.509 -18.166  18.129  1.00  0.00
N
ATOM   6120  CZ  ARG X 390     -24.190 -18.549  19.226  1.00  0.00
C
ATOM   6121  NH1 ARG X 390     -25.383 -19.093  19.126  1.00  0.00
N
ATOM   6122  NH2 ARG X 390     -23.637 -18.343  20.408  1.00  0.00
N
ATOM   6123  H   ARG X 390     -21.328 -19.344  13.471  1.00  0.00
H
ATOM   6124  HA  ARG X 390     -24.005 -20.074  14.533  1.00  0.00
H
ATOM   6125 1HB  ARG X 390     -22.913 -17.451  13.619  1.00  0.00
H
ATOM   6126 2HB  ARG X 390     -24.563 -17.749  14.214  1.00  0.00
H
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ATOM   6127 1HG  ARG X 390     -22.089 -18.335  15.854  1.00  0.00
H
ATOM   6128 2HG  ARG X 390     -22.916 -16.760  15.883  1.00  0.00
H
ATOM   6129 1HD  ARG X 390     -24.927 -17.815  16.675  1.00  0.00
H
ATOM   6130 2HD  ARG X 390     -24.135 -19.407  16.605  1.00  0.00
H
ATOM   6131  HE  ARG X 390     -22.648 -17.755  18.468  1.00  0.00
H
ATOM   6132 1HH1 ARG X 390     -25.799 -19.230  18.216  1.00  0.00
H
ATOM   6133 2HH1 ARG X 390     -25.877 -19.373  19.961  1.00  0.00
H
ATOM   6134 1HH2 ARG X 390     -22.727 -17.906  20.467  1.00  0.00
H
ATOM   6135 2HH2 ARG X 390     -24.126 -18.619  21.246  1.00  0.00
H
ATOM   6136  N   ASN X 391     -25.443 -19.874  12.509  1.00  0.00
N
ATOM   6137  CA  ASN X 391     -26.237 -20.002  11.293  1.00  0.00
C
ATOM   6138  C   ASN X 391     -27.019 -18.727  11.007  1.00  0.00
C
ATOM   6139  O   ASN X 391     -28.048 -18.758  10.331  1.00  0.00
O
ATOM   6140  CB  ASN X 391     -27.180 -21.189  11.368  1.00  0.00
C
ATOM   6141  CG  ASN X 391     -26.479 -22.518  11.403  1.00  0.00
C
ATOM   6142  ND2 ASN X 391     -26.684 -23.237  12.476  1.00  0.00
N
ATOM   6143  OD1 ASN X 391     -25.819 -22.920  10.438  1.00  0.00
O
ATOM   6144  H   ASN X 391     -25.902 -19.946  13.407  1.00  0.00
H
ATOM   6145  HA  ASN X 391     -25.580 -20.160  10.437  1.00  0.00
H
ATOM   6146 1HB  ASN X 391     -28.006 -21.202  12.081  1.00  0.00
H
ATOM   6147 2HB  ASN X 391     -27.569 -21.023  10.364  1.00  0.00
H
ATOM   6148 1HD2 ASN X 391     -26.249 -24.133  12.569  1.00  0.00
H
ATOM   6149 2HD2 ASN X 391     -27.277 -22.891  13.204  1.00  0.00
H
ATOM   6150  N   GLU X 392     -26.529 -17.608  11.528  1.00  0.00
N
ATOM   6151  CA  GLU X 392     -27.199 -16.326  11.361  1.00  0.00
C
ATOM   6152  C   GLU X 392     -26.208 -15.223  11.005  1.00  0.00
C
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ATOM   6153  O   GLU X 392     -25.007 -15.359  11.240  1.00  0.00
O
ATOM   6154  CB  GLU X 392     -27.965 -15.952  12.633  1.00  0.00
C
ATOM   6155  CG  GLU X 392     -27.081 -15.711  13.850  1.00  0.00
C
ATOM   6156  CD  GLU X 392     -27.906 -15.470  15.083  1.00  0.00
C
ATOM   6157  OE1 GLU X 392     -29.109 -15.517  14.989  1.00  0.00
O
ATOM   6158  OE2 GLU X 392     -27.335 -15.349  16.141  1.00  0.00
O
ATOM   6159  H   GLU X 392     -25.667 -17.647  12.054  1.00  0.00
H
ATOM   6160  HA  GLU X 392     -27.907 -16.383  10.533  1.00  0.00
H
ATOM   6161 1HB  GLU X 392     -28.530 -15.048  12.410  1.00  0.00
H
ATOM   6162 2HB  GLU X 392     -28.654 -16.769  12.842  1.00  0.00
H
ATOM   6163 1HG  GLU X 392     -26.374 -16.516  14.038  1.00  0.00
H
ATOM   6164 2HG  GLU X 392     -26.536 -14.802  13.594  1.00  0.00
H
ATOM   6165  N   ASP X 393     -26.717 -14.137  10.439  1.00  0.00
N
ATOM   6166  CA  ASP X 393     -25.865 -13.066   9.930  1.00  0.00
C
ATOM   6167  C   ASP X 393     -25.241 -12.273  11.069  1.00  0.00
C
ATOM   6168  O   ASP X 393     -25.728 -12.300  12.198  1.00  0.00
O
ATOM   6169  CB  ASP X 393     -26.664 -12.134   9.016  1.00  0.00
C
ATOM   6170  CG  ASP X 393     -27.037 -12.741   7.670  1.00  0.00
C
ATOM   6171  OD1 ASP X 393     -26.527 -13.789   7.350  1.00  0.00
O
ATOM   6172  OD2 ASP X 393     -27.941 -12.240   7.046  1.00  0.00
O
ATOM   6173  H   ASP X 393     -27.720 -14.048  10.358  1.00  0.00
H
ATOM   6174  HA  ASP X 393     -25.040 -13.492   9.359  1.00  0.00
H
ATOM   6175 1HB  ASP X 393     -27.555 -11.721   9.487  1.00  0.00
H
ATOM   6176 2HB  ASP X 393     -25.931 -11.339   8.864  1.00  0.00
H
ATOM   6177  N   VAL X 394     -24.160 -11.561  10.764  1.00  0.00
N
ATOM   6178  CA  VAL X 394     -23.361 -10.910  11.793  1.00  0.00
C
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ATOM   6179  C   VAL X 394     -24.197  -9.927  12.604  1.00  0.00
C
ATOM   6180  O   VAL X 394     -24.072  -9.848  13.825  1.00  0.00
O
ATOM   6181  CB  VAL X 394     -22.158 -10.163  11.187  1.00  0.00
C
ATOM   6182  CG1 VAL X 394     -21.452  -9.337  12.250  1.00  0.00
C
ATOM   6183  CG2 VAL X 394     -21.188 -11.147  10.548  1.00  0.00
C
ATOM   6184  H   VAL X 394     -23.886 -11.470   9.796  1.00  0.00
H
ATOM   6185  HA  VAL X 394     -22.992 -11.631  12.523  1.00  0.00
H
ATOM   6186  HB  VAL X 394     -22.512  -9.508  10.391  1.00  0.00
H
ATOM   6187 1HG1 VAL X 394     -20.604  -8.817  11.804  1.00  0.00
H
ATOM   6188 2HG1 VAL X 394     -22.147  -8.608  12.665  1.00  0.00
H
ATOM   6189 3HG1 VAL X 394     -21.097  -9.993  13.045  1.00  0.00
H
ATOM   6190 1HG2 VAL X 394     -20.344 -10.604  10.124  1.00  0.00
H
ATOM   6191 2HG2 VAL X 394     -20.828 -11.844  11.304  1.00  0.00
H
ATOM   6192 3HG2 VAL X 394     -21.696 -11.699   9.758  1.00  0.00
H
ATOM   6193  N   SER X 395     -25.055  -9.182  11.917  1.00  0.00
N
ATOM   6194  CA  SER X 395     -25.905  -8.193  12.569  1.00  0.00
C
ATOM   6195  C   SER X 395     -27.030  -8.864  13.348  1.00  0.00
C
ATOM   6196  O   SER X 395     -27.590  -8.278  14.276  1.00  0.00
O
ATOM   6197  CB  SER X 395     -26.472  -7.232  11.542  1.00  0.00
C
ATOM   6198  OG  SER X 395     -25.475  -6.440  10.955  1.00  0.00
O
ATOM   6199  H   SER X 395     -25.121  -9.304  10.917  1.00  0.00
H
ATOM   6200  HA  SER X 395     -25.356  -7.512  13.221  1.00  0.00
H
ATOM   6201 1HB  SER X 395     -26.971  -7.809  10.763  1.00  0.00
H
ATOM   6202 2HB  SER X 395     -27.195  -6.584  12.033  1.00  0.00
H
ATOM   6203  HG  SER X 395     -25.875  -5.849  10.314  1.00  0.00
H
ATOM   6204  N   GLU X 396     -27.355 -10.094  12.971  1.00  0.00
N
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ATOM   6205  CA  GLU X 396     -28.503 -10.792  13.534  1.00  0.00
C
ATOM   6206  C   GLU X 396     -28.174 -11.383  14.903  1.00  0.00
C
ATOM   6207  O   GLU X 396     -29.042 -11.933  15.574  1.00  0.00
O
ATOM   6208  CB  GLU X 396     -28.978 -11.896  12.586  1.00  0.00
C
ATOM   6209  CG  GLU X 396     -29.635 -11.390  11.312  1.00  0.00
C
ATOM   6210  CD  GLU X 396     -29.955 -12.522  10.375  1.00  0.00
C
ATOM   6211  OE1 GLU X 396     -29.588 -13.633  10.670  1.00  0.00
O
ATOM   6212  OE2 GLU X 396     -30.661 -12.295   9.421  1.00  0.00
O
ATOM   6213  H   GLU X 396     -26.791 -10.559  12.274  1.00  0.00
H
ATOM   6214  HA  GLU X 396     -29.323 -10.090  13.689  1.00  0.00
H
ATOM   6215 1HB  GLU X 396     -28.103 -12.494  12.330  1.00  0.00
H
ATOM   6216 2HB  GLU X 396     -29.687 -12.509  13.141  1.00  0.00
H
ATOM   6217 1HG  GLU X 396     -30.536 -10.803  11.492  1.00  0.00
H
ATOM   6218 2HG  GLU X 396     -28.873 -10.753  10.865  1.00  0.00
H
ATOM   6219  N   VAL X 397     -26.914 -11.265  15.299  1.00  0.00
N
ATOM   6220  CA  VAL X 397     -26.470 -11.767  16.596  1.00  0.00
C
ATOM   6221  C   VAL X 397     -27.085 -10.967  17.736  1.00  0.00
C
ATOM   6222  O   VAL X 397     -27.542 -11.531  18.729  1.00  0.00
O
ATOM   6223  CB  VAL X 397     -24.936 -11.728  16.723  1.00  0.00
C
ATOM   6224  CG1 VAL X 397     -24.511 -12.067  18.144  1.00  0.00
C
ATOM   6225  CG2 VAL X 397     -24.295 -12.689  15.733  1.00  0.00
C
ATOM   6226  H   VAL X 397     -26.246 -10.817  14.689  1.00  0.00
H
ATOM   6227  HA  VAL X 397     -26.806 -12.791  16.761  1.00  0.00
H
ATOM   6228  HB  VAL X 397     -24.584 -10.729  16.467  1.00  0.00
H
ATOM   6229 1HG1 VAL X 397     -23.423 -12.034  18.216  1.00  0.00
H
ATOM   6230 2HG1 VAL X 397     -24.940 -11.342  18.836  1.00  0.00
H
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ATOM   6231 3HG1 VAL X 397     -24.860 -13.067  18.401  1.00  0.00
H
ATOM   6232 1HG2 VAL X 397     -23.211 -12.649  15.836  1.00  0.00
H
ATOM   6233 2HG2 VAL X 397     -24.641 -13.703  15.936  1.00  0.00
H
ATOM   6234 3HG2 VAL X 397     -24.574 -12.406  14.719  1.00  0.00
H
ATOM   6235  N   ALA X 398     -27.092  -9.644  17.588  1.00  0.00
N
ATOM   6236  CA  ALA X 398     -27.507  -8.756  18.664  1.00  0.00
C
ATOM   6237  C   ALA X 398     -27.875  -7.376  18.128  1.00  0.00
C
ATOM   6238  O   ALA X 398     -27.264  -6.889  17.176  1.00  0.00
O
ATOM   6239  CB  ALA X 398     -26.412  -8.647  19.716  1.00  0.00
C
ATOM   6240  H   ALA X 398     -26.802  -9.246  16.705  1.00  0.00
H
ATOM   6241  HA  ALA X 398     -28.399  -9.170  19.135  1.00  0.00
H
ATOM   6242 1HB  ALA X 398     -26.739  -7.980  20.512  1.00  0.00
H
ATOM   6243 2HB  ALA X 398     -26.205  -9.633  20.129  1.00  0.00
H
ATOM   6244 3HB  ALA X 398     -25.509  -8.248  19.257  1.00  0.00
H
ATOM   6245  N   LYS X 399     -28.873  -6.754  18.748  1.00  0.00
N
ATOM   6246  CA  LYS X 399     -29.308  -5.423  18.346  1.00  0.00
C
ATOM   6247  C   LYS X 399     -28.463  -4.341  19.009  1.00  0.00
C
ATOM   6248  O   LYS X 399     -28.350  -4.292  20.235  1.00  0.00
O
ATOM   6249  CB  LYS X 399     -30.785  -5.217  18.687  1.00  0.00
C
ATOM   6250  CG  LYS X 399     -31.356  -3.883  18.225  1.00  0.00
C
ATOM   6251  CD  LYS X 399     -32.835  -3.769  18.561  1.00  0.00
C
ATOM   6252  CE  LYS X 399     -33.409  -2.437  18.097  1.00  0.00
C
ATOM   6253  NZ  LYS X 399     -34.857  -2.312  18.420  1.00  0.00
N
ATOM   6254  H   LYS X 399     -29.342  -7.215  19.514  1.00  0.00
H
ATOM   6255  HA  LYS X 399     -29.177  -5.301  17.270  1.00  0.00
H
ATOM   6256 1HB  LYS X 399     -31.338  -6.031  18.217  1.00  0.00
H
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ATOM   6257 2HB  LYS X 399     -30.877  -5.294  19.770  1.00  0.00
H
ATOM   6258 1HG  LYS X 399     -30.808  -3.081  18.719  1.00  0.00
H
ATOM   6259 2HG  LYS X 399     -31.222  -3.804  17.146  1.00  0.00
H
ATOM   6260 1HD  LYS X 399     -33.368  -4.585  18.069  1.00  0.00
H
ATOM   6261 2HD  LYS X 399     -32.955  -3.859  19.640  1.00  0.00
H
ATOM   6262 1HE  LYS X 399     -32.856  -1.638  18.590  1.00  0.00
H
ATOM   6263 2HE  LYS X 399     -33.271  -2.362  17.019  1.00  0.00
H
ATOM   6264 1HZ  LYS X 399     -35.196  -1.417  18.097  1.00  0.00
H
ATOM   6265 2HZ  LYS X 399     -35.370  -3.053  17.964  1.00  0.00
H
ATOM   6266 3HZ  LYS X 399     -34.985  -2.380  19.420  1.00  0.00
H
ATOM   6267  N   ASP X 400     -27.872  -3.475  18.192  1.00  0.00
N
ATOM   6268  CA  ASP X 400     -27.071  -2.365  18.703  1.00  0.00
C
ATOM   6269  C   ASP X 400     -27.034  -1.214  17.705  1.00  0.00
C
ATOM   6270  O   ASP X 400     -27.803  -1.184  16.746  1.00  0.00
O
ATOM   6271  CB  ASP X 400     -25.650  -2.834  19.024  1.00  0.00
C
ATOM   6272  CG  ASP X 400     -24.860  -3.319  17.817  1.00  0.00
C
ATOM   6273  OD1 ASP X 400     -25.300  -3.094  16.714  1.00  0.00
O
ATOM   6274  OD2 ASP X 400     -23.753  -3.767  17.998  1.00  0.00
O
ATOM   6275  H   ASP X 400     -27.980  -3.587  17.194  1.00  0.00
H
ATOM   6276  HA  ASP X 400     -27.524  -1.973  19.614  1.00  0.00
H
ATOM   6277 1HB  ASP X 400     -25.062  -2.094  19.568  1.00  0.00
H
ATOM   6278 2HB  ASP X 400     -25.870  -3.678  19.678  1.00  0.00
H
ATOM   6279  N   ALA X 401     -26.131  -0.269  17.941  1.00  0.00
N
ATOM   6280  CA  ALA X 401     -26.037   0.924  17.103  1.00  0.00
C
ATOM   6281  C   ALA X 401     -24.722   0.949  16.335  1.00  0.00
C
ATOM   6282  O   ALA X 401     -23.730   0.359  16.760  1.00  0.00
O
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ATOM   6283  CB  ALA X 401     -26.186   2.179  17.950  1.00  0.00
C
ATOM   6284  H   ALA X 401     -25.494  -0.378  18.718  1.00  0.00
H
ATOM   6285  HA  ALA X 401     -26.843   0.900  16.371  1.00  0.00
H
ATOM   6286 1HB  ALA X 401     -26.113   3.059  17.310  1.00  0.00
H
ATOM   6287 2HB  ALA X 401     -27.156   2.172  18.446  1.00  0.00
H
ATOM   6288 3HB  ALA X 401     -25.396   2.209  18.699  1.00  0.00
H
ATOM   6289  N   GLY X 402     -24.722   1.636  15.194  1.00  0.00
N
ATOM   6290  CA  GLY X 402     -23.529   1.739  14.361  1.00  0.00
C
ATOM   6291  C   GLY X 402     -22.556   2.771  14.918  1.00  0.00
C
ATOM   6292  O   GLY X 402     -22.674   3.198  16.065  1.00  0.00
O
ATOM   6293  H   GLY X 402     -25.570   2.099  14.899  1.00  0.00
H
ATOM   6294 1HA  GLY X 402     -23.035   0.767  14.326  1.00  0.00
H
ATOM   6295 2HA  GLY X 402     -23.821   2.033  13.353  1.00  0.00
H
ATOM   6296  N   PRO X 403     -21.589   3.169  14.097  1.00  0.00
N
ATOM   6297  CA  PRO X 403     -20.596   4.154  14.505  1.00  0.00
C
ATOM   6298  C   PRO X 403     -21.256   5.449  14.965  1.00  0.00
C
ATOM   6299  O   PRO X 403     -22.272   5.866  14.412  1.00  0.00
O
ATOM   6300  CB  PRO X 403     -19.734   4.361  13.249  1.00  0.00
C
ATOM   6301  CG  PRO X 403     -19.909   3.102  12.445  1.00  0.00
C
ATOM   6302  CD  PRO X 403     -21.466   2.811  12.677  1.00  0.00
C
ATOM   6303  HA  PRO X 403     -20.049   3.797  15.257  1.00  0.00
H
ATOM   6304 1HB  PRO X 403     -20.211   5.014  12.821  1.00  0.00
H
ATOM   6305 2HB  PRO X 403     -18.938   4.347  13.589  1.00  0.00
H
ATOM   6306 1HG  PRO X 403     -20.672   3.121  12.078  1.00  0.00
H
ATOM   6307 2HG  PRO X 403     -19.064   2.851  12.127  1.00  0.00
H
ATOM   6308 1HD  PRO X 403     -22.363   2.840  12.356  1.00  0.00
H
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ATOM   6309 2HD  PRO X 403     -21.034   1.964  12.708  1.00  0.00
H
ATOM   6310  N   SER X 404     -20.674   6.073  15.983  1.00  0.00
N
ATOM   6311  CA  SER X 404     -21.213   7.314  16.526  1.00  0.00
C
ATOM   6312  C   SER X 404     -21.056   8.462  15.536  1.00  0.00
C
ATOM   6313  O   SER X 404     -21.918   9.332  15.440  1.00  0.00
O
ATOM   6314  CB  SER X 404     -20.531   7.650  17.838  1.00  0.00
C
ATOM   6315  OG  SER X 404     -20.815   6.708  18.836  1.00  0.00
O
ATOM   6316  H   SER X 404     -19.838   5.679  16.390  1.00  0.00
H
ATOM   6317  HA  SER X 404     -22.255   7.233  16.839  1.00  0.00
H
ATOM   6318 1HB  SER X 404     -19.455   7.679  17.673  1.00  0.00
H
ATOM   6319 2HB  SER X 404     -20.873   8.630  18.168  1.00  0.00
H
ATOM   6320  HG  SER X 404     -20.366   6.956  19.647  1.00  0.00
H
ATOM   6321  N   LEU X 405     -19.950   8.457  14.802  1.00  0.00
N
ATOM   6322  CA  LEU X 405     -19.645   9.530  13.864  1.00  0.00
C
ATOM   6323  C   LEU X 405     -19.635   9.025  12.430  1.00  0.00
C
ATOM   6324  O   LEU X 405     -19.403   7.843  12.175  1.00  0.00
O
ATOM   6325  CB  LEU X 405     -18.295  10.171  14.214  1.00  0.00
C
ATOM   6326  CG  LEU X 405     -18.198  10.761  15.625  1.00  0.00
C
ATOM   6327  CD1 LEU X 405     -16.784  11.262  15.886  1.00  0.00
C
ATOM   6328  CD2 LEU X 405     -19.207  11.891  15.776  1.00  0.00
C
ATOM   6329  H   LEU X 405     -19.302   7.688  14.895  1.00  0.00
H
ATOM   6330  HA  LEU X 405     -20.422  10.292  13.917  1.00  0.00
H
ATOM   6331 1HB  LEU X 405     -17.656   9.293  14.129  1.00  0.00
H
ATOM   6332 2HB  LEU X 405     -17.996  10.911  13.470  1.00  0.00
H
ATOM   6333  HG  LEU X 405     -18.475   9.972  16.325  1.00  0.00
H
ATOM   6334 1HD1 LEU X 405     -16.724  11.678  16.892  1.00  0.00
H
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ATOM   6335 2HD1 LEU X 405     -16.082  10.432  15.796  1.00  0.00
H
ATOM   6336 3HD1 LEU X 405     -16.531  12.032  15.158  1.00  0.00
H
ATOM   6337 1HD2 LEU X 405     -19.137  12.308  16.780  1.00  0.00
H
ATOM   6338 2HD2 LEU X 405     -18.993  12.670  15.043  1.00  0.00
H
ATOM   6339 3HD2 LEU X 405     -20.213  11.505  15.614  1.00  0.00
H
ATOM   6340  N   LEU X 406     -19.887   9.930  11.485  1.00  0.00
N
ATOM   6341  CA  LEU X 406     -19.929   9.570  10.074  1.00  0.00
C
ATOM   6342  C   LEU X 406     -19.714  10.794   9.192  1.00  0.00
C
ATOM   6343  O   LEU X 406     -20.058  11.912   9.571  1.00  0.00
O
ATOM   6344  CB  LEU X 406     -21.264   8.895   9.738  1.00  0.00
C
ATOM   6345  CG  LEU X 406     -22.516   9.693  10.124  1.00  0.00
C
ATOM   6346  CD1 LEU X 406     -23.086  10.395   8.899  1.00  0.00
C
ATOM   6347  CD2 LEU X 406     -23.545   8.757  10.739  1.00  0.00
C
ATOM   6348  H   LEU X 406     -20.054  10.889  11.754  1.00  0.00
H
ATOM   6349  HA  LEU X 406     -19.117   8.879   9.849  1.00  0.00
H
ATOM   6350 1HB  LEU X 406     -21.170   8.847   8.653  1.00  0.00
H
ATOM   6351 2HB  LEU X 406     -21.317   7.885  10.141  1.00  0.00
H
ATOM   6352  HG  LEU X 406     -22.217  10.411  10.889  1.00  0.00
H
ATOM   6353 1HD1 LEU X 406     -23.974  10.960   9.183  1.00  0.00
H
ATOM   6354 2HD1 LEU X 406     -22.340  11.077   8.489  1.00  0.00
H
ATOM   6355 3HD1 LEU X 406     -23.352   9.653   8.148  1.00  0.00
H
ATOM   6356 1HD2 LEU X 406     -24.434   9.328  11.014  1.00  0.00
H
ATOM   6357 2HD2 LEU X 406     -23.816   7.988  10.015  1.00  0.00
H
ATOM   6358 3HD2 LEU X 406     -23.127   8.288  11.629  1.00  0.00
H
ATOM   6359  N   PHE X 407     -19.144  10.573   8.010  1.00  0.00
N
ATOM   6360  CA  PHE X 407     -18.895  11.656   7.067  1.00  0.00
C
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ATOM   6361  C   PHE X 407     -19.732  11.493   5.807  1.00  0.00
C
ATOM   6362  O   PHE X 407     -19.893  12.435   5.030  1.00  0.00
O
ATOM   6363  CB  PHE X 407     -17.409  11.719   6.707  1.00  0.00
C
ATOM   6364  CG  PHE X 407     -16.517  12.040   7.872  1.00  0.00
C
ATOM   6365  CD1 PHE X 407     -15.747  11.051   8.467  1.00  0.00
C
ATOM   6366  CD2 PHE X 407     -16.444  13.330   8.375  1.00  0.00
C
ATOM   6367  CE1 PHE X 407     -14.925  11.345   9.539  1.00  0.00
C
ATOM   6368  CE2 PHE X 407     -15.623  13.627   9.446  1.00  0.00
C
ATOM   6369  CZ  PHE X 407     -14.864  12.632  10.028  1.00  0.00
C
ATOM   6370  H   PHE X 407     -18.879   9.631   7.761  1.00  0.00
H
ATOM   6371  HA  PHE X 407     -19.187  12.609   7.512  1.00  0.00
H
ATOM   6372 1HB  PHE X 407     -17.076  10.759   6.314  1.00  0.00
H
ATOM   6373 2HB  PHE X 407     -17.238  12.494   5.961  1.00  0.00
H
ATOM   6374  HD1 PHE X 407     -15.795  10.033   8.079  1.00  0.00
H
ATOM   6375  HD2 PHE X 407     -17.046  14.116   7.916  1.00  0.00
H
ATOM   6376  HE1 PHE X 407     -14.325  10.559   9.998  1.00  0.00
H
ATOM   6377  HE2 PHE X 407     -15.575  14.644   9.831  1.00  0.00
H
ATOM   6378  HZ  PHE X 407     -14.217  12.865  10.873  1.00  0.00
H
ATOM   6379  N   ILE X 408     -20.268  10.293   5.607  1.00  0.00
N
ATOM   6380  CA  ILE X 408     -21.077  10.001   4.433  1.00  0.00
C
ATOM   6381  C   ILE X 408     -22.562  10.052   4.760  1.00  0.00
C
ATOM   6382  O   ILE X 408     -23.021   9.425   5.715  1.00  0.00
O
ATOM   6383  CB  ILE X 408     -20.739   8.619   3.843  1.00  0.00
C
ATOM   6384  CG1 ILE X 408     -19.238   8.514   3.558  1.00  0.00
C
ATOM   6385  CG2 ILE X 408     -21.543   8.370   2.577  1.00  0.00
C
ATOM   6386  CD1 ILE X 408     -18.725   9.557   2.592  1.00  0.00
C
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ATOM   6387  H   ILE X 408     -20.110   9.564   6.288  1.00  0.00
H
ATOM   6388  HA  ILE X 408     -20.936  10.765   3.670  1.00  0.00
H
ATOM   6389  HB  ILE X 408     -20.972   7.851   4.581  1.00  0.00
H
ATOM   6390 1HG1 ILE X 408     -18.718   8.614   4.510  1.00  0.00
H
ATOM   6391 2HG1 ILE X 408     -19.055   7.520   3.148  1.00  0.00
H
ATOM   6392 1HG2 ILE X 408     -21.291   7.390   2.173  1.00  0.00
H
ATOM   6393 2HG2 ILE X 408     -22.606   8.404   2.809  1.00  0.00
H
ATOM   6394 3HG2 ILE X 408     -21.308   9.137   1.839  1.00  0.00
H
ATOM   6395 1HD1 ILE X 408     -17.654   9.419   2.440  1.00  0.00
H
ATOM   6396 2HD1 ILE X 408     -19.243   9.459   1.638  1.00  0.00
H
ATOM   6397 3HD1 ILE X 408     -18.905  10.551   3.000  1.00  0.00
H
ATOM   6398  N   THR X 409     -23.315  10.802   3.960  1.00  0.00
N
ATOM   6399  CA  THR X 409     -24.749  10.951   4.173  1.00  0.00
C
ATOM   6400  C   THR X 409     -25.425   9.592   4.331  1.00  0.00
C
ATOM   6401  O   THR X 409     -26.254   9.401   5.220  1.00  0.00
O
ATOM   6402  CB  THR X 409     -25.415  11.716   3.015  1.00  0.00
C
ATOM   6403  CG2 THR X 409     -26.911  11.851   3.257  1.00  0.00
C
ATOM   6404  OG1 THR X 409     -24.833  13.021   2.903  1.00  0.00
O
ATOM   6405  H   THR X 409     -22.882  11.282   3.185  1.00  0.00
H
ATOM   6406  HA  THR X 409     -24.930  11.495   5.100  1.00  0.00
H
ATOM   6407  HB  THR X 409     -25.246  11.171   2.087  1.00  0.00
H
ATOM   6408  HG1 THR X 409     -25.251  13.495   2.180  1.00  0.00
H
ATOM   6409 1HG2 THR X 409     -27.366  12.393   2.428  1.00  0.00
H
ATOM   6410 2HG2 THR X 409     -27.357  10.859   3.331  1.00  0.00
H
ATOM   6411 3HG2 THR X 409     -27.082  12.396   4.184  1.00  0.00
H
ATOM   6412  N   TYR X 410     -25.068   8.654   3.461  1.00  0.00
N
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ATOM   6413  CA  TYR X 410     -25.639   7.315   3.499  1.00  0.00
C
ATOM   6414  C   TYR X 410     -25.263   6.593   4.789  1.00  0.00
C
ATOM   6415  O   TYR X 410     -26.013   5.753   5.284  1.00  0.00
O
ATOM   6416  CB  TYR X 410     -25.177   6.502   2.287  1.00  0.00
C
ATOM   6417  CG  TYR X 410     -25.956   6.788   1.024  1.00  0.00
C
ATOM   6418  CD1 TYR X 410     -25.315   7.236  -0.123  1.00  0.00
C
ATOM   6419  CD2 TYR X 410     -27.331   6.608   0.979  1.00  0.00
C
ATOM   6420  CE1 TYR X 410     -26.022   7.499  -1.281  1.00  0.00
C
ATOM   6421  CE2 TYR X 410     -28.047   6.870  -0.172  1.00  0.00
C
ATOM   6422  CZ  TYR X 410     -27.390   7.314  -1.300  1.00  0.00
C
ATOM   6423  OH  TYR X 410     -28.099   7.575  -2.450  1.00  0.00
O
ATOM   6424  H   TYR X 410     -24.381   8.875   2.755  1.00  0.00
H
ATOM   6425  HA  TYR X 410     -26.727   7.375   3.482  1.00  0.00
H
ATOM   6426 1HB  TYR X 410     -24.123   6.734   2.126  1.00  0.00
H
ATOM   6427 2HB  TYR X 410     -25.281   5.448   2.548  1.00  0.00
H
ATOM   6428  HD1 TYR X 410     -24.235   7.380  -0.099  1.00  0.00
H
ATOM   6429  HD2 TYR X 410     -27.845   6.258   1.874  1.00  0.00
H
ATOM   6430  HE1 TYR X 410     -25.505   7.851  -2.173  1.00  0.00
H
ATOM   6431  HE2 TYR X 410     -29.128   6.724  -0.186  1.00  0.00
H
ATOM   6432  HH  TYR X 410     -27.545   7.879  -3.173  1.00  0.00
H
ATOM   6433  N   ALA X 411     -24.092   6.924   5.324  1.00  0.00
N
ATOM   6434  CA  ALA X 411     -23.595   6.281   6.536  1.00  0.00
C
ATOM   6435  C   ALA X 411     -24.574   6.456   7.689  1.00  0.00
C
ATOM   6436  O   ALA X 411     -24.612   5.640   8.612  1.00  0.00
O
ATOM   6437  CB  ALA X 411     -22.227   6.836   6.906  1.00  0.00
C
ATOM   6438  H   ALA X 411     -23.533   7.639   4.881  1.00  0.00
H
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ATOM   6439  HA  ALA X 411     -23.498   5.211   6.350  1.00  0.00
H
ATOM   6440 1HB  ALA X 411     -21.869   6.346   7.812  1.00  0.00
H
ATOM   6441 2HB  ALA X 411     -21.526   6.650   6.092  1.00  0.00
H
ATOM   6442 3HB  ALA X 411     -22.304   7.907   7.080  1.00  0.00
H
ATOM   6443  N   GLU X 412     -25.359   7.523   7.636  1.00  0.00
N
ATOM   6444  CA  GLU X 412     -26.321   7.820   8.691  1.00  0.00
C
ATOM   6445  C   GLU X 412     -27.329   6.689   8.855  1.00  0.00
C
ATOM   6446  O   GLU X 412     -27.559   6.209   9.962  1.00  0.00
O
ATOM   6447  CB  GLU X 412     -27.049   9.134   8.397  1.00  0.00
C
ATOM   6448  CG  GLU X 412     -28.039   9.558   9.473  1.00  0.00
C
ATOM   6449  CD  GLU X 412     -28.693  10.868   9.128  1.00  0.00
C
ATOM   6450  OE1 GLU X 412     -28.375  11.417   8.100  1.00  0.00
O
ATOM   6451  OE2 GLU X 412     -29.592  11.264   9.832  1.00  0.00
O
ATOM   6452  H   GLU X 412     -25.289   8.147   6.844  1.00  0.00
H
ATOM   6453  HA  GLU X 412     -25.805   7.914   9.646  1.00  0.00
H
ATOM   6454 1HB  GLU X 412     -26.286   9.903   8.282  1.00  0.00
H
ATOM   6455 2HB  GLU X 412     -27.577   9.002   7.451  1.00  0.00
H
ATOM   6456 1HG  GLU X 412     -28.808   8.812   9.674  1.00  0.00
H
ATOM   6457 2HG  GLU X 412     -27.417   9.687  10.356  1.00  0.00
H
ATOM   6458  N   ALA X 413     -27.926   6.273   7.742  1.00  0.00
N
ATOM   6459  CA  ALA X 413     -28.932   5.220   7.763  1.00  0.00
C
ATOM   6460  C   ALA X 413     -28.330   3.889   8.193  1.00  0.00
C
ATOM   6461  O   ALA X 413     -28.982   3.088   8.867  1.00  0.00
O
ATOM   6462  CB  ALA X 413     -29.592   5.090   6.398  1.00  0.00
C
ATOM   6463  H   ALA X 413     -27.676   6.697   6.860  1.00  0.00
H
ATOM   6464  HA  ALA X 413     -29.697   5.482   8.495  1.00  0.00
H
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ATOM   6465 1HB  ALA X 413     -30.341   4.300   6.430  1.00  0.00
H
ATOM   6466 2HB  ALA X 413     -30.070   6.033   6.134  1.00  0.00
H
ATOM   6467 3HB  ALA X 413     -28.838   4.844   5.652  1.00  0.00
H
ATOM   6468  N   ILE X 414     -27.080   3.656   7.799  1.00  0.00
N
ATOM   6469  CA  ILE X 414     -26.369   2.442   8.186  1.00  0.00
C
ATOM   6470  C   ILE X 414     -26.136   2.397   9.690  1.00  0.00
C
ATOM   6471  O   ILE X 414     -26.319   1.356  10.325  1.00  0.00
O
ATOM   6472  CB  ILE X 414     -25.016   2.325   7.462  1.00  0.00
C
ATOM   6473  CG1 ILE X 414     -25.230   2.114   5.961  1.00  0.00
C
ATOM   6474  CG2 ILE X 414     -24.194   1.187   8.050  1.00  0.00
C
ATOM   6475  CD1 ILE X 414     -23.967   2.239   5.141  1.00  0.00
C
ATOM   6476  H   ILE X 414     -26.612   4.335   7.216  1.00  0.00
H
ATOM   6477  HA  ILE X 414     -26.971   1.560   7.973  1.00  0.00
H
ATOM   6478  HB  ILE X 414     -24.471   3.262   7.573  1.00  0.00
H
ATOM   6479 1HG1 ILE X 414     -25.652   1.118   5.830  1.00  0.00
H
ATOM   6480 2HG1 ILE X 414     -25.953   2.861   5.629  1.00  0.00
H
ATOM   6481 1HG2 ILE X 414     -23.241   1.118   7.526  1.00  0.00
H
ATOM   6482 2HG2 ILE X 414     -24.014   1.377   9.107  1.00  0.00
H
ATOM   6483 3HG2 ILE X 414     -24.739   0.249   7.938  1.00  0.00
H
ATOM   6484 1HD1 ILE X 414     -24.197   2.078   4.088  1.00  0.00
H
ATOM   6485 2HD1 ILE X 414     -23.544   3.237   5.270  1.00  0.00
H
ATOM   6486 3HD1 ILE X 414     -23.243   1.494   5.470  1.00  0.00
H
ATOM   6487  N   ALA X 415     -25.732   3.527  10.259  1.00  0.00
N
ATOM   6488  CA  ALA X 415     -25.491   3.620  11.692  1.00  0.00
C
ATOM   6489  C   ALA X 415     -26.788   3.470  12.479  1.00  0.00
C
ATOM   6490  O   ALA X 415     -26.798   2.893  13.568  1.00  0.00
O
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ATOM   6491  CB  ALA X 415     -24.812   4.939  12.030  1.00  0.00
C
ATOM   6492  H   ALA X 415     -25.589   4.344   9.682  1.00  0.00
H
ATOM   6493  HA  ALA X 415     -24.834   2.804  11.990  1.00  0.00
H
ATOM   6494 1HB  ALA X 415     -24.638   4.994  13.105  1.00  0.00
H
ATOM   6495 2HB  ALA X 415     -23.858   5.003  11.506  1.00  0.00
H
ATOM   6496 3HB  ALA X 415     -25.450   5.767  11.724  1.00  0.00
H
ATOM   6497  N   ASN X 416     -27.875   3.990  11.925  1.00  0.00
N
ATOM   6498  CA  ASN X 416     -29.173   3.938  12.585  1.00  0.00
C
ATOM   6499  C   ASN X 416     -29.865   2.604  12.336  1.00  0.00
C
ATOM   6500  O   ASN X 416     -30.794   2.232  13.053  1.00  0.00
O
ATOM   6501  CB  ASN X 416     -30.067   5.083  12.145  1.00  0.00
C
ATOM   6502  CG  ASN X 416     -29.617   6.428  12.645  1.00  0.00
C
ATOM   6503  ND2 ASN X 416     -30.086   7.459  11.990  1.00  0.00
N
ATOM   6504  OD1 ASN X 416     -28.914   6.534  13.656  1.00  0.00
O
ATOM   6505  H   ASN X 416     -27.801   4.435  11.022  1.00  0.00
H
ATOM   6506  HA  ASN X 416     -29.042   4.021  13.665  1.00  0.00
H
ATOM   6507 1HB  ASN X 416     -30.384   5.175  11.105  1.00  0.00
H
ATOM   6508 2HB  ASN X 416     -30.906   4.746  12.753  1.00  0.00
H
ATOM   6509 1HD2 ASN X 416     -29.829   8.386  12.265  1.00  0.00
H
ATOM   6510 2HD2 ASN X 416     -30.701   7.321  11.213  1.00  0.00
H
ATOM   6511  N   MET X 417     -29.409   1.890  11.312  1.00  0.00
N
ATOM   6512  CA  MET X 417     -29.967   0.586  10.977  1.00  0.00
C
ATOM   6513  C   MET X 417     -28.919  -0.319  10.345  1.00  0.00
C
ATOM   6514  O   MET X 417     -28.926  -0.538   9.133  1.00  0.00
O
ATOM   6515  CB  MET X 417     -31.159   0.747  10.036  1.00  0.00
C
ATOM   6516  CG  MET X 417     -31.866  -0.553   9.686  1.00  0.00
C
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ATOM   6517  SD  MET X 417     -32.711  -1.289  11.100  1.00  0.00
S
ATOM   6518  CE  MET X 417     -31.478  -2.465  11.653  1.00  0.00
C
ATOM   6519  H   MET X 417     -28.655   2.261  10.752  1.00  0.00
H
ATOM   6520  HA  MET X 417     -30.305   0.082  11.882  1.00  0.00
H
ATOM   6521 1HB  MET X 417     -31.860   1.421  10.526  1.00  0.00
H
ATOM   6522 2HB  MET X 417     -30.784   1.213   9.124  1.00  0.00
H
ATOM   6523 1HG  MET X 417     -32.595  -0.345   8.903  1.00  0.00
H
ATOM   6524 2HG  MET X 417     -31.121  -1.254   9.310  1.00  0.00
H
ATOM   6525 1HE  MET X 417     -31.852  -3.001  12.526  1.00  0.00
H
ATOM   6526 2HE  MET X 417     -31.267  -3.175  10.853  1.00  0.00
H
ATOM   6527 3HE  MET X 417     -30.563  -1.935  11.919  1.00  0.00
H
ATOM   6528  N   PRO X 418     -28.018  -0.840  11.170  1.00  0.00
N
ATOM   6529  CA  PRO X 418     -26.902  -1.640  10.677  1.00  0.00
C
ATOM   6530  C   PRO X 418     -27.362  -3.033  10.263  1.00  0.00
C
ATOM   6531  O   PRO X 418     -27.010  -4.026  10.896  1.00  0.00
O
ATOM   6532  CB  PRO X 418     -25.920  -1.681  11.859  1.00  0.00
C
ATOM   6533  CG  PRO X 418     -26.789  -1.644  13.087  1.00  0.00
C
ATOM   6534  CD  PRO X 418     -27.846  -0.454  12.576  1.00  0.00
C
ATOM   6535  HA  PRO X 418     -26.487  -1.198   9.886  1.00  0.00
H
ATOM   6536 1HB  PRO X 418     -25.604  -2.537  11.788  1.00  0.00
H
ATOM   6537 2HB  PRO X 418     -25.536  -0.910  11.785  1.00  0.00
H
ATOM   6538 1HG  PRO X 418     -27.141  -2.406  13.190  1.00  0.00
H
ATOM   6539 2HG  PRO X 418     -26.392  -1.046  13.693  1.00  0.00
H
ATOM   6540 1HD  PRO X 418     -28.696  -0.637  12.968  1.00  0.00
H
ATOM   6541 2HD  PRO X 418     -27.572   0.455  12.515  1.00  0.00
H
ATOM   6542  N   ALA X 419     -28.153  -3.094   9.195  1.00  0.00
N
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ATOM   6543  CA  ALA X 419     -28.595  -4.370   8.644  1.00  0.00
C
ATOM   6544  C   ALA X 419     -27.408  -5.246   8.270  1.00  0.00
C
ATOM   6545  O   ALA X 419     -26.289  -4.762   8.107  1.00  0.00
O
ATOM   6546  CB  ALA X 419     -29.494  -4.142   7.438  1.00  0.00
C
ATOM   6547  H   ALA X 419     -28.454  -2.236   8.755  1.00  0.00
H
ATOM   6548  HA  ALA X 419     -29.165  -4.901   9.407  1.00  0.00
H
ATOM   6549 1HB  ALA X 419     -29.816  -5.105   7.039  1.00  0.00
H
ATOM   6550 2HB  ALA X 419     -30.368  -3.564   7.738  1.00  0.00
H
ATOM   6551 3HB  ALA X 419     -28.944  -3.599   6.671  1.00  0.00
H
ATOM   6552  N   SER X 420     -27.661  -6.545   8.129  1.00  0.00
N
ATOM   6553  CA  SER X 420     -26.603  -7.503   7.844  1.00  0.00
C
ATOM   6554  C   SER X 420     -25.985  -7.253   6.475  1.00  0.00
C
ATOM   6555  O   SER X 420     -24.899  -7.745   6.170  1.00  0.00
O
ATOM   6556  CB  SER X 420     -27.142  -8.918   7.928  1.00  0.00
C
ATOM   6557  OG  SER X 420     -28.064  -9.191   6.910  1.00  0.00
O
ATOM   6558  H   SER X 420     -28.612  -6.875   8.223  1.00  0.00
H
ATOM   6559  HA  SER X 420     -25.822  -7.524   8.605  1.00  0.00
H
ATOM   6560 1HB  SER X 420     -26.307  -9.613   7.848  1.00  0.00
H
ATOM   6561 2HB  SER X 420     -27.630  -9.048   8.893  1.00  0.00
H
ATOM   6562  HG  SER X 420     -28.381 -10.093   6.998  1.00  0.00
H
ATOM   6563  N   THR X 421     -26.684  -6.480   5.649  1.00  0.00
N
ATOM   6564  CA  THR X 421     -26.133  -6.018   4.382  1.00  0.00
C
ATOM   6565  C   THR X 421     -25.403  -4.692   4.547  1.00  0.00
C
ATOM   6566  O   THR X 421     -24.378  -4.451   3.911  1.00  0.00
O
ATOM   6567  CB  THR X 421     -27.231  -5.857   3.314  1.00  0.00
C
ATOM   6568  CG2 THR X 421     -27.890  -7.196   3.019  1.00  0.00
C
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ATOM   6569  OG1 THR X 421     -28.223  -4.934   3.781  1.00  0.00
O
ATOM   6570  H   THR X 421     -27.621  -6.205   5.907  1.00  0.00
H
ATOM   6571  HA  THR X 421     -25.395  -6.733   4.019  1.00  0.00
H
ATOM   6572  HB  THR X 421     -26.784  -5.464   2.402  1.00  0.00
H
ATOM   6573  HG1 THR X 421     -28.614  -5.267   4.593  1.00  0.00
H
ATOM   6574 1HG2 THR X 421     -28.662  -7.061   2.263  1.00  0.00
H
ATOM   6575 2HG2 THR X 421     -27.141  -7.896   2.653  1.00  0.00
H
ATOM   6576 3HG2 THR X 421     -28.339  -7.587   3.931  1.00  0.00
H
ATOM   6577  N   PHE X 422     -25.942  -3.830   5.408  1.00  0.00
N
ATOM   6578  CA  PHE X 422     -25.362  -2.511   5.602  1.00  0.00
C
ATOM   6579  C   PHE X 422     -24.032  -2.662   6.346  1.00  0.00
C
ATOM   6580  O   PHE X 422     -23.184  -1.778   6.310  1.00  0.00
O
ATOM   6581  CB  PHE X 422     -26.331  -1.610   6.368  1.00  0.00
C
ATOM   6582  CG  PHE X 422     -27.591  -1.294   5.613  1.00  0.00
C
ATOM   6583  CD1 PHE X 422     -27.888  -1.949   4.426  1.00  0.00
C
ATOM   6584  CD2 PHE X 422     -28.482  -0.343   6.087  1.00  0.00
C
ATOM   6585  CE1 PHE X 422     -29.047  -1.659   3.730  1.00  0.00
C
ATOM   6586  CE2 PHE X 422     -29.641  -0.052   5.393  1.00  0.00
C
ATOM   6587  CZ  PHE X 422     -29.923  -0.711   4.215  1.00  0.00
C
ATOM   6588  H   PHE X 422     -26.763  -4.096   5.933  1.00  0.00
H
ATOM   6589  HA  PHE X 422     -25.151  -2.054   4.634  1.00  0.00
H
ATOM   6590 1HB  PHE X 422     -26.637  -2.090   7.297  1.00  0.00
H
ATOM   6591 2HB  PHE X 422     -25.857  -0.656   6.593  1.00  0.00
H
ATOM   6592  HD1 PHE X 422     -27.195  -2.699   4.045  1.00  0.00
H
ATOM   6593  HD2 PHE X 422     -28.259   0.178   7.018  1.00  0.00
H
ATOM   6594  HE1 PHE X 422     -29.267  -2.181   2.800  1.00  0.00
H
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ATOM   6595  HE2 PHE X 422     -30.333   0.697   5.777  1.00  0.00
H
ATOM   6596  HZ  PHE X 422     -30.837  -0.481   3.666  1.00  0.00
H
ATOM   6597  N   PHE X 423     -23.856  -3.787   7.036  1.00  0.00
N
ATOM   6598  CA  PHE X 423     -22.605  -4.026   7.757  1.00  0.00
C
ATOM   6599  C   PHE X 423     -21.531  -4.349   6.707  1.00  0.00
C
ATOM   6600  O   PHE X 423     -20.335  -4.145   6.938  1.00  0.00
O
ATOM   6601  CB  PHE X 423     -22.781  -5.156   8.774  1.00  0.00
C
ATOM   6602  CG  PHE X 423     -21.636  -5.291   9.736  1.00  0.00
C
ATOM   6603  CD1 PHE X 423     -21.456  -4.368  10.756  1.00  0.00
C
ATOM   6604  CD2 PHE X 423     -20.735  -6.338   9.620  1.00  0.00
C
ATOM   6605  CE1 PHE X 423     -20.401  -4.492  11.641  1.00  0.00
C
ATOM   6606  CE2 PHE X 423     -19.680  -6.465  10.504  1.00  0.00
C
ATOM   6607  CZ  PHE X 423     -19.513  -5.540  11.515  1.00  0.00
C
ATOM   6608  H   PHE X 423     -24.591  -4.479   7.061  1.00  0.00
H
ATOM   6609  HA  PHE X 423     -22.306  -3.122   8.290  1.00  0.00
H
ATOM   6610 1HB  PHE X 423     -23.674  -4.982   9.376  1.00  0.00
H
ATOM   6611 2HB  PHE X 423     -22.870  -6.111   8.260  1.00  0.00
H
ATOM   6612  HD1 PHE X 423     -22.158  -3.541  10.856  1.00  0.00
H
ATOM   6613  HD2 PHE X 423     -20.866  -7.068   8.820  1.00  0.00
H
ATOM   6614  HE1 PHE X 423     -20.272  -3.761  12.439  1.00  0.00
H
ATOM   6615  HE2 PHE X 423     -18.979  -7.293  10.402  1.00  0.00
H
ATOM   6616  HZ  PHE X 423     -18.682  -5.637  12.212  1.00  0.00
H
ATOM   6617  N   ALA X 424     -21.973  -4.858   5.558  1.00  0.00
N
ATOM   6618  CA  ALA X 424     -21.049  -5.169   4.476  1.00  0.00
C
ATOM   6619  C   ALA X 424     -20.792  -3.908   3.675  1.00  0.00
C
ATOM   6620  O   ALA X 424     -19.692  -3.685   3.170  1.00  0.00
O
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ATOM   6621  CB  ALA X 424     -21.609  -6.285   3.607  1.00  0.00
C
ATOM   6622  H   ALA X 424     -22.961  -5.031   5.435  1.00  0.00
H
ATOM   6623  HA  ALA X 424     -20.105  -5.502   4.907  1.00  0.00
H
ATOM   6624 1HB  ALA X 424     -20.905  -6.505   2.803  1.00  0.00
H
ATOM   6625 2HB  ALA X 424     -21.756  -7.179   4.213  1.00  0.00
H
ATOM   6626 3HB  ALA X 424     -22.560  -5.972   3.180  1.00  0.00
H
ATOM   6627  N   ILE X 425     -21.825  -3.072   3.553  1.00  0.00
N
ATOM   6628  CA  ILE X 425     -21.695  -1.809   2.841  1.00  0.00
C
ATOM   6629  C   ILE X 425     -20.663  -0.934   3.551  1.00  0.00
C
ATOM   6630  O   ILE X 425     -19.739  -0.422   2.928  1.00  0.00
O
ATOM   6631  CB  ILE X 425     -23.043  -1.071   2.748  1.00  0.00
C
ATOM   6632  CG1 ILE X 425     -24.013  -1.842   1.849  1.00  0.00
C
ATOM   6633  CG2 ILE X 425     -22.840   0.343   2.227  1.00  0.00
C
ATOM   6634  CD1 ILE X 425     -25.432  -1.323   1.895  1.00  0.00
C
ATOM   6635  H   ILE X 425     -22.714  -3.321   3.962  1.00  0.00
H
ATOM   6636  HA  ILE X 425     -21.301  -1.972   1.838  1.00  0.00
H
ATOM   6637  HB  ILE X 425     -23.496  -1.033   3.738  1.00  0.00
H
ATOM   6638 1HG1 ILE X 425     -23.634  -1.774   0.830  1.00  0.00
H
ATOM   6639 2HG1 ILE X 425     -23.997  -2.883   2.172  1.00  0.00
H
ATOM   6640 1HG2 ILE X 425     -23.802   0.851   2.168  1.00  0.00
H
ATOM   6641 2HG2 ILE X 425     -22.184   0.890   2.905  1.00  0.00
H
ATOM   6642 3HG2 ILE X 425     -22.389   0.306   1.237  1.00  0.00
H
ATOM   6643 1HD1 ILE X 425     -26.061  -1.919   1.233  1.00  0.00
H
ATOM   6644 2HD1 ILE X 425     -25.813  -1.392   2.915  1.00  0.00
H
ATOM   6645 3HD1 ILE X 425     -25.450  -0.283   1.572  1.00  0.00
H
ATOM   6646  N   ILE X 426     -20.824  -0.770   4.861  1.00  0.00
N
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ATOM   6647  CA  ILE X 426     -19.902   0.050   5.636  1.00  0.00
C
ATOM   6648  C   ILE X 426     -18.494  -0.536   5.664  1.00  0.00
C
ATOM   6649  O   ILE X 426     -17.518   0.186   5.865  1.00  0.00
O
ATOM   6650  CB  ILE X 426     -20.388   0.231   7.086  1.00  0.00
C
ATOM   6651  CG1 ILE X 426     -19.751   1.475   7.712  1.00  0.00
C
ATOM   6652  CG2 ILE X 426     -20.068  -1.006   7.911  1.00  0.00
C
ATOM   6653  CD1 ILE X 426     -20.165   2.770   7.051  1.00  0.00
C
ATOM   6654  H   ILE X 426     -21.599  -1.222   5.327  1.00  0.00
H
ATOM   6655  HA  ILE X 426     -19.774   1.028   5.172  1.00  0.00
H
ATOM   6656  HB  ILE X 426     -21.465   0.397   7.082  1.00  0.00
H
ATOM   6657 1HG1 ILE X 426     -20.041   1.495   8.762  1.00  0.00
H
ATOM   6658 2HG1 ILE X 426     -18.669   1.359   7.636  1.00  0.00
H
ATOM   6659 1HG2 ILE X 426     -20.417  -0.862   8.934  1.00  0.00
H
ATOM   6660 2HG2 ILE X 426     -20.566  -1.872   7.477  1.00  0.00
H
ATOM   6661 3HG2 ILE X 426     -18.989  -1.172   7.916  1.00  0.00
H
ATOM   6662 1HD1 ILE X 426     -19.674   3.607   7.548  1.00  0.00
H
ATOM   6663 2HD1 ILE X 426     -19.875   2.752   6.000  1.00  0.00
H
ATOM   6664 3HD1 ILE X 426     -21.245   2.888   7.126  1.00  0.00
H
ATOM   6665  N   PHE X 427     -18.405  -1.852   5.480  1.00  0.00
N
ATOM   6666  CA  PHE X 427     -17.120  -2.551   5.458  1.00  0.00
C
ATOM   6667  C   PHE X 427     -16.335  -2.184   4.201  1.00  0.00
C
ATOM   6668  O   PHE X 427     -15.187  -1.730   4.276  1.00  0.00
O
ATOM   6669  CB  PHE X 427     -17.334  -4.063   5.535  1.00  0.00
C
ATOM   6670  CG  PHE X 427     -16.069  -4.861   5.386  1.00  0.00
C
ATOM   6671  CD1 PHE X 427     -15.170  -4.965   6.436  1.00  0.00
C
ATOM   6672  CD2 PHE X 427     -15.779  -5.510   4.196  1.00  0.00
C
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ATOM   6673  CE1 PHE X 427     -14.006  -5.699   6.299  1.00  0.00
C
ATOM   6674  CE2 PHE X 427     -14.618  -6.246   4.057  1.00  0.00
C
ATOM   6675  CZ  PHE X 427     -13.730  -6.340   5.110  1.00  0.00
C
ATOM   6676  H   PHE X 427     -19.253  -2.386   5.351  1.00  0.00
H
ATOM   6677  HA  PHE X 427     -16.515  -2.240   6.312  1.00  0.00
H
ATOM   6678 1HB  PHE X 427     -17.761  -4.334   6.500  1.00  0.00
H
ATOM   6679 2HB  PHE X 427     -18.002  -4.388   4.740  1.00  0.00
H
ATOM   6680  HD1 PHE X 427     -15.388  -4.459   7.377  1.00  0.00
H
ATOM   6681  HD2 PHE X 427     -16.480  -5.436   3.363  1.00  0.00
H
ATOM   6682  HE1 PHE X 427     -13.307  -5.772   7.132  1.00  0.00
H
ATOM   6683  HE2 PHE X 427     -14.400  -6.751   3.115  1.00  0.00
H
ATOM   6684  HZ  PHE X 427     -12.814  -6.918   5.002  1.00  0.00
H
ATOM   6685  N   PHE X 428     -16.948  -2.360   3.037  1.00  0.00
N
ATOM   6686  CA  PHE X 428     -16.243  -2.017   1.810  1.00  0.00
C
ATOM   6687  C   PHE X 428     -16.074  -0.518   1.619  1.00  0.00
C
ATOM   6688  O   PHE X 428     -15.135  -0.077   0.944  1.00  0.00
O
ATOM   6689  CB  PHE X 428     -16.970  -2.599   0.596  1.00  0.00
C
ATOM   6690  CG  PHE X 428     -16.781  -4.079   0.428  1.00  0.00
C
ATOM   6691  CD1 PHE X 428     -17.783  -4.967   0.788  1.00  0.00
C
ATOM   6692  CD2 PHE X 428     -15.599  -4.588  -0.091  1.00  0.00
C
ATOM   6693  CE1 PHE X 428     -17.609  -6.330   0.633  1.00  0.00
C
ATOM   6694  CE2 PHE X 428     -15.423  -5.949  -0.247  1.00  0.00
C
ATOM   6695  CZ  PHE X 428     -16.430  -6.821   0.116  1.00  0.00
C
ATOM   6696  H   PHE X 428     -17.890  -2.725   3.003  1.00  0.00
H
ATOM   6697  HA  PHE X 428     -15.231  -2.425   1.838  1.00  0.00
H
ATOM   6698 1HB  PHE X 428     -18.042  -2.430   0.685  1.00  0.00
H
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ATOM   6699 2HB  PHE X 428     -16.604  -2.133  -0.319  1.00  0.00
H
ATOM   6700  HD1 PHE X 428     -18.717  -4.578   1.196  1.00  0.00
H
ATOM   6701  HD2 PHE X 428     -14.803  -3.899  -0.377  1.00  0.00
H
ATOM   6702  HE1 PHE X 428     -18.406  -7.015   0.920  1.00  0.00
H
ATOM   6703  HE2 PHE X 428     -14.489  -6.336  -0.657  1.00  0.00
H
ATOM   6704  HZ  PHE X 428     -16.292  -7.894  -0.006  1.00  0.00
H
ATOM   6705  N   LEU X 429     -16.947   0.279   2.232  1.00  0.00
N
ATOM   6706  CA  LEU X 429     -16.809   1.726   2.122  1.00  0.00
C
ATOM   6707  C   LEU X 429     -15.476   2.086   2.784  1.00  0.00
C
ATOM   6708  O   LEU X 429     -14.683   2.859   2.240  1.00  0.00
O
ATOM   6709  CB  LEU X 429     -18.007   2.423   2.776  1.00  0.00
C
ATOM   6710  CG  LEU X 429     -18.002   3.955   2.685  1.00  0.00
C
ATOM   6711  CD1 LEU X 429     -17.929   4.390   1.228  1.00  0.00
C
ATOM   6712  CD2 LEU X 429     -19.251   4.509   3.353  1.00  0.00
C
ATOM   6713  H   LEU X 429     -17.702  -0.118   2.773  1.00  0.00
H
ATOM   6714  HA  LEU X 429     -16.765   2.009   1.070  1.00  0.00
H
ATOM   6715 1HB  LEU X 429     -18.808   2.016   2.160  1.00  0.00
H
ATOM   6716 2HB  LEU X 429     -18.145   2.104   3.810  1.00  0.00
H
ATOM   6717  HG  LEU X 429     -17.138   4.310   3.248  1.00  0.00
H
ATOM   6718 1HD1 LEU X 429     -17.925   5.479   1.173  1.00  0.00
H
ATOM   6719 2HD1 LEU X 429     -17.016   4.001   0.777  1.00  0.00
H
ATOM   6720 3HD1 LEU X 429     -18.794   4.004   0.689  1.00  0.00
H
ATOM   6721 1HD2 LEU X 429     -19.245   5.598   3.288  1.00  0.00
H
ATOM   6722 2HD2 LEU X 429     -20.137   4.119   2.850  1.00  0.00
H
ATOM   6723 3HD2 LEU X 429     -19.269   4.209   4.401  1.00  0.00
H
ATOM   6724  N   MET X 430     -15.236   1.519   3.964  1.00  0.00
N
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ATOM   6725  CA  MET X 430     -13.987   1.745   4.685  1.00  0.00
C
ATOM   6726  C   MET X 430     -12.829   1.304   3.788  1.00  0.00
C
ATOM   6727  O   MET X 430     -11.818   2.002   3.674  1.00  0.00
O
ATOM   6728  CB  MET X 430     -13.999   0.985   6.010  1.00  0.00
C
ATOM   6729  CG  MET X 430     -12.719   1.116   6.823  1.00  0.00
C
ATOM   6730  SD  MET X 430     -12.735   0.104   8.316  1.00  0.00
S
ATOM   6731  CE  MET X 430     -12.571  -1.536   7.614  1.00  0.00
C
ATOM   6732  H   MET X 430     -15.936   0.916   4.371  1.00  0.00
H
ATOM   6733  HA  MET X 430     -13.865   2.807   4.893  1.00  0.00
H
ATOM   6734 1HB  MET X 430     -14.838   1.370   6.588  1.00  0.00
H
ATOM   6735 2HB  MET X 430     -14.172  -0.066   5.773  1.00  0.00
H
ATOM   6736 1HG  MET X 430     -11.883   0.811   6.192  1.00  0.00
H
ATOM   6737 2HG  MET X 430     -12.599   2.163   7.102  1.00  0.00
H
ATOM   6738 1HE  MET X 430     -12.566  -2.276   8.414  1.00  0.00
H
ATOM   6739 2HE  MET X 430     -13.410  -1.730   6.944  1.00  0.00
H
ATOM   6740 3HE  MET X 430     -11.637  -1.600   7.054  1.00  0.00
H
ATOM   6741  N   LEU X 431     -12.977   0.148   3.150  1.00  0.00
N
ATOM   6742  CA  LEU X 431     -11.918  -0.355   2.274  1.00  0.00
C
ATOM   6743  C   LEU X 431     -11.588   0.643   1.174  1.00  0.00
C
ATOM   6744  O   LEU X 431     -10.432   0.769   0.765  1.00  0.00
O
ATOM   6745  CB  LEU X 431     -12.329  -1.700   1.664  1.00  0.00
C
ATOM   6746  CG  LEU X 431     -11.849  -2.938   2.430  1.00  0.00
C
ATOM   6747  CD1 LEU X 431     -11.864  -2.664   3.927  1.00  0.00
C
ATOM   6748  CD2 LEU X 431     -12.739  -4.124   2.090  1.00  0.00
C
ATOM   6749  H   LEU X 431     -13.825  -0.387   3.270  1.00  0.00
H
ATOM   6750  HA  LEU X 431     -11.003  -0.492   2.850  1.00  0.00
H
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ATOM   6751 1HB  LEU X 431     -13.410  -1.606   1.743  1.00  0.00
H
ATOM   6752 2HB  LEU X 431     -12.046  -1.770   0.612  1.00  0.00
H
ATOM   6753  HG  LEU X 431     -10.842  -3.166   2.079  1.00  0.00
H
ATOM   6754 1HD1 LEU X 431     -11.521  -3.550   4.463  1.00  0.00
H
ATOM   6755 2HD1 LEU X 431     -11.203  -1.827   4.150  1.00  0.00
H
ATOM   6756 3HD1 LEU X 431     -12.879  -2.421   4.241  1.00  0.00
H
ATOM   6757 1HD2 LEU X 431     -12.396  -5.004   2.635  1.00  0.00
H
ATOM   6758 2HD2 LEU X 431     -13.769  -3.901   2.371  1.00  0.00
H
ATOM   6759 3HD2 LEU X 431     -12.691  -4.320   1.019  1.00  0.00
H
ATOM   6760  N   ILE X 432     -12.599   1.356   0.683  1.00  0.00
N
ATOM   6761  CA  ILE X 432     -12.350   2.326  -0.373  1.00  0.00
C
ATOM   6762  C   ILE X 432     -11.515   3.507   0.117  1.00  0.00
C
ATOM   6763  O   ILE X 432     -10.583   3.930  -0.564  1.00  0.00
O
ATOM   6764  CB  ILE X 432     -13.664   2.864  -0.968  1.00  0.00
C
ATOM   6765  CG1 ILE X 432     -14.392   1.760  -1.740  1.00  0.00
C
ATOM   6766  CG2 ILE X 432     -13.391   4.057  -1.870  1.00  0.00
C
ATOM   6767  CD1 ILE X 432     -15.811   2.116  -2.122  1.00  0.00
C
ATOM   6768  H   ILE X 432     -13.534   1.225   1.042  1.00  0.00
H
ATOM   6769  HA  ILE X 432     -11.748   1.884  -1.167  1.00  0.00
H
ATOM   6770  HB  ILE X 432     -14.324   3.166  -0.155  1.00  0.00
H
ATOM   6771 1HG1 ILE X 432     -13.811   1.558  -2.639  1.00  0.00
H
ATOM   6772 2HG1 ILE X 432     -14.398   0.872  -1.107  1.00  0.00
H
ATOM   6773 1HG2 ILE X 432     -14.330   4.425  -2.282  1.00  0.00
H
ATOM   6774 2HG2 ILE X 432     -12.915   4.848  -1.292  1.00  0.00
H
ATOM   6775 3HG2 ILE X 432     -12.731   3.755  -2.684  1.00  0.00
H
ATOM   6776 1HD1 ILE X 432     -16.263   1.286  -2.665  1.00  0.00
H
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ATOM   6777 2HD1 ILE X 432     -16.392   2.317  -1.221  1.00  0.00
H
ATOM   6778 3HD1 ILE X 432     -15.806   3.001  -2.756  1.00  0.00
H
ATOM   6779  N   THR X 433     -11.884   3.963   1.311  1.00  0.00
N
ATOM   6780  CA  THR X 433     -11.102   5.119   1.756  1.00  0.00
C
ATOM   6781  C   THR X 433      -9.668   4.712   2.072  1.00  0.00
C
ATOM   6782  O   THR X 433      -8.745   5.505   1.895  1.00  0.00
O
ATOM   6783  CB  THR X 433     -11.729   5.782   2.997  1.00  0.00
C
ATOM   6784  CG2 THR X 433     -13.149   6.236   2.699  1.00  0.00
C
ATOM   6785  OG1 THR X 433     -11.748   4.846   4.083  1.00  0.00
O
ATOM   6786  H   THR X 433     -12.649   3.622   1.876  1.00  0.00
H
ATOM   6787  HA  THR X 433     -11.049   5.857   0.955  1.00  0.00
H
ATOM   6788  HB  THR X 433     -11.125   6.644   3.280  1.00  0.00
H
ATOM   6789  HG1 THR X 433     -12.268   4.078   3.834  1.00  0.00
H
ATOM   6790 1HG2 THR X 433     -13.575   6.702   3.588  1.00  0.00
H
ATOM   6791 2HG2 THR X 433     -13.138   6.956   1.881  1.00  0.00
H
ATOM   6792 3HG2 THR X 433     -13.752   5.374   2.416  1.00  0.00
H
ATOM   6793  N   LEU X 434      -9.484   3.474   2.523  1.00  0.00
N
ATOM   6794  CA  LEU X 434      -8.143   2.980   2.821  1.00  0.00
C
ATOM   6795  C   LEU X 434      -7.345   2.923   1.515  1.00  0.00
C
ATOM   6796  O   LEU X 434      -6.188   3.336   1.459  1.00  0.00
O
ATOM   6797  CB  LEU X 434      -8.204   1.604   3.494  1.00  0.00
C
ATOM   6798  CG  LEU X 434      -8.708   1.606   4.942  1.00  0.00
C
ATOM   6799  CD1 LEU X 434      -9.008   0.182   5.393  1.00  0.00
C
ATOM   6800  CD2 LEU X 434      -7.665   2.249   5.843  1.00  0.00
C
ATOM   6801  H   LEU X 434     -10.281   2.869   2.661  1.00  0.00
H
ATOM   6802  HA  LEU X 434      -7.638   3.677   3.489  1.00  0.00
H
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ATOM   6803 1HB  LEU X 434      -8.932   1.122   2.845  1.00  0.00
H
ATOM   6804 2HB  LEU X 434      -7.251   1.078   3.423  1.00  0.00
H
ATOM   6805  HG  LEU X 434      -9.603   2.228   4.972  1.00  0.00
H
ATOM   6806 1HD1 LEU X 434      -9.366   0.194   6.422  1.00  0.00
H
ATOM   6807 2HD1 LEU X 434      -9.775  -0.251   4.749  1.00  0.00
H
ATOM   6808 3HD1 LEU X 434      -8.100  -0.417   5.331  1.00  0.00
H
ATOM   6809 1HD2 LEU X 434      -8.025   2.250   6.873  1.00  0.00
H
ATOM   6810 2HD2 LEU X 434      -6.734   1.684   5.785  1.00  0.00
H
ATOM   6811 3HD2 LEU X 434      -7.487   3.275   5.520  1.00  0.00
H
ATOM   6812  N   GLY X 435      -7.976   2.413   0.466  1.00  0.00
N
ATOM   6813  CA  GLY X 435      -7.312   2.388  -0.822  1.00  0.00
C
ATOM   6814  C   GLY X 435      -6.996   3.777  -1.353  1.00  0.00
C
ATOM   6815  O   GLY X 435      -5.922   4.003  -1.892  1.00  0.00
O
ATOM   6816  H   GLY X 435      -8.912   2.046   0.563  1.00  0.00
H
ATOM   6817 1HA  GLY X 435      -6.376   1.840  -0.730  1.00  0.00
H
ATOM   6818 2HA  GLY X 435      -7.957   1.888  -1.544  1.00  0.00
H
ATOM   6819  N   LEU X 436      -7.919   4.717  -1.178  1.00  0.00
N
ATOM   6820  CA  LEU X 436      -7.766   6.058  -1.742  1.00  0.00
C
ATOM   6821  C   LEU X 436      -6.474   6.759  -1.320  1.00  0.00
C
ATOM   6822  O   LEU X 436      -5.717   7.252  -2.160  1.00  0.00
O
ATOM   6823  CB  LEU X 436      -8.962   6.936  -1.351  1.00  0.00
C
ATOM   6824  CG  LEU X 436      -8.872   8.400  -1.801  1.00  0.00
C
ATOM   6825  CD1 LEU X 436      -8.812   8.476  -3.322  1.00  0.00
C
ATOM   6826  CD2 LEU X 436     -10.070   9.171  -1.268  1.00  0.00
C
ATOM   6827  H   LEU X 436      -8.747   4.499  -0.642  1.00  0.00
H
ATOM   6828  HA  LEU X 436      -7.714   5.993  -2.828  1.00  0.00
H
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ATOM   6829 1HB  LEU X 436      -9.747   6.423  -1.905  1.00  0.00
H
ATOM   6830 2HB  LEU X 436      -9.172   6.879  -0.283  1.00  0.00
H
ATOM   6831  HG  LEU X 436      -7.975   8.824  -1.348  1.00  0.00
H
ATOM   6832 1HD1 LEU X 436      -8.748   9.519  -3.630  1.00  0.00
H
ATOM   6833 2HD1 LEU X 436      -7.934   7.937  -3.678  1.00  0.00
H
ATOM   6834 3HD1 LEU X 436      -9.711   8.028  -3.743  1.00  0.00
H
ATOM   6835 1HD2 LEU X 436     -10.003  10.210  -1.589  1.00  0.00
H
ATOM   6836 2HD2 LEU X 436     -10.988   8.729  -1.656  1.00  0.00
H
ATOM   6837 3HD2 LEU X 436     -10.077   9.127  -0.180  1.00  0.00
H
ATOM   6838  N   ASP X 437      -6.227   6.816  -0.013  1.00  0.00
N
ATOM   6839  CA  ASP X 437      -5.015   7.456   0.483  1.00  0.00
C
ATOM   6840  C   ASP X 437      -3.780   6.602   0.206  1.00  0.00
C
ATOM   6841  O   ASP X 437      -2.656   7.016   0.490  1.00  0.00
O
ATOM   6842  CB  ASP X 437      -5.134   7.737   1.983  1.00  0.00
C
ATOM   6843  CG  ASP X 437      -5.281   6.491   2.846  1.00  0.00
C
ATOM   6844  OD1 ASP X 437      -4.985   5.423   2.367  1.00  0.00
O
ATOM   6845  OD2 ASP X 437      -5.536   6.631   4.018  1.00  0.00
O
ATOM   6846  H   ASP X 437      -6.884   6.412   0.639  1.00  0.00
H
ATOM   6847  HA  ASP X 437      -4.858   8.402  -0.038  1.00  0.00
H
ATOM   6848 1HB  ASP X 437      -4.326   8.356   2.375  1.00  0.00
H
ATOM   6849 2HB  ASP X 437      -6.067   8.302   1.999  1.00  0.00
H
ATOM   6850  N   SER X 438      -3.985   5.406  -0.346  1.00  0.00
N
ATOM   6851  CA  SER X 438      -2.859   4.526  -0.633  1.00  0.00
C
ATOM   6852  C   SER X 438      -2.592   4.418  -2.125  1.00  0.00
C
ATOM   6853  O   SER X 438      -1.551   3.920  -2.533  1.00  0.00
O
ATOM   6854  CB  SER X 438      -3.112   3.152  -0.045  1.00  0.00
C
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ATOM   6855  OG  SER X 438      -3.362   3.206   1.332  1.00  0.00
O
ATOM   6856  H   SER X 438      -4.924   5.109  -0.565  1.00  0.00
H
ATOM   6857  HA  SER X 438      -1.942   4.815  -0.119  1.00  0.00
H
ATOM   6858 1HB  SER X 438      -3.977   2.714  -0.545  1.00  0.00
H
ATOM   6859 2HB  SER X 438      -2.236   2.529  -0.224  1.00  0.00
H
ATOM   6860  HG  SER X 438      -4.291   3.397   1.482  1.00  0.00
H
ATOM   6861  N   THR X 439      -3.527   4.888  -2.945  1.00  0.00
N
ATOM   6862  CA  THR X 439      -3.293   4.863  -4.381  1.00  0.00
C
ATOM   6863  C   THR X 439      -2.561   6.111  -4.864  1.00  0.00
C
ATOM   6864  O   THR X 439      -1.622   6.012  -5.661  1.00  0.00
O
ATOM   6865  CB  THR X 439      -4.614   4.728  -5.159  1.00  0.00
C
ATOM   6866  CG2 THR X 439      -5.208   3.342  -4.967  1.00  0.00
C
ATOM   6867  OG1 THR X 439      -5.548   5.714  -4.696  1.00  0.00
O
ATOM   6868  H   THR X 439      -4.392   5.258  -2.575  1.00  0.00
H
ATOM   6869  HA  THR X 439      -2.650   4.020  -4.636  1.00  0.00
H
ATOM   6870  HB  THR X 439      -4.420   4.895  -6.220  1.00  0.00
H
ATOM   6871  HG1 THR X 439      -6.371   5.628  -5.183  1.00  0.00
H
ATOM   6872 1HG2 THR X 439      -6.141   3.266  -5.525  1.00  0.00
H
ATOM   6873 2HG2 THR X 439      -4.505   2.592  -5.329  1.00  0.00
H
ATOM   6874 3HG2 THR X 439      -5.403   3.174  -3.909  1.00  0.00
H
ATOM   6875  N   PHE X 440      -2.958   7.287  -4.390  1.00  0.00
N
ATOM   6876  CA  PHE X 440      -2.284   8.494  -4.862  1.00  0.00
C
ATOM   6877  C   PHE X 440      -0.800   8.409  -4.467  1.00  0.00
C
ATOM   6878  O   PHE X 440       0.056   8.983  -5.130  1.00  0.00
O
ATOM   6879  CB  PHE X 440      -2.952   9.740  -4.280  1.00  0.00
C
ATOM   6880  CG  PHE X 440      -2.455  10.111  -2.912  1.00  0.00
C
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ATOM   6881  CD1 PHE X 440      -1.357  10.943  -2.759  1.00  0.00
C
ATOM   6882  CD2 PHE X 440      -3.085   9.627  -1.775  1.00  0.00
C
ATOM   6883  CE1 PHE X 440      -0.900  11.284  -1.501  1.00  0.00
C
ATOM   6884  CE2 PHE X 440      -2.631   9.967  -0.516  1.00  0.00
C
ATOM   6885  CZ  PHE X 440      -1.536  10.797  -0.379  1.00  0.00
C
ATOM   6886  H   PHE X 440      -3.710   7.345  -3.719  1.00  0.00
H
ATOM   6887  HA  PHE X 440      -2.337   8.545  -5.951  1.00  0.00
H
ATOM   6888 1HB  PHE X 440      -2.765  10.599  -4.922  1.00  0.00
H
ATOM   6889 2HB  PHE X 440      -4.025   9.582  -4.190  1.00  0.00
H
ATOM   6890  HD1 PHE X 440      -0.855  11.330  -3.646  1.00  0.00
H
ATOM   6891  HD2 PHE X 440      -3.950   8.970  -1.884  1.00  0.00
H
ATOM   6892  HE1 PHE X 440      -0.036  11.940  -1.394  1.00  0.00
H
ATOM   6893  HE2 PHE X 440      -3.135   9.581   0.370  1.00  0.00
H
ATOM   6894  HZ  PHE X 440      -1.176  11.065   0.614  1.00  0.00
H
ATOM   6895  N   ALA X 441      -0.504   7.649  -3.417  1.00  0.00
N
ATOM   6896  CA  ALA X 441       0.875   7.488  -2.959  1.00  0.00
C
ATOM   6897  C   ALA X 441       1.809   6.933  -4.044  1.00  0.00
C
ATOM   6898  O   ALA X 441       3.004   7.243  -4.043  1.00  0.00
O
ATOM   6899  CB  ALA X 441       0.905   6.589  -1.730  1.00  0.00
C
ATOM   6900  H   ALA X 441      -1.247   7.173  -2.926  1.00  0.00
H
ATOM   6901  HA  ALA X 441       1.269   8.466  -2.684  1.00  0.00
H
ATOM   6902 1HB  ALA X 441       1.931   6.488  -1.380  1.00  0.00
H
ATOM   6903 2HB  ALA X 441       0.294   7.031  -0.941  1.00  0.00
H
ATOM   6904 3HB  ALA X 441       0.511   5.608  -1.988  1.00  0.00
H
ATOM   6905  N   GLY X 442       1.294   6.104  -4.951  1.00  0.00
N
ATOM   6906  CA  GLY X 442       2.161   5.621  -6.021  1.00  0.00
C
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ATOM   6907  C   GLY X 442       2.011   6.391  -7.321  1.00  0.00
C
ATOM   6908  O   GLY X 442       2.657   6.075  -8.316  1.00  0.00
O
ATOM   6909  H   GLY X 442       0.327   5.816  -4.897  1.00  0.00
H
ATOM   6910 1HA  GLY X 442       3.200   5.706  -5.704  1.00  0.00
H
ATOM   6911 2HA  GLY X 442       1.928   4.576  -6.226  1.00  0.00
H
ATOM   6912  N   LEU X 443       1.158   7.415  -7.321  1.00  0.00
N
ATOM   6913  CA  LEU X 443       1.010   8.214  -8.532  1.00  0.00
C
ATOM   6914  C   LEU X 443       1.843   9.484  -8.393  1.00  0.00
C
ATOM   6915  O   LEU X 443       2.332  10.027  -9.383  1.00  0.00
O
ATOM   6916  CB  LEU X 443      -0.470   8.535  -8.777  1.00  0.00
C
ATOM   6917  CG  LEU X 443      -1.378   7.316  -8.984  1.00  0.00
C
ATOM   6918  CD1 LEU X 443      -2.832   7.757  -9.069  1.00  0.00
C
ATOM   6919  CD2 LEU X 443      -0.961   6.582 -10.249  1.00  0.00
C
ATOM   6920  H   LEU X 443       0.622   7.635  -6.494  1.00  0.00
H
ATOM   6921  HA  LEU X 443       1.397   7.659  -9.385  1.00  0.00
H
ATOM   6922 1HB  LEU X 443      -0.705   9.020  -7.830  1.00  0.00
H
ATOM   6923 2HB  LEU X 443      -0.599   9.248  -9.591  1.00  0.00
H
ATOM   6924  HG  LEU X 443      -1.215   6.645  -8.138  1.00  0.00
H
ATOM   6925 1HD1 LEU X 443      -3.470   6.884  -9.215  1.00  0.00
H
ATOM   6926 2HD1 LEU X 443      -3.116   8.260  -8.143  1.00  0.00
H
ATOM   6927 3HD1 LEU X 443      -2.956   8.441  -9.907  1.00  0.00
H
ATOM   6928 1HD2 LEU X 443      -1.607   5.714 -10.394  1.00  0.00
H
ATOM   6929 2HD2 LEU X 443      -1.053   7.250 -11.104  1.00  0.00
H
ATOM   6930 3HD2 LEU X 443       0.072   6.251 -10.155  1.00  0.00
H
ATOM   6931  N   GLU X 444       2.042   9.947  -7.157  1.00  0.00
N
ATOM   6932  CA  GLU X 444       2.824  11.162  -6.950  1.00  0.00
C
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ATOM   6933  C   GLU X 444       4.205  11.156  -7.626  1.00  0.00
C
ATOM   6934  O   GLU X 444       4.657  12.198  -8.080  1.00  0.00
O
ATOM   6935  CB  GLU X 444       3.024  11.422  -5.456  1.00  0.00
C
ATOM   6936  CG  GLU X 444       1.787  11.942  -4.737  1.00  0.00
C
ATOM   6937  CD  GLU X 444       2.068  12.208  -3.285  1.00  0.00
C
ATOM   6938  OE1 GLU X 444       2.555  11.324  -2.622  1.00  0.00
O
ATOM   6939  OE2 GLU X 444       1.902  13.328  -2.864  1.00  0.00
O
ATOM   6940  H   GLU X 444       1.651   9.456  -6.365  1.00  0.00
H
ATOM   6941  HA  GLU X 444       2.303  12.015  -7.385  1.00  0.00
H
ATOM   6942 1HB  GLU X 444       3.334  10.479  -5.007  1.00  0.00
H
ATOM   6943 2HB  GLU X 444       3.829  12.152  -5.364  1.00  0.00
H
ATOM   6944 1HG  GLU X 444       1.363  12.836  -5.194  1.00  0.00
H
ATOM   6945 2HG  GLU X 444       1.075  11.121  -4.825  1.00  0.00
H
ATOM   6946  N   GLY X 445       4.894   9.991  -7.700  1.00  0.00
N
ATOM   6947  CA  GLY X 445       6.206  10.031  -8.363  1.00  0.00
C
ATOM   6948  C   GLY X 445       6.097  10.394  -9.846  1.00  0.00
C
ATOM   6949  O   GLY X 445       7.050  10.900 -10.440  1.00  0.00
O
ATOM   6950  H   GLY X 445       4.523   9.133  -7.316  1.00  0.00
H
ATOM   6951 1HA  GLY X 445       6.831  10.775  -7.871  1.00  0.00
H
ATOM   6952 2HA  GLY X 445       6.675   9.051  -8.282  1.00  0.00
H
ATOM   6953  N   VAL X 446       4.940  10.127 -10.448  1.00  0.00
N
ATOM   6954  CA  VAL X 446       4.746  10.456 -11.859  1.00  0.00
C
ATOM   6955  C   VAL X 446       4.182  11.876 -11.961  1.00  0.00
C
ATOM   6956  O   VAL X 446       4.517  12.630 -12.878  1.00  0.00
O
ATOM   6957  CB  VAL X 446       3.802   9.454 -12.548  1.00  0.00
C
ATOM   6958  CG1 VAL X 446       3.734   9.727 -14.043  1.00  0.00
C
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ATOM   6959  CG2 VAL X 446       4.259   8.026 -12.289  1.00  0.00
C
ATOM   6960  H   VAL X 446       4.191   9.695  -9.926  1.00  0.00
H
ATOM   6961  HA  VAL X 446       5.695  10.468 -12.398  1.00  0.00
H
ATOM   6962  HB  VAL X 446       2.806   9.549 -12.116  1.00  0.00
H
ATOM   6963 1HG1 VAL X 446       3.063   9.009 -14.516  1.00  0.00
H
ATOM   6964 2HG1 VAL X 446       3.361  10.736 -14.212  1.00  0.00
H
ATOM   6965 3HG1 VAL X 446       4.730   9.629 -14.476  1.00  0.00
H
ATOM   6966 1HG2 VAL X 446       3.581   7.330 -12.783  1.00  0.00
H
ATOM   6967 2HG2 VAL X 446       5.268   7.891 -12.682  1.00  0.00
H
ATOM   6968 3HG2 VAL X 446       4.259   7.833 -11.217  1.00  0.00
H
ATOM   6969  N   ILE X 447       3.322  12.243 -11.014  1.00  0.00
N
ATOM   6970  CA  ILE X 447       2.742  13.578 -11.011  1.00  0.00
C
ATOM   6971  C   ILE X 447       3.859  14.627 -10.991  1.00  0.00
C
ATOM   6972  O   ILE X 447       3.819  15.600 -11.747  1.00  0.00
O
ATOM   6973  CB  ILE X 447       1.805  13.786  -9.807  1.00  0.00
C
ATOM   6974  CG1 ILE X 447       0.571  12.889  -9.930  1.00  0.00
C
ATOM   6975  CG2 ILE X 447       1.398  15.246  -9.694  1.00  0.00
C
ATOM   6976  CD1 ILE X 447      -0.276  12.839  -8.678  1.00  0.00
C
ATOM   6977  H   ILE X 447       3.069  11.589 -10.288  1.00  0.00
H
ATOM   6978  HA  ILE X 447       2.191  13.759 -11.933  1.00  0.00
H
ATOM   6979  HB  ILE X 447       2.323  13.482  -8.898  1.00  0.00
H
ATOM   6980 1HG1 ILE X 447      -0.028  13.273 -10.757  1.00  0.00
H
ATOM   6981 2HG1 ILE X 447       0.921  11.886 -10.173  1.00  0.00
H
ATOM   6982 1HG2 ILE X 447       0.736  15.375  -8.839  1.00  0.00
H
ATOM   6983 2HG2 ILE X 447       2.286  15.862  -9.562  1.00  0.00
H
ATOM   6984 3HG2 ILE X 447       0.879  15.551 -10.603  1.00  0.00
H
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ATOM   6985 1HD1 ILE X 447      -1.131  12.183  -8.842  1.00  0.00
H
ATOM   6986 2HD1 ILE X 447       0.322  12.452  -7.850  1.00  0.00
H
ATOM   6987 3HD1 ILE X 447      -0.628  13.840  -8.435  1.00  0.00
H
ATOM   6988  N   THR X 448       4.856  14.412 -10.138  1.00  0.00
N
ATOM   6989  CA  THR X 448       5.985  15.337 -10.024  1.00  0.00
C
ATOM   6990  C   THR X 448       6.770  15.412 -11.326  1.00  0.00
C
ATOM   6991  O   THR X 448       7.200  16.493 -11.735  1.00  0.00
O
ATOM   6992  CB  THR X 448       6.938  14.926  -8.886  1.00  0.00
C
ATOM   6993  CG2 THR X 448       8.140  15.858  -8.835  1.00  0.00
C
ATOM   6994  OG1 THR X 448       6.243  14.979  -7.634  1.00  0.00
O
ATOM   6995  H   THR X 448       4.833  13.590  -9.552  1.00  0.00
H
ATOM   6996  HA  THR X 448       5.619  16.345  -9.827  1.00  0.00
H
ATOM   6997  HB  THR X 448       7.279  13.905  -9.059  1.00  0.00
H
ATOM   6998  HG1 THR X 448       5.495  14.377  -7.657  1.00  0.00
H
ATOM   6999 1HG2 THR X 448       8.802  15.551  -8.024  1.00  0.00
H
ATOM   7000 2HG2 THR X 448       8.678  15.810  -9.781  1.00  0.00
H
ATOM   7001 3HG2 THR X 448       7.800  16.878  -8.660  1.00  0.00
H
ATOM   7002  N   ALA X 449       6.965  14.274 -11.983  1.00  0.00
N
ATOM   7003  CA  ALA X 449       7.695  14.281 -13.248  1.00  0.00
C
ATOM   7004  C   ALA X 449       6.972  15.164 -14.260  1.00  0.00
C
ATOM   7005  O   ALA X 449       7.603  15.944 -14.979  1.00  0.00
O
ATOM   7006  CB  ALA X 449       7.859  12.862 -13.771  1.00  0.00
C
ATOM   7007  H   ALA X 449       6.609  13.407 -11.608  1.00  0.00
H
ATOM   7008  HA  ALA X 449       8.685  14.706 -13.078  1.00  0.00
H
ATOM   7009 1HB  ALA X 449       8.405  12.884 -14.715  1.00  0.00
H
ATOM   7010 2HB  ALA X 449       8.414  12.267 -13.046  1.00  0.00
H
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ATOM   7011 3HB  ALA X 449       6.878  12.418 -13.932  1.00  0.00
H
ATOM   7012  N   VAL X 450       5.650  15.038 -14.328  1.00  0.00
N
ATOM   7013  CA  VAL X 450       4.881  15.832 -15.277  1.00  0.00
C
ATOM   7014  C   VAL X 450       4.996  17.320 -14.972  1.00  0.00
C
ATOM   7015  O   VAL X 450       5.180  18.128 -15.880  1.00  0.00
O
ATOM   7016  CB  VAL X 450       3.395  15.431 -15.276  1.00  0.00
C
ATOM   7017  CG1 VAL X 450       2.586  16.378 -16.148  1.00  0.00
C
ATOM   7018  CG2 VAL X 450       3.229  13.996 -15.753  1.00  0.00
C
ATOM   7019  H   VAL X 450       5.177  14.387 -13.718  1.00  0.00
H
ATOM   7020  HA  VAL X 450       5.269  15.723 -16.290  1.00  0.00
H
ATOM   7021  HB  VAL X 450       3.019  15.469 -14.253  1.00  0.00
H
ATOM   7022 1HG1 VAL X 450       1.538  16.081 -16.136  1.00  0.00
H
ATOM   7023 2HG1 VAL X 450       2.680  17.395 -15.765  1.00  0.00
H
ATOM   7024 3HG1 VAL X 450       2.961  16.340 -17.172  1.00  0.00
H
ATOM   7025 1HG2 VAL X 450       2.173  13.729 -15.745  1.00  0.00
H
ATOM   7026 2HG2 VAL X 450       3.620  13.905 -16.767  1.00  0.00
H
ATOM   7027 3HG2 VAL X 450       3.777  13.326 -15.091  1.00  0.00
H
ATOM   7028  N   LEU X 451       4.894  17.683 -13.692  1.00  0.00
N
ATOM   7029  CA  LEU X 451       5.001  19.080 -13.280  1.00  0.00
C
ATOM   7030  C   LEU X 451       6.334  19.678 -13.710  1.00  0.00
C
ATOM   7031  O   LEU X 451       6.381  20.777 -14.264  1.00  0.00
O
ATOM   7032  CB  LEU X 451       4.827  19.199 -11.761  1.00  0.00
C
ATOM   7033  CG  LEU X 451       4.716  20.632 -11.227  1.00  0.00
C
ATOM   7034  CD1 LEU X 451       4.224  20.617  -9.786  1.00  0.00
C
ATOM   7035  CD2 LEU X 451       6.070  21.319 -11.325  1.00  0.00
C
ATOM   7036  H   LEU X 451       4.740  16.974 -12.991  1.00  0.00
H
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ATOM   7037  HA  LEU X 451       4.226  19.666 -13.773  1.00  0.00
H
ATOM   7038 1HB  LEU X 451       3.873  18.685 -11.652  1.00  0.00
H
ATOM   7039 2HB  LEU X 451       5.598  18.651 -11.222  1.00  0.00
H
ATOM   7040  HG  LEU X 451       4.023  21.167 -11.876  1.00  0.00
H
ATOM   7041 1HD1 LEU X 451       4.147  21.639  -9.416  1.00  0.00
H
ATOM   7042 2HD1 LEU X 451       3.242  20.142  -9.741  1.00  0.00
H
ATOM   7043 3HD1 LEU X 451       4.925  20.058  -9.168  1.00  0.00
H
ATOM   7044 1HD2 LEU X 451       5.991  22.338 -10.947  1.00  0.00
H
ATOM   7045 2HD2 LEU X 451       6.802  20.767 -10.736  1.00  0.00
H
ATOM   7046 3HD2 LEU X 451       6.390  21.343 -12.369  1.00  0.00
H
ATOM   7047  N   ASP X 452       7.417  18.953 -13.451  1.00  0.00
N
ATOM   7048  CA  ASP X 452       8.760  19.495 -13.610  1.00  0.00
C
ATOM   7049  C   ASP X 452       9.092  19.721 -15.080  1.00  0.00
C
ATOM   7050  O   ASP X 452       9.771  20.687 -15.430  1.00  0.00
O
ATOM   7051  CB  ASP X 452       9.793  18.561 -12.974  1.00  0.00
C
ATOM   7052  CG  ASP X 452       9.799  18.572 -11.451  1.00  0.00
C
ATOM   7053  OD1 ASP X 452       9.191  19.447 -10.881  1.00  0.00
O
ATOM   7054  OD2 ASP X 452      10.275  17.626 -10.871  1.00  0.00
O
ATOM   7055  H   ASP X 452       7.307  17.999 -13.136  1.00  0.00
H
ATOM   7056  HA  ASP X 452       8.825  20.469 -13.124  1.00  0.00
H
ATOM   7057 1HB  ASP X 452       9.726  17.532 -13.330  1.00  0.00
H
ATOM   7058 2HB  ASP X 452      10.714  19.015 -13.343  1.00  0.00
H
ATOM   7059  N   GLU X 453       8.608  18.827 -15.934  1.00  0.00
N
ATOM   7060  CA  GLU X 453       8.890  18.900 -17.362  1.00  0.00
C
ATOM   7061  C   GLU X 453       7.964  19.890 -18.056  1.00  0.00
C
ATOM   7062  O   GLU X 453       8.155  20.217 -19.230  1.00  0.00
O
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ATOM   7063  CB  GLU X 453       8.759  17.519 -18.005  1.00  0.00
C
ATOM   7064  CG  GLU X 453       7.339  16.971 -18.035  1.00  0.00
C
ATOM   7065  CD  GLU X 453       7.304  15.570 -18.581  1.00  0.00
C
ATOM   7066  OE1 GLU X 453       8.352  15.027 -18.837  1.00  0.00
O
ATOM   7067  OE2 GLU X 453       6.241  15.002 -18.636  1.00  0.00
O
ATOM   7068  H   GLU X 453       8.029  18.077 -15.585  1.00  0.00
H
ATOM   7069  HA  GLU X 453       9.906  19.263 -17.519  1.00  0.00
H
ATOM   7070 1HB  GLU X 453       9.136  17.604 -19.024  1.00  0.00
H
ATOM   7071 2HB  GLU X 453       9.397  16.841 -17.437  1.00  0.00
H
ATOM   7072 1HG  GLU X 453       6.844  16.994 -17.065  1.00  0.00
H
ATOM   7073 2HG  GLU X 453       6.822  17.640 -18.721  1.00  0.00
H
ATOM   7074  N   PHE X 454       6.953  20.358 -17.331  1.00  0.00
N
ATOM   7075  CA  PHE X 454       5.901  21.176 -17.921  1.00  0.00
C
ATOM   7076  C   PHE X 454       6.477  22.408 -18.602  1.00  0.00
C
ATOM   7077  O   PHE X 454       6.197  22.674 -19.771  1.00  0.00
O
ATOM   7078  CB  PHE X 454       4.886  21.590 -16.855  1.00  0.00
C
ATOM   7079  CG  PHE X 454       3.885  22.604 -17.334  1.00  0.00
C
ATOM   7080  CD1 PHE X 454       2.834  22.228 -18.157  1.00  0.00
C
ATOM   7081  CD2 PHE X 454       3.992  23.936 -16.962  1.00  0.00
C
ATOM   7082  CE1 PHE X 454       1.913  23.159 -18.598  1.00  0.00
C
ATOM   7083  CE2 PHE X 454       3.072  24.869 -17.400  1.00  0.00
C
ATOM   7084  CZ  PHE X 454       2.032  24.479 -18.219  1.00  0.00
C
ATOM   7085  H   PHE X 454       6.913  20.140 -16.346  1.00  0.00
H
ATOM   7086  HA  PHE X 454       5.381  20.609 -18.696  1.00  0.00
H
ATOM   7087 1HB  PHE X 454       4.317  20.724 -16.521  1.00  0.00
H
ATOM   7088 2HB  PHE X 454       5.397  22.037 -16.004  1.00  0.00
H
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ATOM   7089  HD1 PHE X 454       2.740  21.183 -18.456  1.00  0.00
H
ATOM   7090  HD2 PHE X 454       4.814  24.242 -16.314  1.00  0.00
H
ATOM   7091  HE1 PHE X 454       1.093  22.848 -19.244  1.00  0.00
H
ATOM   7092  HE2 PHE X 454       3.167  25.911 -17.099  1.00  0.00
H
ATOM   7093  HZ  PHE X 454       1.307  25.214 -18.567  1.00  0.00
H
ATOM   7094  N   PRO X 455       7.282  23.165 -17.861  1.00  0.00
N
ATOM   7095  CA  PRO X 455       7.845  24.409 -18.371  1.00  0.00
C
ATOM   7096  C   PRO X 455       8.851  24.142 -19.483  1.00  0.00
C
ATOM   7097  O   PRO X 455       9.243  25.052 -20.216  1.00  0.00
O
ATOM   7098  CB  PRO X 455       8.501  25.057 -17.140  1.00  0.00
C
ATOM   7099  CG  PRO X 455       8.809  23.912 -16.217  1.00  0.00
C
ATOM   7100  CD  PRO X 455       7.602  22.950 -16.445  1.00  0.00
C
ATOM   7101  HA  PRO X 455       7.121  24.989 -18.735  1.00  0.00
H
ATOM   7102 1HB  PRO X 455       9.299  25.331 -17.495  1.00  0.00
H
ATOM   7103 2HB  PRO X 455       7.832  25.493 -16.805  1.00  0.00
H
ATOM   7104 1HG  PRO X 455       9.487  23.499 -16.516  1.00  0.00
H
ATOM   7105 2HG  PRO X 455       8.567  24.174 -15.350  1.00  0.00
H
ATOM   7106 1HD  PRO X 455       7.882  22.039 -16.408  1.00  0.00
H
ATOM   7107 2HD  PRO X 455       6.791  23.183 -16.005  1.00  0.00
H
ATOM   7108  N   HIS X 456       9.276  22.888 -19.603  1.00  0.00
N
ATOM   7109  CA  HIS X 456      10.317  22.516 -20.552  1.00  0.00
C
ATOM   7110  C   HIS X 456       9.713  22.034 -21.865  1.00  0.00
C
ATOM   7111  O   HIS X 456      10.281  22.250 -22.937  1.00  0.00
O
ATOM   7112  CB  HIS X 456      11.225  21.432 -19.963  1.00  0.00
C
ATOM   7113  CG  HIS X 456      12.046  21.901 -18.802  1.00  0.00
C
ATOM   7114  CD2 HIS X 456      13.279  22.459 -18.751  1.00  0.00
C
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ATOM   7115  ND1 HIS X 456      11.608  21.818 -17.498  1.00  0.00
N
ATOM   7116  CE1 HIS X 456      12.537  22.303 -16.693  1.00  0.00
C
ATOM   7117  NE2 HIS X 456      13.559  22.700 -17.428  1.00  0.00
N
ATOM   7118  H   HIS X 456       8.866  22.172 -19.019  1.00  0.00
H
ATOM   7119  HA  HIS X 456      10.925  23.388 -20.790  1.00  0.00
H
ATOM   7120 1HB  HIS X 456      10.627  20.595 -19.602  1.00  0.00
H
ATOM   7121 2HB  HIS X 456      11.925  21.078 -20.718  1.00  0.00
H
ATOM   7122  HD2 HIS X 456      14.007  22.720 -19.519  1.00  0.00
H
ATOM   7123  HE1 HIS X 456      12.380  22.327 -15.615  1.00  0.00
H
ATOM   7124  HE2 HIS X 456      14.414  23.113 -17.083  1.00  0.00
H
ATOM   7125  N   VAL X 457       8.615  21.306 -21.847  1.00  0.00
N
ATOM   7126  CA  VAL X 457       7.931  20.828 -23.043  1.00  0.00
C
ATOM   7127  C   VAL X 457       6.431  20.719 -22.811  1.00  0.00
C
ATOM   7128  O   VAL X 457       5.986  20.214 -21.781  1.00  0.00
O
ATOM   7129  CB  VAL X 457       8.474  19.458 -23.494  1.00  0.00
C
ATOM   7130  CG1 VAL X 457       8.202  18.403 -22.432  1.00  0.00
C
ATOM   7131  CG2 VAL X 457       7.849  19.049 -24.820  1.00  0.00
C
ATOM   7132  H   VAL X 457       8.223  21.065 -20.949  1.00  0.00
H
ATOM   7133  HA  VAL X 457       8.037  21.532 -23.869  1.00  0.00
H
ATOM   7134  HB  VAL X 457       9.547  19.540 -23.660  1.00  0.00
H
ATOM   7135 1HG1 VAL X 457       8.593  17.442 -22.767  1.00  0.00
H
ATOM   7136 2HG1 VAL X 457       8.694  18.689 -21.501  1.00  0.00
H
ATOM   7137 3HG1 VAL X 457       7.130  18.320 -22.266  1.00  0.00
H
ATOM   7138 1HG2 VAL X 457       8.245  18.080 -25.125  1.00  0.00
H
ATOM   7139 2HG2 VAL X 457       6.767  18.983 -24.707  1.00  0.00
H
ATOM   7140 3HG2 VAL X 457       8.090  19.793 -25.580  1.00  0.00
H
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ATOM   7141  N   TRP X 458       5.652  21.192 -23.777  1.00  0.00
N
ATOM   7142  CA  TRP X 458       4.200  21.168 -23.670  1.00  0.00
C
ATOM   7143  C   TRP X 458       3.600  20.099 -24.575  1.00  0.00
C
ATOM   7144  O   TRP X 458       3.523  20.274 -25.793  1.00  0.00
O
ATOM   7145  CB  TRP X 458       3.617  22.538 -24.019  1.00  0.00
C
ATOM   7146  CG  TRP X 458       3.882  23.584 -22.979  1.00  0.00
C
ATOM   7147  CD1 TRP X 458       3.033  23.986 -21.992  1.00  0.00
C
ATOM   7148  CD2 TRP X 458       5.077  24.361 -22.823  1.00  0.00
C
ATOM   7149  CE2 TRP X 458       4.880  25.211 -21.721  1.00  0.00
C
ATOM   7150  CE3 TRP X 458       6.295  24.416 -23.510  1.00  0.00
C
ATOM   7151  NE1 TRP X 458       3.623  24.964 -21.230  1.00  0.00
N
ATOM   7152  CZ2 TRP X 458       5.847  26.106 -21.290  1.00  0.00
C
ATOM   7153  CZ3 TRP X 458       7.266  25.312 -23.078  1.00  0.00
C
ATOM   7154  CH2 TRP X 458       7.049  26.132 -21.999  1.00  0.00
C
ATOM   7155  H   TRP X 458       6.078  21.579 -24.607  1.00  0.00
H
ATOM   7156  HA  TRP X 458       3.909  20.915 -22.651  1.00  0.00
H
ATOM   7157 1HB  TRP X 458       4.049  22.907 -24.949  1.00  0.00
H
ATOM   7158 2HB  TRP X 458       2.534  22.470 -24.125  1.00  0.00
H
ATOM   7159  HD1 TRP X 458       2.060  23.499 -21.950  1.00  0.00
H
ATOM   7160  HE1 TRP X 458       3.200  25.428 -20.439  1.00  0.00
H
ATOM   7161  HE3 TRP X 458       6.521  23.787 -24.371  1.00  0.00
H
ATOM   7162  HZ2 TRP X 458       5.633  26.738 -20.429  1.00  0.00
H
ATOM   7163  HZ3 TRP X 458       8.209  25.346 -23.622  1.00  0.00
H
ATOM   7164  HH2 TRP X 458       7.837  26.821 -21.692  1.00  0.00
H
ATOM   7165  N   ALA X 459       3.176  18.991 -23.974  1.00  0.00
N
ATOM   7166  CA  ALA X 459       2.534  17.914 -24.718  1.00  0.00
C
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ATOM   7167  C   ALA X 459       1.154  18.331 -25.209  1.00  0.00
C
ATOM   7168  O   ALA X 459       0.839  18.191 -26.393  1.00  0.00
O
ATOM   7169  CB  ALA X 459       2.439  16.662 -23.858  1.00  0.00
C
ATOM   7170  H   ALA X 459       3.303  18.893 -22.976  1.00  0.00
H
ATOM   7171  HA  ALA X 459       3.137  17.689 -25.598  1.00  0.00
H
ATOM   7172 1HB  ALA X 459       1.958  15.867 -24.429  1.00  0.00
H
ATOM   7173 2HB  ALA X 459       3.440  16.343 -23.566  1.00  0.00
H
ATOM   7174 3HB  ALA X 459       1.851  16.874 -22.968  1.00  0.00
H
ATOM   7175  N   LYS X 460       0.334  18.846 -24.297  1.00  0.00
N
ATOM   7176  CA  LYS X 460      -1.027  19.245 -24.626  1.00  0.00
C
ATOM   7177  C   LYS X 460      -1.624  20.121 -23.533  1.00  0.00
C
ATOM   7178  O   LYS X 460      -1.663  19.727 -22.365  1.00  0.00
O
ATOM   7179  CB  LYS X 460      -1.906  18.014 -24.855  1.00  0.00
C
ATOM   7180  CG  LYS X 460      -3.309  18.329 -25.358  1.00  0.00
C
ATOM   7181  CD  LYS X 460      -4.112  17.057 -25.587  1.00  0.00
C
ATOM   7182  CE  LYS X 460      -3.551  16.247 -26.747  1.00  0.00
C
ATOM   7183  NZ  LYS X 460      -4.238  14.935 -26.893  1.00  0.00
N
ATOM   7184  H   LYS X 460       0.665  18.963 -23.350  1.00  0.00
H
ATOM   7185  HA  LYS X 460      -1.025  19.845 -25.538  1.00  0.00
H
ATOM   7186 1HB  LYS X 460      -1.393  17.385 -25.581  1.00  0.00
H
ATOM   7187 2HB  LYS X 460      -1.974  17.489 -23.902  1.00  0.00
H
ATOM   7188 1HG  LYS X 460      -3.813  18.950 -24.617  1.00  0.00
H
ATOM   7189 2HG  LYS X 460      -3.225  18.879 -26.295  1.00  0.00
H
ATOM   7190 1HD  LYS X 460      -4.080  16.458 -24.676  1.00  0.00
H
ATOM   7191 2HD  LYS X 460      -5.145  17.332 -25.803  1.00  0.00
H
ATOM   7192 1HE  LYS X 460      -3.677  16.826 -27.660  1.00  0.00
H
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ATOM   7193 2HE  LYS X 460      -2.489  16.081 -26.566  1.00  0.00
H
ATOM   7194 1HZ  LYS X 460      -3.837  14.431 -27.672  1.00  0.00
H
ATOM   7195 2HZ  LYS X 460      -4.121  14.396 -26.047  1.00  0.00
H
ATOM   7196 3HZ  LYS X 460      -5.222  15.088 -27.062  1.00  0.00
H
ATOM   7197  N   ARG X 461      -2.093  21.303 -23.916  1.00  0.00
N
ATOM   7198  CA  ARG X 461      -2.616  22.266 -22.955  1.00  0.00
C
ATOM   7199  C   ARG X 461      -3.887  21.751 -22.294  1.00  0.00
C
ATOM   7200  O   ARG X 461      -4.222  22.148 -21.178  1.00  0.00
O
ATOM   7201  CB  ARG X 461      -2.827  23.639 -23.575  1.00  0.00
C
ATOM   7202  CG  ARG X 461      -1.550  24.388 -23.924  1.00  0.00
C
ATOM   7203  CD  ARG X 461      -1.770  25.698 -24.589  1.00  0.00
C
ATOM   7204  NE  ARG X 461      -0.551  26.397 -24.961  1.00  0.00
N
ATOM   7205  CZ  ARG X 461      -0.507  27.505 -25.727  1.00  0.00
C
ATOM   7206  NH1 ARG X 461      -1.604  28.022 -26.233  1.00  0.00
N
ATOM   7207  NH2 ARG X 461       0.673  28.047 -25.974  1.00  0.00
N
ATOM   7208  H   ARG X 461      -2.087  21.540 -24.897  1.00  0.00
H
ATOM   7209  HA  ARG X 461      -1.891  22.420 -22.155  1.00  0.00
H
ATOM   7210 1HB  ARG X 461      -3.416  23.492 -24.479  1.00  0.00
H
ATOM   7211 2HB  ARG X 461      -3.402  24.226 -22.859  1.00  0.00
H
ATOM   7212 1HG  ARG X 461      -0.991  24.567 -23.005  1.00  0.00
H
ATOM   7213 2HG  ARG X 461      -0.956  23.765 -24.594  1.00  0.00
H
ATOM   7214 1HD  ARG X 461      -2.346  25.540 -25.500  1.00  0.00
H
ATOM   7215 2HD  ARG X 461      -2.326  26.348 -23.914  1.00  0.00
H
ATOM   7216  HE  ARG X 461       0.410  26.186 -24.725  1.00  0.00
H
ATOM   7217 1HH1 ARG X 461      -2.497  27.584 -26.049  1.00  0.00
H
ATOM   7218 2HH1 ARG X 461      -1.550  28.852 -26.805  1.00  0.00
H
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ATOM   7219 1HH2 ARG X 461       1.509  27.626 -25.591  1.00  0.00
H
ATOM   7220 2HH2 ARG X 461       0.734  28.875 -26.545  1.00  0.00
H
ATOM   7221  N   ARG X 462      -4.591  20.866 -22.987  1.00  0.00
N
ATOM   7222  CA  ARG X 462      -5.834  20.301 -22.475  1.00  0.00
C
ATOM   7223  C   ARG X 462      -5.567  19.323 -21.338  1.00  0.00
C
ATOM   7224  O   ARG X 462      -6.452  19.037 -20.531  1.00  0.00
O
ATOM   7225  CB  ARG X 462      -6.670  19.663 -23.575  1.00  0.00
C
ATOM   7226  CG  ARG X 462      -7.273  20.642 -24.570  1.00  0.00
C
ATOM   7227  CD  ARG X 462      -8.065  20.005 -25.653  1.00  0.00
C
ATOM   7228  NE  ARG X 462      -8.607  20.936 -26.630  1.00  0.00
N
ATOM   7229  CZ  ARG X 462      -9.171  20.573 -27.800  1.00  0.00
C
ATOM   7230  NH1 ARG X 462      -9.236  19.310 -28.158  1.00  0.00
N
ATOM   7231  NH2 ARG X 462      -9.635  21.526 -28.590  1.00  0.00
N
ATOM   7232  H   ARG X 462      -4.256  20.574 -23.894  1.00  0.00
H
ATOM   7233  HA  ARG X 462      -6.458  21.095 -22.063  1.00  0.00
H
ATOM   7234 1HB  ARG X 462      -6.021  18.967 -24.105  1.00  0.00
H
ATOM   7235 2HB  ARG X 462      -7.472  19.111 -23.085  1.00  0.00
H
ATOM   7236 1HG  ARG X 462      -7.931  21.325 -24.031  1.00  0.00
H
ATOM   7237 2HG  ARG X 462      -6.464  21.208 -25.033  1.00  0.00
H
ATOM   7238 1HD  ARG X 462      -7.430  19.302 -26.188  1.00  0.00
H
ATOM   7239 2HD  ARG X 462      -8.905  19.471 -25.209  1.00  0.00
H
ATOM   7240  HE  ARG X 462      -8.650  21.945 -26.604  1.00  0.00
H
ATOM   7241 1HH1 ARG X 462      -8.860  18.595 -27.553  1.00  0.00
H
ATOM   7242 2HH1 ARG X 462      -9.662  19.060 -29.040  1.00  0.00
H
ATOM   7243 1HH2 ARG X 462      -9.562  22.494 -28.307  1.00  0.00
H
ATOM   7244 2HH2 ARG X 462     -10.061  21.284 -29.472  1.00  0.00
H
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ATOM   7245  N   GLU X 463      -4.339  18.816 -21.275  1.00  0.00
N
ATOM   7246  CA  GLU X 463      -3.951  17.874 -20.231  1.00  0.00
C
ATOM   7247  C   GLU X 463      -3.488  18.599 -18.979  1.00  0.00
C
ATOM   7248  O   GLU X 463      -2.877  19.668 -19.056  1.00  0.00
O
ATOM   7249  CB  GLU X 463      -2.849  16.940 -20.734  1.00  0.00
C
ATOM   7250  CG  GLU X 463      -3.275  16.018 -21.869  1.00  0.00
C
ATOM   7251  CD  GLU X 463      -2.146  15.124 -22.300  1.00  0.00
C
ATOM   7252  OE1 GLU X 463      -1.072  15.252 -21.760  1.00  0.00
O
ATOM   7253  OE2 GLU X 463      -2.383  14.238 -23.086  1.00  0.00
O
ATOM   7254  H   GLU X 463      -3.657  19.090 -21.968  1.00  0.00
H
ATOM   7255  HA  GLU X 463      -4.811  17.271 -19.939  1.00  0.00
H
ATOM   7256 1HB  GLU X 463      -2.026  17.571 -21.071  1.00  0.00
H
ATOM   7257 2HB  GLU X 463      -2.524  16.341 -19.884  1.00  0.00
H
ATOM   7258 1HG  GLU X 463      -4.148  15.410 -21.629  1.00  0.00
H
ATOM   7259 2HG  GLU X 463      -3.522  16.705 -22.677  1.00  0.00
H
ATOM   7260  N   ARG X 464      -3.778  18.018 -17.818  1.00  0.00
N
ATOM   7261  CA  ARG X 464      -3.280  18.538 -16.553  1.00  0.00
C
ATOM   7262  C   ARG X 464      -2.275  17.584 -15.922  1.00  0.00
C
ATOM   7263  O   ARG X 464      -2.042  16.487 -16.429  1.00  0.00
O
ATOM   7264  CB  ARG X 464      -4.408  18.876 -15.588  1.00  0.00
C
ATOM   7265  CG  ARG X 464      -5.395  19.914 -16.096  1.00  0.00
C
ATOM   7266  CD  ARG X 464      -4.866  21.302 -16.120  1.00  0.00
C
ATOM   7267  NE  ARG X 464      -5.842  22.314 -16.489  1.00  0.00
N
ATOM   7268  CZ  ARG X 464      -5.641  23.642 -16.391  1.00  0.00
C
ATOM   7269  NH1 ARG X 464      -4.521  24.124 -15.902  1.00  0.00
N
ATOM   7270  NH2 ARG X 464      -6.614  24.451 -16.777  1.00  0.00
N
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ATOM   7271  H   ARG X 464      -4.359  17.193 -17.815  1.00  0.00
H
ATOM   7272  HA  ARG X 464      -2.754  19.477 -16.721  1.00  0.00
H
ATOM   7273 1HB  ARG X 464      -4.939  17.947 -15.382  1.00  0.00
H
ATOM   7274 2HB  ARG X 464      -3.945  19.240 -14.671  1.00  0.00
H
ATOM   7275 1HG  ARG X 464      -5.687  19.649 -17.112  1.00  0.00
H
ATOM   7276 2HG  ARG X 464      -6.276  19.901 -15.452  1.00  0.00
H
ATOM   7277 1HD  ARG X 464      -4.492  21.556 -15.129  1.00  0.00
H
ATOM   7278 2HD  ARG X 464      -4.050  21.356 -16.841  1.00  0.00
H
ATOM   7279  HE  ARG X 464      -6.777  22.202 -16.859  1.00  0.00
H
ATOM   7280 1HH1 ARG X 464      -3.794  23.492 -15.594  1.00  0.00
H
ATOM   7281 2HH1 ARG X 464      -4.389  25.123 -15.837  1.00  0.00
H
ATOM   7282 1HH2 ARG X 464      -7.476  24.064 -17.135  1.00  0.00
H
ATOM   7283 2HH2 ARG X 464      -6.489  25.450 -16.714  1.00  0.00
H
ATOM   7284  N   PHE X 465      -1.676  18.011 -14.815  1.00  0.00
N
ATOM   7285  CA  PHE X 465      -0.593  17.248 -14.196  1.00  0.00
C
ATOM   7286  C   PHE X 465      -1.083  15.862 -13.788  1.00  0.00
C
ATOM   7287  O   PHE X 465      -0.409  14.860 -14.027  1.00  0.00
O
ATOM   7288  CB  PHE X 465      -0.035  17.996 -12.985  1.00  0.00
C
ATOM   7289  CG  PHE X 465       0.677  19.272 -13.337  1.00  0.00
C
ATOM   7290  CD1 PHE X 465       1.151  19.487 -14.622  1.00  0.00
C
ATOM   7291  CD2 PHE X 465       0.874  20.260 -12.383  1.00  0.00
C
ATOM   7292  CE1 PHE X 465       1.806  20.660 -14.947  1.00  0.00
C
ATOM   7293  CE2 PHE X 465       1.527  21.434 -12.706  1.00  0.00
C
ATOM   7294  CZ  PHE X 465       1.994  21.634 -13.989  1.00  0.00
C
ATOM   7295  H   PHE X 465      -1.975  18.879 -14.393  1.00  0.00
H
ATOM   7296  HA  PHE X 465       0.213  17.100 -14.915  1.00  0.00
H
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ATOM   7297 1HB  PHE X 465      -0.843  18.268 -12.306  1.00  0.00
H
ATOM   7298 2HB  PHE X 465       0.686  17.374 -12.458  1.00  0.00
H
ATOM   7299  HD1 PHE X 465       1.002  18.717 -15.381  1.00  0.00
H
ATOM   7300  HD2 PHE X 465       0.505  20.102 -11.369  1.00  0.00
H
ATOM   7301  HE1 PHE X 465       2.174  20.816 -15.961  1.00  0.00
H
ATOM   7302  HE2 PHE X 465       1.675  22.202 -11.946  1.00  0.00
H
ATOM   7303  HZ  PHE X 465       2.511  22.558 -14.244  1.00  0.00
H
ATOM   7304  N   VAL X 466      -2.253  15.808 -13.161  1.00  0.00
N
ATOM   7305  CA  VAL X 466      -2.810  14.535 -12.727  1.00  0.00
C
ATOM   7306  C   VAL X 466      -3.441  13.787 -13.895  1.00  0.00
C
ATOM   7307  O   VAL X 466      -3.285  12.574 -14.020  1.00  0.00
O
ATOM   7308  CB  VAL X 466      -3.865  14.729 -11.621  1.00  0.00
C
ATOM   7309  CG1 VAL X 466      -4.464  13.391 -11.215  1.00  0.00
C
ATOM   7310  CG2 VAL X 466      -3.251  15.423 -10.414  1.00  0.00
C
ATOM   7311  H   VAL X 466      -2.763  16.661 -12.983  1.00  0.00
H
ATOM   7312  HA  VAL X 466      -2.032  13.869 -12.353  1.00  0.00
H
ATOM   7313  HB  VAL X 466      -4.653  15.383 -11.995  1.00  0.00
H
ATOM   7314 1HG1 VAL X 466      -5.207  13.546 -10.433  1.00  0.00
H
ATOM   7315 2HG1 VAL X 466      -4.939  12.929 -12.081  1.00  0.00
H
ATOM   7316 3HG1 VAL X 466      -3.676  12.738 -10.841  1.00  0.00
H
ATOM   7317 1HG2 VAL X 466      -4.009  15.553  -9.643  1.00  0.00
H
ATOM   7318 2HG2 VAL X 466      -2.435  14.816 -10.023  1.00  0.00
H
ATOM   7319 3HG2 VAL X 466      -2.867  16.399 -10.712  1.00  0.00
H
ATOM   7320  N   LEU X 467      -4.149  14.512 -14.763  1.00  0.00
N
ATOM   7321  CA  LEU X 467      -4.805  13.854 -15.887  1.00  0.00
C
ATOM   7322  C   LEU X 467      -3.849  13.004 -16.723  1.00  0.00
C
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ATOM   7323  O   LEU X 467      -4.185  11.883 -17.090  1.00  0.00
O
ATOM   7324  CB  LEU X 467      -5.480  14.894 -16.789  1.00  0.00
C
ATOM   7325  CG  LEU X 467      -6.730  15.559 -16.196  1.00  0.00
C
ATOM   7326  CD1 LEU X 467      -7.156  16.736 -17.062  1.00  0.00
C
ATOM   7327  CD2 LEU X 467      -7.849  14.534 -16.091  1.00  0.00
C
ATOM   7328  H   LEU X 467      -4.231  15.511 -14.642  1.00  0.00
H
ATOM   7329  HA  LEU X 467      -5.562  13.164 -15.516  1.00  0.00
H
ATOM   7330 1HB  LEU X 467      -4.670  15.620 -16.861  1.00  0.00
H
ATOM   7331 2HB  LEU X 467      -5.697  14.492 -17.778  1.00  0.00
H
ATOM   7332  HG  LEU X 467      -6.477  15.881 -15.186  1.00  0.00
H
ATOM   7333 1HD1 LEU X 467      -8.044  17.202 -16.634  1.00  0.00
H
ATOM   7334 2HD1 LEU X 467      -6.350  17.467 -17.105  1.00  0.00
H
ATOM   7335 3HD1 LEU X 467      -7.381  16.384 -18.069  1.00  0.00
H
ATOM   7336 1HD2 LEU X 467      -8.737  15.006 -15.668  1.00  0.00
H
ATOM   7337 2HD2 LEU X 467      -8.081  14.144 -17.082  1.00  0.00
H
ATOM   7338 3HD2 LEU X 467      -7.534  13.715 -15.444  1.00  0.00
H
ATOM   7339  N   ALA X 468      -2.666  13.529 -17.023  1.00  0.00
N
ATOM   7340  CA  ALA X 468      -1.709  12.744 -17.797  1.00  0.00
C
ATOM   7341  C   ALA X 468      -1.276  11.509 -17.032  1.00  0.00
C
ATOM   7342  O   ALA X 468      -0.999  10.476 -17.635  1.00  0.00
O
ATOM   7343  CB  ALA X 468      -0.503  13.595 -18.168  1.00  0.00
C
ATOM   7344  H   ALA X 468      -2.430  14.463 -16.718  1.00  0.00
H
ATOM   7345  HA  ALA X 468      -2.193  12.408 -18.714  1.00  0.00
H
ATOM   7346 1HB  ALA X 468       0.201  12.995 -18.745  1.00  0.00
H
ATOM   7347 2HB  ALA X 468      -0.828  14.447 -18.766  1.00  0.00
H
ATOM   7348 3HB  ALA X 468      -0.017  13.952 -17.261  1.00  0.00
H
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ATOM   7349  N   VAL X 469      -1.211  11.608 -15.705  1.00  0.00
N
ATOM   7350  CA  VAL X 469      -0.815  10.455 -14.914  1.00  0.00
C
ATOM   7351  C   VAL X 469      -1.939   9.420 -14.956  1.00  0.00
C
ATOM   7352  O   VAL X 469      -1.685   8.216 -15.019  1.00  0.00
O
ATOM   7353  CB  VAL X 469      -0.502  10.848 -13.458  1.00  0.00
C
ATOM   7354  CG1 VAL X 469      -0.234   9.609 -12.617  1.00  0.00
C
ATOM   7355  CG2 VAL X 469       0.688  11.794 -13.407  1.00  0.00
C
ATOM   7356  H   VAL X 469      -1.436  12.481 -15.251  1.00  0.00
H
ATOM   7357  HA  VAL X 469       0.062   9.965 -15.339  1.00  0.00
H
ATOM   7358  HB  VAL X 469      -1.354  11.390 -13.047  1.00  0.00
H
ATOM   7359 1HG1 VAL X 469      -0.015   9.906 -11.591  1.00  0.00
H
ATOM   7360 2HG1 VAL X 469      -1.112   8.965 -12.627  1.00  0.00
H
ATOM   7361 3HG1 VAL X 469       0.620   9.069 -13.027  1.00  0.00
H
ATOM   7362 1HG2 VAL X 469       0.896  12.063 -12.371  1.00  0.00
H
ATOM   7363 2HG2 VAL X 469       1.562  11.303 -13.836  1.00  0.00
H
ATOM   7364 3HG2 VAL X 469       0.463  12.696 -13.976  1.00  0.00
H
ATOM   7365  N   VAL X 470      -3.180   9.888 -14.940  1.00  0.00
N
ATOM   7366  CA  VAL X 470      -4.325   8.981 -14.986  1.00  0.00
C
ATOM   7367  C   VAL X 470      -4.323   8.191 -16.288  1.00  0.00
C
ATOM   7368  O   VAL X 470      -4.606   6.993 -16.295  1.00  0.00
O
ATOM   7369  CB  VAL X 470      -5.656   9.743 -14.850  1.00  0.00
C
ATOM   7370  CG1 VAL X 470      -6.830   8.821 -15.144  1.00  0.00
C
ATOM   7371  CG2 VAL X 470      -5.787  10.342 -13.457  1.00  0.00
C
ATOM   7372  H   VAL X 470      -3.337  10.885 -14.895  1.00  0.00
H
ATOM   7373  HA  VAL X 470      -4.269   8.232 -14.196  1.00  0.00
H
ATOM   7374  HB  VAL X 470      -5.663  10.575 -15.554  1.00  0.00
H
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ATOM   7375 1HG1 VAL X 470      -7.762   9.376 -15.042  1.00  0.00
H
ATOM   7376 2HG1 VAL X 470      -6.746   8.437 -16.159  1.00  0.00
H
ATOM   7377 3HG1 VAL X 470      -6.825   7.990 -14.438  1.00  0.00
H
ATOM   7378 1HG2 VAL X 470      -6.733  10.878 -13.378  1.00  0.00
H
ATOM   7379 2HG2 VAL X 470      -5.758   9.543 -12.715  1.00  0.00
H
ATOM   7380 3HG2 VAL X 470      -4.963  11.034 -13.279  1.00  0.00
H
ATOM   7381  N   ILE X 471      -3.982   8.860 -17.388  1.00  0.00
N
ATOM   7382  CA  ILE X 471      -3.935   8.216 -18.700  1.00  0.00
C
ATOM   7383  C   ILE X 471      -2.846   7.148 -18.737  1.00  0.00
C
ATOM   7384  O   ILE X 471      -3.083   6.033 -19.194  1.00  0.00
O
ATOM   7385  CB  ILE X 471      -3.686   9.242 -19.822  1.00  0.00
C
ATOM   7386  CG1 ILE X 471      -4.878  10.192 -19.951  1.00  0.00
C
ATOM   7387  CG2 ILE X 471      -3.421   8.531 -21.141  1.00  0.00
C
ATOM   7388  CD1 ILE X 471      -4.606  11.398 -20.822  1.00  0.00
C
ATOM   7389  H   ILE X 471      -3.750   9.840 -17.314  1.00  0.00
H
ATOM   7390  HA  ILE X 471      -4.862   7.680 -18.898  1.00  0.00
H
ATOM   7391  HB  ILE X 471      -2.823   9.853 -19.560  1.00  0.00
H
ATOM   7392 1HG1 ILE X 471      -5.706   9.620 -20.372  1.00  0.00
H
ATOM   7393 2HG1 ILE X 471      -5.140  10.522 -18.946  1.00  0.00
H
ATOM   7394 1HG2 ILE X 471      -3.247   9.270 -21.924  1.00  0.00
H
ATOM   7395 2HG2 ILE X 471      -2.543   7.895 -21.042  1.00  0.00
H
ATOM   7396 3HG2 ILE X 471      -4.284   7.920 -21.405  1.00  0.00
H
ATOM   7397 1HD1 ILE X 471      -5.497  12.025 -20.865  1.00  0.00
H
ATOM   7398 2HD1 ILE X 471      -3.780  11.971 -20.401  1.00  0.00
H
ATOM   7399 3HD1 ILE X 471      -4.345  11.071 -21.827  1.00  0.00
H
ATOM   7400  N   THR X 472      -1.651   7.488 -18.274  1.00  0.00
N
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ATOM   7401  CA  THR X 472      -0.541   6.543 -18.268  1.00  0.00
C
ATOM   7402  C   THR X 472      -0.820   5.375 -17.321  1.00  0.00
C
ATOM   7403  O   THR X 472      -0.512   4.222 -17.634  1.00  0.00
O
ATOM   7404  CB  THR X 472       0.778   7.223 -17.858  1.00  0.00
C
ATOM   7405  CG2 THR X 472       1.914   6.212 -17.829  1.00  0.00
C
ATOM   7406  OG1 THR X 472       1.094   8.265 -18.792  1.00  0.00
O
ATOM   7407  H   THR X 472      -1.507   8.422 -17.918  1.00  0.00
H
ATOM   7408  HA  THR X 472      -0.418   6.113 -19.263  1.00  0.00
H
ATOM   7409  HB  THR X 472       0.658   7.662 -16.868  1.00  0.00
H
ATOM   7410  HG1 THR X 472       1.188   7.887 -19.671  1.00  0.00
H
ATOM   7411 1HG2 THR X 472       2.837   6.712 -17.536  1.00  0.00
H
ATOM   7412 2HG2 THR X 472       1.683   5.426 -17.111  1.00  0.00
H
ATOM   7413 3HG2 THR X 472       2.036   5.775 -18.819  1.00  0.00
H
ATOM   7414  N   CYS X 473      -1.412   5.670 -16.165  1.00  0.00
N
ATOM   7415  CA  CYS X 473      -1.727   4.612 -15.205  1.00  0.00
C
ATOM   7416  C   CYS X 473      -2.686   3.589 -15.826  1.00  0.00
C
ATOM   7417  O   CYS X 473      -2.389   2.394 -15.872  1.00  0.00
O
ATOM   7418  CB  CYS X 473      -2.407   5.377 -14.070  1.00  0.00
C
ATOM   7419  SG  CYS X 473      -2.915   4.349 -12.672  1.00  0.00
S
ATOM   7420  H   CYS X 473      -1.644   6.629 -15.950  1.00  0.00
H
ATOM   7421  HA  CYS X 473      -0.844   4.111 -14.808  1.00  0.00
H
ATOM   7422 1HB  CYS X 473      -1.731   6.129 -13.664  1.00  0.00
H
ATOM   7423 2HB  CYS X 473      -3.313   5.862 -14.434  1.00  0.00
H
ATOM   7424  HG  CYS X 473      -3.431   5.340 -11.951  1.00  0.00
H
ATOM   7425  N   PHE X 474      -3.827   4.066 -16.320  1.00  0.00
N
ATOM   7426  CA  PHE X 474      -4.813   3.183 -16.937  1.00  0.00
C
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ATOM   7427  C   PHE X 474      -4.188   2.356 -18.063  1.00  0.00
C
ATOM   7428  O   PHE X 474      -4.365   1.140 -18.122  1.00  0.00
O
ATOM   7429  CB  PHE X 474      -5.995   3.992 -17.473  1.00  0.00
C
ATOM   7430  CG  PHE X 474      -7.204   3.158 -17.791  1.00  0.00
C
ATOM   7431  CD1 PHE X 474      -7.403   1.933 -17.174  1.00  0.00
C
ATOM   7432  CD2 PHE X 474      -8.144   3.599 -18.711  1.00  0.00
C
ATOM   7433  CE1 PHE X 474      -8.515   1.166 -17.468  1.00  0.00
C
ATOM   7434  CE2 PHE X 474      -9.257   2.834 -19.006  1.00  0.00
C
ATOM   7435  CZ  PHE X 474      -9.441   1.616 -18.383  1.00  0.00
C
ATOM   7436  H   PHE X 474      -4.013   5.057 -16.268  1.00  0.00
H
ATOM   7437  HA  PHE X 474      -5.184   2.470 -16.199  1.00  0.00
H
ATOM   7438 1HB  PHE X 474      -6.310   4.728 -16.736  1.00  0.00
H
ATOM   7439 2HB  PHE X 474      -5.715   4.498 -18.395  1.00  0.00
H
ATOM   7440  HD1 PHE X 474      -6.670   1.577 -16.449  1.00  0.00
H
ATOM   7441  HD2 PHE X 474      -7.998   4.561 -19.205  1.00  0.00
H
ATOM   7442  HE1 PHE X 474      -8.658   0.204 -16.974  1.00  0.00
H
ATOM   7443  HE2 PHE X 474      -9.989   3.192 -19.730  1.00  0.00
H
ATOM   7444  HZ  PHE X 474     -10.317   1.013 -18.614  1.00  0.00
H
ATOM   7445  N   PHE X 475      -3.459   3.019 -18.952  1.00  0.00
N
ATOM   7446  CA  PHE X 475      -2.812   2.316 -20.053  1.00  0.00
C
ATOM   7447  C   PHE X 475      -1.926   1.175 -19.539  1.00  0.00
C
ATOM   7448  O   PHE X 475      -2.056   0.023 -19.960  1.00  0.00
O
ATOM   7449  CB  PHE X 475      -1.982   3.288 -20.894  1.00  0.00
C
ATOM   7450  CG  PHE X 475      -1.239   2.631 -22.023  1.00  0.00
C
ATOM   7451  CD1 PHE X 475      -1.891   2.298 -23.200  1.00  0.00
C
ATOM   7452  CD2 PHE X 475       0.112   2.344 -21.908  1.00  0.00
C
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ATOM   7453  CE1 PHE X 475      -1.208   1.693 -24.239  1.00  0.00
C
ATOM   7454  CE2 PHE X 475       0.799   1.741 -22.945  1.00  0.00
C
ATOM   7455  CZ  PHE X 475       0.136   1.415 -24.112  1.00  0.00
C
ATOM   7456  H   PHE X 475      -3.351   4.020 -18.864  1.00  0.00
H
ATOM   7457  HA  PHE X 475      -3.567   1.858 -20.693  1.00  0.00
H
ATOM   7458 1HB  PHE X 475      -2.627   4.041 -21.344  1.00  0.00
H
ATOM   7459 2HB  PHE X 475      -1.235   3.776 -20.272  1.00  0.00
H
ATOM   7460  HD1 PHE X 475      -2.953   2.519 -23.302  1.00  0.00
H
ATOM   7461  HD2 PHE X 475       0.635   2.602 -20.986  1.00  0.00
H
ATOM   7462  HE1 PHE X 475      -1.732   1.436 -25.159  1.00  0.00
H
ATOM   7463  HE2 PHE X 475       1.861   1.522 -22.843  1.00  0.00
H
ATOM   7464  HZ  PHE X 475       0.675   0.938 -24.929  1.00  0.00
H
ATOM   7465  N   GLY X 476      -1.021   1.517 -18.628  1.00  0.00
N
ATOM   7466  CA  GLY X 476      -0.091   0.545 -18.066  1.00  0.00
C
ATOM   7467  C   GLY X 476      -0.766  -0.650 -17.427  1.00  0.00
C
ATOM   7468  O   GLY X 476      -0.283  -1.775 -17.541  1.00  0.00
O
ATOM   7469  H   GLY X 476      -0.975   2.476 -18.317  1.00  0.00
H
ATOM   7470 1HA  GLY X 476       0.559   0.173 -18.858  1.00  0.00
H
ATOM   7471 2HA  GLY X 476       0.513   1.032 -17.301  1.00  0.00
H
ATOM   7472  N   SER X 477      -1.872  -0.407 -16.735  1.00  0.00
N
ATOM   7473  CA  SER X 477      -2.597  -1.474 -16.051  1.00  0.00
C
ATOM   7474  C   SER X 477      -3.397  -2.369 -16.994  1.00  0.00
C
ATOM   7475  O   SER X 477      -3.919  -3.396 -16.576  1.00  0.00
O
ATOM   7476  CB  SER X 477      -3.532  -0.888 -15.012  1.00  0.00
C
ATOM   7477  OG  SER X 477      -4.582  -0.167 -15.594  1.00  0.00
O
ATOM   7478  H   SER X 477      -2.220   0.539 -16.680  1.00  0.00
H
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ATOM   7479  HA  SER X 477      -1.957  -2.106 -15.434  1.00  0.00
H
ATOM   7480 1HB  SER X 477      -3.947  -1.701 -14.419  1.00  0.00
H
ATOM   7481 2HB  SER X 477      -2.961  -0.222 -14.365  1.00  0.00
H
ATOM   7482  HG  SER X 477      -5.149   0.186 -14.902  1.00  0.00
H
ATOM   7483  N   LEU X 478      -3.503  -1.987 -18.262  1.00  0.00
N
ATOM   7484  CA  LEU X 478      -4.235  -2.784 -19.241  1.00  0.00
C
ATOM   7485  C   LEU X 478      -3.297  -3.685 -20.031  1.00  0.00
C
ATOM   7486  O   LEU X 478      -2.586  -3.228 -20.929  1.00  0.00
O
ATOM   7487  CB  LEU X 478      -5.018  -1.869 -20.190  1.00  0.00
C
ATOM   7488  CG  LEU X 478      -6.161  -1.077 -19.540  1.00  0.00
C
ATOM   7489  CD1 LEU X 478      -6.783  -0.129 -20.555  1.00  0.00
C
ATOM   7490  CD2 LEU X 478      -7.201  -2.042 -18.993  1.00  0.00
C
ATOM   7491  H   LEU X 478      -3.068  -1.124 -18.555  1.00  0.00
H
ATOM   7492  HA  LEU X 478      -4.935  -3.441 -18.727  1.00  0.00
H
ATOM   7493 1HB  LEU X 478      -4.218  -1.192 -20.487  1.00  0.00
H
ATOM   7494 2HB  LEU X 478      -5.381  -2.409 -21.065  1.00  0.00
H
ATOM   7495  HG  LEU X 478      -5.736  -0.531 -18.696  1.00  0.00
H
ATOM   7496 1HD1 LEU X 478      -7.593   0.429 -20.084  1.00  0.00
H
ATOM   7497 2HD1 LEU X 478      -6.026   0.567 -20.916  1.00  0.00
H
ATOM   7498 3HD1 LEU X 478      -7.178  -0.702 -21.394  1.00  0.00
H
ATOM   7499 1HD2 LEU X 478      -8.012  -1.477 -18.530  1.00  0.00
H
ATOM   7500 2HD2 LEU X 478      -7.600  -2.649 -19.806  1.00  0.00
H
ATOM   7501 3HD2 LEU X 478      -6.741  -2.691 -18.249  1.00  0.00
H
ATOM   7502  N   VAL X 479      -3.296  -4.970 -19.691  1.00  0.00
N
ATOM   7503  CA  VAL X 479      -2.331  -5.910 -20.250  1.00  0.00
C
ATOM   7504  C   VAL X 479      -3.004  -6.895 -21.197  1.00  0.00
C
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ATOM   7505  O   VAL X 479      -3.957  -7.583 -20.819  1.00  0.00
O
ATOM   7506  CB  VAL X 479      -1.598  -6.692 -19.146  1.00  0.00
C
ATOM   7507  CG1 VAL X 479      -0.628  -7.692 -19.756  1.00  0.00
C
ATOM   7508  CG2 VAL X 479      -0.865  -5.740 -18.213  1.00  0.00
C
ATOM   7509  H   VAL X 479      -3.980  -5.304 -19.028  1.00  0.00
H
ATOM   7510  HA  VAL X 479      -1.588  -5.398 -20.863  1.00  0.00
H
ATOM   7511  HB  VAL X 479      -2.334  -7.224 -18.541  1.00  0.00
H
ATOM   7512 1HG1 VAL X 479      -0.118  -8.237 -18.960  1.00  0.00
H
ATOM   7513 2HG1 VAL X 479      -1.174  -8.395 -20.385  1.00  0.00
H
ATOM   7514 3HG1 VAL X 479       0.109  -7.160 -20.360  1.00  0.00
H
ATOM   7515 1HG2 VAL X 479      -0.354  -6.310 -17.439  1.00  0.00
H
ATOM   7516 2HG2 VAL X 479      -0.134  -5.166 -18.783  1.00  0.00
H
ATOM   7517 3HG2 VAL X 479      -1.581  -5.061 -17.751  1.00  0.00
H
ATOM   7518  N   THR X 480      -2.513  -6.960 -22.430  1.00  0.00
N
ATOM   7519  CA  THR X 480      -3.093  -7.833 -23.442  1.00  0.00
C
ATOM   7520  C   THR X 480      -3.291  -9.244 -22.907  1.00  0.00
C
ATOM   7521  O   THR X 480      -4.339  -9.858 -23.112  1.00  0.00
O
ATOM   7522  CB  THR X 480      -2.215  -7.894 -24.706  1.00  0.00
C
ATOM   7523  CG2 THR X 480      -2.832  -8.825 -25.739  1.00  0.00
C
ATOM   7524  OG1 THR X 480      -2.088  -6.581 -25.267  1.00  0.00
O
ATOM   7525  H   THR X 480      -1.716  -6.389 -22.672  1.00  0.00
H
ATOM   7526  HA  THR X 480      -4.082  -7.469 -23.721  1.00  0.00
H
ATOM   7527  HB  THR X 480      -1.226  -8.261 -24.433  1.00  0.00
H
ATOM   7528  HG1 THR X 480      -1.681  -5.998 -24.623  1.00  0.00
H
ATOM   7529 1HG2 THR X 480      -2.197  -8.855 -26.625  1.00  0.00
H
ATOM   7530 2HG2 THR X 480      -2.920  -9.827 -25.319  1.00  0.00
H
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ATOM   7531 3HG2 THR X 480      -3.821  -8.459 -26.013  1.00  0.00
H
ATOM   7532  N   LEU X 481      -2.274  -9.757 -22.217  1.00  0.00
N
ATOM   7533  CA  LEU X 481      -2.350 -11.085 -21.618  1.00  0.00
C
ATOM   7534  C   LEU X 481      -3.494 -11.172 -20.615  1.00  0.00
C
ATOM   7535  O   LEU X 481      -4.413 -11.976 -20.775  1.00  0.00
O
ATOM   7536  CB  LEU X 481      -1.021 -11.439 -20.943  1.00  0.00
C
ATOM   7537  CG  LEU X 481      -0.983 -12.807 -20.250  1.00  0.00
C
ATOM   7538  CD1 LEU X 481      -1.121 -13.918 -21.283  1.00  0.00
C
ATOM   7539  CD2 LEU X 481       0.317 -12.950 -19.474  1.00  0.00
C
ATOM   7540  H   LEU X 481      -1.430  -9.214 -22.105  1.00  0.00
H
ATOM   7541  HA  LEU X 481      -2.561 -11.822 -22.391  1.00  0.00
H
ATOM   7542 1HB  LEU X 481      -0.373 -11.446 -21.818  1.00  0.00
H
ATOM   7543 2HB  LEU X 481      -0.695 -10.656 -20.257  1.00  0.00
H
ATOM   7544  HG  LEU X 481      -1.805 -12.830 -19.533  1.00  0.00
H
ATOM   7545 1HD1 LEU X 481      -1.093 -14.886 -20.782  1.00  0.00
H
ATOM   7546 2HD1 LEU X 481      -2.069 -13.810 -21.810  1.00  0.00
H
ATOM   7547 3HD1 LEU X 481      -0.299 -13.856 -21.995  1.00  0.00
H
ATOM   7548 1HD2 LEU X 481       0.342 -13.923 -18.982  1.00  0.00
H
ATOM   7549 2HD2 LEU X 481       1.162 -12.868 -20.159  1.00  0.00
H
ATOM   7550 3HD2 LEU X 481       0.381 -12.162 -18.723  1.00  0.00
H
ATOM   7551  N   THR X 482      -3.429 -10.340 -19.579  1.00  0.00
N
ATOM   7552  CA  THR X 482      -4.480 -10.293 -18.572  1.00  0.00
C
ATOM   7553  C   THR X 482      -4.856  -8.855 -18.232  1.00  0.00
C
ATOM   7554  O   THR X 482      -4.228  -8.227 -17.378  1.00  0.00
O
ATOM   7555  CB  THR X 482      -4.058 -11.019 -17.281  1.00  0.00
C
ATOM   7556  CG2 THR X 482      -4.050 -12.525 -17.496  1.00  0.00
C
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ATOM   7557  OG1 THR X 482      -2.747 -10.589 -16.893  1.00  0.00
O
ATOM   7558  H   THR X 482      -2.632  -9.727 -19.489  1.00  0.00
H
ATOM   7559  HA  THR X 482      -5.383 -10.764 -18.958  1.00  0.00
H
ATOM   7560  HB  THR X 482      -4.762 -10.770 -16.488  1.00  0.00
H
ATOM   7561  HG1 THR X 482      -2.487 -11.044 -16.087  1.00  0.00
H
ATOM   7562 1HG2 THR X 482      -3.750 -13.021 -16.573  1.00  0.00
H
ATOM   7563 2HG2 THR X 482      -5.050 -12.857 -17.779  1.00  0.00
H
ATOM   7564 3HG2 THR X 482      -3.346 -12.775 -18.288  1.00  0.00
H
ATOM   7565  N   PHE X 483      -5.881  -8.341 -18.904  1.00  0.00
N
ATOM   7566  CA  PHE X 483      -6.355  -6.987 -18.658  1.00  0.00
C
ATOM   7567  C   PHE X 483      -6.810  -6.814 -17.214  1.00  0.00
C
ATOM   7568  O   PHE X 483      -6.734  -5.720 -16.652  1.00  0.00
O
ATOM   7569  CB  PHE X 483      -7.498  -6.639 -19.614  1.00  0.00
C
ATOM   7570  CG  PHE X 483      -7.045  -6.320 -21.010  1.00  0.00
C
ATOM   7571  CD1 PHE X 483      -7.155  -7.259 -22.024  1.00  0.00
C
ATOM   7572  CD2 PHE X 483      -6.507  -5.078 -21.312  1.00  0.00
C
ATOM   7573  CE1 PHE X 483      -6.737  -6.965 -23.308  1.00  0.00
C
ATOM   7574  CE2 PHE X 483      -6.090  -4.780 -22.595  1.00  0.00
C
ATOM   7575  CZ  PHE X 483      -6.206  -5.726 -23.594  1.00  0.00
C
ATOM   7576  H   PHE X 483      -6.343  -8.904 -19.603  1.00  0.00
H
ATOM   7577  HA  PHE X 483      -5.543  -6.276 -18.814  1.00  0.00
H
ATOM   7578 1HB  PHE X 483      -8.187  -7.480 -19.695  1.00  0.00
H
ATOM   7579 2HB  PHE X 483      -8.034  -5.764 -19.253  1.00  0.00
H
ATOM   7580  HD1 PHE X 483      -7.577  -8.238 -21.797  1.00  0.00
H
ATOM   7581  HD2 PHE X 483      -6.415  -4.331 -20.524  1.00  0.00
H
ATOM   7582  HE1 PHE X 483      -6.829  -7.713 -24.095  1.00  0.00
H
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ATOM   7583  HE2 PHE X 483      -5.669  -3.800 -22.819  1.00  0.00
H
ATOM   7584  HZ  PHE X 483      -5.875  -5.494 -24.606  1.00  0.00
H
ATOM   7585  N   GLY X 484      -7.285  -7.901 -16.618  1.00  0.00
N
ATOM   7586  CA  GLY X 484      -7.753  -7.877 -15.237  1.00  0.00
C
ATOM   7587  C   GLY X 484      -6.601  -8.073 -14.260  1.00  0.00
C
ATOM   7588  O   GLY X 484      -6.741  -7.827 -13.063  1.00  0.00
O
ATOM   7589  H   GLY X 484      -7.324  -8.768 -17.135  1.00  0.00
H
ATOM   7590 1HA  GLY X 484      -8.227  -6.915 -15.038  1.00  0.00
H
ATOM   7591 2HA  GLY X 484      -8.479  -8.676 -15.093  1.00  0.00
H
ATOM   7592  N   GLY X 485      -5.464  -8.524 -14.777  1.00  0.00
N
ATOM   7593  CA  GLY X 485      -4.290  -8.769 -13.947  1.00  0.00
C
ATOM   7594  C   GLY X 485      -4.451 -10.043 -13.128  1.00  0.00
C
ATOM   7595  O   GLY X 485      -4.186 -10.058 -11.925  1.00  0.00
O
ATOM   7596  H   GLY X 485      -5.410  -8.703 -15.770  1.00  0.00
H
ATOM   7597 1HA  GLY X 485      -3.414  -8.867 -14.588  1.00  0.00
H
ATOM   7598 2HA  GLY X 485      -4.151  -7.926 -13.270  1.00  0.00
H
ATOM   7599  N   ALA X 486      -5.009 -11.182 -13.822  1.00  0.00
N
ATOM   7600  CA  ALA X 486      -5.056 -12.448 -13.104  1.00  0.00
C
ATOM   7601  C   ALA X 486      -3.688 -12.832 -12.564  1.00  0.00
C
ATOM   7602  O   ALA X 486      -3.574 -13.471 -11.519  1.00  0.00
O
ATOM   7603  CB  ALA X 486      -5.598 -13.547 -14.005  1.00  0.00
C
ATOM   7604  H   ALA X 486      -5.353 -11.103 -14.768  1.00  0.00
H
ATOM   7605  HA  ALA X 486      -5.723 -12.341 -12.248  1.00  0.00
H
ATOM   7606 1HB  ALA X 486      -5.627 -14.488 -13.454  1.00  0.00
H
ATOM   7607 2HB  ALA X 486      -6.606 -13.287 -14.332  1.00  0.00
H
ATOM   7608 3HB  ALA X 486      -4.951 -13.657 -14.875  1.00  0.00
H
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ATOM   7609  N   TYR X 487      -2.642 -12.436 -13.285  1.00  0.00
N
ATOM   7610  CA  TYR X 487      -1.273 -12.722 -12.873  1.00  0.00
C
ATOM   7611  C   TYR X 487      -0.532 -11.446 -12.501  1.00  0.00
C
ATOM   7612  O   TYR X 487       0.378 -11.463 -11.673  1.00  0.00
O
ATOM   7613  CB  TYR X 487      -0.522 -13.459 -13.985  1.00  0.00
C
ATOM   7614  CG  TYR X 487      -1.138 -14.787 -14.364  1.00  0.00
C
ATOM   7615  CD1 TYR X 487      -1.896 -14.918 -15.517  1.00  0.00
C
ATOM   7616  CD2 TYR X 487      -0.958 -15.909 -13.566  1.00  0.00
C
ATOM   7617  CE1 TYR X 487      -2.462 -16.129 -15.869  1.00  0.00
C
ATOM   7618  CE2 TYR X 487      -1.518 -17.124 -13.906  1.00  0.00
C
ATOM   7619  CZ  TYR X 487      -2.269 -17.231 -15.059  1.00  0.00
C
ATOM   7620  OH  TYR X 487      -2.828 -18.440 -15.404  1.00  0.00
O
ATOM   7621  H   TYR X 487      -2.800 -11.925 -14.141  1.00  0.00
H
ATOM   7622  HA  TYR X 487      -1.278 -13.349 -11.981  1.00  0.00
H
ATOM   7623 1HB  TYR X 487      -0.509 -12.803 -14.856  1.00  0.00
H
ATOM   7624 2HB  TYR X 487       0.497 -13.618 -13.633  1.00  0.00
H
ATOM   7625  HD1 TYR X 487      -2.044 -14.044 -16.151  1.00  0.00
H
ATOM   7626  HD2 TYR X 487      -0.364 -15.816 -12.657  1.00  0.00
H
ATOM   7627  HE1 TYR X 487      -3.055 -16.217 -16.777  1.00  0.00
H
ATOM   7628  HE2 TYR X 487      -1.365 -17.993 -13.265  1.00  0.00
H
ATOM   7629  HH  TYR X 487      -2.632 -19.137 -14.773  1.00  0.00
H
ATOM   7630  N   VAL X 488      -0.925 -10.339 -13.122  1.00  0.00
N
ATOM   7631  CA  VAL X 488      -0.256  -9.063 -12.906  1.00  0.00
C
ATOM   7632  C   VAL X 488      -0.405  -8.595 -11.465  1.00  0.00
C
ATOM   7633  O   VAL X 488       0.558  -8.145 -10.844  1.00  0.00
O
ATOM   7634  CB  VAL X 488      -0.801  -7.971 -13.846  1.00  0.00
C
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ATOM   7635  CG1 VAL X 488      -0.190  -6.621 -13.506  1.00  0.00
C
ATOM   7636  CG2 VAL X 488      -0.524  -8.332 -15.297  1.00  0.00
C
ATOM   7637  H   VAL X 488      -1.707 -10.383 -13.759  1.00  0.00
H
ATOM   7638  HA  VAL X 488       0.820  -9.149 -13.060  1.00  0.00
H
ATOM   7639  HB  VAL X 488      -1.885  -7.917 -13.735  1.00  0.00
H
ATOM   7640 1HG1 VAL X 488      -0.586  -5.862 -14.181  1.00  0.00
H
ATOM   7641 2HG1 VAL X 488      -0.436  -6.357 -12.478  1.00  0.00
H
ATOM   7642 3HG1 VAL X 488       0.893  -6.674 -13.618  1.00  0.00
H
ATOM   7643 1HG2 VAL X 488      -0.917  -7.551 -15.948  1.00  0.00
H
ATOM   7644 2HG2 VAL X 488       0.552  -8.424 -15.448  1.00  0.00
H
ATOM   7645 3HG2 VAL X 488      -1.007  -9.279 -15.537  1.00  0.00
H
ATOM   7646  N   VAL X 489      -1.619  -8.705 -10.938  1.00  0.00
N
ATOM   7647  CA  VAL X 489      -1.934  -8.151  -9.623  1.00  0.00
C
ATOM   7648  C   VAL X 489      -1.166  -8.911  -8.535  1.00  0.00
C
ATOM   7649  O   VAL X 489      -0.530  -8.309  -7.674  1.00  0.00
O
ATOM   7650  CB  VAL X 489      -3.445  -8.212  -9.324  1.00  0.00
C
ATOM   7651  CG1 VAL X 489      -3.719  -7.810  -7.882  1.00  0.00
C
ATOM   7652  CG2 VAL X 489      -4.214  -7.314 -10.281  1.00  0.00
C
ATOM   7653  H   VAL X 489      -2.341  -9.181 -11.458  1.00  0.00
H
ATOM   7654  HA  VAL X 489      -1.605  -7.114  -9.540  1.00  0.00
H
ATOM   7655  HB  VAL X 489      -3.798  -9.229  -9.491  1.00  0.00
H
ATOM   7656 1HG1 VAL X 489      -4.790  -7.859  -7.687  1.00  0.00
H
ATOM   7657 2HG1 VAL X 489      -3.197  -8.490  -7.209  1.00  0.00
H
ATOM   7658 3HG1 VAL X 489      -3.366  -6.792  -7.715  1.00  0.00
H
ATOM   7659 1HG2 VAL X 489      -5.279  -7.370 -10.056  1.00  0.00
H
ATOM   7660 2HG2 VAL X 489      -3.871  -6.286 -10.168  1.00  0.00
H
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ATOM   7661 3HG2 VAL X 489      -4.043  -7.643 -11.306  1.00  0.00
H
ATOM   7662  N   LYS X 490      -1.223 -10.237  -8.596  1.00  0.00
N
ATOM   7663  CA  LYS X 490      -0.555 -11.098  -7.629  1.00  0.00
C
ATOM   7664  C   LYS X 490       0.968 -11.018  -7.738  1.00  0.00
C
ATOM   7665  O   LYS X 490       1.679 -11.019  -6.732  1.00  0.00
O
ATOM   7666  CB  LYS X 490      -1.016 -12.546  -7.808  1.00  0.00
C
ATOM   7667  CG  LYS X 490      -0.323 -13.544  -6.890  1.00  0.00
C
ATOM   7668  CD  LYS X 490      -0.632 -13.258  -5.429  1.00  0.00
C
ATOM   7669  CE  LYS X 490      -0.108 -14.363  -4.524  1.00  0.00
C
ATOM   7670  NZ  LYS X 490      -0.323 -14.054  -3.084  1.00  0.00
N
ATOM   7671  H   LYS X 490      -1.750 -10.665  -9.344  1.00  0.00
H
ATOM   7672  HA  LYS X 490      -0.802 -10.777  -6.616  1.00  0.00
H
ATOM   7673 1HB  LYS X 490      -2.089 -12.564  -7.621  1.00  0.00
H
ATOM   7674 2HB  LYS X 490      -0.825 -12.816  -8.846  1.00  0.00
H
ATOM   7675 1HG  LYS X 490      -0.668 -14.546  -7.145  1.00  0.00
H
ATOM   7676 2HG  LYS X 490       0.752 -13.479  -7.055  1.00  0.00
H
ATOM   7677 1HD  LYS X 490      -0.163 -12.311  -5.154  1.00  0.00
H
ATOM   7678 2HD  LYS X 490      -1.711 -13.175  -5.311  1.00  0.00
H
ATOM   7679 1HE  LYS X 490      -0.628 -15.287  -4.778  1.00  0.00
H
ATOM   7680 2HE  LYS X 490       0.958 -14.484  -4.714  1.00  0.00
H
ATOM   7681 1HZ  LYS X 490       0.038 -14.810  -2.520  1.00  0.00
H
ATOM   7682 2HZ  LYS X 490       0.158 -13.198  -2.848  1.00  0.00
H
ATOM   7683 3HZ  LYS X 490      -1.312 -13.944  -2.908  1.00  0.00
H
ATOM   7684  N   LEU X 491       1.457 -10.970  -8.973  1.00  0.00
N
ATOM   7685  CA  LEU X 491       2.890 -10.888  -9.231  1.00  0.00
C
ATOM   7686  C   LEU X 491       3.470  -9.586  -8.677  1.00  0.00
C
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ATOM   7687  O   LEU X 491       4.507  -9.592  -8.015  1.00  0.00
O
ATOM   7688  CB  LEU X 491       3.164 -10.997 -10.737  1.00  0.00
C
ATOM   7689  CG  LEU X 491       4.638 -10.873 -11.142  1.00  0.00
C
ATOM   7690  CD1 LEU X 491       5.443 -12.020 -10.548  1.00  0.00
C
ATOM   7691  CD2 LEU X 491       4.749 -10.867 -12.660  1.00  0.00
C
ATOM   7692  H   LEU X 491       0.818 -10.991  -9.755  1.00  0.00
H
ATOM   7693  HA  LEU X 491       3.401 -11.701  -8.718  1.00  0.00
H
ATOM   7694 1HB  LEU X 491       2.817 -12.015 -10.905  1.00  0.00
H
ATOM   7695 2HB  LEU X 491       2.551 -10.303 -11.311  1.00  0.00
H
ATOM   7696  HG  LEU X 491       4.994  -9.908 -10.779  1.00  0.00
H
ATOM   7697 1HD1 LEU X 491       6.489 -11.922 -10.841  1.00  0.00
H
ATOM   7698 2HD1 LEU X 491       5.370 -11.992  -9.461  1.00  0.00
H
ATOM   7699 3HD1 LEU X 491       5.050 -12.968 -10.915  1.00  0.00
H
ATOM   7700 1HD2 LEU X 491       5.797 -10.776 -12.947  1.00  0.00
H
ATOM   7701 2HD2 LEU X 491       4.339 -11.795 -13.059  1.00  0.00
H
ATOM   7702 3HD2 LEU X 491       4.190 -10.023 -13.063  1.00  0.00
H
ATOM   7703  N   LEU X 492       2.769  -8.488  -8.958  1.00  0.00
N
ATOM   7704  CA  LEU X 492       3.328  -7.211  -8.533  1.00  0.00
C
ATOM   7705  C   LEU X 492       3.130  -7.027  -7.036  1.00  0.00
C
ATOM   7706  O   LEU X 492       4.008  -6.504  -6.342  1.00  0.00
O
ATOM   7707  CB  LEU X 492       2.684  -6.056  -9.310  1.00  0.00
C
ATOM   7708  CG  LEU X 492       3.016  -6.010 -10.807  1.00  0.00
C
ATOM   7709  CD1 LEU X 492       2.148  -4.971 -11.503  1.00  0.00
C
ATOM   7710  CD2 LEU X 492       4.492  -5.690 -10.991  1.00  0.00
C
ATOM   7711  H   LEU X 492       1.927  -8.507  -9.514  1.00  0.00
H
ATOM   7712  HA  LEU X 492       4.402  -7.203  -8.717  1.00  0.00
H
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ATOM   7713 1HB  LEU X 492       1.634  -6.311  -9.168  1.00  0.00
H
ATOM   7714 2HB  LEU X 492       2.889  -5.092  -8.845  1.00  0.00
H
ATOM   7715  HG  LEU X 492       2.839  -7.008 -11.209  1.00  0.00
H
ATOM   7716 1HD1 LEU X 492       2.391  -4.946 -12.565  1.00  0.00
H
ATOM   7717 2HD1 LEU X 492       1.097  -5.233 -11.378  1.00  0.00
H
ATOM   7718 3HD1 LEU X 492       2.333  -3.991 -11.066  1.00  0.00
H
ATOM   7719 1HD2 LEU X 492       4.727  -5.659 -12.055  1.00  0.00
H
ATOM   7720 2HD2 LEU X 492       4.714  -4.722 -10.540  1.00  0.00
H
ATOM   7721 3HD2 LEU X 492       5.095  -6.461 -10.509  1.00  0.00
H
ATOM   7722  N   GLU X 493       1.973  -7.455  -6.543  1.00  0.00
N
ATOM   7723  CA  GLU X 493       1.726  -7.445  -5.106  1.00  0.00
C
ATOM   7724  C   GLU X 493       2.855  -8.151  -4.374  1.00  0.00
C
ATOM   7725  O   GLU X 493       3.493  -7.579  -3.491  1.00  0.00
O
ATOM   7726  CB  GLU X 493       0.386  -8.109  -4.782  1.00  0.00
C
ATOM   7727  CG  GLU X 493      -0.820  -7.192  -4.927  1.00  0.00
C
ATOM   7728  CD  GLU X 493      -2.077  -7.863  -4.443  1.00  0.00
C
ATOM   7729  OE1 GLU X 493      -1.982  -8.938  -3.904  1.00  0.00
O
ATOM   7730  OE2 GLU X 493      -3.117  -7.250  -4.510  1.00  0.00
O
ATOM   7731  H   GLU X 493       1.257  -7.791  -7.171  1.00  0.00
H
ATOM   7732  HA  GLU X 493       1.704  -6.418  -4.742  1.00  0.00
H
ATOM   7733 1HB  GLU X 493       0.280  -8.959  -5.456  1.00  0.00
H
ATOM   7734 2HB  GLU X 493       0.448  -8.466  -3.753  1.00  0.00
H
ATOM   7735 1HG  GLU X 493      -0.702  -6.235  -4.421  1.00  0.00
H
ATOM   7736 2HG  GLU X 493      -0.888  -7.027  -6.003  1.00  0.00
H
ATOM   7737  N   GLU X 494       3.110  -9.403  -4.739  1.00  0.00
N
ATOM   7738  CA  GLU X 494       4.127 -10.160  -4.031  1.00  0.00
C
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ATOM   7739  C   GLU X 494       5.537  -9.606  -4.205  1.00  0.00
C
ATOM   7740  O   GLU X 494       6.257  -9.397  -3.222  1.00  0.00
O
ATOM   7741  CB  GLU X 494       4.091 -11.620  -4.485  1.00  0.00
C
ATOM   7742  CG  GLU X 494       2.825 -12.369  -4.092  1.00  0.00
C
ATOM   7743  CD  GLU X 494       2.629 -12.368  -2.602  1.00  0.00
C
ATOM   7744  OE1 GLU X 494       3.563 -12.669  -1.897  1.00  0.00
O
ATOM   7745  OE2 GLU X 494       1.579 -11.959  -2.161  1.00  0.00
O
ATOM   7746  H   GLU X 494       2.602  -9.825  -5.502  1.00  0.00
H
ATOM   7747  HA  GLU X 494       3.935 -10.123  -2.958  1.00  0.00
H
ATOM   7748 1HB  GLU X 494       4.189 -11.619  -5.570  1.00  0.00
H
ATOM   7749 2HB  GLU X 494       4.955 -12.114  -4.042  1.00  0.00
H
ATOM   7750 1HG  GLU X 494       1.927 -11.986  -4.576  1.00  0.00
H
ATOM   7751 2HG  GLU X 494       3.012 -13.386  -4.433  1.00  0.00
H
ATOM   7752  N   TYR X 495       5.943  -9.361  -5.447  1.00  0.00
N
ATOM   7753  CA  TYR X 495       7.283  -8.836  -5.689  1.00  0.00
C
ATOM   7754  C   TYR X 495       7.596  -7.497  -5.039  1.00  0.00
C
ATOM   7755  O   TYR X 495       8.576  -7.379  -4.304  1.00  0.00
O
ATOM   7756  CB  TYR X 495       7.513  -8.718  -7.198  1.00  0.00
C
ATOM   7757  CG  TYR X 495       8.820  -8.052  -7.568  1.00  0.00
C
ATOM   7758  CD1 TYR X 495      10.028  -8.719  -7.418  1.00  0.00
C
ATOM   7759  CD2 TYR X 495       8.843  -6.758  -8.068  1.00  0.00
C
ATOM   7760  CE1 TYR X 495      11.224  -8.114  -7.754  1.00  0.00
C
ATOM   7761  CE2 TYR X 495      10.034  -6.145  -8.408  1.00  0.00
C
ATOM   7762  CZ  TYR X 495      11.221  -6.825  -8.249  1.00  0.00
C
ATOM   7763  OH  TYR X 495      12.410  -6.220  -8.587  1.00  0.00
O
ATOM   7764  H   TYR X 495       5.322  -9.538  -6.223  1.00  0.00
H
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ATOM   7765  HA  TYR X 495       8.028  -9.516  -5.277  1.00  0.00
H
ATOM   7766 1HB  TYR X 495       7.492  -9.729  -7.608  1.00  0.00
H
ATOM   7767 2HB  TYR X 495       6.683  -8.143  -7.607  1.00  0.00
H
ATOM   7768  HD1 TYR X 495      10.021  -9.736  -7.026  1.00  0.00
H
ATOM   7769  HD2 TYR X 495       7.900  -6.224  -8.190  1.00  0.00
H
ATOM   7770  HE1 TYR X 495      12.165  -8.650  -7.630  1.00  0.00
H
ATOM   7771  HE2 TYR X 495      10.031  -5.128  -8.798  1.00  0.00
H
ATOM   7772  HH  TYR X 495      12.346  -5.263  -8.625  1.00  0.00
H
ATOM   7773  N   ALA X 496       6.771  -6.496  -5.306  1.00  0.00
N
ATOM   7774  CA  ALA X 496       7.079  -5.158  -4.829  1.00  0.00
C
ATOM   7775  C   ALA X 496       7.377  -5.115  -3.343  1.00  0.00
C
ATOM   7776  O   ALA X 496       8.414  -4.593  -2.925  1.00  0.00
O
ATOM   7777  CB  ALA X 496       5.932  -4.214  -5.158  1.00  0.00
C
ATOM   7778  H   ALA X 496       5.932  -6.663  -5.840  1.00  0.00
H
ATOM   7779  HA  ALA X 496       7.977  -4.803  -5.336  1.00  0.00
H
ATOM   7780 1HB  ALA X 496       6.176  -3.210  -4.809  1.00  0.00
H
ATOM   7781 2HB  ALA X 496       5.774  -4.194  -6.237  1.00  0.00
H
ATOM   7782 3HB  ALA X 496       5.025  -4.558  -4.664  1.00  0.00
H
ATOM   7783  N   THR X 497       6.478  -5.698  -2.552  1.00  0.00
N
ATOM   7784  CA  THR X 497       6.661  -5.744  -1.111  1.00  0.00
C
ATOM   7785  C   THR X 497       7.403  -6.908  -0.485  1.00  0.00
C
ATOM   7786  O   THR X 497       7.286  -7.130   0.717  1.00  0.00
O
ATOM   7787  CB  THR X 497       5.283  -5.672  -0.425  1.00  0.00
C
ATOM   7788  CG2 THR X 497       4.695  -4.275  -0.555  1.00  0.00
C
ATOM   7789  OG1 THR X 497       4.395  -6.619  -1.032  1.00  0.00
O
ATOM   7790  H   THR X 497       5.655  -6.115  -2.961  1.00  0.00
H
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ATOM   7791  HA  THR X 497       7.256  -4.891  -0.786  1.00  0.00
H
ATOM   7792  HB  THR X 497       5.399  -5.921   0.629  1.00  0.00
H
ATOM   7793  HG1 THR X 497       4.305  -6.419  -1.968  1.00  0.00
H
ATOM   7794 1HG2 THR X 497       3.723  -4.245  -0.065  1.00  0.00
H
ATOM   7795 2HG2 THR X 497       5.363  -3.555  -0.083  1.00  0.00
H
ATOM   7796 3HG2 THR X 497       4.578  -4.026  -1.610  1.00  0.00
H
ATOM   7797  N   GLY X 498       8.160  -7.657  -1.277  1.00  0.00
N
ATOM   7798  CA  GLY X 498       8.761  -8.881  -0.779  1.00  0.00
C
ATOM   7799  C   GLY X 498      10.222  -8.989  -1.201  1.00  0.00
C
ATOM   7800  O   GLY X 498      11.094  -8.370  -0.588  1.00  0.00
O
ATOM   7801  H   GLY X 498       8.319  -7.374  -2.234  1.00  0.00
H
ATOM   7802 1HA  GLY X 498       8.704  -8.888   0.311  1.00  0.00
H
ATOM   7803 2HA  GLY X 498       8.213  -9.734  -1.176  1.00  0.00
H
ATOM   7804  N   PRO X 499      10.493  -9.749  -2.256  1.00  0.00
N
ATOM   7805  CA  PRO X 499      11.822  -9.776  -2.862  1.00  0.00
C
ATOM   7806  C   PRO X 499      12.364  -8.369  -3.077  1.00  0.00
C
ATOM   7807  O   PRO X 499      13.515  -8.077  -2.744  1.00  0.00
O
ATOM   7808  CB  PRO X 499      11.613 -10.521  -4.191  1.00  0.00
C
ATOM   7809  CG  PRO X 499      10.475 -11.470  -3.929  1.00  0.00
C
ATOM   7810  CD  PRO X 499       9.473 -10.341  -3.132  1.00  0.00
C
ATOM   7811  HA  PRO X 499      12.457 -10.270  -2.273  1.00  0.00
H
ATOM   7812 1HB  PRO X 499      11.278  -9.848  -4.714  1.00  0.00
H
ATOM   7813 2HB  PRO X 499      12.339 -10.989  -4.235  1.00  0.00
H
ATOM   7814 1HG  PRO X 499       9.754 -11.028  -3.919  1.00  0.00
H
ATOM   7815 2HG  PRO X 499      10.702 -12.294  -4.313  1.00  0.00
H
ATOM   7816 1HD  PRO X 499       8.752  -9.717  -3.094  1.00  0.00
H
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ATOM   7817 2HD  PRO X 499       9.337 -11.200  -2.746  1.00  0.00
H
ATOM   7818  N   ALA X 500      11.525  -7.504  -3.632  1.00  0.00
N
ATOM   7819  CA  ALA X 500      11.930  -6.146  -3.915  1.00  0.00
C
ATOM   7820  C   ALA X 500      12.331  -5.312  -2.716  1.00  0.00
C
ATOM   7821  O   ALA X 500      13.519  -5.048  -2.520  1.00  0.00
O
ATOM   7822  CB  ALA X 500      10.808  -5.444  -4.667  1.00  0.00
C
ATOM   7823  H   ALA X 500      10.587  -7.800  -3.861  1.00  0.00
H
ATOM   7824  HA  ALA X 500      12.815  -6.170  -4.552  1.00  0.00
H
ATOM   7825 1HB  ALA X 500      11.121  -4.432  -4.921  1.00  0.00
H
ATOM   7826 2HB  ALA X 500      10.582  -5.995  -5.582  1.00  0.00
H
ATOM   7827 3HB  ALA X 500       9.920  -5.401  -4.039  1.00  0.00
H
ATOM   7828  N   VAL X 501      11.360  -4.892  -1.907  1.00  0.00
N
ATOM   7829  CA  VAL X 501      11.680  -4.074  -0.742  1.00  0.00
C
ATOM   7830  C   VAL X 501      12.644  -4.740   0.233  1.00  0.00
C
ATOM   7831  O   VAL X 501      13.369  -4.045   0.944  1.00  0.00
O
ATOM   7832  CB  VAL X 501      10.400  -3.691   0.023  1.00  0.00
C
ATOM   7833  CG1 VAL X 501      10.746  -3.121   1.389  1.00  0.00
C
ATOM   7834  CG2 VAL X 501       9.579  -2.692  -0.776  1.00  0.00
C
ATOM   7835  H   VAL X 501      10.400  -5.141  -2.100  1.00  0.00
H
ATOM   7836  HA  VAL X 501      12.202  -3.160  -1.031  1.00  0.00
H
ATOM   7837  HB  VAL X 501       9.782  -4.581   0.148  1.00  0.00
H
ATOM   7838 1HG1 VAL X 501       9.829  -2.856   1.916  1.00  0.00
H
ATOM   7839 2HG1 VAL X 501      11.293  -3.867   1.968  1.00  0.00
H
ATOM   7840 3HG1 VAL X 501      11.362  -2.231   1.267  1.00  0.00
H
ATOM   7841 1HG2 VAL X 501       8.678  -2.433  -0.221  1.00  0.00
H
ATOM   7842 2HG2 VAL X 501      10.171  -1.792  -0.950  1.00  0.00
H
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ATOM   7843 3HG2 VAL X 501       9.300  -3.133  -1.734  1.00  0.00
H
ATOM   7844  N   LEU X 502      12.661  -6.065   0.286  1.00  0.00
N
ATOM   7845  CA  LEU X 502      13.563  -6.725   1.225  1.00  0.00
C
ATOM   7846  C   LEU X 502      14.996  -6.368   0.851  1.00  0.00
C
ATOM   7847  O   LEU X 502      15.766  -5.876   1.683  1.00  0.00
O
ATOM   7848  CB  LEU X 502      13.332  -8.241   1.206  1.00  0.00
C
ATOM   7849  CG  LEU X 502      14.254  -9.055   2.123  1.00  0.00
C
ATOM   7850  CD1 LEU X 502      13.946  -8.743   3.581  1.00  0.00
C
ATOM   7851  CD2 LEU X 502      14.074 -10.539   1.839  1.00  0.00
C
ATOM   7852  H   LEU X 502      12.059  -6.610  -0.314  1.00  0.00
H
ATOM   7853  HA  LEU X 502      13.379  -6.353   2.231  1.00  0.00
H
ATOM   7854 1HB  LEU X 502      12.310  -8.269   1.583  1.00  0.00
H
ATOM   7855 2HB  LEU X 502      13.356  -8.640   0.192  1.00  0.00
H
ATOM   7856  HG  LEU X 502      15.279  -8.789   1.869  1.00  0.00
H
ATOM   7857 1HD1 LEU X 502      14.605  -9.325   4.226  1.00  0.00
H
ATOM   7858 2HD1 LEU X 502      14.104  -7.681   3.767  1.00  0.00
H
ATOM   7859 3HD1 LEU X 502      12.910  -9.000   3.797  1.00  0.00
H
ATOM   7860 1HD2 LEU X 502      14.730 -11.116   2.491  1.00  0.00
H
ATOM   7861 2HD2 LEU X 502      13.037 -10.822   2.024  1.00  0.00
H
ATOM   7862 3HD2 LEU X 502      14.325 -10.744   0.799  1.00  0.00
H
ATOM   7863  N   THR X 503      15.354  -6.604  -0.407  1.00  0.00
N
ATOM   7864  CA  THR X 503      16.682  -6.266  -0.903  1.00  0.00
C
ATOM   7865  C   THR X 503      16.935  -4.768  -0.746  1.00  0.00
C
ATOM   7866  O   THR X 503      18.001  -4.353  -0.289  1.00  0.00
O
ATOM   7867  CB  THR X 503      16.855  -6.668  -2.380  1.00  0.00
C
ATOM   7868  CG2 THR X 503      18.232  -6.268  -2.884  1.00  0.00
C
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ATOM   7869  OG1 THR X 503      16.694  -8.087  -2.512  1.00  0.00
O
ATOM   7870  H   THR X 503      14.689  -7.029  -1.036  1.00  0.00
H
ATOM   7871  HA  THR X 503      17.440  -6.780  -0.310  1.00  0.00
H
ATOM   7872  HB  THR X 503      16.090  -6.169  -2.974  1.00  0.00
H
ATOM   7873  HG1 THR X 503      17.357  -8.535  -1.979  1.00  0.00
H
ATOM   7874 1HG2 THR X 503      18.335  -6.560  -3.928  1.00  0.00
H
ATOM   7875 2HG2 THR X 503      18.352  -5.188  -2.795  1.00  0.00
H
ATOM   7876 3HG2 THR X 503      18.995  -6.769  -2.290  1.00  0.00
H
ATOM   7877  N   VAL X 504      15.951  -3.953  -1.125  1.00  0.00
N
ATOM   7878  CA  VAL X 504      16.105  -2.509  -1.032  1.00  0.00
C
ATOM   7879  C   VAL X 504      16.250  -2.045   0.413  1.00  0.00
C
ATOM   7880  O   VAL X 504      16.936  -1.062   0.683  1.00  0.00
O
ATOM   7881  CB  VAL X 504      14.913  -1.772  -1.672  1.00  0.00
C
ATOM   7882  CG1 VAL X 504      14.998  -0.278  -1.390  1.00  0.00
C
ATOM   7883  CG2 VAL X 504      14.869  -2.028  -3.170  1.00  0.00
C
ATOM   7884  H   VAL X 504      15.089  -4.342  -1.480  1.00  0.00
H
ATOM   7885  HA  VAL X 504      17.021  -2.176  -1.520  1.00  0.00
H
ATOM   7886  HB  VAL X 504      13.987  -2.167  -1.255  1.00  0.00
H
ATOM   7887 1HG1 VAL X 504      14.149   0.228  -1.849  1.00  0.00
H
ATOM   7888 2HG1 VAL X 504      14.982  -0.110  -0.314  1.00  0.00
H
ATOM   7889 3HG1 VAL X 504      15.924   0.119  -1.808  1.00  0.00
H
ATOM   7890 1HG2 VAL X 504      14.020  -1.501  -3.605  1.00  0.00
H
ATOM   7891 2HG2 VAL X 504      15.793  -1.671  -3.627  1.00  0.00
H
ATOM   7892 3HG2 VAL X 504      14.764  -3.097  -3.353  1.00  0.00
H
ATOM   7893  N   ALA X 505      15.602  -2.750   1.336  1.00  0.00
N
ATOM   7894  CA  ALA X 505      15.714  -2.385   2.742  1.00  0.00
C
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ATOM   7895  C   ALA X 505      17.161  -2.537   3.187  1.00  0.00
C
ATOM   7896  O   ALA X 505      17.709  -1.674   3.880  1.00  0.00
O
ATOM   7897  CB  ALA X 505      14.778  -3.238   3.587  1.00  0.00
C
ATOM   7898  H   ALA X 505      15.032  -3.537   1.062  1.00  0.00
H
ATOM   7899  HA  ALA X 505      15.430  -1.339   2.856  1.00  0.00
H
ATOM   7900 1HB  ALA X 505      14.874  -2.953   4.634  1.00  0.00
H
ATOM   7901 2HB  ALA X 505      13.750  -3.081   3.261  1.00  0.00
H
ATOM   7902 3HB  ALA X 505      15.040  -4.288   3.472  1.00  0.00
H
ATOM   7903  N   LEU X 506      17.783  -3.639   2.793  1.00  0.00
N
ATOM   7904  CA  LEU X 506      19.173  -3.896   3.146  1.00  0.00
C
ATOM   7905  C   LEU X 506      20.062  -2.843   2.495  1.00  0.00
C
ATOM   7906  O   LEU X 506      20.981  -2.312   3.123  1.00  0.00
O
ATOM   7907  CB  LEU X 506      19.577  -5.311   2.714  1.00  0.00
C
ATOM   7908  CG  LEU X 506      21.008  -5.723   3.085  1.00  0.00
C
ATOM   7909  CD1 LEU X 506      21.193  -5.668   4.595  1.00  0.00
C
ATOM   7910  CD2 LEU X 506      21.286  -7.124   2.558  1.00  0.00
C
ATOM   7911  H   LEU X 506      17.282  -4.317   2.237  1.00  0.00
H
ATOM   7912  HA  LEU X 506      19.300  -3.805   4.224  1.00  0.00
H
ATOM   7913 1HB  LEU X 506      18.859  -5.885   3.298  1.00  0.00
H
ATOM   7914 2HB  LEU X 506      19.397  -5.476   1.651  1.00  0.00
H
ATOM   7915  HG  LEU X 506      21.685  -5.036   2.576  1.00  0.00
H
ATOM   7916 1HD1 LEU X 506      22.211  -5.962   4.849  1.00  0.00
H
ATOM   7917 2HD1 LEU X 506      21.012  -4.652   4.947  1.00  0.00
H
ATOM   7918 3HD1 LEU X 506      20.488  -6.349   5.073  1.00  0.00
H
ATOM   7919 1HD2 LEU X 506      22.303  -7.416   2.822  1.00  0.00
H
ATOM   7920 2HD2 LEU X 506      20.580  -7.827   3.002  1.00  0.00
H
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ATOM   7921 3HD2 LEU X 506      21.176  -7.134   1.474  1.00  0.00
H
ATOM   7922  N   ILE X 507      19.778  -2.541   1.232  1.00  0.00
N
ATOM   7923  CA  ILE X 507      20.547  -1.547   0.487  1.00  0.00
C
ATOM   7924  C   ILE X 507      20.513  -0.175   1.161  1.00  0.00
C
ATOM   7925  O   ILE X 507      21.541   0.498   1.253  1.00  0.00
O
ATOM   7926  CB  ILE X 507      20.033  -1.402  -0.956  1.00  0.00
C
ATOM   7927  CG1 ILE X 507      20.327  -2.671  -1.758  1.00  0.00
C
ATOM   7928  CG2 ILE X 507      20.662  -0.188  -1.625  1.00  0.00
C
ATOM   7929  CD1 ILE X 507      19.631  -2.721  -3.100  1.00  0.00
C
ATOM   7930  H   ILE X 507      19.009  -3.010   0.776  1.00  0.00
H
ATOM   7931  HA  ILE X 507      21.604  -1.813   0.471  1.00  0.00
H
ATOM   7932  HB  ILE X 507      18.949  -1.284  -0.937  1.00  0.00
H
ATOM   7933 1HG1 ILE X 507      21.404  -2.722  -1.906  1.00  0.00
H
ATOM   7934 2HG1 ILE X 507      20.004  -3.519  -1.151  1.00  0.00
H
ATOM   7935 1HG2 ILE X 507      20.288  -0.100  -2.645  1.00  0.00
H
ATOM   7936 2HG2 ILE X 507      20.404   0.710  -1.065  1.00  0.00
H
ATOM   7937 3HG2 ILE X 507      21.746  -0.305  -1.645  1.00  0.00
H
ATOM   7938 1HD1 ILE X 507      19.886  -3.651  -3.609  1.00  0.00
H
ATOM   7939 2HD1 ILE X 507      18.551  -2.674  -2.953  1.00  0.00
H
ATOM   7940 3HD1 ILE X 507      19.951  -1.876  -3.708  1.00  0.00
H
ATOM   7941  N   GLU X 508      19.346   0.246   1.627  1.00  0.00
N
ATOM   7942  CA  GLU X 508      19.246   1.548   2.275  1.00  0.00
C
ATOM   7943  C   GLU X 508      19.921   1.530   3.641  1.00  0.00
C
ATOM   7944  O   GLU X 508      20.585   2.490   4.020  1.00  0.00
O
ATOM   7945  CB  GLU X 508      17.782   1.969   2.413  1.00  0.00
C
ATOM   7946  CG  GLU X 508      17.094   2.294   1.096  1.00  0.00
C
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ATOM   7947  CD  GLU X 508      15.634   2.592   1.301  1.00  0.00
C
ATOM   7948  OE1 GLU X 508      15.174   2.476   2.410  1.00  0.00
O
ATOM   7949  OE2 GLU X 508      15.005   3.044   0.372  1.00  0.00
O
ATOM   7950  H   GLU X 508      18.525  -0.335   1.534  1.00  0.00
H
ATOM   7951  HA  GLU X 508      19.768   2.298   1.679  1.00  0.00
H
ATOM   7952 1HB  GLU X 508      17.260   1.145   2.900  1.00  0.00
H
ATOM   7953 2HB  GLU X 508      17.761   2.844   3.060  1.00  0.00
H
ATOM   7954 1HG  GLU X 508      17.559   3.120   0.556  1.00  0.00
H
ATOM   7955 2HG  GLU X 508      17.199   1.378   0.517  1.00  0.00
H
ATOM   7956  N   ALA X 509      19.769   0.431   4.373  1.00  0.00
N
ATOM   7957  CA  ALA X 509      20.388   0.323   5.692  1.00  0.00
C
ATOM   7958  C   ALA X 509      21.906   0.422   5.588  1.00  0.00
C
ATOM   7959  O   ALA X 509      22.556   1.012   6.459  1.00  0.00
O
ATOM   7960  CB  ALA X 509      19.978  -0.980   6.364  1.00  0.00
C
ATOM   7961  H   ALA X 509      19.221  -0.337   4.013  1.00  0.00
H
ATOM   7962  HA  ALA X 509      20.045   1.154   6.308  1.00  0.00
H
ATOM   7963 1HB  ALA X 509      20.446  -1.045   7.345  1.00  0.00
H
ATOM   7964 2HB  ALA X 509      18.894  -1.006   6.477  1.00  0.00
H
ATOM   7965 3HB  ALA X 509      20.300  -1.822   5.751  1.00  0.00
H
ATOM   7966  N   VAL X 510      22.474  -0.151   4.530  1.00  0.00
N
ATOM   7967  CA  VAL X 510      23.915  -0.115   4.319  1.00  0.00
C
ATOM   7968  C   VAL X 510      24.344   1.196   3.675  1.00  0.00
C
ATOM   7969  O   VAL X 510      25.445   1.687   3.915  1.00  0.00
O
ATOM   7970  CB  VAL X 510      24.386  -1.288   3.439  1.00  0.00
C
ATOM   7971  CG1 VAL X 510      25.860  -1.137   3.095  1.00  0.00
C
ATOM   7972  CG2 VAL X 510      24.136  -2.615   4.139  1.00  0.00
C
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ATOM   7973  H   VAL X 510      21.889  -0.623   3.855  1.00  0.00
H
ATOM   7974  HA  VAL X 510      24.456  -0.152   5.265  1.00  0.00
H
ATOM   7975  HB  VAL X 510      23.798  -1.300   2.520  1.00  0.00
H
ATOM   7976 1HG1 VAL X 510      26.176  -1.974   2.473  1.00  0.00
H
ATOM   7977 2HG1 VAL X 510      26.015  -0.204   2.554  1.00  0.00
H
ATOM   7978 3HG1 VAL X 510      26.448  -1.127   4.013  1.00  0.00
H
ATOM   7979 1HG2 VAL X 510      24.473  -3.431   3.502  1.00  0.00
H
ATOM   7980 2HG2 VAL X 510      24.684  -2.636   5.081  1.00  0.00
H
ATOM   7981 3HG2 VAL X 510      23.069  -2.726   4.337  1.00  0.00
H
ATOM   7982  N   ALA X 511      23.465   1.760   2.850  1.00  0.00
N
ATOM   7983  CA  ALA X 511      23.740   3.032   2.194  1.00  0.00
C
ATOM   7984  C   ALA X 511      23.914   4.152   3.213  1.00  0.00
C
ATOM   7985  O   ALA X 511      24.841   4.956   3.115  1.00  0.00
O
ATOM   7986  CB  ALA X 511      22.628   3.372   1.212  1.00  0.00
C
ATOM   7987  H   ALA X 511      22.586   1.295   2.673  1.00  0.00
H
ATOM   7988  HA  ALA X 511      24.676   2.945   1.643  1.00  0.00
H
ATOM   7989 1HB  ALA X 511      22.849   4.326   0.730  1.00  0.00
H
ATOM   7990 2HB  ALA X 511      22.559   2.591   0.455  1.00  0.00
H
ATOM   7991 3HB  ALA X 511      21.682   3.447   1.745  1.00  0.00
H
ATOM   7992  N   VAL X 512      23.016   4.199   4.189  1.00  0.00
N
ATOM   7993  CA  VAL X 512      23.088   5.199   5.249  1.00  0.00
C
ATOM   7994  C   VAL X 512      24.252   4.923   6.192  1.00  0.00
C
ATOM   7995  O   VAL X 512      24.716   5.816   6.897  1.00  0.00
O
ATOM   7996  CB  VAL X 512      21.782   5.253   6.066  1.00  0.00
C
ATOM   7997  CG1 VAL X 512      20.600   5.564   5.159  1.00  0.00
C
ATOM   7998  CG2 VAL X 512      21.558   3.939   6.798  1.00  0.00
C
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ATOM   7999  H   VAL X 512      22.264   3.525   4.197  1.00  0.00
H
ATOM   8000  HA  VAL X 512      23.286   6.192   4.845  1.00  0.00
H
ATOM   8001  HB  VAL X 512      21.872   6.029   6.826  1.00  0.00
H
ATOM   8002 1HG1 VAL X 512      19.687   5.599   5.754  1.00  0.00
H
ATOM   8003 2HG1 VAL X 512      20.756   6.530   4.678  1.00  0.00
H
ATOM   8004 3HG1 VAL X 512      20.510   4.789   4.400  1.00  0.00
H
ATOM   8005 1HG2 VAL X 512      20.632   3.995   7.370  1.00  0.00
H
ATOM   8006 2HG2 VAL X 512      21.490   3.126   6.074  1.00  0.00
H
ATOM   8007 3HG2 VAL X 512      22.391   3.753   7.475  1.00  0.00
H
ATOM   8008  N   SER X 513      24.722   3.680   6.192  1.00  0.00
N
ATOM   8009  CA  SER X 513      25.828   3.280   7.055  1.00  0.00
C
ATOM   8010  C   SER X 513      27.167   3.706   6.464  1.00  0.00
C
ATOM   8011  O   SER X 513      28.067   4.128   7.187  1.00  0.00
O
ATOM   8012  CB  SER X 513      25.799   1.780   7.278  1.00  0.00
C
ATOM   8013  OG  SER X 513      24.675   1.378   8.012  1.00  0.00
O
ATOM   8014  H   SER X 513      24.303   2.996   5.579  1.00  0.00
H
ATOM   8015  HA  SER X 513      25.736   3.651   8.076  1.00  0.00
H
ATOM   8016 1HB  SER X 513      25.785   1.285   6.308  1.00  0.00
H
ATOM   8017 2HB  SER X 513      26.699   1.491   7.819  1.00  0.00
H
ATOM   8018  HG  SER X 513      23.878   1.626   7.538  1.00  0.00
H
ATOM   8019  N   TRP X 514      27.289   3.590   5.146  1.00  0.00
N
ATOM   8020  CA  TRP X 514      28.531   3.927   4.460  1.00  0.00
C
ATOM   8021  C   TRP X 514      28.555   5.394   4.055  1.00  0.00
C
ATOM   8022  O   TRP X 514      29.624   6.002   3.947  1.00  0.00
O
ATOM   8023  CB  TRP X 514      28.719   3.039   3.229  1.00  0.00
C
ATOM   8024  CG  TRP X 514      29.018   1.608   3.562  1.00  0.00
C
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ATOM   8025  CD1 TRP X 514      29.184   1.080   4.806  1.00  0.00
C
ATOM   8026  CD2 TRP X 514      29.183   0.525   2.639  1.00  0.00
C
ATOM   8027  CE2 TRP X 514      29.448  -0.630   3.395  1.00  0.00
C
ATOM   8028  CE3 TRP X 514      29.130   0.422   1.244  1.00  0.00
C
ATOM   8029  NE1 TRP X 514      29.446  -0.266   4.719  1.00  0.00
N
ATOM   8030  CZ2 TRP X 514      29.662  -1.869   2.810  1.00  0.00
C
ATOM   8031  CZ3 TRP X 514      29.343  -0.820   0.657  1.00  0.00
C
ATOM   8032  CH2 TRP X 514      29.601  -1.932   1.419  1.00  0.00
C
ATOM   8033  H   TRP X 514      26.503   3.260   4.606  1.00  0.00
H
ATOM   8034  HA  TRP X 514      29.377   3.776   5.132  1.00  0.00
H
ATOM   8035 1HB  TRP X 514      27.812   3.037   2.623  1.00  0.00
H
ATOM   8036 2HB  TRP X 514      29.555   3.401   2.629  1.00  0.00
H
ATOM   8037  HD1 TRP X 514      29.094   1.763   5.650  1.00  0.00
H
ATOM   8038  HE1 TRP X 514      29.610  -0.885   5.497  1.00  0.00
H
ATOM   8039  HE3 TRP X 514      28.927   1.271   0.593  1.00  0.00
H
ATOM   8040  HZ2 TRP X 514      29.863  -2.726   3.452  1.00  0.00
H
ATOM   8041  HZ3 TRP X 514      29.300  -0.887  -0.430  1.00  0.00
H
ATOM   8042  HH2 TRP X 514      29.762  -2.888   0.919  1.00  0.00
H
ATOM   8043  N   PHE X 515      27.373   5.962   3.835  1.00  0.00
N
ATOM   8044  CA  PHE X 515      27.260   7.329   3.339  1.00  0.00
C
ATOM   8045  C   PHE X 515      26.836   8.281   4.452  1.00  0.00
C
ATOM   8046  O   PHE X 515      27.618   9.126   4.890  1.00  0.00
O
ATOM   8047  CB  PHE X 515      26.266   7.396   2.179  1.00  0.00
C
ATOM   8048  CG  PHE X 515      26.298   8.696   1.426  1.00  0.00
C
ATOM   8049  CD1 PHE X 515      27.267   8.932   0.463  1.00  0.00
C
ATOM   8050  CD2 PHE X 515      25.361   9.686   1.683  1.00  0.00
C
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ATOM   8051  CE1 PHE X 515      27.298  10.128  -0.230  1.00  0.00
C
ATOM   8052  CE2 PHE X 515      25.389  10.882   0.992  1.00  0.00
C
ATOM   8053  CZ  PHE X 515      26.360  11.102   0.036  1.00  0.00
C
ATOM   8054  H   PHE X 515      26.532   5.434   4.016  1.00  0.00
H
ATOM   8055  HA  PHE X 515      28.233   7.676   2.986  1.00  0.00
H
ATOM   8056 1HB  PHE X 515      26.481   6.612   1.455  1.00  0.00
H
ATOM   8057 2HB  PHE X 515      25.249   7.276   2.551  1.00  0.00
H
ATOM   8058  HD1 PHE X 515      28.009   8.161   0.254  1.00  0.00
H
ATOM   8059  HD2 PHE X 515      24.596   9.512   2.439  1.00  0.00
H
ATOM   8060  HE1 PHE X 515      28.065  10.300  -0.985  1.00  0.00
H
ATOM   8061  HE2 PHE X 515      24.647  11.651   1.201  1.00  0.00
H
ATOM   8062  HZ  PHE X 515      26.383  12.045  -0.509  1.00  0.00
H
ATOM   8063  N   TYR X 516      25.596   8.141   4.902  1.00  0.00
N
ATOM   8064  CA  TYR X 516      25.038   9.044   5.901  1.00  0.00
C
ATOM   8065  C   TYR X 516      25.771   8.915   7.230  1.00  0.00
C
ATOM   8066  O   TYR X 516      25.858   9.872   7.998  1.00  0.00
O
ATOM   8067  CB  TYR X 516      23.544   8.770   6.096  1.00  0.00
C
ATOM   8068  CG  TYR X 516      22.859   9.745   7.026  1.00  0.00
C
ATOM   8069  CD1 TYR X 516      22.557  11.034   6.610  1.00  0.00
C
ATOM   8070  CD2 TYR X 516      22.512   9.373   8.315  1.00  0.00
C
ATOM   8071  CE1 TYR X 516      21.930  11.929   7.457  1.00  0.00
C
ATOM   8072  CE2 TYR X 516      21.885  10.260   9.171  1.00  0.00
C
ATOM   8073  CZ  TYR X 516      21.596  11.537   8.736  1.00  0.00
C
ATOM   8074  OH  TYR X 516      20.970  12.424   9.583  1.00  0.00
O
ATOM   8075  H   TYR X 516      25.024   7.390   4.543  1.00  0.00
H
ATOM   8076  HA  TYR X 516      25.162  10.077   5.577  1.00  0.00
H
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ATOM   8077 1HB  TYR X 516      23.077   8.816   5.111  1.00  0.00
H
ATOM   8078 2HB  TYR X 516      23.452   7.759   6.495  1.00  0.00
H
ATOM   8079  HD1 TYR X 516      22.824  11.337   5.598  1.00  0.00
H
ATOM   8080  HD2 TYR X 516      22.745   8.363   8.652  1.00  0.00
H
ATOM   8081  HE1 TYR X 516      21.701  12.938   7.116  1.00  0.00
H
ATOM   8082  HE2 TYR X 516      21.622   9.949  10.181  1.00  0.00
H
ATOM   8083  HH  TYR X 516      20.816  13.282   9.181  1.00  0.00
H
ATOM   8084  N   GLY X 517      26.296   7.724   7.493  1.00  0.00
N
ATOM   8085  CA  GLY X 517      27.091   7.487   8.695  1.00  0.00
C
ATOM   8086  C   GLY X 517      26.403   6.491   9.622  1.00  0.00
C
ATOM   8087  O   GLY X 517      25.285   6.723  10.078  1.00  0.00
O
ATOM   8088  H   GLY X 517      26.141   6.963   6.847  1.00  0.00
H
ATOM   8089 1HA  GLY X 517      28.064   7.090   8.405  1.00  0.00
H
ATOM   8090 2HA  GLY X 517      27.226   8.430   9.223  1.00  0.00
H
ATOM   8091  N   ILE X 518      27.086   5.388   9.899  1.00  0.00
N
ATOM   8092  CA  ILE X 518      26.480   4.277  10.625  1.00  0.00
C
ATOM   8093  C   ILE X 518      26.299   4.616  12.098  1.00  0.00
C
ATOM   8094  O   ILE X 518      25.590   3.920  12.822  1.00  0.00
O
ATOM   8095  CB  ILE X 518      27.325   2.995  10.501  1.00  0.00
C
ATOM   8096  CG1 ILE X 518      26.513   1.776  10.948  1.00  0.00
C
ATOM   8097  CG2 ILE X 518      28.600   3.117  11.321  1.00  0.00
C
ATOM   8098  CD1 ILE X 518      27.172   0.454  10.631  1.00  0.00
C
ATOM   8099  H   ILE X 518      28.048   5.316   9.602  1.00  0.00
H
ATOM   8100  HA  ILE X 518      25.472   4.084  10.259  1.00  0.00
H
ATOM   8101  HB  ILE X 518      27.579   2.836   9.455  1.00  0.00
H
ATOM   8102 1HG1 ILE X 518      26.365   1.860  12.024  1.00  0.00
H
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ATOM   8103 2HG1 ILE X 518      25.546   1.829  10.446  1.00  0.00
H
ATOM   8104 1HG2 ILE X 518      29.184   2.201  11.223  1.00  0.00
H
ATOM   8105 2HG2 ILE X 518      29.185   3.961  10.958  1.00  0.00
H
ATOM   8106 3HG2 ILE X 518      28.345   3.275  12.369  1.00  0.00
H
ATOM   8107 1HD1 ILE X 518      26.536  -0.363  10.976  1.00  0.00
H
ATOM   8108 2HD1 ILE X 518      27.317   0.368   9.554  1.00  0.00
H
ATOM   8109 3HD1 ILE X 518      28.137   0.397  11.131  1.00  0.00
H
ATOM   8110  N   THR X 519      26.949   5.690  12.539  1.00  0.00
N
ATOM   8111  CA  THR X 519      26.847   6.135  13.922  1.00  0.00
C
ATOM   8112  C   THR X 519      25.725   7.150  14.093  1.00  0.00
C
ATOM   8113  O   THR X 519      25.436   7.586  15.208  1.00  0.00
O
ATOM   8114  CB  THR X 519      28.165   6.757  14.414  1.00  0.00
C
ATOM   8115  CG2 THR X 519      29.300   5.750  14.313  1.00  0.00
C
ATOM   8116  OG1 THR X 519      28.481   7.908  13.620  1.00  0.00
O
ATOM   8117  H   THR X 519      27.529   6.211  11.897  1.00  0.00
H
ATOM   8118  HA  THR X 519      26.598   5.289  14.564  1.00  0.00
H
ATOM   8119  HB  THR X 519      28.046   7.065  15.453  1.00  0.00
H
ATOM   8120  HG1 THR X 519      29.304   8.294  13.930  1.00  0.00
H
ATOM   8121 1HG2 THR X 519      30.224   6.207  14.666  1.00  0.00
H
ATOM   8122 2HG2 THR X 519      29.069   4.879  14.925  1.00  0.00
H
ATOM   8123 3HG2 THR X 519      29.422   5.442  13.275  1.00  0.00
H
ATOM   8124  N   GLN X 520      25.098   7.523  12.984  1.00  0.00
N
ATOM   8125  CA  GLN X 520      24.036   8.522  13.004  1.00  0.00
C
ATOM   8126  C   GLN X 520      22.689   7.887  13.331  1.00  0.00
C
ATOM   8127  O   GLN X 520      22.094   8.174  14.370  1.00  0.00
O
ATOM   8128  CB  GLN X 520      23.953   9.242  11.655  1.00  0.00
C
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ATOM   8129  CG  GLN X 520      25.178  10.078  11.320  1.00  0.00
C
ATOM   8130  CD  GLN X 520      25.365  11.240  12.275  1.00  0.00
C
ATOM   8131  NE2 GLN X 520      26.574  11.382  12.803  1.00  0.00
N
ATOM   8132  OE1 GLN X 520      24.431  12.006  12.533  1.00  0.00
O
ATOM   8133  H   GLN X 520      25.364   7.104  12.105  1.00  0.00
H
ATOM   8134  HA  GLN X 520      24.234   9.250  13.789  1.00  0.00
H
ATOM   8135 1HB  GLN X 520      23.811   8.474  10.896  1.00  0.00
H
ATOM   8136 2HB  GLN X 520      23.072   9.882  11.693  1.00  0.00
H
ATOM   8137 1HG  GLN X 520      26.157   9.639  11.131  1.00  0.00
H
ATOM   8138 2HG  GLN X 520      24.766  10.462  10.385  1.00  0.00
H
ATOM   8139 1HE2 GLN X 520      26.758  12.132  13.440  1.00  0.00
H
ATOM   8140 2HE2 GLN X 520      27.303  10.740  12.565  1.00  0.00
H
ATOM   8141  N   PHE X 521      22.214   7.026  12.438  1.00  0.00
N
ATOM   8142  CA  PHE X 521      20.920   6.377  12.614  1.00  0.00
C
ATOM   8143  C   PHE X 521      20.944   5.416  13.796  1.00  0.00
C
ATOM   8144  O   PHE X 521      19.900   5.068  14.348  1.00  0.00
O
ATOM   8145  CB  PHE X 521      20.516   5.635  11.340  1.00  0.00
C
ATOM   8146  CG  PHE X 521      19.862   6.512  10.309  1.00  0.00
C
ATOM   8147  CD1 PHE X 521      20.434   6.678   9.057  1.00  0.00
C
ATOM   8148  CD2 PHE X 521      18.676   7.171  10.591  1.00  0.00
C
ATOM   8149  CE1 PHE X 521      19.833   7.484   8.108  1.00  0.00
C
ATOM   8150  CE2 PHE X 521      18.074   7.977   9.645  1.00  0.00
C
ATOM   8151  CZ  PHE X 521      18.653   8.133   8.403  1.00  0.00
C
ATOM   8152  H   PHE X 521      22.762   6.815  11.616  1.00  0.00
H
ATOM   8153  HA  PHE X 521      20.159   7.126  12.838  1.00  0.00
H
ATOM   8154 1HB  PHE X 521      21.394   5.198  10.865  1.00  0.00
H
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ATOM   8155 2HB  PHE X 521      19.802   4.846  11.576  1.00  0.00
H
ATOM   8156  HD1 PHE X 521      21.367   6.163   8.825  1.00  0.00
H
ATOM   8157  HD2 PHE X 521      18.218   7.049  11.574  1.00  0.00
H
ATOM   8158  HE1 PHE X 521      20.293   7.605   7.127  1.00  0.00
H
ATOM   8159  HE2 PHE X 521      17.140   8.491   9.878  1.00  0.00
H
ATOM   8160  HZ  PHE X 521      18.180   8.771   7.656  1.00  0.00
H
ATOM   8161  N   CYS X 522      22.141   4.989  14.183  1.00  0.00
N
ATOM   8162  CA  CYS X 522      22.311   4.149  15.363  1.00  0.00
C
ATOM   8163  C   CYS X 522      21.608   4.753  16.573  1.00  0.00
C
ATOM   8164  O   CYS X 522      20.776   4.104  17.205  1.00  0.00
O
ATOM   8165  CB  CYS X 522      23.827   4.152  15.565  1.00  0.00
C
ATOM   8166  SG  CYS X 522      24.401   3.139  16.948  1.00  0.00
S
ATOM   8167  H   CYS X 522      22.955   5.253  13.646  1.00  0.00
H
ATOM   8168  HA  CYS X 522      21.981   3.121  15.214  1.00  0.00
H
ATOM   8169 1HB  CYS X 522      24.326   3.761  14.677  1.00  0.00
H
ATOM   8170 2HB  CYS X 522      24.178   5.164  15.765  1.00  0.00
H
ATOM   8171  HG  CYS X 522      25.694   3.400  16.786  1.00  0.00
H
ATOM   8172  N   ARG X 523      21.946   5.997  16.886  1.00  0.00
N
ATOM   8173  CA  ARG X 523      21.405   6.664  18.067  1.00  0.00
C
ATOM   8174  C   ARG X 523      20.002   7.197  17.802  1.00  0.00
C
ATOM   8175  O   ARG X 523      19.150   7.196  18.690  1.00  0.00
O
ATOM   8176  CB  ARG X 523      22.329   7.756  18.582  1.00  0.00
C
ATOM   8177  CG  ARG X 523      21.852   8.457  19.844  1.00  0.00
C
ATOM   8178  CD  ARG X 523      22.822   9.427  20.412  1.00  0.00
C
ATOM   8179  NE  ARG X 523      22.367  10.100  21.618  1.00  0.00
N
ATOM   8180  CZ  ARG X 523      23.050  11.068  22.258  1.00  0.00
C
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ATOM   8181  NH1 ARG X 523      24.233  11.455  21.836  1.00  0.00
N
ATOM   8182  NH2 ARG X 523      22.507  11.606  23.337  1.00  0.00
N
ATOM   8183  H   ARG X 523      22.594   6.495  16.293  1.00  0.00
H
ATOM   8184  HA  ARG X 523      21.317   5.949  18.886  1.00  0.00
H
ATOM   8185 1HB  ARG X 523      23.297   7.291  18.774  1.00  0.00
H
ATOM   8186 2HB  ARG X 523      22.433   8.490  17.783  1.00  0.00
H
ATOM   8187 1HG  ARG X 523      20.932   8.996  19.614  1.00  0.00
H
ATOM   8188 2HG  ARG X 523      21.647   7.701  20.604  1.00  0.00
H
ATOM   8189 1HD  ARG X 523      23.743   8.902  20.661  1.00  0.00
H
ATOM   8190 2HD  ARG X 523      23.032  10.194  19.668  1.00  0.00
H
ATOM   8191  HE  ARG X 523      21.515   9.966  22.148  1.00  0.00
H
ATOM   8192 1HH1 ARG X 523      24.640  11.022  21.020  1.00  0.00
H
ATOM   8193 2HH1 ARG X 523      24.728  12.182  22.330  1.00  0.00
H
ATOM   8194 1HH2 ARG X 523      21.604  11.284  23.660  1.00  0.00
H
ATOM   8195 2HH2 ARG X 523      22.998  12.331  23.836  1.00  0.00
H
ATOM   8196  N   ASP X 524      19.772   7.652  16.577  1.00  0.00
N
ATOM   8197  CA  ASP X 524      18.455   8.140  16.173  1.00  0.00
C
ATOM   8198  C   ASP X 524      17.383   7.084  16.413  1.00  0.00
C
ATOM   8199  O   ASP X 524      16.341   7.367  17.002  1.00  0.00
O
ATOM   8200  CB  ASP X 524      18.465   8.555  14.700  1.00  0.00
C
ATOM   8201  CG  ASP X 524      19.230   9.840  14.413  1.00  0.00
C
ATOM   8202  OD1 ASP X 524      19.555  10.535  15.346  1.00  0.00
O
ATOM   8203  OD2 ASP X 524      19.621  10.036  13.288  1.00  0.00
O
ATOM   8204  H   ASP X 524      20.527   7.661  15.907  1.00  0.00
H
ATOM   8205  HA  ASP X 524      18.180   9.006  16.777  1.00  0.00
H
ATOM   8206 1HB  ASP X 524      18.812   7.768  14.030  1.00  0.00
H
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ATOM   8207 2HB  ASP X 524      17.400   8.724  14.541  1.00  0.00
H
ATOM   8208  N   VAL X 525      17.645   5.866  15.951  1.00  0.00
N
ATOM   8209  CA  VAL X 525      16.706   4.762  16.124  1.00  0.00
C
ATOM   8210  C   VAL X 525      16.589   4.365  17.590  1.00  0.00
C
ATOM   8211  O   VAL X 525      15.490   4.128  18.090  1.00  0.00
O
ATOM   8212  CB  VAL X 525      17.126   3.530  15.300  1.00  0.00
C
ATOM   8213  CG1 VAL X 525      16.270   2.328  15.669  1.00  0.00
C
ATOM   8214  CG2 VAL X 525      17.018   3.823  13.812  1.00  0.00
C
ATOM   8215  H   VAL X 525      18.516   5.700  15.468  1.00  0.00
H
ATOM   8216  HA  VAL X 525      15.696   5.050  15.830  1.00  0.00
H
ATOM   8217  HB  VAL X 525      18.174   3.308  15.503  1.00  0.00
H
ATOM   8218 1HG1 VAL X 525      16.580   1.465  15.076  1.00  0.00
H
ATOM   8219 2HG1 VAL X 525      16.395   2.103  16.727  1.00  0.00
H
ATOM   8220 3HG1 VAL X 525      15.222   2.549  15.464  1.00  0.00
H
ATOM   8221 1HG2 VAL X 525      17.317   2.943  13.244  1.00  0.00
H
ATOM   8222 2HG2 VAL X 525      15.987   4.080  13.566  1.00  0.00
H
ATOM   8223 3HG2 VAL X 525      17.671   4.659  13.556  1.00  0.00
H
ATOM   8224  N   LYS X 526      17.729   4.288  18.268  1.00  0.00
N
ATOM   8225  CA  LYS X 526      17.749   3.957  19.691  1.00  0.00
C
ATOM   8226  C   LYS X 526      16.807   4.854  20.480  1.00  0.00
C
ATOM   8227  O   LYS X 526      15.996   4.373  21.275  1.00  0.00
O
ATOM   8228  CB  LYS X 526      19.170   4.072  20.245  1.00  0.00
C
ATOM   8229  CG  LYS X 526      19.291   3.763  21.733  1.00  0.00
C
ATOM   8230  CD  LYS X 526      20.661   4.150  22.268  1.00  0.00
C
ATOM   8231  CE  LYS X 526      20.791   3.822  23.748  1.00  0.00
C
ATOM   8232  NZ  LYS X 526      19.902   4.673  24.587  1.00  0.00
N
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ATOM   8233  H   LYS X 526      18.601   4.463  17.789  1.00  0.00
H
ATOM   8234  HA  LYS X 526      17.400   2.935  19.836  1.00  0.00
H
ATOM   8235 1HB  LYS X 526      19.791   3.376  19.680  1.00  0.00
H
ATOM   8236 2HB  LYS X 526      19.506   5.092  20.059  1.00  0.00
H
ATOM   8237 1HG  LYS X 526      18.521   4.322  22.266  1.00  0.00
H
ATOM   8238 2HG  LYS X 526      19.132   2.696  21.878  1.00  0.00
H
ATOM   8239 1HD  LYS X 526      21.421   3.604  21.707  1.00  0.00
H
ATOM   8240 2HD  LYS X 526      20.802   5.221  22.120  1.00  0.00
H
ATOM   8241 1HE  LYS X 526      20.529   2.775  23.890  1.00  0.00
H
ATOM   8242 2HE  LYS X 526      21.828   3.982  24.044  1.00  0.00
H
ATOM   8243 1HZ  LYS X 526      20.018   4.425  25.559  1.00  0.00
H
ATOM   8244 2HZ  LYS X 526      20.144   5.645  24.457  1.00  0.00
H
ATOM   8245 3HZ  LYS X 526      18.941   4.525  24.313  1.00  0.00
H
ATOM   8246  N   GLU X 527      16.918   6.162  20.263  1.00  0.00
N
ATOM   8247  CA  GLU X 527      16.105   7.132  20.986  1.00  0.00
C
ATOM   8248  C   GLU X 527      14.650   7.078  20.537  1.00  0.00
C
ATOM   8249  O   GLU X 527      13.734   7.231  21.345  1.00  0.00
O
ATOM   8250  CB  GLU X 527      16.662   8.545  20.798  1.00  0.00
C
ATOM   8251  CG  GLU X 527      18.004   8.788  21.473  1.00  0.00
C
ATOM   8252  CD  GLU X 527      18.535  10.157  21.156  1.00  0.00
C
ATOM   8253  OE1 GLU X 527      17.912  10.853  20.390  1.00  0.00
O
ATOM   8254  OE2 GLU X 527      19.502  10.553  21.763  1.00  0.00
O
ATOM   8255  H   GLU X 527      17.585   6.492  19.578  1.00  0.00
H
ATOM   8256  HA  GLU X 527      16.109   6.896  22.051  1.00  0.00
H
ATOM   8257 1HB  GLU X 527      16.762   8.707  19.724  1.00  0.00
H
ATOM   8258 2HB  GLU X 527      15.922   9.236  21.203  1.00  0.00
H
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ATOM   8259 1HG  GLU X 527      17.975   8.652  22.555  1.00  0.00
H
ATOM   8260 2HG  GLU X 527      18.655   8.035  21.031  1.00  0.00
H
ATOM   8261  N   MET X 528      14.447   6.861  19.242  1.00  0.00
N
ATOM   8262  CA  MET X 528      13.103   6.807  18.678  1.00  0.00
C
ATOM   8263  C   MET X 528      12.322   5.620  19.224  1.00  0.00
C
ATOM   8264  O   MET X 528      11.113   5.706  19.441  1.00  0.00
O
ATOM   8265  CB  MET X 528      13.173   6.735  17.154  1.00  0.00
C
ATOM   8266  CG  MET X 528      11.821   6.808  16.458  1.00  0.00
C
ATOM   8267  SD  MET X 528      11.969   6.926  14.663  1.00  0.00
S
ATOM   8268  CE  MET X 528      10.247   7.043  14.189  1.00  0.00
C
ATOM   8269  H   MET X 528      15.242   6.730  18.634  1.00  0.00
H
ATOM   8270  HA  MET X 528      12.546   7.700  18.960  1.00  0.00
H
ATOM   8271 1HB  MET X 528      13.796   7.566  16.826  1.00  0.00
H
ATOM   8272 2HB  MET X 528      13.660   5.792  16.902  1.00  0.00
H
ATOM   8273 1HG  MET X 528      11.260   5.911  16.713  1.00  0.00
H
ATOM   8274 2HG  MET X 528      11.294   7.686  16.832  1.00  0.00
H
ATOM   8275 1HE  MET X 528      10.172   7.123  13.105  1.00  0.00
H
ATOM   8276 2HE  MET X 528       9.715   6.153  14.527  1.00  0.00
H
ATOM   8277 3HE  MET X 528       9.802   7.927  14.648  1.00  0.00
H
ATOM   8278  N   LEU X 529      13.020   4.512  19.450  1.00  0.00
N
ATOM   8279  CA  LEU X 529      12.401   3.322  20.022  1.00  0.00
C
ATOM   8280  C   LEU X 529      12.345   3.404  21.542  1.00  0.00
C
ATOM   8281  O   LEU X 529      11.534   2.736  22.180  1.00  0.00
O
ATOM   8282  CB  LEU X 529      13.165   2.066  19.583  1.00  0.00
C
ATOM   8283  CG  LEU X 529      13.171   1.799  18.074  1.00  0.00
C
ATOM   8284  CD1 LEU X 529      14.038   0.586  17.761  1.00  0.00
C
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ATOM   8285  CD2 LEU X 529      11.745   1.580  17.590  1.00  0.00
C
ATOM   8286  H   LEU X 529      14.004   4.494  19.221  1.00  0.00
H
ATOM   8287  HA  LEU X 529      11.370   3.246  19.678  1.00  0.00
H
ATOM   8288 1HB  LEU X 529      14.164   2.341  19.918  1.00  0.00
H
ATOM   8289 2HB  LEU X 529      12.832   1.181  20.126  1.00  0.00
H
ATOM   8290  HG  LEU X 529      13.553   2.695  17.586  1.00  0.00
H
ATOM   8291 1HD1 LEU X 529      14.035   0.404  16.686  1.00  0.00
H
ATOM   8292 2HD1 LEU X 529      15.058   0.773  18.094  1.00  0.00
H
ATOM   8293 3HD1 LEU X 529      13.642  -0.287  18.277  1.00  0.00
H
ATOM   8294 1HD2 LEU X 529      11.750   1.390  16.517  1.00  0.00
H
ATOM   8295 2HD2 LEU X 529      11.311   0.725  18.108  1.00  0.00
H
ATOM   8296 3HD2 LEU X 529      11.150   2.469  17.799  1.00  0.00
H
ATOM   8297  N   GLY X 530      13.214   4.232  22.116  1.00  0.00
N
ATOM   8298  CA  GLY X 530      13.274   4.394  23.563  1.00  0.00
C
ATOM   8299  C   GLY X 530      14.035   3.248  24.217  1.00  0.00
C
ATOM   8300  O   GLY X 530      13.650   2.760  25.281  1.00  0.00
O
ATOM   8301  H   GLY X 530      13.848   4.761  21.535  1.00  0.00
H
ATOM   8302 1HA  GLY X 530      13.778   5.332  23.796  1.00  0.00
H
ATOM   8303 2HA  GLY X 530      12.260   4.419  23.961  1.00  0.00
H
ATOM   8304  N   PHE X 531      15.114   2.821  23.572  1.00  0.00
N
ATOM   8305  CA  PHE X 531      15.961   1.763  24.115  1.00  0.00
C
ATOM   8306  C   PHE X 531      16.854   2.288  25.230  1.00  0.00
C
ATOM   8307  O   PHE X 531      17.463   3.349  25.103  1.00  0.00
O
ATOM   8308  CB  PHE X 531      16.814   1.139  23.008  1.00  0.00
C
ATOM   8309  CG  PHE X 531      16.065   0.168  22.141  1.00  0.00
C
ATOM   8310  CD1 PHE X 531      14.754  -0.177  22.433  1.00  0.00
C
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ATOM   8311  CD2 PHE X 531      16.670  -0.400  21.029  1.00  0.00
C
ATOM   8312  CE1 PHE X 531      14.064  -1.070  21.634  1.00  0.00
C
ATOM   8313  CE2 PHE X 531      15.983  -1.291  20.229  1.00  0.00
C
ATOM   8314  CZ  PHE X 531      14.677  -1.626  20.533  1.00  0.00
C
ATOM   8315  H   PHE X 531      15.354   3.238  22.684  1.00  0.00
H
ATOM   8316  HA  PHE X 531      15.341   0.982  24.557  1.00  0.00
H
ATOM   8317 1HB  PHE X 531      17.198   1.916  22.349  1.00  0.00
H
ATOM   8318 2HB  PHE X 531      17.647   0.588  23.444  1.00  0.00
H
ATOM   8319  HD1 PHE X 531      14.268   0.265  23.304  1.00  0.00
H
ATOM   8320  HD2 PHE X 531      17.701  -0.135  20.791  1.00  0.00
H
ATOM   8321  HE1 PHE X 531      13.034  -1.332  21.876  1.00  0.00
H
ATOM   8322  HE2 PHE X 531      16.468  -1.731  19.359  1.00  0.00
H
ATOM   8323  HZ  PHE X 531      14.135  -2.330  19.904  1.00  0.00
H
ATOM   8324  N   SER X 532      16.931   1.538  26.323  1.00  0.00
N
ATOM   8325  CA  SER X 532      17.754   1.923  27.464  1.00  0.00
C
ATOM   8326  C   SER X 532      19.231   1.671  27.188  1.00  0.00
C
ATOM   8327  O   SER X 532      19.586   0.723  26.481  1.00  0.00
O
ATOM   8328  CB  SER X 532      17.313   1.172  28.704  1.00  0.00
C
ATOM   8329  OG  SER X 532      16.018   1.528  29.103  1.00  0.00
O
ATOM   8330  H   SER X 532      16.406   0.676  26.366  1.00  0.00
H
ATOM   8331  HA  SER X 532      17.605   2.958  27.774  1.00  0.00
H
ATOM   8332 1HB  SER X 532      17.337   0.103  28.491  1.00  0.00
H
ATOM   8333 2HB  SER X 532      18.007   1.395  29.513  1.00  0.00
H
ATOM   8334  HG  SER X 532      15.990   2.469  29.296  1.00  0.00
H
ATOM   8335  N   PRO X 533      20.088   2.518  27.746  1.00  0.00
N
ATOM   8336  CA  PRO X 533      21.527   2.384  27.567  1.00  0.00
C
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ATOM   8337  C   PRO X 533      21.975   0.942  27.769  1.00  0.00
C
ATOM   8338  O   PRO X 533      22.795   0.424  27.013  1.00  0.00
O
ATOM   8339  CB  PRO X 533      22.127   3.329  28.623  1.00  0.00
C
ATOM   8340  CG  PRO X 533      21.115   4.431  28.775  1.00  0.00
C
ATOM   8341  CD  PRO X 533      19.747   3.398  28.872  1.00  0.00
C
ATOM   8342  HA  PRO X 533      21.786   2.667  26.648  1.00  0.00
H
ATOM   8343 1HB  PRO X 533      22.064   2.808  29.373  1.00  0.00
H
ATOM   8344 2HB  PRO X 533      22.805   3.651  28.191  1.00  0.00
H
ATOM   8345 1HG  PRO X 533      20.463   4.136  29.228  1.00  0.00
H
ATOM   8346 2HG  PRO X 533      21.585   5.242  28.805  1.00  0.00
H
ATOM   8347 1HD  PRO X 533      19.070   2.919  29.341  1.00  0.00
H
ATOM   8348 2HD  PRO X 533      19.497   4.209  28.439  1.00  0.00
H
ATOM   8349  N   GLY X 534      21.433   0.298  28.798  1.00  0.00
N
ATOM   8350  CA  GLY X 534      21.824  -1.065  29.143  1.00  0.00
C
ATOM   8351  C   GLY X 534      21.621  -2.009  27.968  1.00  0.00
C
ATOM   8352  O   GLY X 534      22.408  -2.935  27.761  1.00  0.00
O
ATOM   8353  H   GLY X 534      20.732   0.765  29.356  1.00  0.00
H
ATOM   8354 1HA  GLY X 534      22.876  -1.072  29.427  1.00  0.00
H
ATOM   8355 2HA  GLY X 534      21.219  -1.407  29.982  1.00  0.00
H
ATOM   8356  N   TRP X 535      20.563  -1.776  27.201  1.00  0.00
N
ATOM   8357  CA  TRP X 535      20.229  -2.638  26.071  1.00  0.00
C
ATOM   8358  C   TRP X 535      21.203  -2.434  24.922  1.00  0.00
C
ATOM   8359  O   TRP X 535      21.702  -3.402  24.342  1.00  0.00
O
ATOM   8360  CB  TRP X 535      18.799  -2.372  25.601  1.00  0.00
C
ATOM   8361  CG  TRP X 535      17.756  -2.756  26.607  1.00  0.00
C
ATOM   8362  CD1 TRP X 535      17.956  -3.453  27.761  1.00  0.00
C
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ATOM   8363  CD2 TRP X 535      16.355  -2.463  26.551  1.00  0.00
C
ATOM   8364  CE2 TRP X 535      15.768  -3.014  27.703  1.00  0.00
C
ATOM   8365  CE3 TRP X 535      15.539  -1.787  25.635  1.00  0.00
C
ATOM   8366  NE1 TRP X 535      16.767  -3.615  28.427  1.00  0.00
N
ATOM   8367  CZ2 TRP X 535      14.411  -2.914  27.966  1.00  0.00
C
ATOM   8368  CZ3 TRP X 535      14.180  -1.686  25.899  1.00  0.00
C
ATOM   8369  CH2 TRP X 535      13.631  -2.232  27.032  1.00  0.00
C
ATOM   8370  H   TRP X 535      19.973  -0.983  27.405  1.00  0.00
H
ATOM   8371  HA  TRP X 535      20.309  -3.684  26.368  1.00  0.00
H
ATOM   8372 1HB  TRP X 535      18.659  -1.310  25.398  1.00  0.00
H
ATOM   8373 2HB  TRP X 535      18.587  -2.945  24.699  1.00  0.00
H
ATOM   8374  HD1 TRP X 535      18.976  -3.765  27.978  1.00  0.00
H
ATOM   8375  HE1 TRP X 535      16.646  -4.099  29.306  1.00  0.00
H
ATOM   8376  HE3 TRP X 535      15.925  -1.332  24.723  1.00  0.00
H
ATOM   8377  HZ2 TRP X 535      14.017  -3.363  28.879  1.00  0.00
H
ATOM   8378  HZ3 TRP X 535      13.556  -1.157  25.177  1.00  0.00
H
ATOM   8379  HH2 TRP X 535      12.559  -2.130  27.203  1.00  0.00
H
ATOM   8380  N   PHE X 536      21.479  -1.177  24.595  1.00  0.00
N
ATOM   8381  CA  PHE X 536      22.378  -0.846  23.495  1.00  0.00
C
ATOM   8382  C   PHE X 536      23.780  -1.379  23.753  1.00  0.00
C
ATOM   8383  O   PHE X 536      24.515  -1.696  22.817  1.00  0.00
O
ATOM   8384  CB  PHE X 536      22.421   0.668  23.278  1.00  0.00
C
ATOM   8385  CG  PHE X 536      23.307   1.092  22.143  1.00  0.00
C
ATOM   8386  CD1 PHE X 536      22.913   0.900  20.827  1.00  0.00
C
ATOM   8387  CD2 PHE X 536      24.538   1.681  22.386  1.00  0.00
C
ATOM   8388  CE1 PHE X 536      23.729   1.289  19.781  1.00  0.00
C
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ATOM   8389  CE2 PHE X 536      25.355   2.074  21.344  1.00  0.00
C
ATOM   8390  CZ  PHE X 536      24.949   1.876  20.039  1.00  0.00
C
ATOM   8391  H   PHE X 536      21.053  -0.429  25.122  1.00  0.00
H
ATOM   8392  HA  PHE X 536      22.029  -1.320  22.576  1.00  0.00
H
ATOM   8393 1HB  PHE X 536      21.423   1.044  23.052  1.00  0.00
H
ATOM   8394 2HB  PHE X 536      22.800   1.163  24.171  1.00  0.00
H
ATOM   8395  HD1 PHE X 536      21.948   0.437  20.622  1.00  0.00
H
ATOM   8396  HD2 PHE X 536      24.860   1.837  23.417  1.00  0.00
H
ATOM   8397  HE1 PHE X 536      23.407   1.132  18.751  1.00  0.00
H
ATOM   8398  HE2 PHE X 536      26.320   2.537  21.550  1.00  0.00
H
ATOM   8399  HZ  PHE X 536      25.592   2.183  19.215  1.00  0.00
H
ATOM   8400  N   TRP X 537      24.146  -1.475  25.026  1.00  0.00
N
ATOM   8401  CA  TRP X 537      25.471  -1.950  25.408  1.00  0.00
C
ATOM   8402  C   TRP X 537      25.622  -3.443  25.139  1.00  0.00
C
ATOM   8403  O   TRP X 537      26.722  -3.991  25.222  1.00  0.00
O
ATOM   8404  CB  TRP X 537      25.738  -1.654  26.886  1.00  0.00
C
ATOM   8405  CG  TRP X 537      25.835  -0.192  27.195  1.00  0.00
C
ATOM   8406  CD1 TRP X 537      26.068   0.816  26.307  1.00  0.00
C
ATOM   8407  CD2 TRP X 537      25.700   0.429  28.480  1.00  0.00
C
ATOM   8408  CE2 TRP X 537      25.865   1.812  28.296  1.00  0.00
C
ATOM   8409  CE3 TRP X 537      25.455  -0.056  29.772  1.00  0.00
C
ATOM   8410  NE1 TRP X 537      26.089   2.025  26.958  1.00  0.00
N
ATOM   8411  CZ2 TRP X 537      25.795   2.715  29.343  1.00  0.00
C
ATOM   8412  CZ3 TRP X 537      25.384   0.850  30.823  1.00  0.00
C
ATOM   8413  CH2 TRP X 537      25.548   2.196  30.615  1.00  0.00
C
ATOM   8414  H   TRP X 537      23.491  -1.212  25.748  1.00  0.00
H
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ATOM   8415  HA  TRP X 537      26.230  -1.447  24.810  1.00  0.00
H
ATOM   8416 1HB  TRP X 537      24.929  -2.050  27.502  1.00  0.00
H
ATOM   8417 2HB  TRP X 537      26.681  -2.102  27.194  1.00  0.00
H
ATOM   8418  HD1 TRP X 537      26.198   0.533  25.265  1.00  0.00
H
ATOM   8419  HE1 TRP X 537      26.246   2.923  26.525  1.00  0.00
H
ATOM   8420  HE3 TRP X 537      25.315  -1.114  29.991  1.00  0.00
H
ATOM   8421  HZ2 TRP X 537      25.930   3.777  29.135  1.00  0.00
H
ATOM   8422  HZ3 TRP X 537      25.194   0.460  31.822  1.00  0.00
H
ATOM   8423  HH2 TRP X 537      25.485   2.874  31.467  1.00  0.00
H
ATOM   8424  N   ARG X 538      24.509  -4.097  24.813  1.00  0.00
N
ATOM   8425  CA  ARG X 538      24.524  -5.520  24.508  1.00  0.00
C
ATOM   8426  C   ARG X 538      24.237  -5.771  23.032  1.00  0.00
C
ATOM   8427  O   ARG X 538      24.817  -6.664  22.421  1.00  0.00
O
ATOM   8428  CB  ARG X 538      23.578  -6.308  25.401  1.00  0.00
C
ATOM   8429  CG  ARG X 538      23.914  -6.270  26.884  1.00  0.00
C
ATOM   8430  CD  ARG X 538      22.949  -6.993  27.751  1.00  0.00
C
ATOM   8431  NE  ARG X 538      23.229  -6.897  29.174  1.00  0.00
N
ATOM   8432  CZ  ARG X 538      22.564  -7.572  30.132  1.00  0.00
C
ATOM   8433  NH1 ARG X 538      21.558  -8.362  29.829  1.00  0.00
N
ATOM   8434  NH2 ARG X 538      22.934  -7.400  31.388  1.00  0.00
N
ATOM   8435  H   ARG X 538      23.635  -3.594  24.775  1.00  0.00
H
ATOM   8436  HA  ARG X 538      25.515  -5.930  24.705  1.00  0.00
H
ATOM   8437 1HB  ARG X 538      22.580  -5.898  25.249  1.00  0.00
H
ATOM   8438 2HB  ARG X 538      23.600  -7.343  25.055  1.00  0.00
H
ATOM   8439 1HG  ARG X 538      24.896  -6.720  27.028  1.00  0.00
H
ATOM   8440 2HG  ARG X 538      23.942  -5.229  27.205  1.00  0.00
H
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ATOM   8441 1HD  ARG X 538      21.952  -6.585  27.586  1.00  0.00
H
ATOM   8442 2HD  ARG X 538      22.958  -8.049  27.486  1.00  0.00
H
ATOM   8443  HE  ARG X 538      23.924  -6.345  29.659  1.00  0.00
H
ATOM   8444 1HH1 ARG X 538      21.275  -8.469  28.864  1.00  0.00
H
ATOM   8445 2HH1 ARG X 538      21.072  -8.859  30.560  1.00  0.00
H
ATOM   8446 1HH2 ARG X 538      23.699  -6.775  31.605  1.00  0.00
H
ATOM   8447 2HH2 ARG X 538      22.452  -7.893  32.125  1.00  0.00
H
ATOM   8448  N   ILE X 539      23.336  -4.974  22.466  1.00  0.00
N
ATOM   8449  CA  ILE X 539      23.001  -5.081  21.052  1.00  0.00
C
ATOM   8450  C   ILE X 539      23.022  -3.713  20.373  1.00  0.00
C
ATOM   8451  O   ILE X 539      22.739  -2.695  21.007  1.00  0.00
O
ATOM   8452  CB  ILE X 539      21.618  -5.726  20.845  1.00  0.00
C
ATOM   8453  CG1 ILE X 539      20.540  -4.919  21.573  1.00  0.00
C
ATOM   8454  CG2 ILE X 539      21.625  -7.167  21.328  1.00  0.00
C
ATOM   8455  CD1 ILE X 539      19.129  -5.374  21.274  1.00  0.00
C
ATOM   8456  H   ILE X 539      22.871  -4.278  23.031  1.00  0.00
H
ATOM   8457  HA  ILE X 539      23.753  -5.664  20.522  1.00  0.00
H
ATOM   8458  HB  ILE X 539      21.368  -5.698  19.785  1.00  0.00
H
ATOM   8459 1HG1 ILE X 539      20.732  -5.009  22.642  1.00  0.00
H
ATOM   8460 2HG1 ILE X 539      20.656  -3.877  21.272  1.00  0.00
H
ATOM   8461 1HG2 ILE X 539      20.639  -7.607  21.175  1.00  0.00
H
ATOM   8462 2HG2 ILE X 539      22.366  -7.734  20.767  1.00  0.00
H
ATOM   8463 3HG2 ILE X 539      21.873  -7.195  22.388  1.00  0.00
H
ATOM   8464 1HD1 ILE X 539      18.421  -4.755  21.826  1.00  0.00
H
ATOM   8465 2HD1 ILE X 539      18.935  -5.281  20.206  1.00  0.00
H
ATOM   8466 3HD1 ILE X 539      19.011  -6.414  21.575  1.00  0.00
H
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ATOM   8467  N   CYS X 540      23.357  -3.700  19.091  1.00  0.00
N
ATOM   8468  CA  CYS X 540      23.169  -2.516  18.262  1.00  0.00
C
ATOM   8469  C   CYS X 540      22.139  -2.771  17.166  1.00  0.00
C
ATOM   8470  O   CYS X 540      22.079  -3.862  16.600  1.00  0.00
O
ATOM   8471  CB  CYS X 540      24.557  -2.301  17.659  1.00  0.00
C
ATOM   8472  SG  CYS X 540      25.856  -1.960  18.870  1.00  0.00
S
ATOM   8473  H   CYS X 540      23.753  -4.533  18.678  1.00  0.00
H
ATOM   8474  HA  CYS X 540      22.896  -1.627  18.832  1.00  0.00
H
ATOM   8475 1HB  CYS X 540      24.875  -3.194  17.118  1.00  0.00
H
ATOM   8476 2HB  CYS X 540      24.546  -1.449  16.981  1.00  0.00
H
ATOM   8477  HG  CYS X 540      26.842  -1.844  17.987  1.00  0.00
H
ATOM   8478  N   TRP X 541      21.332  -1.755  16.875  1.00  0.00
N
ATOM   8479  CA  TRP X 541      20.375  -1.831  15.780  1.00  0.00
C
ATOM   8480  C   TRP X 541      21.084  -1.937  14.436  1.00  0.00
C
ATOM   8481  O   TRP X 541      20.651  -2.679  13.553  1.00  0.00
O
ATOM   8482  CB  TRP X 541      19.453  -0.611  15.792  1.00  0.00
C
ATOM   8483  CG  TRP X 541      18.576  -0.511  14.581  1.00  0.00
C
ATOM   8484  CD1 TRP X 541      17.411  -1.185  14.359  1.00  0.00
C
ATOM   8485  CD2 TRP X 541      18.792   0.308  13.425  1.00  0.00
C
ATOM   8486  CE2 TRP X 541      17.719   0.081  12.546  1.00  0.00
C
ATOM   8487  CE3 TRP X 541      19.791   1.214  13.051  1.00  0.00
C
ATOM   8488  NE1 TRP X 541      16.888  -0.838  13.139  1.00  0.00
N
ATOM   8489  CZ2 TRP X 541      17.614   0.719  11.319  1.00  0.00
C
ATOM   8490  CZ3 TRP X 541      19.686   1.856  11.822  1.00  0.00
C
ATOM   8491  CH2 TRP X 541      18.628   1.615  10.982  1.00  0.00
C
ATOM   8492  H   TRP X 541      21.384  -0.911  17.428  1.00  0.00
H
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ATOM   8493  HA  TRP X 541      19.765  -2.729  15.882  1.00  0.00
H
ATOM   8494 1HB  TRP X 541      18.788  -0.648  16.655  1.00  0.00
H
ATOM   8495 2HB  TRP X 541      20.041   0.305  15.826  1.00  0.00
H
ATOM   8496  HD1 TRP X 541      17.080  -1.865  15.141  1.00  0.00
H
ATOM   8497  HE1 TRP X 541      16.034  -1.198  12.740  1.00  0.00
H
ATOM   8498  HE3 TRP X 541      20.651   1.443  13.680  1.00  0.00
H
ATOM   8499  HZ2 TRP X 541      16.757   0.498  10.682  1.00  0.00
H
ATOM   8500  HZ3 TRP X 541      20.471   2.559  11.543  1.00  0.00
H
ATOM   8501  HH2 TRP X 541      18.582   2.139  10.027  1.00  0.00
H
ATOM   8502  N   VAL X 542      22.174  -1.196  14.287  1.00  0.00
N
ATOM   8503  CA  VAL X 542      22.951  -1.214  13.055  1.00  0.00
C
ATOM   8504  C   VAL X 542      23.567  -2.589  12.814  1.00  0.00
C
ATOM   8505  O   VAL X 542      24.019  -2.889  11.707  1.00  0.00
O
ATOM   8506  CB  VAL X 542      24.071  -0.157  13.078  1.00  0.00
C
ATOM   8507  CG1 VAL X 542      23.483   1.241  13.188  1.00  0.00
C
ATOM   8508  CG2 VAL X 542      25.030  -0.422  14.229  1.00  0.00
C
ATOM   8509  H   VAL X 542      22.473  -0.602  15.047  1.00  0.00
H
ATOM   8510  HA  VAL X 542      22.319  -1.033  12.185  1.00  0.00
H
ATOM   8511  HB  VAL X 542      24.652  -0.236  12.159  1.00  0.00
H
ATOM   8512 1HG1 VAL X 542      24.289   1.975  13.203  1.00  0.00
H
ATOM   8513 2HG1 VAL X 542      22.835   1.431  12.333  1.00  0.00
H
ATOM   8514 3HG1 VAL X 542      22.904   1.320  14.109  1.00  0.00
H
ATOM   8515 1HG2 VAL X 542      25.816   0.333  14.231  1.00  0.00
H
ATOM   8516 2HG2 VAL X 542      24.485  -0.381  15.173  1.00  0.00
H
ATOM   8517 3HG2 VAL X 542      25.477  -1.410  14.111  1.00  0.00
H
ATOM   8518  N   ALA X 543      23.581  -3.416  13.852  1.00  0.00
N
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ATOM   8519  CA  ALA X 543      24.115  -4.767  13.747  1.00  0.00
C
ATOM   8520  C   ALA X 543      23.014  -5.773  13.436  1.00  0.00
C
ATOM   8521  O   ALA X 543      23.151  -6.597  12.532  1.00  0.00
O
ATOM   8522  CB  ALA X 543      24.840  -5.151  15.030  1.00  0.00
C
ATOM   8523  H   ALA X 543      23.213  -3.099  14.738  1.00  0.00
H
ATOM   8524  HA  ALA X 543      24.826  -4.799  12.922  1.00  0.00
H
ATOM   8525 1HB  ALA X 543      25.233  -6.163  14.935  1.00  0.00
H
ATOM   8526 2HB  ALA X 543      25.662  -4.457  15.204  1.00  0.00
H
ATOM   8527 3HB  ALA X 543      24.144  -5.109  15.867  1.00  0.00
H
ATOM   8528  N   ILE X 544      21.921  -5.695  14.190  1.00  0.00
N
ATOM   8529  CA  ILE X 544      20.818  -6.646  14.060  1.00  0.00
C
ATOM   8530  C   ILE X 544      19.964  -6.524  12.801  1.00  0.00
C
ATOM   8531  O   ILE X 544      19.684  -7.527  12.138  1.00  0.00
O
ATOM   8532  CB  ILE X 544      19.847  -6.551  15.249  1.00  0.00
C
ATOM   8533  CG1 ILE X 544      20.542  -6.982  16.544  1.00  0.00
C
ATOM   8534  CG2 ILE X 544      18.611  -7.401  14.996  1.00  0.00
C
ATOM   8535  CD1 ILE X 544      19.751  -6.674  17.795  1.00  0.00
C
ATOM   8536  H   ILE X 544      21.851  -4.955  14.874  1.00  0.00
H
ATOM   8537  HA  ILE X 544      21.197  -7.664  13.981  1.00  0.00
H
ATOM   8538  HB  ILE X 544      19.551  -5.511  15.385  1.00  0.00
H
ATOM   8539 1HG1 ILE X 544      20.713  -8.057  16.477  1.00  0.00
H
ATOM   8540 2HG1 ILE X 544      21.501  -6.466  16.583  1.00  0.00
H
ATOM   8541 1HG2 ILE X 544      17.935  -7.322  15.848  1.00  0.00
H
ATOM   8542 2HG2 ILE X 544      18.104  -7.049  14.099  1.00  0.00
H
ATOM   8543 3HG2 ILE X 544      18.906  -8.441  14.863  1.00  0.00
H
ATOM   8544 1HD1 ILE X 544      20.308  -7.009  18.670  1.00  0.00
H
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ATOM   8545 2HD1 ILE X 544      19.582  -5.599  17.863  1.00  0.00
H
ATOM   8546 3HD1 ILE X 544      18.794  -7.191  17.756  1.00  0.00
H
ATOM   8547  N   SER X 545      19.546  -5.310  12.468  1.00  0.00
N
ATOM   8548  CA  SER X 545      18.700  -5.099  11.296  1.00  0.00
C
ATOM   8549  C   SER X 545      19.320  -5.608   9.984  1.00  0.00
C
ATOM   8550  O   SER X 545      18.726  -6.440   9.292  1.00  0.00
O
ATOM   8551  CB  SER X 545      18.373  -3.626  11.146  1.00  0.00
C
ATOM   8552  OG  SER X 545      17.629  -3.367   9.988  1.00  0.00
O
ATOM   8553  H   SER X 545      19.817  -4.519  13.035  1.00  0.00
H
ATOM   8554  HA  SER X 545      17.704  -5.533  11.396  1.00  0.00
H
ATOM   8555 1HB  SER X 545      17.799  -3.306  12.016  1.00  0.00
H
ATOM   8556 2HB  SER X 545      19.306  -3.064  11.102  1.00  0.00
H
ATOM   8557  HG  SER X 545      18.130  -3.641   9.216  1.00  0.00
H
ATOM   8558  N   PRO X 546      20.521  -5.128   9.625  1.00  0.00
N
ATOM   8559  CA  PRO X 546      21.125  -5.603   8.375  1.00  0.00
C
ATOM   8560  C   PRO X 546      21.374  -7.114   8.343  1.00  0.00
C
ATOM   8561  O   PRO X 546      21.265  -7.745   7.292  1.00  0.00
O
ATOM   8562  CB  PRO X 546      22.450  -4.827   8.278  1.00  0.00
C
ATOM   8563  CG  PRO X 546      22.203  -3.546   9.026  1.00  0.00
C
ATOM   8564  CD  PRO X 546      21.400  -4.195  10.335  1.00  0.00
C
ATOM   8565  HA  PRO X 546      20.531  -5.390   7.604  1.00  0.00
H
ATOM   8566 1HB  PRO X 546      22.989  -5.342   8.810  1.00  0.00
H
ATOM   8567 2HB  PRO X 546      22.472  -4.638   7.434  1.00  0.00
H
ATOM   8568 1HG  PRO X 546      22.217  -3.712   9.857  1.00  0.00
H
ATOM   8569 2HG  PRO X 546      22.573  -2.848   8.520  1.00  0.00
H
ATOM   8570 1HD  PRO X 546      21.369  -4.500  11.237  1.00  0.00
H
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ATOM   8571 2HD  PRO X 546      21.009  -3.348  10.140  1.00  0.00
H
ATOM   8572  N   LEU X 547      21.706  -7.689   9.493  1.00  0.00
N
ATOM   8573  CA  LEU X 547      21.954  -9.128   9.563  1.00  0.00
C
ATOM   8574  C   LEU X 547      20.656  -9.865   9.253  1.00  0.00
C
ATOM   8575  O   LEU X 547      20.622 -10.772   8.423  1.00  0.00
O
ATOM   8576  CB  LEU X 547      22.504  -9.505  10.945  1.00  0.00
C
ATOM   8577  CG  LEU X 547      23.973  -9.136  11.185  1.00  0.00
C
ATOM   8578  CD1 LEU X 547      24.356  -9.435  12.628  1.00  0.00
C
ATOM   8579  CD2 LEU X 547      24.858  -9.910  10.220  1.00  0.00
C
ATOM   8580  H   LEU X 547      21.788  -7.127  10.328  1.00  0.00
H
ATOM   8581  HA  LEU X 547      22.683  -9.409   8.804  1.00  0.00
H
ATOM   8582 1HB  LEU X 547      21.856  -8.888  11.566  1.00  0.00
H
ATOM   8583 2HB  LEU X 547      22.332 -10.557  11.174  1.00  0.00
H
ATOM   8584  HG  LEU X 547      24.082  -8.075  10.958  1.00  0.00
H
ATOM   8585 1HD1 LEU X 547      25.400  -9.169  12.791  1.00  0.00
H
ATOM   8586 2HD1 LEU X 547      23.726  -8.852  13.300  1.00  0.00
H
ATOM   8587 3HD1 LEU X 547      24.217 -10.496  12.830  1.00  0.00
H
ATOM   8588 1HD2 LEU X 547      25.901  -9.647  10.392  1.00  0.00
H
ATOM   8589 2HD2 LEU X 547      24.721 -10.981  10.381  1.00  0.00
H
ATOM   8590 3HD2 LEU X 547      24.584  -9.661   9.195  1.00  0.00
H
ATOM   8591  N   PHE X 548      19.590  -9.452   9.928  1.00  0.00
N
ATOM   8592  CA  PHE X 548      18.266 -10.036   9.758  1.00  0.00
C
ATOM   8593  C   PHE X 548      17.825  -9.941   8.298  1.00  0.00
C
ATOM   8594  O   PHE X 548      17.387 -10.929   7.702  1.00  0.00
O
ATOM   8595  CB  PHE X 548      17.256  -9.341  10.672  1.00  0.00
C
ATOM   8596  CG  PHE X 548      15.868  -9.912  10.585  1.00  0.00
C
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ATOM   8597  CD1 PHE X 548      15.480 -10.958  11.408  1.00  0.00
C
ATOM   8598  CD2 PHE X 548      14.949  -9.404   9.679  1.00  0.00
C
ATOM   8599  CE1 PHE X 548      14.204 -11.484  11.328  1.00  0.00
C
ATOM   8600  CE2 PHE X 548      13.673  -9.926   9.598  1.00  0.00
C
ATOM   8601  CZ  PHE X 548      13.300 -10.968  10.424  1.00  0.00
C
ATOM   8602  H   PHE X 548      19.702  -8.698  10.590  1.00  0.00
H
ATOM   8603  HA  PHE X 548      18.294 -11.097  10.013  1.00  0.00
H
ATOM   8604 1HB  PHE X 548      17.565  -9.433  11.712  1.00  0.00
H
ATOM   8605 2HB  PHE X 548      17.175  -8.288  10.408  1.00  0.00
H
ATOM   8606  HD1 PHE X 548      16.194 -11.366  12.123  1.00  0.00
H
ATOM   8607  HD2 PHE X 548      15.244  -8.580   9.027  1.00  0.00
H
ATOM   8608  HE1 PHE X 548      13.913 -12.306  11.980  1.00  0.00
H
ATOM   8609  HE2 PHE X 548      12.960  -9.517   8.883  1.00  0.00
H
ATOM   8610  HZ  PHE X 548      12.296 -11.382  10.360  1.00  0.00
H
ATOM   8611  N   LEU X 549      17.951  -8.749   7.724  1.00  0.00
N
ATOM   8612  CA  LEU X 549      17.561  -8.514   6.339  1.00  0.00
C
ATOM   8613  C   LEU X 549      18.264  -9.457   5.363  1.00  0.00
C
ATOM   8614  O   LEU X 549      17.613 -10.095   4.536  1.00  0.00
O
ATOM   8615  CB  LEU X 549      17.851  -7.059   5.947  1.00  0.00
C
ATOM   8616  CG  LEU X 549      16.937  -6.013   6.598  1.00  0.00
C
ATOM   8617  CD1 LEU X 549      17.496  -4.616   6.369  1.00  0.00
C
ATOM   8618  CD2 LEU X 549      15.535  -6.134   6.022  1.00  0.00
C
ATOM   8619  H   LEU X 549      18.328  -7.983   8.263  1.00  0.00
H
ATOM   8620  HA  LEU X 549      16.496  -8.707   6.222  1.00  0.00
H
ATOM   8621 1HB  LEU X 549      18.863  -6.968   6.339  1.00  0.00
H
ATOM   8622 2HB  LEU X 549      17.869  -6.929   4.864  1.00  0.00
H
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ATOM   8623  HG  LEU X 549      16.882  -6.248   7.661  1.00  0.00
H
ATOM   8624 1HD1 LEU X 549      16.840  -3.880   6.833  1.00  0.00
H
ATOM   8625 2HD1 LEU X 549      18.491  -4.545   6.808  1.00  0.00
H
ATOM   8626 3HD1 LEU X 549      17.557  -4.420   5.298  1.00  0.00
H
ATOM   8627 1HD2 LEU X 549      14.885  -5.392   6.486  1.00  0.00
H
ATOM   8628 2HD2 LEU X 549      15.566  -5.968   4.945  1.00  0.00
H
ATOM   8629 3HD2 LEU X 549      15.142  -7.133   6.223  1.00  0.00
H
ATOM   8630  N   LEU X 550      19.589  -9.545   5.459  1.00  0.00
N
ATOM   8631  CA  LEU X 550      20.342 -10.418   4.570  1.00  0.00
C
ATOM   8632  C   LEU X 550      19.982 -11.879   4.829  1.00  0.00
C
ATOM   8633  O   LEU X 550      19.905 -12.679   3.901  1.00  0.00
O
ATOM   8634  CB  LEU X 550      21.847 -10.187   4.750  1.00  0.00
C
ATOM   8635  CG  LEU X 550      22.750 -11.004   3.815  1.00  0.00
C
ATOM   8636  CD1 LEU X 550      22.398 -10.710   2.363  1.00  0.00
C
ATOM   8637  CD2 LEU X 550      24.207 -10.670   4.095  1.00  0.00
C
ATOM   8638  H   LEU X 550      20.077  -9.001   6.156  1.00  0.00
H
ATOM   8639  HA  LEU X 550      20.073 -10.206   3.536  1.00  0.00
H
ATOM   8640 1HB  LEU X 550      21.897  -9.132   4.489  1.00  0.00
H
ATOM   8641 2HB  LEU X 550      22.155 -10.320   5.786  1.00  0.00
H
ATOM   8642  HG  LEU X 550      22.596 -12.056   4.055  1.00  0.00
H
ATOM   8643 1HD1 LEU X 550      23.044 -11.294   1.707  1.00  0.00
H
ATOM   8644 2HD1 LEU X 550      21.357 -10.978   2.179  1.00  0.00
H
ATOM   8645 3HD1 LEU X 550      22.542  -9.648   2.162  1.00  0.00
H
ATOM   8646 1HD2 LEU X 550      24.847 -11.251   3.431  1.00  0.00
H
ATOM   8647 2HD2 LEU X 550      24.376  -9.607   3.926  1.00  0.00
H
ATOM   8648 3HD2 LEU X 550      24.444 -10.914   5.131  1.00  0.00
H
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ATOM   8649  N   PHE X 551      19.758 -12.216   6.095  1.00  0.00
N
ATOM   8650  CA  PHE X 551      19.404 -13.581   6.461  1.00  0.00
C
ATOM   8651  C   PHE X 551      18.166 -14.021   5.682  1.00  0.00
C
ATOM   8652  O   PHE X 551      18.158 -15.086   5.058  1.00  0.00
O
ATOM   8653  CB  PHE X 551      19.164 -13.684   7.969  1.00  0.00
C
ATOM   8654  CG  PHE X 551      18.412 -14.919   8.379  1.00  0.00
C
ATOM   8655  CD1 PHE X 551      19.013 -16.167   8.315  1.00  0.00
C
ATOM   8656  CD2 PHE X 551      17.104 -14.833   8.832  1.00  0.00
C
ATOM   8657  CE1 PHE X 551      18.322 -17.303   8.693  1.00  0.00
C
ATOM   8658  CE2 PHE X 551      16.413 -15.968   9.211  1.00  0.00
C
ATOM   8659  CZ  PHE X 551      17.022 -17.204   9.141  1.00  0.00
C
ATOM   8660  H   PHE X 551      19.836 -11.514   6.817  1.00  0.00
H
ATOM   8661  HA  PHE X 551      20.214 -14.259   6.190  1.00  0.00
H
ATOM   8662 1HB  PHE X 551      20.114 -13.707   8.500  1.00  0.00
H
ATOM   8663 2HB  PHE X 551      18.577 -12.833   8.313  1.00  0.00
H
ATOM   8664  HD1 PHE X 551      20.041 -16.245   7.961  1.00  0.00
H
ATOM   8665  HD2 PHE X 551      16.622 -13.857   8.888  1.00  0.00
H
ATOM   8666  HE1 PHE X 551      18.806 -18.279   8.635  1.00  0.00
H
ATOM   8667  HE2 PHE X 551      15.384 -15.887   9.565  1.00  0.00
H
ATOM   8668  HZ  PHE X 551      16.477 -18.099   9.438  1.00  0.00
H
ATOM   8669  N   ILE X 552      17.133 -13.192   5.716  1.00  0.00
N
ATOM   8670  CA  ILE X 552      15.883 -13.478   5.019  1.00  0.00
C
ATOM   8671  C   ILE X 552      16.105 -13.564   3.513  1.00  0.00
C
ATOM   8672  O   ILE X 552      15.558 -14.443   2.847  1.00  0.00
O
ATOM   8673  CB  ILE X 552      14.814 -12.409   5.313  1.00  0.00
C
ATOM   8674  CG1 ILE X 552      14.520 -12.347   6.814  1.00  0.00
C
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ATOM   8675  CG2 ILE X 552      13.543 -12.699   4.531  1.00  0.00
C
ATOM   8676  CD1 ILE X 552      13.999 -13.644   7.389  1.00  0.00
C
ATOM   8677  H   ILE X 552      17.213 -12.333   6.242  1.00  0.00
H
ATOM   8678  HA  ILE X 552      15.503 -14.459   5.300  1.00  0.00
H
ATOM   8679  HB  ILE X 552      15.202 -11.432   5.029  1.00  0.00
H
ATOM   8680 1HG1 ILE X 552      15.449 -12.077   7.316  1.00  0.00
H
ATOM   8681 2HG1 ILE X 552      13.783 -11.560   6.969  1.00  0.00
H
ATOM   8682 1HG2 ILE X 552      12.797 -11.935   4.751  1.00  0.00
H
ATOM   8683 2HG2 ILE X 552      13.763 -12.694   3.463  1.00  0.00
H
ATOM   8684 3HG2 ILE X 552      13.154 -13.677   4.816  1.00  0.00
H
ATOM   8685 1HD1 ILE X 552      13.813 -13.524   8.456  1.00  0.00
H
ATOM   8686 2HD1 ILE X 552      13.067 -13.916   6.889  1.00  0.00
H
ATOM   8687 3HD1 ILE X 552      14.733 -14.433   7.237  1.00  0.00
H
ATOM   8688  N   ILE X 553      16.907 -12.650   2.982  1.00  0.00
N
ATOM   8689  CA  ILE X 553      17.192 -12.620   1.554  1.00  0.00
C
ATOM   8690  C   ILE X 553      17.832 -13.913   1.053  1.00  0.00
C
ATOM   8691  O   ILE X 553      17.454 -14.429  -0.001  1.00  0.00
O
ATOM   8692  CB  ILE X 553      18.123 -11.450   1.189  1.00  0.00
C
ATOM   8693  CG1 ILE X 553      17.390 -10.115   1.350  1.00  0.00
C
ATOM   8694  CG2 ILE X 553      18.642 -11.607  -0.232  1.00  0.00
C
ATOM   8695  CD1 ILE X 553      18.301  -8.910   1.315  1.00  0.00
C
ATOM   8696  H   ILE X 553      17.329 -11.956   3.582  1.00  0.00
H
ATOM   8697  HA  ILE X 553      16.270 -12.544   0.979  1.00  0.00
H
ATOM   8698  HB  ILE X 553      18.962 -11.433   1.882  1.00  0.00
H
ATOM   8699 1HG1 ILE X 553      16.662 -10.045   0.543  1.00  0.00
H
ATOM   8700 2HG1 ILE X 553      16.867 -10.147   2.306  1.00  0.00
H
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ATOM   8701 1HG2 ILE X 553      19.296 -10.771  -0.476  1.00  0.00
H
ATOM   8702 2HG2 ILE X 553      19.197 -12.539  -0.316  1.00  0.00
H
ATOM   8703 3HG2 ILE X 553      17.801 -11.622  -0.927  1.00  0.00
H
ATOM   8704 1HD1 ILE X 553      17.709  -8.001   1.436  1.00  0.00
H
ATOM   8705 2HD1 ILE X 553      19.029  -8.979   2.124  1.00  0.00
H
ATOM   8706 3HD1 ILE X 553      18.823  -8.876   0.359  1.00  0.00
H
ATOM   8707  N   CYS X 554      18.798 -14.437   1.802  1.00  0.00
N
ATOM   8708  CA  CYS X 554      19.468 -15.671   1.411  1.00  0.00
C
ATOM   8709  C   CYS X 554      18.540 -16.865   1.616  1.00  0.00
C
ATOM   8710  O   CYS X 554      18.342 -17.668   0.705  1.00  0.00
O
ATOM   8711  CB  CYS X 554      20.655 -15.729   2.372  1.00  0.00
C
ATOM   8712  SG  CYS X 554      21.916 -14.463   2.084  1.00  0.00
S
ATOM   8713  H   CYS X 554      19.072 -13.972   2.656  1.00  0.00
H
ATOM   8714  HA  CYS X 554      19.845 -15.654   0.389  1.00  0.00
H
ATOM   8715 1HB  CYS X 554      20.317 -15.590   3.399  1.00  0.00
H
ATOM   8716 2HB  CYS X 554      21.166 -16.687   2.282  1.00  0.00
H
ATOM   8717  HG  CYS X 554      22.721 -14.842   3.071  1.00  0.00
H
ATOM   8718  N   SER X 555      17.979 -16.975   2.812  1.00  0.00
N
ATOM   8719  CA  SER X 555      17.071 -18.067   3.130  1.00  0.00
C
ATOM   8720  C   SER X 555      15.923 -18.106   2.130  1.00  0.00
C
ATOM   8721  O   SER X 555      15.335 -19.160   1.882  1.00  0.00
O
ATOM   8722  CB  SER X 555      16.551 -17.917   4.546  1.00  0.00
C
ATOM   8723  OG  SER X 555      15.714 -16.801   4.685  1.00  0.00
O
ATOM   8724  H   SER X 555      18.185 -16.283   3.519  1.00  0.00
H
ATOM   8725  HA  SER X 555      17.565 -19.039   3.182  1.00  0.00
H
ATOM   8726 1HB  SER X 555      15.991 -18.815   4.808  1.00  0.00
H
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ATOM   8727 2HB  SER X 555      17.399 -17.809   5.221  1.00  0.00
H
ATOM   8728  HG  SER X 555      14.960 -16.891   4.098  1.00  0.00
H
ATOM   8729  N   PHE X 556      15.612 -16.953   1.548  1.00  0.00
N
ATOM   8730  CA  PHE X 556      14.534 -16.850   0.573  1.00  0.00
C
ATOM   8731  C   PHE X 556      14.935 -17.518  -0.735  1.00  0.00
C
ATOM   8732  O   PHE X 556      14.092 -18.036  -1.470  1.00  0.00
O
ATOM   8733  CB  PHE X 556      14.166 -15.385   0.335  1.00  0.00
C
ATOM   8734  CG  PHE X 556      13.031 -15.192  -0.630  1.00  0.00
C
ATOM   8735  CD1 PHE X 556      11.727 -15.478  -0.253  1.00  0.00
C
ATOM   8736  CD2 PHE X 556      13.265 -14.730  -1.915  1.00  0.00
C
ATOM   8737  CE1 PHE X 556      10.681 -15.303  -1.141  1.00  0.00
C
ATOM   8738  CE2 PHE X 556      12.223 -14.552  -2.804  1.00  0.00
C
ATOM   8739  CZ  PHE X 556      10.929 -14.840  -2.415  1.00  0.00
C
ATOM   8740  H   PHE X 556      16.138 -16.124   1.787  1.00  0.00
H
ATOM   8741  HA  PHE X 556      13.652 -17.376   0.940  1.00  0.00
H
ATOM   8742 1HB  PHE X 556      13.861 -14.918   1.272  1.00  0.00
H
ATOM   8743 2HB  PHE X 556      15.019 -14.846  -0.076  1.00  0.00
H
ATOM   8744  HD1 PHE X 556      11.531 -15.842   0.756  1.00  0.00
H
ATOM   8745  HD2 PHE X 556      14.286 -14.503  -2.222  1.00  0.00
H
ATOM   8746  HE1 PHE X 556       9.661 -15.530  -0.831  1.00  0.00
H
ATOM   8747  HE2 PHE X 556      12.420 -14.187  -3.811  1.00  0.00
H
ATOM   8748  HZ  PHE X 556      10.106 -14.702  -3.115  1.00  0.00
H
ATOM   8749  N   LEU X 557      16.233 -17.503  -1.022  1.00  0.00
N
ATOM   8750  CA  LEU X 557      16.758 -18.089  -2.246  1.00  0.00
C
ATOM   8751  C   LEU X 557      17.615 -19.327  -1.993  1.00  0.00
C
ATOM   8752  O   LEU X 557      18.424 -19.703  -2.837  1.00  0.00
O
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ATOM   8753  CB  LEU X 557      17.579 -17.050  -3.022  1.00  0.00
C
ATOM   8754  CG  LEU X 557      16.805 -15.799  -3.456  1.00  0.00
C
ATOM   8755  CD1 LEU X 557      17.736 -14.833  -4.176  1.00  0.00
C
ATOM   8756  CD2 LEU X 557      15.646 -16.204  -4.357  1.00  0.00
C
ATOM   8757  H   LEU X 557      16.874 -17.072  -0.370  1.00  0.00
H
ATOM   8758  HA  LEU X 557      15.933 -18.425  -2.874  1.00  0.00
H
ATOM   8759 1HB  LEU X 557      18.308 -16.792  -2.255  1.00  0.00
H
ATOM   8760 2HB  LEU X 557      18.091 -17.496  -3.874  1.00  0.00
H
ATOM   8761  HG  LEU X 557      16.386 -15.349  -2.557  1.00  0.00
H
ATOM   8762 1HD1 LEU X 557      17.179 -13.947  -4.480  1.00  0.00
H
ATOM   8763 2HD1 LEU X 557      18.544 -14.538  -3.505  1.00  0.00
H
ATOM   8764 3HD1 LEU X 557      18.154 -15.318  -5.056  1.00  0.00
H
ATOM   8765 1HD2 LEU X 557      15.098 -15.314  -4.664  1.00  0.00
H
ATOM   8766 2HD2 LEU X 557      16.034 -16.715  -5.239  1.00  0.00
H
ATOM   8767 3HD2 LEU X 557      14.979 -16.872  -3.814  1.00  0.00
H
ATOM   8768  N   MET X 558      17.425 -19.962  -0.841  1.00  0.00
N
ATOM   8769  CA  MET X 558      18.197 -21.142  -0.482  1.00  0.00
C
ATOM   8770  C   MET X 558      17.712 -22.373  -1.235  1.00  0.00
C
ATOM   8771  O   MET X 558      18.506 -23.113  -1.814  1.00  0.00
O
ATOM   8772  CB  MET X 558      18.122 -21.382   1.025  1.00  0.00
C
ATOM   8773  CG  MET X 558      19.136 -20.591   1.840  1.00  0.00
C
ATOM   8774  SD  MET X 558      20.840 -20.997   1.414  1.00  0.00
S
ATOM   8775  CE  MET X 558      20.965 -22.661   2.060  1.00  0.00
C
ATOM   8776  H   MET X 558      16.727 -19.617  -0.199  1.00  0.00
H
ATOM   8777  HA  MET X 558      19.241 -21.001  -0.762  1.00  0.00
H
ATOM   8778 1HB  MET X 558      17.115 -21.114   1.339  1.00  0.00
H
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ATOM   8779 2HB  MET X 558      18.282 -22.449   1.183  1.00  0.00
H
ATOM   8780 1HG  MET X 558      18.963 -19.530   1.659  1.00  0.00
H
ATOM   8781 2HG  MET X 558      18.968 -20.811   2.895  1.00  0.00
H
ATOM   8782 1HE  MET X 558      21.965 -23.051   1.872  1.00  0.00
H
ATOM   8783 2HE  MET X 558      20.774 -22.649   3.134  1.00  0.00
H
ATOM   8784 3HE  MET X 558      20.229 -23.298   1.569  1.00  0.00
H
ATOM   8785  N   SER X 559      16.401 -22.589  -1.220  1.00  0.00
N
ATOM   8786  CA  SER X 559      15.805 -23.739  -1.889  1.00  0.00
C
ATOM   8787  C   SER X 559      15.550 -23.452  -3.364  1.00  0.00
C
ATOM   8788  O   SER X 559      15.942 -24.230  -4.232  1.00  0.00
O
ATOM   8789  CB  SER X 559      14.514 -24.134  -1.198  1.00  0.00
C
ATOM   8790  OG  SER X 559      14.747 -24.830  -0.005  1.00  0.00
O
ATOM   8791  H   SER X 559      15.801 -21.939  -0.732  1.00  0.00
H
ATOM   8792  HA  SER X 559      16.393 -24.652  -1.786  1.00  0.00
H
ATOM   8793 1HB  SER X 559      13.948 -23.230  -0.978  1.00  0.00
H
ATOM   8794 2HB  SER X 559      13.937 -24.767  -1.872  1.00  0.00
H
ATOM   8795  HG  SER X 559      15.250 -24.274   0.595  1.00  0.00
H
ATOM   8796  N   PRO X 560      14.898 -22.327  -3.638  1.00  0.00
N
ATOM   8797  CA  PRO X 560      14.598 -21.932  -5.007  1.00  0.00
C
ATOM   8798  C   PRO X 560      15.834 -21.378  -5.704  1.00  0.00
C
ATOM   8799  O   PRO X 560      16.822 -21.030  -5.053  1.00  0.00
O
ATOM   8800  CB  PRO X 560      13.494 -20.872  -4.860  1.00  0.00
C
ATOM   8801  CG  PRO X 560      13.754 -20.223  -3.529  1.00  0.00
C
ATOM   8802  CD  PRO X 560      14.134 -21.546  -2.654  1.00  0.00
C
ATOM   8803  HA  PRO X 560      14.270 -22.717  -5.526  1.00  0.00
H
ATOM   8804 1HB  PRO X 560      13.748 -20.273  -5.500  1.00  0.00
H
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ATOM   8805 2HB  PRO X 560      12.793 -21.374  -4.775  1.00  0.00
H
ATOM   8806 1HG  PRO X 560      14.417 -19.702  -3.609  1.00  0.00
H
ATOM   8807 2HG  PRO X 560      12.928 -20.127  -3.096  1.00  0.00
H
ATOM   8808 1HD  PRO X 560      14.785 -21.303  -2.000  1.00  0.00
H
ATOM   8809 2HD  PRO X 560      13.446 -22.151  -2.391  1.00  0.00
H
ATOM   8810  N   PRO X 561      15.775 -21.293  -7.027  1.00  0.00
N
ATOM   8811  CA  PRO X 561      16.881 -20.765  -7.815  1.00  0.00
C
ATOM   8812  C   PRO X 561      17.157 -19.304  -7.463  1.00  0.00
C
ATOM   8813  O   PRO X 561      16.382 -18.673  -6.745  1.00  0.00
O
ATOM   8814  CB  PRO X 561      16.418 -20.934  -9.273  1.00  0.00
C
ATOM   8815  CG  PRO X 561      15.352 -21.993  -9.220  1.00  0.00
C
ATOM   8816  CD  PRO X 561      14.638 -21.696  -7.865  1.00  0.00
C
ATOM   8817  HA  PRO X 561      17.708 -21.293  -7.643  1.00  0.00
H
ATOM   8818 1HB  PRO X 561      15.991 -20.137  -9.408  1.00  0.00
H
ATOM   8819 2HB  PRO X 561      17.123 -21.288  -9.630  1.00  0.00
H
ATOM   8820 1HG  PRO X 561      14.646 -21.647  -8.904  1.00  0.00
H
ATOM   8821 2HG  PRO X 561      15.498 -22.576  -9.939  1.00  0.00
H
ATOM   8822 1HD  PRO X 561      13.882 -21.326  -7.418  1.00  0.00
H
ATOM   8823 2HD  PRO X 561      14.718 -22.644  -7.891  1.00  0.00
H
ATOM   8824  N   GLN X 562      18.264 -18.778  -7.975  1.00  0.00
N
ATOM   8825  CA  GLN X 562      18.559 -17.356  -7.854  1.00  0.00
C
ATOM   8826  C   GLN X 562      17.545 -16.513  -8.612  1.00  0.00
C
ATOM   8827  O   GLN X 562      17.527 -16.505  -9.845  1.00  0.00
O
ATOM   8828  CB  GLN X 562      19.970 -17.056  -8.373  1.00  0.00
C
ATOM   8829  CG  GLN X 562      20.400 -15.609  -8.203  1.00  0.00
C
ATOM   8830  CD  GLN X 562      21.823 -15.370  -8.669  1.00  0.00
C
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ATOM   8831  NE2 GLN X 562      22.305 -14.145  -8.496  1.00  0.00
N
ATOM   8832  OE1 GLN X 562      22.486 -16.281  -9.174  1.00  0.00
O
ATOM   8833  H   GLN X 562      18.915 -19.377  -8.462  1.00  0.00
H
ATOM   8834  HA  GLN X 562      18.490 -17.057  -6.808  1.00  0.00
H
ATOM   8835 1HB  GLN X 562      20.649 -17.711  -7.830  1.00  0.00
H
ATOM   8836 2HB  GLN X 562      19.978 -17.321  -9.430  1.00  0.00
H
ATOM   8837 1HG  GLN X 562      19.793 -14.770  -8.540  1.00  0.00
H
ATOM   8838 2HG  GLN X 562      20.395 -15.645  -7.112  1.00  0.00
H
ATOM   8839 1HE2 GLN X 562      23.238 -13.928  -8.784  1.00  0.00
H
ATOM   8840 2HE2 GLN X 562      21.734 -13.438  -8.080  1.00  0.00
H
ATOM   8841  N   LEU X 563      16.700 -15.806  -7.872  1.00  0.00
N
ATOM   8842  CA  LEU X 563      15.648 -14.995  -8.473  1.00  0.00
C
ATOM   8843  C   LEU X 563      16.128 -13.572  -8.731  1.00  0.00
C
ATOM   8844  O   LEU X 563      15.387 -12.745  -9.266  1.00  0.00
O
ATOM   8845  CB  LEU X 563      14.408 -14.985  -7.572  1.00  0.00
C
ATOM   8846  CG  LEU X 563      13.779 -16.360  -7.311  1.00  0.00
C
ATOM   8847  CD1 LEU X 563      12.588 -16.219  -6.372  1.00  0.00
C
ATOM   8848  CD2 LEU X 563      13.353 -16.984  -8.632  1.00  0.00
C
ATOM   8849  H   LEU X 563      16.789 -15.830  -6.866  1.00  0.00
H
ATOM   8850  HA  LEU X 563      15.377 -15.410  -9.443  1.00  0.00
H
ATOM   8851 1HB  LEU X 563      14.855 -14.599  -6.658  1.00  0.00
H
ATOM   8852 2HB  LEU X 563      13.654 -14.284  -7.931  1.00  0.00
H
ATOM   8853  HG  LEU X 563      14.552 -16.993  -6.877  1.00  0.00
H
ATOM   8854 1HD1 LEU X 563      12.149 -17.201  -6.193  1.00  0.00
H
ATOM   8855 2HD1 LEU X 563      12.920 -15.794  -5.425  1.00  0.00
H
ATOM   8856 3HD1 LEU X 563      11.844 -15.565  -6.824  1.00  0.00
H
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ATOM   8857 1HD2 LEU X 563      12.907 -17.961  -8.445  1.00  0.00
H
ATOM   8858 2HD2 LEU X 563      12.622 -16.339  -9.122  1.00  0.00
H
ATOM   8859 3HD2 LEU X 563      14.223 -17.100  -9.277  1.00  0.00
H
ATOM   8860  N   ARG X 564      17.370 -13.292  -8.349  1.00  0.00
N
ATOM   8861  CA  ARG X 564      17.968 -11.986  -8.587  1.00  0.00
C
ATOM   8862  C   ARG X 564      18.227 -11.760 -10.074  1.00  0.00
C
ATOM   8863  O   ARG X 564      18.430 -10.629 -10.512  1.00  0.00
O
ATOM   8864  CB  ARG X 564      19.229 -11.773  -7.763  1.00  0.00
C
ATOM   8865  CG  ARG X 564      19.006 -11.701  -6.260  1.00  0.00
C
ATOM   8866  CD  ARG X 564      20.244 -11.481  -5.468  1.00  0.00
C
ATOM   8867  NE  ARG X 564      21.208 -12.567  -5.542  1.00  0.00
N
ATOM   8868  CZ  ARG X 564      22.406 -12.569  -4.928  1.00  0.00
C
ATOM   8869  NH1 ARG X 564      22.810 -11.534  -4.225  1.00  0.00
N
ATOM   8870  NH2 ARG X 564      23.180 -13.632  -5.070  1.00  0.00
N
ATOM   8871  H   ARG X 564      17.912 -14.003  -7.881  1.00  0.00
H
ATOM   8872  HA  ARG X 564      17.281 -11.202  -8.269  1.00  0.00
H
ATOM   8873 1HB  ARG X 564      19.900 -12.601  -7.988  1.00  0.00
H
ATOM   8874 2HB  ARG X 564      19.677 -10.841  -8.103  1.00  0.00
H
ATOM   8875 1HG  ARG X 564      18.322 -10.879  -6.050  1.00  0.00
H
ATOM   8876 2HG  ARG X 564      18.560 -12.640  -5.932  1.00  0.00
H
ATOM   8877 1HD  ARG X 564      20.739 -10.580  -5.829  1.00  0.00
H
ATOM   8878 2HD  ARG X 564      19.975 -11.353  -4.421  1.00  0.00
H
ATOM   8879  HE  ARG X 564      21.149 -13.449  -6.035  1.00  0.00
H
ATOM   8880 1HH1 ARG X 564      22.215 -10.722  -4.141  1.00  0.00
H
ATOM   8881 2HH1 ARG X 564      23.712 -11.555  -3.772  1.00  0.00
H
ATOM   8882 1HH2 ARG X 564      22.862 -14.413  -5.629  1.00  0.00
H
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ATOM   8883 2HH2 ARG X 564      24.083 -13.659  -4.621  1.00  0.00
H
ATOM   8884  N   LEU X 565      18.214 -12.845 -10.842  1.00  0.00
N
ATOM   8885  CA  LEU X 565      18.538 -12.781 -12.261  1.00  0.00
C
ATOM   8886  C   LEU X 565      17.454 -12.044 -13.040  1.00  0.00
C
ATOM   8887  O   LEU X 565      16.271 -12.136 -12.718  1.00  0.00
O
ATOM   8888  CB  LEU X 565      18.733 -14.193 -12.826  1.00  0.00
C
ATOM   8889  CG  LEU X 565      19.897 -14.984 -12.215  1.00  0.00
C
ATOM   8890  CD1 LEU X 565      19.900 -16.408 -12.754  1.00  0.00
C
ATOM   8891  CD2 LEU X 565      21.210 -14.285 -12.532  1.00  0.00
C
ATOM   8892  H   LEU X 565      17.974 -13.736 -10.432  1.00  0.00
H
ATOM   8893  HA  LEU X 565      19.459 -12.215 -12.400  1.00  0.00
H
ATOM   8894 1HB  LEU X 565      17.784 -14.636 -12.528  1.00  0.00
H
ATOM   8895 2HB  LEU X 565      18.807 -14.187 -13.913  1.00  0.00
H
ATOM   8896  HG  LEU X 565      19.766 -14.970 -11.132  1.00  0.00
H
ATOM   8897 1HD1 LEU X 565      20.730 -16.962 -12.315  1.00  0.00
H
ATOM   8898 2HD1 LEU X 565      18.961 -16.898 -12.496  1.00  0.00
H
ATOM   8899 3HD1 LEU X 565      20.013 -16.387 -13.837  1.00  0.00
H
ATOM   8900 1HD2 LEU X 565      22.037 -14.847 -12.097  1.00  0.00
H
ATOM   8901 2HD2 LEU X 565      21.340 -14.225 -13.614  1.00  0.00
H
ATOM   8902 3HD2 LEU X 565      21.198 -13.278 -12.114  1.00  0.00
H
ATOM   8903  N   PHE X 566      17.867 -11.304 -14.064  1.00  0.00
N
ATOM   8904  CA  PHE X 566      16.945 -10.497 -14.851  1.00  0.00
C
ATOM   8905  C   PHE X 566      16.116 -11.367 -15.788  1.00  0.00
C
ATOM   8906  O   PHE X 566      16.603 -12.365 -16.322  1.00  0.00
O
ATOM   8907  CB  PHE X 566      17.710  -9.441 -15.651  1.00  0.00
C
ATOM   8908  CG  PHE X 566      18.237  -8.311 -14.813  1.00  0.00
C
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ATOM   8909  CD1 PHE X 566      19.565  -8.288 -14.411  1.00  0.00
C
ATOM   8910  CD2 PHE X 566      17.408  -7.269 -14.425  1.00  0.00
C
ATOM   8911  CE1 PHE X 566      20.050  -7.248 -13.641  1.00  0.00
C
ATOM   8912  CE2 PHE X 566      17.892  -6.230 -13.656  1.00  0.00
C
ATOM   8913  CZ  PHE X 566      19.215  -6.219 -13.262  1.00  0.00
C
ATOM   8914  H   PHE X 566      18.848 -11.302 -14.303  1.00  0.00
H
ATOM   8915  HA  PHE X 566      16.239  -9.992 -14.190  1.00  0.00
H
ATOM   8916 1HB  PHE X 566      18.569  -9.892 -16.143  1.00  0.00
H
ATOM   8917 2HB  PHE X 566      17.057  -8.995 -16.399  1.00  0.00
H
ATOM   8918  HD1 PHE X 566      20.225  -9.100 -14.710  1.00  0.00
H
ATOM   8919  HD2 PHE X 566      16.363  -7.277 -14.735  1.00  0.00
H
ATOM   8920  HE1 PHE X 566      21.096  -7.243 -13.332  1.00  0.00
H
ATOM   8921  HE2 PHE X 566      17.230  -5.416 -13.359  1.00  0.00
H
ATOM   8922  HZ  PHE X 566      19.598  -5.400 -12.655  1.00  0.00
H
ATOM   8923  N   GLN X 567      14.858 -10.982 -15.987  1.00  0.00
N
ATOM   8924  CA  GLN X 567      13.946 -11.750 -16.829  1.00  0.00
C
ATOM   8925  C   GLN X 567      14.034 -13.238 -16.517  1.00  0.00
C
ATOM   8926  O   GLN X 567      14.274 -14.055 -17.403  1.00  0.00
O
ATOM   8927  CB  GLN X 567      14.254 -11.511 -18.309  1.00  0.00
C
ATOM   8928  CG  GLN X 567      14.012 -10.087 -18.773  1.00  0.00
C
ATOM   8929  CD  GLN X 567      14.390  -9.881 -20.229  1.00  0.00
C
ATOM   8930  NE2 GLN X 567      14.241  -8.650 -20.708  1.00  0.00
N
ATOM   8931  OE1 GLN X 567      14.814 -10.814 -20.912  1.00  0.00
O
ATOM   8932  H   GLN X 567      14.526 -10.137 -15.545  1.00  0.00
H
ATOM   8933  HA  GLN X 567      12.919 -11.450 -16.622  1.00  0.00
H
ATOM   8934 1HB  GLN X 567      15.301 -11.777 -18.460  1.00  0.00
H
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ATOM   8935 2HB  GLN X 567      13.622 -12.196 -18.875  1.00  0.00
H
ATOM   8936 1HG  GLN X 567      13.076  -9.558 -18.593  1.00  0.00
H
ATOM   8937 2HG  GLN X 567      14.796  -9.657 -18.148  1.00  0.00
H
ATOM   8938 1HE2 GLN X 567      14.474  -8.453 -21.661  1.00  0.00
H
ATOM   8939 2HE2 GLN X 567      13.894  -7.921 -20.118  1.00  0.00
H
ATOM   8940  N   TYR X 568      13.836 -13.586 -15.250  1.00  0.00
N
ATOM   8941  CA  TYR X 568      14.057 -14.949 -14.783  1.00  0.00
C
ATOM   8942  C   TYR X 568      13.272 -15.953 -15.621  1.00  0.00
C
ATOM   8943  O   TYR X 568      12.134 -15.692 -16.008  1.00  0.00
O
ATOM   8944  CB  TYR X 568      13.671 -15.081 -13.309  1.00  0.00
C
ATOM   8945  CG  TYR X 568      13.731 -16.497 -12.781  1.00  0.00
C
ATOM   8946  CD1 TYR X 568      14.945 -17.089 -12.467  1.00  0.00
C
ATOM   8947  CD2 TYR X 568      12.573 -17.236 -12.599  1.00  0.00
C
ATOM   8948  CE1 TYR X 568      15.006 -18.382 -11.986  1.00  0.00
C
ATOM   8949  CE2 TYR X 568      12.621 -18.530 -12.117  1.00  0.00
C
ATOM   8950  CZ  TYR X 568      13.840 -19.101 -11.812  1.00  0.00
C
ATOM   8951  OH  TYR X 568      13.894 -20.389 -11.333  1.00  0.00
O
ATOM   8952  H   TYR X 568      13.523 -12.886 -14.592  1.00  0.00
H
ATOM   8953  HA  TYR X 568      15.111 -15.211 -14.891  1.00  0.00
H
ATOM   8954 1HB  TYR X 568      14.356 -14.451 -12.738  1.00  0.00
H
ATOM   8955 2HB  TYR X 568      12.656 -14.698 -13.205  1.00  0.00
H
ATOM   8956  HD1 TYR X 568      15.862 -16.516 -12.607  1.00  0.00
H
ATOM   8957  HD2 TYR X 568      11.613 -16.781 -12.841  1.00  0.00
H
ATOM   8958  HE1 TYR X 568      15.967 -18.837 -11.744  1.00  0.00
H
ATOM   8959  HE2 TYR X 568      11.699 -19.096 -11.982  1.00  0.00
H
ATOM   8960  HH  TYR X 568      13.027 -20.796 -11.250  1.00  0.00
H
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ATOM   8961  N   ASN X 569      13.888 -17.098 -15.896  1.00  0.00
N
ATOM   8962  CA  ASN X 569      13.220 -18.171 -16.620  1.00  0.00
C
ATOM   8963  C   ASN X 569      12.140 -18.823 -15.767  1.00  0.00
C
ATOM   8964  O   ASN X 569      12.359 -19.875 -15.167  1.00  0.00
O
ATOM   8965  CB  ASN X 569      14.210 -19.216 -17.100  1.00  0.00
C
ATOM   8966  CG  ASN X 569      13.597 -20.275 -17.976  1.00  0.00
C
ATOM   8967  ND2 ASN X 569      14.262 -21.398 -18.052  1.00  0.00
N
ATOM   8968  OD1 ASN X 569      12.497 -20.102 -18.515  1.00  0.00
O
ATOM   8969  H   ASN X 569      14.844 -17.227 -15.596  1.00  0.00
H
ATOM   8970  HA  ASN X 569      12.717 -17.767 -17.500  1.00  0.00
H
ATOM   8971 1HB  ASN X 569      15.174 -18.923 -17.518  1.00  0.00
H
ATOM   8972 2HB  ASN X 569      14.358 -19.628 -16.101  1.00  0.00
H
ATOM   8973 1HD2 ASN X 569      13.914 -22.148 -18.618  1.00  0.00
H
ATOM   8974 2HD2 ASN X 569      15.118 -21.509 -17.548  1.00  0.00
H
ATOM   8975  N   TYR X 570      10.970 -18.192 -15.725  1.00  0.00
N
ATOM   8976  CA  TYR X 570       9.864 -18.655 -14.892  1.00  0.00
C
ATOM   8977  C   TYR X 570       9.031 -19.704 -15.618  1.00  0.00
C
ATOM   8978  O   TYR X 570       8.594 -19.490 -16.746  1.00  0.00
O
ATOM   8979  CB  TYR X 570       8.979 -17.477 -14.474  1.00  0.00
C
ATOM   8980  CG  TYR X 570       8.196 -17.720 -13.204  1.00  0.00
C
ATOM   8981  CD1 TYR X 570       8.783 -17.545 -11.959  1.00  0.00
C
ATOM   8982  CD2 TYR X 570       6.869 -18.123 -13.253  1.00  0.00
C
ATOM   8983  CE1 TYR X 570       8.072 -17.767 -10.796  1.00  0.00
C
ATOM   8984  CE2 TYR X 570       6.149 -18.346 -12.097  1.00  0.00
C
ATOM   8985  CZ  TYR X 570       6.752 -18.167 -10.869  1.00  0.00
C
ATOM   8986  OH  TYR X 570       6.039 -18.387  -9.713  1.00  0.00
O
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ATOM   8987  H   TYR X 570      10.842 -17.364 -16.288  1.00  0.00
H
ATOM   8988  HA  TYR X 570      10.253 -19.134 -13.993  1.00  0.00
H
ATOM   8989 1HB  TYR X 570       9.634 -16.614 -14.338  1.00  0.00
H
ATOM   8990 2HB  TYR X 570       8.290 -17.286 -15.295  1.00  0.00
H
ATOM   8991  HD1 TYR X 570       9.825 -17.230 -11.910  1.00  0.00
H
ATOM   8992  HD2 TYR X 570       6.397 -18.262 -14.225  1.00  0.00
H
ATOM   8993  HE1 TYR X 570       8.546 -17.625  -9.825  1.00  0.00
H
ATOM   8994  HE2 TYR X 570       5.106 -18.662 -12.157  1.00  0.00
H
ATOM   8995  HH  TYR X 570       5.134 -18.661  -9.877  1.00  0.00
H
ATOM   8996  N   PRO X 571       8.816 -20.838 -14.960  1.00  0.00
N
ATOM   8997  CA  PRO X 571       8.142 -21.969 -15.586  1.00  0.00
C
ATOM   8998  C   PRO X 571       6.858 -21.533 -16.281  1.00  0.00
C
ATOM   8999  O   PRO X 571       6.392 -22.187 -17.214  1.00  0.00
O
ATOM   9000  CB  PRO X 571       7.868 -22.935 -14.421  1.00  0.00
C
ATOM   9001  CG  PRO X 571       7.910 -22.076 -13.187  1.00  0.00
C
ATOM   9002  CD  PRO X 571       8.908 -20.984 -13.502  1.00  0.00
C
ATOM   9003  HA  PRO X 571       8.738 -22.390 -16.264  1.00  0.00
H
ATOM   9004 1HB  PRO X 571       6.990 -23.139 -14.570  1.00  0.00
H
ATOM   9005 2HB  PRO X 571       8.590 -23.415 -14.430  1.00  0.00
H
ATOM   9006 1HG  PRO X 571       7.193 -21.628 -13.148  1.00  0.00
H
ATOM   9007 2HG  PRO X 571       8.395 -22.542 -12.535  1.00  0.00
H
ATOM   9008 1HD  PRO X 571       8.644 -20.131 -13.169  1.00  0.00
H
ATOM   9009 2HD  PRO X 571       9.814 -21.248 -13.372  1.00  0.00
H
ATOM   9010  N   TYR X 572       6.287 -20.427 -15.816  1.00  0.00
N
ATOM   9011  CA  TYR X 572       5.021 -19.932 -16.347  1.00  0.00
C
ATOM   9012  C   TYR X 572       5.230 -18.702 -17.221  1.00  0.00
C
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ATOM   9013  O   TYR X 572       5.593 -17.637 -16.726  1.00  0.00
O
ATOM   9014  CB  TYR X 572       4.053 -19.606 -15.207  1.00  0.00
C
ATOM   9015  CG  TYR X 572       3.650 -20.808 -14.383  1.00  0.00
C
ATOM   9016  CD1 TYR X 572       4.388 -21.193 -13.274  1.00  0.00
C
ATOM   9017  CD2 TYR X 572       2.528 -21.555 -14.717  1.00  0.00
C
ATOM   9018  CE1 TYR X 572       4.024 -22.290 -12.517  1.00  0.00
C
ATOM   9019  CE2 TYR X 572       2.155 -22.654 -13.968  1.00  0.00
C
ATOM   9020  CZ  TYR X 572       2.905 -23.018 -12.869  1.00  0.00
C
ATOM   9021  OH  TYR X 572       2.535 -24.112 -12.119  1.00  0.00
O
ATOM   9022  H   TYR X 572       6.742 -19.913 -15.075  1.00  0.00
H
ATOM   9023  HA  TYR X 572       4.565 -20.692 -16.984  1.00  0.00
H
ATOM   9024 1HB  TYR X 572       4.545 -18.875 -14.566  1.00  0.00
H
ATOM   9025 2HB  TYR X 572       3.167 -19.159 -15.656  1.00  0.00
H
ATOM   9026  HD1 TYR X 572       5.270 -20.612 -13.003  1.00  0.00
H
ATOM   9027  HD2 TYR X 572       1.941 -21.262 -15.588  1.00  0.00
H
ATOM   9028  HE1 TYR X 572       4.613 -22.580 -11.649  1.00  0.00
H
ATOM   9029  HE2 TYR X 572       1.271 -23.229 -14.248  1.00  0.00
H
ATOM   9030  HH  TYR X 572       1.745 -24.544 -12.449  1.00  0.00
H
ATOM   9031  N   TRP X 573       4.998 -18.860 -18.517  1.00  0.00
N
ATOM   9032  CA  TRP X 573       5.138 -17.757 -19.460  1.00  0.00
C
ATOM   9033  C   TRP X 573       4.334 -16.542 -19.007  1.00  0.00
C
ATOM   9034  O   TRP X 573       4.761 -15.402 -19.187  1.00  0.00
O
ATOM   9035  CB  TRP X 573       4.693 -18.190 -20.859  1.00  0.00
C
ATOM   9036  CG  TRP X 573       4.785 -17.099 -21.881  1.00  0.00
C
ATOM   9037  CD1 TRP X 573       3.750 -16.401 -22.426  1.00  0.00
C
ATOM   9038  CD2 TRP X 573       5.980 -16.583 -22.483  1.00  0.00
C
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ATOM   9039  CE2 TRP X 573       5.591 -15.572 -23.381  1.00  0.00
C
ATOM   9040  CE3 TRP X 573       7.342 -16.877 -22.346  1.00  0.00
C
ATOM   9041  NE1 TRP X 573       4.222 -15.482 -23.328  1.00  0.00
N
ATOM   9042  CZ2 TRP X 573       6.506 -14.859 -24.138  1.00  0.00
C
ATOM   9043  CZ3 TRP X 573       8.259 -16.161 -23.105  1.00  0.00
C
ATOM   9044  CH2 TRP X 573       7.853 -15.179 -23.975  1.00  0.00
C
ATOM   9045  H   TRP X 573       4.718 -19.768 -18.860  1.00  0.00
H
ATOM   9046  HA  TRP X 573       6.180 -17.442 -19.510  1.00  0.00
H
ATOM   9047 1HB  TRP X 573       5.317 -19.008 -21.216  1.00  0.00
H
ATOM   9048 2HB  TRP X 573       3.651 -18.511 -20.838  1.00  0.00
H
ATOM   9049  HD1 TRP X 573       2.749 -16.658 -22.084  1.00  0.00
H
ATOM   9050  HE1 TRP X 573       3.656 -14.843 -23.868  1.00  0.00
H
ATOM   9051  HE3 TRP X 573       7.719 -17.643 -21.670  1.00  0.00
H
ATOM   9052  HZ2 TRP X 573       6.140 -14.089 -24.817  1.00  0.00
H
ATOM   9053  HZ3 TRP X 573       9.317 -16.400 -22.991  1.00  0.00
H
ATOM   9054  HH2 TRP X 573       8.606 -14.641 -24.551  1.00  0.00
H
ATOM   9055  N   SER X 574       3.170 -16.793 -18.424  1.00  0.00
N
ATOM   9056  CA  SER X 574       2.285 -15.721 -17.983  1.00  0.00
C
ATOM   9057  C   SER X 574       3.014 -14.745 -17.070  1.00  0.00
C
ATOM   9058  O   SER X 574       2.634 -13.580 -16.958  1.00  0.00
O
ATOM   9059  CB  SER X 574       1.074 -16.302 -17.278  1.00  0.00
C
ATOM   9060  OG  SER X 574       1.424 -16.967 -16.096  1.00  0.00
O
ATOM   9061  H   SER X 574       2.889 -17.752 -18.282  1.00  0.00
H
ATOM   9062  HA  SER X 574       1.817 -15.179 -18.807  1.00  0.00
H
ATOM   9063 1HB  SER X 574       0.388 -15.489 -17.038  1.00  0.00
H
ATOM   9064 2HB  SER X 574       0.583 -17.004 -17.948  1.00  0.00
H
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ATOM   9065  HG  SER X 574       0.632 -17.318 -15.682  1.00  0.00
H
ATOM   9066  N   ILE X 575       4.066 -15.226 -16.416  1.00  0.00
N
ATOM   9067  CA  ILE X 575       4.853 -14.396 -15.510  1.00  0.00
C
ATOM   9068  C   ILE X 575       6.067 -13.810 -16.219  1.00  0.00
C
ATOM   9069  O   ILE X 575       6.434 -12.658 -15.989  1.00  0.00
O
ATOM   9070  CB  ILE X 575       5.322 -15.192 -14.278  1.00  0.00
C
ATOM   9071  CG1 ILE X 575       4.117 -15.724 -13.496  1.00  0.00
C
ATOM   9072  CG2 ILE X 575       6.198 -14.327 -13.386  1.00  0.00
C
ATOM   9073  CD1 ILE X 575       3.164 -14.645 -13.035  1.00  0.00
C
ATOM   9074  H   ILE X 575       4.330 -16.192 -16.551  1.00  0.00
H
ATOM   9075  HA  ILE X 575       4.277 -13.531 -15.184  1.00  0.00
H
ATOM   9076  HB  ILE X 575       5.886 -16.062 -14.611  1.00  0.00
H
ATOM   9077 1HG1 ILE X 575       3.589 -16.421 -14.147  1.00  0.00
H
ATOM   9078 2HG1 ILE X 575       4.505 -16.260 -12.630  1.00  0.00
H
ATOM   9079 1HG2 ILE X 575       6.520 -14.905 -12.521  1.00  0.00
H
ATOM   9080 2HG2 ILE X 575       7.072 -13.998 -13.946  1.00  0.00
H
ATOM   9081 3HG2 ILE X 575       5.633 -13.458 -13.051  1.00  0.00
H
ATOM   9082 1HD1 ILE X 575       2.337 -15.098 -12.488  1.00  0.00
H
ATOM   9083 2HD1 ILE X 575       3.690 -13.947 -12.382  1.00  0.00
H
ATOM   9084 3HD1 ILE X 575       2.775 -14.108 -13.899  1.00  0.00
H
ATOM   9085  N   ILE X 576       6.688 -14.611 -17.079  1.00  0.00
N
ATOM   9086  CA  ILE X 576       7.856 -14.167 -17.833  1.00  0.00
C
ATOM   9087  C   ILE X 576       7.578 -12.861 -18.565  1.00  0.00
C
ATOM   9088  O   ILE X 576       8.424 -11.969 -18.613  1.00  0.00
O
ATOM   9089  CB  ILE X 576       8.307 -15.229 -18.855  1.00  0.00
C
ATOM   9090  CG1 ILE X 576       8.907 -16.440 -18.136  1.00  0.00
C
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ATOM   9091  CG2 ILE X 576       9.309 -14.635 -19.832  1.00  0.00
C
ATOM   9092  CD1 ILE X 576       9.224 -17.598 -19.054  1.00  0.00
C
ATOM   9093  H   ILE X 576       6.343 -15.550 -17.215  1.00  0.00
H
ATOM   9094  HA  ILE X 576       8.682 -13.935 -17.161  1.00  0.00
H
ATOM   9095  HB  ILE X 576       7.434 -15.588 -19.400  1.00  0.00
H
ATOM   9096 1HG1 ILE X 576       9.818 -16.104 -17.643  1.00  0.00
H
ATOM   9097 2HG1 ILE X 576       8.185 -16.759 -17.383  1.00  0.00
H
ATOM   9098 1HG2 ILE X 576       9.617 -15.398 -20.545  1.00  0.00
H
ATOM   9099 2HG2 ILE X 576       8.848 -13.804 -20.366  1.00  0.00
H
ATOM   9100 3HG2 ILE X 576      10.180 -14.276 -19.286  1.00  0.00
H
ATOM   9101 1HD1 ILE X 576       9.645 -18.419 -18.472  1.00  0.00
H
ATOM   9102 2HD1 ILE X 576       8.311 -17.935 -19.545  1.00  0.00
H
ATOM   9103 3HD1 ILE X 576       9.945 -17.281 -19.805  1.00  0.00
H
ATOM   9104  N   LEU X 577       6.382 -12.750 -19.134  1.00  0.00
N
ATOM   9105  CA  LEU X 577       5.970 -11.534 -19.825  1.00  0.00
C
ATOM   9106  C   LEU X 577       6.062 -10.324 -18.907  1.00  0.00
C
ATOM   9107  O   LEU X 577       6.560  -9.268 -19.303  1.00  0.00
O
ATOM   9108  CB  LEU X 577       4.542 -11.688 -20.363  1.00  0.00
C
ATOM   9109  CG  LEU X 577       4.001 -10.478 -21.135  1.00  0.00
C
ATOM   9110  CD1 LEU X 577       4.863 -10.215 -22.363  1.00  0.00
C
ATOM   9111  CD2 LEU X 577       2.556 -10.733 -21.536  1.00  0.00
C
ATOM   9112  H   LEU X 577       5.741 -13.529 -19.087  1.00  0.00
H
ATOM   9113  HA  LEU X 577       6.645 -11.343 -20.659  1.00  0.00
H
ATOM   9114 1HB  LEU X 577       4.698 -12.525 -21.043  1.00  0.00
H
ATOM   9115 2HB  LEU X 577       3.844 -11.982 -19.580  1.00  0.00
H
ATOM   9116  HG  LEU X 577       4.013  -9.627 -20.454  1.00  0.00
H
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ATOM   9117 1HD1 LEU X 577       4.471  -9.353 -22.906  1.00  0.00
H
ATOM   9118 2HD1 LEU X 577       5.887 -10.012 -22.053  1.00  0.00
H
ATOM   9119 3HD1 LEU X 577       4.846 -11.089 -23.013  1.00  0.00
H
ATOM   9120 1HD2 LEU X 577       2.173  -9.873 -22.083  1.00  0.00
H
ATOM   9121 2HD2 LEU X 577       2.504 -11.619 -22.168  1.00  0.00
H
ATOM   9122 3HD2 LEU X 577       1.953 -10.890 -20.640  1.00  0.00
H
ATOM   9123  N   GLY X 578       5.581 -10.480 -17.679  1.00  0.00
N
ATOM   9124  CA  GLY X 578       5.669  -9.400 -16.714  1.00  0.00
C
ATOM   9125  C   GLY X 578       7.121  -9.024 -16.437  1.00  0.00
C
ATOM   9126  O   GLY X 578       7.449  -7.847 -16.306  1.00  0.00
O
ATOM   9127  H   GLY X 578       5.151 -11.355 -17.416  1.00  0.00
H
ATOM   9128 1HA  GLY X 578       5.146  -8.528 -17.106  1.00  0.00
H
ATOM   9129 2HA  GLY X 578       5.200  -9.715 -15.783  1.00  0.00
H
ATOM   9130  N   TYR X 579       7.986 -10.027 -16.345  1.00  0.00
N
ATOM   9131  CA  TYR X 579       9.402  -9.771 -16.089  1.00  0.00
C
ATOM   9132  C   TYR X 579       9.997  -8.940 -17.223  1.00  0.00
C
ATOM   9133  O   TYR X 579      10.671  -7.937 -16.988  1.00  0.00
O
ATOM   9134  CB  TYR X 579      10.163 -11.090 -15.927  1.00  0.00
C
ATOM   9135  CG  TYR X 579       9.848 -11.827 -14.645  1.00  0.00
C
ATOM   9136  CD1 TYR X 579       9.210 -11.185 -13.593  1.00  0.00
C
ATOM   9137  CD2 TYR X 579      10.187 -13.163 -14.491  1.00  0.00
C
ATOM   9138  CE1 TYR X 579       8.920 -11.855 -12.419  1.00  0.00
C
ATOM   9139  CE2 TYR X 579       9.901 -13.841 -13.323  1.00  0.00
C
ATOM   9140  CZ  TYR X 579       9.267 -13.184 -12.289  1.00  0.00
C
ATOM   9141  OH  TYR X 579       8.979 -13.856 -11.123  1.00  0.00
O
ATOM   9142  H   TYR X 579       7.662 -10.978 -16.454  1.00  0.00
H
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ATOM   9143  HA  TYR X 579       9.513  -9.189 -15.173  1.00  0.00
H
ATOM   9144 1HB  TYR X 579       9.906 -11.718 -16.781  1.00  0.00
H
ATOM   9145 2HB  TYR X 579      11.227 -10.853 -15.958  1.00  0.00
H
ATOM   9146  HD1 TYR X 579       8.939 -10.135 -13.703  1.00  0.00
H
ATOM   9147  HD2 TYR X 579      10.687 -13.676 -15.311  1.00  0.00
H
ATOM   9148  HE1 TYR X 579       8.420 -11.338 -11.600  1.00  0.00
H
ATOM   9149  HE2 TYR X 579      10.177 -14.891 -13.221  1.00  0.00
H
ATOM   9150  HH  TYR X 579       8.538 -13.305 -10.471  1.00  0.00
H
ATOM   9151  N   CYS X 580       9.739  -9.364 -18.452  1.00  0.00
N
ATOM   9152  CA  CYS X 580      10.227  -8.652 -19.625  1.00  0.00
C
ATOM   9153  C   CYS X 580       9.686  -7.228 -19.632  1.00  0.00
C
ATOM   9154  O   CYS X 580      10.409  -6.276 -19.933  1.00  0.00
O
ATOM   9155  CB  CYS X 580       9.646  -9.466 -20.781  1.00  0.00
C
ATOM   9156  SG  CYS X 580      10.399 -11.095 -21.002  1.00  0.00
S
ATOM   9157  H   CYS X 580       9.190 -10.203 -18.578  1.00  0.00
H
ATOM   9158  HA  CYS X 580      11.314  -8.650 -19.710  1.00  0.00
H
ATOM   9159 1HB  CYS X 580       8.582  -9.643 -20.621  1.00  0.00
H
ATOM   9160 2HB  CYS X 580       9.789  -8.937 -21.723  1.00  0.00
H
ATOM   9161  HG  CYS X 580       9.656 -11.451 -22.044  1.00  0.00
H
ATOM   9162  N   ILE X 581       8.410  -7.075 -19.291  1.00  0.00
N
ATOM   9163  CA  ILE X 581       7.820  -5.748 -19.311  1.00  0.00
C
ATOM   9164  C   ILE X 581       8.426  -4.794 -18.293  1.00  0.00
C
ATOM   9165  O   ILE X 581       8.558  -3.600 -18.574  1.00  0.00
O
ATOM   9166  CB  ILE X 581       6.302  -5.801 -19.056  1.00  0.00
C
ATOM   9167  CG1 ILE X 581       5.583  -6.436 -20.250  1.00  0.00
C
ATOM   9168  CG2 ILE X 581       5.759  -4.407 -18.784  1.00  0.00
C
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ATOM   9169  CD1 ILE X 581       4.146  -6.810 -19.968  1.00  0.00
C
ATOM   9170  H   ILE X 581       7.856  -7.876 -19.021  1.00  0.00
H
ATOM   9171  HA  ILE X 581       8.011  -5.257 -20.263  1.00  0.00
H
ATOM   9172  HB  ILE X 581       6.108  -6.442 -18.196  1.00  0.00
H
ATOM   9173 1HG1 ILE X 581       5.618  -5.720 -21.069  1.00  0.00
H
ATOM   9174 2HG1 ILE X 581       6.143  -7.331 -20.527  1.00  0.00
H
ATOM   9175 1HG2 ILE X 581       4.685  -4.462 -18.608  1.00  0.00
H
ATOM   9176 2HG2 ILE X 581       6.251  -3.990 -17.906  1.00  0.00
H
ATOM   9177 3HG2 ILE X 581       5.952  -3.767 -19.646  1.00  0.00
H
ATOM   9178 1HD1 ILE X 581       3.702  -7.255 -20.859  1.00  0.00
H
ATOM   9179 2HD1 ILE X 581       4.110  -7.530 -19.150  1.00  0.00
H
ATOM   9180 3HD1 ILE X 581       3.584  -5.919 -19.692  1.00  0.00
H
ATOM   9181  N   GLY X 582       8.787  -5.289 -17.109  1.00  0.00
N
ATOM   9182  CA  GLY X 582       9.348  -4.381 -16.115  1.00  0.00
C
ATOM   9183  C   GLY X 582      10.821  -4.076 -16.368  1.00  0.00
C
ATOM   9184  O   GLY X 582      11.305  -3.023 -15.977  1.00  0.00
O
ATOM   9185  H   GLY X 582       8.675  -6.272 -16.905  1.00  0.00
H
ATOM   9186 1HA  GLY X 582       8.795  -3.442 -16.138  1.00  0.00
H
ATOM   9187 2HA  GLY X 582       9.256  -4.832 -15.128  1.00  0.00
H
ATOM   9188  N   THR X 583      11.539  -4.981 -17.029  1.00  0.00
N
ATOM   9189  CA  THR X 583      12.931  -4.695 -17.358  1.00  0.00
C
ATOM   9190  C   THR X 583      12.867  -3.728 -18.550  1.00  0.00
C
ATOM   9191  O   THR X 583      13.737  -2.876 -18.721  1.00  0.00
O
ATOM   9192  CB  THR X 583      13.711  -5.981 -17.687  1.00  0.00
C
ATOM   9193  CG2 THR X 583      13.765  -6.898 -16.474  1.00  0.00
C
ATOM   9194  OG1 THR X 583      13.071  -6.666 -18.772  1.00  0.00
O
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ATOM   9195  H   THR X 583      11.123  -5.861 -17.300  1.00  0.00
H
ATOM   9196  HA  THR X 583      13.415  -4.199 -16.517  1.00  0.00
H
ATOM   9197  HB  THR X 583      14.724  -5.714 -17.985  1.00  0.00
H
ATOM   9198  HG1 THR X 583      12.172  -6.892 -18.520  1.00  0.00
H
ATOM   9199 1HG2 THR X 583      14.320  -7.800 -16.726  1.00  0.00
H
ATOM   9200 2HG2 THR X 583      14.260  -6.382 -15.652  1.00  0.00
H
ATOM   9201 3HG2 THR X 583      12.751  -7.164 -16.176  1.00  0.00
H
ATOM   9202  N   SER X 584      11.822  -3.871 -19.366  1.00  0.00
N
ATOM   9203  CA  SER X 584      11.641  -2.986 -20.505  1.00  0.00
C
ATOM   9204  C   SER X 584      11.392  -1.568 -20.011  1.00  0.00
C
ATOM   9205  O   SER X 584      12.134  -0.645 -20.349  1.00  0.00
O
ATOM   9206  CB  SER X 584      10.496  -3.475 -21.371  1.00  0.00
C
ATOM   9207  OG  SER X 584      10.286  -2.649 -22.483  1.00  0.00
O
ATOM   9208  H   SER X 584      11.148  -4.604 -19.192  1.00  0.00
H
ATOM   9209  HA  SER X 584      12.472  -3.012 -21.211  1.00  0.00
H
ATOM   9210 1HB  SER X 584      10.728  -4.482 -21.716  1.00  0.00
H
ATOM   9211 2HB  SER X 584       9.589  -3.499 -20.769  1.00  0.00
H
ATOM   9212  HG  SER X 584       9.555  -2.994 -23.003  1.00  0.00
H
ATOM   9213  N   SER X 585      10.349  -1.389 -19.209  1.00  0.00
N
ATOM   9214  CA  SER X 585      10.050  -0.069 -18.668  1.00  0.00
C
ATOM   9215  C   SER X 585      11.248   0.463 -17.889  1.00  0.00
C
ATOM   9216  O   SER X 585      11.458   1.671 -17.813  1.00  0.00
O
ATOM   9217  CB  SER X 585       8.816  -0.132 -17.789  1.00  0.00
C
ATOM   9218  OG  SER X 585       9.011  -0.949 -16.668  1.00  0.00
O
ATOM   9219  H   SER X 585       9.758  -2.173 -18.971  1.00  0.00
H
ATOM   9220  HA  SER X 585       9.739   0.650 -19.428  1.00  0.00
H
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ATOM   9221 1HB  SER X 585       8.575   0.877 -17.454  1.00  0.00
H
ATOM   9222 2HB  SER X 585       7.988  -0.526 -18.377  1.00  0.00
H
ATOM   9223  HG  SER X 585       8.208  -0.962 -16.139  1.00  0.00
H
ATOM   9224  N   PHE X 586      12.044  -0.432 -17.313  1.00  0.00
N
ATOM   9225  CA  PHE X 586      13.213   0.015 -16.560  1.00  0.00
C
ATOM   9226  C   PHE X 586      14.219   0.674 -17.501  1.00  0.00
C
ATOM   9227  O   PHE X 586      14.832   1.685 -17.154  1.00  0.00
O
ATOM   9228  CB  PHE X 586      13.853  -1.159 -15.819  1.00  0.00
C
ATOM   9229  CG  PHE X 586      15.050  -0.777 -14.995  1.00  0.00
C
ATOM   9230  CD1 PHE X 586      14.893  -0.285 -13.707  1.00  0.00
C
ATOM   9231  CD2 PHE X 586      16.333  -0.908 -15.504  1.00  0.00
C
ATOM   9232  CE1 PHE X 586      15.992   0.067 -12.948  1.00  0.00
C
ATOM   9233  CE2 PHE X 586      17.433  -0.556 -14.746  1.00  0.00
C
ATOM   9234  CZ  PHE X 586      17.261  -0.069 -13.467  1.00  0.00
C
ATOM   9235  H   PHE X 586      11.842  -1.418 -17.396  1.00  0.00
H
ATOM   9236  HA  PHE X 586      12.916   0.769 -15.829  1.00  0.00
H
ATOM   9237 1HB  PHE X 586      13.134  -1.609 -15.136  1.00  0.00
H
ATOM   9238 2HB  PHE X 586      14.194  -1.910 -16.531  1.00  0.00
H
ATOM   9239  HD1 PHE X 586      13.888  -0.179 -13.296  1.00  0.00
H
ATOM   9240  HD2 PHE X 586      16.467  -1.292 -16.516  1.00  0.00
H
ATOM   9241  HE1 PHE X 586      15.855   0.454 -11.937  1.00  0.00
H
ATOM   9242  HE2 PHE X 586      18.436  -0.665 -15.159  1.00  0.00
H
ATOM   9243  HZ  PHE X 586      18.128   0.210 -12.869  1.00  0.00
H
ATOM   9244  N   ILE X 587      14.385   0.100 -18.691  1.00  0.00
N
ATOM   9245  CA  ILE X 587      15.318   0.643 -19.679  1.00  0.00
C
ATOM   9246  C   ILE X 587      14.734   1.889 -20.334  1.00  0.00
C
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ATOM   9247  O   ILE X 587      15.468   2.721 -20.872  1.00  0.00
O
ATOM   9248  CB  ILE X 587      15.660  -0.397 -20.763  1.00  0.00
C
ATOM   9249  CG1 ILE X 587      16.453  -1.558 -20.158  1.00  0.00
C
ATOM   9250  CG2 ILE X 587      16.443   0.253 -21.894  1.00  0.00
C
ATOM   9251  CD1 ILE X 587      16.588  -2.749 -21.079  1.00  0.00
C
ATOM   9252  H   ILE X 587      13.854  -0.729 -18.917  1.00  0.00
H
ATOM   9253  HA  ILE X 587      16.235   0.979 -19.197  1.00  0.00
H
ATOM   9254  HB  ILE X 587      14.736  -0.818 -21.155  1.00  0.00
H
ATOM   9255 1HG1 ILE X 587      17.441  -1.179 -19.904  1.00  0.00
H
ATOM   9256 2HG1 ILE X 587      15.936  -1.862 -19.247  1.00  0.00
H
ATOM   9257 1HG2 ILE X 587      16.677  -0.495 -22.650  1.00  0.00
H
ATOM   9258 2HG2 ILE X 587      15.845   1.047 -22.342  1.00  0.00
H
ATOM   9259 3HG2 ILE X 587      17.369   0.674 -21.502  1.00  0.00
H
ATOM   9260 1HD1 ILE X 587      17.161  -3.532 -20.581  1.00  0.00
H
ATOM   9261 2HD1 ILE X 587      15.599  -3.131 -21.331  1.00  0.00
H
ATOM   9262 3HD1 ILE X 587      17.104  -2.450 -21.989  1.00  0.00
H
ATOM   9263  N   CYS X 588      13.413   2.014 -20.285  1.00  0.00
N
ATOM   9264  CA  CYS X 588      12.724   3.175 -20.844  1.00  0.00
C
ATOM   9265  C   CYS X 588      12.886   4.367 -19.893  1.00  0.00
C
ATOM   9266  O   CYS X 588      12.560   5.501 -20.238  1.00  0.00
O
ATOM   9267  CB  CYS X 588      11.269   2.706 -20.906  1.00  0.00
C
ATOM   9268  SG  CYS X 588      10.949   1.413 -22.130  1.00  0.00
S
ATOM   9269  H   CYS X 588      12.867   1.284 -19.848  1.00  0.00
H
ATOM   9270  HA  CYS X 588      13.052   3.430 -21.851  1.00  0.00
H
ATOM   9271 1HB  CYS X 588      10.965   2.294 -19.943  1.00  0.00
H
ATOM   9272 2HB  CYS X 588      10.617   3.539 -21.169  1.00  0.00
H
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ATOM   9273  HG  CYS X 588       9.649   1.300 -21.875  1.00  0.00
H
ATOM   9274  N   ILE X 589      13.394   4.099 -18.696  1.00  0.00
N
ATOM   9275  CA  ILE X 589      13.588   5.160 -17.715  1.00  0.00
C
ATOM   9276  C   ILE X 589      14.636   6.161 -18.184  1.00  0.00
C
ATOM   9277  O   ILE X 589      14.345   7.346 -18.323  1.00  0.00
O
ATOM   9278  CB  ILE X 589      14.011   4.594 -16.345  1.00  0.00
C
ATOM   9279  CG1 ILE X 589      12.867   3.786 -15.726  1.00  0.00
C
ATOM   9280  CG2 ILE X 589      14.439   5.718 -15.415  1.00  0.00
C
ATOM   9281  CD1 ILE X 589      11.604   4.587 -15.504  1.00  0.00
C
ATOM   9282  H   ILE X 589      13.648   3.150 -18.462  1.00  0.00
H
ATOM   9283  HA  ILE X 589      12.678   5.748 -17.600  1.00  0.00
H
ATOM   9284  HB  ILE X 589      14.841   3.903 -16.489  1.00  0.00
H
ATOM   9285 1HG1 ILE X 589      12.656   2.954 -16.396  1.00  0.00
H
ATOM   9286 2HG1 ILE X 589      13.225   3.400 -14.771  1.00  0.00
H
ATOM   9287 1HG2 ILE X 589      14.734   5.300 -14.453  1.00  0.00
H
ATOM   9288 2HG2 ILE X 589      15.283   6.251 -15.853  1.00  0.00
H
ATOM   9289 3HG2 ILE X 589      13.607   6.409 -15.271  1.00  0.00
H
ATOM   9290 1HD1 ILE X 589      10.841   3.948 -15.062  1.00  0.00
H
ATOM   9291 2HD1 ILE X 589      11.814   5.419 -14.831  1.00  0.00
H
ATOM   9292 3HD1 ILE X 589      11.245   4.974 -16.457  1.00  0.00
H
ATOM   9293  N   PRO X 590      15.853   5.687 -18.426  1.00  0.00
N
ATOM   9294  CA  PRO X 590      16.907   6.575 -18.906  1.00  0.00
C
ATOM   9295  C   PRO X 590      16.398   7.248 -20.183  1.00  0.00
C
ATOM   9296  O   PRO X 590      16.747   8.392 -20.469  1.00  0.00
O
ATOM   9297  CB  PRO X 590      18.108   5.643 -19.135  1.00  0.00
C
ATOM   9298  CG  PRO X 590      17.895   4.496 -18.185  1.00  0.00
C
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ATOM   9299  CD  PRO X 590      16.274   4.281 -18.418  1.00  0.00
C
ATOM   9300  HA  PRO X 590      17.117   7.262 -18.215  1.00  0.00
H
ATOM   9301 1HB  PRO X 590      17.922   5.328 -19.973  1.00  0.00
H
ATOM   9302 2HB  PRO X 590      18.755   6.125 -18.822  1.00  0.00
H
ATOM   9303 1HG  PRO X 590      17.288   3.996 -18.500  1.00  0.00
H
ATOM   9304 2HG  PRO X 590      18.722   4.305 -17.785  1.00  0.00
H
ATOM   9305 1HD  PRO X 590      15.539   3.820 -18.812  1.00  0.00
H
ATOM   9306 2HD  PRO X 590      16.457   4.118 -17.498  1.00  0.00
H
ATOM   9307  N   THR X 591      15.574   6.537 -20.947  1.00  0.00
N
ATOM   9308  CA  THR X 591      15.025   7.096 -22.180  1.00  0.00
C
ATOM   9309  C   THR X 591      14.060   8.236 -21.852  1.00  0.00
C
ATOM   9310  O   THR X 591      13.998   9.226 -22.576  1.00  0.00
O
ATOM   9311  CB  THR X 591      14.296   6.023 -23.012  1.00  0.00
C
ATOM   9312  CG2 THR X 591      13.674   6.642 -24.254  1.00  0.00
C
ATOM   9313  OG1 THR X 591      15.228   5.006 -23.404  1.00  0.00
O
ATOM   9314  H   THR X 591      15.325   5.598 -20.670  1.00  0.00
H
ATOM   9315  HA  THR X 591      15.828   7.520 -22.783  1.00  0.00
H
ATOM   9316  HB  THR X 591      13.515   5.571 -22.402  1.00  0.00
H
ATOM   9317  HG1 THR X 591      14.773   4.338 -23.922  1.00  0.00
H
ATOM   9318 1HG2 THR X 591      13.165   5.868 -24.828  1.00  0.00
H
ATOM   9319 2HG2 THR X 591      12.956   7.407 -23.958  1.00  0.00
H
ATOM   9320 3HG2 THR X 591      14.455   7.092 -24.865  1.00  0.00
H
ATOM   9321  N   TYR X 592      13.310   8.102 -20.760  1.00  0.00
N
ATOM   9322  CA  TYR X 592      12.376   9.155 -20.360  1.00  0.00
C
ATOM   9323  C   TYR X 592      13.102  10.363 -19.778  1.00  0.00
C
ATOM   9324  O   TYR X 592      12.578  11.475 -19.800  1.00  0.00
O
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ATOM   9325  CB  TYR X 592      11.366   8.618 -19.342  1.00  0.00
C
ATOM   9326  CG  TYR X 592      10.413   7.589 -19.909  1.00  0.00
C
ATOM   9327  CD1 TYR X 592      10.256   7.441 -21.279  1.00  0.00
C
ATOM   9328  CD2 TYR X 592       9.674   6.767 -19.072  1.00  0.00
C
ATOM   9329  CE1 TYR X 592       9.386   6.504 -21.801  1.00  0.00
C
ATOM   9330  CE2 TYR X 592       8.802   5.826 -19.582  1.00  0.00
C
ATOM   9331  CZ  TYR X 592       8.661   5.697 -20.948  1.00  0.00
C
ATOM   9332  OH  TYR X 592       7.793   4.761 -21.463  1.00  0.00
O
ATOM   9333  H   TYR X 592      13.387   7.264 -20.201  1.00  0.00
H
ATOM   9334  HA  TYR X 592      11.830   9.516 -21.231  1.00  0.00
H
ATOM   9335 1HB  TYR X 592      11.937   8.173 -18.526  1.00  0.00
H
ATOM   9336 2HB  TYR X 592      10.802   9.471 -18.968  1.00  0.00
H
ATOM   9337  HD1 TYR X 592      10.833   8.082 -21.947  1.00  0.00
H
ATOM   9338  HD2 TYR X 592       9.791   6.876 -17.992  1.00  0.00
H
ATOM   9339  HE1 TYR X 592       9.272   6.399 -22.880  1.00  0.00
H
ATOM   9340  HE2 TYR X 592       8.228   5.191 -18.906  1.00  0.00
H
ATOM   9341  HH  TYR X 592       7.773   4.757 -22.422  1.00  0.00
H
ATOM   9342  N   ILE X 593      14.303  10.142 -19.247  1.00  0.00
N
ATOM   9343  CA  ILE X 593      15.092  11.238 -18.683  1.00  0.00
C
ATOM   9344  C   ILE X 593      15.898  11.863 -19.818  1.00  0.00
C
ATOM   9345  O   ILE X 593      16.284  13.031 -19.760  1.00  0.00
O
ATOM   9346  CB  ILE X 593      16.018  10.744 -17.557  1.00  0.00
C
ATOM   9347  CG1 ILE X 593      15.195  10.194 -16.389  1.00  0.00
C
ATOM   9348  CG2 ILE X 593      16.930  11.868 -17.087  1.00  0.00
C
ATOM   9349  CD1 ILE X 593      16.010   9.424 -15.375  1.00  0.00
C
ATOM   9350  H   ILE X 593      14.675   9.203 -19.234  1.00  0.00
H
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ATOM   9351  HA  ILE X 593      14.441  12.022 -18.299  1.00  0.00
H
ATOM   9352  HB  ILE X 593      16.624   9.917 -17.931  1.00  0.00
H
ATOM   9353 1HG1 ILE X 593      14.715  11.042 -15.903  1.00  0.00
H
ATOM   9354 2HG1 ILE X 593      14.430   9.540 -16.811  1.00  0.00
H
ATOM   9355 1HG2 ILE X 593      17.579  11.501 -16.290  1.00  0.00
H
ATOM   9356 2HG2 ILE X 593      17.540  12.214 -17.919  1.00  0.00
H
ATOM   9357 3HG2 ILE X 593      16.326  12.694 -16.711  1.00  0.00
H
ATOM   9358 1HD1 ILE X 593      15.357   9.066 -14.579  1.00  0.00
H
ATOM   9359 2HD1 ILE X 593      16.489   8.573 -15.861  1.00  0.00
H
ATOM   9360 3HD1 ILE X 593      16.773  10.076 -14.951  1.00  0.00
H
ATOM   9361  N   ALA X 594      16.136  11.073 -20.862  1.00  0.00
N
ATOM   9362  CA  ALA X 594      16.851  11.541 -22.044  1.00  0.00
C
ATOM   9363  C   ALA X 594      16.056  12.698 -22.671  1.00  0.00
C
ATOM   9364  O   ALA X 594      16.566  13.812 -22.818  1.00  0.00
O
ATOM   9365  CB  ALA X 594      17.059  10.396 -23.026  1.00  0.00
C
ATOM   9366  H   ALA X 594      15.810  10.117 -20.835  1.00  0.00
H
ATOM   9367  HA  ALA X 594      17.827  11.917 -21.736  1.00  0.00
H
ATOM   9368 1HB  ALA X 594      17.594  10.763 -23.902  1.00  0.00
H
ATOM   9369 2HB  ALA X 594      17.640   9.607 -22.548  1.00  0.00
H
ATOM   9370 3HB  ALA X 594      16.092  10.001 -23.332  1.00  0.00
H
ATOM   9371  N   TYR X 595      14.804  12.436 -23.037  1.00  0.00
N
ATOM   9372  CA  TYR X 595      13.963  13.472 -23.632  1.00  0.00
C
ATOM   9373  C   TYR X 595      13.705  14.601 -22.641  1.00  0.00
C
ATOM   9374  O   TYR X 595      13.189  15.660 -23.006  1.00  0.00
O
ATOM   9375  CB  TYR X 595      12.636  12.876 -24.109  1.00  0.00
C
ATOM   9376  CG  TYR X 595      11.577  12.793 -23.033  1.00  0.00
C
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ATOM   9377  CD1 TYR X 595      11.100  13.939 -22.412  1.00  0.00
C
ATOM   9378  CD2 TYR X 595      11.058  11.569 -22.640  1.00  0.00
C
ATOM   9379  CE1 TYR X 595      10.134  13.868 -21.427  1.00  0.00
C
ATOM   9380  CE2 TYR X 595      10.091  11.486 -21.658  1.00  0.00
C
ATOM   9381  CZ  TYR X 595       9.631  12.638 -21.052  1.00  0.00
C
ATOM   9382  OH  TYR X 595       8.668  12.562 -20.074  1.00  0.00
O
ATOM   9383  H   TYR X 595      14.430  11.507 -22.903  1.00  0.00
H
ATOM   9384  HA  TYR X 595      14.471  13.917 -24.487  1.00  0.00
H
ATOM   9385 1HB  TYR X 595      12.275  13.505 -24.926  1.00  0.00
H
ATOM   9386 2HB  TYR X 595      12.849  11.877 -24.487  1.00  0.00
H
ATOM   9387  HD1 TYR X 595      11.502  14.907 -22.713  1.00  0.00
H
ATOM   9388  HD2 TYR X 595      11.425  10.662 -23.122  1.00  0.00
H
ATOM   9389  HE1 TYR X 595       9.769  14.776 -20.949  1.00  0.00
H
ATOM   9390  HE2 TYR X 595       9.696  10.514 -21.361  1.00  0.00
H
ATOM   9391  HH  TYR X 595       8.421  13.420 -19.721  1.00  0.00
H
ATOM   9392  N   ARG X 596      14.057  14.368 -21.378  1.00  0.00
N
ATOM   9393  CA  ARG X 596      13.868  15.377 -20.347  1.00  0.00
C
ATOM   9394  C   ARG X 596      15.115  16.248 -20.213  1.00  0.00
C
ATOM   9395  O   ARG X 596      15.025  17.415 -19.828  1.00  0.00
O
ATOM   9396  CB  ARG X 596      13.459  14.766 -19.015  1.00  0.00
C
ATOM   9397  CG  ARG X 596      13.427  15.740 -17.846  1.00  0.00
C
ATOM   9398  CD  ARG X 596      13.015  15.133 -16.555  1.00  0.00
C
ATOM   9399  NE  ARG X 596      12.929  16.073 -15.449  1.00  0.00
N
ATOM   9400  CZ  ARG X 596      12.708  15.727 -14.165  1.00  0.00
C
ATOM   9401  NH1 ARG X 596      12.512  14.471 -13.828  1.00  0.00
N
ATOM   9402  NH2 ARG X 596      12.669  16.686 -13.257  1.00  0.00
N
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ATOM   9403  H   ARG X 596      14.463  13.476 -21.131  1.00  0.00
H
ATOM   9404  HA  ARG X 596      13.048  16.040 -20.626  1.00  0.00
H
ATOM   9405 1HB  ARG X 596      12.467  14.339 -19.152  1.00  0.00
H
ATOM   9406 2HB  ARG X 596      14.172  13.970 -18.798  1.00  0.00
H
ATOM   9407 1HG  ARG X 596      14.427  16.158 -17.717  1.00  0.00
H
ATOM   9408 2HG  ARG X 596      12.726  16.541 -18.082  1.00  0.00
H
ATOM   9409 1HD  ARG X 596      12.030  14.681 -16.674  1.00  0.00
H
ATOM   9410 2HD  ARG X 596      13.737  14.366 -16.277  1.00  0.00
H
ATOM   9411  HE  ARG X 596      13.015  17.082 -15.451  1.00  0.00
H
ATOM   9412 1HH1 ARG X 596      12.527  13.752 -14.536  1.00  0.00
H
ATOM   9413 2HH1 ARG X 596      12.347  14.232 -12.860  1.00  0.00
H
ATOM   9414 1HH2 ARG X 596      12.803  17.648 -13.538  1.00  0.00
H
ATOM   9415 2HH2 ARG X 596      12.504  16.454 -12.289  1.00  0.00
H
ATOM   9416  N   LEU X 597      16.281  15.686 -20.523  1.00  0.00
N
ATOM   9417  CA  LEU X 597      17.519  16.453 -20.417  1.00  0.00
C
ATOM   9418  C   LEU X 597      17.917  17.045 -21.764  1.00  0.00
C
ATOM   9419  O   LEU X 597      18.794  17.912 -21.832  1.00  0.00
O
ATOM   9420  CB  LEU X 597      18.646  15.569 -19.870  1.00  0.00
C
ATOM   9421  CG  LEU X 597      18.455  15.087 -18.425  1.00  0.00
C
ATOM   9422  CD1 LEU X 597      19.620  14.199 -18.013  1.00  0.00
C
ATOM   9423  CD2 LEU X 597      18.338  16.288 -17.501  1.00  0.00
C
ATOM   9424  H   LEU X 597      16.310  14.726 -20.832  1.00  0.00
H
ATOM   9425  HA  LEU X 597      17.370  17.295 -19.742  1.00  0.00
H
ATOM   9426 1HB  LEU X 597      18.563  14.729 -20.558  1.00  0.00
H
ATOM   9427 2HB  LEU X 597      19.621  16.039 -19.988  1.00  0.00
H
ATOM   9428  HG  LEU X 597      17.510  14.544 -18.388  1.00  0.00
H
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ATOM   9429 1HD1 LEU X 597      19.475  13.861 -16.987  1.00  0.00
H
ATOM   9430 2HD1 LEU X 597      19.671  13.334 -18.675  1.00  0.00
H
ATOM   9431 3HD1 LEU X 597      20.549  14.763 -18.082  1.00  0.00
H
ATOM   9432 1HD2 LEU X 597      18.201  15.945 -16.475  1.00  0.00
H
ATOM   9433 2HD2 LEU X 597      19.247  16.889 -17.565  1.00  0.00
H
ATOM   9434 3HD2 LEU X 597      17.483  16.896 -17.796  1.00  0.00
H
ATOM   9435  N   ILE X 598      17.274  16.590 -22.833  1.00  0.00
N
ATOM   9436  CA  ILE X 598      17.574  17.124 -24.152  1.00  0.00
C
ATOM   9437  C   ILE X 598      16.777  18.407 -24.367  1.00  0.00
C
ATOM   9438  O   ILE X 598      17.130  19.227 -25.214  1.00  0.00
O
ATOM   9439  CB  ILE X 598      17.252  16.107 -25.261  1.00  0.00
C
ATOM   9440  CG1 ILE X 598      18.070  16.411 -26.519  1.00  0.00
C
ATOM   9441  CG2 ILE X 598      15.764  16.114 -25.574  1.00  0.00
C
ATOM   9442  CD1 ILE X 598      19.556  16.190 -26.350  1.00  0.00
C
ATOM   9443  H   ILE X 598      16.573  15.870 -22.729  1.00  0.00
H
ATOM   9444  HA  ILE X 598      18.622  17.413 -24.219  1.00  0.00
H
ATOM   9445  HB  ILE X 598      17.549  15.112 -24.927  1.00  0.00
H
ATOM   9446 1HG1 ILE X 598      17.694  15.766 -27.313  1.00  0.00
H
ATOM   9447 2HG1 ILE X 598      17.885  17.453 -26.781  1.00  0.00
H
ATOM   9448 1HG2 ILE X 598      15.554  15.388 -26.360  1.00  0.00
H
ATOM   9449 2HG2 ILE X 598      15.202  15.850 -24.679  1.00  0.00
H
ATOM   9450 3HG2 ILE X 598      15.467  17.108 -25.909  1.00  0.00
H
ATOM   9451 1HD1 ILE X 598      20.068  16.427 -27.283  1.00  0.00
H
ATOM   9452 2HD1 ILE X 598      19.933  16.835 -25.556  1.00  0.00
H
ATOM   9453 3HD1 ILE X 598      19.742  15.149 -26.091  1.00  0.00
H
ATOM   9454  N   ILE X 599      15.709  18.590 -23.595  1.00  0.00
N
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ATOM   9455  CA  ILE X 599      14.904  19.803 -23.713  1.00  0.00
C
ATOM   9456  C   ILE X 599      15.327  20.785 -22.625  1.00  0.00
C
ATOM   9457  O   ILE X 599      14.898  21.937 -22.614  1.00  0.00
O
ATOM   9458  CB  ILE X 599      13.400  19.496 -23.602  1.00  0.00
C
ATOM   9459  CG1 ILE X 599      13.080  18.880 -22.237  1.00  0.00
C
ATOM   9460  CG2 ILE X 599      12.962  18.567 -24.724  1.00  0.00
C
ATOM   9461  CD1 ILE X 599      11.604  18.648 -22.003  1.00  0.00
C
ATOM   9462  H   ILE X 599      15.453  17.883 -22.920  1.00  0.00
H
ATOM   9463  HA  ILE X 599      15.102  20.305 -24.659  1.00  0.00
H
ATOM   9464  HB  ILE X 599      12.841  20.428 -23.664  1.00  0.00
H
ATOM   9465 1HG1 ILE X 599      13.611  17.931 -22.176  1.00  0.00
H
ATOM   9466 2HG1 ILE X 599      13.464  19.560 -21.477  1.00  0.00
H
ATOM   9467 1HG2 ILE X 599      11.896  18.359 -24.630  1.00  0.00
H
ATOM   9468 2HG2 ILE X 599      13.155  19.041 -25.684  1.00  0.00
H
ATOM   9469 3HG2 ILE X 599      13.519  17.632 -24.662  1.00  0.00
H
ATOM   9470 1HD1 ILE X 599      11.456  18.211 -21.016  1.00  0.00
H
ATOM   9471 2HD1 ILE X 599      11.071  19.597 -22.061  1.00  0.00
H
ATOM   9472 3HD1 ILE X 599      11.217  17.968 -22.761  1.00  0.00
H
ATOM   9473  N   THR X 600      16.166  20.312 -21.710  1.00  0.00
N
ATOM   9474  CA  THR X 600      16.660  21.139 -20.617  1.00  0.00
C
ATOM   9475  C   THR X 600      17.417  22.337 -21.183  1.00  0.00
C
ATOM   9476  O   THR X 600      17.054  23.491 -20.937  1.00  0.00
O
ATOM   9477  CB  THR X 600      17.576  20.339 -19.673  1.00  0.00
C
ATOM   9478  CG2 THR X 600      18.355  21.275 -18.763  1.00  0.00
C
ATOM   9479  OG1 THR X 600      16.782  19.452 -18.872  1.00  0.00
O
ATOM   9480  H   THR X 600      16.469  19.351 -21.774  1.00  0.00
H
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ATOM   9481  HA  THR X 600      15.820  21.530 -20.042  1.00  0.00
H
ATOM   9482  HB  THR X 600      18.272  19.749 -20.269  1.00  0.00
H
ATOM   9483  HG1 THR X 600      16.304  18.847 -19.444  1.00  0.00
H
ATOM   9484 1HG2 THR X 600      18.997  20.691 -18.103  1.00  0.00
H
ATOM   9485 2HG2 THR X 600      18.968  21.943 -19.368  1.00  0.00
H
ATOM   9486 3HG2 THR X 600      17.659  21.863 -18.165  1.00  0.00
H
ATOM   9487  N   PRO X 601      18.473  22.056 -21.937  1.00  0.00
N
ATOM   9488  CA  PRO X 601      19.284  23.103 -22.548  1.00  0.00
C
ATOM   9489  C   PRO X 601      18.444  23.968 -23.480  1.00  0.00
C
ATOM   9490  O   PRO X 601      18.642  25.179 -23.561  1.00  0.00
O
ATOM   9491  CB  PRO X 601      20.384  22.335 -23.301  1.00  0.00
C
ATOM   9492  CG  PRO X 601      20.532  21.037 -22.554  1.00  0.00
C
ATOM   9493  CD  PRO X 601      18.928  20.711 -22.314  1.00  0.00
C
ATOM   9494  HA  PRO X 601      19.677  23.687 -21.843  1.00  0.00
H
ATOM   9495 1HB  PRO X 601      19.951  22.141 -24.083  1.00  0.00
H
ATOM   9496 2HB  PRO X 601      21.077  22.822 -23.123  1.00  0.00
H
ATOM   9497 1HG  PRO X 601      19.876  20.540 -22.750  1.00  0.00
H
ATOM   9498 2HG  PRO X 601      21.449  20.865 -22.470  1.00  0.00
H
ATOM   9499 1HD  PRO X 601      18.122  20.253 -22.540  1.00  0.00
H
ATOM   9500 2HD  PRO X 601      19.400  20.421 -21.540  1.00  0.00
H
ATOM   9501  N   GLY X 602      17.506  23.338 -24.182  1.00  0.00
N
ATOM   9502  CA  GLY X 602      16.640  24.058 -25.108  1.00  0.00
C
ATOM   9503  C   GLY X 602      15.884  25.179 -24.406  1.00  0.00
C
ATOM   9504  O   GLY X 602      15.827  26.305 -24.899  1.00  0.00
O
ATOM   9505  H   GLY X 602      17.391  22.341 -24.072  1.00  0.00
H
ATOM   9506 1HA  GLY X 602      17.249  24.489 -25.904  1.00  0.00
H
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ATOM   9507 2HA  GLY X 602      15.922  23.362 -25.538  1.00  0.00
H
ATOM   9508  N   THR X 603      15.297  24.863 -23.256  1.00  0.00
N
ATOM   9509  CA  THR X 603      14.553  25.848 -22.486  1.00  0.00
C
ATOM   9510  C   THR X 603      15.502  26.930 -21.974  1.00  0.00
C
ATOM   9511  O   THR X 603      15.165  28.112 -21.969  1.00  0.00
O
ATOM   9512  CB  THR X 603      13.813  25.198 -21.302  1.00  0.00
C
ATOM   9513  CG2 THR X 603      13.081  26.253 -20.486  1.00  0.00
C
ATOM   9514  OG1 THR X 603      12.868  24.240 -21.794  1.00  0.00
O
ATOM   9515  H   THR X 603      15.370  23.917 -22.909  1.00  0.00
H
ATOM   9516  HA  THR X 603      13.820  26.340 -23.125  1.00  0.00
H
ATOM   9517  HB  THR X 603      14.538  24.688 -20.667  1.00  0.00
H
ATOM   9518  HG1 THR X 603      13.330  23.561 -22.293  1.00  0.00
H
ATOM   9519 1HG2 THR X 603      12.565  25.775 -19.654  1.00  0.00
H
ATOM   9520 2HG2 THR X 603      13.798  26.977 -20.102  1.00  0.00
H
ATOM   9521 3HG2 THR X 603      12.356  26.763 -21.119  1.00  0.00
H
ATOM   9522  N   PHE X 604      16.689  26.512 -21.548  1.00  0.00
N
ATOM   9523  CA  PHE X 604      17.690  27.439 -21.041  1.00  0.00
C
ATOM   9524  C   PHE X 604      18.085  28.440 -22.122  1.00  0.00
C
ATOM   9525  O   PHE X 604      18.415  29.588 -21.824  1.00  0.00
O
ATOM   9526  CB  PHE X 604      18.919  26.678 -20.539  1.00  0.00
C
ATOM   9527  CG  PHE X 604      18.676  25.895 -19.281  1.00  0.00
C
ATOM   9528  CD1 PHE X 604      17.512  26.077 -18.548  1.00  0.00
C
ATOM   9529  CD2 PHE X 604      19.608  24.975 -18.828  1.00  0.00
C
ATOM   9530  CE1 PHE X 604      17.286  25.356 -17.390  1.00  0.00
C
ATOM   9531  CE2 PHE X 604      19.385  24.252 -17.672  1.00  0.00
C
ATOM   9532  CZ  PHE X 604      18.223  24.445 -16.952  1.00  0.00
C
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ATOM   9533  H   PHE X 604      16.903  25.525 -21.577  1.00  0.00
H
ATOM   9534  HA  PHE X 604      17.274  28.015 -20.212  1.00  0.00
H
ATOM   9535 1HB  PHE X 604      19.251  25.965 -21.291  1.00  0.00
H
ATOM   9536 2HB  PHE X 604      19.727  27.376 -20.320  1.00  0.00
H
ATOM   9537  HD1 PHE X 604      16.771  26.798 -18.894  1.00  0.00
H
ATOM   9538  HD2 PHE X 604      20.526  24.824 -19.396  1.00  0.00
H
ATOM   9539  HE1 PHE X 604      16.369  25.510 -16.825  1.00  0.00
H
ATOM   9540  HE2 PHE X 604      20.126  23.532 -17.327  1.00  0.00
H
ATOM   9541  HZ  PHE X 604      18.046  23.876 -16.040  1.00  0.00
H
ATOM   9542  N   LYS X 605      18.050  27.997 -23.374  1.00  0.00
N
ATOM   9543  CA  LYS X 605      18.402  28.853 -24.499  1.00  0.00
C
ATOM   9544  C   LYS X 605      17.242  29.760 -24.885  1.00  0.00
C
ATOM   9545  O   LYS X 605      17.445  30.906 -25.292  1.00  0.00
O
ATOM   9546  CB  LYS X 605      18.830  28.008 -25.701  1.00  0.00
C
ATOM   9547  CG  LYS X 605      20.176  27.314 -25.533  1.00  0.00
C
ATOM   9548  CD  LYS X 605      20.528  26.489 -26.762  1.00  0.00
C
ATOM   9549  CE  LYS X 605      21.863  25.778 -26.588  1.00  0.00
C
ATOM   9550  NZ  LYS X 605      22.221  24.964 -27.781  1.00  0.00
N
ATOM   9551  H   LYS X 605      17.772  27.042 -23.550  1.00  0.00
H
ATOM   9552  HA  LYS X 605      19.229  29.508 -24.220  1.00  0.00
H
ATOM   9553 1HB  LYS X 605      18.053  27.260 -25.858  1.00  0.00
H
ATOM   9554 2HB  LYS X 605      18.872  28.676 -26.562  1.00  0.00
H
ATOM   9555 1HG  LYS X 605      20.941  28.076 -25.375  1.00  0.00
H
ATOM   9556 2HG  LYS X 605      20.124  26.665 -24.661  1.00  0.00
H
ATOM   9557 1HD  LYS X 605      19.741  25.752 -26.922  1.00  0.00
H
ATOM   9558 2HD  LYS X 605      20.582  27.154 -27.623  1.00  0.00
H
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ATOM   9559 1HE  LYS X 605      22.632  26.531 -26.418  1.00  0.00
H
ATOM   9560 2HE  LYS X 605      21.793  25.131 -25.714  1.00  0.00
H
ATOM   9561 1HZ  LYS X 605      23.109  24.509 -27.624  1.00  0.00
H
ATOM   9562 2HZ  LYS X 605      21.507  24.265 -27.936  1.00  0.00
H
ATOM   9563 3HZ  LYS X 605      22.286  25.564 -28.590  1.00  0.00
H
ATOM   9564  N   GLU X 606      16.026  29.246 -24.754  1.00  0.00
N
ATOM   9565  CA  GLU X 606      14.826  30.039 -24.995  1.00  0.00
C
ATOM   9566  C   GLU X 606      14.698  31.169 -23.982  1.00  0.00
C
ATOM   9567  O   GLU X 606      14.113  32.213 -24.273  1.00  0.00
O
ATOM   9568  CB  GLU X 606      13.580  29.151 -24.951  1.00  0.00
C
ATOM   9569  CG  GLU X 606      13.417  28.235 -26.155  1.00  0.00
C
ATOM   9570  CD  GLU X 606      12.243  27.313 -25.986  1.00  0.00
C
ATOM   9571  OE1 GLU X 606      11.631  27.344 -24.946  1.00  0.00
O
ATOM   9572  OE2 GLU X 606      11.886  26.657 -26.937  1.00  0.00
O
ATOM   9573  H   GLU X 606      15.928  28.279 -24.480  1.00  0.00
H
ATOM   9574  HA  GLU X 606      14.884  30.509 -25.977  1.00  0.00
H
ATOM   9575 1HB  GLU X 606      13.650  28.548 -24.045  1.00  0.00
H
ATOM   9576 2HB  GLU X 606      12.718  29.815 -24.880  1.00  0.00
H
ATOM   9577 1HG  GLU X 606      13.323  28.773 -27.099  1.00  0.00
H
ATOM   9578 2HG  GLU X 606      14.338  27.654 -26.162  1.00  0.00
H
ATOM   9579  N   ARG X 607      15.247  30.954 -22.793  1.00  0.00
N
ATOM   9580  CA  ARG X 607      15.290  31.993 -21.770  1.00  0.00
C
ATOM   9581  C   ARG X 607      16.728  32.329 -21.386  1.00  0.00
C
ATOM   9582  O   ARG X 607      17.030  32.552 -20.213  1.00  0.00
O
ATOM   9583  CB  ARG X 607      14.457  31.631 -20.550  1.00  0.00
C
ATOM   9584  CG  ARG X 607      12.966  31.493 -20.811  1.00  0.00
C
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ATOM   9585  CD  ARG X 607      12.160  31.172 -19.605  1.00  0.00
C
ATOM   9586  NE  ARG X 607      10.734  31.029 -19.853  1.00  0.00
N
ATOM   9587  CZ  ARG X 607       9.800  30.879 -18.893  1.00  0.00
C
ATOM   9588  NH1 ARG X 607      10.139  30.815 -17.624  1.00  0.00
N
ATOM   9589  NH2 ARG X 607       8.536  30.775 -19.262  1.00  0.00
N
ATOM   9590  H   ARG X 607      15.644  30.048 -22.591  1.00  0.00
H
ATOM   9591  HA  ARG X 607      14.849  32.911 -22.159  1.00  0.00
H
ATOM   9592 1HB  ARG X 607      14.845  30.688 -20.168  1.00  0.00
H
ATOM   9593 2HB  ARG X 607      14.618  32.416 -19.810  1.00  0.00
H
ATOM   9594 1HG  ARG X 607      12.596  32.432 -21.221  1.00  0.00
H
ATOM   9595 2HG  ARG X 607      12.814  30.694 -21.539  1.00  0.00
H
ATOM   9596 1HD  ARG X 607      12.513  30.231 -19.183  1.00  0.00
H
ATOM   9597 2HD  ARG X 607      12.286  31.968 -18.873  1.00  0.00
H
ATOM   9598  HE  ARG X 607      10.230  31.019 -20.731  1.00  0.00
H
ATOM   9599 1HH1 ARG X 607      11.114  30.878 -17.360  1.00  0.00
H
ATOM   9600 2HH1 ARG X 607       9.426  30.701 -16.920  1.00  0.00
H
ATOM   9601 1HH2 ARG X 607       8.295  30.811 -20.243  1.00  0.00
H
ATOM   9602 2HH2 ARG X 607       7.817  30.662 -18.563  1.00  0.00
H
ATOM   9603  N   ILE X 608      17.608  32.357 -22.378  1.00  0.00
N
ATOM   9604  CA  ILE X 608      19.041  32.456 -22.130  1.00  0.00
C
ATOM   9605  C   ILE X 608      19.394  33.774 -21.453  1.00  0.00
C
ATOM   9606  O   ILE X 608      18.932  34.838 -21.868  1.00  0.00
O
ATOM   9607  CB  ILE X 608      19.851  32.326 -23.434  1.00  0.00
C
ATOM   9608  CG1 ILE X 608      21.314  31.999 -23.124  1.00  0.00
C
ATOM   9609  CG2 ILE X 608      19.750  33.605 -24.251  1.00  0.00
C
ATOM   9610  CD1 ILE X 608      21.529  30.592 -22.616  1.00  0.00
C
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ATOM   9611  H   ILE X 608      17.276  32.310 -23.331  1.00  0.00
H
ATOM   9612  HA  ILE X 608      19.363  31.689 -21.427  1.00  0.00
H
ATOM   9613  HB  ILE X 608      19.458  31.492 -24.014  1.00  0.00
H
ATOM   9614 1HG1 ILE X 608      21.880  32.144 -24.043  1.00  0.00
H
ATOM   9615 2HG1 ILE X 608      21.653  32.712 -22.373  1.00  0.00
H
ATOM   9616 1HG2 ILE X 608      20.328  33.499 -25.168  1.00  0.00
H
ATOM   9617 2HG2 ILE X 608      18.708  33.797 -24.501  1.00  0.00
H
ATOM   9618 3HG2 ILE X 608      20.143  34.441 -23.671  1.00  0.00
H
ATOM   9619 1HD1 ILE X 608      22.589  30.434 -22.418  1.00  0.00
H
ATOM   9620 2HD1 ILE X 608      20.963  30.446 -21.694  1.00  0.00
H
ATOM   9621 3HD1 ILE X 608      21.190  29.878 -23.365  1.00  0.00
H
ATOM   9622  N   ILE X 609      20.212  33.696 -20.412  1.00  0.00
N
ATOM   9623  CA  ILE X 609      20.640  34.887 -19.682  1.00  0.00
C
ATOM   9624  C   ILE X 609      22.113  35.180 -19.916  1.00  0.00
C
ATOM   9625  O   ILE X 609      22.949  34.275 -19.881  1.00  0.00
O
ATOM   9626  CB  ILE X 609      20.390  34.743 -18.170  1.00  0.00
C
ATOM   9627  CG1 ILE X 609      18.954  34.286 -17.907  1.00  0.00
C
ATOM   9628  CG2 ILE X 609      20.675  36.056 -17.456  1.00  0.00
C
ATOM   9629  CD1 ILE X 609      17.904  35.254 -18.404  1.00  0.00
C
ATOM   9630  H   ILE X 609      20.548  32.791 -20.116  1.00  0.00
H
ATOM   9631  HA  ILE X 609      20.121  35.771 -20.052  1.00  0.00
H
ATOM   9632  HB  ILE X 609      21.044  33.967 -17.774  1.00  0.00
H
ATOM   9633 1HG1 ILE X 609      18.824  33.324 -18.400  1.00  0.00
H
ATOM   9634 2HG1 ILE X 609      18.846  34.157 -16.829  1.00  0.00
H
ATOM   9635 1HG2 ILE X 609      20.492  35.936 -16.388  1.00  0.00
H
ATOM   9636 2HG2 ILE X 609      21.713  36.341 -17.618  1.00  0.00
H
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ATOM   9637 3HG2 ILE X 609      20.018  36.833 -17.851  1.00  0.00
H
ATOM   9638 1HD1 ILE X 609      16.911  34.862 -18.180  1.00  0.00
H
ATOM   9639 2HD1 ILE X 609      18.033  36.217 -17.909  1.00  0.00
H
ATOM   9640 3HD1 ILE X 609      18.009  35.382 -19.481  1.00  0.00
H
ATOM   9641  N   LYS X 610      22.428  36.445 -20.159  1.00  0.00
N
ATOM   9642  CA  LYS X 610      23.807  36.862 -20.397  1.00  0.00
C
ATOM   9643  C   LYS X 610      24.701  36.507 -19.218  1.00  0.00
C
ATOM   9644  O   LYS X 610      25.808  35.996 -19.394  1.00  0.00
O
ATOM   9645  CB  LYS X 610      23.873  38.365 -20.672  1.00  0.00
C
ATOM   9646  CG  LYS X 610      25.269  38.888 -20.976  1.00  0.00
C
ATOM   9647  CD  LYS X 610      25.244  40.372 -21.313  1.00  0.00
C
ATOM   9648  CE  LYS X 610      26.644  40.904 -21.581  1.00  0.00
C
ATOM   9649  NZ  LYS X 610      26.636  42.359 -21.895  1.00  0.00
N
ATOM   9650  H   LYS X 610      21.695  37.139 -20.180  1.00  0.00
H
ATOM   9651  HA  LYS X 610      24.209  36.332 -21.261  1.00  0.00
H
ATOM   9652 1HB  LYS X 610      23.219  38.563 -21.521  1.00  0.00
H
ATOM   9653 2HB  LYS X 610      23.481  38.869 -19.788  1.00  0.00
H
ATOM   9654 1HG  LYS X 610      25.899  38.725 -20.100  1.00  0.00
H
ATOM   9655 2HG  LYS X 610      25.673  38.331 -21.821  1.00  0.00
H
ATOM   9656 1HD  LYS X 610      24.623  40.516 -22.197  1.00  0.00
H
ATOM   9657 2HD  LYS X 610      24.807  40.912 -20.472  1.00  0.00
H
ATOM   9658 1HE  LYS X 610      27.253  40.727 -20.697  1.00  0.00
H
ATOM   9659 2HE  LYS X 610      27.062  40.354 -22.425  1.00  0.00
H
ATOM   9660 1HZ  LYS X 610      27.581  42.672 -22.068  1.00  0.00
H
ATOM   9661 2HZ  LYS X 610      26.071  42.523 -22.717  1.00  0.00
H
ATOM   9662 3HZ  LYS X 610      26.249  42.869 -21.115  1.00  0.00
H
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ATOM   9663  N   SER X 611      24.218  36.784 -18.010  1.00  0.00
N
ATOM   9664  CA  SER X 611      24.999  36.556 -16.801  1.00  0.00
C
ATOM   9665  C   SER X 611      24.891  35.108 -16.340  1.00  0.00
C
ATOM   9666  O   SER X 611      25.777  34.599 -15.651  1.00  0.00
O
ATOM   9667  CB  SER X 611      24.542  37.495 -15.702  1.00  0.00
C
ATOM   9668  OG  SER X 611      23.231  37.227 -15.290  1.00  0.00
O
ATOM   9669  H   SER X 611      23.285  37.163 -17.929  1.00  0.00
H
ATOM   9670  HA  SER X 611      26.048  36.835 -16.904  1.00  0.00
H
ATOM   9671 1HB  SER X 611      25.211  37.384 -14.849  1.00  0.00
H
ATOM   9672 2HB  SER X 611      24.596  38.518 -16.072  1.00  0.00
H
ATOM   9673  HG  SER X 611      22.635  37.327 -16.037  1.00  0.00
H
ATOM   9674  N   ILE X 612      23.804  34.450 -16.725  1.00  0.00
N
ATOM   9675  CA  ILE X 612      23.564  33.068 -16.324  1.00  0.00
C
ATOM   9676  C   ILE X 612      23.420  32.164 -17.542  1.00  0.00
C
ATOM   9677  O   ILE X 612      22.397  32.180 -18.225  1.00  0.00
O
ATOM   9678  CB  ILE X 612      22.304  32.942 -15.449  1.00  0.00
C
ATOM   9679  CG1 ILE X 612      22.443  33.800 -14.188  1.00  0.00
C
ATOM   9680  CG2 ILE X 612      22.054  31.488 -15.081  1.00  0.00
C
ATOM   9681  CD1 ILE X 612      21.177  33.887 -13.366  1.00  0.00
C
ATOM   9682  H   ILE X 612      23.126  34.918 -17.309  1.00  0.00
H
ATOM   9683  HA  ILE X 612      24.422  32.671 -15.782  1.00  0.00
H
ATOM   9684  HB  ILE X 612      21.449  33.331 -16.000  1.00  0.00
H
ATOM   9685 1HG1 ILE X 612      23.238  33.364 -13.584  1.00  0.00
H
ATOM   9686 2HG1 ILE X 612      22.738  34.800 -14.508  1.00  0.00
H
ATOM   9687 1HG2 ILE X 612      21.160  31.417 -14.462  1.00  0.00
H
ATOM   9688 2HG2 ILE X 612      21.913  30.903 -15.989  1.00  0.00
H
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ATOM   9689 3HG2 ILE X 612      22.909  31.100 -14.529  1.00  0.00
H
ATOM   9690 1HD1 ILE X 612      21.353  34.512 -12.490  1.00  0.00
H
ATOM   9691 2HD1 ILE X 612      20.382  34.326 -13.969  1.00  0.00
H
ATOM   9692 3HD1 ILE X 612      20.881  32.890 -13.046  1.00  0.00
H
ATOM   9693  N   THR X 613      24.455  31.367 -17.807  1.00  0.00
N
ATOM   9694  CA  THR X 613      24.377  30.318 -18.818  1.00  0.00
C
ATOM   9695  C   THR X 613      25.202  29.106 -18.417  1.00  0.00
C
ATOM   9696  O   THR X 613      26.303  29.240 -17.879  1.00  0.00
O
ATOM   9697  CB  THR X 613      24.855  30.820 -20.192  1.00  0.00
C
ATOM   9698  CG2 THR X 613      26.318  31.229 -20.131  1.00  0.00
C
ATOM   9699  OG1 THR X 613      24.691  29.782 -21.167  1.00  0.00
O
ATOM   9700  H   THR X 613      25.316  31.492 -17.294  1.00  0.00
H
ATOM   9701  HA  THR X 613      23.347  29.972 -18.912  1.00  0.00
H
ATOM   9702  HB  THR X 613      24.251  31.679 -20.485  1.00  0.00
H
ATOM   9703  HG1 THR X 613      24.989  30.098 -22.023  1.00  0.00
H
ATOM   9704 1HG2 THR X 613      26.638  31.580 -21.112  1.00  0.00
H
ATOM   9705 2HG2 THR X 613      26.444  32.026 -19.399  1.00  0.00
H
ATOM   9706 3HG2 THR X 613      26.922  30.370 -19.840  1.00  0.00
H
ATOM   9707  N   PRO X 614      24.669  27.917 -18.678  1.00  0.00
N
ATOM   9708  CA  PRO X 614      25.375  26.677 -18.388  1.00  0.00
C
ATOM   9709  C   PRO X 614      26.684  26.596 -19.161  1.00  0.00
C
ATOM   9710  O   PRO X 614      26.745  26.941 -20.343  1.00  0.00
O
ATOM   9711  CB  PRO X 614      24.386  25.576 -18.807  1.00  0.00
C
ATOM   9712  CG  PRO X 614      23.029  26.216 -18.710  1.00  0.00
C
ATOM   9713  CD  PRO X 614      23.366  27.680 -19.314  1.00  0.00
C
ATOM   9714  HA  PRO X 614      25.579  26.619 -17.415  1.00  0.00
H
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ATOM   9715 1HB  PRO X 614      24.580  25.503 -19.697  1.00  0.00
H
ATOM   9716 2HB  PRO X 614      24.463  25.023 -18.145  1.00  0.00
H
ATOM   9717 1HG  PRO X 614      22.928  26.733 -19.372  1.00  0.00
H
ATOM   9718 2HG  PRO X 614      22.453  25.598 -18.302  1.00  0.00
H
ATOM   9719 1HD  PRO X 614      23.347  28.303 -20.037  1.00  0.00
H
ATOM   9720 2HD  PRO X 614      22.753  27.816 -18.599  1.00  0.00
H
ATOM   9721  N   GLU X 615      27.736  26.136 -18.488  1.00  0.00
N
ATOM   9722  CA  GLU X 615      29.076  26.148 -19.061  1.00  0.00
C
ATOM   9723  C   GLU X 615      29.402  24.817 -19.728  1.00  0.00
C
ATOM   9724  O   GLU X 615      30.155  24.766 -20.701  1.00  0.00
O
ATOM   9725  CB  GLU X 615      30.116  26.466 -17.985  1.00  0.00
C
ATOM   9726  CG  GLU X 615      29.981  27.852 -17.370  1.00  0.00
C
ATOM   9727  CD  GLU X 615      31.002  28.070 -16.287  1.00  0.00
C
ATOM   9728  OE1 GLU X 615      31.775  27.177 -16.037  1.00  0.00
O
ATOM   9729  OE2 GLU X 615      31.081  29.166 -15.787  1.00  0.00
O
ATOM   9730  H   GLU X 615      27.602  25.770 -17.557  1.00  0.00
H
ATOM   9731  HA  GLU X 615      29.138  26.909 -19.840  1.00  0.00
H
ATOM   9732 1HB  GLU X 615      30.006  25.711 -17.205  1.00  0.00
H
ATOM   9733 2HB  GLU X 615      31.096  26.369 -18.450  1.00  0.00
H
ATOM   9734 1HG  GLU X 615      30.050  28.658 -18.100  1.00  0.00
H
ATOM   9735 2HG  GLU X 615      28.985  27.843 -16.933  1.00  0.00
H
ATOM   9736  N   THR X 616      28.828  23.740 -19.201  1.00  0.00
N
ATOM   9737  CA  THR X 616      28.999  22.417 -19.785  1.00  0.00
C
ATOM   9738  C   THR X 616      27.679  21.880 -20.326  1.00  0.00
C
ATOM   9739  O   THR X 616      26.604  22.347 -19.947  1.00  0.00
O
ATOM   9740  CB  THR X 616      29.569  21.416 -18.763  1.00  0.00
C
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ATOM   9741  CG2 THR X 616      30.908  21.903 -18.231  1.00  0.00
C
ATOM   9742  OG1 THR X 616      28.651  21.268 -17.673  1.00  0.00
O
ATOM   9743  H   THR X 616      28.259  23.841 -18.373  1.00  0.00
H
ATOM   9744  HA  THR X 616      29.680  22.474 -20.635  1.00  0.00
H
ATOM   9745  HB  THR X 616      29.702  20.450 -19.251  1.00  0.00
H
ATOM   9746  HG1 THR X 616      29.008  20.643 -17.036  1.00  0.00
H
ATOM   9747 1HG2 THR X 616      31.295  21.181 -17.511  1.00  0.00
H
ATOM   9748 2HG2 THR X 616      31.612  22.005 -19.058  1.00  0.00
H
ATOM   9749 3HG2 THR X 616      30.776  22.867 -17.745  1.00  0.00
H
ATOM   9750  N   PRO X 617      27.766  20.898 -21.217  1.00  0.00
N
ATOM   9751  CA  PRO X 617      26.579  20.267 -21.781  1.00  0.00
C
ATOM   9752  C   PRO X 617      25.923  19.327 -20.777  1.00  0.00
C
ATOM   9753  O   PRO X 617      26.541  18.931 -19.787  1.00  0.00
O
ATOM   9754  CB  PRO X 617      27.103  19.517 -23.018  1.00  0.00
C
ATOM   9755  CG  PRO X 617      28.520  19.149 -22.678  1.00  0.00
C
ATOM   9756  CD  PRO X 617      28.987  20.535 -21.949  1.00  0.00
C
ATOM   9757  HA  PRO X 617      25.914  20.962 -22.041  1.00  0.00
H
ATOM   9758 1HB  PRO X 617      26.611  18.748 -22.970  1.00  0.00
H
ATOM   9759 2HB  PRO X 617      27.130  20.158 -23.601  1.00  0.00
H
ATOM   9760 1HG  PRO X 617      28.505  18.498 -22.134  1.00  0.00
H
ATOM   9761 2HG  PRO X 617      29.046  19.325 -23.432  1.00  0.00
H
ATOM   9762 1HD  PRO X 617      29.613  20.323 -21.262  1.00  0.00
H
ATOM   9763 2HD  PRO X 617      29.156  21.312 -22.476  1.00  0.00
H
ATOM   9764  N   THR X 618      24.670  18.971 -21.040  1.00  0.00
N
ATOM   9765  CA  THR X 618      23.927  18.078 -20.156  1.00  0.00
C
ATOM   9766  C   THR X 618      23.964  16.642 -20.666  1.00  0.00
C
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ATOM   9767  O   THR X 618      23.569  16.368 -21.801  1.00  0.00
O
ATOM   9768  CB  THR X 618      22.460  18.523 -20.008  1.00  0.00
C
ATOM   9769  CG2 THR X 618      21.707  17.576 -19.086  1.00  0.00
C
ATOM   9770  OG1 THR X 618      22.413  19.850 -19.466  1.00  0.00
O
ATOM   9771  H   THR X 618      24.221  19.327 -21.872  1.00  0.00
H
ATOM   9772  HA  THR X 618      24.390  18.067 -19.169  1.00  0.00
H
ATOM   9773  HB  THR X 618      21.989  18.524 -20.990  1.00  0.00
H
ATOM   9774  HG1 THR X 618      21.499  20.125 -19.375  1.00  0.00
H
ATOM   9775 1HG2 THR X 618      20.673  17.907 -18.994  1.00  0.00
H
ATOM   9776 2HG2 THR X 618      21.732  16.569 -19.501  1.00  0.00
H
ATOM   9777 3HG2 THR X 618      22.177  17.576 -18.103  1.00  0.00
H
ATOM   9778  N   GLU X 619      24.438  15.734 -19.824  1.00  0.00
N
ATOM   9779  CA  GLU X 619      24.574  14.331 -20.205  1.00  0.00
C
ATOM   9780  C   GLU X 619      23.217  13.707 -20.499  1.00  0.00
C
ATOM   9781  O   GLU X 619      22.281  13.825 -19.705  1.00  0.00
O
ATOM   9782  CB  GLU X 619      25.286  13.543 -19.104  1.00  0.00
C
ATOM   9783  CG  GLU X 619      25.574  12.090 -19.455  1.00  0.00
C
ATOM   9784  CD  GLU X 619      26.318  11.397 -18.347  1.00  0.00
C
ATOM   9785  OE1 GLU X 619      26.603  12.033 -17.361  1.00  0.00
O
ATOM   9786  OE2 GLU X 619      26.502  10.207 -18.437  1.00  0.00
O
ATOM   9787  H   GLU X 619      24.713  16.020 -18.896  1.00  0.00
H
ATOM   9788  HA  GLU X 619      25.157  14.251 -21.122  1.00  0.00
H
ATOM   9789 1HB  GLU X 619      26.225  14.060 -18.899  1.00  0.00
H
ATOM   9790 2HB  GLU X 619      24.649  13.584 -18.219  1.00  0.00
H
ATOM   9791 1HG  GLU X 619      24.680  11.519 -19.703  1.00  0.00
H
ATOM   9792 2HG  GLU X 619      26.214  12.162 -20.333  1.00  0.00
H
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ATOM   9793  N   ILE X 620      23.116  13.039 -21.642  1.00  0.00
N
ATOM   9794  CA  ILE X 620      21.893  12.343 -22.020  1.00  0.00
C
ATOM   9795  C   ILE X 620      21.992  10.851 -21.725  1.00  0.00
C
ATOM   9796  O   ILE X 620      22.840  10.155 -22.285  1.00  0.00
O
ATOM   9797  CB  ILE X 620      21.569  12.540 -23.512  1.00  0.00
C
ATOM   9798  CG1 ILE X 620      21.584  14.028 -23.870  1.00  0.00
C
ATOM   9799  CG2 ILE X 620      20.221  11.923 -23.849  1.00  0.00
C
ATOM   9800  CD1 ILE X 620      20.606  14.859 -23.073  1.00  0.00
C
ATOM   9801  H   ILE X 620      23.908  13.013 -22.268  1.00  0.00
H
ATOM   9802  HA  ILE X 620      21.054  12.688 -21.417  1.00  0.00
H
ATOM   9803  HB  ILE X 620      22.345  12.065 -24.109  1.00  0.00
H
ATOM   9804 1HG1 ILE X 620      22.597  14.394 -23.696  1.00  0.00
H
ATOM   9805 2HG1 ILE X 620      21.348  14.108 -24.930  1.00  0.00
H
ATOM   9806 1HG2 ILE X 620      20.006  12.071 -24.907  1.00  0.00
H
ATOM   9807 2HG2 ILE X 620      20.244  10.856 -23.631  1.00  0.00
H
ATOM   9808 3HG2 ILE X 620      19.443  12.398 -23.252  1.00  0.00
H
ATOM   9809 1HD1 ILE X 620      20.675  15.902 -23.382  1.00  0.00
H
ATOM   9810 2HD1 ILE X 620      19.592  14.496 -23.247  1.00  0.00
H
ATOM   9811 3HD1 ILE X 620      20.841  14.781 -22.011  1.00  0.00
H
ATOM   9812  N   PRO X 621      21.128  10.368 -20.840  1.00  0.00
N
ATOM   9813  CA  PRO X 621      21.124   8.959 -20.464  1.00  0.00
C
ATOM   9814  C   PRO X 621      21.016   8.061 -21.690  1.00  0.00
C
ATOM   9815  O   PRO X 621      21.635   7.000 -21.749  1.00  0.00
O
ATOM   9816  CB  PRO X 621      19.904   8.821 -19.537  1.00  0.00
C
ATOM   9817  CG  PRO X 621      19.728  10.183 -18.925  1.00  0.00
C
ATOM   9818  CD  PRO X 621      19.972  11.092 -20.293  1.00  0.00
C
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ATOM   9819  HA  PRO X 621      21.965   8.731 -19.982  1.00  0.00
H
ATOM   9820 1HB  PRO X 621      19.234   8.721 -20.153  1.00  0.00
H
ATOM   9821 2HB  PRO X 621      20.218   8.296 -18.926  1.00  0.00
H
ATOM   9822 1HG  PRO X 621      19.385  10.697 -19.504  1.00  0.00
H
ATOM   9823 2HG  PRO X 621      19.550  10.060 -18.012  1.00  0.00
H
ATOM   9824 1HD  PRO X 621      19.652  11.603 -21.032  1.00  0.00
H
ATOM   9825 2HD  PRO X 621      20.349  11.565 -19.557  1.00  0.00
H
ATOM   9826  N   CYS X 622      20.223   8.492 -22.664  1.00  0.00
N
ATOM   9827  CA  CYS X 622      19.980   7.696 -23.863  1.00  0.00
C
ATOM   9828  C   CYS X 622      19.844   8.584 -25.093  1.00  0.00
C
ATOM   9829  O   CYS X 622      18.905   9.374 -25.200  1.00  0.00
O
ATOM   9830  CB  CYS X 622      18.652   7.005 -23.547  1.00  0.00
C
ATOM   9831  SG  CYS X 622      18.075   5.871 -24.831  1.00  0.00
S
ATOM   9832  H   CYS X 622      19.776   9.393 -22.573  1.00  0.00
H
ATOM   9833  HA  CYS X 622      20.738   6.932 -24.037  1.00  0.00
H
ATOM   9834 1HB  CYS X 622      18.742   6.412 -22.637  1.00  0.00
H
ATOM   9835 2HB  CYS X 622      17.864   7.747 -23.421  1.00  0.00
H
ATOM   9836  HG  CYS X 622      16.961   5.505 -24.203  1.00  0.00
H
ATOM   9837  N   GLY X 623      20.785   8.446 -26.022  1.00  0.00
N
ATOM   9838  CA  GLY X 623      20.726   9.177 -27.285  1.00  0.00
C
ATOM   9839  C   GLY X 623      19.383   8.979 -27.974  1.00  0.00
C
ATOM   9840  O   GLY X 623      18.835   9.908 -28.564  1.00  0.00
O
ATOM   9841  H   GLY X 623      21.559   7.821 -25.850  1.00  0.00
H
ATOM   9842 1HA  GLY X 623      20.871  10.240 -27.089  1.00  0.00
H
ATOM   9843 2HA  GLY X 623      21.518   8.818 -27.941  1.00  0.00
H
ATOM   9844  N   ASP X 624      18.857   7.763 -27.896  1.00  0.00
N
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ATOM   9845  CA  ASP X 624      17.569   7.445 -28.501  1.00  0.00
C
ATOM   9846  C   ASP X 624      16.432   8.169 -27.796  1.00  0.00
C
ATOM   9847  O   ASP X 624      16.097   7.855 -26.653  1.00  0.00
O
ATOM   9848  CB  ASP X 624      17.322   5.935 -28.476  1.00  0.00
C
ATOM   9849  CG  ASP X 624      16.042   5.495 -29.175  1.00  0.00
C
ATOM   9850  OD1 ASP X 624      15.277   6.346 -29.561  1.00  0.00
O
ATOM   9851  OD2 ASP X 624      15.916   4.328 -29.458  1.00  0.00
O
ATOM   9852  H   ASP X 624      19.362   7.039 -27.405  1.00  0.00
H
ATOM   9853  HA  ASP X 624      17.555   7.783 -29.537  1.00  0.00
H
ATOM   9854 1HB  ASP X 624      18.161   5.351 -28.853  1.00  0.00
H
ATOM   9855 2HB  ASP X 624      17.221   5.775 -27.402  1.00  0.00
H
ATOM   9856  N   ILE X 625      15.839   9.139 -28.482  1.00  0.00
N
ATOM   9857  CA  ILE X 625      14.623   9.788 -28.001  1.00  0.00
C
ATOM   9858  C   ILE X 625      13.381   9.139 -28.593  1.00  0.00
C
ATOM   9859  O   ILE X 625      13.122   9.253 -29.790  1.00  0.00
O
ATOM   9860  CB  ILE X 625      14.615  11.291 -28.337  1.00  0.00
C
ATOM   9861  CG1 ILE X 625      15.897  11.958 -27.831  1.00  0.00
C
ATOM   9862  CG2 ILE X 625      13.389  11.963 -27.737  1.00  0.00
C
ATOM   9863  CD1 ILE X 625      16.111  11.819 -26.341  1.00  0.00
C
ATOM   9864  H   ILE X 625      16.239   9.435 -29.360  1.00  0.00
H
ATOM   9865  HA  ILE X 625      14.518   9.657 -26.924  1.00  0.00
H
ATOM   9866  HB  ILE X 625      14.603  11.413 -29.419  1.00  0.00
H
ATOM   9867 1HG1 ILE X 625      16.730  11.502 -28.362  1.00  0.00
H
ATOM   9868 2HG1 ILE X 625      15.836  13.016 -28.090  1.00  0.00
H
ATOM   9869 1HG2 ILE X 625      13.398  13.025 -27.984  1.00  0.00
H
ATOM   9870 2HG2 ILE X 625      12.488  11.506 -28.144  1.00  0.00
H
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ATOM   9871 3HG2 ILE X 625      13.401  11.843 -26.654  1.00  0.00
H
ATOM   9872 1HD1 ILE X 625      17.039  12.318 -26.058  1.00  0.00
H
ATOM   9873 2HD1 ILE X 625      15.278  12.277 -25.808  1.00  0.00
H
ATOM   9874 3HD1 ILE X 625      16.173  10.764 -26.079  1.00  0.00
H
ATOM   9875  N   ARG X 626      12.615   8.460 -27.747  1.00  0.00
N
ATOM   9876  CA  ARG X 626      11.453   7.705 -28.200  1.00  0.00
C
ATOM   9877  C   ARG X 626      10.196   8.567 -28.187  1.00  0.00
C
ATOM   9878  O   ARG X 626       9.206   8.251 -28.846  1.00  0.00
O
ATOM   9879  CB  ARG X 626      11.256   6.422 -27.407  1.00  0.00
C
ATOM   9880  CG  ARG X 626      12.372   5.401 -27.556  1.00  0.00
C
ATOM   9881  CD  ARG X 626      12.111   4.105 -26.880  1.00  0.00
C
ATOM   9882  NE  ARG X 626      11.000   3.349 -27.435  1.00  0.00
N
ATOM   9883  CZ  ARG X 626      10.579   2.156 -26.972  1.00  0.00
C
ATOM   9884  NH1 ARG X 626      11.196   1.560 -25.976  1.00  0.00
N
ATOM   9885  NH2 ARG X 626       9.544   1.586 -27.564  1.00  0.00
N
ATOM   9886  H   ARG X 626      12.843   8.467 -26.762  1.00  0.00
H
ATOM   9887  HA  ARG X 626      11.600   7.387 -29.233  1.00  0.00
H
ATOM   9888 1HB  ARG X 626      11.166   6.706 -26.359  1.00  0.00
H
ATOM   9889 2HB  ARG X 626      10.319   5.980 -27.744  1.00  0.00
H
ATOM   9890 1HG  ARG X 626      12.522   5.202 -28.617  1.00  0.00
H
ATOM   9891 2HG  ARG X 626      13.285   5.822 -27.133  1.00  0.00
H
ATOM   9892 1HD  ARG X 626      13.001   3.480 -26.956  1.00  0.00
H
ATOM   9893 2HD  ARG X 626      11.888   4.290 -25.830  1.00  0.00
H
ATOM   9894  HE  ARG X 626      10.390   3.575 -28.210  1.00  0.00
H
ATOM   9895 1HH1 ARG X 626      11.997   2.000 -25.545  1.00  0.00
H
ATOM   9896 2HH1 ARG X 626      10.865   0.665 -25.645  1.00  0.00
H
```

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ATOM   9897 1HH2 ARG X 626       9.093   2.049 -28.341  1.00  0.00
H
ATOM   9898 2HH2 ARG X 626       9.209   0.692 -27.238  1.00  0.00
H
ATOM   9899  N   LEU X 627      10.240   9.654 -27.427  1.00  0.00
N
ATOM   9900  CA  LEU X 627       9.123  10.590 -27.360  1.00  0.00
C
ATOM   9901  C   LEU X 627       9.057  11.458 -28.611  1.00  0.00
C
ATOM   9902  O   LEU X 627       9.958  12.255 -28.872  1.00  0.00
O
ATOM   9903  CB  LEU X 627       9.240  11.467 -26.107  1.00  0.00
C
ATOM   9904  CG  LEU X 627       8.000  12.310 -25.782  1.00  0.00
C
ATOM   9905  CD1 LEU X 627       6.831  11.404 -25.424  1.00  0.00
C
ATOM   9906  CD2 LEU X 627       8.317  13.260 -24.639  1.00  0.00
C
ATOM   9907  H   LEU X 627      11.070   9.838 -26.880  1.00  0.00
H
ATOM   9908  HA  LEU X 627       8.186  10.036 -27.318  1.00  0.00
H
ATOM   9909 1HB  LEU X 627       9.369  10.688 -25.357  1.00  0.00
H
ATOM   9910 2HB  LEU X 627      10.132  12.094 -26.136  1.00  0.00
H
ATOM   9911  HG  LEU X 627       7.780  12.912 -26.665  1.00  0.00
H
ATOM   9912 1HD1 LEU X 627       5.956  12.012 -25.196  1.00  0.00
H
ATOM   9913 2HD1 LEU X 627       6.607  10.749 -26.267  1.00  0.00
H
ATOM   9914 3HD1 LEU X 627       7.092  10.801 -24.555  1.00  0.00
H
ATOM   9915 1HD2 LEU X 627       7.436  13.860 -24.410  1.00  0.00
H
ATOM   9916 2HD2 LEU X 627       8.606  12.686 -23.757  1.00  0.00
H
ATOM   9917 3HD2 LEU X 627       9.138  13.918 -24.926  1.00  0.00
H
ATOM   9918  N   ASN X 628       7.987  11.298 -29.380  1.00  0.00
N
ATOM   9919  CA  ASN X 628       7.723  12.173 -30.516  1.00  0.00
C
ATOM   9920  C   ASN X 628       7.250  13.547 -30.056  1.00  0.00
C
ATOM   9921  O   ASN X 628       7.317  14.520 -30.808  1.00  0.00
O
ATOM   9922  CB  ASN X 628       6.710  11.559 -31.465  1.00  0.00
C
```

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ATOM   9923  CG  ASN X 628       7.244  10.393 -32.249  1.00  0.00
C
ATOM   9924  ND2 ASN X 628       6.341   9.623 -32.801  1.00  0.00
N
ATOM   9925  OD1 ASN X 628       8.458  10.233 -32.414  1.00  0.00
O
ATOM   9926  H   ASN X 628       7.340  10.551 -29.174  1.00  0.00
H
ATOM   9927  HA  ASN X 628       8.643  12.336 -31.080  1.00  0.00
H
ATOM   9928 1HB  ASN X 628       5.697  11.333 -31.131  1.00  0.00
H
ATOM   9929 2HB  ASN X 628       6.690  12.438 -32.113  1.00  0.00
H
ATOM   9930 1HD2 ASN X 628       6.623   8.827 -33.337  1.00  0.00
H
ATOM   9931 2HD2 ASN X 628       5.369   9.830 -32.687  1.00  0.00
H
ATOM   9932  N   ALA X 629       6.778  13.621 -28.818  1.00  0.00
N
ATOM   9933  CA  ALA X 629       6.341  14.886 -28.239  1.00  0.00
C
ATOM   9934  C   ALA X 629       7.515  15.665 -27.664  1.00  0.00
C
ATOM   9935  O   ALA X 629       7.358  16.792 -27.197  1.00  0.00
O
ATOM   9936  CB  ALA X 629       5.289  14.642 -27.167  1.00  0.00
C
ATOM   9937  H   ALA X 629       6.720  12.780 -28.263  1.00  0.00
H
ATOM   9938  HA  ALA X 629       5.901  15.498 -29.026  1.00  0.00
H
ATOM   9939 1HB  ALA X 629       4.973  15.596 -26.744  1.00  0.00
H
ATOM   9940 2HB  ALA X 629       4.428  14.139 -27.609  1.00  0.00
H
ATOM   9941 3HB  ALA X 629       5.709  14.019 -26.379  1.00  0.00
H
ATOM   9942  N   VAL X 630       8.698  15.054 -27.697  1.00  0.00
N
ATOM   9943  CA  VAL X 630       9.901  15.685 -27.168  1.00  0.00
C
ATOM   9944  C   VAL X 630       9.968  17.158 -27.556  1.00  0.00
C
ATOM   9945  O   VAL X 630       9.725  17.516 -28.705  1.00  0.00
O
ATOM   9946  CB  VAL X 630      11.175  14.974 -27.662  1.00  0.00
C
ATOM   9947  CG1 VAL X 630      11.317  15.122 -29.170  1.00  0.00
C
ATOM   9948  CG2 VAL X 630      12.403  15.530 -26.957  1.00  0.00
C
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ATOM   9949  OXT VAL X 630      10.261  17.982 -26.734  1.00  0.00
O
ATOM   9950  H   VAL X 630       8.764  14.130 -28.101  1.00  0.00
H
ATOM   9951  HA  VAL X 630       9.902  15.683 -26.077  1.00  0.00
H
ATOM   9952  HB  VAL X 630      11.114  13.917 -27.405  1.00  0.00
H
ATOM   9953 1HG1 VAL X 630      12.223  14.614 -29.502  1.00  0.00
H
ATOM   9954 2HG1 VAL X 630      10.452  14.678 -29.661  1.00  0.00
H
ATOM   9955 3HG1 VAL X 630      11.379  16.179 -29.426  1.00  0.00
H
ATOM   9956 1HG2 VAL X 630      13.294  15.018 -27.317  1.00  0.00
H
ATOM   9957 2HG2 VAL X 630      12.489  16.597 -27.164  1.00  0.00
H
ATOM   9958 3HG2 VAL X 630      12.307  15.377 -25.881  1.00  0.00
H
```

S5: *R*-citalopram docked into hSERT model.