Supplementary Material for "Entropic Stabilization of Cas4 Protein SSO0001 predicted with Popcoen"

Martin Goethe,* Ignacio Fita, and J. Miguel Rubi

E-mail: martingoethe@ub.edu

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Supplementary Figures

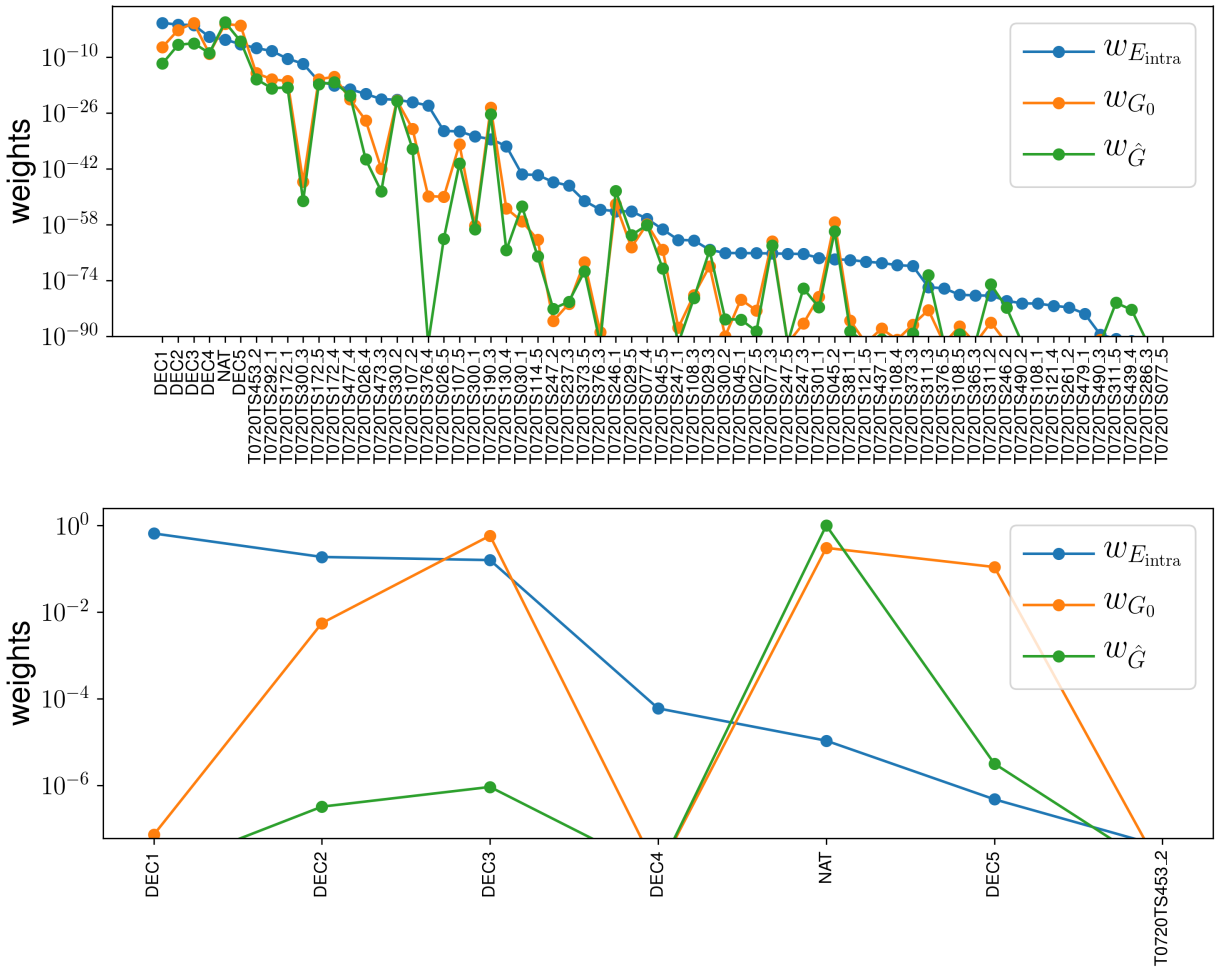

Figure S1: The weights $w_{E_{\text{intra}}}$, w_{G_0}, and $w_{\hat{G}}$ (of Eq. 2) for all structures with weights larger 10^{-90}. The top panel shows the range $[10^{-90}, 1]$ and the bottom panel a zoom to the range $[10^{-7}, 1]$. Most of the CASP-decoys are high-energy states which have only negligible contribution to the equilibrium state of the protein at ambient conditions. In the Result section, we limit our considerations to six states (NAT, DEC1, ... DEC5) because the accumulated weights of these states exceed $1 - 10^{-7}$ for all three cost functions. NAT has a weight $w_{\hat{G}} > 0.99999$. Therefore, it is meaningful to denote NAT as the native state of the protein. The weight $w_{\hat{G}}$ is smaller than w_{G_0} for all decoys with reasonable values w_{G_0}. Therefore, configurational entropy stabilized the native state of the protein against decoy states of low G_0.

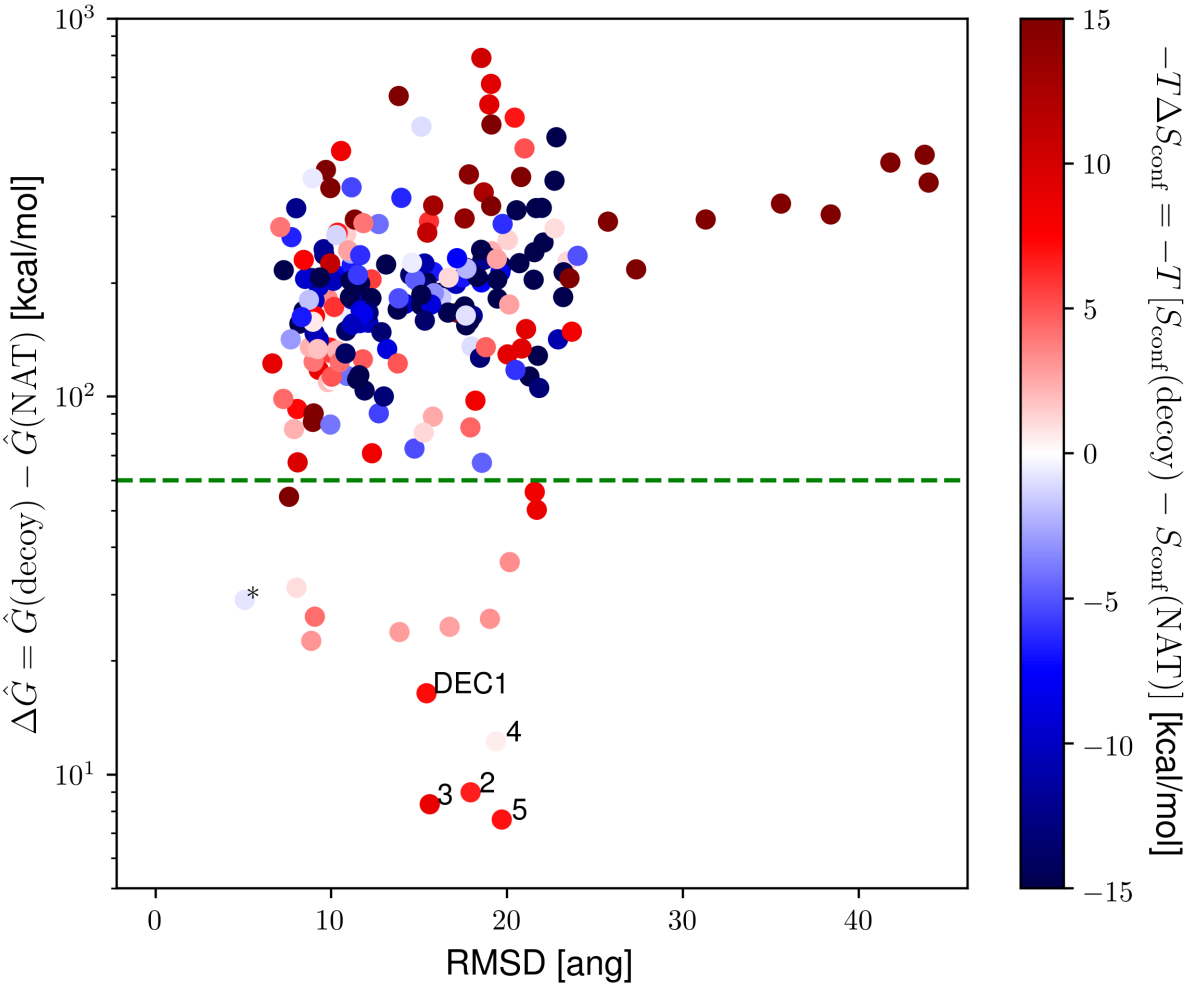

Figure S2: Scatter plot of RMSD vs. $\Delta\hat{G}$ for all 217 decoys where RMSD denotes the root-mean-square deviation between NAT and the decoys, and $\Delta\hat{G}$ is the difference of $\hat{G}$ between the decoys and NAT. DEC1, ..., DEC5 are labeled with DEC1, 2, ... 5. The color code represents $-T\Delta S_{\text{conf}}$. This shows that NAT has more configurational entropy then basically all decoys with $\Delta\hat{G} < 60$ kcal/mol (indicated with the dashed line). (The exception is decoy `T0720TS477_4` with $-T\Delta S_{\text{conf}} = -0.78$ kcal/mol labeled with an asterisk.) This shows that configurational entropy stabilizes NAT against other decoy states of low G_0.

3D visualization of ΔS_i

Fig. 2 of the article shows the scaffold of NAT and DEC3. The color represents the partial entropy differences ΔS_i between the conformations. The raw data for such plots are given below. This allows to easily reproduce the images in 3D using VMD.

Ten pdb files are listed below. The file names are of the format `XXX_vs_YYY_dSi_colored.pdb` where either `XXX` or `YYY` equals NAT and the other equals a decoy name. The pdb file represents the structure of `XXX`. The occupancy records of the pdb file are modified to (rescaled values) of dSi $= S_i(\mathrm{DEC}) - S_i(\mathrm{NAT})$. Note that dSi $= -\Delta S_i$. (By turning the sign, VMD represents residues with more entropy in NAT than in the decoy with red colors). The pdb files can be extracted from this .pdf document (using e.g. `pdftotext`) and loaded into VMD. The representation of Fig. 2 was generated by chosing `"Occupancy"` as the `"Coloring Method"` and `"NewCartoon"` as `"Drawing Method"`. The used linear scaling between occupancy values and dSi is outlined in the header of each pdb file.

```
REMARK   1 ****************************************************************************
REMARK   1 Start File DEC1_vs_NAT_dSi_colored.pdb
REMARK   1 The occupancy record was modified to represent dSi := Si(DEC)-Si(NAT).
REMARK   1 Occ=0.00 means dSi=-1.507170 kB; Occ=99.99 means dSi=1.490229 kB.
MODEL        0
ATOM      1  N   MET A   1       5.474  16.109  -4.355 35.21  0.00           N
ATOM      2  CA  MET A   1       6.038  15.157  -3.406 35.21  0.00           C
ATOM      3  C   MET A   1       7.504  14.877  -3.712 35.21  0.00           C
ATOM      4  O   MET A   1       7.930  14.938  -4.865 35.21  0.00           O
ATOM      5  N   ILE A   2       8.272  14.570  -2.672 31.82  0.00           N
ATOM      6  CA  ILE A   2       9.694  14.291  -2.827 31.82  0.00           C
ATOM      7  C   ILE A   2       9.949  12.797  -2.982 31.82  0.00           C
ATOM      8  O   ILE A   2       9.316  11.977  -2.316 31.82  0.00           O
ATOM      9  N   THR A   3      10.878  12.449  -3.865 27.55  0.00           N
ATOM     10  CA  THR A   3      11.218  11.053  -4.109 27.55  0.00           C
ATOM     11  C   THR A   3      11.486  10.315  -2.804 27.55  0.00           C
ATOM     12  O   THR A   3      10.894   9.269  -2.539 27.55  0.00           O
ATOM     13  N   GLU A   4      12.381  10.867  -1.992 41.92  0.00           N
ATOM     14  CA  GLU A   4      12.747  10.248  -0.722 41.92  0.00           C
ATOM     15  C   GLU A   4      11.565  10.224   0.239 41.92  0.00           C
ATOM     16  O   GLU A   4      11.391   9.271   0.998 41.92  0.00           O
ATOM     17  N   PHE A   5      10.757  11.277   0.201 41.07  0.00           N
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ATOM     20  O   PHE A   5       8.264   9.466   1.746 41.07  0.00           O
ATOM     21  N   LEU A   6       8.318   9.902  -0.461 17.98  0.00           N
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ATOM     23  C   LEU A   6       8.047   7.459  -0.547 17.98  0.00           C
ATOM     24  O   LEU A   6       7.369   6.512  -0.149 17.98  0.00           O
ATOM     25  N   LEU A   7       9.353   7.370  -0.772 29.60  0.00           N
ATOM     26  CA  LEU A   7      10.096   6.144  -0.500 29.60  0.00           C
ATOM     27  C   LEU A   7      10.037   5.783   0.979 29.60  0.00           C
ATOM     28  O   LEU A   7       9.849   4.620   1.336 29.60  0.00           O
ATOM     29  N   LYS A   8      10.200   6.786   1.835 47.82  0.00           N
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ATOM     31  C   LYS A   8       8.737   6.305   3.753 47.82  0.00           C
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ATOM     33  N   LYS A   9       7.760   6.759   2.975 30.34  0.00           N
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ATOM     37  N   LYS A  10       6.539   4.548   1.915 26.27  0.00           N
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ATOM     40  O   LYS A  10       7.264   1.014   1.852 26.27  0.00           O
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ATOM     41  N   LEU A  11       8.216   2.760   2.903 25.05  0.00           N
ATOM     42  CA  LEU A  11       9.294   1.968   3.483 25.05  0.00           C
ATOM     43  C   LEU A  11       8.751   0.735   4.193 25.05  0.00           C
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ATOM     48  O   GLU A  12       6.660  -2.516   5.107 18.67  0.00           O
ATOM     49  N   GLU A  13       6.283  -1.035   3.455  0.00  0.00           N
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ATOM    125  N   CYS A  32      10.843 -15.567  -1.721 67.03  0.00           N
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ATOM    153  N   GLU A  39      13.552 -10.055 -10.056 73.67  0.00           N
ATOM    154  CA  GLU A  39      14.832 -10.477 -10.613 73.67  0.00           C
ATOM    155  C   GLU A  39      14.724 -10.723 -12.113 73.67  0.00           C
ATOM    156  O   GLU A  39      15.615 -10.352 -12.878 73.67  0.00           O
ATOM    157  N   SER A  40      13.628 -11.348 -12.528 55.15  0.00           N
ATOM    158  CA  SER A  40      13.440 -11.719 -13.927 55.15  0.00           C
ATOM    159  C   SER A  40      13.018 -10.518 -14.762 55.15  0.00           C
ATOM    160  O   SER A  40      13.599 -10.245 -15.812 55.15  0.00           O
ATOM    161  N   GLU A  41      12.002  -9.802 -14.290 47.58  0.00           N
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ATOM    163  C   GLU A  41      12.462  -7.503 -15.036 47.58  0.00           C
ATOM    164  O   GLU A  41      12.611  -6.814 -16.046 47.58  0.00           O
ATOM    165  N   TYR A  42      13.143  -7.297 -13.913 46.48  0.00           N
ATOM    166  CA  TYR A  42      14.100  -6.205 -13.786 46.48  0.00           C
ATOM    167  C   TYR A  42      15.492  -6.728 -13.459 46.48  0.00           C
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ATOM    169  N   LYS A  43      16.180  -7.243 -14.474 61.04  0.00           N
ATOM    170  CA  LYS A  43      17.492  -7.848 -14.281 61.04  0.00           C
ATOM    171  C   LYS A  43      18.500  -6.827 -13.769 61.04  0.00           C
ATOM    172  O   LYS A  43      19.471  -7.180 -13.100 61.04  0.00           O
ATOM    173  N   GLU A  44      18.263  -5.558 -14.087 57.96  0.00           N
ATOM    174  CA  GLU A  44      19.156  -4.485 -13.670 57.96  0.00           C
ATOM    175  C   GLU A  44      18.840  -4.021 -12.254 57.96  0.00           C
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ATOM    177  N   LEU A  45      17.677  -4.425 -11.752 52.74  0.00           N
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ATOM    185  N   ILE A  47      18.976  -6.294  -5.798 59.42  0.00           N
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ATOM    189  N   SER A  48      18.712  -6.482  -2.425 66.56  0.00           N
ATOM    190  CA  SER A  48      19.439  -6.576  -1.164 66.56  0.00           C
ATOM    191  C   SER A  48      18.808  -7.610  -0.241 66.56  0.00           C
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ATOM    193  N   GLN A  49      19.508  -7.937   0.839 62.34  0.00           N
ATOM    194  CA  GLN A  49      18.961  -8.810   1.873 62.34  0.00           C
ATOM    195  C   GLN A  49      18.290  -8.003   2.977 62.34  0.00           C
ATOM    196  O   GLN A  49      17.410  -8.504   3.676 62.34  0.00           O
ATOM    197  N   VAL A  50      18.713  -6.753   3.129 62.33  0.00           N
ATOM    198  CA  VAL A  50      18.189  -5.890   4.182 62.33  0.00           C
ATOM    199  C   VAL A  50      16.787  -5.400   3.846 62.33  0.00           C
ATOM    200  O   VAL A  50      15.921  -5.323   4.716 62.33  0.00           O
ATOM    201  N   TYR A  51      16.569  -5.070   2.577 23.81  0.00           N
ATOM    202  CA  TYR A  51      15.303  -4.493   2.142 23.81  0.00           C
ATOM    203  C   TYR A  51      14.898  -5.024   0.773 23.81  0.00           C
ATOM    204  O   TYR A  51      15.735  -5.510   0.012 23.81  0.00           O
ATOM    205  N   ALA A  52      13.609  -4.928   0.464 43.17  0.00           N
ATOM    206  CA  ALA A  52      13.081  -5.444  -0.793 43.17  0.00           C
ATOM    207  C   ALA A  52      13.537  -4.592  -1.971 43.17  0.00           C
ATOM    208  O   ALA A  52      13.737  -3.385  -1.837 43.17  0.00           O
ATOM    209  N   PRO A  53      13.701  -5.229  -3.126 43.74  0.00           N
ATOM    210  CA  PRO A  53      14.125  -4.529  -4.334 43.74  0.00           C
ATOM    211  C   PRO A  53      13.085  -3.506  -4.771 43.74  0.00           C
ATOM    212  O   PRO A  53      13.374  -2.616  -5.572 43.74  0.00           O
ATOM    213  N   SER A  54      11.873  -3.637  -4.242 38.09  0.00           N
ATOM    214  CA  SER A  54      10.808  -2.681  -4.520 38.09  0.00           C
ATOM    215  C   SER A  54      11.169  -1.291  -4.008 38.09  0.00           C
ATOM    216  O   SER A  54      10.608  -0.290  -4.456 38.09  0.00           O
ATOM    217  N   ALA A  55      12.108  -1.237  -3.071 38.71  0.00           N
ATOM    218  CA  ALA A  55      12.633   0.034  -2.585 38.71  0.00           C
ATOM    219  C   ALA A  55      13.374   0.781  -3.686 38.71  0.00           C
ATOM    220  O   ALA A  55      13.191   1.985  -3.865 38.71  0.00           O
ATOM    221  N   ILE A  56      14.213   0.059  -4.423 47.01  0.00           N
ATOM    222  CA  ILE A  56      15.015   0.660  -5.481 47.01  0.00           C
ATOM    223  C   ILE A  56      14.155   1.024  -6.684 47.01  0.00           C
ATOM    224  O   ILE A  56      14.272   2.119  -7.235 47.01  0.00           O
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ATOM    225  N   LEU A  57      13.290   0.101  -7.088 30.78  0.00           N
ATOM    226  CA  LEU A  57      12.359   0.348  -8.182 30.78  0.00           C
ATOM    227  C   LEU A  57      11.362   1.440  -7.821 30.78  0.00           C
ATOM    228  O   LEU A  57      11.021   2.284  -8.651 30.78  0.00           O
ATOM    229  N   GLY A  58      10.896   1.422  -6.577 41.70  0.00           N
ATOM    230  CA  GLY A  58       9.983   2.446  -6.084 41.70  0.00           C
ATOM    231  C   GLY A  58      10.639   3.820  -6.096 41.70  0.00           C
ATOM    232  O   GLY A  58      10.012   4.815  -6.462 41.70  0.00           O
ATOM    233  N   ASP A  59      11.904   3.870  -5.694 47.60  0.00           N
ATOM    234  CA  ASP A  59      12.679   5.103  -5.756 47.60  0.00           C
ATOM    235  C   ASP A  59      12.720   5.659  -7.173 47.60  0.00           C
ATOM    236  O   ASP A  59      12.530   6.857  -7.387 47.60  0.00           O
ATOM    237  N   ILE A  60      12.967   4.781  -8.140 48.47  0.00           N
ATOM    238  CA  ILE A  60      12.964   5.169  -9.546 48.47  0.00           C
ATOM    239  C   ILE A  60      11.595   5.684  -9.973 48.47  0.00           C
ATOM    240  O   ILE A  60      11.490   6.702 -10.656 48.47  0.00           O
ATOM    241  N   LEU A  61      10.548   4.976  -9.564 35.67  0.00           N
ATOM    242  CA  LEU A  61       9.184   5.356  -9.909 35.67  0.00           C
ATOM    243  C   LEU A  61       8.801   6.681  -9.263 35.67  0.00           C
ATOM    244  O   LEU A  61       8.051   7.470  -9.839 35.67  0.00           O
ATOM    245  N   HIS A  62       9.322   6.922  -8.064 37.96  0.00           N
ATOM    246  CA  HIS A  62       9.016   8.141  -7.326 37.96  0.00           C
ATOM    247  C   HIS A  62       9.746   9.340  -7.919 37.96  0.00           C
ATOM    248  O   HIS A  62       9.257  10.469  -7.858 37.96  0.00           O
ATOM    249  N   LEU A  63      10.919   9.090  -8.491 34.78  0.00           N
ATOM    250  CA  LEU A  63      11.650  10.117  -9.221 34.78  0.00           C
ATOM    251  C   LEU A  63      10.859  10.603 -10.429 34.78  0.00           C
ATOM    252  O   LEU A  63      10.672  11.804 -10.618 34.78  0.00           O
ATOM    253  N   GLY A  64      10.396   9.661 -11.244 36.31  0.00           N
ATOM    254  CA  GLY A  64       9.577   9.989 -12.405 36.31  0.00           C
ATOM    255  C   GLY A  64       8.251  10.611 -11.988 36.31  0.00           C
ATOM    256  O   GLY A  64       7.772  11.556 -12.616 36.31  0.00           O
ATOM    257  N   LEU A  65       7.661  10.076 -10.924 17.94  0.00           N
ATOM    258  CA  LEU A  65       6.412  10.608 -10.393 17.94  0.00           C
ATOM    259  C   LEU A  65       6.561  12.070  -9.994 17.94  0.00           C
ATOM    260  O   LEU A  65       5.716  12.903 -10.321 17.94  0.00           O
ATOM    261  N   GLU A  66       7.642  12.377  -9.284 54.01  0.00           N
ATOM    262  CA  GLU A  66       7.918  13.745  -8.861 54.01  0.00           C
ATOM    263  C   GLU A  66       8.073  14.671 -10.061 54.01  0.00           C
ATOM    264  O   GLU A  66       7.549  15.786 -10.068 54.01  0.00           O
ATOM    265  N   SER A  67       8.794  14.204 -11.075 46.40  0.00           N
ATOM    266  CA  SER A  67       9.001  14.982 -12.290 46.40  0.00           C
ATOM    267  C   SER A  67       7.675  15.334 -12.952 46.40  0.00           C
ATOM    268  O   SER A  67       7.480  16.458 -13.413 46.40  0.00           O
ATOM    269  N   VAL A  68       6.766  14.366 -12.993 51.69  0.00           N
ATOM    270  CA  VAL A  68       5.454  14.573 -13.595 51.69  0.00           C
ATOM    271  C   VAL A  68       4.602  15.514 -12.751 51.69  0.00           C
ATOM    272  O   VAL A  68       3.969  16.431 -13.273 51.69  0.00           O
ATOM    273  N   LEU A  69       4.591  15.278 -11.443 50.04  0.00           N
ATOM    274  CA  LEU A  69       3.755  16.053 -10.533 50.04  0.00           C
ATOM    275  C   LEU A  69       4.206  17.507 -10.474 50.04  0.00           C
ATOM    276  O   LEU A  69       3.386  18.416 -10.348 50.04  0.00           O
ATOM    277  N   LYS A  70       5.514  17.719 -10.566 52.71  0.00           N
ATOM    278  CA  LYS A  70       6.078  19.062 -10.508 52.71  0.00           C
ATOM    279  C   LYS A  70       5.368  20.001 -11.475 52.71  0.00           C
ATOM    280  O   LYS A  70       5.007  21.121 -11.115 52.71  0.00           O
ATOM    281  N   GLY A  71       5.171  19.537 -12.704 49.67  0.00           N
ATOM    282  CA  GLY A  71       4.479  20.323 -13.717 49.67  0.00           C
ATOM    283  C   GLY A  71       2.967  20.200 -13.575 49.67  0.00           C
ATOM    284  O   GLY A  71       2.237  21.179 -13.734 49.67  0.00           O
ATOM    285  N   ASN A  72       2.503  18.992 -13.272 49.24  0.00           N
ATOM    286  CA  ASN A  72       1.073  18.722 -13.183 49.24  0.00           C
ATOM    287  C   ASN A  72       0.749  17.874 -11.960 49.24  0.00           C
ATOM    288  O   ASN A  72       0.626  16.653 -12.054 49.24  0.00           O
ATOM    289  N   PHE A  73       0.609  18.529 -10.812 43.22  0.00           N
ATOM    290  CA  PHE A  73       0.374  17.830  -9.555 43.22  0.00           C
ATOM    291  C   PHE A  73      -0.940  17.060  -9.591 43.22  0.00           C
ATOM    292  O   PHE A  73      -1.070  16.005  -8.970 43.22  0.00           O
ATOM    293  N   ASN A  74      -1.914  17.595 -10.320 60.11  0.00           N
ATOM    294  CA  ASN A  74      -3.255  17.022 -10.346 60.11  0.00           C
ATOM    295  C   ASN A  74      -3.379  15.958 -11.427 60.11  0.00           C
ATOM    296  O   ASN A  74      -4.459  15.410 -11.652 60.11  0.00           O
ATOM    297  N   ALA A  75      -2.268  15.668 -12.096 54.45  0.00           N
ATOM    298  CA  ALA A  75      -2.230  14.607 -13.095 54.45  0.00           C
ATOM    299  C   ALA A  75      -2.141  13.234 -12.441 54.45  0.00           C
ATOM    300  O   ALA A  75      -1.349  13.025 -11.522 54.45  0.00           O
ATOM    301  N   GLU A  76      -2.959  12.303 -12.919 56.74  0.00           N
ATOM    302  CA  GLU A  76      -2.994  10.957 -12.361 56.74  0.00           C
ATOM    303  C   GLU A  76      -1.989  10.046 -13.054 56.74  0.00           C
ATOM    304  O   GLU A  76      -2.204   9.619 -14.188 56.74  0.00           O
ATOM    305  N   THR A  77      -0.890   9.753 -12.366 71.61  0.00           N
ATOM    306  CA  THR A  77       0.103   8.814 -12.872 71.61  0.00           C
ATOM    307  C   THR A  77      -0.322   7.374 -12.622 71.61  0.00           C
ATOM    308  O   THR A  77      -0.623   6.992 -11.491 71.61  0.00           O
ATOM    309  N   GLU A  78      -0.346   6.576 -13.684 74.39  0.00           N
ATOM    310  CA  GLU A  78      -0.862   5.214 -13.608 74.39  0.00           C
ATOM    311  C   GLU A  78       0.262   4.192 -13.736 74.39  0.00           C
ATOM    312  O   GLU A  78       0.636   3.802 -14.842 74.39  0.00           O
ATOM    313  N   VAL A  79       0.795   3.762 -12.598 55.67  0.00           N
ATOM    314  CA  VAL A  79       1.814   2.719 -12.575 55.67  0.00           C
ATOM    315  C   VAL A  79       1.203   1.358 -12.266 55.67  0.00           C
ATOM    316  O   VAL A  79       0.630   1.154 -11.196 55.67  0.00           O
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ATOM    317  N   GLU A  80       1.329   0.431 -13.209 51.09  0.00           N
ATOM    318  CA  GLU A  80       0.790  -0.914 -13.037 51.09  0.00           C
ATOM    319  C   GLU A  80       1.486  -1.644 -11.896 51.09  0.00           C
ATOM    320  O   GLU A  80       2.713  -1.718 -11.849 51.09  0.00           O
ATOM    321  N   THR A  81       0.694  -2.182 -10.974 43.26  0.00           N
ATOM    322  CA  THR A  81       1.222  -3.007  -9.895 43.26  0.00           C
ATOM    323  C   THR A  81       0.981  -4.487 -10.163 43.26  0.00           C
ATOM    324  O   THR A  81      -0.153  -4.910 -10.391 43.26  0.00           O
ATOM    325  N   LEU A  82       2.053  -5.272 -10.136 50.29  0.00           N
ATOM    326  CA  LEU A  82       1.955  -6.711 -10.344 50.29  0.00           C
ATOM    327  C   LEU A  82       2.526  -7.479  -9.160 50.29  0.00           C
ATOM    328  O   LEU A  82       3.699  -7.331  -8.819 50.29  0.00           O
ATOM    329  N   ARG A  83       1.690  -8.301  -8.535 18.69  0.00           N
ATOM    330  CA  ARG A  83       2.072  -9.000  -7.314 18.69  0.00           C
ATOM    331  C   ARG A  83       1.652 -10.464  -7.364 18.69  0.00           C
ATOM    332  O   ARG A  83       0.495 -10.779  -7.642 18.69  0.00           O
ATOM    333  N   GLU A  84       2.599 -11.355  -7.092 14.28  0.00           N
ATOM    334  CA  GLU A  84       2.286 -12.761  -6.860 14.28  0.00           C
ATOM    335  C   GLU A  84       1.899 -13.006  -5.407 14.28  0.00           C
ATOM    336  O   GLU A  84       2.754 -13.022  -4.521 14.28  0.00           O
ATOM    337  N   ILE A  85       0.607 -13.196  -5.169 56.26  0.00           N
ATOM    338  CA  ILE A  85       0.073 -13.226  -3.812 56.26  0.00           C
ATOM    339  C   ILE A  85      -0.412 -14.621  -3.441 56.26  0.00           C
ATOM    340  O   ILE A  85      -1.249 -15.202  -4.133 56.26  0.00           O
ATOM    341  N   ASN A  86       0.117 -15.155  -2.346 40.06  0.00           N
ATOM    342  CA  ASN A  86      -0.292 -16.467  -1.859 40.06  0.00           C
ATOM    343  C   ASN A  86      -1.647 -16.401  -1.167 40.06  0.00           C
ATOM    344  O   ASN A  86      -1.775 -15.830  -0.085 40.06  0.00           O
ATOM    345  N   VAL A  87      -2.657 -16.989  -1.800 50.74  0.00           N
ATOM    346  CA  VAL A  87      -4.005 -17.004  -1.244 50.74  0.00           C
ATOM    347  C   VAL A  87      -4.441 -18.421  -0.894 50.74  0.00           C
ATOM    348  O   VAL A  87      -4.785 -19.210  -1.776 50.74  0.00           O
ATOM    349  N   GLY A  88      -4.426 -18.739   0.395 49.52  0.00           N
ATOM    350  CA  GLY A  88      -4.904 -20.031   0.872 49.52  0.00           C
ATOM    351  C   GLY A  88      -3.945 -21.150   0.486 49.52  0.00           C
ATOM    352  O   GLY A  88      -4.337 -22.314   0.401 49.52  0.00           O
ATOM    353  N   GLY A  89      -2.687 -20.790   0.255 48.06  0.00           N
ATOM    354  CA  GLY A  89      -1.673 -21.761  -0.137 48.06  0.00           C
ATOM    355  C   GLY A  89      -1.499 -21.798  -1.650 48.06  0.00           C
ATOM    356  O   GLY A  89      -0.654 -22.525  -2.170 48.06  0.00           O
ATOM    357  N   LYS A  90      -2.305 -21.008  -2.352 49.69  0.00           N
ATOM    358  CA  LYS A  90      -2.242 -20.947  -3.807 49.69  0.00           C
ATOM    359  C   LYS A  90      -1.870 -19.550  -4.284 49.69  0.00           C
ATOM    360  O   LYS A  90      -2.650 -18.608  -4.146 49.69  0.00           O
ATOM    361  N   VAL A  91      -0.673 -19.420  -4.847 50.28  0.00           N
ATOM    362  CA  VAL A  91      -0.190 -18.135  -5.335 50.28  0.00           C
ATOM    363  C   VAL A  91      -0.874 -17.748  -6.640 50.28  0.00           C
ATOM    364  O   VAL A  91      -0.806 -18.479  -7.628 50.28  0.00           O
ATOM    365  N   TYR A  92      -1.535 -16.595  -6.638 61.33  0.00           N
ATOM    366  CA  TYR A  92      -2.205 -16.093  -7.831 61.33  0.00           C
ATOM    367  C   TYR A  92      -1.548 -14.814  -8.335 61.33  0.00           C
ATOM    368  O   TYR A  92      -1.100 -13.983  -7.546 61.33  0.00           O
ATOM    369  N   LYS A  93      -1.495 -14.662  -9.654 75.56  0.00           N
ATOM    370  CA  LYS A  93      -1.036 -13.421 -10.264 75.56  0.00           C
ATOM    371  C   LYS A  93      -2.099 -12.336 -10.173 75.56  0.00           C
ATOM    372  O   LYS A  93      -3.121 -12.393 -10.858 75.56  0.00           O
ATOM    373  N   ILE A  94      -1.854 -11.344  -9.322 54.38  0.00           N
ATOM    374  CA  ILE A  94      -2.834 -10.295  -9.066 54.38  0.00           C
ATOM    375  C   ILE A  94      -2.268  -8.920  -9.396 54.38  0.00           C
ATOM    376  O   ILE A  94      -1.149  -8.589  -9.005 54.38  0.00           O
ATOM    377  N   LYS A  95      -3.049  -8.123 -10.117 65.40  0.00           N
ATOM    378  CA  LYS A  95      -2.610  -6.796 -10.536 65.40  0.00           C
ATOM    379  C   LYS A  95      -3.477  -5.707  -9.915 65.40  0.00           C
ATOM    380  O   LYS A  95      -4.426  -5.997  -9.187 65.40  0.00           O
ATOM    381  N   GLY A  96      -3.145  -4.456 -10.208 50.04  0.00           N
ATOM    382  CA  GLY A  96      -4.026  -3.337  -9.899 50.04  0.00           C
ATOM    383  C   GLY A  96      -3.231  -2.062  -9.647 50.04  0.00           C
ATOM    384  O   GLY A  96      -2.071  -1.954 -10.043 50.04  0.00           O
ATOM    385  N   ARG A  97      -3.863  -1.098  -8.984 43.71  0.00           N
ATOM    386  CA  ARG A  97      -3.202   0.156  -8.642 43.71  0.00           C
ATOM    387  C   ARG A  97      -4.031   0.963  -7.652 43.71  0.00           C
ATOM    388  O   ARG A  97      -5.201   0.661  -7.415 43.71  0.00           O
ATOM    389  N   ALA A  98      -3.419   1.990  -7.074 45.35  0.00           N
ATOM    390  CA  ALA A  98      -4.127   2.902  -6.183 45.35  0.00           C
ATOM    391  C   ALA A  98      -3.531   4.303  -6.240 45.35  0.00           C
ATOM    392  O   ALA A  98      -2.354   4.475  -6.557 45.35  0.00           O
ATOM    393  N   ASP A  99      -4.350   5.302  -5.932 52.70  0.00           N
ATOM    394  CA  ASP A  99      -3.910   6.692  -5.966 52.70  0.00           C
ATOM    395  C   ASP A  99      -4.496   7.484  -4.803 52.70  0.00           C
ATOM    396  O   ASP A  99      -5.699   7.430  -4.547 52.70  0.00           O
ATOM    397  N   ALA A 100      -3.638   8.219  -4.103 56.40  0.00           N
ATOM    398  CA  ALA A 100      -4.090   9.164  -3.088 56.40  0.00           C
ATOM    399  C   ALA A 100      -4.265  10.559  -3.674 56.40  0.00           C
ATOM    400  O   ALA A 100      -3.508  10.974  -4.551 56.40  0.00           O
ATOM    401  N   ILE A 101      -5.269  11.279  -3.183 52.13  0.00           N
ATOM    402  CA  ILE A 101      -5.554  12.624  -3.669 52.13  0.00           C
ATOM    403  C   ILE A 101      -5.525  13.637  -2.532 52.13  0.00           C
ATOM    404  O   ILE A 101      -6.465  13.727  -1.742 52.13  0.00           O
ATOM    405  N   ILE A 102      -4.440  14.400  -2.453 51.64  0.00           N
ATOM    406  CA  ILE A 102      -4.299  15.429  -1.431 51.64  0.00           C
ATOM    407  C   ILE A 102      -4.842  16.767  -1.917 51.64  0.00           C
ATOM    408  O   ILE A 102      -4.306  17.362  -2.854 51.64  0.00           O
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ATOM    409  N   ARG A 103      -5.906  17.237  -1.277 49.29  0.00           N
ATOM    410  CA  ARG A 103      -6.489  18.532  -1.604 49.29  0.00           C
ATOM    411  C   ARG A 103      -6.093  19.589  -0.580 49.29  0.00           C
ATOM    412  O   ARG A 103      -6.312  19.418   0.618 49.29  0.00           O
ATOM    413  N   ASN A 104      -5.508  20.681  -1.061 45.99  0.00           N
ATOM    414  CA  ASN A 104      -5.132  21.792  -0.195 45.99  0.00           C
ATOM    415  C   ASN A 104      -6.217  22.861  -0.169 45.99  0.00           C
ATOM    416  O   ASN A 104      -7.085  22.901  -1.041 45.99  0.00           O
ATOM    417  N   ASP A 105      -6.164  23.727   0.838 43.08  0.00           N
ATOM    418  CA  ASP A 105      -7.141  24.799   0.980 43.08  0.00           C
ATOM    419  C   ASP A 105      -7.041  25.791  -0.172 43.08  0.00           C
ATOM    420  O   ASP A 105      -8.000  26.499  -0.479 43.08  0.00           O
ATOM    421  N   ASN A 106      -5.874  25.838  -0.805 50.08  0.00           N
ATOM    422  CA  ASN A 106      -5.655  26.724  -1.942 50.08  0.00           C
ATOM    423  C   ASN A 106      -6.260  26.145  -3.216 50.08  0.00           C
ATOM    424  O   ASN A 106      -6.341  26.823  -4.240 50.08  0.00           O
ATOM    425  N   GLY A 107      -6.684  24.887  -3.144 44.36  0.00           N
ATOM    426  CA  GLY A 107      -7.288  24.217  -4.289 44.36  0.00           C
ATOM    427  C   GLY A 107      -6.264  23.368  -5.033 44.36  0.00           C
ATOM    428  O   GLY A 107      -6.555  22.812  -6.091 44.36  0.00           O
ATOM    429  N   LYS A 108      -5.062  23.274  -4.472 50.81  0.00           N
ATOM    430  CA  LYS A 108      -3.996  22.484  -5.075 50.81  0.00           C
ATOM    431  C   LYS A 108      -4.222  20.993  -4.855 50.81  0.00           C
ATOM    432  O   LYS A 108      -4.259  20.522  -3.717 50.81  0.00           O
ATOM    433  N   SER A 109      -4.374  20.255  -5.948 55.18  0.00           N
ATOM    434  CA  SER A 109      -4.595  18.815  -5.877 55.18  0.00           C
ATOM    435  C   SER A 109      -3.332  18.046  -6.244 55.18  0.00           C
ATOM    436  O   SER A 109      -2.792  18.205  -7.338 55.18  0.00           O
ATOM    437  N   ILE A 110      -2.865  17.212  -5.321 54.55  0.00           N
ATOM    438  CA  ILE A 110      -1.674  16.403  -5.552 54.55  0.00           C
ATOM    439  C   ILE A 110      -2.012  14.917  -5.564 54.55  0.00           C
ATOM    440  O   ILE A 110      -2.475  14.368  -4.564 54.55  0.00           O
ATOM    441  N   VAL A 111      -1.776  14.271  -6.701 56.94  0.00           N
ATOM    442  CA  VAL A 111      -2.064  12.849  -6.847 56.94  0.00           C
ATOM    443  C   VAL A 111      -0.816  12.007  -6.620 56.94  0.00           C
ATOM    444  O   VAL A 111       0.221  12.237  -7.242 56.94  0.00           O
ATOM    445  N   ILE A 112      -0.922  11.032  -5.725 55.75  0.00           N
ATOM    446  CA  ILE A 112       0.212  10.183  -5.379 55.75  0.00           C
ATOM    447  C   ILE A 112      -0.040   8.735  -5.782 55.75  0.00           C
ATOM    448  O   ILE A 112      -0.946   8.085  -5.262 55.75  0.00           O
ATOM    449  N   GLU A 113       0.766   8.237  -6.713 47.46  0.00           N
ATOM    450  CA  GLU A 113       0.744   6.822  -7.069 47.46  0.00           C
ATOM    451  C   GLU A 113       1.080   5.947  -5.868 47.46  0.00           C
ATOM    452  O   GLU A 113       2.105   6.141  -5.214 47.46  0.00           O
ATOM    453  N   ILE A 114       0.211   4.983  -5.584 50.04  0.00           N
ATOM    454  CA  ILE A 114       0.447   4.035  -4.502 50.04  0.00           C
ATOM    455  C   ILE A 114       0.756   2.645  -5.044 50.04  0.00           C
ATOM    456  O   ILE A 114      -0.012   2.092  -5.832 50.04  0.00           O
ATOM    457  N   LYS A 115       1.883   2.086  -4.619 48.70  0.00           N
ATOM    458  CA  LYS A 115       2.279   0.747  -5.035 48.70  0.00           C
ATOM    459  C   LYS A 115       2.822  -0.058  -3.861 48.70  0.00           C
ATOM    460  O   LYS A 115       3.929   0.193  -3.384 48.70  0.00           O
ATOM    461  N   THR A 116       2.038  -1.025  -3.398 39.30  0.00           N
ATOM    462  CA  THR A 116       2.376  -1.777  -2.195 39.30  0.00           C
ATOM    463  C   THR A 116       3.144  -3.047  -2.537 39.30  0.00           C
ATOM    464  O   THR A 116       3.309  -3.388  -3.710 39.30  0.00           O
ATOM    465  N   SER A 117       3.613  -3.745  -1.508 35.66  0.00           N
ATOM    466  CA  SER A 117       4.461  -4.914  -1.698 35.66  0.00           C
ATOM    467  C   SER A 117       3.656  -6.203  -1.590 35.66  0.00           C
ATOM    468  O   SER A 117       4.023  -7.226  -2.167 35.66  0.00           O
ATOM    469  N   ARG A 118       2.556  -6.146  -0.846  2.77  0.00           N
ATOM    470  CA  ARG A 118       1.725  -7.322  -0.616  2.77  0.00           C
ATOM    471  C   ARG A 118       0.339  -6.929  -0.123  2.77  0.00           C
ATOM    472  O   ARG A 118       0.135  -5.816   0.363  2.77  0.00           O
ATOM    473  N   SER A 119      -0.612  -7.848  -0.250 43.98  0.00           N
ATOM    474  CA  SER A 119      -1.941  -7.660   0.320 43.98  0.00           C
ATOM    475  C   SER A 119      -2.739  -8.957   0.293 43.98  0.00           C
ATOM    476  O   SER A 119      -2.706  -9.698  -0.689 43.98  0.00           O
ATOM    477  N   ASP A 120      -3.459  -9.225   1.377 48.09  0.00           N
ATOM    478  CA  ASP A 120      -4.126 -10.509   1.555 48.09  0.00           C
ATOM    479  C   ASP A 120      -5.511 -10.503   0.921 48.09  0.00           C
ATOM    480  O   ASP A 120      -6.459  -9.957   1.483 48.09  0.00           O
ATOM    481  N   LYS A 121      -5.620 -11.114  -0.255 17.69  0.00           N
ATOM    482  CA  LYS A 121      -6.899 -11.220  -0.946 17.69  0.00           C
ATOM    483  C   LYS A 121      -7.938 -11.918  -0.079 17.69  0.00           C
ATOM    484  O   LYS A 121      -9.135 -11.654  -0.193 17.69  0.00           O
ATOM    485  N   GLY A 122      -7.474 -12.812   0.788 51.98  0.00           N
ATOM    486  CA  GLY A 122      -8.368 -13.672   1.553 51.98  0.00           C
ATOM    487  C   GLY A 122      -9.190 -12.865   2.549 51.98  0.00           C
ATOM    488  O   GLY A 122     -10.196 -13.345   3.073 51.98  0.00           O
ATOM    489  N   LEU A 123      -8.757 -11.636   2.808 66.67  0.00           N
ATOM    490  CA  LEU A 123      -9.459 -10.756   3.735 66.67  0.00           C
ATOM    491  C   LEU A 123     -10.801 -10.315   3.167 66.67  0.00           C
ATOM    492  O   LEU A 123     -10.998 -10.305   1.952 66.67  0.00           O
ATOM    493  N   PRO A 124     -11.722  -9.952   4.053 59.92  0.00           N
ATOM    494  CA  PRO A 124     -13.007  -9.398   3.639 59.92  0.00           C
ATOM    495  C   PRO A 124     -12.819  -8.212   2.703 59.92  0.00           C
ATOM    496  O   PRO A 124     -11.840  -7.474   2.808 59.92  0.00           O
ATOM    497  N   LEU A 125     -13.764  -8.034   1.785 44.28  0.00           N
ATOM    498  CA  LEU A 125     -13.659  -6.994   0.769 44.28  0.00           C
ATOM    499  C   LEU A 125     -13.431  -5.627   1.403 44.28  0.00           C
ATOM    500  O   LEU A 125     -12.870  -4.727   0.776 44.28  0.00           O
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ATOM    501  N   ILE A 126     -13.870  -5.477   2.648 45.33  0.00           N
ATOM    502  CA  ILE A 126     -13.682  -4.230   3.381 45.33  0.00           C
ATOM    503  C   ILE A 126     -12.224  -3.793   3.361 45.33  0.00           C
ATOM    504  O   ILE A 126     -11.924  -2.601   3.303 45.33  0.00           O
ATOM    505  N   HIS A 127     -11.319  -4.766   3.410 35.63  0.00           N
ATOM    506  CA  HIS A 127      -9.901  -4.484   3.600 35.63  0.00           C
ATOM    507  C   HIS A 127      -9.333  -3.700   2.423 35.63  0.00           C
ATOM    508  O   HIS A 127      -8.273  -3.083   2.530 35.63  0.00           O
ATOM    509  N   HIS A 128     -10.043  -3.730   1.301 39.03  0.00           N
ATOM    510  CA  HIS A 128      -9.643  -2.971   0.122 39.03  0.00           C
ATOM    511  C   HIS A 128      -9.780  -1.473   0.358 39.03  0.00           C
ATOM    512  O   HIS A 128      -8.834  -0.713   0.149 39.03  0.00           O
ATOM    513  N   LYS A 129     -10.963  -1.053   0.796 61.21  0.00           N
ATOM    514  CA  LYS A 129     -11.218   0.353   1.081 61.21  0.00           C
ATOM    515  C   LYS A 129     -10.592   0.770   2.406 61.21  0.00           C
ATOM    516  O   LYS A 129     -10.298   1.945   2.623 61.21  0.00           O
ATOM    517  N   MET A 130     -10.391  -0.201   3.291 46.12  0.00           N
ATOM    518  CA  MET A 130      -9.710   0.044   4.556 46.12  0.00           C
ATOM    519  C   MET A 130      -8.259   0.450   4.331 46.12  0.00           C
ATOM    520  O   MET A 130      -7.805   1.474   4.842 46.12  0.00           O
ATOM    521  N   GLN A 131      -7.535  -0.357   3.563 56.30  0.00           N
ATOM    522  CA  GLN A 131      -6.170  -0.024   3.174 56.30  0.00           C
ATOM    523  C   GLN A 131      -6.106   1.342   2.502 56.30  0.00           C
ATOM    524  O   GLN A 131      -5.254   2.166   2.831 56.30  0.00           O
ATOM    525  N   LEU A 132      -7.013   1.574   1.559 53.92  0.00           N
ATOM    526  CA  LEU A 132      -7.030   2.821   0.804 53.92  0.00           C
ATOM    527  C   LEU A 132      -7.169   4.023   1.728 53.92  0.00           C
ATOM    528  O   LEU A 132      -6.457   5.016   1.583 53.92  0.00           O
ATOM    529  N   GLN A 133      -8.093   3.928   2.679 50.81  0.00           N
ATOM    530  CA  GLN A 133      -8.322   5.004   3.636 50.81  0.00           C
ATOM    531  C   GLN A 133      -7.134   5.166   4.576 50.81  0.00           C
ATOM    532  O   GLN A 133      -6.812   6.277   4.998 50.81  0.00           O
ATOM    533  N   ILE A 134      -6.486   4.053   4.901 59.98  0.00           N
ATOM    534  CA  ILE A 134      -5.266   4.081   5.699 59.98  0.00           C
ATOM    535  C   ILE A 134      -4.118   4.720   4.927 59.98  0.00           C
ATOM    536  O   ILE A 134      -3.253   5.373   5.510 59.98  0.00           O
ATOM    537  N   TYR A 135      -4.116   4.528   3.612 55.08  0.00           N
ATOM    538  CA  TYR A 135      -3.146   5.183   2.743 55.08  0.00           C
ATOM    539  C   TYR A 135      -3.415   6.679   2.646 55.08  0.00           C
ATOM    540  O   TYR A 135      -2.488   7.480   2.536 55.08  0.00           O
ATOM    541  N   LEU A 136      -4.690   7.049   2.688 49.84  0.00           N
ATOM    542  CA  LEU A 136      -5.077   8.450   2.807 49.84  0.00           C
ATOM    543  C   LEU A 136      -4.537   9.065   4.091 49.84  0.00           C
ATOM    544  O   LEU A 136      -4.006  10.175   4.083 49.84  0.00           O
ATOM    545  N   TRP A 137      -4.675   8.336   5.193 49.66  0.00           N
ATOM    546  CA  TRP A 137      -4.039   8.718   6.449 49.66  0.00           C
ATOM    547  C   TRP A 137      -2.540   8.918   6.268 49.66  0.00           C
ATOM    548  O   TRP A 137      -1.983   9.929   6.696 49.66  0.00           O
ATOM    549  N   LEU A 138      -1.891   7.948   5.633 53.75  0.00           N
ATOM    550  CA  LEU A 138      -0.449   8.000   5.424 53.75  0.00           C
ATOM    551  C   LEU A 138      -0.035   9.307   4.759 53.75  0.00           C
ATOM    552  O   LEU A 138       0.918   9.957   5.187 53.75  0.00           O
ATOM    553  N   PHE A 139      -0.758   9.686   3.711 48.93  0.00           N
ATOM    554  CA  PHE A 139      -0.378  10.832   2.893 48.93  0.00           C
ATOM    555  C   PHE A 139      -1.228  12.052   3.226 48.93  0.00           C
ATOM    556  O   PHE A 139      -1.148  13.078   2.552 48.93  0.00           O
ATOM    557  N   SER A 140      -2.043  11.932   4.269 50.30  0.00           N
ATOM    558  CA  SER A 140      -2.911  13.025   4.691 50.30  0.00           C
ATOM    559  C   SER A 140      -3.799  13.496   3.547 50.30  0.00           C
ATOM    560  O   SER A 140      -4.050  14.692   3.395 50.30  0.00           O
ATOM    561  N   ALA A 141      -4.273  12.550   2.743 48.21  0.00           N
ATOM    562  CA  ALA A 141      -5.101  12.870   1.588 48.21  0.00           C
ATOM    563  C   ALA A 141      -6.568  13.001   1.981 48.21  0.00           C
ATOM    564  O   ALA A 141      -6.973  12.562   3.057 48.21  0.00           O
ATOM    565  N   GLU A 142      -7.358  13.608   1.103 28.93  0.00           N
ATOM    566  CA  GLU A 142      -8.783  13.791   1.353 28.93  0.00           C
ATOM    567  C   GLU A 142      -9.619  12.854   0.491 28.93  0.00           C
ATOM    568  O   GLU A 142     -10.706  12.435   0.888 28.93  0.00           O
ATOM    569  N   LYS A 143      -9.105  12.528  -0.689 52.21  0.00           N
ATOM    570  CA  LYS A 143      -9.728  11.527  -1.547 52.21  0.00           C
ATOM    571  C   LYS A 143      -8.721  10.472  -1.984 52.21  0.00           C
ATOM    572  O   LYS A 143      -7.518  10.620  -1.769 52.21  0.00           O
ATOM    573  N   GLY A 144      -9.219   9.405  -2.601 52.67  0.00           N
ATOM    574  CA  GLY A 144      -8.356   8.370  -3.160 52.67  0.00           C
ATOM    575  C   GLY A 144      -9.162   7.355  -3.959 52.67  0.00           C
ATOM    576  O   GLY A 144     -10.391   7.344  -3.907 52.67  0.00           O
ATOM    577  N   ILE A 145      -8.461   6.502  -4.698 51.81  0.00           N
ATOM    578  CA  ILE A 145      -9.110   5.491  -5.525 51.81  0.00           C
ATOM    579  C   ILE A 145      -8.251   4.239  -5.642 51.81  0.00           C
ATOM    580  O   ILE A 145      -7.023   4.320  -5.682 51.81  0.00           O
ATOM    581  N   LEU A 146      -8.903   3.083  -5.698 54.22  0.00           N
ATOM    582  CA  LEU A 146      -8.198   1.806  -5.697 54.22  0.00           C
ATOM    583  C   LEU A 146      -8.839   0.824  -6.670 54.22  0.00           C
ATOM    584  O   LEU A 146     -10.051   0.612  -6.645 54.22  0.00           O
ATOM    585  N   VAL A 147      -8.017   0.227  -7.527 56.90  0.00           N
ATOM    586  CA  VAL A 147      -8.482  -0.813  -8.437 56.90  0.00           C
ATOM    587  C   VAL A 147      -7.746  -2.124  -8.197 56.90  0.00           C
ATOM    588  O   VAL A 147      -6.521  -2.190  -8.307 56.90  0.00           O
ATOM    589  N   TYR A 148      -8.499  -3.169  -7.868 56.66  0.00           N
ATOM    590  CA  TYR A 148      -7.913  -4.453  -7.504 56.66  0.00           C
ATOM    591  C   TYR A 148      -8.250  -5.523  -8.533 56.66  0.00           C
ATOM    592  O   TYR A 148      -9.397  -5.958  -8.639 56.66  0.00           O
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ATOM    593  N   ILE A 149      -7.243  -5.947  -9.291 48.41  0.00           N
ATOM    594  CA  ILE A 149      -7.464  -6.801 -10.451 48.41  0.00           C
ATOM    595  C   ILE A 149      -7.029  -8.234 -10.171 48.41  0.00           C
ATOM    596  O   ILE A 149      -5.836  -8.527 -10.090 48.41  0.00           O
ATOM    597  N   THR A 150      -8.004  -9.125 -10.024 51.51  0.00           N
ATOM    598  CA  THR A 150      -7.723 -10.535  -9.779 51.51  0.00           C
ATOM    599  C   THR A 150      -8.141 -11.394 -10.965 51.51  0.00           C
ATOM    600  O   THR A 150      -8.932 -10.966 -11.806 51.51  0.00           O
ATOM    601  N   PRO A 151      -7.604 -12.607 -11.028 42.72  0.00           N
ATOM    602  CA  PRO A 151      -8.004 -13.570 -12.046 42.72  0.00           C
ATOM    603  C   PRO A 151      -9.510 -13.806 -12.020 42.72  0.00           C
ATOM    604  O   PRO A 151     -10.111 -14.152 -13.037 42.72  0.00           O
ATOM    605  N   ASP A 152     -10.113 -13.616 -10.852 49.44  0.00           N
ATOM    606  CA  ASP A 152     -11.548 -13.815 -10.690 49.44  0.00           C
ATOM    607  C   ASP A 152     -12.335 -12.644 -11.264 49.44  0.00           C
ATOM    608  O   ASP A 152     -13.229 -12.830 -12.090 49.44  0.00           O
ATOM    609  N   ARG A 153     -11.997 -11.438 -10.822 50.16  0.00           N
ATOM    610  CA  ARG A 153     -12.718 -10.240 -11.237 50.16  0.00           C
ATOM    611  C   ARG A 153     -11.969  -8.978 -10.831 50.16  0.00           C
ATOM    612  O   ARG A 153     -10.963  -9.041 -10.126 50.16  0.00           O
ATOM    613  N   ILE A 154     -12.466  -7.831 -11.281 49.79  0.00           N
ATOM    614  CA  ILE A 154     -11.872  -6.547 -10.927 49.79  0.00           C
ATOM    615  C   ILE A 154     -12.769  -5.769  -9.974 49.79  0.00           C
ATOM    616  O   ILE A 154     -13.904  -5.430 -10.310 49.79  0.00           O
ATOM    617  N   ALA A 155     -12.254  -5.487  -8.782 50.43  0.00           N
ATOM    618  CA  ALA A 155     -13.002  -4.732  -7.784 50.43  0.00           C
ATOM    619  C   ALA A 155     -12.555  -3.276  -7.746 50.43  0.00           C
ATOM    620  O   ALA A 155     -11.360  -2.985  -7.702 50.43  0.00           O
ATOM    621  N   GLU A 156     -13.522  -2.365  -7.764 50.47  0.00           N
ATOM    622  CA  GLU A 156     -13.228  -0.938  -7.799 50.47  0.00           C
ATOM    623  C   GLU A 156     -13.694  -0.248  -6.524 50.47  0.00           C
ATOM    624  O   GLU A 156     -14.822  -0.449  -6.074 50.47  0.00           O
ATOM    625  N   TYR A 157     -12.819   0.568  -5.944 38.52  0.00           N
ATOM    626  CA  TYR A 157     -13.153   1.318  -4.739 38.52  0.00           C
ATOM    627  C   TYR A 157     -12.754   2.781  -4.874 38.52  0.00           C
ATOM    628  O   TYR A 157     -11.762   3.108  -5.525 38.52  0.00           O
ATOM    629  N   GLU A 158     -13.534   3.661  -4.253 47.79  0.00           N
ATOM    630  CA  GLU A 158     -13.259   5.091  -4.295 47.79  0.00           C
ATOM    631  C   GLU A 158     -13.680   5.772  -3.000 47.79  0.00           C
ATOM    632  O   GLU A 158     -14.786   5.553  -2.502 47.79  0.00           O
ATOM    633  N   ILE A 159     -12.794   6.599  -2.456 53.24  0.00           N
ATOM    634  CA  ILE A 159     -13.075   7.318  -1.219 53.24  0.00           C
ATOM    635  C   ILE A 159     -13.140   8.821  -1.458 53.24  0.00           C
ATOM    636  O   ILE A 159     -12.178   9.426  -1.933 53.24  0.00           O
ATOM    637  N   ASN A 160     -14.279   9.420  -1.127 60.63  0.00           N
ATOM    638  CA  ASN A 160     -14.433  10.868  -1.200 60.63  0.00           C
ATOM    639  C   ASN A 160     -14.303  11.506   0.177 60.63  0.00           C
ATOM    640  O   ASN A 160     -13.991  12.691   0.295 60.63  0.00           O
ATOM    641  N   GLU A 161     -14.544  10.715   1.216 50.70  0.00           N
ATOM    642  CA  GLU A 161     -14.460  11.204   2.587 50.70  0.00           C
ATOM    643  C   GLU A 161     -13.012  11.417   3.008 50.70  0.00           C
ATOM    644  O   GLU A 161     -12.178  10.523   2.873 50.70  0.00           O
ATOM    645  N   PRO A 162     -12.720  12.609   3.518 52.96  0.00           N
ATOM    646  CA  PRO A 162     -11.372  12.942   3.963 52.96  0.00           C
ATOM    647  C   PRO A 162     -10.992  12.154   5.209 52.96  0.00           C
ATOM    648  O   PRO A 162     -11.838  11.862   6.053 52.96  0.00           O
ATOM    649  N   LEU A 163      -9.713  11.809   5.317 52.16  0.00           N
ATOM    650  CA  LEU A 163      -9.228  11.005   6.433 52.16  0.00           C
ATOM    651  C   LEU A 163      -8.789  11.885   7.597 52.16  0.00           C
ATOM    652  O   LEU A 163      -7.630  12.288   7.679 52.16  0.00           O
ATOM    653  N   ASP A 164      -9.725  12.179   8.494 57.09  0.00           N
ATOM    654  CA  ASP A 164      -9.415  12.930   9.704 57.09  0.00           C
ATOM    655  C   ASP A 164      -9.518  12.048  10.942 57.09  0.00           C
ATOM    656  O   ASP A 164      -9.729  10.840  10.839 57.09  0.00           O
ATOM    657  N   GLU A 165      -9.369  12.660  12.112 61.08  0.00           N
ATOM    658  CA  GLU A 165      -9.411  11.926  13.371 61.08  0.00           C
ATOM    659  C   GLU A 165     -10.729  11.178  13.528 61.08  0.00           C
ATOM    660  O   GLU A 165     -10.750  10.012  13.924 61.08  0.00           O
ATOM    661  N   ALA A 166     -11.829  11.856  13.218 53.69  0.00           N
ATOM    662  CA  ALA A 166     -13.156  11.271  13.360 53.69  0.00           C
ATOM    663  C   ALA A 166     -13.324  10.058  12.453 53.69  0.00           C
ATOM    664  O   ALA A 166     -13.949   9.069  12.832 53.69  0.00           O
ATOM    665  N   THR A 167     -12.762  10.143  11.252 50.62  0.00           N
ATOM    666  CA  THR A 167     -12.809   9.036  10.305 50.62  0.00           C
ATOM    667  C   THR A 167     -11.999   7.847  10.805 50.62  0.00           C
ATOM    668  O   THR A 167     -12.410   6.696  10.658 50.62  0.00           O
ATOM    669  N   ILE A 168     -10.844   8.133  11.398 56.16  0.00           N
ATOM    670  CA  ILE A 168     -10.014   7.095  11.998 56.16  0.00           C
ATOM    671  C   ILE A 168     -10.759   6.368  13.109 56.16  0.00           C
ATOM    672  O   ILE A 168     -10.712   5.141  13.202 56.16  0.00           O
ATOM    673  N   VAL A 169     -11.447   7.131  13.952 58.37  0.00           N
ATOM    674  CA  VAL A 169     -12.234   6.557  15.036 58.37  0.00           C
ATOM    675  C   VAL A 169     -13.375   5.704  14.498 58.37  0.00           C
ATOM    676  O   VAL A 169     -13.654   4.623  15.018 58.37  0.00           O
ATOM    677  N   ARG A 170     -14.033   6.195  13.453 59.48  0.00           N
ATOM    678  CA  ARG A 170     -15.111   5.455  12.809 59.48  0.00           C
ATOM    679  C   ARG A 170     -14.615   4.122  12.264 59.48  0.00           C
ATOM    680  O   ARG A 170     -15.248   3.085  12.464 59.48  0.00           O
ATOM    681  N   LEU A 171     -13.481   4.156  11.574 49.98  0.00           N
ATOM    682  CA  LEU A 171     -12.902   2.952  10.990 49.98  0.00           C
ATOM    683  C   LEU A 171     -12.490   1.960  12.068 49.98  0.00           C
ATOM    684  O   LEU A 171     -12.612   0.748  11.890 49.98  0.00           O
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ATOM    685  N   ALA A 172     -12.002   2.481  13.189 58.47  0.00           N
ATOM    686  CA  ALA A 172     -11.698   1.653  14.350 58.47  0.00           C
ATOM    687  C   ALA A 172     -12.945   0.949  14.867 58.47  0.00           C
ATOM    688  O   ALA A 172     -12.945  -0.263  15.078 58.47  0.00           O
ATOM    689  N   GLU A 173     -14.011   1.718  15.071 69.53  0.00           N
ATOM    690  CA  GLU A 173     -15.255   1.176  15.603 69.53  0.00           C
ATOM    691  C   GLU A 173     -15.873   0.167  14.643 69.53  0.00           C
ATOM    692  O   GLU A 173     -16.553  -0.769  15.065 69.53  0.00           O
ATOM    693  N   ASP A 174     -15.629   0.361  13.351 57.67  0.00           N
ATOM    694  CA  ASP A 174     -16.150  -0.539  12.330 57.67  0.00           C
ATOM    695  C   ASP A 174     -15.596  -1.948  12.504 57.67  0.00           C
ATOM    696  O   ASP A 174     -16.242  -2.930  12.137 57.67  0.00           O
ATOM    697  N   THR A 175     -14.396  -2.041  13.066 51.60  0.00           N
ATOM    698  CA  THR A 175     -13.741  -3.329  13.267 51.60  0.00           C
ATOM    699  C   THR A 175     -13.899  -3.810  14.703 51.60  0.00           C
ATOM    700  O   THR A 175     -13.870  -5.010  14.974 51.60  0.00           O
ATOM    701  N   ILE A 176     -14.065  -2.864  15.623 44.53  0.00           N
ATOM    702  CA  ILE A 176     -14.351  -3.193  17.015 44.53  0.00           C
ATOM    703  C   ILE A 176     -15.669  -3.944  17.144 44.53  0.00           C
ATOM    704  O   ILE A 176     -15.787  -4.878  17.938 44.53  0.00           O
ATOM    705  N   MET A 177     -16.660  -3.533  16.361 55.85  0.00           N
ATOM    706  CA  MET A 177     -17.988  -4.128  16.428 55.85  0.00           C
ATOM    707  C   MET A 177     -18.147  -5.238  15.398 55.85  0.00           C
ATOM    708  O   MET A 177     -19.247  -5.745  15.179 55.85  0.00           O
ATOM    709  N   LEU A 178     -17.040  -5.614  14.765 59.55  0.00           N
ATOM    710  CA  LEU A 178     -17.061  -6.635  13.725 59.55  0.00           C
ATOM    711  C   LEU A 178     -16.166  -7.812  14.090 59.55  0.00           C
ATOM    712  O   LEU A 178     -14.962  -7.650  14.291 59.55  0.00           O
ATOM    713  N   GLN A 179     -16.760  -8.997  14.174 54.12  0.00           N
ATOM    714  CA  GLN A 179     -16.018 -10.204  14.515 54.12  0.00           C
ATOM    715  C   GLN A 179     -15.066 -10.602  13.394 54.12  0.00           C
ATOM    716  O   GLN A 179     -13.882 -10.846  13.628 54.12  0.00           O
ATOM    717  N   ASN A 180     -15.590 -10.666  12.175 48.75  0.00           N
ATOM    718  CA  ASN A 180     -14.781 -11.001  11.009 48.75  0.00           C
ATOM    719  C   ASN A 180     -14.136  -9.758  10.411 48.75  0.00           C
ATOM    720  O   ASN A 180     -14.413  -9.392   9.268 48.75  0.00           O
ATOM    721  N   SER A 181     -13.277  -9.110  11.190 62.92  0.00           N
ATOM    722  CA  SER A 181     -12.619  -7.885  10.751 62.92  0.00           C
ATOM    723  C   SER A 181     -11.434  -8.190   9.843 62.92  0.00           C
ATOM    724  O   SER A 181     -10.838  -9.264   9.925 62.92  0.00           O
ATOM    725  N   PRO A 182     -11.098  -7.240   8.977 62.16  0.00           N
ATOM    726  CA  PRO A 182      -9.967  -7.395   8.071 62.16  0.00           C
ATOM    727  C   PRO A 182      -8.644  -7.269   8.814 62.16  0.00           C
ATOM    728  O   PRO A 182      -8.618  -6.997  10.014 62.16  0.00           O
ATOM    729  N   ARG A 183      -7.545  -7.472   8.094 55.41  0.00           N
ATOM    730  CA  ARG A 183      -6.214  -7.307   8.666 55.41  0.00           C
ATOM    731  C   ARG A 183      -5.410  -6.265   7.899 55.41  0.00           C
ATOM    732  O   ARG A 183      -5.899  -5.676   6.936 55.41  0.00           O
ATOM    733  N   PHE A 184      -4.174  -6.042   8.333 42.08  0.00           N
ATOM    734  CA  PHE A 184      -3.260  -5.161   7.617 42.08  0.00           C
ATOM    735  C   PHE A 184      -1.809  -5.572   7.842 42.08  0.00           C
ATOM    736  O   PHE A 184      -1.504  -6.328   8.764 42.08  0.00           O
ATOM    737  N   ASN A 185      -0.919  -5.070   6.992 36.30  0.00           N
ATOM    738  CA  ASN A 185       0.497  -5.403   7.082 36.30  0.00           C
ATOM    739  C   ASN A 185       1.075  -4.990   8.431 36.30  0.00           C
ATOM    740  O   ASN A 185       1.114  -3.806   8.764 36.30  0.00           O
ATOM    741  N   TRP A 186       1.523  -5.975   9.203 34.90  0.00           N
ATOM    742  CA  TRP A 186       1.956  -5.736  10.574 34.90  0.00           C
ATOM    743  C   TRP A 186       3.144  -4.783  10.620 34.90  0.00           C
ATOM    744  O   TRP A 186       3.358  -4.091  11.614 34.90  0.00           O
ATOM    745  N   GLU A 187       3.913  -4.753   9.537 46.05  0.00           N
ATOM    746  CA  GLU A 187       5.099  -3.908   9.463 46.05  0.00           C
ATOM    747  C   GLU A 187       4.725  -2.431   9.488 46.05  0.00           C
ATOM    748  O   GLU A 187       5.479  -1.600   9.992 46.05  0.00           O
ATOM    749  N   CYS A 188       3.558  -2.112   8.941 53.49  0.00           N
ATOM    750  CA  CYS A 188       3.076  -0.736   8.910 53.49  0.00           C
ATOM    751  C   CYS A 188       2.514  -0.320  10.263 53.49  0.00           C
ATOM    752  O   CYS A 188       1.668  -1.008  10.834 53.49  0.00           O
ATOM    753  N   LYS A 189       2.990   0.812  10.773 40.03  0.00           N
ATOM    754  CA  LYS A 189       2.582   1.291  12.087 40.03  0.00           C
ATOM    755  C   LYS A 189       1.621   2.467  11.971 40.03  0.00           C
ATOM    756  O   LYS A 189       1.108   2.965  12.973 40.03  0.00           O
ATOM    757  N   TYR A 190       1.379   2.907  10.740 37.23  0.00           N
ATOM    758  CA  TYR A 190       0.476   4.025  10.490 37.23  0.00           C
ATOM    759  C   TYR A 190      -0.953   3.542  10.275 37.23  0.00           C
ATOM    760  O   TYR A 190      -1.852   4.336   9.999 37.23  0.00           O
ATOM    761  N   CYS A 191      -1.156   2.235  10.402 43.81  0.00           N
ATOM    762  CA  CYS A 191      -2.475   1.643  10.217 43.81  0.00           C
ATOM    763  C   CYS A 191      -3.212   1.510  11.543 43.81  0.00           C
ATOM    764  O   CYS A 191      -2.591   1.446  12.605 43.81  0.00           O
ATOM    765  N   ILE A 192      -4.538   1.470  11.476 41.27  0.00           N
ATOM    766  CA  ILE A 192      -5.361   1.335  12.672 41.27  0.00           C
ATOM    767  C   ILE A 192      -5.216  -0.050  13.287 41.27  0.00           C
ATOM    768  O   ILE A 192      -5.561  -1.056  12.666 41.27  0.00           O
ATOM    769  N   PHE A 193      -4.704  -0.097  14.512 42.93  0.00           N
ATOM    770  CA  PHE A 193      -4.322  -1.359  15.135 42.93  0.00           C
ATOM    771  C   PHE A 193      -5.546  -2.123  15.627 42.93  0.00           C
ATOM    772  O   PHE A 193      -5.497  -3.338  15.814 42.93  0.00           O
ATOM    773  N   SER A 194      -6.643  -1.401  15.835 34.28  0.00           N
ATOM    774  CA  SER A 194      -7.890  -2.014  16.275 34.28  0.00           C
ATOM    775  C   SER A 194      -8.550  -2.794  15.145 34.28  0.00           C
ATOM    776  O   SER A 194      -9.547  -3.486  15.354 34.28  0.00           O
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ATOM    777  N   VAL A 195      -7.988  -2.678  13.946 39.35  0.00           N
ATOM    778  CA  VAL A 195      -8.430  -3.481  12.812 39.35  0.00           C
ATOM    779  C   VAL A 195      -8.156  -4.962  13.045 39.35  0.00           C
ATOM    780  O   VAL A 195      -8.973  -5.815  12.701 39.35  0.00           O
ATOM    781  N   ILE A 196      -7.002  -5.259  13.633 37.38  0.00           N
ATOM    782  CA  ILE A 196      -6.609  -6.638  13.894 37.38  0.00           C
ATOM    783  C   ILE A 196      -6.961  -7.051  15.318 37.38  0.00           C
ATOM    784  O   ILE A 196      -7.494  -8.138  15.545 37.38  0.00           O
ATOM    785  N   CYS A 197      -6.661  -6.179  16.273 52.86  0.00           N
ATOM    786  CA  CYS A 197      -6.797  -6.513  17.686 52.86  0.00           C
ATOM    787  C   CYS A 197      -7.147  -5.282  18.511 52.86  0.00           C
ATOM    788  O   CYS A 197      -6.269  -4.629  19.074 52.86  0.00           O
ATOM    789  N   PRO A 198      -8.437  -4.969  18.581 49.63  0.00           N
ATOM    790  CA  PRO A 198      -8.914  -3.855  19.391 49.63  0.00           C
ATOM    791  C   PRO A 198      -8.736  -4.139  20.877 49.63  0.00           C
ATOM    792  O   PRO A 198      -8.658  -3.218  21.689 49.63  0.00           O
ATOM    793  N   ALA A 199      -8.675  -5.419  21.226 49.32  0.00           N
ATOM    794  CA  ALA A 199      -8.504  -5.827  22.615 49.32  0.00           C
ATOM    795  C   ALA A 199      -7.152  -5.382  23.158 49.32  0.00           C
ATOM    796  O   ALA A 199      -7.015  -5.094  24.347 49.32  0.00           O
ATOM    797  N   LYS A 200      -6.157  -5.326  22.280 64.63  0.00           N
ATOM    798  CA  LYS A 200      -4.826  -4.869  22.660 64.63  0.00           C
ATOM    799  C   LYS A 200      -4.666  -3.374  22.413 64.63  0.00           C
ATOM    800  O   LYS A 200      -4.394  -2.609  23.338 64.63  0.00           O
ATOM    801  N   LEU A 201      -4.838  -2.964  21.162 49.70  0.00           N
ATOM    802  CA  LEU A 201      -4.684  -1.563  20.787 49.70  0.00           C
ATOM    803  C   LEU A 201      -5.983  -0.996  20.228 49.70  0.00           C
ATOM    804  O   LEU A 201      -6.253  -1.099  19.032 49.70  0.00           O
ATOM    805  N   THR A 202      -6.785  -0.398  21.102 50.36  0.00           N
ATOM    806  CA  THR A 202      -8.031   0.237  20.688 50.36  0.00           C
ATOM    807  C   THR A 202      -7.765   1.521  19.913 50.36  0.00           C
ATOM    808  O   THR A 202      -8.090   1.613  18.971 50.36  0.00           O
TER     809      THR A 202
ENDMDL
END
REMARK   1 ************************************************************************
REMARK   1 Start File DEC2_vs_NAT_dSi_colored.pdb
REMARK   1 The occupancy record was modified to represent dSi := Si(DEC)-Si(NAT).
REMARK   1 Occ=0.00 means dSi=-1.461482 kB; Occ=99.99 means dSi=1.491450 kB.
MODEL        0
ATOM      1  N   MET A   1      13.208  10.652   1.184 37.22  0.00           N
ATOM      2  CA  MET A   1      13.950   9.398   1.239 37.22  0.00           C
ATOM      3  C   MET A   1      14.997   9.328   0.135 37.22  0.00           C
ATOM      4  O   MET A   1      16.179   9.584   0.368 37.22  0.00           O
ATOM      5  N   ILE A   2      14.555   8.981  -1.070 27.40  0.00           N
ATOM      6  CA  ILE A   2      15.469   8.753  -2.184 27.40  0.00           C
ATOM      7  C   ILE A   2      16.216  10.028  -2.553 27.40  0.00           C
ATOM      8  O   ILE A   2      17.408   9.993  -2.858 27.40  0.00           O
ATOM      9  N   THR A   3      15.509  11.153  -2.524 41.96  0.00           N
ATOM     10  CA  THR A   3      16.109  12.443  -2.836 41.96  0.00           C
ATOM     11  C   THR A   3      17.319  12.716  -1.951 41.96  0.00           C
ATOM     12  O   THR A   3      18.385  13.092  -2.440 41.96  0.00           O
ATOM     13  N   GLU A   4      17.148  12.526  -0.648 43.40  0.00           N
ATOM     14  CA  GLU A   4      18.230  12.736   0.307 43.40  0.00           C
ATOM     15  C   GLU A   4      19.378  11.765   0.059 43.40  0.00           C
ATOM     16  O   GLU A   4      20.547  12.143   0.120 43.40  0.00           O
ATOM     17  N   PHE A   5      19.036  10.511  -0.221 31.36  0.00           N
ATOM     18  CA  PHE A   5      20.037   9.482  -0.474 31.36  0.00           C
ATOM     19  C   PHE A   5      20.897   9.835  -1.680 31.36  0.00           C
ATOM     20  O   PHE A   5      22.119   9.690  -1.647 31.36  0.00           O
ATOM     21  N   LEU A   6      20.252  10.298  -2.744 28.08  0.00           N
ATOM     22  CA  LEU A   6      20.947  10.600  -3.990 28.08  0.00           C
ATOM     23  C   LEU A   6      21.839  11.826  -3.840 28.08  0.00           C
ATOM     24  O   LEU A   6      22.974  11.842  -4.318 28.08  0.00           O
ATOM     25  N   LEU A   7      21.320  12.852  -3.174 47.44  0.00           N
ATOM     26  CA  LEU A   7      22.075  14.077  -2.943 47.44  0.00           C
ATOM     27  C   LEU A   7      23.280  13.821  -2.048 47.44  0.00           C
ATOM     28  O   LEU A   7      24.363  14.361  -2.277 47.44  0.00           O
ATOM     29  N   LYS A   8      23.087  12.992  -1.027 29.50  0.00           N
ATOM     30  CA  LYS A   8      24.178  12.596  -0.146 29.50  0.00           C
ATOM     31  C   LYS A   8      25.300  11.922  -0.926 29.50  0.00           C
ATOM     32  O   LYS A   8      26.461  12.317  -0.828 29.50  0.00           O
ATOM     33  N   LYS A   9      24.946  10.902  -1.700  0.00  0.00           N
ATOM     34  CA  LYS A   9      25.935  10.087  -2.395  0.00  0.00           C
ATOM     35  C   LYS A   9      26.461  10.797  -3.635  0.00  0.00           C
ATOM     36  O   LYS A   9      27.532  10.466  -4.144  0.00  0.00           O
ATOM     37  N   LYS A  10      25.703  11.776  -4.117 56.51  0.00           N
ATOM     38  CA  LYS A  10      26.183  12.674  -5.159 56.51  0.00           C
ATOM     39  C   LYS A  10      27.364  13.505  -4.672 56.51  0.00           C
ATOM     40  O   LYS A  10      28.363  13.653  -5.374 56.51  0.00           O
ATOM     41  N   LEU A  11      27.241  14.045  -3.464 56.08  0.00           N
ATOM     42  CA  LEU A  11      28.329  14.791  -2.844 56.08  0.00           C
ATOM     43  C   LEU A  11      29.495  13.876  -2.494 56.08  0.00           C
ATOM     44  O   LEU A  11      30.657  14.273  -2.582 56.08  0.00           O
ATOM     45  N   GLU A  12      29.178  12.648  -2.097 40.56  0.00           N
ATOM     46  CA  GLU A  12      30.200  11.647  -1.811 40.56  0.00           C
ATOM     47  C   GLU A  12      30.978  11.279  -3.068 40.56  0.00           C
ATOM     48  O   GLU A  12      32.180  11.021  -3.012 40.56  0.00           O
ATOM     49  N   GLU A  13      30.284  11.255  -4.201 43.09  0.00           N
ATOM     50  CA  GLU A  13      30.931  11.044  -5.490 43.09  0.00           C
ATOM     51  C   GLU A  13      31.823  12.222  -5.859 43.09  0.00           C
ATOM     52  O   GLU A  13      32.930  12.041  -6.365 43.09  0.00           O
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ATOM     53  N   HIS A  14      31.334  13.432  -5.601 62.74  0.00           N
ATOM     54  CA  HIS A  14      32.102  14.641  -5.869 62.74  0.00           C
ATOM     55  C   HIS A  14      33.423  14.635  -5.112 62.74  0.00           C
ATOM     56  O   HIS A  14      34.457  15.044  -5.642 62.74  0.00           O
ATOM     57  N   LEU A  15      33.384  14.169  -3.868 54.44  0.00           N
ATOM     58  CA  LEU A  15      34.585  14.074  -3.047 54.44  0.00           C
ATOM     59  C   LEU A  15      35.462  12.910  -3.486 54.44  0.00           C
ATOM     60  O   LEU A  15      36.677  13.053  -3.626 54.44  0.00           O
ATOM     61  N   SER A  16      34.840  11.756  -3.702 50.75  0.00           N
ATOM     62  CA  SER A  16      35.567  10.557  -4.102 50.75  0.00           C
ATOM     63  C   SER A  16      34.737   9.700  -5.050 50.75  0.00           C
ATOM     64  O   SER A  16      34.060   8.764  -4.625 50.75  0.00           O
ATOM     65  N   HIS A  17      34.795  10.026  -6.337 47.33  0.00           N
ATOM     66  CA  HIS A  17      33.972   9.352  -7.335 47.33  0.00           C
ATOM     67  C   HIS A  17      34.395   7.899  -7.508 47.33  0.00           C
ATOM     68  O   HIS A  17      33.632   7.077  -8.013 47.33  0.00           O
ATOM     69  N   VAL A  18      35.615   7.589  -7.084 46.62  0.00           N
ATOM     70  CA  VAL A  18      36.121   6.223  -7.138 46.62  0.00           C
ATOM     71  C   VAL A  18      35.542   5.377  -6.011 46.62  0.00           C
ATOM     72  O   VAL A  18      35.530   4.148  -6.087 46.62  0.00           O
ATOM     73  N   LYS A  19      35.061   6.041  -4.966 50.02  0.00           N
ATOM     74  CA  LYS A  19      34.504   5.351  -3.809 50.02  0.00           C
ATOM     75  C   LYS A  19      32.991   5.220  -3.920 50.02  0.00           C
ATOM     76  O   LYS A  19      32.455   4.112  -3.952 50.02  0.00           O
ATOM     77  N   GLU A  20      32.307   6.357  -3.979 23.75  0.00           N
ATOM     78  CA  GLU A  20      30.849   6.372  -4.019 23.75  0.00           C
ATOM     79  C   GLU A  20      30.339   6.969  -5.325 23.75  0.00           C
ATOM     80  O   GLU A  20      31.031   7.758  -5.969 23.75  0.00           O
ATOM     81  N   GLU A  21      29.127   6.586  -5.711 36.12  0.00           N
ATOM     82  CA  GLU A  21      28.493   7.137  -6.903 36.12  0.00           C
ATOM     83  C   GLU A  21      27.108   7.686  -6.586 36.12  0.00           C
ATOM     84  O   GLU A  21      26.530   7.376  -5.544 36.12  0.00           O
ATOM     85  N   ASN A  22      26.579   8.503  -7.491 44.32  0.00           N
ATOM     86  CA  ASN A  22      25.247   9.072  -7.325 44.32  0.00           C
ATOM     87  C   ASN A  22      24.169   8.014  -7.520 44.32  0.00           C
ATOM     88  O   ASN A  22      23.479   7.997  -8.539 44.32  0.00           O
ATOM     89  N   THR A  23      24.027   7.131  -6.536 60.13  0.00           N
ATOM     90  CA  THR A  23      23.005   6.094  -6.579 60.13  0.00           C
ATOM     91  C   THR A  23      22.565   5.694  -5.176 60.13  0.00           C
ATOM     92  O   THR A  23      22.987   6.296  -4.189 60.13  0.00           O
ATOM     93  N   ILE A  24      21.716   4.675  -5.094 61.59  0.00           N
ATOM     94  CA  ILE A  24      21.183   4.223  -3.815 61.59  0.00           C
ATOM     95  C   ILE A  24      21.969   3.033  -3.281 61.59  0.00           C
ATOM     96  O   ILE A  24      21.986   1.963  -3.891 61.59  0.00           O
ATOM     97  N   TYR A  25      22.618   3.223  -2.138 56.15  0.00           N
ATOM     98  CA  TYR A  25      23.339   2.144  -1.477 56.15  0.00           C
ATOM     99  C   TYR A  25      22.549   1.596  -0.294 56.15  0.00           C
ATOM    100  O   TYR A  25      21.750   2.308   0.314 56.15  0.00           O
ATOM    101  N   VAL A  26      22.778   0.327   0.027 70.44  0.00           N
ATOM    102  CA  VAL A  26      22.094  -0.316   1.143 70.44  0.00           C
ATOM    103  C   VAL A  26      22.264   0.484   2.427 70.44  0.00           C
ATOM    104  O   VAL A  26      21.338   0.588   3.232 70.44  0.00           O
ATOM    105  N   THR A  27      23.451   1.050   2.614 57.80  0.00           N
ATOM    106  CA  THR A  27      23.751   1.825   3.812 57.80  0.00           C
ATOM    107  C   THR A  27      22.677   2.874   4.072 57.80  0.00           C
ATOM    108  O   THR A  27      22.298   3.118   5.217 57.80  0.00           O
ATOM    109  N   ASP A  28      22.192   3.494   3.002 52.14  0.00           N
ATOM    110  CA  ASP A  28      21.183   4.540   3.114 52.14  0.00           C
ATOM    111  C   ASP A  28      19.777   3.964   3.009 52.14  0.00           C
ATOM    112  O   ASP A  28      18.846   4.453   3.649 52.14  0.00           O
ATOM    113  N   LEU A  29      19.629   2.923   2.197 66.81  0.00           N
ATOM    114  CA  LEU A  29      18.328   2.303   1.975 66.81  0.00           C
ATOM    115  C   LEU A  29      17.700   1.853   3.287 66.81  0.00           C
ATOM    116  O   LEU A  29      16.496   1.997   3.492 66.81  0.00           O
ATOM    117  N   VAL A  30      18.525   1.308   4.175 55.91  0.00           N
ATOM    118  CA  VAL A  30      18.036   0.731   5.422 55.91  0.00           C
ATOM    119  C   VAL A  30      17.506   1.810   6.358 55.91  0.00           C
ATOM    120  O   VAL A  30      16.894   1.509   7.383 55.91  0.00           O
ATOM    121  N   ARG A  31      17.743   3.066   5.998 86.64  0.00           N
ATOM    122  CA  ARG A  31      17.255   4.193   6.784 86.64  0.00           C
ATOM    123  C   ARG A  31      15.736   4.284   6.733 86.64  0.00           C
ATOM    124  O   ARG A  31      15.114   4.931   7.575 86.64  0.00           O
ATOM    125  N   CYS A  32      15.142   3.630   5.740 50.59  0.00           N
ATOM    126  CA  CYS A  32      13.691   3.609   5.595 50.59  0.00           C
ATOM    127  C   CYS A  32      13.007   3.401   6.941 50.59  0.00           C
ATOM    128  O   CYS A  32      13.276   2.425   7.640 50.59  0.00           O
ATOM    129  N   PRO A  33      12.120   4.325   7.296 50.11  0.00           N
ATOM    130  CA  PRO A  33      11.462   4.295   8.596 50.11  0.00           C
ATOM    131  C   PRO A  33      10.497   3.121   8.697 50.11  0.00           C
ATOM    132  O   PRO A  33      10.210   2.632   9.791 50.11  0.00           O
ATOM    133  N   ARG A  34       9.998   2.671   7.551 34.08  0.00           N
ATOM    134  CA  ARG A  34       9.094   1.528   7.505 34.08  0.00           C
ATOM    135  C   ARG A  34       9.788   0.257   7.977 34.08  0.00           C
ATOM    136  O   ARG A  34       9.242  -0.497   8.783 34.08  0.00           O
ATOM    137  N   ARG A  35      10.993   0.024   7.469 25.98  0.00           N
ATOM    138  CA  ARG A  35      11.803  -1.107   7.906 25.98  0.00           C
ATOM    139  C   ARG A  35      12.069  -1.047   9.405 25.98  0.00           C
ATOM    140  O   ARG A  35      11.930  -2.047  10.110 25.98  0.00           O
ATOM    141  N   VAL A  36      12.452   0.131   9.887 52.80  0.00           N
ATOM    142  CA  VAL A  36      12.781   0.312  11.296 52.80  0.00           C
ATOM    143  C   VAL A  36      11.563   0.083  12.180 52.80  0.00           C
ATOM    144  O   VAL A  36      11.652  -0.569  13.221 52.80  0.00           O
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ATOM    145  N   ARG A  37      10.423   0.624  11.760 54.12  0.00           N
ATOM    146  CA  ARG A  37       9.204   0.551  12.554 54.12  0.00           C
ATOM    147  C   ARG A  37       8.748  -0.891  12.735 54.12  0.00           C
ATOM    148  O   ARG A  37       8.289  -1.277  13.810 54.12  0.00           O
ATOM    149  N   TYR A  38       8.881  -1.685  11.678 45.86  0.00           N
ATOM    150  CA  TYR A  38       8.579  -3.110  11.747 45.86  0.00           C
ATOM    151  C   TYR A  38       9.566  -3.839  12.648 45.86  0.00           C
ATOM    152  O   TYR A  38       9.171  -4.602  13.530 45.86  0.00           O
ATOM    153  N   GLU A  39      10.854  -3.602  12.421 57.04  0.00           N
ATOM    154  CA  GLU A  39      11.902  -4.271  13.182 57.04  0.00           C
ATOM    155  C   GLU A  39      11.712  -4.068  14.679 57.04  0.00           C
ATOM    156  O   GLU A  39      11.937  -4.983  15.473 57.04  0.00           O
ATOM    157  N   SER A  40      11.296  -2.865  15.060 46.13  0.00           N
ATOM    158  CA  SER A  40      11.228  -2.488  16.467 46.13  0.00           C
ATOM    159  C   SER A  40      10.197  -3.326  17.213 46.13  0.00           C
ATOM    160  O   SER A  40      10.234  -3.427  18.439 46.13  0.00           O
ATOM    161  N   GLU A  41       9.277  -3.927  16.465 51.09  0.00           N
ATOM    162  CA  GLU A  41       8.230  -4.752  17.054 51.09  0.00           C
ATOM    163  C   GLU A  41       8.410  -6.218  16.684 51.09  0.00           C
ATOM    164  O   GLU A  41       7.971  -7.110  17.410 51.09  0.00           O
ATOM    165  N   TYR A  42       9.058  -6.462  15.550 43.68  0.00           N
ATOM    166  CA  TYR A  42       9.215  -7.817  15.034 43.68  0.00           C
ATOM    167  C   TYR A  42      10.679  -8.134  14.758 43.68  0.00           C
ATOM    168  O   TYR A  42      11.112  -8.163  13.605 43.68  0.00           O
ATOM    169  N   LYS A  43      11.438  -8.372  15.822 60.71  0.00           N
ATOM    170  CA  LYS A  43      12.859  -8.678  15.696 60.71  0.00           C
ATOM    171  C   LYS A  43      13.081 -10.157  15.407 60.71  0.00           C
ATOM    172  O   LYS A  43      14.021 -10.527  14.704 60.71  0.00           O
ATOM    173  N   GLU A  44      12.209 -10.999  15.952 55.81  0.00           N
ATOM    174  CA  GLU A  44      12.332 -12.442  15.786 55.81  0.00           C
ATOM    175  C   GLU A  44      10.962 -13.104  15.696 55.81  0.00           C
ATOM    176  O   GLU A  44      10.105 -12.896  16.555 55.81  0.00           O
ATOM    177  N   LEU A  45      10.763 -13.902  14.653 48.24  0.00           N
ATOM    178  CA  LEU A  45       9.474 -14.537  14.409 48.24  0.00           C
ATOM    179  C   LEU A  45       9.554 -16.044  14.614 48.24  0.00           C
ATOM    180  O   LEU A  45      10.588 -16.661  14.356 48.24  0.00           O
ATOM    181  N   ALA A  46       8.458 -16.632  15.081 62.46  0.00           N
ATOM    182  CA  ALA A  46       8.364 -18.081  15.215 62.46  0.00           C
ATOM    183  C   ALA A  46       7.943 -18.730  13.902 62.46  0.00           C
ATOM    184  O   ALA A  46       7.888 -19.955  13.794 62.46  0.00           O
ATOM    185  N   ILE A  47       7.647 -17.902  12.907 56.61  0.00           N
ATOM    186  CA  ILE A  47       7.259 -18.394  11.590 56.61  0.00           C
ATOM    187  C   ILE A  47       8.364 -18.161  10.569 56.61  0.00           C
ATOM    188  O   ILE A  47       8.104 -18.073   9.369 56.61  0.00           O
ATOM    189  N   SER A  48       9.598 -18.061  11.051 57.74  0.00           N
ATOM    190  CA  SER A  48      10.722 -17.675  10.206 57.74  0.00           C
ATOM    191  C   SER A  48      11.025 -18.747   9.167 57.74  0.00           C
ATOM    192  O   SER A  48      11.725 -18.494   8.187 57.74  0.00           O
ATOM    193  N   GLN A  49      10.493 -19.944   9.388 65.98  0.00           N
ATOM    194  CA  GLN A  49      10.654 -21.040   8.439 65.98  0.00           C
ATOM    195  C   GLN A  49      10.079 -20.677   7.076 65.98  0.00           C
ATOM    196  O   GLN A  49      10.571 -21.133   6.043 65.98  0.00           O
ATOM    197  N   VAL A  50       9.036 -19.854   7.078 68.48  0.00           N
ATOM    198  CA  VAL A  50       8.419 -19.395   5.840 68.48  0.00           C
ATOM    199  C   VAL A  50       8.594 -17.892   5.660 68.48  0.00           C
ATOM    200  O   VAL A  50       9.024 -17.429   4.604 68.48  0.00           O
ATOM    201  N   TYR A  51       8.259 -17.135   6.700 34.17  0.00           N
ATOM    202  CA  TYR A  51       8.376 -15.682   6.658 34.17  0.00           C
ATOM    203  C   TYR A  51       9.430 -15.186   7.638 34.17  0.00           C
ATOM    204  O   TYR A  51       9.103 -14.695   8.720 34.17  0.00           O
ATOM    205  N   ALA A  52      10.695 -15.315   7.256 46.56  0.00           N
ATOM    206  CA  ALA A  52      11.798 -14.824   8.074 46.56  0.00           C
ATOM    207  C   ALA A  52      11.755 -13.306   8.202 46.56  0.00           C
ATOM    208  O   ALA A  52      11.495 -12.598   7.228 46.56  0.00           O
ATOM    209  N   PRO A  53      12.012 -12.812   9.409 49.85  0.00           N
ATOM    210  CA  PRO A  53      11.958 -11.380   9.677 49.85  0.00           C
ATOM    211  C   PRO A  53      13.017 -10.629   8.880 49.85  0.00           C
ATOM    212  O   PRO A  53      12.828  -9.469   8.517 49.85  0.00           O
ATOM    213  N   SER A  54      14.133 -11.300   8.610 47.01  0.00           N
ATOM    214  CA  SER A  54      15.193 -10.724   7.792 47.01  0.00           C
ATOM    215  C   SER A  54      14.739 -10.544   6.350 47.01  0.00           C
ATOM    216  O   SER A  54      14.934  -9.483   5.755 47.01  0.00           O
ATOM    217  N   ALA A  55      14.132 -11.585   5.790 43.60  0.00           N
ATOM    218  CA  ALA A  55      13.612 -11.529   4.430 43.60  0.00           C
ATOM    219  C   ALA A  55      12.495 -10.500   4.310 43.60  0.00           C
ATOM    220  O   ALA A  55      12.371  -9.821   3.291 43.60  0.00           O
ATOM    221  N   ILE A  56      11.683 -10.390   5.356 26.91  0.00           N
ATOM    222  CA  ILE A  56      10.598  -9.417   5.385 26.91  0.00           C
ATOM    223  C   ILE A  56      11.135  -7.993   5.345 26.91  0.00           C
ATOM    224  O   ILE A  56      10.679  -7.170   4.550 26.91  0.00           O
ATOM    225  N   LEU A  57      12.103  -7.707   6.207 22.36  0.00           N
ATOM    226  CA  LEU A  57      12.694  -6.376   6.282 22.36  0.00           C
ATOM    227  C   LEU A  57      13.305  -5.967   4.947 22.36  0.00           C
ATOM    228  O   LEU A  57      13.194  -4.815   4.530 22.36  0.00           O
ATOM    229  N   GLY A  58      13.949  -6.920   4.282 47.90  0.00           N
ATOM    230  CA  GLY A  58      14.524  -6.678   2.964 47.90  0.00           C
ATOM    231  C   GLY A  58      13.441  -6.353   1.942 47.90  0.00           C
ATOM    232  O   GLY A  58      13.588  -5.430   1.141 47.90  0.00           O
ATOM    233  N   ASP A  59      12.354  -7.115   1.977 47.45  0.00           N
ATOM    234  CA  ASP A  59      11.253  -6.923   1.041 47.45  0.00           C
ATOM    235  C   ASP A  59      10.505  -5.628   1.331 47.45  0.00           C
ATOM    236  O   ASP A  59       9.920  -5.023   0.432 47.45  0.00           O
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ATOM    237  N   ILE A  60      10.529  -5.206   2.590 21.25  0.00           N
ATOM    238  CA  ILE A  60       9.979  -3.910   2.976 21.25  0.00           C
ATOM    239  C   ILE A  60      10.769  -2.769   2.350 21.25  0.00           C
ATOM    240  O   ILE A  60      10.194  -1.779   1.895 21.25  0.00           O
ATOM    241  N   LEU A  61      12.090  -2.911   2.329 25.12  0.00           N
ATOM    242  CA  LEU A  61      12.953  -1.958   1.642 25.12  0.00           C
ATOM    243  C   LEU A  61      12.652  -1.918   0.150 25.12  0.00           C
ATOM    244  O   LEU A  61      12.658  -0.852  -0.467 25.12  0.00           O
ATOM    245  N   HIS A  62      12.390  -3.087  -0.427 66.36  0.00           N
ATOM    246  CA  HIS A  62      12.070  -3.185  -1.846 66.36  0.00           C
ATOM    247  C   HIS A  62      10.793  -2.426  -2.177 66.36  0.00           C
ATOM    248  O   HIS A  62      10.763  -1.615  -3.103 66.36  0.00           O
ATOM    249  N   LEU A  63       9.737  -2.694  -1.416 23.84  0.00           N
ATOM    250  CA  LEU A  63       8.443  -2.066  -1.651 23.84  0.00           C
ATOM    251  C   LEU A  63       8.500  -0.567  -1.380 23.84  0.00           C
ATOM    252  O   LEU A  63       7.981   0.234  -2.157 23.84  0.00           O
ATOM    253  N   GLY A  64       9.135  -0.196  -0.274 27.85  0.00           N
ATOM    254  CA  GLY A  64       9.240   1.206   0.114 27.85  0.00           C
ATOM    255  C   GLY A  64      10.021   2.006  -0.919 27.85  0.00           C
ATOM    256  O   GLY A  64       9.630   3.116  -1.284 27.85  0.00           O
ATOM    257  N   LEU A  65      11.125   1.438  -1.390 31.75  0.00           N
ATOM    258  CA  LEU A  65      11.929   2.069  -2.430 31.75  0.00           C
ATOM    259  C   LEU A  65      11.109   2.305  -3.692 31.75  0.00           C
ATOM    260  O   LEU A  65      11.115   3.400  -4.253 31.75  0.00           O
ATOM    261  N   GLU A  66      10.404   1.268  -4.135 78.61  0.00           N
ATOM    262  CA  GLU A  66       9.573   1.362  -5.329 78.61  0.00           C
ATOM    263  C   GLU A  66       8.424   2.341  -5.125 78.61  0.00           C
ATOM    264  O   GLU A  66       8.013   3.034  -6.055 78.61  0.00           O
ATOM    265  N   SER A  67       7.907   2.391  -3.902 40.41  0.00           N
ATOM    266  CA  SER A  67       6.797   3.279  -3.575 40.41  0.00           C
ATOM    267  C   SER A  67       7.189   4.739  -3.754 40.41  0.00           C
ATOM    268  O   SER A  67       6.462   5.516  -4.374 40.41  0.00           O
ATOM    269  N   VAL A  68       8.343   5.109  -3.209 37.35  0.00           N
ATOM    270  CA  VAL A  68       8.839   6.476  -3.318 37.35  0.00           C
ATOM    271  C   VAL A  68       9.177   6.825  -4.762 37.35  0.00           C
ATOM    272  O   VAL A  68       8.937   7.945  -5.211 37.35  0.00           O
ATOM    273  N   LEU A  69       9.735   5.860  -5.484 35.55  0.00           N
ATOM    274  CA  LEU A  69       9.988   6.018  -6.912 35.55  0.00           C
ATOM    275  C   LEU A  69       8.705   6.345  -7.665 35.55  0.00           C
ATOM    276  O   LEU A  69       8.669   7.268  -8.480 35.55  0.00           O
ATOM    277  N   LYS A  70       7.651   5.584  -7.388 19.55  0.00           N
ATOM    278  CA  LYS A  70       6.366   5.786  -8.045 19.55  0.00           C
ATOM    279  C   LYS A  70       5.783   7.152  -7.707 19.55  0.00           C
ATOM    280  O   LYS A  70       5.176   7.805  -8.554 19.55  0.00           O
ATOM    281  N   GLY A  71       5.971   7.578  -6.462 30.56  0.00           N
ATOM    282  CA  GLY A  71       5.517   8.893  -6.026 30.56  0.00           C
ATOM    283  C   GLY A  71       6.223  10.002  -6.796 30.56  0.00           C
ATOM    284  O   GLY A  71       5.604  10.995  -7.182 30.56  0.00           O
ATOM    285  N   ASN A  72       7.521   9.829  -7.017 33.38  0.00           N
ATOM    286  CA  ASN A  72       8.312  10.810  -7.751 33.38  0.00           C
ATOM    287  C   ASN A  72       8.022  10.746  -9.244 33.38  0.00           C
ATOM    288  O   ASN A  72       8.169  11.737  -9.958 33.38  0.00           O
ATOM    289  N   PHE A  73       7.610   9.572  -9.712 52.13  0.00           N
ATOM    290  CA  PHE A  73       7.342   9.364 -11.130 52.13  0.00           C
ATOM    291  C   PHE A  73       5.870   9.588 -11.450 52.13  0.00           C
ATOM    292  O   PHE A  73       5.481   9.646 -12.617 52.13  0.00           O
ATOM    293  N   ASN A  74       5.054   9.712 -10.408 42.19  0.00           N
ATOM    294  CA  ASN A  74       3.611   9.835 -10.575 42.19  0.00           C
ATOM    295  C   ASN A  74       3.023   8.587 -11.219 42.19  0.00           C
ATOM    296  O   ASN A  74       2.076   8.669 -12.003 42.19  0.00           O
ATOM    297  N   ALA A  75       3.588   7.432 -10.887 49.67  0.00           N
ATOM    298  CA  ALA A  75       3.165   6.171 -11.484 49.67  0.00           C
ATOM    299  C   ALA A  75       1.959   5.594 -10.754 49.67  0.00           C
ATOM    300  O   ALA A  75       1.664   5.978  -9.623 49.67  0.00           O
ATOM    301  N   GLU A  76       1.265   4.669 -11.408 45.22  0.00           N
ATOM    302  CA  GLU A  76       0.058   4.076 -10.846 45.22  0.00           C
ATOM    303  C   GLU A  76      -0.008   2.581 -11.133 45.22  0.00           C
ATOM    304  O   GLU A  76       0.506   2.112 -12.149 45.22  0.00           O
ATOM    305  N   THR A  77      -0.644   1.839 -10.233 63.11  0.00           N
ATOM    306  CA  THR A  77      -0.790   0.398 -10.396 63.11  0.00           C
ATOM    307  C   THR A  77      -2.251  -0.022 -10.300 63.11  0.00           C
ATOM    308  O   THR A  77      -2.905   0.200  -9.280 63.11  0.00           O
ATOM    309  N   GLU A  78      -2.759  -0.629 -11.366 62.28  0.00           N
ATOM    310  CA  GLU A  78      -4.142  -1.090 -11.400 62.28  0.00           C
ATOM    311  C   GLU A  78      -4.219  -2.609 -11.297 62.28  0.00           C
ATOM    312  O   GLU A  78      -3.682  -3.326 -12.141 62.28  0.00           O
ATOM    313  N   VAL A  79      -4.891  -3.092 -10.258 42.88  0.00           N
ATOM    314  CA  VAL A  79      -5.038  -4.526 -10.041 42.88  0.00           C
ATOM    315  C   VAL A  79      -6.505  -4.921  -9.941 42.88  0.00           C
ATOM    316  O   VAL A  79      -7.300  -4.237  -9.295 42.88  0.00           O
ATOM    317  N   GLU A  80      -6.860  -6.028 -10.584 42.38  0.00           N
ATOM    318  CA  GLU A  80      -8.245  -6.484 -10.620 42.38  0.00           C
ATOM    319  C   GLU A  80      -8.440  -7.723  -9.756 42.38  0.00           C
ATOM    320  O   GLU A  80      -7.653  -8.667  -9.824 42.38  0.00           O
ATOM    321  N   THR A  81      -9.491  -7.713  -8.944 41.50  0.00           N
ATOM    322  CA  THR A  81      -9.765  -8.816  -8.031 41.50  0.00           C
ATOM    323  C   THR A  81     -11.223  -8.818  -7.590 41.50  0.00           C
ATOM    324  O   THR A  81     -12.017  -7.989  -8.036 41.50  0.00           O
ATOM    325  N   LEU A  82     -11.569  -9.753  -6.711 42.94  0.00           N
ATOM    326  CA  LEU A  82     -12.909  -9.808  -6.141 42.94  0.00           C
ATOM    327  C   LEU A  82     -13.001  -8.976  -4.869 42.94  0.00           C
ATOM    328  O   LEU A  82     -12.283  -9.223  -3.900 42.94  0.00           O
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ATOM    329  N   ARG A  83     -13.889  -7.987  -4.878 22.34  0.00           N
ATOM    330  CA  ARG A  83     -14.107  -7.143  -3.709 22.34  0.00           C
ATOM    331  C   ARG A  83     -15.192  -7.718  -2.808 22.34  0.00           C
ATOM    332  O   ARG A  83     -16.372  -7.715  -3.161 22.34  0.00           O
ATOM    333  N   GLU A  84     -14.787  -8.211  -1.643 13.69  0.00           N
ATOM    334  CA  GLU A  84     -15.731  -8.731  -0.661 13.69  0.00           C
ATOM    335  C   GLU A  84     -15.988  -7.718   0.446 13.69  0.00           C
ATOM    336  O   GLU A  84     -15.325  -7.737   1.484 13.69  0.00           O
ATOM    337  N   ILE A  85     -16.954  -6.835   0.221 55.14  0.00           N
ATOM    338  CA  ILE A  85     -17.197  -5.717   1.126 55.14  0.00           C
ATOM    339  C   ILE A  85     -18.562  -5.834   1.792 55.14  0.00           C
ATOM    340  O   ILE A  85     -19.557  -6.151   1.139 55.14  0.00           O
ATOM    341  N   ASN A  86     -18.603  -5.578   3.095 49.91  0.00           N
ATOM    342  CA  ASN A  86     -19.861  -5.561   3.833 49.91  0.00           C
ATOM    343  C   ASN A  86     -20.424  -4.149   3.930 49.91  0.00           C
ATOM    344  O   ASN A  86     -19.934  -3.328   4.706 49.91  0.00           O
ATOM    345  N   VAL A  87     -21.454  -3.873   3.139 49.44  0.00           N
ATOM    346  CA  VAL A  87     -22.001  -2.524   3.036 49.44  0.00           C
ATOM    347  C   VAL A  87     -23.394  -2.447   3.649 49.44  0.00           C
ATOM    348  O   VAL A  87     -24.344  -3.032   3.131 49.44  0.00           O
ATOM    349  N   GLY A  88     -23.508  -1.722   4.757 48.77  0.00           N
ATOM    350  CA  GLY A  88     -24.801  -1.476   5.382 48.77  0.00           C
ATOM    351  C   GLY A  88     -25.332  -2.730   6.064 48.77  0.00           C
ATOM    352  O   GLY A  88     -26.524  -2.838   6.348 48.77  0.00           O
ATOM    353  N   GLY A  89     -24.437  -3.679   6.325 49.03  0.00           N
ATOM    354  CA  GLY A  89     -24.819  -4.942   6.945 49.03  0.00           C
ATOM    355  C   GLY A  89     -25.056  -6.021   5.896 49.03  0.00           C
ATOM    356  O   GLY A  89     -25.298  -7.181   6.230 49.03  0.00           O
ATOM    357  N   LYS A  90     -24.985  -5.632   4.628 49.16  0.00           N
ATOM    358  CA  LYS A  90     -25.193  -6.565   3.528 49.16  0.00           C
ATOM    359  C   LYS A  90     -23.876  -6.918   2.848 49.16  0.00           C
ATOM    360  O   LYS A  90     -23.041  -6.047   2.602 49.16  0.00           O
ATOM    361  N   VAL A  91     -23.697  -8.200   2.546 52.06  0.00           N
ATOM    362  CA  VAL A  91     -22.476  -8.671   1.903 52.06  0.00           C
ATOM    363  C   VAL A  91     -22.526  -8.449   0.397 52.06  0.00           C
ATOM    364  O   VAL A  91     -23.435  -8.929  -0.281 52.06  0.00           O
ATOM    365  N   TYR A  92     -21.543  -7.722  -0.122 47.93  0.00           N
ATOM    366  CA  TYR A  92     -21.409  -7.529  -1.562 47.93  0.00           C
ATOM    367  C   TYR A  92     -20.090  -8.094  -2.072 47.93  0.00           C
ATOM    368  O   TYR A  92     -19.025  -7.527  -1.828 47.93  0.00           O
ATOM    369  N   LYS A  93     -20.167  -9.215  -2.782 70.62  0.00           N
ATOM    370  CA  LYS A  93     -18.995  -9.797  -3.425 70.62  0.00           C
ATOM    371  C   LYS A  93     -18.956  -9.459  -4.909 70.62  0.00           C
ATOM    372  O   LYS A  93     -19.509 -10.184  -5.736 70.62  0.00           O
ATOM    373  N   ILE A  94     -18.298  -8.354  -5.242 47.02  0.00           N
ATOM    374  CA  ILE A  94     -18.385  -7.785  -6.582 47.02  0.00           C
ATOM    375  C   ILE A  94     -17.017  -7.741  -7.251 47.02  0.00           C
ATOM    376  O   ILE A  94     -16.045  -7.260  -6.669 47.02  0.00           O
ATOM    377  N   LYS A  95     -16.949  -8.247  -8.478 69.21  0.00           N
ATOM    378  CA  LYS A  95     -15.722  -8.185  -9.265 69.21  0.00           C
ATOM    379  C   LYS A  95     -15.409  -6.755  -9.684 69.21  0.00           C
ATOM    380  O   LYS A  95     -16.261  -6.058 -10.237 69.21  0.00           O
ATOM    381  N   GLY A  96     -14.182  -6.321  -9.418 48.31  0.00           N
ATOM    382  CA  GLY A  96     -13.750  -4.975  -9.774 48.31  0.00           C
ATOM    383  C   GLY A  96     -12.235  -4.843  -9.696 48.31  0.00           C
ATOM    384  O   GLY A  96     -11.514  -5.842  -9.691 48.31  0.00           O
ATOM    385  N   ARG A  97     -11.756  -3.606  -9.635 42.47  0.00           N
ATOM    386  CA  ARG A  97     -10.323  -3.336  -9.657 42.47  0.00           C
ATOM    387  C   ARG A  97      -9.993  -2.046  -8.918 42.47  0.00           C
ATOM    388  O   ARG A  97     -10.856  -1.188  -8.730 42.47  0.00           O
ATOM    389  N   ALA A  98      -8.740  -1.914  -8.498 45.19  0.00           N
ATOM    390  CA  ALA A  98      -8.279  -0.702  -7.832 45.19  0.00           C
ATOM    391  C   ALA A  98      -7.037  -0.138  -8.511 45.19  0.00           C
ATOM    392  O   ALA A  98      -6.023  -0.824  -8.641 45.19  0.00           O
ATOM    393  N   ASP A  99      -7.123   1.116  -8.943 66.23  0.00           N
ATOM    394  CA  ASP A  99      -5.987   1.795  -9.554 66.23  0.00           C
ATOM    395  C   ASP A  99      -5.373   2.809  -8.597 66.23  0.00           C
ATOM    396  O   ASP A  99      -5.882   3.920  -8.444 66.23  0.00           O
ATOM    397  N   ALA A 100      -4.276   2.421  -7.956 53.59  0.00           N
ATOM    398  CA  ALA A 100      -3.644   3.258  -6.944 53.59  0.00           C
ATOM    399  C   ALA A 100      -2.569   4.147  -7.557 53.59  0.00           C
ATOM    400  O   ALA A 100      -1.694   3.671  -8.280 53.59  0.00           O
ATOM    401  N   ILE A 101      -2.640   5.442  -7.262 57.33  0.00           N
ATOM    402  CA  ILE A 101      -1.630   6.387  -7.719 57.33  0.00           C
ATOM    403  C   ILE A 101      -1.213   7.332  -6.598 57.33  0.00           C
ATOM    404  O   ILE A 101      -2.058   7.888  -5.897 57.33  0.00           O
ATOM    405  N   ILE A 102       0.094   7.508  -6.436 55.03  0.00           N
ATOM    406  CA  ILE A 102       0.627   8.335  -5.360 55.03  0.00           C
ATOM    407  C   ILE A 102       0.665   9.804  -5.763 55.03  0.00           C
ATOM    408  O   ILE A 102       1.239  10.161  -6.792 55.03  0.00           O
ATOM    409  N   ARG A 103       0.052  10.653  -4.945 27.39  0.00           N
ATOM    410  CA  ARG A 103      -0.066  12.072  -5.261 27.39  0.00           C
ATOM    411  C   ARG A 103       0.943  12.897  -4.474 27.39  0.00           C
ATOM    412  O   ARG A 103       1.551  13.826  -5.008 27.39  0.00           O
ATOM    413  N   ASN A 104       1.118  12.554  -3.202 50.54  0.00           N
ATOM    414  CA  ASN A 104       2.040  13.277  -2.334 50.54  0.00           C
ATOM    415  C   ASN A 104       2.675  12.345  -1.310 50.54  0.00           C
ATOM    416  O   ASN A 104       2.086  12.056  -0.269 50.54  0.00           O
ATOM    417  N   ASP A 105       3.883  11.878  -1.610 48.89  0.00           N
ATOM    418  CA  ASP A 105       4.569  10.920  -0.753 48.89  0.00           C
ATOM    419  C   ASP A 105       5.257  11.619   0.414 48.89  0.00           C
ATOM    420  O   ASP A 105       5.922  10.978   1.229 48.89  0.00           O
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ATOM    421  N   ASN A 106       5.090  12.934   0.490 47.26  0.00           N
ATOM    422  CA  ASN A 106       5.550  13.699   1.643 47.26  0.00           C
ATOM    423  C   ASN A 106       4.401  13.994   2.600 47.26  0.00           C
ATOM    424  O   ASN A 106       4.609  14.159   3.803 47.26  0.00           O
ATOM    425  N   GLY A 107       3.190  14.061   2.060 52.85  0.00           N
ATOM    426  CA  GLY A 107       1.990  14.185   2.880 52.85  0.00           C
ATOM    427  C   GLY A 107       1.264  12.851   3.000 52.85  0.00           C
ATOM    428  O   GLY A 107       0.224  12.756   3.651 52.85  0.00           O
ATOM    429  N   LYS A 108       1.819  11.822   2.369 29.53  0.00           N
ATOM    430  CA  LYS A 108       1.293  10.469   2.499 29.53  0.00           C
ATOM    431  C   LYS A 108      -0.107  10.362   1.907 29.53  0.00           C
ATOM    432  O   LYS A 108      -0.957   9.638   2.426 29.53  0.00           O
ATOM    433  N   SER A 109      -0.341  11.090   0.820 43.88  0.00           N
ATOM    434  CA  SER A 109      -1.633  11.066   0.146 43.88  0.00           C
ATOM    435  C   SER A 109      -1.586  10.197  -1.105 43.88  0.00           C
ATOM    436  O   SER A 109      -0.891  10.518  -2.068 43.88  0.00           O
ATOM    437  N   ILE A 110      -2.331   9.097  -1.083 43.16  0.00           N
ATOM    438  CA  ILE A 110      -2.419   8.209  -2.235 43.16  0.00           C
ATOM    439  C   ILE A 110      -3.864   8.036  -2.689 43.16  0.00           C
ATOM    440  O   ILE A 110      -4.726   7.638  -1.906 43.16  0.00           O
ATOM    441  N   VAL A 111      -4.121   8.340  -3.957 55.63  0.00           N
ATOM    442  CA  VAL A 111      -5.468   8.254  -4.507 55.63  0.00           C
ATOM    443  C   VAL A 111      -5.687   6.928  -5.224 55.63  0.00           C
ATOM    444  O   VAL A 111      -4.970   6.596  -6.167 55.63  0.00           O
ATOM    445  N   ILE A 112      -6.682   6.173  -4.772 58.72  0.00           N
ATOM    446  CA  ILE A 112      -6.992   4.878  -5.363 58.72  0.00           C
ATOM    447  C   ILE A 112      -8.355   4.895  -6.043 58.72  0.00           C
ATOM    448  O   ILE A 112      -9.388   5.001  -5.383 58.72  0.00           O
ATOM    449  N   GLU A 113      -8.352   4.790  -7.368 83.18  0.00           N
ATOM    450  CA  GLU A 113      -9.587   4.802  -8.141 83.18  0.00           C
ATOM    451  C   GLU A 113     -10.228   3.421  -8.176 83.18  0.00           C
ATOM    452  O   GLU A 113      -9.707   2.499  -8.804 83.18  0.00           O
ATOM    453  N   ILE A 114     -11.362   3.283  -7.497 52.42  0.00           N
ATOM    454  CA  ILE A 114     -12.054   2.003  -7.411 52.42  0.00           C
ATOM    455  C   ILE A 114     -13.033   1.828  -8.565 52.42  0.00           C
ATOM    456  O   ILE A 114     -13.987   2.593  -8.704 52.42  0.00           O
ATOM    457  N   LYS A 115     -12.791   0.816  -9.391 70.74  0.00           N
ATOM    458  CA  LYS A 115     -13.617   0.572 -10.568 70.74  0.00           C
ATOM    459  C   LYS A 115     -14.397  -0.729 -10.433 70.74  0.00           C
ATOM    460  O   LYS A 115     -13.958  -1.660  -9.757 70.74  0.00           O
ATOM    461  N   THR A 116     -15.555  -0.789 -11.081 42.92  0.00           N
ATOM    462  CA  THR A 116     -16.378  -1.993 -11.069 42.92  0.00           C
ATOM    463  C   THR A 116     -16.338  -2.701 -12.418 42.92  0.00           C
ATOM    464  O   THR A 116     -16.472  -2.069 -13.465 42.92  0.00           O
ATOM    465  N   SER A 117     -16.154  -4.016 -12.384 45.57  0.00           N
ATOM    466  CA  SER A 117     -16.085  -4.811 -13.604 45.57  0.00           C
ATOM    467  C   SER A 117     -17.324  -5.682 -13.765 45.57  0.00           C
ATOM    468  O   SER A 117     -17.806  -5.891 -14.878 45.57  0.00           O
ATOM    469  N   ARG A 118     -17.835  -6.188 -12.648 29.06  0.00           N
ATOM    470  CA  ARG A 118     -19.020  -7.036 -12.663 29.06  0.00           C
ATOM    471  C   ARG A 118     -20.179  -6.353 -13.378 29.06  0.00           C
ATOM    472  O   ARG A 118     -20.672  -5.318 -12.931 29.06  0.00           O
ATOM    473  N   SER A 119     -20.610  -6.939 -14.489 43.52  0.00           N
ATOM    474  CA  SER A 119     -21.662  -6.348 -15.308 43.52  0.00           C
ATOM    475  C   SER A 119     -22.998  -6.354 -14.578 43.52  0.00           C
ATOM    476  O   SER A 119     -23.907  -5.598 -14.920 43.52  0.00           O
ATOM    477  N   ASP A 120     -23.112  -7.213 -13.571 45.20  0.00           N
ATOM    478  CA  ASP A 120     -24.335  -7.313 -12.784 45.20  0.00           C
ATOM    479  C   ASP A 120     -24.580  -6.040 -11.984 45.20  0.00           C
ATOM    480  O   ASP A 120     -25.722  -5.703 -11.669 45.20  0.00           O
ATOM    481  N   LYS A 121     -23.501  -5.334 -11.659 28.78  0.00           N
ATOM    482  CA  LYS A 121     -23.579  -4.185 -10.766 28.78  0.00           C
ATOM    483  C   LYS A 121     -23.308  -2.886 -11.514 28.78  0.00           C
ATOM    484  O   LYS A 121     -22.497  -2.851 -12.440 28.78  0.00           O
ATOM    485  N   GLY A 122     -23.990  -1.821 -11.109 50.28  0.00           N
ATOM    486  CA  GLY A 122     -23.842  -0.523 -11.756 50.28  0.00           C
ATOM    487  C   GLY A 122     -23.209   0.493 -10.815 50.28  0.00           C
ATOM    488  O   GLY A 122     -22.815   0.159  -9.698 50.28  0.00           O
ATOM    489  N   LEU A 123     -23.116   1.737 -11.273 74.40  0.00           N
ATOM    490  CA  LEU A 123     -22.538   2.808 -10.468 74.40  0.00           C
ATOM    491  C   LEU A 123     -23.474   4.008 -10.396 74.40  0.00           C
ATOM    492  O   LEU A 123     -23.379   4.931 -11.204 74.40  0.00           O
ATOM    493  N   PRO A 124     -24.377   3.990  -9.422 58.93  0.00           N
ATOM    494  CA  PRO A 124     -25.310   5.092  -9.221 58.93  0.00           C
ATOM    495  C   PRO A 124     -24.574   6.418  -9.082 58.93  0.00           C
ATOM    496  O   PRO A 124     -23.563   6.508  -8.386 58.93  0.00           O
ATOM    497  N   LEU A 125     -25.085   7.447  -9.750 43.87  0.00           N
ATOM    498  CA  LEU A 125     -24.449   8.758  -9.742 43.87  0.00           C
ATOM    499  C   LEU A 125     -24.468   9.371  -8.347 43.87  0.00           C
ATOM    500  O   LEU A 125     -23.632  10.213  -8.018 43.87  0.00           O
ATOM    501  N   ILE A 126     -25.426   8.943  -7.532 58.05  0.00           N
ATOM    502  CA  ILE A 126     -25.542   9.434  -6.164 58.05  0.00           C
ATOM    503  C   ILE A 126     -24.407   8.913  -5.293 58.05  0.00           C
ATOM    504  O   ILE A 126     -24.210   9.376  -4.168 58.05  0.00           O
ATOM    505  N   HIS A 127     -23.660   7.947  -5.817 43.35  0.00           N
ATOM    506  CA  HIS A 127     -22.487   7.424  -5.126 43.35  0.00           C
ATOM    507  C   HIS A 127     -21.213   7.711  -5.910 43.35  0.00           C
ATOM    508  O   HIS A 127     -20.139   7.871  -5.329 43.35  0.00           O
ATOM    509  N   HIS A 128     -21.338   7.775  -7.231 52.41  0.00           N
ATOM    510  CA  HIS A 128     -20.196   8.042  -8.097 52.41  0.00           C
ATOM    511  C   HIS A 128     -19.692   9.468  -7.919 52.41  0.00           C
ATOM    512  O   HIS A 128     -18.485   9.711  -7.890 52.41  0.00           O
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ATOM    513  N   LYS A 129     -20.622  10.409  -7.799 88.91  0.00           N
ATOM    514  CA  LYS A 129     -20.274  11.805  -7.565 88.91  0.00           C
ATOM    515  C   LYS A 129     -19.535  11.975  -6.244 88.91  0.00           C
ATOM    516  O   LYS A 129     -18.642  12.812  -6.124 88.91  0.00           O
ATOM    517  N   MET A 130     -19.913  11.174  -5.253 78.04  0.00           N
ATOM    518  CA  MET A 130     -19.219  11.161  -3.972 78.04  0.00           C
ATOM    519  C   MET A 130     -17.787  10.663  -4.125 78.04  0.00           C
ATOM    520  O   MET A 130     -16.852  11.258  -3.588 78.04  0.00           O
ATOM    521  N   GLN A 131     -17.622   9.569  -4.861 58.11  0.00           N
ATOM    522  CA  GLN A 131     -16.297   9.037  -5.155 58.11  0.00           C
ATOM    523  C   GLN A 131     -15.412  10.091  -5.809 58.11  0.00           C
ATOM    524  O   GLN A 131     -14.248  10.252  -5.444 58.11  0.00           O
ATOM    525  N   LEU A 132     -15.972  10.808  -6.778 72.67  0.00           N
ATOM    526  CA  LEU A 132     -15.223  11.820  -7.512 72.67  0.00           C
ATOM    527  C   LEU A 132     -14.768  12.945  -6.591 72.67  0.00           C
ATOM    528  O   LEU A 132     -13.606  13.350  -6.619 72.67  0.00           O
ATOM    529  N   GLN A 133     -15.690  13.445  -5.775 99.99  0.00           N
ATOM    530  CA  GLN A 133     -15.390  14.537  -4.859 99.99  0.00           C
ATOM    531  C   GLN A 133     -14.294  14.147  -3.875 99.99  0.00           C
ATOM    532  O   GLN A 133     -13.375  14.923  -3.615 99.99  0.00           O
ATOM    533  N   ILE A 134     -14.398  12.939  -3.331 69.20  0.00           N
ATOM    534  CA  ILE A 134     -13.425  12.449  -2.362 69.20  0.00           C
ATOM    535  C   ILE A 134     -12.025  12.407  -2.961 69.20  0.00           C
ATOM    536  O   ILE A 134     -11.074  12.928  -2.377 69.20  0.00           O
ATOM    537  N   TYR A 135     -11.904  11.786  -4.129 53.52  0.00           N
ATOM    538  CA  TYR A 135     -10.608  11.601  -4.769 53.52  0.00           C
ATOM    539  C   TYR A 135      -9.911  12.937  -4.996 53.52  0.00           C
ATOM    540  O   TYR A 135      -8.691  13.043  -4.861 53.52  0.00           O
ATOM    541  N   LEU A 136     -10.691  13.955  -5.340 90.27  0.00           N
ATOM    542  CA  LEU A 136     -10.149  15.286  -5.590 90.27  0.00           C
ATOM    543  C   LEU A 136      -9.721  15.957  -4.292 90.27  0.00           C
ATOM    544  O   LEU A 136      -8.885  16.861  -4.296 90.27  0.00           O
ATOM    545  N   TRP A 137     -10.297  15.512  -3.181 77.33  0.00           N
ATOM    546  CA  TRP A 137     -10.027  16.114  -1.882 77.33  0.00           C
ATOM    547  C   TRP A 137      -8.845  15.441  -1.197 77.33  0.00           C
ATOM    548  O   TRP A 137      -8.222  16.017  -0.305 77.33  0.00           O
ATOM    549  N   LEU A 138      -8.540  14.219  -1.619 32.22  0.00           N
ATOM    550  CA  LEU A 138      -7.532  13.406  -0.950 32.22  0.00           C
ATOM    551  C   LEU A 138      -6.191  14.125  -0.895 32.22  0.00           C
ATOM    552  O   LEU A 138      -5.507  14.106   0.128 32.22  0.00           O
ATOM    553  N   PHE A 139      -5.821  14.762  -2.001 59.66  0.00           N
ATOM    554  CA  PHE A 139      -4.550  15.470  -2.088 59.66  0.00           C
ATOM    555  C   PHE A 139      -4.455  16.565  -1.033 59.66  0.00           C
ATOM    556  O   PHE A 139      -3.522  16.589  -0.231 59.66  0.00           O
ATOM    557  N   SER A 140      -5.427  17.471  -1.040 50.13  0.00           N
ATOM    558  CA  SER A 140      -5.436  18.592  -0.108 50.13  0.00           C
ATOM    559  C   SER A 140      -5.690  18.120   1.318 50.13  0.00           C
ATOM    560  O   SER A 140      -5.347  18.807   2.280 50.13  0.00           O
ATOM    561  N   ALA A 141      -6.294  16.943   1.448 49.30  0.00           N
ATOM    562  CA  ALA A 141      -6.559  16.359   2.758 49.30  0.00           C
ATOM    563  C   ALA A 141      -5.352  15.585   3.271 49.30  0.00           C
ATOM    564  O   ALA A 141      -5.324  15.151   4.422 49.30  0.00           O
ATOM    565  N   GLU A 142      -4.355  15.415   2.408 35.86  0.00           N
ATOM    566  CA  GLU A 142      -3.127  14.724   2.785 35.86  0.00           C
ATOM    567  C   GLU A 142      -3.420  13.318   3.291 35.86  0.00           C
ATOM    568  O   GLU A 142      -2.924  12.911   4.342 35.86  0.00           O
ATOM    569  N   LYS A 143      -4.226  12.579   2.537 43.24  0.00           N
ATOM    570  CA  LYS A 143      -4.584  11.214   2.908 43.24  0.00           C
ATOM    571  C   LYS A 143      -5.110  10.437   1.709 43.24  0.00           C
ATOM    572  O   LYS A 143      -5.334  11.004   0.639 43.24  0.00           O
ATOM    573  N   GLY A 144      -5.303   9.136   1.891 49.83  0.00           N
ATOM    574  CA  GLY A 144      -5.952   8.308   0.882 49.83  0.00           C
ATOM    575  C   GLY A 144      -7.239   7.692   1.417 49.83  0.00           C
ATOM    576  O   GLY A 144      -7.380   7.475   2.620 49.83  0.00           O
ATOM    577  N   ILE A 145      -8.174   7.414   0.515 38.62  0.00           N
ATOM    578  CA  ILE A 145      -9.412   6.736   0.882 38.62  0.00           C
ATOM    579  C   ILE A 145      -9.814   5.716  -0.176 38.62  0.00           C
ATOM    580  O   ILE A 145      -9.766   5.997  -1.373 38.62  0.00           O
ATOM    581  N   LEU A 146     -10.212   4.530   0.274 51.00  0.00           N
ATOM    582  CA  LEU A 146     -10.783   3.525  -0.615 51.00  0.00           C
ATOM    583  C   LEU A 146     -12.301   3.635  -0.668 51.00  0.00           C
ATOM    584  O   LEU A 146     -12.991   3.311   0.299 51.00  0.00           O
ATOM    585  N   VAL A 147     -12.817   4.096  -1.803 42.62  0.00           N
ATOM    586  CA  VAL A 147     -14.248   4.334  -1.953 42.62  0.00           C
ATOM    587  C   VAL A 147     -14.893   3.274  -2.836 42.62  0.00           C
ATOM    588  O   VAL A 147     -14.583   3.168  -4.023 42.62  0.00           O
ATOM    589  N   TYR A 148     -15.793   2.492  -2.250 47.38  0.00           N
ATOM    590  CA  TYR A 148     -16.444   1.402  -2.968 47.38  0.00           C
ATOM    591  C   TYR A 148     -17.920   1.697  -3.196 47.38  0.00           C
ATOM    592  O   TYR A 148     -18.619   2.156  -2.292 47.38  0.00           O
ATOM    593  N   ILE A 149     -18.391   1.432  -4.410 37.50  0.00           N
ATOM    594  CA  ILE A 149     -19.755   1.774  -4.794 37.50  0.00           C
ATOM    595  C   ILE A 149     -20.559   0.527  -5.137 37.50  0.00           C
ATOM    596  O   ILE A 149     -20.159  -0.268  -5.988 37.50  0.00           O
ATOM    597  N   THR A 150     -21.697   0.361  -4.471 44.28  0.00           N
ATOM    598  CA  THR A 150     -22.661  -0.667  -4.844 44.28  0.00           C
ATOM    599  C   THR A 150     -23.933  -0.049  -5.411 44.28  0.00           C
ATOM    600  O   THR A 150     -24.183   1.144  -5.243 44.28  0.00           O
ATOM    601  N   PRO A 151     -24.734  -0.868  -6.084 38.24  0.00           N
ATOM    602  CA  PRO A 151     -25.966  -0.396  -6.705 38.24  0.00           C
ATOM    603  C   PRO A 151     -26.876   0.274  -5.684 38.24  0.00           C
ATOM    604  O   PRO A 151     -27.700   1.118  -6.033 38.24  0.00           O
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ATOM    605  N   ASP A 152     -26.723  -0.108  -4.421 44.34  0.00           N
ATOM    606  CA  ASP A 152     -27.594   0.382  -3.361 44.34  0.00           C
ATOM    607  C   ASP A 152     -26.924   1.499  -2.569 44.34  0.00           C
ATOM    608  O   ASP A 152     -27.498   2.572  -2.386 44.34  0.00           O
ATOM    609  N   ARG A 153     -25.707   1.240  -2.104 47.43  0.00           N
ATOM    610  CA  ARG A 153     -25.077   2.083  -1.095 47.43  0.00           C
ATOM    611  C   ARG A 153     -23.600   2.295  -1.399 47.43  0.00           C
ATOM    612  O   ARG A 153     -23.081   1.785  -2.391 47.43  0.00           O
ATOM    613  N   ILE A 154     -22.927   3.052  -0.538 36.41  0.00           N
ATOM    614  CA  ILE A 154     -21.524   3.388  -0.748 36.41  0.00           C
ATOM    615  C   ILE A 154     -20.713   3.188   0.526 36.41  0.00           C
ATOM    616  O   ILE A 154     -21.144   3.571   1.614 36.41  0.00           O
ATOM    617  N   ALA A 155     -19.537   2.585   0.385 46.26  0.00           N
ATOM    618  CA  ALA A 155     -18.674   2.312   1.528 46.26  0.00           C
ATOM    619  C   ALA A 155     -17.390   3.127   1.454 46.26  0.00           C
ATOM    620  O   ALA A 155     -16.833   3.331   0.376 46.26  0.00           O
ATOM    621  N   GLU A 156     -16.922   3.592   2.608 38.25  0.00           N
ATOM    622  CA  GLU A 156     -15.736   4.438   2.670 38.25  0.00           C
ATOM    623  C   GLU A 156     -14.720   3.888   3.663 38.25  0.00           C
ATOM    624  O   GLU A 156     -14.979   3.833   4.865 38.25  0.00           O
ATOM    625  N   TYR A 157     -13.562   3.482   3.152 48.68  0.00           N
ATOM    626  CA  TYR A 157     -12.477   3.004   4.000 48.68  0.00           C
ATOM    627  C   TYR A 157     -11.297   3.966   3.978 48.68  0.00           C
ATOM    628  O   TYR A 157     -10.478   3.940   3.059 48.68  0.00           O
ATOM    629  N   GLU A 158     -11.214   4.816   4.997 43.72  0.00           N
ATOM    630  CA  GLU A 158     -10.190   5.853   5.049 43.72  0.00           C
ATOM    631  C   GLU A 158      -8.832   5.268   5.414 43.72  0.00           C
ATOM    632  O   GLU A 158      -8.739   4.351   6.229 43.72  0.00           O
ATOM    633  N   ILE A 159      -7.780   5.804   4.806 48.13  0.00           N
ATOM    634  CA  ILE A 159      -6.418   5.394   5.126 48.13  0.00           C
ATOM    635  C   ILE A 159      -5.567   6.589   5.540 48.13  0.00           C
ATOM    636  O   ILE A 159      -4.984   7.270   4.696 48.13  0.00           O
ATOM    637  N   ASN A 160      -5.499   6.838   6.843 47.40  0.00           N
ATOM    638  CA  ASN A 160      -4.645   7.891   7.379 47.40  0.00           C
ATOM    639  C   ASN A 160      -3.216   7.401   7.567 47.40  0.00           C
ATOM    640  O   ASN A 160      -2.960   6.197   7.584 47.40  0.00           O
ATOM    641  N   GLU A 161      -2.287   8.340   7.710 37.06  0.00           N
ATOM    642  CA  GLU A 161      -0.872   8.007   7.829 37.06  0.00           C
ATOM    643  C   GLU A 161      -0.635   7.006   8.952 37.06  0.00           C
ATOM    644  O   GLU A 161       0.008   5.976   8.752 37.06  0.00           O
ATOM    645  N   PRO A 162      -1.158   7.315  10.133 52.91  0.00           N
ATOM    646  CA  PRO A 162      -1.004   6.443  11.292 52.91  0.00           C
ATOM    647  C   PRO A 162      -1.816   5.164  11.129 52.91  0.00           C
ATOM    648  O   PRO A 162      -1.545   4.159  11.785 52.91  0.00           O
ATOM    649  N   LEU A 163      -2.814   5.211  10.254 61.33  0.00           N
ATOM    650  CA  LEU A 163      -3.684   4.064  10.022 61.33  0.00           C
ATOM    651  C   LEU A 163      -3.203   3.238   8.836 61.33  0.00           C
ATOM    652  O   LEU A 163      -3.698   2.138   8.591 61.33  0.00           O
ATOM    653  N   ASP A 164      -2.234   3.775   8.102 23.30  0.00           N
ATOM    654  CA  ASP A 164      -1.689   3.091   6.936 23.30  0.00           C
ATOM    655  C   ASP A 164      -0.917   1.842   7.341 23.30  0.00           C
ATOM    656  O   ASP A 164      -1.228   0.737   6.894 23.30  0.00           O
ATOM    657  N   GLU A 165       0.090   2.023   8.189 46.45  0.00           N
ATOM    658  CA  GLU A 165       0.911   0.911   8.650 46.45  0.00           C
ATOM    659  C   GLU A 165       0.094  -0.069   9.484 46.45  0.00           C
ATOM    660  O   GLU A 165       0.366  -1.270   9.491 46.45  0.00           O
ATOM    661  N   ALA A 166      -0.908   0.451  10.185 53.02  0.00           N
ATOM    662  CA  ALA A 166      -1.801  -0.384  10.978 53.02  0.00           C
ATOM    663  C   ALA A 166      -2.565  -1.366  10.099 53.02  0.00           C
ATOM    664  O   ALA A 166      -2.593  -2.567  10.372 53.02  0.00           O
ATOM    665  N   THR A 167      -3.182  -0.850   9.042 42.30  0.00           N
ATOM    666  CA  THR A 167      -3.903  -1.687   8.091 42.30  0.00           C
ATOM    667  C   THR A 167      -2.961  -2.645   7.374 42.30  0.00           C
ATOM    668  O   THR A 167      -3.296  -3.808   7.147 42.30  0.00           O
ATOM    669  N   ILE A 168      -1.780  -2.150   7.019 51.74  0.00           N
ATOM    670  CA  ILE A 168      -0.796  -2.953   6.305 51.74  0.00           C
ATOM    671  C   ILE A 168      -0.370  -4.163   7.128 51.74  0.00           C
ATOM    672  O   ILE A 168      -0.366  -5.291   6.637 51.74  0.00           O
ATOM    673  N   VAL A 169      -0.011  -3.919   8.385 43.45  0.00           N
ATOM    674  CA  VAL A 169       0.451  -4.982   9.269 43.45  0.00           C
ATOM    675  C   VAL A 169      -0.661  -5.984   9.554 43.45  0.00           C
ATOM    676  O   VAL A 169      -0.430  -7.193   9.580 43.45  0.00           O
ATOM    677  N   ARG A 170      -1.869  -5.473   9.770 50.30  0.00           N
ATOM    678  CA  ARG A 170      -3.019  -6.322  10.057 50.30  0.00           C
ATOM    679  C   ARG A 170      -3.308  -7.268   8.898 50.30  0.00           C
ATOM    680  O   ARG A 170      -3.557  -8.457   9.102 50.30  0.00           O
ATOM    681  N   LEU A 171      -3.274  -6.734   7.682 43.66  0.00           N
ATOM    682  CA  LEU A 171      -3.561  -7.523   6.490 43.66  0.00           C
ATOM    683  C   LEU A 171      -2.431  -8.500   6.191 43.66  0.00           C
ATOM    684  O   LEU A 171      -2.668  -9.612   5.720 43.66  0.00           O
ATOM    685  N   ALA A 172      -1.202  -8.076   6.465 49.64  0.00           N
ATOM    686  CA  ALA A 172      -0.037  -8.933   6.276 49.64  0.00           C
ATOM    687  C   ALA A 172      -0.113 -10.170   7.162 49.64  0.00           C
ATOM    688  O   ALA A 172       0.137 -11.286   6.710 49.64  0.00           O
ATOM    689  N   GLU A 173      -0.459  -9.963   8.429 48.78  0.00           N
ATOM    690  CA  GLU A 173      -0.573 -11.061   9.381 48.78  0.00           C
ATOM    691  C   GLU A 173      -1.742 -11.974   9.032 48.78  0.00           C
ATOM    692  O   GLU A 173      -1.639 -13.196   9.131 48.78  0.00           O
ATOM    693  N   ASP A 174      -2.853 -11.372   8.623 38.26  0.00           N
ATOM    694  CA  ASP A 174      -4.040 -12.130   8.244 38.26  0.00           C
ATOM    695  C   ASP A 174      -3.777 -12.982   7.009 38.26  0.00           C
ATOM    696  O   ASP A 174      -4.267 -14.108   6.904 38.26  0.00           O
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ATOM    697  N   THR A 175      -3.001 -12.442   6.076 43.17  0.00           N
ATOM    698  CA  THR A 175      -2.617 -13.178   4.877 43.17  0.00           C
ATOM    699  C   THR A 175      -1.702 -14.348   5.219 43.17  0.00           C
ATOM    700  O   THR A 175      -1.824 -15.432   4.648 43.17  0.00           O
ATOM    701  N   ILE A 176      -0.785 -14.123   6.154 18.83  0.00           N
ATOM    702  CA  ILE A 176       0.078 -15.186   6.653 18.83  0.00           C
ATOM    703  C   ILE A 176      -0.736 -16.295   7.307 18.83  0.00           C
ATOM    704  O   ILE A 176      -0.441 -17.478   7.138 18.83  0.00           O
ATOM    705  N   MET A 177      -1.762 -15.905   8.056 33.37  0.00           N
ATOM    706  CA  MET A 177      -2.672 -16.865   8.668 33.37  0.00           C
ATOM    707  C   MET A 177      -3.453 -17.635   7.611 33.37  0.00           C
ATOM    708  O   MET A 177      -3.750 -18.817   7.783 33.37  0.00           O
ATOM    709  N   LEU A 178      -3.785 -16.956   6.518 30.21  0.00           N
ATOM    710  CA  LEU A 178      -4.422 -17.605   5.378 30.21  0.00           C
ATOM    711  C   LEU A 178      -3.493 -18.628   4.735 30.21  0.00           C
ATOM    712  O   LEU A 178      -3.928 -19.705   4.328 30.21  0.00           O
ATOM    713  N   GLN A 179      -2.213 -18.284   4.650 48.05  0.00           N
ATOM    714  CA  GLN A 179      -1.207 -19.202   4.128 48.05  0.00           C
ATOM    715  C   GLN A 179      -1.049 -20.417   5.034 48.05  0.00           C
ATOM    716  O   GLN A 179      -0.894 -21.542   4.558 48.05  0.00           O
ATOM    717  N   ASN A 180      -1.089 -20.184   6.342 39.77  0.00           N
ATOM    718  CA  ASN A 180      -0.967 -21.261   7.316 39.77  0.00           C
ATOM    719  C   ASN A 180      -2.208 -22.145   7.318 39.77  0.00           C
ATOM    720  O   ASN A 180      -2.112 -23.364   7.467 39.77  0.00           O
ATOM    721  N   SER A 181      -3.371 -21.525   7.152 58.29  0.00           N
ATOM    722  CA  SER A 181      -4.634 -22.252   7.157 58.29  0.00           C
ATOM    723  C   SER A 181      -5.577 -21.726   6.083 58.29  0.00           C
ATOM    724  O   SER A 181      -6.097 -20.615   6.189 58.29  0.00           O
ATOM    725  N   PRO A 182      -5.793 -22.529   5.047 63.56  0.00           N
ATOM    726  CA  PRO A 182      -6.665 -22.142   3.945 63.56  0.00           C
ATOM    727  C   PRO A 182      -8.071 -21.826   4.441 63.56  0.00           C
ATOM    728  O   PRO A 182      -8.808 -21.071   3.807 63.56  0.00           O
ATOM    729  N   ARG A 183      -8.437 -22.408   5.578 84.53  0.00           N
ATOM    730  CA  ARG A 183      -9.784 -22.261   6.115 84.53  0.00           C
ATOM    731  C   ARG A 183      -9.944 -20.931   6.841 84.53  0.00           C
ATOM    732  O   ARG A 183     -11.027 -20.605   7.329 84.53  0.00           O
ATOM    733  N   PHE A 184      -8.860 -20.165   6.910 54.72  0.00           N
ATOM    734  CA  PHE A 184      -8.908 -18.820   7.469 54.72  0.00           C
ATOM    735  C   PHE A 184      -9.933 -17.957   6.744 54.72  0.00           C
ATOM    736  O   PHE A 184      -9.987 -17.943   5.513 54.72  0.00           O
ATOM    737  N   ASN A 185     -10.744 -17.240   7.513 64.00  0.00           N
ATOM    738  CA  ASN A 185     -11.822 -16.436   6.948 64.00  0.00           C
ATOM    739  C   ASN A 185     -11.289 -15.143   6.346 64.00  0.00           C
ATOM    740  O   ASN A 185     -11.490 -14.061   6.897 64.00  0.00           O
ATOM    741  N   TRP A 186     -10.607 -15.261   5.212 35.33  0.00           N
ATOM    742  CA  TRP A 186     -10.074 -14.098   4.513 35.33  0.00           C
ATOM    743  C   TRP A 186     -11.179 -13.330   3.799 35.33  0.00           C
ATOM    744  O   TRP A 186     -11.593 -13.699   2.699 35.33  0.00           O
ATOM    745  N   GLU A 187     -11.652 -12.260   4.428 83.66  0.00           N
ATOM    746  CA  GLU A 187     -12.692 -11.424   3.843 83.66  0.00           C
ATOM    747  C   GLU A 187     -12.150 -10.047   3.478 83.66  0.00           C
ATOM    748  O   GLU A 187     -12.880  -9.055   3.507 83.66  0.00           O
ATOM    749  N   CYS A 188     -10.868  -9.993   3.136 55.50  0.00           N
ATOM    750  CA  CYS A 188     -10.201  -8.724   2.866 55.50  0.00           C
ATOM    751  C   CYS A 188      -9.600  -8.706   1.466 55.50  0.00           C
ATOM    752  O   CYS A 188      -8.540  -8.122   1.242 55.50  0.00           O
ATOM    753  N   LYS A 189     -10.284  -9.349   0.525  7.38  0.00           N
ATOM    754  CA  LYS A 189      -9.826  -9.397  -0.858  7.38  0.00           C
ATOM    755  C   LYS A 189      -9.871  -8.018  -1.502  7.38  0.00           C
ATOM    756  O   LYS A 189      -9.092  -7.720  -2.408  7.38  0.00           O
ATOM    757  N   TYR A 190     -10.785  -7.178  -1.028 22.21  0.00           N
ATOM    758  CA  TYR A 190     -11.014  -5.873  -1.634 22.21  0.00           C
ATOM    759  C   TYR A 190      -9.855  -4.925  -1.358 22.21  0.00           C
ATOM    760  O   TYR A 190      -9.667  -3.935  -2.065 22.21  0.00           O
ATOM    761  N   CYS A 191      -9.077  -5.235  -0.326 36.59  0.00           N
ATOM    762  CA  CYS A 191      -8.007  -4.351   0.120 36.59  0.00           C
ATOM    763  C   CYS A 191      -6.916  -4.232  -0.937 36.59  0.00           C
ATOM    764  O   CYS A 191      -6.617  -5.192  -1.646 36.59  0.00           O
ATOM    765  N   ILE A 192      -6.322  -3.047  -1.036 43.02  0.00           N
ATOM    766  CA  ILE A 192      -5.291  -2.788  -2.034 43.02  0.00           C
ATOM    767  C   ILE A 192      -3.972  -3.441  -1.644 43.02  0.00           C
ATOM    768  O   ILE A 192      -3.026  -3.471  -2.432 43.02  0.00           O
ATOM    769  N   PHE A 193      -3.913  -3.963  -0.424 49.91  0.00           N
ATOM    770  CA  PHE A 193      -2.723  -4.654   0.057 49.91  0.00           C
ATOM    771  C   PHE A 193      -2.884  -6.166  -0.045 49.91  0.00           C
ATOM    772  O   PHE A 193      -1.976  -6.922   0.300 49.91  0.00           O
ATOM    773  N   SER A 194      -4.046  -6.600  -0.522 41.94  0.00           N
ATOM    774  CA  SER A 194      -4.344  -8.023  -0.633 41.94  0.00           C
ATOM    775  C   SER A 194      -3.534  -8.671  -1.748 41.94  0.00           C
ATOM    776  O   SER A 194      -3.431  -9.895  -1.825 41.94  0.00           O
ATOM    777  N   VAL A 195      -2.958  -7.841  -2.612 53.52  0.00           N
ATOM    778  CA  VAL A 195      -2.196  -8.333  -3.755 53.52  0.00           C
ATOM    779  C   VAL A 195      -0.698  -8.192  -3.518 53.52  0.00           C
ATOM    780  O   VAL A 195       0.110  -8.493  -4.397 53.52  0.00           O
ATOM    781  N   ILE A 196      -0.333  -7.735  -2.326 37.19  0.00           N
ATOM    782  CA  ILE A 196       1.067  -7.506  -1.988 37.19  0.00           C
ATOM    783  C   ILE A 196       1.562  -8.525  -0.969 37.19  0.00           C
ATOM    784  O   ILE A 196       0.962  -8.698   0.091 37.19  0.00           O
ATOM    785  N   CYS A 197       2.660  -9.197  -1.299 45.29  0.00           N
ATOM    786  CA  CYS A 197       3.252 -10.182  -0.401 45.29  0.00           C
ATOM    787  C   CYS A 197       3.413  -9.620   1.005 45.29  0.00           C
ATOM    788  O   CYS A 197       3.892  -8.500   1.185 45.29  0.00           O
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ATOM    789  N   PRO A 198       3.011 -10.404   1.999 31.76  0.00           N
ATOM    790  CA  PRO A 198       3.098  -9.980   3.392 31.76  0.00           C
ATOM    791  C   PRO A 198       4.512  -9.537   3.746 31.76  0.00           C
ATOM    792  O   PRO A 198       4.704  -8.625   4.550 31.76  0.00           O
ATOM    793  N   ALA A 199       5.499 -10.189   3.142 39.98  0.00           N
ATOM    794  CA  ALA A 199       6.898  -9.850   3.377 39.98  0.00           C
ATOM    795  C   ALA A 199       7.216  -8.447   2.878 39.98  0.00           C
ATOM    796  O   ALA A 199       7.970  -7.708   3.512 39.98  0.00           O
ATOM    797  N   LYS A 200       6.637  -8.083   1.739 26.21  0.00           N
ATOM    798  CA  LYS A 200       6.827  -6.754   1.173 26.21  0.00           C
ATOM    799  C   LYS A 200       6.074  -5.699   1.976 26.21  0.00           C
ATOM    800  O   LYS A 200       6.531  -4.565   2.110 26.21  0.00           O
ATOM    801  N   LEU A 201       4.919  -6.083   2.509 31.76  0.00           N
ATOM    802  CA  LEU A 201       4.111  -5.178   3.318 31.76  0.00           C
ATOM    803  C   LEU A 201       4.853  -4.757   4.580 31.76  0.00           C
ATOM    804  O   LEU A 201       5.399  -5.593   5.299 31.76  0.00           O
ATOM    805  N   THR A 202       4.870  -3.453   4.843 46.74  0.00           N
ATOM    806  CA  THR A 202       5.512  -2.923   6.038 46.74  0.00           C
ATOM    807  C   THR A 202       5.197  -3.777   7.260 46.74  0.00           C
ATOM    808  O   THR A 202       5.799  -4.797   7.449 46.74  0.00           O
TER     809      THR A 202
ENDMDL
END
REMARK   1 ************************************************************************
REMARK   1 Start File DEC3_vs_NAT_dSi_colored.pdb
REMARK   1 The occupancy record was modified to represent dSi := Si(DEC)-Si(NAT).
REMARK   1 Occ=0.00 means dSi=-1.285567 kB; Occ=99.99 means dSi=1.380460 kB.
MODEL        0
ATOM      1  N   MET A   1      15.717  15.959  -1.793 40.19  0.00           N
ATOM      2  CA  MET A   1      17.073  15.585  -2.177 40.19  0.00           C
ATOM      3  C   MET A   1      17.455  14.228  -1.600 40.19  0.00           C
ATOM      4  O   MET A   1      17.587  13.247  -2.332 40.19  0.00           O
ATOM      5  N   ILE A   2      17.631  14.179  -0.284 42.66  0.00           N
ATOM      6  CA  ILE A   2      18.039  12.952   0.389 42.66  0.00           C
ATOM      7  C   ILE A   2      16.948  11.892   0.311 42.66  0.00           C
ATOM      8  O   ILE A   2      17.218  10.730   0.007 42.66  0.00           O
ATOM      9  N   THR A   3      15.714  12.299   0.588 29.88  0.00           N
ATOM     10  CA  THR A   3      14.570  11.399   0.496 29.88  0.00           C
ATOM     11  C   THR A   3      14.412  10.851  -0.917 29.88  0.00           C
ATOM     12  O   THR A   3      14.157   9.663  -1.107 29.88  0.00           O
ATOM     13  N   GLU A   4      14.567  11.725  -1.906 21.02  0.00           N
ATOM     14  CA  GLU A   4      14.482  11.323  -3.305 21.02  0.00           C
ATOM     15  C   GLU A   4      15.518  10.256  -3.635 21.02  0.00           C
ATOM     16  O   GLU A   4      15.204   9.246  -4.264 21.02  0.00           O
ATOM     17  N   PHE A   5      16.755  10.488  -3.207 47.14  0.00           N
ATOM     18  CA  PHE A   5      17.824   9.515  -3.394 47.14  0.00           C
ATOM     19  C   PHE A   5      17.471   8.178  -2.756 47.14  0.00           C
ATOM     20  O   PHE A   5      17.612   7.125  -3.378 47.14  0.00           O
ATOM     21  N   LEU A   6      17.011   8.226  -1.510 26.94  0.00           N
ATOM     22  CA  LEU A   6      16.722   7.014  -0.753 26.94  0.00           C
ATOM     23  C   LEU A   6      15.610   6.206  -1.410 26.94  0.00           C
ATOM     24  O   LEU A   6      15.634   4.975  -1.398 26.94  0.00           O
ATOM     25  N   LEU A   7      14.637   6.906  -1.983 35.53  0.00           N
ATOM     26  CA  LEU A   7      13.545   6.256  -2.699 35.53  0.00           C
ATOM     27  C   LEU A   7      14.036   5.624  -3.995 35.53  0.00           C
ATOM     28  O   LEU A   7      13.613   4.527  -4.362 35.53  0.00           O
ATOM     29  N   LYS A   8      14.931   6.323  -4.687 28.46  0.00           N
ATOM     30  CA  LYS A   8      15.507   5.815  -5.926 28.46  0.00           C
ATOM     31  C   LYS A   8      16.289   4.529  -5.683 28.46  0.00           C
ATOM     32  O   LYS A   8      16.499   3.737  -6.601 28.46  0.00           O
ATOM     33  N   LYS A   9      16.717   4.329  -4.442 81.62  0.00           N
ATOM     34  CA  LYS A   9      17.499   3.153  -4.082 81.62  0.00           C
ATOM     35  C   LYS A   9      16.639   2.115  -3.372 81.62  0.00           C
ATOM     36  O   LYS A   9      16.899   0.915  -3.458 81.62  0.00           O
ATOM     37  N   LYS A  10      15.614   2.585  -2.670 48.84  0.00           N
ATOM     38  CA  LYS A  10      14.723   1.700  -1.928 48.84  0.00           C
ATOM     39  C   LYS A  10      13.432   1.449  -2.696 48.84  0.00           C
ATOM     40  O   LYS A  10      13.126   0.314  -3.060 48.84  0.00           O
ATOM     41  N   LEU A  11      12.677   2.515  -2.938 40.34  0.00           N
ATOM     42  CA  LEU A  11      11.351   2.395  -3.532 40.34  0.00           C
ATOM     43  C   LEU A  11      11.410   1.677  -4.874 40.34  0.00           C
ATOM     44  O   LEU A  11      10.698   0.697  -5.096 40.34  0.00           O
ATOM     45  N   GLU A  12      12.263   2.169  -5.765 37.85  0.00           N
ATOM     46  CA  GLU A  12      12.368   1.616  -7.111 37.85  0.00           C
ATOM     47  C   GLU A  12      12.706   0.131  -7.071 37.85  0.00           C
ATOM     48  O   GLU A  12      12.113  -0.669  -7.794 37.85  0.00           O
ATOM     49  N   GLU A  13      13.660  -0.231  -6.220 55.83  0.00           N
ATOM     50  CA  GLU A  13      14.115  -1.614  -6.123 55.83  0.00           C
ATOM     51  C   GLU A  13      13.057  -2.498  -5.477 55.83  0.00           C
ATOM     52  O   GLU A  13      12.820  -3.622  -5.917 55.83  0.00           O
ATOM     53  N   HIS A  14      12.423  -1.983  -4.429 31.91  0.00           N
ATOM     54  CA  HIS A  14      11.494  -2.774  -3.631 31.91  0.00           C
ATOM     55  C   HIS A  14      10.225  -3.088  -4.413 31.91  0.00           C
ATOM     56  O   HIS A  14       9.590  -4.119  -4.196 31.91  0.00           O
ATOM     57  N   LEU A  15       9.860  -2.191  -5.324 27.01  0.00           N
ATOM     58  CA  LEU A  15       8.730  -2.421  -6.215 27.01  0.00           C
ATOM     59  C   LEU A  15       9.048  -3.500  -7.242 27.01  0.00           C
ATOM     60  O   LEU A  15       8.199  -4.326  -7.573 27.01  0.00           O
ATOM     61  N   SER A  16      10.279  -3.486  -7.745 43.85  0.00           N
ATOM     62  CA  SER A  16      10.703  -4.444  -8.758 43.85  0.00           C
ATOM     63  C   SER A  16      11.022  -5.798  -8.138 43.85  0.00           C
ATOM     64  O   SER A  16      11.035  -6.820  -8.825 43.85  0.00           O
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ATOM     65  N   HIS A  17      11.279  -5.801  -6.834 38.37  0.00           N
ATOM     66  CA  HIS A  17      11.537  -7.037  -6.105 38.37  0.00           C
ATOM     67  C   HIS A  17      10.237  -7.741  -5.738 38.37  0.00           C
ATOM     68  O   HIS A  17       9.224  -7.094  -5.469 38.37  0.00           O
ATOM     69  N   VAL A  18      10.271  -9.069  -5.728 36.75  0.00           N
ATOM     70  CA  VAL A  18       9.073  -9.864  -5.485 36.75  0.00           C
ATOM     71  C   VAL A  18       8.917 -10.185  -4.005 36.75  0.00           C
ATOM     72  O   VAL A  18       7.844  -9.998  -3.429 36.75  0.00           O
ATOM     73  N   LYS A  19       9.991 -10.671  -3.392 47.79  0.00           N
ATOM     74  CA  LYS A  19       9.924 -11.212  -2.040 47.79  0.00           C
ATOM     75  C   LYS A  19      10.379 -10.184  -1.012 47.79  0.00           C
ATOM     76  O   LYS A  19      10.461 -10.478   0.180 47.79  0.00           O
ATOM     77  N   GLU A  20      10.677  -8.977  -1.481 14.56  0.00           N
ATOM     78  CA  GLU A  20      11.192  -7.924  -0.614 14.56  0.00           C
ATOM     79  C   GLU A  20      10.273  -7.693   0.578 14.56  0.00           C
ATOM     80  O   GLU A  20       9.141  -7.234   0.422 14.56  0.00           O
ATOM     81  N   GLU A  21      10.765  -8.013   1.769  5.07  0.00           N
ATOM     82  CA  GLU A  21      10.006  -7.800   2.995  5.07  0.00           C
ATOM     83  C   GLU A  21      10.454  -6.530   3.707  5.07  0.00           C
ATOM     84  O   GLU A  21       9.890  -6.150   4.733  5.07  0.00           O
ATOM     85  N   ASN A  22      11.473  -5.878   3.157 50.91  0.00           N
ATOM     86  CA  ASN A  22      12.082  -4.722   3.805 50.91  0.00           C
ATOM     87  C   ASN A  22      11.209  -3.483   3.655 50.91  0.00           C
ATOM     88  O   ASN A  22      10.835  -3.105   2.545 50.91  0.00           O
ATOM     89  N   THR A  23      10.886  -2.854   4.780 46.08  0.00           N
ATOM     90  CA  THR A  23      10.092  -1.631   4.774 46.08  0.00           C
ATOM     91  C   THR A  23      10.944  -0.423   4.404 46.08  0.00           C
ATOM     92  O   THR A  23      12.096  -0.313   4.823 46.08  0.00           O
ATOM     93  N   ILE A  24      10.370   0.481   3.617 51.79  0.00           N
ATOM     94  CA  ILE A  24      11.071   1.689   3.201 51.79  0.00           C
ATOM     95  C   ILE A  24      11.001   2.765   4.277 51.79  0.00           C
ATOM     96  O   ILE A  24       9.919   3.238   4.626 51.79  0.00           O
ATOM     97  N   TYR A  25      12.160   3.146   4.802 52.24  0.00           N
ATOM     98  CA  TYR A  25      12.256   4.292   5.699 52.24  0.00           C
ATOM     99  C   TYR A  25      13.173   5.365   5.127 52.24  0.00           C
ATOM    100  O   TYR A  25      14.305   5.082   4.733 52.24  0.00           O
ATOM    101  N   VAL A  26      12.679   6.597   5.084 68.16  0.00           N
ATOM    102  CA  VAL A  26      13.417   7.699   4.478 68.16  0.00           C
ATOM    103  C   VAL A  26      13.369   8.943   5.355 68.16  0.00           C
ATOM    104  O   VAL A  26      12.603   9.007   6.317 68.16  0.00           O
ATOM    105  N   THR A  27      14.191   9.931   5.017 51.67  0.00           N
ATOM    106  CA  THR A  27      14.295  11.146   5.815 51.67  0.00           C
ATOM    107  C   THR A  27      12.926  11.773   6.047 51.67  0.00           C
ATOM    108  O   THR A  27      12.628  12.248   7.142 51.67  0.00           O
ATOM    109  N   ASP A  28      12.098  11.773   5.008 63.07  0.00           N
ATOM    110  CA  ASP A  28      10.740  12.295   5.111 63.07  0.00           C
ATOM    111  C   ASP A  28       9.940  11.547   6.169 63.07  0.00           C
ATOM    112  O   ASP A  28       9.165  12.147   6.914 63.07  0.00           O
ATOM    113  N   LEU A  29      10.130  10.234   6.228 61.09  0.00           N
ATOM    114  CA  LEU A  29       9.417   9.399   7.187 61.09  0.00           C
ATOM    115  C   LEU A  29       9.989   9.559   8.589 61.09  0.00           C
ATOM    116  O   LEU A  29       9.325   9.252   9.581 61.09  0.00           O
ATOM    117  N   VAL A  30      11.223  10.043   8.667 62.86  0.00           N
ATOM    118  CA  VAL A  30      11.830  10.394   9.947 62.86  0.00           C
ATOM    119  C   VAL A  30      11.217  11.665  10.518 62.86  0.00           C
ATOM    120  O   VAL A  30      10.906  11.737  11.707 62.86  0.00           O
ATOM    121  N   ARG A  31      11.043  12.668   9.662 99.99  0.00           N
ATOM    122  CA  ARG A  31      10.462  13.938  10.080 99.99  0.00           C
ATOM    123  C   ARG A  31       8.951  13.831  10.229 99.99  0.00           C
ATOM    124  O   ARG A  31       8.327  14.635  10.920 99.99  0.00           O
ATOM    125  N   CYS A  32       8.367  12.832   9.575 60.45  0.00           N
ATOM    126  CA  CYS A  32       6.926  12.617   9.635 60.45  0.00           C
ATOM    127  C   CYS A  32       6.474  12.301  11.056 60.45  0.00           C
ATOM    128  O   CYS A  32       7.039  11.432  11.719 60.45  0.00           O
ATOM    129  N   PRO A  33       5.452  13.014  11.517 51.71  0.00           N
ATOM    130  CA  PRO A  33       4.979  12.874  12.889 51.71  0.00           C
ATOM    131  C   PRO A  33       4.308  11.524  13.106 51.71  0.00           C
ATOM    132  O   PRO A  33       4.182  11.057  14.237 51.71  0.00           O
ATOM    133  N   ARG A  34       3.879  10.901  12.013 62.60  0.00           N
ATOM    134  CA  ARG A  34       3.235   9.593  12.080 62.60  0.00           C
ATOM    135  C   ARG A  34       4.198   8.531  12.593 62.60  0.00           C
ATOM    136  O   ARG A  34       3.780   7.533  13.181 62.60  0.00           O
ATOM    137  N   ARG A  35       5.489   8.751  12.369 46.60  0.00           N
ATOM    138  CA  ARG A  35       6.523   7.897  12.942 46.60  0.00           C
ATOM    139  C   ARG A  35       6.502   7.955  14.464 46.60  0.00           C
ATOM    140  O   ARG A  35       6.350   6.931  15.131 46.60  0.00           O
ATOM    141  N   VAL A  36       6.658   9.156  15.008 66.80  0.00           N
ATOM    142  CA  VAL A  36       6.602   9.357  16.451 66.80  0.00           C
ATOM    143  C   VAL A  36       5.312   8.799  17.036 66.80  0.00           C
ATOM    144  O   VAL A  36       5.309   8.231  18.129 66.80  0.00           O
ATOM    145  N   ARG A  37       4.216   8.963  16.303 57.00  0.00           N
ATOM    146  CA  ARG A  37       2.920   8.452  16.736 57.00  0.00           C
ATOM    147  C   ARG A  37       2.989   6.960  17.032 57.00  0.00           C
ATOM    148  O   ARG A  37       2.729   6.528  18.155 57.00  0.00           O
ATOM    149  N   TYR A  38       3.339   6.175  16.018 57.26  0.00           N
ATOM    150  CA  TYR A  38       3.290   4.722  16.121 57.26  0.00           C
ATOM    151  C   TYR A  38       4.371   4.200  17.060 57.26  0.00           C
ATOM    152  O   TYR A  38       4.275   3.086  17.574 57.26  0.00           O
ATOM    153  N   GLU A  39       5.399   5.013  17.280 53.99  0.00           N
ATOM    154  CA  GLU A  39       6.439   4.687  18.247 53.99  0.00           C
ATOM    155  C   GLU A  39       5.926   4.818  19.675 53.99  0.00           C
ATOM    156  O   GLU A  39       6.235   3.992  20.534 53.99  0.00           O
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ATOM    157  N   SER A  40       5.142   5.861  19.923 43.00  0.00           N
ATOM    158  CA  SER A  40       4.590   6.107  21.249 43.00  0.00           C
ATOM    159  C   SER A  40       3.390   5.208  21.522 43.00  0.00           C
ATOM    160  O   SER A  40       3.126   4.840  22.667 43.00  0.00           O
ATOM    161  N   GLU A  41       2.666   4.859  20.465 45.51  0.00           N
ATOM    162  CA  GLU A  41       1.539   3.941  20.578 45.51  0.00           C
ATOM    163  C   GLU A  41       2.010   2.495  20.648 45.51  0.00           C
ATOM    164  O   GLU A  41       1.448   1.684  21.387 45.51  0.00           O
ATOM    165  N   TYR A  42       3.042   2.175  19.876 33.77  0.00           N
ATOM    166  CA  TYR A  42       3.543   0.809  19.793 33.77  0.00           C
ATOM    167  C   TYR A  42       5.049   0.759  20.023 33.77  0.00           C
ATOM    168  O   TYR A  42       5.831   0.739  19.073 33.77  0.00           O
ATOM    169  N   LYS A  43       5.448   0.740  21.290 72.52  0.00           N
ATOM    170  CA  LYS A  43       6.860   0.797  21.648 72.52  0.00           C
ATOM    171  C   LYS A  43       7.605  -0.435  21.154 72.52  0.00           C
ATOM    172  O   LYS A  43       8.834  -0.442  21.079 72.52  0.00           O
ATOM    173  N   GLU A  44       6.854  -1.479  20.817 49.66  0.00           N
ATOM    174  CA  GLU A  44       7.442  -2.712  20.306 49.66  0.00           C
ATOM    175  C   GLU A  44       7.858  -2.562  18.849 49.66  0.00           C
ATOM    176  O   GLU A  44       8.681  -3.327  18.346 49.66  0.00           O
ATOM    177  N   LEU A  45       7.284  -1.571  18.173 32.70  0.00           N
ATOM    178  CA  LEU A  45       7.631  -1.287  16.787 32.70  0.00           C
ATOM    179  C   LEU A  45       8.817  -0.335  16.701 32.70  0.00           C
ATOM    180  O   LEU A  45       8.721   0.829  17.091 32.70  0.00           O
ATOM    181  N   ALA A  46       9.935  -0.835  16.186 71.21  0.00           N
ATOM    182  CA  ALA A  46      11.113  -0.005  15.961 71.21  0.00           C
ATOM    183  C   ALA A  46      11.066   0.659  14.591 71.21  0.00           C
ATOM    184  O   ALA A  46      10.107   0.484  13.838 71.21  0.00           O
ATOM    185  N   ILE A  47      12.105   1.423  14.273 54.66  0.00           N
ATOM    186  CA  ILE A  47      12.244   2.014  12.947 54.66  0.00           C
ATOM    187  C   ILE A  47      12.897   1.040  11.975 54.66  0.00           C
ATOM    188  O   ILE A  47      13.064   1.343  10.795 54.66  0.00           O
ATOM    189  N   SER A  48      13.263  -0.135  12.480 68.54  0.00           N
ATOM    190  CA  SER A  48      13.922  -1.147  11.663 68.54  0.00           C
ATOM    191  C   SER A  48      13.028  -1.593  10.512 68.54  0.00           C
ATOM    192  O   SER A  48      11.802  -1.554  10.615 68.54  0.00           O
ATOM    193  N   GLN A  49      13.649  -2.016   9.417 57.91  0.00           N
ATOM    194  CA  GLN A  49      12.917  -2.354   8.203 57.91  0.00           C
ATOM    195  C   GLN A  49      12.108  -3.632   8.385 57.91  0.00           C
ATOM    196  O   GLN A  49      11.270  -3.973   7.550 57.91  0.00           O
ATOM    197  N   VAL A  50      12.367  -4.338   9.481 53.84  0.00           N
ATOM    198  CA  VAL A  50      11.641  -5.564   9.790 53.84  0.00           C
ATOM    199  C   VAL A  50      10.234  -5.262  10.286 53.84  0.00           C
ATOM    200  O   VAL A  50       9.370  -6.138  10.306 53.84  0.00           O
ATOM    201  N   TYR A  51      10.009  -4.015  10.689 36.40  0.00           N
ATOM    202  CA  TYR A  51       8.685  -3.572  11.106 36.40  0.00           C
ATOM    203  C   TYR A  51       8.016  -2.735  10.022 36.40  0.00           C
ATOM    204  O   TYR A  51       8.683  -2.004   9.290 36.40  0.00           O
ATOM    205  N   ALA A  52       6.696  -2.847   9.925 43.22  0.00           N
ATOM    206  CA  ALA A  52       5.947  -2.179   8.867 43.22  0.00           C
ATOM    207  C   ALA A  52       4.621  -1.639   9.388 43.22  0.00           C
ATOM    208  O   ALA A  52       3.562  -2.210   9.128 43.22  0.00           O
ATOM    209  N   PRO A  53       4.686  -0.534  10.124 57.51  0.00           N
ATOM    210  CA  PRO A  53       3.485   0.166  10.563 57.51  0.00           C
ATOM    211  C   PRO A  53       2.601   0.537   9.379 57.51  0.00           C
ATOM    212  O   PRO A  53       3.090   0.990   8.344 57.51  0.00           O
ATOM    213  N   SER A  54       1.296   0.341   9.537 25.24  0.00           N
ATOM    214  CA  SER A  54       0.344   0.621   8.469 25.24  0.00           C
ATOM    215  C   SER A  54       0.390   2.088   8.060 25.24  0.00           C
ATOM    216  O   SER A  54       0.311   2.415   6.877 25.24  0.00           O
ATOM    217  N   ALA A  55       0.519   2.968   9.047 34.28  0.00           N
ATOM    218  CA  ALA A  55       0.611   4.400   8.789 34.28  0.00           C
ATOM    219  C   ALA A  55       1.834   4.730   7.945 34.28  0.00           C
ATOM    220  O   ALA A  55       1.754   5.514   6.998 34.28  0.00           O
ATOM    221  N   ILE A  56       2.967   4.128   8.292 33.53  0.00           N
ATOM    222  CA  ILE A  56       4.201   4.326   7.541 33.53  0.00           C
ATOM    223  C   ILE A  56       4.067   3.812   6.114 33.53  0.00           C
ATOM    224  O   ILE A  56       4.529   4.449   5.168 33.53  0.00           O
ATOM    225  N   LEU A  57       3.430   2.655   5.965 18.72  0.00           N
ATOM    226  CA  LEU A  57       3.215   2.062   4.651 18.72  0.00           C
ATOM    227  C   LEU A  57       2.392   2.983   3.759 18.72  0.00           C
ATOM    228  O   LEU A  57       2.704   3.164   2.582 18.72  0.00           O
ATOM    229  N   GLY A  58       1.340   3.563   4.326 37.26  0.00           N
ATOM    230  CA  GLY A  58       0.519   4.532   3.609 37.26  0.00           C
ATOM    231  C   GLY A  58       1.338   5.748   3.197 37.26  0.00           C
ATOM    232  O   GLY A  58       1.166   6.281   2.101 37.26  0.00           O
ATOM    233  N   ASP A  59       2.229   6.183   4.082 27.71  0.00           N
ATOM    234  CA  ASP A  59       3.118   7.301   3.787 27.71  0.00           C
ATOM    235  C   ASP A  59       4.093   6.950   2.670 27.71  0.00           C
ATOM    236  O   ASP A  59       4.476   7.808   1.876 27.71  0.00           O
ATOM    237  N   ILE A  60       4.491   5.683   2.615 13.66  0.00           N
ATOM    238  CA  ILE A  60       5.377   5.204   1.562 13.66  0.00           C
ATOM    239  C   ILE A  60       4.706   5.288   0.197 13.66  0.00           C
ATOM    240  O   ILE A  60       5.339   5.649  -0.796 13.66  0.00           O
ATOM    241  N   LEU A  61       3.422   4.953   0.153 31.03  0.00           N
ATOM    242  CA  LEU A  61       2.624   5.129  -1.056 31.03  0.00           C
ATOM    243  C   LEU A  61       2.564   6.594  -1.467 31.03  0.00           C
ATOM    244  O   LEU A  61       2.735   6.927  -2.640 31.03  0.00           O
ATOM    245  N   HIS A  62       2.319   7.466  -0.495 54.69  0.00           N
ATOM    246  CA  HIS A  62       2.326   8.905  -0.737 54.69  0.00           C
ATOM    247  C   HIS A  62       3.643   9.352  -1.358 54.69  0.00           C
ATOM    248  O   HIS A  62       3.659  10.143  -2.301 54.69  0.00           O
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ATOM    249  N   LEU A  63       4.747   8.840  -0.824 12.94  0.00           N
ATOM    250  CA  LEU A  63       6.068   9.130  -1.371 12.94  0.00           C
ATOM    251  C   LEU A  63       6.174   8.684  -2.823 12.94  0.00           C
ATOM    252  O   LEU A  63       6.720   9.398  -3.664 12.94  0.00           O
ATOM    253  N   GLY A  64       5.648   7.498  -3.112 20.96  0.00           N
ATOM    254  CA  GLY A  64       5.639   6.975  -4.473 20.96  0.00           C
ATOM    255  C   GLY A  64       4.808   7.857  -5.397 20.96  0.00           C
ATOM    256  O   GLY A  64       5.144   8.035  -6.568 20.96  0.00           O
ATOM    257  N   LEU A  65       3.723   8.406  -4.863 35.09  0.00           N
ATOM    258  CA  LEU A  65       2.849   9.280  -5.636 35.09  0.00           C
ATOM    259  C   LEU A  65       3.509  10.628  -5.898 35.09  0.00           C
ATOM    260  O   LEU A  65       3.293  11.242  -6.943 35.09  0.00           O
ATOM    261  N   GLU A  66       4.315  11.082  -4.945 79.25  0.00           N
ATOM    262  CA  GLU A  66       5.106  12.294  -5.123 79.25  0.00           C
ATOM    263  C   GLU A  66       6.216  12.081  -6.143 79.25  0.00           C
ATOM    264  O   GLU A  66       6.584  13.001  -6.875 79.25  0.00           O
ATOM    265  N   SER A  67       6.746  10.865  -6.188 33.56  0.00           N
ATOM    266  CA  SER A  67       7.708  10.485  -7.217 33.56  0.00           C
ATOM    267  C   SER A  67       7.071  10.507  -8.601 33.56  0.00           C
ATOM    268  O   SER A  67       7.690  10.938  -9.573 33.56  0.00           O
ATOM    269  N   VAL A  68       5.829  10.040  -8.683 22.61  0.00           N
ATOM    270  CA  VAL A  68       5.062  10.116  -9.921 22.61  0.00           C
ATOM    271  C   VAL A  68       4.839  11.562 -10.341 22.61  0.00           C
ATOM    272  O   VAL A  68       4.997  11.911 -11.511 22.61  0.00           O
ATOM    273  N   LEU A  69       4.467  12.402  -9.381 39.64  0.00           N
ATOM    274  CA  LEU A  69       4.276  13.824  -9.638 39.64  0.00           C
ATOM    275  C   LEU A  69       5.544  14.460 -10.194 39.64  0.00           C
ATOM    276  O   LEU A  69       5.513  15.133 -11.224 39.64  0.00           O
ATOM    277  N   LYS A  70       6.659  14.242  -9.505 56.21  0.00           N
ATOM    278  CA  LYS A  70       7.921  14.876  -9.867 56.21  0.00           C
ATOM    279  C   LYS A  70       8.454  14.329 -11.185 56.21  0.00           C
ATOM    280  O   LYS A  70       9.086  15.049 -11.958 56.21  0.00           O
ATOM    281  N   GLY A  71       8.194  13.050 -11.437 41.93  0.00           N
ATOM    282  CA  GLY A  71       8.617  12.413 -12.678 41.93  0.00           C
ATOM    283  C   GLY A  71       7.932  13.045 -13.883 41.93  0.00           C
ATOM    284  O   GLY A  71       8.581  13.378 -14.875 41.93  0.00           O
ATOM    285  N   ASN A  72       6.616  13.206 -13.792 45.44  0.00           N
ATOM    286  CA  ASN A  72       5.841  13.803 -14.873 45.44  0.00           C
ATOM    287  C   ASN A  72       4.498  14.316 -14.370 45.44  0.00           C
ATOM    288  O   ASN A  72       3.549  13.548 -14.213 45.44  0.00           O
ATOM    289  N   PHE A  73       4.424  15.618 -14.116 59.09  0.00           N
ATOM    290  CA  PHE A  73       3.200  16.235 -13.619 59.09  0.00           C
ATOM    291  C   PHE A  73       2.076  16.129 -14.642 59.09  0.00           C
ATOM    292  O   PHE A  73       2.302  16.261 -15.844 59.09  0.00           O
ATOM    293  N   ASN A  74       0.861  15.890 -14.156 50.33  0.00           N
ATOM    294  CA  ASN A  74      -0.310  15.825 -15.021 50.33  0.00           C
ATOM    295  C   ASN A  74      -0.133  14.773 -16.109 50.33  0.00           C
ATOM    296  O   ASN A  74      -0.159  15.088 -17.299 50.33  0.00           O
ATOM    297  N   ALA A  75       0.047  13.524 -15.695 51.14  0.00           N
ATOM    298  CA  ALA A  75       0.305  12.436 -16.630 51.14  0.00           C
ATOM    299  C   ALA A  75      -0.112  11.093 -16.043 51.14  0.00           C
ATOM    300  O   ALA A  75      -0.453  11.000 -14.864 51.14  0.00           O
ATOM    301  N   GLU A  76      -0.084  10.057 -16.872 46.53  0.00           N
ATOM    302  CA  GLU A  76      -0.354   8.699 -16.412 46.53  0.00           C
ATOM    303  C   GLU A  76       0.925   7.876 -16.344 46.53  0.00           C
ATOM    304  O   GLU A  76       1.557   7.608 -17.366 46.53  0.00           O
ATOM    305  N   THR A  77       1.302   7.476 -15.135 53.48  0.00           N
ATOM    306  CA  THR A  77       2.521   6.703 -14.928 53.48  0.00           C
ATOM    307  C   THR A  77       2.202   5.256 -14.577 53.48  0.00           C
ATOM    308  O   THR A  77       1.539   4.980 -13.578 53.48  0.00           O
ATOM    309  N   GLU A  78       2.679   4.332 -15.406 67.11  0.00           N
ATOM    310  CA  GLU A  78       2.480   2.909 -15.163 67.11  0.00           C
ATOM    311  C   GLU A  78       3.499   2.371 -14.167 67.11  0.00           C
ATOM    312  O   GLU A  78       4.707   2.483 -14.379 67.11  0.00           O
ATOM    313  N   VAL A  79       3.005   1.787 -13.081 53.82  0.00           N
ATOM    314  CA  VAL A  79       3.872   1.281 -12.023 53.82  0.00           C
ATOM    315  C   VAL A  79       3.622  -0.199 -11.767 53.82  0.00           C
ATOM    316  O   VAL A  79       2.483  -0.621 -11.566 53.82  0.00           O
ATOM    317  N   GLU A  80       4.693  -0.985 -11.777 38.92  0.00           N
ATOM    318  CA  GLU A  80       4.592  -2.422 -11.550 38.92  0.00           C
ATOM    319  C   GLU A  80       4.761  -2.760 -10.074 38.92  0.00           C
ATOM    320  O   GLU A  80       5.670  -2.258  -9.413 38.92  0.00           O
ATOM    321  N   THR A  81       3.881  -3.613  -9.563 38.45  0.00           N
ATOM    322  CA  THR A  81       3.927  -4.014  -8.162 38.45  0.00           C
ATOM    323  C   THR A  81       4.027  -5.528  -8.025 38.45  0.00           C
ATOM    324  O   THR A  81       3.098  -6.256  -8.374 38.45  0.00           O
ATOM    325  N   LEU A  82       5.161  -5.997  -7.515 48.62  0.00           N
ATOM    326  CA  LEU A  82       5.367  -7.422  -7.287 48.62  0.00           C
ATOM    327  C   LEU A  82       5.455  -7.735  -5.799 48.62  0.00           C
ATOM    328  O   LEU A  82       6.493  -7.527  -5.171 48.62  0.00           O
ATOM    329  N   ARG A  83       4.358  -8.235  -5.240 25.29  0.00           N
ATOM    330  CA  ARG A  83       4.287  -8.516  -3.810 25.29  0.00           C
ATOM    331  C   ARG A  83       3.930  -9.974  -3.553 25.29  0.00           C
ATOM    332  O   ARG A  83       2.807 -10.404  -3.817 25.29  0.00           O
ATOM    333  N   GLU A  84       4.892 -10.732  -3.037 20.97  0.00           N
ATOM    334  CA  GLU A  84       4.627 -12.081  -2.551 20.97  0.00           C
ATOM    335  C   GLU A  84       4.144 -12.062  -1.107 20.97  0.00           C
ATOM    336  O   GLU A  84       4.927 -11.842  -0.183 20.97  0.00           O
ATOM    337  N   ILE A  85       2.849 -12.293  -0.919 55.92  0.00           N
ATOM    338  CA  ILE A  85       2.241 -12.213   0.403 55.92  0.00           C
ATOM    339  C   ILE A  85       1.608 -13.540   0.800 55.92  0.00           C
ATOM    340  O   ILE A  85       0.741 -14.060   0.099 55.92  0.00           O
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ATOM    341  N   ASN A  86       2.048 -14.086   1.929 48.27  0.00           N
ATOM    342  CA  ASN A  86       1.504 -15.340   2.437 48.27  0.00           C
ATOM    343  C   ASN A  86       0.259 -15.097   3.282 48.27  0.00           C
ATOM    344  O   ASN A  86       0.339 -14.543   4.377 48.27  0.00           O
ATOM    345  N   VAL A  87      -0.890 -15.518   2.764 38.64  0.00           N
ATOM    346  CA  VAL A  87      -2.157 -15.335   3.463 38.64  0.00           C
ATOM    347  C   VAL A  87      -2.795 -16.675   3.806 38.64  0.00           C
ATOM    348  O   VAL A  87      -3.062 -17.490   2.924 38.64  0.00           O
ATOM    349  N   GLY A  88      -3.038 -16.895   5.094 47.04  0.00           N
ATOM    350  CA  GLY A  88      -3.772 -18.072   5.544 47.04  0.00           C
ATOM    351  C   GLY A  88      -2.921 -19.330   5.425 47.04  0.00           C
ATOM    352  O   GLY A  88      -3.439 -20.447   5.467 47.04  0.00           O
ATOM    353  N   GLY A  89      -1.614 -19.143   5.276 51.00  0.00           N
ATOM    354  CA  GLY A  89      -0.693 -20.262   5.128 51.00  0.00           C
ATOM    355  C   GLY A  89      -0.430 -20.570   3.660 51.00  0.00           C
ATOM    356  O   GLY A  89       0.303 -21.503   3.332 51.00  0.00           O
ATOM    357  N   LYS A  90      -1.034 -19.780   2.778 53.00  0.00           N
ATOM    358  CA  LYS A  90      -0.860 -19.962   1.342 53.00  0.00           C
ATOM    359  C   LYS A  90      -0.190 -18.749   0.710 53.00  0.00           C
ATOM    360  O   LYS A  90      -0.652 -17.619   0.869 53.00  0.00           O
ATOM    361  N   VAL A  91       0.900 -18.991  -0.009 47.74  0.00           N
ATOM    362  CA  VAL A  91       1.647 -17.916  -0.653 47.74  0.00           C
ATOM    363  C   VAL A  91       0.910 -17.392  -1.880 47.74  0.00           C
ATOM    364  O   VAL A  91       0.607 -18.149  -2.803 47.74  0.00           O
ATOM    365  N   TYR A  92       0.626 -16.094  -1.884 54.10  0.00           N
ATOM    366  CA  TYR A  92       0.053 -15.439  -3.053 54.10  0.00           C
ATOM    367  C   TYR A  92       1.056 -14.491  -3.699 54.10  0.00           C
ATOM    368  O   TYR A  92       1.328 -13.410  -3.177 54.10  0.00           O
ATOM    369  N   LYS A  93       1.603 -14.903  -4.838 52.22  0.00           N
ATOM    370  CA  LYS A  93       2.582 -14.093  -5.554 52.22  0.00           C
ATOM    371  C   LYS A  93       1.901 -13.024  -6.399 52.22  0.00           C
ATOM    372  O   LYS A  93       1.759 -13.176  -7.612 52.22  0.00           O
ATOM    373  N   ILE A  94       1.482 -11.943  -5.750 51.93  0.00           N
ATOM    374  CA  ILE A  94       0.730 -10.890  -6.422 51.93  0.00           C
ATOM    375  C   ILE A  94       1.610 -10.122  -7.399 51.93  0.00           C
ATOM    376  O   ILE A  94       2.356  -9.225  -7.006 51.93  0.00           O
ATOM    377  N   LYS A  95       1.519 -10.480  -8.676 70.68  0.00           N
ATOM    378  CA  LYS A  95       2.338  -9.854  -9.708 70.68  0.00           C
ATOM    379  C   LYS A  95       1.472  -9.172 -10.760 70.68  0.00           C
ATOM    380  O   LYS A  95       0.869  -9.834 -11.605 70.68  0.00           O
ATOM    381  N   GLY A  96       1.414  -7.846 -10.703 49.96  0.00           N
ATOM    382  CA  GLY A  96       0.594  -7.074 -11.630 49.96  0.00           C
ATOM    383  C   GLY A  96       1.035  -5.618 -11.674 49.96  0.00           C
ATOM    384  O   GLY A  96       2.092  -5.263 -11.151 49.96  0.00           O
ATOM    385  N   ARG A  97       0.219  -4.776 -12.300 30.60  0.00           N
ATOM    386  CA  ARG A  97       0.569  -3.374 -12.498 30.60  0.00           C
ATOM    387  C   ARG A  97      -0.585  -2.459 -12.116 30.60  0.00           C
ATOM    388  O   ARG A  97      -1.714  -2.913 -11.928 30.60  0.00           O
ATOM    389  N   ALA A  98      -0.297  -1.167 -12.001 43.89  0.00           N
ATOM    390  CA  ALA A  98      -1.333  -0.167 -11.780 43.89  0.00           C
ATOM    391  C   ALA A  98      -0.963   1.163 -12.424 43.89  0.00           C
ATOM    392  O   ALA A  98       0.200   1.566 -12.413 43.89  0.00           O
ATOM    393  N   ASP A  99      -1.958   1.841 -12.984 66.23  0.00           N
ATOM    394  CA  ASP A  99      -1.735   3.117 -13.653 66.23  0.00           C
ATOM    395  C   ASP A  99      -2.050   4.286 -12.729 66.23  0.00           C
ATOM    396  O   ASP A  99      -3.201   4.494 -12.344 66.23  0.00           O
ATOM    397  N   ALA A 100      -1.020   5.048 -12.377 61.99  0.00           N
ATOM    398  CA  ALA A 100      -1.193   6.233 -11.545 61.99  0.00           C
ATOM    399  C   ALA A 100      -1.529   7.455 -12.390 61.99  0.00           C
ATOM    400  O   ALA A 100      -0.658   8.030 -13.041 61.99  0.00           O
ATOM    401  N   ILE A 101      -2.799   7.846 -12.374 70.75  0.00           N
ATOM    402  CA  ILE A 101      -3.265   8.965 -13.186 70.75  0.00           C
ATOM    403  C   ILE A 101      -3.400  10.233 -12.351 70.75  0.00           C
ATOM    404  O   ILE A 101      -4.229  10.304 -11.444 70.75  0.00           O
ATOM    405  N   ILE A 102      -2.580  11.231 -12.663 38.77  0.00           N
ATOM    406  CA  ILE A 102      -2.625  12.506 -11.959 38.77  0.00           C
ATOM    407  C   ILE A 102      -3.844  13.321 -12.371 38.77  0.00           C
ATOM    408  O   ILE A 102      -4.045  13.602 -13.552 38.77  0.00           O
ATOM    409  N   ARG A 103      -4.655  13.700 -11.388 47.14  0.00           N
ATOM    410  CA  ARG A 103      -5.842  14.507 -11.644 47.14  0.00           C
ATOM    411  C   ARG A 103      -5.649  15.939 -11.159 47.14  0.00           C
ATOM    412  O   ARG A 103      -6.201  16.878 -11.732 47.14  0.00           O
ATOM    413  N   ASN A 104      -4.860  16.098 -10.101 50.55  0.00           N
ATOM    414  CA  ASN A 104      -4.531  17.421  -9.584 50.55  0.00           C
ATOM    415  C   ASN A 104      -3.099  17.469  -9.066 50.55  0.00           C
ATOM    416  O   ASN A 104      -2.836  17.137  -7.910 50.55  0.00           O
ATOM    417  N   ASP A 105      -2.177  17.884  -9.928 44.17  0.00           N
ATOM    418  CA  ASP A 105      -0.765  17.947  -9.567 44.17  0.00           C
ATOM    419  C   ASP A 105      -0.558  18.763  -8.298 44.17  0.00           C
ATOM    420  O   ASP A 105       0.086  18.306  -7.352 44.17  0.00           O
ATOM    421  N   ASN A 106      -1.105  19.973  -8.281 47.42  0.00           N
ATOM    422  CA  ASN A 106      -0.899  20.893  -7.169 47.42  0.00           C
ATOM    423  C   ASN A 106      -1.519  20.355  -5.887 47.42  0.00           C
ATOM    424  O   ASN A 106      -0.984  20.556  -4.796 47.42  0.00           O
ATOM    425  N   GLY A 107      -2.649  19.670  -6.024 50.23  0.00           N
ATOM    426  CA  GLY A 107      -3.347  19.104  -4.875 50.23  0.00           C
ATOM    427  C   GLY A 107      -2.827  17.710  -4.548 50.23  0.00           C
ATOM    428  O   GLY A 107      -3.282  17.076  -3.596 50.23  0.00           O
ATOM    429  N   LYS A 108      -1.873  17.238  -5.342 19.82  0.00           N
ATOM    430  CA  LYS A 108      -1.304  15.910  -5.150 19.82  0.00           C
ATOM    431  C   LYS A 108      -2.385  14.837  -5.182 19.82  0.00           C
ATOM    432  O   LYS A 108      -2.338  13.871  -4.421 19.82  0.00           O
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ATOM    433  N   SER A 109      -3.361  15.014  -6.068 46.23  0.00           N
ATOM    434  CA  SER A 109      -4.454  14.059  -6.205 46.23  0.00           C
ATOM    435  C   SER A 109      -4.203  13.097  -7.360 46.23  0.00           C
ATOM    436  O   SER A 109      -4.251  13.487  -8.526 46.23  0.00           O
ATOM    437  N   ILE A 110      -3.935  11.838  -7.027 49.84  0.00           N
ATOM    438  CA  ILE A 110      -3.684  10.817  -8.036 49.84  0.00           C
ATOM    439  C   ILE A 110      -4.602   9.616  -7.845 49.84  0.00           C
ATOM    440  O   ILE A 110      -4.763   9.118  -6.732 49.84  0.00           O
ATOM    441  N   VAL A 111      -5.202   9.157  -8.938 62.91  0.00           N
ATOM    442  CA  VAL A 111      -6.023   7.953  -8.913 62.91  0.00           C
ATOM    443  C   VAL A 111      -5.250   6.748  -9.433 62.91  0.00           C
ATOM    444  O   VAL A 111      -4.755   6.755 -10.560 62.91  0.00           O
ATOM    445  N   ILE A 112      -5.150   5.713  -8.605 58.29  0.00           N
ATOM    446  CA  ILE A 112      -4.419   4.506  -8.973 58.29  0.00           C
ATOM    447  C   ILE A 112      -5.357   3.446  -9.538 58.29  0.00           C
ATOM    448  O   ILE A 112      -6.109   2.811  -8.799 58.29  0.00           O
ATOM    449  N   GLU A 113      -5.306   3.259 -10.853 83.80  0.00           N
ATOM    450  CA  GLU A 113      -6.138   2.263 -11.517 83.80  0.00           C
ATOM    451  C   GLU A 113      -5.455   0.901 -11.539 83.80  0.00           C
ATOM    452  O   GLU A 113      -4.482   0.696 -12.265 83.80  0.00           O
ATOM    453  N   ILE A 114      -5.971  -0.027 -10.741 47.53  0.00           N
ATOM    454  CA  ILE A 114      -5.400  -1.366 -10.653 47.53  0.00           C
ATOM    455  C   ILE A 114      -5.764  -2.201 -11.874 47.53  0.00           C
ATOM    456  O   ILE A 114      -6.933  -2.290 -12.251 47.53  0.00           O
ATOM    457  N   LYS A 115      -4.758  -2.812 -12.488 61.71  0.00           N
ATOM    458  CA  LYS A 115      -4.971  -3.651 -13.661 61.71  0.00           C
ATOM    459  C   LYS A 115      -5.818  -4.871 -13.321 61.71  0.00           C
ATOM    460  O   LYS A 115      -5.614  -5.512 -12.291 61.71  0.00           O
ATOM    461  N   THR A 116      -6.771  -5.184 -14.191 35.95  0.00           N
ATOM    462  CA  THR A 116      -7.696  -6.286 -13.951 35.95  0.00           C
ATOM    463  C   THR A 116      -7.192  -7.576 -14.586 35.95  0.00           C
ATOM    464  O   THR A 116      -6.188  -7.578 -15.299 35.95  0.00           O
ATOM    465  N   SER A 117      -7.895  -8.673 -14.323 31.53  0.00           N
ATOM    466  CA  SER A 117      -7.587  -9.950 -14.956 31.53  0.00           C
ATOM    467  C   SER A 117      -7.885  -9.910 -16.449 31.53  0.00           C
ATOM    468  O   SER A 117      -7.430 -10.768 -17.206 31.53  0.00           O
ATOM    469  N   ARG A 118      -8.653  -8.910 -16.868 55.43  0.00           N
ATOM    470  CA  ARG A 118      -8.954  -8.715 -18.281 55.43  0.00           C
ATOM    471  C   ARG A 118      -7.875  -7.881 -18.964 55.43  0.00           C
ATOM    472  O   ARG A 118      -7.416  -8.217 -20.055 55.43  0.00           O
ATOM    473  N   SER A 119      -7.476  -6.794 -18.314 29.24  0.00           N
ATOM    474  CA  SER A 119      -6.436  -5.922 -18.846 29.24  0.00           C
ATOM    475  C   SER A 119      -5.054  -6.535 -18.657 29.24  0.00           C
ATOM    476  O   SER A 119      -4.086  -6.115 -19.292 29.24  0.00           O
ATOM    477  N   ASP A 120      -4.968  -7.529 -17.781 36.70  0.00           N
ATOM    478  CA  ASP A 120      -3.713  -8.231 -17.539 36.70  0.00           C
ATOM    479  C   ASP A 120      -3.953  -9.707 -17.251 36.70  0.00           C
ATOM    480  O   ASP A 120      -4.281 -10.085 -16.126 36.70  0.00           O
ATOM    481  N   LYS A 121      -3.787 -10.539 -18.274 43.60  0.00           N
ATOM    482  CA  LYS A 121      -4.044 -11.968 -18.149 43.60  0.00           C
ATOM    483  C   LYS A 121      -3.019 -12.635 -17.241 43.60  0.00           C
ATOM    484  O   LYS A 121      -3.226 -13.754 -16.771 43.60  0.00           O
ATOM    485  N   GLY A 122      -1.913 -11.941 -16.996 49.91  0.00           N
ATOM    486  CA  GLY A 122      -0.859 -12.459 -16.132 49.91  0.00           C
ATOM    487  C   GLY A 122      -1.167 -12.189 -14.665 49.91  0.00           C
ATOM    488  O   GLY A 122      -0.437 -12.628 -13.776 49.91  0.00           O
ATOM    489  N   LEU A 123      -2.252 -11.463 -14.417 46.62  0.00           N
ATOM    490  CA  LEU A 123      -2.676 -11.158 -13.056 46.62  0.00           C
ATOM    491  C   LEU A 123      -3.993 -11.845 -12.722 46.62  0.00           C
ATOM    492  O   LEU A 123      -5.048 -11.467 -13.233 46.62  0.00           O
ATOM    493  N   PRO A 124      -3.927 -12.856 -11.862 73.97  0.00           N
ATOM    494  CA  PRO A 124      -5.121 -13.572 -11.427 73.97  0.00           C
ATOM    495  C   PRO A 124      -6.149 -12.618 -10.833 73.97  0.00           C
ATOM    496  O   PRO A 124      -5.795 -11.589 -10.255 73.97  0.00           O
ATOM    497  N   LEU A 125      -7.423 -12.964 -10.978 23.98  0.00           N
ATOM    498  CA  LEU A 125      -8.505 -12.146 -10.443 23.98  0.00           C
ATOM    499  C   LEU A 125      -8.359 -11.955  -8.939 23.98  0.00           C
ATOM    500  O   LEU A 125      -8.610 -10.869  -8.414 23.98  0.00           O
ATOM    501  N   ILE A 126      -7.953 -13.015  -8.250 38.08  0.00           N
ATOM    502  CA  ILE A 126      -7.707 -12.947  -6.814 38.08  0.00           C
ATOM    503  C   ILE A 126      -6.616 -11.936  -6.488 38.08  0.00           C
ATOM    504  O   ILE A 126      -6.794 -11.070  -5.632 38.08  0.00           O
ATOM    505  N   HIS A 127      -5.486 -12.052  -7.177 29.29  0.00           N
ATOM    506  CA  HIS A 127      -4.350 -11.168  -6.938 29.29  0.00           C
ATOM    507  C   HIS A 127      -4.694  -9.724  -7.278 29.29  0.00           C
ATOM    508  O   HIS A 127      -4.193  -8.792  -6.650 29.29  0.00           O
ATOM    509  N   HIS A 128      -5.554  -9.544  -8.276 39.69  0.00           N
ATOM    510  CA  HIS A 128      -6.082  -8.226  -8.603 39.69  0.00           C
ATOM    511  C   HIS A 128      -6.847  -7.631  -7.428 39.69  0.00           C
ATOM    512  O   HIS A 128      -6.621  -6.482  -7.046 39.69  0.00           O
ATOM    513  N   LYS A 129      -7.751  -8.419  -6.857 27.03  0.00           N
ATOM    514  CA  LYS A 129      -8.598  -7.949  -5.766 27.03  0.00           C
ATOM    515  C   LYS A 129      -7.821  -7.876  -4.458 27.03  0.00           C
ATOM    516  O   LYS A 129      -8.223  -7.182  -3.525 27.03  0.00           O
ATOM    517  N   MET A 130      -6.707  -8.598  -4.395 40.21  0.00           N
ATOM    518  CA  MET A 130      -5.795  -8.502  -3.263 40.21  0.00           C
ATOM    519  C   MET A 130      -4.957  -7.232  -3.336 40.21  0.00           C
ATOM    520  O   MET A 130      -4.637  -6.629  -2.311 40.21  0.00           O
ATOM    521  N   GLN A 131      -4.602  -6.832  -4.552 46.26  0.00           N
ATOM    522  CA  GLN A 131      -3.996  -5.527  -4.782 46.26  0.00           C
ATOM    523  C   GLN A 131      -4.937  -4.401  -4.373 46.26  0.00           C
ATOM    524  O   GLN A 131      -4.509  -3.392  -3.813 46.26  0.00           O
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ATOM    525  N   LEU A 132      -6.224  -4.580  -4.658 48.70  0.00           N
ATOM    526  CA  LEU A 132      -7.241  -3.626  -4.236 48.70  0.00           C
ATOM    527  C   LEU A 132      -7.300  -3.518  -2.717 48.70  0.00           C
ATOM    528  O   LEU A 132      -7.461  -2.428  -2.168 48.70  0.00           O
ATOM    529  N   GLN A 133      -7.166  -4.656  -2.044 49.66  0.00           N
ATOM    530  CA  GLN A 133      -7.084  -4.678  -0.588 49.66  0.00           C
ATOM    531  C   GLN A 133      -5.851  -3.932  -0.094 49.66  0.00           C
ATOM    532  O   GLN A 133      -5.914  -3.189   0.884 49.66  0.00           O
ATOM    533  N   ILE A 134      -4.730  -4.137  -0.777 54.32  0.00           N
ATOM    534  CA  ILE A 134      -3.472  -3.510  -0.389 54.32  0.00           C
ATOM    535  C   ILE A 134      -3.555  -1.993  -0.501 54.32  0.00           C
ATOM    536  O   ILE A 134      -3.204  -1.272   0.433 54.32  0.00           O
ATOM    537  N   TYR A 135      -4.024  -1.513  -1.648 55.17  0.00           N
ATOM    538  CA  TYR A 135      -3.996  -0.088  -1.952 55.17  0.00           C
ATOM    539  C   TYR A 135      -5.095   0.656  -1.203 55.17  0.00           C
ATOM    540  O   TYR A 135      -4.933   1.822  -0.843 55.17  0.00           O
ATOM    541  N   LEU A 136      -6.212  -0.025  -0.973 51.61  0.00           N
ATOM    542  CA  LEU A 136      -7.276   0.510  -0.132 51.61  0.00           C
ATOM    543  C   LEU A 136      -6.812   0.668   1.310 51.61  0.00           C
ATOM    544  O   LEU A 136      -7.070   1.689   1.948 51.61  0.00           O
ATOM    545  N   TRP A 137      -6.126  -0.350   1.820 40.90  0.00           N
ATOM    546  CA  TRP A 137      -5.485  -0.263   3.127 40.90  0.00           C
ATOM    547  C   TRP A 137      -4.538   0.927   3.198 40.90  0.00           C
ATOM    548  O   TRP A 137      -4.556   1.691   4.165 40.90  0.00           O
ATOM    549  N   LEU A 138      -3.709   1.081   2.171 23.53  0.00           N
ATOM    550  CA  LEU A 138      -2.773   2.196   2.101 23.53  0.00           C
ATOM    551  C   LEU A 138      -3.509   3.528   2.030 23.53  0.00           C
ATOM    552  O   LEU A 138      -3.069   4.523   2.606 23.53  0.00           O
ATOM    553  N   PHE A 139      -4.632   3.541   1.320 31.22  0.00           N
ATOM    554  CA  PHE A 139      -5.432   4.751   1.173 31.22  0.00           C
ATOM    555  C   PHE A 139      -5.988   5.210   2.515 31.22  0.00           C
ATOM    556  O   PHE A 139      -5.977   6.401   2.828 31.22  0.00           O
ATOM    557  N   SER A 140      -6.475   4.259   3.304 30.40  0.00           N
ATOM    558  CA  SER A 140      -7.013   4.561   4.625 30.40  0.00           C
ATOM    559  C   SER A 140      -5.910   4.979   5.588 30.40  0.00           C
ATOM    560  O   SER A 140      -6.141   5.757   6.513 30.40  0.00           O
ATOM    561  N   ALA A 141      -4.709   4.457   5.365 38.58  0.00           N
ATOM    562  CA  ALA A 141      -3.557   4.810   6.185 38.58  0.00           C
ATOM    563  C   ALA A 141      -2.949   6.134   5.741 38.58  0.00           C
ATOM    564  O   ALA A 141      -2.288   6.817   6.523 38.58  0.00           O
ATOM    565  N   GLU A 142      -3.177   6.491   4.482  0.00  0.00           N
ATOM    566  CA  GLU A 142      -2.580   7.690   3.906  0.00  0.00           C
ATOM    567  C   GLU A 142      -3.406   8.927   4.233  0.00  0.00           C
ATOM    568  O   GLU A 142      -2.943   9.827   4.935  0.00  0.00           O
ATOM    569  N   LYS A 143      -4.630   8.969   3.719 66.08  0.00           N
ATOM    570  CA  LYS A 143      -5.468  10.157   3.829 66.08  0.00           C
ATOM    571  C   LYS A 143      -6.839   9.814   4.394 66.08  0.00           C
ATOM    572  O   LYS A 143      -7.461  10.627   5.077 66.08  0.00           O
ATOM    573  N   GLY A 144      -7.307   8.604   4.107 60.83  0.00           N
ATOM    574  CA  GLY A 144      -8.645   8.184   4.507 60.83  0.00           C
ATOM    575  C   GLY A 144      -9.616   8.251   3.335 60.83  0.00           C
ATOM    576  O   GLY A 144     -10.832   8.203   3.521 60.83  0.00           O
ATOM    577  N   ILE A 145      -9.072   8.362   2.128 72.37  0.00           N
ATOM    578  CA  ILE A 145      -9.889   8.417   0.922 72.37  0.00           C
ATOM    579  C   ILE A 145      -9.722   7.157   0.084 72.37  0.00           C
ATOM    580  O   ILE A 145      -8.659   6.917  -0.490 72.37  0.00           O
ATOM    581  N   LEU A 146     -10.778   6.353   0.016 57.82  0.00           N
ATOM    582  CA  LEU A 146     -10.707   5.048  -0.631 57.82  0.00           C
ATOM    583  C   LEU A 146     -11.049   5.147  -2.111 57.82  0.00           C
ATOM    584  O   LEU A 146     -11.937   5.905  -2.504 57.82  0.00           O
ATOM    585  N   VAL A 147     -10.340   4.377  -2.930 49.59  0.00           N
ATOM    586  CA  VAL A 147     -10.628   4.307  -4.357 49.59  0.00           C
ATOM    587  C   VAL A 147     -10.805   2.864  -4.813 49.59  0.00           C
ATOM    588  O   VAL A 147      -9.866   2.070  -4.772 49.59  0.00           O
ATOM    589  N   TYR A 148     -12.016   2.531  -5.248 53.71  0.00           N
ATOM    590  CA  TYR A 148     -12.314   1.188  -5.730 53.71  0.00           C
ATOM    591  C   TYR A 148     -12.243   1.119  -7.251 53.71  0.00           C
ATOM    592  O   TYR A 148     -12.922   1.874  -7.947 53.71  0.00           O
ATOM    593  N   ILE A 149     -11.418   0.210  -7.758 38.41  0.00           N
ATOM    594  CA  ILE A 149     -11.216   0.078  -9.196 38.41  0.00           C
ATOM    595  C   ILE A 149     -11.879  -1.184  -9.732 38.41  0.00           C
ATOM    596  O   ILE A 149     -11.446  -2.297  -9.438 38.41  0.00           O
ATOM    597  N   THR A 150     -12.934  -1.003 -10.520 57.09  0.00           N
ATOM    598  CA  THR A 150     -13.520  -2.101 -11.280 57.09  0.00           C
ATOM    599  C   THR A 150     -13.205  -1.971 -12.765 57.09  0.00           C
ATOM    600  O   THR A 150     -12.769  -0.918 -13.227 57.09  0.00           O
ATOM    601  N   PRO A 151     -13.430  -3.050 -13.508 48.53  0.00           N
ATOM    602  CA  PRO A 151     -13.038  -3.109 -14.911 48.53  0.00           C
ATOM    603  C   PRO A 151     -13.660  -1.969 -15.704 48.53  0.00           C
ATOM    604  O   PRO A 151     -13.090  -1.502 -16.691 48.53  0.00           O
ATOM    605  N   ASP A 152     -14.834  -1.522 -15.269 47.48  0.00           N
ATOM    606  CA  ASP A 152     -15.635  -0.585 -16.048 47.48  0.00           C
ATOM    607  C   ASP A 152     -16.265   0.476 -15.154 47.48  0.00           C
ATOM    608  O   ASP A 152     -17.316   1.028 -15.476 47.48  0.00           O
ATOM    609  N   ARG A 153     -15.615   0.756 -14.030 75.55  0.00           N
ATOM    610  CA  ARG A 153     -16.069   1.806 -13.125 75.55  0.00           C
ATOM    611  C   ARG A 153     -15.009   2.127 -12.079 75.55  0.00           C
ATOM    612  O   ARG A 153     -14.325   1.234 -11.578 75.55  0.00           O
ATOM    613  N   ILE A 154     -14.878   3.408 -11.751 47.28  0.00           N
ATOM    614  CA  ILE A 154     -14.048   3.831 -10.630 47.28  0.00           C
ATOM    615  C   ILE A 154     -14.870   4.577  -9.586 47.28  0.00           C
ATOM    616  O   ILE A 154     -15.444   5.628  -9.870 47.28  0.00           O
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ATOM    617  N   ALA A 155     -14.922   4.027  -8.378 49.85  0.00           N
ATOM    618  CA  ALA A 155     -15.759   4.579  -7.320 49.85  0.00           C
ATOM    619  C   ALA A 155     -14.914   5.091  -6.159 49.85  0.00           C
ATOM    620  O   ALA A 155     -13.872   4.519  -5.839 49.85  0.00           O
ATOM    621  N   GLU A 156     -15.371   6.170  -5.533 57.54  0.00           N
ATOM    622  CA  GLU A 156     -14.655   6.763  -4.410 57.54  0.00           C
ATOM    623  C   GLU A 156     -15.462   6.656  -3.123 57.54  0.00           C
ATOM    624  O   GLU A 156     -16.678   6.849  -3.123 57.54  0.00           O
ATOM    625  N   TYR A 157     -14.778   6.347  -2.026 56.62  0.00           N
ATOM    626  CA  TYR A 157     -15.425   6.247  -0.723 56.62  0.00           C
ATOM    627  C   TYR A 157     -14.594   6.926   0.358 56.62  0.00           C
ATOM    628  O   TYR A 157     -13.409   7.200   0.164 56.62  0.00           O
ATOM    629  N   GLU A 158     -15.222   7.196   1.498 49.97  0.00           N
ATOM    630  CA  GLU A 158     -14.514   7.739   2.651 49.97  0.00           C
ATOM    631  C   GLU A 158     -14.480   6.737   3.798 49.97  0.00           C
ATOM    632  O   GLU A 158     -15.430   5.980   4.003 49.97  0.00           O
ATOM    633  N   ILE A 159     -13.381   6.735   4.544 52.35  0.00           N
ATOM    634  CA  ILE A 159     -13.235   5.849   5.693 52.35  0.00           C
ATOM    635  C   ILE A 159     -12.746   6.611   6.918 52.35  0.00           C
ATOM    636  O   ILE A 159     -11.827   7.425   6.828 52.35  0.00           O
ATOM    637  N   ASN A 160     -13.365   6.343   8.061 52.16  0.00           N
ATOM    638  CA  ASN A 160     -13.024   7.033   9.299 52.16  0.00           C
ATOM    639  C   ASN A 160     -11.744   6.474   9.907 52.16  0.00           C
ATOM    640  O   ASN A 160     -11.449   5.286   9.771 52.16  0.00           O
ATOM    641  N   GLU A 161     -10.987   7.336  10.577 24.33  0.00           N
ATOM    642  CA  GLU A 161      -9.660   6.974  11.061 24.33  0.00           C
ATOM    643  C   GLU A 161      -9.720   5.763  11.982 24.33  0.00           C
ATOM    644  O   GLU A 161      -8.898   4.852  11.881 24.33  0.00           O
ATOM    645  N   PRO A 162     -10.698   5.759  12.882 48.62  0.00           N
ATOM    646  CA  PRO A 162     -10.862   4.663  13.830 48.62  0.00           C
ATOM    647  C   PRO A 162     -10.874   3.316  13.119 48.62  0.00           C
ATOM    648  O   PRO A 162     -10.347   2.328  13.631 48.62  0.00           O
ATOM    649  N   LEU A 163     -11.479   3.283  11.937 50.64  0.00           N
ATOM    650  CA  LEU A 163     -11.574   2.054  11.158 50.64  0.00           C
ATOM    651  C   LEU A 163     -10.206   1.618  10.648 50.64  0.00           C
ATOM    652  O   LEU A 163      -9.923   0.425  10.545 50.64  0.00           O
ATOM    653  N   ASP A 164      -9.361   2.593  10.329 13.03  0.00           N
ATOM    654  CA  ASP A 164      -7.975   2.319   9.973 13.03  0.00           C
ATOM    655  C   ASP A 164      -7.171   1.875  11.189 13.03  0.00           C
ATOM    656  O   ASP A 164      -6.316   0.995  11.092 13.03  0.00           O
ATOM    657  N   GLU A 165      -7.450   2.491  12.332 52.58  0.00           N
ATOM    658  CA  GLU A 165      -6.737   2.177  13.565 52.58  0.00           C
ATOM    659  C   GLU A 165      -6.906   0.711  13.941 52.58  0.00           C
ATOM    660  O   GLU A 165      -6.002   0.099  14.510 52.58  0.00           O
ATOM    661  N   ALA A 166      -8.067   0.152  13.618 52.45  0.00           N
ATOM    662  CA  ALA A 166      -8.308  -1.274  13.801 52.45  0.00           C
ATOM    663  C   ALA A 166      -7.261  -2.108  13.073 52.45  0.00           C
ATOM    664  O   ALA A 166      -6.753  -3.093  13.610 52.45  0.00           O
ATOM    665  N   THR A 167      -6.943  -1.708  11.847 22.42  0.00           N
ATOM    666  CA  THR A 167      -6.001  -2.452  11.018 22.42  0.00           C
ATOM    667  C   THR A 167      -4.561  -2.108  11.374 22.42  0.00           C
ATOM    668  O   THR A 167      -3.650  -2.906  11.156 22.42  0.00           O
ATOM    669  N   ILE A 168      -4.362  -0.915  11.926 46.72  0.00           N
ATOM    670  CA  ILE A 168      -3.056  -0.515  12.434 46.72  0.00           C
ATOM    671  C   ILE A 168      -2.629  -1.390  13.605 46.72  0.00           C
ATOM    672  O   ILE A 168      -1.479  -1.824  13.681 46.72  0.00           O
ATOM    673  N   VAL A 169      -3.560  -1.644  14.518 48.67  0.00           N
ATOM    674  CA  VAL A 169      -3.302  -2.522  15.653 48.67  0.00           C
ATOM    675  C   VAL A 169      -3.029  -3.949  15.196 48.67  0.00           C
ATOM    676  O   VAL A 169      -2.095  -4.595  15.670 48.67  0.00           O
ATOM    677  N   ARG A 170      -3.851  -4.435  14.270   4.85  0.00           N
ATOM    678  CA  ARG A 170      -3.708  -5.793  13.757   4.85  0.00           C
ATOM    679  C   ARG A 170      -2.342  -5.998  13.117   4.85  0.00           C
ATOM    680  O   ARG A 170      -1.647  -6.970  13.413   4.85  0.00           O
ATOM    681  N   LEU A 171      -1.961  -5.078  12.238 35.06  0.00           N
ATOM    682  CA  LEU A 171      -0.685  -5.169  11.537 35.06  0.00           C
ATOM    683  C   LEU A 171       0.484  -5.004  12.498 35.06  0.00           C
ATOM    684  O   LEU A 171       1.510  -5.672  12.366 35.06  0.00           O
ATOM    685  N   ALA A 172       0.324  -4.109  13.468 35.22  0.00           N
ATOM    686  CA  ALA A 172       1.321  -3.930  14.518 35.22  0.00           C
ATOM    687  C   ALA A 172       1.656  -5.255  15.190 35.22  0.00           C
ATOM    688  O   ALA A 172       2.826  -5.600  15.354 35.22  0.00           O
ATOM    689  N   GLU A 173       0.623  -5.995  15.577 57.67  0.00           N
ATOM    690  CA  GLU A 173       0.805  -7.298  16.205 57.67  0.00           C
ATOM    691  C   GLU A 173       1.409  -8.300  15.228 57.67  0.00           C
ATOM    692  O   GLU A 173       2.216  -9.146  15.613 57.67  0.00           O
ATOM    693  N   ASP A 174       1.013  -8.199  13.965 41.81  0.00           N
ATOM    694  CA  ASP A 174       1.501  -9.107  12.933 41.81  0.00           C
ATOM    695  C   ASP A 174       2.994  -8.921  12.697 41.81  0.00           C
ATOM    696  O   ASP A 174       3.723  -9.886  12.469 41.81  0.00           O
ATOM    697  N   THR A 175       3.445  -7.671  12.754 37.60  0.00           N
ATOM    698  CA  THR A 175       4.844  -7.349  12.496 37.60  0.00           C
ATOM    699  C   THR A 175       5.701  -7.588  13.732 37.60  0.00           C
ATOM    700  O   THR A 175       6.905  -7.828  13.629 37.60  0.00           O
ATOM    701  N   ILE A 176       5.075  -7.521  14.902 46.10  0.00           N
ATOM    702  CA  ILE A 176       5.733  -7.901  16.146 46.10  0.00           C
ATOM    703  C   ILE A 176       5.959  -9.406  16.212 46.10  0.00           C
ATOM    704  O   ILE A 176       7.042  -9.865  16.574 46.10  0.00           O
ATOM    705  N   MET A 177       4.930 -10.170  15.860 53.53  0.00           N
ATOM    706  CA  MET A 177       5.016 -11.625  15.875 53.53  0.00           C
ATOM    707  C   MET A 177       5.862 -12.140  14.718 53.53  0.00           C
ATOM    708  O   MET A 177       6.651 -13.072  14.878 53.53  0.00           O
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ATOM    709  N   LEU A 178       5.695 -11.527  13.551 54.52  0.00           N
ATOM    710  CA  LEU A 178       6.406 -11.954  12.351 54.52  0.00           C
ATOM    711  C   LEU A 178       7.177 -10.798  11.728 54.52  0.00           C
ATOM    712  O   LEU A 178       6.830 -10.318  10.649 54.52  0.00           O
ATOM    713  N   GLN A 179       8.226 -10.355  12.413  9.65  0.00           N
ATOM    714  CA  GLN A 179       9.062  -9.268  11.916  9.65  0.00           C
ATOM    715  C   GLN A 179       9.892  -9.715  10.719  9.65  0.00           C
ATOM    716  O   GLN A 179      10.498  -8.895  10.031  9.65  0.00           O
ATOM    717  N   ASN A 180       9.914 -11.021  10.476 36.56  0.00           N
ATOM    718  CA  ASN A 180      10.691 -11.582   9.376 36.56  0.00           C
ATOM    719  C   ASN A 180       9.958 -11.429   8.051 36.56  0.00           C
ATOM    720  O   ASN A 180      10.571 -11.466   6.983 36.56  0.00           O
ATOM    721  N   SER A 181       8.642 -11.257   8.123 54.59  0.00           N
ATOM    722  CA  SER A 181       7.818 -11.128   6.927 54.59  0.00           C
ATOM    723  C   SER A 181       6.642 -10.191   7.166 54.59  0.00           C
ATOM    724  O   SER A 181       5.487 -10.617   7.165 54.59  0.00           O
ATOM    725  N   PRO A 182       6.942  -8.914   7.373 58.07  0.00           N
ATOM    726  CA  PRO A 182       5.913  -7.881   7.411 58.07  0.00           C
ATOM    727  C   PRO A 182       5.234  -7.730   6.055 58.07  0.00           C
ATOM    728  O   PRO A 182       5.900  -7.619   5.025 58.07  0.00           O
ATOM    729  N   ARG A 183       3.905  -7.728   6.061 45.05  0.00           N
ATOM    730  CA  ARG A 183       3.133  -7.788   4.826 45.05  0.00           C
ATOM    731  C   ARG A 183       1.671  -7.439   5.073 45.05  0.00           C
ATOM    732  O   ARG A 183       1.268  -7.175   6.206 45.05  0.00           O
ATOM    733  N   PHE A 184       0.879  -7.441   4.006 40.86  0.00           N
ATOM    734  CA  PHE A 184      -0.495  -6.955   4.070 40.86  0.00           C
ATOM    735  C   PHE A 184      -1.470  -8.096   4.329 40.86  0.00           C
ATOM    736  O   PHE A 184      -2.602  -8.078   3.847 40.86  0.00           O
ATOM    737  N   ASN A 185      -1.024  -9.088   5.092 41.19  0.00           N
ATOM    738  CA  ASN A 185      -1.880 -10.204   5.476 41.19  0.00           C
ATOM    739  C   ASN A 185      -2.866  -9.793   6.562 41.19  0.00           C
ATOM    740  O   ASN A 185      -2.470  -9.429   7.670 41.19  0.00           O
ATOM    741  N   TRP A 186      -4.153  -9.853   6.238 25.29  0.00           N
ATOM    742  CA  TRP A 186      -5.201  -9.543   7.204 25.29  0.00           C
ATOM    743  C   TRP A 186      -6.470 -10.334   6.912 25.29  0.00           C
ATOM    744  O   TRP A 186      -6.625 -10.901   5.831 25.29  0.00           O
ATOM    745  N   GLU A 187      -7.376 -10.369   7.884 93.17  0.00           N
ATOM    746  CA  GLU A 187      -8.559 -11.217   7.798 93.17  0.00           C
ATOM    747  C   GLU A 187      -9.701 -10.498   7.092 93.17  0.00           C
ATOM    748  O   GLU A 187      -9.628  -9.296   6.836 93.17  0.00           O
ATOM    749  N   CYS A 188     -10.758 -11.241   6.780 43.08  0.00           N
ATOM    750  CA  CYS A 188     -11.922 -10.674   6.109 43.08  0.00           C
ATOM    751  C   CYS A 188     -12.572  -9.587   6.957 43.08  0.00           C
ATOM    752  O   CYS A 188     -13.252  -8.703   6.436 43.08  0.00           O
ATOM    753  N   LYS A 189     -12.356  -9.658   8.266 45.12  0.00           N
ATOM    754  CA  LYS A 189     -12.901  -8.666   9.186 45.12  0.00           C
ATOM    755  C   LYS A 189     -12.206  -7.321   9.021 45.12  0.00           C
ATOM    756  O   LYS A 189     -12.710  -6.291   9.470 45.12  0.00           O
ATOM    757  N   TYR A 190     -11.045  -7.335   8.374 37.47  0.00           N
ATOM    758  CA  TYR A 190     -10.256  -6.124   8.190 37.47  0.00           C
ATOM    759  C   TYR A 190     -10.228  -5.702   6.727 37.47  0.00           C
ATOM    760  O   TYR A 190     -10.025  -4.529   6.412 37.47  0.00           O
ATOM    761  N   CYS A 191     -10.432  -6.665   5.835 32.14  0.00           N
ATOM    762  CA  CYS A 191     -10.428  -6.396   4.402 32.14  0.00           C
ATOM    763  C   CYS A 191     -11.374  -5.253   4.054 32.14  0.00           C
ATOM    764  O   CYS A 191     -12.595  -5.407   4.106 32.14  0.00           O
ATOM    765  N   ILE A 192     -10.804  -4.107   3.700 21.11  0.00           N
ATOM    766  CA  ILE A 192     -11.596  -2.938   3.334 21.11  0.00           C
ATOM    767  C   ILE A 192     -12.373  -3.181   2.047 21.11  0.00           C
ATOM    768  O   ILE A 192     -13.530  -2.778   1.922 21.11  0.00           O
ATOM    769  N   PHE A 193     -11.731  -3.840   1.089 33.12  0.00           N
ATOM    770  CA  PHE A 193     -12.351  -4.114  -0.202 33.12  0.00           C
ATOM    771  C   PHE A 193     -13.673  -4.851  -0.033 33.12  0.00           C
ATOM    772  O   PHE A 193     -14.658  -4.540  -0.704 33.12  0.00           O
ATOM    773  N   SER A 194     -13.689  -5.829   0.866 47.00  0.00           N
ATOM    774  CA  SER A 194     -14.839  -6.712   1.017 47.00  0.00           C
ATOM    775  C   SER A 194     -16.043  -5.958   1.566 47.00  0.00           C
ATOM    776  O   SER A 194     -17.175  -6.436   1.485 47.00  0.00           O
ATOM    777  N   VAL A 195     -15.793  -4.780   2.126 41.00  0.00           N
ATOM    778  CA  VAL A 195     -16.861  -3.944   2.664 41.00  0.00           C
ATOM    779  C   VAL A 195     -17.840  -3.534   1.572 41.00  0.00           C
ATOM    780  O   VAL A 195     -19.045  -3.440   1.809 41.00  0.00           O
ATOM    781  N   ILE A 196     -17.317  -3.288   0.376 42.60  0.00           N
ATOM    782  CA  ILE A 196     -18.149  -2.922  -0.764 42.60  0.00           C
ATOM    783  C   ILE A 196     -18.400  -4.119  -1.671 42.60  0.00           C
ATOM    784  O   ILE A 196     -19.522  -4.343  -2.123 42.60  0.00           O
ATOM    785  N   CYS A 197     -17.347  -4.886  -1.934 52.08  0.00           N
ATOM    786  CA  CYS A 197     -17.459  -6.082  -2.761 52.08  0.00           C
ATOM    787  C   CYS A 197     -16.514  -7.175  -2.279 52.08  0.00           C
ATOM    788  O   CYS A 197     -15.293  -7.036  -2.365 52.08  0.00           O
ATOM    789  N   PRO A 198     -17.085  -8.262  -1.772 46.10  0.00           N
ATOM    790  CA  PRO A 198     -16.295  -9.396  -1.307 46.10  0.00           C
ATOM    791  C   PRO A 198     -15.353  -9.896  -2.395 46.10  0.00           C
ATOM    792  O   PRO A 198     -15.726  -9.968  -3.566 46.10  0.00           O
ATOM    793  N   ALA A 199     -14.132 -10.239  -2.001 29.17  0.00           N
ATOM    794  CA  ALA A 199     -13.109 -10.655  -2.953 29.17  0.00           C
ATOM    795  C   ALA A 199     -13.340 -12.087  -3.420 29.17  0.00           C
ATOM    796  O   ALA A 199     -14.042 -12.857  -2.766 29.17  0.00           O
ATOM    797  N   LYS A 200     -12.745 -12.437  -4.556 51.72  0.00           N
ATOM    798  CA  LYS A 200     -12.793 -13.805  -5.056 51.72  0.00           C
ATOM    799  C   LYS A 200     -12.228 -14.785  -4.035 51.72  0.00           C
ATOM    800  O   LYS A 200     -12.727 -15.902  -3.891 51.72  0.00           O
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ATOM    801  N   LEU A 201     -11.187 -14.360  -3.329 46.35  0.00           N
ATOM    802  CA  LEU A 201     -10.613 -15.161  -2.255 46.35  0.00           C
ATOM    803  C   LEU A 201     -11.557 -15.242  -1.063 46.35  0.00           C
ATOM    804  O   LEU A 201     -11.734 -16.307  -0.470 46.35  0.00           O
ATOM    805  N   THR A 202     -12.162 -14.111  -0.715 44.58  0.00           N
ATOM    806  CA  THR A 202     -13.093 -14.053   0.406 44.58  0.00           C
ATOM    807  C   THR A 202     -14.063 -15.227   0.377 44.58  0.00           C
ATOM    808  O   THR A 202     -13.717 -16.302   0.783 44.58  0.00           O
TER     809      THR A 202
ENDMDL
END
REMARK   1 ****************************************************************************
REMARK   1 Start File DEC4_vs_NAT_dSi_colored.pdb
REMARK   1 The occupancy record was modified to represent dSi := Si(DEC)-Si(NAT).
REMARK   1 Occ=0.00 means dSi=-1.484741 kB; Occ=99.99 means dSi=1.546813 kB.
MODEL        0
ATOM      1  N   MET A   1      22.940  -3.371 -15.900 48.49  0.00           N
ATOM      2  CA  MET A   1      21.679  -3.206 -16.614 48.49  0.00           C
ATOM      3  C   MET A   1      20.708  -2.338 -15.824 48.49  0.00           C
ATOM      4  O   MET A   1      19.875  -1.639 -16.400 48.49  0.00           O
ATOM      5  N   ILE A   2      20.820  -2.387 -14.502 39.73  0.00           N
ATOM      6  CA  ILE A   2      19.952  -1.606 -13.629 39.73  0.00           C
ATOM      7  C   ILE A   2      20.651  -0.344 -13.141 39.73  0.00           C
ATOM      8  O   ILE A   2      21.639  -0.413 -12.409 39.73  0.00           O
ATOM      9  N   THR A   3      20.132   0.810 -13.548 54.25  0.00           N
ATOM     10  CA  THR A   3      20.740   2.088 -13.201 54.25  0.00           C
ATOM     11  C   THR A   3      20.262   2.574 -11.840 54.25  0.00           C
ATOM     12  O   THR A   3      19.353   1.993 -11.247 54.25  0.00           O
ATOM     13  N   GLU A   4      20.879   3.643 -11.348 44.58  0.00           N
ATOM     14  CA  GLU A   4      20.456   4.265 -10.099 44.58  0.00           C
ATOM     15  C   GLU A   4      18.987   4.663 -10.151 44.58  0.00           C
ATOM     16  O   GLU A   4      18.257   4.506  -9.172 44.58  0.00           O
ATOM     17  N   PHE A   5      18.558   5.178 -11.298 52.03  0.00           N
ATOM     18  CA  PHE A   5      17.154   5.505 -11.514 52.03  0.00           C
ATOM     19  C   PHE A   5      16.266   4.286 -11.301 52.03  0.00           C
ATOM     20  O   PHE A   5      15.275   4.348 -10.573 52.03  0.00           O
ATOM     21  N   LEU A   6      16.626   3.178 -11.941 45.33  0.00           N
ATOM     22  CA  LEU A   6      15.823   1.962 -11.878 45.33  0.00           C
ATOM     23  C   LEU A   6      15.843   1.361 -10.478 45.33  0.00           C
ATOM     24  O   LEU A   6      14.870   0.746 -10.043 45.33  0.00           O
ATOM     25  N   LEU A   7      16.957   1.543  -9.777 34.02  0.00           N
ATOM     26  CA  LEU A   7      17.069   1.107  -8.391 34.02  0.00           C
ATOM     27  C   LEU A   7      16.083   1.849  -7.497 34.02  0.00           C
ATOM     28  O   LEU A   7      15.365   1.237  -6.708 34.02  0.00           O
ATOM     29  N   LYS A   8      16.055   3.171  -7.627 38.58  0.00           N
ATOM     30  CA  LYS A   8      15.133   3.996  -6.857 38.58  0.00           C
ATOM     31  C   LYS A   8      13.688   3.729  -7.256 38.58  0.00           C
ATOM     32  O   LYS A   8      12.786   3.760  -6.419 38.58  0.00           O
ATOM     33  N   LYS A   9      13.473   3.466  -8.541 37.09  0.00           N
ATOM     34  CA  LYS A   9      12.150   3.114  -9.041 37.09  0.00           C
ATOM     35  C   LYS A   9      11.619   1.860  -8.359 37.09  0.00           C
ATOM     36  O   LYS A   9      10.482   1.831  -7.887 37.09  0.00           O
ATOM     37  N   LYS A  10      12.450   0.824  -8.308 45.03  0.00           N
ATOM     38  CA  LYS A  10      12.044  -0.456  -7.739 45.03  0.00           C
ATOM     39  C   LYS A  10      11.944  -0.377  -6.221 45.03  0.00           C
ATOM     40  O   LYS A  10      11.134  -1.071  -5.605 45.03  0.00           O
ATOM     41  N   LEU A  11      12.774   0.471  -5.622 27.27  0.00           N
ATOM     42  CA  LEU A  11      12.707   0.722  -4.187 27.27  0.00           C
ATOM     43  C   LEU A  11      11.367   1.331  -3.796 27.27  0.00           C
ATOM     44  O   LEU A  11      10.769   0.946  -2.790 27.27  0.00           O
ATOM     45  N   GLU A  12      10.899   2.282  -4.597 25.13  0.00           N
ATOM     46  CA  GLU A  12       9.606   2.915  -4.361 25.13  0.00           C
ATOM     47  C   GLU A  12       8.463   1.935  -4.590 25.13  0.00           C
ATOM     48  O   GLU A  12       7.483   1.925  -3.846 25.13  0.00           O
ATOM     49  N   GLU A  13       8.594   1.111  -5.625 28.47  0.00           N
ATOM     50  CA  GLU A  13       7.569   0.129  -5.958 28.47  0.00           C
ATOM     51  C   GLU A  13       7.478  -0.954  -4.890 28.47  0.00           C
ATOM     52  O   GLU A  13       6.392  -1.445  -4.582 28.47  0.00           O
ATOM     53  N   HIS A  14       8.624  -1.323  -4.330 20.56  0.00           N
ATOM     54  CA  HIS A  14       8.679  -2.368  -3.314 20.56  0.00           C
ATOM     55  C   HIS A  14       8.471  -1.793  -1.919 20.56  0.00           C
ATOM     56  O   HIS A  14       8.124  -2.515  -0.984 20.56  0.00           O
ATOM     57  N   LEU A  15       8.684  -0.489  -1.785  7.47  0.00           N
ATOM     58  CA  LEU A  15       8.359   0.218  -0.552  7.47  0.00           C
ATOM     59  C   LEU A  15       6.881   0.080  -0.211  7.47  0.00           C
ATOM     60  O   LEU A  15       6.514  -0.084   0.952  7.47  0.00           O
ATOM     61  N   SER A  16       6.034   0.147  -1.234 18.29  0.00           N
ATOM     62  CA  SER A  16       4.600  -0.041  -1.055 18.29  0.00           C
ATOM     63  C   SER A  16       4.278  -1.475  -0.654 18.29  0.00           C
ATOM     64  O   SER A  16       3.175  -1.769  -0.195 18.29  0.00           O
ATOM     65  N   HIS A  17       5.249  -2.366  -0.832 18.83  0.00           N
ATOM     66  CA  HIS A  17       5.069  -3.772  -0.492 18.83  0.00           C
ATOM     67  C   HIS A  17       5.478  -4.047   0.950 18.83  0.00           C
ATOM     68  O   HIS A  17       5.283  -5.148   1.461 18.83  0.00           O
ATOM     69  N   VAL A  18       6.045  -3.036   1.601 21.61  0.00           N
ATOM     70  CA  VAL A  18       6.578  -3.198   2.949 21.61  0.00           C
ATOM     71  C   VAL A  18       5.774  -2.388   3.959 21.61  0.00           C
ATOM     72  O   VAL A  18       5.456  -1.223   3.723 21.61  0.00           O
ATOM     73  N   LYS A  19       5.450  -3.012   5.085 41.33  0.00           N
ATOM     74  CA  LYS A  19       4.620  -2.378   6.102 41.33  0.00           C
ATOM     75  C   LYS A  19       5.293  -1.132   6.663 41.33  0.00           C
ATOM     76  O   LYS A  19       4.645  -0.108   6.880 41.33  0.00           O
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ATOM     77  N   GLU A  20       6.599  -1.224   6.895 49.34  0.00           N
ATOM     78  CA  GLU A  20       7.361  -0.106   7.438 49.34  0.00           C
ATOM     79  C   GLU A  20       7.122   1.166   6.635 49.34  0.00           C
ATOM     80  O   GLU A  20       7.280   1.180   5.415 49.34  0.00           O
ATOM     81  N   GLU A  21       6.739   2.233   7.327 48.16  0.00           N
ATOM     82  CA  GLU A  21       6.395   3.489   6.672 48.16  0.00           C
ATOM     83  C   GLU A  21       7.636   4.178   6.116 48.16  0.00           C
ATOM     84  O   GLU A  21       7.574   4.855   5.090 48.16  0.00           O
ATOM     85  N   ASN A  22       8.760   4.002   6.801 60.36  0.00           N
ATOM     86  CA  ASN A  22      10.012   4.627   6.392 60.36  0.00           C
ATOM     87  C   ASN A  22      10.488   4.083   5.051 60.36  0.00           C
ATOM     88  O   ASN A  22      10.222   2.931   4.708 60.36  0.00           O
ATOM     89  N   THR A  23      11.192   4.919   4.295 74.63  0.00           N
ATOM     90  CA  THR A  23      11.654   4.544   2.964 74.63  0.00           C
ATOM     91  C   THR A  23      12.794   3.537   3.040 74.63  0.00           C
ATOM     92  O   THR A  23      13.450   3.404   4.074 74.63  0.00           O
ATOM     93  N   ILE A  24      13.027   2.829   1.940 61.70  0.00           N
ATOM     94  CA  ILE A  24      14.033   1.774   1.905 61.70  0.00           C
ATOM     95  C   ILE A  24      15.075   2.043   0.827 61.70  0.00           C
ATOM     96  O   ILE A  24      14.772   2.632  -0.210 61.70  0.00           O
ATOM     97  N   TYR A  25      16.305   1.607   1.079 57.19  0.00           N
ATOM     98  CA  TYR A  25      17.397   1.805   0.133 57.19  0.00           C
ATOM     99  C   TYR A  25      18.289   0.573   0.055 57.19  0.00           C
ATOM    100  O   TYR A  25      18.571  -0.065   1.068 57.19  0.00           O
ATOM    101  N   VAL A  26      18.729   0.243  -1.154 64.40  0.00           N
ATOM    102  CA  VAL A  26      19.552  -0.940  -1.374 64.40  0.00           C
ATOM    103  C   VAL A  26      20.871  -0.842  -0.620 64.40  0.00           C
ATOM    104  O   VAL A  26      21.181  -1.687   0.221 64.40  0.00           O
ATOM    105  N   THR A  27      21.645   0.194  -0.922 61.12  0.00           N
ATOM    106  CA  THR A  27      22.972   0.355  -0.342 61.12  0.00           C
ATOM    107  C   THR A  27      22.906   0.402   1.179 61.12  0.00           C
ATOM    108  O   THR A  27      23.690  -0.256   1.864 61.12  0.00           O
ATOM    109  N   ASP A  28      21.966   1.181   1.703 60.47  0.00           N
ATOM    110  CA  ASP A  28      21.878   1.417   3.139 60.47  0.00           C
ATOM    111  C   ASP A  28      21.527   0.137   3.887 60.47  0.00           C
ATOM    112  O   ASP A  28      22.187  -0.224   4.861 60.47  0.00           O
ATOM    113  N   LEU A  29      20.486  -0.545   3.425 76.20  0.00           N
ATOM    114  CA  LEU A  29      19.945  -1.696   4.138 76.20  0.00           C
ATOM    115  C   LEU A  29      20.842  -2.917   3.973 76.20  0.00           C
ATOM    116  O   LEU A  29      20.889  -3.786   4.843 76.20  0.00           O
ATOM    117  N   VAL A  30      21.552  -2.976   2.852 58.21  0.00           N
ATOM    118  CA  VAL A  30      22.523  -4.037   2.615 58.21  0.00           C
ATOM    119  C   VAL A  30      23.752  -3.868   3.498 58.21  0.00           C
ATOM    120  O   VAL A  30      24.287  -4.842   4.028 58.21  0.00           O
ATOM    121  N   ARG A  31      24.195  -2.625   3.655 99.99  0.00           N
ATOM    122  CA  ARG A  31      25.314  -2.316   4.538 99.99  0.00           C
ATOM    123  C   ARG A  31      24.928  -2.495   6.000 99.99  0.00           C
ATOM    124  O   ARG A  31      25.746  -2.912   6.821 99.99  0.00           O
ATOM    125  N   CYS A  32      23.679  -2.176   6.321 78.31  0.00           N
ATOM    126  CA  CYS A  32      23.184  -2.297   7.686 78.31  0.00           C
ATOM    127  C   CYS A  32      23.117  -3.755   8.122 78.31  0.00           C
ATOM    128  O   CYS A  32      22.743  -4.629   7.341 78.31  0.00           O
ATOM    129  N   PRO A  33      23.482  -4.010   9.374 51.38  0.00           N
ATOM    130  CA  PRO A  33      23.412  -5.355   9.933 51.38  0.00           C
ATOM    131  C   PRO A  33      22.013  -5.939   9.792 51.38  0.00           C
ATOM    132  O   PRO A  33      21.835  -7.158   9.799 51.38  0.00           O
ATOM    133  N   ARG A  34      21.022  -5.064   9.662 62.75  0.00           N
ATOM    134  CA  ARG A  34      19.647  -5.491   9.435 62.75  0.00           C
ATOM    135  C   ARG A  34      19.584  -6.641   8.439 62.75  0.00           C
ATOM    136  O   ARG A  34      18.842  -7.604   8.632 62.75  0.00           O
ATOM    137  N   ARG A  35      20.370  -6.536   7.372 35.09  0.00           N
ATOM    138  CA  ARG A  35      20.418  -7.576   6.350 35.09  0.00           C
ATOM    139  C   ARG A  35      20.877  -8.904   6.937 35.09  0.00           C
ATOM    140  O   ARG A  35      20.329  -9.958   6.617 35.09  0.00           O
ATOM    141  N   VAL A  36      21.888  -8.846   7.798 55.22  0.00           N
ATOM    142  CA  VAL A  36      22.444 -10.048   8.408 55.22  0.00           C
ATOM    143  C   VAL A  36      21.400 -10.772   9.248 55.22  0.00           C
ATOM    144  O   VAL A  36      21.215 -11.982   9.119 55.22  0.00           O
ATOM    145  N   ARG A  37      20.721 -10.024  10.112 66.63  0.00           N
ATOM    146  CA  ARG A  37      19.624 -10.571  10.901 66.63  0.00           C
ATOM    147  C   ARG A  37      18.525 -11.128  10.006 66.63  0.00           C
ATOM    148  O   ARG A  37      18.002 -12.215  10.252 66.63  0.00           O
ATOM    149  N   TYR A  38      18.179 -10.376   8.966 51.44  0.00           N
ATOM    150  CA  TYR A  38      17.141 -10.795   8.031 51.44  0.00           C
ATOM    151  C   TYR A  38      17.469 -12.147   7.412 51.44  0.00           C
ATOM    152  O   TYR A  38      16.620 -13.037   7.356 51.44  0.00           O
ATOM    153  N   GLU A  39      18.705 -12.296   6.949 76.94  0.00           N
ATOM    154  CA  GLU A  39      19.132 -13.520   6.282 76.94  0.00           C
ATOM    155  C   GLU A  39      19.150 -14.697   7.250 76.94  0.00           C
ATOM    156  O   GLU A  39      18.839 -15.827   6.873 76.94  0.00           O
ATOM    157  N   SER A  40      19.515 -14.425   8.498 51.76  0.00           N
ATOM    158  CA  SER A  40      19.515 -15.447   9.536 51.76  0.00           C
ATOM    159  C   SER A  40      18.100 -15.923   9.840 51.76  0.00           C
ATOM    160  O   SER A  40      17.865 -17.114  10.045 51.76  0.00           O
ATOM    161  N   GLU A  41      17.158 -14.985   9.866 49.17  0.00           N
ATOM    162  CA  GLU A  41      15.761 -15.310  10.123 49.17  0.00           C
ATOM    163  C   GLU A  41      15.095 -15.897   8.885 49.17  0.00           C
ATOM    164  O   GLU A  41      14.186 -16.720   8.989 49.17  0.00           O
ATOM    165  N   TYR A  42      15.553 -15.469   7.714 54.89  0.00           N
ATOM    166  CA  TYR A  42      14.967 -15.910   6.454 54.89  0.00           C
ATOM    167  C   TYR A  42      16.023 -16.508   5.534 54.89  0.00           C
ATOM    168  O   TYR A  42      16.308 -15.967   4.465 54.89  0.00           O
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ATOM    169  N   LYS A  43      16.600 -17.628   5.955 62.62  0.00           N
ATOM    170  CA  LYS A  43      17.667 -18.271   5.197 62.62  0.00           C
ATOM    171  C   LYS A  43      17.150 -18.819   3.873 62.62  0.00           C
ATOM    172  O   LYS A  43      17.924 -19.064   2.948 62.62  0.00           O
ATOM    173  N   GLU A  44      15.837 -19.008   3.789 58.52  0.00           N
ATOM    174  CA  GLU A  44      15.217 -19.551   2.587 58.52  0.00           C
ATOM    175  C   GLU A  44      15.049 -18.475   1.521 58.52  0.00           C
ATOM    176  O   GLU A  44      14.828 -18.778   0.348 58.52  0.00           O
ATOM    177  N   LEU A  45      15.155 -17.217   1.936 58.40  0.00           N
ATOM    178  CA  LEU A  45      14.954 -16.092   1.028 58.40  0.00           C
ATOM    179  C   LEU A  45      16.286 -15.524   0.556 58.40  0.00           C
ATOM    180  O   LEU A  45      17.221 -15.372   1.341 58.40  0.00           O
ATOM    181  N   ALA A  46      16.365 -15.209  -0.733 72.70  0.00           N
ATOM    182  CA  ALA A  46      17.584 -14.658  -1.314 72.70  0.00           C
ATOM    183  C   ALA A  46      17.434 -13.169  -1.596 72.70  0.00           C
ATOM    184  O   ALA A  46      16.357 -12.701  -1.963 72.70  0.00           O
ATOM    185  N   ILE A  47      18.524 -12.427  -1.423 57.95  0.00           N
ATOM    186  CA  ILE A  47      18.524 -10.994  -1.688 57.95  0.00           C
ATOM    187  C   ILE A  47      19.415 -10.654  -2.877 57.95  0.00           C
ATOM    188  O   ILE A  47      20.595 -11.004  -2.900 57.95  0.00           O
ATOM    189  N   SER A  48      18.842  -9.972  -3.862 66.06  0.00           N
ATOM    190  CA  SER A  48      19.577  -9.602  -5.067 66.06  0.00           C
ATOM    191  C   SER A  48      20.474  -8.397  -4.817 66.06  0.00           C
ATOM    192  O   SER A  48      20.471  -7.824  -3.727 66.06  0.00           O
ATOM    193  N   GLN A  49      21.239  -8.016  -5.833 66.28  0.00           N
ATOM    194  CA  GLN A  49      22.124  -6.860  -5.735 66.28  0.00           C
ATOM    195  C   GLN A  49      21.419  -5.587  -6.184 66.28  0.00           C
ATOM    196  O   GLN A  49      22.009  -4.507  -6.187 66.28  0.00           O
ATOM    197  N   VAL A  50      20.151  -5.720  -6.562 60.14  0.00           N
ATOM    198  CA  VAL A  50      19.370  -4.584  -7.034 60.14  0.00           C
ATOM    199  C   VAL A  50      18.157  -4.342  -6.145 60.14  0.00           C
ATOM    200  O   VAL A  50      17.531  -3.284  -6.206 60.14  0.00           O
ATOM    201  N   TYR A  51      17.829  -5.329  -5.318 32.22  0.00           N
ATOM    202  CA  TYR A  51      16.739  -5.196  -4.359 32.22  0.00           C
ATOM    203  C   TYR A  51      17.267  -5.124  -2.932 32.22  0.00           C
ATOM    204  O   TYR A  51      18.234  -5.800  -2.582 32.22  0.00           O
ATOM    205  N   ALA A  52      16.627  -4.298  -2.111 41.28  0.00           N
ATOM    206  CA  ALA A  52      16.946  -4.232  -0.689 41.28  0.00           C
ATOM    207  C   ALA A  52      16.343  -5.410   0.065 41.28  0.00           C
ATOM    208  O   ALA A  52      15.367  -6.012  -0.382 41.28  0.00           O
ATOM    209  N   PRO A  53      16.932  -5.736   1.211 48.93  0.00           N
ATOM    210  CA  PRO A  53      16.404  -6.788   2.071 48.93  0.00           C
ATOM    211  C   PRO A  53      14.920  -6.582   2.346 48.93  0.00           C
ATOM    212  O   PRO A  53      14.144  -7.538   2.367 48.93  0.00           O
ATOM    213  N   SER A  54      14.530  -5.329   2.558 36.30  0.00           N
ATOM    214  CA  SER A  54      13.134  -4.993   2.804 36.30  0.00           C
ATOM    215  C   SER A  54      12.296  -5.162   1.543 36.30  0.00           C
ATOM    216  O   SER A  54      11.159  -5.632   1.599 36.30  0.00           O
ATOM    217  N   ALA A  55      12.864  -4.774   0.406 32.49  0.00           N
ATOM    218  CA  ALA A  55      12.202  -4.953  -0.881 32.49  0.00           C
ATOM    219  C   ALA A  55      11.919  -6.425  -1.155 32.49  0.00           C
ATOM    220  O   ALA A  55      10.871  -6.775  -1.698 32.49  0.00           O
ATOM    221  N   ILE A  56      12.860  -7.283  -0.777 36.07  0.00           N
ATOM    222  CA  ILE A  56      12.678  -8.725  -0.902 36.07  0.00           C
ATOM    223  C   ILE A  56      11.552  -9.217  -0.002 36.07  0.00           C
ATOM    224  O   ILE A  56      10.703 -10.002  -0.427 36.07  0.00           O
ATOM    225  N   LEU A  57      11.549  -8.752   1.242 30.30  0.00           N
ATOM    226  CA  LEU A  57      10.497  -9.104   2.189 30.30  0.00           C
ATOM    227  C   LEU A  57       9.118  -8.790   1.623 30.30  0.00           C
ATOM    228  O   LEU A  57       8.232  -9.643   1.611 30.30  0.00           O
ATOM    229  N   GLY A  58       8.943  -7.559   1.154 40.09  0.00           N
ATOM    230  CA  GLY A  58       7.654  -7.110   0.641 40.09  0.00           C
ATOM    231  C   GLY A  58       7.201  -7.966  -0.535 40.09  0.00           C
ATOM    232  O   GLY A  58       6.036  -8.356  -0.619 40.09  0.00           O
ATOM    233  N   ASP A  59       8.128  -8.256  -1.442 43.66  0.00           N
ATOM    234  CA  ASP A  59       7.826  -9.068  -2.613 43.66  0.00           C
ATOM    235  C   ASP A  59       7.396 -10.474  -2.212 43.66  0.00           C
ATOM    236  O   ASP A  59       6.446 -11.026  -2.770 43.66  0.00           O
ATOM    237  N   ILE A  60       8.100 -11.049  -1.245 47.37  0.00           N
ATOM    238  CA  ILE A  60       7.814 -12.405  -0.789 47.37  0.00           C
ATOM    239  C   ILE A  60       6.494 -12.464  -0.031 47.37  0.00           C
ATOM    240  O   ILE A  60       5.779 -13.464  -0.086 47.37  0.00           O
ATOM    241  N   LEU A  61       6.177 -11.386   0.679 37.07  0.00           N
ATOM    242  CA  LEU A  61       4.911 -11.286   1.395 37.07  0.00           C
ATOM    243  C   LEU A  61       3.731 -11.293   0.431 37.07  0.00           C
ATOM    244  O   LEU A  61       2.736 -11.982   0.660 37.07  0.00           O
ATOM    245  N   HIS A  62       3.848 -10.523  -0.645 40.48  0.00           N
ATOM    246  CA  HIS A  62       2.818 -10.489  -1.677 40.48  0.00           C
ATOM    247  C   HIS A  62       2.781 -11.794  -2.462 40.48  0.00           C
ATOM    248  O   HIS A  62       1.729 -12.206  -2.950 40.48  0.00           O
ATOM    249  N   LEU A  63       3.935 -12.441  -2.580 37.63  0.00           N
ATOM    250  CA  LEU A  63       4.016 -13.758  -3.201 37.63  0.00           C
ATOM    251  C   LEU A  63       3.261 -14.799  -2.385 37.63  0.00           C
ATOM    252  O   LEU A  63       2.559 -15.646  -2.938 37.63  0.00           O
ATOM    253  N   GLY A  64       3.409 -14.732  -1.066 32.57  0.00           N
ATOM    254  CA  GLY A  64       2.692 -15.629  -0.168 32.57  0.00           C
ATOM    255  C   GLY A  64       1.185 -15.430  -0.277 32.57  0.00           C
ATOM    256  O   GLY A  64       0.430 -16.395  -0.401 32.57  0.00           O
ATOM    257  N   LEU A  65       0.754 -14.175  -0.229 17.30  0.00           N
ATOM    258  CA  LEU A  65      -0.661 -13.846  -0.346 17.30  0.00           C
ATOM    259  C   LEU A  65      -1.201 -14.214  -1.722 17.30  0.00           C
ATOM    260  O   LEU A  65      -2.347 -14.640  -1.857 17.30  0.00           O
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ATOM    261  N   GLU A  66      -0.367 -14.044  -2.743 52.15  0.00           N
ATOM    262  CA  GLU A  66      -0.709 -14.480  -4.092 52.15  0.00           C
ATOM    263  C   GLU A  66      -1.008 -15.973  -4.130 52.15  0.00           C
ATOM    264  O   GLU A  66      -2.009 -16.402  -4.703 52.15  0.00           O
ATOM    265  N   SER A  67      -0.132 -16.763  -3.516 48.13  0.00           N
ATOM    266  CA  SER A  67      -0.279 -18.213  -3.513 48.13  0.00           C
ATOM    267  C   SER A  67      -1.530 -18.638  -2.755 48.13  0.00           C
ATOM    268  O   SER A  67      -2.250 -19.541  -3.182 48.13  0.00           O
ATOM    269  N   VAL A  68      -1.784 -17.983  -1.627 43.23  0.00           N
ATOM    270  CA  VAL A  68      -2.938 -18.305  -0.797 43.23  0.00           C
ATOM    271  C   VAL A  68      -4.242 -18.010  -1.527 43.23  0.00           C
ATOM    272  O   VAL A  68      -5.166 -18.823  -1.522 43.23  0.00           O
ATOM    273  N   LEU A  69      -4.311 -16.841  -2.155 36.64  0.00           N
ATOM    274  CA  LEU A  69      -5.508 -16.428  -2.877 36.64  0.00           C
ATOM    275  C   LEU A  69      -5.759 -17.320  -4.086 36.64  0.00           C
ATOM    276  O   LEU A  69      -6.878 -17.781  -4.309 36.64  0.00           O
ATOM    277  N   LYS A  70      -4.708 -17.560  -4.865 44.43  0.00           N
ATOM    278  CA  LYS A  70      -4.815 -18.385  -6.062 44.43  0.00           C
ATOM    279  C   LYS A  70      -5.133 -19.833  -5.707 44.43  0.00           C
ATOM    280  O   LYS A  70      -5.802 -20.535  -6.464 44.43  0.00           O
ATOM    281  N   GLY A  71      -4.650 -20.273  -4.550 47.19  0.00           N
ATOM    282  CA  GLY A  71      -4.967 -21.602  -4.043 47.19  0.00           C
ATOM    283  C   GLY A  71      -6.442 -21.716  -3.682 47.19  0.00           C
ATOM    284  O   GLY A  71      -7.105 -22.689  -4.042 47.19  0.00           O
ATOM    285  N   ASN A  72      -6.952 -20.718  -2.970 43.26  0.00           N
ATOM    286  CA  ASN A  72      -8.352 -20.701  -2.566 43.26  0.00           C
ATOM    287  C   ASN A  72      -8.819 -19.285  -2.255 43.26  0.00           C
ATOM    288  O   ASN A  72      -8.639 -18.792  -1.141 43.26  0.00           O
ATOM    289  N   PHE A  73      -9.419 -18.634  -3.246 39.90  0.00           N
ATOM    290  CA  PHE A  73      -9.900 -17.267  -3.084 39.90  0.00           C
ATOM    291  C   PHE A  73     -10.956 -17.180  -1.991 39.90  0.00           C
ATOM    292  O   PHE A  73     -11.075 -16.162  -1.309 39.90  0.00           O
ATOM    293  N   ASN A  74     -11.721 -18.254  -1.827 60.33  0.00           N
ATOM    294  CA  ASN A  74     -12.811 -18.278  -0.860 60.33  0.00           C
ATOM    295  C   ASN A  74     -12.282 -18.284   0.568 60.33  0.00           C
ATOM    296  O   ASN A  74     -12.955 -17.829   1.492 60.33  0.00           O
ATOM    297  N   ALA A  75     -11.070 -18.802   0.743 52.99  0.00           N
ATOM    298  CA  ALA A  75     -10.442 -18.856   2.057 52.99  0.00           C
ATOM    299  C   ALA A  75     -10.089 -17.460   2.555 52.99  0.00           C
ATOM    300  O   ALA A  75      -9.472 -16.671   1.839 52.99  0.00           O
ATOM    301  N   GLU A  76     -10.485 -17.160   3.788 61.81  0.00           N
ATOM    302  CA  GLU A  76     -10.231 -15.851   4.377 61.81  0.00           C
ATOM    303  C   GLU A  76      -8.749 -15.505   4.332 61.81  0.00           C
ATOM    304  O   GLU A  76      -7.919 -16.212   4.904 61.81  0.00           O
ATOM    305  N   THR A  77      -8.421 -14.412   3.651 66.18  0.00           N
ATOM    306  CA  THR A  77      -7.031 -14.016   3.459 66.18  0.00           C
ATOM    307  C   THR A  77      -6.825 -12.546   3.797 66.18  0.00           C
ATOM    308  O   THR A  77      -7.405 -11.666   3.162 66.18  0.00           O
ATOM    309  N   GLU A  78      -5.995 -12.286   4.802 71.90  0.00           N
ATOM    310  CA  GLU A  78      -5.709 -10.920   5.226 71.90  0.00           C
ATOM    311  C   GLU A  78      -4.668 -10.271   4.324 71.90  0.00           C
ATOM    312  O   GLU A  78      -3.494 -10.641   4.346 71.90  0.00           O
ATOM    313  N   VAL A  79      -5.105  -9.299   3.529 45.89  0.00           N
ATOM    314  CA  VAL A  79      -4.213  -8.602   2.610 45.89  0.00           C
ATOM    315  C   VAL A  79      -4.144  -7.114   2.929 45.89  0.00           C
ATOM    316  O   VAL A  79      -5.166  -6.427   2.949 45.89  0.00           O
ATOM    317  N   GLU A  80      -2.936  -6.623   3.180 26.43  0.00           N
ATOM    318  CA  GLU A  80      -2.721  -5.200   3.412 26.43  0.00           C
ATOM    319  C   GLU A  80      -1.443  -4.719   2.735 26.43  0.00           C
ATOM    320  O   GLU A  80      -0.424  -5.410   2.747 26.43  0.00           O
ATOM    321  N   THR A  81      -1.504  -3.531   2.144 34.54  0.00           N
ATOM    322  CA  THR A  81      -0.337  -2.929   1.512 34.54  0.00           C
ATOM    323  C   THR A  81      -0.143  -1.488   1.967 34.54  0.00           C
ATOM    324  O   THR A  81      -1.014  -0.911   2.618 34.54  0.00           O
ATOM    325  N   LEU A  82       1.003  -0.912   1.622 26.00  0.00           N
ATOM    326  CA  LEU A  82       1.323   0.454   2.017 26.00  0.00           C
ATOM    327  C   LEU A  82       1.090   1.428   0.869 26.00  0.00           C
ATOM    328  O   LEU A  82       1.534   1.196  -0.255 26.00  0.00           O
ATOM    329  N   ARG A  83       0.391   2.520   1.160  0.00  0.00           N
ATOM    330  CA  ARG A  83       0.134   3.553   0.164  0.00  0.00           C
ATOM    331  C   ARG A  83       0.347   4.945   0.745  0.00  0.00           C
ATOM    332  O   ARG A  83       0.076   5.185   1.922  0.00  0.00           O
ATOM    333  N   GLU A  84       0.835   5.860  -0.086 16.62  0.00           N
ATOM    334  CA  GLU A  84       1.049   7.240   0.334 16.62  0.00           C
ATOM    335  C   GLU A  84      -0.142   8.116  -0.029 16.62  0.00           C
ATOM    336  O   GLU A  84      -0.407   8.364  -1.206 16.62  0.00           O
ATOM    337  N   ILE A  85      -0.858   8.585   0.987 49.03  0.00           N
ATOM    338  CA  ILE A  85      -2.069   9.370   0.776 49.03  0.00           C
ATOM    339  C   ILE A  85      -2.007  10.693   1.527 49.03  0.00           C
ATOM    340  O   ILE A  85      -1.666  10.731   2.709 49.03  0.00           O
ATOM    341  N   ASN A  86      -2.337  11.778   0.833 23.99  0.00           N
ATOM    342  CA  ASN A  86      -2.324  13.105   1.436 23.99  0.00           C
ATOM    343  C   ASN A  86      -3.583  13.347   2.259 23.99  0.00           C
ATOM    344  O   ASN A  86      -4.681  13.458   1.714 23.99  0.00           O
ATOM    345  N   VAL A  87      -3.416  13.430   3.575 34.12  0.00           N
ATOM    346  CA  VAL A  87      -4.531  13.709   4.472 34.12  0.00           C
ATOM    347  C   VAL A  87      -4.343  15.041   5.188 34.12  0.00           C
ATOM    348  O   VAL A  87      -3.511  15.160   6.088 34.12  0.00           O
ATOM    349  N   GLY A  88      -5.119  16.040   4.782 45.20  0.00           N
ATOM    350  CA  GLY A  88      -5.113  17.335   5.452 45.20  0.00           C
ATOM    351  C   GLY A  88      -3.864  18.132   5.098 45.20  0.00           C
ATOM    352  O   GLY A  88      -3.455  19.024   5.841 45.20  0.00           O
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ATOM    353  N   GLY A  89      -3.263  17.805   3.959 44.67  0.00           N
ATOM    354  CA  GLY A  89      -2.093  18.530   3.475 44.67  0.00           C
ATOM    355  C   GLY A  89      -0.806  17.806   3.845 44.67  0.00           C
ATOM    356  O   GLY A  89       0.289  18.247   3.494 44.67  0.00           O
ATOM    357  N   LYS A  90      -0.941  16.691   4.555 48.32  0.00           N
ATOM    358  CA  LYS A  90       0.211  15.897   4.963 48.32  0.00           C
ATOM    359  C   LYS A  90       0.109  14.469   4.442 48.32  0.00           C
ATOM    360  O   LYS A  90      -0.873  13.773   4.698 48.32  0.00           O
ATOM    361  N   VAL A  91       1.130  14.039   3.708 38.80  0.00           N
ATOM    362  CA  VAL A  91       1.150  12.698   3.134 38.80  0.00           C
ATOM    363  C   VAL A  91       1.535  11.658   4.177 38.80  0.00           C
ATOM    364  O   VAL A  91       2.628  11.706   4.742 38.80  0.00           O
ATOM    365  N   TYR A  92       0.632  10.717   4.428 52.81  0.00           N
ATOM    366  CA  TYR A  92       0.885   9.648   5.388 52.81  0.00           C
ATOM    367  C   TYR A  92       1.035   8.304   4.687 52.81  0.00           C
ATOM    368  O   TYR A  92       0.397   8.049   3.666 52.81  0.00           O
ATOM    369  N   LYS A  93       1.885   7.445   5.241 52.93  0.00           N
ATOM    370  CA  LYS A  93       2.034   6.084   4.742 52.93  0.00           C
ATOM    371  C   LYS A  93       1.070   5.133   5.439 52.93  0.00           C
ATOM    372  O   LYS A  93       1.323   4.689   6.560 52.93  0.00           O
ATOM    373  N   ILE A  94      -0.035   4.824   4.771 51.17  0.00           N
ATOM    374  CA  ILE A  94      -1.116   4.063   5.387 51.17  0.00           C
ATOM    375  C   ILE A  94      -1.045   2.592   4.998 51.17  0.00           C
ATOM    376  O   ILE A  94      -1.013   2.254   3.814 51.17  0.00           O
ATOM    377  N   LYS A  95      -1.020   1.720   6.000 49.55  0.00           N
ATOM    378  CA  LYS A  95      -1.006   0.281   5.764 49.55  0.00           C
ATOM    379  C   LYS A  95      -2.388  -0.325   5.965 49.55  0.00           C
ATOM    380  O   LYS A  95      -2.947  -0.269   7.061 49.55  0.00           O
ATOM    381  N   GLY A  96      -2.935  -0.905   4.903 51.60  0.00           N
ATOM    382  CA  GLY A  96      -4.266  -1.499   4.954 51.60  0.00           C
ATOM    383  C   GLY A  96      -4.818  -1.737   3.554 51.60  0.00           C
ATOM    384  O   GLY A  96      -4.064  -1.980   2.612 51.60  0.00           O
ATOM    385  N   ARG A  97      -6.138  -1.665   3.425 35.35  0.00           N
ATOM    386  CA  ARG A  97      -6.790  -1.817   2.129 35.35  0.00           C
ATOM    387  C   ARG A  97      -7.449  -0.515   1.688 35.35  0.00           C
ATOM    388  O   ARG A  97      -7.552   0.434   2.466 35.35  0.00           O
ATOM    389  N   ALA A  98      -7.893  -0.477   0.437 48.81  0.00           N
ATOM    390  CA  ALA A  98      -8.488   0.728  -0.128 48.81  0.00           C
ATOM    391  C   ALA A  98      -9.726   1.149   0.651 48.81  0.00           C
ATOM    392  O   ALA A  98     -10.544   0.312   1.033 48.81  0.00           O
ATOM    393  N   ASP A  99      -9.859   2.450   0.883 46.60  0.00           N
ATOM    394  CA  ASP A  99     -10.974   2.980   1.659 46.60  0.00           C
ATOM    395  C   ASP A  99     -11.962   3.722   0.770 46.60  0.00           C
ATOM    396  O   ASP A  99     -13.164   3.740   1.038 46.60  0.00           O
ATOM    397  N   ALA A 100     -11.448   4.337  -0.292 51.50  0.00           N
ATOM    398  CA  ALA A 100     -12.283   5.090  -1.219 51.50  0.00           C
ATOM    399  C   ALA A 100     -11.772   4.963  -2.648 51.50  0.00           C
ATOM    400  O   ALA A 100     -10.564   4.892  -2.881 51.50  0.00           O
ATOM    401  N   ILE A 101     -12.696   4.937  -3.603 67.57  0.00           N
ATOM    402  CA  ILE A 101     -12.338   4.891  -5.016 67.57  0.00           C
ATOM    403  C   ILE A 101     -12.902   6.091  -5.766 67.57  0.00           C
ATOM    404  O   ILE A 101     -14.116   6.276  -5.835 67.57  0.00           O
ATOM    405  N   ILE A 102     -12.011   6.904  -6.325 54.39  0.00           N
ATOM    406  CA  ILE A 102     -12.416   8.116  -7.027 54.39  0.00           C
ATOM    407  C   ILE A 102     -11.694   8.248  -8.360 54.39  0.00           C
ATOM    408  O   ILE A 102     -10.702   7.563  -8.611 54.39  0.00           O
ATOM    409  N   ARG A 103     -12.198   9.131  -9.215 48.81  0.00           N
ATOM    410  CA  ARG A 103     -11.593   9.366 -10.522 48.81  0.00           C
ATOM    411  C   ARG A 103     -11.341  10.849 -10.754 48.81  0.00           C
ATOM    412  O   ARG A 103     -12.113  11.697 -10.307 48.81  0.00           O
ATOM    413  N   ASN A 104     -10.255  11.157 -11.456 49.62  0.00           N
ATOM    414  CA  ASN A 104      -9.877  12.541 -11.713 49.62  0.00           C
ATOM    415  C   ASN A 104     -10.598  13.091 -12.938 49.62  0.00           C
ATOM    416  O   ASN A 104     -11.453  12.423 -13.519 49.62  0.00           O
ATOM    417  N   ASP A 105     -10.249  14.313 -13.325 50.98  0.00           N
ATOM    418  CA  ASP A 105     -10.918  14.988 -14.431 50.98  0.00           C
ATOM    419  C   ASP A 105     -10.667  14.266 -15.748 50.98  0.00           C
ATOM    420  O   ASP A 105     -11.487  14.325 -16.664 50.98  0.00           O
ATOM    421  N   ASN A 106      -9.530  13.585 -15.838 41.30  0.00           N
ATOM    422  CA  ASN A 106      -9.168  12.854 -17.045 41.30  0.00           C
ATOM    423  C   ASN A 106      -9.917  11.531 -17.134 41.30  0.00           C
ATOM    424  O   ASN A 106      -9.914  10.874 -18.175 41.30  0.00           O
ATOM    425  N   GLY A 107     -10.558  11.146 -16.037 55.42  0.00           N
ATOM    426  CA  GLY A 107     -11.321   9.903 -15.991 55.42  0.00           C
ATOM    427  C   GLY A 107     -10.455   8.741 -15.523 55.42  0.00           C
ATOM    428  O   GLY A 107     -10.858   7.582 -15.603 55.42  0.00           O
ATOM    429  N   LYS A 108      -9.260   9.059 -15.036 47.85  0.00           N
ATOM    430  CA  LYS A 108      -8.331   8.042 -14.559 47.85  0.00           C
ATOM    431  C   LYS A 108      -8.643   7.642 -13.123 47.85  0.00           C
ATOM    432  O   LYS A 108      -9.087   8.465 -12.322 47.85  0.00           O
ATOM    433  N   SER A 109      -8.407   6.374 -12.801 50.40  0.00           N
ATOM    434  CA  SER A 109      -8.781   5.830 -11.502 50.40  0.00           C
ATOM    435  C   SER A 109      -7.831   6.306 -10.411 50.40  0.00           C
ATOM    436  O   SER A 109      -6.650   6.545 -10.664 50.40  0.00           O
ATOM    437  N   ILE A 110      -8.353   6.442  -9.196 39.96  0.00           N
ATOM    438  CA  ILE A 110      -7.536   6.817  -8.049 39.96  0.00           C
ATOM    439  C   ILE A 110      -7.901   5.996  -6.820 39.96  0.00           C
ATOM    440  O   ILE A 110      -9.064   5.950  -6.416 39.96  0.00           O
ATOM    441  N   VAL A 111      -6.903   5.348  -6.230 55.49  0.00           N
ATOM    442  CA  VAL A 111      -7.106   4.583  -5.005 55.49  0.00           C
ATOM    443  C   VAL A 111      -6.747   5.406  -3.775 55.49  0.00           C
ATOM    444  O   VAL A 111      -5.591   5.784  -3.584 55.49  0.00           O
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ATOM    445  N   ILE A 112      -7.746   5.684  -2.943 50.38  0.00           N
ATOM    446  CA  ILE A 112      -7.534   6.451  -1.722 50.38  0.00           C
ATOM    447  C   ILE A 112      -7.616   5.559  -0.490 50.38  0.00           C
ATOM    448  O   ILE A 112      -8.530   4.745  -0.359 50.38  0.00           O
ATOM    449  N   GLU A 113      -6.654   5.717   0.414 55.15  0.00           N
ATOM    450  CA  GLU A 113      -6.598   4.905   1.623 55.15  0.00           C
ATOM    451  C   GLU A 113      -6.339   5.766   2.854 55.15  0.00           C
ATOM    452  O   GLU A 113      -5.226   6.247   3.063 55.15  0.00           O
ATOM    453  N   ILE A 114      -7.374   5.956   3.665 49.82  0.00           N
ATOM    454  CA  ILE A 114      -7.273   6.796   4.852 49.82  0.00           C
ATOM    455  C   ILE A 114      -7.759   6.058   6.092 49.82  0.00           C
ATOM    456  O   ILE A 114      -8.959   5.849   6.272 49.82  0.00           O
ATOM    457  N   LYS A 115      -6.820   5.664   6.946 55.94  0.00           N
ATOM    458  CA  LYS A 115      -7.152   4.951   8.175 55.94  0.00           C
ATOM    459  C   LYS A 115      -6.577   5.661   9.395 55.94  0.00           C
ATOM    460  O   LYS A 115      -5.588   6.385   9.294 55.94  0.00           O
ATOM    461  N   THR A 116      -7.205   5.447  10.546 47.50  0.00           N
ATOM    462  CA  THR A 116      -6.766   6.076  11.786 47.50  0.00           C
ATOM    463  C   THR A 116      -5.408   5.542  12.224 47.50  0.00           C
ATOM    464  O   THR A 116      -5.008   4.444  11.837 47.50  0.00           O
ATOM    465  N   SER A 117      -4.703   6.325  13.034 38.09  0.00           N
ATOM    466  CA  SER A 117      -3.351   5.976  13.451 38.09  0.00           C
ATOM    467  C   SER A 117      -3.336   4.667  14.231 38.09  0.00           C
ATOM    468  O   SER A 117      -3.975   4.548  15.277 38.09  0.00           O
ATOM    469  N   ARG A 118      -2.604   3.685  13.716 50.72  0.00           N
ATOM    470  CA  ARG A 118      -2.512   2.380  14.358 50.72  0.00           C
ATOM    471  C   ARG A 118      -1.557   2.416  15.545 50.72  0.00           C
ATOM    472  O   ARG A 118      -0.610   3.203  15.568 50.72  0.00           O
ATOM    473  N   SER A 119      -1.808   1.558  16.527 49.06  0.00           N
ATOM    474  CA  SER A 119      -1.040   1.564  17.765 49.06  0.00           C
ATOM    475  C   SER A 119       0.425   1.233  17.506 49.06  0.00           C
ATOM    476  O   SER A 119       0.739   0.318  16.746 49.06  0.00           O
ATOM    477  N   ASP A 120       1.317   1.983  18.143 54.49  0.00           N
ATOM    478  CA  ASP A 120       2.749   1.729  18.034 54.49  0.00           C
ATOM    479  C   ASP A 120       3.481   2.147  19.303 54.49  0.00           C
ATOM    480  O   ASP A 120       3.459   3.317  19.687 54.49  0.00           O
ATOM    481  N   LYS A 121       4.128   1.185  19.950 48.74  0.00           N
ATOM    482  CA  LYS A 121       4.779   1.428  21.233 48.74  0.00           C
ATOM    483  C   LYS A 121       5.914   2.434  21.092 48.74  0.00           C
ATOM    484  O   LYS A 121       6.314   3.074  22.065 48.74  0.00           O
ATOM    485  N   GLY A 122       6.431   2.570  19.876 52.58  0.00           N
ATOM    486  CA  GLY A 122       7.548   3.470  19.614 52.58  0.00           C
ATOM    487  C   GLY A 122       7.077   4.914  19.493 52.58  0.00           C
ATOM    488  O   GLY A 122       7.883   5.844  19.515 52.58  0.00           O
ATOM    489  N   LEU A 123       5.767   5.094  19.363 73.63  0.00           N
ATOM    490  CA  LEU A 123       5.190   6.422  19.193 73.63  0.00           C
ATOM    491  C   LEU A 123       4.311   6.796  20.381 73.63  0.00           C
ATOM    492  O   LEU A 123       3.643   5.942  20.963 73.63  0.00           O
ATOM    493  N   PRO A 124       4.317   8.077  20.734 60.33  0.00           N
ATOM    494  CA  PRO A 124       3.503   8.570  21.838 60.33  0.00           C
ATOM    495  C   PRO A 124       2.026   8.284  21.604 60.33  0.00           C
ATOM    496  O   PRO A 124       1.556   8.288  20.466 60.33  0.00           O
ATOM    497  N   LEU A 125       1.297   8.036  22.687 46.18  0.00           N
ATOM    498  CA  LEU A 125      -0.146   7.843  22.612 46.18  0.00           C
ATOM    499  C   LEU A 125      -0.844   9.099  22.107 46.18  0.00           C
ATOM    500  O   LEU A 125      -1.748   9.027  21.275 46.18  0.00           O
ATOM    501  N   ILE A 126      -0.420  10.252  22.615 54.49  0.00           N
ATOM    502  CA  ILE A 126      -0.942  11.532  22.154 54.49  0.00           C
ATOM    503  C   ILE A 126      -0.661  11.740  20.672 54.49  0.00           C
ATOM    504  O   ILE A 126      -1.506  12.249  19.935 54.49  0.00           O
ATOM    505  N   HIS A 127       0.532  11.345  20.241 57.34  0.00           N
ATOM    506  CA  HIS A 127       0.884  11.375  18.826 57.34  0.00           C
ATOM    507  C   HIS A 127      -0.125  10.598  17.990 57.34  0.00           C
ATOM    508  O   HIS A 127      -0.563  11.062  16.939 57.34  0.00           O
ATOM    509  N   HIS A 128      -0.490   9.411  18.465 49.74  0.00           N
ATOM    510  CA  HIS A 128      -1.498   8.596  17.799 49.74  0.00           C
ATOM    511  C   HIS A 128      -2.850   9.299  17.780 49.74  0.00           C
ATOM    512  O   HIS A 128      -3.566   9.261  16.779 49.74  0.00           O
ATOM    513  N   LYS A 129      -3.195   9.938  18.893 85.68  0.00           N
ATOM    514  CA  LYS A 129      -4.480  10.613  19.022 85.68  0.00           C
ATOM    515  C   LYS A 129      -4.596  11.770  18.039 85.68  0.00           C
ATOM    516  O   LYS A 129      -5.650  11.987  17.441 85.68  0.00           O
ATOM    517  N   MET A 130      -3.506  12.513  17.877 84.86  0.00           N
ATOM    518  CA  MET A 130      -3.494  13.673  16.994 84.86  0.00           C
ATOM    519  C   MET A 130      -3.703  13.262  15.542 84.86  0.00           C
ATOM    520  O   MET A 130      -4.511  13.857  14.828 84.86  0.00           O
ATOM    521  N   GLN A 131      -2.970  12.242  15.109 72.35  0.00           N
ATOM    522  CA  GLN A 131      -3.103  11.724  13.754 72.35  0.00           C
ATOM    523  C   GLN A 131      -4.484  11.120  13.528 72.35  0.00           C
ATOM    524  O   GLN A 131      -5.106  11.339  12.489 72.35  0.00           O
ATOM    525  N   LEU A 132      -4.957  10.358  14.508 55.73  0.00           N
ATOM    526  CA  LEU A 132      -6.292   9.773  14.446 55.73  0.00           C
ATOM    527  C   LEU A 132      -7.343  10.831  14.141 55.73  0.00           C
ATOM    528  O   LEU A 132      -8.191  10.644  13.268 55.73  0.00           O
ATOM    529  N   GLN A 133      -7.284  11.944  14.865 90.16  0.00           N
ATOM    530  CA  GLN A 133      -8.214  13.046  14.653 90.16  0.00           C
ATOM    531  C   GLN A 133      -8.078  13.619  13.248 90.16  0.00           C
ATOM    532  O   GLN A 133      -9.075  13.899  12.583 90.16  0.00           O
ATOM    533  N   ILE A 134      -6.839  13.792  12.803 63.70  0.00           N
ATOM    534  CA  ILE A 134      -6.570  14.325  11.472 63.70  0.00           C
ATOM    535  C   ILE A 134      -7.221  13.467  10.394 63.70  0.00           C
ATOM    536  O   ILE A 134      -7.805  13.988   9.443 63.70  0.00           O
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ATOM    537  N   TYR A 135      -7.119  12.153  10.548 52.62  0.00           N
ATOM    538  CA  TYR A 135      -7.697  11.221   9.588 52.62  0.00           C
ATOM    539  C   TYR A 135      -9.216  11.329   9.561 52.62  0.00           C
ATOM    540  O   TYR A 135      -9.830  11.323   8.493 52.62  0.00           O
ATOM    541  N   LEU A 136      -9.818  11.429  10.741 79.77  0.00           N
ATOM    542  CA  LEU A 136     -11.271  11.487  10.858 79.77  0.00           C
ATOM    543  C   LEU A 136     -11.803  12.851  10.438 79.77  0.00           C
ATOM    544  O   LEU A 136     -12.953  12.976  10.017 79.77  0.00           O
ATOM    545  N   TRP A 137     -10.961  13.871  10.557 62.11  0.00           N
ATOM    546  CA  TRP A 137     -11.339  15.226  10.170 62.11  0.00           C
ATOM    547  C   TRP A 137     -11.617  15.314   8.676 62.11  0.00           C
ATOM    548  O   TRP A 137     -12.650  15.834   8.256 62.11  0.00           O
ATOM    549  N   LEU A 138     -10.687  14.804   7.875 52.60  0.00           N
ATOM    550  CA  LEU A 138     -10.844  14.799   6.424 52.60  0.00           C
ATOM    551  C   LEU A 138     -11.970  13.868   5.995 52.60  0.00           C
ATOM    552  O   LEU A 138     -12.740  14.187   5.088 52.60  0.00           O
ATOM    553  N   PHE A 139     -12.064  12.718   6.653 56.87  0.00           N
ATOM    554  CA  PHE A 139     -13.124  11.758   6.370 56.87  0.00           C
ATOM    555  C   PHE A 139     -14.500  12.384   6.566 56.87  0.00           C
ATOM    556  O   PHE A 139     -15.374  12.268   5.707 56.87  0.00           O
ATOM    557  N   SER A 140     -14.686  13.048   7.701 58.25  0.00           N
ATOM    558  CA  SER A 140     -15.982  13.617   8.054 58.25  0.00           C
ATOM    559  C   SER A 140     -16.238  14.914   7.298 58.25  0.00           C
ATOM    560  O   SER A 140     -17.385  15.320   7.112 58.25  0.00           O
ATOM    561  N   ALA A 141     -15.162  15.563   6.866 50.28  0.00           N
ATOM    562  CA  ALA A 141     -15.270  16.801   6.103 50.28  0.00           C
ATOM    563  C   ALA A 141     -16.076  16.594   4.827 50.28  0.00           C
ATOM    564  O   ALA A 141     -15.862  15.627   4.096 50.28  0.00           O
ATOM    565  N   GLU A 142     -17.004  17.507   4.565 51.95  0.00           N
ATOM    566  CA  GLU A 142     -17.817  17.450   3.356 51.95  0.00           C
ATOM    567  C   GLU A 142     -16.973  17.697   2.112 51.95  0.00           C
ATOM    568  O   GLU A 142     -17.030  16.933   1.149 51.95  0.00           O
ATOM    569  N   LYS A 143     -16.189  18.770   2.140 77.71  0.00           N
ATOM    570  CA  LYS A 143     -15.351  19.135   1.004 77.71  0.00           C
ATOM    571  C   LYS A 143     -13.873  18.961   1.332 77.71  0.00           C
ATOM    572  O   LYS A 143     -13.460  19.117   2.481 77.71  0.00           O
ATOM    573  N   GLY A 144     -13.081  18.636   0.316 59.28  0.00           N
ATOM    574  CA  GLY A 144     -11.638  18.507   0.481 59.28  0.00           C
ATOM    575  C   GLY A 144     -10.987  17.958  -0.783 59.28  0.00           C
ATOM    576  O   GLY A 144     -11.667  17.668  -1.768 59.28  0.00           O
ATOM    577  N   ILE A 145      -9.666  17.818  -0.748 67.60  0.00           N
ATOM    578  CA  ILE A 145      -8.921  17.294  -1.887 67.60  0.00           C
ATOM    579  C   ILE A 145      -8.173  16.020  -1.516 67.60  0.00           C
ATOM    580  O   ILE A 145      -7.423  15.991  -0.539 67.60  0.00           O
ATOM    581  N   LEU A 146      -8.381  14.968  -2.301 54.97  0.00           N
ATOM    582  CA  LEU A 146      -7.711  13.694  -2.067 54.97  0.00           C
ATOM    583  C   LEU A 146      -6.575  13.478  -3.058 54.97  0.00           C
ATOM    584  O   LEU A 146      -6.752  13.644  -4.265 54.97  0.00           O
ATOM    585  N   VAL A 147      -5.409  13.105  -2.543 46.30  0.00           N
ATOM    586  CA  VAL A 147      -4.211  12.987  -3.365 46.30  0.00           C
ATOM    587  C   VAL A 147      -3.556  11.623  -3.191 46.30  0.00           C
ATOM    588  O   VAL A 147      -3.260  11.204  -2.072 46.30  0.00           O
ATOM    589  N   TYR A 148      -3.333  10.933  -4.304 50.57  0.00           N
ATOM    590  CA  TYR A 148      -2.767   9.590  -4.273 50.57  0.00           C
ATOM    591  C   TYR A 148      -1.394   9.554  -4.930 50.57  0.00           C
ATOM    592  O   TYR A 148      -1.268   9.755  -6.138 50.57  0.00           O
ATOM    593  N   ILE A 149      -0.366   9.297  -4.129 43.47  0.00           N
ATOM    594  CA  ILE A 149       1.010   9.343  -4.609 43.47  0.00           C
ATOM    595  C   ILE A 149       1.490   7.962  -5.039 43.47  0.00           C
ATOM    596  O   ILE A 149       1.446   7.010  -4.261 43.47  0.00           O
ATOM    597  N   THR A 150       1.946   7.861  -6.282 49.22  0.00           N
ATOM    598  CA  THR A 150       2.562   6.635  -6.775 49.22  0.00           C
ATOM    599  C   THR A 150       4.019   6.863  -7.154 49.22  0.00           C
ATOM    600  O   THR A 150       4.459   8.002  -7.307 49.22  0.00           O
ATOM    601  N   PRO A 151       4.763   5.772  -7.306 41.72  0.00           N
ATOM    602  CA  PRO A 151       6.179   5.853  -7.645 41.72  0.00           C
ATOM    603  C   PRO A 151       6.395   6.667  -8.914 41.72  0.00           C
ATOM    604  O   PRO A 151       7.421   7.329  -9.071 41.72  0.00           O
ATOM    605  N   ASP A 152       5.423   6.616  -9.817 44.73  0.00           N
ATOM    606  CA  ASP A 152       5.532   7.300 -11.101 44.73  0.00           C
ATOM    607  C   ASP A 152       4.993   8.721 -11.015 44.73  0.00           C
ATOM    608  O   ASP A 152       5.706   9.685 -11.297 44.73  0.00           O
ATOM    609  N   ARG A 153       3.728   8.846 -10.626 52.13  0.00           N
ATOM    610  CA  ARG A 153       3.024  10.120 -10.706 52.13  0.00           C
ATOM    611  C   ARG A 153       2.146  10.343  -9.481 52.13  0.00           C
ATOM    612  O   ARG A 153       1.921   9.425  -8.692 52.13  0.00           O
ATOM    613  N   ILE A 154       1.652  11.566  -9.327 42.27  0.00           N
ATOM    614  CA  ILE A 154       0.750  11.897  -8.230 42.27  0.00           C
ATOM    615  C   ILE A 154      -0.618  12.317  -8.750 42.27  0.00           C
ATOM    616  O   ILE A 154      -0.743  13.313  -9.462 42.27  0.00           O
ATOM    617  N   ALA A 155      -1.643  11.554  -8.388 45.33  0.00           N
ATOM    618  CA  ALA A 155      -3.006  11.847  -8.816 45.33  0.00           C
ATOM    619  C   ALA A 155      -3.734  12.702  -7.788 45.33  0.00           C
ATOM    620  O   ALA A 155      -3.501  12.577  -6.585 45.33  0.00           O
ATOM    621  N   GLU A 156      -4.619  13.570  -8.266 43.25  0.00           N
ATOM    622  CA  GLU A 156      -5.316  14.511  -7.398 43.25  0.00           C
ATOM    623  C   GLU A 156      -6.741  14.752  -7.877 43.25  0.00           C
ATOM    624  O   GLU A 156      -6.981  14.948  -9.069 43.25  0.00           O
ATOM    625  N   TYR A 157      -7.685  14.734  -6.943 49.46  0.00           N
ATOM    626  CA  TYR A 157      -9.081  15.016  -7.259 49.46  0.00           C
ATOM    627  C   TYR A 157      -9.804  15.622  -6.064 49.46  0.00           C
ATOM    628  O   TYR A 157      -9.726  15.104  -4.949 49.46  0.00           O
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ATOM    629  N   GLU A 158     -10.510  16.723  -6.300 47.41  0.00           N
ATOM    630  CA  GLU A 158     -11.288  17.375  -5.254 47.41  0.00           C
ATOM    631  C   GLU A 158     -12.675  16.758  -5.134 47.41  0.00           C
ATOM    632  O   GLU A 158     -13.337  16.493  -6.136 47.41  0.00           O
ATOM    633  N   ILE A 159     -13.110  16.531  -3.899 51.83  0.00           N
ATOM    634  CA  ILE A 159     -14.441  15.993  -3.642 51.83  0.00           C
ATOM    635  C   ILE A 159     -15.297  16.987  -2.868 51.83  0.00           C
ATOM    636  O   ILE A 159     -14.781  17.797  -2.097 51.83  0.00           O
ATOM    637  N   ASN A 160     -16.607  16.922  -3.077 61.93  0.00           N
ATOM    638  CA  ASN A 160     -17.536  17.825  -2.408 61.93  0.00           C
ATOM    639  C   ASN A 160     -18.543  17.053  -1.563 61.93  0.00           C
ATOM    640  O   ASN A 160     -19.567  17.597  -1.151 61.93  0.00           O
ATOM    641  N   GLU A 161     -18.244  15.783  -1.310 47.82  0.00           N
ATOM    642  CA  GLU A 161     -19.142  14.924  -0.548 47.82  0.00           C
ATOM    643  C   GLU A 161     -18.371  13.825   0.173 47.82  0.00           C
ATOM    644  O   GLU A 161     -17.489  13.191  -0.405 47.82  0.00           O
ATOM    645  N   PRO A 162     -18.712  13.603   1.438 55.75  0.00           N
ATOM    646  CA  PRO A 162     -18.103  12.533   2.219 55.75  0.00           C
ATOM    647  C   PRO A 162     -18.227  11.192   1.507 55.75  0.00           C
ATOM    648  O   PRO A 162     -19.284  10.858   0.972 55.75  0.00           O
ATOM    649  N   LEU A 163     -17.140  10.427   1.504 62.98  0.00           N
ATOM    650  CA  LEU A 163     -17.111   9.141   0.818 62.98  0.00           C
ATOM    651  C   LEU A 163     -17.369   7.995   1.788 62.98  0.00           C
ATOM    652  O   LEU A 163     -16.910   8.018   2.930 62.98  0.00           O
ATOM    653  N   ASP A 164     -18.107   6.991   1.326 51.91  0.00           N
ATOM    654  CA  ASP A 164     -18.512   5.880   2.180 51.91  0.00           C
ATOM    655  C   ASP A 164     -17.432   4.809   2.240 51.91  0.00           C
ATOM    656  O   ASP A 164     -17.272   4.022   1.306 51.91  0.00           O
ATOM    657  N   GLU A 165     -16.692   4.782   3.343 46.92  0.00           N
ATOM    658  CA  GLU A 165     -15.608   3.822   3.516 46.92  0.00           C
ATOM    659  C   GLU A 165     -16.141   2.394   3.565 46.92  0.00           C
ATOM    660  O   GLU A 165     -15.557   1.484   2.978 46.92  0.00           O
ATOM    661  N   ALA A 166     -17.251   2.207   4.270 53.66  0.00           N
ATOM    662  CA  ALA A 166     -17.793   0.874   4.504 53.66  0.00           C
ATOM    663  C   ALA A 166     -18.098   0.165   3.191 53.66  0.00           C
ATOM    664  O   ALA A 166     -17.767  -1.008   3.017 53.66  0.00           O
ATOM    665  N   THR A 167     -18.730   0.883   2.269 56.37  0.00           N
ATOM    666  CA  THR A 167     -19.137   0.305   0.993 56.37  0.00           C
ATOM    667  C   THR A 167     -17.929  -0.154   0.187 56.37  0.00           C
ATOM    668  O   THR A 167     -17.895  -1.277  -0.314 56.37  0.00           O
ATOM    669  N   ILE A 168     -16.937   0.723   0.065 67.38  0.00           N
ATOM    670  CA  ILE A 168     -15.758   0.437  -0.742 67.38  0.00           C
ATOM    671  C   ILE A 168     -14.958  -0.721  -0.158 67.38  0.00           C
ATOM    672  O   ILE A 168     -14.499  -1.601  -0.887 67.38  0.00           O
ATOM    673  N   VAL A 169     -14.794  -0.715   1.160 49.35  0.00           N
ATOM    674  CA  VAL A 169     -14.045  -1.762   1.844 49.35  0.00           C
ATOM    675  C   VAL A 169     -14.743  -3.110   1.718 49.35  0.00           C
ATOM    676  O   VAL A 169     -14.100  -4.134   1.488 49.35  0.00           O
ATOM    677  N   ARG A 170     -16.063  -3.103   1.872 56.01  0.00           N
ATOM    678  CA  ARG A 170     -16.852  -4.325   1.766 56.01  0.00           C
ATOM    679  C   ARG A 170     -16.792  -4.899   0.358 56.01  0.00           C
ATOM    680  O   ARG A 170     -16.685  -6.112   0.175 56.01  0.00           O
ATOM    681  N   LEU A 171     -16.861  -4.022  -0.637 73.24  0.00           N
ATOM    682  CA  LEU A 171     -16.757  -4.434  -2.032 73.24  0.00           C
ATOM    683  C   LEU A 171     -15.373  -4.992  -2.338 73.24  0.00           C
ATOM    684  O   LEU A 171     -15.235  -5.961  -3.085 73.24  0.00           O
ATOM    685  N   ALA A 172     -14.350  -4.372  -1.760 49.39  0.00           N
ATOM    686  CA  ALA A 172     -12.977  -4.828  -1.941 49.39  0.00           C
ATOM    687  C   ALA A 172     -12.782  -6.228  -1.374 49.39  0.00           C
ATOM    688  O   ALA A 172     -12.154  -7.080  -2.003 49.39  0.00           O
ATOM    689  N   GLU A 173     -13.324  -6.460  -0.184 55.60  0.00           N
ATOM    690  CA  GLU A 173     -13.204  -7.756   0.473 55.60  0.00           C
ATOM    691  C   GLU A 173     -14.016  -8.820  -0.256 55.60  0.00           C
ATOM    692  O   GLU A 173     -13.630  -9.988  -0.298 55.60  0.00           O
ATOM    693  N   ASP A 174     -15.142  -8.408  -0.828 44.03  0.00           N
ATOM    694  CA  ASP A 174     -15.931  -9.285  -1.685 44.03  0.00           C
ATOM    695  C   ASP A 174     -15.164  -9.662  -2.944 44.03  0.00           C
ATOM    696  O   ASP A 174     -15.253 -10.794  -3.423 44.03  0.00           O
ATOM    697  N   THR A 175     -14.408  -8.708  -3.479 49.85  0.00           N
ATOM    698  CA  THR A 175     -13.555  -8.963  -4.633 49.85  0.00           C
ATOM    699  C   THR A 175     -12.449  -9.955  -4.293 49.85  0.00           C
ATOM    700  O   THR A 175     -12.105 -10.817  -5.101 49.85  0.00           O
ATOM    701  N   ILE A 176     -11.896  -9.827  -3.091 17.70  0.00           N
ATOM    702  CA  ILE A 176     -10.885 -10.761  -2.610 17.70  0.00           C
ATOM    703  C   ILE A 176     -11.434 -12.181  -2.544 17.70  0.00           C
ATOM    704  O   ILE A 176     -10.776 -13.130  -2.971 17.70  0.00           O
ATOM    705  N   MET A 177     -12.640 -12.319  -2.008 27.24  0.00           N
ATOM    706  CA  MET A 177     -13.287 -13.621  -1.902 27.24  0.00           C
ATOM    707  C   MET A 177     -13.656 -14.166  -3.276 27.24  0.00           C
ATOM    708  O   MET A 177     -13.596 -15.372  -3.514 27.24  0.00           O
ATOM    709  N   LEU A 178     -14.039 -13.270  -4.180 45.20  0.00           N
ATOM    710  CA  LEU A 178     -14.426 -13.659  -5.530 45.20  0.00           C
ATOM    711  C   LEU A 178     -13.247 -14.252  -6.292 45.20  0.00           C
ATOM    712  O   LEU A 178     -12.191 -13.630  -6.401 45.20  0.00           O
ATOM    713  N   GLN A 179     -13.435 -15.458  -6.818 46.50  0.00           N
ATOM    714  CA  GLN A 179     -12.409 -16.111  -7.622 46.50  0.00           C
ATOM    715  C   GLN A 179     -12.236 -15.414  -8.965 46.50  0.00           C
ATOM    716  O   GLN A 179     -11.153 -14.926  -9.287 46.50  0.00           O
ATOM    717  N   ASN A 180     -13.309 -15.370  -9.747 46.72  0.00           N
ATOM    718  CA  ASN A 180     -13.291 -14.692 -11.037 46.72  0.00           C
ATOM    719  C   ASN A 180     -13.454 -13.186 -10.871 46.72  0.00           C
ATOM    720  O   ASN A 180     -14.491 -12.622 -11.221 46.72  0.00           O
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ATOM    721  N   SER A 181     -12.424 -12.541 -10.334 59.21  0.00           N
ATOM    722  CA  SER A 181     -12.480 -11.112 -10.049 59.21  0.00           C
ATOM    723  C   SER A 181     -12.416 -10.292 -11.331 59.21  0.00           C
ATOM    724  O   SER A 181     -11.943 -10.770 -12.362 59.21  0.00           O
ATOM    725  N   PRO A 182     -12.896  -9.054 -11.261 65.34  0.00           N
ATOM    726  CA  PRO A 182     -12.893  -8.165 -12.416 65.34  0.00           C
ATOM    727  C   PRO A 182     -11.484  -7.981 -12.967 65.34  0.00           C
ATOM    728  O   PRO A 182     -10.511  -7.956 -12.213 65.34  0.00           O
ATOM    729  N   ARG A 183     -11.381  -7.853 -14.285 81.95  0.00           N
ATOM    730  CA  ARG A 183     -10.105  -7.571 -14.930 81.95  0.00           C
ATOM    731  C   ARG A 183      -9.699  -6.117 -14.734 81.95  0.00           C
ATOM    732  O   ARG A 183     -10.513  -5.208 -14.892 81.95  0.00           O
ATOM    733  N   PHE A 184      -8.432  -5.902 -14.390 48.95  0.00           N
ATOM    734  CA  PHE A 184      -7.909  -4.556 -14.193 48.95  0.00           C
ATOM    735  C   PHE A 184      -7.386  -3.971 -15.498 48.95  0.00           C
ATOM    736  O   PHE A 184      -7.085  -4.704 -16.441 48.95  0.00           O
ATOM    737  N   ASN A 185      -7.280  -2.648 -15.548 52.94  0.00           N
ATOM    738  CA  ASN A 185      -6.819  -1.961 -16.747 52.94  0.00           C
ATOM    739  C   ASN A 185      -5.337  -1.619 -16.651 52.94  0.00           C
ATOM    740  O   ASN A 185      -4.638  -2.094 -15.756 52.94  0.00           O
ATOM    741  N   TRP A 186      -4.864  -0.791 -17.576 49.34  0.00           N
ATOM    742  CA  TRP A 186      -3.440  -0.501 -17.689 49.34  0.00           C
ATOM    743  C   TRP A 186      -2.960   0.365 -16.531 49.34  0.00           C
ATOM    744  O   TRP A 186      -1.761   0.456 -16.266 49.34  0.00           O
ATOM    745  N   GLU A 187      -3.903   1.001 -15.844 69.55  0.00           N
ATOM    746  CA  GLU A 187      -3.586   1.800 -14.667 69.55  0.00           C
ATOM    747  C   GLU A 187      -3.431   0.923 -13.432 69.55  0.00           C
ATOM    748  O   GLU A 187      -4.158   1.081 -12.451 69.55  0.00           O
ATOM    749  N   CYS A 188      -2.478  -0.002 -13.485 43.75  0.00           N
ATOM    750  CA  CYS A 188      -2.372  -1.052 -12.478 43.75  0.00           C
ATOM    751  C   CYS A 188      -2.109  -0.466 -11.097 43.75  0.00           C
ATOM    752  O   CYS A 188      -2.667  -0.925 -10.101 43.75  0.00           O
ATOM    753  N   LYS A 189      -1.254   0.550 -11.045 20.45  0.00           N
ATOM    754  CA  LYS A 189      -0.882   1.174  -9.780 20.45  0.00           C
ATOM    755  C   LYS A 189      -2.008   2.051  -9.247 20.45  0.00           C
ATOM    756  O   LYS A 189      -1.958   2.517  -8.109 20.45  0.00           O
ATOM    757  N   TYR A 190      -3.022   2.272 -10.076 14.03  0.00           N
ATOM    758  CA  TYR A 190      -4.193   3.038  -9.666 14.03  0.00           C
ATOM    759  C   TYR A 190      -5.434   2.156  -9.607 14.03  0.00           C
ATOM    760  O   TYR A 190      -6.556   2.653  -9.496 14.03  0.00           O
ATOM    761  N   CYS A 191      -5.228   0.847  -9.683 35.90  0.00           N
ATOM    762  CA  CYS A 191      -6.283  -0.114  -9.386 35.90  0.00           C
ATOM    763  C   CYS A 191      -6.172  -0.629  -7.957 35.90  0.00           C
ATOM    764  O   CYS A 191      -5.089  -0.638  -7.371 35.90  0.00           O
ATOM    765  N   ILE A 192      -7.299  -1.060  -7.399 22.39  0.00           N
ATOM    766  CA  ILE A 192      -7.340  -1.528  -6.019 22.39  0.00           C
ATOM    767  C   ILE A 192      -6.762  -2.932  -5.895 22.39  0.00           C
ATOM    768  O   ILE A 192      -6.442  -3.387  -4.798 22.39  0.00           O
ATOM    769  N   PHE A 193      -6.630  -3.613  -7.028 23.80  0.00           N
ATOM    770  CA  PHE A 193      -6.141  -4.986  -7.043 23.80  0.00           C
ATOM    771  C   PHE A 193      -4.703  -5.064  -6.544 23.80  0.00           C
ATOM    772  O   PHE A 193      -4.303  -6.051  -5.926 23.80  0.00           O
ATOM    773  N   SER A 194      -3.931  -4.017  -6.813 36.08  0.00           N
ATOM    774  CA  SER A 194      -2.567  -3.920  -6.307 36.08  0.00           C
ATOM    775  C   SER A 194      -2.554  -3.744  -4.793 36.08  0.00           C
ATOM    776  O   SER A 194      -1.510  -3.871  -4.153 36.08  0.00           O
ATOM    777  N   VAL A 195      -3.720  -3.452  -4.226 33.25  0.00           N
ATOM    778  CA  VAL A 195      -3.840  -3.233  -2.789 33.25  0.00           C
ATOM    779  C   VAL A 195      -4.418  -4.457  -2.091 33.25  0.00           C
ATOM    780  O   VAL A 195      -3.967  -4.838  -1.011 33.25  0.00           O
ATOM    781  N   ILE A 196      -5.418  -5.069  -2.714 21.76  0.00           N
ATOM    782  CA  ILE A 196      -6.301  -5.997  -2.018 21.76  0.00           C
ATOM    783  C   ILE A 196      -6.081  -7.428  -2.492 21.76  0.00           C
ATOM    784  O   ILE A 196      -6.479  -8.382  -1.823 21.76  0.00           O
ATOM    785  N   CYS A 197      -5.444  -7.570  -3.650 34.17  0.00           N
ATOM    786  CA  CYS A 197      -5.334  -8.866  -4.310 34.17  0.00           C
ATOM    787  C   CYS A 197      -4.040  -8.971  -5.105 34.17  0.00           C
ATOM    788  O   CYS A 197      -4.016  -8.710  -6.308 34.17  0.00           O
ATOM    789  N   PRO A 198      -2.964  -9.356  -4.427 39.58  0.00           N
ATOM    790  CA  PRO A 198      -1.691  -9.611  -5.090 39.58  0.00           C
ATOM    791  C   PRO A 198      -1.805 -10.768  -6.074 39.58  0.00           C
ATOM    792  O   PRO A 198      -0.934 -10.961  -6.922 39.58  0.00           O
ATOM    793  N   ALA A 199      -2.883 -11.535  -5.955 39.90  0.00           N
ATOM    794  CA  ALA A 199      -3.164 -12.613  -6.896 39.90  0.00           C
ATOM    795  C   ALA A 199      -3.387 -12.072  -8.303 39.90  0.00           C
ATOM    796  O   ALA A 199      -3.230 -12.794  -9.287 39.90  0.00           O
ATOM    797  N   LYS A 200      -3.753 -10.799  -8.390 31.81  0.00           N
ATOM    798  CA  LYS A 200      -3.956 -10.146  -9.679 31.81  0.00           C
ATOM    799  C   LYS A 200      -2.850  -9.139  -9.966 31.81  0.00           C
ATOM    800  O   LYS A 200      -2.251  -9.152 -11.042 31.81  0.00           O
ATOM    801  N   LEU A 201      -2.583  -8.268  -8.999 38.75  0.00           N
ATOM    802  CA  LEU A 201      -1.463  -7.340  -9.093 38.75  0.00           C
ATOM    803  C   LEU A 201      -0.515  -7.499  -7.911 38.75  0.00           C
ATOM    804  O   LEU A 201      -0.675  -6.843  -6.881 38.75  0.00           O
ATOM    805  N   THR A 202       0.473  -8.373  -8.066 45.33  0.00           N
ATOM    806  CA  THR A 202       1.411  -8.668  -6.989 45.33  0.00           C
ATOM    807  C   THR A 202       2.192  -7.425  -6.584 45.33  0.00           C
ATOM    808  O   THR A 202       2.133  -7.081  -5.647 45.33  0.00           O
TER     809      THR A 202
ENDMDL
END
REMARK   1 ************************************************************************
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REMARK   1 Start File DEC5_vs_NAT_dSi_colored.pdb
REMARK   1 The occupancy record was modified to represent dSi := Si(DEC)-Si(NAT).
REMARK   1 Occ=0.00 means dSi=-1.555227 kB; Occ=99.99 means dSi=1.594793 kB.
MODEL        0
ATOM      1  N   MET A   1      20.279  17.173 -18.693 45.76  0.00           N
ATOM      2  CA  MET A   1      19.053  16.399 -18.542 45.76  0.00           C
ATOM      3  C   MET A   1      19.026  15.664 -17.208 45.76  0.00           C
ATOM      4  O   MET A   1      19.795  14.728 -16.988 45.76  0.00           O
ATOM      5  N   ILE A   2      18.137  16.093 -16.319 46.21  0.00           N
ATOM      6  CA  ILE A   2      18.045  15.512 -14.985 46.21  0.00           C
ATOM      7  C   ILE A   2      17.569  14.066 -15.046 46.21  0.00           C
ATOM      8  O   ILE A   2      18.151  13.184 -14.414 46.21  0.00           O
ATOM      9  N   THR A   3      16.508  13.829 -15.810 45.10  0.00           N
ATOM     10  CA  THR A   3      15.931  12.495 -15.928 45.10  0.00           C
ATOM     11  C   THR A   3      16.921  11.521 -16.552 45.10  0.00           C
ATOM     12  O   THR A   3      17.057  10.384 -16.100 45.10  0.00           O
ATOM     13  N   GLU A   4      17.614  11.972 -17.592 48.31  0.00           N
ATOM     14  CA  GLU A   4      18.623  11.156 -18.256 48.31  0.00           C
ATOM     15  C   GLU A   4      19.739  10.771 -17.293 48.31  0.00           C
ATOM     16  O   GLU A   4      20.094   9.598 -17.176 48.31  0.00           O
ATOM     17  N   PHE A   5      20.289  11.766 -16.604 48.37  0.00           N
ATOM     18  CA  PHE A   5      21.387  11.537 -15.672 48.37  0.00           C
ATOM     19  C   PHE A   5      20.934  10.700 -14.483 48.37  0.00           C
ATOM     20  O   PHE A   5      21.720   9.950 -13.905 48.37  0.00           O
ATOM     21  N   LEU A   6      19.662  10.834 -14.122 36.80  0.00           N
ATOM     22  CA  LEU A   6      19.076  10.018 -13.065 36.80  0.00           C
ATOM     23  C   LEU A   6      19.100   8.540 -13.433 36.80  0.00           C
ATOM     24  O   LEU A   6      19.575   7.706 -12.661 36.80  0.00           O
ATOM     25  N   LEU A   7      18.586   8.222 -14.616 54.72  0.00           N
ATOM     26  CA  LEU A   7      18.351   6.835 -15.001 54.72  0.00           C
ATOM     27  C   LEU A   7      19.604   6.209 -15.601 54.72  0.00           C
ATOM     28  O   LEU A   7      19.700   4.989 -15.730 54.72  0.00           O
ATOM     29  N   LYS A   8      20.564   7.053 -15.966 51.73  0.00           N
ATOM     30  CA  LYS A   8      21.818   6.585 -16.543 51.73  0.00           C
ATOM     31  C   LYS A   8      22.928   6.555 -15.500 51.73  0.00           C
ATOM     32  O   LYS A   8      23.607   5.543 -15.332 51.73  0.00           O
ATOM     33  N   LYS A   9      23.107   7.672 -14.803 52.97  0.00           N
ATOM     34  CA  LYS A   9      24.252   7.846 -13.917 52.97  0.00           C
ATOM     35  C   LYS A   9      23.899   7.474 -12.482 52.97  0.00           C
ATOM     36  O   LYS A   9      24.508   6.581 -11.895 52.97  0.00           O
ATOM     37  N   LYS A  10      22.911   8.165 -11.923 52.55  0.00           N
ATOM     38  CA  LYS A  10      22.539   7.975 -10.526 52.55  0.00           C
ATOM     39  C   LYS A  10      22.049   6.555 -10.274 52.55  0.00           C
ATOM     40  O   LYS A  10      22.421   5.927  -9.283 52.55  0.00           O
ATOM     41  N   LEU A  11      21.213   6.054 -11.177 38.88  0.00           N
ATOM     42  CA  LEU A  11      20.689   4.698 -11.066 38.88  0.00           C
ATOM     43  C   LEU A  11      21.810   3.690 -10.846 38.88  0.00           C
ATOM     44  O   LEU A  11      21.823   2.970  -9.848 38.88  0.00           O
ATOM     45  N   GLU A  12      22.749   3.644 -11.784 45.02  0.00           N
ATOM     46  CA  GLU A  12      23.853   2.693 -11.717 45.02  0.00           C
ATOM     47  C   GLU A  12      24.729   2.952 -10.499 45.02  0.00           C
ATOM     48  O   GLU A  12      25.220   2.018  -9.866 45.02  0.00           O
ATOM     49  N   GLU A  13      24.924   4.226 -10.177 49.97  0.00           N
ATOM     50  CA  GLU A  13      25.705   4.609  -9.006 49.97  0.00           C
ATOM     51  C   GLU A  13      25.135   3.991  -7.736 49.97  0.00           C
ATOM     52  O   GLU A  13      25.878   3.535  -6.869 49.97  0.00           O
ATOM     53  N   HIS A  14      23.809   3.980  -7.633 31.53  0.00           N
ATOM     54  CA  HIS A  14      23.139   3.523  -6.422 31.53  0.00           C
ATOM     55  C   HIS A  14      22.904   2.018  -6.458 31.53  0.00           C
ATOM     56  O   HIS A  14      22.830   1.367  -5.416 31.53  0.00           O
ATOM     57  N   LEU A  15      22.788   1.470  -7.662 13.88  0.00           N
ATOM     58  CA  LEU A  15      22.660   0.029  -7.840 13.88  0.00           C
ATOM     59  C   LEU A  15      23.854  -0.707  -7.243 13.88  0.00           C
ATOM     60  O   LEU A  15      23.712  -1.809  -6.713 13.88  0.00           O
ATOM     61  N   SER A  16      25.027  -0.091  -7.332 30.48  0.00           N
ATOM     62  CA  SER A  16      26.241  -0.671  -6.771 30.48  0.00           C
ATOM     63  C   SER A  16      26.212  -0.642  -5.248 30.48  0.00           C
ATOM     64  O   SER A  16      27.006  -1.315  -4.590 30.48  0.00           O
ATOM     65  N   HIS A  17      25.294   0.141  -4.694 47.88  0.00           N
ATOM     66  CA  HIS A  17      25.177   0.279  -3.247 47.88  0.00           C
ATOM     67  C   HIS A  17      23.848  -0.273  -2.746 47.88  0.00           C
ATOM     68  O   HIS A  17      23.628  -0.388  -1.542 47.88  0.00           O
ATOM     69  N   VAL A  18      22.967  -0.615  -3.680 27.03  0.00           N
ATOM     70  CA  VAL A  18      21.659  -1.161  -3.336 27.03  0.00           C
ATOM     71  C   VAL A  18      21.486  -2.568  -3.892 27.03  0.00           C
ATOM     72  O   VAL A  18      21.189  -3.507  -3.154 27.03  0.00           O
ATOM     73  N   LYS A  19      21.673  -2.708  -5.201 25.84  0.00           N
ATOM     74  CA  LYS A  19      21.480  -3.989  -5.870 25.84  0.00           C
ATOM     75  C   LYS A  19      22.601  -4.963  -5.531 25.84  0.00           C
ATOM     76  O   LYS A  19      22.350  -6.105  -5.147 25.84  0.00           O
ATOM     77  N   GLU A  20      23.840  -4.504  -5.675 52.41  0.00           N
ATOM     78  CA  GLU A  20      25.003  -5.321  -5.351 52.41  0.00           C
ATOM     79  C   GLU A  20      25.103  -5.566  -3.850 52.41  0.00           C
ATOM     80  O   GLU A  20      25.664  -6.571  -3.413 52.41  0.00           O
ATOM     81  N   GLU A  21      24.555  -4.644  -3.067 47.67  0.00           N
ATOM     82  CA  GLU A  21      24.571  -4.764  -1.615 47.67  0.00           C
ATOM     83  C   GLU A  21      23.285  -5.397  -1.099 47.67  0.00           C
ATOM     84  O   GLU A  21      22.457  -5.866  -1.879 47.67  0.00           O
ATOM     85  N   ASN A  22      23.123  -5.406   0.220 55.84  0.00           N
ATOM     86  CA  ASN A  22      21.929  -5.965   0.841 55.84  0.00           C
ATOM     87  C   ASN A  22      20.706  -5.100   0.560 55.84  0.00           C
ATOM     88  O   ASN A  22      20.315  -4.274   1.385 55.84  0.00           O
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ATOM     89  N   THR A  23      20.106  -5.296  -0.609 52.17  0.00           N
ATOM     90  CA  THR A  23      18.926  -4.534  -1.001 52.17  0.00           C
ATOM     91  C   THR A  23      17.928  -4.436   0.144 52.17  0.00           C
ATOM     92  O   THR A  23      17.601  -5.437   0.784 52.17  0.00           O
ATOM     93  N   ILE A  24      17.444  -3.225   0.399 52.05  0.00           N
ATOM     94  CA  ILE A  24      16.486  -2.993   1.473 52.05  0.00           C
ATOM     95  C   ILE A  24      15.077  -3.383   1.047 52.05  0.00           C
ATOM     96  O   ILE A  24      14.474  -2.733   0.191 52.05  0.00           O
ATOM     97  N   TYR A  25      14.555  -4.446   1.649 49.96  0.00           N
ATOM     98  CA  TYR A  25      13.183  -4.872   1.398 49.96  0.00           C
ATOM     99  C   TYR A  25      12.277  -4.531   2.574 49.96  0.00           C
ATOM    100  O   TYR A  25      12.745  -4.092   3.624 49.96  0.00           O
ATOM    101  N   VAL A  26      10.977  -4.736   2.391 44.54  0.00           N
ATOM    102  CA  VAL A  26      10.004  -4.469   3.443 44.54  0.00           C
ATOM    103  C   VAL A  26      10.394  -5.163   4.742 44.54  0.00           C
ATOM    104  O   VAL A  26      10.461  -4.533   5.798 44.54  0.00           O
ATOM    105  N   THR A  27      10.651  -6.464   4.658 50.31  0.00           N
ATOM    106  CA  THR A  27      11.001  -7.253   5.833 50.31  0.00           C
ATOM    107  C   THR A  27      12.260  -6.713   6.503 50.31  0.00           C
ATOM    108  O   THR A  27      12.347  -6.660   7.729 50.31  0.00           O
ATOM    109  N   ASP A  28      13.232  -6.314   5.690 54.19  0.00           N
ATOM    110  CA  ASP A  28      14.472  -5.744   6.202 54.19  0.00           C
ATOM    111  C   ASP A  28      14.197  -4.556   7.115 54.19  0.00           C
ATOM    112  O   ASP A  28      14.839  -4.398   8.153 54.19  0.00           O
ATOM    113  N   LEU A  29      13.239  -3.723   6.721 58.99  0.00           N
ATOM    114  CA  LEU A  29      12.855  -2.566   7.521 58.99  0.00           C
ATOM    115  C   LEU A  29      12.069  -2.987   8.756 58.99  0.00           C
ATOM    116  O   LEU A  29      12.303  -2.483   9.855 58.99  0.00           O
ATOM    117  N   VAL A  30      11.135  -3.914   8.570 54.59  0.00           N
ATOM    118  CA  VAL A  30      10.297  -4.387   9.665 54.59  0.00           C
ATOM    119  C   VAL A  30      11.142  -4.871  10.837 54.59  0.00           C
ATOM    120  O   VAL A  30      10.808  -4.629  11.997 54.59  0.00           O
ATOM    121  N   ARG A  31      12.237  -5.556  10.527 99.99  0.00           N
ATOM    122  CA  ARG A  31      13.064  -6.184  11.551 99.99  0.00           C
ATOM    123  C   ARG A  31      13.808  -5.141  12.374 99.99  0.00           C
ATOM    124  O   ARG A  31      14.328  -5.441  13.450 99.99  0.00           O
ATOM    125  N   CYS A  32      13.856  -3.916  11.864 79.02  0.00           N
ATOM    126  CA  CYS A  32      14.565  -2.833  12.536 79.02  0.00           C
ATOM    127  C   CYS A  32      13.592  -1.801  13.093 79.02  0.00           C
ATOM    128  O   CYS A  32      12.429  -1.752  12.695 79.02  0.00           O
ATOM    129  N   PRO A  33      14.077  -0.978  14.017 65.88  0.00           N
ATOM    130  CA  PRO A  33      13.279   0.112  14.565 65.88  0.00           C
ATOM    131  C   PRO A  33      13.074   1.216  13.537 65.88  0.00           C
ATOM    132  O   PRO A  33      13.844   1.343  12.585 65.88  0.00           O
ATOM    133  N   ARG A  34      12.030   2.015  13.734 59.12  0.00           N
ATOM    134  CA  ARG A  34      11.645   3.027  12.757 59.12  0.00           C
ATOM    135  C   ARG A  34      12.767   4.035  12.536 59.12  0.00           C
ATOM    136  O   ARG A  34      12.922   4.574  11.441 59.12  0.00           O
ATOM    137  N   ARG A  35      13.546   4.284  13.584 93.15  0.00           N
ATOM    138  CA  ARG A  35      14.731   5.125  13.473 93.15  0.00           C
ATOM    139  C   ARG A  35      15.690   4.590  12.418 93.15  0.00           C
ATOM    140  O   ARG A  35      16.103   5.317  11.514 93.15  0.00           O
ATOM    141  N   VAL A  36      16.041   3.314  12.537 55.58  0.00           N
ATOM    142  CA  VAL A  36      16.929   2.671  11.575 55.58  0.00           C
ATOM    143  C   VAL A  36      16.278   2.579  10.201 55.58  0.00           C
ATOM    144  O   VAL A  36      16.957   2.649   9.176 55.58  0.00           O
ATOM    145  N   ARG A  37      14.959   2.421  10.186 20.52  0.00           N
ATOM    146  CA  ARG A  37      14.208   2.368   8.937 20.52  0.00           C
ATOM    147  C   ARG A  37      14.417   3.633   8.113 20.52  0.00           C
ATOM    148  O   ARG A  37      14.613   3.570   6.900 20.52  0.00           O
ATOM    149  N   TYR A  38      14.374   4.781   8.781 54.45  0.00           N
ATOM    150  CA  TYR A  38      14.611   6.060   8.122 54.45  0.00           C
ATOM    151  C   TYR A  38      16.074   6.212   7.725 54.45  0.00           C
ATOM    152  O   TYR A  38      16.385   6.673   6.627 54.45  0.00           O
ATOM    153  N   GLU A  39      16.969   5.821   8.626 73.98  0.00           N
ATOM    154  CA  GLU A  39      18.402   5.959   8.391 73.98  0.00           C
ATOM    155  C   GLU A  39      18.842   5.154   7.175 73.98  0.00           C
ATOM    156  O   GLU A  39      19.711   5.582   6.416 73.98  0.00           O
ATOM    157  N   SER A  40      18.235   3.985   6.996 37.54  0.00           N
ATOM    158  CA  SER A  40      18.606   3.089   5.906 37.54  0.00           C
ATOM    159  C   SER A  40      18.329   3.727   4.550 37.54  0.00           C
ATOM    160  O   SER A  40      18.923   3.346   3.542 37.54  0.00           O
ATOM    161  N   GLU A  41      17.425   4.702   4.534  2.00  0.00           N
ATOM    162  CA  GLU A  41      17.068   5.394   3.302  2.00  0.00           C
ATOM    163  C   GLU A  41      18.167   6.357   2.873  2.00  0.00           C
ATOM    164  O   GLU A  41      18.262   6.724   1.701  2.00  0.00           O
ATOM    165  N   TYR A  42      18.994   6.766   3.828 52.16  0.00           N
ATOM    166  CA  TYR A  42      20.038   7.751   3.568 52.16  0.00           C
ATOM    167  C   TYR A  42      21.424   7.157   3.786 52.16  0.00           C
ATOM    168  O   TYR A  42      22.435   7.790   3.483 52.16  0.00           O
ATOM    169  N   LYS A  43      21.463   5.938   4.312 61.43  0.00           N
ATOM    170  CA  LYS A  43      22.722   5.235   4.523 61.43  0.00           C
ATOM    171  C   LYS A  43      22.929   4.149   3.475 61.43  0.00           C
ATOM    172  O   LYS A  43      24.025   3.995   2.935 61.43  0.00           O
ATOM    173  N   GLU A  44      21.871   3.398   3.192 40.87  0.00           N
ATOM    174  CA  GLU A  44      21.942   2.305   2.229 40.87  0.00           C
ATOM    175  C   GLU A  44      21.383   2.726   0.875 40.87  0.00           C
ATOM    176  O   GLU A  44      22.007   2.502  -0.161 40.87  0.00           O
ATOM    177  N   LEU A  45      20.203   3.337   0.893 34.19  0.00           N
ATOM    178  CA  LEU A  45      19.525   3.727  -0.337 34.19  0.00           C
ATOM    179  C   LEU A  45      20.014   5.084  -0.828 34.19  0.00           C
ATOM    180  O   LEU A  45      20.023   5.355  -2.029 34.19  0.00           O
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ATOM    181  N   ALA A  46      20.419   5.935   0.108 56.47  0.00           N
ATOM    182  CA  ALA A  46      20.983   7.237  -0.232 56.47  0.00           C
ATOM    183  C   ALA A  46      20.043   8.025  -1.135 56.47  0.00           C
ATOM    184  O   ALA A  46      20.452   8.532  -2.180 56.47  0.00           O
ATOM    185  N   ILE A  47      18.783   8.126  -0.726 44.14  0.00           N
ATOM    186  CA  ILE A  47      17.759   8.757  -1.549 44.14  0.00           C
ATOM    187  C   ILE A  47      17.930  10.269  -1.577 44.14  0.00           C
ATOM    188  O   ILE A  47      17.333  10.956  -2.407 44.14  0.00           O
ATOM    189  N   SER A  48      18.748  10.785  -0.666 56.13  0.00           N
ATOM    190  CA  SER A  48      19.074  12.206  -0.646 56.13  0.00           C
ATOM    191  C   SER A  48      19.890  12.602  -1.870 56.13  0.00           C
ATOM    192  O   SER A  48      19.992  13.781  -2.205 56.13  0.00           O
ATOM    193  N   GLN A  49      20.467  11.607  -2.536 63.24  0.00           N
ATOM    194  CA  GLN A  49      21.241  11.846  -3.749 63.24  0.00           C
ATOM    195  C   GLN A  49      20.479  11.388  -4.986 63.24  0.00           C
ATOM    196  O   GLN A  49      21.056  11.246  -6.065 63.24  0.00           O
ATOM    197  N   VAL A  50      19.180  11.159  -4.825 56.27  0.00           N
ATOM    198  CA  VAL A  50      18.340  10.703  -5.925 56.27  0.00           C
ATOM    199  C   VAL A  50      17.291  11.747  -6.287 56.27  0.00           C
ATOM    200  O   VAL A  50      16.582  12.256  -5.418 56.27  0.00           O
ATOM    201  N   TYR A  51      17.197  12.062  -7.573 45.04  0.00           N
ATOM    202  CA  TYR A  51      16.254  13.069  -8.049 45.04  0.00           C
ATOM    203  C   TYR A  51      14.815  12.599  -7.879 45.04  0.00           C
ATOM    204  O   TYR A  51      13.941  13.375  -7.493 45.04  0.00           O
ATOM    205  N   ALA A  52      14.576  11.325  -8.169 44.86  0.00           N
ATOM    206  CA  ALA A  52      13.257  10.731  -7.980 44.86  0.00           C
ATOM    207  C   ALA A  52      13.361   9.347  -7.352 44.86  0.00           C
ATOM    208  O   ALA A  52      13.360   8.335  -8.051 44.86  0.00           O
ATOM    209  N   PRO A  53      13.451   9.311  -6.027 43.70  0.00           N
ATOM    210  CA  PRO A  53      13.607   8.054  -5.303 43.70  0.00           C
ATOM    211  C   PRO A  53      12.506   7.067  -5.670 43.70  0.00           C
ATOM    212  O   PRO A  53      12.726   5.856  -5.695 43.70  0.00           O
ATOM    213  N   SER A  54      11.318   7.593  -5.956 42.78  0.00           N
ATOM    214  CA  SER A  54      10.196   6.763  -6.380 42.78  0.00           C
ATOM    215  C   SER A  54      10.522   6.009  -7.663 42.78  0.00           C
ATOM    216  O   SER A  54      10.183   4.835  -7.807 42.78  0.00           O
ATOM    217  N   ALA A  55      11.184   6.691  -8.592 45.72  0.00           N
ATOM    218  CA  ALA A  55      11.513   6.103  -9.885 45.72  0.00           C
ATOM    219  C   ALA A  55      12.622   5.067  -9.754 45.72  0.00           C
ATOM    220  O   ALA A  55      12.538   3.977 -10.319 45.72  0.00           O
ATOM    221  N   ILE A  56      13.662   5.415  -9.004 37.37  0.00           N
ATOM    222  CA  ILE A  56      14.825   4.548  -8.857 37.37  0.00           C
ATOM    223  C   ILE A  56      14.493   3.317  -8.023 37.37  0.00           C
ATOM    224  O   ILE A  56      14.739   2.186  -8.441 37.37  0.00           O
ATOM    225  N   LEU A  57      13.932   3.545  -6.840 21.14  0.00           N
ATOM    226  CA  LEU A  57      13.512   2.454  -5.968 21.14  0.00           C
ATOM    227  C   LEU A  57      12.328   1.699  -6.561 21.14  0.00           C
ATOM    228  O   LEU A  57      12.154   0.506  -6.315 21.14  0.00           O
ATOM    229  N   GLY A  58      11.517   2.403  -7.343 40.76  0.00           N
ATOM    230  CA  GLY A  58      10.409   1.779  -8.056 40.76  0.00           C
ATOM    231  C   GLY A  58      10.902   0.670  -8.976 40.76  0.00           C
ATOM    232  O   GLY A  58      10.363  -0.437  -8.974 40.76  0.00           O
ATOM    233  N   ASP A  59      11.929   0.972  -9.762 51.13  0.00           N
ATOM    234  CA  ASP A  59      12.511  -0.005 -10.674 51.13  0.00           C
ATOM    235  C   ASP A  59      13.190  -1.134  -9.909 51.13  0.00           C
ATOM    236  O   ASP A  59      13.005  -2.310 -10.225 51.13  0.00           O
ATOM    237  N   ILE A  60      13.980  -0.770  -8.905 29.56  0.00           N
ATOM    238  CA  ILE A  60      14.739  -1.747  -8.134 29.56  0.00           C
ATOM    239  C   ILE A  60      13.814  -2.718  -7.412 29.56  0.00           C
ATOM    240  O   ILE A  60      14.056  -3.925  -7.396 29.56  0.00           O
ATOM    241  N   LEU A  61      12.753  -2.185  -6.816 26.41  0.00           N
ATOM    242  CA  LEU A  61      11.835  -2.990  -6.020 26.41  0.00           C
ATOM    243  C   LEU A  61      10.872  -3.768  -6.908 26.41  0.00           C
ATOM    244  O   LEU A  61      10.434  -4.863  -6.556 26.41  0.00           O
ATOM    245  N   HIS A  62      10.545  -3.195  -8.061 53.85  0.00           N
ATOM    246  CA  HIS A  62       9.725  -3.881  -9.052 53.85  0.00           C
ATOM    247  C   HIS A  62      10.354  -5.205  -9.466 53.85  0.00           C
ATOM    248  O   HIS A  62       9.667  -6.220  -9.585 53.85  0.00           O
ATOM    249  N   LEU A  63      11.665  -5.188  -9.687 53.09  0.00           N
ATOM    250  CA  LEU A  63      12.387  -6.385 -10.099 53.09  0.00           C
ATOM    251  C   LEU A  63      12.630  -7.316  -8.917 53.09  0.00           C
ATOM    252  O   LEU A  63      12.680  -8.537  -9.077 53.09  0.00           O
ATOM    253  N   GLY A  64      12.780  -6.734  -7.732 47.77  0.00           N
ATOM    254  CA  GLY A  64      13.088  -7.505  -6.534 47.77  0.00           C
ATOM    255  C   GLY A  64      11.864  -7.642  -5.638 47.77  0.00           C
ATOM    256  O   GLY A  64      11.247  -8.705  -5.572 47.77  0.00           O
ATOM    257  N   LEU A  65      11.518  -6.560  -4.949 26.44  0.00           N
ATOM    258  CA  LEU A  65      10.537  -6.620  -3.871 26.44  0.00           C
ATOM    259  C   LEU A  65       9.259  -7.311  -4.327 26.44  0.00           C
ATOM    260  O   LEU A  65       8.707  -8.149  -3.613 26.44  0.00           O
ATOM    261  N   GLU A  66       8.792  -6.956  -5.519 54.44  0.00           N
ATOM    262  CA  GLU A  66       7.540  -7.490  -6.042 54.44  0.00           C
ATOM    263  C   GLU A  66       7.419  -8.983  -5.762 54.44  0.00           C
ATOM    264  O   GLU A  66       6.398  -9.447  -5.255 54.44  0.00           O
ATOM    265  N   SER A  67       8.465  -9.730  -6.096 47.72  0.00           N
ATOM    266  CA  SER A  67       8.449 -11.180  -5.950 47.72  0.00           C
ATOM    267  C   SER A  67       8.604 -11.589  -4.491 47.72  0.00           C
ATOM    268  O   SER A  67       8.163 -12.665  -4.087 47.72  0.00           O
ATOM    269  N   VAL A  68       9.234 -10.724  -3.703 48.52  0.00           N
ATOM    270  CA  VAL A  68       9.393 -10.964  -2.274 48.52  0.00           C
ATOM    271  C   VAL A  68       8.054 -10.889  -1.550 48.52  0.00           C
ATOM    272  O   VAL A  68       7.738 -11.740  -0.720 48.52  0.00           O
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ATOM    273  N   LEU A  69       7.271  -9.866  -1.872 40.41  0.00           N
ATOM    274  CA  LEU A  69       5.980  -9.656  -1.225 40.41  0.00           C
ATOM    275  C   LEU A  69       4.946 -10.658  -1.723 40.41  0.00           C
ATOM    276  O   LEU A  69       4.231 -11.271  -0.931 40.41  0.00           O
ATOM    277  N   LYS A  70       4.871 -10.819  -3.040 41.93  0.00           N
ATOM    278  CA  LYS A  70       3.845 -11.654  -3.652 41.93  0.00           C
ATOM    279  C   LYS A  70       4.027 -13.118  -3.272 41.93  0.00           C
ATOM    280  O   LYS A  70       3.078 -13.901  -3.308 41.93  0.00           O
ATOM    281  N   GLY A  71       5.252 -13.481  -2.907 46.57  0.00           N
ATOM    282  CA  GLY A  71       5.552 -14.843  -2.481 46.57  0.00           C
ATOM    283  C   GLY A  71       5.089 -15.087  -1.051 46.57  0.00           C
ATOM    284  O   GLY A  71       5.055 -16.226  -0.584 46.57  0.00           O
ATOM    285  N   ASN A  72       4.732 -14.010  -0.358 46.68  0.00           N
ATOM    286  CA  ASN A  72       4.356 -14.095   1.049 46.68  0.00           C
ATOM    287  C   ASN A  72       2.928 -13.609   1.267 46.68  0.00           C
ATOM    288  O   ASN A  72       2.463 -13.510   2.402 46.68  0.00           O
ATOM    289  N   PHE A  73       2.237 -13.309   0.172 43.70  0.00           N
ATOM    290  CA  PHE A  73       0.848 -12.873   0.239 43.70  0.00           C
ATOM    291  C   PHE A  73      -0.068 -14.014   0.662 43.70  0.00           C
ATOM    292  O   PHE A  73       0.091 -15.149   0.213 43.70  0.00           O
ATOM    293  N   ASN A  74      -1.028 -13.707   1.528 53.08  0.00           N
ATOM    294  CA  ASN A  74      -1.947 -14.714   2.043 53.08  0.00           C
ATOM    295  C   ASN A  74      -3.373 -14.448   1.577 53.08  0.00           C
ATOM    296  O   ASN A  74      -4.208 -15.353   1.556 53.08  0.00           O
ATOM    297  N   ALA A  75      -3.647 -13.203   1.205 38.69  0.00           N
ATOM    298  CA  ALA A  75      -4.928 -12.844   0.611 38.69  0.00           C
ATOM    299  C   ALA A  75      -4.804 -11.600  -0.259 38.69  0.00           C
ATOM    300  O   ALA A  75      -4.085 -10.661   0.084 38.69  0.00           O
ATOM    301  N   GLU A  76      -5.508 -11.600  -1.385 45.22  0.00           N
ATOM    302  CA  GLU A  76      -5.538 -10.440  -2.269 45.22  0.00           C
ATOM    303  C   GLU A  76      -6.868 -10.345  -3.008 45.22  0.00           C
ATOM    304  O   GLU A  76      -7.166 -11.164  -3.876 45.22  0.00           O
ATOM    305  N   THR A  77      -7.662  -9.340  -2.657 56.43  0.00           N
ATOM    306  CA  THR A  77      -9.011  -9.206  -3.194 56.43  0.00           C
ATOM    307  C   THR A  77      -9.336  -7.751  -3.510 56.43  0.00           C
ATOM    308  O   THR A  77      -9.064  -6.857  -2.710 56.43  0.00           O
ATOM    309  N   GLU A  78      -9.920  -7.522  -4.681 57.47  0.00           N
ATOM    310  CA  GLU A  78     -10.337  -6.183  -5.080 57.47  0.00           C
ATOM    311  C   GLU A  78     -11.740  -5.870  -4.577 57.47  0.00           C
ATOM    312  O   GLU A  78     -12.623  -6.728  -4.594 57.47  0.00           O
ATOM    313  N   VAL A  79     -11.942  -4.635  -4.131 35.16  0.00           N
ATOM    314  CA  VAL A  79     -13.246  -4.198  -3.647 35.16  0.00           C
ATOM    315  C   VAL A  79     -13.470  -2.718  -3.927 35.16  0.00           C
ATOM    316  O   VAL A  79     -12.557  -1.904  -3.785 35.16  0.00           O
ATOM    317  N   GLU A  80     -14.689  -2.375  -4.328 42.23  0.00           N
ATOM    318  CA  GLU A  80     -15.090  -0.978  -4.456 42.23  0.00           C
ATOM    319  C   GLU A  80     -15.319  -0.343  -3.091 42.23  0.00           C
ATOM    320  O   GLU A  80     -16.112  -0.837  -2.291 42.23  0.00           O
ATOM    321  N   THR A  81     -14.618   0.756  -2.831 32.21  0.00           N
ATOM    322  CA  THR A  81     -14.666   1.403  -1.525 32.21  0.00           C
ATOM    323  C   THR A  81     -15.248   2.807  -1.626 32.21  0.00           C
ATOM    324  O   THR A  81     -15.247   3.414  -2.698 32.21  0.00           O
ATOM    325  N   LEU A  82     -15.746   3.318  -0.506 30.57  0.00           N
ATOM    326  CA  LEU A  82     -16.377   4.633  -0.477 30.57  0.00           C
ATOM    327  C   LEU A  82     -15.918   5.437   0.732 30.57  0.00           C
ATOM    328  O   LEU A  82     -16.029   4.983   1.871 30.57  0.00           O
ATOM    329  N   ARG A  83     -15.403   6.635   0.479 43.98  0.00           N
ATOM    330  CA  ARG A  83     -14.987   7.533   1.551 43.98  0.00           C
ATOM    331  C   ARG A  83     -15.441   8.962   1.279 43.98  0.00           C
ATOM    332  O   ARG A  83     -15.627   9.355   0.128 43.98  0.00           O
ATOM    333  N   GLU A  84     -15.616   9.734   2.345 48.79  0.00           N
ATOM    334  CA  GLU A  84     -16.001  11.135   2.222 48.79  0.00           C
ATOM    335  C   GLU A  84     -14.786  12.049   2.305 48.79  0.00           C
ATOM    336  O   GLU A  84     -14.024  12.000   3.272 48.79  0.00           O
ATOM    337  N   ILE A  85     -14.608  12.883   1.286 54.30  0.00           N
ATOM    338  CA  ILE A  85     -13.444  13.758   1.206 54.30  0.00           C
ATOM    339  C   ILE A  85     -13.855  15.197   0.921 54.30  0.00           C
ATOM    340  O   ILE A  85     -14.708  15.452   0.071 54.30  0.00           O
ATOM    341  N   ASN A  86     -13.243  16.134   1.637 49.78  0.00           N
ATOM    342  CA  ASN A  86     -13.487  17.554   1.408 49.78  0.00           C
ATOM    343  C   ASN A  86     -12.820  18.028   0.124 49.78  0.00           C
ATOM    344  O   ASN A  86     -11.610  18.251   0.087 49.78  0.00           O
ATOM    345  N   VAL A  87     -13.616  18.180  -0.929 52.65  0.00           N
ATOM    346  CA  VAL A  87     -13.102  18.618  -2.221 52.65  0.00           C
ATOM    347  C   VAL A  87     -13.692  19.964  -2.622 52.65  0.00           C
ATOM    348  O   VAL A  87     -14.906  20.102  -2.765 52.65  0.00           O
ATOM    349  N   GLY A  88     -12.825  20.955  -2.802 48.80  0.00           N
ATOM    350  CA  GLY A  88     -13.253  22.277  -3.241 48.80  0.00           C
ATOM    351  C   GLY A  88     -13.935  23.038  -2.111 48.80  0.00           C
ATOM    352  O   GLY A  88     -14.637  24.022  -2.348 48.80  0.00           O
ATOM    353  N   GLY A  89     -13.724  22.578  -0.883 48.31  0.00           N
ATOM    354  CA  GLY A  89     -14.297  23.230   0.288 48.31  0.00           C
ATOM    355  C   GLY A  89     -15.596  22.556   0.715 48.31  0.00           C
ATOM    356  O   GLY A  89     -16.224  22.961   1.692 48.31  0.00           O
ATOM    357  N   LYS A  90     -15.991  21.526  -0.025 50.78  0.00           N
ATOM    358  CA  LYS A  90     -17.207  20.783   0.286 50.78  0.00           C
ATOM    359  C   LYS A  90     -16.946  19.282   0.301 50.78  0.00           C
ATOM    360  O   LYS A  90     -16.261  18.752  -0.574 50.78  0.00           O
ATOM    361  N   VAL A  91     -17.496  18.601   1.301 52.58  0.00           N
ATOM    362  CA  VAL A  91     -17.302  17.164   1.447 52.58  0.00           C
ATOM    363  C   VAL A  91     -18.195  16.387   0.487 52.58  0.00           C
ATOM    364  O   VAL A  91     -19.415  16.549   0.492 52.58  0.00           O
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ATOM    365  N   TYR A  92     -17.579  15.544  -0.334 65.64  0.00           N
ATOM    366  CA  TYR A  92     -18.319  14.720  -1.282 65.64  0.00           C
ATOM    367  C   TYR A  92     -18.048  13.239  -1.054 65.64  0.00           C
ATOM    368  O   TYR A  92     -16.952  12.854  -0.645 65.64  0.00           O
ATOM    369  N   LYS A  93     -19.052  12.410  -1.319 72.23  0.00           N
ATOM    370  CA  LYS A  93     -18.878  10.963  -1.298 72.23  0.00           C
ATOM    371  C   LYS A  93     -18.201  10.470  -2.570 72.23  0.00           C
ATOM    372  O   LYS A  93     -18.718  10.656  -3.672 72.23  0.00           O
ATOM    373  N   ILE A  94     -17.041   9.841  -2.411 56.66  0.00           N
ATOM    374  CA  ILE A  94     -16.238   9.417  -3.552 56.66  0.00           C
ATOM    375  C   ILE A  94     -15.970   7.918  -3.510 56.66  0.00           C
ATOM    376  O   ILE A  94     -15.439   7.400  -2.527 56.66  0.00           O
ATOM    377  N   LYS A  95     -16.341   7.226  -4.582 73.79  0.00           N
ATOM    378  CA  LYS A  95     -16.077   5.797  -4.699 73.79  0.00           C
ATOM    379  C   LYS A  95     -14.855   5.531  -5.567 73.79  0.00           C
ATOM    380  O   LYS A  95     -14.468   6.367  -6.384 73.79  0.00           O
ATOM    381  N   GLY A  96     -14.250   4.362  -5.388 50.94  0.00           N
ATOM    382  CA  GLY A  96     -13.123   3.947  -6.213 50.94  0.00           C
ATOM    383  C   GLY A  96     -12.812   2.469  -6.020 50.94  0.00           C
ATOM    384  O   GLY A  96     -13.457   1.789  -5.221 50.94  0.00           O
ATOM    385  N   ARG A  97     -11.822   1.975  -6.756 36.06  0.00           N
ATOM    386  CA  ARG A  97     -11.459   0.564  -6.706 36.06  0.00           C
ATOM    387  C   ARG A  97     -10.170   0.354  -5.923 36.06  0.00           C
ATOM    388  O   ARG A  97      -9.115   0.865  -6.297 36.06  0.00           O
ATOM    389  N   ALA A  98     -10.263  -0.402  -4.834 44.10  0.00           N
ATOM    390  CA  ALA A  98      -9.107  -0.670  -3.987 44.10  0.00           C
ATOM    391  C   ALA A  98      -8.847  -2.165  -3.864 44.10  0.00           C
ATOM    392  O   ALA A  98      -9.741  -2.933  -3.507 44.10  0.00           O
ATOM    393  N   ASP A  99      -7.618  -2.574  -4.163 48.55  0.00           N
ATOM    394  CA  ASP A  99      -7.213  -3.966  -4.003 48.55  0.00           C
ATOM    395  C   ASP A  99      -6.610  -4.209  -2.626 48.55  0.00           C
ATOM    396  O   ASP A  99      -5.477  -3.811  -2.355 48.55  0.00           O
ATOM    397  N   ALA A 100      -7.373  -4.864  -1.759 55.53  0.00           N
ATOM    398  CA  ALA A 100      -6.911  -5.173  -0.410 55.53  0.00           C
ATOM    399  C   ALA A 100      -5.886  -6.300  -0.424 55.53  0.00           C
ATOM    400  O   ALA A 100      -6.172  -7.407  -0.880 55.53  0.00           O
ATOM    401  N   ILE A 101      -4.691  -6.012   0.078 45.41  0.00           N
ATOM    402  CA  ILE A 101      -3.597  -6.975   0.054 45.41  0.00           C
ATOM    403  C   ILE A 101      -3.146  -7.332   1.465 45.41  0.00           C
ATOM    404  O   ILE A 101      -2.630  -6.486   2.195 45.41  0.00           O
ATOM    405  N   ILE A 102      -3.344  -8.590   1.843 45.98  0.00           N
ATOM    406  CA  ILE A 102      -2.907  -9.076   3.146 45.98  0.00           C
ATOM    407  C   ILE A 102      -1.684  -9.977   3.016 45.98  0.00           C
ATOM    408  O   ILE A 102      -1.742 -11.032   2.385 45.98  0.00           O
ATOM    409  N   ARG A 103      -0.578  -9.554   3.617  0.00  0.00           N
ATOM    410  CA  ARG A 103       0.664 -10.316   3.562  0.00  0.00           C
ATOM    411  C   ARG A 103       0.882 -11.107   4.845  0.00  0.00           C
ATOM    412  O   ARG A 103       1.496 -12.174   4.832  0.00  0.00           O
ATOM    413  N   ASN A 104       0.376 -10.577   5.954 49.80  0.00           N
ATOM    414  CA  ASN A 104       0.451 -11.268   7.236 49.80  0.00           C
ATOM    415  C   ASN A 104      -0.619 -10.765   8.196 49.80  0.00           C
ATOM    416  O   ASN A 104      -0.427  -9.761   8.883 49.80  0.00           O
ATOM    417  N   ASP A 105      -1.746 -11.467   8.240 49.74  0.00           N
ATOM    418  CA  ASP A 105      -2.863 -11.070   9.089 49.74  0.00           C
ATOM    419  C   ASP A 105      -2.420 -10.887  10.534 49.74  0.00           C
ATOM    420  O   ASP A 105      -2.654  -9.840  11.138 49.74  0.00           O
ATOM    421  N   ASN A 106      -1.776 -11.912  11.085 45.80  0.00           N
ATOM    422  CA  ASN A 106      -1.372 -11.899  12.485 45.80  0.00           C
ATOM    423  C   ASN A 106      -0.329 -10.821  12.748 45.80  0.00           C
ATOM    424  O   ASN A 106      -0.302 -10.218  13.821 45.80  0.00           O
ATOM    425  N   GLY A 107       0.531 -10.584  11.764 40.33  0.00           N
ATOM    426  CA  GLY A 107       1.592  -9.593  11.894 40.33  0.00           C
ATOM    427  C   GLY A 107       1.103  -8.208  11.491 40.33  0.00           C
ATOM    428  O   GLY A 107       1.876  -7.250  11.462 40.33  0.00           O
ATOM    429  N   LYS A 108      -0.184  -8.108  11.178 28.24  0.00           N
ATOM    430  CA  LYS A 108      -0.790  -6.828  10.828 28.24  0.00           C
ATOM    431  C   LYS A 108      -0.114  -6.213   9.610 28.24  0.00           C
ATOM    432  O   LYS A 108       0.002  -4.992   9.503 28.24  0.00           O
ATOM    433  N   SER A 109       0.333  -7.066   8.693 50.50  0.00           N
ATOM    434  CA  SER A 109       0.935  -6.606   7.449 50.50  0.00           C
ATOM    435  C   SER A 109      -0.095  -6.550   6.326 50.50  0.00           C
ATOM    436  O   SER A 109      -0.343  -7.547   5.649 50.50  0.00           O
ATOM    437  N   ILE A 110      -0.690  -5.379   6.134 46.11  0.00           N
ATOM    438  CA  ILE A 110      -1.730  -5.202   5.127 46.11  0.00           C
ATOM    439  C   ILE A 110      -1.574  -3.873   4.400 46.11  0.00           C
ATOM    440  O   ILE A 110      -1.365  -2.834   5.026 46.11  0.00           O
ATOM    441  N   VAL A 111      -1.676  -3.913   3.076 52.77  0.00           N
ATOM    442  CA  VAL A 111      -1.586  -2.705   2.264 52.77  0.00           C
ATOM    443  C   VAL A 111      -2.720  -2.640   1.249 52.77  0.00           C
ATOM    444  O   VAL A 111      -3.483  -3.592   1.094 52.77  0.00           O
ATOM    445  N   ILE A 112      -2.824  -1.509   0.559 49.99  0.00           N
ATOM    446  CA  ILE A 112      -3.885  -1.304  -0.420 49.99  0.00           C
ATOM    447  C   ILE A 112      -3.319  -0.838  -1.756 49.99  0.00           C
ATOM    448  O   ILE A 112      -2.634   0.183  -1.828 49.99  0.00           O
ATOM    449  N   GLU A 113      -3.609  -1.591  -2.811 56.99  0.00           N
ATOM    450  CA  GLU A 113      -3.240  -1.190  -4.163 56.99  0.00           C
ATOM    451  C   GLU A 113      -4.434  -0.611  -4.912 56.99  0.00           C
ATOM    452  O   GLU A 113      -5.368  -1.332  -5.262 56.99  0.00           O
ATOM    453  N   ILE A 114      -4.398   0.695  -5.153 52.33  0.00           N
ATOM    454  CA  ILE A 114      -5.512   1.387  -5.789 52.33  0.00           C
ATOM    455  C   ILE A 114      -5.478   1.212  -7.302 52.33  0.00           C
ATOM    456  O   ILE A 114      -4.453   1.447  -7.941 52.33  0.00           O
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ATOM    457  N   LYS A 115      -6.606   0.799  -7.870 54.13  0.00           N
ATOM    458  CA  LYS A 115      -6.678   0.488  -9.292 54.13  0.00           C
ATOM    459  C   LYS A 115      -7.791   1.274  -9.972 54.13  0.00           C
ATOM    460  O   LYS A 115      -8.637   1.873  -9.308 54.13  0.00           O
ATOM    461  N   THR A 116      -7.785   1.269 -11.301 43.55  0.00           N
ATOM    462  CA  THR A 116      -8.842   1.909 -12.074 43.55  0.00           C
ATOM    463  C   THR A 116     -10.181   1.218 -11.856 43.55  0.00           C
ATOM    464  O   THR A 116     -10.266  -0.010 -11.870 43.55  0.00           O
ATOM    465  N   SER A 117     -11.226   2.013 -11.653 40.11  0.00           N
ATOM    466  CA  SER A 117     -12.526   1.484 -11.257 40.11  0.00           C
ATOM    467  C   SER A 117     -13.064   0.509 -12.295 40.11  0.00           C
ATOM    468  O   SER A 117     -13.720  -0.476 -11.955 40.11  0.00           O
ATOM    469  N   ARG A 118     -12.783   0.788 -13.563 45.62  0.00           N
ATOM    470  CA  ARG A 118     -13.249  -0.057 -14.656 45.62  0.00           C
ATOM    471  C   ARG A 118     -12.644  -1.453 -14.569 45.62  0.00           C
ATOM    472  O   ARG A 118     -11.434  -1.605 -14.401 45.62  0.00           O
ATOM    473  N   SER A 119     -13.493  -2.468 -14.686 45.19  0.00           N
ATOM    474  CA  SER A 119     -13.060  -3.851 -14.523 45.19  0.00           C
ATOM    475  C   SER A 119     -12.137  -4.276 -15.658 45.19  0.00           C
ATOM    476  O   SER A 119     -11.366  -5.226 -15.520 45.19  0.00           O
ATOM    477  N   ASP A 120     -12.220  -3.567 -16.779 53.65  0.00           N
ATOM    478  CA  ASP A 120     -11.357  -3.839 -17.922 53.65  0.00           C
ATOM    479  C   ASP A 120     -10.000  -3.166 -17.761 53.65  0.00           C
ATOM    480  O   ASP A 120      -9.066  -3.444 -18.514 53.65  0.00           O
ATOM    481  N   LYS A 121      -9.896  -2.283 -16.775 42.30  0.00           N
ATOM    482  CA  LYS A 121      -8.668  -1.534 -16.543 42.30  0.00           C
ATOM    483  C   LYS A 121      -8.080  -1.850 -15.173 42.30  0.00           C
ATOM    484  O   LYS A 121      -8.634  -2.650 -14.420 42.30  0.00           O
ATOM    485  N   GLY A 122      -6.955  -1.218 -14.858 49.97  0.00           N
ATOM    486  CA  GLY A 122      -6.294  -1.427 -13.574 49.97  0.00           C
ATOM    487  C   GLY A 122      -5.207  -0.385 -13.340 49.97  0.00           C
ATOM    488  O   GLY A 122      -5.158   0.640 -14.021 49.97  0.00           O
ATOM    489  N   LEU A 123      -4.336  -0.653 -12.374 66.42  0.00           N
ATOM    490  CA  LEU A 123      -3.232   0.248 -12.064 66.42  0.00           C
ATOM    491  C   LEU A 123      -2.035  -0.017 -12.966 66.42  0.00           C
ATOM    492  O   LEU A 123      -1.493  -1.122 -12.987 66.42  0.00           O
ATOM    493  N   PRO A 124      -1.625   1.004 -13.712 52.81  0.00           N
ATOM    494  CA  PRO A 124      -0.461   0.897 -14.584 52.81  0.00           C
ATOM    495  C   PRO A 124       0.771   0.456 -13.805 52.81  0.00           C
ATOM    496  O   PRO A 124       0.934   0.800 -12.633 52.81  0.00           O
ATOM    497  N   LEU A 125       1.638  -0.307 -14.461 37.58  0.00           N
ATOM    498  CA  LEU A 125       2.822  -0.856 -13.810 37.58  0.00           C
ATOM    499  C   LEU A 125       3.741   0.253 -13.315 37.58  0.00           C
ATOM    500  O   LEU A 125       4.473   0.077 -12.340 37.58  0.00           O
ATOM    501  N   ILE A 126       3.700   1.396 -13.990 55.60  0.00           N
ATOM    502  CA  ILE A 126       4.514   2.543 -13.606 55.60  0.00           C
ATOM    503  C   ILE A 126       4.041   3.136 -12.284 55.60  0.00           C
ATOM    504  O   ILE A 126       4.781   3.861 -11.619 55.60  0.00           O
ATOM    505  N   HIS A 127       2.805   2.823 -11.910 54.70  0.00           N
ATOM    506  CA  HIS A 127       2.281   3.204 -10.603 54.70  0.00           C
ATOM    507  C   HIS A 127       2.455   2.078  -9.592 54.70  0.00           C
ATOM    508  O   HIS A 127       2.622   2.324  -8.397 54.70  0.00           O
ATOM    509  N   HIS A 128       2.415   0.842 -10.077 42.39  0.00           N
ATOM    510  CA  HIS A 128       2.726  -0.317  -9.249 42.39  0.00           C
ATOM    511  C   HIS A 128       4.125  -0.210  -8.657 42.39  0.00           C
ATOM    512  O   HIS A 128       4.354  -0.591  -7.509 42.39  0.00           O
ATOM    513  N   LYS A 129       5.059   0.308  -9.447 38.83  0.00           N
ATOM    514  CA  LYS A 129       6.413   0.559  -8.971 38.83  0.00           C
ATOM    515  C   LYS A 129       6.408   1.455  -7.739 38.83  0.00           C
ATOM    516  O   LYS A 129       7.098   1.180  -6.756 38.83  0.00           O
ATOM    517  N   MET A 130       5.626   2.527  -7.797 53.12  0.00           N
ATOM    518  CA  MET A 130       5.529   3.466  -6.686 53.12  0.00           C
ATOM    519  C   MET A 130       4.824   2.836  -5.492 53.12  0.00           C
ATOM    520  O   MET A 130       5.153   3.124  -4.341 53.12  0.00           O
ATOM    521  N   GLN A 131       3.851   1.976  -5.772 55.83  0.00           N
ATOM    522  CA  GLN A 131       3.175   1.217  -4.728 55.83  0.00           C
ATOM    523  C   GLN A 131       4.166   0.395  -3.914 55.83  0.00           C
ATOM    524  O   GLN A 131       4.127   0.398  -2.683 55.83  0.00           O
ATOM    525  N   LEU A 132       5.055  -0.308  -4.607 51.50  0.00           N
ATOM    526  CA  LEU A 132       6.068  -1.124  -3.950 51.50  0.00           C
ATOM    527  C   LEU A 132       7.001  -0.269  -3.103 51.50  0.00           C
ATOM    528  O   LEU A 132       7.452  -0.691  -2.039 51.50  0.00           O
ATOM    529  N   GLN A 133       7.287   0.938  -3.581 48.48  0.00           N
ATOM    530  CA  GLN A 133       8.145   1.866  -2.856 48.48  0.00           C
ATOM    531  C   GLN A 133       7.520   2.273  -1.529 48.48  0.00           C
ATOM    532  O   GLN A 133       8.187   2.281  -0.494 48.48  0.00           O
ATOM    533  N   ILE A 134       6.235   2.609  -1.564 74.19  0.00           N
ATOM    534  CA  ILE A 134       5.535   3.090  -0.379 74.19  0.00           C
ATOM    535  C   ILE A 134       5.147   1.938   0.538 74.19  0.00           C
ATOM    536  O   ILE A 134       4.868   2.139   1.719 74.19  0.00           O
ATOM    537  N   TYR A 135       5.132   0.730  -0.014 50.36  0.00           N
ATOM    538  CA  TYR A 135       4.877  -0.470   0.776 50.36  0.00           C
ATOM    539  C   TYR A 135       5.951  -0.670   1.836 50.36  0.00           C
ATOM    540  O   TYR A 135       5.722  -1.332   2.848 50.36  0.00           O
ATOM    541  N   LEU A 136       7.125  -0.096   1.597 55.33  0.00           N
ATOM    542  CA  LEU A 136       8.222  -0.166   2.556 55.33  0.00           C
ATOM    543  C   LEU A 136       7.791   0.346   3.924 55.33  0.00           C
ATOM    544  O   LEU A 136       8.285  -0.114   4.954 55.33  0.00           O
ATOM    545  N   TRP A 137       6.866   1.300   3.929 58.33  0.00           N
ATOM    546  CA  TRP A 137       6.444   1.951   5.163 58.33  0.00           C
ATOM    547  C   TRP A 137       5.014   1.571   5.526 58.33  0.00           C
ATOM    548  O   TRP A 137       4.650   1.533   6.701 58.33  0.00           O
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ATOM    549  N   LEU A 138       4.206   1.289   4.508 32.14  0.00           N
ATOM    550  CA  LEU A 138       2.816   0.903   4.719 32.14  0.00           C
ATOM    551  C   LEU A 138       2.719  -0.444   5.422 32.14  0.00           C
ATOM    552  O   LEU A 138       1.850  -0.653   6.268 32.14  0.00           O
ATOM    553  N   PHE A 139       3.616  -1.357   5.066 45.69  0.00           N
ATOM    554  CA  PHE A 139       3.709  -2.646   5.742 45.69  0.00           C
ATOM    555  C   PHE A 139       4.290  -2.493   7.143 45.69  0.00           C
ATOM    556  O   PHE A 139       3.740  -3.013   8.114 45.69  0.00           O
ATOM    557  N   SER A 140       5.404  -1.775   7.240 48.76  0.00           N
ATOM    558  CA  SER A 140       6.189  -1.743   8.468 48.76  0.00           C
ATOM    559  C   SER A 140       5.547  -0.836   9.509 48.76  0.00           C
ATOM    560  O   SER A 140       5.817  -0.958  10.704 48.76  0.00           O
ATOM    561  N   ALA A 141       4.694   0.074   9.049 46.70  0.00           N
ATOM    562  CA  ALA A 141       3.954   0.954   9.946 46.70  0.00           C
ATOM    563  C   ALA A 141       2.557   0.415  10.217 46.70  0.00           C
ATOM    564  O   ALA A 141       1.811   0.972  11.023 46.70  0.00           O
ATOM    565  N   GLU A 142       2.206  -0.672   9.538 24.72  0.00           N
ATOM    566  CA  GLU A 142       0.882  -1.271   9.681 24.72  0.00           C
ATOM    567  C   GLU A 142      -0.214  -0.273   9.329 24.72  0.00           C
ATOM    568  O   GLU A 142      -1.168  -0.093  10.085 24.72  0.00           O
ATOM    569  N   LYS A 143      -0.071   0.374   8.178 36.43  0.00           N
ATOM    570  CA  LYS A 143      -1.005   1.414   7.762 36.43  0.00           C
ATOM    571  C   LYS A 143      -1.541   1.146   6.362 36.43  0.00           C
ATOM    572  O   LYS A 143      -1.013   0.303   5.636 36.43  0.00           O
ATOM    573  N   GLY A 144      -2.590   1.870   5.988 50.78  0.00           N
ATOM    574  CA  GLY A 144      -3.191   1.721   4.667 50.78  0.00           C
ATOM    575  C   GLY A 144      -3.476   3.079   4.036 50.78  0.00           C
ATOM    576  O   GLY A 144      -3.227   4.120   4.643 50.78  0.00           O
ATOM    577  N   ILE A 145      -3.997   3.059   2.814 48.61  0.00           N
ATOM    578  CA  ILE A 145      -4.347   4.288   2.111 48.61  0.00           C
ATOM    579  C   ILE A 145      -5.389   4.026   1.031 48.61  0.00           C
ATOM    580  O   ILE A 145      -5.278   3.067   0.268 48.61  0.00           O
ATOM    581  N   LEU A 146      -6.400   4.886   0.971 52.71  0.00           N
ATOM    582  CA  LEU A 146      -7.386   4.837  -0.102 52.71  0.00           C
ATOM    583  C   LEU A 146      -7.304   6.078  -0.981 52.71  0.00           C
ATOM    584  O   LEU A 146      -7.851   7.127  -0.642 52.71  0.00           O
ATOM    585  N   VAL A 147      -6.619   5.951  -2.113 58.59  0.00           N
ATOM    586  CA  VAL A 147      -6.448   7.068  -3.034 58.59  0.00           C
ATOM    587  C   VAL A 147      -7.651   7.212  -3.955 58.59  0.00           C
ATOM    588  O   VAL A 147      -8.104   6.239  -4.558 58.59  0.00           O
ATOM    589  N   TYR A 148      -8.167   8.433  -4.060 50.20  0.00           N
ATOM    590  CA  TYR A 148      -9.299   8.713  -4.936 50.20  0.00           C
ATOM    591  C   TYR A 148      -8.964   9.812  -5.936 50.20  0.00           C
ATOM    592  O   TYR A 148      -8.220  10.742  -5.623 50.20  0.00           O
ATOM    593  N   ILE A 149      -9.515   9.699  -7.138 59.40  0.00           N
ATOM    594  CA  ILE A 149      -9.255  10.669  -8.195 59.40  0.00           C
ATOM    595  C   ILE A 149     -10.551  11.264  -8.730 59.40  0.00           C
ATOM    596  O   ILE A 149     -11.401  10.548  -9.260 59.40  0.00           O
ATOM    597  N   THR A 150     -10.697  12.576  -8.589 50.91  0.00           N
ATOM    598  CA  THR A 150     -11.848  13.283  -9.139 50.91  0.00           C
ATOM    599  C   THR A 150     -11.435  14.196 -10.286 50.91  0.00           C
ATOM    600  O   THR A 150     -10.267  14.560 -10.414 50.91  0.00           O
ATOM    601  N   PRO A 151     -12.403  14.565 -11.119 38.79  0.00           N
ATOM    602  CA  PRO A 151     -12.150  15.467 -12.236 38.79  0.00           C
ATOM    603  C   PRO A 151     -11.749  16.853 -11.745 38.79  0.00           C
ATOM    604  O   PRO A 151     -11.261  17.677 -12.518 38.79  0.00           O
ATOM    605  N   ASP A 152     -11.957  17.102 -10.458 46.49  0.00           N
ATOM    606  CA  ASP A 152     -11.584  18.375  -9.853 46.49  0.00           C
ATOM    607  C   ASP A 152     -10.167  18.325  -9.295 46.49  0.00           C
ATOM    608  O   ASP A 152      -9.387  19.261  -9.472 46.49  0.00           O
ATOM    609  N   ARG A 153      -9.841  17.229  -8.620 48.05  0.00           N
ATOM    610  CA  ARG A 153      -8.526  17.068  -8.010 48.05  0.00           C
ATOM    611  C   ARG A 153      -8.323  15.644  -7.509 48.05  0.00           C
ATOM    612  O   ARG A 153      -9.284  14.897  -7.324 48.05  0.00           O
ATOM    613  N   ILE A 154      -7.065  15.272  -7.291 44.50  0.00           N
ATOM    614  CA  ILE A 154      -6.740  13.998  -6.664 44.50  0.00           C
ATOM    615  C   ILE A 154      -6.587  14.148  -5.156 44.50  0.00           C
ATOM    616  O   ILE A 154      -5.919  15.064  -4.679 44.50  0.00           O
ATOM    617  N   ALA A 155      -7.212  13.244  -4.409 44.74  0.00           N
ATOM    618  CA  ALA A 155      -7.213  13.320  -2.954 44.74  0.00           C
ATOM    619  C   ALA A 155      -7.017  11.944  -2.330 44.74  0.00           C
ATOM    620  O   ALA A 155      -7.554  10.949  -2.816 44.74  0.00           O
ATOM    621  N   GLU A 156      -6.245  11.894  -1.249 44.85  0.00           N
ATOM    622  CA  GLU A 156      -5.882  10.628  -0.625 44.85  0.00           C
ATOM    623  C   GLU A 156      -6.514  10.493   0.755 44.85  0.00           C
ATOM    624  O   GLU A 156      -6.402  11.391   1.590 44.85  0.00           O
ATOM    625  N   TYR A 157      -7.179   9.366   0.988 45.56  0.00           N
ATOM    626  CA  TYR A 157      -7.688   9.038   2.314 45.56  0.00           C
ATOM    627  C   TYR A 157      -6.734   8.111   3.056 45.56  0.00           C
ATOM    628  O   TYR A 157      -6.838   6.888   2.958 45.56  0.00           O
ATOM    629  N   GLU A 158      -5.804   8.701   3.800 42.77  0.00           N
ATOM    630  CA  GLU A 158      -4.818   7.931   4.548 42.77  0.00           C
ATOM    631  C   GLU A 158      -5.462   7.202   5.720 42.77  0.00           C
ATOM    632  O   GLU A 158      -6.300   7.762   6.427 42.77  0.00           O
ATOM    633  N   ILE A 159      -5.067   5.950   5.921 48.46  0.00           N
ATOM    634  CA  ILE A 159      -5.604   5.142   7.010 48.46  0.00           C
ATOM    635  C   ILE A 159      -4.551   4.892   8.082 48.46  0.00           C
ATOM    636  O   ILE A 159      -3.571   4.185   7.850 48.46  0.00           O
ATOM    637  N   ASN A 160      -4.761   5.477   9.257 42.29  0.00           N
ATOM    638  CA  ASN A 160      -3.779   5.407  10.332 42.29  0.00           C
ATOM    639  C   ASN A 160      -3.594   3.976  10.818 42.29  0.00           C
ATOM    640  O   ASN A 160      -4.358   3.082  10.452 42.29  0.00           O
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ATOM    641  N   GLU A 161      -2.575   3.763  11.644 29.62  0.00           N
ATOM    642  CA  GLU A 161      -2.253   2.429  12.137 29.62  0.00           C
ATOM    643  C   GLU A 161      -3.358   1.894  13.041 29.62  0.00           C
ATOM    644  O   GLU A 161      -3.853   0.785  12.840 29.62  0.00           O
ATOM    645  N   PRO A 162      -3.739   2.688  14.035 47.60  0.00           N
ATOM    646  CA  PRO A 162      -4.800   2.304  14.958 47.60  0.00           C
ATOM    647  C   PRO A 162      -6.158   2.303  14.268 47.60  0.00           C
ATOM    648  O   PRO A 162      -7.060   1.560  14.652 47.60  0.00           O
ATOM    649  N   LEU A 163      -6.297   3.141  13.245 43.37  0.00           N
ATOM    650  CA  LEU A 163      -7.508   3.166  12.435 43.37  0.00           C
ATOM    651  C   LEU A 163      -7.657   1.883  11.626 43.37  0.00           C
ATOM    652  O   LEU A 163      -8.745   1.317  11.537 43.37  0.00           O
ATOM    653  N   ASP A 164      -6.555   1.430  11.038 15.75  0.00           N
ATOM    654  CA  ASP A 164      -6.541   0.170  10.305 15.75  0.00           C
ATOM    655  C   ASP A 164      -6.905  -0.999  11.212 15.75  0.00           C
ATOM    656  O   ASP A 164      -7.704  -1.859  10.841 15.75  0.00           O
ATOM    657  N   GLU A 165      -6.314  -1.024  12.402 44.28  0.00           N
ATOM    658  CA  GLU A 165      -6.625  -2.051  13.389 44.28  0.00           C
ATOM    659  C   GLU A 165      -8.101  -2.027  13.764 44.28  0.00           C
ATOM    660  O   GLU A 165      -8.738  -3.074  13.885 44.28  0.00           O
ATOM    661  N   ALA A 166      -8.641  -0.826  13.946 56.50  0.00           N
ATOM    662  CA  ALA A 166     -10.042  -0.664  14.320 56.50  0.00           C
ATOM    663  C   ALA A 166     -10.966  -1.240  13.256 56.50  0.00           C
ATOM    664  O   ALA A 166     -11.924  -1.947  13.569 56.50  0.00           O
ATOM    665  N   THR A 167     -10.675  -0.933  11.997 42.80  0.00           N
ATOM    666  CA  THR A 167     -11.529  -1.344  10.890 42.80  0.00           C
ATOM    667  C   THR A 167     -11.428  -2.843  10.642 42.80  0.00           C
ATOM    668  O   THR A 167     -12.402  -3.486  10.251 42.80  0.00           O
ATOM    669  N   ILE A 168     -10.242  -3.397  10.872 43.48  0.00           N
ATOM    670  CA  ILE A 168     -10.030  -4.834  10.752 43.48  0.00           C
ATOM    671  C   ILE A 168     -10.884  -5.602  11.753 43.48  0.00           C
ATOM    672  O   ILE A 168     -11.614  -6.523  11.384 43.48  0.00           O
ATOM    673  N   VAL A 169     -10.789  -5.219  13.021 59.04  0.00           N
ATOM    674  CA  VAL A 169     -11.501  -5.913  14.087 59.04  0.00           C
ATOM    675  C   VAL A 169     -13.005  -5.697  13.977 59.04  0.00           C
ATOM    676  O   VAL A 169     -13.788  -6.638  14.105 59.04  0.00           O
ATOM    677  N   ARG A 170     -13.403  -4.452  13.740 42.54  0.00           N
ATOM    678  CA  ARG A 170     -14.815  -4.093  13.701 42.54  0.00           C
ATOM    679  C   ARG A 170     -15.531  -4.793  12.552 42.54  0.00           C
ATOM    680  O   ARG A 170     -16.626  -5.327  12.724 42.54  0.00           O
ATOM    681  N   LEU A 171     -14.904  -4.787  11.381 50.99  0.00           N
ATOM    682  CA  LEU A 171     -15.507  -5.367  10.186 50.99  0.00           C
ATOM    683  C   LEU A 171     -15.463  -6.888  10.230 50.99  0.00           C
ATOM    684  O   LEU A 171     -16.337  -7.560   9.681 50.99  0.00           O
ATOM    685  N   ALA A 172     -14.441  -7.428  10.886 48.07  0.00           N
ATOM    686  CA  ALA A 172     -14.363  -8.861  11.136 48.07  0.00           C
ATOM    687  C   ALA A 172     -15.526  -9.335  11.999 48.07  0.00           C
ATOM    688  O   ALA A 172     -16.155 -10.351  11.705 48.07  0.00           O
ATOM    689  N   GLU A 173     -15.806  -8.593  13.064 69.67  0.00           N
ATOM    690  CA  GLU A 173     -16.909  -8.923  13.959 69.67  0.00           C
ATOM    691  C   GLU A 173     -18.254  -8.722  13.274 69.67  0.00           C
ATOM    692  O   GLU A 173     -19.193  -9.488  13.492 69.67  0.00           O
ATOM    693  N   ASP A 174     -18.341  -7.688  12.444 40.91  0.00           N
ATOM    694  CA  ASP A 174     -19.549  -7.427  11.670 40.91  0.00           C
ATOM    695  C   ASP A 174     -19.832  -8.558  10.690 40.91  0.00           C
ATOM    696  O   ASP A 174     -20.981  -8.955  10.500 40.91  0.00           O
ATOM    697  N   THR A 175     -18.776  -9.076  10.071 47.42  0.00           N
ATOM    698  CA  THR A 175     -18.902 -10.206   9.159 47.42  0.00           C
ATOM    699  C   THR A 175     -19.352 -11.461   9.896 47.42  0.00           C
ATOM    700  O   THR A 175     -20.185 -12.219   9.399 47.42  0.00           O
ATOM    701  N   ILE A 176     -18.797 -11.674  11.085 32.81  0.00           N
ATOM    702  CA  ILE A 176     -19.205 -12.788  11.932 32.81  0.00           C
ATOM    703  C   ILE A 176     -20.692 -12.716  12.258 32.81  0.00           C
ATOM    704  O   ILE A 176     -21.408 -13.713  12.155 32.81  0.00           O
ATOM    705  N   MET A 177     -21.150 -11.533  12.649 38.99  0.00           N
ATOM    706  CA  MET A 177     -22.556 -11.325  12.975 38.99  0.00           C
ATOM    707  C   MET A 177     -23.436 -11.475  11.741 38.99  0.00           C
ATOM    708  O   MET A 177     -24.568 -11.952  11.827 38.99  0.00           O
ATOM    709  N   LEU A 178     -22.909 -11.065  10.591 39.02  0.00           N
ATOM    710  CA  LEU A 178     -23.625 -11.202   9.328 39.02  0.00           C
ATOM    711  C   LEU A 178     -23.839 -12.668   8.973 39.02  0.00           C
ATOM    712  O   LEU A 178     -24.902 -13.048   8.481 39.02  0.00           O
ATOM    713  N   GLN A 179     -22.823 -13.487   9.223 51.25  0.00           N
ATOM    714  CA  GLN A 179     -22.923 -14.923   8.994 51.25  0.00           C
ATOM    715  C   GLN A 179     -23.858 -15.579  10.001 51.25  0.00           C
ATOM    716  O   GLN A 179     -24.593 -16.508   9.668 51.25  0.00           O
ATOM    717  N   ASN A 180     -23.825 -15.089  11.236 45.90  0.00           N
ATOM    718  CA  ASN A 180     -24.684 -15.614  12.292 45.90  0.00           C
ATOM    719  C   ASN A 180     -26.139 -15.229  12.060 45.90  0.00           C
ATOM    720  O   ASN A 180     -27.052 -15.984  12.393 45.90  0.00           O
ATOM    721  N   SER A 181     -26.349 -14.049  11.486 62.18  0.00           N
ATOM    722  CA  SER A 181     -27.695 -13.547  11.236 62.18  0.00           C
ATOM    723  C   SER A 181     -27.768 -12.803   9.909 62.18  0.00           C
ATOM    724  O   SER A 181     -27.204 -11.718   9.763 62.18  0.00           O
ATOM    725  N   PRO A 182     -28.465 -13.392   8.943 60.53  0.00           N
ATOM    726  CA  PRO A 182     -28.622 -12.781   7.629 60.53  0.00           C
ATOM    727  C   PRO A 182     -29.268 -11.405   7.736 60.53  0.00           C
ATOM    728  O   PRO A 182     -29.086 -10.553   6.866 60.53  0.00           O
ATOM    729  N   ARG A 183     -30.025 -11.194   8.808 84.37  0.00           N
ATOM    730  CA  ARG A 183     -30.759  -9.948   8.995 84.37  0.00           C
ATOM    731  C   ARG A 183     -29.881  -8.883   9.638 84.37  0.00           C
ATOM    732  O   ARG A 183     -30.347  -7.786   9.948 84.37  0.00           O
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ATOM    733  N   PHE A 184     -28.610  -9.212   9.838 52.25  0.00           N
ATOM    734  CA  PHE A 184     -27.642  -8.252  10.354 52.25  0.00           C
ATOM    735  C   PHE A 184     -27.592  -6.999   9.488 52.25  0.00           C
ATOM    736  O   PHE A 184     -27.570  -7.083   8.260 52.25  0.00           O
ATOM    737  N   ASN A 185     -27.576  -5.840  10.134 63.62  0.00           N
ATOM    738  CA  ASN A 185     -27.545  -4.566   9.424 63.62  0.00           C
ATOM    739  C   ASN A 185     -26.163  -4.289   8.849 63.62  0.00           C
ATOM    740  O   ASN A 185     -25.415  -3.464   9.375 63.62  0.00           O
ATOM    741  N   TRP A 186     -25.827  -4.984   7.767 44.36  0.00           N
ATOM    742  CA  TRP A 186     -24.536  -4.809   7.114 44.36  0.00           C
ATOM    743  C   TRP A 186     -24.491  -3.508   6.322 44.36  0.00           C
ATOM    744  O   TRP A 186     -24.978  -3.441   5.193 44.36  0.00           O
ATOM    745  N   GLU A 187     -23.903  -2.477   6.919 82.86  0.00           N
ATOM    746  CA  GLU A 187     -23.773  -1.183   6.262 82.86  0.00           C
ATOM    747  C   GLU A 187     -22.320  -0.886   5.913 82.86  0.00           C
ATOM    748  O   GLU A 187     -21.895   0.270   5.912 82.86  0.00           O
ATOM    749  N   CYS A 188     -21.560  -1.936   5.619 55.08  0.00           N
ATOM    750  CA  CYS A 188     -20.135  -1.798   5.348 55.08  0.00           C
ATOM    751  C   CYS A 188     -19.776  -2.376   3.985 55.08  0.00           C
ATOM    752  O   CYS A 188     -18.698  -2.944   3.805 55.08  0.00           O
ATOM    753  N   LYS A 189     -20.684  -2.226   3.026 38.40  0.00           N
ATOM    754  CA  LYS A 189     -20.477  -2.760   1.684 38.40  0.00           C
ATOM    755  C   LYS A 189     -19.211  -2.193   1.056 38.40  0.00           C
ATOM    756  O   LYS A 189     -18.490  -2.896   0.349 38.40  0.00           O
ATOM    757  N   TYR A 190     -18.947  -0.918   1.316 25.73  0.00           N
ATOM    758  CA  TYR A 190     -17.894  -0.194   0.614 25.73  0.00           C
ATOM    759  C   TYR A 190     -16.692   0.046   1.519 25.73  0.00           C
ATOM    760  O   TYR A 190     -16.037   1.085   1.437 25.73  0.00           O
ATOM    761  N   CYS A 191     -16.407  -0.922   2.384 41.49  0.00           N
ATOM    762  CA  CYS A 191     -15.184  -0.906   3.177 41.49  0.00           C
ATOM    763  C   CYS A 191     -14.118  -1.807   2.566 41.49  0.00           C
ATOM    764  O   CYS A 191     -14.431  -2.746   1.834 41.49  0.00           O
ATOM    765  N   ILE A 192     -12.859  -1.515   2.868 38.99  0.00           N
ATOM    766  CA  ILE A 192     -11.739  -2.209   2.244 38.99  0.00           C
ATOM    767  C   ILE A 192     -11.698  -3.674   2.659 38.99  0.00           C
ATOM    768  O   ILE A 192     -11.155  -4.517   1.944 38.99  0.00           O
ATOM    769  N   PHE A 193     -12.277  -3.973   3.817 38.05  0.00           N
ATOM    770  CA  PHE A 193     -12.291  -5.334   4.339 38.05  0.00           C
ATOM    771  C   PHE A 193     -13.676  -5.955   4.216 38.05  0.00           C
ATOM    772  O   PHE A 193     -13.962  -6.984   4.830 38.05  0.00           O
ATOM    773  N   SER A 194     -14.533  -5.327   3.418 44.71  0.00           N
ATOM    774  CA  SER A 194     -15.924  -5.748   3.305 44.71  0.00           C
ATOM    775  C   SER A 194     -16.038  -7.087   2.587 44.71  0.00           C
ATOM    776  O   SER A 194     -17.053  -7.775   2.692 44.71  0.00           O
ATOM    777  N   VAL A 195     -14.989  -7.452   1.857 51.78  0.00           N
ATOM    778  CA  VAL A 195     -14.989  -8.685   1.080 51.78  0.00           C
ATOM    779  C   VAL A 195     -14.024  -9.706   1.670 51.78  0.00           C
ATOM    780  O   VAL A 195     -13.720 -10.722   1.044 51.78  0.00           O
ATOM    781  N   ILE A 196     -13.543  -9.431   2.878 33.86  0.00           N
ATOM    782  CA  ILE A 196     -12.543 -10.277   3.515 33.86  0.00           C
ATOM    783  C   ILE A 196     -13.060 -10.846   4.831 33.86  0.00           C
ATOM    784  O   ILE A 196     -13.620 -10.121   5.653 33.86  0.00           O
ATOM    785  N   CYS A 197     -12.867 -12.146   5.024 51.61  0.00           N
ATOM    786  CA  CYS A 197     -13.447 -12.844   6.165 51.61  0.00           C
ATOM    787  C   CYS A 197     -12.610 -12.638   7.421 51.61  0.00           C
ATOM    788  O   CYS A 197     -11.436 -12.276   7.344 51.61  0.00           O
ATOM    789  N   PRO A 198     -13.221 -12.871   8.578 31.41  0.00           N
ATOM    790  CA  PRO A 198     -12.525 -12.739   9.853 31.41  0.00           C
ATOM    791  C   PRO A 198     -11.358 -13.715   9.946 31.41  0.00           C
ATOM    792  O   PRO A 198     -10.437 -13.521  10.739 31.41  0.00           O
ATOM    793  N   ALA A 199     -11.405 -14.765   9.132 44.28  0.00           N
ATOM    794  CA  ALA A 199     -10.309 -15.722   9.055 44.28  0.00           C
ATOM    795  C   ALA A 199      -9.023 -15.052   8.588 44.28  0.00           C
ATOM    796  O   ALA A 199      -7.925 -15.474   8.950 44.28  0.00           O
ATOM    797  N   LYS A 200      -9.166 -14.006   7.783 51.19  0.00           N
ATOM    798  CA  LYS A 200      -8.017 -13.260   7.283 51.19  0.00           C
ATOM    799  C   LYS A 200      -7.829 -11.958   8.052 51.19  0.00           C
ATOM    800  O   LYS A 200      -6.725 -11.419   8.117 51.19  0.00           O
ATOM    801  N   LEU A 201      -8.914 -11.458   8.634 36.97  0.00           N
ATOM    802  CA  LEU A 201      -8.859 -10.251   9.448 36.97  0.00           C
ATOM    803  C   LEU A 201      -8.462 -10.573  10.884 36.97  0.00           C
ATOM    804  O   LEU A 201      -9.279 -10.480  11.800 36.97  0.00           O
ATOM    805  N   THR A 202      -7.203 -10.952  11.074 47.06  0.00           N
ATOM    806  CA  THR A 202      -6.689 -11.267  12.401 47.06  0.00           C
ATOM    807  C   THR A 202      -6.152 -10.021  13.094 47.06  0.00           C
ATOM    808  O   THR A 202      -6.910  -9.255  13.622 47.06  0.00           O
TER     809      THR A 202
ENDMDL
END
REMARK   1 ****************************************************************
REMARK   1 Start File NAT_vs_DEC1_dSi_colored.pdb
REMARK   1 The occupancy record was modified to represent dSi := Si(DEC)-Si(NAT).
REMARK   1 Occ=0.00 means dSi=-1.507170 kB; Occ=99.99 means dSi=1.490229 kB.
MODEL        0
ATOM      1  N   MSE A   1      23.268  -4.104 -18.521 35.21  0.00           N
ATOM      2  CA  MSE A   1      23.439  -2.722 -18.016 35.21  0.00           C
ATOM      3  C   MSE A   1      22.152  -2.161 -17.383 35.21  0.00           C
ATOM      4  O   MSE A   1      22.147  -1.650 -16.252 35.21  0.00           O
ATOM      5  N   ILE A   2      21.045  -2.254 -18.100 31.82  0.00           N
ATOM      6  CA  ILE A   2      19.816  -1.632 -17.608 31.82  0.00           C
ATOM      7  C   ILE A   2      19.269  -2.405 -16.412 31.82  0.00           C
ATOM      8  O   ILE A   2      18.935  -1.835 -15.391 31.82  0.00           O
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ATOM      9  N   THR A   3      19.186  -3.703 -16.563 27.55  0.00           N
ATOM     10  CA  THR A   3      18.718  -4.606 -15.498 27.55  0.00           C
ATOM     11  C   THR A   3      19.478  -4.398 -14.212 27.55  0.00           C
ATOM     12  O   THR A   3      18.884  -4.188 -13.150 27.55  0.00           O
ATOM     13  N   GLU A   4      20.800  -4.447 -14.318 41.92  0.00           N
ATOM     14  CA  GLU A   4      21.687  -4.148 -13.195 41.92  0.00           C
ATOM     15  C   GLU A   4      21.342  -2.832 -12.484 41.92  0.00           C
ATOM     16  O   GLU A   4      21.232  -2.791 -11.242 41.92  0.00           O
ATOM     17  N   PHE A   5      21.133  -1.765 -13.247 41.07  0.00           N
ATOM     18  CA  PHE A   5      20.826  -0.486 -12.602 41.07  0.00           C
ATOM     19  C   PHE A   5      19.486  -0.520 -11.886 41.07  0.00           C
ATOM     20  O   PHE A   5      19.415  -0.122 -10.736 41.07  0.00           O
ATOM     21  N   LEU A   6      18.429  -1.039 -12.529 17.98  0.00           N
ATOM     22  CA  LEU A   6      17.100  -1.072 -11.873 17.98  0.00           C
ATOM     23  C   LEU A   6      17.119  -1.921 -10.586 17.98  0.00           C
ATOM     24  O   LEU A   6      16.551  -1.545  -9.531 17.98  0.00           O
ATOM     25  N   LEU A   7      17.767  -3.071 -10.672 29.60  0.00           N
ATOM     26  CA  LEU A   7      17.843  -3.929  -9.486 29.60  0.00           C
ATOM     27  C   LEU A   7      18.603  -3.241  -8.341 29.60  0.00           C
ATOM     28  O   LEU A   7      18.190  -3.292  -7.184 29.60  0.00           O
ATOM     29  N   LYS A   8      19.691  -2.566  -8.693 47.82  0.00           N
ATOM     30  CA  LYS A   8      20.463  -1.856  -7.680 47.82  0.00           C
ATOM     31  C   LYS A   8      19.628  -0.762  -7.044 47.82  0.00           C
ATOM     32  O   LYS A   8      19.527  -0.688  -5.819 47.82  0.00           O
ATOM     33  N   LYS A   9      18.947   0.036  -7.860 30.34  0.00           N
ATOM     34  CA  LYS A   9      18.144   1.113  -7.292 30.34  0.00           C
ATOM     35  C   LYS A   9      17.009   0.545  -6.471 30.34  0.00           C
ATOM     36  O   LYS A   9      16.708   1.086  -5.402 30.34  0.00           O
ATOM     37  N   LYS A  10      16.379  -0.547  -6.912 26.27  0.00           N
ATOM     38  CA  LYS A  10      15.262  -1.072  -6.116 26.27  0.00           C
ATOM     39  C   LYS A  10      15.660  -1.681  -4.726 26.27  0.00           C
ATOM     40  O   LYS A  10      14.931  -1.547  -3.695 26.27  0.00           O
ATOM     41  N   LEU A  11      16.798  -2.366  -4.699 25.05  0.00           N
ATOM     42  CA  LEU A  11      17.328  -2.879  -3.411 25.05  0.00           C
ATOM     43  C   LEU A  11      17.613  -1.686  -2.439 25.05  0.00           C
ATOM     44  O   LEU A  11      17.179  -1.698  -1.270 25.05  0.00           O
ATOM     45  N   GLU A  12      18.299  -0.655  -2.945 18.67  0.00           N
ATOM     46  CA  GLU A  12      18.475   0.605  -2.181 18.67  0.00           C
ATOM     47  C   GLU A  12      17.179   1.213  -1.616 18.67  0.00           C
ATOM     48  O   GLU A  12      17.048   1.390  -0.426 18.67  0.00           O
ATOM     49  N   GLU A  13      16.225   1.536  -2.461  0.00  0.00           N
ATOM     50  CA  GLU A  13      14.901   1.950  -1.974  0.00  0.00           C
ATOM     51  C   GLU A  13      14.358   1.037  -0.868  0.00  0.00           C
ATOM     52  O   GLU A  13      13.966   1.505   0.190  0.00  0.00           O
ATOM     53  N   HIS A  14      14.335  -0.267  -1.101 18.87  0.00           N
ATOM     54  CA  HIS A  14      13.794  -1.199  -0.106 18.87  0.00           C
ATOM     55  C   HIS A  14      14.560  -1.126   1.236 18.87  0.00           C
ATOM     56  O   HIS A  14      13.970  -1.122   2.322 18.87  0.00           O
ATOM     57  N   LEU A  15      15.884  -1.079   1.145 29.94  0.00           N
ATOM     58  CA  LEU A  15      16.750  -1.011   2.322 29.94  0.00           C
ATOM     59  C   LEU A  15      16.724   0.377   2.988 29.94  0.00           C
ATOM     60  O   LEU A  15      17.114   0.492   4.140 29.94  0.00           O
ATOM     61  N   SER A  16      16.283   1.421   2.277 29.27  0.00           N
ATOM     62  CA  SER A  16      16.215   2.761   2.870 29.27  0.00           C
ATOM     63  C   SER A  16      15.126   2.866   3.937 29.27  0.00           C
ATOM     64  O   SER A  16      15.184   3.766   4.746 29.27  0.00           O
ATOM     65  N   HIS A  17      14.126   1.987   3.905 26.74  0.00           N
ATOM     66  CA  HIS A  17      12.931   2.175   4.710 26.74  0.00           C
ATOM     67  C   HIS A  17      12.911   1.290   5.925 26.74  0.00           C
ATOM     68  O   HIS A  17      12.211   0.285   5.939 26.74  0.00           O
ATOM     69  N   VAL A  18      13.667   1.662   6.952 28.01  0.00           N
ATOM     70  CA  VAL A  18      13.649   0.930   8.226 28.01  0.00           C
ATOM     71  C   VAL A  18      12.455   1.416   9.073 28.01  0.00           C
ATOM     72  O   VAL A  18      12.231   2.619   9.198 28.01  0.00           O
ATOM     73  N   LYS A  19      11.711   0.480   9.654 25.89  0.00           N
ATOM     74  CA  LYS A  19      10.394   0.738  10.251 25.89  0.00           C
ATOM     75  C   LYS A  19      10.466   0.797  11.779 25.89  0.00           C
ATOM     76  O   LYS A  19      11.024  -0.102  12.394 25.89  0.00           O
ATOM     77  N   GLU A  20       9.892   1.832  12.391 38.34  0.00           N
ATOM     78  CA  GLU A  20      10.003   2.007  13.848 38.34  0.00           C
ATOM     79  C   GLU A  20       8.986   1.178  14.597 38.34  0.00           C
ATOM     80  O   GLU A  20       7.952   0.808  14.049 38.34  0.00           O
ATOM     81  N   GLU A  21       9.300   0.899  15.861 52.27  0.00           N
ATOM     82  CA  GLU A  21       8.634  -0.168  16.607 52.27  0.00           C
ATOM     83  C   GLU A  21       7.153   0.124  16.844 52.27  0.00           C
ATOM     84  O   GLU A  21       6.369  -0.811  17.040 52.27  0.00           O
ATOM     85  N   ASN A  22       6.774   1.399  16.808 45.69  0.00           N
ATOM     86  CA  ASN A  22       5.371   1.790  16.970 45.69  0.00           C
ATOM     87  C   ASN A  22       4.716   2.391  15.715 45.69  0.00           C
ATOM     88  O   ASN A  22       3.648   3.000  15.824 45.69  0.00           O
ATOM     89  N   THR A  23       5.339   2.269  14.540 71.65  0.00           N
ATOM     90  CA  THR A  23       4.636   2.674  13.297 71.65  0.00           C
ATOM     91  C   THR A  23       3.937   1.492  12.597 71.65  0.00           C
ATOM     92  O   THR A  23       4.343   0.315  12.707 71.65  0.00           O
ATOM     93  N   ILE A  24       2.863   1.841  11.907 76.27  0.00           N
ATOM     94  CA  ILE A  24       2.133   0.908  11.089 76.27  0.00           C
ATOM     95  C   ILE A  24       1.893   1.588   9.781 76.27  0.00           C
ATOM     96  O   ILE A  24       1.270   2.646   9.760 76.27  0.00           O
ATOM     97  N   TYR A  25       2.393   1.015   8.691 61.46  0.00           N
ATOM     98  CA  TYR A  25       2.072   1.558   7.393 61.46  0.00           C
ATOM     99  C   TYR A  25       0.609   1.246   7.051 61.46  0.00           C
ATOM    100  O   TYR A  25       0.029   0.273   7.510 61.46  0.00           O
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ATOM    101  N   VAL A  26       0.019   2.088   6.230 76.75  0.00           N
ATOM    102  CA  VAL A  26      -1.326   1.856   5.716 76.75  0.00           C
ATOM    103  C   VAL A  26      -1.394   0.504   4.989 76.75  0.00           C
ATOM    104  O   VAL A  26      -2.320  -0.244   5.138 76.75  0.00           O
ATOM    105  N   THR A  27      -0.413   0.264   4.153 59.89  0.00           N
ATOM    106  CA  THR A  27      -0.225  -0.940   3.432 59.89  0.00           C
ATOM    107  C   THR A  27      -0.214  -2.155   4.325 59.89  0.00           C
ATOM    108  O   THR A  27      -0.816  -3.189   4.005 59.89  0.00           O
ATOM    109  N   ASP A  28       0.421  -2.066   5.476 62.29  0.00           N
ATOM    110  CA  ASP A  28       0.217  -3.125   6.447 62.29  0.00           C
ATOM    111  C   ASP A  28      -1.221  -3.366   6.899 62.29  0.00           C
ATOM    112  O   ASP A  28      -1.560  -4.494   7.172 62.29  0.00           O
ATOM    113  N   LEU A  29      -2.082  -2.355   6.958 78.11  0.00           N
ATOM    114  CA  LEU A  29      -3.418  -2.565   7.521 78.11  0.00           C
ATOM    115  C   LEU A  29      -4.304  -3.447   6.637 78.11  0.00           C
ATOM    116  O   LEU A  29      -5.335  -3.962   7.065 78.11  0.00           O
ATOM    117  N   VAL A  30      -3.930  -3.597   5.378 60.79  0.00           N
ATOM    118  CA  VAL A  30      -4.776  -4.325   4.449 60.79  0.00           C
ATOM    119  C   VAL A  30      -4.099  -5.619   4.014 60.79  0.00           C
ATOM    120  O   VAL A  30      -4.413  -6.174   2.971 60.79  0.00           O
ATOM    121  N   ARG A  31      -3.154  -6.069   4.828 99.99  0.00           N
ATOM    122  CA  ARG A  31      -2.426  -7.287   4.613 99.99  0.00           C
ATOM    123  C   ARG A  31      -2.433  -8.174   5.834 99.99  0.00           C
ATOM    124  O   ARG A  31      -2.927  -7.806   6.907 99.99  0.00           O
ATOM    125  N   CYS A  32      -1.955  -9.395   5.616 67.03  0.00           N
ATOM    126  CA  CYS A  32      -1.910 -10.426   6.637 67.03  0.00           C
ATOM    127  C   CYS A  32      -1.015  -9.951   7.770 67.03  0.00           C
ATOM    128  O   CYS A  32       0.134  -9.567   7.534 67.03  0.00           O
ATOM    129  N   PRO A  33      -1.508 -10.024   8.999 50.80  0.00           N
ATOM    130  CA  PRO A  33      -0.664  -9.610  10.083 50.80  0.00           C
ATOM    131  C   PRO A  33       0.611 -10.429  10.223 50.80  0.00           C
ATOM    132  O   PRO A  33       1.694  -9.852  10.411 50.80  0.00           O
ATOM    133  N   ARG A  34       0.512 -11.757  10.119 19.13  0.00           N
ATOM    134  CA  ARG A  34       1.689 -12.574  10.256 19.13  0.00           C
ATOM    135  C   ARG A  34       2.720 -12.198   9.218 19.13  0.00           C
ATOM    136  O   ARG A  34       3.911 -12.267   9.453 19.13  0.00           O
ATOM    137  N   ARG A  35       2.276 -11.837   8.033 22.35  0.00           N
ATOM    138  CA  ARG A  35       3.238 -11.530   6.965 22.35  0.00           C
ATOM    139  C   ARG A  35       3.971 -10.221   7.251 22.35  0.00           C
ATOM    140  O   ARG A  35       5.151 -10.042   6.901 22.35  0.00           O
ATOM    141  N   VAL A  36       3.228  -9.297   7.848 50.49  0.00           N
ATOM    142  CA  VAL A  36       3.791  -7.981   8.175 50.49  0.00           C
ATOM    143  C   VAL A  36       4.864  -8.200   9.230 50.49  0.00           C
ATOM    144  O   VAL A  36       5.972  -7.734   9.085 50.49  0.00           O
ATOM    145  N   ARG A  37       4.561  -8.972  10.259 50.75  0.00           N
ATOM    146  CA  ARG A  37       5.600  -9.259  11.227 50.75  0.00           C
ATOM    147  C   ARG A  37       6.749 -10.045  10.630 50.75  0.00           C
ATOM    148  O   ARG A  37       7.879  -9.890  11.061 50.75  0.00           O
ATOM    149  N   TYR A  38       6.481 -10.904   9.649 51.51  0.00           N
ATOM    150  CA  TYR A  38       7.570 -11.660   9.036 51.51  0.00           C
ATOM    151  C   TYR A  38       8.499 -10.724   8.363 51.51  0.00           C
ATOM    152  O   TYR A  38       9.689 -10.942   8.377 51.51  0.00           O
ATOM    153  N   GLU A  39       7.963  -9.678   7.760 73.67  0.00           N
ATOM    154  CA  GLU A  39       8.816  -8.667   7.126 73.67  0.00           C
ATOM    155  C   GLU A  39       9.769  -7.904   8.077 73.67  0.00           C
ATOM    156  O   GLU A  39      10.773  -7.394   7.597 73.67  0.00           O
ATOM    157  N   SER A  40       9.464  -7.844   9.380 55.15  0.00           N
ATOM    158  CA  SER A  40      10.398  -7.338  10.412 55.15  0.00           C
ATOM    159  C   SER A  40      11.345  -8.393  10.958 55.15  0.00           C
ATOM    160  O   SER A  40      12.540  -8.130  11.114 55.15  0.00           O
ATOM    161  N   GLU A  41      10.808  -9.578  11.263 47.58  0.00           N
ATOM    162  CA  GLU A  41      11.604 -10.637  11.865 47.58  0.00           C
ATOM    163  C   GLU A  41      12.456 -11.415  10.889 47.58  0.00           C
ATOM    164  O   GLU A  41      13.321 -12.135  11.370 47.58  0.00           O
ATOM    165  N   TYR A  42      12.238 -11.336   9.566 46.48  0.00           N
ATOM    166  CA  TYR A  42      13.052 -12.135   8.586 46.48  0.00           C
ATOM    167  C   TYR A  42      13.369 -11.290   7.378 46.48  0.00           C
ATOM    168  O   TYR A  42      13.024 -11.599   6.196 46.48  0.00           O
ATOM    169  N   LYS A  43      14.059 -10.210   7.691 61.04  0.00           N
ATOM    170  CA  LYS A  43      14.286  -9.169   6.756 61.04  0.00           C
ATOM    171  C   LYS A  43      15.175  -9.664   5.651 61.04  0.00           C
ATOM    172  O   LYS A  43      15.118  -9.127   4.534 61.04  0.00           O
ATOM    173  N   GLU A  44      16.024 -10.635   5.936 57.96  0.00           N
ATOM    174  CA  GLU A  44      16.906 -11.087   4.887 57.96  0.00           C
ATOM    175  C   GLU A  44      16.077 -11.799   3.791 57.96  0.00           C
ATOM    176  O   GLU A  44      16.309 -11.615   2.572 57.96  0.00           O
ATOM    177  N   LEU A  45      15.070 -12.551   4.234 52.74  0.00           N
ATOM    178  CA  LEU A  45      14.177 -13.244   3.311 52.74  0.00           C
ATOM    179  C   LEU A  45      13.268 -12.185   2.642 52.74  0.00           C
ATOM    180  O   LEU A  45      13.095 -12.177   1.406 52.74  0.00           O
ATOM    181  N   ALA A  46      12.710 -11.278   3.448 72.00  0.00           N
ATOM    182  CA  ALA A  46      11.893 -10.178   2.897 72.00  0.00           C
ATOM    183  C   ALA A  46      12.519  -9.534   1.649 72.00  0.00           C
ATOM    184  O   ALA A  46      11.825  -9.262   0.709 72.00  0.00           O
ATOM    185  N   ILE A  47      13.830  -9.341   1.634 59.42  0.00           N
ATOM    186  CA  ILE A  47      14.526  -8.691   0.538 59.42  0.00           C
ATOM    187  C   ILE A  47      14.299  -9.332  -0.838 59.42  0.00           C
ATOM    188  O   ILE A  47      14.451  -8.669  -1.895 59.42  0.00           O
ATOM    189  N   SER A  48      13.959 -10.620  -0.874 66.56  0.00           N
ATOM    190  CA  SER A  48      13.715 -11.277  -2.169 66.56  0.00           C
ATOM    191  C   SER A  48      12.509 -10.666  -2.882 66.56  0.00           C
ATOM    192  O   SER A  48      12.401 -10.723  -4.108 66.56  0.00           O
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ATOM    193  N   GLN A  49      11.610 -10.068  -2.123 62.34  0.00           N
ATOM    194  CA  GLN A  49      10.459  -9.434  -2.743 62.34  0.00           C
ATOM    195  C   GLN A  49      10.847  -8.226  -3.623 62.34  0.00           C
ATOM    196  O   GLN A  49      10.116  -7.889  -4.482 62.34  0.00           O
ATOM    197  N   VAL A  50      12.031  -7.643  -3.424 62.33  0.00           N
ATOM    198  CA  VAL A  50      12.659  -6.700  -4.358 62.33  0.00           C
ATOM    199  C   VAL A  50      12.750  -7.176  -5.802 62.33  0.00           C
ATOM    200  O   VAL A  50      12.805  -6.373  -6.754 62.33  0.00           O
ATOM    201  N   TYR A  51      12.865  -8.468  -5.991 23.81  0.00           N
ATOM    202  CA  TYR A  51      13.231  -8.953  -7.306 23.81  0.00           C
ATOM    203  C   TYR A  51      12.000  -9.515  -8.013 23.81  0.00           C
ATOM    204  O   TYR A  51      12.116 -10.179  -9.031 23.81  0.00           O
ATOM    205  N   ALA A  52      10.823  -9.258  -7.445 43.17  0.00           N
ATOM    206  CA  ALA A  52       9.580  -9.586  -8.075 43.17  0.00           C
ATOM    207  C   ALA A  52       9.375  -8.694  -9.336 43.17  0.00           C
ATOM    208  O   ALA A  52       9.152  -7.478  -9.216 43.17  0.00           O
ATOM    209  N   PRO A  53       9.401  -9.282 -10.541 43.74  0.00           N
ATOM    210  CA  PRO A  53       9.338  -8.519 -11.804 43.74  0.00           C
ATOM    211  C   PRO A  53       8.051  -7.715 -11.969 43.74  0.00           C
ATOM    212  O   PRO A  53       8.107  -6.662 -12.589 43.74  0.00           O
ATOM    213  N   SER A  54       6.912  -8.185 -11.428 38.09  0.00           N
ATOM    214  CA  SER A  54       5.662  -7.382 -11.372 38.09  0.00           C
ATOM    215  C   SER A  54       5.807  -6.143 -10.551 38.09  0.00           C
ATOM    216  O   SER A  54       5.159  -5.116 -10.806 38.09  0.00           O
ATOM    217  N   ALA A  55       6.666  -6.210  -9.534 38.71  0.00           N
ATOM    218  CA  ALA A  55       6.871  -5.023  -8.707 38.71  0.00           C
ATOM    219  C   ALA A  55       7.756  -4.055  -9.490 38.71  0.00           C
ATOM    220  O   ALA A  55       7.598  -2.860  -9.403 38.71  0.00           O
ATOM    221  N   ILE A  56       8.662  -4.543 -10.314 47.01  0.00           N
ATOM    222  CA  ILE A  56       9.562  -3.610 -11.005 47.01  0.00           C
ATOM    223  C   ILE A  56       8.724  -2.964 -12.115 47.01  0.00           C
ATOM    224  O   ILE A  56       8.790  -1.755 -12.348 47.01  0.00           O
ATOM    225  N   LEU A  57       7.912  -3.805 -12.760 30.78  0.00           N
ATOM    226  CA  LEU A  57       6.935  -3.366 -13.747 30.78  0.00           C
ATOM    227  C   LEU A  57       6.033  -2.336 -13.087 30.78  0.00           C
ATOM    228  O   LEU A  57       5.874  -1.207 -13.590 30.78  0.00           O
ATOM    229  N   GLY A  58       5.483  -2.701 -11.946 41.70  0.00           N
ATOM    230  CA  GLY A  58       4.634  -1.806 -11.182 41.70  0.00           C
ATOM    231  C   GLY A  58       5.258  -0.473 -10.875 41.70  0.00           C
ATOM    232  O   GLY A  58       4.607   0.560 -11.036 41.70  0.00           O
ATOM    233  N   ASP A  59       6.514  -0.439 -10.443 47.60  0.00           N
ATOM    234  CA  ASP A  59       7.150   0.844 -10.105 47.60  0.00           C
ATOM    235  C   ASP A  59       7.486   1.775 -11.275 47.60  0.00           C
ATOM    236  O   ASP A  59       7.461   2.943 -11.121 47.60  0.00           O
ATOM    237  N   ILE A  60       7.874   1.212 -12.405 48.47  0.00           N
ATOM    238  CA  ILE A  60       8.072   1.923 -13.651 48.47  0.00           C
ATOM    239  C   ILE A  60       6.774   2.586 -14.133 48.47  0.00           C
ATOM    240  O   ILE A  60       6.798   3.761 -14.559 48.47  0.00           O
ATOM    241  N   LEU A  61       5.641   1.870 -14.058 35.67  0.00           N
ATOM    242  CA  LEU A  61       4.334   2.454 -14.392 35.67  0.00           C
ATOM    243  C   LEU A  61       4.024   3.653 -13.537 35.67  0.00           C
ATOM    244  O   LEU A  61       3.668   4.678 -14.050 35.67  0.00           O
ATOM    245  N   HIS A  62       4.172   3.508 -12.232 37.96  0.00           N
ATOM    246  CA  HIS A  62       3.968   4.616 -11.306 37.96  0.00           C
ATOM    247  C   HIS A  62       4.884   5.714 -11.684 37.96  0.00           C
ATOM    248  O   HIS A  62       4.443   6.854 -11.841 37.96  0.00           O
ATOM    249  N   LEU A  63       6.158   5.423 -11.888 34.78  0.00           N
ATOM    250  CA  LEU A  63       7.034   6.526 -12.325 34.78  0.00           C
ATOM    251  C   LEU A  63       6.405   7.217 -13.537 34.78  0.00           C
ATOM    252  O   LEU A  63       6.167   8.394 -13.497 34.78  0.00           O
ATOM    253  N   GLY A  64       6.109   6.499 -14.603 36.31  0.00           N
ATOM    254  CA  GLY A  64       5.719   7.158 -15.811 36.31  0.00           C
ATOM    255  C   GLY A  64       4.400   7.890 -15.740 36.31  0.00           C
ATOM    256  O   GLY A  64       4.174   8.755 -16.509 36.31  0.00           O
ATOM    257  N   LEU A  65       3.499   7.454 -14.886 17.94  0.00           N
ATOM    258  CA  LEU A  65       2.129   7.928 -14.922 17.94  0.00           C
ATOM    259  C   LEU A  65       2.136   9.075 -13.968 17.94  0.00           C
ATOM    260  O   LEU A  65       1.699  10.153 -14.266 17.94  0.00           O
ATOM    261  N   GLU A  66       2.672   8.845 -12.789 54.01  0.00           N
ATOM    262  CA  GLU A  66       3.061   9.970 -11.943 54.01  0.00           C
ATOM    263  C   GLU A  66       3.702  11.154 -12.688 54.01  0.00           C
ATOM    264  O   GLU A  66       3.297  12.272 -12.436 54.01  0.00           O
ATOM    265  N   SER A  67       4.665  10.981 -13.581 46.40  0.00           N
ATOM    266  CA  SER A  67       5.183  12.221 -14.250 46.40  0.00           C
ATOM    267  C   SER A  67       4.100  13.012 -15.067 46.40  0.00           C
ATOM    268  O   SER A  67       4.182  14.248 -15.203 46.40  0.00           O
ATOM    269  N   VAL A  68       3.091  12.293 -15.600 51.69  0.00           N
ATOM    270  CA  VAL A  68       1.939  12.934 -16.238 51.69  0.00           C
ATOM    271  C   VAL A  68       1.158  13.773 -15.231 51.69  0.00           C
ATOM    272  O   VAL A  68       0.645  14.865 -15.520 51.69  0.00           O
ATOM    273  N   LEU A  69       1.040  13.216 -14.047 50.04  0.00           N
ATOM    274  CA  LEU A  69       0.261  13.818 -13.004 50.04  0.00           C
ATOM    275  C   LEU A  69       0.848  15.118 -12.430 50.04  0.00           C
ATOM    276  O   LEU A  69       0.134  15.992 -11.952 50.04  0.00           O
ATOM    277  N   LYS A  70       2.165  15.215 -12.445 52.71  0.00           N
ATOM    278  CA  LYS A  70       2.860  16.356 -11.911 52.71  0.00           C
ATOM    279  C   LYS A  70       2.708  17.450 -12.934 52.71  0.00           C
ATOM    280  O   LYS A  70       2.497  18.596 -12.562 52.71  0.00           O
ATOM    281  N   GLY A  71       2.769  17.105 -14.229 49.67  0.00           N
ATOM    282  CA  GLY A  71       2.550  18.111 -15.305 49.67  0.00           C
ATOM    283  C   GLY A  71       1.130  18.685 -15.376 49.67  0.00           C
ATOM    284  O   GLY A  71       0.821  19.815 -14.923 49.67  0.00           O
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ATOM    285  N   ASN A  72       0.217  17.876 -15.876 49.24  0.00           N
ATOM    286  CA  ASN A  72      -1.095  18.370 -16.206 49.24  0.00           C
ATOM    287  C   ASN A  72      -2.040  18.612 -15.074 49.24  0.00           C
ATOM    288  O   ASN A  72      -2.921  19.420 -15.211 49.24  0.00           O
ATOM    289  N   PHE A  73      -1.880  17.933 -13.966 43.22  0.00           N
ATOM    290  CA  PHE A  73      -2.766  18.118 -12.847 43.22  0.00           C
ATOM    291  C   PHE A  73      -2.091  18.771 -11.639 43.22  0.00           C
ATOM    292  O   PHE A  73      -2.674  18.861 -10.593 43.22  0.00           O
ATOM    293  N   ASN A  74      -0.838  19.166 -11.735 60.11  0.00           N
ATOM    294  CA  ASN A  74      -0.201  19.781 -10.582 60.11  0.00           C
ATOM    295  C   ASN A  74      -0.355  18.949  -9.279 60.11  0.00           C
ATOM    296  O   ASN A  74      -0.590  19.474  -8.165 60.11  0.00           O
ATOM    297  N   ALA A  75      -0.160  17.641  -9.414 54.45  0.00           N
ATOM    298  CA  ALA A  75      -0.115  16.792  -8.245 54.45  0.00           C
ATOM    299  C   ALA A  75       1.282  16.777  -7.622 54.45  0.00           C
ATOM    300  O   ALA A  75       2.270  16.992  -8.289 54.45  0.00           O
ATOM    301  N   GLU A  76       1.336  16.530  -6.332 56.74  0.00           N
ATOM    302  CA  GLU A  76       2.559  16.069  -5.695 56.74  0.00           C
ATOM    303  C   GLU A  76       2.544  14.546  -5.834 56.74  0.00           C
ATOM    304  O   GLU A  76       1.466  13.957  -5.865 56.74  0.00           O
ATOM    305  N   THR A  77       3.710  13.915  -5.909 71.61  0.00           N
ATOM    306  CA  THR A  77       3.794  12.484  -6.087 71.61  0.00           C
ATOM    307  C   THR A  77       4.639  11.898  -4.978 71.61  0.00           C
ATOM    308  O   THR A  77       5.510  12.566  -4.500 71.61  0.00           O
ATOM    309  N   GLU A  78       4.321  10.666  -4.562 74.39  0.00           N
ATOM    310  CA  GLU A  78       4.988   9.920  -3.517 74.39  0.00           C
ATOM    311  C   GLU A  78       5.020  10.703  -2.232 74.39  0.00           C
ATOM    312  O   GLU A  78       6.063  10.936  -1.623 74.39  0.00           O
ATOM    313  N   VAL A  79       3.826  11.074  -1.816 55.67  0.00           N
ATOM    314  CA  VAL A  79       3.635  12.010  -0.767 55.67  0.00           C
ATOM    315  C   VAL A  79       3.474  11.303   0.544 55.67  0.00           C
ATOM    316  O   VAL A  79       2.510  10.573   0.774 55.67  0.00           O
ATOM    317  N   GLU A  80       4.416  11.580   1.421 51.09  0.00           N
ATOM    318  CA  GLU A  80       4.530  10.857   2.668 51.09  0.00           C
ATOM    319  C   GLU A  80       3.901  11.655   3.780 51.09  0.00           C
ATOM    320  O   GLU A  80       4.090  12.840   3.853 51.09  0.00           O
ATOM    321  N   THR A  81       3.177  11.027   4.670 43.26  0.00           N
ATOM    322  CA  THR A  81       2.510  11.744   5.761 43.26  0.00           C
ATOM    323  C   THR A  81       2.133  10.811   6.884 43.26  0.00           C
ATOM    324  O   THR A  81       2.164   9.597   6.754 43.26  0.00           O
ATOM    325  N   LEU A  82       1.667  11.373   7.976 50.29  0.00           N
ATOM    326  CA  LEU A  82       1.644  10.601   9.202 50.29  0.00           C
ATOM    327  C   LEU A  82       0.492  11.060  10.035 50.29  0.00           C
ATOM    328  O   LEU A  82       0.098  12.203   9.950 50.29  0.00           O
ATOM    329  N   ARG A  83      -0.124  10.141  10.761 18.69  0.00           N
ATOM    330  CA  ARG A  83      -1.326  10.449  11.518 18.69  0.00           C
ATOM    331  C   ARG A  83      -1.368   9.467  12.659 18.69  0.00           C
ATOM    332  O   ARG A  83      -0.926   8.327  12.512 18.69  0.00           O
ATOM    333  N   GLU A  84      -1.873   9.890  13.809 14.28  0.00           N
ATOM    334  CA  GLU A  84      -1.727   9.022  14.978 14.28  0.00           C
ATOM    335  C   GLU A  84      -3.042   8.425  15.425 14.28  0.00           C
ATOM    336  O   GLU A  84      -4.110   8.996  15.183 14.28  0.00           O
ATOM    337  N   ILE A  85      -2.918   7.275  16.095 56.26  0.00           N
ATOM    338  CA  ILE A  85      -4.029   6.451  16.449 56.26  0.00           C
ATOM    339  C   ILE A  85      -3.781   5.841  17.813 56.26  0.00           C
ATOM    340  O   ILE A  85      -2.643   5.507  18.123 56.26  0.00           O
ATOM    341  N   ASN A  86      -4.840   5.701  18.619 40.06  0.00           N
ATOM    342  CA  ASN A  86      -4.761   5.021  19.937 40.06  0.00           C
ATOM    343  C   ASN A  86      -5.250   3.566  19.895 40.06  0.00           C
ATOM    344  O   ASN A  86      -6.399   3.293  19.511 40.06  0.00           O
ATOM    345  N   VAL A  87      -4.383   2.645  20.322 50.74  0.00           N
ATOM    346  CA  VAL A  87      -4.703   1.227  20.308 50.74  0.00           C
ATOM    347  C   VAL A  87      -4.355   0.547  21.630 50.74  0.00           C
ATOM    348  O   VAL A  87      -3.230   0.067  21.819 50.74  0.00           O
ATOM    349  N   GLY A  88      -5.321   0.484  22.542 49.52  0.00           N
ATOM    350  CA  GLY A  88      -5.066  -0.115  23.865 49.52  0.00           C
ATOM    351  C   GLY A  88      -4.192   0.803  24.708 49.52  0.00           C
ATOM    352  O   GLY A  88      -3.216   0.373  25.351 49.52  0.00           O
ATOM    353  N   GLY A  89      -4.538   2.089  24.663 48.06  0.00           N
ATOM    354  CA  GLY A  89      -3.780   3.124  25.348 48.06  0.00           C
ATOM    355  C   GLY A  89      -2.339   3.328  24.890 48.06  0.00           C
ATOM    356  O   GLY A  89      -1.668   4.231  25.406 48.06  0.00           O
ATOM    357  N   LYS A  90      -1.846   2.502  23.956 49.69  0.00           N
ATOM    358  CA  LYS A  90      -0.547   2.733  23.318 49.69  0.00           C
ATOM    359  C   LYS A  90      -0.830   3.651  22.138 49.69  0.00           C
ATOM    360  O   LYS A  90      -1.881   3.541  21.497 49.69  0.00           O
ATOM    361  N   VAL A  91       0.069   4.592  21.872 50.28  0.00           N
ATOM    362  CA  VAL A  91      -0.106   5.503  20.744 50.28  0.00           C
ATOM    363  C   VAL A  91       0.675   4.963  19.561 50.28  0.00           C
ATOM    364  O   VAL A  91       1.817   4.523  19.727 50.28  0.00           O
ATOM    365  N   TYR A  92       0.052   5.005  18.377 61.33  0.00           N
ATOM    366  CA  TYR A  92       0.676   4.480  17.190 61.33  0.00           C
ATOM    367  C   TYR A  92       0.645   5.490  16.087 61.33  0.00           C
ATOM    368  O   TYR A  92      -0.329   6.191  15.893 61.33  0.00           O
ATOM    369  N   LYS A  93       1.747   5.547  15.371 75.56  0.00           N
ATOM    370  CA  LYS A  93       1.859   6.412  14.217 75.56  0.00           C
ATOM    371  C   LYS A  93       1.524   5.603  12.955 75.56  0.00           C
ATOM    372  O   LYS A  93       2.270   4.714  12.581 75.56  0.00           O
ATOM    373  N   ILE A  94       0.406   5.927  12.320 54.38  0.00           N
ATOM    374  CA  ILE A  94       0.084   5.372  11.038 54.38  0.00           C
ATOM    375  C   ILE A  94       0.743   6.184   9.929 54.38  0.00           C
ATOM    376  O   ILE A  94       0.556   7.385   9.807 54.38  0.00           O
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ATOM    377  N   LYS A  95       1.497   5.507   9.097 65.40  0.00           N
ATOM    378  CA  LYS A  95       2.305   6.166   8.106 65.40  0.00           C
ATOM    379  C   LYS A  95       1.950   5.702   6.699 65.40  0.00           C
ATOM    380  O   LYS A  95       1.760   4.545   6.470 65.40  0.00           O
ATOM    381  N   GLY A  96       1.853   6.613   5.743 50.04  0.00           N
ATOM    382  CA  GLY A  96       1.572   6.242   4.383 50.04  0.00           C
ATOM    383  C   GLY A  96       2.142   7.179   3.378 50.04  0.00           C
ATOM    384  O   GLY A  96       2.537   8.280   3.703 50.04  0.00           O
ATOM    385  N   ARG A  97       2.107   6.740   2.138 43.71  0.00           N
ATOM    386  CA  ARG A  97       2.693   7.428   1.007 43.71  0.00           C
ATOM    387  C   ARG A  97       1.769   7.206  -0.178 43.71  0.00           C
ATOM    388  O   ARG A  97       1.672   6.084  -0.699 43.71  0.00           O
ATOM    389  N   ALA A  98       1.104   8.281  -0.588 45.35  0.00           N
ATOM    390  CA  ALA A  98       0.117   8.243  -1.592 45.35  0.00           C
ATOM    391  C   ALA A  98       0.862   8.383  -2.906 45.35  0.00           C
ATOM    392  O   ALA A  98       1.855   9.097  -3.010 45.35  0.00           O
ATOM    393  N   ASP A  99       0.424   7.673  -3.912 52.70  0.00           N
ATOM    394  CA  ASP A  99       1.076   7.754  -5.196 52.70  0.00           C
ATOM    395  C   ASP A  99       0.974   9.188  -5.720 52.70  0.00           C
ATOM    396  O   ASP A  99       1.922   9.707  -6.350 52.70  0.00           O
ATOM    397  N   ALA A 100      -0.166   9.846  -5.513 56.40  0.00           N
ATOM    398  CA  ALA A 100      -0.251  11.269  -5.953 56.40  0.00           C
ATOM    399  C   ALA A 100      -1.290  11.992  -5.184 56.40  0.00           C
ATOM    400  O   ALA A 100      -2.232  11.366  -4.731 56.40  0.00           O
ATOM    401  N   ILE A 101      -1.104  13.303  -4.998 52.13  0.00           N
ATOM    402  CA  ILE A 101      -2.137  14.137  -4.384 52.13  0.00           C
ATOM    403  C   ILE A 101      -2.390  15.420  -5.140 52.13  0.00           C
ATOM    404  O   ILE A 101      -1.467  16.143  -5.558 52.13  0.00           O
ATOM    405  N   ILE A 102      -3.672  15.695  -5.329 51.64  0.00           N
ATOM    406  CA  ILE A 102      -4.083  17.004  -5.796 51.64  0.00           C
ATOM    407  C   ILE A 102      -4.628  17.765  -4.581 51.64  0.00           C
ATOM    408  O   ILE A 102      -5.695  17.431  -4.073 51.64  0.00           O
ATOM    409  N   ARG A 103      -3.845  18.751  -4.103 49.29  0.00           N
ATOM    410  CA  ARG A 103      -4.150  19.504  -2.879 49.29  0.00           C
ATOM    411  C   ARG A 103      -5.423  20.391  -2.949 49.29  0.00           C
ATOM    412  O   ARG A 103      -6.199  20.482  -1.960 49.29  0.00           O
ATOM    413  N   ASN A 104      -5.626  21.051  -4.095 45.99  0.00           N
ATOM    414  CA  ASN A 104      -6.745  21.998  -4.259 45.99  0.00           C
ATOM    415  C   ASN A 104      -7.230  21.994  -5.679 45.99  0.00           C
ATOM    416  O   ASN A 104      -6.693  22.692  -6.538 45.99  0.00           O
ATOM    417  N   ASP A 105      -8.253  21.174  -5.879 43.08  0.00           N
ATOM    418  CA  ASP A 105      -9.039  21.134  -7.084 43.08  0.00           C
ATOM    419  C   ASP A 105     -10.471  21.605  -6.714 43.08  0.00           C
ATOM    420  O   ASP A 105     -11.262  20.843  -6.158 43.08  0.00           O
ATOM    421  N   ASN A 106     -10.768  22.878  -6.986 50.08  0.00           N
ATOM    422  CA  ASN A 106     -12.040  23.506  -6.575 50.08  0.00           C
ATOM    423  C   ASN A 106     -12.422  23.321  -5.104 50.08  0.00           C
ATOM    424  O   ASN A 106     -13.561  23.020  -4.774 50.08  0.00           O
ATOM    425  N   GLY A 107     -11.470  23.524  -4.215 44.36  0.00           N
ATOM    426  CA  GLY A 107     -11.717  23.337  -2.789 44.36  0.00           C
ATOM    427  C   GLY A 107     -11.737  21.883  -2.335 44.36  0.00           C
ATOM    428  O   GLY A 107     -12.404  21.544  -1.352 44.36  0.00           O
ATOM    429  N   LYS A 108     -11.008  21.019  -3.043 50.81  0.00           N
ATOM    430  CA  LYS A 108     -10.915  19.615  -2.668 50.81  0.00           C
ATOM    431  C   LYS A 108      -9.483  19.049  -2.884 50.81  0.00           C
ATOM    432  O   LYS A 108      -8.779  19.403  -3.839 50.81  0.00           O
ATOM    433  N   SER A 109      -9.039  18.236  -1.933 55.18  0.00           N
ATOM    434  CA  SER A 109      -7.862  17.387  -2.118 55.18  0.00           C
ATOM    435  C   SER A 109      -8.308  16.067  -2.739 55.18  0.00           C
ATOM    436  O   SER A 109      -9.315  15.517  -2.353 55.18  0.00           O
ATOM    437  N   ILE A 110      -7.524  15.551  -3.650 54.55  0.00           N
ATOM    438  CA  ILE A 110      -7.790  14.265  -4.209 54.55  0.00           C
ATOM    439  C   ILE A 110      -6.588  13.343  -3.999 54.55  0.00           C
ATOM    440  O   ILE A 110      -5.512  13.629  -4.510 54.55  0.00           O
ATOM    441  N   VAL A 111      -6.752  12.243  -3.266 56.94  0.00           N
ATOM    442  CA  VAL A 111      -5.679  11.220  -3.198 56.94  0.00           C
ATOM    443  C   VAL A 111      -5.836  10.276  -4.388 56.94  0.00           C
ATOM    444  O   VAL A 111      -6.932   9.764  -4.636 56.94  0.00           O
ATOM    445  N   ILE A 112      -4.775  10.018  -5.128 55.75  0.00           N
ATOM    446  CA  ILE A 112      -4.866   9.126  -6.282 55.75  0.00           C
ATOM    447  C   ILE A 112      -4.010   7.894  -6.056 55.75  0.00           C
ATOM    448  O   ILE A 112      -2.842   8.019  -5.770 55.75  0.00           O
ATOM    449  N   GLU A 113      -4.547   6.709  -6.243 47.46  0.00           N
ATOM    450  CA  GLU A 113      -3.780   5.455  -6.060 47.46  0.00           C
ATOM    451  C   GLU A 113      -3.823   4.710  -7.388 47.46  0.00           C
ATOM    452  O   GLU A 113      -4.882   4.569  -8.052 47.46  0.00           O
ATOM    453  N   ILE A 114      -2.657   4.354  -7.861 50.04  0.00           N
ATOM    454  CA  ILE A 114      -2.531   3.758  -9.150 50.04  0.00           C
ATOM    455  C   ILE A 114      -2.210   2.295  -8.960 50.04  0.00           C
ATOM    456  O   ILE A 114      -1.423   1.954  -8.099 50.04  0.00           O
ATOM    457  N   LYS A 115      -2.787   1.433  -9.786 48.70  0.00           N
ATOM    458  CA  LYS A 115      -2.621   0.003  -9.616 48.70  0.00           C
ATOM    459  C   LYS A 115      -2.438  -0.643 -10.947 48.70  0.00           C
ATOM    460  O   LYS A 115      -2.964  -0.176 -11.951 48.70  0.00           O
ATOM    461  N   THR A 116      -1.684  -1.729 -10.958 39.30  0.00           N
ATOM    462  CA  THR A 116      -1.468  -2.466 -12.194 39.30  0.00           C
ATOM    463  C   THR A 116      -1.602  -3.921 -11.890 39.30  0.00           C
ATOM    464  O   THR A 116      -1.369  -4.337 -10.804 39.30  0.00           O
ATOM    465  N   SER A 117      -2.085  -4.706 -12.802 35.66  0.00           N
ATOM    466  CA  SER A 117      -2.109  -6.154 -12.601 35.66  0.00           C
ATOM    467  C   SER A 117      -2.180  -6.692 -13.946 35.66  0.00           C
ATOM    468  O   SER A 117      -2.324  -5.911 -14.909 35.66  0.00           O
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ATOM    469  N   ARG A 118      -2.032  -8.006 -14.033  2.77  0.00           N
ATOM    470  CA  ARG A 118      -2.068  -8.640 -15.363  2.77  0.00           C
ATOM    471  C   ARG A 118      -3.471  -8.928 -15.862  2.77  0.00           C
ATOM    472  O   ARG A 118      -3.648  -9.162 -17.069  2.77  0.00           O
ATOM    473  N   SER A 119      -4.457  -8.893 -14.965 43.98  0.00           N
ATOM    474  CA  SER A 119      -5.872  -9.062 -15.362 43.98  0.00           C
ATOM    475  C   SER A 119      -6.800  -7.967 -14.770 43.98  0.00           C
ATOM    476  O   SER A 119      -6.533  -7.439 -13.690 43.98  0.00           O
ATOM    477  N   ASP A 120      -7.938  -7.766 -15.424 48.09  0.00           N
ATOM    478  CA  ASP A 120      -8.922  -6.789 -15.023 48.09  0.00           C
ATOM    479  C   ASP A 120     -10.062  -7.464 -14.339 48.09  0.00           C
ATOM    480  O   ASP A 120     -11.180  -6.930 -14.286 48.09  0.00           O
ATOM    481  N   LYS A 121      -9.805  -8.622 -13.800 17.69  0.00           N
ATOM    482  CA  LYS A 121     -10.861  -9.343 -13.147 17.69  0.00           C
ATOM    483  C   LYS A 121     -11.305  -8.719 -11.850 17.69  0.00           C
ATOM    484  O   LYS A 121     -10.493  -8.415 -10.994 17.69  0.00           O
ATOM    485  N   GLY A 122     -12.595  -8.552 -11.661 51.98  0.00           N
ATOM    486  CA  GLY A 122     -13.099  -8.150 -10.341 51.98  0.00           C
ATOM    487  C   GLY A 122     -12.816  -6.695  -9.897 51.98  0.00           C
ATOM    488  O   GLY A 122     -13.062  -6.363  -8.702 51.98  0.00           O
ATOM    489  N   LEU A 123     -12.369  -5.819 -10.826 66.67  0.00           N
ATOM    490  CA  LEU A 123     -12.047  -4.418 -10.440 66.67  0.00           C
ATOM    491  C   LEU A 123     -13.261  -3.672  -9.972 66.67  0.00           C
ATOM    492  O   LEU A 123     -14.252  -3.694 -10.654 66.67  0.00           O
ATOM    493  N   PRO A 124     -13.153  -2.951  -8.838 59.92  0.00           N
ATOM    494  CA  PRO A 124     -11.936  -2.786  -8.048 59.92  0.00           C
ATOM    495  C   PRO A 124     -11.854  -3.776  -6.934 59.92  0.00           C
ATOM    496  O   PRO A 124     -12.861  -4.122  -6.314 59.92  0.00           O
ATOM    497  N   LEU A 125     -10.645  -4.184  -6.634 44.28  0.00           N
ATOM    498  CA  LEU A 125     -10.394  -5.171  -5.542 44.28  0.00           C
ATOM    499  C   LEU A 125     -10.497  -4.530  -4.149 44.28  0.00           C
ATOM    500  O   LEU A 125     -10.112  -3.350  -3.908 44.28  0.00           O
ATOM    501  N   ILE A 126     -11.048  -5.276  -3.221 45.33  0.00           N
ATOM    502  CA  ILE A 126     -11.528  -4.647  -1.996 45.33  0.00           C
ATOM    503  C   ILE A 126     -10.339  -4.126  -1.167 45.33  0.00           C
ATOM    504  O   ILE A 126     -10.462  -3.123  -0.513 45.33  0.00           O
ATOM    505  N   HIS A 127      -9.195  -4.779  -1.251 35.63  0.00           N
ATOM    506  CA  HIS A 127      -8.055  -4.383  -0.479 35.63  0.00           C
ATOM    507  C   HIS A 127      -7.440  -3.163  -1.103 35.63  0.00           C
ATOM    508  O   HIS A 127      -6.834  -2.382  -0.415 35.63  0.00           O
ATOM    509  N   HIS A 128      -7.592  -2.980  -2.400 39.03  0.00           N
ATOM    510  CA  HIS A 128      -7.176  -1.718  -3.018 39.03  0.00           C
ATOM    511  C   HIS A 128      -8.083  -0.558  -2.609 39.03  0.00           C
ATOM    512  O   HIS A 128      -7.606   0.554  -2.368 39.03  0.00           O
ATOM    513  N   LYS A 129      -9.365  -0.803  -2.526 61.21  0.00           N
ATOM    514  CA  LYS A 129     -10.266   0.264  -2.198 61.21  0.00           C
ATOM    515  C   LYS A 129     -10.028   0.593  -0.745 61.21  0.00           C
ATOM    516  O   LYS A 129      -9.930   1.747  -0.408 61.21  0.00           O
ATOM    517  N   MSE A 130      -9.911  -0.410   0.128 46.12  0.00           N
ATOM    518  CA  MSE A 130      -9.661  -0.122   1.564 46.12  0.00           C
ATOM    519  C   MSE A 130      -8.432   0.772   1.739 46.12  0.00           C
ATOM    520  O   MSE A 130      -8.445   1.649   2.550 46.12  0.00           O
ATOM    521  N   GLN A 131      -7.394   0.520   0.958 56.30  0.00           N
ATOM    522  CA  GLN A 131      -6.133   1.211   1.097 56.30  0.00           C
ATOM    523  C   GLN A 131      -6.400   2.668   0.780 56.30  0.00           C
ATOM    524  O   GLN A 131      -5.918   3.542   1.460 56.30  0.00           O
ATOM    525  N   LEU A 132      -7.195   2.936  -0.242 53.92  0.00           N
ATOM    526  CA  LEU A 132      -7.436   4.290  -0.682 53.92  0.00           C
ATOM    527  C   LEU A 132      -8.295   4.984   0.347 53.92  0.00           C
ATOM    528  O   LEU A 132      -8.142   6.173   0.629 53.92  0.00           O
ATOM    529  N   GLN A 133      -9.173   4.244   0.963 50.81  0.00           N
ATOM    530  CA  GLN A 133     -10.034   4.835   1.951 50.81  0.00           C
ATOM    531  C   GLN A 133      -9.306   5.181   3.263 50.81  0.00           C
ATOM    532  O   GLN A 133      -9.739   6.050   4.021 50.81  0.00           O
ATOM    533  N   ILE A 134      -8.240   4.450   3.561 59.98  0.00           N
ATOM    534  CA  ILE A 134      -7.448   4.750   4.709 59.98  0.00           C
ATOM    535  C   ILE A 134      -6.635   6.008   4.375 59.98  0.00           C
ATOM    536  O   ILE A 134      -6.604   6.904   5.182 59.98  0.00           O
ATOM    537  N   TYR A 135      -5.993   6.089   3.200 55.08  0.00           N
ATOM    538  CA  TYR A 135      -5.308   7.299   2.832 55.08  0.00           C
ATOM    539  C   TYR A 135      -6.263   8.486   3.003 55.08  0.00           C
ATOM    540  O   TYR A 135      -5.876   9.536   3.592 55.08  0.00           O
ATOM    541  N   LEU A 136      -7.510   8.345   2.563 49.84  0.00           N
ATOM    542  CA  LEU A 136      -8.431   9.472   2.663 49.84  0.00           C
ATOM    543  C   LEU A 136      -8.471   9.988   4.123 49.84  0.00           C
ATOM    544  O   LEU A 136      -8.423  11.193   4.364 49.84  0.00           O
ATOM    545  N   TRP A 137      -8.562   9.085   5.079 49.66  0.00           N
ATOM    546  CA  TRP A 137      -8.471   9.465   6.480 49.66  0.00           C
ATOM    547  C   TRP A 137      -7.090  10.092   6.781 49.66  0.00           C
ATOM    548  O   TRP A 137      -6.988  11.182   7.363 49.66  0.00           O
ATOM    549  N   LEU A 138      -6.039   9.457   6.283 53.75  0.00           N
ATOM    550  CA  LEU A 138      -4.665   9.881   6.616 53.75  0.00           C
ATOM    551  C   LEU A 138      -4.353  11.332   6.246 53.75  0.00           C
ATOM    552  O   LEU A 138      -3.806  12.080   7.039 53.75  0.00           O
ATOM    553  N   PHE A 139      -4.725  11.691   5.030 48.93  0.00           N
ATOM    554  CA  PHE A 139      -4.602  13.020   4.511 48.93  0.00           C
ATOM    555  C   PHE A 139      -5.790  13.890   4.834 48.93  0.00           C
ATOM    556  O   PHE A 139      -5.772  15.074   4.508 48.93  0.00           O
ATOM    557  N   SER A 140      -6.827  13.321   5.474 50.30  0.00           N
ATOM    558  CA  SER A 140      -8.140  13.999   5.608 50.30  0.00           C
ATOM    559  C   SER A 140      -8.590  14.636   4.304 50.30  0.00           C
ATOM    560  O   SER A 140      -8.961  15.800   4.273 50.30  0.00           O
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ATOM    561  N   ALA A 141      -8.519  13.878   3.227 48.21  0.00           N
ATOM    562  CA  ALA A 141      -8.945  14.332   1.917 48.21  0.00           C
ATOM    563  C   ALA A 141     -10.405  13.939   1.667 48.21  0.00           C
ATOM    564  O   ALA A 141     -10.983  13.084   2.348 48.21  0.00           O
ATOM    565  N   GLU A 142     -11.035  14.621   0.722 28.93  0.00           N
ATOM    566  CA  GLU A 142     -12.471  14.427   0.489 28.93  0.00           C
ATOM    567  C   GLU A 142     -12.738  13.477  -0.702 28.93  0.00           C
ATOM    568  O   GLU A 142     -13.747  12.791  -0.707 28.93  0.00           O
ATOM    569  N   LYS A 143     -11.805  13.444  -1.660 52.21  0.00           N
ATOM    570  CA  LYS A 143     -11.916  12.652  -2.862 52.21  0.00           C
ATOM    571  C   LYS A 143     -10.727  11.686  -3.055 52.21  0.00           C
ATOM    572  O   LYS A 143      -9.539  11.991  -2.732 52.21  0.00           O
ATOM    573  N   GLY A 144     -11.077  10.526  -3.602 52.67  0.00           N
ATOM    574  CA  GLY A 144     -10.120   9.474  -3.925 52.67  0.00           C
ATOM    575  C   GLY A 144     -10.352   8.924  -5.300 52.67  0.00           C
ATOM    576  O   GLY A 144     -11.486   8.740  -5.697 52.67  0.00           O
ATOM    577  N   ILE A 145      -9.286   8.679  -6.041 51.81  0.00           N
ATOM    578  CA  ILE A 145      -9.380   8.016  -7.325 51.81  0.00           C
ATOM    579  C   ILE A 145      -8.437   6.791  -7.270 51.81  0.00           C
ATOM    580  O   ILE A 145      -7.274   6.920  -6.924 51.81  0.00           O
ATOM    581  N   LEU A 146      -8.955   5.621  -7.649 54.22  0.00           N
ATOM    582  CA  LEU A 146      -8.233   4.396  -7.797 54.22  0.00           C
ATOM    583  C   LEU A 146      -8.251   4.098  -9.279 54.22  0.00           C
ATOM    584  O   LEU A 146      -9.304   3.843  -9.816 54.22  0.00           O
ATOM    585  N   VAL A 147      -7.117   4.065  -9.937 56.90  0.00           N
ATOM    586  CA  VAL A 147      -7.059   3.872 -11.356 56.90  0.00           C
ATOM    587  C   VAL A 147      -6.211   2.623 -11.646 56.90  0.00           C
ATOM    588  O   VAL A 147      -5.067   2.470 -11.090 56.90  0.00           O
ATOM    589  N   TYR A 148      -6.742   1.739 -12.509 56.66  0.00           N
ATOM    590  CA  TYR A 148      -6.090   0.482 -12.844 56.66  0.00           C
ATOM    591  C   TYR A 148      -5.595   0.575 -14.257 56.66  0.00           C
ATOM    592  O   TYR A 148      -6.345   0.903 -15.117 56.66  0.00           O
ATOM    593  N   ILE A 149      -4.338   0.293 -14.483 48.41  0.00           N
ATOM    594  CA  ILE A 149      -3.766   0.206 -15.807 48.41  0.00           C
ATOM    595  C   ILE A 149      -3.430  -1.275 -15.990 48.41  0.00           C
ATOM    596  O   ILE A 149      -2.545  -1.776 -15.346 48.41  0.00           O
ATOM    597  N   THR A 150      -4.180  -2.003 -16.800 51.51  0.00           N
ATOM    598  CA  THR A 150      -3.964  -3.413 -16.968 51.51  0.00           C
ATOM    599  C   THR A 150      -3.936  -3.690 -18.433 51.51  0.00           C
ATOM    600  O   THR A 150      -4.311  -2.846 -19.222 51.51  0.00           O
ATOM    601  N   PRO A 151      -3.486  -4.859 -18.836 42.72  0.00           N
ATOM    602  CA  PRO A 151      -3.299  -5.051 -20.300 42.72  0.00           C
ATOM    603  C   PRO A 151      -4.601  -5.273 -21.077 42.72  0.00           C
ATOM    604  O   PRO A 151      -4.598  -5.259 -22.317 42.72  0.00           O
ATOM    605  N   ASP A 152      -5.658  -5.505 -20.333 49.44  0.00           N
ATOM    606  CA  ASP A 152      -6.988  -5.753 -20.794 49.44  0.00           C
ATOM    607  C   ASP A 152      -7.910  -4.564 -20.707 49.44  0.00           C
ATOM    608  O   ASP A 152      -8.921  -4.561 -21.326 49.44  0.00           O
ATOM    609  N   ARG A 153      -7.550  -3.582 -19.909 50.16  0.00           N
ATOM    610  CA  ARG A 153      -8.418  -2.528 -19.517 50.16  0.00           C
ATOM    611  C   ARG A 153      -7.808  -1.437 -18.658 50.16  0.00           C
ATOM    612  O   ARG A 153      -7.169  -1.665 -17.715 50.16  0.00           O
ATOM    613  N   ILE A 154      -8.107  -0.221 -18.973 49.79  0.00           N
ATOM    614  CA  ILE A 154      -7.873   0.874 -18.098 49.79  0.00           C
ATOM    615  C   ILE A 154      -9.177   1.197 -17.432 49.79  0.00           C
ATOM    616  O   ILE A 154     -10.135   1.182 -18.066 49.79  0.00           O
ATOM    617  N   ALA A 155      -9.204   1.463 -16.150 50.43  0.00           N
ATOM    618  CA  ALA A 155     -10.490   1.563 -15.403 50.43  0.00           C
ATOM    619  C   ALA A 155     -10.307   2.411 -14.178 50.43  0.00           C
ATOM    620  O   ALA A 155      -9.405   2.165 -13.464 50.43  0.00           O
ATOM    621  N   GLU A 156     -11.159   3.389 -13.945 50.47  0.00           N
ATOM    622  CA  GLU A 156     -10.959   4.392 -12.924 50.47  0.00           C
ATOM    623  C   GLU A 156     -12.193   4.455 -12.023 50.47  0.00           C
ATOM    624  O   GLU A 156     -13.299   4.455 -12.446 50.47  0.00           O
ATOM    625  N   TYR A 157     -11.976   4.532 -10.746 38.52  0.00           N
ATOM    626  CA  TYR A 157     -13.044   4.493  -9.764 38.52  0.00           C
ATOM    627  C   TYR A 157     -12.934   5.658  -8.804 38.52  0.00           C
ATOM    628  O   TYR A 157     -11.853   6.011  -8.265 38.52  0.00           O
ATOM    629  N   GLU A 158     -14.055   6.253  -8.542 47.79  0.00           N
ATOM    630  CA  GLU A 158     -14.108   7.361  -7.646 47.79  0.00           C
ATOM    631  C   GLU A 158     -14.532   6.786  -6.302 47.79  0.00           C
ATOM    632  O   GLU A 158     -15.602   6.184  -6.178 47.79  0.00           O
ATOM    633  N   ILE A 159     -13.651   6.902  -5.311 53.24  0.00           N
ATOM    634  CA  ILE A 159     -13.878   6.419  -3.939 53.24  0.00           C
ATOM    635  C   ILE A 159     -13.755   7.649  -3.027 53.24  0.00           C
ATOM    636  O   ILE A 159     -12.671   8.212  -2.918 53.24  0.00           O
ATOM    637  N   ASN A 160     -14.849   8.038  -2.394 60.63  0.00           N
ATOM    638  CA  ASN A 160     -14.894   9.274  -1.638 60.63  0.00           C
ATOM    639  C   ASN A 160     -15.165   9.116  -0.146 60.63  0.00           C
ATOM    640  O   ASN A 160     -14.949  10.056   0.594 60.63  0.00           O
ATOM    641  N   GLU A 161     -15.536   7.926   0.306 50.70  0.00           N
ATOM    642  CA  GLU A 161     -15.720   7.704   1.724 50.70  0.00           C
ATOM    643  C   GLU A 161     -14.467   7.151   2.407 50.70  0.00           C
ATOM    644  O   GLU A 161     -13.997   6.052   2.116 50.70  0.00           O
ATOM    645  N   PRO A 162     -13.950   7.900   3.365 52.96  0.00           N
ATOM    646  CA  PRO A 162     -12.848   7.426   4.187 52.96  0.00           C
ATOM    647  C   PRO A 162     -13.323   6.439   5.227 52.96  0.00           C
ATOM    648  O   PRO A 162     -14.483   6.537   5.645 52.96  0.00           O
ATOM    649  N   LEU A 163     -12.444   5.517   5.661 52.16  0.00           N
ATOM    650  CA  LEU A 163     -12.805   4.572   6.724 52.16  0.00           C
ATOM    651  C   LEU A 163     -12.888   5.346   8.019 52.16  0.00           C
ATOM    652  O   LEU A 163     -12.040   6.223   8.266 52.16  0.00           O
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ATOM    653  N   ASP A 164     -13.876   5.013   8.858 57.09  0.00           N
ATOM    654  CA  ASP A 164     -13.934   5.590  10.207 57.09  0.00           C
ATOM    655  C   ASP A 164     -12.616   5.280  10.928 57.09  0.00           C
ATOM    656  O   ASP A 164     -11.940   4.300  10.622 57.09  0.00           O
ATOM    657  N   GLU A 165     -12.301   6.090  11.926 61.08  0.00           N
ATOM    658  CA  GLU A 165     -11.127   5.880  12.758 61.08  0.00           C
ATOM    659  C   GLU A 165     -11.240   4.594  13.565 61.08  0.00           C
ATOM    660  O   GLU A 165     -10.265   3.923  13.761 61.08  0.00           O
ATOM    661  N   ALA A 166     -12.438   4.252  14.016 53.69  0.00           N
ATOM    662  CA  ALA A 166     -12.662   3.006  14.753 53.69  0.00           C
ATOM    663  C   ALA A 166     -12.336   1.750  13.921 53.69  0.00           C
ATOM    664  O   ALA A 166     -11.761   0.808  14.415 53.69  0.00           O
ATOM    665  N   THR A 167     -12.694   1.751  12.648 50.62  0.00           N
ATOM    666  CA  THR A 167     -12.382   0.638  11.768 50.62  0.00           C
ATOM    667  C   THR A 167     -10.872   0.497  11.623 50.62  0.00           C
ATOM    668  O   THR A 167     -10.346  -0.601  11.637 50.62  0.00           O
ATOM    669  N   ILE A 168     -10.171   1.619  11.528 56.16  0.00           N
ATOM    670  CA  ILE A 168      -8.732   1.633  11.358 56.16  0.00           C
ATOM    671  C   ILE A 168      -8.078   1.128  12.626 56.16  0.00           C
ATOM    672  O   ILE A 168      -7.058   0.457  12.570 56.16  0.00           O
ATOM    673  N   VAL A 169      -8.665   1.441  13.778 58.37  0.00           N
ATOM    674  CA  VAL A 169      -8.132   0.957  15.026 58.37  0.00           C
ATOM    675  C   VAL A 169      -8.314  -0.550  15.039 58.37  0.00           C
ATOM    676  O   VAL A 169      -7.394  -1.257  15.440 58.37  0.00           O
ATOM    677  N   ARG A 170      -9.472  -1.045  14.590 59.48  0.00           N
ATOM    678  CA  ARG A 170      -9.700  -2.518  14.528 59.48  0.00           C
ATOM    679  C   ARG A 170      -8.661  -3.202  13.604 59.48  0.00           C
ATOM    680  O   ARG A 170      -8.069  -4.207  13.996 59.48  0.00           O
ATOM    681  N   LEU A 171      -8.396  -2.610  12.430 49.98  0.00           N
ATOM    682  CA  LEU A 171      -7.379  -3.127  11.527 49.98  0.00           C
ATOM    683  C   LEU A 171      -6.020  -3.139  12.210 49.98  0.00           C
ATOM    684  O   LEU A 171      -5.257  -4.108  12.109 49.98  0.00           O
ATOM    685  N   ALA A 172      -5.723  -2.049  12.909 58.47  0.00           N
ATOM    686  CA  ALA A 172      -4.457  -1.898  13.604 58.47  0.00           C
ATOM    687  C   ALA A 172      -4.301  -2.947  14.696 58.47  0.00           C
ATOM    688  O   ALA A 172      -3.240  -3.541  14.801 58.47  0.00           O
ATOM    689  N   GLU A 173      -5.352  -3.187  15.479 69.53  0.00           N
ATOM    690  CA  GLU A 173      -5.292  -4.177  16.568 69.53  0.00           C
ATOM    691  C   GLU A 173      -4.915  -5.559  16.053 69.53  0.00           C
ATOM    692  O   GLU A 173      -4.131  -6.255  16.707 69.53  0.00           O
ATOM    693  N   ASP A 174      -5.506  -5.961  14.919 57.67  0.00           N
ATOM    694  CA  ASP A 174      -5.208  -7.255  14.320 57.67  0.00           C
ATOM    695  C   ASP A 174      -3.815  -7.301  13.840 57.67  0.00           C
ATOM    696  O   ASP A 174      -3.169  -8.343  13.873 57.67  0.00           O
ATOM    697  N   THR A 175      -3.325  -6.165  13.384 51.60  0.00           N
ATOM    698  CA  THR A 175      -1.966  -6.171  12.887 51.60  0.00           C
ATOM    699  C   THR A 175      -1.026  -6.460  14.019 51.60  0.00           C
ATOM    700  O   THR A 175      -0.104  -7.267  13.894 51.60  0.00           O
ATOM    701  N   ILE A 176      -1.312  -5.827  15.139 44.53  0.00           N
ATOM    702  CA  ILE A 176      -0.456  -5.907  16.306 44.53  0.00           C
ATOM    703  C   ILE A 176      -0.618  -7.264  17.013 44.53  0.00           C
ATOM    704  O   ILE A 176       0.348  -7.982  17.191 44.53  0.00           O
ATOM    705  N   MSE A 177      -1.846  -7.622  17.359 55.85  0.00           N
ATOM    706  CA  MSE A 177      -2.110  -8.862  18.066 55.85  0.00           C
ATOM    707  C   MSE A 177      -2.036 -10.148  17.184 55.85  0.00           C
ATOM    708  O   MSE A 177      -2.230 -11.232  17.705 55.85  0.00           O
ATOM    709  N   LEU A 178      -1.747 -10.045  15.885 59.55  0.00           N
ATOM    710  CA  LEU A 178      -1.765 -11.195  14.931 59.55  0.00           C
ATOM    711  C   LEU A 178      -3.082 -11.987  14.963 59.55  0.00           C
ATOM    712  O   LEU A 178      -3.059 -13.216  14.908 59.55  0.00           O
ATOM    713  N   GLN A 179      -4.195 -11.295  14.914 54.12  0.00           N
ATOM    714  CA  GLN A 179      -5.488 -11.880  15.107 54.12  0.00           C
ATOM    715  C   GLN A 179      -6.016 -12.818  14.022 54.12  0.00           C
ATOM    716  O   GLN A 179      -6.283 -13.971  14.291 54.12  0.00           O
ATOM    717  N   ASN A 180      -6.209 -12.312  12.822 48.75  0.00           N
ATOM    718  CA  ASN A 180      -6.832 -13.100  11.723 48.75  0.00           C
ATOM    719  C   ASN A 180      -5.958 -13.170  10.495 48.75  0.00           C
ATOM    720  O   ASN A 180      -5.982 -12.302   9.632 48.75  0.00           O
ATOM    721  N   SER A 181      -5.162 -14.213  10.431 62.92  0.00           N
ATOM    722  CA  SER A 181      -4.294 -14.421   9.316 62.92  0.00           C
ATOM    723  C   SER A 181      -4.685 -15.651   8.495 62.92  0.00           C
ATOM    724  O   SER A 181      -4.793 -16.745   9.008 62.92  0.00           O
ATOM    725  N   PRO A 182      -4.770 -15.497   7.199 62.16  0.00           N
ATOM    726  CA  PRO A 182      -4.417 -14.305   6.461 62.16  0.00           C
ATOM    727  C   PRO A 182      -5.557 -13.337   6.500 62.16  0.00           C
ATOM    728  O   PRO A 182      -6.623 -13.675   7.004 62.16  0.00           O
ATOM    729  N   ARG A 183      -5.357 -12.135   5.998 55.41  0.00           N
ATOM    730  CA  ARG A 183      -6.436 -11.191   6.007 55.41  0.00           C
ATOM    731  C   ARG A 183      -7.372 -11.579   4.893 55.41  0.00           C
ATOM    732  O   ARG A 183      -8.603 -11.628   5.107 55.41  0.00           O
ATOM    733  N   PHE A 184      -6.785 -11.851   3.718 42.08  0.00           N
ATOM    734  CA  PHE A 184      -7.550 -12.410   2.590 42.08  0.00           C
ATOM    735  C   PHE A 184      -7.017 -13.778   2.185 42.08  0.00           C
ATOM    736  O   PHE A 184      -5.814 -14.039   2.233 42.08  0.00           O
ATOM    737  N   ASN A 185      -7.926 -14.630   1.714 36.30  0.00           N
ATOM    738  CA  ASN A 185      -7.604 -16.007   1.378 36.30  0.00           C
ATOM    739  C   ASN A 185      -6.563 -16.229   0.291 36.30  0.00           C
ATOM    740  O   ASN A 185      -5.857 -17.232   0.316 36.30  0.00           O
ATOM    741  N   TRP A 186      -6.507 -15.349  -0.690 34.90  0.00           N
ATOM    742  CA  TRP A 186      -5.602 -15.511  -1.821 34.90  0.00           C
ATOM    743  C   TRP A 186      -4.124 -15.190  -1.442 34.90  0.00           C
ATOM    744  O   TRP A 186      -3.168 -15.441  -2.207 34.90  0.00           O
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ATOM    745  N   GLU A 187      -3.932 -14.615  -0.259 46.05  0.00           N
ATOM    746  CA  GLU A 187      -2.575 -14.179   0.176 46.05  0.00           C
ATOM    747  C   GLU A 187      -1.511 -15.229   0.225 46.05  0.00           C
ATOM    748  O   GLU A 187      -0.428 -15.028  -0.334 46.05  0.00           O
ATOM    749  N   CYS A 188      -1.801 -16.352   0.884 53.49  0.00           N
ATOM    750  CA  CYS A 188      -0.760 -17.344   1.180 53.49  0.00           C
ATOM    751  C   CYS A 188      -0.146 -17.865  -0.127 53.49  0.00           C
ATOM    752  O   CYS A 188       1.067 -18.120  -0.218 53.49  0.00           O
ATOM    753  N   LYS A 189      -0.970 -17.963  -1.166 40.03  0.00           N
ATOM    754  CA  LYS A 189      -0.511 -18.522  -2.447 40.03  0.00           C
ATOM    755  C   LYS A 189       0.696 -17.731  -3.018 40.03  0.00           C
ATOM    756  O   LYS A 189       1.569 -18.272  -3.724 40.03  0.00           O
ATOM    757  N   TYR A 190       0.747 -16.439  -2.708 37.23  0.00           N
ATOM    758  CA  TYR A 190       1.763 -15.611  -3.285 37.23  0.00           C
ATOM    759  C   TYR A 190       2.819 -15.235  -2.248 37.23  0.00           C
ATOM    760  O   TYR A 190       3.823 -14.654  -2.584 37.23  0.00           O
ATOM    761  N   CYS A 191       2.587 -15.625  -0.997 43.81  0.00           N
ATOM    762  CA  CYS A 191       3.353 -15.193   0.160 43.81  0.00           C
ATOM    763  C   CYS A 191       4.692 -15.934   0.269 43.81  0.00           C
ATOM    764  O   CYS A 191       4.732 -17.173   0.348 43.81  0.00           O
ATOM    765  N   ILE A 192       5.784 -15.171   0.315 41.27  0.00           N
ATOM    766  CA  ILE A 192       7.106 -15.776   0.279 41.27  0.00           C
ATOM    767  C   ILE A 192       7.409 -16.403   1.615 41.27  0.00           C
ATOM    768  O   ILE A 192       8.394 -17.068   1.711 41.27  0.00           O
ATOM    769  N   PHE A 193       6.578 -16.191   2.632 42.93  0.00           N
ATOM    770  CA  PHE A 193       6.786 -16.794   3.943 42.93  0.00           C
ATOM    771  C   PHE A 193       5.984 -18.074   4.210 42.93  0.00           C
ATOM    772  O   PHE A 193       5.990 -18.637   5.317 42.93  0.00           O
ATOM    773  N   SER A 194       5.262 -18.513   3.198 34.28  0.00           N
ATOM    774  CA  SER A 194       4.413 -19.711   3.328 34.28  0.00           C
ATOM    775  C   SER A 194       5.249 -20.909   3.657 34.28  0.00           C
ATOM    776  O   SER A 194       4.748 -21.746   4.298 34.28  0.00           O
ATOM    777  N   VAL A 195       6.503 -20.952   3.199 39.35  0.00           N
ATOM    778  CA  VAL A 195       7.410 -21.989   3.516 39.35  0.00           C
ATOM    779  C   VAL A 195       7.733 -22.174   4.979 39.35  0.00           C
ATOM    780  O   VAL A 195       8.309 -23.201   5.323 39.35  0.00           O
ATOM    781  N   ILE A 196       7.419 -21.212   5.849 37.38  0.00           N
ATOM    782  CA  ILE A 196       7.718 -21.354   7.295 37.38  0.00           C
ATOM    783  C   ILE A 196       6.564 -20.975   8.148 37.38  0.00           C
ATOM    784  O   ILE A 196       6.683 -20.972   9.331 37.38  0.00           O
ATOM    785  N   CYS A 197       5.424 -20.671   7.561 52.86  0.00           N
ATOM    786  CA  CYS A 197       4.335 -20.157   8.329 52.86  0.00           C
ATOM    787  C   CYS A 197       3.331 -21.219   8.615 52.86  0.00           C
ATOM    788  O   CYS A 197       2.836 -21.849   7.697 52.86  0.00           O
ATOM    789  N   PRO A 198       2.960 -21.375   9.870 49.63  0.00           N
ATOM    790  CA  PRO A 198       1.970 -22.338  10.280 49.63  0.00           C
ATOM    791  C   PRO A 198       0.542 -22.046   9.971 49.63  0.00           C
ATOM    792  O   PRO A 198      -0.290 -22.938  10.156 49.63  0.00           O
ATOM    793  N   ALA A 199       0.227 -20.829   9.562 49.32  0.00           N
ATOM    794  CA  ALA A 199      -1.167 -20.431   9.353 49.32  0.00           C
ATOM    795  C   ALA A 199      -1.570 -20.467   7.877 49.32  0.00           C
ATOM    796  O   ALA A 199      -2.731 -20.267   7.563 49.32  0.00           O
ATOM    797  N   LYS A 200      -0.591 -20.655   6.991 64.63  0.00           N
ATOM    798  CA  LYS A 200      -0.778 -20.823   5.548 64.63  0.00           C
ATOM    799  C   LYS A 200      -1.946 -21.672   5.236 64.63  0.00           C
ATOM    800  O   LYS A 200      -2.051 -22.735   5.769 64.63  0.00           O
ATOM    801  N   LEU A 201      -2.799 -21.218   4.328 49.70  0.00           N
ATOM    802  CA  LEU A 201      -3.935 -22.003   3.876 49.70  0.00           C
ATOM    803  C   LEU A 201      -3.511 -23.046   2.859 49.70  0.00           C
ATOM    804  O   LEU A 201      -2.649 -22.775   2.009 49.70  0.00           O
ATOM    805  N   THR A 202      -4.127 -24.225   2.953 50.36  0.00           N
ATOM    806  CA  THR A 202      -3.796 -25.369   2.082 50.36  0.00           C
ATOM    807  C   THR A 202      -5.038 -25.920   1.370 50.36  0.00           C
ATOM    808  O   THR A 202      -6.101 -25.964   1.999 50.36  0.00           O
TER     809      THR A 202
ENDMDL
END
REMARK   1 ****************************************************************
REMARK   1 Start File NAT_vs_DEC2_dSi_colored.pdb
REMARK   1 The occupancy record was modified to represent dSi := Si(DEC)-Si(NAT).
REMARK   1 Occ=0.00 means dSi=-1.461482 kB; Occ=99.99 means dSi=1.491450 kB.
MODEL        0
ATOM      1  N   MSE A   1      23.268  -4.104 -18.521 37.22  0.00           N
ATOM      2  CA  MSE A   1      23.439  -2.722 -18.016 37.22  0.00           C
ATOM      3  C   MSE A   1      22.152  -2.161 -17.383 37.22  0.00           C
ATOM      4  O   MSE A   1      22.147  -1.650 -16.252 37.22  0.00           O
ATOM      5  N   ILE A   2      21.045  -2.254 -18.100 27.40  0.00           N
ATOM      6  CA  ILE A   2      19.816  -1.632 -17.608 27.40  0.00           C
ATOM      7  C   ILE A   2      19.269  -2.405 -16.412 27.40  0.00           C
ATOM      8  O   ILE A   2      18.935  -1.835 -15.391 27.40  0.00           O
ATOM      9  N   THR A   3      19.186  -3.703 -16.563 41.96  0.00           N
ATOM     10  CA  THR A   3      18.718  -4.606 -15.498 41.96  0.00           C
ATOM     11  C   THR A   3      19.478  -4.398 -14.212 41.96  0.00           C
ATOM     12  O   THR A   3      18.884  -4.188 -13.150 41.96  0.00           O
ATOM     13  N   GLU A   4      20.800  -4.447 -14.318 43.40  0.00           N
ATOM     14  CA  GLU A   4      21.687  -4.148 -13.195 43.40  0.00           C
ATOM     15  C   GLU A   4      21.342  -2.832 -12.484 43.40  0.00           C
ATOM     16  O   GLU A   4      21.232  -2.791 -11.242 43.40  0.00           O
ATOM     17  N   PHE A   5      21.133  -1.765 -13.247 31.36  0.00           N
ATOM     18  CA  PHE A   5      20.826  -0.486 -12.602 31.36  0.00           C
ATOM     19  C   PHE A   5      19.486  -0.520 -11.886 31.36  0.00           C
ATOM     20  O   PHE A   5      19.415  -0.122 -10.736 31.36  0.00           O
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ATOM     21  N   LEU A   6      18.429  -1.039 -12.529 28.08  0.00           N
ATOM     22  CA  LEU A   6      17.100  -1.072 -11.873 28.08  0.00           C
ATOM     23  C   LEU A   6      17.119  -1.921 -10.586 28.08  0.00           C
ATOM     24  O   LEU A   6      16.551  -1.545  -9.531 28.08  0.00           O
ATOM     25  N   LEU A   7      17.767  -3.071 -10.672 47.44  0.00           N
ATOM     26  CA  LEU A   7      17.843  -3.929  -9.486 47.44  0.00           C
ATOM     27  C   LEU A   7      18.603  -3.241  -8.341 47.44  0.00           C
ATOM     28  O   LEU A   7      18.190  -3.292  -7.184 47.44  0.00           O
ATOM     29  N   LYS A   8      19.691  -2.566  -8.693 29.50  0.00           N
ATOM     30  CA  LYS A   8      20.463  -1.856  -7.680 29.50  0.00           C
ATOM     31  C   LYS A   8      19.628  -0.762  -7.044 29.50  0.00           C
ATOM     32  O   LYS A   8      19.527  -0.688  -5.819 29.50  0.00           O
ATOM     33  N   LYS A   9      18.947   0.036  -7.860  0.00  0.00           N
ATOM     34  CA  LYS A   9      18.144   1.113  -7.292  0.00  0.00           C
ATOM     35  C   LYS A   9      17.009   0.545  -6.471  0.00  0.00           C
ATOM     36  O   LYS A   9      16.708   1.086  -5.402  0.00  0.00           O
ATOM     37  N   LYS A  10      16.379  -0.547  -6.912 56.51  0.00           N
ATOM     38  CA  LYS A  10      15.262  -1.072  -6.116 56.51  0.00           C
ATOM     39  C   LYS A  10      15.660  -1.681  -4.726 56.51  0.00           C
ATOM     40  O   LYS A  10      14.931  -1.547  -3.695 56.51  0.00           O
ATOM     41  N   LEU A  11      16.798  -2.366  -4.699 56.08  0.00           N
ATOM     42  CA  LEU A  11      17.328  -2.879  -3.411 56.08  0.00           C
ATOM     43  C   LEU A  11      17.613  -1.686  -2.439 56.08  0.00           C
ATOM     44  O   LEU A  11      17.179  -1.698  -1.270 56.08  0.00           O
ATOM     45  N   GLU A  12      18.299  -0.655  -2.945 40.56  0.00           N
ATOM     46  CA  GLU A  12      18.475   0.605  -2.181 40.56  0.00           C
ATOM     47  C   GLU A  12      17.179   1.213  -1.616 40.56  0.00           C
ATOM     48  O   GLU A  12      17.048   1.390  -0.426 40.56  0.00           O
ATOM     49  N   GLU A  13      16.225   1.536  -2.461 43.09  0.00           N
ATOM     50  CA  GLU A  13      14.901   1.950  -1.974 43.09  0.00           C
ATOM     51  C   GLU A  13      14.358   1.037  -0.868 43.09  0.00           C
ATOM     52  O   GLU A  13      13.966   1.505   0.190 43.09  0.00           O
ATOM     53  N   HIS A  14      14.335  -0.267  -1.101 62.74  0.00           N
ATOM     54  CA  HIS A  14      13.794  -1.199  -0.106 62.74  0.00           C
ATOM     55  C   HIS A  14      14.560  -1.126   1.236 62.74  0.00           C
ATOM     56  O   HIS A  14      13.970  -1.122   2.322 62.74  0.00           O
ATOM     57  N   LEU A  15      15.884  -1.079   1.145 54.44  0.00           N
ATOM     58  CA  LEU A  15      16.750  -1.011   2.322 54.44  0.00           C
ATOM     59  C   LEU A  15      16.724   0.377   2.988 54.44  0.00           C
ATOM     60  O   LEU A  15      17.114   0.492   4.140 54.44  0.00           O
ATOM     61  N   SER A  16      16.283   1.421   2.277 50.75  0.00           N
ATOM     62  CA  SER A  16      16.215   2.761   2.870 50.75  0.00           C
ATOM     63  C   SER A  16      15.126   2.866   3.937 50.75  0.00           C
ATOM     64  O   SER A  16      15.184   3.766   4.746 50.75  0.00           O
ATOM     65  N   HIS A  17      14.126   1.987   3.905 47.33  0.00           N
ATOM     66  CA  HIS A  17      12.931   2.175   4.710 47.33  0.00           C
ATOM     67  C   HIS A  17      12.911   1.290   5.925 47.33  0.00           C
ATOM     68  O   HIS A  17      12.211   0.285   5.939 47.33  0.00           O
ATOM     69  N   VAL A  18      13.667   1.662   6.952 46.62  0.00           N
ATOM     70  CA  VAL A  18      13.649   0.930   8.226 46.62  0.00           C
ATOM     71  C   VAL A  18      12.455   1.416   9.073 46.62  0.00           C
ATOM     72  O   VAL A  18      12.231   2.619   9.198 46.62  0.00           O
ATOM     73  N   LYS A  19      11.711   0.480   9.654 50.02  0.00           N
ATOM     74  CA  LYS A  19      10.394   0.738  10.251 50.02  0.00           C
ATOM     75  C   LYS A  19      10.466   0.797  11.779 50.02  0.00           C
ATOM     76  O   LYS A  19      11.024  -0.102  12.394 50.02  0.00           O
ATOM     77  N   GLU A  20       9.892   1.832  12.391 23.75  0.00           N
ATOM     78  CA  GLU A  20      10.003   2.007  13.848 23.75  0.00           C
ATOM     79  C   GLU A  20       8.986   1.178  14.597 23.75  0.00           C
ATOM     80  O   GLU A  20       7.952   0.808  14.049 23.75  0.00           O
ATOM     81  N   GLU A  21       9.300   0.899  15.861 36.12  0.00           N
ATOM     82  CA  GLU A  21       8.634  -0.168  16.607 36.12  0.00           C
ATOM     83  C   GLU A  21       7.153   0.124  16.844 36.12  0.00           C
ATOM     84  O   GLU A  21       6.369  -0.811  17.040 36.12  0.00           O
ATOM     85  N   ASN A  22       6.774   1.399  16.808 44.32  0.00           N
ATOM     86  CA  ASN A  22       5.371   1.790  16.970 44.32  0.00           C
ATOM     87  C   ASN A  22       4.716   2.391  15.715 44.32  0.00           C
ATOM     88  O   ASN A  22       3.648   3.000  15.824 44.32  0.00           O
ATOM     89  N   THR A  23       5.339   2.269  14.540 60.13  0.00           N
ATOM     90  CA  THR A  23       4.636   2.674  13.297 60.13  0.00           C
ATOM     91  C   THR A  23       3.937   1.492  12.597 60.13  0.00           C
ATOM     92  O   THR A  23       4.343   0.315  12.707 60.13  0.00           O
ATOM     93  N   ILE A  24       2.863   1.841  11.907 61.59  0.00           N
ATOM     94  CA  ILE A  24       2.133   0.908  11.089 61.59  0.00           C
ATOM     95  C   ILE A  24       1.893   1.588   9.781 61.59  0.00           C
ATOM     96  O   ILE A  24       1.270   2.646   9.760 61.59  0.00           O
ATOM     97  N   TYR A  25       2.393   1.015   8.691 56.15  0.00           N
ATOM     98  CA  TYR A  25       2.072   1.558   7.393 56.15  0.00           C
ATOM     99  C   TYR A  25       0.609   1.246   7.051 56.15  0.00           C
ATOM    100  O   TYR A  25       0.029   0.273   7.510 56.15  0.00           O
ATOM    101  N   VAL A  26       0.019   2.088   6.230 70.44  0.00           N
ATOM    102  CA  VAL A  26      -1.326   1.856   5.716 70.44  0.00           C
ATOM    103  C   VAL A  26      -1.394   0.504   4.989 70.44  0.00           C
ATOM    104  O   VAL A  26      -2.320  -0.244   5.138 70.44  0.00           O
ATOM    105  N   THR A  27      -0.413   0.264   4.153 57.80  0.00           N
ATOM    106  CA  THR A  27      -0.225  -0.940   3.432 57.80  0.00           C
ATOM    107  C   THR A  27      -0.214  -2.155   4.325 57.80  0.00           C
ATOM    108  O   THR A  27      -0.816  -3.189   4.005 57.80  0.00           O
ATOM    109  N   ASP A  28       0.421  -2.066   5.476 52.14  0.00           N
ATOM    110  CA  ASP A  28       0.217  -3.125   6.447 52.14  0.00           C
ATOM    111  C   ASP A  28      -1.221  -3.366   6.899 52.14  0.00           C
ATOM    112  O   ASP A  28      -1.560  -4.494   7.172 52.14  0.00           O
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ATOM    113  N   LEU A  29      -2.082  -2.355   6.958 66.81  0.00           N
ATOM    114  CA  LEU A  29      -3.418  -2.565   7.521 66.81  0.00           C
ATOM    115  C   LEU A  29      -4.304  -3.447   6.637 66.81  0.00           C
ATOM    116  O   LEU A  29      -5.335  -3.962   7.065 66.81  0.00           O
ATOM    117  N   VAL A  30      -3.930  -3.597   5.378 55.91  0.00           N
ATOM    118  CA  VAL A  30      -4.776  -4.325   4.449 55.91  0.00           C
ATOM    119  C   VAL A  30      -4.099  -5.619   4.014 55.91  0.00           C
ATOM    120  O   VAL A  30      -4.413  -6.174   2.971 55.91  0.00           O
ATOM    121  N   ARG A  31      -3.154  -6.069   4.828 86.64  0.00           N
ATOM    122  CA  ARG A  31      -2.426  -7.287   4.613 86.64  0.00           C
ATOM    123  C   ARG A  31      -2.433  -8.174   5.834 86.64  0.00           C
ATOM    124  O   ARG A  31      -2.927  -7.806   6.907 86.64  0.00           O
ATOM    125  N   CYS A  32      -1.955  -9.395   5.616 50.59  0.00           N
ATOM    126  CA  CYS A  32      -1.910 -10.426   6.637 50.59  0.00           C
ATOM    127  C   CYS A  32      -1.015  -9.951   7.770 50.59  0.00           C
ATOM    128  O   CYS A  32       0.134  -9.567   7.534 50.59  0.00           O
ATOM    129  N   PRO A  33      -1.508 -10.024   8.999 50.11  0.00           N
ATOM    130  CA  PRO A  33      -0.664  -9.610  10.083 50.11  0.00           C
ATOM    131  C   PRO A  33       0.611 -10.429  10.223 50.11  0.00           C
ATOM    132  O   PRO A  33       1.694  -9.852  10.411 50.11  0.00           O
ATOM    133  N   ARG A  34       0.512 -11.757  10.119 34.08  0.00           N
ATOM    134  CA  ARG A  34       1.689 -12.574  10.256 34.08  0.00           C
ATOM    135  C   ARG A  34       2.720 -12.198   9.218 34.08  0.00           C
ATOM    136  O   ARG A  34       3.911 -12.267   9.453 34.08  0.00           O
ATOM    137  N   ARG A  35       2.276 -11.837   8.033 25.98  0.00           N
ATOM    138  CA  ARG A  35       3.238 -11.530   6.965 25.98  0.00           C
ATOM    139  C   ARG A  35       3.971 -10.221   7.251 25.98  0.00           C
ATOM    140  O   ARG A  35       5.151 -10.042   6.901 25.98  0.00           O
ATOM    141  N   VAL A  36       3.228  -9.297   7.848 52.80  0.00           N
ATOM    142  CA  VAL A  36       3.791  -7.981   8.175 52.80  0.00           C
ATOM    143  C   VAL A  36       4.864  -8.200   9.230 52.80  0.00           C
ATOM    144  O   VAL A  36       5.972  -7.734   9.085 52.80  0.00           O
ATOM    145  N   ARG A  37       4.561  -8.972  10.259 54.12  0.00           N
ATOM    146  CA  ARG A  37       5.600  -9.259  11.227 54.12  0.00           C
ATOM    147  C   ARG A  37       6.749 -10.045  10.630 54.12  0.00           C
ATOM    148  O   ARG A  37       7.879  -9.890  11.061 54.12  0.00           O
ATOM    149  N   TYR A  38       6.481 -10.904   9.649 45.86  0.00           N
ATOM    150  CA  TYR A  38       7.570 -11.660   9.036 45.86  0.00           C
ATOM    151  C   TYR A  38       8.499 -10.724   8.363 45.86  0.00           C
ATOM    152  O   TYR A  38       9.689 -10.942   8.377 45.86  0.00           O
ATOM    153  N   GLU A  39       7.963  -9.678   7.760 57.04  0.00           N
ATOM    154  CA  GLU A  39       8.816  -8.667   7.126 57.04  0.00           C
ATOM    155  C   GLU A  39       9.769  -7.904   8.077 57.04  0.00           C
ATOM    156  O   GLU A  39      10.773  -7.394   7.597 57.04  0.00           O
ATOM    157  N   SER A  40       9.464  -7.844   9.380 46.13  0.00           N
ATOM    158  CA  SER A  40      10.398  -7.338  10.412 46.13  0.00           C
ATOM    159  C   SER A  40      11.345  -8.393  10.958 46.13  0.00           C
ATOM    160  O   SER A  40      12.540  -8.130  11.114 46.13  0.00           O
ATOM    161  N   GLU A  41      10.808  -9.578  11.263 51.09  0.00           N
ATOM    162  CA  GLU A  41      11.604 -10.637  11.865 51.09  0.00           C
ATOM    163  C   GLU A  41      12.456 -11.415  10.889 51.09  0.00           C
ATOM    164  O   GLU A  41      13.321 -12.135  11.370 51.09  0.00           O
ATOM    165  N   TYR A  42      12.238 -11.336   9.566 43.68  0.00           N
ATOM    166  CA  TYR A  42      13.052 -12.135   8.586 43.68  0.00           C
ATOM    167  C   TYR A  42      13.369 -11.290   7.378 43.68  0.00           C
ATOM    168  O   TYR A  42      13.024 -11.599   6.196 43.68  0.00           O
ATOM    169  N   LYS A  43      14.059 -10.210   7.691 60.71  0.00           N
ATOM    170  CA  LYS A  43      14.286  -9.169   6.756 60.71  0.00           C
ATOM    171  C   LYS A  43      15.175  -9.664   5.651 60.71  0.00           C
ATOM    172  O   LYS A  43      15.118  -9.127   4.534 60.71  0.00           O
ATOM    173  N   GLU A  44      16.024 -10.635   5.936 55.81  0.00           N
ATOM    174  CA  GLU A  44      16.906 -11.087   4.887 55.81  0.00           C
ATOM    175  C   GLU A  44      16.077 -11.799   3.791 55.81  0.00           C
ATOM    176  O   GLU A  44      16.309 -11.615   2.572 55.81  0.00           O
ATOM    177  N   LEU A  45      15.070 -12.551   4.234 48.24  0.00           N
ATOM    178  CA  LEU A  45      14.177 -13.244   3.311 48.24  0.00           C
ATOM    179  C   LEU A  45      13.268 -12.185   2.642 48.24  0.00           C
ATOM    180  O   LEU A  45      13.095 -12.177   1.406 48.24  0.00           O
ATOM    181  N   ALA A  46      12.710 -11.278   3.448 62.46  0.00           N
ATOM    182  CA  ALA A  46      11.893 -10.178   2.897 62.46  0.00           C
ATOM    183  C   ALA A  46      12.519  -9.534   1.649 62.46  0.00           C
ATOM    184  O   ALA A  46      11.825  -9.262   0.709 62.46  0.00           O
ATOM    185  N   ILE A  47      13.830  -9.341   1.634 56.61  0.00           N
ATOM    186  CA  ILE A  47      14.526  -8.691   0.538 56.61  0.00           C
ATOM    187  C   ILE A  47      14.299  -9.332  -0.838 56.61  0.00           C
ATOM    188  O   ILE A  47      14.451  -8.669  -1.895 56.61  0.00           O
ATOM    189  N   SER A  48      13.959 -10.620  -0.874 57.74  0.00           N
ATOM    190  CA  SER A  48      13.715 -11.277  -2.169 57.74  0.00           C
ATOM    191  C   SER A  48      12.509 -10.666  -2.882 57.74  0.00           C
ATOM    192  O   SER A  48      12.401 -10.723  -4.108 57.74  0.00           O
ATOM    193  N   GLN A  49      11.610 -10.068  -2.123 65.98  0.00           N
ATOM    194  CA  GLN A  49      10.459  -9.434  -2.743 65.98  0.00           C
ATOM    195  C   GLN A  49      10.847  -8.226  -3.623 65.98  0.00           C
ATOM    196  O   GLN A  49      10.116  -7.889  -4.482 65.98  0.00           O
ATOM    197  N   VAL A  50      12.031  -7.643  -3.424 68.48  0.00           N
ATOM    198  CA  VAL A  50      12.659  -6.700  -4.358 68.48  0.00           C
ATOM    199  C   VAL A  50      12.750  -7.176  -5.802 68.48  0.00           C
ATOM    200  O   VAL A  50      12.805  -6.373  -6.754 68.48  0.00           O
ATOM    201  N   TYR A  51      12.865  -8.468  -5.991 34.17  0.00           N
ATOM    202  CA  TYR A  51      13.231  -8.953  -7.306 34.17  0.00           C
ATOM    203  C   TYR A  51      12.000  -9.515  -8.013 34.17  0.00           C
ATOM    204  O   TYR A  51      12.116 -10.179  -9.031 34.17  0.00           O
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ATOM    205  N   ALA A  52      10.823  -9.258  -7.445 46.56  0.00           N
ATOM    206  CA  ALA A  52       9.580  -9.586  -8.075 46.56  0.00           C
ATOM    207  C   ALA A  52       9.375  -8.694  -9.336 46.56  0.00           C
ATOM    208  O   ALA A  52       9.152  -7.478  -9.216 46.56  0.00           O
ATOM    209  N   PRO A  53       9.401  -9.282 -10.541 49.85  0.00           N
ATOM    210  CA  PRO A  53       9.338  -8.519 -11.804 49.85  0.00           C
ATOM    211  C   PRO A  53       8.051  -7.715 -11.969 49.85  0.00           C
ATOM    212  O   PRO A  53       8.107  -6.662 -12.589 49.85  0.00           O
ATOM    213  N   SER A  54       6.912  -8.185 -11.428 47.01  0.00           N
ATOM    214  CA  SER A  54       5.662  -7.382 -11.372 47.01  0.00           C
ATOM    215  C   SER A  54       5.807  -6.143 -10.551 47.01  0.00           C
ATOM    216  O   SER A  54       5.159  -5.116 -10.806 47.01  0.00           O
ATOM    217  N   ALA A  55       6.666  -6.210  -9.534 43.60  0.00           N
ATOM    218  CA  ALA A  55       6.871  -5.023  -8.707 43.60  0.00           C
ATOM    219  C   ALA A  55       7.756  -4.055  -9.490 43.60  0.00           C
ATOM    220  O   ALA A  55       7.598  -2.860  -9.403 43.60  0.00           O
ATOM    221  N   ILE A  56       8.662  -4.543 -10.314 26.91  0.00           N
ATOM    222  CA  ILE A  56       9.562  -3.610 -11.005 26.91  0.00           C
ATOM    223  C   ILE A  56       8.724  -2.964 -12.115 26.91  0.00           C
ATOM    224  O   ILE A  56       8.790  -1.755 -12.348 26.91  0.00           O
ATOM    225  N   LEU A  57       7.912  -3.805 -12.760 22.36  0.00           N
ATOM    226  CA  LEU A  57       6.935  -3.366 -13.747 22.36  0.00           C
ATOM    227  C   LEU A  57       6.033  -2.336 -13.087 22.36  0.00           C
ATOM    228  O   LEU A  57       5.874  -1.207 -13.590 22.36  0.00           O
ATOM    229  N   GLY A  58       5.483  -2.701 -11.946 47.90  0.00           N
ATOM    230  CA  GLY A  58       4.634  -1.806 -11.182 47.90  0.00           C
ATOM    231  C   GLY A  58       5.258  -0.473 -10.875 47.90  0.00           C
ATOM    232  O   GLY A  58       4.607   0.560 -11.036 47.90  0.00           O
ATOM    233  N   ASP A  59       6.514  -0.439 -10.443 47.45  0.00           N
ATOM    234  CA  ASP A  59       7.150   0.844 -10.105 47.45  0.00           C
ATOM    235  C   ASP A  59       7.486   1.775 -11.275 47.45  0.00           C
ATOM    236  O   ASP A  59       7.461   2.943 -11.121 47.45  0.00           O
ATOM    237  N   ILE A  60       7.874   1.212 -12.405 21.25  0.00           N
ATOM    238  CA  ILE A  60       8.072   1.923 -13.651 21.25  0.00           C
ATOM    239  C   ILE A  60       6.774   2.586 -14.133 21.25  0.00           C
ATOM    240  O   ILE A  60       6.798   3.761 -14.559 21.25  0.00           O
ATOM    241  N   LEU A  61       5.641   1.870 -14.058 25.12  0.00           N
ATOM    242  CA  LEU A  61       4.334   2.454 -14.392 25.12  0.00           C
ATOM    243  C   LEU A  61       4.024   3.653 -13.537 25.12  0.00           C
ATOM    244  O   LEU A  61       3.668   4.678 -14.050 25.12  0.00           O
ATOM    245  N   HIS A  62       4.172   3.508 -12.232 66.36  0.00           N
ATOM    246  CA  HIS A  62       3.968   4.616 -11.306 66.36  0.00           C
ATOM    247  C   HIS A  62       4.884   5.714 -11.684 66.36  0.00           C
ATOM    248  O   HIS A  62       4.443   6.854 -11.841 66.36  0.00           O
ATOM    249  N   LEU A  63       6.158   5.423 -11.888 23.84  0.00           N
ATOM    250  CA  LEU A  63       7.034   6.526 -12.325 23.84  0.00           C
ATOM    251  C   LEU A  63       6.405   7.217 -13.537 23.84  0.00           C
ATOM    252  O   LEU A  63       6.167   8.394 -13.497 23.84  0.00           O
ATOM    253  N   GLY A  64       6.109   6.499 -14.603 27.85  0.00           N
ATOM    254  CA  GLY A  64       5.719   7.158 -15.811 27.85  0.00           C
ATOM    255  C   GLY A  64       4.400   7.890 -15.740 27.85  0.00           C
ATOM    256  O   GLY A  64       4.174   8.755 -16.509 27.85  0.00           O
ATOM    257  N   LEU A  65       3.499   7.454 -14.886 31.75  0.00           N
ATOM    258  CA  LEU A  65       2.129   7.928 -14.922 31.75  0.00           C
ATOM    259  C   LEU A  65       2.136   9.075 -13.968 31.75  0.00           C
ATOM    260  O   LEU A  65       1.699  10.153 -14.266 31.75  0.00           O
ATOM    261  N   GLU A  66       2.672   8.845 -12.789 78.61  0.00           N
ATOM    262  CA  GLU A  66       3.061   9.970 -11.943 78.61  0.00           C
ATOM    263  C   GLU A  66       3.702  11.154 -12.688 78.61  0.00           C
ATOM    264  O   GLU A  66       3.297  12.272 -12.436 78.61  0.00           O
ATOM    265  N   SER A  67       4.665  10.981 -13.581 40.41  0.00           N
ATOM    266  CA  SER A  67       5.183  12.221 -14.250 40.41  0.00           C
ATOM    267  C   SER A  67       4.100  13.012 -15.067 40.41  0.00           C
ATOM    268  O   SER A  67       4.182  14.248 -15.203 40.41  0.00           O
ATOM    269  N   VAL A  68       3.091  12.293 -15.600 37.35  0.00           N
ATOM    270  CA  VAL A  68       1.939  12.934 -16.238 37.35  0.00           C
ATOM    271  C   VAL A  68       1.158  13.773 -15.231 37.35  0.00           C
ATOM    272  O   VAL A  68       0.645  14.865 -15.520 37.35  0.00           O
ATOM    273  N   LEU A  69       1.040  13.216 -14.047 35.55  0.00           N
ATOM    274  CA  LEU A  69       0.261  13.818 -13.004 35.55  0.00           C
ATOM    275  C   LEU A  69       0.848  15.118 -12.430 35.55  0.00           C
ATOM    276  O   LEU A  69       0.134  15.992 -11.952 35.55  0.00           O
ATOM    277  N   LYS A  70       2.165  15.215 -12.445 19.55  0.00           N
ATOM    278  CA  LYS A  70       2.860  16.356 -11.911 19.55  0.00           C
ATOM    279  C   LYS A  70       2.708  17.450 -12.934 19.55  0.00           C
ATOM    280  O   LYS A  70       2.497  18.596 -12.562 19.55  0.00           O
ATOM    281  N   GLY A  71       2.769  17.105 -14.229 30.56  0.00           N
ATOM    282  CA  GLY A  71       2.550  18.111 -15.305 30.56  0.00           C
ATOM    283  C   GLY A  71       1.130  18.685 -15.376 30.56  0.00           C
ATOM    284  O   GLY A  71       0.821  19.815 -14.923 30.56  0.00           O
ATOM    285  N   ASN A  72       0.217  17.876 -15.876 33.38  0.00           N
ATOM    286  CA  ASN A  72      -1.095  18.370 -16.206 33.38  0.00           C
ATOM    287  C   ASN A  72      -2.040  18.612 -15.074 33.38  0.00           C
ATOM    288  O   ASN A  72      -2.921  19.420 -15.211 33.38  0.00           O
ATOM    289  N   PHE A  73      -1.880  17.933 -13.966 52.13  0.00           N
ATOM    290  CA  PHE A  73      -2.766  18.118 -12.847 52.13  0.00           C
ATOM    291  C   PHE A  73      -2.091  18.771 -11.639 52.13  0.00           C
ATOM    292  O   PHE A  73      -2.674  18.861 -10.593 52.13  0.00           O
ATOM    293  N   ASN A  74      -0.838  19.166 -11.735 42.19  0.00           N
ATOM    294  CA  ASN A  74      -0.201  19.781 -10.582 42.19  0.00           C
ATOM    295  C   ASN A  74      -0.355  18.949  -9.279 42.19  0.00           C
ATOM    296  O   ASN A  74      -0.590  19.474  -8.165 42.19  0.00           O
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ATOM    297  N   ALA A  75      -0.160  17.641  -9.414 49.67  0.00           N
ATOM    298  CA  ALA A  75      -0.115  16.792  -8.245 49.67  0.00           C
ATOM    299  C   ALA A  75       1.282  16.777  -7.622 49.67  0.00           C
ATOM    300  O   ALA A  75       2.270  16.992  -8.289 49.67  0.00           O
ATOM    301  N   GLU A  76       1.336  16.530  -6.332 45.22  0.00           N
ATOM    302  CA  GLU A  76       2.559  16.069  -5.695 45.22  0.00           C
ATOM    303  C   GLU A  76       2.544  14.546  -5.834 45.22  0.00           C
ATOM    304  O   GLU A  76       1.466  13.957  -5.865 45.22  0.00           O
ATOM    305  N   THR A  77       3.710  13.915  -5.909 63.11  0.00           N
ATOM    306  CA  THR A  77       3.794  12.484  -6.087 63.11  0.00           C
ATOM    307  C   THR A  77       4.639  11.898  -4.978 63.11  0.00           C
ATOM    308  O   THR A  77       5.510  12.566  -4.500 63.11  0.00           O
ATOM    309  N   GLU A  78       4.321  10.666  -4.562 62.28  0.00           N
ATOM    310  CA  GLU A  78       4.988   9.920  -3.517 62.28  0.00           C
ATOM    311  C   GLU A  78       5.020  10.703  -2.232 62.28  0.00           C
ATOM    312  O   GLU A  78       6.063  10.936  -1.623 62.28  0.00           O
ATOM    313  N   VAL A  79       3.826  11.074  -1.816 42.88  0.00           N
ATOM    314  CA  VAL A  79       3.635  12.010  -0.767 42.88  0.00           C
ATOM    315  C   VAL A  79       3.474  11.303   0.544 42.88  0.00           C
ATOM    316  O   VAL A  79       2.510  10.573   0.774 42.88  0.00           O
ATOM    317  N   GLU A  80       4.416  11.580   1.421 42.38  0.00           N
ATOM    318  CA  GLU A  80       4.530  10.857   2.668 42.38  0.00           C
ATOM    319  C   GLU A  80       3.901  11.655   3.780 42.38  0.00           C
ATOM    320  O   GLU A  80       4.090  12.840   3.853 42.38  0.00           O
ATOM    321  N   THR A  81       3.177  11.027   4.670 41.50  0.00           N
ATOM    322  CA  THR A  81       2.510  11.744   5.761 41.50  0.00           C
ATOM    323  C   THR A  81       2.133  10.811   6.884 41.50  0.00           C
ATOM    324  O   THR A  81       2.164   9.597   6.754 41.50  0.00           O
ATOM    325  N   LEU A  82       1.667  11.373   7.976 42.94  0.00           N
ATOM    326  CA  LEU A  82       1.644  10.601   9.202 42.94  0.00           C
ATOM    327  C   LEU A  82       0.492  11.060  10.035 42.94  0.00           C
ATOM    328  O   LEU A  82       0.098  12.203   9.950 42.94  0.00           O
ATOM    329  N   ARG A  83      -0.124  10.141  10.761 22.34  0.00           N
ATOM    330  CA  ARG A  83      -1.326  10.449  11.518 22.34  0.00           C
ATOM    331  C   ARG A  83      -1.368   9.467  12.659 22.34  0.00           C
ATOM    332  O   ARG A  83      -0.926   8.327  12.512 22.34  0.00           O
ATOM    333  N   GLU A  84      -1.873   9.890  13.809 13.69  0.00           N
ATOM    334  CA  GLU A  84      -1.727   9.022  14.978 13.69  0.00           C
ATOM    335  C   GLU A  84      -3.042   8.425  15.425 13.69  0.00           C
ATOM    336  O   GLU A  84      -4.110   8.996  15.183 13.69  0.00           O
ATOM    337  N   ILE A  85      -2.918   7.275  16.095 55.14  0.00           N
ATOM    338  CA  ILE A  85      -4.029   6.451  16.449 55.14  0.00           C
ATOM    339  C   ILE A  85      -3.781   5.841  17.813 55.14  0.00           C
ATOM    340  O   ILE A  85      -2.643   5.507  18.123 55.14  0.00           O
ATOM    341  N   ASN A  86      -4.840   5.701  18.619 49.91  0.00           N
ATOM    342  CA  ASN A  86      -4.761   5.021  19.937 49.91  0.00           C
ATOM    343  C   ASN A  86      -5.250   3.566  19.895 49.91  0.00           C
ATOM    344  O   ASN A  86      -6.399   3.293  19.511 49.91  0.00           O
ATOM    345  N   VAL A  87      -4.383   2.645  20.322 49.44  0.00           N
ATOM    346  CA  VAL A  87      -4.703   1.227  20.308 49.44  0.00           C
ATOM    347  C   VAL A  87      -4.355   0.547  21.630 49.44  0.00           C
ATOM    348  O   VAL A  87      -3.230   0.067  21.819 49.44  0.00           O
ATOM    349  N   GLY A  88      -5.321   0.484  22.542 48.77  0.00           N
ATOM    350  CA  GLY A  88      -5.066  -0.115  23.865 48.77  0.00           C
ATOM    351  C   GLY A  88      -4.192   0.803  24.708 48.77  0.00           C
ATOM    352  O   GLY A  88      -3.216   0.373  25.351 48.77  0.00           O
ATOM    353  N   GLY A  89      -4.538   2.089  24.663 49.03  0.00           N
ATOM    354  CA  GLY A  89      -3.780   3.124  25.348 49.03  0.00           C
ATOM    355  C   GLY A  89      -2.339   3.328  24.890 49.03  0.00           C
ATOM    356  O   GLY A  89      -1.668   4.231  25.406 49.03  0.00           O
ATOM    357  N   LYS A  90      -1.846   2.502  23.956 49.16  0.00           N
ATOM    358  CA  LYS A  90      -0.547   2.733  23.318 49.16  0.00           C
ATOM    359  C   LYS A  90      -0.830   3.651  22.138 49.16  0.00           C
ATOM    360  O   LYS A  90      -1.881   3.541  21.497 49.16  0.00           O
ATOM    361  N   VAL A  91       0.069   4.592  21.872 52.06  0.00           N
ATOM    362  CA  VAL A  91      -0.106   5.503  20.744 52.06  0.00           C
ATOM    363  C   VAL A  91       0.675   4.963  19.561 52.06  0.00           C
ATOM    364  O   VAL A  91       1.817   4.523  19.727 52.06  0.00           O
ATOM    365  N   TYR A  92       0.052   5.005  18.377 47.93  0.00           N
ATOM    366  CA  TYR A  92       0.676   4.480  17.190 47.93  0.00           C
ATOM    367  C   TYR A  92       0.645   5.490  16.087 47.93  0.00           C
ATOM    368  O   TYR A  92      -0.329   6.191  15.893 47.93  0.00           O
ATOM    369  N   LYS A  93       1.747   5.547  15.371 70.62  0.00           N
ATOM    370  CA  LYS A  93       1.859   6.412  14.217 70.62  0.00           C
ATOM    371  C   LYS A  93       1.524   5.603  12.955 70.62  0.00           C
ATOM    372  O   LYS A  93       2.270   4.714  12.581 70.62  0.00           O
ATOM    373  N   ILE A  94       0.406   5.927  12.320 47.02  0.00           N
ATOM    374  CA  ILE A  94       0.084   5.372  11.038 47.02  0.00           C
ATOM    375  C   ILE A  94       0.743   6.184   9.929 47.02  0.00           C
ATOM    376  O   ILE A  94       0.556   7.385   9.807 47.02  0.00           O
ATOM    377  N   LYS A  95       1.497   5.507   9.097 69.21  0.00           N
ATOM    378  CA  LYS A  95       2.305   6.166   8.106 69.21  0.00           C
ATOM    379  C   LYS A  95       1.950   5.702   6.699 69.21  0.00           C
ATOM    380  O   LYS A  95       1.760   4.545   6.470 69.21  0.00           O
ATOM    381  N   GLY A  96       1.853   6.613   5.743 48.31  0.00           N
ATOM    382  CA  GLY A  96       1.572   6.242   4.383 48.31  0.00           C
ATOM    383  C   GLY A  96       2.142   7.179   3.378 48.31  0.00           C
ATOM    384  O   GLY A  96       2.537   8.280   3.703 48.31  0.00           O
ATOM    385  N   ARG A  97       2.107   6.740   2.138 42.47  0.00           N
ATOM    386  CA  ARG A  97       2.693   7.428   1.007 42.47  0.00           C
ATOM    387  C   ARG A  97       1.769   7.206  -0.178 42.47  0.00           C
ATOM    388  O   ARG A  97       1.672   6.084  -0.699 42.47  0.00           O
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ATOM    389  N   ALA A  98       1.104   8.281  -0.588 45.19  0.00           N
ATOM    390  CA  ALA A  98       0.117   8.243  -1.592 45.19  0.00           C
ATOM    391  C   ALA A  98       0.862   8.383  -2.906 45.19  0.00           C
ATOM    392  O   ALA A  98       1.855   9.097  -3.010 45.19  0.00           O
ATOM    393  N   ASP A  99       0.424   7.673  -3.912 66.23  0.00           N
ATOM    394  CA  ASP A  99       1.076   7.754  -5.196 66.23  0.00           C
ATOM    395  C   ASP A  99       0.974   9.188  -5.720 66.23  0.00           C
ATOM    396  O   ASP A  99       1.922   9.707  -6.350 66.23  0.00           O
ATOM    397  N   ALA A 100      -0.166   9.846  -5.513 53.59  0.00           N
ATOM    398  CA  ALA A 100      -0.251  11.269  -5.953 53.59  0.00           C
ATOM    399  C   ALA A 100      -1.290  11.992  -5.184 53.59  0.00           C
ATOM    400  O   ALA A 100      -2.232  11.366  -4.731 53.59  0.00           O
ATOM    401  N   ILE A 101      -1.104  13.303  -4.998 57.33  0.00           N
ATOM    402  CA  ILE A 101      -2.137  14.137  -4.384 57.33  0.00           C
ATOM    403  C   ILE A 101      -2.390  15.420  -5.140 57.33  0.00           C
ATOM    404  O   ILE A 101      -1.467  16.143  -5.558 57.33  0.00           O
ATOM    405  N   ILE A 102      -3.672  15.695  -5.329 55.03  0.00           N
ATOM    406  CA  ILE A 102      -4.083  17.004  -5.796 55.03  0.00           C
ATOM    407  C   ILE A 102      -4.628  17.765  -4.581 55.03  0.00           C
ATOM    408  O   ILE A 102      -5.695  17.431  -4.073 55.03  0.00           O
ATOM    409  N   ARG A 103      -3.845  18.751  -4.103 27.39  0.00           N
ATOM    410  CA  ARG A 103      -4.150  19.504  -2.879 27.39  0.00           C
ATOM    411  C   ARG A 103      -5.423  20.391  -2.949 27.39  0.00           C
ATOM    412  O   ARG A 103      -6.199  20.482  -1.960 27.39  0.00           O
ATOM    413  N   ASN A 104      -5.626  21.051  -4.095 50.54  0.00           N
ATOM    414  CA  ASN A 104      -6.745  21.998  -4.259 50.54  0.00           C
ATOM    415  C   ASN A 104      -7.230  21.994  -5.679 50.54  0.00           C
ATOM    416  O   ASN A 104      -6.693  22.692  -6.538 50.54  0.00           O
ATOM    417  N   ASP A 105      -8.253  21.174  -5.879 48.89  0.00           N
ATOM    418  CA  ASP A 105      -9.039  21.134  -7.084 48.89  0.00           C
ATOM    419  C   ASP A 105     -10.471  21.605  -6.714 48.89  0.00           C
ATOM    420  O   ASP A 105     -11.262  20.843  -6.158 48.89  0.00           O
ATOM    421  N   ASN A 106     -10.768  22.878  -6.986 47.26  0.00           N
ATOM    422  CA  ASN A 106     -12.040  23.506  -6.575 47.26  0.00           C
ATOM    423  C   ASN A 106     -12.422  23.321  -5.104 47.26  0.00           C
ATOM    424  O   ASN A 106     -13.561  23.020  -4.774 47.26  0.00           O
ATOM    425  N   GLY A 107     -11.470  23.524  -4.215 52.85  0.00           N
ATOM    426  CA  GLY A 107     -11.717  23.337  -2.789 52.85  0.00           C
ATOM    427  C   GLY A 107     -11.737  21.883  -2.335 52.85  0.00           C
ATOM    428  O   GLY A 107     -12.404  21.544  -1.352 52.85  0.00           O
ATOM    429  N   LYS A 108     -11.008  21.019  -3.043 29.53  0.00           N
ATOM    430  CA  LYS A 108     -10.915  19.615  -2.668 29.53  0.00           C
ATOM    431  C   LYS A 108      -9.483  19.049  -2.884 29.53  0.00           C
ATOM    432  O   LYS A 108      -8.779  19.403  -3.839 29.53  0.00           O
ATOM    433  N   SER A 109      -9.039  18.236  -1.933 43.88  0.00           N
ATOM    434  CA  SER A 109      -7.862  17.387  -2.118 43.88  0.00           C
ATOM    435  C   SER A 109      -8.308  16.067  -2.739 43.88  0.00           C
ATOM    436  O   SER A 109      -9.315  15.517  -2.353 43.88  0.00           O
ATOM    437  N   ILE A 110      -7.524  15.551  -3.650 43.16  0.00           N
ATOM    438  CA  ILE A 110      -7.790  14.265  -4.209 43.16  0.00           C
ATOM    439  C   ILE A 110      -6.588  13.343  -3.999 43.16  0.00           C
ATOM    440  O   ILE A 110      -5.512  13.629  -4.510 43.16  0.00           O
ATOM    441  N   VAL A 111      -6.752  12.243  -3.266 55.63  0.00           N
ATOM    442  CA  VAL A 111      -5.679  11.220  -3.198 55.63  0.00           C
ATOM    443  C   VAL A 111      -5.836  10.276  -4.388 55.63  0.00           C
ATOM    444  O   VAL A 111      -6.932   9.764  -4.636 55.63  0.00           O
ATOM    445  N   ILE A 112      -4.775  10.018  -5.128 58.72  0.00           N
ATOM    446  CA  ILE A 112      -4.866   9.126  -6.282 58.72  0.00           C
ATOM    447  C   ILE A 112      -4.010   7.894  -6.056 58.72  0.00           C
ATOM    448  O   ILE A 112      -2.842   8.019  -5.770 58.72  0.00           O
ATOM    449  N   GLU A 113      -4.547   6.709  -6.243 83.18  0.00           N
ATOM    450  CA  GLU A 113      -3.780   5.455  -6.060 83.18  0.00           C
ATOM    451  C   GLU A 113      -3.823   4.710  -7.388 83.18  0.00           C
ATOM    452  O   GLU A 113      -4.882   4.569  -8.052 83.18  0.00           O
ATOM    453  N   ILE A 114      -2.657   4.354  -7.861 52.42  0.00           N
ATOM    454  CA  ILE A 114      -2.531   3.758  -9.150 52.42  0.00           C
ATOM    455  C   ILE A 114      -2.210   2.295  -8.960 52.42  0.00           C
ATOM    456  O   ILE A 114      -1.423   1.954  -8.099 52.42  0.00           O
ATOM    457  N   LYS A 115      -2.787   1.433  -9.786 70.74  0.00           N
ATOM    458  CA  LYS A 115      -2.621   0.003  -9.616 70.74  0.00           C
ATOM    459  C   LYS A 115      -2.438  -0.643 -10.947 70.74  0.00           C
ATOM    460  O   LYS A 115      -2.964  -0.176 -11.951 70.74  0.00           O
ATOM    461  N   THR A 116      -1.684  -1.729 -10.958 42.92  0.00           N
ATOM    462  CA  THR A 116      -1.468  -2.466 -12.194 42.92  0.00           C
ATOM    463  C   THR A 116      -1.602  -3.921 -11.890 42.92  0.00           C
ATOM    464  O   THR A 116      -1.369  -4.337 -10.804 42.92  0.00           O
ATOM    465  N   SER A 117      -2.085  -4.706 -12.802 45.57  0.00           N
ATOM    466  CA  SER A 117      -2.109  -6.154 -12.601 45.57  0.00           C
ATOM    467  C   SER A 117      -2.180  -6.692 -13.946 45.57  0.00           C
ATOM    468  O   SER A 117      -2.324  -5.911 -14.909 45.57  0.00           O
ATOM    469  N   ARG A 118      -2.032  -8.006 -14.033 29.06  0.00           N
ATOM    470  CA  ARG A 118      -2.068  -8.640 -15.363 29.06  0.00           C
ATOM    471  C   ARG A 118      -3.471  -8.928 -15.862 29.06  0.00           C
ATOM    472  O   ARG A 118      -3.648  -9.162 -17.069 29.06  0.00           O
ATOM    473  N   SER A 119      -4.457  -8.893 -14.965 43.52  0.00           N
ATOM    474  CA  SER A 119      -5.872  -9.062 -15.362 43.52  0.00           C
ATOM    475  C   SER A 119      -6.800  -7.967 -14.770 43.52  0.00           C
ATOM    476  O   SER A 119      -6.533  -7.439 -13.690 43.52  0.00           O
ATOM    477  N   ASP A 120      -7.938  -7.766 -15.424 45.20  0.00           N
ATOM    478  CA  ASP A 120      -8.922  -6.789 -15.023 45.20  0.00           C
ATOM    479  C   ASP A 120     -10.062  -7.464 -14.339 45.20  0.00           C
ATOM    480  O   ASP A 120     -11.180  -6.930 -14.286 45.20  0.00           O
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ATOM    481  N   LYS A 121      -9.805  -8.622 -13.800 28.78  0.00           N
ATOM    482  CA  LYS A 121     -10.861  -9.343 -13.147 28.78  0.00           C
ATOM    483  C   LYS A 121     -11.305  -8.719 -11.850 28.78  0.00           C
ATOM    484  O   LYS A 121     -10.493  -8.415 -10.994 28.78  0.00           O
ATOM    485  N   GLY A 122     -12.595  -8.552 -11.661 50.28  0.00           N
ATOM    486  CA  GLY A 122     -13.099  -8.150 -10.341 50.28  0.00           C
ATOM    487  C   GLY A 122     -12.816  -6.695  -9.897 50.28  0.00           C
ATOM    488  O   GLY A 122     -13.062  -6.363  -8.702 50.28  0.00           O
ATOM    489  N   LEU A 123     -12.369  -5.819 -10.826 74.40  0.00           N
ATOM    490  CA  LEU A 123     -12.047  -4.418 -10.440 74.40  0.00           C
ATOM    491  C   LEU A 123     -13.261  -3.672  -9.972 74.40  0.00           C
ATOM    492  O   LEU A 123     -14.252  -3.694 -10.654 74.40  0.00           O
ATOM    493  N   PRO A 124     -13.153  -2.951  -8.838 58.93  0.00           N
ATOM    494  CA  PRO A 124     -11.936  -2.786  -8.048 58.93  0.00           C
ATOM    495  C   PRO A 124     -11.854  -3.776  -6.934 58.93  0.00           C
ATOM    496  O   PRO A 124     -12.861  -4.122  -6.314 58.93  0.00           O
ATOM    497  N   LEU A 125     -10.645  -4.184  -6.634 43.87  0.00           N
ATOM    498  CA  LEU A 125     -10.394  -5.171  -5.542 43.87  0.00           C
ATOM    499  C   LEU A 125     -10.497  -4.530  -4.149 43.87  0.00           C
ATOM    500  O   LEU A 125     -10.112  -3.350  -3.908 43.87  0.00           O
ATOM    501  N   ILE A 126     -11.048  -5.276  -3.221 58.05  0.00           N
ATOM    502  CA  ILE A 126     -11.528  -4.647  -1.996 58.05  0.00           C
ATOM    503  C   ILE A 126     -10.339  -4.126  -1.167 58.05  0.00           C
ATOM    504  O   ILE A 126     -10.462  -3.123  -0.513 58.05  0.00           O
ATOM    505  N   HIS A 127      -9.195  -4.779  -1.251 43.35  0.00           N
ATOM    506  CA  HIS A 127      -8.055  -4.383  -0.479 43.35  0.00           C
ATOM    507  C   HIS A 127      -7.440  -3.163  -1.103 43.35  0.00           C
ATOM    508  O   HIS A 127      -6.834  -2.382  -0.415 43.35  0.00           O
ATOM    509  N   HIS A 128      -7.592  -2.980  -2.400 52.41  0.00           N
ATOM    510  CA  HIS A 128      -7.176  -1.718  -3.018 52.41  0.00           C
ATOM    511  C   HIS A 128      -8.083  -0.558  -2.609 52.41  0.00           C
ATOM    512  O   HIS A 128      -7.606   0.554  -2.368 52.41  0.00           O
ATOM    513  N   LYS A 129      -9.365  -0.803  -2.526 88.91  0.00           N
ATOM    514  CA  LYS A 129     -10.266   0.264  -2.198 88.91  0.00           C
ATOM    515  C   LYS A 129     -10.028   0.593  -0.745 88.91  0.00           C
ATOM    516  O   LYS A 129      -9.930   1.747  -0.408 88.91  0.00           O
ATOM    517  N   MSE A 130      -9.911  -0.410   0.128 78.04  0.00           N
ATOM    518  CA  MSE A 130      -9.661  -0.122   1.564 78.04  0.00           C
ATOM    519  C   MSE A 130      -8.432   0.772   1.739 78.04  0.00           C
ATOM    520  O   MSE A 130      -8.445   1.649   2.550 78.04  0.00           O
ATOM    521  N   GLN A 131      -7.394   0.520   0.958 58.11  0.00           N
ATOM    522  CA  GLN A 131      -6.133   1.211   1.097 58.11  0.00           C
ATOM    523  C   GLN A 131      -6.400   2.668   0.780 58.11  0.00           C
ATOM    524  O   GLN A 131      -5.918   3.542   1.460 58.11  0.00           O
ATOM    525  N   LEU A 132      -7.195   2.936  -0.242 72.67  0.00           N
ATOM    526  CA  LEU A 132      -7.436   4.290  -0.682 72.67  0.00           C
ATOM    527  C   LEU A 132      -8.295   4.984   0.347 72.67  0.00           C
ATOM    528  O   LEU A 132      -8.142   6.173   0.629 72.67  0.00           O
ATOM    529  N   GLN A 133      -9.173   4.244   0.963 99.99  0.00           N
ATOM    530  CA  GLN A 133     -10.034   4.835   1.951 99.99  0.00           C
ATOM    531  C   GLN A 133      -9.306   5.181   3.263 99.99  0.00           C
ATOM    532  O   GLN A 133      -9.739   6.050   4.021 99.99  0.00           O
ATOM    533  N   ILE A 134      -8.240   4.450   3.561 69.20  0.00           N
ATOM    534  CA  ILE A 134      -7.448   4.750   4.709 69.20  0.00           C
ATOM    535  C   ILE A 134      -6.635   6.008   4.375 69.20  0.00           C
ATOM    536  O   ILE A 134      -6.604   6.904   5.182 69.20  0.00           O
ATOM    537  N   TYR A 135      -5.993   6.089   3.200 53.52  0.00           N
ATOM    538  CA  TYR A 135      -5.308   7.299   2.832 53.52  0.00           C
ATOM    539  C   TYR A 135      -6.263   8.486   3.003 53.52  0.00           C
ATOM    540  O   TYR A 135      -5.876   9.536   3.592 53.52  0.00           O
ATOM    541  N   LEU A 136      -7.510   8.345   2.563 90.27  0.00           N
ATOM    542  CA  LEU A 136      -8.431   9.472   2.663 90.27  0.00           C
ATOM    543  C   LEU A 136      -8.471   9.988   4.123 90.27  0.00           C
ATOM    544  O   LEU A 136      -8.423  11.193   4.364 90.27  0.00           O
ATOM    545  N   TRP A 137      -8.562   9.085   5.079 77.33  0.00           N
ATOM    546  CA  TRP A 137      -8.471   9.465   6.480 77.33  0.00           C
ATOM    547  C   TRP A 137      -7.090  10.092   6.781 77.33  0.00           C
ATOM    548  O   TRP A 137      -6.988  11.182   7.363 77.33  0.00           O
ATOM    549  N   LEU A 138      -6.039   9.457   6.283 32.22  0.00           N
ATOM    550  CA  LEU A 138      -4.665   9.881   6.616 32.22  0.00           C
ATOM    551  C   LEU A 138      -4.353  11.332   6.246 32.22  0.00           C
ATOM    552  O   LEU A 138      -3.806  12.080   7.039 32.22  0.00           O
ATOM    553  N   PHE A 139      -4.725  11.691   5.030 59.66  0.00           N
ATOM    554  CA  PHE A 139      -4.602  13.020   4.511 59.66  0.00           C
ATOM    555  C   PHE A 139      -5.790  13.890   4.834 59.66  0.00           C
ATOM    556  O   PHE A 139      -5.772  15.074   4.508 59.66  0.00           O
ATOM    557  N   SER A 140      -6.827  13.321   5.474 50.13  0.00           N
ATOM    558  CA  SER A 140      -8.140  13.999   5.608 50.13  0.00           C
ATOM    559  C   SER A 140      -8.590  14.636   4.304 50.13  0.00           C
ATOM    560  O   SER A 140      -8.961  15.800   4.273 50.13  0.00           O
ATOM    561  N   ALA A 141      -8.519  13.878   3.227 49.30  0.00           N
ATOM    562  CA  ALA A 141      -8.945  14.332   1.917 49.30  0.00           C
ATOM    563  C   ALA A 141     -10.405  13.939   1.667 49.30  0.00           C
ATOM    564  O   ALA A 141     -10.983  13.084   2.348 49.30  0.00           O
ATOM    565  N   GLU A 142     -11.035  14.621   0.722 35.86  0.00           N
ATOM    566  CA  GLU A 142     -12.471  14.427   0.489 35.86  0.00           C
ATOM    567  C   GLU A 142     -12.738  13.477  -0.702 35.86  0.00           C
ATOM    568  O   GLU A 142     -13.747  12.791  -0.707 35.86  0.00           O
ATOM    569  N   LYS A 143     -11.805  13.444  -1.660 43.24  0.00           N
ATOM    570  CA  LYS A 143     -11.916  12.652  -2.862 43.24  0.00           C
ATOM    571  C   LYS A 143     -10.727  11.686  -3.055 43.24  0.00           C
ATOM    572  O   LYS A 143      -9.539  11.991  -2.732 43.24  0.00           O
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ATOM    573  N   GLY A 144     -11.077  10.526  -3.602 49.83  0.00           N
ATOM    574  CA  GLY A 144     -10.120   9.474  -3.925 49.83  0.00           C
ATOM    575  C   GLY A 144     -10.352   8.924  -5.300 49.83  0.00           C
ATOM    576  O   GLY A 144     -11.486   8.740  -5.697 49.83  0.00           O
ATOM    577  N   ILE A 145      -9.286   8.679  -6.041 38.62  0.00           N
ATOM    578  CA  ILE A 145      -9.380   8.016  -7.325 38.62  0.00           C
ATOM    579  C   ILE A 145      -8.437   6.791  -7.270 38.62  0.00           C
ATOM    580  O   ILE A 145      -7.274   6.920  -6.924 38.62  0.00           O
ATOM    581  N   LEU A 146      -8.955   5.621  -7.649 51.00  0.00           N
ATOM    582  CA  LEU A 146      -8.233   4.396  -7.797 51.00  0.00           C
ATOM    583  C   LEU A 146      -8.251   4.098  -9.279 51.00  0.00           C
ATOM    584  O   LEU A 146      -9.304   3.843  -9.816 51.00  0.00           O
ATOM    585  N   VAL A 147      -7.117   4.065  -9.937 42.62  0.00           N
ATOM    586  CA  VAL A 147      -7.059   3.872 -11.356 42.62  0.00           C
ATOM    587  C   VAL A 147      -6.211   2.623 -11.646 42.62  0.00           C
ATOM    588  O   VAL A 147      -5.067   2.470 -11.090 42.62  0.00           O
ATOM    589  N   TYR A 148      -6.742   1.739 -12.509 47.38  0.00           N
ATOM    590  CA  TYR A 148      -6.090   0.482 -12.844 47.38  0.00           C
ATOM    591  C   TYR A 148      -5.595   0.575 -14.257 47.38  0.00           C
ATOM    592  O   TYR A 148      -6.345   0.903 -15.117 47.38  0.00           O
ATOM    593  N   ILE A 149      -4.338   0.293 -14.483 37.50  0.00           N
ATOM    594  CA  ILE A 149      -3.766   0.206 -15.807 37.50  0.00           C
ATOM    595  C   ILE A 149      -3.430  -1.275 -15.990 37.50  0.00           C
ATOM    596  O   ILE A 149      -2.545  -1.776 -15.346 37.50  0.00           O
ATOM    597  N   THR A 150      -4.180  -2.003 -16.800 44.28  0.00           N
ATOM    598  CA  THR A 150      -3.964  -3.413 -16.968 44.28  0.00           C
ATOM    599  C   THR A 150      -3.936  -3.690 -18.433 44.28  0.00           C
ATOM    600  O   THR A 150      -4.311  -2.846 -19.222 44.28  0.00           O
ATOM    601  N   PRO A 151      -3.486  -4.859 -18.836 38.24  0.00           N
ATOM    602  CA  PRO A 151      -3.299  -5.051 -20.300 38.24  0.00           C
ATOM    603  C   PRO A 151      -4.601  -5.273 -21.077 38.24  0.00           C
ATOM    604  O   PRO A 151      -4.598  -5.259 -22.317 38.24  0.00           O
ATOM    605  N   ASP A 152      -5.658  -5.505 -20.333 44.34  0.00           N
ATOM    606  CA  ASP A 152      -6.988  -5.753 -20.794 44.34  0.00           C
ATOM    607  C   ASP A 152      -7.910  -4.564 -20.707 44.34  0.00           C
ATOM    608  O   ASP A 152      -8.921  -4.561 -21.326 44.34  0.00           O
ATOM    609  N   ARG A 153      -7.550  -3.582 -19.909 47.43  0.00           N
ATOM    610  CA  ARG A 153      -8.418  -2.528 -19.517 47.43  0.00           C
ATOM    611  C   ARG A 153      -7.808  -1.437 -18.658 47.43  0.00           C
ATOM    612  O   ARG A 153      -7.169  -1.665 -17.715 47.43  0.00           O
ATOM    613  N   ILE A 154      -8.107  -0.221 -18.973 36.41  0.00           N
ATOM    614  CA  ILE A 154      -7.873   0.874 -18.098 36.41  0.00           C
ATOM    615  C   ILE A 154      -9.177   1.197 -17.432 36.41  0.00           C
ATOM    616  O   ILE A 154     -10.135   1.182 -18.066 36.41  0.00           O
ATOM    617  N   ALA A 155      -9.204   1.463 -16.150 46.26  0.00           N
ATOM    618  CA  ALA A 155     -10.490   1.563 -15.403 46.26  0.00           C
ATOM    619  C   ALA A 155     -10.307   2.411 -14.178 46.26  0.00           C
ATOM    620  O   ALA A 155      -9.405   2.165 -13.464 46.26  0.00           O
ATOM    621  N   GLU A 156     -11.159   3.389 -13.945 38.25  0.00           N
ATOM    622  CA  GLU A 156     -10.959   4.392 -12.924 38.25  0.00           C
ATOM    623  C   GLU A 156     -12.193   4.455 -12.023 38.25  0.00           C
ATOM    624  O   GLU A 156     -13.299   4.455 -12.446 38.25  0.00           O
ATOM    625  N   TYR A 157     -11.976   4.532 -10.746 48.68  0.00           N
ATOM    626  CA  TYR A 157     -13.044   4.493  -9.764 48.68  0.00           C
ATOM    627  C   TYR A 157     -12.934   5.658  -8.804 48.68  0.00           C
ATOM    628  O   TYR A 157     -11.853   6.011  -8.265 48.68  0.00           O
ATOM    629  N   GLU A 158     -14.055   6.253  -8.542 43.72  0.00           N
ATOM    630  CA  GLU A 158     -14.108   7.361  -7.646 43.72  0.00           C
ATOM    631  C   GLU A 158     -14.532   6.786  -6.302 43.72  0.00           C
ATOM    632  O   GLU A 158     -15.602   6.184  -6.178 43.72  0.00           O
ATOM    633  N   ILE A 159     -13.651   6.902  -5.311 48.13  0.00           N
ATOM    634  CA  ILE A 159     -13.878   6.419  -3.939 48.13  0.00           C
ATOM    635  C   ILE A 159     -13.755   7.649  -3.027 48.13  0.00           C
ATOM    636  O   ILE A 159     -12.671   8.212  -2.918 48.13  0.00           O
ATOM    637  N   ASN A 160     -14.849   8.038  -2.394 47.40  0.00           N
ATOM    638  CA  ASN A 160     -14.894   9.274  -1.638 47.40  0.00           C
ATOM    639  C   ASN A 160     -15.165   9.116  -0.146 47.40  0.00           C
ATOM    640  O   ASN A 160     -14.949  10.056   0.594 47.40  0.00           O
ATOM    641  N   GLU A 161     -15.536   7.926   0.306 37.06  0.00           N
ATOM    642  CA  GLU A 161     -15.720   7.704   1.724 37.06  0.00           C
ATOM    643  C   GLU A 161     -14.467   7.151   2.407 37.06  0.00           C
ATOM    644  O   GLU A 161     -13.997   6.052   2.116 37.06  0.00           O
ATOM    645  N   PRO A 162     -13.950   7.900   3.365 52.91  0.00           N
ATOM    646  CA  PRO A 162     -12.848   7.426   4.187 52.91  0.00           C
ATOM    647  C   PRO A 162     -13.323   6.439   5.227 52.91  0.00           C
ATOM    648  O   PRO A 162     -14.483   6.537   5.645 52.91  0.00           O
ATOM    649  N   LEU A 163     -12.444   5.517   5.661 61.33  0.00           N
ATOM    650  CA  LEU A 163     -12.805   4.572   6.724 61.33  0.00           C
ATOM    651  C   LEU A 163     -12.888   5.346   8.019 61.33  0.00           C
ATOM    652  O   LEU A 163     -12.040   6.223   8.266 61.33  0.00           O
ATOM    653  N   ASP A 164     -13.876   5.013   8.858 23.30  0.00           N
ATOM    654  CA  ASP A 164     -13.934   5.590  10.207 23.30  0.00           C
ATOM    655  C   ASP A 164     -12.616   5.280  10.928 23.30  0.00           C
ATOM    656  O   ASP A 164     -11.940   4.300  10.622 23.30  0.00           O
ATOM    657  N   GLU A 165     -12.301   6.090  11.926 46.45  0.00           N
ATOM    658  CA  GLU A 165     -11.127   5.880  12.758 46.45  0.00           C
ATOM    659  C   GLU A 165     -11.240   4.594  13.565 46.45  0.00           C
ATOM    660  O   GLU A 165     -10.265   3.923  13.761 46.45  0.00           O
ATOM    661  N   ALA A 166     -12.438   4.252  14.016 53.02  0.00           N
ATOM    662  CA  ALA A 166     -12.662   3.006  14.753 53.02  0.00           C
ATOM    663  C   ALA A 166     -12.336   1.750  13.921 53.02  0.00           C
ATOM    664  O   ALA A 166     -11.761   0.808  14.415 53.02  0.00           O
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ATOM    665  N   THR A 167     -12.694   1.751  12.648 42.30  0.00           N
ATOM    666  CA  THR A 167     -12.382   0.638  11.768 42.30  0.00           C
ATOM    667  C   THR A 167     -10.872   0.497  11.623 42.30  0.00           C
ATOM    668  O   THR A 167     -10.346  -0.601  11.637 42.30  0.00           O
ATOM    669  N   ILE A 168     -10.171   1.619  11.528 51.74  0.00           N
ATOM    670  CA  ILE A 168      -8.732   1.633  11.358 51.74  0.00           C
ATOM    671  C   ILE A 168      -8.078   1.128  12.626 51.74  0.00           C
ATOM    672  O   ILE A 168      -7.058   0.457  12.570 51.74  0.00           O
ATOM    673  N   VAL A 169      -8.665   1.441  13.778 43.45  0.00           N
ATOM    674  CA  VAL A 169      -8.132   0.957  15.026 43.45  0.00           C
ATOM    675  C   VAL A 169      -8.314  -0.550  15.039 43.45  0.00           C
ATOM    676  O   VAL A 169      -7.394  -1.257  15.440 43.45  0.00           O
ATOM    677  N   ARG A 170      -9.472  -1.045  14.590 50.30  0.00           N
ATOM    678  CA  ARG A 170      -9.700  -2.518  14.528 50.30  0.00           C
ATOM    679  C   ARG A 170      -8.661  -3.202  13.604 50.30  0.00           C
ATOM    680  O   ARG A 170      -8.069  -4.207  13.996 50.30  0.00           O
ATOM    681  N   LEU A 171      -8.396  -2.610  12.430 43.66  0.00           N
ATOM    682  CA  LEU A 171      -7.379  -3.127  11.527 43.66  0.00           C
ATOM    683  C   LEU A 171      -6.020  -3.139  12.210 43.66  0.00           C
ATOM    684  O   LEU A 171      -5.257  -4.108  12.109 43.66  0.00           O
ATOM    685  N   ALA A 172      -5.723  -2.049  12.909 49.64  0.00           N
ATOM    686  CA  ALA A 172      -4.457  -1.898  13.604 49.64  0.00           C
ATOM    687  C   ALA A 172      -4.301  -2.947  14.696 49.64  0.00           C
ATOM    688  O   ALA A 172      -3.240  -3.541  14.801 49.64  0.00           O
ATOM    689  N   GLU A 173      -5.352  -3.187  15.479 48.78  0.00           N
ATOM    690  CA  GLU A 173      -5.292  -4.177  16.568 48.78  0.00           C
ATOM    691  C   GLU A 173      -4.915  -5.559  16.053 48.78  0.00           C
ATOM    692  O   GLU A 173      -4.131  -6.255  16.707 48.78  0.00           O
ATOM    693  N   ASP A 174      -5.506  -5.961  14.919 38.26  0.00           N
ATOM    694  CA  ASP A 174      -5.208  -7.255  14.320 38.26  0.00           C
ATOM    695  C   ASP A 174      -3.815  -7.301  13.840 38.26  0.00           C
ATOM    696  O   ASP A 174      -3.169  -8.343  13.873 38.26  0.00           O
ATOM    697  N   THR A 175      -3.325  -6.165  13.384 43.17  0.00           N
ATOM    698  CA  THR A 175      -1.966  -6.171  12.887 43.17  0.00           C
ATOM    699  C   THR A 175      -1.026  -6.460  14.019 43.17  0.00           C
ATOM    700  O   THR A 175      -0.104  -7.267  13.894 43.17  0.00           O
ATOM    701  N   ILE A 176      -1.312  -5.827  15.139 18.83  0.00           N
ATOM    702  CA  ILE A 176      -0.456  -5.907  16.306 18.83  0.00           C
ATOM    703  C   ILE A 176      -0.618  -7.264  17.013 18.83  0.00           C
ATOM    704  O   ILE A 176       0.348  -7.982  17.191 18.83  0.00           O
ATOM    705  N   MSE A 177      -1.846  -7.622  17.359 33.37  0.00           N
ATOM    706  CA  MSE A 177      -2.110  -8.862  18.066 33.37  0.00           C
ATOM    707  C   MSE A 177      -2.036 -10.148  17.184 33.37  0.00           C
ATOM    708  O   MSE A 177      -2.230 -11.232  17.705 33.37  0.00           O
ATOM    709  N   LEU A 178      -1.747 -10.045  15.885 30.21  0.00           N
ATOM    710  CA  LEU A 178      -1.765 -11.195  14.931 30.21  0.00           C
ATOM    711  C   LEU A 178      -3.082 -11.987  14.963 30.21  0.00           C
ATOM    712  O   LEU A 178      -3.059 -13.216  14.908 30.21  0.00           O
ATOM    713  N   GLN A 179      -4.195 -11.295  14.914 48.05  0.00           N
ATOM    714  CA  GLN A 179      -5.488 -11.880  15.107 48.05  0.00           C
ATOM    715  C   GLN A 179      -6.016 -12.818  14.022 48.05  0.00           C
ATOM    716  O   GLN A 179      -6.283 -13.971  14.291 48.05  0.00           O
ATOM    717  N   ASN A 180      -6.209 -12.312  12.822 39.77  0.00           N
ATOM    718  CA  ASN A 180      -6.832 -13.100  11.723 39.77  0.00           C
ATOM    719  C   ASN A 180      -5.958 -13.170  10.495 39.77  0.00           C
ATOM    720  O   ASN A 180      -5.982 -12.302   9.632 39.77  0.00           O
ATOM    721  N   SER A 181      -5.162 -14.213  10.431 58.29  0.00           N
ATOM    722  CA  SER A 181      -4.294 -14.421   9.316 58.29  0.00           C
ATOM    723  C   SER A 181      -4.685 -15.651   8.495 58.29  0.00           C
ATOM    724  O   SER A 181      -4.793 -16.745   9.008 58.29  0.00           O
ATOM    725  N   PRO A 182      -4.770 -15.497   7.199 63.56  0.00           N
ATOM    726  CA  PRO A 182      -4.417 -14.305   6.461 63.56  0.00           C
ATOM    727  C   PRO A 182      -5.557 -13.337   6.500 63.56  0.00           C
ATOM    728  O   PRO A 182      -6.623 -13.675   7.004 63.56  0.00           O
ATOM    729  N   ARG A 183      -5.357 -12.135   5.998 84.53  0.00           N
ATOM    730  CA  ARG A 183      -6.436 -11.191   6.007 84.53  0.00           C
ATOM    731  C   ARG A 183      -7.372 -11.579   4.893 84.53  0.00           C
ATOM    732  O   ARG A 183      -8.603 -11.628   5.107 84.53  0.00           O
ATOM    733  N   PHE A 184      -6.785 -11.851   3.718 54.72  0.00           N
ATOM    734  CA  PHE A 184      -7.550 -12.410   2.590 54.72  0.00           C
ATOM    735  C   PHE A 184      -7.017 -13.778   2.185 54.72  0.00           C
ATOM    736  O   PHE A 184      -5.814 -14.039   2.233 54.72  0.00           O
ATOM    737  N   ASN A 185      -7.926 -14.630   1.714 64.00  0.00           N
ATOM    738  CA  ASN A 185      -7.604 -16.007   1.378 64.00  0.00           C
ATOM    739  C   ASN A 185      -6.563 -16.229   0.291 64.00  0.00           C
ATOM    740  O   ASN A 185      -5.857 -17.232   0.316 64.00  0.00           O
ATOM    741  N   TRP A 186      -6.507 -15.349  -0.690 35.33  0.00           N
ATOM    742  CA  TRP A 186      -5.602 -15.511  -1.821 35.33  0.00           C
ATOM    743  C   TRP A 186      -4.124 -15.190  -1.442 35.33  0.00           C
ATOM    744  O   TRP A 186      -3.168 -15.441  -2.207 35.33  0.00           O
ATOM    745  N   GLU A 187      -3.932 -14.615  -0.259 83.66  0.00           N
ATOM    746  CA  GLU A 187      -2.575 -14.179   0.176 83.66  0.00           C
ATOM    747  C   GLU A 187      -1.511 -15.229   0.225 83.66  0.00           C
ATOM    748  O   GLU A 187      -0.428 -15.028  -0.334 83.66  0.00           O
ATOM    749  N   CYS A 188      -1.801 -16.352   0.884 55.50  0.00           N
ATOM    750  CA  CYS A 188      -0.760 -17.344   1.180 55.50  0.00           C
ATOM    751  C   CYS A 188      -0.146 -17.865  -0.127 55.50  0.00           C
ATOM    752  O   CYS A 188       1.067 -18.120  -0.218 55.50  0.00           O
ATOM    753  N   LYS A 189      -0.970 -17.963  -1.166  7.38  0.00           N
ATOM    754  CA  LYS A 189      -0.511 -18.522  -2.447  7.38  0.00           C
ATOM    755  C   LYS A 189       0.696 -17.731  -3.018  7.38  0.00           C
ATOM    756  O   LYS A 189       1.569 -18.272  -3.724  7.38  0.00           O
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ATOM    757  N   TYR A 190       0.747 -16.439  -2.708 22.21  0.00           N
ATOM    758  CA  TYR A 190       1.763 -15.611  -3.285 22.21  0.00           C
ATOM    759  C   TYR A 190       2.819 -15.235  -2.248 22.21  0.00           C
ATOM    760  O   TYR A 190       3.823 -14.654  -2.584 22.21  0.00           O
ATOM    761  N   CYS A 191       2.587 -15.625  -0.997 36.59  0.00           N
ATOM    762  CA  CYS A 191       3.353 -15.193   0.160 36.59  0.00           C
ATOM    763  C   CYS A 191       4.692 -15.934   0.269 36.59  0.00           C
ATOM    764  O   CYS A 191       4.732 -17.173   0.348 36.59  0.00           O
ATOM    765  N   ILE A 192       5.784 -15.171   0.315 43.02  0.00           N
ATOM    766  CA  ILE A 192       7.106 -15.776   0.279 43.02  0.00           C
ATOM    767  C   ILE A 192       7.409 -16.403   1.615 43.02  0.00           C
ATOM    768  O   ILE A 192       8.394 -17.068   1.711 43.02  0.00           O
ATOM    769  N   PHE A 193       6.578 -16.191   2.632 49.91  0.00           N
ATOM    770  CA  PHE A 193       6.786 -16.794   3.943 49.91  0.00           C
ATOM    771  C   PHE A 193       5.984 -18.074   4.210 49.91  0.00           C
ATOM    772  O   PHE A 193       5.990 -18.637   5.317 49.91  0.00           O
ATOM    773  N   SER A 194       5.262 -18.513   3.198 41.94  0.00           N
ATOM    774  CA  SER A 194       4.413 -19.711   3.328 41.94  0.00           C
ATOM    775  C   SER A 194       5.249 -20.909   3.657 41.94  0.00           C
ATOM    776  O   SER A 194       4.748 -21.746   4.298 41.94  0.00           O
ATOM    777  N   VAL A 195       6.503 -20.952   3.199 53.52  0.00           N
ATOM    778  CA  VAL A 195       7.410 -21.989   3.516 53.52  0.00           C
ATOM    779  C   VAL A 195       7.733 -22.174   4.979 53.52  0.00           C
ATOM    780  O   VAL A 195       8.309 -23.201   5.323 53.52  0.00           O
ATOM    781  N   ILE A 196       7.419 -21.212   5.849 37.19  0.00           N
ATOM    782  CA  ILE A 196       7.718 -21.354   7.295 37.19  0.00           C
ATOM    783  C   ILE A 196       6.564 -20.975   8.148 37.19  0.00           C
ATOM    784  O   ILE A 196       6.683 -20.972   9.331 37.19  0.00           O
ATOM    785  N   CYS A 197       5.424 -20.671   7.561 45.29  0.00           N
ATOM    786  CA  CYS A 197       4.335 -20.157   8.329 45.29  0.00           C
ATOM    787  C   CYS A 197       3.331 -21.219   8.615 45.29  0.00           C
ATOM    788  O   CYS A 197       2.836 -21.849   7.697 45.29  0.00           O
ATOM    789  N   PRO A 198       2.960 -21.375   9.870 31.76  0.00           N
ATOM    790  CA  PRO A 198       1.970 -22.338  10.280 31.76  0.00           C
ATOM    791  C   PRO A 198       0.542 -22.046   9.971 31.76  0.00           C
ATOM    792  O   PRO A 198      -0.290 -22.938  10.156 31.76  0.00           O
ATOM    793  N   ALA A 199       0.227 -20.829   9.562 39.98  0.00           N
ATOM    794  CA  ALA A 199      -1.167 -20.431   9.353 39.98  0.00           C
ATOM    795  C   ALA A 199      -1.570 -20.467   7.877 39.98  0.00           C
ATOM    796  O   ALA A 199      -2.731 -20.267   7.563 39.98  0.00           O
ATOM    797  N   LYS A 200      -0.591 -20.655   6.991 26.21  0.00           N
ATOM    798  CA  LYS A 200      -0.778 -20.823   5.548 26.21  0.00           C
ATOM    799  C   LYS A 200      -1.946 -21.672   5.236 26.21  0.00           C
ATOM    800  O   LYS A 200      -2.051 -22.735   5.769 26.21  0.00           O
ATOM    801  N   LEU A 201      -2.799 -21.218   4.328 31.76  0.00           N
ATOM    802  CA  LEU A 201      -3.935 -22.003   3.876 31.76  0.00           C
ATOM    803  C   LEU A 201      -3.511 -23.046   2.859 31.76  0.00           C
ATOM    804  O   LEU A 201      -2.649 -22.775   2.009 31.76  0.00           O
ATOM    805  N   THR A 202      -4.127 -24.225   2.953 46.74  0.00           N
ATOM    806  CA  THR A 202      -3.796 -25.369   2.082 46.74  0.00           C
ATOM    807  C   THR A 202      -5.038 -25.920   1.370 46.74  0.00           C
ATOM    808  O   THR A 202      -6.101 -25.964   1.999 46.74  0.00           O
TER     809      THR A 202
ENDMDL
END
REMARK   1 ****************************************************************
REMARK   1 Start File NAT_vs_DEC3_dSi_colored.pdb
REMARK   1 The occupancy record was modified to represent dSi := Si(DEC)-Si(NAT).
REMARK   1 Occ=0.00 means dSi=-1.285567 kB; Occ=99.99 means dSi=1.380460 kB.
MODEL        0
ATOM      1  N   MSE A   1      23.268  -4.104 -18.521 40.19  0.00           N
ATOM      2  CA  MSE A   1      23.439  -2.722 -18.016 40.19  0.00           C
ATOM      3  C   MSE A   1      22.152  -2.161 -17.383 40.19  0.00           C
ATOM      4  O   MSE A   1      22.147  -1.650 -16.252 40.19  0.00           O
ATOM      5  N   ILE A   2      21.045  -2.254 -18.100 42.66  0.00           N
ATOM      6  CA  ILE A   2      19.816  -1.632 -17.608 42.66  0.00           C
ATOM      7  C   ILE A   2      19.269  -2.405 -16.412 42.66  0.00           C
ATOM      8  O   ILE A   2      18.935  -1.835 -15.391 42.66  0.00           O
ATOM      9  N   THR A   3      19.186  -3.703 -16.563 29.88  0.00           N
ATOM     10  CA  THR A   3      18.718  -4.606 -15.498 29.88  0.00           C
ATOM     11  C   THR A   3      19.478  -4.398 -14.212 29.88  0.00           C
ATOM     12  O   THR A   3      18.884  -4.188 -13.150 29.88  0.00           O
ATOM     13  N   GLU A   4      20.800  -4.447 -14.318 21.02  0.00           N
ATOM     14  CA  GLU A   4      21.687  -4.148 -13.195 21.02  0.00           C
ATOM     15  C   GLU A   4      21.342  -2.832 -12.484 21.02  0.00           C
ATOM     16  O   GLU A   4      21.232  -2.791 -11.242 21.02  0.00           O
ATOM     17  N   PHE A   5      21.133  -1.765 -13.247 47.14  0.00           N
ATOM     18  CA  PHE A   5      20.826  -0.486 -12.602 47.14  0.00           C
ATOM     19  C   PHE A   5      19.486  -0.520 -11.886 47.14  0.00           C
ATOM     20  O   PHE A   5      19.415  -0.122 -10.736 47.14  0.00           O
ATOM     21  N   LEU A   6      18.429  -1.039 -12.529 26.94  0.00           N
ATOM     22  CA  LEU A   6      17.100  -1.072 -11.873 26.94  0.00           C
ATOM     23  C   LEU A   6      17.119  -1.921 -10.586 26.94  0.00           C
ATOM     24  O   LEU A   6      16.551  -1.545  -9.531 26.94  0.00           O
ATOM     25  N   LEU A   7      17.767  -3.071 -10.672 35.53  0.00           N
ATOM     26  CA  LEU A   7      17.843  -3.929  -9.486 35.53  0.00           C
ATOM     27  C   LEU A   7      18.603  -3.241  -8.341 35.53  0.00           C
ATOM     28  O   LEU A   7      18.190  -3.292  -7.184 35.53  0.00           O
ATOM     29  N   LYS A   8      19.691  -2.566  -8.693 28.46  0.00           N
ATOM     30  CA  LYS A   8      20.463  -1.856  -7.680 28.46  0.00           C
ATOM     31  C   LYS A   8      19.628  -0.762  -7.044 28.46  0.00           C
ATOM     32  O   LYS A   8      19.527  -0.688  -5.819 28.46  0.00           O
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ATOM     33  N   LYS A   9      18.947   0.036  -7.860 81.62  0.00           N
ATOM     34  CA  LYS A   9      18.144   1.113  -7.292 81.62  0.00           C
ATOM     35  C   LYS A   9      17.009   0.545  -6.471 81.62  0.00           C
ATOM     36  O   LYS A   9      16.708   1.086  -5.402 81.62  0.00           O
ATOM     37  N   LYS A  10      16.379  -0.547  -6.912 48.84  0.00           N
ATOM     38  CA  LYS A  10      15.262  -1.072  -6.116 48.84  0.00           C
ATOM     39  C   LYS A  10      15.660  -1.681  -4.726 48.84  0.00           C
ATOM     40  O   LYS A  10      14.931  -1.547  -3.695 48.84  0.00           O
ATOM     41  N   LEU A  11      16.798  -2.366  -4.699 40.34  0.00           N
ATOM     42  CA  LEU A  11      17.328  -2.879  -3.411 40.34  0.00           C
ATOM     43  C   LEU A  11      17.613  -1.686  -2.439 40.34  0.00           C
ATOM     44  O   LEU A  11      17.179  -1.698  -1.270 40.34  0.00           O
ATOM     45  N   GLU A  12      18.299  -0.655  -2.945 37.85  0.00           N
ATOM     46  CA  GLU A  12      18.475   0.605  -2.181 37.85  0.00           C
ATOM     47  C   GLU A  12      17.179   1.213  -1.616 37.85  0.00           C
ATOM     48  O   GLU A  12      17.048   1.390  -0.426 37.85  0.00           O
ATOM     49  N   GLU A  13      16.225   1.536  -2.461 55.83  0.00           N
ATOM     50  CA  GLU A  13      14.901   1.950  -1.974 55.83  0.00           C
ATOM     51  C   GLU A  13      14.358   1.037  -0.868 55.83  0.00           C
ATOM     52  O   GLU A  13      13.966   1.505   0.190 55.83  0.00           O
ATOM     53  N   HIS A  14      14.335  -0.267  -1.101 31.91  0.00           N
ATOM     54  CA  HIS A  14      13.794  -1.199  -0.106 31.91  0.00           C
ATOM     55  C   HIS A  14      14.560  -1.126   1.236 31.91  0.00           C
ATOM     56  O   HIS A  14      13.970  -1.122   2.322 31.91  0.00           O
ATOM     57  N   LEU A  15      15.884  -1.079   1.145 27.01  0.00           N
ATOM     58  CA  LEU A  15      16.750  -1.011   2.322 27.01  0.00           C
ATOM     59  C   LEU A  15      16.724   0.377   2.988 27.01  0.00           C
ATOM     60  O   LEU A  15      17.114   0.492   4.140 27.01  0.00           O
ATOM     61  N   SER A  16      16.283   1.421   2.277 43.85  0.00           N
ATOM     62  CA  SER A  16      16.215   2.761   2.870 43.85  0.00           C
ATOM     63  C   SER A  16      15.126   2.866   3.937 43.85  0.00           C
ATOM     64  O   SER A  16      15.184   3.766   4.746 43.85  0.00           O
ATOM     65  N   HIS A  17      14.126   1.987   3.905 38.37  0.00           N
ATOM     66  CA  HIS A  17      12.931   2.175   4.710 38.37  0.00           C
ATOM     67  C   HIS A  17      12.911   1.290   5.925 38.37  0.00           C
ATOM     68  O   HIS A  17      12.211   0.285   5.939 38.37  0.00           O
ATOM     69  N   VAL A  18      13.667   1.662   6.952 36.75  0.00           N
ATOM     70  CA  VAL A  18      13.649   0.930   8.226 36.75  0.00           C
ATOM     71  C   VAL A  18      12.455   1.416   9.073 36.75  0.00           C
ATOM     72  O   VAL A  18      12.231   2.619   9.198 36.75  0.00           O
ATOM     73  N   LYS A  19      11.711   0.480   9.654 47.79  0.00           N
ATOM     74  CA  LYS A  19      10.394   0.738  10.251 47.79  0.00           C
ATOM     75  C   LYS A  19      10.466   0.797  11.779 47.79  0.00           C
ATOM     76  O   LYS A  19      11.024  -0.102  12.394 47.79  0.00           O
ATOM     77  N   GLU A  20       9.892   1.832  12.391 14.56  0.00           N
ATOM     78  CA  GLU A  20      10.003   2.007  13.848 14.56  0.00           C
ATOM     79  C   GLU A  20       8.986   1.178  14.597 14.56  0.00           C
ATOM     80  O   GLU A  20       7.952   0.808  14.049 14.56  0.00           O
ATOM     81  N   GLU A  21       9.300   0.899  15.861  5.07  0.00           N
ATOM     82  CA  GLU A  21       8.634  -0.168  16.607  5.07  0.00           C
ATOM     83  C   GLU A  21       7.153   0.124  16.844  5.07  0.00           C
ATOM     84  O   GLU A  21       6.369  -0.811  17.040  5.07  0.00           O
ATOM     85  N   ASN A  22       6.774   1.399  16.808 50.91  0.00           N
ATOM     86  CA  ASN A  22       5.371   1.790  16.970 50.91  0.00           C
ATOM     87  C   ASN A  22       4.716   2.391  15.715 50.91  0.00           C
ATOM     88  O   ASN A  22       3.648   3.000  15.824 50.91  0.00           O
ATOM     89  N   THR A  23       5.339   2.269  14.540 46.08  0.00           N
ATOM     90  CA  THR A  23       4.636   2.674  13.297 46.08  0.00           C
ATOM     91  C   THR A  23       3.937   1.492  12.597 46.08  0.00           C
ATOM     92  O   THR A  23       4.343   0.315  12.707 46.08  0.00           O
ATOM     93  N   ILE A  24       2.863   1.841  11.907 51.79  0.00           N
ATOM     94  CA  ILE A  24       2.133   0.908  11.089 51.79  0.00           C
ATOM     95  C   ILE A  24       1.893   1.588   9.781 51.79  0.00           C
ATOM     96  O   ILE A  24       1.270   2.646   9.760 51.79  0.00           O
ATOM     97  N   TYR A  25       2.393   1.015   8.691 52.24  0.00           N
ATOM     98  CA  TYR A  25       2.072   1.558   7.393 52.24  0.00           C
ATOM     99  C   TYR A  25       0.609   1.246   7.051 52.24  0.00           C
ATOM    100  O   TYR A  25       0.029   0.273   7.510 52.24  0.00           O
ATOM    101  N   VAL A  26       0.019   2.088   6.230 68.16  0.00           N
ATOM    102  CA  VAL A  26      -1.326   1.856   5.716 68.16  0.00           C
ATOM    103  C   VAL A  26      -1.394   0.504   4.989 68.16  0.00           C
ATOM    104  O   VAL A  26      -2.320  -0.244   5.138 68.16  0.00           O
ATOM    105  N   THR A  27      -0.413   0.264   4.153 51.67  0.00           N
ATOM    106  CA  THR A  27      -0.225  -0.940   3.432 51.67  0.00           C
ATOM    107  C   THR A  27      -0.214  -2.155   4.325 51.67  0.00           C
ATOM    108  O   THR A  27      -0.816  -3.189   4.005 51.67  0.00           O
ATOM    109  N   ASP A  28       0.421  -2.066   5.476 63.07  0.00           N
ATOM    110  CA  ASP A  28       0.217  -3.125   6.447 63.07  0.00           C
ATOM    111  C   ASP A  28      -1.221  -3.366   6.899 63.07  0.00           C
ATOM    112  O   ASP A  28      -1.560  -4.494   7.172 63.07  0.00           O
ATOM    113  N   LEU A  29      -2.082  -2.355   6.958 61.09  0.00           N
ATOM    114  CA  LEU A  29      -3.418  -2.565   7.521 61.09  0.00           C
ATOM    115  C   LEU A  29      -4.304  -3.447   6.637 61.09  0.00           C
ATOM    116  O   LEU A  29      -5.335  -3.962   7.065 61.09  0.00           O
ATOM    117  N   VAL A  30      -3.930  -3.597   5.378 62.86  0.00           N
ATOM    118  CA  VAL A  30      -4.776  -4.325   4.449 62.86  0.00           C
ATOM    119  C   VAL A  30      -4.099  -5.619   4.014 62.86  0.00           C
ATOM    120  O   VAL A  30      -4.413  -6.174   2.971 62.86  0.00           O
ATOM    121  N   ARG A  31      -3.154  -6.069   4.828 99.99  0.00           N
ATOM    122  CA  ARG A  31      -2.426  -7.287   4.613 99.99  0.00           C
ATOM    123  C   ARG A  31      -2.433  -8.174   5.834 99.99  0.00           C
ATOM    124  O   ARG A  31      -2.927  -7.806   6.907 99.99  0.00           O
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ATOM    125  N   CYS A  32      -1.955  -9.395   5.616 60.45  0.00           N
ATOM    126  CA  CYS A  32      -1.910 -10.426   6.637 60.45  0.00           C
ATOM    127  C   CYS A  32      -1.015  -9.951   7.770 60.45  0.00           C
ATOM    128  O   CYS A  32       0.134  -9.567   7.534 60.45  0.00           O
ATOM    129  N   PRO A  33      -1.508 -10.024   8.999 51.71  0.00           N
ATOM    130  CA  PRO A  33      -0.664  -9.610  10.083 51.71  0.00           C
ATOM    131  C   PRO A  33       0.611 -10.429  10.223 51.71  0.00           C
ATOM    132  O   PRO A  33       1.694  -9.852  10.411 51.71  0.00           O
ATOM    133  N   ARG A  34       0.512 -11.757  10.119 62.60  0.00           N
ATOM    134  CA  ARG A  34       1.689 -12.574  10.256 62.60  0.00           C
ATOM    135  C   ARG A  34       2.720 -12.198   9.218 62.60  0.00           C
ATOM    136  O   ARG A  34       3.911 -12.267   9.453 62.60  0.00           O
ATOM    137  N   ARG A  35       2.276 -11.837   8.033 46.60  0.00           N
ATOM    138  CA  ARG A  35       3.238 -11.530   6.965 46.60  0.00           C
ATOM    139  C   ARG A  35       3.971 -10.221   7.251 46.60  0.00           C
ATOM    140  O   ARG A  35       5.151 -10.042   6.901 46.60  0.00           O
ATOM    141  N   VAL A  36       3.228  -9.297   7.848 66.80  0.00           N
ATOM    142  CA  VAL A  36       3.791  -7.981   8.175 66.80  0.00           C
ATOM    143  C   VAL A  36       4.864  -8.200   9.230 66.80  0.00           C
ATOM    144  O   VAL A  36       5.972  -7.734   9.085 66.80  0.00           O
ATOM    145  N   ARG A  37       4.561  -8.972  10.259 57.00  0.00           N
ATOM    146  CA  ARG A  37       5.600  -9.259  11.227 57.00  0.00           C
ATOM    147  C   ARG A  37       6.749 -10.045  10.630 57.00  0.00           C
ATOM    148  O   ARG A  37       7.879  -9.890  11.061 57.00  0.00           O
ATOM    149  N   TYR A  38       6.481 -10.904   9.649 57.26  0.00           N
ATOM    150  CA  TYR A  38       7.570 -11.660   9.036 57.26  0.00           C
ATOM    151  C   TYR A  38       8.499 -10.724   8.363 57.26  0.00           C
ATOM    152  O   TYR A  38       9.689 -10.942   8.377 57.26  0.00           O
ATOM    153  N   GLU A  39       7.963  -9.678   7.760 53.99  0.00           N
ATOM    154  CA  GLU A  39       8.816  -8.667   7.126 53.99  0.00           C
ATOM    155  C   GLU A  39       9.769  -7.904   8.077 53.99  0.00           C
ATOM    156  O   GLU A  39      10.773  -7.394   7.597 53.99  0.00           O
ATOM    157  N   SER A  40       9.464  -7.844   9.380 43.00  0.00           N
ATOM    158  CA  SER A  40      10.398  -7.338  10.412 43.00  0.00           C
ATOM    159  C   SER A  40      11.345  -8.393  10.958 43.00  0.00           C
ATOM    160  O   SER A  40      12.540  -8.130  11.114 43.00  0.00           O
ATOM    161  N   GLU A  41      10.808  -9.578  11.263 45.51  0.00           N
ATOM    162  CA  GLU A  41      11.604 -10.637  11.865 45.51  0.00           C
ATOM    163  C   GLU A  41      12.456 -11.415  10.889 45.51  0.00           C
ATOM    164  O   GLU A  41      13.321 -12.135  11.370 45.51  0.00           O
ATOM    165  N   TYR A  42      12.238 -11.336   9.566 33.77  0.00           N
ATOM    166  CA  TYR A  42      13.052 -12.135   8.586 33.77  0.00           C
ATOM    167  C   TYR A  42      13.369 -11.290   7.378 33.77  0.00           C
ATOM    168  O   TYR A  42      13.024 -11.599   6.196 33.77  0.00           O
ATOM    169  N   LYS A  43      14.059 -10.210   7.691 72.52  0.00           N
ATOM    170  CA  LYS A  43      14.286  -9.169   6.756 72.52  0.00           C
ATOM    171  C   LYS A  43      15.175  -9.664   5.651 72.52  0.00           C
ATOM    172  O   LYS A  43      15.118  -9.127   4.534 72.52  0.00           O
ATOM    173  N   GLU A  44      16.024 -10.635   5.936 49.66  0.00           N
ATOM    174  CA  GLU A  44      16.906 -11.087   4.887 49.66  0.00           C
ATOM    175  C   GLU A  44      16.077 -11.799   3.791 49.66  0.00           C
ATOM    176  O   GLU A  44      16.309 -11.615   2.572 49.66  0.00           O
ATOM    177  N   LEU A  45      15.070 -12.551   4.234 32.70  0.00           N
ATOM    178  CA  LEU A  45      14.177 -13.244   3.311 32.70  0.00           C
ATOM    179  C   LEU A  45      13.268 -12.185   2.642 32.70  0.00           C
ATOM    180  O   LEU A  45      13.095 -12.177   1.406 32.70  0.00           O
ATOM    181  N   ALA A  46      12.710 -11.278   3.448 71.21  0.00           N
ATOM    182  CA  ALA A  46      11.893 -10.178   2.897 71.21  0.00           C
ATOM    183  C   ALA A  46      12.519  -9.534   1.649 71.21  0.00           C
ATOM    184  O   ALA A  46      11.825  -9.262   0.709 71.21  0.00           O
ATOM    185  N   ILE A  47      13.830  -9.341   1.634 54.66  0.00           N
ATOM    186  CA  ILE A  47      14.526  -8.691   0.538 54.66  0.00           C
ATOM    187  C   ILE A  47      14.299  -9.332  -0.838 54.66  0.00           C
ATOM    188  O   ILE A  47      14.451  -8.669  -1.895 54.66  0.00           O
ATOM    189  N   SER A  48      13.959 -10.620  -0.874 68.54  0.00           N
ATOM    190  CA  SER A  48      13.715 -11.277  -2.169 68.54  0.00           C
ATOM    191  C   SER A  48      12.509 -10.666  -2.882 68.54  0.00           C
ATOM    192  O   SER A  48      12.401 -10.723  -4.108 68.54  0.00           O
ATOM    193  N   GLN A  49      11.610 -10.068  -2.123 57.91  0.00           N
ATOM    194  CA  GLN A  49      10.459  -9.434  -2.743 57.91  0.00           C
ATOM    195  C   GLN A  49      10.847  -8.226  -3.623 57.91  0.00           C
ATOM    196  O   GLN A  49      10.116  -7.889  -4.482 57.91  0.00           O
ATOM    197  N   VAL A  50      12.031  -7.643  -3.424 53.84  0.00           N
ATOM    198  CA  VAL A  50      12.659  -6.700  -4.358 53.84  0.00           C
ATOM    199  C   VAL A  50      12.750  -7.176  -5.802 53.84  0.00           C
ATOM    200  O   VAL A  50      12.805  -6.373  -6.754 53.84  0.00           O
ATOM    201  N   TYR A  51      12.865  -8.468  -5.991 36.40  0.00           N
ATOM    202  CA  TYR A  51      13.231  -8.953  -7.306 36.40  0.00           C
ATOM    203  C   TYR A  51      12.000  -9.515  -8.013 36.40  0.00           C
ATOM    204  O   TYR A  51      12.116 -10.179  -9.031 36.40  0.00           O
ATOM    205  N   ALA A  52      10.823  -9.258  -7.445 43.22  0.00           N
ATOM    206  CA  ALA A  52       9.580  -9.586  -8.075 43.22  0.00           C
ATOM    207  C   ALA A  52       9.375  -8.694  -9.336 43.22  0.00           C
ATOM    208  O   ALA A  52       9.152  -7.478  -9.216 43.22  0.00           O
ATOM    209  N   PRO A  53       9.401  -9.282 -10.541 57.51  0.00           N
ATOM    210  CA  PRO A  53       9.338  -8.519 -11.804 57.51  0.00           C
ATOM    211  C   PRO A  53       8.051  -7.715 -11.969 57.51  0.00           C
ATOM    212  O   PRO A  53       8.107  -6.662 -12.589 57.51  0.00           O
ATOM    213  N   SER A  54       6.912  -8.185 -11.428 25.24  0.00           N
ATOM    214  CA  SER A  54       5.662  -7.382 -11.372 25.24  0.00           C
ATOM    215  C   SER A  54       5.807  -6.143 -10.551 25.24  0.00           C
ATOM    216  O   SER A  54       5.159  -5.116 -10.806 25.24  0.00           O
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ATOM    217  N   ALA A  55       6.666  -6.210  -9.534 34.28  0.00           N
ATOM    218  CA  ALA A  55       6.871  -5.023  -8.707 34.28  0.00           C
ATOM    219  C   ALA A  55       7.756  -4.055  -9.490 34.28  0.00           C
ATOM    220  O   ALA A  55       7.598  -2.860  -9.403 34.28  0.00           O
ATOM    221  N   ILE A  56       8.662  -4.543 -10.314 33.53  0.00           N
ATOM    222  CA  ILE A  56       9.562  -3.610 -11.005 33.53  0.00           C
ATOM    223  C   ILE A  56       8.724  -2.964 -12.115 33.53  0.00           C
ATOM    224  O   ILE A  56       8.790  -1.755 -12.348 33.53  0.00           O
ATOM    225  N   LEU A  57       7.912  -3.805 -12.760 18.72  0.00           N
ATOM    226  CA  LEU A  57       6.935  -3.366 -13.747 18.72  0.00           C
ATOM    227  C   LEU A  57       6.033  -2.336 -13.087 18.72  0.00           C
ATOM    228  O   LEU A  57       5.874  -1.207 -13.590 18.72  0.00           O
ATOM    229  N   GLY A  58       5.483  -2.701 -11.946 37.26  0.00           N
ATOM    230  CA  GLY A  58       4.634  -1.806 -11.182 37.26  0.00           C
ATOM    231  C   GLY A  58       5.258  -0.473 -10.875 37.26  0.00           C
ATOM    232  O   GLY A  58       4.607   0.560 -11.036 37.26  0.00           O
ATOM    233  N   ASP A  59       6.514  -0.439 -10.443 27.71  0.00           N
ATOM    234  CA  ASP A  59       7.150   0.844 -10.105 27.71  0.00           C
ATOM    235  C   ASP A  59       7.486   1.775 -11.275 27.71  0.00           C
ATOM    236  O   ASP A  59       7.461   2.943 -11.121 27.71  0.00           O
ATOM    237  N   ILE A  60       7.874   1.212 -12.405 13.66  0.00           N
ATOM    238  CA  ILE A  60       8.072   1.923 -13.651 13.66  0.00           C
ATOM    239  C   ILE A  60       6.774   2.586 -14.133 13.66  0.00           C
ATOM    240  O   ILE A  60       6.798   3.761 -14.559 13.66  0.00           O
ATOM    241  N   LEU A  61       5.641   1.870 -14.058 31.03  0.00           N
ATOM    242  CA  LEU A  61       4.334   2.454 -14.392 31.03  0.00           C
ATOM    243  C   LEU A  61       4.024   3.653 -13.537 31.03  0.00           C
ATOM    244  O   LEU A  61       3.668   4.678 -14.050 31.03  0.00           O
ATOM    245  N   HIS A  62       4.172   3.508 -12.232 54.69  0.00           N
ATOM    246  CA  HIS A  62       3.968   4.616 -11.306 54.69  0.00           C
ATOM    247  C   HIS A  62       4.884   5.714 -11.684 54.69  0.00           C
ATOM    248  O   HIS A  62       4.443   6.854 -11.841 54.69  0.00           O
ATOM    249  N   LEU A  63       6.158   5.423 -11.888 12.94  0.00           N
ATOM    250  CA  LEU A  63       7.034   6.526 -12.325 12.94  0.00           C
ATOM    251  C   LEU A  63       6.405   7.217 -13.537 12.94  0.00           C
ATOM    252  O   LEU A  63       6.167   8.394 -13.497 12.94  0.00           O
ATOM    253  N   GLY A  64       6.109   6.499 -14.603 20.96  0.00           N
ATOM    254  CA  GLY A  64       5.719   7.158 -15.811 20.96  0.00           C
ATOM    255  C   GLY A  64       4.400   7.890 -15.740 20.96  0.00           C
ATOM    256  O   GLY A  64       4.174   8.755 -16.509 20.96  0.00           O
ATOM    257  N   LEU A  65       3.499   7.454 -14.886 35.09  0.00           N
ATOM    258  CA  LEU A  65       2.129   7.928 -14.922 35.09  0.00           C
ATOM    259  C   LEU A  65       2.136   9.075 -13.968 35.09  0.00           C
ATOM    260  O   LEU A  65       1.699  10.153 -14.266 35.09  0.00           O
ATOM    261  N   GLU A  66       2.672   8.845 -12.789 79.25  0.00           N
ATOM    262  CA  GLU A  66       3.061   9.970 -11.943 79.25  0.00           C
ATOM    263  C   GLU A  66       3.702  11.154 -12.688 79.25  0.00           C
ATOM    264  O   GLU A  66       3.297  12.272 -12.436 79.25  0.00           O
ATOM    265  N   SER A  67       4.665  10.981 -13.581 33.56  0.00           N
ATOM    266  CA  SER A  67       5.183  12.221 -14.250 33.56  0.00           C
ATOM    267  C   SER A  67       4.100  13.012 -15.067 33.56  0.00           C
ATOM    268  O   SER A  67       4.182  14.248 -15.203 33.56  0.00           O
ATOM    269  N   VAL A  68       3.091  12.293 -15.600 22.61  0.00           N
ATOM    270  CA  VAL A  68       1.939  12.934 -16.238 22.61  0.00           C
ATOM    271  C   VAL A  68       1.158  13.773 -15.231 22.61  0.00           C
ATOM    272  O   VAL A  68       0.645  14.865 -15.520 22.61  0.00           O
ATOM    273  N   LEU A  69       1.040  13.216 -14.047 39.64  0.00           N
ATOM    274  CA  LEU A  69       0.261  13.818 -13.004 39.64  0.00           C
ATOM    275  C   LEU A  69       0.848  15.118 -12.430 39.64  0.00           C
ATOM    276  O   LEU A  69       0.134  15.992 -11.952 39.64  0.00           O
ATOM    277  N   LYS A  70       2.165  15.215 -12.445 56.21  0.00           N
ATOM    278  CA  LYS A  70       2.860  16.356 -11.911 56.21  0.00           C
ATOM    279  C   LYS A  70       2.708  17.450 -12.934 56.21  0.00           C
ATOM    280  O   LYS A  70       2.497  18.596 -12.562 56.21  0.00           O
ATOM    281  N   GLY A  71       2.769  17.105 -14.229 41.93  0.00           N
ATOM    282  CA  GLY A  71       2.550  18.111 -15.305 41.93  0.00           C
ATOM    283  C   GLY A  71       1.130  18.685 -15.376 41.93  0.00           C
ATOM    284  O   GLY A  71       0.821  19.815 -14.923 41.93  0.00           O
ATOM    285  N   ASN A  72       0.217  17.876 -15.876 45.44  0.00           N
ATOM    286  CA  ASN A  72      -1.095  18.370 -16.206 45.44  0.00           C
ATOM    287  C   ASN A  72      -2.040  18.612 -15.074 45.44  0.00           C
ATOM    288  O   ASN A  72      -2.921  19.420 -15.211 45.44  0.00           O
ATOM    289  N   PHE A  73      -1.880  17.933 -13.966 59.09  0.00           N
ATOM    290  CA  PHE A  73      -2.766  18.118 -12.847 59.09  0.00           C
ATOM    291  C   PHE A  73      -2.091  18.771 -11.639 59.09  0.00           C
ATOM    292  O   PHE A  73      -2.674  18.861 -10.593 59.09  0.00           O
ATOM    293  N   ASN A  74      -0.838  19.166 -11.735 50.33  0.00           N
ATOM    294  CA  ASN A  74      -0.201  19.781 -10.582 50.33  0.00           C
ATOM    295  C   ASN A  74      -0.355  18.949  -9.279 50.33  0.00           C
ATOM    296  O   ASN A  74      -0.590  19.474  -8.165 50.33  0.00           O
ATOM    297  N   ALA A  75      -0.160  17.641  -9.414 51.14  0.00           N
ATOM    298  CA  ALA A  75      -0.115  16.792  -8.245 51.14  0.00           C
ATOM    299  C   ALA A  75       1.282  16.777  -7.622 51.14  0.00           C
ATOM    300  O   ALA A  75       2.270  16.992  -8.289 51.14  0.00           O
ATOM    301  N   GLU A  76       1.336  16.530  -6.332 46.53  0.00           N
ATOM    302  CA  GLU A  76       2.559  16.069  -5.695 46.53  0.00           C
ATOM    303  C   GLU A  76       2.544  14.546  -5.834 46.53  0.00           C
ATOM    304  O   GLU A  76       1.466  13.957  -5.865 46.53  0.00           O
ATOM    305  N   THR A  77       3.710  13.915  -5.909 53.48  0.00           N
ATOM    306  CA  THR A  77       3.794  12.484  -6.087 53.48  0.00           C
ATOM    307  C   THR A  77       4.639  11.898  -4.978 53.48  0.00           C
ATOM    308  O   THR A  77       5.510  12.566  -4.500 53.48  0.00           O
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ATOM    309  N   GLU A  78       4.321  10.666  -4.562 67.11  0.00           N
ATOM    310  CA  GLU A  78       4.988   9.920  -3.517 67.11  0.00           C
ATOM    311  C   GLU A  78       5.020  10.703  -2.232 67.11  0.00           C
ATOM    312  O   GLU A  78       6.063  10.936  -1.623 67.11  0.00           O
ATOM    313  N   VAL A  79       3.826  11.074  -1.816 53.82  0.00           N
ATOM    314  CA  VAL A  79       3.635  12.010  -0.767 53.82  0.00           C
ATOM    315  C   VAL A  79       3.474  11.303   0.544 53.82  0.00           C
ATOM    316  O   VAL A  79       2.510  10.573   0.774 53.82  0.00           O
ATOM    317  N   GLU A  80       4.416  11.580   1.421 38.92  0.00           N
ATOM    318  CA  GLU A  80       4.530  10.857   2.668 38.92  0.00           C
ATOM    319  C   GLU A  80       3.901  11.655   3.780 38.92  0.00           C
ATOM    320  O   GLU A  80       4.090  12.840   3.853 38.92  0.00           O
ATOM    321  N   THR A  81       3.177  11.027   4.670 38.45  0.00           N
ATOM    322  CA  THR A  81       2.510  11.744   5.761 38.45  0.00           C
ATOM    323  C   THR A  81       2.133  10.811   6.884 38.45  0.00           C
ATOM    324  O   THR A  81       2.164   9.597   6.754 38.45  0.00           O
ATOM    325  N   LEU A  82       1.667  11.373   7.976 48.62  0.00           N
ATOM    326  CA  LEU A  82       1.644  10.601   9.202 48.62  0.00           C
ATOM    327  C   LEU A  82       0.492  11.060  10.035 48.62  0.00           C
ATOM    328  O   LEU A  82       0.098  12.203   9.950 48.62  0.00           O
ATOM    329  N   ARG A  83      -0.124  10.141  10.761 25.29  0.00           N
ATOM    330  CA  ARG A  83      -1.326  10.449  11.518 25.29  0.00           C
ATOM    331  C   ARG A  83      -1.368   9.467  12.659 25.29  0.00           C
ATOM    332  O   ARG A  83      -0.926   8.327  12.512 25.29  0.00           O
ATOM    333  N   GLU A  84      -1.873   9.890  13.809 20.97  0.00           N
ATOM    334  CA  GLU A  84      -1.727   9.022  14.978 20.97  0.00           C
ATOM    335  C   GLU A  84      -3.042   8.425  15.425 20.97  0.00           C
ATOM    336  O   GLU A  84      -4.110   8.996  15.183 20.97  0.00           O
ATOM    337  N   ILE A  85      -2.918   7.275  16.095 55.92  0.00           N
ATOM    338  CA  ILE A  85      -4.029   6.451  16.449 55.92  0.00           C
ATOM    339  C   ILE A  85      -3.781   5.841  17.813 55.92  0.00           C
ATOM    340  O   ILE A  85      -2.643   5.507  18.123 55.92  0.00           O
ATOM    341  N   ASN A  86      -4.840   5.701  18.619 48.27  0.00           N
ATOM    342  CA  ASN A  86      -4.761   5.021  19.937 48.27  0.00           C
ATOM    343  C   ASN A  86      -5.250   3.566  19.895 48.27  0.00           C
ATOM    344  O   ASN A  86      -6.399   3.293  19.511 48.27  0.00           O
ATOM    345  N   VAL A  87      -4.383   2.645  20.322 38.64  0.00           N
ATOM    346  CA  VAL A  87      -4.703   1.227  20.308 38.64  0.00           C
ATOM    347  C   VAL A  87      -4.355   0.547  21.630 38.64  0.00           C
ATOM    348  O   VAL A  87      -3.230   0.067  21.819 38.64  0.00           O
ATOM    349  N   GLY A  88      -5.321   0.484  22.542 47.04  0.00           N
ATOM    350  CA  GLY A  88      -5.066  -0.115  23.865 47.04  0.00           C
ATOM    351  C   GLY A  88      -4.192   0.803  24.708 47.04  0.00           C
ATOM    352  O   GLY A  88      -3.216   0.373  25.351 47.04  0.00           O
ATOM    353  N   GLY A  89      -4.538   2.089  24.663 51.00  0.00           N
ATOM    354  CA  GLY A  89      -3.780   3.124  25.348 51.00  0.00           C
ATOM    355  C   GLY A  89      -2.339   3.328  24.890 51.00  0.00           C
ATOM    356  O   GLY A  89      -1.668   4.231  25.406 51.00  0.00           O
ATOM    357  N   LYS A  90      -1.846   2.502  23.956 53.00  0.00           N
ATOM    358  CA  LYS A  90      -0.547   2.733  23.318 53.00  0.00           C
ATOM    359  C   LYS A  90      -0.830   3.651  22.138 53.00  0.00           C
ATOM    360  O   LYS A  90      -1.881   3.541  21.497 53.00  0.00           O
ATOM    361  N   VAL A  91       0.069   4.592  21.872 47.74  0.00           N
ATOM    362  CA  VAL A  91      -0.106   5.503  20.744 47.74  0.00           C
ATOM    363  C   VAL A  91       0.675   4.963  19.561 47.74  0.00           C
ATOM    364  O   VAL A  91       1.817   4.523  19.727 47.74  0.00           O
ATOM    365  N   TYR A  92       0.052   5.005  18.377 54.10  0.00           N
ATOM    366  CA  TYR A  92       0.676   4.480  17.190 54.10  0.00           C
ATOM    367  C   TYR A  92       0.645   5.490  16.087 54.10  0.00           C
ATOM    368  O   TYR A  92      -0.329   6.191  15.893 54.10  0.00           O
ATOM    369  N   LYS A  93       1.747   5.547  15.371 52.22  0.00           N
ATOM    370  CA  LYS A  93       1.859   6.412  14.217 52.22  0.00           C
ATOM    371  C   LYS A  93       1.524   5.603  12.955 52.22  0.00           C
ATOM    372  O   LYS A  93       2.270   4.714  12.581 52.22  0.00           O
ATOM    373  N   ILE A  94       0.406   5.927  12.320 51.93  0.00           N
ATOM    374  CA  ILE A  94       0.084   5.372  11.038 51.93  0.00           C
ATOM    375  C   ILE A  94       0.743   6.184   9.929 51.93  0.00           C
ATOM    376  O   ILE A  94       0.556   7.385   9.807 51.93  0.00           O
ATOM    377  N   LYS A  95       1.497   5.507   9.097 70.68  0.00           N
ATOM    378  CA  LYS A  95       2.305   6.166   8.106 70.68  0.00           C
ATOM    379  C   LYS A  95       1.950   5.702   6.699 70.68  0.00           C
ATOM    380  O   LYS A  95       1.760   4.545   6.470 70.68  0.00           O
ATOM    381  N   GLY A  96       1.853   6.613   5.743 49.96  0.00           N
ATOM    382  CA  GLY A  96       1.572   6.242   4.383 49.96  0.00           C
ATOM    383  C   GLY A  96       2.142   7.179   3.378 49.96  0.00           C
ATOM    384  O   GLY A  96       2.537   8.280   3.703 49.96  0.00           O
ATOM    385  N   ARG A  97       2.107   6.740   2.138 30.60  0.00           N
ATOM    386  CA  ARG A  97       2.693   7.428   1.007 30.60  0.00           C
ATOM    387  C   ARG A  97       1.769   7.206  -0.178 30.60  0.00           C
ATOM    388  O   ARG A  97       1.672   6.084  -0.699 30.60  0.00           O
ATOM    389  N   ALA A  98       1.104   8.281  -0.588 43.89  0.00           N
ATOM    390  CA  ALA A  98       0.117   8.243  -1.592 43.89  0.00           C
ATOM    391  C   ALA A  98       0.862   8.383  -2.906 43.89  0.00           C
ATOM    392  O   ALA A  98       1.855   9.097  -3.010 43.89  0.00           O
ATOM    393  N   ASP A  99       0.424   7.673  -3.912 66.23  0.00           N
ATOM    394  CA  ASP A  99       1.076   7.754  -5.196 66.23  0.00           C
ATOM    395  C   ASP A  99       0.974   9.188  -5.720 66.23  0.00           C
ATOM    396  O   ASP A  99       1.922   9.707  -6.350 66.23  0.00           O
ATOM    397  N   ALA A 100      -0.166   9.846  -5.513 61.99  0.00           N
ATOM    398  CA  ALA A 100      -0.251  11.269  -5.953 61.99  0.00           C
ATOM    399  C   ALA A 100      -1.290  11.992  -5.184 61.99  0.00           C
ATOM    400  O   ALA A 100      -2.232  11.366  -4.731 61.99  0.00           O
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ATOM    401  N   ILE A 101      -1.104  13.303  -4.998 70.75  0.00           N
ATOM    402  CA  ILE A 101      -2.137  14.137  -4.384 70.75  0.00           C
ATOM    403  C   ILE A 101      -2.390  15.420  -5.140 70.75  0.00           C
ATOM    404  O   ILE A 101      -1.467  16.143  -5.558 70.75  0.00           O
ATOM    405  N   ILE A 102      -3.672  15.695  -5.329 38.77  0.00           N
ATOM    406  CA  ILE A 102      -4.083  17.004  -5.796 38.77  0.00           C
ATOM    407  C   ILE A 102      -4.628  17.765  -4.581 38.77  0.00           C
ATOM    408  O   ILE A 102      -5.695  17.431  -4.073 38.77  0.00           O
ATOM    409  N   ARG A 103      -3.845  18.751  -4.103 47.14  0.00           N
ATOM    410  CA  ARG A 103      -4.150  19.504  -2.879 47.14  0.00           C
ATOM    411  C   ARG A 103      -5.423  20.391  -2.949 47.14  0.00           C
ATOM    412  O   ARG A 103      -6.199  20.482  -1.960 47.14  0.00           O
ATOM    413  N   ASN A 104      -5.626  21.051  -4.095 50.55  0.00           N
ATOM    414  CA  ASN A 104      -6.745  21.998  -4.259 50.55  0.00           C
ATOM    415  C   ASN A 104      -7.230  21.994  -5.679 50.55  0.00           C
ATOM    416  O   ASN A 104      -6.693  22.692  -6.538 50.55  0.00           O
ATOM    417  N   ASP A 105      -8.253  21.174  -5.879 44.17  0.00           N
ATOM    418  CA  ASP A 105      -9.039  21.134  -7.084 44.17  0.00           C
ATOM    419  C   ASP A 105     -10.471  21.605  -6.714 44.17  0.00           C
ATOM    420  O   ASP A 105     -11.262  20.843  -6.158 44.17  0.00           O
ATOM    421  N   ASN A 106     -10.768  22.878  -6.986 47.42  0.00           N
ATOM    422  CA  ASN A 106     -12.040  23.506  -6.575 47.42  0.00           C
ATOM    423  C   ASN A 106     -12.422  23.321  -5.104 47.42  0.00           C
ATOM    424  O   ASN A 106     -13.561  23.020  -4.774 47.42  0.00           O
ATOM    425  N   GLY A 107     -11.470  23.524  -4.215 50.23  0.00           N
ATOM    426  CA  GLY A 107     -11.717  23.337  -2.789 50.23  0.00           C
ATOM    427  C   GLY A 107     -11.737  21.883  -2.335 50.23  0.00           C
ATOM    428  O   GLY A 107     -12.404  21.544  -1.352 50.23  0.00           O
ATOM    429  N   LYS A 108     -11.008  21.019  -3.043 19.82  0.00           N
ATOM    430  CA  LYS A 108     -10.915  19.615  -2.668 19.82  0.00           C
ATOM    431  C   LYS A 108      -9.483  19.049  -2.884 19.82  0.00           C
ATOM    432  O   LYS A 108      -8.779  19.403  -3.839 19.82  0.00           O
ATOM    433  N   SER A 109      -9.039  18.236  -1.933 46.23  0.00           N
ATOM    434  CA  SER A 109      -7.862  17.387  -2.118 46.23  0.00           C
ATOM    435  C   SER A 109      -8.308  16.067  -2.739 46.23  0.00           C
ATOM    436  O   SER A 109      -9.315  15.517  -2.353 46.23  0.00           O
ATOM    437  N   ILE A 110      -7.524  15.551  -3.650 49.84  0.00           N
ATOM    438  CA  ILE A 110      -7.790  14.265  -4.209 49.84  0.00           C
ATOM    439  C   ILE A 110      -6.588  13.343  -3.999 49.84  0.00           C
ATOM    440  O   ILE A 110      -5.512  13.629  -4.510 49.84  0.00           O
ATOM    441  N   VAL A 111      -6.752  12.243  -3.266 62.91  0.00           N
ATOM    442  CA  VAL A 111      -5.679  11.220  -3.198 62.91  0.00           C
ATOM    443  C   VAL A 111      -5.836  10.276  -4.388 62.91  0.00           C
ATOM    444  O   VAL A 111      -6.932   9.764  -4.636 62.91  0.00           O
ATOM    445  N   ILE A 112      -4.775  10.018  -5.128 58.29  0.00           N
ATOM    446  CA  ILE A 112      -4.866   9.126  -6.282 58.29  0.00           C
ATOM    447  C   ILE A 112      -4.010   7.894  -6.056 58.29  0.00           C
ATOM    448  O   ILE A 112      -2.842   8.019  -5.770 58.29  0.00           O
ATOM    449  N   GLU A 113      -4.547   6.709  -6.243 83.80  0.00           N
ATOM    450  CA  GLU A 113      -3.780   5.455  -6.060 83.80  0.00           C
ATOM    451  C   GLU A 113      -3.823   4.710  -7.388 83.80  0.00           C
ATOM    452  O   GLU A 113      -4.882   4.569  -8.052 83.80  0.00           O
ATOM    453  N   ILE A 114      -2.657   4.354  -7.861 47.53  0.00           N
ATOM    454  CA  ILE A 114      -2.531   3.758  -9.150 47.53  0.00           C
ATOM    455  C   ILE A 114      -2.210   2.295  -8.960 47.53  0.00           C
ATOM    456  O   ILE A 114      -1.423   1.954  -8.099 47.53  0.00           O
ATOM    457  N   LYS A 115      -2.787   1.433  -9.786 61.71  0.00           N
ATOM    458  CA  LYS A 115      -2.621   0.003  -9.616 61.71  0.00           C
ATOM    459  C   LYS A 115      -2.438  -0.643 -10.947 61.71  0.00           C
ATOM    460  O   LYS A 115      -2.964  -0.176 -11.951 61.71  0.00           O
ATOM    461  N   THR A 116      -1.684  -1.729 -10.958 35.95  0.00           N
ATOM    462  CA  THR A 116      -1.468  -2.466 -12.194 35.95  0.00           C
ATOM    463  C   THR A 116      -1.602  -3.921 -11.890 35.95  0.00           C
ATOM    464  O   THR A 116      -1.369  -4.337 -10.804 35.95  0.00           O
ATOM    465  N   SER A 117      -2.085  -4.706 -12.802 31.53  0.00           N
ATOM    466  CA  SER A 117      -2.109  -6.154 -12.601 31.53  0.00           C
ATOM    467  C   SER A 117      -2.180  -6.692 -13.946 31.53  0.00           C
ATOM    468  O   SER A 117      -2.324  -5.911 -14.909 31.53  0.00           O
ATOM    469  N   ARG A 118      -2.032  -8.006 -14.033 55.43  0.00           N
ATOM    470  CA  ARG A 118      -2.068  -8.640 -15.363 55.43  0.00           C
ATOM    471  C   ARG A 118      -3.471  -8.928 -15.862 55.43  0.00           C
ATOM    472  O   ARG A 118      -3.648  -9.162 -17.069 55.43  0.00           O
ATOM    473  N   SER A 119      -4.457  -8.893 -14.965 29.24  0.00           N
ATOM    474  CA  SER A 119      -5.872  -9.062 -15.362 29.24  0.00           C
ATOM    475  C   SER A 119      -6.800  -7.967 -14.770 29.24  0.00           C
ATOM    476  O   SER A 119      -6.533  -7.439 -13.690 29.24  0.00           O
ATOM    477  N   ASP A 120      -7.938  -7.766 -15.424 36.70  0.00           N
ATOM    478  CA  ASP A 120      -8.922  -6.789 -15.023 36.70  0.00           C
ATOM    479  C   ASP A 120     -10.062  -7.464 -14.339 36.70  0.00           C
ATOM    480  O   ASP A 120     -11.180  -6.930 -14.286 36.70  0.00           O
ATOM    481  N   LYS A 121      -9.805  -8.622 -13.800 43.60  0.00           N
ATOM    482  CA  LYS A 121     -10.861  -9.343 -13.147 43.60  0.00           C
ATOM    483  C   LYS A 121     -11.305  -8.719 -11.850 43.60  0.00           C
ATOM    484  O   LYS A 121     -10.493  -8.415 -10.994 43.60  0.00           O
ATOM    485  N   GLY A 122     -12.595  -8.552 -11.661 49.91  0.00           N
ATOM    486  CA  GLY A 122     -13.099  -8.150 -10.341 49.91  0.00           C
ATOM    487  C   GLY A 122     -12.816  -6.695  -9.897 49.91  0.00           C
ATOM    488  O   GLY A 122     -13.062  -6.363  -8.702 49.91  0.00           O
ATOM    489  N   LEU A 123     -12.369  -5.819 -10.826 46.62  0.00           N
ATOM    490  CA  LEU A 123     -12.047  -4.418 -10.440 46.62  0.00           C
ATOM    491  C   LEU A 123     -13.261  -3.672  -9.972 46.62  0.00           C
ATOM    492  O   LEU A 123     -14.252  -3.694 -10.654 46.62  0.00           O
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ATOM    493  N   PRO A 124     -13.153  -2.951  -8.838 73.97  0.00           N
ATOM    494  CA  PRO A 124     -11.936  -2.786  -8.048 73.97  0.00           C
ATOM    495  C   PRO A 124     -11.854  -3.776  -6.934 73.97  0.00           C
ATOM    496  O   PRO A 124     -12.861  -4.122  -6.314 73.97  0.00           O
ATOM    497  N   LEU A 125     -10.645  -4.184  -6.634 23.98  0.00           N
ATOM    498  CA  LEU A 125     -10.394  -5.171  -5.542 23.98  0.00           C
ATOM    499  C   LEU A 125     -10.497  -4.530  -4.149 23.98  0.00           C
ATOM    500  O   LEU A 125     -10.112  -3.350  -3.908 23.98  0.00           O
ATOM    501  N   ILE A 126     -11.048  -5.276  -3.221 38.08  0.00           N
ATOM    502  CA  ILE A 126     -11.528  -4.647  -1.996 38.08  0.00           C
ATOM    503  C   ILE A 126     -10.339  -4.126  -1.167 38.08  0.00           C
ATOM    504  O   ILE A 126     -10.462  -3.123  -0.513 38.08  0.00           O
ATOM    505  N   HIS A 127      -9.195  -4.779  -1.251 29.29  0.00           N
ATOM    506  CA  HIS A 127      -8.055  -4.383  -0.479 29.29  0.00           C
ATOM    507  C   HIS A 127      -7.440  -3.163  -1.103 29.29  0.00           C
ATOM    508  O   HIS A 127      -6.834  -2.382  -0.415 29.29  0.00           O
ATOM    509  N   HIS A 128      -7.592  -2.980  -2.400 39.69  0.00           N
ATOM    510  CA  HIS A 128      -7.176  -1.718  -3.018 39.69  0.00           C
ATOM    511  C   HIS A 128      -8.083  -0.558  -2.609 39.69  0.00           C
ATOM    512  O   HIS A 128      -7.606   0.554  -2.368 39.69  0.00           O
ATOM    513  N   LYS A 129      -9.365  -0.803  -2.526 27.03  0.00           N
ATOM    514  CA  LYS A 129     -10.266   0.264  -2.198 27.03  0.00           C
ATOM    515  C   LYS A 129     -10.028   0.593  -0.745 27.03  0.00           C
ATOM    516  O   LYS A 129      -9.930   1.747  -0.408 27.03  0.00           O
ATOM    517  N   MSE A 130      -9.911  -0.410   0.128 40.21  0.00           N
ATOM    518  CA  MSE A 130      -9.661  -0.122   1.564 40.21  0.00           C
ATOM    519  C   MSE A 130      -8.432   0.772   1.739 40.21  0.00           C
ATOM    520  O   MSE A 130      -8.445   1.649   2.550 40.21  0.00           O
ATOM    521  N   GLN A 131      -7.394   0.520   0.958 46.26  0.00           N
ATOM    522  CA  GLN A 131      -6.133   1.211   1.097 46.26  0.00           C
ATOM    523  C   GLN A 131      -6.400   2.668   0.780 46.26  0.00           C
ATOM    524  O   GLN A 131      -5.918   3.542   1.460 46.26  0.00           O
ATOM    525  N   LEU A 132      -7.195   2.936  -0.242 48.70  0.00           N
ATOM    526  CA  LEU A 132      -7.436   4.290  -0.682 48.70  0.00           C
ATOM    527  C   LEU A 132      -8.295   4.984   0.347 48.70  0.00           C
ATOM    528  O   LEU A 132      -8.142   6.173   0.629 48.70  0.00           O
ATOM    529  N   GLN A 133      -9.173   4.244   0.963 49.66  0.00           N
ATOM    530  CA  GLN A 133     -10.034   4.835   1.951 49.66  0.00           C
ATOM    531  C   GLN A 133      -9.306   5.181   3.263 49.66  0.00           C
ATOM    532  O   GLN A 133      -9.739   6.050   4.021 49.66  0.00           O
ATOM    533  N   ILE A 134      -8.240   4.450   3.561 54.32  0.00           N
ATOM    534  CA  ILE A 134      -7.448   4.750   4.709 54.32  0.00           C
ATOM    535  C   ILE A 134      -6.635   6.008   4.375 54.32  0.00           C
ATOM    536  O   ILE A 134      -6.604   6.904   5.182 54.32  0.00           O
ATOM    537  N   TYR A 135      -5.993   6.089   3.200 55.17  0.00           N
ATOM    538  CA  TYR A 135      -5.308   7.299   2.832 55.17  0.00           C
ATOM    539  C   TYR A 135      -6.263   8.486   3.003 55.17  0.00           C
ATOM    540  O   TYR A 135      -5.876   9.536   3.592 55.17  0.00           O
ATOM    541  N   LEU A 136      -7.510   8.345   2.563 51.61  0.00           N
ATOM    542  CA  LEU A 136      -8.431   9.472   2.663 51.61  0.00           C
ATOM    543  C   LEU A 136      -8.471   9.988   4.123 51.61  0.00           C
ATOM    544  O   LEU A 136      -8.423  11.193   4.364 51.61  0.00           O
ATOM    545  N   TRP A 137      -8.562   9.085   5.079 40.90  0.00           N
ATOM    546  CA  TRP A 137      -8.471   9.465   6.480 40.90  0.00           C
ATOM    547  C   TRP A 137      -7.090  10.092   6.781 40.90  0.00           C
ATOM    548  O   TRP A 137      -6.988  11.182   7.363 40.90  0.00           O
ATOM    549  N   LEU A 138      -6.039   9.457   6.283 23.53  0.00           N
ATOM    550  CA  LEU A 138      -4.665   9.881   6.616 23.53  0.00           C
ATOM    551  C   LEU A 138      -4.353  11.332   6.246 23.53  0.00           C
ATOM    552  O   LEU A 138      -3.806  12.080   7.039 23.53  0.00           O
ATOM    553  N   PHE A 139      -4.725  11.691   5.030 31.22  0.00           N
ATOM    554  CA  PHE A 139      -4.602  13.020   4.511 31.22  0.00           C
ATOM    555  C   PHE A 139      -5.790  13.890   4.834 31.22  0.00           C
ATOM    556  O   PHE A 139      -5.772  15.074   4.508 31.22  0.00           O
ATOM    557  N   SER A 140      -6.827  13.321   5.474 30.40  0.00           N
ATOM    558  CA  SER A 140      -8.140  13.999   5.608 30.40  0.00           C
ATOM    559  C   SER A 140      -8.590  14.636   4.304 30.40  0.00           C
ATOM    560  O   SER A 140      -8.961  15.800   4.273 30.40  0.00           O
ATOM    561  N   ALA A 141      -8.519  13.878   3.227 38.58  0.00           N
ATOM    562  CA  ALA A 141      -8.945  14.332   1.917 38.58  0.00           C
ATOM    563  C   ALA A 141     -10.405  13.939   1.667 38.58  0.00           C
ATOM    564  O   ALA A 141     -10.983  13.084   2.348 38.58  0.00           O
ATOM    565  N   GLU A 142     -11.035  14.621   0.722  0.00  0.00           N
ATOM    566  CA  GLU A 142     -12.471  14.427   0.489  0.00  0.00           C
ATOM    567  C   GLU A 142     -12.738  13.477  -0.702  0.00  0.00           C
ATOM    568  O   GLU A 142     -13.747  12.791  -0.707  0.00  0.00           O
ATOM    569  N   LYS A 143     -11.805  13.444  -1.660 66.08  0.00           N
ATOM    570  CA  LYS A 143     -11.916  12.652  -2.862 66.08  0.00           C
ATOM    571  C   LYS A 143     -10.727  11.686  -3.055 66.08  0.00           C
ATOM    572  O   LYS A 143      -9.539  11.991  -2.732 66.08  0.00           O
ATOM    573  N   GLY A 144     -11.077  10.526  -3.602 60.83  0.00           N
ATOM    574  CA  GLY A 144     -10.120   9.474  -3.925 60.83  0.00           C
ATOM    575  C   GLY A 144     -10.352   8.924  -5.300 60.83  0.00           C
ATOM    576  O   GLY A 144     -11.486   8.740  -5.697 60.83  0.00           O
ATOM    577  N   ILE A 145      -9.286   8.679  -6.041 72.37  0.00           N
ATOM    578  CA  ILE A 145      -9.380   8.016  -7.325 72.37  0.00           C
ATOM    579  C   ILE A 145      -8.437   6.791  -7.270 72.37  0.00           C
ATOM    580  O   ILE A 145      -7.274   6.920  -6.924 72.37  0.00           O
ATOM    581  N   LEU A 146      -8.955   5.621  -7.649 57.82  0.00           N
ATOM    582  CA  LEU A 146      -8.233   4.396  -7.797 57.82  0.00           C
ATOM    583  C   LEU A 146      -8.251   4.098  -9.279 57.82  0.00           C
ATOM    584  O   LEU A 146      -9.304   3.843  -9.816 57.82  0.00           O
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ATOM    585  N   VAL A 147      -7.117   4.065  -9.937 49.59  0.00           N
ATOM    586  CA  VAL A 147      -7.059   3.872 -11.356 49.59  0.00           C
ATOM    587  C   VAL A 147      -6.211   2.623 -11.646 49.59  0.00           C
ATOM    588  O   VAL A 147      -5.067   2.470 -11.090 49.59  0.00           O
ATOM    589  N   TYR A 148      -6.742   1.739 -12.509 53.71  0.00           N
ATOM    590  CA  TYR A 148      -6.090   0.482 -12.844 53.71  0.00           C
ATOM    591  C   TYR A 148      -5.595   0.575 -14.257 53.71  0.00           C
ATOM    592  O   TYR A 148      -6.345   0.903 -15.117 53.71  0.00           O
ATOM    593  N   ILE A 149      -4.338   0.293 -14.483 38.41  0.00           N
ATOM    594  CA  ILE A 149      -3.766   0.206 -15.807 38.41  0.00           C
ATOM    595  C   ILE A 149      -3.430  -1.275 -15.990 38.41  0.00           C
ATOM    596  O   ILE A 149      -2.545  -1.776 -15.346 38.41  0.00           O
ATOM    597  N   THR A 150      -4.180  -2.003 -16.800 57.09  0.00           N
ATOM    598  CA  THR A 150      -3.964  -3.413 -16.968 57.09  0.00           C
ATOM    599  C   THR A 150      -3.936  -3.690 -18.433 57.09  0.00           C
ATOM    600  O   THR A 150      -4.311  -2.846 -19.222 57.09  0.00           O
ATOM    601  N   PRO A 151      -3.486  -4.859 -18.836 48.53  0.00           N
ATOM    602  CA  PRO A 151      -3.299  -5.051 -20.300 48.53  0.00           C
ATOM    603  C   PRO A 151      -4.601  -5.273 -21.077 48.53  0.00           C
ATOM    604  O   PRO A 151      -4.598  -5.259 -22.317 48.53  0.00           O
ATOM    605  N   ASP A 152      -5.658  -5.505 -20.333 47.48  0.00           N
ATOM    606  CA  ASP A 152      -6.988  -5.753 -20.794 47.48  0.00           C
ATOM    607  C   ASP A 152      -7.910  -4.564 -20.707 47.48  0.00           C
ATOM    608  O   ASP A 152      -8.921  -4.561 -21.326 47.48  0.00           O
ATOM    609  N   ARG A 153      -7.550  -3.582 -19.909 75.55  0.00           N
ATOM    610  CA  ARG A 153      -8.418  -2.528 -19.517 75.55  0.00           C
ATOM    611  C   ARG A 153      -7.808  -1.437 -18.658 75.55  0.00           C
ATOM    612  O   ARG A 153      -7.169  -1.665 -17.715 75.55  0.00           O
ATOM    613  N   ILE A 154      -8.107  -0.221 -18.973 47.28  0.00           N
ATOM    614  CA  ILE A 154      -7.873   0.874 -18.098 47.28  0.00           C
ATOM    615  C   ILE A 154      -9.177   1.197 -17.432 47.28  0.00           C
ATOM    616  O   ILE A 154     -10.135   1.182 -18.066 47.28  0.00           O
ATOM    617  N   ALA A 155      -9.204   1.463 -16.150 49.85  0.00           N
ATOM    618  CA  ALA A 155     -10.490   1.563 -15.403 49.85  0.00           C
ATOM    619  C   ALA A 155     -10.307   2.411 -14.178 49.85  0.00           C
ATOM    620  O   ALA A 155      -9.405   2.165 -13.464 49.85  0.00           O
ATOM    621  N   GLU A 156     -11.159   3.389 -13.945 57.54  0.00           N
ATOM    622  CA  GLU A 156     -10.959   4.392 -12.924 57.54  0.00           C
ATOM    623  C   GLU A 156     -12.193   4.455 -12.023 57.54  0.00           C
ATOM    624  O   GLU A 156     -13.299   4.455 -12.446 57.54  0.00           O
ATOM    625  N   TYR A 157     -11.976   4.532 -10.746 56.62  0.00           N
ATOM    626  CA  TYR A 157     -13.044   4.493  -9.764 56.62  0.00           C
ATOM    627  C   TYR A 157     -12.934   5.658  -8.804 56.62  0.00           C
ATOM    628  O   TYR A 157     -11.853   6.011  -8.265 56.62  0.00           O
ATOM    629  N   GLU A 158     -14.055   6.253  -8.542 49.97  0.00           N
ATOM    630  CA  GLU A 158     -14.108   7.361  -7.646 49.97  0.00           C
ATOM    631  C   GLU A 158     -14.532   6.786  -6.302 49.97  0.00           C
ATOM    632  O   GLU A 158     -15.602   6.184  -6.178 49.97  0.00           O
ATOM    633  N   ILE A 159     -13.651   6.902  -5.311 52.35  0.00           N
ATOM    634  CA  ILE A 159     -13.878   6.419  -3.939 52.35  0.00           C
ATOM    635  C   ILE A 159     -13.755   7.649  -3.027 52.35  0.00           C
ATOM    636  O   ILE A 159     -12.671   8.212  -2.918 52.35  0.00           O
ATOM    637  N   ASN A 160     -14.849   8.038  -2.394 52.16  0.00           N
ATOM    638  CA  ASN A 160     -14.894   9.274  -1.638 52.16  0.00           C
ATOM    639  C   ASN A 160     -15.165   9.116  -0.146 52.16  0.00           C
ATOM    640  O   ASN A 160     -14.949  10.056   0.594 52.16  0.00           O
ATOM    641  N   GLU A 161     -15.536   7.926   0.306 24.33  0.00           N
ATOM    642  CA  GLU A 161     -15.720   7.704   1.724 24.33  0.00           C
ATOM    643  C   GLU A 161     -14.467   7.151   2.407 24.33  0.00           C
ATOM    644  O   GLU A 161     -13.997   6.052   2.116 24.33  0.00           O
ATOM    645  N   PRO A 162     -13.950   7.900   3.365 48.62  0.00           N
ATOM    646  CA  PRO A 162     -12.848   7.426   4.187 48.62  0.00           C
ATOM    647  C   PRO A 162     -13.323   6.439   5.227 48.62  0.00           C
ATOM    648  O   PRO A 162     -14.483   6.537   5.645 48.62  0.00           O
ATOM    649  N   LEU A 163     -12.444   5.517   5.661 50.64  0.00           N
ATOM    650  CA  LEU A 163     -12.805   4.572   6.724 50.64  0.00           C
ATOM    651  C   LEU A 163     -12.888   5.346   8.019 50.64  0.00           C
ATOM    652  O   LEU A 163     -12.040   6.223   8.266 50.64  0.00           O
ATOM    653  N   ASP A 164     -13.876   5.013   8.858 13.03  0.00           N
ATOM    654  CA  ASP A 164     -13.934   5.590  10.207 13.03  0.00           C
ATOM    655  C   ASP A 164     -12.616   5.280  10.928 13.03  0.00           C
ATOM    656  O   ASP A 164     -11.940   4.300  10.622 13.03  0.00           O
ATOM    657  N   GLU A 165     -12.301   6.090  11.926 52.58  0.00           N
ATOM    658  CA  GLU A 165     -11.127   5.880  12.758 52.58  0.00           C
ATOM    659  C   GLU A 165     -11.240   4.594  13.565 52.58  0.00           C
ATOM    660  O   GLU A 165     -10.265   3.923  13.761 52.58  0.00           O
ATOM    661  N   ALA A 166     -12.438   4.252  14.016 52.45  0.00           N
ATOM    662  CA  ALA A 166     -12.662   3.006  14.753 52.45  0.00           C
ATOM    663  C   ALA A 166     -12.336   1.750  13.921 52.45  0.00           C
ATOM    664  O   ALA A 166     -11.761   0.808  14.415 52.45  0.00           O
ATOM    665  N   THR A 167     -12.694   1.751  12.648 22.42  0.00           N
ATOM    666  CA  THR A 167     -12.382   0.638  11.768 22.42  0.00           C
ATOM    667  C   THR A 167     -10.872   0.497  11.623 22.42  0.00           C
ATOM    668  O   THR A 167     -10.346  -0.601  11.637 22.42  0.00           O
ATOM    669  N   ILE A 168     -10.171   1.619  11.528 46.72  0.00           N
ATOM    670  CA  ILE A 168      -8.732   1.633  11.358 46.72  0.00           C
ATOM    671  C   ILE A 168      -8.078   1.128  12.626 46.72  0.00           C
ATOM    672  O   ILE A 168      -7.058   0.457  12.570 46.72  0.00           O
ATOM    673  N   VAL A 169      -8.665   1.441  13.778 48.67  0.00           N
ATOM    674  CA  VAL A 169      -8.132   0.957  15.026 48.67  0.00           C
ATOM    675  C   VAL A 169      -8.314  -0.550  15.039 48.67  0.00           C
ATOM    676  O   VAL A 169      -7.394  -1.257  15.440 48.67  0.00           O
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ATOM    677  N   ARG A 170      -9.472  -1.045  14.590  4.85  0.00           N
ATOM    678  CA  ARG A 170      -9.700  -2.518  14.528  4.85  0.00           C
ATOM    679  C   ARG A 170      -8.661  -3.202  13.604  4.85  0.00           C
ATOM    680  O   ARG A 170      -8.069  -4.207  13.996  4.85  0.00           O
ATOM    681  N   LEU A 171      -8.396  -2.610  12.430 35.06  0.00           N
ATOM    682  CA  LEU A 171      -7.379  -3.127  11.527 35.06  0.00           C
ATOM    683  C   LEU A 171      -6.020  -3.139  12.210 35.06  0.00           C
ATOM    684  O   LEU A 171      -5.257  -4.108  12.109 35.06  0.00           O
ATOM    685  N   ALA A 172      -5.723  -2.049  12.909 35.22  0.00           N
ATOM    686  CA  ALA A 172      -4.457  -1.898  13.604 35.22  0.00           C
ATOM    687  C   ALA A 172      -4.301  -2.947  14.696 35.22  0.00           C
ATOM    688  O   ALA A 172      -3.240  -3.541  14.801 35.22  0.00           O
ATOM    689  N   GLU A 173      -5.352  -3.187  15.479 57.67  0.00           N
ATOM    690  CA  GLU A 173      -5.292  -4.177  16.568 57.67  0.00           C
ATOM    691  C   GLU A 173      -4.915  -5.559  16.053 57.67  0.00           C
ATOM    692  O   GLU A 173      -4.131  -6.255  16.707 57.67  0.00           O
ATOM    693  N   ASP A 174      -5.506  -5.961  14.919 41.81  0.00           N
ATOM    694  CA  ASP A 174      -5.208  -7.255  14.320 41.81  0.00           C
ATOM    695  C   ASP A 174      -3.815  -7.301  13.840 41.81  0.00           C
ATOM    696  O   ASP A 174      -3.169  -8.343  13.873 41.81  0.00           O
ATOM    697  N   THR A 175      -3.325  -6.165  13.384 37.60  0.00           N
ATOM    698  CA  THR A 175      -1.966  -6.171  12.887 37.60  0.00           C
ATOM    699  C   THR A 175      -1.026  -6.460  14.019 37.60  0.00           C
ATOM    700  O   THR A 175      -0.104  -7.267  13.894 37.60  0.00           O
ATOM    701  N   ILE A 176      -1.312  -5.827  15.139 46.10  0.00           N
ATOM    702  CA  ILE A 176      -0.456  -5.907  16.306 46.10  0.00           C
ATOM    703  C   ILE A 176      -0.618  -7.264  17.013 46.10  0.00           C
ATOM    704  O   ILE A 176       0.348  -7.982  17.191 46.10  0.00           O
ATOM    705  N   MSE A 177      -1.846  -7.622  17.359 53.53  0.00           N
ATOM    706  CA  MSE A 177      -2.110  -8.862  18.066 53.53  0.00           C
ATOM    707  C   MSE A 177      -2.036 -10.148  17.184 53.53  0.00           C
ATOM    708  O   MSE A 177      -2.230 -11.232  17.705 53.53  0.00           O
ATOM    709  N   LEU A 178      -1.747 -10.045  15.885 54.52  0.00           N
ATOM    710  CA  LEU A 178      -1.765 -11.195  14.931 54.52  0.00           C
ATOM    711  C   LEU A 178      -3.082 -11.987  14.963 54.52  0.00           C
ATOM    712  O   LEU A 178      -3.059 -13.216  14.908 54.52  0.00           O
ATOM    713  N   GLN A 179      -4.195 -11.295  14.914  9.65  0.00           N
ATOM    714  CA  GLN A 179      -5.488 -11.880  15.107  9.65  0.00           C
ATOM    715  C   GLN A 179      -6.016 -12.818  14.022  9.65  0.00           C
ATOM    716  O   GLN A 179      -6.283 -13.971  14.291  9.65  0.00           O
ATOM    717  N   ASN A 180      -6.209 -12.312  12.822 36.56  0.00           N
ATOM    718  CA  ASN A 180      -6.832 -13.100  11.723 36.56  0.00           C
ATOM    719  C   ASN A 180      -5.958 -13.170  10.495 36.56  0.00           C
ATOM    720  O   ASN A 180      -5.982 -12.302   9.632 36.56  0.00           O
ATOM    721  N   SER A 181      -5.162 -14.213  10.431 54.59  0.00           N
ATOM    722  CA  SER A 181      -4.294 -14.421   9.316 54.59  0.00           C
ATOM    723  C   SER A 181      -4.685 -15.651   8.495 54.59  0.00           C
ATOM    724  O   SER A 181      -4.793 -16.745   9.008 54.59  0.00           O
ATOM    725  N   PRO A 182      -4.770 -15.497   7.199 58.07  0.00           N
ATOM    726  CA  PRO A 182      -4.417 -14.305   6.461 58.07  0.00           C
ATOM    727  C   PRO A 182      -5.557 -13.337   6.500 58.07  0.00           C
ATOM    728  O   PRO A 182      -6.623 -13.675   7.004 58.07  0.00           O
ATOM    729  N   ARG A 183      -5.357 -12.135   5.998 45.05  0.00           N
ATOM    730  CA  ARG A 183      -6.436 -11.191   6.007 45.05  0.00           C
ATOM    731  C   ARG A 183      -7.372 -11.579   4.893 45.05  0.00           C
ATOM    732  O   ARG A 183      -8.603 -11.628   5.107 45.05  0.00           O
ATOM    733  N   PHE A 184      -6.785 -11.851   3.718 40.86  0.00           N
ATOM    734  CA  PHE A 184      -7.550 -12.410   2.590 40.86  0.00           C
ATOM    735  C   PHE A 184      -7.017 -13.778   2.185 40.86  0.00           C
ATOM    736  O   PHE A 184      -5.814 -14.039   2.233 40.86  0.00           O
ATOM    737  N   ASN A 185      -7.926 -14.630   1.714 41.19  0.00           N
ATOM    738  CA  ASN A 185      -7.604 -16.007   1.378 41.19  0.00           C
ATOM    739  C   ASN A 185      -6.563 -16.229   0.291 41.19  0.00           C
ATOM    740  O   ASN A 185      -5.857 -17.232   0.316 41.19  0.00           O
ATOM    741  N   TRP A 186      -6.507 -15.349  -0.690 25.29  0.00           N
ATOM    742  CA  TRP A 186      -5.602 -15.511  -1.821 25.29  0.00           C
ATOM    743  C   TRP A 186      -4.124 -15.190  -1.442 25.29  0.00           C
ATOM    744  O   TRP A 186      -3.168 -15.441  -2.207 25.29  0.00           O
ATOM    745  N   GLU A 187      -3.932 -14.615  -0.259 93.17  0.00           N
ATOM    746  CA  GLU A 187      -2.575 -14.179   0.176 93.17  0.00           C
ATOM    747  C   GLU A 187      -1.511 -15.229   0.225 93.17  0.00           C
ATOM    748  O   GLU A 187      -0.428 -15.028  -0.334 93.17  0.00           O
ATOM    749  N   CYS A 188      -1.801 -16.352   0.884 43.08  0.00           N
ATOM    750  CA  CYS A 188      -0.760 -17.344   1.180 43.08  0.00           C
ATOM    751  C   CYS A 188      -0.146 -17.865  -0.127 43.08  0.00           C
ATOM    752  O   CYS A 188       1.067 -18.120  -0.218 43.08  0.00           O
ATOM    753  N   LYS A 189      -0.970 -17.963  -1.166 45.12  0.00           N
ATOM    754  CA  LYS A 189      -0.511 -18.522  -2.447 45.12  0.00           C
ATOM    755  C   LYS A 189       0.696 -17.731  -3.018 45.12  0.00           C
ATOM    756  O   LYS A 189       1.569 -18.272  -3.724 45.12  0.00           O
ATOM    757  N   TYR A 190       0.747 -16.439  -2.708 37.47  0.00           N
ATOM    758  CA  TYR A 190       1.763 -15.611  -3.285 37.47  0.00           C
ATOM    759  C   TYR A 190       2.819 -15.235  -2.248 37.47  0.00           C
ATOM    760  O   TYR A 190       3.823 -14.654  -2.584 37.47  0.00           O
ATOM    761  N   CYS A 191       2.587 -15.625  -0.997 32.14  0.00           N
ATOM    762  CA  CYS A 191       3.353 -15.193   0.160 32.14  0.00           C
ATOM    763  C   CYS A 191       4.692 -15.934   0.269 32.14  0.00           C
ATOM    764  O   CYS A 191       4.732 -17.173   0.348 32.14  0.00           O
ATOM    765  N   ILE A 192       5.784 -15.171   0.315 21.11  0.00           N
ATOM    766  CA  ILE A 192       7.106 -15.776   0.279 21.11  0.00           C
ATOM    767  C   ILE A 192       7.409 -16.403   1.615 21.11  0.00           C
ATOM    768  O   ILE A 192       8.394 -17.068   1.711 21.11  0.00           O
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ATOM    769  N   PHE A 193       6.578 -16.191   2.632 33.12  0.00           N
ATOM    770  CA  PHE A 193       6.786 -16.794   3.943 33.12  0.00           C
ATOM    771  C   PHE A 193       5.984 -18.074   4.210 33.12  0.00           C
ATOM    772  O   PHE A 193       5.990 -18.637   5.317 33.12  0.00           O
ATOM    773  N   SER A 194       5.262 -18.513   3.198 47.00  0.00           N
ATOM    774  CA  SER A 194       4.413 -19.711   3.328 47.00  0.00           C
ATOM    775  C   SER A 194       5.249 -20.909   3.657 47.00  0.00           C
ATOM    776  O   SER A 194       4.748 -21.746   4.298 47.00  0.00           O
ATOM    777  N   VAL A 195       6.503 -20.952   3.199 41.00  0.00           N
ATOM    778  CA  VAL A 195       7.410 -21.989   3.516 41.00  0.00           C
ATOM    779  C   VAL A 195       7.733 -22.174   4.979 41.00  0.00           C
ATOM    780  O   VAL A 195       8.309 -23.201   5.323 41.00  0.00           O
ATOM    781  N   ILE A 196       7.419 -21.212   5.849 42.60  0.00           N
ATOM    782  CA  ILE A 196       7.718 -21.354   7.295 42.60  0.00           C
ATOM    783  C   ILE A 196       6.564 -20.975   8.148 42.60  0.00           C
ATOM    784  O   ILE A 196       6.683 -20.972   9.331 42.60  0.00           O
ATOM    785  N   CYS A 197       5.424 -20.671   7.561 52.08  0.00           N
ATOM    786  CA  CYS A 197       4.335 -20.157   8.329 52.08  0.00           C
ATOM    787  C   CYS A 197       3.331 -21.219   8.615 52.08  0.00           C
ATOM    788  O   CYS A 197       2.836 -21.849   7.697 52.08  0.00           O
ATOM    789  N   PRO A 198       2.960 -21.375   9.870 46.10  0.00           N
ATOM    790  CA  PRO A 198       1.970 -22.338  10.280 46.10  0.00           C
ATOM    791  C   PRO A 198       0.542 -22.046   9.971 46.10  0.00           C
ATOM    792  O   PRO A 198      -0.290 -22.938  10.156 46.10  0.00           O
ATOM    793  N   ALA A 199       0.227 -20.829   9.562 29.17  0.00           N
ATOM    794  CA  ALA A 199      -1.167 -20.431   9.353 29.17  0.00           C
ATOM    795  C   ALA A 199      -1.570 -20.467   7.877 29.17  0.00           C
ATOM    796  O   ALA A 199      -2.731 -20.267   7.563 29.17  0.00           O
ATOM    797  N   LYS A 200      -0.591 -20.655   6.991 51.72  0.00           N
ATOM    798  CA  LYS A 200      -0.778 -20.823   5.548 51.72  0.00           C
ATOM    799  C   LYS A 200      -1.946 -21.672   5.236 51.72  0.00           C
ATOM    800  O   LYS A 200      -2.051 -22.735   5.769 51.72  0.00           O
ATOM    801  N   LEU A 201      -2.799 -21.218   4.328 46.35  0.00           N
ATOM    802  CA  LEU A 201      -3.935 -22.003   3.876 46.35  0.00           C
ATOM    803  C   LEU A 201      -3.511 -23.046   2.859 46.35  0.00           C
ATOM    804  O   LEU A 201      -2.649 -22.775   2.009 46.35  0.00           O
ATOM    805  N   THR A 202      -4.127 -24.225   2.953 44.58  0.00           N
ATOM    806  CA  THR A 202      -3.796 -25.369   2.082 44.58  0.00           C
ATOM    807  C   THR A 202      -5.038 -25.920   1.370 44.58  0.00           C
ATOM    808  O   THR A 202      -6.101 -25.964   1.999 44.58  0.00           O
TER     809      THR A 202
ENDMDL
END
REMARK   1 ************************************************************************
REMARK   1 Start File NAT_vs_DEC4_dSi_colored.pdb
REMARK   1 The occupancy record was modified to represent dSi := Si(DEC)-Si(NAT).
REMARK   1 Occ=0.00 means dSi=-1.484741 kB; Occ=99.99 means dSi=1.546813 kB.
MODEL        0
ATOM      1  N   MSE A   1      23.268  -4.104 -18.521 48.49  0.00           N
ATOM      2  CA  MSE A   1      23.439  -2.722 -18.016 48.49  0.00           C
ATOM      3  C   MSE A   1      22.152  -2.161 -17.383 48.49  0.00           C
ATOM      4  O   MSE A   1      22.147  -1.650 -16.252 48.49  0.00           O
ATOM      5  N   ILE A   2      21.045  -2.254 -18.100 39.73  0.00           N
ATOM      6  CA  ILE A   2      19.816  -1.632 -17.608 39.73  0.00           C
ATOM      7  C   ILE A   2      19.269  -2.405 -16.412 39.73  0.00           C
ATOM      8  O   ILE A   2      18.935  -1.835 -15.391 39.73  0.00           O
ATOM      9  N   THR A   3      19.186  -3.703 -16.563 54.25  0.00           N
ATOM     10  CA  THR A   3      18.718  -4.606 -15.498 54.25  0.00           C
ATOM     11  C   THR A   3      19.478  -4.398 -14.212 54.25  0.00           C
ATOM     12  O   THR A   3      18.884  -4.188 -13.150 54.25  0.00           O
ATOM     13  N   GLU A   4      20.800  -4.447 -14.318 44.58  0.00           N
ATOM     14  CA  GLU A   4      21.687  -4.148 -13.195 44.58  0.00           C
ATOM     15  C   GLU A   4      21.342  -2.832 -12.484 44.58  0.00           C
ATOM     16  O   GLU A   4      21.232  -2.791 -11.242 44.58  0.00           O
ATOM     17  N   PHE A   5      21.133  -1.765 -13.247 52.03  0.00           N
ATOM     18  CA  PHE A   5      20.826  -0.486 -12.602 52.03  0.00           C
ATOM     19  C   PHE A   5      19.486  -0.520 -11.886 52.03  0.00           C
ATOM     20  O   PHE A   5      19.415  -0.122 -10.736 52.03  0.00           O
ATOM     21  N   LEU A   6      18.429  -1.039 -12.529 45.33  0.00           N
ATOM     22  CA  LEU A   6      17.100  -1.072 -11.873 45.33  0.00           C
ATOM     23  C   LEU A   6      17.119  -1.921 -10.586 45.33  0.00           C
ATOM     24  O   LEU A   6      16.551  -1.545  -9.531 45.33  0.00           O
ATOM     25  N   LEU A   7      17.767  -3.071 -10.672 34.02  0.00           N
ATOM     26  CA  LEU A   7      17.843  -3.929  -9.486 34.02  0.00           C
ATOM     27  C   LEU A   7      18.603  -3.241  -8.341 34.02  0.00           C
ATOM     28  O   LEU A   7      18.190  -3.292  -7.184 34.02  0.00           O
ATOM     29  N   LYS A   8      19.691  -2.566  -8.693 38.58  0.00           N
ATOM     30  CA  LYS A   8      20.463  -1.856  -7.680 38.58  0.00           C
ATOM     31  C   LYS A   8      19.628  -0.762  -7.044 38.58  0.00           C
ATOM     32  O   LYS A   8      19.527  -0.688  -5.819 38.58  0.00           O
ATOM     33  N   LYS A   9      18.947   0.036  -7.860 37.09  0.00           N
ATOM     34  CA  LYS A   9      18.144   1.113  -7.292 37.09  0.00           C
ATOM     35  C   LYS A   9      17.009   0.545  -6.471 37.09  0.00           C
ATOM     36  O   LYS A   9      16.708   1.086  -5.402 37.09  0.00           O
ATOM     37  N   LYS A  10      16.379  -0.547  -6.912 45.03  0.00           N
ATOM     38  CA  LYS A  10      15.262  -1.072  -6.116 45.03  0.00           C
ATOM     39  C   LYS A  10      15.660  -1.681  -4.726 45.03  0.00           C
ATOM     40  O   LYS A  10      14.931  -1.547  -3.695 45.03  0.00           O
ATOM     41  N   LEU A  11      16.798  -2.366  -4.699 27.27  0.00           N
ATOM     42  CA  LEU A  11      17.328  -2.879  -3.411 27.27  0.00           C
ATOM     43  C   LEU A  11      17.613  -1.686  -2.439 27.27  0.00           C
ATOM     44  O   LEU A  11      17.179  -1.698  -1.270 27.27  0.00           O
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ATOM     45  N   GLU A  12      18.299  -0.655  -2.945 25.13  0.00           N
ATOM     46  CA  GLU A  12      18.475   0.605  -2.181 25.13  0.00           C
ATOM     47  C   GLU A  12      17.179   1.213  -1.616 25.13  0.00           C
ATOM     48  O   GLU A  12      17.048   1.390  -0.426 25.13  0.00           O
ATOM     49  N   GLU A  13      16.225   1.536  -2.461 28.47  0.00           N
ATOM     50  CA  GLU A  13      14.901   1.950  -1.974 28.47  0.00           C
ATOM     51  C   GLU A  13      14.358   1.037  -0.868 28.47  0.00           C
ATOM     52  O   GLU A  13      13.966   1.505   0.190 28.47  0.00           O
ATOM     53  N   HIS A  14      14.335  -0.267  -1.101 20.56  0.00           N
ATOM     54  CA  HIS A  14      13.794  -1.199  -0.106 20.56  0.00           C
ATOM     55  C   HIS A  14      14.560  -1.126   1.236 20.56  0.00           C
ATOM     56  O   HIS A  14      13.970  -1.122   2.322 20.56  0.00           O
ATOM     57  N   LEU A  15      15.884  -1.079   1.145  7.47  0.00           N
ATOM     58  CA  LEU A  15      16.750  -1.011   2.322  7.47  0.00           C
ATOM     59  C   LEU A  15      16.724   0.377   2.988  7.47  0.00           C
ATOM     60  O   LEU A  15      17.114   0.492   4.140  7.47  0.00           O
ATOM     61  N   SER A  16      16.283   1.421   2.277 18.29  0.00           N
ATOM     62  CA  SER A  16      16.215   2.761   2.870 18.29  0.00           C
ATOM     63  C   SER A  16      15.126   2.866   3.937 18.29  0.00           C
ATOM     64  O   SER A  16      15.184   3.766   4.746 18.29  0.00           O
ATOM     65  N   HIS A  17      14.126   1.987   3.905 18.83  0.00           N
ATOM     66  CA  HIS A  17      12.931   2.175   4.710 18.83  0.00           C
ATOM     67  C   HIS A  17      12.911   1.290   5.925 18.83  0.00           C
ATOM     68  O   HIS A  17      12.211   0.285   5.939 18.83  0.00           O
ATOM     69  N   VAL A  18      13.667   1.662   6.952 21.61  0.00           N
ATOM     70  CA  VAL A  18      13.649   0.930   8.226 21.61  0.00           C
ATOM     71  C   VAL A  18      12.455   1.416   9.073 21.61  0.00           C
ATOM     72  O   VAL A  18      12.231   2.619   9.198 21.61  0.00           O
ATOM     73  N   LYS A  19      11.711   0.480   9.654 41.33  0.00           N
ATOM     74  CA  LYS A  19      10.394   0.738  10.251 41.33  0.00           C
ATOM     75  C   LYS A  19      10.466   0.797  11.779 41.33  0.00           C
ATOM     76  O   LYS A  19      11.024  -0.102  12.394 41.33  0.00           O
ATOM     77  N   GLU A  20       9.892   1.832  12.391 49.34  0.00           N
ATOM     78  CA  GLU A  20      10.003   2.007  13.848 49.34  0.00           C
ATOM     79  C   GLU A  20       8.986   1.178  14.597 49.34  0.00           C
ATOM     80  O   GLU A  20       7.952   0.808  14.049 49.34  0.00           O
ATOM     81  N   GLU A  21       9.300   0.899  15.861 48.16  0.00           N
ATOM     82  CA  GLU A  21       8.634  -0.168  16.607 48.16  0.00           C
ATOM     83  C   GLU A  21       7.153   0.124  16.844 48.16  0.00           C
ATOM     84  O   GLU A  21       6.369  -0.811  17.040 48.16  0.00           O
ATOM     85  N   ASN A  22       6.774   1.399  16.808 60.36  0.00           N
ATOM     86  CA  ASN A  22       5.371   1.790  16.970 60.36  0.00           C
ATOM     87  C   ASN A  22       4.716   2.391  15.715 60.36  0.00           C
ATOM     88  O   ASN A  22       3.648   3.000  15.824 60.36  0.00           O
ATOM     89  N   THR A  23       5.339   2.269  14.540 74.63  0.00           N
ATOM     90  CA  THR A  23       4.636   2.674  13.297 74.63  0.00           C
ATOM     91  C   THR A  23       3.937   1.492  12.597 74.63  0.00           C
ATOM     92  O   THR A  23       4.343   0.315  12.707 74.63  0.00           O
ATOM     93  N   ILE A  24       2.863   1.841  11.907 61.70  0.00           N
ATOM     94  CA  ILE A  24       2.133   0.908  11.089 61.70  0.00           C
ATOM     95  C   ILE A  24       1.893   1.588   9.781 61.70  0.00           C
ATOM     96  O   ILE A  24       1.270   2.646   9.760 61.70  0.00           O
ATOM     97  N   TYR A  25       2.393   1.015   8.691 57.19  0.00           N
ATOM     98  CA  TYR A  25       2.072   1.558   7.393 57.19  0.00           C
ATOM     99  C   TYR A  25       0.609   1.246   7.051 57.19  0.00           C
ATOM    100  O   TYR A  25       0.029   0.273   7.510 57.19  0.00           O
ATOM    101  N   VAL A  26       0.019   2.088   6.230 64.40  0.00           N
ATOM    102  CA  VAL A  26      -1.326   1.856   5.716 64.40  0.00           C
ATOM    103  C   VAL A  26      -1.394   0.504   4.989 64.40  0.00           C
ATOM    104  O   VAL A  26      -2.320  -0.244   5.138 64.40  0.00           O
ATOM    105  N   THR A  27      -0.413   0.264   4.153 61.12  0.00           N
ATOM    106  CA  THR A  27      -0.225  -0.940   3.432 61.12  0.00           C
ATOM    107  C   THR A  27      -0.214  -2.155   4.325 61.12  0.00           C
ATOM    108  O   THR A  27      -0.816  -3.189   4.005 61.12  0.00           O
ATOM    109  N   ASP A  28       0.421  -2.066   5.476 60.47  0.00           N
ATOM    110  CA  ASP A  28       0.217  -3.125   6.447 60.47  0.00           C
ATOM    111  C   ASP A  28      -1.221  -3.366   6.899 60.47  0.00           C
ATOM    112  O   ASP A  28      -1.560  -4.494   7.172 60.47  0.00           O
ATOM    113  N   LEU A  29      -2.082  -2.355   6.958 76.20  0.00           N
ATOM    114  CA  LEU A  29      -3.418  -2.565   7.521 76.20  0.00           C
ATOM    115  C   LEU A  29      -4.304  -3.447   6.637 76.20  0.00           C
ATOM    116  O   LEU A  29      -5.335  -3.962   7.065 76.20  0.00           O
ATOM    117  N   VAL A  30      -3.930  -3.597   5.378 58.21  0.00           N
ATOM    118  CA  VAL A  30      -4.776  -4.325   4.449 58.21  0.00           C
ATOM    119  C   VAL A  30      -4.099  -5.619   4.014 58.21  0.00           C
ATOM    120  O   VAL A  30      -4.413  -6.174   2.971 58.21  0.00           O
ATOM    121  N   ARG A  31      -3.154  -6.069   4.828 99.99  0.00           N
ATOM    122  CA  ARG A  31      -2.426  -7.287   4.613 99.99  0.00           C
ATOM    123  C   ARG A  31      -2.433  -8.174   5.834 99.99  0.00           C
ATOM    124  O   ARG A  31      -2.927  -7.806   6.907 99.99  0.00           O
ATOM    125  N   CYS A  32      -1.955  -9.395   5.616 78.31  0.00           N
ATOM    126  CA  CYS A  32      -1.910 -10.426   6.637 78.31  0.00           C
ATOM    127  C   CYS A  32      -1.015  -9.951   7.770 78.31  0.00           C
ATOM    128  O   CYS A  32       0.134  -9.567   7.534 78.31  0.00           O
ATOM    129  N   PRO A  33      -1.508 -10.024   8.999 51.38  0.00           N
ATOM    130  CA  PRO A  33      -0.664  -9.610  10.083 51.38  0.00           C
ATOM    131  C   PRO A  33       0.611 -10.429  10.223 51.38  0.00           C
ATOM    132  O   PRO A  33       1.694  -9.852  10.411 51.38  0.00           O
ATOM    133  N   ARG A  34       0.512 -11.757  10.119 62.75  0.00           N
ATOM    134  CA  ARG A  34       1.689 -12.574  10.256 62.75  0.00           C
ATOM    135  C   ARG A  34       2.720 -12.198   9.218 62.75  0.00           C
ATOM    136  O   ARG A  34       3.911 -12.267   9.453 62.75  0.00           O
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ATOM    137  N   ARG A  35       2.276 -11.837   8.033 35.09  0.00           N
ATOM    138  CA  ARG A  35       3.238 -11.530   6.965 35.09  0.00           C
ATOM    139  C   ARG A  35       3.971 -10.221   7.251 35.09  0.00           C
ATOM    140  O   ARG A  35       5.151 -10.042   6.901 35.09  0.00           O
ATOM    141  N   VAL A  36       3.228  -9.297   7.848 55.22  0.00           N
ATOM    142  CA  VAL A  36       3.791  -7.981   8.175 55.22  0.00           C
ATOM    143  C   VAL A  36       4.864  -8.200   9.230 55.22  0.00           C
ATOM    144  O   VAL A  36       5.972  -7.734   9.085 55.22  0.00           O
ATOM    145  N   ARG A  37       4.561  -8.972  10.259 66.63  0.00           N
ATOM    146  CA  ARG A  37       5.600  -9.259  11.227 66.63  0.00           C
ATOM    147  C   ARG A  37       6.749 -10.045  10.630 66.63  0.00           C
ATOM    148  O   ARG A  37       7.879  -9.890  11.061 66.63  0.00           O
ATOM    149  N   TYR A  38       6.481 -10.904   9.649 51.44  0.00           N
ATOM    150  CA  TYR A  38       7.570 -11.660   9.036 51.44  0.00           C
ATOM    151  C   TYR A  38       8.499 -10.724   8.363 51.44  0.00           C
ATOM    152  O   TYR A  38       9.689 -10.942   8.377 51.44  0.00           O
ATOM    153  N   GLU A  39       7.963  -9.678   7.760 76.94  0.00           N
ATOM    154  CA  GLU A  39       8.816  -8.667   7.126 76.94  0.00           C
ATOM    155  C   GLU A  39       9.769  -7.904   8.077 76.94  0.00           C
ATOM    156  O   GLU A  39      10.773  -7.394   7.597 76.94  0.00           O
ATOM    157  N   SER A  40       9.464  -7.844   9.380 51.76  0.00           N
ATOM    158  CA  SER A  40      10.398  -7.338  10.412 51.76  0.00           C
ATOM    159  C   SER A  40      11.345  -8.393  10.958 51.76  0.00           C
ATOM    160  O   SER A  40      12.540  -8.130  11.114 51.76  0.00           O
ATOM    161  N   GLU A  41      10.808  -9.578  11.263 49.17  0.00           N
ATOM    162  CA  GLU A  41      11.604 -10.637  11.865 49.17  0.00           C
ATOM    163  C   GLU A  41      12.456 -11.415  10.889 49.17  0.00           C
ATOM    164  O   GLU A  41      13.321 -12.135  11.370 49.17  0.00           O
ATOM    165  N   TYR A  42      12.238 -11.336   9.566 54.89  0.00           N
ATOM    166  CA  TYR A  42      13.052 -12.135   8.586 54.89  0.00           C
ATOM    167  C   TYR A  42      13.369 -11.290   7.378 54.89  0.00           C
ATOM    168  O   TYR A  42      13.024 -11.599   6.196 54.89  0.00           O
ATOM    169  N   LYS A  43      14.059 -10.210   7.691 62.62  0.00           N
ATOM    170  CA  LYS A  43      14.286  -9.169   6.756 62.62  0.00           C
ATOM    171  C   LYS A  43      15.175  -9.664   5.651 62.62  0.00           C
ATOM    172  O   LYS A  43      15.118  -9.127   4.534 62.62  0.00           O
ATOM    173  N   GLU A  44      16.024 -10.635   5.936 58.52  0.00           N
ATOM    174  CA  GLU A  44      16.906 -11.087   4.887 58.52  0.00           C
ATOM    175  C   GLU A  44      16.077 -11.799   3.791 58.52  0.00           C
ATOM    176  O   GLU A  44      16.309 -11.615   2.572 58.52  0.00           O
ATOM    177  N   LEU A  45      15.070 -12.551   4.234 58.40  0.00           N
ATOM    178  CA  LEU A  45      14.177 -13.244   3.311 58.40  0.00           C
ATOM    179  C   LEU A  45      13.268 -12.185   2.642 58.40  0.00           C
ATOM    180  O   LEU A  45      13.095 -12.177   1.406 58.40  0.00           O
ATOM    181  N   ALA A  46      12.710 -11.278   3.448 72.70  0.00           N
ATOM    182  CA  ALA A  46      11.893 -10.178   2.897 72.70  0.00           C
ATOM    183  C   ALA A  46      12.519  -9.534   1.649 72.70  0.00           C
ATOM    184  O   ALA A  46      11.825  -9.262   0.709 72.70  0.00           O
ATOM    185  N   ILE A  47      13.830  -9.341   1.634 57.95  0.00           N
ATOM    186  CA  ILE A  47      14.526  -8.691   0.538 57.95  0.00           C
ATOM    187  C   ILE A  47      14.299  -9.332  -0.838 57.95  0.00           C
ATOM    188  O   ILE A  47      14.451  -8.669  -1.895 57.95  0.00           O
ATOM    189  N   SER A  48      13.959 -10.620  -0.874 66.06  0.00           N
ATOM    190  CA  SER A  48      13.715 -11.277  -2.169 66.06  0.00           C
ATOM    191  C   SER A  48      12.509 -10.666  -2.882 66.06  0.00           C
ATOM    192  O   SER A  48      12.401 -10.723  -4.108 66.06  0.00           O
ATOM    193  N   GLN A  49      11.610 -10.068  -2.123 66.28  0.00           N
ATOM    194  CA  GLN A  49      10.459  -9.434  -2.743 66.28  0.00           C
ATOM    195  C   GLN A  49      10.847  -8.226  -3.623 66.28  0.00           C
ATOM    196  O   GLN A  49      10.116  -7.889  -4.482 66.28  0.00           O
ATOM    197  N   VAL A  50      12.031  -7.643  -3.424 60.14  0.00           N
ATOM    198  CA  VAL A  50      12.659  -6.700  -4.358 60.14  0.00           C
ATOM    199  C   VAL A  50      12.750  -7.176  -5.802 60.14  0.00           C
ATOM    200  O   VAL A  50      12.805  -6.373  -6.754 60.14  0.00           O
ATOM    201  N   TYR A  51      12.865  -8.468  -5.991 32.22  0.00           N
ATOM    202  CA  TYR A  51      13.231  -8.953  -7.306 32.22  0.00           C
ATOM    203  C   TYR A  51      12.000  -9.515  -8.013 32.22  0.00           C
ATOM    204  O   TYR A  51      12.116 -10.179  -9.031 32.22  0.00           O
ATOM    205  N   ALA A  52      10.823  -9.258  -7.445 41.28  0.00           N
ATOM    206  CA  ALA A  52       9.580  -9.586  -8.075 41.28  0.00           C
ATOM    207  C   ALA A  52       9.375  -8.694  -9.336 41.28  0.00           C
ATOM    208  O   ALA A  52       9.152  -7.478  -9.216 41.28  0.00           O
ATOM    209  N   PRO A  53       9.401  -9.282 -10.541 48.93  0.00           N
ATOM    210  CA  PRO A  53       9.338  -8.519 -11.804 48.93  0.00           C
ATOM    211  C   PRO A  53       8.051  -7.715 -11.969 48.93  0.00           C
ATOM    212  O   PRO A  53       8.107  -6.662 -12.589 48.93  0.00           O
ATOM    213  N   SER A  54       6.912  -8.185 -11.428 36.30  0.00           N
ATOM    214  CA  SER A  54       5.662  -7.382 -11.372 36.30  0.00           C
ATOM    215  C   SER A  54       5.807  -6.143 -10.551 36.30  0.00           C
ATOM    216  O   SER A  54       5.159  -5.116 -10.806 36.30  0.00           O
ATOM    217  N   ALA A  55       6.666  -6.210  -9.534 32.49  0.00           N
ATOM    218  CA  ALA A  55       6.871  -5.023  -8.707 32.49  0.00           C
ATOM    219  C   ALA A  55       7.756  -4.055  -9.490 32.49  0.00           C
ATOM    220  O   ALA A  55       7.598  -2.860  -9.403 32.49  0.00           O
ATOM    221  N   ILE A  56       8.662  -4.543 -10.314 36.07  0.00           N
ATOM    222  CA  ILE A  56       9.562  -3.610 -11.005 36.07  0.00           C
ATOM    223  C   ILE A  56       8.724  -2.964 -12.115 36.07  0.00           C
ATOM    224  O   ILE A  56       8.790  -1.755 -12.348 36.07  0.00           O
ATOM    225  N   LEU A  57       7.912  -3.805 -12.760 30.30  0.00           N
ATOM    226  CA  LEU A  57       6.935  -3.366 -13.747 30.30  0.00           C
ATOM    227  C   LEU A  57       6.033  -2.336 -13.087 30.30  0.00           C
ATOM    228  O   LEU A  57       5.874  -1.207 -13.590 30.30  0.00           O
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ATOM    229  N   GLY A  58       5.483  -2.701 -11.946 40.09  0.00           N
ATOM    230  CA  GLY A  58       4.634  -1.806 -11.182 40.09  0.00           C
ATOM    231  C   GLY A  58       5.258  -0.473 -10.875 40.09  0.00           C
ATOM    232  O   GLY A  58       4.607   0.560 -11.036 40.09  0.00           O
ATOM    233  N   ASP A  59       6.514  -0.439 -10.443 43.66  0.00           N
ATOM    234  CA  ASP A  59       7.150   0.844 -10.105 43.66  0.00           C
ATOM    235  C   ASP A  59       7.486   1.775 -11.275 43.66  0.00           C
ATOM    236  O   ASP A  59       7.461   2.943 -11.121 43.66  0.00           O
ATOM    237  N   ILE A  60       7.874   1.212 -12.405 47.37  0.00           N
ATOM    238  CA  ILE A  60       8.072   1.923 -13.651 47.37  0.00           C
ATOM    239  C   ILE A  60       6.774   2.586 -14.133 47.37  0.00           C
ATOM    240  O   ILE A  60       6.798   3.761 -14.559 47.37  0.00           O
ATOM    241  N   LEU A  61       5.641   1.870 -14.058 37.07  0.00           N
ATOM    242  CA  LEU A  61       4.334   2.454 -14.392 37.07  0.00           C
ATOM    243  C   LEU A  61       4.024   3.653 -13.537 37.07  0.00           C
ATOM    244  O   LEU A  61       3.668   4.678 -14.050 37.07  0.00           O
ATOM    245  N   HIS A  62       4.172   3.508 -12.232 40.48  0.00           N
ATOM    246  CA  HIS A  62       3.968   4.616 -11.306 40.48  0.00           C
ATOM    247  C   HIS A  62       4.884   5.714 -11.684 40.48  0.00           C
ATOM    248  O   HIS A  62       4.443   6.854 -11.841 40.48  0.00           O
ATOM    249  N   LEU A  63       6.158   5.423 -11.888 37.63  0.00           N
ATOM    250  CA  LEU A  63       7.034   6.526 -12.325 37.63  0.00           C
ATOM    251  C   LEU A  63       6.405   7.217 -13.537 37.63  0.00           C
ATOM    252  O   LEU A  63       6.167   8.394 -13.497 37.63  0.00           O
ATOM    253  N   GLY A  64       6.109   6.499 -14.603 32.57  0.00           N
ATOM    254  CA  GLY A  64       5.719   7.158 -15.811 32.57  0.00           C
ATOM    255  C   GLY A  64       4.400   7.890 -15.740 32.57  0.00           C
ATOM    256  O   GLY A  64       4.174   8.755 -16.509 32.57  0.00           O
ATOM    257  N   LEU A  65       3.499   7.454 -14.886 17.30  0.00           N
ATOM    258  CA  LEU A  65       2.129   7.928 -14.922 17.30  0.00           C
ATOM    259  C   LEU A  65       2.136   9.075 -13.968 17.30  0.00           C
ATOM    260  O   LEU A  65       1.699  10.153 -14.266 17.30  0.00           O
ATOM    261  N   GLU A  66       2.672   8.845 -12.789 52.15  0.00           N
ATOM    262  CA  GLU A  66       3.061   9.970 -11.943 52.15  0.00           C
ATOM    263  C   GLU A  66       3.702  11.154 -12.688 52.15  0.00           C
ATOM    264  O   GLU A  66       3.297  12.272 -12.436 52.15  0.00           O
ATOM    265  N   SER A  67       4.665  10.981 -13.581 48.13  0.00           N
ATOM    266  CA  SER A  67       5.183  12.221 -14.250 48.13  0.00           C
ATOM    267  C   SER A  67       4.100  13.012 -15.067 48.13  0.00           C
ATOM    268  O   SER A  67       4.182  14.248 -15.203 48.13  0.00           O
ATOM    269  N   VAL A  68       3.091  12.293 -15.600 43.23  0.00           N
ATOM    270  CA  VAL A  68       1.939  12.934 -16.238 43.23  0.00           C
ATOM    271  C   VAL A  68       1.158  13.773 -15.231 43.23  0.00           C
ATOM    272  O   VAL A  68       0.645  14.865 -15.520 43.23  0.00           O
ATOM    273  N   LEU A  69       1.040  13.216 -14.047 36.64  0.00           N
ATOM    274  CA  LEU A  69       0.261  13.818 -13.004 36.64  0.00           C
ATOM    275  C   LEU A  69       0.848  15.118 -12.430 36.64  0.00           C
ATOM    276  O   LEU A  69       0.134  15.992 -11.952 36.64  0.00           O
ATOM    277  N   LYS A  70       2.165  15.215 -12.445 44.43  0.00           N
ATOM    278  CA  LYS A  70       2.860  16.356 -11.911 44.43  0.00           C
ATOM    279  C   LYS A  70       2.708  17.450 -12.934 44.43  0.00           C
ATOM    280  O   LYS A  70       2.497  18.596 -12.562 44.43  0.00           O
ATOM    281  N   GLY A  71       2.769  17.105 -14.229 47.19  0.00           N
ATOM    282  CA  GLY A  71       2.550  18.111 -15.305 47.19  0.00           C
ATOM    283  C   GLY A  71       1.130  18.685 -15.376 47.19  0.00           C
ATOM    284  O   GLY A  71       0.821  19.815 -14.923 47.19  0.00           O
ATOM    285  N   ASN A  72       0.217  17.876 -15.876 43.26  0.00           N
ATOM    286  CA  ASN A  72      -1.095  18.370 -16.206 43.26  0.00           C
ATOM    287  C   ASN A  72      -2.040  18.612 -15.074 43.26  0.00           C
ATOM    288  O   ASN A  72      -2.921  19.420 -15.211 43.26  0.00           O
ATOM    289  N   PHE A  73      -1.880  17.933 -13.966 39.90  0.00           N
ATOM    290  CA  PHE A  73      -2.766  18.118 -12.847 39.90  0.00           C
ATOM    291  C   PHE A  73      -2.091  18.771 -11.639 39.90  0.00           C
ATOM    292  O   PHE A  73      -2.674  18.861 -10.593 39.90  0.00           O
ATOM    293  N   ASN A  74      -0.838  19.166 -11.735 60.33  0.00           N
ATOM    294  CA  ASN A  74      -0.201  19.781 -10.582 60.33  0.00           C
ATOM    295  C   ASN A  74      -0.355  18.949  -9.279 60.33  0.00           C
ATOM    296  O   ASN A  74      -0.590  19.474  -8.165 60.33  0.00           O
ATOM    297  N   ALA A  75      -0.160  17.641  -9.414 52.99  0.00           N
ATOM    298  CA  ALA A  75      -0.115  16.792  -8.245 52.99  0.00           C
ATOM    299  C   ALA A  75       1.282  16.777  -7.622 52.99  0.00           C
ATOM    300  O   ALA A  75       2.270  16.992  -8.289 52.99  0.00           O
ATOM    301  N   GLU A  76       1.336  16.530  -6.332 61.81  0.00           N
ATOM    302  CA  GLU A  76       2.559  16.069  -5.695 61.81  0.00           C
ATOM    303  C   GLU A  76       2.544  14.546  -5.834 61.81  0.00           C
ATOM    304  O   GLU A  76       1.466  13.957  -5.865 61.81  0.00           O
ATOM    305  N   THR A  77       3.710  13.915  -5.909 66.18  0.00           N
ATOM    306  CA  THR A  77       3.794  12.484  -6.087 66.18  0.00           C
ATOM    307  C   THR A  77       4.639  11.898  -4.978 66.18  0.00           C
ATOM    308  O   THR A  77       5.510  12.566  -4.500 66.18  0.00           O
ATOM    309  N   GLU A  78       4.321  10.666  -4.562 71.90  0.00           N
ATOM    310  CA  GLU A  78       4.988   9.920  -3.517 71.90  0.00           C
ATOM    311  C   GLU A  78       5.020  10.703  -2.232 71.90  0.00           C
ATOM    312  O   GLU A  78       6.063  10.936  -1.623 71.90  0.00           O
ATOM    313  N   VAL A  79       3.826  11.074  -1.816 45.89  0.00           N
ATOM    314  CA  VAL A  79       3.635  12.010  -0.767 45.89  0.00           C
ATOM    315  C   VAL A  79       3.474  11.303   0.544 45.89  0.00           C
ATOM    316  O   VAL A  79       2.510  10.573   0.774 45.89  0.00           O
ATOM    317  N   GLU A  80       4.416  11.580   1.421 26.43  0.00           N
ATOM    318  CA  GLU A  80       4.530  10.857   2.668 26.43  0.00           C
ATOM    319  C   GLU A  80       3.901  11.655   3.780 26.43  0.00           C
ATOM    320  O   GLU A  80       4.090  12.840   3.853 26.43  0.00           O
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ATOM    321  N   THR A  81       3.177  11.027   4.670 34.54  0.00           N
ATOM    322  CA  THR A  81       2.510  11.744   5.761 34.54  0.00           C
ATOM    323  C   THR A  81       2.133  10.811   6.884 34.54  0.00           C
ATOM    324  O   THR A  81       2.164   9.597   6.754 34.54  0.00           O
ATOM    325  N   LEU A  82       1.667  11.373   7.976 26.00  0.00           N
ATOM    326  CA  LEU A  82       1.644  10.601   9.202 26.00  0.00           C
ATOM    327  C   LEU A  82       0.492  11.060  10.035 26.00  0.00           C
ATOM    328  O   LEU A  82       0.098  12.203   9.950 26.00  0.00           O
ATOM    329  N   ARG A  83      -0.124  10.141  10.761  0.00  0.00           N
ATOM    330  CA  ARG A  83      -1.326  10.449  11.518  0.00  0.00           C
ATOM    331  C   ARG A  83      -1.368   9.467  12.659  0.00  0.00           C
ATOM    332  O   ARG A  83      -0.926   8.327  12.512  0.00  0.00           O
ATOM    333  N   GLU A  84      -1.873   9.890  13.809 16.62  0.00           N
ATOM    334  CA  GLU A  84      -1.727   9.022  14.978 16.62  0.00           C
ATOM    335  C   GLU A  84      -3.042   8.425  15.425 16.62  0.00           C
ATOM    336  O   GLU A  84      -4.110   8.996  15.183 16.62  0.00           O
ATOM    337  N   ILE A  85      -2.918   7.275  16.095 49.03  0.00           N
ATOM    338  CA  ILE A  85      -4.029   6.451  16.449 49.03  0.00           C
ATOM    339  C   ILE A  85      -3.781   5.841  17.813 49.03  0.00           C
ATOM    340  O   ILE A  85      -2.643   5.507  18.123 49.03  0.00           O
ATOM    341  N   ASN A  86      -4.840   5.701  18.619 23.99  0.00           N
ATOM    342  CA  ASN A  86      -4.761   5.021  19.937 23.99  0.00           C
ATOM    343  C   ASN A  86      -5.250   3.566  19.895 23.99  0.00           C
ATOM    344  O   ASN A  86      -6.399   3.293  19.511 23.99  0.00           O
ATOM    345  N   VAL A  87      -4.383   2.645  20.322 34.12  0.00           N
ATOM    346  CA  VAL A  87      -4.703   1.227  20.308 34.12  0.00           C
ATOM    347  C   VAL A  87      -4.355   0.547  21.630 34.12  0.00           C
ATOM    348  O   VAL A  87      -3.230   0.067  21.819 34.12  0.00           O
ATOM    349  N   GLY A  88      -5.321   0.484  22.542 45.20  0.00           N
ATOM    350  CA  GLY A  88      -5.066  -0.115  23.865 45.20  0.00           C
ATOM    351  C   GLY A  88      -4.192   0.803  24.708 45.20  0.00           C
ATOM    352  O   GLY A  88      -3.216   0.373  25.351 45.20  0.00           O
ATOM    353  N   GLY A  89      -4.538   2.089  24.663 44.67  0.00           N
ATOM    354  CA  GLY A  89      -3.780   3.124  25.348 44.67  0.00           C
ATOM    355  C   GLY A  89      -2.339   3.328  24.890 44.67  0.00           C
ATOM    356  O   GLY A  89      -1.668   4.231  25.406 44.67  0.00           O
ATOM    357  N   LYS A  90      -1.846   2.502  23.956 48.32  0.00           N
ATOM    358  CA  LYS A  90      -0.547   2.733  23.318 48.32  0.00           C
ATOM    359  C   LYS A  90      -0.830   3.651  22.138 48.32  0.00           C
ATOM    360  O   LYS A  90      -1.881   3.541  21.497 48.32  0.00           O
ATOM    361  N   VAL A  91       0.069   4.592  21.872 38.80  0.00           N
ATOM    362  CA  VAL A  91      -0.106   5.503  20.744 38.80  0.00           C
ATOM    363  C   VAL A  91       0.675   4.963  19.561 38.80  0.00           C
ATOM    364  O   VAL A  91       1.817   4.523  19.727 38.80  0.00           O
ATOM    365  N   TYR A  92       0.052   5.005  18.377 52.81  0.00           N
ATOM    366  CA  TYR A  92       0.676   4.480  17.190 52.81  0.00           C
ATOM    367  C   TYR A  92       0.645   5.490  16.087 52.81  0.00           C
ATOM    368  O   TYR A  92      -0.329   6.191  15.893 52.81  0.00           O
ATOM    369  N   LYS A  93       1.747   5.547  15.371 52.93  0.00           N
ATOM    370  CA  LYS A  93       1.859   6.412  14.217 52.93  0.00           C
ATOM    371  C   LYS A  93       1.524   5.603  12.955 52.93  0.00           C
ATOM    372  O   LYS A  93       2.270   4.714  12.581 52.93  0.00           O
ATOM    373  N   ILE A  94       0.406   5.927  12.320 51.17  0.00           N
ATOM    374  CA  ILE A  94       0.084   5.372  11.038 51.17  0.00           C
ATOM    375  C   ILE A  94       0.743   6.184   9.929 51.17  0.00           C
ATOM    376  O   ILE A  94       0.556   7.385   9.807 51.17  0.00           O
ATOM    377  N   LYS A  95       1.497   5.507   9.097 49.55  0.00           N
ATOM    378  CA  LYS A  95       2.305   6.166   8.106 49.55  0.00           C
ATOM    379  C   LYS A  95       1.950   5.702   6.699 49.55  0.00           C
ATOM    380  O   LYS A  95       1.760   4.545   6.470 49.55  0.00           O
ATOM    381  N   GLY A  96       1.853   6.613   5.743 51.60  0.00           N
ATOM    382  CA  GLY A  96       1.572   6.242   4.383 51.60  0.00           C
ATOM    383  C   GLY A  96       2.142   7.179   3.378 51.60  0.00           C
ATOM    384  O   GLY A  96       2.537   8.280   3.703 51.60  0.00           O
ATOM    385  N   ARG A  97       2.107   6.740   2.138 35.35  0.00           N
ATOM    386  CA  ARG A  97       2.693   7.428   1.007 35.35  0.00           C
ATOM    387  C   ARG A  97       1.769   7.206  -0.178 35.35  0.00           C
ATOM    388  O   ARG A  97       1.672   6.084  -0.699 35.35  0.00           O
ATOM    389  N   ALA A  98       1.104   8.281  -0.588 48.81  0.00           N
ATOM    390  CA  ALA A  98       0.117   8.243  -1.592 48.81  0.00           C
ATOM    391  C   ALA A  98       0.862   8.383  -2.906 48.81  0.00           C
ATOM    392  O   ALA A  98       1.855   9.097  -3.010 48.81  0.00           O
ATOM    393  N   ASP A  99       0.424   7.673  -3.912 46.60  0.00           N
ATOM    394  CA  ASP A  99       1.076   7.754  -5.196 46.60  0.00           C
ATOM    395  C   ASP A  99       0.974   9.188  -5.720 46.60  0.00           C
ATOM    396  O   ASP A  99       1.922   9.707  -6.350 46.60  0.00           O
ATOM    397  N   ALA A 100      -0.166   9.846  -5.513 51.50  0.00           N
ATOM    398  CA  ALA A 100      -0.251  11.269  -5.953 51.50  0.00           C
ATOM    399  C   ALA A 100      -1.290  11.992  -5.184 51.50  0.00           C
ATOM    400  O   ALA A 100      -2.232  11.366  -4.731 51.50  0.00           O
ATOM    401  N   ILE A 101      -1.104  13.303  -4.998 67.57  0.00           N
ATOM    402  CA  ILE A 101      -2.137  14.137  -4.384 67.57  0.00           C
ATOM    403  C   ILE A 101      -2.390  15.420  -5.140 67.57  0.00           C
ATOM    404  O   ILE A 101      -1.467  16.143  -5.558 67.57  0.00           O
ATOM    405  N   ILE A 102      -3.672  15.695  -5.329 54.39  0.00           N
ATOM    406  CA  ILE A 102      -4.083  17.004  -5.796 54.39  0.00           C
ATOM    407  C   ILE A 102      -4.628  17.765  -4.581 54.39  0.00           C
ATOM    408  O   ILE A 102      -5.695  17.431  -4.073 54.39  0.00           O
ATOM    409  N   ARG A 103      -3.845  18.751  -4.103 48.81  0.00           N
ATOM    410  CA  ARG A 103      -4.150  19.504  -2.879 48.81  0.00           C
ATOM    411  C   ARG A 103      -5.423  20.391  -2.949 48.81  0.00           C
ATOM    412  O   ARG A 103      -6.199  20.482  -1.960 48.81  0.00           O
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ATOM    413  N   ASN A 104      -5.626  21.051  -4.095 49.62  0.00           N
ATOM    414  CA  ASN A 104      -6.745  21.998  -4.259 49.62  0.00           C
ATOM    415  C   ASN A 104      -7.230  21.994  -5.679 49.62  0.00           C
ATOM    416  O   ASN A 104      -6.693  22.692  -6.538 49.62  0.00           O
ATOM    417  N   ASP A 105      -8.253  21.174  -5.879 50.98  0.00           N
ATOM    418  CA  ASP A 105      -9.039  21.134  -7.084 50.98  0.00           C
ATOM    419  C   ASP A 105     -10.471  21.605  -6.714 50.98  0.00           C
ATOM    420  O   ASP A 105     -11.262  20.843  -6.158 50.98  0.00           O
ATOM    421  N   ASN A 106     -10.768  22.878  -6.986 41.30  0.00           N
ATOM    422  CA  ASN A 106     -12.040  23.506  -6.575 41.30  0.00           C
ATOM    423  C   ASN A 106     -12.422  23.321  -5.104 41.30  0.00           C
ATOM    424  O   ASN A 106     -13.561  23.020  -4.774 41.30  0.00           O
ATOM    425  N   GLY A 107     -11.470  23.524  -4.215 55.42  0.00           N
ATOM    426  CA  GLY A 107     -11.717  23.337  -2.789 55.42  0.00           C
ATOM    427  C   GLY A 107     -11.737  21.883  -2.335 55.42  0.00           C
ATOM    428  O   GLY A 107     -12.404  21.544  -1.352 55.42  0.00           O
ATOM    429  N   LYS A 108     -11.008  21.019  -3.043 47.85  0.00           N
ATOM    430  CA  LYS A 108     -10.915  19.615  -2.668 47.85  0.00           C
ATOM    431  C   LYS A 108      -9.483  19.049  -2.884 47.85  0.00           C
ATOM    432  O   LYS A 108      -8.779  19.403  -3.839 47.85  0.00           O
ATOM    433  N   SER A 109      -9.039  18.236  -1.933 50.40  0.00           N
ATOM    434  CA  SER A 109      -7.862  17.387  -2.118 50.40  0.00           C
ATOM    435  C   SER A 109      -8.308  16.067  -2.739 50.40  0.00           C
ATOM    436  O   SER A 109      -9.315  15.517  -2.353 50.40  0.00           O
ATOM    437  N   ILE A 110      -7.524  15.551  -3.650 39.96  0.00           N
ATOM    438  CA  ILE A 110      -7.790  14.265  -4.209 39.96  0.00           C
ATOM    439  C   ILE A 110      -6.588  13.343  -3.999 39.96  0.00           C
ATOM    440  O   ILE A 110      -5.512  13.629  -4.510 39.96  0.00           O
ATOM    441  N   VAL A 111      -6.752  12.243  -3.266 55.49  0.00           N
ATOM    442  CA  VAL A 111      -5.679  11.220  -3.198 55.49  0.00           C
ATOM    443  C   VAL A 111      -5.836  10.276  -4.388 55.49  0.00           C
ATOM    444  O   VAL A 111      -6.932   9.764  -4.636 55.49  0.00           O
ATOM    445  N   ILE A 112      -4.775  10.018  -5.128 50.38  0.00           N
ATOM    446  CA  ILE A 112      -4.866   9.126  -6.282 50.38  0.00           C
ATOM    447  C   ILE A 112      -4.010   7.894  -6.056 50.38  0.00           C
ATOM    448  O   ILE A 112      -2.842   8.019  -5.770 50.38  0.00           O
ATOM    449  N   GLU A 113      -4.547   6.709  -6.243 55.15  0.00           N
ATOM    450  CA  GLU A 113      -3.780   5.455  -6.060 55.15  0.00           C
ATOM    451  C   GLU A 113      -3.823   4.710  -7.388 55.15  0.00           C
ATOM    452  O   GLU A 113      -4.882   4.569  -8.052 55.15  0.00           O
ATOM    453  N   ILE A 114      -2.657   4.354  -7.861 49.82  0.00           N
ATOM    454  CA  ILE A 114      -2.531   3.758  -9.150 49.82  0.00           C
ATOM    455  C   ILE A 114      -2.210   2.295  -8.960 49.82  0.00           C
ATOM    456  O   ILE A 114      -1.423   1.954  -8.099 49.82  0.00           O
ATOM    457  N   LYS A 115      -2.787   1.433  -9.786 55.94  0.00           N
ATOM    458  CA  LYS A 115      -2.621   0.003  -9.616 55.94  0.00           C
ATOM    459  C   LYS A 115      -2.438  -0.643 -10.947 55.94  0.00           C
ATOM    460  O   LYS A 115      -2.964  -0.176 -11.951 55.94  0.00           O
ATOM    461  N   THR A 116      -1.684  -1.729 -10.958 47.50  0.00           N
ATOM    462  CA  THR A 116      -1.468  -2.466 -12.194 47.50  0.00           C
ATOM    463  C   THR A 116      -1.602  -3.921 -11.890 47.50  0.00           C
ATOM    464  O   THR A 116      -1.369  -4.337 -10.804 47.50  0.00           O
ATOM    465  N   SER A 117      -2.085  -4.706 -12.802 38.09  0.00           N
ATOM    466  CA  SER A 117      -2.109  -6.154 -12.601 38.09  0.00           C
ATOM    467  C   SER A 117      -2.180  -6.692 -13.946 38.09  0.00           C
ATOM    468  O   SER A 117      -2.324  -5.911 -14.909 38.09  0.00           O
ATOM    469  N   ARG A 118      -2.032  -8.006 -14.033 50.72  0.00           N
ATOM    470  CA  ARG A 118      -2.068  -8.640 -15.363 50.72  0.00           C
ATOM    471  C   ARG A 118      -3.471  -8.928 -15.862 50.72  0.00           C
ATOM    472  O   ARG A 118      -3.648  -9.162 -17.069 50.72  0.00           O
ATOM    473  N   SER A 119      -4.457  -8.893 -14.965 49.06  0.00           N
ATOM    474  CA  SER A 119      -5.872  -9.062 -15.362 49.06  0.00           C
ATOM    475  C   SER A 119      -6.800  -7.967 -14.770 49.06  0.00           C
ATOM    476  O   SER A 119      -6.533  -7.439 -13.690 49.06  0.00           O
ATOM    477  N   ASP A 120      -7.938  -7.766 -15.424 54.49  0.00           N
ATOM    478  CA  ASP A 120      -8.922  -6.789 -15.023 54.49  0.00           C
ATOM    479  C   ASP A 120     -10.062  -7.464 -14.339 54.49  0.00           C
ATOM    480  O   ASP A 120     -11.180  -6.930 -14.286 54.49  0.00           O
ATOM    481  N   LYS A 121      -9.805  -8.622 -13.800 48.74  0.00           N
ATOM    482  CA  LYS A 121     -10.861  -9.343 -13.147 48.74  0.00           C
ATOM    483  C   LYS A 121     -11.305  -8.719 -11.850 48.74  0.00           C
ATOM    484  O   LYS A 121     -10.493  -8.415 -10.994 48.74  0.00           O
ATOM    485  N   GLY A 122     -12.595  -8.552 -11.661 52.58  0.00           N
ATOM    486  CA  GLY A 122     -13.099  -8.150 -10.341 52.58  0.00           C
ATOM    487  C   GLY A 122     -12.816  -6.695  -9.897 52.58  0.00           C
ATOM    488  O   GLY A 122     -13.062  -6.363  -8.702 52.58  0.00           O
ATOM    489  N   LEU A 123     -12.369  -5.819 -10.826 73.63  0.00           N
ATOM    490  CA  LEU A 123     -12.047  -4.418 -10.440 73.63  0.00           C
ATOM    491  C   LEU A 123     -13.261  -3.672  -9.972 73.63  0.00           C
ATOM    492  O   LEU A 123     -14.252  -3.694 -10.654 73.63  0.00           O
ATOM    493  N   PRO A 124     -13.153  -2.951  -8.838 60.33  0.00           N
ATOM    494  CA  PRO A 124     -11.936  -2.786  -8.048 60.33  0.00           C
ATOM    495  C   PRO A 124     -11.854  -3.776  -6.934 60.33  0.00           C
ATOM    496  O   PRO A 124     -12.861  -4.122  -6.314 60.33  0.00           O
ATOM    497  N   LEU A 125     -10.645  -4.184  -6.634 46.18  0.00           N
ATOM    498  CA  LEU A 125     -10.394  -5.171  -5.542 46.18  0.00           C
ATOM    499  C   LEU A 125     -10.497  -4.530  -4.149 46.18  0.00           C
ATOM    500  O   LEU A 125     -10.112  -3.350  -3.908 46.18  0.00           O
ATOM    501  N   ILE A 126     -11.048  -5.276  -3.221 54.49  0.00           N
ATOM    502  CA  ILE A 126     -11.528  -4.647  -1.996 54.49  0.00           C
ATOM    503  C   ILE A 126     -10.339  -4.126  -1.167 54.49  0.00           C
ATOM    504  O   ILE A 126     -10.462  -3.123  -0.513 54.49  0.00           O
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ATOM    505  N   HIS A 127      -9.195  -4.779  -1.251 57.34  0.00           N
ATOM    506  CA  HIS A 127      -8.055  -4.383  -0.479 57.34  0.00           C
ATOM    507  C   HIS A 127      -7.440  -3.163  -1.103 57.34  0.00           C
ATOM    508  O   HIS A 127      -6.834  -2.382  -0.415 57.34  0.00           O
ATOM    509  N   HIS A 128      -7.592  -2.980  -2.400 49.74  0.00           N
ATOM    510  CA  HIS A 128      -7.176  -1.718  -3.018 49.74  0.00           C
ATOM    511  C   HIS A 128      -8.083  -0.558  -2.609 49.74  0.00           C
ATOM    512  O   HIS A 128      -7.606   0.554  -2.368 49.74  0.00           O
ATOM    513  N   LYS A 129      -9.365  -0.803  -2.526 85.68  0.00           N
ATOM    514  CA  LYS A 129     -10.266   0.264  -2.198 85.68  0.00           C
ATOM    515  C   LYS A 129     -10.028   0.593  -0.745 85.68  0.00           C
ATOM    516  O   LYS A 129      -9.930   1.747  -0.408 85.68  0.00           O
ATOM    517  N   MSE A 130      -9.911  -0.410   0.128 84.86  0.00           N
ATOM    518  CA  MSE A 130      -9.661  -0.122   1.564 84.86  0.00           C
ATOM    519  C   MSE A 130      -8.432   0.772   1.739 84.86  0.00           C
ATOM    520  O   MSE A 130      -8.445   1.649   2.550 84.86  0.00           O
ATOM    521  N   GLN A 131      -7.394   0.520   0.958 72.35  0.00           N
ATOM    522  CA  GLN A 131      -6.133   1.211   1.097 72.35  0.00           C
ATOM    523  C   GLN A 131      -6.400   2.668   0.780 72.35  0.00           C
ATOM    524  O   GLN A 131      -5.918   3.542   1.460 72.35  0.00           O
ATOM    525  N   LEU A 132      -7.195   2.936  -0.242 55.73  0.00           N
ATOM    526  CA  LEU A 132      -7.436   4.290  -0.682 55.73  0.00           C
ATOM    527  C   LEU A 132      -8.295   4.984   0.347 55.73  0.00           C
ATOM    528  O   LEU A 132      -8.142   6.173   0.629 55.73  0.00           O
ATOM    529  N   GLN A 133      -9.173   4.244   0.963 90.16  0.00           N
ATOM    530  CA  GLN A 133     -10.034   4.835   1.951 90.16  0.00           C
ATOM    531  C   GLN A 133      -9.306   5.181   3.263 90.16  0.00           C
ATOM    532  O   GLN A 133      -9.739   6.050   4.021 90.16  0.00           O
ATOM    533  N   ILE A 134      -8.240   4.450   3.561 63.70  0.00           N
ATOM    534  CA  ILE A 134      -7.448   4.750   4.709 63.70  0.00           C
ATOM    535  C   ILE A 134      -6.635   6.008   4.375 63.70  0.00           C
ATOM    536  O   ILE A 134      -6.604   6.904   5.182 63.70  0.00           O
ATOM    537  N   TYR A 135      -5.993   6.089   3.200 52.62  0.00           N
ATOM    538  CA  TYR A 135      -5.308   7.299   2.832 52.62  0.00           C
ATOM    539  C   TYR A 135      -6.263   8.486   3.003 52.62  0.00           C
ATOM    540  O   TYR A 135      -5.876   9.536   3.592 52.62  0.00           O
ATOM    541  N   LEU A 136      -7.510   8.345   2.563 79.77  0.00           N
ATOM    542  CA  LEU A 136      -8.431   9.472   2.663 79.77  0.00           C
ATOM    543  C   LEU A 136      -8.471   9.988   4.123 79.77  0.00           C
ATOM    544  O   LEU A 136      -8.423  11.193   4.364 79.77  0.00           O
ATOM    545  N   TRP A 137      -8.562   9.085   5.079 62.11  0.00           N
ATOM    546  CA  TRP A 137      -8.471   9.465   6.480 62.11  0.00           C
ATOM    547  C   TRP A 137      -7.090  10.092   6.781 62.11  0.00           C
ATOM    548  O   TRP A 137      -6.988  11.182   7.363 62.11  0.00           O
ATOM    549  N   LEU A 138      -6.039   9.457   6.283 52.60  0.00           N
ATOM    550  CA  LEU A 138      -4.665   9.881   6.616 52.60  0.00           C
ATOM    551  C   LEU A 138      -4.353  11.332   6.246 52.60  0.00           C
ATOM    552  O   LEU A 138      -3.806  12.080   7.039 52.60  0.00           O
ATOM    553  N   PHE A 139      -4.725  11.691   5.030 56.87  0.00           N
ATOM    554  CA  PHE A 139      -4.602  13.020   4.511 56.87  0.00           C
ATOM    555  C   PHE A 139      -5.790  13.890   4.834 56.87  0.00           C
ATOM    556  O   PHE A 139      -5.772  15.074   4.508 56.87  0.00           O
ATOM    557  N   SER A 140      -6.827  13.321   5.474 58.25  0.00           N
ATOM    558  CA  SER A 140      -8.140  13.999   5.608 58.25  0.00           C
ATOM    559  C   SER A 140      -8.590  14.636   4.304 58.25  0.00           C
ATOM    560  O   SER A 140      -8.961  15.800   4.273 58.25  0.00           O
ATOM    561  N   ALA A 141      -8.519  13.878   3.227 50.28  0.00           N
ATOM    562  CA  ALA A 141      -8.945  14.332   1.917 50.28  0.00           C
ATOM    563  C   ALA A 141     -10.405  13.939   1.667 50.28  0.00           C
ATOM    564  O   ALA A 141     -10.983  13.084   2.348 50.28  0.00           O
ATOM    565  N   GLU A 142     -11.035  14.621   0.722 51.95  0.00           N
ATOM    566  CA  GLU A 142     -12.471  14.427   0.489 51.95  0.00           C
ATOM    567  C   GLU A 142     -12.738  13.477  -0.702 51.95  0.00           C
ATOM    568  O   GLU A 142     -13.747  12.791  -0.707 51.95  0.00           O
ATOM    569  N   LYS A 143     -11.805  13.444  -1.660 77.71  0.00           N
ATOM    570  CA  LYS A 143     -11.916  12.652  -2.862 77.71  0.00           C
ATOM    571  C   LYS A 143     -10.727  11.686  -3.055 77.71  0.00           C
ATOM    572  O   LYS A 143      -9.539  11.991  -2.732 77.71  0.00           O
ATOM    573  N   GLY A 144     -11.077  10.526  -3.602 59.28  0.00           N
ATOM    574  CA  GLY A 144     -10.120   9.474  -3.925 59.28  0.00           C
ATOM    575  C   GLY A 144     -10.352   8.924  -5.300 59.28  0.00           C
ATOM    576  O   GLY A 144     -11.486   8.740  -5.697 59.28  0.00           O
ATOM    577  N   ILE A 145      -9.286   8.679  -6.041 67.60  0.00           N
ATOM    578  CA  ILE A 145      -9.380   8.016  -7.325 67.60  0.00           C
ATOM    579  C   ILE A 145      -8.437   6.791  -7.270 67.60  0.00           C
ATOM    580  O   ILE A 145      -7.274   6.920  -6.924 67.60  0.00           O
ATOM    581  N   LEU A 146      -8.955   5.621  -7.649 54.97  0.00           N
ATOM    582  CA  LEU A 146      -8.233   4.396  -7.797 54.97  0.00           C
ATOM    583  C   LEU A 146      -8.251   4.098  -9.279 54.97  0.00           C
ATOM    584  O   LEU A 146      -9.304   3.843  -9.816 54.97  0.00           O
ATOM    585  N   VAL A 147      -7.117   4.065  -9.937 46.30  0.00           N
ATOM    586  CA  VAL A 147      -7.059   3.872 -11.356 46.30  0.00           C
ATOM    587  C   VAL A 147      -6.211   2.623 -11.646 46.30  0.00           C
ATOM    588  O   VAL A 147      -5.067   2.470 -11.090 46.30  0.00           O
ATOM    589  N   TYR A 148      -6.742   1.739 -12.509 50.57  0.00           N
ATOM    590  CA  TYR A 148      -6.090   0.482 -12.844 50.57  0.00           C
ATOM    591  C   TYR A 148      -5.595   0.575 -14.257 50.57  0.00           C
ATOM    592  O   TYR A 148      -6.345   0.903 -15.117 50.57  0.00           O
ATOM    593  N   ILE A 149      -4.338   0.293 -14.483 43.47  0.00           N
ATOM    594  CA  ILE A 149      -3.766   0.206 -15.807 43.47  0.00           C
ATOM    595  C   ILE A 149      -3.430  -1.275 -15.990 43.47  0.00           C
ATOM    596  O   ILE A 149      -2.545  -1.776 -15.346 43.47  0.00           O
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ATOM    597  N   THR A 150      -4.180  -2.003 -16.800 49.22  0.00           N
ATOM    598  CA  THR A 150      -3.964  -3.413 -16.968 49.22  0.00           C
ATOM    599  C   THR A 150      -3.936  -3.690 -18.433 49.22  0.00           C
ATOM    600  O   THR A 150      -4.311  -2.846 -19.222 49.22  0.00           O
ATOM    601  N   PRO A 151      -3.486  -4.859 -18.836 41.72  0.00           N
ATOM    602  CA  PRO A 151      -3.299  -5.051 -20.300 41.72  0.00           C
ATOM    603  C   PRO A 151      -4.601  -5.273 -21.077 41.72  0.00           C
ATOM    604  O   PRO A 151      -4.598  -5.259 -22.317 41.72  0.00           O
ATOM    605  N   ASP A 152      -5.658  -5.505 -20.333 44.73  0.00           N
ATOM    606  CA  ASP A 152      -6.988  -5.753 -20.794 44.73  0.00           C
ATOM    607  C   ASP A 152      -7.910  -4.564 -20.707 44.73  0.00           C
ATOM    608  O   ASP A 152      -8.921  -4.561 -21.326 44.73  0.00           O
ATOM    609  N   ARG A 153      -7.550  -3.582 -19.909 52.13  0.00           N
ATOM    610  CA  ARG A 153      -8.418  -2.528 -19.517 52.13  0.00           C
ATOM    611  C   ARG A 153      -7.808  -1.437 -18.658 52.13  0.00           C
ATOM    612  O   ARG A 153      -7.169  -1.665 -17.715 52.13  0.00           O
ATOM    613  N   ILE A 154      -8.107  -0.221 -18.973 42.27  0.00           N
ATOM    614  CA  ILE A 154      -7.873   0.874 -18.098 42.27  0.00           C
ATOM    615  C   ILE A 154      -9.177   1.197 -17.432 42.27  0.00           C
ATOM    616  O   ILE A 154     -10.135   1.182 -18.066 42.27  0.00           O
ATOM    617  N   ALA A 155      -9.204   1.463 -16.150 45.33  0.00           N
ATOM    618  CA  ALA A 155     -10.490   1.563 -15.403 45.33  0.00           C
ATOM    619  C   ALA A 155     -10.307   2.411 -14.178 45.33  0.00           C
ATOM    620  O   ALA A 155      -9.405   2.165 -13.464 45.33  0.00           O
ATOM    621  N   GLU A 156     -11.159   3.389 -13.945 43.25  0.00           N
ATOM    622  CA  GLU A 156     -10.959   4.392 -12.924 43.25  0.00           C
ATOM    623  C   GLU A 156     -12.193   4.455 -12.023 43.25  0.00           C
ATOM    624  O   GLU A 156     -13.299   4.455 -12.446 43.25  0.00           O
ATOM    625  N   TYR A 157     -11.976   4.532 -10.746 49.46  0.00           N
ATOM    626  CA  TYR A 157     -13.044   4.493  -9.764 49.46  0.00           C
ATOM    627  C   TYR A 157     -12.934   5.658  -8.804 49.46  0.00           C
ATOM    628  O   TYR A 157     -11.853   6.011  -8.265 49.46  0.00           O
ATOM    629  N   GLU A 158     -14.055   6.253  -8.542 47.41  0.00           N
ATOM    630  CA  GLU A 158     -14.108   7.361  -7.646 47.41  0.00           C
ATOM    631  C   GLU A 158     -14.532   6.786  -6.302 47.41  0.00           C
ATOM    632  O   GLU A 158     -15.602   6.184  -6.178 47.41  0.00           O
ATOM    633  N   ILE A 159     -13.651   6.902  -5.311 51.83  0.00           N
ATOM    634  CA  ILE A 159     -13.878   6.419  -3.939 51.83  0.00           C
ATOM    635  C   ILE A 159     -13.755   7.649  -3.027 51.83  0.00           C
ATOM    636  O   ILE A 159     -12.671   8.212  -2.918 51.83  0.00           O
ATOM    637  N   ASN A 160     -14.849   8.038  -2.394 61.93  0.00           N
ATOM    638  CA  ASN A 160     -14.894   9.274  -1.638 61.93  0.00           C
ATOM    639  C   ASN A 160     -15.165   9.116  -0.146 61.93  0.00           C
ATOM    640  O   ASN A 160     -14.949  10.056   0.594 61.93  0.00           O
ATOM    641  N   GLU A 161     -15.536   7.926   0.306 47.82  0.00           N
ATOM    642  CA  GLU A 161     -15.720   7.704   1.724 47.82  0.00           C
ATOM    643  C   GLU A 161     -14.467   7.151   2.407 47.82  0.00           C
ATOM    644  O   GLU A 161     -13.997   6.052   2.116 47.82  0.00           O
ATOM    645  N   PRO A 162     -13.950   7.900   3.365 55.75  0.00           N
ATOM    646  CA  PRO A 162     -12.848   7.426   4.187 55.75  0.00           C
ATOM    647  C   PRO A 162     -13.323   6.439   5.227 55.75  0.00           C
ATOM    648  O   PRO A 162     -14.483   6.537   5.645 55.75  0.00           O
ATOM    649  N   LEU A 163     -12.444   5.517   5.661 62.98  0.00           N
ATOM    650  CA  LEU A 163     -12.805   4.572   6.724 62.98  0.00           C
ATOM    651  C   LEU A 163     -12.888   5.346   8.019 62.98  0.00           C
ATOM    652  O   LEU A 163     -12.040   6.223   8.266 62.98  0.00           O
ATOM    653  N   ASP A 164     -13.876   5.013   8.858 51.91  0.00           N
ATOM    654  CA  ASP A 164     -13.934   5.590  10.207 51.91  0.00           C
ATOM    655  C   ASP A 164     -12.616   5.280  10.928 51.91  0.00           C
ATOM    656  O   ASP A 164     -11.940   4.300  10.622 51.91  0.00           O
ATOM    657  N   GLU A 165     -12.301   6.090  11.926 46.92  0.00           N
ATOM    658  CA  GLU A 165     -11.127   5.880  12.758 46.92  0.00           C
ATOM    659  C   GLU A 165     -11.240   4.594  13.565 46.92  0.00           C
ATOM    660  O   GLU A 165     -10.265   3.923  13.761 46.92  0.00           O
ATOM    661  N   ALA A 166     -12.438   4.252  14.016 53.66  0.00           N
ATOM    662  CA  ALA A 166     -12.662   3.006  14.753 53.66  0.00           C
ATOM    663  C   ALA A 166     -12.336   1.750  13.921 53.66  0.00           C
ATOM    664  O   ALA A 166     -11.761   0.808  14.415 53.66  0.00           O
ATOM    665  N   THR A 167     -12.694   1.751  12.648 56.37  0.00           N
ATOM    666  CA  THR A 167     -12.382   0.638  11.768 56.37  0.00           C
ATOM    667  C   THR A 167     -10.872   0.497  11.623 56.37  0.00           C
ATOM    668  O   THR A 167     -10.346  -0.601  11.637 56.37  0.00           O
ATOM    669  N   ILE A 168     -10.171   1.619  11.528 67.38  0.00           N
ATOM    670  CA  ILE A 168      -8.732   1.633  11.358 67.38  0.00           C
ATOM    671  C   ILE A 168      -8.078   1.128  12.626 67.38  0.00           C
ATOM    672  O   ILE A 168      -7.058   0.457  12.570 67.38  0.00           O
ATOM    673  N   VAL A 169      -8.665   1.441  13.778 49.35  0.00           N
ATOM    674  CA  VAL A 169      -8.132   0.957  15.026 49.35  0.00           C
ATOM    675  C   VAL A 169      -8.314  -0.550  15.039 49.35  0.00           C
ATOM    676  O   VAL A 169      -7.394  -1.257  15.440 49.35  0.00           O
ATOM    677  N   ARG A 170      -9.472  -1.045  14.590 56.01  0.00           N
ATOM    678  CA  ARG A 170      -9.700  -2.518  14.528 56.01  0.00           C
ATOM    679  C   ARG A 170      -8.661  -3.202  13.604 56.01  0.00           C
ATOM    680  O   ARG A 170      -8.069  -4.207  13.996 56.01  0.00           O
ATOM    681  N   LEU A 171      -8.396  -2.610  12.430 73.24  0.00           N
ATOM    682  CA  LEU A 171      -7.379  -3.127  11.527 73.24  0.00           C
ATOM    683  C   LEU A 171      -6.020  -3.139  12.210 73.24  0.00           C
ATOM    684  O   LEU A 171      -5.257  -4.108  12.109 73.24  0.00           O
ATOM    685  N   ALA A 172      -5.723  -2.049  12.909 49.39  0.00           N
ATOM    686  CA  ALA A 172      -4.457  -1.898  13.604 49.39  0.00           C
ATOM    687  C   ALA A 172      -4.301  -2.947  14.696 49.39  0.00           C
ATOM    688  O   ALA A 172      -3.240  -3.541  14.801 49.39  0.00           O
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ATOM    689  N   GLU A 173      -5.352  -3.187  15.479 55.60  0.00           N
ATOM    690  CA  GLU A 173      -5.292  -4.177  16.568 55.60  0.00           C
ATOM    691  C   GLU A 173      -4.915  -5.559  16.053 55.60  0.00           C
ATOM    692  O   GLU A 173      -4.131  -6.255  16.707 55.60  0.00           O
ATOM    693  N   ASP A 174      -5.506  -5.961  14.919 44.03  0.00           N
ATOM    694  CA  ASP A 174      -5.208  -7.255  14.320 44.03  0.00           C
ATOM    695  C   ASP A 174      -3.815  -7.301  13.840 44.03  0.00           C
ATOM    696  O   ASP A 174      -3.169  -8.343  13.873 44.03  0.00           O
ATOM    697  N   THR A 175      -3.325  -6.165  13.384 49.85  0.00           N
ATOM    698  CA  THR A 175      -1.966  -6.171  12.887 49.85  0.00           C
ATOM    699  C   THR A 175      -1.026  -6.460  14.019 49.85  0.00           C
ATOM    700  O   THR A 175      -0.104  -7.267  13.894 49.85  0.00           O
ATOM    701  N   ILE A 176      -1.312  -5.827  15.139 17.70  0.00           N
ATOM    702  CA  ILE A 176      -0.456  -5.907  16.306 17.70  0.00           C
ATOM    703  C   ILE A 176      -0.618  -7.264  17.013 17.70  0.00           C
ATOM    704  O   ILE A 176       0.348  -7.982  17.191 17.70  0.00           O
ATOM    705  N   MSE A 177      -1.846  -7.622  17.359 27.24  0.00           N
ATOM    706  CA  MSE A 177      -2.110  -8.862  18.066 27.24  0.00           C
ATOM    707  C   MSE A 177      -2.036 -10.148  17.184 27.24  0.00           C
ATOM    708  O   MSE A 177      -2.230 -11.232  17.705 27.24  0.00           O
ATOM    709  N   LEU A 178      -1.747 -10.045  15.885 45.20  0.00           N
ATOM    710  CA  LEU A 178      -1.765 -11.195  14.931 45.20  0.00           C
ATOM    711  C   LEU A 178      -3.082 -11.987  14.963 45.20  0.00           C
ATOM    712  O   LEU A 178      -3.059 -13.216  14.908 45.20  0.00           O
ATOM    713  N   GLN A 179      -4.195 -11.295  14.914 46.50  0.00           N
ATOM    714  CA  GLN A 179      -5.488 -11.880  15.107 46.50  0.00           C
ATOM    715  C   GLN A 179      -6.016 -12.818  14.022 46.50  0.00           C
ATOM    716  O   GLN A 179      -6.283 -13.971  14.291 46.50  0.00           O
ATOM    717  N   ASN A 180      -6.209 -12.312  12.822 46.72  0.00           N
ATOM    718  CA  ASN A 180      -6.832 -13.100  11.723 46.72  0.00           C
ATOM    719  C   ASN A 180      -5.958 -13.170  10.495 46.72  0.00           C
ATOM    720  O   ASN A 180      -5.982 -12.302   9.632 46.72  0.00           O
ATOM    721  N   SER A 181      -5.162 -14.213  10.431 59.21  0.00           N
ATOM    722  CA  SER A 181      -4.294 -14.421   9.316 59.21  0.00           C
ATOM    723  C   SER A 181      -4.685 -15.651   8.495 59.21  0.00           C
ATOM    724  O   SER A 181      -4.793 -16.745   9.008 59.21  0.00           O
ATOM    725  N   PRO A 182      -4.770 -15.497   7.199 65.34  0.00           N
ATOM    726  CA  PRO A 182      -4.417 -14.305   6.461 65.34  0.00           C
ATOM    727  C   PRO A 182      -5.557 -13.337   6.500 65.34  0.00           C
ATOM    728  O   PRO A 182      -6.623 -13.675   7.004 65.34  0.00           O
ATOM    729  N   ARG A 183      -5.357 -12.135   5.998 81.95  0.00           N
ATOM    730  CA  ARG A 183      -6.436 -11.191   6.007 81.95  0.00           C
ATOM    731  C   ARG A 183      -7.372 -11.579   4.893 81.95  0.00           C
ATOM    732  O   ARG A 183      -8.603 -11.628   5.107 81.95  0.00           O
ATOM    733  N   PHE A 184      -6.785 -11.851   3.718 48.95  0.00           N
ATOM    734  CA  PHE A 184      -7.550 -12.410   2.590 48.95  0.00           C
ATOM    735  C   PHE A 184      -7.017 -13.778   2.185 48.95  0.00           C
ATOM    736  O   PHE A 184      -5.814 -14.039   2.233 48.95  0.00           O
ATOM    737  N   ASN A 185      -7.926 -14.630   1.714 52.94  0.00           N
ATOM    738  CA  ASN A 185      -7.604 -16.007   1.378 52.94  0.00           C
ATOM    739  C   ASN A 185      -6.563 -16.229   0.291 52.94  0.00           C
ATOM    740  O   ASN A 185      -5.857 -17.232   0.316 52.94  0.00           O
ATOM    741  N   TRP A 186      -6.507 -15.349  -0.690 49.34  0.00           N
ATOM    742  CA  TRP A 186      -5.602 -15.511  -1.821 49.34  0.00           C
ATOM    743  C   TRP A 186      -4.124 -15.190  -1.442 49.34  0.00           C
ATOM    744  O   TRP A 186      -3.168 -15.441  -2.207 49.34  0.00           O
ATOM    745  N   GLU A 187      -3.932 -14.615  -0.259 69.55  0.00           N
ATOM    746  CA  GLU A 187      -2.575 -14.179   0.176 69.55  0.00           C
ATOM    747  C   GLU A 187      -1.511 -15.229   0.225 69.55  0.00           C
ATOM    748  O   GLU A 187      -0.428 -15.028  -0.334 69.55  0.00           O
ATOM    749  N   CYS A 188      -1.801 -16.352   0.884 43.75  0.00           N
ATOM    750  CA  CYS A 188      -0.760 -17.344   1.180 43.75  0.00           C
ATOM    751  C   CYS A 188      -0.146 -17.865  -0.127 43.75  0.00           C
ATOM    752  O   CYS A 188       1.067 -18.120  -0.218 43.75  0.00           O
ATOM    753  N   LYS A 189      -0.970 -17.963  -1.166 20.45  0.00           N
ATOM    754  CA  LYS A 189      -0.511 -18.522  -2.447 20.45  0.00           C
ATOM    755  C   LYS A 189       0.696 -17.731  -3.018 20.45  0.00           C
ATOM    756  O   LYS A 189       1.569 -18.272  -3.724 20.45  0.00           O
ATOM    757  N   TYR A 190       0.747 -16.439  -2.708 14.03  0.00           N
ATOM    758  CA  TYR A 190       1.763 -15.611  -3.285 14.03  0.00           C
ATOM    759  C   TYR A 190       2.819 -15.235  -2.248 14.03  0.00           C
ATOM    760  O   TYR A 190       3.823 -14.654  -2.584 14.03  0.00           O
ATOM    761  N   CYS A 191       2.587 -15.625  -0.997 35.90  0.00           N
ATOM    762  CA  CYS A 191       3.353 -15.193   0.160 35.90  0.00           C
ATOM    763  C   CYS A 191       4.692 -15.934   0.269 35.90  0.00           C
ATOM    764  O   CYS A 191       4.732 -17.173   0.348 35.90  0.00           O
ATOM    765  N   ILE A 192       5.784 -15.171   0.315 22.39  0.00           N
ATOM    766  CA  ILE A 192       7.106 -15.776   0.279 22.39  0.00           C
ATOM    767  C   ILE A 192       7.409 -16.403   1.615 22.39  0.00           C
ATOM    768  O   ILE A 192       8.394 -17.068   1.711 22.39  0.00           O
ATOM    769  N   PHE A 193       6.578 -16.191   2.632 23.80  0.00           N
ATOM    770  CA  PHE A 193       6.786 -16.794   3.943 23.80  0.00           C
ATOM    771  C   PHE A 193       5.984 -18.074   4.210 23.80  0.00           C
ATOM    772  O   PHE A 193       5.990 -18.637   5.317 23.80  0.00           O
ATOM    773  N   SER A 194       5.262 -18.513   3.198 36.08  0.00           N
ATOM    774  CA  SER A 194       4.413 -19.711   3.328 36.08  0.00           C
ATOM    775  C   SER A 194       5.249 -20.909   3.657 36.08  0.00           C
ATOM    776  O   SER A 194       4.748 -21.746   4.298 36.08  0.00           O
ATOM    777  N   VAL A 195       6.503 -20.952   3.199 33.25  0.00           N
ATOM    778  CA  VAL A 195       7.410 -21.989   3.516 33.25  0.00           C
ATOM    779  C   VAL A 195       7.733 -22.174   4.979 33.25  0.00           C
ATOM    780  O   VAL A 195       8.309 -23.201   5.323 33.25  0.00           O
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ATOM    781  N   ILE A 196       7.419 -21.212   5.849 21.76  0.00           N
ATOM    782  CA  ILE A 196       7.718 -21.354   7.295 21.76  0.00           C
ATOM    783  C   ILE A 196       6.564 -20.975   8.148 21.76  0.00           C
ATOM    784  O   ILE A 196       6.683 -20.972   9.331 21.76  0.00           O
ATOM    785  N   CYS A 197       5.424 -20.671   7.561 34.17  0.00           N
ATOM    786  CA  CYS A 197       4.335 -20.157   8.329 34.17  0.00           C
ATOM    787  C   CYS A 197       3.331 -21.219   8.615 34.17  0.00           C
ATOM    788  O   CYS A 197       2.836 -21.849   7.697 34.17  0.00           O
ATOM    789  N   PRO A 198       2.960 -21.375   9.870 39.58  0.00           N
ATOM    790  CA  PRO A 198       1.970 -22.338  10.280 39.58  0.00           C
ATOM    791  C   PRO A 198       0.542 -22.046   9.971 39.58  0.00           C
ATOM    792  O   PRO A 198      -0.290 -22.938  10.156 39.58  0.00           O
ATOM    793  N   ALA A 199       0.227 -20.829   9.562 39.90  0.00           N
ATOM    794  CA  ALA A 199      -1.167 -20.431   9.353 39.90  0.00           C
ATOM    795  C   ALA A 199      -1.570 -20.467   7.877 39.90  0.00           C
ATOM    796  O   ALA A 199      -2.731 -20.267   7.563 39.90  0.00           O
ATOM    797  N   LYS A 200      -0.591 -20.655   6.991 31.81  0.00           N
ATOM    798  CA  LYS A 200      -0.778 -20.823   5.548 31.81  0.00           C
ATOM    799  C   LYS A 200      -1.946 -21.672   5.236 31.81  0.00           C
ATOM    800  O   LYS A 200      -2.051 -22.735   5.769 31.81  0.00           O
ATOM    801  N   LEU A 201      -2.799 -21.218   4.328 38.75  0.00           N
ATOM    802  CA  LEU A 201      -3.935 -22.003   3.876 38.75  0.00           C
ATOM    803  C   LEU A 201      -3.511 -23.046   2.859 38.75  0.00           C
ATOM    804  O   LEU A 201      -2.649 -22.775   2.009 38.75  0.00           O
ATOM    805  N   THR A 202      -4.127 -24.225   2.953 45.33  0.00           N
ATOM    806  CA  THR A 202      -3.796 -25.369   2.082 45.33  0.00           C
ATOM    807  C   THR A 202      -5.038 -25.920   1.370 45.33  0.00           C
ATOM    808  O   THR A 202      -6.101 -25.964   1.999 45.33  0.00           O
TER     809      THR A 202
ENDMDL
END
REMARK   1 ************************************************************************
REMARK   1 Start File NAT_vs_DEC5_dSi_colored.pdb
REMARK   1 The occupancy record was modified to represent dSi := Si(DEC)-Si(NAT).
REMARK   1 Occ=0.00 means dSi=-1.555227 kB; Occ=99.99 means dSi=1.594793 kB.
MODEL        0
ATOM      1  N   MSE A   1      23.268  -4.104 -18.521 45.76  0.00           N
ATOM      2  CA  MSE A   1      23.439  -2.722 -18.016 45.76  0.00           C
ATOM      3  C   MSE A   1      22.152  -2.161 -17.383 45.76  0.00           C
ATOM      4  O   MSE A   1      22.147  -1.650 -16.252 45.76  0.00           O
ATOM      5  N   ILE A   2      21.045  -2.254 -18.100 46.21  0.00           N
ATOM      6  CA  ILE A   2      19.816  -1.632 -17.608 46.21  0.00           C
ATOM      7  C   ILE A   2      19.269  -2.405 -16.412 46.21  0.00           C
ATOM      8  O   ILE A   2      18.935  -1.835 -15.391 46.21  0.00           O
ATOM      9  N   THR A   3      19.186  -3.703 -16.563 45.10  0.00           N
ATOM     10  CA  THR A   3      18.718  -4.606 -15.498 45.10  0.00           C
ATOM     11  C   THR A   3      19.478  -4.398 -14.212 45.10  0.00           C
ATOM     12  O   THR A   3      18.884  -4.188 -13.150 45.10  0.00           O
ATOM     13  N   GLU A   4      20.800  -4.447 -14.318 48.31  0.00           N
ATOM     14  CA  GLU A   4      21.687  -4.148 -13.195 48.31  0.00           C
ATOM     15  C   GLU A   4      21.342  -2.832 -12.484 48.31  0.00           C
ATOM     16  O   GLU A   4      21.232  -2.791 -11.242 48.31  0.00           O
ATOM     17  N   PHE A   5      21.133  -1.765 -13.247 48.37  0.00           N
ATOM     18  CA  PHE A   5      20.826  -0.486 -12.602 48.37  0.00           C
ATOM     19  C   PHE A   5      19.486  -0.520 -11.886 48.37  0.00           C
ATOM     20  O   PHE A   5      19.415  -0.122 -10.736 48.37  0.00           O
ATOM     21  N   LEU A   6      18.429  -1.039 -12.529 36.80  0.00           N
ATOM     22  CA  LEU A   6      17.100  -1.072 -11.873 36.80  0.00           C
ATOM     23  C   LEU A   6      17.119  -1.921 -10.586 36.80  0.00           C
ATOM     24  O   LEU A   6      16.551  -1.545  -9.531 36.80  0.00           O
ATOM     25  N   LEU A   7      17.767  -3.071 -10.672 54.72  0.00           N
ATOM     26  CA  LEU A   7      17.843  -3.929  -9.486 54.72  0.00           C
ATOM     27  C   LEU A   7      18.603  -3.241  -8.341 54.72  0.00           C
ATOM     28  O   LEU A   7      18.190  -3.292  -7.184 54.72  0.00           O
ATOM     29  N   LYS A   8      19.691  -2.566  -8.693 51.73  0.00           N
ATOM     30  CA  LYS A   8      20.463  -1.856  -7.680 51.73  0.00           C
ATOM     31  C   LYS A   8      19.628  -0.762  -7.044 51.73  0.00           C
ATOM     32  O   LYS A   8      19.527  -0.688  -5.819 51.73  0.00           O
ATOM     33  N   LYS A   9      18.947   0.036  -7.860 52.97  0.00           N
ATOM     34  CA  LYS A   9      18.144   1.113  -7.292 52.97  0.00           C
ATOM     35  C   LYS A   9      17.009   0.545  -6.471 52.97  0.00           C
ATOM     36  O   LYS A   9      16.708   1.086  -5.402 52.97  0.00           O
ATOM     37  N   LYS A  10      16.379  -0.547  -6.912 52.55  0.00           N
ATOM     38  CA  LYS A  10      15.262  -1.072  -6.116 52.55  0.00           C
ATOM     39  C   LYS A  10      15.660  -1.681  -4.726 52.55  0.00           C
ATOM     40  O   LYS A  10      14.931  -1.547  -3.695 52.55  0.00           O
ATOM     41  N   LEU A  11      16.798  -2.366  -4.699 38.88  0.00           N
ATOM     42  CA  LEU A  11      17.328  -2.879  -3.411 38.88  0.00           C
ATOM     43  C   LEU A  11      17.613  -1.686  -2.439 38.88  0.00           C
ATOM     44  O   LEU A  11      17.179  -1.698  -1.270 38.88  0.00           O
ATOM     45  N   GLU A  12      18.299  -0.655  -2.945 45.02  0.00           N
ATOM     46  CA  GLU A  12      18.475   0.605  -2.181 45.02  0.00           C
ATOM     47  C   GLU A  12      17.179   1.213  -1.616 45.02  0.00           C
ATOM     48  O   GLU A  12      17.048   1.390  -0.426 45.02  0.00           O
ATOM     49  N   GLU A  13      16.225   1.536  -2.461 49.97  0.00           N
ATOM     50  CA  GLU A  13      14.901   1.950  -1.974 49.97  0.00           C
ATOM     51  C   GLU A  13      14.358   1.037  -0.868 49.97  0.00           C
ATOM     52  O   GLU A  13      13.966   1.505   0.190 49.97  0.00           O
ATOM     53  N   HIS A  14      14.335  -0.267  -1.101 31.53  0.00           N
ATOM     54  CA  HIS A  14      13.794  -1.199  -0.106 31.53  0.00           C
ATOM     55  C   HIS A  14      14.560  -1.126   1.236 31.53  0.00           C
ATOM     56  O   HIS A  14      13.970  -1.122   2.322 31.53  0.00           O
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ATOM     57  N   LEU A  15      15.884  -1.079   1.145 13.88  0.00           N
ATOM     58  CA  LEU A  15      16.750  -1.011   2.322 13.88  0.00           C
ATOM     59  C   LEU A  15      16.724   0.377   2.988 13.88  0.00           C
ATOM     60  O   LEU A  15      17.114   0.492   4.140 13.88  0.00           O
ATOM     61  N   SER A  16      16.283   1.421   2.277 30.48  0.00           N
ATOM     62  CA  SER A  16      16.215   2.761   2.870 30.48  0.00           C
ATOM     63  C   SER A  16      15.126   2.866   3.937 30.48  0.00           C
ATOM     64  O   SER A  16      15.184   3.766   4.746 30.48  0.00           O
ATOM     65  N   HIS A  17      14.126   1.987   3.905 47.88  0.00           N
ATOM     66  CA  HIS A  17      12.931   2.175   4.710 47.88  0.00           C
ATOM     67  C   HIS A  17      12.911   1.290   5.925 47.88  0.00           C
ATOM     68  O   HIS A  17      12.211   0.285   5.939 47.88  0.00           O
ATOM     69  N   VAL A  18      13.667   1.662   6.952 27.03  0.00           N
ATOM     70  CA  VAL A  18      13.649   0.930   8.226 27.03  0.00           C
ATOM     71  C   VAL A  18      12.455   1.416   9.073 27.03  0.00           C
ATOM     72  O   VAL A  18      12.231   2.619   9.198 27.03  0.00           O
ATOM     73  N   LYS A  19      11.711   0.480   9.654 25.84  0.00           N
ATOM     74  CA  LYS A  19      10.394   0.738  10.251 25.84  0.00           C
ATOM     75  C   LYS A  19      10.466   0.797  11.779 25.84  0.00           C
ATOM     76  O   LYS A  19      11.024  -0.102  12.394 25.84  0.00           O
ATOM     77  N   GLU A  20       9.892   1.832  12.391 52.41  0.00           N
ATOM     78  CA  GLU A  20      10.003   2.007  13.848 52.41  0.00           C
ATOM     79  C   GLU A  20       8.986   1.178  14.597 52.41  0.00           C
ATOM     80  O   GLU A  20       7.952   0.808  14.049 52.41  0.00           O
ATOM     81  N   GLU A  21       9.300   0.899  15.861 47.67  0.00           N
ATOM     82  CA  GLU A  21       8.634  -0.168  16.607 47.67  0.00           C
ATOM     83  C   GLU A  21       7.153   0.124  16.844 47.67  0.00           C
ATOM     84  O   GLU A  21       6.369  -0.811  17.040 47.67  0.00           O
ATOM     85  N   ASN A  22       6.774   1.399  16.808 55.84  0.00           N
ATOM     86  CA  ASN A  22       5.371   1.790  16.970 55.84  0.00           C
ATOM     87  C   ASN A  22       4.716   2.391  15.715 55.84  0.00           C
ATOM     88  O   ASN A  22       3.648   3.000  15.824 55.84  0.00           O
ATOM     89  N   THR A  23       5.339   2.269  14.540 52.17  0.00           N
ATOM     90  CA  THR A  23       4.636   2.674  13.297 52.17  0.00           C
ATOM     91  C   THR A  23       3.937   1.492  12.597 52.17  0.00           C
ATOM     92  O   THR A  23       4.343   0.315  12.707 52.17  0.00           O
ATOM     93  N   ILE A  24       2.863   1.841  11.907 52.05  0.00           N
ATOM     94  CA  ILE A  24       2.133   0.908  11.089 52.05  0.00           C
ATOM     95  C   ILE A  24       1.893   1.588   9.781 52.05  0.00           C
ATOM     96  O   ILE A  24       1.270   2.646   9.760 52.05  0.00           O
ATOM     97  N   TYR A  25       2.393   1.015   8.691 49.96  0.00           N
ATOM     98  CA  TYR A  25       2.072   1.558   7.393 49.96  0.00           C
ATOM     99  C   TYR A  25       0.609   1.246   7.051 49.96  0.00           C
ATOM    100  O   TYR A  25       0.029   0.273   7.510 49.96  0.00           O
ATOM    101  N   VAL A  26       0.019   2.088   6.230 44.54  0.00           N
ATOM    102  CA  VAL A  26      -1.326   1.856   5.716 44.54  0.00           C
ATOM    103  C   VAL A  26      -1.394   0.504   4.989 44.54  0.00           C
ATOM    104  O   VAL A  26      -2.320  -0.244   5.138 44.54  0.00           O
ATOM    105  N   THR A  27      -0.413   0.264   4.153 50.31  0.00           N
ATOM    106  CA  THR A  27      -0.225  -0.940   3.432 50.31  0.00           C
ATOM    107  C   THR A  27      -0.214  -2.155   4.325 50.31  0.00           C
ATOM    108  O   THR A  27      -0.816  -3.189   4.005 50.31  0.00           O
ATOM    109  N   ASP A  28       0.421  -2.066   5.476 54.19  0.00           N
ATOM    110  CA  ASP A  28       0.217  -3.125   6.447 54.19  0.00           C
ATOM    111  C   ASP A  28      -1.221  -3.366   6.899 54.19  0.00           C
ATOM    112  O   ASP A  28      -1.560  -4.494   7.172 54.19  0.00           O
ATOM    113  N   LEU A  29      -2.082  -2.355   6.958 58.99  0.00           N
ATOM    114  CA  LEU A  29      -3.418  -2.565   7.521 58.99  0.00           C
ATOM    115  C   LEU A  29      -4.304  -3.447   6.637 58.99  0.00           C
ATOM    116  O   LEU A  29      -5.335  -3.962   7.065 58.99  0.00           O
ATOM    117  N   VAL A  30      -3.930  -3.597   5.378 54.59  0.00           N
ATOM    118  CA  VAL A  30      -4.776  -4.325   4.449 54.59  0.00           C
ATOM    119  C   VAL A  30      -4.099  -5.619   4.014 54.59  0.00           C
ATOM    120  O   VAL A  30      -4.413  -6.174   2.971 54.59  0.00           O
ATOM    121  N   ARG A  31      -3.154  -6.069   4.828 99.99  0.00           N
ATOM    122  CA  ARG A  31      -2.426  -7.287   4.613 99.99  0.00           C
ATOM    123  C   ARG A  31      -2.433  -8.174   5.834 99.99  0.00           C
ATOM    124  O   ARG A  31      -2.927  -7.806   6.907 99.99  0.00           O
ATOM    125  N   CYS A  32      -1.955  -9.395   5.616 79.02  0.00           N
ATOM    126  CA  CYS A  32      -1.910 -10.426   6.637 79.02  0.00           C
ATOM    127  C   CYS A  32      -1.015  -9.951   7.770 79.02  0.00           C
ATOM    128  O   CYS A  32       0.134  -9.567   7.534 79.02  0.00           O
ATOM    129  N   PRO A  33      -1.508 -10.024   8.999 65.88  0.00           N
ATOM    130  CA  PRO A  33      -0.664  -9.610  10.083 65.88  0.00           C
ATOM    131  C   PRO A  33       0.611 -10.429  10.223 65.88  0.00           C
ATOM    132  O   PRO A  33       1.694  -9.852  10.411 65.88  0.00           O
ATOM    133  N   ARG A  34       0.512 -11.757  10.119 59.12  0.00           N
ATOM    134  CA  ARG A  34       1.689 -12.574  10.256 59.12  0.00           C
ATOM    135  C   ARG A  34       2.720 -12.198   9.218 59.12  0.00           C
ATOM    136  O   ARG A  34       3.911 -12.267   9.453 59.12  0.00           O
ATOM    137  N   ARG A  35       2.276 -11.837   8.033 93.15  0.00           N
ATOM    138  CA  ARG A  35       3.238 -11.530   6.965 93.15  0.00           C
ATOM    139  C   ARG A  35       3.971 -10.221   7.251 93.15  0.00           C
ATOM    140  O   ARG A  35       5.151 -10.042   6.901 93.15  0.00           O
ATOM    141  N   VAL A  36       3.228  -9.297   7.848 55.58  0.00           N
ATOM    142  CA  VAL A  36       3.791  -7.981   8.175 55.58  0.00           C
ATOM    143  C   VAL A  36       4.864  -8.200   9.230 55.58  0.00           C
ATOM    144  O   VAL A  36       5.972  -7.734   9.085 55.58  0.00           O
ATOM    145  N   ARG A  37       4.561  -8.972  10.259 20.52  0.00           N
ATOM    146  CA  ARG A  37       5.600  -9.259  11.227 20.52  0.00           C
ATOM    147  C   ARG A  37       6.749 -10.045  10.630 20.52  0.00           C
ATOM    148  O   ARG A  37       7.879  -9.890  11.061 20.52  0.00           O
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ATOM    149  N   TYR A  38       6.481 -10.904   9.649 54.45  0.00           N
ATOM    150  CA  TYR A  38       7.570 -11.660   9.036 54.45  0.00           C
ATOM    151  C   TYR A  38       8.499 -10.724   8.363 54.45  0.00           C
ATOM    152  O   TYR A  38       9.689 -10.942   8.377 54.45  0.00           O
ATOM    153  N   GLU A  39       7.963  -9.678   7.760 73.98  0.00           N
ATOM    154  CA  GLU A  39       8.816  -8.667   7.126 73.98  0.00           C
ATOM    155  C   GLU A  39       9.769  -7.904   8.077 73.98  0.00           C
ATOM    156  O   GLU A  39      10.773  -7.394   7.597 73.98  0.00           O
ATOM    157  N   SER A  40       9.464  -7.844   9.380 37.54  0.00           N
ATOM    158  CA  SER A  40      10.398  -7.338  10.412 37.54  0.00           C
ATOM    159  C   SER A  40      11.345  -8.393  10.958 37.54  0.00           C
ATOM    160  O   SER A  40      12.540  -8.130  11.114 37.54  0.00           O
ATOM    161  N   GLU A  41      10.808  -9.578  11.263  2.00  0.00           N
ATOM    162  CA  GLU A  41      11.604 -10.637  11.865  2.00  0.00           C
ATOM    163  C   GLU A  41      12.456 -11.415  10.889  2.00  0.00           C
ATOM    164  O   GLU A  41      13.321 -12.135  11.370  2.00  0.00           O
ATOM    165  N   TYR A  42      12.238 -11.336   9.566 52.16  0.00           N
ATOM    166  CA  TYR A  42      13.052 -12.135   8.586 52.16  0.00           C
ATOM    167  C   TYR A  42      13.369 -11.290   7.378 52.16  0.00           C
ATOM    168  O   TYR A  42      13.024 -11.599   6.196 52.16  0.00           O
ATOM    169  N   LYS A  43      14.059 -10.210   7.691 61.43  0.00           N
ATOM    170  CA  LYS A  43      14.286  -9.169   6.756 61.43  0.00           C
ATOM    171  C   LYS A  43      15.175  -9.664   5.651 61.43  0.00           C
ATOM    172  O   LYS A  43      15.118  -9.127   4.534 61.43  0.00           O
ATOM    173  N   GLU A  44      16.024 -10.635   5.936 40.87  0.00           N
ATOM    174  CA  GLU A  44      16.906 -11.087   4.887 40.87  0.00           C
ATOM    175  C   GLU A  44      16.077 -11.799   3.791 40.87  0.00           C
ATOM    176  O   GLU A  44      16.309 -11.615   2.572 40.87  0.00           O
ATOM    177  N   LEU A  45      15.070 -12.551   4.234 34.19  0.00           N
ATOM    178  CA  LEU A  45      14.177 -13.244   3.311 34.19  0.00           C
ATOM    179  C   LEU A  45      13.268 -12.185   2.642 34.19  0.00           C
ATOM    180  O   LEU A  45      13.095 -12.177   1.406 34.19  0.00           O
ATOM    181  N   ALA A  46      12.710 -11.278   3.448 56.47  0.00           N
ATOM    182  CA  ALA A  46      11.893 -10.178   2.897 56.47  0.00           C
ATOM    183  C   ALA A  46      12.519  -9.534   1.649 56.47  0.00           C
ATOM    184  O   ALA A  46      11.825  -9.262   0.709 56.47  0.00           O
ATOM    185  N   ILE A  47      13.830  -9.341   1.634 44.14  0.00           N
ATOM    186  CA  ILE A  47      14.526  -8.691   0.538 44.14  0.00           C
ATOM    187  C   ILE A  47      14.299  -9.332  -0.838 44.14  0.00           C
ATOM    188  O   ILE A  47      14.451  -8.669  -1.895 44.14  0.00           O
ATOM    189  N   SER A  48      13.959 -10.620  -0.874 56.13  0.00           N
ATOM    190  CA  SER A  48      13.715 -11.277  -2.169 56.13  0.00           C
ATOM    191  C   SER A  48      12.509 -10.666  -2.882 56.13  0.00           C
ATOM    192  O   SER A  48      12.401 -10.723  -4.108 56.13  0.00           O
ATOM    193  N   GLN A  49      11.610 -10.068  -2.123 63.24  0.00           N
ATOM    194  CA  GLN A  49      10.459  -9.434  -2.743 63.24  0.00           C
ATOM    195  C   GLN A  49      10.847  -8.226  -3.623 63.24  0.00           C
ATOM    196  O   GLN A  49      10.116  -7.889  -4.482 63.24  0.00           O
ATOM    197  N   VAL A  50      12.031  -7.643  -3.424 56.27  0.00           N
ATOM    198  CA  VAL A  50      12.659  -6.700  -4.358 56.27  0.00           C
ATOM    199  C   VAL A  50      12.750  -7.176  -5.802 56.27  0.00           C
ATOM    200  O   VAL A  50      12.805  -6.373  -6.754 56.27  0.00           O
ATOM    201  N   TYR A  51      12.865  -8.468  -5.991 45.04  0.00           N
ATOM    202  CA  TYR A  51      13.231  -8.953  -7.306 45.04  0.00           C
ATOM    203  C   TYR A  51      12.000  -9.515  -8.013 45.04  0.00           C
ATOM    204  O   TYR A  51      12.116 -10.179  -9.031 45.04  0.00           O
ATOM    205  N   ALA A  52      10.823  -9.258  -7.445 44.86  0.00           N
ATOM    206  CA  ALA A  52       9.580  -9.586  -8.075 44.86  0.00           C
ATOM    207  C   ALA A  52       9.375  -8.694  -9.336 44.86  0.00           C
ATOM    208  O   ALA A  52       9.152  -7.478  -9.216 44.86  0.00           O
ATOM    209  N   PRO A  53       9.401  -9.282 -10.541 43.70  0.00           N
ATOM    210  CA  PRO A  53       9.338  -8.519 -11.804 43.70  0.00           C
ATOM    211  C   PRO A  53       8.051  -7.715 -11.969 43.70  0.00           C
ATOM    212  O   PRO A  53       8.107  -6.662 -12.589 43.70  0.00           O
ATOM    213  N   SER A  54       6.912  -8.185 -11.428 42.78  0.00           N
ATOM    214  CA  SER A  54       5.662  -7.382 -11.372 42.78  0.00           C
ATOM    215  C   SER A  54       5.807  -6.143 -10.551 42.78  0.00           C
ATOM    216  O   SER A  54       5.159  -5.116 -10.806 42.78  0.00           O
ATOM    217  N   ALA A  55       6.666  -6.210  -9.534 45.72  0.00           N
ATOM    218  CA  ALA A  55       6.871  -5.023  -8.707 45.72  0.00           C
ATOM    219  C   ALA A  55       7.756  -4.055  -9.490 45.72  0.00           C
ATOM    220  O   ALA A  55       7.598  -2.860  -9.403 45.72  0.00           O
ATOM    221  N   ILE A  56       8.662  -4.543 -10.314 37.37  0.00           N
ATOM    222  CA  ILE A  56       9.562  -3.610 -11.005 37.37  0.00           C
ATOM    223  C   ILE A  56       8.724  -2.964 -12.115 37.37  0.00           C
ATOM    224  O   ILE A  56       8.790  -1.755 -12.348 37.37  0.00           O
ATOM    225  N   LEU A  57       7.912  -3.805 -12.760 21.14  0.00           N
ATOM    226  CA  LEU A  57       6.935  -3.366 -13.747 21.14  0.00           C
ATOM    227  C   LEU A  57       6.033  -2.336 -13.087 21.14  0.00           C
ATOM    228  O   LEU A  57       5.874  -1.207 -13.590 21.14  0.00           O
ATOM    229  N   GLY A  58       5.483  -2.701 -11.946 40.76  0.00           N
ATOM    230  CA  GLY A  58       4.634  -1.806 -11.182 40.76  0.00           C
ATOM    231  C   GLY A  58       5.258  -0.473 -10.875 40.76  0.00           C
ATOM    232  O   GLY A  58       4.607   0.560 -11.036 40.76  0.00           O
ATOM    233  N   ASP A  59       6.514  -0.439 -10.443 51.13  0.00           N
ATOM    234  CA  ASP A  59       7.150   0.844 -10.105 51.13  0.00           C
ATOM    235  C   ASP A  59       7.486   1.775 -11.275 51.13  0.00           C
ATOM    236  O   ASP A  59       7.461   2.943 -11.121 51.13  0.00           O
ATOM    237  N   ILE A  60       7.874   1.212 -12.405 29.56  0.00           N
ATOM    238  CA  ILE A  60       8.072   1.923 -13.651 29.56  0.00           C
ATOM    239  C   ILE A  60       6.774   2.586 -14.133 29.56  0.00           C
ATOM    240  O   ILE A  60       6.798   3.761 -14.559 29.56  0.00           O
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ATOM    241  N   LEU A  61       5.641   1.870 -14.058 26.41  0.00           N
ATOM    242  CA  LEU A  61       4.334   2.454 -14.392 26.41  0.00           C
ATOM    243  C   LEU A  61       4.024   3.653 -13.537 26.41  0.00           C
ATOM    244  O   LEU A  61       3.668   4.678 -14.050 26.41  0.00           O
ATOM    245  N   HIS A  62       4.172   3.508 -12.232 53.85  0.00           N
ATOM    246  CA  HIS A  62       3.968   4.616 -11.306 53.85  0.00           C
ATOM    247  C   HIS A  62       4.884   5.714 -11.684 53.85  0.00           C
ATOM    248  O   HIS A  62       4.443   6.854 -11.841 53.85  0.00           O
ATOM    249  N   LEU A  63       6.158   5.423 -11.888 53.09  0.00           N
ATOM    250  CA  LEU A  63       7.034   6.526 -12.325 53.09  0.00           C
ATOM    251  C   LEU A  63       6.405   7.217 -13.537 53.09  0.00           C
ATOM    252  O   LEU A  63       6.167   8.394 -13.497 53.09  0.00           O
ATOM    253  N   GLY A  64       6.109   6.499 -14.603 47.77  0.00           N
ATOM    254  CA  GLY A  64       5.719   7.158 -15.811 47.77  0.00           C
ATOM    255  C   GLY A  64       4.400   7.890 -15.740 47.77  0.00           C
ATOM    256  O   GLY A  64       4.174   8.755 -16.509 47.77  0.00           O
ATOM    257  N   LEU A  65       3.499   7.454 -14.886 26.44  0.00           N
ATOM    258  CA  LEU A  65       2.129   7.928 -14.922 26.44  0.00           C
ATOM    259  C   LEU A  65       2.136   9.075 -13.968 26.44  0.00           C
ATOM    260  O   LEU A  65       1.699  10.153 -14.266 26.44  0.00           O
ATOM    261  N   GLU A  66       2.672   8.845 -12.789 54.44  0.00           N
ATOM    262  CA  GLU A  66       3.061   9.970 -11.943 54.44  0.00           C
ATOM    263  C   GLU A  66       3.702  11.154 -12.688 54.44  0.00           C
ATOM    264  O   GLU A  66       3.297  12.272 -12.436 54.44  0.00           O
ATOM    265  N   SER A  67       4.665  10.981 -13.581 47.72  0.00           N
ATOM    266  CA  SER A  67       5.183  12.221 -14.250 47.72  0.00           C
ATOM    267  C   SER A  67       4.100  13.012 -15.067 47.72  0.00           C
ATOM    268  O   SER A  67       4.182  14.248 -15.203 47.72  0.00           O
ATOM    269  N   VAL A  68       3.091  12.293 -15.600 48.52  0.00           N
ATOM    270  CA  VAL A  68       1.939  12.934 -16.238 48.52  0.00           C
ATOM    271  C   VAL A  68       1.158  13.773 -15.231 48.52  0.00           C
ATOM    272  O   VAL A  68       0.645  14.865 -15.520 48.52  0.00           O
ATOM    273  N   LEU A  69       1.040  13.216 -14.047 40.41  0.00           N
ATOM    274  CA  LEU A  69       0.261  13.818 -13.004 40.41  0.00           C
ATOM    275  C   LEU A  69       0.848  15.118 -12.430 40.41  0.00           C
ATOM    276  O   LEU A  69       0.134  15.992 -11.952 40.41  0.00           O
ATOM    277  N   LYS A  70       2.165  15.215 -12.445 41.93  0.00           N
ATOM    278  CA  LYS A  70       2.860  16.356 -11.911 41.93  0.00           C
ATOM    279  C   LYS A  70       2.708  17.450 -12.934 41.93  0.00           C
ATOM    280  O   LYS A  70       2.497  18.596 -12.562 41.93  0.00           O
ATOM    281  N   GLY A  71       2.769  17.105 -14.229 46.57  0.00           N
ATOM    282  CA  GLY A  71       2.550  18.111 -15.305 46.57  0.00           C
ATOM    283  C   GLY A  71       1.130  18.685 -15.376 46.57  0.00           C
ATOM    284  O   GLY A  71       0.821  19.815 -14.923 46.57  0.00           O
ATOM    285  N   ASN A  72       0.217  17.876 -15.876 46.68  0.00           N
ATOM    286  CA  ASN A  72      -1.095  18.370 -16.206 46.68  0.00           C
ATOM    287  C   ASN A  72      -2.040  18.612 -15.074 46.68  0.00           C
ATOM    288  O   ASN A  72      -2.921  19.420 -15.211 46.68  0.00           O
ATOM    289  N   PHE A  73      -1.880  17.933 -13.966 43.70  0.00           N
ATOM    290  CA  PHE A  73      -2.766  18.118 -12.847 43.70  0.00           C
ATOM    291  C   PHE A  73      -2.091  18.771 -11.639 43.70  0.00           C
ATOM    292  O   PHE A  73      -2.674  18.861 -10.593 43.70  0.00           O
ATOM    293  N   ASN A  74      -0.838  19.166 -11.735 53.08  0.00           N
ATOM    294  CA  ASN A  74      -0.201  19.781 -10.582 53.08  0.00           C
ATOM    295  C   ASN A  74      -0.355  18.949  -9.279 53.08  0.00           C
ATOM    296  O   ASN A  74      -0.590  19.474  -8.165 53.08  0.00           O
ATOM    297  N   ALA A  75      -0.160  17.641  -9.414 38.69  0.00           N
ATOM    298  CA  ALA A  75      -0.115  16.792  -8.245 38.69  0.00           C
ATOM    299  C   ALA A  75       1.282  16.777  -7.622 38.69  0.00           C
ATOM    300  O   ALA A  75       2.270  16.992  -8.289 38.69  0.00           O
ATOM    301  N   GLU A  76       1.336  16.530  -6.332 45.22  0.00           N
ATOM    302  CA  GLU A  76       2.559  16.069  -5.695 45.22  0.00           C
ATOM    303  C   GLU A  76       2.544  14.546  -5.834 45.22  0.00           C
ATOM    304  O   GLU A  76       1.466  13.957  -5.865 45.22  0.00           O
ATOM    305  N   THR A  77       3.710  13.915  -5.909 56.43  0.00           N
ATOM    306  CA  THR A  77       3.794  12.484  -6.087 56.43  0.00           C
ATOM    307  C   THR A  77       4.639  11.898  -4.978 56.43  0.00           C
ATOM    308  O   THR A  77       5.510  12.566  -4.500 56.43  0.00           O
ATOM    309  N   GLU A  78       4.321  10.666  -4.562 57.47  0.00           N
ATOM    310  CA  GLU A  78       4.988   9.920  -3.517 57.47  0.00           C
ATOM    311  C   GLU A  78       5.020  10.703  -2.232 57.47  0.00           C
ATOM    312  O   GLU A  78       6.063  10.936  -1.623 57.47  0.00           O
ATOM    313  N   VAL A  79       3.826  11.074  -1.816 35.16  0.00           N
ATOM    314  CA  VAL A  79       3.635  12.010  -0.767 35.16  0.00           C
ATOM    315  C   VAL A  79       3.474  11.303   0.544 35.16  0.00           C
ATOM    316  O   VAL A  79       2.510  10.573   0.774 35.16  0.00           O
ATOM    317  N   GLU A  80       4.416  11.580   1.421 42.23  0.00           N
ATOM    318  CA  GLU A  80       4.530  10.857   2.668 42.23  0.00           C
ATOM    319  C   GLU A  80       3.901  11.655   3.780 42.23  0.00           C
ATOM    320  O   GLU A  80       4.090  12.840   3.853 42.23  0.00           O
ATOM    321  N   THR A  81       3.177  11.027   4.670 32.21  0.00           N
ATOM    322  CA  THR A  81       2.510  11.744   5.761 32.21  0.00           C
ATOM    323  C   THR A  81       2.133  10.811   6.884 32.21  0.00           C
ATOM    324  O   THR A  81       2.164   9.597   6.754 32.21  0.00           O
ATOM    325  N   LEU A  82       1.667  11.373   7.976 30.57  0.00           N
ATOM    326  CA  LEU A  82       1.644  10.601   9.202 30.57  0.00           C
ATOM    327  C   LEU A  82       0.492  11.060  10.035 30.57  0.00           C
ATOM    328  O   LEU A  82       0.098  12.203   9.950 30.57  0.00           O
ATOM    329  N   ARG A  83      -0.124  10.141  10.761 43.98  0.00           N
ATOM    330  CA  ARG A  83      -1.326  10.449  11.518 43.98  0.00           C
ATOM    331  C   ARG A  83      -1.368   9.467  12.659 43.98  0.00           C
ATOM    332  O   ARG A  83      -0.926   8.327  12.512 43.98  0.00           O
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ATOM    333  N   GLU A  84      -1.873   9.890  13.809 48.79  0.00           N
ATOM    334  CA  GLU A  84      -1.727   9.022  14.978 48.79  0.00           C
ATOM    335  C   GLU A  84      -3.042   8.425  15.425 48.79  0.00           C
ATOM    336  O   GLU A  84      -4.110   8.996  15.183 48.79  0.00           O
ATOM    337  N   ILE A  85      -2.918   7.275  16.095 54.30  0.00           N
ATOM    338  CA  ILE A  85      -4.029   6.451  16.449 54.30  0.00           C
ATOM    339  C   ILE A  85      -3.781   5.841  17.813 54.30  0.00           C
ATOM    340  O   ILE A  85      -2.643   5.507  18.123 54.30  0.00           O
ATOM    341  N   ASN A  86      -4.840   5.701  18.619 49.78  0.00           N
ATOM    342  CA  ASN A  86      -4.761   5.021  19.937 49.78  0.00           C
ATOM    343  C   ASN A  86      -5.250   3.566  19.895 49.78  0.00           C
ATOM    344  O   ASN A  86      -6.399   3.293  19.511 49.78  0.00           O
ATOM    345  N   VAL A  87      -4.383   2.645  20.322 52.65  0.00           N
ATOM    346  CA  VAL A  87      -4.703   1.227  20.308 52.65  0.00           C
ATOM    347  C   VAL A  87      -4.355   0.547  21.630 52.65  0.00           C
ATOM    348  O   VAL A  87      -3.230   0.067  21.819 52.65  0.00           O
ATOM    349  N   GLY A  88      -5.321   0.484  22.542 48.80  0.00           N
ATOM    350  CA  GLY A  88      -5.066  -0.115  23.865 48.80  0.00           C
ATOM    351  C   GLY A  88      -4.192   0.803  24.708 48.80  0.00           C
ATOM    352  O   GLY A  88      -3.216   0.373  25.351 48.80  0.00           O
ATOM    353  N   GLY A  89      -4.538   2.089  24.663 48.31  0.00           N
ATOM    354  CA  GLY A  89      -3.780   3.124  25.348 48.31  0.00           C
ATOM    355  C   GLY A  89      -2.339   3.328  24.890 48.31  0.00           C
ATOM    356  O   GLY A  89      -1.668   4.231  25.406 48.31  0.00           O
ATOM    357  N   LYS A  90      -1.846   2.502  23.956 50.78  0.00           N
ATOM    358  CA  LYS A  90      -0.547   2.733  23.318 50.78  0.00           C
ATOM    359  C   LYS A  90      -0.830   3.651  22.138 50.78  0.00           C
ATOM    360  O   LYS A  90      -1.881   3.541  21.497 50.78  0.00           O
ATOM    361  N   VAL A  91       0.069   4.592  21.872 52.58  0.00           N
ATOM    362  CA  VAL A  91      -0.106   5.503  20.744 52.58  0.00           C
ATOM    363  C   VAL A  91       0.675   4.963  19.561 52.58  0.00           C
ATOM    364  O   VAL A  91       1.817   4.523  19.727 52.58  0.00           O
ATOM    365  N   TYR A  92       0.052   5.005  18.377 65.64  0.00           N
ATOM    366  CA  TYR A  92       0.676   4.480  17.190 65.64  0.00           C
ATOM    367  C   TYR A  92       0.645   5.490  16.087 65.64  0.00           C
ATOM    368  O   TYR A  92      -0.329   6.191  15.893 65.64  0.00           O
ATOM    369  N   LYS A  93       1.747   5.547  15.371 72.23  0.00           N
ATOM    370  CA  LYS A  93       1.859   6.412  14.217 72.23  0.00           C
ATOM    371  C   LYS A  93       1.524   5.603  12.955 72.23  0.00           C
ATOM    372  O   LYS A  93       2.270   4.714  12.581 72.23  0.00           O
ATOM    373  N   ILE A  94       0.406   5.927  12.320 56.66  0.00           N
ATOM    374  CA  ILE A  94       0.084   5.372  11.038 56.66  0.00           C
ATOM    375  C   ILE A  94       0.743   6.184   9.929 56.66  0.00           C
ATOM    376  O   ILE A  94       0.556   7.385   9.807 56.66  0.00           O
ATOM    377  N   LYS A  95       1.497   5.507   9.097 73.79  0.00           N
ATOM    378  CA  LYS A  95       2.305   6.166   8.106 73.79  0.00           C
ATOM    379  C   LYS A  95       1.950   5.702   6.699 73.79  0.00           C
ATOM    380  O   LYS A  95       1.760   4.545   6.470 73.79  0.00           O
ATOM    381  N   GLY A  96       1.853   6.613   5.743 50.94  0.00           N
ATOM    382  CA  GLY A  96       1.572   6.242   4.383 50.94  0.00           C
ATOM    383  C   GLY A  96       2.142   7.179   3.378 50.94  0.00           C
ATOM    384  O   GLY A  96       2.537   8.280   3.703 50.94  0.00           O
ATOM    385  N   ARG A  97       2.107   6.740   2.138 36.06  0.00           N
ATOM    386  CA  ARG A  97       2.693   7.428   1.007 36.06  0.00           C
ATOM    387  C   ARG A  97       1.769   7.206  -0.178 36.06  0.00           C
ATOM    388  O   ARG A  97       1.672   6.084  -0.699 36.06  0.00           O
ATOM    389  N   ALA A  98       1.104   8.281  -0.588 44.10  0.00           N
ATOM    390  CA  ALA A  98       0.117   8.243  -1.592 44.10  0.00           C
ATOM    391  C   ALA A  98       0.862   8.383  -2.906 44.10  0.00           C
ATOM    392  O   ALA A  98       1.855   9.097  -3.010 44.10  0.00           O
ATOM    393  N   ASP A  99       0.424   7.673  -3.912 48.55  0.00           N
ATOM    394  CA  ASP A  99       1.076   7.754  -5.196 48.55  0.00           C
ATOM    395  C   ASP A  99       0.974   9.188  -5.720 48.55  0.00           C
ATOM    396  O   ASP A  99       1.922   9.707  -6.350 48.55  0.00           O
ATOM    397  N   ALA A 100      -0.166   9.846  -5.513 55.53  0.00           N
ATOM    398  CA  ALA A 100      -0.251  11.269  -5.953 55.53  0.00           C
ATOM    399  C   ALA A 100      -1.290  11.992  -5.184 55.53  0.00           C
ATOM    400  O   ALA A 100      -2.232  11.366  -4.731 55.53  0.00           O
ATOM    401  N   ILE A 101      -1.104  13.303  -4.998 45.41  0.00           N
ATOM    402  CA  ILE A 101      -2.137  14.137  -4.384 45.41  0.00           C
ATOM    403  C   ILE A 101      -2.390  15.420  -5.140 45.41  0.00           C
ATOM    404  O   ILE A 101      -1.467  16.143  -5.558 45.41  0.00           O
ATOM    405  N   ILE A 102      -3.672  15.695  -5.329 45.98  0.00           N
ATOM    406  CA  ILE A 102      -4.083  17.004  -5.796 45.98  0.00           C
ATOM    407  C   ILE A 102      -4.628  17.765  -4.581 45.98  0.00           C
ATOM    408  O   ILE A 102      -5.695  17.431  -4.073 45.98  0.00           O
ATOM    409  N   ARG A 103      -3.845  18.751  -4.103   0.00  0.00           N
ATOM    410  CA  ARG A 103      -4.150  19.504  -2.879   0.00  0.00           C
ATOM    411  C   ARG A 103      -5.423  20.391  -2.949   0.00  0.00           C
ATOM    412  O   ARG A 103      -6.199  20.482  -1.960   0.00  0.00           O
ATOM    413  N   ASN A 104      -5.626  21.051  -4.095 49.80  0.00           N
ATOM    414  CA  ASN A 104      -6.745  21.998  -4.259 49.80  0.00           C
ATOM    415  C   ASN A 104      -7.230  21.994  -5.679 49.80  0.00           C
ATOM    416  O   ASN A 104      -6.693  22.692  -6.538 49.80  0.00           O
ATOM    417  N   ASP A 105      -8.253  21.174  -5.879 49.74  0.00           N
ATOM    418  CA  ASP A 105      -9.039  21.134  -7.084 49.74  0.00           C
ATOM    419  C   ASP A 105     -10.471  21.605  -6.714 49.74  0.00           C
ATOM    420  O   ASP A 105     -11.262  20.843  -6.158 49.74  0.00           O
ATOM    421  N   ASN A 106     -10.768  22.878  -6.986 45.80  0.00           N
ATOM    422  CA  ASN A 106     -12.040  23.506  -6.575 45.80  0.00           C
ATOM    423  C   ASN A 106     -12.422  23.321  -5.104 45.80  0.00           C
ATOM    424  O   ASN A 106     -13.561  23.020  -4.774 45.80  0.00           O
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ATOM    425  N   GLY A 107     -11.470  23.524  -4.215 40.33  0.00           N
ATOM    426  CA  GLY A 107     -11.717  23.337  -2.789 40.33  0.00           C
ATOM    427  C   GLY A 107     -11.737  21.883  -2.335 40.33  0.00           C
ATOM    428  O   GLY A 107     -12.404  21.544  -1.352 40.33  0.00           O
ATOM    429  N   LYS A 108     -11.008  21.019  -3.043 28.24  0.00           N
ATOM    430  CA  LYS A 108     -10.915  19.615  -2.668 28.24  0.00           C
ATOM    431  C   LYS A 108      -9.483  19.049  -2.884 28.24  0.00           C
ATOM    432  O   LYS A 108      -8.779  19.403  -3.839 28.24  0.00           O
ATOM    433  N   SER A 109      -9.039  18.236  -1.933 50.50  0.00           N
ATOM    434  CA  SER A 109      -7.862  17.387  -2.118 50.50  0.00           C
ATOM    435  C   SER A 109      -8.308  16.067  -2.739 50.50  0.00           C
ATOM    436  O   SER A 109      -9.315  15.517  -2.353 50.50  0.00           O
ATOM    437  N   ILE A 110      -7.524  15.551  -3.650 46.11  0.00           N
ATOM    438  CA  ILE A 110      -7.790  14.265  -4.209 46.11  0.00           C
ATOM    439  C   ILE A 110      -6.588  13.343  -3.999 46.11  0.00           C
ATOM    440  O   ILE A 110      -5.512  13.629  -4.510 46.11  0.00           O
ATOM    441  N   VAL A 111      -6.752  12.243  -3.266 52.77  0.00           N
ATOM    442  CA  VAL A 111      -5.679  11.220  -3.198 52.77  0.00           C
ATOM    443  C   VAL A 111      -5.836  10.276  -4.388 52.77  0.00           C
ATOM    444  O   VAL A 111      -6.932   9.764  -4.636 52.77  0.00           O
ATOM    445  N   ILE A 112      -4.775  10.018  -5.128 49.99  0.00           N
ATOM    446  CA  ILE A 112      -4.866   9.126  -6.282 49.99  0.00           C
ATOM    447  C   ILE A 112      -4.010   7.894  -6.056 49.99  0.00           C
ATOM    448  O   ILE A 112      -2.842   8.019  -5.770 49.99  0.00           O
ATOM    449  N   GLU A 113      -4.547   6.709  -6.243 56.99  0.00           N
ATOM    450  CA  GLU A 113      -3.780   5.455  -6.060 56.99  0.00           C
ATOM    451  C   GLU A 113      -3.823   4.710  -7.388 56.99  0.00           C
ATOM    452  O   GLU A 113      -4.882   4.569  -8.052 56.99  0.00           O
ATOM    453  N   ILE A 114      -2.657   4.354  -7.861 52.33  0.00           N
ATOM    454  CA  ILE A 114      -2.531   3.758  -9.150 52.33  0.00           C
ATOM    455  C   ILE A 114      -2.210   2.295  -8.960 52.33  0.00           C
ATOM    456  O   ILE A 114      -1.423   1.954  -8.099 52.33  0.00           O
ATOM    457  N   LYS A 115      -2.787   1.433  -9.786 54.13  0.00           N
ATOM    458  CA  LYS A 115      -2.621   0.003  -9.616 54.13  0.00           C
ATOM    459  C   LYS A 115      -2.438  -0.643 -10.947 54.13  0.00           C
ATOM    460  O   LYS A 115      -2.964  -0.176 -11.951 54.13  0.00           O
ATOM    461  N   THR A 116      -1.684  -1.729 -10.958 43.55  0.00           N
ATOM    462  CA  THR A 116      -1.468  -2.466 -12.194 43.55  0.00           C
ATOM    463  C   THR A 116      -1.602  -3.921 -11.890 43.55  0.00           C
ATOM    464  O   THR A 116      -1.369  -4.337 -10.804 43.55  0.00           O
ATOM    465  N   SER A 117      -2.085  -4.706 -12.802 40.11  0.00           N
ATOM    466  CA  SER A 117      -2.109  -6.154 -12.601 40.11  0.00           C
ATOM    467  C   SER A 117      -2.180  -6.692 -13.946 40.11  0.00           C
ATOM    468  O   SER A 117      -2.324  -5.911 -14.909 40.11  0.00           O
ATOM    469  N   ARG A 118      -2.032  -8.006 -14.033 45.62  0.00           N
ATOM    470  CA  ARG A 118      -2.068  -8.640 -15.363 45.62  0.00           C
ATOM    471  C   ARG A 118      -3.471  -8.928 -15.862 45.62  0.00           C
ATOM    472  O   ARG A 118      -3.648  -9.162 -17.069 45.62  0.00           O
ATOM    473  N   SER A 119      -4.457  -8.893 -14.965 45.19  0.00           N
ATOM    474  CA  SER A 119      -5.872  -9.062 -15.362 45.19  0.00           C
ATOM    475  C   SER A 119      -6.800  -7.967 -14.770 45.19  0.00           C
ATOM    476  O   SER A 119      -6.533  -7.439 -13.690 45.19  0.00           O
ATOM    477  N   ASP A 120      -7.938  -7.766 -15.424 53.65  0.00           N
ATOM    478  CA  ASP A 120      -8.922  -6.789 -15.023 53.65  0.00           C
ATOM    479  C   ASP A 120     -10.062  -7.464 -14.339 53.65  0.00           C
ATOM    480  O   ASP A 120     -11.180  -6.930 -14.286 53.65  0.00           O
ATOM    481  N   LYS A 121      -9.805  -8.622 -13.800 42.30  0.00           N
ATOM    482  CA  LYS A 121     -10.861  -9.343 -13.147 42.30  0.00           C
ATOM    483  C   LYS A 121     -11.305  -8.719 -11.850 42.30  0.00           C
ATOM    484  O   LYS A 121     -10.493  -8.415 -10.994 42.30  0.00           O
ATOM    485  N   GLY A 122     -12.595  -8.552 -11.661 49.97  0.00           N
ATOM    486  CA  GLY A 122     -13.099  -8.150 -10.341 49.97  0.00           C
ATOM    487  C   GLY A 122     -12.816  -6.695  -9.897 49.97  0.00           C
ATOM    488  O   GLY A 122     -13.062  -6.363  -8.702 49.97  0.00           O
ATOM    489  N   LEU A 123     -12.369  -5.819 -10.826 66.42  0.00           N
ATOM    490  CA  LEU A 123     -12.047  -4.418 -10.440 66.42  0.00           C
ATOM    491  C   LEU A 123     -13.261  -3.672  -9.972 66.42  0.00           C
ATOM    492  O   LEU A 123     -14.252  -3.694 -10.654 66.42  0.00           O
ATOM    493  N   PRO A 124     -13.153  -2.951  -8.838 52.81  0.00           N
ATOM    494  CA  PRO A 124     -11.936  -2.786  -8.048 52.81  0.00           C
ATOM    495  C   PRO A 124     -11.854  -3.776  -6.934 52.81  0.00           C
ATOM    496  O   PRO A 124     -12.861  -4.122  -6.314 52.81  0.00           O
ATOM    497  N   LEU A 125     -10.645  -4.184  -6.634 37.58  0.00           N
ATOM    498  CA  LEU A 125     -10.394  -5.171  -5.542 37.58  0.00           C
ATOM    499  C   LEU A 125     -10.497  -4.530  -4.149 37.58  0.00           C
ATOM    500  O   LEU A 125     -10.112  -3.350  -3.908 37.58  0.00           O
ATOM    501  N   ILE A 126     -11.048  -5.276  -3.221 55.60  0.00           N
ATOM    502  CA  ILE A 126     -11.528  -4.647  -1.996 55.60  0.00           C
ATOM    503  C   ILE A 126     -10.339  -4.126  -1.167 55.60  0.00           C
ATOM    504  O   ILE A 126     -10.462  -3.123  -0.513 55.60  0.00           O
ATOM    505  N   HIS A 127      -9.195  -4.779  -1.251 54.70  0.00           N
ATOM    506  CA  HIS A 127      -8.055  -4.383  -0.479 54.70  0.00           C
ATOM    507  C   HIS A 127      -7.440  -3.163  -1.103 54.70  0.00           C
ATOM    508  O   HIS A 127      -6.834  -2.382  -0.415 54.70  0.00           O
ATOM    509  N   HIS A 128      -7.592  -2.980  -2.400 42.39  0.00           N
ATOM    510  CA  HIS A 128      -7.176  -1.718  -3.018 42.39  0.00           C
ATOM    511  C   HIS A 128      -8.083  -0.558  -2.609 42.39  0.00           C
ATOM    512  O   HIS A 128      -7.606   0.554  -2.368 42.39  0.00           O
ATOM    513  N   LYS A 129      -9.365  -0.803  -2.526 38.83  0.00           N
ATOM    514  CA  LYS A 129     -10.266   0.264  -2.198 38.83  0.00           C
ATOM    515  C   LYS A 129     -10.028   0.593  -0.745 38.83  0.00           C
ATOM    516  O   LYS A 129      -9.930   1.747  -0.408 38.83  0.00           O
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ATOM    517  N   MSE A 130      -9.911  -0.410   0.128 53.12  0.00           N
ATOM    518  CA  MSE A 130      -9.661  -0.122   1.564 53.12  0.00           C
ATOM    519  C   MSE A 130      -8.432   0.772   1.739 53.12  0.00           C
ATOM    520  O   MSE A 130      -8.445   1.649   2.550 53.12  0.00           O
ATOM    521  N   GLN A 131      -7.394   0.520   0.958 55.83  0.00           N
ATOM    522  CA  GLN A 131      -6.133   1.211   1.097 55.83  0.00           C
ATOM    523  C   GLN A 131      -6.400   2.668   0.780 55.83  0.00           C
ATOM    524  O   GLN A 131      -5.918   3.542   1.460 55.83  0.00           O
ATOM    525  N   LEU A 132      -7.195   2.936  -0.242 51.50  0.00           N
ATOM    526  CA  LEU A 132      -7.436   4.290  -0.682 51.50  0.00           C
ATOM    527  C   LEU A 132      -8.295   4.984   0.347 51.50  0.00           C
ATOM    528  O   LEU A 132      -8.142   6.173   0.629 51.50  0.00           O
ATOM    529  N   GLN A 133      -9.173   4.244   0.963 48.48  0.00           N
ATOM    530  CA  GLN A 133     -10.034   4.835   1.951 48.48  0.00           C
ATOM    531  C   GLN A 133      -9.306   5.181   3.263 48.48  0.00           C
ATOM    532  O   GLN A 133      -9.739   6.050   4.021 48.48  0.00           O
ATOM    533  N   ILE A 134      -8.240   4.450   3.561 74.19  0.00           N
ATOM    534  CA  ILE A 134      -7.448   4.750   4.709 74.19  0.00           C
ATOM    535  C   ILE A 134      -6.635   6.008   4.375 74.19  0.00           C
ATOM    536  O   ILE A 134      -6.604   6.904   5.182 74.19  0.00           O
ATOM    537  N   TYR A 135      -5.993   6.089   3.200 50.36  0.00           N
ATOM    538  CA  TYR A 135      -5.308   7.299   2.832 50.36  0.00           C
ATOM    539  C   TYR A 135      -6.263   8.486   3.003 50.36  0.00           C
ATOM    540  O   TYR A 135      -5.876   9.536   3.592 50.36  0.00           O
ATOM    541  N   LEU A 136      -7.510   8.345   2.563 55.33  0.00           N
ATOM    542  CA  LEU A 136      -8.431   9.472   2.663 55.33  0.00           C
ATOM    543  C   LEU A 136      -8.471   9.988   4.123 55.33  0.00           C
ATOM    544  O   LEU A 136      -8.423  11.193   4.364 55.33  0.00           O
ATOM    545  N   TRP A 137      -8.562   9.085   5.079 58.33  0.00           N
ATOM    546  CA  TRP A 137      -8.471   9.465   6.480 58.33  0.00           C
ATOM    547  C   TRP A 137      -7.090  10.092   6.781 58.33  0.00           C
ATOM    548  O   TRP A 137      -6.988  11.182   7.363 58.33  0.00           O
ATOM    549  N   LEU A 138      -6.039   9.457   6.283 32.14  0.00           N
ATOM    550  CA  LEU A 138      -4.665   9.881   6.616 32.14  0.00           C
ATOM    551  C   LEU A 138      -4.353  11.332   6.246 32.14  0.00           C
ATOM    552  O   LEU A 138      -3.806  12.080   7.039 32.14  0.00           O
ATOM    553  N   PHE A 139      -4.725  11.691   5.030 45.69  0.00           N
ATOM    554  CA  PHE A 139      -4.602  13.020   4.511 45.69  0.00           C
ATOM    555  C   PHE A 139      -5.790  13.890   4.834 45.69  0.00           C
ATOM    556  O   PHE A 139      -5.772  15.074   4.508 45.69  0.00           O
ATOM    557  N   SER A 140      -6.827  13.321   5.474 48.76  0.00           N
ATOM    558  CA  SER A 140      -8.140  13.999   5.608 48.76  0.00           C
ATOM    559  C   SER A 140      -8.590  14.636   4.304 48.76  0.00           C
ATOM    560  O   SER A 140      -8.961  15.800   4.273 48.76  0.00           O
ATOM    561  N   ALA A 141      -8.519  13.878   3.227 46.70  0.00           N
ATOM    562  CA  ALA A 141      -8.945  14.332   1.917 46.70  0.00           C
ATOM    563  C   ALA A 141     -10.405  13.939   1.667 46.70  0.00           C
ATOM    564  O   ALA A 141     -10.983  13.084   2.348 46.70  0.00           O
ATOM    565  N   GLU A 142     -11.035  14.621   0.722 24.72  0.00           N
ATOM    566  CA  GLU A 142     -12.471  14.427   0.489 24.72  0.00           C
ATOM    567  C   GLU A 142     -12.738  13.477  -0.702 24.72  0.00           C
ATOM    568  O   GLU A 142     -13.747  12.791  -0.707 24.72  0.00           O
ATOM    569  N   LYS A 143     -11.805  13.444  -1.660 36.43  0.00           N
ATOM    570  CA  LYS A 143     -11.916  12.652  -2.862 36.43  0.00           C
ATOM    571  C   LYS A 143     -10.727  11.686  -3.055 36.43  0.00           C
ATOM    572  O   LYS A 143      -9.539  11.991  -2.732 36.43  0.00           O
ATOM    573  N   GLY A 144     -11.077  10.526  -3.602 50.78  0.00           N
ATOM    574  CA  GLY A 144     -10.120   9.474  -3.925 50.78  0.00           C
ATOM    575  C   GLY A 144     -10.352   8.924  -5.300 50.78  0.00           C
ATOM    576  O   GLY A 144     -11.486   8.740  -5.697 50.78  0.00           O
ATOM    577  N   ILE A 145      -9.286   8.679  -6.041 48.61  0.00           N
ATOM    578  CA  ILE A 145      -9.380   8.016  -7.325 48.61  0.00           C
ATOM    579  C   ILE A 145      -8.437   6.791  -7.270 48.61  0.00           C
ATOM    580  O   ILE A 145      -7.274   6.920  -6.924 48.61  0.00           O
ATOM    581  N   LEU A 146      -8.955   5.621  -7.649 52.71  0.00           N
ATOM    582  CA  LEU A 146      -8.233   4.396  -7.797 52.71  0.00           C
ATOM    583  C   LEU A 146      -8.251   4.098  -9.279 52.71  0.00           C
ATOM    584  O   LEU A 146      -9.304   3.843  -9.816 52.71  0.00           O
ATOM    585  N   VAL A 147      -7.117   4.065  -9.937 58.59  0.00           N
ATOM    586  CA  VAL A 147      -7.059   3.872 -11.356 58.59  0.00           C
ATOM    587  C   VAL A 147      -6.211   2.623 -11.646 58.59  0.00           C
ATOM    588  O   VAL A 147      -5.067   2.470 -11.090 58.59  0.00           O
ATOM    589  N   TYR A 148      -6.742   1.739 -12.509 50.20  0.00           N
ATOM    590  CA  TYR A 148      -6.090   0.482 -12.844 50.20  0.00           C
ATOM    591  C   TYR A 148      -5.595   0.575 -14.257 50.20  0.00           C
ATOM    592  O   TYR A 148      -6.345   0.903 -15.117 50.20  0.00           O
ATOM    593  N   ILE A 149      -4.338   0.293 -14.483 59.40  0.00           N
ATOM    594  CA  ILE A 149      -3.766   0.206 -15.807 59.40  0.00           C
ATOM    595  C   ILE A 149      -3.430  -1.275 -15.990 59.40  0.00           C
ATOM    596  O   ILE A 149      -2.545  -1.776 -15.346 59.40  0.00           O
ATOM    597  N   THR A 150      -4.180  -2.003 -16.800 50.91  0.00           N
ATOM    598  CA  THR A 150      -3.964  -3.413 -16.968 50.91  0.00           C
ATOM    599  C   THR A 150      -3.936  -3.690 -18.433 50.91  0.00           C
ATOM    600  O   THR A 150      -4.311  -2.846 -19.222 50.91  0.00           O
ATOM    601  N   PRO A 151      -3.486  -4.859 -18.836 38.79  0.00           N
ATOM    602  CA  PRO A 151      -3.299  -5.051 -20.300 38.79  0.00           C
ATOM    603  C   PRO A 151      -4.601  -5.273 -21.077 38.79  0.00           C
ATOM    604  O   PRO A 151      -4.598  -5.259 -22.317 38.79  0.00           O
ATOM    605  N   ASP A 152      -5.658  -5.505 -20.333 46.49  0.00           N
ATOM    606  CA  ASP A 152      -6.988  -5.753 -20.794 46.49  0.00           C
ATOM    607  C   ASP A 152      -7.910  -4.564 -20.707 46.49  0.00           C
ATOM    608  O   ASP A 152      -8.921  -4.561 -21.326 46.49  0.00           O
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ATOM    609  N   ARG A 153      -7.550  -3.582 -19.909 48.05  0.00           N
ATOM    610  CA  ARG A 153      -8.418  -2.528 -19.517 48.05  0.00           C
ATOM    611  C   ARG A 153      -7.808  -1.437 -18.658 48.05  0.00           C
ATOM    612  O   ARG A 153      -7.169  -1.665 -17.715 48.05  0.00           O
ATOM    613  N   ILE A 154      -8.107  -0.221 -18.973 44.50  0.00           N
ATOM    614  CA  ILE A 154      -7.873   0.874 -18.098 44.50  0.00           C
ATOM    615  C   ILE A 154      -9.177   1.197 -17.432 44.50  0.00           C
ATOM    616  O   ILE A 154     -10.135   1.182 -18.066 44.50  0.00           O
ATOM    617  N   ALA A 155      -9.204   1.463 -16.150 44.74  0.00           N
ATOM    618  CA  ALA A 155     -10.490   1.563 -15.403 44.74  0.00           C
ATOM    619  C   ALA A 155     -10.307   2.411 -14.178 44.74  0.00           C
ATOM    620  O   ALA A 155      -9.405   2.165 -13.464 44.74  0.00           O
ATOM    621  N   GLU A 156     -11.159   3.389 -13.945 44.85  0.00           N
ATOM    622  CA  GLU A 156     -10.959   4.392 -12.924 44.85  0.00           C
ATOM    623  C   GLU A 156     -12.193   4.455 -12.023 44.85  0.00           C
ATOM    624  O   GLU A 156     -13.299   4.455 -12.446 44.85  0.00           O
ATOM    625  N   TYR A 157     -11.976   4.532 -10.746 45.56  0.00           N
ATOM    626  CA  TYR A 157     -13.044   4.493  -9.764 45.56  0.00           C
ATOM    627  C   TYR A 157     -12.934   5.658  -8.804 45.56  0.00           C
ATOM    628  O   TYR A 157     -11.853   6.011  -8.265 45.56  0.00           O
ATOM    629  N   GLU A 158     -14.055   6.253  -8.542 42.77  0.00           N
ATOM    630  CA  GLU A 158     -14.108   7.361  -7.646 42.77  0.00           C
ATOM    631  C   GLU A 158     -14.532   6.786  -6.302 42.77  0.00           C
ATOM    632  O   GLU A 158     -15.602   6.184  -6.178 42.77  0.00           O
ATOM    633  N   ILE A 159     -13.651   6.902  -5.311 48.46  0.00           N
ATOM    634  CA  ILE A 159     -13.878   6.419  -3.939 48.46  0.00           C
ATOM    635  C   ILE A 159     -13.755   7.649  -3.027 48.46  0.00           C
ATOM    636  O   ILE A 159     -12.671   8.212  -2.918 48.46  0.00           O
ATOM    637  N   ASN A 160     -14.849   8.038  -2.394 42.29  0.00           N
ATOM    638  CA  ASN A 160     -14.894   9.274  -1.638 42.29  0.00           C
ATOM    639  C   ASN A 160     -15.165   9.116  -0.146 42.29  0.00           C
ATOM    640  O   ASN A 160     -14.949  10.056   0.594 42.29  0.00           O
ATOM    641  N   GLU A 161     -15.536   7.926   0.306 29.62  0.00           N
ATOM    642  CA  GLU A 161     -15.720   7.704   1.724 29.62  0.00           C
ATOM    643  C   GLU A 161     -14.467   7.151   2.407 29.62  0.00           C
ATOM    644  O   GLU A 161     -13.997   6.052   2.116 29.62  0.00           O
ATOM    645  N   PRO A 162     -13.950   7.900   3.365 47.60  0.00           N
ATOM    646  CA  PRO A 162     -12.848   7.426   4.187 47.60  0.00           C
ATOM    647  C   PRO A 162     -13.323   6.439   5.227 47.60  0.00           C
ATOM    648  O   PRO A 162     -14.483   6.537   5.645 47.60  0.00           O
ATOM    649  N   LEU A 163     -12.444   5.517   5.661 43.37  0.00           N
ATOM    650  CA  LEU A 163     -12.805   4.572   6.724 43.37  0.00           C
ATOM    651  C   LEU A 163     -12.888   5.346   8.019 43.37  0.00           C
ATOM    652  O   LEU A 163     -12.040   6.223   8.266 43.37  0.00           O
ATOM    653  N   ASP A 164     -13.876   5.013   8.858 15.75  0.00           N
ATOM    654  CA  ASP A 164     -13.934   5.590  10.207 15.75  0.00           C
ATOM    655  C   ASP A 164     -12.616   5.280  10.928 15.75  0.00           C
ATOM    656  O   ASP A 164     -11.940   4.300  10.622 15.75  0.00           O
ATOM    657  N   GLU A 165     -12.301   6.090  11.926 44.28  0.00           N
ATOM    658  CA  GLU A 165     -11.127   5.880  12.758 44.28  0.00           C
ATOM    659  C   GLU A 165     -11.240   4.594  13.565 44.28  0.00           C
ATOM    660  O   GLU A 165     -10.265   3.923  13.761 44.28  0.00           O
ATOM    661  N   ALA A 166     -12.438   4.252  14.016 56.50  0.00           N
ATOM    662  CA  ALA A 166     -12.662   3.006  14.753 56.50  0.00           C
ATOM    663  C   ALA A 166     -12.336   1.750  13.921 56.50  0.00           C
ATOM    664  O   ALA A 166     -11.761   0.808  14.415 56.50  0.00           O
ATOM    665  N   THR A 167     -12.694   1.751  12.648 42.80  0.00           N
ATOM    666  CA  THR A 167     -12.382   0.638  11.768 42.80  0.00           C
ATOM    667  C   THR A 167     -10.872   0.497  11.623 42.80  0.00           C
ATOM    668  O   THR A 167     -10.346  -0.601  11.637 42.80  0.00           O
ATOM    669  N   ILE A 168     -10.171   1.619  11.528 43.48  0.00           N
ATOM    670  CA  ILE A 168      -8.732   1.633  11.358 43.48  0.00           C
ATOM    671  C   ILE A 168      -8.078   1.128  12.626 43.48  0.00           C
ATOM    672  O   ILE A 168      -7.058   0.457  12.570 43.48  0.00           O
ATOM    673  N   VAL A 169      -8.665   1.441  13.778 59.04  0.00           N
ATOM    674  CA  VAL A 169      -8.132   0.957  15.026 59.04  0.00           C
ATOM    675  C   VAL A 169      -8.314  -0.550  15.039 59.04  0.00           C
ATOM    676  O   VAL A 169      -7.394  -1.257  15.440 59.04  0.00           O
ATOM    677  N   ARG A 170      -9.472  -1.045  14.590 42.54  0.00           N
ATOM    678  CA  ARG A 170      -9.700  -2.518  14.528 42.54  0.00           C
ATOM    679  C   ARG A 170      -8.661  -3.202  13.604 42.54  0.00           C
ATOM    680  O   ARG A 170      -8.069  -4.207  13.996 42.54  0.00           O
ATOM    681  N   LEU A 171      -8.396  -2.610  12.430 50.99  0.00           N
ATOM    682  CA  LEU A 171      -7.379  -3.127  11.527 50.99  0.00           C
ATOM    683  C   LEU A 171      -6.020  -3.139  12.210 50.99  0.00           C
ATOM    684  O   LEU A 171      -5.257  -4.108  12.109 50.99  0.00           O
ATOM    685  N   ALA A 172      -5.723  -2.049  12.909 48.07  0.00           N
ATOM    686  CA  ALA A 172      -4.457  -1.898  13.604 48.07  0.00           C
ATOM    687  C   ALA A 172      -4.301  -2.947  14.696 48.07  0.00           C
ATOM    688  O   ALA A 172      -3.240  -3.541  14.801 48.07  0.00           O
ATOM    689  N   GLU A 173      -5.352  -3.187  15.479 69.67  0.00           N
ATOM    690  CA  GLU A 173      -5.292  -4.177  16.568 69.67  0.00           C
ATOM    691  C   GLU A 173      -4.915  -5.559  16.053 69.67  0.00           C
ATOM    692  O   GLU A 173      -4.131  -6.255  16.707 69.67  0.00           O
ATOM    693  N   ASP A 174      -5.506  -5.961  14.919 40.91  0.00           N
ATOM    694  CA  ASP A 174      -5.208  -7.255  14.320 40.91  0.00           C
ATOM    695  C   ASP A 174      -3.815  -7.301  13.840 40.91  0.00           C
ATOM    696  O   ASP A 174      -3.169  -8.343  13.873 40.91  0.00           O
ATOM    697  N   THR A 175      -3.325  -6.165  13.384 47.42  0.00           N
ATOM    698  CA  THR A 175      -1.966  -6.171  12.887 47.42  0.00           C
ATOM    699  C   THR A 175      -1.026  -6.460  14.019 47.42  0.00           C
ATOM    700  O   THR A 175      -0.104  -7.267  13.894 47.42  0.00           O
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ATOM    701  N   ILE A 176      -1.312  -5.827  15.139 32.81  0.00           N
ATOM    702  CA  ILE A 176      -0.456  -5.907  16.306 32.81  0.00           C
ATOM    703  C   ILE A 176      -0.618  -7.264  17.013 32.81  0.00           C
ATOM    704  O   ILE A 176       0.348  -7.982  17.191 32.81  0.00           O
ATOM    705  N   MSE A 177      -1.846  -7.622  17.359 38.99  0.00           N
ATOM    706  CA  MSE A 177      -2.110  -8.862  18.066 38.99  0.00           C
ATOM    707  C   MSE A 177      -2.036 -10.148  17.184 38.99  0.00           C
ATOM    708  O   MSE A 177      -2.230 -11.232  17.705 38.99  0.00           O
ATOM    709  N   LEU A 178      -1.747 -10.045  15.885 39.02  0.00           N
ATOM    710  CA  LEU A 178      -1.765 -11.195  14.931 39.02  0.00           C
ATOM    711  C   LEU A 178      -3.082 -11.987  14.963 39.02  0.00           C
ATOM    712  O   LEU A 178      -3.059 -13.216  14.908 39.02  0.00           O
ATOM    713  N   GLN A 179      -4.195 -11.295  14.914 51.25  0.00           N
ATOM    714  CA  GLN A 179      -5.488 -11.880  15.107 51.25  0.00           C
ATOM    715  C   GLN A 179      -6.016 -12.818  14.022 51.25  0.00           C
ATOM    716  O   GLN A 179      -6.283 -13.971  14.291 51.25  0.00           O
ATOM    717  N   ASN A 180      -6.209 -12.312  12.822 45.90  0.00           N
ATOM    718  CA  ASN A 180      -6.832 -13.100  11.723 45.90  0.00           C
ATOM    719  C   ASN A 180      -5.958 -13.170  10.495 45.90  0.00           C
ATOM    720  O   ASN A 180      -5.982 -12.302   9.632 45.90  0.00           O
ATOM    721  N   SER A 181      -5.162 -14.213  10.431 62.18  0.00           N
ATOM    722  CA  SER A 181      -4.294 -14.421   9.316 62.18  0.00           C
ATOM    723  C   SER A 181      -4.685 -15.651   8.495 62.18  0.00           C
ATOM    724  O   SER A 181      -4.793 -16.745   9.008 62.18  0.00           O
ATOM    725  N   PRO A 182      -4.770 -15.497   7.199 60.53  0.00           N
ATOM    726  CA  PRO A 182      -4.417 -14.305   6.461 60.53  0.00           C
ATOM    727  C   PRO A 182      -5.557 -13.337   6.500 60.53  0.00           C
ATOM    728  O   PRO A 182      -6.623 -13.675   7.004 60.53  0.00           O
ATOM    729  N   ARG A 183      -5.357 -12.135   5.998 84.37  0.00           N
ATOM    730  CA  ARG A 183      -6.436 -11.191   6.007 84.37  0.00           C
ATOM    731  C   ARG A 183      -7.372 -11.579   4.893 84.37  0.00           C
ATOM    732  O   ARG A 183      -8.603 -11.628   5.107 84.37  0.00           O
ATOM    733  N   PHE A 184      -6.785 -11.851   3.718 52.25  0.00           N
ATOM    734  CA  PHE A 184      -7.550 -12.410   2.590 52.25  0.00           C
ATOM    735  C   PHE A 184      -7.017 -13.778   2.185 52.25  0.00           C
ATOM    736  O   PHE A 184      -5.814 -14.039   2.233 52.25  0.00           O
ATOM    737  N   ASN A 185      -7.926 -14.630   1.714 63.62  0.00           N
ATOM    738  CA  ASN A 185      -7.604 -16.007   1.378 63.62  0.00           C
ATOM    739  C   ASN A 185      -6.563 -16.229   0.291 63.62  0.00           C
ATOM    740  O   ASN A 185      -5.857 -17.232   0.316 63.62  0.00           O
ATOM    741  N   TRP A 186      -6.507 -15.349  -0.690 44.36  0.00           N
ATOM    742  CA  TRP A 186      -5.602 -15.511  -1.821 44.36  0.00           C
ATOM    743  C   TRP A 186      -4.124 -15.190  -1.442 44.36  0.00           C
ATOM    744  O   TRP A 186      -3.168 -15.441  -2.207 44.36  0.00           O
ATOM    745  N   GLU A 187      -3.932 -14.615  -0.259 82.86  0.00           N
ATOM    746  CA  GLU A 187      -2.575 -14.179   0.176 82.86  0.00           C
ATOM    747  C   GLU A 187      -1.511 -15.229   0.225 82.86  0.00           C
ATOM    748  O   GLU A 187      -0.428 -15.028  -0.334 82.86  0.00           O
ATOM    749  N   CYS A 188      -1.801 -16.352   0.884 55.08  0.00           N
ATOM    750  CA  CYS A 188      -0.760 -17.344   1.180 55.08  0.00           C
ATOM    751  C   CYS A 188      -0.146 -17.865  -0.127 55.08  0.00           C
ATOM    752  O   CYS A 188       1.067 -18.120  -0.218 55.08  0.00           O
ATOM    753  N   LYS A 189      -0.970 -17.963  -1.166 38.40  0.00           N
ATOM    754  CA  LYS A 189      -0.511 -18.522  -2.447 38.40  0.00           C
ATOM    755  C   LYS A 189       0.696 -17.731  -3.018 38.40  0.00           C
ATOM    756  O   LYS A 189       1.569 -18.272  -3.724 38.40  0.00           O
ATOM    757  N   TYR A 190       0.747 -16.439  -2.708 25.73  0.00           N
ATOM    758  CA  TYR A 190       1.763 -15.611  -3.285 25.73  0.00           C
ATOM    759  C   TYR A 190       2.819 -15.235  -2.248 25.73  0.00           C
ATOM    760  O   TYR A 190       3.823 -14.654  -2.584 25.73  0.00           O
ATOM    761  N   CYS A 191       2.587 -15.625  -0.997 41.49  0.00           N
ATOM    762  CA  CYS A 191       3.353 -15.193   0.160 41.49  0.00           C
ATOM    763  C   CYS A 191       4.692 -15.934   0.269 41.49  0.00           C
ATOM    764  O   CYS A 191       4.732 -17.173   0.348 41.49  0.00           O
ATOM    765  N   ILE A 192       5.784 -15.171   0.315 38.99  0.00           N
ATOM    766  CA  ILE A 192       7.106 -15.776   0.279 38.99  0.00           C
ATOM    767  C   ILE A 192       7.409 -16.403   1.615 38.99  0.00           C
ATOM    768  O   ILE A 192       8.394 -17.068   1.711 38.99  0.00           O
ATOM    769  N   PHE A 193       6.578 -16.191   2.632 38.05  0.00           N
ATOM    770  CA  PHE A 193       6.786 -16.794   3.943 38.05  0.00           C
ATOM    771  C   PHE A 193       5.984 -18.074   4.210 38.05  0.00           C
ATOM    772  O   PHE A 193       5.990 -18.637   5.317 38.05  0.00           O
ATOM    773  N   SER A 194       5.262 -18.513   3.198 44.71  0.00           N
ATOM    774  CA  SER A 194       4.413 -19.711   3.328 44.71  0.00           C
ATOM    775  C   SER A 194       5.249 -20.909   3.657 44.71  0.00           C
ATOM    776  O   SER A 194       4.748 -21.746   4.298 44.71  0.00           O
ATOM    777  N   VAL A 195       6.503 -20.952   3.199 51.78  0.00           N
ATOM    778  CA  VAL A 195       7.410 -21.989   3.516 51.78  0.00           C
ATOM    779  C   VAL A 195       7.733 -22.174   4.979 51.78  0.00           C
ATOM    780  O   VAL A 195       8.309 -23.201   5.323 51.78  0.00           O
ATOM    781  N   ILE A 196       7.419 -21.212   5.849 33.86  0.00           N
ATOM    782  CA  ILE A 196       7.718 -21.354   7.295 33.86  0.00           C
ATOM    783  C   ILE A 196       6.564 -20.975   8.148 33.86  0.00           C
ATOM    784  O   ILE A 196       6.683 -20.972   9.331 33.86  0.00           O
ATOM    785  N   CYS A 197       5.424 -20.671   7.561 51.61  0.00           N
ATOM    786  CA  CYS A 197       4.335 -20.157   8.329 51.61  0.00           C
ATOM    787  C   CYS A 197       3.331 -21.219   8.615 51.61  0.00           C
ATOM    788  O   CYS A 197       2.836 -21.849   7.697 51.61  0.00           O
ATOM    789  N   PRO A 198       2.960 -21.375   9.870 31.41  0.00           N
ATOM    790  CA  PRO A 198       1.970 -22.338  10.280 31.41  0.00           C
ATOM    791  C   PRO A 198       0.542 -22.046   9.971 31.41  0.00           C
ATOM    792  O   PRO A 198      -0.290 -22.938  10.156 31.41  0.00           O
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ATOM    793  N   ALA A 199       0.227 -20.829   9.562 44.28  0.00           N
ATOM    794  CA  ALA A 199      -1.167 -20.431   9.353 44.28  0.00           C
ATOM    795  C   ALA A 199      -1.570 -20.467   7.877 44.28  0.00           C
ATOM    796  O   ALA A 199      -2.731 -20.267   7.563 44.28  0.00           O
ATOM    797  N   LYS A 200      -0.591 -20.655   6.991 51.19  0.00           N
ATOM    798  CA  LYS A 200      -0.778 -20.823   5.548 51.19  0.00           C
ATOM    799  C   LYS A 200      -1.946 -21.672   5.236 51.19  0.00           C
ATOM    800  O   LYS A 200      -2.051 -22.735   5.769 51.19  0.00           O
ATOM    801  N   LEU A 201      -2.799 -21.218   4.328 36.97  0.00           N
ATOM    802  CA  LEU A 201      -3.935 -22.003   3.876 36.97  0.00           C
ATOM    803  C   LEU A 201      -3.511 -23.046   2.859 36.97  0.00           C
ATOM    804  O   LEU A 201      -2.649 -22.775   2.009 36.97  0.00           O
ATOM    805  N   THR A 202      -4.127 -24.225   2.953 47.06  0.00           N
ATOM    806  CA  THR A 202      -3.796 -25.369   2.082 47.06  0.00           C
ATOM    807  C   THR A 202      -5.038 -25.920   1.370 47.06  0.00           C
ATOM    808  O   THR A 202      -6.101 -25.964   1.999 47.06  0.00           O
TER     809      THR A 202
ENDMDL
END
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