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ATOM   2598  CB  SER C  46     -49.461  23.238  77.118
ATOM   2599  OG  SER C  46     -50.204  24.013  76.205
ATOM   2600  H   SER C  46     -47.397  23.030  74.674
ATOM   2601  HG  SER C  46     -50.854  24.695  76.753
ATOM   2602  N   GLY C  47     -50.089  20.542  75.766
ATOM   2603  CA  GLY C  47     -50.888  19.775  74.842
ATOM   2604  C   GLY C  47     -51.687  18.712  75.562
ATOM   2605  O   GLY C  47     -51.752  18.703  76.795
ATOM   2606  H   GLY C  47     -50.099  20.292  76.827
ATOM   2607  N   LYS C  48     -52.263  17.797  74.783
ATOM   2608  CA  LYS C  48     -53.102  16.722  75.295
ATOM   2609  C   LYS C  48     -52.656  15.384  74.748
ATOM   2610  O   LYS C  48     -52.294  15.281  73.582
ATOM   2611  CB  LYS C  48     -54.546  16.943  74.862
ATOM   2612  CG  LYS C  48     -55.378  17.785  75.798
ATOM   2613  CD  LYS C  48     -56.761  17.981  75.215
ATOM   2614  CE  LYS C  48     -57.746  18.512  76.246
ATOM   2615  NZ  LYS C  48     -59.164  18.357  75.755
ATOM   2616  H   LYS C  48     -52.098  17.856  73.707
ATOM   2617  HZ1 LYS C  48     -59.853  18.743  76.506
ATOM   2618  HZ2 LYS C  48     -59.374  17.303  75.577
ATOM   2619  HZ3 LYS C  48     -59.290  18.915  74.827
ATOM   2620  N   THR C  49     -52.693  14.360  75.587
ATOM   2621  CA  THR C  49     -52.312  13.032  75.150
ATOM   2622  C   THR C  49     -53.384  12.481  74.208
ATOM   2623  O   THR C  49     -54.565  12.465  74.532
ATOM   2624  CB  THR C  49     -52.096  12.049  76.341
ATOM   2625  OG1 THR C  49     -53.303  11.951  77.111
ATOM   2626  CG2 THR C  49     -50.952  12.523  77.238
ATOM   2627  H   THR C  49     -53.016  14.517  76.616
ATOM   2628  HG1 THR C  49     -53.149  11.263  77.942
ATOM   2629  N   ALA C  50     -52.954  12.079  73.018
ATOM   2630  CA  ALA C  50     -53.843  11.502  72.006
ATOM   2631  C   ALA C  50     -54.297  10.094  72.432
ATOM   2632  O   ALA C  50     -53.898   9.601  73.469
ATOM   2633  CB  ALA C  50     -53.115  11.437  70.660
ATOM   2634  H   ALA C  50     -51.894  12.182  72.783
ATOM   2635  N   GLU C  51     -55.073   9.434  71.585
ATOM   2636  CA  GLU C  51     -55.585   8.087  71.867
ATOM   2637  C   GLU C  51     -54.551   7.038  72.269
ATOM   2638  O   GLU C  51     -54.774   6.242  73.177
ATOM   2639  CB  GLU C  51     -56.440   7.575  70.696
ATOM   2640  CG  GLU C  51     -56.058   8.119  69.328
ATOM   2641  CD  GLU C  51     -54.818   7.465  68.717
ATOM   2642  OE1 GLU C  51     -54.664   6.222  68.825
ATOM   2643  OE2 GLU C  51     -54.019   8.206  68.094
ATOM   2644  H   GLU C  51     -55.342   9.909  70.642
ATOM   2645  N   SER C  52     -53.406   7.057  71.607
ATOM   2646  CA  SER C  52     -52.347   6.108  71.901
ATOM   2647  C   SER C  52     -51.721   6.354  73.271
ATOM   2648  O   SER C  52     -50.836   5.611  73.678
ATOM   2649  CB  SER C  52     -51.256   6.214  70.838
ATOM   2650  OG  SER C  52     -50.518   7.422  70.993
ATOM   2651  H   SER C  52     -53.254   7.800  70.825
ATOM   2652  HG  SER C  52     -49.746   7.478  70.226
ATOM   2653  N   GLY C  53     -52.146   7.420  73.945
ATOM   2654  CA  GLY C  53     -51.605   7.767  75.246
ATOM   2655  C   GLY C  53     -50.430   8.733  75.136
ATOM   2656  O   GLY C  53     -50.066   9.390  76.114
ATOM   2657  H   GLY C  53     -52.921   8.049  73.508
ATOM   2658  N   GLU C  54     -49.834   8.828  73.944
ATOM   2659  CA  GLU C  54     -48.686   9.706  73.729
ATOM   2660  C   GLU C  54     -49.048  11.169  73.593
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ATOM   2661  O   GLU C  54     -50.185  11.543  73.840
ATOM   2662  CB  GLU C  54     -47.917   9.256  72.506
ATOM   2663  CG  GLU C  54     -46.928   8.168  72.800
ATOM   2664  CD  GLU C  54     -46.679   7.243  71.623
ATOM   2665  OE1 GLU C  54     -46.732   7.688  70.456
ATOM   2666  OE2 GLU C  54     -46.438   6.044  71.887
ATOM   2667  H   GLU C  54     -50.214   8.237  73.112
ATOM   2668  N   LEU C  55     -48.049  12.005  73.302
ATOM   2669  CA  LEU C  55     -48.236  13.451  73.101
ATOM   2670  C   LEU C  55     -47.021  13.916  72.334
ATOM   2671  O   LEU C  55     -45.977  14.188  72.919
ATOM   2672  CB  LEU C  55     -48.318  14.234  74.422
ATOM   2673  CG  LEU C  55     -48.947  15.644  74.346
ATOM   2674  CD1 LEU C  55     -48.416  16.492  75.483
ATOM   2675  CD2 LEU C  55     -48.685  16.354  73.005
ATOM   2676  H   LEU C  55     -47.043  11.596  73.208
ATOM   2677  N   HIS C  56     -47.176  14.034  71.023
ATOM   2678  CA  HIS C  56     -46.076  14.428  70.149
ATOM   2679  C   HIS C  56     -46.036  15.884  69.778
ATOM   2680  O   HIS C  56     -47.074  16.489  69.540
ATOM   2681  CB  HIS C  56     -46.149  13.647  68.840
ATOM   2682  CG  HIS C  56     -45.959  12.174  68.994
ATOM   2683  ND1 HIS C  56     -45.631  11.585  70.198
ATOM   2684  CD2 HIS C  56     -46.032  11.172  68.091
ATOM   2685  CE1 HIS C  56     -45.509  10.284  70.027
ATOM   2686  NE2 HIS C  56     -45.744  10.005  68.757
ATOM   2687  H   HIS C  56     -48.153  13.832  70.585
ATOM   2688  HD1 HIS C  56     -45.493  12.113  71.141
ATOM   2689  N   GLY C  57     -44.822  16.418  69.690
ATOM   2690  CA  GLY C  57     -44.632  17.791  69.260
ATOM   2691  C   GLY C  57     -44.444  18.903  70.268
ATOM   2692  O   GLY C  57     -44.535  20.060  69.886
ATOM   2693  H   GLY C  57     -43.953  15.812  69.945
ATOM   2694  N   LEU C  58     -44.111  18.571  71.510
ATOM   2695  CA  LEU C  58     -43.943  19.590  72.534
ATOM   2696  C   LEU C  58     -42.904  20.681  72.256
ATOM   2697  O   LEU C  58     -43.064  21.810  72.717
ATOM   2698  CB  LEU C  58     -43.733  18.950  73.922
ATOM   2699  CG  LEU C  58     -45.001  18.417  74.648
ATOM   2700  CD1 LEU C  58     -44.648  17.796  76.009
ATOM   2701  CD2 LEU C  58     -46.037  19.550  74.848
ATOM   2702  H   LEU C  58     -43.962  17.522  71.765
ATOM   2703  N   THR C  59     -41.855  20.358  71.498
ATOM   2704  CA  THR C  59     -40.809  21.342  71.179
ATOM   2705  C   THR C  59     -39.835  20.743  70.164
ATOM   2706  O   THR C  59     -39.929  19.564  69.849
ATOM   2707  CB  THR C  59     -40.022  21.778  72.481
ATOM   2708  OG1 THR C  59     -39.164  22.887  72.186
ATOM   2709  CG2 THR C  59     -39.155  20.627  73.026
ATOM   2710  H   THR C  59     -41.773  19.345  71.104
ATOM   2711  HG1 THR C  59     -38.627  23.180  73.087
ATOM   2712  N   THR C  60     -38.980  21.573  69.575
ATOM   2713  CA  THR C  60     -37.950  21.081  68.651
ATOM   2714  C   THR C  60     -36.642  21.318  69.395
ATOM   2715  O   THR C  60     -36.659  21.818  70.526
ATOM   2716  CB  THR C  60     -37.893  21.862  67.303
ATOM   2717  OG1 THR C  60     -37.712  23.260  67.547
ATOM   2718  CG2 THR C  60     -39.151  21.649  66.491
ATOM   2719  H   THR C  60     -39.045  22.641  69.782
ATOM   2720  HG1 THR C  60     -37.674  23.793  66.596
ATOM   2721  N   ASP C  61     -35.516  20.987  68.768
ATOM   2722  CA  ASP C  61     -34.221  21.186  69.399
ATOM   2723  C   ASP C  61     -33.834  22.663  69.479
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ATOM   2724  O   ASP C  61     -33.150  23.095  70.409
ATOM   2725  CB  ASP C  61     -33.143  20.409  68.662
ATOM   2726  CG  ASP C  61     -33.237  18.896  68.891
ATOM   2727  OD1 ASP C  61     -32.977  18.425  70.019
ATOM   2728  OD2 ASP C  61     -33.553  18.175  67.925
ATOM   2729  H   ASP C  61     -35.567  20.560  67.766
ATOM   2730  N   GLU C  62     -34.270  23.449  68.512
ATOM   2731  CA  GLU C  62     -33.915  24.846  68.528
ATOM   2732  C   GLU C  62     -34.503  25.519  69.789
ATOM   2733  O   GLU C  62     -33.828  26.299  70.461
ATOM   2734  CB  GLU C  62     -34.368  25.501  67.215
ATOM   2735  CG  GLU C  62     -34.096  27.023  67.069
ATOM   2736  CD  GLU C  62     -34.014  27.503  65.597
ATOM   2737  OE1 GLU C  62     -33.787  26.662  64.691
ATOM   2738  OE2 GLU C  62     -34.138  28.727  65.349
ATOM   2739  H   GLU C  62     -34.889  23.046  67.711
ATOM   2740  N   LYS C  63     -35.735  25.162  70.132
ATOM   2741  CA  LYS C  63     -36.420  25.736  71.293
ATOM   2742  C   LYS C  63     -35.968  25.078  72.605
ATOM   2743  O   LYS C  63     -35.558  25.758  73.549
ATOM   2744  CB  LYS C  63     -37.940  25.596  71.110
ATOM   2745  CG  LYS C  63     -38.768  26.360  72.102
ATOM   2746  CD  LYS C  63     -40.226  26.201  71.809
ATOM   2747  CE  LYS C  63     -41.055  26.947  72.831
ATOM   2748  NZ  LYS C  63     -41.749  28.152  72.258
ATOM   2749  H   LYS C  63     -36.255  24.417  69.528
ATOM   2750  HZ1 LYS C  63     -42.327  28.645  73.040
ATOM   2751  HZ2 LYS C  63     -42.417  27.840  71.456
ATOM   2752  HZ3 LYS C  63     -41.006  28.846  71.864
ATOM   2753  N   PHE C  64     -36.039  23.748  72.624
ATOM   2754  CA  PHE C  64     -35.648  22.909  73.760
ATOM   2755  C   PHE C  64     -34.191  23.226  74.118
ATOM   2756  O   PHE C  64     -33.274  22.777  73.421
ATOM   2757  CB  PHE C  64     -35.780  21.448  73.327
ATOM   2758  CG  PHE C  64     -35.745  20.462  74.452
ATOM   2759  CD1 PHE C  64     -36.416  20.718  75.635
ATOM   2760  CD2 PHE C  64     -35.052  19.258  74.309
ATOM   2761  CE1 PHE C  64     -36.410  19.791  76.664
ATOM   2762  CE2 PHE C  64     -35.033  18.323  75.329
ATOM   2763  CZ  PHE C  64     -35.711  18.583  76.511
ATOM   2764  H   PHE C  64     -36.414  23.249  71.730
ATOM   2765  N   THR C  65     -33.974  23.983  75.197
ATOM   2766  CA  THR C  65     -32.613  24.373  75.564
ATOM   2767  C   THR C  65     -32.056  23.856  76.877
ATOM   2768  O   THR C  65     -32.765  23.242  77.677
ATOM   2769  CB  THR C  65     -32.459  25.909  75.591
ATOM   2770  OG1 THR C  65     -33.410  26.462  76.501
ATOM   2771  CG2 THR C  65     -32.676  26.514  74.198
ATOM   2772  H   THR C  65     -34.815  24.311  75.808
ATOM   2773  HG1 THR C  65     -33.305  27.547  76.522
ATOM   2774  N   GLU C  66     -30.758  24.064  77.070
ATOM   2775  CA  GLU C  66     -30.111  23.660  78.306
ATOM   2776  C   GLU C  66     -30.865  24.435  79.382
ATOM   2777  O   GLU C  66     -31.191  25.602  79.191
ATOM   2778  CB  GLU C  66     -28.631  24.090  78.294
ATOM   2779  CG  GLU C  66     -27.719  23.481  79.395
ATOM   2780  CD  GLU C  66     -27.816  24.168  80.761
ATOM   2781  OE1 GLU C  66     -28.166  25.368  80.818
ATOM   2782  OE2 GLU C  66     -27.520  23.511  81.788
ATOM   2783  H   GLU C  66     -30.169  24.547  76.290
ATOM   2784  N   GLY C  67     -31.183  23.771  80.482
ATOM   2785  CA  GLY C  67     -31.876  24.434  81.559
ATOM   2786  C   GLY C  67     -32.834  23.481  82.192
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ATOM   2787  O   GLY C  67     -33.092  22.429  81.609
ATOM   2788  H   GLY C  67     -30.919  22.718  80.576
ATOM   2789  N   VAL C  68     -33.309  23.812  83.396
ATOM   2790  CA  VAL C  68     -34.269  22.963  84.119
ATOM   2791  C   VAL C  68     -35.679  23.231  83.590
ATOM   2792  O   VAL C  68     -35.997  24.351  83.185
ATOM   2793  CB  VAL C  68     -34.178  23.132  85.684
ATOM   2794  CG1 VAL C  68     -34.328  24.584  86.095
ATOM   2795  CG2 VAL C  68     -35.222  22.283  86.381
ATOM   2796  H   VAL C  68     -32.974  24.741  83.857
ATOM   2797  N   TYR C  69     -36.478  22.169  83.520
ATOM   2798  CA  TYR C  69     -37.841  22.215  83.011
ATOM   2799  C   TYR C  69     -38.803  21.635  84.024
ATOM   2800  O   TYR C  69     -38.395  21.225  85.123
ATOM   2801  CB  TYR C  69     -37.922  21.402  81.700
ATOM   2802  CG  TYR C  69     -37.337  22.131  80.507
ATOM   2803  CD1 TYR C  69     -38.051  23.148  79.866
ATOM   2804  CD2 TYR C  69     -36.057  21.849  80.054
ATOM   2805  CE1 TYR C  69     -37.494  23.865  78.808
ATOM   2806  CE2 TYR C  69     -35.496  22.550  79.004
ATOM   2807  CZ  TYR C  69     -36.213  23.561  78.378
ATOM   2808  OH  TYR C  69     -35.644  24.262  77.321
ATOM   2809  H   TYR C  69     -36.090  21.211  83.865
ATOM   2810  HH  TYR C  69     -34.641  23.882  77.131
ATOM   2811  N   ARG C  70     -40.073  21.539  83.639
ATOM   2812  CA  ARG C  70     -41.084  20.968  84.521
ATOM   2813  C   ARG C  70     -42.322  20.497  83.753
ATOM   2814  O   ARG C  70     -43.001  21.296  83.126
ATOM   2815  CB  ARG C  70     -41.443  21.977  85.619
ATOM   2816  CG  ARG C  70     -42.622  22.869  85.334
ATOM   2817  CD  ARG C  70     -43.802  22.394  86.151
ATOM   2818  NE  ARG C  70     -43.533  22.637  87.562
ATOM   2819  CZ  ARG C  70     -43.812  23.780  88.175
ATOM   2820  NH1 ARG C  70     -44.385  24.765  87.501
ATOM   2821  NH2 ARG C  70     -43.456  23.965  89.442
ATOM   2822  H   ARG C  70     -40.361  21.892  82.649
ATOM   2823  HE  ARG C  70     -43.078  21.836  88.145
ATOM   2824  HH1 ARG C  70     -44.537  25.618  88.162
ATOM   2825  HH1 ARG C  70     -44.662  24.729  86.447
ATOM   2826  HH2 ARG C  70     -43.770  24.958  89.766
ATOM   2827  HH2 ARG C  70     -42.932  23.237  90.061
ATOM   2828  N   VAL C  71     -42.551  19.188  83.711
ATOM   2829  CA  VAL C  71     -43.715  18.652  83.012
ATOM   2830  C   VAL C  71     -44.800  18.525  84.068
ATOM   2831  O   VAL C  71     -44.555  18.066  85.186
ATOM   2832  CB  VAL C  71     -43.413  17.287  82.320
ATOM   2833  CG1 VAL C  71     -44.593  16.838  81.494
ATOM   2834  CG2 VAL C  71     -42.212  17.419  81.398
ATOM   2835  H   VAL C  71     -41.861  18.506  84.207
ATOM   2836  N   GLU C  72     -46.008  18.924  83.719
ATOM   2837  CA  GLU C  72     -47.094  18.913  84.687
ATOM   2838  C   GLU C  72     -48.364  18.263  84.123
ATOM   2839  O   GLU C  72     -49.179  18.929  83.492
ATOM   2840  CB  GLU C  72     -47.351  20.374  85.105
ATOM   2841  CG  GLU C  72     -48.002  20.565  86.451
ATOM   2842  CD  GLU C  72     -48.816  21.816  86.497
ATOM   2843  OE1 GLU C  72     -50.003  21.731  86.136
ATOM   2844  OE2 GLU C  72     -48.280  22.881  86.866
ATOM   2845  H   GLU C  72     -46.193  19.268  82.701
ATOM   2846  N   LEU C  73     -48.491  16.948  84.300
ATOM   2847  CA  LEU C  73     -49.654  16.181  83.823
ATOM   2848  C   LEU C  73     -50.775  16.275  84.856
ATOM   2849  O   LEU C  73     -50.617  15.784  85.976
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ATOM   2850  CB  LEU C  73     -49.315  14.702  83.687
ATOM   2851  CG  LEU C  73     -48.125  14.145  82.918
ATOM   2852  CD1 LEU C  73     -46.785  14.736  83.397
ATOM   2853  CD2 LEU C  73     -48.168  12.640  83.150
ATOM   2854  H   LEU C  73     -47.697  16.416  84.824
ATOM   2855  N   ASP C  74     -51.927  16.819  84.467
ATOM   2856  CA  ASP C  74     -53.020  16.953  85.418
ATOM   2857  C   ASP C  74     -53.826  15.709  85.701
ATOM   2858  O   ASP C  74     -55.000  15.604  85.363
ATOM   2859  CB  ASP C  74     -53.979  18.094  85.101
ATOM   2860  CG  ASP C  74     -54.948  18.333  86.260
ATOM   2861  OD1 ASP C  74     -54.488  18.254  87.418
ATOM   2862  OD2 ASP C  74     -56.156  18.527  86.038
ATOM   2863  H   ASP C  74     -52.051  17.160  83.439
ATOM   2864  N   THR C  75     -53.215  14.852  86.488
ATOM   2865  CA  THR C  75     -53.801  13.610  86.895
ATOM   2866  C   THR C  75     -55.195  13.728  87.540
ATOM   2867  O   THR C  75     -56.044  12.850  87.321
ATOM   2868  CB  THR C  75     -52.825  12.924  87.834
ATOM   2869  OG1 THR C  75     -52.232  13.889  88.690
ATOM   2870  CG2 THR C  75     -51.689  12.233  87.072
ATOM   2871  H   THR C  75     -52.216  15.098  86.847
ATOM   2872  HG1 THR C  75     -51.532  13.395  89.363
ATOM   2873  N   LYS C  76     -55.465  14.799  88.293
ATOM   2874  CA  LYS C  76     -56.795  14.949  88.892
ATOM   2875  C   LYS C  76     -57.961  15.072  87.891
ATOM   2876  O   LYS C  76     -58.888  14.254  87.912
ATOM   2877  CB  LYS C  76     -56.862  16.100  89.892
ATOM   2878  CG  LYS C  76     -58.275  16.274  90.460
ATOM   2879  CD  LYS C  76     -58.358  17.350  91.531
ATOM   2880  CE  LYS C  76     -57.819  16.852  92.886
ATOM   2881  NZ  LYS C  76     -57.705  17.995  93.818
ATOM   2882  H   LYS C  76     -54.699  15.556  88.461
ATOM   2883  HZ1 LYS C  76     -57.324  17.645  94.777
ATOM   2884  HZ2 LYS C  76     -58.687  18.447  93.961
ATOM   2885  HZ3 LYS C  76     -57.022  18.736  93.403
ATOM   2886  N   SER C  77     -57.915  16.063  87.005
ATOM   2887  CA  SER C  77     -58.995  16.235  86.021
ATOM   2888  C   SER C  77     -59.345  14.951  85.294
ATOM   2889  O   SER C  77     -60.505  14.733  84.960
ATOM   2890  CB  SER C  77     -58.654  17.313  84.998
ATOM   2891  OG  SER C  77     -59.076  18.587  85.451
ATOM   2892  H   SER C  77     -57.071  16.752  87.007
ATOM   2893  HG  SER C  77     -58.823  19.340  84.706
ATOM   2894  N   TYR C  78     -58.342  14.091  85.130
ATOM   2895  CA  TYR C  78     -58.456  12.808  84.453
ATOM   2896  C   TYR C  78     -59.337  11.778  85.154
ATOM   2897  O   TYR C  78     -60.355  11.355  84.599
ATOM   2898  CB  TYR C  78     -57.061  12.231  84.235
ATOM   2899  CG  TYR C  78     -57.048  10.869  83.572
ATOM   2900  CD1 TYR C  78     -57.622  10.683  82.318
ATOM   2901  CD2 TYR C  78     -56.407   9.780  84.177
ATOM   2902  CE1 TYR C  78     -57.556   9.473  81.682
ATOM   2903  CE2 TYR C  78     -56.337   8.554  83.542
ATOM   2904  CZ  TYR C  78     -56.914   8.409  82.303
ATOM   2905  OH  TYR C  78     -56.907   7.189  81.690
ATOM   2906  H   TYR C  78     -57.367  14.367  85.531
ATOM   2907  HH  TYR C  78     -56.365   6.474  82.309
ATOM   2908  N   TRP C  79     -58.913  11.314  86.332
ATOM   2909  CA  TRP C  79     -59.698  10.337  87.074
ATOM   2910  C   TRP C  79     -61.048  10.936  87.390
ATOM   2911  O   TRP C  79     -62.061  10.283  87.209
ATOM   2912  CB  TRP C  79     -59.021   9.947  88.383
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ATOM   2913  CG  TRP C  79     -57.724   9.270  88.188
ATOM   2914  CD1 TRP C  79     -56.494   9.781  88.455
ATOM   2915  CD2 TRP C  79     -57.509   7.952  87.674
ATOM   2916  NE1 TRP C  79     -55.523   8.866  88.141
ATOM   2917  CE2 TRP C  79     -56.123   7.733  87.654
ATOM   2918  CE3 TRP C  79     -58.355   6.939  87.224
ATOM   2919  CZ2 TRP C  79     -55.560   6.538  87.198
ATOM   2920  CZ3 TRP C  79     -57.789   5.748  86.772
ATOM   2921  CH2 TRP C  79     -56.410   5.563  86.763
ATOM   2922  H   TRP C  79     -57.968  11.669  86.741
ATOM   2923  HE1 TRP C  79     -54.450   9.013  88.259
ATOM   2924  N   LYS C  80     -61.054  12.206  87.783
ATOM   2925  CA  LYS C  80     -62.267  12.945  88.141
ATOM   2926  C   LYS C  80     -63.349  12.894  87.085
ATOM   2927  O   LYS C  80     -64.523  12.866  87.405
ATOM   2928  CB  LYS C  80     -61.920  14.404  88.467
ATOM   2929  CG  LYS C  80     -62.823  15.048  89.529
ATOM   2930  CD  LYS C  80     -62.782  14.336  90.898
ATOM   2931  CE  LYS C  80     -62.641  15.335  92.072
ATOM   2932  NZ  LYS C  80     -63.648  16.460  92.077
ATOM   2933  H   LYS C  80     -60.099  12.728  87.844
ATOM   2934  HZ1 LYS C  80     -63.467  17.105  92.937
ATOM   2935  HZ2 LYS C  80     -64.654  16.047  92.138
ATOM   2936  HZ3 LYS C  80     -63.548  17.041  91.160
ATOM   2937  N   ALA C  81     -62.941  12.857  85.829
ATOM   2938  CA  ALA C  81     -63.857  12.784  84.703
ATOM   2939  C   ALA C  81     -64.460  11.380  84.563
ATOM   2940  O   ALA C  81     -65.298  11.145  83.691
ATOM   2941  CB  ALA C  81     -63.120  13.143  83.448
ATOM   2942  H   ALA C  81     -61.870  12.884  85.629
ATOM   2943  N   LEU C  82     -63.973  10.442  85.367
ATOM   2944  CA  LEU C  82     -64.457   9.066  85.356
ATOM   2945  C   LEU C  82     -65.383   8.768  86.539
ATOM   2946  O   LEU C  82     -66.216   7.852  86.471
ATOM   2947  CB  LEU C  82     -63.292   8.078  85.431
ATOM   2948  CG  LEU C  82     -62.195   8.082  84.390
ATOM   2949  CD1 LEU C  82     -61.255   6.935  84.722
ATOM   2950  CD2 LEU C  82     -62.767   7.957  82.992
ATOM   2951  H   LEU C  82     -63.179  10.711  86.064
ATOM   2952  N   GLY C  83     -65.186   9.518  87.629
ATOM   2953  CA  GLY C  83     -65.968   9.341  88.842
ATOM   2954  C   GLY C  83     -65.117   9.036  90.067
ATOM   2955  O   GLY C  83     -65.639   8.958  91.189
ATOM   2956  H   GLY C  83     -64.414  10.288  87.607
ATOM   2957  N   ILE C  84     -63.811   8.879  89.860
ATOM   2958  CA  ILE C  84     -62.876   8.581  90.943
ATOM   2959  C   ILE C  84     -62.187   9.853  91.468
ATOM   2960  O   ILE C  84     -61.615  10.624  90.680
ATOM   2961  CB  ILE C  84     -61.774   7.579  90.484
ATOM   2962  CG1 ILE C  84     -62.405   6.281  89.948
ATOM   2963  CG2 ILE C  84     -60.829   7.286  91.642
ATOM   2964  CD1 ILE C  84     -61.452   5.391  89.122
ATOM   2965  H   ILE C  84     -63.425   8.973  88.845
ATOM   2966  N   SER C  85     -62.301  10.100  92.778
ATOM   2967  CA  SER C  85     -61.649  11.254  93.423
ATOM   2968  C   SER C  85     -60.240  10.798  93.777
ATOM   2969  O   SER C  85     -60.066  10.021  94.726
ATOM   2970  CB  SER C  85     -62.381  11.690  94.708
ATOM   2971  OG  SER C  85     -63.663  12.240  94.433
ATOM   2972  H   SER C  85     -62.896   9.423  93.390
ATOM   2973  HG  SER C  85     -64.141  12.533  95.368
ATOM   2974  N   PRO C  86     -59.231  11.216  92.979
ATOM   2975  CA  PRO C  86     -57.829  10.854  93.190
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ATOM   2976  C   PRO C  86     -57.166  11.566  94.345
ATOM   2977  O   PRO C  86     -57.652  12.576  94.846
ATOM   2978  CB  PRO C  86     -57.182  11.243  91.866
ATOM   2979  CG  PRO C  86     -57.940  12.449  91.477
ATOM   2980  CD  PRO C  86     -59.369  12.045  91.767
ATOM   2981  N   PHE C  87     -56.021  11.044  94.737
ATOM   2982  CA  PHE C  87     -55.257  11.602  95.836
ATOM   2983  C   PHE C  87     -54.526  12.842  95.376
ATOM   2984  O   PHE C  87     -54.717  13.921  95.915
ATOM   2985  CB  PHE C  87     -54.237  10.576  96.290
ATOM   2986  CG  PHE C  87     -53.610  10.873  97.612
ATOM   2987  CD1 PHE C  87     -54.284  10.583  98.789
ATOM   2988  CD2 PHE C  87     -52.318  11.387  97.684
ATOM   2989  CE1 PHE C  87     -53.682  10.785 100.015
ATOM   2990  CE2 PHE C  87     -51.715  11.595  98.908
ATOM   2991  CZ  PHE C  87     -52.403  11.292 100.077
ATOM   2992  H   PHE C  87     -55.638  10.164  94.221
ATOM   2993  N   HIS C  88     -53.688  12.670  94.358
ATOM   2994  CA  HIS C  88     -52.865  13.753  93.814
ATOM   2995  C   HIS C  88     -53.649  14.830  93.065
ATOM   2996  O   HIS C  88     -54.637  14.535  92.364
ATOM   2997  CB  HIS C  88     -51.769  13.188  92.905
ATOM   2998  CG  HIS C  88     -50.955  12.098  93.537
ATOM   2999  ND1 HIS C  88     -51.351  10.775  93.536
ATOM   3000  CD2 HIS C  88     -49.784  12.141  94.217
ATOM   3001  CE1 HIS C  88     -50.460  10.056  94.198
ATOM   3002  NE2 HIS C  88     -49.499  10.860  94.617
ATOM   3003  H   HIS C  88     -53.611  11.681  93.907
ATOM   3004  HD1 HIS C  88     -52.252  10.387  93.062
ATOM   3005  N   GLU C  89     -53.194  16.077  93.231
ATOM   3006  CA  GLU C  89     -53.810  17.242  92.605
ATOM   3007  C   GLU C  89     -53.366  17.254  91.162
ATOM   3008  O   GLU C  89     -54.077  17.723  90.275
ATOM   3009  CB  GLU C  89     -53.315  18.544  93.258
ATOM   3010  CG  GLU C  89     -53.567  18.708  94.763
ATOM   3011  CD  GLU C  89     -55.038  18.687  95.121
ATOM   3012  OE1 GLU C  89     -55.725  19.718  94.904
ATOM   3013  OE2 GLU C  89     -55.505  17.627  95.620
ATOM   3014  H   GLU C  89     -52.320  16.230  93.864
ATOM   3015  N   TYR C  90     -52.143  16.781  90.955
ATOM   3016  CA  TYR C  90     -51.527  16.734  89.636
ATOM   3017  C   TYR C  90     -50.220  15.976  89.791
ATOM   3018  O   TYR C  90     -49.900  15.507  90.892
ATOM   3019  CB  TYR C  90     -51.285  18.154  89.125
ATOM   3020  CG  TYR C  90     -50.638  19.062  90.141
ATOM   3021  CD1 TYR C  90     -49.289  18.927  90.473
ATOM   3022  CD2 TYR C  90     -51.366  20.054  90.767
ATOM   3023  CE1 TYR C  90     -48.683  19.761  91.404
ATOM   3024  CE2 TYR C  90     -50.772  20.893  91.699
ATOM   3025  CZ  TYR C  90     -49.429  20.742  92.013
ATOM   3026  OH  TYR C  90     -48.844  21.579  92.947
ATOM   3027  H   TYR C  90     -51.575  16.411  91.809
ATOM   3028  HH  TYR C  90     -49.586  22.287  93.316
ATOM   3029  N   ALA C  91     -49.457  15.873  88.715
ATOM   3030  CA  ALA C  91     -48.190  15.145  88.750
ATOM   3031  C   ALA C  91     -47.109  15.927  88.021
ATOM   3032  O   ALA C  91     -47.378  16.612  87.025
ATOM   3033  CB  ALA C  91     -48.354  13.749  88.124
ATOM   3034  H   ALA C  91     -49.780  16.339  87.784
ATOM   3035  N   GLU C  92     -45.883  15.840  88.519
ATOM   3036  CA  GLU C  92     -44.804  16.571  87.883
ATOM   3037  C   GLU C  92     -43.511  15.836  87.760
ATOM   3038  O   GLU C  92     -43.236  14.855  88.451
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ATOM   3039  CB  GLU C  92     -44.518  17.852  88.611
ATOM   3040  CG  GLU C  92     -45.630  18.826  88.582
ATOM   3041  CD  GLU C  92     -45.214  20.130  89.192
ATOM   3042  OE1 GLU C  92     -44.579  20.084  90.278
ATOM   3043  OE2 GLU C  92     -45.496  21.183  88.567
ATOM   3044  H   GLU C  92     -45.688  15.225  89.397
ATOM   3045  N   VAL C  93     -42.691  16.348  86.866
ATOM   3046  CA  VAL C  93     -41.381  15.784  86.639
ATOM   3047  C   VAL C  93     -40.507  17.007  86.421
ATOM   3048  O   VAL C  93     -40.717  17.796  85.487
ATOM   3049  CB  VAL C  93     -41.383  14.846  85.423
ATOM   3050  CG1 VAL C  93     -39.996  14.314  85.194
ATOM   3051  CG2 VAL C  93     -42.363  13.728  85.648
ATOM   3052  H   VAL C  93     -43.008  17.214  86.285
ATOM   3053  N   VAL C  94     -39.594  17.219  87.351
ATOM   3054  CA  VAL C  94     -38.721  18.373  87.281
ATOM   3055  C   VAL C  94     -37.370  17.790  86.918
ATOM   3056  O   VAL C  94     -36.960  16.769  87.490
ATOM   3057  CB  VAL C  94     -38.698  19.103  88.640
ATOM   3058  CG1 VAL C  94     -38.049  20.457  88.509
ATOM   3059  CG2 VAL C  94     -40.110  19.239  89.158
ATOM   3060  H   VAL C  94     -39.497  16.520  88.181
ATOM   3061  N   PHE C  95     -36.694  18.401  85.948
ATOM   3062  CA  PHE C  95     -35.413  17.868  85.496
ATOM   3063  C   PHE C  95     -34.657  18.850  84.639
ATOM   3064  O   PHE C  95     -35.240  19.740  84.052
ATOM   3065  CB  PHE C  95     -35.646  16.561  84.699
ATOM   3066  CG  PHE C  95     -36.406  16.765  83.419
ATOM   3067  CD1 PHE C  95     -37.793  16.862  83.423
ATOM   3068  CD2 PHE C  95     -35.724  16.915  82.199
ATOM   3069  CE1 PHE C  95     -38.497  17.133  82.220
ATOM   3070  CE2 PHE C  95     -36.416  17.183  80.998
ATOM   3071  CZ  PHE C  95     -37.804  17.288  81.008
ATOM   3072  H   PHE C  95     -37.098  19.303  85.489
ATOM   3073  N   THR C  96     -33.353  18.653  84.537
ATOM   3074  CA  THR C  96     -32.514  19.529  83.719
ATOM   3075  C   THR C  96     -32.282  18.851  82.373
ATOM   3076  O   THR C  96     -32.015  17.648  82.303
ATOM   3077  CB  THR C  96     -31.141  19.764  84.360
ATOM   3078  OG1 THR C  96     -31.299  20.017  85.766
ATOM   3079  CG2 THR C  96     -30.447  20.947  83.677
ATOM   3080  H   THR C  96     -32.896  17.821  85.073
ATOM   3081  HG1 THR C  96     -30.322  20.183  86.218
ATOM   3082  N   ALA C  97     -32.327  19.627  81.310
ATOM   3083  CA  ALA C  97     -32.152  19.047  80.007
ATOM   3084  C   ALA C  97     -31.062  19.742  79.206
ATOM   3085  O   ALA C  97     -30.699  20.887  79.495
ATOM   3086  CB  ALA C  97     -33.477  19.091  79.264
ATOM   3087  H   ALA C  97     -32.495  20.698  81.418
ATOM   3088  N   ASN C  98     -30.488  19.014  78.257
ATOM   3089  CA  ASN C  98     -29.466  19.558  77.371
ATOM   3090  C   ASN C  98     -28.168  20.079  77.990
ATOM   3091  O   ASN C  98     -27.340  20.657  77.279
ATOM   3092  CB  ASN C  98     -30.085  20.657  76.496
ATOM   3093  CG  ASN C  98     -31.100  20.119  75.487
ATOM   3094  OD1 ASN C  98     -31.140  18.923  75.193
ATOM   3095  ND2 ASN C  98     -31.896  21.019  74.918
ATOM   3096  H   ASN C  98     -30.789  17.973  78.136
ATOM   3097  HD2 ASN C  98     -32.571  20.519  74.223
ATOM   3098  HD2 ASN C  98     -31.878  22.090  75.118
ATOM   3099  N   ASP C  99     -27.986  19.865  79.294
ATOM   3100  CA  ASP C  99     -26.792  20.313  80.042
ATOM   3101  C   ASP C  99     -25.553  19.437  79.821
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ATOM   3102  O   ASP C  99     -24.429  19.936  79.759
ATOM   3103  CB  ASP C  99     -27.110  20.312  81.528
ATOM   3104  CG  ASP C  99     -27.586  18.966  81.993
ATOM   3105  OD1 ASP C  99     -28.805  18.698  81.892
ATOM   3106  OD2 ASP C  99     -26.726  18.150  82.394
ATOM   3107  H   ASP C  99     -28.763  19.331  79.840
ATOM   3108  N   SER C 100     -25.758  18.123  79.799
ATOM   3109  CA  SER C 100     -24.671  17.186  79.570
ATOM   3110  C   SER C 100     -24.701  16.830  78.081
ATOM   3111  O   SER C 100     -24.195  15.789  77.671
ATOM   3112  CB  SER C 100     -24.823  15.924  80.451
ATOM   3113  OG  SER C 100     -25.990  15.144  80.161
ATOM   3114  H   SER C 100     -26.767  17.740  79.956
ATOM   3115  HG  SER C 100     -26.022  14.278  80.822
ATOM   3116  N   GLY C 101     -25.298  17.715  77.281
ATOM   3117  CA  GLY C 101     -25.407  17.502  75.851
ATOM   3118  C   GLY C 101     -26.874  17.539  75.463
ATOM   3119  O   GLY C 101     -27.745  17.308  76.315
ATOM   3120  H   GLY C 101     -25.717  18.623  77.715
ATOM   3121  N   HIS C 102     -27.164  17.879  74.207
ATOM   3122  CA  HIS C 102     -28.547  17.930  73.735
ATOM   3123  C   HIS C 102     -28.984  16.487  73.491
ATOM   3124  O   HIS C 102     -28.431  15.791  72.632
ATOM   3125  CB  HIS C 102     -28.653  18.734  72.430
ATOM   3126  CG  HIS C 102     -29.937  19.495  72.280
ATOM   3127  ND1 HIS C 102     -29.971  20.840  71.970
ATOM   3128  CD2 HIS C 102     -31.228  19.106  72.401
ATOM   3129  CE1 HIS C 102     -31.226  21.247  71.908
ATOM   3130  NE2 HIS C 102     -32.011  20.214  72.167
ATOM   3131  H   HIS C 102     -26.356  18.125  73.519
ATOM   3132  HD1 HIS C 102     -29.096  21.469  71.804
ATOM   3133  N   ARG C 103     -29.987  16.053  74.244
ATOM   3134  CA  ARG C 103     -30.496  14.696  74.140
ATOM   3135  C   ARG C 103     -31.945  14.709  73.660
ATOM   3136  O   ARG C 103     -32.490  15.769  73.329
ATOM   3137  CB  ARG C 103     -30.458  14.069  75.534
ATOM   3138  CG  ARG C 103     -29.101  14.052  76.151
ATOM   3139  CD  ARG C 103     -28.287  13.012  75.446
ATOM   3140  NE  ARG C 103     -26.887  13.391  75.365
ATOM   3141  CZ  ARG C 103     -26.060  13.426  76.402
ATOM   3142  NH1 ARG C 103     -26.481  13.103  77.625
ATOM   3143  NH2 ARG C 103     -24.809  13.793  76.210
ATOM   3144  H   ARG C 103     -30.442  16.736  74.961
ATOM   3145  HE  ARG C 103     -26.490  13.666  74.388
ATOM   3146  HH1 ARG C 103     -25.655  13.196  78.330
ATOM   3147  HH1 ARG C 103     -27.495  12.795  77.881
ATOM   3148  HH2 ARG C 103     -24.272  13.766  77.159
ATOM   3149  HH2 ARG C 103     -24.378  14.080  75.251
ATOM   3150  N   HIS C 104     -32.553  13.521  73.624
ATOM   3151  CA  HIS C 104     -33.966  13.329  73.276
ATOM   3152  C   HIS C 104     -34.583  12.552  74.449
ATOM   3153  O   HIS C 104     -34.223  11.405  74.730
ATOM   3154  CB  HIS C 104     -34.127  12.556  71.968
ATOM   3155  CG  HIS C 104     -34.061  13.415  70.752
ATOM   3156  ND1 HIS C 104     -34.620  13.046  69.552
ATOM   3157  CD2 HIS C 104     -33.528  14.646  70.557
ATOM   3158  CE1 HIS C 104     -34.438  14.010  68.665
ATOM   3159  NE2 HIS C 104     -33.780  14.991  69.253
ATOM   3160  H   HIS C 104     -31.963  12.639  73.871
ATOM   3161  HD1 HIS C 104     -35.133  12.104  69.360
ATOM   3162  N   TYR C 105     -35.464  13.216  75.174
ATOM   3163  CA  TYR C 105     -36.069  12.623  76.346
ATOM   3164  C   TYR C 105     -37.444  12.039  76.096
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ATOM   3165  O   TYR C 105     -38.080  12.311  75.075
ATOM   3166  CB  TYR C 105     -36.138  13.667  77.472
ATOM   3167  CG  TYR C 105     -34.785  14.233  77.875
ATOM   3168  CD1 TYR C 105     -34.190  15.276  77.156
ATOM   3169  CD2 TYR C 105     -34.084  13.693  78.959
ATOM   3170  CE1 TYR C 105     -32.941  15.756  77.506
ATOM   3171  CE2 TYR C 105     -32.841  14.162  79.308
ATOM   3172  CZ  TYR C 105     -32.274  15.191  78.580
ATOM   3173  OH  TYR C 105     -31.026  15.638  78.939
ATOM   3174  H   TYR C 105     -35.740  14.230  74.884
ATOM   3175  HH  TYR C 105     -30.671  15.073  79.801
ATOM   3176  N   THR C 106     -37.883  11.224  77.045
ATOM   3177  CA  THR C 106     -39.186  10.610  77.017
ATOM   3178  C   THR C 106     -39.572  10.334  78.437
ATOM   3179  O   THR C 106     -38.948   9.512  79.114
ATOM   3180  CB  THR C 106     -39.171   9.312  76.277
ATOM   3181  OG1 THR C 106     -38.840   9.575  74.907
ATOM   3182  CG2 THR C 106     -40.536   8.633  76.373
ATOM   3183  H   THR C 106     -37.226  11.009  77.888
ATOM   3184  HG1 THR C 106     -38.824   8.637  74.351
ATOM   3185  N   ILE C 107     -40.579  11.067  78.886
ATOM   3186  CA  ILE C 107     -41.124  10.954  80.219
ATOM   3187  C   ILE C 107     -42.386  10.122  80.128
ATOM   3188  O   ILE C 107     -43.361  10.537  79.500
ATOM   3189  CB  ILE C 107     -41.425  12.341  80.772
ATOM   3190  CG1 ILE C 107     -40.135  12.930  81.339
ATOM   3191  CG2 ILE C 107     -42.541  12.303  81.808
ATOM   3192  CD1 ILE C 107     -40.239  14.355  81.689
ATOM   3193  H   ILE C 107     -41.022  11.799  78.210
ATOM   3194  N   ALA C 108     -42.326   8.918  80.697
ATOM   3195  CA  ALA C 108     -43.454   7.973  80.708
ATOM   3196  C   ALA C 108     -44.057   7.970  82.101
ATOM   3197  O   ALA C 108     -43.322   8.035  83.078
ATOM   3198  CB  ALA C 108     -42.976   6.592  80.338
ATOM   3199  H   ALA C 108     -41.395   8.618  81.178
ATOM   3200  N   ALA C 109     -45.379   7.863  82.203
ATOM   3201  CA  ALA C 109     -46.048   7.889  83.509
ATOM   3202  C   ALA C 109     -47.156   6.858  83.658
ATOM   3203  O   ALA C 109     -48.015   6.719  82.777
ATOM   3204  CB  ALA C 109     -46.612   9.268  83.764
ATOM   3205  H   ALA C 109     -45.977   7.753  81.298
ATOM   3206  N   LEU C 110     -47.129   6.128  84.771
ATOM   3207  CA  LEU C 110     -48.139   5.121  85.054
ATOM   3208  C   LEU C 110     -49.068   5.661  86.129
ATOM   3209  O   LEU C 110     -48.637   5.906  87.259
ATOM   3210  CB  LEU C 110     -47.494   3.839  85.537
ATOM   3211  CG  LEU C 110     -48.468   2.671  85.651
ATOM   3212  CD1 LEU C 110     -48.986   2.310  84.276
ATOM   3213  CD2 LEU C 110     -47.774   1.504  86.298
ATOM   3214  H   LEU C 110     -46.325   6.288  85.489
ATOM   3215  N   LEU C 111     -50.341   5.833  85.785
ATOM   3216  CA  LEU C 111     -51.309   6.379  86.721
ATOM   3217  C   LEU C 111     -52.171   5.372  87.456
ATOM   3218  O   LEU C 111     -52.442   4.289  86.948
ATOM   3219  CB  LEU C 111     -52.229   7.350  86.008
ATOM   3220  CG  LEU C 111     -51.589   8.556  85.349
ATOM   3221  CD1 LEU C 111     -52.686   9.452  84.776
ATOM   3222  CD2 LEU C 111     -50.761   9.305  86.367
ATOM   3223  H   LEU C 111     -50.664   5.559  84.781
ATOM   3224  N   SER C 112     -52.590   5.771  88.656
ATOM   3225  CA  SER C 112     -53.478   5.011  89.545
ATOM   3226  C   SER C 112     -53.985   5.997  90.590
ATOM   3227  O   SER C 112     -53.191   6.667  91.247
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ATOM   3228  CB  SER C 112     -52.748   3.853  90.216
ATOM   3229  OG  SER C 112     -52.320   2.926  89.241
ATOM   3230  H   SER C 112     -52.247   6.745  89.007
ATOM   3231  HG  SER C 112     -51.799   2.102  89.727
ATOM   3232  N   PRO C 113     -55.308   6.056  90.803
ATOM   3233  CA  PRO C 113     -55.971   6.947  91.758
ATOM   3234  C   PRO C 113     -55.142   7.421  92.964
ATOM   3235  O   PRO C 113     -55.132   8.630  93.278
ATOM   3236  CB  PRO C 113     -57.189   6.139  92.174
ATOM   3237  CG  PRO C 113     -57.570   5.494  90.910
ATOM   3238  CD  PRO C 113     -56.231   4.977  90.409
ATOM   3239  N   TYR C 114     -54.445   6.499  93.629
ATOM   3240  CA  TYR C 114     -53.631   6.882  94.780
ATOM   3241  C   TYR C 114     -52.124   6.679  94.597
ATOM   3242  O   TYR C 114     -51.351   6.936  95.525
ATOM   3243  CB  TYR C 114     -54.108   6.173  96.056
ATOM   3244  CG  TYR C 114     -55.413   6.681  96.612
ATOM   3245  CD1 TYR C 114     -56.582   6.635  95.854
ATOM   3246  CD2 TYR C 114     -55.482   7.217  97.904
ATOM   3247  CE1 TYR C 114     -57.799   7.123  96.365
ATOM   3248  CE2 TYR C 114     -56.696   7.703  98.436
ATOM   3249  CZ  TYR C 114     -57.850   7.657  97.656
ATOM   3250  OH  TYR C 114     -59.045   8.159  98.141
ATOM   3251  H   TYR C 114     -54.481   5.457  93.311
ATOM   3252  HH  TYR C 114     -58.899   8.531  99.155
ATOM   3253  N   SER C 115     -51.704   6.264  93.401
ATOM   3254  CA  SER C 115     -50.284   6.044  93.117
ATOM   3255  C   SER C 115     -49.871   6.343  91.666
ATOM   3256  O   SER C 115     -50.711   6.336  90.765
ATOM   3257  CB  SER C 115     -49.908   4.607  93.484
ATOM   3258  OG  SER C 115     -48.634   4.281  92.970
ATOM   3259  H   SER C 115     -52.437   6.082  92.616
ATOM   3260  HG  SER C 115     -48.385   3.255  93.241
ATOM   3261  N   TYR C 116     -48.597   6.673  91.459
ATOM   3262  CA  TYR C 116     -48.070   6.935  90.118
ATOM   3263  C   TYR C 116     -46.569   6.764  90.009
ATOM   3264  O   TYR C 116     -45.849   6.737  91.012
ATOM   3265  CB  TYR C 116     -48.531   8.281  89.526
ATOM   3266  CG  TYR C 116     -47.812   9.527  89.987
ATOM   3267  CD1 TYR C 116     -46.550   9.855  89.492
ATOM   3268  CD2 TYR C 116     -48.422  10.428  90.874
ATOM   3269  CE1 TYR C 116     -45.911  11.043  89.863
ATOM   3270  CE2 TYR C 116     -47.784  11.630  91.250
ATOM   3271  CZ  TYR C 116     -46.534  11.921  90.733
ATOM   3272  OH  TYR C 116     -45.926  13.097  91.049
ATOM   3273  H   TYR C 116     -47.926   6.750  92.315
ATOM   3274  HH  TYR C 116     -46.555  13.657  91.741
ATOM   3275  N   SER C 117     -46.110   6.603  88.772
ATOM   3276  CA  SER C 117     -44.699   6.397  88.481
ATOM   3277  C   SER C 117     -44.276   7.106  87.213
ATOM   3278  O   SER C 117     -45.009   7.124  86.220
ATOM   3279  CB  SER C 117     -44.415   4.911  88.282
ATOM   3280  OG  SER C 117     -45.145   4.121  89.201
ATOM   3281  H   SER C 117     -46.817   6.629  87.943
ATOM   3282  HG  SER C 117     -44.921   3.068  89.033
ATOM   3283  N   THR C 118     -43.080   7.669  87.239
ATOM   3284  CA  THR C 118     -42.533   8.323  86.068
ATOM   3285  C   THR C 118     -41.177   7.710  85.869
ATOM   3286  O   THR C 118     -40.533   7.289  86.843
ATOM   3287  CB  THR C 118     -42.374   9.827  86.242
ATOM   3288  OG1 THR C 118     -42.007  10.137  87.598
ATOM   3289  CG2 THR C 118     -43.633  10.500  85.865
ATOM   3290  H   THR C 118     -42.495   7.642  88.159
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ATOM   3291  HG1 THR C 118     -41.897  11.216  87.707
ATOM   3292  N   THR C 119     -40.772   7.602  84.613
ATOM   3293  CA  THR C 119     -39.477   7.032  84.265
ATOM   3294  C   THR C 119     -38.972   7.818  83.060
ATOM   3295  O   THR C 119     -39.768   8.352  82.268
ATOM   3296  CB  THR C 119     -39.600   5.525  83.920
ATOM   3297  OG1 THR C 119     -38.325   5.000  83.530
ATOM   3298  CG2 THR C 119     -40.569   5.320  82.784
ATOM   3299  H   THR C 119     -41.428   7.950  83.815
ATOM   3300  HG1 THR C 119     -38.427   3.941  83.291
ATOM   3301  N   ALA C 120     -37.660   7.931  82.929
ATOM   3302  CA  ALA C 120     -37.128   8.671  81.809
ATOM   3303  C   ALA C 120     -36.128   7.887  81.000
ATOM   3304  O   ALA C 120     -35.318   7.138  81.545
ATOM   3305  CB  ALA C 120     -36.527   9.988  82.270
ATOM   3306  H   ALA C 120     -36.991   7.476  83.659
ATOM   3307  N   VAL C 121     -36.253   8.014  79.687
ATOM   3308  CA  VAL C 121     -35.363   7.376  78.763
ATOM   3309  C   VAL C 121     -34.642   8.520  78.071
ATOM   3310  O   VAL C 121     -35.272   9.380  77.435
ATOM   3311  CB  VAL C 121     -36.137   6.499  77.757
ATOM   3312  CG1 VAL C 121     -35.259   6.125  76.578
ATOM   3313  CG2 VAL C 121     -36.615   5.245  78.459
ATOM   3314  H   VAL C 121     -37.065   8.626  79.295
ATOM   3315  N   VAL C 122     -33.334   8.580  78.299
ATOM   3316  CA  VAL C 122     -32.477   9.605  77.736
ATOM   3317  C   VAL C 122     -31.874   8.942  76.514
ATOM   3318  O   VAL C 122     -31.324   7.833  76.593
ATOM   3319  CB  VAL C 122     -31.377  10.023  78.752
ATOM   3320  CG1 VAL C 122     -30.408  10.983  78.122
ATOM   3321  CG2 VAL C 122     -32.008  10.675  79.989
ATOM   3322  H   VAL C 122     -32.883   7.822  78.940
ATOM   3323  N   SER C 123     -32.037   9.588  75.368
ATOM   3324  CA  SER C 123     -31.542   9.038  74.121
ATOM   3325  C   SER C 123     -30.855  10.088  73.293
ATOM   3326  O   SER C 123     -31.407  11.155  73.033
ATOM   3327  CB  SER C 123     -32.704   8.462  73.312
ATOM   3328  OG  SER C 123     -32.260   7.862  72.102
ATOM   3329  H   SER C 123     -32.553  10.548  75.364
ATOM   3330  HG  SER C 123     -33.117   7.465  71.557
ATOM   3331  N   ASN C 124     -29.646   9.777  72.859
ATOM   3332  CA  ASN C 124     -28.924  10.701  72.016
ATOM   3333  C   ASN C 124     -29.713  10.651  70.718
ATOM   3334  O   ASN C 124     -30.471   9.701  70.492
ATOM   3335  CB  ASN C 124     -27.501  10.200  71.788
ATOM   3336  CG  ASN C 124     -26.470  11.292  71.962
ATOM   3337  OD1 ASN C 124     -26.803  12.476  72.017
ATOM   3338  ND2 ASN C 124     -25.206  10.897  72.070
ATOM   3339  H   ASN C 124     -29.195   8.825  73.137
ATOM   3340  HD2 ASN C 124     -24.563  11.769  72.191
ATOM   3341  HD2 ASN C 124     -24.865   9.862  72.045
ATOM   3342  N   PRO C 125     -29.654  11.710  69.898
ATOM   3343  CA  PRO C 125     -30.414  11.646  68.640
ATOM   3344  C   PRO C 125     -29.774  10.585  67.741
ATOM   3345  O   PRO C 125     -28.966   9.775  68.205
ATOM   3346  CB  PRO C 125     -30.219  13.044  68.055
ATOM   3347  CG  PRO C 125     -30.018  13.904  69.277
ATOM   3348  CD  PRO C 125     -29.101  13.056  70.115
ATOM   3349  N   GLN C 126     -30.148  10.547  66.469
ATOM   3350  CA  GLN C 126     -29.522   9.579  65.581
ATOM   3351  C   GLN C 126     -28.250  10.286  65.110
ATOM   3352  O   GLN C 126     -28.178  10.764  63.974
ATOM   3353  CB  GLN C 126     -30.439   9.245  64.407
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ATOM   3354  CG  GLN C 126     -30.058   7.980  63.636
ATOM   3355  CD  GLN C 126     -28.611   7.979  63.179
ATOM   3356  OE1 GLN C 126     -27.763   7.314  63.773
ATOM   3357  NE2 GLN C 126     -28.316   8.751  62.141
ATOM   3358  H   GLN C 126     -30.912  11.230  66.096
ATOM   3359  HE2 GLN C 126     -27.254   8.662  61.913
ATOM   3360  HE2 GLN C 126     -29.025   9.377  61.600
ATOM   3361  N   ASN C 127     -27.286  10.395  66.022
ATOM   3362  CA  ASN C 127     -26.005  11.063  65.781
ATOM   3363  C   ASN C 127     -25.132  10.732  67.004
ATOM   3364  OCT ASN C 127     -24.821   9.533  67.188
ATOM   3365  CB  ASN C 127     -26.220  12.594  65.668
ATOM   3366  CG  ASN C 127     -25.310  13.264  64.620
ATOM   3367  OD1 ASN C 127     -24.119  13.509  64.855
ATOM   3368  ND2 ASN C 127     -25.897  13.612  63.477
ATOM   3369  OCT ASN C 127     -24.811  11.650  67.794
ATOM   3370  H   ASN C 127     -27.460   9.962  67.007
ATOM   3371  HD2 ASN C 127     -25.162  14.073  62.817
ATOM   3372  HD2 ASN C 127     -26.949  13.459  63.237
TER
ATOM   3373  N   SER D   8     -48.525   5.045 114.299
ATOM   3374  CA  SER D   8     -49.926   5.047 114.794
ATOM   3375  C   SER D   8     -50.304   6.454 115.249
ATOM   3376  O   SER D   8     -51.029   7.168 114.551
ATOM   3377  CB  SER D   8     -50.072   4.067 115.966
ATOM   3378  OG  SER D   8     -49.195   4.420 117.028
ATOM   3379  H1  SER D   8     -48.256   4.041 113.973
ATOM   3380  H2  SER D   8     -47.856   5.359 115.100
ATOM   3381  H3  SER D   8     -48.436   5.735 113.460
ATOM   3382  HG  SER D   8     -49.314   3.712 117.848
ATOM   3383  N   LYS D   9     -49.749   6.869 116.384
ATOM   3384  CA  LYS D   9     -50.028   8.182 116.947
ATOM   3385  C   LYS D   9     -49.307   9.287 116.146
ATOM   3386  O   LYS D   9     -48.733  10.211 116.718
ATOM   3387  CB  LYS D   9     -49.629   8.195 118.436
ATOM   3388  CG  LYS D   9     -50.260   9.310 119.304
ATOM   3389  CD  LYS D   9     -51.793   9.389 119.177
ATOM   3390  CE  LYS D   9     -52.218  10.343 118.053
ATOM   3391  NZ  LYS D   9     -53.684  10.373 117.775
ATOM   3392  H   LYS D   9     -49.062   6.204 116.909
ATOM   3393  HZ1 LYS D   9     -53.886  11.074 116.966
ATOM   3394  HZ2 LYS D   9     -54.217  10.688 118.672
ATOM   3395  HZ3 LYS D   9     -54.019   9.377 117.485
ATOM   3396  N   CYS D  10     -49.390   9.199 114.816
ATOM   3397  CA  CYS D  10     -48.761  10.151 113.905
ATOM   3398  C   CYS D  10     -49.609  10.239 112.632
ATOM   3399  O   CYS D  10     -49.846   9.230 111.947
ATOM   3400  CB  CYS D  10     -47.340   9.698 113.575
ATOM   3401  SG  CYS D  10     -46.474  10.815 112.482
ATOM   3402  H   CYS D  10     -49.957   8.373 114.388
ATOM   3403  N   PRO D  11     -50.122  11.443 112.334
ATOM   3404  CA  PRO D  11     -50.968  11.759 111.181
ATOM   3405  C   PRO D  11     -50.340  11.689 109.807
ATOM   3406  O   PRO D  11     -50.996  11.285 108.870
ATOM   3407  CB  PRO D  11     -51.430  13.192 111.465
ATOM   3408  CG  PRO D  11     -51.179  13.388 112.905
ATOM   3409  CD  PRO D  11     -49.914  12.644 113.153
ATOM   3410  N   LEU D  12     -49.092  12.119 109.686
ATOM   3411  CA  LEU D  12     -48.406  12.149 108.404
ATOM   3412  C   LEU D  12     -47.010  11.581 108.564
ATOM   3413  O   LEU D  12     -46.233  12.063 109.392
ATOM   3414  CB  LEU D  12     -48.341  13.595 107.930
ATOM   3415  CG  LEU D  12     -47.580  14.152 106.724
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ATOM   3416  CD1 LEU D  12     -47.829  13.351 105.428
ATOM   3417  CD2 LEU D  12     -47.998  15.619 106.564
ATOM   3418  H   LEU D  12     -48.565  12.462 110.576
ATOM   3419  N   MET D  13     -46.732  10.509 107.820
ATOM   3420  CA  MET D  13     -45.436   9.836 107.841
ATOM   3421  C   MET D  13     -44.954   9.698 106.393
ATOM   3422  O   MET D  13     -45.758   9.688 105.455
ATOM   3423  CB  MET D  13     -45.574   8.422 108.436
ATOM   3424  CG  MET D  13     -46.335   8.335 109.748
ATOM   3425  SD  MET D  13     -47.575   6.990 109.828
ATOM   3426  CE  MET D  13     -47.384   6.431 111.523
ATOM   3427  H   MET D  13     -47.511  10.116 107.167
ATOM   3428  N   VAL D  14     -43.650   9.581 106.200
ATOM   3429  CA  VAL D  14     -43.116   9.392 104.864
ATOM   3430  C   VAL D  14     -42.086   8.294 104.931
ATOM   3431  O   VAL D  14     -41.155   8.371 105.711
ATOM   3432  CB  VAL D  14     -42.401  10.626 104.328
ATOM   3433  CG1 VAL D  14     -41.860  10.319 102.928
ATOM   3434  CG2 VAL D  14     -43.321  11.841 104.329
ATOM   3435  H   VAL D  14     -42.971   9.631 107.051
ATOM   3436  N   ALA D  15     -42.221   7.302 104.070
ATOM   3437  CA  ALA D  15     -41.292   6.192 104.025
ATOM   3438  C   ALA D  15     -40.681   6.101 102.635
ATOM   3439  O   ALA D  15     -41.365   5.753 101.681
ATOM   3440  CB  ALA D  15     -42.028   4.904 104.349
ATOM   3449  N   VAL D  16     -39.393   6.403 102.527
ATOM   3450  CA  VAL D  16     -38.667   6.343 101.261
ATOM   3451  C   VAL D  16     -37.793   5.070 101.188
ATOM   3452  O   VAL D  16     -37.202   4.662 102.186
ATOM   3453  CB  VAL D  16     -37.736   7.570 101.108
ATOM   3454  CG1 VAL D  16     -37.319   7.728  99.659
ATOM   3455  CG2 VAL D  16     -38.400   8.840 101.640
ATOM   3456  H   VAL D  16     -38.853   6.710 103.422
ATOM   3457  N   LEU D  17     -37.696   4.462 100.005
ATOM   3458  CA  LEU D  17     -36.881   3.253  99.783
ATOM   3459  C   LEU D  17     -35.904   3.470  98.627
ATOM   3460  O   LEU D  17     -36.142   4.281  97.728
ATOM   3461  CB  LEU D  17     -37.761   2.059  99.450
ATOM   3462  CG  LEU D  17     -38.863   1.740 100.457
ATOM   3463  CD1 LEU D  17     -40.065   1.275  99.682
ATOM   3464  CD2 LEU D  17     -38.431   0.707 101.459
ATOM   3465  H   LEU D  17     -38.245   4.878  99.161
ATOM   3466  N   ASP D  18     -34.829   2.700  98.625
ATOM   3467  CA  ASP D  18     -33.801   2.802  97.607
ATOM   3468  C   ASP D  18     -33.762   1.496  96.792
ATOM   3469  O   ASP D  18     -33.281   0.485  97.285
ATOM   3470  CB  ASP D  18     -32.472   3.067  98.335
ATOM   3471  CG  ASP D  18     -31.292   3.232  97.396
ATOM   3472  OD1 ASP D  18     -31.427   2.970  96.169
ATOM   3473  OD2 ASP D  18     -30.216   3.631  97.897
ATOM   3474  H   ASP D  18     -34.711   1.962  99.418
ATOM   3475  N   ALA D  19     -34.239   1.530  95.549
ATOM   3476  CA  ALA D  19     -34.280   0.339  94.673
ATOM   3477  C   ALA D  19     -32.936  -0.209  94.209
ATOM   3478  O   ALA D  19     -32.838  -1.388  93.835
ATOM   3479  CB  ALA D  19     -35.151   0.579  93.470
ATOM   3480  H   ALA D  19     -34.613   2.476  95.160
ATOM   3481  N   VAL D  20     -31.924   0.652  94.157
ATOM   3482  CA  VAL D  20     -30.590   0.212  93.769
ATOM   3483  C   VAL D  20     -29.993  -0.650  94.887
ATOM   3484  O   VAL D  20     -29.714  -1.834  94.682
ATOM   3485  CB  VAL D  20     -29.660   1.419  93.462
ATOM   3486  CG1 VAL D  20     -28.195   0.992  93.442
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ATOM   3487  CG2 VAL D  20     -30.032   2.039  92.111
ATOM   3488  H   VAL D  20     -32.095   1.699  94.408
ATOM   3489  N   ARG D  21     -29.924  -0.081  96.092
ATOM   3490  CA  ARG D  21     -29.344  -0.747  97.266
ATOM   3491  C   ARG D  21     -30.133  -1.859  97.939
ATOM   3492  O   ARG D  21     -29.545  -2.669  98.635
ATOM   3493  CB  ARG D  21     -28.984   0.288  98.337
ATOM   3494  CG  ARG D  21     -27.655   0.000  98.997
ATOM   3495  CD  ARG D  21     -27.332   0.919 100.169
ATOM   3496  NE  ARG D  21     -27.544   2.330  99.859
ATOM   3497  CZ  ARG D  21     -26.953   3.343 100.490
ATOM   3498  NH1 ARG D  21     -26.081   3.116 101.468
ATOM   3499  NH2 ARG D  21     -27.316   4.594 100.209
ATOM   3500  H   ARG D  21     -30.317   0.928  96.210
ATOM   3501  HE  ARG D  21     -28.237   2.572  99.053
ATOM   3502  HH1 ARG D  21     -25.712   4.066 101.853
ATOM   3503  HH1 ARG D  21     -25.782   2.132 101.828
ATOM   3504  HH2 ARG D  21     -26.731   5.287 100.815
ATOM   3505  HH2 ARG D  21     -28.078   4.881  99.485
ATOM   3506  N   GLY D  22     -31.454  -1.863  97.793
ATOM   3507  CA  GLY D  22     -32.280  -2.881  98.421
ATOM   3508  C   GLY D  22     -32.519  -2.670  99.914
ATOM   3509  O   GLY D  22     -32.885  -3.608 100.642
ATOM   3510  H   GLY D  22     -31.927  -1.087  97.191
ATOM   3511  N   SER D  23     -32.303  -1.434 100.355
ATOM   3512  CA  SER D  23     -32.444  -1.010 101.749
ATOM   3513  C   SER D  23     -33.163   0.314 101.680
ATOM   3514  O   SER D  23     -33.095   0.978 100.654
ATOM   3515  CB  SER D  23     -31.064  -0.717 102.291
ATOM   3516  OG  SER D  23     -30.450   0.202 101.404
ATOM   3517  H   SER D  23     -32.000  -0.682  99.626
ATOM   3518  HG  SER D  23     -29.448   0.439 101.762
ATOM   3519  N   PRO D  24     -33.766   0.772 102.791
ATOM   3520  CA  PRO D  24     -34.487   2.052 102.810
ATOM   3521  C   PRO D  24     -33.560   3.209 102.518
ATOM   3522  O   PRO D  24     -32.370   3.143 102.812
ATOM   3523  CB  PRO D  24     -35.006   2.123 104.234
ATOM   3524  CG  PRO D  24     -33.936   1.432 104.983
ATOM   3525  CD  PRO D  24     -33.714   0.204 104.144
ATOM   3526  N   ALA D  25     -34.102   4.258 101.915
ATOM   3527  CA  ALA D  25     -33.296   5.416 101.582
ATOM   3528  C   ALA D  25     -33.102   6.241 102.849
ATOM   3529  O   ALA D  25     -34.015   6.924 103.318
ATOM   3530  CB  ALA D  25     -33.965   6.217 100.501
ATOM   3531  H   ALA D  25     -35.163   4.249 101.668
ATOM   3532  N   VAL D  26     -31.925   6.105 103.441
ATOM   3533  CA  VAL D  26     -31.598   6.812 104.667
ATOM   3534  C   VAL D  26     -31.167   8.231 104.345
ATOM   3535  O   VAL D  26     -30.716   8.507 103.235
ATOM   3536  CB  VAL D  26     -30.498   6.054 105.477
ATOM   3537  CG1 VAL D  26     -30.274   6.694 106.840
ATOM   3538  CG2 VAL D  26     -30.918   4.635 105.679
ATOM   3539  H   VAL D  26     -31.182   5.444 102.996
ATOM   3540  N   ASP D  27     -31.370   9.126 105.316
ATOM   3541  CA  ASP D  27     -31.039  10.544 105.206
ATOM   3542  C   ASP D  27     -31.408  11.267 103.884
ATOM   3543  O   ASP D  27     -30.567  11.893 103.230
ATOM   3544  CB  ASP D  27     -29.577  10.779 105.608
ATOM   3545  CG  ASP D  27     -29.423  11.127 107.085
ATOM   3546  OD1 ASP D  27     -30.071  10.487 107.960
ATOM   3547  OD2 ASP D  27     -28.645  12.063 107.371
ATOM   3548  H   ASP D  27     -31.812   8.775 106.249
ATOM   3549  N   VAL D  28     -32.683  11.183 103.521
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ATOM   3552  O   VAL D  28     -35.004  12.762 103.656
ATOM   3553  CB  VAL D  28     -34.153  10.840 101.549
ATOM   3554  CG1 VAL D  28     -35.057  11.559 100.574
ATOM   3555  CG2 VAL D  28     -33.305   9.820 100.798
ATOM   3556  H   VAL D  28     -33.356  10.590 104.141
ATOM   3557  N   ALA D  29     -33.598  14.225 102.732
ATOM   3558  CA  ALA D  29     -34.274  15.401 103.300
ATOM   3559  C   ALA D  29     -35.657  15.760 102.773
ATOM   3560  O   ALA D  29     -35.811  16.162 101.607
ATOM   3561  CB  ALA D  29     -33.375  16.619 103.202
ATOM   3562  H   ALA D  29     -32.713  14.371 102.113
ATOM   3563  N   VAL D  30     -36.654  15.656 103.647
ATOM   3564  CA  VAL D  30     -38.017  15.999 103.275
ATOM   3565  C   VAL D  30     -38.380  17.409 103.732
ATOM   3566  O   VAL D  30     -37.873  17.905 104.746
ATOM   3567  CB  VAL D  30     -39.018  14.992 103.807
ATOM   3568  CG1 VAL D  30     -40.417  15.346 103.335
ATOM   3569  CG2 VAL D  30     -38.648  13.626 103.315
ATOM   3570  H   VAL D  30     -36.446  15.304 104.657
ATOM   3571  N   LYS D  31     -39.193  18.086 102.933
ATOM   3572  CA  LYS D  31     -39.615  19.448 103.244
ATOM   3573  C   LYS D  31     -41.105  19.612 102.947
ATOM   3574  O   LYS D  31     -41.508  19.756 101.790
ATOM   3575  CB  LYS D  31     -38.783  20.456 102.443
ATOM   3576  CG  LYS D  31     -39.171  21.926 102.681
ATOM   3577  CD  LYS D  31     -39.063  22.367 104.149
ATOM   3578  CE  LYS D  31     -40.026  23.516 104.486
ATOM   3579  NZ  LYS D  31     -39.649  24.862 103.956
ATOM   3580  H   LYS D  31     -39.556  17.614 102.020
ATOM   3581  HZ1 LYS D  31     -40.400  25.593 104.255
ATOM   3582  HZ2 LYS D  31     -39.595  24.821 102.868
ATOM   3583  HZ3 LYS D  31     -38.679  25.151 104.359
ATOM   3584  N   VAL D  32     -41.915  19.582 104.003
ATOM   3585  CA  VAL D  32     -43.359  19.709 103.865
ATOM   3586  C   VAL D  32     -43.825  21.167 103.972
ATOM   3587  O   VAL D  32     -43.488  21.891 104.916
ATOM   3588  CB  VAL D  32     -44.118  18.804 104.887
ATOM   3589  CG1 VAL D  32     -45.574  18.646 104.492
ATOM   3590  CG2 VAL D  32     -43.485  17.454 104.951
ATOM   3591  H   VAL D  32     -41.485  19.459 104.997
ATOM   3592  N   PHE D  33     -44.586  21.587 102.974
ATOM   3593  CA  PHE D  33     -45.114  22.931 102.899
ATOM   3594  C   PHE D  33     -46.601  22.836 103.036
ATOM   3595  O   PHE D  33     -47.173  21.767 102.829
ATOM   3596  CB  PHE D  33     -44.820  23.535 101.537
ATOM   3597  CG  PHE D  33     -43.367  23.696 101.254
ATOM   3598  CD1 PHE D  33     -42.705  24.866 101.615
ATOM   3599  CD2 PHE D  33     -42.660  22.686 100.600
ATOM   3600  CE1 PHE D  33     -41.365  25.028 101.332
ATOM   3601  CE2 PHE D  33     -41.313  22.844 100.315
ATOM   3602  CZ  PHE D  33     -40.665  24.023 100.680
ATOM   3603  H   PHE D  33     -44.825  20.888 102.172
ATOM   3604  N   LYS D  34     -47.225  23.949 103.407
ATOM   3605  CA  LYS D  34     -48.677  24.007 103.527
ATOM   3606  C   LYS D  34     -49.093  25.272 102.800
ATOM   3607  O   LYS D  34     -48.521  26.339 103.021
ATOM   3608  CB  LYS D  34     -49.133  24.035 104.991
ATOM   3609  CG  LYS D  34     -50.664  23.960 105.178
ATOM   3610  CD  LYS D  34     -51.022  23.911 106.684
ATOM   3611  CE  LYS D  34     -52.524  23.852 106.955
ATOM   3612  NZ  LYS D  34     -53.083  22.476 106.805
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ATOM   3615  HZ2 LYS D  34     -52.590  21.806 107.509
ATOM   3616  HZ3 LYS D  34     -52.913  22.124 105.788
ATOM   3617  N   LYS D  35     -50.017  25.127 101.865
ATOM   3618  CA  LYS D  35     -50.485  26.267 101.103
ATOM   3619  C   LYS D  35     -51.299  27.149 102.033
ATOM   3620  O   LYS D  35     -52.240  26.673 102.661
ATOM   3621  CB  LYS D  35     -51.371  25.799  99.950
ATOM   3622  CG  LYS D  35     -51.448  26.772  98.785
ATOM   3623  CD  LYS D  35     -52.533  26.349  97.794
ATOM   3624  CE  LYS D  35     -52.415  27.041  96.428
ATOM   3625  NZ  LYS D  35     -51.356  26.459  95.529
ATOM   3626  H   LYS D  35     -50.433  24.140 101.666
ATOM   3627  HZ1 LYS D  35     -51.340  27.006  94.586
ATOM   3628  HZ2 LYS D  35     -51.579  25.410  95.336
ATOM   3629  HZ3 LYS D  35     -50.383  26.541  96.013
ATOM   3630  N   THR D  36     -50.898  28.406 102.171
ATOM   3631  CA  THR D  36     -51.621  29.361 103.009
ATOM   3632  C   THR D  36     -52.898  29.799 102.310
ATOM   3633  O   THR D  36     -53.189  29.363 101.198
ATOM   3634  CB  THR D  36     -50.786  30.633 103.278
ATOM   3635  OG1 THR D  36     -49.920  30.897 102.161
ATOM   3636  CG2 THR D  36     -49.981  30.485 104.551
ATOM   3637  H   THR D  36     -50.003  28.736 101.644
ATOM   3638  HG1 THR D  36     -49.336  31.795 102.359
ATOM   3639  N   ALA D  37     -53.624  30.719 102.931
ATOM   3640  CA  ALA D  37     -54.865  31.212 102.350
ATOM   3641  C   ALA D  37     -54.621  32.164 101.177
ATOM   3642  O   ALA D  37     -55.469  32.293 100.303
ATOM   3643  CB  ALA D  37     -55.713  31.885 103.409
ATOM   3644  H   ALA D  37     -53.287  31.111 103.891
ATOM   3645  N   ASP D  38     -53.473  32.840 101.167
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ATOM   3648  O   ASP D  38     -52.856  33.596  97.707
ATOM   3649  CB  ASP D  38     -51.961  34.663 100.439
ATOM   3650  CG  ASP D  38     -50.612  34.020 100.104
ATOM   3651  OD1 ASP D  38     -50.112  34.188  98.956
ATOM   3652  OD2 ASP D  38     -50.057  33.343 100.994
ATOM   3653  H   ASP D  38     -52.761  32.703 101.981
ATOM   3654  N   GLY D  39     -52.567  31.703  98.909
ATOM   3655  CA  GLY D  39     -52.263  30.887  97.748
ATOM   3656  C   GLY D  39     -50.826  30.390  97.695
ATOM   3657  O   GLY D  39     -50.514  29.493  96.903
ATOM   3658  H   GLY D  39     -52.557  31.249  99.900
ATOM   3659  N   SER D  40     -49.953  30.957  98.531
ATOM   3660  CA  SER D  40     -48.540  30.560  98.553
ATOM   3661  C   SER D  40     -48.217  29.347  99.439
ATOM   3662  O   SER D  40     -49.096  28.816 100.125
ATOM   3663  CB  SER D  40     -47.654  31.747  98.940
ATOM   3664  OG  SER D  40     -47.842  32.109 100.292
ATOM   3665  H   SER D  40     -50.299  31.734  99.214
ATOM   3666  HG  SER D  40     -47.199  32.955 100.535
ATOM   3667  N   TRP D  41     -46.943  28.959  99.484
ATOM   3668  CA  TRP D  41     -46.543  27.802 100.276
ATOM   3669  C   TRP D  41     -45.736  28.026 101.560
ATOM   3670  O   TRP D  41     -44.518  27.877 101.584
ATOM   3671  CB  TRP D  41     -45.844  26.805  99.375
ATOM   3672  CG  TRP D  41     -46.741  26.361  98.308
ATOM   3673  CD1 TRP D  41     -46.851  26.893  97.058
ATOM   3674  CD2 TRP D  41     -47.697  25.298  98.387
ATOM   3675  NE1 TRP D  41     -47.820  26.224  96.351
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ATOM   3676  CE2 TRP D  41     -48.356  25.240  97.142
ATOM   3677  CE3 TRP D  41     -48.058  24.389  99.390
ATOM   3678  CZ2 TRP D  41     -49.358  24.307  96.868
ATOM   3679  CZ3 TRP D  41     -49.053  23.461  99.119
ATOM   3680  CH2 TRP D  41     -49.692  23.429  97.864
ATOM   3681  H   TRP D  41     -46.192  29.513  98.921
ATOM   3682  HE1 TRP D  41     -48.116  26.442  95.325
ATOM   3683  N   GLU D  42     -46.447  28.262 102.651
ATOM   3684  CA  GLU D  42     -45.824  28.498 103.934
ATOM   3685  C   GLU D  42     -45.267  27.191 104.511
ATOM   3686  O   GLU D  42     -45.946  26.165 104.509
ATOM   3687  CB  GLU D  42     -46.861  29.118 104.857
ATOM   3688  CG  GLU D  42     -46.461  29.201 106.304
ATOM   3689  CD  GLU D  42     -47.596  28.818 107.250
ATOM   3690  OE1 GLU D  42     -48.324  27.828 106.983
ATOM   3691  OE2 GLU D  42     -47.754  29.499 108.282
ATOM   3692  H   GLU D  42     -47.535  28.279 102.579
ATOM   3693  N   PRO D  43     -43.993  27.204 104.951
ATOM   3694  CA  PRO D  43     -43.257  26.073 105.539
ATOM   3695  C   PRO D  43     -44.124  25.301 106.529
ATOM   3696  O   PRO D  43     -44.746  25.922 107.393
ATOM   3697  CB  PRO D  43     -42.115  26.767 106.276
ATOM   3698  CG  PRO D  43     -41.816  27.939 105.406
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ATOM   3700  N   PHE D  44     -44.133  23.968 106.449
ATOM   3701  CA  PHE D  44     -44.966  23.162 107.353
ATOM   3702  C   PHE D  44     -44.240  22.213 108.323
ATOM   3703  O   PHE D  44     -44.466  22.257 109.526
ATOM   3704  CB  PHE D  44     -46.008  22.386 106.552
ATOM   3705  CG  PHE D  44     -47.090  21.780 107.396
ATOM   3706  CD1 PHE D  44     -47.985  22.589 108.078
ATOM   3707  CD2 PHE D  44     -47.218  20.397 107.506
ATOM   3708  CE1 PHE D  44     -48.990  22.044 108.856
ATOM   3709  CE2 PHE D  44     -48.227  19.836 108.288
ATOM   3710  CZ  PHE D  44     -49.114  20.667 108.963
ATOM   3711  H   PHE D  44     -43.516  23.470 105.701
ATOM   3712  N   ALA D  45     -43.461  21.291 107.779
ATOM   3713  CA  ALA D  45     -42.680  20.331 108.558
ATOM   3714  C   ALA D  45     -41.407  20.195 107.736
ATOM   3715  O   ALA D  45     -41.354  20.662 106.590
ATOM   3716  CB  ALA D  45     -43.389  19.004 108.638
ATOM   3717  H   ALA D  45     -43.397  21.245 106.691
ATOM   3718  N   SER D  46     -40.393  19.541 108.277
ATOM   3719  CA  SER D  46     -39.140  19.428 107.544
ATOM   3720  C   SER D  46     -38.182  18.566 108.306
ATOM   3721  O   SER D  46     -37.766  18.942 109.399
ATOM   3722  CB  SER D  46     -38.538  20.840 107.359
ATOM   3723  OG  SER D  46     -37.142  20.825 107.098
ATOM   3724  H   SER D  46     -40.495  19.089 109.263
ATOM   3725  HG  SER D  46     -36.784  21.847 106.978
ATOM   3726  N   GLY D  47     -37.800  17.442 107.706
ATOM   3727  CA  GLY D  47     -36.872  16.511 108.326
ATOM   3728  C   GLY D  47     -36.114  15.769 107.242
ATOM   3729  O   GLY D  47     -36.054  16.232 106.117
ATOM   3730  H   GLY D  47     -38.195  17.212 106.716
ATOM   3731  N   LYS D  48     -35.491  14.652 107.579
ATOM   3732  CA  LYS D  48     -34.749  13.840 106.622
ATOM   3733  C   LYS D  48     -34.951  12.425 107.128
ATOM   3734  O   LYS D  48     -34.997  12.211 108.335
ATOM   3735  CB  LYS D  48     -33.261  14.195 106.634
ATOM   3736  CG  LYS D  48     -32.529  13.729 107.877
ATOM   3737  CD  LYS D  48     -31.084  14.214 107.935
ATOM   3738  CE  LYS D  48     -30.969  15.716 107.705
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ATOM   3740  H   LYS D  48     -35.534  14.325 108.618
ATOM   3741  HZ1 LYS D  48     -30.603  17.154 106.153
ATOM   3742  HZ2 LYS D  48     -31.476  15.697 105.619
ATOM   3743  HZ3 LYS D  48     -29.730  15.615 105.955
ATOM   3744  N   THR D  49     -35.066  11.462 106.227
ATOM   3745  CA  THR D  49     -35.313  10.098 106.656
ATOM   3746  C   THR D  49     -34.384   9.525 107.743
ATOM   3747  O   THR D  49     -33.155   9.658 107.706
ATOM   3748  CB  THR D  49     -35.395   9.147 105.452
ATOM   3749  OG1 THR D  49     -34.124   9.083 104.811
ATOM   3750  CG2 THR D  49     -36.427   9.647 104.447
ATOM   3751  H   THR D  49     -34.976  11.694 105.166
ATOM   3752  HG1 THR D  49     -34.181   8.409 103.957
ATOM   3753  N   ALA D  50     -35.006   8.937 108.754
ATOM   3754  CA  ALA D  50     -34.277   8.314 109.838
ATOM   3755  C   ALA D  50     -33.825   7.008 109.214
ATOM   3756  O   ALA D  50     -34.330   6.629 108.171
ATOM   3757  CB  ALA D  50     -35.209   8.056 111.032
ATOM   3758  H   ALA D  50     -36.095   8.922 108.769
ATOM   3759  N   GLU D  51     -32.866   6.336 109.839
ATOM   3760  CA  GLU D  51     -32.333   5.075 109.329
ATOM   3761  C   GLU D  51     -33.374   4.191 108.656
ATOM   3762  O   GLU D  51     -33.197   3.819 107.514
ATOM   3763  CB  GLU D  51     -31.597   4.299 110.438
ATOM   3764  CG  GLU D  51     -30.483   3.379 109.911
ATOM   3765  CD  GLU D  51     -29.096   3.734 110.457
ATOM   3766  OE1 GLU D  51     -28.968   3.921 111.689
ATOM   3767  OE2 GLU D  51     -28.134   3.808 109.659
ATOM   3768  H   GLU D  51     -32.461   6.740 110.767
ATOM   3769  N   SER D  52     -34.497   3.949 109.326
ATOM   3770  CA  SER D  52     -35.575   3.101 108.787
ATOM   3771  C   SER D  52     -36.145   3.573 107.454
ATOM   3772  O   SER D  52     -36.956   2.891 106.833
ATOM   3773  CB  SER D  52     -36.729   3.018 109.794
ATOM   3774  OG  SER D  52     -37.224   4.314 110.126
ATOM   3775  H   SER D  52     -34.625   4.395 110.312
ATOM   3776  HG  SER D  52     -38.041   4.219 110.841
ATOM   3777  N   GLY D  53     -35.734   4.749 107.025
ATOM   3778  CA  GLY D  53     -36.244   5.293 105.800
ATOM   3779  C   GLY D  53     -37.554   6.008 106.060
ATOM   3780  O   GLY D  53     -38.165   6.450 105.106
ATOM   3781  H   GLY D  53     -35.002   5.312 107.604
ATOM   3782  N   GLU D  54     -37.993   6.147 107.314
ATOM   3783  CA  GLU D  54     -39.265   6.841 107.571
ATOM   3784  C   GLU D  54     -39.196   8.101 108.404
ATOM   3785  O   GLU D  54     -38.119   8.491 108.854
ATOM   3786  CB  GLU D  54     -40.291   5.912 108.175
ATOM   3787  CG  GLU D  54     -39.968   5.448 109.571
ATOM   3788  CD  GLU D  54     -40.808   4.242 109.936
ATOM   3789  OE1 GLU D  54     -42.059   4.346 109.866
ATOM   3790  OE2 GLU D  54     -40.219   3.179 110.237
ATOM   3791  H   GLU D  54     -37.410   5.747 108.144
ATOM   3792  N   LEU D  55     -40.355   8.730 108.616
ATOM   3793  CA  LEU D  55     -40.458   9.975 109.386
ATOM   3794  C   LEU D  55     -41.804  10.114 110.115
ATOM   3795  O   LEU D  55     -42.854  10.201 109.487
ATOM   3796  CB  LEU D  55     -40.231  11.167 108.463
ATOM   3797  CG  LEU D  55     -38.772  11.561 108.237
ATOM   3798  CD1 LEU D  55     -38.668  12.489 107.058
ATOM   3799  CD2 LEU D  55     -38.206  12.211 109.488
ATOM   3800  H   LEU D  55     -41.264   8.300 108.196
ATOM   3801  N   HIS D  56     -41.747  10.172 111.446
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ATOM   3803  C   HIS D  56     -43.301  11.666 112.821
ATOM   3804  O   HIS D  56     -44.257  12.287 112.350
ATOM   3805  CB  HIS D  56     -42.790   9.314 113.517
ATOM   3806  CG  HIS D  56     -42.169   7.994 113.173
ATOM   3807  ND1 HIS D  56     -40.853   7.696 113.452
ATOM   3808  CD2 HIS D  56     -42.671   6.915 112.528
ATOM   3809  CE1 HIS D  56     -40.567   6.491 112.989
ATOM   3810  NE2 HIS D  56     -41.653   5.997 112.428
ATOM   3811  H   HIS D  56     -40.766  10.154 111.922
ATOM   3812  HD1 HIS D  56     -40.155   8.352 113.972
ATOM   3813  N   GLY D  57     -42.536  12.158 113.791
ATOM   3814  CA  GLY D  57     -42.803  13.464 114.365
ATOM   3815  C   GLY D  57     -42.923  14.694 113.469
ATOM   3816  O   GLY D  57     -42.765  15.806 113.959
ATOM   3817  H   GLY D  57     -41.696  11.571 114.163
ATOM   3818  N   LEU D  58     -43.198  14.519 112.180
ATOM   3819  CA  LEU D  58     -43.338  15.643 111.273
ATOM   3820  C   LEU D  58     -44.344  16.654 111.818
ATOM   3821  O   LEU D  58     -44.083  17.857 111.817
ATOM   3822  CB  LEU D  58     -43.726  15.161 109.868
ATOM   3823  CG  LEU D  58     -42.608  14.593 108.991
ATOM   3824  CD1 LEU D  58     -43.156  14.292 107.615
ATOM   3825  CD2 LEU D  58     -41.477  15.597 108.874
ATOM   3826  H   LEU D  58     -43.320  13.506 111.796
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ATOM   3828  CA  THR D  59     -46.471  17.081 112.902
ATOM   3829  C   THR D  59     -47.320  16.388 113.972
ATOM   3830  O   THR D  59     -47.251  15.160 114.139
ATOM   3831  CB  THR D  59     -47.375  17.684 111.789
ATOM   3832  OG1 THR D  59     -48.310  18.607 112.375
ATOM   3833  CG2 THR D  59     -48.123  16.580 111.039
ATOM   3834  H   THR D  59     -45.641  15.100 112.353
ATOM   3835  HG1 THR D  59     -48.943  19.029 111.593
ATOM   3836  N   THR D  60     -48.075  17.175 114.733
ATOM   3837  CA  THR D  60     -48.928  16.610 115.771
ATOM   3838  C   THR D  60     -50.325  16.442 115.210
ATOM   3839  O   THR D  60     -50.726  17.177 114.297
ATOM   3840  CB  THR D  60     -49.023  17.523 117.023
ATOM   3841  OG1 THR D  60     -49.891  18.635 116.751
ATOM   3842  CG2 THR D  60     -47.641  18.043 117.430
ATOM   3843  H   THR D  60     -48.058  18.254 114.577
ATOM   3844  HG1 THR D  60     -49.953  19.272 117.633
ATOM   3845  N   ASP D  61     -51.088  15.534 115.813
ATOM   3846  CA  ASP D  61     -52.461  15.254 115.414
ATOM   3847  C   ASP D  61     -53.418  16.446 115.484
ATOM   3848  O   ASP D  61     -54.612  16.278 115.260
ATOM   3849  CB  ASP D  61     -53.026  14.118 116.264
ATOM   3850  CG  ASP D  61     -53.445  12.916 115.434
ATOM   3851  OD1 ASP D  61     -54.462  13.011 114.699
ATOM   3852  OD2 ASP D  61     -52.746  11.878 115.515
ATOM   3853  H   ASP D  61     -50.666  14.973 116.648
ATOM   3854  N   GLU D  62     -52.911  17.634 115.814
ATOM   3855  CA  GLU D  62     -53.748  18.835 115.899
ATOM   3856  C   GLU D  62     -53.318  19.903 114.903
ATOM   3857  O   GLU D  62     -54.130  20.733 114.486
ATOM   3858  CB  GLU D  62     -53.668  19.446 117.291
ATOM   3859  CG  GLU D  62     -53.908  18.468 118.410
ATOM   3860  CD  GLU D  62     -53.504  19.032 119.758
ATOM   3861  OE1 GLU D  62     -52.834  20.097 119.792
ATOM   3862  OE2 GLU D  62     -53.854  18.399 120.783
ATOM   3863  H   GLU D  62     -51.845  17.715 116.027
ATOM   3864  N   LYS D  63     -52.027  19.909 114.566
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ATOM   3865  CA  LYS D  63     -51.461  20.889 113.632
ATOM   3866  C   LYS D  63     -51.794  20.585 112.174
ATOM   3867  O   LYS D  63     -51.865  21.481 111.344
ATOM   3868  CB  LYS D  63     -49.943  20.932 113.783
ATOM   3869  CG  LYS D  63     -49.473  21.288 115.164
ATOM   3870  CD  LYS D  63     -47.982  21.080 115.260
ATOM   3871  CE  LYS D  63     -47.471  21.363 116.661
ATOM   3872  NZ  LYS D  63     -46.068  20.863 116.815
ATOM   3873  H   LYS D  63     -51.368  19.156 114.999
ATOM   3874  HZ1 LYS D  63     -45.716  21.074 117.825
ATOM   3875  HZ2 LYS D  63     -45.422  21.364 116.094
ATOM   3876  HZ3 LYS D  63     -46.043  19.788 116.639
ATOM   3877  N   PHE D  64     -51.994  19.310 111.888
ATOM   3878  CA  PHE D  64     -52.291  18.834 110.553
ATOM   3879  C   PHE D  64     -53.731  19.133 110.146
ATOM   3880  O   PHE D  64     -54.516  18.229 109.924
ATOM   3881  CB  PHE D  64     -51.992  17.331 110.503
ATOM   3882  CG  PHE D  64     -52.234  16.702 109.167
ATOM   3883  CD1 PHE D  64     -51.566  17.156 108.032
ATOM   3884  CD2 PHE D  64     -53.137  15.666 109.035
ATOM   3885  CE1 PHE D  64     -51.802  16.585 106.789
ATOM   3886  CE2 PHE D  64     -53.373  15.093 107.789
ATOM   3887  CZ  PHE D  64     -52.701  15.555 106.664
ATOM   3888  H   PHE D  64     -51.934  18.582 112.698
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ATOM   3890  CA  THR D  65     -55.412  20.830 109.628
ATOM   3891  C   THR D  65     -55.806  20.525 108.170
ATOM   3892  O   THR D  65     -54.969  20.223 107.320
ATOM   3893  CB  THR D  65     -55.633  22.348 109.877
ATOM   3894  OG1 THR D  65     -54.685  23.110 109.113
ATOM   3895  CG2 THR D  65     -55.520  22.680 111.372
ATOM   3896  H   THR D  65     -53.306  21.175 110.205
ATOM   3897  HG1 THR D  65     -54.845  24.174 109.292
ATOM   3898  N   GLU D  66     -57.104  20.613 107.901
ATOM   3899  CA  GLU D  66     -57.651  20.359 106.576
ATOM   3900  C   GLU D  66     -57.053  21.359 105.596
ATOM   3901  O   GLU D  66     -57.067  22.558 105.848
ATOM   3902  CB  GLU D  66     -59.172  20.500 106.625
ATOM   3903  CG  GLU D  66     -59.884  20.152 105.339
ATOM   3904  CD  GLU D  66     -61.363  19.810 105.547
ATOM   3905  OE1 GLU D  66     -61.675  18.984 106.445
ATOM   3906  OE2 GLU D  66     -62.213  20.357 104.800
ATOM   3907  H   GLU D  66     -57.788  20.885 108.704
ATOM   3908  N   GLY D  67     -56.485  20.863 104.506
ATOM   3909  CA  GLY D  67     -55.884  21.744 103.519
ATOM   3910  C   GLY D  67     -55.018  20.974 102.539
ATOM   3911  O   GLY D  67     -54.816  19.772 102.690
ATOM   3912  H   GLY D  67     -56.466  19.784 104.350
ATOM   3913  N   VAL D  68     -54.537  21.639 101.500
ATOM   3914  CA  VAL D  68     -53.708  20.945 100.541
ATOM   3915  C   VAL D  68     -52.295  21.141 101.032
ATOM   3916  O   VAL D  68     -51.974  22.172 101.604
ATOM   3917  CB  VAL D  68     -53.902  21.457  99.088
ATOM   3918  CG1 VAL D  68     -53.344  22.848  98.914
ATOM   3919  CG2 VAL D  68     -53.265  20.494  98.116
ATOM   3920  H   VAL D  68     -54.762  22.697 101.370
ATOM   3921  N   TYR D  69     -51.475  20.122 100.844
ATOM   3922  CA  TYR D  69     -50.106  20.148 101.294
ATOM   3923  C   TYR D  69     -49.174  19.777 100.166
ATOM   3924  O   TYR D  69     -49.602  19.219  99.169
ATOM   3925  CB  TYR D  69     -49.934  19.121 102.395
ATOM   3926  CG  TYR D  69     -50.658  19.446 103.664
ATOM   3927  CD1 TYR D  69     -51.995  19.093 103.831
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ATOM   3928  CD2 TYR D  69     -49.966  19.983 104.758
ATOM   3929  CE1 TYR D  69     -52.619  19.247 105.059
ATOM   3930  CE2 TYR D  69     -50.572  20.130 105.971
ATOM   3931  CZ  TYR D  69     -51.896  19.757 106.129
ATOM   3932  OH  TYR D  69     -52.467  19.832 107.381
ATOM   3933  H   TYR D  69     -51.845  19.234 100.333
ATOM   3934  HH  TYR D  69     -51.749  20.256 108.083
ATOM   3935  N   ARG D  70     -47.886  20.024 100.367
ATOM   3936  CA  ARG D  70     -46.884  19.693  99.366
ATOM   3937  C   ARG D  70     -45.701  19.088 100.104
ATOM   3938  O   ARG D  70     -45.139  19.718 100.996
ATOM   3939  CB  ARG D  70     -46.443  20.941  98.612
ATOM   3940  CG  ARG D  70     -45.650  20.643  97.374
ATOM   3941  CD  ARG D  70     -45.083  21.910  96.808
ATOM   3942  NE  ARG D  70     -44.009  21.658  95.848
ATOM   3943  CZ  ARG D  70     -42.809  21.170  96.158
ATOM   3944  NH1 ARG D  70     -42.514  20.863  97.420
ATOM   3945  NH2 ARG D  70     -41.889  21.015  95.209
ATOM   3946  H   ARG D  70     -47.572  20.485 101.303
ATOM   3947  HE  ARG D  70     -44.205  21.885  94.800
ATOM   3948  HH1 ARG D  70     -41.494  20.482  97.472
ATOM   3949  HH1 ARG D  70     -43.187  20.977  98.270
ATOM   3950  HH2 ARG D  70     -40.979  20.607  95.648
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ATOM   3952  N   VAL D  71     -45.429  17.816  99.825
ATOM   3953  CA  VAL D  71     -44.318  17.094 100.423
ATOM   3954  C   VAL D  71     -43.307  17.057  99.294
ATOM   3955  O   VAL D  71     -43.690  16.940  98.137
ATOM   3956  CB  VAL D  71     -44.762  15.684 100.824
ATOM   3957  CG1 VAL D  71     -43.598  14.883 101.402
ATOM   3958  CG2 VAL D  71     -45.869  15.791 101.863
ATOM   3959  H   VAL D  71     -46.069  17.290  99.117
ATOM   3960  N   GLU D  72     -42.041  17.310  99.601
ATOM   3961  CA  GLU D  72     -40.989  17.327  98.577
ATOM   3962  C   GLU D  72     -39.725  16.702  99.129
ATOM   3963  O   GLU D  72     -39.231  17.118 100.186
ATOM   3964  CB  GLU D  72     -40.692  18.751  98.138
ATOM   3965  CG  GLU D  72     -39.408  18.944  97.324
ATOM   3966  CD  GLU D  72     -38.987  20.418  97.252
ATOM   3967  OE1 GLU D  72     -39.466  21.196  98.098
ATOM   3968  OE2 GLU D  72     -38.184  20.804  96.373
ATOM   3969  H   GLU D  72     -41.777  17.511 100.639
ATOM   3970  N   LEU D  73     -39.247  15.680  98.421
ATOM   3971  CA  LEU D  73     -38.064  14.937  98.789
ATOM   3972  C   LEU D  73     -36.922  15.290  97.880
ATOM   3973  O   LEU D  73     -37.069  15.348  96.658
ATOM   3974  CB  LEU D  73     -38.322  13.439  98.686
ATOM   3975  CG  LEU D  73     -39.555  12.927  99.430
ATOM   3976  CD1 LEU D  73     -40.736  12.840  98.471
ATOM   3977  CD2 LEU D  73     -39.267  11.557 100.006
ATOM   3978  H   LEU D  73     -39.776  15.390  97.513
ATOM   3979  N   ASP D  74     -35.763  15.486  98.484
ATOM   3980  CA  ASP D  74     -34.564  15.827  97.753
ATOM   3981  C   ASP D  74     -33.835  14.571  97.256
ATOM   3982  O   ASP D  74     -32.839  14.118  97.856
ATOM   3983  CB  ASP D  74     -33.677  16.681  98.643
ATOM   3984  CG  ASP D  74     -32.306  16.911  98.070
ATOM   3985  OD1 ASP D  74     -32.180  17.245  96.868
ATOM   3986  OD2 ASP D  74     -31.349  16.757  98.861
ATOM   3987  H   ASP D  74     -35.710  15.385  99.568
ATOM   3988  N   THR D  75     -34.373  13.974  96.189
ATOM   3989  CA  THR D  75     -33.750  12.791  95.597
ATOM   3990  C   THR D  75     -32.425  13.220  94.952
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ATOM   3991  O   THR D  75     -31.405  12.558  95.100
ATOM   3992  CB  THR D  75     -34.683  12.076  94.547
ATOM   3993  OG1 THR D  75     -35.398  13.036  93.753
ATOM   3994  CG2 THR D  75     -35.690  11.170  95.254
ATOM   3995  H   THR D  75     -35.289  14.374  95.755
ATOM   3996  HG1 THR D  75     -36.033  12.515  93.037
ATOM   3997  N   LYS D  76     -32.424  14.407  94.362
ATOM   3998  CA  LYS D  76     -31.253  14.930  93.681
ATOM   3999  C   LYS D  76     -29.990  14.799  94.501
ATOM   4000  O   LYS D  76     -28.987  14.282  94.015
ATOM   4001  CB  LYS D  76     -31.468  16.395  93.293
ATOM   4002  CG  LYS D  76     -31.060  16.714  91.861
ATOM   4003  CD  LYS D  76     -29.936  17.725  91.808
ATOM   4004  CE  LYS D  76     -29.642  18.137  90.379
ATOM   4005  NZ  LYS D  76     -28.465  19.064  90.318
ATOM   4006  H   LYS D  76     -33.332  15.011  94.390
ATOM   4007  HZ1 LYS D  76     -28.276  19.344  89.282
ATOM   4008  HZ2 LYS D  76     -27.587  18.563  90.726
ATOM   4009  HZ3 LYS D  76     -28.677  19.959  90.903
ATOM   4010  N   SER D  77     -30.039  15.242  95.754
ATOM   4011  CA  SER D  77     -28.858  15.149  96.604
ATOM   4012  C   SER D  77     -28.652  13.761  97.179
ATOM   4013  O   SER D  77     -27.531  13.403  97.530
ATOM   4014  CB  SER D  77     -28.853  16.212  97.711
ATOM   4015  OG  SER D  77     -28.804  17.532  97.173
ATOM   4016  H   SER D  77     -30.961  15.671  96.145
ATOM   4017  HG  SER D  77     -28.803  18.256  97.987
ATOM   4018  N   TYR D  78     -29.716  12.966  97.250
ATOM   4019  CA  TYR D  78     -29.577  11.606  97.757
ATOM   4020  C   TYR D  78     -28.697  10.865  96.811
ATOM   4021  O   TYR D  78     -27.636  10.390  97.175
ATOM   4022  CB  TYR D  78     -30.892  10.852  97.771
ATOM   4023  CG  TYR D  78     -30.721   9.474  98.353
ATOM   4024  CD1 TYR D  78     -30.144   9.315  99.598
ATOM   4025  CD2 TYR D  78     -31.159   8.336  97.679
ATOM   4026  CE1 TYR D  78     -30.011   8.067 100.180
ATOM   4027  CE2 TYR D  78     -31.031   7.075  98.257
ATOM   4028  CZ  TYR D  78     -30.457   6.956  99.518
ATOM   4029  OH  TYR D  78     -30.389   5.751 100.177
ATOM   4030  H   TYR D  78     -30.691  13.331  96.928
ATOM   4031  HH  TYR D  78     -30.775   4.962  99.532
ATOM   4032  N   TRP D  79     -29.174  10.752  95.583
ATOM   4033  CA  TRP D  79     -28.449  10.036  94.564
ATOM   4034  C   TRP D  79     -27.073  10.618  94.317
ATOM   4035  O   TRP D  79     -26.086   9.876  94.169
ATOM   4036  CB  TRP D  79     -29.275   9.969  93.281
ATOM   4037  CG  TRP D  79     -30.425   9.004  93.419
ATOM   4038  CD1 TRP D  79     -31.752   9.305  93.400
ATOM   4039  CD2 TRP D  79     -30.339   7.585  93.598
ATOM   4040  NE1 TRP D  79     -32.508   8.161  93.557
ATOM   4041  CE2 TRP D  79     -31.665   7.091  93.679
ATOM   4042  CE3 TRP D  79     -29.277   6.680  93.691
ATOM   4043  CZ2 TRP D  79     -31.953   5.736  93.846
ATOM   4044  CZ3 TRP D  79     -29.564   5.336  93.854
ATOM   4045  CH2 TRP D  79     -30.896   4.878  93.927
ATOM   4046  H   TRP D  79     -30.133  11.207  95.337
ATOM   4047  HE1 TRP D  79     -33.597   8.117  93.581
ATOM   4048  N   LYS D  80     -26.993  11.943  94.331
ATOM   4049  CA  LYS D  80     -25.730  12.620  94.107
ATOM   4050  C   LYS D  80     -24.633  12.352  95.143
ATOM   4051  O   LYS D  80     -23.455  12.448  94.820
ATOM   4052  CB  LYS D  80     -25.970  14.117  93.929
ATOM   4053  CG  LYS D  80     -26.178  14.525  92.483
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ATOM   4054  CD  LYS D  80     -24.946  15.250  91.918
ATOM   4055  CE  LYS D  80     -23.674  14.403  91.977
ATOM   4056  NZ  LYS D  80     -23.752  13.160  91.144
ATOM   4057  H   LYS D  80     -27.892  12.532  94.512
ATOM   4058  HZ1 LYS D  80     -22.818  12.605  91.231
ATOM   4059  HZ2 LYS D  80     -23.919  13.431  90.102
ATOM   4060  HZ3 LYS D  80     -24.577  12.540  91.495
ATOM   4061  N   ALA D  81     -25.007  11.951  96.350
ATOM   4062  CA  ALA D  81     -24.034  11.672  97.410
ATOM   4063  C   ALA D  81     -23.513  10.249  97.342
ATOM   4064  O   ALA D  81     -22.781   9.797  98.239
ATOM   4065  CB  ALA D  81     -24.662  11.918  98.807
ATOM   4066  H   ALA D  81     -26.069  11.826  96.561
ATOM   4067  N   LEU D  82     -23.993   9.523  96.347
ATOM   4068  CA  LEU D  82     -23.620   8.137  96.121
ATOM   4069  C   LEU D  82     -22.909   8.069  94.762
ATOM   4070  O   LEU D  82     -22.389   7.029  94.374
ATOM   4071  CB  LEU D  82     -24.874   7.252  96.168
ATOM   4072  CG  LEU D  82     -25.734   7.480  97.421
ATOM   4073  CD1 LEU D  82     -27.123   6.904  97.273
ATOM   4074  CD2 LEU D  82     -25.049   6.897  98.665
ATOM   4075  H   LEU D  82     -24.704   9.986  95.663
ATOM   4076  N   GLY D  83     -22.847   9.221  94.089
ATOM   4077  CA  GLY D  83     -22.181   9.342  92.801
ATOM   4078  C   GLY D  83     -23.042   9.180  91.561
ATOM   4079  O   GLY D  83     -22.542   9.247  90.434
ATOM   4080  H   GLY D  83     -23.316  10.105  94.521
ATOM   4081  N   ILE D  84     -24.337   8.981  91.741
ATOM   4082  CA  ILE D  84     -25.183   8.786  90.587
ATOM   4083  C   ILE D  84     -25.943  10.064  90.273
ATOM   4084  O   ILE D  84     -26.570  10.646  91.153
ATOM   4085  CB  ILE D  84     -26.141   7.587  90.795
ATOM   4086  CG1 ILE D  84     -25.416   6.434  91.498
ATOM   4087  CG2 ILE D  84     -26.586   7.035  89.447
ATOM   4088  CD1 ILE D  84     -26.327   5.306  91.905
ATOM   4089  H   ILE D  84     -24.761   8.963  92.745
ATOM   4090  N   SER D  85     -25.772  10.551  89.044
ATOM   4091  CA  SER D  85     -26.447  11.753  88.563
ATOM   4092  C   SER D  85     -27.863  11.318  88.198
ATOM   4093  O   SER D  85     -28.089  10.699  87.150
ATOM   4094  CB  SER D  85     -25.735  12.318  87.322
ATOM   4095  OG  SER D  85     -26.029  11.577  86.143
ATOM   4096  H   SER D  85     -25.095  10.030  88.367
ATOM   4097  HG  SER D  85     -25.501  12.017  85.296
ATOM   4098  N   PRO D  86     -28.836  11.612  89.073
ATOM   4099  CA  PRO D  86     -30.213  11.214  88.785
ATOM   4100  C   PRO D  86     -30.771  12.053  87.635
ATOM   4101  O   PRO D  86     -30.062  12.885  87.074
ATOM   4102  CB  PRO D  86     -30.912  11.509  90.101
ATOM   4103  CG  PRO D  86     -30.237  12.749  90.544
ATOM   4104  CD  PRO D  86     -28.779  12.495  90.253
ATOM   4105  N   PHE D  87     -32.013  11.787  87.255
ATOM   4106  CA  PHE D  87     -32.663  12.537  86.193
ATOM   4107  C   PHE D  87     -33.426  13.717  86.788
ATOM   4108  O   PHE D  87     -33.260  14.857  86.350
ATOM   4109  CB  PHE D  87     -33.656  11.634  85.439
ATOM   4110  CG  PHE D  87     -34.482  12.356  84.396
ATOM   4111  CD1 PHE D  87     -33.922  12.737  83.180
ATOM   4112  CD2 PHE D  87     -35.815  12.634  84.624
ATOM   4113  CE1 PHE D  87     -34.681  13.391  82.207
ATOM   4114  CE2 PHE D  87     -36.571  13.282  83.666
ATOM   4115  CZ  PHE D  87     -36.003  13.660  82.453
ATOM   4116  H   PHE D  87     -32.561  10.986  87.751
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ATOM   4117  N   HIS D  88     -34.246  13.418  87.800
ATOM   4118  CA  HIS D  88     -35.122  14.392  88.460
ATOM   4119  C   HIS D  88     -34.445  15.366  89.376
ATOM   4120  O   HIS D  88     -33.513  15.014  90.079
ATOM   4121  CB  HIS D  88     -36.238  13.677  89.225
ATOM   4122  CG  HIS D  88     -37.057  12.770  88.366
ATOM   4123  ND1 HIS D  88     -37.083  11.402  88.537
ATOM   4124  CD2 HIS D  88     -37.861  13.035  87.311
ATOM   4125  CE1 HIS D  88     -37.870  10.866  87.621
ATOM   4126  NE2 HIS D  88     -38.355  11.834  86.866
ATOM   4127  H   HIS D  88     -34.269  12.387  88.153
ATOM   4128  HD1 HIS D  88     -36.541  10.851  89.305
ATOM   4129  N   GLU D  89     -34.973  16.583  89.390
ATOM   4130  CA  GLU D  89     -34.450  17.657  90.200
ATOM   4131  C   GLU D  89     -34.840  17.422  91.662
ATOM   4132  O   GLU D  89     -34.094  17.760  92.591
ATOM   4133  CB  GLU D  89     -35.006  18.977  89.662
ATOM   4134  CG  GLU D  89     -34.228  20.236  90.047
ATOM   4135  CD  GLU D  89     -32.758  20.153  89.700
ATOM   4136  OE1 GLU D  89     -32.439  19.723  88.566
ATOM   4137  OE2 GLU D  89     -31.928  20.515  90.573
ATOM   4138  H   GLU D  89     -35.843  16.780  88.764
ATOM   4139  N   TYR D  90     -36.007  16.818  91.848
ATOM   4140  CA  TYR D  90     -36.535  16.483  93.164
ATOM   4141  C   TYR D  90     -37.791  15.633  92.968
ATOM   4142  O   TYR D  90     -38.092  15.219  91.851
ATOM   4143  CB  TYR D  90     -36.861  17.754  93.976
ATOM   4144  CG  TYR D  90     -37.840  18.702  93.326
ATOM   4145  CD1 TYR D  90     -39.177  18.344  93.130
ATOM   4146  CD2 TYR D  90     -37.434  19.966  92.916
ATOM   4147  CE1 TYR D  90     -40.083  19.215  92.547
ATOM   4148  CE2 TYR D  90     -38.333  20.856  92.330
ATOM   4149  CZ  TYR D  90     -39.658  20.477  92.148
ATOM   4150  OH  TYR D  90     -40.553  21.369  91.577
ATOM   4151  H   TYR D  90     -36.601  16.559  90.971
ATOM   4152  HH  TYR D  90     -40.035  22.297  91.334
ATOM   4153  N   ALA D  91     -38.505  15.358  94.056
ATOM   4154  CA  ALA D  91     -39.748  14.597  93.996
ATOM   4155  C   ALA D  91     -40.808  15.334  94.831
ATOM   4156  O   ALA D  91     -40.649  15.542  96.050
ATOM   4157  CB  ALA D  91     -39.540  13.173  94.496
ATOM   4158  H   ALA D  91     -38.149  15.711  95.024
ATOM   4159  N   GLU D  92     -41.875  15.744  94.151
ATOM   4160  CA  GLU D  92     -42.985  16.486  94.763
ATOM   4161  C   GLU D  92     -44.331  15.732  94.728
ATOM   4162  O   GLU D  92     -44.750  15.170  93.702
ATOM   4163  CB  GLU D  92     -43.128  17.857  94.080
ATOM   4164  CG  GLU D  92     -44.293  18.707  94.571
ATOM   4165  CD  GLU D  92     -44.679  19.809  93.590
ATOM   4166  OE1 GLU D  92     -43.859  20.713  93.352
ATOM   4167  OE2 GLU D  92     -45.799  19.768  93.039
ATOM   4168  H   GLU D  92     -41.928  15.518  93.086
ATOM   4169  N   VAL D  93     -45.028  15.793  95.854
ATOM   4170  CA  VAL D  93     -46.309  15.138  96.025
ATOM   4171  C   VAL D  93     -47.237  16.110  96.763
ATOM   4172  O   VAL D  93     -47.149  16.270  97.986
ATOM   4173  CB  VAL D  93     -46.133  13.818  96.835
ATOM   4174  CG1 VAL D  93     -47.448  13.118  97.042
ATOM   4175  CG2 VAL D  93     -45.188  12.912  96.146
ATOM   4176  H   VAL D  93     -44.619  16.362  96.689
ATOM   4177  N   VAL D  94     -48.040  16.833  95.993
ATOM   4178  CA  VAL D  94     -49.008  17.764  96.544
ATOM   4179  C   VAL D  94     -50.292  16.958  96.634
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ATOM   4180  O   VAL D  94     -50.728  16.395  95.629
ATOM   4181  CB  VAL D  94     -49.313  18.950  95.587
ATOM   4182  CG1 VAL D  94     -50.065  20.020  96.316
ATOM   4183  CG2 VAL D  94     -48.068  19.488  94.954
ATOM   4184  H   VAL D  94     -47.971  16.724  94.911
ATOM   4185  N   PHE D  95     -50.903  16.938  97.817
ATOM   4186  CA  PHE D  95     -52.154  16.211  98.074
ATOM   4187  C   PHE D  95     -53.060  17.050  98.975
ATOM   4188  O   PHE D  95     -52.593  17.959  99.662
ATOM   4189  CB  PHE D  95     -51.863  14.890  98.785
ATOM   4190  CG  PHE D  95     -51.256  15.057 100.165
ATOM   4191  CD1 PHE D  95     -49.879  15.170 100.331
ATOM   4192  CD2 PHE D  95     -52.059  15.061 101.301
ATOM   4193  CE1 PHE D  95     -49.314  15.276 101.603
ATOM   4194  CE2 PHE D  95     -51.496  15.166 102.573
ATOM   4195  CZ  PHE D  95     -50.124  15.271 102.722
ATOM   4196  H   PHE D  95     -50.450  17.492  98.640
ATOM   4197  N   THR D  96     -54.357  16.785  98.959
ATOM   4198  CA  THR D  96     -55.241  17.533  99.842
ATOM   4199  C   THR D  96     -55.433  16.631 101.059
ATOM   4200  O   THR D  96     -55.690  15.453 100.922
ATOM   4201  CB  THR D  96     -56.620  17.864  99.187
ATOM   4202  OG1 THR D  96     -56.419  18.489  97.911
ATOM   4203  CG2 THR D  96     -57.415  18.816 100.072
ATOM   4204  H   THR D  96     -54.757  16.019  98.294
ATOM   4205  HG1 THR D  96     -57.386  18.717  97.462
ATOM   4206  N   ALA D  97     -55.207  17.162 102.246
ATOM   4207  CA  ALA D  97     -55.374  16.371 103.444
ATOM   4208  C   ALA D  97     -56.684  16.758 104.089
ATOM   4209  O   ALA D  97     -56.726  17.171 105.243
ATOM   4210  CB  ALA D  97     -54.221  16.636 104.410
ATOM   4211  H   ALA D  97     -54.893  18.203 102.323
ATOM   4212  N   ASN D  98     -57.754  16.677 103.305
ATOM   4213  CA  ASN D  98     -59.087  17.019 103.780
ATOM   4214  C   ASN D  98     -59.377  16.008 104.863
ATOM   4215  O   ASN D  98     -59.861  14.904 104.595
ATOM   4216  CB  ASN D  98     -60.118  16.907 102.654
ATOM   4217  CG  ASN D  98     -61.528  17.211 103.127
ATOM   4218  OD1 ASN D  98     -62.068  16.524 104.000
ATOM   4219  ND2 ASN D  98     -62.128  18.254 102.560
ATOM   4220  H   ASN D  98     -57.630  16.346 102.274
ATOM   4221  HD2 ASN D  98     -63.127  18.370 102.979
ATOM   4222  HD2 ASN D  98     -61.688  18.894 101.795
ATOM   4223  N   ASP D  99     -58.967  16.365 106.071
ATOM   4224  CA  ASP D  99     -59.136  15.517 107.234
ATOM   4225  C   ASP D  99     -60.586  15.130 107.451
ATOM   4226  O   ASP D  99     -61.294  15.723 108.270
ATOM   4227  CB  ASP D  99     -58.549  16.213 108.459
ATOM   4228  CG  ASP D  99     -57.049  16.277 108.403
ATOM   4229  OD1 ASP D  99     -56.434  15.224 108.168
ATOM   4230  OD2 ASP D  99     -56.487  17.374 108.556
ATOM   4231  H   ASP D  99     -58.483  17.333 106.195
ATOM   4232  N   SER D 100     -61.024  14.142 106.683
ATOM   4233  CA  SER D 100     -62.384  13.659 106.783
ATOM   4234  C   SER D 100     -62.330  12.209 107.280
ATOM   4235  O   SER D 100     -61.811  11.938 108.379
ATOM   4236  CB  SER D 100     -63.090  13.782 105.422
ATOM   4237  OG  SER D 100     -64.505  13.762 105.555
ATOM   4238  H   SER D 100     -60.347  13.684 105.962
ATOM   4239  HG  SER D 100     -64.963  13.851 104.570
ATOM   4240  N   GLY D 101     -62.795  11.281 106.450
ATOM   4241  CA  GLY D 101     -62.817   9.878 106.823
ATOM   4242  C   GLY D 101     -61.545   9.287 107.368
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ATOM   4243  O   GLY D 101     -61.571   8.350 108.170
ATOM   4244  H   GLY D 101     -63.169  11.579 105.471
ATOM   4245  N   HIS D 102     -60.425   9.861 106.950
ATOM   4246  CA  HIS D 102     -59.135   9.354 107.355
ATOM   4247  C   HIS D 102     -58.212  10.449 107.879
ATOM   4248  O   HIS D 102     -58.016  11.482 107.232
ATOM   4249  CB  HIS D 102     -58.497   8.654 106.166
ATOM   4250  CG  HIS D 102     -59.373   7.629 105.509
ATOM   4251  ND1 HIS D 102     -59.973   7.840 104.286
ATOM   4252  CD2 HIS D 102     -59.727   6.377 105.890
ATOM   4253  CE1 HIS D 102     -60.659   6.765 103.941
ATOM   4254  NE2 HIS D 102     -60.524   5.862 104.896
ATOM   4255  H   HIS D 102     -60.479  10.728 106.291
ATOM   4256  HD1 HIS D 102     -59.892   8.752 103.695
ATOM   4257  N   ARG D 103     -57.657  10.207 109.061
ATOM   4258  CA  ARG D 103     -56.752  11.151 109.694
ATOM   4259  C   ARG D 103     -55.284  10.849 109.418
ATOM   4260  O   ARG D 103     -54.485  11.769 109.265
ATOM   4261  CB  ARG D 103     -57.011  11.201 111.207
ATOM   4262  CG  ARG D 103     -56.185  12.241 111.992
ATOM   4263  CD  ARG D 103     -56.235  13.651 111.375
ATOM   4264  NE  ARG D 103     -57.415  13.836 110.532
ATOM   4265  CZ  ARG D 103     -58.618  14.174 110.979
ATOM   4266  NH1 ARG D 103     -58.812  14.395 112.272
ATOM   4267  NH2 ARG D 103     -59.653  14.166 110.148
ATOM   4268  H   ARG D 103     -57.888   9.272 109.571
ATOM   4269  HE  ARG D 103     -57.300  13.685 109.459
ATOM   4270  HH1 ARG D 103     -59.856  14.659 112.442
ATOM   4271  HH1 ARG D 103     -58.046  14.324 113.043
ATOM   4272  HH2 ARG D 103     -60.552  14.468 110.685
ATOM   4273  HH2 ARG D 103     -59.611  13.896 109.093
ATOM   4274  N   HIS D 104     -54.923   9.572 109.340
ATOM   4275  CA  HIS D 104     -53.528   9.214 109.107
ATOM   4276  C   HIS D 104     -53.200   8.992 107.640
ATOM   4277  O   HIS D 104     -53.945   8.318 106.916
ATOM   4278  CB  HIS D 104     -53.139   8.002 109.960
ATOM   4279  CG  HIS D 104     -53.284   8.242 111.433
ATOM   4280  ND1 HIS D 104     -53.525   7.228 112.337
ATOM   4281  CD2 HIS D 104     -53.283   9.392 112.152
ATOM   4282  CE1 HIS D 104     -53.672   7.745 113.546
ATOM   4283  NE2 HIS D 104     -53.531   9.055 113.459
ATOM   4284  H   HIS D 104     -55.673   8.789 109.452
ATOM   4285  HD1 HIS D 104     -53.589   6.168 112.092
ATOM   4286  N   TYR D 105     -52.085   9.581 107.219
ATOM   4287  CA  TYR D 105     -51.603   9.498 105.849
ATOM   4288  C   TYR D 105     -50.192   8.978 105.825
ATOM   4289  O   TYR D 105     -49.370   9.335 106.666
ATOM   4290  CB  TYR D 105     -51.589  10.871 105.184
ATOM   4291  CG  TYR D 105     -52.948  11.472 104.966
ATOM   4292  CD1 TYR D 105     -53.601  12.143 105.996
ATOM   4293  CD2 TYR D 105     -53.585  11.370 103.737
ATOM   4294  CE1 TYR D 105     -54.847  12.691 105.810
ATOM   4295  CE2 TYR D 105     -54.829  11.920 103.541
ATOM   4296  CZ  TYR D 105     -55.456  12.578 104.583
ATOM   4297  OH  TYR D 105     -56.702  13.130 104.407
ATOM   4298  H   TYR D 105     -51.501  10.156 107.938
ATOM   4299  HH  TYR D 105     -57.037  12.951 103.386
ATOM   4300  N   THR D 106     -49.911   8.145 104.835
ATOM   4301  CA  THR D 106     -48.577   7.613 104.665
ATOM   4302  C   THR D 106     -48.162   7.752 103.208
ATOM   4303  O   THR D 106     -48.711   7.086 102.318
ATOM   4304  CB  THR D 106     -48.486   6.152 105.116
ATOM   4305  OG1 THR D 106     -48.883   6.066 106.497
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ATOM   4306  CG2 THR D 106     -47.056   5.636 104.947
ATOM   4307  H   THR D 106     -50.697   7.856 104.137
ATOM   4308  HG1 THR D 106     -48.822   5.030 106.829
ATOM   4309  N   ILE D 107     -47.231   8.665 102.969
ATOM   4310  CA  ILE D 107     -46.718   8.891 101.635
ATOM   4311  C   ILE D 107     -45.458   8.056 101.436
ATOM   4312  O   ILE D 107     -44.421   8.350 102.020
ATOM   4313  CB  ILE D 107     -46.366  10.378 101.411
ATOM   4314  CG1 ILE D 107     -47.628  11.228 101.510
ATOM   4315  CG2 ILE D 107     -45.681  10.569 100.064
ATOM   4316  CD1 ILE D 107     -47.387  12.688 101.344
ATOM   4317  H   ILE D 107     -46.843   9.258 103.797
ATOM   4318  N   ALA D 108     -45.557   7.006 100.633
ATOM   4319  CA  ALA D 108     -44.404   6.160 100.348
ATOM   4320  C   ALA D 108     -43.771   6.528  98.987
ATOM   4321  O   ALA D 108     -44.385   7.213  98.147
ATOM   4322  CB  ALA D 108     -44.810   4.715 100.377
ATOM   4323  H   ALA D 108     -46.518   6.772 100.175
ATOM   4324  N   ALA D 109     -42.542   6.087  98.761
ATOM   4325  CA  ALA D 109     -41.865   6.396  97.513
ATOM   4326  C   ALA D 109     -40.626   5.518  97.315
ATOM   4327  O   ALA D 109     -39.823   5.321  98.236
ATOM   4328  CB  ALA D 109     -41.509   7.878  97.469
ATOM   4329  H   ALA D 109     -42.035   5.487  99.517
ATOM   4330  N   LEU D 110     -40.526   4.943  96.121
ATOM   4331  CA  LEU D 110     -39.430   4.068  95.734
ATOM   4332  C   LEU D 110     -38.549   4.833  94.759
ATOM   4333  O   LEU D 110     -39.001   5.224  93.679
ATOM   4334  CB  LEU D 110     -40.000   2.832  95.052
ATOM   4335  CG  LEU D 110     -39.108   1.777  94.405
ATOM   4336  CD1 LEU D 110     -38.469   0.864  95.450
ATOM   4337  CD2 LEU D 110     -39.981   0.951  93.457
ATOM   4338  H   LEU D 110     -41.309   5.140  95.389
ATOM   4339  N   LEU D 111     -37.292   5.020  95.145
ATOM   4340  CA  LEU D 111     -36.313   5.753  94.363
ATOM   4341  C   LEU D 111     -35.418   4.916  93.484
ATOM   4342  O   LEU D 111     -35.010   3.814  93.846
ATOM   4343  CB  LEU D 111     -35.424   6.544  95.300
ATOM   4344  CG  LEU D 111     -36.186   7.323  96.369
ATOM   4345  CD1 LEU D 111     -35.213   8.249  97.156
ATOM   4346  CD2 LEU D 111     -37.322   8.105  95.693
ATOM   4347  H   LEU D 111     -36.978   4.600  96.101
ATOM   4348  N   SER D 112     -35.063   5.487  92.344
ATOM   4349  CA  SER D 112     -34.170   4.873  91.354
ATOM   4350  C   SER D 112     -33.647   6.113  90.668
ATOM   4351  O   SER D 112     -34.369   7.100  90.567
ATOM   4352  CB  SER D 112     -34.949   4.001  90.371
ATOM   4353  OG  SER D 112     -34.553   2.645  90.475
ATOM   4354  H   SER D 112     -35.460   6.479  92.126
ATOM   4355  HG  SER D 112     -35.123   2.045  89.765
ATOM   4356  N   PRO D 113     -32.403   6.085  90.178
ATOM   4357  CA  PRO D 113     -31.750   7.212  89.498
ATOM   4358  C   PRO D 113     -32.536   7.929  88.383
ATOM   4359  O   PRO D 113     -32.386   9.142  88.221
ATOM   4360  CB  PRO D 113     -30.481   6.583  88.945
ATOM   4361  CG  PRO D 113     -30.232   5.441  89.853
ATOM   4362  CD  PRO D 113     -31.593   4.865  90.053
ATOM   4363  N   TYR D 114     -33.350   7.180  87.633
ATOM   4364  CA  TYR D 114     -34.166   7.669  86.523
ATOM   4365  C   TYR D 114     -35.671   7.393  86.665
ATOM   4366  O   TYR D 114     -36.426   7.596  85.694
ATOM   4367  CB  TYR D 114     -33.734   6.979  85.231
ATOM   4368  CG  TYR D 114     -32.546   7.600  84.587
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ATOM   4369  CD1 TYR D 114     -32.679   8.741  83.797
ATOM   4370  CD2 TYR D 114     -31.268   7.115  84.839
ATOM   4371  CE1 TYR D 114     -31.573   9.383  83.292
ATOM   4372  CE2 TYR D 114     -30.144   7.757  84.331
ATOM   4373  CZ  TYR D 114     -30.305   8.886  83.569
ATOM   4374  OH  TYR D 114     -29.190   9.540  83.106
ATOM   4375  H   TYR D 114     -33.412   6.118  87.869
ATOM   4376  HH  TYR D 114     -28.296   9.002  83.423
ATOM   4377  N   SER D 115     -36.125   6.908  87.826
ATOM   4378  CA  SER D 115     -37.547   6.606  87.982
ATOM   4379  C   SER D 115     -37.983   6.582  89.447
ATOM   4380  O   SER D 115     -37.224   6.128  90.324
ATOM   4381  CB  SER D 115     -37.839   5.258  87.314
ATOM   4382  OG  SER D 115     -39.225   5.001  87.153
ATOM   4383  H   SER D 115     -35.436   6.738  88.653
ATOM   4384  HG  SER D 115     -39.361   4.031  86.674
ATOM   4385  N   TYR D 116     -39.185   7.092  89.721
ATOM   4386  CA  TYR D 116     -39.696   7.092  91.091
ATOM   4387  C   TYR D 116     -41.188   6.764  91.121
ATOM   4388  O   TYR D 116     -41.895   6.976  90.126
ATOM   4389  CB  TYR D 116     -39.379   8.410  91.823
ATOM   4390  CG  TYR D 116     -40.246   9.608  91.505
ATOM   4391  CD1 TYR D 116     -39.923  10.485  90.454
ATOM   4392  CD2 TYR D 116     -41.336   9.919  92.306
ATOM   4393  CE1 TYR D 116     -40.681  11.661  90.224
ATOM   4394  CE2 TYR D 116     -42.096  11.082  92.094
ATOM   4395  CZ  TYR D 116     -41.761  11.949  91.056
ATOM   4396  OH  TYR D 116     -42.496  13.099  90.898
ATOM   4397  H   TYR D 116     -39.790   7.513  88.918
ATOM   4398  HH  TYR D 116     -43.288  13.130  91.645
ATOM   4399  N   SER D 117     -41.650   6.200  92.235
ATOM   4400  CA  SER D 117     -43.047   5.832  92.355
ATOM   4401  C   SER D 117     -43.602   6.199  93.711
ATOM   4402  O   SER D 117     -43.098   5.760  94.719
ATOM   4403  CB  SER D 117     -43.208   4.328  92.122
ATOM   4404  OG  SER D 117     -42.528   3.893  90.940
ATOM   4405  H   SER D 117     -40.970   6.012  93.066
ATOM   4406  HG  SER D 117     -42.670   2.820  90.815
ATOM   4407  N   THR D 118     -44.614   7.056  93.740
ATOM   4408  CA  THR D 118     -45.226   7.456  95.007
ATOM   4409  C   THR D 118     -46.537   6.715  95.135
ATOM   4410  O   THR D 118     -47.092   6.205  94.142
ATOM   4411  CB  THR D 118     -45.516   8.994  95.118
ATOM   4412  OG1 THR D 118     -46.326   9.427  94.016
ATOM   4413  CG2 THR D 118     -44.237   9.790  95.136
ATOM   4414  H   THR D 118     -44.995   7.469  92.806
ATOM   4415  HG1 THR D 118     -46.520  10.496  94.105
ATOM   4416  N   THR D 119     -47.031   6.665  96.358
ATOM   4417  CA  THR D 119     -48.277   6.003  96.629
ATOM   4418  C   THR D 119     -48.706   6.523  97.962
ATOM   4419  O   THR D 119     -47.872   6.878  98.805
ATOM   4420  CB  THR D 119     -48.111   4.460  96.705
ATOM   4421  OG1 THR D 119     -49.325   3.858  97.173
ATOM   4422  CG2 THR D 119     -46.978   4.081  97.634
ATOM   4423  H   THR D 119     -46.485   7.136  97.176
ATOM   4424  HG1 THR D 119     -49.199   2.776  97.222
ATOM   4425  N   ALA D 120     -50.007   6.599  98.151
ATOM   4426  CA  ALA D 120     -50.514   7.076  99.407
ATOM   4427  C   ALA D 120     -51.313   5.963 100.025
ATOM   4428  O   ALA D 120     -51.862   5.102  99.330
ATOM   4429  CB  ALA D 120     -51.373   8.271  99.186
ATOM   4430  H   ALA D 120     -50.695   6.306  97.358
ATOM   4431  N   VAL D 121     -51.280   5.928 101.344
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ATOM   4432  CA  VAL D 121     -52.046   4.959 102.105
ATOM   4433  C   VAL D 121     -52.691   5.788 103.184
ATOM   4434  O   VAL D 121     -51.994   6.393 104.021
ATOM   4435  CB  VAL D 121     -51.186   3.885 102.776
ATOM   4436  CG1 VAL D 121     -52.094   2.891 103.491
ATOM   4437  CG2 VAL D 121     -50.324   3.172 101.738
ATOM   4438  H   VAL D 121     -50.658   6.647 101.877
ATOM   4439  N   VAL D 122     -54.010   5.896 103.108
ATOM   4440  CA  VAL D 122     -54.739   6.669 104.092
ATOM   4441  C   VAL D 122     -55.610   5.751 104.936
ATOM   4442  O   VAL D 122     -56.662   5.298 104.485
ATOM   4443  CB  VAL D 122     -55.605   7.728 103.424
ATOM   4444  CG1 VAL D 122     -56.111   8.775 104.418
ATOM   4445  CG2 VAL D 122     -54.860   8.505 102.341
ATOM   4446  H   VAL D 122     -54.549   5.401 102.300
ATOM   4447  N   SER D 123     -55.124   5.416 106.128
ATOM   4448  CA  SER D 123     -55.878   4.569 107.050
ATOM   4449  C   SER D 123     -56.833   5.509 107.775
ATOM   4450  O   SER D 123     -57.192   6.549 107.228
ATOM   4451  CB  SER D 123     -54.942   3.864 108.047
ATOM   4452  OG  SER D 123     -54.245   4.786 108.871
ATOM   4453  H   SER D 123     -54.141   5.783 106.425
ATOM   4454  HG  SER D 123     -53.597   4.242 109.558
ATOM   4455  N   ASN D 124     -57.229   5.177 109.002
ATOM   4456  CA  ASN D 124     -58.133   6.042 109.761
ATOM   4457  C   ASN D 124     -58.091   5.690 111.243
ATOM   4458  O   ASN D 124     -57.566   4.641 111.620
ATOM   4459  CB  ASN D 124     -59.575   5.949 109.219
ATOM   4460  CG  ASN D 124     -60.395   4.854 109.882
ATOM   4461  OD1 ASN D 124     -59.914   3.750 110.119
ATOM   4462  ND2 ASN D 124     -61.645   5.164 110.185
ATOM   4463  H   ASN D 124     -56.876   4.247 109.448
ATOM   4464  HD2 ASN D 124     -62.129   4.306 110.652
ATOM   4465  HD2 ASN D 124     -62.119   6.127 109.996
ATOM   4466  N   PRO D 125     -58.536   6.617 112.110
ATOM   4467  CA  PRO D 125     -58.551   6.384 113.559
ATOM   4468  C   PRO D 125     -59.622   5.346 113.923
ATOM   4469  O   PRO D 125     -60.583   5.638 114.633
ATOM   4470  CB  PRO D 125     -58.875   7.772 114.115
ATOM   4471  CG  PRO D 125     -58.293   8.707 113.066
ATOM   4472  CD  PRO D 125     -58.773   8.043 111.810
ATOM   4473  N   GLN D 126     -59.427   4.142 113.397
ATOM   4474  CA  GLN D 126     -60.299   2.989 113.563
ATOM   4475  C   GLN D 126     -61.392   2.997 114.638
ATOM   4476  O   GLN D 126     -62.574   3.155 114.312
ATOM   4477  CB  GLN D 126     -59.431   1.732 113.672
ATOM   4478  CG  GLN D 126     -58.195   1.924 114.550
ATOM   4479  CD  GLN D 126     -56.928   1.407 113.900
ATOM   4480  OE1 GLN D 126     -56.575   1.818 112.795
ATOM   4481  NE2 GLN D 126     -56.231   0.505 114.586
ATOM   4482  H   GLN D 126     -58.536   4.007 112.784
ATOM   4483  HE2 GLN D 126     -55.349   0.215 114.015
ATOM   4484  HE2 GLN D 126     -56.501   0.115 115.568
ATOM   4485  N   ASN D 127     -60.997   2.842 115.902
ATOM   4486  CA  ASN D 127     -61.936   2.785 117.027
ATOM   4487  C   ASN D 127     -61.883   4.023 117.944
ATOM   4488  OCT ASN D 127     -62.588   4.014 118.980
ATOM   4489  CB  ASN D 127     -61.665   1.516 117.849
ATOM   4490  CG  ASN D 127     -62.941   0.758 118.220
ATOM   4491  OD1 ASN D 127     -63.864   0.615 117.409
ATOM   4492  ND2 ASN D 127     -62.973   0.225 119.438
ATOM   4493  OCT ASN D 127     -61.150   4.990 117.627
ATOM   4494  H   ASN D 127     -59.930   2.754 116.108
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ATOM   4495  HD2 ASN D 127     -63.924  -0.286 119.587
ATOM   4496  HD2 ASN D 127     -62.170   0.286 120.173
TER
REMARK compound 9a docked
ATOM      1  C11 THI A   9     -44.079   0.542  98.310
ATOM      2  C12 THI A   9     -45.005  -0.526  98.367
ATOM      3  C13 THI A   9     -45.122  -1.020  99.686
ATOM      4  C14 THI A   9     -44.320  -0.354 100.618
ATOM      5  S15 THI A   9     -43.418   0.864  99.850
ATOM      6  N17 THI A   9     -45.750  -1.054  97.213
ATOM      7  H18 THI A   9     -45.608  -0.648  96.309
ATOM      8  H19 THI A   9     -46.393  -1.813  97.313
ATOM      9  C28 THI A   9     -45.997  -2.115 100.056
ATOM     10  N29 THI A   9     -46.699  -2.992 100.358
ATOM     11  C21 THI A   9     -43.712   1.262  97.186
ATOM     12  O22 THI A   9     -42.642   1.155  96.669
ATOM     13  O23 THI A   9     -44.632   2.087  96.712
ATOM     14  C24 THI A   9     -44.351   2.781  95.496
ATOM     15  O16 THI A   9     -44.240  -0.636 102.016
ATOM     16  C4  THI A   9     -43.077  -1.258 102.440
ATOM     17  C3  THI A   9     -43.028  -2.645 102.402
ATOM     18  C2  THI A   9     -41.890  -3.320 102.827
ATOM     19  C1  THI A   9     -40.794  -2.606 103.295
ATOM     20  C6  THI A   9     -40.840  -1.217 103.340
ATOM     21  C5  THI A   9     -41.979  -0.545 102.914
TER
REMARK compound 10c docked
ATOM      1  C11 THI C  10     -42.032   1.554 106.653
ATOM      2  C12 THI C  10     -40.695   1.961 106.415
ATOM      3  C13 THI C  10     -40.262   1.726 105.069
ATOM      4  C14 THI C  10     -41.275   1.059 104.349
ATOM      5  S15 THI C  10     -42.677   0.820 105.267
ATOM      6  N17 THI C  10     -39.862   2.532 107.492
ATOM      7  H18 THI C  10     -40.272   2.676 108.396
ATOM      8  H19 THI C  10     -38.897   2.755 107.377
ATOM      9  C21 THI C  10     -42.738   1.674 107.854
ATOM     10  O22 THI C  10     -42.303   1.145 108.871
ATOM     11  C25 THI C  10     -44.019   2.401 107.844
ATOM     12  C30 THI C  10     -43.987   3.788 107.736
ATOM     13  C29 THI C  10     -45.166   4.522 107.706
ATOM     14  C28 THI C  10     -46.391   3.872 107.779
ATOM     15  C27 THI C  10     -46.434   2.485 107.876
ATOM     16  C26 THI C  10     -45.253   1.753 107.905
ATOM     17  C23 THI C  10     -39.038   2.072 104.489
ATOM     18  O36 THI C  10     -38.123   1.265 104.432
ATOM     19  N24 THI C  10     -38.893   3.294 103.975
ATOM     20  H37 THI C  10     -39.650   3.937 103.951
ATOM     21  H38 THI C  10     -37.997   3.513 103.597
ATOM     22  O16 THI C  10     -41.186   0.605 102.996
ATOM     23  C4  THI C  10     -41.453  -0.736 102.787
ATOM     24  C3  THI C  10     -40.411  -1.642 102.926
ATOM     25  C2  THI C  10     -40.629  -2.999 102.715
ATOM     26  C1  THI C  10     -41.894  -3.451 102.362
ATOM     27  C6  THI C  10     -42.939  -2.546 102.218
ATOM     28  C5  THI C  10     -42.718  -1.190 102.429
TER
REMARK compound 10a docked
ATOM      1  C11 THI A  10     -42.073   1.614 106.653
ATOM      2  C12 THI A  10     -40.722   1.957 106.414
ATOM      3  C13 THI A  10     -40.308   1.688 105.068
ATOM      4  C14 THI A  10     -41.364   1.079 104.355
ATOM      5  S15 THI A  10     -42.774   0.916 105.281
ATOM      6  N17 THI A  10     -39.872   2.495 107.495
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ATOM      7  H18 THI A  10     -40.287   2.665 108.392
ATOM      8  H19 THI A  10     -38.898   2.675 107.386
ATOM      9  C21 THI A  10     -42.784   1.779 107.830
ATOM     10  O22 THI A  10     -43.565   2.664 108.002
ATOM     11  O23 THI A  10     -42.544   0.877 108.769
ATOM     12  C24 THI A  10     -42.904   1.188 110.115
ATOM     13  C28 THI A  10     -39.069   1.960 104.485
ATOM     14  O30 THI A  10     -38.158   1.146 104.537
ATOM     15  N29 THI A  10     -38.901   3.117 103.844
ATOM     16  H31 THI A  10     -39.654   3.756 103.737
ATOM     17  H32 THI A  10     -37.997   3.289 103.465
ATOM     18  O16 THI A  10     -41.305   0.627 102.999
ATOM     19  C4  THI A  10     -41.481  -0.730 102.791
ATOM     20  C3  THI A  10     -42.744  -1.173 102.428
ATOM     21  C2  THI A  10     -42.983  -2.525 102.218
ATOM     22  C1  THI A  10     -41.952  -3.444 102.374
ATOM     23  C6  THI A  10     -40.685  -3.008 102.743
ATOM     24  C5  THI A  10     -40.451  -1.653 102.953
TER
REMARK compound 9e docked
ATOM      1  C11 THI E   9     -44.444   0.677 101.937
ATOM      2  C12 THI E   9     -45.144  -0.458 101.897
ATOM      3  C13 THI E   9     -45.368  -0.938 100.527
ATOM      4  C14 THI E   9     -44.884  -0.190  99.495
ATOM      5  S15 THI E   9     -44.102   1.189 100.309
ATOM      6  N17 THI E   9     -45.655  -1.160 103.087
ATOM      7  H18 THI E   9     -45.474  -0.758 103.989
ATOM      8  H19 THI E   9     -46.177  -2.010 103.015
ATOM      9  C23 THI E   9     -46.090  -2.179 100.367
ATOM     10  N24 THI E   9     -46.674  -3.179 100.284
ATOM     11  C21 THI E   9     -44.040   1.394 103.188
ATOM     12  O22 THI E   9     -44.742   2.348 103.515
ATOM     13  C25 THI E   9     -42.842   0.963 103.928
ATOM     14  C30 THI E   9     -41.610   1.498 103.561
ATOM     15  C29 THI E   9     -40.452   1.130 104.234
ATOM     16  C28 THI E   9     -40.518   0.226 105.286
ATOM     17  C27 THI E   9     -41.743  -0.308 105.664
ATOM     18  C26 THI E   9     -42.902   0.061 104.991
ATOM     19  O16 THI E   9     -45.245  -0.875  98.376
ATOM     20  C4  THI E   9     -44.519  -0.878  97.196
ATOM     21  C3  THI E   9     -44.136  -2.110  96.682
ATOM     22  C2  THI E   9     -43.406  -2.183  95.502
ATOM     23  C1  THI E   9     -43.055  -1.020  94.828
ATOM     24  C6  THI E   9     -43.437   0.215  95.338
ATOM     25  C5  THI E   9     -44.167   0.287  96.519
TER
REMARK compound 9g docked
ATOM      1  C11 THI G   9     -48.508   0.285 105.568
ATOM      2  C12 THI G   9     -47.853  -0.775 106.085
ATOM      3  C13 THI G   9     -46.403  -0.719 105.839
ATOM      4  C14 THI G   9     -46.045   0.388 105.171
ATOM      5  S15 THI G   9     -47.412   1.414 104.779
ATOM      6  N17 THI G   9     -48.491  -1.806 106.755
ATOM      7  H18 THI G   9     -48.057  -2.617 107.194
ATOM      8  H19 THI G   9     -49.510  -1.812 106.891
ATOM      9  C7  THI G   9     -45.466  -1.724 106.247
ATOM     10  N2  THI G   9     -44.703  -2.533 106.575
ATOM     11  C21 THI G   9     -49.993   0.480 105.623
ATOM     12  O22 THI G   9     -50.599   0.287 104.572
ATOM     13  C25 THI G   9     -50.616   0.929 106.877
ATOM     14  C30 THI G   9     -51.282  -0.013 107.663
ATOM     15  C29 THI G   9     -51.898   0.368 108.850
ATOM     16  C28 THI G   9     -51.832   1.700 109.238
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ATOM     17  N1  THI G   9     -52.494   2.115 110.483
ATOM     18  O2  THI G   9     -53.093   1.251 111.100
ATOM     19  O1  THI G   9     -52.392   3.292 110.792
ATOM     20  C27 THI G   9     -51.161   2.653 108.483
ATOM     21  C26 THI G   9     -50.550   2.259 107.299
ATOM     22  O16 THI G   9     -44.765   0.683 104.819
ATOM     23  C4  THI G   9     -44.260   0.496 103.541
ATOM     24  C3  THI G   9     -43.627  -0.703 103.242
ATOM     25  C2  THI G   9     -43.107  -0.925 101.973
ATOM     26  C1  THI G   9     -43.217   0.056 100.995
ATOM     27  C6  THI G   9     -43.845   1.259 101.290
ATOM     28  C5  THI G   9     -44.365   1.478 102.561
TER
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REMARK
REMARK Human Transthyretin (TTR) Tetramer
REMARK based on 1eta.pdb
REMARK
REMARK showing a second binding site outside the
REMARK channel of comparable stability for ligand
REMARK interaction
REMARK
REMARK demonstrated for the TTR complex with compound 9e (Table 1)
REMARK
REMARK (c) H.-J. Hofmann & M. Thormann 1998
REMARK
ATOM      1  N   GLY 1   1      -53.953 -10.518  58.498
ATOM      2  CA  GLY 1   1      -54.621 -11.331  59.520
ATOM      3  C   GLY 1   1      -53.587 -12.144  60.304
ATOM      4  O   GLY 1   1      -52.444 -11.705  60.470
ATOM      5  H1  GLY 1   1      -54.698  -9.945  57.946
ATOM      6  H2  GLY 1   1      -53.414 -11.170  57.811
ATOM      7  H3  GLY 1   1      -53.251  -9.837  58.978
ATOM      8  N   PRO 1   2      -54.042 -13.299  60.764
ATOM      9  CA  PRO 1   2      -53.243 -14.251  61.535
ATOM     10  C   PRO 1   2      -51.822 -14.453  61.080
ATOM     11  O   PRO 1   2      -51.012 -13.499  61.084
ATOM     12  CB  PRO 1   2      -54.104 -15.519  61.417
ATOM     13  CG  PRO 1   2      -55.513 -15.008  61.503
ATOM     14  CD  PRO 1   2      -55.496 -13.632  60.877
ATOM     15  N   THR 1   3      -51.459 -15.680  60.745
ATOM     16  CA  THR 1   3      -50.193 -16.062  60.134
ATOM     17  C   THR 1   3      -49.684 -17.440  60.533
ATOM     18  O   THR 1   3      -49.596 -18.300  59.618
ATOM     19  CB  THR 1   3      -49.048 -14.984  60.226
ATOM     20  OG1 THR 1   3      -49.491 -13.828  59.448
ATOM     21  CG2 THR 1   3      -47.699 -15.520  59.712
ATOM     22  H   THR 1   3      -52.174 -16.479  60.942
ATOM     23  HG1 THR 1   3      -48.727 -13.052  59.482
ATOM     24  N   GLY 1   4      -49.301 -17.675  61.770
ATOM     25  CA  GLY 1   4      -48.903 -18.960  62.261
ATOM     26  C   GLY 1   4      -47.579 -19.275  62.846
ATOM     27  O   GLY 1   4      -47.144 -20.460  62.685
ATOM     28  H   GLY 1   4      -49.287 -16.837  62.467
ATOM     29  N   THR 1   5      -46.891 -18.358  63.507
ATOM     30  CA  THR 1   5      -45.605 -18.595  64.164
ATOM     31  C   THR 1   5      -44.609 -17.456  64.049
ATOM     32  O   THR 1   5      -43.383 -17.693  64.211
ATOM     33  CB  THR 1   5      -44.931 -19.950  63.679
ATOM     34  OG1 THR 1   5      -43.950 -20.292  64.703
ATOM     35  CG2 THR 1   5      -44.316 -19.841  62.283
ATOM     36  H   THR 1   5      -47.312 -17.355  63.567
ATOM     37  HG1 THR 1   5      -43.447 -21.219  64.429
ATOM     38  N   GLY 1   6      -45.091 -16.249  63.814
ATOM     39  CA  GLY 1   6      -44.238 -15.110  63.569
ATOM     40  C   GLY 1   6      -44.636 -13.759  64.036
ATOM     41  O   GLY 1   6      -43.954 -13.236  64.945
ATOM     42  H   GLY 1   6      -46.172 -16.108  63.806
ATOM     43  N   GLU 1   7      -45.674 -13.140  63.467
ATOM     44  CA  GLU 1   7      -46.051 -11.770  63.862
ATOM     45  C   GLU 1   7      -47.175 -11.144  63.094
ATOM     46  O   GLU 1   7      -46.983 -10.239  62.245
ATOM     47  CB  GLU 1   7      -44.779 -10.892  63.682
ATOM     48  CG  GLU 1   7      -43.939 -11.318  62.485
ATOM     49  CD  GLU 1   7      -42.528 -10.887  62.366
ATOM     50  OE1 GLU 1   7      -42.154  -9.732  62.454
ATOM     51  OE2 GLU 1   7      -41.755 -11.855  62.143
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ATOM     52  H   GLU 1   7      -46.252 -13.656  62.700
ATOM     53  N   SER 1   8      -48.386 -11.585  63.388
ATOM     54  CA  SER 1   8      -49.634 -11.118  62.790
ATOM     55  C   SER 1   8      -49.748  -9.596  62.761
ATOM     56  O   SER 1   8      -49.196  -8.949  61.851
ATOM     57  CB  SER 1   8      -50.842 -11.705  63.510
ATOM     58  OG  SER 1   8      -51.999 -10.911  63.294
ATOM     59  H   SER 1   8      -48.460 -12.366  64.144
ATOM     60  HG  SER 1   8      -52.846 -11.352  63.819
ATOM     61  N   LYS 1   9      -50.488  -9.061  63.716
ATOM     62  CA  LYS 1   9      -50.647  -7.591  63.839
ATOM     63  C   LYS 1   9      -49.723  -7.180  65.012
ATOM     64  O   LYS 1   9      -49.700  -6.069  65.516
ATOM     65  CB  LYS 1   9      -52.041  -7.136  64.134
ATOM     66  CG  LYS 1   9      -53.182  -7.983  63.571
ATOM     67  CD  LYS 1   9      -54.422  -7.819  64.449
ATOM     68  CE  LYS 1   9      -54.143  -8.170  65.896
ATOM     69  NZ  LYS 1   9      -53.643  -9.569  65.994
ATOM     70  H   LYS 1   9      -50.993  -9.713  64.429
ATOM     71  HZ1 LYS 1   9      -53.445  -9.812  67.038
ATOM     72  HZ2 LYS 1   9      -52.724  -9.668  65.417
ATOM     73  HZ3 LYS 1   9      -54.395 -10.252  65.599
ATOM     74  N   CYS 1  10      -48.959  -8.202  65.361
ATOM     75  CA  CYS 1  10      -48.086  -8.215  66.533
ATOM     76  C   CYS 1  10      -49.083  -8.191  67.724
ATOM     77  O   CYS 1  10      -49.416  -7.121  68.221
ATOM     78  CB  CYS 1  10      -47.005  -7.194  66.609
ATOM     79  SG  CYS 1  10      -45.373  -7.897  66.170
ATOM     80  H   CYS 1  10      -48.983  -9.093  64.733
ATOM     81  N   PRO 1  11      -49.484  -9.410  68.041
ATOM     82  CA  PRO 1  11      -50.471  -9.625  69.104
ATOM     83  C   PRO 1  11      -49.802  -9.645  70.465
ATOM     84  O   PRO 1  11      -50.490  -9.479  71.463
ATOM     85  CB  PRO 1  11      -51.171 -10.904  68.718
ATOM     86  CG  PRO 1  11      -50.125 -11.684  67.984
ATOM     87  CD  PRO 1  11      -49.298 -10.638  67.245
ATOM     88  N   LEU 1  12      -48.488  -9.824  70.455
ATOM     89  CA  LEU 1  12      -47.723  -9.887  71.704
ATOM     90  C   LEU 1  12      -46.389  -9.142  71.558
ATOM     91  O   LEU 1  12      -45.567  -9.609  70.792
ATOM     92  CB  LEU 1  12      -47.555 -11.337  72.121
ATOM     93  CG  LEU 1  12      -46.842 -11.616  73.444
ATOM     94  CD1 LEU 1  12      -47.547 -10.941  74.606
ATOM     95  CD2 LEU 1  12      -46.709 -13.119  73.645
ATOM     96  H   LEU 1  12      -47.968  -9.926  69.503
ATOM     97  N   MET 1  13      -46.292  -8.075  72.347
ATOM     98  CA  MET 1  13      -45.037  -7.273  72.322
ATOM     99  C   MET 1  13      -44.469  -7.126  73.731
ATOM    100  O   MET 1  13      -45.252  -7.084  74.694
ATOM    101  CB  MET 1  13      -45.351  -5.974  71.635
ATOM    102  CG  MET 1  13      -45.805  -6.162  70.213
ATOM    103  SD  MET 1  13      -46.812  -4.700  69.806
ATOM    104  CE  MET 1  13      -48.413  -5.230  70.466
ATOM    105  H   MET 1  13      -47.118  -7.793  73.000
ATOM    106  N   VAL 1  14      -43.150  -7.065  73.852
ATOM    107  CA  VAL 1  14      -42.517  -6.916  75.175
ATOM    108  C   VAL 1  14      -41.527  -5.737  75.061
ATOM    109  O   VAL 1  14      -40.789  -5.676  74.051
ATOM    110  CB  VAL 1  14      -41.879  -8.175  75.738
ATOM    111  CG1 VAL 1  14      -41.354  -7.945  77.192
ATOM    112  CG2 VAL 1  14      -42.704  -9.453  75.734
ATOM    113  H   VAL 1  14      -42.525  -7.124  72.961
ATOM    114  N   LYS 1  15      -41.600  -4.892  76.072
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ATOM    115  CA  LYS 1  15      -40.744  -3.714  76.217
ATOM    116  C   LYS 1  15      -40.120  -3.625  77.596
ATOM    117  O   LYS 1  15      -40.801  -3.577  78.624
ATOM    118  CB  LYS 1  15      -41.548  -2.435  75.886
ATOM    119  CG  LYS 1  15      -40.858  -1.160  76.346
ATOM    120  CD  LYS 1  15      -40.708  -0.120  75.254
ATOM    121  CE  LYS 1  15      -39.322   0.539  75.330
ATOM    122  NZ  LYS 1  15      -39.108   1.297  74.054
ATOM    123  H   LYS 1  15      -42.342  -5.083  76.847
ATOM    124  HZ1 LYS 1  15      -38.130   1.778  74.077
ATOM    125  HZ2 LYS 1  15      -39.883   2.055  73.946
ATOM    126  HZ3 LYS 1  15      -39.153   0.608  73.210
ATOM    127  N   VAL 1  16      -38.762  -3.563  77.616
ATOM    128  CA  VAL 1  16      -38.071  -3.547  78.923
ATOM    129  C   VAL 1  16      -37.182  -2.293  79.027
ATOM    130  O   VAL 1  16      -36.414  -2.003  78.092
ATOM    131  CB  VAL 1  16      -37.256  -4.839  79.121
ATOM    132  CG1 VAL 1  16      -36.767  -4.992  80.575
ATOM    133  CG2 VAL 1  16      -37.916  -6.135  78.686
ATOM    134  H   VAL 1  16      -38.194  -3.526  76.686
ATOM    135  N   LEU 1  17      -37.271  -1.609  80.134
ATOM    136  CA  LEU 1  17      -36.508  -0.417  80.481
ATOM    137  C   LEU 1  17      -35.645  -0.634  81.741
ATOM    138  O   LEU 1  17      -36.021  -1.409  82.664
ATOM    139  CB  LEU 1  17      -37.520   0.723  80.676
ATOM    140  CG  LEU 1  17      -38.334   1.296  79.553
ATOM    141  CD1 LEU 1  17      -38.858   2.689  79.924
ATOM    142  CD2 LEU 1  17      -37.467   1.419  78.272
ATOM    143  H   LEU 1  17      -37.987  -1.965  80.874
ATOM    144  N   ASP 1  18      -34.532   0.019  81.778
ATOM    145  CA  ASP 1  18      -33.552   0.056  82.881
ATOM    146  C   ASP 1  18      -33.636   1.406  83.601
ATOM    147  O   ASP 1  18      -33.309   2.487  83.027
ATOM    148  CB  ASP 1  18      -32.168  -0.179  82.275
ATOM    149  CG  ASP 1  18      -31.023  -0.243  83.232
ATOM    150  OD1 ASP 1  18      -31.130   0.362  84.297
ATOM    151  OD2 ASP 1  18      -30.022  -0.903  82.890
ATOM    152  H   ASP 1  18      -34.290   0.611  80.895
ATOM    153  N   ALA 1  19      -34.099   1.325  84.856
ATOM    154  CA  ALA 1  19      -34.277   2.451  85.752
ATOM    155  C   ALA 1  19      -32.970   2.930  86.387
ATOM    156  O   ALA 1  19      -32.982   4.028  87.006
ATOM    157  CB  ALA 1  19      -35.295   2.155  86.835
ATOM    158  H   ALA 1  19      -34.364   0.336  85.232
ATOM    159  N   VAL 1  20      -31.909   2.217  86.232
ATOM    160  CA  VAL 1  20      -30.597   2.563  86.805
ATOM    161  C   VAL 1  20      -29.846   3.436  85.791
ATOM    162  O   VAL 1  20      -29.285   4.455  86.194
ATOM    163  CB  VAL 1  20      -29.804   1.336  87.226
ATOM    164  CG1 VAL 1  20      -28.299   1.653  87.442
ATOM    165  CG2 VAL 1  20      -30.301   0.666  88.489
ATOM    166  H   VAL 1  20      -31.986   1.303  85.643
ATOM    167  N   ARG 1  21      -29.876   3.034  84.531
ATOM    168  CA  ARG 1  21      -29.144   3.727  83.456
ATOM    169  C   ARG 1  21      -29.941   4.714  82.617
ATOM    170  O   ARG 1  21      -29.408   5.509  81.812
ATOM    171  CB  ARG 1  21      -28.611   2.611  82.520
ATOM    172  CG  ARG 1  21      -27.391   1.901  83.094
ATOM    173  CD  ARG 1  21      -27.243   0.493  82.639
ATOM    174  NE  ARG 1  21      -27.542   0.300  81.219
ATOM    175  CZ  ARG 1  21      -27.278  -0.882  80.643
ATOM    176  NH1 ARG 1  21      -26.729  -1.876  81.351
ATOM    177  NH2 ARG 1  21      -27.570  -1.104  79.376
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ATOM    178  H   ARG 1  21      -30.466   2.152  84.278
ATOM    179  HE  ARG 1  21      -27.975   1.111  80.634
ATOM    180  HH1 ARG 1  21      -26.594  -2.747  80.709
ATOM    181  HH1 ARG 1  21      -26.460  -1.824  82.406
ATOM    182  HH2 ARG 1  21      -27.276  -2.119  79.108
ATOM    183  HH2 ARG 1  21      -28.034  -0.384  78.702
ATOM    184  N   GLY 1  22      -31.253   4.642  82.757
ATOM    185  CA  GLY 1  22      -32.181   5.496  82.017
ATOM    186  C   GLY 1  22      -32.113   5.126  80.527
ATOM    187  O   GLY 1  22      -31.958   6.014  79.662
ATOM    188  H   GLY 1  22      -31.662   3.913  83.456
ATOM    189  N   SER 1  23      -32.248   3.849  80.263
ATOM    190  CA  SER 1  23      -32.132   3.337  78.869
ATOM    191  C   SER 1  23      -32.985   2.115  78.682
ATOM    192  O   SER 1  23      -33.464   1.529  79.676
ATOM    193  CB  SER 1  23      -30.639   2.993  78.660
ATOM    194  OG  SER 1  23      -30.406   1.654  79.126
ATOM    195  H   SER 1  23      -32.450   3.151  81.076
ATOM    196  HG  SER 1  23      -29.356   1.398  78.984
ATOM    197  N   PRO 1  24      -33.165   1.722  77.430
ATOM    198  CA  PRO 1  24      -33.832   0.452  77.117
ATOM    199  C   PRO 1  24      -32.930  -0.652  77.688
ATOM    200  O   PRO 1  24      -31.682  -0.455  77.862
ATOM    201  CB  PRO 1  24      -34.021   0.430  75.632
ATOM    202  CG  PRO 1  24      -33.443   1.677  75.092
ATOM    203  CD  PRO 1  24      -32.879   2.520  76.208
ATOM    204  N   ALA 1  25      -33.527  -1.740  78.016
ATOM    205  CA  ALA 1  25      -32.785  -2.927  78.553
ATOM    206  C   ALA 1  25      -32.563  -3.787  77.313
ATOM    207  O   ALA 1  25      -33.513  -4.360  76.755
ATOM    208  CB  ALA 1  25      -33.540  -3.582  79.690
ATOM    209  H   ALA 1  25      -34.609  -1.803  77.900
ATOM    210  N   ILE 1  26      -31.322  -3.817  76.850
ATOM    211  CA  ILE 1  26      -30.907  -4.520  75.649
ATOM    212  C   ILE 1  26      -30.329  -5.898  75.915
ATOM    213  O   ILE 1  26      -29.695  -6.108  76.953
ATOM    214  CB  ILE 1  26      -29.872  -3.600  74.875
ATOM    215  CG1 ILE 1  26      -30.524  -2.227  74.601
ATOM    216  CG2 ILE 1  26      -29.318  -4.271  73.609
ATOM    217  CD1 ILE 1  26      -29.428  -1.139  74.316
ATOM    218  H   ILE 1  26      -30.559  -3.276  77.410
ATOM    219  N   ASN 1  27      -30.649  -6.813  75.027
ATOM    220  CA  ASN 1  27      -30.258  -8.207  75.020
ATOM    221  C   ASN 1  27      -30.810  -8.983  76.214
ATOM    222  O   ASN 1  27      -30.161  -9.871  76.761
ATOM    223  CB  ASN 1  27      -28.704  -8.335  74.923
ATOM    224  CG  ASN 1  27      -28.264  -8.018  73.495
ATOM    225  OD1 ASN 1  27      -27.199  -7.422  73.288
ATOM    226  ND2 ASN 1  27      -29.064  -8.410  72.501
ATOM    227  H   ASN 1  27      -31.279  -6.485  74.200
ATOM    228  HD2 ASN 1  27      -28.626  -8.119  71.547
ATOM    229  HD2 ASN 1  27      -30.009  -8.939  72.625
ATOM    230  N   VAL 1  28      -32.009  -8.632  76.634
ATOM    231  CA  VAL 1  28      -32.648  -9.329  77.759
ATOM    232  C   VAL 1  28      -33.369 -10.543  77.139
ATOM    233  O   VAL 1  28      -34.189 -10.319  76.214
ATOM    234  CB  VAL 1  28      -33.594  -8.394  78.523
ATOM    235  CG1 VAL 1  28      -34.361  -9.172  79.600
ATOM    236  CG2 VAL 1  28      -32.923  -7.147  79.044
ATOM    237  H   VAL 1  28      -32.533  -7.813  76.142
ATOM    238  N   ALA 1  29      -33.081 -11.699  77.649
ATOM    239  CA  ALA 1  29      -33.672 -12.954  77.170
ATOM    240  C   ALA 1  29      -35.117 -13.036  77.703
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ATOM    241  O   ALA 1  29      -35.311 -12.659  78.871
ATOM    242  CB  ALA 1  29      -32.881 -14.159  77.629
ATOM    243  H   ALA 1  29      -32.367 -11.742  78.472
ATOM    244  N   VAL 1  30      -36.019 -13.480  76.866
ATOM    245  CA  VAL 1  30      -37.432 -13.645  77.282
ATOM    246  C   VAL 1  30      -37.921 -15.017  76.784
ATOM    247  O   VAL 1  30      -37.680 -15.402  75.629
ATOM    248  CB  VAL 1  30      -38.349 -12.511  76.767
ATOM    249  CG1 VAL 1  30      -39.831 -12.783  77.067
ATOM    250  CG2 VAL 1  30      -37.985 -11.122  77.249
ATOM    251  H   VAL 1  30      -35.726 -13.733  75.846
ATOM    252  N   HIS 1  31      -38.618 -15.707  77.665
ATOM    253  CA  HIS 1  31      -39.243 -17.017  77.366
ATOM    254  C   HIS 1  31      -40.739 -16.928  77.622
ATOM    255  O   HIS 1  31      -41.161 -16.444  78.711
ATOM    256  CB  HIS 1  31      -38.559 -18.160  78.183
ATOM    257  CG  HIS 1  31      -37.078 -18.276  77.881
ATOM    258  ND1 HIS 1  31      -36.545 -19.251  77.079
ATOM    259  CD2 HIS 1  31      -36.064 -17.495  78.240
ATOM    260  CE1 HIS 1  31      -35.224 -19.062  76.986
ATOM    261  NE2 HIS 1  31      -34.897 -18.015  77.687
ATOM    262  H   HIS 1  31      -38.741 -15.292  78.665
ATOM    263  HD1 HIS 1  31      -37.106 -20.051  76.596
ATOM    264  N   VAL 1  32      -41.548 -17.348  76.684
ATOM    265  CA  VAL 1  32      -43.024 -17.376  76.819
ATOM    266  C   VAL 1  32      -43.472 -18.826  76.860
ATOM    267  O   VAL 1  32      -42.931 -19.634  76.046
ATOM    268  CB  VAL 1  32      -43.693 -16.601  75.673
ATOM    269  CG1 VAL 1  32      -45.198 -16.424  75.917
ATOM    270  CG2 VAL 1  32      -42.995 -15.273  75.383
ATOM    271  H   VAL 1  32      -41.111 -17.698  75.749
ATOM    272  N   PHE 1  33      -44.403 -19.132  77.742
ATOM    273  CA  PHE 1  33      -44.928 -20.501  77.888
ATOM    274  C   PHE 1  33      -46.469 -20.427  77.867
ATOM    275  O   PHE 1  33      -46.997 -19.354  78.186
ATOM    276  CB  PHE 1  33      -44.491 -21.180  79.176
ATOM    277  CG  PHE 1  33      -43.006 -21.174  79.400
ATOM    278  CD1 PHE 1  33      -42.388 -20.055  79.960
ATOM    279  CD2 PHE 1  33      -42.269 -22.296  79.045
ATOM    280  CE1 PHE 1  33      -41.006 -20.053  80.151
ATOM    281  CE2 PHE 1  33      -40.857 -22.305  79.252
ATOM    282  CZ  PHE 1  33      -40.273 -21.173  79.805
ATOM    283  H   PHE 1  33      -44.797 -18.345  78.386
ATOM    284  N   ARG 1  34      -47.051 -21.533  77.503
ATOM    285  CA  ARG 1  34      -48.544 -21.634  77.491
ATOM    286  C   ARG 1  34      -48.917 -22.841  78.327
ATOM    287  O   ARG 1  34      -48.242 -23.904  78.248
ATOM    288  CB  ARG 1  34      -49.086 -21.710  76.066
ATOM    289  CG  ARG 1  34      -50.642 -21.790  76.062
ATOM    290  CD  ARG 1  34      -51.129 -22.109  74.674
ATOM    291  NE  ARG 1  34      -52.605 -22.054  74.674
ATOM    292  CZ  ARG 1  34      -53.397 -23.119  74.732
ATOM    293  NH1 ARG 1  34      -52.905 -24.363  74.764
ATOM    294  NH2 ARG 1  34      -54.723 -22.895  74.790
ATOM    295  H   ARG 1  34      -46.447 -22.390  77.202
ATOM    296  HE  ARG 1  34      -53.076 -21.072  74.624
ATOM    297  HH1 ARG 1  34      -53.726 -25.078  74.809
ATOM    298  HH1 ARG 1  34      -51.846 -24.620  74.747
ATOM    299  HH2 ARG 1  34      -55.251 -23.848  74.833
ATOM    300  HH2 ARG 1  34      -55.196 -21.913  74.792
ATOM    301  N   LYS 1  35      -49.939 -22.706  79.157
ATOM    302  CA  LYS 1  35      -50.354 -23.841  80.034
ATOM    303  C   LYS 1  35      -51.086 -24.843  79.170
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ATOM    304  O   LYS 1  35     -52.083 -24.474  78.519
ATOM    305  CB  LYS 1  35     -51.162 -23.300  81.195
ATOM    306  CG  LYS 1  35     -51.115 -24.119  82.492
ATOM    307  CD  LYS 1  35     -51.127 -23.203  83.711
ATOM    308  CE  LYS 1  35     -52.461 -22.509  83.873
ATOM    309  NZ  LYS 1  35     -52.515 -21.684  85.097
ATOM    310  H   LYS 1  35     -50.481 -21.761  79.200
ATOM    311  HZ1 LYS 1  35     -53.492 -21.206  85.170
ATOM    312  HZ2 LYS 1  35     -51.739 -20.920  85.054
ATOM    313  HZ3 LYS 1  35     -52.355 -22.317  85.969
ATOM    314  N   ALA 1  36     -50.605 -26.077  79.124
ATOM    315  CA  ALA 1  36     -51.270 -27.116  78.294
ATOM    316  C   ALA 1  36     -52.423 -27.770  79.056
ATOM    317  O   ALA 1  36     -52.625 -27.495  80.247
ATOM    318  CB  ALA 1  36     -50.274 -28.142  77.788
ATOM    319  H   ALA 1  36     -49.715 -26.333  79.699
ATOM    320  N   ALA 1  37     -53.140 -28.634  78.340
ATOM    321  CA  ALA 1  37     -54.310 -29.329  78.903
ATOM    322  C   ALA 1  37     -53.991 -30.033  80.213
ATOM    323  O   ALA 1  37     -54.803 -29.990  81.151
ATOM    324  CB  ALA 1  37     -54.906 -30.296  77.884
ATOM    325  H   ALA 1  37     -52.853 -28.833  77.308
ATOM    326  N   ASP 1  38     -52.855 -30.670  80.294
ATOM    327  CA  ASP 1  38     -52.389 -31.404  81.470
ATOM    328  C   ASP 1  38     -51.873 -30.502  82.576
ATOM    329  O   ASP 1  38     -51.255 -31.005  83.559
ATOM    330  CB  ASP 1  38     -51.263 -32.401  81.024
ATOM    331  CG  ASP 1  38     -50.008 -31.549  80.790
ATOM    332  OD1 ASP 1  38     -49.784 -31.034  79.695
ATOM    333  OD2 ASP 1  38     -49.297 -31.403  81.800
ATOM    334  H   ASP 1  38     -52.205 -30.655  79.419
ATOM    335  N   ASP 1  39     -52.049 -29.208  82.444
ATOM    336  CA  ASP 1  39     -51.599 -28.245  83.456
ATOM    337  C   ASP 1  39     -50.105 -28.018  83.512
ATOM    338  O   ASP 1  39     -49.636 -27.577  84.604
ATOM    339  CB  ASP 1  39     -52.140 -28.731  84.836
ATOM    340  CG  ASP 1  39     -52.617 -27.540  85.657
ATOM    341  OD1 ASP 1  39     -53.702 -27.007  85.353
ATOM    342  OD2 ASP 1  39     -51.881 -27.159  86.588
ATOM    343  H   ASP 1  39     -52.548 -28.836  81.550
ATOM    344  N   THR 1  40     -49.348 -28.297  82.472
ATOM    345  CA  THR 1  40     -47.902 -27.995  82.474
ATOM    346  C   THR 1  40     -47.648 -26.774  81.574
ATOM    347  O   THR 1  40     -48.505 -26.439  80.726
ATOM    348  CB  THR 1  40     -46.972 -29.191  82.071
ATOM    349  OG1 THR 1  40     -47.266 -29.525  80.679
ATOM    350  CG2 THR 1  40     -47.096 -30.415  82.986
ATOM    351  H   THR 1  40     -49.797 -28.759  81.592
ATOM    352  HG1 THR 1  40     -46.635 -30.356  80.364
ATOM    353  N   TRP 1  41     -46.498 -26.162  81.763
ATOM    354  CA  TRP 1  41     -46.061 -25.035  80.952
ATOM    355  C   TRP 1  41     -45.277 -25.529  79.736
ATOM    356  O   TRP 1  41     -44.155 -26.053  79.986
ATOM    357  CB  TRP 1  41     -45.164 -24.046  81.720
ATOM    358  CG  TRP 1  41     -45.872 -23.366  82.830
ATOM    359  CD1 TRP 1  41     -45.751 -23.583  84.165
ATOM    360  CD2 TRP 1  41     -46.882 -22.351  82.668
ATOM    361  NE1 TRP 1  41     -46.604 -22.753  84.860
ATOM    362  CE2 TRP 1  41     -47.300 -21.983  83.961
ATOM    363  CE3 TRP 1  41     -47.434 -21.717  81.567
ATOM    364  CZ2 TRP 1  41     -48.269 -21.020  84.183
ATOM    365  CZ3 TRP 1  41     -48.403 -20.762  81.791
ATOM    366  CH2 TRP 1  41     -48.818 -20.402  83.072
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ATOM    367  H   TRP 1  41     -45.845 -26.515  82.561
ATOM    368  HE1 TRP 1  41     -46.708 -22.715  85.944
ATOM    369  N   GLU 1  42     -45.803 -25.378  78.578
ATOM    370  CA  GLU 1  42     -45.105 -25.748  77.336
ATOM    371  C   GLU 1  42     -44.473 -24.490  76.715
ATOM    372  O   GLU 1  42     -45.115 -23.419  76.729
ATOM    373  CB  GLU 1  42     -46.018 -26.310  76.260
ATOM    374  CG  GLU 1  42     -47.177 -27.268  76.617
ATOM    375  CD  GLU 1  42     -48.022 -27.497  75.379
ATOM    376  OE1 GLU 1  42     -48.861 -26.707  74.982
ATOM    377  OE2 GLU 1  42     -47.709 -28.541  74.774
ATOM    378  H   GLU 1  42     -46.807 -24.958  78.509
ATOM    379  N   PRO 1  43     -43.254 -24.663  76.190
ATOM    380  CA  PRO 1  43     -42.557 -23.614  75.469
ATOM    381  C   PRO 1  43     -43.426 -23.077  74.345
ATOM    382  O   PRO 1  43     -44.078 -23.891  73.650
ATOM    383  CB  PRO 1  43     -41.303 -24.295  74.901
ATOM    384  CG  PRO 1  43     -41.071 -25.456  75.837
ATOM    385  CD  PRO 1  43     -42.499 -25.926  76.190
ATOM    386  N   PHE 1  44     -43.457 -21.759  74.196
ATOM    387  CA  PHE 1  44     -44.336 -21.160  73.152
ATOM    388  C   PHE 1  44     -43.534 -20.268  72.238
ATOM    389  O   PHE 1  44     -43.734 -20.300  71.012
ATOM    390  CB  PHE 1  44     -45.529 -20.482  73.845
ATOM    391  CG  PHE 1  44     -46.454 -19.771  72.918
ATOM    392  CD1 PHE 1  44     -47.489 -20.472  72.300
ATOM    393  CD2 PHE 1  44     -46.300 -18.408  72.654
ATOM    394  CE1 PHE 1  44     -48.354 -19.827  71.414
ATOM    395  CE2 PHE 1  44     -47.154 -17.752  71.774
ATOM    396  CZ  PHE 1  44     -48.187 -18.476  71.165
ATOM    397  H   PHE 1  44     -42.845 -21.120  74.832
ATOM    398  N   ALA 1  45     -42.610 -19.510  72.824
ATOM    399  CA  ALA 1  45     -41.809 -18.555  72.017
ATOM    400  C   ALA 1  45     -40.708 -18.005  72.882
ATOM    401  O   ALA 1  45     -40.901 -18.029  74.118
ATOM    402  CB  ALA 1  45     -42.781 -17.486  71.507
ATOM    403  H   ALA 1  45     -42.441 -19.591  73.897
ATOM    404  N   SER 1  46     -39.601 -17.597  72.289
ATOM    405  CA  SER 1  46     -38.507 -16.931  73.034
ATOM    406  C   SER 1  46     -37.796 -15.961  72.067
ATOM    407  O   SER 1  46     -37.984 -16.048  70.849
ATOM    408  CB  SER 1  46     -37.546 -17.898  73.695
ATOM    409  OG  SER 1  46     -36.914 -18.676  72.658
ATOM    410  H   SER 1  46     -39.488 -17.757  71.217
ATOM    411  HG  SER 1  46     -36.215 -19.382  73.108
ATOM    412  N   GLY 1  47     -37.030 -15.050  72.574
ATOM    413  CA  GLY 1  47     -36.316 -14.004  71.820
ATOM    414  C   GLY 1  47     -35.506 -13.161  72.807
ATOM    415  O   GLY 1  47     -35.572 -13.425  74.013
ATOM    416  H   GLY 1  47     -36.902 -15.056  73.657
ATOM    417  N   LYS 1  48     -34.791 -12.198  72.294
ATOM    418  CA  LYS 1  48     -34.030 -11.242  73.109
ATOM    419  C   LYS 1  48     -34.467  -9.838  72.729
ATOM    420  O   LYS 1  48     -34.831  -9.585  71.593
ATOM    421  CB  LYS 1  48     -32.526 -11.451  72.941
ATOM    422  CG  LYS 1  48     -32.046 -12.547  73.949
ATOM    423  CD  LYS 1  48     -30.535 -12.738  73.746
ATOM    424  CE  LYS 1  48     -30.060 -13.874  74.670
ATOM    425  NZ  LYS 1  48     -28.620 -14.121  74.408
ATOM    426  H   LYS 1  48     -34.772 -12.091  71.209
ATOM    427  HZ1 LYS 1  48     -28.266 -14.924  75.055
ATOM    428  HZ2 LYS 1  48     -28.053 -13.214  74.613
ATOM    429  HZ3 LYS 1  48     -28.484 -14.408  73.366
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