ATOM 1 N MET A 1 79.478 58.087 61.201 1.00 0.00 N

ATOM 2 CA MET A 1 80.541 59.096 61.206 1.00 0.00 C

ATOM 3 C MET A 1 81.718 58.772 60.272 1.00 0.00 C

ATOM 4 O MET A 1 81.987 57.604 59.990 1.00 0.00 O

ATOM 5 CB MET A 1 81.052 59.284 62.634 1.00 0.00 C

ATOM 6 CG MET A 1 79.991 59.738 63.627 1.00 0.00 C

ATOM 7 SD MET A 1 79.293 61.348 63.208 1.00 0.00 S

ATOM 8 CE MET A 1 80.684 62.421 63.553 1.00 0.00 C

ATOM 9 1H MET A 1 78.751 58.363 61.829 1.00 0.00 H

ATOM 10 2H MET A 1 79.106 57.998 60.277 1.00 0.00 H

ATOM 11 3H MET A 1 79.853 57.207 61.494 1.00 0.00 H

ATOM 12 HA MET A 1 80.126 60.038 60.847 1.00 0.00 H

ATOM 13 1HB MET A 1 81.468 58.345 62.998 1.00 0.00 H

ATOM 14 2HB MET A 1 81.854 60.022 62.640 1.00 0.00 H

ATOM 15 1HG MET A 1 79.183 59.008 63.655 1.00 0.00 H

ATOM 16 2HG MET A 1 80.429 59.801 64.623 1.00 0.00 H

ATOM 17 1HE MET A 1 80.408 63.454 63.343 1.00 0.00 H

ATOM 18 2HE MET A 1 80.966 62.326 64.603 1.00 0.00 H

ATOM 19 3HE MET A 1 81.528 62.136 62.925 1.00 0.00 H

ATOM 20 N ASP A 2 82.424 59.820 59.841 1.00 0.00 N

ATOM 21 CA ASP A 2 83.545 59.765 58.912 1.00 0.00 C

ATOM 22 C ASP A 2 84.517 58.582 59.056 1.00 0.00 C

ATOM 23 O ASP A 2 85.224 58.463 60.058 1.00 0.00 O

ATOM 24 CB ASP A 2 84.344 61.067 59.036 1.00 0.00 C

ATOM 25 CG ASP A 2 85.466 61.174 58.012 1.00 0.00 C

ATOM 26 OD1 ASP A 2 85.215 61.661 56.935 1.00 0.00 O

ATOM 27 OD2 ASP A 2 86.562 60.766 58.315 1.00 0.00 O

ATOM 28 H ASP A 2 82.112 60.773 60.017 1.00 0.00 H

ATOM 29 HA ASP A 2 83.151 59.674 57.899 1.00 0.00 H

ATOM 30 1HB ASP A 2 83.673 61.918 58.911 1.00 0.00 H

ATOM 31 2HB ASP A 2 84.776 61.134 60.035 1.00 0.00 H

ATOM 32 N ILE A 3 84.621 57.777 58.000 1.00 0.00 N

ATOM 33 CA ILE A 3 85.550 56.648 57.984 1.00 0.00 C

ATOM 34 C ILE A 3 86.827 57.031 57.231 1.00 0.00 C

ATOM 35 O ILE A 3 87.699 56.192 57.000 1.00 0.00 O

ATOM 36 CB ILE A 3 84.910 55.410 57.328 1.00 0.00 C

ATOM 37 CG1 ILE A 3 84.639 55.671 55.845 1.00 0.00 C

ATOM 38 CG2 ILE A 3 83.626 55.031 58.049 1.00 0.00 C

ATOM 39 CD1 ILE A 3 84.232 54.438 55.072 1.00 0.00 C

ATOM 40 H ILE A 3 84.011 57.903 57.199 1.00 0.00 H

ATOM 41 HA ILE A 3 85.807 56.396 59.012 1.00 0.00 H

ATOM 42 HB ILE A 3 85.604 54.572 57.378 1.00 0.00 H

ATOM 43 1HG1 ILE A 3 83.846 56.413 55.745 1.00 0.00 H

ATOM 44 2HG1 ILE A 3 85.531 56.085 55.378 1.00 0.00 H

ATOM 45 1HG2 ILE A 3 83.186 54.155 57.573 1.00 0.00 H

ATOM 46 2HG2 ILE A 3 83.847 54.805 59.091 1.00 0.00 H

ATOM 47 3HG2 ILE A 3 82.921 55.863 58.000 1.00 0.00 H

ATOM 48 1HD1 ILE A 3 84.057 54.703 54.029 1.00 0.00 H

ATOM 49 2HD1 ILE A 3 85.028 53.694 55.128 1.00 0.00 H

ATOM 50 3HD1 ILE A 3 83.318 54.025 55.498 1.00 0.00 H

ATOM 51 N SER A 4 86.893 58.285 56.755 1.00 0.00 N

ATOM 52 CA SER A 4 88.003 58.789 55.963 1.00 0.00 C

ATOM 53 C SER A 4 88.288 58.029 54.638 1.00 0.00 C

ATOM 54 O SER A 4 89.434 57.741 54.296 1.00 0.00 O

ATOM 55 CB SER A 4 89.250 58.771 56.824 1.00 0.00 C

ATOM 56 OG SER A 4 89.098 59.600 57.944 1.00 0.00 O

ATOM 57 H SER A 4 86.089 58.882 56.874 1.00 0.00 H

ATOM 58 HA SER A 4 87.778 59.814 55.663 1.00 0.00 H

ATOM 59 1HB SER A 4 89.454 57.752 57.149 1.00 0.00 H

ATOM 60 2HB SER A 4 90.104 59.104 56.236 1.00 0.00 H

ATOM 61 HG SER A 4 88.207 59.955 57.890 1.00 0.00 H

ATOM 62 N GLY A 5 87.232 57.710 53.894 1.00 0.00 N

ATOM 63 CA GLY A 5 87.331 56.910 52.671 1.00 0.00 C

ATOM 64 C GLY A 5 86.273 57.314 51.660 1.00 0.00 C

ATOM 65 O GLY A 5 86.088 58.496 51.384 1.00 0.00 O

ATOM 66 H GLY A 5 86.309 57.882 54.252 1.00 0.00 H

ATOM 67 1HA GLY A 5 88.322 57.034 52.234 1.00 0.00 H

ATOM 68 2HA GLY A 5 87.218 55.855 52.917 1.00 0.00 H

ATOM 69 N LEU A 6 85.490 56.344 51.209 1.00 0.00 N

ATOM 70 CA LEU A 6 84.314 56.607 50.380 1.00 0.00 C

ATOM 71 C LEU A 6 83.091 56.612 51.247 1.00 0.00 C

ATOM 72 O LEU A 6 83.090 55.988 52.296 1.00 0.00 O

ATOM 73 CB LEU A 6 84.166 55.550 49.278 1.00 0.00 C

ATOM 74 CG LEU A 6 85.328 55.462 48.281 1.00 0.00 C

ATOM 75 CD1 LEU A 6 85.062 54.336 47.290 1.00 0.00 C

ATOM 76 CD2 LEU A 6 85.485 56.794 47.565 1.00 0.00 C

ATOM 77 H LEU A 6 85.561 55.443 51.666 1.00 0.00 H

ATOM 78 HA LEU A 6 84.436 57.581 49.906 1.00 0.00 H

ATOM 79 1HB LEU A 6 84.057 54.572 49.747 1.00 0.00 H

ATOM 80 2HB LEU A 6 83.259 55.762 48.712 1.00 0.00 H

ATOM 81 HG LEU A 6 86.249 55.226 48.815 1.00 0.00 H

ATOM 82 1HD1 LEU A 6 85.890 54.273 46.582 1.00 0.00 H

ATOM 83 2HD1 LEU A 6 84.975 53.391 47.828 1.00 0.00 H

ATOM 84 3HD1 LEU A 6 84.138 54.534 46.752 1.00 0.00 H

ATOM 85 1HD2 LEU A 6 86.311 56.731 46.856 1.00 0.00 H

ATOM 86 2HD2 LEU A 6 84.565 57.030 47.028 1.00 0.00 H

ATOM 87 3HD2 LEU A 6 85.691 57.578 48.294 1.00 0.00 H

ATOM 88 N PRO A 7 82.059 57.350 50.818 1.00 0.00 N

ATOM 89 CA PRO A 7 80.759 57.493 51.464 1.00 0.00 C

ATOM 90 C PRO A 7 79.713 56.557 50.912 1.00 0.00 C

ATOM 91 O PRO A 7 78.546 56.864 51.009 1.00 0.00 O

ATOM 92 CB PRO A 7 80.398 58.953 51.174 1.00 0.00 C

ATOM 93 CG PRO A 7 81.022 59.229 49.849 1.00 0.00 C

ATOM 94 CD PRO A 7 82.314 58.455 49.876 1.00 0.00 C

ATOM 95 HA PRO A 7 80.871 57.320 52.544 1.00 0.00 H

ATOM 96 1HB PRO A 7 79.305 59.076 51.163 1.00 0.00 H

ATOM 97 2HB PRO A 7 80.785 59.603 51.973 1.00 0.00 H

ATOM 98 1HG PRO A 7 80.354 58.906 49.039 1.00 0.00 H

ATOM 99 2HG PRO A 7 81.180 60.310 49.720 1.00 0.00 H

ATOM 100 1HD PRO A 7 82.517 58.045 48.877 1.00 0.00 H

ATOM 101 2HD PRO A 7 83.132 59.114 50.199 1.00 0.00 H

ATOM 102 N VAL A 8 80.160 55.431 50.322 1.00 0.00 N

ATOM 103 CA VAL A 8 79.310 54.404 49.741 1.00 0.00 C

ATOM 104 C VAL A 8 77.944 54.318 50.351 1.00 0.00 C

ATOM 105 O VAL A 8 77.765 53.677 51.387 1.00 0.00 O

ATOM 106 CB VAL A 8 79.988 53.028 49.879 1.00 0.00 C

ATOM 107 CG1 VAL A 8 79.068 51.928 49.371 1.00 0.00 C

ATOM 108 CG2 VAL A 8 81.306 53.022 49.121 1.00 0.00 C

ATOM 109 H VAL A 8 81.142 55.206 50.383 1.00 0.00 H

ATOM 110 HA VAL A 8 79.171 54.627 48.683 1.00 0.00 H

ATOM 111 HB VAL A 8 80.174 52.829 50.935 1.00 0.00 H

ATOM 112 1HG1 VAL A 8 79.563 50.962 49.476 1.00 0.00 H

ATOM 113 2HG1 VAL A 8 78.146 51.928 49.952 1.00 0.00 H

ATOM 114 3HG1 VAL A 8 78.837 52.104 48.321 1.00 0.00 H

ATOM 115 1HG2 VAL A 8 81.780 52.047 49.223 1.00 0.00 H

ATOM 116 2HG2 VAL A 8 81.120 53.227 48.066 1.00 0.00 H

ATOM 117 3HG2 VAL A 8 81.964 53.790 49.529 1.00 0.00 H

ATOM 118 N PRO A 9 76.933 54.989 49.755 1.00 0.00 N

ATOM 119 CA PRO A 9 75.586 55.051 50.225 1.00 0.00 C

ATOM 120 C PRO A 9 74.891 53.692 50.325 1.00 0.00 C

ATOM 121 O PRO A 9 75.093 52.824 49.496 1.00 0.00 O

ATOM 122 CB PRO A 9 74.932 55.941 49.163 1.00 0.00 C

ATOM 123 CG PRO A 9 76.063 56.728 48.596 1.00 0.00 C

ATOM 124 CD PRO A 9 77.215 55.757 48.566 1.00 0.00 C

ATOM 125 HA PRO A 9 75.571 55.526 51.218 1.00 0.00 H

ATOM 126 1HB PRO A 9 74.426 55.319 48.412 1.00 0.00 H

ATOM 127 2HB PRO A 9 74.162 56.575 49.627 1.00 0.00 H

ATOM 128 1HG PRO A 9 75.802 57.105 47.597 1.00 0.00 H

ATOM 129 2HG PRO A 9 76.267 57.607 49.225 1.00 0.00 H

ATOM 130 1HD PRO A 9 77.169 55.161 47.644 1.00 0.00 H

ATOM 131 2HD PRO A 9 78.165 56.311 48.624 1.00 0.00 H

ATOM 132 N VAL A 10 74.130 53.501 51.392 1.00 0.00 N

ATOM 133 CA VAL A 10 73.579 52.211 51.832 1.00 0.00 C

ATOM 134 C VAL A 10 72.088 52.210 51.672 1.00 0.00 C

ATOM 135 O VAL A 10 71.414 51.577 52.487 1.00 0.00 O

ATOM 136 CB VAL A 10 73.929 51.930 53.306 1.00 0.00 C

ATOM 137 CG1 VAL A 10 75.433 51.785 53.478 1.00 0.00 C

ATOM 138 CG2 VAL A 10 73.390 53.046 54.188 1.00 0.00 C

ATOM 139 H VAL A 10 74.321 54.087 52.187 1.00 0.00 H

ATOM 140 HA VAL A 10 74.017 51.421 51.221 1.00 0.00 H

ATOM 141 HB VAL A 10 73.479 50.982 53.602 1.00 0.00 H

ATOM 142 1HG1 VAL A 10 75.663 51.587 54.525 1.00 0.00 H

ATOM 143 2HG1 VAL A 10 75.792 50.958 52.865 1.00 0.00 H

ATOM 144 3HG1 VAL A 10 75.925 52.707 53.168 1.00 0.00 H

ATOM 145 1HG2 VAL A 10 73.640 52.841 55.228 1.00 0.00 H

ATOM 146 2HG2 VAL A 10 73.836 53.995 53.887 1.00 0.00 H

ATOM 147 3HG2 VAL A 10 72.307 53.104 54.080 1.00 0.00 H

ATOM 148 N CYS A 11 71.623 53.046 50.750 1.00 0.00 N

ATOM 149 CA CYS A 11 70.239 53.082 50.438 1.00 0.00 C

ATOM 150 C CYS A 11 70.015 52.068 49.357 1.00 0.00 C

ATOM 151 O CYS A 11 70.927 51.777 48.576 1.00 0.00 O

ATOM 152 CB CYS A 11 69.803 54.471 49.970 1.00 0.00 C

ATOM 153 SG CYS A 11 70.003 55.765 51.218 1.00 0.00 S

ATOM 154 H CYS A 11 72.291 53.497 50.149 1.00 0.00 H

ATOM 155 HA CYS A 11 69.675 52.835 51.337 1.00 0.00 H

ATOM 156 1HB CYS A 11 70.381 54.758 49.092 1.00 0.00 H

ATOM 157 2HB CYS A 11 68.754 54.443 49.677 1.00 0.00 H

ATOM 158 N THR A 12 68.786 51.552 49.292 1.00 0.00 N

ATOM 159 CA THR A 12 68.371 50.643 48.265 1.00 0.00 C

ATOM 160 C THR A 12 68.254 51.422 46.973 1.00 0.00 C

ATOM 161 O THR A 12 67.590 52.459 46.904 1.00 0.00 O

ATOM 162 CB THR A 12 67.035 49.961 48.610 1.00 0.00 C

ATOM 163 OG1 THR A 12 67.172 49.228 49.835 1.00 0.00 O

ATOM 164 CG2 THR A 12 66.618 49.009 47.499 1.00 0.00 C

ATOM 165 H THR A 12 68.075 51.948 49.900 1.00 0.00 H

ATOM 166 HA THR A 12 69.130 49.867 48.161 1.00 0.00 H

ATOM 167 HB THR A 12 66.262 50.718 48.740 1.00 0.00 H

ATOM 168 HG1 THR A 12 67.602 48.389 49.659 1.00 0.00 H

ATOM 169 1HG2 THR A 12 65.672 48.536 47.760 1.00 0.00 H

ATOM 170 2HG2 THR A 12 66.502 49.565 46.569 1.00 0.00 H

ATOM 171 3HG2 THR A 12 67.383 48.244 47.371 1.00 0.00 H

ATOM 172 N CYS A 13 68.866 50.911 45.910 1.00 0.00 N

ATOM 173 CA CYS A 13 68.669 51.420 44.573 1.00 0.00 C

ATOM 174 C CYS A 13 67.892 50.356 43.804 1.00 0.00 C

ATOM 175 O CYS A 13 67.900 49.187 44.176 1.00 0.00 O

ATOM 176 CB CYS A 13 70.002 51.715 43.883 1.00 0.00 C

ATOM 177 SG CYS A 13 70.938 53.067 44.634 1.00 0.00 S

ATOM 178 H CYS A 13 69.238 49.979 46.030 1.00 0.00 H

ATOM 179 HA CYS A 13 68.106 52.351 44.637 1.00 0.00 H

ATOM 180 1HB CYS A 13 70.626 50.822 43.900 1.00 0.00 H

ATOM 181 2HB CYS A 13 69.822 51.968 42.838 1.00 0.00 H

ATOM 182 N THR A 14 67.211 50.764 42.735 1.00 0.00 N

ATOM 183 CA THR A 14 66.506 49.831 41.874 1.00 0.00 C

ATOM 184 C THR A 14 67.497 49.019 40.996 1.00 0.00 C

ATOM 185 O THR A 14 67.753 47.839 41.234 1.00 0.00 O

ATOM 186 CB THR A 14 65.494 50.576 40.983 1.00 0.00 C

ATOM 187 OG1 THR A 14 66.187 51.522 40.158 1.00 0.00 O

ATOM 188 CG2 THR A 14 64.470 51.307 41.836 1.00 0.00 C

ATOM 189 H THR A 14 67.321 51.724 42.422 1.00 0.00 H

ATOM 190 HA THR A 14 65.963 49.124 42.502 1.00 0.00 H

ATOM 191 HB THR A 14 64.982 49.861 40.340 1.00 0.00 H

ATOM 192 HG1 THR A 14 65.691 52.344 40.130 1.00 0.00 H

ATOM 193 1HG2 THR A 14 63.762 51.827 41.189 1.00 0.00 H

ATOM 194 2HG2 THR A 14 63.934 50.589 42.457 1.00 0.00 H

ATOM 195 3HG2 THR A 14 64.976 52.029 42.474 1.00 0.00 H

ATOM 196 N GLY A 15 67.937 49.599 39.881 1.00 0.00 N

ATOM 197 CA GLY A 15 68.691 48.867 38.867 1.00 0.00 C

ATOM 198 C GLY A 15 67.774 48.422 37.712 1.00 0.00 C

ATOM 199 O GLY A 15 68.049 48.713 36.540 1.00 0.00 O

ATOM 200 H GLY A 15 67.526 50.487 39.629 1.00 0.00 H

ATOM 201 1HA GLY A 15 69.491 49.500 38.481 1.00 0.00 H

ATOM 202 2HA GLY A 15 69.162 47.996 39.322 1.00 0.00 H

ATOM 203 N THR A 16 66.654 47.779 38.068 1.00 0.00 N

ATOM 204 CA THR A 16 65.763 47.066 37.151 1.00 0.00 C

ATOM 205 C THR A 16 65.139 47.848 36.017 1.00 0.00 C

ATOM 206 O THR A 16 65.058 47.308 34.915 1.00 0.00 O

ATOM 207 CB THR A 16 64.619 46.415 37.951 1.00 0.00 C

ATOM 208 OG1 THR A 16 65.159 45.443 38.857 1.00 0.00 O

ATOM 209 CG2 THR A 16 63.633 45.735 37.013 1.00 0.00 C

ATOM 210 H THR A 16 66.770 47.357 38.991 1.00 0.00 H

ATOM 211 HA THR A 16 66.336 46.287 36.647 1.00 0.00 H

ATOM 212 HB THR A 16 64.097 47.178 38.527 1.00 0.00 H

ATOM 213 HG1 THR A 16 64.467 44.831 39.117 1.00 0.00 H

ATOM 214 1HG2 THR A 16 62.832 45.281 37.596 1.00 0.00 H

ATOM 215 2HG2 THR A 16 63.212 46.473 36.331 1.00 0.00 H

ATOM 216 3HG2 THR A 16 64.148 44.965 36.441 1.00 0.00 H

ATOM 217 N PRO A 17 64.676 49.107 36.223 1.00 0.00 N

ATOM 218 CA PRO A 17 64.096 49.918 35.172 1.00 0.00 C

ATOM 219 C PRO A 17 65.137 50.649 34.333 1.00 0.00 C

ATOM 220 O PRO A 17 64.794 51.500 33.518 1.00 0.00 O

ATOM 221 CB PRO A 17 63.223 50.898 35.959 1.00 0.00 C

ATOM 222 CG PRO A 17 63.930 51.054 37.261 1.00 0.00 C

ATOM 223 CD PRO A 17 64.471 49.682 37.561 1.00 0.00 C

ATOM 224 HA PRO A 17 63.486 49.279 34.516 1.00 0.00 H

ATOM 225 1HB PRO A 17 63.131 51.846 35.408 1.00 0.00 H

ATOM 226 2HB PRO A 17 62.208 50.493 36.071 1.00 0.00 H

ATOM 227 1HG PRO A 17 64.726 51.811 37.173 1.00 0.00 H

ATOM 228 2HG PRO A 17 63.235 51.414 38.032 1.00 0.00 H

ATOM 229 1HD PRO A 17 65.424 49.771 38.103 1.00 0.00 H

ATOM 230 2HD PRO A 17 63.737 49.121 38.159 1.00 0.00 H

ATOM 231 N GLN A 18 66.421 50.368 34.597 1.00 0.00 N

ATOM 232 CA GLN A 18 67.569 50.990 33.912 1.00 0.00 C

ATOM 233 C GLN A 18 67.497 52.545 33.974 1.00 0.00 C

ATOM 234 O GLN A 18 67.610 53.218 32.954 1.00 0.00 O

ATOM 235 CB GLN A 18 67.629 50.523 32.456 1.00 0.00 C

ATOM 236 CG GLN A 18 67.708 49.014 32.288 1.00 0.00 C

ATOM 237 CD GLN A 18 69.033 48.449 32.761 1.00 0.00 C

ATOM 238 OE1 GLN A 18 70.091 48.766 32.209 1.00 0.00 O

ATOM 239 NE2 GLN A 18 68.984 47.606 33.786 1.00 0.00 N

ATOM 240 H GLN A 18 66.634 49.763 35.381 1.00 0.00 H

ATOM 241 HA GLN A 18 68.483 50.681 34.419 1.00 0.00 H

ATOM 242 1HB GLN A 18 66.745 50.875 31.924 1.00 0.00 H

ATOM 243 2HB GLN A 18 68.499 50.961 31.968 1.00 0.00 H

ATOM 244 1HG GLN A 18 66.911 48.553 32.871 1.00 0.00 H

ATOM 245 2HG GLN A 18 67.589 48.770 31.233 1.00 0.00 H

ATOM 246 1HE2 GLN A 18 69.827 47.202 34.141 1.00 0.00 H

ATOM 247 2HE2 GLN A 18 68.104 47.377 34.203 1.00 0.00 H

ATOM 248 N GLN A 19 67.299 53.075 35.176 1.00 0.00 N

ATOM 249 CA GLN A 19 67.186 54.526 35.376 1.00 0.00 C

ATOM 250 C GLN A 19 68.463 55.139 35.935 1.00 0.00 C

ATOM 251 O GLN A 19 68.618 56.348 35.951 1.00 0.00 O

ATOM 252 CB GLN A 19 66.016 54.843 36.311 1.00 0.00 C

ATOM 253 CG GLN A 19 64.663 54.389 35.790 1.00 0.00 C

ATOM 254 CD GLN A 19 64.290 55.062 34.483 1.00 0.00 C

ATOM 255 OE1 GLN A 19 64.215 56.292 34.402 1.00 0.00 O

ATOM 256 NE2 GLN A 19 64.054 54.259 33.453 1.00 0.00 N

ATOM 257 H GLN A 19 67.246 52.479 35.983 1.00 0.00 H

ATOM 258 HA GLN A 19 67.000 54.994 34.410 1.00 0.00 H

ATOM 259 1HB GLN A 19 66.183 54.365 37.276 1.00 0.00 H

ATOM 260 2HB GLN A 19 65.968 55.918 36.481 1.00 0.00 H

ATOM 261 1HG GLN A 19 64.692 53.312 35.624 1.00 0.00 H

ATOM 262 2HG GLN A 19 63.900 54.632 36.530 1.00 0.00 H

ATOM 263 1HE2 GLN A 19 63.803 54.646 32.563 1.00 0.00 H

ATOM 264 2HE2 GLN A 19 64.127 53.268 33.562 1.00 0.00 H

ATOM 265 N CYS A 20 69.400 54.314 36.459 1.00 0.00 N

ATOM 266 CA CYS A 20 70.665 54.865 36.880 1.00 0.00 C

ATOM 267 C CYS A 20 71.546 55.331 35.730 1.00 0.00 C

ATOM 268 O CYS A 20 71.617 54.699 34.682 1.00 0.00 O

ATOM 269 CB CYS A 20 71.432 53.826 37.700 1.00 0.00 C

ATOM 270 SG CYS A 20 73.064 54.377 38.249 1.00 0.00 S

ATOM 271 H CYS A 20 69.347 53.307 36.520 1.00 0.00 H

ATOM 272 HA CYS A 20 70.472 55.738 37.504 1.00 0.00 H

ATOM 273 1HB CYS A 20 70.850 53.558 38.583 1.00 0.00 H

ATOM 274 2HB CYS A 20 71.562 52.921 37.108 1.00 0.00 H

ATOM 275 N TYR A 21 72.224 56.454 35.934 1.00 0.00 N

ATOM 276 CA TYR A 21 73.138 57.015 34.920 1.00 0.00 C

ATOM 277 C TYR A 21 74.367 56.171 34.550 1.00 0.00 C

ATOM 278 O TYR A 21 74.887 56.271 33.447 1.00 0.00 O

ATOM 279 CB TYR A 21 73.610 58.394 35.386 1.00 0.00 C

ATOM 280 CG TYR A 21 74.151 59.263 34.272 1.00 0.00 C

ATOM 281 CD1 TYR A 21 73.369 59.525 33.155 1.00 0.00 C

ATOM 282 CD2 TYR A 21 75.426 59.799 34.366 1.00 0.00 C

ATOM 283 CE1 TYR A 21 73.863 60.319 32.138 1.00 0.00 C

ATOM 284 CE2 TYR A 21 75.920 60.592 33.349 1.00 0.00 C

ATOM 285 CZ TYR A 21 75.143 60.852 32.239 1.00 0.00 C

ATOM 286 OH TYR A 21 75.634 61.642 31.225 1.00 0.00 O

ATOM 287 H TYR A 21 72.127 56.958 36.804 1.00 0.00 H

ATOM 288 HA TYR A 21 72.592 57.117 33.981 1.00 0.00 H

ATOM 289 1HB TYR A 21 72.781 58.922 35.858 1.00 0.00 H

ATOM 290 2HB TYR A 21 74.392 58.276 36.135 1.00 0.00 H

ATOM 291 HD1 TYR A 21 72.368 59.104 33.081 1.00 0.00 H

ATOM 292 HD2 TYR A 21 76.041 59.592 35.243 1.00 0.00 H

ATOM 293 HE1 TYR A 21 73.249 60.525 31.261 1.00 0.00 H

ATOM 294 HE2 TYR A 21 76.923 61.011 33.424 1.00 0.00 H

ATOM 295 HH TYR A 21 76.525 61.926 31.444 1.00 0.00 H

ATOM 296 N ARG A 22 74.825 55.341 35.525 1.00 0.00 N

ATOM 297 CA ARG A 22 75.863 54.325 35.355 1.00 0.00 C

ATOM 298 C ARG A 22 77.243 54.889 34.985 1.00 0.00 C

ATOM 299 O ARG A 22 78.042 54.173 34.386 1.00 0.00 O

ATOM 300 CB ARG A 22 75.437 53.335 34.281 1.00 0.00 C

ATOM 301 CG ARG A 22 74.162 52.566 34.590 1.00 0.00 C

ATOM 302 CD ARG A 22 74.362 51.590 35.690 1.00 0.00 C

ATOM 303 NE ARG A 22 73.150 50.840 35.978 1.00 0.00 N

ATOM 304 CZ ARG A 22 72.690 49.814 35.237 1.00 0.00 C

ATOM 305 NH1 ARG A 22 73.350 49.427 34.168 1.00 0.00 N

ATOM 306 NH2 ARG A 22 71.574 49.196 35.583 1.00 0.00 N

ATOM 307 H ARG A 22 74.326 55.348 36.400 1.00 0.00 H

ATOM 308 HA ARG A 22 75.986 53.796 36.300 1.00 0.00 H

ATOM 309 1HB ARG A 22 75.284 53.863 33.340 1.00 0.00 H

ATOM 310 2HB ARG A 22 76.231 52.605 34.122 1.00 0.00 H

ATOM 311 1HG ARG A 22 73.380 53.265 34.890 1.00 0.00 H

ATOM 312 2HG ARG A 22 73.841 52.022 33.701 1.00 0.00 H

ATOM 313 1HD ARG A 22 75.142 50.881 35.409 1.00 0.00 H

ATOM 314 2HD ARG A 22 74.660 52.117 36.595 1.00 0.00 H

ATOM 315 HE ARG A 22 72.614 51.109 36.794 1.00 0.00 H

ATOM 316 1HH1 ARG A 22 74.204 49.900 33.903 1.00 0.00 H

ATOM 317 2HH1 ARG A 22 73.005 48.659 33.611 1.00 0.00 H

ATOM 318 1HH2 ARG A 22 71.066 49.494 36.405 1.00 0.00 H

ATOM 319 2HH2 ARG A 22 71.229 48.428 35.028 1.00 0.00 H

ATOM 320 N TRP A 23 77.532 56.128 35.364 1.00 0.00 N

ATOM 321 CA TRP A 23 78.781 56.818 35.025 1.00 0.00 C

ATOM 322 C TRP A 23 80.007 56.369 35.827 1.00 0.00 C

ATOM 323 O TRP A 23 80.704 57.208 36.411 1.00 0.00 O

ATOM 324 CB TRP A 23 78.594 58.324 35.216 1.00 0.00 C

ATOM 325 CG TRP A 23 79.669 59.147 34.573 1.00 0.00 C

ATOM 326 CD1 TRP A 23 80.778 59.657 35.178 1.00 0.00 C

ATOM 327 CD2 TRP A 23 79.742 59.562 33.187 1.00 0.00 C

ATOM 328 NE1 TRP A 23 81.533 60.357 34.271 1.00 0.00 N

ATOM 329 CE2 TRP A 23 80.915 60.308 33.047 1.00 0.00 C

ATOM 330 CE3 TRP A 23 78.920 59.361 32.072 1.00 0.00 C

ATOM 331 CZ2 TRP A 23 81.292 60.862 31.833 1.00 0.00 C

ATOM 332 CZ3 TRP A 23 79.298 59.915 30.854 1.00 0.00 C

ATOM 333 CH2 TRP A 23 80.454 60.645 30.739 1.00 0.00 C

ATOM 334 H TRP A 23 76.800 56.702 35.747 1.00 0.00 H

ATOM 335 HA TRP A 23 79.014 56.617 33.979 1.00 0.00 H

ATOM 336 1HB TRP A 23 77.634 58.628 34.799 1.00 0.00 H

ATOM 337 2HB TRP A 23 78.576 58.556 36.281 1.00 0.00 H

ATOM 338 HD1 TRP A 23 81.029 59.527 36.230 1.00 0.00 H

ATOM 339 HE1 TRP A 23 82.402 60.833 34.470 1.00 0.00 H

ATOM 340 HE3 TRP A 23 78.002 58.780 32.157 1.00 0.00 H

ATOM 341 HZ2 TRP A 23 82.206 61.445 31.721 1.00 0.00 H

ATOM 342 HZ3 TRP A 23 78.652 59.755 29.991 1.00 0.00 H

ATOM 343 HH2 TRP A 23 80.721 61.065 29.769 1.00 0.00 H

ATOM 344 N GLY A 24 80.291 55.064 35.827 1.00 0.00 N

ATOM 345 CA GLY A 24 81.452 54.496 36.479 1.00 0.00 C

ATOM 346 C GLY A 24 82.754 55.114 36.013 1.00 0.00 C

ATOM 347 O GLY A 24 83.374 55.903 36.708 1.00 0.00 O

ATOM 348 H GLY A 24 79.665 54.437 35.333 1.00 0.00 H

ATOM 349 1HA GLY A 24 81.366 54.632 37.557 1.00 0.00 H

ATOM 350 2HA GLY A 24 81.486 53.423 36.292 1.00 0.00 H

ATOM 351 N CYS A 25 83.117 54.815 34.773 1.00 0.00 N

ATOM 352 CA CYS A 25 84.199 55.489 34.069 1.00 0.00 C

ATOM 353 C CYS A 25 85.545 55.669 34.816 1.00 0.00 C

ATOM 354 O CYS A 25 86.064 56.779 34.923 1.00 0.00 O

ATOM 355 CB CYS A 25 83.705 56.870 33.640 1.00 0.00 C

ATOM 356 SG CYS A 25 82.299 56.832 32.503 1.00 0.00 S

ATOM 357 H CYS A 25 82.434 54.325 34.214 1.00 0.00 H

ATOM 358 HA CYS A 25 84.457 54.901 33.188 1.00 0.00 H

ATOM 359 1HB CYS A 25 83.411 57.442 34.521 1.00 0.00 H

ATOM 360 2HB CYS A 25 84.517 57.412 33.154 1.00 0.00 H

ATOM 361 HG CYS A 25 83.019 56.653 31.399 1.00 0.00 H

ATOM 362 N GLY A 26 86.055 54.563 35.373 1.00 0.00 N

ATOM 363 CA GLY A 26 87.203 54.459 36.291 1.00 0.00 C

ATOM 364 C GLY A 26 87.168 55.241 37.613 1.00 0.00 C

ATOM 365 O GLY A 26 87.523 54.687 38.657 1.00 0.00 O

ATOM 366 H GLY A 26 85.404 53.798 35.420 1.00 0.00 H

ATOM 367 1HA GLY A 26 87.351 53.416 36.570 1.00 0.00 H

ATOM 368 2HA GLY A 26 88.107 54.786 35.780 1.00 0.00 H

ATOM 369 N GLY A 27 86.728 56.497 37.594 1.00 0.00 N

ATOM 370 CA GLY A 27 86.693 57.334 38.790 1.00 0.00 C

ATOM 371 C GLY A 27 85.418 57.251 39.607 1.00 0.00 C

ATOM 372 O GLY A 27 85.401 57.732 40.731 1.00 0.00 O

ATOM 373 H GLY A 27 86.392 56.890 36.722 1.00 0.00 H

ATOM 374 1HA GLY A 27 87.520 57.064 39.447 1.00 0.00 H

ATOM 375 2HA GLY A 27 86.833 58.377 38.509 1.00 0.00 H

ATOM 376 N TRP A 28 84.374 56.620 39.071 1.00 0.00 N

ATOM 377 CA TRP A 28 83.104 56.449 39.762 1.00 0.00 C

ATOM 378 C TRP A 28 82.471 57.756 40.250 1.00 0.00 C

ATOM 379 O TRP A 28 82.482 58.063 41.439 1.00 0.00 O

ATOM 380 CB TRP A 28 83.301 55.513 40.957 1.00 0.00 C

ATOM 381 CG TRP A 28 83.782 54.147 40.576 1.00 0.00 C

ATOM 382 CD1 TRP A 28 85.075 53.713 40.558 1.00 0.00 C

ATOM 383 CD2 TRP A 28 82.975 53.022 40.153 1.00 0.00 C

ATOM 384 NE1 TRP A 28 85.127 52.401 40.154 1.00 0.00 N

ATOM 385 CE2 TRP A 28 83.852 51.963 39.904 1.00 0.00 C

ATOM 386 CE3 TRP A 28 81.600 52.832 39.968 1.00 0.00 C

ATOM 387 CZ2 TRP A 28 83.403 50.723 39.476 1.00 0.00 C

ATOM 388 CZ3 TRP A 28 81.149 51.589 39.541 1.00 0.00 C

ATOM 389 CH2 TRP A 28 82.027 50.562 39.302 1.00 0.00 C

ATOM 390 H TRP A 28 84.457 56.173 38.168 1.00 0.00 H

ATOM 391 HA TRP A 28 82.391 56.001 39.070 1.00 0.00 H

ATOM 392 1HB TRP A 28 84.024 55.952 41.648 1.00 0.00 H

ATOM 393 2HB TRP A 28 82.358 55.408 41.496 1.00 0.00 H

ATOM 394 HD1 TRP A 28 85.938 54.319 40.827 1.00 0.00 H

ATOM 395 HE1 TRP A 28 85.967 51.850 40.057 1.00 0.00 H

ATOM 396 HE3 TRP A 28 80.898 53.643 40.160 1.00 0.00 H

ATOM 397 HZ2 TRP A 28 84.084 49.896 39.279 1.00 0.00 H

ATOM 398 HZ3 TRP A 28 80.077 51.449 39.400 1.00 0.00 H

ATOM 399 HH2 TRP A 28 81.640 49.599 38.968 1.00 0.00 H

ATOM 400 N GLN A 29 81.922 58.524 39.314 1.00 0.00 N

ATOM 401 CA GLN A 29 81.381 59.844 39.636 1.00 0.00 C

ATOM 402 C GLN A 29 79.874 59.865 39.525 1.00 0.00 C

ATOM 403 O GLN A 29 79.333 59.790 38.424 1.00 0.00 O

ATOM 404 CB GLN A 29 81.980 60.913 38.718 1.00 0.00 C

ATOM 405 CG GLN A 29 81.439 62.312 38.955 1.00 0.00 C

ATOM 406 CD GLN A 29 81.831 62.862 40.313 1.00 0.00 C

ATOM 407 OE1 GLN A 29 82.976 63.269 40.526 1.00 0.00 O

ATOM 408 NE2 GLN A 29 80.881 62.878 41.241 1.00 0.00 N

ATOM 409 H GLN A 29 81.871 58.185 38.360 1.00 0.00 H

ATOM 410 HA GLN A 29 81.646 60.084 40.666 1.00 0.00 H

ATOM 411 1HB GLN A 29 83.062 60.943 38.852 1.00 0.00 H

ATOM 412 2HB GLN A 29 81.787 60.649 37.678 1.00 0.00 H

ATOM 413 1HG GLN A 29 81.835 62.978 38.189 1.00 0.00 H

ATOM 414 2HG GLN A 29 80.351 62.284 38.899 1.00 0.00 H

ATOM 415 1HE2 GLN A 29 81.081 63.229 42.156 1.00 0.00 H

ATOM 416 2HE2 GLN A 29 79.965 62.538 41.025 1.00 0.00 H

ATOM 417 N SER A 30 79.218 59.864 40.692 1.00 0.00 N

ATOM 418 CA SER A 30 77.762 59.738 40.826 1.00 0.00 C

ATOM 419 C SER A 30 77.301 58.528 40.045 1.00 0.00 C

ATOM 420 O SER A 30 76.348 58.578 39.268 1.00 0.00 O

ATOM 421 CB SER A 30 77.058 60.982 40.321 1.00 0.00 C

ATOM 422 OG SER A 30 77.449 62.111 41.053 1.00 0.00 O

ATOM 423 H SER A 30 79.773 59.766 41.528 1.00 0.00 H

ATOM 424 HA SER A 30 77.521 59.612 41.882 1.00 0.00 H

ATOM 425 1HB SER A 30 77.290 61.131 39.267 1.00 0.00 H

ATOM 426 2HB SER A 30 75.980 60.849 40.401 1.00 0.00 H

ATOM 427 HG SER A 30 76.658 62.425 41.499 1.00 0.00 H

ATOM 428 N ALA A 31 77.961 57.383 40.259 1.00 0.00 N

ATOM 429 CA ALA A 31 77.611 56.155 39.627 1.00 0.00 C

ATOM 430 C ALA A 31 76.445 55.499 40.346 1.00 0.00 C

ATOM 431 O ALA A 31 76.644 54.563 41.110 1.00 0.00 O

ATOM 432 CB ALA A 31 78.802 55.314 39.483 1.00 0.00 C

ATOM 433 H ALA A 31 78.748 57.411 40.890 1.00 0.00 H

ATOM 434 HA ALA A 31 77.213 56.385 38.639 1.00 0.00 H

ATOM 435 1HB ALA A 31 78.530 54.376 39.000 1.00 0.00 H

ATOM 436 2HB ALA A 31 79.541 55.835 38.874 1.00 0.00 H

ATOM 437 3HB ALA A 31 79.222 55.107 40.465 1.00 0.00 H

ATOM 438 N CYS A 32 75.265 56.088 40.096 1.00 0.00 N

ATOM 439 CA CYS A 32 74.035 55.959 40.784 1.00 0.00 C

ATOM 440 C CYS A 32 74.043 56.900 41.981 1.00 0.00 C

ATOM 441 O CYS A 32 74.004 58.110 41.811 1.00 0.00 O

ATOM 442 CB CYS A 32 73.819 54.515 41.238 1.00 0.00 C

ATOM 443 SG CYS A 32 73.705 53.323 39.884 1.00 0.00 S

ATOM 444 H CYS A 32 75.304 56.865 39.467 1.00 0.00 H

ATOM 445 HA CYS A 32 73.228 56.233 40.104 1.00 0.00 H

ATOM 446 1HB CYS A 32 74.643 54.212 41.886 1.00 0.00 H

ATOM 447 2HB CYS A 32 72.903 54.451 41.823 1.00 0.00 H

ATOM 448 N CYS A 33 73.867 56.427 43.208 1.00 0.00 N

ATOM 449 CA CYS A 33 73.873 57.428 44.296 1.00 0.00 C

ATOM 450 C CYS A 33 75.277 58.040 44.556 1.00 0.00 C

ATOM 451 O CYS A 33 75.397 59.247 44.672 1.00 0.00 O

ATOM 452 CB CYS A 33 73.363 56.792 45.590 1.00 0.00 C

ATOM 453 SG CYS A 33 73.250 57.941 46.982 1.00 0.00 S

ATOM 454 H CYS A 33 73.833 55.431 43.368 1.00 0.00 H

ATOM 455 HA CYS A 33 73.208 58.245 44.018 1.00 0.00 H

ATOM 456 1HB CYS A 33 72.374 56.368 45.421 1.00 0.00 H

ATOM 457 2HB CYS A 33 74.025 55.977 45.880 1.00 0.00 H

ATOM 458 N THR A 34 76.331 57.222 44.578 1.00 0.00 N

ATOM 459 CA THR A 34 77.682 57.781 44.490 1.00 0.00 C

ATOM 460 C THR A 34 78.514 56.654 43.954 1.00 0.00 C

ATOM 461 O THR A 34 78.844 56.617 42.780 1.00 0.00 O

ATOM 462 CB THR A 34 78.228 58.276 45.840 1.00 0.00 C

ATOM 463 OG1 THR A 34 77.411 59.350 46.326 1.00 0.00 O

ATOM 464 CG2 THR A 34 79.661 58.765 45.689 1.00 0.00 C

ATOM 465 H THR A 34 76.178 56.324 44.146 1.00 0.00 H

ATOM 466 HA THR A 34 77.658 58.639 43.818 1.00 0.00 H

ATOM 467 HB THR A 34 78.203 57.462 46.564 1.00 0.00 H

ATOM 468 HG1 THR A 34 76.780 59.602 45.647 1.00 0.00 H

ATOM 469 1HG2 THR A 34 80.032 59.111 46.654 1.00 0.00 H

ATOM 470 2HG2 THR A 34 80.288 57.948 45.331 1.00 0.00 H

ATOM 471 3HG2 THR A 34 79.691 59.586 44.973 1.00 0.00 H

ATOM 472 N THR A 35 78.720 55.612 44.750 1.00 0.00 N

ATOM 473 CA THR A 35 79.523 54.491 44.291 1.00 0.00 C

ATOM 474 C THR A 35 79.109 53.193 44.981 1.00 0.00 C

ATOM 475 O THR A 35 79.800 52.742 45.893 1.00 0.00 O

ATOM 476 CB THR A 35 81.021 54.753 44.530 1.00 0.00 C

ATOM 477 OG1 THR A 35 81.416 55.947 43.842 1.00 0.00 O

ATOM 478 CG2 THR A 35 81.854 53.584 44.027 1.00 0.00 C

ATOM 479 H THR A 35 78.387 55.639 45.698 1.00 0.00 H

ATOM 480 HA THR A 35 79.360 54.365 43.220 1.00 0.00 H

ATOM 481 HB THR A 35 81.201 54.888 45.596 1.00 0.00 H

ATOM 482 HG1 THR A 35 80.986 55.979 42.984 1.00 0.00 H

ATOM 483 1HG2 THR A 35 82.910 53.787 44.205 1.00 0.00 H

ATOM 484 2HG2 THR A 35 81.564 52.677 44.557 1.00 0.00 H

ATOM 485 3HG2 THR A 35 81.685 53.450 42.960 1.00 0.00 H

ATOM 486 N ASN A 36 77.956 52.629 44.623 1.00 0.00 N

ATOM 487 CA ASN A 36 77.470 51.483 45.398 1.00 0.00 C

ATOM 488 C ASN A 36 76.810 50.279 44.658 1.00 0.00 C

ATOM 489 O ASN A 36 77.467 49.273 44.420 1.00 0.00 O

ATOM 490 CB ASN A 36 76.503 52.011 46.442 1.00 0.00 C

ATOM 491 CG ASN A 36 75.403 52.840 45.842 1.00 0.00 C

ATOM 492 OD1 ASN A 36 75.318 52.988 44.618 1.00 0.00 O

ATOM 493 ND2 ASN A 36 74.558 53.385 46.681 1.00 0.00 N

ATOM 494 H ASN A 36 77.317 53.180 44.070 1.00 0.00 H

ATOM 495 HA ASN A 36 78.323 51.008 45.886 1.00 0.00 H

ATOM 496 1HB ASN A 36 76.059 51.173 46.982 1.00 0.00 H

ATOM 497 2HB ASN A 36 77.047 52.617 47.167 1.00 0.00 H

ATOM 498 1HD2 ASN A 36 73.805 53.947 46.339 1.00 0.00 H

ATOM 499 2HD2 ASN A 36 74.667 53.237 47.664 1.00 0.00 H

ATOM 500 N ILE A 37 75.577 50.406 44.144 1.00 0.00 N

ATOM 501 CA ILE A 37 74.930 49.335 43.325 1.00 0.00 C

ATOM 502 C ILE A 37 75.594 49.304 41.929 1.00 0.00 C

ATOM 503 O ILE A 37 75.519 48.290 41.246 1.00 0.00 O

ATOM 504 CB ILE A 37 73.415 49.563 43.180 1.00 0.00 C

ATOM 505 CG1 ILE A 37 72.721 48.273 42.734 1.00 0.00 C

ATOM 506 CG2 ILE A 37 73.139 50.687 42.194 1.00 0.00 C

ATOM 507 CD1 ILE A 37 71.214 48.319 42.850 1.00 0.00 C

ATOM 508 H ILE A 37 75.205 51.337 44.083 1.00 0.00 H

ATOM 509 HA ILE A 37 75.081 48.379 43.825 1.00 0.00 H

ATOM 510 HB ILE A 37 72.992 49.828 44.149 1.00 0.00 H

ATOM 511 1HG1 ILE A 37 72.976 48.062 41.696 1.00 0.00 H

ATOM 512 2HG1 ILE A 37 73.082 47.439 43.334 1.00 0.00 H

ATOM 513 1HG2 ILE A 37 72.063 50.836 42.103 1.00 0.00 H

ATOM 514 2HG2 ILE A 37 73.602 51.607 42.551 1.00 0.00 H

ATOM 515 3HG2 ILE A 37 73.553 50.428 41.221 1.00 0.00 H

ATOM 516 1HD1 ILE A 37 70.795 47.369 42.517 1.00 0.00 H

ATOM 517 2HD1 ILE A 37 70.934 48.493 43.890 1.00 0.00 H

ATOM 518 3HD1 ILE A 37 70.826 49.123 42.230 1.00 0.00 H

ATOM 519 N SER A 38 76.249 50.386 41.515 1.00 0.00 N

ATOM 520 CA SER A 38 76.991 50.392 40.286 1.00 0.00 C

ATOM 521 C SER A 38 78.241 49.531 40.463 1.00 0.00 C

ATOM 522 O SER A 38 78.832 49.137 39.472 1.00 0.00 O

ATOM 523 CB SER A 38 77.362 51.812 39.902 1.00 0.00 C

ATOM 524 OG SER A 38 78.197 52.393 40.866 1.00 0.00 O

ATOM 525 H SER A 38 76.508 51.056 42.213 1.00 0.00 H

ATOM 526 HA SER A 38 76.363 49.970 39.501 1.00 0.00 H

ATOM 527 1HB SER A 38 77.864 51.807 38.936 1.00 0.00 H

ATOM 528 2HB SER A 38 76.456 52.409 39.797 1.00 0.00 H

ATOM 529 HG SER A 38 77.813 53.247 41.071 1.00 0.00 H

ATOM 530 N VAL A 39 78.705 49.320 41.690 1.00 0.00 N

ATOM 531 CA VAL A 39 79.840 48.418 41.925 1.00 0.00 C

ATOM 532 C VAL A 39 79.378 46.957 42.049 1.00 0.00 C

ATOM 533 O VAL A 39 79.856 46.075 41.327 1.00 0.00 O

ATOM 534 CB VAL A 39 80.588 48.828 43.206 1.00 0.00 C

ATOM 535 CG1 VAL A 39 81.690 47.828 43.522 1.00 0.00 C

ATOM 536 CG2 VAL A 39 81.163 50.226 43.046 1.00 0.00 C

ATOM 537 H VAL A 39 78.145 49.573 42.495 1.00 0.00 H

ATOM 538 HA VAL A 39 80.525 48.496 41.079 1.00 0.00 H

ATOM 539 HB VAL A 39 79.892 48.814 44.044 1.00 0.00 H

ATOM 540 1HG1 VAL A 39 82.211 48.131 44.432 1.00 0.00 H

ATOM 541 2HG1 VAL A 39 81.254 46.840 43.668 1.00 0.00 H

ATOM 542 3HG1 VAL A 39 82.398 47.793 42.695 1.00 0.00 H

ATOM 543 1HG2 VAL A 39 81.690 50.511 43.956 1.00 0.00 H

ATOM 544 2HG2 VAL A 39 81.854 50.243 42.204 1.00 0.00 H

ATOM 545 3HG2 VAL A 39 80.353 50.933 42.862 1.00 0.00 H

ATOM 546 N TYR A 40 78.317 46.746 42.838 1.00 0.00 N

ATOM 547 CA TYR A 40 77.509 45.533 42.823 1.00 0.00 C

ATOM 548 C TYR A 40 77.203 45.125 41.383 1.00 0.00 C

ATOM 549 O TYR A 40 76.644 45.921 40.650 1.00 0.00 O

ATOM 550 CB TYR A 40 76.212 45.734 43.611 1.00 0.00 C

ATOM 551 CG TYR A 40 75.308 44.522 43.621 1.00 0.00 C

ATOM 552 CD1 TYR A 40 75.537 43.493 44.523 1.00 0.00 C

ATOM 553 CD2 TYR A 40 74.250 44.440 42.728 1.00 0.00 C

ATOM 554 CE1 TYR A 40 74.712 42.384 44.530 1.00 0.00 C

ATOM 555 CE2 TYR A 40 73.424 43.332 42.738 1.00 0.00 C

ATOM 556 CZ TYR A 40 73.655 42.307 43.634 1.00 0.00 C

ATOM 557 OH TYR A 40 72.830 41.204 43.644 1.00 0.00 O

ATOM 558 H TYR A 40 77.831 47.604 43.087 1.00 0.00 H

ATOM 559 HA TYR A 40 78.079 44.732 43.293 1.00 0.00 H

ATOM 560 1HB TYR A 40 76.451 45.989 44.645 1.00 0.00 H

ATOM 561 2HB TYR A 40 75.656 46.570 43.188 1.00 0.00 H

ATOM 562 HD1 TYR A 40 76.370 43.558 45.223 1.00 0.00 H

ATOM 563 HD2 TYR A 40 74.069 45.248 42.020 1.00 0.00 H

ATOM 564 HE1 TYR A 40 74.893 41.577 45.240 1.00 0.00 H

ATOM 565 HE2 TYR A 40 72.592 43.266 42.037 1.00 0.00 H

ATOM 566 HH TYR A 40 73.172 40.558 44.267 1.00 0.00 H

ATOM 567 N PRO A 41 77.639 43.925 40.939 1.00 0.00 N

ATOM 568 CA PRO A 41 77.428 43.405 39.576 1.00 0.00 C

ATOM 569 C PRO A 41 76.094 43.841 38.913 1.00 0.00 C

ATOM 570 O PRO A 41 75.049 43.239 39.147 1.00 0.00 O

ATOM 571 CB PRO A 41 77.458 41.891 39.806 1.00 0.00 C

ATOM 572 CG PRO A 41 78.291 41.724 41.032 1.00 0.00 C

ATOM 573 CD PRO A 41 77.899 42.880 41.911 1.00 0.00 C

ATOM 574 HA PRO A 41 78.258 43.730 38.932 1.00 0.00 H

ATOM 575 1HB PRO A 41 76.435 41.507 39.931 1.00 0.00 H

ATOM 576 2HB PRO A 41 77.886 41.384 38.928 1.00 0.00 H

ATOM 577 1HG PRO A 41 78.089 40.748 41.499 1.00 0.00 H

ATOM 578 2HG PRO A 41 79.359 41.735 40.769 1.00 0.00 H

ATOM 579 1HD PRO A 41 77.007 42.611 42.497 1.00 0.00 H

ATOM 580 2HD PRO A 41 78.736 43.138 42.575 1.00 0.00 H

ATOM 581 N LEU A 42 76.189 44.780 37.966 1.00 0.00 N

ATOM 582 CA LEU A 42 75.070 45.093 37.049 1.00 0.00 C

ATOM 583 C LEU A 42 75.472 44.815 35.546 1.00 0.00 C

ATOM 584 O LEU A 42 75.974 45.709 34.863 1.00 0.00 O

ATOM 585 CB LEU A 42 74.653 46.561 37.221 1.00 0.00 C

ATOM 586 CG LEU A 42 74.133 46.945 38.614 1.00 0.00 C

ATOM 587 CD1 LEU A 42 73.877 48.446 38.663 1.00 0.00 C

ATOM 588 CD2 LEU A 42 72.864 46.162 38.916 1.00 0.00 C

ATOM 589 H LEU A 42 77.100 45.148 37.755 1.00 0.00 H

ATOM 590 HA LEU A 42 74.226 44.452 37.302 1.00 0.00 H

ATOM 591 1HB LEU A 42 75.509 47.193 37.000 1.00 0.00 H

ATOM 592 2HB LEU A 42 73.866 46.784 36.501 1.00 0.00 H

ATOM 593 HG LEU A 42 74.891 46.711 39.362 1.00 0.00 H

ATOM 594 1HD1 LEU A 42 73.510 48.717 39.652 1.00 0.00 H

ATOM 595 2HD1 LEU A 42 74.805 48.979 38.463 1.00 0.00 H

ATOM 596 3HD1 LEU A 42 73.135 48.712 37.911 1.00 0.00 H

ATOM 597 1HD2 LEU A 42 72.496 46.435 39.906 1.00 0.00 H

ATOM 598 2HD2 LEU A 42 72.107 46.397 38.169 1.00 0.00 H

ATOM 599 3HD2 LEU A 42 73.080 45.095 38.891 1.00 0.00 H

ATOM 600 N PRO A 43 75.556 43.517 35.214 1.00 0.00 N

ATOM 601 CA PRO A 43 76.125 42.967 33.966 1.00 0.00 C

ATOM 602 C PRO A 43 76.797 44.023 33.090 1.00 0.00 C

ATOM 603 O PRO A 43 76.242 44.430 32.071 1.00 0.00 O

ATOM 604 CB PRO A 43 74.894 42.376 33.269 1.00 0.00 C

ATOM 605 CG PRO A 43 74.012 41.944 34.392 1.00 0.00 C

ATOM 606 CD PRO A 43 74.204 42.999 35.448 1.00 0.00 C

ATOM 607 HA PRO A 43 76.854 42.182 34.216 1.00 0.00 H

ATOM 608 1HB PRO A 43 74.426 43.136 32.626 1.00 0.00 H

ATOM 609 2HB PRO A 43 75.195 41.543 32.618 1.00 0.00 H

ATOM 610 1HG PRO A 43 72.968 41.874 34.047 1.00 0.00 H

ATOM 611 2HG PRO A 43 74.300 40.940 34.735 1.00 0.00 H

ATOM 612 1HD PRO A 43 73.491 43.818 35.284 1.00 0.00 H

ATOM 613 2HD PRO A 43 74.062 42.552 36.442 1.00 0.00 H

ATOM 614 N MET A 44 77.979 44.478 33.534 1.00 0.00 N

ATOM 615 CA MET A 44 78.877 45.359 32.812 1.00 0.00 C

ATOM 616 C MET A 44 78.197 46.706 32.455 1.00 0.00 C

ATOM 617 O MET A 44 78.209 47.122 31.309 1.00 0.00 O

ATOM 618 CB MET A 44 79.380 44.658 31.553 1.00 0.00 C

ATOM 619 CG MET A 44 80.318 43.488 31.817 1.00 0.00 C

ATOM 620 SD MET A 44 79.492 42.106 32.631 1.00 0.00 S

ATOM 621 CE MET A 44 78.484 41.479 31.291 1.00 0.00 C

ATOM 622 H MET A 44 78.317 44.071 34.390 1.00 0.00 H

ATOM 623 HA MET A 44 79.726 45.590 33.455 1.00 0.00 H

ATOM 624 1HB MET A 44 78.533 44.284 30.982 1.00 0.00 H

ATOM 625 2HB MET A 44 79.910 45.375 30.923 1.00 0.00 H

ATOM 626 1HG MET A 44 80.734 43.134 30.873 1.00 0.00 H

ATOM 627 2HG MET A 44 81.142 43.817 32.450 1.00 0.00 H

ATOM 628 1HE MET A 44 77.910 40.619 31.637 1.00 0.00 H

ATOM 629 2HE MET A 44 77.799 42.258 30.953 1.00 0.00 H

ATOM 630 3HE MET A 44 79.125 41.176 30.462 1.00 0.00 H

ATOM 631 N SER A 45 77.562 47.368 33.421 1.00 0.00 N

ATOM 632 CA SER A 45 76.676 48.496 33.136 1.00 0.00 C

ATOM 633 C SER A 45 75.682 48.211 32.014 1.00 0.00 C

ATOM 634 O SER A 45 75.482 49.026 31.110 1.00 0.00 O

ATOM 635 CB SER A 45 77.503 49.715 32.777 1.00 0.00 C

ATOM 636 OG SER A 45 78.315 50.105 33.850 1.00 0.00 O

ATOM 637 H SER A 45 77.359 46.812 34.239 1.00 0.00 H

ATOM 638 HA SER A 45 76.092 48.713 34.032 1.00 0.00 H

ATOM 639 1HB SER A 45 78.125 49.489 31.911 1.00 0.00 H

ATOM 640 2HB SER A 45 76.841 50.534 32.501 1.00 0.00 H

ATOM 641 HG SER A 45 78.572 51.013 33.672 1.00 0.00 H

ATOM 642 N THR A 46 75.106 47.018 32.064 1.00 0.00 N

ATOM 643 CA THR A 46 74.253 46.450 31.028 1.00 0.00 C

ATOM 644 C THR A 46 74.885 46.230 29.652 1.00 0.00 C

ATOM 645 O THR A 46 74.403 46.767 28.643 1.00 0.00 O

ATOM 646 CB THR A 46 73.008 47.338 30.850 1.00 0.00 C

ATOM 647 OG1 THR A 46 72.473 47.678 32.136 1.00 0.00 O

ATOM 648 CG2 THR A 46 71.945 46.611 30.040 1.00 0.00 C

ATOM 649 H THR A 46 75.394 46.410 32.825 1.00 0.00 H

ATOM 650 HA THR A 46 73.941 45.454 31.344 1.00 0.00 H

ATOM 651 HB THR A 46 73.287 48.256 30.332 1.00 0.00 H

ATOM 652 HG1 THR A 46 71.581 48.016 32.031 1.00 0.00 H

ATOM 653 1HG2 THR A 46 71.073 47.253 29.923 1.00 0.00 H

ATOM 654 2HG2 THR A 46 72.345 46.361 29.057 1.00 0.00 H

ATOM 655 3HG2 THR A 46 71.656 45.696 30.556 1.00 0.00 H

ATOM 656 N LYS A 47 75.983 45.471 29.623 1.00 0.00 N

ATOM 657 CA LYS A 47 76.782 45.170 28.411 1.00 0.00 C

ATOM 658 C LYS A 47 77.322 46.460 27.772 1.00 0.00 C

ATOM 659 O LYS A 47 77.107 46.700 26.581 1.00 0.00 O

ATOM 660 CB LYS A 47 75.949 44.389 27.394 1.00 0.00 C

ATOM 661 CG LYS A 47 75.446 43.041 27.892 1.00 0.00 C

ATOM 662 CD LYS A 47 74.659 42.310 26.815 1.00 0.00 C

ATOM 663 CE LYS A 47 74.104 40.991 27.331 1.00 0.00 C

ATOM 664 NZ LYS A 47 73.277 40.296 26.307 1.00 0.00 N

ATOM 665 H LYS A 47 76.426 45.340 30.524 1.00 0.00 H

ATOM 666 HA LYS A 47 77.636 44.557 28.703 1.00 0.00 H

ATOM 667 1HB LYS A 47 75.082 44.983 27.102 1.00 0.00 H

ATOM 668 2HB LYS A 47 76.541 44.213 26.495 1.00 0.00 H

ATOM 669 1HG LYS A 47 76.293 42.425 28.193 1.00 0.00 H

ATOM 670 2HG LYS A 47 74.805 43.192 28.760 1.00 0.00 H

ATOM 671 1HD LYS A 47 73.831 42.937 26.481 1.00 0.00 H

ATOM 672 2HD LYS A 47 75.308 42.113 25.962 1.00 0.00 H

ATOM 673 1HE LYS A 47 74.928 40.338 27.617 1.00 0.00 H

ATOM 674 2HE LYS A 47 73.491 41.173 28.213 1.00 0.00 H

ATOM 675 1HZ LYS A 47 72.928 39.428 26.689 1.00 0.00 H

ATOM 676 2HZ LYS A 47 72.498 40.886 26.049 1.00 0.00 H

ATOM 677 3HZ LYS A 47 73.838 40.105 25.491 1.00 0.00 H

ATOM 678 N ARG A 48 78.098 47.222 28.528 1.00 0.00 N

ATOM 679 CA ARG A 48 78.768 48.419 28.010 1.00 0.00 C

ATOM 680 C ARG A 48 80.268 48.215 28.202 1.00 0.00 C

ATOM 681 O ARG A 48 80.824 47.250 27.687 1.00 0.00 O

ATOM 682 CB ARG A 48 78.311 49.679 28.730 1.00 0.00 C

ATOM 683 CG ARG A 48 76.846 50.035 28.529 1.00 0.00 C

ATOM 684 CD ARG A 48 76.568 50.439 27.128 1.00 0.00 C

ATOM 685 NE ARG A 48 75.170 50.785 26.931 1.00 0.00 N

ATOM 686 CZ ARG A 48 74.623 51.120 25.746 1.00 0.00 C

ATOM 687 NH1 ARG A 48 75.368 51.151 24.663 1.00 0.00 N

ATOM 688 NH2 ARG A 48 73.338 51.418 25.672 1.00 0.00 N

ATOM 689 H ARG A 48 78.308 46.935 29.478 1.00 0.00 H

ATOM 690 HA ARG A 48 78.519 48.525 26.954 1.00 0.00 H

ATOM 691 1HB ARG A 48 78.479 49.567 29.800 1.00 0.00 H

ATOM 692 2HB ARG A 48 78.907 50.527 28.393 1.00 0.00 H

ATOM 693 1HG ARG A 48 76.227 49.171 28.767 1.00 0.00 H

ATOM 694 2HG ARG A 48 76.581 50.864 29.185 1.00 0.00 H

ATOM 695 1HD ARG A 48 77.173 51.308 26.873 1.00 0.00 H

ATOM 696 2HD ARG A 48 76.813 49.617 26.456 1.00 0.00 H

ATOM 697 HE ARG A 48 74.563 50.773 27.741 1.00 0.00 H

ATOM 698 1HH1 ARG A 48 76.352 50.922 24.720 1.00 0.00 H

ATOM 699 2HH1 ARG A 48 74.959 51.401 23.776 1.00 0.00 H

ATOM 700 1HH2 ARG A 48 72.765 51.395 26.504 1.00 0.00 H

ATOM 701 2HH2 ARG A 48 72.929 51.669 24.784 1.00 0.00 H

ATOM 702 N ARG A 49 80.919 49.034 29.037 1.00 0.00 N

ATOM 703 CA ARG A 49 82.310 48.753 29.430 1.00 0.00 C

ATOM 704 C ARG A 49 82.363 48.544 30.921 1.00 0.00 C

ATOM 705 O ARG A 49 83.455 48.460 31.472 1.00 0.00 O

ATOM 706 CB ARG A 49 83.244 49.889 29.043 1.00 0.00 C

ATOM 707 CG ARG A 49 83.369 50.134 27.548 1.00 0.00 C

ATOM 708 CD ARG A 49 84.305 51.248 27.250 1.00 0.00 C

ATOM 709 NE ARG A 49 85.683 50.898 27.558 1.00 0.00 N

ATOM 710 CZ ARG A 49 86.725 51.747 27.473 1.00 0.00 C

ATOM 711 NH1 ARG A 49 86.531 52.990 27.086 1.00 0.00 N

ATOM 712 NH2 ARG A 49 87.942 51.331 27.777 1.00 0.00 N

ATOM 713 H ARG A 49 80.351 49.610 29.645 1.00 0.00 H

ATOM 714 HA ARG A 49 82.640 47.852 28.913 1.00 0.00 H

ATOM 715 1HB ARG A 49 82.900 50.816 29.501 1.00 0.00 H

ATOM 716 2HB ARG A 49 84.244 49.686 29.429 1.00 0.00 H

ATOM 717 1HG ARG A 49 83.745 49.232 27.064 1.00 0.00 H

ATOM 718 2HG ARG A 49 82.392 50.387 27.138 1.00 0.00 H

ATOM 719 1HD ARG A 49 84.247 51.499 26.191 1.00 0.00 H

ATOM 720 2HD ARG A 49 84.033 52.120 27.845 1.00 0.00 H

ATOM 721 HE ARG A 49 85.870 49.952 27.859 1.00 0.00 H

ATOM 722 1HH1 ARG A 49 85.600 53.306 26.855 1.00 0.00 H

ATOM 723 2HH1 ARG A 49 87.312 53.625 27.021 1.00 0.00 H

ATOM 724 1HH2 ARG A 49 88.090 50.377 28.072 1.00 0.00 H

ATOM 725 2HH2 ARG A 49 88.723 51.968 27.711 1.00 0.00 H

ATOM 726 N GLY A 50 81.222 48.600 31.610 1.00 0.00 N

ATOM 727 CA GLY A 50 81.236 48.705 33.049 1.00 0.00 C

ATOM 728 C GLY A 50 81.850 50.035 33.469 1.00 0.00 C

ATOM 729 O GLY A 50 81.657 51.043 32.783 1.00 0.00 O

ATOM 730 H GLY A 50 80.389 48.896 31.118 1.00 0.00 H

ATOM 731 1HA GLY A 50 80.217 48.621 33.430 1.00 0.00 H

ATOM 732 2HA GLY A 50 81.804 47.876 33.469 1.00 0.00 H

ATOM 733 N ALA A 51 82.696 50.009 34.496 1.00 0.00 N

ATOM 734 CA ALA A 51 83.499 51.194 34.780 1.00 0.00 C

ATOM 735 C ALA A 51 84.819 51.183 34.030 1.00 0.00 C

ATOM 736 O ALA A 51 85.242 52.187 33.455 1.00 0.00 O

ATOM 737 CB ALA A 51 83.763 51.561 36.224 1.00 0.00 C

ATOM 738 H ALA A 51 82.968 49.156 34.952 1.00 0.00 H

ATOM 739 HA ALA A 51 82.986 52.059 34.362 1.00 0.00 H

ATOM 740 1HB ALA A 51 84.373 52.461 36.264 1.00 0.00 H

ATOM 741 2HB ALA A 51 82.815 51.738 36.733 1.00 0.00 H

ATOM 742 3HB ALA A 51 84.288 50.744 36.716 1.00 0.00 H

ATOM 743 N ARG A 52 85.453 50.004 33.990 1.00 0.00 N

ATOM 744 CA ARG A 52 86.687 49.794 33.257 1.00 0.00 C

ATOM 745 C ARG A 52 86.945 48.363 32.834 1.00 0.00 C

ATOM 746 O ARG A 52 88.074 47.955 32.597 1.00 0.00 O

ATOM 747 CB ARG A 52 87.866 50.267 34.097 1.00 0.00 C

ATOM 748 CG ARG A 52 88.075 49.499 35.392 1.00 0.00 C

ATOM 749 CD ARG A 52 89.207 50.049 36.179 1.00 0.00 C

ATOM 750 NE ARG A 52 89.436 49.296 37.402 1.00 0.00 N

ATOM 751 CZ ARG A 52 90.387 49.581 38.311 1.00 0.00 C

ATOM 752 NH1 ARG A 52 91.190 50.605 38.122 1.00 0.00 N

ATOM 753 NH2 ARG A 52 90.514 48.833 39.392 1.00 0.00 N

ATOM 754 H ARG A 52 85.001 49.236 34.455 1.00 0.00 H

ATOM 755 HA ARG A 52 86.648 50.379 32.338 1.00 0.00 H

ATOM 756 1HB ARG A 52 88.782 50.183 33.514 1.00 0.00 H

ATOM 757 2HB ARG A 52 87.733 51.318 34.352 1.00 0.00 H

ATOM 758 1HG ARG A 52 87.172 49.559 36.000 1.00 0.00 H

ATOM 759 2HG ARG A 52 88.290 48.453 35.167 1.00 0.00 H

ATOM 760 1HD ARG A 52 90.118 50.013 35.582 1.00 0.00 H

ATOM 761 2HD ARG A 52 88.993 51.083 36.451 1.00 0.00 H

ATOM 762 HE ARG A 52 88.837 48.501 37.581 1.00 0.00 H

ATOM 763 1HH1 ARG A 52 91.093 51.178 37.295 1.00 0.00 H

ATOM 764 2HH1 ARG A 52 91.904 50.820 38.803 1.00 0.00 H

ATOM 765 1HH2 ARG A 52 89.896 48.046 39.539 1.00 0.00 H

ATOM 766 2HH2 ARG A 52 91.228 49.049 40.074 1.00 0.00 H

ATOM 767 N ILE A 53 85.867 47.594 32.700 1.00 0.00 N

ATOM 768 CA ILE A 53 85.922 46.213 32.209 1.00 0.00 C

ATOM 769 C ILE A 53 86.229 46.140 30.715 1.00 0.00 C

ATOM 770 O ILE A 53 87.007 45.336 30.216 1.00 0.00 O

ATOM 771 CB ILE A 53 84.597 45.480 32.487 1.00 0.00 C

ATOM 772 CG1 ILE A 53 84.401 45.287 33.991 1.00 0.00 C

ATOM 773 CG2 ILE A 53 84.567 44.142 31.766 1.00 0.00 C

ATOM 774 CD1 ILE A 53 83.016 44.816 34.372 1.00 0.00 C

ATOM 775 H ILE A 53 84.976 48.041 32.789 1.00 0.00 H

ATOM 776 HA ILE A 53 86.722 45.691 32.733 1.00 0.00 H

ATOM 777 HB ILE A 53 83.765 46.092 32.137 1.00 0.00 H

ATOM 778 1HG1 ILE A 53 85.121 44.559 34.362 1.00 0.00 H

ATOM 779 2HG1 ILE A 53 84.595 46.227 34.510 1.00 0.00 H

ATOM 780 1HG2 ILE A 53 83.624 43.638 31.974 1.00 0.00 H

ATOM 781 2HG2 ILE A 53 84.662 44.305 30.693 1.00 0.00 H

ATOM 782 3HG2 ILE A 53 85.393 43.522 32.115 1.00 0.00 H

ATOM 783 1HD1 ILE A 53 82.954 44.703 35.454 1.00 0.00 H

ATOM 784 2HD1 ILE A 53 82.278 45.550 34.043 1.00 0.00 H

ATOM 785 3HD1 ILE A 53 82.812 43.859 33.896 1.00 0.00 H

ATOM 786 N SER A 54 85.592 47.055 29.987 1.00 0.00 N

ATOM 787 CA SER A 54 85.623 47.115 28.565 1.00 0.00 C

ATOM 788 C SER A 54 85.115 45.888 27.823 1.00 0.00 C

ATOM 789 O SER A 54 85.622 45.600 26.743 1.00 0.00 O

ATOM 790 CB SER A 54 87.050 47.397 28.137 1.00 0.00 C

ATOM 791 OG SER A 54 87.498 48.618 28.657 1.00 0.00 O

ATOM 792 H SER A 54 84.905 47.612 30.473 1.00 0.00 H

ATOM 793 HA SER A 54 84.972 47.927 28.238 1.00 0.00 H

ATOM 794 1HB SER A 54 87.700 46.592 28.481 1.00 0.00 H

ATOM 795 2HB SER A 54 87.106 47.419 27.049 1.00 0.00 H

ATOM 796 HG SER A 54 87.841 48.422 29.533 1.00 0.00 H

ATOM 797 N GLY A 55 84.009 45.338 28.301 1.00 0.00 N

ATOM 798 CA GLY A 55 83.291 44.317 27.564 1.00 0.00 C

ATOM 799 C GLY A 55 82.106 43.602 28.141 1.00 0.00 C

ATOM 800 O GLY A 55 81.202 44.217 28.679 1.00 0.00 O

ATOM 801 H GLY A 55 83.468 45.798 29.012 1.00 0.00 H

ATOM 802 1HA GLY A 55 82.912 44.740 26.633 1.00 0.00 H

ATOM 803 2HA GLY A 55 83.975 43.513 27.296 1.00 0.00 H

ATOM 804 N ARG A 56 82.041 42.298 27.924 1.00 0.00 N

ATOM 805 CA ARG A 56 80.895 41.499 28.348 1.00 0.00 C

ATOM 806 C ARG A 56 81.353 40.218 29.114 1.00 0.00 C

ATOM 807 O ARG A 56 80.669 39.199 29.069 1.00 0.00 O

ATOM 808 CB ARG A 56 80.055 41.107 27.142 1.00 0.00 C

ATOM 809 CG ARG A 56 79.422 42.273 26.398 1.00 0.00 C

ATOM 810 CD ARG A 56 78.639 41.814 25.222 1.00 0.00 C

ATOM 811 NE ARG A 56 78.051 42.928 24.494 1.00 0.00 N

ATOM 812 CZ ARG A 56 77.340 42.807 23.356 1.00 0.00 C

ATOM 813 NH1 ARG A 56 77.135 41.619 22.831 1.00 0.00 N

ATOM 814 NH2 ARG A 56 76.846 43.882 22.768 1.00 0.00 N

ATOM 815 H ARG A 56 82.782 41.902 27.365 1.00 0.00 H

ATOM 816 HA ARG A 56 80.284 42.101 29.022 1.00 0.00 H

ATOM 817 1HB ARG A 56 80.672 40.560 26.431 1.00 0.00 H

ATOM 818 2HB ARG A 56 79.250 40.442 27.458 1.00 0.00 H

ATOM 819 1HG ARG A 56 78.750 42.811 27.069 1.00 0.00 H

ATOM 820 2HG ARG A 56 80.203 42.948 26.047 1.00 0.00 H

ATOM 821 1HD ARG A 56 79.288 41.267 24.542 1.00 0.00 H

ATOM 822 2HD ARG A 56 77.831 41.162 25.556 1.00 0.00 H

ATOM 823 HE ARG A 56 78.187 43.858 24.868 1.00 0.00 H

ATOM 824 1HH1 ARG A 56 77.512 40.797 23.280 1.00 0.00 H

ATOM 825 2HH1 ARG A 56 76.601 41.529 21.980 1.00 0.00 H

ATOM 826 1HH2 ARG A 56 77.003 44.797 23.172 1.00 0.00 H

ATOM 827 2HH2 ARG A 56 76.314 43.794 21.916 1.00 0.00 H

ATOM 828 N LYS A 57 82.485 40.317 29.809 1.00 0.00 N

ATOM 829 CA LYS A 57 82.757 39.296 30.853 1.00 0.00 C

ATOM 830 C LYS A 57 82.441 40.063 32.107 1.00 0.00 C

ATOM 831 O LYS A 57 82.654 41.270 32.181 1.00 0.00 O

ATOM 832 CB LYS A 57 84.195 38.775 30.848 1.00 0.00 C

ATOM 833 CG LYS A 57 84.581 38.007 29.591 1.00 0.00 C

ATOM 834 CD LYS A 57 86.010 37.491 29.675 1.00 0.00 C

ATOM 835 CE LYS A 57 86.401 36.730 28.417 1.00 0.00 C

ATOM 836 NZ LYS A 57 87.800 36.230 28.481 1.00 0.00 N

ATOM 837 H LYS A 57 82.707 41.242 30.133 1.00 0.00 H

ATOM 838 HA LYS A 57 82.106 38.439 30.677 1.00 0.00 H

ATOM 839 1HB LYS A 57 84.886 39.612 30.953 1.00 0.00 H

ATOM 840 2HB LYS A 57 84.347 38.116 31.703 1.00 0.00 H

ATOM 841 1HG LYS A 57 83.906 37.160 29.459 1.00 0.00 H

ATOM 842 2HG LYS A 57 84.490 38.659 28.723 1.00 0.00 H

ATOM 843 1HD LYS A 57 86.693 38.332 29.808 1.00 0.00 H

ATOM 844 2HD LYS A 57 86.108 36.828 30.534 1.00 0.00 H

ATOM 845 1HE LYS A 57 85.730 35.883 28.282 1.00 0.00 H

ATOM 846 2HE LYS A 57 86.302 37.384 27.551 1.00 0.00 H

ATOM 847 1HZ LYS A 57 88.020 35.732 27.629 1.00 0.00 H

ATOM 848 2HZ LYS A 57 88.433 37.010 28.587 1.00 0.00 H

ATOM 849 3HZ LYS A 57 87.900 35.606 29.269 1.00 0.00 H

ATOM 850 N MET A 58 81.806 39.376 33.052 1.00 0.00 N

ATOM 851 CA MET A 58 81.581 39.924 34.368 1.00 0.00 C

ATOM 852 C MET A 58 82.823 39.663 35.195 1.00 0.00 C

ATOM 853 O MET A 58 83.505 38.655 34.998 1.00 0.00 O

ATOM 854 CB MET A 58 80.342 39.308 35.013 1.00 0.00 C

ATOM 855 CG MET A 58 79.983 39.895 36.373 1.00 0.00 C

ATOM 856 SD MET A 58 78.451 39.214 37.039 1.00 0.00 S

ATOM 857 CE MET A 58 77.236 40.093 36.062 1.00 0.00 C

ATOM 858 H MET A 58 81.853 38.368 32.979 1.00 0.00 H

ATOM 859 HA MET A 58 81.422 40.998 34.273 1.00 0.00 H

ATOM 860 1HB MET A 58 79.484 39.443 34.355 1.00 0.00 H

ATOM 861 2HB MET A 58 80.490 38.235 35.141 1.00 0.00 H

ATOM 862 1HG MET A 58 80.786 39.692 37.078 1.00 0.00 H

ATOM 863 2HG MET A 58 79.871 40.974 36.285 1.00 0.00 H

ATOM 864 1HE MET A 58 76.235 39.779 36.359 1.00 0.00 H

ATOM 865 2HE MET A 58 77.344 41.167 36.225 1.00 0.00 H

ATOM 866 3HE MET A 58 77.386 39.869 35.005 1.00 0.00 H

ATOM 867 N SER A 59 83.047 40.525 36.207 1.00 0.00 N

ATOM 868 CA SER A 59 84.084 40.321 37.179 1.00 0.00 C

ATOM 869 C SER A 59 85.501 40.320 36.559 1.00 0.00 C

ATOM 870 O SER A 59 86.186 39.300 36.572 1.00 0.00 O

ATOM 871 CB SER A 59 83.829 39.014 37.902 1.00 0.00 C

ATOM 872 OG SER A 59 82.587 39.031 38.549 1.00 0.00 O

ATOM 873 H SER A 59 82.339 41.192 36.471 1.00 0.00 H

ATOM 874 HA SER A 59 84.053 41.143 37.895 1.00 0.00 H

ATOM 875 1HB SER A 59 83.859 38.191 37.186 1.00 0.00 H

ATOM 876 2HB SER A 59 84.620 38.841 38.630 1.00 0.00 H

ATOM 877 HG SER A 59 82.331 38.112 38.656 1.00 0.00 H

ATOM 878 N GLN A 60 85.920 41.470 36.043 1.00 0.00 N

ATOM 879 CA GLN A 60 87.244 41.588 35.456 1.00 0.00 C

ATOM 880 C GLN A 60 88.049 42.773 36.022 1.00 0.00 C

ATOM 881 O GLN A 60 89.104 42.550 36.588 1.00 0.00 O

ATOM 882 CB GLN A 60 87.124 41.720 33.936 1.00 0.00 C

ATOM 883 CG GLN A 60 86.416 40.557 33.266 1.00 0.00 C

ATOM 884 CD GLN A 60 87.160 39.246 33.440 1.00 0.00 C

ATOM 885 OE1 GLN A 60 88.342 39.137 33.104 1.00 0.00 O

ATOM 886 NE2 GLN A 60 86.471 38.243 33.971 1.00 0.00 N

ATOM 887 H GLN A 60 85.381 42.290 36.278 1.00 0.00 H

ATOM 888 HA GLN A 60 87.808 40.686 35.692 1.00 0.00 H

ATOM 889 1HB GLN A 60 86.579 42.632 33.692 1.00 0.00 H

ATOM 890 2HB GLN A 60 88.118 41.808 33.499 1.00 0.00 H

ATOM 891 1HG GLN A 60 85.424 40.447 33.701 1.00 0.00 H

ATOM 892 2HG GLN A 60 86.333 40.762 32.197 1.00 0.00 H

ATOM 893 1HE2 GLN A 60 86.909 37.352 34.111 1.00 0.00 H

ATOM 894 2HE2 GLN A 60 85.515 38.373 34.230 1.00 0.00 H

ATOM 895 N GLY A 61 87.492 43.975 35.932 1.00 0.00 N

ATOM 896 CA GLY A 61 88.184 45.208 36.366 1.00 0.00 C

ATOM 897 C GLY A 61 87.321 46.277 37.100 1.00 0.00 C

ATOM 898 O GLY A 61 87.802 47.073 37.891 1.00 0.00 O

ATOM 899 H GLY A 61 86.660 44.039 35.375 1.00 0.00 H

ATOM 900 1HA GLY A 61 89.002 44.949 37.039 1.00 0.00 H

ATOM 901 2HA GLY A 61 88.624 45.702 35.500 1.00 0.00 H

ATOM 902 N ALA A 62 86.011 46.199 36.894 1.00 0.00 N

ATOM 903 CA ALA A 62 85.059 46.898 37.759 1.00 0.00 C

ATOM 904 C ALA A 62 84.306 45.761 38.498 1.00 0.00 C

ATOM 905 O ALA A 62 84.447 44.642 38.045 1.00 0.00 O

ATOM 906 CB ALA A 62 84.171 47.842 36.959 1.00 0.00 C

ATOM 907 H ALA A 62 85.733 45.275 36.602 1.00 0.00 H

ATOM 908 HA ALA A 62 85.626 47.488 38.480 1.00 0.00 H

ATOM 909 1HB ALA A 62 83.476 48.343 37.633 1.00 0.00 H

ATOM 910 2HB ALA A 62 84.790 48.585 36.456 1.00 0.00 H

ATOM 911 3HB ALA A 62 83.612 47.274 36.217 1.00 0.00 H

ATOM 912 N PHE A 63 83.786 46.026 39.703 1.00 0.00 N

ATOM 913 CA PHE A 63 83.478 44.934 40.655 1.00 0.00 C

ATOM 914 C PHE A 63 84.810 44.267 41.011 1.00 0.00 C

ATOM 915 O PHE A 63 85.505 44.866 41.795 1.00 0.00 O

ATOM 916 CB PHE A 63 82.509 43.912 40.056 1.00 0.00 C

ATOM 917 CG PHE A 63 82.105 42.824 41.013 1.00 0.00 C

ATOM 918 CD1 PHE A 63 81.547 43.136 42.244 1.00 0.00 C

ATOM 919 CD2 PHE A 63 82.287 41.490 40.685 1.00 0.00 C

ATOM 920 CE1 PHE A 63 81.177 42.139 43.124 1.00 0.00 C

ATOM 921 CE2 PHE A 63 81.916 40.491 41.563 1.00 0.00 C

ATOM 922 CZ PHE A 63 81.360 40.815 42.784 1.00 0.00 C

ATOM 923 H PHE A 63 84.155 46.831 40.181 1.00 0.00 H

ATOM 924 HA PHE A 63 83.006 45.367 41.538 1.00 0.00 H

ATOM 925 1HB PHE A 63 81.606 44.420 39.720 1.00 0.00 H

ATOM 926 2HB PHE A 63 82.965 43.446 39.185 1.00 0.00 H

ATOM 927 HD1 PHE A 63 81.401 44.183 42.512 1.00 0.00 H

ATOM 928 HD2 PHE A 63 82.726 41.233 39.721 1.00 0.00 H

ATOM 929 HE1 PHE A 63 80.739 42.396 44.087 1.00 0.00 H

ATOM 930 HE2 PHE A 63 82.063 39.444 41.292 1.00 0.00 H

ATOM 931 HZ PHE A 63 81.071 40.027 43.477 1.00 0.00 H

ATOM 932 N LYS A 64 85.131 43.056 40.545 1.00 0.00 N

ATOM 933 CA LYS A 64 86.334 42.340 41.002 1.00 0.00 C

ATOM 934 C LYS A 64 87.743 42.975 41.077 1.00 0.00 C

ATOM 935 O LYS A 64 88.570 42.437 41.773 1.00 0.00 O

ATOM 936 CB LYS A 64 86.455 41.091 40.130 1.00 0.00 C

ATOM 937 CG LYS A 64 87.605 40.167 40.509 1.00 0.00 C

ATOM 938 CD LYS A 64 87.528 38.848 39.755 1.00 0.00 C

ATOM 939 CE LYS A 64 88.730 37.965 40.056 1.00 0.00 C

ATOM 940 NZ LYS A 64 88.834 37.643 41.505 1.00 0.00 N

ATOM 941 H LYS A 64 84.435 42.618 39.960 1.00 0.00 H

ATOM 942 HA LYS A 64 86.197 42.065 42.048 1.00 0.00 H

ATOM 943 1HB LYS A 64 85.531 40.515 40.190 1.00 0.00 H

ATOM 944 2HB LYS A 64 86.590 41.384 39.088 1.00 0.00 H

ATOM 945 1HG LYS A 64 88.554 40.653 40.276 1.00 0.00 H

ATOM 946 2HG LYS A 64 87.574 39.966 41.579 1.00 0.00 H

ATOM 947 1HD LYS A 64 86.618 38.320 40.040 1.00 0.00 H

ATOM 948 2HD LYS A 64 87.492 39.044 38.682 1.00 0.00 H

ATOM 949 1HE LYS A 64 88.647 37.036 39.495 1.00 0.00 H

ATOM 950 2HE LYS A 64 89.642 38.474 39.744 1.00 0.00 H

ATOM 951 1HZ LYS A 64 89.641 37.058 41.663 1.00 0.00 H

ATOM 952 2HZ LYS A 64 88.929 38.498 42.035 1.00 0.00 H

ATOM 953 3HZ LYS A 64 88.002 37.153 41.802 1.00 0.00 H

ATOM 954 N LYS A 65 87.953 44.185 40.577 1.00 0.00 N

ATOM 955 CA LYS A 65 89.150 44.930 40.988 1.00 0.00 C

ATOM 956 C LYS A 65 88.899 46.343 41.509 1.00 0.00 C

ATOM 957 O LYS A 65 89.897 46.999 41.727 1.00 0.00 O

ATOM 958 CB LYS A 65 90.130 45.004 39.817 1.00 0.00 C

ATOM 959 CG LYS A 65 90.669 43.655 39.363 1.00 0.00 C

ATOM 960 CD LYS A 65 91.488 42.989 40.459 1.00 0.00 C

ATOM 961 CE LYS A 65 91.950 41.601 40.042 1.00 0.00 C

ATOM 962 NZ LYS A 65 92.666 40.899 41.140 1.00 0.00 N

ATOM 963 H LYS A 65 87.156 44.661 40.188 1.00 0.00 H

ATOM 964 HA LYS A 65 89.621 44.400 41.816 1.00 0.00 H

ATOM 965 1HB LYS A 65 89.641 45.474 38.962 1.00 0.00 H

ATOM 966 2HB LYS A 65 90.980 45.629 40.093 1.00 0.00 H

ATOM 967 1HG LYS A 65 89.839 43.002 39.095 1.00 0.00 H

ATOM 968 2HG LYS A 65 91.297 43.791 38.484 1.00 0.00 H

ATOM 969 1HD LYS A 65 92.361 43.602 40.685 1.00 0.00 H

ATOM 970 2HD LYS A 65 90.884 42.904 41.363 1.00 0.00 H

ATOM 971 1HE LYS A 65 91.086 41.003 39.749 1.00 0.00 H

ATOM 972 2HE LYS A 65 92.617 41.683 39.184 1.00 0.00 H

ATOM 973 1HZ LYS A 65 92.957 39.985 40.824 1.00 0.00 H

ATOM 974 2HZ LYS A 65 93.480 41.436 41.409 1.00 0.00 H

ATOM 975 3HZ LYS A 65 92.052 40.802 41.937 1.00 0.00 H

ATOM 976 N VAL A 66 87.660 46.654 41.861 1.00 0.00 N

ATOM 977 CA VAL A 66 87.269 47.892 42.594 1.00 0.00 C

ATOM 978 C VAL A 66 86.713 47.619 43.996 1.00 0.00 C

ATOM 979 O VAL A 66 87.283 48.096 44.946 1.00 0.00 O

ATOM 980 CB VAL A 66 86.207 48.666 41.790 1.00 0.00 C

ATOM 981 CG1 VAL A 66 85.711 49.867 42.581 1.00 0.00 C

ATOM 982 CG2 VAL A 66 86.787 49.104 40.453 1.00 0.00 C

ATOM 983 H VAL A 66 86.941 45.967 41.700 1.00 0.00 H

ATOM 984 HA VAL A 66 88.153 48.520 42.709 1.00 0.00 H

ATOM 985 HB VAL A 66 85.348 48.017 41.618 1.00 0.00 H

ATOM 986 1HG1 VAL A 66 84.962 50.401 41.998 1.00 0.00 H

ATOM 987 2HG1 VAL A 66 85.268 49.527 43.518 1.00 0.00 H

ATOM 988 3HG1 VAL A 66 86.548 50.533 42.796 1.00 0.00 H

ATOM 989 1HG2 VAL A 66 86.031 49.649 39.891 1.00 0.00 H

ATOM 990 2HG2 VAL A 66 87.649 49.749 40.625 1.00 0.00 H

ATOM 991 3HG2 VAL A 66 87.098 48.224 39.886 1.00 0.00 H

ATOM 992 N LEU A 67 85.722 46.741 44.097 1.00 0.00 N

ATOM 993 CA LEU A 67 85.301 46.189 45.391 1.00 0.00 C

ATOM 994 C LEU A 67 86.400 45.350 45.967 1.00 0.00 C

ATOM 995 O LEU A 67 86.589 45.528 47.138 1.00 0.00 O

ATOM 996 CB LEU A 67 84.031 45.342 45.243 1.00 0.00 C

ATOM 997 CG LEU A 67 83.533 44.659 46.525 1.00 0.00 C

ATOM 998 CD1 LEU A 67 83.252 45.714 47.585 1.00 0.00 C

ATOM 999 CD2 LEU A 67 82.286 43.845 46.214 1.00 0.00 C

ATOM 1000 H LEU A 67 85.539 46.198 43.269 1.00 0.00 H

ATOM 1001 HA LEU A 67 85.084 47.017 46.066 1.00 0.00 H

ATOM 1002 1HB LEU A 67 83.229 45.978 44.874 1.00 0.00 H

ATOM 1003 2HB LEU A 67 84.218 44.562 44.505 1.00 0.00 H

ATOM 1004 HG LEU A 67 84.311 43.999 46.910 1.00 0.00 H

ATOM 1005 1HD1 LEU A 67 82.897 45.230 48.495 1.00 0.00 H

ATOM 1006 2HD1 LEU A 67 84.164 46.268 47.801 1.00 0.00 H

ATOM 1007 3HD1 LEU A 67 82.487 46.401 47.219 1.00 0.00 H

ATOM 1008 1HD2 LEU A 67 81.932 43.361 47.124 1.00 0.00 H

ATOM 1009 2HD2 LEU A 67 81.507 44.505 45.830 1.00 0.00 H

ATOM 1010 3HD2 LEU A 67 82.521 43.088 45.467 1.00 0.00 H

ATOM 1011 N GLU A 68 86.978 44.437 45.202 1.00 0.00 N

ATOM 1012 CA GLU A 68 88.008 43.532 45.728 1.00 0.00 C

ATOM 1013 C GLU A 68 89.179 44.353 46.262 1.00 0.00 C

ATOM 1014 O GLU A 68 89.513 44.237 47.447 1.00 0.00 O

ATOM 1015 CB GLU A 68 88.490 42.561 44.648 1.00 0.00 C

ATOM 1016 CG GLU A 68 89.495 41.527 45.137 1.00 0.00 C

ATOM 1017 CD GLU A 68 89.960 40.604 44.043 1.00 0.00 C

ATOM 1018 OE1 GLU A 68 91.104 40.694 43.665 1.00 0.00 O

ATOM 1019 OE2 GLU A 68 89.172 39.810 43.587 1.00 0.00 O

ATOM 1020 H GLU A 68 86.711 44.236 44.252 1.00 0.00 H

ATOM 1021 HA GLU A 68 87.574 42.951 46.543 1.00 0.00 H

ATOM 1022 1HB GLU A 68 87.636 42.026 44.230 1.00 0.00 H

ATOM 1023 2HB GLU A 68 88.953 43.121 43.837 1.00 0.00 H

ATOM 1024 1HG GLU A 68 90.358 42.044 45.552 1.00 0.00 H

ATOM 1025 2HG GLU A 68 89.037 40.940 45.931 1.00 0.00 H

ATOM 1026 N LYS A 69 89.699 45.253 45.422 1.00 0.00 N

ATOM 1027 CA LYS A 69 90.697 46.207 45.850 1.00 0.00 C

ATOM 1028 C LYS A 69 90.254 46.983 47.031 1.00 0.00 C

ATOM 1029 O LYS A 69 90.940 46.803 48.000 1.00 0.00 O

ATOM 1030 CB LYS A 69 91.049 47.168 44.712 1.00 0.00 C

ATOM 1031 CG LYS A 69 92.089 48.218 45.075 1.00 0.00 C

ATOM 1032 CD LYS A 69 92.394 49.127 43.893 1.00 0.00 C

ATOM 1033 CE LYS A 69 93.390 50.213 44.271 1.00 0.00 C

ATOM 1034 NZ LYS A 69 93.701 51.107 43.122 1.00 0.00 N

ATOM 1035 H LYS A 69 89.241 45.493 44.557 1.00 0.00 H

ATOM 1036 HA LYS A 69 91.597 45.662 46.134 1.00 0.00 H

ATOM 1037 1HB LYS A 69 91.428 46.602 43.861 1.00 0.00 H

ATOM 1038 2HB LYS A 69 90.148 47.688 44.384 1.00 0.00 H

ATOM 1039 1HG LYS A 69 91.721 48.826 45.904 1.00 0.00 H

ATOM 1040 2HG LYS A 69 93.009 47.725 45.389 1.00 0.00 H

ATOM 1041 1HD LYS A 69 92.806 48.536 43.077 1.00 0.00 H

ATOM 1042 2HD LYS A 69 91.471 49.597 43.550 1.00 0.00 H

ATOM 1043 1HE LYS A 69 92.984 50.813 45.083 1.00 0.00 H

ATOM 1044 2HE LYS A 69 94.316 49.752 44.616 1.00 0.00 H

ATOM 1045 1HZ LYS A 69 94.364 51.811 43.413 1.00 0.00 H

ATOM 1046 2HZ LYS A 69 94.097 50.562 42.367 1.00 0.00 H

ATOM 1047 3HZ LYS A 69 92.853 51.554 42.806 1.00 0.00 H

ATOM 1048 N LEU A 70 89.123 47.661 46.995 1.00 0.00 N

ATOM 1049 CA LEU A 70 88.705 48.470 48.135 1.00 0.00 C

ATOM 1050 C LEU A 70 88.033 47.736 49.296 1.00 0.00 C

ATOM 1051 O LEU A 70 87.264 48.293 50.040 1.00 0.00 O

ATOM 1052 CB LEU A 70 87.750 49.560 47.633 1.00 0.00 C

ATOM 1053 CG LEU A 70 88.346 50.563 46.638 1.00 0.00 C

ATOM 1054 CD1 LEU A 70 87.256 51.506 46.148 1.00 0.00 C

ATOM 1055 CD2 LEU A 70 89.475 51.332 47.306 1.00 0.00 C

ATOM 1056 H LEU A 70 88.594 47.769 46.142 1.00 0.00 H

ATOM 1057 HA LEU A 70 89.589 48.933 48.573 1.00 0.00 H

ATOM 1058 1HB LEU A 70 86.899 49.081 47.150 1.00 0.00 H

ATOM 1059 2HB LEU A 70 87.384 50.124 48.490 1.00 0.00 H

ATOM 1060 HG LEU A 70 88.737 50.026 45.769 1.00 0.00 H

ATOM 1061 1HD1 LEU A 70 87.680 52.217 45.440 1.00 0.00 H

ATOM 1062 2HD1 LEU A 70 86.471 50.930 45.656 1.00 0.00 H

ATOM 1063 3HD1 LEU A 70 86.834 52.045 46.996 1.00 0.00 H

ATOM 1064 1HD2 LEU A 70 89.901 52.044 46.597 1.00 0.00 H

ATOM 1065 2HD2 LEU A 70 89.086 51.869 48.170 1.00 0.00 H

ATOM 1066 3HD2 LEU A 70 90.249 50.637 47.629 1.00 0.00 H

ATOM 1067 N SER A 71 88.452 46.497 49.529 1.00 0.00 N

ATOM 1068 CA SER A 71 88.042 45.648 50.627 1.00 0.00 C

ATOM 1069 C SER A 71 89.314 45.085 51.205 1.00 0.00 C

ATOM 1070 O SER A 71 89.749 45.530 52.262 1.00 0.00 O

ATOM 1071 CB SER A 71 87.115 44.542 50.166 1.00 0.00 C

ATOM 1072 OG SER A 71 86.742 43.719 51.237 1.00 0.00 O

ATOM 1073 H SER A 71 89.056 46.140 48.806 1.00 0.00 H

ATOM 1074 HA SER A 71 87.503 46.258 51.354 1.00 0.00 H

ATOM 1075 1HB SER A 71 86.226 44.977 49.711 1.00 0.00 H

ATOM 1076 2HB SER A 71 87.613 43.945 49.402 1.00 0.00 H

ATOM 1077 HG SER A 71 86.018 44.171 51.678 1.00 0.00 H

ATOM 1078 N THR A 72 89.996 44.252 50.410 1.00 0.00 N

ATOM 1079 CA THR A 72 91.242 43.589 50.779 1.00 0.00 C

ATOM 1080 C THR A 72 92.457 44.488 51.006 1.00 0.00 C

ATOM 1081 O THR A 72 93.360 44.115 51.744 1.00 0.00 O

ATOM 1082 CB THR A 72 91.606 42.547 49.705 1.00 0.00 C

ATOM 1083 OG1 THR A 72 91.793 43.204 48.443 1.00 0.00 O

ATOM 1084 CG2 THR A 72 90.504 41.508 49.572 1.00 0.00 C

ATOM 1085 H THR A 72 89.690 44.119 49.453 1.00 0.00 H

ATOM 1086 HA THR A 72 91.095 43.082 51.732 1.00 0.00 H

ATOM 1087 HB THR A 72 92.537 42.050 49.981 1.00 0.00 H

ATOM 1088 HG1 THR A 72 90.977 43.644 48.190 1.00 0.00 H

ATOM 1089 1HG2 THR A 72 90.779 40.781 48.809 1.00 0.00 H

ATOM 1090 2HG2 THR A 72 90.367 41.000 50.527 1.00 0.00 H

ATOM 1091 3HG2 THR A 72 89.574 41.998 49.288 1.00 0.00 H

ATOM 1092 N GLU A 73 92.472 45.708 50.456 1.00 0.00 N

ATOM 1093 CA GLU A 73 93.580 46.624 50.669 1.00 0.00 C

ATOM 1094 C GLU A 73 93.455 47.329 52.024 1.00 0.00 C

ATOM 1095 O GLU A 73 94.235 48.218 52.356 1.00 0.00 O

ATOM 1096 CB GLU A 73 93.635 47.659 49.542 1.00 0.00 C

ATOM 1097 CG GLU A 73 94.015 47.086 48.183 1.00 0.00 C

ATOM 1098 CD GLU A 73 95.425 46.572 48.139 1.00 0.00 C

ATOM 1099 OE1 GLU A 73 96.283 47.191 48.720 1.00 0.00 O

ATOM 1100 OE2 GLU A 73 95.648 45.556 47.520 1.00 0.00 O

ATOM 1101 H GLU A 73 91.679 45.950 49.876 1.00 0.00 H

ATOM 1102 HA GLU A 73 94.508 46.051 50.664 1.00 0.00 H

ATOM 1103 1HB GLU A 73 92.662 48.140 49.442 1.00 0.00 H

ATOM 1104 2HB GLU A 73 94.361 48.432 49.793 1.00 0.00 H

ATOM 1105 1HG GLU A 73 93.334 46.270 47.941 1.00 0.00 H

ATOM 1106 2HG GLU A 73 93.891 47.860 47.427 1.00 0.00 H

ATOM 1107 N GLY A 74 92.423 47.003 52.819 1.00 0.00 N

ATOM 1108 CA GLY A 74 92.256 47.609 54.123 1.00 0.00 C

ATOM 1109 C GLY A 74 91.236 48.700 54.161 1.00 0.00 C

ATOM 1110 O GLY A 74 91.125 49.385 55.167 1.00 0.00 O

ATOM 1111 H GLY A 74 91.725 46.350 52.479 1.00 0.00 H

ATOM 1112 1HA GLY A 74 91.965 46.845 54.844 1.00 0.00 H

ATOM 1113 2HA GLY A 74 93.207 48.021 54.457 1.00 0.00 H

ATOM 1114 N TYR A 75 90.419 48.791 53.130 1.00 0.00 N

ATOM 1115 CA TYR A 75 89.366 49.789 53.049 1.00 0.00 C

ATOM 1116 C TYR A 75 88.029 49.218 53.555 1.00 0.00 C

ATOM 1117 O TYR A 75 87.348 49.884 54.337 1.00 0.00 O

ATOM 1118 CB TYR A 75 89.226 50.297 51.613 1.00 0.00 C

ATOM 1119 CG TYR A 75 90.399 51.128 51.142 1.00 0.00 C

ATOM 1120 CD1 TYR A 75 91.376 50.558 50.339 1.00 0.00 C

ATOM 1121 CD2 TYR A 75 90.499 52.460 51.515 1.00 0.00 C

ATOM 1122 CE1 TYR A 75 92.447 51.316 49.909 1.00 0.00 C

ATOM 1123 CE2 TYR A 75 91.571 53.219 51.086 1.00 0.00 C

ATOM 1124 CZ TYR A 75 92.541 52.651 50.285 1.00 0.00 C

ATOM 1125 OH TYR A 75 93.610 53.407 49.858 1.00 0.00 O

ATOM 1126 H TYR A 75 90.620 48.177 52.356 1.00 0.00 H

ATOM 1127 HA TYR A 75 89.633 50.627 53.693 1.00 0.00 H

ATOM 1128 1HB TYR A 75 89.116 49.449 50.936 1.00 0.00 H

ATOM 1129 2HB TYR A 75 88.324 50.902 51.527 1.00 0.00 H

ATOM 1130 HD1 TYR A 75 91.297 49.510 50.044 1.00 0.00 H

ATOM 1131 HD2 TYR A 75 89.734 52.908 52.148 1.00 0.00 H

ATOM 1132 HE1 TYR A 75 93.214 50.868 49.278 1.00 0.00 H

ATOM 1133 HE2 TYR A 75 91.650 54.264 51.379 1.00 0.00 H

ATOM 1134 HH TYR A 75 94.194 52.861 49.327 1.00 0.00 H

ATOM 1135 N SER A 76 87.806 47.921 53.336 1.00 0.00 N

ATOM 1136 CA SER A 76 86.684 47.152 53.874 1.00 0.00 C

ATOM 1137 C SER A 76 85.386 47.720 53.403 1.00 0.00 C

ATOM 1138 O SER A 76 84.406 47.857 54.145 1.00 0.00 O

ATOM 1139 CB SER A 76 86.713 47.144 55.391 1.00 0.00 C

ATOM 1140 OG SER A 76 85.886 46.137 55.902 1.00 0.00 O

ATOM 1141 H SER A 76 88.541 47.451 52.838 1.00 0.00 H

ATOM 1142 HA SER A 76 86.768 46.124 53.521 1.00 0.00 H

ATOM 1143 1HB SER A 76 87.734 46.990 55.734 1.00 0.00 H

ATOM 1144 2HB SER A 76 86.383 48.113 55.764 1.00 0.00 H

ATOM 1145 HG SER A 76 86.154 46.011 56.815 1.00 0.00 H

ATOM 1146 N PHE A 77 85.304 48.144 52.139 1.00 0.00 N

ATOM 1147 CA PHE A 77 84.099 48.748 51.683 1.00 0.00 C

ATOM 1148 C PHE A 77 83.090 47.691 51.241 1.00 0.00 C

ATOM 1149 O PHE A 77 83.007 47.365 50.066 1.00 0.00 O

ATOM 1150 CB PHE A 77 84.400 49.707 50.531 1.00 0.00 C

ATOM 1151 CG PHE A 77 85.212 50.906 50.938 1.00 0.00 C

ATOM 1152 CD1 PHE A 77 85.861 51.677 49.987 1.00 0.00 C

ATOM 1153 CD2 PHE A 77 85.325 51.264 52.272 1.00 0.00 C

ATOM 1154 CE1 PHE A 77 86.608 52.778 50.359 1.00 0.00 C

ATOM 1155 CE2 PHE A 77 86.068 52.366 52.649 1.00 0.00 C

ATOM 1156 CZ PHE A 77 86.710 53.124 51.689 1.00 0.00 C

ATOM 1157 H PHE A 77 86.117 48.034 51.543 1.00 0.00 H

ATOM 1158 HA PHE A 77 83.661 49.312 52.507 1.00 0.00 H

ATOM 1159 1HB PHE A 77 84.944 49.180 49.749 1.00 0.00 H

ATOM 1160 2HB PHE A 77 83.465 50.061 50.098 1.00 0.00 H

ATOM 1161 HD1 PHE A 77 85.778 51.405 48.934 1.00 0.00 H

ATOM 1162 HD2 PHE A 77 84.817 50.666 53.030 1.00 0.00 H

ATOM 1163 HE1 PHE A 77 87.113 53.377 49.600 1.00 0.00 H

ATOM 1164 HE2 PHE A 77 86.149 52.637 53.701 1.00 0.00 H

ATOM 1165 HZ PHE A 77 87.298 53.993 51.986 1.00 0.00 H

ATOM 1166 N GLY A 78 82.433 47.061 52.208 1.00 0.00 N

ATOM 1167 CA GLY A 78 81.777 45.792 51.912 1.00 0.00 C

ATOM 1168 C GLY A 78 82.745 44.602 52.029 1.00 0.00 C

ATOM 1169 O GLY A 78 83.934 44.727 52.352 1.00 0.00 O

ATOM 1170 H GLY A 78 82.865 47.136 53.124 1.00 0.00 H

ATOM 1171 1HA GLY A 78 80.942 45.645 52.596 1.00 0.00 H

ATOM 1172 2HA GLY A 78 81.365 45.822 50.904 1.00 0.00 H

ATOM 1173 N ASN A 79 82.240 43.417 51.681 1.00 0.00 N

ATOM 1174 CA ASN A 79 83.117 42.251 51.575 1.00 0.00 C

ATOM 1175 C ASN A 79 83.599 42.038 50.149 1.00 0.00 C

ATOM 1176 O ASN A 79 82.769 42.046 49.260 1.00 0.00 O

ATOM 1177 CB ASN A 79 82.413 41.007 52.087 1.00 0.00 C

ATOM 1178 CG ASN A 79 82.142 41.062 53.564 1.00 0.00 C

ATOM 1179 OD1 ASN A 79 83.017 41.426 54.356 1.00 0.00 O

ATOM 1180 ND2 ASN A 79 80.943 40.708 53.951 1.00 0.00 N

ATOM 1181 H ASN A 79 81.368 43.402 51.173 1.00 0.00 H

ATOM 1182 HA ASN A 79 84.003 42.427 52.187 1.00 0.00 H

ATOM 1183 1HB ASN A 79 81.466 40.881 51.558 1.00 0.00 H

ATOM 1184 2HB ASN A 79 83.024 40.130 51.872 1.00 0.00 H

ATOM 1185 1HD2 ASN A 79 80.706 40.724 54.922 1.00 0.00 H

ATOM 1186 2HD2 ASN A 79 80.264 40.420 53.276 1.00 0.00 H

ATOM 1187 N ALA A 80 84.907 41.774 49.973 1.00 0.00 N

ATOM 1188 CA ALA A 80 85.482 41.528 48.652 1.00 0.00 C

ATOM 1189 C ALA A 80 84.700 40.478 47.829 1.00 0.00 C

ATOM 1190 O ALA A 80 84.758 39.275 48.092 1.00 0.00 O

ATOM 1191 CB ALA A 80 86.928 41.086 48.875 1.00 0.00 C

ATOM 1192 H ALA A 80 85.487 41.728 50.804 1.00 0.00 H

ATOM 1193 HA ALA A 80 85.450 42.461 48.089 1.00 0.00 H

ATOM 1194 1HB ALA A 80 87.402 40.889 47.914 1.00 0.00 H

ATOM 1195 2HB ALA A 80 87.473 41.874 49.395 1.00 0.00 H

ATOM 1196 3HB ALA A 80 86.942 40.178 49.479 1.00 0.00 H

ATOM 1197 N ILE A 81 84.025 40.983 46.786 1.00 0.00 N

ATOM 1198 CA ILE A 81 83.250 40.320 45.724 1.00 0.00 C

ATOM 1199 C ILE A 81 82.335 39.259 46.330 1.00 0.00 C

ATOM 1200 O ILE A 81 81.992 38.270 45.685 1.00 0.00 O

ATOM 1201 CB ILE A 81 84.172 39.672 44.677 1.00 0.00 C

ATOM 1202 CG1 ILE A 81 85.011 38.565 45.317 1.00 0.00 C

ATOM 1203 CG2 ILE A 81 85.070 40.720 44.036 1.00 0.00 C

ATOM 1204 CD1 ILE A 81 85.744 37.699 44.316 1.00 0.00 C

ATOM 1205 H ILE A 81 84.261 41.962 46.665 1.00 0.00 H

ATOM 1206 HA ILE A 81 82.640 41.070 45.222 1.00 0.00 H

ATOM 1207 HB ILE A 81 83.569 39.201 43.901 1.00 0.00 H

ATOM 1208 1HG1 ILE A 81 85.746 39.006 45.989 1.00 0.00 H

ATOM 1209 2HG1 ILE A 81 84.366 37.919 45.916 1.00 0.00 H

ATOM 1210 1HG2 ILE A 81 85.715 40.244 43.299 1.00 0.00 H

ATOM 1211 2HG2 ILE A 81 84.456 41.475 43.547 1.00 0.00 H

ATOM 1212 3HG2 ILE A 81 85.683 41.192 44.804 1.00 0.00 H

ATOM 1213 1HD1 ILE A 81 86.316 36.934 44.847 1.00 0.00 H

ATOM 1214 2HD1 ILE A 81 85.023 37.216 43.654 1.00 0.00 H

ATOM 1215 3HD1 ILE A 81 86.422 38.315 43.729 1.00 0.00 H

ATOM 1216 N ASP A 82 81.962 39.439 47.601 1.00 0.00 N

ATOM 1217 CA ASP A 82 81.008 38.577 48.244 1.00 0.00 C

ATOM 1218 C ASP A 82 79.602 39.193 48.321 1.00 0.00 C

ATOM 1219 O ASP A 82 78.652 38.457 48.440 1.00 0.00 O

ATOM 1220 CB ASP A 82 81.502 38.228 49.649 1.00 0.00 C

ATOM 1221 CG ASP A 82 82.765 37.377 49.640 1.00 0.00 C

ATOM 1222 OD1 ASP A 82 82.929 36.603 48.726 1.00 0.00 O

ATOM 1223 OD2 ASP A 82 83.553 37.510 50.545 1.00 0.00 O

ATOM 1224 H ASP A 82 82.235 40.290 48.075 1.00 0.00 H

ATOM 1225 HA ASP A 82 80.921 37.661 47.658 1.00 0.00 H

ATOM 1226 1HB ASP A 82 81.704 39.146 50.203 1.00 0.00 H

ATOM 1227 2HB ASP A 82 80.721 37.687 50.186 1.00 0.00 H

ATOM 1228 N LEU A 83 79.510 40.511 48.112 1.00 0.00 N

ATOM 1229 CA LEU A 83 78.222 41.225 48.117 1.00 0.00 C

ATOM 1230 C LEU A 83 77.286 40.697 47.061 1.00 0.00 C

ATOM 1231 O LEU A 83 76.088 40.816 47.195 1.00 0.00 O

ATOM 1232 CB LEU A 83 78.440 42.726 47.888 1.00 0.00 C

ATOM 1233 CG LEU A 83 79.206 43.463 48.992 1.00 0.00 C

ATOM 1234 CD1 LEU A 83 79.409 44.918 48.587 1.00 0.00 C

ATOM 1235 CD2 LEU A 83 78.434 43.364 50.299 1.00 0.00 C

ATOM 1236 H LEU A 83 80.348 41.039 47.923 1.00 0.00 H

ATOM 1237 HA LEU A 83 77.754 41.086 49.091 1.00 0.00 H

ATOM 1238 1HB LEU A 83 78.990 42.859 46.957 1.00 0.00 H

ATOM 1239 2HB LEU A 83 77.465 43.206 47.782 1.00 0.00 H

ATOM 1240 HG LEU A 83 80.190 43.011 49.116 1.00 0.00 H

ATOM 1241 1HD1 LEU A 83 79.955 45.442 49.372 1.00 0.00 H

ATOM 1242 2HD1 LEU A 83 79.980 44.958 47.659 1.00 0.00 H

ATOM 1243 3HD1 LEU A 83 78.440 45.392 48.439 1.00 0.00 H

ATOM 1244 1HD2 LEU A 83 78.979 43.887 51.085 1.00 0.00 H

ATOM 1245 2HD2 LEU A 83 77.450 43.816 50.177 1.00 0.00 H

ATOM 1246 3HD2 LEU A 83 78.319 42.314 50.574 1.00 0.00 H

ATOM 1247 N LYS A 84 77.867 40.237 45.956 1.00 0.00 N

ATOM 1248 CA LYS A 84 77.135 39.648 44.844 1.00 0.00 C

ATOM 1249 C LYS A 84 76.222 38.584 45.429 1.00 0.00 C

ATOM 1250 O LYS A 84 75.044 38.455 45.061 1.00 0.00 O

ATOM 1251 CB LYS A 84 78.078 39.052 43.798 1.00 0.00 C

ATOM 1252 CG LYS A 84 77.374 38.393 42.619 1.00 0.00 C

ATOM 1253 CD LYS A 84 78.373 37.888 41.590 1.00 0.00 C

ATOM 1254 CE LYS A 84 77.671 37.333 40.359 1.00 0.00 C

ATOM 1255 NZ LYS A 84 76.928 36.080 40.661 1.00 0.00 N

ATOM 1256 H LYS A 84 78.876 40.227 45.887 1.00 0.00 H

ATOM 1257 HA LYS A 84 76.548 40.430 44.362 1.00 0.00 H

ATOM 1258 1HB LYS A 84 78.727 39.835 43.404 1.00 0.00 H

ATOM 1259 2HB LYS A 84 78.716 38.304 44.268 1.00 0.00 H

ATOM 1260 1HG LYS A 84 76.777 37.552 42.976 1.00 0.00 H

ATOM 1261 2HG LYS A 84 76.707 39.113 42.144 1.00 0.00 H

ATOM 1262 1HD LYS A 84 79.029 38.708 41.286 1.00 0.00 H

ATOM 1263 2HD LYS A 84 78.986 37.103 42.032 1.00 0.00 H

ATOM 1264 1HE LYS A 84 76.971 38.074 39.976 1.00 0.00 H

ATOM 1265 2HE LYS A 84 78.407 37.125 39.582 1.00 0.00 H

ATOM 1266 1HZ LYS A 84 76.476 35.745 39.821 1.00 0.00 H

ATOM 1267 2HZ LYS A 84 77.571 35.380 41.001 1.00 0.00 H

ATOM 1268 3HZ LYS A 84 76.228 36.265 41.367 1.00 0.00 H

ATOM 1269 N SER A 85 76.797 37.715 46.271 1.00 0.00 N

ATOM 1270 CA SER A 85 76.081 36.633 46.878 1.00 0.00 C

ATOM 1271 C SER A 85 75.386 37.047 48.172 1.00 0.00 C

ATOM 1272 O SER A 85 74.361 36.435 48.400 1.00 0.00 O

ATOM 1273 CB SER A 85 77.037 35.487 47.146 1.00 0.00 C

ATOM 1274 OG SER A 85 77.976 35.835 48.127 1.00 0.00 O

ATOM 1275 H SER A 85 77.742 37.936 46.565 1.00 0.00 H

ATOM 1276 HA SER A 85 75.306 36.300 46.186 1.00 0.00 H

ATOM 1277 1HB SER A 85 76.475 34.614 47.473 1.00 0.00 H

ATOM 1278 2HB SER A 85 77.553 35.220 46.225 1.00 0.00 H

ATOM 1279 HG SER A 85 78.080 36.790 48.067 1.00 0.00 H

ATOM 1280 N HIS A 86 75.832 38.083 48.867 1.00 0.00 N

ATOM 1281 CA HIS A 86 75.137 38.490 50.105 1.00 0.00 C

ATOM 1282 C HIS A 86 73.864 39.339 49.971 1.00 0.00 C

ATOM 1283 O HIS A 86 72.898 39.048 50.645 1.00 0.00 O

ATOM 1284 CB HIS A 86 76.122 39.259 50.993 1.00 0.00 C

ATOM 1285 CG HIS A 86 77.224 38.408 51.543 1.00 0.00 C

ATOM 1286 ND1 HIS A 86 78.357 38.942 52.122 1.00 0.00 N

ATOM 1287 CD2 HIS A 86 77.368 37.064 51.602 1.00 0.00 C

ATOM 1288 CE1 HIS A 86 79.149 37.960 52.515 1.00 0.00 C

ATOM 1289 NE2 HIS A 86 78.574 36.811 52.211 1.00 0.00 N

ATOM 1290 H HIS A 86 76.675 38.572 48.617 1.00 0.00 H

ATOM 1291 HA HIS A 86 74.796 37.604 50.639 1.00 0.00 H

ATOM 1292 1HB HIS A 86 76.571 40.071 50.420 1.00 0.00 H

ATOM 1293 2HB HIS A 86 75.585 39.703 51.829 1.00 0.00 H

ATOM 1294 HD2 HIS A 86 76.662 36.319 51.235 1.00 0.00 H

ATOM 1295 HE1 HIS A 86 80.116 38.077 53.007 1.00 0.00 H

ATOM 1296 HE2 HIS A 86 78.952 35.894 52.394 1.00 0.00 H

ATOM 1297 N TRP A 87 73.833 40.247 49.005 1.00 0.00 N

ATOM 1298 CA TRP A 87 72.554 40.852 48.616 1.00 0.00 C

ATOM 1299 C TRP A 87 71.652 39.773 48.012 1.00 0.00 C

ATOM 1300 O TRP A 87 72.102 38.823 47.409 1.00 0.00 O

ATOM 1301 CB TRP A 87 72.766 41.983 47.610 1.00 0.00 C

ATOM 1302 CG TRP A 87 73.553 43.134 48.159 1.00 0.00 C

ATOM 1303 CD1 TRP A 87 74.325 43.131 49.282 1.00 0.00 C

ATOM 1304 CD2 TRP A 87 73.653 44.471 47.609 1.00 0.00 C

ATOM 1305 NE1 TRP A 87 74.892 44.367 49.471 1.00 0.00 N

ATOM 1306 CE2 TRP A 87 74.494 45.197 48.453 1.00 0.00 C

ATOM 1307 CE3 TRP A 87 73.106 45.096 46.480 1.00 0.00 C

ATOM 1308 CZ2 TRP A 87 74.804 46.528 48.213 1.00 0.00 C

ATOM 1309 CZ3 TRP A 87 73.415 46.427 46.241 1.00 0.00 C

ATOM 1310 CH2 TRP A 87 74.243 47.125 47.083 1.00 0.00 C

ATOM 1311 H TRP A 87 74.537 40.161 48.281 1.00 0.00 H

ATOM 1312 HA TRP A 87 72.083 41.269 49.507 1.00 0.00 H

ATOM 1313 1HB TRP A 87 73.289 41.599 46.732 1.00 0.00 H

ATOM 1314 2HB TRP A 87 71.799 42.359 47.274 1.00 0.00 H

ATOM 1315 HD1 TRP A 87 74.469 42.273 49.938 1.00 0.00 H

ATOM 1316 HE1 TRP A 87 75.504 44.624 50.231 1.00 0.00 H

ATOM 1317 HE3 TRP A 87 72.448 44.546 45.806 1.00 0.00 H

ATOM 1318 HZ2 TRP A 87 75.458 47.099 48.873 1.00 0.00 H

ATOM 1319 HZ3 TRP A 87 72.982 46.908 45.362 1.00 0.00 H

ATOM 1320 HH2 TRP A 87 74.466 48.169 46.864 1.00 0.00 H

ATOM 1321 N ALA A 88 70.346 39.917 48.255 1.00 0.00 N

ATOM 1322 CA ALA A 88 69.319 38.942 47.932 1.00 0.00 C

ATOM 1323 C ALA A 88 69.363 37.575 48.685 1.00 0.00 C

ATOM 1324 O ALA A 88 68.288 37.152 49.094 1.00 0.00 O

ATOM 1325 CB ALA A 88 69.306 38.734 46.415 1.00 0.00 C

ATOM 1326 H ALA A 88 70.095 40.662 48.884 1.00 0.00 H

ATOM 1327 HA ALA A 88 68.358 39.341 48.257 1.00 0.00 H

ATOM 1328 1HB ALA A 88 68.539 38.003 46.155 1.00 0.00 H

ATOM 1329 2HB ALA A 88 69.086 39.679 45.921 1.00 0.00 H

ATOM 1330 3HB ALA A 88 70.279 38.371 46.091 1.00 0.00 H

ATOM 1331 N ARG A 89 70.534 36.958 48.868 1.00 0.00 N

ATOM 1332 CA ARG A 89 70.635 35.726 49.686 1.00 0.00 C

ATOM 1333 C ARG A 89 70.323 35.948 51.157 1.00 0.00 C

ATOM 1334 O ARG A 89 69.603 35.147 51.740 1.00 0.00 O

ATOM 1335 CB ARG A 89 72.032 35.130 49.578 1.00 0.00 C

ATOM 1336 CG ARG A 89 72.220 33.808 50.301 1.00 0.00 C

ATOM 1337 CD ARG A 89 73.571 33.237 50.061 1.00 0.00 C

ATOM 1338 NE ARG A 89 73.739 31.949 50.714 1.00 0.00 N

ATOM 1339 CZ ARG A 89 74.182 31.781 51.974 1.00 0.00 C

ATOM 1340 NH1 ARG A 89 74.496 32.830 52.704 1.00 0.00 N

ATOM 1341 NH2 ARG A 89 74.303 30.567 52.478 1.00 0.00 N

ATOM 1342 H ARG A 89 71.380 37.350 48.456 1.00 0.00 H

ATOM 1343 HA ARG A 89 69.915 34.999 49.307 1.00 0.00 H

ATOM 1344 1HB ARG A 89 72.277 34.971 48.529 1.00 0.00 H

ATOM 1345 2HB ARG A 89 72.759 35.835 49.981 1.00 0.00 H

ATOM 1346 1HG ARG A 89 72.099 33.959 51.375 1.00 0.00 H

ATOM 1347 2HG ARG A 89 71.477 33.091 49.950 1.00 0.00 H

ATOM 1348 1HD ARG A 89 73.721 33.099 48.989 1.00 0.00 H

ATOM 1349 2HD ARG A 89 74.327 33.918 50.448 1.00 0.00 H

ATOM 1350 HE ARG A 89 73.507 31.119 50.183 1.00 0.00 H

ATOM 1351 1HH1 ARG A 89 74.405 33.761 52.319 1.00 0.00 H

ATOM 1352 2HH1 ARG A 89 74.829 32.706 53.650 1.00 0.00 H

ATOM 1353 1HH2 ARG A 89 74.062 29.761 51.917 1.00 0.00 H

ATOM 1354 2HH2 ARG A 89 74.633 30.441 53.423 1.00 0.00 H

ATOM 1355 N HIS A 90 70.862 37.029 51.722 1.00 0.00 N

ATOM 1356 CA HIS A 90 70.505 37.447 53.077 1.00 0.00 C

ATOM 1357 C HIS A 90 69.439 38.540 53.082 1.00 0.00 C

ATOM 1358 O HIS A 90 69.160 39.125 54.121 1.00 0.00 O

ATOM 1359 CB HIS A 90 71.745 37.940 53.827 1.00 0.00 C

ATOM 1360 CG HIS A 90 72.774 36.876 54.056 1.00 0.00 C

ATOM 1361 ND1 HIS A 90 72.624 35.890 55.008 1.00 0.00 N

ATOM 1362 CD2 HIS A 90 73.966 36.644 53.458 1.00 0.00 C

ATOM 1363 CE1 HIS A 90 73.679 35.096 54.984 1.00 0.00 C

ATOM 1364 NE2 HIS A 90 74.508 35.531 54.053 1.00 0.00 N

ATOM 1365 H HIS A 90 71.379 37.690 51.151 1.00 0.00 H

ATOM 1366 HA HIS A 90 70.093 36.598 53.623 1.00 0.00 H

ATOM 1367 1HB HIS A 90 72.212 38.750 53.267 1.00 0.00 H

ATOM 1368 2HB HIS A 90 71.449 38.341 54.797 1.00 0.00 H

ATOM 1369 HD1 HIS A 90 71.815 35.734 55.577 1.00 0.00 H

ATOM 1370 HD2 HIS A 90 74.503 37.153 52.659 1.00 0.00 H

ATOM 1371 HE1 HIS A 90 73.753 34.248 55.665 1.00 0.00 H

ATOM 1372 N GLY A 91 68.854 38.809 51.916 1.00 0.00 N

ATOM 1373 CA GLY A 91 67.743 39.751 51.753 1.00 0.00 C

ATOM 1374 C GLY A 91 68.158 41.221 51.717 1.00 0.00 C

ATOM 1375 O GLY A 91 68.038 41.867 50.675 1.00 0.00 O

ATOM 1376 H GLY A 91 69.160 38.263 51.129 1.00 0.00 H

ATOM 1377 1HA GLY A 91 67.211 39.529 50.828 1.00 0.00 H

ATOM 1378 2HA GLY A 91 67.035 39.622 52.571 1.00 0.00 H

ATOM 1379 N THR A 92 68.714 41.700 52.828 1.00 0.00 N

ATOM 1380 CA THR A 92 69.126 43.087 52.976 1.00 0.00 C

ATOM 1381 C THR A 92 69.982 43.569 51.830 1.00 0.00 C

ATOM 1382 O THR A 92 71.187 43.366 51.804 1.00 0.00 O

ATOM 1383 CB THR A 92 69.890 43.294 54.296 1.00 0.00 C

ATOM 1384 OG1 THR A 92 69.046 42.948 55.401 1.00 0.00 O

ATOM 1385 CG2 THR A 92 70.332 44.742 54.435 1.00 0.00 C

ATOM 1386 H THR A 92 68.727 41.075 53.624 1.00 0.00 H

ATOM 1387 HA THR A 92 68.234 43.714 52.991 1.00 0.00 H

ATOM 1388 HB THR A 92 70.769 42.649 54.311 1.00 0.00 H

ATOM 1389 HG1 THR A 92 68.875 42.003 55.386 1.00 0.00 H

ATOM 1390 1HG2 THR A 92 70.871 44.871 55.374 1.00 0.00 H

ATOM 1391 2HG2 THR A 92 70.984 45.006 53.602 1.00 0.00 H

ATOM 1392 3HG2 THR A 92 69.457 45.391 54.430 1.00 0.00 H

ATOM 1393 N ASN A 93 69.352 44.246 50.873 1.00 0.00 N

ATOM 1394 CA ASN A 93 70.060 44.769 49.711 1.00 0.00 C

ATOM 1395 C ASN A 93 70.821 46.072 49.973 1.00 0.00 C

ATOM 1396 O ASN A 93 71.512 46.565 49.104 1.00 0.00 O

ATOM 1397 CB ASN A 93 69.083 44.961 48.566 1.00 0.00 C

ATOM 1398 CG ASN A 93 68.614 43.657 47.981 1.00 0.00 C

ATOM 1399 OD1 ASN A 93 69.359 42.671 47.955 1.00 0.00 O

ATOM 1400 ND2 ASN A 93 67.392 43.633 47.513 1.00 0.00 N

ATOM 1401 H ASN A 93 68.346 44.186 50.863 1.00 0.00 H

ATOM 1402 HA ASN A 93 70.820 44.045 49.414 1.00 0.00 H

ATOM 1403 1HB ASN A 93 68.216 45.521 48.916 1.00 0.00 H

ATOM 1404 2HB ASN A 93 69.556 45.548 47.780 1.00 0.00 H

ATOM 1405 1HD2 ASN A 93 67.026 42.791 47.113 1.00 0.00 H

ATOM 1406 2HD2 ASN A 93 66.824 44.453 47.555 1.00 0.00 H

ATOM 1407 N LYS A 94 70.725 46.551 51.212 1.00 0.00 N

ATOM 1408 CA LYS A 94 71.531 47.665 51.733 1.00 0.00 C

ATOM 1409 C LYS A 94 72.839 47.260 52.347 1.00 0.00 C

ATOM 1410 O LYS A 94 73.544 48.136 52.841 1.00 0.00 O

ATOM 1411 CB LYS A 94 70.727 48.453 52.768 1.00 0.00 C

ATOM 1412 CG LYS A 94 69.483 49.133 52.214 1.00 0.00 C

ATOM 1413 CD LYS A 94 68.714 49.856 53.311 1.00 0.00 C

ATOM 1414 CE LYS A 94 67.451 50.507 52.765 1.00 0.00 C

ATOM 1415 NZ LYS A 94 66.645 51.144 53.841 1.00 0.00 N

ATOM 1416 H LYS A 94 70.171 46.031 51.873 1.00 0.00 H

ATOM 1417 HA LYS A 94 71.783 48.327 50.904 1.00 0.00 H

ATOM 1418 1HB LYS A 94 70.414 47.784 53.571 1.00 0.00 H

ATOM 1419 2HB LYS A 94 71.359 49.223 53.212 1.00 0.00 H

ATOM 1420 1HG LYS A 94 69.772 49.854 51.449 1.00 0.00 H

ATOM 1421 2HG LYS A 94 68.832 48.387 51.758 1.00 0.00 H

ATOM 1422 1HD LYS A 94 68.438 49.146 54.090 1.00 0.00 H

ATOM 1423 2HD LYS A 94 69.346 50.626 53.752 1.00 0.00 H

ATOM 1424 1HE LYS A 94 67.721 51.266 52.031 1.00 0.00 H

ATOM 1425 2HE LYS A 94 66.839 49.755 52.269 1.00 0.00 H

ATOM 1426 1HZ LYS A 94 65.818 51.564 53.439 1.00 0.00 H

ATOM 1427 2HZ LYS A 94 66.372 50.446 54.518 1.00 0.00 H

ATOM 1428 3HZ LYS A 94 67.196 51.858 54.297 1.00 0.00 H

ATOM 1429 N PHE A 95 73.131 45.956 52.371 1.00 0.00 N

ATOM 1430 CA PHE A 95 74.276 45.456 53.101 1.00 0.00 C

ATOM 1431 C PHE A 95 75.653 45.939 52.602 1.00 0.00 C

ATOM 1432 O PHE A 95 76.350 45.179 51.944 1.00 0.00 O

ATOM 1433 CB PHE A 95 74.242 43.927 53.071 1.00 0.00 C

ATOM 1434 CG PHE A 95 75.407 43.283 53.767 1.00 0.00 C

ATOM 1435 CD1 PHE A 95 75.555 43.384 55.142 1.00 0.00 C

ATOM 1436 CD2 PHE A 95 76.358 42.572 53.049 1.00 0.00 C

ATOM 1437 CE1 PHE A 95 76.626 42.794 55.784 1.00 0.00 C

ATOM 1438 CE2 PHE A 95 77.429 41.978 53.687 1.00 0.00 C

ATOM 1439 CZ PHE A 95 77.563 42.090 55.058 1.00 0.00 C

ATOM 1440 H PHE A 95 72.452 45.286 52.041 1.00 0.00 H

ATOM 1441 HA PHE A 95 74.207 45.803 54.133 1.00 0.00 H

ATOM 1442 1HB PHE A 95 73.327 43.574 53.544 1.00 0.00 H

ATOM 1443 2HB PHE A 95 74.231 43.583 52.038 1.00 0.00 H

ATOM 1444 HD1 PHE A 95 74.814 43.941 55.719 1.00 0.00 H

ATOM 1445 HD2 PHE A 95 76.251 42.486 51.967 1.00 0.00 H

ATOM 1446 HE1 PHE A 95 76.732 42.882 56.866 1.00 0.00 H

ATOM 1447 HE2 PHE A 95 78.169 41.423 53.112 1.00 0.00 H

ATOM 1448 HZ PHE A 95 78.408 41.623 55.563 1.00 0.00 H

ATOM 1449 N VAL A 96 76.070 47.113 53.051 1.00 0.00 N

ATOM 1450 CA VAL A 96 77.545 47.423 53.064 1.00 0.00 C

ATOM 1451 C VAL A 96 78.129 47.673 54.425 1.00 0.00 C

ATOM 1452 O VAL A 96 77.963 48.754 54.977 1.00 0.00 O

ATOM 1453 CB VAL A 96 77.839 48.667 52.206 1.00 0.00 C

ATOM 1454 CG1 VAL A 96 79.328 48.980 52.212 1.00 0.00 C

ATOM 1455 CG2 VAL A 96 77.340 48.446 50.786 1.00 0.00 C

ATOM 1456 H VAL A 96 75.526 47.520 53.805 1.00 0.00 H

ATOM 1457 HA VAL A 96 78.081 46.573 52.642 1.00 0.00 H

ATOM 1458 HB VAL A 96 77.328 49.527 52.641 1.00 0.00 H

ATOM 1459 1HG1 VAL A 96 79.517 49.862 51.601 1.00 0.00 H

ATOM 1460 2HG1 VAL A 96 79.655 49.170 53.234 1.00 0.00 H

ATOM 1461 3HG1 VAL A 96 79.879 48.132 51.805 1.00 0.00 H

ATOM 1462 1HG2 VAL A 96 77.550 49.330 50.185 1.00 0.00 H

ATOM 1463 2HG2 VAL A 96 77.847 47.583 50.353 1.00 0.00 H

ATOM 1464 3HG2 VAL A 96 76.265 48.266 50.802 1.00 0.00 H

ATOM 1465 N THR A 97 78.783 46.664 54.989 1.00 0.00 N

ATOM 1466 CA THR A 97 79.398 46.799 56.310 1.00 0.00 C

ATOM 1467 C THR A 97 80.874 47.049 56.231 1.00 0.00 C

ATOM 1468 O THR A 97 81.591 46.409 55.462 1.00 0.00 O

ATOM 1469 CB THR A 97 79.151 45.545 57.168 1.00 0.00 C

ATOM 1470 OG1 THR A 97 77.744 45.376 57.379 1.00 0.00 O

ATOM 1471 CG2 THR A 97 79.848 45.675 58.514 1.00 0.00 C

ATOM 1472 H THR A 97 78.944 45.828 54.446 1.00 0.00 H

ATOM 1473 HA THR A 97 78.949 47.654 56.815 1.00 0.00 H

ATOM 1474 HB THR A 97 79.535 44.667 56.651 1.00 0.00 H

ATOM 1475 HG1 THR A 97 77.503 45.734 58.237 1.00 0.00 H

ATOM 1476 1HG2 THR A 97 79.664 44.780 59.108 1.00 0.00 H

ATOM 1477 2HG2 THR A 97 80.922 45.793 58.359 1.00 0.00 H

ATOM 1478 3HG2 THR A 97 79.462 46.546 59.042 1.00 0.00 H

ATOM 1479 N ILE A 98 81.308 48.116 56.899 1.00 0.00 N

ATOM 1480 CA ILE A 98 82.664 48.592 56.746 1.00 0.00 C

ATOM 1481 C ILE A 98 83.296 48.490 58.117 1.00 0.00 C

ATOM 1482 O ILE A 98 82.798 49.117 59.040 1.00 0.00 O

ATOM 1483 CB ILE A 98 82.719 50.041 56.224 1.00 0.00 C

ATOM 1484 CG1 ILE A 98 82.024 50.143 54.865 1.00 0.00 C

ATOM 1485 CG2 ILE A 98 84.162 50.515 56.125 1.00 0.00 C

ATOM 1486 CD1 ILE A 98 81.916 51.558 54.341 1.00 0.00 C

ATOM 1487 H ILE A 98 80.626 48.756 57.265 1.00 0.00 H

ATOM 1488 HA ILE A 98 83.173 47.958 56.021 1.00 0.00 H

ATOM 1489 HB ILE A 98 82.177 50.693 56.908 1.00 0.00 H

ATOM 1490 1HG1 ILE A 98 82.568 49.551 54.132 1.00 0.00 H

ATOM 1491 2HG1 ILE A 98 81.018 49.729 54.938 1.00 0.00 H

ATOM 1492 1HG2 ILE A 98 84.182 51.538 55.756 1.00 0.00 H

ATOM 1493 2HG2 ILE A 98 84.625 50.475 57.112 1.00 0.00 H

ATOM 1494 3HG2 ILE A 98 84.711 49.868 55.441 1.00 0.00 H

ATOM 1495 1HD1 ILE A 98 81.410 51.551 53.374 1.00 0.00 H

ATOM 1496 2HD1 ILE A 98 81.342 52.163 55.045 1.00 0.00 H

ATOM 1497 3HD1 ILE A 98 82.912 51.982 54.226 1.00 0.00 H

ATOM 1498 N ARG A 99 84.287 47.608 58.272 1.00 0.00 N

ATOM 1499 CA ARG A 99 84.813 47.293 59.598 1.00 0.00 C

ATOM 1500 C ARG A 99 86.011 46.351 59.488 1.00 0.00 C

ATOM 1501 O ARG A 99 86.623 46.114 58.447 1.00 0.00 O

ATOM 1502 OXT ARG A 99 86.417 45.781 60.463 1.00 0.00 O

ATOM 1503 CB ARG A 99 83.740 46.652 60.466 1.00 0.00 C

ATOM 1504 CG ARG A 99 84.169 46.346 61.892 1.00 0.00 C

ATOM 1505 CD ARG A 99 83.044 45.816 62.704 1.00 0.00 C

ATOM 1506 NE ARG A 99 83.455 45.504 64.063 1.00 0.00 N

ATOM 1507 CZ ARG A 99 82.649 44.969 65.002 1.00 0.00 C

ATOM 1508 NH1 ARG A 99 81.396 44.694 64.714 1.00 0.00 N

ATOM 1509 NH2 ARG A 99 83.119 44.723 66.212 1.00 0.00 N

ATOM 1510 H ARG A 99 84.526 47.020 57.480 1.00 0.00 H

ATOM 1511 HA ARG A 99 85.134 48.220 60.072 1.00 0.00 H

ATOM 1512 1HB ARG A 99 82.873 47.309 60.517 1.00 0.00 H

ATOM 1513 2HB ARG A 99 83.415 45.716 60.013 1.00 0.00 H

ATOM 1514 1HG ARG A 99 84.965 45.601 61.881 1.00 0.00 H

ATOM 1515 2HG ARG A 99 84.533 47.258 62.367 1.00 0.00 H

ATOM 1516 1HD ARG A 99 82.246 46.557 62.750 1.00 0.00 H

ATOM 1517 2HD ARG A 99 82.662 44.903 62.244 1.00 0.00 H

ATOM 1518 HE ARG A 99 84.412 45.701 64.322 1.00 0.00 H

ATOM 1519 1HH1 ARG A 99 81.037 44.883 63.789 1.00 0.00 H

ATOM 1520 2HH1 ARG A 99 80.792 44.295 65.418 1.00 0.00 H

ATOM 1521 1HH2 ARG A 99 84.082 44.933 66.433 1.00 0.00 H

ATOM 1522 2HH2 ARG A 99 82.515 44.323 66.916 1.00 0.00 H

ATOM 1523 N MET A 1 70.589 53.380 32.454 1.00 0.00 N

ATOM 1524 CA MET A 1 71.759 53.617 31.603 1.00 0.00 C

ATOM 1525 C MET A 1 71.998 55.099 31.261 1.00 0.00 C

ATOM 1526 O MET A 1 71.199 55.964 31.620 1.00 0.00 O

ATOM 1527 CB MET A 1 71.619 52.806 30.316 1.00 0.00 C

ATOM 1528 CG MET A 1 71.667 51.297 30.514 1.00 0.00 C

ATOM 1529 SD MET A 1 71.406 50.386 28.979 1.00 0.00 S

ATOM 1530 CE MET A 1 69.635 50.565 28.777 1.00 0.00 C

ATOM 1531 1H MET A 1 70.500 52.400 32.632 1.00 0.00 H

ATOM 1532 2H MET A 1 70.702 53.867 33.320 1.00 0.00 H

ATOM 1533 3H MET A 1 69.767 53.711 31.991 1.00 0.00 H

ATOM 1534 HA MET A 1 72.649 53.289 32.139 1.00 0.00 H

ATOM 1535 1HB MET A 1 70.671 53.048 29.835 1.00 0.00 H

ATOM 1536 2HB MET A 1 72.416 53.078 29.624 1.00 0.00 H

ATOM 1537 1HG MET A 1 72.637 51.016 30.921 1.00 0.00 H

ATOM 1538 2HG MET A 1 70.900 50.999 31.227 1.00 0.00 H

ATOM 1539 1HE MET A 1 69.319 50.053 27.868 1.00 0.00 H

ATOM 1540 2HE MET A 1 69.124 50.131 29.637 1.00 0.00 H

ATOM 1541 3HE MET A 1 69.384 51.624 28.703 1.00 0.00 H

ATOM 1542 N ASP A 2 73.084 55.349 30.532 1.00 0.00 N

ATOM 1543 CA ASP A 2 73.563 56.669 30.142 1.00 0.00 C

ATOM 1544 C ASP A 2 72.692 57.466 29.154 1.00 0.00 C

ATOM 1545 O ASP A 2 72.658 57.157 27.962 1.00 0.00 O

ATOM 1546 CB ASP A 2 74.965 56.522 29.542 1.00 0.00 C

ATOM 1547 CG ASP A 2 75.618 57.861 29.229 1.00 0.00 C

ATOM 1548 OD1 ASP A 2 74.952 58.864 29.337 1.00 0.00 O

ATOM 1549 OD2 ASP A 2 76.776 57.867 28.884 1.00 0.00 O

ATOM 1550 H ASP A 2 73.760 54.616 30.326 1.00 0.00 H

ATOM 1551 HA ASP A 2 73.610 57.297 31.032 1.00 0.00 H

ATOM 1552 1HB ASP A 2 75.601 55.977 30.241 1.00 0.00 H

ATOM 1553 2HB ASP A 2 74.909 55.937 28.625 1.00 0.00 H

ATOM 1554 N ILE A 3 72.084 58.549 29.637 1.00 0.00 N

ATOM 1555 CA ILE A 3 71.169 59.363 28.836 1.00 0.00 C

ATOM 1556 C ILE A 3 71.908 60.577 28.270 1.00 0.00 C

ATOM 1557 O ILE A 3 71.273 61.498 27.757 1.00 0.00 O

ATOM 1558 CB ILE A 3 69.961 59.829 29.669 1.00 0.00 C

ATOM 1559 CG1 ILE A 3 70.416 60.765 30.791 1.00 0.00 C

ATOM 1560 CG2 ILE A 3 69.216 58.632 30.241 1.00 0.00 C

ATOM 1561 CD1 ILE A 3 69.281 61.470 31.498 1.00 0.00 C

ATOM 1562 H ILE A 3 72.209 58.800 30.612 1.00 0.00 H

ATOM 1563 HA ILE A 3 70.801 58.757 28.009 1.00 0.00 H

ATOM 1564 HB ILE A 3 69.282 60.401 29.039 1.00 0.00 H

ATOM 1565 1HG1 ILE A 3 70.979 60.199 31.532 1.00 0.00 H

ATOM 1566 2HG1 ILE A 3 71.086 61.523 30.384 1.00 0.00 H

ATOM 1567 1HG2 ILE A 3 68.365 58.979 30.828 1.00 0.00 H

ATOM 1568 2HG2 ILE A 3 68.862 58.003 29.426 1.00 0.00 H

ATOM 1569 3HG2 ILE A 3 69.887 58.056 30.879 1.00 0.00 H

ATOM 1570 1HD1 ILE A 3 69.682 62.116 32.278 1.00 0.00 H

ATOM 1571 2HD1 ILE A 3 68.724 62.072 30.780 1.00 0.00 H

ATOM 1572 3HD1 ILE A 3 68.616 60.731 31.943 1.00 0.00 H

ATOM 1573 N SER A 4 73.234 60.634 28.447 1.00 0.00 N

ATOM 1574 CA SER A 4 74.036 61.783 28.056 1.00 0.00 C

ATOM 1575 C SER A 4 73.553 63.159 28.586 1.00 0.00 C

ATOM 1576 O SER A 4 73.314 64.096 27.823 1.00 0.00 O

ATOM 1577 CB SER A 4 74.099 61.825 26.542 1.00 0.00 C

ATOM 1578 OG SER A 4 74.716 60.675 26.033 1.00 0.00 O

ATOM 1579 H SER A 4 73.687 59.896 28.960 1.00 0.00 H

ATOM 1580 HA SER A 4 75.041 61.659 28.463 1.00 0.00 H

ATOM 1581 1HB SER A 4 73.090 61.909 26.138 1.00 0.00 H

ATOM 1582 2HB SER A 4 74.651 62.709 26.225 1.00 0.00 H

ATOM 1583 HG SER A 4 74.966 60.149 26.797 1.00 0.00 H

ATOM 1584 N GLY A 5 73.411 63.274 29.904 1.00 0.00 N

ATOM 1585 CA GLY A 5 72.862 64.469 30.547 1.00 0.00 C

ATOM 1586 C GLY A 5 73.471 64.689 31.920 1.00 0.00 C

ATOM 1587 O GLY A 5 74.687 64.655 32.081 1.00 0.00 O

ATOM 1588 H GLY A 5 73.535 62.463 30.483 1.00 0.00 H

ATOM 1589 1HA GLY A 5 73.053 65.339 29.918 1.00 0.00 H

ATOM 1590 2HA GLY A 5 71.782 64.368 30.638 1.00 0.00 H

ATOM 1591 N LEU A 6 72.615 64.778 32.933 1.00 0.00 N

ATOM 1592 CA LEU A 6 73.051 64.815 34.330 1.00 0.00 C

ATOM 1593 C LEU A 6 72.928 63.444 34.920 1.00 0.00 C

ATOM 1594 O LEU A 6 72.219 62.613 34.373 1.00 0.00 O

ATOM 1595 CB LEU A 6 72.214 65.808 35.146 1.00 0.00 C

ATOM 1596 CG LEU A 6 72.248 67.263 34.660 1.00 0.00 C

ATOM 1597 CD1 LEU A 6 71.329 68.111 35.532 1.00 0.00 C

ATOM 1598 CD2 LEU A 6 73.678 67.781 34.707 1.00 0.00 C

ATOM 1599 H LEU A 6 71.648 64.552 32.740 1.00 0.00 H

ATOM 1600 HA LEU A 6 74.091 65.140 34.359 1.00 0.00 H

ATOM 1601 1HB LEU A 6 71.177 65.479 35.134 1.00 0.00 H

ATOM 1602 2HB LEU A 6 72.567 65.795 36.177 1.00 0.00 H

ATOM 1603 HG LEU A 6 71.875 67.314 33.637 1.00 0.00 H

ATOM 1604 1HD1 LEU A 6 71.354 69.145 35.186 1.00 0.00 H

ATOM 1605 2HD1 LEU A 6 70.311 67.730 35.466 1.00 0.00 H

ATOM 1606 3HD1 LEU A 6 71.669 68.066 36.565 1.00 0.00 H

ATOM 1607 1HD2 LEU A 6 73.702 68.814 34.360 1.00 0.00 H

ATOM 1608 2HD2 LEU A 6 74.049 67.733 35.729 1.00 0.00 H

ATOM 1609 3HD2 LEU A 6 74.307 67.166 34.060 1.00 0.00 H

ATOM 1610 N PRO A 7 73.651 63.197 36.019 1.00 0.00 N

ATOM 1611 CA PRO A 7 73.693 61.936 36.752 1.00 0.00 C

ATOM 1612 C PRO A 7 72.655 61.846 37.841 1.00 0.00 C

ATOM 1613 O PRO A 7 72.678 60.872 38.561 1.00 0.00 O

ATOM 1614 CB PRO A 7 75.108 61.936 37.339 1.00 0.00 C

ATOM 1615 CG PRO A 7 75.420 63.378 37.540 1.00 0.00 C

ATOM 1616 CD PRO A 7 74.786 64.068 36.362 1.00 0.00 C

ATOM 1617 HA PRO A 7 73.556 61.103 36.046 1.00 0.00 H

ATOM 1618 1HB PRO A 7 75.125 61.360 38.277 1.00 0.00 H

ATOM 1619 2HB PRO A 7 75.804 61.440 36.646 1.00 0.00 H

ATOM 1620 1HG PRO A 7 75.016 63.724 38.502 1.00 0.00 H

ATOM 1621 2HG PRO A 7 76.511 63.529 37.582 1.00 0.00 H

ATOM 1622 1HD PRO A 7 74.424 65.059 36.668 1.00 0.00 H

ATOM 1623 2HD PRO A 7 75.521 64.155 35.549 1.00 0.00 H

ATOM 1624 N VAL A 8 71.772 62.865 37.960 1.00 0.00 N

ATOM 1625 CA VAL A 8 70.709 62.912 38.948 1.00 0.00 C

ATOM 1626 C VAL A 8 70.239 61.565 39.412 1.00 0.00 C

ATOM 1627 O VAL A 8 69.407 60.932 38.762 1.00 0.00 O

ATOM 1628 CB VAL A 8 69.500 63.674 38.376 1.00 0.00 C

ATOM 1629 CG1 VAL A 8 68.319 63.594 39.332 1.00 0.00 C

ATOM 1630 CG2 VAL A 8 69.879 65.123 38.111 1.00 0.00 C

ATOM 1631 H VAL A 8 71.754 63.590 37.257 1.00 0.00 H

ATOM 1632 HA VAL A 8 71.078 63.440 39.828 1.00 0.00 H

ATOM 1633 HB VAL A 8 69.191 63.202 37.444 1.00 0.00 H

ATOM 1634 1HG1 VAL A 8 67.473 64.136 38.913 1.00 0.00 H

ATOM 1635 2HG1 VAL A 8 68.041 62.550 39.479 1.00 0.00 H

ATOM 1636 3HG1 VAL A 8 68.594 64.036 40.290 1.00 0.00 H

ATOM 1637 1HG2 VAL A 8 69.019 65.655 37.706 1.00 0.00 H

ATOM 1638 2HG2 VAL A 8 70.193 65.592 39.043 1.00 0.00 H

ATOM 1639 3HG2 VAL A 8 70.700 65.157 37.393 1.00 0.00 H

ATOM 1640 N PRO A 9 70.789 61.058 40.541 1.00 0.00 N

ATOM 1641 CA PRO A 9 70.556 59.763 41.093 1.00 0.00 C

ATOM 1642 C PRO A 9 69.094 59.481 41.443 1.00 0.00 C

ATOM 1643 O PRO A 9 68.339 60.376 41.785 1.00 0.00 O

ATOM 1644 CB PRO A 9 71.438 59.798 42.345 1.00 0.00 C

ATOM 1645 CG PRO A 9 72.487 60.807 42.024 1.00 0.00 C

ATOM 1646 CD PRO A 9 71.762 61.867 41.240 1.00 0.00 C

ATOM 1647 HA PRO A 9 70.898 58.998 40.379 1.00 0.00 H

ATOM 1648 1HB PRO A 9 70.833 60.076 43.222 1.00 0.00 H

ATOM 1649 2HB PRO A 9 71.851 58.798 42.543 1.00 0.00 H

ATOM 1650 1HG PRO A 9 72.936 61.197 42.950 1.00 0.00 H

ATOM 1651 2HG PRO A 9 73.301 60.338 41.450 1.00 0.00 H

ATOM 1652 1HD PRO A 9 71.301 62.587 41.934 1.00 0.00 H

ATOM 1653 2HD PRO A 9 72.468 62.375 40.568 1.00 0.00 H

ATOM 1654 N VAL A 10 68.691 58.223 41.275 1.00 0.00 N

ATOM 1655 CA VAL A 10 67.305 57.731 41.320 1.00 0.00 C

ATOM 1656 C VAL A 10 67.124 56.822 42.498 1.00 0.00 C

ATOM 1657 O VAL A 10 66.292 55.913 42.434 1.00 0.00 O

ATOM 1658 CB VAL A 10 66.943 56.968 40.033 1.00 0.00 C

ATOM 1659 CG1 VAL A 10 66.999 57.898 38.830 1.00 0.00 C

ATOM 1660 CG2 VAL A 10 67.886 55.789 39.847 1.00 0.00 C

ATOM 1661 H VAL A 10 69.233 57.677 40.627 1.00 0.00 H

ATOM 1662 HA VAL A 10 66.636 58.587 41.411 1.00 0.00 H

ATOM 1663 HB VAL A 10 65.919 56.605 40.111 1.00 0.00 H

ATOM 1664 1HG1 VAL A 10 66.740 57.343 37.928 1.00 0.00 H

ATOM 1665 2HG1 VAL A 10 66.289 58.714 38.967 1.00 0.00 H

ATOM 1666 3HG1 VAL A 10 68.006 58.302 38.729 1.00 0.00 H

ATOM 1667 1HG2 VAL A 10 67.625 55.254 38.935 1.00 0.00 H

ATOM 1668 2HG2 VAL A 10 68.912 56.151 39.774 1.00 0.00 H

ATOM 1669 3HG2 VAL A 10 67.799 55.116 40.700 1.00 0.00 H

ATOM 1670 N CYS A 11 68.034 56.987 43.460 1.00 0.00 N

ATOM 1671 CA CYS A 11 68.010 56.206 44.644 1.00 0.00 C

ATOM 1672 C CYS A 11 67.495 57.093 45.738 1.00 0.00 C

ATOM 1673 O CYS A 11 68.271 57.792 46.398 1.00 0.00 O

ATOM 1674 CB CYS A 11 69.399 55.672 44.993 1.00 0.00 C

ATOM 1675 SG CYS A 11 70.164 54.690 43.682 1.00 0.00 S

ATOM 1676 H CYS A 11 68.605 57.812 43.408 1.00 0.00 H

ATOM 1677 HA CYS A 11 67.350 55.354 44.484 1.00 0.00 H

ATOM 1678 1HB CYS A 11 70.063 56.506 45.221 1.00 0.00 H

ATOM 1679 2HB CYS A 11 69.336 55.052 45.887 1.00 0.00 H

ATOM 1680 N THR A 12 66.183 57.034 45.950 1.00 0.00 N

ATOM 1681 CA THR A 12 65.516 57.718 47.019 1.00 0.00 C

ATOM 1682 C THR A 12 65.954 57.086 48.322 1.00 0.00 C

ATOM 1683 O THR A 12 65.830 55.879 48.542 1.00 0.00 O

ATOM 1684 CB THR A 12 63.985 57.656 46.871 1.00 0.00 C

ATOM 1685 OG1 THR A 12 63.594 58.272 45.637 1.00 0.00 O

ATOM 1686 CG2 THR A 12 63.307 58.375 48.028 1.00 0.00 C

ATOM 1687 H THR A 12 65.661 56.340 45.424 1.00 0.00 H

ATOM 1688 HA THR A 12 65.814 58.767 46.998 1.00 0.00 H

ATOM 1689 HB THR A 12 63.662 56.615 46.859 1.00 0.00 H

ATOM 1690 HG1 THR A 12 62.643 58.190 45.526 1.00 0.00 H

ATOM 1691 1HG2 THR A 12 62.226 58.320 47.908 1.00 0.00 H

ATOM 1692 2HG2 THR A 12 63.593 57.900 48.967 1.00 0.00 H

ATOM 1693 3HG2 THR A 12 63.617 59.418 48.040 1.00 0.00 H

ATOM 1694 N CYS A 13 66.445 57.917 49.239 1.00 0.00 N

ATOM 1695 CA CYS A 13 66.720 57.521 50.601 1.00 0.00 C

ATOM 1696 C CYS A 13 65.560 58.027 51.451 1.00 0.00 C

ATOM 1697 O CYS A 13 64.875 58.974 51.077 1.00 0.00 O

ATOM 1698 CB CYS A 13 68.045 58.101 51.097 1.00 0.00 C

ATOM 1699 SG CYS A 13 69.499 57.478 50.221 1.00 0.00 S

ATOM 1700 H CYS A 13 66.340 58.898 49.027 1.00 0.00 H

ATOM 1701 HA CYS A 13 66.791 56.434 50.637 1.00 0.00 H

ATOM 1702 1HB CYS A 13 68.029 59.186 50.994 1.00 0.00 H

ATOM 1703 2HB CYS A 13 68.165 57.874 52.157 1.00 0.00 H

ATOM 1704 N THR A 14 65.333 57.385 52.597 1.00 0.00 N

ATOM 1705 CA THR A 14 64.327 57.841 53.538 1.00 0.00 C

ATOM 1706 C THR A 14 64.901 58.913 54.501 1.00 0.00 C

ATOM 1707 O THR A 14 64.171 59.546 55.263 1.00 0.00 O

ATOM 1708 CB THR A 14 63.761 56.657 54.342 1.00 0.00 C

ATOM 1709 OG1 THR A 14 64.815 56.032 55.085 1.00 0.00 O

ATOM 1710 CG2 THR A 14 63.124 55.635 53.410 1.00 0.00 C

ATOM 1711 H THR A 14 65.984 56.662 52.896 1.00 0.00 H

ATOM 1712 HA THR A 14 63.512 58.302 52.978 1.00 0.00 H

ATOM 1713 HB THR A 14 63.007 57.019 55.042 1.00 0.00 H

ATOM 1714 HG1 THR A 14 64.585 56.017 56.015 1.00 0.00 H

ATOM 1715 1HG2 THR A 14 62.729 54.806 53.996 1.00 0.00 H

ATOM 1716 2HG2 THR A 14 62.315 56.105 52.854 1.00 0.00 H

ATOM 1717 3HG2 THR A 14 63.875 55.262 52.714 1.00 0.00 H

ATOM 1718 N GLY A 15 66.228 59.018 54.591 1.00 0.00 N

ATOM 1719 CA GLY A 15 66.862 59.841 55.615 1.00 0.00 C

ATOM 1720 C GLY A 15 67.488 58.963 56.718 1.00 0.00 C

ATOM 1721 O GLY A 15 68.437 59.380 57.393 1.00 0.00 O

ATOM 1722 H GLY A 15 66.789 58.329 54.108 1.00 0.00 H

ATOM 1723 1HA GLY A 15 67.630 60.464 55.158 1.00 0.00 H

ATOM 1724 2HA GLY A 15 66.123 60.511 56.052 1.00 0.00 H

ATOM 1725 N THR A 16 66.992 57.729 56.835 1.00 0.00 N

ATOM 1726 CA THR A 16 67.261 56.844 57.968 1.00 0.00 C

ATOM 1727 C THR A 16 68.700 56.489 58.265 1.00 0.00 C

ATOM 1728 O THR A 16 69.064 56.429 59.438 1.00 0.00 O

ATOM 1729 CB THR A 16 66.484 55.527 57.786 1.00 0.00 C

ATOM 1730 OG1 THR A 16 65.076 55.798 57.764 1.00 0.00 O

ATOM 1731 CG2 THR A 16 66.793 54.564 58.921 1.00 0.00 C

ATOM 1732 H THR A 16 66.049 57.674 56.442 1.00 0.00 H

ATOM 1733 HA THR A 16 66.922 57.336 58.880 1.00 0.00 H

ATOM 1734 HB THR A 16 66.766 55.067 56.839 1.00 0.00 H

ATOM 1735 HG1 THR A 16 64.701 55.601 58.626 1.00 0.00 H

ATOM 1736 1HG2 THR A 16 66.236 53.638 58.774 1.00 0.00 H

ATOM 1737 2HG2 THR A 16 67.863 54.346 58.933 1.00 0.00 H

ATOM 1738 3HG2 THR A 16 66.505 55.014 59.869 1.00 0.00 H

ATOM 1739 N PRO A 17 69.559 56.233 57.240 1.00 0.00 N

ATOM 1740 CA PRO A 17 70.961 55.921 57.432 1.00 0.00 C

ATOM 1741 C PRO A 17 71.851 57.159 57.490 1.00 0.00 C

ATOM 1742 O PRO A 17 73.072 57.047 57.513 1.00 0.00 O

ATOM 1743 CB PRO A 17 71.278 55.063 56.203 1.00 0.00 C

ATOM 1744 CG PRO A 17 70.382 55.603 55.141 1.00 0.00 C

ATOM 1745 CD PRO A 17 69.107 55.942 55.864 1.00 0.00 C

ATOM 1746 HA PRO A 17 71.080 55.346 58.361 1.00 0.00 H

ATOM 1747 1HB PRO A 17 72.344 55.152 55.947 1.00 0.00 H

ATOM 1748 2HB PRO A 17 71.087 54.004 56.425 1.00 0.00 H

ATOM 1749 1HG PRO A 17 70.844 56.480 54.663 1.00 0.00 H

ATOM 1750 2HG PRO A 17 70.236 54.853 54.350 1.00 0.00 H

ATOM 1751 1HD PRO A 17 68.652 56.834 55.408 1.00 0.00 H

ATOM 1752 2HD PRO A 17 68.417 55.088 55.811 1.00 0.00 H

ATOM 1753 N GLN A 18 71.228 58.338 57.433 1.00 0.00 N

ATOM 1754 CA GLN A 18 71.916 59.641 57.407 1.00 0.00 C

ATOM 1755 C GLN A 18 73.016 59.687 56.304 1.00 0.00 C

ATOM 1756 O GLN A 18 74.155 60.048 56.579 1.00 0.00 O

ATOM 1757 CB GLN A 18 72.531 59.939 58.777 1.00 0.00 C

ATOM 1758 CG GLN A 18 71.516 60.086 59.897 1.00 0.00 C

ATOM 1759 CD GLN A 18 70.707 61.364 59.782 1.00 0.00 C

ATOM 1760 OE1 GLN A 18 71.235 62.466 59.956 1.00 0.00 O

ATOM 1761 NE2 GLN A 18 69.420 61.224 59.484 1.00 0.00 N

ATOM 1762 H GLN A 18 70.225 58.351 57.299 1.00 0.00 H

ATOM 1763 HA GLN A 18 71.184 60.415 57.175 1.00 0.00 H

ATOM 1764 1HB GLN A 18 73.218 59.136 59.050 1.00 0.00 H

ATOM 1765 2HB GLN A 18 73.110 60.861 58.725 1.00 0.00 H

ATOM 1766 1HG GLN A 18 70.827 59.242 59.863 1.00 0.00 H

ATOM 1767 2HG GLN A 18 72.042 60.099 60.852 1.00 0.00 H

ATOM 1768 1HE2 GLN A 18 68.836 62.032 59.395 1.00 0.00 H

ATOM 1769 2HE2 GLN A 18 69.034 60.312 59.351 1.00 0.00 H

ATOM 1770 N GLN A 19 72.644 59.308 55.083 1.00 0.00 N

ATOM 1771 CA GLN A 19 73.582 59.331 53.953 1.00 0.00 C

ATOM 1772 C GLN A 19 73.423 60.571 53.084 1.00 0.00 C

ATOM 1773 O GLN A 19 74.180 60.774 52.152 1.00 0.00 O

ATOM 1774 CB GLN A 19 73.405 58.079 53.090 1.00 0.00 C

ATOM 1775 CG GLN A 19 73.686 56.776 53.820 1.00 0.00 C

ATOM 1776 CD GLN A 19 75.121 56.679 54.299 1.00 0.00 C

ATOM 1777 OE1 GLN A 19 76.061 56.707 53.500 1.00 0.00 O

ATOM 1778 NE2 GLN A 19 75.299 56.565 55.610 1.00 0.00 N

ATOM 1779 H GLN A 19 71.699 59.016 54.907 1.00 0.00 H

ATOM 1780 HA GLN A 19 74.598 59.343 54.347 1.00 0.00 H

ATOM 1781 1HB GLN A 19 72.384 58.040 52.711 1.00 0.00 H

ATOM 1782 2HB GLN A 19 74.072 58.133 52.230 1.00 0.00 H

ATOM 1783 1HG GLN A 19 73.029 56.709 54.686 1.00 0.00 H

ATOM 1784 2HG GLN A 19 73.495 55.944 53.140 1.00 0.00 H

ATOM 1785 1HE2 GLN A 19 76.224 56.497 55.986 1.00 0.00 H

ATOM 1786 2HE2 GLN A 19 74.509 56.547 56.222 1.00 0.00 H

ATOM 1787 N CYS A 20 72.430 61.399 53.402 1.00 0.00 N

ATOM 1788 CA CYS A 20 72.169 62.601 52.644 1.00 0.00 C

ATOM 1789 C CYS A 20 72.658 63.871 53.324 1.00 0.00 C

ATOM 1790 O CYS A 20 72.355 64.118 54.487 1.00 0.00 O

ATOM 1791 CB CYS A 20 70.669 62.728 52.380 1.00 0.00 C

ATOM 1792 SG CYS A 20 69.986 61.410 51.348 1.00 0.00 S

ATOM 1793 H CYS A 20 71.801 61.256 54.178 1.00 0.00 H

ATOM 1794 HA CYS A 20 72.692 62.528 51.690 1.00 0.00 H

ATOM 1795 1HB CYS A 20 70.131 62.726 53.329 1.00 0.00 H

ATOM 1796 2HB CYS A 20 70.465 63.680 51.892 1.00 0.00 H

ATOM 1797 N TYR A 21 73.430 64.720 52.550 1.00 0.00 N

ATOM 1798 CA TYR A 21 73.912 66.007 53.089 1.00 0.00 C

ATOM 1799 C TYR A 21 72.967 67.210 52.965 1.00 0.00 C

ATOM 1800 O TYR A 21 73.029 68.145 53.753 1.00 0.00 O

ATOM 1801 CB TYR A 21 75.244 66.357 52.422 1.00 0.00 C

ATOM 1802 CG TYR A 21 76.388 65.458 52.835 1.00 0.00 C

ATOM 1803 CD1 TYR A 21 76.974 64.609 51.908 1.00 0.00 C

ATOM 1804 CD2 TYR A 21 76.851 65.481 54.144 1.00 0.00 C

ATOM 1805 CE1 TYR A 21 78.021 63.789 52.286 1.00 0.00 C

ATOM 1806 CE2 TYR A 21 77.896 64.661 54.520 1.00 0.00 C

ATOM 1807 CZ TYR A 21 78.480 63.818 53.598 1.00 0.00 C

ATOM 1808 OH TYR A 21 79.520 63.000 53.975 1.00 0.00 O

ATOM 1809 H TYR A 21 73.742 64.455 51.628 1.00 0.00 H

ATOM 1810 HA TYR A 21 74.062 65.898 54.163 1.00 0.00 H

ATOM 1811 1HB TYR A 21 75.135 66.291 51.338 1.00 0.00 H

ATOM 1812 2HB TYR A 21 75.514 67.383 52.663 1.00 0.00 H

ATOM 1813 HD1 TYR A 21 76.612 64.591 50.880 1.00 0.00 H

ATOM 1814 HD2 TYR A 21 76.389 66.147 54.872 1.00 0.00 H

ATOM 1815 HE1 TYR A 21 78.481 63.123 51.557 1.00 0.00 H

ATOM 1816 HE2 TYR A 21 78.259 64.679 55.549 1.00 0.00 H

ATOM 1817 HH TYR A 21 79.795 62.467 53.225 1.00 0.00 H

ATOM 1818 N ARG A 22 72.109 67.162 51.946 1.00 0.00 N

ATOM 1819 CA ARG A 22 71.125 68.197 51.633 1.00 0.00 C

ATOM 1820 C ARG A 22 71.734 69.567 51.306 1.00 0.00 C

ATOM 1821 O ARG A 22 71.083 70.596 51.479 1.00 0.00 O

ATOM 1822 CB ARG A 22 70.162 68.357 52.800 1.00 0.00 C

ATOM 1823 CG ARG A 22 69.372 67.107 53.154 1.00 0.00 C

ATOM 1824 CD ARG A 22 68.403 67.362 54.250 1.00 0.00 C

ATOM 1825 NE ARG A 22 67.649 66.167 54.596 1.00 0.00 N

ATOM 1826 CZ ARG A 22 66.757 66.091 55.602 1.00 0.00 C

ATOM 1827 NH1 ARG A 22 66.517 67.145 56.350 1.00 0.00 N

ATOM 1828 NH2 ARG A 22 66.121 64.956 55.837 1.00 0.00 N

ATOM 1829 H ARG A 22 72.053 66.300 51.428 1.00 0.00 H

ATOM 1830 HA ARG A 22 70.565 67.887 50.750 1.00 0.00 H

ATOM 1831 1HB ARG A 22 70.715 68.659 53.689 1.00 0.00 H

ATOM 1832 2HB ARG A 22 69.446 69.147 52.576 1.00 0.00 H

ATOM 1833 1HG ARG A 22 68.819 66.767 52.279 1.00 0.00 H

ATOM 1834 2HG ARG A 22 70.058 66.323 53.477 1.00 0.00 H

ATOM 1835 1HD ARG A 22 68.938 67.696 55.138 1.00 0.00 H

ATOM 1836 2HD ARG A 22 67.698 68.132 53.940 1.00 0.00 H

ATOM 1837 HE ARG A 22 67.807 65.335 54.043 1.00 0.00 H

ATOM 1838 1HH1 ARG A 22 67.003 68.012 56.171 1.00 0.00 H

ATOM 1839 2HH1 ARG A 22 65.848 67.087 57.104 1.00 0.00 H

ATOM 1840 1HH2 ARG A 22 66.305 64.145 55.261 1.00 0.00 H

ATOM 1841 2HH2 ARG A 22 65.452 64.898 56.590 1.00 0.00 H

ATOM 1842 N TRP A 23 72.973 69.570 50.793 1.00 0.00 N

ATOM 1843 CA TRP A 23 73.755 70.773 50.486 1.00 0.00 C

ATOM 1844 C TRP A 23 73.322 71.522 49.219 1.00 0.00 C

ATOM 1845 O TRP A 23 74.145 71.784 48.335 1.00 0.00 O

ATOM 1846 CB TRP A 23 75.232 70.399 50.355 1.00 0.00 C

ATOM 1847 CG TRP A 23 75.886 70.074 51.665 1.00 0.00 C

ATOM 1848 CD1 TRP A 23 75.430 70.403 52.906 1.00 0.00 C

ATOM 1849 CD2 TRP A 23 77.122 69.350 51.869 1.00 0.00 C

ATOM 1850 NE1 TRP A 23 76.296 69.937 53.865 1.00 0.00 N

ATOM 1851 CE2 TRP A 23 77.336 69.288 53.248 1.00 0.00 C

ATOM 1852 CE3 TRP A 23 78.052 68.755 51.006 1.00 0.00 C

ATOM 1853 CZ2 TRP A 23 78.444 68.658 53.792 1.00 0.00 C

ATOM 1854 CZ3 TRP A 23 79.162 68.124 51.550 1.00 0.00 C

ATOM 1855 CH2 TRP A 23 79.352 68.075 52.908 1.00 0.00 C

ATOM 1856 H TRP A 23 73.479 68.700 50.781 1.00 0.00 H

ATOM 1857 HA TRP A 23 73.636 71.481 51.307 1.00 0.00 H

ATOM 1858 1HB TRP A 23 75.330 69.532 49.700 1.00 0.00 H

ATOM 1859 2HB TRP A 23 75.776 71.222 49.895 1.00 0.00 H

ATOM 1860 HD1 TRP A 23 74.514 70.955 53.108 1.00 0.00 H

ATOM 1861 HE1 TRP A 23 76.186 70.052 54.863 1.00 0.00 H

ATOM 1862 HE3 TRP A 23 77.904 68.789 49.926 1.00 0.00 H

ATOM 1863 HZ2 TRP A 23 78.613 68.611 54.869 1.00 0.00 H

ATOM 1864 HZ3 TRP A 23 79.881 67.665 50.870 1.00 0.00 H

ATOM 1865 HH2 TRP A 23 80.235 67.570 53.302 1.00 0.00 H

ATOM 1866 N GLY A 24 72.040 71.892 49.153 1.00 0.00 N

ATOM 1867 CA GLY A 24 71.466 72.597 48.028 1.00 0.00 C

ATOM 1868 C GLY A 24 72.231 73.853 47.663 1.00 0.00 C

ATOM 1869 O GLY A 24 72.958 73.870 46.682 1.00 0.00 O

ATOM 1870 H GLY A 24 71.439 71.677 49.942 1.00 0.00 H

ATOM 1871 1HA GLY A 24 71.440 71.938 47.160 1.00 0.00 H

ATOM 1872 2HA GLY A 24 70.436 72.869 48.256 1.00 0.00 H

ATOM 1873 N CYS A 25 72.143 74.871 48.501 1.00 0.00 N

ATOM 1874 CA CYS A 25 73.037 76.018 48.401 1.00 0.00 C

ATOM 1875 C CYS A 25 73.112 76.756 47.042 1.00 0.00 C

ATOM 1876 O CYS A 25 74.179 77.223 46.648 1.00 0.00 O

ATOM 1877 CB CYS A 25 74.448 75.561 48.771 1.00 0.00 C

ATOM 1878 SG CYS A 25 74.598 74.915 50.454 1.00 0.00 S

ATOM 1879 H CYS A 25 71.676 74.723 49.385 1.00 0.00 H

ATOM 1880 HA CYS A 25 72.702 76.780 49.105 1.00 0.00 H

ATOM 1881 1HB CYS A 25 74.771 74.781 48.081 1.00 0.00 H

ATOM 1882 2HB CYS A 25 75.140 76.396 48.668 1.00 0.00 H

ATOM 1883 HG CYS A 25 75.898 74.643 50.383 1.00 0.00 H

ATOM 1884 N GLY A 26 71.982 76.798 46.322 1.00 0.00 N

ATOM 1885 CA GLY A 26 71.861 77.187 44.907 1.00 0.00 C

ATOM 1886 C GLY A 26 72.636 76.384 43.850 1.00 0.00 C

ATOM 1887 O GLY A 26 72.078 76.062 42.798 1.00 0.00 O

ATOM 1888 H GLY A 26 71.234 76.218 46.669 1.00 0.00 H

ATOM 1889 1HA GLY A 26 70.815 77.139 44.605 1.00 0.00 H

ATOM 1890 2HA GLY A 26 72.184 78.221 44.786 1.00 0.00 H

ATOM 1891 N GLY A 27 73.898 76.038 44.119 1.00 0.00 N

ATOM 1892 CA GLY A 27 74.702 75.257 43.183 1.00 0.00 C

ATOM 1893 C GLY A 27 74.498 73.755 43.244 1.00 0.00 C

ATOM 1894 O GLY A 27 74.982 73.065 42.358 1.00 0.00 O

ATOM 1895 H GLY A 27 74.314 76.312 45.002 1.00 0.00 H

ATOM 1896 1HA GLY A 27 74.486 75.576 42.163 1.00 0.00 H

ATOM 1897 2HA GLY A 27 75.759 75.451 43.362 1.00 0.00 H

ATOM 1898 N TRP A 28 73.766 73.252 44.247 1.00 0.00 N

ATOM 1899 CA TRP A 28 73.470 71.832 44.371 1.00 0.00 C

ATOM 1900 C TRP A 28 74.710 70.930 44.387 1.00 0.00 C

ATOM 1901 O TRP A 28 75.004 70.255 43.404 1.00 0.00 O

ATOM 1902 CB TRP A 28 72.556 71.402 43.222 1.00 0.00 C

ATOM 1903 CG TRP A 28 71.222 72.087 43.233 1.00 0.00 C

ATOM 1904 CD1 TRP A 28 70.825 73.111 42.425 1.00 0.00 C

ATOM 1905 CD2 TRP A 28 70.096 71.797 44.095 1.00 0.00 C

ATOM 1906 NE1 TRP A 28 69.538 73.478 42.724 1.00 0.00 N

ATOM 1907 CE2 TRP A 28 69.075 72.685 43.743 1.00 0.00 C

ATOM 1908 CE3 TRP A 28 69.876 70.871 45.123 1.00 0.00 C

ATOM 1909 CZ2 TRP A 28 67.846 72.678 44.383 1.00 0.00 C

ATOM 1910 CZ3 TRP A 28 68.642 70.865 45.762 1.00 0.00 C

ATOM 1911 CH2 TRP A 28 67.654 71.744 45.402 1.00 0.00 C

ATOM 1912 H TRP A 28 73.331 73.862 44.924 1.00 0.00 H

ATOM 1913 HA TRP A 28 72.957 71.666 45.318 1.00 0.00 H

ATOM 1914 1HB TRP A 28 73.043 71.613 42.270 1.00 0.00 H

ATOM 1915 2HB TRP A 28 72.388 70.327 43.274 1.00 0.00 H

ATOM 1916 HD1 TRP A 28 71.443 73.570 41.654 1.00 0.00 H

ATOM 1917 HE1 TRP A 28 69.015 74.214 42.270 1.00 0.00 H

ATOM 1918 HE3 TRP A 28 70.658 70.169 45.411 1.00 0.00 H

ATOM 1919 HZ2 TRP A 28 67.047 73.370 44.110 1.00 0.00 H

ATOM 1920 HZ3 TRP A 28 68.479 70.140 46.562 1.00 0.00 H

ATOM 1921 HH2 TRP A 28 66.697 71.712 45.924 1.00 0.00 H

ATOM 1922 N GLN A 29 75.428 70.926 45.503 1.00 0.00 N

ATOM 1923 CA GLN A 29 76.656 70.137 45.593 1.00 0.00 C

ATOM 1924 C GLN A 29 76.517 69.012 46.594 1.00 0.00 C

ATOM 1925 O GLN A 29 76.537 69.254 47.800 1.00 0.00 O

ATOM 1926 CB GLN A 29 77.843 71.025 45.978 1.00 0.00 C

ATOM 1927 CG GLN A 29 79.139 70.267 46.210 1.00 0.00 C

ATOM 1928 CD GLN A 29 79.659 69.608 44.946 1.00 0.00 C

ATOM 1929 OE1 GLN A 29 80.036 70.285 43.986 1.00 0.00 O

ATOM 1930 NE2 GLN A 29 79.681 68.280 44.939 1.00 0.00 N

ATOM 1931 H GLN A 29 75.126 71.467 46.304 1.00 0.00 H

ATOM 1932 HA GLN A 29 76.856 69.695 44.617 1.00 0.00 H

ATOM 1933 1HB GLN A 29 78.019 71.758 45.190 1.00 0.00 H

ATOM 1934 2HB GLN A 29 77.607 71.574 46.888 1.00 0.00 H

ATOM 1935 1HG GLN A 29 79.896 70.964 46.569 1.00 0.00 H

ATOM 1936 2HG GLN A 29 78.964 69.489 46.953 1.00 0.00 H

ATOM 1937 1HE2 GLN A 29 80.014 67.789 44.132 1.00 0.00 H

ATOM 1938 2HE2 GLN A 29 79.365 67.770 45.739 1.00 0.00 H

ATOM 1939 N SER A 30 76.372 67.793 46.091 1.00 0.00 N

ATOM 1940 CA SER A 30 76.246 66.597 46.935 1.00 0.00 C

ATOM 1941 C SER A 30 75.006 66.730 47.791 1.00 0.00 C

ATOM 1942 O SER A 30 75.037 66.506 48.998 1.00 0.00 O

ATOM 1943 CB SER A 30 77.469 66.418 47.813 1.00 0.00 C

ATOM 1944 OG SER A 30 78.627 66.274 47.039 1.00 0.00 O

ATOM 1945 H SER A 30 76.346 67.661 45.092 1.00 0.00 H

ATOM 1946 HA SER A 30 76.157 65.724 46.286 1.00 0.00 H

ATOM 1947 1HB SER A 30 77.573 67.280 48.471 1.00 0.00 H

ATOM 1948 2HB SER A 30 77.338 65.539 48.443 1.00 0.00 H

ATOM 1949 HG SER A 30 78.824 65.334 47.026 1.00 0.00 H

ATOM 1950 N ALA A 31 73.924 67.226 47.193 1.00 0.00 N

ATOM 1951 CA ALA A 31 72.700 67.451 47.891 1.00 0.00 C

ATOM 1952 C ALA A 31 71.927 66.150 48.041 1.00 0.00 C

ATOM 1953 O ALA A 31 70.991 65.907 47.292 1.00 0.00 O

ATOM 1954 CB ALA A 31 71.960 68.542 47.254 1.00 0.00 C

ATOM 1955 H ALA A 31 73.978 67.429 46.208 1.00 0.00 H

ATOM 1956 HA ALA A 31 72.942 67.732 48.916 1.00 0.00 H

ATOM 1957 1HB ALA A 31 71.025 68.709 47.790 1.00 0.00 H

ATOM 1958 2HB ALA A 31 72.560 69.452 47.278 1.00 0.00 H

ATOM 1959 3HB ALA A 31 71.741 68.279 46.219 1.00 0.00 H

ATOM 1960 N CYS A 32 72.419 65.345 48.994 1.00 0.00 N

ATOM 1961 CA CYS A 32 72.158 63.972 49.217 1.00 0.00 C

ATOM 1962 C CYS A 32 72.973 63.150 48.224 1.00 0.00 C

ATOM 1963 O CYS A 32 74.170 62.972 48.389 1.00 0.00 O

ATOM 1964 CB CYS A 32 70.666 63.674 49.062 1.00 0.00 C

ATOM 1965 SG CYS A 32 70.231 61.935 49.303 1.00 0.00 S

ATOM 1966 H CYS A 32 73.217 65.696 49.487 1.00 0.00 H

ATOM 1967 HA CYS A 32 72.456 63.724 50.236 1.00 0.00 H

ATOM 1968 1HB CYS A 32 70.102 64.266 49.783 1.00 0.00 H

ATOM 1969 2HB CYS A 32 70.338 63.969 48.066 1.00 0.00 H

ATOM 1970 N CYS A 33 72.343 62.433 47.291 1.00 0.00 N

ATOM 1971 CA CYS A 33 73.191 61.636 46.378 1.00 0.00 C

ATOM 1972 C CYS A 33 73.970 62.505 45.356 1.00 0.00 C

ATOM 1973 O CYS A 33 75.169 62.352 45.193 1.00 0.00 O

ATOM 1974 CB CYS A 33 72.332 60.627 45.615 1.00 0.00 C

ATOM 1975 SG CYS A 33 71.672 59.292 46.643 1.00 0.00 S

ATOM 1976 H CYS A 33 71.343 62.527 47.181 1.00 0.00 H

ATOM 1977 HA CYS A 33 73.927 61.095 46.973 1.00 0.00 H

ATOM 1978 1HB CYS A 33 71.490 61.143 45.151 1.00 0.00 H

ATOM 1979 2HB CYS A 33 72.921 60.177 44.816 1.00 0.00 H

ATOM 1980 N THR A 34 73.291 63.464 44.718 1.00 0.00 N

ATOM 1981 CA THR A 34 73.995 64.524 43.993 1.00 0.00 C

ATOM 1982 C THR A 34 73.000 65.642 43.913 1.00 0.00 C

ATOM 1983 O THR A 34 73.107 66.629 44.620 1.00 0.00 O

ATOM 1984 CB THR A 34 74.463 64.099 42.590 1.00 0.00 C

ATOM 1985 OG1 THR A 34 75.406 63.025 42.701 1.00 0.00 O

ATOM 1986 CG2 THR A 34 75.116 65.269 41.870 1.00 0.00 C

ATOM 1987 H THR A 34 72.421 63.714 45.164 1.00 0.00 H

ATOM 1988 HA THR A 34 74.885 64.798 44.560 1.00 0.00 H

ATOM 1989 HB THR A 34 73.608 63.756 42.010 1.00 0.00 H

ATOM 1990 HG1 THR A 34 75.614 62.879 43.626 1.00 0.00 H

ATOM 1991 1HG2 THR A 34 75.442 64.951 40.878 1.00 0.00 H

ATOM 1992 2HG2 THR A 34 74.399 66.083 41.773 1.00 0.00 H

ATOM 1993 3HG2 THR A 34 75.980 65.611 42.440 1.00 0.00 H

ATOM 1994 N THR A 35 71.895 65.440 43.183 1.00 0.00 N

ATOM 1995 CA THR A 35 70.889 66.480 43.086 1.00 0.00 C

ATOM 1996 C THR A 35 69.501 65.889 42.847 1.00 0.00 C

ATOM 1997 O THR A 35 69.022 65.923 41.714 1.00 0.00 O

ATOM 1998 CB THR A 35 71.233 67.474 41.960 1.00 0.00 C

ATOM 1999 OG1 THR A 35 72.518 68.059 42.212 1.00 0.00 O

ATOM 2000 CG2 THR A 35 70.186 68.574 41.881 1.00 0.00 C

ATOM 2001 H THR A 35 71.808 64.598 42.641 1.00 0.00 H

ATOM 2002 HA THR A 35 70.863 67.025 44.030 1.00 0.00 H

ATOM 2003 HB THR A 35 71.270 66.946 41.008 1.00 0.00 H

ATOM 2004 HG1 THR A 35 72.606 68.244 43.150 1.00 0.00 H

ATOM 2005 1HG2 THR A 35 70.445 69.266 41.081 1.00 0.00 H

ATOM 2006 2HG2 THR A 35 69.210 68.133 41.679 1.00 0.00 H

ATOM 2007 3HG2 THR A 35 70.151 69.112 42.828 1.00 0.00 H

ATOM 2008 N ASN A 36 68.882 65.275 43.861 1.00 0.00 N

ATOM 2009 CA ASN A 36 67.649 64.534 43.571 1.00 0.00 C

ATOM 2010 C ASN A 36 66.455 64.610 44.573 1.00 0.00 C

ATOM 2011 O ASN A 36 65.519 65.364 44.343 1.00 0.00 O

ATOM 2012 CB ASN A 36 68.025 63.079 43.363 1.00 0.00 C

ATOM 2013 CG ASN A 36 68.722 62.485 44.555 1.00 0.00 C

ATOM 2014 OD1 ASN A 36 69.067 63.197 45.506 1.00 0.00 O

ATOM 2015 ND2 ASN A 36 68.936 61.194 44.524 1.00 0.00 N

ATOM 2016 H ASN A 36 69.422 65.065 44.687 1.00 0.00 H

ATOM 2017 HA ASN A 36 67.207 64.940 42.659 1.00 0.00 H

ATOM 2018 1HB ASN A 36 67.127 62.496 43.154 1.00 0.00 H

ATOM 2019 2HB ASN A 36 68.679 62.993 42.494 1.00 0.00 H

ATOM 2020 1HD2 ASN A 36 69.396 60.745 45.291 1.00 0.00 H

ATOM 2021 2HD2 ASN A 36 68.640 60.658 43.735 1.00 0.00 H

ATOM 2022 N ILE A 37 66.523 63.974 45.748 1.00 0.00 N

ATOM 2023 CA ILE A 37 65.439 64.073 46.773 1.00 0.00 C

ATOM 2024 C ILE A 37 65.644 65.366 47.595 1.00 0.00 C

ATOM 2025 O ILE A 37 64.791 65.734 48.393 1.00 0.00 O

ATOM 2026 CB ILE A 37 65.426 62.853 47.711 1.00 0.00 C

ATOM 2027 CG1 ILE A 37 66.684 62.838 48.584 1.00 0.00 C

ATOM 2028 CG2 ILE A 37 65.316 61.566 46.909 1.00 0.00 C

ATOM 2029 CD1 ILE A 37 66.649 61.805 49.687 1.00 0.00 C

ATOM 2030 H ILE A 37 67.430 63.660 46.049 1.00 0.00 H

ATOM 2031 HA ILE A 37 64.479 64.113 46.259 1.00 0.00 H

ATOM 2032 HB ILE A 37 64.574 62.923 48.388 1.00 0.00 H

ATOM 2033 1HG1 ILE A 37 67.557 62.643 47.960 1.00 0.00 H

ATOM 2034 2HG1 ILE A 37 66.822 63.819 49.041 1.00 0.00 H

ATOM 2035 1HG2 ILE A 37 65.309 60.713 47.588 1.00 0.00 H

ATOM 2036 2HG2 ILE A 37 64.394 61.576 46.329 1.00 0.00 H

ATOM 2037 3HG2 ILE A 37 66.167 61.485 46.233 1.00 0.00 H

ATOM 2038 1HD1 ILE A 37 67.575 61.856 50.263 1.00 0.00 H

ATOM 2039 2HD1 ILE A 37 65.801 62.004 50.345 1.00 0.00 H

ATOM 2040 3HD1 ILE A 37 66.547 60.814 49.253 1.00 0.00 H

ATOM 2041 N SER A 38 66.751 66.059 47.384 1.00 0.00 N

ATOM 2042 CA SER A 38 66.934 67.379 47.916 1.00 0.00 C

ATOM 2043 C SER A 38 66.204 68.377 47.015 1.00 0.00 C

ATOM 2044 O SER A 38 66.037 69.520 47.404 1.00 0.00 O

ATOM 2045 CB SER A 38 68.410 67.713 48.008 1.00 0.00 C

ATOM 2046 OG SER A 38 69.007 67.703 46.741 1.00 0.00 O

ATOM 2047 H SER A 38 67.296 65.807 46.582 1.00 0.00 H

ATOM 2048 HA SER A 38 66.505 67.410 48.919 1.00 0.00 H

ATOM 2049 1HB SER A 38 68.531 68.695 48.464 1.00 0.00 H

ATOM 2050 2HB SER A 38 68.906 66.988 48.653 1.00 0.00 H

ATOM 2051 HG SER A 38 69.731 67.074 46.795 1.00 0.00 H

ATOM 2052 N VAL A 39 65.858 67.988 45.785 1.00 0.00 N

ATOM 2053 CA VAL A 39 65.040 68.840 44.909 1.00 0.00 C

ATOM 2054 C VAL A 39 63.537 68.599 45.140 1.00 0.00 C

ATOM 2055 O VAL A 39 62.773 69.541 45.375 1.00 0.00 O

ATOM 2056 CB VAL A 39 65.381 68.568 43.433 1.00 0.00 C

ATOM 2057 CG1 VAL A 39 64.464 69.369 42.519 1.00 0.00 C

ATOM 2058 CG2 VAL A 39 66.839 68.907 43.166 1.00 0.00 C

ATOM 2059 H VAL A 39 65.943 67.013 45.525 1.00 0.00 H

ATOM 2060 HA VAL A 39 65.263 69.883 45.134 1.00 0.00 H

ATOM 2061 HB VAL A 39 65.206 67.514 43.217 1.00 0.00 H

ATOM 2062 1HG1 VAL A 39 64.718 69.165 41.478 1.00 0.00 H

ATOM 2063 2HG1 VAL A 39 63.427 69.084 42.701 1.00 0.00 H

ATOM 2064 3HG1 VAL A 39 64.591 70.432 42.720 1.00 0.00 H

ATOM 2065 1HG2 VAL A 39 67.072 68.711 42.121 1.00 0.00 H

ATOM 2066 2HG2 VAL A 39 67.013 69.960 43.388 1.00 0.00 H

ATOM 2067 3HG2 VAL A 39 67.477 68.292 43.801 1.00 0.00 H

ATOM 2068 N TYR A 40 63.161 67.315 45.252 1.00 0.00 N

ATOM 2069 CA TYR A 40 61.881 66.874 45.797 1.00 0.00 C

ATOM 2070 C TYR A 40 61.547 67.670 47.056 1.00 0.00 C

ATOM 2071 O TYR A 40 62.334 67.670 47.985 1.00 0.00 O

ATOM 2072 CB TYR A 40 61.909 65.375 46.098 1.00 0.00 C

ATOM 2073 CG TYR A 40 60.588 64.825 46.590 1.00 0.00 C

ATOM 2074 CD1 TYR A 40 59.601 64.472 45.680 1.00 0.00 C

ATOM 2075 CD2 TYR A 40 60.362 64.677 47.950 1.00 0.00 C

ATOM 2076 CE1 TYR A 40 58.396 63.973 46.128 1.00 0.00 C

ATOM 2077 CE2 TYR A 40 59.156 64.177 48.399 1.00 0.00 C

ATOM 2078 CZ TYR A 40 58.174 63.825 47.494 1.00 0.00 C

ATOM 2079 OH TYR A 40 56.971 63.326 47.940 1.00 0.00 O

ATOM 2080 H TYR A 40 63.946 66.684 45.390 1.00 0.00 H

ATOM 2081 HA TYR A 40 61.105 67.064 45.054 1.00 0.00 H

ATOM 2082 1HB TYR A 40 62.191 64.826 45.199 1.00 0.00 H

ATOM 2083 2HB TYR A 40 62.665 65.170 46.856 1.00 0.00 H

ATOM 2084 HD1 TYR A 40 59.780 64.590 44.611 1.00 0.00 H

ATOM 2085 HD2 TYR A 40 61.136 64.955 48.665 1.00 0.00 H

ATOM 2086 HE1 TYR A 40 57.621 63.694 45.414 1.00 0.00 H

ATOM 2087 HE2 TYR A 40 58.977 64.059 49.469 1.00 0.00 H

ATOM 2088 HH TYR A 40 56.371 63.230 47.197 1.00 0.00 H

ATOM 2089 N PRO A 41 60.415 68.425 47.068 1.00 0.00 N

ATOM 2090 CA PRO A 41 60.001 69.328 48.159 1.00 0.00 C

ATOM 2091 C PRO A 41 60.439 68.878 49.578 1.00 0.00 C

ATOM 2092 O PRO A 41 59.807 68.028 50.199 1.00 0.00 O

ATOM 2093 CB PRO A 41 58.474 69.309 48.022 1.00 0.00 C

ATOM 2094 CG PRO A 41 58.240 68.980 46.588 1.00 0.00 C

ATOM 2095 CD PRO A 41 59.300 67.963 46.259 1.00 0.00 C

ATOM 2096 HA PRO A 41 60.409 70.333 47.972 1.00 0.00 H

ATOM 2097 1HB PRO A 41 58.045 68.563 48.707 1.00 0.00 H

ATOM 2098 2HB PRO A 41 58.059 70.286 48.310 1.00 0.00 H

ATOM 2099 1HG PRO A 41 57.221 68.591 46.450 1.00 0.00 H

ATOM 2100 2HG PRO A 41 58.320 69.888 45.972 1.00 0.00 H

ATOM 2101 1HD PRO A 41 58.950 66.961 46.548 1.00 0.00 H

ATOM 2102 2HD PRO A 41 59.523 68.001 45.183 1.00 0.00 H

ATOM 2103 N LEU A 42 61.423 69.583 50.127 1.00 0.00 N

ATOM 2104 CA LEU A 42 61.773 69.490 51.562 1.00 0.00 C

ATOM 2105 C LEU A 42 61.428 70.832 52.318 1.00 0.00 C

ATOM 2106 O LEU A 42 62.325 71.627 52.600 1.00 0.00 O

ATOM 2107 CB LEU A 42 63.265 69.166 51.713 1.00 0.00 C

ATOM 2108 CG LEU A 42 63.722 67.834 51.101 1.00 0.00 C

ATOM 2109 CD1 LEU A 42 65.228 67.689 51.270 1.00 0.00 C

ATOM 2110 CD2 LEU A 42 62.983 66.688 51.773 1.00 0.00 C

ATOM 2111 H LEU A 42 61.814 70.335 49.586 1.00 0.00 H

ATOM 2112 HA LEU A 42 61.189 68.686 52.008 1.00 0.00 H

ATOM 2113 1HB LEU A 42 63.842 69.961 51.244 1.00 0.00 H

ATOM 2114 2HB LEU A 42 63.511 69.146 52.775 1.00 0.00 H

ATOM 2115 HG LEU A 42 63.504 67.830 50.034 1.00 0.00 H

ATOM 2116 1HD1 LEU A 42 65.553 66.744 50.837 1.00 0.00 H

ATOM 2117 2HD1 LEU A 42 65.733 68.511 50.764 1.00 0.00 H

ATOM 2118 3HD1 LEU A 42 65.478 67.706 52.331 1.00 0.00 H

ATOM 2119 1HD2 LEU A 42 63.307 65.741 51.338 1.00 0.00 H

ATOM 2120 2HD2 LEU A 42 63.201 66.689 52.841 1.00 0.00 H

ATOM 2121 3HD2 LEU A 42 61.910 66.806 51.622 1.00 0.00 H

ATOM 2122 N PRO A 43 60.132 71.181 52.307 1.00 0.00 N

ATOM 2123 CA PRO A 43 59.576 72.484 52.730 1.00 0.00 C

ATOM 2124 C PRO A 43 60.648 73.536 53.008 1.00 0.00 C

ATOM 2125 O PRO A 43 60.935 73.841 54.164 1.00 0.00 O

ATOM 2126 CB PRO A 43 58.814 72.121 54.008 1.00 0.00 C

ATOM 2127 CG PRO A 43 58.348 70.725 53.776 1.00 0.00 C

ATOM 2128 CD PRO A 43 59.476 70.077 53.017 1.00 0.00 C

ATOM 2129 HA PRO A 43 58.892 72.854 51.952 1.00 0.00 H

ATOM 2130 1HB PRO A 43 59.478 72.211 54.881 1.00 0.00 H

ATOM 2131 2HB PRO A 43 57.984 72.827 54.165 1.00 0.00 H

ATOM 2132 1HG PRO A 43 58.143 70.227 54.736 1.00 0.00 H

ATOM 2133 2HG PRO A 43 57.405 70.727 53.211 1.00 0.00 H

ATOM 2134 1HD PRO A 43 60.199 69.651 53.727 1.00 0.00 H

ATOM 2135 2HD PRO A 43 59.071 69.296 52.358 1.00 0.00 H

ATOM 2136 N MET A 44 61.251 74.050 51.925 1.00 0.00 N

ATOM 2137 CA MET A 44 62.192 75.154 51.921 1.00 0.00 C

ATOM 2138 C MET A 44 63.405 74.879 52.843 1.00 0.00 C

ATOM 2139 O MET A 44 63.778 75.719 53.647 1.00 0.00 O

ATOM 2140 CB MET A 44 61.477 76.437 52.339 1.00 0.00 C

ATOM 2141 CG MET A 44 60.447 76.939 51.333 1.00 0.00 C

ATOM 2142 SD MET A 44 58.998 75.870 51.233 1.00 0.00 S

ATOM 2143 CE MET A 44 58.203 76.233 52.797 1.00 0.00 C

ATOM 2144 H MET A 44 60.926 73.713 51.034 1.00 0.00 H

ATOM 2145 HA MET A 44 62.579 75.275 50.910 1.00 0.00 H

ATOM 2146 1HB MET A 44 60.967 76.277 53.287 1.00 0.00 H

ATOM 2147 2HB MET A 44 62.210 77.232 52.489 1.00 0.00 H

ATOM 2148 1HG MET A 44 60.122 77.938 51.616 1.00 0.00 H

ATOM 2149 2HG MET A 44 60.903 76.995 50.344 1.00 0.00 H

ATOM 2150 1HE MET A 44 57.287 75.647 52.884 1.00 0.00 H

ATOM 2151 2HE MET A 44 58.876 75.978 53.615 1.00 0.00 H

ATOM 2152 3HE MET A 44 57.960 77.295 52.844 1.00 0.00 H

ATOM 2153 N SER A 45 63.999 73.686 52.770 1.00 0.00 N

ATOM 2154 CA SER A 45 64.960 73.234 53.776 1.00 0.00 C

ATOM 2155 C SER A 45 64.490 73.479 55.208 1.00 0.00 C

ATOM 2156 O SER A 45 65.220 74.018 56.042 1.00 0.00 O

ATOM 2157 CB SER A 45 66.290 73.931 53.560 1.00 0.00 C

ATOM 2158 OG SER A 45 66.826 73.609 52.306 1.00 0.00 O

ATOM 2159 H SER A 45 63.453 72.978 52.299 1.00 0.00 H

ATOM 2160 HA SER A 45 65.099 72.158 53.664 1.00 0.00 H

ATOM 2161 1HB SER A 45 66.150 75.009 53.630 1.00 0.00 H

ATOM 2162 2HB SER A 45 66.986 73.638 54.344 1.00 0.00 H

ATOM 2163 HG SER A 45 66.935 72.655 52.303 1.00 0.00 H

ATOM 2164 N THR A 46 63.238 73.116 55.454 1.00 0.00 N

ATOM 2165 CA THR A 46 62.517 73.395 56.690 1.00 0.00 C

ATOM 2166 C THR A 46 62.310 74.865 57.060 1.00 0.00 C

ATOM 2167 O THR A 46 62.725 75.311 58.139 1.00 0.00 O

ATOM 2168 CB THR A 46 63.230 72.698 57.865 1.00 0.00 C

ATOM 2169 OG1 THR A 46 63.583 71.361 57.485 1.00 0.00 O

ATOM 2170 CG2 THR A 46 62.324 72.652 59.086 1.00 0.00 C

ATOM 2171 H THR A 46 62.711 72.740 54.674 1.00 0.00 H

ATOM 2172 HA THR A 46 61.506 72.997 56.598 1.00 0.00 H

ATOM 2173 HB THR A 46 64.139 73.244 58.112 1.00 0.00 H

ATOM 2174 HG1 THR A 46 62.788 70.872 57.257 1.00 0.00 H

ATOM 2175 1HG2 THR A 46 62.845 72.156 59.905 1.00 0.00 H

ATOM 2176 2HG2 THR A 46 62.064 73.667 59.384 1.00 0.00 H

ATOM 2177 3HG2 THR A 46 61.417 72.099 58.846 1.00 0.00 H

ATOM 2178 N LYS A 47 61.704 75.620 56.144 1.00 0.00 N

ATOM 2179 CA LYS A 47 61.452 77.075 56.265 1.00 0.00 C

ATOM 2180 C LYS A 47 62.770 77.847 56.442 1.00 0.00 C

ATOM 2181 O LYS A 47 62.914 78.618 57.394 1.00 0.00 O

ATOM 2182 CB LYS A 47 60.512 77.366 57.437 1.00 0.00 C

ATOM 2183 CG LYS A 47 59.134 76.732 57.311 1.00 0.00 C

ATOM 2184 CD LYS A 47 58.242 77.110 58.482 1.00 0.00 C

ATOM 2185 CE LYS A 47 56.880 76.438 58.383 1.00 0.00 C

ATOM 2186 NZ LYS A 47 56.015 76.757 59.552 1.00 0.00 N

ATOM 2187 H LYS A 47 61.672 75.212 55.216 1.00 0.00 H

ATOM 2188 HA LYS A 47 60.978 77.422 55.346 1.00 0.00 H

ATOM 2189 1HB LYS A 47 60.964 77.006 58.362 1.00 0.00 H

ATOM 2190 2HB LYS A 47 60.378 78.443 57.538 1.00 0.00 H

ATOM 2191 1HG LYS A 47 58.664 77.065 56.385 1.00 0.00 H

ATOM 2192 2HG LYS A 47 59.234 75.647 57.276 1.00 0.00 H

ATOM 2193 1HD LYS A 47 58.718 76.810 59.416 1.00 0.00 H

ATOM 2194 2HD LYS A 47 58.102 78.191 58.499 1.00 0.00 H

ATOM 2195 1HE LYS A 47 56.378 76.766 57.474 1.00 0.00 H

ATOM 2196 2HE LYS A 47 57.011 75.356 58.331 1.00 0.00 H

ATOM 2197 1HZ LYS A 47 55.124 76.294 59.448 1.00 0.00 H

ATOM 2198 2HZ LYS A 47 56.463 76.441 60.400 1.00 0.00 H

ATOM 2199 3HZ LYS A 47 55.870 77.756 59.601 1.00 0.00 H

ATOM 2200 N ARG A 48 63.674 77.721 55.478 1.00 0.00 N

ATOM 2201 CA ARG A 48 64.924 78.485 55.465 1.00 0.00 C

ATOM 2202 C ARG A 48 64.938 79.304 54.176 1.00 0.00 C

ATOM 2203 O ARG A 48 64.038 80.105 53.951 1.00 0.00 O

ATOM 2204 CB ARG A 48 66.142 77.578 55.525 1.00 0.00 C

ATOM 2205 CG ARG A 48 66.353 76.877 56.859 1.00 0.00 C

ATOM 2206 CD ARG A 48 67.573 76.030 56.849 1.00 0.00 C

ATOM 2207 NE ARG A 48 67.787 75.374 58.128 1.00 0.00 N

ATOM 2208 CZ ARG A 48 68.799 74.521 58.390 1.00 0.00 C

ATOM 2209 NH1 ARG A 48 69.679 74.238 57.455 1.00 0.00 N

ATOM 2210 NH2 ARG A 48 68.907 73.974 59.587 1.00 0.00 N

ATOM 2211 H ARG A 48 63.468 77.134 54.676 1.00 0.00 H

ATOM 2212 HA ARG A 48 64.943 79.133 56.342 1.00 0.00 H

ATOM 2213 1HB ARG A 48 66.063 76.809 54.760 1.00 0.00 H

ATOM 2214 2HB ARG A 48 67.041 78.159 55.314 1.00 0.00 H

ATOM 2215 1HG ARG A 48 66.458 77.621 57.649 1.00 0.00 H

ATOM 2216 2HG ARG A 48 65.495 76.239 57.072 1.00 0.00 H

ATOM 2217 1HD ARG A 48 67.476 75.263 56.081 1.00 0.00 H

ATOM 2218 2HD ARG A 48 68.442 76.651 56.634 1.00 0.00 H

ATOM 2219 HE ARG A 48 67.130 75.567 58.871 1.00 0.00 H

ATOM 2220 1HH1 ARG A 48 69.595 74.658 56.539 1.00 0.00 H

ATOM 2221 2HH1 ARG A 48 70.436 73.601 57.652 1.00 0.00 H

ATOM 2222 1HH2 ARG A 48 68.230 74.192 60.307 1.00 0.00 H

ATOM 2223 2HH2 ARG A 48 69.664 73.338 59.785 1.00 0.00 H

ATOM 2224 N ARG A 49 65.879 79.029 53.261 1.00 0.00 N

ATOM 2225 CA ARG A 49 65.808 79.623 51.915 1.00 0.00 C

ATOM 2226 C ARG A 49 65.616 78.521 50.906 1.00 0.00 C

ATOM 2227 O ARG A 49 65.667 78.795 49.712 1.00 0.00 O

ATOM 2228 CB ARG A 49 67.072 80.402 51.579 1.00 0.00 C

ATOM 2229 CG ARG A 49 67.325 81.618 52.456 1.00 0.00 C

ATOM 2230 CD ARG A 49 68.551 82.347 52.045 1.00 0.00 C

ATOM 2231 NE ARG A 49 68.389 82.997 50.754 1.00 0.00 N

ATOM 2232 CZ ARG A 49 69.369 83.646 50.094 1.00 0.00 C

ATOM 2233 NH1 ARG A 49 70.575 83.717 50.616 1.00 0.00 N

ATOM 2234 NH2 ARG A 49 69.119 84.205 48.923 1.00 0.00 N

ATOM 2235 H ARG A 49 66.399 78.172 53.385 1.00 0.00 H

ATOM 2236 HA ARG A 49 64.965 80.315 51.886 1.00 0.00 H

ATOM 2237 1HB ARG A 49 67.937 79.747 51.664 1.00 0.00 H

ATOM 2238 2HB ARG A 49 67.023 80.747 50.546 1.00 0.00 H

ATOM 2239 1HG ARG A 49 66.479 82.302 52.383 1.00 0.00 H

ATOM 2240 2HG ARG A 49 67.447 81.300 53.493 1.00 0.00 H

ATOM 2241 1HD ARG A 49 68.786 83.111 52.784 1.00 0.00 H

ATOM 2242 2HD ARG A 49 69.382 81.647 51.969 1.00 0.00 H

ATOM 2243 HE ARG A 49 67.476 82.963 50.322 1.00 0.00 H

ATOM 2244 1HH1 ARG A 49 70.764 83.290 51.510 1.00 0.00 H

ATOM 2245 2HH1 ARG A 49 71.308 84.203 50.120 1.00 0.00 H

ATOM 2246 1HH2 ARG A 49 68.193 84.149 48.524 1.00 0.00 H

ATOM 2247 2HH2 ARG A 49 69.854 84.689 48.429 1.00 0.00 H

ATOM 2248 N GLY A 50 65.535 77.261 51.343 1.00 0.00 N

ATOM 2249 CA GLY A 50 65.629 76.159 50.418 1.00 0.00 C

ATOM 2250 C GLY A 50 67.014 76.129 49.783 1.00 0.00 C

ATOM 2251 O GLY A 50 67.988 76.550 50.416 1.00 0.00 O

ATOM 2252 H GLY A 50 65.735 77.086 52.319 1.00 0.00 H

ATOM 2253 1HA GLY A 50 65.433 75.224 50.944 1.00 0.00 H

ATOM 2254 2HA GLY A 50 64.863 76.262 49.650 1.00 0.00 H

ATOM 2255 N ALA A 51 67.086 75.779 48.502 1.00 0.00 N

ATOM 2256 CA ALA A 51 68.350 75.958 47.796 1.00 0.00 C

ATOM 2257 C ALA A 51 68.519 77.378 47.279 1.00 0.00 C

ATOM 2258 O ALA A 51 69.575 77.997 47.434 1.00 0.00 O

ATOM 2259 CB ALA A 51 68.705 74.993 46.690 1.00 0.00 C

ATOM 2260 H ALA A 51 66.271 75.600 47.944 1.00 0.00 H

ATOM 2261 HA ALA A 51 69.159 75.862 48.520 1.00 0.00 H

ATOM 2262 1HB ALA A 51 69.672 75.261 46.267 1.00 0.00 H

ATOM 2263 2HB ALA A 51 68.752 73.980 47.091 1.00 0.00 H

ATOM 2264 3HB ALA A 51 67.943 75.036 45.911 1.00 0.00 H

ATOM 2265 N ARG A 52 67.439 77.919 46.708 1.00 0.00 N

ATOM 2266 CA ARG A 52 67.407 79.286 46.217 1.00 0.00 C

ATOM 2267 C ARG A 52 66.028 79.909 46.152 1.00 0.00 C

ATOM 2268 O ARG A 52 65.780 80.843 45.398 1.00 0.00 O

ATOM 2269 CB ARG A 52 68.028 79.345 44.831 1.00 0.00 C

ATOM 2270 CG ARG A 52 67.270 78.581 43.757 1.00 0.00 C

ATOM 2271 CD ARG A 52 67.955 78.657 42.441 1.00 0.00 C

ATOM 2272 NE ARG A 52 67.200 77.982 41.397 1.00 0.00 N

ATOM 2273 CZ ARG A 52 67.586 77.894 40.110 1.00 0.00 C

ATOM 2274 NH1 ARG A 52 68.715 78.443 39.723 1.00 0.00 N

ATOM 2275 NH2 ARG A 52 66.828 77.257 39.235 1.00 0.00 N

ATOM 2276 H ARG A 52 66.613 77.349 46.677 1.00 0.00 H

ATOM 2277 HA ARG A 52 67.989 79.911 46.896 1.00 0.00 H

ATOM 2278 1HB ARG A 52 68.099 80.383 44.507 1.00 0.00 H

ATOM 2279 2HB ARG A 52 69.042 78.944 44.868 1.00 0.00 H

ATOM 2280 1HG ARG A 52 67.192 77.532 44.044 1.00 0.00 H

ATOM 2281 2HG ARG A 52 66.270 79.001 43.648 1.00 0.00 H

ATOM 2282 1HD ARG A 52 68.074 79.702 42.153 1.00 0.00 H

ATOM 2283 2HD ARG A 52 68.933 78.187 42.513 1.00 0.00 H

ATOM 2284 HE ARG A 52 66.324 77.548 41.656 1.00 0.00 H

ATOM 2285 1HH1 ARG A 52 69.296 78.930 40.392 1.00 0.00 H

ATOM 2286 2HH1 ARG A 52 69.005 78.378 38.757 1.00 0.00 H

ATOM 2287 1HH2 ARG A 52 65.958 76.835 39.532 1.00 0.00 H

ATOM 2288 2HH2 ARG A 52 67.116 77.191 38.269 1.00 0.00 H

ATOM 2289 N ILE A 53 65.118 79.402 46.984 1.00 0.00 N

ATOM 2290 CA ILE A 53 63.759 79.940 47.116 1.00 0.00 C

ATOM 2291 C ILE A 53 63.734 81.288 47.833 1.00 0.00 C

ATOM 2292 O ILE A 53 63.037 82.232 47.485 1.00 0.00 O

ATOM 2293 CB ILE A 53 62.853 78.950 47.871 1.00 0.00 C

ATOM 2294 CG1 ILE A 53 62.619 77.693 47.030 1.00 0.00 C

ATOM 2295 CG2 ILE A 53 61.529 79.609 48.229 1.00 0.00 C

ATOM 2296 CD1 ILE A 53 61.961 76.563 47.792 1.00 0.00 C

ATOM 2297 H ILE A 53 65.442 78.734 47.657 1.00 0.00 H

ATOM 2298 HA ILE A 53 63.349 80.092 46.118 1.00 0.00 H

ATOM 2299 HB ILE A 53 63.349 78.630 48.787 1.00 0.00 H

ATOM 2300 1HG1 ILE A 53 61.993 77.939 46.174 1.00 0.00 H

ATOM 2301 2HG1 ILE A 53 63.571 77.332 46.643 1.00 0.00 H

ATOM 2302 1HG2 ILE A 53 60.901 78.894 48.762 1.00 0.00 H

ATOM 2303 2HG2 ILE A 53 61.715 80.474 48.864 1.00 0.00 H

ATOM 2304 3HG2 ILE A 53 61.023 79.929 47.319 1.00 0.00 H

ATOM 2305 1HD1 ILE A 53 61.829 75.707 47.130 1.00 0.00 H

ATOM 2306 2HD1 ILE A 53 62.590 76.276 48.635 1.00 0.00 H

ATOM 2307 3HD1 ILE A 53 60.990 76.891 48.158 1.00 0.00 H

ATOM 2308 N SER A 54 64.565 81.365 48.871 1.00 0.00 N

ATOM 2309 CA SER A 54 64.637 82.472 49.765 1.00 0.00 C

ATOM 2310 C SER A 54 63.360 82.819 50.517 1.00 0.00 C

ATOM 2311 O SER A 54 63.143 83.994 50.799 1.00 0.00 O

ATOM 2312 CB SER A 54 65.094 83.684 48.978 1.00 0.00 C

ATOM 2313 OG SER A 54 66.361 83.471 48.417 1.00 0.00 O

ATOM 2314 H SER A 54 65.031 80.508 49.137 1.00 0.00 H

ATOM 2315 HA SER A 54 65.367 82.242 50.543 1.00 0.00 H

ATOM 2316 1HB SER A 54 64.375 83.897 48.187 1.00 0.00 H

ATOM 2317 2HB SER A 54 65.126 84.553 49.633 1.00 0.00 H

ATOM 2318 HG SER A 54 66.215 82.944 47.628 1.00 0.00 H

ATOM 2319 N GLY A 55 62.674 81.791 51.005 1.00 0.00 N

ATOM 2320 CA GLY A 55 61.583 81.981 51.936 1.00 0.00 C

ATOM 2321 C GLY A 55 60.723 80.843 52.404 1.00 0.00 C

ATOM 2322 O GLY A 55 61.221 79.791 52.768 1.00 0.00 O

ATOM 2323 H GLY A 55 63.061 80.860 50.996 1.00 0.00 H

ATOM 2324 1HA GLY A 55 61.964 82.416 52.860 1.00 0.00 H

ATOM 2325 2HA GLY A 55 60.869 82.690 51.519 1.00 0.00 H

ATOM 2326 N ARG A 56 59.428 81.083 52.516 1.00 0.00 N

ATOM 2327 CA ARG A 56 58.503 80.089 53.049 1.00 0.00 C

ATOM 2328 C ARG A 56 57.257 79.922 52.122 1.00 0.00 C

ATOM 2329 O ARG A 56 56.180 79.575 52.601 1.00 0.00 O

ATOM 2330 CB ARG A 56 58.057 80.488 54.448 1.00 0.00 C

ATOM 2331 CG ARG A 56 59.169 80.547 55.482 1.00 0.00 C

ATOM 2332 CD ARG A 56 58.660 80.961 56.816 1.00 0.00 C

ATOM 2333 NE ARG A 56 59.727 81.042 57.801 1.00 0.00 N

ATOM 2334 CZ ARG A 56 59.555 81.418 59.083 1.00 0.00 C

ATOM 2335 NH1 ARG A 56 58.358 81.746 59.519 1.00 0.00 N

ATOM 2336 NH2 ARG A 56 60.591 81.460 59.904 1.00 0.00 N

ATOM 2337 H ARG A 56 59.129 82.024 52.301 1.00 0.00 H

ATOM 2338 HA ARG A 56 59.019 79.130 53.104 1.00 0.00 H

ATOM 2339 1HB ARG A 56 57.588 81.470 54.414 1.00 0.00 H

ATOM 2340 2HB ARG A 56 57.309 79.781 54.809 1.00 0.00 H

ATOM 2341 1HG ARG A 56 59.628 79.562 55.580 1.00 0.00 H

ATOM 2342 2HG ARG A 56 59.924 81.267 55.166 1.00 0.00 H

ATOM 2343 1HD ARG A 56 58.193 81.941 56.738 1.00 0.00 H

ATOM 2344 2HD ARG A 56 57.926 80.236 57.165 1.00 0.00 H

ATOM 2345 HE ARG A 56 60.662 80.798 57.504 1.00 0.00 H

ATOM 2346 1HH1 ARG A 56 57.567 81.713 58.892 1.00 0.00 H

ATOM 2347 2HH1 ARG A 56 58.230 82.028 60.479 1.00 0.00 H

ATOM 2348 1HH2 ARG A 56 61.511 81.209 59.569 1.00 0.00 H

ATOM 2349 2HH2 ARG A 56 60.462 81.743 60.864 1.00 0.00 H

ATOM 2350 N LYS A 57 57.456 80.157 50.826 1.00 0.00 N

ATOM 2351 CA LYS A 57 56.460 79.636 49.856 1.00 0.00 C

ATOM 2352 C LYS A 57 57.180 78.433 49.310 1.00 0.00 C

ATOM 2353 O LYS A 57 58.403 78.423 49.197 1.00 0.00 O

ATOM 2354 CB LYS A 57 56.094 80.632 48.755 1.00 0.00 C

ATOM 2355 CG LYS A 57 55.382 81.883 49.251 1.00 0.00 C

ATOM 2356 CD LYS A 57 55.025 82.811 48.099 1.00 0.00 C

ATOM 2357 CE LYS A 57 54.327 84.069 48.593 1.00 0.00 C

ATOM 2358 NZ LYS A 57 53.982 84.990 47.477 1.00 0.00 N

ATOM 2359 H LYS A 57 58.395 79.999 50.504 1.00 0.00 H

ATOM 2360 HA LYS A 57 55.541 79.402 50.394 1.00 0.00 H

ATOM 2361 1HB LYS A 57 56.995 80.946 48.232 1.00 0.00 H

ATOM 2362 2HB LYS A 57 55.445 80.146 48.025 1.00 0.00 H

ATOM 2363 1HG LYS A 57 54.467 81.599 49.774 1.00 0.00 H

ATOM 2364 2HG LYS A 57 56.027 82.416 49.949 1.00 0.00 H

ATOM 2365 1HD LYS A 57 55.933 83.094 47.565 1.00 0.00 H

ATOM 2366 2HD LYS A 57 54.366 82.289 47.403 1.00 0.00 H

ATOM 2367 1HE LYS A 57 53.413 83.794 49.117 1.00 0.00 H

ATOM 2368 2HE LYS A 57 54.978 84.593 49.292 1.00 0.00 H

ATOM 2369 1HZ LYS A 57 53.522 85.810 47.845 1.00 0.00 H

ATOM 2370 2HZ LYS A 57 54.826 85.266 46.993 1.00 0.00 H

ATOM 2371 3HZ LYS A 57 53.365 84.520 46.829 1.00 0.00 H

ATOM 2372 N MET A 58 56.420 77.361 49.090 1.00 0.00 N

ATOM 2373 CA MET A 58 56.927 76.193 48.412 1.00 0.00 C

ATOM 2374 C MET A 58 56.803 76.434 46.921 1.00 0.00 C

ATOM 2375 O MET A 58 55.891 77.132 46.476 1.00 0.00 O

ATOM 2376 CB MET A 58 56.173 74.937 48.839 1.00 0.00 C

ATOM 2377 CG MET A 58 56.704 73.646 48.233 1.00 0.00 C

ATOM 2378 SD MET A 58 55.857 72.183 48.864 1.00 0.00 S

ATOM 2379 CE MET A 58 56.610 72.024 50.479 1.00 0.00 C

ATOM 2380 H MET A 58 55.423 77.524 49.033 1.00 0.00 H

ATOM 2381 HA MET A 58 57.977 76.068 48.676 1.00 0.00 H

ATOM 2382 1HB MET A 58 56.212 74.839 49.923 1.00 0.00 H

ATOM 2383 2HB MET A 58 55.121 75.030 48.557 1.00 0.00 H

ATOM 2384 1HG MET A 58 56.583 73.675 47.152 1.00 0.00 H

ATOM 2385 2HG MET A 58 57.766 73.551 48.455 1.00 0.00 H

ATOM 2386 1HE MET A 58 56.189 71.160 50.994 1.00 0.00 H

ATOM 2387 2HE MET A 58 57.688 71.891 50.367 1.00 0.00 H

ATOM 2388 3HE MET A 58 56.416 72.925 51.062 1.00 0.00 H

ATOM 2389 N SER A 59 57.664 75.754 46.144 1.00 0.00 N

ATOM 2390 CA SER A 59 57.570 75.745 44.712 1.00 0.00 C

ATOM 2391 C SER A 59 57.779 77.143 44.083 1.00 0.00 C

ATOM 2392 O SER A 59 56.854 77.711 43.506 1.00 0.00 O

ATOM 2393 CB SER A 59 56.218 75.189 44.313 1.00 0.00 C

ATOM 2394 OG SER A 59 56.042 73.889 44.805 1.00 0.00 O

ATOM 2395 H SER A 59 58.233 75.022 46.539 1.00 0.00 H

ATOM 2396 HA SER A 59 58.358 75.101 44.318 1.00 0.00 H

ATOM 2397 1HB SER A 59 55.428 75.836 44.700 1.00 0.00 H

ATOM 2398 2HB SER A 59 56.132 75.184 43.227 1.00 0.00 H

ATOM 2399 HG SER A 59 55.094 73.752 44.861 1.00 0.00 H

ATOM 2400 N GLN A 60 58.994 77.661 44.195 1.00 0.00 N

ATOM 2401 CA GLN A 60 59.308 78.959 43.620 1.00 0.00 C

ATOM 2402 C GLN A 60 60.563 78.931 42.729 1.00 0.00 C

ATOM 2403 O GLN A 60 60.455 79.232 41.553 1.00 0.00 O

ATOM 2404 CB GLN A 60 59.491 79.987 44.741 1.00 0.00 C

ATOM 2405 CG GLN A 60 58.277 80.147 45.640 1.00 0.00 C

ATOM 2406 CD GLN A 60 57.066 80.670 44.891 1.00 0.00 C

ATOM 2407 OE1 GLN A 60 57.123 81.718 44.243 1.00 0.00 O

ATOM 2408 NE2 GLN A 60 55.960 79.938 44.974 1.00 0.00 N

ATOM 2409 H GLN A 60 59.726 77.032 44.487 1.00 0.00 H

ATOM 2410 HA GLN A 60 58.477 79.267 42.987 1.00 0.00 H

ATOM 2411 1HB GLN A 60 60.337 79.700 45.364 1.00 0.00 H

ATOM 2412 2HB GLN A 60 59.719 80.960 44.308 1.00 0.00 H

ATOM 2413 1HG GLN A 60 58.023 79.177 46.068 1.00 0.00 H

ATOM 2414 2HG GLN A 60 58.518 80.853 46.434 1.00 0.00 H

ATOM 2415 1HE2 GLN A 60 55.129 80.233 44.501 1.00 0.00 H

ATOM 2416 2HE2 GLN A 60 55.957 79.094 45.511 1.00 0.00 H

ATOM 2417 N GLY A 61 61.688 78.495 43.284 1.00 0.00 N

ATOM 2418 CA GLY A 61 62.979 78.479 42.563 1.00 0.00 C

ATOM 2419 C GLY A 61 63.903 77.248 42.801 1.00 0.00 C

ATOM 2420 O GLY A 61 64.710 76.867 41.968 1.00 0.00 O

ATOM 2421 H GLY A 61 61.669 78.357 44.277 1.00 0.00 H

ATOM 2422 1HA GLY A 61 62.797 78.530 41.490 1.00 0.00 H

ATOM 2423 2HA GLY A 61 63.558 79.361 42.834 1.00 0.00 H

ATOM 2424 N ALA A 62 63.683 76.571 43.921 1.00 0.00 N

ATOM 2425 CA ALA A 62 64.212 75.222 44.112 1.00 0.00 C

ATOM 2426 C ALA A 62 62.958 74.310 44.080 1.00 0.00 C

ATOM 2427 O ALA A 62 61.884 74.868 44.199 1.00 0.00 O

ATOM 2428 CB ALA A 62 65.041 75.126 45.385 1.00 0.00 C

ATOM 2429 H ALA A 62 62.752 76.728 44.271 1.00 0.00 H

ATOM 2430 HA ALA A 62 64.855 74.987 43.264 1.00 0.00 H

ATOM 2431 1HB ALA A 62 65.419 74.109 45.499 1.00 0.00 H

ATOM 2432 2HB ALA A 62 65.881 75.821 45.325 1.00 0.00 H

ATOM 2433 3HB ALA A 62 64.422 75.381 46.243 1.00 0.00 H

ATOM 2434 N PHE A 63 63.105 73.046 43.667 1.00 0.00 N

ATOM 2435 CA PHE A 63 61.941 72.268 43.176 1.00 0.00 C

ATOM 2436 C PHE A 63 61.445 72.970 41.906 1.00 0.00 C

ATOM 2437 O PHE A 63 62.095 72.771 40.909 1.00 0.00 O

ATOM 2438 CB PHE A 63 60.826 72.190 44.217 1.00 0.00 C

ATOM 2439 CG PHE A 63 59.657 71.347 43.791 1.00 0.00 C

ATOM 2440 CD1 PHE A 63 59.846 70.046 43.350 1.00 0.00 C

ATOM 2441 CD2 PHE A 63 58.368 71.851 43.830 1.00 0.00 C

ATOM 2442 CE1 PHE A 63 58.773 69.270 42.959 1.00 0.00 C

ATOM 2443 CE2 PHE A 63 57.291 71.079 43.441 1.00 0.00 C

ATOM 2444 CZ PHE A 63 57.496 69.786 43.004 1.00 0.00 C

ATOM 2445 H PHE A 63 63.931 72.844 43.129 1.00 0.00 H

ATOM 2446 HA PHE A 63 62.271 71.250 42.961 1.00 0.00 H

ATOM 2447 1HB PHE A 63 61.221 71.778 45.145 1.00 0.00 H

ATOM 2448 2HB PHE A 63 60.460 73.192 44.435 1.00 0.00 H

ATOM 2449 HD1 PHE A 63 60.858 69.638 43.315 1.00 0.00 H

ATOM 2450 HD2 PHE A 63 58.205 72.874 44.176 1.00 0.00 H

ATOM 2451 HE1 PHE A 63 58.937 68.249 42.613 1.00 0.00 H

ATOM 2452 HE2 PHE A 63 56.282 71.488 43.477 1.00 0.00 H

ATOM 2453 HZ PHE A 63 56.649 69.175 42.695 1.00 0.00 H

ATOM 2454 N LYS A 64 60.313 73.682 41.900 1.00 0.00 N

ATOM 2455 CA LYS A 64 59.737 74.219 40.653 1.00 0.00 C

ATOM 2456 C LYS A 64 60.547 75.000 39.592 1.00 0.00 C

ATOM 2457 O LYS A 64 60.086 75.087 38.479 1.00 0.00 O

ATOM 2458 CB LYS A 64 58.565 75.111 41.065 1.00 0.00 C

ATOM 2459 CG LYS A 64 57.792 75.712 39.899 1.00 0.00 C

ATOM 2460 CD LYS A 64 56.524 76.404 40.375 1.00 0.00 C

ATOM 2461 CE LYS A 64 55.821 77.121 39.229 1.00 0.00 C

ATOM 2462 NZ LYS A 64 55.443 76.185 38.137 1.00 0.00 N

ATOM 2463 H LYS A 64 59.817 73.718 42.777 1.00 0.00 H

ATOM 2464 HA LYS A 64 59.388 73.384 40.045 1.00 0.00 H

ATOM 2465 1HB LYS A 64 57.864 74.533 41.668 1.00 0.00 H

ATOM 2466 2HB LYS A 64 58.930 75.932 41.682 1.00 0.00 H

ATOM 2467 1HG LYS A 64 58.422 76.439 39.382 1.00 0.00 H

ATOM 2468 2HG LYS A 64 57.525 74.925 39.195 1.00 0.00 H

ATOM 2469 1HD LYS A 64 55.846 75.667 40.802 1.00 0.00 H

ATOM 2470 2HD LYS A 64 56.774 77.134 41.146 1.00 0.00 H

ATOM 2471 1HE LYS A 64 54.921 77.606 39.602 1.00 0.00 H

ATOM 2472 2HE LYS A 64 56.479 77.888 38.821 1.00 0.00 H

ATOM 2473 1HZ LYS A 64 54.981 76.696 37.400 1.00 0.00 H

ATOM 2474 2HZ LYS A 64 56.275 75.741 37.769 1.00 0.00 H

ATOM 2475 3HZ LYS A 64 54.819 75.479 38.499 1.00 0.00 H

ATOM 2476 N LYS A 65 61.793 75.356 39.843 1.00 0.00 N

ATOM 2477 CA LYS A 65 62.667 75.732 38.722 1.00 0.00 C

ATOM 2478 C LYS A 65 63.986 74.972 38.630 1.00 0.00 C

ATOM 2479 O LYS A 65 64.757 75.373 37.782 1.00 0.00 O

ATOM 2480 CB LYS A 65 62.966 77.231 38.795 1.00 0.00 C

ATOM 2481 CG LYS A 65 61.745 78.124 38.623 1.00 0.00 C

ATOM 2482 CD LYS A 65 61.129 77.959 37.242 1.00 0.00 C

ATOM 2483 CE LYS A 65 59.857 78.783 37.099 1.00 0.00 C

ATOM 2484 NZ LYS A 65 59.200 78.570 35.782 1.00 0.00 N

ATOM 2485 H LYS A 65 62.182 75.068 40.725 1.00 0.00 H

ATOM 2486 HA LYS A 65 62.146 75.515 37.789 1.00 0.00 H

ATOM 2487 1HB LYS A 65 63.421 77.466 39.757 1.00 0.00 H

ATOM 2488 2HB LYS A 65 63.686 77.496 38.020 1.00 0.00 H

ATOM 2489 1HG LYS A 65 60.997 77.870 39.377 1.00 0.00 H

ATOM 2490 2HG LYS A 65 62.034 79.166 38.761 1.00 0.00 H

ATOM 2491 1HD LYS A 65 61.845 78.278 36.483 1.00 0.00 H

ATOM 2492 2HD LYS A 65 60.890 76.910 37.073 1.00 0.00 H

ATOM 2493 1HE LYS A 65 59.158 78.510 37.889 1.00 0.00 H

ATOM 2494 2HE LYS A 65 60.095 79.841 37.206 1.00 0.00 H

ATOM 2495 1HZ LYS A 65 58.363 79.133 35.726 1.00 0.00 H

ATOM 2496 2HZ LYS A 65 59.834 78.837 35.042 1.00 0.00 H

ATOM 2497 3HZ LYS A 65 58.957 77.594 35.679 1.00 0.00 H

ATOM 2498 N VAL A 66 64.087 73.848 39.325 1.00 0.00 N

ATOM 2499 CA VAL A 66 65.207 72.873 39.206 1.00 0.00 C

ATOM 2500 C VAL A 66 64.774 71.515 38.642 1.00 0.00 C

ATOM 2501 O VAL A 66 65.262 71.139 37.604 1.00 0.00 O

ATOM 2502 CB VAL A 66 65.856 72.644 40.584 1.00 0.00 C

ATOM 2503 CG1 VAL A 66 66.950 71.591 40.489 1.00 0.00 C

ATOM 2504 CG2 VAL A 66 66.413 73.954 41.117 1.00 0.00 C

ATOM 2505 H VAL A 66 63.310 73.591 39.917 1.00 0.00 H

ATOM 2506 HA VAL A 66 65.956 73.286 38.529 1.00 0.00 H

ATOM 2507 HB VAL A 66 65.101 72.262 41.272 1.00 0.00 H

ATOM 2508 1HG1 VAL A 66 67.398 71.442 41.472 1.00 0.00 H

ATOM 2509 2HG1 VAL A 66 66.522 70.652 40.139 1.00 0.00 H

ATOM 2510 3HG1 VAL A 66 67.716 71.924 39.789 1.00 0.00 H

ATOM 2511 1HG2 VAL A 66 66.870 73.785 42.092 1.00 0.00 H

ATOM 2512 2HG2 VAL A 66 67.164 74.339 40.426 1.00 0.00 H

ATOM 2513 3HG2 VAL A 66 65.606 74.680 41.217 1.00 0.00 H

ATOM 2514 N LEU A 67 63.762 70.892 39.243 1.00 0.00 N

ATOM 2515 CA LEU A 67 63.086 69.741 38.632 1.00 0.00 C

ATOM 2516 C LEU A 67 62.374 70.174 37.387 1.00 0.00 C

ATOM 2517 O LEU A 67 62.503 69.421 36.463 1.00 0.00 O

ATOM 2518 CB LEU A 67 62.083 69.109 39.607 1.00 0.00 C

ATOM 2519 CG LEU A 67 61.255 67.945 39.047 1.00 0.00 C

ATOM 2520 CD1 LEU A 67 62.190 66.834 38.589 1.00 0.00 C

ATOM 2521 CD2 LEU A 67 60.294 67.446 40.113 1.00 0.00 C

ATOM 2522 H LEU A 67 63.249 71.445 39.910 1.00 0.00 H

ATOM 2523 HA LEU A 67 63.837 68.994 38.380 1.00 0.00 H

ATOM 2524 1HB LEU A 67 62.626 68.741 40.474 1.00 0.00 H

ATOM 2525 2HB LEU A 67 61.388 69.880 39.939 1.00 0.00 H

ATOM 2526 HG LEU A 67 60.691 68.284 38.178 1.00 0.00 H

ATOM 2527 1HD1 LEU A 67 61.601 66.005 38.191 1.00 0.00 H

ATOM 2528 2HD1 LEU A 67 62.853 67.212 37.812 1.00 0.00 H

ATOM 2529 3HD1 LEU A 67 62.781 66.483 39.434 1.00 0.00 H

ATOM 2530 1HD2 LEU A 67 59.705 66.618 39.717 1.00 0.00 H

ATOM 2531 2HD2 LEU A 67 60.859 67.106 40.982 1.00 0.00 H

ATOM 2532 3HD2 LEU A 67 59.627 68.255 40.409 1.00 0.00 H

ATOM 2533 N GLU A 68 61.595 71.243 37.431 1.00 0.00 N

ATOM 2534 CA GLU A 68 60.806 71.667 36.268 1.00 0.00 C

ATOM 2535 C GLU A 68 61.736 71.869 35.073 1.00 0.00 C

ATOM 2536 O GLU A 68 61.531 71.233 34.032 1.00 0.00 O

ATOM 2537 CB GLU A 68 60.044 72.959 36.566 1.00 0.00 C

ATOM 2538 CG GLU A 68 59.140 73.431 35.435 1.00 0.00 C

ATOM 2539 CD GLU A 68 58.390 74.691 35.772 1.00 0.00 C

ATOM 2540 OE1 GLU A 68 58.676 75.706 35.185 1.00 0.00 O

ATOM 2541 OE2 GLU A 68 57.530 74.637 36.620 1.00 0.00 O

ATOM 2542 H GLU A 68 61.422 71.787 38.259 1.00 0.00 H

ATOM 2543 HA GLU A 68 60.082 70.886 36.037 1.00 0.00 H

ATOM 2544 1HB GLU A 68 59.421 72.819 37.452 1.00 0.00 H

ATOM 2545 2HB GLU A 68 60.749 73.759 36.786 1.00 0.00 H

ATOM 2546 1HG GLU A 68 59.749 73.612 34.550 1.00 0.00 H

ATOM 2547 2HG GLU A 68 58.429 72.641 35.199 1.00 0.00 H

ATOM 2548 N LYS A 69 62.799 72.646 35.284 1.00 0.00 N

ATOM 2549 CA LYS A 69 63.866 72.757 34.314 1.00 0.00 C

ATOM 2550 C LYS A 69 64.414 71.434 33.935 1.00 0.00 C

ATOM 2551 O LYS A 69 64.287 71.187 32.766 1.00 0.00 O

ATOM 2552 CB LYS A 69 64.993 73.640 34.850 1.00 0.00 C

ATOM 2553 CG LYS A 69 66.167 73.812 33.893 1.00 0.00 C

ATOM 2554 CD LYS A 69 67.241 74.708 34.494 1.00 0.00 C

ATOM 2555 CE LYS A 69 68.439 74.833 33.563 1.00 0.00 C

ATOM 2556 NZ LYS A 69 69.498 75.711 34.134 1.00 0.00 N

ATOM 2557 H LYS A 69 63.044 72.961 36.209 1.00 0.00 H

ATOM 2558 HA LYS A 69 63.465 73.216 33.410 1.00 0.00 H

ATOM 2559 1HB LYS A 69 64.602 74.631 35.081 1.00 0.00 H

ATOM 2560 2HB LYS A 69 65.378 73.217 35.778 1.00 0.00 H

ATOM 2561 1HG LYS A 69 66.600 72.837 33.671 1.00 0.00 H

ATOM 2562 2HG LYS A 69 65.815 74.254 32.964 1.00 0.00 H

ATOM 2563 1HD LYS A 69 66.827 75.699 34.677 1.00 0.00 H

ATOM 2564 2HD LYS A 69 67.574 74.287 35.443 1.00 0.00 H

ATOM 2565 1HE LYS A 69 68.861 73.848 33.377 1.00 0.00 H

ATOM 2566 2HE LYS A 69 68.116 75.251 32.610 1.00 0.00 H

ATOM 2567 1HZ LYS A 69 70.271 75.769 33.488 1.00 0.00 H

ATOM 2568 2HZ LYS A 69 69.120 76.634 34.293 1.00 0.00 H

ATOM 2569 3HZ LYS A 69 69.819 75.323 35.009 1.00 0.00 H

ATOM 2570 N LEU A 70 64.839 70.599 34.869 1.00 0.00 N

ATOM 2571 CA LEU A 70 65.437 69.317 34.513 1.00 0.00 C

ATOM 2572 C LEU A 70 64.475 68.173 34.187 1.00 0.00 C

ATOM 2573 O LEU A 70 64.788 67.017 34.342 1.00 0.00 O

ATOM 2574 CB LEU A 70 66.349 68.872 35.663 1.00 0.00 C

ATOM 2575 CG LEU A 70 67.523 69.805 35.981 1.00 0.00 C

ATOM 2576 CD1 LEU A 70 68.298 69.260 37.173 1.00 0.00 C

ATOM 2577 CD2 LEU A 70 68.419 69.935 34.759 1.00 0.00 C

ATOM 2578 H LEU A 70 64.910 70.875 35.837 1.00 0.00 H

ATOM 2579 HA LEU A 70 66.028 69.451 33.608 1.00 0.00 H

ATOM 2580 1HB LEU A 70 65.749 68.771 36.564 1.00 0.00 H

ATOM 2581 2HB LEU A 70 66.763 67.892 35.417 1.00 0.00 H

ATOM 2582 HG LEU A 70 67.141 70.789 36.256 1.00 0.00 H

ATOM 2583 1HD1 LEU A 70 69.130 69.925 37.400 1.00 0.00 H

ATOM 2584 2HD1 LEU A 70 67.639 69.197 38.038 1.00 0.00 H

ATOM 2585 3HD1 LEU A 70 68.679 68.269 36.935 1.00 0.00 H

ATOM 2586 1HD2 LEU A 70 69.251 70.600 34.986 1.00 0.00 H

ATOM 2587 2HD2 LEU A 70 68.802 68.953 34.485 1.00 0.00 H

ATOM 2588 3HD2 LEU A 70 67.844 70.343 33.929 1.00 0.00 H

ATOM 2589 N SER A 71 63.341 68.519 33.590 1.00 0.00 N

ATOM 2590 CA SER A 71 62.325 67.631 33.070 1.00 0.00 C

ATOM 2591 C SER A 71 62.017 68.128 31.683 1.00 0.00 C

ATOM 2592 O SER A 71 62.430 67.511 30.708 1.00 0.00 O

ATOM 2593 CB SER A 71 61.082 67.626 33.938 1.00 0.00 C

ATOM 2594 OG SER A 71 60.103 66.776 33.410 1.00 0.00 O

ATOM 2595 H SER A 71 63.183 69.515 33.585 1.00 0.00 H

ATOM 2596 HA SER A 71 62.727 66.617 33.052 1.00 0.00 H

ATOM 2597 1HB SER A 71 61.342 67.306 34.946 1.00 0.00 H

ATOM 2598 2HB SER A 71 60.687 68.640 34.009 1.00 0.00 H

ATOM 2599 HG SER A 71 60.236 65.925 33.834 1.00 0.00 H

ATOM 2600 N THR A 72 61.462 69.341 31.616 1.00 0.00 N

ATOM 2601 CA THR A 72 61.076 70.007 30.376 1.00 0.00 C

ATOM 2602 C THR A 72 62.207 70.380 29.420 1.00 0.00 C

ATOM 2603 O THR A 72 61.978 70.491 28.220 1.00 0.00 O

ATOM 2604 CB THR A 72 60.280 71.285 30.706 1.00 0.00 C

ATOM 2605 OG1 THR A 72 61.093 72.170 31.484 1.00 0.00 O

ATOM 2606 CG2 THR A 72 59.021 70.941 31.489 1.00 0.00 C

ATOM 2607 H THR A 72 61.365 69.890 32.463 1.00 0.00 H

ATOM 2608 HA THR A 72 60.444 69.330 29.802 1.00 0.00 H

ATOM 2609 HB THR A 72 59.999 71.787 29.781 1.00 0.00 H

ATOM 2610 HG1 THR A 72 61.287 71.765 32.334 1.00 0.00 H

ATOM 2611 1HG2 THR A 72 58.471 71.854 31.712 1.00 0.00 H

ATOM 2612 2HG2 THR A 72 58.394 70.275 30.895 1.00 0.00 H

ATOM 2613 3HG2 THR A 72 59.295 70.445 32.419 1.00 0.00 H

ATOM 2614 N GLU A 73 63.449 70.503 29.902 1.00 0.00 N

ATOM 2615 CA GLU A 73 64.576 70.817 29.040 1.00 0.00 C

ATOM 2616 C GLU A 73 65.080 69.560 28.320 1.00 0.00 C

ATOM 2617 O GLU A 73 66.084 69.589 27.615 1.00 0.00 O

ATOM 2618 CB GLU A 73 65.706 71.449 29.854 1.00 0.00 C

ATOM 2619 CG GLU A 73 65.394 72.839 30.388 1.00 0.00 C

ATOM 2620 CD GLU A 73 65.250 73.867 29.303 1.00 0.00 C

ATOM 2621 OE1 GLU A 73 65.994 73.809 28.354 1.00 0.00 O

ATOM 2622 OE2 GLU A 73 64.394 74.712 29.421 1.00 0.00 O

ATOM 2623 H GLU A 73 63.557 70.379 30.901 1.00 0.00 H

ATOM 2624 HA GLU A 73 64.245 71.532 28.285 1.00 0.00 H

ATOM 2625 1HB GLU A 73 65.947 70.809 30.703 1.00 0.00 H

ATOM 2626 2HB GLU A 73 66.601 71.523 29.236 1.00 0.00 H

ATOM 2627 1HG GLU A 73 64.465 72.796 30.959 1.00 0.00 H

ATOM 2628 2HG GLU A 73 66.190 73.142 31.069 1.00 0.00 H

ATOM 2629 N GLY A 74 64.442 68.400 28.541 1.00 0.00 N

ATOM 2630 CA GLY A 74 64.871 67.179 27.896 1.00 0.00 C

ATOM 2631 C GLY A 74 65.631 66.254 28.788 1.00 0.00 C

ATOM 2632 O GLY A 74 65.929 65.139 28.384 1.00 0.00 O

ATOM 2633 H GLY A 74 63.675 68.378 29.201 1.00 0.00 H

ATOM 2634 1HA GLY A 74 64.001 66.645 27.514 1.00 0.00 H

ATOM 2635 2HA GLY A 74 65.500 67.421 27.041 1.00 0.00 H

ATOM 2636 N TYR A 75 65.847 66.655 30.027 1.00 0.00 N

ATOM 2637 CA TYR A 75 66.540 65.842 31.013 1.00 0.00 C

ATOM 2638 C TYR A 75 65.599 64.779 31.609 1.00 0.00 C

ATOM 2639 O TYR A 75 66.029 63.643 31.810 1.00 0.00 O

ATOM 2640 CB TYR A 75 67.120 66.729 32.117 1.00 0.00 C

ATOM 2641 CG TYR A 75 68.332 67.525 31.686 1.00 0.00 C

ATOM 2642 CD1 TYR A 75 68.204 68.872 31.382 1.00 0.00 C

ATOM 2643 CD2 TYR A 75 69.571 66.909 31.594 1.00 0.00 C

ATOM 2644 CE1 TYR A 75 69.311 69.599 30.989 1.00 0.00 C

ATOM 2645 CE2 TYR A 75 70.678 67.634 31.201 1.00 0.00 C

ATOM 2646 CZ TYR A 75 70.550 68.976 30.899 1.00 0.00 C

ATOM 2647 OH TYR A 75 71.653 69.701 30.507 1.00 0.00 O

ATOM 2648 H TYR A 75 65.568 67.603 30.235 1.00 0.00 H

ATOM 2649 HA TYR A 75 67.359 65.320 30.516 1.00 0.00 H

ATOM 2650 1HB TYR A 75 66.357 67.429 32.460 1.00 0.00 H

ATOM 2651 2HB TYR A 75 67.405 66.111 32.968 1.00 0.00 H

ATOM 2652 HD1 TYR A 75 67.231 69.359 31.455 1.00 0.00 H

ATOM 2653 HD2 TYR A 75 69.672 65.849 31.831 1.00 0.00 H

ATOM 2654 HE1 TYR A 75 69.210 70.659 30.749 1.00 0.00 H

ATOM 2655 HE2 TYR A 75 71.651 67.150 31.128 1.00 0.00 H

ATOM 2656 HH TYR A 75 71.386 70.599 30.303 1.00 0.00 H

ATOM 2657 N SER A 76 64.299 65.083 31.615 1.00 0.00 N

ATOM 2658 CA SER A 76 63.179 64.182 31.889 1.00 0.00 C

ATOM 2659 C SER A 76 63.420 63.414 33.145 1.00 0.00 C

ATOM 2660 O SER A 76 63.297 62.186 33.213 1.00 0.00 O

ATOM 2661 CB SER A 76 62.969 63.217 30.739 1.00 0.00 C

ATOM 2662 OG SER A 76 61.729 62.575 30.843 1.00 0.00 O

ATOM 2663 H SER A 76 64.088 66.016 31.302 1.00 0.00 H

ATOM 2664 HA SER A 76 62.274 64.781 32.008 1.00 0.00 H

ATOM 2665 1HB SER A 76 63.021 63.759 29.794 1.00 0.00 H

ATOM 2666 2HB SER A 76 63.767 62.476 30.736 1.00 0.00 H

ATOM 2667 HG SER A 76 61.510 62.273 29.958 1.00 0.00 H

ATOM 2668 N PHE A 77 63.841 64.070 34.233 1.00 0.00 N

ATOM 2669 CA PHE A 77 64.029 63.328 35.433 1.00 0.00 C

ATOM 2670 C PHE A 77 62.728 63.230 36.225 1.00 0.00 C

ATOM 2671 O PHE A 77 62.496 64.012 37.135 1.00 0.00 O

ATOM 2672 CB PHE A 77 65.120 63.980 36.283 1.00 0.00 C

ATOM 2673 CG PHE A 77 66.500 63.850 35.701 1.00 0.00 C

ATOM 2674 CD1 PHE A 77 67.248 64.977 35.397 1.00 0.00 C

ATOM 2675 CD2 PHE A 77 67.051 62.601 35.458 1.00 0.00 C

ATOM 2676 CE1 PHE A 77 68.516 64.858 34.862 1.00 0.00 C

ATOM 2677 CE2 PHE A 77 68.319 62.479 34.924 1.00 0.00 C

ATOM 2678 CZ PHE A 77 69.054 63.611 34.627 1.00 0.00 C

ATOM 2679 H PHE A 77 64.021 65.064 34.154 1.00 0.00 H

ATOM 2680 HA PHE A 77 64.342 62.317 35.169 1.00 0.00 H

ATOM 2681 1HB PHE A 77 64.901 65.040 36.405 1.00 0.00 H

ATOM 2682 2HB PHE A 77 65.126 63.530 37.275 1.00 0.00 H

ATOM 2683 HD1 PHE A 77 66.825 65.964 35.584 1.00 0.00 H

ATOM 2684 HD2 PHE A 77 66.472 61.708 35.694 1.00 0.00 H

ATOM 2685 HE1 PHE A 77 69.095 65.753 34.626 1.00 0.00 H

ATOM 2686 HE2 PHE A 77 68.740 61.491 34.740 1.00 0.00 H

ATOM 2687 HZ PHE A 77 70.052 63.517 34.204 1.00 0.00 H

ATOM 2688 N GLY A 78 61.845 62.360 35.765 1.00 0.00 N

ATOM 2689 CA GLY A 78 60.445 62.490 36.158 1.00 0.00 C

ATOM 2690 C GLY A 78 59.712 63.560 35.328 1.00 0.00 C

ATOM 2691 O GLY A 78 60.292 64.321 34.544 1.00 0.00 O

ATOM 2692 H GLY A 78 62.012 62.060 34.811 1.00 0.00 H

ATOM 2693 1HA GLY A 78 59.942 61.530 36.035 1.00 0.00 H

ATOM 2694 2HA GLY A 78 60.387 62.749 37.214 1.00 0.00 H

ATOM 2695 N ASN A 79 58.412 63.666 35.571 1.00 0.00 N

ATOM 2696 CA ASN A 79 57.657 64.782 35.004 1.00 0.00 C

ATOM 2697 C ASN A 79 57.793 66.040 35.847 1.00 0.00 C

ATOM 2698 O ASN A 79 57.745 65.923 37.057 1.00 0.00 O

ATOM 2699 CB ASN A 79 56.196 64.410 34.842 1.00 0.00 C

ATOM 2700 CG ASN A 79 55.981 63.357 33.789 1.00 0.00 C

ATOM 2701 OD1 ASN A 79 56.623 63.379 32.733 1.00 0.00 O

ATOM 2702 ND2 ASN A 79 55.092 62.436 34.057 1.00 0.00 N

ATOM 2703 H ASN A 79 58.042 63.208 36.392 1.00 0.00 H

ATOM 2704 HA ASN A 79 58.069 65.014 34.020 1.00 0.00 H

ATOM 2705 1HB ASN A 79 55.806 64.040 35.791 1.00 0.00 H

ATOM 2706 2HB ASN A 79 55.622 65.296 34.574 1.00 0.00 H

ATOM 2707 1HD2 ASN A 79 54.907 61.710 33.395 1.00 0.00 H

ATOM 2708 2HD2 ASN A 79 54.597 62.458 34.925 1.00 0.00 H

ATOM 2709 N ALA A 80 57.877 67.197 35.193 1.00 0.00 N

ATOM 2710 CA ALA A 80 57.993 68.484 35.879 1.00 0.00 C

ATOM 2711 C ALA A 80 56.971 68.661 37.025 1.00 0.00 C

ATOM 2712 O ALA A 80 55.764 68.763 36.806 1.00 0.00 O

ATOM 2713 CB ALA A 80 57.821 69.569 34.816 1.00 0.00 C

ATOM 2714 H ALA A 80 57.833 67.164 34.180 1.00 0.00 H

ATOM 2715 HA ALA A 80 58.985 68.541 36.327 1.00 0.00 H

ATOM 2716 1HB ALA A 80 57.901 70.551 35.283 1.00 0.00 H

ATOM 2717 2HB ALA A 80 58.599 69.462 34.059 1.00 0.00 H

ATOM 2718 3HB ALA A 80 56.843 69.467 34.348 1.00 0.00 H

ATOM 2719 N ILE A 81 57.527 68.761 38.254 1.00 0.00 N

ATOM 2720 CA ILE A 81 56.927 69.037 39.568 1.00 0.00 C

ATOM 2721 C ILE A 81 55.677 68.182 39.762 1.00 0.00 C

ATOM 2722 O ILE A 81 54.753 68.557 40.484 1.00 0.00 O

ATOM 2723 CB ILE A 81 56.565 70.525 39.720 1.00 0.00 C

ATOM 2724 CG1 ILE A 81 55.492 70.919 38.703 1.00 0.00 C

ATOM 2725 CG2 ILE A 81 57.802 71.394 39.554 1.00 0.00 C

ATOM 2726 CD1 ILE A 81 54.880 72.279 38.956 1.00 0.00 C

ATOM 2727 H ILE A 81 58.538 68.813 38.170 1.00 0.00 H

ATOM 2728 HA ILE A 81 57.653 68.783 40.340 1.00 0.00 H

ATOM 2729 HB ILE A 81 56.140 70.698 40.709 1.00 0.00 H

ATOM 2730 1HG1 ILE A 81 55.921 70.920 37.702 1.00 0.00 H

ATOM 2731 2HG1 ILE A 81 54.690 70.180 38.712 1.00 0.00 H

ATOM 2732 1HG2 ILE A 81 57.529 72.443 39.663 1.00 0.00 H

ATOM 2733 2HG2 ILE A 81 58.535 71.130 40.316 1.00 0.00 H

ATOM 2734 3HG2 ILE A 81 58.232 71.232 38.566 1.00 0.00 H

ATOM 2735 1HD1 ILE A 81 54.127 72.486 38.195 1.00 0.00 H

ATOM 2736 2HD1 ILE A 81 54.411 72.290 39.941 1.00 0.00 H

ATOM 2737 3HD1 ILE A 81 55.657 73.040 38.914 1.00 0.00 H

ATOM 2738 N ASP A 82 55.615 67.033 39.084 1.00 0.00 N

ATOM 2739 CA ASP A 82 54.551 66.089 39.292 1.00 0.00 C

ATOM 2740 C ASP A 82 54.944 64.937 40.231 1.00 0.00 C

ATOM 2741 O ASP A 82 54.070 64.339 40.813 1.00 0.00 O

ATOM 2742 CB ASP A 82 54.100 65.526 37.940 1.00 0.00 C

ATOM 2743 CG ASP A 82 53.439 66.574 37.054 1.00 0.00 C

ATOM 2744 OD1 ASP A 82 52.792 67.447 37.581 1.00 0.00 O

ATOM 2745 OD2 ASP A 82 53.590 66.489 35.858 1.00 0.00 O

ATOM 2746 H ASP A 82 56.411 66.746 38.533 1.00 0.00 H

ATOM 2747 HA ASP A 82 53.715 66.607 39.761 1.00 0.00 H

ATOM 2748 1HB ASP A 82 54.962 65.115 37.413 1.00 0.00 H

ATOM 2749 2HB ASP A 82 53.393 64.711 38.103 1.00 0.00 H

ATOM 2750 N LEU A 83 56.255 64.757 40.458 1.00 0.00 N

ATOM 2751 CA LEU A 83 56.757 63.724 41.379 1.00 0.00 C

ATOM 2752 C LEU A 83 56.266 63.940 42.784 1.00 0.00 C

ATOM 2753 O LEU A 83 56.210 63.011 43.561 1.00 0.00 O

ATOM 2754 CB LEU A 83 58.291 63.705 41.380 1.00 0.00 C

ATOM 2755 CG LEU A 83 58.954 63.292 40.060 1.00 0.00 C

ATOM 2756 CD1 LEU A 83 60.467 63.387 40.199 1.00 0.00 C

ATOM 2757 CD2 LEU A 83 58.526 61.877 39.700 1.00 0.00 C

ATOM 2758 H LEU A 83 56.921 65.359 40.001 1.00 0.00 H

ATOM 2759 HA LEU A 83 56.398 62.753 41.039 1.00 0.00 H

ATOM 2760 1HB LEU A 83 58.649 64.704 41.631 1.00 0.00 H

ATOM 2761 2HB LEU A 83 58.630 63.014 42.153 1.00 0.00 H

ATOM 2762 HG LEU A 83 58.647 63.975 39.269 1.00 0.00 H

ATOM 2763 1HD1 LEU A 83 60.938 63.093 39.261 1.00 0.00 H

ATOM 2764 2HD1 LEU A 83 60.746 64.414 40.437 1.00 0.00 H

ATOM 2765 3HD1 LEU A 83 60.801 62.725 40.997 1.00 0.00 H

ATOM 2766 1HD2 LEU A 83 58.997 61.582 38.762 1.00 0.00 H

ATOM 2767 2HD2 LEU A 83 58.833 61.191 40.491 1.00 0.00 H

ATOM 2768 3HD2 LEU A 83 57.441 61.841 39.590 1.00 0.00 H

ATOM 2769 N LYS A 84 56.044 65.207 43.132 1.00 0.00 N

ATOM 2770 CA LYS A 84 55.529 65.602 44.434 1.00 0.00 C

ATOM 2771 C LYS A 84 54.268 64.792 44.678 1.00 0.00 C

ATOM 2772 O LYS A 84 54.014 64.287 45.782 1.00 0.00 O

ATOM 2773 CB LYS A 84 55.241 67.103 44.497 1.00 0.00 C

ATOM 2774 CG LYS A 84 54.672 67.579 45.828 1.00 0.00 C

ATOM 2775 CD LYS A 84 54.454 69.085 45.828 1.00 0.00 C

ATOM 2776 CE LYS A 84 53.960 69.572 47.183 1.00 0.00 C

ATOM 2777 NZ LYS A 84 52.591 69.079 47.486 1.00 0.00 N

ATOM 2778 H LYS A 84 56.170 65.942 42.449 1.00 0.00 H

ATOM 2779 HA LYS A 84 56.282 65.371 45.188 1.00 0.00 H

ATOM 2780 1HB LYS A 84 56.160 67.659 44.308 1.00 0.00 H

ATOM 2781 2HB LYS A 84 54.530 67.369 43.715 1.00 0.00 H

ATOM 2782 1HG LYS A 84 53.719 67.082 46.015 1.00 0.00 H

ATOM 2783 2HG LYS A 84 55.362 67.319 46.631 1.00 0.00 H

ATOM 2784 1HD LYS A 84 55.392 69.589 45.590 1.00 0.00 H

ATOM 2785 2HD LYS A 84 53.718 69.346 45.068 1.00 0.00 H

ATOM 2786 1HE LYS A 84 54.639 69.229 47.962 1.00 0.00 H

ATOM 2787 2HE LYS A 84 53.950 70.663 47.194 1.00 0.00 H

ATOM 2788 1HZ LYS A 84 52.301 69.424 48.390 1.00 0.00 H

ATOM 2789 2HZ LYS A 84 51.949 69.407 46.778 1.00 0.00 H

ATOM 2790 3HZ LYS A 84 52.590 68.069 47.497 1.00 0.00 H

ATOM 2791 N SER A 85 53.390 64.756 43.672 1.00 0.00 N

ATOM 2792 CA SER A 85 52.146 64.053 43.752 1.00 0.00 C

ATOM 2793 C SER A 85 52.282 62.579 43.382 1.00 0.00 C

ATOM 2794 O SER A 85 51.501 61.849 43.960 1.00 0.00 O

ATOM 2795 CB SER A 85 51.131 64.723 42.848 1.00 0.00 C

ATOM 2796 OG SER A 85 51.482 64.570 41.499 1.00 0.00 O

ATOM 2797 H SER A 85 53.705 65.146 42.790 1.00 0.00 H

ATOM 2798 HA SER A 85 51.790 64.095 44.783 1.00 0.00 H

ATOM 2799 1HB SER A 85 50.145 64.288 43.020 1.00 0.00 H

ATOM 2800 2HB SER A 85 51.069 65.782 43.091 1.00 0.00 H

ATOM 2801 HG SER A 85 52.442 64.521 41.480 1.00 0.00 H

ATOM 2802 N HIS A 86 53.277 62.174 42.603 1.00 0.00 N

ATOM 2803 CA HIS A 86 53.422 60.740 42.289 1.00 0.00 C

ATOM 2804 C HIS A 86 54.099 59.838 43.333 1.00 0.00 C

ATOM 2805 O HIS A 86 53.573 58.777 43.612 1.00 0.00 O

ATOM 2806 CB HIS A 86 54.198 60.600 40.975 1.00 0.00 C

ATOM 2807 CG HIS A 86 53.458 61.122 39.783 1.00 0.00 C

ATOM 2808 ND1 HIS A 86 54.085 61.408 38.586 1.00 0.00 N

ATOM 2809 CD2 HIS A 86 52.150 61.413 39.601 1.00 0.00 C

ATOM 2810 CE1 HIS A 86 53.191 61.851 37.721 1.00 0.00 C

ATOM 2811 NE2 HIS A 86 52.009 61.865 38.312 1.00 0.00 N

ATOM 2812 H HIS A 86 53.907 62.822 42.162 1.00 0.00 H

ATOM 2813 HA HIS A 86 52.435 60.293 42.168 1.00 0.00 H

ATOM 2814 1HB HIS A 86 55.146 61.134 41.052 1.00 0.00 H

ATOM 2815 2HB HIS A 86 54.428 59.548 40.799 1.00 0.00 H

ATOM 2816 HD2 HIS A 86 51.354 61.310 40.340 1.00 0.00 H

ATOM 2817 HE1 HIS A 86 53.392 62.155 36.695 1.00 0.00 H

ATOM 2818 HE2 HIS A 86 51.141 62.156 37.888 1.00 0.00 H

ATOM 2819 N TRP A 87 55.133 60.344 43.990 1.00 0.00 N

ATOM 2820 CA TRP A 87 55.643 59.682 45.197 1.00 0.00 C

ATOM 2821 C TRP A 87 54.576 59.745 46.291 1.00 0.00 C

ATOM 2822 O TRP A 87 53.785 60.660 46.367 1.00 0.00 O

ATOM 2823 CB TRP A 87 56.934 60.343 45.684 1.00 0.00 C

ATOM 2824 CG TRP A 87 58.052 60.275 44.689 1.00 0.00 C

ATOM 2825 CD1 TRP A 87 57.958 59.903 43.382 1.00 0.00 C

ATOM 2826 CD2 TRP A 87 59.446 60.595 44.916 1.00 0.00 C

ATOM 2827 NE1 TRP A 87 59.192 59.965 42.782 1.00 0.00 N

ATOM 2828 CE2 TRP A 87 60.114 60.388 43.706 1.00 0.00 C

ATOM 2829 CE3 TRP A 87 60.169 61.033 46.031 1.00 0.00 C

ATOM 2830 CZ2 TRP A 87 61.477 60.602 43.575 1.00 0.00 C

ATOM 2831 CZ3 TRP A 87 61.536 61.250 45.899 1.00 0.00 C

ATOM 2832 CH2 TRP A 87 62.171 61.039 44.703 1.00 0.00 C

ATOM 2833 H TRP A 87 55.247 61.349 43.952 1.00 0.00 H

ATOM 2834 HA TRP A 87 55.861 58.641 44.955 1.00 0.00 H

ATOM 2835 1HB TRP A 87 56.740 61.391 45.914 1.00 0.00 H

ATOM 2836 2HB TRP A 87 57.265 59.861 46.604 1.00 0.00 H

ATOM 2837 HD1 TRP A 87 57.038 59.599 42.884 1.00 0.00 H

ATOM 2838 HE1 TRP A 87 59.391 59.736 41.819 1.00 0.00 H

ATOM 2839 HE3 TRP A 87 59.669 61.204 46.985 1.00 0.00 H

ATOM 2840 HZ2 TRP A 87 62.001 60.441 42.632 1.00 0.00 H

ATOM 2841 HZ3 TRP A 87 62.092 61.590 46.773 1.00 0.00 H

ATOM 2842 HH2 TRP A 87 63.245 61.218 44.634 1.00 0.00 H

ATOM 2843 N ALA A 88 54.534 58.688 47.114 1.00 0.00 N

ATOM 2844 CA ALA A 88 53.509 58.438 48.111 1.00 0.00 C

ATOM 2845 C ALA A 88 52.061 58.162 47.603 1.00 0.00 C

ATOM 2846 O ALA A 88 51.465 57.239 48.146 1.00 0.00 O

ATOM 2847 CB ALA A 88 53.527 59.585 49.125 1.00 0.00 C

ATOM 2848 H ALA A 88 55.144 57.924 46.876 1.00 0.00 H

ATOM 2849 HA ALA A 88 53.745 57.499 48.612 1.00 0.00 H

ATOM 2850 1HB ALA A 88 52.763 59.415 49.883 1.00 0.00 H

ATOM 2851 2HB ALA A 88 54.506 59.634 49.602 1.00 0.00 H

ATOM 2852 3HB ALA A 88 53.327 60.524 48.614 1.00 0.00 H

ATOM 2853 N ARG A 89 51.559 58.902 46.614 1.00 0.00 N

ATOM 2854 CA ARG A 89 50.237 58.597 46.017 1.00 0.00 C

ATOM 2855 C ARG A 89 50.203 57.273 45.269 1.00 0.00 C

ATOM 2856 O ARG A 89 49.251 56.522 45.432 1.00 0.00 O

ATOM 2857 CB ARG A 89 49.822 59.701 45.055 1.00 0.00 C

ATOM 2858 CG ARG A 89 48.430 59.543 44.463 1.00 0.00 C

ATOM 2859 CD ARG A 89 48.052 60.712 43.629 1.00 0.00 C

ATOM 2860 NE ARG A 89 46.703 60.588 43.102 1.00 0.00 N

ATOM 2861 CZ ARG A 89 46.388 59.990 41.937 1.00 0.00 C

ATOM 2862 NH1 ARG A 89 47.336 59.468 41.191 1.00 0.00 N

ATOM 2863 NH2 ARG A 89 45.128 59.932 41.544 1.00 0.00 N

ATOM 2864 H ARG A 89 52.099 59.685 46.245 1.00 0.00 H

ATOM 2865 HA ARG A 89 49.500 58.537 46.819 1.00 0.00 H

ATOM 2866 1HB ARG A 89 49.856 60.660 45.568 1.00 0.00 H

ATOM 2867 2HB ARG A 89 50.529 59.747 44.228 1.00 0.00 H

ATOM 2868 1HG ARG A 89 48.399 58.652 43.837 1.00 0.00 H

ATOM 2869 2HG ARG A 89 47.701 59.446 45.268 1.00 0.00 H

ATOM 2870 1HD ARG A 89 48.100 61.620 44.232 1.00 0.00 H

ATOM 2871 2HD ARG A 89 48.740 60.798 42.789 1.00 0.00 H

ATOM 2872 HE ARG A 89 45.946 60.980 43.649 1.00 0.00 H

ATOM 2873 1HH1 ARG A 89 48.300 59.515 41.490 1.00 0.00 H

ATOM 2874 2HH1 ARG A 89 47.101 59.019 40.317 1.00 0.00 H

ATOM 2875 1HH2 ARG A 89 44.401 60.333 42.117 1.00 0.00 H

ATOM 2876 2HH2 ARG A 89 44.892 59.482 40.670 1.00 0.00 H

ATOM 2877 N HIS A 90 51.240 57.014 44.474 1.00 0.00 N

ATOM 2878 CA HIS A 90 51.412 55.712 43.833 1.00 0.00 C

ATOM 2879 C HIS A 90 52.388 54.818 44.594 1.00 0.00 C

ATOM 2880 O HIS A 90 52.834 53.805 44.069 1.00 0.00 O

ATOM 2881 CB HIS A 90 51.900 55.886 42.391 1.00 0.00 C

ATOM 2882 CG HIS A 90 50.917 56.586 41.502 1.00 0.00 C

ATOM 2883 ND1 HIS A 90 49.789 55.964 41.008 1.00 0.00 N

ATOM 2884 CD2 HIS A 90 50.893 57.851 41.021 1.00 0.00 C

ATOM 2885 CE1 HIS A 90 49.113 56.820 40.261 1.00 0.00 C

ATOM 2886 NE2 HIS A 90 49.760 57.970 40.253 1.00 0.00 N

ATOM 2887 H HIS A 90 52.032 57.650 44.453 1.00 0.00 H

ATOM 2888 HA HIS A 90 50.456 55.190 43.807 1.00 0.00 H

ATOM 2889 1HB HIS A 90 52.828 56.457 42.386 1.00 0.00 H

ATOM 2890 2HB HIS A 90 52.114 54.909 41.958 1.00 0.00 H

ATOM 2891 HD1 HIS A 90 49.472 55.043 41.236 1.00 0.00 H

ATOM 2892 HD2 HIS A 90 51.564 58.701 41.141 1.00 0.00 H

ATOM 2893 HE1 HIS A 90 48.184 56.519 39.774 1.00 0.00 H

ATOM 2894 N GLY A 91 52.714 55.205 45.831 1.00 0.00 N

ATOM 2895 CA GLY A 91 53.557 54.428 46.744 1.00 0.00 C

ATOM 2896 C GLY A 91 55.057 54.527 46.462 1.00 0.00 C

ATOM 2897 O GLY A 91 55.788 55.130 47.248 1.00 0.00 O

ATOM 2898 H GLY A 91 52.280 56.049 46.161 1.00 0.00 H

ATOM 2899 1HA GLY A 91 53.385 54.759 47.768 1.00 0.00 H

ATOM 2900 2HA GLY A 91 53.275 53.377 46.694 1.00 0.00 H

ATOM 2901 N THR A 92 55.463 54.003 45.309 1.00 0.00 N

ATOM 2902 CA THR A 92 56.854 53.935 44.888 1.00 0.00 C

ATOM 2903 C THR A 92 57.573 55.254 45.026 1.00 0.00 C

ATOM 2904 O THR A 92 57.482 56.122 44.170 1.00 0.00 O

ATOM 2905 CB THR A 92 56.960 53.455 43.428 1.00 0.00 C

ATOM 2906 OG1 THR A 92 56.376 52.152 43.307 1.00 0.00 O

ATOM 2907 CG2 THR A 92 58.416 53.398 42.991 1.00 0.00 C

ATOM 2908 H THR A 92 54.757 53.523 44.762 1.00 0.00 H

ATOM 2909 HA THR A 92 57.374 53.219 45.525 1.00 0.00 H

ATOM 2910 HB THR A 92 56.419 54.143 42.780 1.00 0.00 H

ATOM 2911 HG1 THR A 92 55.430 52.212 43.454 1.00 0.00 H

ATOM 2912 1HG2 THR A 92 58.474 53.058 41.957 1.00 0.00 H

ATOM 2913 2HG2 THR A 92 58.861 54.390 43.072 1.00 0.00 H

ATOM 2914 3HG2 THR A 92 58.961 52.705 43.630 1.00 0.00 H

ATOM 2915 N ASN A 93 58.329 55.406 46.116 1.00 0.00 N

ATOM 2916 CA ASN A 93 59.022 56.660 46.387 1.00 0.00 C

ATOM 2917 C ASN A 93 60.347 56.820 45.635 1.00 0.00 C

ATOM 2918 O ASN A 93 60.960 57.867 45.687 1.00 0.00 O

ATOM 2919 CB ASN A 93 59.252 56.802 47.879 1.00 0.00 C

ATOM 2920 CG ASN A 93 57.984 57.084 48.635 1.00 0.00 C

ATOM 2921 OD1 ASN A 93 57.086 57.772 48.134 1.00 0.00 O

ATOM 2922 ND2 ASN A 93 57.890 56.566 49.834 1.00 0.00 N

ATOM 2923 H ASN A 93 58.215 54.720 46.845 1.00 0.00 H

ATOM 2924 HA ASN A 93 58.394 57.484 46.043 1.00 0.00 H

ATOM 2925 1HB ASN A 93 59.697 55.886 48.268 1.00 0.00 H

ATOM 2926 2HB ASN A 93 59.957 57.613 48.063 1.00 0.00 H

ATOM 2927 1HD2 ASN A 93 57.068 56.720 50.382 1.00 0.00 H

ATOM 2928 2HD2 ASN A 93 58.640 56.016 50.200 1.00 0.00 H

ATOM 2929 N LYS A 94 60.713 55.787 44.885 1.00 0.00 N

ATOM 2930 CA LYS A 94 61.843 55.830 43.946 1.00 0.00 C

ATOM 2931 C LYS A 94 61.470 56.163 42.529 1.00 0.00 C

ATOM 2932 O LYS A 94 62.330 56.048 41.661 1.00 0.00 O

ATOM 2933 CB LYS A 94 62.585 54.494 43.956 1.00 0.00 C

ATOM 2934 CG LYS A 94 63.226 54.140 45.291 1.00 0.00 C

ATOM 2935 CD LYS A 94 63.927 52.791 45.228 1.00 0.00 C

ATOM 2936 CE LYS A 94 64.510 52.405 46.579 1.00 0.00 C

ATOM 2937 NZ LYS A 94 63.449 52.149 47.591 1.00 0.00 N

ATOM 2938 H LYS A 94 60.100 54.986 44.857 1.00 0.00 H

ATOM 2939 HA LYS A 94 62.528 56.616 44.265 1.00 0.00 H

ATOM 2940 1HB LYS A 94 61.893 53.692 43.695 1.00 0.00 H

ATOM 2941 2HB LYS A 94 63.370 54.506 43.201 1.00 0.00 H

ATOM 2942 1HG LYS A 94 63.956 54.907 45.559 1.00 0.00 H

ATOM 2943 2HG LYS A 94 62.461 54.107 46.065 1.00 0.00 H

ATOM 2944 1HD LYS A 94 63.213 52.027 44.917 1.00 0.00 H

ATOM 2945 2HD LYS A 94 64.731 52.832 44.494 1.00 0.00 H

ATOM 2946 1HE LYS A 94 65.115 51.507 46.471 1.00 0.00 H

ATOM 2947 2HE LYS A 94 65.153 53.209 46.941 1.00 0.00 H

ATOM 2948 1HZ LYS A 94 63.875 51.897 48.472 1.00 0.00 H

ATOM 2949 2HZ LYS A 94 62.892 52.983 47.714 1.00 0.00 H

ATOM 2950 3HZ LYS A 94 62.857 51.393 47.276 1.00 0.00 H

ATOM 2951 N PHE A 95 60.203 56.505 42.293 1.00 0.00 N

ATOM 2952 CA PHE A 95 59.725 56.722 40.946 1.00 0.00 C

ATOM 2953 C PHE A 95 60.393 57.881 40.175 1.00 0.00 C

ATOM 2954 O PHE A 95 59.792 58.938 40.049 1.00 0.00 O

ATOM 2955 CB PHE A 95 58.216 56.961 40.995 1.00 0.00 C

ATOM 2956 CG PHE A 95 57.607 57.269 39.656 1.00 0.00 C

ATOM 2957 CD1 PHE A 95 57.490 56.285 38.689 1.00 0.00 C

ATOM 2958 CD2 PHE A 95 57.150 58.546 39.364 1.00 0.00 C

ATOM 2959 CE1 PHE A 95 56.930 56.566 37.457 1.00 0.00 C

ATOM 2960 CE2 PHE A 95 56.588 58.832 38.135 1.00 0.00 C

ATOM 2961 CZ PHE A 95 56.478 57.840 37.179 1.00 0.00 C

ATOM 2962 H PHE A 95 59.519 56.428 43.032 1.00 0.00 H

ATOM 2963 HA PHE A 95 59.934 55.828 40.356 1.00 0.00 H

ATOM 2964 1HB PHE A 95 57.722 56.078 41.398 1.00 0.00 H

ATOM 2965 2HB PHE A 95 58.001 57.792 41.667 1.00 0.00 H

ATOM 2966 HD1 PHE A 95 57.845 55.276 38.907 1.00 0.00 H

ATOM 2967 HD2 PHE A 95 57.237 59.329 40.119 1.00 0.00 H

ATOM 2968 HE1 PHE A 95 56.843 55.783 36.705 1.00 0.00 H

ATOM 2969 HE2 PHE A 95 56.232 59.836 37.917 1.00 0.00 H

ATOM 2970 HZ PHE A 95 56.037 58.063 36.210 1.00 0.00 H

ATOM 2971 N VAL A 96 61.534 57.613 39.559 1.00 0.00 N

ATOM 2972 CA VAL A 96 61.998 58.515 38.444 1.00 0.00 C

ATOM 2973 C VAL A 96 62.072 57.870 37.090 1.00 0.00 C

ATOM 2974 O VAL A 96 62.994 57.109 36.822 1.00 0.00 O

ATOM 2975 CB VAL A 96 63.397 59.078 38.759 1.00 0.00 C

ATOM 2976 CG1 VAL A 96 63.869 59.990 37.636 1.00 0.00 C

ATOM 2977 CG2 VAL A 96 63.369 59.823 40.084 1.00 0.00 C

ATOM 2978 H VAL A 96 61.769 56.630 39.463 1.00 0.00 H

ATOM 2979 HA VAL A 96 61.297 59.347 38.358 1.00 0.00 H

ATOM 2980 HB VAL A 96 64.105 58.251 38.820 1.00 0.00 H

ATOM 2981 1HG1 VAL A 96 64.859 60.378 37.875 1.00 0.00 H

ATOM 2982 2HG1 VAL A 96 63.915 59.426 36.705 1.00 0.00 H

ATOM 2983 3HG1 VAL A 96 63.172 60.820 37.524 1.00 0.00 H

ATOM 2984 1HG2 VAL A 96 64.362 60.218 40.300 1.00 0.00 H

ATOM 2985 2HG2 VAL A 96 62.657 60.646 40.024 1.00 0.00 H

ATOM 2986 3HG2 VAL A 96 63.069 59.141 40.879 1.00 0.00 H

ATOM 2987 N THR A 97 61.082 58.138 36.246 1.00 0.00 N

ATOM 2988 CA THR A 97 61.071 57.585 34.890 1.00 0.00 C

ATOM 2989 C THR A 97 61.543 58.570 33.864 1.00 0.00 C

ATOM 2990 O THR A 97 61.091 59.712 33.824 1.00 0.00 O

ATOM 2991 CB THR A 97 59.663 57.098 34.500 1.00 0.00 C

ATOM 2992 OG1 THR A 97 59.246 56.062 35.398 1.00 0.00 O

ATOM 2993 CG2 THR A 97 59.660 56.561 33.077 1.00 0.00 C

ATOM 2994 H THR A 97 60.387 58.818 36.515 1.00 0.00 H

ATOM 2995 HA THR A 97 61.749 56.732 34.859 1.00 0.00 H

ATOM 2996 HB THR A 97 58.959 57.926 34.571 1.00 0.00 H

ATOM 2997 HG1 THR A 97 59.864 55.328 35.348 1.00 0.00 H

ATOM 2998 1HG2 THR A 97 58.657 56.222 32.818 1.00 0.00 H

ATOM 2999 2HG2 THR A 97 59.965 57.350 32.389 1.00 0.00 H

ATOM 3000 3HG2 THR A 97 60.355 55.726 33.002 1.00 0.00 H

ATOM 3001 N ILE A 98 62.592 58.183 33.149 1.00 0.00 N

ATOM 3002 CA ILE A 98 63.272 59.096 32.260 1.00 0.00 C

ATOM 3003 C ILE A 98 62.884 58.679 30.860 1.00 0.00 C

ATOM 3004 O ILE A 98 63.106 57.530 30.506 1.00 0.00 O

ATOM 3005 CB ILE A 98 64.800 59.059 32.440 1.00 0.00 C

ATOM 3006 CG1 ILE A 98 65.178 59.423 33.878 1.00 0.00 C

ATOM 3007 CG2 ILE A 98 65.476 60.000 31.455 1.00 0.00 C

ATOM 3008 CD1 ILE A 98 66.629 59.159 34.214 1.00 0.00 C

ATOM 3009 H ILE A 98 63.091 57.363 33.442 1.00 0.00 H

ATOM 3010 HA ILE A 98 62.936 60.109 32.481 1.00 0.00 H

ATOM 3011 HB ILE A 98 65.162 58.046 32.266 1.00 0.00 H

ATOM 3012 1HG1 ILE A 98 64.974 60.480 34.051 1.00 0.00 H

ATOM 3013 2HG1 ILE A 98 64.560 58.854 34.572 1.00 0.00 H

ATOM 3014 1HG2 ILE A 98 66.556 59.962 31.595 1.00 0.00 H

ATOM 3015 2HG2 ILE A 98 65.231 59.697 30.436 1.00 0.00 H

ATOM 3016 3HG2 ILE A 98 65.123 61.018 31.623 1.00 0.00 H

ATOM 3017 1HD1 ILE A 98 66.819 59.443 35.249 1.00 0.00 H

ATOM 3018 2HD1 ILE A 98 66.846 58.099 34.081 1.00 0.00 H

ATOM 3019 3HD1 ILE A 98 67.266 59.747 33.555 1.00 0.00 H

ATOM 3020 N ARG A 99 62.192 59.554 30.126 1.00 0.00 N

ATOM 3021 CA ARG A 99 61.600 59.161 28.849 1.00 0.00 C

ATOM 3022 C ARG A 99 61.044 60.382 28.120 1.00 0.00 C

ATOM 3023 O ARG A 99 61.231 61.548 28.463 1.00 0.00 O

ATOM 3024 OXT ARG A 99 60.371 60.240 27.138 1.00 0.00 O

ATOM 3025 CB ARG A 99 60.489 58.144 29.059 1.00 0.00 C

ATOM 3026 CG ARG A 99 59.856 57.615 27.782 1.00 0.00 C

ATOM 3027 CD ARG A 99 58.844 56.565 28.064 1.00 0.00 C

ATOM 3028 NE ARG A 99 58.223 56.069 26.847 1.00 0.00 N

ATOM 3029 CZ ARG A 99 57.240 55.148 26.809 1.00 0.00 C

ATOM 3030 NH1 ARG A 99 56.779 54.633 27.928 1.00 0.00 N

ATOM 3031 NH2 ARG A 99 56.740 54.762 25.649 1.00 0.00 N

ATOM 3032 H ARG A 99 61.919 60.427 30.565 1.00 0.00 H

ATOM 3033 HA ARG A 99 62.376 58.704 28.234 1.00 0.00 H

ATOM 3034 1HB ARG A 99 60.877 57.290 29.613 1.00 0.00 H

ATOM 3035 2HB ARG A 99 59.696 58.590 29.660 1.00 0.00 H

ATOM 3036 1HG ARG A 99 59.364 58.432 27.254 1.00 0.00 H

ATOM 3037 2HG ARG A 99 60.629 57.184 27.144 1.00 0.00 H

ATOM 3038 1HD ARG A 99 59.321 55.726 28.569 1.00 0.00 H

ATOM 3039 2HD ARG A 99 58.063 56.976 28.703 1.00 0.00 H

ATOM 3040 HE ARG A 99 58.551 56.442 25.966 1.00 0.00 H

ATOM 3041 1HH1 ARG A 99 57.162 54.928 28.815 1.00 0.00 H

ATOM 3042 2HH1 ARG A 99 56.043 53.943 27.900 1.00 0.00 H

ATOM 3043 1HH2 ARG A 99 57.094 55.158 24.789 1.00 0.00 H

ATOM 3044 2HH2 ARG A 99 56.004 54.072 25.621 1.00 0.00 H

TER

complete: res ss phi psi omega frag rama seq

 1 L 0.000 0.000 0.000 ---- 0.00 M

 2 L 0.000 0.000 0.000 ---- 0.00 D

 3 L 0.000 0.000 0.000 ---- 0.00 I

 4 L 0.000 0.000 0.000 ---- 0.00 S

 5 L 0.000 0.000 0.000 ---- 0.00 G

 6 L 0.000 0.000 0.000 ---- 0.00 L

 7 L 0.000 0.000 0.000 ---- 0.00 P

 8 L 0.000 0.000 0.000 ---- 0.00 V

 9 L 0.000 0.000 0.000 ---- 0.00 P

 10 L 0.000 0.000 0.000 ---- 0.00 V

 11 L 0.000 0.000 0.000 ---- 0.00 C

 12 L 0.000 0.000 0.000 ---- 0.00 T

 13 L 0.000 0.000 0.000 ---- 0.00 C

 14 L 0.000 0.000 0.000 ---- 0.00 T

 15 L 0.000 0.000 0.000 ---- 0.00 G

 16 L 0.000 0.000 0.000 ---- 0.00 T

 17 L 0.000 0.000 0.000 ---- 0.00 P

 18 L 0.000 0.000 0.000 ---- 0.00 Q

 19 L 0.000 0.000 0.000 ---- 0.00 Q

 20 L 0.000 0.000 0.000 ---- 0.00 C

 21 L 0.000 0.000 0.000 ---- 0.00 Y

 22 L 0.000 0.000 0.000 ---- 0.00 R

 23 L 0.000 0.000 0.000 ---- 0.00 W

 24 L 0.000 0.000 0.000 ---- 0.00 G

 25 L 0.000 0.000 0.000 ---- 0.00 C

 26 L 0.000 0.000 0.000 ---- 0.00 G

 27 L 0.000 0.000 0.000 ---- 0.00 G

 28 L 0.000 0.000 0.000 ---- 0.00 W

 29 L 0.000 0.000 0.000 ---- 0.00 Q

 30 E 0.000 0.000 0.000 ---- 0.00 S

 31 L 0.000 0.000 0.000 ---- 0.00 A

 32 L 0.000 0.000 0.000 ---- 0.00 C

 33 L 0.000 0.000 0.000 ---- 0.00 C

 34 E 0.000 0.000 0.000 ---- 0.00 T

 35 L 0.000 0.000 0.000 ---- 0.00 T

 36 L 0.000 0.000 0.000 ---- 0.00 N

 37 L 0.000 0.000 0.000 ---- 0.00 I

 38 L 0.000 0.000 0.000 ---- 0.00 S

 39 L 0.000 0.000 0.000 ---- 0.00 V

 40 L 0.000 0.000 0.000 ---- 0.00 Y

 41 L 0.000 0.000 0.000 ---- 0.00 P

 42 H 0.000 0.000 0.000 ---- 0.00 L

 43 H 0.000 0.000 0.000 ---- 0.00 P

 44 H 0.000 0.000 0.000 ---- 0.00 M

 45 H 0.000 0.000 0.000 ---- 0.00 S

 46 H 0.000 0.000 0.000 ---- 0.00 T

 47 L 0.000 0.000 0.000 ---- 0.00 K

 48 L 0.000 0.000 0.000 ---- 0.00 R

 49 L 0.000 0.000 0.000 ---- 0.00 R

 50 L 0.000 0.000 0.000 ---- 0.00 G

 51 L 0.000 0.000 0.000 ---- 0.00 A

 52 L 0.000 0.000 0.000 ---- 0.00 R

 53 L 0.000 0.000 0.000 ---- 0.00 I

 54 L 0.000 0.000 0.000 ---- 0.00 S

 55 L 0.000 0.000 0.000 ---- 0.00 G

 56 L 0.000 0.000 0.000 ---- 0.00 R

 57 L 0.000 0.000 0.000 ---- 0.00 K

 58 L 0.000 0.000 0.000 ---- 0.00 M

 59 L 0.000 0.000 0.000 ---- 0.00 S

 60 L 0.000 0.000 0.000 ---- 0.00 Q

 61 L 0.000 0.000 0.000 ---- 0.00 G

 62 L 0.000 0.000 0.000 ---- 0.00 A

 63 L 0.000 0.000 0.000 ---- 0.00 F

 64 L 0.000 0.000 0.000 ---- 0.00 K

 65 L 0.000 0.000 0.000 ---- 0.00 K

 66 L 0.000 0.000 0.000 ---- 0.00 V

 67 L 0.000 0.000 0.000 ---- 0.00 L

 68 H 0.000 0.000 0.000 ---- 0.00 E

 69 H 0.000 0.000 0.000 ---- 0.00 K

 70 H 0.000 0.000 0.000 ---- 0.00 L

 71 H 0.000 0.000 0.000 ---- 0.00 S

 72 L 0.000 0.000 0.000 ---- 0.00 T

 73 L 0.000 0.000 0.000 ---- 0.00 E

 74 L 0.000 0.000 0.000 ---- 0.00 G

 75 L 0.000 0.000 0.000 ---- 0.00 Y

 76 L 0.000 0.000 0.000 ---- 0.00 S

 77 L 0.000 0.000 0.000 ---- 0.00 F

 78 L 0.000 0.000 0.000 ---- 0.00 G

 79 L 0.000 0.000 0.000 ---- 0.00 N

 80 L 0.000 0.000 0.000 ---- 0.00 A

 81 L 0.000 0.000 0.000 ---- 0.00 I

 82 H 0.000 0.000 0.000 ---- 0.00 D

 83 H 0.000 0.000 0.000 ---- 0.00 L

 84 H 0.000 0.000 0.000 ---- 0.00 K

 85 H 0.000 0.000 0.000 ---- 0.00 S

 86 H 0.000 0.000 0.000 ---- 0.00 H

 87 H 0.000 0.000 0.000 ---- 0.00 W

 88 H 0.000 0.000 0.000 ---- 0.00 A

 89 L 0.000 0.000 0.000 ---- 0.00 R

 90 L 0.000 0.000 0.000 ---- 0.00 H

 91 L 0.000 0.000 0.000 ---- 0.00 G

 92 L 0.000 0.000 0.000 ---- 0.00 T

 93 L 0.000 0.000 0.000 ---- 0.00 N

 94 L 0.000 0.000 0.000 ---- 0.00 K

 95 L 0.000 0.000 0.000 ---- 0.00 F

 96 L 0.000 0.000 0.000 ---- 0.00 V

 97 L 0.000 0.000 0.000 ---- 0.00 T

 98 L 0.000 0.000 0.000 ---- 0.00 I

 99 L 0.000 0.000 0.000 ---- 0.00 R

 100 L 0.000 0.000 0.000 ---- 0.00 M

 101 L 0.000 0.000 0.000 ---- 0.00 D

 102 L 0.000 0.000 0.000 ---- 0.00 I

 103 L 0.000 0.000 0.000 ---- 0.00 S

 104 L 0.000 0.000 0.000 ---- 0.00 G

 105 L 0.000 0.000 0.000 ---- 0.00 L

 106 L 0.000 0.000 0.000 ---- 0.00 P

 107 L 0.000 0.000 0.000 ---- 0.00 V

 108 L 0.000 0.000 0.000 ---- 0.00 P

 109 L 0.000 0.000 0.000 ---- 0.00 V

 110 L 0.000 0.000 0.000 ---- 0.00 C

 111 L 0.000 0.000 0.000 ---- 0.00 T

 112 L 0.000 0.000 0.000 ---- 0.00 C

 113 L 0.000 0.000 0.000 ---- 0.00 T

 114 L 0.000 0.000 0.000 ---- 0.00 G

 115 L 0.000 0.000 0.000 ---- 0.00 T

 116 L 0.000 0.000 0.000 ---- 0.00 P

 117 L 0.000 0.000 0.000 ---- 0.00 Q

 118 L 0.000 0.000 0.000 ---- 0.00 Q

 119 L 0.000 0.000 0.000 ---- 0.00 C

 120 L 0.000 0.000 0.000 ---- 0.00 Y

 121 L 0.000 0.000 0.000 ---- 0.00 R

 122 L 0.000 0.000 0.000 ---- 0.00 W

 123 L 0.000 0.000 0.000 ---- 0.00 G

 124 L 0.000 0.000 0.000 ---- 0.00 C

 125 L 0.000 0.000 0.000 ---- 0.00 G

 126 L 0.000 0.000 0.000 ---- 0.00 G

 127 L 0.000 0.000 0.000 ---- 0.00 W

 128 L 0.000 0.000 0.000 ---- 0.00 Q

 129 E 0.000 0.000 0.000 ---- 0.00 S

 130 L 0.000 0.000 0.000 ---- 0.00 A

 131 L 0.000 0.000 0.000 ---- 0.00 C

 132 E 0.000 0.000 0.000 ---- 0.00 C

 133 E 0.000 0.000 0.000 ---- 0.00 T

 134 L 0.000 0.000 0.000 ---- 0.00 T

 135 L 0.000 0.000 0.000 ---- 0.00 N

 136 L 0.000 0.000 0.000 ---- 0.00 I

 137 L 0.000 0.000 0.000 ---- 0.00 S

 138 L 0.000 0.000 0.000 ---- 0.00 V

 139 L 0.000 0.000 0.000 ---- 0.00 Y

 140 L 0.000 0.000 0.000 ---- 0.00 P

 141 H 0.000 0.000 0.000 ---- 0.00 L

 142 H 0.000 0.000 0.000 ---- 0.00 P

 143 H 0.000 0.000 0.000 ---- 0.00 M

 144 H 0.000 0.000 0.000 ---- 0.00 S

 145 H 0.000 0.000 0.000 ---- 0.00 T

 146 L 0.000 0.000 0.000 ---- 0.00 K

 147 L 0.000 0.000 0.000 ---- 0.00 R

 148 L 0.000 0.000 0.000 ---- 0.00 R

 149 L 0.000 0.000 0.000 ---- 0.00 G

 150 L 0.000 0.000 0.000 ---- 0.00 A

 151 L 0.000 0.000 0.000 ---- 0.00 R

 152 L 0.000 0.000 0.000 ---- 0.00 I

 153 L 0.000 0.000 0.000 ---- 0.00 S

 154 L 0.000 0.000 0.000 ---- 0.00 G

 155 L 0.000 0.000 0.000 ---- 0.00 R

 156 L 0.000 0.000 0.000 ---- 0.00 K

 157 L 0.000 0.000 0.000 ---- 0.00 M

 158 L 0.000 0.000 0.000 ---- 0.00 S

 159 L 0.000 0.000 0.000 ---- 0.00 Q

 160 L 0.000 0.000 0.000 ---- 0.00 G

 161 L 0.000 0.000 0.000 ---- 0.00 A

 162 L 0.000 0.000 0.000 ---- 0.00 F

 163 L 0.000 0.000 0.000 ---- 0.00 K

 164 L 0.000 0.000 0.000 ---- 0.00 K

 165 L 0.000 0.000 0.000 ---- 0.00 V

 166 L 0.000 0.000 0.000 ---- 0.00 L

 167 H 0.000 0.000 0.000 ---- 0.00 E

 168 H 0.000 0.000 0.000 ---- 0.00 K

 169 H 0.000 0.000 0.000 ---- 0.00 L

 170 H 0.000 0.000 0.000 ---- 0.00 S

 171 L 0.000 0.000 0.000 ---- 0.00 T

 172 L 0.000 0.000 0.000 ---- 0.00 E

 173 L 0.000 0.000 0.000 ---- 0.00 G

 174 L 0.000 0.000 0.000 ---- 0.00 Y

 175 L 0.000 0.000 0.000 ---- 0.00 S

 176 L 0.000 0.000 0.000 ---- 0.00 F

 177 L 0.000 0.000 0.000 ---- 0.00 G

 178 L 0.000 0.000 0.000 ---- 0.00 N

 179 L 0.000 0.000 0.000 ---- 0.00 A

 180 L 0.000 0.000 0.000 ---- 0.00 I

 181 H 0.000 0.000 0.000 ---- 0.00 D

 182 H 0.000 0.000 0.000 ---- 0.00 L

 183 H 0.000 0.000 0.000 ---- 0.00 K

 184 H 0.000 0.000 0.000 ---- 0.00 S

 185 H 0.000 0.000 0.000 ---- 0.00 H

 186 H 0.000 0.000 0.000 ---- 0.00 W

 187 H 0.000 0.000 0.000 ---- 0.00 A

 188 H 0.000 0.000 0.000 ---- 0.00 R

 189 L 0.000 0.000 0.000 ---- 0.00 H

 190 L 0.000 0.000 0.000 ---- 0.00 G

 191 L 0.000 0.000 0.000 ---- 0.00 T

 192 L 0.000 0.000 0.000 ---- 0.00 N

 193 L 0.000 0.000 0.000 ---- 0.00 K

 194 L 0.000 0.000 0.000 ---- 0.00 F

 195 L 0.000 0.000 0.000 ---- 0.00 V

 196 L 0.000 0.000 0.000 ---- 0.00 T

 197 L 0.000 0.000 0.000 ---- 0.00 I

 198 \_ 0.000 0.000 0.000 ---- 0.00 R