Supplementary Information

An *in silico* Study of Benzophenone Derivatives as Potential Non-Competitive Inhibitors of *Trypanosoma cruzi* and *Leishmania amazonensis* Cysteine Proteinases

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Table S1. Configuration parameters of the centers of the search space for the molecular docking simulation for cruzain and Llacys1

Receptor	Binding site	Center of the search space / Å
Cruzain	P_1	10.94 × –0.35 × 10.02
	P_2	5.99 × –9.46 × 0.69
	P_3	18.32 × 5.01 × 6.50
Llacys1	P_1	3.64 × 3.73 × 21.97
	P_2	7.76 × –8.15 × –0.72
	P_3	20.89 × 2.90 × 6.45
	P_4	13.00 × 13.31 × –2.84

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Coordinates in the PDB format of the homology obtained Llacys1 model

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MODEL       82
ATOM       1  N   SER     1       42.950  40.320  65.450  1.00
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ATOM       2  H1  SER     1       43.340  39.570  66.000  1.00
0.00
ATOM       3  H2  SER     1       42.610  40.980  66.140  1.00
0.00
ATOM       4  H3  SER     1       42.170  40.010  64.890  1.00
0.00
ATOM       5  CA  SER     1       44.090  40.920  64.690  1.00
0.00
ATOM       6  HA  SER     1       43.700  41.790  64.170  1.00
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ATOM       7  CB  SER     1       45.240  41.360  65.660  1.00
0.00
ATOM       8  HB1 SER     1       46.020  41.970  65.200  1.00
0.00
ATOM       9  HB2 SER     1       45.710  40.420  65.960  1.00
0.00
ATOM      10  OG  SER     1       44.800  41.960  66.840  1.00
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ATOM      11  HG  SER     1       45.380  41.770  67.590  1.00
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ATOM      12  C   SER     1       44.650  40.010  63.660  1.00
0.00
ATOM      13  O   SER     1       44.540  38.800  63.790  1.00
0.00
ATOM      14  N   VAL     2       45.450  40.530  62.670  1.00
0.00
ATOM      15  H   VAL     2       45.500  41.520  62.510  1.00
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ATOM      17  HA  VAL     2       46.760  38.970  62.540  1.00
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ATOM      18  CB  VAL     2       45.770  39.320  60.590  1.00
0.00
ATOM      19  HB  VAL     2       46.430  38.690  59.990  1.00
0.00
ATOM      20  CG1 VAL     2       44.550  38.410  60.610  1.00
0.00
ATOM      21 1HG1 VAL     2       44.560  37.860  59.670  1.00
0.00
ATOM      22 2HG1 VAL     2       44.620  37.640  61.370  1.00
0.00
ATOM      23 3HG1 VAL     2       43.630  39.010  60.660  1.00
0.00
ATOM      24  CG2 VAL     2       45.580  40.580  59.790  1.00
0.00
ATOM      25 1HG2 VAL     2       44.820  41.190  60.270  1.00
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ATOM      26 2HG2 VAL     2       46.410  41.270  59.600  1.00
0.00
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ATOM     27 3HG2 VAL     2      45.140  40.220  58.860  1.00
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ATOM     28  C   VAL     2      47.770  40.590  61.670  1.00
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ATOM     29  O   VAL     2      47.760  41.830  61.610  1.00
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ATOM     30  N   ASP     3      48.850  39.830  61.500  1.00
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ATOM     31  H   ASP     3      48.730  38.840  61.640  1.00
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ATOM     33  HA  ASP     3      49.850  41.260  60.320  1.00
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ATOM     34  CB  ASP     3      51.010  40.780  62.050  1.00
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ATOM     35  HB1 ASP     3      51.260  39.850  62.560  1.00
0.00
ATOM     36  HB2 ASP     3      50.490  41.480  62.720  1.00
0.00
ATOM     37  CG  ASP     3      52.300  41.530  61.590  1.00
0.00
ATOM     38  OD1 ASP     3      52.960  42.310  62.340  1.00
0.00
ATOM     39  OD2 ASP     3      52.670  41.380  60.380  1.00
0.00
ATOM     40  C   ASP     3      50.720  39.360  59.920  1.00
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ATOM     41  O   ASP     3      51.270  38.370  60.400  1.00
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ATOM     42  N   TRP     4      50.750  39.600  58.580  1.00
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ATOM     43  H   TRP     4      50.260  40.400  58.210  1.00
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ATOM     44  CA  TRP     4      51.290  38.630  57.670  1.00
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ATOM     45  HA  TRP     4      50.960  37.630  57.970  1.00
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ATOM     46  CB  TRP     4      50.630  38.750  56.310  1.00
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ATOM     47  HB1 TRP     4      51.220  38.200  55.580  1.00
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ATOM     48  HB2 TRP     4      50.600  39.780  55.940  1.00
0.00
ATOM     49  CG  TRP     4      49.270  38.160  56.240  1.00
0.00
ATOM     50  CD1 TRP     4      48.210  38.910  56.600  1.00
0.00
ATOM     51  HD1 TRP     4      48.240  39.910  56.990  1.00
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ATOM     52  NE1 TRP     4      47.060  38.130  56.410  1.00
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ATOM     53  HE1 TRP     4      46.130  38.490  56.600  1.00
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ATOM     54  CE2 TRP     4      47.320  36.920  55.710  1.00
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ATOM      55  CZ2 TRP     4       46.570  35.910  55.230  1.00
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ATOM      56  HZ2 TRP     4       45.510  36.020  55.430  1.00
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ATOM      57  CH2 TRP     4       47.130  34.750  54.670  1.00
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ATOM      58  HH2 TRP     4       46.560  33.890  54.350  1.00
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ATOM      59  CZ3 TRP     4       48.540  34.680  54.480  1.00
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ATOM      60  HZ3 TRP     4       49.040  33.900  53.930  1.00
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ATOM      61  CE3 TRP     4       49.340  35.760  54.940  1.00
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ATOM      62  HE3 TRP     4       50.400  35.760  54.740  1.00
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ATOM      63  CD2 TRP     4       48.780  36.930  55.640  1.00
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ATOM      64  C   TRP     4       52.790  38.580  57.620  1.00
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ATOM      65  O   TRP     4       53.320  37.660  56.950  1.00
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ATOM      66  N   ARG     5       53.520  39.380  58.390  1.00
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ATOM      67  H   ARG     5       53.030  40.050  58.970  1.00
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ATOM      68  CA  ARG     5       54.960  39.160  58.710  1.00
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ATOM      69  HA  ARG     5       55.470  39.020  57.750  1.00
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ATOM      70  CB  ARG     5       55.550  40.450  59.250  1.00
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ATOM      71  HB1 ARG     5       56.630  40.380  59.260  1.00
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ATOM      72  HB2 ARG     5       55.200  40.660  60.260  1.00
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ATOM      73  CG  ARG     5       55.210  41.650  58.380  1.00
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ATOM      74  HG1 ARG     5       54.150  41.890  58.330  1.00
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ATOM      75  HG2 ARG     5       55.650  41.470  57.400  1.00
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ATOM      76  CD  ARG     5       55.890  42.860  58.920  1.00
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ATOM      77  HD1 ARG     5       55.950  43.560  58.090  1.00
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ATOM      78  HD2 ARG     5       56.920  42.620  59.180  1.00
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ATOM      79  NE  ARG     5       55.080  43.410  60.000  1.00
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ATOM      80  HE  ARG     5       54.280  42.870  60.290  1.00
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ATOM      81  CZ  ARG     5       55.430  44.280  60.890  1.00
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ATOM      82  NH1 ARG     5       56.580  44.980  60.720  1.00
0.00
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ATOM     83 1HH1 ARG     5      57.280  44.850  60.000  1.00
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ATOM     84 2HH1 ARG     5      56.800  45.710  61.380  1.00
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ATOM     85  NH2 ARG     5      54.750  44.450  62.010  1.00
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ATOM     86 1HH2 ARG     5      54.020  43.810  62.260  1.00
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ATOM     87 2HH2 ARG     5      55.230  44.990  62.720  1.00
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ATOM     88  C   ARG     5      55.310  38.000  59.560  1.00
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ATOM     89  O   ARG     5      56.260  37.260  59.290  1.00
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ATOM     90  N   ASP     6      54.430  37.670  60.470  1.00
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ATOM     93  HA  ASP     6      55.320  36.200  61.740  1.00
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ATOM     96  HB2 ASP     6      53.810  37.640  63.050  1.00
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ATOM     97  CG  ASP     6      53.010  35.740  63.600  1.00
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ATOM    101  O   ASP     6      54.140  34.150  60.690  1.00
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ATOM    103  H   LYS     7      52.780  36.430  59.120  1.00
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ATOM    104  CA  LYS     7      52.860  34.490  58.340  1.00
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ATOM    105  HA  LYS     7      52.910  33.530  58.840  1.00
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ATOM    106  CB  LYS     7      51.390  34.590  57.770  1.00
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ATOM    107  HB1 LYS     7      51.300  33.760  57.070  1.00
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ATOM    108  HB2 LYS     7      51.240  35.530  57.250  1.00
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ATOM    109  CG  LYS     7      50.330  34.290  58.910  1.00
0.00
ATOM    110  HG1 LYS     7      50.420  35.010  59.720  1.00
0.00
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ATOM    112  CD  LYS     7      48.890  34.230  58.480  1.00
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ATOM    113  HD1 LYS     7      48.740  33.630  57.580  1.00
0.00
ATOM    114  HD2 LYS     7      48.550  35.230  58.210  1.00
0.00
ATOM    115  CE  LYS     7      48.180  33.530  59.650  1.00
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ATOM    116  HE1 LYS     7      47.930  34.330  60.350  1.00
0.00
ATOM    117  HE2 LYS     7      48.780  32.740  60.110  1.00
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ATOM    118  NZ  LYS     7      46.810  33.000  59.150  1.00
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ATOM    119  HZ1 LYS     7      46.530  32.300  59.820  1.00
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ATOM    120  HZ2 LYS     7      46.190  33.800  59.060  1.00
0.00
ATOM    121  HZ3 LYS     7      46.770  32.520  58.260  1.00
0.00
ATOM    122  C   LYS     7      53.880  34.380  57.200  1.00
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ATOM    123  O   LYS     7      53.760  33.580  56.250  1.00
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ATOM    124  N   GLY     8      54.860  35.200  57.270  1.00
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ATOM    125  H   GLY     8      54.870  35.850  58.040  1.00
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ATOM    126  CA  GLY     8      56.140  35.160  56.460  1.00
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ATOM    127  HA1 GLY     8      56.590  34.170  56.580  1.00
0.00
ATOM    128  HA2 GLY     8      56.760  35.990  56.800  1.00
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ATOM    129  C   GLY     8      55.810  35.710  55.030  1.00
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ATOM    130  O   GLY     8      56.510  35.400  54.110  1.00
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ATOM    131  N   ALA     9      54.750  36.490  54.820  1.00
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ATOM    132  H   ALA     9      54.150  36.750  55.590  1.00
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ATOM    133  CA  ALA     9      54.400  36.880  53.400  1.00
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ATOM    134  HA  ALA     9      54.640  36.070  52.720  1.00
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ATOM    135  CB  ALA     9      52.850  37.160  53.270  1.00
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ATOM    136  HB1 ALA     9      52.680  38.100  53.800  1.00
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ATOM    137  HB2 ALA     9      52.670  37.340  52.210  1.00
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ATOM    138  HB3 ALA     9      52.260  36.330  53.650  1.00
0.00
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ATOM    139  C   ALA     9      55.140  38.100  52.890  1.00
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ATOM    140  O   ALA     9      54.850  38.580  51.790  1.00
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ATOM    141  N   VAL    10      56.030  38.670  53.720  1.00
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ATOM    142  H   VAL    10      56.330  38.080  54.480  1.00
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ATOM    143  CA  VAL    10      56.720  39.960  53.570  1.00
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ATOM    144  HA  VAL    10      56.360  40.370  52.620  1.00
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ATOM    145  CB  VAL    10      56.310  40.940  54.660  1.00
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ATOM    146  HB  VAL    10      56.890  40.700  55.550  1.00
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ATOM    147  CG1 VAL    10      56.620  42.350  54.280  1.00
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ATOM    148 1HG1 VAL    10      57.690  42.520  54.140  1.00
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ATOM    149 2HG1 VAL    10      56.030  42.670  53.420  1.00
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ATOM    150 3HG1 VAL    10      56.310  42.970  55.120  1.00
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ATOM    151  CG2 VAL    10      54.700  40.920  54.910  1.00
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ATOM    152 1HG2 VAL    10      54.490  39.990  55.440  1.00
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ATOM    153 2HG2 VAL    10      54.370  41.730  55.560  1.00
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ATOM    154 3HG2 VAL    10      54.190  40.950  53.950  1.00
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ATOM    155  C   VAL    10      58.260  39.770  53.330  1.00
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ATOM    156  O   VAL    10      58.950  38.970  53.940  1.00
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ATOM    157  N   THR    11      58.790  40.590  52.390  1.00
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ATOM    158  H   THR    11      58.090  41.080  51.860  1.00
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ATOM    159  CA  THR    11      60.220  40.680  51.980  1.00
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ATOM    160  HA  THR    11      60.700  39.720  52.160  1.00
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ATOM    161  CB  THR    11      60.260  40.980  50.480  1.00
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ATOM    162  HB  THR    11      61.290  40.980  50.130  1.00
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ATOM    163  CG2 THR    11      59.640  39.910  49.580  1.00
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ATOM    164 1HG2 THR    11      60.050  38.960  49.910  1.00
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ATOM    165 2HG2 THR    11      58.560  39.760  49.590  1.00
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ATOM    166 3HG2 THR    11      59.970  40.120  48.560  1.00
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ATOM    167  OG1 THR    11       59.660  42.220  50.240  1.00
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ATOM    168  HG1 THR    11       59.070  42.110  49.490  1.00
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ATOM    169  C   THR    11       60.900  41.840  52.790  1.00
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ATOM    170  O   THR    11       60.130  42.660  53.370  1.00
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ATOM    171  N   PRO    12       62.230  42.020  52.700  1.00
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ATOM    172  CD  PRO    12       63.250  41.110  52.200  1.00
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ATOM    173  HD1 PRO    12       63.190  41.180  51.110  1.00
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ATOM    174  HD2 PRO    12       63.230  40.090  52.560  1.00
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ATOM    175  CG  PRO    12       64.580  41.760  52.740  1.00
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ATOM    176  HG1 PRO    12       65.400  41.450  52.080  1.00
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ATOM    177  HG2 PRO    12       64.780  41.390  53.750  1.00
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ATOM    178  CB  PRO    12       64.300  43.240  52.810  1.00
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ATOM    179  HB1 PRO    12       64.390  43.580  51.780  1.00
0.00
ATOM    180  HB2 PRO    12       64.920  43.750  53.550  1.00
0.00
ATOM    181  CA  PRO    12       62.800  43.350  53.190  1.00
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ATOM    182  HA  PRO    12       62.720  43.440  54.280  1.00
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ATOM    183  C   PRO    12       62.160  44.670  52.740  1.00
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ATOM    184  O   PRO    12       61.470  44.770  51.680  1.00
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ATOM    185  N   VAL    13       62.380  45.730  53.610  1.00
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ATOM    186  H   VAL    13       62.960  45.500  54.400  1.00
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ATOM    187  CA  VAL    13       62.000  47.130  53.360  1.00
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ATOM    188  HA  VAL    13       60.950  47.240  53.090  1.00
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ATOM    189  CB  VAL    13       62.040  47.930  54.610  1.00
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ATOM    190  HB  VAL    13       62.920  47.710  55.220  1.00
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ATOM    191  CG1 VAL    13       61.890  49.480  54.230  1.00
0.00
ATOM    192 1HG1 VAL    13       60.950  49.610  53.690  1.00
0.00
ATOM    193 2HG1 VAL    13       61.960  50.060  55.150  1.00
0.00
ATOM    194 3HG1 VAL    13       62.720  49.770  53.590  1.00
0.00
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ATOM    195  CG2 VAL    13      60.900  47.510  55.550  1.00
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ATOM    196 1HG2 VAL    13      60.900  46.420  55.570  1.00
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ATOM    197 2HG2 VAL    13      61.080  47.920  56.540  1.00
0.00
ATOM    198 3HG2 VAL    13      59.880  47.760  55.230  1.00
0.00
ATOM    199  C   VAL    13      62.870  47.650  52.200  1.00
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ATOM    200  O   VAL    13      64.060  47.420  52.180  1.00
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ATOM    201  N   LYS    14      62.260  48.200  51.130  1.00
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ATOM    202  H   LYS    14      61.270  48.340  51.190  1.00
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ATOM    203  CA  LYS    14      62.910  48.700  49.890  1.00
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ATOM    204  HA  LYS    14      63.960  48.410  49.910  1.00
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ATOM    205  CB  LYS    14      62.250  48.140  48.690  1.00
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ATOM    206  HB1 LYS    14      63.020  48.200  47.910  1.00
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ATOM    207  HB2 LYS    14      61.510  48.850  48.330  1.00
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ATOM    208  CG  LYS    14      61.780  46.720  48.930  1.00
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ATOM    209  HG1 LYS    14      60.820  46.620  49.440  1.00
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ATOM    210  HG2 LYS    14      62.530  46.090  49.420  1.00
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ATOM    211  CD  LYS    14      61.500  46.180  47.530  1.00
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ATOM    212  HD1 LYS    14      62.370  46.230  46.880  1.00
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ATOM    213  HD2 LYS    14      60.720  46.800  47.080  1.00
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ATOM    214  CE  LYS    14      60.910  44.760  47.480  1.00
0.00
ATOM    215  HE1 LYS    14      59.850  44.810  47.720  1.00
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ATOM    216  HE2 LYS    14      61.450  44.050  48.100  1.00
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ATOM    217  NZ  LYS    14      60.910  44.220  46.170  1.00
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ATOM    218  HZ1 LYS    14      60.310  43.400  46.210  1.00
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ATOM    219  HZ2 LYS    14      60.540  44.950  45.570  1.00
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ATOM    220  HZ3 LYS    14      61.840  43.930  45.910  1.00
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ATOM    221  C   LYS    14      62.950  50.240  49.860  1.00
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ATOM    222  O   LYS    14      62.220  50.880  50.640  1.00
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ATOM    223  N   ASN    15      63.560  50.880  48.860  1.00
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ATOM    224  H   ASN    15      64.030  50.350  48.140  1.00
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ATOM    225  CA  ASN    15      63.460  52.350  48.590  1.00
0.00
ATOM    226  HA  ASN    15      62.680  52.710  49.260  1.00
0.00
ATOM    227  CB  ASN    15      64.820  52.960  48.940  1.00
0.00
ATOM    228  HB1 ASN    15      65.560  52.890  48.140  1.00
0.00
ATOM    229  HB2 ASN    15      65.190  52.500  49.860  1.00
0.00
ATOM    230  CG  ASN    15      64.700  54.410  49.250  1.00
0.00
ATOM    231  OD1 ASN    15      63.780  55.080  48.880  1.00
0.00
ATOM    232  ND2 ASN    15      65.680  55.000  49.910  1.00
0.00
ATOM    233 1HD2 ASN    15      66.430  54.440  50.270  1.00
0.00
ATOM    234 2HD2 ASN    15      65.460  55.950  50.190  1.00
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ATOM    235  C   ASN    15      63.110  52.680  47.100  1.00
0.00
ATOM    236  O   ASN    15      63.750  52.180  46.200  1.00
0.00
ATOM    237  N   GLN    16      62.220  53.710  46.820  1.00
0.00
ATOM    238  H   GLN    16      61.780  54.140  47.620  1.00
0.00
ATOM    239  CA  GLN    16      61.940  54.310  45.480  1.00
0.00
ATOM    240  HA  GLN    16      62.040  53.560  44.700  1.00
0.00
ATOM    241  CB  GLN    16      60.520  54.810  45.430  1.00
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ATOM    242  HB1 GLN    16      59.830  54.030  45.760  1.00
0.00
ATOM    243  HB2 GLN    16      60.340  55.100  44.400  1.00
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ATOM    244  CG  GLN    16      60.220  56.010  46.270  1.00
0.00
ATOM    245  HG1 GLN    16      60.600  56.830  45.670  1.00
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ATOM    246  HG2 GLN    16      60.630  55.920  47.270  1.00
0.00
ATOM    247  CD  GLN    16      58.740  56.170  46.370  1.00
0.00
ATOM    248  OE1 GLN    16      58.130  55.540  47.160  1.00
0.00
ATOM    249  NE2 GLN    16      58.110  56.920  45.470  1.00
0.00
ATOM    250 1HE2 GLN    16      58.570  57.600  44.880  1.00
0.00
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ATOM    251 2HE2 GLN    16      57.170  57.230  45.680  1.00
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ATOM    252  C   GLN    16      62.970  55.390  45.210  1.00
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ATOM    253  O   GLN    16      63.230  55.740  44.070  1.00
0.00
ATOM    254  N   GLY    17      63.570  56.070  46.200  1.00
0.00
ATOM    255  H   GLY    17      63.400  55.740  47.140  1.00
0.00
ATOM    256  CA  GLY    17      64.490  57.200  46.020  1.00
0.00
ATOM    257  HA1 GLY    17      65.280  57.030  45.290  1.00
0.00
ATOM    258  HA2 GLY    17      64.930  57.350  47.010  1.00
0.00
ATOM    259  C   GLY    17      63.830  58.540  45.640  1.00
0.00
ATOM    260  O   GLY    17      62.760  58.840  46.100  1.00
0.00
ATOM    261  N   LEU    18      64.400  59.310  44.710  1.00
0.00
ATOM    262  H   LEU    18      65.160  58.890  44.200  1.00
0.00
ATOM    263  CA  LEU    18      63.790  60.570  44.200  1.00
0.00
ATOM    264  HA  LEU    18      63.280  60.970  45.080  1.00
0.00
ATOM    265  CB  LEU    18      64.910  61.510  43.790  1.00
0.00
ATOM    266  HB1 LEU    18      64.590  62.340  43.160  1.00
0.00
ATOM    267  HB2 LEU    18      65.560  60.930  43.130  1.00
0.00
ATOM    268  CG  LEU    18      65.820  61.950  44.920  1.00
0.00
ATOM    269  HG  LEU    18      65.840  61.160  45.670  1.00
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ATOM    270  CD1 LEU    18      67.230  62.160  44.450  1.00
0.00
ATOM    271 1HD1 LEU    18      67.300  63.090  43.900  1.00
0.00
ATOM    272 2HD1 LEU    18      67.950  62.130  45.270  1.00
0.00
ATOM    273 3HD1 LEU    18      67.540  61.410  43.720  1.00
0.00
ATOM    274  CD2 LEU    18      65.220  63.190  45.540  1.00
0.00
ATOM    275 1HD2 LEU    18      65.870  63.600  46.320  1.00
0.00
ATOM    276 2HD2 LEU    18      65.230  64.040  44.860  1.00
0.00
ATOM    277 3HD2 LEU    18      64.260  62.910  45.960  1.00
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ATOM    278  C   LEU    18      62.710  60.360  43.170  1.00
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ATOM 279 O LEU 18 62.110 61.320 42.660 1.00
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ATOM 280 N CYX 19 62.500 59.070 42.750 1.00
0.00
ATOM 281 H CYX 19 62.950 58.350 43.300 1.00
0.00
ATOM 282 CA CYX 19 61.440 58.690 41.870 1.00
0.00
ATOM 283 HA CYX 19 61.440 59.420 41.060 1.00
0.00
ATOM 284 CB CYX 19 61.670 57.260 41.400 1.00
0.00
ATOM 285 HB1 CYX 19 60.770 57.000 40.830 1.00
0.00
ATOM 286 HB2 CYX 19 61.740 56.560 42.240 1.00
0.00
ATOM 287 SG CYX 19 63.120 56.870 40.460 1.00
0.00
ATOM 288 C CYX 19 60.000 58.680 42.430 1.00
0.00
ATOM 289 O CYX 19 59.930 58.500 43.640 1.00
0.00
ATOM 290 N GLY 20 59.000 58.930 41.690 1.00
0.00
ATOM 291 H GLY 20 59.330 59.200 40.780 1.00
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ATOM 292 CA GLY 20 57.530 58.850 41.920 1.00
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ATOM 293 HA1 GLY 20 57.030 59.350 41.100 1.00
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ATOM 294 HA2 GLY 20 57.210 59.310 42.850 1.00
0.00
ATOM 295 C GLY 20 56.900 57.450 42.000 1.00
0.00
ATOM 296 O GLY 20 55.680 57.310 42.030 1.00
0.00
ATOM 297 N SER 21 57.740 56.440 42.100 1.00
0.00
ATOM 298 H SER 21 58.700 56.710 41.990 1.00
0.00
ATOM 299 CA SER 21 57.370 55.070 41.720 1.00
0.00
ATOM 300 HA SER 21 56.550 55.080 41.010 1.00
0.00
ATOM 301 CB SER 21 58.600 54.290 41.160 1.00
0.00
ATOM 302 HB1 SER 21 58.570 54.350 40.070 1.00
0.00
ATOM 303 HB2 SER 21 58.590 53.270 41.550 1.00
0.00
ATOM 304 OG SER 21 59.870 54.840 41.550 1.00
0.00
ATOM 305 HG SER 21 60.460 54.120 41.780 1.00
0.00
ATOM 306 C SER 21 56.850 54.240 42.870 1.00
0.00

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ATOM    307  O   SER    21       56.720  53.020  42.710  1.00
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ATOM    309  H   CYS    22       56.610  55.790  44.090  1.00
0.00
ATOM    310  CA  CYS    22       55.640  54.130  45.070  1.00
0.00
ATOM    311  HA  CYS    22       56.340  53.630  45.730  1.00
0.00
ATOM    312  CB  CYS    22       54.930  55.210  45.880  1.00
0.00
ATOM    313  HB1 CYS    22       55.760  55.690  46.400  1.00
0.00
ATOM    314  HB2 CYS    22       54.360  54.720  46.670  1.00
0.00
ATOM    315  SG  CYS    22       53.990  56.410  44.890  1.00
0.00
ATOM    316  HG  CYS    22       54.930  56.670  43.980  1.00
0.00
ATOM    317  C   CYS    22       54.580  53.000  44.690  1.00
0.00
ATOM    318  O   CYS    22       54.310  52.030  45.410  1.00
0.00
ATOM    319  N   TRP    23       53.830  53.260  43.620  1.00
0.00
ATOM    320  H   TRP    23       54.070  54.090  43.090  1.00
0.00
ATOM    321  CA  TRP    23       52.830  52.360  43.070  1.00
0.00
ATOM    322  HA  TRP    23       52.040  52.100  43.770  1.00
0.00
ATOM    323  CB  TRP    23       52.060  53.120  41.970  1.00
0.00
ATOM    324  HB1 TRP    23       51.450  53.920  42.390  1.00
0.00
ATOM    325  HB2 TRP    23       51.220  52.530  41.600  1.00
0.00
ATOM    326  CG  TRP    23       52.800  53.510  40.800  1.00
0.00
ATOM    327  CD1 TRP    23       53.290  54.750  40.680  1.00
0.00
ATOM    328  HD1 TRP    23       53.130  55.590  41.340  1.00
0.00
ATOM    329  NE1 TRP    23       53.930  54.890  39.410  1.00
0.00
ATOM    330  HE1 TRP    23       54.540  55.630  39.110  1.00
0.00
ATOM    331  CE2 TRP    23       53.980  53.670  38.770  1.00
0.00
ATOM    332  CZ2 TRP    23       54.650  53.330  37.580  1.00
0.00
ATOM    333  HZ2 TRP    23       55.240  54.100  37.110  1.00
0.00
ATOM    334  CH2 TRP    23       54.610  52.040  37.070  1.00
0.00
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ATOM    335  HH2 TRP    23       55.220  51.660  36.270  1.00
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ATOM    336  CZ3 TRP    23       53.840  51.130  37.790  1.00
0.00
ATOM    337  HZ3 TRP    23       53.850  50.120  37.420  1.00
0.00
ATOM    338  CE3 TRP    23       53.230  51.460  39.070  1.00
0.00
ATOM    339  HE3 TRP    23       52.680  50.680  39.570  1.00
0.00
ATOM    340  CD2 TRP    23       53.230  52.790  39.570  1.00
0.00
ATOM    341  C   TRP    23       53.420  51.060  42.630  1.00
0.00
ATOM    342  O   TRP    23       52.770  50.010  42.820  1.00
0.00
ATOM    343  N   ALA    24       54.540  51.050  41.890  1.00
0.00
ATOM    344  H   ALA    24       54.950  51.950  41.710  1.00
0.00
ATOM    345  CA  ALA    24       55.140  49.860  41.480  1.00
0.00
ATOM    346  HA  ALA    24       54.450  49.220  40.930  1.00
0.00
ATOM    347  CB  ALA    24       56.260  50.230  40.440  1.00
0.00
ATOM    348  HB1 ALA    24       56.660  49.340  39.960  1.00
0.00
ATOM    349  HB2 ALA    24       55.950  50.880  39.620  1.00
0.00
ATOM    350  HB3 ALA    24       57.110  50.610  41.010  1.00
0.00
ATOM    351  C   ALA    24       55.700  49.050  42.630  1.00
0.00
ATOM    352  O   ALA    24       55.480  47.820  42.670  1.00
0.00
ATOM    353  N   PHE    25       56.370  49.710  43.630  1.00
0.00
ATOM    354  H   PHE    25       56.480  50.710  43.530  1.00
0.00
ATOM    355  CA  PHE    25       56.720  49.050  44.840  1.00
0.00
ATOM    356  HA  PHE    25       57.340  48.210  44.530  1.00
0.00
ATOM    357  CB  PHE    25       57.610  49.960  45.750  1.00
0.00
ATOM    358  HB1 PHE    25       57.710  49.550  46.760  1.00
0.00
ATOM    359  HB2 PHE    25       57.160  50.910  46.030  1.00
0.00
ATOM    360  CG  PHE    25       58.970  50.150  45.250  1.00
0.00
ATOM    361  CD1 PHE    25       59.210  50.950  44.150  1.00
0.00
ATOM    362  HD1 PHE    25       58.380  51.380  43.600  1.00
0.00
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ATOM 363 CE1 PHE 25 60.560 51.230 43.800 1.00
0.00
ATOM 364 HE1 PHE 25 60.710 51.720 42.850 1.00
0.00
ATOM 365 CZ PHE 25 61.560 50.690 44.490 1.00
0.00
ATOM 366 HZ PHE 25 62.610 50.790 44.260 1.00
0.00
ATOM 367 CE2 PHE 25 61.350 49.930 45.620 1.00
0.00
ATOM 368 HE2 PHE 25 62.220 49.540 46.120 1.00
0.00
ATOM 369 CD2 PHE 25 60.020 49.580 45.960 1.00
0.00
ATOM 370 HD2 PHE 25 59.830 48.900 46.770 1.00
0.00
ATOM 371 C PHE 25 55.560 48.330 45.590 1.00
0.00
ATOM 372 O PHE 25 55.630 47.180 46.010 1.00
0.00
ATOM 373 N SER 26 54.510 49.090 45.890 1.00
0.00
ATOM 374 H SER 26 54.470 50.020 45.500 1.00
0.00
ATOM 375 CA SER 26 53.330 48.550 46.650 1.00
0.00
ATOM 376 HA SER 26 53.820 48.060 47.490 1.00
0.00
ATOM 377 CB SER 26 52.450 49.660 47.140 1.00
0.00
ATOM 378 HB1 SER 26 53.090 50.370 47.670 1.00
0.00
ATOM 379 HB2 SER 26 51.710 49.320 47.860 1.00
0.00
ATOM 380 OG SER 26 51.810 50.250 45.990 1.00
0.00
ATOM 381 HG SER 26 51.120 50.850 46.280 1.00
0.00
ATOM 382 C SER 26 52.550 47.420 45.950 1.00
0.00
ATOM 383 O SER 26 52.100 46.400 46.500 1.00
0.00
ATOM 384 N ALA 27 52.460 47.540 44.650 1.00
0.00
ATOM 385 H ALA 27 52.840 48.370 44.230 1.00
0.00
ATOM 386 CA ALA 27 51.940 46.480 43.770 1.00
0.00
ATOM 387 HA ALA 27 50.930 46.180 44.030 1.00
0.00
ATOM 388 CB ALA 27 52.040 47.090 42.370 1.00
0.00
ATOM 389 HB1 ALA 27 51.450 46.470 41.700 1.00
0.00
ATOM 390 HB2 ALA 27 51.510 48.040 42.370 1.00
0.00

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ATOM    391  HB3 ALA    27      53.080  47.180  42.090  1.00
0.00
ATOM    392  C   ALA    27      52.800  45.230  43.830  1.00
0.00
ATOM    393  O   ALA    27      52.210  44.150  43.880  1.00
0.00
ATOM    394  N   ILE    28      54.120  45.390  43.890  1.00
0.00
ATOM    395  H   ILE    28      54.450  46.340  43.760  1.00
0.00
ATOM    396  CA  ILE    28      55.020  44.240  43.890  1.00
0.00
ATOM    397  HA  ILE    28      54.670  43.560  43.120  1.00
0.00
ATOM    398  CB  ILE    28      56.480  44.560  43.520  1.00
0.00
ATOM    399  HB  ILE    28      56.600  45.650  43.560  1.00
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ATOM    400  CG2 ILE    28      57.590  44.030  44.520  1.00
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ATOM    401 1HG2 ILE    28      58.590  44.350  44.260  1.00
0.00
ATOM    402 2HG2 ILE    28      57.380  44.280  45.560  1.00
0.00
ATOM    403 3HG2 ILE    28      57.590  42.940  44.480  1.00
0.00
ATOM    404  CG1 ILE    28      56.780  43.870  42.150  1.00
0.00
ATOM    405 1HG1 ILE    28      56.510  42.810  42.150  1.00
0.00
ATOM    406 2HG1 ILE    28      57.860  44.050  42.060  1.00
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ATOM    407  CD  ILE    28      56.110  44.550  40.970  1.00
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ATOM    408  HD1 ILE    28      55.080  44.180  40.910  1.00
0.00
ATOM    409  HD2 ILE    28      56.070  45.630  41.130  1.00
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ATOM    410  HD3 ILE    28      56.580  44.260  40.030  1.00
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ATOM    411  C   ILE    28      54.750  43.540  45.220  1.00
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ATOM    412  O   ILE    28      54.400  42.410  45.250  1.00
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ATOM    413  N   GLY    29      54.790  44.240  46.380  1.00
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ATOM    414  H   GLY    29      55.200  45.160  46.270  1.00
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ATOM    415  CA  GLY    29      54.440  43.720  47.680  1.00
0.00
ATOM    416  HA1 GLY    29      54.520  44.440  48.500  1.00
0.00
ATOM    417  HA2 GLY    29      55.240  43.050  47.990  1.00
0.00
ATOM    418  C   GLY    29      53.090  43.100  47.810  1.00
0.00
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ATOM    419  O   GLY    29      52.910  42.130  48.520  1.00
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ATOM    421  H   ASN    30      52.230  44.370  46.480  1.00
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ATOM    423  HA  ASN    30      50.360  42.590  47.770  1.00
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ATOM    424  CB  ASN    30      49.780  43.740  46.170  1.00
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ATOM    425  HB1 ASN    30      50.100  44.150  45.210  1.00
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ATOM    426  HB2 ASN    30      49.590  44.600  46.820  1.00
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ATOM    427  CG  ASN    30      48.550  42.930  45.950  1.00
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ATOM    428  OD1 ASN    30      48.140  42.630  44.870  1.00
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ATOM    429  ND2 ASN    30      47.700  42.730  46.980  1.00
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ATOM    430 1HD2 ASN    30      47.930  42.870  47.950  1.00
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ATOM    431 2HD2 ASN    30      46.900  42.140  46.810  1.00
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ATOM    432  C   ASN    30      50.960  41.420  46.190  1.00
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ATOM    433  O   ASN    30      50.590  40.440  46.810  1.00
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ATOM    434  N   ILE    31      51.780  41.340  45.080  1.00
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ATOM    435  H   ILE    31      52.210  42.200  44.760  1.00
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ATOM    436  CA  ILE    31      51.990  40.010  44.390  1.00
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ATOM    437  HA  ILE    31      51.090  39.410  44.550  1.00
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ATOM    438  CB  ILE    31      52.010  40.100  42.870  1.00
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ATOM    439  HB  ILE    31      52.040  39.100  42.450  1.00
0.00
ATOM    440  CG2 ILE    31      50.720  40.820  42.340  1.00
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ATOM    441 1HG2 ILE    31      50.410  40.540  41.330  1.00
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ATOM    442 2HG2 ILE    31      49.880  40.410  42.900  1.00
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ATOM    443 3HG2 ILE    31      50.710  41.890  42.540  1.00
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ATOM    444  CG1 ILE    31      53.300  40.900  42.510  1.00
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ATOM    445 1HG1 ILE    31      54.190  40.380  42.860  1.00
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ATOM    446 2HG1 ILE    31      53.220  41.920  42.880  1.00
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ATOM 447 CD ILE 31 53.530 41.050 41.030 1.00
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ATOM 448 HD1 ILE 31 54.560 41.300 40.790 1.00
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ATOM 449 HD2 ILE 31 53.210 40.140 40.530 1.00
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ATOM 450 HD3 ILE 31 52.960 41.900 40.660 1.00
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ATOM 451 C ILE 31 53.070 39.110 45.110 1.00
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ATOM 452 O ILE 31 52.960 37.920 45.120 1.00
0.00
ATOM 453 N GLU 32 54.010 39.720 45.880 1.00
0.00
ATOM 454 H GLU 32 53.950 40.720 46.020 1.00
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ATOM 455 CA GLU 32 54.980 39.000 46.760 1.00
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ATOM 456 HA GLU 32 55.580 38.300 46.170 1.00
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ATOM 457 CB GLU 32 55.940 40.070 47.440 1.00
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ATOM 458 HB1 GLU 32 56.520 39.510 48.170 1.00
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ATOM 459 HB2 GLU 32 55.460 40.890 47.990 1.00
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ATOM 460 CG GLU 32 57.040 40.670 46.560 1.00
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ATOM 461 HG1 GLU 32 56.630 41.230 45.720 1.00
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ATOM 462 HG2 GLU 32 57.670 39.880 46.170 1.00
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ATOM 463 CD GLU 32 58.010 41.620 47.200 1.00
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ATOM 464 OE1 GLU 32 57.770 42.030 48.380 1.00
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ATOM 465 OE2 GLU 32 59.050 41.980 46.620 1.00
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ATOM 466 C GLU 32 54.320 38.190 47.880 1.00
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ATOM 467 O GLU 32 54.640 37.040 48.050 1.00
0.00
ATOM 468 N GLY 33 53.210 38.790 48.360 1.00
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ATOM 469 H GLY 33 52.940 39.730 48.110 1.00
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ATOM 470 CA GLY 33 52.440 38.200 49.450 1.00
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ATOM 471 HA1 GLY 33 51.960 38.980 50.040 1.00
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ATOM 472 HA2 GLY 33 53.110 37.650 50.110 1.00
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ATOM 473 C GLY 33 51.420 37.250 48.820 1.00
0.00
ATOM 474 O GLY 33 51.160 36.150 49.420 1.00
0.00

ATOM 475 N GLN 34 50.810 37.600 47.690 1.00
0.00
ATOM 476 H GLN 34 50.810 38.570 47.420 1.00
0.00
ATOM 477 CA GLN 34 49.760 36.800 47.100 1.00
0.00
ATOM 478 HA GLN 34 49.030 36.440 47.830 1.00
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ATOM 479 CB GLN 34 48.960 37.630 46.090 1.00
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ATOM 480 HB1 GLN 34 48.530 36.970 45.340 1.00
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ATOM 481 HB2 GLN 34 49.540 38.450 45.660 1.00
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ATOM 482 CG GLN 34 47.790 38.270 46.760 1.00
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ATOM 483 HG1 GLN 34 48.140 38.860 47.600 1.00
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ATOM 484 HG2 GLN 34 47.270 37.430 47.220 1.00
0.00
ATOM 485 CD GLN 34 46.840 38.940 45.750 1.00
0.00
ATOM 486 OE1 GLN 34 46.940 38.810 44.540 1.00
0.00
ATOM 487 NE2 GLN 34 45.880 39.680 46.170 1.00
0.00
ATOM 488 1HE2 GLN 34 45.870 39.820 47.170 1.00
0.00
ATOM 489 2HE2 GLN 34 45.440 40.350 45.550 1.00
0.00
ATOM 490 C GLN 34 50.350 35.500 46.580 1.00
0.00
ATOM 491 O GLN 34 49.590 34.530 46.560 1.00
0.00
ATOM 492 N TRP 35 51.580 35.460 46.130 1.00
0.00
ATOM 493 H TRP 35 51.990 36.380 46.040 1.00
0.00
ATOM 494 CA TRP 35 52.390 34.310 45.720 1.00
0.00
ATOM 495 HA TRP 35 51.800 33.700 45.040 1.00
0.00
ATOM 496 CB TRP 35 53.660 34.840 45.180 1.00
0.00
ATOM 497 HB1 TRP 35 54.290 35.230 45.980 1.00
0.00
ATOM 498 HB2 TRP 35 53.460 35.640 44.460 1.00
0.00
ATOM 499 CG TRP 35 54.440 33.970 44.350 1.00
0.00
ATOM 500 CD1 TRP 35 55.670 33.470 44.670 1.00
0.00
ATOM 501 HD1 TRP 35 56.140 33.740 45.610 1.00
0.00
ATOM 502 NE1 TRP 35 56.070 32.510 43.690 1.00
0.00

ATOM 503 HE1 TRP 35 56.990 32.100 43.600 1.00
0.00
ATOM 504 CE2 TRP 35 55.120 32.510 42.620 1.00
0.00
ATOM 505 CZ2 TRP 35 55.060 31.760 41.400 1.00
0.00
ATOM 506 HZ2 TRP 35 55.700 30.950 41.120 1.00
0.00
ATOM 507 CH2 TRP 35 53.910 32.010 40.590 1.00
0.00
ATOM 508 HH2 TRP 35 53.740 31.430 39.700 1.00
0.00
ATOM 509 CZ3 TRP 35 52.880 32.830 41.040 1.00
0.00
ATOM 510 HZ3 TRP 35 52.060 33.040 40.370 1.00
0.00
ATOM 511 CE3 TRP 35 52.910 33.470 42.270 1.00
0.00
ATOM 512 HE3 TRP 35 52.060 34.110 42.450 1.00
0.00
ATOM 513 CD2 TRP 35 54.020 33.360 43.060 1.00
0.00
ATOM 514 C TRP 35 52.490 33.340 46.910 1.00
0.00
ATOM 515 O TRP 35 52.280 32.130 46.760 1.00
0.00
ATOM 516 N ALA 36 52.820 33.830 48.110 1.00
0.00
ATOM 517 H ALA 36 53.140 34.780 48.210 1.00
0.00
ATOM 518 CA ALA 36 52.960 33.010 49.380 1.00
0.00
ATOM 519 HA ALA 36 53.430 32.080 49.060 1.00
0.00
ATOM 520 CB ALA 36 53.820 33.680 50.450 1.00
0.00
ATOM 521 HB1 ALA 36 53.430 34.560 50.960 1.00
0.00
ATOM 522 HB2 ALA 36 54.110 32.970 51.230 1.00
0.00
ATOM 523 HB3 ALA 36 54.680 34.190 50.020 1.00
0.00
ATOM 524 C ALA 36 51.580 32.550 49.930 1.00
0.00
ATOM 525 O ALA 36 51.410 31.430 50.480 1.00
0.00
ATOM 526 N ALA 37 50.470 33.330 49.680 1.00
0.00
ATOM 527 H ALA 37 50.530 34.300 49.380 1.00
0.00
ATOM 528 CA ALA 37 49.090 32.960 49.950 1.00
0.00
ATOM 529 HA ALA 37 49.050 32.530 50.960 1.00
0.00
ATOM 530 CB ALA 37 48.310 34.240 49.990 1.00
0.00

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ATOM    531  HB1 ALA    37      48.130  34.580  48.970  1.00
0.00
ATOM    532  HB2 ALA    37      47.320  34.100  50.410  1.00
0.00
ATOM    533  HB3 ALA    37      48.680  35.110  50.530  1.00
0.00
ATOM    534  C   ALA    37      48.470  31.890  49.010  1.00
0.00
ATOM    535  O   ALA    37      47.550  31.210  49.410  1.00
0.00
ATOM    536  N   SER    38      48.940  31.740  47.780  1.00
0.00
ATOM    537  H   SER    38      49.540  32.510  47.490  1.00
0.00
ATOM    538  CA  SER    38      48.720  30.600  46.910  1.00
0.00
ATOM    539  HA  SER    38      47.760  30.210  47.230  1.00
0.00
ATOM    540  CB  SER    38      48.570  31.130  45.510  1.00
0.00
ATOM    541  HB1 SER    38      47.700  31.780  45.460  1.00
0.00
ATOM    542  HB2 SER    38      48.470  30.250  44.880  1.00
0.00
ATOM    543  OG  SER    38      49.660  31.800  45.020  1.00
0.00
ATOM    544  HG  SER    38      49.350  32.670  44.740  1.00
0.00
ATOM    545  C   SER    38      49.710  29.440  47.120  1.00
0.00
ATOM    546  O   SER    38      49.700  28.490  46.360  1.00
0.00
ATOM    547  N   GLY    39      50.420  29.410  48.230  1.00
0.00
ATOM    548  H   GLY    39      50.400  30.210  48.840  1.00
0.00
ATOM    549  CA  GLY    39      51.250  28.280  48.690  1.00
0.00
ATOM    550  HA1 GLY    39      50.810  27.360  48.300  1.00
0.00
ATOM    551  HA2 GLY    39      51.160  28.250  49.770  1.00
0.00
ATOM    552  C   GLY    39      52.670  28.260  48.260  1.00
0.00
ATOM    553  O   GLY    39      53.380  27.320  48.570  1.00
0.00
ATOM    554  N   HIP    40      53.140  29.370  47.700  1.00
0.00
ATOM    555  H   HIP    40      52.490  30.140  47.680  1.00
0.00
ATOM    556  CA  HIP    40      54.440  29.450  46.950  1.00
0.00
ATOM    557  HA  HIP    40      54.770  28.500  46.540  1.00
0.00
ATOM    558  CB  HIP    40      54.400  30.390  45.720  1.00
0.00
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ATOM 559 HB1 HIP 40 55.430 30.400 45.360 1.00
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ATOM 560 HB2 HIP 40 54.320 31.330 46.260 1.00
0.00
ATOM 561 CG HIP 40 53.410 29.970 44.590 1.00
0.00
ATOM 562 ND1 HIP 40 52.070 30.330 44.440 1.00
0.00
ATOM 563 HD1 HIP 40 51.530 30.680 45.220 1.00
0.00
ATOM 564 CE1 HIP 40 51.710 30.040 43.160 1.00
0.00
ATOM 565 HE1 HIP 40 50.750 30.270 42.720 1.00
0.00
ATOM 566 NE2 HIP 40 52.740 29.430 42.530 1.00
0.00
ATOM 567 HE2 HIP 40 52.690 29.090 41.580 1.00
0.00
ATOM 568 CD2 HIP 40 53.830 29.450 43.370 1.00
0.00
ATOM 569 HD2 HIP 40 54.810 29.140 43.050 1.00
0.00
ATOM 570 C HIP 40 55.620 29.920 47.910 1.00
0.00
ATOM 571 O HIP 40 55.370 30.580 48.920 1.00
0.00
ATOM 572 N SER 41 56.900 29.560 47.530 1.00
0.00
ATOM 573 H SER 41 56.930 28.970 46.710 1.00
0.00
ATOM 574 CA SER 41 58.080 29.850 48.360 1.00
0.00
ATOM 575 HA SER 41 57.890 29.620 49.410 1.00
0.00
ATOM 576 CB SER 41 59.310 29.030 47.840 1.00
0.00
ATOM 577 HB1 SER 41 60.220 29.550 48.130 1.00
0.00
ATOM 578 HB2 SER 41 59.300 29.080 46.760 1.00
0.00
ATOM 579 OG SER 41 59.270 27.740 48.350 1.00
0.00
ATOM 580 HG SER 41 59.330 27.170 47.590 1.00
0.00
ATOM 581 C SER 41 58.370 31.330 48.170 1.00
0.00
ATOM 582 O SER 41 58.600 31.780 47.030 1.00
0.00
ATOM 583 N LEU 42 58.400 32.150 49.280 1.00
0.00
ATOM 584 H LEU 42 58.480 31.650 50.150 1.00
0.00
ATOM 585 CA LEU 42 58.390 33.660 49.320 1.00
0.00
ATOM 586 HA LEU 42 57.510 34.040 48.810 1.00
0.00

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ATOM    587  CB  LEU    42      58.280  34.220  50.750  1.00
0.00
ATOM    588  HB1 LEU    42      59.110  33.800  51.310  1.00
0.00
ATOM    589  HB2 LEU    42      57.350  33.830  51.160  1.00
0.00
ATOM    590  CG  LEU    42      58.300  35.780  50.990  1.00
0.00
ATOM    591  HG  LEU    42      57.990  35.940  52.020  1.00
0.00
ATOM    592  CD1 LEU    42      59.780  36.240  50.970  1.00
0.00
ATOM    593 1HD1 LEU    42      60.190  36.190  49.960  1.00
0.00
ATOM    594 2HD1 LEU    42      59.880  37.220  51.420  1.00
0.00
ATOM    595 3HD1 LEU    42      60.350  35.580  51.630  1.00
0.00
ATOM    596  CD2 LEU    42      57.400  36.550  50.030  1.00
0.00
ATOM    597 1HD2 LEU    42      56.600  35.920  49.620  1.00
0.00
ATOM    598 2HD2 LEU    42      57.040  37.470  50.480  1.00
0.00
ATOM    599 3HD2 LEU    42      57.940  36.980  49.180  1.00
0.00
ATOM    600  C   LEU    42      59.670  34.150  48.640  1.00
0.00
ATOM    601  O   LEU    42      60.790  33.770  48.980  1.00
0.00
ATOM    602  N   VAL    43      59.550  35.090  47.700  1.00
0.00
ATOM    603  H   VAL    43      58.630  35.440  47.510  1.00
0.00
ATOM    604  CA  VAL    43      60.670  35.770  46.970  1.00
0.00
ATOM    605  HA  VAL    43      61.470  35.750  47.710  1.00
0.00
ATOM    606  CB  VAL    43      61.080  34.860  45.780  1.00
0.00
ATOM    607  HB  VAL    43      61.280  33.880  46.210  1.00
0.00
ATOM    608  CG1 VAL    43      60.060  34.920  44.700  1.00
0.00
ATOM    609 1HG1 VAL    43      59.970  35.920  44.280  1.00
0.00
ATOM    610 2HG1 VAL    43      60.260  34.210  43.900  1.00
0.00
ATOM    611 3HG1 VAL    43      59.080  34.700  45.130  1.00
0.00
ATOM    612  CG2 VAL    43      62.420  35.210  45.180  1.00
0.00
ATOM    613 1HG2 VAL    43      62.470  36.210  44.750  1.00
0.00
ATOM    614 2HG2 VAL    43      63.120  35.140  46.010  1.00
0.00
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ATOM    615 3HG2 VAL    43      62.690  34.420  44.470  1.00
0.00
ATOM    616  C   VAL    43      60.390  37.240  46.640  1.00
0.00
ATOM    617  O   VAL    43      59.220  37.590  46.400  1.00
0.00
ATOM    618  N   SER    44      61.440  38.040  46.580  1.00
0.00
ATOM    619  H   SER    44      62.320  37.680  46.920  1.00
0.00
ATOM    620  CA  SER    44      61.490  39.450  46.210  1.00
0.00
ATOM    621  HA  SER    44      60.610  39.860  46.710  1.00
0.00
ATOM    622  CB  SER    44      62.690  40.220  46.720  1.00
0.00
ATOM    623  HB1 SER    44      62.540  41.260  46.440  1.00
0.00
ATOM    624  HB2 SER    44      63.570  39.810  46.210  1.00
0.00
ATOM    625  OG  SER    44      62.840  40.040  48.120  1.00
0.00
ATOM    626  HG  SER    44      63.590  40.590  48.330  1.00
0.00
ATOM    627  C   SER    44      61.360  39.700  44.720  1.00
0.00
ATOM    628  O   SER    44      62.100  39.060  43.920  1.00
0.00
ATOM    629  N   LEU    45      60.500  40.620  44.310  1.00
0.00
ATOM    630  H   LEU    45      59.990  41.190  44.970  1.00
0.00
ATOM    631  CA  LEU    45      60.030  40.720  42.910  1.00
0.00
ATOM    632  HA  LEU    45      60.590  40.050  42.260  1.00
0.00
ATOM    633  CB  LEU    45      58.590  40.370  42.870  1.00
0.00
ATOM    634  HB1 LEU    45      58.190  40.490  41.860  1.00
0.00
ATOM    635  HB2 LEU    45      58.000  41.070  43.470  1.00
0.00
ATOM    636  CG  LEU    45      58.270  38.930  43.400  1.00
0.00
ATOM    637  HG  LEU    45      58.660  38.810  44.410  1.00
0.00
ATOM    638  CD1 LEU    45      56.700  38.860  43.460  1.00
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ATOM    639 1HD1 LEU    45      56.280  39.050  42.470  1.00
0.00
ATOM    640 2HD1 LEU    45      56.380  37.880  43.800  1.00
0.00
ATOM    641 3HD1 LEU    45      56.370  39.620  44.170  1.00
0.00
ATOM    642  CD2 LEU    45      58.890  37.880  42.370  1.00
0.00
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ATOM    643 1HD2 LEU    45      58.520  36.880  42.560  1.00
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ATOM    644 2HD2 LEU    45      58.790  38.140  41.310  1.00
0.00
ATOM    645 3HD2 LEU    45      59.960  37.910  42.580  1.00
0.00
ATOM    646  C   LEU    45      60.410  42.130  42.420  1.00
0.00
ATOM    647  O   LEU    45      60.400  43.020  43.290  1.00
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ATOM    648  N   SER    46      60.780  42.310  41.190  1.00
0.00
ATOM    649  H   SER    46      60.780  41.490  40.600  1.00
0.00
ATOM    650  CA  SER    46      61.420  43.520  40.730  1.00
0.00
ATOM    651  HA  SER    46      61.890  44.090  41.530  1.00
0.00
ATOM    652  CB  SER    46      62.390  43.200  39.680  1.00
0.00
ATOM    653  HB1 SER    46      61.880  42.800  38.810  1.00
0.00
ATOM    654  HB2 SER    46      63.080  42.410  39.990  1.00
0.00
ATOM    655  OG  SER    46      63.000  44.430  39.370  1.00
0.00
ATOM    656  HG  SER    46      63.940  44.260  39.300  1.00
0.00
ATOM    657  C   SER    46      60.380  44.460  40.100  1.00
0.00
ATOM    658  O   SER    46      59.840  44.300  38.980  1.00
0.00
ATOM    659  N   GLU    47      60.280  45.600  40.820  1.00
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ATOM    660  H   GLU    47      60.850  45.550  41.650  1.00
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ATOM    661  CA  GLU    47      59.630  46.790  40.390  1.00
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ATOM    662  HA  GLU    47      58.890  46.460  39.660  1.00
0.00
ATOM    663  CB  GLU    47      58.900  47.410  41.590  1.00
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ATOM    664  HB1 GLU    47      58.300  46.590  41.980  1.00
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ATOM    665  HB2 GLU    47      58.330  48.260  41.220  1.00
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ATOM    666  CG  GLU    47      59.950  47.890  42.610  1.00
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ATOM    667  HG1 GLU    47      59.350  48.610  43.170  1.00
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ATOM    668  HG2 GLU    47      60.710  48.400  42.020  1.00
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ATOM    669  CD  GLU    47      60.580  46.850  43.510  1.00
0.00
ATOM    670  OE1 GLU    47      60.040  46.520  44.650  1.00
0.00
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ATOM 671 OE2 GLU 47 61.650 46.460 43.120 1.00
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ATOM 672 C GLU 47 60.440 47.780 39.540 1.00
0.00
ATOM 673 O GLU 47 60.020 48.660 38.830 1.00
0.00
ATOM 674 N GLN 48 61.700 47.420 39.420 1.00
0.00
ATOM 675 H GLN 48 61.990 46.580 39.900 1.00
0.00
ATOM 676 CA GLN 48 62.660 48.000 38.490 1.00
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ATOM 677 HA GLN 48 62.620 49.090 38.520 1.00
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ATOM 678 CB GLN 48 64.170 47.620 38.760 1.00
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ATOM 679 HB1 GLN 48 64.300 46.550 38.590 1.00
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ATOM 680 HB2 GLN 48 64.300 47.850 39.820 1.00
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ATOM 681 CG GLN 48 65.270 48.330 37.850 1.00
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ATOM 682 HG1 GLN 48 65.130 48.070 36.810 1.00
0.00
ATOM 683 HG2 GLN 48 66.240 47.940 38.180 1.00
0.00
ATOM 684 CD GLN 48 65.280 49.830 38.090 1.00
0.00
ATOM 685 OE1 GLN 48 66.120 50.390 38.770 1.00
0.00
ATOM 686 NE2 GLN 48 64.440 50.600 37.420 1.00
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ATOM 687 1HE2 GLN 48 63.970 50.140 36.640 1.00
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ATOM 688 2HE2 GLN 48 64.380 51.570 37.710 1.00
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ATOM 689 C GLN 48 62.170 47.700 37.020 1.00
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ATOM 690 O GLN 48 62.200 48.630 36.200 1.00
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ATOM 691 N MET 49 61.580 46.540 36.790 1.00
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ATOM 692 H MET 49 61.470 45.870 37.540 1.00
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ATOM 693 CA MET 49 61.010 46.160 35.510 1.00
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ATOM 694 HA MET 49 61.840 46.250 34.800 1.00
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ATOM 695 CB MET 49 60.520 44.740 35.720 1.00
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ATOM 696 HB1 MET 49 59.640 44.790 36.360 1.00
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ATOM 697 HB2 MET 49 61.270 44.150 36.260 1.00
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ATOM 698 CG MET 49 60.140 44.040 34.360 1.00
0.00

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ATOM    699  HG1 MET    49      61.090  43.750  33.910  1.00
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ATOM    700  HG2 MET    49      59.630  44.790  33.760  1.00
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ATOM    701  SD  MET    49      59.140  42.600  34.550  1.00
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ATOM    702  CE  MET    49      58.820  41.990  32.930  1.00
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ATOM    703  HE1 MET    49      59.740  41.590  32.520  1.00
0.00
ATOM    704  HE2 MET    49      58.160  41.130  32.810  1.00
0.00
ATOM    705  HE3 MET    49      58.350  42.760  32.320  1.00
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ATOM    706  C   MET    49      59.800  47.040  35.050  1.00
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ATOM    707  O   MET    49      59.670  47.240  33.820  1.00
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ATOM    708  N   LEU    50      58.950  47.460  36.040  1.00
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ATOM    709  H   LEU    50      59.220  47.310  37.000  1.00
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ATOM    710  CA  LEU    50      57.880  48.360  35.750  1.00
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ATOM    711  HA  LEU    50      57.390  48.080  34.810  1.00
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ATOM    712  CB  LEU    50      56.840  48.270  36.890  1.00
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ATOM    713  HB1 LEU    50      55.990  48.780  36.440  1.00
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ATOM    714  HB2 LEU    50      57.190  48.810  37.770  1.00
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ATOM    715  CG  LEU    50      56.410  46.840  37.190  1.00
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ATOM    716  HG  LEU    50      57.200  46.260  37.670  1.00
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ATOM    717  CD1 LEU    50      55.400  46.960  38.290  1.00
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ATOM    718 1HD1 LEU    50      55.060  45.960  38.560  1.00
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ATOM    719 2HD1 LEU    50      55.750  47.420  39.210  1.00
0.00
ATOM    720 3HD1 LEU    50      54.540  47.450  37.840  1.00
0.00
ATOM    721  CD2 LEU    50      55.730  46.080  35.930  1.00
0.00
ATOM    722 1HD2 LEU    50      54.830  46.630  35.650  1.00
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ATOM    723 2HD2 LEU    50      56.470  46.030  35.130  1.00
0.00
ATOM    724 3HD2 LEU    50      55.350  45.110  36.240  1.00
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ATOM    725  C   LEU    50      58.370  49.790  35.500  1.00
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ATOM    726  O   LEU    50      57.640  50.640  35.020  1.00
0.00
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ATOM 727 N VAL 51 59.740 50.010 35.710 1.00
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ATOM 728 H VAL 51 60.370 49.340 36.120 1.00
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ATOM 729 CA VAL 51 60.350 51.410 35.530 1.00
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ATOM 730 HA VAL 51 59.540 52.130 35.410 1.00
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ATOM 731 CB VAL 51 61.100 51.730 36.840 1.00
0.00
ATOM 732 HB VAL 51 61.730 50.910 37.170 1.00
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ATOM 733 CG1 VAL 51 62.030 52.990 36.740 1.00
0.00
ATOM 734 1HG1 VAL 51 62.940 52.800 36.170 1.00
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ATOM 735 2HG1 VAL 51 61.520 53.900 36.420 1.00
0.00
ATOM 736 3HG1 VAL 51 62.480 53.180 37.720 1.00
0.00
ATOM 737 CG2 VAL 51 60.070 52.030 37.900 1.00
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ATOM 738 1HG2 VAL 51 60.430 52.820 38.570 1.00
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ATOM 739 2HG2 VAL 51 59.080 52.270 37.510 1.00
0.00
ATOM 740 3HG2 VAL 51 59.950 51.110 38.470 1.00
0.00
ATOM 741 C VAL 51 61.320 51.510 34.300 1.00
0.00
ATOM 742 O VAL 51 61.600 52.610 33.780 1.00
0.00
ATOM 743 N SER 52 61.860 50.380 33.870 1.00
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ATOM 744 H SER 52 61.770 49.510 34.370 1.00
0.00
ATOM 745 CA SER 52 62.820 50.390 32.740 1.00
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ATOM 746 HA SER 52 62.860 51.420 32.380 1.00
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ATOM 747 CB SER 52 64.210 50.050 33.300 1.00
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ATOM 748 HB1 SER 52 64.360 50.780 34.100 1.00
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ATOM 749 HB2 SER 52 64.990 50.080 32.540 1.00
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ATOM 750 OG SER 52 64.230 48.790 33.950 1.00
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ATOM 751 HG SER 52 65.130 48.470 34.030 1.00
0.00
ATOM 752 C SER 52 62.430 49.520 31.550 1.00
0.00
ATOM 753 O SER 52 62.790 49.860 30.390 1.00
0.00
ATOM 754 N CYX 53 61.850 48.380 31.720 1.00
0.00

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ATOM    755  H   CYX    53       61.750  48.020  32.660  1.00
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ATOM    756  CA  CYX    53       61.530  47.420  30.680  1.00
0.00
ATOM    757  HA  CYX    53       62.340  47.340  29.960  1.00
0.00
ATOM    758  CB  CYX    53       61.470  45.950  31.300  1.00
0.00
ATOM    759  HB1 CYX    53       60.630  45.860  31.980  1.00
0.00
ATOM    760  HB2 CYX    53       62.350  45.720  31.910  1.00
0.00
ATOM    761  SG  CYX    53       61.300  44.780  29.970  1.00
0.00
ATOM    762  C   CYX    53       60.250  47.850  29.950  1.00
0.00
ATOM    763  O   CYX    53       60.110  47.680  28.720  1.00
0.00
ATOM    764  N   ASP    54       59.390  48.590  30.690  1.00
0.00
ATOM    765  H   ASP    54       59.590  48.520  31.680  1.00
0.00
ATOM    766  CA  ASP    54       58.280  49.370  30.270  1.00
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ATOM    767  HA  ASP    54       57.420  48.710  30.140  1.00
0.00
ATOM    768  CB  ASP    54       58.040  50.240  31.510  1.00
0.00
ATOM    769  HB1 ASP    54       58.910  50.600  32.050  1.00
0.00
ATOM    770  HB2 ASP    54       57.420  49.700  32.230  1.00
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ATOM    771  CG  ASP    54       57.140  51.460  31.180  1.00
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ATOM    772  OD1 ASP    54       57.610  52.650  31.350  1.00
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ATOM    773  OD2 ASP    54       56.060  51.230  30.550  1.00
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ATOM    774  C   ASP    54       58.550  50.090  29.000  1.00
0.00
ATOM    775  O   ASP    54       59.530  50.900  28.920  1.00
0.00
ATOM    776  N   ASN    55       57.560  50.030  28.130  1.00
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ATOM    777  H   ASN    55       56.820  49.380  28.360  1.00
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ATOM    778  CA  ASN    55       57.370  50.680  26.840  1.00
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ATOM    779  HA  ASN    55       58.280  51.180  26.530  1.00
0.00
ATOM    780  CB  ASN    55       57.210  49.560  25.760  1.00
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ATOM    781  HB1 ASN    55       56.260  49.030  25.840  1.00
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ATOM    782  HB2 ASN    55       58.030  48.850  25.780  1.00
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ATOM 784 OD1 ASN 55 56.330 49.870 23.610 1.00
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ATOM 785 ND2 ASN 55 58.440 50.650 23.850 1.00
0.00
ATOM 786 1HD2 ASN 55 59.300 50.690 24.380 1.00
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ATOM 787 2HD2 ASN 55 58.480 51.000 22.900 1.00
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ATOM 788 C ASN 55 56.200 51.750 26.690 1.00
0.00
ATOM 789 O ASN 55 55.920 52.130 25.590 1.00
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ATOM 790 N VAL 56 55.580 52.150 27.780 1.00
0.00
ATOM 791 H VAL 56 55.800 51.660 28.630 1.00
0.00
ATOM 792 CA VAL 56 54.420 53.140 27.780 1.00
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ATOM 793 HA VAL 56 54.530 53.730 26.870 1.00
0.00
ATOM 794 CB VAL 56 53.010 52.510 27.620 1.00
0.00
ATOM 795 HB VAL 56 52.260 53.290 27.720 1.00
0.00
ATOM 796 CG1 VAL 56 52.810 51.880 26.270 1.00
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ATOM 797 1HG1 VAL 56 52.860 52.670 25.520 1.00
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ATOM 798 2HG1 VAL 56 53.560 51.100 26.130 1.00
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ATOM 799 3HG1 VAL 56 51.800 51.480 26.240 1.00
0.00
ATOM 800 CG2 VAL 56 52.610 51.560 28.730 1.00
0.00
ATOM 801 1HG2 VAL 56 52.730 52.120 29.660 1.00
0.00
ATOM 802 2HG2 VAL 56 51.570 51.250 28.620 1.00
0.00
ATOM 803 3HG2 VAL 56 53.290 50.720 28.710 1.00
0.00
ATOM 804 C VAL 56 54.370 54.110 29.010 1.00
0.00
ATOM 805 O VAL 56 53.850 55.200 28.870 1.00
0.00
ATOM 806 N ASH 57 54.830 53.740 30.190 1.00
0.00
ATOM 807 H ASH 57 55.370 52.880 30.240 1.00
0.00
ATOM 808 CA ASH 57 54.560 54.440 31.430 1.00
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ATOM 809 HA ASH 57 53.680 55.080 31.390 1.00
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ATOM 810 CB ASH 57 54.390 53.350 32.570 1.00
0.00

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ATOM 812 HB2 ASH 57 53.980 52.410 32.200 1.00
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ATOM 813 CG ASH 57 53.470 53.710 33.790 1.00
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ATOM 814 OD1 ASH 57 53.430 54.800 34.390 1.00
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ATOM 815 OD2 ASH 57 52.530 52.770 33.960 1.00
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ATOM 816 HD2 ASH 57 51.960 52.910 34.720 1.00
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ATOM 817 C ASH 57 55.710 55.480 31.880 1.00
0.00
ATOM 818 O ASH 57 56.670 55.720 31.140 1.00
0.00
ATOM 819 N GLU 58 55.590 56.110 33.080 1.00
0.00
ATOM 820 H GLU 58 54.780 55.960 33.660 1.00
0.00
ATOM 821 CA GLU 58 56.550 57.100 33.480 1.00
0.00
ATOM 822 HA GLU 58 57.500 56.820 33.010 1.00
0.00
ATOM 823 CB GLU 58 56.070 58.420 32.870 1.00
0.00
ATOM 824 HB1 GLU 58 55.180 58.810 33.370 1.00
0.00
ATOM 825 HB2 GLU 58 55.740 58.210 31.850 1.00
0.00
ATOM 826 CG GLU 58 57.020 59.620 32.720 1.00
0.00
ATOM 827 HG1 GLU 58 57.820 59.420 32.010 1.00
0.00
ATOM 828 HG2 GLU 58 57.480 59.820 33.690 1.00
0.00
ATOM 829 CD GLU 58 56.350 60.950 32.180 1.00
0.00
ATOM 830 OE1 GLU 58 56.400 61.080 30.920 1.00
0.00
ATOM 831 OE2 GLU 58 55.820 61.870 32.910 1.00
0.00
ATOM 832 C GLU 58 56.880 57.210 34.960 1.00
0.00
ATOM 833 O GLU 58 56.800 58.240 35.610 1.00
0.00
ATOM 834 N GLY 59 57.360 56.110 35.620 1.00
0.00
ATOM 835 H GLY 59 57.390 55.290 35.030 1.00
0.00
ATOM 836 CA GLY 59 57.630 55.860 37.040 1.00
0.00
ATOM 837 HA1 GLY 59 58.000 54.840 37.190 1.00
0.00
ATOM 838 HA2 GLY 59 56.680 55.930 37.570 1.00
0.00

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ATOM    839  C   GLY    59      58.670  56.750  37.840  1.00
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ATOM    840  O   GLY    59      58.680  56.710  39.070  1.00
0.00
ATOM    841  N   CYX    60      59.550  57.550  37.160  1.00
0.00
ATOM    842  H   CYX    60      59.520  57.610  36.150  1.00
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ATOM    843  CA  CYX    60      60.350  58.530  37.820  1.00
0.00
ATOM    844  HA  CYX    60      60.640  58.180  38.810  1.00
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ATOM    845  CB  CYX    60      61.610  58.660  36.980  1.00
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ATOM    846  HB1 CYX    60      62.210  59.420  37.470  1.00
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ATOM    847  HB2 CYX    60      61.360  58.980  35.970  1.00
0.00
ATOM    848  SG  CYX    60      62.570  57.050  36.780  1.00
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ATOM    849  C   CYX    60      59.600  59.890  38.030  1.00
0.00
ATOM    850  O   CYX    60      59.460  60.290  39.210  1.00
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ATOM    851  N   ASN    61      59.080  60.590  37.030  1.00
0.00
ATOM    852  H   ASN    61      59.100  60.150  36.120  1.00
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ATOM    853  CA  ASN    61      58.240  61.800  37.190  1.00
0.00
ATOM    854  HA  ASN    61      58.920  62.520  37.630  1.00
0.00
ATOM    855  CB  ASN    61      57.870  62.410  35.800  1.00
0.00
ATOM    856  HB1 ASN    61      57.210  61.750  35.230  1.00
0.00
ATOM    857  HB2 ASN    61      58.810  62.540  35.260  1.00
0.00
ATOM    858  CG  ASN    61      57.120  63.690  35.960  1.00
0.00
ATOM    859  OD1 ASN    61      57.230  64.530  36.840  1.00
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ATOM    860  ND2 ASN    61      56.230  64.000  35.040  1.00
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ATOM    861 1HD2 ASN    61      56.180  63.440  34.200  1.00
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ATOM    862 2HD2 ASN    61      55.750  64.880  35.140  1.00
0.00
ATOM    863  C   ASN    61      56.980  61.510  38.050  1.00
0.00
ATOM    864  O   ASN    61      56.690  62.170  38.990  1.00
0.00
ATOM    865  N   GLY    62      56.300  60.360  37.790  1.00
0.00
ATOM    866  H   GLY    62      56.530  59.950  36.900  1.00
0.00
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ATOM    867  CA  GLY    62      55.150  59.850  38.520  1.00
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ATOM    868  HA1 GLY    62      54.240  60.390  38.280  1.00
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ATOM    869  HA2 GLY    62      55.470  59.940  39.560  1.00
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ATOM    870  C   GLY    62      54.850  58.400  38.130  1.00
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ATOM    871  O   GLY    62      55.300  57.450  38.680  1.00
0.00
ATOM    872  N   GLY    63      54.110  58.410  37.050  1.00
0.00
ATOM    873  H   GLY    63      53.800  59.310  36.690  1.00
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ATOM    874  CA  GLY    63      53.640  57.210  36.390  1.00
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ATOM    875  HA1 GLY    63      54.400  56.430  36.450  1.00
0.00
ATOM    876  HA2 GLY    63      53.480  57.430  35.340  1.00
0.00
ATOM    877  C   GLY    63      52.350  56.700  37.110  1.00
0.00
ATOM    878  O   GLY    63      51.820  57.330  38.020  1.00
0.00
ATOM    879  N   LEU    64      51.800  55.670  36.500  1.00
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ATOM    880  H   LEU    64      52.340  55.220  35.770  1.00
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ATOM    881  CA  LEU    64      50.450  55.170  36.660  1.00
0.00
ATOM    882  HA  LEU    64      50.040  55.500  37.610  1.00
0.00
ATOM    883  CB  LEU    64      49.630  55.750  35.500  1.00
0.00
ATOM    884  HB1 LEU    64      48.850  55.030  35.280  1.00
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ATOM    885  HB2 LEU    64      50.320  55.760  34.660  1.00
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ATOM    886  CG  LEU    64      48.970  57.170  35.610  1.00
0.00
ATOM    887  HG  LEU    64      49.710  57.920  35.900  1.00
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ATOM    888  CD1 LEU    64      48.520  57.520  34.140  1.00
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ATOM    889 1HD1 LEU    64      47.870  58.390  34.140  1.00
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ATOM    890 2HD1 LEU    64      49.400  57.730  33.540  1.00
0.00
ATOM    891 3HD1 LEU    64      48.030  56.640  33.730  1.00
0.00
ATOM    892  CD2 LEU    64      47.830  57.270  36.570  1.00
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ATOM    893 1HD2 LEU    64      48.140  57.380  37.610  1.00
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ATOM    894 2HD2 LEU    64      47.330  58.220  36.420  1.00
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ATOM    895 3HD2 LEU    64      47.120  56.450  36.470  1.00
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ATOM    896  C   LEU    64      50.510  53.620  36.800  1.00
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ATOM    897  O   LEU    64      50.930  52.990  35.840  1.00
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ATOM    898  N   MET    65      49.950  53.130  37.890  1.00
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ATOM    899  H   MET    65      49.780  53.830  38.600  1.00
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ATOM    900  CA  MET    65      49.790  51.670  38.210  1.00
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ATOM    901  HA  MET    65      50.750  51.190  38.410  1.00
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ATOM    902  CB  MET    65      48.960  51.560  39.490  1.00
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ATOM    903  HB1 MET    65      47.890  51.670  39.330  1.00
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ATOM    904  HB2 MET    65      49.300  52.230  40.280  1.00
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ATOM    905  CG  MET    65      49.120  50.200  40.150  1.00
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ATOM    906  HG1 MET    65      48.720  50.250  41.160  1.00
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ATOM    907  HG2 MET    65      50.190  50.040  40.290  1.00
0.00
ATOM    908  SD  MET    65      48.390  48.670  39.470  1.00
0.00
ATOM    909  CE  MET    65      46.580  48.950  39.650  1.00
0.00
ATOM    910  HE1 MET    65      46.180  49.070  40.650  1.00
0.00
ATOM    911  HE2 MET    65      46.380  49.900  39.170  1.00
0.00
ATOM    912  HE3 MET    65      45.990  48.170  39.150  1.00
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ATOM    913  C   MET    65      49.200  50.830  37.000  1.00
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ATOM    914  O   MET    65      49.910  49.990  36.460  1.00
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ATOM    915  N   ASP    66      47.950  51.080  36.630  1.00
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ATOM    916  H   ASP    66      47.490  51.900  36.990  1.00
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ATOM    917  CA  ASP    66      47.210  50.160  35.820  1.00
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ATOM    918  HA  ASP    66      47.520  49.160  36.120  1.00
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ATOM    919  CB  ASP    66      45.670  50.190  36.100  1.00
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ATOM    920  HB1 ASP    66      45.520  49.890  37.140  1.00
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ATOM    921  HB2 ASP    66      45.260  49.440  35.430  1.00
0.00
ATOM    922  CG  ASP    66      44.920  51.480  35.820  1.00
0.00
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ATOM    923  OD1 ASP    66      43.750  51.420  35.370  1.00
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ATOM    924  OD2 ASP    66      45.570  52.560  35.820  1.00
0.00
ATOM    925  C   ASP    66      47.500  50.270  34.320  1.00
0.00
ATOM    926  O   ASP    66      47.310  49.320  33.610  1.00
0.00
ATOM    927  N   GLN    67      48.160  51.360  33.930  1.00
0.00
ATOM    928  H   GLN    67      48.220  52.100  34.610  1.00
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ATOM    929  CA  GLN    67      48.890  51.390  32.630  1.00
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ATOM    930  HA  GLN    67      48.170  51.270  31.820  1.00
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ATOM    931  CB  GLN    67      49.490  52.810  32.460  1.00
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ATOM    932  HB1 GLN    67      50.230  53.020  33.220  1.00
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ATOM    933  HB2 GLN    67      48.740  53.560  32.720  1.00
0.00
ATOM    934  CG  GLN    67      50.200  53.030  31.130  1.00
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ATOM    935  HG1 GLN    67      49.610  52.840  30.240  1.00
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ATOM    936  HG2 GLN    67      51.090  52.410  31.080  1.00
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ATOM    937  CD  GLN    67      50.570  54.490  31.100  1.00
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ATOM    938  OE1 GLN    67      50.870  55.130  32.120  1.00
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ATOM    939  NE2 GLN    67      50.430  55.110  29.950  1.00
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ATOM    940 1HE2 GLN    67      50.190  54.560  29.130  1.00
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ATOM    941 2HE2 GLN    67      50.390  56.110  29.880  1.00
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ATOM    942  C   GLN    67      49.980  50.340  32.470  1.00
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ATOM    943  O   GLN    67      50.080  49.810  31.380  1.00
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ATOM    944  N   ALA    68      50.830  50.060  33.510  1.00
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ATOM    945  H   ALA    68      50.550  50.520  34.370  1.00
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ATOM    946  CA  ALA    68      51.930  49.120  33.440  1.00
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ATOM    947  HA  ALA    68      52.500  49.300  32.520  1.00
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ATOM    948  CB  ALA    68      52.770  49.450  34.690  1.00
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ATOM    949  HB1 ALA    68      52.550  48.750  35.490  1.00
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ATOM    950  HB2 ALA    68      53.820  49.270  34.450  1.00
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ATOM 952 C ALA 68 51.470 47.680 33.510 1.00
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ATOM 953 O ALA 68 52.220 46.840 33.000 1.00
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ATOM 955 H MET 69 49.810 48.250 34.470 1.00
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ATOM 956 CA MET 69 49.640 46.120 34.300 1.00
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ATOM 957 HA MET 69 50.390 45.330 34.450 1.00
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ATOM 958 CB MET 69 48.810 46.010 35.590 1.00
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ATOM 959 HB1 MET 69 48.440 45.010 35.840 1.00
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ATOM 960 HB2 MET 69 47.960 46.700 35.560 1.00
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ATOM 961 CG MET 69 49.570 46.420 36.860 1.00
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ATOM 962 HG1 MET 69 48.970 46.160 37.730 1.00
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ATOM 963 HG2 MET 69 49.620 47.500 36.920 1.00
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ATOM 964 SD MET 69 51.210 45.740 37.210 1.00
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ATOM 965 CE MET 69 51.650 46.790 38.540 1.00
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ATOM 966 HE1 MET 69 51.870 47.780 38.140 1.00
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ATOM 967 HE2 MET 69 50.890 46.730 39.310 1.00
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ATOM 968 HE3 MET 69 52.620 46.470 38.910 1.00
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ATOM 969 C MET 69 48.880 45.780 33.050 1.00
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ATOM 970 O MET 69 48.800 44.590 32.710 1.00
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ATOM 971 N ASN 70 48.390 46.730 32.220 1.00
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ATOM 972 H ASN 70 48.200 47.630 32.640 1.00
0.00
ATOM 973 CA ASN 70 48.130 46.450 30.840 1.00
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ATOM 974 HA ASN 70 47.560 45.530 30.740 1.00
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ATOM 975 CB ASN 70 47.430 47.620 30.160 1.00
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ATOM 976 HB1 ASN 70 48.260 48.300 29.950 1.00
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ATOM 977 HB2 ASN 70 46.760 48.220 30.770 1.00
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ATOM 978 CG ASN 70 46.810 47.300 28.830 1.00
0.00

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ATOM    979  OD1 ASN    70      46.610  46.210  28.360  1.00
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ATOM    980  ND2 ASN    70      46.300  48.340  28.270  1.00
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ATOM    981 1HD2 ASN    70      46.430  49.250  28.690  1.00
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ATOM    982 2HD2 ASN    70      45.840  48.170  27.380  1.00
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ATOM    983  C   ASN    70      49.440  46.090  30.020  1.00
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ATOM    984  O   ASN    70      49.350  45.040  29.440  1.00
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ATOM    985  N   TRP    71      50.470  46.900  30.090  1.00
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ATOM    986  H   TRP    71      50.360  47.820  30.490  1.00
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ATOM    987  CA  TRP    71      51.700  46.670  29.370  1.00
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ATOM    988  HA  TRP    71      51.480  46.630  28.300  1.00
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ATOM    989  CB  TRP    71      52.710  47.810  29.580  1.00
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ATOM    990  HB1 TRP    71      52.870  47.990  30.650  1.00
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ATOM    991  HB2 TRP    71      52.450  48.780  29.160  1.00
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ATOM    992  CG  TRP    71      54.050  47.520  28.950  1.00
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ATOM    993  CD1 TRP    71      54.320  47.620  27.640  1.00
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ATOM    994  HD1 TRP    71      53.650  47.990  26.880  1.00
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ATOM    995  NE1 TRP    71      55.570  47.000  27.410  1.00
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ATOM    996  HE1 TRP    71      55.990  46.990  26.490  1.00
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ATOM    997  CE2 TRP    71      56.180  46.590  28.600  1.00
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ATOM    998  CZ2 TRP    71      57.390  45.970  28.930  1.00
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ATOM    999  HZ2 TRP    71      58.080  45.670  28.160  1.00
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ATOM   1000  CH2 TRP    71      57.570  45.560  30.310  1.00
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ATOM   1001  HH2 TRP    71      58.500  45.060  30.570  1.00
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ATOM   1002  CZ3 TRP    71      56.630  45.800  31.310  1.00
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ATOM   1003  HZ3 TRP    71      56.890  45.600  32.340  1.00
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ATOM   1004  CE3 TRP    71      55.480  46.500  30.970  1.00
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ATOM   1005  HE3 TRP    71      54.720  46.780  31.680  1.00
0.00
ATOM   1006  CD2 TRP    71      55.230  46.870  29.590  1.00
0.00
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ATOM   1007  C   TRP    71      52.410  45.330  29.540  1.00
0.00
ATOM   1008  O   TRP    71      52.530  44.570  28.610  1.00
0.00
ATOM   1009  N   ILE    72      52.780  45.040  30.790  1.00
0.00
ATOM   1010  H   ILE    72      52.660  45.740  31.510  1.00
0.00
ATOM   1011  CA  ILE    72      53.430  43.710  31.140  1.00
0.00
ATOM   1012  HA  ILE    72      54.300  43.810  30.500  1.00
0.00
ATOM   1013  CB  ILE    72      53.880  43.790  32.640  1.00
0.00
ATOM   1014  HB  ILE    72      54.250  44.820  32.720  1.00
0.00
ATOM   1015  CG2 ILE    72      52.780  43.680  33.730  1.00
0.00
ATOM   1016 1HG2 ILE    72      52.280  42.720  33.760  1.00
0.00
ATOM   1017 2HG2 ILE    72      53.240  44.000  34.660  1.00
0.00
ATOM   1018 3HG2 ILE    72      52.010  44.420  33.520  1.00
0.00
ATOM   1019  CG1 ILE    72      55.180  42.980  32.940  1.00
0.00
ATOM   1020 1HG1 ILE    72      55.650  43.360  33.850  1.00
0.00
ATOM   1021 2HG1 ILE    72      55.900  43.110  32.130  1.00
0.00
ATOM   1022  CD  ILE    72      54.960  41.510  33.210  1.00
0.00
ATOM   1023  HD1 ILE    72      54.610  41.420  34.240  1.00
0.00
ATOM   1024  HD2 ILE    72      54.380  40.950  32.470  1.00
0.00
ATOM   1025  HD3 ILE    72      55.920  41.000  33.260  1.00
0.00
ATOM   1026  C   ILE    72      52.550  42.490  30.720  1.00
0.00
ATOM   1027  O   ILE    72      53.110  41.560  30.090  1.00
0.00
ATOM   1028  N   MET    73      51.200  42.590  30.820  1.00
0.00
ATOM   1029  H   MET    73      50.710  43.400  31.180  1.00
0.00
ATOM   1030  CA  MET    73      50.380  41.470  30.230  1.00
0.00
ATOM   1031  HA  MET    73      50.760  40.580  30.710  1.00
0.00
ATOM   1032  CB  MET    73      48.890  41.660  30.670  1.00
0.00
ATOM   1033  HB1 MET    73      48.330  42.360  30.050  1.00
0.00
ATOM   1034  HB2 MET    73      48.850  42.060  31.690  1.00
0.00
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ATOM   1035  CG  MET    73       48.230  40.260  30.680  1.00
0.00
ATOM   1036  HG1 MET    73       48.220  39.880  29.660  1.00
0.00
ATOM   1037  HG2 MET    73       47.160  40.320  30.870  1.00
0.00
ATOM   1038  SD  MET    73       48.950  39.020  31.830  1.00
0.00
ATOM   1039  CE  MET    73       48.290  37.450  31.080  1.00
0.00
ATOM   1040  HE1 MET    73       48.470  37.570  30.010  1.00
0.00
ATOM   1041  HE2 MET    73       48.890  36.570  31.280  1.00
0.00
ATOM   1042  HE3 MET    73       47.240  37.330  31.350  1.00
0.00
ATOM   1043  C   MET    73       50.520  41.320  28.710  1.00
0.00
ATOM   1044  O   MET    73       50.600  40.190  28.240  1.00
0.00
ATOM   1045  N   GLN    74       50.620  42.330  27.930  1.00
0.00
ATOM   1046  H   GLN    74       50.700  43.200  28.450  1.00
0.00
ATOM   1047  CA  GLN    74       50.570  42.360  26.410  1.00
0.00
ATOM   1048  HA  GLN    74       49.870  41.560  26.190  1.00
0.00
ATOM   1049  CB  GLN    74       50.000  43.740  25.930  1.00
0.00
ATOM   1050  HB1 GLN    74       50.830  44.340  25.580  1.00
0.00
ATOM   1051  HB2 GLN    74       49.450  44.150  26.780  1.00
0.00
ATOM   1052  CG  GLN    74       48.910  43.570  24.880  1.00
0.00
ATOM   1053  HG1 GLN    74       48.380  44.510  24.700  1.00
0.00
ATOM   1054  HG2 GLN    74       48.170  42.880  25.300  1.00
0.00
ATOM   1055  CD  GLN    74       49.450  43.110  23.530  1.00
0.00
ATOM   1056  OE1 GLN    74       50.620  43.240  23.230  1.00
0.00
ATOM   1057  NE2 GLN    74       48.710  42.320  22.830  1.00
0.00
ATOM   1058 1HE2 GLN    74       47.720  42.250  23.020  1.00
0.00
ATOM   1059 2HE2 GLN    74       49.040  41.960  21.940  1.00
0.00
ATOM   1060  C   GLN    74       51.940  41.990  25.790  1.00
0.00
ATOM   1061  O   GLN    74       52.000  41.170  24.830  1.00
0.00
ATOM   1062  N   SER    75       53.020  42.370  26.430  1.00
0.00
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ATOM   1063  H   SER    75       52.850  42.970  27.230  1.00
0.00
ATOM   1064  CA  SER    75       54.390  42.350  25.960  1.00
0.00
ATOM   1065  HA  SER    75       54.260  42.110  24.900  1.00
0.00
ATOM   1066  CB  SER    75       54.970  43.760  26.150  1.00
0.00
ATOM   1067  HB1 SER    75       54.380  44.500  25.620  1.00
0.00
ATOM   1068  HB2 SER    75       55.930  43.800  25.640  1.00
0.00
ATOM   1069  OG  SER    75       55.200  43.900  27.590  1.00
0.00
ATOM   1070  HG  SER    75       54.540  44.580  27.760  1.00
0.00
ATOM   1071  C   SER    75       55.260  41.290  26.610  1.00
0.00
ATOM   1072  O   SER    75       56.140  40.810  25.920  1.00
0.00
ATOM   1073  N   HIP    76       54.970  40.930  27.850  1.00
0.00
ATOM   1074  H   HIP    76       54.190  41.420  28.250  1.00
0.00
ATOM   1075  CA  HIP    76       55.760  40.120  28.790  1.00
0.00
ATOM   1076  HA  HIP    76       56.500  39.450  28.350  1.00
0.00
ATOM   1077  CB  HIP    76       56.430  41.180  29.680  1.00
0.00
ATOM   1078  HB1 HIP    76       56.580  40.780  30.690  1.00
0.00
ATOM   1079  HB2 HIP    76       55.760  42.020  29.890  1.00
0.00
ATOM   1080  CG  HIP    76       57.720  41.720  29.180  1.00
0.00
ATOM   1081  ND1 HIP    76       57.950  42.860  28.400  1.00
0.00
ATOM   1082  HD1 HIP    76       57.220  43.350  27.910  1.00
0.00
ATOM   1083  CE1 HIP    76       59.290  43.040  28.160  1.00
0.00
ATOM   1084  HE1 HIP    76       59.750  43.780  27.520  1.00
0.00
ATOM   1085  NE2 HIP    76       59.890  41.970  28.730  1.00
0.00
ATOM   1086  HE2 HIP    76       60.880  41.810  28.590  1.00
0.00
ATOM   1087  CD2 HIP    76       58.970  41.120  29.340  1.00
0.00
ATOM   1088  HD2 HIP    76       59.260  40.230  29.880  1.00
0.00
ATOM   1089  C   HIP    76       54.840  39.120  29.580  1.00
0.00
ATOM   1090  O   HIP    76       55.020  38.880  30.810  1.00
0.00
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ATOM   1091  N   ASN    77      53.800  38.560  28.940  1.00
0.00
ATOM   1092  H   ASN    77      53.760  38.770  27.950  1.00
0.00
ATOM   1093  CA  ASN    77      52.760  37.690  29.510  1.00
0.00
ATOM   1094  HA  ASN    77      51.870  37.990  28.950  1.00
0.00
ATOM   1095  CB  ASN    77      53.240  36.240  29.210  1.00
0.00
ATOM   1096  HB1 ASN    77      53.420  36.180  28.140  1.00
0.00
ATOM   1097  HB2 ASN    77      52.440  35.530  29.390  1.00
0.00
ATOM   1098  CG  ASN    77      54.470  35.720  30.040  1.00
0.00
ATOM   1099  OD1 ASN    77      54.420  35.160  31.110  1.00
0.00
ATOM   1100  ND2 ASN    77      55.590  35.790  29.420  1.00
0.00
ATOM   1101 1HD2 ASN    77      55.780  36.200  28.510  1.00
0.00
ATOM   1102 2HD2 ASN    77      56.360  35.330  29.860  1.00
0.00
ATOM   1103  C   ASN    77      52.380  37.910  30.970  1.00
0.00
ATOM   1104  O   ASN    77      52.010  36.910  31.670  1.00
0.00
ATOM   1105  N   GLY    78      52.440  39.110  31.550  1.00
0.00
ATOM   1106  H   GLY    78      52.730  39.880  30.960  1.00
0.00
ATOM   1107  CA  GLY    78      52.150  39.310  32.990  1.00
0.00
ATOM   1108  HA1 GLY    78      51.270  38.720  33.250  1.00
0.00
ATOM   1109  HA2 GLY    78      52.020  40.350  33.310  1.00
0.00
ATOM   1110  C   GLY    78      53.140  38.600  34.000  1.00
0.00
ATOM   1111  O   GLY    78      52.720  38.520  35.190  1.00
0.00
ATOM   1112  N   SER    79      54.340  38.070  33.600  1.00
0.00
ATOM   1113  H   SER    79      54.610  38.130  32.630  1.00
0.00
ATOM   1114  CA  SER    79      55.220  37.370  34.510  1.00
0.00
ATOM   1115  HA  SER    79      54.590  37.090  35.360  1.00
0.00
ATOM   1116  CB  SER    79      55.840  36.080  33.950  1.00
0.00
ATOM   1117  HB1 SER    79      56.590  35.750  34.670  1.00
0.00
ATOM   1118  HB2 SER    79      56.400  36.330  33.050  1.00
0.00
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ATOM   1119  OG  SER    79      54.860  35.100  33.680  1.00
0.00
ATOM   1120  HG  SER    79      54.680  35.160  32.740  1.00
0.00
ATOM   1121  C   SER    79      56.380  38.320  34.910  1.00
0.00
ATOM   1122  O   SER    79      57.050  38.950  34.140  1.00
0.00
ATOM   1123  N   VAL    80      56.440  38.550  36.230  1.00
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ATOM   1124  H   VAL    80      55.780  38.120  36.860  1.00
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ATOM   1125  CA  VAL    80      57.410  39.570  36.750  1.00
0.00
ATOM   1126  HA  VAL    80      57.580  40.370  36.030  1.00
0.00
ATOM   1127  CB  VAL    80      56.880  40.210  38.050  1.00
0.00
ATOM   1128  HB  VAL    80      57.680  40.810  38.500  1.00
0.00
ATOM   1129  CG1 VAL    80      55.590  41.030  37.630  1.00
0.00
ATOM   1130 1HG1 VAL    80      54.770  40.340  37.410  1.00
0.00
ATOM   1131 2HG1 VAL    80      55.240  41.660  38.450  1.00
0.00
ATOM   1132 3HG1 VAL    80      55.850  41.650  36.770  1.00
0.00
ATOM   1133  CG2 VAL    80      56.490  39.290  39.260  1.00
0.00
ATOM   1134 1HG2 VAL    80      56.150  39.860  40.120  1.00
0.00
ATOM   1135 2HG2 VAL    80      55.790  38.500  39.000  1.00
0.00
ATOM   1136 3HG2 VAL    80      57.430  38.830  39.560  1.00
0.00
ATOM   1137  C   VAL    80      58.820  38.880  37.090  1.00
0.00
ATOM   1138  O   VAL    80      58.940  37.720  37.530  1.00
0.00
ATOM   1139  N   PHE    81      59.880  39.660  36.970  1.00
0.00
ATOM   1140  H   PHE    81      59.790  40.580  36.550  1.00
0.00
ATOM   1141  CA  PHE    81      61.270  39.240  37.270  1.00
0.00
ATOM   1142  HA  PHE    81      61.280  38.170  37.030  1.00
0.00
ATOM   1143  CB  PHE    81      62.230  40.080  36.510  1.00
0.00
ATOM   1144  HB1 PHE    81      63.180  40.040  37.040  1.00
0.00
ATOM   1145  HB2 PHE    81      61.790  41.080  36.500  1.00
0.00
ATOM   1146  CG  PHE    81      62.430  39.560  35.050  1.00
0.00
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ATOM   1147  CD1 PHE    81       62.910  38.190  34.820  1.00
0.00
ATOM   1148  HD1 PHE    81       63.100  37.470  35.600  1.00
0.00
ATOM   1149  CE1 PHE    81       62.970  37.690  33.520  1.00
0.00
ATOM   1150  HE1 PHE    81       63.210  36.640  33.420  1.00
0.00
ATOM   1151  CZ  PHE    81       62.810  38.590  32.420  1.00
0.00
ATOM   1152  HZ  PHE    81       62.930  38.210  31.410  1.00
0.00
ATOM   1153  CE2 PHE    81       62.530  39.960  32.640  1.00
0.00
ATOM   1154  HE2 PHE    81       62.320  40.680  31.870  1.00
0.00
ATOM   1155  CD2 PHE    81       62.300  40.430  33.920  1.00
0.00
ATOM   1156  HD2 PHE    81       61.990  41.460  33.990  1.00
0.00
ATOM   1157  C   PHE    81       61.500  39.360  38.810  1.00
0.00
ATOM   1158  O   PHE    81       60.840  40.120  39.520  1.00
0.00
ATOM   1159  N   THR    82       62.450  38.540  39.340  1.00
0.00
ATOM   1160  H   THR    82       62.810  37.800  38.750  1.00
0.00
ATOM   1161  CA  THR    82       62.840  38.580  40.780  1.00
0.00
ATOM   1162  HA  THR    82       61.980  38.810  41.400  1.00
0.00
ATOM   1163  CB  THR    82       63.210  37.230  41.330  1.00
0.00
ATOM   1164  HB  THR    82       63.550  37.440  42.350  1.00
0.00
ATOM   1165  CG2 THR    82       62.150  36.130  41.280  1.00
0.00
ATOM   1166 1HG2 THR    82       62.520  35.110  41.220  1.00
0.00
ATOM   1167 2HG2 THR    82       61.530  36.110  42.170  1.00
0.00
ATOM   1168 3HG2 THR    82       61.540  36.290  40.390  1.00
0.00
ATOM   1169  OG1 THR    82       64.260  36.700  40.510  1.00
0.00
ATOM   1170  HG1 THR    82       64.570  36.010  41.110  1.00
0.00
ATOM   1171  C   THR    82       63.890  39.650  41.040  1.00
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ATOM   1172  O   THR    82       64.610  40.020  40.130  1.00
0.00
ATOM   1173  N   GLU    83       63.900  40.320  42.200  1.00
0.00
ATOM   1174  H   GLU    83       63.230  40.180  42.940  1.00
0.00
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ATOM   1175  CA  GLU    83       64.700  41.510  42.520  1.00
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ATOM   1176  HA  GLU    83       64.760  42.210  41.680  1.00
0.00
ATOM   1177  CB  GLU    83       64.160  42.140  43.750  1.00
0.00
ATOM   1178  HB1 GLU    83       64.580  41.490  44.520  1.00
0.00
ATOM   1179  HB2 GLU    83       63.070  42.140  43.780  1.00
0.00
ATOM   1180  CG  GLU    83       64.760  43.570  43.980  1.00
0.00
ATOM   1181  HG1 GLU    83       64.500  44.200  43.130  1.00
0.00
ATOM   1182  HG2 GLU    83       65.850  43.540  44.060  1.00
0.00
ATOM   1183  CD  GLU    83       64.250  44.140  45.280  1.00
0.00
ATOM   1184  OE1 GLU    83       63.580  43.350  46.030  1.00
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ATOM   1185  OE2 GLU    83       64.640  45.290  45.500  1.00
0.00
ATOM   1186  C   GLU    83       66.160  41.060  42.640  1.00
0.00
ATOM   1187  O   GLU    83       67.060  41.870  42.290  1.00
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ATOM   1188  N   ALA    84       66.490  39.880  43.080  1.00
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ATOM   1189  H   ALA    84       65.770  39.350  43.540  1.00
0.00
ATOM   1190  CA  ALA    84       67.880  39.430  43.040  1.00
0.00
ATOM   1191  HA  ALA    84       68.480  40.220  43.490  1.00
0.00
ATOM   1192  CB  ALA    84       68.000  38.090  43.860  1.00
0.00
ATOM   1193  HB1 ALA    84       67.660  38.380  44.850  1.00
0.00
ATOM   1194  HB2 ALA    84       67.300  37.450  43.320  1.00
0.00
ATOM   1195  HB3 ALA    84       69.020  37.710  43.890  1.00
0.00
ATOM   1196  C   ALA    84       68.550  39.240  41.650  1.00
0.00
ATOM   1197  O   ALA    84       69.790  39.330  41.650  1.00
0.00
ATOM   1198  N   SER    85       67.800  39.010  40.550  1.00
0.00
ATOM   1199  H   SER    85       66.820  38.890  40.750  1.00
0.00
ATOM   1200  CA  SER    85       68.240  38.950  39.160  1.00
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ATOM   1201  HA  SER    85       69.310  38.770  39.270  1.00
0.00
ATOM   1202  CB  SER    85       67.510  37.730  38.560  1.00
0.00
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ATOM 1203 HB1 SER 85 67.670 36.860 39.200 1.00
0.00
ATOM 1204 HB2 SER 85 67.850 37.590 37.530 1.00
0.00
ATOM 1205 OG SER 85 66.090 37.910 38.600 1.00
0.00
ATOM 1206 HG SER 85 65.670 37.440 39.320 1.00
0.00
ATOM 1207 C SER 85 67.940 40.230 38.340 1.00
0.00
ATOM 1208 O SER 85 68.590 40.370 37.260 1.00
0.00
ATOM 1209 N TYR 86 67.030 41.050 38.840 1.00
0.00
ATOM 1210 H TYR 86 66.500 40.750 39.650 1.00
0.00
ATOM 1211 CA TYR 86 66.680 42.400 38.260 1.00
0.00
ATOM 1212 HA TYR 86 67.410 42.600 37.480 1.00
0.00
ATOM 1213 CB TYR 86 65.330 42.190 37.540 1.00
0.00
ATOM 1214 HB1 TYR 86 64.550 42.260 38.300 1.00
0.00
ATOM 1215 HB2 TYR 86 65.400 41.220 37.060 1.00
0.00
ATOM 1216 CG TYR 86 64.950 43.150 36.460 1.00
0.00
ATOM 1217 CD1 TYR 86 64.880 44.570 36.640 1.00
0.00
ATOM 1218 HD1 TYR 86 65.160 44.940 37.620 1.00
0.00
ATOM 1219 CE1 TYR 86 64.730 45.450 35.490 1.00
0.00
ATOM 1220 HE1 TYR 86 64.990 46.500 35.550 1.00
0.00
ATOM 1221 CZ TYR 86 64.410 44.910 34.240 1.00
0.00
ATOM 1222 OH TYR 86 64.210 45.710 33.190 1.00
0.00
ATOM 1223 HH TYR 86 64.410 45.210 32.390 1.00
0.00
ATOM 1224 CE2 TYR 86 64.450 43.480 34.110 1.00
0.00
ATOM 1225 HE2 TYR 86 64.110 43.070 33.170 1.00
0.00
ATOM 1226 CD2 TYR 86 64.770 42.620 35.180 1.00
0.00
ATOM 1227 HD2 TYR 86 64.720 41.540 35.150 1.00
0.00
ATOM 1228 C TYR 86 66.710 43.520 39.350 1.00
0.00
ATOM 1229 O TYR 86 65.630 44.010 39.820 1.00
0.00
ATOM 1230 N PRO 87 67.920 44.030 39.690 1.00
0.00

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ATOM   1231  CD  PRO    87      69.190  43.490  39.290  1.00
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ATOM   1232  HD1 PRO    87      69.420  43.400  38.230  1.00
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ATOM   1233  HD2 PRO    87      69.370  42.500  39.710  1.00
0.00
ATOM   1234  CG  PRO    87      70.210  44.400  39.970  1.00
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ATOM   1235  HG1 PRO    87      70.370  45.250  39.300  1.00
0.00
ATOM   1236  HG2 PRO    87      71.220  44.000  40.030  1.00
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ATOM   1237  CB  PRO    87      69.510  44.780  41.270  1.00
0.00
ATOM   1238  HB1 PRO    87      69.870  45.700  41.750  1.00
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ATOM   1239  HB2 PRO    87      69.590  43.940  41.950  1.00
0.00
ATOM   1240  CA  PRO    87      68.070  44.960  40.850  1.00
0.00
ATOM   1241  HA  PRO    87      67.450  44.630  41.680  1.00
0.00
ATOM   1242  C   PRO    87      67.870  46.380  40.520  1.00
0.00
ATOM   1243  O   PRO    87      68.260  46.870  39.460  1.00
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ATOM   1244  N   TYR    88      67.310  47.100  41.420  1.00
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ATOM   1245  H   TYR    88      67.050  46.670  42.290  1.00
0.00
ATOM   1246  CA  TYR    88      66.910  48.540  41.180  1.00
0.00
ATOM   1247  HA  TYR    88      66.520  48.650  40.170  1.00
0.00
ATOM   1248  CB  TYR    88      65.870  49.080  42.250  1.00
0.00
ATOM   1249  HB1 TYR    88      66.340  49.200  43.220  1.00
0.00
ATOM   1250  HB2 TYR    88      65.030  48.400  42.430  1.00
0.00
ATOM   1251  CG  TYR    88      65.140  50.380  41.980  1.00
0.00
ATOM   1252  CD1 TYR    88      63.880  50.340  41.370  1.00
0.00
ATOM   1253  HD1 TYR    88      63.490  49.370  41.110  1.00
0.00
ATOM   1254  CE1 TYR    88      63.030  51.510  41.370  1.00
0.00
ATOM   1255  HE1 TYR    88      62.050  51.380  40.940  1.00
0.00
ATOM   1256  CZ  TYR    88      63.490  52.690  41.990  1.00
0.00
ATOM   1257  OH  TYR    88      62.590  53.720  42.160  1.00
0.00
ATOM   1258  HH  TYR    88      63.040  54.410  42.640  1.00
0.00
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ATOM 1259 CE2 TYR 88 64.740 52.710 42.570 1.00
0.00
ATOM 1260 HE2 TYR 88 65.060 53.630 43.050 1.00
0.00
ATOM 1261 CD2 TYR 88 65.570 51.610 42.500 1.00
0.00
ATOM 1262 HD2 TYR 88 66.470 51.640 43.090 1.00
0.00
ATOM 1263 C TYR 88 68.240 49.400 41.230 1.00
0.00
ATOM 1264 O TYR 88 69.020 49.160 42.150 1.00
0.00
ATOM 1265 N THR 89 68.330 50.380 40.340 1.00
0.00
ATOM 1266 H THR 89 67.610 50.470 39.640 1.00
0.00
ATOM 1267 CA THR 89 69.370 51.340 40.330 1.00
0.00
ATOM 1268 HA THR 89 69.740 51.480 41.350 1.00
0.00
ATOM 1269 CB THR 89 70.600 50.820 39.550 1.00
0.00
ATOM 1270 HB THR 89 71.000 49.920 40.040 1.00
0.00
ATOM 1271 CG2 THR 89 70.400 50.410 38.110 1.00
0.00
ATOM 1272 1HG2 THR 89 71.310 49.850 37.850 1.00
0.00
ATOM 1273 2HG2 THR 89 69.500 49.800 38.150 1.00
0.00
ATOM 1274 3HG2 THR 89 70.320 51.340 37.550 1.00
0.00
ATOM 1275 OG1 THR 89 71.610 51.740 39.560 1.00
0.00
ATOM 1276 HG1 THR 89 71.100 52.550 39.470 1.00
0.00
ATOM 1277 C THR 89 68.920 52.750 39.850 1.00
0.00
ATOM 1278 O THR 89 69.790 53.470 39.350 1.00
0.00
ATOM 1279 N SER 90 67.620 53.100 40.000 1.00
0.00
ATOM 1280 H SER 90 67.040 52.380 40.390 1.00
0.00
ATOM 1281 CA SER 90 67.010 54.290 39.540 1.00
0.00
ATOM 1282 HA SER 90 67.570 54.630 38.660 1.00
0.00
ATOM 1283 CB SER 90 65.520 54.060 39.110 1.00
0.00
ATOM 1284 HB1 SER 90 65.120 55.000 38.740 1.00
0.00
ATOM 1285 HB2 SER 90 65.000 53.710 40.010 1.00
0.00
ATOM 1286 OG SER 90 65.560 53.050 38.180 1.00
0.00

ATOM 1287 HG SER 90 65.770 52.250 38.660 1.00
0.00
ATOM 1288 C SER 90 67.130 55.440 40.540 1.00
0.00
ATOM 1289 O SER 90 66.470 56.490 40.330 1.00
0.00
ATOM 1290 N GLY 91 67.710 55.280 41.770 1.00
0.00
ATOM 1291 H GLY 91 68.100 54.350 41.890 1.00
0.00
ATOM 1292 CA GLY 91 67.390 56.010 42.950 1.00
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ATOM 1293 HA1 GLY 91 67.850 55.580 43.840 1.00
0.00
ATOM 1294 HA2 GLY 91 66.340 55.790 43.160 1.00
0.00
ATOM 1295 C GLY 91 67.720 57.510 42.920 1.00
0.00
ATOM 1296 O GLY 91 66.950 58.290 43.480 1.00
0.00
ATOM 1297 N GLY 92 68.710 57.770 42.060 1.00
0.00
ATOM 1298 H GLY 92 69.250 56.960 41.770 1.00
0.00
ATOM 1299 CA GLY 92 69.080 59.130 41.600 1.00
0.00
ATOM 1300 HA1 GLY 92 70.000 59.120 41.030 1.00
0.00
ATOM 1301 HA2 GLY 92 69.270 59.740 42.490 1.00
0.00
ATOM 1302 C GLY 92 67.910 59.950 40.840 1.00
0.00
ATOM 1303 O GLY 92 68.000 61.180 40.700 1.00
0.00
ATOM 1304 N GLY 93 66.870 59.270 40.470 1.00
0.00
ATOM 1305 H GLY 93 66.850 58.290 40.690 1.00
0.00
ATOM 1306 CA GLY 93 65.640 59.890 39.990 1.00
0.00
ATOM 1307 HA1 GLY 93 65.570 60.940 40.300 1.00
0.00
ATOM 1308 HA2 GLY 93 64.970 59.250 40.570 1.00
0.00
ATOM 1309 C GLY 93 65.220 59.800 38.470 1.00
0.00
ATOM 1310 O GLY 93 64.320 60.510 38.050 1.00
0.00
ATOM 1311 N THR 94 65.910 58.950 37.690 1.00
0.00
ATOM 1312 H THR 94 66.500 58.360 38.270 1.00
0.00
ATOM 1313 CA THR 94 65.940 58.840 36.230 1.00
0.00
ATOM 1314 HA THR 94 64.900 59.040 36.000 1.00
0.00

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ATOM   1315  CB  THR    94      66.940  59.860  35.610  1.00
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ATOM   1316  HB  THR    94      67.960  59.710  35.950  1.00
0.00
ATOM   1317  CG2 THR    94      66.980  59.720  34.120  1.00
0.00
ATOM   1318 1HG2 THR    94      67.520  58.800  33.870  1.00
0.00
ATOM   1319 2HG2 THR    94      65.980  59.760  33.680  1.00
0.00
ATOM   1320 3HG2 THR    94      67.520  60.500  33.590  1.00
0.00
ATOM   1321  OG1 THR    94      66.540  61.210  35.990  1.00
0.00
ATOM   1322  HG1 THR    94      67.070  61.360  36.770  1.00
0.00
ATOM   1323  C   THR    94      66.150  57.390  35.800  1.00
0.00
ATOM   1324  O   THR    94      67.040  56.720  36.250  1.00
0.00
ATOM   1325  N   ARG    95      65.260  56.930  34.920  1.00
0.00
ATOM   1326  H   ARG    95      64.540  57.540  34.570  1.00
0.00
ATOM   1327  CA  ARG    95      65.150  55.480  34.550  1.00
0.00
ATOM   1328  HA  ARG    95      65.160  55.070  35.550  1.00
0.00
ATOM   1329  CB  ARG    95      63.850  55.050  33.850  1.00
0.00
ATOM   1330  HB1 ARG    95      63.130  55.200  34.650  1.00
0.00
ATOM   1331  HB2 ARG    95      63.950  54.000  33.560  1.00
0.00
ATOM   1332  CG  ARG    95      63.660  55.870  32.470  1.00
0.00
ATOM   1333  HG1 ARG    95      64.430  55.530  31.770  1.00
0.00
ATOM   1334  HG2 ARG    95      63.680  56.950  32.620  1.00
0.00
ATOM   1335  CD  ARG    95      62.310  55.670  31.840  1.00
0.00
ATOM   1336  HD1 ARG    95      62.120  56.420  31.070  1.00
0.00
ATOM   1337  HD2 ARG    95      61.570  55.740  32.650  1.00
0.00
ATOM   1338  NE  ARG    95      62.220  54.330  31.140  1.00
0.00
ATOM   1339  HE  ARG    95      63.020  54.110  30.560  1.00
0.00
ATOM   1340  CZ  ARG    95      61.160  53.610  30.970  1.00
0.00
ATOM   1341  NH1 ARG    95      60.000  53.900  31.410  1.00
0.00
ATOM   1342 1HH1 ARG    95      59.740  54.830  31.720  1.00
0.00
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ATOM   1343 2HH1 ARG    95      59.280  53.190  31.350  1.00
0.00
ATOM   1344  NH2 ARG    95      61.240  52.390  30.410  1.00
0.00
ATOM   1345 1HH2 ARG    95      62.080  52.030  29.980  1.00
0.00
ATOM   1346 2HH2 ARG    95      60.440  51.820  30.170  1.00
0.00
ATOM   1347  C   ARG    95      66.450  54.980  33.880  1.00
0.00
ATOM   1348  O   ARG    95      67.000  55.730  33.010  1.00
0.00
ATOM   1349  N   PRO    96      66.870  53.760  34.200  1.00
0.00
ATOM   1350  CD  PRO    96      66.410  52.930  35.300  1.00
0.00
ATOM   1351  HD1 PRO    96      65.340  52.700  35.290  1.00
0.00
ATOM   1352  HD2 PRO    96      66.670  53.430  36.240  1.00
0.00
ATOM   1353  CG  PRO    96      67.100  51.600  35.200  1.00
0.00
ATOM   1354  HG1 PRO    96      66.470  50.940  34.600  1.00
0.00
ATOM   1355  HG2 PRO    96      67.370  51.270  36.200  1.00
0.00
ATOM   1356  CB  PRO    96      68.320  51.790  34.350  1.00
0.00
ATOM   1357  HB1 PRO    96      68.390  50.940  33.670  1.00
0.00
ATOM   1358  HB2 PRO    96      69.230  51.860  34.950  1.00
0.00
ATOM   1359  CA  PRO    96      67.970  53.050  33.510  1.00
0.00
ATOM   1360  HA  PRO    96      68.800  53.760  33.550  1.00
0.00
ATOM   1361  C   PRO    96      67.590  52.830  32.050  1.00
0.00
ATOM   1362  O   PRO    96      66.360  52.820  31.780  1.00
0.00
ATOM   1363  N   PRO    97      68.600  52.550  31.200  1.00
0.00
ATOM   1364  CD  PRO    97      70.050  52.650  31.410  1.00
0.00
ATOM   1365  HD1 PRO    97      70.470  52.520  32.410  1.00
0.00
ATOM   1366  HD2 PRO    97      70.210  53.690  31.110  1.00
0.00
ATOM   1367  CG  PRO    97      70.680  51.630  30.500  1.00
0.00
ATOM   1368  HG1 PRO    97      70.670  50.660  30.990  1.00
0.00
ATOM   1369  HG2 PRO    97      71.680  51.990  30.260  1.00
0.00
ATOM   1370  CB  PRO    97      69.820  51.650  29.320  1.00
0.00
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ATOM   1371  HB1 PRO    97       69.820  50.680  28.820  1.00
0.00
ATOM   1372  HB2 PRO    97       70.230  52.450  28.710  1.00
0.00
ATOM   1373  CA  PRO    97       68.440  51.800  29.990  1.00
0.00
ATOM   1374  HA  PRO    97       67.860  52.300  29.210  1.00
0.00
ATOM   1375  C   PRO    97       67.570  50.510  30.120  1.00
0.00
ATOM   1376  O   PRO    97       67.790  49.770  31.030  1.00
0.00
ATOM   1377  N   CYX    98       66.640  50.310  29.240  1.00
0.00
ATOM   1378  H   CYX    98       66.450  50.930  28.460  1.00
0.00
ATOM   1379  CA  CYX    98       65.820  49.060  29.180  1.00
0.00
ATOM   1380  HA  CYX    98       65.150  49.130  30.040  1.00
0.00
ATOM   1381  CB  CYX    98       64.950  48.990  27.900  1.00
0.00
ATOM   1382  HB1 CYX    98       65.580  49.200  27.030  1.00
0.00
ATOM   1383  HB2 CYX    98       64.280  49.850  27.970  1.00
0.00
ATOM   1384  SG  CYX    98       63.800  47.660  27.620  1.00
0.00
ATOM   1385  C   CYX    98       66.660  47.800  29.350  1.00
0.00
ATOM   1386  O   CYX    98       67.670  47.700  28.650  1.00
0.00
ATOM   1387  N   HIE    99       66.260  46.860  30.160  1.00
0.00
ATOM   1388  H   HIE    99       65.450  47.080  30.720  1.00
0.00
ATOM   1389  CA  HIE    99       66.830  45.550  30.300  1.00
0.00
ATOM   1390  HA  HIE    99       67.470  45.400  29.430  1.00
0.00
ATOM   1391  CB  HIE    99       67.740  45.570  31.520  1.00
0.00
ATOM   1392  HB1 HIE    99       67.080  45.900  32.320  1.00
0.00
ATOM   1393  HB2 HIE    99       68.550  46.300  31.470  1.00
0.00
ATOM   1394  CG  HIE    99       68.310  44.280  31.970  1.00
0.00
ATOM   1395  ND1 HIE    99       69.460  43.700  31.370  1.00
0.00
ATOM   1396  CE1 HIE    99       69.570  42.460  31.890  1.00
0.00
ATOM   1397  HE1 HIE    99       70.400  41.810  31.660  1.00
0.00
ATOM   1398  NE2 HIE    99       68.570  42.320  32.850  1.00
0.00
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ATOM   1399  HE2 HIE    99      68.360  41.450  33.320  1.00
0.00
ATOM   1400  CD2 HIE    99      67.770  43.350  32.810  1.00
0.00
ATOM   1401  HD2 HIE    99      66.920  43.570  33.440  1.00
0.00
ATOM   1402  C   HIE    99      65.860  44.410  30.330  1.00
0.00
ATOM   1403  O   HIE    99      64.820  44.580  30.930  1.00
0.00
ATOM   1404  N   ASP   100      66.180  43.250  29.680  1.00
0.00
ATOM   1405  H   ASP   100      67.060  43.150  29.200  1.00
0.00
ATOM   1406  CA  ASP   100      65.140  42.310  29.320  1.00
0.00
ATOM   1407  HA  ASP   100      64.190  42.690  29.700  1.00
0.00
ATOM   1408  CB  ASP   100      64.880  42.230  27.800  1.00
0.00
ATOM   1409  HB1 ASP   100      65.620  41.570  27.340  1.00
0.00
ATOM   1410  HB2 ASP   100      65.090  43.190  27.330  1.00
0.00
ATOM   1411  CG  ASP   100      63.520  41.590  27.420  1.00
0.00
ATOM   1412  OD1 ASP   100      63.580  40.540  26.690  1.00
0.00
ATOM   1413  OD2 ASP   100      62.450  42.120  27.780  1.00
0.00
ATOM   1414  C   ASP   100      65.240  40.800  29.940  1.00
0.00
ATOM   1415  O   ASP   100      64.560  39.820  29.510  1.00
0.00
ATOM   1416  N   GLU   101      66.070  40.630  30.980  1.00
0.00
ATOM   1417  H   GLU   101      66.590  41.380  31.420  1.00
0.00
ATOM   1418  CA  GLU   101      66.350  39.280  31.530  1.00
0.00
ATOM   1419  HA  GLU   101      65.360  38.840  31.430  1.00
0.00
ATOM   1420  CB  GLU   101      67.500  38.670  30.720  1.00
0.00
ATOM   1421  HB1 GLU   101      68.370  39.320  30.700  1.00
0.00
ATOM   1422  HB2 GLU   101      67.070  38.490  29.730  1.00
0.00
ATOM   1423  CG  GLU   101      67.920  37.260  31.220  1.00
0.00
ATOM   1424  HG1 GLU   101      67.070  36.570  31.240  1.00
0.00
ATOM   1425  HG2 GLU   101      68.340  37.270  32.220  1.00
0.00
ATOM   1426  CD  GLU   101      68.970  36.680  30.380  1.00
0.00
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ATOM   1427  OE1 GLU   101      68.680  35.780  29.520  1.00
0.00
ATOM   1428  OE2 GLU   101      70.170  36.920  30.660  1.00
0.00
ATOM   1429  C   GLU   101      66.570  39.250  33.000  1.00
0.00
ATOM   1430  O   GLU   101      67.080  40.150  33.600  1.00
0.00
ATOM   1431  N   GLY   102      66.170  38.130  33.570  1.00
0.00
ATOM   1432  H   GLY   102      65.720  37.430  33.000  1.00
0.00
ATOM   1433  CA  GLY   102      66.410  37.680  34.930  1.00
0.00
ATOM   1434  HA1 GLY   102      65.960  38.410  35.600  1.00
0.00
ATOM   1435  HA2 GLY   102      67.470  37.690  35.180  1.00
0.00
ATOM   1436  C   GLY   102      65.930  36.340  35.340  1.00
0.00
ATOM   1437  O   GLY   102      65.830  35.440  34.480  1.00
0.00
ATOM   1438  N   GLU   103      65.460  36.160  36.600  1.00
0.00
ATOM   1439  H   GLU   103      65.760  36.840  37.280  1.00
0.00
ATOM   1440  CA  GLU   103      64.810  34.940  36.990  1.00
0.00
ATOM   1441  HA  GLU   103      64.890  34.250  36.150  1.00
0.00
ATOM   1442  CB  GLU   103      65.640  34.280  38.100  1.00
0.00
ATOM   1443  HB1 GLU   103      65.620  34.930  38.970  1.00
0.00
ATOM   1444  HB2 GLU   103      66.690  34.200  37.800  1.00
0.00
ATOM   1445  CG  GLU   103      65.130  32.830  38.430  1.00
0.00
ATOM   1446  HG1 GLU   103      64.090  32.800  38.750  1.00
0.00
ATOM   1447  HG2 GLU   103      65.740  32.500  39.270  1.00
0.00
ATOM   1448  CD  GLU   103      65.220  31.970  37.180  1.00
0.00
ATOM   1449  OE1 GLU   103      64.250  31.790  36.430  1.00
0.00
ATOM   1450  OE2 GLU   103      66.310  31.380  36.960  1.00
0.00
ATOM   1451  C   GLU   103      63.330  35.040  37.380  1.00
0.00
ATOM   1452  O   GLU   103      62.850  36.140  37.800  1.00
0.00
ATOM   1453  N   VAL   104      62.480  34.020  37.190  1.00
0.00
ATOM   1454  H   VAL   104      62.840  33.190  36.750  1.00
0.00
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ATOM   1455  CA  VAL   104       61.070  34.060  37.190  1.00
0.00
ATOM   1456  HA  VAL   104       60.770  34.980  36.690  1.00
0.00
ATOM   1457  CB  VAL   104       60.480  32.930  36.190  1.00
0.00
ATOM   1458  HB  VAL   104       60.460  31.940  36.640  1.00
0.00
ATOM   1459  CG1 VAL   104       58.990  33.320  35.990  1.00
0.00
ATOM   1460 1HG1 VAL   104       58.490  32.760  35.190  1.00
0.00
ATOM   1461 2HG1 VAL   104       58.480  33.190  36.940  1.00
0.00
ATOM   1462 3HG1 VAL   104       58.960  34.320  35.560  1.00
0.00
ATOM   1463  CG2 VAL   104       61.120  32.870  34.830  1.00
0.00
ATOM   1464 1HG2 VAL   104       60.600  32.130  34.220  1.00
0.00
ATOM   1465 2HG2 VAL   104       61.210  33.810  34.280  1.00
0.00
ATOM   1466 3HG2 VAL   104       62.090  32.380  34.960  1.00
0.00
ATOM   1467  C   VAL   104       60.420  33.940  38.560  1.00
0.00
ATOM   1468  O   VAL   104       60.480  32.890  39.200  1.00
0.00
ATOM   1469  N   GLY   105       59.740  35.010  38.880  1.00
0.00
ATOM   1470  H   GLY   105       59.750  35.830  38.290  1.00
0.00
ATOM   1471  CA  GLY   105       58.950  35.020  40.070  1.00
0.00
ATOM   1472  HA1 GLY   105       59.060  36.040  40.460  1.00
0.00
ATOM   1473  HA2 GLY   105       59.120  34.230  40.800  1.00
0.00
ATOM   1474  C   GLY   105       57.450  34.830  39.740  1.00
0.00
ATOM   1475  O   GLY   105       57.000  33.810  39.240  1.00
0.00
ATOM   1476  N   ALA   106       56.610  35.790  40.150  1.00
0.00
ATOM   1477  H   ALA   106       56.940  36.730  40.300  1.00
0.00
ATOM   1478  CA  ALA   106       55.100  35.640  40.130  1.00
0.00
ATOM   1479  HA  ALA   106       54.880  34.590  40.280  1.00
0.00
ATOM   1480  CB  ALA   106       54.610  36.510  41.270  1.00
0.00
ATOM   1481  HB1 ALA   106       53.520  36.560  41.320  1.00
0.00
ATOM   1482  HB2 ALA   106       55.020  36.230  42.240  1.00
0.00
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ATOM 1483 HB3 ALA 106 55.020 37.520 41.170 1.00
0.00
ATOM 1484 C ALA 106 54.430 35.800 38.780 1.00
0.00
ATOM 1485 O ALA 106 55.050 36.380 37.850 1.00
0.00
ATOM 1486 N LYS 107 53.220 35.360 38.550 1.00
0.00
ATOM 1487 H LYS 107 52.770 34.760 39.230 1.00
0.00
ATOM 1488 CA LYS 107 52.380 35.740 37.370 1.00
0.00
ATOM 1489 HA LYS 107 52.890 36.430 36.700 1.00
0.00
ATOM 1490 CB LYS 107 52.090 34.460 36.580 1.00
0.00
ATOM 1491 HB1 LYS 107 51.550 33.680 37.120 1.00
0.00
ATOM 1492 HB2 LYS 107 53.020 34.020 36.220 1.00
0.00
ATOM 1493 CG LYS 107 51.320 34.710 35.270 1.00
0.00
ATOM 1494 HG1 LYS 107 52.010 35.300 34.670 1.00
0.00
ATOM 1495 HG2 LYS 107 50.450 35.360 35.400 1.00
0.00
ATOM 1496 CD LYS 107 50.840 33.380 34.640 1.00
0.00
ATOM 1497 HD1 LYS 107 50.240 32.920 35.420 1.00
0.00
ATOM 1498 HD2 LYS 107 51.680 32.730 34.400 1.00
0.00
ATOM 1499 CE LYS 107 50.060 33.570 33.390 1.00
0.00
ATOM 1500 HE1 LYS 107 49.220 34.210 33.670 1.00
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ATOM 1501 HE2 LYS 107 49.690 32.600 33.050 1.00
0.00
ATOM 1502 NZ LYS 107 50.980 34.160 32.350 1.00
0.00
ATOM 1503 HZ1 LYS 107 51.820 33.610 32.310 1.00
0.00
ATOM 1504 HZ2 LYS 107 50.610 34.100 31.410 1.00
0.00
ATOM 1505 HZ3 LYS 107 51.190 35.140 32.500 1.00
0.00
ATOM 1506 C LYS 107 51.150 36.510 37.780 1.00
0.00
ATOM 1507 O LYS 107 50.490 36.020 38.710 1.00
0.00
ATOM 1508 N ILE 108 50.910 37.640 37.160 1.00
0.00
ATOM 1509 H ILE 108 51.570 37.880 36.440 1.00
0.00
ATOM 1510 CA ILE 108 49.580 38.310 37.130 1.00
0.00

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ATOM   1511  HA  ILE   108      49.060  37.870  37.990  1.00
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ATOM   1512  CB  ILE   108      49.730  39.830  37.310  1.00
0.00
ATOM   1513  HB  ILE   108      48.790  40.130  37.770  1.00
0.00
ATOM   1514  CG2 ILE   108      50.770  40.050  38.540  1.00
0.00
ATOM   1515 1HG2 ILE   108      50.560  39.390  39.380  1.00
0.00
ATOM   1516 2HG2 ILE   108      51.790  39.910  38.170  1.00
0.00
ATOM   1517 3HG2 ILE   108      50.620  41.040  38.970  1.00
0.00
ATOM   1518  CG1 ILE   108      50.000  40.660  36.080  1.00
0.00
ATOM   1519 1HG1 ILE   108      49.120  40.620  35.430  1.00
0.00
ATOM   1520 2HG1 ILE   108      50.890  40.220  35.620  1.00
0.00
ATOM   1521  CD  ILE   108      50.120  42.160  36.350  1.00
0.00
ATOM   1522  HD1 ILE   108      49.840  42.790  35.510  1.00
0.00
ATOM   1523  HD2 ILE   108      49.440  42.530  37.110  1.00
0.00
ATOM   1524  HD3 ILE   108      51.150  42.450  36.560  1.00
0.00
ATOM   1525  C   ILE   108      48.910  37.980  35.820  1.00
0.00
ATOM   1526  O   ILE   108      49.530  37.620  34.770  1.00
0.00
ATOM   1527  N   THR   109      47.580  38.000  35.810  1.00
0.00
ATOM   1528  H   THR   109      47.170  37.980  36.730  1.00
0.00
ATOM   1529  CA  THR   109      46.820  38.250  34.650  1.00
0.00
ATOM   1530  HA  THR   109      47.460  38.240  33.760  1.00
0.00
ATOM   1531  CB  THR   109      45.740  37.150  34.430  1.00
0.00
ATOM   1532  HB  THR   109      45.040  37.520  33.670  1.00
0.00
ATOM   1533  CG2 THR   109      46.510  35.880  34.120  1.00
0.00
ATOM   1534 1HG2 THR   109      46.980  35.580  35.060  1.00
0.00
ATOM   1535 2HG2 THR   109      45.700  35.220  33.810  1.00
0.00
ATOM   1536 3HG2 THR   109      47.260  36.040  33.350  1.00
0.00
ATOM   1537  OG1 THR   109      45.030  36.990  35.650  1.00
0.00
ATOM   1538  HG1 THR   109      44.510  36.190  35.600  1.00
0.00
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ATOM   1539  C   THR   109      46.160  39.610  34.560  1.00
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ATOM   1540  O   THR   109      45.740  40.040  33.460  1.00
0.00
ATOM   1541  N   GLY   110      46.230  40.350  35.670  1.00
0.00
ATOM   1542  H   GLY   110      46.580  39.920  36.510  1.00
0.00
ATOM   1543  CA  GLY   110      45.810  41.770  35.640  1.00
0.00
ATOM   1544  HA1 GLY   110      44.990  41.860  34.930  1.00
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ATOM   1545  HA2 GLY   110      46.640  42.380  35.270  1.00
0.00
ATOM   1546  C   GLY   110      45.490  42.220  37.050  1.00
0.00
ATOM   1547  O   GLY   110      45.620  41.440  37.980  1.00
0.00
ATOM   1548  N   PHE   111      45.060  43.490  37.190  1.00
0.00
ATOM   1549  H   PHE   111      45.050  44.090  36.380  1.00
0.00
ATOM   1550  CA  PHE   111      44.810  44.160  38.540  1.00
0.00
ATOM   1551  HA  PHE   111      44.970  43.490  39.390  1.00
0.00
ATOM   1552  CB  PHE   111      45.800  45.310  38.740  1.00
0.00
ATOM   1553  HB1 PHE   111      45.270  46.230  38.980  1.00
0.00
ATOM   1554  HB2 PHE   111      46.300  45.530  37.800  1.00
0.00
ATOM   1555  CG  PHE   111      46.910  45.100  39.690  1.00
0.00
ATOM   1556  CD1 PHE   111      46.890  45.510  41.050  1.00
0.00
ATOM   1557  HD1 PHE   111      46.070  46.160  41.340  1.00
0.00
ATOM   1558  CE1 PHE   111      47.960  45.230  41.950  1.00
0.00
ATOM   1559  HE1 PHE   111      47.920  45.590  42.970  1.00
0.00
ATOM   1560  CZ  PHE   111      48.970  44.360  41.560  1.00
0.00
ATOM   1561  HZ  PHE   111      49.810  44.230  42.220  1.00
0.00
ATOM   1562  CE2 PHE   111      49.040  43.960  40.180  1.00
0.00
ATOM   1563  HE2 PHE   111      49.950  43.550  39.770  1.00
0.00
ATOM   1564  CD2 PHE   111      48.040  44.340  39.260  1.00
0.00
ATOM   1565  HD2 PHE   111      48.150  44.020  38.240  1.00
0.00
ATOM   1566  C   PHE   111      43.400  44.660  38.710  1.00
0.00
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ATOM 1567 O PHE 111 42.780 45.100 37.760 1.00
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ATOM 1568 N LEU 112 42.920 44.710 39.930 1.00
0.00
ATOM 1569 H LEU 112 43.470 44.360 40.710 1.00
0.00
ATOM 1570 CA LEU 112 41.530 44.840 40.270 1.00
0.00
ATOM 1571 HA LEU 112 40.950 45.270 39.450 1.00
0.00
ATOM 1572 CB LEU 112 41.080 43.430 40.530 1.00
0.00
ATOM 1573 HB1 LEU 112 41.670 42.950 41.320 1.00
0.00
ATOM 1574 HB2 LEU 112 41.310 42.930 39.580 1.00
0.00
ATOM 1575 CG LEU 112 39.560 43.400 40.750 1.00
0.00
ATOM 1576 HG LEU 112 39.310 44.220 41.420 1.00
0.00
ATOM 1577 CD1 LEU 112 38.650 43.510 39.510 1.00
0.00
ATOM 1578 1HD1 LEU 112 37.620 43.730 39.770 1.00
0.00
ATOM 1579 2HD1 LEU 112 39.040 44.180 38.750 1.00
0.00
ATOM 1580 3HD1 LEU 112 38.610 42.500 39.110 1.00
0.00
ATOM 1581 CD2 LEU 112 39.140 42.170 41.530 1.00
0.00
ATOM 1582 1HD2 LEU 112 39.490 41.360 40.900 1.00
0.00
ATOM 1583 2HD2 LEU 112 39.600 42.310 42.510 1.00
0.00
ATOM 1584 3HD2 LEU 112 38.050 42.180 41.540 1.00
0.00
ATOM 1585 C LEU 112 41.310 45.820 41.490 1.00
0.00
ATOM 1586 O LEU 112 42.030 45.790 42.490 1.00
0.00
ATOM 1587 N SER 113 40.290 46.720 41.360 1.00
0.00
ATOM 1588 H SER 113 39.610 46.730 40.600 1.00
0.00
ATOM 1589 CA SER 113 39.910 47.700 42.370 1.00
0.00
ATOM 1590 HA SER 113 40.860 48.050 42.770 1.00
0.00
ATOM 1591 CB SER 113 39.150 48.750 41.640 1.00
0.00
ATOM 1592 HB1 SER 113 38.790 49.510 42.330 1.00
0.00
ATOM 1593 HB2 SER 113 38.190 48.420 41.240 1.00
0.00
ATOM 1594 OG SER 113 39.840 49.370 40.520 1.00
0.00

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ATOM   1595  HG  SER   113      39.360  50.130  40.190  1.00
0.00
ATOM   1596  C   SER   113      39.130  46.970  43.430  1.00
0.00
ATOM   1597  O   SER   113      38.230  46.240  43.100  1.00
0.00
ATOM   1598  N   LEU   114      39.470  47.160  44.720  1.00
0.00
ATOM   1599  H   LEU   114      40.200  47.830  44.920  1.00
0.00
ATOM   1600  CA  LEU   114      38.880  46.620  45.960  1.00
0.00
ATOM   1601  HA  LEU   114      38.490  45.630  45.750  1.00
0.00
ATOM   1602  CB  LEU   114      40.060  46.330  46.910  1.00
0.00
ATOM   1603  HB1 LEU   114      39.880  46.740  47.910  1.00
0.00
ATOM   1604  HB2 LEU   114      40.850  47.040  46.660  1.00
0.00
ATOM   1605  CG  LEU   114      40.690  44.940  46.890  1.00
0.00
ATOM   1606  HG  LEU   114      39.900  44.190  47.000  1.00
0.00
ATOM   1607  CD1 LEU   114      41.420  44.490  45.550  1.00
0.00
ATOM   1608 1HD1 LEU   114      41.950  43.550  45.700  1.00
0.00
ATOM   1609 2HD1 LEU   114      40.690  44.350  44.760  1.00
0.00
ATOM   1610 3HD1 LEU   114      42.040  45.310  45.190  1.00
0.00
ATOM   1611  CD2 LEU   114      41.640  44.680  48.010  1.00
0.00
ATOM   1612 1HD2 LEU   114      41.190  44.830  48.990  1.00
0.00
ATOM   1613 2HD2 LEU   114      41.990  43.650  47.990  1.00
0.00
ATOM   1614 3HD2 LEU   114      42.560  45.260  47.950  1.00
0.00
ATOM   1615  C   LEU   114      37.760  47.350  46.540  1.00
0.00
ATOM   1616  O   LEU   114      37.440  48.490  46.140  1.00
0.00
ATOM   1617  N   PRO   115      37.110  46.830  47.540  1.00
0.00
ATOM   1618  CD  PRO   115      37.340  45.550  48.240  1.00
0.00
ATOM   1619  HD1 PRO   115      38.300  45.420  48.730  1.00
0.00
ATOM   1620  HD2 PRO   115      37.190  44.690  47.590  1.00
0.00
ATOM   1621  CG  PRO   115      36.350  45.540  49.480  1.00
0.00
ATOM   1622  HG1 PRO   115      36.850  46.010  50.330  1.00
0.00
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ATOM 1623 HG2 PRO 115 36.100 44.540 49.820 1.00
0.00
ATOM 1624 CB PRO 115 35.220 46.400 48.890 1.00
0.00
ATOM 1625 HB1 PRO 115 34.600 46.700 49.730 1.00
0.00
ATOM 1626 HB2 PRO 115 34.520 45.820 48.290 1.00
0.00
ATOM 1627 CA PRO 115 35.920 47.480 48.140 1.00
0.00
ATOM 1628 HA PRO 115 35.380 47.830 47.270 1.00
0.00
ATOM 1629 C PRO 115 36.340 48.740 49.020 1.00
0.00
ATOM 1630 O PRO 115 37.170 48.640 49.910 1.00
0.00
ATOM 1631 N HIP 116 35.820 49.920 48.700 1.00
0.00
ATOM 1632 H HIP 116 35.060 49.940 48.030 1.00
0.00
ATOM 1633 CA HIP 116 36.110 51.250 49.330 1.00
0.00
ATOM 1634 HA HIP 116 37.150 51.390 49.610 1.00
0.00
ATOM 1635 CB HIP 116 35.530 52.300 48.320 1.00
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ATOM 1636 HB1 HIP 116 35.710 53.280 48.760 1.00
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ATOM 1637 HB2 HIP 116 34.450 52.250 48.240 1.00
0.00
ATOM 1638 CG HIP 116 36.210 52.240 46.990 1.00
0.00
ATOM 1639 ND1 HIP 116 35.830 53.010 45.900 1.00
0.00
ATOM 1640 HD1 HIP 116 35.020 53.630 45.910 1.00
0.00
ATOM 1641 CE1 HIP 116 36.670 52.790 44.860 1.00
0.00
ATOM 1642 HE1 HIP 116 36.550 53.170 43.860 1.00
0.00
ATOM 1643 NE2 HIP 116 37.610 51.990 45.280 1.00
0.00
ATOM 1644 HE2 HIP 116 38.270 51.570 44.640 1.00
0.00
ATOM 1645 CD2 HIP 116 37.300 51.560 46.550 1.00
0.00
ATOM 1646 HD2 HIP 116 37.770 50.830 47.200 1.00
0.00
ATOM 1647 C HIP 116 35.370 51.400 50.630 1.00
0.00
ATOM 1648 O HIP 116 34.440 52.170 50.790 1.00
0.00
ATOM 1649 N ASP 117 35.640 50.550 51.640 1.00
0.00
ATOM 1650 H ASP 117 36.030 49.670 51.360 1.00
0.00

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ATOM   1651  CA  ASP   117      35.370  50.580  53.090  1.00
0.00
ATOM   1652  HA  ASP   117      35.490  51.600  53.450  1.00
0.00
ATOM   1653  CB  ASP   117      33.900  50.180  53.270  1.00
0.00
ATOM   1654  HB1 ASP   117      33.720  49.230  52.780  1.00
0.00
ATOM   1655  HB2 ASP   117      33.230  50.850  52.730  1.00
0.00
ATOM   1656  CG  ASP   117      33.470  50.060  54.730  1.00
0.00
ATOM   1657  OD1 ASP   117      32.580  50.880  55.070  1.00
0.00
ATOM   1658  OD2 ASP   117      33.900  49.120  55.460  1.00
0.00
ATOM   1659  C   ASP   117      36.330  49.700  53.870  1.00
0.00
ATOM   1660  O   ASP   117      36.580  48.520  53.530  1.00
0.00
ATOM   1661  N   GLU   118      36.880  50.260  54.970  1.00
0.00
ATOM   1662  H   GLU   118      36.660  51.210  55.230  1.00
0.00
ATOM   1663  CA  GLU   118      37.950  49.640  55.770  1.00
0.00
ATOM   1664  HA  GLU   118      38.870  49.580  55.200  1.00
0.00
ATOM   1665  CB  GLU   118      38.160  50.480  57.050  1.00
0.00
ATOM   1666  HB1 GLU   118      38.640  49.850  57.800  1.00
0.00
ATOM   1667  HB2 GLU   118      37.200  50.810  57.430  1.00
0.00
ATOM   1668  CG  GLU   118      39.010  51.700  56.830  1.00
0.00
ATOM   1669  HG1 GLU   118      38.660  52.390  56.060  1.00
0.00
ATOM   1670  HG2 GLU   118      40.000  51.390  56.490  1.00
0.00
ATOM   1671  CD  GLU   118      39.180  52.370  58.180  1.00
0.00
ATOM   1672  OE1 GLU   118      38.400  53.300  58.550  1.00
0.00
ATOM   1673  OE2 GLU   118      40.120  51.940  58.880  1.00
0.00
ATOM   1674  C   GLU   118      37.570  48.270  56.280  1.00
0.00
ATOM   1675  O   GLU   118      38.440  47.450  56.400  1.00
0.00
ATOM   1676  N   GLU   119      36.340  47.990  56.730  1.00
0.00
ATOM   1677  H   GLU   119      35.680  48.750  56.680  1.00
0.00
ATOM   1678  CA  GLU   119      36.030  46.730  57.470  1.00
0.00
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ATOM 1679 HA GLU 119 36.790 46.330 58.130 1.00
0.00
ATOM 1680 CB GLU 119 34.740 46.970 58.310 1.00
0.00
ATOM 1681 HB1 GLU 119 33.850 47.040 57.690 1.00
0.00
ATOM 1682 HB2 GLU 119 34.860 47.910 58.840 1.00
0.00
ATOM 1683 CG GLU 119 34.380 45.900 59.360 1.00
0.00
ATOM 1684 HG1 GLU 119 34.320 44.890 58.960 1.00
0.00
ATOM 1685 HG2 GLU 119 33.370 46.100 59.730 1.00
0.00
ATOM 1686 CD GLU 119 35.410 45.910 60.500 1.00
0.00
ATOM 1687 OE1 GLU 119 35.960 44.830 60.780 1.00
0.00
ATOM 1688 OE2 GLU 119 35.390 46.870 61.290 1.00
0.00
ATOM 1689 C GLU 119 35.660 45.700 56.440 1.00
0.00
ATOM 1690 O GLU 119 36.050 44.580 56.700 1.00
0.00
ATOM 1691 N ARG 120 35.150 46.060 55.240 1.00
0.00
ATOM 1692 H ARG 120 35.120 47.060 55.100 1.00
0.00
ATOM 1693 CA ARG 120 35.150 45.170 54.030 1.00
0.00
ATOM 1694 HA ARG 120 34.560 44.290 54.300 1.00
0.00
ATOM 1695 CB ARG 120 34.520 45.940 52.820 1.00
0.00
ATOM 1696 HB1 ARG 120 34.480 45.310 51.930 1.00
0.00
ATOM 1697 HB2 ARG 120 34.950 46.920 52.660 1.00
0.00
ATOM 1698 CG ARG 120 33.040 46.220 53.100 1.00
0.00
ATOM 1699 HG1 ARG 120 32.860 46.930 53.900 1.00
0.00
ATOM 1700 HG2 ARG 120 32.570 45.300 53.470 1.00
0.00
ATOM 1701 CD ARG 120 32.230 46.840 51.920 1.00
0.00
ATOM 1702 HD1 ARG 120 32.420 46.190 51.060 1.00
0.00
ATOM 1703 HD2 ARG 120 32.770 47.680 51.490 1.00
0.00
ATOM 1704 NE ARG 120 30.860 47.020 52.260 1.00
0.00
ATOM 1705 HE ARG 120 30.700 46.930 53.260 1.00
0.00
ATOM 1706 CZ ARG 120 29.950 47.670 51.600 1.00
0.00

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ATOM   1707  NH1 ARG   120      30.130  48.110  50.420  1.00
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ATOM   1708 1HH1 ARG   120      30.980  47.830  49.950  1.00
0.00
ATOM   1709 2HH1 ARG   120      29.380  48.530  49.900  1.00
0.00
ATOM   1710  NH2 ARG   120      28.820  47.990  52.140  1.00
0.00
ATOM   1711 1HH2 ARG   120      28.490  47.820  53.080  1.00
0.00
ATOM   1712 2HH2 ARG   120      28.240  48.560  51.540  1.00
0.00
ATOM   1713  C   ARG   120      36.610  44.830  53.690  1.00
0.00
ATOM   1714  O   ARG   120      36.880  43.620  53.640  1.00
0.00
ATOM   1715  N   ILE   121      37.590  45.740  53.590  1.00
0.00
ATOM   1716  H   ILE   121      37.380  46.710  53.790  1.00
0.00
ATOM   1717  CA  ILE   121      39.040  45.490  53.350  1.00
0.00
ATOM   1718  HA  ILE   121      39.150  45.040  52.370  1.00
0.00
ATOM   1719  CB  ILE   121      39.840  46.820  53.220  1.00
0.00
ATOM   1720  HB  ILE   121      39.880  47.270  54.220  1.00
0.00
ATOM   1721  CG2 ILE   121      41.290  46.430  52.890  1.00
0.00
ATOM   1722 1HG2 ILE   121      41.870  47.350  52.800  1.00
0.00
ATOM   1723 2HG2 ILE   121      41.720  45.830  53.690  1.00
0.00
ATOM   1724 3HG2 ILE   121      41.260  45.830  51.980  1.00
0.00
ATOM   1725  CG1 ILE   121      39.460  47.840  52.140  1.00
0.00
ATOM   1726 1HG1 ILE   121      38.370  47.890  52.050  1.00
0.00
ATOM   1727 2HG1 ILE   121      39.690  47.470  51.140  1.00
0.00
ATOM   1728  CD  ILE   121      40.100  49.220  52.200  1.00
0.00
ATOM   1729  HD1 ILE   121      40.340  49.550  51.190  1.00
0.00
ATOM   1730  HD2 ILE   121      39.550  49.900  52.860  1.00
0.00
ATOM   1731  HD3 ILE   121      41.110  49.210  52.600  1.00
0.00
ATOM   1732  C   ILE   121      39.660  44.520  54.350  1.00
0.00
ATOM   1733  O   ILE   121      40.320  43.560  53.970  1.00
0.00
ATOM   1734  N   ALA   122      39.420  44.780  55.640  1.00
0.00
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ATOM   1735  H   ALA   122      38.850  45.570  55.890  1.00
0.00
ATOM   1736  CA  ALA   122      39.980  43.990  56.750  1.00
0.00
ATOM   1737  HA  ALA   122      41.050  43.780  56.620  1.00
0.00
ATOM   1738  CB  ALA   122      39.750  44.670  58.080  1.00
0.00
ATOM   1739  HB1 ALA   122      39.940  44.060  58.970  1.00
0.00
ATOM   1740  HB2 ALA   122      40.450  45.500  58.180  1.00
0.00
ATOM   1741  HB3 ALA   122      38.740  45.070  58.100  1.00
0.00
ATOM   1742  C   ALA   122      39.470  42.570  56.770  1.00
0.00
ATOM   1743  O   ALA   122      40.290  41.660  56.980  1.00
0.00
ATOM   1744  N   ASP   123      38.210  42.410  56.480  1.00
0.00
ATOM   1745  H   ASP   123      37.680  43.240  56.280  1.00
0.00
ATOM   1746  CA  ASP   123      37.730  41.040  56.400  1.00
0.00
ATOM   1747  HA  ASP   123      37.820  40.530  57.360  1.00
0.00
ATOM   1748  CB  ASP   123      36.310  41.070  56.010  1.00
0.00
ATOM   1749  HB1 ASP   123      36.270  41.210  54.930  1.00
0.00
ATOM   1750  HB2 ASP   123      35.760  41.900  56.450  1.00
0.00
ATOM   1751  CG  ASP   123      35.680  39.690  56.280  1.00
0.00
ATOM   1752  OD1 ASP   123      35.160  39.080  55.340  1.00
0.00
ATOM   1753  OD2 ASP   123      35.850  39.230  57.410  1.00
0.00
ATOM   1754  C   ASP   123      38.460  40.200  55.370  1.00
0.00
ATOM   1755  O   ASP   123      38.410  39.000  55.400  1.00
0.00
ATOM   1756  N   TRP   124      39.130  40.770  54.370  1.00
0.00
ATOM   1757  H   TRP   124      39.080  41.760  54.190  1.00
0.00
ATOM   1758  CA  TRP   124      39.870  39.980  53.380  1.00
0.00
ATOM   1759  HA  TRP   124      39.590  38.930  53.480  1.00
0.00
ATOM   1760  CB  TRP   124      39.420  40.350  51.940  1.00
0.00
ATOM   1761  HB1 TRP   124      40.050  39.900  51.170  1.00
0.00
ATOM   1762  HB2 TRP   124      39.470  41.410  51.700  1.00
0.00
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ATOM   1763  CG  TRP   124      38.000  39.850  51.660  1.00
0.00
ATOM   1764  CD1 TRP   124      36.790  40.400  51.920  1.00
0.00
ATOM   1765  HD1 TRP   124      36.670  41.350  52.430  1.00
0.00
ATOM   1766  NE1 TRP   124      35.770  39.510  51.580  1.00
0.00
ATOM   1767  HE1 TRP   124      34.840  39.610  51.970  1.00
0.00
ATOM   1768  CE2 TRP   124      36.280  38.390  50.990  1.00
0.00
ATOM   1769  CZ2 TRP   124      35.630  37.230  50.500  1.00
0.00
ATOM   1770  HZ2 TRP   124      34.560  37.150  50.570  1.00
0.00
ATOM   1771  CH2 TRP   124      36.470  36.180  50.120  1.00
0.00
ATOM   1772  HH2 TRP   124      35.990  35.230  49.970  1.00
0.00
ATOM   1773  CZ3 TRP   124      37.860  36.230  50.320  1.00
0.00
ATOM   1774  HZ3 TRP   124      38.490  35.390  50.070  1.00
0.00
ATOM   1775  CE3 TRP   124      38.460  37.410  50.770  1.00
0.00
ATOM   1776  HE3 TRP   124      39.520  37.420  51.010  1.00
0.00
ATOM   1777  CD2 TRP   124      37.690  38.550  51.130  1.00
0.00
ATOM   1778  C   TRP   124      41.410  40.030  53.500  1.00
0.00
ATOM   1779  O   TRP   124      42.130  39.110  53.040  1.00
0.00
ATOM   1780  N   VAL   125      42.020  41.010  54.150  1.00
0.00
ATOM   1781  H   VAL   125      41.320  41.560  54.620  1.00
0.00
ATOM   1782  CA  VAL   125      43.350  40.970  54.740  1.00
0.00
ATOM   1783  HA  VAL   125      44.050  40.710  53.950  1.00
0.00
ATOM   1784  CB  VAL   125      43.800  42.380  55.300  1.00
0.00
ATOM   1785  HB  VAL   125      43.010  42.650  56.000  1.00
0.00
ATOM   1786  CG1 VAL   125      45.100  42.360  56.030  1.00
0.00
ATOM   1787 1HG1 VAL   125      45.760  41.690  55.480  1.00
0.00
ATOM   1788 2HG1 VAL   125      45.540  43.350  56.140  1.00
0.00
ATOM   1789 3HG1 VAL   125      44.900  41.830  56.960  1.00
0.00
ATOM   1790  CG2 VAL   125      43.880  43.530  54.260  1.00
0.00
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ATOM   1791 1HG2 VAL   125      42.960  43.640  53.690  1.00
0.00
ATOM   1792 2HG2 VAL   125      44.090  44.490  54.740  1.00
0.00
ATOM   1793 3HG2 VAL   125      44.680  43.230  53.590  1.00
0.00
ATOM   1794  C   VAL   125      43.450  39.830  55.770  1.00
0.00
ATOM   1795  O   VAL   125      44.490  39.200  55.790  1.00
0.00
ATOM   1796  N   GLU   126      42.390  39.460  56.430  1.00
0.00
ATOM   1797  H   GLU   126      41.530  39.940  56.250  1.00
0.00
ATOM   1798  CA  GLU   126      42.290  38.270  57.250  1.00
0.00
ATOM   1799  HA  GLU   126      43.140  38.280  57.940  1.00
0.00
ATOM   1800  CB  GLU   126      40.960  38.300  58.090  1.00
0.00
ATOM   1801  HB1 GLU   126      40.140  38.440  57.380  1.00
0.00
ATOM   1802  HB2 GLU   126      40.880  39.120  58.810  1.00
0.00
ATOM   1803  CG  GLU   126      40.800  36.870  58.750  1.00
0.00
ATOM   1804  HG1 GLU   126      41.600  36.720  59.480  1.00
0.00
ATOM   1805  HG2 GLU   126      41.030  36.120  57.990  1.00
0.00
ATOM   1806  CD  GLU   126      39.420  36.660  59.420  1.00
0.00
ATOM   1807  OE1 GLU   126      38.410  36.330  58.730  1.00
0.00
ATOM   1808  OE2 GLU   126      39.380  36.680  60.690  1.00
0.00
ATOM   1809  C   GLU   126      42.530  37.020  56.340  1.00
0.00
ATOM   1810  O   GLU   126      43.190  36.100  56.760  1.00
0.00
ATOM   1811  N   LYS   127      42.030  37.010  55.090  1.00
0.00
ATOM   1812  H   LYS   127      41.530  37.820  54.770  1.00
0.00
ATOM   1813  CA  LYS   127      41.970  35.630  54.390  1.00
0.00
ATOM   1814  HA  LYS   127      41.970  34.910  55.210  1.00
0.00
ATOM   1815  CB  LYS   127      40.670  35.450  53.560  1.00
0.00
ATOM   1816  HB1 LYS   127      40.730  34.470  53.090  1.00
0.00
ATOM   1817  HB2 LYS   127      40.790  36.290  52.880  1.00
0.00
ATOM   1818  CG  LYS   127      39.300  35.760  54.200  1.00
0.00
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ATOM 1819 HG1 LYS 127 38.590 35.320 53.490 1.00
0.00
ATOM 1820 HG2 LYS 127 39.200 36.840 54.090 1.00
0.00
ATOM 1821 CD LYS 127 38.860 35.180 55.590 1.00
0.00
ATOM 1822 HD1 LYS 127 39.400 35.720 56.370 1.00
0.00
ATOM 1823 HD2 LYS 127 39.170 34.140 55.560 1.00
0.00
ATOM 1824 CE LYS 127 37.330 35.170 55.810 1.00
0.00
ATOM 1825 HE1 LYS 127 37.070 34.340 56.470 1.00
0.00
ATOM 1826 HE2 LYS 127 36.750 34.970 54.910 1.00
0.00
ATOM 1827 NZ LYS 127 36.970 36.450 56.410 1.00
0.00
ATOM 1828 HZ1 LYS 127 37.700 36.490 57.110 1.00
0.00
ATOM 1829 HZ2 LYS 127 37.130 37.250 55.820 1.00
0.00
ATOM 1830 HZ3 LYS 127 36.040 36.520 56.790 1.00
0.00
ATOM 1831 C LYS 127 43.200 35.400 53.530 1.00
0.00
ATOM 1832 O LYS 127 43.780 34.340 53.570 1.00
0.00
ATOM 1833 N ARG 128 43.560 36.460 52.800 1.00
0.00
ATOM 1834 H ARG 128 42.950 37.270 52.820 1.00
0.00
ATOM 1835 CA ARG 128 44.410 36.290 51.620 1.00
0.00
ATOM 1836 HA ARG 128 44.990 35.380 51.760 1.00
0.00
ATOM 1837 CB ARG 128 43.550 36.020 50.360 1.00
0.00
ATOM 1838 HB1 ARG 128 43.000 35.090 50.470 1.00
0.00
ATOM 1839 HB2 ARG 128 44.190 35.840 49.490 1.00
0.00
ATOM 1840 CG ARG 128 42.500 37.040 50.090 1.00
0.00
ATOM 1841 HG1 ARG 128 42.100 37.580 50.950 1.00
0.00
ATOM 1842 HG2 ARG 128 41.710 36.610 49.490 1.00
0.00
ATOM 1843 CD ARG 128 43.130 38.080 49.220 1.00
0.00
ATOM 1844 HD1 ARG 128 42.420 38.500 48.510 1.00
0.00
ATOM 1845 HD2 ARG 128 43.810 37.630 48.500 1.00
0.00
ATOM 1846 NE ARG 128 43.610 39.290 49.870 1.00
0.00

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ATOM   1847  HE  ARG   128      44.570  39.230  50.160  1.00
0.00
ATOM   1848  CZ  ARG   128      43.050  40.400  50.110  1.00
0.00
ATOM   1849  NH1 ARG   128      41.940  40.750  49.560  1.00
0.00
ATOM   1850 1HH1 ARG   128      41.520  40.070  48.940  1.00
0.00
ATOM   1851 2HH1 ARG   128      41.390  41.580  49.740  1.00
0.00
ATOM   1852  NH2 ARG   128      43.620  41.200  50.940  1.00
0.00
ATOM   1853 1HH2 ARG   128      44.450  40.970  51.480  1.00
0.00
ATOM   1854 2HH2 ARG   128      43.130  42.050  51.200  1.00
0.00
ATOM   1855  C   ARG   128      45.440  37.400  51.460  1.00
0.00
ATOM   1856  O   ARG   128      46.000  37.580  50.350  1.00
0.00
ATOM   1857  N   GLY   129      45.820  38.040  52.580  1.00
0.00
ATOM   1858  H   GLY   129      45.440  37.780  53.480  1.00
0.00
ATOM   1859  CA  GLY   129      47.100  38.660  52.540  1.00
0.00
ATOM   1860  HA1 GLY   129      47.730  38.050  51.900  1.00
0.00
ATOM   1861  HA2 GLY   129      47.490  38.630  53.560  1.00
0.00
ATOM   1862  C   GLY   129      47.150  40.220  52.310  1.00
0.00
ATOM   1863  O   GLY   129      46.070  40.810  52.290  1.00
0.00
ATOM   1864  N   PRO   130      48.390  40.720  52.150  1.00
0.00
ATOM   1865  CD  PRO   130      49.620  39.980  52.360  1.00
0.00
ATOM   1866  HD1 PRO   130      49.930  39.490  51.440  1.00
0.00
ATOM   1867  HD2 PRO   130      49.560  39.240  53.160  1.00
0.00
ATOM   1868  CG  PRO   130      50.650  41.110  52.670  1.00
0.00
ATOM   1869  HG1 PRO   130      51.610  40.790  52.260  1.00
0.00
ATOM   1870  HG2 PRO   130      50.740  41.310  53.740  1.00
0.00
ATOM   1871  CB  PRO   130      50.120  42.350  51.950  1.00
0.00
ATOM   1872  HB1 PRO   130      50.440  42.370  50.910  1.00
0.00
ATOM   1873  HB2 PRO   130      50.510  43.210  52.490  1.00
0.00
ATOM   1874  CA  PRO   130      48.610  42.150  52.070  1.00
0.00
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ATOM   1875  HA  PRO   130      48.340  42.730  52.950  1.00
0.00
ATOM   1876  C   PRO   130      47.910  42.840  50.910  1.00
0.00
ATOM   1877  O   PRO   130      47.770  42.240  49.860  1.00
0.00
ATOM   1878  N   VAL   131      47.700  44.190  51.010  1.00
0.00
ATOM   1879  H   VAL   131      48.030  44.590  51.880  1.00
0.00
ATOM   1880  CA  VAL   131      47.050  44.980  49.950  1.00
0.00
ATOM   1881  HA  VAL   131      47.170  44.390  49.040  1.00
0.00
ATOM   1882  CB  VAL   131      45.540  45.290  50.290  1.00
0.00
ATOM   1883  HB  VAL   131      45.640  45.760  51.270  1.00
0.00
ATOM   1884  CG1 VAL   131      44.770  46.230  49.370  1.00
0.00
ATOM   1885 1HG1 VAL   131      45.240  47.210  49.510  1.00
0.00
ATOM   1886 2HG1 VAL   131      44.880  45.930  48.330  1.00
0.00
ATOM   1887 3HG1 VAL   131      43.760  46.330  49.770  1.00
0.00
ATOM   1888  CG2 VAL   131      44.790  43.990  50.480  1.00
0.00
ATOM   1889 1HG2 VAL   131      44.570  43.490  49.530  1.00
0.00
ATOM   1890 2HG2 VAL   131      45.380  43.340  51.110  1.00
0.00
ATOM   1891 3HG2 VAL   131      43.850  44.190  51.010  1.00
0.00
ATOM   1892  C   VAL   131      47.690  46.290  49.590  1.00
0.00
ATOM   1893  O   VAL   131      47.900  47.130  50.420  1.00
0.00
ATOM   1894  N   ALA   132      47.970  46.550  48.330  1.00
0.00
ATOM   1895  H   ALA   132      47.800  45.850  47.620  1.00
0.00
ATOM   1896  CA  ALA   132      48.330  47.920  47.930  1.00
0.00
ATOM   1897  HA  ALA   132      49.180  48.280  48.500  1.00
0.00
ATOM   1898  CB  ALA   132      48.830  47.850  46.430  1.00
0.00
ATOM   1899  HB1 ALA   132      49.820  47.390  46.390  1.00
0.00
ATOM   1900  HB2 ALA   132      48.200  47.260  45.780  1.00
0.00
ATOM   1901  HB3 ALA   132      48.820  48.860  46.030  1.00
0.00
ATOM   1902  C   ALA   132      47.160  48.950  48.070  1.00
0.00
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ATOM   1903  O   ALA   132      46.030  48.720  47.700  1.00
0.00
ATOM   1904  N   VAL   133      47.510  50.150  48.620  1.00
0.00
ATOM   1905  H   VAL   133      48.400  50.260  49.080  1.00
0.00
ATOM   1906  CA  VAL   133      46.640  51.290  48.900  1.00
0.00
ATOM   1907  HA  VAL   133      45.770  51.170  48.260  1.00
0.00
ATOM   1908  CB  VAL   133      46.170  51.360  50.340  1.00
0.00
ATOM   1909  HB  VAL   133      45.830  52.380  50.500  1.00
0.00
ATOM   1910  CG1 VAL   133      44.940  50.460  50.600  1.00
0.00
ATOM   1911 1HG1 VAL   133      44.140  50.500  49.860  1.00
0.00
ATOM   1912 2HG1 VAL   133      45.230  49.410  50.610  1.00
0.00
ATOM   1913 3HG1 VAL   133      44.590  50.740  51.600  1.00
0.00
ATOM   1914  CG2 VAL   133      47.300  51.150  51.420  1.00
0.00
ATOM   1915 1HG2 VAL   133      47.750  50.160  51.310  1.00
0.00
ATOM   1916 2HG2 VAL   133      48.110  51.870  51.290  1.00
0.00
ATOM   1917 3HG2 VAL   133      46.960  51.450  52.410  1.00
0.00
ATOM   1918  C   VAL   133      47.370  52.540  48.450  1.00
0.00
ATOM   1919  O   VAL   133      48.570  52.620  48.670  1.00
0.00
ATOM   1920  N   ALA   134      46.640  53.470  47.750  1.00
0.00
ATOM   1921  H   ALA   134      45.700  53.200  47.490  1.00
0.00
ATOM   1922  CA  ALA   134      47.150  54.830  47.620  1.00
0.00
ATOM   1923  HA  ALA   134      48.190  54.770  47.940  1.00
0.00
ATOM   1924  CB  ALA   134      47.220  55.100  46.110  1.00
0.00
ATOM   1925  HB1 ALA   134      47.710  56.060  46.000  1.00
0.00
ATOM   1926  HB2 ALA   134      47.820  54.360  45.590  1.00
0.00
ATOM   1927  HB3 ALA   134      46.240  55.070  45.640  1.00
0.00
ATOM   1928  C   ALA   134      46.380  55.860  48.470  1.00
0.00
ATOM   1929  O   ALA   134      45.130  55.980  48.560  1.00
0.00
ATOM   1930  N   VAL   135      47.210  56.720  49.060  1.00
0.00
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ATOM   1931  H   VAL   135       48.170  56.620  48.780  1.00
0.00
ATOM   1932  CA  VAL   135       46.900  57.610  50.170  1.00
0.00
ATOM   1933  HA  VAL   135       45.830  57.830  50.190  1.00
0.00
ATOM   1934  CB  VAL   135       47.120  56.790  51.520  1.00
0.00
ATOM   1935  HB  VAL   135       46.840  57.460  52.330  1.00
0.00
ATOM   1936  CG1 VAL   135       46.330  55.530  51.730  1.00
0.00
ATOM   1937 1HG1 VAL   135       46.170  55.200  52.760  1.00
0.00
ATOM   1938 2HG1 VAL   135       45.370  55.650  51.230  1.00
0.00
ATOM   1939 3HG1 VAL   135       46.840  54.720  51.210  1.00
0.00
ATOM   1940  CG2 VAL   135       48.530  56.350  51.720  1.00
0.00
ATOM   1941 1HG2 VAL   135       48.850  55.680  50.920  1.00
0.00
ATOM   1942 2HG2 VAL   135       49.200  57.210  51.710  1.00
0.00
ATOM   1943 3HG2 VAL   135       48.670  55.800  52.650  1.00
0.00
ATOM   1944  C   VAL   135       47.670  58.950  50.190  1.00
0.00
ATOM   1945  O   VAL   135       48.470  59.290  49.320  1.00
0.00
ATOM   1946  N   ASP   136       47.360  59.790  51.140  1.00
0.00
ATOM   1947  H   ASP   136       46.560  59.480  51.670  1.00
0.00
ATOM   1948  CA  ASP   136       47.890  61.150  51.440  1.00
0.00
ATOM   1949  HA  ASP   136       48.390  61.580  50.580  1.00
0.00
ATOM   1950  CB  ASP   136       46.720  62.040  51.890  1.00
0.00
ATOM   1951  HB1 ASP   136       46.310  61.830  52.880  1.00
0.00
ATOM   1952  HB2 ASP   136       46.020  61.950  51.070  1.00
0.00
ATOM   1953  CG  ASP   136       47.110  63.490  51.870  1.00
0.00
ATOM   1954  OD1 ASP   136       48.310  63.840  52.000  1.00
0.00
ATOM   1955  OD2 ASP   136       46.190  64.310  51.920  1.00
0.00
ATOM   1956  C   ASP   136       49.110  61.060  52.490  1.00
0.00
ATOM   1957  O   ASP   136       48.770  60.800  53.670  1.00
0.00
ATOM   1958  N   ALA   137       50.360  61.370  52.110  1.00
0.00
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ATOM 1959 H ALA 137 50.530 61.520 51.120 1.00
0.00
ATOM 1960 CA ALA 137 51.510 61.320 53.020 1.00
0.00
ATOM 1961 HA ALA 137 51.290 60.510 53.720 1.00
0.00
ATOM 1962 CB ALA 137 52.690 60.850 52.220 1.00
0.00
ATOM 1963 HB1 ALA 137 53.070 61.730 51.690 1.00
0.00
ATOM 1964 HB2 ALA 137 53.400 60.430 52.930 1.00
0.00
ATOM 1965 HB3 ALA 137 52.360 60.170 51.430 1.00
0.00
ATOM 1966 C ALA 137 51.840 62.630 53.800 1.00
0.00
ATOM 1967 O ALA 137 52.780 62.650 54.540 1.00
0.00
ATOM 1968 N THR 138 51.120 63.700 53.640 1.00
0.00
ATOM 1969 H THR 138 50.250 63.560 53.150 1.00
0.00
ATOM 1970 CA THR 138 51.570 65.040 53.900 1.00
0.00
ATOM 1971 HA THR 138 52.560 65.080 53.440 1.00
0.00
ATOM 1972 CB THR 138 50.650 66.120 53.290 1.00
0.00
ATOM 1973 HB THR 138 50.840 67.120 53.680 1.00
0.00
ATOM 1974 CG2 THR 138 50.930 66.290 51.740 1.00
0.00
ATOM 1975 1HG2 THR 138 51.970 66.580 51.570 1.00
0.00
ATOM 1976 2HG2 THR 138 50.640 65.400 51.170 1.00
0.00
ATOM 1977 3HG2 THR 138 50.420 67.180 51.390 1.00
0.00
ATOM 1978 OG1 THR 138 49.270 65.800 53.460 1.00
0.00
ATOM 1979 HG1 THR 138 48.990 65.270 52.710 1.00
0.00
ATOM 1980 C THR 138 51.690 65.230 55.430 1.00
0.00
ATOM 1981 O THR 138 52.510 66.070 55.880 1.00
0.00
ATOM 1982 N THR 139 51.000 64.460 56.270 1.00
0.00
ATOM 1983 H THR 139 50.250 63.920 55.860 1.00
0.00
ATOM 1984 CA THR 139 51.120 64.490 57.710 1.00
0.00
ATOM 1985 HA THR 139 51.130 65.540 58.000 1.00
0.00
ATOM 1986 CB THR 139 49.930 63.770 58.390 1.00
0.00

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ATOM   1987  HB  THR   139      50.070  62.700  58.220  1.00
0.00
ATOM   1988  CG2 THR   139      50.020  63.960  59.860  1.00
0.00
ATOM   1989 1HG2 THR   139      50.520  63.100  60.310  1.00
0.00
ATOM   1990 2HG2 THR   139      50.570  64.890  59.980  1.00
0.00
ATOM   1991 3HG2 THR   139      49.050  64.210  60.290  1.00
0.00
ATOM   1992  OG1 THR   139      48.670  64.190  57.850  1.00
0.00
ATOM   1993  HG1 THR   139      48.540  63.610  57.090  1.00
0.00
ATOM   1994  C   THR   139      52.450  63.850  58.190  1.00
0.00
ATOM   1995  O   THR   139      52.990  64.360  59.130  1.00
0.00
ATOM   1996  N   TRP   140      52.950  62.710  57.670  1.00
0.00
ATOM   1997  H   TRP   140      52.560  62.340  56.820  1.00
0.00
ATOM   1998  CA  TRP   140      53.850  61.800  58.450  1.00
0.00
ATOM   1999  HA  TRP   140      53.320  61.560  59.370  1.00
0.00
ATOM   2000  CB  TRP   140      54.060  60.510  57.650  1.00
0.00
ATOM   2001  HB1 TRP   140      54.510  59.720  58.250  1.00
0.00
ATOM   2002  HB2 TRP   140      54.660  60.680  56.750  1.00
0.00
ATOM   2003  CG  TRP   140      52.780  59.940  57.140  1.00
0.00
ATOM   2004  CD1 TRP   140      51.520  60.080  57.620  1.00
0.00
ATOM   2005  HD1 TRP   140      51.250  60.540  58.560  1.00
0.00
ATOM   2006  NE1 TRP   140      50.570  59.510  56.730  1.00
0.00
ATOM   2007  HE1 TRP   140      49.560  59.560  56.790  1.00
0.00
ATOM   2008  CE2 TRP   140      51.270  58.780  55.730  1.00
0.00
ATOM   2009  CZ2 TRP   140      50.800  57.990  54.620  1.00
0.00
ATOM   2010  HZ2 TRP   140      49.730  57.880  54.660  1.00
0.00
ATOM   2011  CH2 TRP   140      51.690  57.440  53.700  1.00
0.00
ATOM   2012  HH2 TRP   140      51.350  56.820  52.890  1.00
0.00
ATOM   2013  CZ3 TRP   140      53.090  57.630  53.970  1.00
0.00
ATOM   2014  HZ3 TRP   140      53.800  57.030  53.410  1.00
0.00
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ATOM 2015 CE3 TRP 140 53.510 58.400 55.050 1.00
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ATOM 2016 HE3 TRP 140 54.580 58.560 55.140 1.00
0.00
ATOM 2017 CD2 TRP 140 52.590 58.990 55.990 1.00
0.00
ATOM 2018 C TRP 140 55.200 62.330 58.930 1.00
0.00
ATOM 2019 O TRP 140 55.860 61.670 59.680 1.00
0.00
ATOM 2020 N GLN 141 55.650 63.480 58.510 1.00
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ATOM 2021 H GLN 141 54.980 63.980 57.940 1.00
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ATOM 2022 CA GLN 141 56.740 64.310 59.090 1.00
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ATOM 2023 HA GLN 141 57.710 63.890 58.820 1.00
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ATOM 2024 CB GLN 141 56.720 65.730 58.450 1.00
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ATOM 2025 HB1 GLN 141 57.540 66.180 59.020 1.00
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ATOM 2026 HB2 GLN 141 55.860 66.310 58.780 1.00
0.00
ATOM 2027 CG GLN 141 56.890 65.870 56.910 1.00
0.00
ATOM 2028 HG1 GLN 141 56.010 65.470 56.430 1.00
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ATOM 2029 HG2 GLN 141 57.780 65.280 56.690 1.00
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ATOM 2030 CD GLN 141 57.000 67.310 56.420 1.00
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ATOM 2031 OE1 GLN 141 57.180 68.270 57.170 1.00
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ATOM 2032 NE2 GLN 141 56.580 67.670 55.220 1.00
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ATOM 2033 1HE2 GLN 141 56.300 66.940 54.570 1.00
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ATOM 2034 2HE2 GLN 141 56.570 68.640 54.930 1.00
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ATOM 2036 O GLN 141 57.720 64.490 61.190 1.00
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ATOM 2038 H LEU 142 54.610 64.180 60.760 1.00
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ATOM 2039 CA LEU 142 55.430 64.050 62.700 1.00
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ATOM 2040 HA LEU 142 56.130 64.840 62.980 1.00
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ATOM 2041 CB LEU 142 54.090 64.640 63.140 1.00
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ATOM 2042 HB1 LEU 142 54.050 65.720 62.980 1.00
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ATOM 2043 HB2 LEU 142 53.950 64.450 64.200 1.00
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ATOM 2044 CG LEU 142 52.880 63.980 62.530 1.00
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ATOM 2045 HG LEU 142 52.780 64.430 61.540 1.00
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ATOM 2046 CD1 LEU 142 52.900 62.430 62.440 1.00
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ATOM 2047 1HD1 LEU 142 53.710 62.080 61.800 1.00
0.00
ATOM 2048 2HD1 LEU 142 53.000 62.110 63.480 1.00
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ATOM 2049 3HD1 LEU 142 51.940 62.040 62.110 1.00
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ATOM 2050 CD2 LEU 142 51.570 64.370 63.220 1.00
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ATOM 2051 1HD2 LEU 142 50.720 64.130 62.590 1.00
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ATOM 2052 2HD2 LEU 142 51.440 63.900 64.200 1.00
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ATOM 2053 3HD2 LEU 142 51.720 65.440 63.330 1.00
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ATOM 2054 C LEU 142 55.760 62.670 63.380 1.00
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ATOM 2055 O LEU 142 55.510 62.450 64.580 1.00
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ATOM 2057 H TYR 143 56.410 61.850 61.660 1.00
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ATOM 2058 CA TYR 143 56.350 60.330 63.160 1.00
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ATOM 2059 HA TYR 143 55.690 60.260 64.020 1.00
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ATOM 2060 CB TYR 143 55.680 59.330 62.110 1.00
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ATOM 2061 HB1 TYR 143 56.270 59.480 61.210 1.00
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ATOM 2062 HB2 TYR 143 54.640 59.610 61.920 1.00
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ATOM 2063 CG TYR 143 55.800 57.850 62.490 1.00
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ATOM 2064 CD1 TYR 143 55.330 57.450 63.690 1.00
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ATOM 2065 HD1 TYR 143 54.830 58.180 64.310 1.00
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ATOM 2066 CE1 TYR 143 55.360 56.040 64.010 1.00
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ATOM 2067 HE1 TYR 143 54.790 55.670 64.860 1.00
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ATOM 2068 CZ TYR 143 56.020 55.070 63.200 1.00
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ATOM 2069 OH TYR 143 56.150 53.740 63.500 1.00
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ATOM 2070 HH TYR 143 56.520 53.170 62.820 1.00
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ATOM 2071 CE2 TYR 143 56.580 55.620 61.950 1.00
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ATOM 2072 HE2 TYR 143 57.040 54.910 61.280 1.00
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ATOM 2073 CD2 TYR 143 56.460 56.980 61.630 1.00
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ATOM 2074 HD2 TYR 143 56.930 57.320 60.720 1.00
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ATOM 2075 C TYR 143 57.830 59.850 63.470 1.00
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ATOM 2076 O TYR 143 58.780 60.140 62.730 1.00
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ATOM 2077 N PHE 144 57.980 59.210 64.590 1.00
0.00
ATOM 2078 H PHE 144 57.210 59.110 65.240 1.00
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ATOM 2079 CA PHE 144 59.280 58.690 64.950 1.00
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ATOM 2080 HA PHE 144 59.750 58.340 64.030 1.00
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ATOM 2081 CB PHE 144 60.090 59.790 65.670 1.00
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ATOM 2082 HB1 PHE 144 60.360 60.520 64.910 1.00
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ATOM 2083 HB2 PHE 144 61.010 59.280 65.970 1.00
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ATOM 2084 CG PHE 144 59.330 60.390 66.830 1.00
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ATOM 2085 CD1 PHE 144 59.400 59.850 68.110 1.00
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ATOM 2086 HD1 PHE 144 60.040 59.000 68.320 1.00
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ATOM 2087 CE1 PHE 144 58.560 60.340 69.130 1.00
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ATOM 2088 HE1 PHE 144 58.550 59.870 70.110 1.00
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ATOM 2089 CZ PHE 144 57.630 61.300 68.840 1.00
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ATOM 2090 HZ PHE 144 56.940 61.540 69.640 1.00
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ATOM 2091 CE2 PHE 144 57.610 61.960 67.600 1.00
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ATOM 2092 HE2 PHE 144 56.860 62.650 67.250 1.00
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ATOM 2093 CD2 PHE 144 58.490 61.510 66.590 1.00
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ATOM 2094 HD2 PHE 144 58.360 61.980 65.620 1.00
0.00
ATOM 2095 C PHE 144 59.160 57.440 65.850 1.00
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ATOM 2096 O PHE 144 60.120 56.750 66.150 1.00
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ATOM 2097 N GLY 145 57.990 57.000 66.280 1.00
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ATOM 2098 H GLY 145 57.140 57.530 66.180 1.00
0.00

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ATOM   2099  CA  GLY   145      57.780  55.750  66.920  1.00
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ATOM   2100  HA1 GLY   145      58.100  55.810  67.960  1.00
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ATOM   2101  HA2 GLY   145      58.180  54.950  66.300  1.00
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ATOM   2102  C   GLY   145      56.300  55.320  67.060  1.00
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ATOM   2103  O   GLY   145      55.410  56.160  67.150  1.00
0.00
ATOM   2104  N   GLY   146      56.130  54.030  67.190  1.00
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ATOM   2105  H   GLY   146      56.890  53.380  67.120  1.00
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ATOM   2106  CA  GLY   146      54.920  53.500  67.790  1.00
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ATOM   2107  HA1 GLY   146      54.900  53.920  68.800  1.00
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ATOM   2108  HA2 GLY   146      55.010  52.420  67.870  1.00
0.00
ATOM   2109  C   GLY   146      53.650  53.650  66.920  1.00
0.00
ATOM   2110  O   GLY   146      53.710  53.450  65.710  1.00
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ATOM   2111  N   VAL   147      52.530  53.980  67.570  1.00
0.00
ATOM   2112  H   VAL   147      52.540  54.140  68.570  1.00
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ATOM   2113  CA  VAL   147      51.110  54.080  67.060  1.00
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ATOM   2114  HA  VAL   147      51.160  53.440  66.180  1.00
0.00
ATOM   2115  CB  VAL   147      50.040  53.610  68.170  1.00
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ATOM   2116  HB  VAL   147      50.040  54.300  69.010  1.00
0.00
ATOM   2117  CG1 VAL   147      48.620  53.600  67.630  1.00
0.00
ATOM   2118 1HG1 VAL   147      47.920  53.370  68.440  1.00
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ATOM   2119 2HG1 VAL   147      48.420  54.550  67.130  1.00
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ATOM   2120 3HG1 VAL   147      48.500  52.760  66.950  1.00
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ATOM   2121  CG2 VAL   147      50.270  52.150  68.710  1.00
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ATOM   2122 1HG2 VAL   147      50.010  51.420  67.940  1.00
0.00
ATOM   2123 2HG2 VAL   147      51.260  52.090  69.160  1.00
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ATOM   2124 3HG2 VAL   147      49.710  52.000  69.630  1.00
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ATOM   2125  C   VAL   147      50.860  55.510  66.700  1.00
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ATOM   2126  O   VAL   147      51.240  56.480  67.390  1.00
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ATOM   2127  N   VAL   148      50.180  55.760  65.550  1.00
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ATOM   2128  H   VAL   148      50.190  55.080  64.800  1.00
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ATOM   2129  CA  VAL   148      49.760  57.180  65.180  1.00
0.00
ATOM   2130  HA  VAL   148      50.140  57.920  65.880  1.00
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ATOM   2131  CB  VAL   148      50.480  57.500  63.890  1.00
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ATOM   2132  HB  VAL   148      50.400  56.600  63.280  1.00
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ATOM   2133  CG1 VAL   148      49.920  58.670  63.080  1.00
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ATOM   2134 1HG1 VAL   148      49.820  59.580  63.680  1.00
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ATOM   2135 2HG1 VAL   148      50.550  58.950  62.230  1.00
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ATOM   2136 3HG1 VAL   148      48.930  58.400  62.710  1.00
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ATOM   2137  CG2 VAL   148      52.000  57.740  64.010  1.00
0.00
ATOM   2138 1HG2 VAL   148      52.460  57.070  64.730  1.00
0.00
ATOM   2139 2HG2 VAL   148      52.500  57.570  63.060  1.00
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ATOM   2140 3HG2 VAL   148      52.160  58.760  64.370  1.00
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ATOM   2141  C   VAL   148      48.250  57.100  65.040  1.00
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ATOM   2142  O   VAL   148      47.570  56.140  64.580  1.00
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ATOM   2143  N   SER   149      47.620  58.150  65.490  1.00
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ATOM   2144  H   SER   149      48.260  58.880  65.770  1.00
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ATOM   2145  CA  SER   149      46.140  58.140  65.700  1.00
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ATOM   2146  HA  SER   149      45.770  57.150  65.410  1.00
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ATOM   2147  CB  SER   149      45.890  58.310  67.260  1.00
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ATOM   2148  HB1 SER   149      44.810  58.420  67.350  1.00
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ATOM   2149  HB2 SER   149      46.410  59.150  67.720  1.00
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ATOM   2150  OG  SER   149      46.230  57.020  67.860  1.00
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ATOM   2151  HG  SER   149      47.050  57.230  68.320  1.00
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ATOM   2152  C   SER   149      45.360  59.110  64.840  1.00
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ATOM   2153  O   SER   149      44.240  58.720  64.580  1.00
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ATOM   2154  N   LEU   150      45.940  60.320  64.390  1.00
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ATOM   2155  H   LEU   150      46.900  60.440  64.650  1.00
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ATOM   2156  CA  LEU   150      45.290  61.290  63.560  1.00
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ATOM   2157  HA  LEU   150      44.520  60.830  62.940  1.00
0.00
ATOM   2158  CB  LEU   150      44.670  62.500  64.310  1.00
0.00
ATOM   2159  HB1 LEU   150      45.470  62.900  64.930  1.00
0.00
ATOM   2160  HB2 LEU   150      43.940  62.080  65.010  1.00
0.00
ATOM   2161  CG  LEU   150      44.020  63.550  63.470  1.00
0.00
ATOM   2162  HG  LEU   150      44.730  63.980  62.760  1.00
0.00
ATOM   2163  CD1 LEU   150      42.780  63.060  62.660  1.00
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ATOM   2164 1HD1 LEU   150      42.020  62.660  63.330  1.00
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ATOM   2165 2HD1 LEU   150      42.290  63.830  62.060  1.00
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ATOM   2166 3HD1 LEU   150      43.110  62.280  61.980  1.00
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ATOM   2167  CD2 LEU   150      43.600  64.510  64.540  1.00
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ATOM   2168 1HD2 LEU   150      43.070  65.350  64.090  1.00
0.00
ATOM   2169 2HD2 LEU   150      42.960  63.980  65.250  1.00
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ATOM   2170 3HD2 LEU   150      44.460  64.830  65.130  1.00
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ATOM   2171  C   LEU   150      46.210  61.770  62.460  1.00
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ATOM   2172  O   LEU   150      47.320  62.040  62.820  1.00
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ATOM   2173  N   CYX   151      45.770  61.970  61.220  1.00
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ATOM   2174  H   CYX   151      44.910  61.500  60.980  1.00
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ATOM   2175  CA  CYX   151      46.400  62.530  60.050  1.00
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ATOM   2176  HA  CYX   151      47.270  63.120  60.330  1.00
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ATOM   2177  CB  CYX   151      46.800  61.410  59.090  1.00
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ATOM   2178  HB1 CYX   151      47.160  61.800  58.140  1.00
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ATOM   2179  HB2 CYX   151      45.930  60.810  58.830  1.00
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ATOM   2180  SG  CYX   151      48.160  60.400  59.720  1.00
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ATOM   2181  C   CYX   151      45.350  63.400  59.370  1.00
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ATOM   2182  O   CYX   151      44.110  63.380  59.680  1.00
0.00
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ATOM   2183  N   LEU   152      45.900  64.180  58.430  1.00
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ATOM   2184  H   LEU   152      46.890  64.160  58.220  1.00
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ATOM   2185  CA  LEU   152      45.190  64.950  57.450  1.00
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ATOM   2186  HA  LEU   152      44.330  65.380  57.940  1.00
0.00
ATOM   2187  CB  LEU   152      46.160  66.100  57.080  1.00
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ATOM   2188  HB1 LEU   152      46.850  65.690  56.340  1.00
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ATOM   2189  HB2 LEU   152      46.780  66.390  57.930  1.00
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ATOM   2190  CG  LEU   152      45.520  67.450  56.640  1.00
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ATOM   2191  HG  LEU   152      45.040  67.230  55.690  1.00
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ATOM   2192  CD1 LEU   152      44.560  68.000  57.700  1.00
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ATOM   2193 1HD1 LEU   152      44.110  68.920  57.350  1.00
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ATOM   2194 2HD1 LEU   152      43.730  67.330  57.940  1.00
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ATOM   2195 3HD1 LEU   152      45.110  68.150  58.630  1.00
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ATOM   2196  CD2 LEU   152      46.560  68.470  56.370  1.00
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ATOM   2197 1HD2 LEU   152      47.310  68.030  55.710  1.00
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ATOM   2198 2HD2 LEU   152      46.190  69.380  55.910  1.00
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ATOM   2199 3HD2 LEU   152      47.040  68.730  57.310  1.00
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ATOM   2200  C   LEU   152      44.910  64.040  56.220  1.00
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ATOM   2201  O   LEU   152      45.610  63.080  55.990  1.00
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ATOM   2202  N   ALA   153      43.860  64.440  55.500  1.00
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ATOM   2203  H   ALA   153      43.370  65.290  55.760  1.00
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ATOM   2204  CA  ALA   153      43.300  63.770  54.340  1.00
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ATOM   2205  HA  ALA   153      44.020  63.140  53.830  1.00
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ATOM   2206  CB  ALA   153      42.180  62.840  54.860  1.00
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ATOM   2207  HB1 ALA   153      42.640  62.140  55.560  1.00
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ATOM   2208  HB2 ALA   153      41.470  63.400  55.460  1.00
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ATOM   2209  HB3 ALA   153      41.760  62.320  54.000  1.00
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ATOM   2210  C   ALA   153      42.770  64.790  53.280  1.00
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ATOM 2211 O ALA 153 41.570 65.070 53.330 1.00
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ATOM 2213 H TRP 154 44.540 65.010 52.340 1.00
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ATOM 2214 CA TRP 154 43.120 66.170 51.350 1.00
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ATOM 2215 HA TRP 154 42.040 66.250 51.350 1.00
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ATOM 2216 CB TRP 154 43.820 67.480 51.720 1.00
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ATOM 2217 HB1 TRP 154 44.850 67.310 51.430 1.00
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ATOM 2218 HB2 TRP 154 43.840 67.620 52.800 1.00
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ATOM 2219 CG TRP 154 43.270 68.690 51.040 1.00
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ATOM 2220 CD1 TRP 154 42.000 69.150 51.090 1.00
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ATOM 2221 HD1 TRP 154 41.210 68.520 51.470 1.00
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ATOM 2222 NE1 TRP 154 41.930 70.320 50.400 1.00
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ATOM 2223 HE1 TRP 154 41.000 70.560 50.090 1.00
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ATOM 2224 CE2 TRP 154 43.130 70.680 49.820 1.00
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ATOM 2225 CZ2 TRP 154 43.520 71.730 48.980 1.00
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ATOM 2226 HZ2 TRP 154 42.850 72.550 48.780 1.00
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ATOM 2227 CH2 TRP 154 44.860 71.860 48.640 1.00
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ATOM 2228 HH2 TRP 154 45.180 72.750 48.110 1.00
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ATOM 2229 CZ3 TRP 154 45.790 70.930 49.110 1.00
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ATOM 2230 HZ3 TRP 154 46.840 71.080 48.910 1.00
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ATOM 2231 CE3 TRP 154 45.410 69.860 49.950 1.00
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ATOM 2232 HE3 TRP 154 46.040 69.110 50.400 1.00
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ATOM 2233 CD2 TRP 154 44.070 69.670 50.240 1.00
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ATOM 2234 C TRP 154 43.310 65.710 49.910 1.00
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ATOM 2235 O TRP 154 42.410 65.910 49.140 1.00
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ATOM 2236 N SER 155 44.430 65.070 49.630 1.00
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ATOM 2237 H SER 155 45.090 64.830 50.360 1.00
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ATOM 2238 CA SER 155 44.750 64.680 48.230 1.00
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ATOM 2239 HA SER 155 43.830 64.340 47.760 1.00
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ATOM 2240 CB SER 155 45.250 65.780 47.300 1.00
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ATOM 2241 HB1 SER 155 45.730 65.310 46.440 1.00
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ATOM 2242 HB2 SER 155 46.020 66.280 47.880 1.00
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ATOM 2243 OG SER 155 44.250 66.800 46.890 1.00
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ATOM 2244 HG SER 155 43.580 66.840 47.580 1.00
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ATOM 2245 C SER 155 45.760 63.450 48.240 1.00
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ATOM 2246 O SER 155 46.760 63.530 48.940 1.00
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ATOM 2247 N LEU 156 45.450 62.420 47.410 1.00
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ATOM 2248 H LEU 156 44.590 62.570 46.900 1.00
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ATOM 2249 CA LEU 156 46.320 61.260 47.230 1.00
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ATOM 2250 HA LEU 156 46.530 60.840 48.210 1.00
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ATOM 2251 CB LEU 156 45.590 60.150 46.420 1.00
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ATOM 2252 HB1 LEU 156 46.390 59.530 46.040 1.00
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ATOM 2253 HB2 LEU 156 45.180 60.620 45.530 1.00
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ATOM 2254 CG LEU 156 44.520 59.270 47.010 1.00
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ATOM 2255 HG LEU 156 44.820 59.040 48.030 1.00
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ATOM 2256 CD1 LEU 156 43.180 60.070 47.160 1.00
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ATOM 2257 1HD1 LEU 156 42.430 59.440 47.620 1.00
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ATOM 2258 2HD1 LEU 156 43.400 60.930 47.780 1.00
0.00
ATOM 2259 3HD1 LEU 156 42.810 60.440 46.200 1.00
0.00
ATOM 2260 CD2 LEU 156 44.310 58.070 46.090 1.00
0.00
ATOM 2261 1HD2 LEU 156 43.790 58.220 45.150 1.00
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ATOM 2262 2HD2 LEU 156 45.290 57.620 45.920 1.00
0.00
ATOM 2263 3HD2 LEU 156 43.670 57.400 46.660 1.00
0.00
ATOM 2264 C LEU 156 47.700 61.620 46.510 1.00
0.00
ATOM 2265 O LEU 156 47.690 62.020 45.330 1.00
0.00
ATOM 2266 N ASN 157 48.830 61.300 47.160 1.00
0.00

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ATOM   2267  H   ASN   157      48.740  60.850  48.060  1.00
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ATOM   2268  CA  ASN   157      50.200  61.590  46.720  1.00
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ATOM   2269  HA  ASN   157      50.110  61.700  45.640  1.00
0.00
ATOM   2270  CB  ASN   157      50.650  62.930  47.350  1.00
0.00
ATOM   2271  HB1 ASN   157      50.080  63.780  46.990  1.00
0.00
ATOM   2272  HB2 ASN   157      51.670  63.150  47.010  1.00
0.00
ATOM   2273  CG  ASN   157      50.550  62.980  48.840  1.00
0.00
ATOM   2274  OD1 ASN   157      51.450  62.560  49.540  1.00
0.00
ATOM   2275  ND2 ASN   157      49.410  63.450  49.410  1.00
0.00
ATOM   2276 1HD2 ASN   157      48.640  63.780  48.850  1.00
0.00
ATOM   2277 2HD2 ASN   157      49.260  63.420  50.410  1.00
0.00
ATOM   2278  C   ASN   157      51.230  60.430  46.910  1.00
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ATOM   2279  O   ASN   157      52.370  60.590  46.500  1.00
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ATOM   2280  N   HIE   158      50.900  59.290  47.600  1.00
0.00
ATOM   2281  H   HIE   158      49.970  59.310  48.010  1.00
0.00
ATOM   2282  CA  HIE   158      51.800  58.190  47.870  1.00
0.00
ATOM   2283  HA  HIE   158      52.510  58.110  47.050  1.00
0.00
ATOM   2284  CB  HIE   158      52.430  58.470  49.190  1.00
0.00
ATOM   2285  HB1 HIE   158      51.790  58.200  50.030  1.00
0.00
ATOM   2286  HB2 HIE   158      52.650  59.530  49.320  1.00
0.00
ATOM   2287  CG  HIE   158      53.620  57.610  49.380  1.00
0.00
ATOM   2288  ND1 HIE   158      54.340  56.990  48.340  1.00
0.00
ATOM   2289  CE1 HIE   158      55.430  56.430  48.890  1.00
0.00
ATOM   2290  HE1 HIE   158      56.250  55.880  48.460  1.00
0.00
ATOM   2291  NE2 HIE   158      55.420  56.690  50.220  1.00
0.00
ATOM   2292  HE2 HIE   158      56.160  56.380  50.830  1.00
0.00
ATOM   2293  CD2 HIE   158      54.380  57.480  50.490  1.00
0.00
ATOM   2294  HD2 HIE   158      54.000  57.840  51.430  1.00
0.00
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ATOM   2295  C   HIE   158      51.080  56.820  47.770  1.00
0.00
ATOM   2296  O   HIE   158      49.890  56.850  47.970  1.00
0.00
ATOM   2297  N   GLY   159      51.820  55.760  47.390  1.00
0.00
ATOM   2298  H   GLY   159      52.810  55.840  47.240  1.00
0.00
ATOM   2299  CA  GLY   159      51.160  54.400  47.330  1.00
0.00
ATOM   2300  HA1 GLY   159      51.420  54.120  46.310  1.00
0.00
ATOM   2301  HA2 GLY   159      50.070  54.460  47.400  1.00
0.00
ATOM   2302  C   GLY   159      51.910  53.540  48.310  1.00
0.00
ATOM   2303  O   GLY   159      53.120  53.490  48.210  1.00
0.00
ATOM   2304  N   VAL   160      51.240  52.870  49.250  1.00
0.00
ATOM   2305  H   VAL   160      50.230  52.860  49.260  1.00
0.00
ATOM   2306  CA  VAL   160      51.890  52.090  50.340  1.00
0.00
ATOM   2307  HA  VAL   160      52.940  51.970  50.050  1.00
0.00
ATOM   2308  CB  VAL   160      51.970  52.920  51.640  1.00
0.00
ATOM   2309  HB  VAL   160      52.680  52.440  52.310  1.00
0.00
ATOM   2310  CG1 VAL   160      52.610  54.290  51.490  1.00
0.00
ATOM   2311 1HG1 VAL   160      53.630  54.150  51.140  1.00
0.00
ATOM   2312 2HG1 VAL   160      52.030  54.920  50.820  1.00
0.00
ATOM   2313 3HG1 VAL   160      52.690  54.680  52.510  1.00
0.00
ATOM   2314  CG2 VAL   160      50.610  52.920  52.360  1.00
0.00
ATOM   2315 1HG2 VAL   160      50.270  51.910  52.610  1.00
0.00
ATOM   2316 2HG2 VAL   160      50.600  53.410  53.340  1.00
0.00
ATOM   2317 3HG2 VAL   160      49.930  53.440  51.690  1.00
0.00
ATOM   2318  C   VAL   160      51.260  50.690  50.430  1.00
0.00
ATOM   2319  O   VAL   160      50.170  50.410  49.940  1.00
0.00
ATOM   2320  N   LEU   161      51.850  49.760  51.200  1.00
0.00
ATOM   2321  H   LEU   161      52.690  50.120  51.620  1.00
0.00
ATOM   2322  CA  LEU   161      51.400  48.330  51.350  1.00
0.00
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ATOM   2323  HA  LEU   161      50.520  48.190  50.710  1.00
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ATOM   2324  CB  LEU   161      52.380  47.500  50.520  1.00
0.00
ATOM   2325  HB1 LEU   161      53.330  47.770  50.980  1.00
0.00
ATOM   2326  HB2 LEU   161      52.350  47.890  49.500  1.00
0.00
ATOM   2327  CG  LEU   161      52.320  45.930  50.460  1.00
0.00
ATOM   2328  HG  LEU   161      53.010  45.560  49.700  1.00
0.00
ATOM   2329  CD1 LEU   161      52.670  45.270  51.790  1.00
0.00
ATOM   2330 1HD1 LEU   161      52.700  44.190  51.630  1.00
0.00
ATOM   2331 2HD1 LEU   161      53.630  45.640  52.150  1.00
0.00
ATOM   2332 3HD1 LEU   161      51.890  45.480  52.520  1.00
0.00
ATOM   2333  CD2 LEU   161      50.900  45.400  50.220  1.00
0.00
ATOM   2334 1HD2 LEU   161      50.960  44.310  50.180  1.00
0.00
ATOM   2335 2HD2 LEU   161      50.150  45.660  50.970  1.00
0.00
ATOM   2336 3HD2 LEU   161      50.550  45.720  49.240  1.00
0.00
ATOM   2337  C   LEU   161      50.930  47.910  52.790  1.00
0.00
ATOM   2338  O   LEU   161      51.810  47.800  53.740  1.00
0.00
ATOM   2339  N   ILE   162      49.650  47.630  53.110  1.00
0.00
ATOM   2340  H   ILE   162      49.010  47.540  52.340  1.00
0.00
ATOM   2341  CA  ILE   162      49.140  47.070  54.430  1.00
0.00
ATOM   2342  HA  ILE   162      49.720  47.570  55.200  1.00
0.00
ATOM   2343  CB  ILE   162      47.640  47.520  54.720  1.00
0.00
ATOM   2344  HB  ILE   162      47.380  46.990  55.640  1.00
0.00
ATOM   2345  CG2 ILE   162      47.590  49.000  55.000  1.00
0.00
ATOM   2346 1HG2 ILE   162      47.790  49.720  54.200  1.00
0.00
ATOM   2347 2HG2 ILE   162      46.730  49.270  55.610  1.00
0.00
ATOM   2348 3HG2 ILE   162      48.430  49.230  55.660  1.00
0.00
ATOM   2349  CG1 ILE   162      46.640  47.220  53.520  1.00
0.00
ATOM   2350 1HG1 ILE   162      46.830  46.270  53.020  1.00
0.00
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ATOM   2351 2HG1 ILE   162      46.960  47.880  52.720  1.00
0.00
ATOM   2352  CD  ILE   162      45.220  47.500  53.810  1.00
0.00
ATOM   2353  HD1 ILE   162      45.090  47.100  54.820  1.00
0.00
ATOM   2354  HD2 ILE   162      45.050  48.570  53.850  1.00
0.00
ATOM   2355  HD3 ILE   162      44.700  46.930  53.040  1.00
0.00
ATOM   2356  C   ILE   162      49.370  45.610  54.580  1.00
0.00
ATOM   2357  O   ILE   162      49.080  44.800  53.670  1.00
0.00
ATOM   2358  N   VAL   163      50.020  45.210  55.720  1.00
0.00
ATOM   2359  H   VAL   163      50.420  45.970  56.260  1.00
0.00
ATOM   2360  CA  VAL   163      50.410  43.830  55.980  1.00
0.00
ATOM   2361  HA  VAL   163      50.240  43.140  55.150  1.00
0.00
ATOM   2362  CB  VAL   163      51.920  43.670  56.290  1.00
0.00
ATOM   2363  HB  VAL   163      52.170  42.610  56.370  1.00
0.00
ATOM   2364  CG1 VAL   163      52.730  44.140  55.080  1.00
0.00
ATOM   2365 1HG1 VAL   163      53.760  43.800  55.110  1.00
0.00
ATOM   2366 2HG1 VAL   163      52.240  43.680  54.230  1.00
0.00
ATOM   2367 3HG1 VAL   163      52.740  45.230  54.960  1.00
0.00
ATOM   2368  CG2 VAL   163      52.450  44.420  57.510  1.00
0.00
ATOM   2369 1HG2 VAL   163      52.230  45.480  57.390  1.00
0.00
ATOM   2370 2HG2 VAL   163      52.030  43.970  58.410  1.00
0.00
ATOM   2371 3HG2 VAL   163      53.510  44.210  57.640  1.00
0.00
ATOM   2372  C   VAL   163      49.640  43.170  57.120  1.00
0.00
ATOM   2373  O   VAL   163      49.630  41.940  57.140  1.00
0.00
ATOM   2374  N   GLY   164      48.940  43.960  57.920  1.00
0.00
ATOM   2375  H   GLY   164      48.920  44.970  57.810  1.00
0.00
ATOM   2376  CA  GLY   164      48.130  43.470  59.050  1.00
0.00
ATOM   2377  HA1 GLY   164      48.880  43.220  59.800  1.00
0.00
ATOM   2378  HA2 GLY   164      47.520  42.610  58.750  1.00
0.00
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ATOM   2379  C   GLY   164      47.150  44.420  59.700  1.00
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ATOM   2380  O   GLY   164      47.190  45.660  59.430  1.00
0.00
ATOM   2381  N   PHE   165      46.160  43.970  60.540  1.00
0.00
ATOM   2382  H   PHE   165      46.250  43.050  60.950  1.00
0.00
ATOM   2383  CA  PHE   165      45.260  44.910  61.300  1.00
0.00
ATOM   2384  HA  PHE   165      45.690  45.900  61.420  1.00
0.00
ATOM   2385  CB  PHE   165      43.920  45.070  60.500  1.00
0.00
ATOM   2386  HB1 PHE   165      44.130  45.520  59.530  1.00
0.00
ATOM   2387  HB2 PHE   165      43.350  45.830  61.030  1.00
0.00
ATOM   2388  CG  PHE   165      42.930  43.870  60.510  1.00
0.00
ATOM   2389  CD1 PHE   165      42.120  43.580  61.610  1.00
0.00
ATOM   2390  HD1 PHE   165      42.140  44.230  62.460  1.00
0.00
ATOM   2391  CE1 PHE   165      41.240  42.470  61.500  1.00
0.00
ATOM   2392  HE1 PHE   165      40.630  42.200  62.340  1.00
0.00
ATOM   2393  CZ  PHE   165      41.220  41.590  60.450  1.00
0.00
ATOM   2394  HZ  PHE   165      40.640  40.670  60.440  1.00
0.00
ATOM   2395  CE2 PHE   165      42.200  41.760  59.470  1.00
0.00
ATOM   2396  HE2 PHE   165      42.390  40.980  58.750  1.00
0.00
ATOM   2397  CD2 PHE   165      42.960  42.930  59.460  1.00
0.00
ATOM   2398  HD2 PHE   165      43.540  43.070  58.560  1.00
0.00
ATOM   2399  C   PHE   165      44.960  44.410  62.670  1.00
0.00
ATOM   2400  O   PHE   165      44.980  43.230  62.880  1.00
0.00
ATOM   2401  N   ASN   166      44.700  45.280  63.720  1.00
0.00
ATOM   2402  H   ASN   166      44.430  46.190  63.390  1.00
0.00
ATOM   2403  CA  ASN   166      44.750  44.930  65.150  1.00
0.00
ATOM   2404  HA  ASN   166      44.620  43.850  65.100  1.00
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ATOM   2405  CB  ASN   166      46.060  45.260  65.800  1.00
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ATOM   2406  HB1 ASN   166      46.520  46.230  65.640  1.00
0.00
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ATOM   2407  HB2 ASN   166      46.730  44.530  65.330  1.00
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ATOM   2408  CG  ASN   166      46.160  44.990  67.270  1.00
0.00
ATOM   2409  OD1 ASN   166      45.260  44.870  68.020  1.00
0.00
ATOM   2410  ND2 ASN   166      47.340  44.770  67.860  1.00
0.00
ATOM   2411 1HD2 ASN   166      48.240  44.850  67.410  1.00
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ATOM   2412 2HD2 ASN   166      47.380  44.540  68.840  1.00
0.00
ATOM   2413  C   ASN   166      43.600  45.710  65.880  1.00
0.00
ATOM   2414  O   ASN   166      43.670  46.920  65.910  1.00
0.00
ATOM   2415  N   LYS   167      42.690  45.020  66.550  1.00
0.00
ATOM   2416  H   LYS   167      42.680  44.010  66.510  1.00
0.00
ATOM   2417  CA  LYS   167      41.660  45.670  67.420  1.00
0.00
ATOM   2418  HA  LYS   167      41.960  46.710  67.530  1.00
0.00
ATOM   2419  CB  LYS   167      40.250  45.620  66.870  1.00
0.00
ATOM   2420  HB1 LYS   167      39.620  46.340  67.380  1.00
0.00
ATOM   2421  HB2 LYS   167      39.830  44.630  67.050  1.00
0.00
ATOM   2422  CG  LYS   167      40.010  45.900  65.380  1.00
0.00
ATOM   2423  HG1 LYS   167      40.320  45.130  64.680  1.00
0.00
ATOM   2424  HG2 LYS   167      40.570  46.800  65.110  1.00
0.00
ATOM   2425  CD  LYS   167      38.440  45.890  65.190  1.00
0.00
ATOM   2426  HD1 LYS   167      38.060  46.780  65.700  1.00
0.00
ATOM   2427  HD2 LYS   167      38.060  44.970  65.640  1.00
0.00
ATOM   2428  CE  LYS   167      38.100  45.960  63.720  1.00
0.00
ATOM   2429  HE1 LYS   167      38.540  45.160  63.120  1.00
0.00
ATOM   2430  HE2 LYS   167      38.340  46.950  63.330  1.00
0.00
ATOM   2431  NZ  LYS   167      36.620  45.870  63.560  1.00
0.00
ATOM   2432  HZ1 LYS   167      36.350  44.920  63.780  1.00
0.00
ATOM   2433  HZ2 LYS   167      36.080  46.360  64.260  1.00
0.00
ATOM   2434  HZ3 LYS   167      36.340  46.100  62.620  1.00
0.00
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ATOM   2435  C   LYS   167      41.690  45.140  68.880  1.00
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ATOM   2436  O   LYS   167      40.840  45.510  69.680  1.00
0.00
ATOM   2437  N   ASN   168      42.660  44.290  69.210  1.00
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ATOM   2438  H   ASN   168      43.350  44.190  68.470  1.00
0.00
ATOM   2439  CA  ASN   168      42.990  43.840  70.570  1.00
0.00
ATOM   2440  HA  ASN   168      42.090  43.410  71.010  1.00
0.00
ATOM   2441  CB  ASN   168      43.930  42.630  70.360  1.00
0.00
ATOM   2442  HB1 ASN   168      44.800  42.870  69.760  1.00
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ATOM   2443  HB2 ASN   168      43.320  41.880  69.840  1.00
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ATOM   2444  CG  ASN   168      44.320  42.100  71.740  1.00
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ATOM   2445  OD1 ASN   168      43.760  42.370  72.800  1.00
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ATOM   2446  ND2 ASN   168      45.340  41.250  71.790  1.00
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ATOM   2447 1HD2 ASN   168      45.620  41.010  70.850  1.00
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ATOM   2448 2HD2 ASN   168      45.610  40.690  72.590  1.00
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ATOM   2449  C   ASN   168      43.610  45.070  71.300  1.00
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ATOM   2450  O   ASN   168      43.170  45.320  72.410  1.00
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ATOM   2451  N   ALA   169      44.560  45.800  70.710  1.00
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ATOM   2452  H   ALA   169      45.000  45.520  69.840  1.00
0.00
ATOM   2453  CA  ALA   169      45.080  47.000  71.320  1.00
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ATOM   2454  HA  ALA   169      45.480  46.710  72.290  1.00
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ATOM   2455  CB  ALA   169      46.180  47.570  70.370  1.00
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ATOM   2456  HB1 ALA   169      47.030  46.900  70.350  1.00
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ATOM   2457  HB2 ALA   169      45.750  47.540  69.370  1.00
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ATOM   2458  HB3 ALA   169      46.390  48.590  70.710  1.00
0.00
ATOM   2459  C   ALA   169      43.970  48.040  71.510  1.00
0.00
ATOM   2460  O   ALA   169      43.060  48.120  70.710  1.00
0.00
ATOM   2461  N   LYS   170      44.120  48.940  72.440  1.00
0.00
ATOM   2462  H   LYS   170      44.980  48.890  72.970  1.00
0.00
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ATOM 2463 CA LYS 170 43.070 49.800 72.910 1.00
0.00
ATOM 2464 HA LYS 170 42.150 49.250 73.100 1.00
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ATOM 2465 CB LYS 170 43.460 50.490 74.240 1.00
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ATOM 2466 HB1 LYS 170 44.400 51.040 74.160 1.00
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ATOM 2467 HB2 LYS 170 43.680 49.680 74.940 1.00
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ATOM 2468 CG LYS 170 42.260 51.370 74.600 1.00
0.00
ATOM 2469 HG1 LYS 170 41.340 50.800 74.560 1.00
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ATOM 2470 HG2 LYS 170 42.190 52.210 73.910 1.00
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ATOM 2471 CD LYS 170 42.550 51.930 75.960 1.00
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ATOM 2472 HD1 LYS 170 42.980 51.120 76.550 1.00
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ATOM 2473 HD2 LYS 170 41.630 52.370 76.360 1.00
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ATOM 2474 CE LYS 170 43.700 52.990 76.000 1.00
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ATOM 2475 HE1 LYS 170 43.360 53.920 75.560 1.00
0.00
ATOM 2476 HE2 LYS 170 44.490 52.550 75.390 1.00
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ATOM 2477 NZ LYS 170 44.260 53.160 77.300 1.00
0.00
ATOM 2478 HZ1 LYS 170 44.630 52.320 77.700 1.00
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ATOM 2479 HZ2 LYS 170 44.980 53.860 77.430 1.00
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ATOM 2480 HZ3 LYS 170 43.600 53.510 77.980 1.00
0.00
ATOM 2481 C LYS 170 42.660 50.750 71.740 1.00
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ATOM 2482 O LYS 170 41.480 50.720 71.470 1.00
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ATOM 2483 N PRO 171 43.600 51.350 71.000 1.00
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ATOM 2484 CD PRO 171 45.010 51.580 71.360 1.00
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ATOM 2485 HD1 PRO 171 45.570 50.740 70.930 1.00
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ATOM 2486 HD2 PRO 171 45.190 51.780 72.410 1.00
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ATOM 2487 CG PRO 171 45.440 52.890 70.680 1.00
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ATOM 2488 HG1 PRO 171 46.360 52.710 70.130 1.00
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ATOM 2489 HG2 PRO 171 45.460 53.630 71.480 1.00
0.00
ATOM 2490 CB PRO 171 44.240 53.240 69.710 1.00
0.00

ATOM 2491 HB1 PRO 171 44.670 53.590 68.780 1.00
0.00
ATOM 2492 HB2 PRO 171 43.720 54.110 70.120 1.00
0.00
ATOM 2493 CA PRO 171 43.310 52.010 69.790 1.00
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ATOM 2494 HA PRO 171 42.360 52.530 69.720 1.00
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ATOM 2495 C PRO 171 43.540 51.060 68.560 1.00
0.00
ATOM 2496 O PRO 171 44.720 50.800 68.200 1.00
0.00
ATOM 2497 N PRO 172 42.470 50.690 67.840 1.00
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ATOM 2498 CD PRO 172 41.070 51.070 68.010 1.00
0.00
ATOM 2499 HD1 PRO 172 40.980 52.150 68.140 1.00
0.00
ATOM 2500 HD2 PRO 172 40.570 50.580 68.840 1.00
0.00
ATOM 2501 CG PRO 172 40.490 50.610 66.680 1.00
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ATOM 2502 HG1 PRO 172 40.570 51.380 65.920 1.00
0.00
ATOM 2503 HG2 PRO 172 39.460 50.420 66.980 1.00
0.00
ATOM 2504 CB PRO 172 41.260 49.360 66.350 1.00
0.00
ATOM 2505 HB1 PRO 172 41.200 49.090 65.290 1.00
0.00
ATOM 2506 HB2 PRO 172 40.930 48.540 66.980 1.00
0.00
ATOM 2507 CA PRO 172 42.670 49.820 66.720 1.00
0.00
ATOM 2508 HA PRO 172 43.260 48.970 67.070 1.00
0.00
ATOM 2509 C PRO 172 43.360 50.470 65.490 1.00
0.00
ATOM 2510 O PRO 172 43.170 51.620 65.140 1.00
0.00
ATOM 2511 N TYR 173 44.260 49.620 64.900 1.00
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ATOM 2512 H TYR 173 44.350 48.640 65.160 1.00
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ATOM 2513 CA TYR 173 45.200 50.070 63.930 1.00
0.00
ATOM 2514 HA TYR 173 44.790 50.980 63.490 1.00
0.00
ATOM 2515 CB TYR 173 46.490 50.640 64.540 1.00
0.00
ATOM 2516 HB1 TYR 173 46.300 51.500 65.180 1.00
0.00
ATOM 2517 HB2 TYR 173 47.080 50.940 63.670 1.00
0.00
ATOM 2518 CG TYR 173 47.320 49.670 65.300 1.00
0.00

ATOM 2519 CD1 TYR 173 47.960 48.590 64.700 1.00
0.00
ATOM 2520 HD1 TYR 173 47.960 48.590 63.620 1.00
0.00
ATOM 2521 CE1 TYR 173 48.750 47.740 65.460 1.00
0.00
ATOM 2522 HE1 TYR 173 49.200 46.850 65.050 1.00
0.00
ATOM 2523 CZ TYR 173 48.860 47.940 66.880 1.00
0.00
ATOM 2524 OH TYR 173 49.710 47.170 67.590 1.00
0.00
ATOM 2525 HH TYR 173 50.030 47.500 68.430 1.00
0.00
ATOM 2526 CE2 TYR 173 48.170 49.030 67.480 1.00
0.00
ATOM 2527 HE2 TYR 173 48.260 49.270 68.530 1.00
0.00
ATOM 2528 CD2 TYR 173 47.440 49.910 66.700 1.00
0.00
ATOM 2529 HD2 TYR 173 46.930 50.770 67.110 1.00
0.00
ATOM 2530 C TYR 173 45.600 49.070 62.710 1.00
0.00
ATOM 2531 O TYR 173 45.490 47.850 62.780 1.00
0.00
ATOM 2532 N TRP 174 45.980 49.660 61.600 1.00
0.00
ATOM 2533 H TRP 174 45.980 50.670 61.550 1.00
0.00
ATOM 2534 CA TRP 174 46.620 49.070 60.410 1.00
0.00
ATOM 2535 HA TRP 174 46.260 48.050 60.310 1.00
0.00
ATOM 2536 CB TRP 174 46.210 49.760 59.120 1.00
0.00
ATOM 2537 HB1 TRP 174 46.730 49.270 58.290 1.00
0.00
ATOM 2538 HB2 TRP 174 46.540 50.800 59.140 1.00
0.00
ATOM 2539 CG TRP 174 44.720 49.880 58.820 1.00
0.00
ATOM 2540 CD1 TRP 174 43.910 50.910 59.000 1.00
0.00
ATOM 2541 HD1 TRP 174 44.110 51.770 59.620 1.00
0.00
ATOM 2542 NE1 TRP 174 42.640 50.670 58.440 1.00
0.00
ATOM 2543 HE1 TRP 174 41.840 51.280 58.540 1.00
0.00
ATOM 2544 CE2 TRP 174 42.660 49.430 57.780 1.00
0.00
ATOM 2545 CZ2 TRP 174 41.720 48.600 57.160 1.00
0.00
ATOM 2546 HZ2 TRP 174 40.710 48.940 57.010 1.00
0.00

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ATOM   2547  CH2 TRP   174      42.080  47.310  56.690  1.00
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ATOM   2548  HH2 TRP   174      41.400  46.600  56.240  1.00
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ATOM   2549  CZ3 TRP   174      43.400  46.900  56.880  1.00
0.00
ATOM   2550  HZ3 TRP   174      43.720  45.950  56.480  1.00
0.00
ATOM   2551  CE3 TRP   174      44.330  47.640  57.650  1.00
0.00
ATOM   2552  HE3 TRP   174      45.300  47.220  57.870  1.00
0.00
ATOM   2553  CD2 TRP   174      43.990  48.910  58.050  1.00
0.00
ATOM   2554  C   TRP   174      48.200  49.100  60.500  1.00
0.00
ATOM   2555  O   TRP   174      48.730  50.170  60.600  1.00
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ATOM   2556  N   ILE   175      48.810  47.960  60.360  1.00
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ATOM   2557  H   ILE   175      48.250  47.140  60.200  1.00
0.00
ATOM   2558  CA  ILE   175      50.280  47.890  60.210  1.00
0.00
ATOM   2559  HA  ILE   175      50.750  48.720  60.740  1.00
0.00
ATOM   2560  CB  ILE   175      50.800  46.610  60.840  1.00
0.00
ATOM   2561  HB  ILE   175      50.540  45.800  60.150  1.00
0.00
ATOM   2562  CG2 ILE   175      52.360  46.640  60.860  1.00
0.00
ATOM   2563 1HG2 ILE   175      52.730  47.280  61.660  1.00
0.00
ATOM   2564 2HG2 ILE   175      52.690  45.610  60.970  1.00
0.00
ATOM   2565 3HG2 ILE   175      52.800  47.060  59.960  1.00
0.00
ATOM   2566  CG1 ILE   175      50.220  46.280  62.200  1.00
0.00
ATOM   2567 1HG1 ILE   175      49.140  46.230  62.090  1.00
0.00
ATOM   2568 2HG1 ILE   175      50.490  47.080  62.890  1.00
0.00
ATOM   2569  CD  ILE   175      50.720  44.920  62.630  1.00
0.00
ATOM   2570  HD1 ILE   175      50.250  44.630  63.580  1.00
0.00
ATOM   2571  HD2 ILE   175      50.380  44.210  61.880  1.00
0.00
ATOM   2572  HD3 ILE   175      51.800  44.920  62.760  1.00
0.00
ATOM   2573  C   ILE   175      50.560  48.070  58.710  1.00
0.00
ATOM   2574  O   ILE   175      50.000  47.320  57.880  1.00
0.00
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ATOM   2575  N   VAL   176      51.490  48.960  58.320  1.00
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ATOM   2576  H   VAL   176      51.920  49.530  59.040  1.00
0.00
ATOM   2577  CA  VAL   176      51.680  49.400  56.950  1.00
0.00
ATOM   2578  HA  VAL   176      51.240  48.630  56.310  1.00
0.00
ATOM   2579  CB  VAL   176      51.080  50.870  56.770  1.00
0.00
ATOM   2580  HB  VAL   176      51.890  51.500  57.150  1.00
0.00
ATOM   2581  CG1 VAL   176      50.880  51.160  55.280  1.00
0.00
ATOM   2582 1HG1 VAL   176      50.740  52.220  55.110  1.00
0.00
ATOM   2583 2HG1 VAL   176      51.770  50.910  54.690  1.00
0.00
ATOM   2584 3HG1 VAL   176      50.090  50.610  54.770  1.00
0.00
ATOM   2585  CG2 VAL   176      49.770  51.070  57.530  1.00
0.00
ATOM   2586 1HG2 VAL   176      49.230  51.900  57.090  1.00
0.00
ATOM   2587 2HG2 VAL   176      49.100  50.220  57.380  1.00
0.00
ATOM   2588 3HG2 VAL   176      49.950  51.240  58.590  1.00
0.00
ATOM   2589  C   VAL   176      53.190  49.540  56.610  1.00
0.00
ATOM   2590  O   VAL   176      53.920  50.230  57.300  1.00
0.00
ATOM   2591  N   LYS   177      53.700  48.890  55.530  1.00
0.00
ATOM   2592  H   LYS   177      52.990  48.390  55.020  1.00
0.00
ATOM   2593  CA  LYS   177      55.050  48.910  54.960  1.00
0.00
ATOM   2594  HA  LYS   177      55.770  49.040  55.770  1.00
0.00
ATOM   2595  CB  LYS   177      55.290  47.610  54.150  1.00
0.00
ATOM   2596  HB1 LYS   177      54.680  47.600  53.250  1.00
0.00
ATOM   2597  HB2 LYS   177      54.960  46.670  54.610  1.00
0.00
ATOM   2598  CG  LYS   177      56.830  47.480  53.710  1.00
0.00
ATOM   2599  HG1 LYS   177      57.450  47.470  54.600  1.00
0.00
ATOM   2600  HG2 LYS   177      57.240  48.320  53.140  1.00
0.00
ATOM   2601  CD  LYS   177      57.060  46.240  52.900  1.00
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ATOM   2602  HD1 LYS   177      56.500  46.300  51.970  1.00
0.00
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ATOM   2603  HD2 LYS   177      56.800  45.360  53.490  1.00
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ATOM   2604  CE  LYS   177      58.510  45.950  52.470  1.00
0.00
ATOM   2605  HE1 LYS   177      59.100  45.630  53.330  1.00
0.00
ATOM   2606  HE2 LYS   177      58.980  46.870  52.140  1.00
0.00
ATOM   2607  NZ  LYS   177      58.570  44.880  51.440  1.00
0.00
ATOM   2608  HZ1 LYS   177      58.400  45.190  50.500  1.00
0.00
ATOM   2609  HZ2 LYS   177      59.440  44.380  51.350  1.00
0.00
ATOM   2610  HZ3 LYS   177      57.860  44.170  51.530  1.00
0.00
ATOM   2611  C   LYS   177      55.230  50.110  53.990  1.00
0.00
ATOM   2612  O   LYS   177      54.450  50.230  53.050  1.00
0.00
ATOM   2613  N   ASN   178      56.220  50.950  54.100  1.00
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ATOM   2614  H   ASN   178      56.920  50.680  54.780  1.00
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ATOM   2615  CA  ASN   178      56.540  52.140  53.220  1.00
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ATOM   2616  HA  ASN   178      55.710  52.270  52.520  1.00
0.00
ATOM   2617  CB  ASN   178      56.600  53.430  54.120  1.00
0.00
ATOM   2618  HB1 ASN   178      57.500  53.290  54.720  1.00
0.00
ATOM   2619  HB2 ASN   178      55.740  53.390  54.800  1.00
0.00
ATOM   2620  CG  ASN   178      56.720  54.780  53.510  1.00
0.00
ATOM   2621  OD1 ASN   178      56.640  54.930  52.280  1.00
0.00
ATOM   2622  ND2 ASN   178      56.930  55.830  54.310  1.00
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ATOM   2623 1HD2 ASN   178      57.110  55.750  55.300  1.00
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ATOM   2624 2HD2 ASN   178      57.030  56.760  53.940  1.00
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ATOM   2625  C   ASN   178      57.770  51.940  52.300  1.00
0.00
ATOM   2626  O   ASN   178      58.710  51.170  52.690  1.00
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ATOM   2627  N   SER   179      57.820  52.610  51.170  1.00
0.00
ATOM   2628  H   SER   179      57.040  53.200  50.910  1.00
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ATOM   2629  CA  SER   179      58.930  52.580  50.160  1.00
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ATOM   2630  HA  SER   179      59.580  51.710  50.260  1.00
0.00
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ATOM   2631  CB  SER   179      58.310  52.380  48.720  1.00
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ATOM   2632  HB1 SER   179      57.780  51.430  48.650  1.00
0.00
ATOM   2633  HB2 SER   179      59.110  52.240  48.000  1.00
0.00
ATOM   2634  OG  SER   179      57.380  53.300  48.280  1.00
0.00
ATOM   2635  HG  SER   179      57.840  53.990  47.800  1.00
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ATOM   2636  C   SER   179      59.900  53.790  50.200  1.00
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ATOM   2637  O   SER   179      60.460  54.120  49.180  1.00
0.00
ATOM   2638  N   TRP   180      60.060  54.460  51.330  1.00
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ATOM   2639  H   TRP   180      59.380  54.290  52.070  1.00
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ATOM   2640  CA  TRP   180      61.080  55.470  51.530  1.00
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ATOM   2641  HA  TRP   180      61.490  55.890  50.610  1.00
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ATOM   2642  CB  TRP   180      60.490  56.690  52.260  1.00
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ATOM   2643  HB1 TRP   180      61.350  57.360  52.330  1.00
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ATOM   2644  HB2 TRP   180      60.290  56.520  53.320  1.00
0.00
ATOM   2645  CG  TRP   180      59.430  57.500  51.630  1.00
0.00
ATOM   2646  CD1 TRP   180      59.010  57.530  50.330  1.00
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ATOM   2647  HD1 TRP   180      59.520  57.070  49.490  1.00
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ATOM   2648  NE1 TRP   180      57.920  58.400  50.260  1.00
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ATOM   2649  HE1 TRP   180      57.510  58.650  49.370  1.00
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ATOM   2650  CE2 TRP   180      57.490  58.910  51.470  1.00
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ATOM   2651  CZ2 TRP   180      56.510  59.770  51.880  1.00
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ATOM   2652  HZ2 TRP   180      55.790  60.000  51.110  1.00
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ATOM   2653  CH2 TRP   180      56.450  60.210  53.220  1.00
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ATOM   2654  HH2 TRP   180      55.650  60.890  53.460  1.00
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ATOM   2655  CZ3 TRP   180      57.300  59.590  54.140  1.00
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ATOM   2656  HZ3 TRP   180      57.160  59.930  55.160  1.00
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ATOM   2657  CE3 TRP   180      58.300  58.720  53.710  1.00
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ATOM   2658  HE3 TRP   180      58.940  58.330  54.490  1.00
0.00
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ATOM 2659 CD2 TRP 180 58.450 58.320 52.370 1.00
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ATOM 2660 C TRP 180 62.390 54.920 52.140 1.00
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ATOM 2661 O TRP 180 63.130 55.680 52.740 1.00
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ATOM 2662 N GLY 181 62.620 53.590 52.190 1.00
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ATOM 2663 H GLY 181 61.930 53.000 51.750 1.00
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ATOM 2664 CA GLY 181 63.880 52.980 52.740 1.00
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ATOM 2665 HA1 GLY 181 64.710 53.650 52.540 1.00
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ATOM 2666 HA2 GLY 181 64.090 52.020 52.260 1.00
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ATOM 2667 C GLY 181 63.790 52.660 54.200 1.00
0.00
ATOM 2668 O GLY 181 62.940 53.070 54.920 1.00
0.00
ATOM 2669 N SER 182 64.670 51.770 54.670 1.00
0.00
ATOM 2670 H SER 182 65.240 51.310 53.980 1.00
0.00
ATOM 2671 CA SER 182 64.620 51.200 56.050 1.00
0.00
ATOM 2672 HA SER 182 63.620 50.910 56.350 1.00
0.00
ATOM 2673 CB SER 182 65.380 49.920 56.220 1.00
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ATOM 2674 HB1 SER 182 64.900 49.350 57.030 1.00
0.00
ATOM 2675 HB2 SER 182 66.400 50.180 56.490 1.00
0.00
ATOM 2676 OG SER 182 65.470 49.220 55.050 1.00
0.00
ATOM 2677 HG SER 182 66.280 48.710 54.970 1.00
0.00
ATOM 2678 C SER 182 65.040 52.120 57.180 1.00
0.00
ATOM 2679 O SER 182 64.920 51.690 58.340 1.00
0.00
ATOM 2680 N SER 183 65.610 53.340 56.970 1.00
0.00
ATOM 2681 H SER 183 65.860 53.630 56.030 1.00
0.00
ATOM 2682 CA SER 183 65.940 54.240 58.050 1.00
0.00
ATOM 2683 HA SER 183 66.020 53.760 59.020 1.00
0.00
ATOM 2684 CB SER 183 67.340 54.840 57.760 1.00
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ATOM 2685 HB1 SER 183 67.540 55.590 58.530 1.00
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ATOM 2686 HB2 SER 183 67.320 55.240 56.750 1.00
0.00

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ATOM   2687  OG  SER   183      68.260  53.770  57.680  1.00
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ATOM   2688  HG  SER   183      68.200  53.380  56.810  1.00
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ATOM   2689  C   SER   183      64.840  55.320  58.170  1.00
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ATOM   2690  O   SER   183      65.020  56.290  58.920  1.00
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ATOM   2691  N   TRP   184      63.700  55.170  57.510  1.00
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ATOM   2692  H   TRP   184      63.610  54.290  57.020  1.00
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ATOM   2693  CA  TRP   184      62.490  56.040  57.820  1.00
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ATOM   2694  HA  TRP   184      62.670  57.090  58.020  1.00
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ATOM   2695  CB  TRP   184      61.560  55.960  56.570  1.00
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ATOM   2696  HB1 TRP   184      61.150  54.990  56.300  1.00
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ATOM   2697  HB2 TRP   184      61.990  56.420  55.680  1.00
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ATOM   2698  CG  TRP   184      60.370  56.850  56.850  1.00
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ATOM   2699  CD1 TRP   184      60.410  58.210  56.730  1.00
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ATOM   2700  HD1 TRP   184      61.220  58.740  56.250  1.00
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ATOM   2701  NE1 TRP   184      59.210  58.830  57.140  1.00
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ATOM   2702  HE1 TRP   184      58.930  59.780  56.930  1.00
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ATOM   2703  CE2 TRP   184      58.300  57.850  57.520  1.00
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ATOM   2704  CZ2 TRP   184      56.900  57.940  57.790  1.00
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ATOM   2705  HZ2 TRP   184      56.410  58.900  57.880  1.00
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ATOM   2706  CH2 TRP   184      56.100  56.770  57.780  1.00
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ATOM   2707  HH2 TRP   184      55.080  56.890  58.110  1.00
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ATOM   2708  CZ3 TRP   184      56.710  55.550  57.730  1.00
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ATOM   2709  HZ3 TRP   184      56.110  54.650  57.670  1.00
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ATOM   2710  CE3 TRP   184      58.100  55.460  57.340  1.00
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ATOM   2711  HE3 TRP   184      58.490  54.480  57.130  1.00
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ATOM   2712  CD2 TRP   184      58.970  56.570  57.280  1.00
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ATOM   2713  C   TRP   184      61.630  55.520  59.070  1.00
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ATOM   2714  O   TRP   184      61.450  54.330  59.230  1.00
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ATOM 2715 N GLY 185 61.010 56.530 59.750 1.00
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ATOM 2716 H GLY 185 61.430 57.430 59.570 1.00
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ATOM 2717 CA GLY 185 59.810 56.380 60.640 1.00
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ATOM 2718 HA1 GLY 185 59.050 55.880 60.030 1.00
0.00
ATOM 2719 HA2 GLY 185 59.490 57.380 60.920 1.00
0.00
ATOM 2720 C GLY 185 60.200 55.470 61.760 1.00
0.00
ATOM 2721 O GLY 185 61.040 55.960 62.510 1.00
0.00
ATOM 2722 N GLU 186 59.690 54.230 61.810 1.00
0.00
ATOM 2723 H GLU 186 59.110 53.900 61.050 1.00
0.00
ATOM 2724 CA GLU 186 60.240 53.230 62.720 1.00
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ATOM 2725 HA GLU 186 61.170 53.600 63.150 1.00
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ATOM 2726 CB GLU 186 59.160 52.930 63.790 1.00
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ATOM 2727 HB1 GLU 186 58.380 52.260 63.420 1.00
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ATOM 2728 HB2 GLU 186 58.720 53.900 63.990 1.00
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ATOM 2729 CG GLU 186 59.820 52.270 64.990 1.00
0.00
ATOM 2730 HG1 GLU 186 60.540 52.930 65.490 1.00
0.00
ATOM 2731 HG2 GLU 186 60.430 51.440 64.650 1.00
0.00
ATOM 2732 CD GLU 186 58.820 51.800 66.010 1.00
0.00
ATOM 2733 OE1 GLU 186 58.260 50.710 65.830 1.00
0.00
ATOM 2734 OE2 GLU 186 58.620 52.530 67.020 1.00
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ATOM 2735 C GLU 186 60.550 52.050 61.790 1.00
0.00
ATOM 2736 O GLU 186 59.640 51.190 61.580 1.00
0.00
ATOM 2737 N LYS 187 61.770 51.970 61.230 1.00
0.00
ATOM 2738 H LYS 187 62.370 52.730 61.520 1.00
0.00
ATOM 2739 CA LYS 187 62.340 50.890 60.350 1.00
0.00
ATOM 2740 HA LYS 187 63.220 51.270 59.840 1.00
0.00
ATOM 2741 CB LYS 187 62.810 49.660 61.190 1.00
0.00
ATOM 2742 HB1 LYS 187 63.400 49.010 60.550 1.00
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ATOM 2743 HB2 LYS 187 61.940 49.200 61.670 1.00
0.00
ATOM 2744 CG LYS 187 63.790 49.930 62.340 1.00
0.00
ATOM 2745 HG1 LYS 187 63.340 50.650 63.020 1.00
0.00
ATOM 2746 HG2 LYS 187 64.770 50.240 61.980 1.00
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ATOM 2747 CD LYS 187 64.010 48.670 63.260 1.00
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ATOM 2748 HD1 LYS 187 63.010 48.510 63.660 1.00
0.00
ATOM 2749 HD2 LYS 187 64.720 48.930 64.050 1.00
0.00
ATOM 2750 CE LYS 187 64.440 47.470 62.610 1.00
0.00
ATOM 2751 HE1 LYS 187 65.180 47.760 61.870 1.00
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ATOM 2752 HE2 LYS 187 63.530 47.130 62.100 1.00
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ATOM 2753 NZ LYS 187 65.010 46.480 63.600 1.00
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ATOM 2754 HZ1 LYS 187 65.870 46.850 63.980 1.00
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ATOM 2755 HZ2 LYS 187 64.490 46.210 64.420 1.00
0.00
ATOM 2756 HZ3 LYS 187 65.180 45.620 63.110 1.00
0.00
ATOM 2757 C LYS 187 61.510 50.610 59.100 1.00
0.00
ATOM 2758 O LYS 187 61.430 49.470 58.660 1.00
0.00
ATOM 2759 N GLY 188 60.950 51.730 58.530 1.00
0.00
ATOM 2760 H GLY 188 61.040 52.610 59.020 1.00
0.00
ATOM 2761 CA GLY 188 60.090 51.620 57.320 1.00
0.00
ATOM 2762 HA1 GLY 188 60.520 50.880 56.650 1.00
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ATOM 2763 HA2 GLY 188 60.040 52.500 56.690 1.00
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ATOM 2764 C GLY 188 58.620 51.230 57.610 1.00
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ATOM 2765 O GLY 188 57.960 50.970 56.600 1.00
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0.00
ATOM 2767 H TYR 189 58.900 51.390 59.550 1.00
0.00
ATOM 2768 CA TYR 189 56.820 50.860 59.270 1.00
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ATOM 2769 HA TYR 189 56.120 50.650 58.460 1.00
0.00
ATOM 2770 CB TYR 189 56.930 49.440 59.910 1.00
0.00

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ATOM   2771  HB1 TYR   189      56.060  49.190  60.520  1.00
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ATOM   2772  HB2 TYR   189      57.790  49.380  60.580  1.00
0.00
ATOM   2773  CG  TYR   189      57.060  48.310  58.860  1.00
0.00
ATOM   2774  CD1 TYR   189      58.330  47.730  58.670  1.00
0.00
ATOM   2775  HD1 TYR   189      59.230  48.100  59.140  1.00
0.00
ATOM   2776  CE1 TYR   189      58.460  46.550  57.860  1.00
0.00
ATOM   2777  HE1 TYR   189      59.450  46.220  57.570  1.00
0.00
ATOM   2778  CZ  TYR   189      57.250  46.100  57.180  1.00
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ATOM   2779  OH  TYR   189      57.180  45.130  56.300  1.00
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ATOM   2780  HH  TYR   189      58.020  44.800  55.980  1.00
0.00
ATOM   2781  CE2 TYR   189      55.970  46.670  57.460  1.00
0.00
ATOM   2782  HE2 TYR   189      55.130  46.230  56.940  1.00
0.00
ATOM   2783  CD2 TYR   189      55.900  47.730  58.290  1.00
0.00
ATOM   2784  HD2 TYR   189      54.950  48.120  58.630  1.00
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ATOM   2785  C   TYR   189      56.170  51.780  60.280  1.00
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ATOM   2786  O   TYR   189      56.740  52.480  61.130  1.00
0.00
ATOM   2787  N   ILE   190      54.820  51.860  60.090  1.00
0.00
ATOM   2788  H   ILE   190      54.430  51.310  59.340  1.00
0.00
ATOM   2789  CA  ILE   190      53.860  52.660  60.860  1.00
0.00
ATOM   2790  HA  ILE   190      54.320  52.900  61.820  1.00
0.00
ATOM   2791  CB  ILE   190      53.510  54.040  60.130  1.00
0.00
ATOM   2792  HB  ILE   190      54.450  54.590  60.080  1.00
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ATOM   2793  CG2 ILE   190      52.980  53.940  58.710  1.00
0.00
ATOM   2794 1HG2 ILE   190      51.910  53.730  58.820  1.00
0.00
ATOM   2795 2HG2 ILE   190      53.110  54.840  58.110  1.00
0.00
ATOM   2796 3HG2 ILE   190      53.370  53.120  58.110  1.00
0.00
ATOM   2797  CG1 ILE   190      52.590  54.860  61.040  1.00
0.00
ATOM   2798 1HG1 ILE   190      53.130  55.160  61.940  1.00
0.00
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ATOM   2799 2HG1 ILE   190      51.650  54.370  61.260  1.00
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ATOM   2800  CD  ILE   190      52.120  56.160  60.280  1.00
0.00
ATOM   2801  HD1 ILE   190      51.500  56.850  60.850  1.00
0.00
ATOM   2802  HD2 ILE   190      52.990  56.720  59.930  1.00
0.00
ATOM   2803  HD3 ILE   190      51.540  56.040  59.360  1.00
0.00
ATOM   2804  C   ILE   190      52.630  51.860  61.320  1.00
0.00
ATOM   2805  O   ILE   190      52.150  50.960  60.680  1.00
0.00
ATOM   2806  N   ARG   191      52.060  52.140  62.560  1.00
0.00
ATOM   2807  H   ARG   191      52.320  53.040  62.940  1.00
0.00
ATOM   2808  CA  ARG   191      50.780  51.640  63.060  1.00
0.00
ATOM   2809  HA  ARG   191      50.320  50.900  62.420  1.00
0.00
ATOM   2810  CB  ARG   191      50.970  50.900  64.380  1.00
0.00
ATOM   2811  HB1 ARG   191      49.990  50.920  64.860  1.00
0.00
ATOM   2812  HB2 ARG   191      51.650  51.540  64.950  1.00
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ATOM   2813  CG  ARG   191      51.470  49.490  64.350  1.00
0.00
ATOM   2814  HG1 ARG   191      50.770  48.970  63.690  1.00
0.00
ATOM   2815  HG2 ARG   191      51.330  49.040  65.340  1.00
0.00
ATOM   2816  CD  ARG   191      52.890  49.350  63.870  1.00
0.00
ATOM   2817  HD1 ARG   191      53.010  49.220  62.800  1.00
0.00
ATOM   2818  HD2 ARG   191      53.280  48.390  64.200  1.00
0.00
ATOM   2819  NE  ARG   191      53.840  50.340  64.410  1.00
0.00
ATOM   2820  HE  ARG   191      53.600  51.310  64.510  1.00
0.00
ATOM   2821  CZ  ARG   191      55.040  50.180  64.930  1.00
0.00
ATOM   2822  NH1 ARG   191      55.570  48.980  64.980  1.00
0.00
ATOM   2823 1HH1 ARG   191      55.040  48.190  64.630  1.00
0.00
ATOM   2824 2HH1 ARG   191      56.500  48.960  65.380  1.00
0.00
ATOM   2825  NH2 ARG   191      55.600  51.210  65.430  1.00
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ATOM   2826 1HH2 ARG   191      55.060  52.050  65.600  1.00
0.00
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ATOM   2828  C   ARG   191      49.840  52.760  63.170  1.00
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ATOM   2829  O   ARG   191      50.180  53.770  63.760  1.00
0.00
ATOM   2830  N   LEU   192      48.740  52.680  62.440  1.00
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ATOM   2831  H   LEU   192      48.650  51.910  61.790  1.00
0.00
ATOM   2832  CA  LEU   192      48.030  53.870  61.990  1.00
0.00
ATOM   2833  HA  LEU   192      48.260  54.720  62.630  1.00
0.00
ATOM   2834  CB  LEU   192      48.490  54.160  60.530  1.00
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ATOM   2835  HB1 LEU   192      48.380  53.270  59.920  1.00
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ATOM   2836  HB2 LEU   192      49.570  54.340  60.590  1.00
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ATOM   2837  CG  LEU   192      47.690  55.410  59.970  1.00
0.00
ATOM   2838  HG  LEU   192      46.620  55.190  59.990  1.00
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ATOM   2839  CD1 LEU   192      47.840  56.710  60.740  1.00
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ATOM   2840 1HD1 LEU   192      48.820  57.180  60.670  1.00
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ATOM   2841 2HD1 LEU   192      47.190  57.490  60.360  1.00
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ATOM   2842 3HD1 LEU   192      47.620  56.630  61.810  1.00
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ATOM   2843  CD2 LEU   192      48.280  55.590  58.570  1.00
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ATOM   2844 1HD2 LEU   192      48.040  54.680  58.020  1.00
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ATOM   2845 2HD2 LEU   192      47.740  56.350  58.000  1.00
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ATOM   2846 3HD2 LEU   192      49.340  55.780  58.740  1.00
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ATOM   2847  C   LEU   192      46.490  53.600  62.070  1.00
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ATOM   2848  O   LEU   192      46.010  52.560  61.600  1.00
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ATOM   2849  N   ALA   193      45.770  54.540  62.630  1.00
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ATOM   2850  H   ALA   193      46.360  55.270  63.000  1.00
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ATOM   2851  CA  ALA   193      44.360  54.310  63.120  1.00
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ATOM   2852  HA  ALA   193      44.400  53.610  63.950  1.00
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ATOM   2853  CB  ALA   193      43.730  55.630  63.580  1.00
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ATOM   2854  HB1 ALA   193      44.010  56.480  62.960  1.00
0.00
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ATOM   2855  HB2 ALA   193      42.650  55.500  63.530  1.00
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ATOM   2856  HB3 ALA   193      44.070  55.740  64.610  1.00
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ATOM   2857  C   ALA   193      43.440  53.570  62.080  1.00
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ATOM   2858  O   ALA   193      43.260  54.080  60.990  1.00
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ATOM   2859  N   MET   194      42.700  52.540  62.550  1.00
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ATOM   2860  H   MET   194      42.910  52.370  63.520  1.00
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ATOM   2861  CA  MET   194      41.720  51.640  61.870  1.00
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ATOM   2862  HA  MET   194      41.820  51.850  60.810  1.00
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ATOM   2863  CB  MET   194      42.040  50.150  62.160  1.00
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ATOM   2864  HB1 MET   194      41.700  49.900  63.170  1.00
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ATOM   2865  HB2 MET   194      43.090  49.890  62.080  1.00
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ATOM   2866  CG  MET   194      41.250  49.190  61.260  1.00
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ATOM   2867  HG1 MET   194      41.660  49.100  60.250  1.00
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ATOM   2868  HG2 MET   194      40.250  49.610  61.150  1.00
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ATOM   2869  SD  MET   194      41.110  47.550  61.870  1.00
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ATOM   2870  CE  MET   194      40.130  46.950  60.530  1.00
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ATOM   2871  HE1 MET   194      40.110  45.870  60.640  1.00
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ATOM   2872  HE2 MET   194      39.100  47.300  60.590  1.00
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ATOM   2873  HE3 MET   194      40.630  47.320  59.640  1.00
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ATOM   2874  C   MET   194      40.310  52.060  62.420  1.00
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ATOM   2875  O   MET   194      40.070  51.970  63.600  1.00
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ATOM   2876  N   GLY   195      39.310  52.240  61.570  1.00
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ATOM   2877  H   GLY   195      39.610  52.170  60.610  1.00
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ATOM   2878  CA  GLY   195      37.970  52.780  61.940  1.00
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ATOM   2879  HA1 GLY   195      37.740  52.480  62.970  1.00
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ATOM   2880  HA2 GLY   195      37.270  52.360  61.220  1.00
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ATOM   2881  C   GLY   195      37.750  54.260  61.910  1.00
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ATOM   2882  O   GLY   195      36.870  54.790  62.570  1.00
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ATOM 2884 H SER 196 38.790 54.400 60.210 1.00
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ATOM 2885 CA SER 196 38.200 56.480 60.720 1.00
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ATOM 2886 HA SER 196 37.130 56.690 60.710 1.00
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ATOM 2887 CB SER 196 38.810 57.290 61.890 1.00
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ATOM 2888 HB1 SER 196 38.190 57.080 62.770 1.00
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ATOM 2889 HB2 SER 196 38.670 58.350 61.670 1.00
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ATOM 2890 OG SER 196 40.120 57.020 62.180 1.00
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ATOM 2891 HG SER 196 40.100 56.350 62.870 1.00
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ATOM 2892 C SER 196 38.770 57.030 59.370 1.00
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ATOM 2893 O SER 196 38.990 58.260 59.160 1.00
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ATOM 2897 HA ASN 197 39.870 55.380 56.760 1.00
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ATOM 2898 CB ASN 197 38.420 56.820 56.070 1.00
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ATOM 2900 HB2 ASN 197 37.680 56.030 56.020 1.00
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ATOM 2902 OD1 ASN 197 39.740 56.460 54.050 1.00
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ATOM 2903 ND2 ASN 197 38.010 57.780 53.970 1.00
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ATOM 2905 2HD2 ASN 197 38.190 58.100 53.030 1.00
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ATOM 2907 O ASN 197 40.750 58.410 56.270 1.00
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ATOM 2909 H GLN 198 41.740 56.400 58.490 1.00
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0.00

ATOM 2911 HA GLN 198 42.500 59.000 58.110 1.00
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ATOM 2912 CB GLN 198 43.940 57.630 58.950 1.00
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ATOM 2914 HB2 GLN 198 44.290 56.600 58.860 1.00
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ATOM 2915 CG GLN 198 43.490 57.700 60.430 1.00
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ATOM 2916 HG1 GLN 198 44.340 57.270 60.970 1.00
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ATOM 2917 HG2 GLN 198 42.630 57.040 60.530 1.00
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ATOM 2918 CD GLN 198 43.100 59.090 60.860 1.00
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ATOM 2919 OE1 GLN 198 43.780 60.060 60.440 1.00
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ATOM 2920 NE2 GLN 198 42.040 59.220 61.620 1.00
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ATOM 2921 1HE2 GLN 198 41.450 58.440 61.890 1.00
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ATOM 2922 2HE2 GLN 198 41.640 60.080 61.250 1.00
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ATOM 2934 O CYX 199 44.690 58.770 52.480 1.00
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ATOM 2938 HA MET 200 40.880 58.650 52.820 1.00
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ATOM 2939 CB MET 200 41.980 59.390 51.110 1.00
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ATOM 2940 HB1 MET 200 41.220 59.010 50.430 1.00
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ATOM 2941 HB2 MET 200 42.950 59.390 50.610 1.00
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ATOM 2942 CG MET 200 41.630 60.900 51.460 1.00
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ATOM 2943 HG1 MET 200 42.130 61.150 52.400 1.00
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ATOM 2944 HG2 MET 200 40.560 61.100 51.490 1.00
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ATOM 2949 HE3 MET 200 40.250 62.410 49.320 1.00
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ATOM 2951 O MET 200 42.080 56.560 50.930 1.00
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ATOM 2953 H LEU 201 42.420 56.780 53.990 1.00
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ATOM 2954 CA LEU 201 42.540 54.800 53.040 1.00
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ATOM 2955 HA LEU 201 43.560 54.660 52.700 1.00
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ATOM 2956 CB LEU 201 42.360 54.170 54.480 1.00
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ATOM 2957 HB1 LEU 201 41.470 54.580 54.950 1.00
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ATOM 2958 HB2 LEU 201 43.130 54.620 55.100 1.00
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ATOM 2959 CG LEU 201 42.580 52.660 54.720 1.00
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ATOM 2960 HG LEU 201 42.490 52.530 55.800 1.00
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ATOM 2961 CD1 LEU 201 41.710 51.670 53.950 1.00
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ATOM 2962 1HD1 LEU 201 41.950 51.690 52.880 1.00
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ATOM 2963 2HD1 LEU 201 41.830 50.680 54.370 1.00
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ATOM 2964 3HD1 LEU 201 40.700 51.990 54.210 1.00
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ATOM 2965 CD2 LEU 201 44.050 52.170 54.480 1.00
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ATOM 2966 1HD2 LEU 201 44.280 51.190 54.890 1.00
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ATOM   2967 2HD2 LEU   201      44.450  52.320  53.480  1.00
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ATOM   2968 3HD2 LEU   201      44.660  52.760  55.160  1.00
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ATOM   2969  C   LEU   201      41.640  54.120  52.030  1.00
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ATOM   2970  O   LEU   201      42.130  53.340  51.220  1.00
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ATOM   2971  N   LYS   202      40.340  54.480  52.070  1.00
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ATOM   2972  H   LYS   202      40.080  55.200  52.730  1.00
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ATOM   2973  CA  LYS   202      39.330  53.720  51.330  1.00
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ATOM   2974  HA  LYS   202      39.630  52.680  51.500  1.00
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ATOM   2975  CB  LYS   202      37.970  53.790  52.100  1.00
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ATOM   2976  HB1 LYS   202      38.150  53.900  53.170  1.00
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ATOM   2977  HB2 LYS   202      37.430  52.850  51.980  1.00
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ATOM   2978  CG  LYS   202      37.090  54.960  51.620  1.00
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ATOM   2979  HG1 LYS   202      36.730  54.800  50.610  1.00
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ATOM   2980  HG2 LYS   202      37.770  55.820  51.620  1.00
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ATOM   2981  CD  LYS   202      35.860  55.120  52.510  1.00
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ATOM   2982  HD1 LYS   202      36.240  55.020  53.530  1.00
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ATOM   2983  HD2 LYS   202      35.070  54.360  52.490  1.00
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ATOM   2984  CE  LYS   202      35.280  56.520  52.340  1.00
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ATOM   2985  HE1 LYS   202      34.970  56.830  51.340  1.00
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ATOM   2986  HE2 LYS   202      35.980  57.300  52.620  1.00
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ATOM   2987  NZ  LYS   202      34.030  56.680  53.150  1.00
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ATOM   2988  HZ1 LYS   202      34.140  56.420  54.120  1.00
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ATOM   2989  HZ2 LYS   202      33.640  57.610  53.100  1.00
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ATOM   2990  HZ3 LYS   202      33.350  56.010  52.830  1.00
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ATOM   2991  C   LYS   202      39.180  54.030  49.810  1.00
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ATOM   2992  O   LYS   202      38.390  53.370  49.100  1.00
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ATOM   2994  H   ASN   203      40.580  55.400  50.020  1.00
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ATOM   2995  CA  ASN   203      39.750  55.580  48.010  1.00
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ATOM   2997  CB  ASN   203      40.510  56.950  48.170  1.00
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ATOM   2998  HB1 ASN   203      41.530  56.650  48.400  1.00
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ATOM   2999  HB2 ASN   203      40.150  57.470  49.050  1.00
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ATOM   3000  CG  ASN   203      40.370  57.800  46.930  1.00
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ATOM   3001  OD1 ASN   203      41.140  57.770  46.030  1.00
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ATOM   3002  ND2 ASN   203      39.250  58.440  46.760  1.00
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ATOM   3003 1HD2 ASN   203      38.550  58.230  47.460  1.00
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ATOM   3004 2HD2 ASN   203      39.110  58.840  45.840  1.00
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ATOM   3005  C   ASN   203      40.310  54.860  46.830  1.00
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ATOM   3006  O   ASN   203      39.530  54.620  45.880  1.00
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ATOM   3007  N   TYR   204      41.550  54.430  46.890  1.00
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ATOM   3008  H   TYR   204      42.200  54.790  47.570  1.00
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ATOM   3009  CA  TYR   204      42.070  53.440  45.890  1.00
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ATOM   3010  HA  TYR   204      41.220  53.080  45.320  1.00
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ATOM   3011  CB  TYR   204      42.830  54.150  44.820  1.00
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ATOM   3012  HB1 TYR   204      43.800  54.500  45.170  1.00
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ATOM   3013  HB2 TYR   204      42.210  54.980  44.490  1.00
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ATOM   3014  CG  TYR   204      43.190  53.460  43.530  1.00
0.00
ATOM   3015  CD1 TYR   204      42.280  52.640  42.810  1.00
0.00
ATOM   3016  HD1 TYR   204      41.310  52.370  43.200  1.00
0.00
ATOM   3017  CE1 TYR   204      42.650  52.160  41.520  1.00
0.00
ATOM   3018  HE1 TYR   204      41.970  51.620  40.870  1.00
0.00
ATOM   3019  CZ  TYR   204      43.860  52.500  40.900  1.00
0.00
ATOM   3020  OH  TYR   204      44.150  51.960  39.670  1.00
0.00
ATOM   3021  HH  TYR   204      44.950  52.310  39.270  1.00
0.00
ATOM   3022  CE2 TYR   204      44.750  53.350  41.610  1.00
0.00
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ATOM 3023 HE2 TYR 204 45.700 53.600 41.160 1.00
0.00
ATOM 3024 CD2 TYR 204 44.440 53.770 42.920 1.00
0.00
ATOM 3025 HD2 TYR 204 45.180 54.370 43.430 1.00
0.00
ATOM 3026 C TYR 204 42.860 52.290 46.500 1.00
0.00
ATOM 3027 O TYR 204 44.120 52.230 46.530 1.00
0.00
ATOM 3028 N PRO 205 42.150 51.310 47.070 1.00
0.00
ATOM 3029 CD PRO 205 40.840 51.350 47.650 1.00
0.00
ATOM 3030 HD1 PRO 205 40.130 51.820 46.960 1.00
0.00
ATOM 3031 HD2 PRO 205 40.860 51.960 48.550 1.00
0.00
ATOM 3032 CG PRO 205 40.460 49.900 48.110 1.00
0.00
ATOM 3033 HG1 PRO 205 39.950 49.220 47.430 1.00
0.00
ATOM 3034 HG2 PRO 205 39.880 49.960 49.030 1.00
0.00
ATOM 3035 CB PRO 205 41.850 49.340 48.390 1.00
0.00
ATOM 3036 HB1 PRO 205 41.980 48.260 48.380 1.00
0.00
ATOM 3037 HB2 PRO 205 42.130 49.640 49.400 1.00
0.00
ATOM 3038 CA PRO 205 42.690 49.970 47.300 1.00
0.00
ATOM 3039 HA PRO 205 43.690 50.010 47.740 1.00
0.00
ATOM 3040 C PRO 205 42.720 49.130 46.030 1.00
0.00
ATOM 3041 O PRO 205 41.750 49.090 45.220 1.00
0.00
ATOM 3042 N VAL 206 43.850 48.430 45.730 1.00
0.00
ATOM 3043 H VAL 206 44.650 48.450 46.340 1.00
0.00
ATOM 3044 CA VAL 206 44.010 47.600 44.470 1.00
0.00
ATOM 3045 HA VAL 206 43.030 47.280 44.110 1.00
0.00
ATOM 3046 CB VAL 206 44.870 48.380 43.420 1.00
0.00
ATOM 3047 HB VAL 206 44.870 47.760 42.520 1.00
0.00
ATOM 3048 CG1 VAL 206 44.330 49.710 43.010 1.00
0.00
ATOM 3049 1HG1 VAL 206 44.690 50.110 42.060 1.00
0.00
ATOM 3050 2HG1 VAL 206 43.250 49.630 42.980 1.00
0.00

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ATOM   3051 3HG1 VAL   206      44.660  50.510  43.680  1.00
0.00
ATOM   3052  CG2 VAL   206      46.340  48.570  43.690  1.00
0.00
ATOM   3053 1HG2 VAL   206      46.960  49.150  43.010  1.00
0.00
ATOM   3054 2HG2 VAL   206      46.430  48.780  44.760  1.00
0.00
ATOM   3055 3HG2 VAL   206      46.760  47.560  43.690  1.00
0.00
ATOM   3056  C   VAL   206      44.720  46.240  44.800  1.00
0.00
ATOM   3057  O   VAL   206      45.490  46.080  45.750  1.00
0.00
ATOM   3058  N   SER   207      44.530  45.190  44.030  1.00
0.00
ATOM   3059  H   SER   207      43.790  45.180  43.350  1.00
0.00
ATOM   3060  CA  SER   207      45.270  43.910  44.070  1.00
0.00
ATOM   3061  HA  SER   207      46.320  44.150  44.230  1.00
0.00
ATOM   3062  CB  SER   207      44.800  43.090  45.230  1.00
0.00
ATOM   3063  HB1 SER   207      45.330  42.150  45.070  1.00
0.00
ATOM   3064  HB2 SER   207      43.760  42.840  45.000  1.00
0.00
ATOM   3065  OG  SER   207      44.930  43.640  46.530  1.00
0.00
ATOM   3066  HG  SER   207      45.170  44.570  46.490  1.00
0.00
ATOM   3067  C   SER   207      45.070  43.100  42.780  1.00
0.00
ATOM   3068  O   SER   207      44.160  43.250  42.020  1.00
0.00
ATOM   3069  N   ALA   208      46.030  42.160  42.480  1.00
0.00
ATOM   3070  H   ALA   208      46.810  42.140  43.120  1.00
0.00
ATOM   3071  CA  ALA   208      46.120  41.290  41.340  1.00
0.00
ATOM   3072  HA  ALA   208      45.810  41.910  40.510  1.00
0.00
ATOM   3073  CB  ALA   208      47.520  40.620  41.180  1.00
0.00
ATOM   3074  HB1 ALA   208      48.280  41.380  41.020  1.00
0.00
ATOM   3075  HB2 ALA   208      47.800  40.050  42.070  1.00
0.00
ATOM   3076  HB3 ALA   208      47.460  39.870  40.390  1.00
0.00
ATOM   3077  C   ALA   208      45.050  40.220  41.350  1.00
0.00
ATOM   3078  O   ALA   208      44.760  39.640  42.390  1.00
0.00
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ATOM   3079  N   THR   209      44.480  39.910  40.150  1.00
0.00
ATOM   3080  H   THR   209      44.710  40.430  39.310  1.00
0.00
ATOM   3081  CA  THR   209      43.490  38.830  39.920  1.00
0.00
ATOM   3082  HA  THR   209      42.890  38.900  40.820  1.00
0.00
ATOM   3083  CB  THR   209      42.630  39.020  38.630  1.00
0.00
ATOM   3084  HB  THR   209      42.040  38.130  38.420  1.00
0.00
ATOM   3085  CG2 THR   209      41.690  40.250  38.700  1.00
0.00
ATOM   3086 1HG2 THR   209      42.370  41.070  38.460  1.00
0.00
ATOM   3087 2HG2 THR   209      40.890  40.100  37.970  1.00
0.00
ATOM   3088 3HG2 THR   209      41.210  40.390  39.670  1.00
0.00
ATOM   3089  OG1 THR   209      43.550  39.150  37.490  1.00
0.00
ATOM   3090  HG1 THR   209      44.060  38.340  37.490  1.00
0.00
ATOM   3091  C   THR   209      44.000  37.400  39.940  1.00
0.00
ATOM   3092  OC1 THR   209      43.160  36.540  40.280  1.00
0.00
ATOM   3093  OC2 THR   209      45.220  37.110  39.830  1.00
0.00
TER
ENDMDL
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