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ATOM     56  N   VAL A  14     -43.325  -7.170  73.799
ATOM     57  CA  VAL A  14     -42.773  -6.939  75.118
ATOM     58  C   VAL A  14     -41.791  -5.758  75.081
ATOM     59  O   VAL A  14     -40.992  -5.650  74.158
ATOM     60  CB  VAL A  14     -42.092  -8.232  75.633
ATOM     61  CG1 VAL A  14     -41.627  -8.061  77.038
ATOM     62  CG2 VAL A  14     -43.063  -9.424  75.525
ATOM     63  H   VAL A  14     -42.654  -7.395  72.970
ATOM     64  N   ALA A  15     -41.841  -4.911  76.108
ATOM     65  CA  ALA A  15     -40.997  -3.719  76.232
ATOM     66  C   ALA A  15     -40.273  -3.720  77.592
ATOM     67  O   ALA A  15     -40.935  -3.812  78.628
ATOM     68  CB  ALA A  15     -41.884  -2.473  76.172
ATOM     77  N   VAL A  16     -38.938  -3.705  77.616
ATOM     78  CA  VAL A  16     -38.227  -3.664  78.903
ATOM     79  C   VAL A  16     -37.257  -2.480  79.061
ATOM     80  O   VAL A  16     -36.207  -2.487  78.403
ATOM     81  CB  VAL A  16     -37.354  -4.902  79.191
ATOM     82  CG1 VAL A  16     -37.033  -4.921  80.684
ATOM     83  CG2 VAL A  16     -37.986  -6.223  78.712
ATOM     84  H   VAL A  16     -38.375  -3.722  76.682
ATOM     85  N   LEU A  17     -37.590  -1.497  79.922
ATOM     86  CA  LEU A  17     -36.723  -0.335  80.192
ATOM     87  C   LEU A  17     -35.760  -0.576  81.399
ATOM     88  O   LEU A  17     -35.747  -1.639  82.004
ATOM     89  CB  LEU A  17     -37.531   0.952  80.462
ATOM     90  CG  LEU A  17     -38.673   1.468  79.583
ATOM     91  CD1 LEU A  17     -39.064   2.831  80.060
ATOM     92  CD2 LEU A  17     -38.249   1.538  78.149
ATOM     93  H   LEU A  17     -38.547  -1.563  80.441
ATOM     94  N   ASP A  18     -35.030   0.467  81.794
ATOM     95  CA  ASP A  18     -34.039   0.393  82.874
ATOM     96  C   ASP A  18     -34.137   1.615  83.817
ATOM     97  O   ASP A  18     -33.764   2.727  83.423
ATOM     98  CB  ASP A  18     -32.655   0.375  82.208
ATOM     99  CG  ASP A  18     -31.537   0.014  83.152
ATOM    100  OD1 ASP A  18     -31.589   0.394  84.335
ATOM    101  OD2 ASP A  18     -30.577  -0.652  82.694
ATOM    102  H   ASP A  18     -35.176   1.422  81.289
ATOM    103  N   ALA A  19     -34.562   1.404  85.067
ATOM    104  CA  ALA A  19     -34.677   2.509  86.026
ATOM    105  C   ALA A  19     -33.360   3.109  86.519
ATOM    106  O   ALA A  19     -33.350   4.234  87.060
ATOM    107  CB  ALA A  19     -35.531   2.114  87.213
ATOM    108  H   ALA A  19     -34.829   0.394  85.379
ATOM    109  N   VAL A  20     -32.256   2.375  86.361
ATOM    110  CA  VAL A  20     -30.939   2.870  86.797
ATOM    111  C   VAL A  20     -30.148   3.619  85.713
ATOM    112  O   VAL A  20     -29.432   4.567  86.004
ATOM    113  CB  VAL A  20     -30.073   1.724  87.359
ATOM    114  CG1 VAL A  20     -28.756   2.262  87.881
ATOM    115  CG2 VAL A  20     -30.816   1.013  88.469
ATOM    116  H   VAL A  20     -32.331   1.391  85.900
ATOM    117  N   ARG A  21     -30.346   3.229  84.459
ATOM    118  CA  ARG A  21     -29.640   3.822  83.327
ATOM    119  C   ARG A  21     -30.526   4.673  82.427
ATOM    120  O   ARG A  21     -30.023   5.329  81.522
ATOM    121  CB  ARG A  21     -28.999   2.701  82.500
ATOM    122  CG  ARG A  21     -27.493   2.800  82.368
ATOM    123  CD  ARG A  21     -26.867   1.431  82.218
ATOM    124  NE  ARG A  21     -27.472   0.645  81.150
ATOM    125  CZ  ARG A  21     -26.819  -0.263  80.430
ATOM    126  NH1 ARG A  21     -25.532  -0.495  80.656
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ATOM    127  NH2 ARG A  21     -27.457  -0.965  79.499
ATOM    128  H   ARG A  21     -31.064   2.432  84.267
ATOM    129  HE  ARG A  21     -28.526   0.812  80.928
ATOM    130  HH1 ARG A  21     -25.176  -1.266  79.972
ATOM    131  HH1 ARG A  21     -24.924   0.007  81.409
ATOM    132  HH2 ARG A  21     -26.760  -1.652  79.020
ATOM    133  HH2 ARG A  21     -28.515  -0.867  79.252
ATOM    134  N   GLY A  22     -31.837   4.567  82.609
ATOM    135  CA  GLY A  22     -32.784   5.347  81.832
ATOM    136  C   GLY A  22     -32.518   5.149  80.372
ATOM    137  O   GLY A  22     -32.318   6.095  79.603
ATOM    138  H   GLY A  22     -32.212   3.874  83.363
ATOM    139  N   SER A  23     -32.552   3.886  79.995
ATOM    140  CA  SER A  23     -32.288   3.478  78.640
ATOM    141  C   SER A  23     -33.076   2.192  78.396
ATOM    142  O   SER A  23     -33.664   1.640  79.329
ATOM    143  CB  SER A  23     -30.790   3.178  78.524
ATOM    144  OG  SER A  23     -30.440   2.121  79.417
ATOM    145  H   SER A  23     -32.789   3.123  80.736
ATOM    146  HG  SER A  23     -29.373   1.911  79.331
ATOM    147  N   PRO A  24     -33.309   1.782  77.141
ATOM    148  CA  PRO A  24     -33.944   0.506  76.887
ATOM    149  C   PRO A  24     -33.040  -0.576  77.432
ATOM    150  O   PRO A  24     -31.817  -0.314  77.645
ATOM    151  CB  PRO A  24     -34.124   0.496  75.385
ATOM    152  CG  PRO A  24     -33.569   1.803  74.834
ATOM    153  CD  PRO A  24     -32.983   2.590  75.964
ATOM    154  N   ALA A  25     -33.595  -1.764  77.685
ATOM    155  CA  ALA A  25     -32.780  -2.849  78.217
ATOM    156  C   ALA A  25     -32.594  -3.865  77.112
ATOM    157  O   ALA A  25     -33.507  -4.617  76.803
ATOM    158  CB  ALA A  25     -33.426  -3.482  79.416
ATOM    159  H   ALA A  25     -34.657  -1.921  77.496
ATOM    160  N   VAL A  26     -31.411  -3.875  76.502
ATOM    161  CA  VAL A  26     -31.144  -4.796  75.403
ATOM    162  C   VAL A  26     -30.388  -6.096  75.722
ATOM    163  O   VAL A  26     -29.353  -6.119  76.430
ATOM    164  CB  VAL A  26     -30.535  -4.061  74.172
ATOM    165  CG1 VAL A  26     -30.995  -2.616  74.150
ATOM    166  CG2 VAL A  26     -29.031  -4.163  74.154
ATOM    167  H   VAL A  26     -30.632  -3.187  76.828
ATOM    168  N   ASP A  27     -30.912  -7.161  75.121
ATOM    169  CA  ASP A  27     -30.429  -8.520  75.255
ATOM    170  C   ASP A  27     -30.991  -9.188  76.495
ATOM    171  O   ASP A  27     -30.362 -10.031  77.113
ATOM    172  CB  ASP A  27     -28.901  -8.605  75.191
ATOM    173  CG  ASP A  27     -28.342  -8.096  73.869
ATOM    174  OD1 ASP A  27     -29.133  -7.868  72.913
ATOM    175  OD2 ASP A  27     -27.104  -7.892  73.797
ATOM    176  H   ASP A  27     -31.775  -6.998  74.476
ATOM    177  N   VAL A  28     -32.216  -8.812  76.825
ATOM    178  CA  VAL A  28     -32.921  -9.391  77.943
ATOM    179  C   VAL A  28     -33.679 -10.580  77.345
ATOM    180  O   VAL A  28     -34.663 -10.415  76.607
ATOM    181  CB  VAL A  28     -33.875  -8.374  78.582
ATOM    182  CG1 VAL A  28     -34.567  -8.949  79.770
ATOM    183  CG2 VAL A  28     -33.090  -7.158  79.011
ATOM    184  H   VAL A  28     -32.708  -8.040  76.233
ATOM    185  N   ALA A  29     -33.110 -11.763  77.542
ATOM    186  CA  ALA A  29     -33.696 -13.009  77.056
ATOM    187  C   ALA A  29     -35.119 -13.129  77.566
ATOM    188  O   ALA A  29     -35.399 -12.901  78.757
ATOM    189  CB  ALA A  29     -32.873 -14.203  77.535
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ATOM    190  H   ALA A  29     -32.167 -11.806  78.088
ATOM    191  N   VAL A  30     -36.013 -13.480  76.659
ATOM    192  CA  VAL A  30     -37.412 -13.627  76.993
ATOM    193  C   VAL A  30     -37.897 -14.973  76.491
ATOM    194  O   VAL A  30     -37.553 -15.402  75.382
ATOM    195  CB  VAL A  30     -38.262 -12.508  76.372
ATOM    196  CG1 VAL A  30     -39.746 -12.741  76.646
ATOM    197  CG2 VAL A  30     -37.819 -11.157  76.923
ATOM    198  H   VAL A  30     -35.688 -13.663  75.635
ATOM    199  N   LYS A  31     -38.653 -15.644  77.356
ATOM    200  CA  LYS A  31     -39.234 -16.944  77.078
ATOM    201  C   LYS A  31     -40.713 -16.850  77.422
ATOM    202  O   LYS A  31     -41.060 -16.309  78.474
ATOM    203  CB  LYS A  31     -38.597 -18.004  77.982
ATOM    204  CG  LYS A  31     -37.122 -18.251  77.748
ATOM    205  CD  LYS A  31     -36.466 -18.864  78.984
ATOM    206  CE  LYS A  31     -35.165 -19.578  78.616
ATOM    207  NZ  LYS A  31     -34.362 -20.023  79.801
ATOM    208  H   LYS A  31     -38.846 -15.192  78.329
ATOM    209  HZ1 LYS A  31     -33.455 -20.521  79.458
ATOM    210  HZ2 LYS A  31     -34.952 -20.716  80.400
ATOM    211  HZ3 LYS A  31     -34.094 -19.156  80.404
ATOM    212  N   VAL A  32     -41.582 -17.334  76.536
ATOM    213  CA  VAL A  32     -43.019 -17.323  76.810
ATOM    214  C   VAL A  32     -43.525 -18.756  76.794
ATOM    215  O   VAL A  32     -43.387 -19.450  75.790
ATOM    216  CB  VAL A  32     -43.861 -16.540  75.751
ATOM    217  CG1 VAL A  32     -45.323 -16.543  76.159
ATOM    218  CG2 VAL A  32     -43.364 -15.102  75.584
ATOM    219  H   VAL A  32     -41.218 -17.743  75.594
ATOM    220  N   PHE A  33     -44.129 -19.189  77.893
ATOM    221  CA  PHE A  33     -44.694 -20.537  77.952
ATOM    222  C   PHE A  33     -46.231 -20.518  77.779
ATOM    223  O   PHE A  33     -46.863 -19.454  77.716
ATOM    224  CB  PHE A  33     -44.255 -21.244  79.248
ATOM    225  CG  PHE A  33     -42.747 -21.367  79.386
ATOM    226  CD1 PHE A  33     -41.982 -20.291  79.847
ATOM    227  CD2 PHE A  33     -42.088 -22.538  79.001
ATOM    228  CE1 PHE A  33     -40.595 -20.382  79.910
ATOM    229  CE2 PHE A  33     -40.706 -22.638  79.064
ATOM    230  CZ  PHE A  33     -39.961 -21.559  79.516
ATOM    231  H   PHE A  33     -44.206 -18.534  78.760
ATOM    232  N   LYS A  34     -46.833 -21.691  77.677
ATOM    233  CA  LYS A  34     -48.275 -21.778  77.507
ATOM    234  C   LYS A  34     -48.784 -22.959  78.319
ATOM    235  O   LYS A  34     -48.202 -24.044  78.259
ATOM    236  CB  LYS A  34     -48.616 -21.964  76.030
ATOM    237  CG  LYS A  34     -50.083 -21.816  75.718
ATOM    238  CD  LYS A  34     -50.256 -21.423  74.276
ATOM    239  CE  LYS A  34     -51.711 -21.275  73.905
ATOM    240  NZ  LYS A  34     -51.809 -21.321  72.425
ATOM    241  H   LYS A  34     -46.240 -22.605  77.721
ATOM    242  HZ1 LYS A  34     -52.852 -21.217  72.126
ATOM    243  HZ2 LYS A  34     -51.422 -22.274  72.064
ATOM    244  HZ3 LYS A  34     -51.225 -20.506  71.997
ATOM    245  N   LYS A  35     -49.817 -22.731  79.129
ATOM    246  CA  LYS A  35     -50.381 -23.800  79.947
ATOM    247  C   LYS A  35     -50.884 -24.941  79.059
ATOM    248  O   LYS A  35     -51.215 -24.754  77.884
ATOM    249  CB  LYS A  35     -51.510 -23.291  80.838
ATOM    250  CG  LYS A  35     -51.701 -24.147  82.070
ATOM    251  CD  LYS A  35     -52.863 -23.715  82.952
ATOM    252  CE  LYS A  35     -52.827 -24.520  84.259
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ATOM    253  NZ  LYS A  35     -54.079 -24.500  85.090
ATOM    254  H   LYS A  35     -50.246 -21.730  79.182
ATOM    255  HZ1 LYS A  35     -53.931 -25.103  85.985
ATOM    256  HZ2 LYS A  35     -54.907 -24.908  84.510
ATOM    257  HZ3 LYS A  35     -54.307 -23.473  85.377
ATOM    258  N   THR A  36     -50.975 -26.127  79.632
ATOM    259  CA  THR A  36     -51.398 -27.250  78.834
ATOM    260  C   THR A  36     -52.749 -27.816  79.241
ATOM    261  O   THR A  36     -53.311 -27.447  80.280
ATOM    262  CB  THR A  36     -50.317 -28.359  78.825
ATOM    263  OG1 THR A  36     -49.010 -27.758  78.812
ATOM    264  CG2 THR A  36     -50.465 -29.232  77.581
ATOM    265  H   THR A  36     -50.736 -26.254  80.688
ATOM    266  HG1 THR A  36     -48.251 -28.540  78.806
ATOM    267  N   ALA A  37     -53.278 -28.678  78.373
ATOM    268  CA  ALA A  37     -54.542 -29.347  78.596
ATOM    269  C   ALA A  37     -54.414 -30.196  79.854
ATOM    270  O   ALA A  37     -55.412 -30.578  80.452
ATOM    271  CB  ALA A  37     -54.877 -30.214  77.406
ATOM    272  H   ALA A  37     -52.735 -28.887  77.451
ATOM    273  N   ASP A  38     -53.176 -30.476  80.256
ATOM    274  CA  ASP A  38     -52.914 -31.258  81.459
ATOM    275  C   ASP A  38     -52.518 -30.299  82.575
ATOM    276  O   ASP A  38     -52.042 -30.729  83.628
ATOM    277  CB  ASP A  38     -51.752 -32.230  81.223
ATOM    278  CG  ASP A  38     -51.720 -32.766  79.810
ATOM    279  OD1 ASP A  38     -51.122 -32.097  78.933
ATOM    280  OD2 ASP A  38     -52.301 -33.850  79.580
ATOM    281  H   ASP A  38     -52.334 -30.108  79.670
ATOM    282  N   GLY A  39     -52.688 -29.002  82.324
ATOM    283  CA  GLY A  39     -52.310 -27.980  83.289
ATOM    284  C   GLY A  39     -50.799 -27.825  83.306
ATOM    285  O   GLY A  39     -50.232 -27.080  84.109
ATOM    286  H   GLY A  39     -53.123 -28.698  81.372
ATOM    287  N   SER A  40     -50.154 -28.574  82.415
ATOM    288  CA  SER A  40     -48.704 -28.587  82.249
ATOM    289  C   SER A  40     -48.339 -27.253  81.606
ATOM    290  O   SER A  40     -49.187 -26.374  81.489
ATOM    291  CB  SER A  40     -48.326 -29.778  81.332
ATOM    292  OG  SER A  40     -46.940 -29.851  81.016
ATOM    293  H   SER A  40     -50.747 -29.217  81.765
ATOM    294  HG  SER A  40     -46.759 -30.711  80.371
ATOM    295  N   TRP A  41     -47.088 -27.104  81.191
ATOM    296  CA  TRP A  41     -46.652 -25.881  80.539
ATOM    297  C   TRP A  41     -45.869 -26.150  79.249
ATOM    298  O   TRP A  41     -44.723 -26.570  79.276
ATOM    299  CB  TRP A  41     -45.860 -25.006  81.515
ATOM    300  CG  TRP A  41     -46.759 -24.141  82.347
ATOM    301  CD1 TRP A  41     -47.319 -24.463  83.544
ATOM    302  CD2 TRP A  41     -47.296 -22.862  81.984
ATOM    303  NE1 TRP A  41     -48.184 -23.479  83.941
ATOM    304  CE2 TRP A  41     -48.187 -22.481  83.003
ATOM    305  CE3 TRP A  41     -47.115 -22.009  80.890
ATOM    306  CZ2 TRP A  41     -48.903 -21.287  82.960
ATOM    307  CZ3 TRP A  41     -47.822 -20.835  80.842
ATOM    308  CH2 TRP A  41     -48.709 -20.480  81.872
ATOM    309  H   TRP A  41     -46.374 -27.914  81.341
ATOM    310  HE1 TRP A  41     -48.777 -23.489  84.856
ATOM    311  N   GLU A  42     -46.524 -25.950  78.122
ATOM    312  CA  GLU A  42     -45.924 -26.171  76.815
ATOM    313  C   GLU A  42     -45.122 -24.941  76.401
ATOM    314  O   GLU A  42     -45.538 -23.824  76.678
ATOM    315  CB  GLU A  42     -47.043 -26.436  75.803
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ATOM    316  CG  GLU A  42     -46.608 -27.015  74.462
ATOM    317  CD  GLU A  42     -47.776 -27.156  73.487
ATOM    318  OE1 GLU A  42     -48.279 -26.110  72.999
ATOM    319  OE2 GLU A  42     -48.192 -28.309  73.217
ATOM    320  H   GLU A  42     -47.557 -25.605  78.171
ATOM    321  N   PRO A  43     -43.934 -25.134  75.794
ATOM    322  CA  PRO A  43     -43.044 -24.053  75.327
ATOM    323  C   PRO A  43     -43.571 -23.223  74.127
ATOM    324  O   PRO A  43     -43.583 -23.700  73.004
ATOM    325  CB  PRO A  43     -41.750 -24.803  74.980
ATOM    326  CG  PRO A  43     -42.210 -26.200  74.694
ATOM    327  CD  PRO A  43     -43.236 -26.430  75.754
ATOM    328  N   PHE A  44     -43.907 -21.955  74.360
ATOM    329  CA  PHE A  44     -44.464 -21.096  73.321
ATOM    330  C   PHE A  44     -43.539 -20.121  72.582
ATOM    331  O   PHE A  44     -43.717 -19.886  71.379
ATOM    332  CB  PHE A  44     -45.671 -20.331  73.891
ATOM    333  CG  PHE A  44     -46.388 -19.485  72.883
ATOM    334  CD1 PHE A  44     -47.133 -20.069  71.865
ATOM    335  CD2 PHE A  44     -46.329 -18.099  72.944
ATOM    336  CE1 PHE A  44     -47.807 -19.295  70.926
ATOM    337  CE2 PHE A  44     -47.012 -17.314  71.991
ATOM    338  CZ  PHE A  44     -47.750 -17.928  70.983
ATOM    339  H   PHE A  44     -43.759 -21.546  75.360
ATOM    340  N   ALA A  45     -42.575 -19.521  73.274
ATOM    341  CA  ALA A  45     -41.718 -18.559  72.588
ATOM    342  C   ALA A  45     -40.345 -18.311  73.189
ATOM    343  O   ALA A  45     -40.045 -18.752  74.313
ATOM    344  CB  ALA A  45     -42.457 -17.252  72.390
ATOM    345  H   ALA A  45     -42.427 -19.743  74.331
ATOM    346  N   SER A  46     -39.505 -17.656  72.391
ATOM    347  CA  SER A  46     -38.134 -17.329  72.752
ATOM    348  C   SER A  46     -37.682 -16.142  71.929
ATOM    349  O   SER A  46     -38.059 -15.993  70.758
ATOM    350  CB  SER A  46     -37.189 -18.494  72.435
ATOM    351  OG  SER A  46     -37.147 -19.477  73.464
ATOM    352  H   SER A  46     -39.865 -17.346  71.410
ATOM    353  HG  SER A  46     -36.460 -20.274  73.178
ATOM    354  N   GLY A  47     -36.820 -15.333  72.527
ATOM    355  CA  GLY A  47     -36.293 -14.168  71.842
ATOM    356  C   GLY A  47     -35.627 -13.278  72.868
ATOM    357  O   GLY A  47     -35.629 -13.604  74.056
ATOM    358  H   GLY A  47     -36.503 -15.544  73.548
ATOM    359  N   LYS A  48     -35.001 -12.207  72.396
ATOM    360  CA  LYS A  48     -34.330 -11.252  73.252
ATOM    361  C   LYS A  48     -34.841  -9.862  72.907
ATOM    362  O   LYS A  48     -35.560  -9.691  71.898
ATOM    363  CB  LYS A  48     -32.827 -11.318  73.028
ATOM    364  CG  LYS A  48     -32.127 -12.254  73.998
ATOM    365  CD  LYS A  48     -30.720 -12.546  73.538
ATOM    366  CE  LYS A  48     -29.952 -13.334  74.568
ATOM    367  NZ  LYS A  48     -28.658 -13.772  73.988
ATOM    368  H   LYS A  48     -34.993 -12.039  71.319
ATOM    369  HZ1 LYS A  48     -28.101 -14.342  74.732
ATOM    370  HZ2 LYS A  48     -28.078 -12.898  73.692
ATOM    371  HZ3 LYS A  48     -28.844 -14.398  73.115
ATOM    372  N   THR A  49     -34.524  -8.891  73.765
ATOM    373  CA  THR A  49     -34.926  -7.512  73.534
ATOM    374  C   THR A  49     -33.876  -6.837  72.656
ATOM    375  O   THR A  49     -32.669  -7.040  72.853
ATOM    376  CB  THR A  49     -35.054  -6.769  74.851
ATOM    377  OG1 THR A  49     -33.844  -6.931  75.607
ATOM    378  CG2 THR A  49     -36.235  -7.309  75.640
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ATOM    379  H   THR A  49     -33.949  -9.136  74.658
ATOM    380  HG1 THR A  49     -33.934  -6.398  76.554
ATOM    381  N   ALA A  50     -34.330  -6.110  71.638
ATOM    382  CA  ALA A  50     -33.428  -5.418  70.723
ATOM    383  C   ALA A  50     -32.854  -4.185  71.399
ATOM    384  O   ALA A  50     -32.970  -4.039  72.616
ATOM    385  CB  ALA A  50     -34.167  -5.037  69.464
ATOM    386  H   ALA A  50     -35.406  -6.030  71.483
ATOM    387  N   GLU A  51     -32.253  -3.289  70.618
ATOM    388  CA  GLU A  51     -31.664  -2.057  71.162
ATOM    389  C   GLU A  51     -32.772  -1.100  71.584
ATOM    390  O   GLU A  51     -32.545  -0.092  72.248
ATOM    391  CB  GLU A  51     -30.746  -1.373  70.146
ATOM    392  CG  GLU A  51     -29.780  -2.317  69.428
ATOM    393  CD  GLU A  51     -30.324  -2.759  68.081
ATOM    394  OE1 GLU A  51     -31.053  -3.778  68.029
ATOM    395  OE2 GLU A  51     -30.038  -2.065  67.078
ATOM    396  H   GLU A  51     -32.195  -3.475  69.545
ATOM    397  N   SER A  52     -33.986  -1.446  71.202
ATOM    398  CA  SER A  52     -35.145  -0.662  71.540
ATOM    399  C   SER A  52     -35.739  -1.193  72.848
ATOM    400  O   SER A  52     -36.809  -0.742  73.281
ATOM    401  CB  SER A  52     -36.144  -0.808  70.402
ATOM    402  OG  SER A  52     -35.966  -2.080  69.786
ATOM    403  H   SER A  52     -34.116  -2.354  70.614
ATOM    404  HG  SER A  52     -36.680  -2.191  68.969
ATOM    405  N   GLY A  53     -35.043  -2.164  73.457
ATOM    406  CA  GLY A  53     -35.497  -2.765  74.697
ATOM    407  C   GLY A  53     -36.941  -3.139  74.500
ATOM    408  O   GLY A  53     -37.786  -2.950  75.364
ATOM    409  H   GLY A  53     -34.112  -2.512  73.009
ATOM    410  N   GLU A  54     -37.198  -3.682  73.324
ATOM    411  CA  GLU A  54     -38.521  -4.073  72.892
ATOM    412  C   GLU A  54     -38.338  -5.361  72.063
ATOM    413  O   GLU A  54     -37.361  -5.488  71.323
ATOM    414  CB  GLU A  54     -39.068  -2.921  72.036
ATOM    415  CG  GLU A  54     -40.485  -3.051  71.596
ATOM    416  CD  GLU A  54     -40.863  -1.972  70.612
ATOM    417  OE1 GLU A  54     -40.603  -0.780  70.866
ATOM    418  OE2 GLU A  54     -41.417  -2.325  69.559
ATOM    419  H   GLU A  54     -36.365  -3.843  72.640
ATOM    420  N   LEU A  55     -39.217  -6.339  72.262
ATOM    421  CA  LEU A  55     -39.140  -7.599  71.533
ATOM    422  C   LEU A  55     -40.373  -7.828  70.660
ATOM    423  O   LEU A  55     -41.459  -8.204  71.148
ATOM    424  CB  LEU A  55     -38.954  -8.776  72.495
ATOM    425  CG  LEU A  55     -39.394 -10.157  71.971
ATOM    426  CD1 LEU A  55     -38.621 -10.546  70.708
ATOM    427  CD2 LEU A  55     -39.230 -11.214  73.059
ATOM    428  H   LEU A  55     -40.015  -6.195  72.990
ATOM    429  N   HIS A  56     -40.219  -7.503  69.386
ATOM    430  CA  HIS A  56     -41.287  -7.705  68.419
ATOM    431  C   HIS A  56     -40.846  -8.772  67.436
ATOM    432  O   HIS A  56     -40.035  -8.500  66.540
ATOM    433  CB  HIS A  56     -41.706  -6.420  67.677
ATOM    434  CG  HIS A  56     -40.604  -5.425  67.465
ATOM    435  ND1 HIS A  56     -40.324  -4.419  68.370
ATOM    436  CD2 HIS A  56     -39.740  -5.249  66.432
ATOM    437  CE1 HIS A  56     -39.341  -3.667  67.903
ATOM    438  NE2 HIS A  56     -38.970  -4.150  66.728
ATOM    439  H   HIS A  56     -39.273  -7.077  69.054
ATOM    440  HD1 HIS A  56     -40.835  -4.268  69.321
ATOM    441  N   GLY A  57     -41.309  -9.999  67.675
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ATOM    442  CA  GLY A  57     -40.974 -11.123  66.813
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ATOM    444  O   GLY A  57     -40.296 -13.243  67.741
ATOM    445  H   GLY A  57     -41.955 -10.164  68.537
ATOM    446  N   LEU A  58     -42.493 -12.662  67.900
ATOM    447  CA  LEU A  58     -42.896 -13.864  68.611
ATOM    448  C   LEU A  58     -44.021 -14.620  67.945
ATOM    449  O   LEU A  58     -43.766 -15.506  67.134
ATOM    450  CB  LEU A  58     -43.308 -13.533  70.038
ATOM    451  CG  LEU A  58     -42.241 -13.035  70.993
ATOM    452  CD1 LEU A  58     -42.902 -12.482  72.245
ATOM    453  CD2 LEU A  58     -41.301 -14.157  71.297
ATOM    454  H   LEU A  58     -43.249 -11.913  67.662
ATOM    455  N   THR A  59     -45.264 -14.260  68.261
ATOM    456  CA  THR A  59     -46.418 -14.975  67.721
ATOM    457  C   THR A  59     -47.200 -14.267  66.627
ATOM    458  O   THR A  59     -46.859 -13.166  66.205
ATOM    459  CB  THR A  59     -47.399 -15.384  68.853
ATOM    460  OG1 THR A  59     -48.358 -16.336  68.355
ATOM    461  CG2 THR A  59     -48.115 -14.166  69.413
ATOM    462  H   THR A  59     -45.423 -13.417  68.934
ATOM    463  HG1 THR A  59     -49.041 -16.616  69.156
ATOM    464  N   THR A  60     -48.220 -14.960  66.138
ATOM    465  CA  THR A  60     -49.108 -14.443  65.115
ATOM    466  C   THR A  60     -50.526 -14.617  65.642
ATOM    467  O   THR A  60     -50.793 -15.544  66.410
ATOM    468  CB  THR A  60     -48.978 -15.243  63.818
ATOM    469  OG1 THR A  60     -48.886 -16.639  64.134
ATOM    470  CG2 THR A  60     -47.749 -14.805  63.040
ATOM    471  H   THR A  60     -48.398 -15.964  66.523
ATOM    472  HG1 THR A  60     -48.793 -17.215  63.214
ATOM    473  N   ASP A  61     -51.426 -13.730  65.233
ATOM    474  CA  ASP A  61     -52.816 -13.804  65.658
ATOM    475  C   ASP A  61     -53.292 -15.232  65.426
ATOM    476  O   ASP A  61     -53.841 -15.868  66.323
ATOM    477  CB  ASP A  61     -53.678 -12.817  64.863
ATOM    478  CG  ASP A  61     -53.314 -11.354  65.125
ATOM    479  OD1 ASP A  61     -52.177 -10.933  64.808
ATOM    480  OD2 ASP A  61     -54.180 -10.613  65.635
ATOM    481  H   ASP A  61     -51.116 -12.926  64.565
ATOM    482  N   GLU A  62     -52.959 -15.761  64.256
ATOM    483  CA  GLU A  62     -53.319 -17.113  63.859
ATOM    484  C   GLU A  62     -52.906 -18.162  64.886
ATOM    485  O   GLU A  62     -53.656 -19.092  65.154
ATOM    486  CB  GLU A  62     -52.664 -17.434  62.514
ATOM    487  CG  GLU A  62     -52.913 -18.843  61.980
ATOM    488  CD  GLU A  62     -54.369 -19.099  61.585
ATOM    489  OE1 GLU A  62     -55.193 -18.150  61.611
ATOM    490  OE2 GLU A  62     -54.685 -20.262  61.239
ATOM    491  H   GLU A  62     -52.386 -15.152  63.557
ATOM    492  N   LYS A  63     -51.722 -17.979  65.467
ATOM    493  CA  LYS A  63     -51.147 -18.911  66.453
ATOM    494  C   LYS A  63     -51.353 -18.587  67.937
ATOM    495  O   LYS A  63     -51.231 -19.467  68.785
ATOM    496  CB  LYS A  63     -49.640 -19.068  66.184
ATOM    497  CG  LYS A  63     -48.869 -19.928  67.196
ATOM    498  CD  LYS A  63     -47.367 -19.919  66.922
ATOM    499  CE  LYS A  63     -47.053 -20.301  65.473
ATOM    500  NZ  LYS A  63     -45.607 -20.635  65.245
ATOM    501  H   LYS A  63     -51.148 -17.092  65.200
ATOM    502  HZ1 LYS A  63     -45.456 -20.896  64.197
ATOM    503  HZ2 LYS A  63     -45.326 -21.480  65.874
ATOM    504  HZ3 LYS A  63     -44.991 -19.772  65.498
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ATOM    505  N   PHE A  64     -51.674 -17.340  68.258
ATOM    506  CA  PHE A  64     -51.850 -16.948  69.650
ATOM    507  C   PHE A  64     -53.257 -17.257  70.183
ATOM    508  O   PHE A  64     -54.074 -16.349  70.333
ATOM    509  CB  PHE A  64     -51.526 -15.461  69.776
ATOM    510  CG  PHE A  64     -51.468 -14.969  71.180
ATOM    511  CD1 PHE A  64     -50.584 -15.520  72.091
ATOM    512  CD2 PHE A  64     -52.325 -13.962  71.609
ATOM    513  CE1 PHE A  64     -50.561 -15.079  73.413
ATOM    514  CE2 PHE A  64     -52.306 -13.522  72.927
ATOM    515  CZ  PHE A  64     -51.419 -14.089  73.825
ATOM    516  H   PHE A  64     -51.808 -16.600  67.469
ATOM    517  N   THR A  65     -53.525 -18.523  70.507
ATOM    518  CA  THR A  65     -54.858 -18.929  70.991
ATOM    519  C   THR A  65     -55.203 -18.461  72.397
ATOM    520  O   THR A  65     -54.427 -17.770  73.032
ATOM    521  CB  THR A  65     -55.076 -20.481  70.960
ATOM    522  OG1 THR A  65     -54.534 -21.071  72.148
ATOM    523  CG2 THR A  65     -54.434 -21.127  69.723
ATOM    524  H   THR A  65     -52.741 -19.274  70.411
ATOM    525  HG1 THR A  65     -54.689 -22.150  72.121
ATOM    526  N   GLU A  66     -56.403 -18.815  72.849
ATOM    527  CA  GLU A  66     -56.875 -18.463  74.179
ATOM    528  C   GLU A  66     -56.139 -19.340  75.189
ATOM    529  O   GLU A  66     -56.024 -20.561  74.987
ATOM    530  CB  GLU A  66     -58.397 -18.678  74.297
ATOM    531  CG  GLU A  66     -58.988 -18.226  75.663
ATOM    532  CD  GLU A  66     -60.531 -18.144  75.715
ATOM    533  OE1 GLU A  66     -61.139 -17.392  74.912
ATOM    534  OE2 GLU A  66     -61.136 -18.803  76.595
ATOM    535  H   GLU A  66     -57.058 -19.391  72.196
ATOM    536  N   GLY A  67     -55.621 -18.723  76.251
ATOM    537  CA  GLY A  67     -54.908 -19.493  77.253
ATOM    538  C   GLY A  67     -54.151 -18.732  78.323
ATOM    539  O   GLY A  67     -54.172 -17.507  78.375
ATOM    540  H   GLY A  67     -55.733 -17.645  76.366
ATOM    541  N   VAL A  68     -53.481 -19.480  79.195
ATOM    542  CA  VAL A  68     -52.716 -18.908  80.290
ATOM    543  C   VAL A  68     -51.268 -18.922  79.847
ATOM    544  O   VAL A  68     -50.759 -19.960  79.446
ATOM    545  CB  VAL A  68     -52.846 -19.773  81.561
ATOM    546  CG1 VAL A  68     -52.248 -19.058  82.775
ATOM    547  CG2 VAL A  68     -54.276 -20.135  81.786
ATOM    548  H   VAL A  68     -53.508 -20.564  79.083
ATOM    549  N   TYR A  69     -50.604 -17.779  79.965
ATOM    550  CA  TYR A  69     -49.217 -17.646  79.543
ATOM    551  C   TYR A  69     -48.336 -17.305  80.720
ATOM    552  O   TYR A  69     -48.834 -17.004  81.810
ATOM    553  CB  TYR A  69     -49.107 -16.562  78.486
ATOM    554  CG  TYR A  69     -49.899 -16.896  77.257
ATOM    555  CD1 TYR A  69     -51.281 -16.766  77.237
ATOM    556  CD2 TYR A  69     -49.268 -17.389  76.120
ATOM    557  CE1 TYR A  69     -52.016 -17.120  76.115
ATOM    558  CE2 TYR A  69     -49.983 -17.748  74.998
ATOM    559  CZ  TYR A  69     -51.358 -17.605  74.992
ATOM    560  OH  TYR A  69     -52.048 -17.866  73.829
ATOM    561  H   TYR A  69     -51.111 -16.914  80.392
ATOM    562  HH  TYR A  69     -51.357 -18.236  73.072
ATOM    563  N   ARG A  70     -47.027 -17.307  80.491
ATOM    564  CA  ARG A  70     -46.068 -17.011  81.547
ATOM    565  C   ARG A  70     -44.794 -16.535  80.883
ATOM    566  O   ARG A  70     -43.988 -17.335  80.435
ATOM    567  CB  ARG A  70     -45.841 -18.285  82.363
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ATOM    570  NE  ARG A  70     -43.182 -20.098  84.310
ATOM    571  CZ  ARG A  70     -43.033 -21.330  84.782
ATOM    572 NH1 ARG A  70     -43.775 -22.313  84.282
ATOM    573 NH2 ARG A  70     -42.178 -21.577  85.774
ATOM    574  H   ARG A  70     -46.663 -17.537  79.489
ATOM    575  HE  ARG A  70     -42.561 -19.304  84.725
ATOM    576 HH1 ARG A  70     -43.523 -23.248  84.782
ATOM    577 HH1 ARG A  70     -44.518 -22.200  83.493
ATOM    578 HH2 ARG A  70     -42.201 -22.640  86.016
ATOM    579 HH2 ARG A  70     -41.553 -20.833  86.267
ATOM    580  N   VAL A  71     -44.697 -15.227  80.696
ATOM    581  CA  VAL A  71     -43.537 -14.614  80.067
ATOM    582  C   VAL A  71     -42.489 -14.490  81.139
ATOM    583  O   VAL A  71     -42.737 -13.939  82.201
ATOM    584  CB  VAL A  71     -43.869 -13.225  79.476
ATOM    585 CG1 VAL A  71     -42.587 -12.505  78.987
ATOM    586 CG2 VAL A  71     -44.889 -13.380  78.321
ATOM    587  H   VAL A  71     -45.516 -14.587  81.026
ATOM    588  N   GLU A  72     -41.316 -15.021  80.849
ATOM    589  CA  GLU A  72     -40.208 -15.035  81.780
ATOM    590  C   GLU A  72     -39.039 -14.178  81.309
ATOM    591  O   GLU A  72     -38.459 -14.419  80.240
ATOM    592  CB  GLU A  72     -39.777 -16.479  81.962
ATOM    593  CG  GLU A  72     -38.624 -16.651  82.904
ATOM    594  CD  GLU A  72     -38.439 -18.068  83.323
ATOM    595 OE1 GLU A  72     -39.462 -18.773  83.521
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ATOM    597  H   GLU A  72     -41.175 -15.468  79.865
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ATOM    599  CA  LEU A  73     -37.648 -12.239  81.807
ATOM    600  C   LEU A  73     -36.461 -12.566  82.700
ATOM    601  O   LEU A  73     -36.545 -12.505  83.952
ATOM    602  CB  LEU A  73     -38.109 -10.796  82.048
ATOM    603  CG  LEU A  73     -39.470 -10.373  81.445
ATOM    604 CD1 LEU A  73     -39.938  -9.052  82.026
ATOM    605 CD2 LEU A  73     -39.400 -10.292  79.926
ATOM    606  H   LEU A  73     -39.302 -13.017  83.014
ATOM    607  N   ASP A  74     -35.364 -12.947  82.044
ATOM    608  CA  ASP A  74     -34.127 -13.308  82.726
ATOM    609  C   ASP A  74     -33.419 -12.060  83.251
ATOM    610  O   ASP A  74     -32.429 -11.589  82.687
ATOM    611  CB  ASP A  74     -33.204 -14.107  81.795
ATOM    612  CG  ASP A  74     -32.045 -14.773  82.543
ATOM    613 OD1 ASP A  74     -32.186 -15.131  83.736
ATOM    614 OD2 ASP A  74     -30.983 -14.955  81.922
ATOM    615  H   ASP A  74     -35.394 -12.988  80.955
ATOM    616  N   THR A  75     -33.935 -11.537  84.352
ATOM    617  CA  THR A  75     -33.382 -10.351  84.963
ATOM    618  C   THR A  75     -32.032 -10.566  85.610
ATOM    619  O   THR A  75     -31.200  -9.668  85.596
ATOM    620  CB  THR A  75     -34.332  -9.822  86.025
ATOM    621 OG1 THR A  75     -34.567 -10.823  86.998
ATOM    622 CG2 THR A  75     -35.680  -9.402  85.441
ATOM    623  H   THR A  75     -34.801 -12.015  84.810
ATOM    624 HG1 THR A  75     -35.249 -10.439  87.757
ATOM    625  N   LYS A  76     -31.808 -11.748  86.173
ATOM    626  CA  LYS A  76     -30.548 -12.039  86.841
ATOM    627  C   LYS A  76     -29.366 -11.897  85.880
ATOM    628  O   LYS A  76     -28.395 -11.203  86.173
ATOM    629  CB  LYS A  76     -30.600 -13.418  87.510
ATOM    630  CG  LYS A  76     -29.279 -13.854  88.103
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ATOM    631  CD  LYS A  76     -29.400 -14.796  89.281
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ATOM    633  NZ  LYS A  76     -28.986 -14.867  91.752
ATOM    634  H   LYS A  76     -32.582 -12.514  86.133
ATOM    635  HZ1 LYS A  76     -28.988 -14.263  92.660
ATOM    636  HZ2 LYS A  76     -27.987 -15.270  91.586
ATOM    637  HZ3 LYS A  76     -29.696 -15.687  91.860
ATOM    638  N   SER A  77     -29.443 -12.517  84.716
ATOM    639  CA  SER A  77     -28.361 -12.355  83.773
ATOM    640  C   SER A  77     -28.159 -10.903  83.319
ATOM    641  O   SER A  77     -27.046 -10.520  82.948
ATOM    642  CB  SER A  77     -28.559 -13.256  82.563
ATOM    643  OG  SER A  77     -27.857 -14.467  82.769
ATOM    644  H   SER A  77     -30.305 -13.136  84.472
ATOM    645  HG  SER A  77     -27.994 -15.118  81.906
ATOM    646  N   TYR A  78     -29.227 -10.112  83.299
ATOM    647  CA  TYR A  78     -29.114  -8.721  82.895
ATOM    648  C   TYR A  78     -28.234  -7.977  83.891
ATOM    649  O   TYR A  78     -27.144  -7.518  83.568
ATOM    650  CB  TYR A  78     -30.487  -8.061  82.853
ATOM    651  CG  TYR A  78     -30.444  -6.681  82.265
ATOM    652  CD1 TYR A  78     -30.314  -6.500  80.900
ATOM    653  CD2 TYR A  78     -30.476  -5.556  83.077
ATOM    654  CE1 TYR A  78     -30.208  -5.242  80.340
ATOM    655  CE2 TYR A  78     -30.370  -4.280  82.534
ATOM    656  CZ  TYR A  78     -30.234  -4.134  81.155
ATOM    657  OH  TYR A  78     -30.132  -2.877  80.596
ATOM    658  H   TYR A  78     -30.199 -10.512  83.587
ATOM    659  HH  TYR A  78     -30.171  -2.125  81.384
ATOM    660  N   TRP A  79     -28.695  -7.921  85.134
ATOM    661  CA  TRP A  79     -27.975  -7.230  86.190
ATOM    662  C   TRP A  79     -26.576  -7.761  86.413
ATOM    663  O   TRP A  79     -25.652  -6.995  86.713
ATOM    664  CB  TRP A  79     -28.794  -7.268  87.478
ATOM    665  CG  TRP A  79     -30.020  -6.454  87.331
ATOM    666  CD1 TRP A  79     -31.311  -6.855  87.511
ATOM    667  CD2 TRP A  79     -30.075  -5.088  86.914
ATOM    668  NE1 TRP A  79     -32.174  -5.814  87.228
ATOM    669  CE2 TRP A  79     -31.439  -4.719  86.857
ATOM    670  CE3 TRP A  79     -29.103  -4.139  86.575
ATOM    671  CZ2 TRP A  79     -31.855  -3.446  86.472
ATOM    672  CZ3 TRP A  79     -29.519  -2.871  86.193
ATOM    673  CH2 TRP A  79     -30.887  -2.537  86.143
ATOM    674  H   TRP A  79     -29.641  -8.408  85.370
ATOM    675  HE1 TRP A  79     -33.261  -5.856  87.292
ATOM    676  N   LYS A  80     -26.416  -9.063  86.193
ATOM    677  CA  LYS A  80     -25.135  -9.713  86.377
ATOM    678  C   LYS A  80     -24.036  -9.287  85.402
ATOM    679  O   LYS A  80     -22.914  -9.019  85.827
ATOM    680  CB  LYS A  80     -25.317 -11.230  86.413
ATOM    681  CG  LYS A  80     -25.194 -11.787  87.842
ATOM    682  CD  LYS A  80     -26.199 -12.885  88.135
ATOM    683  CE  LYS A  80     -26.156 -14.061  87.119
ATOM    684  NZ  LYS A  80     -24.978 -14.977  87.223
ATOM    685  H   LYS A  80     -27.270  -9.655  85.864
ATOM    686  HZ1 LYS A  80     -25.057 -15.757  86.465
ATOM    687  HZ2 LYS A  80     -24.958 -15.432  88.213
ATOM    688  HZ3 LYS A  80     -24.061 -14.409  87.066
ATOM    689  N   ALA A  81     -24.363  -9.184  84.115
ATOM    690  CA  ALA A  81     -23.390  -8.791  83.098
ATOM    691  C   ALA A  81     -22.828  -7.396  83.331
ATOM    692  O   ALA A  81     -21.716  -7.091  82.863
ATOM    693  CB  ALA A  81     -24.017  -8.848  81.713
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ATOM    694  H   ALA A  81     -25.388  -9.398  83.812
ATOM    695  N   LEU A  82     -23.638  -6.531  83.959
ATOM    696  CA  LEU A  82     -23.236  -5.149  84.265
ATOM    697  C   LEU A  82     -22.398  -5.036  85.556
ATOM    698  O   LEU A  82     -21.789  -4.009  85.802
ATOM    699  CB  LEU A  82     -24.457  -4.215  84.368
ATOM    700  CG  LEU A  82     -25.507  -3.998  83.253
ATOM    701  CD1 LEU A  82     -26.272  -2.693  83.553
ATOM    702  CD2 LEU A  82     -24.893  -3.932  81.833
ATOM    703  H   LEU A  82     -24.632  -6.866  84.256
ATOM    704  N   GLY A  83     -22.392  -6.072  86.389
ATOM    705  CA  GLY A  83     -21.627  -6.020  87.624
ATOM    706  C   GLY A  83     -22.538  -5.857  88.831
ATOM    707  O   GLY A  83     -22.151  -6.143  89.956
ATOM    708  H   GLY A  83     -22.967  -6.965  86.145
ATOM    709  N   ILE A  84     -23.742  -5.357  88.602
ATOM    710  CA  ILE A  84     -24.732  -5.170  89.656
ATOM    711  C   ILE A  84     -25.076  -6.570  90.173
ATOM    712  O   ILE A  84     -24.961  -7.534  89.417
ATOM    713  CB  ILE A  84     -26.015  -4.599  89.049
ATOM    714  CG1 ILE A  84     -25.699  -3.396  88.170
ATOM    715  CG2 ILE A  84     -27.022  -4.257  90.106
ATOM    716  CD1 ILE A  84     -25.255  -2.202  88.914
ATOM    717  H   ILE A  84     -24.004  -5.071  87.583
ATOM    718  N   SER A  85     -25.507  -6.692  91.422
ATOM    719  CA  SER A  85     -25.883  -7.997  91.960
ATOM    720  C   SER A  85     -27.339  -7.890  92.415
ATOM    721  O   SER A  85     -27.626  -7.394  93.502
ATOM    722  CB  SER A  85     -24.984  -8.394  93.134
ATOM    723  OG  SER A  85     -23.639  -8.641  92.745
ATOM    724  H   SER A  85     -25.584  -5.808  92.054
ATOM    725  HG  SER A  85     -23.053  -8.918  93.620
ATOM    726  N   PRO A  86     -28.268  -8.386  91.586
ATOM    727  CA  PRO A  86     -29.719  -8.396  91.775
ATOM    728  C   PRO A  86     -30.244  -9.319  92.861
ATOM    729  O   PRO A  86     -29.506 -10.118  93.445
ATOM    730  CB  PRO A  86     -30.212  -8.865  90.430
ATOM    731  CG  PRO A  86     -29.211  -9.913  90.104
ATOM    732  CD  PRO A  86     -27.894  -9.267  90.463
ATOM    733  N   PHE A  87     -31.552  -9.236  93.068
ATOM    734  CA  PHE A  87     -32.259 -10.029  94.060
ATOM    735  C   PHE A  87     -33.164 -11.030  93.375
ATOM    736  O   PHE A  87     -33.159 -12.205  93.709
ATOM    737  CB  PHE A  87     -33.105  -9.104  94.913
ATOM    738  CG  PHE A  87     -33.961  -9.798  95.925
ATOM    739  CD1 PHE A  87     -35.265 -10.162  95.618
ATOM    740  CD2 PHE A  87     -33.501  -9.988  97.213
ATOM    741  CE1 PHE A  87     -36.089 -10.684  96.588
ATOM    742  CE2 PHE A  87     -34.311 -10.502  98.166
ATOM    743  CZ  PHE A  87     -35.610 -10.854  97.858
ATOM    744  H   PHE A  87     -32.127  -8.535  92.463
ATOM    745  N   HIS A  88     -33.993 -10.545  92.457
ATOM    746  CA  HIS A  88     -34.910 -11.425  91.736
ATOM    747  C   HIS A  88     -34.105 -12.327  90.809
ATOM    748  O   HIS A  88     -33.003 -11.953  90.381
ATOM    749  CB  HIS A  88     -35.921 -10.614  90.922
ATOM    750  CG  HIS A  88     -36.743  -9.664  91.742
ATOM    751  ND1 HIS A  88     -37.831 -10.067  92.483
ATOM    752  CD2 HIS A  88     -36.642  -8.324  91.918
ATOM    753  CE1 HIS A  88     -38.365  -9.020  93.086
ATOM    754  NE2 HIS A  88     -37.662  -7.948  92.757
ATOM    755  H   HIS A  88     -33.990  -9.477  92.239
ATOM    756  HD1 HIS A  88     -38.195 -11.092  92.562
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ATOM    757  N   GLU A  89     -34.634 -13.515  90.522
ATOM    758  CA  GLU A  89     -33.962 -14.455  89.634
ATOM    759  C   GLU A  89     -34.522 -14.364  88.222
ATOM    760  O   GLU A  89     -33.823 -14.606  87.228
ATOM    761  CB  GLU A  89     -34.150 -15.864  90.141
ATOM    762  CG  GLU A  89     -33.285 -16.194  91.320
ATOM    763  CD  GLU A  89     -32.245 -17.229  90.973
ATOM    764  OE1 GLU A  89     -32.628 -18.297  90.422
ATOM    765  OE2 GLU A  89     -31.057 -16.961  91.256
ATOM    766  H   GLU A  89     -35.593 -13.791  90.961
ATOM    767  N   TYR A  90     -35.807 -14.043  88.161
ATOM    768  CA  TYR A  90     -36.549 -13.913  86.919
ATOM    769  C   TYR A  90     -37.672 -12.935  87.249
ATOM    770  O   TYR A  90     -37.861 -12.559  88.397
ATOM    771  CB  TYR A  90     -37.191 -15.258  86.532
ATOM    772  CG  TYR A  90     -36.238 -16.433  86.416
ATOM    773  CD1 TYR A  90     -35.274 -16.479  85.403
ATOM    774  CD2 TYR A  90     -36.301 -17.500  87.313
ATOM    775  CE1 TYR A  90     -34.391 -17.557  85.284
ATOM    776  CE2 TYR A  90     -35.420 -18.585  87.206
ATOM    777  CZ  TYR A  90     -34.464 -18.610  86.189
ATOM    778  OH  TYR A  90     -33.563 -19.666  86.072
ATOM    779  H   TYR A  90     -36.337 -13.867  89.097
ATOM    780  HH  TYR A  90     -33.759 -20.399  86.854
ATOM    781  N   ALA A  91     -38.401 -12.516  86.234
ATOM    782  CA  ALA A  91     -39.530 -11.630  86.406
ATOM    783  C   ALA A  91     -40.538 -12.319  85.515
ATOM    784  O   ALA A  91     -40.278 -12.502  84.340
ATOM    785  CB  ALA A  91     -39.198 -10.228  85.880
ATOM    786  H   ALA A  91     -38.145 -12.851  85.229
ATOM    787  N   GLU A  92     -41.646 -12.769  86.080
ATOM    788  CA  GLU A  92     -42.639 -13.474  85.291
ATOM    789  C   GLU A  92     -43.970 -12.774  85.214
ATOM    790  O   GLU A  92     -44.517 -12.351  86.236
ATOM    791  CB  GLU A  92     -42.902 -14.853  85.858
ATOM    792  CG  GLU A  92     -41.736 -15.771  85.880
ATOM    793  CD  GLU A  92     -42.190 -17.200  86.044
ATOM    794  OE1 GLU A  92     -43.231 -17.426  86.708
ATOM    795  OE2 GLU A  92     -41.521 -18.101  85.487
ATOM    796  H   GLU A  92     -41.813 -12.614  87.146
ATOM    797  N   VAL A  93     -44.527 -12.748  84.009
ATOM    798  CA  VAL A  93     -45.813 -12.140  83.786
ATOM    799  C   VAL A  93     -46.715 -13.295  83.407
ATOM    800  O   VAL A  93     -46.597 -13.847  82.305
ATOM    801  CB  VAL A  93     -45.804 -11.134  82.596
ATOM    802  CG1 VAL A  93     -47.096 -10.334  82.574
ATOM    803  CG2 VAL A  93     -44.637 -10.203  82.679
ATOM    804  H   VAL A  93     -43.999 -13.198  83.169
ATOM    805  N   VAL A  94     -47.551 -13.725  84.343
ATOM    806  CA  VAL A  94     -48.494 -14.804  84.073
ATOM    807  C   VAL A  94     -49.894 -14.182  83.923
ATOM    808  O   VAL A  94     -50.398 -13.502  84.836
ATOM    809  CB  VAL A  94     -48.451 -15.862  85.189
ATOM    810  CG1 VAL A  94     -49.351 -17.026  84.856
ATOM    811  CG2 VAL A  94     -47.030 -16.353  85.379
ATOM    812  H   VAL A  94     -47.534 -13.264  85.330
ATOM    813  N   PHE A  95     -50.476 -14.348  82.736
ATOM    814  CA  PHE A  95     -51.799 -13.810  82.418
ATOM    815  C   PHE A  95     -52.556 -14.764  81.487
ATOM    816  O   PHE A  95     -51.954 -15.513  80.710
ATOM    817  CB  PHE A  95     -51.654 -12.453  81.708
ATOM    818  CG  PHE A  95     -50.923 -12.542  80.399
ATOM    819  CD1 PHE A  95     -49.535 -12.472  80.357
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ATOM    820  CD2 PHE A  95     -51.606 -12.782  79.223
ATOM    821  CE1 PHE A  95     -48.844 -12.651  79.154
ATOM    822  CE2 PHE A  95     -50.918 -12.958  78.021
ATOM    823  CZ  PHE A  95     -49.543 -12.894  77.992
ATOM    824  H   PHE A  95     -49.944 -14.911  81.969
ATOM    825  N   THR A  96     -53.879 -14.729  81.549
ATOM    826  CA  THR A  96     -54.674 -15.578  80.685
ATOM    827  C   THR A  96     -54.883 -14.645  79.490
ATOM    828  O   THR A  96     -54.910 -13.421  79.680
ATOM    829  CB  THR A  96     -55.993 -15.989  81.382
ATOM    830  OG1 THR A  96     -56.319 -17.335  81.021
ATOM    831  CG2 THR A  96     -57.136 -15.067  81.000
ATOM    832  H   THR A  96     -54.371 -14.059  82.254
ATOM    833  HG1 THR A  96     -57.248 -17.628  81.510
ATOM    834  N   ALA A  97     -55.026 -15.195  78.283
ATOM    835  CA  ALA A  97     -55.158 -14.363  77.092
ATOM    836  C   ALA A  97     -56.229 -14.744  76.088
ATOM    837  O   ALA A  97     -56.584 -15.908  75.925
ATOM    838  CB  ALA A  97     -53.817 -14.272  76.379
ATOM    839  H   ALA A  97     -55.043 -16.280  78.185
ATOM    840  N   ASN A  98     -56.735 -13.720  75.413
ATOM    841  CA  ASN A  98     -57.737 -13.879  74.374
ATOM    842  C   ASN A  98     -59.099 -14.403  74.782
ATOM    843  O   ASN A  98     -59.875 -14.806  73.914
ATOM    844  CB  ASN A  98     -57.195 -14.758  73.246
ATOM    845  CG  ASN A  98     -56.046 -14.116  72.502
ATOM    846  OD1 ASN A  98     -55.926 -12.893  72.433
ATOM    847  ND2 ASN A  98     -55.209 -14.941  71.915
ATOM    848  H   ASN A  98     -56.386 -12.715  75.650
ATOM    849  HD2 ASN A  98     -54.428 -14.369  71.413
ATOM    850  HD2 ASN A  98     -55.284 -16.028  71.927
ATOM    851  N   ASP A  99     -59.417 -14.397  76.073
ATOM    852  CA  ASP A  99     -60.734 -14.869  76.488
ATOM    853  C   ASP A  99     -61.786 -13.769  76.239
ATOM    854  O   ASP A  99     -62.574 -13.414  77.122
ATOM    855  CB  ASP A  99     -60.718 -15.330  77.950
ATOM    856  CG  ASP A  99     -60.568 -14.188  78.913
ATOM    857  OD1 ASP A  99     -59.775 -13.266  78.622
ATOM    858  OD2 ASP A  99     -61.263 -14.203  79.951
ATOM    859  H   ASP A  99     -58.701 -14.045  76.815
ATOM    860  N   SER A 100     -61.793 -13.253  75.010
ATOM    861  CA  SER A 100     -62.699 -12.195  74.578
ATOM    862  C   SER A 100     -62.691 -12.091  73.056
ATOM    863  O   SER A 100     -63.452 -11.310  72.477
ATOM    864  CB  SER A 100     -62.265 -10.849  75.151
ATOM    865  OG  SER A 100     -62.124 -10.887  76.561
ATOM    866  H   SER A 100     -61.080 -13.646  74.285
ATOM    867  HG  SER A 100     -61.814  -9.906  76.922
ATOM    868  N   GLY A 101     -61.802 -12.843  72.409
ATOM    869  CA  GLY A 101     -61.734 -12.801  70.957
ATOM    870  C   GLY A 101     -60.421 -12.305  70.373
ATOM    871  O   GLY A 101     -60.408 -11.643  69.329
ATOM    872  H   GLY A 101     -61.125 -13.489  72.968
ATOM    873  N   HIS A 102     -59.317 -12.670  71.025
ATOM    874  CA  HIS A 102     -57.971 -12.280  70.600
ATOM    875  C   HIS A 102     -57.748 -10.793  70.316
ATOM    876  O   HIS A 102     -58.095 -10.288  69.238
ATOM    877  CB  HIS A 102     -57.494 -13.107  69.403
ATOM    878  CG  HIS A 102     -56.111 -12.748  68.957
ATOM    879  ND1 HIS A 102     -55.019 -13.544  69.214
ATOM    880  CD2 HIS A 102     -55.630 -11.627  68.366
ATOM    881  CE1 HIS A 102     -53.922 -12.923  68.816
ATOM    882  NE2 HIS A 102     -54.267 -11.757  68.298
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ATOM    883  H   HIS A 102     -59.422 -13.289  71.916
ATOM    884  HD1 HIS A 102     -55.052 -14.531  69.674
ATOM    885  N   ARG A 103     -57.039 -10.140  71.229
ATOM    886  CA  ARG A 103     -56.748  -8.716  71.109
ATOM    887  C   ARG A 103     -55.251  -8.480  70.892
ATOM    888  O   ARG A 103     -54.555  -9.342  70.331
ATOM    889  CB  ARG A 103     -57.214  -8.004  72.379
ATOM    890  CG  ARG A 103     -58.717  -7.936  72.541
ATOM    891  CD  ARG A 103     -59.067  -7.121  73.767
ATOM    892  NE  ARG A 103     -60.500  -7.115  74.040
ATOM    893  CZ  ARG A 103     -61.075  -7.759  75.053
ATOM    894  NH1 ARG A 103     -60.348  -8.475  75.907
ATOM    895  NH2 ARG A 103     -62.391  -7.692  75.207
ATOM    896  H   ARG A 103     -56.665 -10.684  72.096
ATOM    897  HE  ARG A 103     -61.143  -6.544  73.370
ATOM    898  HH1 ARG A 103     -61.002  -8.919  76.657
ATOM    899  HH1 ARG A 103     -59.266  -8.598  75.862
ATOM    900  HH2 ARG A 103     -62.685  -8.274  76.080
ATOM    901  HH2 ARG A 103     -63.074  -7.141  74.560
ATOM    902  N   HIS A 104     -54.769  -7.299  71.284
ATOM    903  CA  HIS A 104     -53.348  -6.992  71.179
ATOM    904  C   HIS A 104     -52.748  -6.679  72.541
ATOM    905  O   HIS A 104     -53.182  -5.764  73.255
ATOM    906  CB  HIS A 104     -53.062  -5.889  70.170
ATOM    907  CG  HIS A 104     -52.854  -6.402  68.784
ATOM    908  ND1 HIS A 104     -52.118  -5.723  67.839
ATOM    909  CD2 HIS A 104     -53.292  -7.533  68.181
ATOM    910  CE1 HIS A 104     -52.115  -6.412  66.713
ATOM    911  NE2 HIS A 104     -52.821  -7.514  66.889
ATOM    912  H   HIS A 104     -55.450  -6.551  71.689
ATOM    913  HD1 HIS A 104     -51.614  -4.770  67.997
ATOM    914  N   TYR A 105     -51.748  -7.476  72.894
ATOM    915  CA  TYR A 105     -51.083  -7.367  74.170
ATOM    916  C   TYR A 105     -49.753  -6.643  74.124
ATOM    917  O   TYR A 105     -49.068  -6.609  73.097
ATOM    918  CB  TYR A 105     -50.918  -8.766  74.780
ATOM    919  CG  TYR A 105     -52.247  -9.401  75.111
ATOM    920  CD1 TYR A 105     -53.139  -9.772  74.099
ATOM    921  CD2 TYR A 105     -52.648  -9.565  76.427
ATOM    922  CE1 TYR A 105     -54.392 -10.277  74.395
ATOM    923  CE2 TYR A 105     -53.897 -10.068  76.736
ATOM    924  CZ  TYR A 105     -54.765 -10.420  75.720
ATOM    925  OH  TYR A 105     -56.014 -10.902  76.031
ATOM    926  H   TYR A 105     -51.416  -8.242  72.193
ATOM    927  HH  TYR A 105     -56.127 -10.945  77.114
ATOM    928  N   THR A 106     -49.432  -6.018  75.249
ATOM    929  CA  THR A 106     -48.188  -5.295  75.413
ATOM    930  C   THR A 106     -47.792  -5.369  76.877
ATOM    931  O   THR A 106     -48.522  -4.917  77.776
ATOM    932  CB  THR A 106     -48.283  -3.815  75.007
ATOM    933  OG1 THR A 106     -48.790  -3.688  73.664
ATOM    934  CG2 THR A 106     -46.896  -3.196  75.078
ATOM    935  H   THR A 106     -50.134  -6.049  76.083
ATOM    936  HG1 THR A 106     -48.850  -2.633  73.396
ATOM    937  N   ILE A 107     -46.629  -5.949  77.108
ATOM    938  CA  ILE A 107     -46.100  -6.102  78.444
ATOM    939  C   ILE A 107     -44.848  -5.239  78.536
ATOM    940  O   ILE A 107     -44.011  -5.242  77.630
ATOM    941  CB  ILE A 107     -45.695  -7.570  78.659
ATOM    942  CG1 ILE A 107     -46.851  -8.498  78.258
ATOM    943  CG2 ILE A 107     -45.189  -7.804  80.059
ATOM    944  CD1 ILE A 107     -47.965  -8.579  79.276
ATOM    945  H   ILE A 107     -46.048  -6.321  76.264
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ATOM    946  N   ALA A 108     -44.780  -4.429  79.585
ATOM    947  CA  ALA A 108     -43.624  -3.582  79.849
ATOM    948  C   ALA A 108     -42.956  -4.065  81.142
ATOM    949  O   ALA A 108     -43.570  -4.737  81.966
ATOM    950  CB  ALA A 108     -44.046  -2.112  79.987
ATOM    951  H   ALA A 108     -45.623  -4.394  80.275
ATOM    952  N   ALA A 109     -41.697  -3.730  81.317
ATOM    953  CA  ALA A 109     -41.017  -4.136  82.507
ATOM    954  C   ALA A 109     -40.004  -3.072  82.768
ATOM    955  O   ALA A 109     -39.282  -2.670  81.855
ATOM    956  CB  ALA A 109     -40.346  -5.462  82.298
ATOM    957  H   ALA A 109     -41.174  -3.146  80.559
ATOM    958  N   LEU A 110     -40.067  -2.494  83.964
ATOM    959  CA  LEU A 110     -39.122  -1.472  84.362
ATOM    960  C   LEU A 110     -38.174  -2.191  85.302
ATOM    961  O   LEU A 110     -38.596  -2.745  86.329
ATOM    962  CB  LEU A 110     -39.827  -0.336  85.083
ATOM    963  CG  LEU A 110     -38.902   0.698  85.722
ATOM    964  CD1 LEU A 110     -38.224   1.534  84.611
ATOM    965  CD2 LEU A 110     -39.715   1.590  86.649
ATOM    966  H   LEU A 110     -40.848  -2.797  84.661
ATOM    967  N   LEU A 111     -36.897  -2.195  84.935
ATOM    968  CA  LEU A 111     -35.871  -2.886  85.714
ATOM    969  C   LEU A 111     -34.956  -2.130  86.683
ATOM    970  O   LEU A 111     -34.425  -1.064  86.379
ATOM    971  CB  LEU A 111     -35.008  -3.726  84.773
ATOM    972  CG  LEU A 111     -35.794  -4.729  83.941
ATOM    973  CD1 LEU A 111     -34.814  -5.733  83.385
ATOM    974  CD2 LEU A 111     -36.880  -5.420  84.773
ATOM    975  H   LEU A 111     -36.606  -1.666  84.027
ATOM    976  N   SER A 112     -34.724  -2.757  87.823
ATOM    977  CA  SER A 112     -33.842  -2.258  88.851
ATOM    978  C   SER A 112     -33.434  -3.536  89.584
ATOM    979  O   SER A 112     -34.136  -4.551  89.490
ATOM    980  CB  SER A 112     -34.561  -1.281  89.760
ATOM    981  OG  SER A 112     -33.815  -0.079  89.844
ATOM    982  H   SER A 112     -35.229  -3.707  87.998
ATOM    983  HG  SER A 112     -34.332   0.624  90.497
ATOM    984  N   PRO A 113     -32.291  -3.518  90.300
ATOM    985  CA  PRO A 113     -31.791  -4.686  91.021
ATOM    986  C   PRO A 113     -32.696  -5.300  92.075
ATOM    987  O   PRO A 113     -32.826  -6.550  92.144
ATOM    988  CB  PRO A 113     -30.474  -4.179  91.629
ATOM    989  CG  PRO A 113     -30.063  -3.094  90.703
ATOM    990  CD  PRO A 113     -31.363  -2.388  90.475
ATOM    991  N   TYR A 114     -33.315  -4.458  92.902
ATOM    992  CA  TYR A 114     -34.163  -4.996  93.961
ATOM    993  C   TYR A 114     -35.633  -4.714  93.867
ATOM    994  O   TYR A 114     -36.328  -4.748  94.883
ATOM    995  CB  TYR A 114     -33.637  -4.607  95.342
ATOM    996  CG  TYR A 114     -32.359  -5.320  95.729
ATOM    997  CD1 TYR A 114     -31.136  -4.920  95.206
ATOM    998  CD2 TYR A 114     -32.374  -6.405  96.610
ATOM    999  CE1 TYR A 114     -29.962  -5.584  95.542
ATOM   1000  CE2 TYR A 114     -31.198  -7.073  96.957
ATOM   1001  CZ  TYR A 114     -30.000  -6.657  96.413
ATOM   1002  OH  TYR A 114     -28.835  -7.316  96.712
ATOM   1003  H   TYR A 114     -33.187  -3.381  92.791
ATOM   1004  HH  TYR A 114     -29.045  -8.128  97.407
ATOM   1005  N   SER A 115     -36.121  -4.480  92.652
ATOM   1006  CA  SER A 115     -37.541  -4.213  92.438
ATOM   1007  C   SER A 115     -37.850  -4.003  90.980
ATOM   1008  O   SER A 115     -37.199  -3.214  90.316
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ATOM   1009  CB  SER A 115     -37.994  -2.986  93.227
ATOM   1010  OG  SER A 115     -37.559  -1.795  92.627
ATOM   1011  H   SER A 115     -35.446  -4.487  91.796
ATOM   1012  HG  SER A 115     -37.911  -0.952  93.222
ATOM   1013  N   TYR A 116     -38.813  -4.753  90.468
ATOM   1014  CA  TYR A 116     -39.203  -4.610  89.084
ATOM   1015  C   TYR A 116     -40.673  -4.202  89.089
ATOM   1016  O   TYR A 116     -41.270  -4.083  90.147
ATOM   1017  CB  TYR A 116     -38.892  -5.897  88.284
ATOM   1018  CG  TYR A 116     -39.748  -7.110  88.543
ATOM   1019  CD1 TYR A 116     -41.051  -7.188  88.043
ATOM   1020  CD2 TYR A 116     -39.245  -8.203  89.236
ATOM   1021  CE1 TYR A 116     -41.830  -8.337  88.223
ATOM   1022  CE2 TYR A 116     -40.011  -9.355  89.427
ATOM   1023  CZ  TYR A 116     -41.300  -9.416  88.915
ATOM   1024  OH  TYR A 116     -42.066 -10.553  89.070
ATOM   1025  H   TYR A 116     -39.316  -5.488  91.096
ATOM   1026  HH  TYR A 116     -41.503 -11.297  89.633
ATOM   1027  N   SER A 117     -41.234  -3.891  87.932
ATOM   1028  CA  SER A 117     -42.633  -3.461  87.857
ATOM   1029  C   SER A 117     -43.141  -3.846  86.501
ATOM   1030  O   SER A 117     -42.479  -3.549  85.495
ATOM   1031  CB  SER A 117     -42.746  -1.925  87.991
ATOM   1032  OG  SER A 117     -42.080  -1.416  89.144
ATOM   1033  H   SER A 117     -40.643  -3.953  87.018
ATOM   1034  HG  SER A 117     -42.196  -0.332  89.181
ATOM   1035  N   THR A 118     -44.279  -4.529  86.469
ATOM   1036  CA  THR A 118     -44.878  -4.930  85.195
ATOM   1037  C   THR A 118     -46.309  -4.429  85.066
ATOM   1038  O   THR A 118     -47.034  -4.317  86.052
ATOM   1039  CB  THR A 118     -44.859  -6.456  84.955
ATOM   1040  OG1 THR A 118     -43.542  -6.976  85.183
ATOM   1041  CG2 THR A 118     -45.215  -6.732  83.505
ATOM   1042  H   THR A 118     -44.774  -4.794  87.403
ATOM   1043  HG1 THR A 118     -43.541  -8.052  85.011
ATOM   1044  N   THR A 119     -46.711  -4.188  83.828
ATOM   1045  CA  THR A 119     -48.029  -3.676  83.483
ATOM   1046  C   THR A 119     -48.333  -4.008  82.029
ATOM   1047  O   THR A 119     -47.440  -4.023  81.187
ATOM   1048  CB  THR A 119     -48.072  -2.151  83.633
ATOM   1049  OG1 THR A 119     -49.102  -1.605  82.794
ATOM   1050  CG2 THR A 119     -46.722  -1.544  83.286
ATOM   1051  H   THR A 119     -46.011  -4.384  83.016
ATOM   1052  HG1 THR A 119     -49.125  -0.521  82.907
ATOM   1053  N   ALA A 120     -49.602  -4.275  81.749
ATOM   1054  CA  ALA A 120     -50.057  -4.603  80.409
ATOM   1055  C   ALA A 120     -50.932  -3.457  79.910
ATOM   1056  O   ALA A 120     -51.371  -2.613  80.695
ATOM   1057  CB  ALA A 120     -50.834  -5.890  80.427
ATOM   1058  H   ALA A 120     -50.333  -4.247  82.557
ATOM   1059  N   VAL A 121     -51.140  -3.420  78.597
ATOM   1060  CA  VAL A 121     -51.928  -2.389  77.906
ATOM   1061  C   VAL A 121     -52.733  -3.135  76.849
ATOM   1062  O   VAL A 121     -52.232  -3.379  75.750
ATOM   1063  CB  VAL A 121     -50.977  -1.427  77.200
ATOM   1064  CG1 VAL A 121     -51.742  -0.338  76.434
ATOM   1065  CG2 VAL A 121     -50.000  -0.863  78.207
ATOM   1066  H   VAL A 121     -50.692  -4.209  77.992
ATOM   1067  N   VAL A 122     -53.948  -3.544  77.195
ATOM   1068  CA  VAL A 122     -54.774  -4.313  76.276
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ATOM   1070  O   VAL A 122     -56.255  -2.623  75.384
ATOM   1071  CB  VAL A 122     -55.859  -5.122  77.037
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ATOM   1072  CG1 VAL A 122     -56.778  -5.824  76.064
ATOM   1073  CG2 VAL A 122     -55.201  -6.148  77.939
ATOM   1074  H   VAL A 122     -54.335  -3.298  78.184
ATOM   1075  N   SER A 123     -54.857  -3.670  73.954
ATOM   1076  CA  SER A 123     -55.294  -2.945  72.772
ATOM   1077  C   SER A 123     -56.266  -3.710  71.873
ATOM   1078  O   SER A 123     -56.490  -4.909  72.035
ATOM   1079  CB  SER A 123     -54.071  -2.472  71.963
ATOM   1080  OG  SER A 123     -52.953  -3.353  72.075
ATOM   1081  H   SER A 123     -54.070  -4.417  73.847
ATOM   1082  HG  SER A 123     -52.124  -2.965  71.483
ATOM   1083  N   ASN A 124     -56.833  -2.998  70.909
ATOM   1084  CA  ASN A 124     -57.780  -3.575  69.976
ATOM   1085  C   ASN A 124     -57.432  -3.138  68.573
ATOM   1086  O   ASN A 124     -57.346  -1.931  68.302
ATOM   1087  CB  ASN A 124     -59.189  -3.099  70.283
ATOM   1088  CG  ASN A 124     -60.021  -4.158  70.935
ATOM   1089  OD1 ASN A 124     -59.716  -4.600  72.034
ATOM   1090  ND2 ASN A 124     -61.086  -4.577  70.267
ATOM   1091  H   ASN A 124     -56.578  -1.942  70.815
ATOM   1092  HD2 ASN A 124     -61.601  -5.343  70.847
ATOM   1093  HD2 ASN A 124     -61.397  -4.215  69.287
ATOM   1094  N   PRO A 125     -57.136  -4.113  67.688
ATOM   1095  CA  PRO A 125     -56.791  -3.847  66.283
ATOM   1096  C   PRO A 125     -58.034  -3.282  65.598
ATOM   1097  O   PRO A 125     -57.955  -2.291  64.868
ATOM   1098  CB  PRO A 125     -56.406  -5.233  65.748
ATOM   1099  CG  PRO A 125     -57.173  -6.186  66.643
ATOM   1100  CD  PRO A 125     -57.013  -5.551  68.000
ATOM   1101  N   GLN A 126     -59.178  -3.917  65.859
ATOM   1102  CA  GLN A 126     -60.465  -3.473  65.334
ATOM   1103  C   GLN A 126     -61.328  -3.084  66.532
ATOM   1104  O   GLN A 126     -61.636  -3.941  67.366
ATOM   1105  CB  GLN A 126     -61.155  -4.581  64.524
ATOM   1106  CG  GLN A 126     -62.672  -4.385  64.310
ATOM   1107  CD  GLN A 126     -63.043  -3.046  63.665
ATOM   1108  OE1 GLN A 126     -62.984  -1.999  64.306
ATOM   1109  NE2 GLN A 126     -63.448  -3.083  62.402
ATOM   1110  H   GLN A 126     -59.151  -4.804  66.491
ATOM   1111  HE2 GLN A 126     -63.679  -2.073  62.065
ATOM   1112  HE2 GLN A 126     -63.535  -3.984  61.795
ATOM   1113  N   ASN A 127     -61.605  -1.782  66.643
ATOM   1114  CA  ASN A 127     -62.433  -1.160  67.686
ATOM   1115  C   ASN A 127     -61.936   0.266  67.970
ATOM   1116  OCT ASN A 127     -61.267   0.490  69.007
ATOM   1117  CB  ASN A 127     -62.457  -1.979  68.979
ATOM   1118  CG  ASN A 127     -63.566  -1.560  69.912
ATOM   1119  OD1 ASN A 127     -64.725  -1.931  69.730
ATOM   1120  ND2 ASN A 127     -63.216  -0.795  70.927
ATOM   1121  OCT ASN A 127     -62.212   1.150  67.130
ATOM   1122  H   ASN A 127     -61.177  -1.120  65.890
ATOM   1123  HD2 ASN A 127     -64.096  -0.560  71.525
ATOM   1124  HD2 ASN A 127     -62.203  -0.450  71.135
TER
ATOM   1125  N   SER B   8     -36.506 -13.514 117.752
ATOM   1126  CA  SER B   8     -37.443 -12.378 117.951
ATOM   1127  C   SER B   8     -37.864 -11.780 116.613
ATOM   1128  O   SER B   8     -38.796 -10.982 116.553
ATOM   1129  CB  SER B   8     -36.763 -11.308 118.802
ATOM   1130  OG  SER B   8     -35.366 -11.316 118.544
ATOM   1131  H1  SER B   8     -36.221 -13.923 118.722
ATOM   1132  H2  SER B   8     -35.616 -13.165 117.229
ATOM   1133  H3  SER B   8     -36.995 -14.288 117.160
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ATOM   1134  HG  SER B   8      -34.881 -10.553 119.151
ATOM   1135  N   LYS B   9      -37.196 -12.195 115.542
ATOM   1136  CA  LYS B   9      -37.503 -11.670 114.223
ATOM   1137  C   LYS B   9      -37.407 -12.773 113.183
ATOM   1138  O   LYS B   9      -36.461 -13.559 113.191
ATOM   1139  CB  LYS B   9      -36.516 -10.545 113.891
ATOM   1140  CG  LYS B   9      -36.688  -9.884 112.534
ATOM   1141  CD  LYS B   9      -35.464  -9.029 112.233
ATOM   1142  CE  LYS B   9      -35.548  -8.357 110.878
ATOM   1143  NZ  LYS B   9      -34.240  -7.727 110.510
ATOM   1144  H   LYS B   9      -36.407 -12.939 115.655
ATOM   1145  HZ1 LYS B   9      -34.328  -7.251 109.533
ATOM   1146  HZ2 LYS B   9      -33.466  -8.493 110.473
ATOM   1147  HZ3 LYS B   9      -33.974  -6.979 111.257
ATOM   1148  N   CYS B  10      -38.422 -12.854 112.328
ATOM   1149  CA  CYS B  10      -38.441 -13.840 111.258
ATOM   1150  C   CYS B  10      -37.908 -13.163 109.987
ATOM   1151  O   CYS B  10      -38.054 -11.950 109.805
ATOM   1152  CB  CYS B  10      -39.850 -14.450 111.064
ATOM   1153  SG  CYS B  10      -41.307 -13.361 111.221
ATOM   1154  H   CYS B  10      -39.259 -12.164 112.429
ATOM   1155  N   PRO B  11      -37.135 -13.901 109.180
ATOM   1156  CA  PRO B  11      -36.589 -13.320 107.955
ATOM   1157  C   PRO B  11      -37.654 -12.904 106.964
ATOM   1158  O   PRO B  11      -37.746 -11.738 106.618
ATOM   1159  CB  PRO B  11      -35.714 -14.446 107.407
ATOM   1160  CG  PRO B  11      -35.249 -15.137 108.646
ATOM   1161  CD  PRO B  11      -36.534 -15.222 109.434
ATOM   1162  N   LEU B  12      -38.468 -13.866 106.550
ATOM   1163  CA  LEU B  12      -39.537 -13.663 105.588
ATOM   1164  C   LEU B  12      -40.755 -12.902 106.124
ATOM   1165  O   LEU B  12      -41.232 -13.145 107.241
ATOM   1166  CB  LEU B  12      -39.949 -15.020 105.025
ATOM   1167  CG  LEU B  12      -40.649 -14.977 103.683
ATOM   1168  CD1 LEU B  12      -39.917 -13.988 102.762
ATOM   1169  CD2 LEU B  12      -40.671 -16.377 103.116
ATOM   1170  H   LEU B  12      -38.326 -14.867 106.957
ATOM   1171  N   MET B  13      -41.265 -12.000 105.294
ATOM   1172  CA  MET B  13      -42.419 -11.160 105.619
ATOM   1173  C   MET B  13      -42.932 -10.505 104.319
ATOM   1174  O   MET B  13      -42.132 -10.124 103.459
ATOM   1175  CB  MET B  13      -41.975 -10.112 106.631
ATOM   1176  CG  MET B  13      -42.973  -8.981 106.829
ATOM   1177  SD  MET B  13      -42.271  -7.652 107.774
ATOM   1178  CE  MET B  13      -41.210  -8.320 109.039
ATOM   1179  H   MET B  13      -40.800 -11.880 104.315
ATOM   1180  N   VAL B  14      -44.252 -10.408 104.164
ATOM   1181  CA  VAL B  14      -44.860  -9.808 102.977
ATOM   1182  C   VAL B  14      -45.705  -8.629 103.392
ATOM   1183  O   VAL B  14      -46.313  -8.639 104.458
ATOM   1184  CB  VAL B  14      -45.815 -10.789 102.263
ATOM   1185  CG1 VAL B  14      -46.617 -10.071 101.196
ATOM   1186  CG2 VAL B  14      -45.045 -11.920 101.649
ATOM   1187  H   VAL B  14      -44.902 -10.789 104.952
ATOM   1188  N   ALA B  15      -45.700  -7.600 102.561
ATOM   1189  CA  ALA B  15      -46.517  -6.410 102.773
ATOM   1190  C   ALA B  15      -47.204  -6.230 101.411
ATOM   1191  O   ALA B  15      -46.668  -6.677 100.394
ATOM   1192  CB  ALA B  15      -45.679  -5.185 103.146
ATOM   1201  N   VAL B  16      -48.408  -5.665 101.390
ATOM   1202  CA  VAL B  16      -49.132  -5.484 100.131
ATOM   1203  C   VAL B  16      -50.010  -4.247 100.180
ATOM   1204  O   VAL B  16      -50.760  -4.035 101.123
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ATOM   1205  CB  VAL B  16     -50.013  -6.690  99.819
ATOM   1206  CG1 VAL B  16     -50.949  -6.443  98.632
ATOM   1207  CG2 VAL B  16     -49.205  -7.936  99.452
ATOM   1208  H   VAL B  16     -48.863  -5.335 102.324
ATOM   1209  N   LEU B  17     -49.902  -3.416  99.162
ATOM   1210  CA  LEU B  17     -50.704  -2.221  99.110
ATOM   1211  C   LEU B  17     -51.592  -2.222  97.864
ATOM   1212  O   LEU B  17     -51.327  -2.910  96.876
ATOM   1213  CB  LEU B  17     -49.818  -0.974  99.179
ATOM   1214  CG  LEU B  17     -49.612  -0.291 100.540
ATOM   1215  CD1 LEU B  17     -49.366  -1.272 101.675
ATOM   1216  CD2 LEU B  17     -48.456   0.698 100.429
ATOM   1217  H   LEU B  17     -49.200  -3.634  98.357
ATOM   1218  N   ASP B  18     -52.660  -1.446  97.956
ATOM   1219  CA  ASP B  18     -53.639  -1.307  96.902
ATOM   1220  C   ASP B  18     -53.636   0.151  96.474
ATOM   1221  O   ASP B  18     -54.222   1.006  97.148
ATOM   1222  CB  ASP B  18     -55.022  -1.702  97.412
ATOM   1223  CG  ASP B  18     -56.053  -1.770  96.309
ATOM   1224  OD1 ASP B  18     -55.740  -1.401  95.158
ATOM   1225  OD2 ASP B  18     -57.185  -2.197  96.587
ATOM   1226  H   ASP B  18     -52.808  -0.881  98.877
ATOM   1227  N   ALA B  19     -53.030   0.403  95.314
ATOM   1228  CA  ALA B  19     -52.896   1.752  94.765
ATOM   1229  C   ALA B  19     -54.177   2.359  94.222
ATOM   1230  O   ALA B  19     -54.182   3.510  93.774
ATOM   1231  CB  ALA B  19     -51.815   1.776  93.685
ATOM   1232  H   ALA B  19     -52.615  -0.433  94.750
ATOM   1233  N   VAL B  20     -55.258   1.596  94.258
ATOM   1234  CA  VAL B  20     -56.523   2.087  93.728
ATOM   1235  C   VAL B  20     -57.338   2.819  94.790
ATOM   1236  O   VAL B  20     -57.869   3.905  94.525
ATOM   1237  CB  VAL B  20     -57.329   0.941  93.049
ATOM   1238  CG1 VAL B  20     -58.679   1.437  92.592
ATOM   1239  CG2 VAL B  20     -56.544   0.383  91.878
ATOM   1240  H   VAL B  20     -55.201   0.596  94.688
ATOM   1241  N   ARG B  21     -57.344   2.273  96.008
ATOM   1242  CA  ARG B  21     -58.077   2.894  97.112
ATOM   1243  C   ARG B  21     -57.195   3.357  98.299
ATOM   1244  O   ARG B  21     -57.680   3.480  99.423
ATOM   1245  CB  ARG B  21     -59.163   1.939  97.602
ATOM   1246  CG  ARG B  21     -59.825   1.120  96.502
ATOM   1247  CD  ARG B  21     -59.638  -0.372  96.761
ATOM   1248  NE  ARG B  21     -60.179  -0.803  98.057
ATOM   1249  CZ  ARG B  21     -60.250  -2.069  98.486
ATOM   1250  NH1 ARG B  21     -59.810  -3.084  97.741
ATOM   1251  NH2 ARG B  21     -60.804  -2.323  99.664
ATOM   1252  H   ARG B  21     -56.792   1.350  96.184
ATOM   1253  HE  ARG B  21     -60.555  -0.027  98.724
ATOM   1254  HH1 ARG B  21     -59.963  -4.021  98.278
ATOM   1255  HH1 ARG B  21     -59.367  -2.992  96.749
ATOM   1256  HH2 ARG B  21     -60.778  -3.396  99.854
ATOM   1257  HH2 ARG B  21     -61.221  -1.574 100.338
ATOM   1258  N   GLY B  22     -55.912   3.609  98.035
ATOM   1259  CA  GLY B  22     -54.976   4.053  99.059
ATOM   1260  C   GLY B  22     -55.031   3.182 100.301
ATOM   1261  O   GLY B  22     -54.941   3.657 101.417
ATOM   1262  H   GLY B  22     -55.551   3.480  97.015
ATOM   1263  N   SER B  23     -54.992   1.883 100.093
ATOM   1264  CA  SER B  23     -55.146   0.956 101.193
ATOM   1265  C   SER B  23     -54.202  -0.248 101.167
ATOM   1266  O   SER B  23     -53.777  -0.697 100.103
ATOM   1267  CB  SER B  23     -56.594   0.445 101.119
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ATOM   1268  OG  SER B  23     -57.020  -0.198 102.306
ATOM   1269  H   SER B  23     -54.840   1.502  99.083
ATOM   1270  HG  SER B  23     -58.050  -0.535 102.186
ATOM   1271  N   PRO B  24     -53.778  -0.720 102.351
ATOM   1272  CA  PRO B  24     -52.903  -1.888 102.339
ATOM   1273  C   PRO B  24     -53.879  -3.012 102.009
ATOM   1274  O   PRO B  24     -54.947  -3.100 102.623
ATOM   1275  CB  PRO B  24     -52.433  -1.980 103.791
ATOM   1276  CG  PRO B  24     -53.562  -1.411 104.559
ATOM   1277  CD  PRO B  24     -53.985  -0.226 103.720
ATOM   1278  N   ALA B  25     -53.598  -3.752 100.943
ATOM   1279  CA  ALA B  25     -54.466  -4.859 100.540
ATOM   1280  C   ALA B  25     -54.527  -5.857 101.664
ATOM   1281  O   ALA B  25     -53.484  -6.246 102.191
ATOM   1282  CB  ALA B  25     -53.915  -5.532  99.323
ATOM   1283  H   ALA B  25     -52.706  -3.532 100.357
ATOM   1284  N   VAL B  26     -55.730  -6.242 102.072
ATOM   1285  CA  VAL B  26     -55.850  -7.214 103.148
ATOM   1286  C   VAL B  26     -56.350  -8.540 102.609
ATOM   1287  O   VAL B  26     -57.103  -8.581 101.636
ATOM   1288  CB  VAL B  26     -56.767  -6.752 104.321
ATOM   1289  CG1 VAL B  26     -56.789  -5.248 104.442
ATOM   1290  CG2 VAL B  26     -58.162  -7.326 104.189
ATOM   1291  H   VAL B  26     -56.624  -5.831 101.603
ATOM   1292  N   ASP B  27     -55.879  -9.621 103.228
ATOM   1293  CA  ASP B  27     -56.251 -10.993 102.886
ATOM   1294  C   ASP B  27     -55.812 -11.543 101.536
ATOM   1295  O   ASP B  27     -56.368 -12.542 101.050
ATOM   1296  CB  ASP B  27     -57.744 -11.211 103.110
ATOM   1297  CG  ASP B  27     -58.116 -11.095 104.572
ATOM   1298  OD1 ASP B  27     -57.388 -11.663 105.415
ATOM   1299  OD2 ASP B  27     -59.110 -10.411 104.888
ATOM   1300  H   ASP B  27     -55.169  -9.473 104.042
ATOM   1301  N   VAL B  28     -54.828 -10.898 100.915
ATOM   1302  CA  VAL B  28     -54.321 -11.422  99.651
ATOM   1303  C   VAL B  28     -53.679 -12.749 100.080
ATOM   1304  O   VAL B  28     -53.075 -12.840 101.165
ATOM   1305  CB  VAL B  28     -53.261 -10.487  98.991
ATOM   1306  CG1 VAL B  28     -52.589 -11.194  97.843
ATOM   1307  CG2 VAL B  28     -53.908  -9.219  98.486
ATOM   1308  H   VAL B  28     -54.405  -9.991 101.346
ATOM   1309  N   ALA B  29     -53.926 -13.800  99.310
ATOM   1310  CA  ALA B  29     -53.372 -15.102  99.634
ATOM   1311  C   ALA B  29     -51.893 -15.202  99.242
ATOM   1312  O   ALA B  29     -51.512 -14.886  98.112
ATOM   1313  CB  ALA B  29     -54.195 -16.211  98.966
ATOM   1314  H   ALA B  29     -54.552 -13.685  98.424
ATOM   1315  N   VAL B  30     -51.059 -15.603 100.197
ATOM   1316  CA  VAL B  30     -49.630 -15.775  99.953
ATOM   1317  C   VAL B  30     -49.240 -17.274 100.071
ATOM   1318  O   VAL B  30     -49.693 -17.971 100.989
ATOM   1319  CB  VAL B  30     -48.807 -14.925 100.943
ATOM   1320  CG1 VAL B  30     -47.329 -14.881 100.542
ATOM   1321  CG2 VAL B  30     -49.379 -13.504 101.010
ATOM   1322  H   VAL B  30     -51.453 -15.809 101.192
ATOM   1323  N   LYS B  31     -48.471 -17.767  99.094
ATOM   1324  CA  LYS B  31     -47.976 -19.153  99.050
ATOM   1325  C   LYS B  31     -46.466 -19.098  98.805
ATOM   1326  O   LYS B  31     -46.033 -18.587  97.773
ATOM   1327  CB  LYS B  31     -48.612 -19.944  97.892
ATOM   1328  CG  LYS B  31     -50.012 -20.452  98.108
ATOM   1329  CD  LYS B  31     -50.020 -21.937  98.448
ATOM   1330  CE  LYS B  31     -51.446 -22.475  98.491
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ATOM   1331  NZ  LYS B  31     -52.230 -22.191  97.226
ATOM   1332  H   LYS B  31     -48.191 -17.099  98.280
ATOM   1333  HZ1 LYS B  31     -53.236 -22.600  97.322
ATOM   1334  HZ2 LYS B  31     -51.729 -22.655  96.376
ATOM   1335  HZ3 LYS B  31     -52.289 -21.114  97.069
ATOM   1336  N   VAL B  32     -45.675 -19.647  99.726
ATOM   1337  CA  VAL B  32     -44.211 -19.651  99.611
ATOM   1338  C   VAL B  32     -43.741 -21.049  99.193
ATOM   1339  O   VAL B  32     -43.991 -22.004  99.932
ATOM   1340  CB  VAL B  32     -43.572 -19.271 100.984
ATOM   1341  CG1 VAL B  32     -42.129 -18.791 100.826
ATOM   1342  CG2 VAL B  32     -44.424 -18.218 101.689
ATOM   1343  H   VAL B  32     -46.134 -20.112 100.598
ATOM   1344  N   PHE B  33     -43.103 -21.179  98.018
ATOM   1345  CA  PHE B  33     -42.600 -22.490  97.488
ATOM   1346  C   PHE B  33     -41.063 -22.613  97.474
ATOM   1347  O   PHE B  33     -40.374 -21.809  96.853
ATOM   1348  CB  PHE B  33     -43.086 -22.742  96.055
ATOM   1349  CG  PHE B  33     -44.566 -22.931  95.934
ATOM   1350  CD1 PHE B  33     -45.258 -23.735  96.840
ATOM   1351  CD2 PHE B  33     -45.274 -22.301  94.927
ATOM   1352  CE1 PHE B  33     -46.653 -23.897  96.744
ATOM   1353  CE2 PHE B  33     -46.664 -22.453  94.823
ATOM   1354  CZ  PHE B  33     -47.351 -23.252  95.732
ATOM   1355  H   PHE B  33     -42.944 -20.285  97.416
ATOM   1356  N   LYS B  34     -40.538 -23.670  98.078
ATOM   1357  CA  LYS B  34     -39.091 -23.859  98.160
ATOM   1358  C   LYS B  34     -38.545 -24.944  97.205
ATOM   1359  O   LYS B  34     -39.077 -26.047  97.141
ATOM   1360  CB  LYS B  34     -38.696 -24.128  99.625
ATOM   1361  CG  LYS B  34     -37.262 -24.570  99.795
ATOM   1362  CD  LYS B  34     -36.765 -24.427 101.203
ATOM   1363  CE  LYS B  34     -35.292 -24.042 101.159
ATOM   1364  NZ  LYS B  34     -34.730 -23.719 102.485
ATOM   1365  H   LYS B  34     -41.199 -24.414  98.523
ATOM   1366  HZ1 LYS B  34     -33.678 -23.454 102.379
ATOM   1367  HZ2 LYS B  34     -34.823 -24.585 103.140
ATOM   1368  HZ3 LYS B  34     -35.275 -22.878 102.916
ATOM   1369  N   LYS B  35     -37.496 -24.597  96.458
ATOM   1370  CA  LYS B  35     -36.871 -25.488  95.478
ATOM   1371  C   LYS B  35     -36.138 -26.641  96.141
ATOM   1372  O   LYS B  35     -35.232 -26.439  96.948
ATOM   1373  CB  LYS B  35     -35.889 -24.703  94.618
ATOM   1374  CG  LYS B  35     -35.991 -24.946  93.126
ATOM   1375  CD  LYS B  35     -35.536 -26.333  92.708
ATOM   1376  CE  LYS B  35     -34.087 -26.596  93.090
ATOM   1377  NZ  LYS B  35     -33.163 -25.515  92.684
ATOM   1378  H   LYS B  35     -37.079 -23.598  96.585
ATOM   1379  HZ1 LYS B  35     -32.148 -25.771  92.989
ATOM   1380  HZ2 LYS B  35     -33.462 -24.582  93.163
ATOM   1381  HZ3 LYS B  35     -33.198 -25.394  91.601
ATOM   1382  N   THR B  36     -36.500 -27.847  95.717
ATOM   1383  CA  THR B  36     -35.959 -29.103  96.229
ATOM   1384  C   THR B  36     -34.572 -29.429  95.681
ATOM   1385  O   THR B  36     -34.012 -28.702  94.879
ATOM   1386  CB  THR B  36     -36.869 -30.285  95.831
ATOM   1387  OG1 THR B  36     -36.595 -30.661  94.475
ATOM   1388  CG2 THR B  36     -38.326 -29.912  95.944
ATOM   1389  H   THR B  36     -37.253 -27.903  94.930
ATOM   1390  HG1 THR B  36     -37.237 -31.496  94.193
ATOM   1391  N   ALA B  37     -34.065 -30.590  96.060
ATOM   1392  CA  ALA B  37     -32.775 -31.029  95.570
ATOM   1393  C   ALA B  37     -32.930 -31.373  94.083
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ATOM   1394  O   ALA B  37     -32.242 -30.814  93.246
ATOM   1395  CB  ALA B  37     -32.293 -32.251  96.373
ATOM   1396  H   ALA B  37     -34.623 -31.224  96.748
ATOM   1397  N   ASP B  38     -33.884 -32.245  93.758
ATOM   1398  CA  ASP B  38     -34.117 -32.659  92.368
ATOM   1399  C   ASP B  38     -34.376 -31.491  91.419
ATOM   1400  O   ASP B  38     -34.151 -31.607  90.219
ATOM   1401  CB  ASP B  38     -35.291 -33.651  92.295
ATOM   1402  CG  ASP B  38     -35.570 -34.152  90.865
ATOM   1403  OD1 ASP B  38     -36.359 -33.508  90.129
ATOM   1404  OD2 ASP B  38     -35.017 -35.210  90.486
ATOM   1405  H   ASP B  38     -34.509 -32.663  94.547
ATOM   1406  N   GLY B  39     -34.854 -30.375  91.960
ATOM   1407  CA  GLY B  39     -35.151 -29.223  91.128
ATOM   1408  C   GLY B  39     -36.643 -28.965  90.964
ATOM   1409  O   GLY B  39     -37.079 -28.419  89.939
ATOM   1410  H   GLY B  39     -35.025 -30.326  93.035
ATOM   1411  N   SER B  40     -37.428 -29.398  91.951
ATOM   1412  CA  SER B  40     -38.874 -29.204  91.938
ATOM   1413  C   SER B  40     -39.224 -28.243  93.078
ATOM   1414  O   SER B  40     -38.324 -27.698  93.703
ATOM   1415  CB  SER B  40     -39.600 -30.549  92.088
ATOM   1416  OG  SER B  40     -39.341 -31.172  93.331
ATOM   1417  H   SER B  40     -36.975 -29.917  92.796
ATOM   1418  HG  SER B  40     -39.879 -32.118  93.383
ATOM   1419  N   TRP B  41     -40.510 -28.017  93.335
ATOM   1420  CA  TRP B  41     -40.928 -27.111  94.402
ATOM   1421  C   TRP B  41     -41.803 -27.827  95.414
ATOM   1422  O   TRP B  41     -42.638 -28.652  95.044
ATOM   1423  CB  TRP B  41     -41.758 -25.950  93.852
ATOM   1424  CG  TRP B  41     -41.068 -25.052  92.894
ATOM   1425  CD1 TRP B  41     -41.201 -25.054  91.547
ATOM   1426  CD2 TRP B  41     -40.137 -24.016  93.207
ATOM   1427  NE1 TRP B  41     -40.405 -24.088  90.989
ATOM   1428  CE2 TRP B  41     -39.738 -23.435  91.987
ATOM   1429  CE3 TRP B  41     -39.601 -23.522  94.401
ATOM   1430  CZ2 TRP B  41     -38.822 -22.388  91.921
ATOM   1431  CZ3 TRP B  41     -38.696 -22.482  94.338
ATOM   1432  CH2 TRP B  41     -38.313 -21.927  93.104
ATOM   1433  H   TRP B  41     -41.269 -28.519  92.736
ATOM   1434  HE1 TRP B  41     -40.318 -23.875  89.924
ATOM   1435  N   GLU B  42     -41.619 -27.496  96.686
ATOM   1436  CA  GLU B  42     -42.420 -28.059  97.765
ATOM   1437  C   GLU B  42     -43.012 -26.855  98.505
ATOM   1438  O   GLU B  42     -42.567 -25.720  98.283
ATOM   1439  CB  GLU B  42     -41.560 -28.924  98.710
ATOM   1440  CG  GLU B  42     -40.317 -28.251  99.314
ATOM   1441  CD  GLU B  42     -40.194 -28.443 100.841
ATOM   1442  OE1 GLU B  42     -40.708 -29.452 101.384
ATOM   1443  OE2 GLU B  42     -39.581 -27.569 101.504
ATOM   1444  H   GLU B  42     -40.840 -26.774  96.932
ATOM   1445  N   PRO B  43     -44.106 -27.051  99.267
ATOM   1446  CA  PRO B  43     -44.687 -25.916  99.994
ATOM   1447  C   PRO B  43     -43.745 -25.527 101.129
ATOM   1448  O   PRO B  43     -43.101 -26.394 101.715
ATOM   1449  CB  PRO B  43     -45.989 -26.497 100.548
ATOM   1450  CG  PRO B  43     -46.350 -27.562  99.542
ATOM   1451  CD  PRO B  43     -45.010 -28.214  99.307
ATOM   1452  N   PHE B  44     -43.626 -24.238 101.420
ATOM   1453  CA  PHE B  44     -42.757 -23.810 102.504
ATOM   1454  C   PHE B  44     -43.529 -23.080 103.576
ATOM   1455  O   PHE B  44     -43.171 -23.122 104.746
ATOM   1456  CB  PHE B  44     -41.619 -22.919 102.009
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ATOM   1457  CG  PHE B  44     -40.583 -22.635 103.069
ATOM   1458  CD1 PHE B  44     -39.754 -23.656 103.541
ATOM   1459  CD2 PHE B  44     -40.475 -21.370 103.639
ATOM   1460  CE1 PHE B  44     -38.846 -23.418 104.580
ATOM   1461  CE2 PHE B  44     -39.565 -21.122 104.678
ATOM   1462  CZ  PHE B  44     -38.752 -22.142 105.149
ATOM   1463  H   PHE B  44     -44.182 -23.498 100.845
ATOM   1464  N   ALA B  45     -44.563 -22.367 103.166
ATOM   1465  CA  ALA B  45     -45.391 -21.625 104.103
ATOM   1466  C   ALA B  45     -46.603 -21.108 103.340
ATOM   1467  O   ALA B  45     -46.581 -21.041 102.104
ATOM   1468  CB  ALA B  45     -44.600 -20.469 104.706
ATOM   1469  H   ALA B  45     -44.799 -22.334 102.103
ATOM   1470  N   SER B  46     -47.659 -20.756 104.069
ATOM   1471  CA  SER B  46     -48.881 -20.255 103.458
ATOM   1472  C   SER B  46     -49.602 -19.344 104.457
ATOM   1473  O   SER B  46     -49.447 -19.517 105.675
ATOM   1474  CB  SER B  46     -49.775 -21.436 103.081
ATOM   1475  OG  SER B  46     -49.029 -22.453 102.415
ATOM   1476  H   SER B  46     -47.606 -20.843 105.154
ATOM   1477  HG  SER B  46     -49.691 -23.280 102.159
ATOM   1478  N   GLY B  47     -50.363 -18.373 103.944
ATOM   1479  CA  GLY B  47     -51.087 -17.448 104.809
ATOM   1480  C   GLY B  47     -51.846 -16.344 104.093
ATOM   1481  O   GLY B  47     -51.666 -16.132 102.899
ATOM   1482  H   GLY B  47     -50.443 -18.270 102.862
ATOM   1483  N   LYS B  48     -52.761 -15.701 104.806
ATOM   1484  CA  LYS B  48     -53.571 -14.595 104.276
ATOM   1485  C   LYS B  48     -52.980 -13.259 104.752
ATOM   1486  O   LYS B  48     -52.575 -13.146 105.912
ATOM   1487  CB  LYS B  48     -55.015 -14.699 104.800
ATOM   1488  CG  LYS B  48     -55.945 -15.546 103.969
ATOM   1489  CD  LYS B  48     -57.363 -15.554 104.535
ATOM   1490  CE  LYS B  48     -57.525 -16.496 105.746
ATOM   1491  NZ  LYS B  48     -56.923 -15.987 107.032
ATOM   1492  H   LYS B  48     -52.920 -16.009 105.839
ATOM   1493  HZ1 LYS B  48     -57.088 -16.718 107.824
ATOM   1494  HZ2 LYS B  48     -57.394 -15.043 107.304
ATOM   1495  HZ3 LYS B  48     -55.853 -15.833 106.896
ATOM   1496  N   THR B  49     -52.935 -12.252 103.883
ATOM   1497  CA  THR B  49     -52.399 -10.962 104.308
ATOM   1498  C   THR B  49     -53.323 -10.424 105.399
ATOM   1499  O   THR B  49     -54.549 -10.458 105.260
ATOM   1500  CB  THR B  49     -52.365  -9.930 103.189
ATOM   1501  OG1 THR B  49     -51.811 -10.501 101.996
ATOM   1502  CG2 THR B  49     -51.524  -8.752 103.611
ATOM   1503  H   THR B  49     -53.294 -12.388 102.863
ATOM   1504  HG1 THR B  49     -51.795  -9.749 101.207
ATOM   1505  N   ALA B  50     -52.734  -9.954 106.493
ATOM   1506  CA  ALA B  50     -53.511  -9.426 107.606
ATOM   1507  C   ALA B  50     -54.245  -8.144 107.240
ATOM   1508  O   ALA B  50     -54.157  -7.668 106.134
ATOM   1509  CB  ALA B  50     -52.611  -9.225 108.863
ATOM   1510  H   ALA B  50     -51.646  -9.963 106.558
ATOM   1511  N   GLU B  51     -54.905  -7.540 108.213
ATOM   1512  CA  GLU B  51     -55.696  -6.339 107.975
ATOM   1513  C   GLU B  51     -54.915  -5.047 107.718
ATOM   1514  O   GLU B  51     -55.511  -4.008 107.441
ATOM   1515  CB  GLU B  51     -56.673  -6.148 109.151
ATOM   1516  CG  GLU B  51     -57.652  -7.335 109.388
ATOM   1517  CD  GLU B  51     -59.080  -7.056 108.893
ATOM   1518  OE1 GLU B  51     -59.597  -5.952 109.182
ATOM   1519  OE2 GLU B  51     -59.683  -7.935 108.226
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ATOM   1520  H   GLU B  51     -54.855  -7.949 109.221
ATOM   1521  N   SER B  52     -53.590  -5.109 107.773
ATOM   1522  CA  SER B  52     -52.790  -3.904 107.581
ATOM   1523  C   SER B  52     -51.774  -4.015 106.482
ATOM   1524  O   SER B  52     -50.854  -3.207 106.412
ATOM   1525  CB  SER B  52     -52.079  -3.506 108.882
ATOM   1526  OG  SER B  52     -50.960  -4.341 109.125
ATOM   1527  H   SER B  52     -53.098  -6.063 107.963
ATOM   1528  HG  SER B  52     -50.474  -4.037 110.052
ATOM   1529  N   GLY B  53     -51.917  -5.047 105.662
ATOM   1530  CA  GLY B  53     -51.005  -5.245 104.555
ATOM   1531  C   GLY B  53     -49.879  -6.205 104.840
ATOM   1532  O   GLY B  53     -49.409  -6.900 103.940
ATOM   1533  H   GLY B  53     -52.731  -5.754 105.823
ATOM   1534  N   GLU B  54     -49.451  -6.264 106.089
ATOM   1535  CA  GLU B  54     -48.367  -7.154 106.463
ATOM   1536  C   GLU B  54     -48.769  -8.604 106.734
ATOM   1537  O   GLU B  54     -49.895  -8.891 107.130
ATOM   1538  CB  GLU B  54     -47.642  -6.592 107.678
ATOM   1539  CG  GLU B  54     -46.755  -5.420 107.373
ATOM   1540  CD  GLU B  54     -46.498  -4.572 108.596
ATOM   1541  OE1 GLU B  54     -45.786  -5.016 109.518
ATOM   1542  OE2 GLU B  54     -47.020  -3.446 108.646
ATOM   1543  H   GLU B  54     -49.917  -5.636 106.847
ATOM   1544  N   LEU B  55     -47.815  -9.505 106.530
ATOM   1545  CA  LEU B  55     -47.987 -10.929 106.772
ATOM   1546  C   LEU B  55     -46.663 -11.414 107.341
ATOM   1547  O   LEU B  55     -45.727 -11.674 106.588
ATOM   1548  CB  LEU B  55     -48.255 -11.678 105.462
ATOM   1549  CG  LEU B  55     -48.145 -13.211 105.555
ATOM   1550  CD1 LEU B  55     -49.168 -13.779 106.537
ATOM   1551  CD2 LEU B  55     -48.349 -13.795 104.203
ATOM   1552  H   LEU B  55     -46.850  -9.158 106.162
ATOM   1553  N   HIS B  56     -46.540 -11.475 108.660
ATOM   1554  CA  HIS B  56     -45.283 -11.939 109.233
ATOM   1555  C   HIS B  56     -45.475 -13.209 110.043
ATOM   1556  O   HIS B  56     -46.605 -13.692 110.177
ATOM   1557  CB  HIS B  56     -44.524 -10.844 110.014
ATOM   1558  CG  HIS B  56     -45.400  -9.799 110.628
ATOM   1559  ND1 HIS B  56     -45.915  -8.740 109.911
ATOM   1560  CD2 HIS B  56     -45.812  -9.621 111.909
ATOM   1561  CE1 HIS B  56     -46.603  -7.955 110.719
ATOM   1562  NE2 HIS B  56     -46.555  -8.466 111.938
ATOM   1563  H   HIS B  56     -47.368 -11.183 109.307
ATOM   1564  HD1 HIS B  56     -45.775  -8.578 108.842
ATOM   1565  N   GLY B  57     -44.376 -13.750 110.564
ATOM   1566  CA  GLY B  57     -44.452 -14.987 111.311
ATOM   1567  C   GLY B  57     -44.733 -16.080 110.292
ATOM   1568  O   GLY B  57     -45.382 -17.086 110.584
ATOM   1569  H   GLY B  57     -43.413 -13.258 110.427
ATOM   1570  N   LEU B  58     -44.258 -15.848 109.069
ATOM   1571  CA  LEU B  58     -44.443 -16.790 107.981
ATOM   1572  C   LEU B  58     -43.596 -18.061 108.189
ATOM   1573  O   LEU B  58     -44.126 -19.177 108.244
ATOM   1574  CB  LEU B  58     -44.098 -16.120 106.654
ATOM   1575  CG  LEU B  58     -45.275 -15.996 105.699
ATOM   1576  CD1 LEU B  58     -44.743 -15.622 104.337
ATOM   1577  CD2 LEU B  58     -46.032 -17.317 105.603
ATOM   1578  H   LEU B  58     -43.713 -14.922 108.880
ATOM   1579  N   THR B  59     -42.282 -17.886 108.295
ATOM   1580  CA  THR B  59     -41.386 -19.012 108.505
ATOM   1581  C   THR B  59     -40.773 -18.854 109.884
ATOM   1582  O   THR B  59     -41.041 -17.870 110.592
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ATOM   1583  CB  THR B  59     -40.246 -19.035 107.478
ATOM   1584  OG1 THR B  59     -39.222 -18.112 107.879
ATOM   1585  CG2 THR B  59     -40.764 -18.628 106.108
ATOM   1586  H   THR B  59     -41.870 -16.879 108.226
ATOM   1587  HG1 THR B  59     -38.412 -18.128 107.150
ATOM   1588  N   THR B  60     -39.934 -19.818 110.249
ATOM   1589  CA  THR B  60     -39.250 -19.803 111.538
ATOM   1590  C   THR B  60     -37.845 -19.318 111.186
ATOM   1591  O   THR B  60     -37.295 -19.714 110.151
ATOM   1592  CB  THR B  60     -39.228 -21.246 112.200
ATOM   1593  OG1 THR B  60     -38.102 -22.002 111.731
ATOM   1594  CG2 THR B  60     -40.503 -22.029 111.852
ATOM   1595  H   THR B  60     -39.752 -20.647 109.565
ATOM   1596  HG1 THR B  60     -38.107 -22.987 112.197
ATOM   1597  N   ASP B  61     -37.250 -18.486 112.033
ATOM   1598  CA  ASP B  61     -35.908 -17.976 111.755
ATOM   1599  C   ASP B  61     -34.865 -19.096 111.584
ATOM   1600  O   ASP B  61     -33.679 -18.817 111.443
ATOM   1601  CB  ASP B  61     -35.474 -16.998 112.858
ATOM   1602  CG  ASP B  61     -34.418 -15.993 112.388
ATOM   1603  OD1 ASP B  61     -33.554 -16.360 111.569
ATOM   1604  OD2 ASP B  61     -34.437 -14.832 112.856
ATOM   1605  H   ASP B  61     -37.767 -18.180 112.942
ATOM   1606  N   GLU B  62     -35.298 -20.356 111.620
ATOM   1607  CA  GLU B  62     -34.390 -21.487 111.454
ATOM   1608  C   GLU B  62     -34.897 -22.512 110.451
ATOM   1609  O   GLU B  62     -34.188 -23.454 110.122
ATOM   1610  CB  GLU B  62     -34.078 -22.160 112.800
ATOM   1611  CG  GLU B  62     -32.699 -21.778 113.399
ATOM   1612  CD  GLU B  62     -32.332 -22.576 114.665
ATOM   1613  OE1 GLU B  62     -32.303 -23.834 114.621
ATOM   1614  OE2 GLU B  62     -32.057 -21.934 115.709
ATOM   1615  H   GLU B  62     -36.359 -20.547 111.776
ATOM   1616  N   LYS B  63     -36.139 -22.364 110.008
ATOM   1617  CA  LYS B  63     -36.691 -23.275 109.006
ATOM   1618  C   LYS B  63     -36.415 -22.607 107.668
ATOM   1619  O   LYS B  63     -36.330 -23.250 106.617
ATOM   1620  CB  LYS B  63     -38.197 -23.481 109.202
ATOM   1621  CG  LYS B  63     -38.838 -24.393 108.156
ATOM   1622  CD  LYS B  63     -40.242 -24.855 108.554
ATOM   1623  CE  LYS B  63     -40.210 -25.864 109.710
ATOM   1624  NZ  LYS B  63     -41.539 -26.513 109.944
ATOM   1625  H   LYS B  63     -36.757 -21.555 110.397
ATOM   1626  HZ1 LYS B  63     -41.459 -27.217 110.772
ATOM   1627  HZ2 LYS B  63     -41.847 -27.045 109.043
ATOM   1628  HZ3 LYS B  63     -42.279 -25.750 110.187
ATOM   1629  N   PHE B  64     -36.252 -21.297 107.737
ATOM   1630  CA  PHE B  64     -35.960 -20.483 106.578
ATOM   1631  C   PHE B  64     -34.456 -20.603 106.339
ATOM   1632  O   PHE B  64     -33.684 -19.746 106.756
ATOM   1633  CB  PHE B  64     -36.351 -19.038 106.887
ATOM   1634  CG  PHE B  64     -36.101 -18.086 105.764
ATOM   1635  CD1 PHE B  64     -36.948 -18.053 104.662
ATOM   1636  CD2 PHE B  64     -35.052 -17.175 105.839
ATOM   1637  CE1 PHE B  64     -36.757 -17.118 103.653
ATOM   1638  CE2 PHE B  64     -34.855 -16.241 104.841
ATOM   1639  CZ  PHE B  64     -35.714 -16.210 103.744
ATOM   1640  H   PHE B  64     -36.342 -20.809 108.708
ATOM   1641  N   THR B  65     -34.040 -21.707 105.732
ATOM   1642  CA  THR B  65     -32.628 -21.919 105.453
ATOM   1643  C   THR B  65     -32.355 -21.626 103.982
ATOM   1644  O   THR B  65     -33.278 -21.381 103.216
ATOM   1645  CB  THR B  65     -32.159 -23.355 105.863
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ATOM   1646  OG1 THR B  65     -30.730 -23.456 105.728
ATOM   1647  CG2 THR B  65     -32.868 -24.449 105.026
ATOM   1648  H   THR B  65     -34.766 -22.466 105.439
ATOM   1649  HG1 THR B  65     -30.408 -24.457 106.014
ATOM   1650  N   GLU B  66     -31.075 -21.603 103.626
ATOM   1651  CA  GLU B  66     -30.596 -21.312 102.276
ATOM   1652  C   GLU B  66     -31.405 -21.963 101.152
ATOM   1653  O   GLU B  66     -31.854 -23.106 101.284
ATOM   1654  CB  GLU B  66     -29.118 -21.728 102.181
ATOM   1655  CG  GLU B  66     -28.493 -21.747 100.775
ATOM   1656  CD  GLU B  66     -27.017 -22.149 100.795
ATOM   1657  OE1 GLU B  66     -26.178 -21.302 101.191
ATOM   1658  OE2 GLU B  66     -26.696 -23.305 100.419
ATOM   1659  H   GLU B  66     -30.331 -21.816 104.394
ATOM   1660  N   GLY B  67     -31.621 -21.222 100.067
ATOM   1661  CA  GLY B  67     -32.346 -21.794  98.940
ATOM   1662  C   GLY B  67     -33.063 -20.846  97.988
ATOM   1663  O   GLY B  67     -33.047 -19.623  98.182
ATOM   1664  H   GLY B  67     -31.258 -20.196 100.021
ATOM   1665  N   VAL B  68     -33.655 -21.424  96.937
ATOM   1666  CA  VAL B  68     -34.426 -20.671  95.951
ATOM   1667  C   VAL B  68     -35.866 -20.639  96.470
ATOM   1668  O   VAL B  68     -36.341 -21.619  97.047
ATOM   1669  CB  VAL B  68     -34.404 -21.331  94.573
ATOM   1670  CG1 VAL B  68     -35.047 -20.419  93.553
ATOM   1671  CG2 VAL B  68     -32.985 -21.648  94.157
ATOM   1672  H   VAL B  68     -33.559 -22.503  96.811
ATOM   1673  N   TYR B  69     -36.537 -19.504  96.304
ATOM   1674  CA  TYR B  69     -37.901 -19.324  96.780
ATOM   1675  C   TYR B  69     -38.793 -18.707  95.746
ATOM   1676  O   TYR B  69     -38.329 -18.104  94.779
ATOM   1677  CB  TYR B  69     -37.916 -18.421  98.003
ATOM   1678  CG  TYR B  69     -37.442 -19.130  99.217
ATOM   1679  CD1 TYR B  69     -36.087 -19.251  99.498
ATOM   1680  CD2 TYR B  69     -38.352 -19.733 100.066
ATOM   1681  CE1 TYR B  69     -35.663 -19.970 100.604
ATOM   1682  CE2 TYR B  69     -37.936 -20.448 101.166
ATOM   1683  CZ  TYR B  69     -36.607 -20.566 101.424
ATOM   1684  OH  TYR B  69     -36.255 -21.321 102.480
ATOM   1685  H   TYR B  69     -36.047 -18.676  95.791
ATOM   1686  HH  TYR B  69     -37.151 -21.687 102.981
ATOM   1687  N   ARG B  70     -40.086 -18.805  95.995
ATOM   1688  CA  ARG B  70     -41.075 -18.260  95.083
ATOM   1689  C   ARG B  70     -42.335 -17.922  95.848
ATOM   1690  O   ARG B  70     -43.068 -18.830  96.276
ATOM   1691  CB  ARG B  70     -41.378 -19.283  94.009
ATOM   1692  CG  ARG B  70     -42.574 -18.900  93.164
ATOM   1693  CD  ARG B  70     -42.945 -19.990  92.179
ATOM   1694  NE  ARG B  70     -44.377 -20.276  92.160
ATOM   1695  CZ  ARG B  70     -44.899 -21.327  91.536
ATOM   1696  NH1 ARG B  70     -44.112 -22.200  90.894
ATOM   1697  NH2 ARG B  70     -46.207 -21.590  91.489
ATOM   1698  H   ARG B  70     -40.419 -19.306  96.904
ATOM   1699  HE  ARG B  70     -45.050 -19.596  92.682
ATOM   1700  HH1 ARG B  70     -44.724 -22.984  90.451
ATOM   1701  HH1 ARG B  70     -43.026 -22.135  90.827
ATOM   1702  HH2 ARG B  70     -46.374 -22.504  90.919
ATOM   1703  HH2 ARG B  70     -46.988 -20.985  91.951
ATOM   1704  N   VAL B  71     -42.546 -16.622  96.046
ATOM   1705  CA  VAL B  71     -43.701 -16.096  96.751
ATOM   1706  C   VAL B  71     -44.784 -15.843  95.701
ATOM   1707  O   VAL B  71     -44.548 -15.147  94.722
ATOM   1708  CB  VAL B  71     -43.355 -14.744  97.434
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ATOM   1709  CG1 VAL B  71     -44.575 -14.143  98.122
ATOM   1710  CG2 VAL B  71     -42.227 -14.919  98.404
ATOM   1711  H   VAL B  71     -41.813 -15.916  95.658
ATOM   1712  N   GLU B  72     -45.954 -16.440  95.883
ATOM   1713  CA  GLU B  72     -47.058 -16.232  94.956
ATOM   1714  C   GLU B  72     -48.231 -15.548  95.686
ATOM   1715  O   GLU B  72     -48.784 -16.097  96.650
ATOM   1716  CB  GLU B  72     -47.514 -17.567  94.382
ATOM   1717  CG  GLU B  72     -48.643 -17.423  93.383
ATOM   1718  CD  GLU B  72     -49.354 -18.730  93.070
ATOM   1719  OE1 GLU B  72     -49.071 -19.764  93.727
ATOM   1720  OE2 GLU B  72     -50.210 -18.715  92.162
ATOM   1721  H   GLU B  72     -46.092 -17.099  96.740
ATOM   1722  N   LEU B  73     -48.548 -14.320  95.288
ATOM   1723  CA  LEU B  73     -49.657 -13.578  95.892
ATOM   1724  C   LEU B  73     -50.835 -13.666  94.923
ATOM   1725  O   LEU B  73     -50.765 -13.179  93.790
ATOM   1726  CB  LEU B  73     -49.273 -12.114  96.120
ATOM   1727  CG  LEU B  73     -47.992 -11.856  96.910
ATOM   1728  CD1 LEU B  73     -47.283 -10.650  96.327
ATOM   1729  CD2 LEU B  73     -48.304 -11.629  98.367
ATOM   1730  H   LEU B  73     -47.968 -13.854  94.491
ATOM   1731  N   ASP B  74     -51.887 -14.355  95.344
ATOM   1732  CA  ASP B  74     -53.070 -14.538  94.520
ATOM   1733  C   ASP B  74     -53.780 -13.206  94.330
ATOM   1734  O   ASP B  74     -54.860 -12.968  94.875
ATOM   1735  CB  ASP B  74     -53.998 -15.569  95.167
ATOM   1736  CG  ASP B  74     -55.328 -15.713  94.437
ATOM   1737  OD1 ASP B  74     -55.412 -15.429  93.216
ATOM   1738  OD2 ASP B  74     -56.301 -16.116  95.103
ATOM   1739  H   ASP B  74     -51.864 -14.797  96.340
ATOM   1740  N   THR B  75     -53.196 -12.367  93.491
ATOM   1741  CA  THR B  75     -53.724 -11.044  93.226
ATOM   1742  C   THR B  75     -55.105 -10.983  92.545
ATOM   1743  O   THR B  75     -55.917 -10.110  92.860
ATOM   1744  CB  THR B  75     -52.679 -10.262  92.429
ATOM   1745  OG1 THR B  75     -52.202 -11.073  91.348
ATOM   1746  CG2 THR B  75     -51.503  -9.924  93.327
ATOM   1747  H   THR B  75     -52.286 -12.681  92.980
ATOM   1748  HG1 THR B  75     -51.457 -10.517  90.778
ATOM   1749  N   LYS B  76     -55.384 -11.971  91.688
ATOM   1750  CA  LYS B  76     -56.632 -12.066  90.921
ATOM   1751  C   LYS B  76     -57.929 -12.255  91.696
ATOM   1752  O   LYS B  76     -58.949 -11.672  91.346
ATOM   1753  CB  LYS B  76     -56.514 -13.201  89.918
ATOM   1754  CG  LYS B  76     -57.696 -13.386  88.984
ATOM   1755  CD  LYS B  76     -57.564 -14.765  88.370
ATOM   1756  CE  LYS B  76     -58.425 -14.958  87.147
ATOM   1757  NZ  LYS B  76     -58.201 -16.340  86.599
ATOM   1758  H   LYS B  76     -54.638 -12.753  91.550
ATOM   1759  HZ1 LYS B  76     -58.821 -16.486  85.714
ATOM   1760  HZ2 LYS B  76     -58.468 -17.078  87.355
ATOM   1761  HZ3 LYS B  76     -57.151 -16.459  86.331
ATOM   1762  N   SER B  77     -57.929 -13.103  92.714
ATOM   1763  CA  SER B  77     -59.168 -13.300  93.448
ATOM   1764  C   SER B  77     -59.430 -12.055  94.266
ATOM   1765  O   SER B  77     -60.578 -11.709  94.505
ATOM   1766  CB  SER B  77     -59.119 -14.539  94.322
ATOM   1767  OG  SER B  77     -58.134 -14.377  95.310
ATOM   1768  H   SER B  77     -57.022 -13.637  92.995
ATOM   1769  HG  SER B  77     -58.100 -15.268  95.938
ATOM   1770  N   TYR B  78     -58.357 -11.371  94.656
ATOM   1771  CA  TYR B  78     -58.432 -10.117  95.414
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ATOM   1772  C   TYR B  78     -59.209  -9.087  94.599
ATOM   1773  O   TYR B  78     -60.187  -8.526  95.081
ATOM   1774  CB  TYR B  78     -57.030  -9.575  95.686
ATOM   1775  CG  TYR B  78     -56.996  -8.186  96.257
ATOM   1776  CD1 TYR B  78     -57.018  -7.045  95.438
ATOM   1777  CD2 TYR B  78     -56.904  -7.997  97.613
ATOM   1778  CE1 TYR B  78     -56.943  -5.754  95.984
ATOM   1779  CE2 TYR B  78     -56.826  -6.742  98.151
ATOM   1780  CZ  TYR B  78     -56.839  -5.631  97.357
ATOM   1781  OH  TYR B  78     -56.693  -4.421  97.997
ATOM   1782  H   TYR B  78     -57.373 -11.763  94.400
ATOM   1783  HH  TYR B  78     -56.634  -4.584  99.073
ATOM   1784  N   TRP B  79     -58.787  -8.849  93.355
ATOM   1785  CA  TRP B  79     -59.481  -7.874  92.530
ATOM   1786  C   TRP B  79     -60.831  -8.392  92.047
ATOM   1787  O   TRP B  79     -61.767  -7.617  91.856
ATOM   1788  CB  TRP B  79     -58.643  -7.476  91.327
ATOM   1789  CG  TRP B  79     -57.364  -6.809  91.632
ATOM   1790  CD1 TRP B  79     -56.120  -7.308  91.435
ATOM   1791  CD2 TRP B  79     -57.194  -5.478  92.121
ATOM   1792  NE1 TRP B  79     -55.177  -6.377  91.761
ATOM   1793  CE2 TRP B  79     -55.804  -5.236  92.182
ATOM   1794  CE3 TRP B  79     -58.082  -4.454  92.504
ATOM   1795  CZ2 TRP B  79     -55.273  -4.017  92.610
ATOM   1796  CZ3 TRP B  79     -57.560  -3.250  92.927
ATOM   1797  CH2 TRP B  79     -56.158  -3.040  92.973
ATOM   1798  H   TRP B  79     -57.923  -9.383  92.960
ATOM   1799  HE1 TRP B  79     -54.098  -6.519  91.697
ATOM   1800  N   LYS B  80     -60.931  -9.701  91.841
ATOM   1801  CA  LYS B  80     -62.178 -10.310  91.375
ATOM   1802  C   LYS B  80     -63.273 -10.161  92.428
ATOM   1803  O   LYS B  80     -64.464 -10.213  92.121
ATOM   1804  CB  LYS B  80     -61.952 -11.793  91.051
ATOM   1805  CG  LYS B  80     -62.536 -12.277  89.719
ATOM   1806  CD  LYS B  80     -63.462 -13.457  89.958
ATOM   1807  CE  LYS B  80     -64.670 -13.029  90.797
ATOM   1808  NZ  LYS B  80     -65.529 -14.181  91.213
ATOM   1809  H   LYS B  80     -60.064 -10.336  92.021
ATOM   1810  HZ1 LYS B  80     -66.368 -13.813  91.805
ATOM   1811  HZ2 LYS B  80     -64.940 -14.876  91.811
ATOM   1812  HZ3 LYS B  80     -65.905 -14.692  90.327
ATOM   1813  N   ALA B  81     -62.850  -9.960  93.668
ATOM   1814  CA  ALA B  81     -63.743  -9.793  94.794
ATOM   1815  C   ALA B  81     -64.456  -8.441  94.838
ATOM   1816  O   ALA B  81     -65.491  -8.303  95.503
ATOM   1817  CB  ALA B  81     -62.969 -10.003  96.072
ATOM   1818  H   ALA B  81     -61.775  -9.919  93.847
ATOM   1819  N   LEU B  82     -63.862  -7.432  94.199
ATOM   1820  CA  LEU B  82     -64.425  -6.075  94.163
ATOM   1821  C   LEU B  82     -64.925  -5.606  92.782
ATOM   1822  O   LEU B  82     -64.871  -4.410  92.470
ATOM   1823  CB  LEU B  82     -63.437  -5.036  94.736
ATOM   1824  CG  LEU B  82     -61.936  -5.310  94.973
ATOM   1825  CD1 LEU B  82     -61.150  -3.994  94.823
ATOM   1826  CD2 LEU B  82     -61.699  -5.929  96.368
ATOM   1827  H   LEU B  82     -62.921  -7.621  93.683
ATOM   1828  N   GLY B  83     -65.400  -6.542  91.961
ATOM   1829  CA  GLY B  83     -65.914  -6.180  90.646
ATOM   1830  C   GLY B  83     -64.880  -5.958  89.537
ATOM   1831  O   GLY B  83     -65.239  -5.661  88.397
ATOM   1832  H   GLY B  83     -65.406  -7.586  92.276
ATOM   1833  N   ILE B  84     -63.604  -6.160  89.834
ATOM   1834  CA  ILE B  84     -62.599  -5.936  88.825
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ATOM   1835  C   ILE B  84     -61.976  -7.221  88.298
ATOM   1836  O   ILE B  84     -61.575  -8.095  89.066
ATOM   1837  CB  ILE B  84     -61.510  -4.983  89.354
ATOM   1838  CG1 ILE B  84     -62.161  -3.730  89.946
ATOM   1839  CG2 ILE B  84     -60.595  -4.569  88.236
ATOM   1840  CD1 ILE B  84     -61.194  -2.698  90.502
ATOM   1841  H   ILE B  84     -63.318  -6.492  90.832
ATOM   1842  N   SER B  85     -61.990  -7.364  86.977
ATOM   1843  CA  SER B  85     -61.382  -8.506  86.306
ATOM   1844  C   SER B  85     -59.932  -8.042  86.072
ATOM   1845  O   SER B  85     -59.704  -7.066  85.358
ATOM   1846  CB  SER B  85     -62.095  -8.746  84.969
ATOM   1847  OG  SER B  85     -61.425  -9.698  84.147
ATOM   1848  H   SER B  85     -62.476  -6.598  86.373
ATOM   1849  HG  SER B  85     -61.976  -9.826  83.215
ATOM   1850  N   PRO B  86     -58.953  -8.673  86.741
ATOM   1851  CA  PRO B  86     -57.519  -8.362  86.653
ATOM   1852  C   PRO B  86     -56.796  -8.880  85.417
ATOM   1853  O   PRO B  86     -57.224  -9.852  84.791
ATOM   1854  CB  PRO B  86     -56.932  -9.066  87.884
ATOM   1855  CG  PRO B  86     -58.094  -9.345  88.759
ATOM   1856  CD  PRO B  86     -59.185  -9.674  87.792
ATOM   1857  N   PHE B  87     -55.631  -8.298  85.138
ATOM   1858  CA  PHE B  87     -54.844  -8.758  84.002
ATOM   1859  C   PHE B  87     -54.091 -10.031  84.354
ATOM   1860  O   PHE B  87     -54.261 -11.061  83.724
ATOM   1861  CB  PHE B  87     -53.839  -7.691  83.540
ATOM   1862  CG  PHE B  87     -52.851  -8.210  82.525
ATOM   1863  CD1 PHE B  87     -53.282  -8.624  81.278
ATOM   1864  CD2 PHE B  87     -51.509  -8.358  82.852
ATOM   1865  CE1 PHE B  87     -52.402  -9.181  80.381
ATOM   1866  CE2 PHE B  87     -50.630  -8.912  81.967
ATOM   1867  CZ  PHE B  87     -51.070  -9.327  80.725
ATOM   1868  H   PHE B  87     -55.268  -7.478  85.757
ATOM   1869  N   HIS B  88     -53.211  -9.914  85.340
ATOM   1870  CA  HIS B  88     -52.378 -11.010  85.817
ATOM   1871  C   HIS B  88     -53.211 -12.096  86.492
ATOM   1872  O   HIS B  88     -54.156 -11.789  87.221
ATOM   1873  CB  HIS B  88     -51.357 -10.468  86.824
ATOM   1874  CG  HIS B  88     -50.545  -9.322  86.306
ATOM   1875  ND1 HIS B  88     -51.067  -8.063  86.107
ATOM   1876  CD2 HIS B  88     -49.236  -9.240  85.970
ATOM   1877  CE1 HIS B  88     -50.118  -7.253  85.670
ATOM   1878  NE2 HIS B  88     -48.996  -7.943  85.581
ATOM   1879  H   HIS B  88     -53.106  -8.942  85.822
ATOM   1880  HD1 HIS B  88     -52.104  -7.778  86.284
ATOM   1881  N   GLU B  89     -52.837 -13.356  86.267
ATOM   1882  CA  GLU B  89     -53.534 -14.495  86.870
ATOM   1883  C   GLU B  89     -53.158 -14.539  88.340
ATOM   1884  O   GLU B  89     -53.884 -15.050  89.168
ATOM   1885  CB  GLU B  89     -53.109 -15.794  86.198
ATOM   1886  CG  GLU B  89     -53.865 -16.141  84.945
ATOM   1887  CD  GLU B  89     -55.258 -16.612  85.233
ATOM   1888  OE1 GLU B  89     -55.447 -17.314  86.249
ATOM   1889  OE2 GLU B  89     -56.167 -16.284  84.437
ATOM   1890  H   GLU B  89     -51.986 -13.544  85.613
ATOM   1891  N   TYR B  90     -51.968 -14.035  88.619
ATOM   1892  CA  TYR B  90     -51.416 -13.934  89.955
ATOM   1893  C   TYR B  90     -50.053 -13.280  89.772
ATOM   1894  O   TYR B  90     -49.600 -13.046  88.636
ATOM   1895  CB  TYR B  90     -51.284 -15.310  90.646
ATOM   1896  CG  TYR B  90     -50.331 -16.274  89.970
ATOM   1897  CD1 TYR B  90     -50.771 -17.122  88.958
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ATOM   1898  CD2 TYR B  90      -48.979 -16.288  90.296
ATOM   1899  CE1 TYR B  90      -49.883 -17.953  88.275
ATOM   1900  CE2 TYR B  90      -48.083 -17.114  89.624
ATOM   1901  CZ  TYR B  90      -48.541 -17.936  88.610
ATOM   1902  OH  TYR B  90      -47.645 -18.677  87.875
ATOM   1903  H   TYR B  90      -51.362 -13.670  87.789
ATOM   1904  HH  TYR B  90      -46.642 -18.543  88.281
ATOM   1905  N   ALA B  91      -49.426 -12.973  90.898
ATOM   1906  CA  ALA B  91      -48.130 -12.353  90.929
ATOM   1907  C   ALA B  91      -47.194 -13.261  91.736
ATOM   1908  O   ALA B  91      -47.565 -13.724  92.824
ATOM   1909  CB  ALA B  91      -48.256 -10.999  91.603
ATOM   1910  H   ALA B  91      -49.916 -13.198  91.845
ATOM   1911  N   GLU B  92      -46.013 -13.560  91.189
ATOM   1912  CA  GLU B  92      -45.019 -14.370  91.904
ATOM   1913  C   GLU B  92      -43.615 -13.734  91.946
ATOM   1914  O   GLU B  92      -43.225 -12.939  91.061
ATOM   1915  CB  GLU B  92      -44.981 -15.812  91.396
ATOM   1916  CG  GLU B  92      -44.079 -16.101  90.212
ATOM   1917  CD  GLU B  92      -43.955 -17.614  89.960
ATOM   1918  OE1 GLU B  92      -44.980 -18.349  90.088
ATOM   1919  OE2 GLU B  92      -42.819 -18.061  89.669
ATOM   1920  H   GLU B  92      -45.781 -13.194  90.189
ATOM   1921  N   VAL B  93      -42.882 -14.047  93.012
ATOM   1922  CA  VAL B  93      -41.556 -13.489  93.234
ATOM   1923  C   VAL B  93      -40.490 -14.528  93.541
ATOM   1924  O   VAL B  93      -40.442 -15.038  94.651
ATOM   1925  CB  VAL B  93      -41.606 -12.472  94.369
ATOM   1926  CG1 VAL B  93      -40.231 -11.938  94.642
ATOM   1927  CG2 VAL B  93      -42.509 -11.328  93.974
ATOM   1928  H   VAL B  93      -43.289 -14.744  93.745
ATOM   1929  N   VAL B  94      -39.626 -14.830  92.569
ATOM   1930  CA  VAL B  94      -38.568 -15.819  92.783
ATOM   1931  C   VAL B  94      -37.208 -15.216  93.134
ATOM   1932  O   VAL B  94      -36.624 -14.478  92.349
ATOM   1933  CB  VAL B  94      -38.394 -16.743  91.561
ATOM   1934  CG1 VAL B  94      -37.344 -17.782  91.834
ATOM   1935  CG2 VAL B  94      -39.704 -17.401  91.216
ATOM   1936  H   VAL B  94      -39.709 -14.332  91.603
ATOM   1937  N   PHE B  95      -36.696 -15.536  94.311
ATOM   1938  CA  PHE B  95      -35.395 -15.025  94.727
ATOM   1939  C   PHE B  95      -34.686 -16.164  95.421
ATOM   1940  O   PHE B  95      -35.292 -17.208  95.669
ATOM   1941  CB  PHE B  95      -35.562 -13.859  95.707
ATOM   1942  CG  PHE B  95      -36.106 -14.263  97.039
ATOM   1943  CD1 PHE B  95      -37.460 -14.521  97.201
ATOM   1944  CD2 PHE B  95      -35.261 -14.409  98.131
ATOM   1945  CE1 PHE B  95      -37.972 -14.924  98.447
ATOM   1946  CE2 PHE B  95      -35.759 -14.812  99.385
ATOM   1947  CZ  PHE B  95      -37.114 -15.071  99.541
ATOM   1948  H   PHE B  95      -37.255 -16.189  94.980
ATOM   1949  N   THR B  96      -33.399 -16.010  95.688
ATOM   1950  CA  THR B  96      -32.719 -17.063  96.410
ATOM   1951  C   THR B  96      -32.228 -16.514  97.726
ATOM   1952  O   THR B  96      -31.258 -15.773  97.774
ATOM   1953  CB  THR B  96      -31.574 -17.736  95.617
ATOM   1954  OG1 THR B  96      -30.514 -16.806  95.392
ATOM   1955  CG2 THR B  96      -32.089 -18.253  94.288
ATOM   1956  H   THR B  96      -32.866 -15.113  95.373
ATOM   1957  HG1 THR B  96      -29.715 -17.294  94.833
ATOM   1958  N   ALA B  97      -32.984 -16.786  98.782
ATOM   1959  CA  ALA B  97      -32.609 -16.341 100.111
ATOM   1960  C   ALA B  97      -31.346 -17.123 100.380
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ATOM   1961  O   ALA B  97     -31.118 -18.168  99.748
ATOM   1962  CB  ALA B  97     -33.675 -16.716 101.107
ATOM   1963  H   ALA B  97     -33.903 -17.356  98.649
ATOM   1964  N   ASN B  98     -30.542 -16.680 101.338
ATOM   1965  CA  ASN B  98     -29.306 -17.395 101.582
ATOM   1966  C   ASN B  98     -28.747 -17.153 102.961
ATOM   1967  O   ASN B  98     -29.087 -16.172 103.627
ATOM   1968  CB  ASN B  98     -28.266 -16.958 100.533
ATOM   1969  CG  ASN B  98     -27.222 -18.034 100.231
ATOM   1970  OD1 ASN B  98     -26.417 -18.412 101.095
ATOM   1971  ND2 ASN B  98     -27.207 -18.504  98.991
ATOM   1972  H   ASN B  98     -30.805 -15.802 101.928
ATOM   1973  HD2 ASN B  98     -26.427 -19.259  98.898
ATOM   1974  HD2 ASN B  98     -27.872 -18.184  98.189
ATOM   1975  N   ASP B  99     -27.872 -18.067 103.373
ATOM   1976  CA  ASP B  99     -27.164 -17.965 104.646
ATOM   1977  C   ASP B  99     -25.909 -17.101 104.351
ATOM   1978  O   ASP B  99     -25.019 -16.945 105.195
ATOM   1979  CB  ASP B  99     -26.767 -19.366 105.162
ATOM   1980  CG  ASP B  99     -27.980 -20.249 105.505
ATOM   1981  OD1 ASP B  99     -28.999 -19.719 105.997
ATOM   1982  OD2 ASP B  99     -27.908 -21.483 105.295
ATOM   1983  H   ASP B  99     -27.675 -18.927 102.733
ATOM   1984  N   SER B 100     -25.865 -16.559 103.128
ATOM   1985  CA  SER B 100     -24.788 -15.701 102.639
ATOM   1986  C   SER B 100     -24.721 -14.395 103.415
ATOM   1987  O   SER B 100     -23.775 -13.622 103.266
ATOM   1988  CB  SER B 100     -25.009 -15.383 101.150
ATOM   1989  OG  SER B 100     -26.229 -14.680 100.934
ATOM   1990  H   SER B 100     -26.690 -16.774 102.449
ATOM   1991  HG  SER B 100     -26.347 -14.475  99.870
ATOM   1992  N   GLY B 101     -25.755 -14.130 104.201
ATOM   1993  CA  GLY B 101     -25.804 -12.904 104.974
ATOM   1994  C   GLY B 101     -27.098 -12.205 104.620
ATOM   1995  O   GLY B 101     -27.915 -12.801 103.903
ATOM   1996  H   GLY B 101     -26.578 -14.841 104.266
ATOM   1997  N   HIS B 102     -27.242 -10.934 105.014
ATOM   1998  CA  HIS B 102     -28.460 -10.156 104.752
ATOM   1999  C   HIS B 102     -29.617 -11.133 104.986
ATOM   2000  O   HIS B 102     -30.440 -11.406 104.113
ATOM   2001  CB  HIS B 102     -28.452  -9.548 103.325
ATOM   2002  CG  HIS B 102     -27.560 -10.268 102.357
ATOM   2003  ND1 HIS B 102     -26.221  -9.964 102.215
ATOM   2004  CD2 HIS B 102     -27.785 -11.347 101.567
ATOM   2005  CE1 HIS B 102     -25.659 -10.832 101.393
ATOM   2006  NE2 HIS B 102     -26.583 -11.683 100.988
ATOM   2007  H   HIS B 102     -26.424 -10.457 105.554
ATOM   2008  HD1 HIS B 102     -25.708  -9.136 102.704
ATOM   2009  N   ARG B 103     -29.601 -11.685 106.193
ATOM   2010  CA  ARG B 103     -30.536 -12.694 106.675
ATOM   2011  C   ARG B 103     -32.062 -12.430 106.818
ATOM   2012  O   ARG B 103     -32.808 -13.355 107.154
ATOM   2013  CB  ARG B 103     -29.977 -13.229 107.993
ATOM   2014  CG  ARG B 103     -28.489 -13.598 107.926
ATOM   2015  CD  ARG B 103     -28.231 -14.882 107.114
ATOM   2016  NE  ARG B 103     -28.895 -16.071 107.666
ATOM   2017  CZ  ARG B 103     -28.629 -16.608 108.858
ATOM   2018  NH1 ARG B 103     -27.707 -16.073 109.653
ATOM   2019  NH2 ARG B 103     -29.270 -17.707 109.251
ATOM   2020  H   ARG B 103     -28.823 -11.356 106.882
ATOM   2021  HE  ARG B 103     -29.660 -16.551 107.056
ATOM   2022  HH1 ARG B 103     -27.639 -16.654 110.573
ATOM   2023  HH1 ARG B 103     -27.111 -15.190 109.420
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ATOM   2024  HH2 ARG B 103     -28.922 -17.995 110.243
ATOM   2025  HH2 ARG B 103     -30.025 -18.237 108.671
ATOM   2026  N   HIS B 104     -32.536 -11.207 106.596
ATOM   2027  CA  HIS B 104     -33.972 -10.920 106.721
ATOM   2028  C   HIS B 104     -34.568 -10.260 105.457
ATOM   2029  O   HIS B 104     -33.931  -9.418 104.812
ATOM   2030  CB  HIS B 104     -34.241 -10.103 107.986
ATOM   2031  CG  HIS B 104     -33.997 -10.869 109.259
ATOM   2032  ND1 HIS B 104     -34.976 -11.620 109.875
ATOM   2033  CD2 HIS B 104     -32.883 -11.015 110.016
ATOM   2034  CE1 HIS B 104     -34.477 -12.206 110.950
ATOM   2035  NE2 HIS B 104     -33.207 -11.852 111.061
ATOM   2036  H   HIS B 104     -31.850 -10.407 106.318
ATOM   2037  HD1 HIS B 104     -36.005 -11.717 109.528
ATOM   2038  N   TYR B 105     -35.779 -10.670 105.090
ATOM   2039  CA  TYR B 105     -36.416 -10.154 103.881
ATOM   2040  C   TYR B 105     -37.897  -9.769 103.994
ATOM   2041  O   TYR B 105     -38.679 -10.441 104.658
ATOM   2042  CB  TYR B 105     -36.268 -11.195 102.756
ATOM   2043  CG  TYR B 105     -34.857 -11.731 102.587
ATOM   2044  CD1 TYR B 105     -34.400 -12.800 103.357
ATOM   2045  CD2 TYR B 105     -33.967 -11.153 101.679
ATOM   2046  CE1 TYR B 105     -33.089 -13.282 103.232
ATOM   2047  CE2 TYR B 105     -32.651 -11.628 101.541
ATOM   2048  CZ  TYR B 105     -32.221 -12.695 102.320
ATOM   2049  OH  TYR B 105     -30.947 -13.212 102.153
ATOM   2050  H   TYR B 105     -36.304 -11.405 105.701
ATOM   2051  HH  TYR B 105     -30.413 -12.629 101.403
ATOM   2052  N   THR B 106     -38.271  -8.658 103.368
ATOM   2053  CA  THR B 106     -39.672  -8.237 103.325
ATOM   2054  C   THR B 106     -40.029  -7.987 101.855
ATOM   2055  O   THR B 106     -39.295  -7.321 101.147
ATOM   2056  CB  THR B 106     -39.992  -7.007 104.206
ATOM   2057  OG1 THR B 106     -41.079  -6.272 103.624
ATOM   2058  CG2 THR B 106     -38.789  -6.105 104.400
ATOM   2059  H   THR B 106     -37.516  -8.045 102.875
ATOM   2060  HG1 THR B 106     -41.304  -5.405 104.245
ATOM   2061  N   ILE B 107     -41.082  -8.627 101.372
ATOM   2062  CA  ILE B 107     -41.494  -8.481  99.990
ATOM   2063  C   ILE B 107     -42.655  -7.495 100.008
ATOM   2064  O   ILE B 107     -43.479  -7.539 100.914
ATOM   2065  CB  ILE B 107     -41.916  -9.871  99.407
ATOM   2066  CG1 ILE B 107     -40.829 -10.920  99.695
ATOM   2067  CG2 ILE B 107     -42.185  -9.818  97.897
ATOM   2068  CD1 ILE B 107     -39.381 -10.395  99.729
ATOM   2069  H   ILE B 107     -41.654  -9.281 102.030
ATOM   2070  N   ALA B 108     -42.663  -6.554  99.071
ATOM   2071  CA  ALA B 108     -43.719  -5.538  99.000
ATOM   2072  C   ALA B 108     -44.473  -5.631  97.676
ATOM   2073  O   ALA B 108     -43.906  -6.013  96.655
ATOM   2074  CB  ALA B 108     -43.118  -4.132  99.161
ATOM   2075  H   ALA B 108     -41.860  -6.535  98.333
ATOM   2076  N   ALA B 109     -45.735  -5.230  97.693
ATOM   2077  CA  ALA B 109     -46.550  -5.269  96.500
ATOM   2078  C   ALA B 109     -47.283  -3.939  96.360
ATOM   2079  O   ALA B 109     -47.664  -3.327  97.345
ATOM   2080  CB  ALA B 109     -47.537  -6.431  96.590
ATOM   2081  H   ALA B 109     -46.168  -4.865  98.624
ATOM   2082  N   LEU B 110     -47.455  -3.487  95.130
ATOM   2083  CA  LEU B 110     -48.125  -2.228  94.840
ATOM   2084  C   LEU B 110     -49.114  -2.658  93.778
ATOM   2085  O   LEU B 110     -48.927  -2.414  92.579
ATOM   2086  CB  LEU B 110     -47.117  -1.225  94.270
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ATOM   2087  CG  LEU B 110     -47.373   0.298  94.236
ATOM   2088  CD1 LEU B 110     -47.409   0.867  92.807
ATOM   2089  CD2 LEU B 110     -48.645   0.611  94.946
ATOM   2090  H   LEU B 110     -47.081  -4.083  94.297
ATOM   2091  N   LEU B 111     -50.148  -3.352  94.226
ATOM   2092  CA  LEU B 111     -51.157  -3.878  93.330
ATOM   2093  C   LEU B 111     -52.122  -2.877  92.677
ATOM   2094  O   LEU B 111     -52.619  -1.928  93.314
ATOM   2095  CB  LEU B 111     -51.916  -4.972  94.064
ATOM   2096  CG  LEU B 111     -50.954  -5.971  94.713
ATOM   2097  CD1 LEU B 111     -51.740  -7.008  95.435
ATOM   2098  CD2 LEU B 111     -50.033  -6.599  93.667
ATOM   2099  H   LEU B 111     -50.244  -3.531  95.297
ATOM   2100  N   SER B 112     -52.389  -3.140  91.399
ATOM   2101  CA  SER B 112     -53.282  -2.353  90.558
ATOM   2102  C   SER B 112     -53.765  -3.324  89.465
ATOM   2103  O   SER B 112     -52.999  -4.151  89.000
ATOM   2104  CB  SER B 112     -52.529  -1.181  89.928
ATOM   2105  OG  SER B 112     -53.363  -0.039  89.874
ATOM   2106  H   SER B 112     -51.905  -4.008  90.950
ATOM   2107  HG  SER B 112     -52.816   0.789  89.423
ATOM   2108  N   PRO B 113     -55.029  -3.194  89.015
ATOM   2109  CA  PRO B 113     -55.660  -4.036  87.991
ATOM   2110  C   PRO B 113     -54.758  -4.565  86.861
ATOM   2111  O   PRO B 113     -54.738  -5.767  86.560
ATOM   2112  CB  PRO B 113     -56.770  -3.128  87.449
ATOM   2113  CG  PRO B 113     -57.200  -2.383  88.647
ATOM   2114  CD  PRO B 113     -55.877  -2.013  89.301
ATOM   2115  N   TYR B 114     -54.003  -3.677  86.243
ATOM   2116  CA  TYR B 114     -53.134  -4.071  85.147
ATOM   2117  C   TYR B 114     -51.657  -3.798  85.400
ATOM   2118  O   TYR B 114     -50.880  -3.707  84.449
ATOM   2119  CB  TYR B 114     -53.584  -3.354  83.871
ATOM   2120  CG  TYR B 114     -54.884  -3.898  83.315
ATOM   2121  CD1 TYR B 114     -56.087  -3.772  84.017
ATOM   2122  CD2 TYR B 114     -54.911  -4.539  82.083
ATOM   2123  CE1 TYR B 114     -57.276  -4.279  83.490
ATOM   2124  CE2 TYR B 114     -56.093  -5.042  81.550
ATOM   2125  CZ  TYR B 114     -57.266  -4.914  82.246
ATOM   2126  OH  TYR B 114     -58.414  -5.418  81.680
ATOM   2127  H   TYR B 114     -54.029  -2.634  86.560
ATOM   2128  HH  TYR B 114     -58.177  -5.868  80.716
ATOM   2129  N   SER B 115     -51.245  -3.747  86.664
ATOM   2130  CA  SER B 115     -49.863  -3.443  86.959
ATOM   2131  C   SER B 115     -49.467  -3.744  88.404
ATOM   2132  O   SER B 115     -50.277  -3.568  89.308
ATOM   2133  CB  SER B 115     -49.668  -1.963  86.688
ATOM   2134  OG  SER B 115     -48.310  -1.607  86.692
ATOM   2135  H   SER B 115     -51.949  -3.931  87.475
ATOM   2136  HG  SER B 115     -48.214  -0.539  86.494
ATOM   2137  N   TYR B 116     -48.250  -4.257  88.606
ATOM   2138  CA  TYR B 116     -47.734  -4.521  89.956
ATOM   2139  C   TYR B 116     -46.222  -4.338  90.070
ATOM   2140  O   TYR B 116     -45.458  -4.836  89.251
ATOM   2141  CB  TYR B 116     -48.120  -5.907  90.486
ATOM   2142  CG  TYR B 116     -47.396  -7.064  89.865
ATOM   2143  CD1 TYR B 116     -46.075  -7.360  90.215
ATOM   2144  CD2 TYR B 116     -48.038  -7.899  88.960
ATOM   2145  CE1 TYR B 116     -45.402  -8.469  89.677
ATOM   2146  CE2 TYR B 116     -47.383  -9.006  88.420
ATOM   2147  CZ  TYR B 116     -46.069  -9.297  88.783
ATOM   2148  OH  TYR B 116     -45.455 -10.446  88.303
ATOM   2149  H   TYR B 116     -47.621  -4.484  87.745
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ATOM   2150  HH  TYR B 116     -46.131 -10.959  87.618
ATOM   2151  N   SER B 117     -45.802  -3.598  91.078
ATOM   2152  CA  SER B 117     -44.397  -3.371  91.327
ATOM   2153  C   SER B 117     -44.083  -4.278  92.510
ATOM   2154  O   SER B 117     -44.945  -4.481  93.375
ATOM   2155  CB  SER B 117     -44.190  -1.924  91.762
ATOM   2156  OG  SER B 117     -45.086  -1.041  91.095
ATOM   2157  H   SER B 117     -46.537  -3.143  91.742
ATOM   2158  HG  SER B 117     -44.907  -0.020  91.432
ATOM   2159  N   THR B 118     -42.911  -4.908  92.497
ATOM   2160  CA  THR B 118     -42.500  -5.754  93.624
ATOM   2161  C   THR B 118     -41.209  -5.187  94.190
ATOM   2162  O   THR B 118     -40.274  -4.922  93.437
ATOM   2163  CB  THR B 118     -42.257  -7.217  93.237
ATOM   2164  OG1 THR B 118     -41.213  -7.756  94.067
ATOM   2165  CG2 THR B 118     -41.860  -7.332  91.784
ATOM   2166  H   THR B 118     -42.249  -4.796  91.638
ATOM   2167  HG1 THR B 118     -41.035  -8.797  93.797
ATOM   2168  N   THR B 119     -41.130  -5.054  95.508
ATOM   2169  CA  THR B 119     -39.927  -4.508  96.104
ATOM   2170  C   THR B 119     -39.273  -5.410  97.133
ATOM   2171  O   THR B 119     -39.909  -5.955  98.054
ATOM   2172  CB  THR B 119     -40.141  -3.052  96.656
ATOM   2173  OG1 THR B 119     -39.955  -2.110  95.591
ATOM   2174  CG2 THR B 119     -39.158  -2.716  97.759
ATOM   2175  H   THR B 119     -41.965  -5.355  96.139
ATOM   2176  HG1 THR B 119     -40.103  -1.099  95.970
ATOM   2177  N   ALA B 120     -37.982  -5.587  96.927
ATOM   2178  CA  ALA B 120     -37.189  -6.395  97.807
ATOM   2179  C   ALA B 120     -36.585  -5.406  98.787
ATOM   2180  O   ALA B 120     -36.410  -4.231  98.464
ATOM   2181  CB  ALA B 120     -36.090  -7.121  97.000
ATOM   2182  H   ALA B 120     -37.508  -5.108  96.070
ATOM   2183  N   VAL B 121     -36.341  -5.872  99.994
ATOM   2184  CA  VAL B 121     -35.738  -5.072 101.050
ATOM   2185  C   VAL B 121     -35.059  -6.077 101.956
ATOM   2186  O   VAL B 121     -35.728  -6.785 102.717
ATOM   2187  CB  VAL B 121     -36.787  -4.271 101.899
ATOM   2188  CG1 VAL B 121     -36.115  -3.702 103.159
ATOM   2189  CG2 VAL B 121     -37.387  -3.113 101.077
ATOM   2190  H   VAL B 121     -36.603  -6.907 100.214
ATOM   2191  N   VAL B 122     -33.749  -6.211 101.800
ATOM   2192  CA  VAL B 122     -32.996  -7.150 102.609
ATOM   2193  C   VAL B 122     -32.272  -6.381 103.717
ATOM   2194  O   VAL B 122     -31.948  -5.195 103.564
ATOM   2195  CB  VAL B 122     -31.993  -7.946 101.757
ATOM   2196  CG1 VAL B 122     -32.668  -8.447 100.496
ATOM   2197  CG2 VAL B 122     -30.797  -7.088 101.411
ATOM   2198  H   VAL B 122     -33.232  -5.609 101.053
ATOM   2199  N   SER B 123     -32.073  -7.034 104.852
ATOM   2200  CA  SER B 123     -31.387  -6.389 105.952
ATOM   2201  C   SER B 123     -30.463  -7.337 106.666
ATOM   2202  O   SER B 123     -30.582  -8.555 106.560
ATOM   2203  CB  SER B 123     -32.374  -5.791 106.955
ATOM   2204  OG  SER B 123     -31.684  -5.326 108.109
ATOM   2205  H   SER B 123     -32.428  -8.059 104.959
ATOM   2206  HG  SER B 123     -32.399  -4.903 108.814
ATOM   2207  N   ASN B 124     -29.553  -6.755 107.430
ATOM   2208  CA  ASN B 124     -28.600  -7.534 108.182
ATOM   2209  C   ASN B 124     -28.733  -7.183 109.652
ATOM   2210  O   ASN B 124     -28.766  -5.998 110.017
ATOM   2211  CB  ASN B 124     -27.184  -7.251 107.695
ATOM   2212  CG  ASN B 124     -26.333  -8.481 107.692
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ATOM   2213  OD1 ASN B 124     -26.247  -9.182 106.683
ATOM   2214  ND2 ASN B 124     -25.744  -8.798 108.838
ATOM   2215  H   ASN B 124     -29.522  -5.668 107.491
ATOM   2216  HD2 ASN B 124     -25.157  -9.707 108.706
ATOM   2217  HD2 ASN B 124     -25.834  -8.236 109.768
ATOM   2218  N   PRO B 125     -28.948  -8.206 110.500
ATOM   2219  CA  PRO B 125     -29.087  -8.016 111.951
ATOM   2220  C   PRO B 125     -27.694  -7.814 112.553
ATOM   2221  O   PRO B 125     -26.695  -7.780 111.816
ATOM   2222  CB  PRO B 125     -29.701  -9.345 112.400
ATOM   2223  CG  PRO B 125     -29.068 -10.332 111.465
ATOM   2224  CD  PRO B 125     -29.173  -9.619 110.129
ATOM   2225  N   GLN B 126     -27.605  -7.652 113.871
ATOM   2226  CA  GLN B 126     -26.287  -7.491 114.472
ATOM   2227  C   GLN B 126     -25.686  -8.868 114.716
ATOM   2228  O   GLN B 126     -26.220  -9.677 115.483
ATOM   2229  CB  GLN B 126     -26.321  -6.664 115.752
ATOM   2230  CG  GLN B 126     -25.140  -5.696 115.840
ATOM   2231  CD  GLN B 126     -23.800  -6.367 115.548
ATOM   2232  OE1 GLN B 126     -23.112  -6.821 116.458
ATOM   2233  NE2 GLN B 126     -23.428  -6.427 114.271
ATOM   2234  H   GLN B 126     -28.502  -7.641 114.490
ATOM   2235  HE2 GLN B 126     -22.462  -6.926 114.197
ATOM   2236  HE2 GLN B 126     -23.999  -6.036 113.429
ATOM   2237  N   ASN B 127     -24.607  -9.131 113.991
ATOM   2238  CA  ASN B 127     -23.906 -10.400 114.046
ATOM   2239  C   ASN B 127     -23.276 -10.614 115.407
ATOM   2240  OCT ASN B 127     -22.657  -9.658 115.923
ATOM   2241  CB  ASN B 127     -22.829 -10.450 112.953
ATOM   2242  CG  ASN B 127     -23.240  -9.703 111.697
ATOM   2243  OD1 ASN B 127     -23.884 -10.258 110.800
ATOM   2244  ND2 ASN B 127     -22.891  -8.422 111.640
ATOM   2245  OCT ASN B 127     -23.417 -11.739 115.927
ATOM   2246  H   ASN B 127     -24.229  -8.357 113.323
ATOM   2247  HD2 ASN B 127     -23.238  -7.993 110.700
ATOM   2248  HD2 ASN B 127     -22.344  -7.883 112.413
TER
ATOM   2249  N   SER C   8     -35.726  10.369  62.384
ATOM   2250  CA  SER C   8     -35.247  10.919  63.692
ATOM   2251  C   SER C   8     -36.421  10.932  64.683
ATOM   2252  O   SER C   8     -37.579  10.784  64.259
ATOM   2253  CB  SER C   8     -34.711  12.342  63.485
ATOM   2254  OG  SER C   8     -34.082  12.463  62.214
ATOM   2255  H1  SER C   8     -34.901  10.355  61.672
ATOM   2256  H2  SER C   8     -36.529  10.998  61.998
ATOM   2257  H3  SER C   8     -36.098   9.355  62.530
ATOM   2258  HG  SER C   8     -33.709  13.480  62.088
ATOM   2259  N   LYS C   9     -36.118  11.121  65.975
ATOM   2260  CA  LYS C   9     -37.135  11.140  67.034
ATOM   2261  C   LYS C   9     -37.464  12.521  67.630
ATOM   2262  O   LYS C   9     -36.811  13.511  67.315
ATOM   2263  CB  LYS C   9     -36.776  10.141  68.145
ATOM   2264  CG  LYS C   9     -35.330  10.157  68.587
ATOM   2265  CD  LYS C   9     -35.199   9.617  69.991
ATOM   2266  CE  LYS C   9     -34.259   8.421  70.042
ATOM   2267  NZ  LYS C   9     -34.791   7.226  69.307
ATOM   2268  H   LYS C   9     -35.074  11.265  66.252
ATOM   2269  HZ1 LYS C   9     -34.076   6.407  69.380
ATOM   2270  HZ2 LYS C   9     -34.945   7.482  68.259
ATOM   2271  HZ3 LYS C   9     -35.740   6.921  69.749
ATOM   2272  N   CYS C  10     -38.506  12.574  68.462
ATOM   2273  CA  CYS C  10     -38.946  13.810  69.107
ATOM   2274  C   CYS C  10     -38.010  14.176  70.285
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ATOM   2275  O   CYS C  10     -37.774  13.359  71.172
ATOM   2276  CB  CYS C  10     -40.403  13.659  69.604
ATOM   2277  SG  CYS C  10     -41.728  14.516  68.646
ATOM   2278  H   CYS C  10     -39.056  11.655  68.667
ATOM   2279  N   PRO C  11     -37.427  15.392  70.272
ATOM   2280  CA  PRO C  11     -36.525  15.848  71.338
ATOM   2281  C   PRO C  11     -37.111  15.717  72.728
ATOM   2282  O   PRO C  11     -36.377  15.644  73.720
ATOM   2283  CB  PRO C  11     -36.232  17.314  70.963
ATOM   2284  CG  PRO C  11     -37.331  17.686  70.000
ATOM   2285  CD  PRO C  11     -37.532  16.410  69.215
ATOM   2286  N   LEU C  12     -38.436  15.730  72.800
ATOM   2287  CA  LEU C  12     -39.131  15.567  74.070
ATOM   2288  C   LEU C  12     -40.530  15.002  73.834
ATOM   2289  O   LEU C  12     -41.256  15.422  72.923
ATOM   2290  CB  LEU C  12     -39.191  16.872  74.852
ATOM   2291  CG  LEU C  12     -39.851  16.660  76.201
ATOM   2292  CD1 LEU C  12     -38.977  15.753  77.038
ATOM   2293  CD2 LEU C  12     -40.072  17.966  76.911
ATOM   2294  H   LEU C  12     -39.017  15.866  71.888
ATOM   2295  N   MET C  13     -40.864  13.981  74.607
ATOM   2296  CA  MET C  13     -42.160  13.348  74.487
ATOM   2297  C   MET C  13     -42.681  12.910  75.858
ATOM   2298  O   MET C  13     -41.923  12.878  76.841
ATOM   2299  CB  MET C  13     -42.040  12.120  73.588
ATOM   2300  CG  MET C  13     -43.278  11.878  72.731
ATOM   2301  SD  MET C  13     -43.712  10.156  72.635
ATOM   2302  CE  MET C  13     -44.106   9.542  74.258
ATOM   2303  H   MET C  13     -40.152  13.610  75.345
ATOM   2304  N   VAL C  14     -43.972  12.576  75.899
ATOM   2305  CA  VAL C  14     -44.664  12.176  77.116
ATOM   2306  C   VAL C  14     -45.658  11.096  76.766
ATOM   2307  O   VAL C  14     -46.314  11.157  75.725
ATOM   2308  CB  VAL C  14     -45.444  13.372  77.741
ATOM   2309  CG1 VAL C  14     -46.256  12.918  78.911
ATOM   2310  CG2 VAL C  14     -44.482  14.491  78.153
ATOM   2311  H   VAL C  14     -44.539  12.603  74.969
ATOM   2312  N   ALA C  15     -45.729  10.074  77.607
ATOM   2313  CA  ALA C  15     -46.656   8.981  77.383
ATOM   2314  C   ALA C  15     -47.183   8.598  78.746
ATOM   2315  O   ALA C  15     -46.413   8.552  79.706
ATOM   2316  CB  ALA C  15     -45.947   7.800  76.715
ATOM   2325  N   VAL C  16     -48.495   8.384  78.837
ATOM   2326  CA  VAL C  16     -49.144   8.019  80.100
ATOM   2327  C   VAL C  16     -49.977   6.731  79.993
ATOM   2328  O   VAL C  16     -50.542   6.448  78.935
ATOM   2329  CB  VAL C  16     -50.041   9.168  80.612
ATOM   2330  CG1 VAL C  16     -50.388   8.952  82.076
ATOM   2331  CG2 VAL C  16     -49.342  10.504  80.419
ATOM   2332  H   VAL C  16     -49.107   8.483  77.941
ATOM   2333  N   LEU C  17     -50.030   5.946  81.076
ATOM   2334  CA  LEU C  17     -50.794   4.686  81.095
ATOM   2335  C   LEU C  17     -51.858   4.626  82.196
ATOM   2336  O   LEU C  17     -51.808   5.384  83.158
ATOM   2337  CB  LEU C  17     -49.869   3.463  81.182
ATOM   2338  CG  LEU C  17     -49.030   3.157  79.931
ATOM   2339  CD1 LEU C  17     -47.803   4.051  79.906
ATOM   2340  CD2 LEU C  17     -48.607   1.705  79.875
ATOM   2341  H   LEU C  17     -49.490   6.248  81.973
ATOM   2342  N   ASP C  18     -52.814   3.713  82.041
ATOM   2343  CA  ASP C  18     -53.913   3.537  82.991
ATOM   2344  C   ASP C  18     -53.886   2.176  83.720
ATOM   2345  O   ASP C  18     -54.651   1.284  83.374
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ATOM   2346  CB  ASP C  18     -55.254   3.684  82.244
ATOM   2347  CG  ASP C  18     -56.450   3.908  83.187
ATOM   2348  OD1 ASP C  18     -56.465   3.354  84.337
ATOM   2349  OD2 ASP C  18     -57.372   4.643  82.757
ATOM   2350  H   ASP C  18     -52.777   3.066  81.164
ATOM   2351  N   ALA C  19     -53.098   2.057  84.783
ATOM   2352  CA  ALA C  19     -52.988   0.808  85.549
ATOM   2353  C   ALA C  19     -54.300   0.174  86.028
ATOM   2354  O   ALA C  19     -54.290  -0.876  86.652
ATOM   2355  CB  ALA C  19     -52.078   1.026  86.743
ATOM   2356  H   ALA C  19     -52.510   2.918  85.100
ATOM   2357  N   VAL C  20     -55.421   0.834  85.751
ATOM   2358  CA  VAL C  20     -56.758   0.383  86.152
ATOM   2359  C   VAL C  20     -57.576  -0.237  85.009
ATOM   2360  O   VAL C  20     -58.347  -1.166  85.243
ATOM   2361  CB  VAL C  20     -57.529   1.564  86.800
ATOM   2362  CG1 VAL C  20     -59.000   1.279  86.881
ATOM   2363  CG2 VAL C  20     -56.966   1.844  88.181
ATOM   2364  H   VAL C  20     -55.342   1.766  85.191
ATOM   2365  N   ARG C  21     -57.375   0.261  83.787
ATOM   2366  CA  ARG C  21     -58.072  -0.211  82.588
ATOM   2367  C   ARG C  21     -57.123  -0.992  81.698
ATOM   2368  O   ARG C  21     -57.526  -1.584  80.687
ATOM   2369  CB  ARG C  21     -58.513   0.978  81.732
ATOM   2370  CG  ARG C  21     -59.814   1.635  82.082
ATOM   2371  CD  ARG C  21     -59.749   2.403  83.376
ATOM   2372  NE  ARG C  21     -60.883   3.313  83.421
ATOM   2373  CZ  ARG C  21     -61.019   4.355  82.602
ATOM   2374  NH1 ARG C  21     -60.082   4.628  81.698
ATOM   2375  NH2 ARG C  21     -62.134   5.064  82.614
ATOM   2376  H   ARG C  21     -56.650   1.067  83.675
ATOM   2377  HE  ARG C  21     -61.662   3.133  84.161
ATOM   2378  HH1 ARG C  21     -60.373   5.511  81.129
ATOM   2379  HH1 ARG C  21     -59.165   4.058  81.550
ATOM   2380  HH2 ARG C  21     -62.061   5.868  81.883
ATOM   2381  HH2 ARG C  21     -62.993   4.874  83.258
ATOM   2382  N   GLY C  22     -55.846  -0.882  82.023
ATOM   2383  CA  GLY C  22     -54.819  -1.513  81.238
ATOM   2384  C   GLY C  22     -54.724  -0.820  79.903
ATOM   2385  O   GLY C  22     -54.546  -1.491  78.882
ATOM   2386  H   GLY C  22     -55.566  -0.302  82.902
ATOM   2387  N   SER C  23     -54.787   0.511  79.891
ATOM   2388  CA  SER C  23     -54.728   1.221  78.609
ATOM   2389  C   SER C  23     -54.135   2.668  78.576
ATOM   2390  O   SER C  23     -53.642   3.173  79.588
ATOM   2391  CB  SER C  23     -56.129   1.155  77.968
ATOM   2392  OG  SER C  23     -57.164   1.411  78.908
ATOM   2393  H   SER C  23     -54.882   1.066  80.824
ATOM   2394  HG  SER C  23     -58.131   1.353  78.408
ATOM   2395  N   PRO C  24     -54.049   3.283  77.379
ATOM   2396  CA  PRO C  24     -53.509   4.647  77.281
ATOM   2397  C   PRO C  24     -54.354   5.703  78.020
ATOM   2398  O   PRO C  24     -55.587   5.639  77.995
ATOM   2399  CB  PRO C  24     -53.557   4.919  75.776
ATOM   2400  CG  PRO C  24     -53.342   3.583  75.183
ATOM   2401  CD  PRO C  24     -54.204   2.693  76.033
ATOM   2402  N   ALA C  25     -53.697   6.647  78.698
ATOM   2403  CA  ALA C  25     -54.411   7.738  79.380
ATOM   2404  C   ALA C  25     -54.708   8.726  78.255
ATOM   2405  O   ALA C  25     -53.801   9.331  77.677
ATOM   2406  CB  ALA C  25     -53.542   8.389  80.435
ATOM   2407  H   ALA C  25     -52.609   6.609  78.747
ATOM   2408  N   VAL C  26     -55.972   8.833  77.889
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ATOM   2409  CA  VAL C  26     -56.330   9.696  76.784
ATOM   2410  C   VAL C  26     -56.743  11.078  77.205
ATOM   2411  O   VAL C  26     -57.418  11.263  78.215
ATOM   2412  CB  VAL C  26     -57.481   9.096  75.957
ATOM   2413  CG1 VAL C  26     -57.480   9.676  74.540
ATOM   2414  CG2 VAL C  26     -57.385   7.573  75.954
ATOM   2415  H   VAL C  26     -56.743   8.273  78.418
ATOM   2416  N   ASP C  27     -56.365  12.041  76.384
ATOM   2417  CA  ASP C  27     -56.733  13.419  76.607
ATOM   2418  C   ASP C  27     -56.311  13.922  77.979
ATOM   2419  O   ASP C  27     -57.136  14.259  78.816
ATOM   2420  CB  ASP C  27     -58.245  13.551  76.428
ATOM   2421  CG  ASP C  27     -58.639  14.813  75.725
ATOM   2422  OD1 ASP C  27     -57.989  15.146  74.713
ATOM   2423  OD2 ASP C  27     -59.621  15.449  76.156
ATOM   2424  H   ASP C  27     -55.757  11.788  75.515
ATOM   2425  N   VAL C  28     -55.015  13.908  78.229
ATOM   2426  CA  VAL C  28     -54.502  14.408  79.489
ATOM   2427  C   VAL C  28     -53.793  15.729  79.179
ATOM   2428  O   VAL C  28     -53.015  15.835  78.210
ATOM   2429  CB  VAL C  28     -53.545  13.370  80.181
ATOM   2430  CG1 VAL C  28     -52.690  14.020  81.232
ATOM   2431  CG2 VAL C  28     -54.357  12.246  80.790
ATOM   2432  H   VAL C  28     -54.325  13.520  77.480
ATOM   2433  N   ALA C  29     -54.181  16.760  79.916
ATOM   2434  CA  ALA C  29     -53.566  18.073  79.764
ATOM   2435  C   ALA C  29     -52.140  17.880  80.241
ATOM   2436  O   ALA C  29     -51.899  17.101  81.164
ATOM   2437  CB  ALA C  29     -54.275  19.128  80.642
ATOM   2438  H   ALA C  29     -54.976  16.624  80.649
ATOM   2439  N   VAL C  30     -51.206  18.514  79.545
ATOM   2440  CA  VAL C  30     -49.790  18.444  79.879
ATOM   2441  C   VAL C  30     -49.248  19.844  79.680
ATOM   2442  O   VAL C  30     -49.240  20.339  78.559
ATOM   2443  CB  VAL C  30     -48.981  17.539  78.912
ATOM   2444  CG1 VAL C  30     -47.506  17.540  79.333
ATOM   2445  CG2 VAL C  30     -49.543  16.102  78.871
ATOM   2446  H   VAL C  30     -51.512  19.112  78.686
ATOM   2447  N   LYS C  31     -48.841  20.495  80.761
ATOM   2448  CA  LYS C  31     -48.278  21.826  80.640
ATOM   2449  C   LYS C  31     -46.788  21.664  80.857
ATOM   2450  O   LYS C  31     -46.382  20.703  81.521
ATOM   2451  CB  LYS C  31     -48.871  22.782  81.688
ATOM   2452  CG  LYS C  31     -50.361  23.037  81.538
ATOM   2453  CD  LYS C  31     -51.189  22.224  82.538
ATOM   2454  CE  LYS C  31     -52.680  22.636  82.497
ATOM   2455  NZ  LYS C  31     -53.511  22.110  83.638
ATOM   2456  H   LYS C  31     -48.930  20.030  81.742
ATOM   2457  HZ1 LYS C  31     -54.541  22.449  83.525
ATOM   2458  HZ2 LYS C  31     -53.109  22.479  84.582
ATOM   2459  HZ3 LYS C  31     -53.486  21.020  83.634
ATOM   2460  N   VAL C  32     -45.980  22.507  80.204
ATOM   2461  CA  VAL C  32     -44.527  22.470  80.357
ATOM   2462  C   VAL C  32     -44.026  23.858  80.665
ATOM   2463  O   VAL C  32     -44.299  24.810  79.920
ATOM   2464  CB  VAL C  32     -43.776  21.969  79.106
ATOM   2465  CG1 VAL C  32     -42.265  22.006  79.364
ATOM   2466  CG2 VAL C  32     -44.217  20.552  78.737
ATOM   2467  H   VAL C  32     -46.420  23.246  79.534
ATOM   2468  N   PHE C  33     -43.269  23.967  81.750
ATOM   2469  CA  PHE C  33     -42.720  25.243  82.166
ATOM   2470  C   PHE C  33     -41.198  25.186  82.213
ATOM   2471  O   PHE C  33     -40.623  24.118  82.382
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ATOM   2472  CB  PHE C  33     -43.298  25.619  83.529
ATOM   2473  CG  PHE C  33     -44.801  25.695  83.542
ATOM   2474  CD1 PHE C  33     -45.458  26.819  83.038
ATOM   2475  CD2 PHE C  33     -45.565  24.645  84.058
ATOM   2476  CE1 PHE C  33     -46.843  26.903  83.046
ATOM   2477  CE2 PHE C  33     -46.970  24.721  84.074
ATOM   2478  CZ  PHE C  33     -47.606  25.863  83.562
ATOM   2479  H   PHE C  33     -43.054  23.077  82.341
ATOM   2480  N   LYS C  34     -40.562  26.331  81.979
ATOM   2481  CA  LYS C  34     -39.113  26.461  82.009
ATOM   2482  C   LYS C  34     -38.700  27.500  83.036
ATOM   2483  O   LYS C  34     -39.184  28.629  83.022
ATOM   2484  CB  LYS C  34     -38.568  26.888  80.655
ATOM   2485  CG  LYS C  34     -37.057  26.824  80.640
ATOM   2486  CD  LYS C  34     -36.437  27.403  79.391
ATOM   2487  CE  LYS C  34     -34.924  27.450  79.555
ATOM   2488  NZ  LYS C  34     -34.258  28.015  78.366
ATOM   2489  H   LYS C  34     -41.156  27.217  81.755
ATOM   2490  HZ1 LYS C  34     -33.180  28.030  78.525
ATOM   2491  HZ2 LYS C  34     -34.615  29.032  78.199
ATOM   2492  HZ3 LYS C  34     -34.488  27.402  77.494
ATOM   2493  N   LYS C  35     -37.767  27.142  83.903
ATOM   2494  CA  LYS C  35     -37.310  28.065  84.933
ATOM   2495  C   LYS C  35     -36.427  29.193  84.405
ATOM   2496  O   LYS C  35     -35.378  28.948  83.805
ATOM   2497  CB  LYS C  35     -36.567  27.296  86.008
ATOM   2498  CG  LYS C  35     -36.108  28.135  87.148
ATOM   2499  CD  LYS C  35     -35.513  27.257  88.208
ATOM   2500  CE  LYS C  35     -35.240  28.058  89.458
ATOM   2501  NZ  LYS C  35     -34.298  27.328  90.332
ATOM   2502  H   LYS C  35     -37.334  26.143  83.845
ATOM   2503  HZ1 LYS C  35     -34.108  27.914  91.231
ATOM   2504  HZ2 LYS C  35     -33.361  27.164  89.800
ATOM   2505  HZ3 LYS C  35     -34.732  26.367  90.609
ATOM   2506  N   THR C  36     -36.896  30.427  84.565
ATOM   2507  CA  THR C  36     -36.144  31.613  84.150
ATOM   2508  C   THR C  36     -35.069  31.774  85.213
ATOM   2509  O   THR C  36     -35.365  31.688  86.404
ATOM   2510  CB  THR C  36     -37.039  32.879  84.158
ATOM   2511  OG1 THR C  36     -37.894  32.879  83.008
ATOM   2512  CG2 THR C  36     -36.208  34.140  84.161
ATOM   2513  H   THR C  36     -37.877  30.561  85.022
ATOM   2514  HG1 THR C  36     -38.520  33.771  83.021
ATOM   2515  N   ALA C  37     -33.825  31.974  84.793
ATOM   2516  CA  ALA C  37     -32.727  32.122  85.748
ATOM   2517  C   ALA C  37     -32.977  33.323  86.643
ATOM   2518  O   ALA C  37     -32.592  34.444  86.316
ATOM   2519  CB  ALA C  37     -31.389  32.258  85.023
ATOM   2520  H   ALA C  37     -33.619  32.031  83.724
ATOM   2521  N   ASP C  38     -33.726  33.063  87.716
ATOM   2522  CA  ASP C  38     -34.113  34.027  88.754
ATOM   2523  C   ASP C  38     -35.215  33.417  89.620
ATOM   2524  O   ASP C  38     -35.742  34.073  90.528
ATOM   2525  CB  ASP C  38     -34.566  35.388  88.172
ATOM   2526  CG  ASP C  38     -35.905  35.331  87.421
ATOM   2527  OD1 ASP C  38     -36.554  34.268  87.341
ATOM   2528  OD2 ASP C  38     -36.310  36.386  86.894
ATOM   2529  H   ASP C  38     -34.085  32.040  87.833
ATOM   2530  N   GLY C  39     -35.582  32.176  89.294
ATOM   2531  CA  GLY C  39     -36.620  31.469  90.028
ATOM   2532  C   GLY C  39     -37.782  31.108  89.123
ATOM   2533  O   GLY C  39     -38.104  29.929  88.963
ATOM   2534  H   GLY C  39     -35.094  31.680  88.455
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ATOM   2535  N   SER C  40     -38.364  32.131  88.495
ATOM   2536  CA  SER C  40     -39.504  32.013  87.577
ATOM   2537  C   SER C  40     -39.693  30.679  86.826
ATOM   2538  O   SER C  40     -38.751  29.919  86.615
ATOM   2539  CB  SER C  40     -39.442  33.127  86.522
ATOM   2540  OG  SER C  40     -39.771  34.408  87.029
ATOM   2541  H   SER C  40     -37.963  33.129  88.677
ATOM   2542  HG  SER C  40     -39.706  35.144  86.227
ATOM   2543  N   TRP C  41     -40.933  30.420  86.432
ATOM   2544  CA  TRP C  41     -41.291  29.244  85.654
ATOM   2545  C   TRP C  41     -42.095  29.843  84.511
ATOM   2546  O   TRP C  41     -43.192  30.338  84.748
ATOM   2547  CB  TRP C  41     -42.214  28.306  86.443
ATOM   2548  CG  TRP C  41     -41.528  27.333  87.348
ATOM   2549  CD1 TRP C  41     -41.681  27.226  88.714
ATOM   2550  CD2 TRP C  41     -40.632  26.285  86.964
ATOM   2551  NE1 TRP C  41     -40.941  26.166  89.189
ATOM   2552  CE2 TRP C  41     -40.288  25.573  88.141
ATOM   2553  CE3 TRP C  41     -40.088  25.875  85.744
ATOM   2554  CZ2 TRP C  41     -39.421  24.471  88.126
ATOM   2555  CZ3 TRP C  41     -39.221  24.775  85.733
ATOM   2556  CH2 TRP C  41     -38.899  24.091  86.916
ATOM   2557  H   TRP C  41     -41.721  31.123  86.702
ATOM   2558  HE1 TRP C  41     -40.884  25.851  90.231
ATOM   2559  N   GLU C  42     -41.551  29.890  83.301
ATOM   2560  CA  GLU C  42     -42.327  30.443  82.197
ATOM   2561  C   GLU C  42     -42.895  29.349  81.293
ATOM   2562  O   GLU C  42     -42.342  28.260  81.194
ATOM   2563  CB  GLU C  42     -41.532  31.498  81.417
ATOM   2564  CG  GLU C  42     -40.264  31.007  80.740
ATOM   2565  CD  GLU C  42     -39.281  32.142  80.461
ATOM   2566  OE1 GLU C  42     -39.617  33.326  80.728
ATOM   2567  OE2 GLU C  42     -38.157  31.840  79.998
ATOM   2568  H   GLU C  42     -40.538  29.522  83.136
ATOM   2569  N   PRO C  43     -44.047  29.609  80.664
ATOM   2570  CA  PRO C  43     -44.650  28.609  79.795
ATOM   2571  C   PRO C  43     -43.782  28.246  78.621
ATOM   2572  O   PRO C  43     -43.372  29.119  77.861
ATOM   2573  CB  PRO C  43     -45.930  29.292  79.354
ATOM   2574  CG  PRO C  43     -46.259  30.149  80.537
ATOM   2575  CD  PRO C  43     -44.938  30.770  80.790
ATOM   2576  N   PHE C  44     -43.524  26.951  78.477
ATOM   2577  CA  PHE C  44     -42.703  26.435  77.390
ATOM   2578  C   PHE C  44     -43.582  25.828  76.265
ATOM   2579  O   PHE C  44     -43.463  26.205  75.078
ATOM   2580  CB  PHE C  44     -41.713  25.419  77.950
ATOM   2581  CG  PHE C  44     -40.625  25.048  77.009
ATOM   2582  CD1 PHE C  44     -39.578  25.924  76.760
ATOM   2583  CD2 PHE C  44     -40.614  23.800  76.405
ATOM   2584  CE1 PHE C  44     -38.522  25.556  75.914
ATOM   2585  CE2 PHE C  44     -39.570  23.423  75.569
ATOM   2586  CZ  PHE C  44     -38.520  24.309  75.325
ATOM   2587  H   PHE C  44     -43.944  26.249  79.197
ATOM   2588  N   ALA C  45     -44.500  24.940  76.654
ATOM   2589  CA  ALA C  45     -45.417  24.302  75.706
ATOM   2590  C   ALA C  45     -46.505  23.583  76.478
ATOM   2591  O   ALA C  45     -46.507  23.603  77.699
ATOM   2592  CB  ALA C  45     -44.662  23.330  74.789
ATOM   2593  H   ALA C  45     -44.570  24.680  77.710
ATOM   2594  N   SER C  46     -47.448  22.985  75.762
ATOM   2595  CA  SER C  46     -48.542  22.274  76.385
ATOM   2596  C   SER C  46     -49.341  21.551  75.335
ATOM   2597  O   SER C  46     -49.345  21.947  74.177
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