HEADER HYDROLASE 10-NOV-16 5TVV
TITLE COMPUTATIONALLY DESIGNED FENTANYL BINDER - FEN49* APO

COMPND MOL_ID: 1;
COMPND 2 MOLECULE: ENDO-1,4-BETA-XYLANASE A;
COMPND 3 CHAIN: A, B, C;
COMPND 4 FRAGMENT: UNP RESIDUES 30-213;
COMPND 5 SYNONYM: XYLANASE A,1,4-BETA-D-XYLAN
XYLANOHYDROLASE A;
COMPND 6 EC: 3.2.1.8;
COMPND 7 ENGINEERED: YES;
COMPND 8 MUTATION: YES
SOURCE MOL_ID: 1;
SOURCE 2 ORGANISM_SCIENTIFIC: BACILLUS SUBTILIS (STRAIN 168);

SOURCE 3 ORGANISM_TAXID: 224308;
SOURCE 4 STRAIN: 168;
SOURCE 5 GENE: XYNA, BSU18840;
SOURCE 6 EXPRESSION_SYSTEM: ESCHERICHIA COLI;
SOURCE 7 EXPRESSION_SYSTEM_TAXID: 562
KEYWDS FENTANYL BINDER, COMPUTATIONAL DESIGN, HYDROLASE

EXPDTA X-RAY DIFFRACTION
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REMARK 2
REMARK 2 RESOLUTION. 1.79 ANGSTROMS.
REMARK 3
REMARK 3 REFINEMENT.
REMARK 3 PROGRAM : PHENIX DEV_2313
REMARK 3 AUTHORS : PAUL ADAMS,PAVEL AFONINE,VINCENT
CHEN,IAN
REMARK 3 : DAVIS,KRESHNA GOPAL,RALF GROSSE-KUNSTLEVE,

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REMARK 3 : AIRLIE MCCOY,ERIK MCKEE,NIGEL MORIARTY,

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REMARK   3           : REETAL PAI,RANDY READ,JANE RICHARDSON,
REMARK   3           : DAVID RICHARDSON,TOD ROMO,JIM SACCHETTINI,

REMARK   3           : NICHOLAS SAUTER,JACOB SMITH,LAURENT
REMARK   3           : STORONI,TOM TERWILLIGER,PETER ZWART
REMARK   3
REMARK   3   REFINEMENT TARGET : NULL
REMARK   3
REMARK   3  DATA USED IN REFINEMENT.
REMARK   3   RESOLUTION RANGE HIGH (ANGSTROMS) : 1.79
REMARK   3   RESOLUTION RANGE LOW  (ANGSTROMS) : 43.86
REMARK   3   MIN(FOBS/SIGMA_FOBS)          : 1.350
REMARK   3   COMPLETENESS FOR RANGE       (%) : 98.3
REMARK   3   NUMBER OF REFLECTIONS          : 52283
REMARK   3
REMARK   3  FIT TO DATA USED IN REFINEMENT.
REMARK   3   R VALUE     (WORKING + TEST SET) : 0.205
REMARK   3   R VALUE          (WORKING SET) : 0.204
REMARK   3   FREE R VALUE                   : 0.225
REMARK   3   FREE R VALUE TEST SET SIZE   (%) : 5.090
REMARK   3   FREE R VALUE TEST SET COUNT      : 2660
REMARK   3
REMARK   3  FIT TO DATA USED IN REFINEMENT (IN BINS).
REMARK   3   BIN  RESOLUTION RANGE  COMPL.    NWORK NFREE   RWORK
RFREE
REMARK   3     1 43.8741 -  4.7684    1.00     2876   143  0.2343 0.2647
REMARK   3     2  4.7684 -  3.7855    1.00     2722   160  0.1716 0.1795
REMARK   3     3  3.7855 -  3.3072    1.00     2679   161  0.1704 0.1635
REMARK   3     4  3.3072 -  3.0049    1.00     2685   133  0.1743 0.2166
REMARK   3     5  3.0049 -  2.7896    1.00     2633   157  0.1841 0.2116
REMARK   3     6  2.7896 -  2.6251    1.00     2634   163  0.1973 0.2312
REMARK   3     7  2.6251 -  2.4937    1.00     2667   118  0.2018 0.2619
REMARK   3     8  2.4937 -  2.3851    1.00     2649   129  0.2064 0.2513
REMARK   3     9  2.3851 -  2.2933    0.99     2619   130  0.1972 0.2495
REMARK   3    10  2.2933 -  2.2142    0.99     2648   142  0.2006 0.2711
REMARK   3    11  2.2142 -  2.1449    0.99     2600   135  0.2133 0.2280
REMARK   3    12  2.1449 -  2.0836    0.99     2590   145  0.2171 0.2291
REMARK   3    13  2.0836 -  2.0288    0.99     2613   118  0.2281 0.2593
REMARK   3    14  2.0288 -  1.9793    0.99     2604   147  0.2309 0.2355
REMARK   3    15  1.9793 -  1.9343    0.98     2595   134  0.2195 0.2342
REMARK   3    16  1.9343 -  1.8931    0.98     2540   143  0.2452 0.2803
REMARK   3    17  1.8931 -  1.8552    0.96     2514   142  0.2626 0.2678
REMARK   3    18  1.8552 -  1.8202    0.95     2484   133  0.2905 0.2585
REMARK   3    19  1.8202 -  1.7877    0.87     2271   127  0.3248 0.2983
REMARK   3
REMARK   3  BULK SOLVENT MODELLING.
REMARK   3   METHOD USED       : NULL
REMARK   3   SOLVENT RADIUS    : 1.11
REMARK   3   SHRINKAGE RADIUS  : 0.90
REMARK   3   K_SOL             : NULL
REMARK   3   B_SOL             : NULL
REMARK   3
REMARK   3  ERROR ESTIMATES.
```

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REMARK   3   COORDINATE ERROR (MAXIMUM-LIKELIHOOD BASED)     : 0.200

REMARK   3   PHASE ERROR (DEGREES, MAXIMUM-LIKELIHOOD BASED) :
21.790
REMARK   3
REMARK   3  B VALUES.
REMARK   3   FROM WILSON PLOT           (A**2) : 18.53
REMARK   3   MEAN B VALUE      (OVERALL, A**2) : 28.51
REMARK   3   OVERALL ANISOTROPIC B VALUE.
REMARK   3    B11 (A**2) : NULL
REMARK   3    B22 (A**2) : NULL
REMARK   3    B33 (A**2) : NULL
REMARK   3    B12 (A**2) : NULL
REMARK   3    B13 (A**2) : NULL
REMARK   3    B23 (A**2) : NULL
REMARK   3
REMARK   3  TWINNING INFORMATION.
REMARK   3   FRACTION: NULL
REMARK   3   OPERATOR: NULL
REMARK   3
REMARK   3  DEVIATIONS FROM IDEAL VALUES.
REMARK   3                RMSD         COUNT
REMARK   3   BOND      :  0.005          4507
REMARK   3   ANGLE     :  0.714          6218
REMARK   3   CHIRALITY :  0.052           654
REMARK   3   PLANARITY :  0.004           794
REMARK   3   DIHEDRAL  :  8.702          2440
REMARK   3
REMARK   3  TLS DETAILS
REMARK   3   NUMBER OF TLS GROUPS  : 20
REMARK   3   TLS GROUP : 1
REMARK   3    SELECTION: CHAIN 'A' AND (RESID 1 THROUGH 34 )
REMARK   3    ORIGIN FOR THE GROUP (A):  -7.4266 -14.2785 -19.2916
REMARK   3    T TENSOR
REMARK   3      T11:   0.1465 T22:   0.2537
REMARK   3      T33:   0.1747 T12:   0.1046
REMARK   3      T13:  -0.0107 T23:  -0.0033
REMARK   3    L TENSOR
REMARK   3      L11:   1.9175 L22:   3.6960
REMARK   3      L33:   3.6803 L12:  -1.2216
REMARK   3      L13:   0.8093 L23:  -0.0721
REMARK   3    S TENSOR
REMARK   3      S11:  -0.2795 S12:  -0.4562 S13:   0.0191
REMARK   3      S21:   0.2063 S22:   0.1995 S23:   0.2222
REMARK   3      S31:  -0.0183 S32:  -0.4444 S33:   0.0242
REMARK   3   TLS GROUP : 2
REMARK   3    SELECTION: CHAIN 'A' AND (RESID 35 THROUGH 85 )
REMARK   3    ORIGIN FOR THE GROUP (A):   3.7368 -18.5591 -18.7112
REMARK   3    T TENSOR
REMARK   3      T11:   0.1209 T22:   0.1778
REMARK   3      T33:   0.1018 T12:   0.0550
REMARK   3      T13:  -0.0150 T23:  -0.0167
REMARK   3    L TENSOR
```

REMARK 3 L11: 2.0361 L22: 1.7099
REMARK 3 L33: 1.8231 L12: -1.1001
REMARK 3 L13: 0.0867 L23: 0.1097
REMARK 3 S TENSOR
REMARK 3 S11: -0.2072 S12: -0.3608 S13: 0.0899
REMARK 3 S21: 0.1669 S22: 0.1350 S23: 0.0397
REMARK 3 S31: -0.1683 S32: -0.1803 S33: 0.0225
REMARK 3 TLS GROUP : 3
REMARK 3 SELECTION: CHAIN 'A' AND (RESID 86 THROUGH 102)

REMARK 3 ORIGIN FOR THE GROUP (A): 11.2092 -25.6495 -8.0892
REMARK 3 T TENSOR
REMARK 3 T11: 0.2308 T22: 0.2543
REMARK 3 T33: 0.1686 T12: 0.0577
REMARK 3 T13: -0.0027 T23: 0.0453
REMARK 3 L TENSOR
REMARK 3 L11: 1.3594 L22: 4.8708
REMARK 3 L33: 2.7132 L12: -2.2527
REMARK 3 L13: -0.4914 L23: -0.8920
REMARK 3 S TENSOR
REMARK 3 S11: -0.3291 S12: -0.4173 S13: -0.1837
REMARK 3 S21: 0.4689 S22: 0.3497 S23: 0.3786
REMARK 3 S31: -0.0319 S32: -0.2347 S33: 0.0325
REMARK 3 TLS GROUP : 4
REMARK 3 SELECTION: CHAIN 'A' AND (RESID 103 THROUGH 112)

REMARK 3 ORIGIN FOR THE GROUP (A): 9.9113 -28.5600 -12.5559
REMARK 3 T TENSOR
REMARK 3 T11: 0.1161 T22: 0.1865
REMARK 3 T33: 0.1048 T12: 0.0516
REMARK 3 T13: 0.0252 T23: 0.0412
REMARK 3 L TENSOR
REMARK 3 L11: 4.6460 L22: 7.3079
REMARK 3 L33: 3.2883 L12: 2.7736
REMARK 3 L13: 1.7977 L23: 2.2869
REMARK 3 S TENSOR
REMARK 3 S11: -0.0003 S12: -0.7291 S13: -0.2368
REMARK 3 S21: 0.3632 S22: -0.1622 S23: -0.1008
REMARK 3 S31: 0.1180 S32: -0.5140 S33: 0.1138
REMARK 3 TLS GROUP : 5
REMARK 3 SELECTION: CHAIN 'A' AND (RESID 113 THROUGH 141)

REMARK 3 ORIGIN FOR THE GROUP (A): 3.3591 -25.4410 -17.0045
REMARK 3 T TENSOR
REMARK 3 T11: 0.0913 T22: 0.2020
REMARK 3 T33: 0.1301 T12: 0.0564
REMARK 3 T13: 0.0268 T23: 0.0163
REMARK 3 L TENSOR
REMARK 3 L11: 1.8271 L22: 2.1442
REMARK 3 L33: 1.1852 L12: -1.3140
REMARK 3 L13: 0.0513 L23: -0.2498
REMARK 3 S TENSOR
REMARK 3 S11: -0.0946 S12: -0.4100 S13: -0.1455

REMARK 3 S21: 0.1554 S22: 0.0800 S23: 0.1498
REMARK 3 S31: -0.0416 S32: -0.1855 S33: 0.0234
REMARK 3 TLS GROUP : 6
REMARK 3 SELECTION: CHAIN 'A' AND (RESID 142 THROUGH 156)

REMARK 3 ORIGIN FOR THE GROUP (A): 16.7345 -21.5387 -18.8739
REMARK 3 T TENSOR
REMARK 3 T11: 0.0824 T22: 0.1298
REMARK 3 T33: 0.1331 T12: -0.0083
REMARK 3 T13: -0.0092 T23: -0.0045
REMARK 3 L TENSOR
REMARK 3 L11: 3.5324 L22: 3.0896
REMARK 3 L33: 2.5064 L12: -1.9262
REMARK 3 L13: 1.0637 L23: -0.3943
REMARK 3 S TENSOR
REMARK 3 S11: -0.1630 S12: -0.0716 S13: 0.1040
REMARK 3 S21: -0.2080 S22: 0.0749 S23: -0.2821
REMARK 3 S31: -0.2703 S32: 0.0550 S33: 0.1135
REMARK 3 TLS GROUP : 7
REMARK 3 SELECTION: CHAIN 'A' AND (RESID 157 THROUGH 185)

REMARK 3 ORIGIN FOR THE GROUP (A): 2.0072 -18.4595 -18.8159
REMARK 3 T TENSOR
REMARK 3 T11: 0.1197 T22: 0.1842
REMARK 3 T33: 0.0974 T12: 0.0497
REMARK 3 T13: -0.0153 T23: -0.0094
REMARK 3 L TENSOR
REMARK 3 L11: 2.0450 L22: 2.1579
REMARK 3 L33: 1.1541 L12: -1.0209
REMARK 3 L13: -0.1235 L23: 0.4893
REMARK 3 S TENSOR
REMARK 3 S11: -0.1653 S12: -0.2779 S13: 0.1061
REMARK 3 S21: 0.1804 S22: 0.1385 S23: 0.0186
REMARK 3 S31: -0.0938 S32: -0.2112 S33: 0.0104
REMARK 3 TLS GROUP : 8
REMARK 3 SELECTION: CHAIN 'B' AND (RESID 1 THROUGH 20)
REMARK 3 ORIGIN FOR THE GROUP (A): -28.3573 -21.0667 -44.7718
REMARK 3 T TENSOR
REMARK 3 T11: 0.1757 T22: 0.1567
REMARK 3 T33: 0.1371 T12: -0.0267
REMARK 3 T13: 0.0045 T23: -0.0257
REMARK 3 L TENSOR
REMARK 3 L11: 2.4388 L22: 2.8741
REMARK 3 L33: 3.1348 L12: -1.2527
REMARK 3 L13: 0.8404 L23: -0.6631
REMARK 3 S TENSOR
REMARK 3 S11: -0.0671 S12: -0.0381 S13: -0.1501
REMARK 3 S21: 0.2110 S22: -0.1046 S23: -0.0460
REMARK 3 S31: 0.2016 S32: -0.1554 S33: 0.1147
REMARK 3 TLS GROUP : 9
REMARK 3 SELECTION: CHAIN 'B' AND (RESID 21 THROUGH 85)
REMARK 3 ORIGIN FOR THE GROUP (A): -22.7424 -14.6707 -39.9691
REMARK 3 T TENSOR

REMARK 3 T11: 0.1345 T22: 0.1040
REMARK 3 T33: 0.0974 T12: -0.0229
REMARK 3 T13: 0.0052 T23: 0.0070
REMARK 3 L TENSOR
REMARK 3 L11: 1.4922 L22: 1.0571
REMARK 3 L33: 1.2749 L12: 0.0664
REMARK 3 L13: -0.2456 L23: 0.2571
REMARK 3 S TENSOR
REMARK 3 S11: -0.0274 S12: -0.1098 S13: -0.1216
REMARK 3 S21: 0.1463 S22: -0.0064 S23: 0.0272
REMARK 3 S31: 0.1860 S32: -0.0433 S33: 0.0417
REMARK 3 TLS GROUP : 10
REMARK 3 SELECTION: CHAIN 'B' AND (RESID 86 THROUGH 102)

REMARK 3 ORIGIN FOR THE GROUP (A): -11.2103 -9.4673 -30.2715
REMARK 3 T TENSOR
REMARK 3 T11: 0.2137 T22: 0.1496
REMARK 3 T33: 0.1008 T12: 0.0210
REMARK 3 T13: -0.0075 T23: -0.0208
REMARK 3 L TENSOR
REMARK 3 L11: 5.3646 L22: 1.4615
REMARK 3 L33: 1.0748 L12: -1.3169
REMARK 3 L13: 1.3109 L23: -0.6266
REMARK 3 S TENSOR
REMARK 3 S11: -0.1303 S12: -0.1255 S13: -0.0950
REMARK 3 S21: 0.2780 S22: 0.0451 S23: -0.1774
REMARK 3 S31: 0.0785 S32: -0.0718 S33: 0.1062
REMARK 3 TLS GROUP : 11
REMARK 3 SELECTION: CHAIN 'B' AND (RESID 103 THROUGH 112)

REMARK 3 ORIGIN FOR THE GROUP (A): -9.8123 -11.6432 -33.9187
REMARK 3 T TENSOR
REMARK 3 T11: 0.1681 T22: 0.1389
REMARK 3 T33: 0.1378 T12: -0.0021
REMARK 3 T13: -0.0291 T23: 0.0183
REMARK 3 L TENSOR
REMARK 3 L11: 5.2588 L22: 3.6616
REMARK 3 L33: 3.9269 L12: -1.8113
REMARK 3 L13: -0.0706 L23: 0.9700
REMARK 3 S TENSOR
REMARK 3 S11: -0.0729 S12: -0.0776 S13: -0.3229
REMARK 3 S21: 0.3090 S22: 0.0589 S23: -0.0340
REMARK 3 S31: 0.4581 S32: -0.0363 S33: -0.0025
REMARK 3 TLS GROUP : 12
REMARK 3 SELECTION: CHAIN 'B' AND (RESID 113 THROUGH 124)

REMARK 3 ORIGIN FOR THE GROUP (A): -10.2557 -26.9480 -45.5203
REMARK 3 T TENSOR
REMARK 3 T11: 0.4748 T22: 0.2572
REMARK 3 T33: 0.5760 T12: 0.0773
REMARK 3 T13: -0.1449 T23: -0.0732
REMARK 3 L TENSOR
REMARK 3 L11: 0.5934 L22: 0.4705

REMARK 3 L33: 0.5927 L12: 0.1640
REMARK 3 L13: -0.5883 L23: -0.2007
REMARK 3 S TENSOR
REMARK 3 S11: 0.0539 S12: -0.0286 S13: -0.8568
REMARK 3 S21: 0.5617 S22: 0.3556 S23: -1.0878
REMARK 3 S31: 0.8305 S32: 0.4172 S33: -0.1149
REMARK 3 TLS GROUP : 13
REMARK 3 SELECTION: CHAIN 'B' AND (RESID 125 THROUGH 166)

REMARK 3 ORIGIN FOR THE GROUP (A): -14.1521 -7.4796 -39.6016
REMARK 3 T TENSOR
REMARK 3 T11: 0.0967 T22: 0.1080
REMARK 3 T33: 0.1099 T12: 0.0175
REMARK 3 T13: -0.0145 T23: 0.0061
REMARK 3 L TENSOR
REMARK 3 L11: 1.9685 L22: 1.8381
REMARK 3 L33: 1.6347 L12: 0.6634
REMARK 3 L13: 0.0649 L23: 0.6162
REMARK 3 S TENSOR
REMARK 3 S11: -0.0437 S12: -0.0497 S13: 0.0127
REMARK 3 S21: 0.0781 S22: 0.0725 S23: -0.1727
REMARK 3 S31: 0.1355 S32: 0.0987 S33: -0.0426
REMARK 3 TLS GROUP : 14
REMARK 3 SELECTION: CHAIN 'B' AND (RESID 167 THROUGH 185)

REMARK 3 ORIGIN FOR THE GROUP (A): -26.1437 -16.0144 -37.9159
REMARK 3 T TENSOR
REMARK 3 T11: 0.1763 T22: 0.1494
REMARK 3 T33: 0.1147 T12: -0.0192
REMARK 3 T13: 0.0043 T23: -0.0033
REMARK 3 L TENSOR
REMARK 3 L11: 2.2596 L22: 1.9171
REMARK 3 L33: 2.0756 L12: 1.0177
REMARK 3 L13: -0.2419 L23: 0.1930
REMARK 3 S TENSOR
REMARK 3 S11: 0.0309 S12: -0.2818 S13: -0.1438
REMARK 3 S21: 0.2967 S22: -0.0375 S23: 0.0263
REMARK 3 S31: 0.3876 S32: -0.0012 S33: 0.0492
REMARK 3 TLS GROUP : 15
REMARK 3 SELECTION: CHAIN 'C' AND (RESID 2 THROUGH 20)
REMARK 3 ORIGIN FOR THE GROUP (A): -20.1145 -4.3943 0.0423
REMARK 3 T TENSOR
REMARK 3 T11: 0.3151 T22: 0.2981
REMARK 3 T33: 0.3679 T12: -0.0918
REMARK 3 T13: -0.1710 T23: 0.0889
REMARK 3 L TENSOR
REMARK 3 L11: 3.5236 L22: 4.5697
REMARK 3 L33: 5.5632 L12: -0.5525
REMARK 3 L13: 1.2117 L23: -0.1707
REMARK 3 S TENSOR
REMARK 3 S11: 0.2701 S12: -0.0212 S13: -0.5456
REMARK 3 S21: 0.0799 S22: 0.2827 S23: 1.0646
REMARK 3 S31: 0.7478 S32: -0.6348 S33: -0.4695

REMARK 3 TLS GROUP : 16
REMARK 3 SELECTION: CHAIN 'C' AND (RESID 21 THROUGH 34)
REMARK 3 ORIGIN FOR THE GROUP (A): -16.8581 -6.8161 -6.2287
REMARK 3 T TENSOR
REMARK 3 T11: 0.4388 T22: 0.4301
REMARK 3 T33: 0.3814 T12: 0.3165
REMARK 3 T13: -0.3867 T23: -0.0513
REMARK 3 L TENSOR
REMARK 3 L11: 2.2869 L22: 3.6176
REMARK 3 L33: 4.0125 L12: -1.5084
REMARK 3 L13: 1.5107 L23: -1.8920
REMARK 3 S TENSOR
REMARK 3 S11: 0.7160 S12: 0.0451 S13: -0.9207
REMARK 3 S21: -0.8597 S22: -0.0774 S23: 0.4664
REMARK 3 S31: 0.8666 S32: 0.3094 S33: -0.0420
REMARK 3 TLS GROUP : 17
REMARK 3 SELECTION: CHAIN 'C' AND (RESID 35 THROUGH 85)
REMARK 3 ORIGIN FOR THE GROUP (A): -16.6302 6.2585 -4.2298
REMARK 3 T TENSOR
REMARK 3 T11: 0.3200 T22: 0.2405
REMARK 3 T33: 0.1862 T12: 0.0609
REMARK 3 T13: 0.0157 T23: 0.0475
REMARK 3 L TENSOR
REMARK 3 L11: 3.7079 L22: 3.9865
REMARK 3 L33: 5.8413 L12: -1.5152
REMARK 3 L13: 1.9325 L23: -2.3472
REMARK 3 S TENSOR
REMARK 3 S11: 0.3593 S12: 0.2912 S13: 0.0305
REMARK 3 S21: 0.4082 S22: -0.0794 S23: -0.0809
REMARK 3 S31: -0.4654 S32: 0.0005 S33: -0.0537
REMARK 3 TLS GROUP : 18
REMARK 3 SELECTION: CHAIN 'C' AND (RESID 86 THROUGH 112)

REMARK 3 ORIGIN FOR THE GROUP (A): -19.4903 15.4867 -14.2949
REMARK 3 T TENSOR
REMARK 3 T11: 0.2696 T22: 0.2849
REMARK 3 T33: 0.1954 T12: 0.0083
REMARK 3 T13: -0.0205 T23: 0.0907
REMARK 3 L TENSOR
REMARK 3 L11: 3.2203 L22: 4.2902
REMARK 3 L33: 3.8381 L12: -2.5010
REMARK 3 L13: 2.4302 L23: -0.9386
REMARK 3 S TENSOR
REMARK 3 S11: -0.1841 S12: 0.2041 S13: 0.0396
REMARK 3 S21: 0.5110 S22: -0.1390 S23: -0.1358
REMARK 3 S31: -0.2556 S32: 0.5570 S33: 0.1875
REMARK 3 TLS GROUP : 19
REMARK 3 SELECTION: CHAIN 'C' AND (RESID 113 THROUGH 124)

REMARK 3 ORIGIN FOR THE GROUP (A): -33.1080 8.4485 1.2824
REMARK 3 T TENSOR
REMARK 3 T11: 0.7064 T22: 0.5772
REMARK 3 T33: 0.7716 T12: 0.0858

REMARK 3 T13: 0.3868 T23: 0.2309
REMARK 3 L TENSOR
REMARK 3 L11: 0.5603 L22: 4.5862
REMARK 3 L33: 2.8544 L12: -1.2356
REMARK 3 L13: -0.3163 L23: -1.5391
REMARK 3 S TENSOR
REMARK 3 S11: -0.2752 S12: -0.5478 S13: -0.5842
REMARK 3 S21: 0.3640 S22: 0.7865 S23: 1.2804
REMARK 3 S31: -0.1500 S32: -1.3605 S33: -0.4396
REMARK 3 TLS GROUP : 20
REMARK 3 SELECTION: CHAIN 'C' AND (RESID 125 THROUGH 185)

REMARK 3 ORIGIN FOR THE GROUP (A): -15.2944 9.7380 -6.2454
REMARK 3 T TENSOR
REMARK 3 T11: 0.3936 T22: 0.2809
REMARK 3 T33: 0.1925 T12: 0.0227
REMARK 3 T13: -0.0247 T23: -0.0020
REMARK 3 L TENSOR
REMARK 3 L11: 3.2440 L22: 2.6931
REMARK 3 L33: 4.9663 L12: -0.1727
REMARK 3 L13: 1.8322 L23: -2.2225
REMARK 3 S TENSOR
REMARK 3 S11: 0.0340 S12: 0.2617 S13: 0.0712
REMARK 3 S21: 0.5482 S22: -0.0413 S23: -0.1878
REMARK 3 S31: -0.6528 S32: 0.4477 S33: -0.0297
REMARK 3
REMARK 3 NCS DETAILS
REMARK 3 NUMBER OF NCS GROUPS : NULL
REMARK 3
REMARK 3 OTHER REFINEMENT REMARKS: ITERATIVE ROUNDS OF MODEL BUILDING IN
REMARK 3 COOT AND REFINEMENT IN PHENIX. REFINEMENT PARAMETERS INCLUDED
REMARK 3 REAL AND RECIPROCAL SPACE, INDIVIDUAL ADPS, OCCUPANICES,
REMARK 3 OPTIMIZATION OF X-RAY TO STEREOCHEMICAL AND X-RAY TO ADP
REMARK 3 WEIGHTS. HYDROGENS WERE ADDED AUTOMATICALLY AND AUTOMATIC
REMARK 3 CORRECTION OF N/Q/H ERRORS WAS USED. UPDATED SOLVENT MODEL WAS
REMARK 3 USED IN THE PENULTIMATE ROUND OF REFINEMENT. MANUAL MODELING OF
REMARK 3 SOLVENT WAS CONDUCTED BEFORE THE FINAL ROUND OF REFINEMENT.
REMARK 4
REMARK 4 5TVV COMPLIES WITH FORMAT V. 3.30, 13-JUL-11
REMARK 100
REMARK 100 THIS ENTRY HAS BEEN PROCESSED BY RCSB ON 17-NOV-16.

REMARK 100 THE DEPOSITION ID IS D_1000224895.
REMARK 200
REMARK 200 EXPERIMENTAL DETAILS

REMARK 200 EXPERIMENT TYPE : X-RAY DIFFRACTION
REMARK 200 DATE OF DATA COLLECTION : 09-JUL-15
REMARK 200 TEMPERATURE (KELVIN) : 80
REMARK 200 PH : 7.5
REMARK 200 NUMBER OF CRYSTALS USED : 1
REMARK 200
REMARK 200 SYNCHROTRON (Y/N) : Y
REMARK 200 RADIATION SOURCE : ALS
REMARK 200 BEAMLINE : 8.2.2
REMARK 200 X-RAY GENERATOR MODEL : NULL
REMARK 200 MONOCHROMATIC OR LAUE (M/L) : M
REMARK 200 WAVELENGTH OR RANGE (A) : 0.976246
REMARK 200 MONOCHROMATOR : DOUBLE-CRYSTAL SI(111)

REMARK 200 OPTICS : NULL
REMARK 200
REMARK 200 DETECTOR TYPE : CCD
REMARK 200 DETECTOR MANUFACTURER : ADSC QUANTUM 315R

REMARK 200 INTENSITY-INTEGRATION SOFTWARE : HKL-2000

REMARK 200 DATA SCALING SOFTWARE : HKL-2000, HKL
REMARK 200
REMARK 200 NUMBER OF UNIQUE REFLECTIONS : 52362
REMARK 200 RESOLUTION RANGE HIGH (A) : 1.790
REMARK 200 RESOLUTION RANGE LOW (A) : 43.861
REMARK 200 REJECTION CRITERIA (SIGMA(I)) : NULL
REMARK 200
REMARK 200 OVERALL.
REMARK 200 COMPLETENESS FOR RANGE (%) : 98.5
REMARK 200 DATA REDUNDANCY : 7.800
REMARK 200 R MERGE (I) : 0.11000
REMARK 200 R SYM (I) : NULL
REMARK 200 <I/SIGMA(I)> FOR THE DATA SET : 13.5280
REMARK 200
REMARK 200 IN THE HIGHEST RESOLUTION SHELL.
REMARK 200 HIGHEST RESOLUTION SHELL, RANGE HIGH (A) : 1.79

REMARK 200 HIGHEST RESOLUTION SHELL, RANGE LOW (A) : 1.85

REMARK 200 COMPLETENESS FOR SHELL (%) : 92.8
REMARK 200 DATA REDUNDANCY IN SHELL : 5.90
REMARK 200 R MERGE FOR SHELL (I) : 0.77800
REMARK 200 R SYM FOR SHELL (I) : NULL
REMARK 200 <I/SIGMA(I)> FOR SHELL : 1.538
REMARK 200
REMARK 200 DIFFRACTION PROTOCOL: SINGLE WAVELENGTH

REMARK 200 METHOD USED TO DETERMINE THE STRUCTURE: MOLECULAR REPLACEMENT
REMARK 200 SOFTWARE USED: PHASER 2.5.6
REMARK 200 STARTING MODEL: 2QZ3
REMARK 200

REMARK 200 REMARK: ROD-LIKE CRYSTALS WITH LONGEST DIMENSION OF APPROXIMATELY
REMARK 200 200 MICRONS.
REMARK 280
REMARK 280 CRYSTAL
REMARK 280 SOLVENT CONTENT, VS   (%): 46.13
REMARK 280 MATTHEWS COEFFICIENT, VM (ANGSTROMS**3/DA): 2.28

REMARK 280
REMARK 280 CRYSTALLIZATION CONDITIONS: 0.8M SODIUM PHOSPHATE, 0.8M POTASSIUM
REMARK 280 PHOSPHATE, 0.1M HEPES PH 7.5, VAPOR DIFFUSION, SITTING DROP,
REMARK 280 TEMPERATURE 293.15K
REMARK 290
REMARK 290 CRYSTALLOGRAPHIC SYMMETRY
REMARK 290 SYMMETRY OPERATORS FOR SPACE GROUP: P 21 21 21

REMARK 290
REMARK 290   SYMOP   SYMMETRY
REMARK 290   NNNMMM   OPERATOR
REMARK 290   1555   X,Y,Z
REMARK 290   2555   -X+1/2,-Y,Z+1/2
REMARK 290   3555   -X,Y+1/2,-Z+1/2
REMARK 290   4555   X+1/2,-Y+1/2,-Z
REMARK 290
REMARK 290   WHERE NNN -> OPERATOR NUMBER
REMARK 290   MMM -> TRANSLATION VECTOR
REMARK 290
REMARK 290 CRYSTALLOGRAPHIC SYMMETRY TRANSFORMATIONS

REMARK 290 THE FOLLOWING TRANSFORMATIONS OPERATE ON THE ATOM/HETATM
REMARK 290 RECORDS IN THIS ENTRY TO PRODUCE CRYSTALLOGRAPHICALLY
REMARK 290 RELATED MOLECULES.
REMARK 290   SMTRY1   1 1.000000 0.000000 0.000000   0.00000
REMARK 290   SMTRY2   1 0.000000 1.000000 0.000000   0.00000
REMARK 290   SMTRY3   1 0.000000 0.000000 1.000000   0.00000
REMARK 290   SMTRY1   2 -1.000000 0.000000 0.000000   27.38000
REMARK 290   SMTRY2   2 0.000000 -1.000000 0.000000   0.00000
REMARK 290   SMTRY3   2 0.000000 0.000000 1.000000   68.77900
REMARK 290   SMTRY1   3 -1.000000 0.000000 0.000000   0.00000
REMARK 290   SMTRY2   3 0.000000 1.000000 0.000000   36.62950
REMARK 290   SMTRY3   3 0.000000 0.000000 -1.000000   68.77900
REMARK 290   SMTRY1   4 1.000000 0.000000 0.000000   27.38000
REMARK 290   SMTRY2   4 0.000000 -1.000000 0.000000   36.62950
REMARK 290   SMTRY3   4 0.000000 0.000000 -1.000000   0.00000
REMARK 290
REMARK 290 REMARK: NULL
REMARK 300
REMARK 300 BIOMOLECULE: 1, 2, 3
REMARK 300 SEE REMARK 350 FOR THE AUTHOR PROVIDED AND/OR

PROGRAM
REMARK 300 GENERATED ASSEMBLY INFORMATION FOR THE STRUCTURE IN
REMARK 300 THIS ENTRY. THE REMARK MAY ALSO PROVIDE INFORMATION ON
REMARK 300 BURIED SURFACE AREA.
REMARK 350
REMARK 350 COORDINATES FOR A COMPLETE MULTIMER REPRESENTING THE KNOWN
REMARK 350 BIOLOGICALLY SIGNIFICANT OLIGOMERIZATION STATE OF THE

REMARK 350 MOLECULE CAN BE GENERATED BY APPLYING BIOMT TRANSFORMATIONS
REMARK 350 GIVEN BELOW. BOTH NON-CRYSTALLOGRAPHIC AND

REMARK 350 CRYSTALLOGRAPHIC OPERATIONS ARE GIVEN.

REMARK 350
REMARK 350 BIOMOLECULE: 1
REMARK 350 AUTHOR DETERMINED BIOLOGICAL UNIT: MONOMERIC

REMARK 350 APPLY THE FOLLOWING TO CHAINS: A
REMARK 350   BIOMT1   1 1.000000 0.000000 0.000000   0.00000
REMARK 350   BIOMT2   1 0.000000 1.000000 0.000000   0.00000
REMARK 350   BIOMT3   1 0.000000 0.000000 1.000000   0.00000
REMARK 350
REMARK 350 BIOMOLECULE: 2
REMARK 350 AUTHOR DETERMINED BIOLOGICAL UNIT: MONOMERIC

REMARK 350 APPLY THE FOLLOWING TO CHAINS: B
REMARK 350   BIOMT1   1 1.000000 0.000000 0.000000   0.00000
REMARK 350   BIOMT2   1 0.000000 1.000000 0.000000   0.00000
REMARK 350   BIOMT3   1 0.000000 0.000000 1.000000   0.00000
REMARK 350
REMARK 350 BIOMOLECULE: 3
REMARK 350 AUTHOR DETERMINED BIOLOGICAL UNIT: MONOMERIC

REMARK 350 APPLY THE FOLLOWING TO CHAINS: C
REMARK 350   BIOMT1   1 1.000000 0.000000 0.000000   0.00000
REMARK 350   BIOMT2   1 0.000000 1.000000 0.000000   0.00000
REMARK 350   BIOMT3   1 0.000000 0.000000 1.000000   0.00000
REMARK 465
REMARK 465 MISSING RESIDUES
REMARK 465 THE FOLLOWING RESIDUES WERE NOT LOCATED IN THE

REMARK 465 EXPERIMENT. (M=MODEL NUMBER; RES=RESIDUE NAME; C=CHAIN
REMARK 465 IDENTIFIER; SSSEQ=SEQUENCE NUMBER; I=INSERTION CODE.)

REMARK 465
REMARK 465   M RES C SSSEQI
REMARK 465   GLY A   -2
REMARK 465   PRO A   -1

REMARK 465 HIS A 0
REMARK 465 GLY B -2
REMARK 465 PRO B -1
REMARK 465 HIS B 0
REMARK 465 GLY C -2
REMARK 465 PRO C -1
REMARK 465 HIS C 0
REMARK 465 MET C 1
REMARK 470
REMARK 470 MISSING ATOM
REMARK 470 THE FOLLOWING RESIDUES HAVE MISSING ATOMS (M=MODEL NUMBER;
REMARK 470 RES=RESIDUE NAME; C=CHAIN IDENTIFIER; SSEQ=SEQUENCE NUMBER;
REMARK 470 I=INSERTION CODE):
REMARK 470 M RES CSSEQI ATOMS
REMARK 470 MET A 1 CG SD CE
REMARK 470 ARG A 122 CD NE CZ NH1 NH2
REMARK 470 MET B 1 CG SD CE
REMARK 470 ASP B 121 CG OD1 OD2
REMARK 470 ILE C 15 CG1 CG2 CD1
REMARK 470 VAL C 16 CG1 CG2
REMARK 470 ASN C 17 CG OD1 ND2
REMARK 470 SER C 31 OG
REMARK 470 ASN C 32 CG OD1 ND2
REMARK 470 ASN C 61 CG OD1 ND2
REMARK 470 LYS C 95 CE NZ
REMARK 470 LYS C 99 CG CD CE NZ
REMARK 470 ARG C 112 NE CZ NH1 NH2
REMARK 470 TYR C 113 CG CD1 CD2 CE1 CE2 CZ OH
REMARK 470 ASN C 114 CG OD1 ND2
REMARK 470 SER C 117 OG
REMARK 470 ASP C 121 CG OD1 OD2
REMARK 470 ARG C 122 CG CD NE CZ NH1 NH2
REMARK 470 THR C 123 OG1 CG2
REMARK 470 TYR C 174 CD1 CD2 CE1 CE2 CZ OH
REMARK 470 GLN C 175 CD OE1 NE2
REMARK 500
REMARK 500 GEOMETRY AND STEREOCHEMISTRY
REMARK 500 SUBTOPIC: CLOSE CONTACTS IN SAME ASYMMETRIC UNIT

REMARK 500
REMARK 500 THE FOLLOWING ATOMS ARE IN CLOSE CONTACT.

REMARK 500
REMARK 500 ATM1 RES C SSEQI ATM2 RES C SSEQI DISTANCE

REMARK 500 O HOH B 346 O HOH B 421 2.02
REMARK 500 O HOH B 342 O HOH B 416 2.17
REMARK 500 O HOH C 334 O HOH C 353 2.18
REMARK 500 O HOH A 389 O HOH B 449 2.19
REMARK 500
REMARK 500 REMARK: NULL

REMARK 500
REMARK 500 GEOMETRY AND STEREOCHEMISTRY
REMARK 500 SUBTOPIC: CLOSE CONTACTS
REMARK 500
REMARK 500 THE FOLLOWING ATOMS THAT ARE RELATED BY CRYSTALLOGRAPHIC
REMARK 500 SYMMETRY ARE IN CLOSE CONTACT. AN ATOM LOCATED WITHIN 0.15
REMARK 500 ANGSTROMS OF A SYMMETRY RELATED ATOM IS ASSUMED TO BE ON A
REMARK 500 SPECIAL POSITION AND IS, THEREFORE, LISTED IN REMARK 375
REMARK 500 INSTEAD OF REMARK 500. ATOMS WITH NON-BLANK ALTERNATE
REMARK 500 LOCATION INDICATORS ARE NOT INCLUDED IN THE CALCULATIONS.
REMARK 500
REMARK 500 DISTANCE CUTOFF:
REMARK 500 2.2 ANGSTROMS FOR CONTACTS NOT INVOLVING HYDROGEN ATOMS
REMARK 500 1.6 ANGSTROMS FOR CONTACTS INVOLVING HYDROGEN ATOMS
REMARK 500
REMARK 500 ATM1 RES C SSEQI ATM2 RES C SSEQI SSYMOP DISTANCE
REMARK 500 O HOH A 399 O HOH C 353 4545 2.04
REMARK 500
REMARK 500 REMARK: NULL
REMARK 500
REMARK 500 GEOMETRY AND STEREOCHEMISTRY
REMARK 500 SUBTOPIC: TORSION ANGLES
REMARK 500
REMARK 500 TORSION ANGLES OUTSIDE THE EXPECTED RAMACHANDRAN REGIONS:
REMARK 500 (M=MODEL NUMBER; RES=RESIDUE NAME; C=CHAIN IDENTIFIER;
REMARK 500 SSEQ=SEQUENCE NUMBER; I=INSERTION CODE).

REMARK 500
REMARK 500 STANDARD TABLE:
REMARK 500 FORMAT:(10X,I3,1X,A3,1X,A1,I4,A1,4X,F7.2,3X,F7.2)
REMARK 500
REMARK 500 EXPECTED VALUES: GJ KLEYWEGT AND TA JONES (1996). PHI/PSI-
REMARK 500 CHOLOGY: RAMACHANDRAN REVISITED. STRUCTURE 4, 1395 - 1400
REMARK 500
REMARK 500 M RES CSSEQI PSI PHI
REMARK 500 ASP A 4 29.42 -152.55
REMARK 500 ALA A 165 -155.26 -106.09
REMARK 500 ASP B 4 20.75 -141.31
REMARK 500 SER B 74 60.39 62.17
REMARK 500 ALA B 165 -150.14 -106.68

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REMARK 500    ASP C   4      26.28   -144.37
REMARK 500    SER C 117     -157.56   -143.80
REMARK 500    ASP C 119       49.08   -100.55
REMARK 500    ALA C 165     -151.78    -94.65
REMARK 500    GLN C 175       61.74     28.58
REMARK 500    GLN C 175       62.27     28.58
REMARK 500
REMARK 500 REMARK: NULL
REMARK 620
REMARK 620 METAL COORDINATION
REMARK 620 (M=MODEL NUMBER; RES=RESIDUE NAME; C=CHAIN
IDENTIFIER;
REMARK 620 SSEQ=SEQUENCE NUMBER; I=INSERTION CODE):

REMARK 620
REMARK 620 COORDINATION ANGLES FOR:  M RES CSSEQI METAL

REMARK 620                          K A 201   K
REMARK 620 N RES CSSEQI ATOM
REMARK 620 1 ASN A  20   O
REMARK 620 2 ASN A  20   OD1  68.1
REMARK 620 3 GLY A  21   O    75.0  64.5
REMARK 620 4 TYR B  94   OH  154.1  88.7  84.8
REMARK 620 5 ASP B 106   OD1  99.0 102.2 166.6  97.1
REMARK 620 6 HOH B 390   O    84.1 143.4  86.1 111.0 105.5
REMARK 620 N               1    2    3    4    5
REMARK 620
REMARK 620 COORDINATION ANGLES FOR:  M RES CSSEQI METAL

REMARK 620                          K B 201   K
REMARK 620 N RES CSSEQI ATOM
REMARK 620 1 ASN B  20   O
REMARK 620 2 ASN B  20   OD1  64.0
REMARK 620 3 GLY B  21   O    73.0  64.8
REMARK 620 4 TYR C  94   OH   80.3  61.5   9.8
REMARK 620 5 ASP C 106   OD1  77.5  58.4   9.8   3.5
REMARK 620 6 HOH C 356   O    90.0 141.1  80.7  87.1  89.3
REMARK 620 N               1    2    3    4    5
REMARK 620
REMARK 620 COORDINATION ANGLES FOR:  M RES CSSEQI METAL

REMARK 620                          K C 201   K
REMARK 620 N RES CSSEQI ATOM
REMARK 620 1 ASN C  20   O
REMARK 620 2 ASN C  20   OD1  64.4
REMARK 620 3 GLY C  21   O    71.4  64.3
REMARK 620 4 TYR A  94   OH   91.2 141.9  80.7
REMARK 620 5 ASP A 106   OD1  90.5 139.7  78.4   2.3
REMARK 620 6 HOH A 360   O    91.3 145.8  85.8   5.3   7.6
REMARK 620 N               1    2    3    4    5
REMARK 800
REMARK 800 SITE
REMARK 800 SITE_IDENTIFIER: AC1
```

REMARK 800 EVIDENCE_CODE: SOFTWARE
REMARK 800 SITE_DESCRIPTION: binding site for residue K A 201
REMARK 800
REMARK 800 SITE_IDENTIFIER: AC2
REMARK 800 EVIDENCE_CODE: SOFTWARE
REMARK 800 SITE_DESCRIPTION: binding site for residue K B 201
REMARK 800
REMARK 800 SITE_IDENTIFIER: AC3
REMARK 800 EVIDENCE_CODE: SOFTWARE
REMARK 800 SITE_DESCRIPTION: binding site for residue K C 201
REMARK 900
REMARK 900 RELATED ENTRIES
REMARK 900 RELATED ID: 5TVY RELATED DB: PDB
DBREF 5TVV A 2 185 UNP P18429 XYNA_BACSU 30 213
DBREF 5TVV B 2 185 UNP P18429 XYNA_BACSU 30 213
DBREF 5TVV C 2 185 UNP P18429 XYNA_BACSU 30 213
SEQADV 5TVV GLY A -2 UNP P18429 EXPRESSION TAG
SEQADV 5TVV PRO A -1 UNP P18429 EXPRESSION TAG
SEQADV 5TVV HIS A 0 UNP P18429 EXPRESSION TAG
SEQADV 5TVV MET A 1 UNP P18429 EXPRESSION TAG
SEQADV 5TVV LEU A 7 UNP P18429 GLN 35 ENGINEERED MUTATION
SEQADV 5TVV PHE A 9 UNP P18429 TRP 37 ENGINEERED MUTATION
SEQADV 5TVV SER A 35 UNP P18429 ASN 63 ENGINEERED MUTATION
SEQADV 5TVV TRP A 63 UNP P18429 ASN 91 ENGINEERED MUTATION
SEQADV 5TVV ALA A 65 UNP P18429 TYR 93 ENGINEERED MUTATION
SEQADV 5TVV ALA A 67 UNP P18429 THR 95 ENGINEERED MUTATION
SEQADV 5TVV VAL A 69 UNP P18429 TYR 97 ENGINEERED MUTATION
SEQADV 5TVV ALA A 78 UNP P18429 GLU 106 ENGINEERED MUTATION
SEQADV 5TVV ALA A 88 UNP P18429 TYR 116 ENGINEERED MUTATION
SEQADV 5TVV TRP A 90 UNP P18429 PRO 118 ENGINEERED MUTATION
SEQADV 5TVV ALA A 172 UNP P18429 GLU 200 ENGINEERED MUTATION
SEQADV 5TVV GLY B -2 UNP P18429 EXPRESSION TAG
SEQADV 5TVV PRO B -1 UNP P18429 EXPRESSION TAG
SEQADV 5TVV HIS B 0 UNP P18429 EXPRESSION TAG
SEQADV 5TVV MET B 1 UNP P18429 EXPRESSION TAG
SEQADV 5TVV LEU B 7 UNP P18429 GLN 35 ENGINEERED MUTATION
SEQADV 5TVV PHE B 9 UNP P18429 TRP 37 ENGINEERED MUTATION
SEQADV 5TVV SER B 35 UNP P18429 ASN 63 ENGINEERED MUTATION
SEQADV 5TVV TRP B 63 UNP P18429 ASN 91 ENGINEERED MUTATION

SEQADV 5TVV ALA B 65 UNP P18429 TYR 93 ENGINEERED MUTATION

SEQADV 5TVV ALA B 67 UNP P18429 THR 95 ENGINEERED MUTATION

SEQADV 5TVV VAL B 69 UNP P18429 TYR 97 ENGINEERED MUTATION

SEQADV 5TVV ALA B 78 UNP P18429 GLU 106 ENGINEERED MUTATION

SEQADV 5TVV ALA B 88 UNP P18429 TYR 116 ENGINEERED MUTATION

SEQADV 5TVV TRP B 90 UNP P18429 PRO 118 ENGINEERED MUTATION

SEQADV 5TVV ALA B 172 UNP P18429 GLU 200 ENGINEERED MUTATION

SEQADV 5TVV GLY C -2 UNP P18429 EXPRESSION TAG
SEQADV 5TVV PRO C -1 UNP P18429 EXPRESSION TAG
SEQADV 5TVV HIS C 0 UNP P18429 EXPRESSION TAG
SEQADV 5TVV MET C 1 UNP P18429 EXPRESSION TAG
SEQADV 5TVV LEU C 7 UNP P18429 GLN 35 ENGINEERED MUTATION

SEQADV 5TVV PHE C 9 UNP P18429 TRP 37 ENGINEERED MUTATION

SEQADV 5TVV SER C 35 UNP P18429 ASN 63 ENGINEERED MUTATION

SEQADV 5TVV TRP C 63 UNP P18429 ASN 91 ENGINEERED MUTATION

SEQADV 5TVV ALA C 65 UNP P18429 TYR 93 ENGINEERED MUTATION

SEQADV 5TVV ALA C 67 UNP P18429 THR 95 ENGINEERED MUTATION

SEQADV 5TVV VAL C 69 UNP P18429 TYR 97 ENGINEERED MUTATION

SEQADV 5TVV ALA C 78 UNP P18429 GLU 106 ENGINEERED MUTATION

SEQADV 5TVV ALA C 88 UNP P18429 TYR 116 ENGINEERED MUTATION

SEQADV 5TVV TRP C 90 UNP P18429 PRO 118 ENGINEERED MUTATION

SEQADV 5TVV ALA C 172 UNP P18429 GLU 200 ENGINEERED MUTATION

SEQRES 1 A 188 GLY PRO HIS MET SER THR ASP TYR TRP LEU ASN PHE THR
SEQRES 2 A 188 ASP GLY GLY GLY ILE VAL ASN ALA VAL ASN GLY SER GLY
SEQRES 3 A 188 GLY ASN TYR SER VAL ASN TRP SER ASN THR GLY SER PHE
SEQRES 4 A 188 VAL VAL GLY LYS GLY TRP THR THR GLY SER PRO PHE ARG
SEQRES 5 A 188 THR ILE ASN TYR ASN ALA GLY VAL TRP ALA PRO ASN GLY
SEQRES 6 A 188 TRP GLY ALA LEU ALA LEU VAL GLY TRP THR ARG SER PRO

SEQRES 7 A 188 LEU ILE ALA TYR TYR VAL VAL ASP SER TRP GLY THR ALA
SEQRES 8 A 188 ARG TRP THR GLY THR TYR LYS GLY THR VAL LYS SER ASP
SEQRES 9 A 188 GLY GLY THR TYR ASP ILE TYR THR THR THR ARG TYR ASN
SEQRES 10 A 188 ALA PRO SER ILE ASP GLY ASP ARG THR THR PHE THR GLN
SEQRES 11 A 188 TYR TRP SER VAL ARG GLN SER LYS ARG PRO THR GLY SER
SEQRES 12 A 188 ASN ALA THR ILE THR PHE SER ASN HIS VAL ASN ALA TRP
SEQRES 13 A 188 LYS SER HIS GLY MET ASN LEU GLY SER ASN TRP ALA TYR
SEQRES 14 A 188 GLN VAL MET ALA THR ALA GLY TYR GLN SER SER GLY SER
SEQRES 15 A 188 SER ASN VAL THR VAL TRP
SEQRES 1 B 188 GLY PRO HIS MET SER THR ASP TYR TRP LEU ASN PHE THR
SEQRES 2 B 188 ASP GLY GLY GLY ILE VAL ASN ALA VAL ASN GLY SER GLY
SEQRES 3 B 188 GLY ASN TYR SER VAL ASN TRP SER ASN THR GLY SER PHE
SEQRES 4 B 188 VAL VAL GLY LYS GLY TRP THR THR GLY SER PRO PHE ARG
SEQRES 5 B 188 THR ILE ASN TYR ASN ALA GLY VAL TRP ALA PRO ASN GLY
SEQRES 6 B 188 TRP GLY ALA LEU ALA LEU VAL GLY TRP THR ARG SER PRO
SEQRES 7 B 188 LEU ILE ALA TYR TYR VAL VAL ASP SER TRP GLY THR ALA
SEQRES 8 B 188 ARG TRP THR GLY THR TYR LYS GLY THR VAL LYS SER ASP
SEQRES 9 B 188 GLY GLY THR TYR ASP ILE TYR THR THR THR ARG TYR ASN
SEQRES 10 B 188 ALA PRO SER ILE ASP GLY ASP ARG THR THR PHE THR GLN
SEQRES 11 B 188 TYR TRP SER VAL ARG GLN SER LYS ARG PRO THR GLY SER
SEQRES 12 B 188 ASN ALA THR ILE THR PHE SER ASN HIS VAL ASN ALA TRP
SEQRES 13 B 188 LYS SER HIS GLY MET ASN LEU GLY SER ASN TRP ALA TYR
SEQRES 14 B 188 GLN VAL MET ALA THR ALA GLY TYR GLN SER SER GLY SER
SEQRES 15 B 188 SER ASN VAL THR VAL TRP
SEQRES 1 C 188 GLY PRO HIS MET SER THR ASP TYR TRP LEU ASN PHE THR
SEQRES 2 C 188 ASP GLY GLY GLY ILE VAL ASN ALA VAL ASN GLY SER GLY
SEQRES 3 C 188 GLY ASN TYR SER VAL ASN TRP SER ASN THR GLY SER PHE
SEQRES 4 C 188 VAL VAL GLY LYS GLY TRP THR THR GLY SER PRO PHE

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ARG
SEQRES   5 C  188  THR ILE ASN TYR ASN ALA GLY VAL TRP ALA PRO ASN
GLY
SEQRES   6 C  188  TRP GLY ALA LEU ALA LEU VAL GLY TRP THR ARG SER
PRO
SEQRES   7 C  188  LEU ILE ALA TYR TYR VAL VAL ASP SER TRP GLY THR
ALA
SEQRES   8 C  188  ARG TRP THR GLY THR TYR LYS GLY THR VAL LYS SER
ASP
SEQRES   9 C  188  GLY GLY THR TYR ASP ILE TYR THR THR THR ARG TYR
ASN
SEQRES  10 C  188  ALA PRO SER ILE ASP GLY ASP ARG THR THR PHE THR
GLN
SEQRES  11 C  188  TYR TRP SER VAL ARG GLN SER LYS ARG PRO THR GLY
SER
SEQRES  12 C  188  ASN ALA THR ILE THR PHE SER ASN HIS VAL ASN ALA
TRP
SEQRES  13 C  188  LYS SER HIS GLY MET ASN LEU GLY SER ASN TRP ALA
TYR
SEQRES  14 C  188  GLN VAL MET ALA THR ALA GLY TYR GLN SER SER GLY
SER
SEQRES  15 C  188  SER ASN VAL THR VAL TRP
HET     K  A 201       1
HET     K  B 201       1
HET     K  C 201       1
HETNAM      K POTASSIUM ION
FORMUL   4    K    3(K 1+)
FORMUL   7  HOH   *367(H2 O)
HELIX    1 AA1 PHE A  146  HIS A  156  1                                  11
HELIX    2 AA2 PHE B  146  HIS B  156  1                                  11
HELIX    3 AA3 PHE C  146  SER C  155  1                                   10
SHEET    1 AA116 THR A  93  SER A 100  0
SHEET    2 AA116 GLY A 103  SER A 117 -1  O  ILE A 107   N  GLY A  96
SHEET    3 AA116 GLY A 120  ARG A 132 -1  O  VAL A 131   N  ASP A 106
SHEET    4 AA116 ILE A  77  TRP A  85  1  N  VAL A  82   O  SER A 130
SHEET    5 AA116 THR A  50  ARG A  73 -1  N  LEU A  66   O  SER A  84
SHEET    6 AA116 ASN A 163  TRP A 185 -1  O  SER A 177   N  ASN A  61
SHEET    7 AA116 SER A  35  TRP A  42 -1  N  VAL A  38   O  THR A 171
SHEET    8 AA116 TYR A   5  THR A  10 -1  N  LEU A   7   O  GLY A  39
SHEET    9 AA116 GLY B  92  SER B 100 -1  O  GLY B  92   N  TRP A   6
SHEET   10 AA116 GLY B 103  SER B 117 -1  O  ILE B 107   N  GLY B  96
SHEET   11 AA116 GLY B 120  ARG B 132 -1  O  GLY B 120   N  SER B 117
SHEET   12 AA116 ILE B  77  TRP B  85  1  N  VAL B  82   O  SER B 130
SHEET   13 AA116 THR B  50  ARG B  73 -1  N  GLY B  70   O  TYR B  79
SHEET   14 AA116 ASN B 163  TRP B 185 -1  O  ALA B 172   N  ALA B  65
SHEET   15 AA116 SER B  35  TRP B  42 -1  N  TRP B  42   O  GLN B 167
SHEET   16 AA116 TYR B   5  THR B  10 -1  N  LEU B   7   O  GLY B  39
SHEET    1 AA211 ILE A  15  ASN A  20  0
SHEET    2 AA211 ASN A  25  SER A  31 -1  O  SER A  27   N  VAL A  19
SHEET    3 AA211 ASN A 163  TRP A 185 -1  O  VAL A 182   N  TYR A  26
SHEET    4 AA211 SER A  35  TRP A  42 -1  N  VAL A  38   O  THR A 171
SHEET    5 AA211 TYR A   5  THR A  10 -1  N  LEU A   7   O  GLY A  39
SHEET    6 AA211 GLY B  92  SER B 100 -1  O  GLY B  92   N  TRP A   6
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SHEET    7 AA211 GLY B 103  SER B 117 -1  O  ILE B 107   N  GLY B  96
SHEET    8 AA211 GLY B 120  ARG B 132 -1  O  GLY B 120   N  SER B 117
SHEET    9 AA211 ILE B  77  TRP B  85  1  N  VAL B  82   O  SER B 130
SHEET   10 AA211 THR B  50  ARG B  73 -1  N  GLY B  70   O  TYR B  79
SHEET   11 AA211 ALA B 142  THR B 145 -1  O  ALA B 142   N  TYR B  53
SHEET    1 AA310 ILE A  15  ASN A  20  0
SHEET    2 AA310 ASN A  25  SER A  31 -1  O  SER A  27   N  VAL A  19
SHEET    3 AA310 ASN A 163  TRP A 185 -1  O  VAL A 182   N  TYR A  26
SHEET    4 AA310 THR A  50  ARG A  73 -1  N  ASN A  61   O  SER A 177
SHEET    5 AA310 ALA A 142  THR A 145 -1  O  ALA A 142   N  TYR A  53
SHEET    6 AA310 THR A  50  ARG A  73 -1  N  TYR A  53   O  ALA A 142
SHEET    7 AA310 ILE A  77  TRP A  85 -1  O  SER A  84   N  LEU A  66
SHEET    8 AA310 GLY A 120  ARG A 132  1  O  SER A 130   N  VAL A  82
SHEET    9 AA310 GLY A 103  SER A 117 -1  N  ASP A 106   O  VAL A 131
SHEET   10 AA310 THR A  93  SER A 100 -1  N  GLY A  96   O  ILE A 107
SHEET    1 AA4 5 TYR B   5  THR B  10  0
SHEET    2 AA4 5 SER B  35  TRP B  42 -1  O  GLY B  39   N  LEU B   7
SHEET    3 AA4 5 ASN B 163  TRP B 185 -1  O  GLN B 167   N  TRP B  42
SHEET    4 AA4 5 ASN B  25  SER B  31 -1  N  TRP B  30   O  GLY B 178
SHEET    5 AA4 5 ILE B  15  ASN B  20 -1  N  ASN B  17   O  ASN B  29
SHEET    1 AA5 5 ILE B  15  ASN B  20  0
SHEET    2 AA5 5 ASN B  25  SER B  31 -1  O  ASN B  29   N  ASN B  17
SHEET    3 AA5 5 ASN B 163  TRP B 185 -1  O  GLY B 178   N  TRP B  30
SHEET    4 AA5 5 THR B  50  ARG B  73 -1  N  ALA B  65   O  ALA B 172
SHEET    5 AA5 5 ALA B 142  THR B 145 -1  O  ALA B 142   N  TYR B  53
SHEET    1 AA6 8 TYR C   5  THR C  10  0
SHEET    2 AA6 8 SER C  35  TRP C  42 -1  O  GLY C  39   N  LEU C   7
SHEET    3 AA6 8 ASN C 163  TRP C 185 -1  O  THR C 171   N  VAL C  38
SHEET    4 AA6 8 THR C  50  ARG C  73 -1  N  ALA C  65   O  ALA C 172
SHEET    5 AA6 8 ILE C  77  TRP C  85 -1  O  SER C  84   N  LEU C  66
SHEET    6 AA6 8 THR C 123  ARG C 132  1  O  SER C 130   N  VAL C  82
SHEET    7 AA6 8 GLY C 103  ALA C 115 -1  N  ALA C 115   O  THR C 123
SHEET    8 AA6 8 THR C  93  SER C 100 -1  N  VAL C  98   O  TYR C 105
SHEET    1 AA7 5 ILE C  15  ASN C  20  0
SHEET    2 AA7 5 ASN C  25  SER C  31 -1  O  SER C  27   N  VAL C  19
SHEET    3 AA7 5 ASN C 163  TRP C 185 -1  O  SER C 180   N  VAL C  28
SHEET    4 AA7 5 THR C  50  ARG C  73 -1  N  ALA C  65   O  ALA C 172
SHEET    5 AA7 5 ALA C 142  THR C 145 -1  O  ILE C 144   N  ILE C  51
LINK         O   ASN A  20                 K     K A 201     1555   1555  2.78
LINK         OD1 ASN A  20                 K     K A 201     1555   1555  2.84
LINK         O   GLY A  21                 K     K A 201     1555   1555  2.76
LINK         O   ASN B  20                 K     K B 201     1555   1555  2.81
LINK         OD1 ASN B  20                 K     K B 201     1555   1555  3.01
LINK         O   GLY B  21                 K     K B 201     1555   1555  2.83
LINK         OH  TYR B  94                 K     K A 201     1555   1555  2.67
LINK         OD1 ASP B 106                 K     K A 201     1555   1555  2.71
LINK         O   ASN C  20                 K     K C 201     1555   1555  2.74
LINK         OD1 ASN C  20                 K     K C 201     1555   1555  2.92
LINK         O   GLY C  21                 K     K C 201     1555   1555  2.71
LINK         K     K A 201                 O   HOH B 390     1555   1555  2.67
LINK         OH  TYR A  94                 K     K C 201     1555   4545  2.72
LINK         OD1 ASP A 106                 K     K C 201     1555   4545  2.64
LINK         OH  TYR C  94                 K     K B 201     1555   3454  2.80
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LINK         OD1 ASP C 106                K     K B 201     1555   3454  2.60
LINK         K     K B 201                O   HOH C 356     1555   3444  2.91
LINK         K     K C 201                O   HOH A 360     1555   4445  2.99
CISPEP   1 SER A   74    PRO A   75         0        -1.23
CISPEP   2 SER B   74    PRO B   75         0         1.92
CISPEP   3 SER C   74    PRO C   75         0         1.73
SITE     1 AC1  7 ASN A  20  GLY A  21  TYR B  94  THR B  97
SITE     2 AC1  7 ASP B 106  GLN B 133  HOH B 390
SITE     1 AC2  5 ASN B  20  GLY B  21  TYR C  94  ASP C 106
SITE     2 AC2  5 HOH C 356
SITE     1 AC3  7 TYR A  94  THR A  97  ASP A 106  GLN A 133
SITE     2 AC3  7 HOH A 360  ASN C  20  GLY C  21
CRYST1   54.760   73.259  137.558  90.00  90.00  90.00 P 21 21 21   12
ORIGX1      1.000000  0.000000  0.000000        0.00000
ORIGX2      0.000000  1.000000  0.000000        0.00000
ORIGX3      0.000000  0.000000  1.000000        0.00000
SCALE1      0.018262  0.000000  0.000000        0.00000
SCALE2      0.000000  0.013650  0.000000        0.00000
SCALE3      0.000000  0.000000  0.007270        0.00000
ATOM      1  N   MET A   1      10.518  -8.748 -29.729  1.00 63.76           N
ANISOU    1  N   MET A   1     6872   7840   9513   -263    722    536       N
ATOM      2  CA  MET A   1       9.467  -7.797 -30.197  1.00 61.68           C
ANISOU    2  CA  MET A   1     6899   7382   9153   -335    665    566       C
ATOM      3  C   MET A   1       8.390  -7.628 -29.131  1.00 55.67           C
ANISOU    3  C   MET A   1     6263   6561   8329   -257    389    416       C
ATOM      4  O   MET A   1       8.363  -8.370 -28.149  1.00 56.71           O
ANISOU    4  O   MET A   1     6298   6802   8448   -138    273    307       O
ATOM      5  CB  MET A   1       8.842  -8.292 -31.503  1.00 62.19           C
ANISOU    5  CB  MET A   1     7216   7430   8983   -236    857    656       C
ATOM      6  H   MET A   1      11.286  -8.312 -29.620  1.00 76.51           H
ATOM      7  HA  MET A   1       9.877  -6.935 -30.369  1.00 74.01           H
ATOM      8  N   SER A   2       7.504  -6.652 -29.317  1.00 46.95           N
ANISOU    8  N   SER A   2     5380   5287   7174   -306    290    415       N
ATOM      9  CA  SER A   2       6.381  -6.514 -28.407  1.00 35.79           C
ANISOU    9  CA  SER A   2     4088   3836   5673   -197     64    279       C
ATOM     10  C   SER A   2       5.413  -7.680 -28.608  1.00 26.20           C
ANISOU   10  C   SER A   2     2987   2719   4248    -14    105    254       C
ATOM     11  O   SER A   2       5.504  -8.446 -29.574  1.00 22.86           O
ANISOU   11  O   SER A   2     2611   2345   3729     27    283    335       O
ATOM     12  CB  SER A   2       5.678  -5.170 -28.605  1.00 35.64           C
ANISOU   12  CB  SER A   2     4278   3611   5654   -265    -52    281       C
ATOM     13  OG  SER A   2       4.900  -5.154 -29.789  1.00 35.73           O
ANISOU   13  OG  SER A   2     4516   3555   5503   -221     53    370       O
ATOM     14  H   SER A   2       7.532  -6.071 -29.950  1.00 56.34           H
ATOM     15  HA  SER A   2       6.708  -6.550 -27.495  1.00 42.94           H
ATOM     16  HB2 SER A   2       5.096  -5.007 -27.847  1.00 42.77           H
ATOM     17  HB3 SER A   2       6.348  -4.472 -28.662  1.00 42.77           H
ATOM     18  HG  SER A   2       4.525  -4.407 -29.876  1.00 42.87           H
ATOM     19  N   THR A   3       4.489  -7.823 -27.663  1.00 22.44           N
ANISOU   19  N   THR A   3     2556   2269   3700     96    -61    140       N
ATOM     20  CA  THR A   3       3.617  -8.986 -27.630  1.00 19.97           C
ANISOU   20  CA  THR A   3     2306   2054   3227    240    -40    114       C
ATOM     21  C   THR A   3       2.665  -8.991 -28.821  1.00 18.92           C
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ANISOU   21  C   THR A   3    2378   1852   2958    264     18    173      C
ATOM     22  O   THR A   3     2.345  -7.948 -29.397  1.00 18.10           O
ANISOU   22  O   THR A   3    2402   1619   2854    212    -10    207      O
ATOM     23  CB  THR A   3     2.815  -9.019 -26.327  1.00 19.45           C
ANISOU   23  CB  THR A   3    2233   2038   3121    338   -209     -2      C
ATOM     24  OG1 THR A   3     2.113  -7.783 -26.157  1.00 20.18           O
ANISOU   24  OG1 THR A   3    2432   2018   3218    331   -338    -49      O
ATOM     25  CG2 THR A   3     3.726  -9.243 -25.138  1.00 20.20           C
ANISOU   25  CG2 THR A   3    2155   2215   3305    352   -282    -67      C
ATOM     26  H   THR A   3     4.349  -7.259 -27.029  1.00 26.92           H
ATOM     27  HA  THR A   3     4.158  -9.790 -27.672  1.00 23.96           H
ATOM     28  HB  THR A   3     2.176  -9.748 -26.362  1.00 23.35           H
ATOM     29  HG1 THR A   3     1.586  -7.662 -26.800  1.00 24.22           H
ATOM     30 HG21 THR A   3     3.205  -9.262 -24.320  1.00 24.24           H
ATOM     31 HG22 THR A   3     4.193 -10.088 -25.234  1.00 24.24           H
ATOM     32 HG23 THR A   3     4.378  -8.527 -25.081  1.00 24.24           H
ATOM     33  N   ASP A   4     2.216 -10.199 -29.197  1.00 17.87           N
ANISOU   33  N   ASP A   4    2293   1792   2704    349     82    183      N
ATOM     34  CA  ASP A   4     1.262 -10.339 -30.293  1.00 18.15           C
ANISOU   34  CA  ASP A   4    2524   1770   2603    385     98    218      C
ATOM     35  C   ASP A   4     0.396 -11.589 -30.144  1.00 17.36           C
ANISOU   35  C   ASP A   4    2451   1744   2402    472     64    177      C
ATOM     36  O   ASP A   4    -0.059 -12.149 -31.148  1.00 16.74           O
ANISOU   36  O   ASP A   4    2515   1635   2212    501     98    206      O
ATOM     37  CB  ASP A   4     1.999 -10.371 -31.634  1.00 19.80           C
ANISOU   37  CB  ASP A   4    2827   1930   2766    348    274    325      C
ATOM     38  CG  ASP A   4     2.829 -11.629 -31.821  1.00 19.73           C
ANISOU   38  CG  ASP A   4    2748   2017   2733    398    419    346      C
ATOM     39  OD1 ASP A   4     2.972 -12.434 -30.878  1.00 19.20           O
ANISOU   39  OD1 ASP A   4    2552   2039   2702    446    377    286      O
ATOM     40  OD2 ASP A   4     3.340 -11.819 -32.935  1.00 22.88           O
ANISOU   40  OD2 ASP A   4    3239   2398   3058    408    580    425      O
ATOM     41  H   ASP A   4     2.450 -10.942 -28.833  1.00 21.44           H
ATOM     42  HA  ASP A   4     0.673  -9.569 -30.295  1.00 21.78           H
ATOM     43  HB2 ASP A   4     1.348 -10.332 -32.353  1.00 23.76           H
ATOM     44  HB3 ASP A   4     2.595  -9.608 -31.685  1.00 23.76           H
ATOM     45  N   TYR A   5     0.140 -12.029 -28.914  1.00 15.74           N
ANISOU   45  N   TYR A   5    2128   1625   2228    509     -9    114      N
ATOM     46  CA  TYR A   5    -0.614 -13.254 -28.699  1.00 15.44           C
ANISOU   46  CA  TYR A   5    2108   1645   2115    559    -28     97      C
ATOM     47  C   TYR A   5    -1.455 -13.128 -27.440  1.00 15.74           C
ANISOU   47  C   TYR A   5    2059   1756   2167    593   -132     39      C
ATOM     48  O   TYR A   5    -0.980 -12.628 -26.417  1.00 15.89           O
ANISOU   48  O   TYR A   5    1982   1813   2243    609   -167      0      O
ATOM     49  CB  TYR A   5     0.315 -14.464 -28.580  1.00 15.85           C
ANISOU   49  CB  TYR A   5    2120   1740   2162    588     69    118      C
ATOM     50  CG  TYR A   5    -0.404 -15.777 -28.768  1.00 16.04           C
ANISOU   50  CG  TYR A   5    2233   1762   2100    617     60    121      C
ATOM     51  CD1 TYR A   5    -0.570 -16.323 -30.035  1.00 17.46           C
ANISOU   51  CD1 TYR A   5    2575   1868   2192    625     99    144      C
ATOM     52  CD2 TYR A   5    -0.932 -16.460 -27.682  1.00 15.88           C
ANISOU   52  CD2 TYR A   5    2155   1800   2080    633      8    103      C
ATOM     53  CE1 TYR A   5    -1.232 -17.531 -30.212  1.00 17.95           C
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ANISOU   53  CE1 TYR A   5     2735   1898   2189    634     59    136      C
ATOM     54  CE2 TYR A   5      -1.597 -17.666 -27.846  1.00 16.77           C
ANISOU   54  CE2 TYR A   5     2353   1885   2135    626     -6    119      C
ATOM     55  CZ  TYR A   5      -1.745 -18.192 -29.114  1.00 18.13           C
ANISOU   55  CZ  TYR A   5     2682   1966   2241    619      6    128      C
ATOM     56  OH  TYR A   5      -2.409 -19.381 -29.281  1.00 19.43           O
ANISOU   56  OH  TYR A   5     2945   2075   2363    595    -38    133      O
ATOM     57  H   TYR A   5       0.392 -11.636 -28.192  1.00 18.89           H
ATOM     58  HA  TYR A   5      -1.210 -13.401 -29.450  1.00 18.53           H
ATOM     59  HB2 TYR A   5       1.005 -14.401 -29.259  1.00 19.02           H
ATOM     60  HB3 TYR A   5       0.718 -14.467 -27.697  1.00 19.02           H
ATOM     61  HD1 TYR A   5      -0.223 -15.878 -30.774  1.00 20.96           H
ATOM     62  HD2 TYR A   5      -0.831 -16.107 -26.827  1.00 19.06           H
ATOM     63  HE1 TYR A   5      -1.336 -17.888 -31.064  1.00 21.54           H
ATOM     64  HE2 TYR A   5      -1.944 -18.114 -27.109  1.00 20.13           H
ATOM     65  HH  TYR A   5      -2.667 -19.673 -28.536  1.00 23.32           H
ATOM     66  N   TRP A   6      -2.703 -13.588 -27.528  1.00 15.42           N
ANISOU   66  N   TRP A   6     2050   1738   2070    607   -182     32      N
ATOM     67  CA  TRP A   6      -3.640 -13.600 -26.411  1.00 14.82           C
ANISOU   67  CA  TRP A   6     1882   1758   1993    646   -242     -4      C
ATOM     68  C   TRP A   6      -4.069 -15.038 -26.161  1.00 15.42           C
ANISOU   68  C   TRP A   6     1946   1879   2034    625   -207     32      C
ATOM     69  O   TRP A   6      -4.632 -15.686 -27.054  1.00 14.28           O
ANISOU   69  O   TRP A   6     1875   1686   1863    579   -220     56      O
ATOM     70  CB  TRP A   6      -4.850 -12.712 -26.704  1.00 14.58           C
ANISOU   70  CB  TRP A   6     1860   1725   1955    675   -334    -36      C
ATOM     71  CG  TRP A   6      -5.968 -12.798 -25.706  1.00 14.63           C
ANISOU   71  CG  TRP A   6     1751   1855   1951    728   -366    -64      C
ATOM     72  CD1 TRP A   6      -7.269 -13.123 -25.967  1.00 14.54           C
ANISOU   72  CD1 TRP A   6     1689   1899   1935    722   -406    -57      C
ATOM     73  CD2 TRP A   6      -5.898 -12.537 -24.294  1.00 14.96           C
ANISOU   73  CD2 TRP A   6     1707   1992   1983    802   -354   -100      C
ATOM     74  NE1 TRP A   6      -8.010 -13.078 -24.811  1.00 15.56           N
ANISOU   74  NE1 TRP A   6     1685   2168   2060    784   -390    -73      N
ATOM     75  CE2 TRP A   6      -7.193 -12.725 -23.772  1.00 16.00           C
ANISOU   75  CE2 TRP A   6     1740   2248   2094    845   -355   -101      C
ATOM     76  CE3 TRP A   6      -4.866 -12.171 -23.421  1.00 15.63           C
ANISOU   76  CE3 TRP A   6     1789   2077   2072    840   -352   -136      C
ATOM     77  CZ2 TRP A   6      -7.488 -12.553 -22.423  1.00 17.87           C
ANISOU   77  CZ2 TRP A   6     1898   2608   2285    939   -322   -128      C
ATOM     78  CZ3 TRP A   6      -5.163 -12.009 -22.071  1.00 17.90           C
ANISOU   78  CZ3 TRP A   6     2025   2469   2307    916   -349   -174      C
ATOM     79  CH2 TRP A   6      -6.465 -12.196 -21.593  1.00 18.52           C
ANISOU   79  CH2 TRP A   6     2036   2664   2337    959   -317   -164      C
ATOM     80  H   TRP A   6      -3.038 -13.910 -28.252  1.00 18.50           H
ATOM     81  HA  TRP A   6      -3.199 -13.267 -25.614  1.00 17.79           H
ATOM     82  HB2 TRP A   6      -4.554 -11.789 -26.731  1.00 17.50           H
ATOM     83  HB3 TRP A   6      -5.212 -12.962 -27.568  1.00 17.50           H
ATOM     84  HD1 TRP A   6      -7.607 -13.330 -26.808  1.00 17.44           H
ATOM     85  HE1 TRP A   6      -8.851 -13.246 -24.750  1.00 18.67           H
ATOM     86  HE3 TRP A   6      -4.001 -12.038 -23.737  1.00 18.76           H
ATOM     87  HZ2 TRP A   6      -8.349 -12.687 -22.097  1.00 21.45           H
ATOM     88  HZ3 TRP A   6      -4.490 -11.759 -21.480  1.00 21.48           H
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ATOM     89  HH2 TRP A   6      -6.636 -12.082 -20.686  1.00 22.23           H
ATOM     90  N   LEU A   7      -3.777 -15.533 -24.959  1.00 14.52           N
ANISOU   90  N   LEU A   7     1764   1840   1913    657   -176     37       N
ATOM     91  CA  LEU A   7      -4.166 -16.863 -24.515  1.00 14.46           C
ANISOU   91  CA  LEU A   7     1760   1862   1873    632   -138     88       C
ATOM     92  C   LEU A   7      -5.326 -16.741 -23.537  1.00 15.50           C
ANISOU   92  C   LEU A   7     1793   2108   1988    647   -145     94       C
ATOM     93  O   LEU A   7      -5.233 -16.005 -22.546  1.00 15.67           O
ANISOU   93  O   LEU A   7     1755   2210   1989    731   -151     55       O
ATOM     94  CB  LEU A   7      -2.990 -17.577 -23.851  1.00 13.66           C
ANISOU   94  CB  LEU A   7     1675   1761   1753    678    -88    108       C
ATOM     95  CG  LEU A   7      -3.285 -18.915 -23.173  1.00 13.59           C
ANISOU   95  CG  LEU A   7     1702   1763   1698    668    -50    174       C
ATOM     96  CD1 LEU A   7      -3.750 -19.940 -24.196  1.00 14.45           C
ANISOU   96  CD1 LEU A   7     1917   1765   1807    581    -49    214       C
ATOM     97  CD2 LEU A   7      -2.043 -19.394 -22.439  1.00 14.15           C
ANISOU   97  CD2 LEU A   7     1792   1841   1744    758    -29    180       C
ATOM     98  H   LEU A   7      -3.336 -15.096 -24.364  1.00 17.43           H
ATOM     99  HA  LEU A   7      -4.458 -17.388 -25.277  1.00 17.36           H
ATOM    100  HB2 LEU A   7      -2.316 -17.742 -24.528  1.00 16.39           H
ATOM    101  HB3 LEU A   7      -2.623 -16.988 -23.173  1.00 16.39           H
ATOM    102  HG  LEU A   7      -3.994 -18.793 -22.523  1.00 16.31           H
ATOM    103 HD11 LEU A   7      -3.931 -20.778 -23.743  1.00 17.34           H
ATOM    104 HD12 LEU A   7      -4.557 -19.614 -24.624  1.00 17.34           H
ATOM    105 HD13 LEU A   7      -3.051 -20.064 -24.857  1.00 17.34           H
ATOM    106 HD21 LEU A   7      -2.238 -20.243 -22.012  1.00 16.98           H
ATOM    107 HD22 LEU A   7      -1.321 -19.503 -23.077  1.00 16.98           H
ATOM    108 HD23 LEU A   7      -1.798 -18.736 -21.770  1.00 16.98           H
ATOM    109  N   ASN A   8      -6.412 -17.468 -23.807  1.00 15.66           N
ANISOU  109  N   ASN A   8     1794   2139   2019    567   -145    140       N
ATOM    110  CA  ASN A   8      -7.590 -17.432 -22.934  1.00 16.67           C
ANISOU  110  CA  ASN A   8     1792   2400   2144    570   -118    166       C
ATOM    111  C   ASN A   8      -8.241 -18.819 -22.960  1.00 18.33           C
ANISOU  111  C   ASN A   8     2001   2590   2374    439    -82    259       C
ATOM    112  O   ASN A   8      -9.161 -19.070 -23.741  1.00 20.24           O
ANISOU  112  O   ASN A   8     2204   2809   2679    340   -141    267       O
ATOM    113  CB  ASN A   8      -8.558 -16.349 -23.383  1.00 17.36           C
ANISOU  113  CB  ASN A   8     1787   2540   2267    603   -189    108       C
ATOM    114  CG  ASN A   8      -9.744 -16.199 -22.452  1.00 18.03           C
ANISOU  114  CG  ASN A   8     1703   2797   2350    641   -140    128       C
ATOM    115  OD1 ASN A   8      -9.795 -16.801 -21.387  1.00 17.38           O
ANISOU  115  OD1 ASN A   8     1584   2798   2222    645    -37    191       O
ATOM    116  ND2 ASN A   8     -10.699 -15.370 -22.847  1.00 19.47           N
ANISOU  116  ND2 ASN A   8     1785   3040   2573    689   -207     79       N
ATOM    117  H   ASN A   8      -6.493 -17.989 -24.487  1.00 18.80           H
ATOM    118  HA  ASN A   8      -7.313 -17.239 -22.024  1.00 20.01           H
ATOM    119  HB2 ASN A   8      -8.090 -15.499 -23.411  1.00 20.83           H
ATOM    120  HB3 ASN A   8      -8.895 -16.572 -24.265  1.00 20.83           H
ATOM    121 HD21 ASN A   8     -11.394 -15.249 -22.356  1.00 23.37           H
ATOM    122 HD22 ASN A   8     -10.623 -14.952 -23.595  1.00 23.37           H
ATOM    123  N   PHE A   9      -7.761 -19.710 -22.094  1.00 17.69           N
ANISOU  123  N   PHE A   9     1974   2505   2243    438     -3    328       N
ATOM    124  CA  PHE A   9      -8.212 -21.096 -22.072  1.00 18.09           C
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ANISOU  124  CA  PHE A   9     2071   2490   2314    303     31    430      C
ATOM    125  C   PHE A   9      -8.803 -21.440 -20.716  1.00 19.00           C
ANISOU  125  C   PHE A   9     2103   2731   2384    298    148    529      C
ATOM    126  O   PHE A   9      -8.217 -21.120 -19.676  1.00 17.40           O
ANISOU  126  O   PHE A   9     1921   2605   2083    433    206    526      O
ATOM    127  CB  PHE A   9      -7.069 -22.060 -22.382  1.00 17.95           C
ANISOU  127  CB  PHE A   9     2249   2311   2261    310     23    446      C
ATOM    128  CG  PHE A   9      -7.376 -23.490 -22.013  1.00 18.91           C
ANISOU  128  CG  PHE A   9     2461   2345   2379    199     63    561      C
ATOM    129  CD1 PHE A   9      -8.064 -24.309 -22.890  1.00 20.12           C
ANISOU  129  CD1 PHE A   9     2669   2370   2607     35     -4    587      C
ATOM    130  CD2 PHE A   9      -6.990 -24.005 -20.790  1.00 20.13           C
ANISOU  130  CD2 PHE A   9     2668   2530   2452    257    150    644      C
ATOM    131  CE1 PHE A   9      -8.350 -25.625 -22.559  1.00 21.33           C
ANISOU  131  CE1 PHE A   9     2927   2407   2772    -91     20    699      C
ATOM    132  CE2 PHE A   9      -7.279 -25.318 -20.450  1.00 22.01           C
ANISOU  132  CE2 PHE A   9     3020   2660   2683    148    190    769      C
ATOM    133  CZ  PHE A   9      -7.957 -26.127 -21.340  1.00 22.81           C
ANISOU  133  CZ  PHE A   9     3173   2615   2879    -37    126    798      C
ATOM    134  H   PHE A   9      -7.164 -19.531 -21.502  1.00 21.23           H
ATOM    135  HA  PHE A   9      -8.902 -21.217 -22.743  1.00 21.71           H
ATOM    136  HB2 PHE A   9      -6.884 -22.031 -23.334  1.00 21.54           H
ATOM    137  HB3 PHE A   9      -6.283 -21.785 -21.885  1.00 21.54           H
ATOM    138  HD1 PHE A   9      -8.329 -23.976 -23.717  1.00 24.15           H
ATOM    139  HD2 PHE A   9      -6.530 -23.465 -20.188  1.00 24.16           H
ATOM    140  HE1 PHE A   9      -8.810 -26.166 -23.158  1.00 25.60           H
ATOM    141  HE2 PHE A   9      -7.010 -25.656 -19.626  1.00 26.41           H
ATOM    142  HZ  PHE A   9      -8.151 -27.008 -21.115  1.00 27.37           H
ATOM    143  N  ATHR A  10      -9.964 -22.090 -20.730  0.43 21.24           N
ANISOU  143  N  ATHR A  10     2294   3037   2738    141    181    618      N
ATOM    144  N  BTHR A  10      -9.964 -22.092 -20.732  0.57 21.26           N
ANISOU  144  N  BTHR A  10     2296   3040   2740    141    181    618      N
ATOM    145  CA ATHR A  10     -10.566 -22.631 -19.522  0.43 23.27           C
ANISOU  145  CA ATHR A  10     2485   3401   2955    100    328    751      C
ATOM    146  CA BTHR A  10     -10.583 -22.621 -19.527  0.57 23.25           C
ANISOU  146  CA BTHR A  10     2480   3400   2954     99    328    751      C
ATOM    147  C  ATHR A  10     -11.219 -23.960 -19.862  0.43 26.32           C
ANISOU  147  C  ATHR A  10     2898   3665   3438   -137    331    872      C
ATOM    148  C  BTHR A  10     -11.224 -23.959 -19.863  0.57 26.31           C
ANISOU  148  C  BTHR A  10     2896   3665   3437   -138    331    872      C
ATOM    149  O  ATHR A  10     -11.618 -24.196 -21.004  0.43 26.52           O
ANISOU  149  O  ATHR A  10     2913   3584   3579   -267    204    830      O
ATOM    150  O  BTHR A  10     -11.619 -24.201 -21.006  0.57 26.55           O
ANISOU  150  O  BTHR A  10     2917   3588   3583   -268    204    831      O
ATOM    151  CB ATHR A  10     -11.609 -21.678 -18.913  0.43 23.53           C
ANISOU  151  CB ATHR A  10     2280   3671   2989    165    409    745      C
ATOM    152  CB BTHR A  10     -11.652 -21.675 -18.953  0.57 23.54           C
ANISOU  152  CB BTHR A  10     2274   3672   2997    159    406    744      C
ATOM    153  OG1ATHR A  10     -11.999 -22.153 -17.617  0.43 25.15           O
ANISOU  153  OG1ATHR A  10     2451   3996   3109    166    591    883      O
ATOM    154  OG1BTHR A  10     -12.843 -21.763 -19.742  0.57 24.56           O
ANISOU  154  OG1BTHR A  10     2222   3829   3282      0    353    755      O
ATOM    155  CG2ATHR A  10     -12.843 -21.574 -19.802  0.43 24.44           C
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ANISOU  155  CG2ATHR A  10     2195   3824   3265     22    341    734      C
ATOM    156  CG2BTHR A  10    -11.157 -20.228 -18.935  0.57 21.91          C
ANISOU  156  CG2BTHR A  10     2055   3541   2730    373    345    593      C
ATOM    157  H  ATHR A  10    -10.427 -22.231 -21.440  0.43 25.48          H
ATOM    158  H  BTHR A  10    -10.418 -22.242 -21.447  0.57 25.51          H
ATOM    159  HA ATHR A  10     -9.874 -22.790 -18.861  0.43 27.92          H
ATOM    160  HA BTHR A  10     -9.904 -22.766 -18.850  0.57 27.90          H
ATOM    161  HB ATHR A  10    -11.222 -20.793 -18.826  0.43 28.24          H
ATOM    162  HB BTHR A  10    -11.854 -21.937 -18.041  0.57 28.24          H
ATOM    163  HG1ATHR A  10    -11.330 -22.188 -17.110  0.43 30.18          H
ATOM    164  HG1BTHR A  10    -13.431 -21.248 -19.434  0.57 29.47          H
ATOM    165 HG21ATHR A  10    -12.594 -21.236 -20.676  0.43 29.32          H
ATOM    166 HG21BTHR A  10    -10.946 -19.939 -19.837  0.57 26.29          H
ATOM    167 HG22ATHR A  10    -13.251 -22.448 -19.906  0.43 29.32          H
ATOM    168 HG22BTHR A  10    -11.844 -19.648 -18.571  0.57 26.29          H
ATOM    169 HG23ATHR A  10    -13.489 -20.970 -19.403  0.43 29.32          H
ATOM    170 HG23BTHR A  10    -10.361 -20.157 -18.386  0.57 26.29          H
ATOM    171  N   ASP A  11    -11.322 -24.831 -18.861  1.00 30.94          N
ANISOU  171  N   ASP A  11     3538   4250   3967   -195    464   1024      N
ATOM    172  CA  ASP A  11    -12.019 -26.097 -19.048  1.00 39.87          C
ANISOU  172  CA  ASP A  11     4693   5251   5202   -450    477   1162      C
ATOM    173  C   ASP A  11    -13.524 -25.967 -18.844  1.00 47.09          C
ANISOU  173  C   ASP A  11     5308   6340   6243   -614    561   1248      C
ATOM    174  O   ASP A  11    -14.255 -26.927 -19.116  1.00 48.75          O
ANISOU  174  O   ASP A  11     5485   6448   6589   -871    548   1357      O
ATOM    175  CB  ASP A  11    -11.463 -27.157 -18.099  1.00 43.13          C
ANISOU  175  CB  ASP A  11     5327   5557   5502   -454    584   1312      C
ATOM    176  CG  ASP A  11    -11.641 -26.785 -16.648  1.00 45.64          C
ANISOU  176  CG  ASP A  11     5575   6088   5678   -333    783   1410      C
ATOM    177  OD1 ASP A  11    -12.425 -25.858 -16.352  1.00 46.33          O
ANISOU  177  OD1 ASP A  11     5415   6410   5779   -287    863   1385      O
ATOM    178  OD2 ASP A  11    -10.989 -27.425 -15.798  1.00 47.31          O
ANISOU  178  OD2 ASP A  11     5998   6231   5746   -260    857   1509      O
ATOM    179  H  AASP A  11    -11.001 -24.713 -18.073  0.43 37.13          H
ATOM    180  H  BASP A  11    -10.998 -24.714 -18.074  0.57 37.13          H
ATOM    181  HA  ASP A  11    -11.869 -26.404 -19.956  1.00 47.84          H
ATOM    182  HB2 ASP A  11    -11.927 -27.995 -18.254  1.00 51.75          H
ATOM    183  HB3 ASP A  11    -10.514 -27.267 -18.268  1.00 51.75          H
ATOM    184  N   GLY A  12    -13.999 -24.821 -18.358  1.00 50.98          N
ANISOU  184  N   GLY A  12     5580   7088   6701   -469    644   1201      N
ATOM    185  CA  GLY A  12    -15.423 -24.540 -18.267  1.00 54.12          C
ANISOU  185  CA  GLY A  12     5646   7689   7229   -578    718   1256      C
ATOM    186  C   GLY A  12    -15.953 -24.328 -16.864  1.00 53.63          C
ANISOU  186  C   GLY A  12     5440   7874   7064   -497    981   1384      C
ATOM    187  O   GLY A  12    -17.147 -24.031 -16.718  1.00 58.23          O
ANISOU  187  O   GLY A  12     5708   8666   7751   -558   1075   1432      O
ATOM    188  H   GLY A  12    -13.502 -24.180 -18.071  1.00 61.17          H
ATOM    189  HA2 GLY A  12    -15.618 -23.741 -18.782  1.00 64.94          H
ATOM    190  HA3 GLY A  12    -15.914 -25.277 -18.663  1.00 64.94          H
ATOM    191  N   GLY A  13    -15.139 -24.450 -15.817  1.00 47.45          N
ANISOU  191  N   GLY A  13     4866   7091   6070   -343   1105   1439      N
ATOM    192  CA  GLY A  13    -15.641 -24.383 -14.455  1.00 45.95          C
ANISOU  192  CA  GLY A  13     4590   7124   5745   -262   1370   1580      C
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ATOM   193  C   GLY A  13    -15.658 -22.972 -13.898  1.00 43.45           C
ANISOU 193  C   GLY A  13     4176   7045   5288    50   1417   1443      C
ATOM   194  O   GLY A  13    -14.679 -22.232 -14.021  1.00 40.59           O
ANISOU 194  O   GLY A  13     3976   6620   4826   255   1276   1275      O
ATOM   195  H   GLY A  13    -14.290 -24.572 -15.873  1.00 56.94           H
ATOM   196  HA2 GLY A  13    -16.545 -24.733 -14.429  1.00 55.14           H
ATOM   197  HA3 GLY A  13    -15.084 -24.932 -13.881  1.00 55.14           H
ATOM   198  N   GLY A  14    -16.782 -22.604 -13.290  1.00 45.73           N
ANISOU 198  N   GLY A  14     4220   7575   5581    81   1591   1494      N
ATOM   199  CA  GLY A  14    -16.855 -21.360 -12.539  1.00 45.59           C
ANISOU 199  CA  GLY A  14     4197   7725   5401   393   1619   1346      C
ATOM   200  C   GLY A  14    -16.660 -20.130 -13.401  1.00 42.15           C
ANISOU 200  C   GLY A  14     3690   7304   5023   550   1421   1130      C
ATOM   201  O   GLY A  14    -17.084 -20.069 -14.561  1.00 42.48           O
ANISOU 201  O   GLY A  14     3557   7315   5270   418   1292   1089      O
ATOM   202  H   GLY A  14    -17.513 -23.056 -13.298  1.00 54.88           H
ATOM   203  HA2 GLY A  14    -17.722 -21.297 -12.109  1.00 54.71           H
ATOM   204  HA3 GLY A  14    -16.172 -21.361 -11.851  1.00 54.71           H
ATOM   205  N   ILE A  15    -16.001 -19.130 -12.822  1.00 38.94           N
ANISOU 205  N   ILE A  15     3447   6917   4433   831   1368    984      N
ATOM   206  CA  ILE A  15    -15.845 -17.812 -13.429  1.00 35.71           C
ANISOU 206  CA  ILE A  15     3026   6490   4052   999   1177    769      C
ATOM   207  C   ILE A  15    -14.374 -17.603 -13.760  1.00 32.11           C
ANISOU 207  C   ILE A  15     2795   5875   3529  1084   1026    673      C
ATOM   208  O   ILE A  15    -13.509 -17.700 -12.880  1.00 30.33           O
ANISOU 208  O   ILE A  15     2780   5621   3122  1204   1054    675      O
ATOM   209  CB  ILE A  15    -16.349 -16.701 -12.496  1.00 37.10           C
ANISOU 209  CB  ILE A  15     3219   6785   4094  1236   1208    665      C
ATOM   210  CG1 ILE A  15    -17.817 -16.933 -12.130  1.00 41.04           C
ANISOU 210  CG1 ILE A  15     3472   7459   4663  1167   1383    761      C
ATOM   211  CG2 ILE A  15    -16.162 -15.327 -13.149  1.00 35.08           C
ANISOU 211  CG2 ILE A  15     3004   6453   3870  1379    992    455      C
ATOM   212  CD1 ILE A  15    -18.301 -16.074 -10.971  1.00 44.03           C
ANISOU 212  CD1 ILE A  15     3884   7976   4869  1410   1475    705      C
ATOM   213  H   ILE A  15    -15.624 -19.194 -12.052  1.00 46.73           H
ATOM   214  HA  ILE A  15    -16.354 -17.774 -14.253  1.00 42.85           H
ATOM   215  HB  ILE A  15    -15.823 -16.725 -11.681  1.00 44.52           H
ATOM   216 HG12 ILE A  15    -18.368 -16.729 -12.901  1.00 49.25           H
ATOM   217 HG13 ILE A  15    -17.934 -17.863 -11.879  1.00 49.25           H
ATOM   218 HG21 ILE A  15    -16.487 -14.643 -12.542  1.00 42.09           H
ATOM   219 HG22 ILE A  15    -15.220 -15.189 -13.330  1.00 42.09           H
ATOM   220 HG23 ILE A  15    -16.666 -15.301 -13.978  1.00 42.09           H
ATOM   221 HD11 ILE A  15    -19.234 -16.275 -10.797  1.00 52.84           H
ATOM   222 HD12 ILE A  15    -17.767 -16.273 -10.186  1.00 52.84           H
ATOM   223 HD13 ILE A  15    -18.203 -15.139 -11.210  1.00 52.84           H
ATOM   224  N   VAL A  16    -14.093 -17.303 -15.026  1.00 31.67           N
ANISOU 224  N   VAL A  16     2733   5673   3626  1006    830    573      N
ATOM   225  CA  VAL A  16    -12.769 -16.864 -15.461  1.00 29.57           C
ANISOU 225  CA  VAL A  16     2688   5210   3335  1063    644    446      C
ATOM   226  C   VAL A  16    -13.006 -15.652 -16.358  1.00 28.83           C
ANISOU 226  C   VAL A  16     2527   5093   3333  1143    487    293      C
ATOM   227  O   VAL A  16    -13.094 -15.773 -17.585  1.00 28.75           O
ANISOU 227  O   VAL A  16     2489   4966   3468  1003    368    277      O
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ATOM    228  CB  VAL A  16    -11.985 -17.956 -16.196  1.00 28.76           C
ANISOU  228  CB  VAL A  16     2719   4895   3313    857    572    510      C
ATOM    229  CG1 VAL A  16    -10.630 -17.421 -16.640  1.00 26.82           C
ANISOU  229  CG1 VAL A  16     2653   4485   3054    929    409    383      C
ATOM    230  CG2 VAL A  16    -11.799 -19.187 -15.302  1.00 29.63           C
ANISOU  230  CG2 VAL A  16     2923   5005   3330    787    718    672      C
ATOM    231  H   VAL A  16    -14.666 -17.347 -15.666  1.00 38.00           H
ATOM    232  HA  VAL A  16    -12.252 -16.580 -14.691  1.00 35.48           H
ATOM    233  HB  VAL A  16    -12.479 -18.226 -16.986  1.00 34.51           H
ATOM    234 HG11 VAL A  16    -10.149 -18.125 -17.102  1.00 32.19           H
ATOM    235 HG12 VAL A  16    -10.769 -16.668 -17.236  1.00 32.19           H
ATOM    236 HG13 VAL A  16    -10.131 -17.137 -15.858  1.00 32.19           H
ATOM    237 HG21 VAL A  16    -11.301 -19.859 -15.792  1.00 35.55           H
ATOM    238 HG22 VAL A  16    -11.310 -18.927 -14.506  1.00 35.55           H
ATOM    239 HG23 VAL A  16    -12.671 -19.533 -15.057  1.00 35.55           H
ATOM    240  N   ASN A  17    -13.118 -14.473 -15.751  1.00 28.46           N
ANISOU  240  N   ASN A  17     2546   5079   3190   1318    450    176      N
ATOM    241  CA  ASN A  17    -13.309 -13.247 -16.519  1.00 28.22           C
ANISOU  241  CA  ASN A  17     2545   4950   3228   1357    287     37      C
ATOM    242  C   ASN A  17    -11.930 -12.702 -16.861  1.00 25.76           C
ANISOU  242  C   ASN A  17     2446   4440   2902   1364    136    -58      C
ATOM    243  O   ASN A  17    -11.312 -11.971 -16.088  1.00 26.64           O
ANISOU  243  O   ASN A  17     2703   4519   2901   1473     90   -140      O
ATOM    244  CB  ASN A  17    -14.147 -12.229 -15.760  1.00 31.47           C
ANISOU  244  CB  ASN A  17     2938   5465   3553   1515    314    -30      C
ATOM    245  CG  ASN A  17    -14.605 -11.094 -16.654  1.00 33.31           C
ANISOU  245  CG  ASN A  17     3172   5612   3871   1545    171   -138      C
ATOM    246  OD1 ASN A  17    -14.330 -11.089 -17.858  1.00 32.17           O
ANISOU  246  OD1 ASN A  17     3046   5332   3846   1440     56   -154      O
ATOM    247  ND2 ASN A  17    -15.317 -10.137 -16.082  1.00 36.29           N
ANISOU  247  ND2 ASN A  17     3545   6070   4175   1703    179   -205      N
ATOM    248  H   ASN A  17    -13.088 -14.357 -14.899  1.00 34.16           H
ATOM    249  HA  ASN A  17    -13.766 -13.458 -17.348  1.00 33.86           H
ATOM    250  HB2 ASN A  17    -14.934 -12.668 -15.401  1.00 37.76           H
ATOM    251  HB3 ASN A  17    -13.617 -11.852 -15.040  1.00 37.76           H
ATOM    252 HD21 ASN A  17    -15.599  -9.473 -16.550  1.00 43.55           H
ATOM    253 HD22 ASN A  17    -15.498 -10.179 -15.242  1.00 43.55           H
ATOM    254  N   ALA A  18    -11.442 -13.086 -18.037  1.00 22.34           N
ANISOU  254  N   ALA A  18     2023   3879   2586   1240     56    -43      N
ATOM    255  CA  ALA A  18    -10.158 -12.630 -18.547  1.00 20.37           C
ANISOU  255  CA  ALA A  18     1944   3439   2356   1209    -66   -112      C
ATOM    256  C   ALA A  18    -10.363 -11.406 -19.426  1.00 19.90           C
ANISOU  256  C   ALA A  18     1937   3269   2357   1209   -186   -199      C
ATOM    257  O   ALA A  18    -11.251 -11.396 -20.283  1.00 21.33           O
ANISOU  257  O   ALA A  18     2028   3463   2614   1176   -213   -183      O
ATOM    258  CB  ALA A  18     -9.479 -13.743 -19.345  1.00 19.75           C
ANISOU  258  CB  ALA A  18     1868   3287   2347   1097    -70    -35      C
ATOM    259  H   ALA A  18    -11.850 -13.624 -18.570  1.00 26.81           H
ATOM    260  HA  ALA A  18     -9.582 -12.386 -17.805  1.00 24.44           H
ATOM    261  HB1 ALA A  18     -8.627 -13.419 -19.675  1.00 23.69           H
ATOM    262  HB2 ALA A  18     -9.341 -14.508 -18.766  1.00 23.69           H
ATOM    263  HB3 ALA A  18    -10.050 -13.990 -20.090  1.00 23.69           H
ATOM    264  N   VAL A  19     -9.539 -10.384 -19.224  1.00 18.24           N
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ANISOU  264  N   VAL A  19     1869   2949   2113   1248   -268   -287      N
ATOM    265  CA  VAL A  19      -9.674  -9.122 -19.943  1.00 18.23          C
ANISOU  265  CA  VAL A  19     1941   2837   2147   1268   -374   -361      C
ATOM    266  C   VAL A  19      -8.457  -8.944 -20.837  1.00 17.12          C
ANISOU  266  C   VAL A  19     1904   2523   2079   1171   -447   -362      C
ATOM    267  O   VAL A  19      -7.330  -8.797 -20.352  1.00 16.02          O
ANISOU  267  O   VAL A  19     1831   2326   1930   1162   -473   -392      O
ATOM    268  CB  VAL A  19      -9.836  -7.932 -18.987  1.00 19.27          C
ANISOU  268  CB  VAL A  19     2150   2990   2183   1410   -420   -465      C
ATOM    269  CG1 VAL A  19     -10.032  -6.644 -19.785  1.00 19.31          C
ANISOU  269  CG1 VAL A  19     2244   2868   2223   1440   -537   -534      C
ATOM    270  CG2 VAL A  19     -11.018  -8.167 -18.054  1.00 20.44          C
ANISOU  270  CG2 VAL A  19     2188   3335   2243   1526   -321   -451      C
ATOM    271  H   VAL A  19      -8.884 -10.397 -18.668  1.00 21.89          H
ATOM    272  HA  VAL A  19     -10.461  -9.162 -20.509  1.00 21.87          H
ATOM    273  HB  VAL A  19      -9.034  -7.840 -18.448  1.00 23.13          H
ATOM    274 HG11 VAL A  19     -10.132  -5.903 -19.168  1.00 23.17          H
ATOM    275 HG12 VAL A  19      -9.256  -6.502 -20.350  1.00 23.17          H
ATOM    276 HG13 VAL A  19     -10.828  -6.730 -20.332  1.00 23.17          H
ATOM    277 HG21 VAL A  19     -11.105  -7.407 -17.457  1.00 24.53          H
ATOM    278 HG22 VAL A  19     -11.823  -8.266 -18.584  1.00 24.53          H
ATOM    279 HG23 VAL A  19     -10.858  -8.974 -17.540  1.00 24.53          H
ATOM    280  N   ASN A  20      -8.690  -8.938 -22.147  1.00 16.65          N
ANISOU  280  N   ASN A  20     1853   2386   2089   1112   -486   -329      N
ATOM    281  CA  ASN A  20      -7.655  -8.595 -23.120  1.00 17.51          C
ANISOU  281  CA  ASN A  20     2069   2330   2254   1046   -546   -322      C
ATOM    282  C   ASN A  20      -7.503  -7.076 -23.117  1.00 18.65          C
ANISOU  282  C   ASN A  20     2327   2363   2395   1105   -646   -401      C
ATOM    283  O   ASN A  20      -8.300  -6.358 -23.728  1.00 19.34          O
ANISOU  283  O   ASN A  20     2459   2414   2476   1151   -704   -421      O
ATOM    284  CB  ASN A  20      -8.034  -9.122 -24.499  1.00 16.65          C
ANISOU  284  CB  ASN A  20     1966   2178   2183    994   -563   -262      C
ATOM    285  CG  ASN A  20      -7.002  -8.802 -25.564  1.00 15.15          C
ANISOU  285  CG  ASN A  20     1909   1815   2031    945   -604   -236      C
ATOM    286  OD1 ASN A  20      -6.144  -7.936 -25.396  1.00 14.89          O
ANISOU  286  OD1 ASN A  20     1951   1679   2026    946   -637   -264      O
ATOM    287  ND2 ASN A  20      -7.094  -9.505 -26.679  1.00 15.36          N
ANISOU  287  ND2 ASN A  20     1977   1800   2058    897   -602   -176      N
ATOM    288  H   ASN A  20      -9.449  -9.132 -22.502  1.00 19.98          H
ATOM    289  HA  ASN A  20      -6.811  -8.993 -22.856  1.00 21.01          H
ATOM    290  HB2 ASN A  20      -8.126 -10.087 -24.453  1.00 19.98          H
ATOM    291  HB3 ASN A  20      -8.875  -8.722 -24.769  1.00 19.98          H
ATOM    292 HD21 ASN A  20      -6.537  -9.370 -27.320  1.00 18.43          H
ATOM    293 HD22 ASN A  20      -7.711 -10.098 -26.764  1.00 18.43          H
ATOM    294  N   GLY A  21      -6.481  -6.584 -22.416  1.00 18.63          N
ANISOU  294  N   GLY A  21     2377   2298   2401   1110   -687   -452      N
ATOM    295  CA  GLY A  21      -6.246  -5.162 -22.277  1.00 20.36          C
ANISOU  295  CA  GLY A  21     2718   2388   2630   1164   -811   -537      C
ATOM    296  C   GLY A  21      -5.434  -4.606 -23.433  1.00 22.19          C
ANISOU  296  C   GLY A  21     3056   2412   2965   1084   -876   -496      C
ATOM    297  O   GLY A  21      -5.188  -5.271 -24.441  1.00 19.14          O
ANISOU  297  O   GLY A  21     2660   1992   2620   1008   -818   -404      O
ATOM    298  H   GLY A  21      -5.903  -7.071 -22.006  1.00 22.35          H
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ATOM    299  HA2 GLY A  21     -7.096  -4.694 -22.244  1.00 24.43           H
ATOM    300  HA3 GLY A  21     -5.766  -4.991 -21.452  1.00 24.43           H
ATOM    301  N  ASER A  22     -5.010  -3.356 -23.269  0.52 23.49           N
ANISOU  301  N  ASER A  22     3344   2416   3167   1101  -1000   -559      N
ATOM    302  N  BSER A  22     -5.006  -3.358 -23.271  0.28 23.58           N
ANISOU  302  N  BSER A  22     3354   2426   3178   1101  -1000   -559      N
ATOM    303  N  CSER A  22     -5.003  -3.359 -23.265  0.20 23.60           N
ANISOU  303  N  CSER A  22     3357   2430   3181   1101  -1000   -559      N
ATOM    304  CA ASER A  22     -4.229  -2.688 -24.301  0.52 23.36           C
ANISOU  304  CA ASER A  22     3455   2162   3259   1002  -1052   -501      C
ATOM    305  CA BSER A  22     -4.245  -2.692 -24.319  0.28 23.37           C
ANISOU  305  CA BSER A  22     3456   2163   3258   1002  -1051   -499      C
ATOM    306  CA CSER A  22     -4.231  -2.681 -24.297  0.20 23.39           C
ANISOU  306  CA CSER A  22     3459   2165   3262   1002  -1053   -501      C
ATOM    307  C  ASER A  22     -2.814  -3.250 -24.357  0.52 22.91           C
ANISOU  307  C  ASER A  22     3331   2051   3323    856  -1001   -447      C
ATOM    308  C  BSER A  22     -2.812  -3.212 -24.361  0.28 22.97           C
ANISOU  308  C  BSER A  22     3343   2053   3333    856  -1004   -448      C
ATOM    309  C  CSER A  22     -2.808  -3.225 -24.355  0.20 24.96           C
ANISOU  309  C  CSER A  22     3593   2307   3585    856  -1004   -448      C
ATOM    310  O  ASER A  22     -2.190  -3.517 -23.327  0.52 24.39           O
ANISOU  310  O  ASER A  22     3424   2307   3535    853  -1025   -508      O
ATOM    311  O  BSER A  22     -2.174  -3.412 -23.324  0.28 24.40           O
ANISOU  311  O  BSER A  22     3436   2293   3541    853  -1036   -513      O
ATOM    312  O  CSER A  22     -2.170  -3.454 -23.324  0.20 24.32           O
ANISOU  312  O  CSER A  22     3421   2288   3530    852  -1032   -511      O
ATOM    313  CB ASER A  22     -4.181  -1.182 -24.037  0.52 24.88           C
ANISOU  313  CB ASER A  22     3803   2186   3464   1026  -1199   -573      C
ATOM    314  CB BSER A  22     -4.244  -1.177 -24.097  0.28 24.87           C
ANISOU  314  CB BSER A  22     3804   2186   3458   1029  -1196   -570      C
ATOM    315  CB CSER A  22     -4.207  -1.175 -24.028  0.20 24.88           C
ANISOU  315  CB CSER A  22     3804   2189   3462   1030  -1200   -575      C
ATOM    316  OG ASER A  22     -5.483  -0.629 -24.055  0.52 26.61           O
ANISOU  316  OG ASER A  22     4071   2478   3563   1156  -1231   -617      O
ATOM    317  OG BSER A  22     -3.546  -0.833 -22.914  0.28 26.81           O
ANISOU  317  OG BSER A  22     4042   2402   3744   1041  -1295   -672      O
ATOM    318  OG CSER A  22     -3.444  -0.488 -25.003  0.20 27.03           O
ANISOU  318  OG CSER A  22     4213   2216   3840    890  -1225   -493      O
ATOM    319  H  ASER A  22     -5.162  -2.875 -22.572  0.52 28.19           H
ATOM    320  H  BSER A  22     -5.142  -2.879 -22.570  0.28 28.29           H
ATOM    321  H  CSER A  22     -5.144  -2.885 -22.561  0.20 28.32           H
ATOM    322  HA ASER A  22     -4.648  -2.833 -25.163  0.52 28.03           H
ATOM    323  HA BSER A  22     -4.658  -2.872 -25.177  0.28 28.04           H
ATOM    324  HA CSER A  22     -4.649  -2.829 -25.160  0.20 28.07           H
ATOM    325  HB2ASER A  22     -3.782  -1.026 -23.167  0.52 29.85           H
ATOM    326  HB2BSER A  22     -3.813  -0.749 -24.852  0.28 29.84           H
ATOM    327  HB2CSER A  22     -5.117  -0.838 -24.046  0.20 29.86           H
ATOM    328  HB3ASER A  22     -3.648  -0.758 -24.728  0.52 29.85           H
ATOM    329  HB3BSER A  22     -5.161  -0.870 -24.022  0.28 29.84           H
ATOM    330  HB3CSER A  22     -3.815  -1.018 -23.154  0.20 29.86           H
ATOM    331  HG ASER A  22     -5.840  -0.758 -24.804  0.52 31.94           H
ATOM    332  HG BSER A  22     -3.910  -1.196 -22.250  0.28 32.18           H
ATOM    333  HG CSER A  22     -3.443   0.336 -24.838  0.20 32.43           H
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ATOM 334 N GLY A 23 -2.310 -3.429 -25.572 1.00 23.03 N
ANISOU 334 N GLY A 23 3380 1990 3382 710 -902 -322 N
ATOM 335 CA GLY A 23 -0.937 -3.881 -25.739 1.00 21.39 C
ANISOU 335 CA GLY A 23 3072 1780 3275 535 -803 -252 C
ATOM 336 C GLY A 23 -0.683 -5.210 -25.056 1.00 19.28 C
ANISOU 336 C GLY A 23 2629 1716 2980 564 -726 -266 C
ATOM 337 O GLY A 23 -1.414 -6.189 -25.247 1.00 17.67 O
ANISOU 337 O GLY A 23 2394 1640 2680 633 -651 -240 O
ATOM 338 H GLY A 23 -2.744 -3.311 -26.305 1.00 27.64 H
ATOM 339 HA2 GLY A 23 -0.740 -3.978 -26.684 1.00 25.67 H
ATOM 340 HA3 GLY A 23 -0.331 -3.222 -25.365 1.00 25.67 H
ATOM 341 N GLY A 24 0.371 -5.254 -24.249 1.00 19.61 N
ANISOU 341 N GLY A 24 2561 1779 3112 508 -760 -306 N
ATOM 342 CA GLY A 24 0.723 -6.450 -23.513 1.00 18.93 C
ANISOU 342 CA GLY A 24 2331 1866 2995 552 -710 -319 C
ATOM 343 C GLY A 24 0.052 -6.577 -22.165 1.00 19.75 C
ANISOU 343 C GLY A 24 2431 2076 2999 715 -805 -429 C
ATOM 344 O GLY A 24 0.434 -7.445 -21.371 1.00 19.44 O
ANISOU 344 O GLY A 24 2300 2160 2926 760 -789 -444 O
ATOM 345 H GLY A 24 0.903 -4.592 -24.112 1.00 23.54 H
ATOM 346 HA2 GLY A 24 0.484 -7.227 -24.042 1.00 22.71 H
ATOM 347 HA3 GLY A 24 1.683 -6.464 -23.373 1.00 22.71 H
ATOM 348 N ASN A 25 -0.937 -5.738 -21.877 1.00 20.20 N
ANISOU 348 N ASN A 25 2595 2090 2991 825 -897 -502 N
ATOM 349 CA ASN A 25 -1.596 -5.741 -20.579 1.00 19.87 C
ANISOU 349 CA ASN A 25 2560 2157 2833 1005 -967 -608 C
ATOM 350 C ASN A 25 -2.820 -6.650 -20.588 1.00 18.16 C
ANISOU 350 C ASN A 25 2309 2118 2474 1046 -815 -547 C
ATOM 351 O ASN A 25 -3.539 -6.750 -21.588 1.00 15.96 O
ANISOU 351 O ASN A 25 2042 1826 2195 1019 -757 -483 O
ATOM 352 CB ASN A 25 -2.014 -4.325 -20.180 1.00 22.90 C
ANISOU 352 CB ASN A 25 3081 2422 3196 1088 -1119 -722 C
ATOM 353 CG ASN A 25 -2.788 -4.299 -18.883 1.00 24.69 C
ANISOU 353 CG ASN A 25 3337 2806 3239 1227 -1121 -811 C
ATOM 354 OD1 ASN A 25 -4.006 -4.136 -18.882 1.00 26.64 O
ANISOU 354 OD1 ASN A 25 3610 3139 3373 1301 -1058 -809 O
ATOM 355 ND2 ASN A 25 -2.089 -4.483 -17.770 1.00 24.53 N
ANISOU 355 ND2 ASN A 25 3307 2827 3187 1275 -1194 -888 N
ATOM 356 H ASN A 25 -1.248 -5.151 -22.424 1.00 24.24 H
ATOM 357 HA ASN A 25 -0.978 -6.074 -19.910 1.00 23.84 H
ATOM 358 HB2 ASN A 25 -1.219 -3.780 -20.067 1.00 27.47 H
ATOM 359 HB3 ASN A 25 -2.578 -3.952 -20.875 1.00 27.47 H
ATOM 360 HD21 ASN A 25 -2.485 -4.476 -17.007 1.00 29.44 H
ATOM 361 HD22 ASN A 25 -1.239 -4.609 -17.812 1.00 29.44 H
ATOM 362 N TYR A 26 -3.044 -7.329 -19.468 1.00 17.47 N
ANISOU 362 N TYR A 26 2183 2182 2273 1104 -762 -563 N
ATOM 363 CA TYR A 26 -4.258 -8.109 -19.298 1.00 17.37 C
ANISOU 363 CA TYR A 26 2129 2317 2154 1137 -635 -505 C
ATOM 364 C TYR A 26 -4.569 -8.187 -17.815 1.00 17.95 C
ANISOU 364 C TYR A 26 2219 2513 2087 1258 -629 -562 C
ATOM 365 O TYR A 26 -3.736 -7.864 -16.969 1.00 19.45 O
ANISOU 365 O TYR A 26 2460 2680 2250 1309 -723 -643 O
ATOM 366 CB TYR A 26 -4.129 -9.516 -19.903 1.00 16.14 C

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ANISOU  366  CB  TYR A  26     1896   2206   2029   1049   -521   -387      C
ATOM    367  CG  TYR A  26      -3.230 -10.468 -19.130  1.00 16.74           C
ANISOU  367  CG  TYR A  26     1944   2336   2078   1047   -491   -364      C
ATOM    368  CD1 TYR A  26      -3.753 -11.333 -18.179  1.00 17.09           C
ANISOU  368  CD1 TYR A  26     1975   2509   2009   1110   -416   -331      C
ATOM    369  CD2 TYR A  26      -1.862 -10.503 -19.360  1.00 16.46           C
ANISOU  369  CD2 TYR A  26     1892   2227   2136    997   -541   -370      C
ATOM    370  CE1 TYR A  26      -2.940 -12.205 -17.483  1.00 17.09           C
ANISOU  370  CE1 TYR A  26     1979   2547   1969   1129   -403   -305      C
ATOM    371  CE2 TYR A  26      -1.038 -11.379 -18.674  1.00 16.57           C
ANISOU  371  CE2 TYR A  26     1879   2293   2124   1009   -527   -351      C
ATOM    372  CZ  TYR A  26      -1.582 -12.224 -17.735  1.00 16.34           C
ANISOU  372  CZ  TYR A  26     1871   2373   1963   1078   -465   -320      C
ATOM    373  OH  TYR A  26      -0.762 -13.075 -17.049  1.00 17.13           O
ANISOU  373  OH  TYR A  26     1974   2511   2025   1110   -467   -300      O
ATOM    374  H   TYR A  26      -2.510  -7.352 -18.795  1.00 20.96           H
ATOM    375  HA  TYR A  26      -4.993  -7.656 -19.739  1.00 20.84           H
ATOM    376  HB2 TYR A  26      -5.012  -9.916 -19.944  1.00 19.36           H
ATOM    377  HB3 TYR A  26      -3.767  -9.435 -20.799  1.00 19.36           H
ATOM    378  HD1 TYR A  26      -4.667 -11.326 -18.009  1.00 20.51           H
ATOM    379  HD2 TYR A  26      -1.493  -9.936 -19.998  1.00 19.75           H
ATOM    380  HE1 TYR A  26      -3.305 -12.778 -16.848  1.00 20.51           H
ATOM    381  HE2 TYR A  26      -0.123 -11.388 -18.838  1.00 19.88           H
ATOM    382  HH  TYR A  26       0.032 -12.978 -17.306  1.00 20.56           H
ATOM    383  N   SER A  27      -5.788  -8.626 -17.513  1.00 17.29           N
ANISOU  383  N   SER A  27     2091   2566   1915   1316   -527   -520      N
ATOM    384  CA  SER A  27      -6.208  -8.845 -16.140  1.00 18.67           C
ANISOU  384  CA  SER A  27     2278   2885   1930   1455   -485   -544      C
ATOM    385  C   SER A  27      -7.158 -10.033 -16.094  1.00 19.37           C
ANISOU  385  C   SER A  27     2256   3119   1983   1449   -326   -422      C
ATOM    386  O   SER A  27      -7.728 -10.439 -17.110  1.00 17.65           O
ANISOU  386  O   SER A  27     1953   2890   1864   1355   -277   -352      O
ATOM    387  CB  SER A  27      -6.873  -7.593 -15.554  1.00 20.02           C
ANISOU  387  CB  SER A  27     2524   3078   2007   1602   -557   -654      C
ATOM    388  OG  SER A  27      -7.945  -7.147 -16.366  1.00 21.58           O
ANISOU  388  OG  SER A  27     2671   3274   2254   1592   -531   -636      O
ATOM    389  H   SER A  27      -6.395  -8.806 -18.095  1.00 20.75           H
ATOM    390  HA  SER A  27      -5.432  -9.057 -15.599  1.00 22.40           H
ATOM    391  HB2 SER A  27      -7.215  -7.804 -14.671  1.00 24.03           H
ATOM    392  HB3 SER A  27      -6.212  -6.887 -15.491  1.00 24.03           H
ATOM    393  HG  SER A  27      -8.295  -6.462 -16.028  1.00 25.90           H
ATOM    394  N   VAL A  28      -7.309 -10.594 -14.895  1.00 20.93           N
ANISOU  394  N   VAL A  28     2461   3455   2036   1561   -254   -396      N
ATOM    395  CA  VAL A  28      -8.117 -11.795 -14.687  1.00 21.29           C
ANISOU  395  CA  VAL A  28     2399   3646   2045   1563    -87   -261      C
ATOM    396  C   VAL A  28      -8.779 -11.703 -13.320  1.00 23.30           C
ANISOU  396  C   VAL A  28     2672   4073   2110   1742     -3   -255      C
ATOM    397  O   VAL A  28      -8.106 -11.460 -12.315  1.00 23.03           O
ANISOU  397  O   VAL A  28     2767   4048   1935   1867    -64   -314      O
ATOM    398  CB  VAL A  28      -7.287 -13.095 -14.761  1.00 21.98           C
ANISOU  398  CB  VAL A  28     2491   3709   2153   1495    -45   -167      C
ATOM    399  CG1 VAL A  28      -8.204 -14.284 -15.036  1.00 22.79           C
ANISOU  399  CG1 VAL A  28     2457   3917   2283   1444    120    -16      C
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ATOM 400 CG2 VAL A 28 -6.177 -13.001 -15.793 1.00 21.25 C
ANISOU 400 CG2 VAL A 28 2433 3435 2204 1360 -157 -201 C
ATOM 401 H VAL A 28 -6.948 -10.293 -14.175 1.00 25.12 H
ATOM 402 HA VAL A 28 -8.813 -11.836 -15.363 1.00 25.55 H
ATOM 403 HB VAL A 28 -6.870 -13.243 -13.897 1.00 26.38 H
ATOM 404 HG11 VAL A 28 -7.669 -15.092 -15.080 1.00 27.34 H
ATOM 405 HG12 VAL A 28 -8.853 -14.354 -14.319 1.00 27.34 H
ATOM 406 HG13 VAL A 28 -8.659 -14.142 -15.882 1.00 27.34 H
ATOM 407 HG21 VAL A 28 -5.684 -13.837 -15.804 1.00 25.49 H
ATOM 408 HG22 VAL A 28 -6.570 -12.837 -16.665 1.00 25.49 H
ATOM 409 HG23 VAL A 28 -5.585 -12.271 -15.554 1.00 25.49 H
ATOM 410 N ASN A 29 -10.094 -11.904 -13.293 1.00 25.09 N
ANISOU 410 N ASN A 29 2764 4436 2334 1756 133 -181 N
ATOM 411 CA ASN A 29 -10.872 -12.122 -12.079 1.00 28.41 C
ANISOU 411 CA ASN A 29 3161 5043 2592 1894 280 -118 C
ATOM 412 C ASN A 29 -11.451 -13.525 -12.174 1.00 28.70 C
ANISOU 412 C ASN A 29 3051 5184 2670 1780 480 64 C
ATOM 413 O ASN A 29 -12.217 -13.813 -13.099 1.00 29.62 O
ANISOU 413 O ASN A 29 2995 5317 2944 1646 523 115 O
ATOM 414 CB ASN A 29 -12.003 -11.095 -11.958 1.00 30.39 C
ANISOU 414 CB ASN A 29 3350 5373 2826 1993 285 -180 C
ATOM 415 CG ASN A 29 -11.810 -10.117 -10.809 1.00 31.94 C
ANISOU 415 CG ASN A 29 3708 5597 2830 2211 210 -284 C
ATOM 416 OD1 ASN A 29 -10.690 -9.787 -10.429 1.00 32.18 O
ANISOU 416 OD1 ASN A 29 3910 5527 2790 2264 66 -369 O
ATOM 417 ND2 ASN A 29 -12.919 -9.631 -10.262 1.00 33.34 N
ANISOU 417 ND2 ASN A 29 3824 5913 2931 2345 296 -285 N
ATOM 418 H ASN A 29 -10.579 -11.918 -14.003 1.00 30.11 H
ATOM 419 HA ASN A 29 -10.300 -12.064 -11.297 1.00 34.10 H
ATOM 420 HB2 ASN A 29 -12.051 -10.582 -12.780 1.00 36.47 H
ATOM 421 HB3 ASN A 29 -12.839 -11.564 -11.812 1.00 36.47 H
ATOM 422 HD21 ASN A 29 -12.868 -9.074 -9.609 1.00 40.01 H
ATOM 423 HD22 ASN A 29 -13.688 -9.873 -10.562 1.00 40.01 H
ATOM 424 N TRP A 30 -11.076 -14.405 -11.251 1.00 28.14 N
ANISOU 424 N TRP A 30 3060 5170 2462 1822 590 165 N
ATOM 425 CA TRP A 30 -11.513 -15.791 -11.338 1.00 27.64 C
ANISOU 425 CA TRP A 30 2895 5173 2434 1676 785 358 C
ATOM 426 C TRP A 30 -12.004 -16.276 -9.983 1.00 31.09 C
ANISOU 426 C TRP A 30 3379 5741 2693 1753 966 481 C
ATOM 427 O TRP A 30 -11.631 -15.751 -8.930 1.00 31.64 O
ANISOU 427 O TRP A 30 3607 5830 2585 1946 921 415 O
ATOM 428 CB TRP A 30 -10.400 -16.701 -11.893 1.00 25.44 C
ANISOU 428 CB TRP A 30 2709 4755 2201 1570 738 404 C
ATOM 429 CG TRP A 30 -9.289 -17.069 -10.953 1.00 25.21 C
ANISOU 429 CG TRP A 30 2908 4675 1996 1680 700 408 C
ATOM 430 CD1 TRP A 30 -9.216 -18.186 -10.163 1.00 26.67 C
ANISOU 430 CD1 TRP A 30 3202 4882 2048 1660 834 572 C
ATOM 431 CD2 TRP A 30 -8.069 -16.350 -10.741 1.00 24.24 C
ANISOU 431 CD2 TRP A 30 2931 4457 1823 1817 495 244 C
ATOM 432 NE1 TRP A 30 -8.032 -18.195 -9.464 1.00 26.48 N
ANISOU 432 NE1 TRP A 30 3390 4793 1879 1806 714 512 N
ATOM 433 CE2 TRP A 30 -7.312 -17.078 -9.799 1.00 25.15 C
ANISOU 433 CE2 TRP A 30 3228 4558 1769 1896 500 306 C

ATOM 434 CE3 TRP A 30 -7.547 -15.154 -11.248 1.00 23.25 C
ANISOU 434 CE3 TRP A 30 2803 4243 1787 1865 295 59 C
ATOM 435 CZ2 TRP A 30 -6.061 -16.651 -9.357 1.00 24.94 C
ANISOU 435 CZ2 TRP A 30 3347 4455 1673 2031 300 174 C
ATOM 436 CZ3 TRP A 30 -6.308 -14.730 -10.805 1.00 22.78 C
ANISOU 436 CZ3 TRP A 30 2889 4095 1672 1961 111 -58 C
ATOM 437 CH2 TRP A 30 -5.578 -15.478 -9.873 1.00 23.72 C
ANISOU 437 CH2 TRP A 30 3152 4227 1632 2058 110 -11 C
ATOM 438 H TRP A 30 -10.576 -14.227 -10.575 1.00 33.77 H
ATOM 439 HA TRP A 30 -12.262 -15.839 -11.953 1.00 33.17 H
ATOM 440 HB2 TRP A 30 -10.808 -17.529 -12.191 1.00 30.52 H
ATOM 441 HB3 TRP A 30 -9.995 -16.254 -12.652 1.00 30.52 H
ATOM 442 HD1 TRP A 30 -9.871 -18.843 -10.108 1.00 32.00 H
ATOM 443 HE1 TRP A 30 -7.785 -18.801 -8.905 1.00 31.78 H
ATOM 444 HE3 TRP A 30 -8.024 -14.655 -11.870 1.00 27.90 H
ATOM 445 HZ2 TRP A 30 -5.575 -17.141 -8.734 1.00 29.92 H
ATOM 446 HZ3 TRP A 30 -5.950 -13.938 -11.137 1.00 27.34 H
ATOM 447 HH2 TRP A 30 -4.748 -15.167 -9.591 1.00 28.46 H
ATOM 448 N SER A 31 -12.869 -17.287 -10.029 1.00 34.31 N
ANISOU 448 N SER A 31 3648 6225 3162 1585 1163 664 N
ATOM 449 CA SER A 31 -13.516 -17.778 -8.822 1.00 38.78 C
ANISOU 449 CA SER A 31 4233 6908 3592 1618 1362 799 C
ATOM 450 C SER A 31 -14.100 -19.159 -9.077 1.00 40.89 C
ANISOU 450 C SER A 31 4394 7176 3965 1352 1541 1020 C
ATOM 451 O SER A 31 -14.731 -19.382 -10.114 1.00 40.20 O
ANISOU 451 O SER A 31 4094 7091 4089 1159 1543 1054 O
ATOM 452 CB SER A 31 -14.620 -16.813 -8.370 1.00 40.99 C
ANISOU 452 CB SER A 31 4381 7345 3848 1749 1419 734 C
ATOM 453 OG SER A 31 -15.380 -17.366 -7.313 1.00 44.85 O
ANISOU 453 OG SER A 31 4846 7963 4230 1755 1649 882 O
ATOM 454 H SER A 31 -13.097 -17.702 -10.747 1.00 41.17 H
ATOM 455 HA SER A 31 -12.860 -17.849 -8.111 1.00 46.53 H
ATOM 456 HB2 SER A 31 -14.211 -15.987 -8.066 1.00 49.19 H
ATOM 457 HB3 SER A 31 -15.208 -16.634 -9.120 1.00 49.19 H
ATOM 458 HG SER A 31 -15.979 -16.826 -7.077 1.00 53.81 H
ATOM 459 N AASN A 32 -13.878 -20.063 -8.122 0.50 43.39 N
ANISOU 459 N AASN A 32 4875 7471 4141 1337 1664 1165 N
ATOM 460 N BASN A 32 -13.892 -20.086 -8.142 0.50 43.40 N
ANISOU 460 N BASN A 32 4872 7471 4146 1330 1667 1169 N
ATOM 461 CA AASN A 32 -14.433 -21.415 -8.131 0.50 45.27 C
ANISOU 461 CA AASN A 32 5068 7677 4457 1073 1836 1391 C
ATOM 462 CA BASN A 32 -14.563 -21.387 -8.199 0.50 45.36 C
ANISOU 462 CA BASN A 32 5046 7700 4489 1059 1843 1392 C
ATOM 463 C AASN A 32 -14.324 -22.042 -9.517 0.50 44.15 C
ANISOU 463 C AASN A 32 4833 7403 4540 820 1755 1439 C
ATOM 464 C BASN A 32 -14.338 -22.074 -9.548 0.50 44.15 C
ANISOU 464 C BASN A 32 4829 7400 4547 810 1756 1443 C
ATOM 465 O AASN A 32 -15.290 -22.559 -10.082 0.50 45.59 O
ANISOU 465 O AASN A 32 4802 7605 4914 577 1832 1542 O
ATOM 466 O BASN A 32 -15.249 -22.668 -10.129 0.50 45.54 O
ANISOU 466 O BASN A 32 4805 7581 4915 556 1830 1554 O
ATOM 467 CB AASN A 32 -15.876 -21.401 -7.631 0.50 48.57 C
ANISOU 467 CB AASN A 32 5267 8275 4913 1012 2045 1478 C

ATOM 468 CB BASN A 32 -16.060 -21.218 -7.922 0.50 48.22 C
ANISOU 468 CB BASN A 32 5147 8248 4925 995 2025 1451 C
ATOM 469 CG AASN A 32 -15.985 -20.911 -6.196 0.50 50.56 C
ANISOU 469 CG AASN A 32 5643 8651 4919 1263 2150 1459 C
ATOM 470 CG BASN A 32 -16.813 -22.533 -7.926 0.50 50.46 C
ANISOU 470 CG BASN A 32 5341 8505 5325 687 2203 1676 C
ATOM 471 OD1AASN A 32 -15.155 -21.246 -5.351 0.50 50.84 O
ANISOU 471 OD1AASN A 32 5948 8612 4757 1377 2139 1488 O
ATOM 472 OD1BASN A 32 -16.395 -23.505 -7.300 0.50 51.67 O
ANISOU 472 OD1BASN A 32 5708 8555 5368 618 2281 1818 O
ATOM 473 ND2AASN A 32 -17.002 -20.106 -5.917 0.50 52.57 N
ANISOU 473 ND2AASN A 32 5707 9088 5179 1364 2239 1405 N
ATOM 474 ND2BASN A 32 -17.925 -22.573 -8.654 0.50 51.58 N
ANISOU 474 ND2BASN A 32 5174 8723 5700 494 2244 1703 N
ATOM 475 H AASN A 32 -13.388 -19.908 -7.432 0.50 52.07 H
ATOM 476 H BASN A 32 -13.369 -19.989 -7.467 0.50 52.08 H
ATOM 477 HA AASN A 32 -13.918 -21.965 -7.520 0.50 54.33 H
ATOM 478 HA BASN A 32 -14.195 -21.960 -7.508 0.50 54.43 H
ATOM 479 HB2AASN A 32 -16.401 -20.808 -8.192 0.50 58.28 H
ATOM 480 HB2BASN A 32 -16.175 -20.810 -7.050 0.50 57.86 H
ATOM 481 HB3AASN A 32 -16.235 -22.301 -7.670 0.50 58.28 H
ATOM 482 HB3BASN A 32 -16.445 -20.650 -8.607 0.50 57.86 H
ATOM 483 HD21AASN A 32 -17.105 -19.803 -5.119 0.50 63.08 H
ATOM 484 HD21BASN A 32 -18.389 -23.296 -8.690 0.50 61.89 H
ATOM 485 HD22AASN A 32 -17.559 -19.887 -6.535 0.50 63.08 H
ATOM 486 HD22BASN A 32 -18.180 -21.876 -9.088 0.50 61.89 H
ATOM 487 N THR A 33 -13.111 -22.002 -10.059 1.00 41.85 N
ANISOU 487 N THR A 33 4707 6969 4224 878 1586 1359 N
ATOM 488 CA THR A 33 -12.851 -22.445 -11.419 1.00 40.58 C
ANISOU 488 CA THR A 33 4504 6642 4271 673 1452 1354 C
ATOM 489 C THR A 33 -12.540 -23.939 -11.476 1.00 41.49 C
ANISOU 489 C THR A 33 4797 6551 4416 463 1476 1534 C
ATOM 490 O THR A 33 -12.577 -24.657 -10.475 1.00 43.11 O
ANISOU 490 O THR A 33 5142 6763 4477 465 1627 1694 O
ATOM 491 CB THR A 33 -11.694 -21.649 -12.027 1.00 37.75 C
ANISOU 491 CB THR A 33 4259 6159 3923 814 1199 1128 C
ATOM 492 OG1 THR A 33 -10.487 -21.922 -11.300 1.00 36.84 O
ANISOU 492 OG1 THR A 33 4413 5957 3628 962 1146 1120 O
ATOM 493 CG2 THR A 33 -11.990 -20.163 -11.978 1.00 37.74 C
ANISOU 493 CG2 THR A 33 4124 6318 3896 1015 1155 953 C
ATOM 494 H THR A 33 -12.416 -21.711 -9.645 1.00 50.21 H
ATOM 495 HA THR A 33 -13.641 -22.283 -11.959 1.00 48.69 H
ATOM 496 HB THR A 33 -11.577 -21.908 -12.954 1.00 45.29 H
ATOM 497 HG1 THR A 33 -10.307 -22.741 -11.338 1.00 44.21 H
ATOM 498 HG21 THR A 33 -11.253 -19.665 -12.365 1.00 45.28 H
ATOM 499 HG22 THR A 33 -12.798 -19.970 -12.479 1.00 45.28 H
ATOM 500 HG23 THR A 33 -12.115 -19.880 -11.059 1.00 45.28 H
ATOM 501 N GLY A 34 -12.262 -24.413 -12.689 1.00 40.59 N
ANISOU 501 N GLY A 34 4701 6225 4495 283 1304 1488 N
ATOM 502 CA GLY A 34 -11.570 -25.669 -12.896 1.00 40.84 C
ANISOU 502 CA GLY A 34 4978 6002 4537 160 1244 1583 C
ATOM 503 C GLY A 34 -10.124 -25.357 -13.209 1.00 38.18 C
ANISOU 503 C GLY A 34 4831 5538 4139 344 1048 1415 C

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ATOM    504  O   GLY A  34     -9.453 -24.723 -12.395  1.00 37.74           O
ANISOU  504  O   GLY A  34     4855   5575   3908    585   1041   1344      O
ATOM    505  H   GLY A  34    -12.472 -24.011 -13.420  1.00 48.71           H
ATOM    506  HA2 GLY A  34    -11.616 -26.215 -12.096  1.00 49.01           H
ATOM    507  HA3 GLY A  34    -11.964 -26.152 -13.639  1.00 49.01           H
ATOM    508  N   SER A  35     -9.642 -25.763 -14.384  1.00 32.39           N
ANISOU  508  N   SER A  35     2854   5348   4105    413    913    624      N
ATOM    509  CA  SER A  35     -8.328 -25.377 -14.884  1.00 30.00           C
ANISOU  509  CA  SER A  35     2672   4985   3741    442    815    566      C
ATOM    510  C   SER A  35     -8.462 -24.212 -15.855  1.00 27.13           C
ANISOU  510  C   SER A  35     2297   4632   3379    489    693    428      C
ATOM    511  O   SER A  35     -9.429 -24.134 -16.617  1.00 27.52           O
ANISOU  511  O   SER A  35     2233   4689   3534    441    664    384      O
ATOM    512  CB  SER A  35     -7.640 -26.540 -15.600  1.00 30.44           C
ANISOU  512  CB  SER A  35     2741   4914   3912    305    811    616      C
ATOM    513  OG  SER A  35     -7.413 -27.616 -14.715  1.00 33.30           O
ANISOU  513  OG  SER A  35     3140   5244   4270    272    914    746      O
ATOM    514  H   SER A  35    -10.072 -26.277 -14.922  1.00 38.87           H
ATOM    515  HA  SER A  35     -7.769 -25.097 -14.143  1.00 36.00           H
ATOM    516  HB2 SER A  35     -8.208 -26.843 -16.325  1.00 36.53           H
ATOM    517  HB3 SER A  35     -6.789 -26.235 -15.951  1.00 36.53           H
ATOM    518  HG  SER A  35     -7.035 -28.247 -15.121  1.00 39.96           H
ATOM    519  N   PHE A  36     -7.481 -23.314 -15.835  1.00 23.34           N
ANISOU  519  N   PHE A  36     1939   4146   2785    585    615    357      N
ATOM    520  CA  PHE A  36     -7.489 -22.192 -16.760  1.00 20.87           C
ANISOU  520  CA  PHE A  36     1642   3816   2470    635    495    233      C
ATOM    521  C   PHE A  36     -6.079 -21.643 -16.893  1.00 19.01           C
ANISOU  521  C   PHE A  36     1543   3525   2156    685    418    177      C
ATOM    522  O   PHE A  36     -5.261 -21.764 -15.979  1.00 18.38           O
ANISOU  522  O   PHE A  36     1546   3456   1983    729    450    208      O
ATOM    523  CB  PHE A  36     -8.448 -21.088 -16.302  1.00 21.23           C
ANISOU  523  CB  PHE A  36     1670   3945   2452    751    484    173      C
ATOM    524  CG  PHE A  36     -7.920 -20.252 -15.168  1.00 21.07           C
ANISOU  524  CG  PHE A  36     1765   3967   2272    886    480    143      C
ATOM    525  CD1 PHE A  36     -8.217 -20.576 -13.854  1.00 23.11           C
ANISOU  525  CD1 PHE A  36     2020   4311   2450    936    578    218      C
ATOM    526  CD2 PHE A  36     -7.141 -19.133 -15.419  1.00 20.30           C
ANISOU  526  CD2 PHE A  36     1783   3818   2111    964    371     36      C
ATOM    527  CE1 PHE A  36     -7.731 -19.806 -12.809  1.00 24.31           C
ANISOU  527  CE1 PHE A  36     2277   4509   2450   1069    554    177      C
ATOM    528  CE2 PHE A  36     -6.654 -18.362 -14.389  1.00 20.94           C
ANISOU  528  CE2 PHE A  36     1967   3930   2060   1080    349    -11      C
ATOM    529  CZ  PHE A  36     -6.950 -18.697 -13.076  1.00 23.23           C
ANISOU  529  CZ  PHE A  36     2249   4319   2260   1137    434     55      C
ATOM    530  H   PHE A  36     -6.806 -23.334 -15.301  1.00 28.01           H
ATOM    531  HA  PHE A  36     -7.778 -22.500 -17.633  1.00 25.04           H
ATOM    532  HB2 PHE A  36     -8.622 -20.495 -17.050  1.00 25.48           H
ATOM    533  HB3 PHE A  36     -9.277 -21.496 -16.007  1.00 25.48           H
ATOM    534  HD1 PHE A  36     -8.739 -21.323 -13.671  1.00 27.73           H
ATOM    535  HD2 PHE A  36     -6.937 -18.905 -16.298  1.00 24.36           H
ATOM    536  HE1 PHE A  36     -7.933 -20.033 -11.930  1.00 29.17           H
ATOM    537  HE2 PHE A  36     -6.130 -17.616 -14.573  1.00 25.13           H
ATOM    538  HZ  PHE A  36     -6.625 -18.177 -12.378  1.00 27.88           H
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ATOM   539  N  AVAL A  37     -5.797 -21.055 -18.054  0.73 17.61           N
ANISOU 539  N  AVAL A  37     1418   3251   2023   658   298    92      N
ATOM   540  N  BVAL A  37     -5.807 -21.046 -18.051  0.27 17.83           N
ANISOU 540  N  BVAL A  37     1444   3279   2049   659   298    91      N
ATOM   541  CA AVAL A  37     -4.533 -20.374 -18.317  0.73 17.26           C
ANISOU 541  CA AVAL A  37     1521   3107   1929   675   205    28      C
ATOM   542  CA BVAL A  37     -4.527 -20.404 -18.318  0.27 17.28           C
ANISOU 542  CA BVAL A  37     1523   3109   1933   673   207    30      C
ATOM   543  C  AVAL A  37     -4.848 -19.156 -19.183  0.73 16.75           C
ANISOU 543  C  AVAL A  37     1486   3004   1875   729   105   -66      C
ATOM   544  C  BVAL A  37     -4.788 -19.222 -19.245  0.27 16.68           C
ANISOU 544  C  BVAL A  37     1480   2988   1872   719   104   -64      C
ATOM   545  O  AVAL A  37     -5.549 -19.279 -20.194  0.73 17.27           O
ANISOU 545  O  AVAL A  37     1489   3056   2016   687    72   -76      O
ATOM   546  O  BVAL A  37     -5.380 -19.383 -20.318  0.27 17.07           O
ANISOU 546  O  BVAL A  37     1476   3012   1999   668    66   -73      O
ATOM   547  CB AVAL A  37     -3.503 -21.284 -19.024  0.73 16.23           C
ANISOU 547  CB AVAL A  37     1447   2861   1860   550   181    64      C
ATOM   548  CB BVAL A  37     -3.513 -21.395 -18.928  0.27 16.27           C
ANISOU 548  CB BVAL A  37     1446   2871   1863   547   192    73      C
ATOM   549  CG1AVAL A  37     -2.130 -20.611 -19.042  0.73 15.60           C
ANISOU 549  CG1AVAL A  37     1499   2703   1727   572   109    13      C
ATOM   550  CG1BVAL A  37     -3.255 -22.564 -17.986  0.27 17.35           C
ANISOU 550  CG1BVAL A  37     1565   3042   1986   516   295   177      C
ATOM   551  CG2AVAL A  37     -3.394 -22.672 -18.381  0.73 17.37           C
ANISOU 551  CG2AVAL A  37     1553   3024   2025   486   283   172      C
ATOM   552  CG2BVAL A  37     -3.997 -21.924 -20.266  0.27 16.25           C
ANISOU 552  CG2BVAL A  37     1392   2809   1975   447   154    68      C
ATOM   553  H  AVAL A  37     -6.338 -21.037 -18.723  0.73 21.14           H
ATOM   554  H  BVAL A  37     -6.360 -21.000 -18.709  0.27 21.39           H
ATOM   555  HA AVAL A  37     -4.150 -20.067 -17.481  0.73 20.71           H
ATOM   556  HA BVAL A  37     -4.159 -20.064 -17.487  0.27 20.74           H
ATOM   557  HB AVAL A  37     -3.780 -21.409 -19.945  0.73 19.48           H
ATOM   558  HB BVAL A  37     -2.670 -20.936 -19.074  0.27 19.52           H
ATOM   559 HG11AVAL A  37     -1.497 -21.195 -19.488  0.73 18.72           H
ATOM   560 HG11BVAL A  37     -2.616 -23.166 -18.398  0.27 20.82           H
ATOM   561 HG12AVAL A  37     -2.197 -19.769 -19.520  0.73 18.72           H
ATOM   562 HG12BVAL A  37     -2.899 -22.224 -17.151  0.27 20.82           H
ATOM   563 HG13AVAL A  37     -1.845 -20.451 -18.128  0.73 18.72           H
ATOM   564 HG13BVAL A  37     -4.091 -23.029 -17.825  0.27 20.82           H
ATOM   565 HG21AVAL A  37     -4.008 -22.721 -17.632  0.73 20.85           H
ATOM   566 HG21BVAL A  37     -4.858 -21.527 -20.469  0.27 19.50           H
ATOM   567 HG22AVAL A  37     -3.623 -23.345 -19.042  0.73 20.85           H
ATOM   568 HG22BVAL A  37     -3.352 -21.687 -20.951  0.27 19.50           H
ATOM   569 HG23AVAL A  37     -2.484 -22.807 -18.074  0.73 20.85           H
ATOM   570 HG23BVAL A  37     -4.082 -22.889 -20.211  0.27 19.50           H
ATOM   571  N  AVAL A  38     -4.337 -17.987 -18.794  0.73 16.90           N
ANISOU 571  N  AVAL A  38     1602   3000   1821   826    52   -138      N
ATOM   572  N  BVAL A  38     -4.373 -18.024 -18.837  0.27 16.89           N
ANISOU 572  N  BVAL A  38     1596   2999   1823   822    52   -136      N
ATOM   573  CA AVAL A  38     -4.649 -16.724 -19.463  0.73 16.41           C
ANISOU 573  CA AVAL A  38     1583   2889   1763   898   -35   -219      C
ATOM   574  CA BVAL A  38     -4.606 -16.824 -19.630  0.27 16.29           C
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ANISOU  574  CA BVAL A  38    1567   2863   1760    880    -38   -213      C
ATOM    575  C  AVAL A  38     -3.394 -15.861 -19.493  0.73 16.04           C
ANISOU  575  C  AVAL A  38    1678   2723   1693    908    -110   -274      C
ATOM    576  C  BVAL A  38     -3.381 -15.927 -19.548  0.27 16.01           C
ANISOU  576  C  BVAL A  38    1672   2717   1694    900    -109   -270      C
ATOM    577  O  AVAL A  38     -2.635 -15.826 -18.518  0.73 16.01           O
ANISOU  577  O  AVAL A  38    1721   2729   1632    931    -100   -289      O
ATOM    578  O  BVAL A  38     -2.639 -15.941 -18.561  0.27 16.03           O
ANISOU  578  O  BVAL A  38    1718   2733   1639    921    -95   -281      O
ATOM    579  CB AVAL A  38     -5.794 -15.972 -18.744  0.73 17.66           C
ANISOU  579  CB AVAL A  38    1692   3153   1866   1031    -12   -259      C
ATOM    580  CB BVAL A  38     -5.863 -16.049 -19.169  0.27 17.50           C
ANISOU  580  CB BVAL A  38    1660   3115   1873   1010    -25   -255      C
ATOM    581  CG1AVAL A  38     -6.013 -14.591 -19.358  0.73 17.61           C
ANISOU  581  CG1AVAL A  38    1766   3066   1859   1104    -106   -338      C
ATOM    582  CG1BVAL A  38     -7.053 -16.984 -18.991  0.27 18.08           C
ANISOU  582  CG1BVAL A  38    1585   3300   1984    965    60   -188      C
ATOM    583  CG2AVAL A  38     -7.087 -16.779 -18.786  0.73 18.14           C
ANISOU  583  CG2AVAL A  38    1605   3314   1972    989    61   -198      C
ATOM    584  CG2BVAL A  38     -5.596 -15.301 -17.881  0.27 17.71           C
ANISOU  584  CG2BVAL A  38    1762   3169   1796   1109    -18   -301      C
ATOM    585  H  AVAL A  38     -3.795 -17.899 -18.132  0.73 20.28           H
ATOM    586  H  BVAL A  38     -3.953 -17.881 -18.100  0.27 20.27           H
ATOM    587  HA AVAL A  38     -4.924 -16.901 -20.376  0.73 19.69           H
ATOM    588  HA BVAL A  38     -4.733 -17.077 -20.558  0.27 19.55           H
ATOM    589  HB AVAL A  38     -5.551 -15.848 -17.813  0.73 21.20           H
ATOM    590  HB BVAL A  38     -6.095 -15.397 -19.848  0.27 21.00           H
ATOM    591 HG11AVAL A  38     -6.735 -14.147 -18.886  0.73 21.13           H
ATOM    592 HG11BVAL A  38     -7.821 -16.466 -18.703  0.27 21.69           H
ATOM    593 HG12AVAL A  38     -5.195 -14.076 -19.274  0.73 21.13           H
ATOM    594 HG12BVAL A  38     -7.244 -17.415 -19.839  0.27 21.69           H
ATOM    595 HG13AVAL A  38     -6.244 -14.696 -20.294  0.73 21.13           H
ATOM    596 HG13BVAL A  38     -6.833 -17.651 -18.323  0.27 21.69           H
ATOM    597 HG21AVAL A  38     -7.783 -16.282 -18.328  0.73 21.76           H
ATOM    598 HG21BVAL A  38     -6.401 -14.827 -17.619  0.27 21.25           H
ATOM    599 HG22AVAL A  38     -7.337 -16.925 -19.711  0.73 21.76           H
ATOM    600 HG22BVAL A  38     -5.348 -15.937 -17.192  0.27 21.25           H
ATOM    601 HG23AVAL A  38     -6.942 -17.630 -18.344  0.73 21.76           H
ATOM    602 HG23BVAL A  38     -4.873 -14.671 -18.026  0.27 21.25           H
ATOM    603  N   GLY A  39     -3.185 -15.132 -20.587  1.00 15.87           N
ANISOU  603  N   GLY A  39    1722   2591   1718    895    -186   -303      N
ATOM    604  CA  GLY A  39     -2.094 -14.175 -20.596  1.00 16.51           C
ANISOU  604  CA  GLY A  39    1925   2551   1799    902    -250   -353      C
ATOM    605  C   GLY A  39     -1.775 -13.643 -21.973  1.00 15.87           C
ANISOU  605  C   GLY A  39    1911   2342   1778    860    -307   -343      C
ATOM    606  O   GLY A  39     -2.253 -14.137 -22.996  1.00 14.16           O
ANISOU  606  O   GLY A  39    1655   2134   1589    821    -305   -300      O
ATOM    607  H   GLY A  39     -3.659 -15.152 -21.304  1.00 19.05           H
ATOM    608  HA2 GLY A  39     -2.322 -13.425 -20.026  1.00 19.82           H
ATOM    609  HA3 GLY A  39     -1.296 -14.597 -20.241  1.00 19.82           H
ATOM    610  N   LYS A  40     -0.925 -12.615 -21.970  1.00 15.73           N
ANISOU  610  N   LYS A  40    1995   2202   1778    869    -360   -384      N
ATOM    611  CA  LYS A  40     -0.365 -12.032 -23.179  1.00 15.43           C
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ANISOU 611 CA LYS A 40 2038 2027 1798 823 -398 -356 C
ATOM 612 C LYS A 40 1.051 -12.552 -23.396 1.00 14.76 C
ANISOU 612 C LYS A 40 1977 1881 1751 698 -384 -316 C
ATOM 613 O LYS A 40 1.783 -12.845 -22.444 1.00 13.79 O
ANISOU 613 O LYS A 40 1841 1781 1618 670 -377 -343 O
ATOM 614 CB LYS A 40 -0.334 -10.498 -23.100 1.00 15.84 C
ANISOU 614 CB LYS A 40 2188 1960 1872 904 -458 -416 C
ATOM 615 CG LYS A 40 -1.691 -9.793 -23.166 1.00 17.79 C
ANISOU 615 CG LYS A 40 2430 2242 2088 1048 -482 -451 C
ATOM 616 CD LYS A 40 -2.182 -9.663 -24.593 1.00 18.71 C
ANISOU 616 CD LYS A 40 2565 2322 2221 1059 -497 -388 C
ATOM 617 CE LYS A 40 -3.520 -8.969 -24.673 1.00 19.58 C
ANISOU 617 CE LYS A 40 2662 2481 2296 1184 -520 -418 C
ATOM 618 NZ LYS A 40 -3.458 -7.542 -24.266 1.00 20.58 N
ANISOU 618 NZ LYS A 40 2892 2495 2433 1248 -558 -471 N
ATOM 619 H LYS A 40 -0.652 -12.229 -21.252 1.00 18.87 H
ATOM 620 HA LYS A 40 -0.906 -12.288 -23.942 1.00 18.52 H
ATOM 621 HB2 LYS A 40 0.083 -10.245 -22.262 1.00 19.01 H
ATOM 622 HB3 LYS A 40 0.201 -10.166 -23.839 1.00 19.01 H
ATOM 623 HG2 LYS A 40 -2.344 -10.307 -22.666 1.00 21.35 H
ATOM 624 HG3 LYS A 40 -1.607 -8.902 -22.792 1.00 21.35 H
ATOM 625 HD2 LYS A 40 -1.541 -9.144 -25.104 1.00 22.45 H
ATOM 626 HD3 LYS A 40 -2.277 -10.548 -24.978 1.00 22.45 H
ATOM 627 HE2 LYS A 40 -3.841 -9.006 -25.587 1.00 23.50 H
ATOM 628 HE3 LYS A 40 -4.146 -9.421 -24.085 1.00 23.50 H
ATOM 629 HZ1 LYS A 40 -3.175 -7.478 -23.424 1.00 24.70 H
ATOM 630 HZ2 LYS A 40 -2.896 -7.099 -24.795 1.00 24.70 H
ATOM 631 HZ3 LYS A 40 -4.266 -7.173 -24.327 1.00 24.70 H
ATOM 632 N GLY A 41 1.432 -12.655 -24.665 1.00 14.84 N
ANISOU 632 N GLY A 41 2019 1824 1796 638 -380 -253 N
ATOM 633 CA GLY A 41 2.775 -13.059 -25.008 1.00 14.55 C
ANISOU 633 CA GLY A 41 2001 1731 1798 530 -359 -211 C
ATOM 634 C GLY A 41 3.050 -13.017 -26.494 1.00 13.93 C
ANISOU 634 C GLY A 41 1966 1587 1739 494 -347 -138 C
ATOM 635 O GLY A 41 2.623 -12.091 -27.195 1.00 13.72 O
ANISOU 635 O GLY A 41 2003 1493 1718 549 -371 -122 O
ATOM 636 H GLY A 41 0.926 -12.495 -25.342 1.00 17.81 H
ATOM 637 HA2 GLY A 41 3.408 -12.473 -24.564 1.00 17.47 H
ATOM 638 HA3 GLY A 41 2.926 -13.964 -24.695 1.00 17.47 H
ATOM 639 N TRP A 42 3.763 -14.025 -26.983 1.00 13.23 N
ANISOU 639 N TRP A 42 1853 1523 1652 417 -308 -89 N
ATOM 640 CA TRP A 42 4.221 -14.058 -28.364 1.00 13.61 C
ANISOU 640 CA TRP A 42 1947 1523 1703 388 -285 -18 C
ATOM 641 C TRP A 42 3.719 -15.306 -29.080 1.00 13.15 C
ANISOU 641 C TRP A 42 1849 1552 1597 385 -271 0 C
ATOM 642 O TRP A 42 3.656 -16.401 -28.499 1.00 11.48 O
ANISOU 642 O TRP A 42 1571 1411 1381 352 -256 -20 O
ATOM 643 CB TRP A 42 5.753 -13.993 -28.420 1.00 14.07 C
ANISOU 643 CB TRP A 42 2017 1515 1814 301 -251 18 C
ATOM 644 CG TRP A 42 6.301 -12.699 -27.907 1.00 14.90 C
ANISOU 644 CG TRP A 42 2161 1508 1990 288 -275 -5 C
ATOM 645 CD1 TRP A 42 6.663 -11.609 -28.645 1.00 15.10 C
ANISOU 645 CD1 TRP A 42 2260 1411 2069 279 -266 48 C

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ATOM    646  CD2 TRP A  42      6.546 -12.355 -26.541  1.00 14.70           C
ANISOU  646  CD2 TRP A  42     2110   1478   1997    284   -316    -88       C
ATOM    647  NE1 TRP A  42      7.115 -10.608 -27.827  1.00 17.09           N
ANISOU  647  NE1 TRP A  42     2528   1563   2403    256   -304     -5       N
ATOM    648  CE2 TRP A  42      7.054 -11.038 -26.527  1.00 16.45           C
ANISOU  648  CE2 TRP A  42     2388   1559   2304    264   -342   -100       C
ATOM    649  CE3 TRP A  42      6.380 -13.027 -25.328  1.00 15.28           C
ANISOU  649  CE3 TRP A  42     2123   1650   2031    301   -332   -153       C
ATOM    650  CZ2 TRP A  42      7.403 -10.384 -25.347  1.00 17.09           C
ANISOU  650  CZ2 TRP A  42     2464   1597   2434    262   -401   -196       C
ATOM    651  CZ3 TRP A  42      6.732 -12.376 -24.156  1.00 16.02           C
ANISOU  651  CZ3 TRP A  42     2217   1719   2150    314   -383   -238       C
ATOM    652  CH2 TRP A  42      7.237 -11.069 -24.175  1.00 17.04           C
ANISOU  652  CH2 TRP A  42     2400   1708   2367    294   -425   -270       C
ATOM    653  H   TRP A  42      3.998 -14.714 -26.525  1.00 15.88           H
ATOM    654  HA  TRP A  42      3.871 -13.284 -28.831  1.00 16.33           H
ATOM    655  HB2 TRP A  42      6.119 -14.709 -27.877  1.00 16.88           H
ATOM    656  HB3 TRP A  42      6.040 -14.096 -29.341  1.00 16.88           H
ATOM    657  HD1 TRP A  42      6.607 -11.553 -29.572  1.00 18.13           H
ATOM    658  HE1 TRP A  42      7.394  -9.837 -28.086  1.00 20.51           H
ATOM    659  HE3 TRP A  42      6.047 -13.895 -25.308  1.00 18.33           H
ATOM    660  HZ2 TRP A  42      7.740  -9.517 -25.356  1.00 20.51           H
ATOM    661  HZ3 TRP A  42      6.627 -12.813 -23.342  1.00 19.22           H
ATOM    662  HH2 TRP A  42      7.461 -10.656 -23.372  1.00 20.45           H
ATOM    663  N   THR A  43      3.386 -15.127 -30.358  1.00 13.76           N
ANISOU  663  N   THR A  43     1973   1616   1639    425   -279     38       N
ATOM    664  CA  THR A  43      2.898 -16.230 -31.176  1.00 12.97           C
ANISOU  664  CA  THR A  43     1844   1589   1493    431   -285     36       C
ATOM    665  C   THR A  43      3.968 -17.294 -31.353  1.00 12.64           C
ANISOU  665  C   THR A  43     1790   1556   1457    357   -238     58       C
ATOM    666  O   THR A  43      3.675 -18.496 -31.279  1.00 12.76           O
ANISOU  666  O   THR A  43     1752   1627   1469    333   -240     29       O
ATOM    667  CB  THR A  43      2.440 -15.699 -32.535  1.00 14.31           C
ANISOU  667  CB  THR A  43     2083   1748   1604    509   -312     68       C
ATOM    668  OG1 THR A  43      1.437 -14.696 -32.331  1.00 13.31           O
ANISOU  668  OG1 THR A  43     1970   1614   1475    593   -360     46       O
ATOM    669  CG2 THR A  43      1.870 -16.833 -33.393  1.00 15.49           C
ANISOU  669  CG2 THR A  43     2202   1980   1704    525   -341     39       C
ATOM    670  H   THR A  43      3.434 -14.376 -30.773  1.00 16.51           H
ATOM    671  HA  THR A  43      2.135 -16.638 -30.738  1.00 15.56           H
ATOM    672  HB  THR A  43      3.196 -15.310 -33.002  1.00 17.17           H
ATOM    673  HG1 THR A  43      1.177 -14.396 -33.071  1.00 15.98           H
ATOM    674 HG21 THR A  43      1.583 -16.486 -34.252  1.00 18.59           H
ATOM    675 HG22 THR A  43      2.548 -17.512 -33.537  1.00 18.59           H
ATOM    676 HG23 THR A  43      1.110 -17.237 -32.945  1.00 18.59           H
ATOM    677  N   THR A  44      5.214 -16.875 -31.579  1.00 13.02           N
ANISOU  677  N   THR A  44     1880   1543   1525    320   -193    111       N
ATOM    678  CA  THR A  44      6.336 -17.795 -31.741  1.00 14.32           C
ANISOU  678  CA  THR A  44     2026   1720   1695    263   -143    135       C
ATOM    679  C   THR A  44      7.317 -17.560 -30.602  1.00 13.36           C
ANISOU  679  C   THR A  44     1868   1570   1640    203   -123    131       C
ATOM    680  O   THR A  44      7.999 -16.525 -30.556  1.00 12.07           O
ANISOU  680  O   THR A  44     1729   1336   1521    180   -110    159       O
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ATOM    681  CB  THR A  44       7.026 -17.619 -33.095  1.00 16.15           C
ANISOU  681  CB  THR A  44     2319   1930   1886    281    -99    203       C
ATOM    682  OG1 THR A  44       6.069 -17.784 -34.155  1.00 17.26           O
ANISOU  682  OG1 THR A  44     2502   2109   1947    358   -135    195       O
ATOM    683  CG2 THR A  44       8.145 -18.656 -33.265  1.00 15.77           C
ANISOU  683  CG2 THR A  44     2244   1910   1838    239    -45    219       C
ATOM    684  H   THR A  44       5.437 -16.047 -31.643  1.00 15.63           H
ATOM    685  HA  THR A  44       6.012 -18.707 -31.681  1.00 17.19           H
ATOM    686  HB  THR A  44       7.417 -16.733 -33.147  1.00 19.37           H
ATOM    687  HG1 THR A  44       5.459 -17.212 -34.083  1.00 20.71           H
ATOM    688 HG21 THR A  44       8.578 -18.539 -34.125  1.00 18.92           H
ATOM    689 HG22 THR A  44       8.806 -18.549 -32.563  1.00 18.92           H
ATOM    690 HG23 THR A  44       7.777 -19.552 -33.218  1.00 18.92           H
ATOM    691  N   GLY A  45       7.390 -18.522 -29.687  1.00 12.12           N
ANISOU  691  N   GLY A  45     1652   1461   1492    178   -124     96       N
ATOM    692  CA  GLY A  45       8.380 -18.460 -28.637  1.00 11.61           C
ANISOU  692  CA  GLY A  45     1549   1390   1471    136   -116     85       C
ATOM    693  C   GLY A  45       9.795 -18.542 -29.174  1.00 12.39           C
ANISOU  693  C   GLY A  45     1642   1467   1598     93    -69    131       C
ATOM    694  O   GLY A  45      10.061 -18.995 -30.293  1.00 13.10           O
ANISOU  694  O   GLY A  45     1755   1564   1657    100    -30    173       O
ATOM    695  H   GLY A  45       6.878 -19.213 -29.658  1.00 14.55           H
ATOM    696  HA2 GLY A  45       8.283 -17.626 -28.151  1.00 13.93           H
ATOM    697  HA3 GLY A  45       8.242 -19.195 -28.019  1.00 13.93           H
ATOM    698  N   SER A  46      10.722 -18.100 -28.330  1.00 13.28           N
ANISOU  698  N   SER A  46     1717   1563   1767     53    -77    116       N
ATOM    699  CA  SER A  46      12.144 -18.126 -28.609  1.00 15.24           C
ANISOU  699  CA  SER A  46     1926   1801   2063      5    -36    152       C
ATOM    700  C   SER A  46      12.880 -18.522 -27.337  1.00 14.44           C
ANISOU  700  C   SER A  46     1755   1743   1989    -12    -66    104       C
ATOM    701  O   SER A  46      12.536 -18.033 -26.247  1.00 13.72           O
ANISOU  701  O   SER A  46     1657   1649   1905     -1   -124     44       O
ATOM    702  CB  SER A  46      12.663 -16.764 -29.089  1.00 16.59           C
ANISOU  702  CB  SER A  46     2114   1882   2306    -40    -20    189       C
ATOM    703  OG  SER A  46      14.077 -16.726 -29.076  1.00 17.16           O
ANISOU  703  OG  SER A  46     2117   1952   2450   -101     15    213       O
ATOM    704  H   SER A  46      10.538 -17.767 -27.559  1.00 15.94           H
ATOM    705  HA  SER A  46      12.330 -18.788 -29.293  1.00 18.29           H
ATOM    706  HB2 SER A  46      12.352 -16.609 -29.994  1.00 19.91           H
ATOM    707  HB3 SER A  46      12.324 -16.072 -28.499  1.00 19.91           H
ATOM    708  HG  SER A  46      14.347 -15.975 -29.341  1.00 20.59           H
ATOM    709  N   PRO A  47      13.901 -19.378 -27.438  1.00 14.59           N
ANISOU  709  N   PRO A  47     1724   1808   2013    -22    -32    127       N
ATOM    710  CA  PRO A  47      14.744 -19.669 -26.276  1.00 15.17           C
ANISOU  710  CA  PRO A  47     1725   1928   2110    -26    -68     84       C
ATOM    711  C   PRO A  47      15.722 -18.559 -25.934  1.00 17.17           C
ANISOU  711  C   PRO A  47     1920   2142   2460    -88    -99     57       C
ATOM    712  O   PRO A  47      16.474 -18.699 -24.963  1.00 18.12           O
ANISOU  712  O   PRO A  47     1973   2308   2603    -88   -147      7       O
ATOM    713  CB  PRO A  47      15.487 -20.943 -26.709  1.00 15.64           C
ANISOU  713  CB  PRO A  47     1753   2043   2145     -4    -17    123       C
ATOM    714  CG  PRO A  47      15.601 -20.814 -28.199  1.00 15.69           C
ANISOU  714  CG  PRO A  47     1790   2020   2152    -18     53    185       C
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ATOM   715  CD  PRO A  47     14.343 -20.112 -28.642  1.00 15.43           C
ANISOU 715  CD  PRO A  47     1837   1933   2093    -13     38    186       C
ATOM   716  HA  PRO A  47     14.195 -19.865 -25.501  1.00 18.20           H
ATOM   717  HB2 PRO A  47     16.364 -20.969 -26.296  1.00 18.77           H
ATOM   718  HB3 PRO A  47     14.967 -21.726 -26.469  1.00 18.77           H
ATOM   719  HG2 PRO A  47     16.384 -20.286 -28.421  1.00 18.83           H
ATOM   720  HG3 PRO A  47     15.659 -21.696 -28.599  1.00 18.83           H
ATOM   721  HD2 PRO A  47     14.539 -19.492 -29.361  1.00 18.52           H
ATOM   722  HD3 PRO A  47     13.671 -20.760 -28.906  1.00 18.52           H
ATOM   723  N   PHE A  48     15.735 -17.468 -26.699  1.00 17.61           N
ANISOU 723  N   PHE A  48     2001   2112   2579   -138    -76     89       N
ATOM   724  CA  PHE A  48     16.632 -16.348 -26.452  1.00 19.26           C
ANISOU 724  CA  PHE A  48     2153   2254   2910   -217   -102     67       C
ATOM   725  C   PHE A  48     15.889 -15.103 -26.012  1.00 18.95           C
ANISOU 725  C   PHE A  48     2174   2118   2909   -225   -166     13       C
ATOM   726  O   PHE A  48     16.511 -14.048 -25.849  1.00 19.51           O
ANISOU 726  O   PHE A  48     2213   2100   3099   -298   -195    -13       O
ATOM   727  CB  PHE A  48     17.445 -16.046 -27.713  1.00 22.45           C
ANISOU 727  CB  PHE A  48     2530   2619   3381   -278     -6    166       C
ATOM   728  CG  PHE A  48     17.996 -17.269 -28.358  1.00 24.37           C
ANISOU 728  CG  PHE A  48     2737   2957   3565   -244     69    222       C
ATOM   729  CD1 PHE A  48     19.010 -17.982 -27.752  1.00 25.74           C
ANISOU 729  CD1 PHE A  48     2807   3214   3760   -243     54    191       C
ATOM   730  CD2 PHE A  48     17.481 -17.725 -29.559  1.00 25.76           C
ANISOU 730  CD2 PHE A  48     2987   3143   3656   -197    144    296       C
ATOM   731  CE1 PHE A  48     19.512 -19.126 -28.337  1.00 26.42           C
ANISOU 731  CE1 PHE A  48     2866   3381   3790   -195    121    237       C
ATOM   732  CE2 PHE A  48     17.980 -18.872 -30.145  1.00 26.51           C
ANISOU 732  CE2 PHE A  48     3059   3321   3694   -152    206    331       C
ATOM   733  CZ  PHE A  48     18.994 -19.569 -29.530  1.00 26.37           C
ANISOU 733  CZ  PHE A  48     2941   3376   3704   -151    197    303       C
ATOM   734  H   PHE A  48     15.221 -17.354 -27.379  1.00 21.14           H
ATOM   735  HA  PHE A  48     17.252 -16.591 -25.747  1.00 23.11           H
ATOM   736  HB2 PHE A  48     16.874 -15.600 -28.357  1.00 26.94           H
ATOM   737  HB3 PHE A  48     18.190 -15.471 -27.477  1.00 26.94           H
ATOM   738  HD1 PHE A  48     19.360 -17.687 -26.942  1.00 30.89           H
ATOM   739  HD2 PHE A  48     16.793 -17.257 -29.973  1.00 30.91           H
ATOM   740  HE1 PHE A  48     20.199 -19.598 -27.923  1.00 31.70           H
ATOM   741  HE2 PHE A  48     17.633 -19.170 -30.955  1.00 31.82           H
ATOM   742  HZ  PHE A  48     19.335 -20.337 -29.927  1.00 31.65           H
ATOM   743  N   ARG A  49     14.579 -15.190 -25.824  1.00 17.79           N
ANISOU 743  N   ARG A  49     2108   1980   2673   -153   -188     -9       N
ATOM   744  CA  ARG A  49     13.806 -14.012 -25.481  1.00 16.69           C
ANISOU 744  CA  ARG A  49     2031   1751   2559   -139   -244    -60       C
ATOM   745  C   ARG A  49     13.929 -13.704 -23.998  1.00 15.92           C
ANISOU 745  C   ARG A  49     1903   1673   2471   -118   -344   -183       C
ATOM   746  O   ARG A  49     13.866 -14.600 -23.151  1.00 15.25           O
ANISOU 746  O   ARG A  49     1788   1701   2305    -65   -367   -221       O
ATOM   747  CB  ARG A  49     12.341 -14.209 -25.853  1.00 15.84           C
ANISOU 747  CB  ARG A  49     2005   1662   2353    -58   -231    -39       C
ATOM   748  CG  ARG A  49     11.432 -13.100 -25.345  1.00 16.84           C
ANISOU 748  CG  ARG A  49     2193   1718   2488    -13   -293   -104       C
ATOM   749  CD  ARG A  49     10.033 -13.165 -25.946  1.00 17.82           C
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ANISOU  749  CD  ARG A  49     2382   1857   2532     64   -275    -72      C
ATOM    750  NE  ARG A  49      10.002 -12.754 -27.357  1.00 20.07           N
ANISOU  750  NE  ARG A  49     2721   2070   2835     49   -222     24      N
ATOM    751  CZ  ARG A  49      9.642 -13.530 -28.380  1.00 20.30           C
ANISOU  751  CZ  ARG A  49     2764   2156   2794     74   -171     93      C
ATOM    752  NH1 ARG A  49      9.255 -14.781 -28.189  1.00 19.40           N
ANISOU  752  NH1 ARG A  49     2611   2153   2608     99   -165     76      N
ATOM    753  NH2 ARG A  49      9.658 -13.038 -29.613  1.00 21.88           N
ANISOU  753  NH2 ARG A  49     3022   2294   2995     78   -127    178      N
ATOM    754  H   ARG A  49     14.119 -15.913 -25.889  1.00 21.35           H
ATOM    755  HA  ARG A  49     14.145 -13.251 -25.978  1.00 20.03           H
ATOM    756  HB2 ARG A  49     12.263 -14.238 -26.820  1.00 19.01           H
ATOM    757  HB3 ARG A  49     12.030 -15.046 -25.473  1.00 19.01           H
ATOM    758  HG2 ARG A  49     11.349 -13.176 -24.382  1.00 20.21           H
ATOM    759  HG3 ARG A  49     11.819 -12.242 -25.578  1.00 20.21           H
ATOM    760  HD2 ARG A  49      9.707 -14.077 -25.891  1.00 21.38           H
ATOM    761  HD3 ARG A  49      9.448 -12.573 -25.448  1.00 21.38           H
ATOM    762  HE  ARG A  49     10.236 -11.946 -27.538  1.00 24.09           H
ATOM    763 HH11 ARG A  49      9.240 -15.110 -27.395  1.00 23.28           H
ATOM    764 HH12 ARG A  49      9.023 -15.267 -28.860  1.00 23.28           H
ATOM    765 HH21 ARG A  49      9.905 -12.226 -29.749  1.00 26.25           H
ATOM    766 HH22 ARG A  49      9.423 -13.533 -30.277  1.00 26.25           H
ATOM    767  N   THR A  50     14.103 -12.425 -23.686  1.00 16.88           N
ANISOU  767  N   THR A  50     2042   1681   2690   -154   -404   -246      N
ATOM    768  CA  THR A  50     13.969 -11.933 -22.323  1.00 18.36           C
ANISOU  768  CA  THR A  50     2231   1876   2871   -109   -513   -384      C
ATOM    769  C   THR A  50     12.544 -11.423 -22.168  1.00 17.89           C
ANISOU  769  C   THR A  50     2269   1790   2741    -16   -530   -413      C
ATOM    770  O   THR A  50     12.144 -10.454 -22.827  1.00 19.07           O
ANISOU  770  O   THR A  50     2485   1811   2952    -30   -521   -387      O
ATOM    771  CB  THR A  50     14.990 -10.842 -22.019  1.00 21.34           C
ANISOU  771  CB  THR A  50     2566   2136   3407   -200   -585   -460      C
ATOM    772  OG1 THR A  50     16.308 -11.394 -22.110  1.00 22.77           O
ANISOU  772  OG1 THR A  50     2632   2369   3652   -279   -569   -437      O
ATOM    773  CG2 THR A  50     14.784 -10.281 -20.617  1.00 22.52           C
ANISOU  773  CG2 THR A  50     2731   2291   3535   -135   -714   -627      C
ATOM    774  H   THR A  50     14.302 -11.813 -24.257  1.00 20.25           H
ATOM    775  HA  THR A  50     14.105 -12.664 -21.700  1.00 22.04           H
ATOM    776  HB  THR A  50     14.895 -10.119 -22.659  1.00 25.61           H
ATOM    777  HG1 THR A  50     16.880 -10.801 -21.945  1.00 27.33           H
ATOM    778 HG21 THR A  50     15.439  -9.588 -20.438  1.00 27.02           H
ATOM    779 HG22 THR A  50     13.895  -9.901 -20.540  1.00 27.02           H
ATOM    780 HG23 THR A  50     14.883 -10.987 -19.960  1.00 27.02           H
ATOM    781  N   ILE A  51     11.775 -12.088 -21.320  1.00 16.33           N
ANISOU  781  N   ILE A  51     2076   1716   2414     84   -546   -454      N
ATOM    782  CA  ILE A  51     10.396 -11.702 -21.066  1.00 16.61           C
ANISOU  782  CA  ILE A  51     2181   1757   2374    185   -556   -485      C
ATOM    783  C   ILE A  51     10.397 -10.670 -19.950  1.00 17.95           C
ANISOU  783  C   ILE A  51     2378   1881   2560    237   -661   -630      C
ATOM    784  O   ILE A  51     10.961 -10.897 -18.874  1.00 17.97           O
ANISOU  784  O   ILE A  51     2341   1958   2529    261   -722   -717      O
ATOM    785  CB  ILE A  51      9.529 -12.921 -20.707  1.00 17.20           C
ANISOU  785  CB  ILE A  51     2236   1987   2312    263   -507   -448      C
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ATOM    786  CG1 ILE A  51      9.407 -13.863 -21.905  1.00 17.12           C
ANISOU  786  CG1 ILE A  51    2212   1998   2297    217   -419   -324       C
ATOM    787  CG2 ILE A  51      8.137 -12.494 -20.294  1.00 17.71           C
ANISOU  787  CG2 ILE A  51    2346   2078   2304    372   -517   -489       C
ATOM    788  CD1 ILE A  51     10.491 -14.909 -21.971  1.00 16.61           C
ANISOU  788  CD1 ILE A  51    2085   1988   2239    160   -388   -281       C
ATOM    789  H   ILE A  51     12.032 -12.776 -20.873  1.00 19.60           H
ATOM    790  HA  ILE A  51     10.027 -11.289 -21.862  1.00 19.93           H
ATOM    791  HB  ILE A  51      9.944 -13.398 -19.971  1.00 20.64           H
ATOM    792 HG12 ILE A  51      8.555 -14.323 -21.855  1.00 20.55           H
ATOM    793 HG13 ILE A  51      9.450 -13.340 -22.720  1.00 20.55           H
ATOM    794 HG21 ILE A  51      7.617 -13.283 -20.075  1.00 21.25           H
ATOM    795 HG22 ILE A  51      8.202 -11.914 -19.519  1.00 21.25           H
ATOM    796 HG23 ILE A  51      7.722 -12.017 -21.030  1.00 21.25           H
ATOM    797 HD11 ILE A  51     10.346 -15.464 -22.753  1.00 19.93           H
ATOM    798 HD12 ILE A  51     11.352 -14.466 -22.034  1.00 19.93           H
ATOM    799 HD13 ILE A  51     10.456 -15.451 -21.168  1.00 19.93           H
ATOM    800  N   ASN A  52      9.793  -9.521 -20.220  1.00 17.71           N
ANISOU  800  N   ASN A  52    2424   1727   2579    263   -688   -661       N
ATOM    801  CA  ASN A  52      9.587  -8.490 -19.221  1.00 19.72           C
ANISOU  801  CA  ASN A  52    2726   1926   2841    336   -790   -811       C
ATOM    802  C   ASN A  52      8.130  -8.514 -18.806  1.00 19.85           C
ANISOU  802  C   ASN A  52    2786   2029   2726    486   -775   -833       C
ATOM    803  O   ASN A  52      7.244  -8.723 -19.639  1.00 20.14           O
ANISOU  803  O   ASN A  52    2842   2077   2734    509   -705   -737       O
ATOM    804  CB  ASN A  52      9.945  -7.104 -19.761  1.00 21.36           C
ANISOU  804  CB  ASN A  52    2993   1909   3212    269   -834   -837       C
ATOM    805  CG  ASN A  52     11.342  -7.043 -20.324  1.00 22.67           C
ANISOU  805  CG  ASN A  52    3100   1986   3530    106   -824   -790       C
ATOM    806  OD1 ASN A  52     12.300  -6.784 -19.600  1.00 24.84           O
ANISOU  806  OD1 ASN A  52    3323   2237   3879     53   -908   -895       O
ATOM    807  ND2 ASN A  52     11.468  -7.275 -21.625  1.00 21.33           N
ANISOU  807  ND2 ASN A  52    2928   1773   3402     32   -723   -634       N
ATOM    808  H   ASN A  52      9.487  -9.312 -20.997  1.00 21.25           H
ATOM    809  HA  ASN A  52     10.137  -8.673 -18.443  1.00 23.67           H
ATOM    810  HB2 ASN A  52      9.325  -6.871 -20.469  1.00 25.63           H
ATOM    811  HB3 ASN A  52      9.884  -6.458 -19.040  1.00 25.63           H
ATOM    812 HD21 ASN A  52     12.245  -7.251 -21.992  1.00 25.59           H
ATOM    813 HD22 ASN A  52     10.773  -7.450 -22.100  1.00 25.59           H
ATOM    814  N   TYR A  53      7.880  -8.306 -17.518  1.00 19.63           N
ANISOU  814  N   TYR A  53    2769   2075   2613    596   -843   -963       N
ATOM    815  CA  TYR A  53      6.509  -8.185 -17.063  1.00 19.23           C
ANISOU  815  CA  TYR A  53    2754   2108   2444    749   -825   -993       C
ATOM    816  C   TYR A  53      6.471  -7.340 -15.801  1.00 20.36           C
ANISOU  816  C   TYR A  53    2924   2264   2547    847   -912  -1128       C
ATOM    817  O   TYR A  53      7.480  -7.157 -15.114  1.00 21.79           O
ANISOU  817  O   TYR A  53    3081   2438   2762    808   -981  -1198       O
ATOM    818  CB  TYR A  53      5.868  -9.564 -16.830  1.00 17.08           C
ANISOU  818  CB  TYR A  53    2415   2038   2036    794   -730   -901       C
ATOM    819  CG  TYR A  53      6.332 -10.301 -15.594  1.00 17.20           C
ANISOU  819  CG  TYR A  53    2390   2203   1944    843   -746   -948       C
ATOM    820  CD1 TYR A  53      7.434 -11.143 -15.629  1.00 17.14           C
ANISOU  820  CD1 TYR A  53    2328   2226   1959    748   -739   -900       C
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ATOM    821  CD2 TYR A  53      5.645 -10.176 -14.396  1.00 18.18           C
ANISOU  821  CD2 TYR A  53     2527   2447   1934    998   -760  -1025       C
ATOM    822  CE1 TYR A  53      7.853 -11.823 -14.492  1.00 16.91           C
ANISOU  822  CE1 TYR A  53     2268   2337   1819    812   -758   -935       C
ATOM    823  CE2 TYR A  53      6.051 -10.849 -13.264  1.00 18.76           C
ANISOU  823  CE2 TYR A  53     2561   2660   1906   1049   -758  -1028       C
ATOM    824  CZ  TYR A  53      7.151 -11.667 -13.314  1.00 17.95           C
ANISOU  824  CZ  TYR A  53     2421   2583   1817    966   -766  -1000       C
ATOM    825  OH  TYR A  53      7.530 -12.324 -12.171  1.00 19.60           O
ANISOU  825  OH  TYR A  53     2597   2925   1924   1035   -760   -992       O
ATOM    826  H   TYR A  53      8.475  -8.233 -16.901  1.00 23.55           H
ATOM    827  HA  TYR A  53      5.991  -7.727 -17.744  1.00 23.08           H
ATOM    828  HB2 TYR A  53      4.908  -9.447 -16.755  1.00 20.49           H
ATOM    829  HB3 TYR A  53      6.067 -10.127 -17.594  1.00 20.49           H
ATOM    830  HD1 TYR A  53      7.908 -11.244 -16.423  1.00 20.57           H
ATOM    831  HD2 TYR A  53      4.901  -9.620 -14.353  1.00 21.81           H
ATOM    832  HE1 TYR A  53      8.597 -12.380 -14.526  1.00 20.29           H
ATOM    833  HE2 TYR A  53      5.582 -10.747 -12.467  1.00 22.51           H
ATOM    834  HH  TYR A  53      8.210 -12.794 -12.322  1.00 23.51           H
ATOM    835  N   ASN A  54      5.292  -6.800 -15.527  1.00 20.29           N
ANISOU  835  N   ASN A  54     2948   2289   2471    967   -900  -1141       N
ATOM    836  CA  ASN A  54      5.015  -6.133 -14.262  1.00 22.52           C
ANISOU  836  CA  ASN A  54     3243   2630   2682   1082   -960  -1238       C
ATOM    837  C   ASN A  54      3.627  -6.577 -13.839  1.00 22.18           C
ANISOU  837  C   ASN A  54     3179   2758   2490   1221   -888  -1198       C
ATOM    838  O   ASN A  54      2.638  -6.258 -14.512  1.00 21.35           O
ANISOU  838  O   ASN A  54     3095   2628   2391   1255   -850  -1155       O
ATOM    839  CB  ASN A  54      5.096  -4.615 -14.396  1.00 23.60           C
ANISOU  839  CB  ASN A  54     3452   2586   2930   1073  -1038  -1309       C
ATOM    840  CG  ASN A  54      4.972  -3.906 -13.065  1.00 25.48           C
ANISOU  840  CG  ASN A  54     3706   2872   3103   1189  -1117  -1428       C
ATOM    841  OD1 ASN A  54      4.163  -4.284 -12.217  1.00 25.54           O
ANISOU  841  OD1 ASN A  54     3693   3050   2960   1325  -1090  -1435       O
ATOM    842  ND2 ASN A  54      5.799  -2.889 -12.864  1.00 27.17           N
ANISOU  842  ND2 ASN A  54     3954   2937   3433   1134  -1212  -1521       N
ATOM    843  H   ASN A  54      4.623  -6.808 -16.067  1.00 24.34           H
ATOM    844  HA  ASN A  54      5.653  -6.422 -13.591  1.00 27.02           H
ATOM    845  HB2 ASN A  54      5.953  -4.377 -14.784  1.00 28.32           H
ATOM    846  HB3 ASN A  54      4.376  -4.309 -14.968  1.00 28.32           H
ATOM    847 HD21 ASN A  54      5.770  -2.451 -12.124  1.00 32.61           H
ATOM    848 HD22 ASN A  54      6.364  -2.667 -13.473  1.00 32.61           H
ATOM    849  N   ALA A  55      3.562  -7.340 -12.752  1.00 20.94           N
ANISOU  849  N   ALA A  55     2974   2778   2204   1298   -863  -1199       N
ATOM    850  CA  ALA A  55      2.290  -7.753 -12.169  1.00 21.14           C
ANISOU  850  CA  ALA A  55     2966   2977   2090   1426   -788  -1153       C
ATOM    851  C   ALA A  55      1.877  -6.665 -11.191  1.00 23.07           C
ANISOU  851  C   ALA A  55     3250   3229   2285   1552   -859  -1252       C
ATOM    852  O   ALA A  55      2.321  -6.632 -10.042  1.00 24.23           O
ANISOU  852  O   ALA A  55     3395   3446   2366   1621   -906  -1315       O
ATOM    853  CB  ALA A  55      2.412  -9.108 -11.485  1.00 20.61           C
ANISOU  853  CB  ALA A  55     2833   3086   1911   1446   -713  -1083       C
ATOM    854  H   ALA A  55      4.250  -7.635 -12.328  1.00 25.13           H
ATOM    855  HA  ALA A  55      1.617  -7.816 -12.865  1.00 25.37           H
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ATOM    856  HB1 ALA A  55      1.551  -9.350 -11.110  1.00 24.73           H
ATOM    857  HB2 ALA A  55      2.686  -9.768 -12.140  1.00 24.73           H
ATOM    858  HB3 ALA A  55      3.075  -9.047 -10.779  1.00 24.73           H
ATOM    859  N   GLY A  56      1.035  -5.747 -11.670  1.00 23.57           N
ANISOU  859  N   GLY A  56    3355   3220   2381   1591   -871  -1269      N
ATOM    860  CA  GLY A  56      0.529  -4.691 -10.814  1.00 25.48           C
ANISOU  860  CA  GLY A  56    3641   3469   2572   1721   -936  -1364      C
ATOM    861  C   GLY A  56     -0.380  -5.212  -9.723  1.00 26.64           C
ANISOU  861  C   GLY A  56    3739   3835   2548   1865   -876  -1339      C
ATOM    862  O   GLY A  56     -0.489  -4.601  -8.659  1.00 28.40           O
ANISOU  862  O   GLY A  56    3989   4103   2698   1987   -935  -1427      O
ATOM    863  H   GLY A  56      0.748  -5.718 -12.480  1.00 28.29           H
ATOM    864  HA2 GLY A  56      1.274  -4.229 -10.397  1.00 30.58           H
ATOM    865  HA3 GLY A  56      0.032  -4.052 -11.348  1.00 30.58           H
ATOM    866  N   VAL A  57     -1.054  -6.334  -9.972  1.00 25.05           N
ANISOU  866  N   VAL A  57    3465   3769   2285   1853   -756  -1218      N
ATOM    867  CA  VAL A  57     -1.858  -7.012  -8.964  1.00 25.74           C
ANISOU  867  CA  VAL A  57    3494   4066   2221   1964   -674  -1162      C
ATOM    868  C   VAL A  57     -1.585  -8.503  -9.067  1.00 24.89           C
ANISOU  868  C   VAL A  57    3316   4054   2089   1885   -573  -1040      C
ATOM    869  O   VAL A  57     -1.630  -9.076 -10.161  1.00 22.84           O
ANISOU  869  O   VAL A  57    3025   3749   1904   1772   -518   -967      O
ATOM    870  CB  VAL A  57     -3.364  -6.736  -9.123  1.00 26.92           C
ANISOU  870  CB  VAL A  57    3614   4293   2321   2045   -610  -1125      C
ATOM    871  CG1 VAL A  57     -4.163  -7.494  -8.059  1.00 28.04           C
ANISOU  871  CG1 VAL A  57    3688   4652   2315   2147   -511  -1052      C
ATOM    872  CG2 VAL A  57     -3.638  -5.239  -9.020  1.00 27.88           C
ANISOU  872  CG2 VAL A  57    3815   4315   2463   2134   -711  -1246      C
ATOM    873  H   VAL A  57     -1.060  -6.728 -10.737  1.00 30.06           H
ATOM    874  HA  VAL A  57     -1.585  -6.713  -8.082  1.00 30.89           H
ATOM    875  HB  VAL A  57     -3.656  -7.040  -9.997  1.00 32.30           H
ATOM    876 HG11 VAL A  57     -5.107  -7.304  -8.179  1.00 33.65           H
ATOM    877 HG12 VAL A  57     -4.000  -8.444  -8.160  1.00 33.65           H
ATOM    878 HG13 VAL A  57     -3.876  -7.200  -7.181  1.00 33.65           H
ATOM    879 HG21 VAL A  57     -4.590  -5.085  -9.123  1.00 33.46           H
ATOM    880 HG22 VAL A  57     -3.343  -4.924  -8.152  1.00 33.46           H
ATOM    881 HG23 VAL A  57     -3.150  -4.781  -9.723  1.00 33.46           H
ATOM    882  N   TRP A  58     -1.308  -9.130  -7.926  1.00 25.05           N
ANISOU  882  N   TRP A  58    3314   4202   2002   1952   -549  -1017      N
ATOM    883  CA  TRP A  58     -1.133 -10.580  -7.858  1.00 24.43           C
ANISOU  883  CA  TRP A  58    3174   4223   1887   1895   -443   -887      C
ATOM    884  C   TRP A  58     -1.762 -11.041  -6.550  1.00 25.78           C
ANISOU  884  C   TRP A  58    3313   4576   1907   2027   -373   -827      C
ATOM    885  O   TRP A  58     -1.155 -10.905  -5.482  1.00 26.76           O
ANISOU  885  O   TRP A  58    3466   4745   1956   2121   -428   -881      O
ATOM    886  CB  TRP A  58      0.331 -10.984  -7.939  1.00 24.63           C
ANISOU  886  CB  TRP A  58    3218   4176   1965   1813   -497   -911      C
ATOM    887  CG  TRP A  58      0.502 -12.470  -7.846  1.00 24.81           C
ANISOU  887  CG  TRP A  58    3186   4294   1945   1765   -388   -774      C
ATOM    888  CD1 TRP A  58      1.199 -13.161  -6.899  1.00 26.84           C
ANISOU  888  CD1 TRP A  58    3439   4631   2128   1810   -379   -744      C
ATOM    889  CD2 TRP A  58     -0.065 -13.450  -8.724  1.00 24.82           C
ANISOU  889  CD2 TRP A  58    3130   4315   1983   1667   -271   -644      C
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ATOM    890  NE1 TRP A  58      1.113 -14.515  -7.141  1.00 25.90           N
ANISOU  890  NE1 TRP A  58    3273   4571   1999   1743   -262   -595       N
ATOM    891  CE2 TRP A  58      0.338 -14.717  -8.253  1.00 25.13           C
ANISOU  891  CE2 TRP A  58    3140   4436   1972   1649   -194   -534       C
ATOM    892  CE3 TRP A  58     -0.869 -13.379  -9.867  1.00 24.28           C
ANISOU  892  CE3 TRP A  58    3033   4199   1994   1595   -227   -613       C
ATOM    893  CZ2 TRP A  58     -0.038 -15.900  -8.886  1.00 25.40           C
ANISOU  893  CZ2 TRP A  58    3117   4494   2041   1553    -75   -394       C
ATOM    894  CZ3 TRP A  58     -1.244 -14.554 -10.492  1.00 23.42           C
ANISOU  894  CZ3 TRP A  58    2855   4125   1919   1504   -112   -483       C
ATOM    895  CH2 TRP A  58     -0.824 -15.799 -10.004  1.00 24.07           C
ANISOU  895  CH2 TRP A  58    2910   4277   1959   1477    -37   -376       C
ATOM    896  H   TRP A  58     -1.216  -8.734  -7.169  1.00 30.06           H
ATOM    897  HA  TRP A  58     -1.608 -10.999  -8.593  1.00 29.32           H
ATOM    898  HB2 TRP A  58      0.698 -10.689  -8.788  1.00 29.56           H
ATOM    899  HB3 TRP A  58      0.817 -10.576  -7.205  1.00 29.56           H
ATOM    900  HD1 TRP A  58      1.669 -12.774  -6.195  1.00 32.21           H
ATOM    901  HE1 TRP A  58      1.479 -15.133  -6.667  1.00 31.09           H
ATOM    902  HE3 TRP A  58     -1.151 -12.557 -10.197  1.00 29.14           H
ATOM    903  HZ2 TRP A  58      0.240 -16.728  -8.565  1.00 30.48           H
ATOM    904  HZ3 TRP A  58     -1.778 -14.518 -11.253  1.00 28.11           H
ATOM    905  HH2 TRP A  58     -1.089 -16.573 -10.445  1.00 28.88           H
ATOM    906  N   ALA A  59     -2.977 -11.575  -6.637  1.00 26.15           N
ANISOU  906  N   ALA A  59    3294   4725   1916   2035   -249   -716       N
ATOM    907  CA  ALA A  59     -3.772 -11.924  -5.457  1.00 28.25           C
ANISOU  907  CA  ALA A  59    3526   5161   2047   2163   -166   -647       C
ATOM    908  C   ALA A  59     -4.473 -13.253  -5.689  1.00 27.57           C
ANISOU  908  C   ALA A  59    3349   5159   1969   2084     -3   -469       C
ATOM    909  O   ALA A  59     -5.701 -13.317  -5.823  1.00 27.88           O
ANISOU  909  O   ALA A  59    3323   5265   2007   2094     87   -409       O
ATOM    910  CB  ALA A  59     -4.783 -10.822  -5.138  1.00 30.13           C
ANISOU  910  CB  ALA A  59    3776   5438   2234   2287   -193   -722       C
ATOM    911  H   ALA A  59     -3.372 -11.750  -7.381  1.00 31.38           H
ATOM    912  HA  ALA A  59     -3.182 -12.022  -4.693  1.00 33.90           H
ATOM    913  HB1 ALA A  59     -5.293 -11.079  -4.355  1.00 36.16           H
ATOM    914  HB2 ALA A  59     -4.305  -9.996  -4.966  1.00 36.16           H
ATOM    915  HB3 ALA A  59     -5.376 -10.709  -5.898  1.00 36.16           H
ATOM    916  N   PRO A  60     -3.716 -14.344  -5.744  1.00 27.86           N
ANISOU  916  N   PRO A  60    3374   5185   2025   2000     40   -382       N
ATOM    917  CA  PRO A  60     -4.332 -15.671  -5.820  1.00 28.79           C
ANISOU  917  CA  PRO A  60    3410   5370   2160   1927    197   -206       C
ATOM    918  C   PRO A  60     -4.833 -16.142  -4.465  1.00 32.56           C
ANISOU  918  C   PRO A  60    3867   5994   2509   2049    287   -112       C
ATOM    919  O   PRO A  60     -4.264 -15.826  -3.417  1.00 32.59           O
ANISOU  919  O   PRO A  60    3929   6050   2404   2179    227   -164       O
ATOM    920  CB  PRO A  60     -3.181 -16.556  -6.308  1.00 26.96           C
ANISOU  920  CB  PRO A  60    3194   5058   1990   1811    190   -162       C
ATOM    921  CG  PRO A  60     -1.971 -15.907  -5.707  1.00 26.52           C
ANISOU  921  CG  PRO A  60    3222   4973   1880   1892     56   -287       C
ATOM    922  CD  PRO A  60     -2.244 -14.419  -5.770  1.00 26.82           C
ANISOU  922  CD  PRO A  60    3300   4971   1918   1964    -54   -442       C
ATOM    923  HA  PRO A  60     -5.055 -15.682  -6.465  1.00 34.55           H
ATOM    924  HB2 PRO A  60     -3.293 -17.460  -5.975  1.00 32.35           H
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ATOM    925  HB3 PRO A  60      -3.139 -16.542  -7.277  1.00 32.35           H
ATOM    926  HG2 PRO A  60      -1.867 -16.197  -4.787  1.00 31.82           H
ATOM    927  HG3 PRO A  60      -1.185 -16.134  -6.229  1.00 31.82           H
ATOM    928  HD2 PRO A  60      -1.868 -13.973  -4.996  1.00 32.18           H
ATOM    929  HD3 PRO A  60      -1.901 -14.047  -6.598  1.00 32.18           H
ATOM    930  N   ASN A  61     -5.912 -16.924  -4.504  1.00 36.02           N
ANISOU  930  N   ASN A  61    4215   6498   2973   2005    434     27      N
ATOM    931  CA  ASN A  61      -6.532 -17.496  -3.306  1.00 40.50           C
ANISOU  931  CA  ASN A  61    4749   7203   3436   2105    551    146      C
ATOM    932  C   ASN A  61     -6.809 -18.967  -3.597  1.00 40.58           C
ANISOU  932  C   ASN A  61    4684   7199   3535   1969    697    327      C
ATOM    933  O   ASN A  61     -7.921 -19.333  -3.987  1.00 41.49           O
ANISOU  933  O   ASN A  61    4699   7336   3730   1896    804    405      O
ATOM    934  CB  ASN A  61      -7.806 -16.744  -2.927  1.00 44.12           C
ANISOU  934  CB  ASN A  61    5162   7763   3839   2210    588    120      C
ATOM    935  CG  ASN A  61      -8.451 -17.288  -1.663  1.00 48.32           C
ANISOU  935  CG  ASN A  61    5659   8445   4255   2325    716    245      C
ATOM    936  OD1 ASN A  61      -7.860 -18.103  -0.953  1.00 49.20           O
ANISOU  936  OD1 ASN A  61    5799   8584   4311   2352    759    337      O
ATOM    937  ND2 ASN A  61      -9.669 -16.837  -1.375  1.00 50.33           N
ANISOU  937  ND2 ASN A  61    5851   8800   4473   2402    781    252      N
ATOM    938  H   ASN A  61     -6.314 -17.144  -5.232  1.00 43.22           H
ATOM    939  HA  ASN A  61      -5.911 -17.441  -2.563  1.00 48.60           H
ATOM    940  HB2 ASN A  61      -7.590 -15.810  -2.776  1.00 52.94           H
ATOM    941  HB3 ASN A  61      -8.448 -16.823  -3.650  1.00 52.94           H
ATOM    942 HD21 ASN A  61     -10.075 -17.115  -0.670  1.00 60.40           H
ATOM    943 HD22 ASN A  61     -10.050 -16.266  -1.894  1.00 60.40           H
ATOM    944  N   GLY A  62     -5.795 -19.808  -3.384  1.00 39.28           N
ANISOU  944  N   GLY A  62    4564   6994   3365   1937    698    389      N
ATOM    945  CA  GLY A  62      -5.837 -21.204  -3.769  1.00 37.58           C
ANISOU  945  CA  GLY A  62    4298   6727   3252   1797    813    546      C
ATOM    946  C   GLY A  62     -4.691 -21.545  -4.707  1.00 34.61           C
ANISOU  946  C   GLY A  62    3965   6219   2965   1678    737    510      C
ATOM    947  O   GLY A  62      -3.644 -20.885  -4.703  1.00 32.72           O
ANISOU  947  O   GLY A  62    3804   5949   2679   1729    606    388      O
ATOM    948  H   GLY A  62     -5.056 -19.580  -3.007  1.00 47.13           H
ATOM    949  HA2 GLY A  62      -5.770 -21.764  -2.979  1.00 45.09           H
ATOM    950  HA3 GLY A  62      -6.675 -21.396  -4.217  1.00 45.09           H
ATOM    951  N   TRP A  63     -4.899 -22.574  -5.521  1.00 34.76           N
ANISOU  951  N   TRP A  63    3927   6160   3121   1518    817    612      N
ATOM    952  CA  TRP A  63      -3.884 -22.940  -6.505  1.00 33.48           C
ANISOU  952  CA  TRP A  63    3797   5875   3047   1404    754    584      C
ATOM    953  C   TRP A  63     -3.959 -21.951  -7.664  1.00 30.30           C
ANISOU  953  C   TRP A  63    3383   5417   2712   1351    660    444      C
ATOM    954  O   TRP A  63     -4.792 -22.081  -8.562  1.00 30.74           O
ANISOU  954  O   TRP A  63    3356   5439   2885   1250    701    459      O
ATOM    955  CB  TRP A  63      -4.059 -24.373  -6.990  1.00 35.75           C
ANISOU  955  CB  TRP A  63    4033   6086   3462   1258    863    732      C
ATOM    956  CG  TRP A  63      -2.771 -24.937  -7.548  1.00 36.69           C
ANISOU  956  CG  TRP A  63    4215   6103   3621   1191    807    730      C
ATOM    957  CD1 TRP A  63      -1.935 -25.833  -6.941  1.00 37.90           C
ANISOU  957  CD1 TRP A  63    4425   6237   3737   1219    830    815      C
ATOM    958  CD2 TRP A  63      -2.166 -24.620  -8.811  1.00 36.22           C
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ANISOU  958  CD2 TRP A  63     4165   5953   3642   1100    721    636       C
ATOM    959  NE1 TRP A  63     -0.855 -26.097  -7.751  1.00 36.89           N
ANISOU  959  NE1 TRP A  63     4340   6014   3664   1147    762    778       N
ATOM    960  CE2 TRP A  63     -0.974 -25.366  -8.904  1.00 35.67           C
ANISOU  960  CE2 TRP A  63     4157   5817   3579   1072    698    672       C
ATOM    961  CE3 TRP A  63     -2.522 -23.782  -9.874  1.00 35.78           C
ANISOU  961  CE3 TRP A  63     4073   5868   3654   1049    662    528       C
ATOM    962  CZ2 TRP A  63     -0.136 -25.298 -10.017  1.00 34.19           C
ANISOU  962  CZ2 TRP A  63     3992   5541   3457    990    626    607       C
ATOM    963  CZ3 TRP A  63     -1.688 -23.717 -10.976  1.00 33.92           C
ANISOU  963  CZ3 TRP A  63     3862   5542   3485    972    591    466       C
ATOM    964  CH2 TRP A  63     -0.510 -24.472 -11.040  1.00 33.36           C
ANISOU  964  CH2 TRP A  63     3849   5413   3413    941    578    507       C
ATOM    965  H   TRP A  63     -5.603 -23.068  -5.526  1.00 41.71           H
ATOM    966  HA  TRP A  63     -3.006 -22.864  -6.100  1.00 40.17           H
ATOM    967  HB2 TRP A  63     -4.337 -24.930  -6.246  1.00 42.89           H
ATOM    968  HB3 TRP A  63     -4.728 -24.394  -7.692  1.00 42.89           H
ATOM    969  HD1 TRP A  63     -2.076 -26.209  -6.103  1.00 45.47           H
ATOM    970  HE1 TRP A  63     -0.211 -26.635  -7.564  1.00 44.27           H
ATOM    971  HE3 TRP A  63     -3.302 -23.278  -9.840  1.00 42.94           H
ATOM    972  HZ2 TRP A  63      0.647 -25.798 -10.063  1.00 41.02           H
ATOM    973  HZ3 TRP A  63     -1.915 -23.163 -11.688  1.00 40.71           H
ATOM    974  HH2 TRP A  63      0.030 -24.408 -11.793  1.00 40.03           H
ATOM    975  N   GLY A  64     -3.097 -20.949  -7.622  1.00 26.76           N
ANISOU  975  N   GLY A  64     3015   4955   2199   1425    528    304       N
ATOM    976  CA  GLY A  64     -2.918 -20.040  -8.737  1.00 23.38           C
ANISOU  976  CA  GLY A  64     2597   4448   1839   1377    431    173       C
ATOM    977  C   GLY A  64     -1.445 -19.734  -8.882  1.00 22.04           C
ANISOU  977  C   GLY A  64     2513   4212   1650   1382    316     80       C
ATOM    978  O   GLY A  64     -0.703 -19.687  -7.898  1.00 21.69           O
ANISOU  978  O   GLY A  64     2523   4207   1511   1474    273     60       O
ATOM    979  H   GLY A  64     -2.595 -20.772  -6.946  1.00 32.11           H
ATOM    980  HA2 GLY A  64     -3.242 -20.447  -9.556  1.00 28.06           H
ATOM    981  HA3 GLY A  64     -3.402 -19.215  -8.578  1.00 28.06           H
ATOM    982  N   ALA A  65     -1.022 -19.532 -10.131  1.00 20.16           N
ANISOU  982  N   ALA A  65     2278   3873   1510   1285    265     21       N
ATOM    983  CA  ALA A  65      0.392 -19.412 -10.448  1.00 20.74           C
ANISOU  983  CA  ALA A  65     2416   3874   1589   1260    173    -51       C
ATOM    984  C   ALA A  65      0.617 -18.277 -11.435  1.00 19.76           C
ANISOU  984  C   ALA A  65     2319   3653   1534   1234     72   -191       C
ATOM    985  O   ALA A  65     -0.151 -18.107 -12.383  1.00 20.22           O
ANISOU  985  O   ALA A  65     2331   3673   1678   1182     97   -188       O
ATOM    986  CB  ALA A  65      0.938 -20.725 -11.029  1.00 20.86           C
ANISOU  986  CB  ALA A  65     2412   3848   1665   1151    238     60       C
ATOM    987  H   ALA A  65     -1.541 -19.462 -10.813  1.00 24.19           H
ATOM    988  HA  ALA A  65      0.885 -19.211  -9.637  1.00 24.88           H
ATOM    989  HB1 ALA A  65      1.880 -20.613 -11.230  1.00 25.03           H
ATOM    990  HB2 ALA A  65      0.820 -21.432 -10.375  1.00 25.03           H
ATOM    991  HB3 ALA A  65      0.449 -20.938 -11.839  1.00 25.03           H
ATOM    992  N   LEU A  66      1.669 -17.492 -11.189  1.00 20.28           N
ANISOU  992  N   LEU A  66     2457   3671   1578   1268    -49   -314       N
ATOM    993  CA  LEU A  66      2.132 -16.455 -12.110  1.00 19.34           C
ANISOU  993  CA  LEU A  66     2381   3422   1546   1222   -154   -438       C
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ATOM 994 C LEU A 66 3.374 -17.006 -12.797 1.00 17.31 C
ANISOU 994 C LEU A 66 2133 3063 1382 1085 -195 -403 C
ATOM 995 O LEU A 66 4.423 -17.148 -12.161 1.00 17.67 O
ANISOU 995 O LEU A 66 2206 3130 1378 1108 -248 -438 O
ATOM 996 CB LEU A 66 2.437 -15.157 -11.360 1.00 21.09 C
ANISOU 996 CB LEU A 66 2659 3615 1738 1312 -273 -577 C
ATOM 997 CG LEU A 66 3.064 -13.993 -12.131 1.00 20.77 C
ANISOU 997 CG LEU A 66 2676 3413 1804 1259 -393 -704 C
ATOM 998 CD1 LEU A 66 2.101 -13.449 -13.188 1.00 21.11 C
ANISOU 998 CD1 LEU A 66 2716 3385 1921 1241 -371 -705 C
ATOM 999 CD2 LEU A 66 3.493 -12.887 -11.169 1.00 22.34 C
ANISOU 999 CD2 LEU A 66 2917 3582 1988 1338 -504 -827 C
ATOM 1000 H LEU A 66 2.144 -17.545 -10.474 1.00 24.34 H
ATOM 1001 HA LEU A 66 1.453 -16.280 -12.780 1.00 23.21 H
ATOM 1002 HB2 LEU A 66 1.604 -14.829 -10.986 1.00 25.30 H
ATOM 1003 HB3 LEU A 66 3.044 -15.370 -10.634 1.00 25.30 H
ATOM 1004 HG LEU A 66 3.857 -14.312 -12.589 1.00 24.93 H
ATOM 1005 HD11 LEU A 66 2.528 -12.715 -13.657 1.00 25.34 H
ATOM 1006 HD12 LEU A 66 1.884 -14.159 -13.813 1.00 25.34 H
ATOM 1007 HD13 LEU A 66 1.294 -13.137 -12.749 1.00 25.34 H
ATOM 1008 HD21 LEU A 66 3.887 -12.161 -11.678 1.00 26.80 H
ATOM 1009 HD22 LEU A 66 2.714 -12.568 -10.686 1.00 26.80 H
ATOM 1010 HD23 LEU A 66 4.145 -13.246 -10.546 1.00 26.80 H
ATOM 1011 N ALA A 67 3.258 -17.329 -14.087 1.00 15.15 N
ANISOU 1011 N ALA A 67 1832 2691 1235 955 -172 -340 N
ATOM 1012 CA ALA A 67 4.274 -18.150 -14.726 1.00 14.82 C
ANISOU 1012 CA ALA A 67 1785 2583 1265 838 -175 -278 C
ATOM 1013 C ALA A 67 4.353 -17.901 -16.219 1.00 13.57 C
ANISOU 1013 C ALA A 67 1627 2293 1237 721 -196 -269 C
ATOM 1014 O ALA A 67 3.333 -17.718 -16.896 1.00 12.33 O
ANISOU 1014 O ALA A 67 1449 2119 1117 710 -168 -251 O
ATOM 1015 CB ALA A 67 4.001 -19.640 -14.495 1.00 15.53 C
ANISOU 1015 CB ALA A 67 1833 2743 1326 820 -67 -143 C
ATOM 1016 H ALA A 67 2.612 -17.088 -14.601 1.00 18.18 H
ATOM 1017 HA ALA A 67 5.139 -17.939 -14.340 1.00 17.79 H
ATOM 1018 HB1 ALA A 67 4.695 -20.159 -14.932 1.00 18.64 H
ATOM 1019 HB2 ALA A 67 4.007 -19.817 -13.541 1.00 18.64 H
ATOM 1020 HB3 ALA A 67 3.135 -19.864 -14.868 1.00 18.64 H
ATOM 1021 N LEU A 68 5.581 -17.920 -16.724 1.00 13.83 N
ANISOU 1021 N LEU A 68 1676 2246 1333 643 -244 -279 N
ATOM 1022 CA LEU A 68 5.791 -18.083 -18.150 1.00 13.28 C
ANISOU 1022 CA LEU A 68 1604 2076 1366 534 -236 -235 C
ATOM 1023 C LEU A 68 5.341 -19.477 -18.552 1.00 13.32 C
ANISOU 1023 C LEU A 68 1571 2113 1377 492 -153 -130 C
ATOM 1024 O LEU A 68 5.715 -20.467 -17.919 1.00 11.96 O
ANISOU 1024 O LEU A 68 1384 1995 1165 502 -115 -79 O
ATOM 1025 CB LEU A 68 7.257 -17.877 -18.509 1.00 12.65 C
ANISOU 1025 CB LEU A 68 1536 1924 1347 467 -288 -258 C
ATOM 1026 CG LEU A 68 7.574 -17.844 -20.010 1.00 12.33 C
ANISOU 1026 CG LEU A 68 1502 1783 1400 371 -276 -215 C
ATOM 1027 CD1 LEU A 68 7.173 -16.507 -20.629 1.00 12.35 C
ANISOU 1027 CD1 LEU A 68 1545 1694 1451 369 -315 -259 C
ATOM 1028 CD2 LEU A 68 9.056 -18.121 -20.224 1.00 12.17 C

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ANISOU 1028  CD2 LEU A  68    1464   1733   1426    309   -292   -207      C
ATOM   1029  H   LEU A  68      6.303 -17.841 -16.263  1.00 16.60           H
ATOM   1030  HA  LEU A  68      5.258 -17.433 -18.635  1.00 15.94           H
ATOM   1031  HB2 LEU A  68      7.550 -17.033 -18.132  1.00 15.18           H
ATOM   1032  HB3 LEU A  68      7.773 -18.601 -18.120  1.00 15.18           H
ATOM   1033  HG  LEU A  68      7.070 -18.544 -20.455  1.00 14.80           H
ATOM   1034 HD11 LEU A  68      7.386 -16.521 -21.575  1.00 14.82           H
ATOM   1035 HD12 LEU A  68      6.219 -16.376 -20.506  1.00 14.82           H
ATOM   1036 HD13 LEU A  68      7.664 -15.796 -20.189  1.00 14.82           H
ATOM   1037 HD21 LEU A  68      9.248 -18.098 -21.175  1.00 14.60           H
ATOM   1038 HD22 LEU A  68      9.574 -17.440 -19.766  1.00 14.60           H
ATOM   1039 HD23 LEU A  68      9.269 -18.996 -19.865  1.00 14.60           H
ATOM   1040  N  AVAL A  69      4.536 -19.551 -19.607  0.55 12.75           N
ANISOU 1040  N  AVAL A  69    1485   2001   1357    449   -131   -103      N
ATOM   1041  N  BVAL A  69      4.507 -19.549 -19.582  0.45 12.80           N
ANISOU 1041  N  BVAL A  69    1491   2010   1362    451   -130   -103      N
ATOM   1042  CA AVAL A  69      3.988 -20.804 -20.113  0.55 12.97           C
ANISOU 1042  CA AVAL A  69    1474   2041   1414    399    -68    -25      C
ATOM   1043  CA BVAL A  69      4.007 -20.810 -20.113  0.45 12.94           C
ANISOU 1043  CA BVAL A  69    1470   2036   1410    398    -68    -25      C
ATOM   1044  C  AVAL A  69      4.183 -20.818 -21.620  0.55 12.34           C
ANISOU 1044  C  AVAL A  69    1411   1874   1403    327    -90    -21      C
ATOM   1045  C  BVAL A  69      4.237 -20.803 -21.613  0.45 12.32           C
ANISOU 1045  C  BVAL A  69    1411   1871   1401    327    -91    -21      C
ATOM   1046  O  AVAL A  69      3.885 -19.828 -22.294  0.55 12.79           O
ANISOU 1046  O  AVAL A  69    1491   1890   1477    337   -130    -59      O
ATOM   1047  O  BVAL A  69      4.037 -19.780 -22.275  0.45 12.81           O
ANISOU 1047  O  BVAL A  69    1498   1888   1480    335   -134    -61      O
ATOM   1048  CB AVAL A  69      2.495 -20.958 -19.759  0.55 13.52           C
ANISOU 1048  CB AVAL A  69    1486   2182   1467    437    -20     -5      C
ATOM   1049  CB BVAL A  69      2.510 -21.025 -19.790  0.45 13.48           C
ANISOU 1049  CB BVAL A  69    1481   2176   1465    432    -18     -2      C
ATOM   1050  CG1AVAL A  69      1.957 -22.299 -20.249  0.55 13.34           C
ANISOU 1050  CG1AVAL A  69    1413   2154   1500    366     38     68      C
ATOM   1051  CG1BVAL A  69      2.280 -21.018 -18.280  0.45 14.10           C
ANISOU 1051  CG1BVAL A  69    1546   2358   1454    521     22      6      C
ATOM   1052  CG2AVAL A  69      2.283 -20.813 -18.256  0.55 14.07           C
ANISOU 1052  CG2AVAL A  69    1547   2354   1445    531     12     -7      C
ATOM   1053  CG2BVAL A  69      1.646 -19.971 -20.471  0.45 13.96           C
ANISOU 1053  CG2BVAL A  69    1539   2219   1547    458    -60    -56      C
ATOM   1054  H  AVAL A  69      4.286 -18.865 -20.061  0.55 15.30           H
ATOM   1055  H  BVAL A  69      4.208 -18.860 -20.001  0.45 15.36           H
ATOM   1056  HA AVAL A  69      4.476 -21.550 -19.731  0.55 15.56           H
ATOM   1057  HA BVAL A  69      4.512 -21.544 -19.729  0.45 15.53           H
ATOM   1058  HB AVAL A  69      1.992 -20.256 -20.200  0.55 16.22           H
ATOM   1059  HB BVAL A  69      2.239 -21.893 -20.127  0.45 16.18           H
ATOM   1060 HG11AVAL A  69      2.673 -22.784 -20.688  0.55 16.00           H
ATOM   1061 HG11BVAL A  69      3.129 -20.879 -17.832  0.45 16.92           H
ATOM   1062 HG12AVAL A  69      1.631 -22.805 -19.489  0.55 16.00           H
ATOM   1063 HG12BVAL A  69      1.667 -20.300 -18.058  0.45 16.92           H
ATOM   1064 HG13AVAL A  69      1.234 -22.138 -20.875  0.55 16.00           H
ATOM   1065 HG13BVAL A  69      1.902 -21.871 -18.015  0.45 16.92           H
ATOM   1066 HG21AVAL A  69      1.339 -20.914 -18.059  0.55 16.88           H
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ATOM   1067 HG21BVAL A  69       0.716 -20.134 -20.249  0.45 16.75           H
ATOM   1068 HG22AVAL A  69       2.792 -21.500 -17.798  0.55 16.88           H
ATOM   1069 HG22BVAL A  69       1.912 -19.093 -20.157  0.45 16.75           H
ATOM   1070 HG23AVAL A  69       2.588 -19.935 -17.978  0.55 16.88           H
ATOM   1071 HG23BVAL A  69       1.772 -20.032 -21.431  0.45 16.75           H
ATOM   1072  N   GLY A  70      4.663 -21.938 -22.151  1.00 11.03           N
ANISOU 1072  N   GLY A  70    1241   1681   1267    270    -63     27       N
ATOM   1073  CA  GLY A  70      4.858 -22.027 -23.582  1.00 10.72           C
ANISOU 1073  CA  GLY A  70    1225   1575   1273    221    -80     28       C
ATOM   1074  C   GLY A  70      4.933 -23.461 -24.047  1.00  9.43           C
ANISOU 1074  C   GLY A  70    1050   1394   1140    175    -46     70       C
ATOM   1075  O   GLY A  70      4.866 -24.401 -23.250  1.00  8.54           O
ANISOU 1075  O   GLY A  70     913   1306   1026    173     -3    110       O
ATOM   1076  H   GLY A  70      4.859 -22.649 -21.709  1.00 13.23           H
ATOM   1077  HA2 GLY A  70      4.120 -21.592 -24.039  1.00 12.86           H
ATOM   1078  HA3 GLY A  70      5.682 -21.578 -23.827  1.00 12.86           H
ATOM   1079  N   TRP A  71      5.077 -23.611 -25.368  1.00  9.82           N
ANISOU 1079  N   TRP A  71    1124   1395   1213    146    -64     60       N
ATOM   1080  CA  TRP A  71      5.089 -24.914 -26.019  1.00 11.02           C
ANISOU 1080  CA  TRP A  71    1276   1514   1397    109    -48     75       C
ATOM   1081  C   TRP A  71      6.125 -24.956 -27.136  1.00 11.74           C
ANISOU 1081  C   TRP A  71    1418   1564   1480    106    -58     69       C
ATOM   1082  O   TRP A  71      6.458 -23.939 -27.757  1.00 10.29           O
ANISOU 1082  O   TRP A  71    1263   1372   1274    121    -77     58       O
ATOM   1083  CB  TRP A  71      3.730 -25.273 -26.652  1.00 11.73           C
ANISOU 1083  CB  TRP A  71    1330   1605   1523     90    -68     50       C
ATOM   1084  CG  TRP A  71      2.587 -25.426 -25.702  1.00 13.98           C
ANISOU 1084  CG  TRP A  71    1543   1937   1831     85    -43     65       C
ATOM   1085  CD1 TRP A  71      1.819 -24.429 -25.179  1.00 14.12           C
ANISOU 1085  CD1 TRP A  71    1527   2014   1825    127    -50     50       C
ATOM   1086  CD2 TRP A  71      2.052 -26.654 -25.196  1.00 14.02           C
ANISOU 1086  CD2 TRP A  71    1499   1934   1895     40      3    104       C
ATOM   1087  NE1 TRP A  71      0.849 -24.954 -24.369  1.00 14.53           N
ANISOU 1087  NE1 TRP A  71    1502   2113   1907    115     -4     79       N
ATOM   1088  CE2 TRP A  71      0.970 -26.319 -24.357  1.00 15.08           C
ANISOU 1088  CE2 TRP A  71    1559   2137   2033     54     33     120       C
ATOM   1089  CE3 TRP A  71      2.388 -28.001 -25.361  1.00 15.06           C
ANISOU 1089  CE3 TRP A  71    1642   1998   2080     -8     27     130       C
ATOM   1090  CZ2 TRP A  71      0.221 -27.279 -23.688  1.00 16.55           C
ANISOU 1090  CZ2 TRP A  71    1675   2332   2281     12     97     175       C
ATOM   1091  CZ3 TRP A  71      1.644 -28.957 -24.688  1.00 16.63           C
ANISOU 1091  CZ3 TRP A  71    1783   2185   2348    -53     82     182       C
ATOM   1092  CH2 TRP A  71      0.571 -28.588 -23.862  1.00 16.62           C
ANISOU 1092  CH2 TRP A  71    1701   2260   2355    -49    121     210       C
ATOM   1093  H   TRP A  71      5.170 -22.954 -25.916  1.00 11.79           H
ATOM   1094  HA  TRP A  71      5.313 -25.596 -25.368  1.00 13.22           H
ATOM   1095  HB2 TRP A  71      3.492 -24.574 -27.281  1.00 14.08           H
ATOM   1096  HB3 TRP A  71      3.827 -26.114 -27.126  1.00 14.08           H
ATOM   1097  HD1 TRP A  71      1.936 -23.522 -25.348  1.00 16.95           H
ATOM   1098  HE1 TRP A  71      0.262 -24.501 -23.934  1.00 17.44           H
ATOM   1099  HE3 TRP A  71      3.099 -28.250 -25.906  1.00 18.07           H
ATOM   1100  HZ2 TRP A  71     -0.489 -27.038 -23.137  1.00 19.86           H
ATOM   1101  HZ3 TRP A  71      1.856 -29.857 -24.789  1.00 19.95           H
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ATOM   1102  HH2 TRP A  71      0.086 -29.250 -23.423  1.00 19.95           H
ATOM   1103  N   THR A  72      6.605 -26.160 -27.402  1.00 11.22           N
ANISOU 1103  N   THR A  72    1363   1468   1432     91    -37     82       N
ATOM   1104  CA  THR A  72      7.215 -26.496 -28.672  1.00 10.69           C
ANISOU 1104  CA  THR A  72    1339   1369   1352     98    -44     66       C
ATOM   1105  C   THR A  72      6.444 -27.655 -29.286  1.00 11.93           C
ANISOU 1105  C   THR A  72    1499   1488   1544     80    -62     33       C
ATOM   1106  O   THR A  72      5.709 -28.375 -28.603  1.00 13.30           O
ANISOU 1106  O   THR A  72    1635   1647   1770     47    -53     42       O
ATOM   1107  CB  THR A  72      8.697 -26.879 -28.526  1.00 10.32           C
ANISOU 1107  CB  THR A  72    1307   1317   1296    114     -9     94       C
ATOM   1108  OG1 THR A  72      8.842 -28.092 -27.767  1.00 11.33           O
ANISOU 1108  OG1 THR A  72    1427   1426   1453    112     14    118       O
ATOM   1109  CG2 THR A  72      9.458 -25.769 -27.851  1.00 11.37           C
ANISOU 1109  CG2 THR A  72    1420   1483   1417    118     -5    113       C
ATOM   1110  H   THR A  72      6.587 -26.815 -26.846  1.00 13.46           H
ATOM   1111  HA  THR A  72      7.153 -25.735 -29.271  1.00 12.82           H
ATOM   1112  HB  THR A  72      9.078 -27.011 -29.408  1.00 12.38           H
ATOM   1113  HG1 THR A  72      8.516 -27.991 -26.999  1.00 13.60           H
ATOM   1114 HG21 THR A  72     10.392 -26.015 -27.761  1.00 13.64           H
ATOM   1115 HG22 THR A  72      9.396 -24.957 -28.378  1.00 13.64           H
ATOM   1116 HG23 THR A  72      9.090 -25.603 -26.970  1.00 13.64           H
ATOM   1117  N   ARG A  73      6.586 -27.795 -30.592  1.00 12.64           N
ANISOU 1117  N   ARG A  73    1632   1564   1606    103    -88     -7       N
ATOM   1118  CA  ARG A  73      6.277 -29.032 -31.288  1.00 13.96           C
ANISOU 1118  CA  ARG A  73    1819   1682   1803     97   -114    -57       C
ATOM   1119  C   ARG A  73      7.583 -29.637 -31.780  1.00 13.71           C
ANISOU 1119  C   ARG A  73    1841   1629   1740    138    -83    -52       C
ATOM   1120  O   ARG A  73      8.630 -28.989 -31.776  1.00 13.79           O
ANISOU 1120  O   ARG A  73    1862   1675   1705    168    -44    -11       O
ATOM   1121  CB  ARG A  73      5.316 -28.799 -32.458  1.00 14.91           C
ANISOU 1121  CB  ARG A  73    1949   1816   1900    113   -184   -129       C
ATOM   1122  CG  ARG A  73      3.911 -28.386 -32.038  1.00 15.99           C
ANISOU 1122  CG  ARG A  73    2016   1979   2082     78   -221   -146       C
ATOM   1123  CD  ARG A  73      3.052 -28.099 -33.263  1.00 18.03           C
ANISOU 1123  CD  ARG A  73    2281   2264   2304    114   -305   -223       C
ATOM   1124  NE  ARG A  73      1.622 -28.033 -32.951  1.00 20.51           N
ANISOU 1124  NE  ARG A  73    2506   2604   2683     77   -351   -258       N
ATOM   1125  CZ  ARG A  73      0.896 -26.915 -32.896  1.00 21.16           C
ANISOU 1125  CZ  ARG A  73    2555   2750   2737    111   -376   -254       C
ATOM   1126  NH1 ARG A  73      1.443 -25.729 -33.121  1.00 21.09           N
ANISOU 1126  NH1 ARG A  73    2606   2767   2641    174   -360   -213       N
ATOM   1127  NH2 ARG A  73     -0.393 -26.984 -32.608  1.00 21.80           N
ANISOU 1127  NH2 ARG A  73    2537   2861   2884     80   -414   -288       N
ATOM   1128  H   ARG A  73      6.868 -27.171 -31.112  1.00 15.17           H
ATOM   1129  HA  ARG A  73      5.864 -29.655 -30.671  1.00 16.75           H
ATOM   1130  HB2 ARG A  73      5.675 -28.095 -33.020  1.00 17.89           H
ATOM   1131  HB3 ARG A  73      5.242 -29.620 -32.968  1.00 17.89           H
ATOM   1132  HG2 ARG A  73      3.498 -29.106 -31.536  1.00 19.19           H
ATOM   1133  HG3 ARG A  73      3.957 -27.580 -31.500  1.00 19.19           H
ATOM   1134  HD2 ARG A  73      3.316 -27.245 -33.641  1.00 21.63           H
ATOM   1135  HD3 ARG A  73      3.185 -28.805 -33.914  1.00 21.63           H
ATOM   1136  HE  ARG A  73      1.217 -28.775 -32.792  1.00 24.61           H
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ATOM   1137 HH11 ARG A  73      2.280 -25.670 -33.310  1.00 25.31           H
ATOM   1138 HH12 ARG A  73      0.961 -25.018 -33.080  1.00 25.31           H
ATOM   1139 HH21 ARG A  73     -0.760 -27.747 -32.458  1.00 26.16           H
ATOM   1140 HH22 ARG A  73     -0.864 -26.265 -32.569  1.00 26.16           H
ATOM   1141  N   SER A  74      7.512 -30.902 -32.184  1.00 14.44           N
ANISOU 1141  N   SER A  74    1962  1659  1868   140   -100    -98      N
ATOM   1142  CA  SER A  74      8.670 -31.613 -32.714  1.00 16.41           C
ANISOU 1142  CA  SER A  74    2264  1885  2085   198    -74   -107      C
ATOM   1143  C   SER A  74      9.820 -31.650 -31.707  1.00 15.06           C
ANISOU 1143  C   SER A  74    2074  1728  1919   210     -9    -29      C
ATOM   1144  O   SER A  74     10.917 -31.152 -32.003  1.00 15.21           O
ANISOU 1144  O   SER A  74    2098  1799  1884   255     27     -4      O
ATOM   1145  CB  SER A  74      9.118 -30.964 -34.024  1.00 19.09           C
ANISOU 1145  CB  SER A  74    2648  2282  2323   266    -78   -134      C
ATOM   1146  OG  SER A  74     10.084 -31.761 -34.682  1.00 21.17           O
ANISOU 1146  OG  SER A  74    2963  2531  2549   336    -55   -158      O
ATOM   1147  H   SER A  74      6.794 -31.375 -32.162  1.00 17.33           H
ATOM   1148  HA  SER A  74      8.415 -32.529 -32.908  1.00 19.69           H
ATOM   1149  HB2 SER A  74      8.348 -30.859 -34.603  1.00 22.91           H
ATOM   1150  HB3 SER A  74      9.506 -30.096 -33.828  1.00 22.91           H
ATOM   1151  HG  SER A  74     10.758 -31.860 -34.191  1.00 25.40           H
ATOM   1152  N   PRO A  75      9.622 -32.244 -30.511  1.00 14.40           N
ANISOU 1152  N   PRO A  75    1966  1606  1901   175      8     14      N
ATOM   1153  CA  PRO A  75      8.366 -32.855 -30.058  1.00 14.62           C
ANISOU 1153  CA  PRO A  75    1973  1571  2009   111    -13      6      C
ATOM   1154  C   PRO A  75      7.459 -31.896 -29.300  1.00 12.72           C
ANISOU 1154  C   PRO A  75    1670  1388  1774    64    -13     37      C
ATOM   1155  O   PRO A  75      7.848 -30.774 -28.979  1.00 11.00           O
ANISOU 1155  O   PRO A  75    1434  1243  1501    83     -2     63      O
ATOM   1156  CB  PRO A  75      8.835 -33.979 -29.113  1.00 14.95           C
ANISOU 1156  CB  PRO A  75    2030  1548  2103   118     31     65      C
ATOM   1157  CG  PRO A  75     10.333 -33.770 -28.919  1.00 15.51           C
ANISOU 1157  CG  PRO A  75    2114  1670  2108   193     64    100      C
ATOM   1158  CD  PRO A  75     10.688 -32.454 -29.515  1.00 14.07           C
ANISOU 1158  CD  PRO A  75    1910  1580  1855   205     55     80      C
ATOM   1159  HA  PRO A  75      7.883 -33.239 -30.806  1.00 17.54           H
ATOM   1160  HB2 PRO A  75      8.369 -33.905 -28.266  1.00 17.94           H
ATOM   1161  HB3 PRO A  75      8.662 -34.840 -29.523  1.00 17.94           H
ATOM   1162  HG2 PRO A  75     10.536 -33.773 -27.970  1.00 18.61           H
ATOM   1163  HG3 PRO A  75     10.816 -34.482 -29.367  1.00 18.61           H
ATOM   1164  HD2 PRO A  75     10.663 -31.757 -28.840  1.00 16.88           H
ATOM   1165  HD3 PRO A  75     11.554 -32.500 -29.950  1.00 16.88           H
ATOM   1166  N   LEU A  76      6.254 -32.380 -29.018  1.00 12.34           N
ANISOU 1166  N   LEU A  76    1585  1299  1803      4    -25     30      N
ATOM   1167  CA  LEU A  76      5.273 -31.645 -28.231  1.00 12.06           C
ANISOU 1167  CA  LEU A  76    1480  1321  1780    -32    -16     60      C
ATOM   1168  C   LEU A  76      5.682 -31.623 -26.760  1.00 11.39           C
ANISOU 1168  C   LEU A  76    1380  1267  1682    -18     50    153      C
ATOM   1169  O   LEU A  76      5.717 -32.667 -26.102  1.00 11.00           O
ANISOU 1169  O   LEU A  76    1338  1159  1684    -33     94    209      O
ATOM   1170  CB  LEU A  76      3.903 -32.294 -28.392  1.00 13.32           C
ANISOU 1170  CB  LEU A  76    1586  1433  2041   -104    -40     28      C
ATOM   1171  CG  LEU A  76      2.722 -31.618 -27.708  1.00 12.37           C
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ANISOU 1171 CG LEU A 76 1376 1380 1942 -137 -28 52 C
ATOM 1172 CD1 LEU A 76 2.434 -30.275 -28.345 1.00 12.97 C
ANISOU 1172 CD1 LEU A 76 1443 1539 1945 -96 -82 -2 C
ATOM 1173 CD2 LEU A 76 1.502 -32.533 -27.757 1.00 14.63 C
ANISOU 1173 CD2 LEU A 76 1590 1608 2360 -223 -36 34 C
ATOM 1174 H LEU A 76 5.976 -33.152 -29.277 1.00 14.80 H
ATOM 1175 HA LEU A 76 5.220 -30.730 -28.551 1.00 14.47 H
ATOM 1176 HB2 LEU A 76 3.698 -32.333 -29.339 1.00 15.98 H
ATOM 1177 HB3 LEU A 76 3.955 -33.197 -28.040 1.00 15.98 H
ATOM 1178 HG LEU A 76 2.944 -31.465 -26.776 1.00 14.84 H
ATOM 1179 HD11 LEU A 76 1.679 -29.867 -27.892 1.00 15.56 H
ATOM 1180 HD12 LEU A 76 3.217 -29.710 -28.258 1.00 15.56 H
ATOM 1181 HD13 LEU A 76 2.224 -30.409 -29.282 1.00 15.56 H
ATOM 1182 HD21 LEU A 76 0.759 -32.090 -27.319 1.00 17.55 H
ATOM 1183 HD22 LEU A 76 1.281 -32.713 -28.684 1.00 17.55 H
ATOM 1184 HD23 LEU A 76 1.711 -33.362 -27.299 1.00 17.55 H
ATOM 1185 N ILE A 77 5.977 -30.433 -26.247 1.00 10.98 N
ANISOU 1185 N ILE A 77 1313 1299 1558 16 53 167 N
ATOM 1186 CA ILE A 77 6.420 -30.248 -24.871 1.00 11.63 C
ANISOU 1186 CA ILE A 77 1385 1431 1602 50 97 235 C
ATOM 1187 C ILE A 77 5.828 -28.943 -24.368 1.00 12.13 C
ANISOU 1187 C ILE A 77 1409 1577 1623 63 85 221 C
ATOM 1188 O ILE A 77 5.844 -27.928 -25.075 1.00 11.90 O
ANISOU 1188 O ILE A 77 1385 1566 1569 70 41 168 O
ATOM 1189 CB ILE A 77 7.961 -30.222 -24.757 1.00 12.49 C
ANISOU 1189 CB ILE A 77 1532 1552 1661 104 98 245 C
ATOM 1190 CG1 ILE A 77 8.576 -31.514 -25.319 1.00 13.06 C
ANISOU 1190 CG1 ILE A 77 1648 1543 1770 112 109 251 C
ATOM 1191 CG2 ILE A 77 8.401 -29.991 -23.304 1.00 13.73 C
ANISOU 1191 CG2 ILE A 77 1675 1774 1766 152 123 299 C
ATOM 1192 CD1 ILE A 77 10.025 -31.377 -25.632 1.00 13.95 C
ANISOU 1192 CD1 ILE A 77 1782 1678 1840 166 103 241 C
ATOM 1193 H ILE A 77 5.928 -29.698 -26.691 1.00 13.17 H
ATOM 1194 HA ILE A 77 6.082 -30.973 -24.321 1.00 13.95 H
ATOM 1195 HB ILE A 77 8.287 -29.480 -25.290 1.00 14.99 H
ATOM 1196 HG12 ILE A 77 8.477 -32.222 -24.664 1.00 15.67 H
ATOM 1197 HG13 ILE A 77 8.114 -31.753 -26.138 1.00 15.67 H
ATOM 1198 HG21 ILE A 77 9.370 -29.980 -23.267 1.00 16.47 H
ATOM 1199 HG22 ILE A 77 8.048 -29.141 -23.000 1.00 16.47 H
ATOM 1200 HG23 ILE A 77 8.056 -30.710 -22.752 1.00 16.47 H
ATOM 1201 HD11 ILE A 77 10.353 -32.221 -25.981 1.00 16.74 H
ATOM 1202 HD12 ILE A 77 10.140 -30.678 -26.294 1.00 16.74 H
ATOM 1203 HD13 ILE A 77 10.502 -31.147 -24.820 1.00 16.74 H
ATOM 1204 N ALA A 78 5.307 -28.972 -23.146 1.00 11.99 N
ANISOU 1204 N ALA A 78 1359 1607 1592 78 129 273 N
ATOM 1205 CA ALA A 78 4.898 -27.769 -22.434 1.00 12.41 C
ANISOU 1205 CA ALA A 78 1384 1745 1587 117 121 257 C
ATOM 1206 C ALA A 78 5.962 -27.405 -21.408 1.00 11.87 C
ANISOU 1206 C ALA A 78 1342 1728 1442 183 122 273 C
ATOM 1207 O ALA A 78 6.552 -28.287 -20.774 1.00 12.04 O
ANISOU 1207 O ALA A 78 1381 1744 1448 208 157 332 O
ATOM 1208 CB ALA A 78 3.555 -27.977 -21.731 1.00 12.93 C
ANISOU 1208 CB ALA A 78 1387 1852 1673 107 172 298 C

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ATOM   1209  H   ALA A  78      5.177 -29.695 -22.699  1.00 14.39           H
ATOM   1210  HA  ALA A  78      4.809 -27.034 -23.060  1.00 14.89           H
ATOM   1211  HB1 ALA A  78      3.312 -27.161 -21.267  1.00 15.51           H
ATOM   1212  HB2 ALA A  78      2.882 -28.194 -22.395  1.00 15.51           H
ATOM   1213  HB3 ALA A  78      3.641 -28.706 -21.096  1.00 15.51           H
ATOM   1214  N   TYR A  79      6.204 -26.106 -21.237  1.00  9.88           N
ANISOU 1214  N   TYR A  79    1092   1519   1144    217     76    217      N
ATOM   1215  CA  TYR A  79      7.160 -25.646 -20.245  1.00 10.69           C
ANISOU 1215  CA  TYR A  79    1208   1673   1179    278     55    206      C
ATOM   1216  C   TYR A  79      6.580 -24.487 -19.440  1.00 12.06           C
ANISOU 1216  C   TYR A  79    1371   1914   1297    332     32    160      C
ATOM   1217  O   TYR A  79      5.671 -23.774 -19.888  1.00 11.27           O
ANISOU 1217  O   TYR A  79    1258   1808   1218    320     20    124      O
ATOM   1218  CB  TYR A  79      8.489 -25.252 -20.898  1.00 10.57           C
ANISOU 1218  CB  TYR A  79    1210   1623   1182    262      5    165      C
ATOM   1219  CG  TYR A  79      8.418 -24.086 -21.832  1.00 10.44           C
ANISOU 1219  CG  TYR A  79    1199   1568   1198    228    -37    107      C
ATOM   1220  CD1 TYR A  79      8.377 -22.784 -21.347  1.00 10.46           C
ANISOU 1220  CD1 TYR A  79    1203   1592   1181    254    -82     49      C
ATOM   1221  CD2 TYR A  79      8.403 -24.273 -23.207  1.00  9.86           C
ANISOU 1221  CD2 TYR A  79    1140   1435   1171    180    -33    109      C
ATOM   1222  CE1 TYR A  79      8.319 -21.716 -22.195  1.00  9.76           C
ANISOU 1222  CE1 TYR A  79    1130   1450   1128    226   -115     11      C
ATOM   1223  CE2 TYR A  79      8.338 -23.209 -24.065  1.00  9.43           C
ANISOU 1223  CE2 TYR A  79    1101   1347   1133    162    -63     75      C
ATOM   1224  CZ  TYR A  79      8.307 -21.925 -23.561  1.00 10.69           C
ANISOU 1224  CZ  TYR A  79    1263   1513   1285    181   -100     33      C
ATOM   1225  OH  TYR A  79      8.239 -20.840 -24.414  1.00 10.95           O
ANISOU 1225  OH  TYR A  79    1322   1494   1343    166   -124     13      O
ATOM   1226  H   TYR A  79      5.826 -25.475 -21.683  1.00 11.86           H
ATOM   1227  HA  TYR A  79      7.340 -26.373 -19.628  1.00 12.82           H
ATOM   1228  HB2 TYR A  79      9.121 -25.025 -20.197  1.00 12.68           H
ATOM   1229  HB3 TYR A  79      8.822 -26.010 -21.402  1.00 12.68           H
ATOM   1230  HD1 TYR A  79      8.391 -22.638 -20.428  1.00 12.56           H
ATOM   1231  HD2 TYR A  79      8.429 -25.136 -23.552  1.00 11.83           H
ATOM   1232  HE1 TYR A  79      8.291 -20.850 -21.855  1.00 11.71           H
ATOM   1233  HE2 TYR A  79      8.329 -23.350 -24.984  1.00 11.31           H
ATOM   1234  HH  TYR A  79      8.238 -21.101 -25.212  1.00 13.13           H
ATOM   1235  N   TYR A  80      7.131 -24.321 -18.235  1.00 13.69           N
ANISOU 1235  N   TYR A  80    1586   2189   1425    406     21    154      N
ATOM   1236  CA  TYR A  80      6.618 -23.397 -17.232  1.00 14.52           C
ANISOU 1236  CA  TYR A  80    1690   2373   1454    486      3    107      C
ATOM   1237  C   TYR A  80      7.783 -22.828 -16.428  1.00 14.20           C
ANISOU 1237  C   TYR A  80    1670   2373   1354    547    -70     41      C
ATOM   1238  O   TYR A  80      8.638 -23.583 -15.954  1.00 15.02           O
ANISOU 1238  O   TYR A  80    1778   2505   1424    576    -68     79      O
ATOM   1239  CB  TYR A  80      5.638 -24.097 -16.271  1.00 16.36           C
ANISOU 1239  CB  TYR A  80    1903   2688   1624    542     91    187      C
ATOM   1240  CG  TYR A  80      4.600 -24.950 -16.952  1.00 16.93           C
ANISOU 1240  CG  TYR A  80    1938   2719   1777    467    166    262      C
ATOM   1241  CD1 TYR A  80      4.892 -26.256 -17.333  1.00 17.34           C
ANISOU 1241  CD1 TYR A  80    1994   2709   1886    410    210    341      C
ATOM   1242  CD2 TYR A  80      3.332 -24.461 -17.216  1.00 17.50           C
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ANISOU 1242 CD2 TYR A 80 1963 2810 1874 457 184 243 C
ATOM 1243 CE1 TYR A 80 3.957 -27.040 -17.967 1.00 17.77 C
ANISOU 1243 CE1 TYR A 80 2010 2711 2032 332 263 391 C
ATOM 1244 CE2 TYR A 80 2.387 -25.246 -17.850 1.00 18.62 C
ANISOU 1244 CE2 TYR A 80 2053 2917 2104 381 238 297 C
ATOM 1245 CZ TYR A 80 2.703 -26.531 -18.218 1.00 19.30 C
ANISOU 1245 CZ TYR A 80 2145 2932 2256 313 274 367 C
ATOM 1246 OH TYR A 80 1.762 -27.312 -18.852 1.00 21.67 O
ANISOU 1246 OH TYR A 80 2390 3185 2661 229 313 403 O
ATOM 1247 H TYR A 80 7.828 -24.751 -17.972 1.00 16.42 H
ATOM 1248 HA TYR A 80 6.155 -22.665 -17.669 1.00 17.42 H
ATOM 1249 HB2 TYR A 80 6.145 -24.670 -15.675 1.00 19.63 H
ATOM 1250 HB3 TYR A 80 5.171 -23.421 -15.756 1.00 19.63 H
ATOM 1251 HD1 TYR A 80 5.740 -26.601 -17.167 1.00 20.81 H
ATOM 1252 HD2 TYR A 80 3.115 -23.591 -16.971 1.00 21.00 H
ATOM 1253 HE1 TYR A 80 4.168 -27.911 -18.217 1.00 21.33 H
ATOM 1254 HE2 TYR A 80 1.539 -24.906 -18.024 1.00 22.34 H
ATOM 1255 HH TYR A 80 1.046 -26.882 -18.942 1.00 26.01 H
ATOM 1256 N VAL A 81 7.813 -21.509 -16.258 1.00 12.15 N
ANISOU 1256 N VAL A 81 1420 2112 1085 572 -142 -62 N
ATOM 1257 CA VAL A 81 8.727 -20.865 -15.312 1.00 12.89 C
ANISOU 1257 CA VAL A 81 1525 2252 1121 640 -227 -149 C
ATOM 1258 C VAL A 81 7.842 -20.123 -14.317 1.00 14.15 C
ANISOU 1258 C VAL A 81 1703 2488 1183 747 -237 -207 C
ATOM 1259 O VAL A 81 7.287 -19.068 -14.638 1.00 13.92 O
ANISOU 1259 O VAL A 81 1687 2414 1189 743 -270 -278 O
ATOM 1260 CB VAL A 81 9.721 -19.922 -15.998 1.00 13.67 C
ANISOU 1260 CB VAL A 81 1618 2259 1316 568 -315 -235 C
ATOM 1261 CG1 VAL A 81 10.633 -19.244 -14.972 1.00 13.97 C
ANISOU 1261 CG1 VAL A 81 1655 2343 1311 630 -419 -345 C
ATOM 1262 CG2 VAL A 81 10.537 -20.686 -17.051 1.00 13.82 C
ANISOU 1262 CG2 VAL A 81 1613 2218 1419 475 -286 -169 C
ATOM 1263 H VAL A 81 7.309 -20.957 -16.683 1.00 14.58 H
ATOM 1264 HA VAL A 81 9.228 -21.543 -14.833 1.00 15.47 H
ATOM 1265 HB VAL A 81 9.225 -19.226 -16.457 1.00 16.40 H
ATOM 1266 HG11 VAL A 81 11.248 -18.656 -15.437 1.00 16.77 H
ATOM 1267 HG12 VAL A 81 10.087 -18.732 -14.356 1.00 16.77 H
ATOM 1268 HG13 VAL A 81 11.126 -19.926 -14.490 1.00 16.77 H
ATOM 1269 HG21 VAL A 81 11.159 -20.074 -17.473 1.00 16.58 H
ATOM 1270 HG22 VAL A 81 11.022 -21.404 -16.614 1.00 16.58 H
ATOM 1271 HG23 VAL A 81 9.931 -21.052 -17.714 1.00 16.58 H
ATOM 1272 N VAL A 82 7.704 -20.673 -13.112 1.00 14.46 N
ANISOU 1272 N VAL A 82 1751 2648 1094 857 -204 -173 N
ATOM 1273 CA VAL A 82 6.778 -20.157 -12.106 1.00 16.35 C
ANISOU 1273 CA VAL A 82 2007 2988 1216 982 -187 -209 C
ATOM 1274 C VAL A 82 7.521 -19.180 -11.200 1.00 17.22 C
ANISOU 1274 C VAL A 82 2149 3137 1255 1075 -309 -357 C
ATOM 1275 O VAL A 82 8.495 -19.557 -10.538 1.00 17.39 O
ANISOU 1275 O VAL A 82 2170 3186 1253 1105 -340 -365 O
ATOM 1276 CB VAL A 82 6.166 -21.300 -11.282 1.00 18.01 C
ANISOU 1276 CB VAL A 82 2211 3314 1318 1059 -66 -75 C
ATOM 1277 CG1 VAL A 82 5.183 -20.749 -10.230 1.00 19.61 C
ANISOU 1277 CG1 VAL A 82 2414 3616 1420 1187 -32 -101 C

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ATOM   1278  CG2 VAL A  82      5.470 -22.300 -12.184  1.00 17.40           C
ANISOU 1278  CG2 VAL A  82     2093   3174   1343    947     44     58       C
ATOM   1279  H   VAL A  82      8.146 -21.362 -12.848  1.00 17.35           H
ATOM   1280  HA  VAL A  82      6.059 -19.679 -12.547  1.00 19.62           H
ATOM   1281  HB  VAL A  82      6.876 -21.765 -10.813  1.00 21.61           H
ATOM   1282 HG11 VAL A  82      4.813 -21.491  -9.725  1.00 23.53           H
ATOM   1283 HG12 VAL A  82      5.662 -20.151  -9.635  1.00 23.53           H
ATOM   1284 HG13 VAL A  82      4.473 -20.269 -10.682  1.00 23.53           H
ATOM   1285 HG21 VAL A  82      5.094 -23.008 -11.638  1.00 20.88           H
ATOM   1286 HG22 VAL A  82      4.764 -21.847 -12.671  1.00 20.88           H
ATOM   1287 HG23 VAL A  82      6.118 -22.668 -12.805  1.00 20.88           H
ATOM   1288  N   ASP A  83      7.050 -17.932 -11.153  1.00 18.06           N
ANISOU 1288  N   ASP A  83     2276   3209   1378    1106   -364   -473       N
ATOM   1289  CA  ASP A  83      7.651 -16.897 -10.316  1.00 20.07           C
ANISOU 1289  CA  ASP A  83     2550   3444   1632    1169   -471   -615       C
ATOM   1290  C   ASP A  83      6.918 -16.685  -9.001  1.00 21.26           C
ANISOU 1290  C   ASP A  83     2709   3699   1670    1324   -442   -628       C
ATOM   1291  O   ASP A  83      7.555 -16.353  -7.995  1.00 22.87           O
ANISOU 1291  O   ASP A  83     2923   3934   1832    1404   -510   -707       O
ATOM   1292  CB  ASP A  83      7.704 -15.560 -11.068  1.00 20.70           C
ANISOU 1292  CB  ASP A  83     2652   3389   1823    1106   -565   -736       C
ATOM   1293  CG  ASP A  83      9.037 -15.322 -11.765  1.00 20.37           C
ANISOU 1293  CG  ASP A  83     2595   3239   1905    982   -657   -786       C
ATOM   1294  OD1 ASP A  83      9.951 -16.156 -11.607  1.00 20.75           O
ANISOU 1294  OD1 ASP A  83     2610   3328   1945    956   -655   -740       O
ATOM   1295  OD2 ASP A  83      9.179 -14.283 -12.453  1.00 19.99           O
ANISOU 1295  OD2 ASP A  83     2566   3061   1970    913   -727   -866       O
ATOM   1296  H   ASP A  83      6.372 -17.658 -11.606  1.00 21.68           H
ATOM   1297  HA  ASP A  83      8.562 -17.156 -10.108  1.00 24.08           H
ATOM   1298  HB2 ASP A  83      7.008 -15.550 -11.743  1.00 24.84           H
ATOM   1299  HB3 ASP A  83      7.564 -14.837 -10.437  1.00 24.84           H
ATOM   1300  N   SER A  84      5.598 -16.854  -8.978  1.00 19.98           N
ANISOU 1300  N   SER A  84     2536   3597   1459    1370   -347   -552       N
ATOM   1301  CA  SER A  84      4.848 -16.732  -7.738  1.00 19.81           C
ANISOU 1301  CA  SER A  84     2512   3687   1327    1517   -313   -539       C
ATOM   1302  C   SER A  84      3.622 -17.622  -7.825  1.00 19.63           C
ANISOU 1302  C   SER A  84     2450   3745   1265    1518   -167   -379       C
ATOM   1303  O   SER A  84      3.286 -18.154  -8.891  1.00 18.39           O
ANISOU 1303  O   SER A  84     2268   3545   1175    1408   -102   -304       O
ATOM   1304  CB  SER A  84      4.439 -15.281  -7.457  1.00 21.11           C
ANISOU 1304  CB  SER A  84     2706   3818   1498    1589   -403   -677       C
ATOM   1305  OG  SER A  84      3.914 -15.157  -6.139  1.00 22.47           O
ANISOU 1305  OG  SER A  84     2880   4109   1548    1746   -388   -675       O
ATOM   1306  H   SER A  84      5.117 -17.039  -9.666  1.00 23.98           H
ATOM   1307  HA  SER A  84      5.396 -17.042  -7.000  1.00 23.77           H
ATOM   1308  HB2 SER A  84      5.219 -14.711  -7.543  1.00 25.34           H
ATOM   1309  HB3 SER A  84      3.760 -15.014  -8.096  1.00 25.34           H
ATOM   1310  HG  SER A  84      3.693 -14.360  -5.993  1.00 26.96           H
ATOM   1311  N   TRP A  85      2.937 -17.751  -6.694  1.00 22.59           N
ANISOU 1311  N   TRP A  85     2816   4232   1536    1640   -115   -329       N
ATOM   1312  CA  TRP A  85      1.761 -18.599  -6.606  1.00 23.69           C
ANISOU 1312  CA  TRP A  85     2908   4445   1647    1636    29   -169       C
ATOM   1313  C   TRP A  85      1.005 -18.248  -5.332  1.00 25.92           C
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ANISOU 1313  C   TRP A  85     3191   4845   1812   1791     53   -163      C
ATOM   1314  O   TRP A  85      1.464 -17.453  -4.507  1.00 28.80          O
ANISOU 1314  O   TRP A  85     3595   5237   2110   1908    -44   -280      O
ATOM   1315  CB  TRP A  85      2.150 -20.080  -6.619  1.00 23.43          C
ANISOU 1315  CB  TRP A  85     2859   4419   1623   1576    122    -16      C
ATOM   1316  CG  TRP A  85      3.033 -20.462  -5.472  1.00 24.45          C
ANISOU 1316  CG  TRP A  85     3020   4604   1663   1680     97    -11      C
ATOM   1317  CD1 TRP A  85      2.638 -20.951  -4.255  1.00 27.12          C
ANISOU 1317  CD1 TRP A  85     3358   5048   1896   1801    168     78      C
ATOM   1318  CD2 TRP A  85      4.461 -20.367  -5.421  1.00 24.80          C
ANISOU 1318  CD2 TRP A  85     3099   4607   1717   1680     -6   -104      C
ATOM   1319  NE1 TRP A  85      3.738 -21.170  -3.451  1.00 28.16          N
ANISOU 1319  NE1 TRP A  85     3526   5209   1963   1887    112     43      N
ATOM   1320  CE2 TRP A  85      4.868 -20.823  -4.145  1.00 26.94          C
ANISOU 1320  CE2 TRP A  85     3388   4967   1881   1810      5    -72      C
ATOM   1321  CE3 TRP A  85      5.437 -19.946  -6.330  1.00 24.35          C
ANISOU 1321  CE3 TRP A  85     3055   4448   1749   1581   -103   -209      C
ATOM   1322  CZ2 TRP A  85      6.207 -20.866  -3.761  1.00 27.55          C
ANISOU 1322  CZ2 TRP A  85     3490   5037   1940   1843    -82   -150      C
ATOM   1323  CZ3 TRP A  85      6.765 -19.991  -5.945  1.00 24.71          C
ANISOU 1323  CZ3 TRP A  85     3121   4484   1786   1600   -187   -281      C
ATOM   1324  CH2 TRP A  85      7.139 -20.446  -4.671  1.00 26.33          C
ANISOU 1324  CH2 TRP A  85     3338   4782   1883   1732   -178   -256      C
ATOM   1325  H   TRP A  85      3.137 -17.352  -5.958  1.00 27.11          H
ATOM   1326  HA  TRP A  85      1.181 -18.427  -7.364  1.00 28.42          H
ATOM   1327  HB2 TRP A  85      1.344 -20.618  -6.568  1.00 28.12          H
ATOM   1328  HB3 TRP A  85      2.626 -20.274  -7.441  1.00 28.12          H
ATOM   1329  HD1 TRP A  85      1.756 -21.111  -4.006  1.00 32.54          H
ATOM   1330  HE1 TRP A  85      3.718 -21.479  -2.648  1.00 33.79          H
ATOM   1331  HE3 TRP A  85      5.198 -19.642  -7.175  1.00 29.22          H
ATOM   1332  HZ2 TRP A  85      6.457 -21.168  -2.918  1.00 33.06          H
ATOM   1333  HZ3 TRP A  85      7.423 -19.713  -6.542  1.00 29.66          H
ATOM   1334  HH2 TRP A  85      8.040 -20.466  -4.441  1.00 31.59          H
ATOM   1335  N   GLY A  86     -0.167 -18.856  -5.183  1.00 33.21          N
ANISOU 1335  N   GLY A  86     3618   5050   3950   2020   1365   1400      N
ATOM   1336  CA  GLY A  86     -0.946 -18.693  -3.973  1.00 35.92          C
ANISOU 1336  CA  GLY A  86     4038   5399   4212   2270   1670   1603      C
ATOM   1337  C   GLY A  86     -0.600 -19.769  -2.972  1.00 37.18          C
ANISOU 1337  C   GLY A  86     4293   5505   4328   2291   1822   1707      C
ATOM   1338  O   GLY A  86      0.386 -19.650  -2.238  1.00 37.23          O
ANISOU 1338  O   GLY A  86     4648   5469   4030   2407   1790   1597      O
ATOM   1339  H   GLY A  86     -0.529 -19.368  -5.771  1.00 39.85          H
ATOM   1340  HA2 GLY A  86     -0.764 -17.826  -3.578  1.00 43.10          H
ATOM   1341  HA3 GLY A  86     -1.892 -18.750  -4.180  1.00 43.10          H
ATOM   1342  N   THR A  87     -1.398 -20.832  -2.943  1.00 39.67          N
ANISOU 1342  N   THR A  87     4312   5805   4957   2171   1961   1908      N
ATOM   1343  CA  THR A  87     -1.127 -22.010  -2.129  1.00 41.63          C
ANISOU 1343  CA  THR A  87     4620   5978   5217   2164   2106   2019      C
ATOM   1344  C   THR A  87     -0.888 -23.180  -3.071  1.00 41.53          C
ANISOU 1344  C   THR A  87     4308   5966   5507   1855   1994   1993      C
ATOM   1345  O   THR A  87     -1.785 -23.564  -3.829  1.00 42.37          O
ANISOU 1345  O   THR A  87     4051   6071   5976   1665   1956   2075      O
ATOM   1346  CB  THR A  87     -2.288 -22.301  -1.172  1.00 45.50          C
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ANISOU 1346 CB THR A 87 5061 6397 5831 2307 2389 2297 C
ATOM 1347 OG1 THR A 87 -2.490 -21.174 -0.306 1.00 47.29 O
ANISOU 1347 OG1 THR A 87 5596 6611 5760 2612 2482 2330 O
ATOM 1348 CG2 THR A 87 -2.004 -23.536 -0.327 1.00 46.79 C
ANISOU 1348 CG2 THR A 87 5309 6455 6014 2327 2539 2409 C
ATOM 1349 H THR A 87 -2.124 -20.895 -3.400 1.00 47.61 H
ATOM 1350 HA THR A 87 -0.323 -21.865 -1.605 1.00 49.95 H
ATOM 1351 HB THR A 87 -3.095 -22.461 -1.685 1.00 54.60 H
ATOM 1352 HG1 THR A 87 -2.672 -20.491 -0.761 1.00 56.74 H
ATOM 1353 HG21 THR A 87 -2.747 -23.706 0.272 1.00 56.15 H
ATOM 1354 HG22 THR A 87 -1.878 -24.308 -0.901 1.00 56.15 H
ATOM 1355 HG23 THR A 87 -1.200 -23.400 0.199 1.00 56.15 H
ATOM 1356 N ALA A 88 0.320 -23.734 -3.035 1.00 41.21 N
ANISOU 1356 N ALA A 88 4437 5912 5309 1797 1908 1871 N
ATOM 1357 CA ALA A 88 0.675 -24.837 -3.916 1.00 41.88 C
ANISOU 1357 CA ALA A 88 4349 5938 5624 1468 1721 1811 C
ATOM 1358 C ALA A 88 1.895 -25.547 -3.353 1.00 42.69 C
ANISOU 1358 C ALA A 88 4733 5988 5498 1475 1697 1738 C
ATOM 1359 O ALA A 88 2.863 -24.899 -2.948 1.00 41.83 O
ANISOU 1359 O ALA A 88 4940 5897 5055 1607 1584 1580 O
ATOM 1360 CB ALA A 88 0.967 -24.347 -5.337 1.00 39.36 C
ANISOU 1360 CB ALA A 88 3953 5632 5371 1247 1356 1592 C
ATOM 1361 H ALA A 88 0.953 -23.487 -2.508 1.00 49.45 H
ATOM 1362 HA ALA A 88 -0.059 -25.470 -3.953 1.00 50.25 H
ATOM 1363 HB1 ALA A 88 1.199 -25.108 -5.892 1.00 47.23 H
ATOM 1364 HB2 ALA A 88 0.175 -23.909 -5.689 1.00 47.23 H
ATOM 1365 HB3 ALA A 88 1.707 -23.720 -5.309 1.00 47.23 H
ATOM 1366 N ARG A 89 1.844 -26.874 -3.333 1.00 45.06 N
ANISOU 1366 N ARG A 89 4914 6214 5992 1332 1792 1851 N
ATOM 1367 CA ARG A 89 2.988 -27.690 -2.947 1.00 46.16 C
ANISOU 1367 CA ARG A 89 5290 6301 5947 1322 1756 1790 C
ATOM 1368 C ARG A 89 3.568 -28.283 -4.219 1.00 44.41 C
ANISOU 1368 C ARG A 89 4974 6027 5874 1002 1461 1637 C
ATOM 1369 O ARG A 89 2.875 -28.999 -4.949 1.00 47.26 O
ANISOU 1369 O ARG A 89 5069 6323 6565 782 1445 1707 O
ATOM 1370 CB ARG A 89 2.624 -28.813 -1.973 1.00 49.37 C
ANISOU 1370 CB ARG A 89 5705 6629 6426 1419 2082 2022 C
ATOM 1371 CG ARG A 89 1.346 -28.643 -1.152 1.00 52.66 C
ANISOU 1371 CG ARG A 89 6040 6989 6977 1591 2315 2208 C
ATOM 1372 CD ARG A 89 1.565 -27.938 0.190 1.00 53.65 C
ANISOU 1372 CD ARG A 89 6522 7115 6748 1963 2417 2213 C
ATOM 1373 NE ARG A 89 2.741 -28.402 0.923 1.00 52.39 N
ANISOU 1373 NE ARG A 89 6684 6923 6300 2092 2366 2116 N
ATOM 1374 CZ ARG A 89 3.168 -27.856 2.058 1.00 53.05 C
ANISOU 1374 CZ ARG A 89 7103 6989 6065 2405 2370 2064 C
ATOM 1375 NH1 ARG A 89 2.510 -26.839 2.594 1.00 54.12 N
ANISOU 1375 NH1 ARG A 89 7327 7124 6112 2622 2445 2118 N
ATOM 1376 NH2 ARG A 89 4.251 -28.326 2.662 1.00 52.97 N
ANISOU 1376 NH2 ARG A 89 7343 6951 5833 2506 2281 1955 N
ATOM 1377 H ARG A 89 1.147 -27.333 -3.542 1.00 54.07 H
ATOM 1378 HA ARG A 89 3.662 -27.129 -2.532 1.00 55.39 H
ATOM 1379 HB2 ARG A 89 2.528 -29.633 -2.483 1.00 59.25 H
ATOM 1380 HB3 ARG A 89 3.355 -28.914 -1.344 1.00 59.25 H

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ATOM   1381  HG2 ARG A  89      0.713 -28.116  -1.664  1.00 63.19           H
ATOM   1382  HG3 ARG A  89      0.973 -29.519  -0.969  1.00 63.19           H
ATOM   1383  HD2 ARG A  89      1.673 -26.988   0.029  1.00 64.38           H
ATOM   1384  HD3 ARG A  89      0.789 -28.090   0.752  1.00 64.38           H
ATOM   1385  HE  ARG A  89      3.124 -29.123   0.654  1.00 62.87           H
ATOM   1386 HH11 ARG A  89      1.809 -26.528   2.205  1.00 64.94           H
ATOM   1387 HH12 ARG A  89      2.786 -26.488   3.329  1.00 64.94           H
ATOM   1388 HH21 ARG A  89      4.680 -28.988   2.320  1.00 63.56           H
ATOM   1389 HH22 ARG A  89      4.520 -27.973   3.398  1.00 63.56           H
ATOM   1390  N   TRP A  90      4.825 -27.984  -4.484  1.00 39.86           N
ANISOU 1390  N   TRP A  90    4616   5466   5064    985   1227   1433      N
ATOM   1391  CA  TRP A  90      5.489 -28.495  -5.667  1.00 36.70           C
ANISOU 1391  CA  TRP A  90    4179   5008   4757    733    976   1296      C
ATOM   1392  C   TRP A  90      6.059 -29.870  -5.344  1.00 39.48           C
ANISOU 1392  C   TRP A  90    4612   5280   5109    686   1060   1366      C
ATOM   1393  O   TRP A  90      6.743 -30.042  -4.328  1.00 39.19           O
ANISOU 1393  O   TRP A  90    4789   5265   4838    873   1162   1391      O
ATOM   1394  CB  TRP A  90      6.554 -27.501  -6.118  1.00 32.04           C
ANISOU 1394  CB  TRP A  90    3757   4461   3955    746    727   1076      C
ATOM   1395  CG  TRP A  90      5.943 -26.122  -6.251  1.00 30.18           C
ANISOU 1395  CG  TRP A  90    3484   4290   3692    835    694   1029      C
ATOM   1396  CD1 TRP A  90      6.066 -25.076  -5.379  1.00 30.56           C
ANISOU 1396  CD1 TRP A  90    3706   4396   3511   1060    747    996      C
ATOM   1397  CD2 TRP A  90      5.081 -25.668  -7.301  1.00 28.43           C
ANISOU 1397  CD2 TRP A  90    3059   4073   3670    720    599   1011      C
ATOM   1398  NE1 TRP A  90      5.346 -23.992  -5.834  1.00 29.61           N
ANISOU 1398  NE1 TRP A  90    3506   4310   3435   1090    714    967      N
ATOM   1399  CE2 TRP A  90      4.732 -24.331  -7.011  1.00 28.45           C
ANISOU 1399  CE2 TRP A  90    3118   4142   3550    890    623    979      C
ATOM   1400  CE3 TRP A  90      4.580 -26.256  -8.466  1.00 27.61           C
ANISOU 1400  CE3 TRP A  90    2756   3913   3820    505    475   1009      C
ATOM   1401  CZ2 TRP A  90      3.906 -23.578  -7.846  1.00 27.16           C
ANISOU 1401  CZ2 TRP A  90    2802   4005   3512    861    546    960      C
ATOM   1402  CZ3 TRP A  90      3.758 -25.501  -9.295  1.00 26.76           C
ANISOU 1402  CZ3 TRP A  90    2498   3835   3835    477    366    977      C
ATOM   1403  CH2 TRP A  90      3.430 -24.183  -8.978  1.00 26.31           C
ANISOU 1403  CH2 TRP A  90    2484   3858   3653    658    413    960      C
ATOM   1404  H   TRP A  90      5.321 -27.482  -3.991  1.00 47.83           H
ATOM   1405  HA  TRP A  90      4.841 -28.594  -6.382  1.00 44.04           H
ATOM   1406  HB2 TRP A  90      7.264 -27.462  -5.457  1.00 38.44           H
ATOM   1407  HB3 TRP A  90      6.905 -27.768  -6.981  1.00 38.44           H
ATOM   1408  HD1 TRP A  90      6.565 -25.092  -4.595  1.00 36.68           H
ATOM   1409  HE1 TRP A  90      5.289 -23.229  -5.441  1.00 35.53           H
ATOM   1410  HE3 TRP A  90      4.794 -27.134  -8.683  1.00 33.13           H
ATOM   1411  HZ2 TRP A  90      3.687 -22.698  -7.640  1.00 32.59           H
ATOM   1412  HZ3 TRP A  90      3.417 -25.883 -10.071  1.00 32.11           H
ATOM   1413  HH2 TRP A  90      2.877 -23.702  -9.552  1.00 31.57           H
ATOM   1414  N   THR A  91      5.712 -30.854  -6.173  1.00 41.83           N
ANISOU 1414  N   THR A  91    4754   5473   5666    454   1018   1402      N
ATOM   1415  CA  THR A  91      6.057 -32.249  -5.945  1.00 42.84           C
ANISOU 1415  CA  THR A  91    4946   5492   5840    391   1126   1491      C
ATOM   1416  C   THR A  91      6.330 -32.910  -7.287  1.00 39.22           C
ANISOU 1416  C   THR A  91    4448   4923   5530    133    897   1386      C
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ATOM 1417 O THR A 91 5.721 -32.560 -8.299 1.00 41.08 O
ANISOU 1417 O THR A 91 4525 5140 5945 -19 722 1316 O
ATOM 1418 CB THR A 91 4.924 -32.996 -5.211 1.00 47.22 C
ANISOU 1418 CB THR A 91 5343 5976 6622 408 1442 1737 C
ATOM 1419 OG1 THR A 91 4.798 -32.495 -3.875 1.00 48.91 O
ANISOU 1419 OG1 THR A 91 5674 6273 6637 707 1695 1852 O
ATOM 1420 CG2 THR A 91 5.183 -34.497 -5.150 1.00 47.92 C
ANISOU 1420 CG2 THR A 91 5487 5911 6807 302 1550 1830 C
ATOM 1421 H THR A 91 5.263 -30.730 -6.896 1.00 50.19 H
ATOM 1422 HA THR A 91 6.861 -32.301 -5.406 1.00 51.41 H
ATOM 1423 HB THR A 91 4.090 -32.852 -5.684 1.00 56.66 H
ATOM 1424 HG1 THR A 91 4.181 -32.900 -3.473 1.00 58.69 H
ATOM 1425 HG21 THR A 91 4.457 -34.940 -4.684 1.00 57.50 H
ATOM 1426 HG22 THR A 91 5.248 -34.858 -6.048 1.00 57.50 H
ATOM 1427 HG23 THR A 91 6.013 -34.671 -4.679 1.00 57.50 H
ATOM 1428 N GLY A 92 7.253 -33.866 -7.290 1.00 33.23 N
ANISOU 1428 N GLY A 92 3862 4089 4676 111 897 1376 N
ATOM 1429 CA GLY A 92 7.498 -34.689 -8.452 1.00 29.09 C
ANISOU 1429 CA GLY A 92 3356 3426 4272 -101 728 1304 C
ATOM 1430 C GLY A 92 8.980 -34.864 -8.707 1.00 25.51 C
ANISOU 1430 C GLY A 92 3138 2979 3574 -41 623 1199 C
ATOM 1431 O GLY A 92 9.826 -34.549 -7.868 1.00 23.42 O
ANISOU 1431 O GLY A 92 3003 2817 3078 149 683 1195 O
ATOM 1432 H GLY A 92 7.755 -34.056 -6.618 1.00 39.88 H
ATOM 1433 HA2 GLY A 92 7.101 -35.565 -8.322 1.00 34.91 H
ATOM 1434 HA3 GLY A 92 7.096 -34.279 -9.233 1.00 34.91 H
ATOM 1435 N THR A 93 9.294 -35.386 -9.895 1.00 23.87 N
ANISOU 1435 N THR A 93 2991 2651 3426 -193 454 1114 N
ATOM 1436 CA THR A 93 10.682 -35.622 -10.262 1.00 22.25 C
ANISOU 1436 CA THR A 93 2992 2436 3024 -133 379 1039 C
ATOM 1437 C THR A 93 11.445 -34.304 -10.299 1.00 19.80 C
ANISOU 1437 C THR A 93 2699 2275 2547 -18 268 925 C
ATOM 1438 O THR A 93 10.989 -33.320 -10.892 1.00 19.18 O
ANISOU 1438 O THR A 93 2531 2236 2522 -62 146 841 O
ATOM 1439 CB THR A 93 10.770 -36.334 -11.616 1.00 22.99 C
ANISOU 1439 CB THR A 93 3177 2356 3201 -290 228 974 C
ATOM 1440 OG1 THR A 93 10.182 -37.635 -11.506 1.00 26.89 O
ANISOU 1440 OG1 THR A 93 3682 2681 3853 -406 325 1074 O
ATOM 1441 CG2 THR A 93 12.226 -36.491 -12.055 1.00 21.83 C
ANISOU 1441 CG2 THR A 93 3235 2202 2856 -197 182 919 C
ATOM 1442 H THR A 93 8.723 -35.610 -10.498 1.00 28.64 H
ATOM 1443 HA THR A 93 11.095 -36.191 -9.594 1.00 26.70 H
ATOM 1444 HB THR A 93 10.297 -35.818 -12.287 1.00 27.58 H
ATOM 1445 HG1 THR A 93 9.376 -37.568 -11.280 1.00 32.26 H
ATOM 1446 HG21 THR A 93 12.266 -36.942 -12.913 1.00 26.19 H
ATOM 1447 HG22 THR A 93 12.642 -35.619 -12.139 1.00 26.19 H
ATOM 1448 HG23 THR A 93 12.715 -37.013 -11.401 1.00 26.19 H
ATOM 1449 N TYR A 94 12.623 -34.312 -9.678 1.00 19.14 N
ANISOU 1449 N TYR A 94 2732 2265 2276 130 304 924 N
ATOM 1450 CA TYR A 94 13.408 -33.124 -9.380 1.00 18.26 C
ANISOU 1450 CA TYR A 94 2625 2286 2025 246 215 831 C
ATOM 1451 C TYR A 94 14.793 -33.279 -9.985 1.00 19.09 C
ANISOU 1451 C TYR A 94 2824 2373 2057 267 129 779 C

ATOM 1452 O TYR A 94 15.478 -34.279 -9.734 1.00 18.43 O
ANISOU 1452 O TYR A 94 2836 2256 1909 326 198 847 O
ATOM 1453 CB TYR A 94 13.509 -32.917 -7.864 1.00 20.26 C
ANISOU 1453 CB TYR A 94 2911 2652 2135 433 319 884 C
ATOM 1454 CG TYR A 94 14.548 -31.910 -7.459 1.00 19.64 C
ANISOU 1454 CG TYR A 94 2871 2683 1908 552 190 777 C
ATOM 1455 CD1 TYR A 94 14.369 -30.564 -7.726 1.00 18.44 C
ANISOU 1455 CD1 TYR A 94 2657 2577 1771 530 77 669 C
ATOM 1456 CD2 TYR A 94 15.709 -32.303 -6.800 1.00 20.94 C
ANISOU 1456 CD2 TYR A 94 3129 2895 1931 688 169 784 C
ATOM 1457 CE1 TYR A 94 15.318 -29.635 -7.362 1.00 18.97 C
ANISOU 1457 CE1 TYR A 94 2755 2713 1740 612 -56 563 C
ATOM 1458 CE2 TYR A 94 16.666 -31.371 -6.424 1.00 20.98 C
ANISOU 1458 CE2 TYR A 94 3140 2987 1844 776 9 676 C
ATOM 1459 CZ TYR A 94 16.460 -30.041 -6.713 1.00 20.24 C
ANISOU 1459 CZ TYR A 94 2984 2916 1791 724 -103 563 C
ATOM 1460 OH TYR A 94 17.393 -29.101 -6.348 1.00 21.51 O
ANISOU 1460 OH TYR A 94 3146 3132 1895 784 -274 448 O
ATOM 1461 H TYR A 94 13.003 -35.035 -9.408 1.00 22.97 H
ATOM 1462 HA TYR A 94 12.983 -32.345 -9.772 1.00 21.91 H
ATOM 1463 HB2 TYR A 94 12.651 -32.608 -7.533 1.00 24.31 H
ATOM 1464 HB3 TYR A 94 13.737 -33.763 -7.448 1.00 24.31 H
ATOM 1465 HD1 TYR A 94 13.600 -30.283 -8.168 1.00 22.12 H
ATOM 1466 HD2 TYR A 94 15.846 -33.203 -6.609 1.00 25.12 H
ATOM 1467 HE1 TYR A 94 15.184 -28.734 -7.549 1.00 22.76 H
ATOM 1468 HE2 TYR A 94 17.440 -31.642 -5.986 1.00 25.18 H
ATOM 1469 HH TYR A 94 18.040 -29.472 -5.962 1.00 25.81 H
ATOM 1470 N LYS A 95 15.210 -32.283 -10.767 1.00 18.81 N
ANISOU 1470 N LYS A 95 2759 2352 2035 237 1 675 N
ATOM 1471 CA LYS A 95 16.407 -32.391 -11.584 1.00 20.52 C
ANISOU 1471 CA LYS A 95 3040 2522 2234 245 -49 649 C
ATOM 1472 C LYS A 95 17.560 -31.511 -11.127 1.00 20.12 C
ANISOU 1472 C LYS A 95 2941 2573 2131 338 -115 596 C
ATOM 1473 O LYS A 95 18.702 -31.776 -11.510 1.00 21.52 O
ANISOU 1473 O LYS A 95 3140 2729 2309 377 -119 616 O
ATOM 1474 CB LYS A 95 16.073 -32.036 -13.042 1.00 22.21 C
ANISOU 1474 CB LYS A 95 3281 2630 2528 145 -122 590 C
ATOM 1475 CG LYS A 95 15.196 -33.053 -13.734 1.00 24.70 C
ANISOU 1475 CG LYS A 95 3671 2807 2908 44 -118 623 C
ATOM 1476 CD LYS A 95 15.924 -34.368 -13.880 1.00 26.74 C
ANISOU 1476 CD LYS A 95 4076 2968 3115 76 -42 698 C
ATOM 1477 CE LYS A 95 15.263 -35.267 -14.881 1.00 28.34 C
ANISOU 1477 CE LYS A 95 4410 2984 3376 -28 -85 696 C
ATOM 1478 NZ LYS A 95 15.958 -36.570 -14.900 1.00 29.77 N
ANISOU 1478 NZ LYS A 95 4764 3059 3490 20 12 776 N
ATOM 1479 H LYS A 95 14.808 -31.526 -10.840 1.00 22.57 H
ATOM 1480 HA LYS A 95 16.713 -33.311 -11.566 1.00 24.62 H
ATOM 1481 HB2 LYS A 95 15.608 -31.185 -13.057 1.00 26.65 H
ATOM 1482 HB3 LYS A 95 16.900 -31.968 -13.544 1.00 26.65 H
ATOM 1483 HG2 LYS A 95 14.396 -33.203 -13.206 1.00 29.64 H
ATOM 1484 HG3 LYS A 95 14.963 -32.731 -14.618 1.00 29.64 H
ATOM 1485 HD2 LYS A 95 16.831 -34.198 -14.178 1.00 32.08 H
ATOM 1486 HD3 LYS A 95 15.933 -34.824 -13.024 1.00 32.08 H

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ATOM   1487  HE2 LYS A  95     14.338 -35.412 -14.629  1.00 34.01          H
ATOM   1488  HE3 LYS A  95     15.321 -34.871 -15.764  1.00 34.01          H
ATOM   1489  HZ1 LYS A  95     15.573 -37.111 -15.492  1.00 35.73          H
ATOM   1490  HZ2 LYS A  95     16.812 -36.456 -15.125  1.00 35.73          H
ATOM   1491  HZ3 LYS A  95     15.920 -36.947 -14.094  1.00 35.73          H
ATOM   1492  N   GLY A  96     17.304 -30.490 -10.339  1.00 18.21          N
ANISOU 1492  N   GLY A  96     2636   2426   1857    378   -169    534      N
ATOM   1493  CA  GLY A  96     18.342 -29.573  -9.940  1.00 17.13          C
ANISOU 1493  CA  GLY A  96     2451   2357   1702    437   -276    459      C
ATOM   1494  C   GLY A  96     17.782 -28.177  -9.854  1.00 16.80          C
ANISOU 1494  C   GLY A  96     2369   2338   1674    411   -349    359      C
ATOM   1495  O   GLY A  96     16.575 -27.985  -9.739  1.00 16.49          O
ANISOU 1495  O   GLY A  96     2337   2306   1624    396   -302    366      O
ATOM   1496  H   GLY A  96     16.528 -30.305 -10.018  1.00 21.85          H
ATOM   1497  HA2 GLY A  96     18.693 -29.826  -9.072  1.00 20.56          H
ATOM   1498  HA3 GLY A  96     19.063 -29.585 -10.589  1.00 20.56          H
ATOM   1499  N   THR A  97     18.670 -27.195  -9.941  1.00 17.58          N
ANISOU 1499  N   THR A  97     2418   2440   1821    405   -456    276      N
ATOM   1500  CA  THR A  97     18.298 -25.805  -9.745  1.00 17.73          C
ANISOU 1500  CA  THR A  97     2430   2466   1842    394   -532    171      C
ATOM   1501  C   THR A  97     18.925 -24.964 -10.855  1.00 16.50          C
ANISOU 1501  C   THR A  97     2220   2219   1831    304   -562    124      C
ATOM   1502  O   THR A  97     19.882 -25.384 -11.514  1.00 16.73          O
ANISOU 1502  O   THR A  97     2203   2199   1954    277   -536    172      O
ATOM   1503  CB  THR A  97     18.755 -25.306  -8.358  1.00 19.83          C
ANISOU 1503  CB  THR A  97     2724   2806   2003    502   -656     97      C
ATOM   1504  OG1 THR A  97     20.181 -25.435  -8.286  1.00 21.54          O
ANISOU 1504  OG1 THR A  97     2864   3025   2293    502   -764     80      O
ATOM   1505  CG2 THR A  97     18.036 -26.079  -7.132  1.00 20.45          C
ANISOU 1505  CG2 THR A  97     2907   2966   1898    648   -585    162      C
ATOM   1506  H   THR A  97     19.504 -27.311 -10.115  1.00 21.09          H
ATOM   1507  HA  THR A  97     17.334 -25.717  -9.801  1.00 21.28          H
ATOM   1508  HB  THR A  97     18.528 -24.366  -8.281  1.00 23.79          H
ATOM   1509  HG1 THR A  97     20.456 -25.169  -7.538  1.00 25.84          H
ATOM   1510 HG21 THR A  97     18.356 -25.729  -6.286  1.00 24.54          H
ATOM   1511 HG22 THR A  97     17.075 -25.955  -7.181  1.00 24.54          H
ATOM   1512 HG23 THR A  97     18.234 -27.028  -7.177  1.00 24.54          H
ATOM   1513  N   VAL A  98     18.364 -23.775 -11.072  1.00 15.70          N
ANISOU 1513  N   VAL A  98     2136   2084   1744    277   -586     47      N
ATOM   1514  CA  VAL A  98     18.955 -22.773 -11.957  1.00 16.07          C
ANISOU 1514  CA  VAL A  98     2152   2029   1924    210   -598      0      C
ATOM   1515  C   VAL A  98     18.812 -21.404 -11.308  1.00 16.52          C
ANISOU 1515  C   VAL A  98     2236   2078   1963    218   -694   -117      C
ATOM   1516  O   VAL A  98     17.778 -21.087 -10.709  1.00 15.42          O
ANISOU 1516  O   VAL A  98     2172   1991   1697    281   -696   -148      O
ATOM   1517  CB  VAL A  98     18.313 -22.778 -13.361  1.00 15.44          C
ANISOU 1517  CB  VAL A  98     2125   1864   1876    177   -494     42      C
ATOM   1518  CG1 VAL A  98     16.810 -22.642 -13.275  1.00 16.24          C
ANISOU 1518  CG1 VAL A  98     2278   2009   1883    202   -484     30      C
ATOM   1519  CG2 VAL A  98     18.914 -21.664 -14.234  1.00 17.26          C
ANISOU 1519  CG2 VAL A  98     2355   1973   2231    140   -467     10      C
ATOM   1520  H   VAL A  98     17.626 -23.521 -10.710  1.00 18.84          H
ATOM   1521  HA  VAL A  98     19.901 -22.960 -12.059  1.00 19.28          H
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ATOM   1522  HB  VAL A  98     18.509 -23.626 -13.789  1.00 18.52           H
ATOM   1523 HG11 VAL A  98     16.441 -22.649 -14.172  1.00 19.49           H
ATOM   1524 HG12 VAL A  98     16.455 -23.387 -12.765  1.00 19.49           H
ATOM   1525 HG13 VAL A  98     16.594 -21.805 -12.834  1.00 19.49           H
ATOM   1526 HG21 VAL A  98     18.495 -21.689 -15.108  1.00 20.71           H
ATOM   1527 HG22 VAL A  98     18.747 -20.807 -13.811  1.00 20.71           H
ATOM   1528 HG23 VAL A  98     19.869 -21.811 -14.320  1.00 20.71           H
ATOM   1529  N   LYS A  99     19.860 -20.600 -11.409  1.00 18.59           N
ANISOU 1529  N   LYS A  99    2436   2262   2367    160   -765   -176      N
ATOM   1530  CA  LYS A  99     19.822 -19.224 -10.941  1.00 21.18           C
ANISOU 1530  CA  LYS A  99    2812   2533   2704    147   -864   -300      C
ATOM   1531  C   LYS A  99     19.550 -18.308 -12.126  1.00 20.30           C
ANISOU 1531  C   LYS A  99    2733   2292   2687     94   -754   -299      C
ATOM   1532  O   LYS A  99     20.201 -18.423 -13.168  1.00 19.75           O
ANISOU 1532  O   LYS A  99    2600   2134   2770     40   -656   -229      O
ATOM   1533  CB  LYS A  99     21.131 -18.840 -10.253  1.00 25.43           C
ANISOU 1533  CB  LYS A  99    3255   3037   3371     98  -1043   -379      C
ATOM   1534  CG  LYS A  99     21.367 -19.548  -8.927  1.00 29.43           C
ANISOU 1534  CG  LYS A  99    3777   3668   3736    194  -1193   -407      C
ATOM   1535  CD  LYS A  99     22.592 -18.999  -8.220  1.00 34.02           C
ANISOU 1535  CD  LYS A  99    4270   4207   4448    150  -1436   -518      C
ATOM   1536  CE  LYS A  99     22.927 -19.786  -6.965  1.00 37.19           C
ANISOU 1536  CE  LYS A  99    4704   4735   4693    280  -1603   -543      C
ATOM   1537  NZ  LYS A  99     24.203 -19.301  -6.343  1.00 41.78           N
ANISOU 1537  NZ  LYS A  99    5171   5273   5430    230  -1864   -650      N
ATOM   1538  H   LYS A  99     20.615 -20.832 -11.750  1.00 22.31           H
ATOM   1539  HA  LYS A  99     19.099 -19.121 -10.303  1.00 25.42           H
ATOM   1540  HB2 LYS A  99     21.870 -19.061 -10.842  1.00 30.52           H
ATOM   1541  HB3 LYS A  99     21.124 -17.885 -10.080  1.00 30.52           H
ATOM   1542  HG2 LYS A  99     20.598 -19.416  -8.351  1.00 35.31           H
ATOM   1543  HG3 LYS A  99     21.507 -20.494  -9.089  1.00 35.31           H
ATOM   1544  HD2 LYS A  99     23.353 -19.047  -8.819  1.00 40.82           H
ATOM   1545  HD3 LYS A  99     22.425 -18.078  -7.964  1.00 40.82           H
ATOM   1546  HE2 LYS A  99     22.212 -19.678  -6.318  1.00 44.63           H
ATOM   1547  HE3 LYS A  99     23.035 -20.722  -7.193  1.00 44.63           H
ATOM   1548  HZ1 LYS A  99     24.382 -19.773  -5.610  1.00 50.14           H
ATOM   1549  HZ2 LYS A  99     24.876 -19.393  -6.918  1.00 50.14           H
ATOM   1550  HZ3 LYS A  99     24.126 -18.442  -6.122  1.00 50.14           H
ATOM   1551  N   SER A 100     18.587 -17.405 -11.966  1.00 19.61           N
ANISOU 1551  N   SER A 100    2765   2190   2495    140   -750   -363      N
ATOM   1552  CA  SER A 100     18.228 -16.502 -13.044  1.00 18.83           C
ANISOU 1552  CA  SER A 100    2729   1973   2452    126   -643   -361      C
ATOM   1553  C   SER A 100     17.467 -15.319 -12.468  1.00 18.56           C
ANISOU 1553  C   SER A 100    2829   1916   2309    186   -683   -459      C
ATOM   1554  O   SER A 100     16.608 -15.491 -11.602  1.00 18.20           O
ANISOU 1554  O   SER A 100    2845   1982   2090    283   -715   -473      O
ATOM   1555  CB  SER A 100     17.379 -17.225 -14.096  1.00 17.49           C
ANISOU 1555  CB  SER A 100    2586   1837   2223    170   -520   -262      C
ATOM   1556  OG  SER A 100     17.300 -16.467 -15.287  1.00 17.51           O
ANISOU 1556  OG  SER A 100    2662   1709   2283    178   -417   -248      O
ATOM   1557  H   SER A 100     18.130 -17.298 -11.246  1.00 23.53           H
ATOM   1558  HA  SER A 100     19.034 -16.172 -13.471  1.00 22.59           H
ATOM   1559  HB2 SER A 100     17.785 -18.083 -14.295  1.00 20.99           H
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ATOM   1560  HB3 SER A 100     16.484 -17.354 -13.745  1.00 20.99           H
ATOM   1561  HG  SER A 100     16.950 -15.720 -15.130  1.00 21.02           H
ATOM   1562  N   ASP A 101     17.803 -14.123 -12.949  1.00 20.27           N
ANISOU 1562  N   ASP A 101     3100   1972   2629    141   -655   -512       N
ATOM   1563  CA  ASP A 101     17.053 -12.902 -12.650  1.00 20.88           C
ANISOU 1563  CA  ASP A 101     3341   1991   2601    213   -657   -594       C
ATOM   1564  C   ASP A 101     16.902 -12.694 -11.147  1.00 21.97           C
ANISOU 1564  C   ASP A 101     3565   2189   2594    275   -811   -695       C
ATOM   1565  O   ASP A 101     15.820 -12.403 -10.636  1.00 21.83           O
ANISOU 1565  O   ASP A 101     3676   2237   2382    414   -783   -705       O
ATOM   1566  CB  ASP A 101     15.695 -12.934 -13.346  1.00 19.99           C
ANISOU 1566  CB  ASP A 101     3297   1946   2354    332   -530   -523       C
ATOM   1567  CG  ASP A 101     15.822 -13.243 -14.810  1.00 19.27           C
ANISOU 1567  CG  ASP A 101     3172   1793   2356    309   -409   -434       C
ATOM   1568  OD1 ASP A 101     16.192 -12.320 -15.563  1.00 19.44           O
ANISOU 1568  OD1 ASP A 101     3268   1651   2468    294   -324   -443       O
ATOM   1569  OD2 ASP A 101     15.578 -14.405 -15.203  1.00 18.55           O
ANISOU 1569  OD2 ASP A 101     3005   1799   2244    316   -394   -353       O
ATOM   1570  H   ASP A 101     18.479 -13.990 -13.464  1.00 24.32           H
ATOM   1571  HA  ASP A 101     17.545 -12.144 -13.002  1.00 25.06           H
ATOM   1572  HB2 ASP A 101     15.144 -13.621 -12.938  1.00 23.99           H
ATOM   1573  HB3 ASP A 101     15.270 -12.067 -13.255  1.00 23.99           H
ATOM   1574  N   GLY A 102     18.020 -12.821 -10.440  1.00 23.48           N
ANISOU 1574  N   GLY A 102     3692   2349   2880    190   -976   -767       N
ATOM   1575  CA  GLY A 102     18.043 -12.599  -9.012  1.00 27.10           C
ANISOU 1575  CA  GLY A 102     4274   2837   3185    268  -1160   -882       C
ATOM   1576  C   GLY A 102     17.375 -13.664  -8.173  1.00 28.25           C
ANISOU 1576  C   GLY A 102     4446   3175   3112    416  -1153   -820       C
ATOM   1577  O   GLY A 102     17.262 -13.484  -6.955  1.00 30.19           O
ANISOU 1577  O   GLY A 102     4849   3444   3176    537  -1277   -903       O
ATOM   1578  H   GLY A 102     18.783 -13.038 -10.772  1.00 28.17           H
ATOM   1579  HA2 GLY A 102     18.966 -12.529  -8.722  1.00 32.51           H
ATOM   1580  HA3 GLY A 102     17.606 -11.754  -8.821  1.00 32.51           H
ATOM   1581  N   GLY A 103     16.936 -14.776  -8.775  1.00 24.82           N
ANISOU 1581  N   GLY A 103     3385   2896   3152   1090  -1136  -1018       N
ATOM   1582  CA  GLY A 103     16.275 -15.830  -8.038  1.00 25.09           C
ANISOU 1582  CA  GLY A 103     3387   3175   2972   1177  -1058  -1037       C
ATOM   1583  C   GLY A 103     16.895 -17.187  -8.322  1.00 23.12           C
ANISOU 1583  C   GLY A 103     3085   2940   2759   1083   -995   -801       C
ATOM   1584  O   GLY A 103     17.703 -17.350  -9.241  1.00 23.70           O
ANISOU 1584  O   GLY A 103     3128   2815   3063   983   -946   -684       O
ATOM   1585  H   GLY A 103     17.016 -14.935  -9.616  1.00 29.79           H
ATOM   1586  HA2 GLY A 103     16.339 -15.652  -7.087  1.00 30.11           H
ATOM   1587  HA3 GLY A 103     15.337 -15.860  -8.285  1.00 30.11           H
ATOM   1588  N   THR A 104     16.499 -18.165  -7.506  1.00 20.87           N
ANISOU 1588  N   THR A 104     2785   2893   2252   1059   -961   -718       N
ATOM   1589  CA  THR A 104     16.890 -19.559  -7.678  1.00 19.47           C
ANISOU 1589  CA  THR A 104     2551   2714   2133    970   -916   -464       C
ATOM   1590  C   THR A 104     15.625 -20.381  -7.886  1.00 18.54           C
ANISOU 1590  C   THR A 104     2432   2764   1849    978   -737   -399       C
ATOM   1591  O   THR A 104     14.640 -20.193  -7.162  1.00 20.49           O
ANISOU 1591  O   THR A 104     2713   3238   1835    994   -674   -524       O
ATOM   1592  CB  THR A 104     17.676 -20.080  -6.463  1.00 22.07           C
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ANISOU 1592 CB THR A 104 2902 3106 2378 870 -1089 -358 C
ATOM 1593 OG1 THR A 104 18.868 -19.304 -6.299 1.00 23.53 O
ANISOU 1593 OG1 THR A 104 3051 3124 2763 854 -1257 -437 O
ATOM 1594 CG2 THR A 104 18.060 -21.536 -6.637 1.00 22.27 C
ANISOU 1594 CG2 THR A 104 2861 3070 2530 787 -1087 -100 C
ATOM 1595 H THR A 104 15.988 -18.038 -6.826 1.00 25.04 H
ATOM 1596 HA THR A 104 17.448 -19.646 -8.467 1.00 23.37 H
ATOM 1597 HB THR A 104 17.127 -20.001 -5.666 1.00 26.48 H
ATOM 1598 HG1 THR A 104 19.303 -19.582 -5.636 1.00 28.23 H
ATOM 1599 HG21 THR A 104 18.553 -21.843 -5.860 1.00 26.72 H
ATOM 1600 HG22 THR A 104 17.262 -22.079 -6.739 1.00 26.72 H
ATOM 1601 HG23 THR A 104 18.615 -21.640 -7.425 1.00 26.72 H
ATOM 1602 N TYR A 105 15.653 -21.279 -8.872 1.00 16.45 N
ANISOU 1602 N TYR A 105 2112 2386 1751 940 -624 -238 N
ATOM 1603 CA TYR A 105 14.496 -22.072 -9.269 1.00 14.95 C
ANISOU 1603 CA TYR A 105 1907 2309 1465 932 -459 -176 C
ATOM 1604 C TYR A 105 14.793 -23.561 -9.152 1.00 14.74 C
ANISOU 1604 C TYR A 105 1854 2272 1475 835 -452 61 C
ATOM 1605 O TYR A 105 15.884 -24.017 -9.506 1.00 13.15 O
ANISOU 1605 O TYR A 105 1597 1867 1531 787 -507 153 O
ATOM 1606 CB TYR A 105 14.081 -21.791 -10.717 1.00 13.71 C
ANISOU 1606 CB TYR A 105 1757 1986 1465 911 -336 -212 C
ATOM 1607 CG TYR A 105 13.633 -20.372 -10.990 1.00 12.97 C
ANISOU 1607 CG TYR A 105 1722 1840 1367 946 -388 -390 C
ATOM 1608 CD1 TYR A 105 14.555 -19.346 -11.068 1.00 12.88 C
ANISOU 1608 CD1 TYR A 105 1761 1676 1457 926 -489 -450 C
ATOM 1609 CD2 TYR A 105 12.297 -20.069 -11.207 1.00 13.28 C
ANISOU 1609 CD2 TYR A 105 1740 1957 1350 976 -371 -477 C
ATOM 1610 CE1 TYR A 105 14.173 -18.059 -11.330 1.00 13.71 C
ANISOU 1610 CE1 TYR A 105 1923 1705 1581 943 -580 -567 C
ATOM 1611 CE2 TYR A 105 11.891 -18.761 -11.468 1.00 14.45 C
ANISOU 1611 CE2 TYR A 105 1917 2015 1559 998 -483 -602 C
ATOM 1612 CZ TYR A 105 12.841 -17.764 -11.528 1.00 14.81 C
ANISOU 1612 CZ TYR A 105 2040 1909 1679 985 -590 -634 C
ATOM 1613 OH TYR A 105 12.483 -16.463 -11.784 1.00 17.05 O
ANISOU 1613 OH TYR A 105 2359 2084 2037 1015 -729 -736 O
ATOM 1614 H TYR A 105 16.355 -21.450 -9.339 1.00 19.74 H
ATOM 1615 HA TYR A 105 13.747 -21.862 -8.689 1.00 17.94 H
ATOM 1616 HB2 TYR A 105 14.838 -21.975 -11.296 1.00 16.45 H
ATOM 1617 HB3 TYR A 105 13.345 -22.379 -10.947 1.00 16.45 H
ATOM 1618 HD1 TYR A 105 15.456 -19.534 -10.933 1.00 15.46 H
ATOM 1619 HD2 TYR A 105 11.661 -20.746 -11.162 1.00 15.94 H
ATOM 1620 HE1 TYR A 105 14.810 -17.382 -11.368 1.00 16.45 H
ATOM 1621 HE2 TYR A 105 10.993 -18.564 -11.604 1.00 17.34 H
ATOM 1622 HH TYR A 105 11.651 -16.409 -11.886 1.00 20.47 H
ATOM 1623 N ASP A 106 13.804 -24.317 -8.680 1.00 15.15 N
ANISOU 1623 N ASP A 106 1928 2516 1312 770 -364 133 N
ATOM 1624 CA ASP A 106 13.852 -25.773 -8.706 1.00 14.81 C
ANISOU 1624 CA ASP A 106 1882 2427 1316 667 -358 368 C
ATOM 1625 C ASP A 106 13.335 -26.287 -10.042 1.00 13.51 C
ANISOU 1625 C ASP A 106 1649 2153 1333 679 -191 374 C
ATOM 1626 O ASP A 106 12.329 -25.798 -10.557 1.00 13.09 O
ANISOU 1626 O ASP A 106 1573 2186 1214 720 -71 239 O

ATOM 1627 CB ASP A 106 13.020 -26.357 -7.567 1.00 16.19 C
ANISOU 1627 CB ASP A 106 2153 2856 1144 526 -326 460 C
ATOM 1628 CG ASP A 106 13.595 -26.026 -6.207 1.00 19.52 C
ANISOU 1628 CG ASP A 106 2713 3381 1321 455 -519 486 C
ATOM 1629 OD1 ASP A 106 14.834 -26.097 -6.061 1.00 19.01 O
ANISOU 1629 OD1 ASP A 106 2659 3107 1457 473 -761 579 O
ATOM 1630 OD2 ASP A 106 12.815 -25.682 -5.293 1.00 22.49 O
ANISOU 1630 OD2 ASP A 106 3176 3992 1377 342 -410 367 O
ATOM 1631 H ASP A 106 13.082 -24.002 -8.334 1.00 18.18 H
ATOM 1632 HA ASP A 106 14.769 -26.067 -8.598 1.00 17.77 H
ATOM 1633 HB2 ASP A 106 12.121 -25.994 -7.612 1.00 19.43 H
ATOM 1634 HB3 ASP A 106 12.994 -27.323 -7.657 1.00 19.43 H
ATOM 1635 N ILE A 107 14.021 -27.291 -10.591 1.00 13.85 N
ANISOU 1635 N ILE A 107 1651 1989 1624 644 -210 509 N
ATOM 1636 CA ILE A 107 13.686 -27.864 -11.895 1.00 13.25 C
ANISOU 1636 CA ILE A 107 1534 1788 1713 627 -54 494 C
ATOM 1637 C ILE A 107 12.938 -29.176 -11.678 1.00 14.29 C
ANISOU 1637 C ILE A 107 1673 1966 1793 526 -16 654 C
ATOM 1638 O ILE A 107 13.432 -30.068 -10.978 1.00 15.78 O
ANISOU 1638 O ILE A 107 1879 2078 2039 466 -149 834 O
ATOM 1639 CB ILE A 107 14.953 -28.096 -12.744 1.00 13.61 C
ANISOU 1639 CB ILE A 107 1532 1574 2065 577 -49 407 C
ATOM 1640 CG1 ILE A 107 15.699 -26.781 -12.983 1.00 13.73 C
ANISOU 1640 CG1 ILE A 107 1555 1546 2116 604 -72 251 C
ATOM 1641 CG2 ILE A 107 14.605 -28.764 -14.092 1.00 12.65 C
ANISOU 1641 CG2 ILE A 107 1412 1360 2033 506 123 361 C
ATOM 1642 CD1 ILE A 107 17.125 -26.970 -13.549 1.00 14.53 C
ANISOU 1642 CD1 ILE A 107 1584 1489 2450 551 -29 180 C
ATOM 1643 H ILE A 107 14.700 -27.665 -10.218 1.00 16.62 H
ATOM 1644 HA ILE A 107 13.104 -27.254 -12.375 1.00 15.90 H
ATOM 1645 HB ILE A 107 15.540 -28.692 -12.253 1.00 16.33 H
ATOM 1646 HG12 ILE A 107 15.196 -26.247 -13.617 1.00 16.48 H
ATOM 1647 HG13 ILE A 107 15.775 -26.306 -12.140 1.00 16.48 H
ATOM 1648 HG21 ILE A 107 15.421 -28.895 -14.599 1.00 15.18 H
ATOM 1649 HG22 ILE A 107 14.181 -29.619 -13.919 1.00 15.18 H
ATOM 1650 HG23 ILE A 107 13.999 -28.186 -14.582 1.00 15.18 H
ATOM 1651 HD11 ILE A 107 17.533 -26.099 -13.674 1.00 17.44 H
ATOM 1652 HD12 ILE A 107 17.647 -27.493 -12.921 1.00 17.44 H
ATOM 1653 HD13 ILE A 107 17.068 -27.433 -14.399 1.00 17.44 H
ATOM 1654 N TYR A 108 11.757 -29.304 -12.289 1.00 14.30 N
ANISOU 1654 N TYR A 108 1663 2059 1709 495 126 598 N
ATOM 1655 CA TYR A 108 10.967 -30.529 -12.208 1.00 15.03 C
ANISOU 1655 CA TYR A 108 1749 2185 1775 370 185 730 C
ATOM 1656 C TYR A 108 10.540 -30.963 -13.603 1.00 16.05 C
ANISOU 1656 C TYR A 108 1850 2188 2060 358 293 658 C
ATOM 1657 O TYR A 108 10.505 -30.164 -14.546 1.00 13.84 O
ANISOU 1657 O TYR A 108 1586 1867 1804 426 328 505 O
ATOM 1658 CB TYR A 108 9.696 -30.357 -11.355 1.00 13.68 C
ANISOU 1658 CB TYR A 108 1566 2317 1314 287 268 708 C
ATOM 1659 CG TYR A 108 9.901 -29.837 -9.954 1.00 14.72 C
ANISOU 1659 CG TYR A 108 1769 2637 1188 252 207 728 C
ATOM 1660 CD1 TYR A 108 10.259 -30.693 -8.924 1.00 16.78 C
ANISOU 1660 CD1 TYR A 108 2157 2901 1317 91 103 969 C

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ATOM   1661  CD2 TYR A 108      9.703 -28.493  -9.652  1.00 14.77           C
ANISOU 1661  CD2 TYR A 108    1743   2800   1068    361    227    504      C
ATOM   1662  CE1 TYR A 108     10.431 -30.229  -7.640  1.00 18.79           C
ANISOU 1662  CE1 TYR A 108    2533   3302   1302     15     31    953      C
ATOM   1663  CE2 TYR A 108      9.877 -28.018  -8.366  1.00 16.39           C
ANISOU 1663  CE2 TYR A 108    2032   3188   1007    309    186    481      C
ATOM   1664  CZ  TYR A 108     10.237 -28.893  -7.361  1.00 18.55           C
ANISOU 1664  CZ  TYR A 108    2459   3467   1120    118     94    709      C
ATOM   1665  OH  TYR A 108     10.413 -28.432  -6.070  1.00 20.93           O
ANISOU 1665  OH  TYR A 108    2903   3888   1161     23     35    658      O
ATOM   1666  H   TYR A 108     11.391 -28.687 -12.762  1.00 17.15           H
ATOM   1667  HA  TYR A 108     11.505 -31.235 -11.818  1.00 18.03           H
ATOM   1668  HB2 TYR A 108      9.106 -29.736 -11.810  1.00 16.41           H
ATOM   1669  HB3 TYR A 108      9.260 -31.220 -11.282  1.00 16.41           H
ATOM   1670  HD1 TYR A 108     10.389 -31.596  -9.105  1.00 20.13           H
ATOM   1671  HD2 TYR A 108      9.458 -27.903 -10.328  1.00 17.72           H
ATOM   1672  HE1 TYR A 108     10.676 -30.816  -6.962  1.00 22.54           H
ATOM   1673  HE2 TYR A 108      9.746 -27.117  -8.178  1.00 19.67           H
ATOM   1674  HH  TYR A 108     10.264 -27.606  -6.037  1.00 25.11           H
ATOM   1675  N  ATHR A 109     10.228 -32.258 -13.731  0.75 17.72           N
ANISOU 1675  N  ATHR A 109    2053   2316   2362    245    320    780      N
ATOM   1676  N  BTHR A 109     10.191 -32.240 -13.719  0.25 17.77           N
ANISOU 1676  N  BTHR A 109    2060   2331   2361    244    322    779      N
ATOM   1677  CA ATHR A 109      9.612 -32.805 -14.934  0.75 18.29           C
ANISOU 1677  CA ATHR A 109    2113   2300   2537    196    413    707      C
ATOM   1678  CA BTHR A 109      9.587 -32.767 -14.932  0.25 18.22           C
ANISOU 1678  CA BTHR A 109    2104   2298   2521    197    414    703      C
ATOM   1679  C  ATHR A 109      8.401 -33.638 -14.543  0.75 19.10           C
ANISOU 1679  C  ATHR A 109    2176   2528   2553     51    458    799      C
ATOM   1680  C  BTHR A 109      8.402 -33.640 -14.555  0.25 19.03           C
ANISOU 1680  C  BTHR A 109    2167   2518   2545     51    458    798      C
ATOM   1681  O  ATHR A 109      8.417 -34.334 -13.520  0.75 20.52           O
ANISOU 1681  O  ATHR A 109    2382   2736   2677    -60    421    987      O
ATOM   1682  O  BTHR A 109      8.443 -34.366 -13.556  0.25 20.72           O
ANISOU 1682  O  BTHR A 109    2409   2751   2714    -59    419    988      O
ATOM   1683  CB ATHR A 109     10.586 -33.679 -15.769  0.75 18.60           C
ANISOU 1683  CB ATHR A 109    2162   2035   2869    183    431    696      C
ATOM   1684  CB BTHR A 109     10.589 -33.573 -15.772  0.25 18.47           C
ANISOU 1684  CB BTHR A 109    2148   2030   2840    191    432    687      C
ATOM   1685  OG1ATHR A 109     10.993 -34.838 -15.024  0.75 20.35           O
ANISOU 1685  OG1ATHR A 109    2366   2131   3236    126    326    861      O
ATOM   1686  OG1BTHR A 109      9.988 -33.923 -17.025  0.25 18.56           O
ANISOU 1686  OG1BTHR A 109    2191   1977   2885    127    528    570      O
ATOM   1687  CG2ATHR A 109     11.806 -32.878 -16.199  0.75 18.19           C
ANISOU 1687  CG2ATHR A 109    2114   1871   2928    278    446    568      C
ATOM   1688  CG2BTHR A 109     11.028 -34.842 -15.038  0.25 20.47           C
ANISOU 1688  CG2BTHR A 109    2380   2140   3259    128    325    858      C
ATOM   1689  H  ATHR A 109     10.368 -32.847 -13.120  0.75 21.26           H
ATOM   1690  H  BTHR A 109     10.296 -32.827 -13.100  0.25 21.33           H
ATOM   1691  HA ATHR A 109      9.308 -32.075 -15.495  0.75 21.95           H
ATOM   1692  HA BTHR A 109      9.262 -32.031 -15.472  0.25 21.86           H
ATOM   1693  HB ATHR A 109     10.128 -33.972 -16.573  0.75 22.32           H
ATOM   1694  HB BTHR A 109     11.376 -33.030 -15.936  0.25 22.16           H
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ATOM   1695  HG1ATHR A 109      11.383 -34.603 -14.318  0.75 24.42           H
ATOM   1696  HG1BTHR A 109       9.300 -34.387 -16.895  0.25 22.27           H
ATOM   1697 HG21ATHR A 109      12.403 -33.438 -16.719  0.75 21.83           H
ATOM   1698 HG21BTHR A 109      11.660 -35.337 -15.583  0.25 24.57           H
ATOM   1699 HG22ATHR A 109      11.531 -32.121 -16.741  0.75 21.83           H
ATOM   1700 HG22BTHR A 109      11.452 -34.609 -14.198  0.25 24.57           H
ATOM   1701 HG23ATHR A 109      12.279 -32.551 -15.418  0.75 21.83           H
ATOM   1702 HG23BTHR A 109      10.259 -35.404 -14.858  0.25 24.57           H
ATOM   1703  N   THR A 110       7.343 -33.551 -15.355  1.00 18.28           N
ANISOU 1703  N   THR A 110    2020   2491   2432     26    517    673      N
ATOM   1704  CA  THR A 110       6.133 -34.336 -15.153  1.00 18.91           C
ANISOU 1704  CA  THR A 110    2016   2684   2485   -132    579    716      C
ATOM   1705  C   THR A 110       5.578 -34.735 -16.514  1.00 16.01           C
ANISOU 1705  C   THR A 110    1641   2195   2249   -163    574    604      C
ATOM   1706  O   THR A 110       6.100 -34.344 -17.562  1.00 13.63           O
ANISOU 1706  O   THR A 110    1435   1747   1997    -81    537    496      O
ATOM   1707  CB  THR A 110       5.078 -33.556 -14.361  1.00 21.91           C
ANISOU 1707  CB  THR A 110    2260   3383   2681   -140    646    615      C
ATOM   1708  OG1 THR A 110       4.794 -32.328 -15.038  1.00 20.58           O
ANISOU 1708  OG1 THR A 110    2041   3252   2528     37    580    397      O
ATOM   1709  CG2 THR A 110       5.568 -33.249 -12.943  1.00 23.49           C
ANISOU 1709  CG2 THR A 110    2531   3703   2690   -163    646    690      C
ATOM   1710  H   THR A 110       7.303 -33.032 -16.040  1.00 21.93           H
ATOM   1711  HA  THR A 110       6.351 -35.143 -14.662  1.00 22.69           H
ATOM   1712  HB  THR A 110       4.267 -34.085 -14.297  1.00 26.29           H
ATOM   1713  HG1 THR A 110       4.502 -32.486 -15.810  1.00 24.70           H
ATOM   1714 HG21 THR A 110       4.888 -32.757 -12.457  1.00 28.19           H
ATOM   1715 HG22 THR A 110       5.756 -34.076 -12.471  1.00 28.19           H
ATOM   1716 HG23 THR A 110       6.377 -32.716 -12.981  1.00 28.19           H
ATOM   1717  N   THR A 111       4.502 -35.519 -16.493  1.00 17.17           N
ANISOU 1717  N   THR A 111    1691   2407   2428   -318    617    623      N
ATOM   1718  CA  THR A 111       3.762 -35.882 -17.694  1.00 17.14           C
ANISOU 1718  CA  THR A 111    1664   2320   2529   -371    575    501      C
ATOM   1719  C   THR A 111       2.280 -35.626 -17.460  1.00 18.10           C
ANISOU 1719  C   THR A 111    1563   2680   2635   -430    585    392      C
ATOM   1720  O   THR A 111       1.769 -35.869 -16.364  1.00 20.05           O
ANISOU 1720  O   THR A 111    1680   3117   2822   -550    710    456      O
ATOM   1721  CB  THR A 111       3.979 -37.357 -18.061  1.00 17.91           C
ANISOU 1721  CB  THR A 111    1830   2182   2793   -526    597    599      C
ATOM   1722  OG1 THR A 111       5.372 -37.593 -18.275  1.00 18.63           O
ANISOU 1722  OG1 THR A 111    2060   2035   2982   -450    595    637      O
ATOM   1723  CG2 THR A 111       3.198 -37.748 -19.319  1.00 17.07           C
ANISOU 1723  CG2 THR A 111    1723   1993   2770   -604    540    449      C
ATOM   1724  H   THR A 111       4.176 -35.860 -15.775  1.00 20.61           H
ATOM   1725  HA  THR A 111       4.057 -35.332 -18.437  1.00 20.57           H
ATOM   1726  HB  THR A 111       3.671 -37.915 -17.329  1.00 21.49           H
ATOM   1727  HG1 THR A 111       5.499 -38.399 -18.476  1.00 22.35           H
ATOM   1728 HG21 THR A 111       3.353 -38.682 -19.528  1.00 20.48           H
ATOM   1729 HG22 THR A 111       2.249 -37.610 -19.176  1.00 20.48           H
ATOM   1730 HG23 THR A 111       3.486 -37.205 -20.069  1.00 20.48           H
ATOM   1731  N   ARG A 112       1.593 -35.137 -18.489  1.00 18.87           N
ANISOU 1731  N   ARG A 112    1616   2762   2790   -366    446    215      N
ATOM   1732  CA  ARG A 112       0.138 -35.040 -18.491  1.00 22.18           C
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ANISOU 1732 CA ARG A 112 1765 3349 3311 -417 405 65 C
ATOM 1733 C ARG A 112 -0.426 -36.045 -19.482 1.00 23.41 C
ANISOU 1733 C ARG A 112 1934 3359 3603 -571 319 43 C
ATOM 1734 O ARG A 112 0.081 -36.182 -20.599 1.00 21.85 O
ANISOU 1734 O ARG A 112 1970 2946 3386 -554 195 30 O
ATOM 1735 CB ARG A 112 -0.343 -33.632 -18.867 1.00 24.06 C
ANISOU 1735 CB ARG A 112 1913 3652 3577 -204 209 -138 C
ATOM 1736 CG ARG A 112 0.154 -32.553 -17.936 1.00 25.22 C
ANISOU 1736 CG ARG A 112 2041 3928 3615 -43 276 -165 C
ATOM 1737 CD ARG A 112 -0.766 -32.209 -16.751 1.00 29.63 C
ANISOU 1737 CD ARG A 112 2261 4784 4212 -56 437 -321 C
ATOM 1738 NE ARG A 112 -1.950 -33.064 -16.613 1.00 34.03 N
ANISOU 1738 NE ARG A 112 2595 5430 4902 -246 532 -370 N
ATOM 1739 CZ ARG A 112 -3.214 -32.644 -16.694 1.00 37.86 C
ANISOU 1739 CZ ARG A 112 2843 5969 5573 -192 448 -582 C
ATOM 1740 NH1 ARG A 112 -3.506 -31.364 -16.918 1.00 38.73 N
ANISOU 1740 NH1 ARG A 112 2894 6041 5779 45 250 -774 N
ATOM 1741 NH2 ARG A 112 -4.205 -33.515 -16.545 1.00 41.25 N
ANISOU 1741 NH2 ARG A 112 3106 6459 6106 -381 550 -596 N
ATOM 1742 H ARG A 112 1.957 -34.850 -19.214 1.00 22.64 H
ATOM 1743 HA ARG A 112 -0.201 -35.255 -17.608 1.00 26.61 H
ATOM 1744 HB2 ARG A 112 -0.029 -33.422 -19.760 1.00 28.87 H
ATOM 1745 HB3 ARG A 112 -1.313 -33.617 -18.847 1.00 28.87 H
ATOM 1746 HG2 ARG A 112 1.006 -32.835 -17.569 1.00 30.27 H
ATOM 1747 HG3 ARG A 112 0.278 -31.740 -18.451 1.00 30.27 H
ATOM 1748 HD2 ARG A 112 -0.253 -32.286 -15.931 1.00 35.55 H
ATOM 1749 HD3 ARG A 112 -1.076 -31.296 -16.856 1.00 35.55 H
ATOM 1750 HE ARG A 112 -1.819 -33.901 -16.469 1.00 40.83 H
ATOM 1751 HH11 ARG A 112 -2.874 -30.789 -17.014 1.00 46.47 H
ATOM 1752 HH12 ARG A 112 -4.327 -31.112 -16.967 1.00 46.47 H
ATOM 1753 HH21 ARG A 112 -4.030 -34.345 -16.401 1.00 49.50 H
ATOM 1754 HH22 ARG A 112 -5.022 -33.251 -16.598 1.00 49.50 H
ATOM 1755 N TYR A 113 -1.486 -36.733 -19.072 1.00 22.58 N
ANISOU 1755 N TYR A 113 1777 2759 4044 -14 340 830 N
ATOM 1756 CA TYR A 113 -2.086 -37.802 -19.858 1.00 24.34 C
ANISOU 1756 CA TYR A 113 1939 2813 4498 -101 258 811 C
ATOM 1757 C TYR A 113 -3.491 -37.405 -20.286 1.00 25.50 C
ANISOU 1757 C TYR A 113 1955 2963 4772 -138 207 754 C
ATOM 1758 O TYR A 113 -4.298 -36.975 -19.456 1.00 26.42 O
ANISOU 1758 O TYR A 113 1971 3183 4885 -131 304 833 O
ATOM 1759 CB TYR A 113 -2.142 -39.099 -19.052 1.00 26.24 C
ANISOU 1759 CB TYR A 113 2111 2976 4883 -160 352 985 C
ATOM 1760 CG TYR A 113 -0.796 -39.569 -18.572 1.00 25.60 C
ANISOU 1760 CG TYR A 113 2148 2894 4684 -115 402 1054 C
ATOM 1761 CD1 TYR A 113 -0.303 -39.181 -17.334 1.00 25.48 C
ANISOU 1761 CD1 TYR A 113 2154 3028 4500 -46 526 1167 C
ATOM 1762 CD2 TYR A 113 -0.016 -40.407 -19.354 1.00 25.51 C
ANISOU 1762 CD2 TYR A 113 2230 2735 4726 -129 317 1002 C
ATOM 1763 CE1 TYR A 113 0.930 -39.615 -16.892 1.00 25.79 C
ANISOU 1763 CE1 TYR A 113 2292 3071 4435 1 557 1227 C
ATOM 1764 CE2 TYR A 113 1.214 -40.838 -18.925 1.00 25.71 C
ANISOU 1764 CE2 TYR A 113 2354 2764 4652 -81 362 1068 C
ATOM 1765 CZ TYR A 113 1.686 -40.443 -17.694 1.00 26.48 C

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ANISOU 1765  CZ  TYR A 113     2458   3011   4591    -19    478   1182      C
ATOM   1766  OH  TYR A 113      2.923 -40.888 -17.273  1.00 28.28           O
ANISOU 1766  OH  TYR A 113     2776   3245   4725     35    507   1244      O
ATOM   1767  H   TYR A 113     -1.885 -36.595 -18.323  1.00 27.10           H
ATOM   1768  HA  TYR A 113     -1.554 -37.957 -20.654  1.00 29.21           H
ATOM   1769  HB2 TYR A 113     -2.703 -38.961 -18.273  1.00 31.49           H
ATOM   1770  HB3 TYR A 113     -2.518 -39.798 -19.609  1.00 31.49           H
ATOM   1771  HD1 TYR A 113     -0.813 -38.621 -16.793  1.00 30.58           H
ATOM   1772  HD2 TYR A 113     -0.329 -40.676 -20.188  1.00 30.61           H
ATOM   1773  HE1 TYR A 113      1.251 -39.347 -16.061  1.00 30.94           H
ATOM   1774  HE2 TYR A 113      1.725 -41.399 -19.462  1.00 30.85           H
ATOM   1775  HH  TYR A 113      3.266 -41.381 -17.860  1.00 33.94           H
ATOM   1776  N   ASN A 114     -3.779 -37.557 -21.576  1.00 26.32           N
ANISOU 1776  N   ASN A 114     2077   2955   4969   -161     49    608      N
ATOM   1777  CA  ASN A 114     -5.131 -37.348 -22.093  1.00 29.17           C
ANISOU 1777  CA  ASN A 114     2303   3298   5484   -200    -32    543      C
ATOM   1778  C   ASN A 114     -5.663 -35.978 -21.694  1.00 26.29           C
ANISOU 1778  C   ASN A 114     1895   3106   4988   -135     27    533      C
ATOM   1779  O   ASN A 114     -6.820 -35.832 -21.295  1.00 27.35           O
ANISOU 1779  O   ASN A 114     1926   3282   5184   -156     65    569      O
ATOM   1780  CB  ASN A 114     -6.076 -38.445 -21.603  1.00 33.58           C
ANISOU 1780  CB  ASN A 114     2720   3762   6278   -298      7    653      C
ATOM   1781  CG  ASN A 114     -5.616 -39.825 -22.002  1.00 36.00           C
ANISOU 1781  CG  ASN A 114     3052   3876   6751   -366    -57    661      C
ATOM   1782  OD1 ASN A 114     -5.193 -40.046 -23.136  1.00 36.66           O
ANISOU 1782  OD1 ASN A 114     3220   3853   6855   -360   -212    516      O
ATOM   1783  ND2 ASN A 114     -5.690 -40.765 -21.068  1.00 37.61           N
ANISOU 1783  ND2 ASN A 114     3228   4036   7025   -401     59    819      N
ATOM   1784  H   ASN A 114     -3.206 -37.782 -22.177  1.00 31.59           H
ATOM   1785  HA  ASN A 114     -5.106 -37.387 -23.062  1.00 35.01           H
ATOM   1786  HB2 ASN A 114     -6.124 -38.413 -20.635  1.00 40.30           H
ATOM   1787  HB3 ASN A 114     -6.955 -38.300 -21.985  1.00 40.30           H
ATOM   1788 HD21 ASN A 114     -5.440 -41.568 -21.245  1.00 45.13           H
ATOM   1789 HD22 ASN A 114     -5.988 -40.570 -20.285  1.00 45.13           H
ATOM   1790  N   ALA A 115     -4.806 -34.963 -21.812  1.00 22.28           N
ANISOU 1790  N   ALA A 115     1533   2689   4245    -43     32    466      N
ATOM   1791  CA  ALA A 115     -5.141 -33.619 -21.367  1.00 21.08           C
ANISOU 1791  CA  ALA A 115     1367   2691   3951     30     92    453      C
ATOM   1792  C   ALA A 115     -5.147 -32.655 -22.546  1.00 20.55           C
ANISOU 1792  C   ALA A 115     1387   2625   3795     95    -32    289      C
ATOM   1793  O   ALA A 115     -4.661 -32.994 -23.634  1.00 19.64           O
ANISOU 1793  O   ALA A 115     1370   2408   3683    100   -147    193      O
ATOM   1794  CB  ALA A 115     -4.150 -33.145 -20.301  1.00 19.74           C
ANISOU 1794  CB  ALA A 115     1286   2630   3586     88    215    527      C
ATOM   1795  H   ALA A 115     -4.018 -35.032 -22.150  1.00 26.74           H
ATOM   1796  HA  ALA A 115     -6.029 -33.624 -20.975  1.00 25.30           H
ATOM   1797  HB1 ALA A 115     -4.393 -32.249 -20.020  1.00 23.69           H
ATOM   1798  HB2 ALA A 115     -4.187 -33.751 -19.544  1.00 23.69           H
ATOM   1799  HB3 ALA A 115     -3.257 -33.143 -20.680  1.00 23.69           H
ATOM   1800  N   PRO A 116     -5.699 -31.456 -22.379  1.00 21.81           N
ANISOU 1800  N   PRO A 116     1520   2896   3870    158     -7    256      N
ATOM   1801  CA  PRO A 116     -5.682 -30.485 -23.476  1.00 22.02           C
ANISOU 1801  CA  PRO A 116     1638   2924   3805    232   -112    116      C
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ATOM 1802 C PRO A 116 -4.278 -29.978 -23.760 1.00 20.99 C
ANISOU 1802 C PRO A 116 1691 2788 3495 290 -105 76 C
ATOM 1803 O PRO A 116 -3.474 -29.768 -22.849 1.00 21.49 O
ANISOU 1803 O PRO A 116 1799 2909 3460 299 -5 141 O
ATOM 1804 CB PRO A 116 -6.591 -29.357 -22.968 1.00 22.91 C
ANISOU 1804 CB PRO A 116 1668 3160 3876 288 -57 119 C
ATOM 1805 CG PRO A 116 -7.393 -29.959 -21.882 1.00 23.85 C
ANISOU 1805 CG PRO A 116 1650 3321 4091 226 45 239 C
ATOM 1806 CD PRO A 116 -6.524 -30.993 -21.252 1.00 23.47 C
ANISOU 1806 CD PRO A 116 1622 3226 4068 170 114 342 C
ATOM 1807 HA PRO A 116 -6.060 -30.871 -24.282 1.00 26.42 H
ATOM 1808 HB2 PRO A 116 -6.047 -28.628 -22.629 1.00 27.49 H
ATOM 1809 HB3 PRO A 116 -7.164 -29.051 -23.688 1.00 27.49 H
ATOM 1810 HG2 PRO A 116 -7.630 -29.275 -21.237 1.00 28.62 H
ATOM 1811 HG3 PRO A 116 -8.191 -30.366 -22.255 1.00 28.62 H
ATOM 1812 HD2 PRO A 116 -5.968 -30.597 -20.564 1.00 28.16 H
ATOM 1813 HD3 PRO A 116 -7.062 -31.722 -20.902 1.00 28.16 H
ATOM 1814 N SER A 117 -3.995 -29.779 -25.044 1.00 18.95 N
ANISOU 1814 N SER A 117 1538 2463 3200 336 -214 -32 N
ATOM 1815 CA SER A 117 -2.749 -29.173 -25.488 1.00 16.77 C
ANISOU 1815 CA SER A 117 1424 2177 2770 400 -202 -68 C
ATOM 1816 C SER A 117 -3.039 -28.353 -26.733 1.00 16.48 C
ANISOU 1816 C SER A 117 1462 2124 2674 488 -293 -176 C
ATOM 1817 O SER A 117 -4.176 -28.302 -27.216 1.00 17.17 O
ANISOU 1817 O SER A 117 1478 2213 2834 500 -378 -230 O
ATOM 1818 CB SER A 117 -1.687 -30.228 -25.773 1.00 15.64 C
ANISOU 1818 CB SER A 117 1361 1942 2639 372 -213 -48 C
ATOM 1819 OG SER A 117 -1.991 -30.937 -26.960 1.00 16.06 O
ANISOU 1819 OG SER A 117 1446 1893 2763 380 -337 -127 O
ATOM 1820 H SER A 117 -4.522 -29.993 -25.690 1.00 22.74 H
ATOM 1821 HA SER A 117 -2.415 -28.578 -24.798 1.00 20.12 H
ATOM 1822 HB2 SER A 117 -0.827 -29.791 -25.878 1.00 18.77 H
ATOM 1823 HB3 SER A 117 -1.654 -30.852 -25.032 1.00 18.77 H
ATOM 1824 HG SER A 117 -2.735 -31.320 -26.884 1.00 19.27 H
ATOM 1825 N ILE A 118 -1.993 -27.724 -27.274 1.00 16.77 N
ANISOU 1825 N ILE A 118 1641 2145 2585 556 -275 -201 N
ATOM 1826 CA ILE A 118 -2.128 -27.043 -28.552 1.00 17.98 C
ANISOU 1826 CA ILE A 118 1890 2272 2669 657 -350 -286 C
ATOM 1827 C ILE A 118 -2.438 -28.012 -29.687 1.00 19.61 C
ANISOU 1827 C ILE A 118 2131 2393 2929 675 -481 -357 C
ATOM 1828 O ILE A 118 -2.812 -27.568 -30.774 1.00 19.79 O
ANISOU 1828 O ILE A 118 2221 2402 2897 772 -568 -437 O
ATOM 1829 CB ILE A 118 -0.854 -26.220 -28.872 1.00 17.60 C
ANISOU 1829 CB ILE A 118 1981 2214 2493 723 -280 -273 C
ATOM 1830 CG1 ILE A 118 0.395 -27.119 -28.870 1.00 17.92 C
ANISOU 1830 CG1 ILE A 118 2082 2195 2531 691 -244 -229 C
ATOM 1831 CG2 ILE A 118 -0.713 -25.062 -27.884 1.00 17.47 C
ANISOU 1831 CG2 ILE A 118 1939 2270 2428 709 -182 -232 C
ATOM 1832 CD1 ILE A 118 1.645 -26.422 -29.383 1.00 18.39 C
ANISOU 1832 CD1 ILE A 118 2267 2235 2485 719 -169 -199 C
ATOM 1833 H ILE A 118 -1.209 -27.680 -26.923 1.00 20.12 H
ATOM 1834 HA ILE A 118 -2.869 -26.420 -28.491 1.00 21.57 H
ATOM 1835 HB ILE A 118 -0.953 -25.847 -29.761 1.00 21.12 H

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ATOM   1836 HG12 ILE A 118      0.570 -27.412 -27.962  1.00 21.50          H
ATOM   1837 HG13 ILE A 118      0.229 -27.888 -29.438  1.00 21.50          H
ATOM   1838 HG21 ILE A 118      0.088 -24.559 -28.100  1.00 20.96          H
ATOM   1839 HG22 ILE A 118     -1.492 -24.489 -27.957  1.00 20.96          H
ATOM   1840 HG23 ILE A 118     -0.647 -25.420 -26.985  1.00 20.96          H
ATOM   1841 HD11 ILE A 118      2.388 -27.045 -29.353  1.00 22.07          H
ATOM   1842 HD12 ILE A 118      1.492 -26.132 -30.295  1.00 22.07          H
ATOM   1843 HD13 ILE A 118      1.833 -25.656 -28.818  1.00 22.07          H
ATOM   1844  N   ASP A 119     -2.303 -29.328 -29.459  1.00 20.03          N
ANISOU 1844  N   ASP A 119    2143   2382   3084    595   -504   -335      N
ATOM   1845  CA  ASP A 119     -2.551 -30.339 -30.487  1.00 21.38          C
ANISOU 1845  CA  ASP A 119    2352   2453   3319    610   -642   -417      C
ATOM   1846  C   ASP A 119     -3.918 -31.012 -30.383  1.00 22.82          C
ANISOU 1846  C   ASP A 119    2377   2609   3683    536   -749   -453      C
ATOM   1847  O   ASP A 119     -4.276 -31.781 -31.284  1.00 24.98          O
ANISOU 1847  O   ASP A 119    2673   2794   4026    551   -895   -548      O
ATOM   1848  CB  ASP A 119     -1.470 -31.427 -30.433  1.00 21.77          C
ANISOU 1848  CB  ASP A 119    2469   2420   3382    577   -611   -380      C
ATOM   1849  CG  ASP A 119     -0.245 -31.093 -31.282  1.00 21.77          C
ANISOU 1849  CG  ASP A 119    2649   2399   3225    688   -580   -396      C
ATOM   1850  OD1 ASP A 119     -0.187 -29.988 -31.865  1.00 22.47          O
ANISOU 1850  OD1 ASP A 119    2811   2533   3192    783   -567   -423      O
ATOM   1851  OD2 ASP A 119      0.665 -31.941 -31.358  1.00 21.63          O
ANISOU 1851  OD2 ASP A 119    2694   2315   3208    682   -557   -372      O
ATOM   1852  H   ASP A 119     -2.065 -29.660 -28.702  1.00 24.03          H
ATOM   1853  HA  ASP A 119     -2.498 -29.914 -31.357  1.00 25.66          H
ATOM   1854  HB2 ASP A 119     -1.177 -31.535 -29.515  1.00 26.12          H
ATOM   1855  HB3 ASP A 119     -1.844 -32.259 -30.762  1.00 26.12          H
ATOM   1856  N   GLY A 120     -4.679 -30.774 -29.328  1.00 22.86          N
ANISOU 1856  N   GLY A 120    2223   2685   3776    462   -682   -383      N
ATOM   1857  CA  GLY A 120     -5.982 -31.398 -29.210  1.00 24.63          C
ANISOU 1857  CA  GLY A 120    2273   2884   4202    387   -768   -400      C
ATOM   1858  C   GLY A 120     -6.452 -31.463 -27.772  1.00 25.60          C
ANISOU 1858  C   GLY A 120    2228   3074   4423    292   -633   -269      C
ATOM   1859  O   GLY A 120     -5.747 -31.077 -26.839  1.00 22.77          O
ANISOU 1859  O   GLY A 120    1901   2784   3965    290   -486   -176      O
ATOM   1860  H   GLY A 120     -4.465 -30.261 -28.672  1.00 27.43          H
ATOM   1861  HA2 GLY A 120     -6.631 -30.892 -29.724  1.00 29.56          H
ATOM   1862  HA3 GLY A 120     -5.943 -32.300 -29.563  1.00 29.56          H
ATOM   1863  N  AASP A 121     -7.678 -31.978 -27.618  0.63 28.46          N
ANISOU 1863  N  AASP A 121    2407   3415   4991    221   -690   -264      N
ATOM   1864  N  BASP A 121     -7.669 -31.991 -27.618  0.37 28.54          N
ANISOU 1864  N  BASP A 121    2419   3425   5002    220   -690   -264      N
ATOM   1865  CA AASP A 121     -8.331 -32.030 -26.313  0.63 29.83          C
ANISOU 1865  CA AASP A 121    2413   3660   5260    146   -551   -129      C
ATOM   1866  CA BASP A 121     -8.327 -32.023 -26.317  0.37 29.86          C
ANISOU 1866  CA BASP A 121    2417   3664   5263    147   -551   -130      C
ATOM   1867  C  AASP A 121     -7.790 -33.147 -25.430  0.63 30.01          C
ANISOU 1867  C  AASP A 121    2395   3625   5380     51   -452     -2      C
ATOM   1868  C  BASP A 121     -7.822 -33.157 -25.433  0.37 30.03          C
ANISOU 1868  C  BASP A 121    2394   3628   5389     50   -453     -2      C
ATOM   1869  O  AASP A 121     -7.808 -33.021 -24.200  0.63 30.14          O
ANISOU 1869  O  AASP A 121    2355   3727   5369     29   -287    131      O
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ATOM   1870  O  BASP A 121     -7.893 -33.053 -24.203  0.37 30.30           O
ANISOU 1870  O  BASP A 121     2367   3745   5399     24   -290    132      O
ATOM   1871  CB AASP A 121     -9.840 -32.221 -26.484  0.63 33.03           C
ANISOU 1871  CB AASP A 121     2687   4056   5806     97   -608   -147      C
ATOM   1872  CB BASP A 121     -9.839 -32.154 -26.509  0.37 32.94           C
ANISOU 1872  CB BASP A 121     2680   4049   5785     103  -610   -151      C
ATOM   1873  CG AASP A 121    -10.485 -31.112 -27.285  0.63 33.58           C
ANISOU 1873  CG AASP A 121     2793   4191   5774     193  -694   -254      C
ATOM   1874  CG BASP A 121    -10.595 -32.151 -25.198  0.37 34.36           C
ANISOU 1874  CG BASP A 121     2722   4314   6020     46   -446     -7      C
ATOM   1875  OD1AASP A 121    -10.012 -29.959 -27.197  0.63 32.96           O
ANISOU 1875  OD1AASP A 121     2804   4207   5512     287  -634   -260      O
ATOM   1876  OD1BASP A 121    -10.376 -31.227 -24.386  0.37 33.83           O
ANISOU 1876  OD1BASP A 121     2674   4376   5803     104  -314     53      O
ATOM   1877  OD2AASP A 121    -11.469 -31.395 -28.003  0.63 35.79           O
ANISOU 1877  OD2AASP A 121     3016   4421   6163     177  -820   -329      O
ATOM   1878  OD2BASP A 121    -11.406 -33.077 -24.981  0.37 36.59           O
ANISOU 1878  OD2BASP A 121     2885   4527   6492     -46  -451     43      O
ATOM   1879  H  AASP A 121     -8.151 -32.304 -28.258  0.63 34.15           H
ATOM   1880  H  BASP A 121     -8.132 -32.337 -28.254  0.37 34.25           H
ATOM   1881  HA AASP A 121     -8.186 -31.188 -25.853  0.63 35.79           H
ATOM   1882  HA BASP A 121     -8.155 -31.187 -25.857  0.37 35.83           H
ATOM   1883  HB2AASP A 121    -10.001 -33.058 -26.946  0.63 39.63           H
ATOM   1884  HB2BASP A 121    -10.156 -31.406 -27.040  0.37 39.52           H
ATOM   1885  HB3AASP A 121    -10.257 -32.240 -25.608  0.63 39.63           H
ATOM   1886  HB3BASP A 121    -10.029 -32.989 -26.964  0.37 39.52           H
ATOM   1887  N   ARG A 122     -7.321 -34.241 -26.026  1.00 28.67           N
ANISOU 1887  N   ARG A 122     2286   3313   5293      7   -542    -41      N
ATOM   1888  CA  ARG A 122     -6.855 -35.410 -25.281  1.00 26.50           C
ANISOU 1888  CA  ARG A 122     1984   2961   5124    -82   -457     80      C
ATOM   1889  C   ARG A 122     -5.496 -35.821 -25.837  1.00 23.95           C
ANISOU 1889  C   ARG A 122     1861   2562   4678    -42   -490     33      C
ATOM   1890  O   ARG A 122     -5.413 -36.636 -26.760  1.00 24.35           O
ANISOU 1890  O   ARG A 122     1962   2473   4815    -54   -627    -60      O
ATOM   1891  CB  ARG A 122     -7.864 -36.545 -25.368  1.00 28.84           C
ANISOU 1891  CB  ARG A 122     2125   3130   5704   -193   -528     95      C
ATOM   1892  CG  ARG A 122     -7.447 -37.786 -24.598  1.00 30.24           C
ANISOU 1892  CG  ARG A 122     2276   3211   6005   -281   -433    234      C
ATOM   1893  H   ARG A 122     -7.249 -34.331 -26.878  1.00 34.40           H
ATOM   1894  HA  ARG A 122     -6.744 -35.173 -24.347  1.00 31.80           H
ATOM   1895  HB2 ARG A 122     -8.711 -36.240 -25.006  1.00 34.61           H
ATOM   1896  HB3 ARG A 122     -7.975 -36.795 -26.299  1.00 34.61           H
ATOM   1897  N   THR A 123     -4.435 -35.270 -25.258  1.00 21.78           N
ANISOU 1897  N   THR A 123     1692   2375   4208     10   -368     95      N
ATOM   1898  CA  THR A 123     -3.080 -35.540 -25.707  1.00 20.68           C
ANISOU 1898  CA  THR A 123     1728   2182   3946     58   -376     66      C
ATOM   1899  C   THR A 123     -2.214 -35.870 -24.502  1.00 19.59           C
ANISOU 1899  C   THR A 123     1599   2085   3761     34   -226    212      C
ATOM   1900  O   THR A 123     -2.564 -35.571 -23.356  1.00 19.99           O
ANISOU 1900  O   THR A 123     1554   2235   3806     11   -110    321      O
ATOM   1901  CB  THR A 123     -2.498 -34.341 -26.471  1.00 20.32           C
ANISOU 1901  CB  THR A 123     1823   2203   3694    171  -403    -31      C
ATOM   1902  OG1 THR A 123     -2.453 -33.203 -25.609  1.00 19.70           O
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ANISOU 1902 OG1 THR A 123 1720 2267 3500 198 -290 27 O
ATOM 1903 CG2 THR A 123 -3.371 -34.007 -27.684 1.00 21.43 C
ANISOU 1903 CG2 THR A 123 1967 2312 3862 218 -557 -172 C
ATOM 1904 H THR A 123 -4.477 -34.728 -24.591 1.00 26.13 H
ATOM 1905 HA THR A 123 -3.084 -36.307 -26.300 1.00 24.81 H
ATOM 1906 HB THR A 123 -1.603 -34.553 -26.780 1.00 24.38 H
ATOM 1907 HG1 THR A 123 -3.228 -33.012 -25.344 1.00 23.65 H
ATOM 1908 HG21 THR A 123 -2.998 -33.249 -28.162 1.00 25.71 H
ATOM 1909 HG22 THR A 123 -3.411 -34.768 -28.283 1.00 25.71 H
ATOM 1910 HG23 THR A 123 -4.270 -33.785 -27.394 1.00 25.71 H
ATOM 1911 N THR A 124 -1.074 -36.495 -24.769 1.00 18.36 N
ANISOU 1911 N THR A 124 1561 1856 3559 53 -229 214 N
ATOM 1912 CA THR A 124 -0.112 -36.832 -23.732 1.00 17.08 C
ANISOU 1912 CA THR A 124 1422 1729 3337 48 -107 342 C
ATOM 1913 C THR A 124 1.204 -36.142 -24.054 1.00 15.94 C
ANISOU 1913 C THR A 124 1421 1632 3002 134 -91 300 C
ATOM 1914 O THR A 124 1.667 -36.188 -25.197 1.00 16.84 O
ANISOU 1914 O THR A 124 1641 1676 3081 185 -171 202 O
ATOM 1915 CB THR A 124 0.061 -38.351 -23.630 1.00 18.24 C
ANISOU 1915 CB THR A 124 1557 1734 3641 -14 -114 407 C
ATOM 1916 OG1 THR A 124 -1.194 -38.945 -23.274 1.00 19.62 O
ANISOU 1916 OG1 THR A 124 1575 1857 4022 -105 -116 462 O
ATOM 1917 CG2 THR A 124 1.091 -38.712 -22.576 1.00 18.07 C
ANISOU 1917 CG2 THR A 124 1566 1754 3545 -2 7 543 C
ATOM 1918 H THR A 124 -0.832 -36.739 -25.557 1.00 22.03 H
ATOM 1919 HA THR A 124 -0.430 -36.501 -22.877 1.00 20.49 H
ATOM 1920 HB THR A 124 0.357 -38.703 -24.485 1.00 21.89 H
ATOM 1921 HG1 THR A 124 -1.771 -38.768 -23.859 1.00 23.54 H
ATOM 1922 HG21 THR A 124 1.188 -39.676 -22.524 1.00 21.68 H
ATOM 1923 HG22 THR A 124 1.948 -38.320 -22.802 1.00 21.68 H
ATOM 1924 HG23 THR A 124 0.809 -38.377 -21.710 1.00 21.68 H
ATOM 1925 N PHE A 125 1.794 -35.485 -23.060 1.00 14.89 N
ANISOU 1925 N PHE A 125 1290 1619 2751 158 10 373 N
ATOM 1926 CA PHE A 125 2.966 -34.670 -23.327 1.00 14.84 C
ANISOU 1926 CA PHE A 125 1390 1659 2591 229 23 333 C
ATOM 1927 C PHE A 125 3.777 -34.483 -22.058 1.00 14.39 C
ANISOU 1927 C PHE A 125 1322 1696 2447 239 117 430 C
ATOM 1928 O PHE A 125 3.247 -34.502 -20.943 1.00 14.90 O
ANISOU 1928 O PHE A 125 1307 1837 2519 215 181 512 O
ATOM 1929 CB PHE A 125 2.585 -33.298 -23.916 1.00 14.00 C
ANISOU 1929 CB PHE A 125 1306 1612 2401 278 -9 236 C
ATOM 1930 CG PHE A 125 1.582 -32.530 -23.094 1.00 14.96 C
ANISOU 1930 CG PHE A 125 1330 1839 2516 263 31 256 C
ATOM 1931 CD1 PHE A 125 0.221 -32.708 -23.292 1.00 15.61 C
ANISOU 1931 CD1 PHE A 125 1317 1905 2707 228 -11 237 C
ATOM 1932 CD2 PHE A 125 1.999 -31.622 -22.135 1.00 14.87 C
ANISOU 1932 CD2 PHE A 125 1318 1939 2392 292 103 288 C
ATOM 1933 CE1 PHE A 125 -0.706 -32.001 -22.537 1.00 16.51 C
ANISOU 1933 CE1 PHE A 125 1336 2123 2816 227 39 263 C
ATOM 1934 CE2 PHE A 125 1.081 -30.914 -21.380 1.00 15.49 C
ANISOU 1934 CE2 PHE A 125 1318 2116 2451 297 144 302 C
ATOM 1935 CZ PHE A 125 -0.273 -31.110 -21.580 1.00 16.47 C
ANISOU 1935 CZ PHE A 125 1347 2232 2681 268 121 296 C

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ATOM   1936  H   PHE A 125      1.539 -35.495 -22.239  1.00 17.87           H
ATOM   1937  HA  PHE A 125      3.525 -35.127 -23.975  1.00 17.81           H
ATOM   1938  HB2 PHE A 125      3.386 -32.756 -23.986  1.00 16.80           H
ATOM   1939  HB3 PHE A 125      2.202 -33.433 -24.797  1.00 16.80           H
ATOM   1940  HD1 PHE A 125     -0.075 -33.314 -23.933  1.00 18.73           H
ATOM   1941  HD2 PHE A 125      2.909 -31.491 -21.992  1.00 17.84           H
ATOM   1942  HE1 PHE A 125     -1.616 -32.132 -22.675  1.00 19.82           H
ATOM   1943  HE2 PHE A 125      1.375 -30.311 -20.736  1.00 18.59           H
ATOM   1944  HZ  PHE A 125     -0.892 -30.632 -21.076  1.00 19.77           H
ATOM   1945  N   THR A 126      5.075 -34.294 -22.260  1.00 12.84           N
ANISOU 1945  N   THR A 126     1209   1500   2170    284    124    420      N
ATOM   1946  CA  THR A 126      5.999 -33.966 -21.189  1.00 12.61           C
ANISOU 1946  CA  THR A 126     1179   1562   2051    306    184    484      C
ATOM   1947  C   THR A 126      5.892 -32.487 -20.816  1.00 11.44           C
ANISOU 1947  C   THR A 126     1022   1521   1805    335    195    432      C
ATOM   1948  O   THR A 126      5.599 -31.625 -21.654  1.00 11.20           O
ANISOU 1948  O   THR A 126     1020   1477   1758    354    161    345      O
ATOM   1949  CB  THR A 126      7.423 -34.318 -21.627  1.00 12.87           C
ANISOU 1949  CB  THR A 126     1285   1545   2062    342    179    488      C
ATOM   1950  OG1 THR A 126      7.504 -35.730 -21.849  1.00 15.12           O
ANISOU 1950  OG1 THR A 126     1582   1727   2437    324    172    538      O
ATOM   1951  CG2 THR A 126      8.464 -33.902 -20.583  1.00 13.87           C
ANISOU 1951  CG2 THR A 126     1402   1766   2104    369    217    537      C
ATOM   1952  H   THR A 126      5.452 -34.352 -23.030  1.00 15.41           H
ATOM   1953  HA  THR A 126      5.781 -34.494 -20.405  1.00 15.13           H
ATOM   1954  HB  THR A 126      7.624 -33.854 -22.455  1.00 15.45           H
ATOM   1955  HG1 THR A 126      8.281 -35.939 -22.090  1.00 18.15           H
ATOM   1956 HG21 THR A 126      9.353 -34.138 -20.890  1.00 16.65           H
ATOM   1957 HG22 THR A 126      8.425 -32.943 -20.440  1.00 16.65           H
ATOM   1958 HG23 THR A 126      8.290 -34.354 -19.743  1.00 16.65           H
ATOM   1959  N   GLN A 127      6.144 -32.206 -19.539  1.00 11.76           N
ANISOU 1959  N   GLN A 127     1031   1663   1773    349    239    486      N
ATOM   1960  CA  GLN A 127      6.183 -30.851 -19.002  1.00 12.41           C
ANISOU 1960  CA  GLN A 127     1114   1843   1760    384    242    433      C
ATOM   1961  C   GLN A 127      7.530 -30.597 -18.336  1.00 12.28           C
ANISOU 1961  C   GLN A 127     1121   1871   1671    416    239    444      C
ATOM   1962  O   GLN A 127      7.985 -31.410 -17.521  1.00 14.64           O
ANISOU 1962  O   GLN A 127     1409   2201   1954    424    261    528      O
ATOM   1963  CB  GLN A 127      5.072 -30.628 -17.976  1.00 13.88           C
ANISOU 1963  CB  GLN A 127     1236   2127   1912    392    288    469      C
ATOM   1964  CG  GLN A 127      3.668 -30.887 -18.470  1.00 15.62           C
ANISOU 1964  CG  GLN A 127     1398   2313   2223    357    292    469      C
ATOM   1965  CD  GLN A 127      2.654 -30.842 -17.337  1.00 17.65           C
ANISOU 1965  CD  GLN A 127     1576   2671   2459    371    365    539      C
ATOM   1966  OE1 GLN A 127      2.688 -31.677 -16.426  1.00 19.16           O
ANISOU 1966  OE1 GLN A 127     1736   2895   2650    370    427    654      O
ATOM   1967  NE2 GLN A 127      1.752 -29.865 -17.378  1.00 18.77           N
ANISOU 1967  NE2 GLN A 127     1688   2866   2577    395    367    479      N
ATOM   1968  H   GLN A 127      6.301 -32.808 -18.945  1.00 14.11           H
ATOM   1969  HA  GLN A 127      6.070 -30.213 -19.724  1.00 14.90           H
ATOM   1970  HB2 GLN A 127      5.229 -31.218 -17.222  1.00 16.66           H
ATOM   1971  HB3 GLN A 127      5.111 -29.705 -17.678  1.00 16.66           H
ATOM   1972  HG2 GLN A 127      3.428 -30.207 -19.119  1.00 18.74           H
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ATOM 1973 HG3 GLN A 127 3.630 -31.767 -18.876 1.00 18.74 H
ATOM 1974 HE21 GLN A 127 1.762 -29.298 -18.025 1.00 22.52 H
ATOM 1975 HE22 GLN A 127 1.159 -29.800 -16.759 1.00 22.52 H
ATOM 1976 N TYR A 128 8.147 -29.460 -18.656 1.00 11.15 N
ANISOU 1976 N TYR A 128 1008 1731 1497 436 208 363 N
ATOM 1977 CA TYR A 128 9.375 -29.003 -18.010 1.00 11.43 C
ANISOU 1977 CA TYR A 128 1049 1809 1486 461 185 352 C
ATOM 1978 C TYR A 128 9.031 -27.833 -17.098 1.00 11.46 C
ANISOU 1978 C TYR A 128 1043 1904 1408 492 169 290 C
ATOM 1979 O TYR A 128 8.339 -26.901 -17.520 1.00 10.05 O
ANISOU 1979 O TYR A 128 875 1716 1230 494 166 221 O
ATOM 1980 CB TYR A 128 10.424 -28.540 -19.026 1.00 11.40 C
ANISOU 1980 CB TYR A 128 1072 1723 1535 458 165 309 C
ATOM 1981 CG TYR A 128 10.965 -29.581 -19.988 1.00 11.24 C
ANISOU 1981 CG TYR A 128 1076 1612 1581 452 182 358 C
ATOM 1982 CD1 TYR A 128 10.757 -30.936 -19.786 1.00 12.10 C
ANISOU 1982 CD1 TYR A 128 1182 1707 1710 443 198 433 C
ATOM 1983 CD2 TYR A 128 11.686 -29.190 -21.109 1.00 11.26 C
ANISOU 1983 CD2 TYR A 128 1111 1539 1628 465 189 331 C
ATOM 1984 CE1 TYR A 128 11.259 -31.881 -20.679 1.00 12.26 C
ANISOU 1984 CE1 TYR A 128 1237 1634 1788 449 207 464 C
ATOM 1985 CE2 TYR A 128 12.192 -30.123 -22.001 1.00 10.79 C
ANISOU 1985 CE2 TYR A 128 1087 1402 1612 482 209 369 C
ATOM 1986 CZ TYR A 128 11.969 -31.467 -21.781 1.00 10.63 C
ANISOU 1986 CZ TYR A 128 1069 1365 1606 475 211 427 C
ATOM 1987 OH TYR A 128 12.466 -32.400 -22.664 1.00 11.28 O
ANISOU 1987 OH TYR A 128 1196 1361 1729 502 225 453 O
ATOM 1988 H TYR A 128 7.863 -28.921 -19.263 1.00 13.38 H
ATOM 1989 HA TYR A 128 9.751 -29.719 -17.474 1.00 13.72 H
ATOM 1990 HB2 TYR A 128 10.032 -27.833 -19.562 1.00 13.67 H
ATOM 1991 HB3 TYR A 128 11.181 -28.185 -18.535 1.00 13.67 H
ATOM 1992 HD1 TYR A 128 10.276 -31.219 -19.043 1.00 14.52 H
ATOM 1993 HD2 TYR A 128 11.837 -28.286 -21.262 1.00 13.51 H
ATOM 1994 HE1 TYR A 128 11.111 -32.788 -20.532 1.00 14.71 H
ATOM 1995 HE2 TYR A 128 12.672 -29.845 -22.747 1.00 12.95 H
ATOM 1996 HH TYR A 128 12.876 -32.015 -23.288 1.00 13.53 H
ATOM 1997 N TRP A 129 9.531 -27.866 -15.862 1.00 12.11 N
ANISOU 1997 N TRP A 129 1115 2076 1412 529 152 309 N
ATOM 1998 CA TRP A 129 9.220 -26.845 -14.873 1.00 13.37 C
ANISOU 1998 CA TRP A 129 1279 2329 1473 578 127 242 C
ATOM 1999 C TRP A 129 10.486 -26.217 -14.305 1.00 13.63 C
ANISOU 1999 C TRP A 129 1316 2384 1480 603 46 178 C
ATOM 2000 O TRP A 129 11.454 -26.918 -13.989 1.00 13.73 O
ANISOU 2000 O TRP A 129 1314 2405 1495 609 22 228 O
ATOM 2001 CB TRP A 129 8.415 -27.419 -13.689 1.00 16.00 C
ANISOU 2001 CB TRP A 129 1599 2774 1705 630 179 318 C
ATOM 2002 CG TRP A 129 7.108 -28.054 -14.036 1.00 16.43 C
ANISOU 2002 CG TRP A 129 1623 2815 1805 603 258 390 C
ATOM 2003 CD1 TRP A 129 6.913 -29.326 -14.501 1.00 16.92 C
ANISOU 2003 CD1 TRP A 129 1660 2813 1955 555 300 490 C
ATOM 2004 CD2 TRP A 129 5.806 -27.474 -13.898 1.00 17.67 C
ANISOU 2004 CD2 TRP A 129 1759 3018 1937 624 300 368 C
ATOM 2005 NE1 TRP A 129 5.571 -29.564 -14.677 1.00 18.02 N

ANISOU 2005 NE1 TRP A 129 1755 2949 2141 534 356 527 N
ATOM 2006 CE2 TRP A 129 4.870 -28.441 -14.319 1.00 17.76 C
ANISOU 2006 CE2 TRP A 129 1719 2990 2039 578 362 458 C
ATOM 2007 CE3 TRP A 129 5.339 -26.225 -13.475 1.00 18.07 C
ANISOU 2007 CE3 TRP A 129 1826 3132 1907 681 288 276 C
ATOM 2008 CZ2 TRP A 129 3.503 -28.201 -14.323 1.00 18.58 C
ANISOU 2008 CZ2 TRP A 129 1772 3125 2163 584 413 466 C
ATOM 2009 CZ3 TRP A 129 3.985 -25.985 -13.488 1.00 19.05 C
ANISOU 2009 CZ3 TRP A 129 1913 3290 2035 697 346 286 C
ATOM 2010 CH2 TRP A 129 3.079 -26.970 -13.909 1.00 19.14 C
ANISOU 2010 CH2 TRP A 129 1857 3270 2144 647 409 384 C
ATOM 2011 H TRP A 129 10.059 -28.480 -15.572 1.00 14.54 H
ATOM 2012 HA TRP A 129 8.693 -26.145 -15.290 1.00 16.05 H
ATOM 2013 HB2 TRP A 129 8.957 -28.093 -13.250 1.00 19.20 H
ATOM 2014 HB3 TRP A 129 8.231 -26.698 -13.067 1.00 19.20 H
ATOM 2015 HD1 TRP A 129 7.590 -29.940 -14.672 1.00 20.30 H
ATOM 2016 HE1 TRP A 129 5.228 -30.296 -14.969 1.00 21.62 H
ATOM 2017 HE3 TRP A 129 5.934 -25.566 -13.197 1.00 21.68 H
ATOM 2018 HZ2 TRP A 129 2.899 -28.849 -14.605 1.00 22.30 H
ATOM 2019 HZ3 TRP A 129 3.664 -25.159 -13.207 1.00 22.86 H
ATOM 2020 HH2 TRP A 129 2.169 -26.781 -13.903 1.00 22.97 H
ATOM 2021 N SER A 130 10.456 -24.892 -14.170 1.00 12.07 N
ANISOU 2021 N SER A 130 1132 2188 1265 619 -2 64 N
ATOM 2022 CA SER A 130 11.286 -24.151 -13.223 1.00 13.02 C
ANISOU 2022 CA SER A 130 1256 2357 1334 661 -97 -22 C
ATOM 2023 C SER A 130 10.339 -23.464 -12.249 1.00 13.69 C
ANISOU 2023 C SER A 130 1376 2540 1286 739 -101 -84 C
ATOM 2024 O SER A 130 9.445 -22.721 -12.675 1.00 14.11 O
ANISOU 2024 O SER A 130 1445 2565 1350 736 -69 -132 O
ATOM 2025 CB SER A 130 12.166 -23.104 -13.918 1.00 12.96 C
ANISOU 2025 CB SER A 130 1234 2242 1449 614 -158 -113 C
ATOM 2026 OG SER A 130 13.224 -23.682 -14.645 1.00 12.38 O
ANISOU 2026 OG SER A 130 1121 2094 1487 563 -154 -55 O
ATOM 2027 H SER A 130 9.942 -24.383 -14.634 1.00 14.48 H
ATOM 2028 HA SER A 130 11.854 -24.763 -12.731 1.00 15.63 H
ATOM 2029 HB2 SER A 130 11.614 -22.592 -14.529 1.00 15.56 H
ATOM 2030 HB3 SER A 130 12.538 -22.516 -13.243 1.00 15.56 H
ATOM 2031 HG SER A 130 13.717 -24.127 -14.130 1.00 14.85 H
ATOM 2032 N VAL A 131 10.528 -23.706 -10.954 1.00 14.79 N
ANISOU 2032 N VAL A 131 1533 2798 1290 822 -137 -81 N
ATOM 2033 CA VAL A 131 9.689 -23.122 -9.911 1.00 16.08 C
ANISOU 2033 CA VAL A 131 1741 3072 1297 926 -134 -134 C
ATOM 2034 C VAL A 131 10.590 -22.353 -8.951 1.00 17.37 C
ANISOU 2034 C VAL A 131 1936 3281 1384 995 -275 -265 C
ATOM 2035 O VAL A 131 11.498 -22.936 -8.346 1.00 17.66 O
ANISOU 2035 O VAL A 131 1965 3367 1379 1026 -338 -239 O
ATOM 2036 CB VAL A 131 8.884 -24.192 -9.157 1.00 16.90 C
ANISOU 2036 CB VAL A 131 1848 3293 1279 993 -29 6 C
ATOM 2037 CG1 VAL A 131 7.959 -23.540 -8.151 1.00 17.51 C
ANISOU 2037 CG1 VAL A 131 1972 3489 1192 1115 -3 -40 C
ATOM 2038 CG2 VAL A 131 8.083 -25.066 -10.128 1.00 15.88 C
ANISOU 2038 CG2 VAL A 131 1672 3099 1263 910 88 129 C
ATOM 2039 H VAL A 131 11.149 -24.216 -10.648 1.00 17.75 H

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ATOM   2040  HA  VAL A 131      9.065 -22.497 -10.312  1.00 19.29           H
ATOM   2041  HB  VAL A 131      9.498 -24.766  -8.673  1.00 20.28           H
ATOM   2042 HG11 VAL A 131      7.461 -24.231  -7.687  1.00 21.01           H
ATOM   2043 HG12 VAL A 131      8.490 -23.032  -7.518  1.00 21.01           H
ATOM   2044 HG13 VAL A 131      7.349 -22.950  -8.620  1.00 21.01           H
ATOM   2045 HG21 VAL A 131      7.588 -25.729  -9.620  1.00 19.06           H
ATOM   2046 HG22 VAL A 131      7.469 -24.504 -10.626  1.00 19.06           H
ATOM   2047 HG23 VAL A 131      8.697 -25.506 -10.736  1.00 19.06           H
ATOM   2048  N   ARG A 132     10.324 -21.055  -8.790  1.00 18.20           N
ANISOU 2048  N   ARG A 132     2077   3367   1472   1027   -334   -410      N
ATOM   2049  CA  ARG A 132     11.157 -20.227  -7.927  1.00 18.85           C
ANISOU 2049  CA  ARG A 132     2190   3470   1502   1089   -493   -563      C
ATOM   2050  C   ARG A 132     11.127 -20.772  -6.503  1.00 20.30           C
ANISOU 2050  C   ARG A 132     2425   3826   1463   1234   -518   -541      C
ATOM   2051  O   ARG A 132     10.084 -21.208  -6.013  1.00 21.06           O
ANISOU 2051  O   ARG A 132     2555   4030   1417   1319   -402   -454      O
ATOM   2052  CB  ARG A 132     10.676 -18.774  -7.954  1.00 19.28           C
ANISOU 2052  CB  ARG A 132     2289   3470   1567   1113   -540   -721      C
ATOM   2053  CG  ARG A 132     11.777 -17.757  -7.700  1.00 20.43           C
ANISOU 2053  CG  ARG A 132     2432   3535   1795   1099   -720   -894      C
ATOM   2054  CD  ARG A 132     11.255 -16.345  -7.837  1.00 21.60           C
ANISOU 2054  CD  ARG A 132     2627   3601   1978   1115   -754  -1041      C
ATOM   2055  NE  ARG A 132     12.297 -15.323  -7.729  1.00 22.86           N
ANISOU 2055  NE  ARG A 132     2772   3644   2269   1078   -927  -1207      N
ATOM   2056  CZ  ARG A 132     12.693 -14.752  -6.593  1.00 25.34           C
ANISOU 2056  CZ  ARG A 132     3130   3986   2512   1164  -1064  -1342      C
ATOM   2057  NH1 ARG A 132     12.158 -15.109  -5.431  1.00 25.76           N
ANISOU 2057  NH1 ARG A 132     3247   4176   2363   1297  -1026  -1307      N
ATOM   2058  NH2 ARG A 132     13.636 -13.819  -6.616  1.00 27.26           N
ANISOU 2058  NH2 ARG A 132     3339   4088   2929   1104  -1207  -1474      N
ATOM   2059  H   ARG A 132      9.674 -20.636  -9.167  1.00 21.84           H
ATOM   2060  HA  ARG A 132     12.073 -20.252  -8.244  1.00 22.62           H
ATOM   2061  HB2 ARG A 132     10.296 -18.587  -8.827  1.00 23.14           H
ATOM   2062  HB3 ARG A 132     10.000 -18.656  -7.269  1.00 23.14           H
ATOM   2063  HG2 ARG A 132     12.117 -17.870  -6.798  1.00 24.52           H
ATOM   2064  HG3 ARG A 132     12.488 -17.884  -8.347  1.00 24.52           H
ATOM   2065  HD2 ARG A 132     10.834 -16.249  -8.705  1.00 25.92           H
ATOM   2066  HD3 ARG A 132     10.604 -16.182  -7.136  1.00 25.92           H
ATOM   2067  HE  ARG A 132     12.683 -15.071  -8.455  1.00 27.43           H
ATOM   2068 HH11 ARG A 132     11.543 -15.709  -5.407  1.00 30.91           H
ATOM   2069 HH12 ARG A 132     12.424 -14.736  -4.703  1.00 30.91           H
ATOM   2070 HH21 ARG A 132     13.992 -13.586  -7.364  1.00 32.71           H
ATOM   2071 HH22 ARG A 132     13.901 -13.456  -5.883  1.00 32.71           H
ATOM   2072  N   GLN A 133     12.287 -20.761  -5.841  1.00 21.38           N
ANISOU 2072  N   GLN A 133     2559   3988   1575   1270   -666   -613      N
ATOM   2073  CA  GLN A 133     12.369 -21.322  -4.495  1.00 23.06           C
ANISOU 2073  CA  GLN A 133     2821   4306   1633   1385   -654   -572      C
ATOM   2074  C   GLN A 133     11.605 -20.469  -3.489  1.00 25.11           C
ANISOU 2074  C   GLN A 133     3160   4613   1767   1509   -651   -666      C
ATOM   2075  O   GLN A 133     11.102 -20.988  -2.487  1.00 25.56           O
ANISOU 2075  O   GLN A 133     3258   4774   1678   1625   -574   -587      O
ATOM   2076  CB  GLN A 133     13.833 -21.477  -4.075  1.00 23.89           C
ANISOU 2076  CB  GLN A 133     2900   4388   1788   1372   -800   -626      C
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ATOM 2077 CG GLN A 133 14.596 -22.505 -4.908 1.00 22.65 C
ANISOU 2077 CG GLN A 133 2658 4194 1753 1273 -784 -499 C
ATOM 2078 CD GLN A 133 15.974 -22.827 -4.351 1.00 24.31 C
ANISOU 2078 CD GLN A 133 2839 4400 1997 1277 -906 -525 C
ATOM 2079 OE1 GLN A 133 16.623 -21.987 -3.714 1.00 26.17 O
ANISOU 2079 OE1 GLN A 133 3087 4613 2242 1304 -1051 -680 O
ATOM 2080 NE2 GLN A 133 16.417 -24.061 -4.565 1.00 23.29 N
ANISOU 2080 NE2 GLN A 133 2670 4288 1891 1254 -850 -373 N
ATOM 2081 H GLN A 133 13.026 -20.442 -6.144 1.00 25.65 H
ATOM 2082 HA GLN A 133 11.967 -22.205 -4.499 1.00 27.67 H
ATOM 2083 HB2 GLN A 133 14.280 -20.622 -4.174 1.00 28.66 H
ATOM 2084 HB3 GLN A 133 13.865 -21.760 -3.148 1.00 28.66 H
ATOM 2085 HG2 GLN A 133 14.085 -23.329 -4.935 1.00 27.18 H
ATOM 2086 HG3 GLN A 133 14.711 -22.158 -5.806 1.00 27.18 H
ATOM 2087 HE21 GLN A 133 15.931 -24.623 -4.998 1.00 27.95 H
ATOM 2088 HE22 GLN A 133 17.190 -24.297 -4.272 1.00 27.95 H
ATOM 2089 N SER A 134 11.511 -19.170 -3.732 1.00 25.79 N
ANISOU 2089 N SER A 134 3264 4616 1919 1491 -730 -824 N
ATOM 2090 CA SER A 134 10.684 -18.288 -2.930 1.00 28.16 C
ANISOU 2090 CA SER A 134 3633 4942 2123 1604 -721 -903 C
ATOM 2091 C SER A 134 9.892 -17.397 -3.869 1.00 26.54 C
ANISOU 2091 C SER A 134 3423 4651 2012 1543 -680 -952 C
ATOM 2092 O SER A 134 10.331 -17.100 -4.984 1.00 23.58 O
ANISOU 2092 O SER A 134 3004 4168 1788 1421 -721 -996 O
ATOM 2093 CB SER A 134 11.524 -17.444 -1.965 1.00 31.45 C
ANISOU 2093 CB SER A 134 4095 5333 2522 1674 -896 -1075 C
ATOM 2094 OG SER A 134 12.394 -16.583 -2.676 1.00 32.97 O
ANISOU 2094 OG SER A 134 4248 5380 2900 1561 -1035 -1213 O
ATOM 2095 H SER A 134 11.926 -18.769 -4.370 1.00 30.95 H
ATOM 2096 HA SER A 134 10.060 -18.817 -2.409 1.00 33.79 H
ATOM 2097 HB2 SER A 134 10.931 -16.910 -1.415 1.00 37.74 H
ATOM 2098 HB3 SER A 134 12.053 -18.035 -1.406 1.00 37.74 H
ATOM 2099 HG SER A 134 12.849 -16.126 -2.138 1.00 39.57 H
ATOM 2100 N LYS A 135 8.707 -16.998 -3.420 1.00 27.22 N
ANISOU 2100 N LYS A 135 3550 4782 2011 1631 -595 -932 N
ATOM 2101 CA LYS A 135 7.832 -16.197 -4.260 1.00 26.79 C
ANISOU 2101 CA LYS A 135 3490 4651 2039 1582 -541 -958 C
ATOM 2102 C LYS A 135 8.505 -14.880 -4.618 1.00 27.01 C
ANISOU 2102 C LYS A 135 3534 4533 2194 1531 -687 -1142 C
ATOM 2103 O LYS A 135 9.034 -14.174 -3.753 1.00 28.08 O
ANISOU 2103 O LYS A 135 3713 4651 2304 1597 -814 -1268 O
ATOM 2104 CB LYS A 135 6.506 -15.941 -3.551 1.00 28.01 C
ANISOU 2104 CB LYS A 135 3682 4882 2080 1694 -445 -905 C
ATOM 2105 CG LYS A 135 5.641 -17.175 -3.435 1.00 27.95 C
ANISOU 2105 CG LYS A 135 3636 4982 2003 1714 -279 -704 C
ATOM 2106 CD LYS A 135 4.319 -16.833 -2.782 1.00 29.45 C
ANISOU 2106 CD LYS A 135 3849 5234 2104 1817 -190 -654 C
ATOM 2107 CE LYS A 135 3.530 -18.083 -2.449 1.00 30.65 C
ANISOU 2107 CE LYS A 135 3959 5489 2198 1847 -34 -450 C
ATOM 2108 NZ LYS A 135 2.264 -17.751 -1.743 1.00 32.19 N
ANISOU 2108 NZ LYS A 135 4173 5750 2309 1956 52 -399 N
ATOM 2109 H LYS A 135 8.390 -17.176 -2.641 1.00 32.66 H
ATOM 2110 HA LYS A 135 7.650 -16.679 -5.082 1.00 32.15 H

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ATOM   2111  HB2 LYS A 135      6.687 -15.618  -2.655  1.00 33.62           H
ATOM   2112  HB3 LYS A 135      6.008 -15.274  -4.049  1.00 33.62           H
ATOM   2113  HG2 LYS A 135      5.464 -17.531  -4.319  1.00 33.54           H
ATOM   2114  HG3 LYS A 135      6.092 -17.836  -2.887  1.00 33.54           H
ATOM   2115  HD2 LYS A 135      4.484 -16.348  -1.959  1.00 35.33           H
ATOM   2116  HD3 LYS A 135      3.791 -16.293  -3.391  1.00 35.33           H
ATOM   2117  HE2 LYS A 135      3.307 -18.550  -3.270  1.00 36.78           H
ATOM   2118  HE3 LYS A 135      4.061 -18.653  -1.871  1.00 36.78           H
ATOM   2119  HZ1 LYS A 135      1.816 -18.497  -1.556  1.00 38.63           H
ATOM   2120  HZ2 LYS A 135      2.443 -17.324  -0.983  1.00 38.63           H
ATOM   2121  HZ3 LYS A 135      1.757 -17.230  -2.256  1.00 38.63           H
ATOM   2122  N   ARG A 136      8.480 -14.561  -5.892  1.00 24.97           N
ANISOU 2122  N   ARG A 136     3239   4164   2083   1415   -666  -1154      N
ATOM   2123  CA  ARG A 136      9.114 -13.351  -6.388  1.00 24.99           C
ANISOU 2123  CA  ARG A 136     3244   4003   2247   1348   -784  -1305      C
ATOM   2124  C   ARG A 136      8.273 -12.131  -6.021  1.00 26.19           C
ANISOU 2124  C   ARG A 136     3456   4117   2380   1416   -787  -1376      C
ATOM   2125  O   ARG A 136      7.055 -12.148  -6.222  1.00 26.32           O
ANISOU 2125  O   ARG A 136     3482   4178   2340   1445   -662  -1291      O
ATOM   2126  CB  ARG A 136      9.271 -13.437  -7.901  1.00 23.60           C
ANISOU 2126  CB  ARG A 136     3017   3716   2236   1218   -735  -1277      C
ATOM   2127  CG  ARG A 136     10.162 -12.370  -8.487  1.00 23.32           C
ANISOU 2127  CG  ARG A 136     2962   3490   2409   1128   -851  -1408      C
ATOM   2128  CD  ARG A 136     10.413 -12.634  -9.959  1.00 20.50           C
ANISOU 2128  CD  ARG A 136     2535   3012   2243    991   -764  -1305      C
ATOM   2129  NE  ARG A 136     11.407 -11.711 -10.478  1.00 21.03           N
ANISOU 2129  NE  ARG A 136     2562   2887   2539    894   -857  -1388      N
ATOM   2130  CZ  ARG A 136     11.935 -11.790 -11.693  1.00 20.62           C
ANISOU 2130  CZ  ARG A 136     2441   2707   2687    772   -792  -1289      C
ATOM   2131  NH1 ARG A 136     11.568 -12.762 -12.512  1.00 19.30           N
ANISOU 2131  NH1 ARG A 136     2247   2582   2502    737   -653  -1121      N
ATOM   2132  NH2 ARG A 136     12.842 -10.900 -12.077  1.00 21.92           N
ANISOU 2132  NH2 ARG A 136     2561   2695   3073    691   -868  -1357      N
ATOM   2133  H   ARG A 136      8.099 -15.032  -6.502  1.00 29.96           H
ATOM   2134  HA  ARG A 136      9.993 -13.254  -5.989  1.00 29.98           H
ATOM   2135  HB2 ARG A 136      9.655 -14.299  -8.126  1.00 28.33           H
ATOM   2136  HB3 ARG A 136      8.397 -13.351  -8.312  1.00 28.33           H
ATOM   2137  HG2 ARG A 136      9.730 -11.506  -8.399  1.00 27.99           H
ATOM   2138  HG3 ARG A 136     11.015 -12.372  -8.025  1.00 27.99           H
ATOM   2139  HD2 ARG A 136     10.744 -13.539 -10.074  1.00 24.60           H
ATOM   2140  HD3 ARG A 136      9.589 -12.509 -10.456  1.00 24.60           H
ATOM   2141  HE  ARG A 136     11.684 -11.084  -9.959  1.00 25.23           H
ATOM   2142 HH11 ARG A 136     10.981 -13.339 -12.260  1.00 23.16           H
ATOM   2143 HH12 ARG A 136     11.911 -12.814 -13.299  1.00 23.16           H
ATOM   2144 HH21 ARG A 136     13.080 -10.270 -11.542  1.00 26.31           H
ATOM   2145 HH22 ARG A 136     13.187 -10.950 -12.863  1.00 26.31           H
ATOM   2146  N   PRO A 137      8.876 -11.061  -5.495  1.00 26.36           N
ANISOU 2146  N   PRO A 137     3509   4051   2454   1437   -931  -1528      N
ATOM   2147  CA  PRO A 137      8.119  -9.817  -5.319  1.00 27.40           C
ANISOU 2147  CA  PRO A 137     3698   4125   2588   1488   -937  -1599      C
ATOM   2148  C   PRO A 137      7.500  -9.373  -6.635  1.00 25.87           C
ANISOU 2148  C   PRO A 137     3484   3825   2521   1396   -842  -1553      C
ATOM   2149  O   PRO A 137      8.061  -9.587  -7.712  1.00 24.54           O
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ANISOU 2149 O PRO A 137 3263 3561 2502 1279 -831 -1531 O
ATOM 2150 CB PRO A 137 9.176 -8.819 -4.831 1.00 29.17 C
ANISOU 2150 CB PRO A 137 3939 4233 2913 1484 -1124 -1772 C
ATOM 2151 CG PRO A 137 10.256 -9.665 -4.219 1.00 30.26 C
ANISOU 2151 CG PRO A 137 4045 4434 3017 1491 -1213 -1783 C
ATOM 2152 CD PRO A 137 10.268 -10.932 -5.029 1.00 27.52 C
ANISOU 2152 CD PRO A 137 3637 4145 2673 1414 -1099 -1638 C
ATOM 2153 HA PRO A 137 7.429 -9.924 -4.646 1.00 32.88 H
ATOM 2154 HB2 PRO A 137 9.520 -8.313 -5.583 1.00 35.01 H
ATOM 2155 HB3 PRO A 137 8.786 -8.228 -4.168 1.00 35.01 H
ATOM 2156 HG2 PRO A 137 11.108 -9.207 -4.287 1.00 36.31 H
ATOM 2157 HG3 PRO A 137 10.040 -9.852 -3.292 1.00 36.31 H
ATOM 2158 HD2 PRO A 137 10.870 -10.844 -5.785 1.00 33.02 H
ATOM 2159 HD3 PRO A 137 10.508 -11.688 -4.470 1.00 33.02 H
ATOM 2160 N THR A 138 6.330 -8.752 -6.538 1.00 26.24 N
ANISOU 2160 N THR A 138 3575 3888 2508 1458 -772 -1534 N
ATOM 2161 CA THR A 138 5.608 -8.230 -7.690 1.00 25.14 C
ANISOU 2161 CA THR A 138 3426 3655 2471 1391 -681 -1487 C
ATOM 2162 C THR A 138 5.346 -6.738 -7.506 1.00 26.68 C
ANISOU 2162 C THR A 138 3680 3743 2712 1426 -740 -1597 C
ATOM 2163 O THR A 138 5.463 -6.190 -6.407 1.00 28.46 O
ANISOU 2163 O THR A 138 3960 3996 2858 1521 -833 -1699 O
ATOM 2164 CB THR A 138 4.277 -8.963 -7.892 1.00 24.16 C
ANISOU 2164 CB THR A 138 3283 3652 2246 1423 -524 -1337 C
ATOM 2165 OG1 THR A 138 3.493 -8.863 -6.696 1.00 26.37 O
ANISOU 2165 OG1 THR A 138 3605 4053 2359 1557 -509 -1337 O
ATOM 2166 CG2 THR A 138 4.520 -10.419 -8.239 1.00 23.55 C
ANISOU 2166 CG2 THR A 138 3142 3655 2151 1373 -458 -1221 C
ATOM 2167 H THR A 138 5.923 -8.617 -5.793 1.00 31.49 H
ATOM 2168 HA THR A 138 6.147 -8.349 -8.488 1.00 30.17 H
ATOM 2169 HB THR A 138 3.794 -8.552 -8.626 1.00 28.99 H
ATOM 2170 HG1 THR A 138 3.905 -9.211 -6.052 1.00 31.64 H
ATOM 2171 HG21 THR A 138 3.673 -10.875 -8.365 1.00 28.26 H
ATOM 2172 HG22 THR A 138 5.037 -10.482 -9.058 1.00 28.26 H
ATOM 2173 HG23 THR A 138 5.009 -10.853 -7.523 1.00 28.26 H
ATOM 2174 N GLY A 139 4.973 -6.085 -8.605 1.00 25.83 N
ANISOU 2174 N GLY A 139 3569 3514 2730 1357 -683 -1572 N
ATOM 2175 CA GLY A 139 4.668 -4.668 -8.618 1.00 27.08 C
ANISOU 2175 CA GLY A 139 3784 3558 2949 1380 -718 -1658 C
ATOM 2176 C GLY A 139 5.738 -3.814 -9.262 1.00 27.85 C
ANISOU 2176 C GLY A 139 3871 3448 3261 1279 -802 -1740 C
ATOM 2177 O GLY A 139 5.489 -2.633 -9.538 1.00 28.47 O
ANISOU 2177 O GLY A 139 3991 3402 3422 1277 -810 -1790 O
ATOM 2178 H GLY A 139 4.888 -6.458 -9.375 1.00 30.99 H
ATOM 2179 HA2 GLY A 139 3.838 -4.526 -9.100 1.00 32.50 H
ATOM 2180 HA3 GLY A 139 4.545 -4.361 -7.707 1.00 32.50 H
ATOM 2181 N SER A 140 6.925 -4.364 -9.481 1.00 27.55 N
ANISOU 2181 N SER A 140 3776 3366 3326 1195 -864 -1752 N
ATOM 2182 CA SER A 140 7.989 -3.690 -10.203 1.00 28.93 C
ANISOU 2182 CA SER A 140 3915 3336 3740 1081 -926 -1800 C
ATOM 2183 C SER A 140 8.282 -4.448 -11.488 1.00 26.80 C
ANISOU 2183 C SER A 140 3581 3022 3579 980 -825 -1676 C
ATOM 2184 O SER A 140 7.839 -5.582 -11.683 1.00 26.14 O

ANISOU 2184 O SER A 140 3478 3071 3383 997 -739 -1578 O
ATOM 2185 CB SER A 140 9.251 -3.584 -9.339 1.00 30.77 C
ANISOU 2185 CB SER A 140 4117 3533 4039 1065 -1101 -1926 C
ATOM 2186 OG SER A 140 9.033 -2.743 -8.224 1.00 32.85 O
ANISOU 2186 OG SER A 140 4449 3812 4221 1164 -1203 -2050 O
ATOM 2187 H SER A 140 7.141 -5.152 -9.213 1.00 33.06 H
ATOM 2188 HA SER A 140 7.702 -2.793 -10.436 1.00 34.71 H
ATOM 2189 HB2 SER A 140 9.492 -4.469 -9.024 1.00 36.92 H
ATOM 2190 HB3 SER A 140 9.970 -3.216 -9.876 1.00 36.92 H
ATOM 2191 HG SER A 140 9.732 -2.694 -7.760 1.00 39.42 H
ATOM 2192 N ASN A 141 9.022 -3.801 -12.384 1.00 27.15 N
ANISOU 2192 N ASN A 141 3591 2871 3852 879 -828 -1672 N
ATOM 2193 CA ASN A 141 9.400 -4.457 -13.626 1.00 25.18 C
ANISOU 2193 CA ASN A 141 3283 2562 3720 793 -729 -1548 C
ATOM 2194 C ASN A 141 10.271 -5.669 -13.317 1.00 25.55 C
ANISOU 2194 C ASN A 141 3261 2687 3761 763 -782 -1551 C
ATOM 2195 O ASN A 141 11.247 -5.574 -12.567 1.00 26.49 O
ANISOU 2195 O ASN A 141 3341 2781 3945 738 -921 -1651 O
ATOM 2196 CB ASN A 141 10.133 -3.483 -14.553 1.00 26.13 C
ANISOU 2196 CB ASN A 141 3375 2453 4100 696 -716 -1526 C
ATOM 2197 CG ASN A 141 9.229 -2.379 -15.080 1.00 26.02 C
ANISOU 2197 CG ASN A 141 3437 2359 4088 730 -635 -1496 C
ATOM 2198 OD1 ASN A 141 8.017 -2.416 -14.901 1.00 25.58 O
ANISOU 2198 OD1 ASN A 141 3444 2420 3853 818 -579 -1478 O
ATOM 2199 ND2 ASN A 141 9.820 -1.395 -15.747 1.00 27.63 N
ANISOU 2199 ND2 ASN A 141 3630 2364 4506 660 -623 -1478 N
ATOM 2200 H ASN A 141 9.313 -2.996 -12.297 1.00 32.58 H
ATOM 2201 HA ASN A 141 8.601 -4.765 -14.081 1.00 30.21 H
ATOM 2202 HB2 ASN A 141 10.861 -3.068 -14.064 1.00 31.35 H
ATOM 2203 HB3 ASN A 141 10.483 -3.974 -15.314 1.00 31.35 H
ATOM 2204 HD21 ASN A 141 9.350 -0.748 -16.064 1.00 33.16 H
ATOM 2205 HD22 ASN A 141 10.672 -1.404 -15.862 1.00 33.16 H
ATOM 2206 N ALA A 142 9.898 -6.815 -13.882 1.00 24.58 N
ANISOU 2206 N ALA A 142 3938 2440 2961 1344 -1743 -1007 N
ATOM 2207 CA ALA A 142 10.592 -8.069 -13.655 1.00 23.45 C
ANISOU 2207 CA ALA A 142 3676 2384 2849 1269 -1595 -971 C
ATOM 2208 C ALA A 142 11.005 -8.664 -14.991 1.00 23.09 C
ANISOU 2208 C ALA A 142 3647 2251 2874 1057 -1544 -848 C
ATOM 2209 O ALA A 142 10.376 -8.415 -16.020 1.00 23.75 O
ANISOU 2209 O ALA A 142 3825 2269 2930 1031 -1539 -784 O
ATOM 2210 CB ALA A 142 9.704 -9.067 -12.896 1.00 22.10 C
ANISOU 2210 CB ALA A 142 3401 2499 2496 1383 -1364 -999 C
ATOM 2211 H ALA A 142 9.227 -6.887 -14.414 1.00 29.50 H
ATOM 2212 HA ALA A 142 11.391 -7.907 -13.130 1.00 28.14 H
ATOM 2213 HB1 ALA A 142 10.199 -9.891 -12.763 1.00 26.52 H
ATOM 2214 HB2 ALA A 142 9.462 -8.685 -12.038 1.00 26.52 H
ATOM 2215 HB3 ALA A 142 8.906 -9.241 -13.418 1.00 26.52 H
ATOM 2216 N THR A 143 12.070 -9.457 -14.972 1.00 22.88 N
ANISOU 2216 N THR A 143 3527 2247 2920 875 -1471 -813 N
ATOM 2217 CA THR A 143 12.545 -10.108 -16.183 1.00 21.06 C
ANISOU 2217 CA THR A 143 3261 1984 2757 638 -1318 -645 C
ATOM 2218 C THR A 143 12.676 -11.607 -15.957 1.00 19.31 C
ANISOU 2218 C THR A 143 2873 2007 2456 600 -1148 -584 C

ATOM 2219 O THR A 143 13.054 -12.058 -14.869 1.00 19.83 O
ANISOU 2219 O THR A 143 2850 2192 2492 667 -1172 -664 O
ATOM 2220 CB THR A 143 13.894 -9.537 -16.631 1.00 23.62 C
ANISOU 2220 CB THR A 143 3606 2057 3313 414 -1356 -595 C
ATOM 2221 OG1 THR A 143 14.846 -9.682 -15.574 1.00 25.45 O
ANISOU 2221 OG1 THR A 143 3743 2298 3628 399 -1442 -710 O
ATOM 2222 CG2 THR A 143 13.763 -8.066 -16.986 1.00 25.92 C
ANISOU 2222 CG2 THR A 143 4062 2068 3719 421 -1514 -609 C
ATOM 2223 H THR A 143 12.535 -9.634 -14.270 1.00 27.46 H
ATOM 2224 HA THR A 143 11.902 -9.963 -16.895 1.00 25.27 H
ATOM 2225 HB THR A 143 14.204 -10.017 -17.415 1.00 28.35 H
ATOM 2226 HG1 THR A 143 14.939 -10.494 -15.381 1.00 30.54 H
ATOM 2227 HG21 THR A 143 13.124 -7.955 -17.708 1.00 31.11 H
ATOM 2228 HG22 THR A 143 13.456 -7.564 -16.215 1.00 31.11 H
ATOM 2229 HG23 THR A 143 14.622 -7.715 -17.269 1.00 31.11 H
ATOM 2230 N ILE A 144 12.348 -12.374 -16.991 1.00 17.26 N
ANISOU 2230 N ILE A 144 2584 1815 2160 508 -993 -448 N
ATOM 2231 CA ILE A 144 12.663 -13.797 -17.056 1.00 15.13 C
ANISOU 2231 CA ILE A 144 2174 1705 1871 425 -838 -374 C
ATOM 2232 C ILE A 144 13.593 -13.960 -18.248 1.00 15.48 C
ANISOU 2232 C ILE A 144 2234 1632 2015 220 -736 -263 C
ATOM 2233 O ILE A 144 13.172 -13.796 -19.401 1.00 14.74 O
ANISOU 2233 O ILE A 144 2227 1488 1886 186 -690 -182 O
ATOM 2234 CB ILE A 144 11.409 -14.676 -17.186 1.00 14.02 C
ANISOU 2234 CB ILE A 144 1971 1750 1608 517 -762 -330 C
ATOM 2235 CG1 ILE A 144 10.576 -14.565 -15.907 1.00 14.11 C
ANISOU 2235 CG1 ILE A 144 1930 1904 1526 710 -787 -403 C
ATOM 2236 CG2 ILE A 144 11.805 -16.148 -17.453 1.00 14.50 C
ANISOU 2236 CG2 ILE A 144 1908 1910 1690 405 -619 -248 C
ATOM 2237 CD1 ILE A 144 9.256 -15.321 -15.937 1.00 13.87 C
ANISOU 2237 CD1 ILE A 144 1808 2029 1434 751 -661 -333 C
ATOM 2238 H ILE A 144 11.932 -12.085 -17.686 1.00 20.71 H
ATOM 2239 HA ILE A 144 13.141 -14.061 -16.254 1.00 18.16 H
ATOM 2240 HB ILE A 144 10.880 -14.355 -17.933 1.00 16.83 H
ATOM 2241 HG12 ILE A 144 11.097 -14.915 -15.167 1.00 16.93 H
ATOM 2242 HG13 ILE A 144 10.374 -13.630 -15.750 1.00 16.93 H
ATOM 2243 HG21 ILE A 144 11.000 -16.682 -17.532 1.00 17.39 H
ATOM 2244 HG22 ILE A 144 12.314 -16.193 -18.278 1.00 17.39 H
ATOM 2245 HG23 ILE A 144 12.345 -16.469 -16.714 1.00 17.39 H
ATOM 2246 HD11 ILE A 144 8.800 -15.194 -15.090 1.00 16.64 H
ATOM 2247 HD12 ILE A 144 8.711 -14.976 -16.662 1.00 16.64 H
ATOM 2248 HD13 ILE A 144 9.436 -16.264 -16.078 1.00 16.64 H
ATOM 2249 N THR A 145 14.869 -14.212 -17.964 1.00 15.36 N
ANISOU 2249 N THR A 145 2136 1585 2117 105 -707 -259 N
ATOM 2250 CA THR A 145 15.886 -14.449 -18.984 1.00 15.46 C
ANISOU 2250 CA THR A 145 2125 1526 2223 -72 -580 -144 C
ATOM 2251 C THR A 145 15.757 -15.920 -19.352 1.00 14.43 C
ANISOU 2251 C THR A 145 1912 1560 2009 -77 -435 -99 C
ATOM 2252 O THR A 145 16.412 -16.792 -18.778 1.00 13.97 O
ANISOU 2252 O THR A 145 1731 1588 1990 -96 -390 -116 O
ATOM 2253 CB THR A 145 17.275 -14.098 -18.466 1.00 16.96 C
ANISOU 2253 CB THR A 145 2227 1620 2599 -183 -623 -165 C
ATOM 2254 OG1 THR A 145 17.298 -12.727 -18.025 1.00 19.43 O

ANISOU 2254 OG1 THR A 145 2622 1747 3013 -169 -806 -236 O
ATOM 2255 CG2 THR A 145 18.326 -14.286 -19.555 1.00 17.74 C
ANISOU 2255 CG2 THR A 145 2276 1667 2800 -356 -464 -20 C
ATOM 2256 H THR A 145 15.178 -14.252 -17.163 1.00 18.44 H
ATOM 2257 HA THR A 145 15.698 -13.911 -19.769 1.00 18.55 H
ATOM 2258 HB THR A 145 17.498 -14.679 -17.721 1.00 20.36 H
ATOM 2259 HG1 THR A 145 16.738 -12.614 -17.409 1.00 23.32 H
ATOM 2260 HG21 THR A 145 19.204 -14.059 -19.211 1.00 21.29 H
ATOM 2261 HG22 THR A 145 18.332 -15.210 -19.852 1.00 21.29 H
ATOM 2262 HG23 THR A 145 18.125 -13.713 -20.311 1.00 21.29 H
ATOM 2263 N PHE A 146 14.852 -16.200 -20.293 1.00 13.97 N
ANISOU 2263 N PHE A 146 1930 1538 1842 -43 -386 -53 N
ATOM 2264 CA PHE A 146 14.421 -17.577 -20.524 1.00 12.62 C
ANISOU 2264 CA PHE A 146 1691 1501 1603 -20 -306 -45 C
ATOM 2265 C PHE A 146 15.578 -18.474 -20.952 1.00 12.88 C
ANISOU 2265 C PHE A 146 1651 1554 1690 -115 -178 -4 C
ATOM 2266 O PHE A 146 15.546 -19.684 -20.695 1.00 13.09 O
ANISOU 2266 O PHE A 146 1589 1670 1714 -97 -136 -20 O
ATOM 2267 CB PHE A 146 13.301 -17.588 -21.563 1.00 12.78 C
ANISOU 2267 CB PHE A 146 1812 1531 1514 30 -317 -23 C
ATOM 2268 CG PHE A 146 12.723 -18.951 -21.836 1.00 11.95 C
ANISOU 2268 CG PHE A 146 1639 1528 1372 50 -282 -34 C
ATOM 2269 CD1 PHE A 146 12.318 -19.771 -20.798 1.00 11.34 C
ANISOU 2269 CD1 PHE A 146 1428 1546 1333 89 -296 -58 C
ATOM 2270 CD2 PHE A 146 12.566 -19.400 -23.140 1.00 12.30 C
ANISOU 2270 CD2 PHE A 146 1761 1566 1348 40 -245 -18 C
ATOM 2271 CE1 PHE A 146 11.784 -21.015 -21.053 1.00 10.58 C
ANISOU 2271 CE1 PHE A 146 1263 1504 1253 86 -280 -53 C
ATOM 2272 CE2 PHE A 146 12.024 -20.642 -23.394 1.00 12.28 C
ANISOU 2272 CE2 PHE A 146 1701 1621 1343 56 -254 -53 C
ATOM 2273 CZ PHE A 146 11.638 -21.450 -22.349 1.00 11.23 C
ANISOU 2273 CZ PHE A 146 1421 1550 1295 64 -275 -66 C
ATOM 2274 H PHE A 146 14.477 -15.618 -20.803 1.00 16.77 H
ATOM 2275 HA PHE A 146 14.061 -17.934 -19.697 1.00 15.15 H
ATOM 2276 HB2 PHE A 146 12.581 -17.019 -21.250 1.00 15.34 H
ATOM 2277 HB3 PHE A 146 13.650 -17.243 -22.400 1.00 15.34 H
ATOM 2278 HD1 PHE A 146 12.416 -19.484 -19.919 1.00 13.60 H
ATOM 2279 HD2 PHE A 146 12.828 -18.858 -23.848 1.00 14.76 H
ATOM 2280 HE1 PHE A 146 11.519 -21.560 -20.348 1.00 12.70 H
ATOM 2281 HE2 PHE A 146 11.928 -20.938 -24.271 1.00 14.74 H
ATOM 2282 HZ PHE A 146 11.275 -22.289 -22.519 1.00 13.47 H
ATOM 2283 N SER A 147 16.599 -17.908 -21.607 1.00 14.33 N
ANISOU 2283 N SER A 147 1859 1652 1932 -210 -109 62 N
ATOM 2284 CA SER A 147 17.737 -18.706 -22.060 1.00 14.64 C
ANISOU 2284 CA SER A 147 1813 1730 2017 -277 30 106 C
ATOM 2285 C SER A 147 18.428 -19.417 -20.906 1.00 13.49 C
ANISOU 2285 C SER A 147 1511 1645 1969 -281 15 51 C
ATOM 2286 O SER A 147 18.949 -20.524 -21.083 1.00 12.43 O
ANISOU 2286 O SER A 147 1302 1580 1842 -279 105 53 O
ATOM 2287 CB SER A 147 18.745 -17.819 -22.792 1.00 16.80 C
ANISOU 2287 CB SER A 147 2102 1913 2366 -381 116 216 C
ATOM 2288 OG SER A 147 19.235 -16.797 -21.949 1.00 17.97 O
ANISOU 2288 OG SER A 147 2203 1951 2672 -447 13 205 O

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ATOM   2289  H   SER A 147     16.654 -17.071 -21.798  1.00 17.19           H
ATOM   2290  HA  SER A 147     17.422 -19.380 -22.682  1.00 17.56           H
ATOM   2291  HB2 SER A 147     19.489 -18.367 -23.088  1.00 20.15           H
ATOM   2292  HB3 SER A 147     18.309 -17.413 -23.558  1.00 20.15           H
ATOM   2293  HG  SER A 147     19.787 -16.320 -22.366  1.00 21.56           H
ATOM   2294  N   ASN A 148     18.474 -18.792 -19.728  1.00 13.85           N
ANISOU 2294  N   ASN A 148    1517   1663   2081   -265   -110     -7       N
ATOM   2295  CA  ASN A 148     19.068 -19.457 -18.573  1.00 12.84           C
ANISOU 2295  CA  ASN A 148    1256   1609   2013   -236   -144    -60       C
ATOM   2296  C   ASN A 148     18.315 -20.738 -18.228  1.00 11.24           C
ANISOU 2296  C   ASN A 148    1025   1523   1723   -145   -118    -68       C
ATOM   2297  O   ASN A 148     18.922 -21.739 -17.835  1.00 11.43           O
ANISOU 2297  O   ASN A 148     948   1608   1788   -135    -75    -63       O
ATOM   2298  CB  ASN A 148     19.072 -18.519 -17.370  1.00 13.56           C
ANISOU 2298  CB  ASN A 148    1343   1665   2145   -190   -312   -145       C
ATOM   2299  CG  ASN A 148     20.072 -17.393 -17.504  1.00 15.39           C
ANISOU 2299  CG  ASN A 148    1557   1750   2541   -305   -369   -144       C
ATOM   2300  OD1 ASN A 148     21.100 -17.535 -18.161  1.00 16.84           O
ANISOU 2300  OD1 ASN A 148    1658   1904   2837   -423   -264    -68       O
ATOM   2301  ND2 ASN A 148     19.781 -16.267 -16.863  1.00 15.33           N
ANISOU 2301  ND2 ASN A 148    1616   1646   2562   -266   -541   -227       N
ATOM   2302  H   ASN A 148     18.173 -18.001 -19.575  1.00 16.62           H
ATOM   2303  HA  ASN A 148     19.987 -19.691 -18.777  1.00 15.40           H
ATOM   2304  HB2 ASN A 148     18.190 -18.126 -17.273  1.00 16.27           H
ATOM   2305  HB3 ASN A 148     19.298 -19.027 -16.575  1.00 16.27           H
ATOM   2306 HD21 ASN A 148     20.318 -15.597 -16.907  1.00 18.40           H
ATOM   2307 HD22 ASN A 148     19.057 -16.209 -16.403  1.00 18.40           H
ATOM   2308  N   HIS A 149     16.988 -20.707 -18.325  1.00 10.91           N
ANISOU 2308  N   HIS A 149    1058   1506   1583    -79   -153    -70       N
ATOM   2309  CA  HIS A 149     16.190 -21.899 -18.044  1.00  9.90           C
ANISOU 2309  CA  HIS A 149     881   1465   1415    -17   -132    -50       C
ATOM   2310  C   HIS A 149     16.375 -22.953 -19.127  1.00 10.66           C
ANISOU 2310  C   HIS A 149     981   1541   1528    -65    -41    -26       C
ATOM   2311  O   HIS A 149     16.575 -24.138 -18.830  1.00  9.64           O
ANISOU 2311  O   HIS A 149     774   1443   1446    -52     -8    -11       O
ATOM   2312  CB  HIS A 149     14.720 -21.513 -17.911  1.00 10.44           C
ANISOU 2312  CB  HIS A 149     997   1568   1403     60   -196    -52       C
ATOM   2313  CG  HIS A 149     14.456 -20.608 -16.749  1.00 12.05           C
ANISOU 2313  CG  HIS A 149    1201   1816   1563    159   -287    -94       C
ATOM   2314  ND1 HIS A 149     14.242 -21.083 -15.474  1.00 12.77           N
ANISOU 2314  ND1 HIS A 149    1204   2031   1619    263   -299    -81       N
ATOM   2315  CD2 HIS A 149     14.423 -19.256 -16.656  1.00 13.35           C
ANISOU 2315  CD2 HIS A 149    1453   1912   1706    188   -378   -154       C
ATOM   2316  CE1 HIS A 149     14.067 -20.066 -14.648  1.00 14.09           C
ANISOU 2316  CE1 HIS A 149    1410   2225   1720    373   -395   -151       C
ATOM   2317  NE2 HIS A 149     14.178 -18.944 -15.338  1.00 13.44           N
ANISOU 2317  NE2 HIS A 149    1434   2011   1660    324   -456   -207       N
ATOM   2318  H   HIS A 149     16.529 -20.016 -18.549  1.00 13.10           H
ATOM   2319  HA  HIS A 149     16.478 -22.281 -17.201  1.00 11.88           H
ATOM   2320  HB2 HIS A 149     14.441 -21.053 -18.718  1.00 12.53           H
ATOM   2321  HB3 HIS A 149     14.193 -22.318 -17.789  1.00 12.53           H
ATOM   2322  HD1 HIS A 149     14.219 -21.914 -15.251  1.00 15.33           H
ATOM   2323  HD2 HIS A 149     14.542 -18.652 -17.353  1.00 16.01           H
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ATOM   2324  HE1 HIS A 149     13.897 -20.129 -13.736  1.00 16.91           H
ATOM   2325  N   VAL A 150     16.293 -22.543 -20.391  1.00 10.55           N
ANISOU 2325  N   VAL A 150     1071   1472   1467   -101     -9    -25       N
ATOM   2326  CA  VAL A 150     16.509 -23.478 -21.492  1.00 10.47           C
ANISOU 2326  CA  VAL A 150     1090   1451   1437   -110     65    -31       C
ATOM   2327  C   VAL A 150     17.855 -24.168 -21.339  1.00 10.82           C
ANISOU 2327  C   VAL A 150     1042   1512   1559   -130    154    -27       C
ATOM   2328  O   VAL A 150     17.976 -25.387 -21.511  1.00 10.99           O
ANISOU 2328  O   VAL A 150     1030   1538   1606   -100    180    -50       O
ATOM   2329  CB  VAL A 150     16.402 -22.744 -22.842  1.00 10.00           C
ANISOU 2329  CB  VAL A 150     1169   1354   1276   -117     98    -17       C
ATOM   2330  CG1 VAL A 150     16.725 -23.691 -24.002  1.00 10.68           C
ANISOU 2330  CG1 VAL A 150     1303   1452   1302    -85    174    -44       C
ATOM   2331  CG2 VAL A 150     15.013 -22.138 -23.013  1.00  9.85           C
ANISOU 2331  CG2 VAL A 150     1238   1322   1183    -76     -9    -28       C
ATOM   2332  H   VAL A 150     16.116 -21.737 -20.635  1.00 12.67           H
ATOM   2333  HA  VAL A 150     15.819 -24.160 -21.467  1.00 12.57           H
ATOM   2334  HB  VAL A 150     17.048 -22.020 -22.858  1.00 12.00           H
ATOM   2335 HG11 VAL A 150     16.650 -23.203 -24.837  1.00 12.81           H
ATOM   2336 HG12 VAL A 150     17.628 -24.026 -23.894  1.00 12.81           H
ATOM   2337 HG13 VAL A 150     16.094 -24.428 -23.992  1.00 12.81           H
ATOM   2338 HG21 VAL A 150     14.971 -21.682 -23.868  1.00 11.82           H
ATOM   2339 HG22 VAL A 150     14.353 -22.848 -22.983  1.00 11.82           H
ATOM   2340 HG23 VAL A 150     14.853 -21.508 -22.293  1.00 11.82           H
ATOM   2341  N   ASN A 151     18.894 -23.398 -21.017  1.00 12.53           N
ANISOU 2341  N   ASN A 151     1206   1723   1832   -180    187     -1       N
ATOM   2342  CA  ASN A 151     20.229 -23.979 -20.925  1.00 13.26           C
ANISOU 2342  CA  ASN A 151     1185   1843   2010   -195    271      6       C
ATOM   2343  C   ASN A 151     20.349 -24.910 -19.725  1.00 12.55           C
ANISOU 2343  C   ASN A 151     988   1793   1986   -146    218    -16       C
ATOM   2344  O   ASN A 151     20.969 -25.972 -19.827  1.00 11.79           O
ANISOU 2344  O   ASN A 151     831   1716   1935   -112    274    -24       O
ATOM   2345  CB  ASN A 151     21.284 -22.876 -20.865  1.00 16.85           C
ANISOU 2345  CB  ASN A 151     1578   2273   2551   -278    300     48       C
ATOM   2346  CG  ASN A 151     21.487 -22.204 -22.208  1.00 21.37           C
ANISOU 2346  CG  ASN A 151     2233   2817   3071   -323    412    121       C
ATOM   2347  OD1 ASN A 151     21.320 -22.832 -23.246  1.00 23.07           O
ANISOU 2347  OD1 ASN A 151     2521   3068   3177   -268    503    124       O
ATOM   2348  ND2 ASN A 151     21.853 -20.927 -22.193  1.00 23.90           N
ANISOU 2348  ND2 ASN A 151     2548   3066   3468   -413    397    182       N
ATOM   2349  H   ASN A 151     18.853 -22.556 -20.850  1.00 15.04           H
ATOM   2350  HA  ASN A 151     20.396 -24.504 -21.723  1.00 15.91           H
ATOM   2351  HB2 ASN A 151     21.002 -22.200 -20.229  1.00 20.22           H
ATOM   2352  HB3 ASN A 151     22.131 -23.261 -20.590  1.00 20.22           H
ATOM   2353 HD21 ASN A 151     21.979 -20.508 -22.933  1.00 28.68           H
ATOM   2354 HD22 ASN A 151     21.964 -20.521 -21.444  1.00 28.68           H
ATOM   2355  N   ALA A 152     19.767 -24.532 -18.584  1.00 13.34           N
ANISOU 2355  N   ALA A 152     1073   1914   2083   -119    113    -20       N
ATOM   2356  CA  ALA A 152     19.783 -25.416 -17.421  1.00 13.66           C
ANISOU 2356  CA  ALA A 152     1026   2010   2153    -50     73     -9       C
ATOM   2357  C   ALA A 152     19.049 -26.714 -17.725  1.00 13.25           C
ANISOU 2357  C   ALA A 152     989   1942   2102    -18     99     20       C
ATOM   2358  O   ALA A 152     19.560 -27.809 -17.462  1.00 13.65           O
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ANISOU 2358 O ALA A 152 981 1991 2213 16 122 37 O
ATOM 2359 CB ALA A 152 19.161 -24.716 -16.214 1.00 13.55 C
ANISOU 2359 CB ALA A 152 1013 2049 2087 9 -31 -13 C
ATOM 2360 H ALA A 152 19.362 -23.783 -18.461 1.00 16.01 H
ATOM 2361 HA ALA A 152 20.703 -25.634 -17.202 1.00 16.39 H
ATOM 2362 HB1 ALA A 152 19.182 -25.319 -15.454 1.00 16.26 H
ATOM 2363 HB2 ALA A 152 19.672 -23.916 -16.016 1.00 16.26 H
ATOM 2364 HB3 ALA A 152 18.244 -24.480 -16.424 1.00 16.26 H
ATOM 2365 N TRP A 153 17.844 -26.609 -18.288 1.00 11.05 N
ANISOU 2365 N TRP A 153 790 1637 1772 -28 76 22 N
ATOM 2366 CA TRP A 153 17.109 -27.806 -18.686 1.00 10.57 C
ANISOU 2366 CA TRP A 153 734 1529 1755 -18 68 35 C
ATOM 2367 C TRP A 153 17.938 -28.658 -19.641 1.00 10.76 C
ANISOU 2367 C TRP A 153 781 1492 1816 -15 124 -19 C
ATOM 2368 O TRP A 153 18.012 -29.887 -19.494 1.00 10.30 O
ANISOU 2368 O TRP A 153 683 1382 1847 13 114 -10 O
ATOM 2369 CB TRP A 153 15.777 -27.404 -19.332 1.00 9.62 C
ANISOU 2369 CB TRP A 153 687 1386 1581 -34 14 22 C
ATOM 2370 CG TRP A 153 14.823 -26.642 -18.427 1.00 9.75 C
ANISOU 2370 CG TRP A 153 674 1476 1555 -5 -35 72 C
ATOM 2371 CD1 TRP A 153 14.879 -26.538 -17.065 1.00 10.68 C
ANISOU 2371 CD1 TRP A 153 711 1680 1667 51 -37 131 C
ATOM 2372 CD2 TRP A 153 13.667 -25.898 -18.836 1.00 9.93 C
ANISOU 2372 CD2 TRP A 153 749 1507 1515 3 -90 59 C
ATOM 2373 NE1 TRP A 153 13.830 -25.775 -16.606 1.00 11.46 N
ANISOU 2373 NE1 TRP A 153 810 1849 1696 102 -79 152 N
ATOM 2374 CE2 TRP A 153 13.076 -25.366 -17.672 1.00 10.74 C
ANISOU 2374 CE2 TRP A 153 793 1707 1582 68 -113 109 C
ATOM 2375 CE3 TRP A 153 13.082 -25.619 -20.074 1.00 10.50 C
ANISOU 2375 CE3 TRP A 153 919 1527 1543 -16 -129 5 C
ATOM 2376 CZ2 TRP A 153 11.928 -24.571 -17.712 1.00 11.35 C
ANISOU 2376 CZ2 TRP A 153 891 1825 1598 113 -165 106 C
ATOM 2377 CZ3 TRP A 153 11.936 -24.825 -20.109 1.00 11.42 C
ANISOU 2377 CZ3 TRP A 153 1058 1676 1605 18 -195 8 C
ATOM 2378 CH2 TRP A 153 11.372 -24.323 -18.934 1.00 11.05 C
ANISOU 2378 CH2 TRP A 153 936 1721 1542 81 -209 58 C
ATOM 2379 H TRP A 153 17.437 -25.869 -18.447 1.00 13.26 H
ATOM 2380 HA TRP A 153 16.915 -28.337 -17.898 1.00 12.69 H
ATOM 2381 HB2 TRP A 153 15.965 -26.840 -20.098 1.00 11.54 H
ATOM 2382 HB3 TRP A 153 15.322 -28.208 -19.625 1.00 11.54 H
ATOM 2383 HD1 TRP A 153 15.526 -26.934 -16.526 1.00 12.82 H
ATOM 2384 HE1 TRP A 153 13.676 -25.580 -15.782 1.00 13.76 H
ATOM 2385 HE3 TRP A 153 13.451 -25.953 -20.859 1.00 12.60 H
ATOM 2386 HZ2 TRP A 153 11.550 -24.232 -16.933 1.00 13.63 H
ATOM 2387 HZ3 TRP A 153 11.534 -24.638 -20.927 1.00 13.70 H
ATOM 2388 HH2 TRP A 153 10.608 -23.796 -18.986 1.00 13.26 H
ATOM 2389 N LYS A 154 18.582 -28.018 -20.621 1.00 12.15 N
ANISOU 2389 N LYS A 154 1020 1673 1925 -31 187 -66 N
ATOM 2390 CA LYS A 154 19.435 -28.746 -21.554 1.00 14.89 C
ANISOU 2390 CA LYS A 154 1386 2000 2271 10 263 -120 C
ATOM 2391 C LYS A 154 20.530 -29.513 -20.819 1.00 12.50 C
ANISOU 2391 C LYS A 154 964 1713 2073 46 299 -106 C
ATOM 2392 O LYS A 154 20.851 -30.657 -21.175 1.00 11.72 O

ANISOU 2392 O LYS A 154 866 1567 2019 112 311 -152 O
ATOM 2393 CB LYS A 154 20.054 -27.767 -22.553 1.00 19.57 C
ANISOU 2393 CB LYS A 154 2037 2633 2765 -6 362 -122 C
ATOM 2394 CG LYS A 154 20.322 -28.334 -23.911 1.00 24.72 C
ANISOU 2394 CG LYS A 154 2780 3287 3327 72 432 -186 C
ATOM 2395 CD LYS A 154 20.992 -27.297 -24.822 1.00 28.71 C
ANISOU 2395 CD LYS A 154 3325 3858 3725 61 566 -133 C
ATOM 2396 CE LYS A 154 20.002 -26.249 -25.331 1.00 31.32 C
ANISOU 2396 CE LYS A 154 3786 4169 3944 26 517 -102 C
ATOM 2397 NZ LYS A 154 20.680 -25.142 -26.087 1.00 34.67 N
ANISOU 2397 NZ LYS A 154 4242 4640 4291 -2 654 0 N
ATOM 2398 H LYS A 154 18.541 -27.170 -20.763 1.00 14.58 H
ATOM 2399 HA LYS A 154 18.897 -29.384 -22.048 1.00 17.87 H
ATOM 2400 HB2 LYS A 154 19.449 -27.016 -22.664 1.00 23.48 H
ATOM 2401 HB3 LYS A 154 20.899 -27.453 -22.195 1.00 23.48 H
ATOM 2402 HG2 LYS A 154 20.916 -29.097 -23.829 1.00 29.67 H
ATOM 2403 HG3 LYS A 154 19.484 -28.603 -24.318 1.00 29.67 H
ATOM 2404 HD2 LYS A 154 21.687 -26.838 -24.324 1.00 34.45 H
ATOM 2405 HD3 LYS A 154 21.374 -27.748 -25.590 1.00 34.45 H
ATOM 2406 HE2 LYS A 154 19.367 -26.676 -25.926 1.00 37.58 H
ATOM 2407 HE3 LYS A 154 19.538 -25.857 -24.574 1.00 37.58 H
ATOM 2408 HZ1 LYS A 154 20.077 -24.551 -26.368 1.00 41.61 H
ATOM 2409 HZ2 LYS A 154 21.266 -24.728 -25.560 1.00 41.61 H
ATOM 2410 HZ3 LYS A 154 21.110 -25.474 -26.792 1.00 41.61 H
ATOM 2411 N SER A 155 21.110 -28.907 -19.782 1.00 12.56 N
ANISOU 2411 N SER A 155 873 1780 2121 21 295 -57 N
ATOM 2412 CA SER A 155 22.196 -29.561 -19.061 1.00 13.54 C
ANISOU 2412 CA SER A 155 890 1932 2323 69 306 -44 C
ATOM 2413 C SER A 155 21.731 -30.834 -18.369 1.00 13.32 C
ANISOU 2413 C SER A 155 854 1853 2352 127 243 -12 C
ATOM 2414 O SER A 155 22.565 -31.681 -18.031 1.00 13.91 O
ANISOU 2414 O SER A 155 889 1925 2471 187 246 -9 O
ATOM 2415 CB SER A 155 22.813 -28.606 -18.028 1.00 14.85 C
ANISOU 2415 CB SER A 155 1023 2168 2452 38 246 -16 C
ATOM 2416 OG SER A 155 21.992 -28.466 -16.882 1.00 14.04 O
ANISOU 2416 OG SER A 155 941 2086 2307 57 154 13 O
ATOM 2417 H SER A 155 20.896 -28.130 -19.482 1.00 15.08 H
ATOM 2418 HA SER A 155 22.890 -29.803 -19.693 1.00 16.25 H
ATOM 2419 HB2 SER A 155 23.675 -28.956 -17.754 1.00 17.82 H
ATOM 2420 HB3 SER A 155 22.927 -27.734 -18.438 1.00 17.82 H
ATOM 2421 HG SER A 155 21.241 -28.160 -17.101 1.00 16.85 H
ATOM 2422 N HIS A 156 20.425 -30.985 -18.143 1.00 12.08 N
ANISOU 2422 N HIS A 156 727 1656 2208 108 187 30 N
ATOM 2423 CA HIS A 156 19.870 -32.212 -17.590 1.00 13.05 C
ANISOU 2423 CA HIS A 156 831 1706 2422 140 138 99 C
ATOM 2424 C HIS A 156 19.226 -33.089 -18.658 1.00 13.69 C
ANISOU 2424 C HIS A 156 986 1650 2567 131 105 39 C
ATOM 2425 O HIS A 156 18.467 -34.007 -18.323 1.00 14.10 O
ANISOU 2425 O HIS A 156 1019 1603 2734 121 43 106 O
ATOM 2426 CB HIS A 156 18.858 -31.881 -16.490 1.00 13.70 C
ANISOU 2426 CB HIS A 156 933 1842 2430 121 90 198 C
ATOM 2427 CG HIS A 156 19.446 -31.109 -15.351 1.00 14.15 C
ANISOU 2427 CG HIS A 156 994 2014 2367 155 79 200 C

ATOM 2428 ND1 HIS A 156 20.221 -31.701 -14.379 1.00 15.18 N
ANISOU 2428 ND1 HIS A 156 1094 2171 2504 218 68 235 N
ATOM 2429 CD2 HIS A 156 19.408 -29.791 -15.051 1.00 13.70 C
ANISOU 2429 CD2 HIS A 156 957 2034 2216 146 58 153 C
ATOM 2430 CE1 HIS A 156 20.615 -30.786 -13.512 1.00 15.06 C
ANISOU 2430 CE1 HIS A 156 1075 2245 2403 248 33 198 C
ATOM 2431 NE2 HIS A 156 20.134 -29.617 -13.897 1.00 14.57 N
ANISOU 2431 NE2 HIS A 156 1040 2203 2292 204 24 146 N
ATOM 2432 H HIS A 156 19.835 -30.381 -18.306 1.00 14.50 H
ATOM 2433 HA HIS A 156 20.588 -32.722 -17.184 1.00 15.66 H
ATOM 2434 HB2 HIS A 156 18.143 -31.348 -16.872 1.00 16.44 H
ATOM 2435 HB3 HIS A 156 18.499 -32.708 -16.135 1.00 16.44 H
ATOM 2436 HD1 HIS A 156 20.409 -32.540 -14.335 1.00 18.22 H
ATOM 2437 HD2 HIS A 156 18.960 -29.129 -15.526 1.00 16.44 H
ATOM 2438 HE1 HIS A 156 21.143 -30.937 -12.762 1.00 18.08 H
ATOM 2439 N GLY A 157 19.528 -32.840 -19.933 1.00 14.69 N
ANISOU 2439 N GLY A 157 1563 1734 2286 476 -445 -120 N
ATOM 2440 CA GLY A 157 18.959 -33.620 -21.016 1.00 13.80 C
ANISOU 2440 CA GLY A 157 1477 1566 2199 395 -341 -72 C
ATOM 2441 C GLY A 157 17.520 -33.302 -21.343 1.00 12.33 C
ANISOU 2441 C GLY A 157 1348 1400 1936 319 -271 -14 C
ATOM 2442 O GLY A 157 16.893 -34.047 -22.106 1.00 11.87 O
ANISOU 2442 O GLY A 157 1317 1300 1892 262 -202 22 O
ATOM 2443 H GLY A 157 20.064 -32.219 -20.193 1.00 17.63 H
ATOM 2444 HA2 GLY A 157 19.486 -33.477 -21.818 1.00 16.56 H
ATOM 2445 HA3 GLY A 157 19.012 -34.561 -20.787 1.00 16.56 H
ATOM 2446 N MET A 158 16.973 -32.226 -20.780 1.00 11.71 N
ANISOU 2446 N MET A 158 1280 1384 1784 323 -295 -15 N
ATOM 2447 CA MET A 158 15.592 -31.808 -21.022 1.00 11.39 C
ANISOU 2447 CA MET A 158 1281 1372 1676 263 -238 32 C
ATOM 2448 C MET A 158 15.584 -30.861 -22.220 1.00 10.73 C
ANISOU 2448 C MET A 158 1156 1284 1637 181 -196 -25 C
ATOM 2449 O MET A 158 15.629 -29.631 -22.089 1.00 11.16 O
ANISOU 2449 O MET A 158 1188 1368 1684 177 -218 -66 O
ATOM 2450 CB MET A 158 15.019 -31.142 -19.776 1.00 11.56 C
ANISOU 2450 CB MET A 158 1339 1464 1591 326 -282 58 C
ATOM 2451 CG MET A 158 14.976 -32.023 -18.535 1.00 13.64 C
ANISOU 2451 CG MET A 158 1663 1741 1779 425 -311 134 C
ATOM 2452 SD MET A 158 14.901 -31.073 -16.987 1.00 14.46 S
ANISOU 2452 SD MET A 158 1803 1945 1748 544 -396 116 S
ATOM 2453 CE MET A 158 13.466 -30.040 -17.307 1.00 14.03 C
ANISOU 2453 CE MET A 158 1753 1934 1645 469 -327 126 C
ATOM 2454 H MET A 158 17.394 -31.708 -20.238 1.00 14.05 H
ATOM 2455 HA MET A 158 15.052 -32.588 -21.227 1.00 13.67 H
ATOM 2456 HB2 MET A 158 15.560 -30.365 -19.565 1.00 13.88 H
ATOM 2457 HB3 MET A 158 14.110 -30.862 -19.967 1.00 13.88 H
ATOM 2458 HG2 MET A 158 14.189 -32.588 -18.577 1.00 16.37 H
ATOM 2459 HG3 MET A 158 15.776 -32.571 -18.511 1.00 16.37 H
ATOM 2460 HE1 MET A 158 13.311 -29.469 -16.539 1.00 16.84 H
ATOM 2461 HE2 MET A 158 13.636 -29.499 -18.094 1.00 16.84 H
ATOM 2462 HE3 MET A 158 12.695 -30.610 -17.457 1.00 16.84 H
ATOM 2463 N ASN A 159 15.553 -31.452 -23.412 1.00 10.34 N
ANISOU 2463 N ASN A 159 1102 1193 1633 122 -134 -29 N

ATOM 2464 CA ASN A 159 15.627 -30.683 -24.644 1.00 12.33 C
ANISOU 2464 CA ASN A 159 1331 1441 1912 61 -82 -70 C
ATOM 2465 C ASN A 159 14.230 -30.312 -25.113 1.00 11.63 C
ANISOU 2465 C ASN A 159 1284 1384 1751 16 -50 -35 C
ATOM 2466 O ASN A 159 13.301 -31.117 -25.032 1.00 11.47 O
ANISOU 2466 O ASN A 159 1295 1363 1700 5 -40 6 O
ATOM 2467 CB ASN A 159 16.349 -31.472 -25.735 1.00 13.54 C
ANISOU 2467 CB ASN A 159 1465 1548 2132 39 -33 -103 C
ATOM 2468 CG ASN A 159 17.803 -31.713 -25.406 1.00 15.98 C
ANISOU 2468 CG ASN A 159 1711 1828 2533 84 -61 -151 C
ATOM 2469 OD1 ASN A 159 18.658 -30.883 -25.704 1.00 17.60 O
ANISOU 2469 OD1 ASN A 159 1855 2029 2802 73 -45 -201 O
ATOM 2470 ND2 ASN A 159 18.092 -32.848 -24.790 1.00 16.61 N
ANISOU 2470 ND2 ASN A 159 1799 1879 2631 136 -99 -135 N
ATOM 2471 H ASN A 159 15.489 -32.301 -23.531 1.00 12.41 H
ATOM 2472 HA ASN A 159 16.121 -29.865 -24.482 1.00 14.79 H
ATOM 2473 HB2 ASN A 159 15.917 -32.334 -25.841 1.00 16.25 H
ATOM 2474 HB3 ASN A 159 16.307 -30.974 -26.566 1.00 16.25 H
ATOM 2475 HD21 ASN A 159 18.907 -33.029 -24.583 1.00 19.93 H
ATOM 2476 HD22 ASN A 159 17.465 -33.405 -24.598 1.00 19.93 H
ATOM 2477 N LEU A 160 14.087 -29.080 -25.583 1.00 10.99 N
ANISOU 2477 N LEU A 160 1198 1323 1657 -6 -34 -52 N
ATOM 2478 CA LEU A 160 12.836 -28.605 -26.153 1.00 12.30 C
ANISOU 2478 CA LEU A 160 1396 1519 1756 -36 -12 -27 C
ATOM 2479 C LEU A 160 12.780 -28.893 -27.654 1.00 12.85 C
ANISOU 2479 C LEU A 160 1483 1576 1822 -71 42 -44 C
ATOM 2480 O LEU A 160 13.794 -29.162 -28.301 1.00 13.12 O
ANISOU 2480 O LEU A 160 1502 1579 1904 -75 78 -74 O
ATOM 2481 CB LEU A 160 12.677 -27.112 -25.895 1.00 12.39 C
ANISOU 2481 CB LEU A 160 1405 1552 1752 -27 -25 -33 C
ATOM 2482 CG LEU A 160 12.462 -26.767 -24.417 1.00 13.29 C
ANISOU 2482 CG LEU A 160 1515 1696 1839 21 -85 -29 C
ATOM 2483 CD1 LEU A 160 12.667 -25.285 -24.178 1.00 14.25 C
ANISOU 2483 CD1 LEU A 160 1623 1814 1979 33 -106 -64 C
ATOM 2484 CD2 LEU A 160 11.068 -27.188 -23.984 1.00 14.50 C
ANISOU 2484 CD2 LEU A 160 1697 1895 1916 27 -84 20 C
ATOM 2485 H LEU A 160 14.712 -28.489 -25.582 1.00 13.19 H
ATOM 2486 HA LEU A 160 12.096 -29.067 -25.728 1.00 14.75 H
ATOM 2487 HB2 LEU A 160 13.479 -26.655 -26.194 1.00 14.87 H
ATOM 2488 HB3 LEU A 160 11.909 -26.788 -26.391 1.00 14.87 H
ATOM 2489 HG LEU A 160 13.107 -27.253 -23.879 1.00 15.95 H
ATOM 2490 HD11 LEU A 160 12.526 -25.095 -23.238 1.00 17.11 H
ATOM 2491 HD12 LEU A 160 13.573 -25.047 -24.432 1.00 17.11 H
ATOM 2492 HD13 LEU A 160 12.031 -24.788 -24.716 1.00 17.11 H
ATOM 2493 HD21 LEU A 160 10.947 -26.964 -23.048 1.00 17.40 H
ATOM 2494 HD22 LEU A 160 10.415 -26.717 -24.525 1.00 17.40 H
ATOM 2495 HD23 LEU A 160 10.974 -28.146 -24.111 1.00 17.40 H
ATOM 2496 N GLY A 161 11.567 -28.848 -28.198 1.00 13.20 N
ANISOU 2496 N GLY A 161 1558 1653 1806 -87 43 -30 N
ATOM 2497 CA GLY A 161 11.364 -29.140 -29.605 1.00 12.92 C
ANISOU 2497 CA GLY A 161 1549 1621 1740 -102 75 -56 C
ATOM 2498 C GLY A 161 11.866 -28.026 -30.511 1.00 13.85 C
ANISOU 2498 C GLY A 161 1688 1741 1831 -94 123 -54 C

ATOM 2499 O GLY A 161 12.287 -26.953 -30.076 1.00 13.36 O
ANISOU 2499 O GLY A 161 1613 1667 1794 -88 132 -35 O
ATOM 2500 H GLY A 161 10.847 -28.652 -27.770 1.00 15.85 H
ATOM 2501 HA2 GLY A 161 11.833 -29.958 -29.836 1.00 15.51 H
ATOM 2502 HA3 GLY A 161 10.418 -29.270 -29.775 1.00 15.51 H
ATOM 2503 N SER A 162 11.824 -28.300 -31.816 1.00 15.38 N
ANISOU 2503 N SER A 162 1921 1947 1976 -89 159 -75 N
ATOM 2504 CA SER A 162 12.370 -27.381 -32.810 1.00 17.59 C
ANISOU 2504 CA SER A 162 2237 2227 2221 -72 232 -56 C
ATOM 2505 C SER A 162 11.337 -26.421 -33.393 1.00 17.55 C
ANISOU 2505 C SER A 162 2287 2262 2118 -46 219 -22 C
ATOM 2506 O SER A 162 11.729 -25.450 -34.047 1.00 19.25 O
ANISOU 2506 O SER A 162 2541 2466 2307 -28 285 19 O
ATOM 2507 CB SER A 162 13.016 -28.172 -33.946 1.00 19.35 C
ANISOU 2507 CB SER A 162 2484 2449 2421 -59 291 -95 C
ATOM 2508 OG SER A 162 12.085 -29.047 -34.549 1.00 20.29 O
ANISOU 2508 OG SER A 162 2636 2604 2470 -46 241 -142 O
ATOM 2509 H SER A 162 11.482 -29.015 -32.150 1.00 18.46 H
ATOM 2510 HA SER A 162 13.063 -26.847 -32.391 1.00 21.11 H
ATOM 2511 HB2 SER A 162 13.344 -27.551 -34.616 1.00 23.23 H
ATOM 2512 HB3 SER A 162 13.752 -28.693 -33.589 1.00 23.23 H
ATOM 2513 HG SER A 162 12.454 -29.474 -35.171 1.00 24.35 H
ATOM 2514 N ASN A 163 10.043 -26.660 -33.178 1.00 16.81 N
ANISOU 2514 N ASN A 163 2195 2211 1981 -41 142 -33 N
ATOM 2515 CA ASN A 163 8.970 -25.857 -33.771 1.00 17.77 C
ANISOU 2515 CA ASN A 163 2362 2380 2010 -3 112 -12 C
ATOM 2516 C ASN A 163 8.261 -25.103 -32.648 1.00 15.86 C
ANISOU 2516 C ASN A 163 2085 2141 1798 -6 66 16 C
ATOM 2517 O ASN A 163 7.427 -25.670 -31.940 1.00 15.31 O
ANISOU 2517 O ASN A 163 1971 2096 1749 -22 10 -5 O
ATOM 2518 CB ASN A 163 7.998 -26.741 -34.550 1.00 20.36 C
ANISOU 2518 CB ASN A 163 2704 2761 2272 14 51 -71 C
ATOM 2519 CG ASN A 163 6.851 -25.955 -35.158 1.00 24.49 C
ANISOU 2519 CG ASN A 163 3266 3341 2698 69 -1 -61 C
ATOM 2520 OD1 ASN A 163 6.802 -24.732 -35.056 1.00 25.97 O
ANISOU 2520 OD1 ASN A 163 3482 3523 2864 98 19 2 O
ATOM 2521 ND2 ASN A 163 5.923 -26.659 -35.809 1.00 26.67 N
ANISOU 2521 ND2 ASN A 163 3539 3669 2926 89 -75 -130 N
ATOM 2522 H ASN A 163 9.753 -27.299 -32.681 1.00 20.17 H
ATOM 2523 HA ASN A 163 9.353 -25.208 -34.382 1.00 21.33 H
ATOM 2524 HB2 ASN A 163 8.477 -27.179 -35.271 1.00 24.43 H
ATOM 2525 HB3 ASN A 163 7.622 -27.404 -33.950 1.00 24.43 H
ATOM 2526 HD21 ASN A 163 5.254 -26.258 -36.170 1.00 32.00 H
ATOM 2527 HD22 ASN A 163 5.995 -27.514 -35.867 1.00 32.00 H
ATOM 2528 N TRP A 164 8.579 -23.821 -32.496 1.00 14.81 N
ANISOU 2528 N TRP A 164 1972 1980 1676 11 97 63 N
ATOM 2529 CA TRP A 164 8.134 -23.065 -31.334 1.00 14.08 C
ANISOU 2529 CA TRP A 164 1846 1882 1622 14 59 76 C
ATOM 2530 C TRP A 164 6.718 -22.530 -31.526 1.00 14.45 C
ANISOU 2530 C TRP A 164 1909 1980 1601 57 4 85 C
ATOM 2531 O TRP A 164 6.408 -21.914 -32.556 1.00 14.43 O
ANISOU 2531 O TRP A 164 1966 1989 1529 102 11 111 O
ATOM 2532 CB TRP A 164 9.113 -21.924 -31.048 1.00 14.13 C

ANISOU 2532 CB TRP A 164 1856 1818 1695 11 107 102 C
ATOM 2533 CG TRP A 164 10.410 -22.443 -30.506 1.00 15.08 C
ANISOU 2533 CG TRP A 164 1927 1895 1907 -28 135 74 C
ATOM 2534 CD1 TRP A 164 11.399 -23.077 -31.207 1.00 16.58 C
ANISOU 2534 CD1 TRP A 164 2115 2063 2121 -49 196 66 C
ATOM 2535 CD2 TRP A 164 10.841 -22.413 -29.144 1.00 14.71 C
ANISOU 2535 CD2 TRP A 164 1824 1831 1935 -38 95 43 C
ATOM 2536 NE1 TRP A 164 12.420 -23.434 -30.367 1.00 17.05 N
ANISOU 2536 NE1 TRP A 164 2112 2088 2279 -73 193 32 N
ATOM 2537 CE2 TRP A 164 12.104 -23.043 -29.093 1.00 16.33 C
ANISOU 2537 CE2 TRP A 164 1989 2001 2213 -63 124 16 C
ATOM 2538 CE3 TRP A 164 10.287 -21.911 -27.962 1.00 14.60 C
ANISOU 2538 CE3 TRP A 164 1790 1833 1923 -15 34 29 C
ATOM 2539 CZ2 TRP A 164 12.820 -23.185 -27.908 1.00 16.03 C
ANISOU 2539 CZ2 TRP A 164 1895 1946 2250 -62 80 -24 C
ATOM 2540 CZ3 TRP A 164 11.003 -22.045 -26.786 1.00 15.38 C
ANISOU 2540 CZ3 TRP A 164 1843 1919 2081 -12 -3 -12 C
ATOM 2541 CH2 TRP A 164 12.256 -22.681 -26.768 1.00 15.74 C
ANISOU 2541 CH2 TRP A 164 1851 1932 2198 -33 14 -38 C
ATOM 2542 H TRP A 164 9.052 -23.367 -33.053 1.00 17.77 H
ATOM 2543 HA TRP A 164 8.127 -23.652 -30.562 1.00 16.90 H
ATOM 2544 HB2 TRP A 164 9.297 -21.445 -31.871 1.00 16.96 H
ATOM 2545 HB3 TRP A 164 8.726 -21.326 -30.390 1.00 16.96 H
ATOM 2546 HD1 TRP A 164 11.378 -23.247 -32.121 1.00 19.89 H
ATOM 2547 HE1 TRP A 164 13.139 -23.843 -30.600 1.00 20.46 H
ATOM 2548 HE3 TRP A 164 9.454 -21.496 -27.966 1.00 17.52 H
ATOM 2549 HZ2 TRP A 164 13.655 -23.593 -27.894 1.00 19.24 H
ATOM 2550 HZ3 TRP A 164 10.643 -21.721 -25.992 1.00 18.45 H
ATOM 2551 HH2 TRP A 164 12.716 -22.756 -25.963 1.00 18.89 H
ATOM 2552 N ALA A 165 5.868 -22.754 -30.519 1.00 12.58 N
ANISOU 2552 N ALA A 165 1619 1778 1384 53 -46 67 N
ATOM 2553 CA ALA A 165 4.501 -22.241 -30.467 1.00 13.05 C
ANISOU 2553 CA ALA A 165 1666 1888 1403 95 -97 67 C
ATOM 2554 C ALA A 165 4.452 -21.096 -29.450 1.00 12.51 C
ANISOU 2554 C ALA A 165 1589 1799 1366 121 -99 83 C
ATOM 2555 O ALA A 165 5.487 -20.458 -29.194 1.00 13.17 O
ANISOU 2555 O ALA A 165 1693 1819 1492 114 -65 95 O
ATOM 2556 CB ALA A 165 3.554 -23.401 -30.168 1.00 13.86 C
ANISOU 2556 CB ALA A 165 1704 2042 1519 68 -134 30 C
ATOM 2557 H ALA A 165 6.074 -23.221 -29.827 1.00 15.10 H
ATOM 2558 HA ALA A 165 4.266 -21.880 -31.336 1.00 15.65 H
ATOM 2559 HB1 ALA A 165 2.645 -23.064 -30.132 1.00 16.63 H
ATOM 2560 HB2 ALA A 165 3.634 -24.063 -30.871 1.00 16.63 H
ATOM 2561 HB3 ALA A 165 3.795 -23.793 -29.314 1.00 16.63 H
ATOM 2562 N TYR A 166 3.280 -20.833 -28.884 1.00 10.88 N
ANISOU 2562 N TYR A 166 1343 1642 1147 153 -139 72 N
ATOM 2563 CA TYR A 166 3.123 -19.601 -28.128 1.00 11.58 C
ANISOU 2563 CA TYR A 166 1435 1712 1252 198 -146 77 C
ATOM 2564 C TYR A 166 3.972 -19.608 -26.861 1.00 11.03 C
ANISOU 2564 C TYR A 166 1348 1614 1230 178 -130 59 C
ATOM 2565 O TYR A 166 4.401 -20.651 -26.356 1.00 10.79 O
ANISOU 2565 O TYR A 166 1292 1595 1212 140 -118 52 O
ATOM 2566 CB TYR A 166 1.645 -19.339 -27.794 1.00 12.55 C

ANISOU 2566 CB TYR A 166 1513 1903 1352 246 -186 62 C
ATOM 2567 CG TYR A 166 0.981 -20.242 -26.779 1.00 13.08 C
ANISOU 2567 CG TYR A 166 1504 2031 1433 224 -181 44 C
ATOM 2568 CD1 TYR A 166 1.363 -20.230 -25.437 1.00 12.67 C
ANISOU 2568 CD1 TYR A 166 1440 1978 1395 226 -157 40 C
ATOM 2569 CD2 TYR A 166 -0.092 -21.056 -27.144 1.00 14.13 C
ANISOU 2569 CD2 TYR A 166 1576 2222 1569 209 -198 29 C
ATOM 2570 CE1 TYR A 166 0.734 -21.027 -24.509 1.00 13.25 C
ANISOU 2570 CE1 TYR A 166 1458 2107 1469 216 -131 43 C
ATOM 2571 CE2 TYR A 166 -0.729 -21.856 -26.215 1.00 13.95 C
ANISOU 2571 CE2 TYR A 166 1479 2242 1578 183 -170 27 C
ATOM 2572 CZ TYR A 166 -0.316 -21.834 -24.900 1.00 14.22 C
ANISOU 2572 CZ TYR A 166 1518 2275 1611 189 -127 45 C
ATOM 2573 OH TYR A 166 -0.926 -22.621 -23.943 1.00 16.46 O
ANISOU 2573 OH TYR A 166 1742 2600 1913 173 -78 63 O
ATOM 2574 H TYR A 166 2.582 -21.333 -28.922 1.00 13.05 H
ATOM 2575 HA TYR A 166 3.430 -18.864 -28.678 1.00 13.89 H
ATOM 2576 HB2 TYR A 166 1.571 -18.433 -27.457 1.00 15.06 H
ATOM 2577 HB3 TYR A 166 1.135 -19.415 -28.615 1.00 15.06 H
ATOM 2578 HD1 TYR A 166 2.068 -19.686 -25.168 1.00 15.20 H
ATOM 2579 HD2 TYR A 166 -0.375 -21.070 -28.030 1.00 16.95 H
ATOM 2580 HE1 TYR A 166 1.010 -21.016 -23.620 1.00 15.90 H
ATOM 2581 HE2 TYR A 166 -1.435 -22.404 -26.475 1.00 16.73 H
ATOM 2582 HH TYR A 166 -1.547 -23.067 -24.291 1.00 19.75 H
ATOM 2583 N GLN A 167 4.206 -18.400 -26.355 1.00 9.96 N
ANISOU 2583 N GLN A 167 1227 1435 1122 215 -138 47 N
ATOM 2584 CA GLN A 167 5.055 -18.167 -25.196 1.00 10.99 C
ANISOU 2584 CA GLN A 167 1343 1535 1297 215 -145 8 C
ATOM 2585 C GLN A 167 4.439 -16.980 -24.469 1.00 12.34 C
ANISOU 2585 C GLN A 167 1514 1705 1469 282 -175 -24 C
ATOM 2586 O GLN A 167 4.531 -15.845 -24.955 1.00 13.19 O
ANISOU 2586 O GLN A 167 1653 1743 1617 304 -176 -20 O
ATOM 2587 CB GLN A 167 6.486 -17.884 -25.643 1.00 12.60 C
ANISOU 2587 CB GLN A 167 1565 1647 1576 175 -118 6 C
ATOM 2588 CG GLN A 167 7.493 -17.643 -24.545 1.00 12.74 C
ANISOU 2588 CG GLN A 167 1555 1628 1658 175 -144 -54 C
ATOM 2589 CD GLN A 167 8.886 -17.442 -25.113 1.00 13.94 C
ANISOU 2589 CD GLN A 167 1700 1687 1910 125 -109 -59 C
ATOM 2590 OE1 GLN A 167 9.131 -16.513 -25.894 1.00 14.43 O
ANISOU 2590 OE1 GLN A 167 1785 1669 2029 114 -69 -35 O
ATOM 2591 NE2 GLN A 167 9.800 -18.321 -24.746 1.00 13.89 N
ANISOU 2591 NE2 GLN A 167 1659 1687 1931 97 -114 -85 N
ATOM 2592 H GLN A 167 3.870 -17.677 -26.679 1.00 11.95 H
ATOM 2593 HA GLN A 167 5.048 -18.941 -24.612 1.00 13.18 H
ATOM 2594 HB2 GLN A 167 6.799 -18.644 -26.159 1.00 15.12 H
ATOM 2595 HB3 GLN A 167 6.479 -17.094 -26.205 1.00 15.12 H
ATOM 2596 HG2 GLN A 167 7.246 -16.845 -24.052 1.00 15.29 H
ATOM 2597 HG3 GLN A 167 7.513 -18.412 -23.953 1.00 15.29 H
ATOM 2598 HE21 GLN A 167 9.590 -18.963 -24.214 1.00 16.67 H
ATOM 2599 HE22 GLN A 167 10.605 -18.251 -25.040 1.00 16.67 H
ATOM 2600 N AVAL A 168 3.784 -17.226 -23.335 0.16 12.27 N
ANISOU 2600 N AVAL A 168 1474 1770 1417 320 -191 -51 N
ATOM 2601 N BVAL A 168 3.834 -17.245 -23.314 0.84 12.20 N

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ANISOU 2601  N  BVAL A 168    1466  1761  1410   318  -191   -52      N
ATOM   2602  CA AVAL A 168     2.957 -16.210 -22.691  0.16 12.80           C
ANISOU 2602  CA AVAL A 168    1537  1857  1469   396  -215   -86      C
ATOM   2603  CA BVAL A 168     2.948 -16.297 -22.643  0.84 12.68           C
ANISOU 2603  CA BVAL A 168    1520  1849  1451   395  -213   -86      C
ATOM   2604  C  AVAL A 168     3.288 -16.128 -21.208  0.16 13.48           C
ANISOU 2604  C  AVAL A 168    1615  1973  1533   440  -235   -147     C
ATOM   2605  C  BVAL A 168     3.357 -16.137 -21.184  0.84 13.49           C
ANISOU 2605  C  BVAL A 168    1616  1972  1536   439  -236   -149     C
ATOM   2606  O  AVAL A 168     3.543 -17.147 -20.556  0.16 13.43           O
ANISOU 2606  O  AVAL A 168    1598  2020  1486   427  -223   -137     O
ATOM   2607  O  BVAL A 168     3.712 -17.113 -20.516  0.84 13.61           O
ANISOU 2607  O  BVAL A 168    1623  2034  1514   426  -227   -143     O
ATOM   2608  CB AVAL A 168     1.453 -16.497 -22.890  0.16 12.97           C
ANISOU 2608  CB AVAL A 168    1523  1965  1441   424  -205   -60      C
ATOM   2609  CB BVAL A 168     1.479 -16.769 -22.743  0.84 12.89           C
ANISOU 2609  CB BVAL A 168    1506  1968  1424   417  -199   -58      C
ATOM   2610  CG1AVAL A 168     1.086 -16.412 -24.366  0.16 12.95           C
ANISOU 2610  CG1AVAL A 168    1536  1940  1446   408  -210   -18      C
ATOM   2611  CG1BVAL A 168     0.545 -15.978 -21.814  0.84 13.75           C
ANISOU 2611  CG1BVAL A 168    1593  2126  1505   504  -209   -100     C
ATOM   2612  CG2AVAL A 168     1.084 -17.860 -22.321  0.16 12.88           C
ANISOU 2612  CG2AVAL A 168    1468  2035  1390   394  -171   -38      C
ATOM   2613  CG2BVAL A 168     1.004 -16.696 -24.208  0.84 12.84           C
ANISOU 2613  CG2BVAL A 168    1509  1945  1424   401  -206   -19      C
ATOM   2614  H  AVAL A 168     3.803 -17.977 -22.918  0.16 14.72           H
ATOM   2615  H  BVAL A 168     3.925 -17.987 -22.888  0.84 14.65           H
ATOM   2616  HA AVAL A 168     3.152 -15.347 -23.089  0.16 15.36           H
ATOM   2617  HA BVAL A 168     3.019 -15.432 -23.075  0.84 15.22           H
ATOM   2618  HB AVAL A 168     0.939 -15.825 -22.415  0.16 15.57           H
ATOM   2619  HB BVAL A 168     1.438 -17.699 -22.472  0.84 15.47           H
ATOM   2620 HG11AVAL A 168     0.139 -16.595 -24.467  0.16 15.55           H
ATOM   2621 HG11BVAL A 168     1.066 -15.318 -21.330  0.84 16.50           H
ATOM   2622 HG12AVAL A 168     1.287 -15.520 -24.691  0.16 15.55           H
ATOM   2623 HG12BVAL A 168    -0.133 -15.536 -22.349  0.84 16.50           H
ATOM   2624 HG13AVAL A 168     1.604 -17.068 -24.858  0.16 15.55           H
ATOM   2625 HG13BVAL A 168     0.127 -16.592 -21.190  0.84 16.50           H
ATOM   2626 HG21AVAL A 168     1.879 -18.271 -21.947  0.16 15.45           H
ATOM   2627 HG21BVAL A 168     1.731 -16.367 -24.759  0.84 15.41           H
ATOM   2628 HG22AVAL A 168     0.415 -17.742 -21.628  0.16 15.45           H
ATOM   2629 HG22BVAL A 168     0.742 -17.583 -24.499  0.84 15.41           H
ATOM   2630 HG23AVAL A 168     0.729 -18.414 -23.034  0.16 15.45           H
ATOM   2631 HG23BVAL A 168     0.247 -16.092 -24.264  0.84 15.41           H
ATOM   2632  N   MET A 169     3.273 -14.905 -20.680  1.00 14.19           N
ANISOU 2632  N   MET A 169    1717  2027  1648   503  -271  -212      N
ATOM   2633  CA  MET A 169     3.418 -14.655 -19.246  1.00 14.96           C
ANISOU 2633  CA  MET A 169    1814  2167  1705   573  -304  -291      C
ATOM   2634  C   MET A 169     2.018 -14.730 -18.656  1.00 15.19           C
ANISOU 2634  C   MET A 169    1824  2304  1646   643  -275  -282      C
ATOM   2635  O   MET A 169     1.222 -13.786 -18.773  1.00 15.04           O
ANISOU 2635  O   MET A 169    1799  2276  1639   697  -283  -307      O
ATOM   2636  CB  MET A 169     4.066 -13.304 -18.969  1.00 15.82           C
ANISOU 2636  CB  MET A 169    1938  2176  1897   608  -361  -386      C
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ATOM   2637  CG  MET A 169      4.442 -13.125 -17.505  1.00 16.14           C
ANISOU 2637  CG  MET A 169     1982   2260   1889    685   -417   -492      C
ATOM   2638  SD  MET A 169      5.705 -14.324 -16.995  1.00 15.56           S
ANISOU 2638  SD  MET A 169     1904   2217   1792    649   -441   -494      S
ATOM   2639  CE  MET A 169      5.393 -14.423 -15.229  1.00 17.11           C
ANISOU 2639  CE  MET A 169     2126   2542   1835    785   -482   -572      C
ATOM   2640  H  AMET A 169      3.179 -14.187 -21.143  0.16 17.03           H
ATOM   2641  H  BMET A 169      3.133 -14.197 -21.147  0.84 17.03           H
ATOM   2642  HA  MET A 169      3.972 -15.347 -18.852  1.00 17.96           H
ATOM   2643  HB2 MET A 169      4.874 -13.226 -19.499  1.00 18.99           H
ATOM   2644  HB3 MET A 169      3.443 -12.600 -19.207  1.00 18.99           H
ATOM   2645  HG2 MET A 169      4.798 -12.233 -17.372  1.00 19.36           H
ATOM   2646  HG3 MET A 169      3.655 -13.259 -16.953  1.00 19.36           H
ATOM   2647  HE1 MET A 169      6.020 -15.048 -14.833  1.00 20.54           H
ATOM   2648  HE2 MET A 169      5.511 -13.543 -14.839  1.00 20.54           H
ATOM   2649  HE3 MET A 169      4.484 -14.730 -15.086  1.00 20.54           H
ATOM   2650  N   ALA A 170      1.723 -15.849 -18.010  1.00 12.97           N
ANISOU 2650  N   ALA A 170     1528   2118   1283    644   -233   -242      N
ATOM   2651  CA  ALA A 170      0.355 -16.268 -17.775  1.00 12.43           C
ANISOU 2651  CA  ALA A 170     1418   2146   1157    673   -171   -199      C
ATOM   2652  C   ALA A 170     -0.038 -16.156 -16.312  1.00 14.05           C
ANISOU 2652  C   ALA A 170     1632   2445   1263    775   -147   -237      C
ATOM   2653  O   ALA A 170      0.796 -16.167 -15.400  1.00 14.67           O
ANISOU 2653  O   ALA A 170     1755   2533   1287    820   -180   -282      O
ATOM   2654  CB  ALA A 170      0.151 -17.718 -18.234  1.00 12.82           C
ANISOU 2654  CB  ALA A 170     1439   2226   1208    590   -114   -109      C
ATOM   2655  H   ALA A 170      2.310 -16.391 -17.694  1.00 15.57           H
ATOM   2656  HA  ALA A 170     -0.241 -15.703 -18.290  1.00 14.91           H
ATOM   2657  HB1 ALA A 170     -0.769 -17.975 -18.067  1.00 15.39           H
ATOM   2658  HB2 ALA A 170      0.345 -17.779 -19.183  1.00 15.39           H
ATOM   2659  HB3 ALA A 170      0.752 -18.294 -17.736  1.00 15.39           H
ATOM   2660  N   THR A 171     -1.347 -16.058 -16.124  1.00 14.45           N
ANISOU 2660  N   THR A 171     1635   2570   1286    818    -90   -221      N
ATOM   2661  CA  THR A 171     -2.015 -16.372 -14.875  1.00 15.63           C
ANISOU 2661  CA  THR A 171     1776   2832   1328    900    -16   -213      C
ATOM   2662  C   THR A 171     -2.723 -17.708 -15.067  1.00 15.49           C
ANISOU 2662  C   THR A 171     1702   2865   1319    830     85   -102      C
ATOM   2663  O   THR A 171     -3.523 -17.861 -15.995  1.00 16.56           O
ANISOU 2663  O   THR A 171     1765   2990   1536    772    103    -74      O
ATOM   2664  CB  THR A 171     -3.006 -15.267 -14.506  1.00 17.45           C
ANISOU 2664  CB  THR A 171     1979   3107   1543   1002     -9   -281      C
ATOM   2665  OG1 THR A 171     -2.298 -14.029 -14.322  1.00 17.00           O
ANISOU 2665  OG1 THR A 171     1977   2981   1501   1063   -107   -393      O
ATOM   2666  CG2 THR A 171     -3.746 -15.624 -13.235  1.00 19.42           C
ANISOU 2666  CG2 THR A 171     2219   3485   1674   1092     92   -265      C
ATOM   2667  H   THR A 171     -1.891 -15.799 -16.737  1.00 17.34           H
ATOM   2668  HA  THR A 171     -1.362 -16.460 -14.164  1.00 18.75           H
ATOM   2669  HB  THR A 171     -3.655 -15.163 -15.219  1.00 20.94           H
ATOM   2670  HG1 THR A 171     -1.900 -13.818 -15.031  1.00 20.40           H
ATOM   2671 HG21 THR A 171     -4.372 -14.919 -13.007  1.00 23.30           H
ATOM   2672 HG22 THR A 171     -4.235 -16.452 -13.358  1.00 23.30           H
ATOM   2673 HG23 THR A 171     -3.116 -15.734 -12.505  1.00 23.30           H
ATOM   2674  N   ALA A 172     -2.414 -18.680 -14.217  1.00 16.85           N
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ANISOU 2674 N ALA A 172 1905 3082 1413 838 147 -42 N
ATOM 2675 CA ALA A 172 -2.995 -20.011 -14.339 1.00 18.45 C
ANISOU 2675 CA ALA A 172 2057 3308 1644 764 252 68 C
ATOM 2676 C ALA A 172 -3.499 -20.464 -12.982 1.00 21.91 C
ANISOU 2676 C ALA A 172 2510 3847 1967 846 372 126 C
ATOM 2677 O ALA A 172 -3.005 -20.026 -11.941 1.00 22.67 O
ANISOU 2677 O ALA A 172 2688 3992 1935 958 352 86 O
ATOM 2678 CB ALA A 172 -1.990 -21.029 -14.885 1.00 18.92 C
ANISOU 2678 CB ALA A 172 2149 3291 1748 669 224 120 C
ATOM 2679 H ALA A 172 -1.868 -18.595 -13.558 1.00 20.21 H
ATOM 2680 HA ALA A 172 -3.750 -19.975 -14.947 1.00 22.14 H
ATOM 2681 HB1 ALA A 172 -2.422 -21.895 -14.947 1.00 22.70 H
ATOM 2682 HB2 ALA A 172 -1.695 -20.742 -15.763 1.00 22.70 H
ATOM 2683 HB3 ALA A 172 -1.233 -21.079 -14.281 1.00 22.70 H
ATOM 2684 N GLY A 173 -4.496 -21.341 -13.001 1.00 23.11 N
ANISOU 2684 N GLY A 173 2583 4029 2169 795 499 217 N
ATOM 2685 CA GLY A 173 -5.102 -21.761 -11.752 1.00 24.95 C
ANISOU 2685 CA GLY A 173 2829 4342 2310 864 635 289 C
ATOM 2686 C GLY A 173 -5.873 -23.054 -11.880 1.00 26.13 C
ANISOU 2686 C GLY A 173 2902 4465 2562 761 767 409 C
ATOM 2687 O GLY A 173 -6.119 -23.565 -12.974 1.00 24.06 O
ANISOU 2687 O GLY A 173 2546 4159 2435 653 769 423 O
ATOM 2688 H GLY A 173 -4.830 -21.700 -13.708 1.00 27.73 H
ATOM 2689 HA2 GLY A 173 -4.410 -21.882 -11.083 1.00 29.94 H
ATOM 2690 HA3 GLY A 173 -5.710 -21.071 -11.442 1.00 29.94 H
ATOM 2691 N TYR A 174 -6.257 -23.576 -10.717 1.00 29.89 N
ANISOU 2691 N TYR A 174 3419 4959 2980 797 873 487 N
ATOM 2692 CA TYR A 174 -6.976 -24.842 -10.636 1.00 31.90 C
ANISOU 2692 CA TYR A 174 3614 5169 3337 703 1012 602 C
ATOM 2693 C TYR A 174 -7.857 -24.785 -9.395 1.00 33.28 C
ANISOU 2693 C TYR A 174 3799 5398 3448 771 1133 644 C
ATOM 2694 O TYR A 174 -7.340 -24.696 -8.278 1.00 34.46 O
ANISOU 2694 O TYR A 174 4067 5582 3444 878 1133 668 O
ATOM 2695 CB TYR A 174 -6.008 -26.020 -10.578 1.00 33.49 C
ANISOU 2695 CB TYR A 174 3895 5297 3534 660 1016 695 C
ATOM 2696 CG TYR A 174 -6.682 -27.378 -10.531 1.00 35.94 C
ANISOU 2696 CG TYR A 174 4151 5535 3972 556 1153 809 C
ATOM 2697 CD1 TYR A 174 -7.253 -27.929 -11.666 1.00 36.43 C
ANISOU 2697 CD1 TYR A 174 4081 5531 4228 417 1169 801 C
ATOM 2698 CD2 TYR A 174 -6.737 -28.111 -9.350 1.00 38.79 C
ANISOU 2698 CD2 TYR A 174 4588 5886 4263 601 1258 916 C
ATOM 2699 CE1 TYR A 174 -7.864 -29.170 -11.631 1.00 38.20 C
ANISOU 2699 CE1 TYR A 174 4251 5674 4590 315 1283 885 C
ATOM 2700 CE2 TYR A 174 -7.350 -29.350 -9.305 1.00 40.67 C
ANISOU 2700 CE2 TYR A 174 4778 6045 4631 504 1385 1018 C
ATOM 2701 CZ TYR A 174 -7.910 -29.875 -10.452 1.00 40.81 C
ANISOU 2701 CZ TYR A 174 4661 5989 4855 357 1395 996 C
ATOM 2702 OH TYR A 174 -8.522 -31.108 -10.420 1.00 42.87 O
ANISOU 2702 OH TYR A 174 4867 6160 5263 256 1510 1080 O
ATOM 2703 H TYR A 174 -6.111 -23.210 -9.953 1.00 35.87 H
ATOM 2704 HA TYR A 174 -7.544 -24.946 -11.415 1.00 38.27 H
ATOM 2705 HB2 TYR A 174 -5.444 -25.998 -11.367 1.00 40.19 H
ATOM 2706 HB3 TYR A 174 -5.461 -25.935 -9.781 1.00 40.19 H

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ATOM   2707  HD1 TYR A 174     -7.224 -27.457 -12.466  1.00 43.71           H
ATOM   2708  HD2 TYR A 174     -6.360 -27.760  -8.576  1.00 46.54           H
ATOM   2709  HE1 TYR A 174     -8.245 -29.524 -12.402  1.00 45.84           H
ATOM   2710  HE2 TYR A 174     -7.380 -29.828  -8.508  1.00 48.81           H
ATOM   2711  HH  TYR A 174     -8.818 -31.301 -11.182  1.00 51.45           H
ATOM   2712  N   GLN A 175     -9.173 -24.799  -9.594  1.00 32.75           N
ANISOU 2712  N   GLN A 175     3602   5342   3498    716   1228    641      N
ATOM   2713  CA  GLN A 175     -10.146 -24.786  -8.501  1.00 33.81           C
ANISOU 2713  CA  GLN A 175     3725   5530   3593    767   1365    681      C
ATOM   2714  C   GLN A 175     -9.770 -23.744  -7.452  1.00 33.99           C
ANISOU 2714  C   GLN A 175     3862   5637   3417    931   1317    629      C
ATOM   2715  O   GLN A 175     -9.538 -24.050  -6.284  1.00 34.42           O
ANISOU 2715  O   GLN A 175     4018   5719   3341   1012   1377    697      O
ATOM   2716  CB  GLN A 175     -10.270 -26.177  -7.869  1.00 35.92           C
ANISOU 2716  CB  GLN A 175     4019   5744   3885    715   1506    826      C
ATOM   2717  CG  GLN A 175     -10.318 -27.301  -8.888  1.00 37.05           C
ANISOU 2717  CG  GLN A 175     4077   5780   4220    556   1522    869      C
ATOM   2718  CD  GLN A 175     -10.630 -28.661  -8.286  1.00 40.91           C
ANISOU 2718  CD  GLN A 175     4576   6202   4766    497   1671   1007      C
ATOM   2719  OE1 GLN A 175     -11.250 -29.504  -8.938  1.00 42.22           O
ANISOU 2719  OE1 GLN A 175     4626   6291   5126    362   1727   1027      O
ATOM   2720  NE2 GLN A 175     -10.194 -28.890  -7.048  1.00 42.67           N
ANISOU 2720  NE2 GLN A 175     4936   6449   4826    604   1728   1096      N
ATOM   2721  H   GLN A 175     -9.537 -24.816 -10.374  1.00 39.29           H
ATOM   2722  HA  GLN A 175     -11.015 -24.546  -8.859  1.00 40.58           H
ATOM   2723  HB2 GLN A 175     -9.504 -26.329  -7.293  1.00 43.10           H
ATOM   2724  HB3 GLN A 175     -11.087 -26.212  -7.347  1.00 43.10           H
ATOM   2725  HG2 GLN A 175     -11.005 -27.100  -9.542  1.00 44.46           H
ATOM   2726  HG3 GLN A 175     -9.455 -27.361  -9.327  1.00 44.46           H
ATOM   2727 HE21 GLN A 175     -9.757 -28.281  -6.627  1.00 51.20           H
ATOM   2728 HE22 GLN A 175     -10.349 -29.647  -6.671  1.00 51.20           H
ATOM   2729  N   SER A 176     -9.722 -22.489  -7.891  1.00 33.83           N
ANISOU 2729  N   SER A 176     3822   5653   3378    985   1200    502      N
ATOM   2730  CA  SER A 176     -9.245 -21.415  -7.037  1.00 34.38           C
ANISOU 2730  CA  SER A 176     3996   5785   3281   1133   1120    423      C
ATOM   2731  C   SER A 176     -9.942 -20.114  -7.412  1.00 32.79           C
ANISOU 2731  C   SER A 176     3720   5621   3117   1175   1067    298      C
ATOM   2732  O   SER A 176    -10.754 -20.060  -8.340  1.00 32.83           O
ANISOU 2732  O   SER A 176     3595   5609   3271   1097   1085    276      O
ATOM   2733  CB  SER A 176     -7.723 -21.276  -7.143  1.00 33.33           C
ANISOU 2733  CB  SER A 176     3976   5621   3065   1169   968    385      C
ATOM   2734  OG  SER A 176     -7.323 -20.937  -8.463  1.00 31.68           O
ANISOU 2734  OG  SER A 176     3717   5364   2955   1099   859    318      O
ATOM   2735  H   SER A 176     -9.961 -22.237  -8.677  1.00 40.59           H
ATOM   2736  HA  SER A 176     -9.465 -21.620  -6.115  1.00 41.26           H
ATOM   2737  HB2 SER A 176     -7.429 -20.579  -6.537  1.00 39.99           H
ATOM   2738  HB3 SER A 176     -7.313 -22.121  -6.898  1.00 39.99           H
ATOM   2739  HG  SER A 176     -6.487 -20.866  -8.501  1.00 38.02           H
ATOM   2740  N  ASER A 177     -9.619 -19.063  -6.663  0.58 31.52           N
ANISOU 2740  N  ASER A 177     3641   5507   2827   1306    991    210      N
ATOM   2741  N  BSER A 177     -9.623 -19.062  -6.661  0.42 31.55           N
ANISOU 2741  N  BSER A 177     3645   5512   2831   1306    991    210      N
ATOM   2742  CA ASER A 177    -10.122 -17.722  -6.914  0.58 30.89           C
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ANISOU 2742 CA ASER A 177 3516 5451 2771 1365 921 83 C
ATOM 2743 CA BSER A 177 -10.122 -17.722 -6.922 0.42 30.88 C
ANISOU 2743 CA BSER A 177 3514 5448 2770 1365 921 83 C
ATOM 2744 C ASER A 177 -8.953 -16.755 -6.802 0.58 29.62 C
ANISOU 2744 C ASER A 177 3459 5271 2523 1449 747 -29 C
ATOM 2745 C BSER A 177 -8.959 -16.750 -6.792 0.42 29.61 C
ANISOU 2745 C BSER A 177 3459 5271 2522 1450 747 -29 C
ATOM 2746 O ASER A 177 -7.908 -17.080 -6.231 0.58 29.60 O
ANISOU 2746 O ASER A 177 3560 5264 2422 1485 697 -13 O
ATOM 2747 O BSER A 177 -7.926 -17.067 -6.194 0.42 29.63 O
ANISOU 2747 O BSER A 177 3565 5270 2423 1489 699 -13 O
ATOM 2748 CB ASER A 177 -11.234 -17.341 -5.927 0.58 32.76 C
ANISOU 2748 CB ASER A 177 3725 5763 2958 1446 1037 76 C
ATOM 2749 CB BSER A 177 -11.251 -17.337 -5.957 0.42 32.73 C
ANISOU 2749 CB BSER A 177 3718 5758 2959 1444 1037 75 C
ATOM 2750 OG ASER A 177 -12.227 -18.352 -5.861 0.58 33.63 O
ANISOU 2750 OG ASER A 177 3743 5883 3152 1365 1214 184 O
ATOM 2751 OG BSER A 177 -10.769 -17.200 -4.631 0.42 33.97 O
ANISOU 2751 OG BSER A 177 3999 5969 2939 1563 1039 76 O
ATOM 2752 H ASER A 177 -9.094 -19.107 -5.983 0.58 37.82 H
ATOM 2753 H BSER A 177 -9.104 -19.105 -5.977 0.42 37.86 H
ATOM 2754 HA ASER A 177 -10.478 -17.673 -7.815 0.58 37.07 H
ATOM 2755 HA BSER A 177 -10.463 -17.674 -7.829 0.42 37.05 H
ATOM 2756 HB2ASER A 177 -10.846 -17.223 -5.045 0.58 39.31 H
ATOM 2757 HB2BSER A 177 -11.634 -16.493 -6.241 0.42 39.27 H
ATOM 2758 HB3ASER A 177 -11.645 -16.513 -6.220 0.58 39.31 H
ATOM 2759 HB3BSER A 177 -11.929 -18.031 -5.974 0.42 39.27 H
ATOM 2760 HG ASER A 177 -12.827 -18.129 -5.318 0.58 40.35 H
ATOM 2761 HG BSER A 177 -11.399 -16.989 -4.116 0.42 40.76 H
ATOM 2762 N GLY A 178 -9.128 -15.567 -7.361 1.00 28.59 N
ANISOU 2762 N GLY A 178 3296 5120 2446 1478 650 -146 N
ATOM 2763 CA GLY A 178 -8.111 -14.544 -7.244 1.00 27.16 C
ANISOU 2763 CA GLY A 178 3201 4905 2215 1550 489 -267 C
ATOM 2764 C GLY A 178 -8.286 -13.445 -8.272 1.00 25.79 C
ANISOU 2764 C GLY A 178 2978 4668 2153 1540 390 -368 C
ATOM 2765 O GLY A 178 -9.288 -13.377 -8.980 1.00 24.78 O
ANISOU 2765 O GLY A 178 2750 4540 2127 1499 439 -353 O
ATOM 2766 H GLY A 178 -9.822 -15.336 -7.814 1.00 34.31 H
ATOM 2767 HA2 GLY A 178 -8.151 -14.148 -6.359 1.00 32.60 H
ATOM 2768 HA3 GLY A 178 -7.235 -14.943 -7.364 1.00 32.60 H
ATOM 2769 N ASER A 179 -7.276 -12.580 -8.321 0.68 26.25 N
ANISOU 2769 N ASER A 179 3107 4664 2203 1579 246 -474 N
ATOM 2770 N BSER A 179 -7.279 -12.574 -8.318 0.32 26.26 N
ANISOU 2770 N BSER A 179 3108 4665 2203 1580 246 -474 N
ATOM 2771 CA ASER A 179 -7.229 -11.488 -9.279 0.68 25.48 C
ANISOU 2771 CA ASER A 179 2988 4478 2217 1571 143 -566 C
ATOM 2772 CA BSER A 179 -7.250 -11.468 -9.261 0.32 25.56 C
ANISOU 2772 CA BSER A 179 2997 4488 2225 1573 144 -568 C
ATOM 2773 C ASER A 179 -5.779 -11.234 -9.650 0.68 24.27 C
ANISOU 2773 C ASER A 179 2903 4230 2088 1546 15 -625 C
ATOM 2774 C BSER A 179 -5.807 -11.226 -9.674 0.32 24.20 C
ANISOU 2774 C BSER A 179 2893 4221 2082 1545 16 -625 C
ATOM 2775 O ASER A 179 -4.889 -11.333 -8.799 0.68 25.00 O

ANISOU 2775 O ASER A 179 3067 4335 2099 1586 -33 -657 O
ATOM 2776 O BSER A 179 -4.881 -11.401 -8.876 0.32 24.96 O
ANISOU 2776 O BSER A 179 3058 4328 2098 1578 -30 -650 O
ATOM 2777 CB ASER A 179 -7.859 -10.208 -8.713 0.68 27.89 C
ANISOU 2777 CB ASER A 179 3296 4790 2512 1671 112 -670 C
ATOM 2778 CB BSER A 179 -7.852 -10.190 -8.659 0.32 27.89 C
ANISOU 2778 CB BSER A 179 3298 4792 2508 1676 112 -673 C
ATOM 2779 OG ASER A 179 -9.255 -10.357 -8.579 0.68 29.03 O
ANISOU 2779 OG ASER A 179 3357 5006 2666 1687 230 -625 O
ATOM 2780 OG BSER A 179 -6.842 -9.334 -8.154 0.32 28.15 O
ANISOU 2780 OG BSER A 179 3414 4771 2513 1733 -15 -786 O
ATOM 2781 H ASER A 179 -6.594 -12.608 -7.798 0.68 31.50 H
ATOM 2782 H BSER A 179 -6.591 -12.607 -7.803 0.32 31.51 H
ATOM 2783 HA ASER A 179 -7.713 -11.740 -10.082 0.68 30.58 H
ATOM 2784 HA BSER A 179 -7.760 -11.704 -10.051 0.32 30.67 H
ATOM 2785 HB2ASER A 179 -7.475 -10.026 -7.840 0.68 33.47 H
ATOM 2786 HB2BSER A 179 -8.346 -9.720 -9.349 0.32 33.47 H
ATOM 2787 HB3ASER A 179 -7.675 -9.471 -9.316 0.68 33.47 H
ATOM 2788 HB3BSER A 179 -8.448 -10.435 -7.934 0.32 33.47 H
ATOM 2789 HG ASER A 179 -9.591 -9.653 -8.269 0.68 34.83 H
ATOM 2790 HG BSER A 179 -6.405 -9.727 -7.554 0.32 33.79 H
ATOM 2791 N ASER A 180 -5.552 -10.899 -10.920 0.68 22.03 N
ANISOU 2791 N ASER A 180 2595 3849 1928 1483 -41 -639 N
ATOM 2792 N BSER A 180 -5.624 -10.816 -10.928 0.32 22.16 N
ANISOU 2792 N BSER A 180 2608 3864 1947 1487 -42 -644 N
ATOM 2793 CA ASER A 180 -4.230 -10.543 -11.402 0.68 19.58 C
ANISOU 2793 CA ASER A 180 2338 3426 1676 1450 -152 -699 C
ATOM 2794 CA BSER A 180 -4.299 -10.562 -11.467 0.32 19.86 C
ANISOU 2794 CA BSER A 180 2369 3462 1716 1447 -147 -694 C
ATOM 2795 C ASER A 180 -4.347 -9.437 -12.439 0.68 19.43 C
ANISOU 2795 C ASER A 180 2304 3282 1795 1436 -218 -748 C
ATOM 2796 C BSER A 180 -4.373 -9.409 -12.457 0.32 19.49 C
ANISOU 2796 C BSER A 180 2312 3288 1806 1436 -219 -749 C
ATOM 2797 O ASER A 180 -5.363 -9.306 -13.127 0.68 19.28 O
ANISOU 2797 O ASER A 180 2226 3268 1830 1428 -180 -705 O
ATOM 2798 O BSER A 180 -5.392 -9.210 -13.123 0.32 19.34 O
ANISOU 2798 O BSER A 180 2235 3272 1842 1433 -184 -711 O
ATOM 2799 CB ASER A 180 -3.505 -11.747 -12.020 0.68 18.30 C
ANISOU 2799 CB ASER A 180 2174 3257 1521 1363 -127 -616 C
ATOM 2800 CB BSER A 180 -3.733 -11.807 -12.160 0.32 18.25 C
ANISOU 2800 CB BSER A 180 2153 3258 1523 1357 -111 -601 C
ATOM 2801 OG ASER A 180 -3.930 -11.978 -13.356 0.68 17.35 O
ANISOU 2801 OG ASER A 180 1991 3094 1506 1289 -104 -552 O
ATOM 2802 OG BSER A 180 -2.365 -11.639 -12.480 0.32 17.74 O
ANISOU 2802 OG BSER A 180 2139 3094 1506 1325 -204 -655 O
ATOM 2803 H ASER A 180 -6.161 -10.873 -11.527 0.68 26.44 H
ATOM 2804 H BSER A 180 -6.262 -10.678 -11.489 0.32 26.59 H
ATOM 2805 HA ASER A 180 -3.697 -10.213 -10.663 0.68 23.50 H
ATOM 2806 HA BSER A 180 -3.699 -10.311 -10.747 0.32 23.83 H
ATOM 2807 HB2ASER A 180 -2.551 -11.573 -12.020 0.68 21.96 H
ATOM 2808 HB2BSER A 180 -3.826 -12.567 -11.565 0.32 21.90 H
ATOM 2809 HB3ASER A 180 -3.696 -12.536 -11.488 0.68 21.96 H
ATOM 2810 HB3BSER A 180 -4.230 -11.965 -12.978 0.32 21.90 H

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ATOM   2811  HG ASER A 180     -3.524 -12.639 -13.677  0.68 20.82           H
ATOM   2812  HG BSER A 180     -2.071 -12.329 -12.859  0.32 21.29           H
ATOM   2813  N   ASN A 181     -3.284  -8.647 -12.543  1.00 20.01           N
ANISOU 2813  N   ASN A 181     2430   3234   1938   1429   -321   -834      N
ATOM   2814  CA  ASN A 181     -3.132  -7.655 -13.603  1.00 20.96           C
ANISOU 2814  CA  ASN A 181     2554   3202   2209   1399   -379   -856      C
ATOM   2815  C   ASN A 181     -1.658  -7.640 -13.973  1.00 20.95           C
ANISOU 2815  C   ASN A 181     2590   3080   2289   1334   -447   -885      C
ATOM   2816  O   ASN A 181     -0.800  -7.414 -13.112  1.00 20.66           O
ANISOU 2816  O   ASN A 181     2586   3031   2234   1350   -509   -976      O
ATOM   2817  CB  ASN A 181     -3.613  -6.274 -13.165  1.00 21.73           C
ANISOU 2817  CB  ASN A 181     2665   3250   2342   1472   -422   -948      C
ATOM   2818  CG  ASN A 181     -3.652  -5.282 -14.305  1.00 22.05           C
ANISOU 2818  CG  ASN A 181     2712   3132   2535   1448   -460   -940      C
ATOM   2819  OD1 ASN A 181     -2.665  -5.088 -15.014  1.00 22.43           O
ANISOU 2819  OD1 ASN A 181     2788   3047   2687   1383   -500   -931      O
ATOM   2820  ND2 ASN A 181     -4.804  -4.657 -14.500  1.00 22.53           N
ANISOU 2820  ND2 ASN A 181     2747   3203   2611   1502   -441   -932      N
ATOM   2821  H   ASN A 181     -2.619  -8.675 -11.999  1.00 24.01           H
ATOM   2822  HA  ASN A 181     -3.643  -7.928 -14.381  1.00 25.16           H
ATOM   2823  HB2 ASN A 181     -4.511  -6.351 -12.804  1.00 26.08           H
ATOM   2824  HB3 ASN A 181     -3.011  -5.929 -12.487  1.00 26.08           H
ATOM   2825 HD21 ASN A 181     -4.880  -4.082 -15.135  1.00 27.04           H
ATOM   2826 HD22 ASN A 181     -5.477  -4.825 -13.991  1.00 27.04           H
ATOM   2827  N   VAL A 182     -1.364  -7.930 -15.235  1.00 20.19           N
ANISOU 2827  N   VAL A 182     2483   2903   2284   1262   -438   -806      N
ATOM   2828  CA  VAL A 182      0.004  -8.131 -15.691  1.00 19.56           C
ANISOU 2828  CA  VAL A 182     2429   2717   2286   1158   -476   -794      C
ATOM   2829  C   VAL A 182      0.178  -7.433 -17.027  1.00 18.90           C
ANISOU 2829  C   VAL A 182     2359   2478   2346   1097   -484   -736      C
ATOM   2830  O   VAL A 182     -0.681  -7.534 -17.910  1.00 18.51           O
ANISOU 2830  O   VAL A 182     2295   2445   2292   1090   -446   -642      O
ATOM   2831  CB  VAL A 182      0.346  -9.632 -15.827  1.00 20.33           C
ANISOU 2831  CB  VAL A 182     2514   2901   2309   1070   -429   -693      C
ATOM   2832  CG1 VAL A 182      1.821  -9.813 -16.122  1.00 20.78           C
ANISOU 2832  CG1 VAL A 182     2588   2859   2449    980   -472   -703      C
ATOM   2833  CG2 VAL A 182     -0.045 -10.393 -14.583  1.00 19.91           C
ANISOU 2833  CG2 VAL A 182     2457   3008   2101   1141   -395   -709      C
ATOM   2834  H   VAL A 182     -1.952  -8.018 -15.857  1.00 24.23           H
ATOM   2835  HA  VAL A 182      0.618  -7.733 -15.054  1.00 23.47           H
ATOM   2836  HB  VAL A 182     -0.155 -10.002 -16.572  1.00 24.39           H
ATOM   2837 HG11 VAL A 182      2.013 -10.761 -16.204  1.00 24.94           H
ATOM   2838 HG12 VAL A 182      2.035  -9.359 -16.952  1.00 24.94           H
ATOM   2839 HG13 VAL A 182      2.337  -9.432 -15.394  1.00 24.94           H
ATOM   2840 HG21 VAL A 182      0.182 -11.328 -14.701  1.00 23.90           H
ATOM   2841 HG22 VAL A 182      0.439 -10.027 -13.826  1.00 23.90           H
ATOM   2842 HG23 VAL A 182     -1.000 -10.298 -14.443  1.00 23.90           H
ATOM   2843  N   THR A 183      1.294  -6.726 -17.173  1.00 18.65           N
ANISOU 2843  N   THR A 183     2350   2292   2443   1057   -532   -794      N
ATOM   2844  CA  THR A 183      1.702  -6.151 -18.445  1.00 18.92           C
ANISOU 2844  CA  THR A 183     2407   2165   2617    987   -517   -719      C
ATOM   2845  C   THR A 183      2.963  -6.859 -18.908  1.00 18.55           C
ANISOU 2845  C   THR A 183     2356   2074   2619    865   -502   -672      C
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ATOM 2846 O THR A 183 3.893 -7.055 -18.117 1.00 18.71 O
ANISOU 2846 O THR A 183 2358 2094 2658 849 -545 -764 O
ATOM 2847 CB THR A 183 1.944 -4.645 -18.323 1.00 20.07 C
ANISOU 2847 CB THR A 183 2576 2139 2912 1035 -563 -814 C
ATOM 2848 OG1 THR A 183 0.792 -4.026 -17.746 1.00 20.50 O
ANISOU 2848 OG1 THR A 183 2629 2256 2903 1136 -575 -860 O
ATOM 2849 CG2 THR A 183 2.211 -4.036 -19.703 1.00 21.28 C
ANISOU 2849 CG2 THR A 183 2765 2123 3198 975 -523 -702 C
ATOM 2850 H THR A 183 1.843 -6.562 -16.532 1.00 22.38 H
ATOM 2851 HA THR A 183 1.007 -6.298 -19.105 1.00 22.71 H
ATOM 2852 HB THR A 183 2.716 -4.484 -17.758 1.00 24.09 H
ATOM 2853 HG1 THR A 183 0.916 -3.199 -17.675 1.00 24.60 H
ATOM 2854 HG21 THR A 183 2.363 -3.081 -19.620 1.00 25.54 H
ATOM 2855 HG22 THR A 183 2.995 -4.447 -20.100 1.00 25.54 H
ATOM 2856 HG23 THR A 183 1.449 -4.184 -20.284 1.00 25.54 H
ATOM 2857 N VAL A 184 2.985 -7.251 -20.180 1.00 18.07 N
ANISOU 2857 N VAL A 184 2310 1984 2572 793 -444 -538 N
ATOM 2858 CA VAL A 184 4.034 -8.090 -20.742 1.00 17.80 C
ANISOU 2858 CA VAL A 184 2269 1931 2563 683 -411 -478 C
ATOM 2859 C VAL A 184 4.658 -7.351 -21.914 1.00 19.00 C
ANISOU 2859 C VAL A 184 2453 1912 2854 626 -368 -409 C
ATOM 2860 O VAL A 184 3.946 -6.749 -22.728 1.00 19.00 O
ANISOU 2860 O VAL A 184 2496 1865 2858 663 -342 -333 O
ATOM 2861 CB VAL A 184 3.472 -9.454 -21.206 1.00 17.23 C
ANISOU 2861 CB VAL A 184 2187 2001 2358 653 -369 -378 C
ATOM 2862 CG1 VAL A 184 4.600 -10.416 -21.584 1.00 16.79 C
ANISOU 2862 CG1 VAL A 184 2120 1937 2321 553 -342 -340 C
ATOM 2863 CG2 VAL A 184 2.567 -10.057 -20.142 1.00 17.71 C
ANISOU 2863 CG2 VAL A 184 2219 2221 2289 719 -384 -418 C
ATOM 2864 H VAL A 184 2.380 -7.036 -20.753 1.00 21.69 H
ATOM 2865 HA VAL A 184 4.719 -8.247 -20.074 1.00 21.36 H
ATOM 2866 HB VAL A 184 2.934 -9.310 -22.000 1.00 20.67 H
ATOM 2867 HG11 VAL A 184 4.213 -11.258 -21.869 1.00 20.14 H
ATOM 2868 HG12 VAL A 184 5.117 -10.027 -22.307 1.00 20.14 H
ATOM 2869 HG13 VAL A 184 5.167 -10.557 -20.810 1.00 20.14 H
ATOM 2870 HG21 VAL A 184 2.231 -10.910 -20.461 1.00 21.25 H
ATOM 2871 HG22 VAL A 184 3.079 -10.186 -19.328 1.00 21.25 H
ATOM 2872 HG23 VAL A 184 1.828 -9.451 -19.976 1.00 21.25 H
ATOM 2873 N TRP A 185 5.981 -7.411 -22.014 1.00 18.56 N
ANISOU 2873 N TRP A 185 2376 1765 2911 542 -354 -429 N
ATOM 2874 CA TRP A 185 6.665 -6.804 -23.151 1.00 20.04 C
ANISOU 2874 CA TRP A 185 2590 1789 3234 477 -283 -345 C
ATOM 2875 C TRP A 185 8.048 -7.401 -23.348 1.00 20.72 C
ANISOU 2875 C TRP A 185 2631 1836 3404 373 -248 -346 C
ATOM 2876 O TRP A 185 8.508 -8.213 -22.545 1.00 20.50 O
ANISOU 2876 O TRP A 185 2553 1899 3338 358 -297 -423 O
ATOM 2877 CB TRP A 185 6.756 -5.286 -22.970 1.00 21.08 C
ANISOU 2877 CB TRP A 185 2736 1743 3531 510 -300 -403 C
ATOM 2878 CG TRP A 185 7.676 -4.817 -21.877 1.00 22.44 C
ANISOU 2878 CG TRP A 185 2843 1837 3845 492 -370 -572 C
ATOM 2879 CD1 TRP A 185 8.971 -4.417 -22.016 1.00 23.38 C
ANISOU 2879 CD1 TRP A 185 2915 1801 4169 403 -347 -611 C
ATOM 2880 CD2 TRP A 185 7.357 -4.665 -20.485 1.00 23.43 C

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ANISOU 2880  CD2 TRP A 185     2940   2038   3923    574   -478   -736      C
ATOM   2881  NE1 TRP A 185      9.483  -4.026 -20.800  1.00 24.61          N
ANISOU 2881  NE1 TRP A 185     3007   1954   4391    414   -446   -787      N
ATOM   2882  CE2 TRP A 185      8.513  -4.173 -19.844  1.00 24.55          C
ANISOU 2882  CE2 TRP A 185     3019   2083   4225    526   -530   -868      C
ATOM   2883  CE3 TRP A 185      6.211  -4.905 -19.720  1.00 22.93          C
ANISOU 2883  CE3 TRP A 185     2894   2131   3686    681   -526   -776      C
ATOM   2884  CZ2 TRP A 185      8.559  -3.926 -18.473  1.00 25.98          C
ANISOU 2884  CZ2 TRP A 185     3164   2347   4359    581   -635  -1023      C
ATOM   2885  CZ3 TRP A 185      6.257  -4.659 -18.365  1.00 24.11          C
ANISOU 2885  CZ3 TRP A 185     3018   2328   3814    754   -621   -947      C
ATOM   2886  CH2 TRP A 185      7.423  -4.172 -17.752  1.00 25.80          C
ANISOU 2886  CH2 TRP A 185     3179   2473   4153    696   -676  -1057      C
ATOM   2887  OXT TRP A 185      8.719  -7.099 -24.335  1.00 21.58          O
ANISOU 2887  OXT TRP A 185     2755   1825   3618    308   -163   -264      O
ATOM   2888  H   TRP A 185      6.501  -7.792 -21.445  1.00 22.27          H
ATOM   2889  HA  TRP A 185      6.149  -6.977 -23.954  1.00 24.05          H
ATOM   2890  HB2 TRP A 185      7.070  -4.897 -23.802  1.00 25.30          H
ATOM   2891  HB3 TRP A 185      5.869  -4.948 -22.769  1.00 25.30          H
ATOM   2892  HD1 TRP A 185      9.438  -4.396 -22.821  1.00 28.06          H
ATOM   2893  HE1 TRP A 185     10.284  -3.745 -20.661  1.00 29.53          H
ATOM   2894  HE3 TRP A 185      5.435  -5.229 -20.117  1.00 27.51          H
ATOM   2895  HZ2 TRP A 185      9.330  -3.604 -18.065  1.00 31.17          H
ATOM   2896  HZ3 TRP A 185      5.500  -4.813 -17.848  1.00 28.93          H
ATOM   2897  HH2 TRP A 185      7.421  -4.012 -16.836  1.00 30.96          H
TER    2898      TRP A 185
ATOM   2899  N   MET B   1    -34.851  -5.247 -52.661  1.00 54.58          N
ANISOU 2899  N   MET B   1     7142   7065   6531    780   -717   -328      N
ATOM   2900  CA  MET B   1    -34.013  -6.088 -51.753  1.00 52.56          C
ANISOU 2900  CA  MET B   1     6867   6777   6327    633   -665   -338      C
ATOM   2901  C   MET B   1    -32.548  -5.648 -51.774  1.00 49.60          C
ANISOU 2901  C   MET B   1     6560   6222   6063    517   -710   -185      C
ATOM   2902  O   MET B   1    -31.946  -5.503 -52.838  1.00 51.52          O
ANISOU 2902  O   MET B   1     6789   6457   6329    483   -688    -40      O
ATOM   2903  CB  MET B   1    -34.119  -7.562 -52.149  1.00 52.15          C
ANISOU 2903  CB  MET B   1     6689   6895   6233    554   -548   -372      C
ATOM   2904  H   MET B   1    -35.691  -5.540 -52.644  1.00 65.50          H
ATOM   2905  HA  MET B   1    -34.351  -6.001 -50.848  1.00 63.07          H
ATOM   2906  N   SER B   2    -31.977  -5.431 -50.586  1.00 43.89          N
ANISOU 2906  N   SER B   2     5904   5366   5405    461   -775   -211      N
ATOM   2907  CA  SER B   2    -30.570  -5.058 -50.494  1.00 38.71          C
ANISOU 2907  CA  SER B   2     5281   4544   4881    329   -841    -69      C
ATOM   2908  C   SER B   2    -29.669  -6.287 -50.602  1.00 31.40          C
ANISOU 2908  C   SER B   2     4240   3707   3983    204   -734     -7      C
ATOM   2909  O   SER B   2    -28.728  -6.311 -51.402  1.00 32.12          O
ANISOU 2909  O   SER B   2     4273   3788   4143    128   -698    157      O
ATOM   2910  CB  SER B   2    -30.317  -4.313 -49.184  1.00 40.64          C
ANISOU 2910  CB  SER B   2     5657   4603   5182    328   -991   -139      C
ATOM   2911  OG  SER B   2    -31.135  -3.156 -49.087  1.00 43.12          O
ANISOU 2911  OG  SER B   2     6100   4817   5466    473  -1095   -206      O
ATOM   2912  H   SER B   2    -32.380  -5.494 -49.829  1.00 52.66          H
ATOM   2913  HA  SER B   2    -30.352  -4.461 -51.227  1.00 46.45          H
ATOM   2914  HB2 SER B   2    -30.518  -4.904 -48.442  1.00 48.77          H
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ATOM 2915 HB3 SER B 2 -29.386 -4.044 -49.150 1.00 48.77 H
ATOM 2916 HG SER B 2 -31.946 -3.374 -49.115 1.00 51.74 H
ATOM 2917 N THR B 3 -29.953 -7.319 -49.818 1.00 23.94 N
ANISOU 2917 N THR B 3 3262 2854 2980 195 -674 -124 N
ATOM 2918 CA THR B 3 -29.164 -8.542 -49.860 1.00 18.04 C
ANISOU 2918 CA THR B 3 2426 2178 2253 101 -580 -79 C
ATOM 2919 C THR B 3 -29.503 -9.345 -51.113 1.00 15.80 C
ANISOU 2919 C THR B 3 2058 2048 1897 128 -455 -64 C
ATOM 2920 O THR B 3 -30.575 -9.198 -51.704 1.00 14.13 O
ANISOU 2920 O THR B 3 1845 1920 1602 215 -440 -129 O
ATOM 2921 CB THR B 3 -29.420 -9.391 -48.616 1.00 15.93 C
ANISOU 2921 CB THR B 3 2171 1942 1939 89 -560 -198 C
ATOM 2922 OG1 THR B 3 -30.828 -9.608 -48.465 1.00 16.27 O
ANISOU 2922 OG1 THR B 3 2212 2095 1875 176 -509 -330 O
ATOM 2923 CG2 THR B 3 -28.885 -8.706 -47.383 1.00 16.58 C
ANISOU 2923 CG2 THR B 3 2352 1876 2072 69 -697 -215 C
ATOM 2924 H THR B 3 -30.600 -7.337 -49.251 1.00 28.73 H
ATOM 2925 HA THR B 3 -28.222 -8.316 -49.887 1.00 21.65 H
ATOM 2926 HB THR B 3 -28.971 -10.245 -48.711 1.00 19.11 H
ATOM 2927 HG1 THR B 3 -30.975 -10.074 -47.782 1.00 19.52 H
ATOM 2928 HG21 THR B 3 -29.052 -9.254 -46.600 1.00 19.90 H
ATOM 2929 HG22 THR B 3 -27.929 -8.566 -47.471 1.00 19.90 H
ATOM 2930 HG23 THR B 3 -29.320 -7.847 -47.266 1.00 19.90 H
ATOM 2931 N ASP B 4 -28.557 -10.194 -51.529 1.00 15.98 N
ANISOU 2931 N ASP B 4 2015 2108 1948 69 -376 19 N
ATOM 2932 CA ASP B 4 -28.787 -11.054 -52.686 1.00 17.19 C
ANISOU 2932 CA ASP B 4 2119 2398 2016 111 -268 13 C
ATOM 2933 C ASP B 4 -28.204 -12.453 -52.513 1.00 16.35 C
ANISOU 2933 C ASP B 4 1971 2333 1910 70 -185 -6 C
ATOM 2934 O ASP B 4 -28.000 -13.152 -53.514 1.00 16.79 O
ANISOU 2934 O ASP B 4 2001 2472 1906 111 -103 12 O
ATOM 2935 CB ASP B 4 -28.217 -10.426 -53.971 1.00 19.16 C
ANISOU 2935 CB ASP B 4 2352 2666 2263 147 -238 174 C
ATOM 2936 CG ASP B 4 -26.711 -10.198 -53.916 1.00 20.93 C
ANISOU 2936 CG ASP B 4 2520 2822 2608 69 -223 358 C
ATOM 2937 OD1 ASP B 4 -26.007 -10.897 -53.174 1.00 19.96 O
ANISOU 2937 OD1 ASP B 4 2356 2679 2548 8 -212 351 O
ATOM 2938 OD2 ASP B 4 -26.223 -9.308 -54.653 1.00 23.28 O
ANISOU 2938 OD2 ASP B 4 2806 3094 2946 69 -221 526 O
ATOM 2939 H ASP B 4 -27.785 -10.287 -51.162 1.00 19.18 H
ATOM 2940 HA ASP B 4 -29.744 -11.151 -52.810 1.00 20.63 H
ATOM 2941 HB2 ASP B 4 -28.401 -11.018 -54.717 1.00 22.99 H
ATOM 2942 HB3 ASP B 4 -28.643 -9.568 -54.117 1.00 22.99 H
ATOM 2943 N TYR B 5 -27.953 -12.892 -51.281 1.00 14.29 N
ANISOU 2943 N TYR B 5 1721 2012 1696 10 -210 -48 N
ATOM 2944 CA TYR B 5 -27.325 -14.185 -51.059 1.00 13.98 C
ANISOU 2944 CA TYR B 5 1657 1987 1666 -18 -143 -51 C
ATOM 2945 C TYR B 5 -27.919 -14.847 -49.826 1.00 14.11 C
ANISOU 2945 C TYR B 5 1716 1981 1664 -55 -155 -160 C
ATOM 2946 O TYR B 5 -28.142 -14.190 -48.804 1.00 14.28 O
ANISOU 2946 O TYR B 5 1779 1948 1698 -68 -228 -185 O
ATOM 2947 CB TYR B 5 -25.805 -14.039 -50.903 1.00 14.37 C
ANISOU 2947 CB TYR B 5 1655 1985 1822 -53 -154 98 C

ATOM 2948 CG TYR B 5 -25.057 -15.347 -51.050 1.00 14.98 C
ANISOU 2948 CG TYR B 5 1696 2098 1898 -35 -68 116 C
ATOM 2949 CD1 TYR B 5 -24.778 -15.875 -52.305 1.00 16.02 C
ANISOU 2949 CD1 TYR B 5 1796 2317 1974 42 36 151 C
ATOM 2950 CD2 TYR B 5 -24.640 -16.058 -49.934 1.00 14.40 C
ANISOU 2950 CD2 TYR B 5 1639 1970 1863 -71 -94 95 C
ATOM 2951 CE1 TYR B 5 -24.096 -17.076 -52.438 1.00 17.69 C
ANISOU 2951 CE1 TYR B 5 1994 2550 2177 90 111 153 C
ATOM 2952 CE2 TYR B 5 -23.960 -17.255 -50.059 1.00 15.02 C
ANISOU 2952 CE2 TYR B 5 1698 2065 1943 -33 -24 112 C
ATOM 2953 CZ TYR B 5 -23.696 -17.761 -51.313 1.00 16.82 C
ANISOU 2953 CZ TYR B 5 1896 2370 2123 51 78 135 C
ATOM 2954 OH TYR B 5 -23.017 -18.950 -51.446 1.00 18.22 O
ANISOU 2954 OH TYR B 5 2073 2555 2296 119 145 139 O
ATOM 2955 H TYR B 5 -28.138 -12.460 -50.561 1.00 17.14 H
ATOM 2956 HA TYR B 5 -27.497 -14.758 -51.823 1.00 16.77 H
ATOM 2957 HB2 TYR B 5 -25.476 -13.430 -51.583 1.00 17.25 H
ATOM 2958 HB3 TYR B 5 -25.612 -13.683 -50.021 1.00 17.25 H
ATOM 2959 HD1 TYR B 5 -25.050 -15.415 -53.066 1.00 19.23 H
ATOM 2960 HD2 TYR B 5 -24.820 -15.722 -49.086 1.00 17.28 H
ATOM 2961 HE1 TYR B 5 -23.914 -17.419 -53.283 1.00 21.23 H
ATOM 2962 HE2 TYR B 5 -23.687 -17.719 -49.300 1.00 18.02 H
ATOM 2963 HH TYR B 5 -22.833 -19.262 -50.688 1.00 21.87 H
ATOM 2964 N TRP B 6 -28.188 -16.151 -49.944 1.00 14.40 N
ANISOU 2964 N TRP B 6 1754 2053 1663 -63 -83 -223 N
ATOM 2965 CA TRP B 6 -28.712 -16.978 -48.863 1.00 15.59 C
ANISOU 2965 CA TRP B 6 1941 2184 1799 -110 -68 -293 C
ATOM 2966 C TRP B 6 -27.700 -18.084 -48.608 1.00 15.39 C
ANISOU 2966 C TRP B 6 1932 2106 1810 -125 -34 -245 C
ATOM 2967 O TRP B 6 -27.475 -18.939 -49.473 1.00 14.47 O
ANISOU 2967 O TRP B 6 1812 2003 1683 -99 21 -255 O
ATOM 2968 CB TRP B 6 -30.081 -17.556 -49.220 1.00 15.36 C
ANISOU 2968 CB TRP B 6 1896 2222 1716 -126 -29 -403 C
ATOM 2969 CG TRP B 6 -30.571 -18.628 -48.282 1.00 15.38 C
ANISOU 2969 CG TRP B 6 1922 2203 1718 -195 13 -442 C
ATOM 2970 CD1 TRP B 6 -30.973 -19.884 -48.619 1.00 16.03 C
ANISOU 2970 CD1 TRP B 6 2008 2274 1807 -248 55 -490 C
ATOM 2971 CD2 TRP B 6 -30.717 -18.531 -46.855 1.00 16.22 C
ANISOU 2971 CD2 TRP B 6 2064 2287 1811 -218 16 -426 C
ATOM 2972 NE1 TRP B 6 -31.356 -20.578 -47.495 1.00 17.28 N
ANISOU 2972 NE1 TRP B 6 2192 2400 1975 -319 93 -483 N
ATOM 2973 CE2 TRP B 6 -31.206 -19.772 -46.400 1.00 17.38 C
ANISOU 2973 CE2 TRP B 6 2224 2420 1960 -291 80 -441 C
ATOM 2974 CE3 TRP B 6 -30.472 -17.521 -45.921 1.00 16.82 C
ANISOU 2974 CE3 TRP B 6 2178 2346 1866 -177 -38 -402 C
ATOM 2975 CZ2 TRP B 6 -31.468 -20.025 -45.051 1.00 18.45 C
ANISOU 2975 CZ2 TRP B 6 2401 2547 2062 -318 116 -411 C
ATOM 2976 CZ3 TRP B 6 -30.728 -17.776 -44.584 1.00 18.02 C
ANISOU 2976 CZ3 TRP B 6 2385 2493 1969 -186 -17 -400 C
ATOM 2977 CH2 TRP B 6 -31.222 -19.016 -44.164 1.00 18.40 C
ANISOU 2977 CH2 TRP B 6 2436 2550 2006 -252 72 -394 C
ATOM 2978 H TRP B 6 -28.067 -16.591 -50.673 1.00 17.28 H
ATOM 2979 HA TRP B 6 -28.801 -16.445 -48.058 1.00 18.71 H

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ATOM   2980  HB2 TRP B   6     -30.733 -16.838 -49.212  1.00 18.43           H
ATOM   2981  HB3 TRP B   6     -30.033 -17.942 -50.109  1.00 18.43           H
ATOM   2982  HD1 TRP B   6     -30.986 -20.224 -49.484  1.00 19.23           H
ATOM   2983  HE1 TRP B   6     -31.644 -21.388 -47.483  1.00 20.74           H
ATOM   2984  HE3 TRP B   6     -30.148 -16.693 -46.193  1.00 20.18           H
ATOM   2985  HZ2 TRP B   6     -31.791 -20.850 -44.767  1.00 22.14           H
ATOM   2986  HZ3 TRP B   6     -30.573 -17.109 -43.954  1.00 21.62           H
ATOM   2987  HH2 TRP B   6     -31.382 -19.159 -43.259  1.00 22.08           H
ATOM   2988  N   LEU B   7     -27.076 -18.046 -47.437  1.00 14.52           N
ANISOU 2988  N   LEU B   7     1851   1933   1731   -147    -77   -199       N
ATOM   2989  CA  LEU B   7     -26.074 -19.030 -47.055  1.00 13.38           C
ANISOU 2989  CA  LEU B   7     1723   1738   1623   -143    -62   -143       C
ATOM   2990  C   LEU B   7     -26.693 -20.011 -46.070  1.00 12.79           C
ANISOU 2990  C   LEU B   7     1726   1628   1507   -181    -32   -189       C
ATOM   2991  O   LEU B   7     -27.245 -19.604 -45.043  1.00 12.29           O
ANISOU 2991  O   LEU B   7     1703   1566   1400   -203    -59   -209       O
ATOM   2992  CB  LEU B   7     -24.854 -18.354 -46.438  1.00 14.56           C
ANISOU 2992  CB  LEU B   7     1843   1845   1843   -140   -153    -45       C
ATOM   2993  CG  LEU B   7     -23.756 -19.259 -45.867  1.00 15.37           C
ANISOU 2993  CG  LEU B   7     1948   1904   1988   -119   -164     22       C
ATOM   2994  CD1 LEU B   7     -23.104 -20.102 -46.952  1.00 16.37           C
ANISOU 2994  CD1 LEU B   7     2020   2059   2140    -55    -76     61       C
ATOM   2995  CD2 LEU B   7     -22.729 -18.407 -45.145  1.00 16.68           C
ANISOU 2995  CD2 LEU B   7     2072   2035   2231   -135   -296    105       C
ATOM   2996  H   LEU B   7     -27.218 -17.448 -46.835  1.00 17.42           H
ATOM   2997  HA  LEU B   7     -25.788 -19.522 -47.841  1.00 16.06           H
ATOM   2998  HB2 LEU B   7     -24.440 -17.801 -47.119  1.00 17.47           H
ATOM   2999  HB3 LEU B   7     -25.160 -17.788 -45.712  1.00 17.47           H
ATOM   3000  HG  LEU B   7     -24.151 -19.862 -45.219  1.00 18.44           H
ATOM   3001 HD11 LEU B   7     -22.418 -20.658 -46.550  1.00 19.64           H
ATOM   3002 HD12 LEU B   7     -23.781 -20.660 -47.367  1.00 19.64           H
ATOM   3003 HD13 LEU B   7     -22.708 -19.514 -47.613  1.00 19.64           H
ATOM   3004 HD21 LEU B   7     -22.036 -18.984 -44.786  1.00 20.02           H
ATOM   3005 HD22 LEU B   7     -22.342 -17.778 -45.775  1.00 20.02           H
ATOM   3006 HD23 LEU B   7     -23.167 -17.928 -44.425  1.00 20.02           H
ATOM   3007  N   ASN B   8     -26.592 -21.298 -46.385  1.00 12.85           N
ANISOU 3007  N   ASN B   8     1764   1597   1520   -181     27   -199       N
ATOM   3008  CA  ASN B   8     -27.162 -22.334 -45.526  1.00 15.06           C
ANISOU 3008  CA  ASN B   8     2123   1822   1777   -234     63   -215       C
ATOM   3009  C   ASN B   8     -26.221 -23.533 -45.623  1.00 16.02           C
ANISOU 3009  C   ASN B   8     2297   1854   1935   -191     79   -173       C
ATOM   3010  O   ASN B   8     -26.341 -24.356 -46.532  1.00 17.13           O
ANISOU 3010  O   ASN B   8     2460   1961   2088   -177    117   -222       O
ATOM   3011  CB  ASN B   8     -28.583 -22.670 -45.948  1.00 16.03           C
ANISOU 3011  CB  ASN B   8     2234   1978   1879   -305    113   -302       C
ATOM   3012  CG  ASN B   8     -29.255 -23.637 -45.005  1.00 18.02           C
ANISOU 3012  CG  ASN B   8     2546   2178   2123   -388    161   -287       C
ATOM   3013  OD1 ASN B   8     -28.683 -24.035 -43.999  1.00 18.30           O
ANISOU 3013  OD1 ASN B   8     2654   2152   2146   -377    161   -212       O
ATOM   3014  ND2 ASN B   8     -30.485 -24.006 -45.320  1.00 20.51           N
ANISOU 3014  ND2 ASN B   8     2823   2522   2450   -475    199   -346       N
ATOM   3015  H   ASN B   8     -26.199 -21.599 -47.088  1.00 15.42           H
ATOM   3016  HA  ASN B   8     -27.176 -22.024 -44.607  1.00 18.07           H
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ATOM   3017  HB2 ASN B   8     -29.109 -21.855 -45.967  1.00 19.24          H
ATOM   3018  HB3 ASN B   8     -28.565 -23.074 -46.830  1.00 19.24          H
ATOM   3019 HD21 ASN B   8     -30.911 -24.556 -44.814  1.00 24.62          H
ATOM   3020 HD22 ASN B   8     -30.858 -23.697 -46.030  1.00 24.62          H
ATOM   3021  N   PHE B   9     -25.258 -23.589 -44.703  1.00 16.34          N
ANISOU 3021  N   PHE B   9     2365   1854   1989   -153     34    -89      N
ATOM   3022  CA  PHE B   9     -24.222 -24.615 -44.715  1.00 17.12          C
ANISOU 3022  CA  PHE B   9     2502   1877   2126    -79     36    -35      C
ATOM   3023  C   PHE B   9     -24.148 -25.327 -43.372  1.00 16.93          C
ANISOU 3023  C   PHE B   9     2587   1771   2075    -92     17     23      C
ATOM   3024  O   PHE B   9     -24.212 -24.693 -42.318  1.00 14.81          O
ANISOU 3024  O   PHE B   9     2336   1531   1761    -113    -35     55      O
ATOM   3025  CB  PHE B   9     -22.837 -24.041 -45.012  1.00 18.07          C
ANISOU 3025  CB  PHE B   9     2518   2043   2303      9    -13     42      C
ATOM   3026  CG  PHE B   9     -21.734 -25.037 -44.799  1.00 19.58          C
ANISOU 3026  CG  PHE B   9     2732   2173   2532    110    -19    109      C
ATOM   3027  CD1 PHE B   9     -21.435 -25.958 -45.781  1.00 20.19          C
ANISOU 3027  CD1 PHE B   9     2829   2223   2621    204     52     83      C
ATOM   3028  CD2 PHE B   9     -21.025 -25.083 -43.601  1.00 21.05          C
ANISOU 3028  CD2 PHE B   9     2939   2329   2730    131   -106    189      C
ATOM   3029  CE1 PHE B   9     -20.444 -26.896 -45.596  1.00 22.03          C
ANISOU 3029  CE1 PHE B   9     3089   2395   2884    327     48    139      C
ATOM   3030  CE2 PHE B   9     -20.025 -26.036 -43.408  1.00 23.00          C
ANISOU 3030  CE2 PHE B   9     3204   2523   3012    244    -119    255      C
ATOM   3031  CZ  PHE B   9     -19.740 -26.938 -44.412  1.00 23.46          C
ANISOU 3031  CZ  PHE B   9     3273   2552   3090    346    -36    231      C
ATOM   3032  H   PHE B   9     -25.184 -23.033 -44.051  1.00 19.61          H
ATOM   3033  HA  PHE B   9     -24.432 -25.272 -45.396  1.00 20.54          H
ATOM   3034  HB2 PHE B   9     -22.807 -23.754 -45.939  1.00 21.68          H
ATOM   3035  HB3 PHE B   9     -22.676 -23.285 -44.426  1.00 21.68          H
ATOM   3036  HD1 PHE B   9     -21.906 -25.942 -46.583  1.00 24.23          H
ATOM   3037  HD2 PHE B   9     -21.222 -24.476 -42.925  1.00 25.26          H
ATOM   3038  HE1 PHE B   9     -20.251 -27.505 -46.271  1.00 26.43          H
ATOM   3039  HE2 PHE B   9     -19.548 -26.058 -42.610  1.00 27.60          H
ATOM   3040  HZ  PHE B   9     -19.068 -27.570 -44.293  1.00 28.16          H
ATOM   3041  N   THR B  10     -23.980 -26.646 -43.424  1.00 18.36          N
ANISOU 3041  N   THR B  10     2861   1842   2275    -64     52     36      N
ATOM   3042  CA  THR B  10     -23.649 -27.438 -42.247  1.00 20.04          C
ANISOU 3042  CA  THR B  10     3188   1961   2465    -45     31    121      C
ATOM   3043  C   THR B  10     -22.704 -28.549 -42.670  1.00 20.61          C
ANISOU 3043  C   THR B  10     3312   1928   2590     71     30    148      C
ATOM   3044  O   THR B  10     -22.837 -29.084 -43.772  1.00 20.35          O
ANISOU 3044  O   THR B  10     3289   1854   2590     98     75     75      O
ATOM   3045  CB  THR B  10     -24.897 -28.043 -41.601  1.00 22.36          C
ANISOU 3045  CB  THR B  10     3587   2195   2715    -165     95    124      C
ATOM   3046  OG1 THR B  10     -24.513 -28.854 -40.486  1.00 24.69          O
ANISOU 3046  OG1 THR B  10     4011   2393   2977    -134     82    231      O
ATOM   3047  CG2 THR B  10     -25.648 -28.903 -42.602  1.00 22.88          C
ANISOU 3047  CG2 THR B  10     3681   2177   2837   -233    154     47      C
ATOM   3048  H   THR B  10     -24.053 -27.112 -44.143  1.00 22.04          H
ATOM   3049  HA  THR B  10     -23.200 -26.879 -41.593  1.00 24.04          H
ATOM   3050  HB  THR B  10     -25.485 -27.333 -41.300  1.00 26.84          H
ATOM   3051  HG1 THR B  10     -25.194 -29.190 -40.127  1.00 29.63          H
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ATOM   3052 HG21 THR B  10     -26.437 -29.283 -42.185  1.00 27.46           H
ATOM   3053 HG22 THR B  10     -25.920 -28.365 -43.362  1.00 27.46           H
ATOM   3054 HG23 THR B  10     -25.077 -29.623 -42.913  1.00 27.46           H
ATOM   3055  N   ASP B  11     -21.742 -28.896 -41.807  1.00 21.08           N
ANISOU 3055  N   ASP B  11     3413   1948   2648    163    -32    245       N
ATOM   3056  CA  ASP B  11     -20.913 -30.060 -42.110  1.00 23.23           C
ANISOU 3056  CA  ASP B  11     3753   2107   2965    298    -30    274       C
ATOM   3057  C   ASP B  11     -21.647 -31.375 -41.871  1.00 24.96           C
ANISOU 3057  C   ASP B  11     4168   2138   3178    247     16    273       C
ATOM   3058  O   ASP B  11     -21.050 -32.443 -42.047  1.00 26.18           O
ANISOU 3058  O   ASP B  11     4422   2157   3366    366      9    292       O
ATOM   3059  CB  ASP B  11     -19.604 -30.027 -41.303  1.00 24.17           C
ANISOU 3059  CB  ASP B  11     3836   2250   3096    429   -126    385       C
ATOM   3060  CG  ASP B  11     -19.813 -30.207 -39.809  1.00 24.80           C
ANISOU 3060  CG  ASP B  11     4044   2280   3098    391   -183    468       C
ATOM   3061  OD1 ASP B  11     -20.948 -30.481 -39.375  1.00 24.69           O
ANISOU 3061  OD1 ASP B  11     4149   2208   3025    269   -121    461       O
ATOM   3062  OD2 ASP B  11     -18.818 -30.084 -39.065  1.00 25.41           O
ANISOU 3062  OD2 ASP B  11     4096   2387   3170    490   -291    551       O
ATOM   3063  H   ASP B  11     -21.557 -28.492 -41.071  1.00 25.29           H
ATOM   3064  HA  ASP B  11     -20.675 -30.029 -43.049  1.00 27.87           H
ATOM   3065  HB2 ASP B  11     -19.027 -30.743 -41.611  1.00 29.00           H
ATOM   3066  HB3 ASP B  11     -19.171 -29.170 -41.442  1.00 29.00           H
ATOM   3067  N   GLY B  12     -22.923 -31.328 -41.488  1.00 25.27           N
ANISOU 3067  N   GLY B  12     4258   2159   3184     75     62    258       N
ATOM   3068  CA  GLY B  12     -23.712 -32.521 -41.286  1.00 26.45           C
ANISOU 3068  CA  GLY B  12     4569   2125   3354    -18    106    277       C
ATOM   3069  C   GLY B  12     -23.890 -32.935 -39.840  1.00 27.29           C
ANISOU 3069  C   GLY B  12     4798   2169   3401    -60    113    422       C
ATOM   3070  O   GLY B  12     -24.656 -33.868 -39.573  1.00 29.18           O
ANISOU 3070  O   GLY B  12     5164   2258   3666   -172    162    470       O
ATOM   3071  H   GLY B  12     -23.354 -30.599 -41.338  1.00 30.32           H
ATOM   3072  HA2 GLY B  12     -24.593 -32.383 -41.667  1.00 31.74           H
ATOM   3073  HA3 GLY B  12     -23.294 -33.258 -41.758  1.00 31.74           H
ATOM   3074  N   GLY B  13     -23.211 -32.274 -38.904  1.00 25.91           N
ANISOU 3074  N   GLY B  13     4595   2101   3147     24     57    499       N
ATOM   3075  CA  GLY B  13     -23.345 -32.620 -37.498  1.00 26.72           C
ANISOU 3075  CA  GLY B  13     4833   2166   3154     14     60    640       C
ATOM   3076  C   GLY B  13     -24.644 -32.088 -36.921  1.00 27.11           C
ANISOU 3076  C   GLY B  13     4865   2314   3122   -141    151    656       C
ATOM   3077  O   GLY B  13     -25.017 -30.934 -37.158  1.00 24.47           O
ANISOU 3077  O   GLY B  13     4396   2143   2760   -175    154    568       O
ATOM   3078  H   GLY B  13     -22.669 -31.625 -39.059  1.00 31.09           H
ATOM   3079  HA2 GLY B  13     -23.331 -33.584 -37.396  1.00 32.07           H
ATOM   3080  HA3 GLY B  13     -22.605 -32.243 -36.997  1.00 32.07           H
ATOM   3081  N   GLY B  14     -25.342 -32.937 -36.173  1.00 31.03           N
ANISOU 3081  N   GLY B  14     5497   2711   3584   -229    234    779       N
ATOM   3082  CA  GLY B  14     -26.527 -32.518 -35.449  1.00 32.00           C
ANISOU 3082  CA  GLY B  14     5599   2948   3610   -350    345    833       C
ATOM   3083  C   GLY B  14     -27.618 -32.006 -36.372  1.00 29.52           C
ANISOU 3083  C   GLY B  14     5121   2722   3374   -494    413    711       C
ATOM   3084  O   GLY B  14     -27.803 -32.483 -37.498  1.00 30.71           O
ANISOU 3084  O   GLY B  14     5232   2772   3664   -563    403    622       O
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ATOM   3085  H   GLY B  14    -25.145 -33.768 -36.070  1.00 37.24          H
ATOM   3086  HA2 GLY B  14    -26.878 -33.268 -34.943  1.00 38.40          H
ATOM   3087  HA3 GLY B  14    -26.292 -31.811 -34.828  1.00 38.40          H
ATOM   3088  N   ILE B  15    -28.343 -30.997 -35.887  1.00 25.58          N
ANISOU 3088  N   ILE B  15    4534   2417   2770   -518    470    697      N
ATOM   3089  CA  ILE B  15    -29.510 -30.439 -36.561  1.00 24.01          C
ANISOU 3089  CA  ILE B  15    4171   2332   2621   -640    542    603      C
ATOM   3090  C   ILE B  15    -29.281 -28.950 -36.788  1.00 21.93          C
ANISOU 3090  C   ILE B  15    3798   2242   2294   -538    474    476      C
ATOM   3091  O   ILE B  15    -28.949 -28.226 -35.844  1.00 21.95          O
ANISOU 3091  O   ILE B  15    3848   2340   2153   -430    444    502      O
ATOM   3092  CB  ILE B  15    -30.788 -30.640 -35.725  1.00 25.80          C
ANISOU 3092  CB  ILE B  15    4381   2637   2785   -759    702    725      C
ATOM   3093  CG1 ILE B  15    -31.014 -32.120 -35.363  1.00 29.38          C
ANISOU 3093  CG1 ILE B  15    4957   2896   3308   -881    772    892      C
ATOM   3094  CG2 ILE B  15    -31.991 -30.018 -36.451  1.00 25.22          C
ANISOU 3094  CG2 ILE B  15    4104   2703   2774   -868    763    624      C
ATOM   3095  CD1 ILE B  15    -31.595 -32.964 -36.478  1.00 30.74          C
ANISOU 3095  CD1 ILE B  15    5074   2914   3692  -1062    765    839      C
ATOM   3096  H   ILE B  15    -28.168 -30.607 -35.141  1.00 30.70          H
ATOM   3097  HA  ILE B  15    -29.630 -30.871 -37.422  1.00 28.82          H
ATOM   3098  HB  ILE B  15    -30.669 -30.154 -34.894  1.00 30.96          H
ATOM   3099 HG12 ILE B  15    -30.162 -32.510 -35.113  1.00 35.25          H
ATOM   3100 HG13 ILE B  15    -31.626 -32.164 -34.612  1.00 35.25          H
ATOM   3101 HG21 ILE B  15    -32.787 -30.151 -35.914  1.00 30.26          H
ATOM   3102 HG22 ILE B  15    -31.829 -29.069 -36.574  1.00 30.26          H
ATOM   3103 HG23 ILE B  15    -32.097 -30.450 -37.313  1.00 30.26          H
ATOM   3104 HD11 ILE B  15    -31.701 -33.874 -36.162  1.00 36.89          H
ATOM   3105 HD12 ILE B  15    -32.456 -32.599 -36.734  1.00 36.89          H
ATOM   3106 HD13 ILE B  15    -30.989 -32.945 -37.236  1.00 36.89          H
ATOM   3107  N   VAL B  16    -29.498 -28.481 -38.021  1.00 20.61          N
ANISOU 3107  N   VAL B  16    3498   2109   2225   -572    443    340      N
ATOM   3108  CA  VAL B  16    -29.472 -27.049 -38.336  1.00 19.62          C
ANISOU 3108  CA  VAL B  16    3265   2133   2058   -501    388    231      C
ATOM   3109  C   VAL B  16    -30.699 -26.762 -39.191  1.00 20.43          C
ANISOU 3109  C   VAL B  16    3222   2317   2221   -604    450    145      C
ATOM   3110  O   VAL B  16    -30.690 -26.994 -40.406  1.00 19.68          O
ANISOU 3110  O   VAL B  16    3070   2173   2234   -644    413     62      O
ATOM   3111  CB  VAL B  16    -28.187 -26.615 -39.047  1.00 18.05          C
ANISOU 3111  CB  VAL B  16    3048   1898   1912   -399    260    168      C
ATOM   3112  CG1 VAL B  16    -28.252 -25.124 -39.421  1.00 16.59          C
ANISOU 3112  CG1 VAL B  16    2757   1842   1704   -352    204     73      C
ATOM   3113  CG2 VAL B  16    -26.987 -26.876 -38.167  1.00 18.72          C
ANISOU 3113  CG2 VAL B  16    3246   1920   1948   -294    180    255      C
ATOM   3114  H   VAL B  16    -29.666 -28.980 -38.701  1.00 24.74          H
ATOM   3115  HA  VAL B  16    -29.549 -26.540 -37.514  1.00 23.55          H
ATOM   3116  HB  VAL B  16    -28.084 -27.129 -39.863  1.00 21.66          H
ATOM   3117 HG11 VAL B  16    -27.429 -24.875 -39.869  1.00 19.91          H
ATOM   3118 HG12 VAL B  16    -29.008 -24.980 -40.012  1.00 19.91          H
ATOM   3119 HG13 VAL B  16    -28.361 -24.600 -38.612  1.00 19.91          H
ATOM   3120 HG21 VAL B  16    -26.185 -26.595 -38.635  1.00 22.47          H
ATOM   3121 HG22 VAL B  16    -27.083 -26.371 -37.344  1.00 22.47          H
ATOM   3122 HG23 VAL B  16    -26.940 -27.824 -37.970  1.00 22.47          H
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ATOM 3123 N ASN B 17 -31.754 -26.243 -38.563 1.00 22.49 N
ANISOU 3123 N ASN B 17 3423 2718 2402 -628 539 164 N
ATOM 3124 CA ASN B 17 -33.009 -25.913 -39.240 1.00 24.88 C
ANISOU 3124 CA ASN B 17 3563 3131 2759 -714 596 95 C
ATOM 3125 C ASN B 17 -32.998 -24.427 -39.571 1.00 21.88 C
ANISOU 3125 C ASN B 17 3112 2878 2325 -598 532 -17 C
ATOM 3126 O ASN B 17 -33.201 -23.583 -38.697 1.00 20.40 O
ANISOU 3126 O ASN B 17 2943 2798 2010 -501 555 -10 O
ATOM 3127 CB ASN B 17 -34.207 -26.270 -38.367 1.00 32.14 C
ANISOU 3127 CB ASN B 17 4431 4145 3635 -800 750 201 C
ATOM 3128 CG ASN B 17 -35.516 -25.827 -38.982 1.00 37.98 C
ANISOU 3128 CG ASN B 17 4967 5032 4432 -871 802 135 C
ATOM 3129 OD1 ASN B 17 -35.697 -25.908 -40.198 1.00 39.72 O
ANISOU 3129 OD1 ASN B 17 5102 5216 4773 -935 727 34 O
ATOM 3130 ND2 ASN B 17 -36.427 -25.328 -38.154 1.00 41.10 N
ANISOU 3130 ND2 ASN B 17 5282 5607 4726 -836 926 188 N
ATOM 3131 H ASN B 17 -31.767 -26.068 -37.721 1.00 26.98 H
ATOM 3132 HA ASN B 17 -33.072 -26.414 -40.068 1.00 29.86 H
ATOM 3133 HB2 ASN B 17 -34.239 -27.232 -38.249 1.00 38.57 H
ATOM 3134 HB3 ASN B 17 -34.114 -25.832 -37.506 1.00 38.57 H
ATOM 3135 HD21 ASN B 17 -37.187 -25.063 -38.458 1.00 49.32 H
ATOM 3136 HD22 ASN B 17 -36.257 -25.269 -37.313 1.00 49.32 H
ATOM 3137 N ALA B 18 -32.760 -24.110 -40.837 1.00 20.61 N
ANISOU 3137 N ALA B 18 2887 2696 2250 -595 449 -117 N
ATOM 3138 CA ALA B 18 -32.645 -22.733 -41.295 1.00 20.20 C
ANISOU 3138 CA ALA B 18 2780 2728 2166 -493 376 -206 C
ATOM 3139 C ALA B 18 -33.821 -22.394 -42.200 1.00 20.53 C
ANISOU 3139 C ALA B 18 2672 2874 2253 -537 398 -286 C
ATOM 3140 O ALA B 18 -34.208 -23.198 -43.057 1.00 20.53 O
ANISOU 3140 O ALA B 18 2617 2836 2346 -639 401 -313 O
ATOM 3141 CB ALA B 18 -31.331 -22.512 -42.049 1.00 18.02 C
ANISOU 3141 CB ALA B 18 2545 2361 1941 -436 265 -230 C
ATOM 3142 H ALA B 18 -32.660 -24.689 -41.465 1.00 24.74 H
ATOM 3143 HA ALA B 18 -32.663 -22.136 -40.530 1.00 24.24 H
ATOM 3144 HB1 ALA B 18 -31.285 -21.588 -42.340 1.00 21.62 H
ATOM 3145 HB2 ALA B 18 -30.589 -22.710 -41.456 1.00 21.62 H
ATOM 3146 HB3 ALA B 18 -31.306 -23.103 -42.819 1.00 21.62 H
ATOM 3147 N VAL B 19 -34.366 -21.191 -42.028 1.00 18.43 N
ANISOU 3147 N VAL B 19 2351 2732 1921 -446 394 -334 N
ATOM 3148 CA VAL B 19 -35.515 -20.727 -42.799 1.00 18.06 C
ANISOU 3148 CA VAL B 19 2151 2806 1903 -455 404 -407 C
ATOM 3149 C VAL B 19 -35.092 -19.490 -43.583 1.00 16.65 C
ANISOU 3149 C VAL B 19 1978 2633 1715 -342 296 -480 C
ATOM 3150 O VAL B 19 -34.642 -18.500 -42.993 1.00 16.07 O
ANISOU 3150 O VAL B 19 1981 2553 1572 -230 251 -483 O
ATOM 3151 CB VAL B 19 -36.720 -20.426 -41.893 1.00 20.37 C
ANISOU 3151 CB VAL B 19 2356 3258 2125 -427 517 -383 C
ATOM 3152 CG1 VAL B 19 -37.906 -19.915 -42.707 1.00 21.04 C
ANISOU 3152 CG1 VAL B 19 2258 3485 2251 -419 514 -457 C
ATOM 3153 CG2 VAL B 19 -37.107 -21.676 -41.099 1.00 21.31 C
ANISOU 3153 CG2 VAL B 19 2467 3370 2260 -556 641 -271 C
ATOM 3154 H VAL B 19 -34.081 -20.614 -41.457 1.00 22.12 H
ATOM 3155 HA VAL B 19 -35.775 -21.414 -43.432 1.00 21.67 H

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ATOM   3156  HB  VAL B  19     -36.472 -19.734 -41.260  1.00 24.44           H
ATOM   3157 HG11 VAL B  19     -38.647 -19.735 -42.107  1.00 25.25           H
ATOM   3158 HG12 VAL B  19     -37.647 -19.100 -43.166  1.00 25.25           H
ATOM   3159 HG13 VAL B  19     -38.160 -20.592 -43.353  1.00 25.25           H
ATOM   3160 HG21 VAL B  19     -37.868 -21.467 -40.534  1.00 25.57           H
ATOM   3161 HG22 VAL B  19     -37.340 -22.384 -41.719  1.00 25.57           H
ATOM   3162 HG23 VAL B  19     -36.354 -21.948 -40.552  1.00 25.57           H
ATOM   3163  N   ASN B  20     -35.219 -19.558 -44.908  1.00 15.88           N
ANISOU 3163  N   ASN B  20     1815   2535   1684   -371    244   -535      N
ATOM   3164  CA  ASN B  20     -34.982 -18.414 -45.789  1.00 14.94           C
ANISOU 3164  CA  ASN B  20     1689   2432   1556   -271    155   -583      C
ATOM   3165  C   ASN B  20     -36.238 -17.553 -45.753  1.00 15.61           C
ANISOU 3165  C   ASN B  20     1668   2660   1602   -199    166   -635      C
ATOM   3166  O   ASN B  20     -37.228 -17.849 -46.418  1.00 15.70           O
ANISOU 3166  O   ASN B  20     1552   2763   1649   -242    174   -680      O
ATOM   3167  CB  ASN B  20     -34.656 -18.882 -47.204  1.00 16.28           C
ANISOU 3167  CB  ASN B  20     1844   2564   1777   -305    107   -613      C
ATOM   3168  CG  ASN B  20     -34.533 -17.740 -48.193  1.00 16.17           C
ANISOU 3168  CG  ASN B  20     1818   2583   1741   -203     33   -638      C
ATOM   3169  OD1 ASN B  20     -34.821 -16.587 -47.885  1.00 16.28           O
ANISOU 3169  OD1 ASN B  20     1828   2638   1721   -116      5   -643      O
ATOM   3170  ND2 ASN B  20     -34.103 -18.071 -49.406  1.00 17.47           N
ANISOU 3170  ND2 ASN B  20     1995   2727   1918   -201      1   -651      N
ATOM   3171  H   ASN B  20     -35.447 -20.272 -45.330  1.00 19.06           H
ATOM   3172  HA  ASN B  20     -34.236 -17.891 -45.454  1.00 17.93           H
ATOM   3173  HB2 ASN B  20     -33.811 -19.359 -47.191  1.00 19.53           H
ATOM   3174  HB3 ASN B  20     -35.363 -19.470 -47.512  1.00 19.53           H
ATOM   3175 HD21 ASN B  20     -34.013 -17.466 -50.011  1.00 20.97           H
ATOM   3176 HD22 ASN B  20     -33.915 -18.891 -49.587  1.00 20.97           H
ATOM   3177  N   GLY B  21     -36.210 -16.484 -44.960  1.00 16.15           N
ANISOU 3177  N   GLY B  21     1658   2341   2139   -752    199   -283      N
ATOM   3178  CA  GLY B  21     -37.388 -15.682 -44.710  1.00 16.71           C
ANISOU 3178  CA  GLY B  21     1621   2501   2229   -740    204   -301      C
ATOM   3179  C   GLY B  21     -37.606 -14.611 -45.765  1.00 16.88           C
ANISOU 3179  C   GLY B  21     1572   2599   2242   -668    126   -312      C
ATOM   3180  O   GLY B  21     -36.911 -14.529 -46.780  1.00 16.58           O
ANISOU 3180  O   GLY B  21     1567   2556   2178   -638     68   -308      O
ATOM   3181  H   GLY B  21     -35.506 -16.205 -44.552  1.00 19.38           H
ATOM   3182  HA2 GLY B  21     -38.170 -16.255 -44.690  1.00 20.06           H
ATOM   3183  HA3 GLY B  21     -37.304 -15.248 -43.846  1.00 20.06           H
ATOM   3184  N   SER B  22     -38.593 -13.766 -45.503  1.00 19.97           N
ANISOU 3184  N   SER B  22     1866   3065   2657   -635    127   -321      N
ATOM   3185  CA  SER B  22     -38.921 -12.689 -46.428  1.00 21.52           C
ANISOU 3185  CA  SER B  22     1991   3333   2852   -555     52   -320      C
ATOM   3186  C   SER B  22     -37.809 -11.646 -46.460  1.00 20.76           C
ANISOU 3186  C   SER B  22     1970   3188   2730   -459     26   -266      C
ATOM   3187  O   SER B  22     -37.299 -11.231 -45.415  1.00 19.25           O
ANISOU 3187  O   SER B  22     1831   2943   2539   -431     72   -241      O
ATOM   3188  CB  SER B  22     -40.241 -12.042 -46.026  1.00 24.38           C
ANISOU 3188  CB  SER B  22     2228   3779   3257   -533     67   -343      C
ATOM   3189  OG  SER B  22     -40.552 -10.981 -46.902  1.00 27.03           O
ANISOU 3189  OG  SER B  22     2498   4176   3595   -443     -9   -331      O
ATOM   3190  H   SER B  22     -39.087 -13.793 -44.799  1.00 23.96           H
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ATOM   3191  HA  SER B  22     -39.021 -13.055 -47.321  1.00 25.82           H
ATOM   3192  HB2 SER B  22     -40.946 -12.706 -46.069  1.00 29.26           H
ATOM   3193  HB3 SER B  22     -40.163 -11.696 -45.123  1.00 29.26           H
ATOM   3194  HG  SER B  22     -41.280 -10.627 -46.677  1.00 32.43           H
ATOM   3195  N   GLY B  23     -37.441 -11.222 -47.667  1.00 20.20           N
ANISOU 3195  N   GLY B  23     1903   3140   2633   -415    -46   -250      N
ATOM   3196  CA  GLY B  23     -36.446 -10.174 -47.835  1.00 19.73           C
ANISOU 3196  CA  GLY B  23     1904   3036   2555   -331    -71   -197      C
ATOM   3197  C   GLY B  23     -35.092 -10.578 -47.282  1.00 17.99           C
ANISOU 3197  C   GLY B  23     1798   2725   2314   -347    -35   -177      C
ATOM   3198  O   GLY B  23     -34.478 -11.561 -47.723  1.00 17.48           O
ANISOU 3198  O   GLY B  23     1785   2633   2225   -396    -37   -189      O
ATOM   3199  H   GLY B  23     -37.756 -11.528 -48.406  1.00 24.24           H
ATOM   3200  HA2 GLY B  23     -36.345  -9.971 -48.778  1.00 23.67           H
ATOM   3201  HA3 GLY B  23     -36.739  -9.372 -47.376  1.00 23.67           H
ATOM   3202  N   GLY B  24     -34.609  -9.802 -46.312  1.00 17.47           N
ANISOU 3202  N   GLY B  24     1768   2611   2258   -302     -3   -152      N
ATOM   3203  CA  GLY B  24     -33.355 -10.059 -45.639  1.00 16.02           C
ANISOU 3203  CA  GLY B  24     1679   2352   2054   -309     26   -134      C
ATOM   3204  C   GLY B  24     -33.476 -10.836 -44.344  1.00 14.88           C
ANISOU 3204  C   GLY B  24     1561   2182   1911   -359     89   -145      C
ATOM   3205  O   GLY B  24     -32.493 -10.922 -43.598  1.00 14.23           O
ANISOU 3205  O   GLY B  24     1551   2046   1809   -353    109   -125      O
ATOM   3206  H   GLY B  24     -35.011  -9.098 -46.023  1.00 20.96           H
ATOM   3207  HA2 GLY B  24     -32.775 -10.559 -46.234  1.00 19.22           H
ATOM   3208  HA3 GLY B  24     -32.925  -9.213 -45.441  1.00 19.22           H
ATOM   3209  N   ASN B  25     -34.635 -11.426 -44.063  1.00 15.22           N
ANISOU 3209  N   ASN B  25     1545   2264   1972   -411    120   -174      N
ATOM   3210  CA  ASN B  25     -34.880 -12.116 -42.804  1.00 14.68           C
ANISOU 3210  CA  ASN B  25     1500   2177   1901   -463    190   -176      C
ATOM   3211  C   ASN B  25     -34.586 -13.605 -42.929  1.00 14.78           C
ANISOU 3211  C   ASN B  25     1565   2145   1906   -539    207   -175      C
ATOM   3212  O   ASN B  25     -34.800 -14.216 -43.982  1.00 14.79           O
ANISOU 3212  O   ASN B  25     1544   2156   1919   -574    176   -200      O
ATOM   3213  CB  ASN B  25     -36.330 -11.919 -42.357  1.00 16.91           C
ANISOU 3213  CB  ASN B  25     1684   2527   2212   -483    229   -209      C
ATOM   3214  CG  ASN B  25     -36.668 -12.716 -41.104  1.00 18.44           C
ANISOU 3214  CG  ASN B  25     1903   2709   2396   -551    312   -207      C
ATOM   3215  OD1 ASN B  25     -37.347 -13.744 -41.165  1.00 19.86           O
ANISOU 3215  OD1 ASN B  25     2057   2898   2593   -633    343   -224      O
ATOM   3216  ND2 ASN B  25     -36.186 -12.246 -39.961  1.00 17.55           N
ANISOU 3216  ND2 ASN B  25     1841   2575   2251   -520    349   -188      N
ATOM   3217  H   ASN B  25     -35.307 -11.440 -44.598  1.00 18.26           H
ATOM   3218  HA  ASN B  25     -34.299 -11.749 -42.120  1.00 17.62           H
ATOM   3219  HB2 ASN B  25     -36.477 -10.980 -42.164  1.00 20.29           H
ATOM   3220  HB3 ASN B  25     -36.923 -12.210 -43.067  1.00 20.29           H
ATOM   3221 HD21 ASN B  25     -36.348 -12.659 -39.224  1.00 21.06           H
ATOM   3222 HD22 ASN B  25     -35.712 -11.528 -39.956  1.00 21.06           H
ATOM   3223  N   TYR B  26     -34.090 -14.182 -41.835  1.00 14.88           N
ANISOU 3223  N   TYR B  26     1651   2106   1898   -562    255   -147      N
ATOM   3224  CA  TYR B  26     -33.873 -15.615 -41.738  1.00 14.99           C
ANISOU 3224  CA  TYR B  26     1722   2060   1914   -631    284   -136      C
ATOM   3225  C   TYR B  26     -33.923 -16.017 -40.275  1.00 15.42           C
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ANISOU 3225 C TYR B 26 1826 2090 1945 -659 353 -99 C
ATOM 3226 O TYR B 26 -33.826 -15.176 -39.376 1.00 16.64 O
ANISOU 3226 O TYR B 26 1984 2272 2068 -617 369 -86 O
ATOM 3227 CB TYR B 26 -32.534 -16.030 -42.358 1.00 14.37 C
ANISOU 3227 CB TYR B 26 1719 1916 1824 -603 243 -118 C
ATOM 3228 CG TYR B 26 -31.303 -15.607 -41.581 1.00 14.05 C
ANISOU 3228 CG TYR B 26 1750 1841 1749 -542 236 -74 C
ATOM 3229 CD1 TYR B 26 -30.732 -16.445 -40.630 1.00 14.41 C
ANISOU 3229 CD1 TYR B 26 1873 1827 1774 -556 269 -31 C
ATOM 3230 CD2 TYR B 26 -30.706 -14.372 -41.800 1.00 14.23 C
ANISOU 3230 CD2 TYR B 26 1760 1889 1759 -471 195 -73 C
ATOM 3231 CE1 TYR B 26 -29.601 -16.066 -39.924 1.00 14.10 C
ANISOU 3231 CE1 TYR B 26 1888 1770 1698 -499 253 6 C
ATOM 3232 CE2 TYR B 26 -29.574 -13.985 -41.094 1.00 13.99 C
ANISOU 3232 CE2 TYR B 26 1784 1832 1698 -425 186 -43 C
ATOM 3233 CZ TYR B 26 -29.026 -14.840 -40.160 1.00 14.60 C
ANISOU 3233 CZ TYR B 26 1930 1866 1752 -438 211 -6 C
ATOM 3234 OH TYR B 26 -27.899 -14.469 -39.452 1.00 14.80 O
ANISOU 3234 OH TYR B 26 2001 1880 1743 -391 192 20 O
ATOM 3235 H TYR B 26 -33.868 -13.752 -41.124 1.00 17.86 H
ATOM 3236 HA TYR B 26 -34.583 -16.080 -42.207 1.00 17.99 H
ATOM 3237 HB2 TYR B 26 -32.515 -16.997 -42.431 1.00 17.24 H
ATOM 3238 HB3 TYR B 26 -32.470 -15.637 -43.243 1.00 17.24 H
ATOM 3239 HD1 TYR B 26 -31.112 -17.278 -40.468 1.00 17.29 H
ATOM 3240 HD2 TYR B 26 -31.070 -13.795 -42.432 1.00 17.08 H
ATOM 3241 HE1 TYR B 26 -29.232 -16.641 -39.293 1.00 16.91 H
ATOM 3242 HE2 TYR B 26 -29.185 -13.156 -41.254 1.00 16.79 H
ATOM 3243 HH TYR B 26 -27.650 -13.702 -39.689 1.00 17.76 H
ATOM 3244 N SER B 27 -34.080 -17.318 -40.042 1.00 16.01 N
ANISOU 3244 N SER B 27 1942 2110 2030 -733 396 -84 N
ATOM 3245 CA SER B 27 -34.020 -17.853 -38.693 1.00 15.29 C
ANISOU 3245 CA SER B 27 1916 1987 1906 -762 462 -32 C
ATOM 3246 C SER B 27 -33.280 -19.182 -38.728 1.00 16.14 C
ANISOU 3246 C SER B 27 2119 1990 2022 -791 469 9 C
ATOM 3247 O SER B 27 -33.176 -19.835 -39.772 1.00 15.27 O
ANISOU 3247 O SER B 27 2008 1837 1955 -816 443 -21 O
ATOM 3248 CB SER B 27 -35.424 -18.017 -38.085 1.00 17.60 C
ANISOU 3248 CB SER B 27 2146 2331 2211 -838 538 -49 C
ATOM 3249 OG SER B 27 -36.234 -18.879 -38.854 1.00 19.83 O
ANISOU 3249 OG SER B 27 2382 2602 2551 -923 552 -87 O
ATOM 3250 H SER B 27 -34.223 -17.908 -40.651 1.00 19.21 H
ATOM 3251 HA SER B 27 -33.518 -17.243 -38.131 1.00 18.35 H
ATOM 3252 HB2 SER B 27 -35.336 -18.386 -37.192 1.00 21.13 H
ATOM 3253 HB3 SER B 27 -35.848 -17.146 -38.041 1.00 21.13 H
ATOM 3254 HG SER B 27 -36.993 -18.951 -38.501 1.00 23.80 H
ATOM 3255 N VAL B 28 -32.751 -19.567 -37.570 1.00 16.52 N
ANISOU 3255 N VAL B 28 2252 1998 2025 -783 503 78 N
ATOM 3256 CA VAL B 28 -32.013 -20.812 -37.417 1.00 16.87 C
ANISOU 3256 CA VAL B 28 2396 1935 2078 -796 513 134 C
ATOM 3257 C VAL B 28 -32.346 -21.389 -36.050 1.00 17.47 C
ANISOU 3257 C VAL B 28 2533 1992 2112 -840 588 206 C
ATOM 3258 O VAL B 28 -32.339 -20.667 -35.047 1.00 17.00 O
ANISOU 3258 O VAL B 28 2478 1998 1984 -811 603 232 O

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ATOM   3259  CB  VAL B  28    -30.487 -20.630 -37.531  1.00 16.72           C
ANISOU 3259  CB  VAL B  28     2435   1881   2036   -701    446    163       C
ATOM   3260  CG1 VAL B  28    -29.827 -21.983 -37.849  1.00 17.56           C
ANISOU 3260  CG1 VAL B  28     2621   1868   2182   -708    447    195       C
ATOM   3261  CG2 VAL B  28    -30.110 -19.563 -38.561  1.00 18.29           C
ANISOU 3261  CG2 VAL B  28     2569   2133   2245   -643    378    102       C
ATOM   3262  H   VAL B  28    -32.808 -19.111 -36.843  1.00 19.82           H
ATOM   3263  HA  VAL B  28    -32.299 -21.443 -38.096  1.00 20.24           H
ATOM   3264  HB  VAL B  28    -30.148 -20.336 -36.671  1.00 20.06           H
ATOM   3265 HG11 VAL B  28    -28.868 -21.857 -37.918  1.00 21.07           H
ATOM   3266 HG12 VAL B  28    -30.029 -22.607 -37.134  1.00 21.07           H
ATOM   3267 HG13 VAL B  28    -30.180 -22.316 -38.689  1.00 21.07           H
ATOM   3268 HG21 VAL B  28    -29.144 -19.486 -38.596  1.00 21.94           H
ATOM   3269 HG22 VAL B  28    -30.453 -19.829 -39.429  1.00 21.94           H
ATOM   3270 HG23 VAL B  28    -30.501 -18.716 -38.295  1.00 21.94           H
ATOM   3271  N   ASN B  29    -32.634 -22.681 -36.015  1.00 19.08           N
ANISOU 3271  N   ASN B  29     2789   2106   2356   -914    639    238       N
ATOM   3272  CA  ASN B  29    -32.722 -23.458 -34.784  1.00 21.74           C
ANISOU 3272  CA  ASN B  29     3202   2403   2656   -932    694    326       C
ATOM   3273  C   ASN B  29    -31.761 -24.622 -34.952  1.00 22.28           C
ANISOU 3273  C   ASN B  29     3368   2341   2758   -903    672    383       C
ATOM   3274  O   ASN B  29    -31.901 -25.401 -35.901  1.00 21.62           O
ANISOU 3274  O   ASN B  29     3275   2185   2756   -935    665    340       O
ATOM   3275  CB  ASN B  29    -34.143 -23.970 -34.539  1.00 25.57           C
ANISOU 3275  CB  ASN B  29     3630   2909   3176  -1015    759    307       C
ATOM   3276  CG  ASN B  29    -35.149 -22.851 -34.330  1.00 28.31           C
ANISOU 3276  CG  ASN B  29     3872   3386   3499  -1034    784    249       C
ATOM   3277  OD1 ASN B  29    -34.940 -21.951 -33.519  1.00 29.60           O
ANISOU 3277  OD1 ASN B  29     4040   3620   3586   -994    792    268       O
ATOM   3278  ND2 ASN B  29    -36.262 -22.915 -35.057  1.00 29.66           N
ANISOU 3278  ND2 ASN B  29     3945   3590   3735  -1092    795    174       N
ATOM   3279  H   ASN B  29    -32.790 -23.150 -36.720  1.00 22.90           H
ATOM   3280  HA  ASN B  29    -32.442 -22.920 -34.028  1.00 26.09           H
ATOM   3281  HB2 ASN B  29    -34.428 -24.489 -35.308  1.00 30.68           H
ATOM   3282  HB3 ASN B  29    -34.145 -24.527 -33.745  1.00 30.68           H
ATOM   3283 HD21 ASN B  29    -36.864 -22.306 -34.976  1.00 35.59           H
ATOM   3284 HD22 ASN B  29    -36.379 -23.565 -35.608  1.00 35.59           H
ATOM   3285  N   TRP B  30    -30.781 -24.737 -34.055  1.00 22.17           N
ANISOU 3285  N   TRP B  30     3442   2300   2680   -837    657    474       N
ATOM   3286  CA  TRP B  30    -29.729 -25.727 -34.224  1.00 22.50           C
ANISOU 3286  CA  TRP B  30     3571   2222   2756   -786    625    528       C
ATOM   3287  C   TRP B  30    -29.474 -26.467 -32.917  1.00 23.08           C
ANISOU 3287  C   TRP B  30     3726   2262   2780   -761    647    647       C
ATOM   3288  O   TRP B  30    -29.791 -25.979 -31.827  1.00 23.64           O
ANISOU 3288  O   TRP B  30     3799   2418   2764   -764    672    688       O
ATOM   3289  CB  TRP B  30    -28.438 -25.072 -34.755  1.00 21.68           C
ANISOU 3289  CB  TRP B  30     3474   2125   2637   -691    546    511       C
ATOM   3290  CG  TRP B  30    -27.686 -24.164 -33.809  1.00 21.75           C
ANISOU 3290  CG  TRP B  30     3492   2224   2546   -608    500    554       C
ATOM   3291  CD1 TRP B  30    -26.604 -24.502 -33.041  1.00 22.15           C
ANISOU 3291  CD1 TRP B  30     3622   2248   2548   -530    463    643       C
ATOM   3292  CD2 TRP B  30    -27.929 -22.766 -33.560  1.00 20.52           C
ANISOU 3292  CD2 TRP B  30     3263   2202   2331   -593    480    502       C
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ATOM 3293 NE1 TRP B 30 -26.169 -23.410 -32.329 1.00 22.27 N
ANISOU 3293 NE1 TRP B 30 3612 2376 2471 -477 421 642 N
ATOM 3294 CE2 TRP B 30 -26.961 -22.334 -32.630 1.00 20.55 C
ANISOU 3294 CE2 TRP B 30 3306 2251 2250 -515 434 554 C
ATOM 3295 CE3 TRP B 30 -28.868 -21.842 -34.033 1.00 18.93 C
ANISOU 3295 CE3 TRP B 30 2965 2082 2145 -634 495 415 C
ATOM 3296 CZ2 TRP B 30 -26.914 -21.020 -32.154 1.00 19.33 C
ANISOU 3296 CZ2 TRP B 30 3103 2214 2028 -487 410 514 C
ATOM 3297 CZ3 TRP B 30 -28.812 -20.534 -33.564 1.00 18.84 C
ANISOU 3297 CZ3 TRP B 30 2907 2178 2071 -595 472 383 C
ATOM 3298 CH2 TRP B 30 -27.843 -20.141 -32.632 1.00 18.63 C
ANISOU 3298 CH2 TRP B 30 2928 2188 1964 -527 433 429 C
ATOM 3299 H TRP B 30 -30.706 -24.255 -33.346 1.00 26.60 H
ATOM 3300 HA TRP B 30 -30.020 -26.380 -34.880 1.00 27.00 H
ATOM 3301 HB2 TRP B 30 -27.828 -25.779 -35.018 1.00 26.01 H
ATOM 3302 HB3 TRP B 30 -28.668 -24.543 -35.536 1.00 26.01 H
ATOM 3303 HD1 TRP B 30 -26.219 -25.347 -33.006 1.00 26.58 H
ATOM 3304 HE1 TRP B 30 -25.507 -23.404 -31.780 1.00 26.72 H
ATOM 3305 HE3 TRP B 30 -29.514 -22.097 -34.651 1.00 22.71 H
ATOM 3306 HZ2 TRP B 30 -26.270 -20.754 -31.538 1.00 23.20 H
ATOM 3307 HZ3 TRP B 30 -29.433 -19.912 -33.868 1.00 22.60 H
ATOM 3308 HH2 TRP B 30 -27.831 -19.260 -32.333 1.00 22.36 H
ATOM 3309 N SER B 31 -28.908 -27.671 -33.042 1.00 22.58 N
ANISOU 3309 N SER B 31 3731 2075 2775 -735 637 698 N
ATOM 3310 CA SER B 31 -28.716 -28.529 -31.880 1.00 24.21 C
ANISOU 3310 CA SER B 31 4014 2238 2948 -716 656 818 C
ATOM 3311 C SER B 31 -27.577 -29.516 -32.119 1.00 26.18 C
ANISOU 3311 C SER B 31 4337 2360 3252 -639 612 873 C
ATOM 3312 O SER B 31 -27.534 -30.179 -33.160 1.00 25.22 O
ANISOU 3312 O SER B 31 4209 2141 3232 -655 611 816 O
ATOM 3313 CB SER B 31 -30.007 -29.288 -31.564 1.00 25.08 C
ANISOU 3313 CB SER B 31 4110 2325 3094 -820 735 828 C
ATOM 3314 OG SER B 31 -29.783 -30.246 -30.548 1.00 28.39 O
ANISOU 3314 OG SER B 31 4611 2684 3492 -805 754 952 O
ATOM 3315 H SER B 31 -28.631 -28.008 -33.783 1.00 27.10 H
ATOM 3316 HA SER B 31 -28.489 -27.982 -31.112 1.00 29.06 H
ATOM 3317 HB2 SER B 31 -30.679 -28.657 -31.263 1.00 30.10 H
ATOM 3318 HB3 SER B 31 -30.311 -29.742 -32.366 1.00 30.10 H
ATOM 3319 HG SER B 31 -29.201 -30.798 -30.796 1.00 34.07 H
ATOM 3320 N ASN B 32 -26.675 -29.626 -31.141 1.00 28.71 N
ANISOU 3320 N ASN B 32 4719 2688 3503 -555 575 980 N
ATOM 3321 CA ASN B 32 -25.597 -30.619 -31.169 1.00 31.02 C
ANISOU 3321 CA ASN B 32 5077 2864 3844 -471 531 1049 C
ATOM 3322 C ASN B 32 -24.894 -30.625 -32.524 1.00 29.79 C
ANISOU 3322 C ASN B 32 4900 2641 3776 -427 491 960 C
ATOM 3323 O ASN B 32 -24.600 -31.674 -33.098 1.00 30.75 O
ANISOU 3323 O ASN B 32 5051 2635 3997 -412 492 955 O
ATOM 3324 CB ASN B 32 -26.136 -32.001 -30.822 1.00 34.46 C
ANISOU 3324 CB ASN B 32 5564 3187 4342 -524 582 1117 C
ATOM 3325 CG ASN B 32 -26.741 -32.054 -29.439 1.00 36.91 C
ANISOU 3325 CG ASN B 32 5901 3562 4559 -562 623 1217 C
ATOM 3326 OD1 ASN B 32 -26.434 -31.224 -28.582 1.00 36.94 O
ANISOU 3326 OD1 ASN B 32 5903 3686 4446 -520 597 1258 O

ATOM 3327 ND2 ASN B 32 -27.606 -33.033 -29.210 1.00 39.01 N
ANISOU 3327 ND2 ASN B 32 6192 3754 4875 -646 689 1254 N
ATOM 3328 H ASN B 32 -26.666 -29.129 -30.439 1.00 34.46 H
ATOM 3329 HA ASN B 32 -24.939 -30.382 -30.497 1.00 37.22 H
ATOM 3330 HB2 ASN B 32 -26.824 -32.243 -31.461 1.00 41.35 H
ATOM 3331 HB3 ASN B 32 -25.409 -32.643 -30.857 1.00 41.35 H
ATOM 3332 HD21 ASN B 32 -27.978 -33.106 -28.438 1.00 46.81 H
ATOM 3333 HD22 ASN B 32 -27.794 -33.595 -29.833 1.00 46.81 H
ATOM 3334 N THR B 33 -24.615 -29.433 -33.035 1.00 27.70 N
ANISOU 3334 N THR B 33 4585 2464 3475 -405 458 887 N
ATOM 3335 CA THR B 33 -24.104 -29.310 -34.386 1.00 26.63 C
ANISOU 3335 CA THR B 33 4420 2282 3415 -379 432 791 C
ATOM 3336 C THR B 33 -22.640 -29.740 -34.448 1.00 28.91 C
ANISOU 3336 C THR B 33 4749 2506 3729 -251 369 836 C
ATOM 3337 O THR B 33 -21.999 -30.039 -33.434 1.00 29.34 O
ANISOU 3337 O THR B 33 4848 2565 3737 -178 335 941 O
ATOM 3338 CB THR B 33 -24.242 -27.872 -34.885 1.00 24.69 C
ANISOU 3338 CB THR B 33 4108 2153 3121 -396 413 708 C
ATOM 3339 OG1 THR B 33 -23.368 -27.013 -34.140 1.00 24.54 O
ANISOU 3339 OG1 THR B 33 4075 2240 3011 -307 345 746 O
ATOM 3340 CG2 THR B 33 -25.685 -27.389 -34.741 1.00 23.88 C
ANISOU 3340 CG2 THR B 33 3956 2126 2993 -512 472 666 C
ATOM 3341 H THR B 33 -24.712 -28.686 -32.620 1.00 33.24 H
ATOM 3342 HA THR B 33 -24.616 -29.887 -34.975 1.00 31.95 H
ATOM 3343 HB THR B 33 -24.002 -27.835 -35.824 1.00 29.63 H
ATOM 3344 HG1 THR B 33 -22.571 -27.261 -34.236 1.00 29.45 H
ATOM 3345 HG21 THR B 33 -25.761 -26.476 -35.060 1.00 28.66 H
ATOM 3346 HG22 THR B 33 -26.277 -27.955 -35.260 1.00 28.66 H
ATOM 3347 HG23 THR B 33 -25.953 -27.421 -33.810 1.00 28.66 H
ATOM 3348 N GLY B 34 -22.132 -29.816 -35.674 1.00 29.02 N
ANISOU 3348 N GLY B 34 4741 2465 3822 -222 353 750 N
ATOM 3349 CA GLY B 34 -20.709 -29.738 -35.918 1.00 29.66 C
ANISOU 3349 CA GLY B 34 4823 2530 3915 -94 288 758 C
ATOM 3350 C GLY B 34 -20.387 -28.285 -36.201 1.00 29.07 C
ANISOU 3350 C GLY B 34 4642 2623 3778 -74 230 682 C
ATOM 3351 O GLY B 34 -20.712 -27.413 -35.390 1.00 30.16 O
ANISOU 3351 O GLY B 34 4761 2875 3823 -95 218 709 O
ATOM 3352 H GLY B 34 -22.603 -29.915 -36.387 1.00 34.83 H
ATOM 3353 HA2 GLY B 34 -20.213 -30.035 -35.139 1.00 35.59 H
ATOM 3354 HA3 GLY B 34 -20.464 -30.280 -36.684 1.00 35.59 H
ATOM 3355 N SER B 35 -19.779 -28.003 -37.347 1.00 26.20 N
ANISOU 3355 N SER B 35 4214 2274 3466 -39 202 585 N
ATOM 3356 CA SER B 35 -19.626 -26.633 -37.821 1.00 24.42 C
ANISOU 3356 CA SER B 35 3890 2191 3196 -42 162 505 C
ATOM 3357 C SER B 35 -20.781 -26.282 -38.750 1.00 22.18 C
ANISOU 3357 C SER B 35 3562 1932 2933 -148 205 411 C
ATOM 3358 O SER B 35 -21.249 -27.123 -39.524 1.00 21.65 O
ANISOU 3358 O SER B 35 3516 1773 2937 -196 248 366 O
ATOM 3359 CB SER B 35 -18.297 -26.456 -38.556 1.00 25.53 C
ANISOU 3359 CB SER B 35 3980 2347 3374 52 111 458 C
ATOM 3360 OG SER B 35 -17.203 -26.664 -37.681 1.00 28.08 O
ANISOU 3360 OG SER B 35 4324 2670 3675 156 59 541 O
ATOM 3361 H SER B 35 -19.442 -28.594 -37.873 1.00 31.44 H

ATOM 3362 HA SER B 35 -19.643 -26.025 -37.066 1.00 29.30 H
ATOM 3363 HB2 SER B 35 -18.248 -27.100 -39.280 1.00 30.64 H
ATOM 3364 HB3 SER B 35 -18.250 -25.554 -38.911 1.00 30.64 H
ATOM 3365 HG SER B 35 -16.479 -26.564 -38.096 1.00 33.70 H
ATOM 3366 N PHE B 36 -21.238 -25.036 -38.671 1.00 20.81 N
ANISOU 3366 N PHE B 36 3324 1882 2698 -182 190 378 N
ATOM 3367 CA PHE B 36 -22.305 -24.567 -39.546 1.00 19.49 C
ANISOU 3367 CA PHE B 36 3103 1757 2544 -268 218 294 C
ATOM 3368 C PHE B 36 -22.253 -23.047 -39.626 1.00 18.24 C
ANISOU 3368 C PHE B 36 2869 1732 2331 -257 179 258 C
ATOM 3369 O PHE B 36 -21.717 -22.378 -38.737 1.00 18.24 O
ANISOU 3369 O PHE B 36 2866 1791 2275 -211 147 300 O
ATOM 3370 CB PHE B 36 -23.684 -25.025 -39.055 1.00 20.02 C
ANISOU 3370 CB PHE B 36 3199 1796 2610 -366 280 316 C
ATOM 3371 CG PHE B 36 -24.196 -24.255 -37.865 1.00 19.80 C
ANISOU 3371 CG PHE B 36 3167 1855 2503 -383 287 367 C
ATOM 3372 CD1 PHE B 36 -23.884 -24.654 -36.576 1.00 21.45 C
ANISOU 3372 CD1 PHE B 36 3446 2041 2664 -353 294 469 C
ATOM 3373 CD2 PHE B 36 -25.007 -23.149 -38.040 1.00 19.20 C
ANISOU 3373 CD2 PHE B 36 3017 1884 2397 -426 290 313 C
ATOM 3374 CE1 PHE B 36 -24.361 -23.953 -35.488 1.00 21.16 C
ANISOU 3374 CE1 PHE B 36 3406 2091 2542 -372 305 506 C
ATOM 3375 CE2 PHE B 36 -25.483 -22.443 -36.960 1.00 19.07 C
ANISOU 3375 CE2 PHE B 36 2993 1944 2309 -439 303 347 C
ATOM 3376 CZ PHE B 36 -25.161 -22.841 -35.680 1.00 20.41 C
ANISOU 3376 CZ PHE B 36 3234 2097 2424 -416 314 439 C
ATOM 3377 H PHE B 36 -20.947 -24.443 -38.120 1.00 24.97 H
ATOM 3378 HA PHE B 36 -22.167 -24.923 -40.438 1.00 23.38 H
ATOM 3379 HB2 PHE B 36 -24.324 -24.916 -39.776 1.00 24.02 H
ATOM 3380 HB3 PHE B 36 -23.630 -25.959 -38.802 1.00 24.02 H
ATOM 3381 HD1 PHE B 36 -23.344 -25.398 -36.443 1.00 25.74 H
ATOM 3382 HD2 PHE B 36 -25.225 -22.872 -38.901 1.00 23.05 H
ATOM 3383 HE1 PHE B 36 -24.141 -24.226 -34.626 1.00 25.39 H
ATOM 3384 HE2 PHE B 36 -26.023 -21.697 -37.094 1.00 22.88 H
ATOM 3385 HZ PHE B 36 -25.485 -22.367 -34.948 1.00 24.49 H
ATOM 3386 N AVAL B 37 -22.813 -22.518 -40.713 0.40 17.98 N
ANISOU 3386 N AVAL B 37 2776 1742 2315 -300 182 177 N
ATOM 3387 N BVAL B 37 -22.831 -22.510 -40.698 0.60 17.96 N
ANISOU 3387 N BVAL B 37 2773 1740 2312 -301 183 178 N
ATOM 3388 CA AVAL B 37 -22.950 -21.077 -40.923 0.40 17.27 C
ANISOU 3388 CA AVAL B 37 2615 1761 2184 -297 154 143 C
ATOM 3389 CA BVAL B 37 -22.966 -21.064 -40.864 0.60 17.27 C
ANISOU 3389 CA BVAL B 37 2617 1763 2183 -297 154 145 C
ATOM 3390 C AVAL B 37 -24.203 -20.841 -41.758 0.40 16.84 C
ANISOU 3390 C AVAL B 37 2514 1739 2145 -371 177 82 C
ATOM 3391 C BVAL B 37 -24.160 -20.794 -41.771 0.60 16.82 C
ANISOU 3391 C BVAL B 37 2511 1739 2142 -368 174 82 C
ATOM 3392 O AVAL B 37 -24.401 -21.495 -42.788 0.40 17.01 O
ANISOU 3392 O AVAL B 37 2533 1723 2208 -401 187 32 O
ATOM 3393 O BVAL B 37 -24.278 -21.382 -42.852 0.60 16.83 O
ANISOU 3393 O BVAL B 37 2506 1706 2182 -393 181 30 O
ATOM 3394 CB AVAL B 37 -21.717 -20.464 -41.622 0.40 16.93 C
ANISOU 3394 CB AVAL B 37 2537 1751 2145 -231 108 113 C

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ATOM   3395  CB BVAL B  37    -21.673 -20.425 -41.420  0.60 16.93           C
ANISOU 3395  CB BVAL B  37     2540   1753   2138   -227    106    123      C
ATOM   3396  CG1AVAL B  37    -21.807 -18.939 -41.630  0.40 16.61           C
ANISOU 3396  CG1AVAL B  37     2438   1808   2066   -228     83     93      C
ATOM   3397  CG1BVAL B  37    -21.267 -21.064 -42.741  0.60 16.92           C
ANISOU 3397  CG1BVAL B  37     2534   1708   2188   -221    110     68      C
ATOM   3398  CG2AVAL B  37    -20.423 -20.915 -40.958  0.40 17.22           C
ANISOU 3398  CG2AVAL B  37     2609   1752   2181   -155     82    163      C
ATOM   3399  CG2BVAL B  37    -21.827 -18.910 -41.566  0.60 16.69           C
ANISOU 3399  CG2BVAL B  37     2449   1820   2074   -229     83     95      C
ATOM   3400  H  AVAL B  37    -23.129 -22.986 -41.361  0.40 21.58           H
ATOM   3401  H  BVAL B  37    -23.157 -22.967 -41.350  0.60 21.55           H
ATOM   3402  HA AVAL B  37    -23.066 -20.637 -40.067  0.40 20.72           H
ATOM   3403  HA BVAL B  37    -23.149 -20.663 -40.000  0.60 20.73           H
ATOM   3404  HB AVAL B  37    -21.698 -20.765 -42.544  0.40 20.32           H
ATOM   3405  HB BVAL B  37    -20.956 -20.585 -40.788  0.60 20.31           H
ATOM   3406 HG11AVAL B  37    -22.628 -18.670 -41.190  0.40 19.93           H
ATOM   3407 HG11BVAL B  37    -21.911 -21.752 -42.970  0.60 20.30           H
ATOM   3408 HG12AVAL B  37    -21.042 -18.576 -41.156  0.40 19.93           H
ATOM   3409 HG12BVAL B  37    -21.254 -20.381 -43.430  0.60 20.30           H
ATOM   3410 HG13AVAL B  37    -21.806 -18.628 -42.549  0.40 19.93           H
ATOM   3411 HG13BVAL B  37    -20.385 -21.454 -42.645  0.60 20.30           H
ATOM   3412 HG21AVAL B  37    -19.673 -20.511 -41.423  0.40 20.66           H
ATOM   3413 HG21BVAL B  37    -21.001 -18.541 -41.916  0.60 20.03           H
ATOM   3414 HG22AVAL B  37    -20.429 -20.631 -40.031  0.40 20.66           H
ATOM   3415 HG22BVAL B  37    -22.558 -18.724 -42.177  0.60 20.03           H
ATOM   3416 HG23AVAL B  37    -20.362 -21.881 -41.009  0.40 20.66           H
ATOM   3417 HG23BVAL B  37    -22.018 -18.527 -40.695  0.60 20.03           H
ATOM   3418  N   VAL B  38    -25.042 -19.901 -41.323  1.00 15.64           N
ANISOU 3418  N   VAL B  38     2321   1661   1959   -398    182     81      N
ATOM   3419  CA  VAL B  38    -26.307 -19.595 -41.990  1.00 14.44           C
ANISOU 3419  CA  VAL B  38     2112   1553   1820   -460    197     30      C
ATOM   3420  C   VAL B  38    -26.518 -18.087 -41.972  1.00 13.61           C
ANISOU 3420  C   VAL B  38     1948   1540   1684   -435    172     16      C
ATOM   3421  O   VAL B  38    -26.297 -17.442 -40.942  1.00 13.73           O
ANISOU 3421  O   VAL B  38     1971   1581   1664   -406    171     49      O
ATOM   3422  CB  VAL B  38    -27.491 -20.295 -41.286  1.00 15.71           C
ANISOU 3422  CB  VAL B  38     2286   1692   1990   -535    253     47      C
ATOM   3423  CG1 VAL B  38    -28.833 -19.861 -41.897  1.00 16.11           C
ANISOU 3423  CG1 VAL B  38     2258   1810   2055   -595    263    -10      C
ATOM   3424  CG2 VAL B  38    -27.325 -21.810 -41.334  1.00 15.92           C
ANISOU 3424  CG2 VAL B  38     2381   1609   2060   -566    285     62      C
ATOM   3425  H  AVAL B  38    -24.897 -19.418 -40.627  0.40 18.76           H
ATOM   3426  H  BVAL B  38    -24.924 -19.443 -40.605  0.60 18.76           H
ATOM   3427  HA  VAL B  38    -26.272 -19.894 -42.912  1.00 17.32           H
ATOM   3428  HB  VAL B  38    -27.495 -20.031 -40.353  1.00 18.85           H
ATOM   3429 HG11 VAL B  38    -29.553 -20.317 -41.434  1.00 19.34           H
ATOM   3430 HG12 VAL B  38    -28.930 -18.901 -41.795  1.00 19.34           H
ATOM   3431 HG13 VAL B  38    -28.842 -20.097 -42.838  1.00 19.34           H
ATOM   3432 HG21 VAL B  38    -28.079 -22.224 -40.886  1.00 19.10           H
ATOM   3433 HG22 VAL B  38    -27.293 -22.095 -42.261  1.00 19.10           H
ATOM   3434 HG23 VAL B  38    -26.500 -22.051 -40.885  1.00 19.10           H
ATOM   3435  N   GLY B  39    -26.989 -17.523 -43.082  1.00 13.38           N
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ANISOU 3435 N GLY B 39 1861 1559 1666 -445 151 -32 N
ATOM 3436 CA GLY B 39 -27.339 -16.116 -43.060 1.00 14.13 C
ANISOU 3436 CA GLY B 39 1901 1726 1742 -420 132 -39 C
ATOM 3437 C GLY B 39 -27.655 -15.547 -44.427 1.00 13.46 C
ANISOU 3437 C GLY B 39 1763 1687 1665 -418 100 -77 C
ATOM 3438 O GLY B 39 -27.529 -16.209 -45.463 1.00 12.61 O
ANISOU 3438 O GLY B 39 1658 1567 1567 -436 90 -107 O
ATOM 3439 H GLY B 39 -27.110 -17.921 -43.835 1.00 16.06 H
ATOM 3440 HA2 GLY B 39 -28.116 -15.989 -42.493 1.00 16.96 H
ATOM 3441 HA3 GLY B 39 -26.602 -15.609 -42.684 1.00 16.96 H
ATOM 3442 N LYS B 40 -28.067 -14.279 -44.397 1.00 13.96 N
ANISOU 3442 N LYS B 40 1780 1804 1720 -391 85 -77 N
ATOM 3443 CA LYS B 40 -28.340 -13.493 -45.591 1.00 14.08 C
ANISOU 3443 CA LYS B 40 1746 1868 1734 -373 49 -94 C
ATOM 3444 C LYS B 40 -27.250 -12.442 -45.750 1.00 13.17 C
ANISOU 3444 C LYS B 40 1646 1749 1608 -317 26 -71 C
ATOM 3445 O LYS B 40 -26.771 -11.867 -44.763 1.00 11.16 O
ANISOU 3445 O LYS B 40 1410 1479 1352 -292 35 -53 O
ATOM 3446 CB LYS B 40 -29.713 -12.808 -45.517 1.00 15.70 C
ANISOU 3446 CB LYS B 40 1883 2132 1952 -379 50 -106 C
ATOM 3447 CG LYS B 40 -30.923 -13.753 -45.588 1.00 16.73 C
ANISOU 3447 CG LYS B 40 1975 2284 2099 -445 70 -138 C
ATOM 3448 CD LYS B 40 -31.468 -13.876 -46.981 1.00 17.21 C
ANISOU 3448 CD LYS B 40 1987 2395 2156 -463 30 -172 C
ATOM 3449 CE LYS B 40 -32.704 -14.768 -47.074 1.00 17.29 C
ANISOU 3449 CE LYS B 40 1947 2435 2189 -538 47 -216 C
ATOM 3450 NZ LYS B 40 -33.971 -14.141 -46.605 1.00 16.45 N
ANISOU 3450 NZ LYS B 40 1756 2392 2103 -538 57 -223 N
ATOM 3451 H LYS B 40 -28.199 -13.841 -43.668 1.00 16.75 H
ATOM 3452 HA LYS B 40 -28.326 -14.072 -46.369 1.00 16.89 H
ATOM 3453 HB2 LYS B 40 -29.771 -12.323 -44.679 1.00 18.84 H
ATOM 3454 HB3 LYS B 40 -29.786 -12.185 -46.257 1.00 18.84 H
ATOM 3455 HG2 LYS B 40 -30.654 -14.636 -45.291 1.00 20.08 H
ATOM 3456 HG3 LYS B 40 -31.628 -13.410 -45.018 1.00 20.08 H
ATOM 3457 HD2 LYS B 40 -31.713 -12.994 -47.301 1.00 20.65 H
ATOM 3458 HD3 LYS B 40 -30.783 -14.256 -47.553 1.00 20.65 H
ATOM 3459 HE2 LYS B 40 -32.831 -15.025 -48.000 1.00 20.75 H
ATOM 3460 HE3 LYS B 40 -32.554 -15.561 -46.535 1.00 20.75 H
ATOM 3461 HZ1 LYS B 40 -33.895 -13.906 -45.750 1.00 19.74 H
ATOM 3462 HZ2 LYS B 40 -34.148 -13.416 -47.090 1.00 19.74 H
ATOM 3463 HZ3 LYS B 40 -34.645 -14.716 -46.688 1.00 19.74 H
ATOM 3464 N GLY B 41 -26.859 -12.202 -46.990 1.00 13.45 N
ANISOU 3464 N GLY B 41 1674 1804 1633 -304 -2 -76 N
ATOM 3465 CA GLY B 41 -25.873 -11.188 -47.284 1.00 13.66 C
ANISOU 3465 CA GLY B 41 1710 1827 1652 -262 -18 -53 C
ATOM 3466 C GLY B 41 -25.714 -10.954 -48.769 1.00 13.73 C
ANISOU 3466 C GLY B 41 1707 1871 1639 -257 -42 -53 C
ATOM 3467 O GLY B 41 -26.702 -10.863 -49.505 1.00 13.81 O
ANISOU 3467 O GLY B 41 1682 1929 1637 -267 -62 -61 O
ATOM 3468 H GLY B 41 -27.155 -12.617 -47.683 1.00 16.14 H
ATOM 3469 HA2 GLY B 41 -26.134 -10.352 -46.867 1.00 16.39 H
ATOM 3470 HA3 GLY B 41 -25.014 -11.458 -46.922 1.00 16.39 H
ATOM 3471 N TRP B 42 -24.469 -10.882 -49.216 1.00 12.78 N

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ANISOU 3471  N   TRP B  42     1613   1735   1507   -243    -41    -46      N
ATOM   3472  CA  TRP B  42     -24.162 -10.518 -50.584  1.00 13.82          C
ANISOU 3472  CA  TRP B  42     1741   1905   1607   -238    -55    -38      C
ATOM   3473  C   TRP B  42     -23.295 -11.578 -51.253  1.00 13.68          C
ANISOU 3473  C   TRP B  42     1747   1881   1570   -253    -41    -71      C
ATOM   3474  O   TRP B  42     -22.427 -12.186 -50.616  1.00 13.35          O
ANISOU 3474  O   TRP B  42     1728   1794   1551   -248    -22    -82      O
ATOM   3475  CB  TRP B  42     -23.491  -9.143 -50.597  1.00 13.94          C
ANISOU 3475  CB  TRP B  42     1757   1910   1628   -207    -56      5      C
ATOM   3476  CG  TRP B  42     -24.444  -8.063 -50.126  1.00 14.89          C
ANISOU 3476  CG  TRP B  42     1854   2031   1772   -185    -68     31      C
ATOM   3477  CD1 TRP B  42     -25.261  -7.302 -50.902  1.00 16.03          C
ANISOU 3477  CD1 TRP B  42     1974   2211   1904   -165    -93     60      C
ATOM   3478  CD2 TRP B  42     -24.693  -7.660 -48.768  1.00 14.47          C
ANISOU 3478  CD2 TRP B  42     1797   1944   1756   -174    -56     27      C
ATOM   3479  NE1 TRP B  42     -25.996  -6.441 -50.120  1.00 15.71          N
ANISOU 3479  NE1 TRP B  42     1913   2153   1903   -138    -94     72      N
ATOM   3480  CE2 TRP B  42     -25.667  -6.644 -48.806  1.00 14.88          C
ANISOU 3480  CE2 TRP B  42     1821   2007   1826   -147    -68     47      C
ATOM   3481  CE3 TRP B  42     -24.191  -8.063 -47.525  1.00 14.77          C
ANISOU 3481  CE3 TRP B  42     1855   1948   1809   -182    -37      8      C
ATOM   3482  CZ2 TRP B  42     -26.144  -6.021 -47.652  1.00 14.48          C
ANISOU 3482  CZ2 TRP B  42     1759   1932   1811   -129    -54     38      C
ATOM   3483  CZ3 TRP B  42     -24.667  -7.437 -46.384  1.00 13.76          C
ANISOU 3483  CZ3 TRP B  42     1719   1805   1703   -170    -27      3      C
ATOM   3484  CH2 TRP B  42     -25.631  -6.433 -46.458  1.00 13.65          C
ANISOU 3484  CH2 TRP B  42     1676   1800   1711   -145    -32     12      C
ATOM   3485  H   TRP B  42     -23.774 -11.044 -48.735  1.00 15.33          H
ATOM   3486  HA  TRP B  42     -24.990 -10.451 -51.085  1.00 16.59          H
ATOM   3487  HB2 TRP B  42     -22.725  -9.154 -50.002  1.00 16.73          H
ATOM   3488  HB3 TRP B  42     -23.213  -8.930 -51.501  1.00 16.73          H
ATOM   3489  HD1 TRP B  42     -25.310  -7.351 -51.830  1.00 19.23          H
ATOM   3490  HE1 TRP B  42     -26.569  -5.869 -50.410  1.00 18.85          H
ATOM   3491  HE3 TRP B  42     -23.548  -8.733 -47.467  1.00 17.73          H
ATOM   3492  HZ2 TRP B  42     -26.785  -5.349 -47.696  1.00 17.38          H
ATOM   3493  HZ3 TRP B  42     -24.339  -7.693 -45.553  1.00 16.51          H
ATOM   3494  HH2 TRP B  42     -25.929  -6.031 -45.674  1.00 16.38          H
ATOM   3495  N   THR B  43     -23.554 -11.791 -52.550  1.00 14.28          N
ANISOU 3495  N   THR B  43     1816   2008   1602   -267    -53    -90      N
ATOM   3496  CA  THR B  43     -22.840 -12.804 -53.326  1.00 15.54          C
ANISOU 3496  CA  THR B  43     1996   2169   1739   -283    -35   -136      C
ATOM   3497  C   THR B  43     -21.359 -12.487 -53.428  1.00 16.11          C
ANISOU 3497  C   THR B  43     2083   2224   1814   -258    -10   -121      C
ATOM   3498  O   THR B  43     -20.509 -13.377 -53.288  1.00 16.62          O
ANISOU 3498  O   THR B  43     2164   2254   1898   -253     14   -155      O
ATOM   3499  CB  THR B  43     -23.447 -12.896 -54.727  1.00 17.03          C
ANISOU 3499  CB  THR B  43     2173   2434   1864   -304    -56   -160      C
ATOM   3500  OG1 THR B  43     -24.811 -13.301 -54.626  1.00 18.12          O
ANISOU 3500  OG1 THR B  43     2285   2594   2006   -333    -82   -185      O
ATOM   3501  CG2 THR B  43     -22.683 -13.889 -55.607  1.00 18.70          C
ANISOU 3501  CG2 THR B  43     2407   2652   2045   -320    -31   -221      C
ATOM   3502  H   THR B  43     -24.143 -11.357 -53.002  1.00 17.14          H
ATOM   3503  HA  THR B  43     -22.938 -13.667 -52.894  1.00 18.64          H
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ATOM 3504 HB THR B 43 -23.405 -12.024 -55.149 1.00 20.43 H
ATOM 3505 HG1 THR B 43 -25.244 -12.742 -54.173 1.00 21.75 H
ATOM 3506 HG21 THR B 43 -23.087 -13.929 -56.488 1.00 22.44 H
ATOM 3507 HG22 THR B 43 -21.759 -13.609 -55.696 1.00 22.44 H
ATOM 3508 HG23 THR B 43 -22.709 -14.772 -55.208 1.00 22.44 H
ATOM 3509 N THR B 44 -21.033 -11.233 -53.718 1.00 16.14 N
ANISOU 3509 N THR B 44 2078 2252 1802 -242 -14 -72 N
ATOM 3510 CA THR B 44 -19.658 -10.772 -53.811 1.00 16.17 C
ANISOU 3510 CA THR B 44 2085 2246 1814 -229 14 -56 C
ATOM 3511 C THR B 44 -19.445 -9.726 -52.731 1.00 15.09 C
ANISOU 3511 C THR B 44 1940 2070 1722 -213 9 -15 C
ATOM 3512 O THR B 44 -20.098 -8.674 -52.741 1.00 15.29 O
ANISOU 3512 O THR B 44 1961 2100 1747 -208 -7 27 O
ATOM 3513 CB THR B 44 -19.360 -10.199 -55.194 1.00 18.58 C
ANISOU 3513 CB THR B 44 2392 2609 2057 -236 25 -36 C
ATOM 3514 OG1 THR B 44 -19.672 -11.182 -56.181 1.00 20.02 O
ANISOU 3514 OG1 THR B 44 2582 2837 2187 -254 26 -87 O
ATOM 3515 CG2 THR B 44 -17.886 -9.807 -55.309 1.00 19.44 C
ANISOU 3515 CG2 THR B 44 2496 2711 2179 -233 65 -26 C
ATOM 3516 H THR B 44 -21.611 -10.614 -53.868 1.00 19.37 H
ATOM 3517 HA THR B 44 -19.054 -11.514 -53.647 1.00 19.41 H
ATOM 3518 HB THR B 44 -19.902 -9.408 -55.341 1.00 22.29 H
ATOM 3519 HG1 THR B 44 -20.485 -11.389 -56.133 1.00 24.03 H
ATOM 3520 HG21 THR B 44 -17.708 -9.444 -56.190 1.00 23.33 H
ATOM 3521 HG22 THR B 44 -17.669 -9.137 -54.642 1.00 23.33 H
ATOM 3522 HG23 THR B 44 -17.325 -10.585 -55.168 1.00 23.33 H
ATOM 3523 N GLY B 45 -18.538 -10.024 -51.806 1.00 14.04 N
ANISOU 3523 N GLY B 45 1805 1898 1629 -203 20 -29 N
ATOM 3524 CA GLY B 45 -18.240 -9.105 -50.733 1.00 13.51 C
ANISOU 3524 CA GLY B 45 1731 1802 1601 -194 14 -5 C
ATOM 3525 C GLY B 45 -17.504 -7.876 -51.219 1.00 12.28 C
ANISOU 3525 C GLY B 45 1566 1652 1449 -201 29 26 C
ATOM 3526 O GLY B 45 -16.842 -7.881 -52.255 1.00 12.42 O
ANISOU 3526 O GLY B 45 1579 1699 1442 -211 53 28 O
ATOM 3527 H GLY B 45 -18.084 -10.755 -51.784 1.00 16.84 H
ATOM 3528 HA2 GLY B 45 -19.066 -8.823 -50.311 1.00 16.21 H
ATOM 3529 HA3 GLY B 45 -17.691 -9.550 -50.069 1.00 16.21 H
ATOM 3530 N SER B 46 -17.638 -6.802 -50.438 1.00 11.69 N
ANISOU 3530 N SER B 46 1488 1546 1407 -200 21 46 N
ATOM 3531 CA SER B 46 -16.926 -5.562 -50.668 1.00 12.09 C
ANISOU 3531 CA SER B 46 1533 1582 1479 -215 40 74 C
ATOM 3532 C SER B 46 -16.227 -5.135 -49.385 1.00 11.47 C
ANISOU 3532 C SER B 46 1440 1471 1448 -220 35 49 C
ATOM 3533 O SER B 46 -16.795 -5.277 -48.293 1.00 10.21 O
ANISOU 3533 O SER B 46 1285 1295 1298 -207 14 31 O
ATOM 3534 CB SER B 46 -17.869 -4.439 -51.127 1.00 11.59 C
ANISOU 3534 CB SER B 46 1486 1503 1414 -210 35 124 C
ATOM 3535 OG SER B 46 -17.207 -3.179 -51.051 1.00 12.35 O
ANISOU 3535 OG SER B 46 1584 1559 1550 -228 56 149 O
ATOM 3536 H SER B 46 -18.154 -6.775 -49.750 1.00 14.02 H
ATOM 3537 HA SER B 46 -16.253 -5.698 -51.354 1.00 14.51 H
ATOM 3538 HB2 SER B 46 -18.135 -4.603 -52.045 1.00 13.91 H
ATOM 3539 HB3 SER B 46 -18.648 -4.423 -50.550 1.00 13.91 H

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ATOM   3540  HG  SER B  46    -17.725  -2.568 -51.303  1.00 14.82          H
ATOM   3541  N   PRO B  47    -15.007  -4.596 -49.476  1.00 13.08          N
ANISOU 3541  N   PRO B  47     1622   1672   1677   -243     56     45      N
ATOM   3542  CA  PRO B  47    -14.367  -4.022 -48.285  1.00 13.77          C
ANISOU 3542  CA  PRO B  47     1690   1736   1807   -256     46     15      C
ATOM   3543  C   PRO B  47    -14.969  -2.693 -47.849  1.00 14.43          C
ANISOU 3543  C   PRO B  47     1792   1767   1923   -266     47     28      C
ATOM   3544  O   PRO B  47    -14.567  -2.163 -46.805  1.00 16.04          O
ANISOU 3544  O   PRO B  47     1984   1951   2159   -280     37     -9      O
ATOM   3545  CB  PRO B  47    -12.911  -3.852 -48.729  1.00 14.33          C
ANISOU 3545  CB  PRO B  47     1721   1826   1898   -285     73      4      C
ATOM   3546  CG  PRO B  47    -13.004  -3.646 -50.192  1.00 14.65          C
ANISOU 3546  CG  PRO B  47     1776   1878   1912   -299    110     48      C
ATOM   3547  CD  PRO B  47    -14.145  -4.491 -50.666  1.00 13.44          C
ANISOU 3547  CD  PRO B  47     1654   1743   1708   -266     93     62      C
ATOM   3548  HA  PRO B  47    -14.406  -4.650 -47.547  1.00 16.53          H
ATOM   3549  HB2 PRO B  47    -12.521  -3.077 -48.294  1.00 17.20          H
ATOM   3550  HB3 PRO B  47    -12.407  -4.655 -48.524  1.00 17.20          H
ATOM   3551  HG2 PRO B  47    -13.176  -2.709 -50.376  1.00 17.58          H
ATOM   3552  HG3 PRO B  47    -12.176  -3.928 -50.612  1.00 17.58          H
ATOM   3553  HD2 PRO B  47    -14.618  -4.048 -51.388  1.00 16.12          H
ATOM   3554  HD3 PRO B  47    -13.829  -5.368 -50.933  1.00 16.12          H
ATOM   3555  N   PHE B  48    -15.929  -2.158 -48.601  1.00 13.18          N
ANISOU 3555  N   PHE B  48     1661   1588   1757   -256     55     74      N
ATOM   3556  CA  PHE B  48    -16.646  -0.942 -48.231  1.00 12.27          C
ANISOU 3556  CA  PHE B  48     1566   1415   1681   -251     57     88      C
ATOM   3557  C   PHE B  48    -18.115  -1.203 -47.926  1.00 13.22          C
ANISOU 3557  C   PHE B  48     1698   1538   1785   -209     34     92      C
ATOM   3558  O   PHE B  48    -18.900  -0.255 -47.817  1.00 13.43          O
ANISOU 3558  O   PHE B  48     1739   1520   1843   -190     36    110      O
ATOM   3559  CB  PHE B  48    -16.483   0.090 -49.339  1.00 12.45          C
ANISOU 3559  CB  PHE B  48     1607   1402   1720   -267     87    149      C
ATOM   3560  CG  PHE B  48    -15.058   0.484 -49.550  1.00 13.26          C
ANISOU 3560  CG  PHE B  48     1691   1496   1849   -320    119    142      C
ATOM   3561  CD1 PHE B  48    -14.385   1.221 -48.585  1.00 14.30          C
ANISOU 3561  CD1 PHE B  48     1808   1584   2040   -354    125     95      C
ATOM   3562  CD2 PHE B  48    -14.370   0.073 -50.672  1.00 13.87          C
ANISOU 3562  CD2 PHE B  48     1760   1619   1891   -340    146    171      C
ATOM   3563  CE1 PHE B  48    -13.062   1.568 -48.757  1.00 15.21          C
ANISOU 3563  CE1 PHE B  48     1895   1700   2186   -410    155     81      C
ATOM   3564  CE2 PHE B  48    -13.045   0.424 -50.855  1.00 15.01          C
ANISOU 3564  CE2 PHE B  48     1876   1765   2064   -392    184    160      C
ATOM   3565  CZ  PHE B  48    -12.388   1.169 -49.885  1.00 15.41          C
ANISOU 3565  CZ  PHE B  48     1904   1769   2180   -429    187    115      C
ATOM   3566  H   PHE B  48    -16.189  -2.492 -49.349  1.00 15.81          H
ATOM   3567  HA  PHE B  48    -16.241  -0.577 -47.428  1.00 14.72          H
ATOM   3568  HB2 PHE B  48    -16.818  -0.282 -50.170  1.00 14.94          H
ATOM   3569  HB3 PHE B  48    -16.984   0.887 -49.106  1.00 14.94          H
ATOM   3570  HD1 PHE B  48    -14.835   1.493 -47.819  1.00 17.16          H
ATOM   3571  HD2 PHE B  48    -14.807  -0.427 -51.322  1.00 16.64          H
ATOM   3572  HE1 PHE B  48    -12.625   2.072 -48.108  1.00 18.26          H
ATOM   3573  HE2 PHE B  48    -12.591   0.151 -51.619  1.00 18.02          H
ATOM   3574  HZ  PHE B  48    -11.497   1.407 -50.005  1.00 18.49          H
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ATOM 3575 N ARG B 49 -18.480 -2.464 -47.727 1.00 13.35 N
ANISOU 3575 N ARG B 49 1708 1603 1761 -196 16 72 N
ATOM 3576 CA ARG B 49 -19.843 -2.840 -47.376 1.00 14.39 C
ANISOU 3576 CA ARG B 49 1841 1746 1879 -168 0 68 C
ATOM 3577 C ARG B 49 -20.269 -2.214 -46.055 1.00 13.75 C
ANISOU 3577 C ARG B 49 1761 1633 1829 -159 1 33 C
ATOM 3578 O ARG B 49 -19.505 -2.183 -45.087 1.00 12.38 O
ANISOU 3578 O ARG B 49 1587 1453 1664 -176 1 -6 O
ATOM 3579 CB ARG B 49 -19.933 -4.367 -47.275 1.00 14.99 C
ANISOU 3579 CB ARG B 49 1914 1868 1915 -169 -11 48 C
ATOM 3580 CG ARG B 49 -21.339 -4.912 -47.017 1.00 16.52 C
ANISOU 3580 CG ARG B 49 2103 2081 2094 -155 -21 42 C
ATOM 3581 CD ARG B 49 -22.176 -4.868 -48.271 1.00 17.51 C
ANISOU 3581 CD ARG B 49 2219 2232 2200 -145 -31 75 C
ATOM 3582 NE ARG B 49 -21.596 -5.709 -49.320 1.00 17.19 N
ANISOU 3582 NE ARG B 49 2185 2225 2123 -161 -31 78 N
ATOM 3583 CZ ARG B 49 -21.952 -5.668 -50.597 1.00 19.06 C
ANISOU 3583 CZ ARG B 49 2420 2497 2326 -160 -41 105 C
ATOM 3584 NH1 ARG B 49 -22.894 -4.832 -51.001 1.00 20.55 N
ANISOU 3584 NH1 ARG B 49 2598 2692 2516 -136 -57 141 N
ATOM 3585 NH2 ARG B 49 -21.358 -6.461 -51.478 1.00 19.97 N
ANISOU 3585 NH2 ARG B 49 2542 2644 2402 -177 -34 95 N
ATOM 3586 H ARG B 49 -17.944 -3.134 -47.791 1.00 16.02 H
ATOM 3587 HA ARG B 49 -20.451 -2.540 -48.069 1.00 17.27 H
ATOM 3588 HB2 ARG B 49 -19.619 -4.750 -48.109 1.00 17.99 H
ATOM 3589 HB3 ARG B 49 -19.365 -4.662 -46.546 1.00 17.99 H
ATOM 3590 HG2 ARG B 49 -21.277 -5.834 -46.723 1.00 19.83 H
ATOM 3591 HG3 ARG B 49 -21.774 -4.370 -46.340 1.00 19.83 H
ATOM 3592 HD2 ARG B 49 -23.067 -5.197 -48.075 1.00 21.01 H
ATOM 3593 HD3 ARG B 49 -22.218 -3.956 -48.599 1.00 21.01 H
ATOM 3594 HE ARG B 49 -20.982 -6.266 -49.093 1.00 20.63 H
ATOM 3595 HH11 ARG B 49 -23.279 -4.313 -50.434 1.00 24.66 H
ATOM 3596 HH12 ARG B 49 -23.122 -4.810 -51.829 1.00 24.66 H
ATOM 3597 HH21 ARG B 49 -20.746 -7.007 -51.221 1.00 23.97 H
ATOM 3598 HH22 ARG B 49 -21.593 -6.436 -52.305 1.00 23.97 H
ATOM 3599 N THR B 50 -21.506 -1.723 -46.018 1.00 14.94 N
ANISOU 3599 N THR B 50 1910 1772 1996 -130 0 44 N
ATOM 3600 CA THR B 50 -22.168 -1.298 -44.785 1.00 15.66 C
ANISOU 3600 CA THR B 50 1997 1845 2108 -115 8 2 C
ATOM 3601 C THR B 50 -23.295 -2.287 -44.518 1.00 15.01 C
ANISOU 3601 C THR B 50 1898 1811 1993 -103 2 -6 C
ATOM 3602 O THR B 50 -24.250 -2.371 -45.300 1.00 15.21 O
ANISOU 3602 O THR B 50 1905 1857 2018 -83 -6 23 O
ATOM 3603 CB THR B 50 -22.709 0.126 -44.903 1.00 17.88 C
ANISOU 3603 CB THR B 50 2281 2066 2446 -86 20 14 C
ATOM 3604 OG1 THR B 50 -21.649 1.010 -45.275 1.00 19.61 O
ANISOU 3604 OG1 THR B 50 2519 2231 2700 -109 31 28 O
ATOM 3605 CG2 THR B 50 -23.308 0.584 -43.576 1.00 17.86 C
ANISOU 3605 CG2 THR B 50 2275 2045 2467 -71 36 -46 C
ATOM 3606 H THR B 50 -21.997 -1.622 -46.717 1.00 17.93 H
ATOM 3607 HA THR B 50 -21.540 -1.333 -44.046 1.00 18.79 H
ATOM 3608 HB THR B 50 -23.404 0.152 -45.579 1.00 21.45 H
ATOM 3609 HG1 THR B 50 -21.326 0.776 -46.013 1.00 23.53 H

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ATOM   3610 HG21 THR B  50     -23.649   1.489 -43.662  1.00 21.43           H
ATOM   3611 HG22 THR B  50     -24.036  -0.004 -43.321  1.00 21.43           H
ATOM   3612 HG23 THR B  50     -22.630   0.567 -42.883  1.00 21.43           H
ATOM   3613  N   ILE B  51     -23.174  -3.049 -43.436  1.00 12.41           N
ANISOU 3613  N   ILE B  51     1574   1504   1635   -119      7    -42       N
ATOM   3614  CA  ILE B  51     -24.139  -4.087 -43.099  1.00 12.00           C
ANISOU 3614  CA  ILE B  51     1511   1493   1554   -122     11    -48       C
ATOM   3615  C   ILE B  51     -25.038  -3.565 -41.990  1.00 14.17           C
ANISOU 3615  C   ILE B  51     1775   1770   1840   -108     35    -84       C
ATOM   3616  O   ILE B  51     -24.558  -3.205 -40.908  1.00 14.63           O
ANISOU 3616  O   ILE B  51     1851   1818   1890   -114     46   -120       O
ATOM   3617  CB  ILE B  51     -23.449  -5.391 -42.669  1.00 11.03           C
ANISOU 3617  CB  ILE B  51     1409   1392   1390   -147      6    -51       C
ATOM   3618  CG1 ILE B  51     -22.509  -5.912 -43.774  1.00 11.46           C
ANISOU 3618  CG1 ILE B  51     1470   1446   1439   -156    -10    -27       C
ATOM   3619  CG2 ILE B  51     -24.504  -6.450 -42.292  1.00 10.74           C
ANISOU 3619  CG2 ILE B  51     1367   1384   1330   -160     21    -53       C
ATOM   3620  CD1 ILE B  51     -21.060  -5.434 -43.614  1.00 10.45           C
ANISOU 3620  CD1 ILE B  51     1350   1300   1321   -160    -18    -34       C
ATOM   3621  H   ILE B  51     -22.529  -2.981 -42.871  1.00 14.89           H
ATOM   3622  HA  ILE B  51     -24.691  -4.276 -43.874  1.00 14.39           H
ATOM   3623  HB  ILE B  51     -22.915  -5.204 -41.882  1.00 13.24           H
ATOM   3624 HG12 ILE B  51     -22.506  -6.882 -43.752  1.00 13.75           H
ATOM   3625 HG13 ILE B  51     -22.832  -5.602 -44.634  1.00 13.75           H
ATOM   3626 HG21 ILE B  51     -24.050  -7.265 -42.024  1.00 12.89           H
ATOM   3627 HG22 ILE B  51     -25.040  -6.113 -41.558  1.00 12.89           H
ATOM   3628 HG23 ILE B  51     -25.067  -6.622 -43.062  1.00 12.89           H
ATOM   3629 HD11 ILE B  51     -20.527  -5.797 -44.339  1.00 12.54           H
ATOM   3630 HD12 ILE B  51     -21.043  -4.465 -43.644  1.00 12.54           H
ATOM   3631 HD13 ILE B  51     -20.717  -5.746 -42.762  1.00 12.54           H
ATOM   3632  N   ASN B  52     -26.339  -3.546 -42.255  1.00 13.82           N
ANISOU 3632  N   ASN B  52     1697   1746   1810    -90     44    -80       N
ATOM   3633  CA  ASN B  52     -27.353  -3.255 -41.255  1.00 13.85           C
ANISOU 3633  CA  ASN B  52     1677   1763   1820    -77     76   -118       C
ATOM   3634  C   ASN B  52     -28.085  -4.538 -40.888  1.00 12.90           C
ANISOU 3634  C   ASN B  52     1544   1694   1663   -108     93   -120       C
ATOM   3635  O   ASN B  52     -28.359  -5.380 -41.751  1.00 13.19           O
ANISOU 3635  O   ASN B  52     1567   1752   1693   -125     76    -93       O
ATOM   3636  CB  ASN B  52     -28.354  -2.225 -41.774  1.00 16.18           C
ANISOU 3636  CB  ASN B  52     1930   2045   2171    -28     78   -114       C
ATOM   3637  CG  ASN B  52     -27.681  -0.988 -42.303  1.00 18.42           C
ANISOU 3637  CG  ASN B  52     2234   2264   2499      0     65    -97       C
ATOM   3638  OD1 ASN B  52     -27.245  -0.136 -41.534  1.00 19.40           O
ANISOU 3638  OD1 ASN B  52     2380   2343   2647      5     84   -135       O
ATOM   3639  ND2 ASN B  52     -27.588  -0.880 -43.625  1.00 19.41           N
ANISOU 3639  ND2 ASN B  52     2357   2384   2635     13     34    -41       N
ATOM   3640  H   ASN B  52     -26.667  -3.703 -43.034  1.00 16.59           H
ATOM   3641  HA  ASN B  52     -26.931  -2.900 -40.457  1.00 16.61           H
ATOM   3642  HB2 ASN B  52     -28.870  -2.619 -42.495  1.00 19.41           H
ATOM   3643  HB3 ASN B  52     -28.943  -1.962 -41.049  1.00 19.41           H
ATOM   3644 HD21 ASN B  52     -27.212  -0.191 -43.974  1.00 23.30           H
ATOM   3645 HD22 ASN B  52     -27.905  -1.500 -44.130  1.00 23.30           H
ATOM   3646  N   TYR B  53     -28.416  -4.683 -39.611  1.00 11.54           N
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ANISOU 3646 N TYR B 53 1378 1543 1465 -120 130 -153 N
ATOM 3647 CA TYR B 53 -29.117 -5.882 -39.195 1.00 12.73 C
ANISOU 3647 CA TYR B 53 1521 1734 1582 -158 156 -148 C
ATOM 3648 C TYR B 53 -29.854 -5.624 -37.892 1.00 13.38 C
ANISOU 3648 C TYR B 53 1593 1847 1645 -160 209 -189 C
ATOM 3649 O TYR B 53 -29.550 -4.682 -37.145 1.00 13.52 O
ANISOU 3649 O TYR B 53 1624 1853 1660 -138 222 -227 O
ATOM 3650 CB TYR B 53 -28.157 -7.071 -39.042 1.00 12.71 C
ANISOU 3650 CB TYR B 53 1572 1724 1533 -193 142 -119 C
ATOM 3651 CG TYR B 53 -27.308 -7.035 -37.780 1.00 12.93 C
ANISOU 3651 CG TYR B 53 1649 1753 1512 -197 150 -130 C
ATOM 3652 CD1 TYR B 53 -26.052 -6.440 -37.785 1.00 13.96 C
ANISOU 3652 CD1 TYR B 53 1804 1858 1642 -180 115 -136 C
ATOM 3653 CD2 TYR B 53 -27.755 -7.615 -36.599 1.00 13.73 C
ANISOU 3653 CD2 TYR B 53 1769 1886 1562 -222 190 -133 C
ATOM 3654 CE1 TYR B 53 -25.270 -6.404 -36.646 1.00 14.23 C
ANISOU 3654 CE1 TYR B 53 1875 1907 1626 -184 112 -151 C
ATOM 3655 CE2 TYR B 53 -26.987 -7.586 -35.448 1.00 13.20 C
ANISOU 3655 CE2 TYR B 53 1748 1832 1433 -223 189 -140 C
ATOM 3656 CZ TYR B 53 -25.744 -6.981 -35.474 1.00 13.59 C
ANISOU 3656 CZ TYR B 53 1816 1864 1484 -202 145 -152 C
ATOM 3657 OH TYR B 53 -24.964 -6.951 -34.338 1.00 13.57 O
ANISOU 3657 OH TYR B 53 1852 1888 1416 -204 134 -165 O
ATOM 3658 H TYR B 53 -28.251 -4.117 -38.984 1.00 13.85 H
ATOM 3659 HA TYR B 53 -29.774 -6.113 -39.870 1.00 15.28 H
ATOM 3660 HB2 TYR B 53 -28.677 -7.889 -39.024 1.00 15.25 H
ATOM 3661 HB3 TYR B 53 -27.555 -7.083 -39.803 1.00 15.25 H
ATOM 3662 HD1 TYR B 53 -25.735 -6.049 -38.568 1.00 16.75 H
ATOM 3663 HD2 TYR B 53 -28.592 -8.019 -36.577 1.00 16.48 H
ATOM 3664 HE1 TYR B 53 -24.434 -5.998 -36.664 1.00 17.08 H
ATOM 3665 HE2 TYR B 53 -27.302 -7.975 -34.665 1.00 15.83 H
ATOM 3666 HH TYR B 53 -24.239 -6.559 -34.498 1.00 16.29 H
ATOM 3667 N ASN B 54 -30.820 -6.496 -37.629 1.00 13.94 N
ANISOU 3667 N ASN B 54 1638 1958 1701 -194 245 -186 N
ATOM 3668 CA ASN B 54 -31.547 -6.502 -36.366 1.00 14.91 C
ANISOU 3668 CA ASN B 54 1751 2121 1791 -210 309 -219 C
ATOM 3669 C ASN B 54 -31.785 -7.954 -35.977 1.00 14.57 C
ANISOU 3669 C ASN B 54 1733 2101 1703 -273 338 -185 C
ATOM 3670 O ASN B 54 -32.435 -8.698 -36.722 1.00 14.24 O
ANISOU 3670 O ASN B 54 1655 2066 1691 -303 338 -168 O
ATOM 3671 CB ASN B 54 -32.869 -5.734 -36.492 1.00 16.78 C
ANISOU 3671 CB ASN B 54 1905 2388 2083 -179 340 -259 C
ATOM 3672 CG ASN B 54 -33.624 -5.643 -35.180 1.00 18.91 C
ANISOU 3672 CG ASN B 54 2159 2706 2318 -192 417 -304 C
ATOM 3673 OD1 ASN B 54 -33.669 -6.598 -34.407 1.00 19.32 O
ANISOU 3673 OD1 ASN B 54 2244 2788 2308 -247 456 -287 O
ATOM 3674 ND2 ASN B 54 -34.217 -4.482 -34.918 1.00 19.66 N
ANISOU 3674 ND2 ASN B 54 2207 2808 2455 -141 444 -360 N
ATOM 3675 H ASN B 54 -31.077 -7.107 -38.177 1.00 16.73 H
ATOM 3676 HA ASN B 54 -31.008 -6.081 -35.677 1.00 17.89 H
ATOM 3677 HB2 ASN B 54 -32.682 -4.831 -36.793 1.00 20.14 H
ATOM 3678 HB3 ASN B 54 -33.437 -6.186 -37.135 1.00 20.14 H
ATOM 3679 HD21 ASN B 54 -34.658 -4.380 -34.187 1.00 23.59 H

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ATOM   3680 HD22 ASN B  54    -34.160  -3.834 -35.480  1.00 23.59           H
ATOM   3681  N   ALA B  55    -31.237  -8.369 -34.835  1.00 13.36           N
ANISOU 3681  N   ALA B  55     1643   1955   1478   -294    361   -174       N
ATOM   3682  CA  ALA B  55    -31.376  -9.743 -34.358  1.00 14.05           C
ANISOU 3682  CA  ALA B  55     1769   2051   1520   -351    393   -128       C
ATOM   3683  C   ALA B  55    -32.522  -9.769 -33.356  1.00 15.70           C
ANISOU 3683  C   ALA B  55     1951   2317   1698   -382    476   -152       C
ATOM   3684  O   ALA B  55    -32.334  -9.479 -32.172  1.00 16.50           O
ANISOU 3684  O   ALA B  55     2089   2451   1730   -380    509   -165       O
ATOM   3685  CB  ALA B  55    -30.079 -10.252 -33.737  1.00 14.71           C
ANISOU 3685  CB  ALA B  55     1939   2111   1537   -349    364    -86       C
ATOM   3686  H   ALA B  55    -30.774  -7.866 -34.313  1.00 16.03           H
ATOM   3687  HA  ALA B  55    -31.606 -10.320 -35.103  1.00 16.86           H
ATOM   3688  HB1 ALA B  55    -30.212 -11.164 -33.434  1.00 17.65           H
ATOM   3689  HB2 ALA B  55    -29.377 -10.224 -34.406  1.00 17.65           H
ATOM   3690  HB3 ALA B  55    -29.845  -9.685 -32.986  1.00 17.65           H
ATOM   3691  N   GLY B  56    -33.715 -10.118 -33.841  1.00 15.90           N
ANISOU 3691  N   GLY B  56     1905   2363   1772   -415    511   -161       N
ATOM   3692  CA  GLY B  56    -34.873 -10.178 -32.970  1.00 16.51           C
ANISOU 3692  CA  GLY B  56     1941   2502   1830   -451    599   -187       C
ATOM   3693  C   GLY B  56    -34.787 -11.299 -31.956  1.00 17.84           C
ANISOU 3693  C   GLY B  56     2182   2678   1919   -516    655   -135       C
ATOM   3694  O   GLY B  56    -35.346 -11.189 -30.861  1.00 18.84           O
ANISOU 3694  O   GLY B  56     2308   2861   1990   -538    731   -151       O
ATOM   3695  H   GLY B  56    -33.873 -10.321 -34.661  1.00 19.08           H
ATOM   3696  HA2 GLY B  56    -34.959  -9.339 -32.492  1.00 19.81           H
ATOM   3697  HA3 GLY B  56    -35.671 -10.310 -33.505  1.00 19.81           H
ATOM   3698  N   VAL B  57    -34.099 -12.386 -32.305  1.00 17.43           N
ANISOU 3698  N   VAL B  57     2195   2567   1859   -544    622    -69       N
ATOM   3699  CA  VAL B  57    -33.828 -13.490 -31.395  1.00 17.77           C
ANISOU 3699  CA  VAL B  57     2326   2598   1830   -594    662      0       C
ATOM   3700  C   VAL B  57    -32.349 -13.818 -31.493  1.00 16.12           C
ANISOU 3700  C   VAL B  57     2203   2331   1591   -555    587     51       C
ATOM   3701  O   VAL B  57    -31.836 -14.081 -32.588  1.00 15.76           O
ANISOU 3701  O   VAL B  57     2153   2228   1605   -538    526     58       O
ATOM   3702  CB  VAL B  57    -34.676 -14.737 -31.719  1.00 19.05           C
ANISOU 3702  CB  VAL B  57     2473   2734   2031   -680    714     33       C
ATOM   3703  CG1 VAL B  57    -34.302 -15.899 -30.798  1.00 20.00           C
ANISOU 3703  CG1 VAL B  57     2699   2820   2079   -726    756    122       C
ATOM   3704  CG2 VAL B  57    -36.170 -14.423 -31.584  1.00 20.51           C
ANISOU 3704  CG2 VAL B  57     2555   2990   2248   -723    793    -22       C
ATOM   3705  H   VAL B  57    -33.771 -12.507 -33.090  1.00 20.91           H
ATOM   3706  HA  VAL B  57    -34.022 -13.215 -30.485  1.00 21.33           H
ATOM   3707  HB  VAL B  57    -34.506 -15.009 -32.634  1.00 22.86           H
ATOM   3708 HG11 VAL B  57    -34.850 -16.668 -31.023  1.00 24.00           H
ATOM   3709 HG12 VAL B  57    -33.364 -16.112 -30.925  1.00 24.00           H
ATOM   3710 HG13 VAL B  57    -34.462 -15.637 -29.878  1.00 24.00           H
ATOM   3711 HG21 VAL B  57    -36.680 -15.221 -31.792  1.00 24.61           H
ATOM   3712 HG22 VAL B  57    -36.352 -14.142 -30.673  1.00 24.61           H
ATOM   3713 HG23 VAL B  57    -36.400 -13.712 -32.202  1.00 24.61           H
ATOM   3714  N   TRP B  58    -31.669 -13.815 -30.352  1.00 15.50           N
ANISOU 3714  N   TRP B  58     2198   2274   1416   -539    589    84       N
ATOM   3715  CA  TRP B  58    -30.272 -14.240 -30.294  1.00 15.50           C
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ANISOU 3715 CA TRP B 58 2276 2231 1382 -501 519 139 C
ATOM 3716 C TRP B 58 -30.121 -15.057 -29.014 1.00 16.41 C
ANISOU 3716 C TRP B 58 2479 2363 1392 -527 559 216 C
ATOM 3717 O TRP B 58 -30.071 -14.506 -27.909 1.00 16.35 O
ANISOU 3717 O TRP B 58 2494 2429 1289 -517 579 203 O
ATOM 3718 CB TRP B 58 -29.307 -13.056 -30.350 1.00 15.27 C
ANISOU 3718 CB TRP B 58 2236 2222 1344 -433 449 88 C
ATOM 3719 CG TRP B 58 -27.904 -13.517 -30.240 1.00 16.27 C
ANISOU 3719 CG TRP B 58 2427 2317 1436 -396 378 141 C
ATOM 3720 CD1 TRP B 58 -26.997 -13.189 -29.270 1.00 17.01 C
ANISOU 3720 CD1 TRP B 58 2566 2455 1441 -363 342 148 C
ATOM 3721 CD2 TRP B 58 -27.250 -14.447 -31.107 1.00 16.80 C
ANISOU 3721 CD2 TRP B 58 2518 2308 1558 -386 335 190 C
ATOM 3722 NE1 TRP B 58 -25.814 -13.856 -29.490 1.00 17.86 N
ANISOU 3722 NE1 TRP B 58 2716 2521 1549 -328 276 205 N
ATOM 3723 CE2 TRP B 58 -25.942 -14.629 -30.615 1.00 16.97 C
ANISOU 3723 CE2 TRP B 58 2592 2330 1527 -339 274 230 C
ATOM 3724 CE3 TRP B 58 -27.643 -15.136 -32.262 1.00 17.13 C
ANISOU 3724 CE3 TRP B 58 2536 2285 1687 -411 342 196 C
ATOM 3725 CZ2 TRP B 58 -25.026 -15.478 -31.231 1.00 17.88 C
ANISOU 3725 CZ2 TRP B 58 2734 2377 1680 -310 226 278 C
ATOM 3726 CZ3 TRP B 58 -26.728 -15.979 -32.876 1.00 17.43 C
ANISOU 3726 CZ3 TRP B 58 2609 2254 1758 -388 296 238 C
ATOM 3727 CH2 TRP B 58 -25.438 -16.147 -32.354 1.00 17.02 C
ANISOU 3727 CH2 TRP B 58 2608 2199 1660 -334 242 279 C
ATOM 3728 H TRP B 58 -31.994 -13.571 -29.594 1.00 18.60 H
ATOM 3729 HA TRP B 58 -30.083 -14.820 -31.048 1.00 18.60 H
ATOM 3730 HB2 TRP B 58 -29.413 -12.594 -31.196 1.00 18.33 H
ATOM 3731 HB3 TRP B 58 -29.491 -12.455 -29.611 1.00 18.33 H
ATOM 3732 HD1 TRP B 58 -27.159 -12.607 -28.563 1.00 20.41 H
ATOM 3733 HE1 TRP B 58 -25.106 -13.791 -29.005 1.00 21.43 H
ATOM 3734 HE3 TRP B 58 -28.502 -15.038 -32.604 1.00 20.55 H
ATOM 3735 HZ2 TRP B 58 -24.166 -15.584 -30.895 1.00 21.45 H
ATOM 3736 HZ3 TRP B 58 -26.976 -16.445 -33.641 1.00 20.91 H
ATOM 3737 HH2 TRP B 58 -24.841 -16.709 -32.792 1.00 20.42 H
ATOM 3738 N ALA B 59 -30.086 -16.380 -29.164 1.00 16.95 N
ANISOU 3738 N ALA B 59 2601 2363 1475 -561 573 297 N
ATOM 3739 CA ALA B 59 -30.127 -17.304 -28.029 1.00 17.50 C
ANISOU 3739 CA ALA B 59 2759 2435 1453 -594 624 390 C
ATOM 3740 C ALA B 59 -29.176 -18.469 -28.275 1.00 18.85 C
ANISOU 3740 C ALA B 59 3010 2510 1641 -572 576 482 C
ATOM 3741 O ALA B 59 -29.599 -19.627 -28.396 1.00 19.84 O
ANISOU 3741 O ALA B 59 3177 2562 1801 -625 624 545 O
ATOM 3742 CB ALA B 59 -31.556 -17.798 -27.795 1.00 18.55 C
ANISOU 3742 CB ALA B 59 2870 2580 1599 -686 735 397 C
ATOM 3743 H ALA B 59 -30.038 -16.775 -29.927 1.00 20.34 H
ATOM 3744 HA ALA B 59 -29.835 -16.838 -27.230 1.00 20.99 H
ATOM 3745 HB1 ALA B 59 -31.559 -18.408 -27.040 1.00 22.26 H
ATOM 3746 HB2 ALA B 59 -32.127 -17.037 -27.609 1.00 22.26 H
ATOM 3747 HB3 ALA B 59 -31.866 -18.257 -28.592 1.00 22.26 H
ATOM 3748 N PRO B 60 -27.872 -18.199 -28.329 1.00 19.31 N
ANISOU 3748 N PRO B 60 3092 2566 1681 -493 484 489 N
ATOM 3749 CA PRO B 60 -26.894 -19.279 -28.491 1.00 21.32 C

ANISOU 3749 CA PRO B 60 3417 2734 1951 -455 436 576 C
ATOM 3750 C PRO B 60 -26.630 -20.026 -27.192 1.00 25.52 C
ANISOU 3750 C PRO B 60 4050 3275 2370 -450 453 690 C
ATOM 3751 O PRO B 60 -26.689 -19.466 -26.096 1.00 24.34 O
ANISOU 3751 O PRO B 60 3919 3226 2103 -448 465 694 O
ATOM 3752 CB PRO B 60 -25.635 -18.534 -28.942 1.00 19.84 C
ANISOU 3752 CB PRO B 60 3196 2564 1777 -372 334 530 C
ATOM 3753 CG PRO B 60 -25.744 -17.212 -28.242 1.00 18.70 C
ANISOU 3753 CG PRO B 60 3015 2534 1558 -365 330 462 C
ATOM 3754 CD PRO B 60 -27.220 -16.875 -28.279 1.00 19.15 C
ANISOU 3754 CD PRO B 60 3026 2618 1634 -436 420 413 C
ATOM 3755 HA PRO B 60 -27.174 -19.900 -29.181 1.00 25.59 H
ATOM 3756 HB2 PRO B 60 -24.843 -19.015 -28.654 1.00 23.80 H
ATOM 3757 HB3 PRO B 60 -25.643 -18.420 -29.905 1.00 23.80 H
ATOM 3758 HG2 PRO B 60 -25.434 -17.298 -27.327 1.00 22.45 H
ATOM 3759 HG3 PRO B 60 -25.227 -16.544 -28.720 1.00 22.45 H
ATOM 3760 HD2 PRO B 60 -27.478 -16.401 -27.473 1.00 22.99 H
ATOM 3761 HD3 PRO B 60 -27.430 -16.364 -29.076 1.00 22.99 H
ATOM 3762 N AASN B 61 -26.324 -21.317 -27.333 0.67 29.16 N
ANISOU 3762 N AASN B 61 4583 3630 2867 -446 455 785 N
ATOM 3763 N BASN B 61 -26.316 -21.313 -27.338 0.33 29.26 N
ANISOU 3763 N BASN B 61 4595 3642 2879 -446 455 785 N
ATOM 3764 CA AASN B 61 -25.957 -22.175 -26.203 0.67 31.67 C
ANISOU 3764 CA AASN B 61 4974 3944 3114 -413 451 901 C
ATOM 3765 CA BASN B 61 -25.961 -22.185 -26.216 0.33 31.66 C
ANISOU 3765 CA BASN B 61 4972 3941 3114 -414 451 901 C
ATOM 3766 C AASN B 61 -24.650 -22.874 -26.565 0.67 32.56 C
ANISOU 3766 C AASN B 61 5134 3975 3263 -329 367 964 C
ATOM 3767 C BASN B 61 -24.647 -22.876 -26.571 0.33 32.51 C
ANISOU 3767 C BASN B 61 5127 3967 3257 -329 367 964 C
ATOM 3768 O AASN B 61 -24.652 -23.925 -27.214 0.67 33.55 O
ANISOU 3768 O AASN B 61 5281 3975 3490 -334 381 1000 O
ATOM 3769 O BASN B 61 -24.644 -23.924 -27.224 0.33 33.43 O
ANISOU 3769 O BASN B 61 5266 3960 3476 -334 381 1000 O
ATOM 3770 CB AASN B 61 -27.065 -23.171 -25.882 0.67 33.95 C
ANISOU 3770 CB AASN B 61 5275 4184 3441 -485 543 953 C
ATOM 3771 CB BASN B 61 -27.072 -23.190 -25.925 0.33 34.02 C
ANISOU 3771 CB BASN B 61 5283 4189 3454 -486 544 952 C
ATOM 3772 CG AASN B 61 -26.669 -24.154 -24.790 0.67 35.88 C
ANISOU 3772 CG AASN B 61 5592 4415 3626 -450 537 1085 C
ATOM 3773 CG BASN B 61 -28.273 -22.555 -25.251 0.33 34.84 C
ANISOU 3773 CG BASN B 61 5342 4394 3502 -551 624 906 C
ATOM 3774 OD1AASN B 61 -25.677 -23.957 -24.087 0.67 36.13 O
ANISOU 3774 OD1AASN B 61 5656 4505 3567 -373 467 1132 O
ATOM 3775 OD1BASN B 61 -28.149 -21.545 -24.559 0.33 35.42 O
ANISOU 3775 OD1BASN B 61 5400 4583 3476 -528 611 867 O
ATOM 3776 ND2AASN B 61 -27.446 -25.223 -24.646 0.67 37.34 N
ANISOU 3776 ND2AASN B 61 5798 4526 3862 -510 607 1145 N
ATOM 3777 ND2BASN B 61 -29.444 -23.153 -25.442 0.33 35.96 N
ANISOU 3777 ND2BASN B 61 5457 4493 3712 -632 708 903 N
ATOM 3778 H AASN B 61 -26.322 -21.727 -28.089 0.67 35.00 H
ATOM 3779 H BASN B 61 -26.302 -21.716 -28.098 0.33 35.11 H
ATOM 3780 HA AASN B 61 -25.803 -21.626 -25.419 0.67 38.00 H

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ATOM   3781  HA BASN B  61    -25.820 -21.646 -25.422  0.33 37.99          H
ATOM   3782  HB2AASN B  61    -27.849 -22.687 -25.579  0.67 40.74          H
ATOM   3783  HB2BASN B  61    -27.370 -23.583 -26.761  0.33 40.82          H
ATOM   3784  HB3AASN B  61    -27.276 -23.679 -26.681  0.67 40.74          H
ATOM   3785  HB3BASN B  61    -26.728 -23.880 -25.337  0.33 40.82          H
ATOM   3786 HD21AASN B  61    -28.131 -25.328 -25.156  0.67 44.80          H
ATOM   3787 HD21BASN B  61    -29.492 -23.862 -25.926  0.33 43.15          H
ATOM   3788 HD22AASN B  61    -27.265 -25.808 -24.043  0.67 44.80          H
ATOM   3789 HD22BASN B  61    -30.155 -22.831 -25.080  0.33 43.15          H
ATOM   3790  N   GLY B  62    -23.535 -22.291 -26.132  1.00 29.66          N
ANISOU 3790  N   GLY B  62    4774   3679   2817   -249    279    969      N
ATOM   3791  CA  GLY B  62    -22.222 -22.811 -26.462  1.00 25.93          C
ANISOU 3791  CA  GLY B  62    4326   3147   2378   -155    191   1017      C
ATOM   3792  C   GLY B  62    -21.529 -21.950 -27.495  1.00 22.96          C
ANISOU 3792  C   GLY B  62    3858   2789   2075   -116    124    904      C
ATOM   3793  O   GLY B  62    -21.755 -20.733 -27.547  1.00 19.51          O
ANISOU 3793  O   GLY B  62    3352   2446   1616   -139    119    805      O
ATOM   3794  H   GLY B  62    -23.518 -21.586 -25.640  1.00 35.59          H
ATOM   3795  HA2 GLY B  62    -21.673 -22.840 -25.663  1.00 31.11          H
ATOM   3796  HA3 GLY B  62    -22.307 -23.711 -26.814  1.00 31.11          H
ATOM   3797  N   TRP B  63    -20.687 -22.558 -28.331  1.00 24.75          N
ANISOU 3797  N   TRP B  63    4078   2927   2397    -56     78    914      N
ATOM   3798  CA  TRP B  63    -19.945 -21.793 -29.332  1.00 25.83          C
ANISOU 3798  CA  TRP B  63    4123   3086   2606    -18     19    811      C
ATOM   3799  C   TRP B  63    -20.880 -21.500 -30.495  1.00 24.76          C
ANISOU 3799  C   TRP B  63    3933   2912   2564    -92     78    720      C
ATOM   3800  O   TRP B  63    -20.959 -22.244 -31.473  1.00 25.80          O
ANISOU 3800  O   TRP B  63    4066   2941   2795    -99     99    711      O
ATOM   3801  CB  TRP B  63    -18.693 -22.527 -29.798  1.00 29.13          C
ANISOU 3801  CB  TRP B  63    4545   3436   3088     75    -46    848      C
ATOM   3802  CG  TRP B  63    -17.620 -21.556 -30.248  1.00 30.72          C
ANISOU 3802  CG  TRP B  63    4655   3714   3305    128   -125    765      C
ATOM   3803  CD1 TRP B  63    -16.445 -21.278 -29.605  1.00 31.92          C
ANISOU 3803  CD1 TRP B  63    4787   3942   3398    206   -212    786      C
ATOM   3804  CD2 TRP B  63    -17.647 -20.712 -31.412  1.00 30.13          C
ANISOU 3804  CD2 TRP B  63    4493   3650   3305    100   -120    650      C
ATOM   3805  NE1 TRP B  63    -15.736 -20.324 -30.305  1.00 31.66          N
ANISOU 3805  NE1 TRP B  63    4657   3962   3408    220   -256    686      N
ATOM   3806  CE2 TRP B  63    -16.451 -19.962 -31.415  1.00 29.99          C
ANISOU 3806  CE2 TRP B  63    4409   3708   3276    157   -199    608      C
ATOM   3807  CE3 TRP B  63    -18.559 -20.526 -32.457  1.00 29.11          C
ANISOU 3807  CE3 TRP B  63    4334   3477   3247     32    -60    582      C
ATOM   3808  CZ2 TRP B  63    -16.147 -19.046 -32.418  1.00 28.97          C
ANISOU 3808  CZ2 TRP B  63    4197   3604   3208    144   -209    508      C
ATOM   3809  CZ3 TRP B  63    -18.250 -19.614 -33.454  1.00 27.79          C
ANISOU 3809  CZ3 TRP B  63    4085   3341   3131     28    -78    488      C
ATOM   3810  CH2 TRP B  63    -17.058 -18.888 -33.426  1.00 27.91          C
ANISOU 3810  CH2 TRP B  63    4046   3423   3136     82   -147    455      C
ATOM   3811  H   TRP B  63    -20.529 -23.404 -28.339  1.00 29.69          H
ATOM   3812  HA  TRP B  63    -19.671 -20.947 -28.945  1.00 31.00          H
ATOM   3813  HB2 TRP B  63    -18.338 -23.054 -29.065  1.00 34.96          H
ATOM   3814  HB3 TRP B  63    -18.917 -23.101 -30.547  1.00 34.96          H
ATOM   3815  HD1 TRP B  63    -16.165 -21.673 -28.811  1.00 38.30          H
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ATOM 3816 HE1 TRP B 63 -14.969 -20.007 -30.080 1.00 37.99 H
ATOM 3817 HE3 TRP B 63 -19.355 -21.006 -32.483 1.00 34.93 H
ATOM 3818 HZ2 TRP B 63 -15.353 -18.563 -32.405 1.00 34.77 H
ATOM 3819 HZ3 TRP B 63 -18.850 -19.480 -34.153 1.00 33.34 H
ATOM 3820 HH2 TRP B 63 -16.879 -18.282 -34.108 1.00 33.49 H
ATOM 3821 N GLY B 64 -21.612 -20.401 -30.369 1.00 21.66 N
ANISOU 3821 N GLY B 64 3490 2603 2135 -144 104 648 N
ATOM 3822 CA GLY B 64 -22.404 -19.870 -31.453 1.00 18.48 C
ANISOU 3822 CA GLY B 64 3020 2190 1810 -198 140 556 C
ATOM 3823 C GLY B 64 -22.178 -18.375 -31.508 1.00 18.33 C
ANISOU 3823 C GLY B 64 2929 2267 1769 -187 105 470 C
ATOM 3824 O GLY B 64 -22.104 -17.730 -30.456 1.00 18.53 O
ANISOU 3824 O GLY B 64 2963 2377 1703 -180 94 470 O
ATOM 3825 H GLY B 64 -21.662 -19.939 -29.646 1.00 25.99 H
ATOM 3826 HA2 GLY B 64 -22.133 -20.268 -32.295 1.00 22.17 H
ATOM 3827 HA3 GLY B 64 -23.346 -20.048 -31.301 1.00 22.17 H
ATOM 3828 N ALA B 65 -22.052 -17.814 -32.707 1.00 16.88 N
ANISOU 3828 N ALA B 65 2678 2071 1663 -185 88 395 N
ATOM 3829 CA ALA B 65 -21.687 -16.414 -32.869 1.00 16.53 C
ANISOU 3829 CA ALA B 65 2571 2097 1613 -170 52 320 C
ATOM 3830 C ALA B 65 -22.622 -15.716 -33.842 1.00 15.60 C
ANISOU 3830 C ALA B 65 2395 1978 1556 -212 87 250 C
ATOM 3831 O ALA B 65 -23.042 -16.294 -34.851 1.00 14.63 O
ANISOU 3831 O ALA B 65 2261 1799 1500 -234 107 245 O
ATOM 3832 CB ALA B 65 -20.252 -16.270 -33.377 1.00 15.82 C
ANISOU 3832 CB ALA B 65 2454 2003 1554 -108 -19 308 C
ATOM 3833 H ALA B 65 -22.175 -18.230 -33.450 1.00 20.25 H
ATOM 3834 HA ALA B 65 -21.752 -15.966 -32.011 1.00 19.84 H
ATOM 3835 HB1 ALA B 65 -20.044 -15.327 -33.472 1.00 18.98 H
ATOM 3836 HB2 ALA B 65 -19.648 -16.678 -32.736 1.00 18.98 H
ATOM 3837 HB3 ALA B 65 -20.175 -16.715 -34.235 1.00 18.98 H
ATOM 3838 N LEU B 66 -22.925 -14.461 -33.525 1.00 14.18 N
ANISOU 3838 N LEU B 66 2177 1861 1352 -220 90 195 N
ATOM 3839 CA LEU B 66 -23.635 -13.548 -34.412 1.00 14.37 C
ANISOU 3839 CA LEU B 66 2138 1890 1431 -240 107 131 C
ATOM 3840 C LEU B 66 -22.577 -12.635 -35.017 1.00 14.25 C
ANISOU 3840 C LEU B 66 2087 1882 1447 -203 53 92 C
ATOM 3841 O LEU B 66 -21.986 -11.813 -34.307 1.00 13.46 O
ANISOU 3841 O LEU B 66 1982 1823 1308 -185 27 66 O
ATOM 3842 CB LEU B 66 -24.684 -12.755 -33.634 1.00 14.24 C
ANISOU 3842 CB LEU B 66 2106 1927 1379 -266 153 96 C
ATOM 3843 CG LEU B 66 -25.480 -11.672 -34.367 1.00 13.49 C
ANISOU 3843 CG LEU B 66 1944 1842 1339 -273 170 33 C
ATOM 3844 CD1 LEU B 66 -26.318 -12.283 -35.480 1.00 14.40 C
ANISOU 3844 CD1 LEU B 66 2030 1923 1517 -302 191 39 C
ATOM 3845 CD2 LEU B 66 -26.352 -10.905 -33.396 1.00 15.73 C
ANISOU 3845 CD2 LEU B 66 2214 2180 1583 -286 217 -5 C
ATOM 3846 H LEU B 66 -22.721 -14.104 -32.770 1.00 17.02 H
ATOM 3847 HA LEU B 66 -24.073 -14.043 -35.122 1.00 17.24 H
ATOM 3848 HB2 LEU B 66 -25.330 -13.386 -33.281 1.00 17.09 H
ATOM 3849 HB3 LEU B 66 -24.234 -12.318 -32.894 1.00 17.09 H
ATOM 3850 HG LEU B 66 -24.860 -11.045 -34.771 1.00 16.18 H
ATOM 3851 HD11 LEU B 66 -26.811 -11.577 -35.927 1.00 17.28 H

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ATOM   3852 HD12 LEU B  66     -25.729 -12.726 -36.111  1.00 17.28           H
ATOM   3853 HD13 LEU B  66     -26.935 -12.925 -35.095  1.00 17.28           H
ATOM   3854 HD21 LEU B  66     -26.846 -10.227 -33.883  1.00 18.88           H
ATOM   3855 HD22 LEU B  66     -26.969 -11.522 -32.971  1.00 18.88           H
ATOM   3856 HD23 LEU B  66     -25.788 -10.488 -32.727  1.00 18.88           H
ATOM   3857  N   ALA B  67     -22.327 -12.785 -36.317  1.00 13.46           N
ANISOU 3857  N   ALA B  67     1960   1742   1412   -197     39     83       N
ATOM   3858  CA  ALA B  67     -21.119 -12.221 -36.898  1.00 12.44           C
ANISOU 3858  CA  ALA B  67     1805   1613   1309   -165     -8     62       C
ATOM   3859  C   ALA B  67     -21.275 -12.019 -38.394  1.00 12.54           C
ANISOU 3859  C   ALA B  67     1782   1600   1384   -172     -4     40       C
ATOM   3860  O   ALA B  67     -21.908 -12.825 -39.088  1.00 12.59           O
ANISOU 3860  O   ALA B  67     1793   1577   1414   -191     17     50       O
ATOM   3861  CB  ALA B  67     -19.914 -13.136 -36.650  1.00 13.22           C
ANISOU 3861  CB  ALA B  67     1930   1697   1395   -129    -44    100       C
ATOM   3862  H   ALA B  67     -22.834 -13.201 -36.873  1.00 16.15           H
ATOM   3863  HA  ALA B  67     -20.938 -11.359 -36.491  1.00 14.93           H
ATOM   3864  HB1 ALA B  67     -19.126 -12.734 -37.048  1.00 15.86           H
ATOM   3865  HB2 ALA B  67     -19.787 -13.237 -35.693  1.00 15.86           H
ATOM   3866  HB3 ALA B  67     -20.085 -14.000 -37.055  1.00 15.86           H
ATOM   3867  N   LEU B  68     -20.653 -10.951 -38.884  1.00 11.11           N
ANISOU 3867  N   LEU B  68     1565   1430   1225   -161    -26     10       N
ATOM   3868  CA  LEU B  68     -20.350 -10.861 -40.304  1.00 10.81           C
ANISOU 3868  CA  LEU B  68     1501   1374   1232   -159    -31      1       C
ATOM   3869  C   LEU B  68     -19.313 -11.923 -40.638  1.00 12.05           C
ANISOU 3869  C   LEU B  68     1671   1511   1398   -136    -48     19       C
ATOM   3870  O   LEU B  68     -18.281 -12.014 -39.969  1.00 12.91           O
ANISOU 3870  O   LEU B  68     1782   1631   1492   -110    -75     26       O
ATOM   3871  CB  LEU B  68     -19.825  -9.467 -40.650  1.00 11.27           C
ANISOU 3871  CB  LEU B  68     1527   1443   1312   -155    -43    -26       C
ATOM   3872  CG  LEU B  68     -19.511  -9.195 -42.116  1.00 12.95           C
ANISOU 3872  CG  LEU B  68     1715   1645   1560   -157    -43    -27       C
ATOM   3873  CD1 LEU B  68     -20.781  -9.049 -42.904  1.00 13.98           C
ANISOU 3873  CD1 LEU B  68     1837   1774   1699   -170    -24    -23       C
ATOM   3874  CD2 LEU B  68     -18.658  -7.933 -42.230  1.00 13.61           C
ANISOU 3874  CD2 LEU B  68     1776   1732   1665   -157    -52    -44       C
ATOM   3875  H   LEU B  68     -20.399 -10.273 -38.420  1.00 13.33           H
ATOM   3876  HA  LEU B  68     -21.152 -11.032 -40.823  1.00 12.97           H
ATOM   3877  HB2 LEU B  68     -20.490  -8.816 -40.375  1.00 13.52           H
ATOM   3878  HB3 LEU B  68     -19.007  -9.319 -40.150  1.00 13.52           H
ATOM   3879  HG  LEU B  68     -19.007  -9.939 -42.481  1.00 15.54           H
ATOM   3880 HD11 LEU B  68     -20.558  -8.878 -43.833  1.00 16.77           H
ATOM   3881 HD12 LEU B  68     -21.292  -9.871 -42.833  1.00 16.77           H
ATOM   3882 HD13 LEU B  68     -21.292  -8.308 -42.544  1.00 16.77           H
ATOM   3883 HD21 LEU B  68     -18.463  -7.768 -43.165  1.00 16.34           H
ATOM   3884 HD22 LEU B  68     -19.151  -7.185 -41.857  1.00 16.34           H
ATOM   3885 HD23 LEU B  68     -17.833  -8.064 -41.737  1.00 16.34           H
ATOM   3886  N   VAL B  69     -19.607 -12.756 -41.638  1.00 11.57           N
ANISOU 3886  N   VAL B  69     1614   1421   1359   -144    -32     21       N
ATOM   3887  CA  VAL B  69     -18.718 -13.826 -42.078  1.00 11.37           C
ANISOU 3887  CA  VAL B  69     1601   1367   1353   -119    -39     29       C
ATOM   3888  C   VAL B  69     -18.557 -13.732 -43.587  1.00 10.91           C
ANISOU 3888  C   VAL B  69     1517   1309   1320   -126    -30      1       C
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ATOM 3889 O VAL B 69 -19.552 -13.670 -44.316 1.00 12.49 O
ANISOU 3889 O VAL B 69 1712 1512 1520 -157 -13 -12 O
ATOM 3890 CB VAL B 69 -19.260 -15.214 -41.684 1.00 12.53 C
ANISOU 3890 CB VAL B 69 1796 1466 1499 -125 -21 55 C
ATOM 3891 CG1 VAL B 69 -18.341 -16.340 -42.189 1.00 14.23 C
ANISOU 3891 CG1 VAL B 69 2026 1636 1746 -90 -24 58 C
ATOM 3892 CG2 VAL B 69 -19.423 -15.295 -40.170 1.00 12.04 C
ANISOU 3892 CG2 VAL B 69 1765 1412 1396 -119 -26 93 C
ATOM 3893 H VAL B 69 -20.339 -12.718 -42.087 1.00 13.88 H
ATOM 3894 HA VAL B 69 -17.846 -13.710 -41.669 1.00 13.65 H
ATOM 3895 HB VAL B 69 -20.134 -15.337 -42.087 1.00 15.04 H
ATOM 3896 HG11 VAL B 69 -18.714 -17.195 -41.923 1.00 17.08 H
ATOM 3897 HG12 VAL B 69 -18.283 -16.290 -43.156 1.00 17.08 H
ATOM 3898 HG13 VAL B 69 -17.461 -16.226 -41.798 1.00 17.08 H
ATOM 3899 HG21 VAL B 69 -19.765 -16.172 -39.936 1.00 14.44 H
ATOM 3900 HG22 VAL B 69 -18.559 -15.153 -39.752 1.00 14.44 H
ATOM 3901 HG23 VAL B 69 -20.046 -14.609 -39.883 1.00 14.44 H
ATOM 3902 N GLY B 70 -17.315 -13.757 -44.057 1.00 9.84 N
ANISOU 3902 N GLY B 70 1360 1178 1201 -98 -40 -10 N
ATOM 3903 CA GLY B 70 -17.076 -13.739 -45.486 1.00 9.14 C
ANISOU 3903 CA GLY B 70 1251 1097 1125 -105 -24 -37 C
ATOM 3904 C GLY B 70 -15.737 -14.359 -45.815 1.00 11.06 C
ANISOU 3904 C GLY B 70 1479 1333 1391 -67 -24 -51 C
ATOM 3905 O GLY B 70 -14.974 -14.765 -44.931 1.00 11.65 O
ANISOU 3905 O GLY B 70 1554 1398 1476 -28 -45 -35 O
ATOM 3906 H GLY B 70 -16.604 -13.784 -43.573 1.00 11.81 H
ATOM 3907 HA2 GLY B 70 -17.772 -14.239 -45.942 1.00 10.97 H
ATOM 3908 HA3 GLY B 70 -17.085 -12.825 -45.809 1.00 10.97 H
ATOM 3909 N TRP B 71 -15.462 -14.421 -47.118 1.00 11.43 N
ANISOU 3909 N TRP B 71 1509 1393 1442 -74 -1 -80 N
ATOM 3910 CA TRP B 71 -14.265 -15.058 -47.638 1.00 13.04 C
ANISOU 3910 CA TRP B 71 1691 1594 1671 -37 11 -106 C
ATOM 3911 C TRP B 71 -13.654 -14.216 -48.743 1.00 13.31 C
ANISOU 3911 C TRP B 71 1683 1678 1694 -54 33 -127 C
ATOM 3912 O TRP B 71 -14.360 -13.547 -49.499 1.00 13.10 O
ANISOU 3912 O TRP B 71 1663 1677 1639 -93 45 -124 O
ATOM 3913 CB TRP B 71 -14.550 -16.436 -48.245 1.00 14.66 C
ANISOU 3913 CB TRP B 71 1930 1751 1890 -28 35 -136 C
ATOM 3914 CG TRP B 71 -14.994 -17.490 -47.305 1.00 16.25 C
ANISOU 3914 CG TRP B 71 2178 1886 2111 -12 26 -113 C
ATOM 3915 CD1 TRP B 71 -16.271 -17.732 -46.892 1.00 16.42 C
ANISOU 3915 CD1 TRP B 71 2239 1881 2120 -51 27 -96 C
ATOM 3916 CD2 TRP B 71 -14.178 -18.493 -46.700 1.00 16.81 C
ANISOU 3916 CD2 TRP B 71 2261 1905 2220 49 19 -101 C
ATOM 3917 NE1 TRP B 71 -16.296 -18.815 -46.061 1.00 15.87 N
ANISOU 3917 NE1 TRP B 71 2213 1743 2075 -27 27 -70 N
ATOM 3918 CE2 TRP B 71 -15.022 -19.299 -45.918 1.00 16.35 C
ANISOU 3918 CE2 TRP B 71 2262 1784 2167 40 18 -67 C
ATOM 3919 CE3 TRP B 71 -12.811 -18.779 -46.731 1.00 16.81 C
ANISOU 3919 CE3 TRP B 71 2224 1909 2253 114 13 -111 C
ATOM 3920 CZ2 TRP B 71 -14.547 -20.369 -45.172 1.00 17.84 C
ANISOU 3920 CZ2 TRP B 71 2485 1905 2390 95 10 -34 C
ATOM 3921 CZ3 TRP B 71 -12.340 -19.845 -45.993 1.00 18.06 C

ANISOU 3921 CZ3 TRP B 71 2407 2004 2449 177 0 -84 C
ATOM 3922 CH2 TRP B 71 -13.207 -20.626 -45.221 1.00 18.34 C
ANISOU 3922 CH2 TRP B 71 2514 1970 2486 169 -3 -41 C
ATOM 3923 H TRP B 71 -15.968 -14.092 -47.730 1.00 13.72 H
ATOM 3924 HA TRP B 71 -13.613 -15.159 -46.926 1.00 15.65 H
ATOM 3925 HB2 TRP B 71 -15.245 -16.335 -48.914 1.00 17.60 H
ATOM 3926 HB3 TRP B 71 -13.738 -16.753 -48.670 1.00 17.60 H
ATOM 3927 HD1 TRP B 71 -17.016 -17.238 -47.147 1.00 19.71 H
ATOM 3928 HE1 TRP B 71 -16.997 -19.133 -45.678 1.00 19.04 H
ATOM 3929 HE3 TRP B 71 -12.229 -18.262 -47.241 1.00 20.17 H
ATOM 3930 HZ2 TRP B 71 -15.120 -20.891 -44.659 1.00 21.41 H
ATOM 3931 HZ3 TRP B 71 -11.432 -20.044 -46.006 1.00 21.67 H
ATOM 3932 HH2 TRP B 71 -12.862 -21.339 -44.733 1.00 22.01 H
ATOM 3933 N THR B 72 -12.332 -14.296 -48.849 1.00 14.10 N
ANISOU 3933 N THR B 72 1741 1796 1821 -22 41 -144 N
ATOM 3934 CA THR B 72 -11.623 -13.989 -50.079 1.00 14.23 C
ANISOU 3934 CA THR B 72 1721 1855 1832 -33 80 -173 C
ATOM 3935 C THR B 72 -10.844 -15.217 -50.526 1.00 15.89 C
ANISOU 3935 C THR B 72 1919 2050 2071 15 105 -217 C
ATOM 3936 O THR B 72 -10.610 -16.151 -49.754 1.00 15.63 O
ANISOU 3936 O THR B 72 1896 1970 2073 64 85 -215 O
ATOM 3937 CB THR B 72 -10.643 -12.815 -49.920 1.00 13.34 C
ANISOU 3937 CB THR B 72 1550 1786 1731 -46 81 -163 C
ATOM 3938 OG1 THR B 72 -9.566 -13.200 -49.061 1.00 14.04 O
ANISOU 3938 OG1 THR B 72 1596 1877 1863 1 57 -172 O
ATOM 3939 CG2 THR B 72 -11.332 -11.586 -49.375 1.00 13.11 C
ANISOU 3939 CG2 THR B 72 1536 1758 1688 -87 58 -126 C
ATOM 3940 H THR B 72 -11.813 -14.532 -48.205 1.00 16.92 H
ATOM 3941 HA THR B 72 -12.264 -13.763 -50.772 1.00 17.08 H
ATOM 3942 HB THR B 72 -10.282 -12.590 -50.792 1.00 16.00 H
ATOM 3943 HG1 THR B 72 -9.864 -13.414 -48.305 1.00 16.85 H
ATOM 3944 HG21 THR B 72 -10.694 -10.861 -49.285 1.00 15.74 H
ATOM 3945 HG22 THR B 72 -12.041 -11.309 -49.977 1.00 15.74 H
ATOM 3946 HG23 THR B 72 -11.715 -11.779 -48.505 1.00 15.74 H
ATOM 3947 N ARG B 73 -10.471 -15.208 -51.801 1.00 16.34 N
ANISOU 3947 N ARG B 73 1957 2143 2108 1 153 -256 N
ATOM 3948 CA ARG B 73 -9.443 -16.074 -52.358 1.00 18.19 C
ANISOU 3948 CA ARG B 73 2157 2380 2373 46 190 -309 C
ATOM 3949 C ARG B 73 -8.251 -15.220 -52.772 1.00 17.36 C
ANISOU 3949 C ARG B 73 1977 2344 2273 38 220 -317 C
ATOM 3950 O ARG B 73 -8.358 -13.997 -52.917 1.00 16.21 O
ANISOU 3950 O ARG B 73 1822 2239 2100 -15 222 -284 O
ATOM 3951 CB ARG B 73 -9.970 -16.858 -53.567 1.00 18.67 C
ANISOU 3951 CB ARG B 73 2257 2435 2400 32 232 -364 C
ATOM 3952 CG ARG B 73 -11.085 -17.833 -53.253 1.00 19.23 C
ANISOU 3952 CG ARG B 73 2396 2434 2478 32 211 -370 C
ATOM 3953 CD ARG B 73 -11.427 -18.677 -54.491 1.00 20.43 C
ANISOU 3953 CD ARG B 73 2576 2584 2603 16 255 -446 C
ATOM 3954 NE ARG B 73 -12.325 -19.783 -54.168 1.00 22.27 N
ANISOU 3954 NE ARG B 73 2868 2733 2861 14 243 -465 N
ATOM 3955 CZ ARG B 73 -13.645 -19.783 -54.356 1.00 23.31 C
ANISOU 3955 CZ ARG B 73 3040 2862 2954 -44 226 -464 C
ATOM 3956 NH1 ARG B 73 -14.268 -18.738 -54.885 1.00 24.54 N

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ANISOU 3956  NH1 ARG B  73     3188   3095   3041    -95    214   -441      N
ATOM   3957  NH2 ARG B  73     -14.348 -20.846 -54.019  1.00 24.18          N
ANISOU 3957  NH2 ARG B  73     3198   2890   3100    -50    223   -485      N
ATOM   3958  H   ARG B  73     -10.818 -14.683 -52.387  1.00 19.61          H
ATOM   3959  HA  ARG B  73      -9.151 -16.707 -51.683  1.00 21.82          H
ATOM   3960  HB2 ARG B  73     -10.307 -16.226 -54.221  1.00 22.40          H
ATOM   3961  HB3 ARG B  73      -9.236 -17.364 -53.950  1.00 22.40          H
ATOM   3962  HG2 ARG B  73     -10.803 -18.430 -52.543  1.00 23.08          H
ATOM   3963  HG3 ARG B  73     -11.879 -17.342 -52.988  1.00 23.08          H
ATOM   3964  HD2 ARG B  73     -11.864 -18.115 -55.150  1.00 24.52          H
ATOM   3965  HD3 ARG B  73     -10.610 -19.049 -54.859  1.00 24.52          H
ATOM   3966  HE  ARG B  73     -11.975 -20.491 -53.828  1.00 26.73          H
ATOM   3967 HH11 ARG B  73     -13.820 -18.039 -55.109  1.00 29.45          H
ATOM   3968 HH12 ARG B  73     -15.120 -18.759 -55.000  1.00 29.45          H
ATOM   3969 HH21 ARG B  73     -13.956 -21.531 -53.678  1.00 29.02          H
ATOM   3970 HH22 ARG B  73     -15.200 -20.855 -54.141  1.00 29.02          H
ATOM   3971  N   SER B  74     -7.104 -15.869 -52.930  1.00 19.18          N
ANISOU 3971  N   SER B  74     2153   2586   2548     91    247   -361      N
ATOM   3972  CA  SER B  74      -5.889 -15.211 -53.400  1.00 20.61          C
ANISOU 3972  CA  SER B  74     2251   2839   2742     81    288   -380      C
ATOM   3973  C   SER B  74      -5.439 -14.118 -52.435  1.00 19.35          C
ANISOU 3973  C   SER B  74     2042   2704   2605     59    247   -337      C
ATOM   3974  O   SER B  74      -5.327 -12.945 -52.822  1.00 18.92          O
ANISOU 3974  O   SER B  74     1969   2691   2528     -6    271   -318      O
ATOM   3975  CB  SER B  74      -6.106 -14.636 -54.804  1.00 22.53          C
ANISOU 3975  CB  SER B  74     2506   3136   2917     17    352   -393      C
ATOM   3976  OG  SER B  74      -6.323 -15.680 -55.736  1.00 25.54          O
ANISOU 3976  OG  SER B  74     2919   3511   3275     38    394   -453      O
ATOM   3977  H   SER B  74     -7.001 -16.708 -52.769  1.00 23.01          H
ATOM   3978  HA  SER B  74      -5.178 -15.869 -53.456  1.00 24.74          H
ATOM   3979  HB2 SER B  74      -6.882 -14.054 -54.793  1.00 27.03          H
ATOM   3980  HB3 SER B  74      -5.318 -14.135 -55.067  1.00 27.03          H
ATOM   3981  HG  SER B  74      -5.657 -16.192 -55.753  1.00 30.65          H
ATOM   3982  N   PRO B  75     -5.136 -14.461 -51.175  1.00 18.66          N
ANISOU 3982  N   PRO B  75     1935   2591   2563    111    185   -323      N
ATOM   3983  CA  PRO B  75      -5.150 -15.812 -50.606  1.00 18.11          C
ANISOU 3983  CA  PRO B  75     1889   2464   2529    194    155   -330      C
ATOM   3984  C   PRO B  75     -6.511 -16.212 -50.037  1.00 17.26          C
ANISOU 3984  C   PRO B  75     1880   2285   2393    118    187   -291      C
ATOM   3985  O   PRO B  75     -7.395 -15.367 -49.887  1.00 16.98          O
ANISOU 3985  O   PRO B  75     1884   2253   2315    125    105   -258      O
ATOM   3986  CB  PRO B  75      -4.100 -15.734 -49.486  1.00 19.83          C
ANISOU 3986  CB  PRO B  75     2030   2710   2796    246    101   -320      C
ATOM   3987  CG  PRO B  75      -4.294 -14.294 -49.433  1.00 19.22          C
ANISOU 3987  CG  PRO B  75     1891   2701   2709    175    103   -315      C
ATOM   3988  CD  PRO B  75      -4.620 -13.484 -50.206  1.00 18.62          C
ANISOU 3988  CD  PRO B  75     1878   2618   2578     90    141   -298      C
ATOM   3989  HA  PRO B  75      -4.870 -16.464 -51.268  1.00 21.74          H
ATOM   3990  HB2 PRO B  75      -4.507 -15.990 -48.643  1.00 23.80          H
ATOM   3991  HB3 PRO B  75      -3.358 -16.323 -49.696  1.00 23.80          H
ATOM   3992  HG2 PRO B  75      -3.606 -13.999 -48.510  1.00 23.06          H
ATOM   3993  HG3 PRO B  75      -2.754 -14.227 -49.835  1.00 23.06          H
ATOM   3994  HD2 PRO B  75      -5.331 -13.169 -49.627  1.00 22.34          H
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ATOM   3995  HD3 PRO B  75      -4.176 -12.752 -50.663  1.00 22.34           H
ATOM   3996  N   LEU B  76      -6.670 -17.495 -49.722  1.00 16.65           N
ANISOU 3996  N   LEU B  76     1841   2140   2344    249    107   -295       N
ATOM   3997  CA  LEU B  76      -7.899 -17.983 -49.106  1.00 16.13           C
ANISOU 3997  CA  LEU B  76     1865   2004   2260    240     78   -257       C
ATOM   3998  C   LEU B  76      -7.933 -17.564 -47.637  1.00 15.96           C
ANISOU 3998  C   LEU B  76     1844   1986   2233    251     12   -197       C
ATOM   3999  O   LEU B  76      -7.152 -18.062 -46.821  1.00 16.73           O
ANISOU 3999  O   LEU B  76     1914   2077   2365    321    -26   -179       O
ATOM   4000  CB  LEU B  76      -7.983 -19.497 -49.242  1.00 16.67           C
ANISOU 4000  CB  LEU B  76     1977   1988   2370    298     95   -279       C
ATOM   4001  CG  LEU B  76      -9.224 -20.170 -48.669  1.00 16.57           C
ANISOU 4001  CG  LEU B  76     2057   1892   2348    282     78   -243       C
ATOM   4002  CD1 LEU B  76     -10.465 -19.768 -49.448  1.00 15.12           C
ANISOU 4002  CD1 LEU B  76     1915   1718   2111    194    103   -261       C
ATOM   4003  CD2 LEU B  76      -9.046 -21.692 -48.649  1.00 18.01           C
ANISOU 4003  CD2 LEU B  76     2278   1975   2591    350     93   -259       C
ATOM   4004  H   LEU B  76      -6.079 -18.105 -49.857  1.00 19.98           H
ATOM   4005  HA  LEU B  76      -8.664 -17.591 -49.555  1.00 19.36           H
ATOM   4006  HB2 LEU B  76      -7.947 -19.718 -50.186  1.00 20.01           H
ATOM   4007  HB3 LEU B  76      -7.214 -19.884 -48.794  1.00 20.01           H
ATOM   4008  HG  LEU B  76      -9.343 -19.875 -47.752  1.00 19.89           H
ATOM   4009 HD11 LEU B  76     -11.237 -20.210 -49.061  1.00 18.14           H
ATOM   4010 HD12 LEU B  76     -10.574 -18.805 -49.394  1.00 18.14           H
ATOM   4011 HD13 LEU B  76     -10.358 -20.038 -50.373  1.00 18.14           H
ATOM   4012 HD21 LEU B  76      -9.846 -22.099 -48.282  1.00 21.62           H
ATOM   4013 HD22 LEU B  76      -8.903 -22.004 -49.557  1.00 21.62           H
ATOM   4014 HD23 LEU B  76      -8.278 -21.913 -48.098  1.00 21.62           H
ATOM   4015  N   ILE B  77      -8.834 -16.646 -47.299  1.00 15.13           N
ANISOU 4015  N   ILE B  77     1769   1896   2083    186     -4   -167       N
ATOM   4016  CA  ILE B  77      -8.964 -16.127 -45.940  1.00 14.83           C
ANISOU 4016  CA  ILE B  77     1737   1871   2027    185    -60   -122       C
ATOM   4017  C   ILE B  77     -10.439 -16.073 -45.580  1.00 14.50           C
ANISOU 4017  C   ILE B  77     1772   1792   1946    140    -61    -91       C
ATOM   4018  O   ILE B  77     -11.256 -15.582 -46.364  1.00 14.60           O
ANISOU 4018  O   ILE B  77     1803   1808   1936     84    -31   -104       O
ATOM   4019  CB  ILE B  77      -8.346 -14.723 -45.788  1.00 15.45           C
ANISOU 4019  CB  ILE B  77     1750   2022   2097    147    -73   -131       C
ATOM   4020  CG1 ILE B  77      -6.852 -14.764 -46.112  1.00 17.24           C
ANISOU 4020  CG1 ILE B  77     1886   2297   2369    185    -68   -166       C
ATOM   4021  CG2 ILE B  77      -8.571 -14.197 -44.359  1.00 16.24           C
ANISOU 4021  CG2 ILE B  77     1863   2137   2171    142   -130    -98       C
ATOM   4022  CD1 ILE B  77      -6.203 -13.389 -46.234  1.00 18.59           C
ANISOU 4022  CD1 ILE B  77     1987   2535   2542    129    -63   -186       C
ATOM   4023  H   ILE B  77      -9.394 -16.300 -47.852  1.00 18.15           H
ATOM   4024  HA  ILE B  77      -8.518 -16.727 -45.321  1.00 17.80           H
ATOM   4025  HB  ILE B  77      -8.782 -14.123 -46.413  1.00 18.54           H
ATOM   4026 HG12 ILE B  77      -6.393 -15.246 -45.406  1.00 20.69           H
ATOM   4027 HG13 ILE B  77      -6.728 -15.225 -46.956  1.00 20.69           H
ATOM   4028 HG21 ILE B  77      -8.176 -13.314 -44.282  1.00 19.49           H
ATOM   4029 HG22 ILE B  77      -9.524 -14.150 -44.186  1.00 19.49           H
ATOM   4030 HG23 ILE B  77      -8.150 -14.804 -43.730  1.00 19.49           H
ATOM   4031 HD11 ILE B  77      -5.262 -13.501 -46.439  1.00 22.31           H
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ATOM   4032 HD12 ILE B  77     -6.641 -12.896 -46.946  1.00 22.31           H
ATOM   4033 HD13 ILE B  77     -6.305 -12.917 -45.393  1.00 22.31           H
ATOM   4034  N   ALA B  78    -10.772 -16.539 -44.382  1.00 12.83           N
ANISOU 4034  N   ALA B  78     1601   1552   1723    165    -97    -47       N
ATOM   4035  CA  ALA B  78    -12.084 -16.326 -43.793  1.00 11.78           C
ANISOU 4035  CA  ALA B  78     1527   1400   1550    120    -99    -17       C
ATOM   4036  C   ALA B  78    -11.986 -15.151 -42.836  1.00 11.63           C
ANISOU 4036  C   ALA B  78     1485   1437   1498     99   -135     -5       C
ATOM   4037  O   ALA B  78    -11.026 -15.051 -42.067  1.00 11.88           O
ANISOU 4037  O   ALA B  78     1482   1504   1529    138   -177      3       O
ATOM   4038  CB  ALA B  78    -12.565 -17.569 -43.043  1.00 12.20           C
ANISOU 4038  CB  ALA B  78     1645   1386   1604    150   -105     26       C
ATOM   4039  H   ALA B  78    -10.240 -16.992 -43.880  1.00 15.40           H
ATOM   4040  HA  ALA B  78    -12.726 -16.112 -44.488  1.00 14.14           H
ATOM   4041  HB1 ALA B  78    -13.440 -17.391 -42.665  1.00 14.64           H
ATOM   4042  HB2 ALA B  78    -12.617 -18.312 -43.664  1.00 14.64           H
ATOM   4043  HB3 ALA B  78    -11.934 -17.774 -42.335  1.00 14.64           H
ATOM   4044  N   TYR B  79    -12.971 -14.264 -42.875  1.00 11.66           N
ANISOU 4044  N   TYR B  79     1505   1452   1475     42   -121     -9       N
ATOM   4045  CA  TYR B  79    -12.980 -13.131 -41.961  1.00 12.10           C
ANISOU 4045  CA  TYR B  79     1546   1550   1503     20   -147     -9       C
ATOM   4046  C   TYR B  79    -14.300 -13.076 -41.207  1.00 11.87           C
ANISOU 4046  C   TYR B  79     1569   1505   1435     -7   -140     14       C
ATOM   4047  O   TYR B  79    -15.340 -13.537 -41.693  1.00 11.61           O
ANISOU 4047  O   TYR B  79     1570   1438   1404    -28   -109     21       O
ATOM   4048  CB  TYR B  79    -12.713 -11.801 -42.687  1.00 12.02           C
ANISOU 4048  CB  TYR B  79     1489   1568   1508    -20   -132    -42       C
ATOM   4049  CG  TYR B  79    -13.741 -11.401 -43.713  1.00 11.52           C
ANISOU 4049  CG  TYR B  79     1446   1486   1446    -60    -93    -45       C
ATOM   4050  CD1 TYR B  79    -14.924 -10.789 -43.335  1.00 11.06           C
ANISOU 4050  CD1 TYR B  79     1415   1420   1367    -89    -88    -37       C
ATOM   4051  CD2 TYR B  79    -13.510 -11.601 -45.064  1.00 12.31           C
ANISOU 4051  CD2 TYR B  79     1530   1583   1562    -65    -63    -58       C
ATOM   4052  CE1 TYR B  79    -15.859 -10.409 -44.272  1.00 11.58           C
ANISOU 4052  CE1 TYR B  79     1490   1477   1434   -116    -61    -36       C
ATOM   4053  CE2 TYR B  79    -14.436 -11.228 -46.013  1.00 10.84           C
ANISOU 4053  CE2 TYR B  79     1361   1393   1366    -97    -36    -57       C
ATOM   4054  CZ  TYR B  79    -15.610 -10.628 -45.612  1.00 10.61           C
ANISOU 4054  CZ  TYR B  79     1355   1356   1320   -120    -40    -43       C
ATOM   4055  OH  TYR B  79    -16.545 -10.260 -46.547  1.00 10.96           O
ANISOU 4055  OH  TYR B  79     1407   1402   1353   -144    -23    -37       O
ATOM   4056  H   TYR B  79    -13.640 -14.294 -43.415  1.00 14.00           H
ATOM   4057  HA  TYR B  79    -12.274 -13.255 -41.308  1.00 14.52           H
ATOM   4058  HB2 TYR B  79    -12.673 -11.094 -42.024  1.00 14.42           H
ATOM   4059  HB3 TYR B  79    -11.859 -11.866 -43.142  1.00 14.42           H
ATOM   4060  HD1 TYR B  79    -15.094 -10.640 -42.433  1.00 13.27           H
ATOM   4061  HD2 TYR B  79    -12.718 -12.006 -45.336  1.00 14.77           H
ATOM   4062  HE1 TYR B  79    -16.654 -10.007 -44.003  1.00 13.90           H
ATOM   4063  HE2 TYR B  79    -14.270 -11.377 -46.915  1.00 13.01           H
ATOM   4064  HH  TYR B  79    -16.270 -10.448 -47.318  1.00 13.15           H
ATOM   4065  N   TYR B  80    -14.232 -12.495 -40.011  1.00 12.28           N
ANISOU 4065  N   TYR B  80     1622   1592   1450     -8   -169     17       N
ATOM   4066  CA  TYR B  80    -15.334 -12.465 -39.057  1.00 12.09           C
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ANISOU 4066  CA  TYR B  80    1645   1567   1381    -28   -161     36       C
ATOM   4067  C   TYR B  80    -15.353 -11.125 -38.325  1.00 12.97           C
ANISOU 4067  C   TYR B  80    1738   1724   1467    -53   -174      3       C
ATOM   4068  O   TYR B  80    -14.315 -10.675 -37.829  1.00 14.02           O
ANISOU 4068  O   TYR B  80    1837   1897   1591    -41   -213    -18       O
ATOM   4069  CB  TYR B  80    -15.195 -13.588 -38.019  1.00 13.64           C
ANISOU 4069  CB  TYR B  80    1885   1758   1539      9   -182     87       C
ATOM   4070  CG  TYR B  80    -14.901 -14.966 -38.587  1.00 13.85           C
ANISOU 4070  CG  TYR B  80    1933   1728   1602     46   -175    118       C
ATOM   4071  CD1 TYR B  80    -13.615 -15.322 -38.974  1.00 15.00           C
ANISOU 4071  CD1 TYR B  80    2040   1877   1784     97   -203    112       C
ATOM   4072  CD2 TYR B  80    -15.905 -15.911 -38.711  1.00 14.64           C
ANISOU 4072  CD2 TYR B  80    2087   1769   1706     29   -136    147       C
ATOM   4073  CE1 TYR B  80    -13.345 -16.581 -39.490  1.00 15.85           C
ANISOU 4073  CE1 TYR B  80    2167   1923   1931    137   -191    132       C
ATOM   4074  CE2 TYR B  80    -15.646 -17.167 -39.222  1.00 16.35           C
ANISOU 4074  CE2 TYR B  80    2327   1920   1963     60   -125    167       C
ATOM   4075  CZ  TYR B  80    -14.362 -17.498 -39.604  1.00 16.49           C
ANISOU 4075  CZ  TYR B  80    2311   1936   2018    118   -152    159       C
ATOM   4076  OH  TYR B  80    -14.098 -18.748 -40.112  1.00 17.58           O
ANISOU 4076  OH  TYR B  80    2475   2001   2204    156   -136    171       O
ATOM   4077  H   TYR B  80    -13.527 -12.097 -39.720  1.00 14.73           H
ATOM   4078  HA  TYR B  80    -16.175 -12.576 -39.526  1.00 14.51           H
ATOM   4079  HB2 TYR B  80    -14.471 -13.361 -37.416  1.00 16.37           H
ATOM   4080  HB3 TYR B  80    -16.025 -13.649 -37.521  1.00 16.37           H
ATOM   4081  HD1 TYR B  80    -12.926 -14.702 -38.896  1.00 18.01           H
ATOM   4082  HD2 TYR B  80    -16.772 -15.693 -38.454  1.00 17.57           H
ATOM   4083  HE1 TYR B  80    -12.480 -16.806 -39.748  1.00 19.02           H
ATOM   4084  HE2 TYR B  80    -16.332 -17.790 -39.302  1.00 19.62           H
ATOM   4085  HH  TYR B  80    -14.801 -19.207 -40.127  1.00 21.10           H
ATOM   4086  N   VAL B  81    -16.526 -10.499 -38.233  1.00 11.64           N
ANISOU 4086  N   VAL B  81    1586   1549   1288    -87   -143    -10       N
ATOM   4087  CA  VAL B  81    -16.766  -9.408 -37.289  1.00 10.09           C
ANISOU 4087  CA  VAL B  81    1387   1386   1061   -107   -147    -44       C
ATOM   4088  C   VAL B  81    -17.837  -9.906 -36.329  1.00 10.41           C
ANISOU 4088  C   VAL B  81    1475   1435   1046   -113   -125    -21       C
ATOM   4089  O   VAL B  81    -19.019  -9.978 -36.679  1.00 11.02           O
ANISOU 4089  O   VAL B  81    1563   1489   1136   -132    -83    -15       O
ATOM   4090  CB  VAL B  81    -17.188  -8.101 -37.974  1.00 11.67           C
ANISOU 4090  CB  VAL B  81    1561   1567   1304   -135   -122    -83       C
ATOM   4091  CG1 VAL B  81    -17.430  -7.019 -36.947  1.00 13.76           C
ANISOU 4091  CG1 VAL B  81    1828   1855   1544   -152   -122   -129       C
ATOM   4092  CG2 VAL B  81    -16.115  -7.660 -38.967  1.00 12.15           C
ANISOU 4092  CG2 VAL B  81    1581   1620   1417   -138   -134    -96       C
ATOM   4093  H   VAL B  81    -17.211 -10.693 -38.715  1.00 13.97           H
ATOM   4094  HA  VAL B  81    -15.956  -9.238 -36.782  1.00 12.11           H
ATOM   4095  HB  VAL B  81    -18.013  -8.248 -38.462  1.00 14.00           H
ATOM   4096 HG11 VAL B  81    -17.695  -6.205 -37.403  1.00 16.51           H
ATOM   4097 HG12 VAL B  81    -18.135  -7.306 -36.346  1.00 16.51           H
ATOM   4098 HG13 VAL B  81    -16.612  -6.868 -36.448  1.00 16.51           H
ATOM   4099 HG21 VAL B  81    -16.398  -6.834 -39.390  1.00 14.58           H
ATOM   4100 HG22 VAL B  81    -15.282  -7.519 -38.490  1.00 14.58           H
ATOM   4101 HG23 VAL B  81    -16.001  -8.352 -39.637  1.00 14.58           H
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ATOM 4102 N VAL B 82 -17.422 -10.269 -35.124 1.00 10.70 N
ANISOU 4102 N VAL B 82 1536 1512 1018 -96 -153 -5 N
ATOM 4103 CA VAL B 82 -18.283 -10.940 -34.158 1.00 10.43 C
ANISOU 4103 CA VAL B 82 1554 1490 920 -102 -129 32 C
ATOM 4104 C VAL B 82 -18.867 -9.902 -33.211 1.00 10.50 C
ANISOU 4104 C VAL B 82 1566 1545 880 -127 -112 -17 C
ATOM 4105 O VAL B 82 -18.132 -9.278 -32.436 1.00 10.94 O
ANISOU 4105 O VAL B 82 1612 1651 892 -122 -150 -54 O
ATOM 4106 CB VAL B 82 -17.506 -12.008 -33.375 1.00 11.55 C
ANISOU 4106 CB VAL B 82 1731 1651 1008 -64 -170 91 C
ATOM 4107 CG1 VAL B 82 -18.431 -12.735 -32.416 1.00 12.98 C
ANISOU 4107 CG1 VAL B 82 1974 1838 1118 -76 -135 143 C
ATOM 4108 CG2 VAL B 82 -16.798 -12.986 -34.333 1.00 11.89 C
ANISOU 4108 CG2 VAL B 82 1765 1640 1112 -29 -187 128 C
ATOM 4109 H VAL B 82 -16.624 -10.133 -34.833 1.00 12.84 H
ATOM 4110 HA VAL B 82 -19.014 -11.375 -34.625 1.00 12.52 H
ATOM 4111 HB VAL B 82 -16.822 -11.567 -32.847 1.00 13.87 H
ATOM 4112 HG11 VAL B 82 -17.921 -13.403 -31.933 1.00 15.57 H
ATOM 4113 HG12 VAL B 82 -18.809 -12.093 -31.795 1.00 15.57 H
ATOM 4114 HG13 VAL B 82 -19.139 -13.161 -32.924 1.00 15.57 H
ATOM 4115 HG21 VAL B 82 -16.317 -13.647 -33.811 1.00 14.27 H
ATOM 4116 HG22 VAL B 82 -17.465 -13.423 -34.887 1.00 14.27 H
ATOM 4117 HG23 VAL B 82 -16.179 -12.489 -34.891 1.00 14.27 H
ATOM 4118 N ASP B 83 -20.193 -9.741 -33.243 1.00 10.93 N
ANISOU 4118 N ASP B 83 1628 1587 938 -153 -54 -25 N
ATOM 4119 CA ASP B 83 -20.887 -8.826 -32.345 1.00 12.05 C
ANISOU 4119 CA ASP B 83 1772 1769 1037 -173 -24 -77 C
ATOM 4120 C ASP B 83 -21.414 -9.499 -31.080 1.00 12.34 C
ANISOU 4120 C ASP B 83 1859 1854 976 -182 2 -44 C
ATOM 4121 O ASP B 83 -21.480 -8.852 -30.026 1.00 13.43 O
ANISOU 4121 O ASP B 83 2008 2049 1045 -189 8 -89 O
ATOM 4122 CB ASP B 83 -22.043 -8.151 -33.091 1.00 12.59 C
ANISOU 4122 CB ASP B 83 1807 1804 1171 -189 26 -111 C
ATOM 4123 CG ASP B 83 -21.608 -6.872 -33.803 1.00 12.99 C
ANISOU 4123 CG ASP B 83 1818 1828 1290 -183 9 -165 C
ATOM 4124 OD1 ASP B 83 -20.451 -6.461 -33.606 1.00 14.51 O
ANISOU 4124 OD1 ASP B 83 2004 2032 1476 -178 -35 -189 O
ATOM 4125 OD2 ASP B 83 -22.420 -6.286 -34.544 1.00 12.90 O
ANISOU 4125 OD2 ASP B 83 1779 1784 1339 -184 39 -182 O
ATOM 4126 H ASP B 83 -20.715 -10.157 -33.785 1.00 13.12 H
ATOM 4127 HA ASP B 83 -20.268 -8.132 -32.072 1.00 14.46 H
ATOM 4128 HB2 ASP B 83 -22.391 -8.763 -33.757 1.00 15.10 H
ATOM 4129 HB3 ASP B 83 -22.738 -7.920 -32.455 1.00 15.10 H
ATOM 4130 N SER B 84 -21.775 -10.779 -31.139 1.00 12.85 N
ANISOU 4130 N SER B 84 1959 1894 1030 -185 22 32 N
ATOM 4131 CA SER B 84 -22.204 -11.484 -29.942 1.00 14.62 C
ANISOU 4131 CA SER B 84 2240 2158 1157 -197 50 80 C
ATOM 4132 C SER B 84 -21.945 -12.976 -30.104 1.00 15.22 C
ANISOU 4132 C SER B 84 2362 2187 1234 -185 42 177 C
ATOM 4133 O SER B 84 -21.632 -13.466 -31.189 1.00 13.96 O
ANISOU 4133 O SER B 84 2186 1962 1156 -172 26 193 O
ATOM 4134 CB SER B 84 -23.677 -11.232 -29.629 1.00 14.98 C
ANISOU 4134 CB SER B 84 2280 2221 1191 -238 133 55 C

ATOM 4135 OG SER B 84 -24.007 -11.773 -28.350 1.00 16.39 O
ANISOU 4135 OG SER B 84 2516 2453 1259 -255 166 98 O
ATOM 4136 H SER B 84 -21.779 -11.255 -31.855 1.00 15.42 H
ATOM 4137 HA SER B 84 -21.681 -11.170 -29.188 1.00 17.54 H
ATOM 4138 HB2 SER B 84 -23.842 -10.277 -29.622 1.00 17.98 H
ATOM 4139 HB3 SER B 84 -24.223 -11.661 -30.306 1.00 17.98 H
ATOM 4140 HG SER B 84 -24.818 -11.633 -28.180 1.00 19.67 H
ATOM 4141 N TRP B 85 -22.095 -13.695 -28.997 1.00 16.46 N
ANISOU 4141 N TRP B 85 2581 2375 1297 -189 58 241 N
ATOM 4142 CA TRP B 85 -21.780 -15.114 -28.962 1.00 16.48 C
ANISOU 4142 CA TRP B 85 2642 2324 1295 -171 50 343 C
ATOM 4143 C TRP B 85 -22.406 -15.702 -27.705 1.00 17.66 C
ANISOU 4143 C TRP B 85 2863 2511 1336 -197 98 411 C
ATOM 4144 O TRP B 85 -22.911 -14.977 -26.842 1.00 18.99 O
ANISOU 4144 O TRP B 85 3031 2760 1424 -222 129 371 O
ATOM 4145 CB TRP B 85 -20.263 -15.336 -28.995 1.00 16.58 C
ANISOU 4145 CB TRP B 85 2654 2340 1306 -104 -42 368 C
ATOM 4146 CG TRP B 85 -19.550 -14.708 -27.835 1.00 18.10 C
ANISOU 4146 CG TRP B 85 2853 2634 1389 -80 -96 353 C
ATOM 4147 CD1 TRP B 85 -19.252 -15.300 -26.644 1.00 19.83 C
ANISOU 4147 CD1 TRP B 85 3136 2905 1493 -56 -120 429 C
ATOM 4148 CD2 TRP B 85 -19.051 -13.367 -27.749 1.00 18.10 C
ANISOU 4148 CD2 TRP B 85 2796 2700 1382 -80 -135 253 C
ATOM 4149 NE1 TRP B 85 -18.595 -14.419 -25.824 1.00 20.16 N
ANISOU 4149 NE1 TRP B 85 3159 3052 1448 -42 -176 376 N
ATOM 4150 CE2 TRP B 85 -18.457 -13.225 -26.476 1.00 19.33 C
ANISOU 4150 CE2 TRP B 85 2979 2952 1413 -59 -184 263 C
ATOM 4151 CE3 TRP B 85 -19.042 -12.277 -28.624 1.00 17.13 C
ANISOU 4151 CE3 TRP B 85 2604 2560 1345 -97 -132 159 C
ATOM 4152 CZ2 TRP B 85 -17.865 -12.033 -26.054 1.00 19.38 C
ANISOU 4152 CZ2 TRP B 85 2942 3038 1384 -63 -230 168 C
ATOM 4153 CZ3 TRP B 85 -18.450 -11.097 -28.204 1.00 17.60 C
ANISOU 4153 CZ3 TRP B 85 2627 2686 1377 -99 -172 75 C
ATOM 4154 CH2 TRP B 85 -17.874 -10.984 -26.932 1.00 18.76 C
ANISOU 4154 CH2 TRP B 85 2798 2927 1404 -85 -220 73 C
ATOM 4155 H TRP B 85 -22.380 -13.380 -28.249 1.00 19.75 H
ATOM 4156 HA TRP B 85 -22.171 -15.551 -29.734 1.00 19.77 H
ATOM 4157 HB2 TRP B 85 -20.084 -16.290 -28.974 1.00 19.90 H
ATOM 4158 HB3 TRP B 85 -19.906 -14.950 -29.810 1.00 19.90 H
ATOM 4159 HD1 TRP B 85 -19.462 -16.178 -26.421 1.00 23.79 H
ATOM 4160 HE1 TRP B 85 -18.317 -14.589 -25.028 1.00 24.19 H
ATOM 4161 HE3 TRP B 85 -19.423 -12.343 -29.470 1.00 20.56 H
ATOM 4162 HZ2 TRP B 85 -17.479 -11.956 -25.211 1.00 23.26 H
ATOM 4163 HZ3 TRP B 85 -18.440 -10.364 -28.776 1.00 21.13 H
ATOM 4164 HH2 TRP B 85 -17.485 -10.178 -26.680 1.00 22.52 H
ATOM 4165 N GLY B 86 -22.378 -17.028 -27.615 1.00 21.40 N
ANISOU 4165 N GLY B 86 2744 2653 2735 -228 492 946 N
ATOM 4166 CA GLY B 86 -22.877 -17.694 -26.429 1.00 23.54 C
ANISOU 4166 CA GLY B 86 2902 3002 3041 -231 554 1294 C
ATOM 4167 C GLY B 86 -21.773 -17.873 -25.416 1.00 24.64 C
ANISOU 4167 C GLY B 86 3089 3204 3067 -152 544 1423 C
ATOM 4168 O GLY B 86 -21.509 -16.984 -24.601 1.00 24.56 O
ANISOU 4168 O GLY B 86 3156 3440 2735 -35 589 1421 O

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ATOM   4169  H   GLY B  86    -22.078 -17.557 -28.223  1.00 25.68           H
ATOM   4170  HA2 GLY B  86     -23.587 -17.166 -26.029  1.00 28.25           H
ATOM   4171  HA3 GLY B  86     -23.231 -18.566 -26.665  1.00 28.25           H
ATOM   4172  N   THR B  87    -21.114 -19.023 -25.465  1.00 26.31           N
ANISOU 4172  N   THR B  87     3249   3191   3558   -208    467   1519      N
ATOM   4173  CA  THR B  87    -19.937 -19.296 -24.653  1.00 29.55           C
ANISOU 4173  CA  THR B  87     3702   3623   3905   -142    434   1627      C
ATOM   4174  C   THR B  87    -18.781 -19.543 -25.608  1.00 30.08           C
ANISOU 4174  C   THR B  87     3848   3448   4132   -160    322   1361      C
ATOM   4175  O   THR B  87    -18.760 -20.560 -26.311  1.00 31.66           O
ANISOU 4175  O   THR B  87     3968   3379   4683   -241    244   1329      O
ATOM   4176  CB  THR B  87    -20.172 -20.494 -23.737  1.00 32.65           C
ANISOU 4176  CB  THR B  87     3929   3978   4499   -179    448   2040      C
ATOM   4177  OG1 THR B  87     -21.282 -20.212 -22.876  1.00 34.38           O
ANISOU 4177  OG1 THR B  87     4055   4478   4531   -140    556   2243      O
ATOM   4178  CG2 THR B  87     -18.930 -20.797 -22.901  1.00 33.49           C
ANISOU 4178  CG2 THR B  87     4072   4116   4536   -105    406   2164      C
ATOM   4179  H   THR B  87    -21.336 -19.679 -25.975  1.00 31.58           H
ATOM   4180  HA  THR B  87     -19.730 -18.522 -24.106  1.00 35.47           H
ATOM   4181  HB  THR B  87     -20.374 -21.274 -24.276  1.00 39.18           H
ATOM   4182  HG1 THR B  87     -21.972 -20.070 -23.334  1.00 41.26           H
ATOM   4183 HG21 THR B  87     -19.096 -21.560 -22.326  1.00 40.18           H
ATOM   4184 HG22 THR B  87     -18.180 -20.998 -23.483  1.00 40.18           H
ATOM   4185 HG23 THR B  87     -18.706 -20.030 -22.351  1.00 40.18           H
ATOM   4186  N   ALA B  88    -17.831 -18.616 -25.636  1.00 28.98           N
ANISOU 4186  N   ALA B  88     3848   3408   3754    -76    304   1165      N
ATOM   4187  CA  ALA B  88     -16.714 -18.707 -26.560  1.00 29.53           C
ANISOU 4187  CA  ALA B  88     3981   3305   3934    -77    215    921      C
ATOM   4188  C   ALA B  88    -15.578 -17.852 -26.031  1.00 29.39           C
ANISOU 4188  C   ALA B  88     4078   3421   3669     21    195    854      C
ATOM   4189  O   ALA B  88     -15.814 -16.772 -25.482  1.00 30.35           O
ANISOU 4189  O   ALA B  88     4259   3756   3516     86    236    834      O
ATOM   4190  CB  ALA B  88     -17.108 -18.251 -27.971  1.00 28.21           C
ANISOU 4190  CB  ALA B  88     3833   3087   3799   -113    205    639      C
ATOM   4191  H   ALA B  88     -17.813 -17.923 -25.128  1.00 34.77           H
ATOM   4192  HA  ALA B  88     -16.409 -19.627 -26.609  1.00 35.44           H
ATOM   4193  HB1 ALA B  88     -16.336 -18.327 -28.554  1.00 33.85           H
ATOM   4194  HB2 ALA B  88     -17.826 -18.816 -28.296  1.00 33.85           H
ATOM   4195  HB3 ALA B  88     -17.403 -17.328 -27.932  1.00 33.85           H
ATOM   4196  N   ARG B  89    -14.352 -18.343 -26.205  1.00 28.37           N
ANISOU 4196  N   ARG B  89     3965   3154   3660     36    119    803      N
ATOM   4197  CA  ARG B  89     -13.146 -17.618 -25.834  1.00 27.70           C
ANISOU 4197  CA  ARG B  89     3971   3154   3400    117     76    726      C
ATOM   4198  C   ARG B  89     -12.192 -17.616 -27.015  1.00 26.94           C
ANISOU 4198  C   ARG B  89     3893   2919   3425    111     18    498      C
ATOM   4199  O   ARG B  89     -11.983 -18.656 -27.649  1.00 28.71           O
ANISOU 4199  O   ARG B  89     4053   2956   3900     77    -18    463      O
ATOM   4200  CB  ARG B  89     -12.477 -18.251 -24.615  1.00 29.15           C
ANISOU 4200  CB  ARG B  89     4133   3362   3579    163     44   1958      C
ATOM   4201  CG  ARG B  89     -13.388 -18.313 -23.425  1.00 30.79           C
ANISOU 4201  CG  ARG B  89     4294   3768   3638    191    111   1220      C
ATOM   4202  CD  ARG B  89     -12.660 -18.751 -22.180  1.00 30.95           C
ANISOU 4202  CD  ARG B  89     4292   3886   3581    263    78   1452      C
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ATOM 4203 NE ARG B 89 -13.518 -18.580 -21.009 1.00 33.04 N
ANISOU 4203 NE ARG B 89 4506 4439 3606 327 155 1688 N
ATOM 4204 CZ ARG B 89 -13.333 -17.683 -20.045 1.00 33.53 C
ANISOU 4204 CZ ARG B 89 4625 4799 3317 460 151 1665 C
ATOM 4205 NH1 ARG B 89 -12.295 -16.857 -20.069 1.00 31.72 N
ANISOU 4205 NH1 ARG B 89 4503 4583 2967 526 58 1426 N
ATOM 4206 NH2 ARG B 89 -14.193 -17.623 -19.037 1.00 36.55 N
ANISOU 4206 NH2 ARG B 89 4926 5430 3530 505 219 1781 N
ATOM 4207 H ARG B 89 -14.193 -19.116 -26.547 1.00 34.04 H
ATOM 4208 HA ARG B 89 -13.372 -16.700 -25.618 1.00 33.24 H
ATOM 4209 HB2 ARG B 89 -12.210 -19.157 -24.835 1.00 34.97 H
ATOM 4210 HB3 ARG B 89 -11.700 -17.725 -24.371 1.00 34.97 H
ATOM 4211 HG2 ARG B 89 -13.761 -17.432 -23.263 1.00 36.95 H
ATOM 4212 HG3 ARG B 89 -14.098 -18.949 -23.600 1.00 36.95 H
ATOM 4213 HD2 ARG B 89 -12.424 -19.689 -22.255 1.00 37.14 H
ATOM 4214 HD3 ARG B 89 -11.865 -18.208 -22.061 1.00 37.14 H
ATOM 4215 HE ARG B 89 -14.199 -19.101 -20.939 1.00 39.64 H
ATOM 4216 HH11 ARG B 89 -11.734 -16.889 -20.720 1.00 38.07 H
ATOM 4217 HH12 ARG B 89 -12.186 -16.284 -19.436 1.00 38.07 H
ATOM 4218 HH21 ARG B 89 -14.866 -18.158 -19.013 1.00 43.86 H
ATOM 4219 HH22 ARG B 89 -14.076 -17.051 -18.406 1.00 43.86 H
ATOM 4220 N TRP B 90 -11.630 -16.451 -27.320 1.00 24.08 N
ANISOU 4220 N TRP B 90 3598 2652 2899 153 4 345 N
ATOM 4221 CA TRP B 90 -10.718 -16.310 -28.444 1.00 23.43 C
ANISOU 4221 CA TRP B 90 3510 2500 2893 160 -33 163 C
ATOM 4222 C TRP B 90 -9.274 -16.374 -27.970 1.00 23.55 C
ANISOU 4222 C TRP B 90 3542 2486 2920 214 -102 191 C
ATOM 4223 O TRP B 90 -8.874 -15.649 -27.048 1.00 24.36 O
ANISOU 4223 O TRP B 90 3695 2687 2872 258 -134 246 O
ATOM 4224 CB TRP B 90 -10.989 -15.010 -29.199 1.00 22.34 C
ANISOU 4224 CB TRP B 90 3396 2475 2619 161 -8 24 C
ATOM 4225 CG TRP B 90 -12.136 -15.191 -30.150 1.00 21.63 C
ANISOU 4225 CG TRP B 90 3262 2381 2574 110 44 -52 C
ATOM 4226 CD1 TRP B 90 -12.063 -15.512 -31.471 1.00 21.45 C
ANISOU 4226 CD1 TRP B 90 3183 2326 2641 102 41 -202 C
ATOM 4227 CD2 TRP B 90 -13.532 -15.111 -29.832 1.00 21.62 C
ANISOU 4227 CD2 TRP B 90 3256 2429 2528 71 99 14 C
ATOM 4228 NE1 TRP B 90 -13.327 -15.629 -32.000 1.00 21.56 N
ANISOU 4228 NE1 TRP B 90 3163 2355 2674 56 77 -244 N
ATOM 4229 CE2 TRP B 90 -14.246 -15.392 -31.012 1.00 21.20 C
ANISOU 4229 CE2 TRP B 90 3147 2347 2562 28 116 -103 C
ATOM 4230 CE3 TRP B 90 -14.244 -14.825 -28.664 1.00 21.81 C
ANISOU 4230 CE3 TRP B 90 3306 2548 2432 83 135 158 C
ATOM 4231 CZ2 TRP B 90 -15.637 -15.392 -31.060 1.00 21.52 C
ANISOU 4231 CZ2 TRP B 90 3157 2418 2601 -20 162 -70 C
ATOM 4232 CZ3 TRP B 90 -15.624 -14.822 -28.713 1.00 22.08 C
ANISOU 4232 CZ3 TRP B 90 3305 2631 2455 42 197 200 C
ATOM 4233 CH2 TRP B 90 -16.307 -15.100 -29.904 1.00 21.98 C
ANISOU 4233 CH2 TRP B 90 3237 2556 2558 -17 208 92 C
ATOM 4234 H TRP B 90 -11.762 -15.722 -26.885 1.00 28.90 H
ATOM 4235 HA TRP B 90 -10.863 -17.046 -29.059 1.00 28.12 H
ATOM 4236 HB2 TRP B 90 -11.219 -14.310 -28.567 1.00 26.81 H
ATOM 4237 HB3 TRP B 90 -10.202 -14.762 -29.709 1.00 26.81 H

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ATOM   4238  HD1 TRP B  90     -11.273 -15.642 -31.944  1.00 25.74           H
ATOM   4239  HE1 TRP B  90     -13.511 -15.824 -32.817  1.00 25.87           H
ATOM   4240  HE3 TRP B  90     -13.798 -14.644 -27.868  1.00 26.17           H
ATOM   4241  HZ2 TRP B  90     -16.093 -15.567 -31.852  1.00 25.82           H
ATOM   4242  HZ3 TRP B  90     -16.108 -14.636 -27.941  1.00 26.50           H
ATOM   4243  HH2 TRP B  90     -17.237 -15.091 -29.907  1.00 26.38           H
ATOM   4244  N   THR B  91     -8.515 -17.268 -28.587  1.00 23.00           N
ANISOU 4244  N   THR B  91     3420   2281   3037    220   -135    136       N
ATOM   4245  CA  THR B  91     -7.087 -17.411 -28.379  1.00 23.52           C
ANISOU 4245  CA  THR B  91     3481   2306   3149    272   -199    142       C
ATOM   4246  C   THR B  91     -6.416 -17.305 -29.736  1.00 21.95           C
ANISOU 4246  C   THR B  91     3230   2099   3010    297   -198    -42       C
ATOM   4247  O   THR B  91     -6.874 -17.913 -30.707  1.00 23.91           O
ANISOU 4247  O   THR B  91     3425   2299   3363    289   -176   -163       O
ATOM   4248  CB  THR B  91     -6.744 -18.769 -27.729  1.00 25.70           C
ANISOU 4248  CB  THR B  91     3715   2431   3618    279   -243    282       C
ATOM   4249  OG1 THR B  91     -7.153 -18.775 -26.360  1.00 26.40           O
ANISOU 4249  OG1 THR B  91     3834   2593   3604    278   -241    501       O
ATOM   4250  CG2 THR B  91     -5.238 -19.073 -27.798  1.00 26.37           C
ANISOU 4250  CG2 THR B  91     3774   2449   3798    337   -310    253       C
ATOM   4251  H   THR B  91     -8.825 -17.831 -29.159  1.00 27.60           H
ATOM   4252  HA  THR B  91     -6.762 -16.696 -27.808  1.00 28.22           H
ATOM   4253  HB  THR B  91     -7.214 -19.473 -28.202  1.00 30.84           H
ATOM   4254  HG1 THR B  91     -6.966 -19.514 -26.008  1.00 31.68           H
ATOM   4255 HG21 THR B  91     -5.054 -19.931 -27.383  1.00 31.65           H
ATOM   4256 HG22 THR B  91     -4.948 -19.102 -28.723  1.00 31.65           H
ATOM   4257 HG23 THR B  91     -4.739 -18.384 -27.332  1.00 31.65           H
ATOM   4258  N   GLY B  92     -5.340 -16.540 -29.814  1.00 18.65           N
ANISOU 4258  N   GLY B  92     2811   1748   2528    335   -228    -62       N
ATOM   4259  CA  GLY B  92     -4.578 -16.488 -31.043  1.00 17.52           C
ANISOU 4259  CA  GLY B  92     2589   1640   2429    376   -216   -191       C
ATOM   4260  C   GLY B  92     -3.735 -15.234 -31.100  1.00 16.02           C
ANISOU 4260  C   GLY B  92     2383   1555   2148    390   -237   -162       C
ATOM   4261  O   GLY B  92     -3.634 -14.479 -30.132  1.00 15.93           O
ANISOU 4261  O   GLY B  92     2430   1555   2068    375   -288    -78       O
ATOM   4262  H   GLY B  92     -5.035 -16.048 -29.178  1.00 22.38           H
ATOM   4263  HA2 GLY B  92     -3.994 -17.260 -31.100  1.00 21.03           H
ATOM   4264  HA3 GLY B  92     -5.180 -16.494 -31.803  1.00 21.03           H
ATOM   4265  N   THR B  93     -3.118 -15.048 -32.259  1.00 16.00           N
ANISOU 4265  N   THR B  93     2283   1638   2157    429   -207   -234       N
ATOM   4266  CA  THR B  93     -2.351 -13.842 -32.508  1.00 15.50           C
ANISOU 4266  CA  THR B  93     2162   1673   2053    432   -225   -173       C
ATOM   4267  C   THR B  93     -3.251 -12.633 -32.319  1.00 15.28           C
ANISOU 4267  C   THR B  93     2181   1693   1930    373   -224   -137       C
ATOM   4268  O   THR B  93     -4.398 -12.619 -32.777  1.00 14.75           O
ANISOU 4268  O   THR B  93     2135   1671   1796    347   -164   -191       O
ATOM   4269  CB  THR B  93     -1.761 -13.877 -33.920  1.00 16.28           C
ANISOU 4269  CB  THR B  93     2119   1916   2152    493   -164   -226       C
ATOM   4270  OG1 THR B  93     -0.857 -14.981 -34.011  1.00 17.04           O
ANISOU 4270  OG1 THR B  93     2165   1962   2348    568   -177   -282       O
ATOM   4271  CG2 THR B  93     -1.010 -12.591 -34.247  1.00 16.14           C
ANISOU 4271  CG2 THR B  93     2002   2005   2126    484   -177   -103       C
ATOM   4272  H   THR B  93     -3.129 -15.605 -32.914  1.00 19.20           H
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ATOM   4273  HA  THR B  93     -1.621 -13.785 -31.871  1.00 18.60           H
ATOM   4274  HB  THR B  93     -2.475 -13.990 -34.567  1.00 19.54           H
ATOM   4275  HG1 THR B  93     -1.264 -15.699 -33.857  1.00 20.45           H
ATOM   4276 HG21 THR B  93     -0.647 -12.639 -35.145  1.00 19.37           H
ATOM   4277 HG22 THR B  93     -1.612 -11.833 -34.190  1.00 19.37           H
ATOM   4278 HG23 THR B  93     -0.282 -12.464 -33.619  1.00 19.37           H
ATOM   4279  N   TYR B  94     -2.742 -11.648 -31.594  1.00 14.57           N
ANISOU 4279  N   TYR B  94    2103   1579   1854    359   -308    -62      N
ATOM   4280  CA  TYR B  94     -3.493 -10.464 -31.213  1.00 14.91           C
ANISOU 4280  CA  TYR B  94    2188   1634   1843    321   -344    -51      C
ATOM   4281  C   TYR B  94     -2.769  -9.250 -31.781  1.00 15.73           C
ANISOU 4281  C   TYR B  94    2172   1770   2036    309   -392     21      C
ATOM   4282  O   TYR B  94     -1.578  -9.051 -31.510  1.00 16.32           O
ANISOU 4282  O   TYR B  94    2186   1800   2214    323   -473     79      O
ATOM   4283  CB  TYR B  94     -3.631 -10.375 -29.691  1.00 15.78           C
ANISOU 4283  CB  TYR B  94    2408   1678   1910    334   -434    -52      C
ATOM   4284  CG  TYR B  94     -4.114  -9.020 -29.243  1.00 15.17           C
ANISOU 4284  CG  TYR B  94    2351   1607   1805    326   -509    -79      C
ATOM   4285  CD1 TYR B  94     -5.410  -8.610 -29.508  1.00 16.01           C
ANISOU 4285  CD1 TYR B  94    2487   1761   1833    304   -447   -118      C
ATOM   4286  CD2 TYR B  94     -3.267  -8.138 -28.586  1.00 15.80           C
ANISOU 4286  CD2 TYR B  94    2406   1632   1965    347   -658    -81      C
ATOM   4287  CE1 TYR B  94     -5.857  -7.362 -29.128  1.00 17.19           C
ANISOU 4287  CE1 TYR B  94    2644   1903   1985    311   -525   -162      C
ATOM   4288  CE2 TYR B  94     -3.711  -6.886 -28.193  1.00 17.82           C
ANISOU 4288  CE2 TYR B  94    2666   1866   2238    355   -755   -143      C
ATOM   4289  CZ  TYR B  94     -5.010  -6.506 -28.471  1.00 17.46           C
ANISOU 4289  CZ  TYR B  94    2652   1868   2115    340   -684   -185      C
ATOM   4290  OH  TYR B  94     -5.469  -5.267 -28.089  1.00 19.01           O
ANISOU 4290  OH  TYR B  94    2844   2030   2349    361   -788   -265      O
ATOM   4291  H   TYR B  94     -1.934 -11.645 -31.301  1.00 17.48           H
ATOM   4292  HA  TYR B  94     -4.381 -10.503 -31.602  1.00 17.89           H
ATOM   4293  HB2 TYR B  94     -4.272 -11.039 -29.391  1.00 18.94           H
ATOM   4294  HB3 TYR B  94     -2.766 -10.538 -29.283  1.00 18.94           H
ATOM   4295  HD1 TYR B  94     -5.987  -9.184 -29.957  1.00 19.21           H
ATOM   4296  HD2 TYR B  94     -2.392  -8.393 -28.403  1.00 18.96           H
ATOM   4297  HE1 TYR B  94     -6.732  -7.105 -29.309  1.00 20.63           H
ATOM   4298  HE2 TYR B  94     -3.137  -6.304 -27.750  1.00 21.38           H
ATOM   4299  HH  TYR B  94     -4.859  -4.841 -27.699  1.00 22.81           H
ATOM   4300  N   LYS B  95     -3.481  -8.447 -32.573  1.00 15.11           N
ANISOU 4300  N   LYS B  95    2040   1763   1936    278   -348     41      N
ATOM   4301  CA  LYS B  95     -2.858  -7.377 -33.336  1.00 18.07           C
ANISOU 4301  CA  LYS B  95    2259   2184   2423    261   -375    164      C
ATOM   4302  C   LYS B  95     -3.206  -5.975 -32.853  1.00 19.19           C
ANISOU 4302  C   LYS B  95    2393   2234   2664    223   -489    193      C
ATOM   4303  O   LYS B  95     -2.567  -5.016 -33.297  1.00 21.46           O
ANISOU 4303  O   LYS B  95    2531   2506   3117    199   -550    326      O
ATOM   4304  CB  LYS B  95     -3.242  -7.506 -34.819  1.00 19.91           C
ANISOU 4304  CB  LYS B  95    2383   2603   2578    270   -243    204      C
ATOM   4305  CG  LYS B  95     -2.740  -8.776 -35.509  1.00 23.36           C
ANISOU 4305  CG  LYS B  95    2780   3153   2945    336   -151    147      C
ATOM   4306  CD  LYS B  95     -1.211  -8.891 -35.417  1.00 27.20           C
ANISOU 4306  CD  LYS B  95    3165   3627   3541    371   -194    233      C
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ATOM   4307  CE  LYS B  95     -0.543  -8.945 -36.775  1.00 30.30           C
ANISOU 4307  CE  LYS B  95     3359   4253   3899    434   -100    321       C
ATOM   4308  NZ  LYS B  95     -0.565 -10.315 -37.343  1.00 31.88           N
ANISOU 4308  NZ  LYS B  95     3569   4556   3987    527    -15    152       N
ATOM   4309  H   LYS B  95     -4.332  -8.506 -32.683  1.00 18.13           H
ATOM   4310  HA  LYS B  95     -1.895  -7.476 -33.273  1.00 21.68           H
ATOM   4311  HB2 LYS B  95     -4.210  -7.499 -34.889  1.00 23.89           H
ATOM   4312  HB3 LYS B  95     -2.876  -6.748 -35.300  1.00 23.89           H
ATOM   4313  HG2 LYS B  95     -3.131  -9.552 -35.077  1.00 28.04           H
ATOM   4314  HG3 LYS B  95     -2.988  -8.752 -36.446  1.00 28.04           H
ATOM   4315  HD2 LYS B  95     -0.864  -8.118 -34.943  1.00 32.64           H
ATOM   4316  HD3 LYS B  95     -0.983  -9.703 -34.938  1.00 32.64           H
ATOM   4317  HE2 LYS B  95     -1.013  -8.356 -37.386  1.00 36.35           H
ATOM   4318  HE3 LYS B  95      0.382  -8.668 -36.688  1.00 36.35           H
ATOM   4319  HZ1 LYS B  95     -0.135 -10.875 -36.802  1.00 38.25           H
ATOM   4320  HZ2 LYS B  95     -1.405 -10.592 -37.438  1.00 38.25           H
ATOM   4321  HZ3 LYS B  95     -0.168 -10.320 -38.140  1.00 38.25           H
ATOM   4322  N   GLY B  96     -4.184  -5.823 -31.961  1.00 17.88           N
ANISOU 4322  N   GLY B  96     2364   2007   2423    226    -525     78       N
ATOM   4323  CA  GLY B  96     -4.630  -4.523 -31.516  1.00 17.58           C
ANISOU 4323  CA  GLY B  96     2318   1884   2479    215    -640     55       C
ATOM   4324  C   GLY B  96     -6.139  -4.457 -31.515  1.00 15.73           C
ANISOU 4324  C   GLY B  96     2168   1698   2109    215    -567    -25       C
ATOM   4325  O   GLY B  96     -6.825  -5.483 -31.442  1.00 13.88           O
ANISOU 4325  O   GLY B  96     2030   1537   1709    224    -457    -81       O
ATOM   4326  H   GLY B  96     -4.607  -6.477 -31.597  1.00 21.46           H
ATOM   4327  HA2 GLY B  96     -4.308  -4.353 -30.617  1.00 21.10           H
ATOM   4328  HA3 GLY B  96     -4.287  -3.836 -32.108  1.00 21.10           H
ATOM   4329  N   THR B  97     -6.664  -3.235 -31.615  1.00 14.87           N
ANISOU 4329  N   THR B  97     2007   1538   2105    202    -637    -21       N
ATOM   4330  CA  THR B  97     -8.096  -2.994 -31.518  1.00 14.39           C
ANISOU 4330  CA  THR B  97     2015   1515   1939    211    -587   -102       C
ATOM   4331  C   THR B  97     -8.568  -2.068 -32.632  1.00 14.52           C
ANISOU 4331  C   THR B  97     1901   1549   2068    167    -566     11       C
ATOM   4332  O   THR B  97     -7.797  -1.287 -33.195  1.00 15.79           O
ANISOU 4332  O   THR B  97     1910   1656   2433    136    -638    153       O
ATOM   4333  CB  THR B  97     -8.469  -2.373 -30.158  1.00 15.03           C
ANISOU 4333  CB  THR B  97     2181   1514   2014    279    -721   -265       C
ATOM   4334  OG1 THR B  97     -7.859  -1.082 -30.034  1.00 16.70           O
ANISOU 4334  OG1 THR B  97     2288   1574   2482    283    -906   -266       O
ATOM   4335  CG2 THR B  97     -8.006  -3.263 -29.011  1.00 15.79           C
ANISOU 4335  CG2 THR B  97     2390   1637   1974    335    -744   -346       C
ATOM   4336  H   THR B  97     -6.201  -2.522 -31.740  1.00 17.85           H
ATOM   4337  HA  THR B  97     -8.568  -3.838 -31.605  1.00 17.27           H
ATOM   4338  HB  THR B  97     -9.433  -2.279 -30.102  1.00 18.03           H
ATOM   4339  HG1 THR B  97     -7.023  -1.154 -30.085  1.00 20.03           H
ATOM   4340 HG21 THR B  97     -8.247  -2.860 -28.162  1.00 18.95           H
ATOM   4341 HG22 THR B  97     -8.427  -4.134 -29.077  1.00 18.95           H
ATOM   4342 HG23 THR B  97     -7.043  -3.374 -29.045  1.00 18.95           H
ATOM   4343  N   VAL B  98     -9.863  -2.151 -32.930  1.00 13.47           N
ANISOU 4343  N   VAL B  98     1811   1496   1811    164    -472    -28       N
ATOM   4344  CA  VAL B  98    -10.522  -1.217 -33.840  1.00 14.12           C
ANISOU 4344  CA  VAL B  98     1779   1600   1985    133    -462     72       C
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ATOM   4345  C   VAL B  98    -11.819  -0.746 -33.196  1.00 13.84           C
ANISOU 4345  C   VAL B  98     1824   1531   1904    168   -482    -63      C
ATOM   4346  O   VAL B  98    -12.561  -1.542 -32.607  1.00 13.36           O
ANISOU 4346  O   VAL B  98     1891   1537   1650    196   -405   -179      O
ATOM   4347  CB  VAL B  98    -10.779  -1.853 -35.231  1.00 14.69           C
ANISOU 4347  CB  VAL B  98     1780   1865   1935    101   -305    185      C
ATOM   4348  CG1 VAL B  98    -11.607  -3.112 -35.131  1.00 14.94           C
ANISOU 4348  CG1 VAL B  98     1940   1994   1743    112   -185     57      C
ATOM   4349  CG2 VAL B  98    -11.431  -0.862 -36.163  1.00 15.96           C
ANISOU 4349  CG2 VAL B  98     1809   2077   2180     75   -300    320      C
ATOM   4350  H   VAL B  98    -10.390  -2.751 -32.611  1.00 16.16           H
ATOM   4351  HA  VAL B  98     -9.952  -0.443 -33.966  1.00 16.94           H
ATOM   4352  HB  VAL B  98     -9.924  -2.098 -35.619  1.00 17.62           H
ATOM   4353 HG11 VAL B  98    -11.742  -3.473 -36.021  1.00 17.93           H
ATOM   4354 HG12 VAL B  98    -11.136  -3.756 -34.580  1.00 17.93           H
ATOM   4355 HG13 VAL B  98    -12.463  -2.895 -34.729  1.00 17.93           H
ATOM   4356 HG21 VAL B  98    -11.578  -1.286 -37.022  1.00 19.16           H
ATOM   4357 HG22 VAL B  98    -12.277  -0.581 -35.782  1.00 19.16           H
ATOM   4358 HG23 VAL B  98    -10.845  -0.096 -36.268  1.00 19.16           H
ATOM   4359  N   LYS B  99    -12.074   0.559 -33.276  1.00 14.97           N
ANISOU 4359  N   LYS B  99     1875   1565   2249    171   -593    -35      N
ATOM   4360  CA  LYS B  99    -13.325   1.142 -32.819  1.00 16.78           C
ANISOU 4360  CA  LYS B  99     2148   1770   2459    217   -615   -158      C
ATOM   4361  C   LYS B  99    -14.259   1.330 -34.007  1.00 16.05           C
ANISOU 4361  C   LYS B  99     1971   1779   2347    170   -509    -28      C
ATOM   4362  O   LYS B  99    -13.882   1.947 -35.008  1.00 16.21           O
ANISOU 4362  O   LYS B  99     1834   1794   2530    121   -529    169      O
ATOM   4363  CB  LYS B  99    -13.074   2.478 -32.118  1.00 22.55           C
ANISOU 4363  CB  LYS B  99     2819   2292   3456    270   -831   -249      C
ATOM   4364  CG  LYS B  99    -12.539   2.321 -30.701  1.00 26.55           C
ANISOU 4364  CG  LYS B  99     3434   2741   3914    357   -948   -461      C
ATOM   4365  CD  LYS B  99    -12.254   3.675 -30.052  1.00 31.96           C
ANISOU 4365  CD  LYS B  99     4043   3206   4893    424  -1199   -598      C
ATOM   4366  CE  LYS B  99    -12.175   3.551 -28.530  1.00 35.68           C
ANISOU 4366  CE  LYS B  99     4638   3697   5224    560  -1308   -883      C
ATOM   4367  NZ  LYS B  99    -11.354   2.380 -28.105  1.00 36.34           N
ANISOU 4367  NZ  LYS B  99     4816   3889   5101    550  -1239   -858      N
ATOM   4368  H   LYS B  99    -11.523   1.136 -33.599  1.00 17.97           H
ATOM   4369  HA  LYS B  99    -13.749   0.540 -32.188  1.00 20.14           H
ATOM   4370  HB2 LYS B  99    -12.423   2.983 -32.629  1.00 27.06           H
ATOM   4371  HB3 LYS B  99    -13.909   2.969 -32.069  1.00 27.06           H
ATOM   4372  HG2 LYS B  99    -13.198   1.859 -30.160  1.00 31.86           H
ATOM   4373  HG3 LYS B  99    -11.711   1.816 -30.725  1.00 31.86           H
ATOM   4374  HD2 LYS B  99    -11.404   4.013 -30.375  1.00 38.35           H
ATOM   4375  HD3 LYS B  99    -12.968   4.293 -30.272  1.00 38.35           H
ATOM   4376  HE2 LYS B  99    -11.769   4.353 -28.166  1.00 42.82           H
ATOM   4377  HE3 LYS B  99    -13.070   3.438 -28.173  1.00 42.82           H
ATOM   4378  HZ1 LYS B  99    -11.710   1.628 -28.422  1.00 43.60           H
ATOM   4379  HZ2 LYS B  99    -10.524   2.461 -28.416  1.00 43.60           H
ATOM   4380  HZ3 LYS B  99    -11.327   2.334 -27.216  1.00 43.60           H
ATOM   4381  N   SER B 100    -15.478   0.811 -33.890  1.00 14.81           N
ANISOU 4381  N   SER B 100     1901   1730   1994    188   -400   -117      N
ATOM   4382  CA  SER B 100    -16.431   0.892 -34.983  1.00 14.09           C
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ANISOU 4382 CA SER B 100 1738 1755 1862 148 -304 -14 C
ATOM 4383 C SER B 100 -17.835 0.725 -34.426 1.00 14.47 C
ANISOU 4383 C SER B 100 1873 1849 1775 189 -247 -151 C
ATOM 4384 O SER B 100 -18.069 -0.135 -33.575 1.00 14.79 O
ANISOU 4384 O SER B 100 2034 1933 1651 219 -194 -268 O
ATOM 4385 CB SER B 100 -16.139 -0.180 -36.044 1.00 12.78 C
ANISOU 4385 CB SER B 100 1548 1764 1546 97 -175 84 C
ATOM 4386 OG SER B 100 -16.886 0.048 -37.220 1.00 13.20 O
ANISOU 4386 OG SER B 100 1498 1950 1568 70 -111 197 O
ATOM 4387 H SER B 100 -15.774 0.409 -33.190 1.00 17.77 H
ATOM 4388 HA SER B 100 -16.368 1.765 -35.402 1.00 16.91 H
ATOM 4389 HB2 SER B 100 -15.194 -0.158 -36.263 1.00 15.34 H
ATOM 4390 HB3 SER B 100 -16.374 -1.050 -35.686 1.00 15.34 H
ATOM 4391 HG SER B 100 -17.707 0.030 -37.046 1.00 15.84 H
ATOM 4392 N ASP B 101 -18.756 1.565 -34.901 1.00 13.62 N
ANISOU 4392 N ASP B 101 1684 1740 1750 191 -258 -108 N
ATOM 4393 CA ASP B 101 -20.189 1.392 -34.649 1.00 13.48 C
ANISOU 4393 CA ASP B 101 1714 1802 1605 220 -181 -197 C
ATOM 4394 C ASP B 101 -20.486 1.312 -33.155 1.00 14.63 C
ANISOU 4394 C ASP B 101 1972 1918 1668 315 -208 -391 C
ATOM 4395 O ASP B 101 -21.235 0.452 -32.693 1.00 14.42 O
ANISOU 4395 O ASP B 101 2021 2007 1451 330 -101 -445 O
ATOM 4396 CB ASP B 101 -20.717 0.157 -35.377 1.00 13.40 C
ANISOU 4396 CB ASP B 101 1727 1963 1401 159 -32 -154 C
ATOM 4397 CG ASP B 101 -20.375 0.173 -36.850 1.00 12.90 C
ANISOU 4397 CG ASP B 101 1545 1995 1361 98 -6 10 C
ATOM 4398 OD1 ASP B 101 -20.982 0.986 -37.588 1.00 14.48 O
ANISOU 4398 OD1 ASP B 101 1635 2228 1639 90 -20 111 O
ATOM 4399 OD2 ASP B 101 -19.492 -0.611 -37.264 1.00 12.14 O
ANISOU 4399 OD2 ASP B 101 1453 1958 1201 72 28 42 O
ATOM 4400 H ASP B 101 -18.573 2.254 -35.382 1.00 16.34 H
ATOM 4401 HA ASP B 101 -20.660 2.164 -35.000 1.00 16.17 H
ATOM 4402 HB2 ASP B 101 -20.322 -0.637 -34.985 1.00 16.08 H
ATOM 4403 HB3 ASP B 101 -21.683 0.126 -35.292 1.00 16.08 H
ATOM 4404 N GLY B 102 -19.886 2.220 -32.397 1.00 14.77 N
ANISOU 4404 N GLY B 102 1983 1793 1837 388 -362 -489 N
ATOM 4405 CA GLY B 102 -20.147 2.292 -30.976 1.00 17.53 C
ANISOU 4405 CA GLY B 102 2418 2158 2086 514 -408 -697 C
ATOM 4406 C GLY B 102 -19.476 1.228 -30.130 1.00 18.09 C
ANISOU 4406 C GLY B 102 2600 2306 1969 533 -369 -740 C
ATOM 4407 O GLY B 102 -19.692 1.211 -28.911 1.00 20.88 O
ANISOU 4407 O GLY B 102 3015 2728 2188 653 -396 -894 O
ATOM 4408 H GLY B 102 -19.324 2.804 -32.685 1.00 17.73 H
ATOM 4409 HA2 GLY B 102 -19.856 3.157 -30.649 1.00 21.04 H
ATOM 4410 HA3 GLY B 102 -21.104 2.225 -30.831 1.00 21.04 H
ATOM 4411 N GLY B 103 -18.652 0.362 -30.723 1.00 17.77 N
ANISOU 4411 N GLY B 103 1861 2818 2073 656 -194 -397 N
ATOM 4412 CA GLY B 103 -18.007 -0.705 -29.991 1.00 16.95 C
ANISOU 4412 CA GLY B 103 1830 2761 1849 537 -155 -369 C
ATOM 4413 C GLY B 103 -16.508 -0.705 -30.229 1.00 15.70 C
ANISOU 4413 C GLY B 103 1774 2417 1773 467 -255 -331 C
ATOM 4414 O GLY B 103 -15.994 -0.047 -31.146 1.00 14.56 O
ANISOU 4414 O GLY B 103 1630 2116 1787 464 -319 -287 O

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ATOM   4415  H   GLY B 103    -18.453   0.379 -31.560  1.00 21.32           H
ATOM   4416  HA2 GLY B 103    -18.171  -0.595 -29.041  1.00 20.34           H
ATOM   4417  HA3 GLY B 103    -18.367  -1.560 -30.273  1.00 20.34           H
ATOM   4418  N   THR B 104    -15.811  -1.448 -29.373  1.00 14.81           N
ANISOU 4418  N   THR B 104    1741   2338   1549    424   -259   -337      N
ATOM   4419  CA  THR B 104    -14.383  -1.687 -29.520  1.00 14.71           C
ANISOU 4419  CA  THR B 104    1788   2200   1603    360   -352   -310      C
ATOM   4420  C   THR B 104    -14.169  -3.179 -29.734  1.00 13.92           C
ANISOU 4420  C   THR B 104    1716   2152   1419    257   -295   -176      C
ATOM   4421  O   THR B 104    -14.703  -3.999 -28.978  1.00 15.20           O
ANISOU 4421  O   THR B 104    1918   2430   1427    252   -209   -138      O
ATOM   4422  CB  THR B 104    -13.605  -1.193 -28.294  1.00 17.94           C
ANISOU 4422  CB  THR B 104    2263   2594   1962    444   -458   -469      C
ATOM   4423  OG1 THR B 104    -13.904   0.194 -28.075  1.00 19.58           O
ANISOU 4423  OG1 THR B 104    2448   2718   2274    544   -512   -631      O
ATOM   4424  CG2 THR B 104    -12.106  -1.348 -28.492  1.00 17.92           C
ANISOU 4424  CG2 THR B 104    2267   2475   2067    382   -572   -469      C
ATOM   4425  H   THR B 104    -16.154  -1.832 -28.684  1.00 17.78           H
ATOM   4426  HA  THR B 104    -14.056  -1.215 -30.302  1.00 17.66           H
ATOM   4427  HB  THR B 104    -13.868  -1.708 -27.515  1.00 21.53           H
ATOM   4428  HG1 THR B 104    -14.727   0.293 -27.941  1.00 23.50           H
ATOM   4429 HG21 THR B 104    -11.634  -1.030 -27.706  1.00 21.50           H
ATOM   4430 HG22 THR B 104    -11.886  -2.281 -28.636  1.00 21.50           H
ATOM   4431 HG23 THR B 104    -11.819  -0.833 -29.262  1.00 21.50           H
ATOM   4432  N   TYR B 105    -13.376  -3.520 -30.743  1.00 12.25           N
ANISOU 4432  N   TYR B 105    1491   1846   1317    182   -328   -102      N
ATOM   4433  CA  TYR B 105    -13.165  -4.900 -31.166  1.00 12.94           C
ANISOU 4433  CA  TYR B 105    1605   1944   1369     98   -285     -1      C
ATOM   4434  C   TYR B 105    -11.690  -5.259 -31.040  1.00 12.80           C
ANISOU 4434  C   TYR B 105    1629   1851   1383    105   -371      1      C
ATOM   4435  O   TYR B 105    -10.820  -4.496 -31.473  1.00 12.71           O
ANISOU 4435  O   TYR B 105    1565   1764   1499    108   -438    -36      O
ATOM   4436  CB  TYR B 105    -13.614  -5.119 -32.623  1.00 12.26           C
ANISOU 4436  CB  TYR B 105    1444   1859   1355     36   -248     52      C
ATOM   4437  CG  TYR B 105    -15.079  -4.868 -32.916  1.00 12.01           C
ANISOU 4437  CG  TYR B 105    1328   1931   1305     39   -189     35      C
ATOM   4438  CD1 TYR B 105    -15.579  -3.578 -33.017  1.00 12.64           C
ANISOU 4438  CD1 TYR B 105    1358   2020   1425    134   -213     -6      C
ATOM   4439  CD2 TYR B 105    -15.959  -5.928 -33.138  1.00 11.55           C
ANISOU 4439  CD2 TYR B 105    1223   1948   1218    -50   -118     49      C
ATOM   4440  CE1 TYR B 105    -16.915  -3.345 -33.302  1.00 12.60           C
ANISOU 4440  CE1 TYR B 105    1250   2135   1405    171   -176    -33      C
ATOM   4441  CE2 TYR B 105    -17.291  -5.700 -33.422  1.00 12.42           C
ANISOU 4441  CE2 TYR B 105    1205   2182   1332    -48   -79      7      C
ATOM   4442  CZ  TYR B 105    -17.764  -4.399 -33.495  1.00 13.43           C
ANISOU 4442  CZ  TYR B 105    1275   2355 1473     78   -112    -34      C
ATOM   4443  OH  TYR B 105    -19.089  -4.152 -33.781  1.00 13.86           O
ANISOU 4443  OH  TYR B 105    1179   2556 1531    115   -89    -86      O
ATOM   4444  H   TYR B 105    -12.936  -2.951 -31.214  1.00 14.70           H
ATOM   4445  HA  TYR B 105    -13.676  -5.495 -30.595  1.00 15.53           H
ATOM   4446  HB2 TYR B 105    -13.100  -4.525 -33.192  1.00 14.71           H
ATOM   4447  HB3 TYR B 105    -13.425  -6.039 -32.864  1.00 14.71           H
ATOM   4448  HD1 TYR B 105    -15.010  -2.856 -32.879  1.00 15.17           H
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ATOM   4449  HD2 TYR B 105     -15.646  -6.802 -33.082  1.00 13.86           H
ATOM   4450  HE1 TYR B 105     -17.234  -2.474 -33.354  1.00 15.12           H
ATOM   4451  HE2 TYR B 105     -17.869  -6.416 -33.557  1.00 14.91           H
ATOM   4452  HH  TYR B 105     -19.502  -4.878 -33.877  1.00 16.63           H
ATOM   4453  N   ASP B 106     -11.418  -6.421 -30.453  1.00 11.69           N
ANISOU 4453  N   ASP B 106     1573  1725  1144   110  -360    55      N
ATOM   4454  CA  ASP B 106     -10.077  -6.991 -30.453  1.00 12.37           C
ANISOU 4454  CA  ASP B 106     1684  1755  1260   142  -445    65      C
ATOM   4455  C   ASP B 106      -9.806  -7.676 -31.788  1.00 12.01           C
ANISOU 4455  C   ASP B 106     1597  1651  1315    77  -407   114      C
ATOM   4456  O   ASP B 106     -10.670  -8.368 -32.330  1.00 12.25           O
ANISOU 4456  O   ASP B 106     1642  1679  1335    10  -323   158      O
ATOM   4457  CB  ASP B 106      -9.929  -8.000 -29.316  1.00 13.05           C
ANISOU 4457  CB  ASP B 106     1903  1867  1186   216  -452   129      C
ATOM   4458  CG  ASP B 106      -9.986  -7.351 -27.945  1.00 15.37           C
ANISOU 4458  CG  ASP B 106     2249  2268  1322   327  -510    58      C
ATOM   4459  OD1 ASP B 106      -9.352  -6.288 -27.766  1.00 14.92           O
ANISOU 4459  OD1 ASP B 106     2120  2221  1330   372  -633   -91      O
ATOM   4460  OD2 ASP B 106     -10.662  -7.905 -27.049  1.00 16.51           O
ANISOU 4460  OD2 ASP B 106     2505  2487  1282   369  -425   146      O
ATOM   4461  H   ASP B 106     -12.000  -6.903 -30.043  1.00 14.03           H
ATOM   4462  HA  ASP B 106      -9.423  -6.286 -30.328  1.00 14.84           H
ATOM   4463  HB2 ASP B 106     -10.650  -8.647 -29.371  1.00 15.66           H
ATOM   4464  HB3 ASP B 106      -9.073  -8.448 -29.400  1.00 15.66           H
ATOM   4465  N   ILE B 107      -8.600  -7.485 -32.320  1.00 13.20           N
ANISOU 4465  N   ILE B 107     1678  1770  1566    97  -468    85      N
ATOM   4466  CA  ILE B 107      -8.230  -8.025 -33.627  1.00 13.06           C
ANISOU 4466  CA  ILE B 107     1612  1735  1616    68  -424   110      C
ATOM   4467  C   ILE B 107      -7.364  -9.265 -33.423  1.00 13.82           C
ANISOU 4467  C   ILE B 107     1760  1790  1703   136  -463   115      C
ATOM   4468  O   ILE B 107      -6.322  -9.202 -32.759  1.00 15.13           O
ANISOU 4468  O   ILE B 107     1901  1961  1885   217  -557    83      O
ATOM   4469  CB  ILE B 107      -7.493  -6.984 -34.484  1.00 14.42           C
ANISOU 4469  CB  ILE B 107     1655  1915  1909    50  -417   101      C
ATOM   4470  CG1 ILE B 107      -8.359  -5.736 -34.687  1.00 14.16           C
ANISOU 4470  CG1 ILE B 107     1599  1879  1901    13  -384   119      C
ATOM   4471  CG2 ILE B 107      -7.117  -7.594 -35.840  1.00 14.45           C
ANISOU 4471  CG2 ILE B 107     1615  1952  1923    52  -349   128      C
ATOM   4472  CD1 ILE B 107      -7.584  -4.545 -35.235  1.00 14.52           C
ANISOU 4472  CD1 ILE B 107     1542  1872  2102   -14  -369   143      C
ATOM   4473  H   ILE B 107      -7.971  -7.041 -31.938  1.00 15.84           H
ATOM   4474  HA  ILE B 107      -9.033  -8.292 -34.100  1.00 15.67           H
ATOM   4475  HB  ILE B 107      -6.679  -6.725 -34.024  1.00 17.30           H
ATOM   4476 HG12 ILE B 107      -9.068  -5.945 -35.315  1.00 16.99           H
ATOM   4477 HG13 ILE B 107      -8.740  -5.477 -33.833  1.00 16.99           H
ATOM   4478 HG21 ILE B 107      -6.654  -6.926 -36.368  1.00 17.34           H
ATOM   4479 HG22 ILE B 107      -6.539  -8.359 -35.692  1.00 17.34           H
ATOM   4480 HG23 ILE B 107      -7.927  -7.874 -36.295  1.00 17.34           H
ATOM   4481 HD11 ILE B 107      -8.190  -3.795 -35.338  1.00 17.42           H
ATOM   4482 HD12 ILE B 107      -6.876  -4.316 -34.612  1.00 17.42           H
ATOM   4483 HD13 ILE B 107      -7.204  -4.785 -36.095  1.00 17.42           H
ATOM   4484  N   TYR B 108      -7.778 -10.385 -34.017  1.00 12.93           N
ANISOU 4484  N   TYR B 108     1707  1629  1578   116  -408   135      N
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ATOM   4485  CA  TYR B 108     -7.035 -11.636 -33.928  1.00 13.22           C
ANISOU 4485  CA  TYR B 108    1812   1579   1630    201   -440    138       C
ATOM   4486  C   TYR B 108     -6.776 -12.214 -35.314  1.00 13.20           C
ANISOU 4486  C   TYR B 108    1760   1570   1685    205   -399     72       C
ATOM   4487  O   TYR B 108     -7.493 -11.930 -36.271  1.00 11.77           O
ANISOU 4487  O   TYR B 108    1532   1447   1492    131   -342     40       O
ATOM   4488  CB  TYR B 108     -7.786 -12.699 -33.118  1.00 14.11           C
ANISOU 4488  CB  TYR B 108    2092   1576   1692    187   -408    220       C
ATOM   4489  CG  TYR B 108     -8.187 -12.303 -31.725  1.00 15.27           C
ANISOU 4489  CG  TYR B 108    2316   1764   1722    206   -416    299       C
ATOM   4490  CD1 TYR B 108     -7.252 -12.260 -30.702  1.00 16.51           C
ANISOU 4490  CD1 TYR B 108    2520   1953   1801    355   -524    320       C
ATOM   4491  CD2 TYR B 108     -9.518 -12.015 -31.416  1.00 15.24           C
ANISOU 4491  CD2 TYR B 108    2329   1796   1667     96   -319    338       C
ATOM   4492  CE1 TYR B 108     -7.619 -11.918 -29.417  1.00 17.98           C
ANISOU 4492  CE1 TYR B 108    2789   2215   1828    405   -536    375       C
ATOM   4493  CE2 TYR B 108     -9.892 -11.674 -30.129  1.00 16.44           C
ANISOU 4493  CE2 TYR B 108    2552   2019   1676    138   -304    401       C
ATOM   4494  CZ  TYR B 108     -8.941 -11.626 -29.137  1.00 17.43           C
ANISOU 4494  CZ  TYR B 108    2746   2183   1693    297   -413    419       C
ATOM   4495  OH  TYR B 108     -9.303 -11.302 -27.851  1.00 18.23           O
ANISOU 4495  OH  TYR B 108    2932   2393   1603    371   -405    466       O
ATOM   4496  H   TYR B 108     -8.497 -10.444 -34.485  1.00 15.52           H
ATOM   4497  HA  TYR B 108     -6.180 -11.473 -33.500  1.00 15.86           H
ATOM   4498  HB2 TYR B 108     -8.597 -12.932 -33.597  1.00 16.93           H
ATOM   4499  HB3 TYR B 108     -7.220 -13.483 -33.044  1.00 16.93           H
ATOM   4500  HD1 TYR B 108     -6.362 -12.456 -30.887  1.00 19.82           H
ATOM   4501  HD2 TYR B 108    -10.161 -12.047 -32.087  1.00 18.29           H
ATOM   4502  HE1 TYR B 108     -6.981 -11.889 -28.742  1.00 21.58           H
ATOM   4503  HE2 TYR B 108    -10.781 -11.479 -29.935  1.00 19.73           H
ATOM   4504  HH  TYR B 108     -8.630 -11.319 -27.350  1.00 21.88           H
ATOM   4505  N   THR B 109     -5.757 -13.065 -35.404  1.00 14.67           N
ANISOU 4505  N   THR B 109    1959   1702   1913    323   -440     39       N
ATOM   4506  CA  THR B 109     -5.588 -13.943 -36.555  1.00 15.97           C
ANISOU 4506  CA  THR B 109    2120   1834   2114    362   -405    -54       C
ATOM   4507  C   THR B 109     -5.312 -15.353 -36.057  1.00 17.28           C
ANISOU 4507  C   THR B 109    2431   1804   2330    461   -447    -52       C
ATOM   4508  O   THR B 109     -4.603 -15.543 -35.063  1.00 17.75           O
ANISOU 4508  O   THR B 109    2536   1820   2386    576   -520     16       O
ATOM   4509  CB  THR B 109     -4.456 -13.492 -37.490  1.00 17.11           C
ANISOU 4509  CB  THR B 109    2098   2126   2278    444   -382   -118       C
ATOM   4510  OG1 THR B 109     -3.191 -13.592 -36.823  1.00 19.84           O
ANISOU 4510  OG1 THR B 109    2382   2475   2680    572   -455   -117       O
ATOM   4511  CG2 THR B 109     -4.681 -12.075 -37.956  1.00 15.60           C
ANISOU 4511  CG2 THR B 109    1787   2081   2058    349   -322    -70       C
ATOM   4512  H   THR B 109     -5.145 -13.152 -34.805  1.00 17.60           H
ATOM   4513  HA  THR B 109     -6.412 -13.959 -37.065  1.00 19.17           H
ATOM   4514  HB  THR B 109     -4.446 -14.066 -38.272  1.00 20.53           H
ATOM   4515  HG1 THR B 109     -3.050 -14.387 -36.592  1.00 23.80           H
ATOM   4516 HG21 THR B 109     -3.961 -11.802 -38.546  1.00 18.72           H
ATOM   4517 HG22 THR B 109     -5.522 -12.014 -38.437  1.00 18.72           H
ATOM   4518 HG23 THR B 109     -4.710 -11.476 -37.194  1.00 18.72           H
ATOM   4519  N   THR B 110     -5.888 -16.331 -36.751  1.00 17.14           N
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ANISOU 4519  N   THR B 110     2488   1660   2363    427   -413   -136      N
ATOM   4520  CA  THR B 110      -5.724 -17.742 -36.447  1.00 19.26          C
ANISOU 4520  CA  THR B 110     2916   1674   2728    509   -439   -143      C
ATOM   4521  C   THR B 110      -5.678 -18.520 -37.757  1.00 20.48          C
ANISOU 4521  C   THR B 110     3054   1779   2949    547   -429   -352      C
ATOM   4522  O   THR B 110      -5.966 -17.990 -38.833  1.00 18.89          O
ANISOU 4522  O   THR B 110     2733   1763   2680    496   -397   -472      O
ATOM   4523  CB  THR B 110      -6.869 -18.272 -35.575  1.00 20.19          C
ANISOU 4523  CB  THR B 110     3193   1592   2885    366   -393    -14      C
ATOM   4524  OG1 THR B 110      -8.118 -18.097 -36.265  1.00 19.05          O
ANISOU 4524  OG1 THR B 110     2990   1485   2763    166   -333   -102      O
ATOM   4525  CG2 THR B 110      -6.921 -17.543 -34.238  1.00 18.75          C
ANISOU 4525  CG2 THR B 110     3045   1493   2588    367   -398    176      C
ATOM   4526  H   THR B 110      -6.398 -16.190 -37.429  1.00 20.57          H
ATOM   4527  HA  THR B 110      -4.887 -17.878 -35.976  1.00 23.12          H
ATOM   4528  HB  THR B 110      -6.729 -19.216 -35.401  1.00 24.22          H
ATOM   4529  HG1 THR B 110      -8.750 -18.385 -35.793  1.00 22.86          H
ATOM   4530 HG21 THR B 110      -7.649 -17.891 -33.700  1.00 22.51          H
ATOM   4531 HG22 THR B 110      -6.087 -17.670 -33.759  1.00 22.51          H
ATOM   4532 HG23 THR B 110      -7.061 -16.595 -34.383  1.00 22.51          H
ATOM   4533  N   THR B 111      -5.325 -19.796 -37.654  1.00 23.30          N
ANISOU 4533  N   THR B 111     3545   1880   3428    659   -462   -399      N
ATOM   4534  CA  THR B 111      -5.347 -20.715 -38.781  1.00 26.64          C
ANISOU 4534  CA  THR B 111     3986   2200   3938    708   -468   -640      C
ATOM   4535  C   THR B 111      -6.235 -21.901 -38.436  1.00 29.87          C
ANISOU 4535  C   THR B 111     4583   2231   4536    590   -462   -643      C
ATOM   4536  O   THR B 111      -6.137 -22.455 -37.338  1.00 30.62          O
ANISOU 4536  O   THR B 111     4840   2082   4713    621   -460   -446      O
ATOM   4537  CB  THR B 111      -3.935 -21.222 -39.122  1.00 29.58          C
ANISOU 4537  CB  THR B 111     4328   2578   4332    990   -512   -746      C
ATOM   4538  OG1 THR B 111      -3.042 -20.115 -39.268  1.00 29.01          O
ANISOU 4538  OG1 THR B 111     4056   2837   4129   1071   -495   -706      O
ATOM   4539  CG2 THR B 111      -3.947 -22.026 -40.412  1.00 32.17          C
ANISOU 4539  CG2 THR B 111     4654   2860   4708   1067   -515  -1046      C
ATOM   4540  H   THR B 111      -5.061 -20.161 -36.921  1.00 27.96          H
ATOM   4541  HA  THR B 111      -5.714 -20.268 -39.560  1.00 31.97          H
ATOM   4542  HB  THR B 111      -3.620 -21.797 -38.407  1.00 35.49          H
ATOM   4543  HG1 THR B 111      -2.271 -20.391 -39.454  1.00 34.81          H
ATOM   4544 HG21 THR B 111      -3.052 -22.340 -40.615  1.00 38.60          H
ATOM   4545 HG22 THR B 111      -4.536 -22.792 -40.319  1.00 38.60          H
ATOM   4546 HG23 THR B 111      -4.262 -21.473 -41.144  1.00 38.60          H
ATOM   4547  N   ARG B 112      -7.089 -22.303 -39.375  1.00 31.64          N
ANISOU 4547  N   ARG B 112     4784   2405   4833    459   -460   -867      N
ATOM   4548  CA  ARG B 112      -7.897 -23.508 -39.223  1.00 35.67          C
ANISOU 4548  CA  ARG B 112     5441   2521   5592    319   -453   -928      C
ATOM   4549  C   ARG B 112      -7.407 -24.564 -40.206  1.00 37.35          C
ANISOU 4549  C   ARG B 112     5686   2601   5904    460   -502  -1216      C
ATOM   4550  O   ARG B 112      -7.188 -24.267 -41.384  1.00 37.43          O
ANISOU 4550  O   ARG B 112     5565   2875   5782    548   -541  -1466      O
ATOM   4551  CB  ARG B 112      -9.383 -23.205 -39.433  1.00 36.85          C
ANISOU 4551  CB  ARG B 112     5499   2725   5777     20   -417   -982      C
ATOM   4552  CG  ARG B 112     -10.299 -24.260 -38.816  1.00 41.20          C
ANISOU 4552  CG  ARG B 112     6178   2871   6604   -200   -353   -916      C
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ATOM   4553  CD  ARG B 112     -11.645 -23.684 -38.418  1.00 41.82           C
ANISOU 4553  CD  ARG B 112     6146   3043   6702   -487   -277   -821       C
ATOM   4554  NE  ARG B 112     -12.290 -24.498 -37.385  1.00 45.69           N
ANISOU 4554  NE  ARG B 112     6776   3236   7350   -666   -144   -584       N
ATOM   4555  CZ  ARG B 112     -13.342 -25.293 -37.571  1.00 50.13           C
ANISOU 4555  CZ  ARG B 112     7318   3662   8069   -899   -109   -662       C
ATOM   4556  NH1 ARG B 112     -13.914 -25.407 -38.763  1.00 51.74           N
ANISOU 4556  NH1 ARG B 112     7361   3993   8306   -978   -202   -991       N
ATOM   4557  NH2 ARG B 112     -13.833 -25.979 -36.546  1.00 53.13           N
ANISOU 4557  NH2 ARG B 112     7830   3798   8560  -1042      3   -399       N
ATOM   4558  H   ARG B 112      -7.218 -21.890 -40.118  1.00 37.97           H
ATOM   4559  HA  ARG B 112      -7.784 -23.855 -38.325  1.00 42.81           H
ATOM   4560  HB2 ARG B 112      -9.592 -22.351 -39.023  1.00 44.22           H
ATOM   4561  HB3 ARG B 112      -9.566 -23.170 -40.384  1.00 44.22           H
ATOM   4562  HG2 ARG B 112     -10.452 -24.966 -39.463  1.00 49.44           H
ATOM   4563  HG3 ARG B 112      -9.878 -24.621 -38.020  1.00 49.44           H
ATOM   4564  HD2 ARG B 112     -11.519 -22.789 -38.066  1.00 50.19           H
ATOM   4565  HD3 ARG B 112     -12.226 -23.662 -39.194  1.00 50.19           H
ATOM   4566  HE  ARG B 112     -11.961 -24.459 -36.591  1.00 54.83           H
ATOM   4567 HH11 ARG B 112     -13.603 -24.966 -39.433  1.00 62.09           H
ATOM   4568 HH12 ARG B 112     -14.593 -25.924 -38.866  1.00 62.09           H
ATOM   4569 HH21 ARG B 112     -13.470 -25.911 -35.769  1.00 63.76           H
ATOM   4570 HH22 ARG B 112     -14.513 -26.493 -36.659  1.00 63.76           H
ATOM   4571  N   TYR B 113      -7.228 -25.791 -39.716  1.00 45.41           N
ANISOU 4571  N   TYR B 113     6227   3839   7188   1378  -2765   -280       N
ATOM   4572  CA  TYR B 113      -6.598 -26.863 -40.476  1.00 46.84           C
ANISOU 4572  CA  TYR B 113     6284   3856   7658   1511  -2757   -452       C
ATOM   4573  C   TYR B 113      -7.606 -27.952 -40.821  1.00 46.92           C
ANISOU 4573  C   TYR B 113     6532   3686   7609   1446  -2670   -356       C
ATOM   4574  O   TYR B 113      -8.456 -28.309 -39.999  1.00 45.28           O
ANISOU 4574  O   TYR B 113     6595   3444   7164   1350  -2712   -130       O
ATOM   4575  CB  TYR B 113      -5.440 -27.481 -39.689  1.00 50.75           C
ANISOU 4575  CB  TYR B 113     6705   4287   8291   1656  -2963   -473       C
ATOM   4576  CG  TYR B 113      -4.259 -26.559 -39.483  1.00 51.92           C
ANISOU 4576  CG  TYR B 113     6592   4596   8538   1721  -3028   -608       C
ATOM   4577  CD1 TYR B 113      -4.157 -25.773 -38.343  1.00 51.91           C
ANISOU 4577  CD1 TYR B 113     6653   4719   8353   1671  -3136   -485       C
ATOM   4578  CD2 TYR B 113      -3.242 -26.481 -40.427  1.00 52.93           C
ANISOU 4578  CD2 TYR B 113     6417   4764   8930   1808  -2951   -863       C
ATOM   4579  CE1 TYR B 113      -3.076 -24.931 -38.150  1.00 52.68           C
ANISOU 4579  CE1 TYR B 113     6523   4962   8531   1714  -3178   -609       C
ATOM   4580  CE2 TYR B 113      -2.158 -25.642 -40.243  1.00 53.49           C
ANISOU 4580  CE2 TYR B 113     6260   4991   9074   1843  -2987   -984       C
ATOM   4581  CZ  TYR B 113      -2.080 -24.871 -39.103  1.00 53.37           C
ANISOU 4581  CZ  TYR B 113     6316   5084   8877   1800  -3107   -856       C
ATOM   4582  OH  TYR B 113      -1.002 -24.036 -38.918  1.00 53.63           O
ANISOU 4582  OH  TYR B 113     6136   5266   8976   1824  -3126   -977       O
ATOM   4583  H   TYR B 113      -7.470 -26.029 -38.926  1.00 54.49           H
ATOM   4584  HA  TYR B 113      -6.244 -26.502 -41.304  1.00 56.21           H
ATOM   4585  HB2 TYR B 113      -5.765 -27.743 -38.814  1.00 60.90           H
ATOM   4586  HB3 TYR B 113      -5.123 -28.263 -40.168  1.00 60.90           H
ATOM   4587  HD1 TYR B 113      -4.827 -25.812 -37.699  1.00 62.29           H
ATOM   4588  HD2 TYR B 113      -3.292 -27.000 -41.197  1.00 63.52           H
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ATOM   4589  HE1 TYR B 113     -3.021 -24.409 -37.382  1.00 63.21           H
ATOM   4590  HE2 TYR B 113     -1.485 -25.599 -40.883  1.00 64.19           H
ATOM   4591  HH  TYR B 113     -0.476 -24.098 -39.570  1.00 64.36           H
ATOM   4592  N   ASN B 114     -7.492 -28.482 -42.040  1.00 48.74           N
ANISOU 4592  N   ASN B 114     6644   3833   8041   1474  -2514   -546       N
ATOM   4593  CA  ASN B 114     -8.320 -29.597 -42.504  1.00 50.16           C
ANISOU 4593  CA  ASN B 114     7018   3840   8200   1412  -2413   -496       C
ATOM   4594  C   ASN B 114     -9.788 -29.373 -42.154  1.00 45.82           C
ANISOU 4594  C   ASN B 114     6764   3336   7311   1205  -2325   -261       C
ATOM   4595  O   ASN B 114    -10.451 -30.226 -41.559  1.00 47.68           O
ANISOU 4595  O   ASN B 114     7237   3468   7412   1163  -2377    -82       O
ATOM   4596  CB  ASN B 114     -7.824 -30.922 -41.924  1.00 55.11           C
ANISOU 4596  CB  ASN B 114     7710   4300   8930   1536  -2572   -443       C
ATOM   4597  CG  ASN B 114     -6.332 -31.115 -42.098  1.00 58.68           C
ANISOU 4597  CG  ASN B 114     7883   4744   9671   1718  -2662   -635       C
ATOM   4598  OD1 ASN B 114     -5.810 -31.077 -43.213  1.00 58.94           O
ANISOU 4598  OD1 ASN B 114     7692   4799   9901   1748  -2517   -861       O
ATOM   4599  ND2 ASN B 114     -5.633 -31.316 -40.987  1.00 61.07           N
ANISOU 4599  ND2 ASN B 114     8193   5030   9979   1822  -2883   -546       N
ATOM   4600  H   ASN B 114     -6.930 -28.206 -42.629  1.00 58.49           H
ATOM   4601  HA  ASN B 114     -8.252 -29.653 -43.470  1.00 60.19           H
ATOM   4602  HB2 ASN B 114     -8.021 -30.944 -40.974  1.00 66.14           H
ATOM   4603  HB3 ASN B 114     -8.276 -31.653 -42.374  1.00 66.14           H
ATOM   4604 HD21 ASN B 114     -4.781 -31.432 -41.029  1.00 73.28           H
ATOM   4605 HD22 ASN B 114     -6.031 -31.331 -40.225  1.00 73.28           H
ATOM   4606  N   ALA B 115    -10.293 -28.205 -42.525  1.00 39.58           N
ANISOU 4606  N   ALA B 115     5908   2809   6321   1019  -2115   -266       N
ATOM   4607  CA  ALA B 115    -11.650 -27.792 -42.218  1.00 35.66           C
ANISOU 4607  CA  ALA B 115     5654   2409   5486    806  -2002    -46       C
ATOM   4608  C   ALA B 115    -12.381 -27.424 -43.502  1.00 36.14           C
ANISOU 4608  C   ALA B 115     5640   2636   5455    606  -1657   -143       C
ATOM   4609  O   ALA B 115    -11.749 -27.148 -44.529  1.00 33.22           O
ANISOU 4609  O   ALA B 115     5002   2365   5256    623  -1505    -383       O
ATOM   4610  CB  ALA B 115    -11.644 -26.593 -41.260  1.00 34.75           C
ANISOU 4610  CB  ALA B 115     5554   2472   5175    763  -2083     85       C
ATOM   4611  H   ALA B 115     -9.852 -27.616 -42.970  1.00 47.49           H
ATOM   4612  HA  ALA B 115    -12.123 -28.524 -41.793  1.00 42.79           H
ATOM   4613  HB1 ALA B 115    -12.560 -26.336 -41.070  1.00 41.69           H
ATOM   4614  HB2 ALA B 115    -11.195 -26.848 -40.439  1.00 41.69           H
ATOM   4615  HB3 ALA B 115    -11.173 -25.856 -41.679  1.00 41.69           H
ATOM   4616  N   PRO B 116    -13.713 -27.410 -43.485  1.00 37.97           N
ANISOU 4616  N   PRO B 116     6101   2908   5417    414  -1525     39       N
ATOM   4617  CA  PRO B 116    -14.448 -27.070 -44.707  1.00 37.32           C
ANISOU 4617  CA  PRO B 116     5949   2996   5235    218  -1198    -42       C
ATOM   4618  C   PRO B 116    -14.362 -25.583 -45.012  1.00 34.10           C
ANISOU 4618  C   PRO B 116     5347   2893   4716    115  -1022    -96       C
ATOM   4619  O   PRO B 116    -14.443 -24.737 -44.119  1.00 34.37           O
ANISOU 4619  O   PRO B 116     5437   3030   4592     92  -1101     45       O
ATOM   4620  CB  PRO B 116    -15.883 -27.502 -44.392  1.00 38.08           C
ANISOU 4620  CB  PRO B 116     6367   3036   5067     56  -1149    203       C
ATOM   4621  CG  PRO B 116    -15.990 -27.378 -42.924  1.00 39.45           C
ANISOU 4621  CG  PRO B 116     6744   3135   5110    113  -1395    435       C
ATOM   4622  CD  PRO B 116    -14.624 -27.705 -42.364  1.00 40.69           C
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ANISOU 4622  CD  PRO B 116     6778   3150   5532    363  -1664    330       C
ATOM   4623  HA  PRO B 116     -14.112 -27.579 -45.462  1.00 44.78           H
ATOM   4624  HB2 PRO B 116     -16.510 -26.910 -44.835  1.00 45.70           H
ATOM   4625  HB3 PRO B 116     -16.018 -28.421 -44.672  1.00 45.70           H
ATOM   4626  HG2 PRO B 116     -16.243 -26.471 -42.695  1.00 47.34           H
ATOM   4627  HG3 PRO B 116     -16.651 -28.008 -42.595  1.00 47.34           H
ATOM   4628  HD2 PRO B 116     -14.424 -27.132 -41.607  1.00 48.83           H
ATOM   4629  HD3 PRO B 116     -14.572 -28.643 -42.124  1.00 48.83           H
ATOM   4630  N   SER B 117     -14.185 -25.276 -46.292  1.00 30.31           N
ANISOU 4630  N   SER B 117     4639   2555   4325     53   -778   -306       N
ATOM   4631  CA  SER B 117     -14.101 -23.911 -46.775  1.00 25.87           C
ANISOU 4631  CA  SER B 117     3871   2282   3677    -48   -573   -382       C
ATOM   4632  C   SER B 117     -14.824 -23.840 -48.111  1.00 23.41           C
ANISOU 4632  C   SER B 117     3492   2108   3293   -222   -253   -466       C
ATOM   4633  O   SER B 117     -15.369 -24.835 -48.601  1.00 23.71           O
ANISOU 4633  O   SER B 117     3646   2018   3344   -267   -203   -465       O
ATOM   4634  CB  SER B 117     -12.644 -23.459 -46.915  1.00 26.22           C
ANISOU 4634  CB  SER B 117     3614   2368   3981    120   -648   -610       C
ATOM   4635  OG  SER B 117     -12.014 -24.115 -48.013  1.00 27.04           O
ANISOU 4635  OG  SER B 117     3529   2399   4345    196   -567   -858       O
ATOM   4636  H   SER B 117     -14.109 -25.863 -46.916  1.00 36.38           H
ATOM   4637  HA  SER B 117     -14.548 -23.318 -46.151  1.00 31.04           H
ATOM   4638  HB2 SER B 117     -12.622 -22.501 -47.065  1.00 31.47           H
ATOM   4639  HB3 SER B 117     -12.165 -23.678 -46.100  1.00 31.47           H
ATOM   4640  HG  SER B 117     -11.216 -23.860 -48.080  1.00 32.45           H
ATOM   4641  N   ILE B 118     -14.826 -22.650 -48.711  1.00 21.21           N
ANISOU 4641  N   ILE B 118     3023   2098   2937   -324    -30   -540       N
ATOM   4642  CA  ILE B 118     -15.354 -22.504 -50.057  1.00 21.41           C
ANISOU 4642  CA  ILE B 118     2938   2279   2918   -476    278   -647       C
ATOM   4643  C   ILE B 118     -14.545 -23.289 -51.082  1.00 23.02           C
ANISOU 4643  C   ILE B 118     2952   2378   3415   -373    313   -921       C
ATOM   4644  O   ILE B 118     -15.023 -23.496 -52.201  1.00 21.79           O
ANISOU 4644  O   ILE B 118     2745   2297   3238   -492    540  -1010       O
ATOM   4645  CB  ILE B 118     -15.430 -21.007 -50.448  1.00 19.75           C
ANISOU 4645  CB  ILE B 118     2549   2379   2578   -589    505   -670       C
ATOM   4646  CG1 ILE B 118     -14.070 -20.324 -50.277  1.00 20.80           C
ANISOU 4646  CG1 ILE B 118     2427   2560   2915   -433    416   -847       C
ATOM   4647  CG2 ILE B 118     -16.475 -20.311 -49.599  1.00 19.08           C
ANISOU 4647  CG2 ILE B 118     2677   2399   2173   -727    526   -385       C
ATOM   4648  CD1 ILE B 118     -14.003 -18.917 -50.851  1.00 20.04           C
ANISOU 4648  CD1 ILE B 118     2117   2759   2740   -531    664   -919       C
ATOM   4649  H   ILE B 118     -14.529 -21.922 -48.362  1.00 25.45           H
ATOM   4650  HA  ILE B 118     -16.259 -22.854 -50.071  1.00 25.70           H
ATOM   4651  HB  ILE B 118     -15.694 -20.943 -51.379  1.00 23.70           H
ATOM   4652 HG12 ILE B 118     -13.867 -20.266 -49.331  1.00 24.96           H
ATOM   4653 HG13 ILE B 118     -13.395 -20.857 -50.725  1.00 24.96           H
ATOM   4654 HG21 ILE B 118     -16.514 -19.376 -49.852  1.00 22.89           H
ATOM   4655 HG22 ILE B 118     -17.335 -20.732 -49.751  1.00 22.89           H
ATOM   4656 HG23 ILE B 118     -16.227 -20.392 -48.665  1.00 22.89           H
ATOM   4657 HD11 ILE B 118     -13.114 -18.558 -50.702  1.00 24.05           H
ATOM   4658 HD12 ILE B 118     -14.190 -18.955 -51.802  1.00 24.05           H
ATOM   4659 HD13 ILE B 118     -14.663 -18.363 -50.405  1.00 24.05           H
ATOM   4660  N   ASP B 119     -13.341 -23.755 -50.726  1.00 25.06           N
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ANISOU 4660  N   ASP B 119     3110   2466   3947   -157     93  -1053       N
ATOM   4661  CA  ASP B 119     -12.507 -24.525 -51.644  1.00 27.21           C
ANISOU 4661  CA  ASP B 119     3203   2621   4516    -43    117  -1312       C
ATOM   4662  C   ASP B 119     -12.598 -26.033 -51.442  1.00 28.80           C
ANISOU 4662  C   ASP B 119     3591   2519   4832     42    -41  -1285       C
ATOM   4663  O   ASP B 119     -12.057 -26.780 -52.266  1.00 31.02           O
ANISOU 4663  O   ASP B 119     3754   2687   5344    117      4  -1490       O
ATOM   4664  CB  ASP B 119     -11.034 -24.105 -51.518  1.00 29.63           C
ANISOU 4664  CB  ASP B 119     3243   2932   5082    151     -3  -1502       C
ATOM   4665  CG  ASP B 119     -10.734 -22.807 -52.243  1.00 28.95           C
ANISOU 4665  CG  ASP B 119     2893   3131   4975     77    223  -1638       C
ATOM   4666  OD1 ASP B 119     -11.668 -22.239 -52.845  1.00 27.01           O
ANISOU 4666  OD1 ASP B 119     2670   3079   4514   -120    473  -1581       O
ATOM   4667  OD2 ASP B 119      -9.573 -22.344 -52.198  1.00 30.31           O
ANISOU 4667  OD2 ASP B 119     2835   3336   5345    215    151  -1797       O
ATOM   4668  H   ASP B 119     -12.986 -23.635 -49.952  1.00 30.08           H
ATOM   4669  HA  ASP B 119     -12.790 -24.334 -52.552  1.00 32.66           H
ATOM   4670  HB2 ASP B 119     -10.819 -23.982 -50.580  1.00 35.55           H
ATOM   4671  HB3 ASP B 119     -10.473 -24.798 -51.900  1.00 35.55           H
ATOM   4672  N   GLY B 120     -13.249 -26.503 -50.389  1.00 27.68           N
ANISOU 4672  N   GLY B 120     3735   2237   4544     36   -216  -1043       N
ATOM   4673  CA  GLY B 120     -13.377 -27.934 -50.193  1.00 29.70           C
ANISOU 4673  CA  GLY B 120     4179   2202   4904    113   -354  -1009       C
ATOM   4674  C   GLY B 120     -13.752 -28.276 -48.772  1.00 31.06           C
ANISOU 4674  C   GLY B 120     4628   2220   4954    163   -610   -747       C
ATOM   4675  O   GLY B 120     -13.813 -27.423 -47.886  1.00 29.97           O
ANISOU 4675  O   GLY B 120     4530   2192   4667    154   -702   -601       O
ATOM   4676  H   GLY B 120     -13.619 -26.021 -49.781  1.00 33.21           H
ATOM   4677  HA2 GLY B 120     -14.062 -28.283 -50.786  1.00 35.64           H
ATOM   4678  HA3 GLY B 120     -12.536 -28.368 -50.404  1.00 35.64           H
ATOM   4679  N   ASP B 121     -13.994 -29.571 -48.566  1.00 33.72           N
ANISOU 4679  N   ASP B 121     5159   2292   5360    218   -723   -693       N
ATOM   4680  CA  ASP B 121     -14.392 -30.079 -47.260  1.00 34.94           C
ANISOU 4680  CA  ASP B 121     5597   2269   5410    271   -964   -443       C
ATOM   4681  C   ASP B 121     -13.228 -30.172 -46.282  1.00 36.21           C
ANISOU 4681  C   ASP B 121     5699   2299   5760    513  -1263   -448       C
ATOM   4682  O   ASP B 121     -13.461 -30.197 -45.070  1.00 36.90           O
ANISOU 4682  O   ASP B 121     5983   2311   5726    553  -1469   -231       O
ATOM   4683  CB  ASP B 121     -15.035 -31.460 -47.416  1.00 36.84           C
ANISOU 4683  CB  ASP B 121     6063   2264   5670    247   -971   -390       C
ATOM   4684  H   ASP B 121     -13.933 -30.178 -49.173  1.00 40.46           H
ATOM   4685  HA  ASP B 121     -15.054 -29.481 -46.880  1.00 41.93           H
ATOM   4686  N   ARG B 122     -11.989 -30.216 -46.773  1.00 36.57           N
ANISOU 4686  N   ARG B 122     5477   2323   6097    674  -1291   -686       N
ATOM   4687  CA  ARG B 122     -10.817 -30.473 -45.933  1.00 39.01           C
ANISOU 4687  CA  ARG B 122     5714   2488   6622    920  -1579   -707       C
ATOM   4688  C   ARG B 122      -9.697 -29.554 -46.417  1.00 39.19           C
ANISOU 4688  C   ARG B 122     5390   2690   6811    995  -1529   -929       C
ATOM   4689  O   ARG B 122      -8.907 -29.931 -47.286  1.00 40.09           O
ANISOU 4689  O   ARG B 122     5294   2751   7187   1090  -1463  -1163       O
ATOM   4690  CB  ARG B 122     -10.423 -31.943 -46.008  1.00 42.20           C
ANISOU 4690  CB  ARG B 122     6184   2578   7270   1081  -1699   -763       C
ATOM   4691  CG  ARG B 122      -9.779 -32.478 -44.752  1.00 44.37           C
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ANISOU 4691 CG ARG B 122 6527 2726 7604 1264 -1995 -628 C
ATOM 4692 CD ARG B 122 -9.338 -33.921 -44.941 1.00 47.30 C
ANISOU 4692 CD ARG B 122 6905 2908 8159 1375 -2023 -678 C
ATOM 4693 NE ARG B 122 -8.318 -34.301 -43.969 1.00 49.94 N
ANISOU 4693 NE ARG B 122 7184 3183 8609 1564 -2269 -630 N
ATOM 4694 CZ ARG B 122 -7.008 -34.307 -44.207 1.00 51.89 C
ANISOU 4694 CZ ARG B 122 7172 3442 9103 1719 -2327 -803 C
ATOM 4695 NH1 ARG B 122 -6.532 -33.957 -45.398 1.00 51.20 N
ANISOU 4695 NH1 ARG B 122 6844 3437 9172 1709 -2149 -1041 N
ATOM 4696 NH2 ARG B 122 -6.165 -34.671 -43.248 1.00 54.21 N
ANISOU 4696 NH2 ARG B 122 7442 3683 9472 1869 -2551 -736 N
ATOM 4697 H ARG B 122 -11.798 -30.099 -47.603 1.00 43.89 H
ATOM 4698 HA ARG B 122 -11.022 -30.253 -45.010 1.00 46.82 H
ATOM 4699 HB2 ARG B 122 -11.219 -32.470 -46.179 1.00 50.63 H
ATOM 4700 HB3 ARG B 122 -9.791 -32.058 -46.735 1.00 50.63 H
ATOM 4701 HG2 ARG B 122 -8.998 -31.945 -44.538 1.00 53.24 H
ATOM 4702 HG3 ARG B 122 -10.419 -32.447 -44.024 1.00 53.24 H
ATOM 4703 HD2 ARG B 122 -10.103 -34.507 -44.824 1.00 56.76 H
ATOM 4704 HD3 ARG B 122 -8.966 -34.028 -45.830 1.00 56.76 H
ATOM 4705 HE ARG B 122 -8.582 -34.538 -43.185 1.00 59.93 H
ATOM 4706 HH11 ARG B 122 -7.072 -33.720 -46.024 1.00 61.44 H
ATOM 4707 HH12 ARG B 122 -5.684 -33.965 -45.542 1.00 61.44 H
ATOM 4708 HH21 ARG B 122 -6.466 -34.900 -42.475 1.00 65.05 H
ATOM 4709 HH22 ARG B 122 -5.318 -34.678 -43.399 1.00 65.05 H
ATOM 4710 N THR B 123 -9.636 -28.347 -45.851 1.00 37.50 N
ANISOU 4710 N THR B 123 5119 2685 6445 948 -1556 -856 N
ATOM 4711 CA THR B 123 -8.714 -27.321 -46.316 1.00 37.93 C
ANISOU 4711 CA THR B 123 4855 2943 6614 983 -1477 -1053 C
ATOM 4712 C THR B 123 -8.128 -26.569 -45.126 1.00 38.24 C
ANISOU 4712 C THR B 123 4867 3048 6612 1072 -1703 -957 C
ATOM 4713 O THR B 123 -8.628 -26.643 -43.999 1.00 37.29 O
ANISOU 4713 O THR B 123 4986 2866 6315 1062 -1876 -722 O
ATOM 4714 CB THR B 123 -9.413 -26.334 -47.265 1.00 35.44 C
ANISOU 4714 CB THR B 123 4451 2898 6117 759 -1149 -1108 C
ATOM 4715 OG1 THR B 123 -10.438 -25.631 -46.555 1.00 33.99 O
ANISOU 4715 OG1 THR B 123 4470 2841 5604 598 -1126 -866 O
ATOM 4716 CG2 THR B 123 -10.039 -27.068 -48.441 1.00 35.58 C
ANISOU 4716 CG2 THR B 123 4500 2864 6155 655 -924 -1198 C
ATOM 4717 H THR B 123 -10.125 -28.099 -45.188 1.00 45.00 H
ATOM 4718 HA THR B 123 -7.985 -27.741 -46.799 1.00 45.52 H
ATOM 4719 HB THR B 123 -8.763 -25.700 -47.608 1.00 42.53 H
ATOM 4720 HG1 THR B 123 -11.005 -26.175 -46.256 1.00 40.79 H
ATOM 4721 HG21 THR B 123 -10.476 -26.435 -49.032 1.00 42.70 H
ATOM 4722 HG22 THR B 123 -9.354 -27.542 -48.938 1.00 42.70 H
ATOM 4723 HG23 THR B 123 -10.695 -27.707 -48.122 1.00 42.70 H
ATOM 4724 N THR B 124 -7.053 -25.832 -45.393 1.00 39.43 N
ANISOU 4724 N THR B 124 4723 3331 6927 1156 -1697 -1146 N
ATOM 4725 CA THR B 124 -6.391 -25.000 -44.397 1.00 41.73 C
ANISOU 4725 CA THR B 124 4943 3718 7193 1230 -1887 -1096 C
ATOM 4726 C THR B 124 -6.463 -23.546 -44.843 1.00 39.52 C
ANISOU 4726 C THR B 124 4492 3740 6785 1081 -1664 -1171 C
ATOM 4727 O THR B 124 -6.153 -23.235 -45.997 1.00 38.35 O
ANISOU 4727 O THR B 124 4115 3702 6755 1049 -1443 -1384 O

ATOM 4728 CB THR B 124 -4.933 -25.428 -44.209 1.00 45.94 C
ANISOU 4728 CB THR B 124 5266 4132 8056 1480 -2107 -1251 C
ATOM 4729 OG1 THR B 124 -4.888 -26.789 -43.758 1.00 48.85 O
ANISOU 4729 OG1 THR B 124 5803 4214 8543 1623 -2311 -1166 O
ATOM 4730 CG2 THR B 124 -4.233 -24.539 -43.193 1.00 46.78 C
ANISOU 4730 CG2 THR B 124 5288 4355 8132 1546 -2302 -1207 C
ATOM 4731 H THR B 124 -6.679 -25.798 -46.167 1.00 47.32 H
ATOM 4732 HA THR B 124 -6.850 -25.085 -43.546 1.00 50.07 H
ATOM 4733 HB THR B 124 -4.464 -25.354 -45.055 1.00 55.12 H
ATOM 4734 HG1 THR B 124 -4.090 -27.030 -43.653 1.00 58.62 H
ATOM 4735 HG21 THR B 124 -3.311 -24.821 -43.085 1.00 56.14 H
ATOM 4736 HG22 THR B 124 -4.246 -23.617 -43.495 1.00 56.14 H
ATOM 4737 HG23 THR B 124 -4.683 -24.596 -42.336 1.00 56.14 H
ATOM 4738 N PHE B 125 -6.868 -22.657 -43.935 1.00 26.21 N
ANISOU 4738 N PHE B 125 3287 2360 4311 987 -17 -506 N
ATOM 4739 CA PHE B 125 -7.029 -21.256 -44.294 1.00 25.04 C
ANISOU 4739 CA PHE B 125 3073 2399 4043 880 31 -505 C
ATOM 4740 C PHE B 125 -6.780 -20.365 -43.084 1.00 23.85 C
ANISOU 4740 C PHE B 125 2893 2313 3856 910 -84 -392 C
ATOM 4741 O PHE B 125 -6.966 -20.774 -41.933 1.00 24.86 O
ANISOU 4741 O PHE B 125 3102 2359 3984 966 -196 -281 O
ATOM 4742 CB PHE B 125 -8.425 -20.983 -44.862 1.00 24.02 C
ANISOU 4742 CB PHE B 125 3048 2317 3763 723 102 -475 C
ATOM 4743 CG PHE B 125 -9.542 -21.511 -44.013 1.00 22.64 C
ANISOU 4743 CG PHE B 125 3022 2048 3531 693 40 -354 C
ATOM 4744 CD1 PHE B 125 -9.974 -22.820 -44.151 1.00 22.67 C
ANISOU 4744 CD1 PHE B 125 3130 1899 3586 701 56 -372 C
ATOM 4745 CD2 PHE B 125 -10.170 -20.698 -43.086 1.00 21.23 C
ANISOU 4745 CD2 PHE B 125 2882 1934 3249 647 -22 -231 C
ATOM 4746 CE1 PHE B 125 -11.003 -23.308 -43.376 1.00 22.48 C
ANISOU 4746 CE1 PHE B 125 3244 1791 3506 655 11 -260 C
ATOM 4747 CE2 PHE B 125 -11.205 -21.183 -42.306 1.00 20.95 C
ANISOU 4747 CE2 PHE B 125 2979 1826 3155 605 -61 -129 C
ATOM 4748 CZ PHE B 125 -11.617 -22.495 -42.454 1.00 21.69 C
ANISOU 4748 CZ PHE B 125 3176 1770 3296 604 -43 -138 C
ATOM 4749 H PHE B 125 -7.054 -22.840 -43.116 1.00 31.45 H
ATOM 4750 HA PHE B 125 -6.377 -21.027 -44.975 1.00 30.05 H
ATOM 4751 HB2 PHE B 125 -8.545 -20.024 -44.946 1.00 28.83 H
ATOM 4752 HB3 PHE B 125 -8.494 -21.400 -45.735 1.00 28.83 H
ATOM 4753 HD1 PHE B 125 -9.562 -23.377 -44.772 1.00 27.21 H
ATOM 4754 HD2 PHE B 125 -9.891 -19.816 -42.984 1.00 25.47 H
ATOM 4755 HE1 PHE B 125 -11.282 -24.190 -43.476 1.00 26.98 H
ATOM 4756 HE2 PHE B 125 -11.618 -20.631 -41.682 1.00 25.14 H
ATOM 4757 HZ PHE B 125 -12.312 -22.826 -41.932 1.00 26.03 H
ATOM 4758 N THR B 126 -6.353 -19.142 -43.365 1.00 22.02 N
ANISOU 4758 N THR B 126 2552 2227 3586 862 -52 -422 N
ATOM 4759 CA THR B 126 -6.190 -18.129 -42.335 1.00 19.99 C
ANISOU 4759 CA THR B 126 2266 2048 3282 863 -144 -336 C
ATOM 4760 C THR B 126 -7.538 -17.510 -41.993 1.00 18.67 C
ANISOU 4760 C THR B 126 2213 1919 2964 750 -144 -235 C
ATOM 4761 O THR B 126 -8.423 -17.382 -42.849 1.00 18.38 O
ANISOU 4761 O THR B 126 2224 1906 2853 648 -56 -250 O
ATOM 4762 CB THR B 126 -5.227 -17.042 -42.815 1.00 21.21 C

ANISOU 4762 CB THR B 126 2261 2333 3465 842 -100 -415 C
ATOM 4763 OG1 THR B 126 -3.949 -17.625 -43.084 1.00 24.20 O
ANISOU 4763 OG1 THR B 126 2510 2687 3998 952 -97 -523 O
ATOM 4764 CG2 THR B 126 -5.076 -15.927 -41.778 1.00 20.54 C
ANISOU 4764 CG2 THR B 126 2145 2327 3333 830 -191 -341 C
ATOM 4765 H THR B 126 -6.148 -18.871 -44.155 1.00 26.42 H
ATOM 4766 HA THR B 126 -5.824 -18.535 -41.534 1.00 23.99 H
ATOM 4767 HB THR B 126 -5.574 -16.648 -43.631 1.00 25.45 H
ATOM 4768 HG1 THR B 126 -3.413 -17.034 -43.348 1.00 29.04 H
ATOM 4769 HG21 THR B 126 -4.462 -15.251 -42.105 1.00 24.65 H
ATOM 4770 HG22 THR B 126 -5.938 -15.514 -41.608 1.00 24.65 H
ATOM 4771 HG23 THR B 126 -4.732 -16.291 -40.948 1.00 24.65 H
ATOM 4772 N GLN B 127 -7.687 -17.118 -40.729 1.00 16.20 N
ANISOU 4772 N GLN B 127 1936 1617 2604 767 -246 -138 N
ATOM 4773 CA GLN B 127 -8.883 -16.441 -40.248 1.00 15.77 C
ANISOU 4773 CA GLN B 127 1968 1607 2419 670 -248 -56 C
ATOM 4774 C GLN B 127 -8.501 -15.080 -39.682 1.00 14.33 C
ANISOU 4774 C GLN B 127 1709 1532 2205 651 -288 -46 C
ATOM 4775 O GLN B 127 -7.573 -14.984 -38.871 1.00 14.69 O
ANISOU 4775 O GLN B 127 1698 1588 2294 727 -379 -40 O
ATOM 4776 CB GLN B 127 -9.594 -17.261 -39.168 1.00 16.82 C
ANISOU 4776 CB GLN B 127 2237 1651 2503 685 -317 46 C
ATOM 4777 CG GLN B 127 -10.081 -18.628 -39.610 1.00 18.54 C
ANISOU 4777 CG GLN B 127 2550 1740 2754 689 -281 45 C
ATOM 4778 CD GLN B 127 -10.517 -19.504 -38.435 1.00 19.72 C
ANISOU 4778 CD GLN B 127 2836 1786 2871 712 -361 158 C
ATOM 4779 OE1 GLN B 127 -9.713 -19.831 -37.559 1.00 20.86 O
ANISOU 4779 OE1 GLN B 127 2983 1886 3057 811 -470 207 O
ATOM 4780 NE2 GLN B 127 -11.790 -19.891 -38.420 1.00 19.66 N
ANISOU 4780 NE2 GLN B 127 2941 1742 2785 614 -311 202 N
ATOM 4781 H GLN B 127 -7.093 -17.238 -40.119 1.00 19.44 H
ATOM 4782 HA GLN B 127 -9.497 -16.306 -40.987 1.00 18.93 H
ATOM 4783 HB2 GLN B 127 -8.981 -17.394 -38.429 1.00 20.18 H
ATOM 4784 HB3 GLN B 127 -10.368 -16.761 -38.862 1.00 20.18 H
ATOM 4785 HG2 GLN B 127 -10.841 -18.518 -40.201 1.00 22.25 H
ATOM 4786 HG3 GLN B 127 -9.362 -19.085 -40.074 1.00 22.25 H
ATOM 4787 HE21 GLN B 127 -12.321 -19.647 -39.051 1.00 23.59 H
ATOM 4788 HE22 GLN B 127 -12.082 -20.384 -37.779 1.00 23.59 H
ATOM 4789 N TYR B 128 -9.218 -14.041 -40.110 1.00 13.48 N
ANISOU 4789 N TYR B 128 1599 1498 2025 551 -228 -45 N
ATOM 4790 CA TYR B 128 -9.108 -12.691 -39.564 1.00 13.05 C
ANISOU 4790 CA TYR B 128 1496 1526 1937 516 -257 -34 C
ATOM 4791 C TYR B 128 -10.324 -12.417 -38.689 1.00 12.77 C
ANISOU 4791 C TYR B 128 1558 1494 1802 467 -281 37 C
ATOM 4792 O TYR B 128 -11.458 -12.675 -39.102 1.00 12.09 O
ANISOU 4792 O TYR B 128 1540 1387 1666 410 -228 59 O
ATOM 4793 CB TYR B 128 -9.044 -11.632 -40.669 1.00 11.98 C
ANISOU 4793 CB TYR B 128 1290 1457 1804 440 -175 -82 C
ATOM 4794 CG TYR B 128 -7.787 -11.612 -41.517 1.00 12.06 C
ANISOU 4794 CG TYR B 128 1186 1495 1900 460 -132 -165 C
ATOM 4795 CD1 TYR B 128 -6.695 -12.428 -41.231 1.00 13.17 C
ANISOU 4795 CD1 TYR B 128 1263 1606 2134 561 -174 -209 C
ATOM 4796 CD2 TYR B 128 -7.699 -10.760 -42.613 1.00 12.19 C

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ANISOU 4796  CD2 TYR B 128     1156   1569   1906    376    -47   -199      C
ATOM   4797  CE1 TYR B 128      -5.560 -12.386 -42.007  1.00 14.27          C
ANISOU 4797  CE1 TYR B 128     1279   1782   2361    576   -121   -302      C
ATOM   4798  CE2 TYR B 128      -6.574 -10.719 -43.389  1.00 14.06          C
ANISOU 4798  CE2 TYR B 128     1289   1844   2211    375     12   -281      C
ATOM   4799  CZ  TYR B 128      -5.508 -11.527 -43.087  1.00 14.32          C
ANISOU 4799  CZ  TYR B 128     1242   1856   2342    474    -19   -341      C
ATOM   4800  OH  TYR B 128      -4.389 -11.472 -43.877  1.00 16.46          O
ANISOU 4800  OH  TYR B 128     1389   2175   2689    470     53   -441      O
ATOM   4801  H   TYR B 128      -9.798 -14.099 -40.742  1.00 16.18          H
ATOM   4802  HA  TYR B 128      -8.309 -12.622 -39.019  1.00 15.66          H
ATOM   4803  HB2 TYR B 128      -9.793 -11.775 -41.269  1.00 14.37          H
ATOM   4804  HB3 TYR B 128      -9.127 -10.758 -40.256  1.00 14.37          H
ATOM   4805  HD1 TYR B 128      -6.731 -13.003 -40.501  1.00 15.80          H
ATOM   4806  HD2 TYR B 128      -8.417 -10.207 -42.820  1.00 14.63          H
ATOM   4807  HE1 TYR B 128      -4.835 -12.935 -41.809  1.00 17.12          H
ATOM   4808  HE2 TYR B 128      -6.530 -10.143 -44.117  1.00 16.88          H
ATOM   4809  HH  TYR B 128      -4.498 -10.909 -44.491  1.00 19.75          H
ATOM   4810  N   TRP B 129     -10.096 -11.871 -37.498  1.00 12.55          N
ANISOU 4810  N   TRP B 129     1527   1500   1743    483    -356     61      N
ATOM   4811  CA  TRP B 129     -11.174 -11.646 -36.548  1.00 12.64          C
ANISOU 4811  CA  TRP B 129     1624   1522   1654    437    -370    113      C
ATOM   4812  C   TRP B 129     -11.171 -10.217 -36.029  1.00 12.23          C
ANISOU 4812  C   TRP B 129     1523   1545   1578    398    -382     86      C
ATOM   4813  O   TRP B 129     -10.121  -9.676 -35.676  1.00 13.15          O
ANISOU 4813  O   TRP B 129     1565   1699   1733    429    -436     52      O
ATOM   4814  CB  TRP B 129     -11.059 -12.555 -35.321  1.00 13.90          C
ANISOU 4814  CB  TRP B 129     1869   1646   1768    484    -455    177      C
ATOM   4815  CG  TRP B 129     -10.980 -14.019 -35.562  1.00 14.96          C
ANISOU 4815  CG  TRP B 129     2068   1680   1936    534    -465    214      C
ATOM   4816  CD1 TRP B 129      -9.854 -14.749 -35.818  1.00 15.47          C
ANISOU 4816  CD1 TRP B 129     2087   1691   2099    630    -514    197      C
ATOM   4817  CD2 TRP B 129     -12.061 -14.953 -35.509  1.00 15.55          C
ANISOU 4817  CD2 TRP B 129     2262   1686   1958    490    -427    269      C
ATOM   4818  NE1 TRP B 129     -10.174 -16.081 -35.946  1.00 16.45          N
ANISOU 4818  NE1 TRP B 129     2305   1704   2242    656    -511    239      N
ATOM   4819  CE2 TRP B 129     -11.521 -16.230 -35.759  1.00 16.55          C
ANISOU 4819  CE2 TRP B 129     2424   1704   2158    563    -457    286      C
ATOM   4820  CE3 TRP B 129     -13.437 -14.834 -35.283  1.00 15.29          C
ANISOU 4820  CE3 TRP B 129     2303   1670   1836    394    -368    297      C
ATOM   4821  CZ2 TRP B 129     -12.308 -17.382 -35.790  1.00 17.70          C
ANISOU 4821  CZ2 TRP B 129     2690   1750   2286    534    -428    336      C
ATOM   4822  CZ3 TRP B 129     -14.215 -15.982 -35.319  1.00 16.36          C
ANISOU 4822  CZ3 TRP B 129     2545   1722   1949    359    -336    344      C
ATOM   4823  CH2 TRP B 129     -13.648 -17.235 -35.572  1.00 17.39          C
ANISOU 4823  CH2 TRP B 129     2722   1737   2150    424    -367    366      C
ATOM   4824  H   TRP B 129      -9.322 -11.622 -37.217  1.00 15.07          H
ATOM   4825  HA  TRP B 129     -12.026 -11.815 -36.978  1.00 15.16          H
ATOM   4826  HB2 TRP B 129     -10.259 -12.303 -34.834  1.00 16.69          H
ATOM   4827  HB3 TRP B 129     -11.835 -12.401 -34.759  1.00 16.69          H
ATOM   4828  HD1 TRP B 129      -8.997 -14.397 -35.895  1.00 18.56          H
ATOM   4829  HE1 TRP B 129      -9.618 -16.715 -36.115  1.00 19.74          H
ATOM   4830  HE3 TRP B 129     -13.821 -14.004 -35.113  1.00 18.35          H
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ATOM   4831  HZ2 TRP B 129    -11.936 -18.217 -35.965  1.00 21.24           H
ATOM   4832  HZ3 TRP B 129    -15.131 -15.917 -35.170  1.00 19.63           H
ATOM   4833  HH2 TRP B 129    -14.196 -17.986 -35.591  1.00 20.87           H
ATOM   4834  N   SER B 130    -12.359  -9.629 -35.964  1.00 11.61           N
ANISOU 4834  N   SER B 130    1481   1485   1446    331   -334     93       N
ATOM   4835  CA  SER B 130    -12.655  -8.525 -35.059  1.00 11.58           C
ANISOU 4835  CA  SER B 130    1469   1532   1400    298   -350     71       C
ATOM   4836  C   SER B 130    -13.719  -9.028 -34.098  1.00 11.39           C
ANISOU 4836  C   SER B 130    1542   1510   1275    268   -345    110       C
ATOM   4837  O   SER B 130    -14.821  -9.374 -34.527  1.00 11.79           O
ANISOU 4837  O   SER B 130    1632   1542   1308    228   -283    128       O
ATOM   4838  CB  SER B 130    -13.154  -7.284 -35.801  1.00 11.34           C
ANISOU 4838  CB  SER B 130    1384   1515   1409    249   -293     35       C
ATOM   4839  OG  SER B 130    -12.111  -6.623 -36.497  1.00 11.85           O
ANISOU 4839  OG  SER B 130    1364   1586   1552    256   -296      0       O
ATOM   4840  H   SER B 130    -13.030  -9.859 -36.450  1.00 13.93           H
ATOM   4841  HA  SER B 130    -11.861  -8.290 -34.553  1.00 13.90           H
ATOM   4842  HB2 SER B 130    -13.832  -7.555 -36.440  1.00 13.61           H
ATOM   4843  HB3 SER B 130    -13.538  -6.669 -35.157  1.00 13.61           H
ATOM   4844  HG  SER B 130    -11.516  -6.378 -35.957  1.00 14.22           H
ATOM   4845  N   VAL B 131    -13.394  -9.080 -32.809  1.00 11.69           N
ANISOU 4845  N   VAL B 131    1619   1581   1241    279   -409    121       N
ATOM   4846  CA  VAL B 131    -14.311  -9.590 -31.796  1.00 12.80           C
ANISOU 4846  CA  VAL B 131    1863   1735   1264    236   -399    161       C
ATOM   4847  C   VAL B 131    -14.618  -8.467 -30.817  1.00 13.13           C
ANISOU 4847  C   VAL B 131    1894   1853   1243    191   -395    102       C
ATOM   4848  O   VAL B 131    -13.709  -7.927 -30.179  1.00 15.46           O
ANISOU 4848  O   VAL B 131    2158   2190   1526    213   -466     70       O
ATOM   4849  CB  VAL B 131    -13.729 -10.806 -31.058  1.00 14.67           C
ANISOU 4849  CB  VAL B 131    2189   1941   1444    276   -482    241       C
ATOM   4850  CG1 VAL B 131    -14.721 -11.320 -30.012  1.00 15.96           C
ANISOU 4850  CG1 VAL B 131    2475   2120   1468    208   -459    293       C
ATOM   4851  CG2 VAL B 131    -13.341 -11.892 -32.050  1.00 14.31           C
ANISOU 4851  CG2 VAL B 131    2145   1804   1486    331   -484    278       C
ATOM   4852  H   VAL B 131    -12.637  -8.823 -32.493  1.00 14.03           H
ATOM   4853  HA  VAL B 131    -15.140  -9.859 -32.220  1.00 15.36           H
ATOM   4854  HB  VAL B 131    -12.925 -10.532 -30.592  1.00 17.60           H
ATOM   4855 HG11 VAL B 131    -14.334 -12.086 -29.560  1.00 19.15           H
ATOM   4856 HG12 VAL B 131    -14.898 -10.612 -29.372  1.00 19.15           H
ATOM   4857 HG13 VAL B 131    -15.543 -11.578 -30.457  1.00 19.15           H
ATOM   4858 HG21 VAL B 131    -12.977 -12.648 -31.564  1.00 17.17           H
ATOM   4859 HG22 VAL B 131    -14.130 -12.164 -32.545  1.00 17.17           H
ATOM   4860 HG23 VAL B 131    -12.674 -11.538 -32.660  1.00 17.17           H
ATOM   4861  N   ARG B 132    -15.898  -8.134 -30.687  1.00 13.47           N
ANISOU 4861  N   ARG B 132    1953   1915   1249    129   -311     76       N
ATOM   4862  CA  ARG B 132    -16.304  -7.059 -29.794  1.00 14.13           C
ANISOU 4862  CA  ARG B 132    2019   2065   1283     87   -288     -2       C
ATOM   4863  C   ARG B 132    -15.879  -7.378 -28.363  1.00 15.69           C
ANISOU 4863  C   ARG B 132    2299   2323   1341     70   -350     14       C
ATOM   4864  O   ARG B 132    -16.009  -8.512 -27.891  1.00 14.79           O
ANISOU 4864  O   ARG B 132    2286   2200   1133     56   -369     99       O
ATOM   4865  CB  ARG B 132    -17.815  -6.859 -29.876  1.00 13.65           C
ANISOU 4865  CB  ARG B 132    1957   2016   1213     29   -182    -35       C
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ATOM 4866 CG ARG B 132 -18.276 -5.433 -29.576 1.00 13.66 C
ANISOU 4866 CG ARG B 132 1886 2052 1250 11 -140 -146 C
ATOM 4867 CD ARG B 132 -19.745 -5.272 -29.884 1.00 13.08 C
ANISOU 4867 CD ARG B 132 1782 1981 1208 -25 -44 -180 C
ATOM 4868 NE ARG B 132 -20.256 -3.913 -29.694 1.00 13.80 N
ANISOU 4868 NE ARG B 132 1793 2084 1365 -26 -3 -292 N
ATOM 4869 CZ ARG B 132 -20.674 -3.405 -28.538 1.00 15.12 C
ANISOU 4869 CZ ARG B 132 1968 2315 1462 -67 42 -385 C
ATOM 4870 NH1 ARG B 132 -20.632 -4.121 -27.425 1.00 16.16 N
ANISOU 4870 NH1 ARG B 132 2192 2516 1433 -120 49 -368 N
ATOM 4871 NH2 ARG B 132 -21.131 -2.160 -28.491 1.00 15.48 N
ANISOU 4871 NH2 ARG B 132 1933 2351 1599 -55 80 -496 N
ATOM 4872 H ARG B 132 -16.547 -8.514 -31.104 1.00 16.16 H
ATOM 4873 HA ARG B 132 -15.872 -6.235 -30.065 1.00 16.95 H
ATOM 4874 HB2 ARG B 132 -18.111 -7.083 -30.772 1.00 16.38 H
ATOM 4875 HB3 ARG B 132 -18.242 -7.448 -29.234 1.00 16.38 H
ATOM 4876 HG2 ARG B 132 -18.137 -5.239 -28.636 1.00 16.39 H
ATOM 4877 HG3 ARG B 132 -17.777 -4.810 -30.128 1.00 16.39 H
ATOM 4878 HD2 ARG B 132 -19.897 -5.518 -30.811 1.00 15.70 H
ATOM 4879 HD3 ARG B 132 -20.251 -5.861 -29.303 1.00 15.70 H
ATOM 4880 HE ARG B 132 -20.287 -3.402 -30.385 1.00 16.56 H
ATOM 4881 HH11 ARG B 132 -20.341 -4.930 -27.445 1.00 19.40 H
ATOM 4882 HH12 ARG B 132 -20.903 -3.779 -26.684 1.00 19.40 H
ATOM 4883 HH21 ARG B 132 -21.157 -1.684 -29.207 1.00 18.58 H
ATOM 4884 HH22 ARG B 132 -21.394 -1.826 -27.743 1.00 18.58 H
ATOM 4885 N GLN B 133 -15.356 -6.365 -27.673 1.00 15.82 N
ANISOU 4885 N GLN B 133 2277 2396 1337 64 -387 -65 N
ATOM 4886 CA GLN B 133 -14.805 -6.592 -26.342 1.00 17.19 C
ANISOU 4886 CA GLN B 133 2524 2641 1367 47 -467 -53 C
ATOM 4887 C GLN B 133 -15.882 -6.944 -25.326 1.00 18.40 C
ANISOU 4887 C GLN B 133 2782 2852 1357 -38 -401 -46 C
ATOM 4888 O GLN B 133 -15.579 -7.573 -24.305 1.00 18.59 O
ANISOU 4888 O GLN B 133 2910 2924 1230 -62 -467 14 O
ATOM 4889 CB GLN B 133 -14.030 -5.356 -25.886 1.00 18.43 C
ANISOU 4889 CB GLN B 133 2609 2851 1544 47 -517 -161 C
ATOM 4890 CG GLN B 133 -12.755 -5.129 -26.675 1.00 17.59 C
ANISOU 4890 CG GLN B 133 2406 2705 1573 116 -594 -161 C
ATOM 4891 CD GLN B 133 -11.939 -3.969 -26.162 1.00 17.87 C
ANISOU 4891 CD GLN B 133 2370 2793 1626 101 -648 -269 C
ATOM 4892 OE1 GLN B 133 -12.467 -3.037 -25.555 1.00 18.59 O
ANISOU 4892 OE1 GLN B 133 2462 2923 1678 44 -599 -368 O
ATOM 4893 NE2 GLN B 133 -10.632 -4.029 -26.384 1.00 18.18 N
ANISOU 4893 NE2 GLN B 133 2343 2834 1731 150 -748 -261 N
ATOM 4894 H GLN B 133 -15.308 -5.551 -27.948 1.00 18.98 H
ATOM 4895 HA GLN B 133 -14.182 -7.334 -26.384 1.00 20.63 H
ATOM 4896 HB2 GLN B 133 -14.592 -4.573 -25.994 1.00 22.12 H
ATOM 4897 HB3 GLN B 133 -13.788 -5.463 -24.952 1.00 22.12 H
ATOM 4898 HG2 GLN B 133 -12.206 -5.927 -26.622 1.00 21.11 H
ATOM 4899 HG3 GLN B 133 -12.986 -4.946 -27.599 1.00 21.11 H
ATOM 4900 HE21 GLN B 133 -10.297 -4.703 -26.799 1.00 21.82 H
ATOM 4901 HE22 GLN B 133 -10.120 -3.393 -26.112 1.00 21.82 H
ATOM 4902 N SER B 134 -17.121 -6.534 -25.573 1.00 19.44 N
ANISOU 4902 N SER B 134 2885 2985 1514 -86 -275 -107 N

ATOM 4903 CA SER B 134 -18.269 -6.979 -24.806 1.00 20.78 C
ANISOU 4903 CA SER B 134 3137 3207 1549 -176 -184 -103 C
ATOM 4904 C SER B 134 -19.396 -7.256 -25.787 1.00 17.89 C
ANISOU 4904 C SER B 134 2728 2787 1281 -188 -81 -96 C
ATOM 4905 O SER B 134 -19.471 -6.641 -26.856 1.00 16.16 O
ANISOU 4905 O SER B 134 2404 2516 1219 -138 -66 -136 O
ATOM 4906 CB SER B 134 -18.703 -5.931 -23.768 1.00 24.84 C
ANISOU 4906 CB SER B 134 3637 3821 1979 -240 -125 -240 C
ATOM 4907 OG SER B 134 -19.112 -4.746 -24.427 1.00 26.00 O
ANISOU 4907 OG SER B 134 3656 3939 2283 -213 -64 -358 O
ATOM 4908 H SER B 134 -17.324 -5.982 -26.200 1.00 23.32 H
ATOM 4909 HA SER B 134 -18.052 -7.803 -24.342 1.00 24.93 H
ATOM 4910 HB2 SER B 134 -19.445 -6.281 -23.251 1.00 29.81 H
ATOM 4911 HB3 SER B 134 -17.954 -5.730 -23.185 1.00 29.81 H
ATOM 4912 HG SER B 134 -19.350 -4.170 -23.863 1.00 31.20 H
ATOM 4913 N LYS B 135 -20.270 -8.189 -25.423 1.00 16.15 N
ANISOU 4913 N LYS B 135 2593 2581 962 -263 -14 -40 N
ATOM 4914 CA LYS B 135 -21.340 -8.592 -26.327 1.00 15.53 C
ANISOU 4914 CA LYS B 135 2474 2458 970 -285 75 -31 C
ATOM 4915 C LYS B 135 -22.213 -7.399 -26.701 1.00 15.36 C
ANISOU 4915 C LYS B 135 2318 2464 1055 -283 159 -164 C
ATOM 4916 O LYS B 135 -22.598 -6.603 -25.841 1.00 16.29 O
ANISOU 4916 O LYS B 135 2413 2658 1121 -322 214 -270 O
ATOM 4917 CB LYS B 135 -22.188 -9.685 -25.675 1.00 16.62 C
ANISOU 4917 CB LYS B 135 2723 2620 971 -391 147 32 C
ATOM 4918 CG LYS B 135 -21.487 -11.020 -25.584 1.00 17.63 C
ANISOU 4918 CG LYS B 135 2987 2679 1034 -382 63 184 C
ATOM 4919 CD LYS B 135 -22.352 -12.047 -24.882 1.00 18.45 C
ANISOU 4919 CD LYS B 135 3216 2797 998 -506 141 253 C
ATOM 4920 CE LYS B 135 -21.609 -13.354 -24.677 1.00 19.70 C
ANISOU 4920 CE LYS B 135 3494 2858 1133 -473 43 405 C
ATOM 4921 NZ LYS B 135 -22.493 -14.352 -24.027 1.00 20.09 N
ANISOU 4921 NZ LYS B 135 3619 2893 1122 -572 119 459 N
ATOM 4922 H LYS B 135 -20.265 -8.599 -24.667 1.00 19.38 H
ATOM 4923 HA LYS B 135 -20.953 -8.952 -27.140 1.00 18.64 H
ATOM 4924 HB2 LYS B 135 -22.417 -9.408 -24.774 1.00 19.94 H
ATOM 4925 HB3 LYS B 135 -22.996 -9.808 -26.197 1.00 19.94 H
ATOM 4926 HG2 LYS B 135 -21.296 -11.343 -26.479 1.00 21.16 H
ATOM 4927 HG3 LYS B 135 -20.665 -10.918 -25.080 1.00 21.16 H
ATOM 4928 HD2 LYS B 135 -22.611 -11.705 -24.012 1.00 22.14 H
ATOM 4929 HD3 LYS B 135 -23.138 -12.226 -25.421 1.00 22.14 H
ATOM 4930 HE2 LYS B 135 -21.329 -13.705 -25.536 1.00 23.64 H
ATOM 4931 HE3 LYS B 135 -20.841 -13.203 -24.104 1.00 23.64 H
ATOM 4932 HZ1 LYS B 135 -22.764 -14.048 -23.235 1.00 24.11 H
ATOM 4933 HZ2 LYS B 135 -23.206 -14.504 -24.537 1.00 24.11 H
ATOM 4934 HZ3 LYS B 135 -22.053 -15.116 -23.908 1.00 24.11 H
ATOM 4935 N ARG B 136 -22.532 -7.283 -27.981 1.00 15.40 N
ANISOU 4935 N ARG B 136 2237 2406 1210 -238 165 -161 N
ATOM 4936 CA ARG B 136 -23.355 -6.170 -28.444 1.00 14.63 C
ANISOU 4936 CA ARG B 136 2010 2316 1234 -220 222 -269 C
ATOM 4937 C ARG B 136 -24.815 -6.436 -28.101 1.00 14.71 C
ANISOU 4937 C ARG B 136 1994 2382 1211 -302 341 -320 C
ATOM 4938 O ARG B 136 -25.295 -7.546 -28.330 1.00 15.48 O

ANISOU 4938 O ARG B 136 2142 2472 1270 -355 370 -249 O
ATOM 4939 CB ARG B 136 -23.217 -5.991 -29.956 1.00 14.16 C
ANISOU 4939 CB ARG B 136 1877 2176 1327 -152 177 -233 C
ATOM 4940 CG ARG B 136 -23.796 -4.689 -30.495 1.00 14.59 C
ANISOU 4940 CG ARG B 136 1806 2216 1522 -110 196 -323 C
ATOM 4941 CD ARG B 136 -23.490 -4.544 -31.989 1.00 14.33 C
ANISOU 4941 CD ARG B 136 1728 2109 1608 -52 135 -263 C
ATOM 4942 NE ARG B 136 -23.826 -3.216 -32.503 1.00 14.12 N
ANISOU 4942 NE ARG B 136 1600 2047 1717 -3 126 -325 N
ATOM 4943 CZ ARG B 136 -23.467 -2.766 -33.700 1.00 14.15 C
ANISOU 4943 CZ ARG B 136 1570 1988 1819 44 69 -278 C
ATOM 4944 NH1 ARG B 136 -22.759 -3.535 -34.516 1.00 14.39 N
ANISOU 4944 NH1 ARG B 136 1647 1994 1824 45 28 -187 N
ATOM 4945 NH2 ARG B 136 -23.821 -1.542 -34.083 1.00 14.81 N
ANISOU 4945 NH2 ARG B 136 1575 2028 2025 87 55 -323 N
ATOM 4946 H ARG B 136 -22.289 -7.828 -28.599 1.00 18.48 H
ATOM 4947 HA ARG B 136 -23.076 -5.351 -28.006 1.00 17.56 H
ATOM 4948 HB2 ARG B 136 -22.275 -6.011 -30.185 1.00 16.99 H
ATOM 4949 HB3 ARG B 136 -23.677 -6.722 -30.398 1.00 16.99 H
ATOM 4950 HG2 ARG B 136 -24.758 -4.690 -30.377 1.00 17.51 H
ATOM 4951 HG3 ARG B 136 -23.397 -3.940 -30.026 1.00 17.51 H
ATOM 4952 HD2 ARG B 136 -22.543 -4.692 -32.134 1.00 17.20 H
ATOM 4953 HD3 ARG B 136 -24.009 -5.198 -32.483 1.00 17.20 H
ATOM 4954 HE ARG B 136 -24.286 -2.694 -31.998 1.00 16.94 H
ATOM 4955 HH11 ARG B 136 -22.530 -4.326 -34.270 1.00 17.26 H
ATOM 4956 HH12 ARG B 136 -22.528 -3.241 -35.290 1.00 17.26 H
ATOM 4957 HH21 ARG B 136 -24.280 -1.042 -33.556 1.00 17.77 H
ATOM 4958 HH22 ARG B 136 -23.588 -1.251 -34.858 1.00 17.77 H
ATOM 4959 N PRO B 137 -25.552 -5.453 -27.573 1.00 16.47 N
ANISOU 4959 N PRO B 137 2134 2660 1462 -315 415 -453 N
ATOM 4960 CA PRO B 137 -26.993 -5.646 -27.370 1.00 17.33 C
ANISOU 4960 CA PRO B 137 2184 2830 1572 -388 536 -521 C
ATOM 4961 C PRO B 137 -27.670 -6.038 -28.673 1.00 16.49 C
ANISOU 4961 C PRO B 137 2002 2674 1590 -366 528 -477 C
ATOM 4962 O PRO B 137 -27.296 -5.569 -29.748 1.00 15.61 O
ANISOU 4962 O PRO B 137 1835 2490 1605 -279 448 -449 O
ATOM 4963 CB PRO B 137 -27.474 -4.274 -26.880 1.00 19.39 C
ANISOU 4963 CB PRO B 137 2333 3130 1905 -362 594 -688 C
ATOM 4964 CG PRO B 137 -26.255 -3.614 -26.324 1.00 19.90 C
ANISOU 4964 CG PRO B 137 2454 3182 1924 -323 522 -705 C
ATOM 4965 CD PRO B 137 -25.115 -4.105 -27.170 1.00 18.08 C
ANISOU 4965 CD PRO B 137 2284 2870 1717 -266 397 -562 C
ATOM 4966 HA PRO B 137 -27.162 -6.318 -26.691 1.00 20.80 H
ATOM 4967 HB2 PRO B 137 -27.829 -3.767 -27.627 1.00 23.27 H
ATOM 4968 HB3 PRO B 137 -28.146 -4.390 -26.191 1.00 23.27 H
ATOM 4969 HG2 PRO B 137 -26.344 -2.651 -26.396 1.00 23.88 H
ATOM 4970 HG3 PRO B 137 -26.134 -3.879 -25.399 1.00 23.88 H
ATOM 4971 HD2 PRO B 137 -25.002 -3.539 -27.949 1.00 21.70 H
ATOM 4972 HD3 PRO B 137 -24.301 -4.156 -26.645 1.00 21.70 H
ATOM 4973 N THR B 138 -28.673 -6.903 -28.574 1.00 16.95 N
ANISOU 4973 N THR B 138 2061 2775 1605 -458 613 -471 N
ATOM 4974 CA THR B 138 -29.435 -7.317 -29.740 1.00 17.55 C
ANISOU 4974 CA THR B 138 2058 2821 1787 -456 608 -445 C

ATOM 4975 C THR B 138 -30.885 -6.887 -29.585 1.00 18.96 C
ANISOU 4975 C THR B 138 2089 3075 2039 -495 711 -572 C
ATOM 4976 O THR B 138 -31.356 -6.588 -28.484 1.00 20.85 O
ANISOU 4976 O THR B 138 2311 3395 2215 -552 814 -672 O
ATOM 4977 CB THR B 138 -29.364 -8.832 -29.953 1.00 17.32 C
ANISOU 4977 CB THR B 138 2146 2764 1672 -534 609 -328 C
ATOM 4978 OG1 THR B 138 -29.885 -9.508 -28.802 1.00 19.84 O
ANISOU 4978 OG1 THR B 138 2539 3150 1849 -661 715 -337 O
ATOM 4979 CG2 THR B 138 -27.929 -9.265 -30.189 1.00 15.30 C
ANISOU 4979 CG2 THR B 138 2013 2427 1374 -477 501 -214 C
ATOM 4980 H THR B 138 -28.932 -7.266 -27.838 1.00 20.34 H
ATOM 4981 HA THR B 138 -29.073 -6.883 -30.528 1.00 21.05 H
ATOM 4982 HB THR B 138 -29.888 -9.073 -30.733 1.00 20.79 H
ATOM 4983 HG1 THR B 138 -29.435 -9.306 -28.122 1.00 23.81 H
ATOM 4984 HG21 THR B 138 -27.890 -10.224 -30.324 1.00 18.36 H
ATOM 4985 HG22 THR B 138 -27.575 -8.821 -30.976 1.00 18.36 H
ATOM 4986 HG23 THR B 138 -27.382 -9.031 -29.423 1.00 18.36 H
ATOM 4987 N GLY B 139 -31.589 -6.863 -30.713 1.00 18.43 N
ANISOU 4987 N GLY B 139 1910 2989 2105 -464 682 -575 N
ATOM 4988 CA GLY B 139 -32.999 -6.534 -30.751 1.00 19.87 C
ANISOU 4988 CA GLY B 139 1926 3240 2384 -488 760 -691 C
ATOM 4989 C GLY B 139 -33.307 -5.186 -31.358 1.00 19.69 C
ANISOU 4989 C GLY B 139 1746 3188 2546 -362 700 -768 C
ATOM 4990 O GLY B 139 -34.480 -4.905 -31.638 1.00 21.35 O
ANISOU 4990 O GLY B 139 1797 3443 2874 -356 734 -856 O
ATOM 4991 H GLY B 139 -31.258 -7.039 -31.487 1.00 22.12 H
ATOM 4992 HA2 GLY B 139 -33.468 -7.210 -31.266 1.00 23.84 H
ATOM 4993 HA3 GLY B 139 -33.352 -6.544 -29.848 1.00 23.84 H
ATOM 4994 N SER B 140 -32.308 -4.337 -31.545 1.00 18.61 N
ANISOU 4994 N SER B 140 1648 2975 2446 -262 613 -741 N
ATOM 4995 CA SER B 140 -32.474 -3.053 -32.208 1.00 20.55 C
ANISOU 4995 CA SER B 140 1773 3163 2872 -139 539 -786 C
ATOM 4996 C SER B 140 -31.639 -3.043 -33.481 1.00 19.69 C
ANISOU 4996 C SER B 140 1719 2963 2798 -76 402 -650 C
ATOM 4997 O SER B 140 -30.787 -3.908 -33.703 1.00 19.49 O
ANISOU 4997 O SER B 140 1823 2920 2663 -115 373 -545 O
ATOM 4998 CB SER B 140 -32.065 -1.896 -31.289 1.00 21.20 C
ANISOU 4998 CB SER B 140 1847 3228 2981 -88 568 -890 C
ATOM 4999 OG SER B 140 -32.908 -1.832 -30.159 1.00 23.35 O
ANISOU 4999 OG SER B 140 2055 3594 3222 -149 706 -1036 O
ATOM 5000 H SER B 140 -31.501 -4.487 -31.289 1.00 22.33 H
ATOM 5001 HA SER B 140 -33.405 -2.935 -32.452 1.00 24.66 H
ATOM 5002 HB2 SER B 140 -31.151 -2.034 -30.995 1.00 25.44 H
ATOM 5003 HB3 SER B 140 -32.133 -1.063 -31.781 1.00 25.44 H
ATOM 5004 HG SER B 140 -32.676 -1.196 -29.662 1.00 28.02 H
ATOM 5005 N ASN B 141 -31.894 -2.057 -34.334 1.00 19.00 N
ANISOU 5005 N ASN B 141 1534 2817 2867 22 319 -654 N
ATOM 5006 CA ASN B 141 -31.125 -1.941 -35.561 1.00 17.14 C
ANISOU 5006 CA ASN B 141 1353 2503 2656 71 197 -528 C
ATOM 5007 C ASN B 141 -29.665 -1.669 -35.234 1.00 16.87 C
ANISOU 5007 C ASN B 141 1442 2412 2555 85 174 -483 C
ATOM 5008 O ASN B 141 -29.347 -0.812 -34.400 1.00 16.84 O
ANISOU 5008 O ASN B 141 1433 2387 2578 115 202 -561 O

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ATOM   5009  CB  ASN B 141    -31.695  -0.833 -36.441  1.00 16.72           C
ANISOU 5009  CB  ASN B 141    1183   2392   2778    170    107   -532      C
ATOM   5010  CG  ASN B 141    -33.042  -1.190 -37.031  1.00 18.10           C
ANISOU 5010  CG  ASN B 141    1230   2626   3020    162     92   -554      C
ATOM   5011  OD1 ASN B 141    -33.578  -2.279 -36.799  1.00 16.91           O
ANISOU 5011  OD1 ASN B 141    1075   2562   2789     71    161   -573      O
ATOM   5012  ND2 ASN B 141    -33.611  -0.259 -37.792  1.00 18.74           N
ANISOU 5012  ND2 ASN B 141    1203   2660   3258    257     -4   -550      N
ATOM   5013  H   ASN B 141    -32.497  -1.453 -34.226  1.00 22.80           H
ATOM   5014  HA  ASN B 141    -31.177  -2.776 -36.052  1.00 20.57           H
ATOM   5015  HB2 ASN B 141    -31.804  -0.030 -35.907  1.00 20.07           H
ATOM   5016  HB3 ASN B 141    -31.082  -0.664 -37.173  1.00 20.07           H
ATOM   5017 HD21 ASN B 141    -34.377  -0.408 -38.153  1.00 22.49           H
ATOM   5018 HD22 ASN B 141    -33.212   0.492 -37.922  1.00 22.49           H
ATOM   5019  N   ALA B 142    -28.778  -2.417 -35.886  1.00 14.50           N
ANISOU 5019  N   ALA B 142    1245   2092   2173     60    127   -371      N
ATOM   5020  CA  ALA B 142    -27.344  -2.314 -35.687  1.00 14.47           C
ANISOU 5020  CA  ALA B 142    1344   2044   2108     69    100   -325      C
ATOM   5021  C   ALA B 142    -26.643  -2.234 -37.035  1.00 14.55           C
ANISOU 5021  C   ALA B 142    1385   1997   2146     97     13   -221      C
ATOM   5022  O   ALA B 142    -27.162  -2.702 -38.053  1.00 13.99           O
ANISOU 5022  O   ALA B 142    1295   1937   2085     85    -20   -169      O
ATOM   5023  CB  ALA B 142    -26.810  -3.516 -34.887  1.00 14.74           C
ANISOU 5023  CB  ALA B 142    1484   2124   1992      0    150   -303      C
ATOM   5024  H   ALA B 142    -28.996  -3.011 -36.469  1.00 17.40           H
ATOM   5025  HA  ALA B 142    -27.146  -1.505 -35.191  1.00 17.36           H
ATOM   5026  HB1 ALA B 142    -25.852  -3.417 -34.771  1.00 17.69           H
ATOM   5027  HB2 ALA B 142    -27.248  -3.538 -34.022  1.00 17.69           H
ATOM   5028  HB3 ALA B 142    -27.002  -4.331 -35.376  1.00 17.69           H
ATOM   5029  N   THR B 143    -25.460  -1.628 -37.032  1.00 14.50           N
ANISOU 5029  N   THR B 143    1425   1937   2146    124    -21   -197      N
ATOM   5030  CA  THR B 143    -24.664  -1.453 -38.238  1.00 14.24           C
ANISOU 5030  CA  THR B 143    1425   1854   2130    137    -88   -107      C
ATOM   5031  C   THR B 143    -23.253  -1.972 -38.005  1.00 11.88           C
ANISOU 5031  C   THR B 143    1210   1555   1751    116    -84    -77      C
ATOM   5032  O   THR B 143    -22.684  -1.802 -36.919  1.00 11.66           O
ANISOU 5032  O   THR B 143    1202   1534   1694    117    -63   -127      O
ATOM   5033  CB  THR B 143    -24.617   0.028 -38.661  1.00 15.92           C
ANISOU 5033  CB  THR B 143    1594   1988   2468    190   -139   -105      C
ATOM   5034  OG1 THR B 143    -25.940   0.477 -38.975  1.00 17.72           O
ANISOU 5034  OG1 THR B 143    1734   2210   2789    225   -161   -125      O
ATOM   5035  CG2 THR B 143    -23.728   0.231 -39.896  1.00 16.47           C
ANISOU 5035  CG2 THR B 143    1710   2012   2535    182   -196     -3      C
ATOM   5036  H   THR B 143    -25.091  -1.303 -36.327  1.00 17.40           H
ATOM   5037  HA  THR B 143    -25.061  -1.964 -38.961  1.00 17.09           H
ATOM   5038  HB  THR B 143    -24.259   0.561 -37.933  1.00 19.11           H
ATOM   5039  HG1 THR B 143    -26.256   0.020 -39.605  1.00 21.27           H
ATOM   5040 HG21 THR B 143    -23.713   1.168 -40.143  1.00 19.76           H
ATOM   5041 HG22 THR B 143    -22.823  -0.059 -39.703  1.00 19.76           H
ATOM   5042 HG23 THR B 143    -24.073  -0.287 -40.640  1.00 19.76           H
ATOM   5043  N   ILE B 144    -22.704  -2.632 -39.020  1.00 11.03           N
ANISOU 5043  N   ILE B 144    1142   1444   1603     98   -107     -4      N
ATOM   5044  CA  ILE B 144    -21.282  -2.955 -39.086  1.00 11.29           C
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ANISOU 5044 CA ILE B 144 1229 1467 1594 93 -114 24 C
ATOM 5045 C ILE B 144 -20.719 -2.212 -40.286 1.00 10.91 C
ANISOU 5045 C ILE B 144 1173 1377 1594 94 -151 76 C
ATOM 5046 O ILE B 144 -21.076 -2.503 -41.435 1.00 11.29 O
ANISOU 5046 O ILE B 144 1227 1433 1629 75 -167 128 O
ATOM 5047 CB ILE B 144 -21.024 -4.465 -39.192 1.00 12.04 C
ANISOU 5047 CB ILE B 144 1380 1590 1604 67 -94 50 C
ATOM 5048 CG1 ILE B 144 -21.433 -5.152 -37.883 1.00 13.04 C
ANISOU 5048 CG1 ILE B 144 1535 1748 1671 53 -58 14 C
ATOM 5049 CG2 ILE B 144 -19.547 -4.741 -39.483 1.00 10.76 C
ANISOU 5049 CG2 ILE B 144 1249 1414 1426 75 -107 72 C
ATOM 5050 CD1 ILE B 144 -21.419 -6.685 -37.949 1.00 13.41 C
ANISOU 5050 CD1 ILE B 144 1647 1802 1647 24 -39 47 C
ATOM 5051 H ILE B 144 -23.148 -2.911 -39.701 1.00 13.23 H
ATOM 5052 HA ILE B 144 -20.841 -2.626 -38.288 1.00 13.55 H
ATOM 5053 HB ILE B 144 -21.560 -4.825 -39.916 1.00 14.45 H
ATOM 5054 HG12 ILE B 144 -20.818 -4.880 -37.184 1.00 15.65 H
ATOM 5055 HG13 ILE B 144 -22.334 -4.874 -37.654 1.00 15.65 H
ATOM 5056 HG21 ILE B 144 -19.412 -5.699 -39.545 1.00 12.91 H
ATOM 5057 HG22 ILE B 144 -19.307 -4.317 -40.322 1.00 12.91 H
ATOM 5058 HG23 ILE B 144 -19.010 -4.376 -38.762 1.00 12.91 H
ATOM 5059 HD11 ILE B 144 -21.688 -7.040 -37.087 1.00 16.09 H
ATOM 5060 HD12 ILE B 144 -22.039 -6.977 -38.635 1.00 16.09 H
ATOM 5061 HD13 ILE B 144 -20.522 -6.983 -38.165 1.00 16.09 H
ATOM 5062 N THR B 145 -19.859 -1.238 -40.013 1.00 11.76 N
ANISOU 5062 N THR B 145 1273 1446 1750 105 -164 61 N
ATOM 5063 CA THR B 145 -19.228 -0.413 -41.034 1.00 12.54 C
ANISOU 5063 CA THR B 145 1372 1498 1893 90 -189 113 C
ATOM 5064 C THR B 145 -17.936 -1.129 -41.386 1.00 10.53 C
ANISOU 5064 C THR B 145 1144 1272 1584 64 -170 127 C
ATOM 5065 O THR B 145 -16.912 -0.977 -40.719 1.00 10.93 O
ANISOU 5065 O THR B 145 1187 1323 1643 66 -165 88 O
ATOM 5066 CB THR B 145 -18.983 0.997 -40.519 1.00 13.52 C
ANISOU 5066 CB THR B 145 1470 1555 2110 105 -205 79 C
ATOM 5067 OG1 THR B 145 -20.227 1.583 -40.101 1.00 14.59 O
ANISOU 5067 OG1 THR B 145 1569 1664 2312 144 -216 44 O
ATOM 5068 CG2 THR B 145 -18.339 1.863 -41.604 1.00 14.20 C
ANISOU 5068 CG2 THR B 145 1571 1582 2241 73 -227 147 C
ATOM 5069 H THR B 145 -19.617 -1.030 -39.214 1.00 14.11 H
ATOM 5070 HA THR B 145 -19.791 -0.370 -41.823 1.00 15.04 H
ATOM 5071 HB THR B 145 -18.378 0.960 -39.762 1.00 16.22 H
ATOM 5072 HG1 THR B 145 -20.570 1.122 -39.488 1.00 17.51 H
ATOM 5073 HG21 THR B 145 -18.187 2.759 -41.267 1.00 17.03 H
ATOM 5074 HG22 THR B 145 -17.489 1.479 -41.873 1.00 17.03 H
ATOM 5075 HG23 THR B 145 -18.922 1.912 -42.378 1.00 17.03 H
ATOM 5076 N PHE B 146 -17.999 -1.969 -42.417 1.00 10.53 N
ANISOU 5076 N PHE B 146 1170 1302 1529 39 -160 170 N
ATOM 5077 CA PHE B 146 -16.917 -2.927 -42.620 1.00 10.41 C
ANISOU 5077 CA PHE B 146 1171 1318 1467 27 -130 160 C
ATOM 5078 C PHE B 146 -15.620 -2.240 -43.033 1.00 11.30 C
ANISOU 5078 C PHE B 146 1265 1419 1611 1 -120 162 C
ATOM 5079 O PHE B 146 -14.536 -2.778 -42.788 1.00 11.96 O
ANISOU 5079 O PHE B 146 1331 1523 1688 8 -101 126 O

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ATOM   5080  CB  PHE B 146    -17.334  -3.974 -43.651  1.00 10.64           C
ANISOU 5080  CB  PHE B 146     1232   1379   1433     1   -113    186       C
ATOM   5081  CG  PHE B 146    -16.371  -5.123 -43.792  1.00 10.35           C
ANISOU 5081  CG  PHE B 146     1209   1362   1362     3    -77    157       C
ATOM   5082  CD1 PHE B 146    -15.863  -5.770 -42.674  1.00 11.02           C
ANISOU 5082  CD1 PHE B 146     1293   1441   1453    47    -80    119       C
ATOM   5083  CD2 PHE B 146    -15.999  -5.576 -45.047  1.00 11.62           C
ANISOU 5083  CD2 PHE B 146     1384   1545   1484   -37    -45    165       C
ATOM   5084  CE1 PHE B 146    -14.996  -6.843 -42.806  1.00 12.12           C
ANISOU 5084  CE1 PHE B 146     1440   1583   1583    66    -59     94       C
ATOM   5085  CE2 PHE B 146    -15.132  -6.644 -45.187  1.00 11.74           C
ANISOU 5085  CE2 PHE B 146     1402   1571   1488   -25     -7    121       C
ATOM   5086  CZ  PHE B 146    -14.627  -7.276 -44.063  1.00 11.85           C
ANISOU 5086  CZ  PHE B 146     1408   1564   1531    34    -18     87       C
ATOM   5087  H   PHE B 146    -18.635  -2.006 -42.995  1.00 12.64           H
ATOM   5088  HA  PHE B 146    -16.751  -3.388 -41.783  1.00 12.49           H
ATOM   5089  HB2 PHE B 146    -18.194  -4.340 -43.392  1.00 12.77           H
ATOM   5090  HB3 PHE B 146    -17.409  -3.544 -44.518  1.00 12.77           H
ATOM   5091  HD1 PHE B 146    -16.111  -5.482 -41.825  1.00 13.22           H
ATOM   5092  HD2 PHE B 146    -16.336  -5.156 -45.805  1.00 13.94           H
ATOM   5093  HE1 PHE B 146    -14.657  -7.264 -42.050  1.00 14.54           H
ATOM   5094  HE2 PHE B 146    -14.885  -6.934 -46.035  1.00 14.09           H
ATOM   5095  HZ  PHE B 146    -14.041  -7.993 -44.156  1.00 14.22           H
ATOM   5096  N   SER B 147    -15.698  -1.066 -43.659  1.00 11.59           N
ANISOU 5096  N   SER B 147     1300   1417   1687   -32   -133    204       N
ATOM   5097  CA  SER B 147    -14.464  -0.384 -44.044  1.00 12.12           C
ANISOU 5097  CA  SER B 147     1350   1471   1783   -77   -111    206       C
ATOM   5098  C   SER B 147    -13.570  -0.120 -42.838  1.00 11.70           C
ANISOU 5098  C   SER B 147     1253   1413   1780   -54   -115    133       C
ATOM   5099  O   SER B 147    -12.344  -0.148 -42.963  1.00 11.67           O
ANISOU 5099  O   SER B 147     1213   1431   1788   -82    -89    105       O
ATOM   5100  CB  SER B 147    -14.767   0.922 -44.781  1.00 12.14           C
ANISOU 5100  CB  SER B 147     1375   1412   1827  -120   -132    276       C
ATOM   5101  OG  SER B 147    -15.149   1.993 -43.919  1.00 11.98           O
ANISOU 5101  OG  SER B 147     1338   1318   1895   -90   -168    256       O
ATOM   5102  H   SER B 147    -16.425  -0.656 -43.866  1.00 13.91           H
ATOM   5103  HA  SER B 147    -13.972  -0.956 -44.653  1.00 14.54           H
ATOM   5104  HB2 SER B 147    -13.972   1.190 -45.269  1.00 14.57           H
ATOM   5105  HB3 SER B 147    -15.490   0.760 -45.407  1.00 14.57           H
ATOM   5106  HG  SER B 147    -14.532   2.156 -43.373  1.00 14.37           H
ATOM   5107  N   ASN B 148    -14.152   0.143 -41.665  1.00 10.70           N
ANISOU 5107  N   ASN B 148     1120   1268   1679   -10   -146     94       N
ATOM   5108  CA  ASN B 148    -13.325   0.378 -40.487  1.00 11.31           C
ANISOU 5108  CA  ASN B 148     1161   1354   1784     5   -160     21       C
ATOM   5109  C   ASN B 148    -12.492  -0.853 -40.150  1.00 10.08           C
ANISOU 5109  C   ASN B 148     990   1261   1580    31   -159     -8       C
ATOM   5110  O   ASN B 148    -11.310  -0.742 -39.813  1.00  9.60           O
ANISOU 5110  O   ASN B 148     880   1220   1546    25   -167    -51       O
ATOM   5111  CB  ASN B 148    -14.195   0.776 -39.301  1.00 11.84           C
ANISOU 5111  CB  ASN B 148     1234   1403   1862    40   -184    -25       C
ATOM   5112  CG  ASN B 148    -14.749   2.183 -39.425  1.00 13.02           C
ANISOU 5112  CG  ASN B 148     1379   1470   2097    27   -193    -25       C
ATOM   5113  OD1 ASN B 148    -14.162   3.057 -40.082  1.00 12.87           O
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ANISOU 5113 OD1 ASN B 148 1355 1399 2137 -17 -190 1 O
ATOM 5114 ND2 ASN B 148 -15.884 2.419 -38.769 1.00 14.07 N
ANISOU 5114 ND2 ASN B 148 1514 1586 2244 63 -199 -57 N
ATOM 5115 H ASN B 148 -15.000 0.189 -41.530 1.00 12.84 H
ATOM 5116 HA ASN B 148 -12.716 1.110 -40.671 1.00 13.57 H
ATOM 5117 HB2 ASN B 148 -14.944 0.163 -39.238 1.00 14.21 H
ATOM 5118 HB3 ASN B 148 -13.663 0.734 -38.490 1.00 14.21 H
ATOM 5119 HD21 ASN B 148 -16.246 3.198 -38.803 1.00 16.88 H
ATOM 5120 HD22 ASN B 148 -16.255 1.792 -38.312 1.00 16.88 H
ATOM 5121 N HIS B 149 -13.085 -2.041 -40.265 1.00 10.27 N
ANISOU 5121 N HIS B 149 1050 1309 1543 61 -152 16 N
ATOM 5122 CA HIS B 149 -12.356 -3.262 -39.952 1.00 10.06 C
ANISOU 5122 CA HIS B 149 1018 1319 1486 98 -159 -3 C
ATOM 5123 C HIS B 149 -11.298 -3.573 -41.006 1.00 10.21 C
ANISOU 5123 C HIS B 149 997 1354 1527 79 -122 -8 C
ATOM 5124 O HIS B 149 -10.139 -3.849 -40.668 1.00 10.32 O
ANISOU 5124 O HIS B 149 956 1392 1571 102 -136 -52 O
ATOM 5125 CB HIS B 149 -13.346 -4.411 -39.798 1.00 10.41 C
ANISOU 5125 CB HIS B 149 1123 1365 1468 124 -156 23 C
ATOM 5126 CG HIS B 149 -14.328 -4.202 -38.690 1.00 9.92 C
ANISOU 5126 CG HIS B 149 1090 1301 1376 134 -175 15 C
ATOM 5127 ND1 HIS B 149 -14.084 -4.613 -37.400 1.00 10.39 N
ANISOU 5127 ND1 HIS B 149 1169 1383 1397 163 -209 -7 N
ATOM 5128 CD2 HIS B 149 -15.544 -3.603 -38.672 1.00 9.83 C
ANISOU 5128 CD2 HIS B 149 1089 1277 1369 118 -163 21 C
ATOM 5129 CE1 HIS B 149 -15.117 -4.302 -36.639 1.00 10.87 C
ANISOU 5129 CE1 HIS B 149 1254 1449 1426 152 -202 -21 C
ATOM 5130 NE2 HIS B 149 -16.014 -3.680 -37.385 1.00 9.72 N
ANISOU 5130 NE2 HIS B 149 1095 1282 1318 130 -172 -11 N
ATOM 5131 H HIS B 149 -13.897 -2.163 -40.519 1.00 12.33 H
ATOM 5132 HA HIS B 149 -11.903 -3.146 -39.102 1.00 12.07 H
ATOM 5133 HB2 HIS B 149 -13.845 -4.507 -40.625 1.00 12.49 H
ATOM 5134 HB3 HIS B 149 -12.855 -5.226 -39.612 1.00 12.49 H
ATOM 5135 HD1 HIS B 149 -13.378 -5.027 -37.135 1.00 12.47 H
ATOM 5136 HD2 HIS B 149 -15.981 -3.221 -39.397 1.00 11.80 H
ATOM 5137 HE1 HIS B 149 -15.193 -4.475 -35.728 1.00 13.04 H
ATOM 5138 N VAL B 150 -11.671 -3.530 -42.291 1.00 10.32 N
ANISOU 5138 N VAL B 150 1034 1365 1524 33 -77 30 N
ATOM 5139 CA VAL B 150 -10.688 -3.784 -43.340 1.00 10.63 C
ANISOU 5139 CA VAL B 150 1036 1431 1570 -2 -23 13 C
ATOM 5140 C VAL B 150 -9.541 -2.784 -43.247 1.00 10.35 C
ANISOU 5140 C VAL B 150 930 1404 1598 -40 -14 -20 C
ATOM 5141 O VAL B 150 -8.367 -3.151 -43.356 1.00 10.61 O
ANISOU 5141 O VAL B 150 893 1474 1666 -36 10 -75 O
ATOM 5142 CB VAL B 150 -11.349 -3.750 -44.729 1.00 11.12 C
ANISOU 5142 CB VAL B 150 1147 1498 1578 -63 20 64 C
ATOM 5143 CG1 VAL B 150 -10.302 -3.971 -45.819 1.00 11.87 C
ANISOU 5143 CG1 VAL B 150 1207 1636 1665 -115 94 34 C
ATOM 5144 CG2 VAL B 150 -12.436 -4.795 -44.829 1.00 10.39 C
ANISOU 5144 CG2 VAL B 150 1113 1404 1429 -34 11 80 C
ATOM 5145 H VAL B 150 -12.466 -3.361 -42.572 1.00 12.39 H
ATOM 5146 HA VAL B 150 -10.318 -4.671 -43.211 1.00 12.75 H
ATOM 5147 HB VAL B 150 -11.753 -2.879 -44.869 1.00 13.34 H

ATOM 5148 HG11 VAL B 150 -10.738 -3.946 -46.685 1.00 14.24 H
ATOM 5149 HG12 VAL B 150 -9.635 -3.268 -45.763 1.00 14.24 H
ATOM 5150 HG13 VAL B 150 -9.884 -4.836 -45.683 1.00 14.24 H
ATOM 5151 HG21 VAL B 150 -12.835 -4.752 -45.712 1.00 12.46 H
ATOM 5152 HG22 VAL B 150 -12.046 -5.671 -44.684 1.00 12.46 H
ATOM 5153 HG23 VAL B 150 -13.109 -4.616 -44.152 1.00 12.46 H
ATOM 5154 N ASN B 151 -9.857 -1.500 -43.064 1.00 10.72 N
ANISOU 5154 N ASN B 151 988 1413 1673 -81 -32 6 N
ATOM 5155 CA ASN B 151 -8.792 -0.504 -43.031 1.00 10.99 C
ANISOU 5155 CA ASN B 151 960 1444 1773 -137 -18 -27 C
ATOM 5156 C ASN B 151 -7.897 -0.707 -41.813 1.00 11.86 C
ANISOU 5156 C ASN B 151 995 1584 1926 -88 -64 -106 C
ATOM 5157 O ASN B 151 -6.668 -0.575 -41.906 1.00 11.82 O
ANISOU 5157 O ASN B 151 904 1615 1972 -117 -43 -160 O
ATOM 5158 CB ASN B 151 -9.388 0.903 -43.052 1.00 11.54 C
ANISOU 5158 CB ASN B 151 1068 1441 1877 -186 -33 17 C
ATOM 5159 CG ASN B 151 -10.054 1.234 -44.383 1.00 12.75 C
ANISOU 5159 CG ASN B 151 1287 1567 1990 -244 -2 109 C
ATOM 5160 OD1 ASN B 151 -9.697 0.679 -45.424 1.00 12.53 O
ANISOU 5160 OD1 ASN B 151 1264 1587 1910 -286 53 127 O
ATOM 5161 ND2 ASN B 151 -11.006 2.169 -44.359 1.00 13.34 N
ANISOU 5161 ND2 ASN B 151 1413 1566 2092 -247 -40 165 N
ATOM 5162 H ASN B 151 -10.653 -1.191 -42.961 1.00 12.87 H
ATOM 5163 HA ASN B 151 -8.242 -0.606 -43.823 1.00 13.19 H
ATOM 5164 HB2 ASN B 151 -10.059 0.974 -42.355 1.00 13.85 H
ATOM 5165 HB3 ASN B 151 -8.681 1.550 -42.900 1.00 13.85 H
ATOM 5166 HD21 ASN B 151 -11.411 2.390 -45.086 1.00 16.01 H
ATOM 5167 HD22 ASN B 151 -11.216 2.551 -43.618 1.00 16.01 H
ATOM 5168 N ALA B 152 -8.491 -1.039 -40.662 1.00 12.14 N
ANISOU 5168 N ALA B 152 1060 1614 1938 -20 -127 -117 N
ATOM 5169 CA ALA B 152 -7.688 -1.321 -39.473 1.00 11.04 C
ANISOU 5169 CA ALA B 152 865 1513 1817 28 -189 -180 C
ATOM 5170 C ALA B 152 -6.839 -2.567 -39.676 1.00 11.98 C
ANISOU 5170 C ALA B 152 934 1678 1941 82 -190 -203 C
ATOM 5171 O ALA B 152 -5.642 -2.580 -39.363 1.00 12.13 O
ANISOU 5171 O ALA B 152 857 1738 2015 93 -216 -263 O
ATOM 5172 CB ALA B 152 -8.592 -1.493 -38.251 1.00 10.66 C
ANISOU 5172 CB ALA B 152 879 1457 1714 77 -247 -177 C
ATOM 5173 H ALA B 152 -9.341 -1.106 -40.547 1.00 14.56 H
ATOM 5174 HA ALA B 152 -7.093 -0.573 -39.307 1.00 13.25 H
ATOM 5175 HB1 ALA B 152 -8.040 -1.679 -37.475 1.00 12.79 H
ATOM 5176 HB2 ALA B 152 -9.094 -0.675 -38.112 1.00 12.79 H
ATOM 5177 HB3 ALA B 152 -9.200 -2.232 -38.409 1.00 12.79 H
ATOM 5178 N TRP B 153 -7.450 -3.632 -40.194 1.00 11.46 N
ANISOU 5178 N TRP B 153 925 1600 1828 118 -165 -163 N
ATOM 5179 CA TRP B 153 -6.722 -4.876 -40.408 1.00 11.85 C
ANISOU 5179 CA TRP B 153 935 1671 1898 180 -164 -190 C
ATOM 5180 C TRP B 153 -5.463 -4.650 -41.244 1.00 12.43 C
ANISOU 5180 C TRP B 153 896 1784 2043 143 -106 -251 C
ATOM 5181 O TRP B 153 -4.367 -5.073 -40.861 1.00 14.33 O
ANISOU 5181 O TRP B 153 1040 2059 2348 195 -141 -312 O
ATOM 5182 CB TRP B 153 -7.640 -5.907 -41.070 1.00 12.22 C
ANISOU 5182 CB TRP B 153 1066 1688 1890 198 -126 -147 C

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ATOM   5183  CG  TRP B 153     -8.748  -6.426 -40.194  1.00 12.04           C
ANISOU 5183  CG  TRP B 153     1138   1632   1804    237   -176    -99      C
ATOM   5184  CD1 TRP B 153     -8.890  -6.263 -38.845  1.00 12.58           C
ANISOU 5184  CD1 TRP B 153     1226   1703   1849    268   -251    -92      C
ATOM   5185  CD2 TRP B 153     -9.880  -7.197 -40.624  1.00 12.47           C
ANISOU 5185  CD2 TRP B 153     1279   1655   1802    234   -147    -56      C
ATOM   5186  NE1 TRP B 153    -10.040  -6.879 -38.415  1.00 12.25           N
ANISOU 5186  NE1 TRP B 153     1280   1636   1739    280   -260    -45      N
ATOM   5187  CE2 TRP B 153    -10.663  -7.462 -39.486  1.00 11.22           C
ANISOU 5187  CE2 TRP B 153     1187   1480   1595    260   -198    -23      C
ATOM   5188  CE3 TRP B 153    -10.303  -7.686 -41.863  1.00 13.17           C
ANISOU 5188  CE3 TRP B 153     1396   1735   1871    201    -80    -48      C
ATOM   5189  CZ2 TRP B 153    -11.853  -8.182 -39.549  1.00 11.83           C
ANISOU 5189  CZ2 TRP B 153     1347   1530   1617    251   -180     17      C
ATOM   5190  CZ3 TRP B 153    -11.490  -8.407 -41.926  1.00 12.64           C
ANISOU 5190  CZ3 TRP B 153     1412   1640   1749    197    -75    -12      C
ATOM   5191  CH2 TRP B 153    -12.245  -8.652 -40.773  1.00 11.54           C
ANISOU 5191  CH2 TRP B 153     1328   1481   1575    221   -122     20      C
ATOM   5192  H   TRP B 153     -8.277  -3.659 -40.427  1.00 13.75           H
ATOM   5193  HA  TRP B 153     -6.448  -5.230 -39.548  1.00 14.23           H
ATOM   5194  HB2 TRP B 153     -8.049  -5.500 -41.849  1.00 14.67           H
ATOM   5195  HB3 TRP B 153     -7.103  -6.667 -41.344  1.00 14.67           H
ATOM   5196  HD1 TRP B 153     -8.297  -5.800 -38.298  1.00 15.09           H
ATOM   5197  HE1 TRP B 153    -10.321  -6.899 -37.603  1.00 14.70           H
ATOM   5198  HE3 TRP B 153     -9.807  -7.521 -42.633  1.00 15.80           H
ATOM   5199  HZ2 TRP B 153    -12.355  -8.351 -38.785  1.00 14.19           H
ATOM   5200  HZ3 TRP B 153    -11.782  -8.738 -42.744  1.00 15.16           H
ATOM   5201  HH2 TRP B 153    -13.032  -9.143 -40.841  1.00 13.84           H
ATOM   5202  N   LYS B 154     -5.586  -3.976 -42.389  1.00 12.40           N
ANISOU 5202  N   LYS B 154      900   1782   2028     49    -19   -236      N
ATOM   5203  CA  LYS B 154     -4.403  -3.829 -43.228  1.00 13.97           C
ANISOU 5203  CA  LYS B 154      996   2030   2282     -4     57   -298      C
ATOM   5204  C   LYS B 154     -3.348  -2.947 -42.570  1.00 14.34           C
ANISOU 5204  C   LYS B 154      933   2106   2408    -32     26   -356      C
ATOM   5205  O   LYS B 154     -2.152  -3.187 -42.757  1.00 15.50           O
ANISOU 5205  O   LYS B 154      953   2308   2628    -30     53   -437      O
ATOM   5206  CB  LYS B 154     -4.787  -3.306 -44.613  1.00 15.91           C
ANISOU 5206  CB  LYS B 154     1293   2276   2474   -115    158   -256      C
ATOM   5207  CG  LYS B 154     -5.202  -1.872 -44.672  1.00 16.34           C
ANISOU 5207  CG  LYS B 154     1394   2294   2521   -205    156   -196      C
ATOM   5208  CD  LYS B 154     -5.406  -1.432 -46.137  1.00 16.56           C
ANISOU 5208  CD  LYS B 154     1474   2330   2489   -320    249   -143      C
ATOM   5209  CE  LYS B 154     -6.649  -2.072 -46.754  1.00 16.41           C
ANISOU 5209  CE  LYS B 154     1565   2295   2374   -300    247    -77      C
ATOM   5210  NZ  LYS B 154     -6.916  -1.536 -48.119  1.00 16.12           N
ANISOU 5210  NZ  LYS B 154     1594   2270   2261   -415    314    -10      N
ATOM   5211  H   LYS B 154     -6.306  -3.612 -42.688  1.00 14.88           H
ATOM   5212  HA  LYS B 154     -4.008  -4.706 -43.352  1.00 16.77           H
ATOM   5213  HB2 LYS B 154     -4.024  -3.411 -45.202  1.00 19.09           H
ATOM   5214  HB3 LYS B 154     -5.528  -3.836 -44.946  1.00 19.09           H
ATOM   5215  HG2 LYS B 154     -6.040  -1.758 -44.197  1.00 19.61           H
ATOM   5216  HG3 LYS B 154     -4.511  -1.318 -44.277  1.00 19.61           H
ATOM   5217  HD2 LYS B 154     -5.514  -0.468 -46.169  1.00 19.87           H
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ATOM   5218  HD3 LYS B 154     -4.635  -1.700 -46.661  1.00 19.87           H
ATOM   5219  HE2 LYS B 154     -6.515  -3.030 -46.824  1.00 19.69           H
ATOM   5220  HE3 LYS B 154     -7.419  -1.880 -46.196  1.00 19.69           H
ATOM   5221  HZ1 LYS B 154     -7.046  -0.657 -48.080  1.00 19.35           H
ATOM   5222  HZ2 LYS B 154     -6.223  -1.703 -48.652  1.00 19.35           H
ATOM   5223  HZ3 LYS B 154     -7.642  -1.922 -48.460  1.00 19.35           H
ATOM   5224  N   SER B 155     -3.750  -1.954 -41.769  1.00 13.56           N
ANISOU 5224  N   SER B 155     870   1977   2307    -58    -32    -331       N
ATOM   5225  CA  SER B 155     -2.746  -1.159 -41.069  1.00 16.66           C
ANISOU 5225  CA  SER B 155     1157   2398   2775    -90    -70    -400       C
ATOM   5226  C   SER B 155     -1.990  -1.986 -40.037  1.00 16.80           C
ANISOU 5226  C   SER B 155     1089   2464   2829     16   -168    -461       C
ATOM   5227  O   SER B 155     -0.907  -1.578 -39.611  1.00 16.93           O
ANISOU 5227  O   SER B 155     983   2531   2921     -3   -200    -538       O
ATOM   5228  CB  SER B 155     -3.385   0.076 -40.413  1.00 17.03           C
ANISOU 5228  CB  SER B 155     1268   2391   2814   -141   -109    -375       C
ATOM   5229  OG  SER B 155     -4.022  -0.222 -39.185  1.00 17.55           O
ANISOU 5229  OG  SER B 155     1387   2447   2836    -60   -204    -369       O
ATOM   5230  H   SER B 155     -4.567  -1.731 -41.619  1.00 16.28           H
ATOM   5231  HA  SER B 155     -2.099  -0.842 -41.718  1.00 19.99           H
ATOM   5232  HB2 SER B 155     -2.691   0.733 -40.249  1.00 20.44           H
ATOM   5233  HB3 SER B 155     -4.044   0.443 -41.022  1.00 20.44           H
ATOM   5234  HG  SER B 155     -4.632  -0.787 -39.308  1.00 21.06           H
ATOM   5235  N   HIS B 156     -2.531  -3.141 -39.642  1.00 18.11           N
ANISOU 5235  N   HIS B 156     1318   2615   2947    122   -220    -425       N
ATOM   5236  CA  HIS B 156     -1.847  -4.091 -38.774  1.00 21.34           C
ANISOU 5236  CA  HIS B 156     1663   3056   3388    235   -322    -460       C
ATOM   5237  C   HIS B 156     -1.286  -5.286 -39.548  1.00 20.70           C
ANISOU 5237  C   HIS B 156     1522   2982   3360    303   -279    -490       C
ATOM   5238  O   HIS B 156     -1.007  -6.332 -38.951  1.00 20.96           O
ANISOU 5238  O   HIS B 156     1554   3004   3406    414   -360    -485       O
ATOM   5239  CB  HIS B 156     -2.795  -4.572 -37.670  1.00 23.00           C
ANISOU 5239  CB  HIS B 156     1997   3234   3509    303   -417    -394       C
ATOM   5240  CG  HIS B 156     -3.195  -3.497 -36.706  1.00 24.41           C
ANISOU 5240  CG  HIS B 156     2215   3418   3643    252   -468    -395       C
ATOM   5241  ND1 HIS B 156     -2.412  -3.128 -35.632  1.00 25.89           N
ANISOU 5241  ND1 HIS B 156     2330   3658   3848    263   -570    -451       N
ATOM   5242  CD2 HIS B 156     -4.298  -2.713 -36.652  1.00 23.99           C
ANISOU 5242  CD2 HIS B 156     2259   3323   3532    192   -431    -359       C
ATOM   5243  CE1 HIS B 156     -3.014  -2.160 -34.962  1.00 25.68           C
ANISOU 5243  CE1 HIS B 156     2363   3623   3771    204   -584    -457       C
ATOM   5244  NE2 HIS B 156     -4.160  -1.890 -35.560  1.00 24.59           N
ANISOU 5244  NE2 HIS B 156     2324   3423   3596    166   -499    -403       N
ATOM   5245  H   HIS B 156     -3.319  -3.399 -39.872  1.00 21.73           H
ATOM   5246  HA  HIS B 156     -1.101  -3.641 -38.348  1.00 25.60           H
ATOM   5247  HB2 HIS B 156     -3.603  -4.918 -38.081  1.00 27.60           H
ATOM   5248  HB3 HIS B 156     -2.356  -5.274 -37.166  1.00 27.60           H
ATOM   5249  HD2 HIS B 156     -5.014  -2.726 -37.245  1.00 28.78           H
ATOM   5250  HE1 HIS B 156     -2.687  -1.742 -34.198  1.00 30.81           H
ATOM   5251  HE2 HIS B 156     -4.728  -1.297 -35.306  1.00 29.51           H
ATOM   5252  N   GLY B 157     -1.118  -5.153 -40.861  1.00 20.02           N
ANISOU 5252  N   GLY B 157     1406   2906   3293    232   -149    -515       N
ATOM   5253  CA  GLY B 157     -0.480  -6.189 -41.650  1.00 19.92           C
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ANISOU 5253 CA GLY B 157 1318 2909 3341 285 -89 -575 C
ATOM 5254 C GLY B 157 -1.376 -7.331 -42.071 1.00 19.70 C
ANISOU 5254 C GLY B 157 1408 2819 3256 343 -66 -528 C
ATOM 5255 O GLY B 157 -0.865 -8.340 -42.565 1.00 21.88 O
ANISOU 5255 O GLY B 157 1629 3092 3594 410 -30 -588 O
ATOM 5256 H GLY B 157 -1.367 -4.468 -41.317 1.00 24.02 H
ATOM 5257 HA2 GLY B 157 -0.113 -5.788 -42.453 1.00 23.90 H
ATOM 5258 HA3 GLY B 157 0.255 -6.561 -41.139 1.00 23.90 H
ATOM 5259 N MET B 158 -2.692 -7.208 -41.900 1.00 17.12 N
ANISOU 5259 N MET B 158 1236 2444 2827 319 -81 -434 N
ATOM 5260 CA MET B 158 -3.647 -8.242 -42.296 1.00 15.32 C
ANISOU 5260 CA MET B 158 1123 2158 2541 354 -57 -390 C
ATOM 5261 C MET B 158 -4.298 -7.814 -43.606 1.00 15.06 C
ANISOU 5261 C MET B 158 1149 2135 2439 243 60 -372 C
ATOM 5262 O MET B 158 -5.276 -7.058 -43.606 1.00 14.29 O
ANISOU 5262 O MET B 158 1138 2023 2267 178 56 -299 O
ATOM 5263 CB MET B 158 -4.683 -8.458 -41.203 1.00 15.03 C
ANISOU 5263 CB MET B 158 1206 2070 2434 396 -153 -304 C
ATOM 5264 CG MET B 158 -4.108 -9.021 -39.910 1.00 17.94 C
ANISOU 5264 CG MET B 158 1545 2428 2843 504 -280 -304 C
ATOM 5265 SD MET B 158 -5.121 -8.569 -38.488 1.00 18.61 S
ANISOU 5265 SD MET B 158 1747 2501 2823 495 -376 -219 S
ATOM 5266 CE MET B 158 -6.696 -9.285 -38.937 1.00 17.01 C
ANISOU 5266 CE MET B 158 1700 2232 2532 471 -318 -146 C
ATOM 5267 H MET B 158 -3.065 -6.518 -41.547 1.00 20.55 H
ATOM 5268 HA MET B 158 -3.173 -9.078 -42.434 1.00 18.39 H
ATOM 5269 HB2 MET B 158 -5.101 -7.607 -40.996 1.00 18.04 H
ATOM 5270 HB3 MET B 158 -5.353 -9.082 -41.525 1.00 18.04 H
ATOM 5271 HG2 MET B 158 -4.077 -9.988 -39.967 1.00 21.52 H
ATOM 5272 HG3 MET B 158 -3.216 -8.663 -39.774 1.00 21.52 H
ATOM 5273 HE1 MET B 158 -7.337 -9.103 -38.232 1.00 20.41 H
ATOM 5274 HE2 MET B 158 -6.998 -8.888 -39.769 1.00 20.41 H
ATOM 5275 HE3 MET B 158 -6.588 -10.243 -39.047 1.00 20.41 H
ATOM 5276 N ASN B 159 -3.745 -8.295 -44.722 1.00 14.62 N
ANISOU 5276 N ASN B 159 1041 2108 2408 221 160 -442 N
ATOM 5277 CA ASN B 159 -4.284 -8.019 -46.048 1.00 14.55 C
ANISOU 5277 CA ASN B 159 1092 2122 2315 111 269 -428 C
ATOM 5278 C ASN B 159 -5.220 -9.145 -46.465 1.00 13.98 C
ANISOU 5278 C ASN B 159 1124 2004 2185 142 282 -412 C
ATOM 5279 O ASN B 159 -4.874 -10.325 -46.346 1.00 14.66 O
ANISOU 5279 O ASN B 159 1187 2055 2329 233 277 -472 O
ATOM 5280 CB ASN B 159 -3.162 -7.880 -47.080 1.00 17.31 C
ANISOU 5280 CB ASN B 159 1331 2544 2701 45 390 -525 C
ATOM 5281 CG ASN B 159 -2.272 -6.684 -46.824 1.00 18.31 C
ANISOU 5281 CG ASN B 159 1356 2720 2881 -19 395 -542 C
ATOM 5282 OD1 ASN B 159 -2.747 -5.582 -46.580 1.00 18.35 O
ANISOU 5282 OD1 ASN B 159 1415 2711 2846 -88 364 -463 O
ATOM 5283 ND2 ASN B 159 -0.971 -6.900 -46.886 1.00 19.34 N
ANISOU 5283 ND2 ASN B 159 1329 2903 3114 3 437 -654 N
ATOM 5284 H ASN B 159 -3.045 -8.794 -44.733 1.00 17.55 H
ATOM 5285 HA ASN B 159 -4.788 -7.190 -46.027 1.00 17.46 H
ATOM 5286 HB2 ASN B 159 -2.609 -8.676 -47.054 1.00 20.77 H
ATOM 5287 HB3 ASN B 159 -3.555 -7.777 -47.961 1.00 20.77 H

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ATOM   5288 HD21 ASN B 159     -0.421  -6.254 -46.748  1.00 23.20           H
ATOM   5289 HD22 ASN B 159     -0.674  -7.687 -47.063  1.00 23.20           H
ATOM   5290  N   LEU B 160     -6.399  -8.777 -46.946  1.00 13.44           N
ANISOU 5290  N   LEU B 160     1166   1929   2012     68    293   -335      N
ATOM   5291  CA  LEU B 160     -7.340  -9.742 -47.484  1.00 14.18           C
ANISOU 5291  CA  LEU B 160     1355   1992   2042     69    312   -328      C
ATOM   5292  C   LEU B 160     -6.983 -10.103 -48.924  1.00 16.60           C
ANISOU 5292  C   LEU B 160     1649   2352   2308     -2    432   -404      C
ATOM   5293  O   LEU B 160     -6.229  -9.402 -49.601  1.00 17.32           O
ANISOU 5293  O   LEU B 160     1679   2511   2391    -78    507   -436      O
ATOM   5294  CB  LEU B 160     -8.759  -9.187 -47.418  1.00 14.15           C
ANISOU 5294  CB  LEU B 160     1456   1973   1949     19    267   -224      C
ATOM   5295  CG  LEU B 160     -9.321  -9.080 -45.997  1.00 14.17           C
ANISOU 5295  CG  LEU B 160     1486   1923   1975     87    165   -165      C
ATOM   5296  CD1 LEU B 160    -10.506  -8.136 -45.963  1.00 13.18           C
ANISOU 5296  CD1 LEU B 160     1423   1799   1788     31    133    -81      C
ATOM   5297  CD2 LEU B 160     -9.715 -10.453 -45.470  1.00 14.64           C
ANISOU 5297  CD2 LEU B 160     1595   1922   2046    163    134   -175      C
ATOM   5298  H   LEU B 160     -6.680  -7.964 -46.971  1.00 16.13           H
ATOM   5299  HA  LEU B 160     -7.305 -10.552 -46.951  1.00 17.02           H
ATOM   5300  HB2 LEU B 160     -8.765  -8.298 -47.806  1.00 16.98           H
ATOM   5301  HB3 LEU B 160     -9.346  -9.770 -47.925  1.00 16.98           H
ATOM   5302  HG  LEU B 160     -8.635  -8.720 -45.412  1.00 17.00           H
ATOM   5303 HD11 LEU B 160    -10.843  -8.086 -45.054  1.00 15.82           H
ATOM   5304 HD12 LEU B 160    -10.219  -7.259 -46.259  1.00 15.82           H
ATOM   5305 HD13 LEU B 160    -11.197  -8.476 -46.553  1.00 15.82           H
ATOM   5306 HD21 LEU B 160    -10.066 -10.357 -44.571  1.00 17.57           H
ATOM   5307 HD22 LEU B 160    -10.392 -10.832 -46.052  1.00 17.57           H
ATOM   5308 HD23 LEU B 160     -8.930 -11.023 -45.460  1.00 17.57           H
ATOM   5309  N   GLY B 161     -7.549 -11.213 -49.389  1.00 16.32           N
ANISOU 5309  N   GLY B 161     1677   2286   2239     12    456   -438      N
ATOM   5310  CA  GLY B 161     -7.350 -11.638 -50.758  1.00 18.44           C
ANISOU 5310  CA  GLY B 161     1949   2609   2449    -63    572   -522      C
ATOM   5311  C   GLY B 161     -8.018 -10.696 -51.739  1.00 17.63           C
ANISOU 5311  C   GLY B 161     1915   2578   2204   -202    602   -452      C
ATOM   5312  O   GLY B 161     -8.828  -9.837 -51.384  1.00 16.64           O
ANISOU 5312  O   GLY B 161     1843   2442   2037   -228    527   -336      O
ATOM   5313  H   GLY B 161     -8.053 -11.734 -48.926  1.00 19.59           H
ATOM   5314  HA2 GLY B 161     -6.401 -11.668 -50.955  1.00 22.13           H
ATOM   5315  HA3 GLY B 161     -7.721 -12.526 -50.880  1.00 22.13           H
ATOM   5316  N   SER B 162     -7.659 -10.871 -53.009  1.00 18.39           N
ANISOU 5316  N   SER B 162     2012   2750   2226   -293    715   -527      N
ATOM   5317  CA  SER B 162     -8.131  -9.996 -54.074  1.00 19.70           C
ANISOU 5317  CA  SER B 162     2248   2997   2242   -437    748   -457      C
ATOM   5318  C   SER B 162     -9.425 -10.470 -54.724  1.00 19.92           C
ANISOU 5318  C   SER B 162     2391   3031   2146   -485    718   -423      C
ATOM   5319  O   SER B 162    -10.089  -9.667 -55.387  1.00 19.68           O
ANISOU 5319  O   SER B 162     2432   3051   1994   -584    692   -326      O
ATOM   5320  CB  SER B 162     -7.051  -9.858 -55.149  1.00 22.00           C
ANISOU 5320  CB  SER B 162     2485   3386   2488   -536    893   -552      C
ATOM   5321  OG  SER B 162     -6.648 -11.132 -55.615  1.00 23.82           O
ANISOU 5321  OG  SER B 162     2685   3626   2741   -505    982   -709      O
ATOM   5322  H   SER B 162     -7.136 -11.498 -53.280  1.00 22.07           H
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ATOM   5323  HA  SER B 162     -8.293  -9.115 -53.703  1.00 23.65           H
ATOM   5324  HB2 SER B 162     -7.408  -9.347 -55.892  1.00 26.40           H
ATOM   5325  HB3 SER B 162     -6.284  -9.401 -54.769  1.00 26.40           H
ATOM   5326  HG  SER B 162     -7.305 -11.538 -55.944  1.00 28.59           H
ATOM   5327  N   ASN B 163     -9.808 -11.735 -54.545  1.00 19.40           N
ANISOU 5327  N   ASN B 163    2346   2912   2114   -420    711   -497      N
ATOM   5328  CA  ASN B 163    -11.033 -12.285 -55.121  1.00 20.10           C
ANISOU 5328  CA  ASN B 163    2532   3007   2097   -471    682   -484      C
ATOM   5329  C   ASN B 163    -12.042 -12.513 -54.001  1.00 18.70           C
ANISOU 5329  C   ASN B 163    2385   2738   1981   -389    565   -407      C
ATOM   5330  O   ASN B 163    -11.859 -13.408 -53.170  1.00 18.91           O
ANISOU 5330  O   ASN B 163    2392   2677   2117   -291    553   -456      O
ATOM   5331  CB  ASN B 163    -10.754 -13.595 -55.849  1.00 21.45           C
ANISOU 5331  CB  ASN B 163    2711   3184   2256   -483    778   -643      C
ATOM   5332  CG  ASN B 163     -9.846 -13.430 -57.033  1.00 24.89           C
ANISOU 5332  CG  ASN B 163    3119   3728   2609   -581    912   -738      C
ATOM   5333  OD1 ASN B 163     -9.090 -12.467 -57.151  1.00 27.50           O
ANISOU 5333  OD1 ASN B 163    3400   4116   2933   -621    950   -704      O
ATOM   5334  ND2 ASN B 163     -9.910 -14.383 -57.921  1.00 25.77           N
ANISOU 5334  ND2 ASN B 163    3264   3866   2662   -628    987   -864      N
ATOM   5335  H   ASN B 163     -9.362 -12.307 -54.083  1.00 23.28           H
ATOM   5336  HA  ASN B 163    -11.409 -11.653 -55.753  1.00 24.12           H
ATOM   5337  HB2 ASN B 163    -10.332 -14.214 -55.233  1.00 25.74           H
ATOM   5338  HB3 ASN B 163    -11.594 -13.964 -56.166  1.00 25.74           H
ATOM   5339 HD21 ASN B 163     -9.415 -14.349 -58.624  1.00 30.92           H
ATOM   5340 HD22 ASN B 163    -10.446 -15.045 -57.804  1.00 30.92           H
ATOM   5341  N   TRP B 164    -13.123 -11.743 -54.009  1.00 16.85           N
ANISOU 5341  N   TRP B 164    2200   2524   1677   -433    482   -289      N
ATOM   5342  CA  TRP B 164    -14.081 -11.746 -52.909  1.00 15.79           C
ANISOU 5342  CA  TRP B 164    2080   2319   1599   -367    382   -216      C
ATOM   5343  C   TRP B 164    -15.211 -12.737 -53.171  1.00 14.79           C
ANISOU 5343  C   TRP B 164    2013   2179   1428   -393    361   -244      C
ATOM   5344  O   TRP B 164    -15.775 -12.773 -54.268  1.00 15.94           O
ANISOU 5344  O   TRP B 164    2203   2396   1459   -487    367   -253      O
ATOM   5345  CB  TRP B 164    -14.640 -10.339 -52.702  1.00 15.42           C
ANISOU 5345  CB  TRP B 164    2035   2293   1531   -387    305    -88      C
ATOM   5346  CG  TRP B 164    -13.608  -9.416 -52.135  1.00 16.21           C
ANISOU 5346  CG  TRP B 164    2076   2379   1703   -353    315    -64      C
ATOM   5347  CD1 TRP B 164    -12.491  -8.944 -52.765  1.00 18.21           C
ANISOU 5347  CD1 TRP B 164    2297   2681   1942   -403    389    -92      C
ATOM   5348  CD2 TRP B 164    -13.592  -8.863 -50.815  1.00 15.83           C
ANISOU 5348  CD2 TRP B 164    1991   2272   1752   -274    254    -18      C
ATOM   5349  NE1 TRP B 164    -11.772  -8.133 -51.906  1.00 18.14           N
ANISOU 5349  NE1 TRP B 164    2227   2641   2025   -359    372    -66      N
ATOM   5350  CE2 TRP B 164    -12.432  -8.071 -50.706  1.00 16.61           C
ANISOU 5350  CE2 TRP B 164    2034   2382   1897   -278    286    -23      C
ATOM   5351  CE3 TRP B 164    -14.447  -8.964 -49.713  1.00 15.64           C
ANISOU 5351  CE3 TRP B 164    1975   2194   1773   -212    182     17      C
ATOM   5352  CZ2 TRP B 164    -12.111  -7.381 -49.540  1.00 15.76           C
ANISOU 5352  CZ2 TRP B 164    1881   2232   1878   -219    239      3      C
ATOM   5353  CZ3 TRP B 164    -14.122  -8.280 -48.557  1.00 15.08           C
ANISOU 5353  CZ3 TRP B 164    1865   2086   1780   -153    142     44      C
ATOM   5354  CH2 TRP B 164    -12.967  -7.499 -48.480  1.00 15.03           C
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ANISOU 5354  CH2 TRP B 164    1805   2089   1817   -156    166     35       C
ATOM   5355  H   TRP B 164    -13.328 -11.203 -54.647  1.00 20.22           H
ATOM   5356  HA  TRP B 164    -13.628 -12.014 -52.094  1.00 18.94           H
ATOM   5357  HB2 TRP B 164    -14.931  -9.981 -53.556  1.00 18.50           H
ATOM   5358  HB3 TRP B 164    -15.386 -10.378 -52.083  1.00 18.50           H
ATOM   5359  HD1 TRP B 164    -12.242  -9.151 -53.637  1.00 21.85           H
ATOM   5360  HE1 TRP B 164    -11.036  -7.731 -52.095  1.00 21.77           H
ATOM   5361  HE3 TRP B 164    -15.216  -9.486 -49.755  1.00 18.77           H
ATOM   5362  HZ2 TRP B 164    -11.345  -6.856 -49.485  1.00 18.92           H
ATOM   5363  HZ3 TRP B 164    -14.683  -8.341 -47.817  1.00 18.10           H
ATOM   5364  HH2 TRP B 164    -12.776  -7.047 -47.690  1.00 18.04           H
ATOM   5365  N   ALA B 165    -15.541 -13.533 -52.154  1.00 14.48           N
ANISOU 5365  N   ALA B 165    1979   2051   1474   -321    333    -257       N
ATOM   5366  CA  ALA B 165    -16.666 -14.459 -52.225  1.00 13.30           C
ANISOU 5366  CA  ALA B 165    1882   1874   1298   -353    312    -279       C
ATOM   5367  C   ALA B 165    -17.814 -13.924 -51.367  1.00 13.08           C
ANISOU 5367  C   ALA B 165    1852   1834   1283   -341    224    -180       C
ATOM   5368  O   ALA B 165    -17.949 -12.703 -51.229  1.00 11.51           O
ANISOU 5368  O   ALA B 165    1625   1676   1074   -338    178     -99       O
ATOM   5369  CB  ALA B 165    -16.229 -15.868 -51.797  1.00 13.77           C
ANISOU 5369  CB  ALA B 165    1960   1830   1442   -296    357    -369       C
ATOM   5370  H   ALA B 165    -15.121 -13.554 -51.404  1.00 17.38           H
ATOM   5371  HA  ALA B 165    -16.976 -14.508 -53.143  1.00 15.96           H
ATOM   5372  HB1 ALA B 165    -16.992 -16.465 -51.852  1.00 16.52           H
ATOM   5373  HB2 ALA B 165    -15.525 -16.174 -52.391  1.00 16.52           H
ATOM   5374  HB3 ALA B 165    -15.901 -15.833 -50.885  1.00 16.52           H
ATOM   5375  N   TYR B 166    -18.652 -14.796 -50.796  1.00 13.91           N
ANISOU 5375  N   TYR B 166    1988   1883   1416   -339    208    -192       N
ATOM   5376  CA  TYR B 166    -19.841 -14.280 -50.127  1.00 14.29           C
ANISOU 5376  CA  TYR B 166    2021   1941   1466   -346    140    -117       C
ATOM   5377  C   TYR B 166    -19.476 -13.485 -48.871  1.00 13.22           C
ANISOU 5377  C   TYR B 166    1851   1774   1399   -265    112     -53       C
ATOM   5378  O   TYR B 166    -18.371 -13.575 -48.332  1.00 11.57           O
ANISOU 5378  O   TYR B 166    1635   1520   1242   -199    134     -65       O
ATOM   5379  CB  TYR B 166    -20.824 -15.405 -49.790  1.00 16.89           C
ANISOU 5379  CB  TYR B 166    2388   2224   1807   -382    143    -150       C
ATOM   5380  CG  TYR B 166    -20.365 -16.414 -48.760  1.00 17.11           C
ANISOU 5380  CG  TYR B 166    2455   2136   1911   -327    174    -169       C
ATOM   5381  CD1 TYR B 166    -20.198 -16.060 -47.427  1.00 16.96           C
ANISOU 5381  CD1 TYR B 166    2426   2076   1943   -259    149    -106       C
ATOM   5382  CD2 TYR B 166    -20.135 -17.738 -49.118  1.00 18.90           C
ANISOU 5382  CD2 TYR B 166    2737   2287   2156   -345    223    -249       C
ATOM   5383  CE1 TYR B 166    -19.783 -16.988 -46.488  1.00 18.31           C
ANISOU 5383  CE1 TYR B 166    2647   2142   2169   -211    162    -105       C
ATOM   5384  CE2 TYR B 166    -19.724 -18.672 -48.182  1.00 19.23           C
ANISOU 5384  CE2 TYR B 166    2826   2205   2275   -289    237    -250       C
ATOM   5385  CZ  TYR B 166    -19.552 -18.292 -46.877  1.00 19.09           C
ANISOU 5385  CZ  TYR B 166    2803   2155   2294   -222    202    -169       C
ATOM   5386  OH  TYR B 166    -19.150 -19.218 -45.940  1.00 20.63           O
ANISOU 5386  OH  TYR B 166    3059   2228   2552   -169    201    -152       O
ATOM   5387  H   TYR B 166    -18.558 -15.650 -50.782  1.00 16.70           H
ATOM   5388  HA  TYR B 166    -20.293 -13.673 -50.733  1.00 17.14           H
ATOM   5389  HB2 TYR B 166    -21.641 -15.003 -49.455  1.00 20.27           H
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ATOM   5390  HB3 TYR B 166     -21.017 -15.893 -50.606  1.00 20.27           H
ATOM   5391  HD1 TYR B 166     -20.350 -15.181 -47.165  1.00 20.36           H
ATOM   5392  HD2 TYR B 166     -20.246 -17.998 -50.004  1.00 22.68           H
ATOM   5393  HE1 TYR B 166     -19.669 -16.737 -45.600  1.00 21.98           H
ATOM   5394  HE2 TYR B 166     -19.567 -19.552 -48.438  1.00 23.08           H
ATOM   5395  HH  TYR B 166     -19.044 -19.968 -46.305  1.00 24.76           H
ATOM   5396  N   GLN B 167     -20.447 -12.690 -48.422  1.00 12.71           N
ANISOU 5396  N   GLN B 167     1460   1814   1556   -152    -26   -395       N
ATOM   5397  CA  GLN B 167     -20.302 -11.765 -47.303  1.00 11.49           C
ANISOU 5397  CA  GLN B 167     1263   1681   1422   -116    -60   -367       C
ATOM   5398  C   GLN B 167     -21.677 -11.720 -46.645  1.00 11.56           C
ANISOU 5398  C   GLN B 167     1305   1649   1437   -137    -74   -318       C
ATOM   5399  O   GLN B 167     -22.593 -11.099 -47.191  1.00 11.48           O
ANISOU 5399  O   GLN B 167     1283   1640   1437   -202    -84   -289       O
ATOM   5400  CB  GLN B 167     -19.864 -10.398 -47.814  1.00 11.61           C
ANISOU 5400  CB  GLN B 167     1218   1753   1440   -170    -69   -369       C
ATOM   5401  CG  GLN B 167     -19.657  -9.336 -46.768  1.00 11.14           C
ANISOU 5401  CG  GLN B 167     1119   1709   1404   -153    -95   -362       C
ATOM   5402  CD  GLN B 167     -19.132  -8.056 -47.375  1.00 12.40           C
ANISOU 5402  CD  GLN B 167     1233   1904   1575   -216    -97   -366       C
ATOM   5403  OE1 GLN B 167     -19.749  -7.498 -48.281  1.00 12.34           O
ANISOU 5403  OE1 GLN B 167     1236   1881   1571   -285   -101   -325       O
ATOM   5404  NE2 GLN B 167     -17.987  -7.589 -46.893  1.00 12.64           N
ANISOU 5404  NE2 GLN B 167     1210   1983   1609   -203    -99   -406       N
ATOM   5405  H   GLN B 167     -21.234 -12.670 -48.768  1.00 15.26           H
ATOM   5406  HA  GLN B 167     -19.649 -12.099 -46.668  1.00 13.79           H
ATOM   5407  HB2 GLN B 167     -19.024 -10.504 -48.287  1.00 13.93           H
ATOM   5408  HB3 GLN B 167     -20.540 -10.071 -48.428  1.00 13.93           H
ATOM   5409  HG2 GLN B 167     -20.504  -9.143 -46.336  1.00 13.37           H
ATOM   5410  HG3 GLN B 167     -19.011  -9.650 -46.116  1.00 13.37           H
ATOM   5411 HE21 GLN B 167     -17.581  -8.013 -46.264  1.00 15.17           H
ATOM   5412 HE22 GLN B 167     -17.651  -6.863 -47.209  1.00 15.17           H
ATOM   5413  N  AVAL B 168     -21.849 -12.421 -45.524  0.43 11.86           N
ANISOU 5413  N  AVAL B 168     1383   1653   1471    -86    -75   -303       N
ATOM   5414  N  BVAL B 168     -21.807 -12.345 -45.472  0.57 11.89           N
ANISOU 5414  N  BVAL B 168     1382   1660   1474    -84    -76   -304       N
ATOM   5415  CA AVAL B 168     -23.181 -12.532 -44.940  0.43 11.73           C
ANISOU 5415  CA AVAL B 168     1396   1604   1454   -119    -68   -267       C
ATOM   5416  CA BVAL B 168     -23.108 -12.648 -44.883  0.57 11.78           C
ANISOU 5416  CA BVAL B 168     1409   1609   1459   -113    -67   -267       C
ATOM   5417  C  AVAL B 168     -23.144 -12.232 -43.449  0.43 11.13           C
ANISOU 5417  C  AVAL B 168     1323   1543   1362    -83    -73   -256       C
ATOM   5418  C  BVAL B 168     -23.125 -12.240 -43.414  0.57 11.11           C
ANISOU 5418  C  BVAL B 168     1322   1541   1359    -81    -73   -256       C
ATOM   5419  O  AVAL B 168     -22.138 -12.445 -42.763  0.43 10.88           O
ANISOU 5419  O  AVAL B 168     1298   1532   1306    -24    -94   -261       O
ATOM   5420  O  BVAL B 168     -22.124 -12.389 -42.702  0.57 10.64           O
ANISOU 5420  O  BVAL B 168     1264   1503   1273    -24    -95   -261       O
ATOM   5421  CB AVAL B 168     -23.824 -13.921 -45.191  0.43 11.92           C
ANISOU 5421  CB AVAL B 168     1496   1566   1468   -141    -45   -255       C
ATOM   5422  CB BVAL B 168     -23.429 -14.150 -45.046  0.57 12.00           C
ANISOU 5422  CB BVAL B 168     1517   1570   1475   -114    -45   -260       C
ATOM   5423  CG1AVAL B 168     -23.660 -14.379 -46.651  0.43 12.21           C
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ANISOU 5423  CG1AVAL B 168     1544   1594   1500   -183    -32   -289      C
ATOM   5424  CG1BVAL B 168     -24.692 -14.546 -44.305  0.57 12.10          C
ANISOU 5424  CG1BVAL B 168     1569   1549   1478   -155    -28   -222      C
ATOM   5425  CG2AVAL B 168     -23.284 -14.968 -44.231  0.43 12.21          C
ANISOU 5425  CG2AVAL B 168     1598   1554   1488    -71    -42   -239      C
ATOM   5426  CG2BVAL B 168     -23.579 -14.501 -46.533  0.57 12.27          C
ANISOU 5426  CG2BVAL B 168     1560   1596   1508   -173    -31   -290      C
ATOM   5427  H  AVAL B 168     -21.228 -12.830 -45.093  0.43 14.23          H
ATOM   5428  H  BVAL B 168     -21.143 -12.606 -44.992  0.57 14.26          H
ATOM   5429  HA AVAL B 168     -23.754 -11.868 -45.355  0.43 14.07          H
ATOM   5430  HA BVAL B 168     -23.793 -12.141 -45.345  0.57 14.14          H
ATOM   5431  HB AVAL B 168     -24.777 -13.845 -45.022  0.43 14.31          H
ATOM   5432  HB BVAL B 168     -22.694 -14.671 -44.686  0.57 14.41          H
ATOM   5433 HG11AVAL B 168     -23.177 -13.698 -47.143  0.43 14.65          H
ATOM   5434 HG11BVAL B 168     -25.058 -13.763 -43.865  0.57 14.52          H
ATOM   5435 HG12AVAL B 168     -23.165 -15.213 -46.666  0.43 14.65          H
ATOM   5436 HG12BVAL B 168     -25.334 -14.898 -44.941  0.57 14.52          H
ATOM   5437 HG13AVAL B 168     -24.539 -14.509 -47.041  0.43 14.65          H
ATOM   5438 HG13BVAL B 168     -24.472 -15.223 -43.646  0.57 14.52          H
ATOM   5439 HG21AVAL B 168     -23.710 -15.818 -44.420  0.43 14.65          H
ATOM   5440 HG21BVAL B 168     -23.780 -15.447 -46.615  0.57 14.73          H
ATOM   5441 HG22AVAL B 168     -22.325 -15.043 -44.353  0.43 14.65          H
ATOM   5442 HG22BVAL B 168     -24.301 -13.975 -46.911  0.57 14.73          H
ATOM   5443 HG23AVAL B 168     -23.481 -14.693 -43.321  0.43 14.65          H
ATOM   5444 HG23BVAL B 168     -22.748 -14.299 -46.991  0.57 14.73          H
ATOM   5445  N   MET B 169     -24.270 -11.725 -42.957  1.00 11.54          N
ANISOU 5445  N   MET B 169     1364   1594   1425   -123    -53   -245      N
ATOM   5446  CA  MET B 169     -24.475 -11.469 -41.536  1.00 12.22          C
ANISOU 5446  CA  MET B 169     1464   1700   1480   -115    -37   -248      C
ATOM   5447  C   MET B 169     -25.053 -12.754 -40.965  1.00 12.91          C
ANISOU 5447  C   MET B 169     1630   1751   1523   -127    -15   -207      C
ATOM   5448  O   MET B 169     -26.230 -13.061 -41.169  1.00 14.34          O
ANISOU 5448  O   MET B 169     1816   1909   1723   -182     20   -194      O
ATOM   5449  CB  MET B 169     -25.403 -10.278 -41.312  1.00 13.68          C
ANISOU 5449  CB  MET B 169     1590   1896   1713   -150     -6   -272      C
ATOM   5450  CG  MET B 169     -25.492  -9.867 -39.868  1.00 13.49          C
ANISOU 5450  CG  MET B 169     1578   1903   1645   -152     27   -304      C
ATOM   5451  SD  MET B 169     -23.913  -9.278 -39.240  1.00 13.16          S
ANISOU 5451  SD  MET B 169     1535   1915   1550   -119    -18   -343      S
ATOM   5452  CE  MET B 169     -24.077  -9.635 -37.479  1.00 14.31          C
ANISOU 5452  CE  MET B 169     1747   2113   1579   -141      6   -349      C
ATOM   5453  H   MET B 169     -24.946 -11.516 -43.446  1.00 13.84          H
ATOM   5454  HA  MET B 169     -23.623 -11.280 -41.113  1.00 14.67          H
ATOM   5455  HB2 MET B 169     -25.071  -9.521 -41.819  1.00 16.42          H
ATOM   5456  HB3 MET B 169     -26.295 -10.513 -41.612  1.00 16.42          H
ATOM   5457  HG2 MET B 169     -26.140  -9.151 -39.780  1.00 16.19          H
ATOM   5458  HG3 MET B 169     -25.764 -10.631 -39.335  1.00 16.19          H
ATOM   5459  HE1 MET B 169     -23.268  -9.354 -37.024  1.00 17.18          H
ATOM   5460  HE2 MET B 169     -24.840  -9.149 -37.128  1.00 17.18          H
ATOM   5461  HE3 MET B 169     -24.209 -10.588 -37.361  1.00 17.18          H
ATOM   5462  N   ALA B 170     -24.216 -13.519 -40.277  1.00 13.27          N
ANISOU 5462  N   ALA B 170     1735   1792   1515    -79    -42   -180      N
ATOM   5463  CA  ALA B 170     -24.459 -14.938 -40.079  1.00 13.74          C
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ANISOU 5463  CA  ALA B 170     1888   1783   1549    -78    -34   -126      C
ATOM   5464  C   ALA B 170    -24.725 -15.290 -38.628  1.00 14.34           C
ANISOU 5464  C   ALA B 170     2033   1873   1542    -95    -26    -77      C
ATOM   5465  O   ALA B 170    -24.363 -14.569 -37.691  1.00 13.13           O
ANISOU 5465  O   ALA B 170     1861   1794   1333    -90    -41    -90      O
ATOM   5466  CB  ALA B 170    -23.267 -15.775 -40.553  1.00 13.27           C
ANISOU 5466  CB  ALA B 170     1855   1678   1510      5    -75   -114      C
ATOM   5467  H   ALA B 170    -23.492 -13.235 -39.911  1.00 15.92           H
ATOM   5468  HA  ALA B 170    -25.235 -15.201 -40.599  1.00 16.49           H
ATOM   5469  HB1 ALA B 170    -23.462 -16.713 -40.406  1.00 15.93           H
ATOM   5470  HB2 ALA B 170    -23.121 -15.610 -41.497  1.00 15.93           H
ATOM   5471  HB3 ALA B 170    -22.480 -15.517 -40.046  1.00 15.93           H
ATOM   5472  N   THR B 171    -25.392 -16.428 -38.483  1.00 14.00           N
ANISOU 5472  N   THR B 171     2078   1758   1483    -134      3    -25      N
ATOM   5473  CA  THR B 171    -25.333 -17.257 -37.291  1.00 15.26           C
ANISOU 5473  CA  THR B 171     2344   1898   1558    -139     -6     57      C
ATOM   5474  C   THR B 171    -24.396 -18.414 -37.607  1.00 15.64           C
ANISOU 5474  C   THR B 171     2460   1847   1638    -51    -60    114      C
ATOM   5475  O   THR B 171    -24.668 -19.199 -38.524  1.00 14.39           O
ANISOU 5475  O   THR B 171     2335   1588   1545    -59    -34    105      O
ATOM   5476  CB  THR B 171    -26.720 -17.774 -36.924  1.00 16.57           C
ANISOU 5476  CB  THR B 171     2566   2035   1693    -251     70     83      C
ATOM   5477  OG1 THR B 171    -27.604 -16.672 -36.686  1.00 17.42           O
ANISOU 5477  OG1 THR B 171     2587   2232   1799    -317    130     17      O
ATOM   5478  CG2 THR B 171    -26.652 -18.641 -35.678  1.00 19.14           C
ANISOU 5478  CG2 THR B 171     3020   2339   1915    -274     63    184      C
ATOM   5479  H   THR B 171    -25.907 -16.753 -39.091  1.00 16.80           H
ATOM   5480  HA  THR B 171    -24.974 -16.749 -36.547  1.00 18.32           H
ATOM   5481  HB  THR B 171    -27.066 -18.313 -37.652  1.00 19.88           H
ATOM   5482  HG1 THR B 171    -27.664 -16.197 -37.376  1.00 20.90           H
ATOM   5483 HG21 THR B 171    -27.538 -18.965 -35.451  1.00 22.97           H
ATOM   5484 HG22 THR B 171    -26.068 -19.400 -35.834  1.00 22.97           H
ATOM   5485 HG23 THR B 171    -26.306 -18.124 -34.934  1.00 22.97           H
ATOM   5486  N   ALA B 172    -23.286 -18.504 -36.877  1.00 15.35           N
ANISOU 5486  N   ALA B 172     2435   1838   1560     34    -136    165      N
ATOM   5487  CA  ALA B 172    -22.291 -19.544 -37.098  1.00 17.43           C
ANISOU 5487  CA  ALA B 172     2741   2006   1876    146    -194    221      C
ATOM   5488  C   ALA B 172    -22.032 -20.258 -35.783  1.00 18.62           C
ANISOU 5488  C   ALA B 172     2995   2140   1940    168    -255    353      C
ATOM   5489  O   ALA B 172    -22.115 -19.655 -34.710  1.00 19.04           O
ANISOU 5489  O   ALA B 172     3051   2306   1877    119    -277    379      O
ATOM   5490  CB  ALA B 172    -20.971 -18.975 -37.648  1.00 18.07           C
ANISOU 5490  CB  ALA B 172     2703   2145   2016    252    -250    164      C
ATOM   5491  H   ALA B 172    -23.085 -17.965 -36.238  1.00 18.42           H
ATOM   5492  HA  ALA B 172    -22.635 -20.190 -37.735  1.00 20.91           H
ATOM   5493  HB1 ALA B 172    -20.343 -19.703 -37.778  1.00 21.68           H
ATOM   5494  HB2 ALA B 172    -21.146 -18.533 -38.494  1.00 21.68           H
ATOM   5495  HB3 ALA B 172    -20.612 -18.338 -37.010  1.00 21.68           H
ATOM   5496  N   GLY B 173    -21.717 -21.547 -35.864  1.00 19.30           N
ANISOU 5496  N   GLY B 173     3174   2079   2080    238    -281    437      N
ATOM   5497  CA  GLY B 173    -21.539 -22.319 -34.647  1.00 20.36           C
ANISOU 5497  CA  GLY B 173     3426   2177   2133    254    -347    592      C
ATOM   5498  C   GLY B 173    -20.617 -23.505 -34.807  1.00 23.14           C
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ANISOU 5498  C   GLY B 173     3830   2375   2587    403   -416    682       C
ATOM   5499  O   GLY B 173    -20.308 -23.949 -35.920  1.00 21.45           O
ANISOU 5499  O   GLY B 173     3585   2050   2514    476   -382    611       O
ATOM   5500  H   GLY B 173    -21.604 -21.987 -36.594  1.00 23.16           H
ATOM   5501  HA2 GLY B 173    -21.175 -21.744 -33.956  1.00 24.43           H
ATOM   5502  HA3 GLY B 173    -22.402 -22.644 -34.347  1.00 24.43           H
ATOM   5503  N   TYR B 174    -20.181 -24.015 -33.654  1.00 26.44           N
ANISOU 5503  N   TYR B 174     4329   2789   2929    444   -515    841       N
ATOM   5504  CA  TYR B 174    -19.329 -25.198 -33.573  1.00 29.93           C
ANISOU 5504  CA  TYR B 174     4830   3070   3470    599   -600    965       C
ATOM   5505  C   TYR B 174    -19.748 -25.988 -32.341  1.00 30.95           C
ANISOU 5505  C   TYR B 174     5139   3138   3482    541   -650   1163       C
ATOM   5506  O   TYR B 174    -19.580 -25.511 -31.215  1.00 30.76           O
ANISOU 5506  O   TYR B 174     5122   3270   3296    498   -731   1247       O
ATOM   5507  CB  TYR B 174    -17.850 -24.814 -33.499  1.00 33.23           C
ANISOU 5507  CB  TYR B 174     5099   3587   3939    766   -724    968       C
ATOM   5508  CG  TYR B 174    -16.920 -25.998 -33.421  1.00 38.25           C
ANISOU 5508  CG  TYR B 174     5769   4059   4706    953   -818   1097       C
ATOM   5509  CD1 TYR B 174    -16.531 -26.675 -34.568  1.00 39.55           C
ANISOU 5509  CD1 TYR B 174     5901   4051   5075   1075   -760   1016       C
ATOM   5510  CD2 TYR B 174    -16.430 -26.442 -32.200  1.00 42.00           C
ANISOU 5510  CD2 TYR B 174     6308   4549   5103   1011   -967   1299       C
ATOM   5511  CE1 TYR B 174    -15.680 -27.761 -34.501  1.00 42.40           C
ANISOU 5511  CE1 TYR B 174     6277   4249   5585   1257   -831   1120       C
ATOM   5512  CE2 TYR B 174    -15.582 -27.527 -32.124  1.00 45.20           C
ANISOU 5512  CE2 TYR B 174     6679   4830   5664   1160  -1016   1404       C
ATOM   5513  CZ  TYR B 174    -15.209 -28.182 -33.278  1.00 45.56           C
ANISOU 5513  CZ  TYR B 174     6681   4695   5935   1285   -946   1312       C
ATOM   5514  OH  TYR B 174    -14.361 -29.266 -33.201  1.00 48.98           O
ANISOU 5514  OH  TYR B 174     7072   4998   6539   1437   -981   1412       O
ATOM   5515  H   TYR B 174    -20.372 -23.681 -32.885  1.00 31.73           H
ATOM   5516  HA  TYR B 174    -19.466 -25.752 -34.358  1.00 35.91           H
ATOM   5517  HB2 TYR B 174    -17.618 -24.306 -34.293  1.00 39.87           H
ATOM   5518  HB3 TYR B 174    -17.707 -24.271 -32.708  1.00 39.87           H
ATOM   5519  HD1 TYR B 174    -16.848 -26.392 -35.395  1.00 47.46           H
ATOM   5520  HD2 TYR B 174    -16.681 -26.002 -31.420  1.00 50.40           H
ATOM   5521  HE1 TYR B 174    -15.427 -28.206 -35.278  1.00 50.88           H
ATOM   5522  HE2 TYR B 174    -15.262 -27.813 -31.299  1.00 54.24           H
ATOM   5523  HH  TYR B 174    -14.152 -29.411 -32.401  1.00 58.77           H
ATOM   5524  N   GLN B 175    -20.306 -27.180 -32.554  1.00 30.93           N
ANISOU 5524  N   GLN B 175     5289   2912   3550    522   -597   1232       N
ATOM   5525  CA  GLN B 175    -20.674 -28.090 -31.471  1.00 33.30           C
ANISOU 5525  CA  GLN B 175     5763   3128   3761    462   -632   1430       C
ATOM   5526  C   GLN B 175    -21.542 -27.394 -30.425  1.00 32.98           C
ANISOU 5526  C   GLN B 175     5766   3275   3489    266   -601   1457       C
ATOM   5527  O   GLN B 175    -21.291 -27.477 -29.220  1.00 33.74           O
ANISOU 5527  O   GLN B 175     5879   3479   3460    244   -671   1582       O
ATOM   5528  CB  GLN B 175    -19.423 -28.691 -30.827  1.00 35.74           C
ANISOU 5528  CB  GLN B 175     6019   3430   4131    631   -769   1575       C
ATOM   5529  CG  GLN B 175    -18.651 -29.627 -31.746  1.00 38.33           C
ANISOU 5529  CG  GLN B 175     6305   3548   4710    814   -770   1556       C
ATOM   5530  CD  GLN B 175    -17.448 -30.264 -31.067  1.00 43.30           C
ANISOU 5530  CD  GLN B 175     6869   4170   5414    982   -896   1716       C
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ATOM   5531  OE1 GLN B 175     -16.993 -29.806 -30.018  1.00 45.06           O
ANISOU 5531  OE1 GLN B 175     7046   4581   5493    982  -1003   1820       O
ATOM   5532  NE2 GLN B 175     -16.935 -31.336 -31.659  1.00 45.38           N
ANISOU 5532  NE2 GLN B 175     7124   4218   5900   1121   -875   1734       N
ATOM   5533  H   GLN B 175     -20.486 -27.490 -33.336  1.00 37.11           H
ATOM   5534  HA  GLN B 175     -21.192 -28.821 -31.843  1.00 39.96           H
ATOM   5535  HB2 GLN B 175     -18.826 -27.970 -30.570  1.00 42.89           H
ATOM   5536  HB3 GLN B 175     -19.686 -29.196 -30.042  1.00 42.89           H
ATOM   5537  HG2 GLN B 175     -19.242 -30.339 -32.038  1.00 45.99           H
ATOM   5538  HG3 GLN B 175     -18.332 -29.125 -32.512  1.00 45.99           H
ATOM   5539 HE21 GLN B 175     -17.285 -31.634 -32.387  1.00 54.46           H
ATOM   5540 HE22 GLN B 175     -16.254 -31.733 -31.315  1.00 54.46           H
ATOM   5541  N   SER B 176     -22.593 -26.720 -30.892  1.00 30.21           N
ANISOU 5541  N   SER B 176     5389   2989   3100    120   -471   1312       N
ATOM   5542  CA  SER B 176     -23.443 -25.938 -30.003  1.00 30.64           C
ANISOU 5542  CA  SER B 176     5455   3229   2957    -60   -414   1296       C
ATOM   5543  C   SER B 176     -24.912 -26.134 -30.374  1.00 29.56           C
ANISOU 5543  C   SER B 176     5370   3038   2823   -237   -252   1225       C
ATOM   5544  O   SER B 176     -25.263 -26.937 -31.243  1.00 28.71           O
ANISOU 5544  O   SER B 176     5310   2748   2851   -234   -196   1205       O
ATOM   5545  CB  SER B 176     -23.050 -24.460 -30.061  1.00 28.96           C
ANISOU 5545  CB  SER B 176     5060   3239   2704    -41   -427   1148       C
ATOM   5546  OG  SER B 176     -23.220 -23.957 -31.364  1.00 26.75           O
ANISOU 5546  OG  SER B 176     4652   2940   2573    -11   -353    974       O
ATOM   5547  H   SER B 176     -22.832 -26.700 -31.718  1.00 36.25           H
ATOM   5548  HA  SER B 176     -23.319 -26.247 -29.092  1.00 36.76           H
ATOM   5549  HB2 SER B 176     -23.614 -23.958 -29.451  1.00 34.75           H
ATOM   5550  HB3 SER B 176     -22.119 -24.369 -29.805  1.00 34.75           H
ATOM   5551  HG  SER B 176     -23.003 -23.146 -31.389  1.00 32.10           H
ATOM   5552  N   SER B 177     -25.768 -25.382 -29.680  1.00 29.02           N
ANISOU 5552  N   SER B 177     5286   3138   2602   -396   -173   1180       N
ATOM   5553  CA  SER B 177     -27.212 -25.385 -29.865  1.00 28.29           C
ANISOU 5553  CA  SER B 177     5206   3046   2496   -576    -18   1106       C
ATOM   5554  C   SER B 177     -27.705 -23.963 -29.667  1.00 27.05           C
ANISOU 5554  C   SER B 177     4902   3107   2269   -646     54    953       C
ATOM   5555  O   SER B 177     -27.006 -23.127 -29.088  1.00 28.06           O
ANISOU 5555  O   SER B 177     4973   3377   2312   -596    -11    935       O
ATOM   5556  CB  SER B 177     -27.923 -26.301 -28.865  1.00 30.24           C
ANISOU 5556  CB  SER B 177     5555   3269   2665   -696    29   1209       C
ATOM   5557  OG  SER B 177     -27.289 -27.556 -28.774  1.00 31.73           O
ANISOU 5557  OG  SER B 177     5848   3282   2924   -602   -55   1355       O
ATOM   5558  H   SER B 177     -25.516 -24.836 -29.065  1.00 34.82           H
ATOM   5559  HA  SER B 177     -27.429 -25.672 -30.766  1.00 33.94           H
ATOM   5560  HB2 SER B 177     -27.912 -25.880 -27.991  1.00 36.28           H
ATOM   5561  HB3 SER B 177     -28.839 -26.433 -29.156  1.00 36.28           H
ATOM   5562  HG  SER B 177     -27.291 -27.934 -29.524  1.00 38.07           H
ATOM   5563  N   GLY B 178     -28.915 -23.688 -30.127  1.00 25.17           N
ANISOU 5563  N   GLY B 178     4601   2892   2073   -765    186    842       N
ATOM   5564  CA  GLY B 178     -29.525 -22.398 -29.874  1.00 24.06           C
ANISOU 5564  CA  GLY B 178     4326   2935   1883   -833    270    703       C
ATOM   5565  C   GLY B 178     -30.544 -22.041 -30.937  1.00 22.62           C
ANISOU 5565  C   GLY B 178     4013   2743   1838   -880    368    568       C
ATOM   5566  O   GLY B 178     -30.953 -22.873 -31.743  1.00 22.66           O
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ANISOU 5566 O GLY B 178 4050 2618 1941 -905 387 583 O
ATOM 5567 H GLY B 178 -29.401 -24.229 -30.587 1.00 30.21 H
ATOM 5568 HA2 GLY B 178 -29.969 -22.412 -29.012 1.00 28.88 H
ATOM 5569 HA3 GLY B 178 -28.840 -21.712 -29.858 1.00 28.88 H
ATOM 5570 N SER B 179 -30.949 -20.771 -30.913 1.00 20.52 N
ANISOU 5570 N SER B 179 3600 2619 1579 -893 427 434 N
ATOM 5571 CA SER B 179 -31.856 -20.217 -31.908 1.00 19.40 C
ANISOU 5571 CA SER B 179 3306 2492 1574 -916 498 311 C
ATOM 5572 C SER B 179 -31.457 -18.784 -32.217 1.00 18.78 C
ANISOU 5572 C SER B 179 3076 2505 1553 -820 475 192 C
ATOM 5573 O SER B 179 -30.890 -18.089 -31.369 1.00 18.27 O
ANISOU 5573 O SER B 179 3015 2531 1395 -795 458 173 O
ATOM 5574 CB SER B 179 -33.305 -20.223 -31.434 1.00 20.73 C
ANISOU 5574 CB SER B 179 3441 2728 1707 -1082 643 273 C
ATOM 5575 OG SER B 179 -33.693 -21.508 -30.995 1.00 21.86 O
ANISOU 5575 OG SER B 179 3737 2791 1777 -1199 675 387 O
ATOM 5576 H SER B 179 -30.706 -20.202 -30.316 1.00 24.63 H
ATOM 5577 HA SER B 179 -31.797 -20.737 -32.725 1.00 23.28 H
ATOM 5578 HB2 SER B 179 -33.398 -19.598 -30.698 1.00 24.87 H
ATOM 5579 HB3 SER B 179 -33.878 -19.955 -32.169 1.00 24.87 H
ATOM 5580 HG SER B 179 -33.619 -22.061 -31.623 1.00 26.23 H
ATOM 5581 N SER B 180 -31.783 -18.345 -33.433 1.00 17.21 N
ANISOU 5581 N SER B 180 2751 2284 1503 -780 472 115 N
ATOM 5582 CA SER B 180 -31.605 -16.955 -33.822 1.00 16.95 C
ANISOU 5582 CA SER B 180 2574 2322 1545 -705 463 9 C
ATOM 5583 C SER B 180 -32.679 -16.570 -34.831 1.00 17.09 C
ANISOU 5583 C SER B 180 2453 2342 1700 -734 508 -58 C
ATOM 5584 O SER B 180 -33.275 -17.420 -35.501 1.00 16.84 O
ANISOU 5584 O SER B 180 2435 2252 1713 -792 515 -26 O
ATOM 5585 CB SER B 180 -30.214 -16.701 -34.418 1.00 16.90 C
ANISOU 5585 CB SER B 180 2567 2280 1574 -571 344 17 C
ATOM 5586 OG SER B 180 -30.084 -17.356 -35.678 1.00 16.05 O
ANISOU 5586 OG SER B 180 2461 2076 1562 -537 298 39 O
ATOM 5587 H SER B 180 -32.111 -18.841 -34.053 1.00 20.65 H
ATOM 5588 HA SER B 180 -31.707 -16.390 -33.040 1.00 20.34 H
ATOM 5589 HB2 SER B 180 -30.092 -15.747 -34.543 1.00 20.28 H
ATOM 5590 HB3 SER B 180 -29.541 -17.046 -33.810 1.00 20.28 H
ATOM 5591 HG SER B 180 -29.321 -17.213 -35.998 1.00 19.26 H
ATOM 5592 N ASN B 181 -32.923 -15.264 -34.917 1.00 16.32 N
ANISOU 5592 N ASN B 181 2221 2310 1671 -695 534 -149 N
ATOM 5593 CA ASN B 181 -33.779 -14.683 -35.947 1.00 17.39 C
ANISOU 5593 CA ASN B 181 2204 2450 1953 -690 544 -200 C
ATOM 5594 C ASN B 181 -33.194 -13.317 -36.266 1.00 15.99 C
ANISOU 5594 C ASN B 181 1939 2288 1849 -586 503 -261 C
ATOM 5595 O ASN B 181 -33.051 -12.484 -35.369 1.00 15.75 O
ANISOU 5595 O ASN B 181 1892 2305 1786 -572 553 -323 O
ATOM 5596 CB ASN B 181 -35.235 -14.568 -35.476 1.00 18.44 C
ANISOU 5596 CB ASN B 181 2243 2648 2117 -787 665 -245 C
ATOM 5597 CG ASN B 181 -36.198 -14.182 -36.593 1.00 18.14 C
ANISOU 5597 CG ASN B 181 2039 2618 2234 -786 654 -272 C
ATOM 5598 OD1 ASN B 181 -36.021 -13.171 -37.272 1.00 17.25 O
ANISOU 5598 OD1 ASN B 181 1827 2502 2226 -696 601 -302 O
ATOM 5599 ND2 ASN B 181 -37.248 -14.980 -36.764 1.00 18.84 N

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ANISOU 5599  ND2 ASN B 181     2097   2724   2338   -896    700   -253      N
ATOM   5600  H   ASN B 181    -32.595 -14.681 -34.377  1.00 19.59          H
ATOM   5601  HA  ASN B 181    -33.751 -15.231 -36.746  1.00 20.87          H
ATOM   5602  HB2 ASN B 181    -35.519 -15.425 -35.120  1.00 22.13          H
ATOM   5603  HB3 ASN B 181    -35.290 -13.889 -34.786  1.00 22.13          H
ATOM   5604 HD21 ASN B 181    -37.823 -14.809 -37.380  1.00 22.61          H
ATOM   5605 HD22 ASN B 181    -37.352 -15.669 -36.259  1.00 22.61          H
ATOM   5606  N   VAL B 182    -32.818 -13.102 -37.525  1.00 13.75          N
ANISOU 5606  N   VAL B 182     1611   1962   1650   -527    416   -246      N
ATOM   5607  CA  VAL B 182    -32.032 -11.935 -37.908  1.00 13.47          C
ANISOU 5607  CA  VAL B 182     1525   1924   1671   -437    363   -282      C
ATOM   5608  C   VAL B 182    -32.561 -11.408 -39.232  1.00 13.97          C
ANISOU 5608  C   VAL B 182     1474   1971   1864   -418    319   -277      C
ATOM   5609  O   VAL B 182    -32.822 -12.181 -40.158  1.00 14.06          O
ANISOU 5609  O   VAL B 182     1493   1964   1886   -454    276   -231      O
ATOM   5610  CB  VAL B 182    -30.527 -12.274 -38.033  1.00 13.79          C
ANISOU 5610  CB  VAL B 182     1663   1936   1639   -382    281   -249      C
ATOM   5611  CG1 VAL B 182    -29.710 -11.022 -38.305  1.00 14.00          C
ANISOU 5611  CG1 VAL B 182     1636   1969   1714   -313    241   -293      C
ATOM   5612  CG2 VAL B 182    -30.012 -12.996 -36.798  1.00 14.01          C
ANISOU 5612  CG2 VAL B 182     1810   1981   1533   -401    297   -220      C
ATOM   5613  H   VAL B 182    -33.008 -13.624 -38.181  1.00 16.50          H
ATOM   5614  HA  VAL B 182    -32.136 -11.241 -37.238  1.00 16.17          H
ATOM   5615  HB  VAL B 182    -30.408 -12.870 -38.789  1.00 16.54          H
ATOM   5616 HG11 VAL B 182    -28.774 -11.266 -38.379  1.00 16.80          H
ATOM   5617 HG12 VAL B 182    -30.014 -10.622 -39.135  1.00 16.80          H
ATOM   5618 HG13 VAL B 182    -29.834 -10.399 -37.572  1.00 16.80          H
ATOM   5619 HG21 VAL B 182    -29.069 -13.190 -36.916  1.00 16.81          H
ATOM   5620 HG22 VAL B 182    -30.138 -12.425 -36.024  1.00 16.81          H
ATOM   5621 HG23 VAL B 182    -30.508 -13.822 -36.685  1.00 16.81          H
ATOM   5622  N   THR B 183    -32.692 -10.088 -39.332  1.00 13.79          N
ANISOU 5622  N   THR B 183     1352   1950   1937   -366    323   -321      N
ATOM   5623  CA  THR B 183    -32.987  -9.425 -40.598  1.00 14.87          C
ANISOU 5623  CA  THR B 183     1392   2067   2192   -335    256   -293      C
ATOM   5624  C   THR B 183    -31.786  -8.582 -41.009  1.00 13.81          C
ANISOU 5624  C   THR B 183     1283   1898   2066   -272    195   -296      C
ATOM   5625  O   THR B 183    -31.219  -7.861 -40.177  1.00 12.85          O
ANISOU 5625  O   THR B 183     1179   1770   1931   -240    230   -352      O
ATOM   5626  CB  THR B 183    -34.244  -8.561 -40.480  1.00 16.62          C
ANISOU 5626  CB  THR B 183     1464   2299   2551   -320    307   -325      C
ATOM   5627  OG1 THR B 183    -35.346  -9.384 -40.074  1.00 18.01          O
ANISOU 5627  OG1 THR B 183     1605   2523   2716   -393    374   -329      O
ATOM   5628  CG2 THR B 183    -34.573  -7.894 -41.814  1.00 18.04          C
ANISOU 5628  CG2 THR B 183     1544   2457   2851   -285    214   -267      C
ATOM   5629  H   THR B 183    -32.614  -9.546 -38.669  1.00 16.55          H
ATOM   5630  HA  THR B 183    -33.140 -10.094 -41.283  1.00 17.85          H
ATOM   5631  HB  THR B 183    -34.098  -7.867 -39.817  1.00 19.94          H
ATOM   5632  HG1 THR B 183    -36.042  -8.919 -40.006  1.00 21.62          H
ATOM   5633 HG21 THR B 183    -35.371  -7.350 -41.724  1.00 21.64          H
ATOM   5634 HG22 THR B 183    -33.835  -7.329 -42.093  1.00 21.64          H
ATOM   5635 HG23 THR B 183    -34.727  -8.570 -42.492  1.00 21.64          H
ATOM   5636  N   VAL B 184    -31.407  -8.672 -42.290  1.00 13.48          N
ANISOU 5636  N   VAL B 184     1242   1842   2036   -272    109   -240      N
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ATOM 5637 CA VAL B 184 -30.191 -8.066 -42.825 1.00 13.52 C
ANISOU 5637 CA VAL B 184 1280 1826 2030 -236 54 -234 C
ATOM 5638 C VAL B 184 -30.558 -7.131 -43.974 1.00 14.23 C
ANISOU 5638 C VAL B 184 1290 1895 2223 -227 -7 -186 C
ATOM 5639 O VAL B 184 -31.432 -7.450 -44.789 1.00 15.20 O
ANISOU 5639 O VAL B 184 1363 2037 2377 -261 -46 -133 O
ATOM 5640 CB VAL B 184 -29.192 -9.138 -43.325 1.00 13.03 C
ANISOU 5640 CB VAL B 184 1311 1773 1866 -253 16 -214 C
ATOM 5641 CG1 VAL B 184 -27.845 -8.522 -43.633 1.00 12.40 C
ANISOU 5641 CG1 VAL B 184 1253 1690 1769 -220 -19 -226 C
ATOM 5642 CG2 VAL B 184 -29.049 -10.264 -42.314 1.00 14.21 C
ANISOU 5642 CG2 VAL B 184 1542 1929 1927 -263 59 -228 C
ATOM 5643 H VAL B 184 -31.859 -9.097 -42.886 1.00 16.17 H
ATOM 5644 HA VAL B 184 -29.758 -7.544 -42.132 1.00 16.22 H
ATOM 5645 HB VAL B 184 -29.535 -9.523 -44.147 1.00 15.63 H
ATOM 5646 HG11 VAL B 184 -27.243 -9.218 -43.942 1.00 14.88 H
ATOM 5647 HG12 VAL B 184 -27.956 -7.849 -44.322 1.00 14.88 H
ATOM 5648 HG13 VAL B 184 -27.492 -8.115 -42.826 1.00 14.88 H
ATOM 5649 HG21 VAL B 184 -28.419 -10.917 -42.656 1.00 17.05 H
ATOM 5650 HG22 VAL B 184 -28.724 -9.897 -41.477 1.00 17.05 H
ATOM 5651 HG23 VAL B 184 -29.915 -10.679 -42.179 1.00 17.05 H
ATOM 5652 N TRP B 185 -29.868 -5.995 -44.059 1.00 13.36 N
ANISOU 5652 N TRP B 185 1173 1747 2157 -190 -23 -195 N
ATOM 5653 CA TRP B 185 -30.041 -5.097 -45.204 1.00 15.02 C
ANISOU 5653 CA TRP B 185 1331 1925 2451 -186 -92 -125 C
ATOM 5654 C TRP B 185 -28.860 -4.153 -45.399 1.00 15.66 C
ANISOU 5654 C TRP B 185 1450 1967 2534 -176 -110 -132 C
ATOM 5655 O TRP B 185 -27.916 -4.119 -44.605 1.00 14.52 O
ANISOU 5655 O TRP B 185 1355 1827 2334 -169 -70 -202 O
ATOM 5656 CB TRP B 185 -31.338 -4.290 -45.067 1.00 16.31 C
ANISOU 5656 CB TRP B 185 1381 2049 2767 -145 -83 -108 C
ATOM 5657 CG TRP B 185 -31.370 -3.268 -43.962 1.00 16.06 C
ANISOU 5657 CG TRP B 185 1323 1952 2826 -87 -3 -191 C
ATOM 5658 CD1 TRP B 185 -31.116 -1.930 -44.075 1.00 16.81 C
ANISOU 5658 CD1 TRP B 185 1399 1954 3032 -44 -11 -190 C
ATOM 5659 CD2 TRP B 185 -31.701 -3.499 -42.586 1.00 16.23 C
ANISOU 5659 CD2 TRP B 185 1344 1992 2831 -79 104 -293 C
ATOM 5660 NE1 TRP B 185 -31.264 -1.312 -42.849 1.00 16.57 N
ANISOU 5660 NE1 TRP B 185 1354 1879 3062 -7 90 -302 N
ATOM 5661 CE2 TRP B 185 -31.623 -2.254 -41.921 1.00 17.00 C
ANISOU 5661 CE2 TRP B 185 1419 2012 3030 -31 162 -368 C
ATOM 5662 CE3 TRP B 185 -32.052 -4.636 -41.851 1.00 15.76 C
ANISOU 5662 CE3 TRP B 185 1310 2003 2675 -118 160 -328 C
ATOM 5663 CZ2 TRP B 185 -31.874 -2.119 -40.557 1.00 16.86 C
ANISOU 5663 CZ2 TRP B 185 1400 2001 3004 -27 279 -488 C
ATOM 5664 CZ3 TRP B 185 -32.308 -4.497 -40.494 1.00 16.40 C
ANISOU 5664 CZ3 TRP B 185 1393 2095 2744 -116 270 -428 C
ATOM 5665 CH2 TRP B 185 -32.215 -3.247 -39.863 1.00 16.07 C
ANISOU 5665 CH2 TRP B 185 1325 1991 2790 -73 331 -514 C
ATOM 5666 OXT TRP B 185 -28.822 -3.426 -46.394 1.00 15.92 O
ANISOU 5666 OXT TRP B 185 1464 1970 2617 -187 -171 -60 O
ATOM 5667 H TRP B 185 -29.298 -5.721 -43.475 1.00 16.03 H
ATOM 5668 HA TRP B 185 -30.117 -5.636 -46.007 1.00 18.03 H

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ATOM   5669  HB2 TRP B 185     -31.494  -3.819 -45.901  1.00 19.57           H
ATOM   5670  HB3 TRP B 185     -32.067  -4.911 -44.907  1.00 19.57           H
ATOM   5671  HD1 TRP B 185     -30.882  -1.497 -44.865  1.00 20.17           H
ATOM   5672  HE1 TRP B 185     -31.147  -0.474 -42.693  1.00 19.88           H
ATOM   5673  HE3 TRP B 185     -32.114  -5.468 -42.263  1.00 18.91           H
ATOM   5674  HZ2 TRP B 185     -31.816  -1.292 -40.135  1.00 20.23           H
ATOM   5675  HZ3 TRP B 185     -32.541  -5.245 -39.994  1.00 19.68           H
ATOM   5676  HH2 TRP B 185     -32.392  -3.183 -38.952  1.00 19.29           H
TER    5677      TRP B 185
ATOM   5678  N   SER C   2     -5.314   3.845   7.444  1.00 37.06           N
ANISOU 5678  N   SER C   2     5183   5326   3570   -107   -810   -522      N
ATOM   5679  CA  SER C   2     -5.781   2.797   6.546  1.00 35.60           C
ANISOU 5679  CA  SER C   2     4945   5114   3467    -37   -800   -453      C
ATOM   5680  C   SER C   2     -7.303   2.707   6.594  1.00 34.03           C
ANISOU 5680  C   SER C   2     4819   4842   3269     23   -738   -385      C
ATOM   5681  O   SER C   2     -7.948   3.370   7.405  1.00 33.51           O
ANISOU 5681  O   SER C   2     4871   4733   3129     52   -696   -386      O
ATOM   5682  CB  SER C   2     -5.146   1.456   6.920  1.00 36.88           C
ANISOU 5682  CB  SER C   2     5104   5274   3635    104   -894   -468      C
ATOM   5683  OG  SER C   2     -5.486   1.083   8.247  1.00 37.59           O
ANISOU 5683  OG  SER C   2     5322   5318   3641    179   -917   -444      O
ATOM   5684  HA  SER C   2     -5.519   3.014   5.638  1.00 42.72           H
ATOM   5685  HB2 SER C   2     -5.467   0.774   6.309  1.00 44.26           H
ATOM   5686  HB3 SER C   2     -4.182   1.534   6.851  1.00 44.26           H
ATOM   5687  HG  SER C   2     -5.213   1.665   8.787  1.00 45.10           H
ATOM   5688  N   THR C   3     -7.872   1.887   5.716  1.00 33.49           N
ANISOU 5688  N   THR C   3     4710   4744   3271     54   -748   -326      N
ATOM   5689  CA  THR C   3     -9.320   1.768   5.630  1.00 32.64           C
ANISOU 5689  CA  THR C   3     4676   4561   3163     95   -731   -241      C
ATOM   5690  C   THR C   3     -9.887   1.026   6.841  1.00 30.55           C
ANISOU 5690  C   THR C   3     4585   4215   2810    179   -752   -171      C
ATOM   5691  O   THR C   3     -9.227   0.172   7.441  1.00 32.09           O
ANISOU 5691  O   THR C   3     4820   4392   2980    231   -813   -186      O
ATOM   5692  CB  THR C   3     -9.712   1.043   4.345  1.00 34.25           C
ANISOU 5692  CB  THR C   3     4795   4757   3462     81   -771   -204      C
ATOM   5693  OG1 THR C   3     -9.087  -0.244   4.309  1.00 36.27           O
ANISOU 5693  OG1 THR C   3     5054   4982   3744    138   -839   -232      O
ATOM   5694  CG2 THR C   3     -9.265   1.839   3.115  1.00 34.42           C
ANISOU 5694  CG2 THR C   3     4695   4864   3517    -12   -733   -237      C
ATOM   5695  H   THR C   3     -7.442   1.391   5.160  1.00 40.19           H
ATOM   5696  HA  THR C   3     -9.712   2.655   5.609  1.00 39.16           H
ATOM   5697  HB  THR C   3    -10.676   0.937   4.312  1.00 41.10           H
ATOM   5698  HG1 THR C   3     -8.252  -0.159   4.333  1.00 43.52           H
ATOM   5699 HG21 THR C   3     -9.519   1.369   2.305  1.00 41.30           H
ATOM   5700 HG22 THR C   3     -9.684   2.714   3.116  1.00 41.30           H
ATOM   5701 HG23 THR C   3     -8.302   1.951   3.125  1.00 41.30           H
ATOM   5702  N   ASP C   4    -11.140   1.367   7.194  1.00 25.70           N
ANISOU 5702  N   ASP C   4     4101   3547   2115    196   -693    -65      N
ATOM   5703  CA  ASP C   4    -11.835   0.708   8.296  1.00 23.97           C
ANISOU 5703  CA  ASP C   4     4079   3267   1762    244   -654     71      C
ATOM   5704  C   ASP C   4    -13.329   0.553   8.022  1.00 20.85           C
ANISOU 5704  C   ASP C   4     3646   2823   1454    189   -539    274      C
ATOM   5705  O   ASP C   4    -14.122   0.479   8.967  1.00 21.84           O
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ANISOU 5705 O ASP C 4 3834 2938 1527 195 -356 417 O
ATOM 5706 CB ASP C 4 -11.640 1.484 9.605 1.00 26.63 C
ANISOU 5706 CB ASP C 4 4548 3631 1940 301 -533 24 C
ATOM 5707 CG ASP C 4 -12.044 2.940 9.487 1.00 28.54 C
ANISOU 5707 CG ASP C 4 4808 3887 2149 317 -406 -33 C
ATOM 5708 OD1 ASP C 4 -12.723 3.295 8.502 1.00 28.41 O
ANISOU 5708 OD1 ASP C 4 4665 3858 2274 282 -364 23 O
ATOM 5709 OD2 ASP C 4 -11.679 3.730 10.379 1.00 30.78 O
ANISOU 5709 OD2 ASP C 4 5179 4172 2344 351 -344 -133 O
ATOM 5710 H ASP C 4 -11.604 1.978 6.805 1.00 30.84 H
ATOM 5711 HA ASP C 4 -11.461 -0.178 8.416 1.00 28.77 H
ATOM 5712 HB2 ASP C 4 -12.183 1.077 10.298 1.00 31.96 H
ATOM 5713 HB3 ASP C 4 -10.703 1.452 9.856 1.00 31.96 H
ATOM 5714 N TYR C 5 -13.736 0.496 6.752 1.00 18.68 N
ANISOU 5714 N TYR C 5 3191 2537 1369 117 -605 292 N
ATOM 5715 CA TYR C 5 -15.143 0.349 6.416 1.00 18.97 C
ANISOU 5715 CA TYR C 5 3069 2548 1593 34 -501 476 C
ATOM 5716 C TYR C 5 -15.308 -0.525 5.183 1.00 18.62 C
ANISOU 5716 C TYR C 5 2926 2447 1701 -61 -708 489 C
ATOM 5717 O TYR C 5 -14.585 -0.372 4.194 1.00 17.37 O
ANISOU 5717 O TYR C 5 2748 2320 1533 -40 -857 344 O
ATOM 5718 CB TYR C 5 -15.807 1.707 6.168 1.00 19.14 C
ANISOU 5718 CB TYR C 5 2952 2625 1694 75 -337 483 C
ATOM 5719 CG TYR C 5 -17.310 1.632 6.203 1.00 20.79 C
ANISOU 5719 CG TYR C 5 2967 2853 2080 34 -184 684 C
ATOM 5720 CD1 TYR C 5 -17.988 1.580 7.411 1.00 23.55 C
ANISOU 5720 CD1 TYR C 5 3336 3241 2373 68 57 809 C
ATOM 5721 CD2 TYR C 5 -18.053 1.610 5.033 1.00 21.19 C
ANISOU 5721 CD2 TYR C 5 2797 2911 2343 -36 -282 751 C
ATOM 5722 CE1 TYR C 5 -19.364 1.508 7.453 1.00 25.89 C
ANISOU 5722 CE1 TYR C 5 3390 3601 2846 26 223 1002 C
ATOM 5723 CE2 TYR C 5 -19.435 1.542 5.065 1.00 23.22 C
ANISOU 5723 CE2 TYR C 5 2816 3217 2790 -78 -163 936 C
ATOM 5724 CZ TYR C 5 -20.082 1.493 6.282 1.00 26.22 C
ANISOU 5724 CZ TYR C 5 3173 3654 3136 -50 102 1063 C
ATOM 5725 OH TYR C 5 -21.455 1.419 6.330 1.00 29.58 O
ANISOU 5725 OH TYR C 5 3302 4174 3764 -97 247 1256 O
ATOM 5726 H TYR C 5 -13.213 0.540 6.071 1.00 22.41 H
ATOM 5727 HA TYR C 5 -15.602 -0.081 7.155 1.00 22.77 H
ATOM 5728 HB2 TYR C 5 -15.522 2.329 6.855 1.00 22.97 H
ATOM 5729 HB3 TYR C 5 -15.543 2.033 5.294 1.00 22.97 H
ATOM 5730 HD1 TYR C 5 -17.506 1.591 8.206 1.00 28.26 H
ATOM 5731 HD2 TYR C 5 -17.615 1.646 4.213 1.00 25.43 H
ATOM 5732 HE1 TYR C 5 -19.805 1.474 8.272 1.00 31.07 H
ATOM 5733 HE2 TYR C 5 -19.923 1.529 4.273 1.00 27.87 H
ATOM 5734 HH TYR C 5 -21.771 1.418 5.552 1.00 35.50 H
ATOM 5735 N TRP C 6 -16.280 -1.432 5.251 1.00 20.15 N
ANISOU 5735 N TRP C 6 3065 2563 2027 -178 -712 666 N
ATOM 5736 CA TRP C 6 -16.615 -2.338 4.155 1.00 20.50 C
ANISOU 5736 CA TRP C 6 3045 2519 2227 -294 -933 681 C
ATOM 5737 C TRP C 6 -18.070 -2.099 3.791 1.00 22.02 C
ANISOU 5737 C TRP C 6 2978 2749 2641 -417 -855 854 C
ATOM 5738 O TRP C 6 -18.968 -2.357 4.602 1.00 23.83 O

ANISOU 5738 O TRP C 6 3128 2980 2948 -506 -691 1050 O
ATOM 5739 CB TRP C 6 -16.373 -3.795 4.559 1.00 21.87 C
ANISOU 5739 CB TRP C 6 3413 2517 2381 -356 -1079 730 C
ATOM 5740 CG TRP C 6 -16.895 -4.838 3.601 1.00 23.09 C
ANISOU 5740 CG TRP C 6 3544 2521 2709 -506 -1314 758 C
ATOM 5741 CD1 TRP C 6 -17.747 -5.864 3.901 1.00 26.23 C
ANISOU 5741 CD1 TRP C 6 3962 2754 3251 -705 -1361 953 C
ATOM 5742 CD2 TRP C 6 -16.575 -4.981 2.213 1.00 22.75 C
ANISOU 5742 CD2 TRP C 6 3482 2467 2694 -482 -1545 582 C
ATOM 5743 NE1 TRP C 6 -17.979 -6.633 2.787 1.00 26.72 N
ANISOU 5743 NE1 TRP C 6 4029 2677 3447 -814 -1638 888 N
ATOM 5744 CE2 TRP C 6 -17.275 -6.110 1.736 1.00 25.67 C
ANISOU 5744 CE2 TRP C 6 3882 2645 3227 -660 -1751 652 C
ATOM 5745 CE3 TRP C 6 -15.775 -4.261 1.322 1.00 20.87 C
ANISOU 5745 CE3 TRP C 6 3208 2365 2357 -339 -1559 372 C
ATOM 5746 CZ2 TRP C 6 -17.197 -6.532 0.412 1.00 25.67 C
ANISOU 5746 CZ2 TRP C 6 3908 2586 3261 -670 -2012 495 C
ATOM 5747 CZ3 TRP C 6 -15.698 -4.688 0.008 1.00 20.85 C
ANISOU 5747 CZ3 TRP C 6 3184 2327 2412 -322 -1619 229 C
ATOM 5748 CH2 TRP C 6 -16.406 -5.807 -0.434 1.00 23.74 C
ANISOU 5748 CH2 TRP C 6 3612 2500 2907 -460 -1836 279 C
ATOM 5749 H TRP C 6 -16.775 -1.545 5.945 1.00 24.18 H
ATOM 5750 HA TRP C 6 -16.064 -2.135 3.383 1.00 24.61 H
ATOM 5751 HB2 TRP C 6 -15.417 -3.933 4.645 1.00 26.25 H
ATOM 5752 HB3 TRP C 6 -16.800 -3.949 5.416 1.00 26.25 H
ATOM 5753 HD1 TRP C 6 -18.109 -6.025 4.742 1.00 31.48 H
ATOM 5754 HE1 TRP C 6 -18.490 -7.324 2.753 1.00 32.07 H
ATOM 5755 HE3 TRP C 6 -15.299 -3.515 1.608 1.00 25.05 H
ATOM 5756 HZ2 TRP C 6 -17.668 -7.276 0.114 1.00 30.81 H
ATOM 5757 HZ3 TRP C 6 -15.167 -4.217 -0.594 1.00 25.02 H
ATOM 5758 HH2 TRP C 6 -16.335 -6.068 -1.323 1.00 28.48 H
ATOM 5759 N LEU C 7 -18.294 -1.596 2.582 1.00 21.12 N
ANISOU 5759 N LEU C 7 2721 2688 2617 -417 -969 792 N
ATOM 5760 CA LEU C 7 -19.624 -1.335 2.059 1.00 22.58 C
ANISOU 5760 CA LEU C 7 2630 2928 3023 -507 -962 936 C
ATOM 5761 C LEU C 7 -19.959 -2.410 1.041 1.00 24.30 C
ANISOU 5761 C LEU C 7 2823 3043 3367 -672 -1261 934 C
ATOM 5762 O LEU C 7 -19.181 -2.653 0.113 1.00 22.61 O
ANISOU 5762 O LEU C 7 2750 2789 3051 -630 -1473 758 O
ATOM 5763 CB LEU C 7 -19.697 0.052 1.414 1.00 21.61 C
ANISOU 5763 CB LEU C 7 2396 2917 2898 -374 -914 883 C
ATOM 5764 CG LEU C 7 -21.041 0.422 0.775 1.00 23.48 C
ANISOU 5764 CG LEU C 7 2330 3229 3364 -414 -949 1024 C
ATOM 5765 CD1 LEU C 7 -22.158 0.414 1.804 1.00 25.69 C
ANISOU 5765 CD1 LEU C 7 2389 3577 3796 -443 -708 1218 C
ATOM 5766 CD2 LEU C 7 -20.976 1.761 0.094 1.00 22.97 C
ANISOU 5766 CD2 LEU C 7 2231 3228 3269 -258 -941 975 C
ATOM 5767 H LEU C 7 -17.667 -1.391 2.030 1.00 25.35 H
ATOM 5768 HA LEU C 7 -20.272 -1.376 2.780 1.00 27.10 H
ATOM 5769 HB2 LEU C 7 -19.507 0.717 2.094 1.00 25.93 H
ATOM 5770 HB3 LEU C 7 -19.022 0.101 0.718 1.00 25.93 H
ATOM 5771 HG LEU C 7 -21.257 -0.241 0.101 1.00 28.18 H
ATOM 5772 HD11 LEU C 7 -22.991 0.652 1.368 1.00 30.83 H

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ATOM   5773 HD12 LEU C   7    -22.227  -0.474   2.188  1.00 30.83          H
ATOM   5774 HD13 LEU C   7    -21.952   1.060   2.498  1.00 30.83          H
ATOM   5775 HD21 LEU C   7    -21.842   1.959  -0.296  1.00 27.57          H
ATOM   5776 HD22 LEU C   7    -20.746   2.438   0.750  1.00 27.57          H
ATOM   5777 HD23 LEU C   7    -20.299   1.729  -0.601  1.00 27.57          H
ATOM   5778  N   ASN C   8    -21.113  -3.059   1.219  1.00 27.88          N
ANISOU 5778  N   ASN C   8     3096   3461   4034   -867  -1278   1123      N
ATOM   5779  CA  ASN C   8    -21.475  -4.192   0.372  1.00 32.06          C
ANISOU 5779  CA  ASN C   8     3636   3848   4699  -1067  -1594   1118      C
ATOM   5780  C   ASN C   8    -22.999  -4.194   0.208  1.00 36.48          C
ANISOU 5780  C   ASN C   8     3825   4487   5548  -1262  -1603   1328      C
ATOM   5781  O   ASN C   8    -23.728  -4.988   0.814  1.00 39.42          O
ANISOU 5781  O   ASN C   8     4099   4794   6086  -1489  -1564   1516      O
ATOM   5782  CB  ASN C   8    -20.965  -5.502   0.966  1.00 33.97          C
ANISOU 5782  CB  ASN C   8     4155   3861   4891  -1168  -1678   1122      C
ATOM   5783  CG  ASN C   8    -21.438  -6.709   0.200  1.00 36.78          C
ANISOU 5783  CG  ASN C   8     4555   4012   5409  -1400  -2012   1122      C
ATOM   5784  OD1 ASN C   8    -21.822  -6.613  -0.961  1.00 36.94          O
ANISOU 5784  OD1 ASN C   8     4477   4065   5495  -1420  -2207   1036      O
ATOM   5785  ND2 ASN C   8    -21.410  -7.864   0.853  1.00 39.92          N
ANISOU 5785  ND2 ASN C   8     5147   4175   5847  -1555  -2067   1218      N
ATOM   5786  H   ASN C   8    -21.697  -2.863   1.819  1.00 33.45          H
ATOM   5787  HA  ASN C   8    -21.074  -4.078  -0.504  1.00 38.48          H
ATOM   5788  HB2 ASN C   8    -19.995  -5.499   0.953  1.00 40.76          H
ATOM   5789  HB3 ASN C   8    -21.285  -5.581   1.878  1.00 40.76          H
ATOM   5790 HD21 ASN C   8    -21.669  -8.585   0.462  1.00 47.91          H
ATOM   5791 HD22 ASN C   8    -21.133  -7.891   1.666  1.00 47.91          H
ATOM   5792  N   PHE C   9    -23.485  -3.300  -0.648  1.00 36.54          N
ANISOU 5792  N   PHE C   9     3614   4645   5624  -1179  -1667   1308      N
ATOM   5793  CA  PHE C   9    -24.913  -3.073  -0.808  1.00 40.59          C
ANISOU 5793  CA  PHE C   9     3718   5292   6412  -1292  -1662   1493      C
ATOM   5794  C   PHE C   9    -25.378  -3.534  -2.180  1.00 42.64          C
ANISOU 5794  C   PHE C   9     4049   5469   6682  -1321  -1914   1369      C
ATOM   5795  O   PHE C   9    -24.746  -3.234  -3.199  1.00 41.65          O
ANISOU 5795  O   PHE C   9     4146   5312   6366  -1165  -2014   1165      O
ATOM   5796  CB  PHE C   9    -25.265  -1.594  -0.620  1.00 40.53          C
ANISOU 5796  CB  PHE C   9     3489   5497   6415  -1045  -1425   1542      C
ATOM   5797  CG  PHE C   9    -26.646  -1.227  -1.117  1.00 44.34          C
ANISOU 5797  CG  PHE C   9     3617   6113   7119  -1045  -1446   1647      C
ATOM   5798  CD1 PHE C   9    -27.710  -1.109  -0.237  1.00 47.35          C
ANISOU 5798  CD1 PHE C   9     3630   6652   7708  -1086  -1196   1854      C
ATOM   5799  CD2 PHE C   9    -26.877  -0.996  -2.466  1.00 45.28          C
ANISOU 5799  CD2 PHE C   9     3810   6204   7189  -974  -1668   1512      C
ATOM   5800  CE1 PHE C   9    -28.974  -0.771  -0.694  1.00 50.90          C
ANISOU 5800  CE1 PHE C   9     3772   7231   8335  -1048  -1216   1911      C
ATOM   5801  CE2 PHE C   9    -28.138  -0.666  -2.926  1.00 48.43          C
ANISOU 5801  CE2 PHE C   9     3912   6723   7766  -958  -1707   1586      C
ATOM   5802  CZ  PHE C   9    -29.185  -0.549  -2.040  1.00 51.31          C
ANISOU 5802  CZ  PHE C   9     3891   7246   8360  -990  -1499   1780      C
ATOM   5803  H   PHE C   9    -22.997  -2.805  -1.155  1.00 43.84          H
ATOM   5804  HA  PHE C   9    -25.393  -3.585  -0.138  1.00 48.71          H
ATOM   5805  HB2 PHE C   9    -25.224  -1.380   0.325  1.00 48.64          H
ATOM   5806  HB3 PHE C   9    -24.622  -1.055  -1.107  1.00 48.64          H
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ATOM   5807  HD1 PHE C   9    -27.574  -1.257   0.671  1.00 56.82          H
ATOM   5808  HD2 PHE C   9    -26.175  -1.073  -3.071  1.00 54.34          H
ATOM   5809  HE1 PHE C   9    -29.681  -0.696  -0.095  1.00 61.07          H
ATOM   5810  HE2 PHE C   9    -28.277  -0.514  -3.833  1.00 58.12          H
ATOM   5811  HZ  PHE C   9    -30.033  -0.324  -2.348  1.00 61.58          H
ATOM   5812  N   THR C  10    -26.503  -4.244  -2.190  1.00 45.55          N
ANISOU 5812  N   THR C  10     4217   5824   7267  -1528  -1981   1498      N
ATOM   5813  CA  THR C  10    -27.217  -4.605  -3.406  1.00 48.28          C
ANISOU 5813  CA  THR C  10     4536   6138   7669  -1582  -2219   1420      C
ATOM   5814  C   THR C  10    -28.695  -4.603  -3.051  1.00 52.34          C
ANISOU 5814  C   THR C  10     4622   6799   8464  -1729  -2153   1627      C
ATOM   5815  O   THR C  10    -29.071  -5.137  -2.005  1.00 53.43          O
ANISOU 5815  O   THR C  10     4621   6941   8740  -1910  -2000   1805      O
ATOM   5816  CB  THR C  10    -26.781  -5.983  -3.934  1.00 50.32          C
ANISOU 5816  CB  THR C  10     5119   6141   7861  -1721  -2465   1292      C
ATOM   5817  OG1 THR C  10    -27.270  -6.173  -5.269  1.00 53.17          O
ANISOU 5817  OG1 THR C  10     5500   6490   8214  -1722  -2695   1171      O
ATOM   5818  CG2 THR C  10    -27.302  -7.112  -3.037  1.00 53.77          C
ANISOU 5818  CG2 THR C  10     5491   6454   8484  -2011  -2471   1472      C
ATOM   5819  H   THR C  10    -26.883  -4.538  -1.476  1.00 54.66          H
ATOM   5820  HA  THR C  10    -27.057  -3.940  -4.093  1.00 57.93          H
ATOM   5821  HB  THR C  10    -25.812  -6.027  -3.942  1.00 60.39          H
ATOM   5822  HG1 THR C  10    -27.032  -6.925  -5.558  1.00 63.81          H
ATOM   5823 HG21 THR C  10    -27.017  -7.971  -3.386  1.00 64.52          H
ATOM   5824 HG22 THR C  10    -26.955  -7.007  -2.137  1.00 64.52          H
ATOM   5825 HG23 THR C  10    -28.271  -7.090  -3.006  1.00 64.52          H
ATOM   5826  N   ASP C  11    -29.527  -3.996  -3.895  1.00 55.41          N
ANISOU 5826  N   ASP C  11     4802   7326   8927  -1648  -2245   1605      N
ATOM   5827  CA  ASP C  11    -30.952  -3.947  -3.590  1.00 60.76          C
ANISOU 5827  CA  ASP C  11     5033   8179   9876  -1760  -2180   1781      C
ATOM   5828  C   ASP C  11    -31.624  -5.256  -3.983  1.00 65.88          C
ANISOU 5828  C   ASP C  11     5657   8707  10666  -2071  -2420   1800      C
ATOM   5829  O   ASP C  11    -32.638  -5.253  -4.686  1.00 68.98          O
ANISOU 5829  O   ASP C  11     5809   9199  11202  -2133  -2586   1804      O
ATOM   5830  CB  ASP C  11    -31.620  -2.760  -4.290  1.00 60.96          C
ANISOU 5830  CB  ASP C  11     4824   8402  9936  -1533  -2208   1754      C
ATOM   5831  CG  ASP C  11    -31.617  -2.886  -5.800  1.00 61.37          C
ANISOU 5831  CG  ASP C  11     5055   8385  9877  -1512  -2543   1579      C
ATOM   5832  OD1 ASP C  11    -30.822  -3.689  -6.334  1.00 60.04          O
ANISOU 5832  OD1 ASP C  11     5251   8016  9545  -1592  -2707   1437      O
ATOM   5833  OD2 ASP C  11    -32.407  -2.175  -6.456  1.00 63.63          O
ANISOU 5833  OD2 ASP C  11     5122   8828 10228  -1392  -2635   1579      O
ATOM   5834  H   ASP C  11    -29.299  -3.616  -4.631  1.00 66.50          H
ATOM   5835  HA  ASP C  11    -31.064  -3.831  -2.634  1.00 72.92          H
ATOM   5836  HB2 ASP C  11    -32.543  -2.700  -3.997  1.00 73.15          H
ATOM   5837  HB3 ASP C  11    -31.145  -1.947  -4.057  1.00 73.15          H
ATOM   5838  N   GLY C  12    -31.056  -6.381  -3.542  1.00 67.09          N
ANISOU 5838  N   GLY C  12     6072   8636 10782  -2263  -2460   1807      N
ATOM   5839  CA  GLY C  12    -31.629  -7.692  -3.777  1.00 71.89          C
ANISOU 5839  CA  GLY C  12     6699   9084 11531  -2575  -2680   1838      C
ATOM   5840  C   GLY C  12    -31.650  -8.162  -5.218  1.00 72.87          C
ANISOU 5840  C   GLY C  12     7018   9078 11589  -2591  -3053   1637      C
ATOM   5841  O   GLY C  12    -31.882  -9.353  -5.450  1.00 77.69          O
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ANISOU 5841 O GLY C 12 7750 9491 12279 -2836 -3268 1624 O
ATOM 5842 H GLY C 12 -30.321 -6.403 -3.095 1.00 80.50 H
ATOM 5843 HA2 GLY C 12 -31.131 -8.346 -3.262 1.00 86.27 H
ATOM 5844 HA3 GLY C 12 -32.544 -7.694 -3.454 1.00 86.27 H
ATOM 5845 N GLY C 13 -31.410 -7.283 -6.192 1.00 67.47 N
ANISOU 5845 N GLY C 13 6391 8493 10751 -2339 -3129 1482 N
ATOM 5846 CA GLY C 13 -31.581 -7.656 -7.586 1.00 65.86 C
ANISOU 5846 CA GLY C 13 6329 8219 10475 -2352 -3456 1305 C
ATOM 5847 C GLY C 13 -30.407 -8.453 -8.116 1.00 61.07 C
ANISOU 5847 C GLY C 13 6223 7350 9631 -2304 -3595 1100 C
ATOM 5848 O GLY C 13 -29.248 -8.052 -7.969 1.00 56.85 O
ANISOU 5848 O GLY C 13 5940 6785 8875 -2089 -3445 1004 O
ATOM 5849 H GLY C 13 -31.150 -6.473 -6.068 1.00 80.96 H
ATOM 5850 HA2 GLY C 13 -32.385 -8.190 -7.682 1.00 79.03 H
ATOM 5851 HA3 GLY C 13 -31.677 -6.855 -8.125 1.00 79.03 H
ATOM 5852 N GLY C 14 -30.709 -9.589 -8.737 1.00 63.62 N
ANISOU 5852 N GLY C 14 6681 7487 10003 -2498 -3883 1023 N
ATOM 5853 CA GLY C 14 -29.692 -10.339 -9.459 1.00 62.93 C
ANISOU 5853 CA GLY C 14 7058 7168 9685 -2408 -4042 794 C
ATOM 5854 C GLY C 14 -28.648 -10.938 -8.538 1.00 60.75 C
ANISOU 5854 C GLY C 14 7062 6685 9337 -2384 -3915 799 C
ATOM 5855 O GLY C 14 -28.952 -11.431 -7.446 1.00 62.11 O
ANISOU 5855 O GLY C 14 7135 6775 9689 -2586 -3840 986 O
ATOM 5856 H GLY C 14 -31.492 -9.945 -8.754 1.00 76.34 H
ATOM 5857 HA2 GLY C 14 -30.113 -11.058 -9.956 1.00 75.52 H
ATOM 5858 HA3 GLY C 14 -29.245 -9.752 -10.089 1.00 75.52 H
ATOM 5859 N ILE C 15 -27.397 -10.912 -8.994 1.00 58.87 N
ANISOU 5859 N ILE C 15 7171 6374 8825 -2132 -3884 591 N
ATOM 5860 CA ILE C 15 -26.268 -11.471 -8.258 1.00 57.69 C
ANISOU 5860 CA ILE C 15 7315 6034 8573 -2051 -3795 551 C
ATOM 5861 C ILE C 15 -25.214 -10.384 -8.092 1.00 52.84 C
ANISOU 5861 C ILE C 15 6743 5592 7741 -1759 -3523 475 C
ATOM 5862 O ILE C 15 -24.713 -9.838 -9.083 1.00 51.25 O
ANISOU 5862 O ILE C 15 6628 5512 7334 -1552 -3496 300 O
ATOM 5863 CB ILE C 15 -25.667 -12.696 -8.967 1.00 60.71 C
ANISOU 5863 CB ILE C 15 8091 6137 8839 -2015 -4037 344 C
ATOM 5864 H ILE C 15 -27.173 -10.565 -9.748 1.00 70.65 H
ATOM 5865 HA ILE C 15 -26.564 -11.745 -7.376 1.00 69.23 H
ATOM 5866 N VAL C 16 -24.878 -10.072 -6.848 1.00 50.23 N
ANISOU 5866 N VAL C 16 6350 5284 7451 -1760 -3320 612 N
ATOM 5867 CA VAL C 16 -23.764 -9.190 -6.528 1.00 45.99 C
ANISOU 5867 CA VAL C 16 5887 4870 6716 -1510 -3081 534 C
ATOM 5868 C VAL C 16 -22.860 -9.964 -5.580 1.00 44.24 C
ANISOU 5868 C VAL C 16 5912 4447 6452 -1497 -3067 531 C
ATOM 5869 O VAL C 16 -23.212 -10.179 -4.412 1.00 43.36 O
ANISOU 5869 O VAL C 16 5710 4281 6485 -1674 -3022 736 O
ATOM 5870 CB VAL C 16 -24.231 -7.866 -5.905 1.00 44.46 C
ANISOU 5870 CB VAL C 16 5371 4926 6596 -1495 -2859 698 C
ATOM 5871 H VAL C 16 -25.292 -10.367 -6.154 1.00 60.28 H
ATOM 5872 HA VAL C 16 -23.266 -8.990 -7.335 1.00 55.18 H
ATOM 5873 N ASN C 17 -21.714 -10.410 -6.082 1.00 44.04 N
ANISOU 5873 N ASN C 17 6185 4321 6226 -1286 -3099 308 N
ATOM 5874 CA ASN C 17 -20.781 -11.230 -5.313 1.00 44.60 C

ANISOU 5874 CA ASN C 17 6524 4181 6239 -1218 -3129 272 C
ATOM 5875 C ASN C 17 -19.585 -10.360 -4.943 1.00 40.47 C
ANISOU 5875 C ASN C 17 6020 3829 5528 -965 -2879 172 C
ATOM 5876 O ASN C 17 -18.702 -10.114 -5.772 1.00 39.34 O
ANISOU 5876 O ASN C 17 5950 3795 5201 -732 -2790 -36 O
ATOM 5877 CB ASN C 17 -20.359 -12.466 -6.107 1.00 47.17 C
ANISOU 5877 CB ASN C 17 7156 4267 6500 -1135 -3359 88 C
ATOM 5878 H ASN C 17 -21.448 -10.248 -6.884 1.00 52.84 H
ATOM 5879 HA ASN C 17 -21.210 -11.525 -4.495 1.00 53.52 H
ATOM 5880 N ALA C 18 -19.558 -9.906 -3.691 1.00 38.63 N
ANISOU 5880 N ALA C 18 5702 3638 5338 -1033 -2759 330 N
ATOM 5881 CA ALA C 18 -18.544 -8.987 -3.195 1.00 34.63 C
ANISOU 5881 CA ALA C 18 5180 3311 4668 -829 -2525 257 C
ATOM 5882 C ALA C 18 -17.569 -9.721 -2.286 1.00 33.91 C
ANISOU 5882 C ALA C 18 5345 3042 4498 -734 -2570 217 C
ATOM 5883 O ALA C 18 -17.982 -10.505 -1.430 1.00 36.15 O
ANISOU 5883 O ALA C 18 5745 3104 4885 -925 -2729 379 O
ATOM 5884 CB ALA C 18 -19.189 -7.836 -2.423 1.00 33.10 C
ANISOU 5884 CB ALA C 18 4715 3313 4549 -943 -2370 449 C
ATOM 5885 H ALA C 18 -20.137 -10.125 -3.094 1.00 46.36 H
ATOM 5886 HA ALA C 18 -18.049 -8.617 -3.942 1.00 41.56 H
ATOM 5887 HB1 ALA C 18 -18.492 -7.240 -2.105 1.00 39.72 H
ATOM 5888 HB2 ALA C 18 -19.789 -7.357 -3.015 1.00 39.72 H
ATOM 5889 HB3 ALA C 18 -19.683 -8.198 -1.672 1.00 39.72 H
ATOM 5890 N VAL C 19 -16.277 -9.456 -2.465 1.00 32.00 N
ANISOU 5890 N VAL C 19 5170 2911 4077 -452 -2420 19 N
ATOM 5891 CA VAL C 19 -15.224 -10.129 -1.710 1.00 32.86 C
ANISOU 5891 CA VAL C 19 5505 2878 4101 -290 -2459 -52 C
ATOM 5892 C VAL C 19 -14.468 -9.087 -0.896 1.00 29.13 C
ANISOU 5892 C VAL C 19 4912 2646 3511 -172 -2204 -62 C
ATOM 5893 O VAL C 19 -13.820 -8.195 -1.458 1.00 27.80 O
ANISOU 5893 O VAL C 19 4571 2741 3250 -38 -1986 -180 O
ATOM 5894 CB VAL C 19 -14.268 -10.904 -2.630 1.00 34.63 C
ANISOU 5894 CB VAL C 19 5877 3035 4244 -39 -2525 -281 C
ATOM 5895 CG1 VAL C 19 -13.139 -11.548 -1.830 1.00 35.10 C
ANISOU 5895 CG1 VAL C 19 6140 2965 4232 180 -2573 -357 C
ATOM 5896 CG2 VAL C 19 -15.026 -11.966 -3.412 1.00 37.69 C
ANISOU 5896 CG2 VAL C 19 6417 3176 4727 -145 -2798 -281 C
ATOM 5897 H VAL C 19 -15.980 -8.879 -3.030 1.00 38.40 H
ATOM 5898 HA VAL C 19 -15.627 -10.760 -1.093 1.00 39.43 H
ATOM 5899 HB VAL C 19 -13.872 -10.288 -3.266 1.00 41.55 H
ATOM 5900 HG11 VAL C 19 -12.556 -12.028 -2.439 1.00 42.12 H
ATOM 5901 HG12 VAL C 19 -12.641 -10.853 -1.372 1.00 42.12 H
ATOM 5902 HG13 VAL C 19 -13.521 -12.163 -1.184 1.00 42.12 H
ATOM 5903 HG21 VAL C 19 -14.403 -12.440 -3.984 1.00 45.23 H
ATOM 5904 HG22 VAL C 19 -15.438 -12.583 -2.787 1.00 45.23 H
ATOM 5905 HG23 VAL C 19 -15.708 -11.534 -3.950 1.00 45.23 H
ATOM 5906 N ASN C 20 -14.536 -9.216 0.426 1.00 28.37 N
ANISOU 5906 N ASN C 20 4921 2459 3400 -243 -2243 80 N
ATOM 5907 CA ASN C 20 -13.776 -8.382 1.354 1.00 26.05 C
ANISOU 5907 CA ASN C 20 4558 2366 2972 -113 -2022 70 C
ATOM 5908 C ASN C 20 -12.348 -8.921 1.412 1.00 26.63 C
ANISOU 5908 C ASN C 20 4743 2417 2959 154 -2009 -123 C

ATOM 5909 O ASN C 20 -12.034 -9.853 2.156 1.00 26.90 O
ANISOU 5909 O ASN C 20 5020 2234 2966 212 -2161 -103 O
ATOM 5910 CB ASN C 20 -14.443 -8.388 2.726 1.00 27.27 C
ANISOU 5910 CB ASN C 20 4804 2457 3099 -267 -2050 342 C
ATOM 5911 CG ASN C 20 -13.718 -7.530 3.746 1.00 25.68 C
ANISOU 5911 CG ASN C 20 4563 2454 2741 -120 -1812 328 C
ATOM 5912 OD1 ASN C 20 -12.515 -7.268 3.635 1.00 24.42 O
ANISOU 5912 OD1 ASN C 20 4351 2415 2514 82 -1710 115 O
ATOM 5913 ND2 ASN C 20 -14.453 -7.099 4.767 1.00 25.69 N
ANISOU 5913 ND2 ASN C 20 4557 2494 2711 -233 -1669 576 N
ATOM 5914 H ASN C 20 -15.031 -9.798 0.822 1.00 34.04 H
ATOM 5915 HA ASN C 20 -13.750 -7.470 1.026 1.00 31.26 H
ATOM 5916 HB2 ASN C 20 -15.346 -8.047 2.637 1.00 32.72 H
ATOM 5917 HB3 ASN C 20 -14.464 -9.297 3.061 1.00 32.72 H
ATOM 5918 HD21 ASN C 20 -14.096 -6.609 5.377 1.00 30.83 H
ATOM 5919 HD22 ASN C 20 -15.285 -7.310 4.818 1.00 30.83 H
ATOM 5920 N GLY C 21 -11.471 -8.329 0.610 1.00 34.47 N
ANISOU 5920 N GLY C 21 3964 4963 4170 1746 -1731 -5 N
ATOM 5921 CA GLY C 21 -10.107 -8.794 0.507 1.00 35.74 C
ANISOU 5921 CA GLY C 21 4134 5184 4260 1906 -1724 -98 C
ATOM 5922 C GLY C 21 -9.278 -8.405 1.715 1.00 37.99 C
ANISOU 5922 C GLY C 21 4276 5627 4533 1841 -1636 7 C
ATOM 5923 O GLY C 21 -9.724 -7.723 2.638 1.00 34.29 O
ANISOU 5923 O GLY C 21 3728 5211 4089 1683 -1581 128 O
ATOM 5924 H GLY C 21 -11.648 -7.650 0.113 1.00 41.37 H
ATOM 5925 HA2 GLY C 21 -10.099 -9.761 0.426 1.00 42.88 H
ATOM 5926 HA3 GLY C 21 -9.694 -8.415 -0.285 1.00 42.88 H
ATOM 5927 N SER C 22 -8.033 -8.863 1.704 1.00 44.35 N
ANISOU 5927 N SER C 22 5056 6505 5289 1982 -1635 -45 N
ATOM 5928 CA SER C 22 -7.143 -8.572 2.815 1.00 47.99 C
ANISOU 5928 CA SER C 22 5383 7109 5743 1932 -1583 45 C
ATOM 5929 C SER C 22 -6.830 -7.082 2.835 1.00 46.45 C
ANISOU 5929 C SER C 22 5129 7079 5443 1849 -1432 10 C
ATOM 5930 O SER C 22 -6.609 -6.460 1.791 1.00 47.29 O
ANISOU 5930 O SER C 22 5264 7253 5449 1916 -1345 -104 O
ATOM 5931 CB SER C 22 -5.860 -9.399 2.711 1.00 50.91 C
ANISOU 5931 CB SER C 22 5720 7533 6090 2118 -1620 7 C
ATOM 5932 OG SER C 22 -4.824 -8.676 2.077 1.00 51.35 O
ANISOU 5932 OG SER C 22 5717 7776 6019 2213 -1498 -84 O
ATOM 5933 H SER C 22 -7.686 -9.338 1.077 1.00 53.22 H
ATOM 5934 HA SER C 22 -7.585 -8.800 3.648 1.00 57.59 H
ATOM 5935 HB2 SER C 22 -5.571 -9.642 3.604 1.00 61.09 H
ATOM 5936 HB3 SER C 22 -6.044 -10.199 2.195 1.00 61.09 H
ATOM 5937 HG SER C 22 -4.131 -9.148 2.031 1.00 61.62 H
ATOM 5938 N GLY C 23 -6.846 -6.505 4.031 1.00 43.55 N
ANISOU 5938 N GLY C 23 4691 6769 5089 1710 -1411 111 N
ATOM 5939 CA GLY C 23 -6.581 -5.092 4.187 1.00 40.73 C
ANISOU 5939 CA GLY C 23 4294 6546 4635 1624 -1296 84 C
ATOM 5940 C GLY C 23 -7.499 -4.214 3.365 1.00 39.80 C
ANISOU 5940 C GLY C 23 4255 6398 4468 1582 -1216 16 C
ATOM 5941 O GLY C 23 -8.641 -3.946 3.756 1.00 38.96 O
ANISOU 5941 O GLY C 23 4196 6211 4398 1485 -1222 68 O
ATOM 5942 H GLY C 23 -7.009 -6.917 4.768 1.00 52.27 H

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ATOM   5943  HA2 GLY C  23     -6.684  -4.849   5.120  1.00 48.87          H
ATOM   5944  HA3 GLY C  23     -5.667  -4.907   3.922  1.00 48.87          H
ATOM   5945  N   GLY C  24     -7.012  -3.760   2.214  1.00 39.02          N
ANISOU 5945  N   GLY C  24     4164   6377   4284   1666  -1142    -86      N
ATOM   5946  CA  GLY C  24     -7.745  -2.781   1.438  1.00 36.18          C
ANISOU 5946  CA  GLY C  24     3872   6009   3865   1629  -1062   -147      C
ATOM   5947  C   GLY C  24     -8.287  -3.313   0.133  1.00 34.96          C
ANISOU 5947  C   GLY C  24     3826   5757   3702   1744  -1090   -244      C
ATOM   5948  O   GLY C  24     -9.019  -2.608  -0.566  1.00 33.89          O
ANISOU 5948  O   GLY C  24     3758   5591   3526   1722  -1042   -294      O
ATOM   5949  H   GLY C  24     -6.264  -4.003   1.867  1.00 46.82          H
ATOM   5950  HA2 GLY C  24     -8.492  -2.454   1.963  1.00 43.41          H
ATOM   5951  HA3 GLY C  24     -7.163  -2.032   1.240  1.00 43.41          H
ATOM   5952  N   ASN C  25     -7.930  -4.542  -0.219  1.00 35.96          N
ANISOU 5952  N   ASN C  25     3982   5824   3858   1879  -1179   -278      N
ATOM   5953  CA  ASN C  25     -8.421  -5.133  -1.450  1.00 37.05          C
ANISOU 5953  CA  ASN C  25     4257   5845   3974   2010  -1241   -392      C
ATOM   5954  C   ASN C  25     -9.865  -5.584  -1.288  1.00 35.32          C
ANISOU 5954  C   ASN C  25     4114   5422   3885   1910  -1360   -345      C
ATOM   5955  O   ASN C  25    -10.307  -5.977  -0.205  1.00 36.09          O
ANISOU 5955  O   ASN C  25     4150   5462   4100   1792  -1421   -207      O
ATOM   5956  CB  ASN C  25     -7.545  -6.313  -1.872  1.00 39.39          C
ANISOU 5956  CB  ASN C  25     4587   6136   4243   2216  -1315   -455      C
ATOM   5957  CG  ASN C  25     -8.100  -7.050  -3.073  1.00 41.33          C
ANISOU 5957  CG  ASN C  25     5024   6223   4458   2369  -1425   -591      C
ATOM   5958  OD1 ASN C  25     -8.921  -7.959  -2.933  1.00 42.50          O
ANISOU 5958  OD1 ASN C  25     5261   6161   4727   2342  -1589   -581      O
ATOM   5959  ND2 ASN C  25     -7.659  -6.658  -4.264  1.00 41.43          N
ANISOU 5959  ND2 ASN C  25     5106   6334   4300   2530  -1349   -710      N
ATOM   5960  H   ASN C  25     -7.407  -5.050   0.237  1.00 43.15          H
ATOM   5961  HA  ASN C  25     -8.390  -4.468  -2.156  1.00 44.46          H
ATOM   5962  HB2 ASN C  25     -6.662  -5.984  -2.103  1.00 47.27          H
ATOM   5963  HB3 ASN C  25     -7.483  -6.941  -1.136  1.00 47.27          H
ATOM   5964 HD21 ASN C  25     -7.944  -7.046  -4.977  1.00 49.71          H
ATOM   5965 HD22 ASN C  25     -7.089  -6.017  -4.322  1.00 49.71          H
ATOM   5966  N   TYR C  26    -10.609  -5.485  -2.382  1.00 32.50          N
ANISOU 5966  N   TYR C  26     3879   4970   3500   1956  -1394   -442      N
ATOM   5967  CA  TYR C  26    -11.922  -6.092  -2.476  1.00 31.46          C
ANISOU 5967  CA  TYR C  26     3817   4637   3500   1886  -1544   -400      C
ATOM   5968  C   TYR C  26    -12.155  -6.448  -3.935  1.00 32.51          C
ANISOU 5968  C   TYR C  26     4132   4652   3567   2041  -1637   -576      C
ATOM   5969  O   TYR C  26    -11.488  -5.929  -4.830  1.00 32.44          O
ANISOU 5969  O   TYR C  26     4181   4750   3395   2180  -1540   -706      O
ATOM   5970  CB  TYR C  26    -13.023  -5.162  -1.945  1.00 29.89          C
ANISOU 5970  CB  TYR C  26     3546   4450   3359   1699  -1486   -277      C
ATOM   5971  CG  TYR C  26    -13.319  -3.959  -2.825  1.00 28.66          C
ANISOU 5971  CG  TYR C  26     3446   4347   3096   1710  -1380   -372      C
ATOM   5972  CD1 TYR C  26    -14.243  -4.040  -3.855  1.00 29.17          C
ANISOU 5972  CD1 TYR C  26     3623   4283   3179   1738  -1470   -441      C
ATOM   5973  CD2 TYR C  26    -12.684  -2.744  -2.612  1.00 27.34          C
ANISOU 5973  CD2 TYR C  26     3222   4350   2816   1689  -1208   -386      C
ATOM   5974  CE1 TYR C  26    -14.523  -2.946  -4.654  1.00 28.06          C
ANISOU 5974  CE1 TYR C  26     3534   4188   2940   1757  -1376   -518      C
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ATOM 5975 CE2 TYR C 26 -12.960 -1.639 -3.408 1.00 26.92 C
ANISOU 5975 CE2 TYR C 26 3218 4341 2669 1703 -1114 -456 C
ATOM 5976 CZ TYR C 26 -13.881 -1.752 -4.429 1.00 26.70 C
ANISOU 5976 CZ TYR C 26 3299 4189 2655 1742 -1193 -520 C
ATOM 5977 OH TYR C 26 -14.165 -0.670 -5.232 1.00 25.88 O
ANISOU 5977 OH TYR C 26 3248 4124 2461 1766 -1105 -582 O
ATOM 5978 H TYR C 26 -10.369 -5.065 -3.093 1.00 39.00 H
ATOM 5979 HA TYR C 26 -11.936 -6.911 -1.955 1.00 37.75 H
ATOM 5980 HB2 TYR C 26 -13.844 -5.671 -1.859 1.00 35.86 H
ATOM 5981 HB3 TYR C 26 -12.753 -4.829 -1.074 1.00 35.86 H
ATOM 5982 HD1 TYR C 26 -14.681 -4.845 -4.012 1.00 35.01 H
ATOM 5983 HD2 TYR C 26 -12.064 -2.668 -1.924 1.00 32.81 H
ATOM 5984 HE1 TYR C 26 -15.143 -3.018 -5.343 1.00 33.67 H
ATOM 5985 HE2 TYR C 26 -12.524 -0.832 -3.257 1.00 32.30 H
ATOM 5986 HH TYR C 26 -13.709 -0.006 -4.992 1.00 31.05 H
ATOM 5987 N SER C 27 -13.108 -7.343 -4.164 1.00 33.98 N
ANISOU 5987 N SER C 27 4411 4622 3877 2018 -1835 -569 N
ATOM 5988 CA SER C 27 -13.425 -7.799 -5.508 1.00 35.60 C
ANISOU 5988 CA SER C 27 4832 4665 4030 2163 -1980 -751 C
ATOM 5989 C SER C 27 -14.932 -7.851 -5.669 1.00 35.33 C
ANISOU 5989 C SER C 27 4827 4451 4145 2015 -2127 -683 C
ATOM 5990 O SER C 27 -15.668 -8.017 -4.695 1.00 35.11 O
ANISOU 5990 O SER C 27 4659 4403 4278 1834 -2161 -481 O
ATOM 5991 CB SER C 27 -12.811 -9.182 -5.797 1.00 39.55 C
ANISOU 5991 CB SER C 27 5480 5031 4518 2345 -2155 -861 C
ATOM 5992 OG SER C 27 -11.397 -9.113 -5.808 1.00 40.72 O
ANISOU 5992 OG SER C 27 5592 5374 4505 2516 -2013 -920 O
ATOM 5993 H SER C 27 -13.591 -7.704 -3.550 1.00 40.77 H
ATOM 5994 HA SER C 27 -13.070 -7.167 -6.153 1.00 42.72 H
ATOM 5995 HB2 SER C 27 -13.092 -9.802 -5.107 1.00 47.46 H
ATOM 5996 HB3 SER C 27 -13.119 -9.489 -6.664 1.00 47.46 H
ATOM 5997 HG SER C 27 -11.074 -9.871 -5.966 1.00 48.86 H
ATOM 5998 N VAL C 28 -15.387 -7.707 -6.912 1.00 35.96 N
ANISOU 5998 N VAL C 28 5083 4419 4161 2102 -2212 -838 N
ATOM 5999 CA VAL C 28 -16.807 -7.747 -7.220 1.00 36.92 C
ANISOU 5999 CA VAL C 28 5238 4365 4426 1972 -2375 -783 C
ATOM 6000 C VAL C 28 -17.000 -8.487 -8.535 1.00 39.57 C
ANISOU 6000 C VAL C 28 5859 4454 4720 2131 -2618 -1002 C
ATOM 6001 O VAL C 28 -16.218 -8.317 -9.476 1.00 40.21 O
ANISOU 6001 O VAL C 28 6103 4585 4590 2354 -2562 -1203 O
ATOM 6002 CB VAL C 28 -17.411 -6.330 -7.301 1.00 34.76 C
ANISOU 6002 CB VAL C 28 4859 4235 4114 1871 -2201 -713 C
ATOM 6003 CG1 VAL C 28 -18.914 -6.393 -7.125 1.00 35.51 C
ANISOU 6003 CG1 VAL C 28 4882 4217 4394 1690 -2338 -555 C
ATOM 6004 CG2 VAL C 28 -16.772 -5.407 -6.250 1.00 32.86 C
ANISOU 6004 CG2 VAL C 28 4420 4251 3815 1798 -1938 -592 C
ATOM 6005 H VAL C 28 -14.885 -7.583 -7.599 1.00 43.15 H
ATOM 6006 HA VAL C 28 -17.273 -8.237 -6.524 1.00 44.31 H
ATOM 6007 HB VAL C 28 -17.227 -5.958 -8.177 1.00 41.71 H
ATOM 6008 HG11 VAL C 28 -19.276 -5.494 -7.179 1.00 42.62 H
ATOM 6009 HG12 VAL C 28 -19.291 -6.944 -7.829 1.00 42.62 H
ATOM 6010 HG13 VAL C 28 -19.115 -6.779 -6.258 1.00 42.62 H
ATOM 6011 HG21 VAL C 28 -17.169 -4.524 -6.322 1.00 39.43 H

ATOM 6012 HG22 VAL C 28 -16.937 -5.773 -5.367 1.00 39.43 H
ATOM 6013 HG23 VAL C 28 -15.818 -5.355 -6.414 1.00 39.43 H
ATOM 6014 N ASN C 29 -18.033 -9.325 -8.584 1.00 41.14 N
ANISOU 6014 N ASN C 29 6124 4391 5114 2020 -2897 -953 N
ATOM 6015 CA ASN C 29 -18.494 -9.963 -9.814 1.00 43.19 C
ANISOU 6015 CA ASN C 29 6677 4362 5372 2126 -3185 -1149 C
ATOM 6016 C ASN C 29 -20.014 -9.971 -9.754 1.00 43.95 C
ANISOU 6016 C ASN C 29 6703 4293 5704 1892 -3369 -991 C
ATOM 6017 O ASN C 29 -20.585 -10.526 -8.811 1.00 44.78 O
ANISOU 6017 O ASN C 29 6651 4339 6024 1699 -3463 -780 O
ATOM 6018 CB ASN C 29 -17.943 -11.395 -9.957 1.00 46.01 C
ANISOU 6018 CB ASN C 29 7260 4488 5732 2269 -3445 -1296 C
ATOM 6019 CG ASN C 29 -16.421 -11.443 -10.078 1.00 46.32 C
ANISOU 6019 CG ASN C 29 7378 4711 5512 2547 -3286 -1462 C
ATOM 6020 OD1 ASN C 29 -15.850 -11.047 -11.091 1.00 46.68 O
ANISOU 6020 OD1 ASN C 29 7611 4828 5296 2803 -3230 -1686 O
ATOM 6021 ND2 ASN C 29 -15.761 -11.962 -9.049 1.00 47.35 N
ANISOU 6021 ND2 ASN C 29 7363 4930 5699 2513 -3217 -1340 N
ATOM 6022 H ASN C 29 -18.498 -9.546 -7.895 1.00 49.36 H
ATOM 6023 HA ASN C 29 -18.213 -9.441 -10.582 1.00 51.83 H
ATOM 6024 HB2 ASN C 29 -18.198 -11.909 -9.175 1.00 55.21 H
ATOM 6025 HB3 ASN C 29 -18.319 -11.798 -10.755 1.00 55.21 H
ATOM 6026 HD21 ASN C 29 -14.903 -12.011 -9.069 1.00 56.82 H
ATOM 6027 HD22 ASN C 29 -16.192 -12.249 -8.362 1.00 56.82 H
ATOM 6028 N TRP C 30 -20.676 -9.351 -10.733 1.00 44.13 N
ANISOU 6028 N TRP C 30 6825 4257 5687 1913 -3414 -1071 N
ATOM 6029 CA TRP C 30 -22.115 -9.138 -10.641 1.00 44.71 C
ANISOU 6029 CA TRP C 30 6774 4243 5969 1689 -3541 -887 C
ATOM 6030 C TRP C 30 -22.780 -9.333 -11.999 1.00 47.27 C
ANISOU 6030 C TRP C 30 7369 4287 6303 1757 -3820 -1056 C
ATOM 6031 O TRP C 30 -22.129 -9.295 -13.047 1.00 47.58 O
ANISOU 6031 O TRP C 30 7679 4267 6134 2005 -3833 -1316 O
ATOM 6032 CB TRP C 30 -22.422 -7.739 -10.096 1.00 41.87 C
ANISOU 6032 CB TRP C 30 6143 4207 5560 1590 -3224 -711 C
ATOM 6033 CG TRP C 30 -22.152 -6.614 -11.067 1.00 40.77 C
ANISOU 6033 CG TRP C 30 6106 4179 5204 1738 -3062 -870 C
ATOM 6034 CD1 TRP C 30 -23.070 -5.977 -11.855 1.00 41.03 C
ANISOU 6034 CD1 TRP C 30 6179 4164 5245 1714 -3124 -877 C
ATOM 6035 CD2 TRP C 30 -20.889 -5.991 -11.341 1.00 38.87 C
ANISOU 6035 CD2 TRP C 30 5930 4124 4716 1932 -2813 -1024 C
ATOM 6036 NE1 TRP C 30 -22.458 -4.997 -12.601 1.00 39.76 N
ANISOU 6036 NE1 TRP C 30 6117 4136 4852 1885 -2926 -1028 N
ATOM 6037 CE2 TRP C 30 -21.121 -4.984 -12.304 1.00 38.50 C
ANISOU 6037 CE2 TRP C 30 5967 4124 4536 2017 -2731 -1114 C
ATOM 6038 CE3 TRP C 30 -19.589 -6.177 -10.862 1.00 38.18 C
ANISOU 6038 CE3 TRP C 30 5822 4175 4509 2039 -2655 -1075 C
ATOM 6039 CZ2 TRP C 30 -20.102 -4.176 -12.799 1.00 36.98 C
ANISOU 6039 CZ2 TRP C 30 5836 4110 4104 2204 -2493 -1242 C
ATOM 6040 CZ3 TRP C 30 -18.576 -5.368 -11.356 1.00 36.71 C
ANISOU 6040 CZ3 TRP C 30 5684 4179 4086 2217 -2422 -1201 C
ATOM 6041 CH2 TRP C 30 -18.841 -4.379 -12.312 1.00 36.23 C
ANISOU 6041 CH2 TRP C 30 5701 4160 3903 2296 -2340 -1277 C
ATOM 6042 H TRP C 30 -20.316 -9.047 -11.453 1.00 52.96 H

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ATOM   6043  HA  TRP C  30    -22.491  -9.788 -10.027  1.00 53.65           H
ATOM   6044  HB2 TRP C  30    -23.361  -7.700  -9.855  1.00 50.25           H
ATOM   6045  HB3 TRP C  30    -21.876  -7.586  -9.309  1.00 50.25           H
ATOM   6046  HD1 TRP C  30    -23.978  -6.179 -11.884  1.00 49.23           H
ATOM   6047  HE1 TRP C  30    -22.850  -4.479 -13.165  1.00 47.71           H
ATOM   6048  HE3 TRP C  30    -19.408  -6.829 -10.224  1.00 45.82           H
ATOM   6049  HZ2 TRP C  30    -20.274  -3.518 -13.435  1.00 44.37           H
ATOM   6050  HZ3 TRP C  30    -17.706  -5.484 -11.048  1.00 44.05           H
ATOM   6051  HH2 TRP C  30    -18.142  -3.855 -12.629  1.00 43.47           H
ATOM   6052  N   SER C  31    -24.100  -9.535 -11.961  1.00 49.62           N
ANISOU 6052  N   SER C  31     7587   4422   6842   1545  -4042   -890      N
ATOM   6053  CA  SER C  31    -24.870  -9.765 -13.175  1.00 54.74           C
ANISOU 6053  CA  SER C  31     8482   4771   7546   1574  -4354  -1015      C
ATOM   6054  C   SER C  31    -26.351  -9.500 -12.924  1.00 62.71           C
ANISOU 6054  C   SER C  31     9265   5756   8803   1308  -4470   -750      C
ATOM   6055  O   SER C  31    -26.880  -9.847 -11.864  1.00 59.47           O
ANISOU 6055  O   SER C  31     8599   5390   8608   1090  -4484   -485      O
ATOM   6056  CB  SER C  31    -24.672 -11.198 -13.687  1.00 56.06           C
ANISOU 6056  CB  SER C  31     9016   4483   7803   1667  -4795  -1218      C
ATOM   6057  H   SER C  31    -24.570  -9.543 -11.241  1.00 59.54           H
ATOM   6058  HA  SER C  31    -24.566  -9.154 -13.864  1.00 65.69           H
ATOM   6059  N   ASN C  32    -27.010  -8.894 -13.917  1.00 74.36           N
ANISOU 6059  N   ASN C  32    10837   7175  10242   1344  -4549   -813      N
ATOM   6060  CA  ASN C  32    -28.455  -8.654 -13.889  1.00 83.45           C
ANISOU 6060  CA  ASN C  32    11798   8289  11618   1120  -4697   -581      C
ATOM   6061  C   ASN C  32    -28.891  -8.031 -12.566  1.00 84.87           C
ANISOU 6061  C   ASN C  32    11549   8819  11878    943  -4415   -263      C
ATOM   6062  O   ASN C  32    -29.962  -8.331 -12.034  1.00 86.86           O
ANISOU 6062  O   ASN C  32    11581   9033  12387    724  -4551      2      O
ATOM   6063  CB  ASN C  32    -29.226  -9.947 -14.159  1.00 89.42           C
ANISOU 6063  CB  ASN C  32    12696   8607  12673    967  -5182   -531      C
ATOM   6064  H   ASN C  32    -26.631  -8.607 -14.634  1.00 89.23           H
ATOM   6065  HA  ASN C  32    -28.678  -8.027 -14.595  1.00100.13           H
ATOM   6066  N   THR C  33    -28.059  -7.139 -12.040  1.00 82.53           N
ANISOU 6066  N   THR C  33    11139   8862  11357   1053  -4021   -284      N
ATOM   6067  CA  THR C  33    -28.307  -6.545 -10.737  1.00 79.70           C
ANISOU 6067  CA  THR C  33    10426   8835  11023    945  -3738    -16      C
ATOM   6068  C   THR C  33    -29.487  -5.580 -10.802  1.00 75.15           C
ANISOU 6068  C   THR C  33     9644   8425  10483    872  -3673    159      C
ATOM   6069  O   THR C  33    -30.105  -5.367 -11.848  1.00 78.52           O
ANISOU 6069  O   THR C  33    10189   8714  10929    884  -3851     83      O
ATOM   6070  CB  THR C  33    -27.063  -5.808 -10.246  1.00 78.07           C
ANISOU 6070  CB  THR C  33    10196   8903  10563   1087  -3373   -102      C
ATOM   6071  OG1 THR C  33    -26.765  -4.721 -11.134  1.00 76.84           O
ANISOU 6071  OG1 THR C  33    10162   8840  10195   1228  -3229   -269      O
ATOM   6072  CG2 THR C  33    -25.874  -6.748 -10.189  1.00 78.86           C
ANISOU 6072  CG2 THR C  33    10480   8868  10617   1184  -3428   -270      C
ATOM   6073  H   THR C  33    -27.340  -6.861 -12.421  1.00 99.04           H
ATOM   6074  HA  THR C  33    -28.519  -7.245 -10.100  1.00 95.64           H
ATOM   6075  HB  THR C  33    -27.223  -5.462  -9.354  1.00 93.68           H
ATOM   6076  HG1 THR C  33    -27.412  -4.185 -11.158  1.00 92.21           H
ATOM   6077 HG21 THR C  33    -25.090  -6.271  -9.877  1.00 94.63           H
ATOM   6078 HG22 THR C  33    -26.060  -7.481  -9.582  1.00 94.63           H
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ATOM 6079 HG23 THR C 33 -25.694 -7.107 -11.072 1.00 94.63 H
ATOM 6080 N GLY C 34 -29.815 -5.011 -9.648 1.00 66.61 N
ANISOU 6080 N GLY C 34 8259 7646 9403 817 -3424 396 N
ATOM 6081 CA GLY C 34 -30.565 -3.775 -9.597 1.00 59.96 C
ANISOU 6081 CA GLY C 34 7237 7063 8482 843 -3239 516 C
ATOM 6082 C GLY C 34 -29.578 -2.650 -9.365 1.00 52.91 C
ANISOU 6082 C GLY C 34 6366 6428 7310 990 -2890 419 C
ATOM 6083 O GLY C 34 -28.682 -2.430 -10.185 1.00 50.84 O
ANISOU 6083 O GLY C 34 6342 6074 6900 1093 -2871 178 O
ATOM 6084 H GLY C 34 -29.611 -5.328 -8.875 1.00 79.93 H
ATOM 6085 HA2 GLY C 34 -31.031 -3.627 -10.434 1.00 71.95 H
ATOM 6086 HA3 GLY C 34 -31.206 -3.797 -8.869 1.00 71.95 H
ATOM 6087 N SER C 35 -29.713 -1.948 -8.248 1.00 46.55 N
ANISOU 6087 N SER C 35 4451 6710 6525 -38 -1724 1778 N
ATOM 6088 CA SER C 35 -28.699 -1.010 -7.793 1.00 42.53 C
ANISOU 6088 CA SER C 35 4166 6184 5809 205 -1324 1614 C
ATOM 6089 C SER C 35 -27.803 -1.688 -6.768 1.00 38.46 C
ANISOU 6089 C SER C 35 3852 5436 5325 77 -1342 1532 C
ATOM 6090 O SER C 35 -28.277 -2.469 -5.937 1.00 41.14 O
ANISOU 6090 O SER C 35 4080 5726 5823 -163 -1448 1756 O
ATOM 6091 CB SER C 35 -29.339 0.233 -7.182 1.00 44.12 C
ANISOU 6091 CB SER C 35 4209 6636 5920 382 -867 1861 C
ATOM 6092 OG SER C 35 -29.494 1.247 -8.158 1.00 45.24 O
ANISOU 6092 OG SER C 35 4337 6921 5929 634 -744 1798 O
ATOM 6093 H SER C 35 -30.395 -1.999 -7.727 1.00 55.86 H
ATOM 6094 HA SER C 35 -28.152 -0.735 -8.545 1.00 51.04 H
ATOM 6095 HB2 SER C 35 -30.212 -0.002 -6.829 1.00 52.95 H
ATOM 6096 HB3 SER C 35 -28.771 0.564 -6.469 1.00 52.95 H
ATOM 6097 HG SER C 35 -29.847 1.927 -7.812 1.00 54.28 H
ATOM 6098 N PHE C 36 -26.504 -1.392 -6.836 1.00 32.44 N
ANISOU 6098 N PHE C 36 3365 4547 4414 232 -1246 1243 N
ATOM 6099 CA PHE C 36 -25.549 -1.892 -5.855 1.00 29.00 C
ANISOU 6099 CA PHE C 36 3120 3916 3983 151 -1242 1162 C
ATOM 6100 C PHE C 36 -24.360 -0.945 -5.775 1.00 25.99 C
ANISOU 6100 C PHE C 36 2938 3527 3409 356 -974 962 C
ATOM 6101 O PHE C 36 -24.021 -0.261 -6.745 1.00 25.02 O
ANISOU 6101 O PHE C 36 2850 3484 3172 538 -905 819 O
ATOM 6102 CB PHE C 36 -25.050 -3.296 -6.211 1.00 29.43 C
ANISOU 6102 CB PHE C 36 3309 3714 4157 24 -1684 984 C
ATOM 6103 CG PHE C 36 -24.090 -3.311 -7.359 1.00 28.54 C
ANISOU 6103 CG PHE C 36 3376 3548 3919 240 -1806 638 C
ATOM 6104 CD1 PHE C 36 -24.554 -3.333 -8.659 1.00 30.32 C
ANISOU 6104 CD1 PHE C 36 3563 3849 4109 330 -1993 543 C
ATOM 6105 CD2 PHE C 36 -22.728 -3.278 -7.139 1.00 26.99 C
ANISOU 6105 CD2 PHE C 36 3370 3264 3620 369 -1726 432 C
ATOM 6106 CE1 PHE C 36 -23.679 -3.333 -9.718 1.00 29.75 C
ANISOU 6106 CE1 PHE C 36 3660 3774 3871 572 -2071 243 C
ATOM 6107 CE2 PHE C 36 -21.848 -3.275 -8.194 1.00 26.70 C
ANISOU 6107 CE2 PHE C 36 3454 3244 3448 599 -1795 159 C
ATOM 6108 CZ PHE C 36 -22.328 -3.305 -9.488 1.00 27.86 C
ANISOU 6108 CZ PHE C 36 3580 3476 3530 715 -1954 63 C
ATOM 6109 H PHE C 36 -26.151 -0.900 -7.447 1.00 38.93 H
ATOM 6110 HA PHE C 36 -25.972 -1.929 -4.983 1.00 34.80 H

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ATOM   6111  HB2 PHE C  36    -24.598  -3.674  -5.440  1.00 35.31           H
ATOM   6112  HB3 PHE C  36    -25.810  -3.848  -6.452  1.00 35.31           H
ATOM   6113  HD1 PHE C  36    -25.470  -3.351  -8.820  1.00 36.39           H
ATOM   6114  HD2 PHE C  36    -22.403  -3.256  -6.268  1.00 32.39           H
ATOM   6115  HE1 PHE C  36    -24.002  -3.353 -10.589  1.00 35.70           H
ATOM   6116  HE2 PHE C  36    -20.932  -3.258  -8.037  1.00 32.04           H
ATOM   6117  HZ  PHE C  36    -21.734  -3.307 -10.204  1.00 33.43           H
ATOM   6118  N  AVAL C  37    -23.738  -0.905  -4.600  0.64 25.51           N
ANISOU 6118  N  AVAL C  37     3003   3377   3314    307   -841    980      N
ATOM   6119  N  BVAL C  37    -23.727  -0.919  -4.608  0.36 25.46           N
ANISOU 6119  N  BVAL C  37     2997   3368   3308    306   -846    977      N
ATOM   6120  CA AVAL C  37    -22.507  -0.154  -4.374  0.64 23.56           C
ANISOU 6120  CA AVAL C  37     2945   3085   2922    427   -664    810      C
ATOM   6121  CA BVAL C  37    -22.492  -0.168  -4.410  0.36 23.51           C
ANISOU 6121  CA BVAL C  37     2939   3078   2916    429   -670    804      C
ATOM   6122  C  AVAL C  37    -21.643  -0.978  -3.430  0.64 22.88           C
ANISOU 6122  C  AVAL C  37     2995   2824   2875    308   -797    755      C
ATOM   6123  C  BVAL C  37    -21.633  -0.945  -3.426  0.36 22.97           C
ANISOU 6123  C  BVAL C  37     3008   2837   2882    311   -789    755      C
ATOM   6124  O  AVAL C  37    -22.108  -1.391  -2.363  0.64 23.82           O
ANISOU 6124  O  AVAL C  37     3103   2908   3038    171   -787    938      O
ATOM   6125  O  BVAL C  37    -22.090  -1.300  -2.335  0.36 23.73           O
ANISOU 6125  O  BVAL C  37     3098   2904   3016    180   -764    937      O
ATOM   6126  CB AVAL C  37    -22.773   1.245  -3.775  0.64 22.97           C
ANISOU 6126  CB AVAL C  37     2912   3109   2706    533   -295    922      C
ATOM   6127  CB BVAL C  37    -22.763   1.270  -3.914  0.36 22.93           C
ANISOU 6127  CB BVAL C  37     2902   3111   2702    544   -302    910      C
ATOM   6128  CG1AVAL C  37    -21.463   1.997  -3.580  0.64 21.48           C
ANISOU 6128  CG1AVAL C  37     2929   2835   2399    594   -187    758      C
ATOM   6129  CG1BVAL C  37    -23.612   1.262  -2.645  0.36 24.21           C
ANISOU 6129  CG1BVAL C  37     3025   3318   2857    479   -151   1151      C
ATOM   6130  CG2AVAL C  37    -23.724   2.070  -4.646  0.64 23.53           C
ANISOU 6130  CG2AVAL C  37     2844   3353   2745    679   -159   1014      C
ATOM   6131  CG2BVAL C  37    -21.453   2.018  -3.687  0.36 21.49           C
ANISOU 6131  CG2BVAL C  37     2924   2842   2400    602   -190    750      C
ATOM   6132  H  AVAL C  37    -24.019  -1.316  -3.899  0.64 30.62           H
ATOM   6133  H  BVAL C  37    -23.996  -1.335  -3.905  0.36 30.55           H
ATOM   6134  HA AVAL C  37    -22.033  -0.046  -5.213  0.64 28.27           H
ATOM   6135  HA BVAL C  37    -22.014  -0.112  -5.252  0.36 28.21           H
ATOM   6136  HB AVAL C  37    -23.185   1.139  -2.904  0.64 27.56           H
ATOM   6137  HB BVAL C  37    -23.259   1.746  -4.597  0.36 27.52           H
ATOM   6138 HG11AVAL C  37    -21.653   2.870  -3.204  0.64 25.78           H
ATOM   6139 HG11BVAL C  37    -23.763   2.177  -2.361  0.36 29.05           H
ATOM   6140 HG12AVAL C  37    -20.897   1.492  -2.975  0.64 25.78           H
ATOM   6141 HG12BVAL C  37    -24.459   0.830  -2.836  0.36 29.05           H
ATOM   6142 HG13AVAL C  37    -21.024   2.095  -4.440  0.64 25.78           H
ATOM   6143 HG13BVAL C  37    -23.140   0.774  -1.953  0.36 29.05           H
ATOM   6144 HG21AVAL C  37    -23.980   1.543  -5.419  0.64 28.24           H
ATOM   6145 HG21BVAL C  37    -20.713   1.430  -3.903  0.36 25.79           H
ATOM   6146 HG22AVAL C  37    -24.510   2.298  -4.125  0.64 28.24           H
ATOM   6147 HG22BVAL C  37    -21.433   2.800  -4.260  0.36 25.79           H
ATOM   6148 HG23AVAL C  37    -23.270   2.878  -4.931  0.64 28.24           H
ATOM   6149 HG23BVAL C  37    -21.401   2.287  -2.756  0.36 25.79           H
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ATOM   6150  N   VAL C  38    -20.395  -1.227  -3.820  1.00 22.04           N
ANISOU 6150  N   VAL C  38     2998   2635   2741    376   -914    533       N
ATOM   6151  CA  VAL C  38    -19.481  -2.043  -3.027  1.00 22.13           C
ANISOU 6151  CA  VAL C  38     3128   2488   2793    300  -1070    472       C
ATOM   6152  C   VAL C  38    -18.123  -1.364  -2.974  1.00 20.90           C
ANISOU 6152  C   VAL C  38     3057   2357   2527    397   -961    333       C
ATOM   6153  O   VAL C  38    -17.632  -0.866  -3.990  1.00 20.44           O
ANISOU 6153  O   VAL C  38     2956   2402   2409    537   -909    216       O
ATOM   6154  CB  VAL C  38    -19.332  -3.464  -3.614  1.00 23.46           C
ANISOU 6154  CB  VAL C  38     3319   2505   3091    293  -1440    354       C
ATOM   6155  CG1 VAL C  38    -18.352  -4.270  -2.789  1.00 24.17           C
ANISOU 6155  CG1 VAL C  38     3539   2426   3220    255  -1597    303       C
ATOM   6156  CG2 VAL C  38    -20.683  -4.162  -3.695  1.00 25.17           C
ANISOU 6156  CG2 VAL C  38     3440   2671   3453    131  -1614    523       C
ATOM   6157  HA  VAL C  38    -19.821  -2.120  -2.122  1.00 26.56           H
ATOM   6158  HB  VAL C  38    -18.977  -3.395  -4.515  1.00 28.16           H
ATOM   6159 HG11 VAL C  38    -18.272  -5.157  -3.173  1.00 29.01           H
ATOM   6160 HG12 VAL C  38    -17.490  -3.826  -2.799  1.00 29.01           H
ATOM   6161 HG13 VAL C  38    -18.683  -4.332  -1.879  1.00 29.01           H
ATOM   6162 HG21 VAL C  38    -20.558  -5.049  -4.067  1.00 30.20           H
ATOM   6163 HG22 VAL C  38    -21.059  -4.226  -2.804  1.00 30.20           H
ATOM   6164 HG23 VAL C  38    -21.272  -3.644  -4.266  1.00 30.20           H
ATOM   6165  N   GLY C  39    -17.494  -1.380  -1.806  1.00 20.79           N
ANISOU 6165  N   GLY C  39     3150   2263   2485    310   -948    367       N
ATOM   6166  CA  GLY C  39    -16.137  -0.881  -1.732  1.00 20.22           C
ANISOU 6166  CA  GLY C  39     3124   2212   2346    356   -918    258       C
ATOM   6167  C   GLY C  39    -15.612  -0.837  -0.318  1.00 20.88           C
ANISOU 6167  C   GLY C  39     3343   2205   2383    235   -927    318       C
ATOM   6168  O   GLY C  39    -16.337  -1.048   0.661  1.00 21.00           O
ANISOU 6168  O   GLY C  39     3440   2163   2377    139   -900    452       O
ATOM   6169  H   GLY C  39    -17.822  -1.666  -1.064  1.00 24.94           H
ATOM   6170  HA2 GLY C  39    -15.555  -1.452  -2.257  1.00 24.26           H
ATOM   6171  HA3 GLY C  39    -16.102   0.015  -2.101  1.00 24.26           H
ATOM   6172  N   LYS C  40    -14.311  -0.572  -0.244  1.00 20.42           N
ANISOU 6172  N   LYS C  40     3292   2167   2301    245   -975    236       N
ATOM   6173  CA  LYS C  40    -13.592  -0.345   0.997  1.00 20.91           C
ANISOU 6173  CA  LYS C  40     3486   2160   2297    129  -1017    270       C
ATOM   6174  C   LYS C  40    -13.350   1.145   1.165  1.00 20.86           C
ANISOU 6174  C   LYS C  40     3570   2177   2179     74   -845    280       C
ATOM   6175  O   LYS C  40    -13.181   1.885   0.191  1.00 20.43           O
ANISOU 6175  O   LYS C  40     3421   2209   2134    126   -740    253       O
ATOM   6176  CB  LYS C  40    -12.248  -1.069   0.996  1.00 22.66           C
ANISOU 6176  CB  LYS C  40     3631   2392   2588    162  -1234    197       C
ATOM   6177  CG  LYS C  40    -12.321  -2.577   1.164  1.00 24.60           C
ANISOU 6177  CG  LYS C  40     3882   2531   2934    212  -1461    186       C
ATOM   6178  CD  LYS C  40    -12.334  -2.968   2.625  1.00 24.77           C
ANISOU 6178  CD  LYS C  40     4067   2429   2913     75  -1559    296       C
ATOM   6179  CE  LYS C  40    -12.356  -4.478   2.794  1.00 24.99           C
ANISOU 6179  CE  LYS C  40     4121   2313   3061    111  -1812    316       C
ATOM   6180  NZ  LYS C  40    -11.024  -5.135   2.607  1.00 25.24           N
ANISOU 6180  NZ  LYS C  40     4087   2347   3157    251  -2023    215       N
ATOM   6181  H   LYS C  40    -13.804  -0.518  -0.936  1.00 24.51           H
ATOM   6182  HA  LYS C  40    -14.119  -0.664   1.746  1.00 25.09           H
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ATOM   6183  HB2 LYS C  40    -11.803  -0.892   0.152  1.00 27.19          H
ATOM   6184  HB3 LYS C  40    -11.711  -0.721   1.725  1.00 27.19          H
ATOM   6185  HG2 LYS C  40    -13.137  -2.905   0.753  1.00 29.52          H
ATOM   6186  HG3 LYS C  40    -11.547  -2.984   0.746  1.00 29.52          H
ATOM   6187  HD2 LYS C  40    -11.535  -2.625   3.056  1.00 29.72          H
ATOM   6188  HD3 LYS C  40    -13.127  -2.603   3.048  1.00 29.72          H
ATOM   6189  HE2 LYS C  40    -12.666  -4.687   3.689  1.00 29.99          H
ATOM   6190  HE3 LYS C  40    -12.966  -4.855   2.140  1.00 29.99          H
ATOM   6191  HZ1 LYS C  40    -11.100  -6.014   2.717  1.00 30.29          H
ATOM   6192  HZ2 LYS C  40    -10.717  -4.971   1.787  1.00 30.29          H
ATOM   6193  HZ3 LYS C  40    -10.443  -4.818   3.202  1.00 30.29          H
ATOM   6194  N   GLY C  41    -13.316   1.578   2.410  1.00 21.52          N
ANISOU 6194  N   GLY C  41     3867   2165   2143    -29   -837    323      N
ATOM   6195  CA  GLY C  41    -12.994   2.954   2.662  1.00 22.33          C
ANISOU 6195  CA  GLY C  41     4128   2219   2139    -94   -746    309      C
ATOM   6196  C   GLY C  41    -12.900   3.246   4.132  1.00 24.20          C
ANISOU 6196  C   GLY C  41     4658   2331   2208   -183   -799    321      C
ATOM   6197  O   GLY C  41    -12.480   2.410   4.937  1.00 23.98          O
ANISOU 6197  O   GLY C  41     4660   2282   2167   -237   -970    337      O
ATOM   6198  H   GLY C  41    -13.473   1.103   3.110  1.00 25.82          H
ATOM   6199  HA2 GLY C  41    -12.143   3.169   2.249  1.00 26.80          H
ATOM   6200  HA3 GLY C  41    -13.678   3.524   2.277  1.00 26.80          H
ATOM   6201  N   TRP C  42    -13.307   4.451   4.479  1.00 25.48          N
ANISOU 6201  N   TRP C  42     5066   2397   2217   -170   -660    308      N
ATOM   6202  CA  TRP C  42    -13.194   4.960   5.827  1.00 27.26          C
ANISOU 6202  CA  TRP C  42     5650   2485   2223   -218   -712    282      C
ATOM   6203  C   TRP C  42    -14.591   5.137   6.392  1.00 26.64          C
ANISOU 6203  C   TRP C  42     5754   2419   1951    -33   -463    341      C
ATOM   6204  O   TRP C  42    -15.515   5.534   5.677  1.00 26.03          O
ANISOU 6204  O   TRP C  42     5593   2399   1899    106   -242    381      O
ATOM   6205  CB  TRP C  42    -12.397   6.271   5.818  1.00 29.07          C
ANISOU 6205  CB  TRP C  42     6075   2556   2413   -343   -803    205      C
ATOM   6206  CG  TRP C  42    -10.992   6.010   5.371  1.00 29.79          C
ANISOU 6206  CG  TRP C  42     5918   2703   2696   -535  -1045    210      C
ATOM   6207  CD1 TRP C  42     -9.923   5.716   6.167  1.00 32.48          C
ANISOU 6207  CD1 TRP C  42     6297   3016   3028   -700  -1325    200      C
ATOM   6208  CD2 TRP C  42    -10.516   5.945   4.024  1.00 29.24          C
ANISOU 6208  CD2 TRP C  42     5489   2779   2840   -547  -1018    254      C
ATOM   6209  NE1 TRP C  42     -8.807   5.491   5.400  1.00 33.00          N
ANISOU 6209  NE1 TRP C  42     6016   3215   3307   -811  -1463    249      N
ATOM   6210  CE2 TRP C  42     -9.145   5.628   4.079  1.00 31.15          C
ANISOU 6210  CE2 TRP C  42     5541   3095   3197   -708  -1264    282      C
ATOM   6211  CE3 TRP C  42    -11.113   6.129   2.777  1.00 26.65          C
ANISOU 6211  CE3 TRP C  42     4978   2552   2597   -418   -810    283      C
ATOM   6212  CZ2 TRP C  42     -8.364   5.494   2.934  1.00 31.23          C
ANISOU 6212  CZ2 TRP C  42     5176   3300   3389   -717  -1271    349      C
ATOM   6213  CZ3 TRP C  42    -10.336   5.996   1.643  1.00 27.21          C
ANISOU 6213  CZ3 TRP C  42     4717   2793   2829   -437   -834    331      C
ATOM   6214  CH2 TRP C  42     -8.979   5.682   1.727  1.00 29.24          C
ANISOU 6214  CH2 TRP C  42     4781   3144   3184   -572  -1045    367      C
ATOM   6215  H   TRP C  42    -13.664   5.009   3.931  1.00 30.57          H
ATOM   6216  HA  TRP C  42    -12.720   4.317   6.376  1.00 32.71          H
ATOM   6217  HB2 TRP C  42    -12.806   6.897   5.200  1.00 34.88          H
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ATOM   6218  HB3 TRP C  42    -12.372   6.643   6.714  1.00 34.88           H
ATOM   6219  HD1 TRP C  42     -9.946   5.677   7.096  1.00 38.97           H
ATOM   6220  HE1 TRP C  42     -8.023   5.302   5.699  1.00 39.60           H
ATOM   6221  HE3 TRP C  42    -12.018   6.334   2.710  1.00 31.98           H
ATOM   6222  HZ2 TRP C  42     -7.459   5.289   2.989  1.00 37.47           H
ATOM   6223  HZ3 TRP C  42    -10.724   6.120   0.807  1.00 32.66           H
ATOM   6224  HH2 TRP C  42     -8.480   5.606   0.946  1.00 35.08           H
ATOM   6225  N   THR C  43    -14.759   4.787   7.663  1.00 28.15           N
ANISOU 6225  N   THR C  43     6161   2594   1941    -14   -491    375      N
ATOM   6226  CA  THR C  43    -16.044   5.035   8.292  1.00 29.48           C
ANISOU 6226  CA  THR C  43     6497   2823   1880    196   -220    463      C
ATOM   6227  C   THR C  43    -16.343   6.534   8.346  1.00 31.39           C
ANISOU 6227  C   THR C  43     7061   2929   1935    345    -71    356      C
ATOM   6228  O   THR C  43    -17.516   6.912   8.446  1.00 31.90           O
ANISOU 6228  O   THR C  43     7107   3083   1930    579    209    407      O
ATOM   6229  CB  THR C  43    -16.077   4.406   9.689  1.00 33.49           C
ANISOU 6229  CB  THR C  43     7140   3372   2213    200   -267    520      C
ATOM   6230  OG1 THR C  43    -15.392   3.138   9.668  1.00 31.45           O
ANISOU 6230  OG1 THR C  43     6698   3142   2110     26   -511    592      O
ATOM   6231  CG2 THR C  43    -17.522   4.172  10.125  1.00 34.70           C
ANISOU 6231  CG2 THR C  43     7179   3723   2284    397     39    686      C
ATOM   6232  H   THR C  43    -14.166   4.417   8.165  1.00 33.78           H
ATOM   6233  HA  THR C  43    -16.738   4.613   7.761  1.00 35.37           H
ATOM   6234  HB  THR C  43    -15.651   5.000  10.327  1.00 40.19           H
ATOM   6235  HG1 THR C  43    -14.593   3.248   9.435  1.00 37.74           H
ATOM   6236 HG21 THR C  43    -17.541   3.774  11.010  1.00 41.64           H
ATOM   6237 HG22 THR C  43    -18.002   5.014  10.148  1.00 41.64           H
ATOM   6238 HG23 THR C  43    -17.963   3.574   9.501  1.00 41.64           H
ATOM   6239  N   THR C  44    -15.313   7.386   8.217  1.00 32.87           N
ANISOU 6239  N   THR C  44     7442   2908   2141    203   -269    207      N
ATOM   6240  CA  THR C  44    -15.443   8.845   8.277  1.00 33.37           C
ANISOU 6240  CA  THR C  44     7884   2751   2044    306   -207     93      C
ATOM   6241  C   THR C  44    -14.607   9.478   7.166  1.00 32.92           C
ANISOU 6241  C   THR C  44     7694   2575   2240    106   -346     54      C
ATOM   6242  O   THR C  44    -13.375   9.388   7.182  1.00 32.92           O
ANISOU 6242  O   THR C  44     7641   2508   2361   -165   -633     21      O
ATOM   6243  CB  THR C  44    -14.985   9.385   9.646  1.00 36.58           C
ANISOU 6243  CB  THR C  44     8735   2949   2215    298   -370    -40      C
ATOM   6244  OG1 THR C  44    -15.787   8.817  10.691  1.00 37.88           O
ANISOU 6244  OG1 THR C  44     8884   3266   2241    502   -198     18      O
ATOM   6245  CG2 THR C  44    -15.085  10.919   9.708  1.00 39.18           C
ANISOU 6245  CG2 THR C  44     9476   2979   2431    405   -358   -157      C
ATOM   6246  H   THR C  44    -14.502   7.128   8.090  1.00 39.45           H
ATOM   6247  HA  THR C  44    -16.371   9.093   8.144  1.00 40.04           H
ATOM   6248  HB  THR C  44    -14.058   9.139   9.789  1.00 43.90           H
ATOM   6249  HG1 THR C  44    -16.594   9.018  10.575  1.00 45.45           H
ATOM   6250 HG21 THR C  44    -14.793  11.236  10.577  1.00 47.01           H
ATOM   6251 HG22 THR C  44    -14.525  11.316   9.023  1.00 47.01           H
ATOM   6252 HG23 THR C  44    -16.004  11.198   9.564  1.00 47.01           H
ATOM   6253  N   GLY C  45    -15.267  10.148   6.224  1.00 31.91           N
ANISOU 6253  N   GLY C  45     7499   2442   2184    245   -142     89      N
ATOM   6254  CA  GLY C  45    -14.549  10.819   5.160  1.00 31.81           C
ANISOU 6254  CA  GLY C  45     7370   2332   2383     71   -241     97      C
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ATOM 6255 C GLY C 45 -13.846 12.077 5.640 1.00 34.49 C
ANISOU 6255 C GLY C 45 8158 2317 2629 -70 -446 -4 C
ATOM 6256 O GLY C 45 -14.192 12.676 6.664 1.00 37.06 O
ANISOU 6256 O GLY C 45 8969 2432 2681 67 -454 -120 O
ATOM 6257 H GLY C 45 -16.122 10.225 6.183 1.00 38.30 H
ATOM 6258 HA2 GLY C 45 -13.885 10.218 4.789 1.00 38.17 H
ATOM 6259 HA3 GLY C 45 -15.170 11.064 4.456 1.00 38.17 H
ATOM 6260 N SER C 46 -12.824 12.475 4.878 1.00 34.60 N
ANISOU 6260 N SER C 46 8012 2266 2867 -351 -629 53 N
ATOM 6261 CA SER C 46 -12.050 13.677 5.152 1.00 37.79 C
ANISOU 6261 CA SER C 46 8786 2314 3260 -578 -885 8 C
ATOM 6262 C SER C 46 -11.922 14.470 3.858 1.00 37.94 C
ANISOU 6262 C SER C 46 8638 2291 3485 -659 -818 144 C
ATOM 6263 O SER C 46 -11.609 13.883 2.801 1.00 35.60 O
ANISOU 6263 O SER C 46 7842 2282 3401 -728 -742 287 O
ATOM 6264 CB SER C 46 -10.658 13.333 5.696 1.00 39.01 C
ANISOU 6264 CB SER C 46 8839 2481 3503 -936 -1254 14 C
ATOM 6265 OG SER C 46 -9.863 14.495 5.836 1.00 42.43 O
ANISOU 6265 OG SER C 46 9414 2733 3975 -1164 -1500 37 O
ATOM 6266 H SER C 46 -12.557 12.050 4.179 1.00 41.52 H
ATOM 6267 HA SER C 46 -12.514 14.222 5.807 1.00 45.35 H
ATOM 6268 HB2 SER C 46 -10.755 12.912 6.565 1.00 46.81 H
ATOM 6269 HB3 SER C 46 -10.221 12.725 5.080 1.00 46.81 H
ATOM 6270 HG SER C 46 -10.229 15.032 6.368 1.00 50.92 H
ATOM 6271 N PRO C 47 -12.147 15.788 3.878 1.00 40.61 N
ANISOU 6271 N PRO C 47 9264 2415 3751 -611 -829 108 N
ATOM 6272 CA PRO C 47 -11.896 16.576 2.661 1.00 41.14 C
ANISOU 6272 CA PRO C 47 9163 2441 4029 -731 -800 267 C
ATOM 6273 C PRO C 47 -10.416 16.705 2.347 1.00 42.54 C
ANISOU 6273 C PRO C 47 9098 2624 4442 -1177 -1094 416 C
ATOM 6274 O PRO C 47 -10.063 17.158 1.253 1.00 42.92 O
ANISOU 6274 O PRO C 47 8916 2706 4685 -1316 -1059 615 O
ATOM 6275 CB PRO C 47 -12.540 17.934 2.980 1.00 44.43 C
ANISOU 6275 CB PRO C 47 10012 2588 4280 -548 -776 171 C
ATOM 6276 CG PRO C 47 -12.464 18.039 4.465 1.00 46.85 C
ANISOU 6276 CG PRO C 47 10715 2758 4327 -511 -956 -10 C
ATOM 6277 CD PRO C 47 -12.566 16.640 5.011 1.00 43.97 C
ANISOU 6277 CD PRO C 47 10195 2621 3891 -447 -892 -52 C
ATOM 6278 HA PRO C 47 -12.350 16.176 1.902 1.00 49.37 H
ATOM 6279 HB2 PRO C 47 -12.035 18.645 2.557 1.00 53.31 H
ATOM 6280 HB3 PRO C 47 -13.463 17.939 2.680 1.00 53.31 H
ATOM 6281 HG2 PRO C 47 -11.616 18.438 4.716 1.00 56.22 H
ATOM 6282 HG3 PRO C 47 -13.200 18.582 4.787 1.00 56.22 H
ATOM 6283 HD2 PRO C 47 -11.961 16.525 5.760 1.00 52.76 H
ATOM 6284 HD3 PRO C 47 -13.482 16.442 5.260 1.00 52.76 H
ATOM 6285 N PHE C 48 -9.544 16.291 3.265 1.00 43.60 N
ANISOU 6285 N PHE C 48 9242 2767 4556 -1394 -1372 359 N
ATOM 6286 CA PHE C 48 -8.109 16.345 3.044 1.00 45.47 C
ANISOU 6286 CA PHE C 48 9183 3072 5020 -1809 -1658 531 C
ATOM 6287 C PHE C 48 -7.537 15.040 2.516 1.00 42.92 C
ANISOU 6287 C PHE C 48 8368 3076 4865 -1918 -1634 667 C
ATOM 6288 O PHE C 48 -6.409 15.034 2.011 1.00 44.21 O
ANISOU 6288 O PHE C 48 8158 3393 5246 -2224 -1790 884 O

ATOM 6289 CB PHE C 48 -7.397 16.713 4.349 1.00 48.92 C
ANISOU 6289 CB PHE C 48 9890 3353 5345 -1980 -2014 427 C
ATOM 6290 CG PHE C 48 -7.912 17.977 4.975 1.00 52.49 C
ANISOU 6290 CG PHE C 48 10879 3466 5597 -1860 -2079 291 C
ATOM 6291 CD1 PHE C 48 -7.872 19.168 4.273 1.00 54.93 C
ANISOU 6291 CD1 PHE C 48 11264 3585 6023 -1956 -2097 390 C
ATOM 6292 CD2 PHE C 48 -8.440 17.976 6.256 1.00 53.60 C
ANISOU 6292 CD2 PHE C 48 11456 3484 5427 -1636 -2118 85 C
ATOM 6293 CE1 PHE C 48 -8.344 20.332 4.831 1.00 58.69 C
ANISOU 6293 CE1 PHE C 48 12256 3727 6316 -1832 -2179 261 C
ATOM 6294 CE2 PHE C 48 -8.913 19.143 6.823 1.00 57.36 C
ANISOU 6294 CE2 PHE C 48 12444 3650 5698 -1493 -2181 -31 C
ATOM 6295 CZ PHE C 48 -8.865 20.324 6.108 1.00 59.93 C
ANISOU 6295 CZ PHE C 48 12857 3765 6147 -1590 -2223 43 C
ATOM 6296 H PHE C 48 -9.766 15.971 4.032 1.00 52.32 H
ATOM 6297 HA PHE C 48 -7.918 17.039 2.393 1.00 54.56 H
ATOM 6298 HB2 PHE C 48 -7.520 15.994 4.988 1.00 58.70 H
ATOM 6299 HB3 PHE C 48 -6.452 16.835 4.167 1.00 58.70 H
ATOM 6300 HD1 PHE C 48 -7.522 19.181 3.412 1.00 65.92 H
ATOM 6301 HD2 PHE C 48 -8.473 17.182 6.739 1.00 64.32 H
ATOM 6302 HE1 PHE C 48 -8.309 21.127 4.348 1.00 70.42 H
ATOM 6303 HE2 PHE C 48 -9.265 19.133 7.684 1.00 68.83 H
ATOM 6304 HZ PHE C 48 -9.184 21.111 6.487 1.00 71.91 H
ATOM 6305 N ARG C 49 -8.286 13.948 2.601 1.00 40.27 N
ANISOU 6305 N ARG C 49 7931 2945 4424 -1617 -1418 557 N
ATOM 6306 CA ARG C 49 -7.725 12.649 2.286 1.00 39.82 C
ANISOU 6306 CA ARG C 49 7352 3299 4478 -1600 -1401 618 C
ATOM 6307 C ARG C 49 -7.376 12.549 0.810 1.00 41.68 C
ANISOU 6307 C ARG C 49 7092 3842 4901 -1595 -1234 826 C
ATOM 6308 O ARG C 49 -8.093 13.059 -0.053 1.00 39.47 O
ANISOU 6308 O ARG C 49 6835 3550 4613 -1445 -1003 877 O
ATOM 6309 CB ARG C 49 -8.709 11.551 2.662 1.00 35.74 C
ANISOU 6309 CB ARG C 49 6845 2922 3814 -1265 -1210 462 C
ATOM 6310 CG ARG C 49 -8.227 10.176 2.314 1.00 33.60 C
ANISOU 6310 CG ARG C 49 6105 3010 3652 -1205 -1209 501 C
ATOM 6311 CD ARG C 49 -9.086 9.124 2.979 1.00 31.46 C
ANISOU 6311 CD ARG C 49 5921 2789 3245 -968 -1121 368 C
ATOM 6312 NE ARG C 49 -8.765 9.017 4.398 1.00 34.60 N
ANISOU 6312 NE ARG C 49 6613 3028 3507 -1078 -1351 282 N
ATOM 6313 CZ ARG C 49 -9.621 9.201 5.402 1.00 35.11 C
ANISOU 6313 CZ ARG C 49 7094 2912 3334 -953 -1299 169 C
ATOM 6314 NH1 ARG C 49 -10.901 9.501 5.183 1.00 34.49 N
ANISOU 6314 NH1 ARG C 49 7165 2796 3145 -705 -1013 140 N
ATOM 6315 NH2 ARG C 49 -9.185 9.069 6.643 1.00 36.25 N
ANISOU 6315 NH2 ARG C 49 7495 2946 3334 -1054 -1534 100 N
ATOM 6316 H ARG C 49 -9.113 13.935 2.837 1.00 48.32 H
ATOM 6317 HA ARG C 49 -6.913 12.519 2.800 1.00 47.78 H
ATOM 6318 HB2 ARG C 49 -8.861 11.580 3.620 1.00 42.89 H
ATOM 6319 HB3 ARG C 49 -9.543 11.702 2.191 1.00 42.89 H
ATOM 6320 HG2 ARG C 49 -8.276 10.051 1.354 1.00 40.32 H
ATOM 6321 HG3 ARG C 49 -7.314 10.067 2.623 1.00 40.32 H
ATOM 6322 HD2 ARG C 49 -10.020 9.369 2.893 1.00 37.76 H
ATOM 6323 HD3 ARG C 49 -8.922 8.264 2.561 1.00 37.76 H

ATOM 6324 HE ARG C 49 -7.955 8.817 4.603 1.00 41.52 H
ATOM 6325 HH11 ARG C 49 -11.190 9.587 4.378 1.00 41.39 H
ATOM 6326 HH12 ARG C 49 -11.435 9.614 5.847 1.00 41.39 H
ATOM 6327 HH21 ARG C 49 -8.361 8.873 6.791 1.00 43.50 H
ATOM 6328 HH22 ARG C 49 -9.725 9.182 7.303 1.00 43.50 H
ATOM 6329 N THR C 50 -6.254 11.895 0.527 1.00 45.99 N
ANISOU 6329 N THR C 50 7191 4688 5595 -1730 -1349 957 N
ATOM 6330 CA THR C 50 -5.913 11.458 -0.820 1.00 48.01 C
ANISOU 6330 CA THR C 50 6938 5337 5967 -1618 -1158 1127 C
ATOM 6331 C THR C 50 -6.151 9.955 -0.876 1.00 43.45 C
ANISOU 6331 C THR C 50 6134 5032 5341 -1315 -1066 989 C
ATOM 6332 O THR C 50 -5.393 9.177 -0.284 1.00 45.46 O
ANISOU 6332 O THR C 50 6235 5400 5636 -1367 -1250 971 O
ATOM 6333 CB THR C 50 -4.465 11.797 -1.168 1.00 54.36 C
ANISOU 6333 CB THR C 50 7368 6326 6960 -1936 -1328 1406 C
ATOM 6334 OG1 THR C 50 -4.271 13.215 -1.086 1.00 58.27 O
ANISOU 6334 OG1 THR C 50 8115 6503 7523 -2270 -1464 1552 O
ATOM 6335 CG2 THR C 50 -4.117 11.314 -2.580 1.00 54.80 C
ANISOU 6335 CG2 THR C 50 6897 6847 7077 -1746 -1086 1588 C
ATOM 6336 H THR C 50 -5.661 11.688 1.115 1.00 55.19 H
ATOM 6337 HA THR C 50 -6.497 11.890 -1.463 1.00 57.61 H
ATOM 6338 HB THR C 50 -3.872 11.356 -0.540 1.00 65.23 H
ATOM 6339 HG1 THR C 50 -4.783 13.606 -1.625 1.00 69.93 H
ATOM 6340 HG21 THR C 50 -3.196 11.535 -2.789 1.00 65.76 H
ATOM 6341 HG22 THR C 50 -4.231 10.352 -2.639 1.00 65.76 H
ATOM 6342 HG23 THR C 50 -4.698 11.740 -3.229 1.00 65.76 H
ATOM 6343 N ILE C 51 -7.215 9.550 -1.561 1.00 35.58 N
ANISOU 6343 N ILE C 51 5138 4115 4266 -1007 -815 900 N
ATOM 6344 CA ILE C 51 -7.525 8.135 -1.693 1.00 30.01 C
ANISOU 6344 CA ILE C 51 4261 3610 3529 -737 -764 771 C
ATOM 6345 C ILE C 51 -6.579 7.530 -2.717 1.00 30.08 C
ANISOU 6345 C ILE C 51 3807 3998 3623 -638 -733 886 C
ATOM 6346 O ILE C 51 -6.345 8.107 -3.790 1.00 30.61 O
ANISOU 6346 O ILE C 51 3681 4236 3714 -625 -591 1045 O
ATOM 6347 CB ILE C 51 -8.995 7.925 -2.097 1.00 26.83 C
ANISOU 6347 CB ILE C 51 4005 3161 3027 -476 -553 658 C
ATOM 6348 CG1 ILE C 51 -9.932 8.357 -0.963 1.00 26.13 C
ANISOU 6348 CG1 ILE C 51 4340 2763 2825 -502 -556 555 C
ATOM 6349 CG2 ILE C 51 -9.264 6.462 -2.429 1.00 24.96 C
ANISOU 6349 CG2 ILE C 51 3580 3114 2790 -232 -544 550 C
ATOM 6350 CD1 ILE C 51 -10.312 9.815 -1.001 1.00 28.17 C
ANISOU 6350 CD1 ILE C 51 4878 2789 3037 -582 -478 611 C
ATOM 6351 H ILE C 51 -7.771 10.074 -1.957 1.00 42.70 H
ATOM 6352 HA ILE C 51 -7.376 7.694 -0.842 1.00 36.01 H
ATOM 6353 HB ILE C 51 -9.185 8.463 -2.881 1.00 32.19 H
ATOM 6354 HG12 ILE C 51 -10.749 7.837 -1.018 1.00 31.36 H
ATOM 6355 HG13 ILE C 51 -9.492 8.188 -0.115 1.00 31.36 H
ATOM 6356 HG21 ILE C 51 -10.196 6.361 -2.679 1.00 29.95 H
ATOM 6357 HG22 ILE C 51 -8.692 6.196 -3.166 1.00 29.95 H
ATOM 6358 HG23 ILE C 51 -9.070 5.921 -1.648 1.00 29.95 H
ATOM 6359 HD11 ILE C 51 -10.902 10.006 -0.255 1.00 33.81 H
ATOM 6360 HD12 ILE C 51 -9.507 10.352 -0.933 1.00 33.81 H
ATOM 6361 HD13 ILE C 51 -10.765 10.001 -1.838 1.00 33.81 H

ATOM 6362 N ASN C 52 -6.020 6.376 -2.379 1.00 29.21 N
ANISOU 6362 N ASN C 52 3528 4029 3542 -540 -861 819 N
ATOM 6363 CA ASN C 52 -5.181 5.616 -3.284 1.00 30.20 C
ANISOU 6363 CA ASN C 52 3240 4526 3707 -339 -822 888 C
ATOM 6364 C ASN C 52 -5.902 4.330 -3.640 1.00 28.27 C
ANISOU 6364 C ASN C 52 3025 4324 3393 10 -776 683 C
ATOM 6365 O ASN C 52 -6.613 3.753 -2.813 1.00 26.74 O
ANISOU 6365 O ASN C 52 3081 3904 3176 20 -870 534 O
ATOM 6366 CB ASN C 52 -3.830 5.282 -2.650 1.00 32.63 C
ANISOU 6366 CB ASN C 52 3311 4971 4117 -471 -1041 991 C
ATOM 6367 CG ASN C 52 -3.068 6.513 -2.227 1.00 35.11 C
ANISOU 6367 CG ASN C 52 3598 5216 4527 -880 -1166 1207 C
ATOM 6368 OD1 ASN C 52 -2.240 7.032 -2.975 1.00 37.42 O
ANISOU 6368 OD1 ASN C 52 3548 5770 4901 -970 -1107 1456 O
ATOM 6369 ND2 ASN C 52 -3.350 6.996 -1.021 1.00 34.91 N
ANISOU 6369 ND2 ASN C 52 3946 4834 4483 -1133 -1354 1126 N
ATOM 6370 H ASN C 52 -6.117 6.006 -1.609 1.00 35.05 H
ATOM 6371 HA ASN C 52 -5.029 6.124 -4.096 1.00 36.23 H
ATOM 6372 HB2 ASN C 52 -3.975 4.734 -1.863 1.00 39.16 H
ATOM 6373 HB3 ASN C 52 -3.288 4.801 -3.295 1.00 39.16 H
ATOM 6374 HD21 ASN C 52 -2.943 7.697 -0.733 1.00 41.89 H
ATOM 6375 HD22 ASN C 52 -3.939 6.608 -0.530 1.00 41.89 H
ATOM 6376 N TYR C 53 -5.706 3.868 -4.869 1.00 28.82 N
ANISOU 6376 N TYR C 53 2849 4682 3418 296 -648 689 N
ATOM 6377 CA TYR C 53 -6.317 2.605 -5.231 1.00 27.66 C
ANISOU 6377 CA TYR C 53 2766 4534 3209 619 -672 479 C
ATOM 6378 C TYR C 53 -5.663 2.061 -6.489 1.00 29.47 C
ANISOU 6378 C TYR C 53 2708 5126 3362 967 -578 486 C
ATOM 6379 O TYR C 53 -4.972 2.777 -7.216 1.00 31.29 O
ANISOU 6379 O TYR C 53 2682 5640 3567 965 -426 682 O
ATOM 6380 CB TYR C 53 -7.834 2.757 -5.434 1.00 25.46 C
ANISOU 6380 CB TYR C 53 2758 4048 2869 642 -586 369 C
ATOM 6381 CG TYR C 53 -8.205 3.401 -6.755 1.00 25.67 C
ANISOU 6381 CG TYR C 53 2702 4249 2802 771 -377 431 C
ATOM 6382 CD1 TYR C 53 -8.320 4.778 -6.875 1.00 25.89 C
ANISOU 6382 CD1 TYR C 53 2763 4242 2831 568 -239 602 C
ATOM 6383 CD2 TYR C 53 -8.433 2.624 -7.881 1.00 26.05 C
ANISOU 6383 CD2 TYR C 53 2676 4476 2745 1107 -344 316 C
ATOM 6384 CE1 TYR C 53 -8.654 5.367 -8.089 1.00 26.33 C
ANISOU 6384 CE1 TYR C 53 2750 4461 2794 692 -52 687 C
ATOM 6385 CE2 TYR C 53 -8.757 3.199 -9.100 1.00 26.55 C
ANISOU 6385 CE2 TYR C 53 2677 4724 2688 1243 -163 380 C
ATOM 6386 CZ TYR C 53 -8.869 4.566 -9.200 1.00 26.61 C
ANISOU 6386 CZ TYR C 53 2688 4716 2706 1032 -8 580 C
ATOM 6387 OH TYR C 53 -9.200 5.122 -10.416 1.00 27.32 O
ANISOU 6387 OH TYR C 53 2723 4991 2667 1176 167 668 O
ATOM 6388 H TYR C 53 -5.244 4.250 -5.485 1.00 34.58 H
ATOM 6389 HA TYR C 53 -6.172 1.966 -4.516 1.00 33.19 H
ATOM 6390 HB2 TYR C 53 -8.244 1.879 -5.405 1.00 30.55 H
ATOM 6391 HB3 TYR C 53 -8.191 3.311 -4.722 1.00 30.55 H
ATOM 6392 HD1 TYR C 53 -8.171 5.315 -6.131 1.00 31.06 H
ATOM 6393 HD2 TYR C 53 -8.354 1.700 -7.820 1.00 31.26 H
ATOM 6394 HE1 TYR C 53 -8.726 6.292 -8.156 1.00 31.60 H

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ATOM   6395  HE2 TYR C  53     -8.907   2.663  -9.845  1.00 31.86           H
ATOM   6396  HH  TYR C  53     -9.239   5.959 -10.349  1.00 32.78           H
ATOM   6397  N   ASN C  54     -5.898   0.775  -6.727  1.00 29.37           N
ANISOU 6397  N   ASN C  54     2760   5096   3302   1277   -678    280       N
ATOM   6398  CA  ASN C  54     -5.491   0.124  -7.966  1.00 33.19           C
ANISOU 6398  CA  ASN C  54     3077   5881   3652   1703   -602    212       C
ATOM   6399  C   ASN C  54     -6.592  -0.858  -8.328  1.00 32.70           C
ANISOU 6399  C   ASN C  54     3298   5605   3521   1922   -717    -56       C
ATOM   6400  O   ASN C  54     -6.813  -1.838  -7.611  1.00 31.63           O
ANISOU 6400  O   ASN C  54     3336   5218   3465   1934   -937   -197       O
ATOM   6401  CB  ASN C  54     -4.140  -0.580  -7.821  1.00 35.34           C
ANISOU 6401  CB  ASN C  54     3088   6392   3947   1915   -678    252       C
ATOM   6402  CG  ASN C  54     -3.675  -1.227  -9.123  1.00 39.11           C
ANISOU 6402  CG  ASN C  54     3532   7081   4249   2271   -516    156       C
ATOM   6403  OD1 ASN C  54     -4.490  -1.672  -9.938  1.00 38.92           O
ANISOU 6403  OD1 ASN C  54     3745   6962   4080   2448   -494    -41       O
ATOM   6404  ND2 ASN C  54     -2.361  -1.279  -9.322  1.00 41.53           N
ANISOU 6404  ND2 ASN C  54     3551   7687   4541   2369   -423    305       N
ATOM   6405  H   ASN C  54     -6.300   0.250  -6.177  1.00 35.24           H
ATOM   6406  HA  ASN C  54     -5.421   0.785  -8.672  1.00 39.83           H
ATOM   6407  HB2 ASN C  54     -3.472   0.070  -7.553  1.00 42.40           H
ATOM   6408  HB3 ASN C  54     -4.216  -1.276  -7.150  1.00 42.40           H
ATOM   6409 HD21 ASN C  54     -1.823  -0.958  -8.733  1.00 49.83           H
ATOM   6410 HD22 ASN C  54     -2.049  -1.635 -10.041  1.00 49.83           H
ATOM   6411  N   ALA C  55     -7.300  -0.569  -9.415  1.00 33.71           N
ANISOU 6411  N   ALA C  55     3478   5819   3512   2061   -591   -100       N
ATOM   6412  CA  ALA C  55     -8.344  -1.453  -9.927  1.00 34.93           C
ANISOU 6412  CA  ALA C  55     3913   5759   3601   2182   -705   -341       C
ATOM   6413  C   ALA C  55     -7.679  -2.454 -10.864  1.00 35.91           C
ANISOU 6413  C   ALA C  55     4071   6014   3560   2499   -707   -505       C
ATOM   6414  O   ALA C  55     -7.583  -2.239 -12.072  1.00 37.87           O
ANISOU 6414  O   ALA C  55     4291   6508   3591   2695   -562   -512       O
ATOM   6415  CB  ALA C  55     -9.434  -0.657 -10.637  1.00 34.28           C
ANISOU 6415  CB  ALA C  55     3889   5702   3434   2153   -596   -305       C
ATOM   6416  H   ALA C  55     -7.193   0.145  -9.883  1.00 40.46           H
ATOM   6417  HA  ALA C  55     -8.747  -1.940  -9.191  1.00 41.92           H
ATOM   6418  HB1 ALA C  55     -10.111  -1.270 -10.964  1.00 41.14           H
ATOM   6419  HB2 ALA C  55     -9.830  -0.033 -10.008  1.00 41.14           H
ATOM   6420  HB3 ALA C  55     -9.039  -0.173 -11.379  1.00 41.14           H
ATOM   6421  N   GLY C  56     -7.209  -3.559 -10.290  1.00 34.40           N
ANISOU 6421  N   GLY C  56     3965   5665   3441   2566   -883   -626       N
ATOM   6422  CA  GLY C  56     -6.558  -4.585 -11.086  1.00 37.71           C
ANISOU 6422  CA  GLY C  56     4459   6190   3679   2906   -918   -795       C
ATOM   6423  C   GLY C  56     -7.495  -5.234 -12.080  1.00 37.81           C
ANISOU 6423  C   GLY C  56     4763   6094   3511   3084  -1050  -1039       C
ATOM   6424  O   GLY C  56     -7.054  -5.768 -13.101  1.00 41.28           O
ANISOU 6424  O   GLY C  56     5274   6718   3694   3411  -1049  -1161       O
ATOM   6425  H   GLY C  56     -7.256  -3.735  -9.450  1.00 41.28           H
ATOM   6426  HA2 GLY C  56     -5.817  -4.192 -11.574  1.00 45.25           H
ATOM   6427  HA3 GLY C  56     -6.207  -5.273 -10.499  1.00 45.25           H
ATOM   6428  N   VAL C  57     -8.791  -5.216 -11.791  1.00 35.57           N
ANISOU 6428  N   VAL C  57     4646   5521   3347   2879  -1194  -1099       N
ATOM   6429  CA  VAL C  57     -9.807  -5.720 -12.708  1.00 36.51           C
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ANISOU 6429 CA VAL C 57 5016 5526 3331 3002 -1364 -1309 C
ATOM 6430 C VAL C 57 -10.934 -4.701 -12.760 1.00 34.16 C
ANISOU 6430 C VAL C 57 4665 5209 3107 2777 -1274 -1182 C
ATOM 6431 O VAL C 57 -11.510 -4.353 -11.721 1.00 31.41 O
ANISOU 6431 O VAL C 57 4278 4661 2993 2472 -1299 -1048 O
ATOM 6432 CB VAL C 57 -10.344 -7.099 -12.288 1.00 37.72 C
ANISOU 6432 CB VAL C 57 5466 5264 3601 2991 -1735 -1532 C
ATOM 6433 CG1 VAL C 57 -11.532 -7.517 -13.173 1.00 38.92 C
ANISOU 6433 CG1 VAL C 57 5870 5247 3673 3065 -1966 -1735 C
ATOM 6434 CG2 VAL C 57 -9.207 -8.135 -12.352 1.00 40.79 C
ANISOU 6434 CG2 VAL C 57 5934 5691 3872 3271 -1838 -1663 C
ATOM 6435 H VAL C 57 -9.114 -4.910 -11.055 1.00 42.68 H
ATOM 6436 HA VAL C 57 -9.426 -5.799 -13.596 1.00 43.81 H
ATOM 6437 HB VAL C 57 -10.656 -7.051 -11.371 1.00 45.26 H
ATOM 6438 HG11 VAL C 57 -11.848 -8.388 -12.885 1.00 46.71 H
ATOM 6439 HG12 VAL C 57 -12.240 -6.861 -13.081 1.00 46.71 H
ATOM 6440 HG13 VAL C 57 -11.238 -7.560 -14.096 1.00 46.71 H
ATOM 6441 HG21 VAL C 57 -9.553 -9.001 -12.087 1.00 48.95 H
ATOM 6442 HG22 VAL C 57 -8.870 -8.177 -13.261 1.00 48.95 H
ATOM 6443 HG23 VAL C 57 -8.498 -7.863 -11.749 1.00 48.95 H
ATOM 6444 N TRP C 58 -11.239 -4.218 -13.967 1.00 34.96 N
ANISOU 6444 N TRP C 58 4769 5538 2977 2943 -1173 -1203 N
ATOM 6445 CA TRP C 58 -12.354 -3.298 -14.202 1.00 33.50 C
ANISOU 6445 CA TRP C 58 4545 5353 2829 2784 -1095 -1091 C
ATOM 6446 C TRP C 58 -13.054 -3.727 -15.488 1.00 35.40 C
ANISOU 6446 C TRP C 58 4976 5616 2859 3026 -1230 -1302 C
ATOM 6447 O TRP C 58 -12.665 -3.318 -16.584 1.00 36.98 O
ANISOU 6447 O TRP C 58 5138 6146 2768 3256 -1091 -1275 O
ATOM 6448 CB TRP C 58 -11.888 -1.856 -14.294 1.00 34.23 C
ANISOU 6448 CB TRP C 58 4386 5749 2870 2712 -763 -811 C
ATOM 6449 CG TRP C 58 -13.040 -0.935 -14.495 1.00 33.62 C
ANISOU 6449 CG TRP C 58 4295 5657 2823 2572 -696 -690 C
ATOM 6450 CD1 TRP C 58 -13.247 -0.090 -15.546 1.00 34.90 C
ANISOU 6450 CD1 TRP C 58 4403 6075 2783 2686 -523 -590 C
ATOM 6451 CD2 TRP C 58 -14.174 -0.795 -13.635 1.00 32.36 C
ANISOU 6451 CD2 TRP C 58 4179 5230 2886 2299 -806 -628 C
ATOM 6452 NE1 TRP C 58 -14.435 0.580 -15.384 1.00 33.85 N
ANISOU 6452 NE1 TRP C 58 4276 5831 2755 2512 -518 -485 N
ATOM 6453 CE2 TRP C 58 -15.021 0.169 -14.214 1.00 32.16 C
ANISOU 6453 CE2 TRP C 58 4115 5314 2792 2272 -684 -498 C
ATOM 6454 CE3 TRP C 58 -14.550 -1.383 -12.423 1.00 31.47 C
ANISOU 6454 CE3 TRP C 58 4133 4824 3003 2077 -987 -637 C
ATOM 6455 CZ2 TRP C 58 -16.224 0.557 -13.625 1.00 31.21 C
ANISOU 6455 CZ2 TRP C 58 4004 5034 2819 2052 -729 -383 C
ATOM 6456 CZ3 TRP C 58 -15.740 -1.000 -11.841 1.00 30.39 C
ANISOU 6456 CZ3 TRP C 58 4002 4548 2995 1851 -1026 -511 C
ATOM 6457 CH2 TRP C 58 -16.565 -0.038 -12.441 1.00 30.46 C
ANISOU 6457 CH2 TRP C 58 3956 4688 2928 1853 -892 -388 C
ATOM 6458 H TRP C 58 -10.804 -4.415 -14.682 1.00 41.95 H
ATOM 6459 HA TRP C 58 -12.988 -3.368 -13.472 1.00 40.20 H
ATOM 6460 HB2 TRP C 58 -11.440 -1.610 -13.469 1.00 41.07 H
ATOM 6461 HB3 TRP C 58 -11.285 -1.760 -15.047 1.00 41.07 H
ATOM 6462 HD1 TRP C 58 -12.666 0.020 -16.264 1.00 41.88 H

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ATOM   6463  HE1 TRP C  58    -14.755   1.168 -15.924  1.00 40.62           H
ATOM   6464  HE3 TRP C  58    -14.007  -2.020 -12.017  1.00 37.77           H
ATOM   6465  HZ2 TRP C  58    -16.774   1.193 -14.022  1.00 37.45           H
ATOM   6466  HZ3 TRP C  58    -15.998  -1.383 -11.034  1.00 36.46           H
ATOM   6467  HH2 TRP C  58    -17.361   0.202 -12.024  1.00 36.55           H
ATOM   6468  N   ALA C  59    -14.102  -4.531 -15.346  1.00 35.52           N
ANISOU 6468  N   ALA C  59    5174   5264   3059   2936  -1520  -1446      N
ATOM   6469  CA  ALA C  59    -14.825  -5.092 -16.484  1.00 38.11           C
ANISOU 6469  CA  ALA C  59    5682   5488   3309   3156  -1714  -1641      C
ATOM   6470  C   ALA C  59    -16.318  -4.907 -16.264  1.00 37.76           C
ANISOU 6470  C   ALA C  59    5627   5242   3477   2791  -1858  -1506      C
ATOM   6471  O   ALA C  59    -17.051  -5.871 -16.009  1.00 38.02           O
ANISOU 6471  O   ALA C  59    5812   4930   3702   2636  -2177  -1574      O
ATOM   6472  CB  ALA C  59    -14.472  -6.569 -16.682  1.00 41.36           C
ANISOU 6472  CB  ALA C  59    6317   5642   3755   3340  -2016  -1843      C
ATOM   6473  H   ALA C  59    -14.421  -4.771 -14.584  1.00 42.63           H
ATOM   6474  HA  ALA C  59    -14.575  -4.611 -17.289  1.00 45.73           H
ATOM   6475  HB1 ALA C  59    -14.967  -6.912 -17.443  1.00 49.63           H
ATOM   6476  HB2 ALA C  59    -13.519  -6.646 -16.844  1.00 49.63           H
ATOM   6477  HB3 ALA C  59    -14.713  -7.061 -15.882  1.00 49.63           H
ATOM   6478  N   PRO C  60    -16.800  -3.667 -16.330  1.00 37.86           N
ANISOU 6478  N   PRO C  60    5456   5476   3454   2640  -1631  -1285      N
ATOM   6479  CA  PRO C  60    -18.244  -3.434 -16.293  1.00 39.71           C
ANISOU 6479  CA  PRO C  60    5657   5606   3826   2361  -1752  -1156      C
ATOM   6480  C   PRO C  60    -18.883  -3.689 -17.646  1.00 45.38           C
ANISOU 6480  C   PRO C  60    6488   6353   4401   2526  -1906  -1285      C
ATOM   6481  O   PRO C  60    -18.297  -3.431 -18.699  1.00 47.90           O
ANISOU 6481  O   PRO C  60    6838   6894   4466   2863  -1775  -1383      O
ATOM   6482  CB  PRO C  60    -18.349  -1.953 -15.909  1.00 36.49           C
ANISOU 6482  CB  PRO C  60    5031   5431   3402   2239  -1430  -881      C
ATOM   6483  CG  PRO C  60    -17.105  -1.347 -16.496  1.00 35.80           C
ANISOU 6483  CG  PRO C  60    4890   5636   3075   2519  -1156  -894      C
ATOM   6484  CD  PRO C  60    -16.036  -2.403 -16.344  1.00 35.85           C
ANISOU 6484  CD  PRO C  60    5004   5566   3051   2701  -1261  -1104      C
ATOM   6485  HA  PRO C  60    -18.667  -3.984 -15.616  1.00 47.66           H
ATOM   6486  HB2 PRO C  60    -19.145  -1.564 -16.304  1.00 43.79           H
ATOM   6487  HB3 PRO C  60    -18.358  -1.861 -14.944  1.00 43.79           H
ATOM   6488  HG2 PRO C  60    -17.253  -1.141 -17.432  1.00 42.96           H
ATOM   6489  HG3 PRO C  60    -16.868  -0.546 -16.002  1.00 42.96           H
ATOM   6490  HD2 PRO C  60    -15.430  -2.383 -17.101  1.00 43.02           H
ATOM   6491  HD3 PRO C  60    -15.562  -2.286 -15.505  1.00 43.02           H
ATOM   6492  N   ASN C  61    -20.112  -4.199 -17.602  1.00 48.64           N
ANISOU 6492  N   ASN C  61    6943   6557   4979   2281  -2191  -1255      N
ATOM   6493  CA  ASN C  61    -20.917  -4.436 -18.803  1.00 53.07           C
ANISOU 6493  CA  ASN C  61    7604   7121   5437   2359  -2395  -1344      C
ATOM   6494  C   ASN C  61    -22.249  -3.722 -18.588  1.00 51.90           C
ANISOU 6494  C   ASN C  61    7250   7061   5408   2048  -2403  -1077      C
ATOM   6495  O   ASN C  61    -23.191  -4.304 -18.041  1.00 54.41           O
ANISOU 6495  O   ASN C  61    7529   7191   5954   1747  -2657  -981      O
ATOM   6496  CB  ASN C  61    -21.101  -5.932 -19.062  1.00 57.80           C
ANISOU 6496  CB  ASN C  61    8470   7364   6127   2384  -2809  -1566      C
ATOM   6497  H   ASN C  61    -20.511  -4.421 -16.874  1.00 58.36           H
ATOM   6498  HA  ASN C  61    -20.477  -4.042 -19.572  1.00 63.68           H
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ATOM 6499 N GLY C 62 -22.317 -2.460 -19.013 1.00 47.32 N
ANISOU 6499 N GLY C 62 6522 6778 4678 2140 -2120 -930 N
ATOM 6500 CA GLY C 62 -23.486 -1.628 -18.788 1.00 42.85 C
ANISOU 6500 CA GLY C 62 5742 6328 4213 1929 -2077 -651 C
ATOM 6501 C GLY C 62 -23.190 -0.477 -17.846 1.00 37.68 C
ANISOU 6501 C GLY C 62 4912 5795 3611 1884 -1720 -425 C
ATOM 6502 O GLY C 62 -22.058 0.018 -17.804 1.00 33.83 O
ANISOU 6502 O GLY C 62 4454 5404 2996 2051 -1456 -465 O
ATOM 6503 H GLY C 62 -21.687 -2.062 -19.441 1.00 56.78 H
ATOM 6504 HA2 GLY C 62 -23.793 -1.264 -19.633 1.00 51.42 H
ATOM 6505 HA3 GLY C 62 -24.198 -2.165 -18.406 1.00 51.42 H
ATOM 6506 N TRP C 63 -24.183 -0.035 -17.079 1.00 38.02 N
ANISOU 6506 N TRP C 63 4766 5843 3836 1678 -1707 -172 N
ATOM 6507 CA TRP C 63 -23.963 1.078 -16.159 1.00 37.36 C
ANISOU 6507 CA TRP C 63 4564 5837 3794 1674 -1366 29 C
ATOM 6508 C TRP C 63 -23.263 0.534 -14.921 1.00 34.14 C
ANISOU 6508 C TRP C 63 4197 5260 3516 1568 -1371 -10 C
ATOM 6509 O TRP C 63 -23.893 -0.014 -14.014 1.00 34.79 O
ANISOU 6509 O TRP C 63 4205 5220 3795 1372 -1530 89 O
ATOM 6510 CB TRP C 63 -25.267 1.782 -15.806 1.00 41.11 C
ANISOU 6510 CB TRP C 63 4833 6397 4389 1580 -1308 307 C
ATOM 6511 CG TRP C 63 -25.026 3.199 -15.359 1.00 41.90 C
ANISOU 6511 CG TRP C 63 4893 6592 4436 1678 -894 476 C
ATOM 6512 CD1 TRP C 63 -25.284 4.343 -16.064 1.00 43.57 C
ANISOU 6512 CD1 TRP C 63 5084 6945 4526 1811 -679 583 C
ATOM 6513 CD2 TRP C 63 -24.447 3.618 -14.116 1.00 40.75 C
ANISOU 6513 CD2 TRP C 63 4766 6367 4351 1643 -667 557 C
ATOM 6514 NE1 TRP C 63 -24.913 5.447 -15.329 1.00 42.19 N
ANISOU 6514 NE1 TRP C 63 4931 6753 4347 1849 -344 723 N
ATOM 6515 CE2 TRP C 63 -24.395 5.027 -14.131 1.00 40.48 C
ANISOU 6515 CE2 TRP C 63 4744 6400 4236 1748 -333 705 C
ATOM 6516 CE3 TRP C 63 -23.974 2.938 -12.989 1.00 40.10 C
ANISOU 6516 CE3 TRP C 63 4720 6127 4387 1508 -721 513 C
ATOM 6517 CZ2 TRP C 63 -23.889 5.765 -13.061 1.00 38.70 C
ANISOU 6517 CZ2 TRP C 63 4588 6078 4040 1738 -82 804 C
ATOM 6518 CZ3 TRP C 63 -23.474 3.674 -11.927 1.00 38.27 C
ANISOU 6518 CZ3 TRP C 63 4546 5808 4188 1454 -433 595 C
ATOM 6519 CH2 TRP C 63 -23.434 5.072 -11.973 1.00 37.76 C
ANISOU 6519 CH2 TRP C 63 4514 5797 4035 1565 -130 725 C
ATOM 6520 H TRP C 63 -24.981 -0.355 -17.071 1.00 45.62 H
ATOM 6521 HA TRP C 63 -23.375 1.726 -16.579 1.00 44.83 H
ATOM 6522 HB2 TRP C 63 -25.841 1.804 -16.588 1.00 49.33 H
ATOM 6523 HB3 TRP C 63 -25.703 1.305 -15.083 1.00 49.33 H
ATOM 6524 HD1 TRP C 63 -25.659 4.371 -16.914 1.00 52.28 H
ATOM 6525 HE1 TRP C 63 -24.990 6.265 -15.582 1.00 50.63 H
ATOM 6526 HE3 TRP C 63 -23.996 2.009 -12.952 1.00 48.11 H
ATOM 6527 HZ2 TRP C 63 -23.864 6.695 -13.086 1.00 46.44 H
ATOM 6528 HZ3 TRP C 63 -23.155 3.231 -11.174 1.00 45.93 H
ATOM 6529 HH2 TRP C 63 -23.093 5.540 -11.246 1.00 45.31 H
ATOM 6530 N GLY C 64 -21.945 0.660 -14.907 1.00 30.12 N
ANISOU 6530 N GLY C 64 3788 4763 2892 1698 -1211 -133 N
ATOM 6531 CA GLY C 64 -21.149 0.329 -13.749 1.00 28.11 C
ANISOU 6531 CA GLY C 64 3567 4373 2739 1619 -1184 -153 C

ATOM 6532 C GLY C 64 -20.048 1.355 -13.658 1.00 26.03 C
ANISOU 6532 C GLY C 64 3293 4245 2353 1741 -864 -96 C
ATOM 6533 O GLY C 64 -19.491 1.747 -14.685 1.00 26.56 O
ANISOU 6533 O GLY C 64 3372 4484 2234 1922 -748 -146 O
ATOM 6534 H GLY C 64 -21.483 0.943 -15.575 1.00 36.14 H
ATOM 6535 HA2 GLY C 64 -21.689 0.361 -12.944 1.00 33.73 H
ATOM 6536 HA3 GLY C 64 -20.761 -0.555 -13.845 1.00 33.73 H
ATOM 6537 N ALA C 65 -19.734 1.811 -12.454 1.00 23.88 N
ANISOU 6537 N ALA C 65 3002 3875 2195 1590 -696 20 N
ATOM 6538 CA ALA C 65 -18.841 2.938 -12.274 1.00 22.96 C
ANISOU 6538 CA ALA C 65 2879 3831 2016 1603 -399 121 C
ATOM 6539 C ALA C 65 -17.832 2.648 -11.176 1.00 22.50 C
ANISOU 6539 C ALA C 65 2857 3640 2051 1472 -387 84 C
ATOM 6540 O ALA C 65 -18.141 1.994 -10.172 1.00 21.54 O
ANISOU 6540 O ALA C 65 2776 3343 2067 1320 -506 69 O
ATOM 6541 CB ALA C 65 -19.633 4.213 -11.935 1.00 22.39 C
ANISOU 6541 CB ALA C 65 2791 3746 1969 1535 -171 333 C
ATOM 6542 H ALA C 65 -20.030 1.479 -11.718 1.00 28.65 H
ATOM 6543 HA ALA C 65 -18.354 3.094 -13.099 1.00 27.56 H
ATOM 6544 HB1 ALA C 65 -19.012 4.949 -11.820 1.00 26.87 H
ATOM 6545 HB2 ALA C 65 -20.246 4.406 -12.662 1.00 26.87 H
ATOM 6546 HB3 ALA C 65 -20.129 4.067 -11.114 1.00 26.87 H
ATOM 6547 N LEU C 66 -16.623 3.138 -11.394 1.00 23.35 N
ANISOU 6547 N LEU C 66 2932 3857 2082 1526 -250 102 N
ATOM 6548 CA LEU C 66 -15.528 3.074 -10.438 1.00 24.29 C
ANISOU 6548 CA LEU C 66 3053 3897 2279 1401 -232 104 C
ATOM 6549 C LEU C 66 -15.366 4.482 -9.885 1.00 22.53 C
ANISOU 6549 C LEU C 66 2860 3620 2079 1237 -14 288 C
ATOM 6550 O LEU C 66 -14.933 5.383 -10.609 1.00 24.26 O
ANISOU 6550 O LEU C 66 3022 3978 2216 1284 140 404 O
ATOM 6551 CB LEU C 66 -14.262 2.582 -11.134 1.00 27.22 C
ANISOU 6551 CB LEU C 66 3325 4462 2554 1587 -260 20 C
ATOM 6552 CG LEU C 66 -12.937 2.590 -10.379 1.00 30.02 C
ANISOU 6552 CG LEU C 66 3606 4824 2977 1491 -239 60 C
ATOM 6553 CD1 LEU C 66 -12.978 1.596 -9.225 1.00 29.95 C
ANISOU 6553 CD1 LEU C 66 3692 4585 3104 1381 -445 -47 C
ATOM 6554 CD2 LEU C 66 -11.792 2.260 -11.342 1.00 32.79 C
ANISOU 6554 CD2 LEU C 66 3793 5472 3193 1752 -203 31 C
ATOM 6555 H LEU C 66 -16.403 3.533 -12.125 1.00 28.02 H
ATOM 6556 HA LEU C 66 -15.750 2.469 -9.713 1.00 29.15 H
ATOM 6557 HB2 LEU C 66 -14.418 1.665 -11.409 1.00 32.66 H
ATOM 6558 HB3 LEU C 66 -14.132 3.127 -11.926 1.00 32.66 H
ATOM 6559 HG LEU C 66 -12.782 3.475 -10.013 1.00 36.03 H
ATOM 6560 HD11 LEU C 66 -12.127 1.618 -8.760 1.00 35.94 H
ATOM 6561 HD12 LEU C 66 -13.693 1.845 -8.619 1.00 35.94 H
ATOM 6562 HD13 LEU C 66 -13.138 0.708 -9.580 1.00 35.94 H
ATOM 6563 HD21 LEU C 66 -10.955 2.268 -10.852 1.00 39.35 H
ATOM 6564 HD22 LEU C 66 -11.944 1.381 -11.724 1.00 39.35 H
ATOM 6565 HD23 LEU C 66 -11.770 2.927 -12.046 1.00 39.35 H
ATOM 6566 N ALA C 67 -15.748 4.687 -8.621 1.00 20.32 N
ANISOU 6566 N ALA C 67 2696 3129 1895 1056 -9 325 N
ATOM 6567 CA ALA C 67 -15.912 6.041 -8.123 1.00 20.28 C
ANISOU 6567 CA ALA C 67 2807 3014 1885 946 167 466 C

ATOM 6568 C ALA C 67 -15.697 6.126 -6.621 1.00 20.88 C
ANISOU 6568 C ALA C 67 3036 2878 2020 763 136 461 C
ATOM 6569 O ALA C 67 -16.029 5.209 -5.867 1.00 19.40 O
ANISOU 6569 O ALA C 67 2873 2620 1879 726 22 393 O
ATOM 6570 CB ALA C 67 -17.312 6.588 -8.436 1.00 20.38 C
ANISOU 6570 CB ALA C 67 2862 3018 1862 1043 274 542 C
ATOM 6571 H ALA C 67 -15.914 4.068 -8.048 1.00 24.38 H
ATOM 6572 HA ALA C 67 -15.261 6.617 -8.553 1.00 24.34 H
ATOM 6573 HB1 ALA C 67 -17.382 7.491 -8.088 1.00 24.45 H
ATOM 6574 HB2 ALA C 67 -17.441 6.592 -9.397 1.00 24.45 H
ATOM 6575 HB3 ALA C 67 -17.974 6.018 -8.014 1.00 24.45 H
ATOM 6576 N LEU C 68 -15.158 7.262 -6.199 1.00 20.92 N
ANISOU 6576 N LEU C 68 3166 2769 2012 641 219 545 N
ATOM 6577 CA LEU C 68 -15.269 7.653 -4.804 1.00 21.31 C
ANISOU 6577 CA LEU C 68 3451 2589 2057 511 212 538 C
ATOM 6578 C LEU C 68 -16.727 7.974 -4.513 1.00 20.60 C
ANISOU 6578 C LEU C 68 3485 2435 1909 639 345 572 C
ATOM 6579 O LEU C 68 -17.346 8.772 -5.221 1.00 21.06 O
ANISOU 6579 O LEU C 68 3556 2518 1930 760 481 651 O
ATOM 6580 CB LEU C 68 -14.390 8.868 -4.518 1.00 22.79 C
ANISOU 6580 CB LEU C 68 3790 2628 2240 345 222 613 C
ATOM 6581 CG LEU C 68 -14.247 9.276 -3.061 1.00 25.03 C
ANISOU 6581 CG LEU C 68 4370 2655 2484 205 152 569 C
ATOM 6582 CD1 LEU C 68 -13.477 8.208 -2.280 1.00 24.49 C
ANISOU 6582 CD1 LEU C 68 4229 2620 2458 90 -36 489 C
ATOM 6583 CD2 LEU C 68 -13.552 10.627 -2.983 1.00 26.92 C
ANISOU 6583 CD2 LEU C 68 4803 2699 2729 36 127 650 C
ATOM 6584 H LEU C 68 -14.727 7.818 -6.694 1.00 25.10 H
ATOM 6585 HA LEU C 68 -14.989 6.921 -4.233 1.00 25.57 H
ATOM 6586 HB2 LEU C 68 -13.499 8.683 -4.853 1.00 27.35 H
ATOM 6587 HB3 LEU C 68 -14.760 9.628 -4.993 1.00 27.35 H
ATOM 6588 HG LEU C 68 -15.128 9.364 -2.666 1.00 30.03 H
ATOM 6589 HD11 LEU C 68 -13.398 8.489 -1.355 1.00 29.39 H
ATOM 6590 HD12 LEU C 68 -13.962 7.369 -2.331 1.00 29.39 H
ATOM 6591 HD13 LEU C 68 -12.595 8.105 -2.671 1.00 29.39 H
ATOM 6592 HD21 LEU C 68 -13.463 10.882 -2.052 1.00 32.31 H
ATOM 6593 HD22 LEU C 68 -12.675 10.554 -3.392 1.00 32.31 H
ATOM 6594 HD23 LEU C 68 -14.086 11.283 -3.457 1.00 32.31 H
ATOM 6595 N VAL C 69 -17.289 7.323 -3.504 1.00 20.35 N
ANISOU 6595 N VAL C 69 3514 2350 1866 630 313 541 N
ATOM 6596 CA VAL C 69 -18.676 7.524 -3.103 1.00 20.79 C
ANISOU 6596 CA VAL C 69 3631 2406 1863 766 458 614 C
ATOM 6597 C VAL C 69 -18.689 7.810 -1.608 1.00 22.16 C
ANISOU 6597 C VAL C 69 4072 2417 1931 726 495 602 C
ATOM 6598 O VAL C 69 -18.055 7.092 -0.830 1.00 21.45 O
ANISOU 6598 O VAL C 69 4013 2283 1852 590 353 547 O
ATOM 6599 CB VAL C 69 -19.545 6.294 -3.435 1.00 20.61 C
ANISOU 6599 CB VAL C 69 3364 2546 1919 806 386 645 C
ATOM 6600 CG1 VAL C 69 -20.980 6.502 -2.985 1.00 21.68 C
ANISOU 6600 CG1 VAL C 69 3487 2742 2008 933 548 784 C
ATOM 6601 CG2 VAL C 69 -19.500 5.997 -4.927 1.00 19.89 C
ANISOU 6601 CG2 VAL C 69 3068 2604 1886 871 311 618 C
ATOM 6602 H VAL C 69 -16.876 6.743 -3.022 1.00 24.42 H

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ATOM   6603  HA  VAL C  69    -19.040   8.294  -3.568  1.00 24.95          H
ATOM   6604  HB  VAL C  69    -19.192   5.522  -2.965  1.00 24.73          H
ATOM   6605 HG11 VAL C  69    -21.498   5.712  -3.208  1.00 26.02          H
ATOM   6606 HG12 VAL C  69    -20.992   6.646  -2.026  1.00 26.02          H
ATOM   6607 HG13 VAL C  69    -21.344   7.277  -3.441  1.00 26.02          H
ATOM   6608 HG21 VAL C  69    -20.052   5.221  -5.111  1.00 23.87          H
ATOM   6609 HG22 VAL C  69    -19.838   6.767  -5.412  1.00 23.87          H
ATOM   6610 HG23 VAL C  69    -18.582   5.820  -5.186  1.00 23.87          H
ATOM   6611  N   GLY C  70    -19.389   8.860  -1.209  1.00 23.91          N
ANISOU 6611  N   GLY C  70     4510   2547   2027    877    677    650      N
ATOM   6612  CA  GLY C  70    -19.434   9.182   0.204  1.00 26.51          C
ANISOU 6612  CA  GLY C  70     5149   2728   2196    899    719    617      C
ATOM   6613  C   GLY C  70    -20.621  10.065   0.495  1.00 29.99          C
ANISOU 6613  C   GLY C  70     5754   3157   2482   1185    968    691      C
ATOM   6614  O   GLY C  70    -21.344  10.500  -0.405  1.00 28.33          O
ANISOU 6614  O   GLY C  70     5413   3038   2312   1346   1093    776      O
ATOM   6615  H   GLY C  70    -19.834   9.389  -1.720  1.00 28.69          H
ATOM   6616  HA2 GLY C  70    -19.511   8.368   0.727  1.00 31.81          H
ATOM   6617  HA3 GLY C  70    -18.624   9.647   0.464  1.00 31.81          H
ATOM   6618  N   TRP C  71    -20.813  10.323   1.781  1.00 33.06          N
ANISOU 6618  N   TRP C  71     6424   3451   2686   1275   1034    652      N
ATOM   6619  CA  TRP C  71    -21.889  11.181   2.235  1.00 36.13          C
ANISOU 6619  CA  TRP C  71     6940   3826   2963   1588   1247    669      C
ATOM   6620  C   TRP C  71    -21.352  12.167   3.258  1.00 36.95          C
ANISOU 6620  C   TRP C  71     7586   3611   2842   1652   1219    522      C
ATOM   6621  O   TRP C  71    -20.362  11.902   3.946  1.00 37.27          O
ANISOU 6621  O   TRP C  71     7842   3518   2801   1441   1035    423      O
ATOM   6622  CB  TRP C  71    -23.045  10.373   2.872  1.00 37.53          C
ANISOU 6622  CB  TRP C  71     6836   4276   3149   1711   1372    804      C
ATOM   6623  CG  TRP C  71    -23.670   9.337   1.968  1.00 34.70          C
ANISOU 6623  CG  TRP C  71     5998   4202   2986   1627   1359    967      C
ATOM   6624  CD1 TRP C  71    -23.125   8.146   1.581  1.00 33.06          C
ANISOU 6624  CD1 TRP C  71     5599   4069   2892   1370   1183   1000      C
ATOM   6625  CD2 TRP C  71    -24.970   9.396   1.364  1.00 34.83          C
ANISOU 6625  CD2 TRP C  71     5704   4440   3090   1815   1496   1136      C
ATOM   6626  NE1 TRP C  71    -24.002   7.464   0.765  1.00 32.00          N
ANISOU 6626  NE1 TRP C  71     5091   4168   2901   1376   1192   1170      N
ATOM   6627  CE2 TRP C  71    -25.143   8.208   0.620  1.00 32.89          C
ANISOU 6627  CE2 TRP C  71     5102   4393   3003   1628   1382   1259      C
ATOM   6628  CE3 TRP C  71    -26.003  10.339   1.375  1.00 37.11          C
ANISOU 6628  CE3 TRP C  71     5998   4769   3333   2137   1677   1217      C
ATOM   6629  CZ2 TRP C  71    -26.301   7.942  -0.104  1.00 32.54          C
ANISOU 6629  CZ2 TRP C  71     4697   4597   3069   1719   1436   1457      C
ATOM   6630  CZ3 TRP C  71    -27.157  10.070   0.652  1.00 36.96          C
ANISOU 6630  CZ3 TRP C  71     5592   5018   3435   2241   1737   1423      C
ATOM   6631  CH2 TRP C  71    -27.293   8.883  -0.077  1.00 34.37          C
ANISOU 6631  CH2 TRP C  71     4900   4897   3263   2017   1616   1537      C
ATOM   6632  H   TRP C  71    -20.326  10.008   2.416  1.00 39.67          H
ATOM   6633  HA  TRP C  71    -22.242  11.681   1.482  1.00 43.36          H
ATOM   6634  HB2 TRP C  71    -22.705   9.912   3.654  1.00 45.04          H
ATOM   6635  HB3 TRP C  71    -23.744  10.991   3.137  1.00 45.04          H
ATOM   6636  HD1 TRP C  71    -22.284   7.839   1.831  1.00 39.67          H
ATOM   6637  HE1 TRP C  71    -23.859   6.694   0.409  1.00 38.40          H
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ATOM   6638  HE3 TRP C  71    -25.918  11.129   1.858  1.00 44.53           H
ATOM   6639  HZ2 TRP C  71    -26.395   7.156  -0.592  1.00 39.05           H
ATOM   6640  HZ3 TRP C  71    -27.852  10.688   0.653  1.00 44.36           H
ATOM   6641  HH2 TRP C  71    -28.078   8.729  -0.552  1.00 41.25           H
ATOM   6642  N   THR C  72    -22.008  13.316   3.334  1.00 37.66           N
ANISOU 6642  N   THR C  72    7923   3558   2827   1953   1365    520      N
ATOM   6643  CA  THR C  72    -21.984  14.138   4.530  1.00 39.32           C
ANISOU 6643  CA  THR C  72    8626   3514   2801   2122   1357    428      C
ATOM   6644  C   THR C  72    -23.417  14.300   5.008  1.00 41.75           C
ANISOU 6644  C   THR C  72    8798   4017   3050   2500   1582    571      C
ATOM   6645  O   THR C  72    -24.373  14.055   4.265  1.00 40.43           O
ANISOU 6645  O   THR C  72    8226   4108   3028   2626   1723    734      O
ATOM   6646  CB  THR C  72    -21.355  15.520   4.290  1.00 40.66           C
ANISOU 6646  CB  THR C  72    9309   3304   2835   2106   1246    345      C
ATOM   6647  OG1 THR C  72    -22.121  16.229   3.311  1.00 40.87           O
ANISOU 6647  OG1 THR C  72    9234   3398   2897   2305   1403    468      O
ATOM   6648  CG2 THR C  72    -19.898  15.382   3.830  1.00 38.65           C
ANISOU 6648  CG2 THR C  72    9129   2874   2683   1685   986    214      C
ATOM   6649  H   THR C  72    -22.481  13.645   2.696  1.00 45.19           H
ATOM   6650  HA  THR C  72    -21.478  13.686   5.223  1.00 47.19           H
ATOM   6651  HB  THR C  72    -21.362  16.020   5.121  1.00 48.79           H
ATOM   6652  HG1 THR C  72    -22.131  15.800   2.589  1.00 49.05           H
ATOM   6653 HG21 THR C  72    -19.512  16.260   3.682  1.00 46.38           H
ATOM   6654 HG22 THR C  72    -19.379  14.919   4.507  1.00 46.38           H
ATOM   6655 HG23 THR C  72    -19.858  14.877   3.002  1.00 46.38           H
ATOM   6656  N   ARG C  73    -23.554  14.683   6.271  1.00 44.58           N
ANISOU 6656  N   ARG C  73    9486   4272   3179   2674   1593    521      N
ATOM   6657  CA  ARG C  73    -24.825  15.117   6.826  1.00 48.55           C
ANISOU 6657  CA  ARG C  73    9977   4919   3549   3085   1803    652      C
ATOM   6658  C   ARG C  73    -24.753  16.609   7.125  1.00 51.88           C
ANISOU 6658  C   ARG C  73   10977   5013   3722   3308   1764    578      C
ATOM   6659  O   ARG C  73    -23.688  17.230   7.066  1.00 51.60           O
ANISOU 6659  O   ARG C  73   11347   4648   3611   3094   1548    420      O
ATOM   6660  CB  ARG C  73    -25.174  14.311   8.086  1.00 51.08           C
ANISOU 6660  CB  ARG C  73   10194   5457   3758   3152   1878    682      C
ATOM   6661  CG  ARG C  73    -25.374  12.825   7.833  1.00 48.44           C
ANISOU 6661  CG  ARG C  73    9295   5480   3629   2909   1905    804      C
ATOM   6662  CD  ARG C  73    -25.748  12.102   9.118  1.00 52.75           C
ANISOU 6662  CD  ARG C  73    9772   6245   4026   2970   1990    878      C
ATOM   6663  NE  ARG C  73    -26.440  10.841   8.853  1.00 52.85           N
ANISOU 6663  NE  ARG C  73    9215   6648   4216   2828   2068   1106      N
ATOM   6664  CZ  ARG C  73    -25.886   9.632   8.895  1.00 51.62           C
ANISOU 6664  CZ  ARG C  73    8862   6593   4159   2473   1937   1133      C
ATOM   6665  NH1 ARG C  73    -24.604   9.477   9.200  1.00 50.78           N
ANISOU 6665  NH1 ARG C  73    9042   6256   3994   2234   1725    944      N
ATOM   6666  NH2 ARG C  73    -26.631   8.563   8.633  1.00 51.28           N
ANISOU 6666  NH2 ARG C  73    8342   6869   4272   2351   1991   1378      N
ATOM   6667  H   ARG C  73    -22.909  14.699   6.839  1.00 53.49           H
ATOM   6668  HA  ARG C  73    -25.526  14.972   6.170  1.00 58.25           H
ATOM   6669  HB2 ARG C  73    -24.453  14.408   8.728  1.00 61.30           H
ATOM   6670  HB3 ARG C  73    -25.997  14.661   8.462  1.00 61.30           H
ATOM   6671  HG2 ARG C  73    -26.092  12.701   7.192  1.00 58.12           H
ATOM   6672  HG3 ARG C  73    -24.549  12.442   7.495  1.00 58.12           H
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ATOM 6673 HD2 ARG C 73 -24.941 11.905 9.619 1.00 63.30 H
ATOM 6674 HD3 ARG C 73 -26.338 12.667 9.641 1.00 63.30 H
ATOM 6675 HE ARG C 73 -27.275 10.885 8.653 1.00 63.42 H
ATOM 6676 HH11 ARG C 73 -24.117 10.164 9.371 1.00 60.93 H
ATOM 6677 HH12 ARG C 73 -24.260 8.689 9.224 1.00 60.93 H
ATOM 6678 HH21 ARG C 73 -27.463 8.656 8.435 1.00 61.53 H
ATOM 6679 HH22 ARG C 73 -26.281 7.778 8.659 1.00 61.53 H
ATOM 6680 N SER C 74 -25.910 17.191 7.421 1.00 55.18 N
ANISOU 6680 N SER C 74 11417 5551 3998 3721 1955 704 N
ATOM 6681 CA SER C 74 -26.011 18.603 7.771 1.00 59.60 C
ANISOU 6681 CA SER C 74 12526 5843 4275 3986 1931 635 C
ATOM 6682 C SER C 74 -25.328 19.482 6.723 1.00 58.56 C
ANISOU 6682 C SER C 74 12622 5447 4181 3778 1783 553 C
ATOM 6683 O SER C 74 -24.351 20.181 7.031 1.00 59.97 O
ANISOU 6683 O SER C 74 13274 5283 4230 3598 1550 355 O
ATOM 6684 CB SER C 74 -25.425 18.851 9.153 1.00 62.79 C
ANISOU 6684 CB SER C 74 13420 6023 4415 4023 1794 454 C
ATOM 6685 OG SER C 74 -26.187 18.192 10.145 1.00 64.71 O
ANISOU 6685 OG SER C 74 13473 6548 4565 4278 1977 542 O
ATOM 6686 H SER C 74 -26.665 16.780 7.428 1.00 66.22 H
ATOM 6687 HA SER C 74 -26.949 18.850 7.798 1.00 71.52 H
ATOM 6688 HB2 SER C 74 -24.516 18.514 9.176 1.00 75.35 H
ATOM 6689 HB3 SER C 74 -25.430 19.805 9.332 1.00 75.35 H
ATOM 6690 HG SER C 74 -25.856 18.335 10.904 1.00 77.65 H
ATOM 6691 N PRO C 75 -25.812 19.480 5.470 1.00 56.50 N
ANISOU 6691 N PRO C 75 12013 5354 4100 3774 1894 696 N
ATOM 6692 CA PRO C 75 -26.979 18.730 4.996 1.00 55.30 C
ANISOU 6692 CA PRO C 75 11281 5605 4126 3946 2103 939 C
ATOM 6693 C PRO C 75 -26.603 17.365 4.433 1.00 50.59 C
ANISOU 6693 C PRO C 75 10183 5197 3841 3615 2054 970 C
ATOM 6694 O PRO C 75 -25.418 17.102 4.227 1.00 47.78 O
ANISOU 6694 O PRO C 75 9942 4655 3557 3276 1882 819 O
ATOM 6695 CB PRO C 75 -27.545 19.630 3.892 1.00 56.28 C
ANISOU 6695 CB PRO C 75 11385 5754 4243 4086 2185 1042 C
ATOM 6696 CG PRO C 75 -26.417 20.638 3.553 1.00 56.80 C
ANISOU 6696 CG PRO C 75 11930 5430 4221 3864 2003 813 C
ATOM 6697 CD PRO C 75 -25.213 20.248 4.370 1.00 55.56 C
ANISOU 6697 CD PRO C 75 12023 5049 4037 3568 1791 618 C
ATOM 6698 HA PRO C 75 -27.633 18.627 5.705 1.00 66.36 H
ATOM 6699 HB2 PRO C 75 -27.766 19.092 3.116 1.00 67.53 H
ATOM 6700 HB3 PRO C 75 -28.330 20.094 4.222 1.00 67.53 H
ATOM 6701 HG2 PRO C 75 -26.214 20.585 2.606 1.00 68.16 H
ATOM 6702 HG3 PRO C 75 -26.707 21.534 3.786 1.00 68.16 H
ATOM 6703 HD2 PRO C 75 -24.615 19.689 3.850 1.00 66.67 H
ATOM 6704 HD3 PRO C 75 -24.763 21.037 4.711 1.00 66.67 H
ATOM 6705 N LEU C 76 -27.601 16.519 4.177 1.00 49.68 N
ANISOU 6705 N LEU C 76 9522 5460 3896 3702 2183 1160 N
ATOM 6706 CA LEU C 76 -27.354 15.198 3.615 1.00 45.66 C
ANISOU 6706 CA LEU C 76 8524 5162 3662 3389 2118 1177 C
ATOM 6707 C LEU C 76 -26.958 15.334 2.150 1.00 44.14 C
ANISOU 6707 C LEU C 76 8206 4920 3644 3219 2037 1183 C
ATOM 6708 O LEU C 76 -27.782 15.701 1.303 1.00 44.79 O
ANISOU 6708 O LEU C 76 8098 5148 3773 3374 2110 1352 O

ATOM 6709 CB LEU C 76 -28.589 14.315 3.753 1.00 46.49 C
ANISOU 6709 CB LEU C 76 8106 5696 3863 3495 2246 1402 C
ATOM 6710 CG LEU C 76 -28.349 12.859 3.334 1.00 43.03 C
ANISOU 6710 CG LEU C 76 7212 5482 3654 3136 2150 1424 C
ATOM 6711 CD1 LEU C 76 -27.339 12.192 4.250 1.00 41.80 C
ANISOU 6711 CD1 LEU C 76 7229 5220 3432 2886 2052 1256 C
ATOM 6712 CD2 LEU C 76 -29.658 12.080 3.316 1.00 44.79 C
ANISOU 6712 CD2 LEU C 76 6927 6121 3972 3212 2251 1703 C
ATOM 6713 H LEU C 76 -28.432 16.689 4.322 1.00 59.62 H
ATOM 6714 HA LEU C 76 -26.622 14.777 4.092 1.00 54.79 H
ATOM 6715 HB2 LEU C 76 -28.872 14.315 4.681 1.00 55.79 H
ATOM 6716 HB3 LEU C 76 -29.295 14.674 3.193 1.00 55.79 H
ATOM 6717 HG LEU C 76 -27.985 12.848 2.435 1.00 51.63 H
ATOM 6718 HD11 LEU C 76 -27.208 11.275 3.961 1.00 50.16 H
ATOM 6719 HD12 LEU C 76 -26.501 12.677 4.203 1.00 50.16 H
ATOM 6720 HD13 LEU C 76 -27.679 12.207 5.159 1.00 50.16 H
ATOM 6721 HD21 LEU C 76 -29.478 11.165 3.048 1.00 53.75 H
ATOM 6722 HD22 LEU C 76 -30.046 12.094 4.205 1.00 53.75 H
ATOM 6723 HD23 LEU C 76 -30.264 12.496 2.684 1.00 53.75 H
ATOM 6724 N ILE C 77 -25.697 15.043 1.852 1.00 40.77 N
ANISOU 6724 N ILE C 77 7888 4312 3291 2905 1887 1011 N
ATOM 6725 CA ILE C 77 -25.159 15.121 0.500 1.00 38.23 C
ANISOU 6725 CA ILE C 77 7452 3956 3120 2737 1817 997 C
ATOM 6726 C ILE C 77 -24.533 13.774 0.179 1.00 35.93 C
ANISOU 6726 C ILE C 77 6805 3845 3002 2401 1697 931 C
ATOM 6727 O ILE C 77 -23.858 13.182 1.026 1.00 34.11 O
ANISOU 6727 O ILE C 77 6674 3570 2716 2209 1604 829 O
ATOM 6728 CB ILE C 77 -24.113 16.251 0.359 1.00 38.47 C
ANISOU 6728 CB ILE C 77 7957 3667 2991 2592 1737 831 C
ATOM 6729 CG1 ILE C 77 -24.758 17.622 0.604 1.00 42.63 C
ANISOU 6729 CG1 ILE C 77 8845 4077 3274 2874 1842 870 C
ATOM 6730 CG2 ILE C 77 -23.446 16.211 -1.016 1.00 36.33 C
ANISOU 6730 CG2 ILE C 77 7513 3421 2871 2400 1700 786 C
ATOM 6731 CD1 ILE C 77 -23.755 18.758 0.761 1.00 45.06 C
ANISOU 6731 CD1 ILE C 77 9669 3999 3454 2738 1699 662 C
ATOM 6732 H ILE C 77 -25.116 14.791 2.434 1.00 48.92 H
ATOM 6733 HA ILE C 77 -25.880 15.285 -0.129 1.00 45.88 H
ATOM 6734 HB ILE C 77 -23.427 16.114 1.032 1.00 46.16 H
ATOM 6735 HG12 ILE C 77 -25.332 17.836 -0.148 1.00 51.15 H
ATOM 6736 HG13 ILE C 77 -25.285 17.578 1.418 1.00 51.15 H
ATOM 6737 HG21 ILE C 77 -22.797 16.930 -1.073 1.00 43.60 H
ATOM 6738 HG22 ILE C 77 -23.003 15.355 -1.127 1.00 43.60 H
ATOM 6739 HG23 ILE C 77 -24.125 16.324 -1.699 1.00 43.60 H
ATOM 6740 HD11 ILE C 77 -24.237 19.586 0.912 1.00 54.08 H
ATOM 6741 HD12 ILE C 77 -23.178 18.568 1.518 1.00 54.08 H
ATOM 6742 HD13 ILE C 77 -23.226 18.826 -0.050 1.00 54.08 H
ATOM 6743 N ALA C 78 -24.775 13.281 -1.032 1.00 35.13 N
ANISOU 6743 N ALA C 78 6313 3962 3073 2320 1665 1020 N
ATOM 6744 CA ALA C 78 -24.065 12.130 -1.573 1.00 33.94 C
ANISOU 6744 CA ALA C 78 5901 3948 3047 1994 1496 993 C
ATOM 6745 C ALA C 78 -23.182 12.626 -2.703 1.00 32.72 C
ANISOU 6745 C ALA C 78 5802 3685 2945 1868 1406 955 C
ATOM 6746 O ALA C 78 -23.664 13.307 -3.609 1.00 34.76 O

ANISOU 6746 O ALA C 78 5999 3977 3231 2024 1480 1024 O
ATOM 6747 CB ALA C 78 -25.027 11.061 -2.090 1.00 34.13 C
ANISOU 6747 CB ALA C 78 5460 4310 3199 1992 1486 1149 C
ATOM 6748 H ALA C 78 -25.361 13.606 -1.571 1.00 42.16 H
ATOM 6749 HA ALA C 78 -23.503 11.739 -0.886 1.00 40.73 H
ATOM 6750 HB1 ALA C 78 -24.512 10.317 -2.440 1.00 40.96 H
ATOM 6751 HB2 ALA C 78 -25.588 10.761 -1.358 1.00 40.96 H
ATOM 6752 HB3 ALA C 78 -25.575 11.444 -2.793 1.00 40.96 H
ATOM 6753 N TYR C 79 -21.893 12.326 -2.629 1.00 30.75 N
ANISOU 6753 N TYR C 79 5657 3315 2711 1596 1240 872 N
ATOM 6754 CA TYR C 79 -20.949 12.808 -3.619 1.00 29.79 C
ANISOU 6754 CA TYR C 79 5556 3104 2659 1454 1145 880 C
ATOM 6755 C TYR C 79 -20.277 11.635 -4.313 1.00 26.28 C
ANISOU 6755 C TYR C 79 4785 2861 2338 1255 986 860 C
ATOM 6756 O TYR C 79 -20.176 10.533 -3.760 1.00 23.80 O
ANISOU 6756 O TYR C 79 4350 2635 2059 1155 891 800 O
ATOM 6757 CB TYR C 79 -19.899 13.738 -2.988 1.00 32.36 C
ANISOU 6757 CB TYR C 79 6282 3081 2932 1303 1058 807 C
ATOM 6758 CG TYR C 79 -19.026 13.122 -1.907 1.00 31.49 C
ANISOU 6758 CG TYR C 79 6269 2888 2808 1076 895 685 C
ATOM 6759 CD1 TYR C 79 -17.806 12.547 -2.224 1.00 30.04 C
ANISOU 6759 CD1 TYR C 79 5902 2760 2752 792 704 660 C
ATOM 6760 CD2 TYR C 79 -19.401 13.167 -0.568 1.00 33.39 C
ANISOU 6760 CD2 TYR C 79 6790 3012 2885 1177 935 607 C
ATOM 6761 CE1 TYR C 79 -16.993 11.997 -1.248 1.00 29.90 C
ANISOU 6761 CE1 TYR C 79 5955 2677 2727 596 536 564 C
ATOM 6762 CE2 TYR C 79 -18.591 12.620 0.423 1.00 32.87 C
ANISOU 6762 CE2 TYR C 79 6826 2875 2786 973 765 504 C
ATOM 6763 CZ TYR C 79 -17.386 12.039 0.074 1.00 30.92 C
ANISOU 6763 CZ TYR C 79 6378 2675 2696 673 554 485 C
ATOM 6764 OH TYR C 79 -16.565 11.497 1.041 1.00 31.51 O
ANISOU 6764 OH TYR C 79 6535 2692 2745 482 367 400 O
ATOM 6765 H TYR C 79 -21.540 11.843 -2.011 1.00 36.90 H
ATOM 6766 HA TYR C 79 -21.431 13.316 -4.290 1.00 35.75 H
ATOM 6767 HB2 TYR C 79 -19.310 14.053 -3.691 1.00 38.83 H
ATOM 6768 HB3 TYR C 79 -20.360 14.494 -2.592 1.00 38.83 H
ATOM 6769 HD1 TYR C 79 -17.536 12.515 -3.114 1.00 36.05 H
ATOM 6770 HD2 TYR C 79 -20.212 13.557 -0.332 1.00 40.07 H
ATOM 6771 HE1 TYR C 79 -16.181 11.609 -1.482 1.00 35.87 H
ATOM 6772 HE2 TYR C 79 -18.856 12.649 1.314 1.00 39.44 H
ATOM 6773 HH TYR C 79 -16.917 11.587 1.799 1.00 37.81 H
ATOM 6774 N TYR C 80 -19.835 11.899 -5.541 1.00 25.38 N
ANISOU 6774 N TYR C 80 4543 2822 2280 1225 958 912 N
ATOM 6775 CA TYR C 80 -19.230 10.914 -6.418 1.00 24.29 C
ANISOU 6775 CA TYR C 80 4109 2900 2219 1124 829 880 C
ATOM 6776 C TYR C 80 -18.046 11.542 -7.139 1.00 25.38 C
ANISOU 6776 C TYR C 80 4253 3012 2378 998 798 933 C
ATOM 6777 O TYR C 80 -18.142 12.667 -7.638 1.00 26.00 O
ANISOU 6777 O TYR C 80 4452 2999 2427 1053 893 1054 O
ATOM 6778 CB TYR C 80 -20.230 10.403 -7.468 1.00 24.77 C
ANISOU 6778 CB TYR C 80 3919 3211 2284 1301 847 931 C
ATOM 6779 CG TYR C 80 -21.553 9.948 -6.911 1.00 24.39 C
ANISOU 6779 CG TYR C 80 3801 3229 2238 1418 892 966 C

ATOM 6780 CD1 TYR C 80 -22.600 10.839 -6.747 1.00 26.41 C
ANISOU 6780 CD1 TYR C 80 4143 3460 2431 1627 1071 1085 C
ATOM 6781 CD2 TYR C 80 -21.761 8.622 -6.556 1.00 24.46 C
ANISOU 6781 CD2 TYR C 80 3643 3334 2317 1327 753 911 C
ATOM 6782 CE1 TYR C 80 -23.815 10.430 -6.238 1.00 27.35 C
ANISOU 6782 CE1 TYR C 80 4133 3705 2553 1745 1138 1170 C
ATOM 6783 CE2 TYR C 80 -22.971 8.202 -6.044 1.00 25.45 C
ANISOU 6783 CE2 TYR C 80 3657 3548 2464 1394 793 1007 C
ATOM 6784 CZ TYR C 80 -23.993 9.110 -5.888 1.00 27.47 C
ANISOU 6784 CZ TYR C 80 3949 3835 2652 1605 999 1147 C
ATOM 6785 OH TYR C 80 -25.204 8.704 -5.379 1.00 30.26 O
ANISOU 6785 OH TYR C 80 4130 4341 3026 1685 1065 1294 O
ATOM 6786 H TYR C 80 -19.880 12.680 -5.898 1.00 30.46 H
ATOM 6787 HA TYR C 80 -18.913 10.161 -5.896 1.00 29.15 H
ATOM 6788 HB2 TYR C 80 -20.408 11.118 -8.099 1.00 29.73 H
ATOM 6789 HB3 TYR C 80 -19.833 9.650 -7.933 1.00 29.73 H
ATOM 6790 HD1 TYR C 80 -22.480 11.731 -6.981 1.00 31.69 H
ATOM 6791 HD2 TYR C 80 -21.070 8.008 -6.659 1.00 29.35 H
ATOM 6792 HE1 TYR C 80 -24.507 11.041 -6.130 1.00 32.82 H
ATOM 6793 HE2 TYR C 80 -23.096 7.311 -5.807 1.00 30.54 H
ATOM 6794 HH TYR C 80 -25.182 7.882 -5.207 1.00 36.31 H
ATOM 6795 N VAL C 81 -16.941 10.807 -7.209 1.00 25.13 N
ANISOU 6795 N VAL C 81 4073 3075 2400 842 668 874 N
ATOM 6796 CA VAL C 81 -15.840 11.116 -8.115 1.00 26.24 C
ANISOU 6796 CA VAL C 81 4081 3330 2558 754 655 969 C
ATOM 6797 C VAL C 81 -15.662 9.901 -9.013 1.00 25.47 C
ANISOU 6797 C VAL C 81 3696 3541 2442 870 595 897 C
ATOM 6798 O VAL C 81 -15.160 8.860 -8.570 1.00 23.98 O
ANISOU 6798 O VAL C 81 3418 3399 2295 820 466 774 O
ATOM 6799 CB VAL C 81 -14.542 11.454 -7.370 1.00 28.02 C
ANISOU 6799 CB VAL C 81 4383 3410 2853 483 550 992 C
ATOM 6800 CG1 VAL C 81 -13.415 11.755 -8.355 1.00 29.83 C
ANISOU 6800 CG1 VAL C 81 4395 3827 3111 389 561 1159 C
ATOM 6801 CG2 VAL C 81 -14.765 12.632 -6.436 1.00 29.38 C
ANISOU 6801 CG2 VAL C 81 4927 3220 3018 383 557 1018 C
ATOM 6802 H VAL C 81 -16.804 10.106 -6.731 1.00 30.15 H
ATOM 6803 HA VAL C 81 -16.081 11.874 -8.669 1.00 31.48 H
ATOM 6804 HB VAL C 81 -14.276 10.691 -6.833 1.00 33.62 H
ATOM 6805 HG11 VAL C 81 -12.609 11.964 -7.858 1.00 35.80 H
ATOM 6806 HG12 VAL C 81 -13.267 10.975 -8.912 1.00 35.80 H
ATOM 6807 HG13 VAL C 81 -13.671 12.511 -8.905 1.00 35.80 H
ATOM 6808 HG21 VAL C 81 -13.935 12.831 -5.975 1.00 35.26 H
ATOM 6809 HG22 VAL C 81 -15.046 13.400 -6.959 1.00 35.26 H
ATOM 6810 HG23 VAL C 81 -15.454 12.399 -5.794 1.00 35.26 H
ATOM 6811 N VAL C 82 -16.067 10.032 -10.271 1.00 23.43 N
ANISOU 6811 N VAL C 82 3323 3477 2102 1046 670 967 N
ATOM 6812 CA VAL C 82 -16.151 8.903 -11.191 1.00 23.27 C
ANISOU 6812 CA VAL C 82 3106 3721 2015 1219 591 862 C
ATOM 6813 C VAL C 82 -14.926 8.902 -12.096 1.00 24.46 C
ANISOU 6813 C VAL C 82 3087 4113 2094 1251 627 936 C
ATOM 6814 O VAL C 82 -14.752 9.805 -12.930 1.00 26.20 O
ANISOU 6814 O VAL C 82 3278 4439 2239 1288 761 1124 O
ATOM 6815 CB VAL C 82 -17.439 8.958 -12.026 1.00 23.30 C

ANISOU 6815 CB VAL C 82 3095 3821 1938 1422 619 882 C
ATOM 6816 CG1 VAL C 82 -17.568 7.703 -12.873 1.00 23.98 C
ANISOU 6816 CG1 VAL C 82 3044 4122 1947 1584 463 729 C
ATOM 6817 CG2 VAL C 82 -18.653 9.139 -11.137 1.00 22.65 C
ANISOU 6817 CG2 VAL C 82 3127 3554 1925 1409 635 884 C
ATOM 6818 H VAL C 82 -16.304 10.780 -10.623 1.00 28.12 H
ATOM 6819 HA VAL C 82 -16.153 8.077 -10.683 1.00 27.93 H
ATOM 6820 HB VAL C 82 -17.392 9.719 -12.626 1.00 27.96 H
ATOM 6821 HG11 VAL C 82 -18.386 7.755 -13.392 1.00 28.78 H
ATOM 6822 HG12 VAL C 82 -16.802 7.643 -13.466 1.00 28.78 H
ATOM 6823 HG13 VAL C 82 -17.596 6.929 -12.289 1.00 28.78 H
ATOM 6824 HG21 VAL C 82 -19.449 9.170 -11.691 1.00 27.18 H
ATOM 6825 HG22 VAL C 82 -18.708 8.392 -10.520 1.00 27.18 H
ATOM 6826 HG23 VAL C 82 -18.562 9.970 -10.643 1.00 27.18 H
ATOM 6827 N ASP C 83 -14.111 7.856 -11.975 1.00 24.40 N
ANISOU 6827 N ASP C 83 2957 4217 2097 1269 515 808 N
ATOM 6828 CA ASP C 83 -12.913 7.691 -12.789 1.00 26.08 C
ANISOU 6828 CA ASP C 83 2964 4724 2222 1361 565 879 C
ATOM 6829 C ASP C 83 -13.125 6.830 -14.025 1.00 26.94 C
ANISOU 6829 C ASP C 83 2988 5108 2139 1694 536 755 C
ATOM 6830 O ASP C 83 -12.457 7.053 -15.041 1.00 28.95 O
ANISOU 6830 O ASP C 83 3097 5666 2238 1850 661 876 O
ATOM 6831 CB ASP C 83 -11.792 7.075 -11.942 1.00 28.61 C
ANISOU 6831 CB ASP C 83 3191 5030 2648 1240 462 822 C
ATOM 6832 CG ASP C 83 -10.924 8.123 -11.271 1.00 29.90 C
ANISOU 6832 CG ASP C 83 3334 5092 2933 934 510 1037 C
ATOM 6833 OD1 ASP C 83 -11.226 9.330 -11.416 1.00 30.31 O
ANISOU 6833 OD1 ASP C 83 3490 5032 2996 811 615 1215 O
ATOM 6834 OD2 ASP C 83 -9.942 7.736 -10.600 1.00 31.19 O
ANISOU 6834 OD2 ASP C 83 3392 5271 3188 814 412 1031 O
ATOM 6835 H ASP C 83 -14.235 7.215 -11.415 1.00 29.28 H
ATOM 6836 HA ASP C 83 -12.615 8.565 -13.085 1.00 31.30 H
ATOM 6837 HB2 ASP C 83 -12.185 6.522 -11.249 1.00 34.33 H
ATOM 6838 HB3 ASP C 83 -11.223 6.536 -12.514 1.00 34.33 H
ATOM 6839 N SER C 84 -14.025 5.857 -13.977 1.00 25.94 N
ANISOU 6839 N SER C 84 2959 4889 2006 1805 361 531 N
ATOM 6840 CA SER C 84 -14.301 5.045 -15.154 1.00 27.22 C
ANISOU 6840 CA SER C 84 3112 5260 1971 2117 269 380 C
ATOM 6841 C SER C 84 -15.690 4.452 -15.004 1.00 26.70 C
ANISOU 6841 C SER C 84 3177 5006 1961 2111 67 231 C
ATOM 6842 O SER C 84 -16.309 4.518 -13.934 1.00 24.61 O
ANISOU 6842 O SER C 84 2974 4494 1883 1892 23 248 O
ATOM 6843 CB SER C 84 -13.238 3.953 -15.349 1.00 28.55 C
ANISOU 6843 CB SER C 84 3204 5581 2061 2315 179 219 C
ATOM 6844 OG SER C 84 -13.492 3.182 -16.515 1.00 30.36 O
ANISOU 6844 OG SER C 84 3533 5945 2058 2572 57 46 O
ATOM 6845 H SER C 84 -14.486 5.647 -13.282 1.00 31.12 H
ATOM 6846 HA SER C 84 -14.298 5.613 -15.940 1.00 32.67 H
ATOM 6847 HB2 SER C 84 -12.368 4.373 -15.434 1.00 34.25 H
ATOM 6848 HB3 SER C 84 -13.246 3.366 -14.576 1.00 34.25 H
ATOM 6849 HG SER C 84 -12.901 2.592 -16.603 1.00 36.43 H
ATOM 6850 N TRP C 85 -16.170 3.875 -16.099 1.00 29.08 N
ANISOU 6850 N TRP C 85 3518 5444 2086 2347 -61 99 N

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ATOM   6851  CA  TRP C  85    -17.514   3.332 -16.151  1.00 28.78           C
ANISOU 6851  CA  TRP C  85     3574   5239   2122   2278   -266    -18      C
ATOM   6852  C   TRP C  85    -17.614   2.425 -17.369  1.00 31.04           C
ANISOU 6852  C   TRP C  85     3945   5610   2237   2492   -428   -251      C
ATOM   6853  O   TRP C  85    -16.700   2.352 -18.194  1.00 32.55           O
ANISOU 6853  O   TRP C  85     4127   6023   2218   2739   -329   -309      O
ATOM   6854  CB  TRP C  85    -18.556   4.453 -16.215  1.00 27.66           C
ANISOU 6854  CB  TRP C  85     3403   5098   2010   2202   -140    193      C
ATOM   6855  CG  TRP C  85    -18.368   5.333 -17.414  1.00 29.56           C
ANISOU 6855  CG  TRP C  85     3609   5577   2047   2372     49    312      C
ATOM   6856  CD1 TRP C  85    -18.969   5.195 -18.630  1.00 31.09           C
ANISOU 6856  CD1 TRP C  85     3823   5891   2101   2521    -15    236      C
ATOM   6857  CD2 TRP C  85    -17.511   6.479 -17.519  1.00 29.31           C
ANISOU 6857  CD2 TRP C  85     3506   5666   1963   2388    313    552      C
ATOM   6858  NE1 TRP C  85    -18.548   6.186 -19.483  1.00 32.28           N
ANISOU 6858  NE1 TRP C  85     3898   6238   2129   2659    207    414      N
ATOM   6859  CE2 TRP C  85    -17.649   6.985 -18.827  1.00 30.82           C
ANISOU 6859  CE2 TRP C  85     3643   6026   2041   2552    385    625      C
ATOM   6860  CE3 TRP C  85    -16.644   7.125 -16.636  1.00 27.86           C
ANISOU 6860  CE3 TRP C  85     3302   5402   1880   2206    473    706      C
ATOM   6861  CZ2 TRP C  85    -16.958   8.108 -19.270  1.00 31.87           C
ANISOU 6861  CZ2 TRP C  85     3700   6225   2184   2518    566    880      C
ATOM   6862  CZ3 TRP C  85    -15.957   8.237 -17.074  1.00 29.08           C
ANISOU 6862  CZ3 TRP C  85     3383   5605   2061   2141    654    932      C
ATOM   6863  CH2 TRP C  85    -16.118   8.721 -18.384  1.00 31.32           C
ANISOU 6863  CH2 TRP C  85     3612   6044   2243   2294    694   1027      C
ATOM   6864  H   TRP C  85    -15.729   3.787 -16.833  1.00 34.89           H
ATOM   6865  HA  TRP C  85    -17.680   2.801 -15.356  1.00 34.53           H
ATOM   6866  HB2 TRP C  85    -19.442   4.062 -16.263  1.00 33.20           H
ATOM   6867  HB3 TRP C  85    -18.477   5.005 -15.421  1.00 33.20           H
ATOM   6868  HD1 TRP C  85    -19.579   4.528 -18.849  1.00 37.31           H
ATOM   6869  HE1 TRP C  85    -18.803   6.285 -20.298  1.00 38.74           H
ATOM   6870  HE3 TRP C  85    -16.533   6.812 -15.768  1.00 33.43           H
ATOM   6871  HZ2 TRP C  85    -17.063   8.430 -20.137  1.00 38.24           H
ATOM   6872  HZ3 TRP C  85    -15.377   8.675 -16.493  1.00 34.90           H
ATOM   6873  HH2 TRP C  85    -15.641   9.472 -18.654  1.00 37.58           H
ATOM   6874  N   GLY C  86    -18.745   1.734 -17.474  1.00 29.41           N
ANISOU 6874  N   GLY C  86     3766   3632   3776   1889   -652     14      N
ATOM   6875  CA  GLY C  86    -19.021   0.924 -18.641  1.00 31.88           C
ANISOU 6875  CA  GLY C  86     4102   3872   4140   2035   -819   -191      C
ATOM   6876  C   GLY C  86    -19.733   1.749 -19.687  1.00 32.16           C
ANISOU 6876  C   GLY C  86     4053   3991   4175   1991   -781   -263      C
ATOM   6877  O   GLY C  86    -19.093   2.450 -20.476  1.00 32.37           O
ANISOU 6877  O   GLY C  86     3986   4352   3962   2055   -704   -278      O
ATOM   6878  H   GLY C  86    -19.367   1.722 -16.880  1.00 35.29           H
ATOM   6879  HA2 GLY C  86    -18.191   0.589 -19.014  1.00 38.26           H
ATOM   6880  HA3 GLY C  86    -19.583   0.172 -18.396  1.00 38.26           H
ATOM   6881  N   THR C  87    -21.060   1.689 -19.679  1.00 32.52           N
ANISOU 6881  N   THR C  87     4128   3727   4500   1870   -830   -287      N
ATOM   6882  CA  THR C  87    -21.910   2.498 -20.544  1.00 33.71           C
ANISOU 6882  CA  THR C  87     4211   3908   4691   1810   -809   -353      C
ATOM   6883  C   THR C  87    -22.678   3.464 -19.656  1.00 34.55           C
ANISOU 6883  C   THR C  87     4267   3925   4937   1551   -624   -191      C
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ATOM 6884 O THR C 87 -23.400 3.030 -18.752 1.00 34.08 O
ANISOU 6884 O THR C 87 4242 3584 5122 1377 -587 -94 O
ATOM 6885 CB THR C 87 -22.882 1.624 -21.339 1.00 36.23 C
ANISOU 6885 CB THR C 87 4592 3963 5212 1808 -1015 -520 C
ATOM 6886 OG1 THR C 87 -22.176 0.521 -21.919 1.00 39.28 O
ANISOU 6886 OG1 THR C 87 5081 4388 5455 1992 -1185 -661 O
ATOM 6887 CG2 THR C 87 -23.574 2.429 -22.441 1.00 36.72 C
ANISOU 6887 CG2 THR C 87 4605 4112 5235 1796 -1026 -617 C
ATOM 6888 H THR C 87 -21.506 1.167 -19.161 1.00 39.02 H
ATOM 6889 HA THR C 87 -21.363 3.006 -21.164 1.00 40.46 H
ATOM 6890 HB THR C 87 -23.565 1.283 -20.740 1.00 43.48 H
ATOM 6891 HG1 THR C 87 -21.821 0.057 -21.315 1.00 47.13 H
ATOM 6892 HG21 THR C 87 -24.185 1.859 -22.933 1.00 44.07 H
ATOM 6893 HG22 THR C 87 -24.073 3.163 -22.050 1.00 44.07 H
ATOM 6894 HG23 THR C 87 -22.913 2.787 -23.054 1.00 44.07 H
ATOM 6895 N ALA C 88 -22.515 4.764 -19.902 1.00 36.22 N
ANISOU 6895 N ALA C 88 4403 4390 4969 1473 -477 -133 N
ATOM 6896 CA ALA C 88 -23.247 5.767 -19.142 1.00 36.18 C
ANISOU 6896 CA ALA C 88 4379 4324 5043 1206 -296 1 C
ATOM 6897 C ALA C 88 -23.318 7.059 -19.943 1.00 33.48 C
ANISOU 6897 C ALA C 88 3975 4191 4555 1185 -247 -14 C
ATOM 6898 O ALA C 88 -22.423 7.371 -20.733 1.00 35.70 O
ANISOU 6898 O ALA C 88 4214 4746 4604 1323 -273 -30 O
ATOM 6899 CB ALA C 88 -22.600 6.023 -17.778 1.00 37.24 C
ANISOU 6899 CB ALA C 88 4568 4508 5072 1076 -147 183 C
ATOM 6900 H ALA C 88 -21.990 5.086 -20.502 1.00 43.47 H
ATOM 6901 HA ALA C 88 -24.153 5.454 -18.993 1.00 43.42 H
ATOM 6902 HB1 ALA C 88 -23.117 6.695 -17.306 1.00 44.68 H
ATOM 6903 HB2 ALA C 88 -22.593 5.196 -17.272 1.00 44.68 H
ATOM 6904 HB3 ALA C 88 -21.693 6.338 -17.913 1.00 44.68 H
ATOM 6905 N ARG C 89 -24.392 7.807 -19.719 1.00 28.03 N
ANISOU 6905 N ARG C 89 3274 3377 4000 1022 -169 12 N
ATOM 6906 CA ARG C 89 -24.646 9.067 -20.414 1.00 25.54 C
ANISOU 6906 CA ARG C 89 2929 3196 3579 988 -144 0 C
ATOM 6907 C ARG C 89 -24.879 10.117 -19.335 1.00 24.15 C
ANISOU 6907 C ARG C 89 2795 3001 3381 784 13 141 C
ATOM 6908 O ARG C 89 -25.948 10.162 -18.722 1.00 24.81 O
ANISOU 6908 O ARG C 89 2882 2894 3649 694 85 152 O
ATOM 6909 CB ARG C 89 -25.839 8.937 -21.356 1.00 25.04 C
ANISOU 6909 CB ARG C 89 2832 2977 3705 1056 -267 -161 C
ATOM 6910 CG ARG C 89 -25.881 9.953 -22.483 1.00 24.37 C
ANISOU 6910 CG ARG C 89 2744 3060 3457 1125 -308 -213 C
ATOM 6911 CD ARG C 89 -26.915 9.555 -23.520 1.00 23.81 C
ANISOU 6911 CD ARG C 89 2660 2830 3559 1261 -498 -414 C
ATOM 6912 NE ARG C 89 -26.417 8.495 -24.387 1.00 24.19 N
ANISOU 6912 NE ARG C 89 2751 2915 3524 1486 -664 -547 N
ATOM 6913 CZ ARG C 89 -25.746 8.701 -25.518 1.00 24.52 C
ANISOU 6913 CZ ARG C 89 2850 3201 3264 1641 -697 -586 C
ATOM 6914 NH1 ARG C 89 -25.484 9.939 -25.935 1.00 22.97 N
ANISOU 6914 NH1 ARG C 89 2639 3223 2864 1662 -612 -498 N
ATOM 6915 NH2 ARG C 89 -25.346 7.663 -26.241 1.00 25.33 N
ANISOU 6915 NH2 ARG C 89 3034 3329 3262 1791 -821 -706 N
ATOM 6916 H ARG C 89 -25.007 7.601 -19.153 1.00 33.64 H

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ATOM   6917  HA  ARG C  89    -23.865   9.319 -20.932  1.00 30.65           H
ATOM   6918  HB2 ARG C  89    -25.819   8.055 -21.758  1.00 30.05           H
ATOM   6919  HB3 ARG C  89    -26.652   9.040 -20.838  1.00 30.05           H
ATOM   6920  HG2 ARG C  89    -26.123  10.822 -22.126  1.00 29.25           H
ATOM   6921  HG3 ARG C  89    -25.013   9.994 -22.915  1.00 29.25           H
ATOM   6922  HD2 ARG C  89    -27.711   9.231 -23.070  1.00 28.58           H
ATOM   6923  HD3 ARG C  89    -27.129  10.324 -24.071  1.00 28.58           H
ATOM   6924  HE  ARG C  89    -26.566   7.681 -24.152  1.00 29.03           H
ATOM   6925 HH11 ARG C  89    -25.745  10.613 -25.470  1.00 27.56           H
ATOM   6926 HH12 ARG C  89    -25.050  10.063 -26.667  1.00 27.56           H
ATOM   6927 HH21 ARG C  89    -25.514   6.863 -25.974  1.00 30.40           H
ATOM   6928 HH22 ARG C  89    -24.910   7.790 -26.971  1.00 30.40           H
ATOM   6929  N   TRP C  90    -23.868  10.939 -19.085  1.00 23.23           N
ANISOU 6929  N   TRP C  90    2704   3081   3043    726     51    254      N
ATOM   6930  CA  TRP C  90    -23.928  11.912 -18.009  1.00 22.68           C
ANISOU 6930  CA  TRP C  90    2723   2975   2921    570    138    366      C
ATOM   6931  C   TRP C  90    -24.744  13.118 -18.457  1.00 22.74           C
ANISOU 6931  C   TRP C  90    2750   2953   2937    512    134    336      C
ATOM   6932  O   TRP C  90    -24.618  13.581 -19.592  1.00 22.57           O
ANISOU 6932  O   TRP C  90    2682   3045   2847    552     60    304      O
ATOM   6933  CB  TRP C  90    -22.508  12.310 -17.597  1.00 23.29           C
ANISOU 6933  CB  TRP C  90    2814   3234   2801    521    111    492      C
ATOM   6934  CG  TRP C  90    -21.635  11.077 -17.341  1.00 24.53           C
ANISOU 6934  CG  TRP C  90    2935   3448   2937    625     90    500      C
ATOM   6935  CD1 TRP C  90    -20.715  10.527 -18.195  1.00 26.33           C
ANISOU 6935  CD1 TRP C  90    3049   3879   3075    764     26    482      C
ATOM   6936  CD2 TRP C  90    -21.639  10.244 -16.173  1.00 24.74           C
ANISOU 6936  CD2 TRP C  90    3053   3331   3018    631    131    529      C
ATOM   6937  NE1 TRP C  90    -20.141   9.415 -17.624  1.00 26.81           N
ANISOU 6937  NE1 TRP C  90    3128   3918   3143    858      3    477      N
ATOM   6938  CE2 TRP C  90    -20.691   9.217 -16.386  1.00 25.58           C
ANISOU 6938  CE2 TRP C  90    3104   3537   3079    765     61    514      C
ATOM   6939  CE3 TRP C  90    -22.346  10.267 -14.967  1.00 24.02           C
ANISOU 6939  CE3 TRP C  90    3091   3050   2984    562    231    580      C
ATOM   6940  CZ2 TRP C  90    -20.435   8.226 -15.435  1.00 25.75           C
ANISOU 6940  CZ2 TRP C  90    3213   3442   3130    810     62    544      C
ATOM   6941  CZ3 TRP C  90    -22.087   9.291 -14.030  1.00 25.12           C
ANISOU 6941  CZ3 TRP C  90    3312   3097   3136    606    260    635      C
ATOM   6942  CH2 TRP C  90    -21.142   8.280 -14.269  1.00 26.24           C
ANISOU 6942  CH2 TRP C  90    3412   3307   3251    717    163    615      C
ATOM   6943  H   TRP C  90    -23.131  10.952 -19.529  1.00 27.88           H
ATOM   6944  HA  TRP C  90    -24.368  11.515 -17.241  1.00 27.22           H
ATOM   6945  HB2 TRP C  90    -22.101  12.829 -18.308  1.00 27.95           H
ATOM   6946  HB3 TRP C  90    -22.545  12.831 -16.780  1.00 27.95           H
ATOM   6947  HD1 TRP C  90    -20.507  10.860 -19.038  1.00 31.59           H
ATOM   6948  HE1 TRP C  90    -19.538   8.922 -17.988  1.00 32.18           H
ATOM   6949  HE3 TRP C  90    -22.976  10.930 -14.799  1.00 28.82           H
ATOM   6950  HZ2 TRP C  90    -19.805   7.559 -15.588  1.00 30.90           H
ATOM   6951  HZ3 TRP C  90    -22.554   9.296 -13.225  1.00 30.15           H
ATOM   6952  HH2 TRP C  90    -20.991   7.636 -13.616  1.00 31.49           H
ATOM   6953  N   THR C  91    -25.613  13.597 -17.573  1.00 22.28           N
ANISOU 6953  N   THR C  91    2770   2749   2949    449    217    348      N
ATOM   6954  CA  THR C  91    -26.550  14.655 -17.924  1.00 21.18           C
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ANISOU 6954 CA THR C 91 2656 2552 2840 431 204 294 C
ATOM 6955 C THR C 91 -27.144 15.226 -16.645 1.00 20.19 C
ANISOU 6955 C THR C 91 2648 2320 2702 403 310 336 C
ATOM 6956 O THR C 91 -27.346 14.499 -15.669 1.00 20.25 O
ANISOU 6956 O THR C 91 2669 2262 2765 422 434 386 O
ATOM 6957 CB THR C 91 -27.645 14.110 -18.853 1.00 23.29 C
ANISOU 6957 CB THR C 91 2800 2730 3318 512 172 161 C
ATOM 6958 OG1 THR C 91 -28.491 15.170 -19.305 1.00 23.96 O
ANISOU 6958 OG1 THR C 91 2907 2776 3420 517 134 98 O
ATOM 6959 CG2 THR C 91 -28.481 13.055 -18.142 1.00 24.62 C
ANISOU 6959 CG2 THR C 91 2892 2736 3725 518 273 160 C
ATOM 6960 H THR C 91 -25.679 13.324 -16.760 1.00 26.74 H
ATOM 6961 HA THR C 91 -26.078 15.364 -18.388 1.00 25.42 H
ATOM 6962 HB THR C 91 -27.226 13.691 -19.621 1.00 27.95 H
ATOM 6963 HG1 THR C 91 -29.087 14.866 -19.812 1.00 28.75 H
ATOM 6964 HG21 THR C 91 -29.168 12.720 -18.739 1.00 29.54 H
ATOM 6965 HG22 THR C 91 -27.917 12.317 -17.864 1.00 29.54 H
ATOM 6966 HG23 THR C 91 -28.904 13.441 -17.359 1.00 29.54 H
ATOM 6967 N GLY C 92 -27.420 16.536 -16.657 1.00 17.71 N
ANISOU 6967 N GLY C 92 2440 1989 2299 384 255 321 N
ATOM 6968 CA GLY C 92 -28.004 17.214 -15.523 1.00 18.73 C
ANISOU 6968 CA GLY C 92 2717 2032 2370 423 330 330 C
ATOM 6969 C GLY C 92 -27.447 18.617 -15.386 1.00 18.86 C
ANISOU 6969 C GLY C 92 2927 2039 2200 376 164 349 C
ATOM 6970 O GLY C 92 -26.818 19.154 -16.298 1.00 18.25 O
ANISOU 6970 O GLY C 92 2834 2017 2082 286 12 376 O
ATOM 6971 H GLY C 92 -27.272 17.052 -17.329 1.00 21.25 H
ATOM 6972 HA2 GLY C 92 -28.966 17.270 -15.633 1.00 22.48 H
ATOM 6973 HA3 GLY C 92 -27.811 16.721 -14.710 1.00 22.48 H
ATOM 6974 N THR C 93 -27.710 19.230 -14.234 1.00 20.19 N
ANISOU 6974 N THR C 93 3290 2128 2251 449 184 344 N
ATOM 6975 CA THR C 93 -27.140 20.540 -13.941 1.00 21.23 C
ANISOU 6975 CA THR C 93 3652 2194 2219 410 -36 352 C
ATOM 6976 C THR C 93 -25.619 20.458 -13.985 1.00 21.10 C
ANISOU 6976 C THR C 93 3633 2243 2140 250 -189 469 C
ATOM 6977 O THR C 93 -25.021 19.552 -13.400 1.00 21.88 O
ANISOU 6977 O THR C 93 3694 2400 2219 252 -114 523 O
ATOM 6978 CB THR C 93 -27.617 21.031 -12.565 1.00 22.15 C
ANISOU 6978 CB THR C 93 4014 2217 2185 581 0 306 C
ATOM 6979 OG1 THR C 93 -29.029 21.258 -12.607 1.00 22.26 O
ANISOU 6979 OG1 THR C 93 3995 2205 2259 745 141 212 O
ATOM 6980 CG2 THR C 93 -26.907 22.321 -12.160 1.00 22.78 C
ANISOU 6980 CG2 THR C 93 4376 2178 2102 547 -305 297 C
ATOM 6981 H THR C 93 -28.210 18.911 -13.611 1.00 24.22 H
ATOM 6982 HA THR C 93 -27.433 21.176 -14.612 1.00 25.47 H
ATOM 6983 HB THR C 93 -27.422 20.354 -11.899 1.00 26.58 H
ATOM 6984 HG1 THR C 93 -29.299 21.527 -11.859 1.00 26.71 H
ATOM 6985 HG21 THR C 93 -27.222 22.613 -11.290 1.00 27.34 H
ATOM 6986 HG22 THR C 93 -25.949 22.172 -12.115 1.00 27.34 H
ATOM 6987 HG23 THR C 93 -27.087 23.017 -12.810 1.00 27.34 H
ATOM 6988 N TYR C 94 -25.001 21.409 -14.685 1.00 21.23 N
ANISOU 6988 N TYR C 94 3675 2251 2139 110 -406 528 N
ATOM 6989 CA TYR C 94 -23.576 21.391 -14.995 1.00 21.27 C

ANISOU 6989 CA TYR C 94 3587 2361 2133 -67 -542 681 C
ATOM 6990 C TYR C 94 -22.926 22.684 -14.510 1.00 23.37 C
ANISOU 6990 C TYR C 94 4058 2485 2337 -189 -842 748 C
ATOM 6991 O TYR C 94 -23.386 23.781 -14.850 1.00 22.80 O
ANISOU 6991 O TYR C 94 4119 2280 2265 -214 -989 725 O
ATOM 6992 CB TYR C 94 -23.357 21.217 -16.508 1.00 19.92 C
ANISOU 6992 CB TYR C 94 3188 2352 2030 -141 -510 753 C
ATOM 6993 CG TYR C 94 -21.927 21.447 -16.940 1.00 20.81 C
ANISOU 6993 CG TYR C 94 3173 2607 2126 -320 -638 956 C
ATOM 6994 CD1 TYR C 94 -20.914 20.598 -16.519 1.00 20.91 C
ANISOU 6994 CD1 TYR C 94 3061 2756 2129 -338 -605 1029 C
ATOM 6995 CD2 TYR C 94 -21.586 22.518 -17.752 1.00 21.90 C
ANISOU 6995 CD2 TYR C 94 3302 2750 2270 -471 -792 1099 C
ATOM 6996 CE1 TYR C 94 -19.604 20.803 -16.904 1.00 22.14 C
ANISOU 6996 CE1 TYR C 94 3045 3076 2290 -494 -710 1235 C
ATOM 6997 CE2 TYR C 94 -20.279 22.731 -18.140 1.00 23.25 C
ANISOU 6997 CE2 TYR C 94 3304 3077 2453 -651 -885 1338 C
ATOM 6998 CZ TYR C 94 -19.288 21.870 -17.709 1.00 23.40 C
ANISOU 6998 CZ TYR C 94 3161 3257 2472 -659 -838 1403 C
ATOM 6999 OH TYR C 94 -17.975 22.065 -18.084 1.00 25.13 O
ANISOU 6999 OH TYR C 94 3158 3667 2723 -829 -917 1659 O
ATOM 7000 H TYR C 94 -25.404 22.099 -15.002 1.00 25.47 H
ATOM 7001 HA TYR C 94 -23.155 20.646 -14.538 1.00 25.52 H
ATOM 7002 HB2 TYR C 94 -23.602 20.312 -16.759 1.00 23.91 H
ATOM 7003 HB3 TYR C 94 -23.916 21.853 -16.981 1.00 23.91 H
ATOM 7004 HD1 TYR C 94 -21.122 19.875 -15.972 1.00 25.10 H
ATOM 7005 HD2 TYR C 94 -22.250 23.101 -18.043 1.00 26.28 H
ATOM 7006 HE1 TYR C 94 -18.936 20.224 -16.614 1.00 26.57 H
ATOM 7007 HE2 TYR C 94 -20.066 23.453 -18.686 1.00 27.90 H
ATOM 7008 HH TYR C 94 -17.914 22.746 -18.573 1.00 30.16 H
ATOM 7009 N LYS C 95 -21.847 22.557 -13.727 1.00 25.38 N
ANISOU 7009 N LYS C 95 4345 2744 2555 -264 -970 828 N
ATOM 7010 CA LYS C 95 -21.240 23.703 -13.052 1.00 29.57 C
ANISOU 7010 CA LYS C 95 5101 3086 3050 -366 -1314 869 C
ATOM 7011 C LYS C 95 -19.854 24.085 -13.557 1.00 32.95 C
ANISOU 7011 C LYS C 95 5350 3586 3585 -642 -1533 1094 C
ATOM 7012 O LYS C 95 -19.463 25.242 -13.404 1.00 34.91 O
ANISOU 7012 O LYS C 95 5699 3660 3905 -783 -1805 1114 O
ATOM 7013 CB LYS C 95 -21.148 23.435 -11.544 1.00 31.89 C
ANISOU 7013 CB LYS C 95 5629 3276 3211 -207 -1363 768 C
ATOM 7014 CG LYS C 95 -22.499 23.222 -10.870 1.00 32.11 C
ANISOU 7014 CG LYS C 95 5847 3239 3114 80 -1146 589 C
ATOM 7015 CD LYS C 95 -23.335 24.487 -10.862 1.00 33.33 C
ANISOU 7015 CD LYS C 95 6248 3199 3215 168 -1304 478 C
ATOM 7016 H LYS C 95 -21.447 21.811 -13.572 1.00 30.46 H
ATOM 7017 HA LYS C 95 -21.817 24.473 -13.177 1.00 35.49 H
ATOM 7018 HB2 LYS C 95 -20.617 22.636 -11.401 1.00 38.27 H
ATOM 7019 HB3 LYS C 95 -20.721 24.194 -11.118 1.00 38.27 H
ATOM 7020 HG2 LYS C 95 -22.991 22.537 -11.350 1.00 38.53 H
ATOM 7021 HG3 LYS C 95 -22.356 22.948 -9.950 1.00 38.53 H
ATOM 7022 N GLY C 96 -19.090 23.159 -14.125 1.00 34.91 N
ANISOU 7022 N GLY C 96 5285 4094 3883 -705 -1380 1221 N
ATOM 7023 CA GLY C 96 -17.772 23.497 -14.638 1.00 36.94 C

ANISOU 7023 CA GLY C 96 5303 4477 4255 -950 -1533 1461 C
ATOM 7024 C GLY C 96 -16.877 22.269 -14.677 1.00 35.69 C
ANISOU 7024 C GLY C 96 4871 4593 4095 -918 -1388 1546 C
ATOM 7025 O GLY C 96 -17.357 21.138 -14.702 1.00 33.80 O
ANISOU 7025 O GLY C 96 4591 4462 3791 -719 -1128 1415 O
ATOM 7026 H GLY C 96 -19.310 22.334 -14.224 1.00 41.89 H
ATOM 7027 HA2 GLY C 96 -17.851 23.855 -15.536 1.00 44.33 H
ATOM 7028 HA3 GLY C 96 -17.360 24.166 -14.070 1.00 44.33 H
ATOM 7029 N THR C 97 -15.568 22.523 -14.675 1.00 35.45 N
ANISOU 7029 N THR C 97 4640 4662 4169 -1114 -1567 1753 N
ATOM 7030 CA THR C 97 -14.577 21.459 -14.739 1.00 33.33 C
ANISOU 7030 CA THR C 97 4079 4678 3907 -1075 -1461 1848 C
ATOM 7031 C THR C 97 -13.538 21.626 -13.640 1.00 35.09 C
ANISOU 7031 C THR C 97 4319 4806 4206 -1176 -1746 1891 C
ATOM 7032 O THR C 97 -13.360 22.710 -13.080 1.00 38.05 O
ANISOU 7032 O THR C 97 4863 4916 4677 -1334 -2036 1891 O
ATOM 7033 CB THR C 97 -13.863 21.432 -16.096 1.00 32.76 C
ANISOU 7033 CB THR C 97 3617 4941 3890 -1177 -1334 2106 C
ATOM 7034 OG1 THR C 97 -13.116 22.641 -16.271 1.00 35.30 O
ANISOU 7034 OG1 THR C 97 3833 5208 4371 -1482 -1587 2365 O
ATOM 7035 CG2 THR C 97 -14.872 21.282 -17.217 1.00 30.04 C
ANISOU 7035 CG2 THR C 97 3285 4674 3454 -1044 -1081 2034 C
ATOM 7036 H THR C 97 -15.230 23.312 -14.636 1.00 42.54 H
ATOM 7037 HA THR C 97 -15.018 20.604 -14.612 1.00 40.00 H
ATOM 7038 HB THR C 97 -13.259 20.674 -16.126 1.00 39.31 H
ATOM 7039 HG1 THR C 97 -13.631 23.303 -16.245 1.00 42.36 H
ATOM 7040 HG21 THR C 97 -14.416 21.265 -18.073 1.00 36.04 H
ATOM 7041 HG22 THR C 97 -15.368 20.455 -17.108 1.00 36.04 H
ATOM 7042 HG23 THR C 97 -15.494 22.026 -17.205 1.00 36.04 H
ATOM 7043 N VAL C 98 -12.845 20.526 -13.344 1.00 33.14 N
ANISOU 7043 N VAL C 98 3905 4758 3928 -1063 -1669 1895 N
ATOM 7044 CA VAL C 98 -11.686 20.537 -12.460 1.00 34.53 C
ANISOU 7044 CA VAL C 98 4021 4899 4201 -1141 -1907 1934 C
ATOM 7045 C VAL C 98 -10.664 19.540 -12.990 1.00 34.76 C
ANISOU 7045 C VAL C 98 3643 5305 4258 -1087 -1759 2071 C
ATOM 7046 O VAL C 98 -11.021 18.470 -13.498 1.00 32.92 O
ANISOU 7046 O VAL C 98 3326 5280 3902 -871 -1488 2008 O
ATOM 7047 CB VAL C 98 -12.074 20.215 -11.003 1.00 32.91 C
ANISOU 7047 CB VAL C 98 4201 4435 3868 -952 -2009 1685 C
ATOM 7048 CG1 VAL C 98 -12.860 18.918 -10.926 1.00 30.84 C
ANISOU 7048 CG1 VAL C 98 4028 4266 3425 -677 -1713 1551 C
ATOM 7049 CG2 VAL C 98 -10.829 20.145 -10.104 1.00 36.30 C
ANISOU 7049 CG2 VAL C 98 4575 4832 4387 -996 -2261 1705 C
ATOM 7050 H VAL C 98 -13.034 19.745 -13.651 1.00 39.77 H
ATOM 7051 HA VAL C 98 -11.283 21.419 -12.477 1.00 41.44 H
ATOM 7052 HB VAL C 98 -12.642 20.926 -10.667 1.00 39.49 H
ATOM 7053 HG11 VAL C 98 -13.089 18.743 -9.999 1.00 37.01 H
ATOM 7054 HG12 VAL C 98 -13.667 19.007 -11.456 1.00 37.01 H
ATOM 7055 HG13 VAL C 98 -12.313 18.197 -11.274 1.00 37.01 H
ATOM 7056 HG21 VAL C 98 -11.106 19.942 -9.197 1.00 43.56 H
ATOM 7057 HG22 VAL C 98 -10.241 19.448 -10.435 1.00 43.56 H
ATOM 7058 HG23 VAL C 98 -10.375 21.002 -10.128 1.00 43.56 H
ATOM 7059 N LYS C 99 -9.396 19.915 -12.906 1.00 37.38 N

ANISOU 7059 N LYS C 99 3727 5711 4766 -1268 -1930 2249 N
ATOM 7060 CA LYS C 99 -8.292 19.030 -13.235 1.00 39.30 C
ANISOU 7060 CA LYS C 99 3598 6295 5039 -1187 -1804 2357 C
ATOM 7061 C LYS C 99 -7.725 18.469 -11.944 1.00 39.85 C
ANISOU 7061 C LYS C 99 3799 6241 5104 -1074 -1990 2202 C
ATOM 7062 O LYS C 99 -7.554 19.198 -10.962 1.00 41.97 O
ANISOU 7062 O LYS C 99 4292 6204 5451 -1188 -2294 2144 O
ATOM 7063 CB LYS C 99 -7.201 19.772 -14.013 1.00 43.04 C
ANISOU 7063 CB LYS C 99 3698 6951 5703 -1437 -1827 2690 C
ATOM 7064 H LYS C 99 -9.145 20.698 -12.654 1.00 44.86 H
ATOM 7065 HA LYS C 99 -8.615 18.294 -13.778 1.00 47.16 H
ATOM 7066 N SER C 100 -7.437 17.169 -11.943 1.00 38.31 N
ANISOU 7066 N SER C 100 3491 6264 4803 -823 -1823 2120 N
ATOM 7067 CA SER C 100 -6.939 16.547 -10.725 1.00 38.96 C
ANISOU 7067 CA SER C 100 3720 6233 4851 -683 -1999 1972 C
ATOM 7068 C SER C 100 -6.420 15.144 -11.008 1.00 39.06 C
ANISOU 7068 C SER C 100 3526 6533 4782 -421 -1810 1932 C
ATOM 7069 O SER C 100 -7.062 14.366 -11.724 1.00 36.76 O
ANISOU 7069 O SER C 100 3218 6383 4364 -239 -1542 1878 O
ATOM 7070 CB SER C 100 -8.041 16.519 -9.664 1.00 36.99 C
ANISOU 7070 CB SER C 100 3974 5645 4435 -561 -2077 1753 C
ATOM 7071 OG SER C 100 -7.639 15.779 -8.529 1.00 37.81 O
ANISOU 7071 OG SER C 100 4250 5663 4451 -375 -2201 1620 O
ATOM 7072 H SER C 100 -7.519 16.640 -12.615 1.00 45.98 H
ATOM 7073 HA SER C 100 -6.203 17.075 -10.378 1.00 46.75 H
ATOM 7074 HB2 SER C 100 -8.239 17.429 -9.392 1.00 44.38 H
ATOM 7075 HB3 SER C 100 -8.833 16.107 -10.044 1.00 44.38 H
ATOM 7076 HG SER C 100 -7.465 14.988 -8.749 1.00 45.37 H
ATOM 7077 N ASP C 101 -5.248 14.830 -10.461 1.00 41.29 N
ANISOU 7077 N ASP C 101 3662 6883 5144 -387 -1969 1942 N
ATOM 7078 CA ASP C 101 -4.632 13.521 -10.633 1.00 41.71 C
ANISOU 7078 CA ASP C 101 3543 7178 5126 -118 -1838 1881 C
ATOM 7079 C ASP C 101 -4.556 13.131 -12.110 1.00 41.60 C
ANISOU 7079 C ASP C 101 3215 7510 5079 -35 -1506 1980 C
ATOM 7080 O ASP C 101 -4.914 12.022 -12.508 1.00 40.16 O
ANISOU 7080 O ASP C 101 3077 7432 4752 238 -1309 1851 O
ATOM 7081 CB ASP C 101 -5.390 12.472 -9.820 1.00 39.68 C
ANISOU 7081 CB ASP C 101 3658 6743 4675 150 -1829 1666 C
ATOM 7082 CG ASP C 101 -5.589 12.898 -8.381 1.00 39.75 C
ANISOU 7082 CG ASP C 101 4049 6414 4642 114 -2112 1569 C
ATOM 7083 OD1 ASP C 101 -4.661 12.694 -7.571 1.00 42.17 O
ANISOU 7083 OD1 ASP C 101 4348 6696 4980 174 -2333 1528 O
ATOM 7084 OD2 ASP C 101 -6.662 13.458 -8.065 1.00 38.05 O
ANISOU 7084 OD2 ASP C 101 4152 5960 4347 50 -2107 1521 O
ATOM 7085 H ASP C 101 -4.784 15.369 -9.978 1.00 49.55 H
ATOM 7086 HA ASP C 101 -3.725 13.558 -10.292 1.00 50.05 H
ATOM 7087 HB2 ASP C 101 -6.263 12.333 -10.217 1.00 47.61 H
ATOM 7088 HB3 ASP C 101 -4.886 11.644 -9.823 1.00 47.61 H
ATOM 7089 N GLY C 102 -4.081 14.067 -12.932 1.00 43.65 N
ANISOU 7089 N GLY C 102 3191 7931 5463 -263 -1453 2217 N
ATOM 7090 CA GLY C 102 -3.813 13.806 -14.334 1.00 44.43 C
ANISOU 7090 CA GLY C 102 3001 8391 5490 -167 -1144 2348 C
ATOM 7091 C GLY C 102 -5.023 13.743 -15.243 1.00 41.76 C

ANISOU 7091 C GLY C 102 2793 8074 5000 -82 -909 2296 C
ATOM 7092 O GLY C 102 -4.849 13.607 -16.463 1.00 42.58 O
ANISOU 7092 O GLY C 102 2706 8470 5003 19 -665 2402 O
ATOM 7093 H GLY C 102 -3.905 14.874 -12.691 1.00 52.38 H
ATOM 7094 HA2 GLY C 102 -3.226 14.500 -14.673 1.00 53.32 H
ATOM 7095 HA3 GLY C 102 -3.345 12.959 -14.408 1.00 53.32 H
ATOM 7096 N GLY C 103 -6.244 13.826 -14.703 1.00 38.54 N
ANISOU 7096 N GLY C 103 2721 7371 4552 -94 -979 2136 N
ATOM 7097 CA GLY C 103 -7.445 13.856 -15.508 1.00 37.52 C
ANISOU 7097 CA GLY C 103 2715 7228 4314 -31 -796 2080 C
ATOM 7098 C GLY C 103 -8.195 15.173 -15.353 1.00 37.30 C
ANISOU 7098 C GLY C 103 2840 6965 4367 -319 -926 2166 C
ATOM 7099 O GLY C 103 -7.886 15.999 -14.485 1.00 38.36 O
ANISOU 7099 O GLY C 103 3058 6887 4630 -547 -1183 2225 O
ATOM 7100 H GLY C 103 -6.394 13.866 -13.857 1.00 46.25 H
ATOM 7101 HA2 GLY C 103 -7.214 13.739 -16.443 1.00 45.03 H
ATOM 7102 HA3 GLY C 103 -8.033 13.132 -15.242 1.00 45.03 H
ATOM 7103 N THR C 104 -9.185 15.365 -16.224 1.00 35.39 N
ANISOU 7103 N THR C 104 2661 6741 4044 -284 -770 2151 N
ATOM 7104 CA THR C 104 -10.097 16.498 -16.158 1.00 34.15 C
ANISOU 7104 CA THR C 104 2709 6337 3928 -498 -878 2186 C
ATOM 7105 C THR C 104 -11.512 15.982 -15.923 1.00 30.76 C
ANISOU 7105 C THR C 104 2647 5643 3398 -328 -759 1898 C
ATOM 7106 O THR C 104 -11.939 15.010 -16.557 1.00 29.26 O
ANISOU 7106 O THR C 104 2441 5564 3113 -87 -559 1771 O
ATOM 7107 CB THR C 104 -10.054 17.334 -17.445 1.00 35.86 C
ANISOU 7107 CB THR C 104 2713 6751 4162 -629 -772 2417 C
ATOM 7108 OG1 THR C 104 -8.715 17.782 -17.692 1.00 38.42 O
ANISOU 7108 OG1 THR C 104 2721 7279 4599 -796 -800 2691 O
ATOM 7109 CG2 THR C 104 -10.957 18.543 -17.327 1.00 35.52 C
ANISOU 7109 CG2 THR C 104 2938 6383 4175 -848 -900 2414 C
ATOM 7110 H THR C 104 -9.351 14.834 -16.880 1.00 42.47 H
ATOM 7111 HA THR C 104 -9.851 17.069 -15.413 1.00 40.98 H
ATOM 7112 HB THR C 104 -10.358 16.794 -18.192 1.00 43.04 H
ATOM 7113 HG1 THR C 104 -8.691 18.239 -18.397 1.00 46.11 H
ATOM 7114 HG21 THR C 104 -10.922 19.064 -18.144 1.00 42.62 H
ATOM 7115 HG22 THR C 104 -11.872 18.260 -17.172 1.00 42.62 H
ATOM 7116 HG23 THR C 104 -10.670 19.100 -16.586 1.00 42.62 H
ATOM 7117 N TYR C 105 -12.245 16.637 -15.024 1.00 28.51 N
ANISOU 7117 N TYR C 105 2686 5007 3139 -442 -894 1798 N
ATOM 7118 CA TYR C 105 -13.537 16.140 -14.553 1.00 26.82 C
ANISOU 7118 CA TYR C 105 2794 4544 2853 -290 -781 1556 C
ATOM 7119 C TYR C 105 -14.617 17.193 -14.757 1.00 26.62 C
ANISOU 7119 C TYR C 105 2965 4310 2841 -399 -790 1518 C
ATOM 7120 O TYR C 105 -14.420 18.356 -14.398 1.00 27.23 O
ANISOU 7120 O TYR C 105 3126 4248 2970 -593 -1002 1607 O
ATOM 7121 CB TYR C 105 -13.480 15.774 -13.067 1.00 26.23 C
ANISOU 7121 CB TYR C 105 2964 4258 2742 -230 -901 1450 C
ATOM 7122 CG TYR C 105 -12.555 14.637 -12.683 1.00 27.02 C
ANISOU 7122 CG TYR C 105 2942 4505 2817 -84 -911 1447 C
ATOM 7123 CD1 TYR C 105 -11.178 14.815 -12.633 1.00 29.57 C
ANISOU 7123 CD1 TYR C 105 3010 5020 3204 -171 -1086 1604 C
ATOM 7124 CD2 TYR C 105 -13.065 13.398 -12.320 1.00 25.98 C

ANISOU 7124 CD2 TYR C 105 2951 4301 2618 135 -769 1300 C
ATOM 7125 CE1 TYR C 105 -10.332 13.785 -12.262 1.00 30.34 C
ANISOU 7125 CE1 TYR C 105 2998 5254 3275 -9 -1113 1588 C
ATOM 7126 CE2 TYR C 105 -12.224 12.354 -11.941 1.00 26.82 C
ANISOU 7126 CE2 TYR C 105 2982 4513 2695 287 -807 1290 C
ATOM 7127 CZ TYR C 105 -10.858 12.555 -11.915 1.00 29.06 C
ANISOU 7127 CZ TYR C 105 3018 5005 3020 231 -979 1420 C
ATOM 7128 OH TYR C 105 -10.010 11.531 -11.541 1.00 30.57 O
ANISOU 7128 OH TYR C 105 3128 5309 3179 408 -1033 1399 O
ATOM 7129 H TYR C 105 -12.012 17.384 -14.667 1.00 34.21 H
ATOM 7130 HA TYR C 105 -13.781 15.347 -15.056 1.00 32.19 H
ATOM 7131 HB2 TYR C 105 -13.191 16.558 -12.573 1.00 31.47 H
ATOM 7132 HB3 TYR C 105 -14.373 15.527 -12.781 1.00 31.47 H
ATOM 7133 HD1 TYR C 105 -10.817 15.640 -12.865 1.00 35.48 H
ATOM 7134 HD2 TYR C 105 -13.984 13.261 -12.336 1.00 31.17 H
ATOM 7135 HE1 TYR C 105 -9.413 13.921 -12.243 1.00 36.41 H
ATOM 7136 HE2 TYR C 105 -12.580 11.527 -11.709 1.00 32.18 H
ATOM 7137 HH TYR C 105 -10.454 10.842 -11.357 1.00 36.69 H
ATOM 7138 N ASP C 106 -15.763 16.777 -15.304 1.00 26.74 N
ANISOU 7138 N ASP C 106 3060 4277 2823 -264 -595 1378 N
ATOM 7139 CA ASP C 106 -16.946 17.630 -15.368 1.00 26.58 C
ANISOU 7139 CA ASP C 106 3245 4042 2811 -311 -593 1298 C
ATOM 7140 C ASP C 106 -17.706 17.588 -14.045 1.00 27.08 C
ANISOU 7140 C ASP C 106 3612 3839 2839 -239 -610 1152 C
ATOM 7141 O ASP C 106 -17.839 16.528 -13.426 1.00 24.81 O
ANISOU 7141 O ASP C 106 3375 3530 2523 -97 -504 1072 O
ATOM 7142 CB ASP C 106 -17.877 17.178 -16.493 1.00 25.71 C
ANISOU 7142 CB ASP C 106 3074 3994 2702 -183 -401 1204 C
ATOM 7143 CG ASP C 106 -17.274 17.367 -17.871 1.00 27.06 C
ANISOU 7143 CG ASP C 106 2997 4437 2849 -205 -368 1349 C
ATOM 7144 OD1 ASP C 106 -16.744 18.460 -18.140 1.00 27.88 O
ANISOU 7144 OD1 ASP C 106 3042 4582 2970 -396 -486 1536 O
ATOM 7145 OD2 ASP C 106 -17.331 16.417 -18.686 1.00 27.11 O
ANISOU 7145 OD2 ASP C 106 2879 4610 2813 -18 -233 1285 O
ATOM 7146 H ASP C 106 -15.878 15.998 -15.648 1.00 32.09 H
ATOM 7147 HA ASP C 106 -16.676 18.546 -15.539 1.00 31.89 H
ATOM 7148 HB2 ASP C 106 -18.074 16.235 -16.379 1.00 30.86 H
ATOM 7149 HB3 ASP C 106 -18.697 17.695 -16.451 1.00 30.86 H
ATOM 7150 N ILE C 107 -18.245 18.736 -13.635 1.00 26.85 N
ANISOU 7150 N ILE C 107 3798 3608 2796 -313 -736 1126 N
ATOM 7151 CA ILE C 107 -18.936 18.870 -12.355 1.00 27.13 C
ANISOU 7151 CA ILE C 107 4141 3420 2748 -203 -754 1001 C
ATOM 7152 C ILE C 107 -20.437 18.935 -12.604 1.00 25.09 C
ANISOU 7152 C ILE C 107 3974 3066 2494 -89 -568 875 C
ATOM 7153 O ILE C 107 -20.911 19.816 -13.331 1.00 24.77 O
ANISOU 7153 O ILE C 107 3936 2984 2490 -153 -620 870 O
ATOM 7154 CB ILE C 107 -18.466 20.121 -11.597 1.00 30.16 C
ANISOU 7154 CB ILE C 107 4738 3629 3093 -307 -1075 1031 C
ATOM 7155 CG1 ILE C 107 -16.974 20.023 -11.265 1.00 32.20 C
ANISOU 7155 CG1 ILE C 107 4876 3970 3390 -430 -1292 1160 C
ATOM 7156 CG2 ILE C 107 -19.299 20.322 -10.316 1.00 30.55 C
ANISOU 7156 CG2 ILE C 107 5148 3468 2994 -114 -1077 880 C
ATOM 7157 CD1 ILE C 107 -16.379 21.322 -10.726 1.00 35.18 C

ANISOU 7157 CD1 ILE C 107 5409 4153 3804 -586 -1680 1205 C
ATOM 7158 H ILE C 107 -18.222 19.465 -14.091 1.00 32.22 H
ATOM 7159 HA ILE C 107 -18.750 18.092 -11.806 1.00 32.56 H
ATOM 7160 HB ILE C 107 -18.600 20.892 -12.170 1.00 36.19 H
ATOM 7161 HG12 ILE C 107 -16.848 19.337 -10.590 1.00 38.65 H
ATOM 7162 HG13 ILE C 107 -16.489 19.785 -12.070 1.00 38.65 H
ATOM 7163 HG21 ILE C 107 -18.984 21.116 -9.856 1.00 36.66 H
ATOM 7164 HG22 ILE C 107 -20.232 20.429 -10.560 1.00 36.66 H
ATOM 7165 HG23 ILE C 107 -19.193 19.545 -9.745 1.00 36.66 H
ATOM 7166 HD11 ILE C 107 -15.437 21.184 -10.540 1.00 42.21 H
ATOM 7167 HD12 ILE C 107 -16.486 22.018 -11.393 1.00 42.21 H
ATOM 7168 HD13 ILE C 107 -16.845 21.569 -9.912 1.00 42.21 H
ATOM 7169 N TYR C 108 -21.194 18.040 -11.959 1.00 22.50 N
ANISOU 7169 N TYR C 108 3718 2693 2139 77 -364 792 N
ATOM 7170 CA TYR C 108 -22.647 18.035 -12.065 1.00 21.72 C
ANISOU 7170 CA TYR C 108 3661 2513 2078 188 -179 695 C
ATOM 7171 C TYR C 108 -23.303 18.049 -10.693 1.00 23.16 C
ANISOU 7171 C TYR C 108 4088 2574 2136 353 -89 649 C
ATOM 7172 O TYR C 108 -22.715 17.656 -9.680 1.00 22.60 O
ANISOU 7172 O TYR C 108 4147 2488 1950 413 -116 686 O
ATOM 7173 CB TYR C 108 -23.179 16.803 -12.813 1.00 20.37 C
ANISOU 7173 CB TYR C 108 3270 2420 2050 235 30 672 C
ATOM 7174 CG TYR C 108 -22.619 16.597 -14.195 1.00 19.12 C
ANISOU 7174 CG TYR C 108 2886 2411 1966 158 -23 697 C
ATOM 7175 CD1 TYR C 108 -23.146 17.270 -15.288 1.00 19.35 C
ANISOU 7175 CD1 TYR C 108 2852 2455 2046 125 -53 662 C
ATOM 7176 CD2 TYR C 108 -21.576 15.707 -14.413 1.00 19.45 C
ANISOU 7176 CD2 TYR C 108 2790 2595 2004 159 -38 755 C
ATOM 7177 CE1 TYR C 108 -22.641 17.076 -16.553 1.00 18.32 C
ANISOU 7177 CE1 TYR C 108 2540 2488 1934 102 -82 698 C
ATOM 7178 CE2 TYR C 108 -21.065 15.507 -15.675 1.00 18.75 C
ANISOU 7178 CE2 TYR C 108 2502 2683 1937 149 -62 781 C
ATOM 7179 CZ TYR C 108 -21.601 16.197 -16.738 1.00 18.29 C
ANISOU 7179 CZ TYR C 108 2398 2647 1904 125 -76 759 C
ATOM 7180 OH TYR C 108 -21.107 16.002 -17.997 1.00 18.52 O
ANISOU 7180 OH TYR C 108 2253 2875 1909 159 -82 795 O
ATOM 7181 H TYR C 108 -20.881 17.422 -11.449 1.00 27.00 H
ATOM 7182 HA TYR C 108 -22.933 18.828 -12.546 1.00 26.06 H
ATOM 7183 HB2 TYR C 108 -22.968 16.012 -12.292 1.00 24.44 H
ATOM 7184 HB3 TYR C 108 -24.142 16.887 -12.898 1.00 24.44 H
ATOM 7185 HD1 TYR C 108 -23.848 17.868 -15.163 1.00 23.22 H
ATOM 7186 HD2 TYR C 108 -21.212 15.244 -13.693 1.00 23.33 H
ATOM 7187 HE1 TYR C 108 -23.000 17.537 -17.277 1.00 21.99 H
ATOM 7188 HE2 TYR C 108 -20.363 14.912 -15.808 1.00 22.50 H
ATOM 7189 HH TYR C 108 -21.528 16.477 -18.548 1.00 22.23 H
ATOM 7190 N THR C 109 -24.558 18.483 -10.682 1.00 23.90 N
ANISOU 7190 N THR C 109 4239 2599 2241 456 30 575 N
ATOM 7191 CA THR C 109 -25.439 18.254 -9.551 1.00 26.35 C
ANISOU 7191 CA THR C 109 4701 2861 2450 659 227 559 C
ATOM 7192 C THR C 109 -26.722 17.635 -10.071 1.00 26.33 C
ANISOU 7192 C THR C 109 4483 2884 2636 702 490 549 C
ATOM 7193 O THR C 109 -27.258 18.060 -11.100 1.00 25.92 O
ANISOU 7193 O THR C 109 4300 2831 2717 648 454 483 O

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ATOM   7194  CB  THR C 109    -25.745  19.542  -8.770  1.00 29.03           C
ANISOU 7194  CB  THR C 109     5349   3095   2586    805     94    477      C
ATOM   7195  OG1 THR C 109    -26.547  20.425  -9.569  1.00 29.46           O
ANISOU 7195  OG1 THR C 109     5364   3110   2721    801     52    391      O
ATOM   7196  CG2 THR C 109    -24.453  20.232  -8.379  1.00 30.33           C
ANISOU 7196  CG2 THR C 109     5713   3186   2626    724   -253    479      C
ATOM   7197  H   THR C 109    -24.925  18.917 -11.328  1.00 28.67           H
ATOM   7198  HA  THR C 109    -25.022  17.624  -8.943  1.00 31.62           H
ATOM   7199  HB  THR C 109    -26.227  19.318  -7.959  1.00 34.84           H
ATOM   7200  HG1 THR C 109    -26.714  21.129  -9.141  1.00 35.36           H
ATOM   7201 HG21 THR C 109    -24.648  21.045  -7.886  1.00 36.40           H
ATOM   7202 HG22 THR C 109    -23.920  19.645  -7.820  1.00 36.40           H
ATOM   7203 HG23 THR C 109    -23.945  20.459  -9.173  1.00 36.40           H
ATOM   7204  N   THR C 110    -27.176  16.600  -9.387  1.00 27.15           N
ANISOU 7204  N   THR C 110     4543   3003   2771    788    732    632      N
ATOM   7205  CA  THR C 110    -28.499  16.045  -9.583  1.00 28.08           C
ANISOU 7205  CA  THR C 110     4461   3123   3087    837    984    660      C
ATOM   7206  C   THR C 110    -29.128  15.931  -8.205  1.00 33.19           C
ANISOU 7206  C   THR C 110     5249   3785   3578   1039   1228    758      C
ATOM   7207  O   THR C 110    -28.485  16.194  -7.185  1.00 34.35           O
ANISOU 7207  O   THR C 110     5670   3930   3450   1151   1178    780      O
ATOM   7208  CB  THR C 110    -28.448  14.686 -10.303  1.00 26.70           C
ANISOU 7208  CB  THR C 110     4028   2941   3176    708   1036    715      C
ATOM   7209  OG1 THR C 110    -27.680  13.761  -9.529  1.00 27.59           O
ANISOU 7209  OG1 THR C 110     4224   3050   3211    712   1075    827      O
ATOM   7210  CG2 THR C 110    -27.808  14.828 -11.692  1.00 24.81           C
ANISOU 7210  CG2 THR C 110     3671   2728   3028    576    810    615      C
ATOM   7211  H   THR C 110    -26.720  16.189  -8.785  1.00 32.58           H
ATOM   7212  HA  THR C 110    -29.032  16.656 -10.116  1.00 33.70           H
ATOM   7213  HB  THR C 110    -29.350  14.344 -10.414  1.00 32.04           H
ATOM   7214  HG1 THR C 110    -28.030  13.658  -8.773  1.00 33.11           H
ATOM   7215 HG21 THR C 110    -27.782  13.965 -12.135  1.00 29.78           H
ATOM   7216 HG22 THR C 110    -28.325  15.445 -12.234  1.00 29.78           H
ATOM   7217 HG23 THR C 110    -26.903  15.166 -11.606  1.00 29.78           H
ATOM   7218  N   THR C 111    -30.396  15.567  -8.164  1.00 37.06           N
ANISOU 7218  N   THR C 111     5547   4298   4236   1102   1487    826      N
ATOM   7219  CA  THR C 111    -31.076  15.458  -6.887  1.00 42.95           C
ANISOU 7219  CA  THR C 111     6390   5106   4823   1319   1777    963      C
ATOM   7220  C   THR C 111    -31.919  14.200  -6.891  1.00 46.07           C
ANISOU 7220  C   THR C 111     6478   5507   5521   1244   2059   1162      C
ATOM   7221  O   THR C 111    -32.483  13.816  -7.922  1.00 45.27           O
ANISOU 7221  O   THR C 111     6076   5357   5769   1089   2031   1134      O
ATOM   7222  CB  THR C 111    -31.940  16.694  -6.593  1.00 45.08           C
ANISOU 7222  CB  THR C 111     6763   5434   4931   1553   1830   1164      C
ATOM   7223  OG1 THR C 111    -32.406  16.641  -5.237  1.00 48.83           O
ANISOU 7223  OG1 THR C 111     7391   6009   5152   1830   2112    999      O
ATOM   7224  CG2 THR C 111    -33.123  16.778  -7.549  1.00 45.29           C
ANISOU 7224  CG2 THR C 111     6454   5475   5278   1499   1910    823      C
ATOM   7225  H   THR C 111    -30.881  15.379  -8.850  1.00 44.47           H
ATOM   7226  HA  THR C 111    -30.416  15.377  -6.181  1.00 51.54           H
ATOM   7227  HB  THR C 111    -31.402  17.492  -6.712  1.00 54.09           H
ATOM   7228  HG1 THR C 111    -31.753  16.629  -4.709  1.00 58.59           H
ATOM   7229 HG21 THR C 111    -33.656  17.563  -7.348  1.00 54.35           H
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ATOM   7230 HG22 THR C 111    -32.806  16.837  -8.464  1.00 54.35           H
ATOM   7231 HG23 THR C 111    -33.679  15.988  -7.458  1.00 54.35           H
ATOM   7232  N   ARG C 112    -31.967  13.552  -5.735  1.00 49.71           N
ANISOU 7232  N   ARG C 112    7031   6008   5849   1354   2301   1373      N
ATOM   7233  CA  ARG C 112    -32.742  12.341  -5.527  1.00 52.98           C
ANISOU 7233  CA  ARG C 112    7165   6395   6570   1259   2491   1581      C
ATOM   7234  C   ARG C 112    -33.839  12.650  -4.521  1.00 56.48           C
ANISOU 7234  C   ARG C 112    7580   6958   6923   1468   2717   1691      C
ATOM   7235  O   ARG C 112    -33.567  13.215  -3.458  1.00 58.43           O
ANISOU 7235  O   ARG C 112    8117   7279   6807   1701   2731   1674      O
ATOM   7236  CB  ARG C 112    -31.843  11.204  -5.029  1.00 53.88           C
ANISOU 7236  CB  ARG C 112    7378   6430   6665   1173   2429   1685      C
ATOM   7237  CG  ARG C 112    -31.629  10.055  -6.019  1.00 52.98           C
ANISOU 7237  CG  ARG C 112    7041   6170   6920    919   2330   1728      C
ATOM   7238  CD  ARG C 112    -31.381  10.540  -7.437  1.00 49.74           C
ANISOU 7238  CD  ARG C 112    6530   5716   6651    801   2105   1518      C
ATOM   7239  H   ARG C 112    -31.542  13.806  -5.031  1.00 59.66           H
ATOM   7240  HA  ARG C 112    -33.153  12.069  -6.363  1.00 63.57           H
ATOM   7241  HB2 ARG C 112    -30.970  11.572  -4.818  1.00 64.66           H
ATOM   7242  HB3 ARG C 112    -32.238  10.828  -4.227  1.00 64.66           H
ATOM   7243  HG2 ARG C 112    -30.859   9.537  -5.740  1.00 63.58           H
ATOM   7244  HG3 ARG C 112    -32.421   9.495  -6.028  1.00 63.58           H
ATOM   7245  N   TYR C 113    -35.078  12.335  -4.889  1.00 70.74           N
ANISOU 7245  N   TYR C 113    9081   7809   9986    866   2745   1775      N
ATOM   7246  CA  TYR C 113    -36.218  12.411  -3.987  1.00 74.62           C
ANISOU 7246  CA  TYR C 113    9147   8621  10584   1059   2973   2128      C
ATOM   7247  C   TYR C 113    -36.951  11.081  -4.033  1.00 80.14           C
ANISOU 7247  C   TYR C 113    9438   9384  11627    711   2854   2411      C
ATOM   7248  O   TYR C 113    -37.178  10.527  -5.113  1.00 78.27           O
ANISOU 7248  O   TYR C 113    9132   9034  11574    392   2513   2390      O
ATOM   7249  CB  TYR C 113    -37.172  13.549  -4.367  1.00 75.14           C
ANISOU 7249  CB  TYR C 113    9035   8884 10632   1350   2984   2225      C
ATOM   7250  H   TYR C 113    -35.287  12.068  -5.679  1.00 84.89           H
ATOM   7251  HA  TYR C 113    -35.905  12.560  -3.081  1.00 89.55           H
ATOM   7252  N   ASN C 114    -37.323  10.569  -2.862  1.00 87.62           N
ANISOU 7252  N   ASN C 114   10142  10496  12653    773   3132   2679      N
ATOM   7253  CA  ASN C 114    -37.826   9.203  -2.785  1.00 93.96           C
ANISOU 7253  CA  ASN C 114   10613  11313  13776    414   3050   2931      C
ATOM   7254  C   ASN C 114    -36.690   8.264  -3.161  1.00 90.54           C
ANISOU 7254  C   ASN C 114   10536  10562  13302     78   2866   2683      C
ATOM   7255  O   ASN C 114    -36.789   7.509  -4.135  1.00 92.53           O
ANISOU 7255  O   ASN C 114   10760  10659  13738   -290   2539   2656      O
ATOM   7256  CB  ASN C 114    -39.030   9.000  -3.712  1.00 99.47           C
ANISOU 7256  CB  ASN C 114   10871  12121  14804    205   2763   3149      C
ATOM   7257  H   ASN C 114    -37.295  10.985  -2.110  1.00105.14           H
ATOM   7258  HA  ASN C 114    -38.100   9.008  -1.876  1.00112.76           H
ATOM   7259  N   ALA C 115    -35.597   8.327  -2.400  1.00 84.12           N
ANISOU 7259  N   ALA C 115   10080   9642 12239    217   3067   2502      N
ATOM   7260  CA  ALA C 115    -34.398   7.565  -2.683  1.00 76.49           C
ANISOU 7260  CA  ALA C 115    9475   8379 11208    -30   2938   2262      C
ATOM   7261  C   ALA C 115    -33.815   7.002  -1.393  1.00 69.82           C
ANISOU 7261  C   ALA C 115    8724   7538 10268     43   3211   2322      C
ATOM   7262  O   ALA C 115    -33.882   7.656  -0.341  1.00 72.43           O
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ANISOU 7262 O ALA C 115 9060 8031 10428 387 3497 2389 O
ATOM 7263 CB ALA C 115 -33.343 8.433 -3.382 1.00 73.68 C
ANISOU 7263 CB ALA C 115 9562 7819 10613 73 2824 1884 C
ATOM 7264 H ALA C 115 -35.532 8.819 -1.697 1.00100.94 H
ATOM 7265 HA ALA C 115 -34.620 6.824 -3.268 1.00 91.78 H
ATOM 7266 HB1 ALA C 115 -33.710 8.764 -4.216 1.00 88.41 H
ATOM 7267 HB2 ALA C 115 -33.113 9.177 -2.803 1.00 88.41 H
ATOM 7268 HB3 ALA C 115 -32.557 7.894 -3.556 1.00 88.41 H
ATOM 7269 N PRO C 116 -33.236 5.804 -1.444 1.00 60.02 N
ANISOU 7269 N PRO C 116 7591 6105 9108 -255 3131 2298 N
ATOM 7270 CA PRO C 116 -32.545 5.272 -0.265 1.00 55.56 C
ANISOU 7270 CA PRO C 116 7169 5529 8414 -167 3337 2302 C
ATOM 7271 C PRO C 116 -31.226 5.987 -0.032 1.00 51.95 C
ANISOU 7271 C PRO C 116 7136 4939 7662 44 3367 1982 C
ATOM 7272 O PRO C 116 -30.499 6.312 -0.974 1.00 48.11 O
ANISOU 7272 O PRO C 116 6905 4243 7131 -44 3203 1742 O
ATOM 7273 CB PRO C 116 -32.323 3.799 -0.622 1.00 54.42 C
ANISOU 7273 CB PRO C 116 7026 5248 8405 -539 3091 2271 C
ATOM 7274 CG PRO C 116 -32.245 3.800 -2.120 1.00 53.62 C
ANISOU 7274 CG PRO C 116 7032 4933 8408 -798 2810 2145 C
ATOM 7275 CD PRO C 116 -33.189 4.869 -2.580 1.00 56.42 C
ANISOU 7275 CD PRO C 116 7167 5430 8839 -666 2817 2250 C
ATOM 7276 HA PRO C 116 -33.104 5.340 0.524 1.00 66.67 H
ATOM 7277 HB2 PRO C 116 -31.492 3.486 -0.231 1.00 65.31 H
ATOM 7278 HB3 PRO C 116 -33.074 3.267 -0.314 1.00 65.31 H
ATOM 7279 HG2 PRO C 116 -31.339 4.003 -2.398 1.00 64.34 H
ATOM 7280 HG3 PRO C 116 -32.520 2.933 -2.460 1.00 64.34 H
ATOM 7281 HD2 PRO C 116 -32.838 5.312 -3.368 1.00 67.70 H
ATOM 7282 HD3 PRO C 116 -34.069 4.494 -2.745 1.00 67.70 H
ATOM 7283 N SER C 117 -30.916 6.220 1.236 1.00 53.73 N
ANISOU 7283 N SER C 117 7443 5275 7696 322 3547 1974 N
ATOM 7284 CA SER C 117 -29.680 6.892 1.613 1.00 51.91 C
ANISOU 7284 CA SER C 117 7590 4926 7208 517 3557 1695 C
ATOM 7285 C SER C 117 -29.198 6.242 2.905 1.00 52.56 C
ANISOU 7285 C SER C 117 7738 5041 7189 617 3620 1707 C
ATOM 7286 O SER C 117 -29.549 5.098 3.220 1.00 53.37 O
ANISOU 7286 O SER C 117 7662 5193 7424 461 3605 1858 O
ATOM 7287 CB SER C 117 -29.905 8.408 1.732 1.00 52.13 C
ANISOU 7287 CB SER C 117 7717 5042 7046 846 3700 1650 C
ATOM 7288 H SER C 117 -31.410 5.997 1.904 1.00 64.47 H
ATOM 7289 HA SER C 117 -29.011 6.738 0.928 1.00 62.29 H
ATOM 7290 N ILE C 118 -28.378 6.971 3.659 1.00 52.25 N
ANISOU 7290 N ILE C 118 7981 4958 6912 872 3674 1546 N
ATOM 7291 CA ILE C 118 -27.971 6.537 4.991 1.00 53.71 C
ANISOU 7291 CA ILE C 118 8268 5167 6971 1022 3743 1576 C
ATOM 7292 C ILE C 118 -28.853 7.158 6.071 1.00 56.56 C
ANISOU 7292 C ILE C 118 8570 5713 7206 1350 3927 1753 C
ATOM 7293 O ILE C 118 -28.886 6.642 7.200 1.00 57.25 O
ANISOU 7293 O ILE C 118 8680 5844 7227 1468 4014 1858 O
ATOM 7294 CB ILE C 118 -26.483 6.864 5.244 1.00 51.35 C
ANISOU 7294 CB ILE C 118 8330 4679 6501 1084 3648 1314 C
ATOM 7295 CG1 ILE C 118 -26.230 8.373 5.149 1.00 50.23 C
ANISOU 7295 CG1 ILE C 118 8412 4495 6180 1295 3634 1163 C

ATOM 7296 CG2 ILE C 118 -25.614 6.108 4.240 1.00 49.23 C
ANISOU 7296 CG2 ILE C 118 8086 4245 6373 778 3463 1149 C
ATOM 7297 CD1 ILE C 118 -24.796 8.781 5.450 1.00 48.41 C
ANISOU 7297 CD1 ILE C 118 8524 4069 5801 1331 3509 947 C
ATOM 7298 H ILE C 118 -28.041 7.725 3.419 1.00 62.69 H
ATOM 7299 HA ILE C 118 -28.074 5.574 5.047 1.00 64.45 H
ATOM 7300 HB ILE C 118 -26.250 6.567 6.138 1.00 61.62 H
ATOM 7301 HG12 ILE C 118 -26.438 8.668 4.249 1.00 60.28 H
ATOM 7302 HG13 ILE C 118 -26.805 8.826 5.785 1.00 60.28 H
ATOM 7303 HG21 ILE C 118 -24.682 6.320 4.407 1.00 59.07 H
ATOM 7304 HG22 ILE C 118 -25.762 5.156 4.349 1.00 59.07 H
ATOM 7305 HG23 ILE C 118 -25.859 6.381 3.342 1.00 59.07 H
ATOM 7306 HD11 ILE C 118 -24.719 9.744 5.369 1.00 58.09 H
ATOM 7307 HD12 ILE C 118 -24.573 8.505 6.352 1.00 58.09 H
ATOM 7308 HD13 ILE C 118 -24.205 8.347 4.815 1.00 58.09 H
ATOM 7309 N ASP C 119 -29.563 8.238 5.759 1.00 57.82 N
ANISOU 7309 N ASP C 119 8671 5971 7326 1512 3982 1787 N
ATOM 7310 CA ASP C 119 -30.650 8.754 6.593 1.00 60.35 C
ANISOU 7310 CA ASP C 119 8865 6481 7585 1802 4150 1999 C
ATOM 7311 C ASP C 119 -32.006 8.340 6.041 1.00 62.12 C
ANISOU 7311 C ASP C 119 8644 6884 8075 1686 4245 2278 C
ATOM 7312 O ASP C 119 -32.891 9.180 5.878 1.00 65.13 O
ANISOU 7312 O ASP C 119 8884 7403 8460 1865 4328 2391 O
ATOM 7313 CB ASP C 119 -30.575 10.273 6.698 1.00 60.09 C
ANISOU 7313 CB ASP C 119 9065 6441 7327 2081 4121 1870 C
ATOM 7314 CG ASP C 119 -29.311 10.755 7.363 1.00 58.14 C
ANISOU 7314 CG ASP C 119 9240 6019 6831 2179 3987 1638 C
ATOM 7315 OD1 ASP C 119 -28.560 9.912 7.898 1.00 57.58 O
ANISOU 7315 OD1 ASP C 119 9274 5858 6747 2097 3964 1602 O
ATOM 7316 OD2 ASP C 119 -29.082 11.988 7.368 1.00 57.11 O
ANISOU 7316 OD2 ASP C 119 9328 5848 6524 2324 3887 1510 O
ATOM 7317 H ASP C 119 -29.430 8.704 5.048 1.00 69.38 H
ATOM 7318 HA ASP C 119 -30.564 8.386 7.486 1.00 72.43 H
ATOM 7319 HB2 ASP C 119 -30.608 10.653 5.806 1.00 72.11 H
ATOM 7320 HB3 ASP C 119 -31.328 10.590 7.221 1.00 72.11 H
ATOM 7321 N GLY C 120 -32.195 7.065 5.727 1.00 60.50 N
ANISOU 7321 N GLY C 120 8209 6672 8105 1375 4206 2399 N
ATOM 7322 CA GLY C 120 -33.512 6.552 5.403 1.00 62.59 C
ANISOU 7322 CA GLY C 120 8030 7100 8652 1241 4270 2703 C
ATOM 7323 C GLY C 120 -33.547 5.790 4.089 1.00 62.36 C
ANISOU 7323 C GLY C 120 7828 6982 8886 807 4073 2704 C
ATOM 7324 O GLY C 120 -32.626 5.830 3.273 1.00 57.91 O
ANISOU 7324 O GLY C 120 7496 6228 8278 640 3904 2464 O
ATOM 7325 H GLY C 120 -31.571 6.474 5.696 1.00 72.60 H
ATOM 7326 HA2 GLY C 120 -33.807 5.956 6.109 1.00 75.11 H
ATOM 7327 HA3 GLY C 120 -34.138 7.290 5.345 1.00 75.11 H
ATOM 7328 N ASP C 121 -34.677 5.098 3.894 1.00 68.76 N
ANISOU 7328 N ASP C 121 8230 7913 9984 624 4080 2989 N
ATOM 7329 CA ASP C 121 -34.899 4.236 2.736 1.00 71.86 C
ANISOU 7329 CA ASP C 121 8442 8208 10655 181 3845 3032 C
ATOM 7330 C ASP C 121 -35.563 4.961 1.574 1.00 75.38 C
ANISOU 7330 C ASP C 121 8679 8695 11268 106 3763 3114 C
ATOM 7331 O ASP C 121 -35.421 4.532 0.423 1.00 74.42 O

ANISOU 7331 O ASP C 121 8568 8402 11306 -240 3509 3049 O
ATOM 7332 CB ASP C 121 -35.767 3.038 3.135 1.00 75.30 C
ANISOU 7332 CB ASP C 121 8550 8727 11332 -17 3849 3294 C
ATOM 7333 H ASP C 121 -35.344 5.116 4.437 1.00 82.52 H
ATOM 7334 HA ASP C 121 -34.044 3.897 2.428 1.00 86.24 H
ATOM 7335 N ARG C 122 -36.308 6.030 1.850 1.00 80.41 N
ANISOU 7335 N ARG C 122 9142 9545 11867 433 3954 3258 N
ATOM 7336 CA ARG C 122 -36.862 6.898 0.810 1.00 83.72 C
ANISOU 7336 CA ARG C 122 9391 10028 12392 442 3884 3311 C
ATOM 7337 C ARG C 122 -36.620 8.330 1.279 1.00 84.36 C
ANISOU 7337 C ARG C 122 9712 10201 12140 918 4083 3172 C
ATOM 7338 O ARG C 122 -37.353 8.841 2.132 1.00 86.98 O
ANISOU 7338 O ARG C 122 9891 10743 12416 1251 4299 3352 O
ATOM 7339 CB ARG C 122 -38.343 6.623 0.576 1.00 89.12 C
ANISOU 7339 CB ARG C 122 9485 10928 13447 331 3869 3700 C
ATOM 7340 H ARG C 122 -36.510 6.279 2.647 1.00 96.50 H
ATOM 7341 HA ARG C 122 -36.384 6.758 -0.022 1.00100.47 H
ATOM 7342 N THR C 123 -35.586 8.969 0.731 1.00 81.71 N
ANISOU 7342 N THR C 123 9800 9675 11570 951 3912 2789 N
ATOM 7343 CA THR C 123 -35.115 10.248 1.239 1.00 79.95 C
ANISOU 7343 CA THR C 123 9902 9474 11003 1361 4079 2609 C
ATOM 7344 C THR C 123 -34.784 11.184 0.086 1.00 74.06 C
ANISOU 7344 C THR C 123 9354 8615 10170 1369 3832 2320 C
ATOM 7345 O THR C 123 -34.728 10.783 -1.080 1.00 76.14 O
ANISOU 7345 O THR C 123 9579 8749 10602 1059 3529 2222 O
ATOM 7346 CB THR C 123 -33.879 10.073 2.132 1.00 79.32 C
ANISOU 7346 CB THR C 123 10236 9233 10667 1434 4143 2396 C
ATOM 7347 H THR C 123 -35.140 8.676 0.057 1.00 98.05 H
ATOM 7348 HA THR C 123 -35.816 10.658 1.770 1.00 95.94 H
ATOM 7349 N THR C 124 -34.552 12.447 0.440 1.00 65.93 N
ANISOU 7349 N THR C 124 8581 7615 8856 1740 3974 2184 N
ATOM 7350 CA THR C 124 -34.157 13.488 -0.504 1.00 58.20 C
ANISOU 7350 CA THR C 124 7851 6516 7746 1809 3800 1901 C
ATOM 7351 C THR C 124 -32.759 13.961 -0.135 1.00 55.25 C
ANISOU 7351 C THR C 124 7977 5925 7090 1896 3813 1572 C
ATOM 7352 O THR C 124 -32.541 14.443 0.982 1.00 53.37 O
ANISOU 7352 O THR C 124 7916 5718 6644 2136 3913 1560 O
ATOM 7353 CB THR C 124 -35.125 14.680 -0.504 1.00 56.91 C
ANISOU 7353 CB THR C 124 7565 6560 7499 2175 3941 2024 C
ATOM 7354 OG1 THR C 124 -36.385 14.278 -1.053 1.00 59.04 O
ANISOU 7354 OG1 THR C 124 7337 7020 8077 2060 3861 2319 O
ATOM 7355 CG2 THR C 124 -34.564 15.853 -1.303 1.00 53.86 C
ANISOU 7355 CG2 THR C 124 7528 6021 6914 2295 3810 1705 C
ATOM 7356 H THR C 124 -34.620 12.733 1.248 1.00 79.12 H
ATOM 7357 HA THR C 124 -34.128 13.116 -1.400 1.00 69.84 H
ATOM 7358 HB THR C 124 -35.259 14.977 0.410 1.00 68.29 H
ATOM 7359 HG1 THR C 124 -36.918 14.927 -1.054 1.00 70.85 H
ATOM 7360 HG21 THR C 124 -35.191 16.593 -1.289 1.00 64.63 H
ATOM 7361 HG22 THR C 124 -33.723 16.145 -0.917 1.00 64.63 H
ATOM 7362 HG23 THR C 124 -34.413 15.585 -2.223 1.00 64.63 H
ATOM 7363 N PHE C 125 -31.821 13.829 -1.069 1.00 47.59 N
ANISOU 7363 N PHE C 125 7566 6057 4461 3107 1905 1311 N
ATOM 7364 CA PHE C 125 -30.473 14.336 -0.875 1.00 49.35 C

ANISOU 7364 CA PHE C 125 8163 5984 4602 2965 1776 1031 C
ATOM 7365 C PHE C 125 -29.986 14.976 -2.166 1.00 47.94 C
ANISOU 7365 C PHE C 125 8039 5665 4510 2844 1690 955 C
ATOM 7366 O PHE C 125 -30.555 14.781 -3.244 1.00 47.36 O
ANISOU 7366 O PHE C 125 7684 5735 4575 2828 1716 1096 O
ATOM 7367 CB PHE C 125 -29.501 13.231 -0.432 1.00 48.99 C
ANISOU 7367 CB PHE C 125 8092 5941 4583 2736 1662 918 C
ATOM 7368 CG PHE C 125 -29.581 11.981 -1.261 1.00 47.46 C
ANISOU 7368 CG PHE C 125 7520 5946 4565 2567 1623 1031 C
ATOM 7369 CD1 PHE C 125 -28.646 11.729 -2.254 1.00 45.19 C
ANISOU 7369 CD1 PHE C 125 7227 5583 4359 2349 1491 917 C
ATOM 7370 CD2 PHE C 125 -30.584 11.049 -1.039 1.00 48.45 C
ANISOU 7370 CD2 PHE C 125 7299 6351 4760 2607 1700 1265 C
ATOM 7371 CE1 PHE C 125 -28.719 10.573 -3.019 1.00 43.79 C
ANISOU 7371 CE1 PHE C 125 6707 5560 4370 2132 1361 1018 C
ATOM 7372 CE2 PHE C 125 -30.662 9.894 -1.796 1.00 46.80 C
ANISOU 7372 CE2 PHE C 125 6773 6307 4700 2396 1614 1392 C
ATOM 7373 CZ PHE C 125 -29.730 9.655 -2.788 1.00 44.47 C
ANISOU 7373 CZ PHE C 125 6497 5889 4511 2157 1422 1258 C
ATOM 7374 H PHE C 125 -31.945 13.446 -1.829 1.00 57.11 H
ATOM 7375 HA PHE C 125 -30.487 15.019 -0.186 1.00 59.22 H
ATOM 7376 HB2 PHE C 125 -28.594 13.570 -0.494 1.00 58.79 H
ATOM 7377 HB3 PHE C 125 -29.699 12.991 0.486 1.00 58.79 H
ATOM 7378 HD1 PHE C 125 -27.967 12.344 -2.414 1.00 54.23 H
ATOM 7379 HD2 PHE C 125 -31.216 11.205 -0.374 1.00 58.14 H
ATOM 7380 HE1 PHE C 125 -28.089 10.414 -3.685 1.00 52.54 H
ATOM 7381 HE2 PHE C 125 -31.341 9.279 -1.638 1.00 56.16 H
ATOM 7382 HZ PHE C 125 -29.780 8.879 -3.297 1.00 53.37 H
ATOM 7383 N THR C 126 -28.926 15.762 -2.030 1.00 46.26 N
ANISOU 7383 N THR C 126 8185 5177 4214 2746 1571 741 N
ATOM 7384 CA THR C 126 -28.250 16.366 -3.164 1.00 42.98 C
ANISOU 7384 CA THR C 126 7839 4604 3886 2597 1456 654 C
ATOM 7385 C THR C 126 -27.094 15.474 -3.585 1.00 38.74 C
ANISOU 7385 C THR C 126 7220 4048 3450 2330 1304 556 C
ATOM 7386 O THR C 126 -26.423 14.869 -2.743 1.00 36.66 O
ANISOU 7386 O THR C 126 7046 3767 3117 2230 1244 458 O
ATOM 7387 CB THR C 126 -27.746 17.763 -2.798 1.00 45.69 C
ANISOU 7387 CB THR C 126 8618 4649 4093 2623 1379 505 C
ATOM 7388 OG1 THR C 126 -28.869 18.634 -2.618 1.00 48.91 O
ANISOU 7388 OG1 THR C 126 9087 5073 4424 2907 1522 591 O
ATOM 7389 CG2 THR C 126 -26.814 18.336 -3.879 1.00 44.22 C
ANISOU 7389 CG2 THR C 126 8522 4267 4013 2410 1207 427 C
ATOM 7390 H THR C 126 -28.572 15.964 -1.273 1.00 55.51 H
ATOM 7391 HA THR C 126 -28.868 16.444 -3.908 1.00 51.57 H
ATOM 7392 HB THR C 126 -27.248 17.712 -1.967 1.00 54.83 H
ATOM 7393 HG1 THR C 126 -28.604 19.405 -2.417 1.00 58.69 H
ATOM 7394 HG21 THR C 126 -26.511 19.220 -3.620 1.00 53.07 H
ATOM 7395 HG22 THR C 126 -26.042 17.759 -3.991 1.00 53.07 H
ATOM 7396 HG23 THR C 126 -27.286 18.400 -4.724 1.00 53.07 H
ATOM 7397 N GLN C 127 -26.879 15.386 -4.894 1.00 36.33 N
ANISOU 7397 N GLN C 127 6736 3759 3310 2221 1230 599 N
ATOM 7398 CA GLN C 127 -25.789 14.608 -5.462 1.00 32.27 C
ANISOU 7398 CA GLN C 127 6060 3310 2891 1882 1033 531 C

ATOM 7399 C GLN C 127 -24.784 15.548 -6.113 1.00 30.62 C
ANISOU 7399 C GLN C 127 6032 2916 2687 1699 878 459 C
ATOM 7400 O GLN C 127 -25.128 16.277 -7.048 1.00 30.58 O
ANISOU 7400 O GLN C 127 6004 2876 2741 1737 885 549 O
ATOM 7401 CB GLN C 127 -26.317 13.590 -6.469 1.00 31.26 C
ANISOU 7401 CB GLN C 127 5510 3443 2922 1805 1017 658 C
ATOM 7402 CG GLN C 127 -27.149 12.498 -5.829 1.00 31.89 C
ANISOU 7402 CG GLN C 127 5386 3710 3019 1891 1105 761 C
ATOM 7403 CD GLN C 127 -27.578 11.445 -6.824 1.00 31.71 C
ANISOU 7403 CD GLN C 127 4997 3898 3155 1764 1023 872 C
ATOM 7404 OE1 GLN C 127 -28.113 11.763 -7.881 1.00 32.95 O
ANISOU 7404 OE1 GLN C 127 5013 4123 3385 1784 1025 974 O
ATOM 7405 NE2 GLN C 127 -27.332 10.180 -6.496 1.00 31.57 N
ANISOU 7405 NE2 GLN C 127 4845 3964 3186 1626 925 853 N
ATOM 7406 H GLN C 127 -27.364 15.779 -5.486 1.00 43.60 H
ATOM 7407 HA GLN C 127 -25.337 14.126 -4.752 1.00 38.72 H
ATOM 7408 HB2 GLN C 127 -26.873 14.048 -7.118 1.00 37.51 H
ATOM 7409 HB3 GLN C 127 -25.565 13.169 -6.915 1.00 37.51 H
ATOM 7410 HG2 GLN C 127 -26.626 12.064 -5.137 1.00 38.27 H
ATOM 7411 HG3 GLN C 127 -27.948 12.892 -5.445 1.00 38.27 H
ATOM 7412 HE21 GLN C 127 -26.948 9.996 -5.749 1.00 37.88 H
ATOM 7413 HE22 GLN C 127 -27.558 9.545 -7.031 1.00 37.88 H
ATOM 7414 N TYR C 128 -23.568 15.561 -5.578 1.00 30.99 N
ANISOU 7414 N TYR C 128 6256 2852 2669 1494 730 327 N
ATOM 7415 CA TYR C 128 -22.420 16.205 -6.198 1.00 30.90 C
ANISOU 7415 CA TYR C 128 6330 2737 2674 1234 544 299 C
ATOM 7416 C TYR C 128 -21.688 15.176 -7.045 1.00 27.59 C
ANISOU 7416 C TYR C 128 5545 2579 2361 1008 447 307 C
ATOM 7417 O TYR C 128 -21.433 14.062 -6.578 1.00 25.38 O
ANISOU 7417 O TYR C 128 5122 2428 2095 972 430 250 O
ATOM 7418 CB TYR C 128 -21.453 16.751 -5.144 1.00 34.60 C
ANISOU 7418 CB TYR C 128 7166 2970 3009 1109 408 178 C
ATOM 7419 CG TYR C 128 -21.933 17.930 -4.326 1.00 39.98 C
ANISOU 7419 CG TYR C 128 8315 3328 3547 1316 453 121 C
ATOM 7420 CD1 TYR C 128 -23.222 18.430 -4.452 1.00 42.52 C
ANISOU 7420 CD1 TYR C 128 8693 3600 3863 1655 646 182 C
ATOM 7421 CD2 TYR C 128 -21.075 18.547 -3.421 1.00 42.85 C
ANISOU 7421 CD2 TYR C 128 9078 3432 3770 1184 287 3 C
ATOM 7422 CE1 TYR C 128 -23.647 19.520 -3.692 1.00 46.39 C
ANISOU 7422 CE1 TYR C 128 9493 3931 4203 1803 669 118 C
ATOM 7423 CE2 TYR C 128 -21.486 19.633 -2.661 1.00 46.36 C
ANISOU 7423 CE2 TYR C 128 9903 3653 4060 1344 295 -66 C
ATOM 7424 CZ TYR C 128 -22.773 20.119 -2.798 1.00 48.13 C
ANISOU 7424 CZ TYR C 128 10087 3926 4275 1657 491 -10 C
ATOM 7425 OH TYR C 128 -23.189 21.207 -2.044 1.00 51.24 O
ANISOU 7425 OH TYR C 128 10813 4146 4508 1824 493 -68 O
ATOM 7426 H TYR C 128 -23.379 15.187 -4.826 1.00 37.19 H
ATOM 7427 HA TYR C 128 -22.714 16.934 -6.767 1.00 37.08 H
ATOM 7428 HB2 TYR C 128 -21.247 16.035 -4.523 1.00 41.51 H
ATOM 7429 HB3 TYR C 128 -20.639 17.027 -5.595 1.00 41.51 H
ATOM 7430 HD1 TYR C 128 -23.811 18.033 -5.051 1.00 51.03 H
ATOM 7431 HD2 TYR C 128 -20.208 18.226 -3.325 1.00 51.42 H
ATOM 7432 HE1 TYR C 128 -24.512 19.845 -3.788 1.00 55.67 H

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ATOM   7433  HE2 TYR C 128    -20.897  20.033  -2.062  1.00 55.64           H
ATOM   7434  HH  TYR C 128    -23.987  21.396  -2.228  1.00 61.48           H
ATOM   7435  N   TRP C 129    -21.323  15.553  -8.271  1.00 26.41           N
ANISOU 7435  N   TRP C 129     5259   2505   2269    870    378    380       N
ATOM   7436  CA  TRP C 129    -20.557  14.681  -9.149  1.00 24.94           C
ANISOU 7436  CA  TRP C 129     4751   2583   2144    693    296    374       C
ATOM   7437  C   TRP C 129    -19.308  15.382  -9.662  1.00 26.13           C
ANISOU 7437  C   TRP C 129     4925   2739   2265    436    148    413       C
ATOM   7438  O   TRP C 129    -19.353  16.555 -10.049  1.00 27.28           O
ANISOU 7438  O   TRP C 129     5232   2742   2393    383    112    510       O
ATOM   7439  CB  TRP C 129    -21.368  14.234 -10.384  1.00 24.10           C
ANISOU 7439  CB  TRP C 129     4363   2684   2112    770    366    454       C
ATOM   7440  CG  TRP C 129    -22.692  13.579 -10.139  1.00 23.62           C
ANISOU 7440  CG  TRP C 129     4211   2664   2100    980    488    486       C
ATOM   7441  CD1 TRP C 129    -23.882  14.198  -9.901  1.00 24.67           C
ANISOU 7441  CD1 TRP C 129     4443   2698   2234   1188    614    587       C
ATOM   7442  CD2 TRP C 129    -22.971  12.178 -10.176  1.00 22.39           C
ANISOU 7442  CD2 TRP C 129     3827   2675   2004    996    479    449       C
ATOM   7443  NE1 TRP C 129    -24.883  13.268  -9.761  1.00 24.35           N
ANISOU 7443  NE1 TRP C 129     4212   2791   2248   1311    691    642       N
ATOM   7444  CE2 TRP C 129    -24.346  12.018  -9.923  1.00 22.76           C
ANISOU 7444  CE2 TRP C 129     3828   2731   2090   1175    592    558       C
ATOM   7445  CE3 TRP C 129    -22.187  11.042 -10.383  1.00 21.49           C
ANISOU 7445  CE3 TRP C 129     3552   2696   1919    886    374    343       C
ATOM   7446  CZ2 TRP C 129    -24.953  10.769  -9.876  1.00 22.42           C
ANISOU 7446  CZ2 TRP C 129     3585   2816   2117   1194    576    585       C
ATOM   7447  CZ3 TRP C 129    -22.789   9.802 -10.331  1.00 20.74           C
ANISOU 7447  CZ3 TRP C 129     3302   2683   1895    937    356    335       C
ATOM   7448  CH2 TRP C 129    -24.159   9.675 -10.084  1.00 21.94           C
ANISOU 7448  CH2 TRP C 129     3414   2831   2090   1062    443    465       C
ATOM   7449  H   TRP C 129    -21.511  16.318  -8.618  1.00 31.69           H
ATOM   7450  HA  TRP C 129    -20.285  13.889  -8.659  1.00 29.93           H
ATOM   7451  HB2 TRP C 129    -21.535  15.016 -10.932  1.00 28.93           H
ATOM   7452  HB3 TRP C 129    -20.828  13.604 -10.886  1.00 28.93           H
ATOM   7453  HD1 TRP C 129    -23.998  15.118  -9.834  1.00 29.60           H
ATOM   7454  HE1 TRP C 129    -25.709  13.441  -9.596  1.00 29.22           H
ATOM   7455  HE3 TRP C 129    -21.276  11.120 -10.549  1.00 25.79           H
ATOM   7456  HZ2 TRP C 129    -25.864  10.680  -9.707  1.00 26.90           H
ATOM   7457  HZ3 TRP C 129    -22.276   9.038 -10.468  1.00 24.89           H
ATOM   7458  HH2 TRP C 129    -24.538   8.826 -10.053  1.00 26.33           H
ATOM   7459  N   SER C 130    -18.210  14.636  -9.708  1.00 25.77           N
ANISOU 7459  N   SER C 130     4694   2876   2220    281     57    363       N
ATOM   7460  CA  SER C 130    -17.084  14.911 -10.591  1.00 26.97           C
ANISOU 7460  CA  SER C 130     4678   3214   2356     55    -48    444       C
ATOM   7461  C   SER C 130    -16.909  13.689 -11.476  1.00 26.48           C
ANISOU 7461  C   SER C 130     4253   3486   2323    109     -5    394       C
ATOM   7462  O   SER C 130    -16.687  12.586 -10.967  1.00 25.20           O
ANISOU 7462  O   SER C 130     3997   3390   2188    177    -11    278       O
ATOM   7463  CB  SER C 130    -15.803  15.196  -9.805  1.00 28.94           C
ANISOU 7463  CB  SER C 130     5031   3404   2561   -167    -209    447       C
ATOM   7464  OG  SER C 130    -15.821  16.497  -9.255  1.00 30.22           O
ANISOU 7464  OG  SER C 130     5559   3246   2676   -267    -300    504       O
ATOM   7465  H   SER C 130    -18.091  13.939  -9.218  1.00 30.92           H
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ATOM   7466  HA  SER C 130    -17.285  15.677 -11.151  1.00 32.37           H
ATOM   7467  HB2 SER C 130    -15.724  14.551  -9.085  1.00 34.73           H
ATOM   7468  HB3 SER C 130    -15.043  15.118 -10.403  1.00 34.73           H
ATOM   7469  HG  SER C 130    -15.888  17.068  -9.868  1.00 36.26           H
ATOM   7470  N   VAL C 131    -17.019  13.879 -12.789  1.00 24.87           N
ANISOU 7470  N   VAL C 131    3871   3479   2101     89     26    478      N
ATOM   7471  CA  VAL C 131    -16.993  12.782 -13.750  1.00 24.14           C
ANISOU 7471  CA  VAL C 131    3487   3686   1999    175     66    408      C
ATOM   7472  C   VAL C 131    -15.842  13.019 -14.718  1.00 25.70           C
ANISOU 7472  C   VAL C 131    3469   4190   2108     23     27    495      C
ATOM   7473  O   VAL C 131    -15.850  14.001 -15.474  1.00 26.61           O
ANISOU 7473  O   VAL C 131    3582   4354   2174    -95     22    660      O
ATOM   7474  CB  VAL C 131    -18.323  12.660 -14.509  1.00 23.57           C
ANISOU 7474  CB  VAL C 131    3383   3624   1949    318    147    429      C
ATOM   7475  CG1 VAL C 131    -18.316  11.423 -15.395  1.00 23.12           C
ANISOU 7475  CG1 VAL C 131    3090   3829   1866    407    150    317      C
ATOM   7476  CG2 VAL C 131    -19.507  12.638 -13.532  1.00 22.85           C
ANISOU 7476  CG2 VAL C 131    3479   3266   1936    463    203    412      C
ATOM   7477  H   VAL C 131    -17.113  14.652 -13.154  1.00 29.85           H
ATOM   7478  HA  VAL C 131    -16.832  11.949 -13.281  1.00 28.97           H
ATOM   7479  HB  VAL C 131    -18.427  13.435 -15.083  1.00 28.29           H
ATOM   7480 HG11 VAL C 131    -19.164  11.366 -15.864  1.00 27.74           H
ATOM   7481 HG12 VAL C 131    -17.589  11.496 -16.033  1.00 27.74           H
ATOM   7482 HG13 VAL C 131    -18.192  10.638 -14.839  1.00 27.74           H
ATOM   7483 HG21 VAL C 131    -20.332  12.561 -14.038  1.00 27.42           H
ATOM   7484 HG22 VAL C 131    -19.411  11.878 -12.937  1.00 27.42           H
ATOM   7485 HG23 VAL C 131    -19.509  13.462 -13.020  1.00 27.42           H
ATOM   7486  N   ARG C 132    -14.880  12.100 -14.733  1.00 25.59           N
ANISOU 7486  N   ARG C 132    3254   4402   2068     41      4    404      N
ATOM   7487  CA  ARG C 132    -13.738  12.238 -15.629  1.00 27.38           C
ANISOU 7487  CA  ARG C 132    3223   4992   2188    -67     -6    502      C
ATOM   7488  C   ARG C 132    -14.201  12.288 -17.081  1.00 28.02           C
ANISOU 7488  C   ARG C 132    3164   5313   2170     -9     72    544      C
ATOM   7489  O   ARG C 132    -15.067  11.514 -17.500  1.00 26.77           O
ANISOU 7489  O   ARG C 132    3003   5153   2016    176    119    405      O
ATOM   7490  CB  ARG C 132    -12.764  11.077 -15.415  1.00 27.54           C
ANISOU 7490  CB  ARG C 132    3037   5228   2197     36    -19    373      C
ATOM   7491  CG  ARG C 132    -11.325  11.329 -15.888  1.00 29.96           C
ANISOU 7491  CG  ARG C 132    3066   5914   2405    -96    -38    520      C
ATOM   7492  CD  ARG C 132    -10.413  10.218 -15.381  1.00 30.19           C
ANISOU 7492  CD  ARG C 132    2926   6089   2457     39    -62    398      C
ATOM   7493  NE  ARG C 132     -8.994  10.488 -15.592  1.00 33.14           N
ANISOU 7493  NE  ARG C 132    3009   6829   2753    -93    -89    580      N
ATOM   7494  CZ  ARG C 132     -8.310  10.140 -16.679  1.00 36.01           C
ANISOU 7494  CZ  ARG C 132    3048   7659   2976     21      9    613      C
ATOM   7495  NH1 ARG C 132     -8.904   9.501 -17.678  1.00 34.35           N
ANISOU 7495  NH1 ARG C 132    2804   7576   2672    269    123    445      N
ATOM   7496  NH2 ARG C 132     -7.019  10.432 -16.765  1.00 39.19           N
ANISOU 7496  NH2 ARG C 132    3155   8422   3315   -112    -14    827      N
ATOM   7497  H   ARG C 132    -14.865  11.396 -14.240  1.00 30.71           H
ATOM   7498  HA  ARG C 132    -13.273  13.066 -15.429  1.00 32.86           H
ATOM   7499  HB2 ARG C 132    -12.728  10.877 -14.467  1.00 33.04           H
ATOM   7500  HB3 ARG C 132    -13.098  10.304 -15.897  1.00 33.04           H
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ATOM   7501  HG2 ARG C 132     -11.297  11.333 -16.858  1.00 35.96           H
ATOM   7502  HG3 ARG C 132     -11.009  12.175 -15.534  1.00 35.96           H
ATOM   7503  HD2 ARG C 132     -10.556  10.106 -14.428  1.00 36.23           H
ATOM   7504  HD3 ARG C 132     -10.632   9.395 -15.846  1.00 36.23           H
ATOM   7505  HE  ARG C 132      -8.569  10.903 -14.970  1.00 39.77           H
ATOM   7506 HH11 ARG C 132      -9.740   9.307 -17.627  1.00 41.22           H
ATOM   7507 HH12 ARG C 132      -8.453   9.280 -18.376  1.00 41.22           H
ATOM   7508 HH21 ARG C 132      -6.628  10.847 -16.122  1.00 47.03           H
ATOM   7509 HH22 ARG C 132      -6.573  10.210 -17.467  1.00 47.03           H
ATOM   7510  N   GLN C 133     -13.591  13.195 -17.855  1.00 30.19           N
ANISOU 7510  N   GLN C 133     3319   5806   2344   -193     63    756      N
ATOM   7511  CA  GLN C 133     -14.019  13.456 -19.228  1.00 30.92           C
ANISOU 7511  CA  GLN C 133     3299   6131   2318   -179    126    846      C
ATOM   7512  C   GLN C 133     -13.756  12.285 -20.160  1.00 32.21           C
ANISOU 7512  C   GLN C 133     3225   6673   2341     25    205    682      C
ATOM   7513  O   GLN C 133     -14.391  12.195 -21.216  1.00 31.25           O
ANISOU 7513  O   GLN C 133     3063   6696   2114     99    250    675      O
ATOM   7514  CB  GLN C 133     -13.315  14.694 -19.769  1.00 32.70           C
ANISOU 7514  CB  GLN C 133     3442   6519   2463   -453     81   1149      C
ATOM   7515  CG  GLN C 133     -13.750  15.972 -19.083  1.00 33.03           C
ANISOU 7515  CG  GLN C 133     3787   6139   2625   -639    -22   1309      C
ATOM   7516  CD  GLN C 133     -13.218  17.199 -19.781  1.00 35.35           C
ANISOU 7516  CD  GLN C 133     4024   6559   2848   -926    -99   1635      C
ATOM   7517  OE1 GLN C 133     -12.212  17.131 -20.485  1.00 37.22           O
ANISOU 7517  OE1 GLN C 133     3961   7229   2952  -1044    -85   1776      O
ATOM   7518  NE2 GLN C 133     -13.896  18.327 -19.601  1.00 35.79           N
ANISOU 7518  NE2 GLN C 133     4364   6248   2987  -1030   -183   1774      N
ATOM   7519  H   GLN C 133     -12.922  13.673 -17.603  1.00 36.22           H
ATOM   7520  HA  GLN C 133     -14.973  13.631 -19.231  1.00 37.10           H
ATOM   7521  HB2 GLN C 133     -12.359  14.595 -19.637  1.00 39.24           H
ATOM   7522  HB3 GLN C 133     -13.511  14.780 -20.715  1.00 39.24           H
ATOM   7523  HG2 GLN C 133     -14.719  16.020 -19.085  1.00 39.64           H
ATOM   7524  HG3 GLN C 133     -13.417  15.975 -18.172  1.00 39.64           H
ATOM   7525 HE21 GLN C 133     -14.599  18.332 -19.107  1.00 42.95           H
ATOM   7526 HE22 GLN C 133     -13.631  19.053 -19.979  1.00 42.95           H
ATOM   7527  N   SER C 134     -12.812  11.418 -19.816  1.00 33.07           N
ANISOU 7527  N   SER C 134     3187   6945   2432    126    212    555      N
ATOM   7528  CA  SER C 134     -12.693  10.126 -20.465  1.00 34.80           C
ANISOU 7528  CA  SER C 134     3270   7408   2544    398    270    322      C
ATOM   7529  C   SER C 134     -12.192   9.142 -19.422  1.00 32.93           C
ANISOU 7529  C   SER C 134     3044   7044   2423    533    227    142      C
ATOM   7530  O   SER C 134     -11.616   9.528 -18.399  1.00 31.16           O
ANISOU 7530  O   SER C 134     2843   6691   2305    390    169    239      O
ATOM   7531  CB  SER C 134     -11.772  10.179 -21.690  1.00 39.08           C
ANISOU 7531  CB  SER C 134     3518   8491   2841    426    362    411      C
ATOM   7532  OG  SER C 134     -10.434  10.447 -21.323  1.00 41.84           O
ANISOU 7532  OG  SER C 134     3649   9077   3172    320    366    565      O
ATOM   7533  H   SER C 134     -12.226  11.557 -19.203  1.00 39.68           H
ATOM   7534  HA  SER C 134     -13.570   9.835 -20.759  1.00 41.76           H
ATOM   7535  HB2 SER C 134     -11.807   9.324 -22.146  1.00 46.90           H
ATOM   7536  HB3 SER C 134     -12.081  10.882 -22.284  1.00 46.90           H
ATOM   7537  HG  SER C 134     -10.151   9.845 -20.809  1.00 50.21           H
ATOM   7538  N   LYS C 135     -12.433   7.862 -19.695  1.00 32.78           N
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ANISOU 7538 N LYS C 135 3032 7044 2380 802 230 -117 N
ATOM 7539 CA LYS C 135 -12.201 6.821 -18.708 1.00 31.53 C
ANISOU 7539 CA LYS C 135 2932 6691 2358 948 162 -296 C
ATOM 7540 C LYS C 135 -10.730 6.745 -18.330 1.00 32.92 C
ANISOU 7540 C LYS C 135 2881 7116 2511 958 174 -231 C
ATOM 7541 O LYS C 135 -9.843 6.766 -19.189 1.00 35.02 O
ANISOU 7541 O LYS C 135 2891 7815 2602 1034 261 -181 O
ATOM 7542 CB LYS C 135 -12.677 5.477 -19.250 1.00 31.57 C
ANISOU 7542 CB LYS C 135 2999 6671 2324 1230 133 -576 C
ATOM 7543 CG LYS C 135 -14.129 5.504 -19.701 1.00 30.31 C
ANISOU 7543 CG LYS C 135 3027 6307 2181 1196 95 -609 C
ATOM 7544 CD LYS C 135 -14.606 4.149 -20.169 1.00 31.08 C
ANISOU 7544 CD LYS C 135 3227 6331 2252 1427 7 -878 C
ATOM 7545 CE LYS C 135 -16.072 4.205 -20.553 1.00 31.06 C
ANISOU 7545 CE LYS C 135 3385 6136 2281 1345 -62 -861 C
ATOM 7546 NZ LYS C 135 -16.615 2.873 -20.910 1.00 32.15 N
ANISOU 7546 NZ LYS C 135 3664 6135 2415 1513 -208 -1105 N
ATOM 7547 H LYS C 135 -12.732 7.573 -20.448 1.00 39.34 H
ATOM 7548 HA LYS C 135 -12.709 7.022 -17.907 1.00 37.84 H
ATOM 7549 HB2 LYS C 135 -12.130 5.234 -20.014 1.00 37.88 H
ATOM 7550 HB3 LYS C 135 -12.591 4.808 -18.554 1.00 37.88 H
ATOM 7551 HG2 LYS C 135 -14.687 5.781 -18.957 1.00 36.37 H
ATOM 7552 HG3 LYS C 135 -14.221 6.128 -20.437 1.00 36.37 H
ATOM 7553 HD2 LYS C 135 -14.094 3.877 -20.948 1.00 37.30 H
ATOM 7554 HD3 LYS C 135 -14.501 3.504 -19.453 1.00 37.30 H
ATOM 7555 HE2 LYS C 135 -16.583 4.548 -19.804 1.00 37.27 H
ATOM 7556 HE3 LYS C 135 -16.176 4.788 -21.322 1.00 37.27 H
ATOM 7557 HZ1 LYS C 135 -16.167 2.537 -21.601 1.00 38.57 H
ATOM 7558 HZ2 LYS C 135 -16.538 2.319 -20.218 1.00 38.57 H
ATOM 7559 HZ3 LYS C 135 -17.475 2.945 -21.129 1.00 38.57 H
ATOM 7560 N ARG C 136 -10.480 6.644 -17.037 1.00 31.35 N
ANISOU 7560 N ARG C 136 2763 6673 2477 886 88 -215 N
ATOM 7561 CA ARG C 136 -9.120 6.573 -16.531 1.00 32.81 C
ANISOU 7561 CA ARG C 136 2731 7069 2666 869 65 -123 C
ATOM 7562 C ARG C 136 -8.561 5.166 -16.725 1.00 34.03 C
ANISOU 7562 C ARG C 136 2755 7377 2799 1223 76 -342 C
ATOM 7563 O ARG C 136 -9.279 4.186 -16.514 1.00 32.96 O
ANISOU 7563 O ARG C 136 2809 6966 2747 1407 19 -567 O
ATOM 7564 CB ARG C 136 -9.089 6.931 -15.056 1.00 31.27 C
ANISOU 7564 CB ARG C 136 2701 6543 2637 667 -56 -38 C
ATOM 7565 CG ARG C 136 -7.715 7.190 -14.489 1.00 33.10 C
ANISOU 7565 CG ARG C 136 2718 6984 2873 539 -118 137 C
ATOM 7566 CD ARG C 136 -7.862 7.637 -13.031 1.00 32.31 C
ANISOU 7566 CD ARG C 136 2862 6509 2906 315 -258 204 C
ATOM 7567 NE ARG C 136 -6.607 8.094 -12.444 1.00 35.11 N
ANISOU 7567 NE ARG C 136 3046 7032 3261 104 -365 415 N
ATOM 7568 CZ ARG C 136 -6.520 8.804 -11.320 1.00 36.16 C
ANISOU 7568 CZ ARG C 136 3385 6904 3452 -168 -511 527 C
ATOM 7569 NH1 ARG C 136 -7.613 9.152 -10.657 1.00 34.22 N
ANISOU 7569 NH1 ARG C 136 3515 6232 3253 -222 -535 440 N
ATOM 7570 NH2 ARG C 136 -5.334 9.177 -10.861 1.00 38.69 N
ANISOU 7570 NH2 ARG C 136 3531 7403 3766 -382 -640 736 N
ATOM 7571 H ARG C 136 -11.085 6.615 -16.426 1.00 37.63 H

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ATOM   7572  HA  ARG C 136     -8.558   7.200 -17.014  1.00 39.37           H
ATOM   7573  HB2 ARG C 136     -9.617   7.734 -14.923  1.00 37.52           H
ATOM   7574  HB3 ARG C 136     -9.479   6.198 -14.553  1.00 37.52           H
ATOM   7575  HG2 ARG C 136     -7.189   6.376 -14.515  1.00 39.72           H
ATOM   7576  HG3 ARG C 136     -7.280   7.898 -14.990  1.00 39.72           H
ATOM   7577  HD2 ARG C 136     -8.497   8.370 -12.988  1.00 38.78           H
ATOM   7578  HD3 ARG C 136     -8.184   6.889 -12.503  1.00 38.78           H
ATOM   7579  HE  ARG C 136     -5.876   7.892 -12.849  1.00 42.13           H
ATOM   7580 HH11 ARG C 136     -8.387   8.914 -10.949  1.00 41.06           H
ATOM   7581 HH12 ARG C 136     -7.550   9.611  -9.933  1.00 41.06           H
ATOM   7582 HH21 ARG C 136     -4.620   8.957 -11.286  1.00 46.43           H
ATOM   7583 HH22 ARG C 136     -5.279   9.637 -10.136  1.00 46.43           H
ATOM   7584  N   PRO C 137     -7.293   5.035 -17.126  1.00 36.80           N
ANISOU 7584  N   PRO C 137    2781   8163   3036   1332    141   -268      N
ATOM   7585  CA  PRO C 137     -6.683   3.702 -17.171  1.00 38.78           C
ANISOU 7585  CA  PRO C 137    2922   8532   3281   1715    145   -477      C
ATOM   7586  C   PRO C 137     -6.599   3.094 -15.782  1.00 37.97           C
ANISOU 7586  C   PRO C 137    2945   8082   3401   1717     -6   -524      C
ATOM   7587  O   PRO C 137     -6.235   3.758 -14.807  1.00 36.71           O
ANISOU 7587  O   PRO C 137    2771   7838   3340   1443    -85   -321      O
ATOM   7588  CB  PRO C 137     -5.287   3.959 -17.749  1.00 42.30           C
ANISOU 7588  CB  PRO C 137    3028   9475   3570   1736    235   -286      C
ATOM   7589  CG  PRO C 137     -5.362   5.318 -18.376  1.00 42.79           C
ANISOU 7589  CG  PRO C 137    2969   9782   3509   1433    309    -27      C
ATOM   7590  CD  PRO C 137     -6.336   6.076 -17.536  1.00 39.07           C
ANISOU 7590  CD  PRO C 137    2775   8869   3203   1120    204     34      C
ATOM   7591  HA  PRO C 137     -7.181   3.114 -17.760  1.00 46.54           H
ATOM   7592  HB2 PRO C 137     -4.630   3.947 -17.035  1.00 50.76           H
ATOM   7593  HB3 PRO C 137     -5.080   3.285 -18.416  1.00 50.76           H
ATOM   7594  HG2 PRO C 137     -4.488   5.738 -18.353  1.00 51.35           H
ATOM   7595  HG3 PRO C 137     -5.682   5.240 -19.289  1.00 51.35           H
ATOM   7596  HD2 PRO C 137     -5.893   6.454 -16.761  1.00 46.89           H
ATOM   7597  HD3 PRO C 137     -6.780   6.758 -18.063  1.00 46.89           H
ATOM   7598  N   THR C 138     -6.937   1.815 -15.709  1.00 38.26           N
ANISOU 7598  N   THR C 138    3125   7909   3505   2021    -66   -789      N
ATOM   7599  CA  THR C 138     -6.852   1.031 -14.490  1.00 36.79           C
ANISOU 7599  CA  THR C 138    3051   7408   3518   2073   -217   -844      C
ATOM   7600  C   THR C 138     -5.619   0.129 -14.538  1.00 40.05           C
ANISOU 7600  C   THR C 138    3279   8023   3916   2351   -217   -886      C
ATOM   7601  O   THR C 138     -4.923   0.035 -15.554  1.00 42.67           O
ANISOU 7601  O   THR C 138    3477   8665   4071   2479   -101   -885      O
ATOM   7602  CB  THR C 138     -8.127   0.201 -14.323  1.00 35.15           C
ANISOU 7602  CB  THR C 138    3186   6750   3421   2152   -323  -1059      C
ATOM   7603  OG1 THR C 138     -8.355  -0.563 -15.519  1.00 36.71           O
ANISOU 7603  OG1 THR C 138    3447   7007   3493   2414   -293  -1279      O
ATOM   7604  CG2 THR C 138     -9.328   1.111 -14.074  1.00 32.14           C
ANISOU 7604  CG2 THR C 138    3015   6122   3075   1828   -321   -955      C
ATOM   7605  H   THR C 138     -7.229   1.364 -16.380  1.00 45.92           H
ATOM   7606  HA  THR C 138     -6.769   1.625 -13.728  1.00 44.14           H
ATOM   7607  HB  THR C 138     -8.030  -0.398 -13.567  1.00 42.18           H
ATOM   7608  HG1 THR C 138     -9.053  -1.022 -15.438  1.00 44.05           H
ATOM   7609 HG21 THR C 138    -10.131   0.578 -13.970  1.00 38.57           H
ATOM   7610 HG22 THR C 138     -9.187   1.632 -13.268  1.00 38.57           H
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ATOM   7611 HG23 THR C 138     -9.446   1.716 -14.823  1.00 38.57           H
ATOM   7612  N   GLY C 139     -5.351  -0.542 -13.417  1.00 39.81           N
ANISOU 7612  N   GLY C 139    3295   7765   4066   2401   -358   -893      N
ATOM   7613  CA  GLY C 139     -4.284  -1.513 -13.322  1.00 42.89           C
ANISOU 7613  CA  GLY C 139    3597   8222   4479   2630   -377   -924      C
ATOM   7614  C   GLY C 139     -3.030  -1.014 -12.628  1.00 44.32           C
ANISOU 7614  C   GLY C 139    3465   8679   4695   2506   -382   -652      C
ATOM   7615  O   GLY C 139     -2.294  -1.823 -12.047  1.00 46.20           O
ANISOU 7615  O   GLY C 139    3652   8863   5038   2653   -456   -644      O
ATOM   7616  H   GLY C 139     -5.789  -0.443 -12.684  1.00 47.77           H
ATOM   7617  HA2 GLY C 139     -4.607  -2.288 -12.835  1.00 51.47           H
ATOM   7618  HA3 GLY C 139     -4.039  -1.800 -14.215  1.00 51.47           H
ATOM   7619  N   SER C 140     -2.755   0.286 -12.698  1.00 43.89           N
ANISOU 7619  N   SER C 140    3205   8913   4559   2218   -325   -411      N
ATOM   7620  CA  SER C 140     -1.616   0.898 -12.028  1.00 45.44           C
ANISOU 7620  CA  SER C 140    3123   9357   4786   2000   -375   -107      C
ATOM   7621  C   SER C 140     -2.105   1.721 -10.848  1.00 42.70           C
ANISOU 7621  C   SER C 140    2874   8809   4541   1639   -560     38      C
ATOM   7622  O   SER C 140     -3.290   2.031 -10.727  1.00 39.79           O
ANISOU 7622  O   SER C 140    2853   8073   4192   1487   -567    -68      O
ATOM   7623  CB  SER C 140     -0.813   1.787 -12.987  1.00 47.93           C
ANISOU 7623  CB  SER C 140    3156  10145   4911   1873   -220    112      C
ATOM   7624  OG  SER C 140     -0.313   1.050 -14.086  1.00 50.92           O
ANISOU 7624  OG  SER C 140    3462  10742   5141   2213    -63    -12      O
ATOM   7625  H   SER C 140     -3.230   0.849 -13.142  1.00 52.67           H
ATOM   7626  HA  SER C 140     -1.028   0.203 -11.692  1.00 54.53           H
ATOM   7627  HB2 SER C 140     -1.392   2.491 -13.320  1.00 57.52           H
ATOM   7628  HB3 SER C 140     -0.067   2.176 -12.504  1.00 57.52           H
ATOM   7629  HG  SER C 140      0.122   1.555 -14.597  1.00 61.10           H
ATOM   7630  N   ASN C 141     -1.172   2.090  -9.978  1.00 44.02           N
ANISOU 7630  N   ASN C 141    2878   9085   4762   1415   -685    289      N
ATOM   7631  CA  ASN C 141     -1.542   2.823  -8.775  1.00 42.32           C
ANISOU 7631  CA  ASN C 141    2926   8539   4616   1009   -859    408      C
ATOM   7632  C   ASN C 141     -2.071   4.199  -9.145  1.00 40.74           C
ANISOU 7632  C   ASN C 141    2869   8296   4314    653   -812    512      C
ATOM   7633  O   ASN C 141     -1.490   4.900  -9.979  1.00 42.56           O
ANISOU 7633  O   ASN C 141    2833   8904   4434    548   -733    689      O
ATOM   7634  CB  ASN C 141     -0.352   2.941  -7.830  1.00 44.27           C
ANISOU 7634  CB  ASN C 141    2949   8955   4917    835 -1038    667      C
ATOM   7635  CG  ASN C 141     -0.141   1.682  -7.029  1.00 44.76           C
ANISOU 7635  CG  ASN C 141    3025   8863   5117   1103 -1151    568      C
ATOM   7636  OD1 ASN C 141     -0.981   0.783  -7.049  1.00 43.13           O
ANISOU 7636  OD1 ASN C 141    3057   8353   4979   1364 -1121    309      O
ATOM   7637  ND2 ASN C 141      0.972   1.610  -6.307  1.00 47.17           N
ANISOU 7637  ND2 ASN C 141    3156   9279   5488    992 -1271    775      N
ATOM   7638  H   ASN C 141     -0.331   1.930 -10.058  1.00 52.82           H
ATOM   7639  HA  ASN C 141     -2.247   2.343  -8.314  1.00 50.79           H
ATOM   7640  HB2 ASN C 141      0.451   3.108  -8.348  1.00 53.13           H
ATOM   7641  HB3 ASN C 141     -0.508   3.671  -7.211  1.00 53.13           H
ATOM   7642 HD21 ASN C 141      1.134   0.910  -5.835  1.00 56.60           H
ATOM   7643 HD22 ASN C 141      1.532   2.263  -6.313  1.00 56.60           H
ATOM   7644  N   ALA C 142     -3.180   4.574  -8.517  1.00 37.92           N
ANISOU 7644  N   ALA C 142    2929   7488   3992   481   -862    419      N
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ATOM 7645 CA ALA C 142 -3.905 5.788 -8.840 1.00 36.58 C
ANISOU 7645 CA ALA C 142 2969 7184 3744 213 -816 470 C
ATOM 7646 C ALA C 142 -4.237 6.546 -7.561 1.00 36.05 C
ANISOU 7646 C ALA C 142 3246 6750 3701 -109 -978 542 C
ATOM 7647 O ALA C 142 -4.389 5.955 -6.485 1.00 34.92 O
ANISOU 7647 O ALA C 142 3266 6373 3628 -70 -1080 470 O
ATOM 7648 CB ALA C 142 -5.195 5.464 -9.617 1.00 34.40 C
ANISOU 7648 CB ALA C 142 2884 6733 3455 424 -661 238 C
ATOM 7649 H ALA C 142 -3.540 4.124 -7.880 1.00 45.51 H
ATOM 7650 HA ALA C 142 -3.349 6.357 -9.396 1.00 43.89 H
ATOM 7651 HB1 ALA C 142 -4.961 5.007 -10.440 1.00 41.29 H
ATOM 7652 HB2 ALA C 142 -5.758 4.895 -9.070 1.00 41.29 H
ATOM 7653 HB3 ALA C 142 -5.658 6.293 -9.819 1.00 41.29 H
ATOM 7654 N THR C 143 -4.338 7.865 -7.693 1.00 35.79 N
ANISOU 7654 N THR C 143 3339 6667 3594 -422 -1009 685 N
ATOM 7655 CA THR C 143 -4.682 8.754 -6.596 1.00 35.34 C
ANISOU 7655 CA THR C 143 3665 6246 3518 -716 -1160 733 C
ATOM 7656 C THR C 143 -5.916 9.552 -6.977 1.00 33.93 C
ANISOU 7656 C THR C 143 3801 5794 3295 -744 -1054 648 C
ATOM 7657 O THR C 143 -6.081 9.952 -8.136 1.00 33.73 O
ANISOU 7657 O THR C 143 3647 5935 3233 -727 -936 691 O
ATOM 7658 CB THR C 143 -3.534 9.724 -6.260 1.00 38.71 C
ANISOU 7658 CB THR C 143 3998 6810 3898 -1108 -1370 1015 C
ATOM 7659 OG1 THR C 143 -3.242 10.554 -7.395 1.00 39.83 O
ANISOU 7659 OG1 THR C 143 3949 7201 3982 -1255 -1315 1189 O
ATOM 7660 CG2 THR C 143 -2.276 8.963 -5.845 1.00 41.12 C
ANISOU 7660 CG2 THR C 143 3950 7421 4252 -1086 -1487 1142 C
ATOM 7661 H THR C 143 -4.207 8.279 -8.436 1.00 42.95 H
ATOM 7662 HA THR C 143 -4.884 8.230 -5.806 1.00 42.41 H
ATOM 7663 HB THR C 143 -3.803 10.287 -5.517 1.00 46.45 H
ATOM 7664 HG1 THR C 143 -2.616 11.083 -7.211 1.00 47.79 H
ATOM 7665 HG21 THR C 143 -1.564 9.588 -5.636 1.00 49.34 H
ATOM 7666 HG22 THR C 143 -2.460 8.422 -5.061 1.00 49.34 H
ATOM 7667 HG23 THR C 143 -1.986 8.384 -6.567 1.00 49.34 H
ATOM 7668 N ILE C 144 -6.795 9.756 -6.005 1.00 32.23 N
ANISOU 7668 N ILE C 144 3987 5185 3075 -762 -1086 539 N
ATOM 7669 CA ILE C 144 -7.871 10.732 -6.114 1.00 31.29 C
ANISOU 7669 CA ILE C 144 4204 4779 2905 -816 -1021 500 C
ATOM 7670 C ILE C 144 -7.604 11.757 -5.022 1.00 32.80 C
ANISOU 7670 C ILE C 144 4738 4703 3021 -1108 -1220 580 C
ATOM 7671 O ILE C 144 -7.919 11.535 -3.849 1.00 32.45 O
ANISOU 7671 O ILE C 144 4958 4425 2945 -1079 -1278 486 O
ATOM 7672 CB ILE C 144 -9.263 10.104 -5.981 1.00 28.86 C
ANISOU 7672 CB ILE C 144 4074 4260 2631 -536 -860 302 C
ATOM 7673 CG1 ILE C 144 -9.561 9.256 -7.223 1.00 27.84 C
ANISOU 7673 CG1 ILE C 144 3657 4363 2558 -293 -703 225 C
ATOM 7674 CG2 ILE C 144 -10.333 11.194 -5.794 1.00 28.44 C
ANISOU 7674 CG2 ILE C 144 4397 3892 2517 -579 -809 283 C
ATOM 7675 CD1 ILE C 144 -10.981 8.762 -7.325 1.00 26.22 C
ANISOU 7675 CD1 ILE C 144 3596 3977 2391 -73 -568 80 C
ATOM 7676 H ILE C 144 -6.789 9.333 -5.257 1.00 38.68 H
ATOM 7677 HA ILE C 144 -7.817 11.177 -6.973 1.00 37.55 H
ATOM 7678 HB ILE C 144 -9.270 9.526 -5.202 1.00 34.63 H

ATOM 7679 HG12 ILE C 144 -9.378 9.789 -8.012 1.00 33.41 H
ATOM 7680 HG13 ILE C 144 -8.980 8.479 -7.213 1.00 33.41 H
ATOM 7681 HG21 ILE C 144 -11.202 10.772 -5.713 1.00 34.13 H
ATOM 7682 HG22 ILE C 144 -10.133 11.698 -4.990 1.00 34.13 H
ATOM 7683 HG23 ILE C 144 -10.321 11.783 -6.565 1.00 34.13 H
ATOM 7684 HD11 ILE C 144 -11.579 9.525 -7.352 1.00 31.47 H
ATOM 7685 HD12 ILE C 144 -11.076 8.239 -8.136 1.00 31.47 H
ATOM 7686 HD13 ILE C 144 -11.180 8.212 -6.551 1.00 31.47 H
ATOM 7687 N THR C 145 -7.000 12.876 -5.405 1.00 34.83 N
ANISOU 7687 N THR C 145 5002 4998 3235 -1400 -1343 765 N
ATOM 7688 CA THR C 145 -6.743 13.968 -4.474 1.00 36.83 C
ANISOU 7688 CA THR C 145 5636 4951 3405 -1708 -1577 839 C
ATOM 7689 C THR C 145 -8.049 14.698 -4.180 1.00 36.24 C
ANISOU 7689 C THR C 145 6042 4457 3270 -1599 -1494 690 C
ATOM 7690 O THR C 145 -8.394 15.669 -4.865 1.00 36.61 O
ANISOU 7690 O THR C 145 6210 4394 3306 -1678 -1481 758 O
ATOM 7691 CB THR C 145 -5.701 14.918 -5.062 1.00 39.68 C
ANISOU 7691 CB THR C 145 5843 5479 3755 -2080 -1762 1117 C
ATOM 7692 OG1 THR C 145 -4.553 14.166 -5.473 1.00 40.65 O
ANISOU 7692 OG1 THR C 145 5441 6076 3929 -2110 -1781 1273 O
ATOM 7693 CG2 THR C 145 -5.279 15.953 -4.035 1.00 42.33 C
ANISOU 7693 CG2 THR C 145 6586 5490 4006 -2441 -2075 1201 C
ATOM 7694 H THR C 145 -6.728 13.028 -6.206 1.00 41.80 H
ATOM 7695 HA THR C 145 -6.397 13.609 -3.642 1.00 44.19 H
ATOM 7696 HB THR C 145 -6.078 15.379 -5.827 1.00 47.62 H
ATOM 7697 HG1 THR C 145 -4.772 13.601 -6.055 1.00 48.78 H
ATOM 7698 HG21 THR C 145 -4.618 16.550 -4.419 1.00 50.79 H
ATOM 7699 HG22 THR C 145 -6.048 16.473 -3.753 1.00 50.79 H
ATOM 7700 HG23 THR C 145 -4.895 15.513 -3.260 1.00 50.79 H
ATOM 7701 N PHE C 146 -8.778 14.226 -3.161 1.00 34.79 N
ANISOU 7701 N PHE C 146 6119 4057 3041 -1403 -1433 506 N
ATOM 7702 CA PHE C 146 -10.139 14.697 -2.920 1.00 33.93 C
ANISOU 7702 CA PHE C 146 6388 3630 2874 -1197 -1286 360 C
ATOM 7703 C PHE C 146 -10.179 16.188 -2.606 1.00 36.41 C
ANISOU 7703 C PHE C 146 7158 3594 3081 -1395 -1447 393 C
ATOM 7704 O PHE C 146 -11.189 16.845 -2.873 1.00 36.26 O
ANISOU 7704 O PHE C 146 7383 3355 3038 -1236 -1323 331 O
ATOM 7705 CB PHE C 146 -10.775 13.887 -1.780 1.00 33.32 C
ANISOU 7705 CB PHE C 146 6471 3448 2742 -977 -1205 202 C
ATOM 7706 CG PHE C 146 -12.259 14.112 -1.613 1.00 32.74 C
ANISOU 7706 CG PHE C 146 6665 3160 2617 -694 -992 77 C
ATOM 7707 CD1 PHE C 146 -13.112 14.068 -2.705 1.00 30.37 C
ANISOU 7707 CD1 PHE C 146 6194 2936 2409 -510 -792 82 C
ATOM 7708 CD2 PHE C 146 -12.803 14.345 -0.359 1.00 32.88 C
ANISOU 7708 CD2 PHE C 146 7084 2933 2475 -598 -988 -31 C
ATOM 7709 CE1 PHE C 146 -14.474 14.274 -2.550 1.00 29.85 C
ANISOU 7709 CE1 PHE C 146 6327 2710 2304 -246 -600 7 C
ATOM 7710 CE2 PHE C 146 -14.167 14.544 -0.203 1.00 32.45 C
ANISOU 7710 CE2 PHE C 146 7229 2737 2362 -303 -768 -117 C
ATOM 7711 CZ PHE C 146 -14.999 14.514 -1.298 1.00 30.94 C
ANISOU 7711 CZ PHE C 146 6837 2630 2290 -132 -577 -86 C
ATOM 7712 H PHE C 146 -8.505 13.635 -2.600 1.00 41.74 H
ATOM 7713 HA PHE C 146 -10.667 14.548 -3.720 1.00 40.72 H

ATOM 7714 HB2 PHE C 146 -10.638 12.943 -1.955 1.00 39.99 H
ATOM 7715 HB3 PHE C 146 -10.344 14.132 -0.946 1.00 39.99 H
ATOM 7716 HD1 PHE C 146 -12.764 13.913 -3.554 1.00 36.44 H
ATOM 7717 HD2 PHE C 146 -12.247 14.373 0.385 1.00 39.45 H
ATOM 7718 HE1 PHE C 146 -15.035 14.247 -3.292 1.00 35.82 H
ATOM 7719 HE2 PHE C 146 -14.519 14.706 0.643 1.00 38.94 H
ATOM 7720 HZ PHE C 146 -15.914 14.646 -1.193 1.00 37.13 H
ATOM 7721 N SER C 147 -9.100 16.750 -2.058 1.00 39.03 N
ANISOU 7721 N SER C 147 7620 3858 3351 -1741 -1741 500 N
ATOM 7722 CA SER C 147 -9.079 18.197 -1.844 1.00 41.90 C
ANISOU 7722 CA SER C 147 8451 3848 3622 -1963 -1946 538 C
ATOM 7723 C SER C 147 -9.225 18.958 -3.159 1.00 42.23 C
ANISOU 7723 C SER C 147 8377 3917 3753 -2035 -1908 685 C
ATOM 7724 O SER C 147 -9.799 20.056 -3.184 1.00 43.79 O
ANISOU 7724 O SER C 147 8988 3749 3901 -2036 -1958 660 O
ATOM 7725 CB SER C 147 -7.792 18.623 -1.131 1.00 45.03 C
ANISOU 7725 CB SER C 147 8963 4195 3949 -2390 -2322 670 C
ATOM 7726 OG SER C 147 -6.643 18.302 -1.885 1.00 45.47 O
ANISOU 7726 OG SER C 147 8493 4661 4121 -2643 -2418 922 O
ATOM 7727 H SER C 147 -8.391 16.332 -1.809 1.00 46.84 H
ATOM 7728 HA SER C 147 -9.827 18.440 -1.277 1.00 50.28 H
ATOM 7729 HB2 SER C 147 -7.816 19.582 -0.990 1.00 54.03 H
ATOM 7730 HB3 SER C 147 -7.743 18.166 -0.276 1.00 54.03 H
ATOM 7731 HG SER C 147 -6.606 17.473 -2.013 1.00 54.56 H
ATOM 7732 N ASN C 148 -8.719 18.400 -4.260 1.00 41.15 N
ANISOU 7732 N ASN C 148 7695 4208 3732 -2077 -1822 841 N
ATOM 7733 CA ASN C 148 -8.897 19.053 -5.553 1.00 41.63 C
ANISOU 7733 CA ASN C 148 7619 4344 3855 -2135 -1766 995 C
ATOM 7734 C ASN C 148 -10.376 19.224 -5.875 1.00 40.44 C
ANISOU 7734 C ASN C 148 7671 3983 3712 -1778 -1521 839 C
ATOM 7735 O ASN C 148 -10.805 20.296 -6.321 1.00 41.13 O
ANISOU 7735 O ASN C 148 8003 3826 3798 -1828 -1565 911 O
ATOM 7736 CB ASN C 148 -8.199 18.255 -6.657 1.00 40.77 C
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ATOM 7737 CG ASN C 148 -6.678 18.353 -6.590 1.00 43.12 C
ANISOU 7737 CG ASN C 148 6916 5344 4124 -2543 -1911 1399 C
ATOM 7738 OD1 ASN C 148 -6.122 19.253 -5.952 1.00 45.97 O
ANISOU 7738 OD1 ASN C 148 7569 5459 4439 -2889 -2210 1517 O
ATOM 7739 ND2 ASN C 148 -5.998 17.430 -7.270 1.00 42.54 N
ANISOU 7739 ND2 ASN C 148 6290 5779 4094 -2481 -1799 1490 N
ATOM 7740 H ASN C 148 -8.279 17.661 -4.285 1.00 49.38 H
ATOM 7741 HA ASN C 148 -8.493 19.935 -5.520 1.00 49.96 H
ATOM 7742 HB2 ASN C 148 -8.443 17.320 -6.572 1.00 48.93 H
ATOM 7743 HB3 ASN C 148 -8.483 18.595 -7.520 1.00 48.93 H
ATOM 7744 HD21 ASN C 148 -5.138 17.439 -7.266 1.00 51.05 H
ATOM 7745 HD22 ASN C 148 -6.419 16.825 -7.713 1.00 51.05 H
ATOM 7746 N HIS C 149 -11.175 18.178 -5.638 1.00 36.95 N
ANISOU 7746 N HIS C 149 7125 3629 3284 -1424 -1278 650 N
ATOM 7747 CA HIS C 149 -12.603 18.225 -5.936 1.00 35.44 C
ANISOU 7747 CA HIS C 149 7055 3302 3107 -1084 -1040 537 C
ATOM 7748 C HIS C 149 -13.365 19.055 -4.920 1.00 36.93 C
ANISOU 7748 C HIS C 149 7807 3034 3190 -958 -1066 408 C
ATOM 7749 O HIS C 149 -14.293 19.790 -5.272 1.00 37.45 O

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ATOM 7750 CB HIS C 149 -13.162 16.808 -5.972 1.00 32.50 C
ANISOU 7750 CB HIS C 149 6382 3180 2787 -793 -814 414 C
ATOM 7751 CG HIS C 149 -12.467 15.940 -6.964 1.00 31.40 C
ANISOU 7751 CG HIS C 149 5737 3465 2728 -847 -780 494 C
ATOM 7752 ND1 HIS C 149 -12.896 15.817 -8.268 1.00 30.45 N
ANISOU 7752 ND1 HIS C 149 5360 3550 2661 -749 -641 548 N
ATOM 7753 CD2 HIS C 149 -11.345 15.191 -6.861 1.00 31.53 C
ANISOU 7753 CD2 HIS C 149 5468 3749 2763 -969 -870 531 C
ATOM 7754 CE1 HIS C 149 -12.080 15.007 -8.918 1.00 30.09 C
ANISOU 7754 CE1 HIS C 149 4913 3878 2643 -789 -634 590 C
ATOM 7755 NE2 HIS C 149 -11.130 14.615 -8.088 1.00 30.76 N
ANISOU 7755 NE2 HIS C 149 4961 4009 2718 -908 -765 585 N
ATOM 7756 H HIS C 149 -10.910 17.431 -5.305 1.00 44.34 H
ATOM 7757 HA HIS C 149 -12.734 18.624 -6.811 1.00 42.52 H
ATOM 7758 HB2 HIS C 149 -13.058 16.405 -5.096 1.00 39.00 H
ATOM 7759 HB3 HIS C 149 -14.101 16.844 -6.212 1.00 39.00 H
ATOM 7760 HD1 HIS C 149 -13.591 16.198 -8.602 1.00 36.54 H
ATOM 7761 HD2 HIS C 149 -10.824 15.079 -6.099 1.00 37.84 H
ATOM 7762 HE1 HIS C 149 -12.160 14.757 -9.811 1.00 36.11 H
ATOM 7763 N VAL C 150 -13.007 18.920 -3.652 1.00 37.86 N
ANISOU 7763 N VAL C 150 8178 3008 3201 -1007 -1182 301 N
ATOM 7764 CA VAL C 150 -13.620 19.750 -2.628 1.00 40.02 C
ANISOU 7764 CA VAL C 150 9031 2851 3322 -880 -1221 159 C
ATOM 7765 C VAL C 150 -13.501 21.219 -3.016 1.00 42.93 C
ANISOU 7765 C VAL C 150 9752 2881 3678 -1055 -1413 247 C
ATOM 7766 O VAL C 150 -14.496 21.948 -3.064 1.00 43.91 O
ANISOU 7766 O VAL C 150 10191 2724 3769 -803 -1310 179 O
ATOM 7767 CB VAL C 150 -12.974 19.453 -1.265 1.00 41.11 C
ANISOU 7767 CB VAL C 150 9389 2914 3318 -998 -1387 60 C
ATOM 7768 CG1 VAL C 150 -13.435 20.450 -0.227 1.00 44.12 C
ANISOU 7768 CG1 VAL C 150 10365 2894 3505 -879 -1454 -72 C
ATOM 7769 CG2 VAL C 150 -13.311 17.981 -0.856 1.00 38.28 C
ANISOU 7769 CG2 VAL C 150 8713 2853 2980 -771 -1176 -20 C
ATOM 7770 H VAL C 150 -12.421 18.363 -3.360 1.00 45.44 H
ATOM 7771 HA VAL C 150 -14.563 19.532 -2.567 1.00 48.02 H
ATOM 7772 HB VAL C 150 -12.011 19.528 -1.348 1.00 49.34 H
ATOM 7773 HG11 VAL C 150 -13.014 20.240 0.621 1.00 52.95 H
ATOM 7774 HG12 VAL C 150 -13.181 21.341 -0.512 1.00 52.95 H
ATOM 7775 HG13 VAL C 150 -14.400 20.392 -0.142 1.00 52.95 H
ATOM 7776 HG21 VAL C 150 -12.905 17.791 0.004 1.00 45.94 H
ATOM 7777 HG22 VAL C 150 -14.274 17.883 -0.796 1.00 45.94 H
ATOM 7778 HG23 VAL C 150 -12.959 17.378 -1.529 1.00 45.94 H
ATOM 7779 N ASN C 151 -12.284 21.666 -3.331 1.00 44.81 N
ANISOU 7779 N ASN C 151 9920 3152 3952 -1491 -1703 428 N
ATOM 7780 CA ASN C 151 -12.068 23.079 -3.650 1.00 48.04 C
ANISOU 7780 CA ASN C 151 10625 3275 4353 -1700 -1933 536 C
ATOM 7781 C ASN C 151 -12.832 23.480 -4.900 1.00 47.29 C
ANISOU 7781 C ASN C 151 10398 3193 4378 -1557 -1771 642 C
ATOM 7782 O ASN C 151 -13.550 24.486 -4.910 1.00 49.29 O
ANISOU 7782 O ASN C 151 10927 3200 4602 -1373 -1759 568 O
ATOM 7783 CB ASN C 151 -10.583 23.364 -3.846 1.00 51.19 C
ANISOU 7783 CB ASN C 151 10849 3818 4782 -2217 -2267 771 C

ATOM 7784 CG ASN C 151 -9.823 23.381 -2.557 1.00 55.03 C
ANISOU 7784 CG ASN C 151 11545 4242 5122 -2367 -2496 705 C
ATOM 7785 OD1 ASN C 151 -10.208 24.052 -1.598 1.00 57.42 O
ANISOU 7785 OD1 ASN C 151 12289 4266 5264 -2198 -2549 551 O
ATOM 7786 ND2 ASN C 151 -8.735 22.638 -2.518 1.00 55.26 N
ANISOU 7786 ND2 ASN C 151 11235 4562 5200 -2667 -2621 852 N
ATOM 7787 H ASN C 151 -11.575 21.179 -3.366 1.00 53.77 H
ATOM 7788 HA ASN C 151 -12.386 23.624 -2.913 1.00 57.65 H
ATOM 7789 HB2 ASN C 151 -10.200 22.674 -4.410 1.00 61.43 H
ATOM 7790 HB3 ASN C 151 -10.480 24.232 -4.266 1.00 61.43 H
ATOM 7791 HD21 ASN C 151 -8.259 22.609 -1.802 1.00 66.31 H
ATOM 7792 HD22 ASN C 151 -8.501 22.182 -3.208 1.00 66.31 H
ATOM 7793 N ALA C 152 -12.663 22.715 -5.981 1.00 44.76 N
ANISOU 7793 N ALA C 152 9539 3293 4176 -1593 -1626 795 N
ATOM 7794 CA ALA C 152 -13.383 23.002 -7.216 1.00 44.15 C
ANISOU 7794 CA ALA C 152 9285 3298 4192 -1457 -1468 909 C
ATOM 7795 C ALA C 152 -14.877 23.130 -6.952 1.00 43.31 C
ANISOU 7795 C ALA C 152 9442 2949 4064 -993 -1233 731 C
ATOM 7796 O ALA C 152 -15.518 24.097 -7.379 1.00 44.98 O
ANISOU 7796 O ALA C 152 9855 2928 4306 -890 -1235 773 O
ATOM 7797 CB ALA C 152 -13.105 21.905 -8.244 1.00 41.22 C
ANISOU 7797 CB ALA C 152 8269 3494 3901 -1454 -1292 1003 C
ATOM 7798 H ALA C 152 -12.143 22.032 -6.021 1.00 53.72 H
ATOM 7799 HA ALA C 152 -13.067 23.844 -7.580 1.00 52.98 H
ATOM 7800 HB1 ALA C 152 -13.589 22.107 -9.060 1.00 49.47 H
ATOM 7801 HB2 ALA C 152 -12.152 21.874 -8.422 1.00 49.47 H
ATOM 7802 HB3 ALA C 152 -13.402 21.054 -7.885 1.00 49.47 H
ATOM 7803 N TRP C 153 -15.448 22.154 -6.248 1.00 41.13 N
ANISOU 7803 N TRP C 153 9096 2785 3745 -697 -1022 536 N
ATOM 7804 CA TRP C 153 -16.861 22.214 -5.900 1.00 40.81 C
ANISOU 7804 CA TRP C 153 9259 2576 3669 -251 -785 398 C
ATOM 7805 C TRP C 153 -17.166 23.487 -5.119 1.00 44.43 C
ANISOU 7805 C TRP C 153 10222 2642 4016 -155 -892 279 C
ATOM 7806 O TRP C 153 -18.121 24.208 -5.435 1.00 45.68 O
ANISOU 7806 O TRP C 153 10465 2695 4196 98 -782 271 O
ATOM 7807 CB TRP C 153 -17.257 20.966 -5.096 1.00 39.11 C
ANISOU 7807 CB TRP C 153 8885 2571 3407 -21 -588 239 C
ATOM 7808 CG TRP C 153 -17.240 19.655 -5.876 1.00 35.18 C
ANISOU 7808 CG TRP C 153 7805 2537 3026 -14 -441 294 C
ATOM 7809 CD1 TRP C 153 -17.100 19.489 -7.228 1.00 34.05 C
ANISOU 7809 CD1 TRP C 153 7286 2655 2996 -115 -418 440 C
ATOM 7810 CD2 TRP C 153 -17.370 18.338 -5.326 1.00 33.03 C
ANISOU 7810 CD2 TRP C 153 7304 2495 2749 107 -319 197 C
ATOM 7811 NE1 TRP C 153 -17.135 18.141 -7.549 1.00 31.42 N
ANISOU 7811 NE1 TRP C 153 6535 2681 2722 -46 -293 408 N
ATOM 7812 CE2 TRP C 153 -17.297 17.420 -6.396 1.00 31.25 C
ANISOU 7812 CE2 TRP C 153 6597 2629 2647 81 -242 269 C
ATOM 7813 CE3 TRP C 153 -17.537 17.846 -4.029 1.00 33.09 C
ANISOU 7813 CE3 TRP C 153 7485 2436 2651 231 -280 62 C
ATOM 7814 CZ2 TRP C 153 -17.394 16.044 -6.207 1.00 28.66 C
ANISOU 7814 CZ2 TRP C 153 5985 2545 2359 175 -150 204 C
ATOM 7815 CZ3 TRP C 153 -17.630 16.468 -3.844 1.00 31.19 C
ANISOU 7815 CZ3 TRP C 153 6923 2469 2457 304 -180 31 C

ATOM 7816 CH2 TRP C 153 -17.557 15.590 -4.928 1.00 29.11 C
ANISOU 7816 CH2 TRP C 153 6209 2513 2339 274 -128 98 C
ATOM 7817 H TRP C 153 -15.040 21.452 -5.963 1.00 49.35 H
ATOM 7818 HA TRP C 153 -17.388 22.227 -6.714 1.00 48.97 H
ATOM 7819 HB2 TRP C 153 -16.642 20.871 -4.353 1.00 46.94 H
ATOM 7820 HB3 TRP C 153 -18.158 21.092 -4.758 1.00 46.94 H
ATOM 7821 HD1 TRP C 153 -16.996 20.180 -7.842 1.00 40.86 H
ATOM 7822 HE1 TRP C 153 -17.065 17.812 -8.341 1.00 37.70 H
ATOM 7823 HE3 TRP C 153 -17.587 18.426 -3.305 1.00 39.71 H
ATOM 7824 HZ2 TRP C 153 -17.344 15.455 -6.925 1.00 34.39 H
ATOM 7825 HZ3 TRP C 153 -17.742 16.128 -2.985 1.00 37.42 H
ATOM 7826 HH2 TRP C 153 -17.621 14.675 -4.775 1.00 34.93 H
ATOM 7827 N LYS C 154 -16.343 23.796 -4.111 1.00 46.50 N
ANISOU 7827 N LYS C 154 10752 2769 4148 -355 -1115 189 N
ATOM 7828 CA LYS C 154 -16.552 25.012 -3.330 1.00 50.51 C
ANISOU 7828 CA LYS C 154 11697 2987 4507 -265 -1237 79 C
ATOM 7829 C LYS C 154 -16.692 26.228 -4.239 1.00 53.78 C
ANISOU 7829 C LYS C 154 12193 3222 5017 -336 -1352 197 C
ATOM 7830 O LYS C 154 -17.619 27.031 -4.087 1.00 55.13 O
ANISOU 7830 O LYS C 154 12597 3209 5141 -35 -1265 119 O
ATOM 7831 CB LYS C 154 -15.400 25.219 -2.345 1.00 52.74 C
ANISOU 7831 CB LYS C 154 12214 3175 4648 -573 -1536 48 C
ATOM 7832 CG LYS C 154 -15.370 24.225 -1.182 1.00 51.51 C
ANISOU 7832 CG LYS C 154 12068 3143 4361 -456 -1436 -78 C
ATOM 7833 CD LYS C 154 -14.183 24.465 -0.235 1.00 53.99 C
ANISOU 7833 CD LYS C 154 12595 3373 4546 -779 -1755 -62 C
ATOM 7834 CE LYS C 154 -14.024 25.937 0.118 1.00 58.93 C
ANISOU 7834 CE LYS C 154 13662 3677 5053 -850 -2002 -67 C
ATOM 7835 NZ LYS C 154 -13.286 26.155 1.397 1.00 62.06 N
ANISOU 7835 NZ LYS C 154 14365 3952 5264 -998 -2235 -96 N
ATOM 7836 H LYS C 154 -15.668 23.324 -3.865 1.00 55.80 H
ATOM 7837 HA LYS C 154 -17.372 24.923 -2.819 1.00 60.61 H
ATOM 7838 HB2 LYS C 154 -14.562 25.134 -2.826 1.00 63.29 H
ATOM 7839 HB3 LYS C 154 -15.471 26.110 -1.968 1.00 63.29 H
ATOM 7840 HG2 LYS C 154 -16.188 24.314 -0.668 1.00 61.81 H
ATOM 7841 HG3 LYS C 154 -15.295 23.325 -1.536 1.00 61.81 H
ATOM 7842 HD2 LYS C 154 -14.327 23.971 0.587 1.00 64.79 H
ATOM 7843 HD3 LYS C 154 -13.366 24.167 -0.666 1.00 64.79 H
ATOM 7844 HE2 LYS C 154 -13.532 26.380 -0.591 1.00 70.72 H
ATOM 7845 HE3 LYS C 154 -14.904 26.336 0.209 1.00 70.72 H
ATOM 7846 HZ1 LYS C 154 -13.217 27.027 1.563 1.00 74.48 H
ATOM 7847 HZ2 LYS C 154 -13.720 25.766 2.069 1.00 74.48 H
ATOM 7848 HZ3 LYS C 154 -12.469 25.806 1.340 1.00 74.48 H
ATOM 7849 N SER C 155 -15.781 26.370 -5.207 1.00 54.29 N
ANISOU 7849 N SER C 155 12042 3367 5218 -734 -1545 412 N
ATOM 7850 CA SER C 155 -15.765 27.544 -6.074 1.00 56.53 C
ANISOU 7850 CA SER C 155 12387 3495 5596 -866 -1696 565 C
ATOM 7851 C SER C 155 -17.025 27.679 -6.919 1.00 55.09 C
ANISOU 7851 C SER C 155 12079 3328 5524 -519 -1437 602 C
ATOM 7852 O SER C 155 -17.181 28.701 -7.599 1.00 56.86 O
ANISOU 7852 O SER C 155 12379 3395 5828 -571 -1543 722 O
ATOM 7853 CB SER C 155 -14.537 27.503 -6.990 1.00 55.85 C
ANISOU 7853 CB SER C 155 11988 3611 5621 -1367 -1916 841 C

ATOM 7854 OG SER C 155 -14.681 26.519 -8.002 1.00 51.59 O
ANISOU 7854 OG SER C 155 10985 3422 5195 -1350 -1703 988 O
ATOM 7855 H SER C 155 -15.163 25.797 -5.380 1.00 65.15 H
ATOM 7856 HA SER C 155 -15.694 28.338 -5.521 1.00 67.83 H
ATOM 7857 HB2 SER C 155 -14.429 28.371 -7.409 1.00 67.02 H
ATOM 7858 HB3 SER C 155 -13.754 27.294 -6.457 1.00 67.02 H
ATOM 7859 HG SER C 155 -14.000 26.511 -8.493 1.00 61.91 H
ATOM 7860 N HIS C 156 -17.919 26.685 -6.899 1.00 51.16 N
ANISOU 7860 N HIS C 156 11379 3024 5037 -180 -1119 525 N
ATOM 7861 CA HIS C 156 -19.156 26.712 -7.675 1.00 50.57 C
ANISOU 7861 CA HIS C 156 11134 3018 5062 153 -874 584 C
ATOM 7862 C HIS C 156 -20.385 26.625 -6.775 1.00 52.51 C
ANISOU 7862 C HIS C 156 11530 3220 5202 634 -626 384 C
ATOM 7863 O HIS C 156 -21.443 26.156 -7.201 1.00 48.99 O
ANISOU 7863 O HIS C 156 10840 2953 4821 932 -370 423 O
ATOM 7864 CB HIS C 156 -19.176 25.581 -8.702 1.00 46.34 C
ANISOU 7864 CB HIS C 156 10129 2845 4633 103 -725 750 C
ATOM 7865 CG HIS C 156 -18.133 25.711 -9.767 1.00 46.31 C
ANISOU 7865 CG HIS C 156 9906 2986 4705 -329 -918 1001 C
ATOM 7866 ND1 HIS C 156 -18.178 26.688 -10.739 1.00 48.38 N
ANISOU 7866 ND1 HIS C 156 10142 3182 5056 -448 -1024 1194 N
ATOM 7867 CD2 HIS C 156 -17.022 24.980 -10.021 1.00 44.79 C
ANISOU 7867 CD2 HIS C 156 9469 3053 4496 -667 -1014 1114 C
ATOM 7868 CE1 HIS C 156 -17.137 26.556 -11.542 1.00 48.15 C
ANISOU 7868 CE1 HIS C 156 9849 3393 5052 -846 -1167 1415 C
ATOM 7869 NE2 HIS C 156 -16.420 25.526 -11.128 1.00 46.47 N
ANISOU 7869 NE2 HIS C 156 9487 3398 4772 -979 -1158 1372 N
ATOM 7870 H HIS C 156 -17.826 25.969 -6.431 1.00 61.39 H
ATOM 7871 HA HIS C 156 -19.202 27.552 -8.159 1.00 60.68 H
ATOM 7872 HB2 HIS C 156 -19.027 24.740 -8.243 1.00 55.61 H
ATOM 7873 HB3 HIS C 156 -20.043 25.570 -9.137 1.00 55.61 H
ATOM 7874 HD2 HIS C 156 -16.721 24.246 -9.535 1.00 53.75 H
ATOM 7875 HE1 HIS C 156 -16.942 27.096 -12.273 1.00 57.78 H
ATOM 7876 HE2 HIS C 156 -15.693 25.245 -11.492 1.00 55.77 H
ATOM 7877 N GLY C 157 -20.261 27.077 -5.529 1.00 57.97 N
ANISOU 7877 N GLY C 157 12601 3715 5712 703 -705 200 N
ATOM 7878 CA GLY C 157 -21.389 27.053 -4.623 1.00 61.94 C
ANISOU 7878 CA GLY C 157 13238 4224 6073 1149 -468 49 C
ATOM 7879 C GLY C 157 -21.784 25.675 -4.155 1.00 58.51 C
ANISOU 7879 C GLY C 157 12536 4101 5594 1315 -220 2 C
ATOM 7880 O GLY C 157 -22.898 25.499 -3.655 1.00 62.21 O
ANISOU 7880 O GLY C 157 12975 4680 5982 1690 27 -43 O
ATOM 7881 H GLY C 157 -19.538 27.398 -5.192 1.00 69.57 H
ATOM 7882 HA2 GLY C 157 -21.178 27.587 -3.841 1.00 74.33 H
ATOM 7883 HA3 GLY C 157 -22.156 27.453 -5.062 1.00 74.33 H
ATOM 7884 N MET C 158 -20.899 24.687 -4.310 1.00 50.82 N
ANISOU 7884 N MET C 158 11354 3284 4673 1039 -286 34 N
ATOM 7885 CA MET C 158 -21.161 23.310 -3.910 1.00 44.84 C
ANISOU 7885 CA MET C 158 10339 2803 3896 1159 -87 1 C
ATOM 7886 C MET C 158 -20.413 23.048 -2.605 1.00 46.36 C
ANISOU 7886 C MET C 158 10763 2942 3910 1040 -206 -129 C
ATOM 7887 O MET C 158 -19.247 22.649 -2.602 1.00 45.92 O
ANISOU 7887 O MET C 158 10680 2888 3879 701 -402 -117 O

ATOM 7888 CB MET C 158 -20.741 22.343 -5.013 1.00 41.26 C
ANISOU 7888 CB MET C 158 9493 2558 3624 969 -78 141 C
ATOM 7889 CG MET C 158 -21.643 22.416 -6.244 1.00 40.37 C
ANISOU 7889 CG MET C 158 9105 2572 3664 1126 69 297 C
ATOM 7890 SD MET C 158 -20.996 21.556 -7.687 1.00 37.22 S
ANISOU 7890 SD MET C 158 8252 2470 3420 842 19 498 S
ATOM 7891 CE MET C 158 -21.046 19.850 -7.110 1.00 34.14 C
ANISOU 7891 CE MET C 158 7509 2441 3019 901 165 387 C
ATOM 7892 H MET C 158 -20.119 24.798 -4.654 1.00 60.99 H
ATOM 7893 HA MET C 158 -22.113 23.199 -3.758 1.00 53.81 H
ATOM 7894 HB2 MET C 158 -19.837 22.555 -5.292 1.00 49.51 H
ATOM 7895 HB3 MET C 158 -20.778 21.437 -4.669 1.00 49.51 H
ATOM 7896 HG2 MET C 158 -22.501 22.020 -6.025 1.00 48.45 H
ATOM 7897 HG3 MET C 158 -21.764 23.347 -6.486 1.00 48.45 H
ATOM 7898 HE1 MET C 158 -20.714 19.270 -7.813 1.00 40.96 H
ATOM 7899 HE2 MET C 158 -20.487 19.768 -6.322 1.00 40.96 H
ATOM 7900 HE3 MET C 158 -21.962 19.618 -6.893 1.00 40.96 H
ATOM 7901 N ASN C 159 -21.098 23.257 -1.490 1.00 47.73 N
ANISOU 7901 N ASN C 159 11143 3090 3903 1321 -89 -222 N
ATOM 7902 CA ASN C 159 -20.506 23.069 -0.176 1.00 48.98 C
ANISOU 7902 CA ASN C 159 11532 3198 3880 1243 -195 -317 C
ATOM 7903 C ASN C 159 -20.912 21.718 0.388 1.00 46.47 C
ANISOU 7903 C ASN C 159 10944 3161 3551 1384 13 -311 C
ATOM 7904 O ASN C 159 -22.045 21.268 0.199 1.00 45.48 O
ANISOU 7904 O ASN C 159 10581 3229 3468 1674 276 -252 O
ATOM 7905 CB ASN C 159 -20.933 24.181 0.778 1.00 53.56 C
ANISOU 7905 CB ASN C 159 12544 3551 4256 1455 -224 -403 C
ATOM 7906 CG ASN C 159 -20.555 25.541 0.267 1.00 56.57 C
ANISOU 7906 CG ASN C 159 13215 3626 4653 1316 -457 -408 C
ATOM 7907 OD1 ASN C 159 -19.375 25.832 0.081 1.00 57.06 O
ANISOU 7907 OD1 ASN C 159 13381 3555 4746 928 -754 -385 O
ATOM 7908 ND2 ASN C 159 -21.554 26.388 0.029 1.00 59.51 N
ANISOU 7908 ND2 ASN C 159 13705 3892 5013 1621 -339 -416 N
ATOM 7909 H ASN C 159 -21.920 23.512 -1.469 1.00 57.28 H
ATOM 7910 HA ASN C 159 -19.540 23.089 -0.253 1.00 58.77 H
ATOM 7911 HB2 ASN C 159 -21.897 24.156 0.884 1.00 64.28 H
ATOM 7912 HB3 ASN C 159 -20.499 24.049 1.635 1.00 64.28 H
ATOM 7913 HD21 ASN C 159 -21.386 27.178 -0.265 1.00 71.41 H
ATOM 7914 HD22 ASN C 159 -22.367 26.144 0.168 1.00 71.41 H
ATOM 7915 N LEU C 160 -19.976 21.072 1.072 1.00 45.71 N
ANISOU 7915 N LEU C 160 10865 3094 3410 1159 -125 -348 N
ATOM 7916 CA LEU C 160 -20.233 19.782 1.689 1.00 43.69 C
ANISOU 7916 CA LEU C 160 10365 3079 3156 1251 27 -341 C
ATOM 7917 C LEU C 160 -20.682 19.969 3.134 1.00 46.59 C
ANISOU 7917 C LEU C 160 10970 3404 3328 1459 93 -394 C
ATOM 7918 O LEU C 160 -20.339 20.956 3.790 1.00 50.01 O
ANISOU 7918 O LEU C 160 11796 3599 3609 1431 -59 -465 O
ATOM 7919 CB LEU C 160 -18.984 18.904 1.635 1.00 41.49 C
ANISOU 7919 CB LEU C 160 9937 2877 2950 903 -157 -350 C
ATOM 7920 CG LEU C 160 -18.683 18.287 0.269 1.00 38.45 C
ANISOU 7920 CG LEU C 160 9230 2622 2757 758 -159 -302 C
ATOM 7921 CD1 LEU C 160 -17.272 17.723 0.270 1.00 37.53 C
ANISOU 7921 CD1 LEU C 160 9035 2557 2667 381 -405 -317 C

ATOM 7922 CD2 LEU C 160 -19.705 17.209 -0.051 1.00 35.90 C
ANISOU 7922 CD2 LEU C 160 8552 2566 2521 1010 112 -259 C
ATOM 7923 H LEU C 160 -19.176 21.364 1.194 1.00 54.86 H
ATOM 7924 HA LEU C 160 -20.943 19.332 1.206 1.00 52.43 H
ATOM 7925 HB2 LEU C 160 -18.218 19.443 1.888 1.00 49.79 H
ATOM 7926 HB3 LEU C 160 -19.092 18.177 2.267 1.00 49.79 H
ATOM 7927 HG LEU C 160 -18.738 18.974 -0.414 1.00 46.14 H
ATOM 7928 HD11 LEU C 160 -17.087 17.333 -0.599 1.00 45.04 H
ATOM 7929 HD12 LEU C 160 -16.645 18.441 0.451 1.00 45.04 H
ATOM 7930 HD13 LEU C 160 -17.205 17.043 0.959 1.00 45.04 H
ATOM 7931 HD21 LEU C 160 -20.590 17.607 -0.064 1.00 43.07 H
ATOM 7932 HD22 LEU C 160 -19.500 16.828 -0.919 1.00 43.07 H
ATOM 7933 HD23 LEU C 160 -19.662 16.521 0.631 1.00 43.07 H
ATOM 7934 N GLY C 161 -21.462 19.011 3.617 1.00 45.49 N
ANISOU 7934 N GLY C 161 10595 3497 3193 1665 311 -353 N
ATOM 7935 CA GLY C 161 -21.979 19.071 4.970 1.00 48.60 C
ANISOU 7935 CA GLY C 161 11169 3895 3403 1885 405 -390 C
ATOM 7936 C GLY C 161 -20.879 19.044 6.017 1.00 49.80 C
ANISOU 7936 C GLY C 161 11568 3921 3432 1654 184 -484 C
ATOM 7937 O GLY C 161 -19.697 18.840 5.742 1.00 48.26 O
ANISOU 7937 O GLY C 161 11356 3673 3309 1309 -43 -496 O
ATOM 7938 H GLY C 161 -21.706 18.313 3.177 1.00 54.59 H
ATOM 7939 HA2 GLY C 161 -22.490 19.888 5.083 1.00 58.32 H
ATOM 7940 HA3 GLY C 161 -22.568 18.316 5.124 1.00 58.32 H
ATOM 7941 N SER C 162 -21.306 19.245 7.264 1.00 52.84 N
ANISOU 7941 N SER C 162 12175 4283 3620 1856 256 -539 N
ATOM 7942 CA SER C 162 -20.391 19.325 8.393 1.00 54.97 C
ANISOU 7942 CA SER C 162 12724 4427 3736 1676 56 -631 C
ATOM 7943 C SER C 162 -20.152 17.981 9.070 1.00 53.15 C
ANISOU 7943 C SER C 162 12240 4438 3518 1580 91 -608 C
ATOM 7944 O SER C 162 -19.147 17.829 9.776 1.00 53.95 O
ANISOU 7944 O SER C 162 12478 4473 3546 1332 -118 -657 O
ATOM 7945 CB SER C 162 -20.934 20.315 9.425 1.00 60.03 C
ANISOU 7945 CB SER C 162 13788 4901 4119 1952 99 -727 C
ATOM 7946 OG SER C 162 -22.249 19.953 9.806 1.00 60.80 O
ANISOU 7946 OG SER C 162 13728 5221 4154 2336 411 -686 O
ATOM 7947 H SER C 162 -22.133 19.338 7.481 1.00 63.41 H
ATOM 7948 HA SER C 162 -19.536 19.658 8.080 1.00 65.97 H
ATOM 7949 HB2 SER C 162 -20.362 20.304 10.208 1.00 72.03 H
ATOM 7950 HB3 SER C 162 -20.949 21.204 9.036 1.00 72.03 H
ATOM 7951 HG SER C 162 -22.544 20.498 10.372 1.00 72.96 H
ATOM 7952 N ASN C 163 -21.052 17.017 8.887 1.00 51.07 N
ANISOU 7952 N ASN C 163 11612 4456 3336 1759 332 -520 N
ATOM 7953 CA ASN C 163 -20.943 15.695 9.500 1.00 49.58 C
ANISOU 7953 CA ASN C 163 11172 4518 3148 1680 370 -476 C
ATOM 7954 C ASN C 163 -20.589 14.687 8.404 1.00 45.21 C
ANISOU 7954 C ASN C 163 10226 4117 2835 1484 334 -391 C
ATOM 7955 O ASN C 163 -21.440 14.280 7.609 1.00 43.37 O
ANISOU 7955 O ASN C 163 9710 4038 2731 1631 513 -297 O
ATOM 7956 CB ASN C 163 -22.235 15.335 10.226 1.00 51.29 C
ANISOU 7956 CB ASN C 163 11283 4961 3245 2016 649 -414 C
ATOM 7957 CG ASN C 163 -22.239 13.906 10.741 1.00 49.75 C
ANISOU 7957 CG ASN C 163 10790 5059 3054 1924 693 -324 C

ATOM 7958 OD1 ASN C 163 -21.200 13.247 10.786 1.00 47.97 O
ANISOU 7958 OD1 ASN C 163 10506 4840 2880 1627 496 -333 O
ATOM 7959 ND2 ASN C 163 -23.410 13.424 11.135 1.00 50.76 N
ANISOU 7959 ND2 ASN C 163 10720 5448 3121 2174 940 -209 N
ATOM 7960 H ASN C 163 -21.754 17.108 8.398 1.00 61.28 H
ATOM 7961 HA ASN C 163 -20.223 15.702 10.149 1.00 59.50 H
ATOM 7962 HB2 ASN C 163 -22.346 15.928 10.986 1.00 61.55 H
ATOM 7963 HB3 ASN C 163 -22.981 15.436 9.614 1.00 61.55 H
ATOM 7964 HD21 ASN C 163 -23.465 12.619 11.435 1.00 60.92 H
ATOM 7965 HD22 ASN C 163 -24.115 13.915 11.092 1.00 60.92 H
ATOM 7966 N TRP C 164 -19.316 14.307 8.371 1.00 43.95 N
ANISOU 7966 N TRP C 164 10053 3919 2725 1155 90 -417 N
ATOM 7967 CA TRP C 164 -18.786 13.346 7.411 1.00 40.83 C
ANISOU 7967 CA TRP C 164 9321 3667 2527 960 15 -354 C
ATOM 7968 C TRP C 164 -19.170 11.919 7.785 1.00 40.03 C
ANISOU 7968 C TRP C 164 8930 3839 2441 999 110 -259 C
ATOM 7969 O TRP C 164 -18.818 11.430 8.866 1.00 40.94 O
ANISOU 7969 O TRP C 164 9102 4017 2437 925 37 -252 O
ATOM 7970 CB TRP C 164 -17.269 13.501 7.337 1.00 40.69 C
ANISOU 7970 CB TRP C 164 9384 3536 2539 607 -293 -390 C
ATOM 7971 CG TRP C 164 -16.893 14.812 6.749 1.00 41.81 C
ANISOU 7971 CG TRP C 164 9763 3433 2690 522 -407 -433 C
ATOM 7972 CD1 TRP C 164 -16.920 16.028 7.368 1.00 44.89 C
ANISOU 7972 CD1 TRP C 164 10554 3577 2927 568 -466 -494 C
ATOM 7973 CD2 TRP C 164 -16.466 15.055 5.407 1.00 40.02 C
ANISOU 7973 CD2 TRP C 164 9406 3187 2614 377 -486 -405 C
ATOM 7974 NE1 TRP C 164 -16.527 17.011 6.497 1.00 45.33 N
ANISOU 7974 NE1 TRP C 164 10738 3448 3036 444 -594 -489 N
ATOM 7975 CE2 TRP C 164 -16.242 16.440 5.286 1.00 42.15 C
ANISOU 7975 CE2 TRP C 164 10007 3190 2820 318 -602 -433 C
ATOM 7976 CE3 TRP C 164 -16.246 14.237 4.298 1.00 37.83 C
ANISOU 7976 CE3 TRP C 164 8776 3100 2499 294 -481 -356 C
ATOM 7977 CZ2 TRP C 164 -15.809 17.024 4.103 1.00 41.53 C
ANISOU 7977 CZ2 TRP C 164 9904 3034 2841 154 -712 -400 C
ATOM 7978 CZ3 TRP C 164 -15.821 14.819 3.120 1.00 37.96 C
ANISOU 7978 CZ3 TRP C 164 8766 3057 2599 152 -573 -344 C
ATOM 7979 CH2 TRP C 164 -15.604 16.199 3.032 1.00 39.59 C
ANISOU 7979 CH2 TRP C 164 9296 2997 2749 70 -688 -360 C
ATOM 7980 H TRP C 164 -18.720 14.603 8.916 1.00 52.73 H
ATOM 7981 HA TRP C 164 -19.153 13.537 6.534 1.00 49.00 H
ATOM 7982 HB2 TRP C 164 -16.896 13.450 8.231 1.00 48.83 H
ATOM 7983 HB3 TRP C 164 -16.901 12.799 6.778 1.00 48.83 H
ATOM 7984 HD1 TRP C 164 -17.168 16.169 8.254 1.00 53.87 H
ATOM 7985 HE1 TRP C 164 -16.467 17.849 6.681 1.00 54.39 H
ATOM 7986 HE3 TRP C 164 -16.391 13.320 4.349 1.00 45.40 H
ATOM 7987 HZ2 TRP C 164 -15.664 17.941 4.041 1.00 49.83 H
ATOM 7988 HZ3 TRP C 164 -15.669 14.284 2.375 1.00 45.55 H
ATOM 7989 HH2 TRP C 164 -15.312 16.562 2.228 1.00 47.51 H
ATOM 7990 N ALA C 165 -19.902 11.257 6.890 1.00 39.32 N
ANISOU 7990 N ALA C 165 8537 3911 2490 1105 257 -164 N
ATOM 7991 CA ALA C 165 -20.176 9.831 7.016 1.00 38.49 C
ANISOU 7991 CA ALA C 165 8146 4048 2432 1092 295 -30 C
ATOM 7992 C ALA C 165 -19.144 9.059 6.207 1.00 35.27 C

ANISOU 7992 C ALA C 165 7564 3667 2170 859 85 -13 C
ATOM 7993 O ALA C 165 -18.023 9.545 6.019 1.00 34.02 O
ANISOU 7993 O ALA C 165 7517 3382 2026 665 -115 -104 O
ATOM 7994 CB ALA C 165 -21.599 9.505 6.554 1.00 37.86 C
ANISOU 7994 CB ALA C 165 7831 4136 2419 1328 548 105 C
ATOM 7995 H ALA C 165 -20.255 11.618 6.194 1.00 47.18 H
ATOM 7996 HA ALA C 165 -20.091 9.570 7.946 1.00 46.19 H
ATOM 7997 HB1 ALA C 165 -21.751 8.552 6.650 1.00 45.44 H
ATOM 7998 HB2 ALA C 165 -22.229 9.998 7.103 1.00 45.44 H
ATOM 7999 HB3 ALA C 165 -21.696 9.765 5.625 1.00 45.44 H
ATOM 8000 N TYR C 166 -19.502 7.874 5.713 1.00 34.15 N
ANISOU 8000 N TYR C 166 7111 3688 2178 867 107 121 N
ATOM 8001 CA TYR C 166 -18.487 7.016 5.122 1.00 32.94 C
ANISOU 8001 CA TYR C 166 6694 3557 2263 663 -113 130 C
ATOM 8002 C TYR C 166 -17.994 7.587 3.795 1.00 30.94 C
ANISOU 8002 C TYR C 166 6338 3245 2172 599 -160 44 C
ATOM 8003 O TYR C 166 -18.622 8.440 3.162 1.00 30.02 O
ANISOU 8003 O TYR C 166 6284 3078 2044 709 -19 12 O
ATOM 8004 CB TYR C 166 -18.997 5.578 4.939 1.00 33.14 C
ANISOU 8004 CB TYR C 166 6390 3718 2482 680 -116 280 C
ATOM 8005 CG TYR C 166 -19.996 5.328 3.816 1.00 31.73 C
ANISOU 8005 CG TYR C 166 5966 3603 2488 787 15 343 C
ATOM 8006 CD1 TYR C 166 -19.648 5.502 2.478 1.00 30.15 C
ANISOU 8006 CD1 TYR C 166 5616 3374 2466 751 -30 258 C
ATOM 8007 CD2 TYR C 166 -21.273 4.860 4.094 1.00 32.12 C
ANISOU 8007 CD2 TYR C 166 5910 3770 2523 905 166 514 C
ATOM 8008 CE1 TYR C 166 -20.555 5.264 1.464 1.00 28.80 C
ANISOU 8008 CE1 TYR C 166 5238 3264 2441 832 62 316 C
ATOM 8009 CE2 TYR C 166 -22.186 4.615 3.077 1.00 30.22 C
ANISOU 8009 CE2 TYR C 166 5435 3594 2451 970 249 596 C
ATOM 8010 CZ TYR C 166 -21.815 4.814 1.768 1.00 29.20 C
ANISOU 8010 CZ TYR C 166 5197 3409 2488 931 188 485 C
ATOM 8011 OH TYR C 166 -22.705 4.580 0.744 1.00 28.80 O
ANISOU 8011 OH TYR C 166 4933 3424 2585 979 245 564 O
ATOM 8012 H TYR C 166 -20.300 7.555 5.707 1.00 40.98 H
ATOM 8013 HA TYR C 166 -17.728 6.981 5.724 1.00 39.52 H
ATOM 8014 HB2 TYR C 166 -18.232 5.007 4.772 1.00 39.76 H
ATOM 8015 HB3 TYR C 166 -19.425 5.303 5.766 1.00 39.76 H
ATOM 8016 HD1 TYR C 166 -18.796 5.809 2.265 1.00 36.18 H
ATOM 8017 HD2 TYR C 166 -21.527 4.727 4.979 1.00 38.54 H
ATOM 8018 HE1 TYR C 166 -20.308 5.397 0.577 1.00 34.56 H
ATOM 8019 HE2 TYR C 166 -23.042 4.313 3.280 1.00 36.26 H
ATOM 8020 HH TYR C 166 -23.437 4.310 1.055 1.00 34.56 H
ATOM 8021 N GLN C 167 -16.836 7.092 3.391 1.00 29.08 N
ANISOU 8021 N GLN C 167 5930 3038 2082 428 -359 25 N
ATOM 8022 CA GLN C 167 -16.130 7.572 2.214 1.00 28.16 C
ANISOU 8022 CA GLN C 167 5690 2921 2089 336 -426 -31 C
ATOM 8023 C GLN C 167 -15.439 6.330 1.680 1.00 25.96 C
ANISOU 8023 C GLN C 167 5075 2769 2019 288 -554 -5 C
ATOM 8024 O GLN C 167 -14.495 5.836 2.303 1.00 26.06 O
ANISOU 8024 O GLN C 167 5061 2808 2032 181 -724 16 O
ATOM 8025 CB GLN C 167 -15.144 8.687 2.582 1.00 29.88 C
ANISOU 8025 CB GLN C 167 6161 3026 2164 158 -567 -86 C

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ATOM   8026  CG  GLN C 167    -14.242   9.212   1.468  1.00 30.68           C
ANISOU 8026  CG  GLN C 167     6114   3167   2376     9   -666    -90      C
ATOM   8027  CD  GLN C 167    -13.317  10.326   1.965  1.00 33.19           C
ANISOU 8027  CD  GLN C 167     6707   3354   2548   -218   -848   -101      C
ATOM   8028  OE1 GLN C 167    -12.477  10.107   2.843  1.00 33.75           O
ANISOU 8028  OE1 GLN C 167     6845   3430   2547   -369  -1033    -79      O
ATOM   8029  NE2 GLN C 167    -13.483  11.528   1.418  1.00 33.70           N
ANISOU 8029  NE2 GLN C 167     6947   3287   2570   -256   -824   -120      N
ATOM   8030  H   GLN C 167    -16.424   6.455   3.797  1.00 34.90           H
ATOM   8031  HA  GLN C 167    -16.758   7.901   1.552  1.00 33.80           H
ATOM   8032  HB2 GLN C 167    -15.655   9.442   2.915  1.00 35.85           H
ATOM   8033  HB3 GLN C 167    -14.566   8.357   3.287  1.00 35.85           H
ATOM   8034  HG2 GLN C 167    -13.691   8.486   1.136  1.00 36.82           H
ATOM   8035  HG3 GLN C 167    -14.791   9.570   0.754  1.00 36.82           H
ATOM   8036 HE21 GLN C 167    -14.088  11.647   0.818  1.00 40.44           H
ATOM   8037 HE22 GLN C 167    -12.987  12.185   1.666  1.00 40.44           H
ATOM   8038  N  AVAL C 168    -15.927   5.786   0.567  0.46 24.05           N
ANISOU 8038  N  AVAL C 168     4591   2600   1945   384   -483     -5      N
ATOM   8039  N  BVAL C 168    -15.929   5.827   0.550  0.54 24.05           N
ANISOU 8039  N  BVAL C 168     4595   2599   1943   383   -480     -7      N
ATOM   8040  CA AVAL C 168    -15.422   4.520   0.050  0.46 23.46           C
ANISOU 8040  CA AVAL C 168     4244   2614   2056   399   -598     -8      C
ATOM   8041  CA BVAL C 168    -15.534   4.533   0.019  0.54 23.40           C
ANISOU 8041  CA BVAL C 168     4239   2604   2049   408   -584     -7      C
ATOM   8042  C  AVAL C 168    -15.076   4.679  -1.420  0.46 22.74           C
ANISOU 8042  C  AVAL C 168     3954   2621   2065   419   -581    -74      C
ATOM   8043  C  BVAL C 168    -15.107   4.705  -1.430  0.54 22.73           C
ANISOU 8043  C  BVAL C 168     3956   2617   2061   420   -576    -74      C
ATOM   8044  O  AVAL C 168    -15.788   5.359  -2.168  0.46 22.19           O
ANISOU 8044  O  AVAL C 168     3903   2549   1977   462   -450    -83      O
ATOM   8045  O  BVAL C 168    -15.729   5.460  -2.186  0.54 22.22           O
ANISOU 8045  O  BVAL C 168     3915   2555   1974   453   -450    -85      O
ATOM   8046  CB AVAL C 168    -16.438   3.372   0.243  0.46 23.14           C
ANISOU 8046  CB AVAL C 168     4126   2556   2110   501   -573     61      C
ATOM   8047  CB BVAL C 168    -16.690   3.513   0.129  0.54 23.01           C
ANISOU 8047  CB BVAL C 168     4119   2538   2086   517   -533     64      C
ATOM   8048  CG1AVAL C 168    -16.645   3.080   1.728  0.46 24.20           C
ANISOU 8048  CG1AVAL C 168     4418   2645   2133   470   -602    159      C
ATOM   8049  CG1BVAL C 168    -16.380   2.247  -0.647  0.54 22.64           C
ANISOU 8049  CG1BVAL C 168     3838   2523   2240   563   -658     30      C
ATOM   8050  CG2AVAL C 168    -17.761   3.698  -0.429  0.46 22.48           C
ANISOU 8050  CG2AVAL C 168     4026   2478   2039   597   -398     90      C
ATOM   8051  CG2BVAL C 168    -16.968   3.184   1.596  0.54 24.05           C
ANISOU 8051  CG2BVAL C 168     4401   2627   2111   495   -554    164      C
ATOM   8052  H  AVAL C 168    -16.554   6.134   0.092  0.46 28.86           H
ATOM   8053  H  BVAL C 168    -16.509   6.233   0.061  0.54 28.86           H
ATOM   8054  HA AVAL C 168    -14.610   4.285   0.526  0.46 28.15           H
ATOM   8055  HA BVAL C 168    -14.778   4.194   0.523  0.54 28.08           H
ATOM   8056  HB AVAL C 168    -16.085   2.569  -0.171  0.46 27.77           H
ATOM   8057  HB BVAL C 168    -17.493   3.905  -0.247  0.54 27.62           H
ATOM   8058 HG11AVAL C 168    -17.285   2.358   1.822  0.46 29.04           H
ATOM   8059 HG11BVAL C 168    -17.124   1.632  -0.556  0.54 27.16           H
ATOM   8060 HG12AVAL C 168    -15.795   2.823   2.120  0.46 29.04           H
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ATOM   8061 HG12BVAL C 168    -16.250   2.474  -1.581  0.54 27.16        H
ATOM   8062 HG13AVAL C 168    -16.981   3.880   2.163  0.46 29.04        H
ATOM   8063 HG13BVAL C 168    -15.573   1.847  -0.287  0.54 27.16        H
ATOM   8064 HG21AVAL C 168    -17.696   4.571  -0.847  0.46 26.98        H
ATOM   8065 HG21BVAL C 168    -17.695   2.544   1.643  0.54 28.86        H
ATOM   8066 HG22AVAL C 168    -17.949   3.023  -1.100  0.46 26.98        H
ATOM   8067 HG22BVAL C 168    -16.167   2.806   1.991  0.54 28.86        H
ATOM   8068 HG23AVAL C 168    -18.463   3.703   0.241  0.46 26.98        H
ATOM   8069 HG23BVAL C 168    -17.213   3.999   2.061  0.54 28.86        H
ATOM   8070  N  AMET C 169    -13.969   4.065  -1.825  0.46 23.05         N
ANISOU 8070  N  AMET C 169    3797  2766  2195   405  -709  -108     N
ATOM   8071  N  BMET C 169    -14.039   4.014  -1.809  0.54 23.01         N
ANISOU 8071  N  BMET C 169    3794  2756  2194   412  -706  -107     N
ATOM   8072  CA AMET C 169    -13.667   3.879  -3.237  0.46 22.92         C
ANISOU 8072  CA AMET C 169    3558  2889  2263   477  -687  -174     C
ATOM   8073  CA BMET C 169    -13.672   3.855  -3.210  0.54 22.94         C
ANISOU 8073  CA BMET C 169    3561  2888  2266   478  -689  -174     C
ATOM   8074  C  AMET C 169    -14.441   2.654  -3.700  0.46 22.33         C
ANISOU 8074  C  AMET C 169    3393  2776  2316   629  -693  -219     C
ATOM   8075  C  BMET C 169    -14.426   2.636  -3.722  0.54 22.35         C
ANISOU 8075  C  BMET C 169    3390  2781  2320   631  -694  -221     C
ATOM   8076  O  AMET C 169    -14.121   1.525  -3.311  0.46 22.76         O
ANISOU 8076  O  AMET C 169    3391  2791  2465   689  -821  -229     O
ATOM   8077  O  BMET C 169    -14.078   1.497  -3.388  0.54 22.78         O
ANISOU 8077  O  BMET C 169    3380  2802  2472   696  -823  -236     O
ATOM   8078  CB AMET C 169    -12.167   3.708  -3.454  0.46 24.19         C
ANISOU 8078  CB AMET C 169    3529  3217  2446   441  -804  -180     C
ATOM   8079  CB BMET C 169    -12.160   3.698  -3.358  0.54 24.21         C
ANISOU 8079  CB BMET C 169    3541  3210  2446   436  -810  -176     C
ATOM   8080  CG AMET C 169    -11.764   3.793  -4.912  0.46 24.32         C
ANISOU 8080  CG AMET C 169    3323  3436  2482   514  -746  -235     C
ATOM   8081  CG BMET C 169    -11.667   3.577  -4.797  0.54 24.45         C
ANISOU 8081  CG BMET C 169    3326  3450  2515   530  -769  -238     C
ATOM   8082  SD AMET C 169    -12.008   5.462  -5.543  0.46 24.28         S
ANISOU 8082  SD AMET C 169    3403  3468  2356   358  -629  -173     S
ATOM   8083  SD BMET C 169    -12.182   4.925  -5.878  0.54 24.20         S
ANISOU 8083  SD BMET C 169    3323  3483  2388   452  -616  -219     S
ATOM   8084  CE AMET C 169    -12.166   5.149  -7.301  0.46 23.98         C
ANISOU 8084  CE AMET C 169    3131  3640  2339   510  -529  -250     C
ATOM   8085  CE BMET C 169    -12.062   6.347  -4.800  0.54 23.98         C
ANISOU 8085  CE BMET C 169    3565  3308  2240   212  -645  -109     C
ATOM   8086  H  AMET C 169    -13.372   3.744  -1.295  0.46 27.66         H
ATOM   8087  H  BMET C 169    -13.502   3.621  -1.264  0.54 27.61         H
ATOM   8088  HA AMET C 169    -13.963   4.657  -3.736  0.46 27.51         H
ATOM   8089  HA BMET C 169    -13.950   4.640  -3.707  0.54 27.52         H
ATOM   8090  HB2AMET C 169    -11.698   4.407  -2.972  0.46 29.03         H
ATOM   8091  HB2BMET C 169    -11.729   4.472  -2.964  0.54 29.05         H
ATOM   8092  HB3AMET C 169    -11.898   2.838  -3.119  0.46 29.03         H
ATOM   8093  HB3BMET C 169    -11.885   2.897  -2.886  0.54 29.05         H
ATOM   8094  HG2AMET C 169    -10.826   3.566  -5.002  0.46 29.19         H
ATOM   8095  HG2BMET C 169    -10.697   3.557  -4.792  0.54 29.34         H
ATOM   8096  HG3AMET C 169    -12.311   3.185  -5.434  0.46 29.19         H
ATOM   8097  HG3BMET C 169    -12.008   2.751  -5.173  0.54 29.34         H
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ATOM   8098  HE1AMET C 169    -12.924   4.563  -7.450  0.46 28.77           H
ATOM   8099  HE1BMET C 169    -11.146   6.434  -4.493  0.54 28.78           H
ATOM   8100  HE2AMET C 169    -12.304   5.993  -7.760  0.46 28.77           H
ATOM   8101  HE2BMET C 169    -12.323   7.140  -5.294  0.54 28.78           H
ATOM   8102  HE3AMET C 169    -11.353   4.728  -7.620  0.46 28.77           H
ATOM   8103  HE3BMET C 169    -12.655   6.220  -4.043  0.54 28.78           H
ATOM   8104  N   ALA C 170    -15.465   2.873  -4.518  1.00 21.44           N
ANISOU 8104  N   ALA C 170     3279   2657   2210    680   -582   -232      N
ATOM   8105  CA  ALA C 170    -16.484   1.871  -4.767  1.00 21.21           C
ANISOU 8105  CA  ALA C 170     3223   2550   2284    764   -607   -230      C
ATOM   8106  C   ALA C 170    -16.561   1.427  -6.219  1.00 21.22           C
ANISOU 8106  C   ALA C 170     3089   2633   2342    860   -622   -339      C
ATOM   8107  O   ALA C 170    -16.121   2.111  -7.147  1.00 21.17           O
ANISOU 8107  O   ALA C 170     3005   2772   2268    867   -551   -392      O
ATOM   8108  CB  ALA C 170    -17.860   2.397  -4.359  1.00 20.75           C
ANISOU 8108  CB  ALA C 170     3281   2424   2180    740   -479   -111      C
ATOM   8109  HA  ALA C 170    -16.292   1.089  -4.227  1.00 25.45           H
ATOM   8110  HB1 ALA C 170    -18.524   1.713  -4.534  1.00 24.90           H
ATOM   8111  HB2 ALA C 170    -17.847   2.613  -3.413  1.00 24.90           H
ATOM   8112  HB3 ALA C 170    -18.059   3.193  -4.877  1.00 24.90           H
ATOM   8113  N   THR C 171    -17.145   0.247  -6.370  1.00 21.61           N
ANISOU 8113  N   THR C 171     3128   2580   2504    920   -734   -358      N
ATOM   8114  CA  THR C 171    -17.731  -0.220  -7.613  1.00 21.85           C
ANISOU 8114  CA  THR C 171     3105   2624   2571    988   -768   -439      C
ATOM   8115  C   THR C 171    -19.243  -0.131  -7.454  1.00 21.46           C
ANISOU 8115  C   THR C 171     3103   2499   2552    909   -729   -286      C
ATOM   8116  O   THR C 171    -19.807  -0.735  -6.536  1.00 21.81           O
ANISOU 8116  O   THR C 171     3195   2424   2669    856   -799   -162      O
ATOM   8117  CB  THR C 171    -17.277  -1.650  -7.908  1.00 23.20           C
ANISOU 8117  CB  THR C 171     3264   2701   2849   1108   -970   -572      C
ATOM   8118  OG1 THR C 171    -15.850  -1.667  -8.009  1.00 23.88           O
ANISOU 8118  OG1 THR C 171     3265   2907   2899   1216   -977   -685      O
ATOM   8119  CG2 THR C 171    -17.887  -2.167  -9.206  1.00 24.37           C
ANISOU 8119  CG2 THR C 171     3412   2838   3009   1174  -1039   -683      C
ATOM   8120  H   THR C 171    -17.217  -0.325  -5.732  1.00 25.94           H
ATOM   8121  HA  THR C 171    -17.457   0.355  -8.345  1.00 26.21           H
ATOM   8122  HB  THR C 171    -17.556  -2.232  -7.184  1.00 27.83           H
ATOM   8123  HG1 THR C 171    -15.582  -2.447  -8.171  1.00 28.65           H
ATOM   8124 HG21 THR C 171    -17.588  -3.074  -9.374  1.00 29.24           H
ATOM   8125 HG22 THR C 171    -18.855  -2.162  -9.142  1.00 29.24           H
ATOM   8126 HG23 THR C 171    -17.617  -1.603  -9.947  1.00 29.24           H
ATOM   8127  N   ALA C 172    -19.894   0.644  -8.323  1.00 20.99           N
ANISOU 8127  N   ALA C 172     3008   2536   2432    899   -615   -263      N
ATOM   8128  CA  ALA C 172    -21.329   0.873  -8.248  1.00 20.89           C
ANISOU 8128  CA  ALA C 172     2995   2504   2440    843   -555    -87      C
ATOM   8129  C   ALA C 172    -21.945   0.663  -9.624  1.00 22.60           C
ANISOU 8129  C   ALA C 172     3143   2775   2670    850   -611   -127      C
ATOM   8130  O   ALA C 172    -21.312   0.931 -10.647  1.00 22.13           O
ANISOU 8130  O   ALA C 172     3050   2820   2537    904   -598   -274      O
ATOM   8131  CB  ALA C 172    -21.652   2.291  -7.740  1.00 20.24           C
ANISOU 8131  CB  ALA C 172     2961   2479   2252    835   -339    28      C
ATOM   8132  H   ALA C 172    -19.514   1.055  -8.976  1.00 25.19           H
ATOM   8133  HA  ALA C 172    -21.725   0.233  -7.636  1.00 25.07           H
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ATOM   8134  HB1 ALA C 172    -22.615   2.402  -7.705  1.00 24.29           H
ATOM   8135  HB2 ALA C 172    -21.274   2.403  -6.854  1.00 24.29           H
ATOM   8136  HB3 ALA C 172    -21.266   2.940  -8.349  1.00 24.29           H
ATOM   8137  N   GLY C 173    -23.179   0.171  -9.646  1.00 24.75           N
ANISOU 8137  N   GLY C 173    3383   3000   3022    782   -685     25       N
ATOM   8138  CA  GLY C 173    -23.811  -0.123 -10.922  1.00 27.86           C
ANISOU 8138  CA  GLY C 173    3728   3432   3424    758   -787     -1       C
ATOM   8139  C   GLY C 173    -25.320  -0.110 -10.844  1.00 30.37           C
ANISOU 8139  C   GLY C 173    3962   3773   3805    657   -795    262       C
ATOM   8140  O   GLY C 173    -25.915   0.001  -9.771  1.00 30.53           O
ANISOU 8140  O   GLY C 173    3950   3788   3863    624   -715    471       O
ATOM   8141  H   GLY C 173    -23.661   0.003  -8.954  1.00 29.70           H
ATOM   8142  HA2 GLY C 173    -23.533   0.534 -11.578  1.00 33.43           H
ATOM   8143  HA3 GLY C 173    -23.528  -1.000 -11.226  1.00 33.43           H
ATOM   8144  N   TYR C 174    -25.936  -0.221 -12.023  1.00 34.22           N
ANISOU 8144  N   TYR C 174    4401   4317   4287    612   -892    264       N
ATOM   8145  CA  TYR C 174    -27.387  -0.251 -12.160  1.00 37.21           C
ANISOU 8145  CA  TYR C 174    4657   4751   4729    499   -936    538       C
ATOM   8146  C   TYR C 174    -27.755  -1.218 -13.274  1.00 40.17           C
ANISOU 8146  C   TYR C 174    5060   5064   5140    392  -1229    468       C
ATOM   8147  O   TYR C 174    -27.265  -1.078 -14.398  1.00 39.68           O
ANISOU 8147  O   TYR C 174    5054   5051   4972    451  -1262    256       O
ATOM   8148  CB  TYR C 174    -27.950   1.138 -12.474  1.00 36.86           C
ANISOU 8148  CB  TYR C 174    4510   4890   4604    562   -697    679       C
ATOM   8149  CG  TYR C 174    -29.458   1.174 -12.584  1.00 38.16           C
ANISOU 8149  CG  TYR C 174    4502   5160   4837    474   -720    999       C
ATOM   8150  H   TYR C 174    -25.521  -0.282 -12.774  1.00 41.07           H
ATOM   8151  HA  TYR C 174    -27.786  -0.566 -11.334  1.00 44.65           H
ATOM   8152  HB2 TYR C 174    -27.689   1.748 -11.766  1.00 44.23           H
ATOM   8153  HB3 TYR C 174    -27.583   1.440 -13.320  1.00 44.23           H
ATOM   8154  N   GLN C 175    -28.627  -2.180 -12.960  1.00 43.20           N
ANISOU 8154  N   GLN C 175    5410   5347   5656    226  -1452    659       N
ATOM   8155  CA  GLN C 175    -29.034  -3.230 -13.891  1.00 45.45           C
ANISOU 8155  CA  GLN C 175    5773   5509   5988     83  -1801    604       C
ATOM   8156  C   GLN C 175    -27.925  -3.525 -14.893  1.00 41.49           C
ANISOU 8156  C   GLN C 175    5463   4934   5366    222  -1889    199       C
ATOM   8157  O   GLN C 175    -28.103  -3.329 -16.099  1.00 45.19           O
ANISOU 8157  O   GLN C 175    5951   5495   5724    220  -1949    103       O
ATOM   8158  CB  GLN C 175    -30.327  -2.836 -14.620  1.00 48.55           C
ANISOU 8158  CB  GLN C 175    5999   6069   6380    -55  -1843    861       C
ATOM   8159  CG  GLN C 175    -31.274  -1.976 -13.800  1.00 48.83           C
ANISOU 8159  CG  GLN C 175    5788   6305   6458    -63  -1595   1239       C
ATOM   8160  H   GLN C 175    -29.005  -2.244 -12.190  1.00 51.84           H
ATOM   8161  HA  GLN C 175    -29.209  -4.043 -13.391  1.00 54.54           H
ATOM   8162  HB2 GLN C 175    -30.093  -2.336 -15.418  1.00 58.26           H
ATOM   8163  HB3 GLN C 175    -30.802  -3.644 -14.868  1.00 58.26           H
ATOM   8164  N  ASER C 176    -26.772  -3.974 -14.412  0.51 37.13           N
ANISOU 8164  N  ASER C 176    5039   4250   4818    358  -1888    -28       N
ATOM   8165  N  BSER C 176    -26.781  -3.984 -14.395  0.49 37.12           N
ANISOU 8165  N  BSER C 176    5038   4246   4821    356  -1890    -24       N
ATOM   8166  CA ASER C 176    -25.641  -4.261 -15.289  0.51 35.44           C
ANISOU 8166  CA ASER C 176    4977   4013   4477    543  -1935   -401       C
ATOM   8167  CA BSER C 176    -25.601  -4.207 -15.218  0.49 35.29           C
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ANISOU 8167 CA BSER C 176 4950 4000 4459 549 -1915 -396 C
ATOM 8168 C ASER C 176 -25.006 -5.566 -14.827 0.51 35.71 C
ANISOU 8168 C ASER C 176 5194 3761 4614 601 -2174 -568 C
ATOM 8169 C BSER C 176 -25.005 -5.559 -14.830 0.49 35.70 C
ANISOU 8169 C BSER C 176 5191 3761 4611 601 -2173 -568 C
ATOM 8170 O ASER C 176 -25.609 -6.358 -14.094 0.51 35.96 O
ANISOU 8170 O ASER C 176 5260 3587 4815 441 -2379 -389 O
ATOM 8171 O BSER C 176 -25.632 -6.383 -14.151 0.49 36.07 O
ANISOU 8171 O BSER C 176 5280 3598 4827 438 -2390 -394 O
ATOM 8172 CB ASER C 176 -24.651 -3.086 -15.304 0.51 32.32 C
ANISOU 8172 CB ASER C 176 4495 3843 3942 716 -1601 -502 C
ATOM 8173 CB BSER C 176 -24.610 -3.046 -15.048 0.49 32.06 C
ANISOU 8173 CB BSER C 176 4451 3801 3929 715 -1577 -476 C
ATOM 8174 OG ASER C 176 -23.981 -2.958 -14.063 0.51 30.51 O
ANISOU 8174 OG ASER C 176 4245 3567 3782 769 -1475 -466 O
ATOM 8175 OG BSER C 176 -23.720 -2.955 -16.148 0.49 32.12 O
ANISOU 8175 OG BSER C 176 4512 3928 3763 879 -1550 -756 O
ATOM 8176 HA ASER C 176 -25.967 -4.389 -16.193 0.51 42.53 H
ATOM 8177 HA BSER C 176 -25.864 -4.247 -16.151 0.49 42.35 H
ATOM 8178 HB2ASER C 176 -23.993 -3.239 -16.001 0.51 38.78 H
ATOM 8179 HB2BSER C 176 -25.108 -2.216 -14.979 0.49 38.47 H
ATOM 8180 HB3ASER C 176 -25.138 -2.267 -15.484 0.51 38.78 H
ATOM 8181 HB3BSER C 176 -24.094 -3.190 -14.239 0.49 38.47 H
ATOM 8182 HG ASER C 176 -23.445 -2.312 -14.091 0.51 36.61 H
ATOM 8183 HG BSER C 176 -23.279 -3.667 -16.220 0.49 38.54 H
ATOM 8184 N SER C 177 -23.770 -5.797 -15.264 1.00 36.30 N
ANISOU 8184 N SER C 177 5374 3833 4584 840 -2152 -892 N
ATOM 8185 CA SER C 177 -23.072 -7.045 -15.004 1.00 39.01 C
ANISOU 8185 CA SER C 177 5912 3902 5010 964 -2386 -1094 C
ATOM 8186 C SER C 177 -21.581 -6.769 -15.131 1.00 39.11 C
ANISOU 8186 C SER C 177 5900 4063 4899 1262 -2190 -1349 C
ATOM 8187 O SER C 177 -21.178 -5.816 -15.804 1.00 36.99 O
ANISOU 8187 O SER C 177 5514 4090 4452 1351 -1953 -1415 O
ATOM 8188 CB SER C 177 -23.510 -8.135 -15.995 1.00 42.44 C
ANISOU 8188 CB SER C 177 6592 4104 5429 946 -2751 -1272 C
ATOM 8189 OG SER C 177 -24.899 -8.416 -15.889 1.00 43.09 O
ANISOU 8189 OG SER C 177 6669 4065 5637 628 -2969 -992 O
ATOM 8190 HA SER C 177 -23.260 -7.346 -14.101 1.00 46.82 H
ATOM 8191 HB2 SER C 177 -23.319 -7.833 -16.896 1.00 50.93 H
ATOM 8192 HB3 SER C 177 -23.012 -8.946 -15.807 1.00 50.93 H
ATOM 8193 HG SER C 177 -25.345 -7.723 -16.052 1.00 51.70 H
ATOM 8194 N GLY C 178 -20.768 -7.595 -14.475 1.00 41.73 N
ANISOU 8194 N GLY C 178 6323 4203 5328 1404 -2298 -1456 N
ATOM 8195 CA GLY C 178 -19.339 -7.591 -14.732 1.00 42.98 C
ANISOU 8195 CA GLY C 178 6458 4498 5374 1719 -2172 -1709 C
ATOM 8196 C GLY C 178 -18.530 -7.955 -13.500 1.00 42.58 C
ANISOU 8196 C GLY C 178 6375 4336 5466 1792 -2177 -1655 C
ATOM 8197 O GLY C 178 -19.053 -8.501 -12.532 1.00 43.14 O
ANISOU 8197 O GLY C 178 6509 4159 5723 1627 -2341 -1474 O
ATOM 8198 H GLY C 178 -21.021 -8.163 -13.881 1.00 50.07 H
ATOM 8199 HA2 GLY C 178 -19.134 -8.228 -15.434 1.00 51.57 H
ATOM 8200 HA3 GLY C 178 -19.066 -6.708 -15.029 1.00 51.57 H
ATOM 8201 N SER C 179 -17.236 -7.621 -13.573 1.00 40.58 N

ANISOU 8201 N SER C 179 5991 4320 5108 2016 -1988 -1770 N
ATOM 8202 CA SER C 179 -16.247 -7.996 -12.574 1.00 39.51 C
ANISOU 8202 CA SER C 179 5789 4161 5061 2089 -1984 -1718 C
ATOM 8203 C SER C 179 -15.374 -6.806 -12.216 1.00 36.16 C
ANISOU 8203 C SER C 179 5134 4052 4554 2125 -1705 -1652 C
ATOM 8204 O SER C 179 -15.034 -5.987 -13.075 1.00 35.34 O
ANISOU 8204 O SER C 179 4906 4250 4273 2194 -1512 -1719 O
ATOM 8205 CB SER C 179 -15.332 -9.102 -13.077 1.00 42.68 C
ANISOU 8205 CB SER C 179 6254 4550 5414 2317 -2089 -1896 C
ATOM 8206 OG SER C 179 -16.064 -10.273 -13.369 1.00 45.89 O
ANISOU 8206 OG SER C 179 6896 4640 5901 2287 -2382 -1949 O
ATOM 8207 H SER C 179 -16.904 -7.161 -14.219 1.00 48.70 H
ATOM 8208 HA SER C 179 -16.695 -8.304 -11.771 1.00 47.41 H
ATOM 8209 HB2 SER C 179 -14.886 -8.800 -13.883 1.00 51.22 H
ATOM 8210 HB3 SER C 179 -14.675 -9.304 -12.392 1.00 51.22 H
ATOM 8211 HG SER C 179 -16.456 -10.547 -12.679 1.00 55.07 H
ATOM 8212 N ASER C 180 -14.978 -6.748 -10.945 0.49 34.58 N
ANISOU 8212 N ASER C 180 4879 3788 4471 2062 -1706 -1499 N
ATOM 8213 N BSER C 180 -14.995 -6.724 -10.942 0.51 34.52 N
ANISOU 8213 N BSER C 180 4870 3782 4463 2059 -1704 -1496 N
ATOM 8214 CA ASER C 180 -14.105 -5.696 -10.452 0.49 32.79 C
ANISOU 8214 CA ASER C 180 4449 3838 4173 2036 -1493 -1394 C
ATOM 8215 CA BSER C 180 -14.072 -5.690 -10.503 0.51 32.84 C
ANISOU 8215 CA BSER C 180 4452 3855 4173 2046 -1489 -1402 C
ATOM 8216 C ASER C 180 -13.207 -6.253 -9.358 0.49 33.52 C
ANISOU 8216 C ASER C 180 4510 3848 4380 2101 -1589 -1336 C
ATOM 8217 C BSER C 180 -13.219 -6.219 -9.360 0.51 33.47 C
ANISOU 8217 C BSER C 180 4501 3845 4371 2098 -1585 -1333 C
ATOM 8218 O ASER C 180 -13.637 -7.084 -8.555 0.49 34.25 O
ANISOU 8218 O ASER C 180 4737 3660 4617 2010 -1768 -1253 O
ATOM 8219 O BSER C 180 -13.691 -6.993 -8.523 0.51 34.05 O
ANISOU 8219 O BSER C 180 4708 3639 4589 1997 -1759 -1240 O
ATOM 8220 CB ASER C 180 -14.900 -4.512 -9.892 0.49 29.92 C
ANISOU 8220 CB ASER C 180 4056 3534 3779 1735 -1343 -1165 C
ATOM 8221 CB BSER C 180 -14.810 -4.419 -10.055 0.51 29.98 C
ANISOU 8221 CB BSER C 180 4045 3582 3762 1753 -1320 -1183 C
ATOM 8222 OG ASER C 180 -14.028 -3.577 -9.278 0.49 28.50 O
ANISOU 8222 OG ASER C 180 3738 3554 3536 1674 -1196 -1060 O
ATOM 8223 OG BSER C 180 -15.476 -4.612 -8.818 0.51 28.43 O
ANISOU 8223 OG BSER C 180 3939 3172 3690 1569 -1403 -995 O
ATOM 8224 H ASER C 180 -15.208 -7.318 -10.343 0.49 41.49 H
ATOM 8225 HA ASER C 180 -13.544 -5.375 -11.176 0.49 39.35 H
ATOM 8226 HA BSER C 180 -13.484 -5.455 -11.237 0.51 39.41 H
ATOM 8227 HB2ASER C 180 -15.373 -4.076 -10.618 0.49 35.91 H
ATOM 8228 HB2BSER C 180 -14.166 -3.701 -9.956 0.51 35.97 H
ATOM 8229 HB3ASER C 180 -15.531 -4.837 -9.231 0.49 35.91 H
ATOM 8230 HB3BSER C 180 -15.466 -4.183 -10.730 0.51 35.97 H
ATOM 8231 HG ASER C 180 -13.475 -3.288 -9.841 0.49 34.20 H
ATOM 8232 HG BSER C 180 -14.921 -4.816 -8.222 0.51 34.11 H
ATOM 8233 N ASN C 181 -11.960 -5.790 -9.340 1.00 32.70 N
ANISOU 8233 N ASN C 181 4209 4018 4197 2212 -1467 -1340 N
ATOM 8234 CA ASN C 181 -11.050 -6.014 -8.227 1.00 33.78 C
ANISOU 8234 CA ASN C 181 4268 4149 4419 2216 -1528 -1226 C

ATOM 8235 C ASN C 181 -10.376 -4.686 -7.971 1.00 32.32 C
ANISOU 8235 C ASN C 181 3881 4278 4121 2087 -1353 -1089 C
ATOM 8236 O ASN C 181 -9.799 -4.101 -8.893 1.00 32.44 O
ANISOU 8236 O ASN C 181 3727 4598 4001 2174 -1205 -1147 O
ATOM 8237 CB ASN C 181 -9.988 -7.080 -8.506 1.00 37.39 C
ANISOU 8237 CB ASN C 181 4687 4630 4890 2444 -1581 -1344 C
ATOM 8238 CG ASN C 181 -8.920 -7.135 -7.399 1.00 39.35 C
ANISOU 8238 CG ASN C 181 4796 4939 5216 2452 -1622 -1195 C
ATOM 8239 OD1 ASN C 181 -9.040 -7.900 -6.446 1.00 39.76 O
ANISOU 8239 OD1 ASN C 181 4963 4737 5409 2393 -1785 -1113 O
ATOM 8240 ND2 ASN C 181 -7.889 -6.298 -7.517 1.00 40.21 N
ANISOU 8240 ND2 ASN C 181 4643 5406 5230 2497 -1487 -1130 N
ATOM 8241 H ASN C 181 -11.603 -5.340 -9.980 1.00 39.24 H
ATOM 8242 HA ASN C 181 -11.552 -6.269 -7.436 1.00 40.54 H
ATOM 8243 HB2 ASN C 181 -10.416 -7.949 -8.557 1.00 44.87 H
ATOM 8244 HB3 ASN C 181 -9.545 -6.876 -9.344 1.00 44.87 H
ATOM 8245 HD21 ASN C 181 -7.268 -6.294 -6.922 1.00 48.26 H
ATOM 8246 HD22 ASN C 181 -7.844 -5.763 -8.189 1.00 48.26 H
ATOM 8247 N VAL C 182 -10.469 -4.205 -6.737 1.00 30.64 N
ANISOU 8247 N VAL C 182 3706 3994 3941 1845 -1371 -894 N
ATOM 8248 CA VAL C 182 -9.898 -2.922 -6.367 1.00 29.74 C
ANISOU 8248 CA VAL C 182 3473 4111 3714 1649 -1246 -750 C
ATOM 8249 C VAL C 182 -9.254 -3.056 -5.001 1.00 31.72 C
ANISOU 8249 C VAL C 182 3719 4309 4025 1552 -1369 -599 C
ATOM 8250 O VAL C 182 -9.738 -3.773 -4.119 1.00 32.35 O
ANISOU 8250 O VAL C 182 3949 4137 4206 1519 -1504 -548 O
ATOM 8251 CB VAL C 182 -10.949 -1.790 -6.341 1.00 27.90 C
ANISOU 8251 CB VAL C 182 3369 3840 3392 1400 -1113 -671 C
ATOM 8252 CG1 VAL C 182 -10.273 -0.432 -6.124 1.00 27.28 C
ANISOU 8252 CG1 VAL C 182 3203 3970 3190 1209 -1015 -545 C
ATOM 8253 CG2 VAL C 182 -11.779 -1.792 -7.613 1.00 27.03 C
ANISOU 8253 CG2 VAL C 182 3287 3742 3241 1480 -1029 -795 C
ATOM 8254 H VAL C 182 -10.864 -4.610 -6.089 1.00 36.76 H
ATOM 8255 HA VAL C 182 -9.210 -2.682 -7.007 1.00 35.68 H
ATOM 8256 HB VAL C 182 -11.551 -1.942 -5.596 1.00 33.48 H
ATOM 8257 HG11 VAL C 182 -10.953 0.260 -6.111 1.00 32.73 H
ATOM 8258 HG12 VAL C 182 -9.800 -0.447 -5.277 1.00 32.73 H
ATOM 8259 HG13 VAL C 182 -9.650 -0.271 -6.849 1.00 32.73 H
ATOM 8260 HG21 VAL C 182 -12.428 -1.072 -7.567 1.00 32.43 H
ATOM 8261 HG22 VAL C 182 -11.191 -1.659 -8.373 1.00 32.43 H
ATOM 8262 HG23 VAL C 182 -12.235 -2.644 -7.691 1.00 32.43 H
ATOM 8263 N THR C 183 -8.149 -2.354 -4.846 1.00 32.16 N
ANISOU 8263 N THR C 183 3591 4621 4009 1485 -1337 -503 N
ATOM 8264 CA THR C 183 -7.441 -2.242 -3.588 1.00 32.44 C
ANISOU 8264 CA THR C 183 3607 4657 4061 1341 -1460 -337 C
ATOM 8265 C THR C 183 -7.378 -0.769 -3.240 1.00 30.73 C
ANISOU 8265 C THR C 183 3433 4543 3700 1032 -1384 -210 C
ATOM 8266 O THR C 183 -7.175 0.070 -4.120 1.00 30.64 O
ANISOU 8266 O THR C 183 3312 4733 3599 988 -1260 -217 O
ATOM 8267 CB THR C 183 -6.046 -2.861 -3.707 1.00 34.36 C
ANISOU 8267 CB THR C 183 3572 5118 4366 1553 -1547 -316 C
ATOM 8268 OG1 THR C 183 -6.187 -4.274 -3.903 1.00 35.56 O
ANISOU 8268 OG1 THR C 183 3762 5089 4660 1859 -1650 -449 O

ATOM 8269 CG2 THR C 183 -5.201 -2.591 -2.487 1.00 35.32 C
ANISOU 8269 CG2 THR C 183 3634 5300 4487 1365 -1686 -111 C
ATOM 8270 H THR C 183 -7.774 -1.915 -5.483 1.00 38.60 H
ATOM 8271 HA THR C 183 -7.932 -2.707 -2.892 1.00 38.92 H
ATOM 8272 HB THR C 183 -5.594 -2.478 -4.475 1.00 41.23 H
ATOM 8273 HG1 THR C 183 -6.623 -4.425 -4.605 1.00 42.67 H
ATOM 8274 HG21 THR C 183 -4.326 -2.995 -2.594 1.00 42.38 H
ATOM 8275 HG22 THR C 183 -5.094 -1.635 -2.364 1.00 42.38 H
ATOM 8276 HG23 THR C 183 -5.627 -2.964 -1.700 1.00 42.38 H
ATOM 8277 N VAL C 184 -7.607 -0.462 -1.965 1.00 30.26 N
ANISOU 8277 N VAL C 184 3564 4327 3605 821 -1467 -97 N
ATOM 8278 CA VAL C 184 -7.775 0.905 -1.494 1.00 29.53 C
ANISOU 8278 CA VAL C 184 3629 4229 3363 538 -1420 -10 C
ATOM 8279 C VAL C 184 -6.845 1.126 -0.317 1.00 31.05 C
ANISOU 8279 C VAL C 184 3830 4458 3509 354 -1595 140 C
ATOM 8280 O VAL C 184 -6.612 0.219 0.486 1.00 31.85 O
ANISOU 8280 O VAL C 184 3930 4486 3684 414 -1735 187 O
ATOM 8281 CB VAL C 184 -9.232 1.196 -1.068 1.00 28.09 C
ANISOU 8281 CB VAL C 184 3751 3799 3123 474 -1328 -42 C
ATOM 8282 CG1 VAL C 184 -9.408 2.660 -0.747 1.00 27.40 C
ANISOU 8282 CG1 VAL C 184 3854 3688 2870 247 -1266 8 C
ATOM 8283 CG2 VAL C 184 -10.221 0.747 -2.140 1.00 26.72 C
ANISOU 8283 CG2 VAL C 184 3558 3574 3020 649 -1203 -165 C
ATOM 8284 H VAL C 184 -7.671 -1.048 -1.339 1.00 36.31 H
ATOM 8285 HA VAL C 184 -7.531 1.524 -2.200 1.00 35.44 H
ATOM 8286 HB VAL C 184 -9.425 0.693 -0.261 1.00 33.71 H
ATOM 8287 HG11 VAL C 184 -10.328 2.817 -0.483 1.00 32.88 H
ATOM 8288 HG12 VAL C 184 -8.810 2.898 -0.021 1.00 32.88 H
ATOM 8289 HG13 VAL C 184 -9.196 3.184 -1.536 1.00 32.88 H
ATOM 8290 HG21 VAL C 184 -11.122 0.944 -1.840 1.00 32.06 H
ATOM 8291 HG22 VAL C 184 -10.034 1.226 -2.962 1.00 32.06 H
ATOM 8292 HG23 VAL C 184 -10.121 -0.207 -2.282 1.00 32.06 H
ATOM 8293 N TRP C 185 -6.330 2.344 -0.205 1.00 31.96 N
ANISOU 8293 N TRP C 185 3970 4671 3500 110 -1615 231 N
ATOM 8294 CA TRP C 185 -5.451 2.681 0.907 1.00 34.29 C
ANISOU 8294 CA TRP C 185 4304 4997 3727 -118 -1815 383 C
ATOM 8295 C TRP C 185 -5.156 4.172 0.963 1.00 34.89 C
ANISOU 8295 C TRP C 185 4509 5097 3651 -426 -1849 461 C
ATOM 8296 O TRP C 185 -5.572 4.938 0.085 1.00 33.17 O
ANISOU 8296 O TRP C 185 4319 4889 3397 -448 -1709 412 O
ATOM 8297 CB TRP C 185 -4.135 1.901 0.812 1.00 36.99 C
ANISOU 8297 CB TRP C 185 4277 5592 4185 -18 -1951 489 C
ATOM 8298 CG TRP C 185 -3.203 2.374 -0.283 1.00 38.65 C
ANISOU 8298 CG TRP C 185 4143 6139 4403 -21 -1902 561 C
ATOM 8299 CD1 TRP C 185 -2.238 3.339 -0.182 1.00 41.03 C
ANISOU 8299 CD1 TRP C 185 4322 6642 4626 -310 -2017 753 C
ATOM 8300 CD2 TRP C 185 -3.142 1.890 -1.631 1.00 37.76 C
ANISOU 8300 CD2 TRP C 185 3763 6221 4362 267 -1737 463 C
ATOM 8301 NE1 TRP C 185 -1.586 3.487 -1.384 1.00 41.78 N
ANISOU 8301 NE1 TRP C 185 4053 7077 4744 -223 -1916 810 N
ATOM 8302 CE2 TRP C 185 -2.120 2.608 -2.288 1.00 39.68 C
ANISOU 8302 CE2 TRP C 185 3700 6821 4555 150 -1731 619 C
ATOM 8303 CE3 TRP C 185 -3.849 0.919 -2.344 1.00 35.73 C

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ANISOU 8303  CE3 TRP C 185     3508   5875   4193    601  -1610    266       C
ATOM   8304  CZ2 TRP C 185      -1.792   2.388  -3.625  1.00 40.05           C
ANISOU 8304  CZ2 TRP C 185     3436   7170   4612    386  -1569    579       C
ATOM   8305  CZ3 TRP C 185      -3.521   0.702  -3.672  1.00 36.54           C
ANISOU 8305  CZ3 TRP C 185     3344   6237   4304    836  -1472    194       C
ATOM   8306  CH2 TRP C 185      -2.501   1.432  -4.297  1.00 38.53           C
ANISOU 8306  CH2 TRP C 185     3283   6876   4480    743  -1435    347       C
ATOM   8307  OXT TRP C 185      -4.485   4.620   1.898  1.00 35.70           O
ANISOU 8307  OXT TRP C 185     4704   5194   3665   -669  -2044    585       O
ATOM   8308  H   TRP C 185      -6.471   2.990  -0.755  1.00 38.35           H
ATOM   8309  HA  TRP C 185      -5.886   2.433   1.738  1.00 41.15           H
ATOM   8310  HB2 TRP C 185      -3.664   1.984   1.656  1.00 44.39           H
ATOM   8311  HB3 TRP C 185      -4.339   0.968   0.642  1.00 44.39           H
ATOM   8312  HD1 TRP C 185      -2.052   3.827   0.588  1.00 49.24           H
ATOM   8313  HE1 TRP C 185      -0.946   4.040  -1.541  1.00 50.14           H
ATOM   8314  HE3 TRP C 185      -4.526   0.428  -1.936  1.00 42.88           H
ATOM   8315  HZ2 TRP C 185      -1.117   2.872  -4.043  1.00 48.06           H
ATOM   8316  HZ3 TRP C 185      -3.986   0.059  -4.157  1.00 43.85           H
ATOM   8317  HH2 TRP C 185      -2.305   1.266  -5.190  1.00 46.23           H
TER    8318      TRP C 185
HETATM 8319  K     K A 201      -7.319  -5.472 -26.177  1.00 17.24           K
HETATM 8320  K     K B 201     -37.692 -16.388 -48.771  1.00 21.22           K
HETATM 8321  K     K C 201     -10.727  -9.394   4.518  1.00 41.96           K
HETATM 8322  O   HOH A 301      -9.339 -21.157  -3.388  1.00 44.07           O
HETATM 8323  O   HOH A 302      -9.599  -8.614 -15.360  1.00 39.39           O
HETATM 8324  O   HOH A 303     -10.229 -11.531  -6.671  0.89 37.20           O
HETATM 8325  O   HOH A 304     -12.049 -22.967 -15.288  1.00 44.18           O
HETATM 8326  O   HOH A 305     -14.217 -21.490 -16.673  1.00 47.88           O
HETATM 8327  O   HOH A 306       2.746 -31.536 -32.761  0.91 27.90           O
HETATM 8328  O   HOH A 307      -0.009  -7.455 -27.526  0.80 19.09           O
HETATM 8329  O   HOH A 308      20.715 -27.009 -13.296  1.00 30.75           O
HETATM 8330  O   HOH A 309       6.080  -1.039 -15.852  1.00 41.13           O
HETATM 8331  O   HOH A 310       8.790 -14.535 -31.973  1.00 39.94           O
HETATM 8332  O   HOH A 311       4.588 -12.892  -5.108  0.91 22.51           O
HETATM 8333  O   HOH A 312       9.940 -34.355 -34.551  1.00 29.08           O
HETATM 8334  O   HOH A 313      11.827 -19.020 -32.206  1.00 29.41           O
HETATM 8335  O  AHOH A 314      14.338 -38.591 -15.199  0.59 20.58           O
HETATM 8336  O  BHOH A 314      15.495 -40.071 -14.302  0.41 20.16           O
HETATM 8337  O   HOH A 315      18.292 -10.734 -19.392  1.00 36.16           O
HETATM 8338  O   HOH A 316       6.134  -7.517 -11.228  0.96 19.21           O
HETATM 8339  O   HOH A 317       7.346 -35.849 -11.658  0.97 32.98           O
HETATM 8340  O   HOH A 318      10.748  -9.066 -24.574  1.00 27.77           O
HETATM 8341  O   HOH A 319       6.902 -22.110 -35.275  1.00 25.32           O
HETATM 8342  O   HOH A 320      -7.045 -23.930  -4.819  1.00 35.53           O
HETATM 8343  O   HOH A 321       3.695  -5.808 -25.176  1.00 17.43           O
HETATM 8344  O   HOH A 322       9.220 -23.279  -4.612  1.00 35.34           O
HETATM 8345  O   HOH A 323       3.232 -10.643  -4.755  1.00 33.11           O
HETATM 8346  O   HOH A 324      10.043 -25.867  -5.523  1.00 18.98           O
HETATM 8347  O   HOH A 325       6.040 -35.026 -24.918  1.00 13.30           O
HETATM 8348  O   HOH A 326      13.860 -16.283 -14.386  1.00 13.60           O
HETATM 8349  O   HOH A 327      14.470 -11.621  -8.460  1.00 43.82           O
HETATM 8350  O   HOH A 328      14.660 -25.758 -29.578  1.00 22.80           O
HETATM 8351  O   HOH A 329      -3.440 -38.841 -24.807  1.00 32.52           O
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HETATM 8352 O HOH A 330 7.224 -21.375 -26.865 1.00 11.67 O
HETATM 8353 O HOH A 331 1.862 -6.239 -31.443 1.00 38.15 O
HETATM 8354 O HOH A 332 18.375 -35.866 -16.322 1.00 26.84 O
HETATM 8355 O HOH A 333 -1.264 -41.662 -22.983 1.00 39.83 O
HETATM 8356 O HOH A 334 -6.685 -40.337 -18.540 0.96 37.26 O
HETATM 8357 O HOH A 335 5.447 -15.242 -35.003 0.94 28.85 O
HETATM 8358 O HOH A 336 16.487 -29.292 -28.867 1.00 34.14 O
HETATM 8359 O HOH A 337 -3.543 -3.248 -28.058 1.00 22.47 O
HETATM 8360 O HOH A 338 20.756 -34.427 -14.549 1.00 27.81 O
HETATM 8361 O HOH A 339 -8.889 -4.528 -16.234 0.96 30.70 O
HETATM 8362 O HOH A 340 -0.186 -28.229 -4.681 1.00 44.82 O
HETATM 8363 O HOH A 341 18.119 -28.503 -27.065 1.00 24.60 O
HETATM 8364 O HOH A 342 21.608 -21.574 -17.078 0.95 19.25 O
HETATM 8365 O HOH A 343 16.047 -26.957 -22.810 1.00 11.78 O
HETATM 8366 O HOH A 344 13.231 -31.946 -33.367 0.99 29.44 O
HETATM 8367 O HOH A 345 21.961 -19.591 -15.022 0.93 34.32 O
HETATM 8368 O HOH A 346 -5.321 -2.742 -16.824 1.00 31.19 O
HETATM 8369 O HOH A 347 8.587 -6.955 -8.551 0.84 28.84 O
HETATM 8370 O HOH A 348 16.106 -27.123 -25.646 1.00 11.73 O
HETATM 8371 O HOH A 349 1.688 -6.705 -7.287 0.99 24.53 O
HETATM 8372 O HOH A 350 7.950 -17.721 -0.792 1.00 33.81 O
HETATM 8373 O HOH A 351 7.301 -9.966 -10.420 1.00 20.38 O
HETATM 8374 O HOH A 352 9.746 -22.444 -34.690 1.00 21.86 O
HETATM 8375 O HOH A 353 19.223 -22.052 -2.552 1.00 45.23 O
HETATM 8376 O HOH A 354 -5.367 -2.216 -20.679 1.00 24.47 O
HETATM 8377 O HOH A 355 13.575 -14.416 -10.127 1.00 17.91 O
HETATM 8378 O HOH A 356 14.228 -8.577 -13.012 1.00 32.37 O
HETATM 8379 O HOH A 357 1.277 -2.788 -7.310 1.00 51.44 O
HETATM 8380 O HOH A 358 4.439 -25.016 -33.453 1.00 44.52 O
HETATM 8381 O HOH A 359 19.220 -14.310 -23.437 0.99 25.38 O
HETATM 8382 O HOH A 360 18.863 -25.383 -3.736 1.00 27.33 O
HETATM 8383 O HOH A 361 16.711 -15.208 -22.683 1.00 24.81 O
HETATM 8384 O HOH A 362 -6.930 -0.824 -26.575 0.78 26.97 O
HETATM 8385 O HOH A 363 11.343 -23.750 -36.390 0.95 32.94 O
HETATM 8386 O HOH A 364 -16.270 -16.989 -16.969 0.95 29.18 O
HETATM 8387 O HOH A 365 12.073 -2.654 -20.584 1.00 40.69 O
HETATM 8388 O HOH A 366 -6.634 -5.427 -18.517 0.93 29.57 O
HETATM 8389 O HOH A 367 9.738 -0.969 -11.967 1.00 33.88 O
HETATM 8390 O HOH A 368 -0.272 -7.349 -5.806 1.00 29.70 O
HETATM 8391 O HOH A 369 11.681 -5.625 -16.951 1.00 41.30 O
HETATM 8392 O HOH A 370 -6.693 -38.863 -28.231 0.98 36.57 O
HETATM 8393 O HOH A 371 14.543 -10.553 -25.957 1.00 25.19 O
HETATM 8394 O HOH A 372 18.013 -36.112 -23.943 1.00 11.72 O
HETATM 8395 O HOH A 373 12.520 -9.147 -9.416 0.96 37.22 O
HETATM 8396 O HOH A 374 22.436 -21.756 -12.398 0.87 30.32 O
HETATM 8397 O HOH A 375 1.793 -2.833 -23.207 1.00 24.39 O
HETATM 8398 O HOH A 376 20.122 -13.660 -14.791 1.00 27.65 O
HETATM 8399 O HOH A 377 -11.446 -9.848 -22.944 0.98 29.92 O
HETATM 8400 O HOH A 378 -11.476 -22.435 -23.453 1.00 34.04 O
HETATM 8401 O HOH A 379 -9.055 -33.801 -21.449 0.99 41.65 O
HETATM 8402 O HOH A 380 -2.472 -36.198 -16.262 0.93 26.71 O
HETATM 8403 O HOH A 381 21.815 -14.028 -16.971 1.00 42.55 O
HETATM 8404 O HOH A 382 21.949 -17.989 -21.275 0.91 40.88 O

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HETATM 8405  O   HOH A 383     -12.721 -13.104  -7.895  1.00 38.02           O
HETATM 8406  O   HOH A 384      18.738 -23.129 -27.295  1.00 40.05           O
HETATM 8407  O   HOH A 385      -3.577 -18.517  -1.327  1.00 32.32           O
HETATM 8408  O   HOH A 386       3.971 -36.958 -13.855  1.00 38.44           O
HETATM 8409  O   HOH A 387      -3.354 -19.765 -32.165  1.00 38.19           O
HETATM 8410  O   HOH A 388       4.873 -32.402 -32.587  1.00 21.44           O
HETATM 8411  O   HOH A 389     -15.990 -19.972 -17.420  1.00 48.45           O
HETATM 8412  O   HOH A 390       4.302 -20.300 -34.234  1.00 35.10           O
HETATM 8413  O   HOH A 391      12.917 -13.524  -2.798  1.00 32.89           O
HETATM 8414  O   HOH A 392      19.895 -15.574  -7.940  1.00 49.91           O
HETATM 8415  O   HOH A 393      14.860 -17.419  -4.970  1.00 25.91           O
HETATM 8416  O   HOH A 394       5.931 -13.899 -32.187  1.00 20.30           O
HETATM 8417  O   HOH A 395      19.847 -34.591 -12.273  0.97 34.00           O
HETATM 8418  O   HOH A 396      -6.928 -32.588 -32.809  1.00 42.51           O
HETATM 8419  O   HOH A 397      18.913 -20.727 -25.028  1.00 33.02           O
HETATM 8420  O   HOH A 398       3.669 -39.747 -14.394  0.98 39.60           O
HETATM 8421  O   HOH A 399       5.683 -24.024  -1.735  1.00 51.54           O
HETATM 8422  O   HOH A 400       2.691 -22.028  -0.542  1.00 39.51           O
HETATM 8423  O   HOH A 401      10.969  -7.160  -9.786  1.00 42.94           O
HETATM 8424  O   HOH A 402      21.626 -28.369 -10.530  1.00 37.94           O
HETATM 8425  O   HOH A 403      20.958 -13.872 -11.324  1.00 42.63           O
HETATM 8426  O   HOH A 404       7.177 -37.720 -12.729  1.00 32.85           O
HETATM 8427  O   HOH A 405      -3.398 -29.127 -19.642  1.00 37.76           O
HETATM 8428  O   HOH A 406      -9.694 -21.699 -25.663  1.00 39.07           O
HETATM 8429  O   HOH A 407       5.030  -8.904  -3.424  0.92 32.51           O
HETATM 8430  O   HOH A 408       2.803  -3.123 -25.301  0.97 36.94           O
HETATM 8431  O   HOH A 409       3.080 -13.694 -35.828  1.00 53.04           O
HETATM 8432  O   HOH A 410       0.989 -14.435  -2.873  1.00 33.30           O
HETATM 8433  O   HOH A 411       2.478  -4.432  -5.943  1.00 42.21           O
HETATM 8434  O   HOH A 412      18.376 -23.493  -0.915  0.97 37.09           O
HETATM 8435  O   HOH A 413      14.047 -11.745  -3.444  1.00 48.80           O
HETATM 8436  O   HOH A 414      -9.150  -2.817 -22.592  0.88 31.56           O
HETATM 8437  O   HOH A 415      11.225 -38.674 -15.291  0.93 38.19           O
HETATM 8438  O   HOH A 416      16.468 -28.030 -30.885  1.00 46.91           O
HETATM 8439  O   HOH A 417       1.692 -31.198 -35.344  0.91 38.08           O
HETATM 8440  O   HOH A 418      -2.520 -39.832 -26.932  1.00 40.06           O
HETATM 8441  O   HOH A 419      20.190 -32.355  -7.758  1.00 42.70           O
HETATM 8442  O   HOH A 420      20.339 -10.973 -13.983  1.00 42.20           O
HETATM 8443  O   HOH A 421      20.488 -12.289 -21.491  0.95 37.72           O
HETATM 8444  O   HOH A 422       9.787 -38.480 -17.080  0.97 35.85           O
HETATM 8445  O   HOH A 423      15.944 -25.038 -27.298  1.00 16.52           O
HETATM 8446  O   HOH A 424      11.789 -20.592 -34.506  1.00 37.90           O
HETATM 8447  O   HOH B 301      -8.721 -20.561 -53.439  1.00 43.62           O
HETATM 8448  O   HOH B 302       0.249 -23.246 -40.752  0.96 37.32           O
HETATM 8449  O   HOH B 303      -5.106 -19.264 -46.225  1.00 36.83           O
HETATM 8450  O   HOH B 304     -15.221 -14.617 -24.431  1.00 50.95           O
HETATM 8451  O   HOH B 305     -32.482 -10.989 -49.681  0.94 31.59           O
HETATM 8452  O   HOH B 306     -20.994   3.176 -44.263  0.97 20.02           O
HETATM 8453  O   HOH B 307     -16.427 -30.072 -39.891  1.00 43.93           O
HETATM 8454  O   HOH B 308     -25.077 -36.208 -38.675  1.00 36.47           O
HETATM 8455  O   HOH B 309     -32.015 -23.527 -47.337  1.00 27.22           O
HETATM 8456  O   HOH B 310     -26.236  -2.194 -46.938  1.00 27.50           O
HETATM 8457  O   HOH B 311     -25.261 -26.022 -48.205  1.00 24.83           O
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HETATM 8458  O   HOH B 312     -10.899  -7.012 -24.616  1.00 20.48           O
HETATM 8459  O   HOH B 313     -13.134   3.067 -42.478  1.00 11.62           O
HETATM 8460  O   HOH B 314     -17.443 -26.362 -48.090  1.00 34.48           O
HETATM 8461  O   HOH B 315      -0.799 -12.805 -38.145  0.83 32.26          O
HETATM 8462  O   HOH B 316     -33.087 -22.723 -28.732  1.00 36.22          O
HETATM 8463  O   HOH B 317      -2.987 -11.552 -47.729  1.00 36.76          O
HETATM 8464  O   HOH B 318      -4.910  -8.728 -51.798  1.00 43.85          O
HETATM 8465  O   HOH B 319     -30.621   1.117 -33.099  1.00 24.81          O
HETATM 8466  O   HOH B 320     -26.410 -30.408 -39.467  1.00 25.60          O
HETATM 8467  O   HOH B 321     -20.350  -2.421 -32.208  1.00 12.77          O
HETATM 8468  O   HOH B 322     -32.453  -9.849 -29.427  1.00 26.53          O
HETATM 8469  O   HOH B 323     -16.373 -11.528 -48.896  1.00 12.68          O
HETATM 8470  O   HOH B 324     -30.523 -32.817 -30.709  0.95 34.12          O
HETATM 8471  O   HOH B 325     -22.885   2.552 -36.526  0.92 22.48          O
HETATM 8472  O   HOH B 326      -1.141  -4.985 -44.506  0.92 37.45          O
HETATM 8473  O   HOH B 327     -28.284 -10.560 -26.911  1.00 19.48          O
HETATM 8474  O   HOH B 328      -5.639   1.751 -38.319  0.99 15.33          O
HETATM 8475  O   HOH B 329     -29.911  -6.410 -33.171  0.96 13.20          O
HETATM 8476  O   HOH B 330     -21.648   3.464 -41.448  1.00 22.54          O
HETATM 8477  O   HOH B 331     -18.525  -2.948 -36.275  0.94  7.74          O
HETATM 8478  O   HOH B 332     -23.224 -29.008 -38.096  1.00 23.17          O
HETATM 8479  O   HOH B 333     -26.391   2.321 -42.328  0.92 24.07          O
HETATM 8480  O   HOH B 334     -23.792 -20.115 -23.920  1.00 33.08          O
HETATM 8481  O   HOH B 335     -35.888  -7.606 -45.331  1.00 27.03          O
HETATM 8482  O   HOH B 336     -11.851 -10.336 -27.394  1.00 22.43          O
HETATM 8483  O   HOH B 337     -22.469  -0.545 -30.462  1.00 23.61          O
HETATM 8484  O   HOH B 338     -14.340   5.394 -38.662  1.00 29.94          O
HETATM 8485  O   HOH B 339      -7.179 -20.461 -31.671  0.89 38.19          O
HETATM 8486  O   HOH B 340     -25.606  -9.955 -27.046  1.00 15.20          O
HETATM 8487  O   HOH B 341     -32.102  -7.156 -47.453  1.00 26.14          O
HETATM 8488  O   HOH B 342     -20.363 -16.098 -53.747  1.00 30.54          O
HETATM 8489  O   HOH B 343      -4.644 -10.720 -57.484  0.99 29.08          O
HETATM 8490  O   HOH B 344     -32.728 -12.560 -28.114  1.00 27.36          O
HETATM 8491  O   HOH B 345     -11.933 -16.238 -58.357  1.00 44.04          O
HETATM 8492  O   HOH B 346     -35.703 -10.661 -36.120  1.00 26.22          O
HETATM 8493  O   HOH B 347     -16.652   2.619 -30.703  0.92 43.10          O
HETATM 8494  O   HOH B 348     -16.419   1.338 -27.692  1.00 37.88          O
HETATM 8495  O   HOH B 349     -27.050  -6.390 -32.405  0.92 15.61          O
HETATM 8496  O   HOH B 350     -22.192 -31.336 -30.959  1.00 46.35          O
HETATM 8497  O   HOH B 351     -38.191 -20.305 -47.364  1.00 23.52          O
HETATM 8498  O   HOH B 352     -37.442 -16.834 -40.343  1.00 44.83          O
HETATM 8499  O   HOH B 353     -39.053 -14.598 -39.108  1.00 42.25          O
HETATM 8500  O   HOH B 354      -5.005  -4.677 -47.990  1.00 20.31          O
HETATM 8501  O   HOH B 355     -35.873  -3.572 -37.788  0.92 48.31          O
HETATM 8502  O   HOH B 356     -36.033 -22.030 -45.983  1.00 25.63          O
HETATM 8503  O   HOH B 357     -29.937 -12.416 -26.010  1.00 36.72          O
HETATM 8504  O   HOH B 358     -21.592   0.905 -48.101  0.99 17.96          O
HETATM 8505  O   HOH B 359       1.227  -1.184 -41.433  1.00 35.34          O
HETATM 8506  O   HOH B 360     -29.525  -3.958 -30.467  1.00 21.06          O
HETATM 8507  O   HOH B 361     -18.098 -13.537 -55.891  0.87 27.53          O
HETATM 8508  O   HOH B 362     -20.222 -25.297 -27.703  0.97 24.68          O
HETATM 8509  O   HOH B 363     -31.601 -21.141 -27.044  1.00 40.96          O
HETATM 8510  O   HOH B 364      -7.682  -5.800 -44.492  1.00 12.52          O
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HETATM 8511  O   HOH B 365     -39.712 -13.822 -42.772  0.94 22.58           O
HETATM 8512  O   HOH B 366     -15.063  -2.052 -24.817  0.75 23.06           O
HETATM 8513  O   HOH B 367     -13.646  -9.849 -56.106  0.78 13.61           O
HETATM 8514  O   HOH B 368      -9.528  -2.182 -49.151  1.00 29.53           O
HETATM 8515  O   HOH B 369     -10.163  -6.789 -55.207  1.00 39.82           O
HETATM 8516  O   HOH B 370      -0.693  -6.652 -30.164  1.00 24.46           O
HETATM 8517  O   HOH B 371     -10.202 -21.531 -35.273  0.88 28.53           O
HETATM 8518  O   HOH B 372      -8.698  -6.945 -51.201  0.99 27.01           O
HETATM 8519  O   HOH B 373     -14.842 -11.640 -56.774  1.00 37.71           O
HETATM 8520  O   HOH B 374      -4.623 -19.198 -50.899  1.00 28.44           O
HETATM 8521  O   HOH B 375     -19.774  -9.416 -22.825  0.95 17.69           O
HETATM 8522  O   HOH B 376     -32.385 -25.759 -43.221  0.92 23.58           O
HETATM 8523  O   HOH B 377     -18.112   3.722 -36.769  1.00 22.70           O
HETATM 8524  O   HOH B 378     -36.262  -6.896 -33.086  1.00 32.74           O
HETATM 8525  O   HOH B 379     -29.366  -7.754 -25.859  1.00 32.03           O
HETATM 8526  O   HOH B 380     -24.916   0.509 -32.299  1.00 44.52           O
HETATM 8527  O   HOH B 381     -17.507   4.848 -39.075  1.00 28.66           O
HETATM 8528  O   HOH B 382      -7.179  -5.951 -47.238  1.00 15.87           O
HETATM 8529  O   HOH B 383     -10.928 -14.105 -25.593  0.93 25.76           O
HETATM 8530  O   HOH B 384     -21.993  -6.694 -54.358  0.95 31.60           O
HETATM 8531  O   HOH B 385     -29.880 -29.219 -27.765  1.00 35.10           O
HETATM 8532  O  AHOH B 386     -13.292 -21.320 -36.293  0.55 20.93           O
HETATM 8533  O  BHOH B 386     -14.747 -22.571 -35.858  0.45 21.18           O
HETATM 8534  O   HOH B 387     -23.130  -1.468 -48.494  1.00 19.70           O
HETATM 8535  O   HOH B 388     -14.113 -21.257 -26.739  1.00 33.87           O
HETATM 8536  O   HOH B 389     -31.920 -25.835 -29.754  1.00 41.10           O
HETATM 8537  O   HOH B 390      -8.037  -3.066 -25.283  0.94 15.70           O
HETATM 8538  O   HOH B 391     -22.937 -19.982 -54.251  1.00 43.71           O
HETATM 8539  O   HOH B 392      -8.022 -26.343 -36.885  1.00 38.24           O
HETATM 8540  O   HOH B 393     -25.721  -1.456 -30.999  1.00 32.96           O
HETATM 8541  O   HOH B 394     -17.352   3.730 -32.951  1.00 24.92           O
HETATM 8542  O   HOH B 395      -6.522 -18.821 -52.994  1.00 25.38           O
HETATM 8543  O   HOH B 396      -2.424 -16.472 -37.310  1.00 34.48           O
HETATM 8544  O   HOH B 397     -11.467  -1.047 -47.160  0.84 18.70           O
HETATM 8545  O   HOH B 398     -16.621 -22.697 -26.340  1.00 35.34           O
HETATM 8546  O   HOH B 399     -19.677  -6.328 -54.606  1.00 33.61           O
HETATM 8547  O   HOH B 400     -25.102   1.013 -35.086  1.00 20.09           O
HETATM 8548  O   HOH B 401     -24.576 -27.887 -46.124  0.99 21.00           O
HETATM 8549  O  AHOH B 402     -38.154  -8.419 -40.697  0.57 20.10           O
HETATM 8550  O  BHOH B 402     -38.942  -6.503 -40.774  0.43 20.61           O
HETATM 8551  O   HOH B 403      -1.343 -10.158 -44.949  0.97 23.70           O
HETATM 8552  O   HOH B 404     -34.567  -0.658 -33.990  1.00 30.55           O
HETATM 8553  O   HOH B 405     -12.842  -7.774 -22.995  0.99 30.77           O
HETATM 8554  O   HOH B 406      -4.227 -20.634 -34.943  1.00 29.24           O
HETATM 8555  O   HOH B 407     -16.997  -2.685 -23.656  0.71 30.73           O
HETATM 8556  O   HOH B 408      -2.347 -18.613 -36.702  1.00 42.32           O
HETATM 8557  O   HOH B 409     -23.165  -9.218 -54.577  1.00 18.92           O
HETATM 8558  O   HOH B 410     -27.502  -3.640 -50.553  1.00 38.28           O
HETATM 8559  O   HOH B 411      -4.061 -17.750 -55.751  1.00 35.19           O
HETATM 8560  O   HOH B 412       0.252  -4.587 -35.211  1.00 34.18           O
HETATM 8561  O   HOH B 413     -35.791 -19.131 -34.448  1.00 48.06           O
HETATM 8562  O   HOH B 414     -22.482 -10.298 -57.122  1.00 33.19           O
HETATM 8563  O   HOH B 415      -5.388 -19.961 -32.493  0.99 38.13           O
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HETATM 8564 O HOH B 416 -19.126 -17.366 -52.486 1.00 29.58 O
HETATM 8565 O HOH B 417 -30.966 1.579 -41.711 0.96 35.62 O
HETATM 8566 O HOH B 418 -19.144 -0.002 -26.071 1.00 35.48 O
HETATM 8567 O HOH B 419 -14.103 -10.245 -26.101 1.00 30.63 O
HETATM 8568 O HOH B 420 -24.994 -2.995 -49.561 1.00 21.71 O
HETATM 8569 O HOH B 421 -35.573 -8.763 -36.809 1.00 31.32 O
HETATM 8570 O HOH B 422 -23.533 -26.624 -26.049 1.00 42.19 O
HETATM 8571 O HOH B 423 -13.439 -13.935 -20.326 0.79 28.32 O
HETATM 8572 O HOH B 424 -6.169 1.083 -31.899 1.00 39.35 O
HETATM 8573 O HOH B 425 -37.429 -17.391 -34.727 0.93 21.00 O
HETATM 8574 O HOH B 426 -17.372 -2.762 -26.935 0.88 18.76 O
HETATM 8575 O HOH B 427 -4.448 -0.992 -32.108 1.00 27.38 O
HETATM 8576 O HOH B 428 -18.065 -16.183 -23.206 1.00 32.03 O
HETATM 8577 O HOH B 429 -1.542 -2.407 -31.750 0.98 37.62 O
HETATM 8578 O HOH B 430 -31.800 -9.576 -54.647 1.00 42.35 O
HETATM 8579 O HOH B 431 -30.490 -32.822 -27.801 1.00 32.01 O
HETATM 8580 O HOH B 432 -15.533 -10.680 -23.410 1.00 49.55 O
HETATM 8581 O HOH B 433 -8.618 1.737 -31.495 1.00 39.57 O
HETATM 8582 O HOH B 434 -38.343 -8.412 -44.107 1.00 49.16 O
HETATM 8583 O HOH B 435 -28.060 -6.490 -54.609 0.95 34.19 O
HETATM 8584 O HOH B 436 -26.447 1.750 -45.260 0.95 36.33 O
HETATM 8585 O HOH B 437 -2.234 -18.026 -34.320 0.94 25.50 O
HETATM 8586 O HOH B 438 -4.834 -1.547 -28.501 0.83 23.60 O
HETATM 8587 O HOH B 439 -17.002 -14.059 -22.782 1.00 40.14 O
HETATM 8588 O HOH B 440 -18.629 -15.798 -55.060 0.81 31.55 O
HETATM 8589 O HOH B 441 -2.579 -15.474 -45.582 1.00 35.94 O
HETATM 8590 O HOH B 442 -19.629 -0.627 -51.741 0.87 29.07 O
HETATM 8591 O HOH B 443 -40.611 -17.429 -45.222 1.00 31.49 O
HETATM 8592 O HOH B 444 -36.911 -7.260 -37.603 0.88 35.66 O
HETATM 8593 O HOH B 445 -34.533 -10.111 -51.085 1.00 35.39 O
HETATM 8594 O HOH B 446 -1.524 -4.260 -29.854 1.00 28.78 O
HETATM 8595 O HOH B 447 -23.206 -33.309 -44.925 1.00 42.72 O
HETATM 8596 O HOH B 448 -23.751 -5.599 -54.530 1.00 31.81 O
HETATM 8597 O HOH B 449 -16.522 -20.480 -19.488 1.00 48.74 O
HETATM 8598 O HOH B 450 -26.028 -13.783 -25.194 0.97 30.86 O
HETATM 8599 O HOH B 451 -11.636 -11.582 -24.865 1.00 58.48 O
HETATM 8600 O HOH B 452 -7.521 1.385 -35.943 1.00 20.72 O
HETATM 8601 O HOH B 453 -25.363 -11.068 -57.989 1.00 39.59 O
HETATM 8602 O HOH B 454 -13.987 -5.839 -21.069 1.00 41.75 O
HETATM 8603 O HOH B 455 1.394 -4.367 -33.121 1.00 42.14 O
HETATM 8604 O HOH B 456 -6.644 -6.413 -52.359 1.00 45.60 O
HETATM 8605 O HOH B 457 1.488 -3.748 -36.754 0.93 34.91 O
HETATM 8606 O HOH B 458 -39.313 -16.470 -33.315 1.00 51.22 O
HETATM 8607 O HOH B 459 -26.251 -8.051 -24.119 1.00 42.34 O
HETATM 8608 O HOH B 460 -35.180 -5.567 -46.888 1.00 41.98 O
HETATM 8609 O HOH B 461 -18.987 -19.527 -53.034 1.00 37.25 O
HETATM 8610 O HOH B 462 -22.662 -25.066 -49.073 0.91 39.52 O
HETATM 8611 O HOH B 463 -9.299 -5.298 -49.015 0.95 17.18 O
HETATM 8612 O HOH B 464 -21.402 -22.977 -48.897 1.00 36.99 O
HETATM 8613 O HOH C 301 -10.221 15.844 -20.793 0.89 33.78 O
HETATM 8614 O HOH C 302 -14.358 24.235 -11.214 0.93 29.35 O
HETATM 8615 O HOH C 303 -26.426 -2.508 -17.706 0.94 45.14 O
HETATM 8616 O HOH C 304 -6.161 0.922 -11.054 0.97 30.41 O

HETATM 8617 O HOH C 305 -19.697 5.670 8.380 1.00 30.80 O
HETATM 8618 O HOH C 306 -30.948 15.266 -18.689 0.84 21.75 O
HETATM 8619 O HOH C 307 -7.296 3.716 -12.502 1.00 32.75 O
HETATM 8620 O HOH C 308 -31.653 15.868 -10.351 1.00 51.62 O
HETATM 8621 O HOH C 309 -7.341 -2.826 -14.881 0.91 24.72 O
HETATM 8622 O HOH C 310 -19.540 2.336 -23.007 0.93 33.75 O
HETATM 8623 O HOH C 311 -16.822 24.351 -18.489 1.00 21.73 O
HETATM 8624 O HOH C 312 -17.546 11.281 3.444 1.00 32.54 O
HETATM 8625 O HOH C 313 -2.040 14.507 -1.512 1.00 43.38 O
HETATM 8626 O HOH C 314 -18.701 16.766 12.137 0.85 26.70 O
HETATM 8627 O HOH C 315 -23.887 26.202 -6.227 0.92 31.34 O
HETATM 8628 O HOH C 316 -5.934 -0.217 2.996 0.82 22.43 O
HETATM 8629 O HOH C 317 -9.487 12.836 -9.134 1.00 25.03 O
HETATM 8630 O HOH C 318 -3.558 14.426 1.155 1.00 53.36 O
HETATM 8631 O HOH C 319 -28.299 8.677 -8.468 1.00 41.11 O
HETATM 8632 O HOH C 320 -13.581 -11.943 2.738 1.00 30.98 O
HETATM 8633 O HOH C 321 -3.996 2.619 -13.824 0.99 26.52 O
HETATM 8634 O HOH C 322 -18.835 14.185 -18.384 1.00 26.25 O
HETATM 8635 O HOH C 323 -11.120 2.532 -17.668 0.89 21.44 O
HETATM 8636 O HOH C 324 -17.340 21.731 1.161 0.98 28.57 O
HETATM 8637 O HOH C 325 -28.530 9.258 -18.765 0.88 28.62 O
HETATM 8638 O HOH C 326 -2.714 5.515 -12.352 0.98 32.06 O
HETATM 8639 O HOH C 327 -18.510 8.789 10.368 1.00 31.69 O
HETATM 8640 O HOH C 328 -17.280 -8.005 -17.748 1.00 39.06 O
HETATM 8641 O HOH C 329 0.998 4.527 -11.152 0.90 31.85 O
HETATM 8642 O HOH C 330 -6.756 15.370 -0.832 0.96 32.99 O
HETATM 8643 O HOH C 331 -7.683 11.551 -13.098 1.00 41.83 O
HETATM 8644 O HOH C 332 -9.936 0.228 -17.712 1.00 34.43 O
HETATM 8645 O HOH C 333 -25.672 25.052 -3.133 1.00 38.05 O
HETATM 8646 O HOH C 334 -19.804 -9.162 2.829 1.00 50.74 O
HETATM 8647 O HOH C 335 -8.671 -2.593 7.939 1.00 38.67 O
HETATM 8648 O HOH C 336 -13.485 14.905 8.318 1.00 48.32 O
HETATM 8649 O HOH C 337 -24.587 6.183 -28.601 1.00 22.74 O
HETATM 8650 O HOH C 338 -29.874 13.818 -14.430 1.00 42.76 O
HETATM 8651 O HOH C 339 -13.147 7.410 -22.482 0.90 34.71 O
HETATM 8652 O HOH C 340 -14.453 24.928 -17.483 1.00 37.66 O
HETATM 8653 O HOH C 341 -8.675 22.599 -12.002 0.84 28.58 O
HETATM 8654 O HOH C 342 -2.001 14.020 -4.056 1.00 46.99 O
HETATM 8655 O HOH C 343 -7.362 12.990 6.057 0.86 29.23 O
HETATM 8656 O HOH C 344 -4.288 11.468 2.667 0.91 27.78 O
HETATM 8657 O HOH C 345 -5.707 7.317 2.142 0.94 36.15 O
HETATM 8658 O HOH C 346 -4.891 9.971 -14.661 1.00 51.24 O
HETATM 8659 O HOH C 347 -5.724 12.215 -18.947 1.00 41.21 O
HETATM 8660 O HOH C 348 -3.300 16.320 -8.754 1.00 40.17 O
HETATM 8661 O HOH C 349 -17.434 12.173 -19.203 0.99 30.30 O
HETATM 8662 O HOH C 350 -2.328 9.448 -10.020 0.92 33.87 O
HETATM 8663 O HOH C 351 -20.512 5.587 -22.193 0.97 38.84 O
HETATM 8664 O HOH C 352 -10.744 15.647 8.460 1.00 39.55 O
HETATM 8665 O HOH C 353 -21.129 -10.655 1.957 1.00 51.25 O
HETATM 8666 O HOH C 354 -12.608 6.547 9.667 0.99 31.91 O
HETATM 8667 O HOH C 355 -1.025 5.846 -5.522 1.00 34.17 O
HETATM 8668 O HOH C 356 -14.441 21.003 -20.999 1.00 30.68 O
HETATM 8669 O HOH C 357 -2.963 16.847 -12.226 1.00 40.60 O

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HETATM 8670  O   HOH C 358      -5.873   7.995   4.690  1.00 49.57           O
HETATM 8671  O   HOH C 359     -18.779   7.132 -22.435  1.00 35.65           O
HETATM 8672  O   HOH C 360      -3.681   7.690 -13.454  1.00 46.34           O
HETATM 8673  O   HOH C 361      -4.067  -4.260   0.984  1.00 38.16           O
HETATM 8674  O   HOH C 362     -26.451  20.503  -1.510  1.00 42.31           O
HETATM 8675  O   HOH C 363      -1.919  -0.704 -16.585  1.00 43.51           O
HETATM 8676  O   HOH C 364     -21.638   6.080   7.439  0.92 37.65           O
HETATM 8677  O   HOH C 365      -9.226  13.384 -18.848  1.00 32.76           O
HETATM 8678  O   HOH C 366     -21.571  10.943 -21.441  1.00 36.57           O
HETATM 8679  O   HOH C 367      -6.529  10.110 -20.019  1.00 35.49           O
HETATM 8680  O   HOH C 368      -2.265   2.568 -16.308  1.00 44.15           O
HETATM 8681  O   HOH C 369      -6.360  -8.018   7.012  1.00 27.50           O
HETATM 8682  O   HOH C 370     -29.234   5.795  -4.066  1.00 37.18           O
HETATM 8683  O   HOH C 371      -4.212  -1.951   2.876  0.96 36.60           O
HETATM 8684  O   HOH C 372     -26.492   5.093 -23.726  0.97 37.58           O
HETATM 8685  O   HOH C 373     -14.098 -13.773  -6.449  0.90 38.20           O
HETATM 8686  O   HOH C 374      -0.521  15.092 -12.369  1.00 41.29           O
HETATM 8687  O   HOH C 375     -21.356   8.069  10.448  1.00 38.21           O
HETATM 8688  O   HOH C 376     -26.885   4.285 -27.201  1.00 50.44           O
HETATM 8689  O   HOH C 377     -18.035 -10.580   3.042  1.00 46.13           O
HETATM 8690  O   HOH C 378     -23.877   4.610   6.578  0.99 37.49           O
HETATM 8691  O   HOH C 379     -11.086   1.974 -20.823  1.00 42.99           O
CONECT  283 8319
CONECT  286 8319
CONECT  297 8319
CONECT 3166 8320
CONECT 3169 8320
CONECT 3180 8320
CONECT 4290 8319
CONECT 4459 8319
CONECT 5909 8321
CONECT 5912 8321
CONECT 5923 8321
CONECT 8319  283  286  297 4290
CONECT 8319 4459 8537
CONECT 8320 3166 3169 3180
CONECT 8321 5909 5912 5923
CONECT 8537 8319
MASTER      685    0    3    3   60    0    6    6 4576    3   16   45
END
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