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HEADER    HPRMT1_13a(DCPR049)
COMPND    HPRMT1_13a(DCPR049)
REMARK    GENERATED BY SYBYL (TRIPOS, INC.)       03-AUG-17
SEQRES   1 A  327  GLU ASP MET THR SER LYS ASP TYR TYR PHE ASP SER TYR
SEQRES   2 A  327  ALA HIE PHE GLY ILE HIE GLU GLU MET LEU LYS ASP GLU
SEQRES   3 A  327  VAL ARG THR LEU THR TYR ARG ASN SER MET PHE HIS ASN
SEQRES   4 A  327  ARG HIE LEU PHE LYS ASP LYS VAL VAL LEU ASP VAL GLY
SEQRES   5 A  327  SER GLY THR GLY ILE LEU CYS MET PHE ALA ALA LYS ALA
SEQRES   6 A  327  GLY ALA ARG LYS VAL ILE GLY ILE GLU CYS SER SER ILE
SEQRES   7 A  327  SER ASP TYR ALA VAL LYS ILE VAL LYS ALA ASN LYS LEU
SEQRES   8 A  327  ASP HIS VAL VAL THR ILE ILE LYS GLY LYS VAL GLU GLU
SEQRES   9 A  327  VAL GLU LEU PRO VAL GLU LYS VAL ASP ILE ILE ILE SER
SEQRES  10 A  327  GLU TRP MET GLY TYR CYS LEU PHE TYR GLU SER MET LEU
SEQRES  11 A  327  ASN THR VAL LEU TYR ALA ARG ASP LYS TRP LEU ALA PRO
SEQRES  12 A  327  ASP GLY LEU ILE PHE PRO ASP ARG ALA THR LEU TYR VAL
SEQRES  13 A  327  THR ALA ILE GLU ASP ARG GLN TYR LYS ASP TYR LYS ILE
SEQRES  14 A  327  HIE TRP TRP GLU ASN VAL TYR GLY PHE ASP MET SER CYS
SEQRES  15 A  327  ILE LYS ASP VAL ALA ILE LYS GLU PRO LEU VAL ASP VAL
SEQRES  16 A  327  VAL ASP PRO LYS GLN LEU VAL THR ASN ALA CYS LEU ILE
SEQRES  17 A  327  LYS GLU VAL ASP ILE TYR THR VAL LYS VAL GLU ASP LEU
SEQRES  18 A  327  THR PHE THR SER PRO PHE CYS LEU GLN VAL LYS ARG ASN
SEQRES  19 A  327  ASP TYR VAL HIE ALA LEU VAL ALA TYR PHE ASN ILE GLU
SEQRES  20 A  327  PHE THR ARG CYS HIS LYS ARG THR GLY PHE SER THR SER
SEQRES  21 A  327  PRO GLU SER PRO TYR THR HIP TRP LYS GLN THR VAL PHE
SEQRES  22 A  327  TYR MET GLU ASP TYR LEU THR VAL LYS THR GLY GLU GLU
SEQRES  23 A  327  ILE PHE GLY THR ILE GLY MET ARG PRO ASN ALA LYS ASN
SEQRES  24 A  327  ASN ARG ASP LEU ASP PHE THR ILE ASP LEU ASP PHE LYS
SEQRES  25 A  327  GLY GLN LEU CYS GLU LEU SER CYS SER THR ASP TYR ARG
SEQRES  26 A  327  MET ARG
HET    HIE  A  41       10
HET    HIE  A  45       10
HET    HIE  A  67       10
HET    HIE  A 196       10
HET    HIE  A 264       10
HET    HIP  A 293       10
HET    Q0   A   0       25
ATOM      1  N   GLU A  27      89.646  45.974 214.346  1.00  0.00
N
ATOM      2  CA  GLU A  27      88.879  47.225 214.514  1.00  0.00
C
ATOM      3  C   GLU A  27      87.365  47.053 214.297  1.00  0.00
C
ATOM      4  O   GLU A  27      86.606  47.974 214.604  1.00  0.00
O
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ATOM      5  CB  GLU A  27      89.490  48.365 213.658  1.00  0.00
C
ATOM      6  CG  GLU A  27      89.113  48.416 212.153  1.00  0.00
C
ATOM      7  CD  GLU A  27      89.708  47.286 211.303  1.00  0.00
C
ATOM      8  OE1 GLU A  27      90.681  46.651 211.768  1.00  0.00
O
ATOM      9  OE2 GLU A  27      89.175  47.074 210.193  1.00  0.00
O
ATOM     10  N   ASP A  28      86.913  45.889 213.803  1.00  0.00
N
ATOM     11  CA  ASP A  28      85.504  45.549 213.588  1.00  0.00
C
ATOM     12  C   ASP A  28      84.752  45.404 214.927  1.00  0.00
C
ATOM     13  O   ASP A  28      83.635  45.906 215.048  1.00  0.00
O
ATOM     14  CB  ASP A  28      85.403  44.249 212.743  1.00  0.00
C
ATOM     15  CG  ASP A  28      85.982  42.955 213.344  1.00  0.00
C
ATOM     16  OD1 ASP A  28      86.983  43.041 214.093  1.00  0.00
O
ATOM     17  OD2 ASP A  28      85.408  41.891 213.031  1.00  0.00
O
ATOM     18  N   MET A  29      85.383  44.775 215.936  1.00  0.00
N
ATOM     19  CA  MET A  29      84.871  44.622 217.295  1.00  0.00
C
ATOM     20  C   MET A  29      84.670  45.979 217.991  1.00  0.00
C
ATOM     21  O   MET A  29      83.591  46.227 218.523  1.00  0.00
O
ATOM     22  CB  MET A  29      85.789  43.672 218.107  1.00  0.00
C
ATOM     23  CG  MET A  29      87.230  44.162 218.360  1.00  0.00
C
ATOM     24  SD  MET A  29      88.325  42.997 219.212  1.00  0.00
S
ATOM     25  CE  MET A  29      88.675  41.830 217.872  1.00  0.00
C
ATOM     26  N   THR A  30      85.676  46.870 217.920  1.00  0.00
N
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ATOM     27  CA  THR A  30      85.731  48.157 218.619  1.00  0.00
C
ATOM     28  C   THR A  30      84.717  49.184 218.079  1.00  0.00
C
ATOM     29  O   THR A  30      84.213  49.994 218.857  1.00  0.00
O
ATOM     30  CB  THR A  30      87.174  48.730 218.546  1.00  0.00
C
ATOM     31  OG1 THR A  30      87.553  49.105 217.235  1.00  0.00
O
ATOM     32  CG2 THR A  30      88.253  47.791 219.107  1.00  0.00
C
ATOM     33  N   SER A  31      84.403  49.142 216.770  1.00  0.00
N
ATOM     34  CA  SER A  31      83.429  50.023 216.120  1.00  0.00
C
ATOM     35  C   SER A  31      81.982  49.703 216.546  1.00  0.00
C
ATOM     36  O   SER A  31      81.170  50.617 216.692  1.00  0.00
O
ATOM     37  CB  SER A  31      83.600  49.919 214.585  1.00  0.00
C
ATOM     38  OG  SER A  31      83.119  48.706 214.032  1.00  0.00
O
ATOM     39  N   LYS A  32      81.685  48.415 216.790  1.00  0.00
N
ATOM     40  CA  LYS A  32      80.392  47.927 217.255  1.00  0.00
C
ATOM     41  C   LYS A  32      80.225  48.178 218.759  1.00  0.00
C
ATOM     42  O   LYS A  32      79.136  48.565 219.178  1.00  0.00
O
ATOM     43  CB  LYS A  32      80.307  46.410 216.994  1.00  0.00
C
ATOM     44  CG  LYS A  32      80.280  46.031 215.500  1.00  0.00
C
ATOM     45  CD  LYS A  32      78.967  46.391 214.786  1.00  0.00
C
ATOM     46  CE  LYS A  32      78.946  45.902 213.332  1.00  0.00
C
ATOM     47  NZ  LYS A  32      77.697  46.288 212.654  1.00  0.00
N
ATOM     48  N   ASP A  33      81.298  48.026 219.557  1.00  0.00
N
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ATOM     49  CA  ASP A  33       81.321  48.338 220.990  1.00  0.00
C
ATOM     50  C   ASP A  33       81.028  49.815 221.280  1.00  0.00
C
ATOM     51  O   ASP A  33       80.296  50.091 222.224  1.00  0.00
O
ATOM     52  CB  ASP A  33       82.669  47.943 221.638  1.00  0.00
C
ATOM     53  CG  ASP A  33       82.984  46.446 221.598  1.00  0.00
C
ATOM     54  OD1 ASP A  33       82.033  45.647 221.744  1.00  0.00
O
ATOM     55  OD2 ASP A  33       84.183  46.125 221.442  1.00  0.00
O
ATOM     56  N   TYR A  34       81.526  50.752 220.453  1.00  0.00
N
ATOM     57  CA  TYR A  34       81.270  52.188 220.594  1.00  0.00
C
ATOM     58  C   TYR A  34       79.812  52.563 220.248  1.00  0.00
C
ATOM     59  O   TYR A  34       79.255  53.471 220.865  1.00  0.00
O
ATOM     60  CB  TYR A  34       82.242  52.961 219.677  1.00  0.00
C
ATOM     61  CG  TYR A  34       82.163  54.472 219.827  1.00  0.00
C
ATOM     62  CD1 TYR A  34       82.712  55.095 220.967  1.00  0.00
C
ATOM     63  CD2 TYR A  34       81.492  55.251 218.860  1.00  0.00
C
ATOM     64  CE1 TYR A  34       82.582  56.485 221.146  1.00  0.00
C
ATOM     65  CE2 TYR A  34       81.362  56.641 219.039  1.00  0.00
C
ATOM     66  CZ  TYR A  34       81.904  57.259 220.183  1.00  0.00
C
ATOM     67  OH  TYR A  34       81.766  58.604 220.360  1.00  0.00
O
ATOM     68  N   TYR A  35       79.192  51.852 219.290  1.00  0.00
N
ATOM     69  CA  TYR A  35       77.804  52.040 218.870  1.00  0.00
C
ATOM     70  C   TYR A  35       76.822  51.531 219.942  1.00  0.00
C
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ATOM     71  O   TYR A  35      75.899  52.256 220.309  1.00  0.00
O
ATOM     72  CB  TYR A  35      77.603  51.289 217.532  1.00  0.00
C
ATOM     73  CG  TYR A  35      76.186  51.260 216.982  1.00  0.00
C
ATOM     74  CD1 TYR A  35      75.519  52.457 216.646  1.00  0.00
C
ATOM     75  CD2 TYR A  35      75.526  50.027 216.807  1.00  0.00
C
ATOM     76  CE1 TYR A  35      74.194  52.418 216.170  1.00  0.00
C
ATOM     77  CE2 TYR A  35      74.201  49.989 216.329  1.00  0.00
C
ATOM     78  CZ  TYR A  35      73.527  51.186 216.029  1.00  0.00
C
ATOM     79  OH  TYR A  35      72.231  51.150 215.607  1.00  0.00
O
ATOM     80  N   PHE A  36      77.033  50.312 220.466  1.00  0.00
N
ATOM     81  CA  PHE A  36      76.147  49.684 221.449  1.00  0.00
C
ATOM     82  C   PHE A  36      76.410  50.148 222.890  1.00  0.00
C
ATOM     83  O   PHE A  36      75.544  49.946 223.738  1.00  0.00
O
ATOM     84  CB  PHE A  36      76.305  48.153 221.353  1.00  0.00
C
ATOM     85  CG  PHE A  36      75.832  47.593 220.020  1.00  0.00
C
ATOM     86  CD1 PHE A  36      74.546  47.913 219.534  1.00  0.00
C
ATOM     87  CD2 PHE A  36      76.682  46.783 219.241  1.00  0.00
C
ATOM     88  CE1 PHE A  36      74.108  47.405 218.295  1.00  0.00
C
ATOM     89  CE2 PHE A  36      76.264  46.331 217.976  1.00  0.00
C
ATOM     90  CZ  PHE A  36      74.966  46.612 217.514  1.00  0.00
C
ATOM     91  N   ASP A  37      77.533  50.836 223.160  1.00  0.00
N
ATOM     92  CA  ASP A  37      77.794  51.521 224.428  1.00  0.00
C
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ATOM     93  C    ASP A  37       76.980  52.829 224.542  1.00  0.00
C
ATOM     94  O    ASP A  37       76.636  53.235 225.652  1.00  0.00
O
ATOM     95  CB   ASP A  37       79.311  51.801 224.551  1.00  0.00
C
ATOM     96  CG   ASP A  37       79.721  52.513 225.843  1.00  0.00
C
ATOM     97  OD1 ASP A  37       79.609  51.860 226.904  1.00  0.00
O
ATOM     98  OD2 ASP A  37       80.132  53.689 225.745  1.00  0.00
O
ATOM     99  N    SER A  38       76.612  53.458 223.410  1.00  0.00
N
ATOM    100  CA   SER A  38       75.704  54.605 223.387  1.00  0.00
C
ATOM    101  C    SER A  38       74.271  54.165 223.743  1.00  0.00
C
ATOM    102  O    SER A  38       73.601  54.850 224.509  1.00  0.00
O
ATOM    103  CB   SER A  38       75.747  55.274 221.998  1.00  0.00
C
ATOM    104  OG   SER A  38       75.003  56.477 221.988  1.00  0.00
O
ATOM    105  N    TYR A  39       73.823  52.990 223.271  1.00  0.00
N
ATOM    106  CA   TYR A  39       72.523  52.414 223.623  1.00  0.00
C
ATOM    107  C    TYR A  39       72.514  51.706 224.991  1.00  0.00
C
ATOM    108  O    TYR A  39       71.447  51.270 225.420  1.00  0.00
O
ATOM    109  CB   TYR A  39       72.103  51.423 222.518  1.00  0.00
C
ATOM    110  CG   TYR A  39       71.581  52.136 221.286  1.00  0.00
C
ATOM    111  CD1 TYR A  39       70.308  52.742 221.320  1.00  0.00
C
ATOM    112  CD2 TYR A  39       72.367  52.231 220.120  1.00  0.00
C
ATOM    113  CE1 TYR A  39       69.821  53.440 220.201  1.00  0.00
C
ATOM    114  CE2 TYR A  39       71.884  52.942 219.004  1.00  0.00
C
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ATOM    115  CZ  TYR A  39      70.614  53.548 219.043  1.00  0.00
C
ATOM    116  OH  TYR A  39      70.155  54.242 217.961  1.00  0.00
O
ATOM    117  N   ALA A  40      73.658  51.613 225.695  1.00  0.00
N
ATOM    118  CA  ALA A  40      73.760  51.052 227.044  1.00  0.00
C
ATOM    119  C   ALA A  40      73.218  52.028 228.097  1.00  0.00
C
ATOM    120  O   ALA A  40      72.579  51.582 229.051  1.00  0.00
O
ATOM    121  CB  ALA A  40      75.235  50.770 227.361  1.00  0.00
C
HETATM  122  N   HIE A  41      73.423  53.346 227.898  1.00  0.00
N
HETATM  123  CA  HIE A  41      72.778  54.383 228.694  1.00  0.00
C
HETATM  124  C   HIE A  41      71.363  54.629 228.155  1.00  0.00
C
HETATM  125  O   HIE A  41      71.066  54.456 226.972  1.00  0.00
O
HETATM  126  CB  HIE A  41      73.608  55.693 228.706  1.00  0.00
C
HETATM  127  CG  HIE A  41      73.668  56.547 227.460  1.00  0.00
C
HETATM  128  ND1 HIE A  41      72.628  57.399 227.076  1.00  0.00
N
HETATM  129  CE1 HIE A  41      73.047  57.978 225.960  1.00  0.00
C
HETATM  130  NE2 HIE A  41      74.272  57.591 225.606  1.00  0.00
N
HETATM  131  CD2 HIE A  41      74.703  56.683 226.560  1.00  0.00
C
ATOM    132  N   PHE A  42      70.508  55.056 229.083  1.00  0.00
N
ATOM    133  CA  PHE A  42      69.083  55.325 228.978  1.00  0.00
C
ATOM    134  C   PHE A  42      68.705  56.533 228.103  1.00  0.00
C
ATOM    135  O   PHE A  42      67.516  56.782 227.949  1.00  0.00
O
ATOM    136  CB  PHE A  42      68.606  55.606 230.425  1.00  0.00
C
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ATOM    137  CG  PHE A  42      69.295  56.805 231.072  1.00  0.00
C
ATOM    138  CD1 PHE A  42      68.741  58.097 230.943  1.00  0.00
C
ATOM    139  CD2 PHE A  42      70.533  56.644 231.733  1.00  0.00
C
ATOM    140  CE1 PHE A  42      69.437  59.220 231.429  1.00  0.00
C
ATOM    141  CE2 PHE A  42      71.228  57.767 232.221  1.00  0.00
C
ATOM    142  CZ  PHE A  42      70.683  59.055 232.064  1.00  0.00
C
ATOM    143  N   GLY A  43      69.668  57.305 227.573  1.00  0.00
N
ATOM    144  CA  GLY A  43      69.439  58.665 227.089  1.00  0.00
C
ATOM    145  C   GLY A  43      69.076  58.729 225.604  1.00  0.00
C
ATOM    146  O   GLY A  43      68.357  59.645 225.205  1.00  0.00
O
ATOM    147  N   ILE A  44      69.481  57.722 224.808  1.00  0.00
N
ATOM    148  CA  ILE A  44      69.001  57.516 223.435  1.00  0.00
C
ATOM    149  C   ILE A  44      67.565  56.965 223.508  1.00  0.00
C
ATOM    150  O   ILE A  44      66.711  57.380 222.731  1.00  0.00
O
ATOM    151  CB  ILE A  44      69.879  56.494 222.639  1.00  0.00
C
ATOM    152  CG1 ILE A  44      70.068  56.911 221.161  1.00  0.00
C
ATOM    153  CG2 ILE A  44      71.263  56.246 223.255  1.00  0.00
C
ATOM    154  CD1 ILE A  44      68.783  57.021 220.329  1.00  0.00
C
HETATM  155  N   HIE A  45      67.296  56.069 224.475  1.00  0.00
N
HETATM  156  CA  HIE A  45      65.982  55.489 224.736  1.00  0.00
C
HETATM  157  C   HIE A  45      65.016  56.513 225.332  1.00  0.00
C
HETATM  158  O   HIE A  45      63.836  56.466 225.009  1.00  0.00
O
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HETATM  159  CB  HIE A  45      66.113  54.306 225.703  1.00  0.00
C
HETATM  160  CG  HIE A  45      66.975  53.213 225.141  1.00  0.00
C
HETATM  161  ND1 HIE A  45      66.527  52.338 224.146  1.00  0.00
N
HETATM  162  CE1 HIE A  45      67.589  51.602 223.847  1.00  0.00
C
HETATM  163  NE2 HIE A  45      68.659  51.912 224.576  1.00  0.00
N
HETATM  164  CD2 HIE A  45      68.296  52.942 225.419  1.00  0.00
C
ATOM    165  N   GLU A  46      65.510  57.465 226.140  1.00  0.00
N
ATOM    166  CA  GLU A  46      64.740  58.578 226.678  1.00  0.00
C
ATOM    167  C   GLU A  46      64.288  59.519 225.555  1.00  0.00
C
ATOM    168  O   GLU A  46      63.125  59.904 225.550  1.00  0.00
O
ATOM    169  CB  GLU A  46      65.561  59.328 227.748  1.00  0.00
C
ATOM    170  CG  GLU A  46      64.843  60.562 228.330  1.00  0.00
C
ATOM    171  CD  GLU A  46      65.346  60.986 229.708  1.00  0.00
C
ATOM    172  OE1 GLU A  46      66.551  60.800 229.983  1.00  0.00
O
ATOM    173  OE2 GLU A  46      64.500  61.514 230.463  1.00  0.00
O
ATOM    174  N   GLU A  47      65.171  59.820 224.584  1.00  0.00
N
ATOM    175  CA  GLU A  47      64.869  60.640 223.411  1.00  0.00
C
ATOM    176  C   GLU A  47      63.939  59.913 222.414  1.00  0.00
C
ATOM    177  O   GLU A  47      63.077  60.557 221.817  1.00  0.00
O
ATOM    178  CB  GLU A  47      66.193  61.036 222.720  1.00  0.00
C
ATOM    179  CG  GLU A  47      66.014  62.190 221.710  1.00  0.00
C
ATOM    180  CD  GLU A  47      67.220  62.437 220.804  1.00  0.00
C
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ATOM    181  OE1 GLU A  47      67.837  61.441 220.368  1.00  0.00
O
ATOM    182  OE2 GLU A  47      67.466  63.628 220.512  1.00  0.00
O
ATOM    183  N   MET A  48      64.071  58.580 222.276  1.00  0.00
N
ATOM    184  CA  MET A  48      63.196  57.722 221.473  1.00  0.00
C
ATOM    185  C   MET A  48      61.784  57.649 222.082  1.00  0.00
C
ATOM    186  O   MET A  48      60.806  57.821 221.360  1.00  0.00
O
ATOM    187  CB  MET A  48      63.787  56.295 221.395  1.00  0.00
C
ATOM    188  CG  MET A  48      64.923  56.131 220.374  1.00  0.00
C
ATOM    189  SD  MET A  48      64.354  55.930 218.669  1.00  0.00
S
ATOM    190  CE  MET A  48      65.920  55.528 217.853  1.00  0.00
C
ATOM    191  N   LEU A  49      61.675  57.433 223.404  1.00  0.00
N
ATOM    192  CA  LEU A  49      60.415  57.344 224.145  1.00  0.00
C
ATOM    193  C   LEU A  49      59.696  58.701 224.264  1.00  0.00
C
ATOM    194  O   LEU A  49      58.467  58.722 224.224  1.00  0.00
O
ATOM    195  CB  LEU A  49      60.692  56.798 225.565  1.00  0.00
C
ATOM    196  CG  LEU A  49      61.033  55.292 225.626  1.00  0.00
C
ATOM    197  CD1 LEU A  49      61.634  54.923 226.992  1.00  0.00
C
ATOM    198  CD2 LEU A  49      59.812  54.414 225.339  1.00  0.00
C
ATOM    199  N   LYS A  50      60.439  59.820 224.365  1.00  0.00
N
ATOM    200  CA  LYS A  50      59.892  61.184 224.382  1.00  0.00
C
ATOM    201  C   LYS A  50      59.472  61.682 222.994  1.00  0.00
C
ATOM    202  O   LYS A  50      58.698  62.636 222.923  1.00  0.00
O
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ATOM    203  CB  LYS A  50      60.925  62.175 224.967  1.00  0.00
C
ATOM    204  CG  LYS A  50      60.675  62.447 226.460  1.00  0.00
C
ATOM    205  CD  LYS A  50      61.948  62.772 227.248  1.00  0.00
C
ATOM    206  CE  LYS A  50      61.633  63.315 228.648  1.00  0.00
C
ATOM    207  NZ  LYS A  50      62.857  63.542 229.433  1.00  0.00
N
ATOM    208  N   ASP A  51      59.922  61.032 221.905  1.00  0.00
N
ATOM    209  CA  ASP A  51      59.392  61.245 220.561  1.00  0.00
C
ATOM    210  C   ASP A  51      58.057  60.486 220.485  1.00  0.00
C
ATOM    211  O   ASP A  51      58.024  59.277 220.252  1.00  0.00
O
ATOM    212  CB  ASP A  51      60.424  60.747 219.519  1.00  0.00
C
ATOM    213  CG  ASP A  51      60.072  61.025 218.050  1.00  0.00
C
ATOM    214  OD1 ASP A  51      61.018  60.941 217.239  1.00  0.00
O
ATOM    215  OD2 ASP A  51      58.893  61.305 217.738  1.00  0.00
O
ATOM    216  N   GLU A  52      56.964  61.221 220.730  1.00  0.00
N
ATOM    217  CA  GLU A  52      55.608  60.694 220.823  1.00  0.00
C
ATOM    218  C   GLU A  52      55.007  60.430 219.437  1.00  0.00
C
ATOM    219  O   GLU A  52      54.218  59.499 219.308  1.00  0.00
O
ATOM    220  CB  GLU A  52      54.719  61.714 221.560  1.00  0.00
C
ATOM    221  CG  GLU A  52      55.187  61.977 223.010  1.00  0.00
C
ATOM    222  CD  GLU A  52      54.075  62.454 223.948  1.00  0.00
C
ATOM    223  OE1 GLU A  52      52.958  61.896 223.862  1.00  0.00
O
ATOM    224  OE2 GLU A  52      54.371  63.356 224.760  1.00  0.00
O
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ATOM    225  N   VAL A  53      55.409  61.185 218.396  1.00  0.00
N
ATOM    226  CA  VAL A  53      55.029  60.955 216.995  1.00  0.00
C
ATOM    227  C   VAL A  53      55.505  59.569 216.527  1.00  0.00
C
ATOM    228  O   VAL A  53      54.732  58.834 215.920  1.00  0.00
O
ATOM    229  CB  VAL A  53      55.586  62.094 216.098  1.00  0.00
C
ATOM    230  CG1 VAL A  53      55.419  61.834 214.584  1.00  0.00
C
ATOM    231  CG2 VAL A  53      54.961  63.454 216.451  1.00  0.00
C
ATOM    232  N   ARG A  54      56.744  59.196 216.882  1.00  0.00
N
ATOM    233  CA  ARG A  54      57.314  57.872 216.681  1.00  0.00
C
ATOM    234  C   ARG A  54      56.581  56.822 217.538  1.00  0.00
C
ATOM    235  O   ARG A  54      55.917  55.953 216.977  1.00  0.00
O
ATOM    236  CB  ARG A  54      58.811  57.946 217.035  1.00  0.00
C
ATOM    237  CG  ARG A  54      59.594  56.632 216.911  1.00  0.00
C
ATOM    238  CD  ARG A  54      60.884  56.681 217.742  1.00  0.00
C
ATOM    239  NE  ARG A  54      60.638  56.171 219.097  1.00  0.00
N
ATOM    240  CZ  ARG A  54      60.469  54.887 219.456  1.00  0.00
C
ATOM    241  NH1 ARG A  54      60.531  53.890 218.565  1.00  0.00
N
ATOM    242  NH2 ARG A  54      60.221  54.597 220.738  1.00  0.00
N
ATOM    243  N   THR A  55      56.706  56.907 218.877  1.00  0.00
N
ATOM    244  CA  THR A  55      56.297  55.885 219.852  1.00  0.00
C
ATOM    245  C   THR A  55      54.805  55.525 219.760  1.00  0.00
C
ATOM    246  O   THR A  55      54.464  54.344 219.830  1.00  0.00
O
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ATOM    247  CB  THR A  55      56.657  56.341 221.292  1.00  0.00
C
ATOM    248  OG1 THR A  55      58.044  56.583 221.386  1.00  0.00
O
ATOM    249  CG2 THR A  55      56.344  55.293 222.379  1.00  0.00
C
ATOM    250  N   LEU A  56      53.927  56.527 219.580  1.00  0.00
N
ATOM    251  CA  LEU A  56      52.484  56.326 219.488  1.00  0.00
C
ATOM    252  C   LEU A  56      52.062  55.803 218.110  1.00  0.00
C
ATOM    253  O   LEU A  56      51.083  55.069 218.067  1.00  0.00
O
ATOM    254  CB  LEU A  56      51.720  57.638 219.765  1.00  0.00
C
ATOM    255  CG  LEU A  56      51.938  58.233 221.175  1.00  0.00
C
ATOM    256  CD1 LEU A  56      51.256  59.604 221.287  1.00  0.00
C
ATOM    257  CD2 LEU A  56      51.448  57.298 222.291  1.00  0.00
C
ATOM    258  N   THR A  57      52.790  56.087 217.010  1.00  0.00
N
ATOM    259  CA  THR A  57      52.501  55.484 215.699  1.00  0.00
C
ATOM    260  C   THR A  57      52.855  53.984 215.711  1.00  0.00
C
ATOM    261  O   THR A  57      52.094  53.187 215.163  1.00  0.00
O
ATOM    262  CB  THR A  57      53.273  56.193 214.560  1.00  0.00
C
ATOM    263  OG1 THR A  57      52.798  57.515 214.423  1.00  0.00
O
ATOM    264  CG2 THR A  57      53.028  55.553 213.186  1.00  0.00
C
ATOM    265  N   TYR A  58      53.957  53.603 216.384  1.00  0.00
N
ATOM    266  CA  TYR A  58      54.328  52.214 216.651  1.00  0.00
C
ATOM    267  C   TYR A  58      53.292  51.497 217.523  1.00  0.00
C
ATOM    268  O   TYR A  58      53.003  50.336 217.264  1.00  0.00
O
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ATOM    269  CB  TYR A  58      55.701  52.145 217.348  1.00  0.00
C
ATOM    270  CG  TYR A  58      56.874  52.030 216.399  1.00  0.00
C
ATOM    271  CD1 TYR A  58      57.578  53.184 216.008  1.00  0.00
C
ATOM    272  CD2 TYR A  58      57.261  50.769 215.900  1.00  0.00
C
ATOM    273  CE1 TYR A  58      58.633  53.095 215.090  1.00  0.00
C
ATOM    274  CE2 TYR A  58      58.331  50.675 214.990  1.00  0.00
C
ATOM    275  CZ  TYR A  58      59.000  51.843 214.570  1.00  0.00
C
ATOM    276  OH  TYR A  58      59.994  51.777 213.646  1.00  0.00
O
ATOM    277  N   ARG A  59      52.709  52.175 218.523  1.00  0.00
N
ATOM    278  CA  ARG A  59      51.705  51.588 219.404  1.00  0.00
C
ATOM    279  C   ARG A  59      50.350  51.452 218.688  1.00  0.00
C
ATOM    280  O   ARG A  59      49.704  50.420 218.842  1.00  0.00
O
ATOM    281  CB  ARG A  59      51.538  52.480 220.642  1.00  0.00
C
ATOM    282  CG  ARG A  59      50.745  51.789 221.764  1.00  0.00
C
ATOM    283  CD  ARG A  59      50.538  52.703 222.970  1.00  0.00
C
ATOM    284  NE  ARG A  59      49.497  53.694 222.678  1.00  0.00
N
ATOM    285  CZ  ARG A  59      49.199  54.764 223.430  1.00  0.00
C
ATOM    286  NH1 ARG A  59      49.853  55.015 224.573  1.00  0.00
N
ATOM    287  NH2 ARG A  59      48.230  55.593 223.024  1.00  0.00
N
ATOM    288  N   ASN A  60      49.946  52.454 217.886  1.00  0.00
N
ATOM    289  CA  ASN A  60      48.710  52.475 217.094  1.00  0.00
C
ATOM    290  C   ASN A  60      48.702  51.406 215.995  1.00  0.00
C
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ATOM    291  O   ASN A  60      47.643  50.855 215.701  1.00  0.00
O
ATOM    292  CB  ASN A  60      48.507  53.861 216.432  1.00  0.00
C
ATOM    293  CG  ASN A  60      48.135  54.989 217.401  1.00  0.00
C
ATOM    294  OD1 ASN A  60      47.933  54.773 218.594  1.00  0.00
O
ATOM    295  ND2 ASN A  60      48.062  56.217 216.882  1.00  0.00
N
ATOM    296  N   SER A  61      49.878  51.073 215.434  1.00  0.00
N
ATOM    297  CA  SER A  61      50.053  49.998 214.462  1.00  0.00
C
ATOM    298  C   SER A  61      49.720  48.602 215.029  1.00  0.00
C
ATOM    299  O   SER A  61      49.326  47.729 214.259  1.00  0.00
O
ATOM    300  CB  SER A  61      51.482  50.063 213.866  1.00  0.00
C
ATOM    301  OG  SER A  61      52.474  49.486 214.688  1.00  0.00
O
ATOM    302  N   MET A  62      49.832  48.408 216.355  1.00  0.00
N
ATOM    303  CA  MET A  62      49.563  47.144 217.039  1.00  0.00
C
ATOM    304  C   MET A  62      48.207  47.179 217.766  1.00  0.00
C
ATOM    305  O   MET A  62      47.449  46.216 217.670  1.00  0.00
O
ATOM    306  CB  MET A  62      50.680  46.862 218.072  1.00  0.00
C
ATOM    307  CG  MET A  62      52.107  46.997 217.520  1.00  0.00
C
ATOM    308  SD  MET A  62      53.395  46.388 218.639  1.00  0.00
S
ATOM    309  CE  MET A  62      54.649  47.681 218.458  1.00  0.00
C
ATOM    310  N   PHE A  63      47.890  48.272 218.485  1.00  0.00
N
ATOM    311  CA  PHE A  63      46.702  48.409 219.337  1.00  0.00
C
ATOM    312  C   PHE A  63      45.412  48.637 218.537  1.00  0.00
C
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ATOM    313  O   PHE A  63      44.342  48.279 219.024  1.00  0.00
O
ATOM    314  CB  PHE A  63      46.868  49.621 220.288  1.00  0.00
C
ATOM    315  CG  PHE A  63      47.668  49.408 221.565  1.00  0.00
C
ATOM    316  CD1 PHE A  63      48.606  48.361 221.699  1.00  0.00
C
ATOM    317  CD2 PHE A  63      47.450  50.280 222.654  1.00  0.00
C
ATOM    318  CE1 PHE A  63      49.299  48.189 222.910  1.00  0.00
C
ATOM    319  CE2 PHE A  63      48.150  50.106 223.864  1.00  0.00
C
ATOM    320  CZ  PHE A  63      49.078  49.057 223.992  1.00  0.00
C
ATOM    321  N   HIS A  64      45.489  49.215 217.329  1.00  0.00
N
ATOM    322  CA  HIS A  64      44.330  49.395 216.448  1.00  0.00
C
ATOM    323  C   HIS A  64      44.269  48.293 215.378  1.00  0.00
C
ATOM    324  O   HIS A  64      43.429  48.365 214.482  1.00  0.00
O
ATOM    325  CB  HIS A  64      44.385  50.783 215.773  1.00  0.00
C
ATOM    326  CG  HIS A  64      44.511  51.960 216.715  1.00  0.00
C
ATOM    327  ND1 HIS A  64      44.110  51.925 218.042  1.00  0.00
N
ATOM    328  CD2 HIS A  64      44.960  53.244 216.504  1.00  0.00
C
ATOM    329  CE1 HIS A  64      44.352  53.131 218.562  1.00  0.00
C
ATOM    330  NE2 HIS A  64      44.856  53.986 217.683  1.00  0.00
N
ATOM    331  N   ASN A  65      45.141  47.274 215.475  1.00  0.00
N
ATOM    332  CA  ASN A  65      45.233  46.123 214.579  1.00  0.00
C
ATOM    333  C   ASN A  65      45.513  44.844 215.369  1.00  0.00
C
ATOM    334  O   ASN A  65      46.354  44.043 214.965  1.00  0.00
O
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ATOM    335  CB  ASN A  65      46.227  46.354 213.420  1.00  0.00
C
ATOM    336  CG  ASN A  65      45.916  47.577 212.565  1.00  0.00
C
ATOM    337  OD1 ASN A  65      45.068  47.515 211.679  1.00  0.00
O
ATOM    338  ND2 ASN A  65      46.586  48.695 212.845  1.00  0.00
N
ATOM    339  N   ARG A  66      44.814  44.652 216.502  1.00  0.00
N
ATOM    340  CA  ARG A  66      44.969  43.509 217.408  1.00  0.00
C
ATOM    341  C   ARG A  66      44.705  42.147 216.751  1.00  0.00
C
ATOM    342  O   ARG A  66      45.271  41.155 217.200  1.00  0.00
O
ATOM    343  CB  ARG A  66      44.048  43.673 218.629  1.00  0.00
C
ATOM    344  CG  ARG A  66      44.454  44.852 219.520  1.00  0.00
C
ATOM    345  CD  ARG A  66      43.714  44.875 220.864  1.00  0.00
C
ATOM    346  NE  ARG A  66      44.529  45.539 221.889  1.00  0.00
N
ATOM    347  CZ  ARG A  66      44.433  46.815 222.294  1.00  0.00
C
ATOM    348  NH1 ARG A  66      45.290  47.263 223.219  1.00  0.00
N
ATOM    349  NH2 ARG A  66      43.511  47.648 221.793  1.00  0.00
N
HETATM  350  N   HIE A  67      43.907  42.112 215.670  1.00  0.00
N
HETATM  351  CA  HIE A  67      43.637  40.946 214.829  1.00  0.00
C
HETATM  352  C   HIE A  67      44.888  40.426 214.096  1.00  0.00
C
HETATM  353  O   HIE A  67      44.985  39.222 213.860  1.00  0.00
O
HETATM  354  CB  HIE A  67      42.538  41.311 213.806  1.00  0.00
C
HETATM  355  CG  HIE A  67      42.872  42.424 212.835  1.00  0.00
C
HETATM  356  ND1 HIE A  67      42.768  43.778 213.175  1.00  0.00
N
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HETATM  357  CE1 HIE A  67      43.138  44.433 212.081  1.00  0.00
C
HETATM  358  NE2 HIE A  67      43.481  43.625 211.079  1.00  0.00
N
HETATM  359  CD2 HIE A  67      43.317  42.327 211.533  1.00  0.00
C
ATOM    360  N   LEU A  68      45.849  41.310 213.769  1.00  0.00
N
ATOM    361  CA  LEU A  68      47.118  40.946 213.137  1.00  0.00
C
ATOM    362  C   LEU A  68      48.091  40.342 214.151  1.00  0.00
C
ATOM    363  O   LEU A  68      48.928  39.550 213.736  1.00  0.00
O
ATOM    364  CB  LEU A  68      47.822  42.188 212.544  1.00  0.00
C
ATOM    365  CG  LEU A  68      47.037  42.947 211.463  1.00  0.00
C
ATOM    366  CD1 LEU A  68      47.821  44.187 211.020  1.00  0.00
C
ATOM    367  CD2 LEU A  68      46.699  42.071 210.246  1.00  0.00
C
ATOM    368  N   PHE A  69      47.982  40.708 215.440  1.00  0.00
N
ATOM    369  CA  PHE A  69      48.858  40.281 216.530  1.00  0.00
C
ATOM    370  C   PHE A  69      48.242  39.156 217.373  1.00  0.00
C
ATOM    371  O   PHE A  69      48.943  38.634 218.235  1.00  0.00
O
ATOM    372  CB  PHE A  69      49.135  41.501 217.445  1.00  0.00
C
ATOM    373  CG  PHE A  69      50.147  42.454 216.838  1.00  0.00
C
ATOM    374  CD1 PHE A  69      49.748  43.371 215.845  1.00  0.00
C
ATOM    375  CD2 PHE A  69      51.505  42.377 217.209  1.00  0.00
C
ATOM    376  CE1 PHE A  69      50.706  44.160 215.182  1.00  0.00
C
ATOM    377  CE2 PHE A  69      52.464  43.174 216.554  1.00  0.00
C
ATOM    378  CZ  PHE A  69      52.066  44.049 215.525  1.00  0.00
C
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ATOM    379  N   LYS A  70      46.973  38.767 217.145  1.00  0.00
N
ATOM    380  CA  LYS A  70      46.228  37.827 217.984  1.00  0.00
C
ATOM    381  C   LYS A  70      46.824  36.413 217.914  1.00  0.00
C
ATOM    382  O   LYS A  70      46.704  35.724 216.901  1.00  0.00
O
ATOM    383  CB  LYS A  70      44.736  37.819 217.573  1.00  0.00
C
ATOM    384  CG  LYS A  70      43.830  36.904 218.427  1.00  0.00
C
ATOM    385  CD  LYS A  70      43.964  37.148 219.941  1.00  0.00
C
ATOM    386  CE  LYS A  70      43.008  36.296 220.781  1.00  0.00
C
ATOM    387  NZ  LYS A  70      43.357  36.376 222.209  1.00  0.00
N
ATOM    388  N   ASP A  71      47.484  36.018 219.014  1.00  0.00
N
ATOM    389  CA  ASP A  71      48.100  34.714 219.265  1.00  0.00
C
ATOM    390  C   ASP A  71      49.363  34.461 218.422  1.00  0.00
C
ATOM    391  O   ASP A  71      49.706  33.313 218.143  1.00  0.00
O
ATOM    392  CB  ASP A  71      47.093  33.533 219.257  1.00  0.00
C
ATOM    393  CG  ASP A  71      45.894  33.715 220.195  1.00  0.00
C
ATOM    394  OD1 ASP A  71      46.109  34.190 221.332  1.00  0.00
O
ATOM    395  OD2 ASP A  71      44.775  33.369 219.760  1.00  0.00
O
ATOM    396  N   LYS A  72      50.047  35.534 218.000  1.00  0.00
N
ATOM    397  CA  LYS A  72      51.203  35.490 217.111  1.00  0.00
C
ATOM    398  C   LYS A  72      52.511  35.575 217.905  1.00  0.00
C
ATOM    399  O   LYS A  72      52.552  36.120 219.008  1.00  0.00
O
ATOM    400  CB  LYS A  72      51.130  36.713 216.180  1.00  0.00
C
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ATOM    401  CG  LYS A  72      49.945  36.653 215.203  1.00  0.00
C
ATOM    402  CD  LYS A  72      50.134  35.663 214.048  1.00  0.00
C
ATOM    403  CE  LYS A  72      48.968  35.672 213.052  1.00  0.00
C
ATOM    404  NZ  LYS A  72      49.264  34.818 211.888  1.00  0.00
N
ATOM    405  N   VAL A  73      53.583  35.041 217.303  1.00  0.00
N
ATOM    406  CA  VAL A  73      54.956  35.147 217.783  1.00  0.00
C
ATOM    407  C   VAL A  73      55.566  36.381 217.099  1.00  0.00
C
ATOM    408  O   VAL A  73      55.645  36.436 215.872  1.00  0.00
O
ATOM    409  CB  VAL A  73      55.757  33.879 217.385  1.00  0.00
C
ATOM    410  CG1 VAL A  73      57.185  33.908 217.959  1.00  0.00
C
ATOM    411  CG2 VAL A  73      55.057  32.585 217.835  1.00  0.00
C
ATOM    412  N   VAL A  74      55.988  37.364 217.904  1.00  0.00
N
ATOM    413  CA  VAL A  74      56.562  38.628 217.446  1.00  0.00
C
ATOM    414  C   VAL A  74      58.044  38.669 217.848  1.00  0.00
C
ATOM    415  O   VAL A  74      58.418  38.181 218.913  1.00  0.00
O
ATOM    416  CB  VAL A  74      55.770  39.816 218.056  1.00  0.00
C
ATOM    417  CG1 VAL A  74      56.232  41.172 217.492  1.00  0.00
C
ATOM    418  CG2 VAL A  74      54.251  39.668 217.856  1.00  0.00
C
ATOM    419  N   LEU A  75      58.881  39.268 216.992  1.00  0.00
N
ATOM    420  CA  LEU A  75      60.283  39.571 217.254  1.00  0.00
C
ATOM    421  C   LEU A  75      60.465  41.086 217.260  1.00  0.00
C
ATOM    422  O   LEU A  75      60.031  41.747 216.324  1.00  0.00
O
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ATOM    423  CB  LEU A  75      61.137  38.971 216.125  1.00  0.00
C
ATOM    424  CG  LEU A  75      62.659  39.198 216.239  1.00  0.00
C
ATOM    425  CD1 LEU A  75      63.208  38.609 217.543  1.00  0.00
C
ATOM    426  CD2 LEU A  75      63.387  38.612 215.024  1.00  0.00
C
ATOM    427  N   ASP A  76      61.176  41.616 218.262  1.00  0.00
N
ATOM    428  CA  ASP A  76      61.593  43.007 218.342  1.00  0.00
C
ATOM    429  C   ASP A  76      63.114  43.075 218.157  1.00  0.00
C
ATOM    430  O   ASP A  76      63.872  42.633 219.021  1.00  0.00
O
ATOM    431  CB  ASP A  76      61.117  43.594 219.678  1.00  0.00
C
ATOM    432  CG  ASP A  76      61.247  45.113 219.825  1.00  0.00
C
ATOM    433  OD1 ASP A  76      60.961  45.570 220.953  1.00  0.00
O
ATOM    434  OD2 ASP A  76      61.615  45.793 218.841  1.00  0.00
O
ATOM    435  N   VAL A  77      63.545  43.611 217.005  1.00  0.00
N
ATOM    436  CA  VAL A  77      64.944  43.728 216.596  1.00  0.00
C
ATOM    437  C   VAL A  77      65.455  45.081 217.124  1.00  0.00
C
ATOM    438  O   VAL A  77      65.173  46.132 216.545  1.00  0.00
O
ATOM    439  CB  VAL A  77      65.014  43.670 215.042  1.00  0.00
C
ATOM    440  CG1 VAL A  77      66.446  43.777 214.496  1.00  0.00
C
ATOM    441  CG2 VAL A  77      64.360  42.398 214.472  1.00  0.00
C
ATOM    442  N   GLY A  78      66.162  45.041 218.263  1.00  0.00
N
ATOM    443  CA  GLY A  78      66.723  46.206 218.938  1.00  0.00
C
ATOM    444  C   GLY A  78      65.742  46.700 219.999  1.00  0.00
C
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ATOM    445  O   GLY A  78      65.322  47.855 219.945  1.00  0.00
O
ATOM    446  N   SER A  79      65.311  45.794 220.892  1.00  0.00
N
ATOM    447  CA  SER A  79      64.172  45.971 221.792  1.00  0.00
C
ATOM    448  C   SER A  79      64.294  47.099 222.828  1.00  0.00
C
ATOM    449  O   SER A  79      63.264  47.613 223.266  1.00  0.00
O
ATOM    450  CB  SER A  79      63.834  44.615 222.446  1.00  0.00
C
ATOM    451  OG  SER A  79      64.827  44.164 223.346  1.00  0.00
O
ATOM    452  N   GLY A  80      65.520  47.506 223.195  1.00  0.00
N
ATOM    453  CA  GLY A  80      65.773  48.685 224.012  1.00  0.00
C
ATOM    454  C   GLY A  80      65.330  48.468 225.456  1.00  0.00
C
ATOM    455  O   GLY A  80      65.733  47.494 226.084  1.00  0.00
O
ATOM    456  N   THR A  81      64.462  49.363 225.947  1.00  0.00
N
ATOM    457  CA  THR A  81      63.776  49.281 227.240  1.00  0.00
C
ATOM    458  C   THR A  81      62.648  48.226 227.263  1.00  0.00
C
ATOM    459  O   THR A  81      62.140  47.913 228.339  1.00  0.00
O
ATOM    460  CB  THR A  81      63.173  50.675 227.553  1.00  0.00
C
ATOM    461  OG1 THR A  81      62.245  51.076 226.556  1.00  0.00
O
ATOM    462  CG2 THR A  81      64.247  51.757 227.729  1.00  0.00
C
ATOM    463  N   GLY A  82      62.233  47.709 226.095  1.00  0.00
N
ATOM    464  CA  GLY A  82      61.215  46.676 225.957  1.00  0.00
C
ATOM    465  C   GLY A  82      59.847  47.251 225.581  1.00  0.00
C
ATOM    466  O   GLY A  82      58.868  46.513 225.608  1.00  0.00
O
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ATOM    467  N   ILE A  83      59.752  48.562 225.291  1.00  0.00
N
ATOM    468  CA  ILE A  83      58.510  49.303 225.049  1.00  0.00
C
ATOM    469  C   ILE A  83      57.632  48.714 223.930  1.00  0.00
C
ATOM    470  O   ILE A  83      56.432  48.533 224.135  1.00  0.00
O
ATOM    471  CB  ILE A  83      58.824  50.810 224.837  1.00  0.00
C
ATOM    472  CG1 ILE A  83      57.553  51.689 224.762  1.00  0.00
C
ATOM    473  CG2 ILE A  83      59.729  51.083 223.614  1.00  0.00
C
ATOM    474  CD1 ILE A  83      56.725  51.709 226.055  1.00  0.00
C
ATOM    475  N   LEU A  84      58.235  48.383 222.775  1.00  0.00
N
ATOM    476  CA  LEU A  84      57.544  47.801 221.627  1.00  0.00
C
ATOM    477  C   LEU A  84      57.208  46.322 221.873  1.00  0.00
C
ATOM    478  O   LEU A  84      56.189  45.854 221.365  1.00  0.00
O
ATOM    479  CB  LEU A  84      58.427  47.901 220.364  1.00  0.00
C
ATOM    480  CG  LEU A  84      58.845  49.315 219.921  1.00  0.00
C
ATOM    481  CD1 LEU A  84      59.627  49.241 218.599  1.00  0.00
C
ATOM    482  CD2 LEU A  84      57.644  50.259 219.786  1.00  0.00
C
ATOM    483  N   CYS A  85      58.004  45.609 222.695  1.00  0.00
N
ATOM    484  CA  CYS A  85      57.723  44.234 223.111  1.00  0.00
C
ATOM    485  C   CYS A  85      56.464  44.150 223.987  1.00  0.00
C
ATOM    486  O   CYS A  85      55.650  43.243 223.818  1.00  0.00
O
ATOM    487  CB  CYS A  85      58.884  43.634 223.929  1.00  0.00
C
ATOM    488  SG  CYS A  85      60.261  43.082 222.910  1.00  0.00
S
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ATOM    489  N   MET A  86      56.305  45.118 224.905  1.00  0.00
N
ATOM    490  CA  MET A  86      55.160  45.237 225.797  1.00  0.00
C
ATOM    491  C   MET A  86      53.915  45.750 225.055  1.00  0.00
C
ATOM    492  O   MET A  86      52.811  45.394 225.456  1.00  0.00
O
ATOM    493  CB  MET A  86      55.508  46.206 226.944  1.00  0.00
C
ATOM    494  CG  MET A  86      56.551  45.638 227.924  1.00  0.00
C
ATOM    495  SD  MET A  86      56.764  46.598 229.447  1.00  0.00
S
ATOM    496  CE  MET A  86      57.397  48.161 228.781  1.00  0.00
C
ATOM    497  N   PHE A  87      54.071  46.511 223.954  1.00  0.00
N
ATOM    498  CA  PHE A  87      52.969  46.916 223.075  1.00  0.00
C
ATOM    499  C   PHE A  87      52.474  45.738 222.224  1.00  0.00
C
ATOM    500  O   PHE A  87      51.273  45.627 221.998  1.00  0.00
O
ATOM    501  CB  PHE A  87      53.416  48.031 222.103  1.00  0.00
C
ATOM    502  CG  PHE A  87      53.680  49.420 222.662  1.00  0.00
C
ATOM    503  CD1 PHE A  87      53.230  49.819 223.942  1.00  0.00
C
ATOM    504  CD2 PHE A  87      54.368  50.347 221.852  1.00  0.00
C
ATOM    505  CE1 PHE A  87      53.467  51.130 224.398  1.00  0.00
C
ATOM    506  CE2 PHE A  87      54.610  51.655 222.311  1.00  0.00
C
ATOM    507  CZ  PHE A  87      54.153  52.049 223.581  1.00  0.00
C
ATOM    508  N   ALA A  88      53.369  44.840 221.781  1.00  0.00
N
ATOM    509  CA  ALA A  88      53.014  43.638 221.029  1.00  0.00
C
ATOM    510  C   ALA A  88      52.269  42.624 221.910  1.00  0.00
C
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ATOM    511  O   ALA A  88      51.297  42.024 221.456  1.00  0.00
O
ATOM    512  CB  ALA A  88      54.293  43.008 220.468  1.00  0.00
C
ATOM    513  N   ALA A  89      52.677  42.495 223.185  1.00  0.00
N
ATOM    514  CA  ALA A  89      52.049  41.644 224.193  1.00  0.00
C
ATOM    515  C   ALA A  89      50.662  42.164 224.613  1.00  0.00
C
ATOM    516  O   ALA A  89      49.736  41.367 224.752  1.00  0.00
O
ATOM    517  CB  ALA A  89      52.974  41.594 225.418  1.00  0.00
C
ATOM    518  N   LYS A  90      50.505  43.493 224.754  1.00  0.00
N
ATOM    519  CA  LYS A  90      49.241  44.175 225.062  1.00  0.00
C
ATOM    520  C   LYS A  90      48.288  44.239 223.849  1.00  0.00
C
ATOM    521  O   LYS A  90      47.079  44.375 224.038  1.00  0.00
O
ATOM    522  CB  LYS A  90      49.554  45.620 225.510  1.00  0.00
C
ATOM    523  CG  LYS A  90      50.146  45.738 226.926  1.00  0.00
C
ATOM    524  CD  LYS A  90      49.098  45.734 228.048  1.00  0.00
C
ATOM    525  CE  LYS A  90      49.744  45.921 229.429  1.00  0.00
C
ATOM    526  NZ  LYS A  90      48.733  45.973 230.497  1.00  0.00
N
ATOM    527  N   ALA A  91      48.812  44.105 222.617  1.00  0.00
N
ATOM    528  CA  ALA A  91      48.038  43.989 221.380  1.00  0.00
C
ATOM    529  C   ALA A  91      47.514  42.560 221.150  1.00  0.00
C
ATOM    530  O   ALA A  91      46.628  42.379 220.316  1.00  0.00
O
ATOM    531  CB  ALA A  91      48.935  44.361 220.193  1.00  0.00
C
ATOM    532  N   GLY A  92      48.018  41.563 221.898  1.00  0.00
N
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ATOM    533  CA  GLY A  92      47.471  40.212 221.952  1.00  0.00
C
ATOM    534  C   GLY A  92      48.410  39.110 221.459  1.00  0.00
C
ATOM    535  O   GLY A  92      47.934  37.994 221.250  1.00  0.00
O
ATOM    536  N   ALA A  93      49.716  39.383 221.278  1.00  0.00
N
ATOM    537  CA  ALA A  93      50.730  38.384 220.919  1.00  0.00
C
ATOM    538  C   ALA A  93      50.877  37.337 222.029  1.00  0.00
C
ATOM    539  O   ALA A  93      51.021  37.709 223.195  1.00  0.00
O
ATOM    540  CB  ALA A  93      52.072  39.090 220.694  1.00  0.00
C
ATOM    541  N   ARG A  94      50.840  36.037 221.673  1.00  0.00
N
ATOM    542  CA  ARG A  94      51.006  34.934 222.631  1.00  0.00
C
ATOM    543  C   ARG A  94      52.451  34.838 223.143  1.00  0.00
C
ATOM    544  O   ARG A  94      52.685  34.322 224.235  1.00  0.00
O
ATOM    545  CB  ARG A  94      50.605  33.571 222.008  1.00  0.00
C
ATOM    546  CG  ARG A  94      51.564  32.929 220.975  1.00  0.00
C
ATOM    547  CD  ARG A  94      51.097  31.527 220.551  1.00  0.00
C
ATOM    548  NE  ARG A  94      52.200  30.720 220.006  1.00  0.00
N
ATOM    549  CZ  ARG A  94      52.478  30.509 218.708  1.00  0.00
C
ATOM    550  NH1 ARG A  94      51.783  31.116 217.735  1.00  0.00
N
ATOM    551  NH2 ARG A  94      53.472  29.673 218.384  1.00  0.00
N
ATOM    552  N   LYS A  95      53.403  35.320 222.335  1.00  0.00
N
ATOM    553  CA  LYS A  95      54.829  35.276 222.572  1.00  0.00
C
ATOM    554  C   LYS A  95      55.451  36.490 221.895  1.00  0.00
C
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ATOM    555  O   LYS A  95      55.132  36.804 220.749  1.00  0.00
O
ATOM    556  CB  LYS A  95      55.388  33.924 222.091  1.00  0.00
C
ATOM    557  CG  LYS A  95      56.897  33.736 222.331  1.00  0.00
C
ATOM    558  CD  LYS A  95      57.419  32.384 221.822  1.00  0.00
C
ATOM    559  CE  LYS A  95      56.931  31.183 222.646  1.00  0.00
C
ATOM    560  NZ  LYS A  95      57.469  29.920 222.115  1.00  0.00
N
ATOM    561  N   VAL A  96      56.362  37.152 222.609  1.00  0.00
N
ATOM    562  CA  VAL A  96      57.188  38.228 222.095  1.00  0.00
C
ATOM    563  C   VAL A  96      58.624  37.935 222.522  1.00  0.00
C
ATOM    564  O   VAL A  96      58.869  37.525 223.655  1.00  0.00
O
ATOM    565  CB  VAL A  96      56.661  39.613 222.531  1.00  0.00
C
ATOM    566  CG1 VAL A  96      57.474  40.734 221.872  1.00  0.00
C
ATOM    567  CG2 VAL A  96      55.166  39.833 222.241  1.00  0.00
C
ATOM    568  N   ILE A  97      59.574  38.145 221.609  1.00  0.00
N
ATOM    569  CA  ILE A  97      60.998  38.001 221.865  1.00  0.00
C
ATOM    570  C   ILE A  97      61.644  39.340 221.521  1.00  0.00
C
ATOM    571  O   ILE A  97      61.392  39.883 220.451  1.00  0.00
O
ATOM    572  CB  ILE A  97      61.602  36.808 221.081  1.00  0.00
C
ATOM    573  CG1 ILE A  97      60.853  35.475 221.335  1.00  0.00
C
ATOM    574  CG2 ILE A  97      63.094  36.664 221.441  1.00  0.00
C
ATOM    575  CD1 ILE A  97      61.146  34.394 220.292  1.00  0.00
C
ATOM    576  N   GLY A  98      62.491  39.855 222.417  1.00  0.00
N
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ATOM    577  CA  GLY A  98      63.245  41.080 222.209  1.00  0.00
C
ATOM    578  C   GLY A  98      64.726  40.750 222.177  1.00  0.00
C
ATOM    579  O   GLY A  98      65.237  40.177 223.131  1.00  0.00
O
ATOM    580  N   ILE A  99      65.421  41.118 221.094  1.00  0.00
N
ATOM    581  CA  ILE A  99      66.873  41.004 221.009  1.00  0.00
C
ATOM    582  C   ILE A  99      67.426  42.413 221.247  1.00  0.00
C
ATOM    583  O   ILE A  99      67.063  43.348 220.534  1.00  0.00
O
ATOM    584  CB  ILE A  99      67.318  40.467 219.621  1.00  0.00
C
ATOM    585  CG1 ILE A  99      66.701  39.084 219.303  1.00  0.00
C
ATOM    586  CG2 ILE A  99      68.858  40.370 219.568  1.00  0.00
C
ATOM    587  CD1 ILE A  99      66.889  38.652 217.838  1.00  0.00
C
ATOM    588  N   GLU A 100      68.319  42.543 222.236  1.00  0.00
N
ATOM    589  CA  GLU A 100      69.027  43.772 222.563  1.00  0.00
C
ATOM    590  C   GLU A 100      70.428  43.445 223.077  1.00  0.00
C
ATOM    591  O   GLU A 100      70.579  42.824 224.120  1.00  0.00
O
ATOM    592  CB  GLU A 100      68.172  44.669 223.483  1.00  0.00
C
ATOM    593  CG  GLU A 100      68.873  45.932 224.018  1.00  0.00
C
ATOM    594  CD  GLU A 100      69.300  46.870 222.891  1.00  0.00
C
ATOM    595  OE1 GLU A 100      68.388  47.416 222.236  1.00  0.00
O
ATOM    596  OE2 GLU A 100      70.526  46.990 222.680  1.00  0.00
O
ATOM    597  N   CYS A 101      71.456  43.873 222.345  1.00  0.00
N
ATOM    598  CA  CYS A 101      72.871  43.607 222.596  1.00  0.00
C
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ATOM    599  C   CYS A 101      73.494  44.470 223.704  1.00  0.00
C
ATOM    600  O   CYS A 101      74.452  44.010 224.327  1.00  0.00
O
ATOM    601  CB  CYS A 101      73.653  43.841 221.286  1.00  0.00
C
ATOM    602  SG  CYS A 101      72.991  45.248 220.363  1.00  0.00
S
ATOM    603  N   SER A 102      72.980  45.683 223.974  1.00  0.00
N
ATOM    604  CA  SER A 102      73.510  46.553 225.026  1.00  0.00
C
ATOM    605  C   SER A 102      72.919  46.178 226.401  1.00  0.00
C
ATOM    606  O   SER A 102      71.960  45.410 226.498  1.00  0.00
O
ATOM    607  CB  SER A 102      73.209  48.024 224.669  1.00  0.00
C
ATOM    608  OG  SER A 102      71.928  48.455 225.056  1.00  0.00
O
ATOM    609  N   SER A 103      73.502  46.744 227.469  1.00  0.00
N
ATOM    610  CA  SER A 103      73.116  46.533 228.867  1.00  0.00
C
ATOM    611  C   SER A 103      71.739  47.111 229.258  1.00  0.00
C
ATOM    612  O   SER A 103      71.279  46.837 230.366  1.00  0.00
O
ATOM    613  CB  SER A 103      74.228  47.097 229.776  1.00  0.00
C
ATOM    614  OG  SER A 103      74.260  48.510 229.779  1.00  0.00
O
ATOM    615  N   ILE A 104      71.053  47.849 228.364  1.00  0.00
N
ATOM    616  CA  ILE A 104      69.656  48.263 228.538  1.00  0.00
C
ATOM    617  C   ILE A 104      68.694  47.052 228.492  1.00  0.00
C
ATOM    618  O   ILE A 104      67.596  47.144 229.032  1.00  0.00
O
ATOM    619  CB  ILE A 104      69.289  49.331 227.472  1.00  0.00
C
ATOM    620  CG1 ILE A 104      68.060  50.185 227.867  1.00  0.00
C
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ATOM    621  CG2 ILE A 104      69.065  48.722 226.079  1.00  0.00
C
ATOM    622  CD1 ILE A 104      68.317  51.154 229.030  1.00  0.00
C
ATOM    623  N   SER A 105      69.125  45.916 227.907  1.00  0.00
N
ATOM    624  CA  SER A 105      68.441  44.620 227.926  1.00  0.00
C
ATOM    625  C   SER A 105      68.225  44.074 229.348  1.00  0.00
C
ATOM    626  O   SER A 105      67.203  43.442 229.599  1.00  0.00
O
ATOM    627  CB  SER A 105      69.224  43.605 227.068  1.00  0.00
C
ATOM    628  OG  SER A 105      70.452  43.220 227.652  1.00  0.00
O
ATOM    629  N   ASP A 106      69.150  44.357 230.282  1.00  0.00
N
ATOM    630  CA  ASP A 106      69.071  43.960 231.691  1.00  0.00
C
ATOM    631  C   ASP A 106      67.958  44.726 232.423  1.00  0.00
C
ATOM    632  O   ASP A 106      67.279  44.153 233.274  1.00  0.00
O
ATOM    633  CB  ASP A 106      70.419  44.227 232.408  1.00  0.00
C
ATOM    634  CG  ASP A 106      71.643  43.620 231.713  1.00  0.00
C
ATOM    635  OD1 ASP A 106      71.559  42.444 231.299  1.00  0.00
O
ATOM    636  OD2 ASP A 106      72.658  44.341 231.600  1.00  0.00
O
ATOM    637  N   TYR A 107      67.738  45.997 232.049  1.00  0.00
N
ATOM    638  CA  TYR A 107      66.645  46.833 232.538  1.00  0.00
C
ATOM    639  C   TYR A 107      65.337  46.530 231.803  1.00  0.00
C
ATOM    640  O   TYR A 107      64.278  46.704 232.396  1.00  0.00
O
ATOM    641  CB  TYR A 107      67.007  48.315 232.333  1.00  0.00
C
ATOM    642  CG  TYR A 107      68.166  48.727 233.217  1.00  0.00
C
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ATOM    643  CD1 TYR A 107      69.483  48.682 232.719  1.00  0.00
C
ATOM    644  CD2 TYR A 107      67.936  49.077 234.563  1.00  0.00
C
ATOM    645  CE1 TYR A 107      70.570  48.965 233.564  1.00  0.00
C
ATOM    646  CE2 TYR A 107      69.024  49.362 235.411  1.00  0.00
C
ATOM    647  CZ  TYR A 107      70.341  49.298 234.913  1.00  0.00
C
ATOM    648  OH  TYR A 107      71.393  49.551 235.742  1.00  0.00
O
ATOM    649  N   ALA A 108      65.393  46.021 230.561  1.00  0.00
N
ATOM    650  CA  ALA A 108      64.227  45.599 229.792  1.00  0.00
C
ATOM    651  C   ALA A 108      63.578  44.348 230.390  1.00  0.00
C
ATOM    652  O   ALA A 108      62.356  44.302 230.445  1.00  0.00
O
ATOM    653  CB  ALA A 108      64.640  45.316 228.347  1.00  0.00
C
ATOM    654  N   VAL A 109      64.375  43.392 230.907  1.00  0.00
N
ATOM    655  CA  VAL A 109      63.920  42.225 231.675  1.00  0.00
C
ATOM    656  C   VAL A 109      63.178  42.654 232.956  1.00  0.00
C
ATOM    657  O   VAL A 109      62.113  42.112 233.255  1.00  0.00
O
ATOM    658  CB  VAL A 109      65.130  41.301 232.010  1.00  0.00
C
ATOM    659  CG1 VAL A 109      64.798  40.170 233.007  1.00  0.00
C
ATOM    660  CG2 VAL A 109      65.736  40.660 230.754  1.00  0.00
C
ATOM    661  N   LYS A 110      63.731  43.638 233.688  1.00  0.00
N
ATOM    662  CA  LYS A 110      63.180  44.167 234.937  1.00  0.00
C
ATOM    663  C   LYS A 110      61.875  44.942 234.703  1.00  0.00
C
ATOM    664  O   LYS A 110      60.932  44.760 235.468  1.00  0.00
O
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ATOM    665  CB  LYS A 110      64.210  45.104 235.602  1.00  0.00
C
ATOM    666  CG  LYS A 110      65.451  44.374 236.139  1.00  0.00
C
ATOM    667  CD  LYS A 110      66.563  45.350 236.554  1.00  0.00
C
ATOM    668  CE  LYS A 110      67.897  44.646 236.832  1.00  0.00
C
ATOM    669  NZ  LYS A 110      68.986  45.621 237.012  1.00  0.00
N
ATOM    670  N   ILE A 111      61.808  45.763 233.637  1.00  0.00
N
ATOM    671  CA  ILE A 111      60.627  46.517 233.205  1.00  0.00
C
ATOM    672  C   ILE A 111      59.511  45.560 232.743  1.00  0.00
C
ATOM    673  O   ILE A 111      58.365  45.743 233.143  1.00  0.00
O
ATOM    674  CB  ILE A 111      61.035  47.542 232.102  1.00  0.00
C
ATOM    675  CG1 ILE A 111      61.889  48.689 232.697  1.00  0.00
C
ATOM    676  CG2 ILE A 111      59.839  48.143 231.332  1.00  0.00
C
ATOM    677  CD1 ILE A 111      62.688  49.480 231.648  1.00  0.00
C
ATOM    678  N   VAL A 112      59.842  44.530 231.946  1.00  0.00
N
ATOM    679  CA  VAL A 112      58.936  43.474 231.485  1.00  0.00
C
ATOM    680  C   VAL A 112      58.258  42.725 232.650  1.00  0.00
C
ATOM    681  O   VAL A 112      57.038  42.573 232.633  1.00  0.00
O
ATOM    682  CB  VAL A 112      59.703  42.551 230.497  1.00  0.00
C
ATOM    683  CG1 VAL A 112      59.123  41.138 230.342  1.00  0.00
C
ATOM    684  CG2 VAL A 112      59.804  43.221 229.116  1.00  0.00
C
ATOM    685  N   LYS A 113      59.030  42.307 233.669  1.00  0.00
N
ATOM    686  CA  LYS A 113      58.522  41.616 234.855  1.00  0.00
C
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ATOM    687  C   LYS A 113      57.731  42.556 235.783  1.00  0.00
C
ATOM    688  O   LYS A 113      56.717  42.134 236.338  1.00  0.00
O
ATOM    689  CB  LYS A 113      59.709  40.994 235.622  1.00  0.00
C
ATOM    690  CG  LYS A 113      59.275  40.098 236.800  1.00  0.00
C
ATOM    691  CD  LYS A 113      60.450  39.461 237.550  1.00  0.00
C
ATOM    692  CE  LYS A 113      59.968  38.628 238.747  1.00  0.00
C
ATOM    693  NZ  LYS A 113      61.098  38.056 239.495  1.00  0.00
N
ATOM    694  N   ALA A 114      58.160  43.824 235.925  1.00  0.00
N
ATOM    695  CA  ALA A 114      57.500  44.846 236.743  1.00  0.00
C
ATOM    696  C   ALA A 114      56.121  45.256 236.195  1.00  0.00
C
ATOM    697  O   ALA A 114      55.255  45.651 236.973  1.00  0.00
O
ATOM    698  CB  ALA A 114      58.401  46.089 236.820  1.00  0.00
C
ATOM    699  N   ASN A 115      55.912  45.119 234.875  1.00  0.00
N
ATOM    700  CA  ASN A 115      54.644  45.339 234.179  1.00  0.00
C
ATOM    701  C   ASN A 115      53.853  44.032 233.958  1.00  0.00
C
ATOM    702  O   ASN A 115      52.781  44.084 233.356  1.00  0.00
O
ATOM    703  CB  ASN A 115      54.937  46.020 232.820  1.00  0.00
C
ATOM    704  CG  ASN A 115      55.252  47.511 232.989  1.00  0.00
C
ATOM    705  OD1 ASN A 115      54.341  48.326 233.109  1.00  0.00
O
ATOM    706  ND2 ASN A 115      56.532  47.881 233.007  1.00  0.00
N
ATOM    707  N   LYS A 116      54.344  42.882 234.462  1.00  0.00
N
ATOM    708  CA  LYS A 116      53.670  41.574 234.511  1.00  0.00
C
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ATOM    709  C   LYS A 116      53.537  40.920 233.124  1.00  0.00
C
ATOM    710  O   LYS A 116      52.506  40.326 232.807  1.00  0.00
O
ATOM    711  CB  LYS A 116      52.329  41.631 235.284  1.00  0.00
C
ATOM    712  CG  LYS A 116      52.461  42.072 236.749  1.00  0.00
C
ATOM    713  CD  LYS A 116      51.084  42.297 237.386  1.00  0.00
C
ATOM    714  CE  LYS A 116      51.166  42.688 238.865  1.00  0.00
C
ATOM    715  NZ  LYS A 116      49.830  42.984 239.410  1.00  0.00
N
ATOM    716  N   LEU A 117      54.573  41.067 232.288  1.00  0.00
N
ATOM    717  CA  LEU A 117      54.620  40.617 230.898  1.00  0.00
C
ATOM    718  C   LEU A 117      55.773  39.634 230.658  1.00  0.00
C
ATOM    719  O   LEU A 117      56.031  39.289 229.510  1.00  0.00
O
ATOM    720  CB  LEU A 117      54.668  41.845 229.956  1.00  0.00
C
ATOM    721  CG  LEU A 117      53.406  42.739 229.995  1.00  0.00
C
ATOM    722  CD1 LEU A 117      53.650  44.075 229.286  1.00  0.00
C
ATOM    723  CD2 LEU A 117      52.172  42.041 229.402  1.00  0.00
C
ATOM    724  N   ASP A 118      56.436  39.145 231.720  1.00  0.00
N
ATOM    725  CA  ASP A 118      57.537  38.172 231.705  1.00  0.00
C
ATOM    726  C   ASP A 118      57.122  36.759 231.242  1.00  0.00
C
ATOM    727  O   ASP A 118      58.000  35.939 230.973  1.00  0.00
O
ATOM    728  CB  ASP A 118      58.180  38.105 233.117  1.00  0.00
C
ATOM    729  CG  ASP A 118      57.223  37.763 234.271  1.00  0.00
C
ATOM    730  OD1 ASP A 118      56.341  38.604 234.556  1.00  0.00
O
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ATOM    731  OD2 ASP A 118      57.407  36.677 234.862  1.00  0.00
O
ATOM    732  N   HIS A 119      55.814  36.480 231.118  1.00  0.00
N
ATOM    733  CA  HIS A 119      55.268  35.216 230.618  1.00  0.00
C
ATOM    734  C   HIS A 119      54.938  35.258 229.114  1.00  0.00
C
ATOM    735  O   HIS A 119      54.717  34.199 228.529  1.00  0.00
O
ATOM    736  CB  HIS A 119      53.974  34.901 231.395  1.00  0.00
C
ATOM    737  CG  HIS A 119      54.178  34.709 232.879  1.00  0.00
C
ATOM    738  ND1 HIS A 119      55.231  33.976 233.403  1.00  0.00
N
ATOM    739  CD2 HIS A 119      53.453  35.140 233.968  1.00  0.00
C
ATOM    740  CE1 HIS A 119      55.118  34.015 234.732  1.00  0.00
C
ATOM    741  NE2 HIS A 119      54.054  34.692 235.147  1.00  0.00
N
ATOM    742  N   VAL A 120      54.930  36.447 228.485  1.00  0.00
N
ATOM    743  CA  VAL A 120      54.737  36.642 227.045  1.00  0.00
C
ATOM    744  C   VAL A 120      56.056  37.135 226.434  1.00  0.00
C
ATOM    745  O   VAL A 120      56.546  36.540 225.476  1.00  0.00
O
ATOM    746  CB  VAL A 120      53.575  37.646 226.797  1.00  0.00
C
ATOM    747  CG1 VAL A 120      53.455  38.086 225.324  1.00  0.00
C
ATOM    748  CG2 VAL A 120      52.229  37.070 227.268  1.00  0.00
C
ATOM    749  N   VAL A 121      56.621  38.217 226.993  1.00  0.00
N
ATOM    750  CA  VAL A 121      57.861  38.847 226.559  1.00  0.00
C
ATOM    751  C   VAL A 121      59.044  38.150 227.252  1.00  0.00
C
ATOM    752  O   VAL A 121      59.011  37.866 228.450  1.00  0.00
O
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ATOM    753  CB  VAL A 121      57.861  40.354 226.929  1.00  0.00
C
ATOM    754  CG1 VAL A 121      59.146  41.058 226.448  1.00  0.00
C
ATOM    755  CG2 VAL A 121      56.624  41.104 226.400  1.00  0.00
C
ATOM    756  N   THR A 122      60.101  37.923 226.468  1.00  0.00
N
ATOM    757  CA  THR A 122      61.374  37.329 226.850  1.00  0.00
C
ATOM    758  C   THR A 122      62.481  38.095 226.117  1.00  0.00
C
ATOM    759  O   THR A 122      62.547  38.061 224.891  1.00  0.00
O
ATOM    760  CB  THR A 122      61.337  35.781 226.674  1.00  0.00
C
ATOM    761  OG1 THR A 122      62.646  35.247 226.599  1.00  0.00
O
ATOM    762  CG2 THR A 122      60.585  35.280 225.431  1.00  0.00
C
ATOM    763  N   ILE A 123      63.340  38.799 226.870  1.00  0.00
N
ATOM    764  CA  ILE A 123      64.447  39.575 226.321  1.00  0.00
C
ATOM    765  C   ILE A 123      65.702  38.684 226.314  1.00  0.00
C
ATOM    766  O   ILE A 123      66.049  38.072 227.326  1.00  0.00
O
ATOM    767  CB  ILE A 123      64.700  40.839 227.183  1.00  0.00
C
ATOM    768  CG1 ILE A 123      63.435  41.704 227.407  1.00  0.00
C
ATOM    769  CG2 ILE A 123      65.867  41.697 226.646  1.00  0.00
C
ATOM    770  CD1 ILE A 123      62.787  42.261 226.129  1.00  0.00
C
ATOM    771  N   ILE A 124      66.377  38.644 225.160  1.00  0.00
N
ATOM    772  CA  ILE A 124      67.641  37.964 224.906  1.00  0.00
C
ATOM    773  C   ILE A 124      68.706  39.051 224.759  1.00  0.00
C
ATOM    774  O   ILE A 124      68.537  39.988 223.975  1.00  0.00
O
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ATOM    775  CB  ILE A 124      67.531  37.155 223.585  1.00  0.00
C
ATOM    776  CG1 ILE A 124      66.416  36.095 223.687  1.00  0.00
C
ATOM    777  CG2 ILE A 124      68.867  36.489 223.177  1.00  0.00
C
ATOM    778  CD1 ILE A 124      66.120  35.409 222.358  1.00  0.00
C
ATOM    779  N   LYS A 125      69.823  38.889 225.482  1.00  0.00
N
ATOM    780  CA  LYS A 125      70.988  39.749 225.344  1.00  0.00
C
ATOM    781  C   LYS A 125      71.912  39.185 224.255  1.00  0.00
C
ATOM    782  O   LYS A 125      72.219  37.993 224.252  1.00  0.00
O
ATOM    783  CB  LYS A 125      71.732  39.838 226.687  1.00  0.00
C
ATOM    784  CG  LYS A 125      72.763  40.983 226.710  1.00  0.00
C
ATOM    785  CD  LYS A 125      73.208  41.337 228.133  1.00  0.00
C
ATOM    786  CE  LYS A 125      74.021  42.634 228.193  1.00  0.00
C
ATOM    787  NZ  LYS A 125      74.315  43.001 229.588  1.00  0.00
N
ATOM    788  N   GLY A 126      72.369  40.067 223.358  1.00  0.00
N
ATOM    789  CA  GLY A 126      73.257  39.754 222.244  1.00  0.00
C
ATOM    790  C   GLY A 126      72.777  40.353 220.924  1.00  0.00
C
ATOM    791  O   GLY A 126      71.683  40.908 220.830  1.00  0.00
O
ATOM    792  N   LYS A 127      73.651  40.272 219.911  1.00  0.00
N
ATOM    793  CA  LYS A 127      73.468  40.861 218.586  1.00  0.00
C
ATOM    794  C   LYS A 127      72.634  39.888 217.750  1.00  0.00
C
ATOM    795  O   LYS A 127      72.866  38.684 217.794  1.00  0.00
O
ATOM    796  CB  LYS A 127      74.841  41.022 217.887  1.00  0.00
C
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ATOM    797  CG  LYS A 127      75.992  41.459 218.812  1.00  0.00
C
ATOM    798  CD  LYS A 127      77.288  41.755 218.051  1.00  0.00
C
ATOM    799  CE  LYS A 127      77.354  43.203 217.576  1.00  0.00
C
ATOM    800  NZ  LYS A 127      78.600  43.463 216.842  1.00  0.00
N
ATOM    801  N   VAL A 128      71.683  40.418 216.977  1.00  0.00
N
ATOM    802  CA  VAL A 128      70.753  39.724 216.078  1.00  0.00
C
ATOM    803  C   VAL A 128      71.417  38.693 215.144  1.00  0.00
C
ATOM    804  O   VAL A 128      70.886  37.602 214.945  1.00  0.00
O
ATOM    805  CB  VAL A 128      69.972  40.830 215.338  1.00  0.00
C
ATOM    806  CG1 VAL A 128      69.210  40.385 214.078  1.00  0.00
C
ATOM    807  CG2 VAL A 128      69.049  41.615 216.286  1.00  0.00
C
ATOM    808  N   GLU A 129      72.600  39.029 214.610  1.00  0.00
N
ATOM    809  CA  GLU A 129      73.412  38.194 213.726  1.00  0.00
C
ATOM    810  C   GLU A 129      74.145  37.057 214.482  1.00  0.00
C
ATOM    811  O   GLU A 129      74.691  36.167 213.830  1.00  0.00
O
ATOM    812  CB  GLU A 129      74.449  39.064 212.948  1.00  0.00
C
ATOM    813  CG  GLU A 129      74.740  40.501 213.457  1.00  0.00
C
ATOM    814  CD  GLU A 129      73.641  41.534 213.175  1.00  0.00
C
ATOM    815  OE1 GLU A 129      73.203  41.628 212.007  1.00  0.00
O
ATOM    816  OE2 GLU A 129      73.253  42.216 214.150  1.00  0.00
O
ATOM    817  N   GLU A 130      74.146  37.073 215.827  1.00  0.00
N
ATOM    818  CA  GLU A 130      74.850  36.137 216.706  1.00  0.00
C
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ATOM    819  C   GLU A 130      73.906  35.277 217.565  1.00  0.00
C
ATOM    820  O   GLU A 130      74.294  34.159 217.906  1.00  0.00
O
ATOM    821  CB  GLU A 130      75.803  36.925 217.638  1.00  0.00
C
ATOM    822  CG  GLU A 130      76.860  37.792 216.919  1.00  0.00
C
ATOM    823  CD  GLU A 130      77.848  37.003 216.056  1.00  0.00
C
ATOM    824  OE1 GLU A 130      78.152  35.846 216.420  1.00  0.00
O
ATOM    825  OE2 GLU A 130      78.294  37.587 215.044  1.00  0.00
O
ATOM    826  N   VAL A 131      72.700  35.757 217.936  1.00  0.00
N
ATOM    827  CA  VAL A 131      71.786  35.012 218.815  1.00  0.00
C
ATOM    828  C   VAL A 131      71.127  33.838 218.072  1.00  0.00
C
ATOM    829  O   VAL A 131      70.845  33.908 216.874  1.00  0.00
O
ATOM    830  CB  VAL A 131      70.672  35.908 219.440  1.00  0.00
C
ATOM    831  CG1 VAL A 131      71.223  37.056 220.297  1.00  0.00
C
ATOM    832  CG2 VAL A 131      69.610  36.432 218.461  1.00  0.00
C
ATOM    833  N   GLU A 132      70.843  32.781 218.840  1.00  0.00
N
ATOM    834  CA  GLU A 132      69.928  31.704 218.500  1.00  0.00
C
ATOM    835  C   GLU A 132      68.582  32.083 219.133  1.00  0.00
C
ATOM    836  O   GLU A 132      68.514  32.253 220.353  1.00  0.00
O
ATOM    837  CB  GLU A 132      70.486  30.415 219.150  1.00  0.00
C
ATOM    838  CG  GLU A 132      69.555  29.182 219.109  1.00  0.00
C
ATOM    839  CD  GLU A 132      70.164  27.929 219.749  1.00  0.00
C
ATOM    840  OE1 GLU A 132      71.198  28.056 220.443  1.00  0.00
O
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ATOM    841  OE2 GLU A 132      69.566  26.851 219.539  1.00  0.00
O
ATOM    842  N   LEU A 133      67.512  32.212 218.326  1.00  0.00
N
ATOM    843  CA  LEU A 133      66.170  32.459 218.856  1.00  0.00
C
ATOM    844  C   LEU A 133      65.602  31.165 219.485  1.00  0.00
C
ATOM    845  O   LEU A 133      65.788  30.093 218.909  1.00  0.00
O
ATOM    846  CB  LEU A 133      65.175  32.896 217.749  1.00  0.00
C
ATOM    847  CG  LEU A 133      65.056  34.400 217.423  1.00  0.00
C
ATOM    848  CD1 LEU A 133      63.805  34.635 216.559  1.00  0.00
C
ATOM    849  CD2 LEU A 133      64.981  35.298 218.658  1.00  0.00
C
ATOM    850  N   PRO A 134      64.856  31.260 220.614  1.00  0.00
N
ATOM    851  CA  PRO A 134      64.041  30.182 221.202  1.00  0.00
C
ATOM    852  C   PRO A 134      63.049  29.515 220.232  1.00  0.00
C
ATOM    853  O   PRO A 134      62.705  28.350 220.417  1.00  0.00
O
ATOM    854  CB  PRO A 134      63.245  30.850 222.338  1.00  0.00
C
ATOM    855  CG  PRO A 134      64.040  32.081 222.719  1.00  0.00
C
ATOM    856  CD  PRO A 134      64.822  32.445 221.463  1.00  0.00
C
ATOM    857  N   VAL A 135      62.599  30.265 219.213  1.00  0.00
N
ATOM    858  CA  VAL A 135      61.719  29.829 218.137  1.00  0.00
C
ATOM    859  C   VAL A 135      62.500  29.808 216.818  1.00  0.00
C
ATOM    860  O   VAL A 135      63.446  30.567 216.610  1.00  0.00
O
ATOM    861  CB  VAL A 135      60.494  30.773 218.045  1.00  0.00
C
ATOM    862  CG1 VAL A 135      59.636  30.701 219.320  1.00  0.00
C
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ATOM    863  CG2 VAL A 135      60.860  32.228 217.701  1.00  0.00
C
ATOM    864  N   GLU A 136      62.062  28.930 215.915  1.00  0.00
N
ATOM    865  CA  GLU A 136      62.654  28.688 214.606  1.00  0.00
C
ATOM    866  C   GLU A 136      62.257  29.772 213.587  1.00  0.00
C
ATOM    867  O   GLU A 136      63.026  30.077 212.676  1.00  0.00
O
ATOM    868  CB  GLU A 136      62.098  27.319 214.179  1.00  0.00
C
ATOM    869  CG  GLU A 136      62.776  26.670 212.968  1.00  0.00
C
ATOM    870  CD  GLU A 136      62.376  25.197 212.893  1.00  0.00
C
ATOM    871  OE1 GLU A 136      61.188  24.951 212.590  1.00  0.00
O
ATOM    872  OE2 GLU A 136      63.247  24.349 213.186  1.00  0.00
O
ATOM    873  N   LYS A 137      61.065  30.364 213.770  1.00  0.00
N
ATOM    874  CA  LYS A 137      60.500  31.438 212.968  1.00  0.00
C
ATOM    875  C   LYS A 137      59.485  32.256 213.779  1.00  0.00
C
ATOM    876  O   LYS A 137      58.934  31.775 214.770  1.00  0.00
O
ATOM    877  CB  LYS A 137      59.992  30.911 211.599  1.00  0.00
C
ATOM    878  CG  LYS A 137      58.942  29.780 211.659  1.00  0.00
C
ATOM    879  CD  LYS A 137      57.490  30.285 211.674  1.00  0.00
C
ATOM    880  CE  LYS A 137      56.451  29.183 211.924  1.00  0.00
C
ATOM    881  NZ  LYS A 137      56.290  28.305 210.753  1.00  0.00
N
ATOM    882  N   VAL A 138      59.237  33.493 213.327  1.00  0.00
N
ATOM    883  CA  VAL A 138      58.324  34.475 213.905  1.00  0.00
C
ATOM    884  C   VAL A 138      57.331  34.926 212.832  1.00  0.00
C
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ATOM    885  O   VAL A 138      57.676  35.024 211.655  1.00  0.00
O
ATOM    886  CB  VAL A 138      59.115  35.649 214.542  1.00  0.00
C
ATOM    887  CG1 VAL A 138      60.051  35.129 215.646  1.00  0.00
C
ATOM    888  CG2 VAL A 138      59.886  36.510 213.517  1.00  0.00
C
ATOM    889  N   ASP A 139      56.094  35.211 213.251  1.00  0.00
N
ATOM    890  CA  ASP A 139      54.999  35.636 212.381  1.00  0.00
C
ATOM    891  C   ASP A 139      55.039  37.148 212.108  1.00  0.00
C
ATOM    892  O   ASP A 139      54.502  37.590 211.094  1.00  0.00
O
ATOM    893  CB  ASP A 139      53.648  35.328 213.066  1.00  0.00
C
ATOM    894  CG  ASP A 139      53.499  33.896 213.593  1.00  0.00
C
ATOM    895  OD1 ASP A 139      53.820  32.963 212.826  1.00  0.00
O
ATOM    896  OD2 ASP A 139      53.057  33.760 214.755  1.00  0.00
O
ATOM    897  N   ILE A 140      55.654  37.936 213.008  1.00  0.00
N
ATOM    898  CA  ILE A 140      55.794  39.388 212.920  1.00  0.00
C
ATOM    899  C   ILE A 140      57.215  39.778 213.345  1.00  0.00
C
ATOM    900  O   ILE A 140      57.769  39.199 214.278  1.00  0.00
O
ATOM    901  CB  ILE A 140      54.685  40.140 213.719  1.00  0.00
C
ATOM    902  CG1 ILE A 140      53.256  39.653 213.392  1.00  0.00
C
ATOM    903  CG2 ILE A 140      54.790  41.672 213.550  1.00  0.00
C
ATOM    904  CD1 ILE A 140      52.165  40.291 214.254  1.00  0.00
C
ATOM    905  N   ILE A 141      57.768  40.808 212.694  1.00  0.00
N
ATOM    906  CA  ILE A 141      58.931  41.563 213.140  1.00  0.00
C
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ATOM    907  C   ILE A 141      58.457  43.001 213.380  1.00  0.00
C
ATOM    908  O   ILE A 141      57.941  43.644 212.475  1.00  0.00
O
ATOM    909  CB  ILE A 141      60.087  41.449 212.106  1.00  0.00
C
ATOM    910  CG1 ILE A 141      60.702  40.033 212.160  1.00  0.00
C
ATOM    911  CG2 ILE A 141      61.187  42.515 212.317  1.00  0.00
C
ATOM    912  CD1 ILE A 141      61.663  39.708 211.016  1.00  0.00
C
ATOM    913  N   ILE A 142      58.664  43.517 214.594  1.00  0.00
N
ATOM    914  CA  ILE A 142      58.572  44.935 214.927  1.00  0.00
C
ATOM    915  C   ILE A 142      60.022  45.423 215.086  1.00  0.00
C
ATOM    916  O   ILE A 142      60.886  44.668 215.530  1.00  0.00
O
ATOM    917  CB  ILE A 142      57.706  45.128 216.210  1.00  0.00
C
ATOM    918  CG1 ILE A 142      58.346  44.560 217.499  1.00  0.00
C
ATOM    919  CG2 ILE A 142      56.269  44.601 216.003  1.00  0.00
C
ATOM    920  CD1 ILE A 142      57.452  44.595 218.738  1.00  0.00
C
ATOM    921  N   SER A 143      60.324  46.661 214.684  1.00  0.00
N
ATOM    922  CA  SER A 143      61.663  47.219 214.829  1.00  0.00
C
ATOM    923  C   SER A 143      61.627  48.734 214.704  1.00  0.00
C
ATOM    924  O   SER A 143      61.148  49.257 213.699  1.00  0.00
O
ATOM    925  CB  SER A 143      62.651  46.580 213.829  1.00  0.00
C
ATOM    926  OG  SER A 143      63.961  47.070 214.044  1.00  0.00
O
ATOM    927  N   GLU A 144      62.234  49.414 215.684  1.00  0.00
N
ATOM    928  CA  GLU A 144      62.667  50.796 215.582  1.00  0.00
C
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ATOM    929  C   GLU A 144      64.084  50.777 214.995  1.00  0.00
C
ATOM    930  O   GLU A 144      65.044  50.606 215.740  1.00  0.00
O
ATOM    931  CB  GLU A 144      62.630  51.423 217.001  1.00  0.00
C
ATOM    932  CG  GLU A 144      63.331  52.788 217.160  1.00  0.00
C
ATOM    933  CD  GLU A 144      62.954  53.744 216.032  1.00  0.00
C
ATOM    934  OE1 GLU A 144      61.755  54.087 215.948  1.00  0.00
O
ATOM    935  OE2 GLU A 144      63.862  54.035 215.228  1.00  0.00
O
ATOM    936  N   TRP A 145      64.196  50.921 213.665  1.00  0.00
N
ATOM    937  CA  TRP A 145      65.451  50.773 212.929  1.00  0.00
C
ATOM    938  C   TRP A 145      65.927  52.055 212.249  1.00  0.00
C
ATOM    939  O   TRP A 145      67.083  52.096 211.839  1.00  0.00
O
ATOM    940  CB  TRP A 145      65.309  49.654 211.878  1.00  0.00
C
ATOM    941  CG  TRP A 145      64.255  49.819 210.816  1.00  0.00
C
ATOM    942  CD1 TRP A 145      63.025  49.261 210.841  1.00  0.00
C
ATOM    943  CD2 TRP A 145      64.326  50.560 209.557  1.00  0.00
C
ATOM    944  NE1 TRP A 145      62.330  49.605 209.701  1.00  0.00
N
ATOM    945  CE2 TRP A 145      63.085  50.403 208.867  1.00  0.00
C
ATOM    946  CE3 TRP A 145      65.314  51.349 208.920  1.00  0.00
C
ATOM    947  CZ2 TRP A 145      62.842  50.988 207.613  1.00  0.00
C
ATOM    948  CZ3 TRP A 145      65.082  51.946 207.667  1.00  0.00
C
ATOM    949  CH2 TRP A 145      63.854  51.756 207.008  1.00  0.00
C
ATOM    950  N   MET A 146      65.065  53.070 212.084  1.00  0.00
N
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ATOM    951  CA  MET A 146      65.345  54.247 211.266  1.00  0.00
C
ATOM    952  C   MET A 146      66.454  55.109 211.874  1.00  0.00
C
ATOM    953  O   MET A 146      66.493  55.341 213.083  1.00  0.00
O
ATOM    954  CB  MET A 146      64.085  55.111 211.137  1.00  0.00
C
ATOM    955  CG  MET A 146      62.961  54.468 210.326  1.00  0.00
C
ATOM    956  SD  MET A 146      61.866  53.322 211.204  1.00  0.00
S
ATOM    957  CE  MET A 146      61.177  54.473 212.420  1.00  0.00
C
ATOM    958  N   GLY A 147      67.325  55.607 210.994  1.00  0.00
N
ATOM    959  CA  GLY A 147      68.436  56.481 211.316  1.00  0.00
C
ATOM    960  C   GLY A 147      68.172  57.890 210.791  1.00  0.00
C
ATOM    961  O   GLY A 147      67.112  58.171 210.229  1.00  0.00
O
ATOM    962  N   TYR A 148      69.149  58.787 210.975  1.00  0.00
N
ATOM    963  CA  TYR A 148      69.113  60.160 210.468  1.00  0.00
C
ATOM    964  C   TYR A 148      69.343  60.122 208.950  1.00  0.00
C
ATOM    965  O   TYR A 148      70.185  59.365 208.475  1.00  0.00
O
ATOM    966  CB  TYR A 148      70.228  60.968 211.154  1.00  0.00
C
ATOM    967  CG  TYR A 148      70.058  61.067 212.659  1.00  0.00
C
ATOM    968  CD1 TYR A 148      70.774  60.215 213.527  1.00  0.00
C
ATOM    969  CD2 TYR A 148      69.152  62.001 213.194  1.00  0.00
C
ATOM    970  CE1 TYR A 148      70.584  60.300 214.920  1.00  0.00
C
ATOM    971  CE2 TYR A 148      68.972  62.095 214.587  1.00  0.00
C
ATOM    972  CZ  TYR A 148      69.679  61.241 215.451  1.00  0.00
C
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ATOM    973  OH  TYR A 148      69.482  61.332 216.798  1.00  0.00
O
ATOM    974  N   CYS A 149      68.519  60.840 208.170  1.00  0.00
N
ATOM    975  CA  CYS A 149      68.476  60.741 206.701  1.00  0.00
C
ATOM    976  C   CYS A 149      67.947  59.358 206.237  1.00  0.00
C
ATOM    977  O   CYS A 149      68.252  58.918 205.130  1.00  0.00
O
ATOM    978  CB  CYS A 149      69.854  61.107 206.084  1.00  0.00
C
ATOM    979  SG  CYS A 149      69.691  61.669 204.369  1.00  0.00
S
ATOM    980  N   LEU A 150      67.231  58.649 207.132  1.00  0.00
N
ATOM    981  CA  LEU A 150      66.702  57.284 207.054  1.00  0.00
C
ATOM    982  C   LEU A 150      67.748  56.205 207.371  1.00  0.00
C
ATOM    983  O   LEU A 150      67.421  55.209 208.018  1.00  0.00
O
ATOM    984  CB  LEU A 150      65.907  57.016 205.753  1.00  0.00
C
ATOM    985  CG  LEU A 150      65.181  55.656 205.658  1.00  0.00
C
ATOM    986  CD1 LEU A 150      64.181  55.444 206.805  1.00  0.00
C
ATOM    987  CD2 LEU A 150      64.474  55.526 204.299  1.00  0.00
C
ATOM    988  N   PHE A 151      68.983  56.389 206.883  1.00  0.00
N
ATOM    989  CA  PHE A 151      69.976  55.332 206.736  1.00  0.00
C
ATOM    990  C   PHE A 151      71.218  55.497 207.631  1.00  0.00
C
ATOM    991  O   PHE A 151      71.934  54.510 207.807  1.00  0.00
O
ATOM    992  CB  PHE A 151      70.393  55.281 205.253  1.00  0.00
C
ATOM    993  CG  PHE A 151      69.306  54.866 204.276  1.00  0.00
C
ATOM    994  CD1 PHE A 151      68.835  55.781 203.309  1.00  0.00
C
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ATOM    995  CD2 PHE A 151      68.775  53.561 204.318  1.00  0.00
C
ATOM    996  CE1 PHE A 151      67.858  55.387 202.376  1.00  0.00
C
ATOM    997  CE2 PHE A 151      67.782  53.176 203.397  1.00  0.00
C
ATOM    998  CZ  PHE A 151      67.331  54.084 202.423  1.00  0.00
C
ATOM    999  N   TYR A 152      71.504  56.692 208.191  1.00  0.00
N
ATOM   1000  CA  TYR A 152      72.708  56.930 209.001  1.00  0.00
C
ATOM   1001  C   TYR A 152      72.492  56.361 210.407  1.00  0.00
C
ATOM   1002  O   TYR A 152      71.625  56.838 211.139  1.00  0.00
O
ATOM   1003  CB  TYR A 152      73.007  58.441 209.139  1.00  0.00
C
ATOM   1004  CG  TYR A 152      74.235  58.744 209.972  1.00  0.00
C
ATOM   1005  CD1 TYR A 152      75.505  58.337 209.523  1.00  0.00
C
ATOM   1006  CD2 TYR A 152      74.098  59.352 211.239  1.00  0.00
C
ATOM   1007  CE1 TYR A 152      76.619  58.487 210.366  1.00  0.00
C
ATOM   1008  CE2 TYR A 152      75.214  59.494 212.081  1.00  0.00
C
ATOM   1009  CZ  TYR A 152      76.468  59.022 211.656  1.00  0.00
C
ATOM   1010  OH  TYR A 152      77.533  59.039 212.503  1.00  0.00
O
ATOM   1011  N   GLU A 153      73.279  55.328 210.754  1.00  0.00
N
ATOM   1012  CA  GLU A 153      73.217  54.565 212.006  1.00  0.00
C
ATOM   1013  C   GLU A 153      71.954  53.693 212.096  1.00  0.00
C
ATOM   1014  O   GLU A 153      71.577  53.272 213.190  1.00  0.00
O
ATOM   1015  CB  GLU A 153      73.426  55.446 213.261  1.00  0.00
C
ATOM   1016  CG  GLU A 153      74.807  56.118 213.305  1.00  0.00
C
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ATOM   1017  CD  GLU A 153      74.980  57.053 214.503  1.00  0.00
C
ATOM   1018  OE1 GLU A 153      73.995  57.739 214.858  1.00  0.00
O
ATOM   1019  OE2 GLU A 153      76.112  57.085 215.032  1.00  0.00
O
ATOM   1020  N   SER A 154      71.292  53.422 210.956  1.00  0.00
N
ATOM   1021  CA  SER A 154      70.092  52.598 210.889  1.00  0.00
C
ATOM   1022  C   SER A 154      70.439  51.123 211.135  1.00  0.00
C
ATOM   1023  O   SER A 154      71.535  50.663 210.810  1.00  0.00
O
ATOM   1024  CB  SER A 154      69.397  52.796 209.520  1.00  0.00
C
ATOM   1025  OG  SER A 154      69.943  52.028 208.461  1.00  0.00
O
ATOM   1026  N   MET A 155      69.471  50.385 211.687  1.00  0.00
N
ATOM   1027  CA  MET A 155      69.540  48.940 211.860  1.00  0.00
C
ATOM   1028  C   MET A 155      68.833  48.218 210.702  1.00  0.00
C
ATOM   1029  O   MET A 155      68.520  47.042 210.857  1.00  0.00
O
ATOM   1030  CB  MET A 155      68.859  48.555 213.190  1.00  0.00
C
ATOM   1031  CG  MET A 155      69.655  48.999 214.422  1.00  0.00
C
ATOM   1032  SD  MET A 155      69.094  48.237 215.968  1.00  0.00
S
ATOM   1033  CE  MET A 155      67.437  48.949 216.045  1.00  0.00
C
ATOM   1034  N   LEU A 156      68.588  48.877 209.548  1.00  0.00
N
ATOM   1035  CA  LEU A 156      67.931  48.290 208.373  1.00  0.00
C
ATOM   1036  C   LEU A 156      68.565  46.957 207.951  1.00  0.00
C
ATOM   1037  O   LEU A 156      67.839  45.971 207.895  1.00  0.00
O
ATOM   1038  CB  LEU A 156      67.847  49.297 207.209  1.00  0.00
C
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ATOM   1039  CG  LEU A 156      67.076  48.805 205.956  1.00  0.00
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ATOM   1040  CD1 LEU A 156      65.659  48.293 206.268  1.00  0.00
C
ATOM   1041  CD2 LEU A 156      67.003  49.924 204.915  1.00  0.00
C
ATOM   1042  N   ASN A 157      69.905  46.921 207.803  1.00  0.00
N
ATOM   1043  CA  ASN A 157      70.758  45.735 207.630  1.00  0.00
C
ATOM   1044  C   ASN A 157      70.439  44.572 208.575  1.00  0.00
C
ATOM   1045  O   ASN A 157      70.216  43.451 208.126  1.00  0.00
O
ATOM   1046  CB  ASN A 157      72.253  46.127 207.759  1.00  0.00
C
ATOM   1047  CG  ASN A 157      72.965  46.230 206.416  1.00  0.00
C
ATOM   1048  OD1 ASN A 157      72.780  47.196 205.684  1.00  0.00
O
ATOM   1049  ND2 ASN A 157      73.782  45.226 206.091  1.00  0.00
N
ATOM   1050  N   THR A 158      70.408  44.864 209.882  1.00  0.00
N
ATOM   1051  CA  THR A 158      70.146  43.922 210.963  1.00  0.00
C
ATOM   1052  C   THR A 158      68.696  43.390 210.916  1.00  0.00
C
ATOM   1053  O   THR A 158      68.485  42.212 211.198  1.00  0.00
O
ATOM   1054  CB  THR A 158      70.464  44.636 212.300  1.00  0.00
C
ATOM   1055  OG1 THR A 158      71.852  44.912 212.347  1.00  0.00
O
ATOM   1056  CG2 THR A 158      70.175  43.786 213.532  1.00  0.00
C
ATOM   1057  N   VAL A 159      67.715  44.218 210.504  1.00  0.00
N
ATOM   1058  CA  VAL A 159      66.326  43.804 210.281  1.00  0.00
C
ATOM   1059  C   VAL A 159      66.190  42.958 208.998  1.00  0.00
C
ATOM   1060  O   VAL A 159      65.321  42.090 208.971  1.00  0.00
O
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ATOM   1061  CB  VAL A 159      65.372  45.031 210.230  1.00  0.00
C
ATOM   1062  CG1 VAL A 159      63.895  44.621 210.039  1.00  0.00
C
ATOM   1063  CG2 VAL A 159      65.437  45.871 211.510  1.00  0.00
C
ATOM   1064  N   LEU A 160      67.051  43.140 207.973  1.00  0.00
N
ATOM   1065  CA  LEU A 160      67.063  42.290 206.773  1.00  0.00
C
ATOM   1066  C   LEU A 160      67.577  40.888 207.120  1.00  0.00
C
ATOM   1067  O   LEU A 160      67.007  39.913 206.646  1.00  0.00
O
ATOM   1068  CB  LEU A 160      67.953  42.848 205.632  1.00  0.00
C
ATOM   1069  CG  LEU A 160      67.683  44.291 205.164  1.00  0.00
C
ATOM   1070  CD1 LEU A 160      68.369  44.582 203.826  1.00  0.00
C
ATOM   1071  CD2 LEU A 160      66.193  44.672 205.129  1.00  0.00
C
ATOM   1072  N   TYR A 161      68.595  40.786 207.991  1.00  0.00
N
ATOM   1073  CA  TYR A 161      69.153  39.524 208.480  1.00  0.00
C
ATOM   1074  C   TYR A 161      68.166  38.793 209.405  1.00  0.00
C
ATOM   1075  O   TYR A 161      68.053  37.573 209.316  1.00  0.00
O
ATOM   1076  CB  TYR A 161      70.453  39.803 209.258  1.00  0.00
C
ATOM   1077  CG  TYR A 161      71.516  40.549 208.464  1.00  0.00
C
ATOM   1078  CD1 TYR A 161      72.606  41.160 209.126  1.00  0.00
C
ATOM   1079  CD2 TYR A 161      71.413  40.641 207.057  1.00  0.00
C
ATOM   1080  CE1 TYR A 161      73.587  41.854 208.386  1.00  0.00
C
ATOM   1081  CE2 TYR A 161      72.394  41.334 206.317  1.00  0.00
C
ATOM   1082  CZ  TYR A 161      73.482  41.941 206.980  1.00  0.00
C
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ATOM   1083  OH  TYR A 161      74.430  42.611 206.260  1.00  0.00
O
ATOM   1084  N   ALA A 162      67.417  39.535 210.243  1.00  0.00
N
ATOM   1085  CA  ALA A 162      66.372  39.011 211.125  1.00  0.00
C
ATOM   1086  C   ALA A 162      65.152  38.516 210.334  1.00  0.00
C
ATOM   1087  O   ALA A 162      64.563  37.499 210.698  1.00  0.00
O
ATOM   1088  CB  ALA A 162      65.912  40.123 212.080  1.00  0.00
C
ATOM   1089  N   ARG A 163      64.808  39.209 209.234  1.00  0.00
N
ATOM   1090  CA  ARG A 163      63.778  38.829 208.275  1.00  0.00
C
ATOM   1091  C   ARG A 163      64.159  37.544 207.531  1.00  0.00
C
ATOM   1092  O   ARG A 163      63.363  36.608 207.494  1.00  0.00
O
ATOM   1093  CB  ARG A 163      63.548  39.989 207.286  1.00  0.00
C
ATOM   1094  CG  ARG A 163      62.620  39.686 206.089  1.00  0.00
C
ATOM   1095  CD  ARG A 163      62.846  40.673 204.948  1.00  0.00
C
ATOM   1096  NE  ARG A 163      64.101  40.378 204.243  1.00  0.00
N
ATOM   1097  CZ  ARG A 163      64.695  41.170 203.340  1.00  0.00
C
ATOM   1098  NH1 ARG A 163      64.139  42.323 202.958  1.00  0.00
N
ATOM   1099  NH2 ARG A 163      65.869  40.800 202.818  1.00  0.00
N
ATOM   1100  N   ASP A 164      65.366  37.502 206.945  1.00  0.00
N
ATOM   1101  CA  ASP A 164      65.871  36.373 206.163  1.00  0.00
C
ATOM   1102  C   ASP A 164      66.050  35.102 207.006  1.00  0.00
C
ATOM   1103  O   ASP A 164      65.797  34.011 206.498  1.00  0.00
O
ATOM   1104  CB  ASP A 164      67.218  36.731 205.484  1.00  0.00
C
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ATOM   1105  CG  ASP A 164      67.151  37.845 204.431  1.00  0.00
C
ATOM   1106  OD1 ASP A 164      66.031  38.170 203.980  1.00  0.00
O
ATOM   1107  OD2 ASP A 164      68.235  38.366 204.090  1.00  0.00
O
ATOM   1108  N   LYS A 165      66.454  35.236 208.281  1.00  0.00
N
ATOM   1109  CA  LYS A 165      66.710  34.106 209.168  1.00  0.00
C
ATOM   1110  C   LYS A 165      65.428  33.595 209.856  1.00  0.00
C
ATOM   1111  O   LYS A 165      65.345  32.388 210.085  1.00  0.00
O
ATOM   1112  CB  LYS A 165      67.742  34.528 210.244  1.00  0.00
C
ATOM   1113  CG  LYS A 165      68.277  33.339 211.068  1.00  0.00
C
ATOM   1114  CD  LYS A 165      69.333  33.703 212.122  1.00  0.00
C
ATOM   1115  CE  LYS A 165      70.778  33.604 211.620  1.00  0.00
C
ATOM   1116  NZ  LYS A 165      71.731  33.711 212.739  1.00  0.00
N
ATOM   1117  N   TRP A 166      64.452  34.463 210.196  1.00  0.00
N
ATOM   1118  CA  TRP A 166      63.329  34.099 211.072  1.00  0.00
C
ATOM   1119  C   TRP A 166      61.931  34.494 210.612  1.00  0.00
C
ATOM   1120  O   TRP A 166      60.988  33.943 211.169  1.00  0.00
O
ATOM   1121  CB  TRP A 166      63.543  34.593 212.512  1.00  0.00
C
ATOM   1122  CG  TRP A 166      64.809  34.199 213.192  1.00  0.00
C
ATOM   1123  CD1 TRP A 166      65.233  32.938 213.430  1.00  0.00
C
ATOM   1124  CD2 TRP A 166      65.802  35.079 213.781  1.00  0.00
C
ATOM   1125  NE1 TRP A 166      66.424  32.979 214.124  1.00  0.00
N
ATOM   1126  CE2 TRP A 166      66.817  34.277 214.382  1.00  0.00
C
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ATOM   1127  CE3 TRP A 166      65.927  36.480 213.895  1.00  0.00
C
ATOM   1128  CZ2 TRP A 166      67.899  34.843 215.077  1.00  0.00
C
ATOM   1129  CZ3 TRP A 166      66.987  37.057 214.615  1.00  0.00
C
ATOM   1130  CH2 TRP A 166      67.969  36.241 215.206  1.00  0.00
C
ATOM   1131  N   LEU A 167      61.725  35.414 209.657  1.00  0.00
N
ATOM   1132  CA  LEU A 167      60.356  35.786 209.285  1.00  0.00
C
ATOM   1133  C   LEU A 167      59.708  34.634 208.509  1.00  0.00
C
ATOM   1134  O   LEU A 167      60.265  34.136 207.529  1.00  0.00
O
ATOM   1135  CB  LEU A 167      60.326  37.080 208.452  1.00  0.00
C
ATOM   1136  CG  LEU A 167      58.928  37.712 208.269  1.00  0.00
C
ATOM   1137  CD1 LEU A 167      58.298  38.146 209.605  1.00  0.00
C
ATOM   1138  CD2 LEU A 167      59.026  38.913 207.323  1.00  0.00
C
ATOM   1139  N   ALA A 168      58.521  34.229 208.981  1.00  0.00
N
ATOM   1140  CA  ALA A 168      57.649  33.220 208.393  1.00  0.00
C
ATOM   1141  C   ALA A 168      57.223  33.630 206.971  1.00  0.00
C
ATOM   1142  O   ALA A 168      57.198  34.828 206.678  1.00  0.00
O
ATOM   1143  CB  ALA A 168      56.408  33.102 209.295  1.00  0.00
C
ATOM   1144  N   PRO A 169      56.848  32.681 206.087  1.00  0.00
N
ATOM   1145  CA  PRO A 169      56.321  33.013 204.760  1.00  0.00
C
ATOM   1146  C   PRO A 169      54.933  33.654 204.917  1.00  0.00
C
ATOM   1147  O   PRO A 169      54.049  33.074 205.547  1.00  0.00
O
ATOM   1148  CB  PRO A 169      56.291  31.679 204.004  1.00  0.00
C
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ATOM   1149  CG  PRO A 169      56.182  30.616 205.087  1.00  0.00
C
ATOM   1150  CD  PRO A 169      56.855  31.235 206.315  1.00  0.00
C
ATOM   1151  N   ASP A 170      54.805  34.897 204.428  1.00  0.00
N
ATOM   1152  CA  ASP A 170      53.648  35.785 204.603  1.00  0.00
C
ATOM   1153  C   ASP A 170      53.620  36.452 205.989  1.00  0.00
C
ATOM   1154  O   ASP A 170      52.558  36.855 206.463  1.00  0.00
O
ATOM   1155  CB  ASP A 170      52.288  35.179 204.164  1.00  0.00
C
ATOM   1156  CG  ASP A 170      52.300  34.485 202.799  1.00  0.00
C
ATOM   1157  OD1 ASP A 170      53.009  34.987 201.898  1.00  0.00
O
ATOM   1158  OD2 ASP A 170      51.586  33.466 202.678  1.00  0.00
O
ATOM   1159  N   GLY A 171      54.795  36.605 206.619  1.00  0.00
N
ATOM   1160  CA  GLY A 171      54.956  37.229 207.922  1.00  0.00
C
ATOM   1161  C   GLY A 171      55.156  38.732 207.738  1.00  0.00
C
ATOM   1162  O   GLY A 171      55.580  39.184 206.674  1.00  0.00
O
ATOM   1163  N   LEU A 172      54.773  39.506 208.760  1.00  0.00
N
ATOM   1164  CA  LEU A 172      54.629  40.955 208.668  1.00  0.00
C
ATOM   1165  C   LEU A 172      55.872  41.657 209.239  1.00  0.00
C
ATOM   1166  O   LEU A 172      56.579  41.103 210.077  1.00  0.00
O
ATOM   1167  CB  LEU A 172      53.385  41.387 209.473  1.00  0.00
C
ATOM   1168  CG  LEU A 172      52.090  40.570 209.227  1.00  0.00
C
ATOM   1169  CD1 LEU A 172      50.900  41.207 209.962  1.00  0.00
C
ATOM   1170  CD2 LEU A 172      51.765  40.342 207.736  1.00  0.00
C
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ATOM   1171  N   ILE A 173      56.127  42.893 208.787  1.00  0.00
N
ATOM   1172  CA  ILE A 173      57.185  43.781 209.268  1.00  0.00
C
ATOM   1173  C   ILE A 173      56.535  45.130 209.621  1.00  0.00
C
ATOM   1174  O   ILE A 173      55.664  45.616 208.900  1.00  0.00
O
ATOM   1175  CB  ILE A 173      58.402  43.868 208.299  1.00  0.00
C
ATOM   1176  CG1 ILE A 173      58.986  42.485 207.925  1.00  0.00
C
ATOM   1177  CG2 ILE A 173      59.533  44.734 208.895  1.00  0.00
C
ATOM   1178  CD1 ILE A 173      59.995  42.538 206.771  1.00  0.00
C
ATOM   1179  N   PHE A 174      56.938  45.709 210.759  1.00  0.00
N
ATOM   1180  CA  PHE A 174      56.373  46.908 211.368  1.00  0.00
C
ATOM   1181  C   PHE A 174      57.516  47.873 211.724  1.00  0.00
C
ATOM   1182  O   PHE A 174      58.154  47.667 212.758  1.00  0.00
O
ATOM   1183  CB  PHE A 174      55.554  46.494 212.612  1.00  0.00
C
ATOM   1184  CG  PHE A 174      54.143  46.005 212.339  1.00  0.00
C
ATOM   1185  CD1 PHE A 174      53.044  46.848 212.591  1.00  0.00
C
ATOM   1186  CD2 PHE A 174      53.915  44.707 211.839  1.00  0.00
C
ATOM   1187  CE1 PHE A 174      51.736  46.427 212.295  1.00  0.00
C
ATOM   1188  CE2 PHE A 174      52.603  44.273 211.574  1.00  0.00
C
ATOM   1189  CZ  PHE A 174      51.515  45.138 211.785  1.00  0.00
C
ATOM   1190  N   PRO A 175      57.793  48.934 210.932  1.00  0.00
N
ATOM   1191  CA  PRO A 175      57.189  49.306 209.644  1.00  0.00
C
ATOM   1192  C   PRO A 175      57.818  48.513 208.492  1.00  0.00
C
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ATOM   1193  O   PRO A 175      58.984  48.123 208.551  1.00  0.00
O
ATOM   1194  CB  PRO A 175      57.534  50.792 209.483  1.00  0.00
C
ATOM   1195  CG  PRO A 175      58.866  50.946 210.198  1.00  0.00
C
ATOM   1196  CD  PRO A 175      58.783  49.930 211.328  1.00  0.00
C
ATOM   1197  N   ASP A 176      57.031  48.312 207.433  1.00  0.00
N
ATOM   1198  CA  ASP A 176      57.400  47.592 206.214  1.00  0.00
C
ATOM   1199  C   ASP A 176      57.678  48.536 205.033  1.00  0.00
C
ATOM   1200  O   ASP A 176      58.056  48.054 203.966  1.00  0.00
O
ATOM   1201  CB  ASP A 176      56.238  46.661 205.810  1.00  0.00
C
ATOM   1202  CG  ASP A 176      54.826  47.263 205.817  1.00  0.00
C
ATOM   1203  OD1 ASP A 176      53.885  46.454 205.888  1.00  0.00
O
ATOM   1204  OD2 ASP A 176      54.675  48.501 205.745  1.00  0.00
O
ATOM   1205  N   ARG A 177      57.496  49.852 205.209  1.00  0.00
N
ATOM   1206  CA  ARG A 177      57.690  50.851 204.174  1.00  0.00
C
ATOM   1207  C   ARG A 177      58.392  52.079 204.745  1.00  0.00
C
ATOM   1208  O   ARG A 177      57.996  52.606 205.783  1.00  0.00
O
ATOM   1209  CB  ARG A 177      56.380  51.121 203.408  1.00  0.00
C
ATOM   1210  CG  ARG A 177      56.522  52.175 202.295  1.00  0.00
C
ATOM   1211  CD  ARG A 177      55.236  52.391 201.493  1.00  0.00
C
ATOM   1212  NE  ARG A 177      55.519  53.210 200.307  1.00  0.00
N
ATOM   1213  CZ  ARG A 177      55.122  54.465 200.049  1.00  0.00
C
ATOM   1214  NH1 ARG A 177      54.384  55.167 200.917  1.00  0.00
N
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ATOM   1215  NH2 ARG A 177      55.481  55.030 198.891  1.00  0.00
N
ATOM   1216  N   ALA A 178      59.417  52.540 204.020  1.00  0.00
N
ATOM   1217  CA  ALA A 178      60.128  53.783 204.249  1.00  0.00
C
ATOM   1218  C   ALA A 178      60.406  54.454 202.908  1.00  0.00
C
ATOM   1219  O   ALA A 178      60.671  53.780 201.916  1.00  0.00
O
ATOM   1220  CB  ALA A 178      61.382  53.548 205.092  1.00  0.00
C
ATOM   1221  N   THR A 179      60.337  55.788 202.883  1.00  0.00
N
ATOM   1222  CA  THR A 179      60.529  56.620 201.702  1.00  0.00
C
ATOM   1223  C   THR A 179      61.354  57.848 202.073  1.00  0.00
C
ATOM   1224  O   THR A 179      60.990  58.542 203.012  1.00  0.00
O
ATOM   1225  CB  THR A 179      59.176  56.957 201.031  1.00  0.00
C
ATOM   1226  OG1 THR A 179      58.250  57.487 201.958  1.00  0.00
O
ATOM   1227  CG2 THR A 179      58.522  55.791 200.286  1.00  0.00
C
ATOM   1228  N   LEU A 180      62.443  58.115 201.336  1.00  0.00
N
ATOM   1229  CA  LEU A 180      63.314  59.277 201.505  1.00  0.00
C
ATOM   1230  C   LEU A 180      63.009  60.271 200.374  1.00  0.00
C
ATOM   1231  O   LEU A 180      62.847  59.879 199.219  1.00  0.00
O
ATOM   1232  CB  LEU A 180      64.781  58.800 201.406  1.00  0.00
C
ATOM   1233  CG  LEU A 180      65.871  59.807 201.835  1.00  0.00
C
ATOM   1234  CD1 LEU A 180      65.794  60.183 203.319  1.00  0.00
C
ATOM   1235  CD2 LEU A 180      67.266  59.238 201.532  1.00  0.00
C
ATOM   1236  N   TYR A 181      62.936  61.557 200.730  1.00  0.00
N
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ATOM 1237 CA TYR A 181 62.654 62.693 199.857 1.00 0.00
C
ATOM 1238 C TYR A 181 63.807 63.693 199.932 1.00 0.00
C
ATOM 1239 O TYR A 181 64.544 63.694 200.912 1.00 0.00
O
ATOM 1240 CB TYR A 181 61.352 63.376 200.321 1.00 0.00
C
ATOM 1241 CG TYR A 181 60.114 62.524 200.138 1.00 0.00
C
ATOM 1242 CD1 TYR A 181 59.761 61.581 201.124 1.00 0.00
C
ATOM 1243 CD2 TYR A 181 59.333 62.646 198.971 1.00 0.00
C
ATOM 1244 CE1 TYR A 181 58.659 60.734 200.922 1.00 0.00
C
ATOM 1245 CE2 TYR A 181 58.226 61.798 198.771 1.00 0.00
C
ATOM 1246 CZ TYR A 181 57.897 60.833 199.743 1.00 0.00
C
ATOM 1247 OH TYR A 181 56.844 59.989 199.542 1.00 0.00
O
ATOM 1248 N VAL A 182 63.914 64.572 198.924 1.00 0.00
N
ATOM 1249 CA VAL A 182 64.742 65.781 198.917 1.00 0.00
C
ATOM 1250 C VAL A 182 63.862 66.988 198.586 1.00 0.00
C
ATOM 1251 O VAL A 182 62.881 66.857 197.859 1.00 0.00
O
ATOM 1252 CB VAL A 182 65.964 65.671 197.970 1.00 0.00
C
ATOM 1253 CG1 VAL A 182 66.964 64.622 198.464 1.00 0.00
C
ATOM 1254 CG2 VAL A 182 65.592 65.446 196.494 1.00 0.00
C
ATOM 1255 N THR A 183 64.237 68.160 199.110 1.00 0.00
N
ATOM 1256 CA THR A 183 63.605 69.457 198.887 1.00 0.00
C
ATOM 1257 C THR A 183 64.667 70.555 199.028 1.00 0.00
C
ATOM 1258 O THR A 183 65.611 70.383 199.791 1.00 0.00
O

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ATOM   1259  CB  THR A 183      62.348  69.612 199.781  1.00  0.00
C
ATOM   1260  OG1 THR A 183      61.641  70.780 199.420  1.00  0.00
O
ATOM   1261  CG2 THR A 183      62.640  69.684 201.289  1.00  0.00
C
ATOM   1262  N   ALA A 184      64.531  71.674 198.306  1.00  0.00
N
ATOM   1263  CA  ALA A 184      65.459  72.803 198.340  1.00  0.00
C
ATOM   1264  C   ALA A 184      64.920  73.908 199.261  1.00  0.00
C
ATOM   1265  O   ALA A 184      63.722  74.202 199.251  1.00  0.00
O
ATOM   1266  CB  ALA A 184      65.611  73.344 196.908  1.00  0.00
C
ATOM   1267  N   ILE A 185      65.830  74.524 200.035  1.00  0.00
N
ATOM   1268  CA  ILE A 185      65.553  75.597 200.989  1.00  0.00
C
ATOM   1269  C   ILE A 185      66.433  76.825 200.748  1.00  0.00
C
ATOM   1270  O   ILE A 185      67.596  76.704 200.363  1.00  0.00
O
ATOM   1271  CB  ILE A 185      65.673  75.117 202.465  1.00  0.00
C
ATOM   1272  CG1 ILE A 185      67.102  74.686 202.889  1.00  0.00
C
ATOM   1273  CG2 ILE A 185      64.612  74.062 202.799  1.00  0.00
C
ATOM   1274  CD1 ILE A 185      67.297  74.550 204.408  1.00  0.00
C
ATOM   1275  N   GLU A 186      65.882  77.991 201.111  1.00  0.00
N
ATOM   1276  CA  GLU A 186      66.608  79.213 201.423  1.00  0.00
C
ATOM   1277  C   GLU A 186      67.129  79.068 202.850  1.00  0.00
C
ATOM   1278  O   GLU A 186      66.385  78.670 203.745  1.00  0.00
O
ATOM   1279  CB  GLU A 186      65.632  80.413 201.315  1.00  0.00
C
ATOM   1280  CG  GLU A 186      66.204  81.810 201.674  1.00  0.00
C
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ATOM 1281 CD GLU A 186 66.323 82.127 203.168 1.00 0.00
C
ATOM 1282 OE1 GLU A 186 67.410 82.616 203.552 1.00 0.00
O
ATOM 1283 OE2 GLU A 186 65.344 81.855 203.898 1.00 0.00
O
ATOM 1284 N ASP A 187 68.412 79.382 203.057 1.00 0.00
N
ATOM 1285 CA ASP A 187 69.068 79.258 204.347 1.00 0.00
C
ATOM 1286 C ASP A 187 70.296 80.165 204.448 1.00 0.00
C
ATOM 1287 O ASP A 187 71.362 79.694 204.835 1.00 0.00
O
ATOM 1288 CB ASP A 187 69.326 77.759 204.662 1.00 0.00
C
ATOM 1289 CG ASP A 187 69.556 77.442 206.139 1.00 0.00
C
ATOM 1290 OD1 ASP A 187 70.132 76.363 206.391 1.00 0.00
O
ATOM 1291 OD2 ASP A 187 69.138 78.254 206.993 1.00 0.00
O
ATOM 1292 N ARG A 188 70.175 81.452 204.073 1.00 0.00
N
ATOM 1293 CA ARG A 188 71.290 82.403 204.078 1.00 0.00
C
ATOM 1294 C ARG A 188 71.881 82.604 205.482 1.00 0.00
C
ATOM 1295 O ARG A 188 73.089 82.472 205.654 1.00 0.00
O
ATOM 1296 CB ARG A 188 70.860 83.752 203.458 1.00 0.00
C
ATOM 1297 CG ARG A 188 71.990 84.803 203.453 1.00 0.00
C
ATOM 1298 CD ARG A 188 72.011 85.692 202.203 1.00 0.00
C
ATOM 1299 NE ARG A 188 73.136 86.641 202.243 1.00 0.00
N
ATOM 1300 CZ ARG A 188 74.442 86.338 202.115 1.00 0.00
C
ATOM 1301 NH1 ARG A 188 74.865 85.077 201.938 1.00 0.00
N
ATOM 1302 NH2 ARG A 188 75.349 87.320 202.177 1.00 0.00
N

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ATOM   1303  N   GLN A 189      71.016  82.885 206.468  1.00  0.00
N
ATOM   1304  CA  GLN A 189      71.356  83.234 207.845  1.00  0.00
C
ATOM   1305  C   GLN A 189      72.151  82.133 208.564  1.00  0.00
C
ATOM   1306  O   GLN A 189      73.217  82.420 209.110  1.00  0.00
O
ATOM   1307  CB  GLN A 189      70.068  83.566 208.637  1.00  0.00
C
ATOM   1308  CG  GLN A 189      69.391  84.908 208.273  1.00  0.00
C
ATOM   1309  CD  GLN A 189      68.609  84.916 206.953  1.00  0.00
C
ATOM   1310  OE1 GLN A 189      68.238  83.871 206.425  1.00  0.00
O
ATOM   1311  NE2 GLN A 189      68.360  86.107 206.407  1.00  0.00
N
ATOM   1312  N   TYR A 190      71.654  80.882 208.551  1.00  0.00
N
ATOM   1313  CA  TYR A 190      72.295  79.770 209.252  1.00  0.00
C
ATOM   1314  C   TYR A 190      73.450  79.155 208.442  1.00  0.00
C
ATOM   1315  O   TYR A 190      74.359  78.599 209.058  1.00  0.00
O
ATOM   1316  CB  TYR A 190      71.256  78.677 209.579  1.00  0.00
C
ATOM   1317  CG  TYR A 190      71.735  77.653 210.598  1.00  0.00
C
ATOM   1318  CD1 TYR A 190      72.059  78.055 211.911  1.00  0.00
C
ATOM   1319  CD2 TYR A 190      71.880  76.299 210.234  1.00  0.00
C
ATOM   1320  CE1 TYR A 190      72.539  77.115 212.843  1.00  0.00
C
ATOM   1321  CE2 TYR A 190      72.381  75.363 211.156  1.00  0.00
C
ATOM   1322  CZ  TYR A 190      72.701  75.768 212.465  1.00  0.00
C
ATOM   1323  OH  TYR A 190      73.140  74.849 213.372  1.00  0.00
O
ATOM   1324  N   LYS A 191      73.476  79.299 207.098  1.00  0.00
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ATOM   1325  CA  LYS A 191      74.642  78.935 206.285  1.00  0.00
C
ATOM   1326  C   LYS A 191      75.807  79.889 206.583  1.00  0.00
C
ATOM   1327  O   LYS A 191      76.938  79.422 206.711  1.00  0.00
O
ATOM   1328  CB  LYS A 191      74.332  78.954 204.768  1.00  0.00
C
ATOM   1329  CG  LYS A 191      75.502  78.400 203.928  1.00  0.00
C
ATOM   1330  CD  LYS A 191      75.304  78.425 202.411  1.00  0.00
C
ATOM   1331  CE  LYS A 191      76.563  77.946 201.671  1.00  0.00
C
ATOM   1332  NZ  LYS A 191      76.441  78.129 200.216  1.00  0.00
N
ATOM   1333  N   ASP A 192      75.540  81.199 206.746  1.00  0.00
N
ATOM   1334  CA  ASP A 192      76.558  82.179 207.120  1.00  0.00
C
ATOM   1335  C   ASP A 192      77.131  81.944 208.527  1.00  0.00
C
ATOM   1336  O   ASP A 192      78.313  82.192 208.745  1.00  0.00
O
ATOM   1337  CB  ASP A 192      76.050  83.638 207.015  1.00  0.00
C
ATOM   1338  CG  ASP A 192      75.797  84.143 205.590  1.00  0.00
C
ATOM   1339  OD1 ASP A 192      76.555  83.742 204.679  1.00  0.00
O
ATOM   1340  OD2 ASP A 192      74.866  84.964 205.439  1.00  0.00
O
ATOM   1341  N   TYR A 193      76.321  81.415 209.456  1.00  0.00
N
ATOM   1342  CA  TYR A 193      76.734  81.052 210.810  1.00  0.00
C
ATOM   1343  C   TYR A 193      77.583  79.763 210.842  1.00  0.00
C
ATOM   1344  O   TYR A 193      78.360  79.589 211.780  1.00  0.00
O
ATOM   1345  CB  TYR A 193      75.453  80.850 211.647  1.00  0.00
C
ATOM   1346  CG  TYR A 193      75.672  80.534 213.116  1.00  0.00
C
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ATOM   1347  CD1 TYR A 193      76.199  81.515 213.982  1.00  0.00
C
ATOM   1348  CD2 TYR A 193      75.362  79.253 213.617  1.00  0.00
C
ATOM   1349  CE1 TYR A 193      76.408  81.216 215.342  1.00  0.00
C
ATOM   1350  CE2 TYR A 193      75.564  78.956 214.978  1.00  0.00
C
ATOM   1351  CZ  TYR A 193      76.087  79.939 215.842  1.00  0.00
C
ATOM   1352  OH  TYR A 193      76.282  79.657 217.162  1.00  0.00
O
ATOM   1353  N   LYS A 194      77.451  78.878 209.836  1.00  0.00
N
ATOM   1354  CA  LYS A 194      78.088  77.563 209.816  1.00  0.00
C
ATOM   1355  C   LYS A 194      79.311  77.468 208.896  1.00  0.00
C
ATOM   1356  O   LYS A 194      80.300  76.869 209.319  1.00  0.00
O
ATOM   1357  CB  LYS A 194      77.040  76.495 209.426  1.00  0.00
C
ATOM   1358  CG  LYS A 194      76.227  75.989 210.631  1.00  0.00
C
ATOM   1359  CD  LYS A 194      77.084  75.142 211.591  1.00  0.00
C
ATOM   1360  CE  LYS A 194      76.295  74.489 212.724  1.00  0.00
C
ATOM   1361  NZ  LYS A 194      77.172  73.626 213.533  1.00  0.00
N
ATOM   1362  N   ILE A 195      79.275  78.042 207.678  1.00  0.00
N
ATOM   1363  CA  ILE A 195      80.389  77.985 206.725  1.00  0.00
C
ATOM   1364  C   ILE A 195      81.045  79.357 206.537  1.00  0.00
C
ATOM   1365  O   ILE A 195      82.246  79.449 206.767  1.00  0.00
O
ATOM   1366  CB  ILE A 195      80.047  77.288 205.381  1.00  0.00
C
ATOM   1367  CG1 ILE A 195      80.203  75.755 205.455  1.00  0.00
C
ATOM   1368  CG2 ILE A 195      78.718  77.706 204.742  1.00  0.00
C
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ATOM   1369  CD1 ILE A 195      79.043  74.992 206.109  1.00  0.00
C
HETATM 1370  N   HIE A 196      80.310  80.431 206.185  1.00  0.00
N
HETATM 1371  CA  HIE A 196      80.889  81.776 205.980  1.00  0.00
C
HETATM 1372  C   HIE A 196      81.605  82.339 207.226  1.00  0.00
C
HETATM 1373  O   HIE A 196      82.524  83.143 207.089  1.00  0.00
O
HETATM 1374  CB  HIE A 196      79.799  82.764 205.534  1.00  0.00
C
HETATM 1375  CG  HIE A 196      80.283  84.147 205.193  1.00  0.00
C
HETATM 1376  ND1 HIE A 196      80.115  85.228 206.067  1.00  0.00
N
HETATM 1377  CE1 HIE A 196      80.729  86.241 205.474  1.00  0.00
C
HETATM 1378  NE2 HIE A 196      81.252  85.911 204.293  1.00  0.00
N
HETATM 1379  CD2 HIE A 196      80.969  84.574 204.079  1.00  0.00
C
ATOM   1380  N   TRP A 197      81.210  81.872 208.422  1.00  0.00
N
ATOM   1381  CA  TRP A 197      81.796  82.158 209.728  1.00  0.00
C
ATOM   1382  C   TRP A 197      83.311  81.894 209.794  1.00  0.00
C
ATOM   1383  O   TRP A 197      84.029  82.646 210.451  1.00  0.00
O
ATOM   1384  CB  TRP A 197      81.027  81.338 210.783  1.00  0.00
C
ATOM   1385  CG  TRP A 197      81.487  81.510 212.199  1.00  0.00
C
ATOM   1386  CD1 TRP A 197      81.006  82.424 213.071  1.00  0.00
C
ATOM   1387  CD2 TRP A 197      82.539  80.788 212.910  1.00  0.00
C
ATOM   1388  NE1 TRP A 197      81.704  82.339 214.257  1.00  0.00
N
ATOM   1389  CE2 TRP A 197      82.675  81.361 214.211  1.00  0.00
C
ATOM   1390  CE3 TRP A 197      83.409  79.721 212.584  1.00  0.00
C
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ATOM 1391 CZ2 TRP A 197 83.640 80.915 215.132 1.00 0.00
C
ATOM 1392 CZ3 TRP A 197 84.373 79.263 213.503 1.00 0.00
C
ATOM 1393 CH2 TRP A 197 84.496 79.860 214.771 1.00 0.00
C
ATOM 1394 N TRP A 198 83.794 80.853 209.093 1.00 0.00
N
ATOM 1395 CA TRP A 198 85.203 80.473 209.032 1.00 0.00
C
ATOM 1396 C TRP A 198 86.081 81.452 208.227 1.00 0.00
C
ATOM 1397 O TRP A 198 87.298 81.379 208.362 1.00 0.00
O
ATOM 1398 CB TRP A 198 85.333 79.061 208.430 1.00 0.00
C
ATOM 1399 CG TRP A 198 84.782 77.946 209.264 1.00 0.00
C
ATOM 1400 CD1 TRP A 198 83.618 77.299 209.045 1.00 0.00
C
ATOM 1401 CD2 TRP A 198 85.365 77.318 210.444 1.00 0.00
C
ATOM 1402 NE1 TRP A 198 83.415 76.350 210.023 1.00 0.00
N
ATOM 1403 CE2 TRP A 198 84.467 76.311 210.913 1.00 0.00
C
ATOM 1404 CE3 TRP A 198 86.570 77.492 211.165 1.00 0.00
C
ATOM 1405 CZ2 TRP A 198 84.744 75.525 212.045 1.00 0.00
C
ATOM 1406 CZ3 TRP A 198 86.864 76.702 212.295 1.00 0.00
C
ATOM 1407 CH2 TRP A 198 85.953 75.723 212.738 1.00 0.00
C
ATOM 1408 N GLU A 199 85.516 82.396 207.445 1.00 0.00
N
ATOM 1409 CA GLU A 199 86.287 83.404 206.700 1.00 0.00
C
ATOM 1410 C GLU A 199 87.046 84.382 207.614 1.00 0.00
C
ATOM 1411 O GLU A 199 88.111 84.859 207.228 1.00 0.00
O
ATOM 1412 CB GLU A 199 85.368 84.260 205.807 1.00 0.00
C

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ATOM   1413  CG  GLU A 199      84.812  83.539 204.568  1.00  0.00
C
ATOM   1414  CD  GLU A 199      84.296  84.490 203.482  1.00  0.00
C
ATOM   1415  OE1 GLU A 199      84.281  85.721 203.712  1.00  0.00
O
ATOM   1416  OE2 GLU A 199      83.894  83.959 202.425  1.00  0.00
O
ATOM   1417  N   ASN A 200      86.501  84.683 208.802  1.00  0.00
N
ATOM   1418  CA  ASN A 200      87.089  85.579 209.789  1.00  0.00
C
ATOM   1419  C   ASN A 200      86.737  85.046 211.178  1.00  0.00
C
ATOM   1420  O   ASN A 200      85.617  85.235 211.652  1.00  0.00
O
ATOM   1421  CB  ASN A 200      86.658  87.039 209.520  1.00  0.00
C
ATOM   1422  CG  ASN A 200      87.436  88.044 210.377  1.00  0.00
C
ATOM   1423  OD1 ASN A 200      87.150  88.212 211.561  1.00  0.00
O
ATOM   1424  ND2 ASN A 200      88.431  88.708 209.787  1.00  0.00
N
ATOM   1425  N   VAL A 201      87.716  84.400 211.823  1.00  0.00
N
ATOM   1426  CA  VAL A 201      87.636  83.858 213.174  1.00  0.00
C
ATOM   1427  C   VAL A 201      88.668  84.630 214.004  1.00  0.00
C
ATOM   1428  O   VAL A 201      89.848  84.279 214.020  1.00  0.00
O
ATOM   1429  CB  VAL A 201      87.896  82.326 213.133  1.00  0.00
C
ATOM   1430  CG1 VAL A 201      87.836  81.682 214.529  1.00  0.00
C
ATOM   1431  CG2 VAL A 201      86.923  81.597 212.190  1.00  0.00
C
ATOM   1432  N   TYR A 202      88.217  85.723 214.646  1.00  0.00
N
ATOM   1433  CA  TYR A 202      88.988  86.610 215.530  1.00  0.00
C
ATOM   1434  C   TYR A 202      90.040  87.445 214.775  1.00  0.00
C
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ATOM   1435  O   TYR A 202      91.073  87.802 215.341  1.00  0.00
O
ATOM   1436  CB  TYR A 202      89.555  85.860 216.762  1.00  0.00
C
ATOM   1437  CG  TYR A 202      88.481  85.235 217.631  1.00  0.00
C
ATOM   1438  CD1 TYR A 202      88.263  83.843 217.600  1.00  0.00
C
ATOM   1439  CD2 TYR A 202      87.673  86.052 218.448  1.00  0.00
C
ATOM   1440  CE1 TYR A 202      87.223  83.273 218.359  1.00  0.00
C
ATOM   1441  CE2 TYR A 202      86.639  85.482 219.215  1.00  0.00
C
ATOM   1442  CZ  TYR A 202      86.409  84.093 219.164  1.00  0.00
C
ATOM   1443  OH  TYR A 202      85.397  83.540 219.894  1.00  0.00
O
ATOM   1444  N   GLY A 203      89.794  87.711 213.483  1.00  0.00
N
ATOM   1445  CA  GLY A 203      90.668  88.468 212.594  1.00  0.00
C
ATOM   1446  C   GLY A 203      91.383  87.576 211.573  1.00  0.00
C
ATOM   1447  O   GLY A 203      91.880  88.088 210.572  1.00  0.00
O
ATOM   1448  N   PHE A 204      91.462  86.260 211.838  1.00  0.00
N
ATOM   1449  CA  PHE A 204      92.247  85.294 211.074  1.00  0.00
C
ATOM   1450  C   PHE A 204      91.379  84.572 210.046  1.00  0.00
C
ATOM   1451  O   PHE A 204      90.241  84.196 210.327  1.00  0.00
O
ATOM   1452  CB  PHE A 204      92.785  84.221 212.040  1.00  0.00
C
ATOM   1453  CG  PHE A 204      93.775  84.776 213.044  1.00  0.00
C
ATOM   1454  CD1 PHE A 204      93.425  84.885 214.405  1.00  0.00
C
ATOM   1455  CD2 PHE A 204      95.039  85.219 212.604  1.00  0.00
C
ATOM   1456  CE1 PHE A 204      94.337  85.441 215.322  1.00  0.00
C
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ATOM   1457  CE2 PHE A 204      95.949  85.778 213.521  1.00  0.00
C
ATOM   1458  CZ  PHE A 204      95.597  85.891 214.880  1.00  0.00
C
ATOM   1459  N   ASP A 205      91.966  84.338 208.865  1.00  0.00
N
ATOM   1460  CA  ASP A 205      91.358  83.599 207.771  1.00  0.00
C
ATOM   1461  C   ASP A 205      91.507  82.089 208.022  1.00  0.00
C
ATOM   1462  O   ASP A 205      92.621  81.567 208.074  1.00  0.00
O
ATOM   1463  CB  ASP A 205      92.062  84.023 206.457  1.00  0.00
C
ATOM   1464  CG  ASP A 205      91.490  83.385 205.186  1.00  0.00
C
ATOM   1465  OD1 ASP A 205      90.328  82.927 205.240  1.00  0.00
O
ATOM   1466  OD2 ASP A 205      92.221  83.383 204.173  1.00  0.00
O
ATOM   1467  N   MET A 206      90.362  81.404 208.152  1.00  0.00
N
ATOM   1468  CA  MET A 206      90.242  79.953 208.276  1.00  0.00
C
ATOM   1469  C   MET A 206      89.370  79.399 207.134  1.00  0.00
C
ATOM   1470  O   MET A 206      88.700  78.383 207.320  1.00  0.00
O
ATOM   1471  CB  MET A 206      89.715  79.564 209.679  1.00  0.00
C
ATOM   1472  CG  MET A 206      90.558  80.082 210.852  1.00  0.00
C
ATOM   1473  SD  MET A 206      90.065  79.386 212.451  1.00  0.00
S
ATOM   1474  CE  MET A 206      91.208  80.280 213.536  1.00  0.00
C
ATOM   1475  N   SER A 207      89.368  80.065 205.958  1.00  0.00
N
ATOM   1476  CA  SER A 207      88.546  79.751 204.779  1.00  0.00
C
ATOM   1477  C   SER A 207      88.686  78.317 204.246  1.00  0.00
C
ATOM   1478  O   SER A 207      87.740  77.800 203.656  1.00  0.00
O
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ATOM   1479  CB  SER A 207      88.831  80.736 203.626  1.00  0.00
C
ATOM   1480  OG  SER A 207      88.132  81.946 203.809  1.00  0.00
O
ATOM   1481  N   CYS A 208      89.841  77.671 204.479  1.00  0.00
N
ATOM   1482  CA  CYS A 208      90.135  76.280 204.129  1.00  0.00
C
ATOM   1483  C   CYS A 208      89.244  75.241 204.845  1.00  0.00
C
ATOM   1484  O   CYS A 208      89.134  74.113 204.364  1.00  0.00
O
ATOM   1485  CB  CYS A 208      91.633  76.005 204.393  1.00  0.00
C
ATOM   1486  SG  CYS A 208      92.109  76.269 206.132  1.00  0.00
S
ATOM   1487  N   ILE A 209      88.595  75.618 205.962  1.00  0.00
N
ATOM   1488  CA  ILE A 209      87.675  74.776 206.730  1.00  0.00
C
ATOM   1489  C   ILE A 209      86.227  74.921 206.207  1.00  0.00
C
ATOM   1490  O   ILE A 209      85.417  74.043 206.501  1.00  0.00
O
ATOM   1491  CB  ILE A 209      87.784  75.131 208.249  1.00  0.00
C
ATOM   1492  CG1 ILE A 209      89.234  74.905 208.753  1.00  0.00
C
ATOM   1493  CG2 ILE A 209      86.787  74.336 209.126  1.00  0.00
C
ATOM   1494  CD1 ILE A 209      89.499  75.308 210.211  1.00  0.00
C
ATOM   1495  N   LYS A 210      85.896  75.941 205.382  1.00  0.00
N
ATOM   1496  CA  LYS A 210      84.576  76.088 204.740  1.00  0.00
C
ATOM   1497  C   LYS A 210      84.221  74.890 203.860  1.00  0.00
C
ATOM   1498  O   LYS A 210      83.101  74.389 203.928  1.00  0.00
O
ATOM   1499  CB  LYS A 210      84.501  77.341 203.845  1.00  0.00
C
ATOM   1500  CG  LYS A 210      84.530  78.653 204.622  1.00  0.00
C
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ATOM   1501  CD  LYS A 210      83.836  79.827 203.911  1.00  0.00
C
ATOM   1502  CE  LYS A 210      84.611  80.408 202.718  1.00  0.00
C
ATOM   1503  NZ  LYS A 210      84.554  79.540 201.529  1.00  0.00
N
ATOM   1504  N   ASP A 211      85.209  74.432 203.075  1.00  0.00
N
ATOM   1505  CA  ASP A 211      85.160  73.276 202.188  1.00  0.00
C
ATOM   1506  C   ASP A 211      84.848  71.985 202.956  1.00  0.00
C
ATOM   1507  O   ASP A 211      83.979  71.233 202.532  1.00  0.00
O
ATOM   1508  CB  ASP A 211      86.495  73.132 201.418  1.00  0.00
C
ATOM   1509  CG  ASP A 211      86.939  74.406 200.691  1.00  0.00
C
ATOM   1510  OD1 ASP A 211      87.485  75.298 201.378  1.00  0.00
O
ATOM   1511  OD2 ASP A 211      86.719  74.464 199.463  1.00  0.00
O
ATOM   1512  N   VAL A 212      85.512  71.762 204.103  1.00  0.00
N
ATOM   1513  CA  VAL A 212      85.358  70.579 204.954  1.00  0.00
C
ATOM   1514  C   VAL A 212      84.004  70.589 205.695  1.00  0.00
C
ATOM   1515  O   VAL A 212      83.371  69.541 205.817  1.00  0.00
O
ATOM   1516  CB  VAL A 212      86.532  70.527 205.974  1.00  0.00
C
ATOM   1517  CG1 VAL A 212      86.500  69.261 206.854  1.00  0.00
C
ATOM   1518  CG2 VAL A 212      87.909  70.632 205.289  1.00  0.00
C
ATOM   1519  N   ALA A 213      83.555  71.766 206.165  1.00  0.00
N
ATOM   1520  CA  ALA A 213      82.310  71.960 206.907  1.00  0.00
C
ATOM   1521  C   ALA A 213      81.052  71.808 206.030  1.00  0.00
C
ATOM   1522  O   ALA A 213      80.026  71.356 206.537  1.00  0.00
O
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ATOM   1523  CB  ALA A 213      82.344  73.363 207.535  1.00  0.00
C
ATOM   1524  N   ILE A 214      81.131  72.138 204.724  1.00  0.00
N
ATOM   1525  CA  ILE A 214      80.080  71.922 203.716  1.00  0.00
C
ATOM   1526  C   ILE A 214      79.823  70.421 203.488  1.00  0.00
C
ATOM   1527  O   ILE A 214      78.668  70.027 203.340  1.00  0.00
O
ATOM   1528  CB  ILE A 214      80.453  72.687 202.395  1.00  0.00
C
ATOM   1529  CG1 ILE A 214      79.567  73.937 202.187  1.00  0.00
C
ATOM   1530  CG2 ILE A 214      80.456  71.866 201.082  1.00  0.00
C
ATOM   1531  CD1 ILE A 214      80.348  75.128 201.615  1.00  0.00
C
ATOM   1532  N   LYS A 215      80.882  69.593 203.501  1.00  0.00
N
ATOM   1533  CA  LYS A 215      80.840  68.145 203.277  1.00  0.00
C
ATOM   1534  C   LYS A 215      80.401  67.359 204.534  1.00  0.00
C
ATOM   1535  O   LYS A 215      80.646  66.158 204.621  1.00  0.00
O
ATOM   1536  CB  LYS A 215      82.252  67.675 202.856  1.00  0.00
C
ATOM   1537  CG  LYS A 215      82.745  68.292 201.537  1.00  0.00
C
ATOM   1538  CD  LYS A 215      84.047  67.644 201.048  1.00  0.00
C
ATOM   1539  CE  LYS A 215      84.558  68.260 199.740  1.00  0.00
C
ATOM   1540  NZ  LYS A 215      85.780  67.582 199.277  1.00  0.00
N
ATOM   1541  N   GLU A 216      79.740  68.017 205.499  1.00  0.00
N
ATOM   1542  CA  GLU A 216      79.299  67.457 206.771  1.00  0.00
C
ATOM   1543  C   GLU A 216      77.803  67.803 206.928  1.00  0.00
C
ATOM   1544  O   GLU A 216      77.496  68.904 207.387  1.00  0.00
O
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ATOM   1545  CB  GLU A 216      80.244  67.994 207.877  1.00  0.00
C
ATOM   1546  CG  GLU A 216      80.411  67.068 209.099  1.00  0.00
C
ATOM   1547  CD  GLU A 216      79.205  67.023 210.036  1.00  0.00
C
ATOM   1548  OE1 GLU A 216      78.732  68.117 210.415  1.00  0.00
O
ATOM   1549  OE2 GLU A 216      78.796  65.893 210.378  1.00  0.00
O
ATOM   1550  N   PRO A 217      76.866  66.919 206.495  1.00  0.00
N
ATOM   1551  CA  PRO A 217      75.409  67.133 206.569  1.00  0.00
C
ATOM   1552  C   PRO A 217      74.938  67.330 208.018  1.00  0.00
C
ATOM   1553  O   PRO A 217      75.355  66.589 208.909  1.00  0.00
O
ATOM   1554  CB  PRO A 217      74.764  65.858 205.998  1.00  0.00
C
ATOM   1555  CG  PRO A 217      75.848  65.228 205.151  1.00  0.00
C
ATOM   1556  CD  PRO A 217      77.162  65.685 205.775  1.00  0.00
C
ATOM   1557  N   LEU A 218      74.087  68.339 208.242  1.00  0.00
N
ATOM   1558  CA  LEU A 218      73.646  68.758 209.569  1.00  0.00
C
ATOM   1559  C   LEU A 218      72.219  68.275 209.830  1.00  0.00
C
ATOM   1560  O   LEU A 218      71.330  68.475 209.006  1.00  0.00
O
ATOM   1561  CB  LEU A 218      73.641  70.297 209.638  1.00  0.00
C
ATOM   1562  CG  LEU A 218      74.988  70.981 209.333  1.00  0.00
C
ATOM   1563  CD1 LEU A 218      74.830  72.502 209.449  1.00  0.00
C
ATOM   1564  CD2 LEU A 218      76.124  70.486 210.242  1.00  0.00
C
ATOM   1565  N   VAL A 219      72.003  67.685 211.012  1.00  0.00
N
ATOM   1566  CA  VAL A 219      70.700  67.253 211.503  1.00  0.00
C
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ATOM   1567  C   VAL A 219      70.114  68.416 212.331  1.00  0.00
C
ATOM   1568  O   VAL A 219      70.488  68.615 213.488  1.00  0.00
O
ATOM   1569  CB  VAL A 219      70.903  65.966 212.350  1.00  0.00
C
ATOM   1570  CG1 VAL A 219      69.622  65.508 213.064  1.00  0.00
C
ATOM   1571  CG2 VAL A 219      71.434  64.808 211.480  1.00  0.00
C
ATOM   1572  N   ASP A 220      69.201  69.181 211.712  1.00  0.00
N
ATOM   1573  CA  ASP A 220      68.506  70.348 212.266  1.00  0.00
C
ATOM   1574  C   ASP A 220      67.015  70.299 211.933  1.00  0.00
C
ATOM   1575  O   ASP A 220      66.614  69.702 210.932  1.00  0.00
O
ATOM   1576  CB  ASP A 220      69.120  71.680 211.767  1.00  0.00
C
ATOM   1577  CG  ASP A 220      70.557  71.936 212.216  1.00  0.00
C
ATOM   1578  OD1 ASP A 220      70.766  72.013 213.447  1.00  0.00
O
ATOM   1579  OD2 ASP A 220      71.418  72.080 211.324  1.00  0.00
O
ATOM   1580  N   VAL A 221      66.198  70.989 212.748  1.00  0.00
N
ATOM   1581  CA  VAL A 221      64.803  71.291 212.433  1.00  0.00
C
ATOM   1582  C   VAL A 221      64.821  72.466 211.445  1.00  0.00
C
ATOM   1583  O   VAL A 221      65.227  73.578 211.786  1.00  0.00
O
ATOM   1584  CB  VAL A 221      64.017  71.683 213.717  1.00  0.00
C
ATOM   1585  CG1 VAL A 221      62.556  72.081 213.416  1.00  0.00
C
ATOM   1586  CG2 VAL A 221      64.018  70.552 214.756  1.00  0.00
C
ATOM   1587  N   VAL A 222      64.372  72.190 210.218  1.00  0.00
N
ATOM   1588  CA  VAL A 222      64.173  73.147 209.143  1.00  0.00
C
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ATOM   1589  C   VAL A 222      62.747  73.690 209.299  1.00  0.00
C
ATOM   1590  O   VAL A 222      61.792  72.924 209.448  1.00  0.00
O
ATOM   1591  CB  VAL A 222      64.327  72.396 207.792  1.00  0.00
C
ATOM   1592  CG1 VAL A 222      63.937  73.231 206.559  1.00  0.00
C
ATOM   1593  CG2 VAL A 222      65.762  71.865 207.622  1.00  0.00
C
ATOM   1594  N   ASP A 223      62.618  75.022 209.238  1.00  0.00
N
ATOM   1595  CA  ASP A 223      61.344  75.734 209.218  1.00  0.00
C
ATOM   1596  C   ASP A 223      60.712  75.539 207.820  1.00  0.00
C
ATOM   1597  O   ASP A 223      61.411  75.735 206.826  1.00  0.00
O
ATOM   1598  CB  ASP A 223      61.647  77.229 209.508  1.00  0.00
C
ATOM   1599  CG  ASP A 223      60.431  78.139 209.740  1.00  0.00
C
ATOM   1600  OD1 ASP A 223      60.539  79.003 210.636  1.00  0.00
O
ATOM   1601  OD2 ASP A 223      59.419  77.988 209.022  1.00  0.00
O
ATOM   1602  N   PRO A 224      59.414  75.176 207.705  1.00  0.00
N
ATOM   1603  CA  PRO A 224      58.750  74.989 206.406  1.00  0.00
C
ATOM   1604  C   PRO A 224      58.533  76.280 205.593  1.00  0.00
C
ATOM   1605  O   PRO A 224      58.216  76.194 204.408  1.00  0.00
O
ATOM   1606  CB  PRO A 224      57.429  74.286 206.736  1.00  0.00
C
ATOM   1607  CG  PRO A 224      57.126  74.675 208.173  1.00  0.00
C
ATOM   1608  CD  PRO A 224      58.496  74.901 208.811  1.00  0.00
C
ATOM   1609  N   LYS A 225      58.764  77.465 206.183  1.00  0.00
N
ATOM   1610  CA  LYS A 225      58.779  78.748 205.482  1.00  0.00
C
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ATOM   1611  C   LYS A 225      60.100  78.990 204.733  1.00  0.00
C
ATOM   1612  O   LYS A 225      60.150  79.896 203.906  1.00  0.00
O
ATOM   1613  CB  LYS A 225      58.585  79.889 206.498  1.00  0.00
C
ATOM   1614  CG  LYS A 225      57.196  79.841 207.145  1.00  0.00
C
ATOM   1615  CD  LYS A 225      56.917  81.032 208.065  1.00  0.00
C
ATOM   1616  CE  LYS A 225      55.470  81.008 208.572  1.00  0.00
C
ATOM   1617  NZ  LYS A 225      55.205  82.121 209.495  1.00  0.00
N
ATOM   1618  N   GLN A 226      61.144  78.178 204.973  1.00  0.00
N
ATOM   1619  CA  GLN A 226      62.394  78.203 204.218  1.00  0.00
C
ATOM   1620  C   GLN A 226      62.307  77.364 202.932  1.00  0.00
C
ATOM   1621  O   GLN A 226      63.181  77.521 202.086  1.00  0.00
O
ATOM   1622  CB  GLN A 226      63.535  77.653 205.098  1.00  0.00
C
ATOM   1623  CG  GLN A 226      63.922  78.645 206.216  1.00  0.00
C
ATOM   1624  CD  GLN A 226      65.183  78.298 207.018  1.00  0.00
C
ATOM   1625  OE1 GLN A 226      65.487  78.987 207.988  1.00  0.00
O
ATOM   1626  NE2 GLN A 226      65.926  77.254 206.646  1.00  0.00
N
ATOM   1627  N   LEU A 227      61.264  76.531 202.746  1.00  0.00
N
ATOM   1628  CA  LEU A 227      61.035  75.710 201.551  1.00  0.00
C
ATOM   1629  C   LEU A 227      60.750  76.581 200.321  1.00  0.00
C
ATOM   1630  O   LEU A 227      59.740  77.282 200.271  1.00  0.00
O
ATOM   1631  CB  LEU A 227      59.836  74.765 201.787  1.00  0.00
C
ATOM   1632  CG  LEU A 227      60.087  73.643 202.812  1.00  0.00
C
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ATOM   1633  CD1 LEU A 227      58.764  72.982 203.222  1.00  0.00
C
ATOM   1634  CD2 LEU A 227      61.030  72.575 202.247  1.00  0.00
C
ATOM   1635  N   VAL A 228      61.654  76.512 199.334  1.00  0.00
N
ATOM   1636  CA  VAL A 228      61.571  77.231 198.062  1.00  0.00
C
ATOM   1637  C   VAL A 228      60.933  76.334 196.984  1.00  0.00
C
ATOM   1638  O   VAL A 228      60.366  76.864 196.031  1.00  0.00
O
ATOM   1639  CB  VAL A 228      63.007  77.647 197.635  1.00  0.00
C
ATOM   1640  CG1 VAL A 228      63.063  78.357 196.270  1.00  0.00
C
ATOM   1641  CG2 VAL A 228      63.653  78.562 198.687  1.00  0.00
C
ATOM   1642  N   THR A 229      61.001  74.999 197.139  1.00  0.00
N
ATOM   1643  CA  THR A 229      60.481  74.003 196.203  1.00  0.00
C
ATOM   1644  C   THR A 229      59.462  73.074 196.885  1.00  0.00
C
ATOM   1645  O   THR A 229      59.267  73.115 198.100  1.00  0.00
O
ATOM   1646  CB  THR A 229      61.655  73.204 195.568  1.00  0.00
C
ATOM   1647  OG1 THR A 229      62.259  72.330 196.500  1.00  0.00
O
ATOM   1648  CG2 THR A 229      62.745  74.050 194.900  1.00  0.00
C
ATOM   1649  N   ASN A 230      58.872  72.178 196.076  1.00  0.00
N
ATOM   1650  CA  ASN A 230      58.215  70.937 196.501  1.00  0.00
C
ATOM   1651  C   ASN A 230      59.263  69.874 196.905  1.00  0.00
C
ATOM   1652  O   ASN A 230      60.467  70.117 196.827  1.00  0.00
O
ATOM   1653  CB  ASN A 230      57.327  70.392 195.342  1.00  0.00
C
ATOM   1654  CG  ASN A 230      58.042  70.041 194.022  1.00  0.00
C
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ATOM   1655  OD1 ASN A 230      59.164  70.468 193.766  1.00  0.00
O
ATOM   1656  ND2 ASN A 230      57.401  69.226 193.186  1.00  0.00
N
ATOM   1657  N   ALA A 231      58.800  68.687 197.318  1.00  0.00
N
ATOM   1658  CA  ALA A 231      59.643  67.524 197.576  1.00  0.00
C
ATOM   1659  C   ALA A 231      59.619  66.555 196.382  1.00  0.00
C
ATOM   1660  O   ALA A 231      58.661  66.532 195.608  1.00  0.00
O
ATOM   1661  CB  ALA A 231      59.085  66.799 198.803  1.00  0.00
C
ATOM   1662  N   CYS A 232      60.676  65.738 196.263  1.00  0.00
N
ATOM   1663  CA  CYS A 232      60.846  64.688 195.260  1.00  0.00
C
ATOM   1664  C   CYS A 232      61.363  63.427 195.950  1.00  0.00
C
ATOM   1665  O   CYS A 232      62.372  63.486 196.651  1.00  0.00
O
ATOM   1666  CB  CYS A 232      61.776  65.187 194.137  1.00  0.00
C
ATOM   1667  SG  CYS A 232      61.935  63.974 192.792  1.00  0.00
S
ATOM   1668  N   LEU A 233      60.692  62.289 195.707  1.00  0.00
N
ATOM   1669  CA  LEU A 233      61.065  60.953 196.173  1.00  0.00
C
ATOM   1670  C   LEU A 233      62.384  60.526 195.507  1.00  0.00
C
ATOM   1671  O   LEU A 233      62.493  60.554 194.281  1.00  0.00
O
ATOM   1672  CB  LEU A 233      59.920  59.983 195.787  1.00  0.00
C
ATOM   1673  CG  LEU A 233      60.084  58.517 196.253  1.00  0.00
C
ATOM   1674  CD1 LEU A 233      59.879  58.373 197.763  1.00  0.00
C
ATOM   1675  CD2 LEU A 233      59.111  57.590 195.510  1.00  0.00
C
ATOM   1676  N   ILE A 234      63.369  60.135 196.329  1.00  0.00
N
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ATOM   1677  CA  ILE A 234      64.690  59.661 195.906  1.00  0.00
C
ATOM   1678  C   ILE A 234      64.959  58.220 196.352  1.00  0.00
C
ATOM   1679  O   ILE A 234      65.906  57.613 195.859  1.00  0.00
O
ATOM   1680  CB  ILE A 234      65.806  60.609 196.413  1.00  0.00
C
ATOM   1681  CG1 ILE A 234      65.797  60.818 197.946  1.00  0.00
C
ATOM   1682  CG2 ILE A 234      65.775  61.939 195.648  1.00  0.00
C
ATOM   1683  CD1 ILE A 234      67.195  61.044 198.529  1.00  0.00
C
ATOM   1684  N   LYS A 235      64.158  57.661 197.270  1.00  0.00
N
ATOM   1685  CA  LYS A 235      64.292  56.278 197.704  1.00  0.00
C
ATOM   1686  C   LYS A 235      62.959  55.734 198.200  1.00  0.00
C
ATOM   1687  O   LYS A 235      62.222  56.430 198.890  1.00  0.00
O
ATOM   1688  CB  LYS A 235      65.454  56.118 198.712  1.00  0.00
C
ATOM   1689  CG  LYS A 235      65.888  54.674 198.998  1.00  0.00
C
ATOM   1690  CD  LYS A 235      66.285  53.879 197.750  1.00  0.00
C
ATOM   1691  CE  LYS A 235      66.897  52.521 198.096  1.00  0.00
C
ATOM   1692  NZ  LYS A 235      67.213  51.775 196.869  1.00  0.00
N
ATOM   1693  N   GLU A 236      62.701  54.468 197.857  1.00  0.00
N
ATOM   1694  CA  GLU A 236      61.587  53.636 198.283  1.00  0.00
C
ATOM   1695  C   GLU A 236      62.213  52.351 198.837  1.00  0.00
C
ATOM   1696  O   GLU A 236      63.008  51.706 198.152  1.00  0.00
O
ATOM   1697  CB  GLU A 236      60.660  53.405 197.065  1.00  0.00
C
ATOM   1698  CG  GLU A 236      59.504  52.388 197.232  1.00  0.00
C
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ATOM   1699  CD  GLU A 236      58.198  52.993 197.750  1.00  0.00
C
ATOM   1700  OE1 GLU A 236      57.743  54.000 197.162  1.00  0.00
O
ATOM   1701  OE2 GLU A 236      57.643  52.418 198.709  1.00  0.00
O
ATOM   1702  N   VAL A 237      61.868  52.001 200.081  1.00  0.00
N
ATOM   1703  CA  VAL A 237      62.306  50.804 200.785  1.00  0.00
C
ATOM   1704  C   VAL A 237      61.038  50.022 201.128  1.00  0.00
C
ATOM   1705  O   VAL A 237      60.273  50.453 201.987  1.00  0.00
O
ATOM   1706  CB  VAL A 237      63.097  51.199 202.066  1.00  0.00
C
ATOM   1707  CG1 VAL A 237      63.555  49.979 202.886  1.00  0.00
C
ATOM   1708  CG2 VAL A 237      64.306  52.099 201.769  1.00  0.00
C
ATOM   1709  N   ASP A 238      60.848  48.859 200.492  1.00  0.00
N
ATOM   1710  CA  ASP A 238      59.908  47.832 200.926  1.00  0.00
C
ATOM   1711  C   ASP A 238      60.761  46.832 201.715  1.00  0.00
C
ATOM   1712  O   ASP A 238      61.604  46.154 201.131  1.00  0.00
O
ATOM   1713  CB  ASP A 238      59.264  47.175 199.675  1.00  0.00
C
ATOM   1714  CG  ASP A 238      58.451  45.891 199.913  1.00  0.00
C
ATOM   1715  OD1 ASP A 238      58.110  45.249 198.898  1.00  0.00
O
ATOM   1716  OD2 ASP A 238      58.181  45.560 201.088  1.00  0.00
O
ATOM   1717  N   ILE A 239      60.554  46.749 203.038  1.00  0.00
N
ATOM   1718  CA  ILE A 239      61.407  45.972 203.938  1.00  0.00
C
ATOM   1719  C   ILE A 239      61.158  44.450 203.802  1.00  0.00
C
ATOM   1720  O   ILE A 239      61.987  43.677 204.269  1.00  0.00
O
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ATOM   1721  CB  ILE A 239      61.292  46.466 205.416  1.00  0.00
C
ATOM   1722  CG1 ILE A 239      62.485  45.927 206.258  1.00  0.00
C
ATOM   1723  CG2 ILE A 239      61.227  48.011 205.518  1.00  0.00
C
ATOM   1724  CD1 ILE A 239      62.801  46.680 207.559  1.00  0.00
C
ATOM   1725  N   TYR A 240      60.101  44.003 203.092  1.00  0.00
N
ATOM   1726  CA  TYR A 240      59.881  42.592 202.743  1.00  0.00
C
ATOM   1727  C   TYR A 240      60.817  42.106 201.623  1.00  0.00
C
ATOM   1728  O   TYR A 240      61.031  40.898 201.519  1.00  0.00
O
ATOM   1729  CB  TYR A 240      58.435  42.385 202.232  1.00  0.00
C
ATOM   1730  CG  TYR A 240      57.362  42.628 203.270  1.00  0.00
C
ATOM   1731  CD1 TYR A 240      56.392  43.634 203.079  1.00  0.00
C
ATOM   1732  CD2 TYR A 240      57.343  41.848 204.442  1.00  0.00
C
ATOM   1733  CE1 TYR A 240      55.453  43.907 204.089  1.00  0.00
C
ATOM   1734  CE2 TYR A 240      56.410  42.129 205.452  1.00  0.00
C
ATOM   1735  CZ  TYR A 240      55.496  43.183 205.295  1.00  0.00
C
ATOM   1736  OH  TYR A 240      54.686  43.525 206.331  1.00  0.00
O
ATOM   1737  N   THR A 241      61.361  43.019 200.795  1.00  0.00
N
ATOM   1738  CA  THR A 241      62.086  42.698 199.562  1.00  0.00
C
ATOM   1739  C   THR A 241      63.443  43.403 199.406  1.00  0.00
C
ATOM   1740  O   THR A 241      64.236  42.952 198.579  1.00  0.00
O
ATOM   1741  CB  THR A 241      61.177  42.873 198.318  1.00  0.00
C
ATOM   1742  OG1 THR A 241      60.851  44.232 198.103  1.00  0.00
O
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ATOM   1743  CG2 THR A 241      59.889  42.036 198.338  1.00  0.00
C
ATOM   1744  N   VAL A 242      63.732  44.476 200.169  1.00  0.00
N
ATOM   1745  CA  VAL A 242      64.980  45.241 200.066  1.00  0.00
C
ATOM   1746  C   VAL A 242      66.181  44.375 200.487  1.00  0.00
C
ATOM   1747  O   VAL A 242      66.103  43.612 201.448  1.00  0.00
O
ATOM   1748  CB  VAL A 242      64.896  46.555 200.897  1.00  0.00
C
ATOM   1749  CG1 VAL A 242      64.949  46.334 202.417  1.00  0.00
C
ATOM   1750  CG2 VAL A 242      65.974  47.572 200.478  1.00  0.00
C
ATOM   1751  N   LYS A 243      67.282  44.497 199.747  1.00  0.00
N
ATOM   1752  CA  LYS A 243      68.553  43.837 200.006  1.00  0.00
C
ATOM   1753  C   LYS A 243      69.569  44.897 200.457  1.00  0.00
C
ATOM   1754  O   LYS A 243      69.380  46.091 200.220  1.00  0.00
O
ATOM   1755  CB  LYS A 243      69.021  43.171 198.700  1.00  0.00
C
ATOM   1756  CG  LYS A 243      68.048  42.098 198.176  1.00  0.00
C
ATOM   1757  CD  LYS A 243      68.532  41.502 196.852  1.00  0.00
C
ATOM   1758  CE  LYS A 243      67.590  40.446 196.271  1.00  0.00
C
ATOM   1759  NZ  LYS A 243      68.106  39.954 194.983  1.00  0.00
N
ATOM   1760  N   VAL A 244      70.661  44.455 201.102  1.00  0.00
N
ATOM   1761  CA  VAL A 244      71.772  45.291 201.584  1.00  0.00
C
ATOM   1762  C   VAL A 244      72.440  46.097 200.448  1.00  0.00
C
ATOM   1763  O   VAL A 244      72.839  47.242 200.656  1.00  0.00
O
ATOM   1764  CB  VAL A 244      72.794  44.391 202.335  1.00  0.00
C
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ATOM   1765  CG1 VAL A 244      74.081  45.132 202.752  1.00  0.00
C
ATOM   1766  CG2 VAL A 244      72.160  43.714 203.565  1.00  0.00
C
ATOM   1767  N   GLU A 245      72.516  45.506 199.245  1.00  0.00
N
ATOM   1768  CA  GLU A 245      73.054  46.096 198.020  1.00  0.00
C
ATOM   1769  C   GLU A 245      72.178  47.229 197.451  1.00  0.00
C
ATOM   1770  O   GLU A 245      72.706  48.088 196.747  1.00  0.00
O
ATOM   1771  CB  GLU A 245      73.220  44.973 196.970  1.00  0.00
C
ATOM   1772  CG  GLU A 245      71.966  44.099 196.722  1.00  0.00
C
ATOM   1773  CD  GLU A 245      72.141  43.045 195.625  1.00  0.00
C
ATOM   1774  OE1 GLU A 245      71.120  42.403 195.297  1.00  0.00
O
ATOM   1775  OE2 GLU A 245      73.280  42.878 195.137  1.00  0.00
O
ATOM   1776  N   ASP A 246      70.874  47.274 197.784  1.00  0.00
N
ATOM   1777  CA  ASP A 246      69.942  48.330 197.368  1.00  0.00
C
ATOM   1778  C   ASP A 246      70.145  49.619 198.181  1.00  0.00
C
ATOM   1779  O   ASP A 246      69.706  50.682 197.748  1.00  0.00
O
ATOM   1780  CB  ASP A 246      68.469  47.891 197.574  1.00  0.00
C
ATOM   1781  CG  ASP A 246      68.058  46.563 196.931  1.00  0.00
C
ATOM   1782  OD1 ASP A 246      68.781  46.082 196.032  1.00  0.00
O
ATOM   1783  OD2 ASP A 246      66.998  46.052 197.349  1.00  0.00
O
ATOM   1784  N   LEU A 247      70.820  49.539 199.339  1.00  0.00
N
ATOM   1785  CA  LEU A 247      71.135  50.674 200.205  1.00  0.00
C
ATOM   1786  C   LEU A 247      72.351  51.458 199.673  1.00  0.00
C
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ATOM   1787  O   LEU A 247      72.525  52.616 200.042  1.00  0.00
O
ATOM   1788  CB  LEU A 247      71.431  50.164 201.632  1.00  0.00
C
ATOM   1789  CG  LEU A 247      70.404  49.148 202.191  1.00  0.00
C
ATOM   1790  CD1 LEU A 247      70.730  48.801 203.648  1.00  0.00
C
ATOM   1791  CD2 LEU A 247      68.947  49.616 202.053  1.00  0.00
C
ATOM   1792  N   THR A 248      73.136  50.871 198.754  1.00  0.00
N
ATOM   1793  CA  THR A 248      74.071  51.581 197.887  1.00  0.00
C
ATOM   1794  C   THR A 248      73.273  51.909 196.611  1.00  0.00
C
ATOM   1795  O   THR A 248      72.920  51.004 195.855  1.00  0.00
O
ATOM   1796  CB  THR A 248      75.254  50.640 197.546  1.00  0.00
C
ATOM   1797  OG1 THR A 248      75.963  50.354 198.734  1.00  0.00
O
ATOM   1798  CG2 THR A 248      76.270  51.250 196.563  1.00  0.00
C
ATOM   1799  N   PHE A 249      72.959  53.195 196.389  1.00  0.00
N
ATOM   1800  CA  PHE A 249      72.114  53.659 195.287  1.00  0.00
C
ATOM   1801  C   PHE A 249      72.521  55.044 194.779  1.00  0.00
C
ATOM   1802  O   PHE A 249      73.216  55.783 195.472  1.00  0.00
O
ATOM   1803  CB  PHE A 249      70.612  53.549 195.653  1.00  0.00
C
ATOM   1804  CG  PHE A 249      70.093  54.578 196.648  1.00  0.00
C
ATOM   1805  CD1 PHE A 249      69.532  55.790 196.189  1.00  0.00
C
ATOM   1806  CD2 PHE A 249      70.177  54.334 198.034  1.00  0.00
C
ATOM   1807  CE1 PHE A 249      69.077  56.756 197.108  1.00  0.00
C
ATOM   1808  CE2 PHE A 249      69.718  55.297 198.953  1.00  0.00
C
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ATOM   1809  CZ  PHE A 249      69.174  56.511 198.491  1.00  0.00
C
ATOM   1810  N   THR A 250      72.012  55.396 193.589  1.00  0.00
N
ATOM   1811  CA  THR A 250      72.014  56.733 193.004  1.00  0.00
C
ATOM   1812  C   THR A 250      70.637  56.960 192.375  1.00  0.00
C
ATOM   1813  O   THR A 250      70.161  56.107 191.626  1.00  0.00
O
ATOM   1814  CB  THR A 250      73.202  56.936 192.028  1.00  0.00
C
ATOM   1815  OG1 THR A 250      74.419  56.930 192.747  1.00  0.00
O
ATOM   1816  CG2 THR A 250      73.160  58.275 191.267  1.00  0.00
C
ATOM   1817  N   SER A 251      70.013  58.108 192.679  1.00  0.00
N
ATOM   1818  CA  SER A 251      68.670  58.467 192.234  1.00  0.00
C
ATOM   1819  C   SER A 251      68.643  59.904 191.699  1.00  0.00
C
ATOM   1820  O   SER A 251      69.162  60.788 192.380  1.00  0.00
O
ATOM   1821  CB  SER A 251      67.680  58.290 193.396  1.00  0.00
C
ATOM   1822  OG  SER A 251      67.387  56.922 193.578  1.00  0.00
O
ATOM   1823  N   PRO A 252      67.994  60.176 190.543  1.00  0.00
N
ATOM   1824  CA  PRO A 252      67.751  61.539 190.063  1.00  0.00
C
ATOM   1825  C   PRO A 252      66.588  62.194 190.829  1.00  0.00
C
ATOM   1826  O   PRO A 252      65.756  61.507 191.426  1.00  0.00
O
ATOM   1827  CB  PRO A 252      67.411  61.369 188.577  1.00  0.00
C
ATOM   1828  CG  PRO A 252      66.747  60.004 188.503  1.00  0.00
C
ATOM   1829  CD  PRO A 252      67.435  59.196 189.606  1.00  0.00
C
ATOM   1830  N   PHE A 253      66.534  63.531 190.794  1.00  0.00
N
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ATOM   1831  CA  PHE A 253      65.480  64.344 191.391  1.00  0.00
C
ATOM   1832  C   PHE A 253      65.171  65.568 190.531  1.00  0.00
C
ATOM   1833  O   PHE A 253      66.043  66.075 189.828  1.00  0.00
O
ATOM   1834  CB  PHE A 253      65.770  64.659 192.872  1.00  0.00
C
ATOM   1835  CG  PHE A 253      67.061  65.410 193.146  1.00  0.00
C
ATOM   1836  CD1 PHE A 253      67.116  66.815 193.025  1.00  0.00
C
ATOM   1837  CD2 PHE A 253      68.211  64.697 193.541  1.00  0.00
C
ATOM   1838  CE1 PHE A 253      68.317  67.501 193.289  1.00  0.00
C
ATOM   1839  CE2 PHE A 253      69.404  65.385 193.822  1.00  0.00
C
ATOM   1840  CZ  PHE A 253      69.460  66.783 193.687  1.00  0.00
C
ATOM   1841  N   CYS A 254      63.913  66.025 190.609  1.00  0.00
N
ATOM   1842  CA  CYS A 254      63.367  67.200 189.936  1.00  0.00
C
ATOM   1843  C   CYS A 254      62.571  67.969 190.996  1.00  0.00
C
ATOM   1844  O   CYS A 254      61.605  67.432 191.538  1.00  0.00
O
ATOM   1845  CB  CYS A 254      62.472  66.786 188.741  1.00  0.00
C
ATOM   1846  SG  CYS A 254      63.247  65.580 187.624  1.00  0.00
S
ATOM   1847  N   LEU A 255      62.981  69.209 191.299  1.00  0.00
N
ATOM   1848  CA  LEU A 255      62.363  70.075 192.299  1.00  0.00
C
ATOM   1849  C   LEU A 255      61.908  71.364 191.616  1.00  0.00
C
ATOM   1850  O   LEU A 255      62.740  72.185 191.230  1.00  0.00
O
ATOM   1851  CB  LEU A 255      63.382  70.389 193.418  1.00  0.00
C
ATOM   1852  CG  LEU A 255      63.950  69.173 194.171  1.00  0.00
C
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ATOM   1853  CD1 LEU A 255      65.117  69.596 195.076  1.00  0.00
C
ATOM   1854  CD2 LEU A 255      62.870  68.454 194.983  1.00  0.00
C
ATOM   1855  N   GLN A 256      60.585  71.552 191.491  1.00  0.00
N
ATOM   1856  CA  GLN A 256      59.980  72.749 190.924  1.00  0.00
C
ATOM   1857  C   GLN A 256      59.961  73.846 191.992  1.00  0.00
C
ATOM   1858  O   GLN A 256      59.445  73.650 193.092  1.00  0.00
O
ATOM   1859  CB  GLN A 256      58.532  72.448 190.484  1.00  0.00
C
ATOM   1860  CG  GLN A 256      57.907  73.621 189.695  1.00  0.00
C
ATOM   1861  CD  GLN A 256      56.503  73.315 189.176  1.00  0.00
C
ATOM   1862  OE1 GLN A 256      55.672  72.762 189.893  1.00  0.00
O
ATOM   1863  NE2 GLN A 256      56.230  73.685 187.924  1.00  0.00
N
ATOM   1864  N   VAL A 257      60.516  75.005 191.627  1.00  0.00
N
ATOM   1865  CA  VAL A 257      60.592  76.222 192.419  1.00  0.00
C
ATOM   1866  C   VAL A 257      59.202  76.871 192.454  1.00  0.00
C
ATOM   1867  O   VAL A 257      58.590  77.116 191.416  1.00  0.00
O
ATOM   1868  CB  VAL A 257      61.658  77.139 191.768  1.00  0.00
C
ATOM   1869  CG1 VAL A 257      61.731  78.517 192.430  1.00  0.00
C
ATOM   1870  CG2 VAL A 257      63.057  76.484 191.777  1.00  0.00
C
ATOM   1871  N   LYS A 258      58.711  77.112 193.675  1.00  0.00
N
ATOM   1872  CA  LYS A 258      57.375  77.617 193.977  1.00  0.00
C
ATOM   1873  C   LYS A 258      57.380  79.137 194.220  1.00  0.00
C
ATOM   1874  O   LYS A 258      56.306  79.733 194.276  1.00  0.00
O
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ATOM   1875  CB  LYS A 258      56.889  76.930 195.277  1.00  0.00
C
ATOM   1876  CG  LYS A 258      56.835  75.392 195.197  1.00  0.00
C
ATOM   1877  CD  LYS A 258      55.722  74.837 194.290  1.00  0.00
C
ATOM   1878  CE  LYS A 258      56.223  73.728 193.355  1.00  0.00
C
ATOM   1879  NZ  LYS A 258      55.106  72.999 192.736  1.00  0.00
N
ATOM   1880  N   ARG A 259      58.561  79.762 194.366  1.00  0.00
N
ATOM   1881  CA  ARG A 259      58.735  81.189 194.631  1.00  0.00
C
ATOM   1882  C   ARG A 259      60.124  81.669 194.193  1.00  0.00
C
ATOM   1883  O   ARG A 259      61.066  80.879 194.134  1.00  0.00
O
ATOM   1884  CB  ARG A 259      58.422  81.512 196.104  1.00  0.00
C
ATOM   1885  CG  ARG A 259      59.451  80.966 197.105  1.00  0.00
C
ATOM   1886  CD  ARG A 259      59.069  81.307 198.542  1.00  0.00
C
ATOM   1887  NE  ARG A 259      60.221  81.130 199.428  1.00  0.00
N
ATOM   1888  CZ  ARG A 259      60.215  80.609 200.661  1.00  0.00
C
ATOM   1889  NH1 ARG A 259      59.094  80.143 201.226  1.00  0.00
N
ATOM   1890  NH2 ARG A 259      61.367  80.576 201.338  1.00  0.00
N
ATOM   1891  N   ASN A 260      60.270  82.986 193.976  1.00  0.00
N
ATOM   1892  CA  ASN A 260      61.561  83.638 193.741  1.00  0.00
C
ATOM   1893  C   ASN A 260      62.359  83.655 195.051  1.00  0.00
C
ATOM   1894  O   ASN A 260      61.884  84.187 196.056  1.00  0.00
O
ATOM   1895  CB  ASN A 260      61.367  85.099 193.268  1.00  0.00
C
ATOM   1896  CG  ASN A 260      60.652  85.280 191.923  1.00  0.00
C
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ATOM   1897  OD1 ASN A 260      60.327  84.326 191.222  1.00  0.00
O
ATOM   1898  ND2 ASN A 260      60.391  86.536 191.557  1.00  0.00
N
ATOM   1899  N   ASP A 261      63.553  83.042 195.040  1.00  0.00
N
ATOM   1900  CA  ASP A 261      64.427  82.924 196.204  1.00  0.00
C
ATOM   1901  C   ASP A 261      65.874  82.588 195.830  1.00  0.00
C
ATOM   1902  O   ASP A 261      66.212  82.405 194.662  1.00  0.00
O
ATOM   1903  CB  ASP A 261      63.835  81.935 197.248  1.00  0.00
C
ATOM   1904  CG  ASP A 261      63.827  82.489 198.674  1.00  0.00
C
ATOM   1905  OD1 ASP A 261      64.761  83.252 199.007  1.00  0.00
O
ATOM   1906  OD2 ASP A 261      62.897  82.115 199.421  1.00  0.00
O
ATOM   1907  N   TYR A 262      66.716  82.496 196.866  1.00  0.00
N
ATOM   1908  CA  TYR A 262      68.075  81.976 196.825  1.00  0.00
C
ATOM   1909  C   TYR A 262      68.059  80.640 197.573  1.00  0.00
C
ATOM   1910  O   TYR A 262      67.676  80.617 198.739  1.00  0.00
O
ATOM   1911  CB  TYR A 262      68.993  82.968 197.561  1.00  0.00
C
ATOM   1912  CG  TYR A 262      69.036  84.332 196.902  1.00  0.00
C
ATOM   1913  CD1 TYR A 262      68.315  85.410 197.456  1.00  0.00
C
ATOM   1914  CD2 TYR A 262      69.756  84.511 195.705  1.00  0.00
C
ATOM   1915  CE1 TYR A 262      68.307  86.660 196.807  1.00  0.00
C
ATOM   1916  CE2 TYR A 262      69.766  85.767 195.071  1.00  0.00
C
ATOM   1917  CZ  TYR A 262      69.030  86.837 195.612  1.00  0.00
C
ATOM   1918  OH  TYR A 262      69.015  88.040 194.970  1.00  0.00
O
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ATOM   1919  N   VAL A 263      68.453  79.537 196.916  1.00  0.00
N
ATOM   1920  CA  VAL A 263      68.518  78.201 197.512  1.00  0.00
C
ATOM   1921  C   VAL A 263      69.972  77.938 197.920  1.00  0.00
C
ATOM   1922  O   VAL A 263      70.869  77.997 197.082  1.00  0.00
O
ATOM   1923  CB  VAL A 263      68.066  77.128 196.487  1.00  0.00
C
ATOM   1924  CG1 VAL A 263      68.139  75.695 197.049  1.00  0.00
C
ATOM   1925  CG2 VAL A 263      66.638  77.395 195.992  1.00  0.00
C
HETATM 1926  N   HIE A 264      70.181  77.626 199.205  1.00  0.00
N
HETATM 1927  CA  HIE A 264      71.486  77.437 199.839  1.00  0.00
C
HETATM 1928  C   HIE A 264      71.775  75.971 200.187  1.00  0.00
C
HETATM 1929  O   HIE A 264      72.944  75.612 200.340  1.00  0.00
O
HETATM 1930  CB  HIE A 264      71.484  78.258 201.140  1.00  0.00
C
HETATM 1931  CG  HIE A 264      71.393  79.740 200.897  1.00  0.00
C
HETATM 1932  ND1 HIE A 264      70.166  80.402 200.811  1.00  0.00
N
HETATM 1933  CE1 HIE A 264      70.477  81.661 200.550  1.00  0.00
C
HETATM 1934  NE2 HIE A 264      71.790  81.866 200.456  1.00  0.00
N
HETATM 1935  CD2 HIE A 264      72.407  80.649 200.681  1.00  0.00
C
ATOM   1936  N   ALA A 265      70.732  75.136 200.318  1.00  0.00
N
ATOM   1937  CA  ALA A 265      70.826  73.744 200.741  1.00  0.00
C
ATOM   1938  C   ALA A 265      69.712  72.885 200.150  1.00  0.00
C
ATOM   1939  O   ALA A 265      68.620  73.382 199.871  1.00  0.00
O
ATOM   1940  CB  ALA A 265      70.842  73.655 202.274  1.00  0.00
C
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ATOM   1941  N   LEU A 266      69.981  71.574 200.055  1.00  0.00
N
ATOM   1942  CA  LEU A 266      68.957  70.538 199.976  1.00  0.00
C
ATOM   1943  C   LEU A 266      68.717  69.984 201.385  1.00  0.00
C
ATOM   1944  O   LEU A 266      69.624  69.939 202.211  1.00  0.00
O
ATOM   1945  CB  LEU A 266      69.431  69.357 199.107  1.00  0.00
C
ATOM   1946  CG  LEU A 266      69.600  69.658 197.607  1.00  0.00
C
ATOM   1947  CD1 LEU A 266      69.889  68.349 196.867  1.00  0.00
C
ATOM   1948  CD2 LEU A 266      68.377  70.350 196.979  1.00  0.00
C
ATOM   1949  N   VAL A 267      67.480  69.547 201.635  1.00  0.00
N
ATOM   1950  CA  VAL A 267      67.002  68.954 202.873  1.00  0.00
C
ATOM   1951  C   VAL A 267      66.448  67.579 202.526  1.00  0.00
C
ATOM   1952  O   VAL A 267      65.468  67.487 201.789  1.00  0.00
O
ATOM   1953  CB  VAL A 267      65.916  69.861 203.498  1.00  0.00
C
ATOM   1954  CG1 VAL A 267      65.295  69.267 204.772  1.00  0.00
C
ATOM   1955  CG2 VAL A 267      66.475  71.248 203.807  1.00  0.00
C
ATOM   1956  N   ALA A 268      67.045  66.527 203.098  1.00  0.00
N
ATOM   1957  CA  ALA A 268      66.514  65.179 203.041  1.00  0.00
C
ATOM   1958  C   ALA A 268      65.701  64.905 204.308  1.00  0.00
C
ATOM   1959  O   ALA A 268      66.143  65.181 205.424  1.00  0.00
O
ATOM   1960  CB  ALA A 268      67.657  64.165 202.972  1.00  0.00
C
ATOM   1961  N   TYR A 269      64.513  64.331 204.107  1.00  0.00
N
ATOM   1962  CA  TYR A 269      63.597  63.864 205.137  1.00  0.00
C
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ATOM   1963  C   TYR A 269      62.995  62.539 204.680  1.00  0.00
C
ATOM   1964  O   TYR A 269      62.934  62.278 203.479  1.00  0.00
O
ATOM   1965  CB  TYR A 269      62.544  64.942 205.465  1.00  0.00
C
ATOM   1966  CG  TYR A 269      61.457  65.139 204.417  1.00  0.00
C
ATOM   1967  CD1 TYR A 269      60.347  64.266 204.384  1.00  0.00
C
ATOM   1968  CD2 TYR A 269      61.542  66.193 203.484  1.00  0.00
C
ATOM   1969  CE1 TYR A 269      59.344  64.427 203.414  1.00  0.00
C
ATOM   1970  CE2 TYR A 269      60.519  66.374 202.532  1.00  0.00
C
ATOM   1971  CZ  TYR A 269      59.420  65.493 202.500  1.00  0.00
C
ATOM   1972  OH  TYR A 269      58.420  65.668 201.592  1.00  0.00
O
ATOM   1973  N   PHE A 270      62.490  61.740 205.627  1.00  0.00
N
ATOM   1974  CA  PHE A 270      61.858  60.457 205.350  1.00  0.00
C
ATOM   1975  C   PHE A 270      60.467  60.335 205.967  1.00  0.00
C
ATOM   1976  O   PHE A 270      60.148  60.991 206.957  1.00  0.00
O
ATOM   1977  CB  PHE A 270      62.802  59.305 205.731  1.00  0.00
C
ATOM   1978  CG  PHE A 270      63.063  59.155 207.218  1.00  0.00
C
ATOM   1979  CD1 PHE A 270      62.197  58.371 208.008  1.00  0.00
C
ATOM   1980  CD2 PHE A 270      64.161  59.805 207.817  1.00  0.00
C
ATOM   1981  CE1 PHE A 270      62.432  58.225 209.386  1.00  0.00
C
ATOM   1982  CE2 PHE A 270      64.402  59.653 209.195  1.00  0.00
C
ATOM   1983  CZ  PHE A 270      63.543  58.855 209.974  1.00  0.00
C
ATOM   1984  N   ASN A 271      59.654  59.456 205.372  1.00  0.00
N
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ATOM   1985  CA  ASN A 271      58.346  59.045 205.863  1.00  0.00
C
ATOM   1986  C   ASN A 271      58.388  57.537 206.098  1.00  0.00
C
ATOM   1987  O   ASN A 271      59.078  56.810 205.385  1.00  0.00
O
ATOM   1988  CB  ASN A 271      57.221  59.407 204.863  1.00  0.00
C
ATOM   1989  CG  ASN A 271      57.151  60.883 204.451  1.00  0.00
C
ATOM   1990  OD1 ASN A 271      57.760  61.755 205.065  1.00  0.00
O
ATOM   1991  ND2 ASN A 271      56.408  61.171 203.382  1.00  0.00
N
ATOM   1992  N   ILE A 272      57.634  57.086 207.105  1.00  0.00
N
ATOM   1993  CA  ILE A 272      57.504  55.705 207.549  1.00  0.00
C
ATOM   1994  C   ILE A 272      56.034  55.314 207.450  1.00  0.00
C
ATOM   1995  O   ILE A 272      55.164  56.134 207.734  1.00  0.00
O
ATOM   1996  CB  ILE A 272      58.081  55.579 208.985  1.00  0.00
C
ATOM   1997  CG1 ILE A 272      59.589  55.899 209.029  1.00  0.00
C
ATOM   1998  CG2 ILE A 272      57.803  54.224 209.650  1.00  0.00
C
ATOM   1999  CD1 ILE A 272      60.459  55.033 208.098  1.00  0.00
C
ATOM   2000  N   GLU A 273      55.774  54.065 207.042  1.00  0.00
N
ATOM   2001  CA  GLU A 273      54.446  53.500 206.856  1.00  0.00
C
ATOM   2002  C   GLU A 273      54.402  52.044 207.309  1.00  0.00
C
ATOM   2003  O   GLU A 273      55.322  51.264 207.063  1.00  0.00
O
ATOM   2004  CB  GLU A 273      53.949  53.695 205.412  1.00  0.00
C
ATOM   2005  CG  GLU A 273      53.621  55.161 205.069  1.00  0.00
C
ATOM   2006  CD  GLU A 273      52.892  55.343 203.740  1.00  0.00
C
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ATOM   2007  OE1 GLU A 273      52.473  54.332 203.137  1.00  0.00
O
ATOM   2008  OE2 GLU A 273      52.777  56.517 203.323  1.00  0.00
O
ATOM   2009  N   PHE A 274      53.285  51.703 207.958  1.00  0.00
N
ATOM   2010  CA  PHE A 274      52.921  50.382 208.440  1.00  0.00
C
ATOM   2011  C   PHE A 274      51.717  49.977 207.579  1.00  0.00
C
ATOM   2012  O   PHE A 274      50.568  50.164 207.977  1.00  0.00
O
ATOM   2013  CB  PHE A 274      52.544  50.500 209.936  1.00  0.00
C
ATOM   2014  CG  PHE A 274      53.639  51.013 210.861  1.00  0.00
C
ATOM   2015  CD1 PHE A 274      53.930  52.392 210.935  1.00  0.00
C
ATOM   2016  CD2 PHE A 274      54.359  50.115 211.670  1.00  0.00
C
ATOM   2017  CE1 PHE A 274      54.937  52.861 211.799  1.00  0.00
C
ATOM   2018  CE2 PHE A 274      55.331  50.587 212.572  1.00  0.00
C
ATOM   2019  CZ  PHE A 274      55.626  51.962 212.632  1.00  0.00
C
ATOM   2020  N   THR A 275      51.984  49.492 206.354  1.00  0.00
N
ATOM   2021  CA  THR A 275      50.982  49.264 205.303  1.00  0.00
C
ATOM   2022  C   THR A 275      50.039  48.075 205.587  1.00  0.00
C
ATOM   2023  O   THR A 275      49.026  47.934 204.903  1.00  0.00
O
ATOM   2024  CB  THR A 275      51.685  49.080 203.930  1.00  0.00
C
ATOM   2025  OG1 THR A 275      52.356  47.840 203.821  1.00  0.00
O
ATOM   2026  CG2 THR A 275      52.643  50.224 203.558  1.00  0.00
C
ATOM   2027  N   ARG A 276      50.347  47.243 206.597  1.00  0.00
N
ATOM   2028  CA  ARG A 276      49.520  46.116 207.040  1.00  0.00
C
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ATOM   2029  C   ARG A 276      48.374  46.559 207.946  1.00  0.00
C
ATOM   2030  O   ARG A 276      47.411  45.809 208.104  1.00  0.00
O
ATOM   2031  CB  ARG A 276      50.409  45.117 207.813  1.00  0.00
C
ATOM   2032  CG  ARG A 276      50.813  43.931 206.934  1.00  0.00
C
ATOM   2033  CD  ARG A 276      51.585  44.356 205.682  1.00  0.00
C
ATOM   2034  NE  ARG A 276      51.547  43.379 204.596  1.00  0.00
N
ATOM   2035  CZ  ARG A 276      51.619  43.690 203.289  1.00  0.00
C
ATOM   2036  NH1 ARG A 276      51.701  44.960 202.857  1.00  0.00
N
ATOM   2037  NH2 ARG A 276      51.619  42.704 202.386  1.00  0.00
N
ATOM   2038  N   CYS A 277      48.450  47.781 208.491  1.00  0.00
N
ATOM   2039  CA  CYS A 277      47.404  48.399 209.288  1.00  0.00
C
ATOM   2040  C   CYS A 277      46.208  48.734 208.393  1.00  0.00
C
ATOM   2041  O   CYS A 277      46.385  49.223 207.276  1.00  0.00
O
ATOM   2042  CB  CYS A 277      47.944  49.691 209.919  1.00  0.00
C
ATOM   2043  SG  CYS A 277      49.344  49.292 210.998  1.00  0.00
S
ATOM   2044  N   HIS A 278      44.998  48.446 208.893  1.00  0.00
N
ATOM   2045  CA  HIS A 278      43.728  48.618 208.192  1.00  0.00
C
ATOM   2046  C   HIS A 278      43.454  50.090 207.838  1.00  0.00
C
ATOM   2047  O   HIS A 278      43.159  50.397 206.684  1.00  0.00
O
ATOM   2048  CB  HIS A 278      42.602  48.019 209.058  1.00  0.00
C
ATOM   2049  CG  HIS A 278      41.234  48.121 208.433  1.00  0.00
C
ATOM   2050  ND1 HIS A 278      40.313  49.092 208.789  1.00  0.00
N
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ATOM   2051  CD2 HIS A 278      40.648  47.410 207.411  1.00  0.00
C
ATOM   2052  CE1 HIS A 278      39.251  48.934 207.996  1.00  0.00
C
ATOM   2053  NE2 HIS A 278      39.383  47.931 207.135  1.00  0.00
N
ATOM   2054  N   LYS A 279      43.611  50.990 208.821  1.00  0.00
N
ATOM   2055  CA  LYS A 279      43.659  52.435 208.617  1.00  0.00
C
ATOM   2056  C   LYS A 279      45.119  52.860 208.423  1.00  0.00
C
ATOM   2057  O   LYS A 279      46.029  52.256 208.995  1.00  0.00
O
ATOM   2058  CB  LYS A 279      43.096  53.145 209.867  1.00  0.00
C
ATOM   2059  CG  LYS A 279      41.592  53.438 209.730  1.00  0.00
C
ATOM   2060  CD  LYS A 279      40.998  54.173 210.940  1.00  0.00
C
ATOM   2061  CE  LYS A 279      40.749  53.248 212.139  1.00  0.00
C
ATOM   2062  NZ  LYS A 279      40.250  53.999 213.302  1.00  0.00
N
ATOM   2063  N   ARG A 280      45.315  53.916 207.616  1.00  0.00
N
ATOM   2064  CA  ARG A 280      46.599  54.526 207.272  1.00  0.00
C
ATOM   2065  C   ARG A 280      47.407  54.904 208.524  1.00  0.00
C
ATOM   2066  O   ARG A 280      46.997  55.774 209.291  1.00  0.00
O
ATOM   2067  CB  ARG A 280      46.337  55.728 206.338  1.00  0.00
C
ATOM   2068  CG  ARG A 280      47.614  56.457 205.886  1.00  0.00
C
ATOM   2069  CD  ARG A 280      47.374  57.483 204.763  1.00  0.00
C
ATOM   2070  NE  ARG A 280      48.114  57.113 203.549  1.00  0.00
N
ATOM   2071  CZ  ARG A 280      49.450  57.162 203.408  1.00  0.00
C
ATOM   2072  NH1 ARG A 280      50.248  57.629 204.379  1.00  0.00
N
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ATOM   2073  NH2 ARG A 280      50.010  56.714 202.279  1.00  0.00
N
ATOM   2074  N   THR A 281      48.535  54.207 208.722  1.00  0.00
N
ATOM   2075  CA  THR A 281      49.409  54.313 209.885  1.00  0.00
C
ATOM   2076  C   THR A 281      50.833  54.559 209.384  1.00  0.00
C
ATOM   2077  O   THR A 281      51.254  53.996 208.372  1.00  0.00
O
ATOM   2078  CB  THR A 281      49.283  53.041 210.755  1.00  0.00
C
ATOM   2079  OG1 THR A 281      47.955  52.921 211.226  1.00  0.00
O
ATOM   2080  CG2 THR A 281      50.176  53.049 212.006  1.00  0.00
C
ATOM   2081  N   GLY A 282      51.572  55.395 210.122  1.00  0.00
N
ATOM   2082  CA  GLY A 282      52.832  55.972 209.697  1.00  0.00
C
ATOM   2083  C   GLY A 282      52.949  57.436 210.114  1.00  0.00
C
ATOM   2084  O   GLY A 282      52.005  58.036 210.630  1.00  0.00
O
ATOM   2085  N   PHE A 283      54.148  57.986 209.904  1.00  0.00
N
ATOM   2086  CA  PHE A 283      54.528  59.356 210.218  1.00  0.00
C
ATOM   2087  C   PHE A 283      55.483  59.898 209.154  1.00  0.00
C
ATOM   2088  O   PHE A 283      56.055  59.146 208.367  1.00  0.00
O
ATOM   2089  CB  PHE A 283      55.041  59.484 211.672  1.00  0.00
C
ATOM   2090  CG  PHE A 283      56.374  58.810 211.962  1.00  0.00
C
ATOM   2091  CD1 PHE A 283      57.587  59.497 211.739  1.00  0.00
C
ATOM   2092  CD2 PHE A 283      56.404  57.490 212.456  1.00  0.00
C
ATOM   2093  CE1 PHE A 283      58.816  58.858 211.992  1.00  0.00
C
ATOM   2094  CE2 PHE A 283      57.630  56.852 212.713  1.00  0.00
C
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ATOM   2095  CZ  PHE A 283      58.835  57.537 212.477  1.00  0.00
C
ATOM   2096  N   SER A 284      55.664  61.220 209.171  1.00  0.00
N
ATOM   2097  CA  SER A 284      56.544  61.971 208.295  1.00  0.00
C
ATOM   2098  C   SER A 284      57.472  62.827 209.158  1.00  0.00
C
ATOM   2099  O   SER A 284      57.026  63.442 210.127  1.00  0.00
O
ATOM   2100  CB  SER A 284      55.672  62.769 207.307  1.00  0.00
C
ATOM   2101  OG  SER A 284      56.420  63.709 206.566  1.00  0.00
O
ATOM   2102  N   THR A 285      58.758  62.875 208.783  1.00  0.00
N
ATOM   2103  CA  THR A 285      59.773  63.732 209.394  1.00  0.00
C
ATOM   2104  C   THR A 285      60.020  64.976 208.516  1.00  0.00
C
ATOM   2105  O   THR A 285      61.064  65.602 208.657  1.00  0.00
O
ATOM   2106  CB  THR A 285      61.082  62.925 209.646  1.00  0.00
C
ATOM   2107  OG1 THR A 285      61.795  62.630 208.462  1.00  0.00
O
ATOM   2108  CG2 THR A 285      60.868  61.615 210.419  1.00  0.00
C
ATOM   2109  N   SER A 286      59.080  65.354 207.625  1.00  0.00
N
ATOM   2110  CA  SER A 286      59.158  66.546 206.770  1.00  0.00
C
ATOM   2111  C   SER A 286      59.164  67.858 207.586  1.00  0.00
C
ATOM   2112  O   SER A 286      58.638  67.868 208.700  1.00  0.00
O
ATOM   2113  CB  SER A 286      58.005  66.520 205.738  1.00  0.00
C
ATOM   2114  OG  SER A 286      56.762  66.982 206.227  1.00  0.00
O
ATOM   2115  N   PRO A 287      59.743  68.968 207.069  1.00  0.00
N
ATOM   2116  CA  PRO A 287      59.685  70.302 207.700  1.00  0.00
C
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ATOM 2117 C PRO A 287 58.260 70.785 208.052 1.00 0.00
C
ATOM 2118 O PRO A 287 58.075 71.440 209.076 1.00 0.00
O
ATOM 2119 CB PRO A 287 60.319 71.254 206.676 1.00 0.00
C
ATOM 2120 CG PRO A 287 61.233 70.373 205.848 1.00 0.00
C
ATOM 2121 CD PRO A 287 60.578 68.995 205.866 1.00 0.00
C
ATOM 2122 N GLU A 288 57.264 70.433 207.218 1.00 0.00
N
ATOM 2123 CA GLU A 288 55.846 70.764 207.365 1.00 0.00
C
ATOM 2124 C GLU A 288 55.129 69.883 208.406 1.00 0.00
C
ATOM 2125 O GLU A 288 54.069 70.272 208.899 1.00 0.00
O
ATOM 2126 CB GLU A 288 55.115 70.541 206.016 1.00 0.00
C
ATOM 2127 CG GLU A 288 55.727 71.238 204.779 1.00 0.00
C
ATOM 2128 CD GLU A 288 56.630 70.339 203.926 1.00 0.00
C
ATOM 2129 OE1 GLU A 288 57.461 69.614 204.515 1.00 0.00
O
ATOM 2130 OE2 GLU A 288 56.488 70.407 202.687 1.00 0.00
O
ATOM 2131 N SER A 289 55.688 68.707 208.736 1.00 0.00
N
ATOM 2132 CA SER A 289 55.153 67.757 209.708 1.00 0.00
C
ATOM 2133 C SER A 289 55.624 68.118 211.131 1.00 0.00
C
ATOM 2134 O SER A 289 56.630 68.816 211.280 1.00 0.00
O
ATOM 2135 CB SER A 289 55.692 66.353 209.360 1.00 0.00
C
ATOM 2136 OG SER A 289 54.942 65.826 208.290 1.00 0.00
O
ATOM 2137 N PRO A 290 54.935 67.626 212.188 1.00 0.00
N
ATOM 2138 CA PRO A 290 55.335 67.854 213.582 1.00 0.00
C

ATOM 2139 C PRO A 290 56.647 67.135 213.933 1.00 0.00
C
ATOM 2140 O PRO A 290 56.987 66.115 213.330 1.00 0.00
O
ATOM 2141 CB PRO A 290 54.151 67.366 214.428 1.00 0.00
C
ATOM 2142 CG PRO A 290 53.444 66.343 213.555 1.00 0.00
C
ATOM 2143 CD PRO A 290 53.731 66.791 212.121 1.00 0.00
C
ATOM 2144 N TYR A 291 57.380 67.717 214.897 1.00 0.00
N
ATOM 2145 CA TYR A 291 58.714 67.329 215.354 1.00 0.00
C
ATOM 2146 C TYR A 291 58.866 65.830 215.666 1.00 0.00
C
ATOM 2147 O TYR A 291 58.025 65.225 216.331 1.00 0.00
O
ATOM 2148 CB TYR A 291 59.117 68.212 216.558 1.00 0.00
C
ATOM 2149 CG TYR A 291 60.454 67.867 217.201 1.00 0.00
C
ATOM 2150 CD1 TYR A 291 61.654 68.403 216.692 1.00 0.00
C
ATOM 2151 CD2 TYR A 291 60.499 66.971 218.292 1.00 0.00
C
ATOM 2152 CE1 TYR A 291 62.887 68.043 217.270 1.00 0.00
C
ATOM 2153 CE2 TYR A 291 61.733 66.596 218.855 1.00 0.00
C
ATOM 2154 CZ TYR A 291 62.930 67.133 218.344 1.00 0.00
C
ATOM 2155 OH TYR A 291 64.130 66.774 218.886 1.00 0.00
O
ATOM 2156 N THR A 292 60.008 65.290 215.227 1.00 0.00
N
ATOM 2157 CA THR A 292 60.583 64.004 215.601 1.00 0.00
C
ATOM 2158 C THR A 292 62.057 64.260 215.954 1.00 0.00
C
ATOM 2159 O THR A 292 62.636 65.251 215.499 1.00 0.00
O
ATOM 2160 CB THR A 292 60.387 62.961 214.472 1.00 0.00
C

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ATOM   2161  OG1 THR A 292      61.208  63.245 213.355  1.00  0.00
O
ATOM   2162  CG2 THR A 292      58.937  62.788 213.998  1.00  0.00
C
HETATM 2163  N   HIP A 293      62.683  63.364 216.736  1.00  0.00
N
HETATM 2164  CA  HIP A 293      64.091  63.485 217.136  1.00  0.00
C
HETATM 2165  C   HIP A 293      65.086  63.364 215.961  1.00  0.00
C
HETATM 2166  O   HIP A 293      66.228  63.796 216.099  1.00  0.00
O
HETATM 2167  CB  HIP A 293      64.437  62.460 218.236  1.00  0.00
C
HETATM 2168  CG  HIP A 293      64.671  61.036 217.790  1.00  0.00
C
HETATM 2169  ND1 HIP A 293      63.633  60.185 217.450  1.00  0.00
N
HETATM 2170  CE1 HIP A 293      64.181  59.030 217.092  1.00  0.00
C
HETATM 2171  NE2 HIP A 293      65.509  59.068 217.164  1.00  0.00
N
HETATM 2172  CD2 HIP A 293      65.848  60.331 217.617  1.00  0.00
C
ATOM   2173  N   TRP A 294      64.645  62.818 214.813  1.00  0.00
N
ATOM   2174  CA  TRP A 294      65.419  62.731 213.575  1.00  0.00
C
ATOM   2175  C   TRP A 294      65.526  64.066 212.849  1.00  0.00
C
ATOM   2176  O   TRP A 294      66.527  64.293 212.173  1.00  0.00
O
ATOM   2177  CB  TRP A 294      64.742  61.758 212.605  1.00  0.00
C
ATOM   2178  CG  TRP A 294      64.835  60.339 213.032  1.00  0.00
C
ATOM   2179  CD1 TRP A 294      65.963  59.596 213.011  1.00  0.00
C
ATOM   2180  CD2 TRP A 294      63.782  59.476 213.539  1.00  0.00
C
ATOM   2181  NE1 TRP A 294      65.678  58.322 213.445  1.00  0.00
N
ATOM   2182  CE2 TRP A 294      64.346  58.189 213.764  1.00  0.00
C
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ATOM 2183 CE3 TRP A 294 62.402 59.634 213.804 1.00 0.00
C
ATOM 2184 CZ2 TRP A 294 63.580 57.110 214.207 1.00 0.00
C
ATOM 2185 CZ3 TRP A 294 61.623 58.556 214.266 1.00 0.00
C
ATOM 2186 CH2 TRP A 294 62.210 57.289 214.451 1.00 0.00
C
ATOM 2187 N LYS A 295 64.497 64.923 212.974 1.00 0.00
N
ATOM 2188 CA LYS A 295 64.426 66.268 212.406 1.00 0.00
C
ATOM 2189 C LYS A 295 64.475 66.152 210.868 1.00 0.00
C
ATOM 2190 O LYS A 295 63.720 65.366 210.294 1.00 0.00
O
ATOM 2191 CB LYS A 295 65.518 67.178 213.029 1.00 0.00
C
ATOM 2192 CG LYS A 295 65.543 67.185 214.569 1.00 0.00
C
ATOM 2193 CD LYS A 295 66.789 67.874 215.139 1.00 0.00
C
ATOM 2194 CE LYS A 295 66.876 67.765 216.667 1.00 0.00
C
ATOM 2195 NZ LYS A 295 68.163 68.277 217.164 1.00 0.00
N
ATOM 2196 N GLN A 296 65.382 66.892 210.215 1.00 0.00
N
ATOM 2197 CA GLN A 296 65.733 66.771 208.802 1.00 0.00
C
ATOM 2198 C GLN A 296 67.257 66.863 208.655 1.00 0.00
C
ATOM 2199 O GLN A 296 67.921 67.447 209.510 1.00 0.00
O
ATOM 2200 CB GLN A 296 65.019 67.831 207.943 1.00 0.00
C
ATOM 2201 CG GLN A 296 63.480 67.837 207.993 1.00 0.00
C
ATOM 2202 CD GLN A 296 62.879 68.597 209.182 1.00 0.00
C
ATOM 2203 OE1 GLN A 296 63.401 69.622 209.600 1.00 0.00
O
ATOM 2204 NE2 GLN A 296 61.789 68.092 209.757 1.00 0.00
N

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ATOM   2205  N   THR A 297      67.812  66.308 207.566  1.00  0.00
N
ATOM   2206  CA  THR A 297      69.247  66.338 207.273  1.00  0.00
C
ATOM   2207  C   THR A 297      69.476  67.353 206.141  1.00  0.00
C
ATOM   2208  O   THR A 297      69.003  67.154 205.026  1.00  0.00
O
ATOM   2209  CB  THR A 297      69.704  64.927 206.837  1.00  0.00
C
ATOM   2210  OG1 THR A 297      69.414  64.023 207.885  1.00  0.00
O
ATOM   2211  CG2 THR A 297      71.220  64.842 206.581  1.00  0.00
C
ATOM   2212  N   VAL A 298      70.207  68.435 206.443  1.00  0.00
N
ATOM   2213  CA  VAL A 298      70.502  69.562 205.561  1.00  0.00
C
ATOM   2214  C   VAL A 298      71.899  69.355 204.949  1.00  0.00
C
ATOM   2215  O   VAL A 298      72.872  69.140 205.669  1.00  0.00
O
ATOM   2216  CB  VAL A 298      70.492  70.873 206.402  1.00  0.00
C
ATOM   2217  CG1 VAL A 298      70.715  72.130 205.537  1.00  0.00
C
ATOM   2218  CG2 VAL A 298      69.190  71.035 207.210  1.00  0.00
C
ATOM   2219  N   PHE A 299      71.984  69.446 203.616  1.00  0.00
N
ATOM   2220  CA  PHE A 299      73.190  69.327 202.805  1.00  0.00
C
ATOM   2221  C   PHE A 299      73.457  70.694 202.163  1.00  0.00
C
ATOM   2222  O   PHE A 299      72.750  71.082 201.232  1.00  0.00
O
ATOM   2223  CB  PHE A 299      72.927  68.296 201.685  1.00  0.00
C
ATOM   2224  CG  PHE A 299      72.693  66.877 202.162  1.00  0.00
C
ATOM   2225  CD1 PHE A 299      71.410  66.475 202.584  1.00  0.00
C
ATOM   2226  CD2 PHE A 299      73.754  65.950 202.173  1.00  0.00
C
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ATOM   2227  CE1 PHE A 299      71.201  65.159 203.033  1.00  0.00
C
ATOM   2228  CE2 PHE A 299      73.537  64.627 202.604  1.00  0.00
C
ATOM   2229  CZ  PHE A 299      72.260  64.233 203.040  1.00  0.00
C
ATOM   2230  N   TYR A 300      74.484  71.416 202.639  1.00  0.00
N
ATOM   2231  CA  TYR A 300      74.911  72.690 202.060  1.00  0.00
C
ATOM   2232  C   TYR A 300      75.799  72.428 200.844  1.00  0.00
C
ATOM   2233  O   TYR A 300      76.795  71.712 200.944  1.00  0.00
O
ATOM   2234  CB  TYR A 300      75.767  73.479 203.080  1.00  0.00
C
ATOM   2235  CG  TYR A 300      74.976  74.175 204.169  1.00  0.00
C
ATOM   2236  CD1 TYR A 300      75.324  74.011 205.525  1.00  0.00
C
ATOM   2237  CD2 TYR A 300      73.901  75.018 203.822  1.00  0.00
C
ATOM   2238  CE1 TYR A 300      74.590  74.679 206.522  1.00  0.00
C
ATOM   2239  CE2 TYR A 300      73.127  75.632 204.820  1.00  0.00
C
ATOM   2240  CZ  TYR A 300      73.479  75.467 206.169  1.00  0.00
C
ATOM   2241  OH  TYR A 300      72.753  76.085 207.135  1.00  0.00
O
ATOM   2242  N   MET A 301      75.455  73.050 199.710  1.00  0.00
N
ATOM   2243  CA  MET A 301      76.328  73.150 198.543  1.00  0.00
C
ATOM   2244  C   MET A 301      77.210  74.403 198.671  1.00  0.00
C
ATOM   2245  O   MET A 301      76.878  75.338 199.403  1.00  0.00
O
ATOM   2246  CB  MET A 301      75.493  73.219 197.245  1.00  0.00
C
ATOM   2247  CG  MET A 301      74.267  74.149 197.242  1.00  0.00
C
ATOM   2248  SD  MET A 301      72.676  73.325 197.499  1.00  0.00
S
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ATOM   2249  CE  MET A 301      71.614  74.469 196.581  1.00  0.00
C
ATOM   2250  N   GLU A 302      78.350  74.394 197.965  1.00  0.00
N
ATOM   2251  CA  GLU A 302      79.359  75.452 197.926  1.00  0.00
C
ATOM   2252  C   GLU A 302      78.788  76.817 197.502  1.00  0.00
C
ATOM   2253  O   GLU A 302      78.867  77.785 198.259  1.00  0.00
O
ATOM   2254  CB  GLU A 302      80.529  74.963 197.048  1.00  0.00
C
ATOM   2255  CG  GLU A 302      81.689  75.963 196.872  1.00  0.00
C
ATOM   2256  CD  GLU A 302      82.924  75.334 196.218  1.00  0.00
C
ATOM   2257  OE1 GLU A 302      82.750  74.366 195.444  1.00  0.00
O
ATOM   2258  OE2 GLU A 302      84.029  75.841 196.503  1.00  0.00
O
ATOM   2259  N   ASP A 303      78.152  76.853 196.323  1.00  0.00
N
ATOM   2260  CA  ASP A 303      77.421  77.996 195.772  1.00  0.00
C
ATOM   2261  C   ASP A 303      75.929  77.879 196.124  1.00  0.00
C
ATOM   2262  O   ASP A 303      75.468  76.835 196.578  1.00  0.00
O
ATOM   2263  CB  ASP A 303      77.536  77.971 194.229  1.00  0.00
C
ATOM   2264  CG  ASP A 303      78.972  77.842 193.714  1.00  0.00
C
ATOM   2265  OD1 ASP A 303      79.793  78.706 194.093  1.00  0.00
O
ATOM   2266  OD2 ASP A 303      79.222  76.873 192.964  1.00  0.00
O
ATOM   2267  N   TYR A 304      75.171  78.956 195.885  1.00  0.00
N
ATOM   2268  CA  TYR A 304      73.712  79.015 195.976  1.00  0.00
C
ATOM   2269  C   TYR A 304      73.123  79.239 194.570  1.00  0.00
C
ATOM   2270  O   TYR A 304      73.806  79.751 193.680  1.00  0.00
O
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ATOM   2271  CB  TYR A 304      73.311  80.146 196.955  1.00  0.00
C
ATOM   2272  CG  TYR A 304      73.710  81.545 196.524  1.00  0.00
C
ATOM   2273  CD1 TYR A 304      72.803  82.343 195.796  1.00  0.00
C
ATOM   2274  CD2 TYR A 304      75.003  82.031 196.805  1.00  0.00
C
ATOM   2275  CE1 TYR A 304      73.201  83.607 195.323  1.00  0.00
C
ATOM   2276  CE2 TYR A 304      75.399  83.296 196.333  1.00  0.00
C
ATOM   2277  CZ  TYR A 304      74.500  84.081 195.586  1.00  0.00
C
ATOM   2278  OH  TYR A 304      74.890  85.300 195.113  1.00  0.00
O
ATOM   2279  N   LEU A 305      71.851  78.862 194.377  1.00  0.00
N
ATOM   2280  CA  LEU A 305      71.100  79.050 193.135  1.00  0.00
C
ATOM   2281  C   LEU A 305      70.145  80.236 193.318  1.00  0.00
C
ATOM   2282  O   LEU A 305      69.380  80.242 194.279  1.00  0.00
O
ATOM   2283  CB  LEU A 305      70.223  77.799 192.876  1.00  0.00
C
ATOM   2284  CG  LEU A 305      70.975  76.455 192.828  1.00  0.00
C
ATOM   2285  CD1 LEU A 305      69.985  75.283 192.791  1.00  0.00
C
ATOM   2286  CD2 LEU A 305      71.932  76.392 191.633  1.00  0.00
C
ATOM   2287  N   THR A 306      70.141  81.203 192.385  1.00  0.00
N
ATOM   2288  CA  THR A 306      69.140  82.275 192.338  1.00  0.00
C
ATOM   2289  C   THR A 306      68.029  81.774 191.400  1.00  0.00
C
ATOM   2290  O   THR A 306      68.217  81.703 190.185  1.00  0.00
O
ATOM   2291  CB  THR A 306      69.763  83.567 191.752  1.00  0.00
C
ATOM   2292  OG1 THR A 306      70.905  83.927 192.502  1.00  0.00
O
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ATOM   2293  CG2 THR A 306      68.790  84.757 191.791  1.00  0.00
C
ATOM   2294  N   VAL A 307      66.882  81.403 191.982  1.00  0.00
N
ATOM   2295  CA  VAL A 307      65.781  80.733 191.297  1.00  0.00
C
ATOM   2296  C   VAL A 307      64.556  81.657 191.208  1.00  0.00
C
ATOM   2297  O   VAL A 307      64.370  82.535 192.052  1.00  0.00
O
ATOM   2298  CB  VAL A 307      65.457  79.404 192.031  1.00  0.00
C
ATOM   2299  CG1 VAL A 307      66.672  78.465 192.119  1.00  0.00
C
ATOM   2300  CG2 VAL A 307      64.855  79.561 193.440  1.00  0.00
C
ATOM   2301  N   LYS A 308      63.716  81.427 190.187  1.00  0.00
N
ATOM   2302  CA  LYS A 308      62.410  82.053 189.987  1.00  0.00
C
ATOM   2303  C   LYS A 308      61.313  80.987 189.930  1.00  0.00
C
ATOM   2304  O   LYS A 308      61.582  79.831 189.603  1.00  0.00
O
ATOM   2305  CB  LYS A 308      62.377  82.877 188.688  1.00  0.00
C
ATOM   2306  CG  LYS A 308      63.429  83.989 188.623  1.00  0.00
C
ATOM   2307  CD  LYS A 308      63.223  84.928 187.426  1.00  0.00
C
ATOM   2308  CE  LYS A 308      62.040  85.899 187.563  1.00  0.00
C
ATOM   2309  NZ  LYS A 308      62.265  86.876 188.642  1.00  0.00
N
ATOM   2310  N   THR A 309      60.067  81.406 190.211  1.00  0.00
N
ATOM   2311  CA  THR A 309      58.843  80.600 190.210  1.00  0.00
C
ATOM   2312  C   THR A 309      58.653  79.870 188.867  1.00  0.00
C
ATOM   2313  O   THR A 309      58.544  80.516 187.824  1.00  0.00
O
ATOM   2314  CB  THR A 309      57.626  81.519 190.487  1.00  0.00
C
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ATOM   2315  OG1 THR A 309      57.839  82.293 191.647  1.00  0.00
O
ATOM   2316  CG2 THR A 309      56.316  80.739 190.700  1.00  0.00
C
ATOM   2317  N   GLY A 310      58.628  78.532 188.906  1.00  0.00
N
ATOM   2318  CA  GLY A 310      58.342  77.660 187.771  1.00  0.00
C
ATOM   2319  C   GLY A 310      59.570  76.897 187.264  1.00  0.00
C
ATOM   2320  O   GLY A 310      59.404  75.883 186.589  1.00  0.00
O
ATOM   2321  N   GLU A 311      60.788  77.373 187.579  1.00  0.00
N
ATOM   2322  CA  GLU A 311      62.063  76.778 187.169  1.00  0.00
C
ATOM   2323  C   GLU A 311      62.339  75.501 187.980  1.00  0.00
C
ATOM   2324  O   GLU A 311      61.829  75.346 189.088  1.00  0.00
O
ATOM   2325  CB  GLU A 311      63.190  77.807 187.400  1.00  0.00
C
ATOM   2326  CG  GLU A 311      63.034  79.045 186.488  1.00  0.00
C
ATOM   2327  CD  GLU A 311      64.026  80.176 186.755  1.00  0.00
C
ATOM   2328  OE1 GLU A 311      64.089  81.078 185.892  1.00  0.00
O
ATOM   2329  OE2 GLU A 311      64.691  80.155 187.811  1.00  0.00
O
ATOM   2330  N   GLU A 312      63.110  74.570 187.401  1.00  0.00
N
ATOM   2331  CA  GLU A 312      63.317  73.227 187.938  1.00  0.00
C
ATOM   2332  C   GLU A 312      64.795  73.043 188.309  1.00  0.00
C
ATOM   2333  O   GLU A 312      65.672  73.224 187.464  1.00  0.00
O
ATOM   2334  CB  GLU A 312      62.882  72.207 186.862  1.00  0.00
C
ATOM   2335  CG  GLU A 312      62.492  70.819 187.419  1.00  0.00
C
ATOM   2336  CD  GLU A 312      61.105  70.760 188.070  1.00  0.00
C
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ATOM   2337  OE1 GLU A 312      60.285  71.665 187.804  1.00  0.00
O
ATOM   2338  OE2 GLU A 312      60.877  69.784 188.816  1.00  0.00
O
ATOM   2339  N   ILE A 313      65.059  72.651 189.566  1.00  0.00
N
ATOM   2340  CA  ILE A 313      66.374  72.246 190.062  1.00  0.00
C
ATOM   2341  C   ILE A 313      66.438  70.725 189.890  1.00  0.00
C
ATOM   2342  O   ILE A 313      65.663  69.988 190.500  1.00  0.00
O
ATOM   2343  CB  ILE A 313      66.546  72.623 191.563  1.00  0.00
C
ATOM   2344  CG1 ILE A 313      66.266  74.120 191.832  1.00  0.00
C
ATOM   2345  CG2 ILE A 313      67.945  72.225 192.091  1.00  0.00
C
ATOM   2346  CD1 ILE A 313      66.207  74.477 193.322  1.00  0.00
C
ATOM   2347  N   PHE A 314      67.375  70.277 189.048  1.00  0.00
N
ATOM   2348  CA  PHE A 314      67.668  68.876 188.781  1.00  0.00
C
ATOM   2349  C   PHE A 314      68.936  68.458 189.537  1.00  0.00
C
ATOM   2350  O   PHE A 314      69.511  69.230 190.309  1.00  0.00
O
ATOM   2351  CB  PHE A 314      67.899  68.701 187.264  1.00  0.00
C
ATOM   2352  CG  PHE A 314      66.696  69.036 186.414  1.00  0.00
C
ATOM   2353  CD1 PHE A 314      66.687  70.203 185.625  1.00  0.00
C
ATOM   2354  CD2 PHE A 314      65.587  68.168 186.404  1.00  0.00
C
ATOM   2355  CE1 PHE A 314      65.579  70.488 184.806  1.00  0.00
C
ATOM   2356  CE2 PHE A 314      64.478  68.453 185.586  1.00  0.00
C
ATOM   2357  CZ  PHE A 314      64.478  69.609 184.781  1.00  0.00
C
ATOM   2358  N   GLY A 315      69.382  67.224 189.275  1.00  0.00
N
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ATOM   2359  CA  GLY A 315      70.532  66.609 189.905  1.00  0.00
C
ATOM   2360  C   GLY A 315      70.290  65.142 190.237  1.00  0.00
C
ATOM   2361  O   GLY A 315      69.222  64.593 189.967  1.00  0.00
O
ATOM   2362  N   THR A 316      71.322  64.524 190.821  1.00  0.00
N
ATOM   2363  CA  THR A 316      71.359  63.150 191.302  1.00  0.00
C
ATOM   2364  C   THR A 316      71.932  63.140 192.718  1.00  0.00
C
ATOM   2365  O   THR A 316      72.817  63.931 193.029  1.00  0.00
O
ATOM   2366  CB  THR A 316      72.125  62.218 190.326  1.00  0.00
C
ATOM   2367  OG1 THR A 316      73.504  62.526 190.276  1.00  0.00
O
ATOM   2368  CG2 THR A 316      71.581  62.200 188.891  1.00  0.00
C
ATOM   2369  N   ILE A 317      71.445  62.222 193.557  1.00  0.00
N
ATOM   2370  CA  ILE A 317      71.934  61.971 194.905  1.00  0.00
C
ATOM   2371  C   ILE A 317      72.321  60.502 194.989  1.00  0.00
C
ATOM   2372  O   ILE A 317      71.482  59.616 194.840  1.00  0.00
O
ATOM   2373  CB  ILE A 317      70.938  62.447 195.994  1.00  0.00
C
ATOM   2374  CG1 ILE A 317      71.448  62.139 197.425  1.00  0.00
C
ATOM   2375  CG2 ILE A 317      69.505  61.921 195.795  1.00  0.00
C
ATOM   2376  CD1 ILE A 317      70.809  63.011 198.515  1.00  0.00
C
ATOM   2377  N   GLY A 318      73.606  60.285 195.276  1.00  0.00
N
ATOM   2378  CA  GLY A 318      74.223  59.001 195.508  1.00  0.00
C
ATOM   2379  C   GLY A 318      74.401  58.817 197.005  1.00  0.00
C
ATOM   2380  O   GLY A 318      74.545  59.790 197.744  1.00  0.00
O
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ATOM   2381  N   MET A 319      74.361  57.556 197.438  1.00  0.00
N
ATOM   2382  CA  MET A 319      74.552  57.123 198.809  1.00  0.00
C
ATOM   2383  C   MET A 319      75.250  55.768 198.791  1.00  0.00
C
ATOM   2384  O   MET A 319      74.886  54.894 198.006  1.00  0.00
O
ATOM   2385  CB  MET A 319      73.219  57.101 199.578  1.00  0.00
C
ATOM   2386  CG  MET A 319      73.431  57.119 201.098  1.00  0.00
C
ATOM   2387  SD  MET A 319      71.959  56.679 202.051  1.00  0.00
S
ATOM   2388  CE  MET A 319      72.142  54.876 202.084  1.00  0.00
C
ATOM   2389  N   ARG A 320      76.233  55.594 199.680  1.00  0.00
N
ATOM   2390  CA  ARG A 320      76.934  54.342 199.918  1.00  0.00
C
ATOM   2391  C   ARG A 320      77.433  54.307 201.371  1.00  0.00
C
ATOM   2392  O   ARG A 320      77.837  55.351 201.889  1.00  0.00
O
ATOM   2393  CB  ARG A 320      78.027  54.117 198.842  1.00  0.00
C
ATOM   2394  CG  ARG A 320      79.232  55.084 198.883  1.00  0.00
C
ATOM   2395  CD  ARG A 320      80.530  54.394 199.333  1.00  0.00
C
ATOM   2396  NE  ARG A 320      81.612  55.349 199.624  1.00  0.00
N
ATOM   2397  CZ  ARG A 320      82.865  55.335 199.131  1.00  0.00
C
ATOM   2398  NH1 ARG A 320      83.252  54.460 198.193  1.00  0.00
N
ATOM   2399  NH2 ARG A 320      83.750  56.221 199.598  1.00  0.00
N
ATOM   2400  N   PRO A 321      77.472  53.128 202.031  1.00  0.00
N
ATOM   2401  CA  PRO A 321      78.140  52.969 203.325  1.00  0.00
C
ATOM   2402  C   PRO A 321      79.657  52.984 203.078  1.00  0.00
C
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ATOM   2403  O   PRO A 321      80.152  52.239 202.230  1.00  0.00
O
ATOM   2404  CB  PRO A 321      77.641  51.616 203.852  1.00  0.00
C
ATOM   2405  CG  PRO A 321      77.326  50.804 202.603  1.00  0.00
C
ATOM   2406  CD  PRO A 321      76.931  51.852 201.559  1.00  0.00
C
ATOM   2407  N   ASN A 322      80.372  53.877 203.779  1.00  0.00
N
ATOM   2408  CA  ASN A 322      81.800  54.163 203.615  1.00  0.00
C
ATOM   2409  C   ASN A 322      82.666  52.898 203.794  1.00  0.00
C
ATOM   2410  O   ASN A 322      82.325  51.993 204.555  1.00  0.00
O
ATOM   2411  CB  ASN A 322      82.165  55.287 204.610  1.00  0.00
C
ATOM   2412  CG  ASN A 322      83.598  55.821 204.527  1.00  0.00
C
ATOM   2413  OD1 ASN A 322      84.202  55.852 203.458  1.00  0.00
O
ATOM   2414  ND2 ASN A 322      84.167  56.202 205.674  1.00  0.00
N
ATOM   2415  N   ALA A 323      83.788  52.846 203.062  1.00  0.00
N
ATOM   2416  CA  ALA A 323      84.709  51.712 203.003  1.00  0.00
C
ATOM   2417  C   ALA A 323      85.531  51.507 204.290  1.00  0.00
C
ATOM   2418  O   ALA A 323      86.064  50.417 204.491  1.00  0.00
O
ATOM   2419  CB  ALA A 323      85.680  51.963 201.838  1.00  0.00
C
ATOM   2420  N   LYS A 324      85.622  52.532 205.156  1.00  0.00
N
ATOM   2421  CA  LYS A 324      86.402  52.541 206.394  1.00  0.00
C
ATOM   2422  C   LYS A 324      85.536  52.989 207.582  1.00  0.00
C
ATOM   2423  O   LYS A 324      85.949  53.861 208.341  1.00  0.00
O
ATOM   2424  CB  LYS A 324      87.701  53.360 206.213  1.00  0.00
C
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ATOM   2425  CG  LYS A 324      88.689  52.758 205.201  1.00  0.00
C
ATOM   2426  CD  LYS A 324      90.017  53.526 205.160  1.00  0.00
C
ATOM   2427  CE  LYS A 324      91.003  52.940 204.143  1.00  0.00
C
ATOM   2428  NZ  LYS A 324      92.279  53.675 204.150  1.00  0.00
N
ATOM   2429  N   ASN A 325      84.344  52.377 207.703  1.00  0.00
N
ATOM   2430  CA  ASN A 325      83.282  52.484 208.716  1.00  0.00
C
ATOM   2431  C   ASN A 325      81.957  52.298 207.970  1.00  0.00
C
ATOM   2432  O   ASN A 325      81.598  53.143 207.156  1.00  0.00
O
ATOM   2433  CB  ASN A 325      83.180  53.871 209.423  1.00  0.00
C
ATOM   2434  CG  ASN A 325      83.923  53.982 210.756  1.00  0.00
C
ATOM   2435  OD1 ASN A 325      83.624  53.248 211.695  1.00  0.00
O
ATOM   2436  ND2 ASN A 325      84.876  54.910 210.859  1.00  0.00
N
ATOM   2437  N   ASN A 326      81.185  51.249 208.292  1.00  0.00
N
ATOM   2438  CA  ASN A 326      79.791  51.108 207.841  1.00  0.00
C
ATOM   2439  C   ASN A 326      78.800  51.786 208.810  1.00  0.00
C
ATOM   2440  O   ASN A 326      77.590  51.716 208.598  1.00  0.00
O
ATOM   2441  CB  ASN A 326      79.435  49.610 207.674  1.00  0.00
C
ATOM   2442  CG  ASN A 326      80.096  48.912 206.474  1.00  0.00
C
ATOM   2443  OD1 ASN A 326      80.141  47.686 206.438  1.00  0.00
O
ATOM   2444  ND2 ASN A 326      80.580  49.653 205.473  1.00  0.00
N
ATOM   2445  N   ARG A 327      79.314  52.502 209.826  1.00  0.00
N
ATOM   2446  CA  ARG A 327      78.577  53.459 210.646  1.00  0.00
C
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ATOM   2447  C   ARG A 327      78.549  54.849 209.971  1.00  0.00
C
ATOM   2448  O   ARG A 327      77.694  55.657 210.322  1.00  0.00
O
ATOM   2449  CB  ARG A 327      79.293  53.544 212.014  1.00  0.00
C
ATOM   2450  CG  ARG A 327      78.617  54.458 213.059  1.00  0.00
C
ATOM   2451  CD  ARG A 327      79.369  55.776 213.303  1.00  0.00
C
ATOM   2452  NE  ARG A 327      80.509  55.547 214.204  1.00  0.00
N
ATOM   2453  CZ  ARG A 327      81.813  55.727 213.932  1.00  0.00
C
ATOM   2454  NH1 ARG A 327      82.243  56.213 212.761  1.00  0.00
N
ATOM   2455  NH2 ARG A 327      82.718  55.401 214.864  1.00  0.00
N
ATOM   2456  N   ASP A 328      79.442  55.117 209.000  1.00  0.00
N
ATOM   2457  CA  ASP A 328      79.506  56.360 208.226  1.00  0.00
C
ATOM   2458  C   ASP A 328      78.803  56.157 206.880  1.00  0.00
C
ATOM   2459  O   ASP A 328      79.083  55.186 206.174  1.00  0.00
O
ATOM   2460  CB  ASP A 328      80.978  56.727 207.914  1.00  0.00
C
ATOM   2461  CG  ASP A 328      81.865  57.012 209.123  1.00  0.00
C
ATOM   2462  OD1 ASP A 328      81.341  57.014 210.258  1.00  0.00
O
ATOM   2463  OD2 ASP A 328      83.074  57.233 208.887  1.00  0.00
O
ATOM   2464  N   LEU A 329      77.927  57.104 206.511  1.00  0.00
N
ATOM   2465  CA  LEU A 329      77.374  57.212 205.165  1.00  0.00
C
ATOM   2466  C   LEU A 329      78.127  58.297 204.409  1.00  0.00
C
ATOM   2467  O   LEU A 329      78.235  59.425 204.887  1.00  0.00
O
ATOM   2468  CB  LEU A 329      75.915  57.702 205.203  1.00  0.00
C
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ATOM   2469  CG  LEU A 329      74.863  56.640 205.528  1.00  0.00
C
ATOM   2470  CD1 LEU A 329      73.492  57.305 205.445  1.00  0.00
C
ATOM   2471  CD2 LEU A 329      74.912  55.427 204.582  1.00  0.00
C
ATOM   2472  N   ASP A 330      78.552  57.956 203.189  1.00  0.00
N
ATOM   2473  CA  ASP A 330      78.994  58.908 202.183  1.00  0.00
C
ATOM   2474  C   ASP A 330      77.830  59.166 201.227  1.00  0.00
C
ATOM   2475  O   ASP A 330      77.115  58.237 200.849  1.00  0.00
O
ATOM   2476  CB  ASP A 330      80.171  58.322 201.374  1.00  0.00
C
ATOM   2477  CG  ASP A 330      81.465  58.149 202.171  1.00  0.00
C
ATOM   2478  OD1 ASP A 330      81.497  58.521 203.364  1.00  0.00
O
ATOM   2479  OD2 ASP A 330      82.437  57.660 201.560  1.00  0.00
O
ATOM   2480  N   PHE A 331      77.671  60.434 200.828  1.00  0.00
N
ATOM   2481  CA  PHE A 331      76.748  60.877 199.788  1.00  0.00
C
ATOM   2482  C   PHE A 331      77.545  61.609 198.706  1.00  0.00
C
ATOM   2483  O   PHE A 331      78.621  62.138 198.977  1.00  0.00
O
ATOM   2484  CB  PHE A 331      75.642  61.805 200.343  1.00  0.00
C
ATOM   2485  CG  PHE A 331      74.759  61.254 201.449  1.00  0.00
C
ATOM   2486  CD1 PHE A 331      75.255  61.129 202.765  1.00  0.00
C
ATOM   2487  CD2 PHE A 331      73.418  60.914 201.175  1.00  0.00
C
ATOM   2488  CE1 PHE A 331      74.421  60.647 203.790  1.00  0.00
C
ATOM   2489  CE2 PHE A 331      72.578  60.456 202.209  1.00  0.00
C
ATOM   2490  CZ  PHE A 331      73.082  60.319 203.516  1.00  0.00
C
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ATOM   2491  N   THR A 332      76.986  61.669 197.492  1.00  0.00
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ATOM   2492  CA  THR A 332      77.479  62.458 196.367  1.00  0.00
C
ATOM   2493  C   THR A 332      76.248  63.107 195.743  1.00  0.00
C
ATOM   2494  O   THR A 332      75.479  62.416 195.078  1.00  0.00
O
ATOM   2495  CB  THR A 332      78.282  61.572 195.379  1.00  0.00
C
ATOM   2496  OG1 THR A 332      79.488  61.152 195.985  1.00  0.00
O
ATOM   2497  CG2 THR A 332      78.670  62.292 194.072  1.00  0.00
C
ATOM   2498  N   ILE A 333      76.055  64.417 195.958  1.00  0.00
N
ATOM   2499  CA  ILE A 333      74.951  65.161 195.365  1.00  0.00
C
ATOM   2500  C   ILE A 333      75.535  65.986 194.218  1.00  0.00
C
ATOM   2501  O   ILE A 333      76.311  66.918 194.434  1.00  0.00
O
ATOM   2502  CB  ILE A 333      74.238  66.072 196.398  1.00  0.00
C
ATOM   2503  CG1 ILE A 333      73.847  65.277 197.664  1.00  0.00
C
ATOM   2504  CG2 ILE A 333      72.991  66.733 195.771  1.00  0.00
C
ATOM   2505  CD1 ILE A 333      73.073  66.077 198.715  1.00  0.00
C
ATOM   2506  N   ASP A 334      75.097  65.643 193.003  1.00  0.00
N
ATOM   2507  CA  ASP A 334      75.264  66.443 191.803  1.00  0.00
C
ATOM   2508  C   ASP A 334      74.005  67.299 191.656  1.00  0.00
C
ATOM   2509  O   ASP A 334      72.894  66.814 191.856  1.00  0.00
O
ATOM   2510  CB  ASP A 334      75.413  65.545 190.554  1.00  0.00
C
ATOM   2511  CG  ASP A 334      76.609  64.583 190.598  1.00  0.00
C
ATOM   2512  OD1 ASP A 334      77.497  64.773 191.459  1.00  0.00
O
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ATOM   2513  OD2 ASP A 334      76.625  63.670 189.745  1.00  0.00
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ATOM   2514  N   LEU A 335      74.199  68.576 191.329  1.00  0.00
N
ATOM   2515  CA  LEU A 335      73.176  69.572 191.040  1.00  0.00
C
ATOM   2516  C   LEU A 335      73.309  69.956 189.569  1.00  0.00
C
ATOM   2517  O   LEU A 335      74.415  69.997 189.029  1.00  0.00
O
ATOM   2518  CB  LEU A 335      73.424  70.809 191.940  1.00  0.00
C
ATOM   2519  CG  LEU A 335      72.430  71.002 193.104  1.00  0.00
C
ATOM   2520  CD1 LEU A 335      72.133  69.716 193.881  1.00  0.00
C
ATOM   2521  CD2 LEU A 335      72.960  72.065 194.073  1.00  0.00
C
ATOM   2522  N   ASP A 336      72.168  70.265 188.944  1.00  0.00
N
ATOM   2523  CA  ASP A 336      72.078  70.774 187.585  1.00  0.00
C
ATOM   2524  C   ASP A 336      70.900  71.748 187.522  1.00  0.00
C
ATOM   2525  O   ASP A 336      69.768  71.371 187.816  1.00  0.00
O
ATOM   2526  CB  ASP A 336      72.066  69.603 186.572  1.00  0.00
C
ATOM   2527  CG  ASP A 336      72.265  70.014 185.110  1.00  0.00
C
ATOM   2528  OD1 ASP A 336      72.877  71.080 184.877  1.00  0.00
O
ATOM   2529  OD2 ASP A 336      71.827  69.228 184.243  1.00  0.00
O
ATOM   2530  N   PHE A 337      71.173  73.013 187.186  1.00  0.00
N
ATOM   2531  CA  PHE A 337      70.205  74.099 187.186  1.00  0.00
C
ATOM   2532  C   PHE A 337      70.461  75.046 186.016  1.00  0.00
C
ATOM   2533  O   PHE A 337      71.601  75.421 185.741  1.00  0.00
O
ATOM   2534  CB  PHE A 337      70.172  74.809 188.556  1.00  0.00
C
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ATOM 2535 CG PHE A 337 69.152 75.932 188.630 1.00 0.00
C
ATOM 2536 CD1 PHE A 337 67.780 75.620 188.696 1.00 0.00
C
ATOM 2537 CD2 PHE A 337 69.555 77.282 188.555 1.00 0.00
C
ATOM 2538 CE1 PHE A 337 66.810 76.636 188.694 1.00 0.00
C
ATOM 2539 CE2 PHE A 337 68.584 78.301 188.543 1.00 0.00
C
ATOM 2540 CZ PHE A 337 67.217 77.978 188.613 1.00 0.00
C
ATOM 2541 N LYS A 338 69.363 75.472 185.383 1.00 0.00
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ATOM 2542 CA LYS A 338 69.318 76.487 184.349 1.00 0.00
C
ATOM 2543 C LYS A 338 68.029 77.280 184.574 1.00 0.00
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ATOM 2544 O LYS A 338 66.935 76.790 184.295 1.00 0.00
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ATOM 2545 CB LYS A 338 69.473 75.828 182.958 1.00 0.00
C
ATOM 2546 CG LYS A 338 70.026 76.758 181.864 1.00 0.00
C
ATOM 2547 CD LYS A 338 69.057 77.849 181.372 1.00 0.00
C
ATOM 2548 CE LYS A 338 69.549 79.272 181.666 1.00 0.00
C
ATOM 2549 NZ LYS A 338 70.632 79.682 180.756 1.00 0.00
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ATOM 2550 N GLY A 339 68.179 78.501 185.096 1.00 0.00
N
ATOM 2551 CA GLY A 339 67.136 79.490 185.311 1.00 0.00
C
ATOM 2552 C GLY A 339 67.502 80.815 184.647 1.00 0.00
C
ATOM 2553 O GLY A 339 68.597 80.982 184.109 1.00 0.00
O
ATOM 2554 N GLN A 340 66.575 81.778 184.696 1.00 0.00
N
ATOM 2555 CA GLN A 340 66.708 83.084 184.055 1.00 0.00
C
ATOM 2556 C GLN A 340 67.750 83.993 184.746 1.00 0.00
C

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ATOM   2557  O   GLN A 340      68.325  84.854 184.082  1.00  0.00
O
ATOM   2558  CB  GLN A 340      65.308  83.739 184.033  1.00  0.00
C
ATOM   2559  CG  GLN A 340      65.178  84.905 183.019  1.00  0.00
C
ATOM   2560  CD  GLN A 340      65.004  86.324 183.575  1.00  0.00
C
ATOM   2561  OE1 GLN A 340      65.203  87.286 182.841  1.00  0.00
O
ATOM   2562  NE2 GLN A 340      64.641  86.490 184.846  1.00  0.00
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ATOM   2563  N   LEU A 341      68.014  83.782 186.049  1.00  0.00
N
ATOM   2564  CA  LEU A 341      68.955  84.556 186.867  1.00  0.00
C
ATOM   2565  C   LEU A 341      70.228  83.772 187.247  1.00  0.00
C
ATOM   2566  O   LEU A 341      71.149  84.375 187.799  1.00  0.00
O
ATOM   2567  CB  LEU A 341      68.249  84.965 188.183  1.00  0.00
C
ATOM   2568  CG  LEU A 341      66.978  85.824 188.017  1.00  0.00
C
ATOM   2569  CD1 LEU A 341      66.250  85.976 189.360  1.00  0.00
C
ATOM   2570  CD2 LEU A 341      67.268  87.205 187.407  1.00  0.00
C
ATOM   2571  N   CYS A 342      70.293  82.452 186.996  1.00  0.00
N
ATOM   2572  CA  CYS A 342      71.398  81.582 187.411  1.00  0.00
C
ATOM   2573  C   CYS A 342      71.505  80.356 186.501  1.00  0.00
C
ATOM   2574  O   CYS A 342      70.497  79.792 186.086  1.00  0.00
O
ATOM   2575  CB  CYS A 342      71.268  81.245 188.916  1.00  0.00
C
ATOM   2576  SG  CYS A 342      72.537  80.113 189.557  1.00  0.00
S
ATOM   2577  N   GLU A 343      72.745  79.917 186.255  1.00  0.00
N
ATOM   2578  CA  GLU A 343      73.096  78.700 185.540  1.00  0.00
C
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ATOM   2579  C   GLU A 343      74.294  78.062 186.249  1.00  0.00
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ATOM   2580  O   GLU A 343      75.342  78.697 186.368  1.00  0.00
O
ATOM   2581  CB  GLU A 343      73.253  79.013 184.039  1.00  0.00
C
ATOM   2582  CG  GLU A 343      73.847  77.874 183.188  1.00  0.00
C
ATOM   2583  CD  GLU A 343      73.654  78.090 181.684  1.00  0.00
C
ATOM   2584  OE1 GLU A 343      73.428  79.252 181.275  1.00  0.00
O
ATOM   2585  OE2 GLU A 343      73.700  77.075 180.958  1.00  0.00
O
ATOM   2586  N   LEU A 344      74.119  76.832 186.757  1.00  0.00
N
ATOM   2587  CA  LEU A 344      75.092  76.123 187.584  1.00  0.00
C
ATOM   2588  C   LEU A 344      74.955  74.608 187.421  1.00  0.00
C
ATOM   2589  O   LEU A 344      73.848  74.078 187.361  1.00  0.00
O
ATOM   2590  CB  LEU A 344      74.991  76.585 189.064  1.00  0.00
C
ATOM   2591  CG  LEU A 344      75.959  75.892 190.061  1.00  0.00
C
ATOM   2592  CD1 LEU A 344      77.430  76.245 189.792  1.00  0.00
C
ATOM   2593  CD2 LEU A 344      75.602  76.210 191.517  1.00  0.00
C
ATOM   2594  N   SER A 345      76.103  73.924 187.483  1.00  0.00
N
ATOM   2595  CA  SER A 345      76.234  72.505 187.771  1.00  0.00
C
ATOM   2596  C   SER A 345      77.422  72.315 188.723  1.00  0.00
C
ATOM   2597  O   SER A 345      78.465  72.945 188.545  1.00  0.00
O
ATOM   2598  CB  SER A 345      76.269  71.674 186.472  1.00  0.00
C
ATOM   2599  OG  SER A 345      77.496  71.818 185.780  1.00  0.00
O
ATOM   2600  N   CYS A 346      77.257  71.457 189.738  1.00  0.00
N
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ATOM   2601  CA  CYS A 346      78.269  71.154 190.749  1.00  0.00
C
ATOM   2602  C   CYS A 346      78.106  69.726 191.270  1.00  0.00
C
ATOM   2603  O   CYS A 346      77.002  69.194 191.243  1.00  0.00
O
ATOM   2604  CB  CYS A 346      78.317  72.243 191.850  1.00  0.00
C
ATOM   2605  SG  CYS A 346      76.779  72.338 192.818  1.00  0.00
S
ATOM   2606  N   SER A 347      79.201  69.135 191.769  1.00  0.00
N
ATOM   2607  CA  SER A 347      79.249  67.839 192.440  1.00  0.00
C
ATOM   2608  C   SER A 347      79.892  68.059 193.813  1.00  0.00
C
ATOM   2609  O   SER A 347      80.997  68.598 193.889  1.00  0.00
O
ATOM   2610  CB  SER A 347      80.038  66.840 191.569  1.00  0.00
C
ATOM   2611  OG  SER A 347      80.097  65.559 192.163  1.00  0.00
O
ATOM   2612  N   THR A 348      79.197  67.655 194.887  1.00  0.00
N
ATOM   2613  CA  THR A 348      79.659  67.779 196.268  1.00  0.00
C
ATOM   2614  C   THR A 348      79.525  66.408 196.932  1.00  0.00
C
ATOM   2615  O   THR A 348      78.429  65.849 196.978  1.00  0.00
O
ATOM   2616  CB  THR A 348      78.862  68.881 197.013  1.00  0.00
C
ATOM   2617  OG1 THR A 348      78.978  70.112 196.327  1.00  0.00
O
ATOM   2618  CG2 THR A 348      79.379  69.132 198.443  1.00  0.00
C
ATOM   2619  N   ASP A 349      80.639  65.896 197.475  1.00  0.00
N
ATOM   2620  CA  ASP A 349      80.682  64.684 198.289  1.00  0.00
C
ATOM   2621  C   ASP A 349      80.524  65.074 199.758  1.00  0.00
C
ATOM   2622  O   ASP A 349      81.111  66.053 200.207  1.00  0.00
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ATOM 2623 CB ASP A 349 82.045 63.974 198.137 1.00 0.00
C
ATOM 2624 CG ASP A 349 82.346 63.494 196.715 1.00 0.00
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ATOM 2625 OD1 ASP A 349 81.378 63.256 195.960 1.00 0.00
O
ATOM 2626 OD2 ASP A 349 83.551 63.351 196.417 1.00 0.00
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ATOM 2627 N TYR A 350 79.730 64.297 200.497 1.00 0.00
N
ATOM 2628 CA TYR A 350 79.429 64.496 201.908 1.00 0.00
C
ATOM 2629 C TYR A 350 79.785 63.232 202.686 1.00 0.00
C
ATOM 2630 O TYR A 350 79.826 62.142 202.117 1.00 0.00
O
ATOM 2631 CB TYR A 350 77.933 64.797 202.077 1.00 0.00
C
ATOM 2632 CG TYR A 350 77.422 66.030 201.361 1.00 0.00
C
ATOM 2633 CD1 TYR A 350 77.034 65.936 200.010 1.00 0.00
C
ATOM 2634 CD2 TYR A 350 77.315 67.263 202.036 1.00 0.00
C
ATOM 2635 CE1 TYR A 350 76.568 67.073 199.330 1.00 0.00
C
ATOM 2636 CE2 TYR A 350 76.824 68.395 201.357 1.00 0.00
C
ATOM 2637 CZ TYR A 350 76.461 68.304 200.000 1.00 0.00
C
ATOM 2638 OH TYR A 350 76.014 69.402 199.328 1.00 0.00
O
ATOM 2639 N ARG A 351 79.978 63.385 204.002 1.00 0.00
N
ATOM 2640 CA ARG A 351 80.096 62.301 204.963 1.00 0.00
C
ATOM 2641 C ARG A 351 79.352 62.666 206.242 1.00 0.00
C
ATOM 2642 O ARG A 351 79.718 63.634 206.908 1.00 0.00
O
ATOM 2643 CB ARG A 351 81.565 61.895 205.187 1.00 0.00
C
ATOM 2644 CG ARG A 351 81.732 60.772 206.238 1.00 0.00
C

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ATOM   2645  CD  ARG A 351      83.151  60.198 206.291  1.00  0.00
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ATOM   2646  NE  ARG A 351      83.469  59.534 205.023  1.00  0.00
N
ATOM   2647  CZ  ARG A 351      84.668  59.443 204.431  1.00  0.00
C
ATOM   2648  NH1 ARG A 351      85.777  59.913 205.018  1.00  0.00
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ATOM   2649  NH2 ARG A 351      84.745  58.876 203.221  1.00  0.00
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ATOM   2650  N   MET A 352      78.359  61.844 206.613  1.00  0.00
N
ATOM   2651  CA  MET A 352      77.762  61.843 207.942  1.00  0.00
C
ATOM   2652  C   MET A 352      78.654  60.965 208.829  1.00  0.00
C
ATOM   2653  O   MET A 352      78.976  59.831 208.467  1.00  0.00
O
ATOM   2654  CB  MET A 352      76.345  61.242 207.878  1.00  0.00
C
ATOM   2655  CG  MET A 352      75.369  62.153 207.123  1.00  0.00
C
ATOM   2656  SD  MET A 352      73.619  61.684 207.206  1.00  0.00
S
ATOM   2657  CE  MET A 352      73.179  62.394 208.814  1.00  0.00
C
ATOM   2658  N   ARG A 353      79.072  61.533 209.969  1.00  0.00
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ATOM   2659  CA  ARG A 353      80.018  60.957 210.919  1.00  0.00
C
ATOM   2660  C   ARG A 353      79.651  61.322 212.361  1.00  0.00
C
ATOM   2661  O   ARG A 353      78.932  62.328 212.548  1.00  0.00
O
ATOM   2662  CB  ARG A 353      81.472  61.345 210.554  1.00  0.00
C
ATOM   2663  CG  ARG A 353      82.346  60.110 210.325  1.00  0.00
C
ATOM   2664  CD  ARG A 353      83.860  60.360 210.371  1.00  0.00
C
ATOM   2665  NE  ARG A 353      84.470  59.631 211.497  1.00  0.00
N
ATOM   2666  CZ  ARG A 353      85.662  59.008 211.513  1.00  0.00
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ATOM   2667  NH1 ARG A 353      86.462  58.993 210.438  1.00  0.00
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ATOM   2668  NH2 ARG A 353      86.059  58.390 212.633  1.00  0.00
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ATOM   2669  OXT ARG A 353      80.118  60.587 213.259  1.00  0.00
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TER    2670      ARG A 353
HETATM 2671  C25  Q0 A   0      66.617  53.304 215.243  1.00  0.00
C
HETATM 2672  N23  Q0 A   0      67.985  53.456 214.693  1.00  0.00
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HETATM 2673  C24  Q0 A   0      68.624  52.141 214.465  1.00  0.00
C
HETATM 2674  C22  Q0 A   0      68.841  54.364 215.497  1.00  0.00
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HETATM 2675  C20  Q0 A   0      68.569  55.852 215.192  1.00  0.00
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HETATM 2676  N19  Q0 A   0      69.164  56.736 216.194  1.00  0.00
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HETATM 2677  C21  Q0 A   0      68.373  57.958 216.327  1.00  0.00
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HETATM 2678  C16  Q0 A   0      70.527  57.070 215.779  1.00  0.00
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HETATM 2679  C13  Q0 A   0      71.586  56.821 216.847  1.00  0.00
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HETATM 2680  C15  Q0 A   0      72.471  55.737 216.665  1.00  0.00
C
HETATM 2681  C18  Q0 A   0      73.467  55.455 217.618  1.00  0.00
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HETATM 2682  C17  Q0 A   0      73.589  56.260 218.765  1.00  0.00
C
HETATM 2683  C14  Q0 A   0      72.715  57.346 218.955  1.00  0.00
C
HETATM 2684  C10  Q0 A   0      71.711  57.631 218.006  1.00  0.00
C
HETATM 2685  S5   Q0 A   0      70.657  59.023 218.302  1.00  0.00
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HETATM 2686  C2   Q0 A   0      71.807  60.201 218.961  1.00  0.00
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HETATM 2687  C6   Q0 A   0      71.309  61.255 219.755  1.00  0.00
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HETATM 2688  C11  Q0 A   0      72.181  62.222 220.286  1.00  0.00
C
HETATM 2689  C7   Q0 A   0      73.561  62.138 220.031  1.00  0.00
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HETATM 2690  C3   Q0 A   0       74.075  61.082 219.252  1.00  0.00
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HETATM 2691  C8   Q0 A   0       75.464  61.008 219.015  1.00  0.00
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HETATM 2692  C12  Q0 A   0       75.997  59.957 218.248  1.00  0.00
C
HETATM 2693  C9   Q0 A   0       75.143  58.973 217.718  1.00  0.00
C
HETATM 2694  C4   Q0 A   0       73.756  59.041 217.950  1.00  0.00
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HETATM 2695  C1   Q0 A   0       73.202  60.098 218.713  1.00  0.00
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CONECT  160  159  161  164
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CONECT  164  160  163
CONECT  350  341  351
CONECT  351  350  352  354
CONECT  352  351  353  360
CONECT  353  352
CONECT  354  351  355
CONECT  355  354  356  359
CONECT  356  355  357
CONECT  357  356  358
CONECT  358  357  359
CONECT  359  355  358
CONECT 1370 1364 1371
```

CONECT 1371 1370 1372 1374
CONECT 1372 1371 1373 1380
CONECT 1373 1372
CONECT 1374 1371 1375
CONECT 1375 1374 1376 1379
CONECT 1376 1375 1377
CONECT 1377 1376 1378
CONECT 1378 1377 1379
CONECT 1379 1375 1378
CONECT 1926 1921 1927
CONECT 1927 1926 1928 1930
CONECT 1928 1927 1929 1936
CONECT 1929 1928
CONECT 1930 1927 1931
CONECT 1931 1930 1932 1935
CONECT 1932 1931 1933
CONECT 1933 1932 1934
CONECT 1934 1933 1935
CONECT 1935 1931 1934
CONECT 2163 2158 2164
CONECT 2164 2163 2165 2167
CONECT 2165 2164 2166 2173
CONECT 2166 2165
CONECT 2167 2164 2168
CONECT 2168 2167 2169 2172
CONECT 2169 2168 2170
CONECT 2170 2169 2171
CONECT 2171 2170 2172
CONECT 2172 2168 2171
CONECT 2671 2672
CONECT 2672 2671 2673 2674
CONECT 2673 2672
CONECT 2674 2672 2675
CONECT 2675 2674 2676
CONECT 2676 2675 2677 2678
CONECT 2677 2676
CONECT 2678 2676 2679
CONECT 2679 2678 2680 2684
CONECT 2680 2679 2681
CONECT 2681 2680 2682
CONECT 2682 2681 2683
CONECT 2683 2682 2684
CONECT 2684 2679 2683 2685
CONECT 2685 2684 2686

```
CONECT 2686 2685 2687 2695
CONECT 2687 2686 2688
CONECT 2688 2687 2689
CONECT 2689 2688 2690
CONECT 2690 2689 2691 2695
CONECT 2691 2690 2692
CONECT 2692 2691 2693
CONECT 2693 2692 2694
CONECT 2694 2693 2695
CONECT 2695 2686 2690 2694
MASTER        0    0    0    0    0    0    0    0 2694    1   85   26
END
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