ATOM 1 CA ALA A 33 30.115 6.681 -18.986 1.00 43.62 C

ATOM 2 C ALA A 33 31.071 6.320 -17.856 1.00 42.57 C

ATOM 3 O ALA A 33 31.493 5.166 -17.724 1.00 43.84 O

ATOM 4 CB ALA A 33 30.900 7.160 -20.219 1.00 43.09 C

ATOM 5 CA ASN A 34 32.306 7.103 -15.920 1.00 38.97 C

ATOM 6 C ASN A 34 31.663 5.979 -15.124 1.00 36.94 C

ATOM 7 O ASN A 34 30.527 6.104 -14.657 1.00 38.78 O

ATOM 8 CB ASN A 34 32.392 8.383 -15.072 1.00 42.24 C

ATOM 9 CG ASN A 34 33.474 8.327 -13.980 1.00 45.34 C

ATOM 10 OD1 ASN A 34 34.027 9.360 -13.609 1.00 47.64 O

ATOM 11 ND2 ASN A 34 33.762 7.136 -13.462 1.00 45.69 N

ATOM 12 N PRO A 35 32.358 4.842 -15.005 1.00 33.03 N

ATOM 13 CA PRO A 35 31.810 3.717 -14.246 1.00 30.63 C

ATOM 14 C PRO A 35 31.684 4.040 -12.752 1.00 31.14 C

ATOM 15 O PRO A 35 31.102 3.272 -11.982 1.00 30.92 O

ATOM 16 CB PRO A 35 32.798 2.586 -14.513 1.00 31.59 C

ATOM 17 CG PRO A 35 34.070 3.266 -14.933 1.00 31.35 C

ATOM 18 CD PRO A 35 33.667 4.535 -15.609 1.00 31.98 C

ATOM 19 N CYS A 36 32.233 5.184 -12.349 1.00 30.94 N

ATOM 20 CA CYS A 36 32.180 5.603 -10.952 1.00 32.13 C

ATOM 21 C CYS A 36 31.068 6.617 -10.744 1.00 32.26 C

ATOM 22 O CYS A 36 30.910 7.165 -9.656 1.00 30.20 O

ATOM 23 CB CYS A 36 33.530 6.192 -10.510 1.00 34.37 C

ATOM 24 SG CYS A 36 34.785 4.934 -10.055 1.00 32.45 S

ATOM 25 N CYS A 37 30.290 6.830 -11.802 1.00 33.71 N

ATOM 26 CA CYS A 37 29.167 7.765 -11.808 1.00 33.83 C

ATOM 27 C CYS A 37 28.079 7.397 -10.802 1.00 33.14 C

ATOM 28 O CYS A 37 27.358 8.268 -10.318 1.00 34.21 O

ATOM 29 CB CYS A 37 28.543 7.831 -13.213 1.00 30.81 C

ATOM 30 SG CYS A 37 29.093 9.226 -14.267 1.00 33.49 S

ATOM 31 N SER A 38 27.972 6.113 -10.477 1.00 31.60 N

ATOM 32 CA SER A 38 26.946 5.661 -9.554 1.00 31.42 C

ATOM 33 C SER A 38 27.315 5.601 -8.078 1.00 31.91 C

ATOM 34 O SER A 38 26.545 5.062 -7.284 1.00 35.26 O

ATOM 35 CB SER A 38 26.435 4.295 -9.982 1.00 31.90 C

ATOM 36 OG SER A 38 27.160 3.272 -9.331 1.00 37.47 O

ATOM 37 N ASN A 39 28.476 6.130 -7.701 1.00 29.33 N

ATOM 38 CA ASN A 39 28.892 6.140 -6.291 1.00 27.75 C

ATOM 39 C ASN A 39 28.829 4.769 -5.633 1.00 27.96 C

ATOM 40 O ASN A 39 28.149 4.585 -4.615 1.00 28.55 O

ATOM 41 CB ASN A 39 28.008 7.084 -5.485 1.00 26.35 C

ATOM 42 CG ASN A 39 27.794 8.400 -6.170 1.00 25.87 C

ATOM 43 OD1 ASN A 39 28.548 9.352 -5.965 1.00 30.83 O

ATOM 44 ND2 ASN A 39 26.764 8.470 -6.992 1.00 28.46 N

ATOM 45 N PRO A 40 29.557 3.795 -6.193 1.00 27.99 N

ATOM 46 CA PRO A 40 29.579 2.428 -5.665 1.00 25.38 C

ATOM 47 C PRO A 40 30.266 2.256 -4.319 1.00 25.00 C

ATOM 48 O PRO A 40 29.738 1.609 -3.413 1.00 25.70 O

ATOM 49 CB PRO A 40 30.277 1.621 -6.766 1.00 25.13 C

ATOM 50 CG PRO A 40 30.431 2.569 -7.945 1.00 26.86 C

ATOM 51 CD PRO A 40 30.415 3.947 -7.381 1.00 25.87 C

ATOM 52 N CYS A 41 31.446 2.840 -4.188 1.00 24.33 N

ATOM 53 CA CYS A 41 32.213 2.695 -2.962 1.00 24.09 C

ATOM 54 C CYS A 41 31.539 3.277 -1.740 1.00 20.51 C

ATOM 55 O CYS A 41 31.290 4.472 -1.643 1.00 22.29 O

ATOM 56 CB CYS A 41 33.610 3.290 -3.153 1.00 23.67 C

ATOM 57 SG CYS A 41 34.279 2.903 -4.801 1.00 26.04 S

ATOM 58 N GLN A 42 31.249 2.403 -0.800 1.00 18.86 N

ATOM 59 CA GLN A 42 30.600 2.817 0.413 1.00 22.03 C

ATOM 60 C GLN A 42 31.657 3.055 1.474 1.00 22.68 C

ATOM 61 O GLN A 42 32.839 2.754 1.273 1.00 23.44 O

ATOM 62 CB GLN A 42 29.592 1.743 0.864 1.00 22.88 C

ATOM 63 CG GLN A 42 28.477 1.453 -0.166 1.00 19.06 C

ATOM 64 CD GLN A 42 27.823 2.727 -0.726 1.00 19.92 C

ATOM 65 OE1 GLN A 42 27.254 3.533 0.018 1.00 18.24 O

ATOM 66 NE2 GLN A 42 27.907 2.909 -2.042 1.00 19.54 N

ATOM 67 N ASN A 43 31.212 3.614 2.595 1.00 23.34 N

ATOM 68 CA ASN A 43 32.059 3.923 3.743 1.00 23.57 C

ATOM 69 C ASN A 43 33.334 4.723 3.528 1.00 22.27 C

ATOM 70 O ASN A 43 34.366 4.423 4.134 1.00 22.12 O

ATOM 71 CB ASN A 43 32.382 2.641 4.474 1.00 23.24 C

ATOM 72 CG ASN A 43 31.144 1.959 4.955 1.00 23.00 C

ATOM 73 OD1 ASN A 43 30.511 2.400 5.918 1.00 20.74 O

ATOM 74 ND2 ASN A 43 30.769 0.883 4.278 1.00 28.18 N

ATOM 75 N ARG A 44 33.245 5.748 2.685 1.00 19.81 N

ATOM 76 CA ARG A 44 34.378 6.612 2.395 1.00 17.79 C

ATOM 77 C ARG A 44 35.466 5.973 1.547 1.00 17.08 C

ATOM 78 O ARG A 44 36.580 6.482 1.469 1.00 16.52 O

ATOM 79 CB ARG A 44 34.965 7.120 3.703 1.00 19.19 C

ATOM 80 CG ARG A 44 33.983 7.951 4.511 1.00 17.98 C

ATOM 81 CD ARG A 44 34.229 9.417 4.264 1.00 13.01 C

ATOM 82 NE ARG A 44 35.052 9.988 5.315 1.00 15.80 N

ATOM 83 CZ ARG A 44 36.027 10.856 5.109 1.00 15.53 C

ATOM 84 NH1 ARG A 44 36.315 11.265 3.878 1.00 18.50 N

ATOM 85 NH2 ARG A 44 36.695 11.330 6.144 1.00 10.64 N

ATOM 86 N GLY A 45 35.129 4.855 0.913 1.00 19.33 N

ATOM 87 CA GLY A 45 36.078 4.171 0.054 1.00 22.99 C

ATOM 88 C GLY A 45 36.246 5.028 -1.174 1.00 23.68 C

ATOM 89 O GLY A 45 35.347 5.801 -1.506 1.00 25.27 O

ATOM 90 N GLU A 46 37.376 4.897 -1.858 1.00 26.00 N

ATOM 91 CA GLU A 46 37.618 5.716 -3.037 1.00 26.03 C

ATOM 92 C GLU A 46 37.411 4.947 -4.331 1.00 25.38 C

ATOM 93 O GLU A 46 37.965 3.868 -4.527 1.00 23.06 O

ATOM 94 CB GLU A 46 39.036 6.298 -3.000 1.00 27.52 C

ATOM 95 CG GLU A 46 39.570 6.571 -1.592 1.00 33.33 C

ATOM 96 CD GLU A 46 40.170 7.966 -1.453 1.00 36.36 C

ATOM 97 OE1 GLU A 46 40.703 8.475 -2.472 1.00 36.66 O

ATOM 98 OE2 GLU A 46 40.106 8.546 -0.335 1.00 33.51 O

ATOM 99 N CYS A 47 36.586 5.514 -5.208 1.00 26.98 N

ATOM 100 CA CYS A 47 36.308 4.918 -6.505 1.00 26.05 C

ATOM 101 C CYS A 47 37.329 5.472 -7.498 1.00 27.28 C

ATOM 102 O CYS A 47 37.555 6.686 -7.590 1.00 26.37 O

ATOM 103 CB CYS A 47 34.888 5.276 -6.974 1.00 27.63 C

ATOM 104 SG CYS A 47 34.188 4.173 -8.257 1.00 27.97 S

ATOM 105 N MET A 48 37.958 4.572 -8.233 1.00 25.80 N

ATOM 106 CA MET A 48 38.919 4.975 -9.222 1.00 23.52 C

ATOM 107 C MET A 48 38.538 4.144 -10.430 1.00 22.73 C

ATOM 108 O MET A 48 38.347 2.944 -10.324 1.00 22.32 O

ATOM 109 CB MET A 48 40.331 4.647 -8.737 1.00 26.51 C

ATOM 110 CG MET A 48 41.395 4.847 -9.800 1.00 32.41 C

ATOM 111 SD MET A 48 42.890 3.920 -9.491 1.00 28.47 S

ATOM 112 CE MET A 48 42.375 2.266 -9.861 1.00 33.49 C

ATOM 113 N SER A 49 38.393 4.778 -11.576 1.00 23.78 N

ATOM 114 CA SER A 49 38.015 4.042 -12.763 1.00 27.55 C

ATOM 115 C SER A 49 39.172 3.185 -13.257 1.00 31.96 C

ATOM 116 O SER A 49 40.277 3.687 -13.477 1.00 36.26 O

ATOM 117 CB SER A 49 37.572 5.014 -13.863 1.00 29.60 C

ATOM 118 OG SER A 49 38.626 5.882 -14.249 1.00 28.47 O

ATOM 119 N THR A 50 38.914 1.890 -13.437 1.00 33.74 N

ATOM 120 CA THR A 50 39.930 0.940 -13.917 1.00 33.28 C

ATOM 121 C THR A 50 39.563 0.376 -15.294 1.00 31.21 C

ATOM 122 O THR A 50 39.383 -0.822 -15.447 1.00 33.28 O

ATOM 123 CB THR A 50 40.092 -0.236 -12.927 1.00 31.66 C

ATOM 124 OG1 THR A 50 39.022 -1.168 -13.113 1.00 33.77 O

ATOM 125 CG2 THR A 50 40.053 0.268 -11.491 1.00 32.44 C

ATOM 126 N GLY A 51 39.470 1.244 -16.292 1.00 30.38 N

ATOM 127 CA GLY A 51 39.097 0.808 -17.626 1.00 30.83 C

ATOM 128 C GLY A 51 37.822 1.527 -18.024 1.00 32.34 C

ATOM 129 O GLY A 51 37.074 1.982 -17.155 1.00 35.28 O

ATOM 130 N PHE A 52 37.560 1.636 -19.322 1.00 33.50 N

ATOM 131 CA PHE A 52 36.364 2.333 -19.809 1.00 33.92 C

ATOM 132 C PHE A 52 35.016 1.997 -19.164 1.00 36.74 C

ATOM 133 O PHE A 52 34.157 2.876 -19.047 1.00 36.79 O

ATOM 134 CB PHE A 52 36.240 2.150 -21.316 1.00 30.39 C

ATOM 135 CG PHE A 52 37.064 3.114 -22.100 1.00 27.43 C

ATOM 136 CD1 PHE A 52 38.080 2.666 -22.924 1.00 24.20 C

ATOM 137 CD2 PHE A 52 36.833 4.475 -22.000 1.00 26.60 C

ATOM 138 CE1 PHE A 52 38.849 3.551 -23.629 1.00 21.14 C

ATOM 139 CE2 PHE A 52 37.597 5.372 -22.703 1.00 24.10 C

ATOM 140 CZ PHE A 52 38.610 4.908 -23.521 1.00 24.88 C

ATOM 141 N ASP A 53 34.826 0.744 -18.746 1.00 39.92 N

ATOM 142 CA ASP A 53 33.558 0.315 -18.144 1.00 42.28 C

ATOM 143 C ASP A 53 33.689 -0.421 -16.816 1.00 42.26 C

ATOM 144 O ASP A 53 32.777 -1.151 -16.422 1.00 41.69 O

ATOM 145 CB ASP A 53 32.807 -0.604 -19.106 1.00 45.94 C

ATOM 146 CG ASP A 53 32.427 0.080 -20.401 1.00 53.10 C

ATOM 147 OD1 ASP A 53 31.706 1.109 -20.349 1.00 58.79 O

ATOM 148 OD2 ASP A 53 32.845 -0.421 -21.469 1.00 51.91 O

ATOM 149 N GLN A 54 34.814 -0.251 -16.130 1.00 41.77 N

ATOM 150 CA GLN A 54 35.020 -0.929 -14.856 1.00 38.99 C

ATOM 151 C GLN A 54 35.543 0.073 -13.843 1.00 35.31 C

ATOM 152 O GLN A 54 36.069 1.121 -14.219 1.00 34.62 O

ATOM 153 CB GLN A 54 36.007 -2.096 -15.016 1.00 43.97 C

ATOM 154 CG GLN A 54 35.571 -3.154 -16.036 1.00 48.92 C

ATOM 155 CD GLN A 54 36.243 -2.972 -17.403 1.00 54.41 C

ATOM 156 OE1 GLN A 54 36.344 -1.852 -17.912 1.00 55.64 O

ATOM 157 NE2 GLN A 54 36.705 -4.075 -18.000 1.00 56.33 N

ATOM 158 N TYR A 55 35.379 -0.252 -12.563 1.00 31.03 N

ATOM 159 CA TYR A 55 35.810 0.611 -11.467 1.00 26.48 C

ATOM 160 C TYR A 55 36.380 -0.225 -10.317 1.00 25.39 C

ATOM 161 O TYR A 55 36.219 -1.444 -10.278 1.00 26.34 O

ATOM 162 CB TYR A 55 34.619 1.437 -10.963 1.00 23.10 C

ATOM 163 CG TYR A 55 33.673 0.642 -10.093 1.00 24.68 C

ATOM 164 CD1 TYR A 55 33.925 0.479 -8.729 1.00 24.80 C

ATOM 165 CD2 TYR A 55 32.573 -0.016 -10.643 1.00 22.79 C

ATOM 166 CE1 TYR A 55 33.117 -0.322 -7.944 1.00 23.35 C

ATOM 167 CE2 TYR A 55 31.761 -0.821 -9.863 1.00 18.88 C

ATOM 168 CZ TYR A 55 32.041 -0.972 -8.520 1.00 21.01 C

ATOM 169 OH TYR A 55 31.271 -1.797 -7.745 1.00 19.75 O

ATOM 170 N LYS A 56 37.049 0.438 -9.379 1.00 26.52 N

ATOM 171 CA LYS A 56 37.620 -0.241 -8.214 1.00 24.49 C

ATOM 172 C LYS A 56 37.490 0.652 -6.986 1.00 22.54 C

ATOM 173 O LYS A 56 37.410 1.880 -7.098 1.00 22.70 O

ATOM 174 CB LYS A 56 39.090 -0.563 -8.440 1.00 24.97 C

ATOM 175 CG LYS A 56 39.886 -0.559 -7.160 1.00 27.19 C

ATOM 176 CD LYS A 56 40.726 -1.816 -7.017 1.00 28.89 C

ATOM 177 CE LYS A 56 41.120 -2.059 -5.562 1.00 27.77 C

ATOM 178 NZ LYS A 56 40.774 -3.452 -5.155 1.00 29.29 N

ATOM 179 N CYS A 57 37.452 0.048 -5.809 1.00 21.59 N

ATOM 180 CA CYS A 57 37.340 0.857 -4.605 1.00 23.08 C

ATOM 181 C CYS A 57 38.533 0.651 -3.680 1.00 22.65 C

ATOM 182 O CYS A 57 38.846 -0.476 -3.303 1.00 24.45 O

ATOM 183 CB CYS A 57 36.028 0.549 -3.856 1.00 23.94 C

ATOM 184 SG CYS A 57 34.478 0.879 -4.783 1.00 27.36 S

ATOM 185 N ASP A 58 39.198 1.757 -3.343 1.00 21.50 N

ATOM 186 CA ASP A 58 40.352 1.774 -2.446 1.00 18.12 C

ATOM 187 C ASP A 58 39.729 1.819 -1.060 1.00 16.03 C

ATOM 188 O ASP A 58 39.224 2.866 -0.624 1.00 12.02 O

ATOM 189 CB ASP A 58 41.184 3.042 -2.707 1.00 21.45 C

ATOM 190 CG ASP A 58 42.515 3.060 -1.956 1.00 19.05 C

ATOM 191 OD1 ASP A 58 42.702 2.291 -0.988 1.00 18.65 O

ATOM 192 OD2 ASP A 58 43.379 3.866 -2.345 1.00 15.53 O

ATOM 193 N CYS A 59 39.741 0.673 -0.384 1.00 17.64 N

ATOM 194 CA CYS A 59 39.128 0.571 0.940 1.00 21.86 C

ATOM 195 C CYS A 59 40.112 0.869 2.057 1.00 19.37 C

ATOM 196 O CYS A 59 39.800 0.725 3.232 1.00 21.21 O

ATOM 197 CB CYS A 59 38.471 -0.816 1.130 1.00 23.40 C

ATOM 198 SG CYS A 59 37.176 -1.287 -0.106 1.00 34.96 S

ATOM 199 N THR A 60 41.295 1.321 1.671 1.00 18.94 N

ATOM 200 CA THR A 60 42.346 1.681 2.608 1.00 17.90 C

ATOM 201 C THR A 60 41.876 2.435 3.849 1.00 19.07 C

ATOM 202 O THR A 60 41.236 3.490 3.746 1.00 21.07 O

ATOM 203 CB THR A 60 43.368 2.561 1.922 1.00 19.27 C

ATOM 204 OG1 THR A 60 43.939 1.841 0.826 1.00 16.92 O

ATOM 205 CG2 THR A 60 44.443 2.996 2.914 1.00 17.33 C

ATOM 206 N ARG A 61 42.214 1.903 5.017 1.00 17.51 N

ATOM 207 CA ARG A 61 41.858 2.534 6.284 1.00 18.66 C

ATOM 208 C ARG A 61 40.385 2.933 6.432 1.00 22.33 C

ATOM 209 O ARG A 61 40.103 3.938 7.084 1.00 24.71 O

ATOM 210 CB ARG A 61 42.710 3.790 6.505 1.00 18.30 C

ATOM 211 CG ARG A 61 43.864 3.651 7.486 1.00 15.65 C

ATOM 212 CD ARG A 61 44.931 4.737 7.249 1.00 14.45 C

ATOM 213 NE ARG A 61 45.740 4.455 6.063 1.00 10.38 N

ATOM 214 CZ ARG A 61 45.776 5.233 4.988 1.00 15.04 C

ATOM 215 NH1 ARG A 61 45.051 6.339 4.949 1.00 20.23 N

ATOM 216 NH2 ARG A 61 46.520 4.905 3.949 1.00 14.66 N

ATOM 217 N THR A 62 39.449 2.182 5.845 1.00 23.64 N

ATOM 218 CA THR A 62 38.028 2.531 5.977 1.00 24.40 C

ATOM 219 C THR A 62 37.340 1.671 7.042 1.00 26.84 C

ATOM 220 O THR A 62 36.406 2.116 7.710 1.00 27.88 O

ATOM 221 CB THR A 62 37.240 2.361 4.650 1.00 21.95 C

ATOM 222 OG1 THR A 62 37.150 0.972 4.334 1.00 27.17 O

ATOM 223 CG2 THR A 62 37.912 3.089 3.505 1.00 20.46 C

ATOM 224 N GLY A 63 37.808 0.442 7.207 1.00 27.96 N

ATOM 225 CA GLY A 63 37.206 -0.438 8.189 1.00 26.78 C

ATOM 226 C GLY A 63 36.400 -1.510 7.485 1.00 28.09 C

ATOM 227 O GLY A 63 35.927 -2.460 8.115 1.00 29.44 O

ATOM 228 N PHE A 64 36.242 -1.362 6.171 1.00 26.54 N

ATOM 229 CA PHE A 64 35.491 -2.337 5.387 1.00 26.30 C

ATOM 230 C PHE A 64 36.314 -2.787 4.201 1.00 26.69 C

ATOM 231 O PHE A 64 37.249 -2.109 3.793 1.00 27.49 O

ATOM 232 CB PHE A 64 34.178 -1.735 4.852 1.00 25.71 C

ATOM 233 CG PHE A 64 33.280 -1.157 5.916 1.00 21.88 C

ATOM 234 CD1 PHE A 64 33.659 -0.032 6.635 1.00 17.27 C

ATOM 235 CD2 PHE A 64 32.061 -1.740 6.195 1.00 17.14 C

ATOM 236 CE1 PHE A 64 32.834 0.488 7.602 1.00 15.61 C

ATOM 237 CE2 PHE A 64 31.236 -1.216 7.162 1.00 13.01 C

ATOM 238 CZ PHE A 64 31.619 -0.110 7.866 1.00 12.41 C

ATOM 239 N TYR A 65 35.952 -3.936 3.646 1.00 28.62 N

ATOM 240 CA TYR A 65 36.630 -4.470 2.479 1.00 29.43 C

ATOM 241 C TYR A 65 35.542 -5.033 1.599 1.00 30.16 C

ATOM 242 O TYR A 65 34.435 -5.267 2.069 1.00 34.46 O

ATOM 243 CB TYR A 65 37.608 -5.569 2.877 1.00 32.14 C

ATOM 244 CG TYR A 65 37.035 -6.615 3.788 1.00 35.22 C

ATOM 245 CD1 TYR A 65 36.703 -7.870 3.299 1.00 39.31 C

ATOM 246 CD2 TYR A 65 36.862 -6.369 5.143 1.00 39.35 C

ATOM 247 CE1 TYR A 65 36.217 -8.859 4.134 1.00 41.42 C

ATOM 248 CE2 TYR A 65 36.376 -7.351 5.990 1.00 41.45 C

ATOM 249 CZ TYR A 65 36.057 -8.596 5.475 1.00 42.44 C

ATOM 250 OH TYR A 65 35.584 -9.592 6.293 1.00 43.76 O

ATOM 251 N GLY A 66 35.847 -5.252 0.329 1.00 29.11 N

ATOM 252 CA GLY A 66 34.847 -5.782 -0.577 1.00 29.06 C

ATOM 253 C GLY A 66 34.762 -4.880 -1.786 1.00 29.78 C

ATOM 254 O GLY A 66 35.081 -3.698 -1.684 1.00 29.95 O

ATOM 255 N GLU A 67 34.350 -5.424 -2.927 1.00 30.25 N

ATOM 256 CA GLU A 67 34.241 -4.636 -4.150 1.00 33.34 C

ATOM 257 C GLU A 67 33.674 -3.219 -3.940 1.00 34.43 C

ATOM 258 O GLU A 67 33.950 -2.313 -4.739 1.00 34.07 O

ATOM 259 CB GLU A 67 33.380 -5.382 -5.171 1.00 34.87 C

ATOM 260 CG GLU A 67 33.434 -4.798 -6.577 1.00 41.94 C

ATOM 261 CD GLU A 67 32.357 -5.373 -7.477 1.00 44.16 C

ATOM 262 OE1 GLU A 67 31.540 -6.154 -6.960 1.00 44.92 O

ATOM 263 OE2 GLU A 67 32.321 -5.052 -8.688 1.00 45.41 O

ATOM 264 N ASN A 68 32.893 -3.037 -2.872 1.00 34.33 N

ATOM 265 CA ASN A 68 32.274 -1.752 -2.556 1.00 35.14 C

ATOM 266 C ASN A 68 32.499 -1.322 -1.092 1.00 34.64 C

ATOM 267 O ASN A 68 31.745 -0.536 -0.523 1.00 34.52 O

ATOM 268 CB ASN A 68 30.778 -1.819 -2.883 1.00 37.29 C

ATOM 269 CG ASN A 68 30.513 -2.284 -4.308 1.00 40.28 C

ATOM 270 OD1 ASN A 68 31.064 -1.743 -5.259 1.00 38.28 O

ATOM 271 ND2 ASN A 68 29.676 -3.304 -4.454 1.00 48.32 N

ATOM 272 N CYS A 69 33.554 -1.848 -0.490 1.00 33.85 N

ATOM 273 CA CYS A 69 33.915 -1.516 0.884 1.00 35.77 C

ATOM 274 C CYS A 69 32.753 -1.645 1.854 1.00 35.47 C

ATOM 275 O CYS A 69 32.675 -0.926 2.842 1.00 37.19 O

ATOM 276 CB CYS A 69 34.498 -0.085 0.951 1.00 35.26 C

ATOM 277 SG CYS A 69 35.858 0.288 -0.232 1.00 38.52 S

ATOM 278 N THR A 70 31.856 -2.585 1.592 1.00 34.63 N

ATOM 279 CA THR A 70 30.703 -2.755 2.465 1.00 33.17 C

ATOM 280 C THR A 70 30.873 -3.797 3.565 1.00 32.12 C

ATOM 281 O THR A 70 30.209 -3.722 4.600 1.00 35.23 O

ATOM 282 CB THR A 70 29.457 -3.091 1.646 1.00 32.44 C

ATOM 283 OG1 THR A 70 29.837 -3.844 0.486 1.00 36.48 O

ATOM 284 CG2 THR A 70 28.770 -1.807 1.210 1.00 35.33 C

ATOM 285 N THR A 71 31.760 -4.762 3.350 1.00 29.17 N

ATOM 286 CA THR A 71 32.010 -5.814 4.327 1.00 26.43 C

ATOM 287 C THR A 71 32.817 -5.288 5.509 1.00 28.07 C

ATOM 288 O THR A 71 34.001 -4.999 5.374 1.00 31.53 O

ATOM 289 CB THR A 71 32.784 -6.947 3.678 1.00 24.75 C

ATOM 290 OG1 THR A 71 32.191 -7.252 2.412 1.00 23.15 O

ATOM 291 CG2 THR A 71 32.775 -8.173 4.562 1.00 25.92 C

ATOM 292 N PRO A 72 32.196 -5.174 6.693 1.00 27.85 N

ATOM 293 CA PRO A 72 32.941 -4.668 7.849 1.00 29.75 C

ATOM 294 C PRO A 72 33.970 -5.656 8.353 1.00 30.23 C

ATOM 295 O PRO A 72 33.800 -6.860 8.208 1.00 30.69 O

ATOM 296 CB PRO A 72 31.859 -4.423 8.901 1.00 26.58 C

ATOM 297 CG PRO A 72 30.847 -5.413 8.588 1.00 28.31 C

ATOM 298 CD PRO A 72 30.817 -5.511 7.065 1.00 28.76 C

ATOM 299 N GLU A 73 35.043 -5.130 8.928 1.00 33.16 N

ATOM 300 CA GLU A 73 36.076 -5.965 9.502 1.00 37.91 C

ATOM 301 C GLU A 73 35.556 -6.225 10.889 1.00 37.95 C

ATOM 302 O GLU A 73 34.589 -5.596 11.307 1.00 39.29 O

ATOM 303 CB GLU A 73 37.393 -5.221 9.601 1.00 40.41 C

ATOM 304 CG GLU A 73 38.081 -5.017 8.277 1.00 46.66 C

ATOM 305 CD GLU A 73 39.159 -3.958 8.365 1.00 50.30 C

ATOM 306 OE1 GLU A 73 39.419 -3.477 9.498 1.00 51.17 O

ATOM 307 OE2 GLU A 73 39.737 -3.613 7.308 1.00 51.16 O

ATOM 308 N PHE A 74 36.203 -7.130 11.610 1.00 40.23 N

ATOM 309 CA PHE A 74 35.759 -7.471 12.956 1.00 43.61 C

ATOM 310 C PHE A 74 35.585 -6.270 13.875 1.00 43.86 C

ATOM 311 O PHE A 74 34.449 -5.908 14.227 1.00 42.88 O

ATOM 312 CB PHE A 74 36.729 -8.452 13.619 1.00 45.68 C

ATOM 313 CG PHE A 74 36.280 -8.902 14.979 1.00 44.64 C

ATOM 314 CD1 PHE A 74 35.107 -9.641 15.125 1.00 45.87 C

ATOM 315 CD2 PHE A 74 36.994 -8.549 16.115 1.00 44.70 C

ATOM 316 CE1 PHE A 74 34.648 -10.022 16.381 1.00 45.95 C

ATOM 317 CE2 PHE A 74 36.546 -8.923 17.380 1.00 46.79 C

ATOM 318 CZ PHE A 74 35.367 -9.662 17.514 1.00 46.90 C

ATOM 319 N LEU A 75 36.712 -5.676 14.277 1.00 41.61 N

ATOM 320 CA LEU A 75 36.696 -4.523 15.165 1.00 41.23 C

ATOM 321 C LEU A 75 35.611 -3.534 14.727 1.00 41.64 C

ATOM 322 O LEU A 75 34.934 -2.930 15.567 1.00 41.13 O

ATOM 323 CB LEU A 75 38.070 -3.846 15.171 1.00 42.48 C

ATOM 324 CG LEU A 75 38.227 -2.455 15.814 1.00 44.70 C

ATOM 325 CD1 LEU A 75 38.023 -2.544 17.326 1.00 43.12 C

ATOM 326 CD2 LEU A 75 39.618 -1.887 15.490 1.00 43.09 C

ATOM 327 N THR A 76 35.434 -3.392 13.411 1.00 42.11 N

ATOM 328 CA THR A 76 34.429 -2.475 12.853 1.00 38.89 C

ATOM 329 C THR A 76 33.043 -2.789 13.374 1.00 41.15 C

ATOM 330 O THR A 76 32.340 -1.900 13.853 1.00 41.85 O

ATOM 331 CB THR A 76 34.359 -2.544 11.309 1.00 35.82 C

ATOM 332 OG1 THR A 76 35.611 -2.128 10.750 1.00 32.68 O

ATOM 333 CG2 THR A 76 33.243 -1.644 10.792 1.00 28.76 C

ATOM 334 N ARG A 77 32.660 -4.059 13.277 1.00 41.43 N

ATOM 335 CA ARG A 77 31.353 -4.507 13.725 1.00 42.78 C

ATOM 336 C ARG A 77 31.142 -4.301 15.220 1.00 43.55 C

ATOM 337 O ARG A 77 30.012 -4.081 15.654 1.00 43.10 O

ATOM 338 CB ARG A 77 31.162 -5.975 13.375 1.00 45.19 C

ATOM 339 CG ARG A 77 31.849 -6.377 12.098 1.00 52.66 C

ATOM 340 CD ARG A 77 32.012 -7.884 12.034 1.00 57.49 C

ATOM 341 NE ARG A 77 31.125 -8.468 11.034 1.00 63.44 N

ATOM 342 CZ ARG A 77 30.687 -9.723 11.061 1.00 65.70 C

ATOM 343 NH1 ARG A 77 31.056 -10.538 12.045 1.00 65.44 N

ATOM 344 NH2 ARG A 77 29.875 -10.161 10.104 1.00 65.69 N

ATOM 345 N ILE A 78 32.218 -4.382 16.005 1.00 44.49 N

ATOM 346 CA ILE A 78 32.121 -4.175 17.454 1.00 44.80 C

ATOM 347 C ILE A 78 31.826 -2.701 17.700 1.00 45.26 C

ATOM 348 O ILE A 78 30.910 -2.345 18.449 1.00 45.31 O

ATOM 349 CB ILE A 78 33.435 -4.526 18.183 1.00 42.98 C

ATOM 350 CG1 ILE A 78 33.515 -6.029 18.408 1.00 40.09 C

ATOM 351 CG2 ILE A 78 33.505 -3.802 19.517 1.00 42.00 C

ATOM 352 CD1 ILE A 78 34.291 -6.726 17.348 1.00 39.23 C

ATOM 353 N LYS A 79 32.615 -1.848 17.054 1.00 45.87 N

ATOM 354 CA LYS A 79 32.445 -0.414 17.177 1.00 45.90 C

ATOM 355 C LYS A 79 31.038 -0.001 16.749 1.00 44.94 C

ATOM 356 O LYS A 79 30.399 0.804 17.421 1.00 46.24 O

ATOM 357 CB LYS A 79 33.482 0.306 16.326 1.00 45.30 C

ATOM 358 CG LYS A 79 34.824 0.464 17.008 1.00 45.78 C

ATOM 359 CD LYS A 79 35.918 0.676 15.961 1.00 50.01 C

ATOM 360 CE LYS A 79 37.319 0.658 16.569 1.00 49.36 C

ATOM 361 NZ LYS A 79 38.232 1.504 15.760 1.00 46.77 N

ATOM 362 N LEU A 80 30.547 -0.557 15.645 1.00 44.30 N

ATOM 363 CA LEU A 80 29.204 -0.211 15.168 1.00 45.41 C

ATOM 364 C LEU A 80 28.191 -0.448 16.274 1.00 46.59 C

ATOM 365 O LEU A 80 27.465 0.465 16.670 1.00 48.71 O

ATOM 366 CB LEU A 80 28.818 -1.043 13.939 1.00 42.63 C

ATOM 367 CG LEU A 80 29.658 -0.779 12.681 1.00 43.64 C

ATOM 368 CD1 LEU A 80 29.074 -1.544 11.501 1.00 41.66 C

ATOM 369 CD2 LEU A 80 29.705 0.721 12.387 1.00 42.31 C

ATOM 370 N LEU A 81 28.165 -1.677 16.781 1.00 47.34 N

ATOM 371 CA LEU A 81 27.246 -2.063 17.845 1.00 46.95 C

ATOM 372 C LEU A 81 27.265 -1.092 19.009 1.00 46.60 C

ATOM 373 O LEU A 81 26.219 -0.756 19.559 1.00 46.57 O

ATOM 374 CB LEU A 81 27.601 -3.451 18.365 1.00 47.41 C

ATOM 375 CG LEU A 81 27.009 -4.625 17.593 1.00 49.75 C

ATOM 376 CD1 LEU A 81 26.958 -4.314 16.095 1.00 52.01 C

ATOM 377 CD2 LEU A 81 27.859 -5.848 17.860 1.00 50.71 C

ATOM 378 N LEU A 82 28.460 -0.648 19.383 1.00 46.39 N

ATOM 379 CA LEU A 82 28.617 0.274 20.506 1.00 47.17 C

ATOM 380 C LEU A 82 28.595 1.758 20.123 1.00 47.24 C

ATOM 381 O LEU A 82 29.153 2.591 20.839 1.00 46.36 O

ATOM 382 CB LEU A 82 29.918 -0.027 21.260 1.00 44.45 C

ATOM 383 CG LEU A 82 30.070 -1.389 21.939 1.00 41.87 C

ATOM 384 CD1 LEU A 82 29.104 -2.386 21.324 1.00 41.58 C

ATOM 385 CD2 LEU A 82 31.511 -1.862 21.783 1.00 41.42 C

ATOM 386 N LYS A 83 27.964 2.094 19.002 1.00 45.65 N

ATOM 387 CA LYS A 83 27.893 3.491 18.598 1.00 44.41 C

ATOM 388 C LYS A 83 26.460 3.982 18.558 1.00 44.98 C

ATOM 389 O LYS A 83 25.670 3.561 17.705 1.00 45.98 O

ATOM 390 CB LYS A 83 28.528 3.698 17.230 1.00 44.63 C

ATOM 391 CG LYS A 83 28.546 5.150 16.796 1.00 42.90 C

ATOM 392 CD LYS A 83 27.984 5.293 15.405 1.00 44.95 C

ATOM 393 CE LYS A 83 28.370 6.621 14.803 1.00 46.29 C

ATOM 394 NZ LYS A 83 29.515 6.481 13.860 1.00 47.92 N

ATOM 395 N PRO A 84 26.106 4.885 19.492 1.00 45.20 N

ATOM 396 CA PRO A 84 24.768 5.481 19.617 1.00 44.94 C

ATOM 397 C PRO A 84 24.481 6.451 18.476 1.00 43.11 C

ATOM 398 O PRO A 84 25.349 7.228 18.082 1.00 42.21 O

ATOM 399 CB PRO A 84 24.809 6.186 20.970 1.00 44.33 C

ATOM 400 CG PRO A 84 26.249 6.492 21.190 1.00 44.37 C

ATOM 401 CD PRO A 84 27.034 5.393 20.518 1.00 44.31 C

ATOM 402 N THR A 85 23.262 6.406 17.954 1.00 44.61 N

ATOM 403 CA THR A 85 22.882 7.279 16.848 1.00 45.31 C

ATOM 404 C THR A 85 22.966 8.766 17.195 1.00 45.35 C

ATOM 405 O THR A 85 22.925 9.155 18.368 1.00 47.19 O

ATOM 406 CB THR A 85 21.449 6.968 16.346 1.00 45.35 C

ATOM 407 OG1 THR A 85 20.516 7.843 16.986 1.00 46.07 O

ATOM 408 CG2 THR A 85 21.078 5.531 16.639 1.00 45.11 C

ATOM 409 N PRO A 86 23.101 9.619 16.167 1.00 43.50 N

ATOM 410 CA PRO A 86 23.187 11.063 16.400 1.00 41.27 C

ATOM 411 C PRO A 86 22.014 11.578 17.221 1.00 37.64 C

ATOM 412 O PRO A 86 22.189 12.469 18.050 1.00 36.50 O

ATOM 413 CB PRO A 86 23.212 11.658 14.988 1.00 42.38 C

ATOM 414 CG PRO A 86 23.748 10.553 14.122 1.00 41.18 C

ATOM 415 CD PRO A 86 23.204 9.283 14.735 1.00 43.09 C

ATOM 416 N ASN A 87 20.830 11.003 16.990 1.00 36.96 N

ATOM 417 CA ASN A 87 19.601 11.395 17.696 1.00 37.72 C

ATOM 418 C ASN A 87 19.551 10.910 19.144 1.00 37.41 C

ATOM 419 O ASN A 87 18.849 11.481 19.970 1.00 36.56 O

ATOM 420 CB ASN A 87 18.374 10.882 16.948 1.00 37.22 C

ATOM 421 CG ASN A 87 18.384 11.265 15.478 1.00 38.81 C

ATOM 422 OD1 ASN A 87 17.951 12.364 15.105 1.00 36.23 O

ATOM 423 ND2 ASN A 87 18.882 10.357 14.634 1.00 38.20 N

ATOM 424 N THR A 88 20.287 9.842 19.439 1.00 40.51 N

ATOM 425 CA THR A 88 20.374 9.317 20.801 1.00 40.07 C

ATOM 426 C THR A 88 21.190 10.337 21.587 1.00 39.32 C

ATOM 427 O THR A 88 20.724 10.920 22.571 1.00 41.19 O

ATOM 428 CB THR A 88 21.170 8.007 20.879 1.00 40.31 C

ATOM 429 OG1 THR A 88 20.579 7.017 20.030 1.00 42.78 O

ATOM 430 CG2 THR A 88 21.209 7.516 22.320 1.00 38.33 C

ATOM 431 N VAL A 89 22.422 10.543 21.130 1.00 36.54 N

ATOM 432 CA VAL A 89 23.326 11.484 21.770 1.00 35.36 C

ATOM 433 C VAL A 89 22.640 12.832 21.979 1.00 35.70 C

ATOM 434 O VAL A 89 22.663 13.387 23.085 1.00 33.89 O

ATOM 435 CB VAL A 89 24.593 11.676 20.931 1.00 31.98 C

ATOM 436 CG1 VAL A 89 25.569 12.553 21.677 1.00 30.09 C

ATOM 437 CG2 VAL A 89 25.213 10.332 20.630 1.00 30.04 C

ATOM 438 N HIS A 90 22.035 13.354 20.914 1.00 34.18 N

ATOM 439 CA HIS A 90 21.327 14.622 20.992 1.00 34.90 C

ATOM 440 C HIS A 90 20.380 14.626 22.185 1.00 34.39 C

ATOM 441 O HIS A 90 20.411 15.533 23.024 1.00 30.55 O

ATOM 442 CB HIS A 90 20.511 14.864 19.718 1.00 39.94 C

ATOM 443 CG HIS A 90 19.902 16.233 19.649 1.00 44.66 C

ATOM 444 ND1 HIS A 90 20.237 17.239 20.530 1.00 48.83 N

ATOM 445 CD2 HIS A 90 19.008 16.772 18.788 1.00 45.85 C

ATOM 446 CE1 HIS A 90 19.581 18.341 20.213 1.00 46.34 C

ATOM 447 NE2 HIS A 90 18.830 18.085 19.159 1.00 45.28 N

ATOM 448 N TYR A 91 19.540 13.597 22.238 1.00 32.69 N

ATOM 449 CA TYR A 91 18.565 13.444 23.299 1.00 31.66 C

ATOM 450 C TYR A 91 19.196 13.501 24.688 1.00 30.59 C

ATOM 451 O TYR A 91 18.733 14.239 25.565 1.00 28.54 O

ATOM 452 CB TYR A 91 17.819 12.128 23.130 1.00 36.99 C

ATOM 453 CG TYR A 91 16.783 11.919 24.200 1.00 43.25 C

ATOM 454 CD1 TYR A 91 15.496 12.425 24.056 1.00 46.05 C

ATOM 455 CD2 TYR A 91 17.103 11.258 25.382 1.00 45.92 C

ATOM 456 CE1 TYR A 91 14.549 12.286 25.068 1.00 49.09 C

ATOM 457 CE2 TYR A 91 16.168 11.114 26.400 1.00 49.33 C

ATOM 458 CZ TYR A 91 14.893 11.631 26.239 1.00 49.98 C

ATOM 459 OH TYR A 91 13.975 11.515 27.261 1.00 49.68 O

ATOM 460 N ILE A 92 20.259 12.736 24.890 1.00 26.80 N

ATOM 461 CA ILE A 92 20.915 12.726 26.183 1.00 26.00 C

ATOM 462 C ILE A 92 21.418 14.118 26.563 1.00 26.55 C

ATOM 463 O ILE A 92 21.358 14.521 27.725 1.00 23.33 O

ATOM 464 CB ILE A 92 22.125 11.793 26.184 1.00 26.39 C

ATOM 465 CG1 ILE A 92 21.672 10.333 26.165 1.00 27.13 C

ATOM 466 CG2 ILE A 92 23.000 12.104 27.390 1.00 26.73 C

ATOM 467 CD1 ILE A 92 22.246 9.523 24.998 1.00 25.43 C

ATOM 468 N LEU A 93 21.920 14.844 25.569 1.00 26.84 N

ATOM 469 CA LEU A 93 22.484 16.169 25.787 1.00 25.43 C

ATOM 470 C LEU A 93 21.456 17.246 26.056 1.00 24.88 C

ATOM 471 O LEU A 93 21.752 18.262 26.681 1.00 21.26 O

ATOM 472 CB LEU A 93 23.325 16.581 24.581 1.00 25.53 C

ATOM 473 CG LEU A 93 24.854 16.433 24.572 1.00 26.14 C

ATOM 474 CD1 LEU A 93 25.447 16.183 25.964 1.00 20.41 C

ATOM 475 CD2 LEU A 93 25.173 15.301 23.615 1.00 24.62 C

ATOM 476 N THR A 94 20.240 17.038 25.574 1.00 29.54 N

ATOM 477 CA THR A 94 19.204 18.038 25.783 1.00 31.29 C

ATOM 478 C THR A 94 18.240 17.625 26.888 1.00 32.27 C

ATOM 479 O THR A 94 17.228 18.275 27.099 1.00 33.50 O

ATOM 480 CB THR A 94 18.428 18.329 24.465 1.00 31.18 C

ATOM 481 OG1 THR A 94 17.882 17.115 23.937 1.00 29.50 O

ATOM 482 CG2 THR A 94 19.366 18.943 23.428 1.00 26.55 C

ATOM 483 N HIS A 95 18.576 16.557 27.607 1.00 34.71 N

ATOM 484 CA HIS A 95 17.744 16.074 28.703 1.00 36.86 C

ATOM 485 C HIS A 95 18.569 15.795 29.952 1.00 37.63 C

ATOM 486 O HIS A 95 19.781 16.005 29.955 1.00 39.01 O

ATOM 487 CB HIS A 95 17.001 14.804 28.284 1.00 39.49 C

ATOM 488 CG HIS A 95 15.992 15.036 27.204 1.00 41.60 C

ATOM 489 ND1 HIS A 95 14.749 15.581 27.449 1.00 40.07 N

ATOM 490 CD2 HIS A 95 16.058 14.838 25.866 1.00 43.53 C

ATOM 491 CE1 HIS A 95 14.093 15.710 26.309 1.00 40.93 C

ATOM 492 NE2 HIS A 95 14.865 15.267 25.334 1.00 42.57 N

ATOM 493 N PHE A 96 17.905 15.322 31.008 1.00 36.95 N

ATOM 494 CA PHE A 96 18.587 15.022 32.263 1.00 34.45 C

ATOM 495 C PHE A 96 19.296 16.275 32.728 1.00 35.72 C

ATOM 496 O PHE A 96 20.465 16.232 33.114 1.00 36.67 O

ATOM 497 CB PHE A 96 19.608 13.906 32.052 1.00 30.05 C

ATOM 498 CG PHE A 96 19.117 12.815 31.167 1.00 24.57 C

ATOM 499 CD1 PHE A 96 19.354 12.852 29.807 1.00 24.06 C

ATOM 500 CD2 PHE A 96 18.407 11.753 31.695 1.00 22.22 C

ATOM 501 CE1 PHE A 96 18.887 11.835 28.981 1.00 25.79 C

ATOM 502 CE2 PHE A 96 17.944 10.745 30.887 1.00 21.27 C

ATOM 503 CZ PHE A 96 18.183 10.782 29.526 1.00 22.30 C

ATOM 504 N LYS A 97 18.570 17.388 32.677 1.00 36.09 N

ATOM 505 CA LYS A 97 19.085 18.697 33.065 1.00 37.37 C

ATOM 506 C LYS A 97 19.658 18.747 34.489 1.00 37.66 C

ATOM 507 O LYS A 97 20.369 19.683 34.846 1.00 35.79 O

ATOM 508 CB LYS A 97 17.978 19.742 32.899 1.00 37.73 C

ATOM 509 CG LYS A 97 18.311 21.079 33.495 1.00 41.94 C

ATOM 510 CD LYS A 97 17.802 22.216 32.642 1.00 42.60 C

ATOM 511 CE LYS A 97 17.999 23.536 33.380 1.00 49.48 C

ATOM 512 NZ LYS A 97 17.215 24.671 32.802 1.00 52.50 N

ATOM 513 N GLY A 98 19.354 17.726 35.290 1.00 40.11 N

ATOM 514 CA GLY A 98 19.860 17.651 36.654 1.00 41.45 C

ATOM 515 C GLY A 98 21.262 17.060 36.628 1.00 41.49 C

ATOM 516 O GLY A 98 22.195 17.586 37.248 1.00 43.79 O

ATOM 517 N VAL A 99 21.403 15.958 35.896 1.00 38.93 N

ATOM 518 CA VAL A 99 22.690 15.296 35.736 1.00 38.23 C

ATOM 519 C VAL A 99 23.674 16.332 35.228 1.00 35.96 C

ATOM 520 O VAL A 99 24.720 16.584 35.824 1.00 36.40 O

ATOM 521 CB VAL A 99 22.625 14.217 34.654 1.00 40.31 C

ATOM 522 CG1 VAL A 99 24.045 13.781 34.283 1.00 41.26 C

ATOM 523 CG2 VAL A 99 21.773 13.057 35.116 1.00 40.21 C

ATOM 524 N TRP A 100 23.309 16.915 34.095 1.00 34.10 N

ATOM 525 CA TRP A 100 24.109 17.926 33.433 1.00 34.36 C

ATOM 526 C TRP A 100 24.540 19.014 34.388 1.00 34.96 C

ATOM 527 O TRP A 100 25.606 19.609 34.239 1.00 34.54 O

ATOM 528 CB TRP A 100 23.314 18.505 32.259 1.00 28.78 C

ATOM 529 CG TRP A 100 23.329 17.543 31.128 1.00 24.01 C

ATOM 530 CD1 TRP A 100 22.256 17.027 30.468 1.00 20.54 C

ATOM 531 CD2 TRP A 100 24.488 16.876 30.608 1.00 21.49 C

ATOM 532 NE1 TRP A 100 22.674 16.070 29.572 1.00 23.15 N

ATOM 533 CE2 TRP A 100 24.039 15.958 29.639 1.00 21.18 C

ATOM 534 CE3 TRP A 100 25.862 16.967 30.874 1.00 17.26 C

ATOM 535 CZ2 TRP A 100 24.911 15.134 28.932 1.00 22.75 C

ATOM 536 CZ3 TRP A 100 26.729 16.150 30.175 1.00 20.96 C

ATOM 537 CH2 TRP A 100 26.252 15.244 29.213 1.00 24.70 C

ATOM 538 N ASN A 101 23.714 19.257 35.387 1.00 36.19 N

ATOM 539 CA ASN A 101 24.031 20.282 36.344 1.00 40.24 C

ATOM 540 C ASN A 101 25.196 19.884 37.213 1.00 40.43 C

ATOM 541 O ASN A 101 25.960 20.733 37.676 1.00 40.91 O

ATOM 542 CB ASN A 101 22.821 20.587 37.206 1.00 45.61 C

ATOM 543 CG ASN A 101 22.510 22.059 37.231 1.00 52.26 C

ATOM 544 OD1 ASN A 101 21.384 22.470 36.947 1.00 57.04 O

ATOM 545 ND2 ASN A 101 23.519 22.873 37.559 1.00 54.50 N

ATOM 546 N ILE A 102 25.327 18.588 37.439 1.00 40.20 N

ATOM 547 CA ILE A 102 26.416 18.086 38.252 1.00 40.37 C

ATOM 548 C ILE A 102 27.700 18.123 37.435 1.00 38.96 C

ATOM 549 O ILE A 102 28.623 18.861 37.771 1.00 36.92 O

ATOM 550 CB ILE A 102 26.122 16.654 38.724 1.00 41.29 C

ATOM 551 CG1 ILE A 102 24.882 16.662 39.631 1.00 40.25 C

ATOM 552 CG2 ILE A 102 27.329 16.092 39.460 1.00 40.50 C

ATOM 553 CD1 ILE A 102 24.655 15.368 40.378 1.00 38.84 C

ATOM 554 N VAL A 103 27.734 17.326 36.363 1.00 38.88 N

ATOM 555 CA VAL A 103 28.876 17.247 35.440 1.00 37.91 C

ATOM 556 C VAL A 103 29.450 18.634 35.183 1.00 38.21 C

ATOM 557 O VAL A 103 30.657 18.864 35.275 1.00 37.87 O

ATOM 558 CB VAL A 103 28.447 16.680 34.062 1.00 35.94 C

ATOM 559 CG1 VAL A 103 29.601 16.812 33.049 1.00 30.20 C

ATOM 560 CG2 VAL A 103 27.991 15.239 34.214 1.00 28.70 C

ATOM 561 N ASN A 104 28.546 19.540 34.841 1.00 38.21 N

ATOM 562 CA ASN A 104 28.858 20.927 34.543 1.00 38.15 C

ATOM 563 C ASN A 104 29.591 21.663 35.639 1.00 38.09 C

ATOM 564 O ASN A 104 30.073 22.774 35.422 1.00 37.32 O

ATOM 565 CB ASN A 104 27.573 21.674 34.242 1.00 37.63 C

ATOM 566 CG ASN A 104 27.365 21.858 32.788 1.00 37.05 C

ATOM 567 OD1 ASN A 104 28.242 21.536 31.984 1.00 40.48 O

ATOM 568 ND2 ASN A 104 26.206 22.380 32.419 1.00 38.69 N

ATOM 569 N ASN A 105 29.652 21.061 36.820 1.00 38.13 N

ATOM 570 CA ASN A 105 30.342 21.690 37.935 1.00 40.18 C

ATOM 571 C ASN A 105 31.525 20.862 38.424 1.00 39.60 C

ATOM 572 O ASN A 105 32.150 21.178 39.431 1.00 39.35 O

ATOM 573 CB ASN A 105 29.352 21.978 39.056 1.00 41.53 C

ATOM 574 CG ASN A 105 28.435 23.146 38.718 1.00 46.96 C

ATOM 575 OD1 ASN A 105 28.805 24.317 38.885 1.00 46.41 O

ATOM 576 ND2 ASN A 105 27.238 22.833 38.217 1.00 49.02 N

ATOM 577 N ILE A 105A 31.832 19.808 37.676 1.00 39.84 N

ATOM 578 CA ILE A 105A 32.955 18.936 37.975 1.00 38.64 C

ATOM 579 C ILE A 105A 33.992 19.213 36.889 1.00 38.10 C

ATOM 580 O ILE A 105A 34.053 18.520 35.870 1.00 38.33 O

ATOM 581 CB ILE A 105A 32.549 17.448 37.924 1.00 40.05 C

ATOM 582 CG1 ILE A 105A 31.715 17.100 39.161 1.00 38.00 C

ATOM 583 CG2 ILE A 105A 33.800 16.561 37.840 1.00 38.59 C

ATOM 584 CD1 ILE A 105A 30.561 16.155 38.875 1.00 38.19 C

ATOM 585 N PRO A 106 34.812 20.253 37.098 1.00 36.00 N

ATOM 586 CA PRO A 106 35.857 20.667 36.167 1.00 35.55 C

ATOM 587 C PRO A 106 36.396 19.557 35.287 1.00 34.77 C

ATOM 588 O PRO A 106 36.247 19.578 34.069 1.00 33.28 O

ATOM 589 CB PRO A 106 36.917 21.255 37.082 1.00 34.31 C

ATOM 590 CG PRO A 106 36.116 21.848 38.223 1.00 33.09 C

ATOM 591 CD PRO A 106 34.788 21.114 38.294 1.00 34.45 C

ATOM 592 N PHE A 107 37.017 18.567 35.892 1.00 37.75 N

ATOM 593 CA PHE A 107 37.555 17.509 35.072 1.00 41.63 C

ATOM 594 C PHE A 107 36.474 16.748 34.300 1.00 39.56 C

ATOM 595 O PHE A 107 36.699 16.336 33.173 1.00 40.58 O

ATOM 596 CB PHE A 107 38.386 16.567 35.936 1.00 47.99 C

ATOM 597 CG PHE A 107 37.714 15.267 36.225 1.00 55.22 C

ATOM 598 CD1 PHE A 107 37.770 14.220 35.301 1.00 57.48 C

ATOM 599 CD2 PHE A 107 37.046 15.074 37.436 1.00 57.93 C

ATOM 600 CE1 PHE A 107 37.167 12.990 35.575 1.00 61.42 C

ATOM 601 CE2 PHE A 107 36.437 13.851 37.730 1.00 61.55 C

ATOM 602 CZ PHE A 107 36.498 12.800 36.798 1.00 63.75 C

ATOM 603 N LEU A 108 35.299 16.570 34.887 1.00 38.40 N

ATOM 604 CA LEU A 108 34.232 15.844 34.203 1.00 37.99 C

ATOM 605 C LEU A 108 33.757 16.572 32.960 1.00 36.85 C

ATOM 606 O LEU A 108 33.546 15.983 31.898 1.00 37.19 O

ATOM 607 CB LEU A 108 33.053 15.644 35.137 1.00 39.74 C

ATOM 608 CG LEU A 108 32.765 14.165 35.349 1.00 42.58 C

ATOM 609 CD1 LEU A 108 31.636 14.033 36.337 1.00 43.66 C

ATOM 610 CD2 LEU A 108 32.420 13.499 34.020 1.00 41.72 C

ATOM 611 N ARG A 109 33.562 17.869 33.120 1.00 36.31 N

ATOM 612 CA ARG A 109 33.133 18.711 32.028 1.00 34.06 C

ATOM 613 C ARG A 109 34.189 18.613 30.937 1.00 34.36 C

ATOM 614 O ARG A 109 33.872 18.395 29.769 1.00 35.56 O

ATOM 615 CB ARG A 109 33.020 20.149 32.518 1.00 28.35 C

ATOM 616 CG ARG A 109 32.846 21.160 31.423 1.00 27.42 C

ATOM 617 CD ARG A 109 32.284 22.456 31.986 1.00 23.69 C

ATOM 618 NE ARG A 109 32.058 23.442 30.937 1.00 22.04 N

ATOM 619 CZ ARG A 109 32.391 24.724 31.033 1.00 19.82 C

ATOM 620 NH1 ARG A 109 32.964 25.179 32.131 1.00 20.50 N

ATOM 621 NH2 ARG A 109 32.152 25.556 30.028 1.00 20.40 N

ATOM 622 N SER A 110 35.447 18.769 31.343 1.00 34.49 N

ATOM 623 CA SER A 110 36.576 18.715 30.421 1.00 34.32 C

ATOM 624 C SER A 110 36.531 17.404 29.659 1.00 33.48 C

ATOM 625 O SER A 110 36.637 17.371 28.431 1.00 37.15 O

ATOM 626 CB SER A 110 37.902 18.817 31.188 1.00 34.59 C

ATOM 627 OG SER A 110 38.291 20.166 31.420 1.00 34.90 O

ATOM 628 N LEU A 111 36.357 16.320 30.391 1.00 28.93 N

ATOM 629 CA LEU A 111 36.304 15.012 29.778 1.00 27.34 C

ATOM 630 C LEU A 111 35.343 14.996 28.592 1.00 25.15 C

ATOM 631 O LEU A 111 35.701 14.574 27.492 1.00 24.70 O

ATOM 632 CB LEU A 111 35.855 13.981 30.814 1.00 28.52 C

ATOM 633 CG LEU A 111 36.617 12.663 30.804 1.00 28.77 C

ATOM 634 CD1 LEU A 111 35.983 11.714 31.792 1.00 32.12 C

ATOM 635 CD2 LEU A 111 36.603 12.073 29.408 1.00 29.45 C

ATOM 636 N ILE A 112 34.123 15.459 28.839 1.00 21.31 N

ATOM 637 CA ILE A 112 33.066 15.486 27.837 1.00 21.91 C

ATOM 638 C ILE A 112 33.386 16.330 26.601 1.00 20.26 C

ATOM 639 O ILE A 112 33.400 15.828 25.480 1.00 19.23 O

ATOM 640 CB ILE A 112 31.756 16.007 28.487 1.00 23.35 C

ATOM 641 CG1 ILE A 112 31.584 15.358 29.872 1.00 24.39 C

ATOM 642 CG2 ILE A 112 30.566 15.783 27.554 1.00 19.75 C

ATOM 643 CD1 ILE A 112 30.456 14.348 29.980 1.00 21.42 C

ATOM 644 N MET A 113 33.614 17.620 26.827 1.00 19.99 N

ATOM 645 CA MET A 113 33.931 18.581 25.782 1.00 21.28 C

ATOM 646 C MET A 113 35.067 18.096 24.872 1.00 24.90 C

ATOM 647 O MET A 113 35.097 18.385 23.658 1.00 22.55 O

ATOM 648 CB MET A 113 34.307 19.913 26.429 1.00 18.67 C

ATOM 649 CG MET A 113 34.533 21.028 25.439 1.00 17.25 C

ATOM 650 SD MET A 113 32.985 21.698 24.874 1.00 18.65 S

ATOM 651 CE MET A 113 33.366 22.072 23.117 1.00 12.72 C

ATOM 652 N LYS A 114 36.006 17.364 25.461 1.00 25.33 N

ATOM 653 CA LYS A 114 37.112 16.846 24.684 1.00 28.59 C

ATOM 654 C LYS A 114 36.551 15.818 23.712 1.00 29.09 C

ATOM 655 O LYS A 114 37.011 15.695 22.585 1.00 30.13 O

ATOM 656 CB LYS A 114 38.149 16.195 25.601 1.00 31.01 C

ATOM 657 CG LYS A 114 39.387 15.663 24.855 1.00 36.30 C

ATOM 658 CD LYS A 114 40.294 14.813 25.749 1.00 37.75 C

ATOM 659 CE LYS A 114 41.518 15.612 26.205 1.00 39.87 C

ATOM 660 NZ LYS A 114 42.108 15.080 27.464 1.00 40.45 N

ATOM 661 N TYR A 115 35.541 15.087 24.171 1.00 31.50 N

ATOM 662 CA TYR A 115 34.890 14.049 23.381 1.00 32.90 C

ATOM 663 C TYR A 115 34.106 14.650 22.235 1.00 32.34 C

ATOM 664 O TYR A 115 34.092 14.107 21.130 1.00 31.14 O

ATOM 665 CB TYR A 115 33.918 13.254 24.247 1.00 40.49 C

ATOM 666 CG TYR A 115 32.700 12.810 23.474 1.00 46.40 C

ATOM 667 CD1 TYR A 115 32.793 11.796 22.518 1.00 49.63 C

ATOM 668 CD2 TYR A 115 31.473 13.435 23.652 1.00 46.90 C

ATOM 669 CE1 TYR A 115 31.696 11.423 21.763 1.00 52.70 C

ATOM 670 CE2 TYR A 115 30.365 13.070 22.899 1.00 49.40 C

ATOM 671 CZ TYR A 115 30.482 12.067 21.954 1.00 52.82 C

ATOM 672 OH TYR A 115 29.397 11.719 21.179 1.00 52.75 O

ATOM 673 N VAL A 116 33.424 15.756 22.518 1.00 31.52 N

ATOM 674 CA VAL A 116 32.636 16.439 21.500 1.00 31.23 C

ATOM 675 C VAL A 116 33.588 17.062 20.479 1.00 31.06 C

ATOM 676 O VAL A 116 33.299 17.088 19.280 1.00 31.18 O

ATOM 677 CB VAL A 116 31.726 17.540 22.119 1.00 30.55 C

ATOM 678 CG1 VAL A 116 31.517 17.282 23.615 1.00 29.79 C

ATOM 679 CG2 VAL A 116 32.328 18.906 21.886 1.00 30.06 C

ATOM 680 N LEU A 117 34.734 17.540 20.972 1.00 30.01 N

ATOM 681 CA LEU A 117 35.764 18.148 20.132 1.00 27.78 C

ATOM 682 C LEU A 117 36.336 17.121 19.147 1.00 28.97 C

ATOM 683 O LEU A 117 36.290 17.305 17.933 1.00 32.26 O

ATOM 684 CB LEU A 117 36.894 18.690 21.010 1.00 24.88 C

ATOM 685 CG LEU A 117 37.085 20.205 21.110 1.00 27.06 C

ATOM 686 CD1 LEU A 117 35.905 20.930 20.494 1.00 30.89 C

ATOM 687 CD2 LEU A 117 37.230 20.598 22.558 1.00 24.55 C

ATOM 688 N THR A 118 36.848 16.024 19.683 1.00 30.17 N

ATOM 689 CA THR A 118 37.459 14.959 18.893 1.00 31.06 C

ATOM 690 C THR A 118 36.526 14.076 18.035 1.00 30.81 C

ATOM 691 O THR A 118 36.794 13.877 16.839 1.00 32.11 O

ATOM 692 CB THR A 118 38.285 14.046 19.824 1.00 31.30 C

ATOM 693 OG1 THR A 118 37.426 13.489 20.832 1.00 29.31 O

ATOM 694 CG2 THR A 118 39.397 14.848 20.505 1.00 28.87 C

ATOM 695 N SER A 119 35.456 13.553 18.651 1.00 31.03 N

ATOM 696 CA SER A 119 34.477 12.673 17.999 1.00 32.05 C

ATOM 697 C SER A 119 33.996 13.235 16.681 1.00 34.70 C

ATOM 698 O SER A 119 33.733 12.496 15.735 1.00 35.10 O

ATOM 699 CB SER A 119 33.276 12.466 18.909 1.00 30.71 C

ATOM 700 OG SER A 119 32.756 13.719 19.309 1.00 29.56 O

ATOM 701 N ARG A 120 33.888 14.558 16.645 1.00 38.58 N

ATOM 702 CA ARG A 120 33.447 15.304 15.476 1.00 42.07 C

ATOM 703 C ARG A 120 34.505 15.384 14.373 1.00 45.82 C

ATOM 704 O ARG A 120 34.317 14.875 13.264 1.00 46.52 O

ATOM 705 CB ARG A 120 33.093 16.721 15.905 1.00 41.53 C

ATOM 706 CG ARG A 120 31.717 17.153 15.497 1.00 42.12 C

ATOM 707 CD ARG A 120 30.690 16.636 16.477 1.00 39.90 C

ATOM 708 NE ARG A 120 29.396 16.484 15.836 1.00 38.75 N

ATOM 709 CZ ARG A 120 28.239 16.643 16.460 1.00 38.18 C

ATOM 710 NH1 ARG A 120 28.213 16.959 17.744 1.00 39.43 N

ATOM 711 NH2 ARG A 120 27.109 16.476 15.801 1.00 40.56 N

ATOM 712 N SER A 121 35.615 16.042 14.704 1.00 49.05 N

ATOM 713 CA SER A 121 36.725 16.278 13.786 1.00 49.33 C

ATOM 714 C SER A 121 37.134 15.184 12.802 1.00 46.29 C

ATOM 715 O SER A 121 37.556 15.494 11.690 1.00 45.53 O

ATOM 716 CB SER A 121 37.945 16.723 14.591 1.00 51.41 C

ATOM 717 OG SER A 121 37.808 18.091 14.939 1.00 54.76 O

ATOM 718 N TYR A 122 37.011 13.921 13.192 1.00 41.37 N

ATOM 719 CA TYR A 122 37.401 12.830 12.301 1.00 38.27 C

ATOM 720 C TYR A 122 36.597 12.746 10.991 1.00 34.12 C

ATOM 721 O TYR A 122 36.950 11.999 10.087 1.00 32.94 O

ATOM 722 CB TYR A 122 37.305 11.492 13.047 1.00 40.95 C

ATOM 723 CG TYR A 122 35.983 10.773 12.854 1.00 43.63 C

ATOM 724 CD1 TYR A 122 35.715 10.066 11.681 1.00 42.95 C

ATOM 725 CD2 TYR A 122 34.988 10.823 13.834 1.00 45.32 C

ATOM 726 CE1 TYR A 122 34.490 9.430 11.486 1.00 43.05 C

ATOM 727 CE2 TYR A 122 33.761 10.191 13.648 1.00 43.81 C

ATOM 728 CZ TYR A 122 33.518 9.495 12.468 1.00 43.63 C

ATOM 729 OH TYR A 122 32.310 8.862 12.260 1.00 43.77 O

ATOM 730 N LEU A 123 35.522 13.516 10.893 1.00 31.00 N

ATOM 731 CA LEU A 123 34.662 13.503 9.703 1.00 25.29 C

ATOM 732 C LEU A 123 35.153 14.444 8.615 1.00 25.80 C

ATOM 733 O LEU A 123 34.612 14.446 7.518 1.00 24.94 O

ATOM 734 CB LEU A 123 33.227 13.922 10.069 1.00 23.61 C

ATOM 735 CG LEU A 123 32.108 12.897 10.317 1.00 20.14 C

ATOM 736 CD1 LEU A 123 32.056 11.851 9.203 1.00 19.88 C

ATOM 737 CD2 LEU A 123 32.333 12.249 11.663 1.00 17.27 C

ATOM 738 N ILE A 124 36.156 15.264 8.928 1.00 27.15 N

ATOM 739 CA ILE A 124 36.697 16.230 7.971 1.00 22.28 C

ATOM 740 C ILE A 124 38.010 15.756 7.371 1.00 23.09 C

ATOM 741 O ILE A 124 38.849 15.179 8.070 1.00 24.19 O

ATOM 742 CB ILE A 124 36.948 17.599 8.647 1.00 19.68 C

ATOM 743 CG1 ILE A 124 35.623 18.200 9.156 1.00 18.06 C

ATOM 744 CG2 ILE A 124 37.643 18.531 7.670 1.00 14.96 C

ATOM 745 CD1 ILE A 124 34.453 18.071 8.198 1.00 13.13 C

ATOM 746 N ASP A 125 38.196 15.996 6.077 1.00 24.51 N

ATOM 747 CA ASP A 125 39.444 15.596 5.416 1.00 27.31 C

ATOM 748 C ASP A 125 40.402 16.773 5.624 1.00 29.57 C

ATOM 749 O ASP A 125 40.087 17.904 5.235 1.00 31.18 O

ATOM 750 CB ASP A 125 39.221 15.360 3.908 1.00 28.65 C

ATOM 751 CG ASP A 125 38.445 14.060 3.598 1.00 33.23 C

ATOM 752 OD1 ASP A 125 38.239 13.230 4.510 1.00 32.41 O

ATOM 753 OD2 ASP A 125 38.041 13.870 2.423 1.00 30.46 O

ATOM 754 N SER A 126 41.557 16.532 6.246 1.00 28.47 N

ATOM 755 CA SER A 126 42.507 17.620 6.487 1.00 27.61 C

ATOM 756 C SER A 126 43.944 17.112 6.557 1.00 28.40 C

ATOM 757 O SER A 126 44.287 16.349 7.460 1.00 31.68 O

ATOM 758 CB SER A 126 42.157 18.331 7.798 1.00 27.38 C

ATOM 759 OG SER A 126 42.690 19.640 7.829 1.00 31.96 O

ATOM 760 N PRO A 127 44.819 17.546 5.622 1.00 27.50 N

ATOM 761 CA PRO A 127 44.612 18.479 4.493 1.00 26.82 C

ATOM 762 C PRO A 127 43.425 18.171 3.567 1.00 22.68 C

ATOM 763 O PRO A 127 43.036 17.019 3.394 1.00 20.28 O

ATOM 764 CB PRO A 127 45.945 18.438 3.733 1.00 24.76 C

ATOM 765 CG PRO A 127 46.950 17.930 4.726 1.00 24.68 C

ATOM 766 CD PRO A 127 46.205 17.033 5.670 1.00 25.86 C

ATOM 767 N PRO A 128 42.849 19.218 2.950 1.00 21.88 N

ATOM 768 CA PRO A 128 41.706 19.113 2.034 1.00 23.66 C

ATOM 769 C PRO A 128 41.952 18.247 0.795 1.00 22.38 C

ATOM 770 O PRO A 128 43.097 18.022 0.390 1.00 21.92 O

ATOM 771 CB PRO A 128 41.392 20.563 1.665 1.00 18.64 C

ATOM 772 CG PRO A 128 42.625 21.294 1.932 1.00 20.72 C

ATOM 773 CD PRO A 128 43.284 20.615 3.101 1.00 23.51 C

ATOM 774 N THR A 129 40.850 17.787 0.196 1.00 22.97 N

ATOM 775 CA THR A 129 40.886 16.928 -0.969 1.00 20.20 C

ATOM 776 C THR A 129 40.322 17.527 -2.253 1.00 19.59 C

ATOM 777 O THR A 129 41.051 18.178 -2.995 1.00 22.28 O

ATOM 778 CB THR A 129 40.166 15.622 -0.660 1.00 18.58 C

ATOM 779 OG1 THR A 129 39.006 15.893 0.135 1.00 15.95 O

ATOM 780 CG2 THR A 129 41.085 14.704 0.122 1.00 18.76 C

ATOM 781 N TYR A 130 39.032 17.324 -2.514 1.00 19.27 N

ATOM 782 CA TYR A 130 38.418 17.819 -3.764 1.00 18.23 C

ATOM 783 C TYR A 130 37.883 19.239 -3.777 1.00 14.61 C

ATOM 784 O TYR A 130 37.832 19.916 -2.756 1.00 14.76 O

ATOM 785 CB TYR A 130 37.267 16.897 -4.220 1.00 16.51 C

ATOM 786 CG TYR A 130 37.457 15.450 -3.874 1.00 17.62 C

ATOM 787 CD1 TYR A 130 37.039 14.953 -2.638 1.00 18.66 C

ATOM 788 CD2 TYR A 130 38.111 14.590 -4.748 1.00 18.51 C

ATOM 789 CE1 TYR A 130 37.277 13.625 -2.277 1.00 21.56 C

ATOM 790 CE2 TYR A 130 38.358 13.264 -4.403 1.00 21.07 C

ATOM 791 CZ TYR A 130 37.939 12.786 -3.165 1.00 22.55 C

ATOM 792 OH TYR A 130 38.157 11.472 -2.824 1.00 21.58 O

ATOM 793 N ASN A 131 37.508 19.690 -4.966 1.00 11.07 N

ATOM 794 CA ASN A 131 36.893 21.000 -5.102 1.00 14.47 C

ATOM 795 C ASN A 131 35.872 20.940 -6.261 1.00 14.60 C

ATOM 796 O ASN A 131 35.614 19.854 -6.803 1.00 14.12 O

ATOM 797 CB ASN A 131 37.950 22.092 -5.289 1.00 14.62 C

ATOM 798 CG ASN A 131 38.742 21.940 -6.559 1.00 19.43 C

ATOM 799 OD1 ASN A 131 39.808 22.537 -6.702 1.00 23.53 O

ATOM 800 ND2 ASN A 131 38.234 21.148 -7.492 1.00 20.08 N

ATOM 801 N VAL A 132 35.268 22.065 -6.632 1.00 11.48 N

ATOM 802 CA VAL A 132 34.282 22.018 -7.702 1.00 12.15 C

ATOM 803 C VAL A 132 34.791 21.467 -9.027 1.00 12.56 C

ATOM 804 O VAL A 132 34.013 20.943 -9.815 1.00 14.04 O

ATOM 805 CB VAL A 132 33.650 23.407 -7.972 1.00 10.05 C

ATOM 806 CG1 VAL A 132 34.623 24.298 -8.705 1.00 8.06 C

ATOM 807 CG2 VAL A 132 32.375 23.230 -8.797 1.00 9.08 C

ATOM 808 N HIS A 133 36.093 21.588 -9.274 1.00 13.00 N

ATOM 809 CA HIS A 133 36.690 21.118 -10.521 1.00 10.65 C

ATOM 810 C HIS A 133 37.432 19.785 -10.441 1.00 12.41 C

ATOM 811 O HIS A 133 37.816 19.222 -11.472 1.00 14.63 O

ATOM 812 CB HIS A 133 37.660 22.161 -11.051 1.00 12.09 C

ATOM 813 CG HIS A 133 36.995 23.374 -11.593 1.00 15.35 C

ATOM 814 ND1 HIS A 133 37.675 24.542 -11.852 1.00 17.64 N

ATOM 815 CD2 HIS A 133 35.704 23.608 -11.930 1.00 19.09 C

ATOM 816 CE1 HIS A 133 36.836 25.445 -12.326 1.00 18.38 C

ATOM 817 NE2 HIS A 133 35.632 24.902 -12.383 1.00 19.86 N

ATOM 818 N TYR A 134 37.654 19.275 -9.237 1.00 10.96 N

ATOM 819 CA TYR A 134 38.382 18.016 -9.107 1.00 9.54 C

ATOM 820 C TYR A 134 37.711 16.960 -8.237 1.00 9.01 C

ATOM 821 O TYR A 134 37.525 17.144 -7.022 1.00 2.26 O

ATOM 822 CB TYR A 134 39.804 18.270 -8.585 1.00 6.76 C

ATOM 823 CG TYR A 134 40.677 19.030 -9.562 1.00 7.52 C

ATOM 824 CD1 TYR A 134 40.714 20.425 -9.562 1.00 3.99 C

ATOM 825 CD2 TYR A 134 41.427 18.349 -10.527 1.00 7.81 C

ATOM 826 CE1 TYR A 134 41.470 21.120 -10.504 1.00 7.57 C

ATOM 827 CE2 TYR A 134 42.195 19.041 -11.480 1.00 4.81 C

ATOM 828 CZ TYR A 134 42.208 20.430 -11.468 1.00 6.86 C

ATOM 829 OH TYR A 134 42.922 21.141 -12.424 1.00 3.94 O

ATOM 830 N GLY A 135 37.380 15.842 -8.886 1.00 10.24 N

ATOM 831 CA GLY A 135 36.756 14.722 -8.213 1.00 12.51 C

ATOM 832 C GLY A 135 37.768 13.670 -7.801 1.00 13.09 C

ATOM 833 O GLY A 135 37.419 12.604 -7.278 1.00 12.52 O

ATOM 834 N TYR A 136 39.034 13.977 -8.067 1.00 14.70 N

ATOM 835 CA TYR A 136 40.154 13.118 -7.709 1.00 13.98 C

ATOM 836 C TYR A 136 41.189 14.059 -7.100 1.00 16.32 C

ATOM 837 O TYR A 136 41.287 15.229 -7.510 1.00 18.55 O

ATOM 838 CB TYR A 136 40.728 12.433 -8.961 1.00 14.11 C

ATOM 839 CG TYR A 136 41.138 13.397 -10.072 1.00 10.70 C

ATOM 840 CD1 TYR A 136 42.383 14.016 -10.053 1.00 9.67 C

ATOM 841 CD2 TYR A 136 40.284 13.687 -11.122 1.00 4.98 C

ATOM 842 CE1 TYR A 136 42.756 14.884 -11.042 1.00 9.44 C

ATOM 843 CE2 TYR A 136 40.660 14.559 -12.117 1.00 6.72 C

ATOM 844 CZ TYR A 136 41.890 15.149 -12.072 1.00 6.72 C

ATOM 845 OH TYR A 136 42.269 15.990 -13.078 1.00 7.90 O

ATOM 846 N LYS A 137 41.956 13.569 -6.125 1.00 17.18 N

ATOM 847 CA LYS A 137 42.981 14.395 -5.475 1.00 13.68 C

ATOM 848 C LYS A 137 44.030 14.832 -6.462 1.00 10.84 C

ATOM 849 O LYS A 137 44.539 14.023 -7.244 1.00 12.16 O

ATOM 850 CB LYS A 137 43.636 13.621 -4.329 1.00 14.27 C

ATOM 851 CG LYS A 137 42.610 13.053 -3.361 1.00 17.33 C

ATOM 852 CD LYS A 137 43.176 12.776 -1.996 1.00 18.64 C

ATOM 853 CE LYS A 137 42.483 11.589 -1.372 1.00 18.96 C

ATOM 854 NZ LYS A 137 42.508 10.408 -2.290 1.00 23.46 N

ATOM 855 N SER A 138 44.328 16.121 -6.442 1.00 8.17 N

ATOM 856 CA SER A 138 45.337 16.674 -7.320 1.00 9.22 C

ATOM 857 C SER A 138 46.060 17.794 -6.600 1.00 10.37 C

ATOM 858 O SER A 138 45.562 18.307 -5.596 1.00 13.34 O

ATOM 859 CB SER A 138 44.687 17.196 -8.582 1.00 9.39 C

ATOM 860 OG SER A 138 43.756 18.187 -8.256 1.00 12.64 O

ATOM 861 N TRP A 139 47.241 18.174 -7.085 1.00 12.58 N

ATOM 862 CA TRP A 139 47.973 19.253 -6.428 1.00 9.90 C

ATOM 863 C TRP A 139 47.269 20.576 -6.628 1.00 7.23 C

ATOM 864 O TRP A 139 47.282 21.430 -5.747 1.00 8.01 O

ATOM 865 CB TRP A 139 49.389 19.395 -6.955 1.00 8.74 C

ATOM 866 CG TRP A 139 50.146 20.301 -6.059 1.00 8.42 C

ATOM 867 CD1 TRP A 139 50.369 21.644 -6.229 1.00 5.91 C

ATOM 868 CD2 TRP A 139 50.698 19.954 -4.786 1.00 8.47 C

ATOM 869 NE1 TRP A 139 51.025 22.155 -5.129 1.00 6.13 N

ATOM 870 CE2 TRP A 139 51.242 21.135 -4.230 1.00 10.06 C

ATOM 871 CE3 TRP A 139 50.785 18.756 -4.055 1.00 5.58 C

ATOM 872 CZ2 TRP A 139 51.869 21.147 -2.968 1.00 10.11 C

ATOM 873 CZ3 TRP A 139 51.402 18.771 -2.815 1.00 6.39 C

ATOM 874 CH2 TRP A 139 51.935 19.958 -2.283 1.00 9.85 C

ATOM 875 N GLU A 140 46.696 20.744 -7.807 1.00 3.79 N

ATOM 876 CA GLU A 140 45.963 21.941 -8.119 1.00 4.62 C

ATOM 877 C GLU A 140 44.869 22.138 -7.068 1.00 6.00 C

ATOM 878 O GLU A 140 44.702 23.247 -6.528 1.00 3.18 O

ATOM 879 CB GLU A 140 45.309 21.799 -9.483 1.00 7.33 C

ATOM 880 CG GLU A 140 44.378 22.950 -9.772 1.00 11.81 C

ATOM 881 CD GLU A 140 45.103 24.275 -9.760 1.00 15.11 C

ATOM 882 OE1 GLU A 140 44.425 25.311 -9.608 1.00 17.94 O

ATOM 883 OE2 GLU A 140 46.350 24.281 -9.909 1.00 21.51 O

ATOM 884 N ALA A 141 44.118 21.053 -6.808 1.00 4.32 N

ATOM 885 CA ALA A 141 43.050 21.031 -5.816 1.00 3.18 C

ATOM 886 C ALA A 141 43.622 21.361 -4.444 1.00 5.26 C

ATOM 887 O ALA A 141 43.196 22.313 -3.809 1.00 9.08 O

ATOM 888 CB ALA A 141 42.389 19.687 -5.775 1.00 2.00 C

ATOM 889 N PHE A 142 44.601 20.599 -3.985 1.00 2.53 N

ATOM 890 CA PHE A 142 45.172 20.891 -2.691 1.00 6.12 C

ATOM 891 C PHE A 142 45.895 22.251 -2.502 1.00 10.62 C

ATOM 892 O PHE A 142 45.965 22.772 -1.388 1.00 11.70 O

ATOM 893 CB PHE A 142 46.175 19.831 -2.285 1.00 7.55 C

ATOM 894 CG PHE A 142 47.133 20.331 -1.250 1.00 10.01 C

ATOM 895 CD1 PHE A 142 46.770 20.337 0.092 1.00 10.65 C

ATOM 896 CD2 PHE A 142 48.331 20.950 -1.623 1.00 7.47 C

ATOM 897 CE1 PHE A 142 47.581 20.964 1.042 1.00 10.02 C

ATOM 898 CE2 PHE A 142 49.134 21.572 -0.680 1.00 5.33 C

ATOM 899 CZ PHE A 142 48.760 21.582 0.651 1.00 6.07 C

ATOM 900 N SER A 143 46.455 22.827 -3.559 1.00 13.84 N

ATOM 901 CA SER A 143 47.200 24.070 -3.381 1.00 15.64 C

ATOM 902 C SER A 143 46.468 25.363 -3.672 1.00 16.01 C

ATOM 903 O SER A 143 46.785 26.394 -3.068 1.00 15.34 O

ATOM 904 CB SER A 143 48.490 24.020 -4.196 1.00 19.07 C

ATOM 905 OG SER A 143 48.216 24.012 -5.578 1.00 21.66 O

ATOM 906 N ASN A 144 45.500 25.324 -4.589 1.00 16.93 N

ATOM 907 CA ASN A 144 44.736 26.534 -4.918 1.00 15.25 C

ATOM 908 C ASN A 144 43.740 26.961 -3.816 1.00 16.30 C

ATOM 909 O ASN A 144 42.685 26.338 -3.593 1.00 19.51 O

ATOM 910 CB ASN A 144 43.999 26.363 -6.234 1.00 11.11 C

ATOM 911 CG ASN A 144 43.720 27.680 -6.900 1.00 10.23 C

ATOM 912 OD1 ASN A 144 43.447 28.679 -6.231 1.00 7.50 O

ATOM 913 ND2 ASN A 144 43.787 27.687 -8.223 1.00 12.10 N

ATOM 914 N LEU A 145 44.099 28.040 -3.132 1.00 13.48 N

ATOM 915 CA LEU A 145 43.309 28.594 -2.044 1.00 10.15 C

ATOM 916 C LEU A 145 42.077 29.401 -2.489 1.00 9.75 C

ATOM 917 O LEU A 145 41.272 29.825 -1.658 1.00 9.14 O

ATOM 918 CB LEU A 145 44.233 29.469 -1.183 1.00 7.78 C

ATOM 919 CG LEU A 145 45.384 28.684 -0.561 1.00 2.00 C

ATOM 920 CD1 LEU A 145 45.954 29.454 0.585 1.00 2.00 C

ATOM 921 CD2 LEU A 145 44.877 27.368 -0.088 1.00 2.00 C

ATOM 922 N SER A 146 41.931 29.603 -3.795 1.00 11.13 N

ATOM 923 CA SER A 146 40.815 30.368 -4.343 1.00 11.61 C

ATOM 924 C SER A 146 39.509 29.576 -4.388 1.00 12.75 C

ATOM 925 O SER A 146 38.439 30.147 -4.563 1.00 13.39 O

ATOM 926 CB SER A 146 41.171 30.829 -5.752 1.00 11.53 C

ATOM 927 OG SER A 146 41.921 32.020 -5.711 1.00 14.85 O

ATOM 928 N TYR A 147 39.614 28.258 -4.236 1.00 14.46 N

ATOM 929 CA TYR A 147 38.470 27.350 -4.265 1.00 13.54 C

ATOM 930 C TYR A 147 37.929 27.060 -2.876 1.00 13.22 C

ATOM 931 O TYR A 147 38.654 27.107 -1.878 1.00 14.59 O

ATOM 932 CB TYR A 147 38.876 25.980 -4.823 1.00 15.89 C

ATOM 933 CG TYR A 147 39.167 25.859 -6.297 1.00 16.99 C

ATOM 934 CD1 TYR A 147 40.480 25.836 -6.753 1.00 13.27 C

ATOM 935 CD2 TYR A 147 38.136 25.624 -7.217 1.00 16.17 C

ATOM 936 CE1 TYR A 147 40.764 25.575 -8.080 1.00 15.28 C

ATOM 937 CE2 TYR A 147 38.411 25.361 -8.542 1.00 16.65 C

ATOM 938 CZ TYR A 147 39.731 25.335 -8.969 1.00 17.58 C

ATOM 939 OH TYR A 147 40.030 25.060 -10.283 1.00 16.49 O

ATOM 940 N TYR A 148 36.649 26.732 -2.824 1.00 11.23 N

ATOM 941 CA TYR A 148 36.041 26.325 -1.577 1.00 10.12 C

ATOM 942 C TYR A 148 36.367 24.832 -1.699 1.00 8.94 C

ATOM 943 O TYR A 148 36.303 24.298 -2.808 1.00 11.42 O

ATOM 944 CB TYR A 148 34.518 26.493 -1.637 1.00 7.88 C

ATOM 945 CG TYR A 148 33.959 27.829 -1.228 1.00 2.00 C

ATOM 946 CD1 TYR A 148 34.134 28.319 0.063 1.00 2.00 C

ATOM 947 CD2 TYR A 148 33.241 28.597 -2.138 1.00 2.00 C

ATOM 948 CE1 TYR A 148 33.615 29.535 0.438 1.00 2.00 C

ATOM 949 CE2 TYR A 148 32.722 29.808 -1.783 1.00 2.00 C

ATOM 950 CZ TYR A 148 32.908 30.277 -0.496 1.00 3.53 C

ATOM 951 OH TYR A 148 32.373 31.493 -0.161 1.00 5.93 O

ATOM 952 N THR A 149 36.728 24.154 -0.622 1.00 7.40 N

ATOM 953 CA THR A 149 36.985 22.712 -0.755 1.00 13.60 C

ATOM 954 C THR A 149 35.628 21.952 -0.824 1.00 13.25 C

ATOM 955 O THR A 149 34.565 22.575 -0.765 1.00 14.41 O

ATOM 956 CB THR A 149 37.878 22.167 0.430 1.00 15.30 C

ATOM 957 OG1 THR A 149 38.141 20.767 0.244 1.00 16.16 O

ATOM 958 CG2 THR A 149 37.197 22.391 1.790 1.00 14.60 C

ATOM 959 N ARG A 150 35.657 20.624 -0.949 1.00 12.26 N

ATOM 960 CA ARG A 150 34.418 19.840 -1.029 1.00 10.25 C

ATOM 961 C ARG A 150 34.411 18.554 -0.183 1.00 10.57 C

ATOM 962 O ARG A 150 35.311 17.724 -0.281 1.00 12.12 O

ATOM 963 CB ARG A 150 34.128 19.462 -2.494 1.00 4.95 C

ATOM 964 CG ARG A 150 33.539 20.567 -3.350 1.00 2.95 C

ATOM 965 CD ARG A 150 32.026 20.715 -3.114 1.00 6.24 C

ATOM 966 NE ARG A 150 31.237 19.778 -3.909 1.00 4.77 N

ATOM 967 CZ ARG A 150 30.875 19.985 -5.177 1.00 4.92 C

ATOM 968 NH1 ARG A 150 31.215 21.091 -5.818 1.00 2.00 N

ATOM 969 NH2 ARG A 150 30.189 19.067 -5.822 1.00 5.79 N

ATOM 970 N ALA A 151 33.396 18.387 0.651 1.00 11.29 N

ATOM 971 CA ALA A 151 33.261 17.167 1.452 1.00 12.19 C

ATOM 972 C ALA A 151 32.992 15.919 0.551 1.00 12.10 C

ATOM 973 O ALA A 151 33.336 14.786 0.890 1.00 13.40 O

ATOM 974 CB ALA A 151 32.131 17.349 2.468 1.00 10.94 C

ATOM 975 N LEU A 152 32.363 16.133 -0.597 1.00 12.26 N

ATOM 976 CA LEU A 152 32.106 15.041 -1.512 1.00 15.46 C

ATOM 977 C LEU A 152 32.442 15.541 -2.892 1.00 14.82 C

ATOM 978 O LEU A 152 32.042 16.650 -3.272 1.00 18.33 O

ATOM 979 CB LEU A 152 30.639 14.629 -1.489 1.00 18.33 C

ATOM 980 CG LEU A 152 30.231 13.626 -0.424 1.00 16.45 C

ATOM 981 CD1 LEU A 152 28.737 13.427 -0.504 1.00 16.19 C

ATOM 982 CD2 LEU A 152 30.971 12.333 -0.634 1.00 15.97 C

ATOM 983 N PRO A 153 33.200 14.742 -3.654 1.00 11.79 N

ATOM 984 CA PRO A 153 33.607 15.079 -5.020 1.00 12.55 C

ATOM 985 C PRO A 153 32.401 15.437 -5.877 1.00 12.77 C

ATOM 986 O PRO A 153 31.310 14.880 -5.714 1.00 13.14 O

ATOM 987 CB PRO A 153 34.290 13.806 -5.510 1.00 9.43 C

ATOM 988 CG PRO A 153 33.915 12.738 -4.492 1.00 5.69 C

ATOM 989 CD PRO A 153 33.736 13.443 -3.221 1.00 8.03 C

ATOM 990 N PRO A 154 32.570 16.383 -6.799 1.00 12.14 N

ATOM 991 CA PRO A 154 31.395 16.712 -7.619 1.00 15.08 C

ATOM 992 C PRO A 154 31.036 15.512 -8.496 1.00 15.40 C

ATOM 993 O PRO A 154 31.844 14.581 -8.635 1.00 19.48 O

ATOM 994 CB PRO A 154 31.855 17.906 -8.456 1.00 9.63 C

ATOM 995 CG PRO A 154 33.367 17.815 -8.456 1.00 11.32 C

ATOM 996 CD PRO A 154 33.766 17.163 -7.158 1.00 11.60 C

ATOM 997 N VAL A 155 29.836 15.523 -9.072 1.00 14.86 N

ATOM 998 CA VAL A 155 29.403 14.442 -9.966 1.00 13.18 C

ATOM 999 C VAL A 155 30.096 14.659 -11.321 1.00 14.42 C

ATOM 1000 O VAL A 155 30.127 15.798 -11.833 1.00 15.56 O

ATOM 1001 CB VAL A 155 27.865 14.472 -10.182 1.00 11.83 C

ATOM 1002 CG1 VAL A 155 27.455 13.432 -11.216 1.00 6.64 C

ATOM 1003 CG2 VAL A 155 27.149 14.266 -8.852 1.00 7.83 C

ATOM 1004 N ALA A 156 30.651 13.590 -11.894 1.00 14.40 N

ATOM 1005 CA ALA A 156 31.342 13.701 -13.178 1.00 17.71 C

ATOM 1006 C ALA A 156 30.469 14.411 -14.205 1.00 20.04 C

ATOM 1007 O ALA A 156 29.245 14.296 -14.179 1.00 22.67 O

ATOM 1008 CB ALA A 156 31.750 12.320 -13.683 1.00 16.54 C

ATOM 1009 N ASP A 157 31.101 15.147 -15.110 1.00 25.64 N

ATOM 1010 CA ASP A 157 30.365 15.886 -16.126 1.00 29.27 C

ATOM 1011 C ASP A 157 29.747 14.966 -17.163 1.00 31.93 C

ATOM 1012 O ASP A 157 28.738 15.299 -17.777 1.00 34.35 O

ATOM 1013 CB ASP A 157 31.285 16.895 -16.812 1.00 30.16 C

ATOM 1014 CG ASP A 157 31.472 18.170 -15.990 1.00 34.00 C

ATOM 1015 OD1 ASP A 157 30.804 18.294 -14.936 1.00 37.75 O

ATOM 1016 OD2 ASP A 157 32.279 19.046 -16.388 1.00 33.63 O

ATOM 1017 N ASP A 158 30.342 13.798 -17.355 1.00 35.50 N

ATOM 1018 CA ASP A 158 29.818 12.868 -18.340 1.00 37.95 C

ATOM 1019 C ASP A 158 28.868 11.842 -17.727 1.00 37.12 C

ATOM 1020 O ASP A 158 28.611 10.782 -18.300 1.00 38.22 O

ATOM 1021 CB ASP A 158 30.970 12.184 -19.100 1.00 42.82 C

ATOM 1022 CG ASP A 158 31.573 11.003 -18.337 1.00 48.56 C

ATOM 1023 OD1 ASP A 158 32.050 11.199 -17.190 1.00 50.23 O

ATOM 1024 OD2 ASP A 158 31.578 9.878 -18.900 1.00 50.24 O

ATOM 1025 N CYS A 159 28.338 12.160 -16.555 1.00 34.47 N

ATOM 1026 CA CYS A 159 27.388 11.265 -15.909 1.00 33.87 C

ATOM 1027 C CYS A 159 26.047 11.419 -16.649 1.00 34.20 C

ATOM 1028 O CYS A 159 25.747 12.489 -17.189 1.00 35.55 O

ATOM 1029 CB CYS A 159 27.230 11.640 -14.435 1.00 31.85 C

ATOM 1030 SG CYS A 159 28.474 10.910 -13.323 1.00 28.08 S

ATOM 1031 N PRO A 160 25.226 10.352 -16.683 1.00 32.68 N

ATOM 1032 CA PRO A 160 23.925 10.380 -17.368 1.00 32.45 C

ATOM 1033 C PRO A 160 22.849 11.272 -16.743 1.00 31.80 C

ATOM 1034 O PRO A 160 22.011 11.834 -17.449 1.00 30.64 O

ATOM 1035 CB PRO A 160 23.511 8.912 -17.403 1.00 31.18 C

ATOM 1036 CG PRO A 160 24.203 8.300 -16.234 1.00 30.31 C

ATOM 1037 CD PRO A 160 25.495 9.039 -16.066 1.00 31.92 C

ATOM 1038 N THR A 161 22.869 11.392 -15.420 1.00 32.81 N

ATOM 1039 CA THR A 161 21.895 12.222 -14.725 1.00 33.27 C

ATOM 1040 C THR A 161 22.604 13.190 -13.805 1.00 32.60 C

ATOM 1041 O THR A 161 23.773 13.002 -13.467 1.00 32.72 O

ATOM 1042 CB THR A 161 20.887 11.382 -13.892 1.00 35.33 C

ATOM 1043 OG1 THR A 161 21.583 10.628 -12.895 1.00 34.65 O

ATOM 1044 CG2 THR A 161 20.115 10.435 -14.796 1.00 37.68 C

ATOM 1045 N PRO A 162 21.896 14.247 -13.384 1.00 33.12 N

ATOM 1046 CA PRO A 162 22.455 15.273 -12.496 1.00 31.84 C

ATOM 1047 C PRO A 162 23.057 14.743 -11.202 1.00 32.63 C

ATOM 1048 O PRO A 162 24.061 15.283 -10.728 1.00 33.71 O

ATOM 1049 CB PRO A 162 21.285 16.228 -12.254 1.00 31.00 C

ATOM 1050 CG PRO A 162 20.357 15.991 -13.420 1.00 31.78 C

ATOM 1051 CD PRO A 162 20.495 14.532 -13.748 1.00 33.05 C

ATOM 1052 N MET A 163 22.462 13.691 -10.641 1.00 30.65 N

ATOM 1053 CA MET A 163 22.960 13.110 -9.390 1.00 27.88 C

ATOM 1054 C MET A 163 23.696 11.804 -9.607 1.00 28.24 C

ATOM 1055 O MET A 163 23.879 11.037 -8.674 1.00 28.62 O

ATOM 1056 CB MET A 163 21.820 12.863 -8.404 1.00 26.30 C

ATOM 1057 CG MET A 163 20.981 14.076 -8.121 1.00 28.22 C

ATOM 1058 SD MET A 163 21.773 15.151 -6.980 1.00 22.99 S

ATOM 1059 CE MET A 163 20.926 16.682 -7.354 1.00 22.95 C

ATOM 1060 N GLY A 164 24.111 11.546 -10.842 1.00 28.95 N

ATOM 1061 CA GLY A 164 24.838 10.320 -11.125 1.00 29.65 C

ATOM 1062 C GLY A 164 24.168 9.441 -12.157 1.00 29.17 C

ATOM 1063 O GLY A 164 24.349 9.644 -13.355 1.00 28.48 O

ATOM 1064 N VAL A 165 23.400 8.461 -11.684 1.00 29.04 N

ATOM 1065 CA VAL A 165 22.672 7.538 -12.562 1.00 29.92 C

ATOM 1066 C VAL A 165 21.164 7.496 -12.246 1.00 29.45 C

ATOM 1067 O VAL A 165 20.360 7.113 -13.088 1.00 31.04 O

ATOM 1068 CB VAL A 165 23.253 6.082 -12.473 1.00 26.87 C

ATOM 1069 CG1 VAL A 165 24.649 6.048 -13.063 1.00 24.04 C

ATOM 1070 CG2 VAL A 165 23.271 5.594 -11.023 1.00 26.31 C

ATOM 1071 N LYS A 166 20.792 7.897 -11.031 1.00 28.24 N

ATOM 1072 CA LYS A 166 19.398 7.899 -10.600 1.00 24.93 C

ATOM 1073 C LYS A 166 18.670 9.181 -10.999 1.00 25.92 C

ATOM 1074 O LYS A 166 19.286 10.236 -11.161 1.00 23.92 O

ATOM 1075 CB LYS A 166 19.318 7.736 -9.084 1.00 24.66 C

ATOM 1076 CG LYS A 166 19.643 6.353 -8.580 1.00 23.27 C

ATOM 1077 CD LYS A 166 19.691 6.344 -7.080 1.00 21.60 C

ATOM 1078 CE LYS A 166 19.618 4.933 -6.567 1.00 26.22 C

ATOM 1079 NZ LYS A 166 20.574 4.722 -5.442 1.00 27.78 N

ATOM 1080 N GLY A 167 17.350 9.074 -11.147 1.00 26.61 N

ATOM 1081 CA GLY A 167 16.537 10.217 -11.522 1.00 25.80 C

ATOM 1082 C GLY A 167 16.466 10.482 -13.014 1.00 25.35 C

ATOM 1083 O GLY A 167 16.903 9.669 -13.815 1.00 27.64 O

ATOM 1084 N ASN A 168 15.918 11.632 -13.388 1.00 28.10 N

ATOM 1085 CA ASN A 168 15.785 12.004 -14.796 1.00 33.18 C

ATOM 1086 C ASN A 168 16.924 12.905 -15.271 1.00 34.55 C

ATOM 1087 O ASN A 168 17.713 13.411 -14.467 1.00 35.19 O

ATOM 1088 CB ASN A 168 14.439 12.712 -15.044 1.00 37.48 C

ATOM 1089 CG ASN A 168 13.273 12.015 -14.356 1.00 40.66 C

ATOM 1090 OD1 ASN A 168 13.036 10.824 -14.564 1.00 43.44 O

ATOM 1091 ND2 ASN A 168 12.543 12.755 -13.527 1.00 42.60 N

ATOM 1092 N LYS A 169 16.998 13.103 -16.584 1.00 35.02 N

ATOM 1093 CA LYS A 169 18.039 13.928 -17.175 1.00 37.15 C

ATOM 1094 C LYS A 169 18.092 15.275 -16.498 1.00 36.70 C

ATOM 1095 O LYS A 169 19.132 15.933 -16.509 1.00 37.05 O

ATOM 1096 CB LYS A 169 17.793 14.123 -18.672 1.00 40.87 C

ATOM 1097 CG LYS A 169 17.461 12.837 -19.425 1.00 46.60 C

ATOM 1098 CD LYS A 169 18.703 12.204 -20.055 1.00 49.71 C

ATOM 1099 CE LYS A 169 18.390 10.832 -20.640 1.00 51.56 C

ATOM 1100 NZ LYS A 169 17.996 10.903 -22.083 1.00 54.78 N

ATOM 1101 N GLU A 170 16.979 15.688 -15.900 1.00 35.80 N

ATOM 1102 CA GLU A 170 16.943 16.982 -15.229 1.00 36.34 C

ATOM 1103 C GLU A 170 16.229 16.982 -13.893 1.00 32.53 C

ATOM 1104 O GLU A 170 15.197 16.344 -13.727 1.00 33.40 O

ATOM 1105 CB GLU A 170 16.293 18.022 -16.129 1.00 40.07 C

ATOM 1106 CG GLU A 170 17.140 18.418 -17.311 1.00 51.21 C

ATOM 1107 CD GLU A 170 16.306 18.821 -18.511 1.00 56.79 C

ATOM 1108 OE1 GLU A 170 16.317 18.080 -19.521 1.00 59.43 O

ATOM 1109 OE2 GLU A 170 15.639 19.881 -18.442 1.00 60.31 O

ATOM 1110 N LEU A 171 16.799 17.701 -12.934 1.00 29.86 N

ATOM 1111 CA LEU A 171 16.199 17.817 -11.613 1.00 26.74 C

ATOM 1112 C LEU A 171 14.931 18.662 -11.778 1.00 25.47 C

ATOM 1113 O LEU A 171 14.752 19.348 -12.796 1.00 22.93 O

ATOM 1114 CB LEU A 171 17.162 18.523 -10.663 1.00 25.07 C

ATOM 1115 CG LEU A 171 17.923 17.802 -9.550 1.00 23.16 C

ATOM 1116 CD1 LEU A 171 17.969 16.315 -9.741 1.00 22.45 C

ATOM 1117 CD2 LEU A 171 19.318 18.377 -9.534 1.00 21.29 C

ATOM 1118 N PRO A 172 14.039 18.629 -10.778 1.00 23.67 N

ATOM 1119 CA PRO A 172 12.800 19.399 -10.844 1.00 22.26 C

ATOM 1120 C PRO A 172 13.058 20.895 -10.877 1.00 22.39 C

ATOM 1121 O PRO A 172 14.069 21.374 -10.370 1.00 25.41 O

ATOM 1122 CB PRO A 172 12.046 18.966 -9.593 1.00 21.06 C

ATOM 1123 CG PRO A 172 13.092 18.525 -8.660 1.00 23.68 C

ATOM 1124 CD PRO A 172 14.144 17.882 -9.517 1.00 24.24 C

ATOM 1125 N ASP A 173 12.142 21.623 -11.496 1.00 23.87 N

ATOM 1126 CA ASP A 173 12.244 23.065 -11.585 1.00 25.70 C

ATOM 1127 C ASP A 173 12.532 23.653 -10.200 1.00 25.92 C

ATOM 1128 O ASP A 173 11.797 23.404 -9.243 1.00 23.73 O

ATOM 1129 CB ASP A 173 10.935 23.616 -12.133 1.00 31.14 C

ATOM 1130 CG ASP A 173 11.008 25.087 -12.449 1.00 34.55 C

ATOM 1131 OD1 ASP A 173 10.368 25.503 -13.436 1.00 38.23 O

ATOM 1132 OD2 ASP A 173 11.699 25.826 -11.714 1.00 38.58 O

ATOM 1133 N SER A 174 13.612 24.425 -10.099 1.00 26.83 N

ATOM 1134 CA SER A 174 14.001 25.045 -8.834 1.00 25.85 C

ATOM 1135 C SER A 174 12.935 26.043 -8.362 1.00 24.59 C

ATOM 1136 O SER A 174 12.714 26.211 -7.168 1.00 23.24 O

ATOM 1137 CB SER A 174 15.368 25.737 -8.982 1.00 24.37 C

ATOM 1138 OG SER A 174 15.312 26.798 -9.924 1.00 22.72 O

ATOM 1139 N LYS A 175 12.279 26.701 -9.309 1.00 23.63 N

ATOM 1140 CA LYS A 175 11.220 27.660 -8.987 1.00 23.00 C

ATOM 1141 C LYS A 175 10.012 26.929 -8.376 1.00 21.52 C

ATOM 1142 O LYS A 175 9.339 27.453 -7.482 1.00 20.37 O

ATOM 1143 CB LYS A 175 10.791 28.405 -10.250 1.00 22.08 C

ATOM 1144 CG LYS A 175 9.664 29.366 -10.031 1.00 24.83 C

ATOM 1145 CD LYS A 175 8.986 29.742 -11.342 1.00 28.02 C

ATOM 1146 CE LYS A 175 7.496 29.991 -11.137 1.00 30.03 C

ATOM 1147 NZ LYS A 175 7.162 31.437 -11.079 1.00 33.29 N

ATOM 1148 N GLU A 176 9.754 25.719 -8.866 1.00 21.53 N

ATOM 1149 CA GLU A 176 8.657 24.899 -8.372 1.00 25.53 C

ATOM 1150 C GLU A 176 8.990 24.402 -6.967 1.00 23.28 C

ATOM 1151 O GLU A 176 8.126 24.338 -6.099 1.00 22.59 O

ATOM 1152 CB GLU A 176 8.430 23.701 -9.306 1.00 34.41 C

ATOM 1153 CG GLU A 176 6.975 23.498 -9.760 1.00 43.17 C

ATOM 1154 CD GLU A 176 6.474 24.622 -10.655 1.00 49.24 C

ATOM 1155 OE1 GLU A 176 5.599 25.414 -10.211 1.00 51.34 O

ATOM 1156 OE2 GLU A 176 6.965 24.707 -11.803 1.00 53.27 O

ATOM 1157 N VAL A 177 10.251 24.027 -6.767 1.00 22.40 N

ATOM 1158 CA VAL A 177 10.736 23.557 -5.475 1.00 19.17 C

ATOM 1159 C VAL A 177 10.648 24.725 -4.502 1.00 20.14 C

ATOM 1160 O VAL A 177 10.163 24.595 -3.369 1.00 20.32 O

ATOM 1161 CB VAL A 177 12.205 23.129 -5.553 1.00 15.71 C

ATOM 1162 CG1 VAL A 177 12.689 22.750 -4.164 1.00 15.19 C

ATOM 1163 CG2 VAL A 177 12.369 21.978 -6.545 1.00 12.68 C

ATOM 1164 N LEU A 178 11.126 25.874 -4.976 1.00 20.56 N

ATOM 1165 CA LEU A 178 11.133 27.118 -4.216 1.00 19.77 C

ATOM 1166 C LEU A 178 9.723 27.437 -3.699 1.00 20.12 C

ATOM 1167 O LEU A 178 9.502 27.545 -2.485 1.00 18.52 O

ATOM 1168 CB LEU A 178 11.632 28.256 -5.115 1.00 17.15 C

ATOM 1169 CG LEU A 178 12.167 29.554 -4.499 1.00 16.91 C

ATOM 1170 CD1 LEU A 178 11.617 30.772 -5.248 1.00 13.23 C

ATOM 1171 CD2 LEU A 178 11.784 29.606 -3.034 1.00 18.33 C

ATOM 1172 N GLU A 179 8.773 27.554 -4.627 1.00 20.09 N

ATOM 1173 CA GLU A 179 7.401 27.888 -4.274 1.00 21.20 C

ATOM 1174 C GLU A 179 6.596 26.846 -3.526 1.00 19.31 C

ATOM 1175 O GLU A 179 5.890 27.175 -2.595 1.00 23.31 O

ATOM 1176 CB GLU A 179 6.644 28.317 -5.518 1.00 20.53 C

ATOM 1177 CG GLU A 179 7.023 29.712 -5.946 1.00 24.17 C

ATOM 1178 CD GLU A 179 6.553 30.017 -7.335 1.00 27.53 C

ATOM 1179 OE1 GLU A 179 6.129 29.066 -8.028 1.00 28.99 O

ATOM 1180 OE2 GLU A 179 6.608 31.202 -7.729 1.00 29.88 O

ATOM 1181 N LYS A 180 6.707 25.589 -3.901 1.00 19.44 N

ATOM 1182 CA LYS A 180 5.937 24.558 -3.221 1.00 21.01 C

ATOM 1183 C LYS A 180 6.321 24.236 -1.765 1.00 20.84 C

ATOM 1184 O LYS A 180 5.448 23.984 -0.934 1.00 21.48 O

ATOM 1185 CB LYS A 180 5.962 23.264 -4.041 1.00 21.54 C

ATOM 1186 CG LYS A 180 5.432 23.416 -5.436 1.00 25.44 C

ATOM 1187 CD LYS A 180 4.887 22.095 -5.920 1.00 30.61 C

ATOM 1188 CE LYS A 180 3.949 22.278 -7.094 1.00 34.73 C

ATOM 1189 NZ LYS A 180 4.594 21.833 -8.372 1.00 37.57 N

ATOM 1190 N VAL A 181 7.610 24.243 -1.438 1.00 21.96 N

ATOM 1191 CA VAL A 181 7.997 23.892 -0.072 1.00 22.50 C

ATOM 1192 C VAL A 181 8.956 24.828 0.647 1.00 18.41 C

ATOM 1193 O VAL A 181 9.257 24.606 1.810 1.00 16.53 O

ATOM 1194 CB VAL A 181 8.595 22.457 -0.013 1.00 23.60 C

ATOM 1195 CG1 VAL A 181 7.500 21.421 -0.293 1.00 22.89 C

ATOM 1196 CG2 VAL A 181 9.720 22.317 -1.019 1.00 24.08 C

ATOM 1197 N LEU A 182 9.421 25.878 -0.022 1.00 17.55 N

ATOM 1198 CA LEU A 182 10.352 26.802 0.629 1.00 18.05 C

ATOM 1199 C LEU A 182 9.781 28.157 1.019 1.00 16.62 C

ATOM 1200 O LEU A 182 9.992 28.605 2.137 1.00 15.46 O

ATOM 1201 CB LEU A 182 11.609 26.998 -0.236 1.00 15.01 C

ATOM 1202 CG LEU A 182 12.424 25.717 -0.463 1.00 13.53 C

ATOM 1203 CD1 LEU A 182 13.686 26.071 -1.200 1.00 15.45 C

ATOM 1204 CD2 LEU A 182 12.758 25.035 0.850 1.00 11.41 C

ATOM 1205 N LEU A 183 9.074 28.815 0.102 1.00 18.59 N

ATOM 1206 CA LEU A 183 8.474 30.130 0.384 1.00 18.68 C

ATOM 1207 C LEU A 183 7.552 30.096 1.612 1.00 18.15 C

ATOM 1208 O LEU A 183 6.780 29.166 1.790 1.00 18.29 O

ATOM 1209 CB LEU A 183 7.684 30.626 -0.832 1.00 19.09 C

ATOM 1210 CG LEU A 183 8.480 31.017 -2.087 1.00 20.61 C

ATOM 1211 CD1 LEU A 183 7.638 31.956 -2.985 1.00 18.41 C

ATOM 1212 CD2 LEU A 183 9.786 31.681 -1.665 1.00 20.44 C

ATOM 1213 N ARG A 184 7.639 31.123 2.450 1.00 17.99 N

ATOM 1214 CA ARG A 184 6.841 31.210 3.666 1.00 17.09 C

ATOM 1215 C ARG A 184 5.500 31.900 3.474 1.00 19.15 C

ATOM 1216 O ARG A 184 5.432 32.998 2.917 1.00 18.55 O

ATOM 1217 CB ARG A 184 7.632 31.949 4.758 1.00 16.13 C

ATOM 1218 CG ARG A 184 6.818 32.912 5.611 1.00 11.59 C

ATOM 1219 CD ARG A 184 7.659 34.082 6.082 1.00 15.00 C

ATOM 1220 NE ARG A 184 8.775 33.639 6.914 1.00 18.80 N

ATOM 1221 CZ ARG A 184 9.805 34.402 7.271 1.00 17.90 C

ATOM 1222 NH1 ARG A 184 9.870 35.660 6.869 1.00 14.96 N

ATOM 1223 NH2 ARG A 184 10.766 33.907 8.044 1.00 17.65 N

ATOM 1224 N ARG A 185 4.430 31.253 3.942 1.00 20.37 N

ATOM 1225 CA ARG A 185 3.089 31.823 3.859 1.00 21.53 C

ATOM 1226 C ARG A 185 2.861 32.569 5.172 1.00 21.50 C

ATOM 1227 O ARG A 185 2.519 33.752 5.184 1.00 21.94 O

ATOM 1228 CB ARG A 185 2.052 30.725 3.679 1.00 18.27 C

ATOM 1229 CG ARG A 185 2.659 29.416 3.280 1.00 21.15 C

ATOM 1230 CD ARG A 185 2.721 29.264 1.780 1.00 24.35 C

ATOM 1231 NE ARG A 185 3.634 28.186 1.394 1.00 30.00 N

ATOM 1232 CZ ARG A 185 3.828 27.760 0.145 1.00 30.14 C

ATOM 1233 NH1 ARG A 185 3.167 28.308 -0.865 1.00 28.41 N

ATOM 1234 NH2 ARG A 185 4.707 26.794 -0.089 1.00 33.63 N

ATOM 1235 N GLU A 186 3.081 31.888 6.285 1.00 23.96 N

ATOM 1236 CA GLU A 186 2.931 32.533 7.579 1.00 28.02 C

ATOM 1237 C GLU A 186 4.251 32.398 8.323 1.00 26.90 C

ATOM 1238 O GLU A 186 4.900 31.353 8.248 1.00 28.20 O

ATOM 1239 CB GLU A 186 1.806 31.889 8.371 1.00 32.97 C

ATOM 1240 CG GLU A 186 0.754 32.878 8.786 1.00 43.75 C

ATOM 1241 CD GLU A 186 -0.198 32.301 9.802 1.00 52.49 C

ATOM 1242 OE1 GLU A 186 -0.707 31.177 9.563 1.00 56.92 O

ATOM 1243 OE2 GLU A 186 -0.430 32.971 10.835 1.00 54.92 O

ATOM 1244 N PHE A 187 4.654 33.454 9.026 1.00 23.73 N

ATOM 1245 CA PHE A 187 5.926 33.431 9.753 1.00 20.93 C

ATOM 1246 C PHE A 187 5.935 32.382 10.855 1.00 18.28 C

ATOM 1247 O PHE A 187 5.074 32.393 11.730 1.00 19.39 O

ATOM 1248 CB PHE A 187 6.204 34.815 10.347 1.00 19.03 C

ATOM 1249 CG PHE A 187 7.399 34.869 11.260 1.00 17.27 C

ATOM 1250 CD1 PHE A 187 7.243 34.776 12.634 1.00 15.86 C

ATOM 1251 CD2 PHE A 187 8.674 35.060 10.749 1.00 18.16 C

ATOM 1252 CE1 PHE A 187 8.322 34.880 13.481 1.00 15.01 C

ATOM 1253 CE2 PHE A 187 9.756 35.164 11.594 1.00 18.98 C

ATOM 1254 CZ PHE A 187 9.575 35.073 12.967 1.00 17.25 C

ATOM 1255 N ILE A 188 6.901 31.470 10.800 1.00 16.51 N

ATOM 1256 CA ILE A 188 7.022 30.418 11.816 1.00 17.35 C

ATOM 1257 C ILE A 188 8.168 30.772 12.767 1.00 18.60 C

ATOM 1258 O ILE A 188 9.334 30.660 12.404 1.00 19.79 O

ATOM 1259 CB ILE A 188 7.310 29.040 11.168 1.00 14.97 C

ATOM 1260 CG1 ILE A 188 6.132 28.625 10.299 1.00 11.72 C

ATOM 1261 CG2 ILE A 188 7.540 27.984 12.233 1.00 11.88 C

ATOM 1262 CD1 ILE A 188 6.478 27.592 9.248 1.00 16.06 C

ATOM 1263 N PRO A 189 7.849 31.187 14.004 1.00 18.83 N

ATOM 1264 CA PRO A 189 8.912 31.546 14.948 1.00 20.05 C

ATOM 1265 C PRO A 189 9.776 30.348 15.342 1.00 19.66 C

ATOM 1266 O PRO A 189 9.372 29.200 15.187 1.00 22.19 O

ATOM 1267 CB PRO A 189 8.147 32.137 16.137 1.00 18.24 C

ATOM 1268 CG PRO A 189 6.819 31.467 16.081 1.00 15.93 C

ATOM 1269 CD PRO A 189 6.514 31.308 14.618 1.00 19.40 C

ATOM 1270 N ASP A 190 10.971 30.621 15.846 1.00 19.99 N

ATOM 1271 CA ASP A 190 11.844 29.542 16.255 1.00 21.38 C

ATOM 1272 C ASP A 190 11.497 29.096 17.664 1.00 19.54 C

ATOM 1273 O ASP A 190 11.487 29.898 18.601 1.00 19.69 O

ATOM 1274 CB ASP A 190 13.316 29.974 16.210 1.00 26.37 C

ATOM 1275 CG ASP A 190 14.231 29.039 17.024 1.00 28.27 C

ATOM 1276 OD1 ASP A 190 14.214 27.795 16.815 1.00 26.54 O

ATOM 1277 OD2 ASP A 190 14.972 29.558 17.882 1.00 28.90 O

ATOM 1278 N PRO A 191 11.181 27.810 17.826 1.00 17.65 N

ATOM 1279 CA PRO A 191 10.837 27.252 19.137 1.00 17.08 C

ATOM 1280 C PRO A 191 11.950 27.437 20.161 1.00 18.23 C

ATOM 1281 O PRO A 191 11.686 27.458 21.368 1.00 20.96 O

ATOM 1282 CB PRO A 191 10.562 25.772 18.858 1.00 15.72 C

ATOM 1283 CG PRO A 191 11.001 25.529 17.461 1.00 18.43 C

ATOM 1284 CD PRO A 191 11.072 26.831 16.735 1.00 14.82 C

ATOM 1285 N GLN A 192 13.188 27.569 19.680 1.00 17.51 N

ATOM 1286 CA GLN A 192 14.357 27.750 20.551 1.00 17.38 C

ATOM 1287 C GLN A 192 14.527 29.160 21.111 1.00 17.68 C

ATOM 1288 O GLN A 192 15.367 29.389 21.989 1.00 18.95 O

ATOM 1289 CB GLN A 192 15.630 27.355 19.810 1.00 18.01 C

ATOM 1290 CG GLN A 192 15.634 25.902 19.407 1.00 22.43 C

ATOM 1291 CD GLN A 192 17.016 25.329 19.312 1.00 23.73 C

ATOM 1292 OE1 GLN A 192 17.291 24.510 18.441 1.00 27.37 O

ATOM 1293 NE2 GLN A 192 17.901 25.751 20.207 1.00 25.13 N

ATOM 1294 N GLY A 193 13.742 30.107 20.600 1.00 14.88 N

ATOM 1295 CA GLY A 193 13.829 31.471 21.084 1.00 13.13 C

ATOM 1296 C GLY A 193 14.875 32.352 20.428 1.00 13.94 C

ATOM 1297 O GLY A 193 15.118 33.462 20.875 1.00 13.37 O

ATOM 1298 N SER A 194 15.504 31.856 19.372 1.00 15.56 N

ATOM 1299 CA SER A 194 16.507 32.623 18.645 1.00 16.01 C

ATOM 1300 C SER A 194 15.945 33.995 18.310 1.00 15.39 C

ATOM 1301 O SER A 194 14.863 34.098 17.746 1.00 16.57 O

ATOM 1302 CB SER A 194 16.872 31.908 17.343 1.00 16.41 C

ATOM 1303 OG SER A 194 17.686 30.783 17.597 1.00 19.82 O

ATOM 1304 N ASN A 195 16.683 35.045 18.653 1.00 15.68 N

ATOM 1305 CA ASN A 195 16.240 36.408 18.364 1.00 16.37 C

ATOM 1306 C ASN A 195 17.075 36.968 17.222 1.00 17.72 C

ATOM 1307 O ASN A 195 17.738 36.218 16.507 1.00 18.84 O

ATOM 1308 CB ASN A 195 16.388 37.301 19.596 1.00 16.40 C

ATOM 1309 CG ASN A 195 17.778 37.251 20.184 1.00 19.32 C

ATOM 1310 OD1 ASN A 195 18.717 36.800 19.534 1.00 22.34 O

ATOM 1311 ND2 ASN A 195 17.919 37.711 21.419 1.00 19.52 N

ATOM 1312 N MET A 196 17.051 38.284 17.051 1.00 18.64 N

ATOM 1313 CA MET A 196 17.811 38.915 15.979 1.00 19.05 C

ATOM 1314 C MET A 196 19.305 39.135 16.311 1.00 20.18 C

ATOM 1315 O MET A 196 20.131 39.262 15.403 1.00 21.63 O

ATOM 1316 CB MET A 196 17.137 40.232 15.578 1.00 18.37 C

ATOM 1317 CG MET A 196 15.814 40.064 14.808 1.00 13.44 C

ATOM 1318 SD MET A 196 15.743 38.693 13.577 1.00 18.74 S

ATOM 1319 CE MET A 196 16.204 39.580 12.118 1.00 13.47 C

ATOM 1320 N MET A 197 19.658 39.186 17.598 1.00 19.93 N

ATOM 1321 CA MET A 197 21.064 39.345 17.969 1.00 18.68 C

ATOM 1322 C MET A 197 21.766 38.074 17.518 1.00 19.69 C

ATOM 1323 O MET A 197 22.950 38.083 17.175 1.00 22.18 O

ATOM 1324 CB MET A 197 21.246 39.504 19.482 1.00 16.59 C

ATOM 1325 CG MET A 197 20.874 40.883 20.024 1.00 18.86 C

ATOM 1326 SD MET A 197 21.816 42.278 19.380 1.00 16.44 S

ATOM 1327 CE MET A 197 23.368 41.993 20.159 1.00 16.48 C

ATOM 1328 N PHE A 198 21.020 36.974 17.518 1.00 18.39 N

ATOM 1329 CA PHE A 198 21.569 35.697 17.105 1.00 16.04 C

ATOM 1330 C PHE A 198 21.643 35.616 15.593 1.00 17.39 C

ATOM 1331 O PHE A 198 22.689 35.290 15.047 1.00 20.59 O

ATOM 1332 CB PHE A 198 20.710 34.537 17.621 1.00 14.08 C

ATOM 1333 CG PHE A 198 20.999 33.220 16.945 1.00 12.84 C

ATOM 1334 CD1 PHE A 198 22.023 32.401 17.409 1.00 14.19 C

ATOM 1335 CD2 PHE A 198 20.265 32.813 15.830 1.00 12.02 C

ATOM 1336 CE1 PHE A 198 22.315 31.187 16.765 1.00 14.74 C

ATOM 1337 CE2 PHE A 198 20.544 31.609 15.174 1.00 10.61 C

ATOM 1338 CZ PHE A 198 21.569 30.792 15.637 1.00 10.45 C

ATOM 1339 N ALA A 199 20.536 35.914 14.914 1.00 18.25 N

ATOM 1340 CA ALA A 199 20.503 35.821 13.460 1.00 15.84 C

ATOM 1341 C ALA A 199 21.559 36.705 12.804 1.00 15.10 C

ATOM 1342 O ALA A 199 22.248 36.248 11.897 1.00 15.85 O

ATOM 1343 CB ALA A 199 19.103 36.159 12.930 1.00 15.33 C

ATOM 1344 N PHE A 200 21.686 37.954 13.262 1.00 14.76 N

ATOM 1345 CA PHE A 200 22.666 38.898 12.707 1.00 15.35 C

ATOM 1346 C PHE A 200 24.106 38.594 13.132 1.00 15.42 C

ATOM 1347 O PHE A 200 25.061 38.938 12.421 1.00 15.34 O

ATOM 1348 CB PHE A 200 22.316 40.325 13.102 1.00 14.17 C

ATOM 1349 CG PHE A 200 21.222 40.926 12.274 1.00 16.94 C

ATOM 1350 CD1 PHE A 200 21.330 40.987 10.888 1.00 19.39 C

ATOM 1351 CD2 PHE A 200 20.059 41.397 12.876 1.00 17.35 C

ATOM 1352 CE1 PHE A 200 20.288 41.507 10.108 1.00 19.60 C

ATOM 1353 CE2 PHE A 200 19.014 41.916 12.109 1.00 17.64 C

ATOM 1354 CZ PHE A 200 19.128 41.968 10.725 1.00 18.15 C

ATOM 1355 N PHE A 201 24.252 37.952 14.291 1.00 13.61 N

ATOM 1356 CA PHE A 201 25.563 37.571 14.783 1.00 11.23 C

ATOM 1357 C PHE A 201 26.087 36.524 13.820 1.00 13.45 C

ATOM 1358 O PHE A 201 27.187 36.652 13.296 1.00 16.35 O

ATOM 1359 CB PHE A 201 25.480 36.965 16.185 1.00 12.13 C

ATOM 1360 CG PHE A 201 26.831 36.652 16.772 1.00 15.76 C

ATOM 1361 CD1 PHE A 201 27.564 37.641 17.413 1.00 14.03 C

ATOM 1362 CD2 PHE A 201 27.420 35.407 16.591 1.00 12.75 C

ATOM 1363 CE1 PHE A 201 28.845 37.402 17.844 1.00 9.91 C

ATOM 1364 CE2 PHE A 201 28.703 35.176 17.026 1.00 10.82 C

ATOM 1365 CZ PHE A 201 29.412 36.179 17.652 1.00 10.24 C

ATOM 1366 N ALA A 202 25.288 35.482 13.599 1.00 11.73 N

ATOM 1367 CA ALA A 202 25.636 34.406 12.681 1.00 8.48 C

ATOM 1368 C ALA A 202 25.965 34.946 11.283 1.00 7.30 C

ATOM 1369 O ALA A 202 26.878 34.460 10.621 1.00 5.13 O

ATOM 1370 CB ALA A 202 24.482 33.395 12.601 1.00 5.24 C

ATOM 1371 N GLN A 203 25.212 35.946 10.833 1.00 6.09 N

ATOM 1372 CA GLN A 203 25.435 36.541 9.516 1.00 7.63 C

ATOM 1373 C GLN A 203 26.762 37.308 9.464 1.00 10.81 C

ATOM 1374 O GLN A 203 27.575 37.141 8.546 1.00 7.75 O

ATOM 1375 CB GLN A 203 24.313 37.495 9.183 1.00 5.76 C

ATOM 1376 CG GLN A 203 24.263 37.825 7.725 1.00 11.16 C

ATOM 1377 CD GLN A 203 23.440 39.062 7.427 1.00 11.14 C

ATOM 1378 OE1 GLN A 203 23.291 39.461 6.273 1.00 14.42 O

ATOM 1379 NE2 GLN A 203 22.902 39.672 8.464 1.00 11.42 N

ATOM 1380 N HIS A 204 26.962 38.179 10.451 1.00 12.93 N

ATOM 1381 CA HIS A 204 28.184 38.965 10.554 1.00 11.09 C

ATOM 1382 C HIS A 204 29.402 38.046 10.640 1.00 11.58 C

ATOM 1383 O HIS A 204 30.373 38.210 9.915 1.00 13.15 O

ATOM 1384 CB HIS A 204 28.142 39.856 11.812 1.00 11.22 C

ATOM 1385 CG HIS A 204 29.334 40.763 11.954 1.00 9.86 C

ATOM 1386 ND1 HIS A 204 30.409 40.465 12.767 1.00 6.60 N

ATOM 1387 CD2 HIS A 204 29.632 41.949 11.366 1.00 6.36 C

ATOM 1388 CE1 HIS A 204 31.313 41.423 12.672 1.00 5.44 C

ATOM 1389 NE2 HIS A 204 30.864 42.335 11.828 1.00 6.92 N

ATOM 1390 N PHE A 205 29.347 37.081 11.546 1.00 11.36 N

ATOM 1391 CA PHE A 205 30.443 36.141 11.761 1.00 14.15 C

ATOM 1392 C PHE A 205 30.726 35.211 10.566 1.00 15.80 C

ATOM 1393 O PHE A 205 31.861 35.144 10.081 1.00 16.45 O

ATOM 1394 CB PHE A 205 30.136 35.332 13.028 1.00 17.90 C

ATOM 1395 CG PHE A 205 30.922 34.057 13.165 1.00 21.38 C

ATOM 1396 CD1 PHE A 205 32.256 34.089 13.554 1.00 25.51 C

ATOM 1397 CD2 PHE A 205 30.314 32.814 12.969 1.00 20.49 C

ATOM 1398 CE1 PHE A 205 32.971 32.898 13.751 1.00 23.98 C

ATOM 1399 CE2 PHE A 205 31.024 31.627 13.166 1.00 20.39 C

ATOM 1400 CZ PHE A 205 32.350 31.672 13.558 1.00 21.37 C

ATOM 1401 N THR A 206 29.709 34.493 10.087 1.00 16.23 N

ATOM 1402 CA THR A 206 29.907 33.584 8.964 1.00 14.32 C

ATOM 1403 C THR A 206 30.361 34.302 7.706 1.00 14.12 C

ATOM 1404 O THR A 206 30.881 33.664 6.794 1.00 13.26 O

ATOM 1405 CB THR A 206 28.624 32.773 8.621 1.00 13.80 C

ATOM 1406 OG1 THR A 206 27.638 33.628 8.029 1.00 12.16 O

ATOM 1407 CG2 THR A 206 28.067 32.138 9.859 1.00 11.25 C

ATOM 1408 N HIS A 207 30.189 35.624 7.662 1.00 15.11 N

ATOM 1409 CA HIS A 207 30.555 36.397 6.474 1.00 15.85 C

ATOM 1410 C HIS A 207 32.007 36.823 6.328 1.00 13.66 C

ATOM 1411 O HIS A 207 32.360 37.617 5.454 1.00 11.30 O

ATOM 1412 CB HIS A 207 29.617 37.590 6.319 1.00 17.66 C

ATOM 1413 CG HIS A 207 28.315 37.226 5.678 1.00 22.56 C

ATOM 1414 ND1 HIS A 207 27.615 36.091 6.024 1.00 27.29 N

ATOM 1415 CD2 HIS A 207 27.604 37.821 4.689 1.00 22.37 C

ATOM 1416 CE1 HIS A 207 26.526 35.999 5.280 1.00 27.25 C

ATOM 1417 NE2 HIS A 207 26.496 37.038 4.462 1.00 28.09 N

ATOM 1418 N GLN A 208 32.851 36.276 7.189 1.00 13.52 N

ATOM 1419 CA GLN A 208 34.258 36.554 7.080 1.00 15.13 C

ATOM 1420 C GLN A 208 34.843 35.400 6.302 1.00 14.93 C

ATOM 1421 O GLN A 208 35.793 35.584 5.561 1.00 20.03 O

ATOM 1422 CB GLN A 208 34.927 36.684 8.444 1.00 15.32 C

ATOM 1423 CG GLN A 208 34.999 35.427 9.262 1.00 14.59 C

ATOM 1424 CD GLN A 208 35.439 35.741 10.675 1.00 15.58 C

ATOM 1425 OE1 GLN A 208 36.628 35.858 10.954 1.00 16.43 O

ATOM 1426 NE2 GLN A 208 34.479 35.888 11.571 1.00 12.03 N

ATOM 1427 N PHE A 209 34.280 34.210 6.442 1.00 11.48 N

ATOM 1428 CA PHE A 209 34.810 33.098 5.675 1.00 11.78 C

ATOM 1429 C PHE A 209 33.925 32.638 4.518 1.00 11.78 C

ATOM 1430 O PHE A 209 34.332 31.772 3.740 1.00 16.55 O

ATOM 1431 CB PHE A 209 35.168 31.904 6.574 1.00 13.02 C

ATOM 1432 CG PHE A 209 34.121 31.551 7.589 1.00 13.74 C

ATOM 1433 CD1 PHE A 209 34.328 31.820 8.932 1.00 12.29 C

ATOM 1434 CD2 PHE A 209 32.959 30.878 7.210 1.00 13.50 C

ATOM 1435 CE1 PHE A 209 33.405 31.419 9.869 1.00 14.27 C

ATOM 1436 CE2 PHE A 209 32.035 30.475 8.140 1.00 9.17 C

ATOM 1437 CZ PHE A 209 32.250 30.740 9.468 1.00 15.23 C

ATOM 1438 N PHE A 210 32.724 33.206 4.401 1.00 11.12 N

ATOM 1439 CA PHE A 210 31.813 32.880 3.305 1.00 7.89 C

ATOM 1440 C PHE A 210 31.805 34.115 2.467 1.00 5.92 C

ATOM 1441 O PHE A 210 31.030 35.004 2.695 1.00 7.25 O

ATOM 1442 CB PHE A 210 30.390 32.622 3.807 1.00 8.74 C

ATOM 1443 CG PHE A 210 30.223 31.307 4.541 1.00 8.95 C

ATOM 1444 CD1 PHE A 210 31.059 30.223 4.263 1.00 6.73 C

ATOM 1445 CD2 PHE A 210 29.223 31.161 5.504 1.00 8.81 C

ATOM 1446 CE1 PHE A 210 30.907 29.028 4.920 1.00 7.26 C

ATOM 1447 CE2 PHE A 210 29.053 29.967 6.171 1.00 10.62 C

ATOM 1448 CZ PHE A 210 29.896 28.889 5.882 1.00 11.75 C

ATOM 1449 N LYS A 211 32.693 34.176 1.500 1.00 7.69 N

ATOM 1450 CA LYS A 211 32.796 35.333 0.625 1.00 11.21 C

ATOM 1451 C LYS A 211 32.996 34.805 -0.789 1.00 10.59 C

ATOM 1452 O LYS A 211 34.095 34.822 -1.327 1.00 11.87 O

ATOM 1453 CB LYS A 211 33.965 36.221 1.089 1.00 5.79 C

ATOM 1454 CG LYS A 211 33.996 36.310 2.598 1.00 2.74 C

ATOM 1455 CD LYS A 211 34.939 37.355 3.079 1.00 8.51 C

ATOM 1456 CE LYS A 211 36.253 37.308 2.298 1.00 11.24 C

ATOM 1457 NZ LYS A 211 37.132 38.525 2.465 1.00 4.96 N

ATOM 1458 N THR A 212 31.910 34.324 -1.376 1.00 10.55 N

ATOM 1459 CA THR A 212 31.961 33.763 -2.707 1.00 14.63 C

ATOM 1460 C THR A 212 32.505 34.776 -3.706 1.00 18.44 C

ATOM 1461 O THR A 212 32.115 35.946 -3.698 1.00 19.47 O

ATOM 1462 CB THR A 212 30.558 33.278 -3.173 1.00 12.00 C

ATOM 1463 OG1 THR A 212 30.223 32.033 -2.524 1.00 6.67 O

ATOM 1464 CG2 THR A 212 30.559 33.076 -4.685 1.00 10.79 C

ATOM 1465 N ASP A 213 33.424 34.324 -4.554 1.00 21.10 N

ATOM 1466 CA ASP A 213 34.006 35.180 -5.577 1.00 25.66 C

ATOM 1467 C ASP A 213 33.153 34.965 -6.824 1.00 27.85 C

ATOM 1468 O ASP A 213 33.451 34.128 -7.678 1.00 25.98 O

ATOM 1469 CB ASP A 213 35.460 34.778 -5.830 1.00 26.13 C

ATOM 1470 CG ASP A 213 36.176 35.746 -6.733 1.00 27.41 C

ATOM 1471 OD1 ASP A 213 35.542 36.733 -7.183 1.00 28.73 O

ATOM 1472 OD2 ASP A 213 37.375 35.511 -6.990 1.00 27.82 O

ATOM 1473 N HIS A 214 32.074 35.732 -6.910 1.00 32.91 N

ATOM 1474 CA HIS A 214 31.128 35.622 -8.019 1.00 37.14 C

ATOM 1475 C HIS A 214 31.717 35.885 -9.405 1.00 37.63 C

ATOM 1476 O HIS A 214 31.138 35.478 -10.412 1.00 37.70 O

ATOM 1477 CB HIS A 214 29.916 36.532 -7.756 1.00 39.43 C

ATOM 1478 CG HIS A 214 29.122 36.133 -6.547 1.00 42.34 C

ATOM 1479 ND1 HIS A 214 28.480 34.913 -6.442 1.00 41.64 N

ATOM 1480 CD2 HIS A 214 28.908 36.770 -5.369 1.00 43.30 C

ATOM 1481 CE1 HIS A 214 27.909 34.818 -5.253 1.00 42.43 C

ATOM 1482 NE2 HIS A 214 28.155 35.931 -4.584 1.00 44.08 N

ATOM 1483 N LYS A 215 32.868 36.552 -9.459 1.00 38.41 N

ATOM 1484 CA LYS A 215 33.523 36.814 -10.737 1.00 36.22 C

ATOM 1485 C LYS A 215 34.057 35.487 -11.285 1.00 33.97 C

ATOM 1486 O LYS A 215 34.124 35.293 -12.492 1.00 34.69 O

ATOM 1487 CB LYS A 215 34.690 37.794 -10.569 1.00 39.52 C

ATOM 1488 CG LYS A 215 34.549 38.762 -9.403 1.00 47.17 C

ATOM 1489 CD LYS A 215 35.021 40.174 -9.780 1.00 50.29 C

ATOM 1490 CE LYS A 215 34.031 41.252 -9.305 1.00 51.34 C

ATOM 1491 NZ LYS A 215 34.592 42.632 -9.406 1.00 51.06 N

ATOM 1492 N ARG A 216 34.433 34.576 -10.387 1.00 30.42 N

ATOM 1493 CA ARG A 216 34.960 33.273 -10.784 1.00 26.36 C

ATOM 1494 C ARG A 216 33.885 32.201 -10.883 1.00 23.75 C

ATOM 1495 O ARG A 216 33.823 31.468 -11.863 1.00 24.63 O

ATOM 1496 CB ARG A 216 36.024 32.800 -9.801 1.00 24.89 C

ATOM 1497 CG ARG A 216 37.245 33.676 -9.714 1.00 26.75 C

ATOM 1498 CD ARG A 216 38.252 33.063 -8.741 1.00 30.75 C

ATOM 1499 NE ARG A 216 39.532 33.775 -8.715 1.00 32.00 N

ATOM 1500 CZ ARG A 216 40.437 33.734 -9.694 1.00 31.96 C

ATOM 1501 NH1 ARG A 216 40.210 33.010 -10.787 1.00 32.81 N

ATOM 1502 NH2 ARG A 216 41.565 34.424 -9.584 1.00 29.89 N

ATOM 1503 N GLY A 217 33.051 32.104 -9.857 1.00 20.40 N

ATOM 1504 CA GLY A 217 32.001 31.106 -9.848 1.00 17.79 C

ATOM 1505 C GLY A 217 31.617 30.786 -8.414 1.00 18.68 C

ATOM 1506 O GLY A 217 32.300 31.185 -7.468 1.00 17.23 O

ATOM 1507 N PRO A 218 30.524 30.047 -8.213 1.00 19.56 N

ATOM 1508 CA PRO A 218 30.093 29.704 -6.850 1.00 17.47 C

ATOM 1509 C PRO A 218 31.109 28.892 -6.043 1.00 18.65 C

ATOM 1510 O PRO A 218 31.192 29.045 -4.820 1.00 22.84 O

ATOM 1511 CB PRO A 218 28.790 28.937 -7.068 1.00 16.45 C

ATOM 1512 CG PRO A 218 28.893 28.423 -8.483 1.00 18.48 C

ATOM 1513 CD PRO A 218 29.636 29.477 -9.243 1.00 17.04 C

ATOM 1514 N GLY A 219 31.863 28.024 -6.717 1.00 16.36 N

ATOM 1515 CA GLY A 219 32.847 27.211 -6.028 1.00 17.73 C

ATOM 1516 C GLY A 219 34.141 27.939 -5.662 1.00 19.38 C

ATOM 1517 O GLY A 219 35.099 27.308 -5.218 1.00 20.07 O

ATOM 1518 N PHE A 220 34.179 29.260 -5.842 1.00 19.17 N

ATOM 1519 CA PHE A 220 35.364 30.070 -5.515 1.00 13.68 C

ATOM 1520 C PHE A 220 35.108 31.054 -4.371 1.00 12.25 C

ATOM 1521 O PHE A 220 33.996 31.578 -4.221 1.00 11.84 O

ATOM 1522 CB PHE A 220 35.833 30.826 -6.749 1.00 13.74 C

ATOM 1523 CG PHE A 220 36.291 29.925 -7.850 1.00 19.55 C

ATOM 1524 CD1 PHE A 220 35.386 29.374 -8.746 1.00 18.97 C

ATOM 1525 CD2 PHE A 220 37.628 29.583 -7.966 1.00 22.23 C

ATOM 1526 CE1 PHE A 220 35.805 28.499 -9.735 1.00 19.01 C

ATOM 1527 CE2 PHE A 220 38.047 28.705 -8.954 1.00 23.64 C

ATOM 1528 CZ PHE A 220 37.130 28.165 -9.838 1.00 20.34 C

ATOM 1529 N THR A 221 36.142 31.295 -3.563 1.00 9.63 N

ATOM 1530 CA THR A 221 36.048 32.184 -2.408 1.00 7.33 C

ATOM 1531 C THR A 221 37.064 33.317 -2.470 1.00 9.24 C

ATOM 1532 O THR A 221 38.048 33.244 -3.206 1.00 10.79 O

ATOM 1533 CB THR A 221 36.244 31.389 -1.084 1.00 5.13 C

ATOM 1534 OG1 THR A 221 36.110 32.268 0.035 1.00 6.28 O

ATOM 1535 CG2 THR A 221 37.609 30.749 -1.031 1.00 2.29 C

ATOM 1536 N ARG A 222 36.796 34.375 -1.709 1.00 11.64 N

ATOM 1537 CA ARG A 222 37.682 35.531 -1.631 1.00 12.53 C

ATOM 1538 C ARG A 222 38.294 35.565 -0.247 1.00 12.19 C

ATOM 1539 O ARG A 222 39.211 36.339 0.013 1.00 13.23 O

ATOM 1540 CB ARG A 222 36.918 36.829 -1.853 1.00 16.36 C

ATOM 1541 CG ARG A 222 36.395 37.009 -3.247 1.00 23.42 C

ATOM 1542 CD ARG A 222 35.404 38.131 -3.259 1.00 32.99 C

ATOM 1543 NE ARG A 222 36.086 39.415 -3.331 1.00 44.85 N

ATOM 1544 CZ ARG A 222 35.464 40.592 -3.309 1.00 51.51 C

ATOM 1545 NH1 ARG A 222 34.137 40.641 -3.216 1.00 56.66 N

ATOM 1546 NH2 ARG A 222 36.163 41.722 -3.385 1.00 52.84 N

ATOM 1547 N GLY A 223 37.757 34.741 0.646 1.00 11.83 N

ATOM 1548 CA GLY A 223 38.281 34.667 1.988 1.00 13.77 C

ATOM 1549 C GLY A 223 39.442 33.692 1.964 1.00 16.04 C

ATOM 1550 O GLY A 223 39.287 32.531 2.377 1.00 18.03 O

ATOM 1551 N LEU A 224 40.597 34.156 1.479 1.00 14.20 N

ATOM 1552 CA LEU A 224 41.792 33.327 1.384 1.00 13.03 C

ATOM 1553 C LEU A 224 42.413 32.903 2.734 1.00 13.54 C

ATOM 1554 O LEU A 224 43.445 32.236 2.762 1.00 13.32 O

ATOM 1555 CB LEU A 224 42.812 34.039 0.494 1.00 12.99 C

ATOM 1556 CG LEU A 224 42.409 34.184 -0.997 1.00 10.90 C

ATOM 1557 CD1 LEU A 224 43.630 34.631 -1.796 1.00 7.58 C

ATOM 1558 CD2 LEU A 224 41.880 32.871 -1.575 1.00 4.43 C

ATOM 1559 N GLY A 225 41.770 33.276 3.846 1.00 12.91 N

ATOM 1560 CA GLY A 225 42.253 32.874 5.158 1.00 11.29 C

ATOM 1561 C GLY A 225 41.553 31.577 5.571 1.00 11.15 C

ATOM 1562 O GLY A 225 41.945 30.886 6.513 1.00 12.19 O

ATOM 1563 N HIS A 226 40.494 31.245 4.848 1.00 9.14 N

ATOM 1564 CA HIS A 226 39.715 30.044 5.113 1.00 11.37 C

ATOM 1565 C HIS A 226 39.323 29.842 6.591 1.00 12.70 C

ATOM 1566 O HIS A 226 39.265 28.717 7.092 1.00 11.98 O

ATOM 1567 CB HIS A 226 40.454 28.805 4.568 1.00 11.93 C

ATOM 1568 CG HIS A 226 40.342 28.641 3.077 1.00 11.18 C

ATOM 1569 ND1 HIS A 226 39.484 27.733 2.488 1.00 4.25 N

ATOM 1570 CD2 HIS A 226 40.931 29.321 2.060 1.00 10.40 C

ATOM 1571 CE1 HIS A 226 39.547 27.870 1.173 1.00 9.03 C

ATOM 1572 NE2 HIS A 226 40.416 28.823 0.888 1.00 6.14 N

ATOM 1573 N GLY A 227 39.017 30.934 7.285 1.00 12.55 N

ATOM 1574 CA GLY A 227 38.605 30.807 8.671 1.00 10.14 C

ATOM 1575 C GLY A 227 38.409 32.127 9.375 1.00 10.31 C

ATOM 1576 O GLY A 227 38.325 33.181 8.734 1.00 10.09 O

ATOM 1577 N VAL A 228 38.332 32.050 10.704 1.00 11.88 N

ATOM 1578 CA VAL A 228 38.150 33.212 11.584 1.00 10.84 C

ATOM 1579 C VAL A 228 39.441 34.048 11.688 1.00 10.49 C

ATOM 1580 O VAL A 228 40.168 33.957 12.677 1.00 13.66 O

ATOM 1581 CB VAL A 228 37.781 32.759 13.027 1.00 9.69 C

ATOM 1582 CG1 VAL A 228 37.251 33.925 13.805 1.00 10.77 C

ATOM 1583 CG2 VAL A 228 36.777 31.653 12.997 1.00 5.06 C

ATOM 1584 N ASP A 229 39.751 34.843 10.679 1.00 9.88 N

ATOM 1585 CA ASP A 229 40.966 35.651 10.729 1.00 7.81 C

ATOM 1586 C ASP A 229 40.521 37.085 10.951 1.00 6.13 C

ATOM 1587 O ASP A 229 41.330 37.996 10.973 1.00 2.90 O

ATOM 1588 CB ASP A 229 41.752 35.517 9.412 1.00 8.63 C

ATOM 1589 CG ASP A 229 40.942 35.956 8.193 1.00 10.43 C

ATOM 1590 OD1 ASP A 229 39.903 36.640 8.365 1.00 10.40 O

ATOM 1591 OD2 ASP A 229 41.345 35.619 7.063 1.00 10.64 O

ATOM 1592 N LEU A 230 39.210 37.243 11.129 1.00 8.41 N

ATOM 1593 CA LEU A 230 38.555 38.524 11.354 1.00 7.80 C

ATOM 1594 C LEU A 230 38.865 39.516 10.270 1.00 9.19 C

ATOM 1595 O LEU A 230 39.071 40.695 10.539 1.00 11.87 O

ATOM 1596 CB LEU A 230 38.940 39.128 12.706 1.00 7.41 C

ATOM 1597 CG LEU A 230 38.587 38.392 14.017 1.00 10.58 C

ATOM 1598 CD1 LEU A 230 38.054 39.426 14.984 1.00 9.88 C

ATOM 1599 CD2 LEU A 230 37.588 37.269 13.825 1.00 2.30 C

ATOM 1600 N ASN A 231 38.893 39.051 9.033 1.00 9.90 N

ATOM 1601 CA ASN A 231 39.151 39.970 7.936 1.00 12.78 C

ATOM 1602 C ASN A 231 37.936 40.884 7.725 1.00 10.12 C

ATOM 1603 O ASN A 231 38.025 41.922 7.087 1.00 10.47 O

ATOM 1604 CB ASN A 231 39.469 39.190 6.640 1.00 18.29 C

ATOM 1605 CG ASN A 231 38.253 38.474 6.061 1.00 22.83 C

ATOM 1606 OD1 ASN A 231 37.416 39.078 5.375 1.00 25.67 O

ATOM 1607 ND2 ASN A 231 38.152 37.177 6.338 1.00 25.26 N

ATOM 1608 N HIS A 232 36.787 40.488 8.255 1.00 11.26 N

ATOM 1609 CA HIS A 232 35.594 41.293 8.094 1.00 10.08 C

ATOM 1610 C HIS A 232 35.620 42.579 8.943 1.00 9.22 C

ATOM 1611 O HIS A 232 34.743 43.434 8.832 1.00 8.39 O

ATOM 1612 CB HIS A 232 34.356 40.436 8.378 1.00 8.18 C

ATOM 1613 CG HIS A 232 34.233 39.978 9.795 1.00 12.13 C

ATOM 1614 ND1 HIS A 232 35.262 39.359 10.472 1.00 14.82 N

ATOM 1615 CD2 HIS A 232 33.183 39.997 10.652 1.00 12.01 C

ATOM 1616 CE1 HIS A 232 34.853 39.016 11.682 1.00 14.28 C

ATOM 1617 NE2 HIS A 232 33.595 39.391 11.816 1.00 11.67 N

ATOM 1618 N ILE A 233 36.663 42.718 9.757 1.00 8.36 N

ATOM 1619 CA ILE A 233 36.848 43.879 10.619 1.00 4.46 C

ATOM 1620 C ILE A 233 38.085 44.638 10.133 1.00 5.47 C

ATOM 1621 O ILE A 233 38.077 45.863 9.986 1.00 4.90 O

ATOM 1622 CB ILE A 233 37.149 43.442 12.051 1.00 3.43 C

ATOM 1623 CG1 ILE A 233 35.906 42.880 12.718 1.00 4.05 C

ATOM 1624 CG2 ILE A 233 37.701 44.599 12.842 1.00 3.73 C

ATOM 1625 CD1 ILE A 233 36.231 42.161 14.020 1.00 3.25 C

ATOM 1626 N TYR A 234 39.143 43.866 9.888 1.00 5.71 N

ATOM 1627 CA TYR A 234 40.448 44.361 9.461 1.00 7.16 C

ATOM 1628 C TYR A 234 40.771 44.398 7.966 1.00 8.60 C

ATOM 1629 O TYR A 234 41.697 45.064 7.558 1.00 9.84 O

ATOM 1630 CB TYR A 234 41.519 43.540 10.168 1.00 5.63 C

ATOM 1631 CG TYR A 234 41.379 43.572 11.661 1.00 3.15 C

ATOM 1632 CD1 TYR A 234 41.503 44.770 12.358 1.00 3.28 C

ATOM 1633 CD2 TYR A 234 41.125 42.427 12.371 1.00 2.00 C

ATOM 1634 CE1 TYR A 234 41.382 44.825 13.729 1.00 2.00 C

ATOM 1635 CE2 TYR A 234 40.996 42.473 13.745 1.00 8.96 C

ATOM 1636 CZ TYR A 234 41.129 43.682 14.416 1.00 4.84 C

ATOM 1637 OH TYR A 234 41.018 43.732 15.777 1.00 5.17 O

ATOM 1638 N GLY A 235 40.024 43.684 7.149 1.00 11.86 N

ATOM 1639 CA GLY A 235 40.306 43.688 5.727 1.00 12.68 C

ATOM 1640 C GLY A 235 41.109 42.464 5.335 1.00 14.40 C

ATOM 1641 O GLY A 235 41.891 41.952 6.142 1.00 15.64 O

ATOM 1642 N GLU A 236 40.896 41.986 4.108 1.00 17.25 N

ATOM 1643 CA GLU A 236 41.621 40.828 3.575 1.00 18.42 C

ATOM 1644 C GLU A 236 43.037 41.240 3.198 1.00 18.45 C

ATOM 1645 O GLU A 236 43.983 40.498 3.420 1.00 20.31 O

ATOM 1646 CB GLU A 236 40.938 40.278 2.316 1.00 19.64 C

ATOM 1647 CG GLU A 236 39.992 39.080 2.551 1.00 26.46 C

ATOM 1648 CD GLU A 236 40.707 37.757 2.851 1.00 27.57 C

ATOM 1649 OE1 GLU A 236 41.639 37.390 2.086 1.00 26.61 O

ATOM 1650 OE2 GLU A 236 40.313 37.090 3.853 1.00 27.63 O

ATOM 1651 N THR A 237 43.167 42.430 2.620 1.00 19.19 N

ATOM 1652 CA THR A 237 44.461 42.944 2.199 1.00 17.35 C

ATOM 1653 C THR A 237 45.094 43.959 3.149 1.00 17.48 C

ATOM 1654 O THR A 237 44.408 44.735 3.817 1.00 14.39 O

ATOM 1655 CB THR A 237 44.376 43.595 0.793 1.00 18.97 C

ATOM 1656 OG1 THR A 237 43.707 44.862 0.877 1.00 16.70 O

ATOM 1657 CG2 THR A 237 43.624 42.694 -0.167 1.00 17.62 C

ATOM 1658 N LEU A 238 46.423 43.920 3.187 1.00 17.74 N

ATOM 1659 CA LEU A 238 47.253 44.806 3.997 1.00 16.21 C

ATOM 1660 C LEU A 238 46.942 46.217 3.577 1.00 17.60 C

ATOM 1661 O LEU A 238 46.975 47.148 4.370 1.00 17.81 O

ATOM 1662 CB LEU A 238 48.727 44.529 3.702 1.00 16.86 C

ATOM 1663 CG LEU A 238 49.697 44.437 4.866 1.00 12.32 C

ATOM 1664 CD1 LEU A 238 50.997 45.115 4.495 1.00 12.50 C

ATOM 1665 CD2 LEU A 238 49.043 45.062 6.076 1.00 12.56 C

ATOM 1666 N ASP A 239 46.662 46.366 2.298 1.00 19.69 N

ATOM 1667 CA ASP A 239 46.341 47.661 1.739 1.00 23.05 C

ATOM 1668 C ASP A 239 45.058 48.215 2.354 1.00 21.60 C

ATOM 1669 O ASP A 239 44.974 49.383 2.714 1.00 16.45 O

ATOM 1670 CB ASP A 239 46.181 47.525 0.230 1.00 30.03 C

ATOM 1671 CG ASP A 239 46.564 48.786 -0.500 1.00 36.70 C

ATOM 1672 OD1 ASP A 239 47.726 48.870 -0.991 1.00 38.67 O

ATOM 1673 OD2 ASP A 239 45.693 49.690 -0.570 1.00 40.55 O

ATOM 1674 N ARG A 240 44.054 47.354 2.462 1.00 22.10 N

ATOM 1675 CA ARG A 240 42.779 47.738 3.031 1.00 18.32 C

ATOM 1676 C ARG A 240 42.989 47.972 4.528 1.00 18.56 C

ATOM 1677 O ARG A 240 42.499 48.955 5.089 1.00 19.55 O

ATOM 1678 CB ARG A 240 41.747 46.621 2.793 1.00 17.49 C

ATOM 1679 CG ARG A 240 40.312 46.969 3.165 1.00 15.89 C

ATOM 1680 CD ARG A 240 39.347 45.851 2.753 1.00 16.21 C

ATOM 1681 NE ARG A 240 37.937 46.161 3.054 1.00 16.79 N

ATOM 1682 CZ ARG A 240 37.102 46.830 2.255 1.00 12.58 C

ATOM 1683 NH1 ARG A 240 37.513 47.279 1.074 1.00 12.99 N

ATOM 1684 NH2 ARG A 240 35.853 47.057 2.649 1.00 10.73 N

ATOM 1685 N GLN A 241 43.735 47.074 5.175 1.00 16.73 N

ATOM 1686 CA GLN A 241 43.987 47.177 6.612 1.00 15.84 C

ATOM 1687 C GLN A 241 44.641 48.482 7.014 1.00 16.55 C

ATOM 1688 O GLN A 241 44.312 49.055 8.038 1.00 17.27 O

ATOM 1689 CB GLN A 241 44.868 46.028 7.075 1.00 17.40 C

ATOM 1690 CG GLN A 241 45.132 46.012 8.572 1.00 20.47 C

ATOM 1691 CD GLN A 241 46.486 45.414 8.911 1.00 22.46 C

ATOM 1692 OE1 GLN A 241 46.701 44.195 8.799 1.00 22.80 O

ATOM 1693 NE2 GLN A 241 47.416 46.273 9.325 1.00 23.03 N

ATOM 1694 N HIS A 242 45.576 48.956 6.208 1.00 18.25 N

ATOM 1695 CA HIS A 242 46.255 50.198 6.516 1.00 18.01 C

ATOM 1696 C HIS A 242 45.343 51.397 6.290 1.00 17.25 C

ATOM 1697 O HIS A 242 45.517 52.435 6.911 1.00 17.56 O

ATOM 1698 CB HIS A 242 47.521 50.312 5.666 1.00 21.96 C

ATOM 1699 CG HIS A 242 48.619 49.386 6.103 1.00 26.26 C

ATOM 1700 ND1 HIS A 242 48.477 48.519 7.163 1.00 29.29 N

ATOM 1701 CD2 HIS A 242 49.884 49.214 5.644 1.00 23.66 C

ATOM 1702 CE1 HIS A 242 49.605 47.853 7.345 1.00 27.96 C

ATOM 1703 NE2 HIS A 242 50.472 48.257 6.435 1.00 25.96 N

ATOM 1704 N LYS A 243 44.360 51.251 5.409 1.00 16.76 N

ATOM 1705 CA LYS A 243 43.422 52.332 5.122 1.00 16.22 C

ATOM 1706 C LYS A 243 42.446 52.511 6.268 1.00 14.92 C

ATOM 1707 O LYS A 243 41.944 53.609 6.506 1.00 13.80 O

ATOM 1708 CB LYS A 243 42.656 52.032 3.837 1.00 17.28 C

ATOM 1709 CG LYS A 243 43.333 52.605 2.617 1.00 20.82 C

ATOM 1710 CD LYS A 243 42.996 51.822 1.374 1.00 25.73 C

ATOM 1711 CE LYS A 243 42.801 52.764 0.197 1.00 26.73 C

ATOM 1712 NZ LYS A 243 42.534 52.026 -1.072 1.00 32.00 N

ATOM 1713 N LEU A 244 42.187 51.404 6.964 1.00 15.61 N

ATOM 1714 CA LEU A 244 41.279 51.364 8.110 1.00 13.91 C

ATOM 1715 C LEU A 244 41.964 51.726 9.429 1.00 14.67 C

ATOM 1716 O LEU A 244 41.295 52.095 10.400 1.00 18.04 O

ATOM 1717 CB LEU A 244 40.636 49.963 8.235 1.00 7.99 C

ATOM 1718 CG LEU A 244 39.747 49.530 7.049 1.00 8.52 C

ATOM 1719 CD1 LEU A 244 39.337 48.079 7.158 1.00 4.49 C

ATOM 1720 CD2 LEU A 244 38.512 50.403 6.990 1.00 6.45 C

ATOM 1721 N ARG A 245 43.292 51.641 9.462 1.00 15.14 N

ATOM 1722 CA ARG A 245 44.048 51.932 10.674 1.00 12.92 C

ATOM 1723 C ARG A 245 44.392 53.390 10.979 1.00 13.88 C

ATOM 1724 O ARG A 245 44.754 54.193 10.112 1.00 13.58 O

ATOM 1725 CB ARG A 245 45.323 51.109 10.680 1.00 12.79 C

ATOM 1726 CG ARG A 245 45.066 49.636 10.814 1.00 14.13 C

ATOM 1727 CD ARG A 245 46.356 48.841 10.736 1.00 15.03 C

ATOM 1728 NE ARG A 245 47.371 49.369 11.638 1.00 15.56 N

ATOM 1729 CZ ARG A 245 48.544 48.788 11.846 1.00 17.82 C

ATOM 1730 NH1 ARG A 245 48.829 47.657 11.211 1.00 20.51 N

ATOM 1731 NH2 ARG A 245 49.438 49.336 12.666 1.00 15.96 N

ATOM 1732 N LEU A 246 44.290 53.704 12.254 1.00 13.46 N

ATOM 1733 CA LEU A 246 44.571 55.026 12.754 1.00 13.51 C

ATOM 1734 C LEU A 246 46.102 55.269 12.834 1.00 18.06 C

ATOM 1735 O LEU A 246 46.600 56.381 12.627 1.00 18.69 O

ATOM 1736 CB LEU A 246 43.908 55.140 14.118 1.00 8.44 C

ATOM 1737 CG LEU A 246 44.043 56.466 14.819 1.00 10.01 C

ATOM 1738 CD1 LEU A 246 43.646 57.566 13.848 1.00 6.79 C

ATOM 1739 CD2 LEU A 246 43.194 56.463 16.089 1.00 9.34 C

ATOM 1740 N PHE A 247 46.842 54.205 13.132 1.00 20.67 N

ATOM 1741 CA PHE A 247 48.297 54.253 13.239 1.00 20.79 C

ATOM 1742 C PHE A 247 48.805 55.025 14.432 1.00 25.35 C

ATOM 1743 O PHE A 247 49.829 55.699 14.363 1.00 26.85 O

ATOM 1744 CB PHE A 247 48.902 54.815 11.968 1.00 17.21 C

ATOM 1745 CG PHE A 247 48.875 53.853 10.838 1.00 14.28 C

ATOM 1746 CD1 PHE A 247 48.107 54.100 9.713 1.00 11.94 C

ATOM 1747 CD2 PHE A 247 49.600 52.674 10.917 1.00 15.02 C

ATOM 1748 CE1 PHE A 247 48.060 53.186 8.688 1.00 13.70 C

ATOM 1749 CE2 PHE A 247 49.561 51.747 9.892 1.00 14.20 C

ATOM 1750 CZ PHE A 247 48.788 52.003 8.773 1.00 14.63 C

ATOM 1751 N LYS A 248 48.070 54.902 15.530 1.00 28.33 N

ATOM 1752 CA LYS A 248 48.401 55.524 16.801 1.00 30.36 C

ATOM 1753 C LYS A 248 47.700 54.642 17.830 1.00 30.20 C

ATOM 1754 O LYS A 248 46.473 54.522 17.826 1.00 28.66 O

ATOM 1755 CB LYS A 248 47.873 56.957 16.855 1.00 34.17 C

ATOM 1756 CG LYS A 248 47.426 57.484 15.491 1.00 44.96 C

ATOM 1757 CD LYS A 248 47.953 58.892 15.220 1.00 49.75 C

ATOM 1758 CE LYS A 248 47.627 59.366 13.804 1.00 52.06 C

ATOM 1759 NZ LYS A 248 48.151 60.749 13.566 1.00 54.99 N

ATOM 1760 N ASP A 249 48.498 53.989 18.674 1.00 29.54 N

ATOM 1761 CA ASP A 249 47.996 53.106 19.725 1.00 27.96 C

ATOM 1762 C ASP A 249 47.390 51.810 19.199 1.00 27.34 C

ATOM 1763 O ASP A 249 46.695 51.110 19.929 1.00 27.92 O

ATOM 1764 CB ASP A 249 46.984 53.846 20.591 1.00 29.97 C

ATOM 1765 CG ASP A 249 47.565 55.115 21.205 1.00 33.65 C

ATOM 1766 OD1 ASP A 249 47.093 56.225 20.888 1.00 35.84 O

ATOM 1767 OD2 ASP A 249 48.508 55.011 22.010 1.00 36.19 O

ATOM 1768 N GLY A 250 47.662 51.497 17.930 1.00 26.83 N

ATOM 1769 CA GLY A 250 47.165 50.271 17.315 1.00 23.81 C

ATOM 1770 C GLY A 250 45.682 50.310 16.993 1.00 23.28 C

ATOM 1771 O GLY A 250 45.084 49.296 16.630 1.00 21.32 O

ATOM 1772 N LYS A 251 45.097 51.499 17.098 1.00 22.24 N

ATOM 1773 CA LYS A 251 43.677 51.685 16.864 1.00 20.81 C

ATOM 1774 C LYS A 251 43.179 51.695 15.418 1.00 19.42 C

ATOM 1775 O LYS A 251 43.933 51.909 14.464 1.00 17.60 O

ATOM 1776 CB LYS A 251 43.218 52.959 17.570 1.00 18.92 C

ATOM 1777 CG LYS A 251 42.712 52.687 18.963 1.00 19.26 C

ATOM 1778 CD LYS A 251 42.951 53.867 19.856 1.00 19.98 C

ATOM 1779 CE LYS A 251 42.529 53.545 21.259 1.00 20.33 C

ATOM 1780 NZ LYS A 251 42.486 54.778 22.077 1.00 22.27 N

ATOM 1781 N LEU A 252 41.881 51.435 15.295 1.00 17.66 N

ATOM 1782 CA LEU A 252 41.176 51.427 14.030 1.00 15.84 C

ATOM 1783 C LEU A 252 40.532 52.831 13.863 1.00 15.33 C

ATOM 1784 O LEU A 252 39.979 53.399 14.819 1.00 12.33 O

ATOM 1785 CB LEU A 252 40.094 50.345 14.085 1.00 16.37 C

ATOM 1786 CG LEU A 252 40.119 49.019 13.309 1.00 14.82 C

ATOM 1787 CD1 LEU A 252 41.492 48.670 12.824 1.00 11.71 C

ATOM 1788 CD2 LEU A 252 39.566 47.931 14.226 1.00 16.68 C

ATOM 1789 N LYS A 253 40.625 53.402 12.667 1.00 13.52 N

ATOM 1790 CA LYS A 253 40.030 54.710 12.412 1.00 15.92 C

ATOM 1791 C LYS A 253 38.544 54.658 12.750 1.00 18.89 C

ATOM 1792 O LYS A 253 37.904 53.614 12.612 1.00 20.29 O

ATOM 1793 CB LYS A 253 40.172 55.080 10.939 1.00 15.93 C

ATOM 1794 CG LYS A 253 41.466 55.750 10.568 1.00 19.28 C

ATOM 1795 CD LYS A 253 41.692 55.654 9.078 1.00 20.62 C

ATOM 1796 CE LYS A 253 42.303 56.938 8.544 1.00 25.70 C

ATOM 1797 NZ LYS A 253 42.481 56.928 7.057 1.00 28.04 N

ATOM 1798 N TYR A 254 37.983 55.783 13.176 1.00 19.63 N

ATOM 1799 CA TYR A 254 36.564 55.829 13.505 1.00 18.84 C

ATOM 1800 C TYR A 254 36.054 57.257 13.453 1.00 17.27 C

ATOM 1801 O TYR A 254 36.827 58.166 13.206 1.00 18.32 O

ATOM 1802 CB TYR A 254 36.345 55.249 14.896 1.00 19.10 C

ATOM 1803 CG TYR A 254 37.001 56.054 15.981 1.00 18.94 C

ATOM 1804 CD1 TYR A 254 36.275 57.008 16.699 1.00 20.50 C

ATOM 1805 CD2 TYR A 254 38.338 55.866 16.293 1.00 18.79 C

ATOM 1806 CE1 TYR A 254 36.864 57.748 17.691 1.00 18.15 C

ATOM 1807 CE2 TYR A 254 38.933 56.597 17.278 1.00 20.23 C

ATOM 1808 CZ TYR A 254 38.195 57.539 17.977 1.00 20.84 C

ATOM 1809 OH TYR A 254 38.811 58.269 18.961 1.00 22.48 O

ATOM 1810 N GLN A 255 34.757 57.451 13.670 1.00 17.86 N

ATOM 1811 CA GLN A 255 34.194 58.797 13.673 1.00 18.35 C

ATOM 1812 C GLN A 255 33.249 58.923 14.849 1.00 18.39 C

ATOM 1813 O GLN A 255 32.775 57.915 15.377 1.00 18.77 O

ATOM 1814 CB GLN A 255 33.442 59.098 12.375 1.00 16.07 C

ATOM 1815 CG GLN A 255 32.190 58.281 12.169 1.00 17.48 C

ATOM 1816 CD GLN A 255 31.509 58.610 10.856 1.00 20.51 C

ATOM 1817 OE1 GLN A 255 31.288 59.780 10.544 1.00 22.81 O

ATOM 1818 NE2 GLN A 255 31.175 57.579 10.073 1.00 21.92 N

ATOM 1819 N VAL A 256 32.995 60.162 15.270 1.00 19.18 N

ATOM 1820 CA VAL A 256 32.089 60.410 16.383 1.00 18.40 C

ATOM 1821 C VAL A 256 30.863 61.182 15.892 1.00 19.47 C

ATOM 1822 O VAL A 256 30.972 62.319 15.420 1.00 20.79 O

ATOM 1823 CB VAL A 256 32.782 61.196 17.505 1.00 14.38 C

ATOM 1824 CG1 VAL A 256 31.804 61.449 18.641 1.00 15.22 C

ATOM 1825 CG2 VAL A 256 33.969 60.414 18.020 1.00 17.14 C

ATOM 1826 N ILE A 257 29.700 60.539 15.975 1.00 20.92 N

ATOM 1827 CA ILE A 257 28.445 61.150 15.546 1.00 21.55 C

ATOM 1828 C ILE A 257 27.496 61.242 16.730 1.00 21.79 C

ATOM 1829 O ILE A 257 27.133 60.234 17.329 1.00 22.51 O

ATOM 1830 CB ILE A 257 27.754 60.337 14.427 1.00 17.60 C

ATOM 1831 CG1 ILE A 257 28.678 60.176 13.222 1.00 15.82 C

ATOM 1832 CG2 ILE A 257 26.523 61.054 13.977 1.00 19.40 C

ATOM 1833 CD1 ILE A 257 28.273 59.063 12.296 1.00 14.02 C

ATOM 1834 N GLY A 258 27.113 62.466 17.071 1.00 23.48 N

ATOM 1835 CA GLY A 258 26.215 62.655 18.188 1.00 22.94 C

ATOM 1836 C GLY A 258 26.798 61.988 19.408 1.00 23.02 C

ATOM 1837 O GLY A 258 26.110 61.246 20.098 1.00 25.68 O

ATOM 1838 N GLY A 259 28.078 62.239 19.668 1.00 23.53 N

ATOM 1839 CA GLY A 259 28.741 61.652 20.824 1.00 22.86 C

ATOM 1840 C GLY A 259 28.899 60.139 20.831 1.00 22.70 C

ATOM 1841 O GLY A 259 29.221 59.560 21.865 1.00 21.50 O

ATOM 1842 N GLU A 260 28.674 59.503 19.681 1.00 24.17 N

ATOM 1843 CA GLU A 260 28.792 58.055 19.558 1.00 22.21 C

ATOM 1844 C GLU A 260 29.863 57.668 18.550 1.00 20.26 C

ATOM 1845 O GLU A 260 30.045 58.352 17.543 1.00 16.14 O

ATOM 1846 CB GLU A 260 27.460 57.465 19.110 1.00 25.28 C

ATOM 1847 CG GLU A 260 26.386 57.547 20.156 1.00 29.50 C

ATOM 1848 CD GLU A 260 26.607 56.561 21.282 1.00 33.64 C

ATOM 1849 OE1 GLU A 260 26.673 55.334 20.998 1.00 36.49 O

ATOM 1850 OE2 GLU A 260 26.712 57.016 22.447 1.00 34.96 O

ATOM 1851 N VAL A 261 30.548 56.553 18.816 1.00 19.42 N

ATOM 1852 CA VAL A 261 31.609 56.057 17.925 1.00 17.16 C

ATOM 1853 C VAL A 261 31.100 55.119 16.831 1.00 15.51 C

ATOM 1854 O VAL A 261 30.478 54.097 17.109 1.00 11.30 O

ATOM 1855 CB VAL A 261 32.729 55.333 18.720 1.00 14.25 C

ATOM 1856 CG1 VAL A 261 33.536 54.415 17.792 1.00 8.14 C

ATOM 1857 CG2 VAL A 261 33.636 56.379 19.389 1.00 10.66 C

ATOM 1858 N TYR A 262 31.361 55.499 15.585 1.00 17.68 N

ATOM 1859 CA TYR A 262 30.960 54.708 14.428 1.00 22.09 C

ATOM 1860 C TYR A 262 32.136 54.555 13.462 1.00 19.29 C

ATOM 1861 O TYR A 262 33.122 55.291 13.545 1.00 18.19 O

ATOM 1862 CB TYR A 262 29.789 55.374 13.700 1.00 21.19 C

ATOM 1863 CG TYR A 262 28.515 55.384 14.513 1.00 24.29 C

ATOM 1864 CD1 TYR A 262 28.131 56.523 15.217 1.00 25.05 C

ATOM 1865 CD2 TYR A 262 27.695 54.259 14.582 1.00 22.47 C

ATOM 1866 CE1 TYR A 262 26.966 56.543 15.970 1.00 25.77 C

ATOM 1867 CE2 TYR A 262 26.526 54.268 15.332 1.00 24.45 C

ATOM 1868 CZ TYR A 262 26.162 55.414 16.022 1.00 26.23 C

ATOM 1869 OH TYR A 262 24.984 55.453 16.743 1.00 26.88 O

ATOM 1870 N PRO A 263 32.049 53.584 12.549 1.00 16.45 N

ATOM 1871 CA PRO A 263 33.127 53.381 11.590 1.00 17.74 C

ATOM 1872 C PRO A 263 33.312 54.636 10.758 1.00 20.10 C

ATOM 1873 O PRO A 263 32.382 55.421 10.583 1.00 23.35 O

ATOM 1874 CB PRO A 263 32.640 52.215 10.749 1.00 18.78 C

ATOM 1875 CG PRO A 263 31.642 51.520 11.618 1.00 17.47 C

ATOM 1876 CD PRO A 263 30.963 52.614 12.365 1.00 17.16 C

ATOM 1877 N PRO A 264 34.516 54.831 10.214 1.00 19.68 N

ATOM 1878 CA PRO A 264 34.837 55.994 9.394 1.00 20.41 C

ATOM 1879 C PRO A 264 34.073 55.933 8.088 1.00 19.02 C

ATOM 1880 O PRO A 264 33.387 54.956 7.822 1.00 18.08 O

ATOM 1881 CB PRO A 264 36.345 55.877 9.184 1.00 22.92 C

ATOM 1882 CG PRO A 264 36.637 54.428 9.335 1.00 21.39 C

ATOM 1883 CD PRO A 264 35.649 53.898 10.327 1.00 21.65 C

ATOM 1884 N THR A 265 34.196 56.971 7.269 1.00 21.14 N

ATOM 1885 CA THR A 265 33.499 56.993 5.989 1.00 23.92 C

ATOM 1886 C THR A 265 34.413 56.583 4.857 1.00 23.28 C

ATOM 1887 O THR A 265 35.631 56.622 4.986 1.00 25.21 O

ATOM 1888 CB THR A 265 32.969 58.390 5.646 1.00 24.57 C

ATOM 1889 OG1 THR A 265 34.067 59.313 5.638 1.00 26.78 O

ATOM 1890 CG2 THR A 265 31.885 58.828 6.652 1.00 23.81 C

ATOM 1891 N VAL A 266 33.808 56.209 3.737 1.00 23.90 N

ATOM 1892 CA VAL A 266 34.555 55.793 2.559 1.00 25.30 C

ATOM 1893 C VAL A 266 35.281 56.987 1.956 1.00 26.64 C

ATOM 1894 O VAL A 266 36.296 56.839 1.277 1.00 25.12 O

ATOM 1895 CB VAL A 266 33.614 55.211 1.484 1.00 24.95 C

ATOM 1896 CG1 VAL A 266 34.341 55.119 0.153 1.00 22.80 C

ATOM 1897 CG2 VAL A 266 33.100 53.841 1.922 1.00 25.99 C

ATOM 1898 N LYS A 267 34.751 58.178 2.207 1.00 28.42 N

ATOM 1899 CA LYS A 267 35.352 59.385 1.670 1.00 31.12 C

ATOM 1900 C LYS A 267 36.627 59.735 2.429 1.00 31.88 C

ATOM 1901 O LYS A 267 37.531 60.361 1.877 1.00 30.89 O

ATOM 1902 CB LYS A 267 34.339 60.544 1.714 1.00 31.65 C

ATOM 1903 CG LYS A 267 34.924 61.885 2.131 1.00 35.45 C

ATOM 1904 CD LYS A 267 34.335 63.067 1.349 1.00 34.17 C

ATOM 1905 CE LYS A 267 34.793 64.401 1.973 1.00 35.49 C

ATOM 1906 NZ LYS A 267 33.944 65.572 1.588 1.00 32.67 N

ATOM 1907 N ASP A 268 36.709 59.302 3.684 1.00 33.67 N

ATOM 1908 CA ASP A 268 37.878 59.588 4.500 1.00 35.20 C

ATOM 1909 C ASP A 268 38.959 58.505 4.513 1.00 32.08 C

ATOM 1910 O ASP A 268 40.129 58.802 4.752 1.00 31.18 O

ATOM 1911 CB ASP A 268 37.456 59.869 5.942 1.00 43.34 C

ATOM 1912 CG ASP A 268 38.658 59.937 6.895 1.00 52.75 C

ATOM 1913 OD1 ASP A 268 39.380 60.968 6.875 1.00 56.11 O

ATOM 1914 OD2 ASP A 268 38.889 58.958 7.654 1.00 55.09 O

ATOM 1915 N THR A 269 38.575 57.262 4.253 1.00 29.05 N

ATOM 1916 CA THR A 269 39.520 56.154 4.277 1.00 25.64 C

ATOM 1917 C THR A 269 39.927 55.638 2.904 1.00 25.47 C

ATOM 1918 O THR A 269 41.010 55.078 2.740 1.00 25.54 O

ATOM 1919 CB THR A 269 38.938 54.994 5.060 1.00 24.74 C

ATOM 1920 OG1 THR A 269 37.686 54.621 4.474 1.00 25.68 O

ATOM 1921 CG2 THR A 269 38.718 55.395 6.512 1.00 23.27 C

ATOM 1922 N GLN A 270 39.046 55.817 1.927 1.00 26.19 N

ATOM 1923 CA GLN A 270 39.292 55.378 0.554 1.00 26.84 C

ATOM 1924 C GLN A 270 39.110 53.876 0.364 1.00 26.55 C

ATOM 1925 O GLN A 270 39.417 53.335 -0.696 1.00 26.08 O

ATOM 1926 CB GLN A 270 40.696 55.777 0.102 1.00 28.92 C

ATOM 1927 CG GLN A 270 40.723 56.931 -0.871 1.00 32.68 C

ATOM 1928 CD GLN A 270 40.461 58.242 -0.179 1.00 37.33 C

ATOM 1929 OE1 GLN A 270 40.276 58.281 1.034 1.00 42.31 O

ATOM 1930 NE2 GLN A 270 40.448 59.329 -0.938 1.00 41.55 N

ATOM 1931 N VAL A 271 38.613 53.198 1.389 1.00 27.24 N

ATOM 1932 CA VAL A 271 38.406 51.771 1.263 1.00 28.53 C

ATOM 1933 C VAL A 271 37.085 51.550 0.522 1.00 30.99 C

ATOM 1934 O VAL A 271 36.073 52.216 0.805 1.00 31.12 O

ATOM 1935 CB VAL A 271 38.399 51.066 2.661 1.00 25.96 C

ATOM 1936 CG1 VAL A 271 39.132 51.921 3.679 1.00 25.01 C

ATOM 1937 CG2 VAL A 271 36.989 50.774 3.115 1.00 25.42 C

ATOM 1938 N GLU A 272 37.105 50.629 -0.445 1.00 32.30 N

ATOM 1939 CA GLU A 272 35.919 50.314 -1.248 1.00 32.30 C

ATOM 1940 C GLU A 272 34.826 49.550 -0.500 1.00 27.36 C

ATOM 1941 O GLU A 272 35.078 48.533 0.146 1.00 25.27 O

ATOM 1942 CB GLU A 272 36.331 49.509 -2.475 1.00 38.96 C

ATOM 1943 CG GLU A 272 37.778 49.671 -2.853 1.00 48.58 C

ATOM 1944 CD GLU A 272 37.931 49.992 -4.322 1.00 55.52 C

ATOM 1945 OE1 GLU A 272 37.989 49.044 -5.144 1.00 59.15 O

ATOM 1946 OE2 GLU A 272 37.982 51.196 -4.651 1.00 57.62 O

ATOM 1947 N MET A 273 33.605 50.052 -0.614 1.00 22.89 N

ATOM 1948 CA MET A 273 32.442 49.451 0.020 1.00 20.16 C

ATOM 1949 C MET A 273 31.364 49.345 -1.043 1.00 19.46 C

ATOM 1950 O MET A 273 31.400 50.052 -2.044 1.00 19.61 O

ATOM 1951 CB MET A 273 31.919 50.337 1.165 1.00 17.79 C

ATOM 1952 CG MET A 273 32.804 50.401 2.407 1.00 14.40 C

ATOM 1953 SD MET A 273 32.912 48.823 3.244 1.00 14.60 S

ATOM 1954 CE MET A 273 31.258 48.520 3.677 1.00 9.31 C

ATOM 1955 N ILE A 274 30.397 48.464 -0.841 1.00 21.06 N

ATOM 1956 CA ILE A 274 29.319 48.341 -1.809 1.00 20.97 C

ATOM 1957 C ILE A 274 28.089 49.052 -1.278 1.00 21.52 C

ATOM 1958 O ILE A 274 27.483 48.631 -0.295 1.00 22.31 O

ATOM 1959 CB ILE A 274 28.958 46.901 -2.081 1.00 20.08 C

ATOM 1960 CG1 ILE A 274 30.089 46.225 -2.865 1.00 19.26 C

ATOM 1961 CG2 ILE A 274 27.643 46.858 -2.828 1.00 19.35 C

ATOM 1962 CD1 ILE A 274 30.113 44.726 -2.714 1.00 21.89 C

ATOM 1963 N TYR A 275 27.742 50.147 -1.935 1.00 23.19 N

ATOM 1964 CA TYR A 275 26.601 50.953 -1.546 1.00 23.92 C

ATOM 1965 C TYR A 275 25.861 51.386 -2.794 1.00 27.64 C

ATOM 1966 O TYR A 275 26.479 51.658 -3.821 1.00 28.73 O

ATOM 1967 CB TYR A 275 27.061 52.216 -0.812 1.00 21.78 C

ATOM 1968 CG TYR A 275 27.377 52.020 0.647 1.00 20.77 C

ATOM 1969 CD1 TYR A 275 28.658 52.257 1.138 1.00 21.61 C

ATOM 1970 CD2 TYR A 275 26.405 51.572 1.537 1.00 19.31 C

ATOM 1971 CE1 TYR A 275 28.962 52.050 2.473 1.00 17.42 C

ATOM 1972 CE2 TYR A 275 26.701 51.363 2.870 1.00 16.26 C

ATOM 1973 CZ TYR A 275 27.978 51.602 3.333 1.00 16.00 C

ATOM 1974 OH TYR A 275 28.265 51.400 4.668 1.00 19.51 O

ATOM 1975 N PRO A 276 24.523 51.432 -2.732 1.00 30.53 N

ATOM 1976 CA PRO A 276 23.793 51.867 -3.929 1.00 31.49 C

ATOM 1977 C PRO A 276 24.163 53.331 -4.180 1.00 35.51 C

ATOM 1978 O PRO A 276 24.516 54.065 -3.242 1.00 35.35 O

ATOM 1979 CB PRO A 276 22.328 51.694 -3.551 1.00 32.51 C

ATOM 1980 CG PRO A 276 22.320 51.669 -2.040 1.00 32.99 C

ATOM 1981 CD PRO A 276 23.626 51.073 -1.620 1.00 31.51 C

ATOM 1982 N PRO A 277 24.064 53.782 -5.442 1.00 36.78 N

ATOM 1983 CA PRO A 277 24.396 55.151 -5.851 1.00 35.95 C

ATOM 1984 C PRO A 277 23.731 56.278 -5.071 1.00 37.02 C

ATOM 1985 O PRO A 277 24.271 57.380 -5.006 1.00 36.92 O

ATOM 1986 CB PRO A 277 24.014 55.193 -7.335 1.00 34.82 C

ATOM 1987 CG PRO A 277 23.071 54.067 -7.517 1.00 35.16 C

ATOM 1988 CD PRO A 277 23.553 52.999 -6.577 1.00 37.47 C

ATOM 1989 N HIS A 278 22.581 56.009 -4.469 1.00 37.39 N

ATOM 1990 CA HIS A 278 21.872 57.056 -3.744 1.00 38.06 C

ATOM 1991 C HIS A 278 22.271 57.271 -2.290 1.00 38.40 C

ATOM 1992 O HIS A 278 21.678 58.116 -1.608 1.00 39.12 O

ATOM 1993 CB HIS A 278 20.356 56.824 -3.825 1.00 39.46 C

ATOM 1994 CG HIS A 278 19.880 55.599 -3.103 1.00 40.89 C

ATOM 1995 ND1 HIS A 278 19.790 54.363 -3.712 1.00 42.71 N

ATOM 1996 CD2 HIS A 278 19.431 55.427 -1.838 1.00 40.52 C

ATOM 1997 CE1 HIS A 278 19.305 53.484 -2.853 1.00 42.32 C

ATOM 1998 NE2 HIS A 278 19.079 54.102 -1.708 1.00 41.96 N

ATOM 1999 N ILE A 279 23.268 56.535 -1.804 1.00 35.97 N

ATOM 2000 CA ILE A 279 23.687 56.715 -0.419 1.00 33.74 C

ATOM 2001 C ILE A 279 24.662 57.891 -0.261 1.00 35.80 C

ATOM 2002 O ILE A 279 25.689 57.970 -0.955 1.00 34.79 O

ATOM 2003 CB ILE A 279 24.342 55.443 0.143 1.00 31.57 C

ATOM 2004 CG1 ILE A 279 23.400 54.254 -0.044 1.00 30.55 C

ATOM 2005 CG2 ILE A 279 24.663 55.631 1.623 1.00 31.00 C

ATOM 2006 CD1 ILE A 279 22.168 54.314 0.828 1.00 25.92 C

ATOM 2007 N PRO A 280 24.336 58.831 0.652 1.00 36.96 N

ATOM 2008 CA PRO A 280 25.131 60.032 0.963 1.00 35.90 C

ATOM 2009 C PRO A 280 26.486 59.662 1.553 1.00 38.58 C

ATOM 2010 O PRO A 280 26.560 58.847 2.473 1.00 39.08 O

ATOM 2011 CB PRO A 280 24.272 60.781 1.977 1.00 36.23 C

ATOM 2012 CG PRO A 280 23.387 59.733 2.578 1.00 35.42 C

ATOM 2013 CD PRO A 280 23.105 58.766 1.462 1.00 34.72 C

ATOM 2014 N GLU A 281 27.551 60.267 1.029 1.00 40.19 N

ATOM 2015 CA GLU A 281 28.918 59.993 1.495 1.00 41.41 C

ATOM 2016 C GLU A 281 29.086 59.884 3.015 1.00 38.63 C

ATOM 2017 O GLU A 281 29.869 59.067 3.502 1.00 38.35 O

ATOM 2018 CB GLU A 281 29.873 61.063 0.965 1.00 42.69 C

ATOM 2019 CG GLU A 281 30.144 60.948 -0.516 1.00 48.43 C

ATOM 2020 CD GLU A 281 30.936 62.131 -1.041 1.00 53.33 C

ATOM 2021 OE1 GLU A 281 31.091 63.125 -0.281 1.00 52.77 O

ATOM 2022 OE2 GLU A 281 31.397 62.055 -2.209 1.00 53.49 O

ATOM 2023 N ASN A 282 28.352 60.712 3.751 1.00 35.72 N

ATOM 2024 CA ASN A 282 28.410 60.724 5.210 1.00 34.95 C

ATOM 2025 C ASN A 282 27.746 59.509 5.859 1.00 33.32 C

ATOM 2026 O ASN A 282 27.794 59.343 7.083 1.00 33.59 O

ATOM 2027 CB ASN A 282 27.765 62.014 5.741 1.00 36.04 C

ATOM 2028 CG ASN A 282 26.231 61.943 5.791 1.00 38.63 C

ATOM 2029 OD1 ASN A 282 25.566 61.597 4.803 1.00 40.28 O

ATOM 2030 ND2 ASN A 282 25.667 62.281 6.950 1.00 40.73 N

ATOM 2031 N LEU A 283 27.141 58.663 5.031 1.00 30.33 N

ATOM 2032 CA LEU A 283 26.449 57.461 5.502 1.00 28.51 C

ATOM 2033 C LEU A 283 27.159 56.206 5.020 1.00 26.84 C

ATOM 2034 O LEU A 283 26.913 55.110 5.530 1.00 25.75 O

ATOM 2035 CB LEU A 283 24.994 57.453 5.016 1.00 28.92 C

ATOM 2036 CG LEU A 283 24.013 58.193 5.937 1.00 28.83 C

ATOM 2037 CD1 LEU A 283 22.596 57.992 5.422 1.00 28.00 C

ATOM 2038 CD2 LEU A 283 24.151 57.679 7.377 1.00 24.46 C

ATOM 2039 N GLN A 284 28.037 56.377 4.032 1.00 23.73 N

ATOM 2040 CA GLN A 284 28.818 55.270 3.492 1.00 21.92 C

ATOM 2041 C GLN A 284 29.927 54.888 4.482 1.00 20.47 C

ATOM 2042 O GLN A 284 31.037 55.411 4.398 1.00 18.77 O

ATOM 2043 CB GLN A 284 29.464 55.675 2.170 1.00 22.84 C

ATOM 2044 CG GLN A 284 28.474 55.989 1.077 1.00 25.48 C

ATOM 2045 CD GLN A 284 29.158 56.373 -0.214 1.00 26.28 C

ATOM 2046 OE1 GLN A 284 28.896 57.444 -0.774 1.00 27.42 O

ATOM 2047 NE2 GLN A 284 30.046 55.498 -0.698 1.00 26.96 N

ATOM 2048 N PHE A 285 29.625 53.987 5.414 1.00 19.14 N

ATOM 2049 CA PHE A 285 30.604 53.555 6.398 1.00 19.51 C

ATOM 2050 C PHE A 285 31.627 52.577 5.829 1.00 16.76 C

ATOM 2051 O PHE A 285 31.291 51.720 5.025 1.00 16.94 O

ATOM 2052 CB PHE A 285 29.887 52.921 7.573 1.00 28.05 C

ATOM 2053 CG PHE A 285 29.106 53.904 8.391 1.00 35.32 C

ATOM 2054 CD1 PHE A 285 28.551 53.535 9.604 1.00 36.53 C

ATOM 2055 CD2 PHE A 285 28.931 55.206 7.942 1.00 38.72 C

ATOM 2056 CE1 PHE A 285 27.834 54.450 10.354 1.00 40.00 C

ATOM 2057 CE2 PHE A 285 28.214 56.127 8.690 1.00 40.88 C

ATOM 2058 CZ PHE A 285 27.665 55.748 9.898 1.00 40.43 C

ATOM 2059 N ALA A 286 32.878 52.709 6.259 1.00 12.29 N

ATOM 2060 CA ALA A 286 33.942 51.855 5.775 1.00 10.80 C

ATOM 2061 C ALA A 286 34.337 50.851 6.858 1.00 12.60 C

ATOM 2062 O ALA A 286 34.764 51.232 7.955 1.00 14.72 O

ATOM 2063 CB ALA A 286 35.124 52.693 5.384 1.00 8.75 C

ATOM 2064 N VAL A 287 34.172 49.565 6.558 1.00 10.51 N

ATOM 2065 CA VAL A 287 34.496 48.507 7.511 1.00 9.44 C

ATOM 2066 C VAL A 287 35.295 47.439 6.797 1.00 12.07 C

ATOM 2067 O VAL A 287 35.564 47.547 5.586 1.00 13.82 O

ATOM 2068 CB VAL A 287 33.230 47.845 8.111 1.00 5.25 C

ATOM 2069 CG1 VAL A 287 32.438 48.856 8.930 1.00 2.00 C

ATOM 2070 CG2 VAL A 287 32.371 47.300 6.995 1.00 3.17 C

ATOM 2071 N GLY A 288 35.666 46.403 7.547 1.00 11.77 N

ATOM 2072 CA GLY A 288 36.460 45.331 6.971 1.00 14.96 C

ATOM 2073 C GLY A 288 35.828 44.696 5.746 1.00 14.23 C

ATOM 2074 O GLY A 288 36.435 44.645 4.676 1.00 13.05 O

ATOM 2075 N GLN A 289 34.602 44.207 5.914 1.00 16.05 N

ATOM 2076 CA GLN A 289 33.878 43.560 4.833 1.00 17.47 C

ATOM 2077 C GLN A 289 33.181 44.609 3.992 1.00 19.98 C

ATOM 2078 O GLN A 289 32.352 45.363 4.490 1.00 18.78 O

ATOM 2079 CB GLN A 289 32.860 42.587 5.407 1.00 14.85 C

ATOM 2080 CG GLN A 289 33.096 41.144 4.983 1.00 13.50 C

ATOM 2081 CD GLN A 289 32.267 40.730 3.780 1.00 9.99 C

ATOM 2082 OE1 GLN A 289 31.840 41.565 2.983 1.00 12.28 O

ATOM 2083 NE2 GLN A 289 32.045 39.433 3.641 1.00 8.37 N

ATOM 2084 N GLU A 290 33.504 44.638 2.707 1.00 24.13 N

ATOM 2085 CA GLU A 290 32.936 45.622 1.779 1.00 27.83 C

ATOM 2086 C GLU A 290 31.410 45.563 1.626 1.00 25.29 C

ATOM 2087 O GLU A 290 30.790 46.497 1.118 1.00 24.81 O

ATOM 2088 CB GLU A 290 33.589 45.456 0.400 1.00 32.13 C

ATOM 2089 CG GLU A 290 33.782 43.999 0.006 1.00 42.83 C

ATOM 2090 CD GLU A 290 33.542 43.761 -1.473 1.00 48.01 C

ATOM 2091 OE1 GLU A 290 33.977 44.615 -2.282 1.00 52.77 O

ATOM 2092 OE2 GLU A 290 32.920 42.727 -1.823 1.00 48.72 O

ATOM 2093 N VAL A 291 30.803 44.482 2.087 1.00 23.01 N

ATOM 2094 CA VAL A 291 29.369 44.332 1.947 1.00 19.72 C

ATOM 2095 C VAL A 291 28.520 44.576 3.196 1.00 19.38 C

ATOM 2096 O VAL A 291 27.300 44.562 3.117 1.00 24.03 O

ATOM 2097 CB VAL A 291 29.059 42.933 1.372 1.00 20.13 C

ATOM 2098 CG1 VAL A 291 28.745 41.946 2.492 1.00 14.59 C

ATOM 2099 CG2 VAL A 291 27.942 43.034 0.360 1.00 19.68 C

ATOM 2100 N PHE A 292 29.148 44.814 4.342 1.00 18.71 N

ATOM 2101 CA PHE A 292 28.416 45.048 5.597 1.00 18.73 C

ATOM 2102 C PHE A 292 27.666 46.398 5.689 1.00 21.32 C

ATOM 2103 O PHE A 292 27.068 46.725 6.723 1.00 21.85 O

ATOM 2104 CB PHE A 292 29.368 44.923 6.801 1.00 14.03 C

ATOM 2105 CG PHE A 292 29.827 43.519 7.079 1.00 14.49 C

ATOM 2106 CD1 PHE A 292 29.491 42.472 6.220 1.00 13.48 C

ATOM 2107 CD2 PHE A 292 30.623 43.241 8.189 1.00 16.18 C

ATOM 2108 CE1 PHE A 292 29.938 41.173 6.470 1.00 11.60 C

ATOM 2109 CE2 PHE A 292 31.076 41.934 8.448 1.00 13.77 C

ATOM 2110 CZ PHE A 292 30.735 40.911 7.586 1.00 11.54 C

ATOM 2111 N GLY A 293 27.697 47.191 4.626 1.00 22.22 N

ATOM 2112 CA GLY A 293 26.978 48.449 4.685 1.00 24.25 C

ATOM 2113 C GLY A 293 25.571 48.295 4.122 1.00 25.32 C

ATOM 2114 O GLY A 293 24.774 49.232 4.122 1.00 24.75 O

ATOM 2115 N LEU A 294 25.261 47.084 3.669 1.00 25.40 N

ATOM 2116 CA LEU A 294 23.985 46.800 3.060 1.00 23.89 C

ATOM 2117 C LEU A 294 22.912 46.338 4.029 1.00 23.52 C

ATOM 2118 O LEU A 294 21.755 46.138 3.660 1.00 24.64 O

ATOM 2119 CB LEU A 294 24.202 45.779 1.945 1.00 25.93 C

ATOM 2120 CG LEU A 294 25.020 46.381 0.782 1.00 26.06 C

ATOM 2121 CD1 LEU A 294 25.060 45.420 -0.404 1.00 22.17 C

ATOM 2122 CD2 LEU A 294 24.415 47.739 0.374 1.00 22.90 C

ATOM 2123 N VAL A 295 23.287 46.179 5.284 1.00 21.17 N

ATOM 2124 CA VAL A 295 22.323 45.767 6.286 1.00 16.97 C

ATOM 2125 C VAL A 295 22.707 46.342 7.632 1.00 13.34 C

ATOM 2126 O VAL A 295 23.745 46.004 8.182 1.00 13.56 O

ATOM 2127 CB VAL A 295 22.269 44.236 6.422 1.00 20.05 C

ATOM 2128 CG1 VAL A 295 21.178 43.829 7.426 1.00 18.36 C

ATOM 2129 CG2 VAL A 295 22.043 43.600 5.054 1.00 21.58 C

ATOM 2130 N PRO A 296 21.887 47.245 8.168 1.00 10.22 N

ATOM 2131 CA PRO A 296 22.113 47.885 9.474 1.00 8.78 C

ATOM 2132 C PRO A 296 22.410 46.889 10.616 1.00 10.16 C

ATOM 2133 O PRO A 296 23.071 47.240 11.598 1.00 11.15 O

ATOM 2134 CB PRO A 296 20.827 48.660 9.731 1.00 8.15 C

ATOM 2135 CG PRO A 296 20.203 48.839 8.382 1.00 7.16 C

ATOM 2136 CD PRO A 296 20.676 47.735 7.495 1.00 7.56 C

ATOM 2137 N GLY A 297 21.913 45.658 10.506 1.00 11.02 N

ATOM 2138 CA GLY A 297 22.180 44.660 11.536 1.00 10.20 C

ATOM 2139 C GLY A 297 23.636 44.217 11.470 1.00 12.14 C

ATOM 2140 O GLY A 297 24.266 43.908 12.492 1.00 10.66 O

ATOM 2141 N LEU A 298 24.160 44.169 10.248 1.00 10.80 N

ATOM 2142 CA LEU A 298 25.544 43.802 10.012 1.00 8.43 C

ATOM 2143 C LEU A 298 26.433 44.950 10.467 1.00 9.78 C

ATOM 2144 O LEU A 298 27.483 44.742 11.049 1.00 13.51 O

ATOM 2145 CB LEU A 298 25.774 43.543 8.525 1.00 6.32 C

ATOM 2146 CG LEU A 298 26.239 42.145 8.144 1.00 7.47 C

ATOM 2147 CD1 LEU A 298 25.679 41.151 9.134 1.00 10.20 C

ATOM 2148 CD2 LEU A 298 25.757 41.811 6.743 1.00 7.79 C

ATOM 2149 N MET A 299 26.007 46.172 10.192 1.00 12.63 N

ATOM 2150 CA MET A 299 26.774 47.362 10.563 1.00 16.04 C

ATOM 2151 C MET A 299 26.714 47.617 12.072 1.00 16.25 C

ATOM 2152 O MET A 299 27.526 48.363 12.640 1.00 15.57 O

ATOM 2153 CB MET A 299 26.237 48.584 9.809 1.00 17.76 C

ATOM 2154 CG MET A 299 27.150 49.790 9.869 1.00 21.81 C

ATOM 2155 SD MET A 299 28.672 49.531 8.947 1.00 27.26 S

ATOM 2156 CE MET A 299 28.063 49.032 7.329 1.00 22.79 C

ATOM 2157 N MET A 300 25.732 47.003 12.720 1.00 17.31 N

ATOM 2158 CA MET A 300 25.589 47.150 14.159 1.00 16.73 C

ATOM 2159 C MET A 300 26.751 46.396 14.809 1.00 16.66 C

ATOM 2160 O MET A 300 27.482 46.956 15.619 1.00 19.64 O

ATOM 2161 CB MET A 300 24.244 46.574 14.605 1.00 15.04 C

ATOM 2162 CG MET A 300 24.033 46.608 16.101 1.00 15.26 C

ATOM 2163 SD MET A 300 22.988 45.251 16.634 1.00 19.27 S

ATOM 2164 CE MET A 300 23.602 44.928 18.223 1.00 22.84 C

ATOM 2165 N TYR A 301 26.932 45.134 14.421 1.00 14.79 N

ATOM 2166 CA TYR A 301 27.998 44.304 14.965 1.00 12.68 C

ATOM 2167 C TYR A 301 29.361 44.810 14.568 1.00 9.82 C

ATOM 2168 O TYR A 301 30.307 44.704 15.333 1.00 9.15 O

ATOM 2169 CB TYR A 301 27.810 42.864 14.523 1.00 13.52 C

ATOM 2170 CG TYR A 301 26.943 42.082 15.480 1.00 14.16 C

ATOM 2171 CD1 TYR A 301 27.403 41.769 16.760 1.00 14.41 C

ATOM 2172 CD2 TYR A 301 25.667 41.642 15.103 1.00 15.71 C

ATOM 2173 CE1 TYR A 301 26.622 41.029 17.639 1.00 16.40 C

ATOM 2174 CE2 TYR A 301 24.869 40.899 15.978 1.00 14.95 C

ATOM 2175 CZ TYR A 301 25.356 40.589 17.248 1.00 17.20 C

ATOM 2176 OH TYR A 301 24.614 39.807 18.115 1.00 12.99 O

ATOM 2177 N ALA A 302 29.439 45.367 13.367 1.00 9.89 N

ATOM 2178 CA ALA A 302 30.666 45.969 12.828 1.00 12.37 C

ATOM 2179 C ALA A 302 31.201 47.080 13.761 1.00 10.42 C

ATOM 2180 O ALA A 302 32.400 47.154 14.049 1.00 10.31 O

ATOM 2181 CB ALA A 302 30.379 46.545 11.413 1.00 7.50 C

ATOM 2182 N THR A 303 30.289 47.937 14.214 1.00 11.07 N

ATOM 2183 CA THR A 303 30.601 49.043 15.115 1.00 8.80 C

ATOM 2184 C THR A 303 30.978 48.531 16.496 1.00 7.60 C

ATOM 2185 O THR A 303 31.915 49.015 17.104 1.00 6.66 O

ATOM 2186 CB THR A 303 29.385 49.983 15.258 1.00 9.28 C

ATOM 2187 OG1 THR A 303 28.894 50.335 13.955 1.00 9.03 O

ATOM 2188 CG2 THR A 303 29.769 51.247 16.004 1.00 8.21 C

ATOM 2189 N ILE A 304 30.234 47.548 16.989 1.00 8.11 N

ATOM 2190 CA ILE A 304 30.497 46.962 18.295 1.00 7.67 C

ATOM 2191 C ILE A 304 31.909 46.365 18.373 1.00 11.18 C

ATOM 2192 O ILE A 304 32.607 46.545 19.377 1.00 9.41 O

ATOM 2193 CB ILE A 304 29.442 45.871 18.610 1.00 7.21 C

ATOM 2194 CG1 ILE A 304 28.110 46.541 18.997 1.00 7.20 C

ATOM 2195 CG2 ILE A 304 29.938 44.965 19.726 1.00 6.52 C

ATOM 2196 CD1 ILE A 304 26.993 45.580 19.249 1.00 3.51 C

ATOM 2197 N TRP A 305 32.324 45.671 17.302 1.00 15.14 N

ATOM 2198 CA TRP A 305 33.643 45.012 17.217 1.00 12.87 C

ATOM 2199 C TRP A 305 34.756 45.992 16.920 1.00 13.15 C

ATOM 2200 O TRP A 305 35.901 45.711 17.216 1.00 13.48 O

ATOM 2201 CB TRP A 305 33.640 43.910 16.152 1.00 13.30 C

ATOM 2202 CG TRP A 305 33.030 42.589 16.614 1.00 14.46 C

ATOM 2203 CD1 TRP A 305 31.892 41.993 16.130 1.00 15.63 C

ATOM 2204 CD2 TRP A 305 33.580 41.669 17.566 1.00 16.57 C

ATOM 2205 NE1 TRP A 305 31.705 40.757 16.711 1.00 12.28 N

ATOM 2206 CE2 TRP A 305 32.726 40.530 17.595 1.00 16.08 C

ATOM 2207 CE3 TRP A 305 34.711 41.688 18.392 1.00 15.12 C

ATOM 2208 CZ2 TRP A 305 32.974 39.427 18.422 1.00 14.65 C

ATOM 2209 CZ3 TRP A 305 34.956 40.593 19.206 1.00 13.76 C

ATOM 2210 CH2 TRP A 305 34.088 39.477 19.216 1.00 13.12 C

ATOM 2211 N LEU A 306 34.422 47.132 16.324 1.00 14.92 N

ATOM 2212 CA LEU A 306 35.412 48.174 16.054 1.00 16.42 C

ATOM 2213 C LEU A 306 35.689 48.804 17.433 1.00 18.44 C

ATOM 2214 O LEU A 306 36.847 48.997 17.841 1.00 19.01 O

ATOM 2215 CB LEU A 306 34.825 49.234 15.101 1.00 15.76 C

ATOM 2216 CG LEU A 306 35.647 50.417 14.545 1.00 14.60 C

ATOM 2217 CD1 LEU A 306 34.709 51.544 14.091 1.00 13.89 C

ATOM 2218 CD2 LEU A 306 36.608 50.942 15.598 1.00 16.16 C

ATOM 2219 N ARG A 307 34.606 49.107 18.147 1.00 17.66 N

ATOM 2220 CA ARG A 307 34.682 49.700 19.475 1.00 18.65 C

ATOM 2221 C ARG A 307 35.526 48.826 20.385 1.00 19.95 C

ATOM 2222 O ARG A 307 36.321 49.327 21.193 1.00 20.64 O

ATOM 2223 CB ARG A 307 33.280 49.837 20.070 1.00 18.33 C

ATOM 2224 CG ARG A 307 32.844 51.271 20.288 1.00 23.11 C

ATOM 2225 CD ARG A 307 31.645 51.629 19.433 1.00 20.80 C

ATOM 2226 NE ARG A 307 30.410 51.618 20.212 1.00 22.13 N

ATOM 2227 CZ ARG A 307 29.415 52.478 20.040 1.00 20.52 C

ATOM 2228 NH1 ARG A 307 29.497 53.425 19.115 1.00 18.41 N

ATOM 2229 NH2 ARG A 307 28.336 52.393 20.796 1.00 21.53 N

ATOM 2230 N GLU A 308 35.342 47.511 20.254 1.00 18.29 N

ATOM 2231 CA GLU A 308 36.079 46.556 21.067 1.00 15.80 C

ATOM 2232 C GLU A 308 37.564 46.532 20.710 1.00 17.10 C

ATOM 2233 O GLU A 308 38.411 46.492 21.599 1.00 20.62 O

ATOM 2234 CB GLU A 308 35.459 45.157 20.932 1.00 16.32 C

ATOM 2235 CG GLU A 308 36.244 44.037 21.612 1.00 18.19 C

ATOM 2236 CD GLU A 308 36.240 44.126 23.133 1.00 22.49 C

ATOM 2237 OE1 GLU A 308 37.126 43.502 23.761 1.00 20.38 O

ATOM 2238 OE2 GLU A 308 35.352 44.808 23.701 1.00 24.77 O

ATOM 2239 N HIS A 309 37.903 46.576 19.427 1.00 14.21 N

ATOM 2240 CA HIS A 309 39.313 46.555 19.073 1.00 12.16 C

ATOM 2241 C HIS A 309 40.056 47.686 19.782 1.00 11.53 C

ATOM 2242 O HIS A 309 41.037 47.441 20.460 1.00 11.34 O

ATOM 2243 CB HIS A 309 39.516 46.686 17.565 1.00 13.75 C

ATOM 2244 CG HIS A 309 40.939 46.924 17.185 1.00 13.68 C

ATOM 2245 ND1 HIS A 309 41.847 45.901 17.041 1.00 17.57 N

ATOM 2246 CD2 HIS A 309 41.633 48.071 17.012 1.00 16.11 C

ATOM 2247 CE1 HIS A 309 43.043 46.407 16.802 1.00 18.80 C

ATOM 2248 NE2 HIS A 309 42.941 47.722 16.777 1.00 15.88 N

ATOM 2249 N ASN A 310 39.577 48.920 19.637 1.00 12.64 N

ATOM 2250 CA ASN A 310 40.226 50.066 20.271 1.00 12.03 C

ATOM 2251 C ASN A 310 40.139 50.024 21.803 1.00 13.44 C

ATOM 2252 O ASN A 310 41.019 50.535 22.509 1.00 13.60 O

ATOM 2253 CB ASN A 310 39.621 51.360 19.740 1.00 11.87 C

ATOM 2254 CG ASN A 310 39.856 51.551 18.240 1.00 14.12 C

ATOM 2255 OD1 ASN A 310 40.504 50.730 17.577 1.00 12.71 O

ATOM 2256 ND2 ASN A 310 39.322 52.644 17.698 1.00 16.30 N

ATOM 2257 N ARG A 311 39.076 49.417 22.318 1.00 13.63 N

ATOM 2258 CA ARG A 311 38.906 49.279 23.755 1.00 12.33 C

ATOM 2259 C ARG A 311 40.095 48.497 24.303 1.00 14.42 C

ATOM 2260 O ARG A 311 40.762 48.925 25.244 1.00 14.82 O

ATOM 2261 CB ARG A 311 37.630 48.507 24.049 1.00 14.07 C

ATOM 2262 CG ARG A 311 37.296 48.440 25.522 1.00 13.37 C

ATOM 2263 CD ARG A 311 36.332 47.333 25.838 1.00 9.30 C

ATOM 2264 NE ARG A 311 36.772 46.639 27.033 1.00 12.30 N

ATOM 2265 CZ ARG A 311 37.090 45.350 27.061 1.00 16.31 C

ATOM 2266 NH1 ARG A 311 37.010 44.618 25.958 1.00 15.78 N

ATOM 2267 NH2 ARG A 311 37.496 44.789 28.191 1.00 16.83 N

ATOM 2268 N VAL A 312 40.328 47.328 23.713 1.00 14.68 N

ATOM 2269 CA VAL A 312 41.438 46.460 24.101 1.00 15.72 C

ATOM 2270 C VAL A 312 42.795 47.179 23.843 1.00 15.09 C

ATOM 2271 O VAL A 312 43.771 46.960 24.550 1.00 14.87 O

ATOM 2272 CB VAL A 312 41.359 45.087 23.323 1.00 11.52 C

ATOM 2273 CG1 VAL A 312 42.657 44.320 23.443 1.00 9.42 C

ATOM 2274 CG2 VAL A 312 40.236 44.238 23.874 1.00 7.13 C

ATOM 2275 N CYS A 313 42.834 48.049 22.841 1.00 15.85 N

ATOM 2276 CA CYS A 313 44.043 48.797 22.513 1.00 17.58 C

ATOM 2277 C CYS A 313 44.413 49.671 23.694 1.00 18.40 C

ATOM 2278 O CYS A 313 45.589 49.916 23.960 1.00 17.66 O

ATOM 2279 CB CYS A 313 43.809 49.719 21.316 1.00 16.52 C

ATOM 2280 SG CYS A 313 44.350 49.060 19.791 1.00 17.47 S

ATOM 2281 N ASP A 314 43.397 50.177 24.381 1.00 19.86 N

ATOM 2282 CA ASP A 314 43.646 51.024 25.532 1.00 19.64 C

ATOM 2283 C ASP A 314 44.142 50.146 26.664 1.00 19.83 C

ATOM 2284 O ASP A 314 45.064 50.507 27.387 1.00 20.58 O

ATOM 2285 CB ASP A 314 42.368 51.734 25.950 1.00 20.68 C

ATOM 2286 CG ASP A 314 41.995 52.839 25.003 1.00 25.44 C

ATOM 2287 OD1 ASP A 314 42.840 53.186 24.156 1.00 29.15 O

ATOM 2288 OD2 ASP A 314 40.863 53.362 25.101 1.00 28.96 O

ATOM 2289 N ILE A 315 43.532 48.979 26.807 1.00 18.48 N

ATOM 2290 CA ILE A 315 43.936 48.087 27.855 1.00 14.92 C

ATOM 2291 C ILE A 315 45.392 47.714 27.657 1.00 16.83 C

ATOM 2292 O ILE A 315 46.173 47.759 28.607 1.00 22.03 O

ATOM 2293 CB ILE A 315 43.075 46.817 27.885 1.00 13.50 C

ATOM 2294 CG1 ILE A 315 41.659 47.154 28.365 1.00 6.66 C

ATOM 2295 CG2 ILE A 315 43.698 45.794 28.831 1.00 13.08 C

ATOM 2296 CD1 ILE A 315 40.606 46.199 27.882 1.00 2.46 C

ATOM 2297 N LEU A 316 45.767 47.371 26.428 1.00 17.93 N

ATOM 2298 CA LEU A 316 47.153 46.971 26.121 1.00 16.83 C

ATOM 2299 C LEU A 316 48.170 48.086 26.308 1.00 17.48 C

ATOM 2300 O LEU A 316 49.239 47.838 26.817 1.00 21.14 O

ATOM 2301 CB LEU A 316 47.269 46.425 24.688 1.00 13.12 C

ATOM 2302 CG LEU A 316 46.778 44.991 24.451 1.00 6.55 C

ATOM 2303 CD1 LEU A 316 47.200 44.493 23.094 1.00 4.07 C

ATOM 2304 CD2 LEU A 316 47.325 44.104 25.521 1.00 5.79 C

ATOM 2305 N LYS A 317 47.850 49.304 25.889 1.00 20.08 N

ATOM 2306 CA LYS A 317 48.771 50.435 26.049 1.00 22.47 C

ATOM 2307 C LYS A 317 49.005 50.719 27.532 1.00 23.88 C

ATOM 2308 O LYS A 317 50.077 51.172 27.934 1.00 24.20 O

ATOM 2309 CB LYS A 317 48.195 51.688 25.381 1.00 23.59 C

ATOM 2310 CG LYS A 317 48.956 52.956 25.700 1.00 24.19 C

ATOM 2311 CD LYS A 317 48.843 53.977 24.577 1.00 27.66 C

ATOM 2312 CE LYS A 317 50.207 54.600 24.257 1.00 31.82 C

ATOM 2313 NZ LYS A 317 51.059 53.765 23.348 1.00 34.10 N

ATOM 2314 N GLN A 318 47.978 50.450 28.332 1.00 25.60 N

ATOM 2315 CA GLN A 318 48.013 50.653 29.773 1.00 25.40 C

ATOM 2316 C GLN A 318 49.050 49.745 30.404 1.00 23.74 C

ATOM 2317 O GLN A 318 49.819 50.155 31.262 1.00 24.17 O

ATOM 2318 CB GLN A 318 46.653 50.330 30.362 1.00 31.27 C

ATOM 2319 CG GLN A 318 46.642 50.316 31.864 1.00 40.55 C

ATOM 2320 CD GLN A 318 46.000 51.571 32.428 1.00 45.79 C

ATOM 2321 OE1 GLN A 318 45.005 51.498 33.160 1.00 48.04 O

ATOM 2322 NE2 GLN A 318 46.559 52.735 32.081 1.00 46.38 N

ATOM 2323 N GLU A 319 49.059 48.498 29.965 1.00 23.11 N

ATOM 2324 CA GLU A 319 50.000 47.512 30.462 1.00 24.53 C

ATOM 2325 C GLU A 319 51.380 47.626 29.796 1.00 23.53 C

ATOM 2326 O GLU A 319 52.399 47.329 30.412 1.00 25.06 O

ATOM 2327 CB GLU A 319 49.439 46.115 30.204 1.00 27.74 C

ATOM 2328 CG GLU A 319 48.108 45.875 30.844 1.00 35.92 C

ATOM 2329 CD GLU A 319 48.227 45.711 32.351 1.00 42.60 C

ATOM 2330 OE1 GLU A 319 48.914 44.757 32.774 1.00 46.78 O

ATOM 2331 OE2 GLU A 319 47.647 46.525 33.109 1.00 43.94 O

ATOM 2332 N HIS A 320 51.393 48.070 28.539 1.00 21.21 N

ATOM 2333 CA HIS A 320 52.608 48.180 27.745 1.00 16.81 C

ATOM 2334 C HIS A 320 52.903 49.561 27.180 1.00 16.42 C

ATOM 2335 O HIS A 320 52.842 49.776 25.958 1.00 16.41 O

ATOM 2336 CB HIS A 320 52.545 47.173 26.606 1.00 14.54 C

ATOM 2337 CG HIS A 320 52.520 45.755 27.073 1.00 16.17 C

ATOM 2338 ND1 HIS A 320 53.591 45.163 27.708 1.00 19.27 N

ATOM 2339 CD2 HIS A 320 51.561 44.804 26.989 1.00 18.79 C

ATOM 2340 CE1 HIS A 320 53.296 43.906 27.988 1.00 21.43 C

ATOM 2341 NE2 HIS A 320 52.069 43.663 27.561 1.00 22.65 N

ATOM 2342 N PRO A 321 53.253 50.513 28.065 1.00 15.29 N

ATOM 2343 CA PRO A 321 53.563 51.878 27.626 1.00 14.85 C

ATOM 2344 C PRO A 321 54.699 51.904 26.607 1.00 13.93 C

ATOM 2345 O PRO A 321 54.802 52.842 25.814 1.00 13.59 O

ATOM 2346 CB PRO A 321 53.923 52.613 28.931 1.00 11.29 C

ATOM 2347 CG PRO A 321 54.219 51.543 29.921 1.00 11.39 C

ATOM 2348 CD PRO A 321 53.390 50.359 29.526 1.00 14.03 C

ATOM 2349 N GLU A 322 55.525 50.857 26.635 1.00 14.37 N

ATOM 2350 CA GLU A 322 56.680 50.730 25.746 1.00 15.74 C

ATOM 2351 C GLU A 322 56.346 50.175 24.374 1.00 16.67 C

ATOM 2352 O GLU A 322 57.209 50.080 23.513 1.00 15.84 O

ATOM 2353 CB GLU A 322 57.729 49.820 26.378 1.00 16.02 C

ATOM 2354 CG GLU A 322 57.280 49.201 27.665 1.00 16.63 C

ATOM 2355 CD GLU A 322 56.411 48.011 27.455 1.00 11.62 C

ATOM 2356 OE1 GLU A 322 56.671 47.260 26.512 1.00 10.45 O

ATOM 2357 OE2 GLU A 322 55.473 47.819 28.237 1.00 14.51 O

ATOM 2358 N TRP A 323 55.096 49.791 24.168 1.00 17.54 N

ATOM 2359 CA TRP A 323 54.698 49.237 22.892 1.00 16.92 C

ATOM 2360 C TRP A 323 54.340 50.271 21.852 1.00 18.08 C

ATOM 2361 O TRP A 323 53.785 51.324 22.154 1.00 18.35 O

ATOM 2362 CB TRP A 323 53.514 48.325 23.076 1.00 16.88 C

ATOM 2363 CG TRP A 323 53.910 47.010 23.511 1.00 13.10 C

ATOM 2364 CD1 TRP A 323 55.118 46.640 23.983 1.00 8.98 C

ATOM 2365 CD2 TRP A 323 53.076 45.861 23.572 1.00 14.88 C

ATOM 2366 NE1 TRP A 323 55.097 45.323 24.347 1.00 12.55 N

ATOM 2367 CE2 TRP A 323 53.849 44.819 24.101 1.00 13.91 C

ATOM 2368 CE3 TRP A 323 51.742 45.613 23.233 1.00 11.78 C

ATOM 2369 CZ2 TRP A 323 53.340 43.550 24.300 1.00 17.52 C

ATOM 2370 CZ3 TRP A 323 51.241 44.359 23.428 1.00 11.40 C

ATOM 2371 CH2 TRP A 323 52.034 43.339 23.956 1.00 16.25 C

ATOM 2372 N GLY A 324 54.616 49.925 20.605 1.00 18.19 N

ATOM 2373 CA GLY A 324 54.339 50.829 19.514 1.00 19.71 C

ATOM 2374 C GLY A 324 52.965 50.574 18.926 1.00 20.40 C

ATOM 2375 O GLY A 324 52.237 49.683 19.360 1.00 20.62 O

ATOM 2376 N ASP A 325 52.617 51.366 17.923 1.00 19.29 N

ATOM 2377 CA ASP A 325 51.338 51.237 17.274 1.00 20.26 C

ATOM 2378 C ASP A 325 51.155 49.886 16.608 1.00 21.76 C

ATOM 2379 O ASP A 325 50.103 49.265 16.758 1.00 25.47 O

ATOM 2380 CB ASP A 325 51.147 52.338 16.227 1.00 20.43 C

ATOM 2381 CG ASP A 325 49.999 52.041 15.273 1.00 21.10 C

ATOM 2382 OD1 ASP A 325 48.822 52.165 15.686 1.00 21.15 O

ATOM 2383 OD2 ASP A 325 50.270 51.677 14.108 1.00 24.09 O

ATOM 2384 N GLU A 326 52.157 49.407 15.881 1.00 18.98 N

ATOM 2385 CA GLU A 326 51.981 48.127 15.205 1.00 17.50 C

ATOM 2386 C GLU A 326 51.813 46.950 16.161 1.00 16.62 C

ATOM 2387 O GLU A 326 50.970 46.087 15.948 1.00 17.67 O

ATOM 2388 CB GLU A 326 53.132 47.845 14.237 1.00 14.67 C

ATOM 2389 CG GLU A 326 52.731 47.983 12.769 1.00 15.36 C

ATOM 2390 CD GLU A 326 52.269 46.674 12.155 1.00 18.58 C

ATOM 2391 OE1 GLU A 326 51.560 46.718 11.128 1.00 19.81 O

ATOM 2392 OE2 GLU A 326 52.613 45.593 12.693 1.00 19.27 O

ATOM 2393 N GLN A 327 52.596 46.905 17.223 1.00 14.58 N

ATOM 2394 CA GLN A 327 52.456 45.793 18.139 1.00 13.11 C

ATOM 2395 C GLN A 327 51.164 45.852 18.950 1.00 12.58 C

ATOM 2396 O GLN A 327 50.657 44.815 19.360 1.00 12.76 O

ATOM 2397 CB GLN A 327 53.655 45.715 19.076 1.00 14.91 C

ATOM 2398 CG GLN A 327 53.576 44.538 20.033 1.00 14.41 C

ATOM 2399 CD GLN A 327 54.922 44.137 20.596 1.00 13.66 C

ATOM 2400 OE1 GLN A 327 55.119 42.990 20.974 1.00 17.06 O

ATOM 2401 NE2 GLN A 327 55.855 45.082 20.650 1.00 9.75 N

ATOM 2402 N LEU A 328 50.638 47.046 19.205 1.00 12.72 N

ATOM 2403 CA LEU A 328 49.378 47.151 19.948 1.00 13.20 C

ATOM 2404 C LEU A 328 48.249 46.642 19.053 1.00 12.99 C

ATOM 2405 O LEU A 328 47.437 45.812 19.478 1.00 13.11 O

ATOM 2406 CB LEU A 328 49.086 48.605 20.350 1.00 13.70 C

ATOM 2407 CG LEU A 328 49.853 49.166 21.558 1.00 15.70 C

ATOM 2408 CD1 LEU A 328 49.707 50.676 21.613 1.00 12.65 C

ATOM 2409 CD2 LEU A 328 49.328 48.528 22.847 1.00 15.88 C

ATOM 2410 N PHE A 329 48.204 47.144 17.814 1.00 10.97 N

ATOM 2411 CA PHE A 329 47.180 46.741 16.855 1.00 8.86 C

ATOM 2412 C PHE A 329 47.157 45.246 16.591 1.00 9.76 C

ATOM 2413 O PHE A 329 46.093 44.627 16.604 1.00 12.25 O

ATOM 2414 CB PHE A 329 47.356 47.450 15.518 1.00 5.42 C

ATOM 2415 CG PHE A 329 46.592 46.800 14.397 1.00 7.88 C

ATOM 2416 CD1 PHE A 329 45.270 47.169 14.132 1.00 8.13 C

ATOM 2417 CD2 PHE A 329 47.179 45.798 13.623 1.00 6.02 C

ATOM 2418 CE1 PHE A 329 44.546 46.549 13.111 1.00 6.00 C

ATOM 2419 CE2 PHE A 329 46.468 45.167 12.598 1.00 4.97 C

ATOM 2420 CZ PHE A 329 45.150 45.542 12.340 1.00 7.18 C

ATOM 2421 N GLN A 330 48.333 44.678 16.338 1.00 12.45 N

ATOM 2422 CA GLN A 330 48.478 43.248 16.043 1.00 13.79 C

ATOM 2423 C GLN A 330 48.064 42.352 17.207 1.00 14.65 C

ATOM 2424 O GLN A 330 47.410 41.332 17.004 1.00 16.84 O

ATOM 2425 CB GLN A 330 49.924 42.924 15.647 1.00 14.47 C

ATOM 2426 CG GLN A 330 50.366 43.527 14.302 1.00 17.91 C

ATOM 2427 CD GLN A 330 49.701 42.876 13.082 1.00 21.45 C

ATOM 2428 OE1 GLN A 330 49.168 41.770 13.164 1.00 27.90 O

ATOM 2429 NE2 GLN A 330 49.737 43.565 11.948 1.00 19.47 N

ATOM 2430 N THR A 331 48.452 42.724 18.421 1.00 15.11 N

ATOM 2431 CA THR A 331 48.088 41.948 19.601 1.00 12.36 C

ATOM 2432 C THR A 331 46.581 42.021 19.843 1.00 11.54 C

ATOM 2433 O THR A 331 45.983 41.021 20.207 1.00 11.60 O

ATOM 2434 CB THR A 331 48.882 42.437 20.830 1.00 11.80 C

ATOM 2435 OG1 THR A 331 50.251 42.621 20.437 1.00 9.11 O

ATOM 2436 CG2 THR A 331 48.818 41.400 21.984 1.00 11.01 C

ATOM 2437 N SER A 332 45.984 43.199 19.641 1.00 13.88 N

ATOM 2438 CA SER A 332 44.536 43.404 19.788 1.00 11.85 C

ATOM 2439 C SER A 332 43.820 42.428 18.843 1.00 12.33 C

ATOM 2440 O SER A 332 42.934 41.677 19.248 1.00 12.70 O

ATOM 2441 CB SER A 332 44.153 44.838 19.379 1.00 12.12 C

ATOM 2442 OG SER A 332 44.485 45.797 20.369 1.00 13.97 O

ATOM 2443 N ARG A 333 44.200 42.448 17.570 1.00 8.60 N

ATOM 2444 CA ARG A 333 43.583 41.560 16.615 1.00 6.51 C

ATOM 2445 C ARG A 333 43.683 40.109 17.051 1.00 6.95 C

ATOM 2446 O ARG A 333 42.790 39.325 16.782 1.00 10.86 O

ATOM 2447 CB ARG A 333 44.225 41.722 15.249 1.00 5.86 C

ATOM 2448 CG ARG A 333 43.800 40.648 14.262 1.00 7.80 C

ATOM 2449 CD ARG A 333 44.197 41.038 12.864 1.00 13.45 C

ATOM 2450 NE ARG A 333 43.560 40.217 11.845 1.00 14.96 N

ATOM 2451 CZ ARG A 333 43.731 40.407 10.540 1.00 17.35 C

ATOM 2452 NH1 ARG A 333 44.516 41.384 10.108 1.00 20.32 N

ATOM 2453 NH2 ARG A 333 43.117 39.628 9.663 1.00 17.46 N

ATOM 2454 N LEU A 334 44.768 39.733 17.711 1.00 7.59 N

ATOM 2455 CA LEU A 334 44.910 38.348 18.158 1.00 10.25 C

ATOM 2456 C LEU A 334 43.929 38.058 19.308 1.00 11.66 C

ATOM 2457 O LEU A 334 43.396 36.951 19.429 1.00 13.69 O

ATOM 2458 CB LEU A 334 46.365 38.058 18.606 1.00 8.27 C

ATOM 2459 CG LEU A 334 47.411 37.646 17.535 1.00 4.40 C

ATOM 2460 CD1 LEU A 334 48.656 37.102 18.221 1.00 2.00 C

ATOM 2461 CD2 LEU A 334 46.835 36.621 16.562 1.00 2.00 C

ATOM 2462 N ILE A 335 43.692 39.068 20.139 1.00 13.12 N

ATOM 2463 CA ILE A 335 42.784 38.983 21.282 1.00 14.86 C

ATOM 2464 C ILE A 335 41.326 38.886 20.795 1.00 14.71 C

ATOM 2465 O ILE A 335 40.554 38.056 21.290 1.00 15.45 O

ATOM 2466 CB ILE A 335 42.972 40.235 22.210 1.00 16.23 C

ATOM 2467 CG1 ILE A 335 44.285 40.112 22.974 1.00 15.22 C

ATOM 2468 CG2 ILE A 335 41.844 40.357 23.213 1.00 18.61 C

ATOM 2469 CD1 ILE A 335 44.586 41.306 23.845 1.00 15.74 C

ATOM 2470 N LEU A 336 40.956 39.722 19.824 1.00 13.71 N

ATOM 2471 CA LEU A 336 39.595 39.708 19.284 1.00 12.39 C

ATOM 2472 C LEU A 336 39.313 38.373 18.573 1.00 12.90 C

ATOM 2473 O LEU A 336 38.176 37.878 18.587 1.00 13.34 O

ATOM 2474 CB LEU A 336 39.384 40.882 18.316 1.00 11.61 C

ATOM 2475 CG LEU A 336 38.620 42.096 18.863 1.00 7.91 C

ATOM 2476 CD1 LEU A 336 39.389 42.763 19.985 1.00 2.37 C

ATOM 2477 CD2 LEU A 336 38.392 43.076 17.743 1.00 4.99 C

ATOM 2478 N ILE A 337 40.331 37.787 17.947 1.00 9.86 N

ATOM 2479 CA ILE A 337 40.125 36.508 17.300 1.00 8.92 C

ATOM 2480 C ILE A 337 39.791 35.491 18.396 1.00 11.97 C

ATOM 2481 O ILE A 337 38.895 34.662 18.229 1.00 14.23 O

ATOM 2482 CB ILE A 337 41.378 36.051 16.554 1.00 6.37 C

ATOM 2483 CG1 ILE A 337 41.615 36.956 15.333 1.00 6.83 C

ATOM 2484 CG2 ILE A 337 41.226 34.598 16.136 1.00 2.53 C

ATOM 2485 CD1 ILE A 337 42.781 36.523 14.437 1.00 2.00 C

ATOM 2486 N GLY A 338 40.499 35.572 19.526 1.00 12.41 N

ATOM 2487 CA GLY A 338 40.272 34.644 20.625 1.00 11.48 C

ATOM 2488 C GLY A 338 38.916 34.819 21.279 1.00 12.07 C

ATOM 2489 O GLY A 338 38.271 33.848 21.667 1.00 11.50 O

ATOM 2490 N GLU A 339 38.493 36.072 21.408 1.00 13.57 N

ATOM 2491 CA GLU A 339 37.208 36.403 22.008 1.00 12.72 C

ATOM 2492 C GLU A 339 36.118 35.829 21.107 1.00 13.24 C

ATOM 2493 O GLU A 339 35.152 35.213 21.573 1.00 16.33 O

ATOM 2494 CB GLU A 339 37.037 37.911 22.076 1.00 10.99 C

ATOM 2495 CG GLU A 339 37.856 38.637 23.111 1.00 16.04 C

ATOM 2496 CD GLU A 339 37.283 40.032 23.362 1.00 20.71 C

ATOM 2497 OE1 GLU A 339 37.725 40.997 22.704 1.00 21.43 O

ATOM 2498 OE2 GLU A 339 36.366 40.165 24.209 1.00 25.60 O

ATOM 2499 N THR A 340 36.279 36.049 19.808 1.00 10.84 N

ATOM 2500 CA THR A 340 35.328 35.555 18.817 1.00 9.66 C

ATOM 2501 C THR A 340 35.148 34.028 18.905 1.00 10.47 C

ATOM 2502 O THR A 340 34.015 33.543 18.880 1.00 12.77 O

ATOM 2503 CB THR A 340 35.782 35.934 17.355 1.00 9.34 C

ATOM 2504 OG1 THR A 340 35.784 37.364 17.197 1.00 5.00 O

ATOM 2505 CG2 THR A 340 34.843 35.289 16.302 1.00 4.18 C

ATOM 2506 N ILE A 341 36.257 33.285 19.013 1.00 10.84 N

ATOM 2507 CA ILE A 341 36.226 31.817 19.101 1.00 9.87 C

ATOM 2508 C ILE A 341 35.562 31.380 20.422 1.00 11.89 C

ATOM 2509 O ILE A 341 34.857 30.366 20.482 1.00 13.69 O

ATOM 2510 CB ILE A 341 37.684 31.209 19.018 1.00 8.44 C

ATOM 2511 CG1 ILE A 341 38.428 31.791 17.810 1.00 2.68 C

ATOM 2512 CG2 ILE A 341 37.625 29.682 18.944 1.00 2.00 C

ATOM 2513 CD1 ILE A 341 38.912 30.774 16.833 1.00 2.00 C

ATOM 2514 N LYS A 342 35.786 32.173 21.467 1.00 13.27 N

ATOM 2515 CA LYS A 342 35.235 31.923 22.805 1.00 16.17 C

ATOM 2516 C LYS A 342 33.703 32.079 22.812 1.00 18.11 C

ATOM 2517 O LYS A 342 32.963 31.175 23.270 1.00 18.27 O

ATOM 2518 CB LYS A 342 35.858 32.911 23.797 1.00 13.92 C

ATOM 2519 CG LYS A 342 35.136 33.043 25.095 1.00 7.00 C

ATOM 2520 CD LYS A 342 35.498 31.911 25.993 1.00 2.11 C

ATOM 2521 CE LYS A 342 34.964 32.182 27.385 1.00 5.14 C

ATOM 2522 NZ LYS A 342 35.195 31.046 28.308 1.00 6.99 N

ATOM 2523 N ILE A 343 33.243 33.229 22.309 1.00 16.91 N

ATOM 2524 CA ILE A 343 31.818 33.541 22.223 1.00 18.07 C

ATOM 2525 C ILE A 343 31.059 32.585 21.288 1.00 18.45 C

ATOM 2526 O ILE A 343 29.960 32.118 21.596 1.00 17.47 O

ATOM 2527 CB ILE A 343 31.615 34.974 21.719 1.00 14.20 C

ATOM 2528 CG1 ILE A 343 32.077 35.964 22.785 1.00 9.94 C

ATOM 2529 CG2 ILE A 343 30.163 35.190 21.357 1.00 14.74 C

ATOM 2530 CD1 ILE A 343 32.206 37.352 22.294 1.00 9.66 C

ATOM 2531 N VAL A 344 31.659 32.285 20.147 1.00 18.51 N

ATOM 2532 CA VAL A 344 31.004 31.411 19.211 1.00 17.66 C

ATOM 2533 C VAL A 344 30.806 30.036 19.828 1.00 16.85 C

ATOM 2534 O VAL A 344 29.819 29.378 19.550 1.00 20.76 O

ATOM 2535 CB VAL A 344 31.820 31.302 17.894 1.00 17.61 C

ATOM 2536 CG1 VAL A 344 31.147 30.323 16.946 1.00 16.61 C

ATOM 2537 CG2 VAL A 344 31.936 32.683 17.229 1.00 15.33 C

ATOM 2538 N ILE A 345 31.706 29.601 20.695 1.00 17.18 N

ATOM 2539 CA ILE A 345 31.564 28.256 21.260 1.00 17.99 C

ATOM 2540 C ILE A 345 30.777 28.192 22.568 1.00 17.84 C

ATOM 2541 O ILE A 345 30.118 27.198 22.865 1.00 18.91 O

ATOM 2542 CB ILE A 345 32.970 27.571 21.461 1.00 14.71 C

ATOM 2543 CG1 ILE A 345 33.579 27.222 20.099 1.00 10.57 C

ATOM 2544 CG2 ILE A 345 32.834 26.315 22.308 1.00 8.35 C

ATOM 2545 CD1 ILE A 345 34.903 26.569 20.171 1.00 9.21 C

ATOM 2546 N GLU A 346 30.801 29.265 23.340 1.00 18.96 N

ATOM 2547 CA GLU A 346 30.115 29.220 24.619 1.00 20.90 C

ATOM 2548 C GLU A 346 28.795 29.974 24.722 1.00 20.54 C

ATOM 2549 O GLU A 346 28.046 29.792 25.676 1.00 21.30 O

ATOM 2550 CB GLU A 346 31.094 29.673 25.694 1.00 22.99 C

ATOM 2551 CG GLU A 346 32.391 28.887 25.638 1.00 25.04 C

ATOM 2552 CD GLU A 346 33.129 28.914 26.939 1.00 28.46 C

ATOM 2553 OE1 GLU A 346 32.605 29.526 27.890 1.00 31.89 O

ATOM 2554 OE2 GLU A 346 34.228 28.331 27.010 1.00 29.62 O

ATOM 2555 N ASP A 347 28.510 30.807 23.731 1.00 20.28 N

ATOM 2556 CA ASP A 347 27.266 31.560 23.692 1.00 17.57 C

ATOM 2557 C ASP A 347 26.472 31.067 22.479 1.00 17.75 C

ATOM 2558 O ASP A 347 25.482 30.371 22.596 1.00 19.20 O

ATOM 2559 CB ASP A 347 27.542 33.061 23.520 1.00 20.24 C

ATOM 2560 CG ASP A 347 28.108 33.725 24.783 1.00 21.72 C

ATOM 2561 OD1 ASP A 347 27.662 33.422 25.912 1.00 23.45 O

ATOM 2562 OD2 ASP A 347 29.005 34.581 24.634 1.00 22.29 O

ATOM 2563 N TYR A 348 26.950 31.445 21.309 1.00 16.51 N

ATOM 2564 CA TYR A 348 26.344 31.110 20.041 1.00 14.09 C

ATOM 2565 C TYR A 348 25.994 29.637 19.869 1.00 13.67 C

ATOM 2566 O TYR A 348 24.824 29.285 19.773 1.00 15.05 O

ATOM 2567 CB TYR A 348 27.282 31.591 18.933 1.00 12.73 C

ATOM 2568 CG TYR A 348 26.775 31.451 17.517 1.00 15.34 C

ATOM 2569 CD1 TYR A 348 26.044 32.469 16.901 1.00 18.15 C

ATOM 2570 CD2 TYR A 348 27.122 30.348 16.752 1.00 15.96 C

ATOM 2571 CE1 TYR A 348 25.686 32.385 15.541 1.00 17.04 C

ATOM 2572 CE2 TYR A 348 26.775 30.256 15.400 1.00 15.08 C

ATOM 2573 CZ TYR A 348 26.069 31.268 14.800 1.00 15.24 C

ATOM 2574 OH TYR A 348 25.805 31.171 13.452 1.00 16.03 O

ATOM 2575 N VAL A 349 26.992 28.768 19.822 1.00 15.36 N

ATOM 2576 CA VAL A 349 26.712 27.344 19.646 1.00 16.24 C

ATOM 2577 C VAL A 349 25.966 26.799 20.846 1.00 17.55 C

ATOM 2578 O VAL A 349 25.122 25.921 20.712 1.00 19.63 O

ATOM 2579 CB VAL A 349 27.983 26.494 19.489 1.00 13.69 C

ATOM 2580 CG1 VAL A 349 27.601 25.057 19.351 1.00 9.12 C

ATOM 2581 CG2 VAL A 349 28.756 26.925 18.276 1.00 14.56 C

ATOM 2582 N GLN A 350 26.287 27.312 22.023 1.00 15.69 N

ATOM 2583 CA GLN A 350 25.632 26.851 23.235 1.00 15.94 C

ATOM 2584 C GLN A 350 24.114 26.953 23.100 1.00 17.79 C

ATOM 2585 O GLN A 350 23.378 26.026 23.465 1.00 20.10 O

ATOM 2586 CB GLN A 350 26.092 27.698 24.416 1.00 15.53 C

ATOM 2587 CG GLN A 350 25.575 27.236 25.738 1.00 16.01 C

ATOM 2588 CD GLN A 350 26.149 25.905 26.141 1.00 19.15 C

ATOM 2589 OE1 GLN A 350 27.333 25.806 26.448 1.00 21.02 O

ATOM 2590 NE2 GLN A 350 25.315 24.866 26.144 1.00 19.34 N

ATOM 2591 N HIS A 351 23.651 28.083 22.569 1.00 16.40 N

ATOM 2592 CA HIS A 351 22.231 28.337 22.397 1.00 13.13 C

ATOM 2593 C HIS A 351 21.714 27.477 21.268 1.00 13.52 C

ATOM 2594 O HIS A 351 20.676 26.824 21.395 1.00 14.00 O

ATOM 2595 CB HIS A 351 21.984 29.824 22.086 1.00 15.37 C

ATOM 2596 CG HIS A 351 20.711 30.086 21.333 1.00 18.54 C

ATOM 2597 ND1 HIS A 351 19.472 30.050 21.935 1.00 18.37 N

ATOM 2598 CD2 HIS A 351 20.481 30.330 20.018 1.00 18.03 C

ATOM 2599 CE1 HIS A 351 18.533 30.255 21.027 1.00 15.71 C

ATOM 2600 NE2 HIS A 351 19.117 30.426 19.856 1.00 14.38 N

ATOM 2601 N LEU A 352 22.451 27.483 20.165 1.00 12.46 N

ATOM 2602 CA LEU A 352 22.102 26.724 18.979 1.00 13.93 C

ATOM 2603 C LEU A 352 21.870 25.239 19.245 1.00 17.12 C

ATOM 2604 O LEU A 352 20.846 24.691 18.849 1.00 21.32 O

ATOM 2605 CB LEU A 352 23.213 26.864 17.961 1.00 15.30 C

ATOM 2606 CG LEU A 352 22.809 26.991 16.512 1.00 15.60 C

ATOM 2607 CD1 LEU A 352 21.715 28.036 16.401 1.00 18.58 C

ATOM 2608 CD2 LEU A 352 24.013 27.394 15.694 1.00 16.87 C

ATOM 2609 N SER A 353 22.828 24.590 19.901 1.00 17.19 N

ATOM 2610 CA SER A 353 22.751 23.167 20.209 1.00 17.83 C

ATOM 2611 C SER A 353 21.617 22.757 21.144 1.00 19.64 C

ATOM 2612 O SER A 353 21.063 21.672 21.016 1.00 21.14 O

ATOM 2613 CB SER A 353 24.069 22.710 20.814 1.00 20.16 C

ATOM 2614 OG SER A 353 24.245 23.251 22.120 1.00 23.20 O

ATOM 2615 N GLY A 354 21.274 23.612 22.095 1.00 21.77 N

ATOM 2616 CA GLY A 354 20.214 23.265 23.023 1.00 23.09 C

ATOM 2617 C GLY A 354 20.718 22.307 24.089 1.00 23.10 C

ATOM 2618 O GLY A 354 19.951 21.802 24.905 1.00 23.63 O

ATOM 2619 N TYR A 355 22.024 22.068 24.083 1.00 23.06 N

ATOM 2620 CA TYR A 355 22.647 21.168 25.039 1.00 23.76 C

ATOM 2621 C TYR A 355 22.530 21.711 26.449 1.00 23.67 C

ATOM 2622 O TYR A 355 22.522 22.921 26.649 1.00 22.91 O

ATOM 2623 CB TYR A 355 24.130 20.978 24.690 1.00 24.00 C

ATOM 2624 CG TYR A 355 24.364 20.222 23.400 1.00 24.77 C

ATOM 2625 CD1 TYR A 355 23.307 19.608 22.733 1.00 25.82 C

ATOM 2626 CD2 TYR A 355 25.633 20.132 22.840 1.00 21.80 C

ATOM 2627 CE1 TYR A 355 23.506 18.926 21.542 1.00 27.47 C

ATOM 2628 CE2 TYR A 355 25.843 19.450 21.646 1.00 23.13 C

ATOM 2629 CZ TYR A 355 24.774 18.850 21.002 1.00 27.52 C

ATOM 2630 OH TYR A 355 24.953 18.177 19.809 1.00 27.82 O

ATOM 2631 N HIS A 356 22.435 20.806 27.418 1.00 26.13 N

ATOM 2632 CA HIS A 356 22.360 21.182 28.821 1.00 28.55 C

ATOM 2633 C HIS A 356 23.781 21.134 29.327 1.00 28.20 C

ATOM 2634 O HIS A 356 24.090 21.635 30.412 1.00 25.23 O

ATOM 2635 CB HIS A 356 21.496 20.202 29.610 1.00 32.92 C

ATOM 2636 CG HIS A 356 20.035 20.471 29.486 1.00 33.88 C

ATOM 2637 ND1 HIS A 356 19.120 19.484 29.196 1.00 34.79 N

ATOM 2638 CD2 HIS A 356 19.335 21.628 29.564 1.00 32.68 C

ATOM 2639 CE1 HIS A 356 17.917 20.020 29.099 1.00 36.00 C

ATOM 2640 NE2 HIS A 356 18.022 21.320 29.318 1.00 35.32 N

ATOM 2641 N PHE A 357 24.637 20.503 28.525 1.00 29.51 N

ATOM 2642 CA PHE A 357 26.058 20.410 28.834 1.00 29.71 C

ATOM 2643 C PHE A 357 26.667 21.758 28.446 1.00 27.97 C

ATOM 2644 O PHE A 357 26.441 22.262 27.338 1.00 26.23 O

ATOM 2645 CB PHE A 357 26.719 19.299 28.016 1.00 33.17 C

ATOM 2646 CG PHE A 357 28.220 19.344 28.048 1.00 34.63 C

ATOM 2647 CD1 PHE A 357 28.896 19.193 29.247 1.00 34.06 C

ATOM 2648 CD2 PHE A 357 28.950 19.573 26.889 1.00 33.55 C

ATOM 2649 CE1 PHE A 357 30.276 19.274 29.288 1.00 33.83 C

ATOM 2650 CE2 PHE A 357 30.327 19.651 26.931 1.00 34.06 C

ATOM 2651 CZ PHE A 357 30.989 19.504 28.133 1.00 33.36 C

ATOM 2652 N LYS A 358 27.429 22.342 29.364 1.00 27.72 N

ATOM 2653 CA LYS A 358 28.068 23.633 29.136 1.00 27.24 C

ATOM 2654 C LYS A 358 29.342 23.491 28.308 1.00 27.95 C

ATOM 2655 O LYS A 358 30.354 22.965 28.778 1.00 25.83 O

ATOM 2656 CB LYS A 358 28.395 24.293 30.469 1.00 29.53 C

ATOM 2657 CG LYS A 358 28.338 25.797 30.436 1.00 33.73 C

ATOM 2658 CD LYS A 358 28.639 26.388 31.801 1.00 38.13 C

ATOM 2659 CE LYS A 358 27.660 27.505 32.122 1.00 43.77 C

ATOM 2660 NZ LYS A 358 27.988 28.216 33.389 1.00 47.75 N

ATOM 2661 N LEU A 359 29.272 23.958 27.064 1.00 28.26 N

ATOM 2662 CA LEU A 359 30.397 23.895 26.153 1.00 27.03 C

ATOM 2663 C LEU A 359 31.552 24.712 26.691 1.00 27.74 C

ATOM 2664 O LEU A 359 31.349 25.695 27.406 1.00 28.47 O

ATOM 2665 CB LEU A 359 29.980 24.412 24.785 1.00 24.42 C

ATOM 2666 CG LEU A 359 28.918 23.523 24.149 1.00 22.84 C

ATOM 2667 CD1 LEU A 359 28.653 23.991 22.736 1.00 26.68 C

ATOM 2668 CD2 LEU A 359 29.373 22.073 24.153 1.00 22.54 C

ATOM 2669 N LYS A 360 32.766 24.306 26.338 1.00 28.41 N

ATOM 2670 CA LYS A 360 33.950 24.995 26.807 1.00 28.59 C

ATOM 2671 C LYS A 360 34.964 25.268 25.707 1.00 28.23 C

ATOM 2672 O LYS A 360 35.272 24.385 24.900 1.00 29.83 O

ATOM 2673 CB LYS A 360 34.609 24.168 27.906 1.00 29.72 C

ATOM 2674 CG LYS A 360 35.289 25.005 28.970 1.00 33.61 C

ATOM 2675 CD LYS A 360 35.878 24.131 30.062 1.00 33.08 C

ATOM 2676 CE LYS A 360 37.240 23.573 29.668 1.00 37.30 C

ATOM 2677 NZ LYS A 360 38.119 23.349 30.847 1.00 35.84 N

ATOM 2678 N PHE A 361 35.469 26.499 25.663 1.00 26.85 N

ATOM 2679 CA PHE A 361 36.498 26.854 24.695 1.00 25.37 C

ATOM 2680 C PHE A 361 37.803 26.789 25.470 1.00 23.29 C

ATOM 2681 O PHE A 361 38.115 27.673 26.265 1.00 19.88 O

ATOM 2682 CB PHE A 361 36.303 28.259 24.142 1.00 26.07 C

ATOM 2683 CG PHE A 361 37.472 28.751 23.333 1.00 23.89 C

ATOM 2684 CD1 PHE A 361 38.056 27.930 22.369 1.00 21.00 C

ATOM 2685 CD2 PHE A 361 37.966 30.050 23.512 1.00 22.03 C

ATOM 2686 CE1 PHE A 361 39.103 28.396 21.589 1.00 21.30 C

ATOM 2687 CE2 PHE A 361 39.012 30.527 22.742 1.00 19.36 C

ATOM 2688 CZ PHE A 361 39.585 29.701 21.777 1.00 20.71 C

ATOM 2689 N ASP A 362 38.539 25.709 25.232 1.00 23.98 N

ATOM 2690 CA ASP A 362 39.812 25.437 25.884 1.00 22.49 C

ATOM 2691 C ASP A 362 40.731 24.682 24.910 1.00 21.44 C

ATOM 2692 O ASP A 362 40.681 23.460 24.820 1.00 19.35 O

ATOM 2693 CB ASP A 362 39.539 24.596 27.129 1.00 22.48 C

ATOM 2694 CG ASP A 362 40.798 24.197 27.871 1.00 24.42 C

ATOM 2695 OD1 ASP A 362 41.913 24.649 27.519 1.00 25.51 O

ATOM 2696 OD2 ASP A 362 40.652 23.417 28.832 1.00 24.21 O

ATOM 2697 N PRO A 363 41.565 25.415 24.145 1.00 23.37 N

ATOM 2698 CA PRO A 363 42.469 24.747 23.193 1.00 22.60 C

ATOM 2699 C PRO A 363 43.339 23.619 23.778 1.00 24.37 C

ATOM 2700 O PRO A 363 43.808 22.729 23.049 1.00 25.19 O

ATOM 2701 CB PRO A 363 43.308 25.902 22.625 1.00 22.27 C

ATOM 2702 CG PRO A 363 42.435 27.130 22.777 1.00 19.59 C

ATOM 2703 CD PRO A 363 41.688 26.892 24.081 1.00 21.32 C

ATOM 2704 N GLU A 364 43.542 23.648 25.091 1.00 25.21 N

ATOM 2705 CA GLU A 364 44.366 22.646 25.757 1.00 25.48 C

ATOM 2706 C GLU A 364 43.801 21.227 25.742 1.00 24.29 C

ATOM 2707 O GLU A 364 44.552 20.265 25.879 1.00 24.08 O

ATOM 2708 CB GLU A 364 44.615 23.066 27.200 1.00 29.47 C

ATOM 2709 CG GLU A 364 44.749 24.555 27.393 1.00 38.78 C

ATOM 2710 CD GLU A 364 45.700 24.905 28.528 1.00 46.27 C

ATOM 2711 OE1 GLU A 364 46.176 26.069 28.581 1.00 48.84 O

ATOM 2712 OE2 GLU A 364 45.971 24.013 29.367 1.00 49.07 O

ATOM 2713 N LEU A 365 42.482 21.099 25.592 1.00 23.56 N

ATOM 2714 CA LEU A 365 41.819 19.792 25.572 1.00 21.12 C

ATOM 2715 C LEU A 365 42.253 18.945 24.367 1.00 22.64 C

ATOM 2716 O LEU A 365 42.064 17.720 24.341 1.00 20.54 O

ATOM 2717 CB LEU A 365 40.294 19.972 25.551 1.00 20.11 C

ATOM 2718 CG LEU A 365 39.618 20.651 26.759 1.00 22.88 C

ATOM 2719 CD1 LEU A 365 38.183 21.010 26.400 1.00 22.19 C

ATOM 2720 CD2 LEU A 365 39.635 19.749 27.976 1.00 19.45 C

ATOM 2721 N LEU A 366 42.852 19.602 23.372 1.00 22.66 N

ATOM 2722 CA LEU A 366 43.300 18.918 22.163 1.00 19.62 C

ATOM 2723 C LEU A 366 44.798 18.685 22.138 1.00 19.60 C

ATOM 2724 O LEU A 366 45.302 17.980 21.263 1.00 20.07 O

ATOM 2725 CB LEU A 366 42.892 19.732 20.935 1.00 17.35 C

ATOM 2726 CG LEU A 366 41.402 19.691 20.608 1.00 14.13 C

ATOM 2727 CD1 LEU A 366 41.014 20.847 19.701 1.00 15.50 C

ATOM 2728 CD2 LEU A 366 41.099 18.368 19.935 1.00 15.90 C

ATOM 2729 N PHE A 367 45.502 19.262 23.107 1.00 20.35 N

ATOM 2730 CA PHE A 367 46.957 19.157 23.184 1.00 19.99 C

ATOM 2731 C PHE A 367 47.541 17.762 23.275 1.00 24.68 C

ATOM 2732 O PHE A 367 48.685 17.550 22.911 1.00 26.12 O

ATOM 2733 CB PHE A 367 47.489 19.988 24.349 1.00 15.53 C

ATOM 2734 CG PHE A 367 47.504 21.481 24.084 1.00 12.59 C

ATOM 2735 CD1 PHE A 367 47.890 22.375 25.079 1.00 10.64 C

ATOM 2736 CD2 PHE A 367 47.111 21.991 22.857 1.00 9.27 C

ATOM 2737 CE1 PHE A 367 47.878 23.749 24.852 1.00 9.76 C

ATOM 2738 CE2 PHE A 367 47.099 23.360 22.631 1.00 8.92 C

ATOM 2739 CZ PHE A 367 47.484 24.241 23.630 1.00 6.74 C

ATOM 2740 N ASN A 368 46.779 16.802 23.769 1.00 30.13 N

ATOM 2741 CA ASN A 368 47.293 15.438 23.866 1.00 32.05 C

ATOM 2742 C ASN A 368 46.539 14.590 22.866 1.00 30.92 C

ATOM 2743 O ASN A 368 46.482 13.375 22.980 1.00 31.34 O

ATOM 2744 CB ASN A 368 47.089 14.891 25.279 1.00 39.26 C

ATOM 2745 CG ASN A 368 45.647 15.043 25.782 1.00 45.65 C

ATOM 2746 OD1 ASN A 368 44.888 15.910 25.322 1.00 48.24 O

ATOM 2747 ND2 ASN A 368 45.272 14.196 26.739 1.00 47.67 N

ATOM 2748 N GLN A 369 45.966 15.257 21.873 1.00 30.67 N

ATOM 2749 CA GLN A 369 45.188 14.596 20.848 1.00 30.32 C

ATOM 2750 C GLN A 369 45.816 14.767 19.474 1.00 30.91 C

ATOM 2751 O GLN A 369 46.701 15.600 19.279 1.00 32.54 O

ATOM 2752 CB GLN A 369 43.781 15.184 20.839 1.00 31.06 C

ATOM 2753 CG GLN A 369 42.667 14.152 20.963 1.00 34.04 C

ATOM 2754 CD GLN A 369 42.742 13.349 22.253 1.00 34.27 C

ATOM 2755 OE1 GLN A 369 43.053 13.882 23.316 1.00 35.06 O

ATOM 2756 NE2 GLN A 369 42.452 12.061 22.161 1.00 33.09 N

ATOM 2757 N GLN A 370 45.352 13.974 18.519 1.00 30.04 N

ATOM 2758 CA GLN A 370 45.847 14.075 17.162 1.00 29.68 C

ATOM 2759 C GLN A 370 44.924 15.057 16.455 1.00 28.61 C

ATOM 2760 O GLN A 370 43.767 14.737 16.193 1.00 32.14 O

ATOM 2761 CB GLN A 370 45.775 12.714 16.497 1.00 30.02 C

ATOM 2762 CG GLN A 370 47.006 11.894 16.724 1.00 35.13 C

ATOM 2763 CD GLN A 370 47.065 10.707 15.802 1.00 37.04 C

ATOM 2764 OE1 GLN A 370 46.715 9.592 16.184 1.00 40.59 O

ATOM 2765 NE2 GLN A 370 47.503 10.936 14.573 1.00 38.94 N

ATOM 2766 N PHE A 371 45.419 16.249 16.144 1.00 25.51 N

ATOM 2767 CA PHE A 371 44.570 17.252 15.516 1.00 24.02 C

ATOM 2768 C PHE A 371 45.350 18.164 14.576 1.00 22.07 C

ATOM 2769 O PHE A 371 46.449 18.593 14.906 1.00 22.33 O

ATOM 2770 CB PHE A 371 43.898 18.076 16.622 1.00 25.46 C

ATOM 2771 CG PHE A 371 42.882 19.058 16.122 1.00 28.31 C

ATOM 2772 CD1 PHE A 371 41.603 18.641 15.769 1.00 27.81 C

ATOM 2773 CD2 PHE A 371 43.208 20.396 15.983 1.00 28.12 C

ATOM 2774 CE1 PHE A 371 40.669 19.544 15.279 1.00 26.37 C

ATOM 2775 CE2 PHE A 371 42.276 21.295 15.495 1.00 29.88 C

ATOM 2776 CZ PHE A 371 41.005 20.864 15.141 1.00 26.49 C

ATOM 2777 N GLN A 372 44.778 18.461 13.409 1.00 20.45 N

ATOM 2778 CA GLN A 372 45.430 19.322 12.429 1.00 17.25 C

ATOM 2779 C GLN A 372 45.022 20.756 12.639 1.00 17.35 C

ATOM 2780 O GLN A 372 43.851 21.089 12.500 1.00 18.85 O

ATOM 2781 CB GLN A 372 45.052 18.913 11.013 1.00 14.38 C

ATOM 2782 CG GLN A 372 45.550 17.538 10.622 1.00 15.05 C

ATOM 2783 CD GLN A 372 47.066 17.402 10.687 1.00 14.18 C

ATOM 2784 OE1 GLN A 372 47.789 18.052 9.934 1.00 13.26 O

ATOM 2785 NE2 GLN A 372 47.550 16.542 11.579 1.00 11.37 N

ATOM 2786 N TYR A 373 45.995 21.596 12.984 1.00 18.09 N

ATOM 2787 CA TYR A 373 45.755 23.015 13.201 1.00 16.18 C

ATOM 2788 C TYR A 373 45.694 23.753 11.876 1.00 15.39 C

ATOM 2789 O TYR A 373 46.513 24.624 11.598 1.00 16.60 O

ATOM 2790 CB TYR A 373 46.851 23.587 14.089 1.00 13.65 C

ATOM 2791 CG TYR A 373 46.630 23.165 15.496 1.00 12.87 C

ATOM 2792 CD1 TYR A 373 47.508 22.311 16.126 1.00 16.00 C

ATOM 2793 CD2 TYR A 373 45.479 23.546 16.174 1.00 13.20 C

ATOM 2794 CE1 TYR A 373 47.244 21.834 17.403 1.00 17.92 C

ATOM 2795 CE2 TYR A 373 45.205 23.082 17.438 1.00 14.80 C

ATOM 2796 CZ TYR A 373 46.089 22.222 18.048 1.00 19.55 C

ATOM 2797 OH TYR A 373 45.816 21.734 19.300 1.00 24.55 O

ATOM 2798 N GLN A 374 44.727 23.374 11.051 1.00 12.46 N

ATOM 2799 CA GLN A 374 44.537 24.009 9.767 1.00 14.78 C

ATOM 2800 C GLN A 374 43.096 23.834 9.279 1.00 15.08 C

ATOM 2801 O GLN A 374 42.350 23.009 9.803 1.00 13.47 O

ATOM 2802 CB GLN A 374 45.517 23.440 8.757 1.00 14.40 C

ATOM 2803 CG GLN A 374 45.107 22.130 8.163 1.00 17.93 C

ATOM 2804 CD GLN A 374 46.117 21.651 7.151 1.00 20.70 C

ATOM 2805 OE1 GLN A 374 45.974 21.908 5.952 1.00 21.54 O

ATOM 2806 NE2 GLN A 374 47.159 20.961 7.628 1.00 22.59 N

ATOM 2807 N ASN A 375 42.702 24.627 8.285 1.00 14.54 N

ATOM 2808 CA ASN A 375 41.354 24.540 7.768 1.00 11.33 C

ATOM 2809 C ASN A 375 41.200 25.011 6.334 1.00 11.74 C

ATOM 2810 O ASN A 375 42.037 25.733 5.804 1.00 11.44 O

ATOM 2811 CB ASN A 375 40.404 25.327 8.657 1.00 9.70 C

ATOM 2812 CG ASN A 375 38.953 25.028 8.358 1.00 10.71 C

ATOM 2813 OD1 ASN A 375 38.556 23.872 8.194 1.00 11.62 O

ATOM 2814 ND2 ASN A 375 38.148 26.075 8.281 1.00 10.88 N

ATOM 2815 N ARG A 376 40.096 24.589 5.733 1.00 10.30 N

ATOM 2816 CA ARG A 376 39.759 24.899 4.368 1.00 9.54 C

ATOM 2817 C ARG A 376 38.224 24.940 4.328 1.00 11.76 C

ATOM 2818 O ARG A 376 37.547 23.912 4.450 1.00 14.45 O

ATOM 2819 CB ARG A 376 40.310 23.797 3.449 1.00 6.05 C

ATOM 2820 CG ARG A 376 40.373 24.154 1.981 1.00 5.64 C

ATOM 2821 CD ARG A 376 41.400 25.235 1.720 1.00 8.22 C

ATOM 2822 NE ARG A 376 42.281 24.848 0.630 1.00 8.83 N

ATOM 2823 CZ ARG A 376 43.473 24.287 0.791 1.00 5.99 C

ATOM 2824 NH1 ARG A 376 43.950 24.040 2.001 1.00 10.93 N

ATOM 2825 NH2 ARG A 376 44.185 23.956 -0.271 1.00 3.07 N

ATOM 2826 N ILE A 377 37.678 26.145 4.194 1.00 12.49 N

ATOM 2827 CA ILE A 377 36.237 26.352 4.137 1.00 7.52 C

ATOM 2828 C ILE A 377 35.608 25.515 3.037 1.00 6.90 C

ATOM 2829 O ILE A 377 35.993 25.599 1.870 1.00 4.83 O

ATOM 2830 CB ILE A 377 35.917 27.846 3.898 1.00 8.16 C

ATOM 2831 CG1 ILE A 377 36.445 28.693 5.070 1.00 3.37 C

ATOM 2832 CG2 ILE A 377 34.428 28.048 3.761 1.00 8.35 C

ATOM 2833 CD1 ILE A 377 35.804 28.375 6.339 1.00 2.00 C

ATOM 2834 N ALA A 378 34.635 24.702 3.444 1.00 7.86 N

ATOM 2835 CA ALA A 378 33.905 23.799 2.550 1.00 7.73 C

ATOM 2836 C ALA A 378 32.740 24.485 1.833 1.00 9.56 C

ATOM 2837 O ALA A 378 32.082 25.374 2.393 1.00 9.65 O

ATOM 2838 CB ALA A 378 33.383 22.587 3.353 1.00 4.83 C

ATOM 2839 N SER A 379 32.485 24.075 0.592 1.00 9.64 N

ATOM 2840 CA SER A 379 31.382 24.636 -0.160 1.00 8.95 C

ATOM 2841 C SER A 379 30.086 24.196 0.522 1.00 11.60 C

ATOM 2842 O SER A 379 29.191 25.005 0.730 1.00 13.79 O

ATOM 2843 CB SER A 379 31.399 24.128 -1.598 1.00 8.67 C

ATOM 2844 OG SER A 379 30.604 24.956 -2.432 1.00 14.34 O

ATOM 2845 N GLU A 380 29.987 22.917 0.881 1.00 12.52 N

ATOM 2846 CA GLU A 380 28.776 22.421 1.528 1.00 14.09 C

ATOM 2847 C GLU A 380 28.473 23.154 2.832 1.00 14.59 C

ATOM 2848 O GLU A 380 27.312 23.344 3.190 1.00 19.33 O

ATOM 2849 CB GLU A 380 28.880 20.919 1.803 1.00 13.02 C

ATOM 2850 CG GLU A 380 29.029 20.077 0.555 1.00 13.45 C

ATOM 2851 CD GLU A 380 30.489 19.820 0.194 1.00 15.18 C

ATOM 2852 OE1 GLU A 380 31.364 20.485 0.799 1.00 9.37 O

ATOM 2853 OE2 GLU A 380 30.756 18.960 -0.694 1.00 15.39 O

ATOM 2854 N PHE A 381 29.507 23.547 3.563 1.00 14.18 N

ATOM 2855 CA PHE A 381 29.291 24.262 4.813 1.00 12.73 C

ATOM 2856 C PHE A 381 28.611 25.580 4.451 1.00 12.41 C

ATOM 2857 O PHE A 381 27.650 26.000 5.071 1.00 10.73 O

ATOM 2858 CB PHE A 381 30.637 24.524 5.499 1.00 14.60 C

ATOM 2859 CG PHE A 381 30.519 25.083 6.900 1.00 17.70 C

ATOM 2860 CD1 PHE A 381 29.525 24.640 7.762 1.00 18.93 C

ATOM 2861 CD2 PHE A 381 31.415 26.049 7.356 1.00 17.90 C

ATOM 2862 CE1 PHE A 381 29.427 25.145 9.050 1.00 18.36 C

ATOM 2863 CE2 PHE A 381 31.322 26.555 8.637 1.00 16.05 C

ATOM 2864 CZ PHE A 381 30.327 26.101 9.486 1.00 18.71 C

ATOM 2865 N ASN A 382 29.129 26.223 3.417 1.00 13.45 N

ATOM 2866 CA ASN A 382 28.599 27.484 2.945 1.00 10.29 C

ATOM 2867 C ASN A 382 27.143 27.306 2.549 1.00 12.60 C

ATOM 2868 O ASN A 382 26.296 28.136 2.886 1.00 16.25 O

ATOM 2869 CB ASN A 382 29.439 27.975 1.755 1.00 10.36 C

ATOM 2870 CG ASN A 382 28.992 29.330 1.241 1.00 11.02 C

ATOM 2871 OD1 ASN A 382 27.864 29.478 0.799 1.00 17.85 O

ATOM 2872 ND2 ASN A 382 29.875 30.327 1.294 1.00 10.05 N

ATOM 2873 N THR A 383 26.837 26.220 1.841 1.00 14.87 N

ATOM 2874 CA THR A 383 25.468 25.966 1.401 1.00 14.04 C

ATOM 2875 C THR A 383 24.544 25.736 2.597 1.00 14.69 C

ATOM 2876 O THR A 383 23.473 26.334 2.681 1.00 18.95 O

ATOM 2877 CB THR A 383 25.401 24.756 0.435 1.00 12.78 C

ATOM 2878 OG1 THR A 383 26.055 25.090 -0.792 1.00 17.39 O

ATOM 2879 CG2 THR A 383 23.977 24.403 0.108 1.00 14.50 C

ATOM 2880 N LEU A 384 24.961 24.893 3.535 1.00 12.96 N

ATOM 2881 CA LEU A 384 24.143 24.601 4.698 1.00 12.85 C

ATOM 2882 C LEU A 384 23.940 25.797 5.631 1.00 13.07 C

ATOM 2883 O LEU A 384 23.126 25.738 6.552 1.00 15.45 O

ATOM 2884 CB LEU A 384 24.758 23.424 5.474 1.00 11.07 C

ATOM 2885 CG LEU A 384 26.013 23.672 6.319 1.00 12.42 C

ATOM 2886 CD1 LEU A 384 25.657 24.364 7.668 1.00 7.80 C

ATOM 2887 CD2 LEU A 384 26.722 22.341 6.523 1.00 6.50 C

ATOM 2888 N TYR A 385 24.640 26.895 5.375 1.00 14.88 N

ATOM 2889 CA TYR A 385 24.549 28.061 6.255 1.00 15.01 C

ATOM 2890 C TYR A 385 23.647 29.177 5.761 1.00 17.01 C

ATOM 2891 O TYR A 385 23.535 30.221 6.403 1.00 18.48 O

ATOM 2892 CB TYR A 385 25.949 28.619 6.540 1.00 13.85 C

ATOM 2893 CG TYR A 385 26.264 28.727 8.016 1.00 14.65 C

ATOM 2894 CD1 TYR A 385 27.178 27.867 8.631 1.00 12.45 C

ATOM 2895 CD2 TYR A 385 25.665 29.713 8.796 1.00 14.16 C

ATOM 2896 CE1 TYR A 385 27.483 28.000 9.981 1.00 8.26 C

ATOM 2897 CE2 TYR A 385 25.969 29.846 10.138 1.00 11.00 C

ATOM 2898 CZ TYR A 385 26.875 28.995 10.722 1.00 7.55 C

ATOM 2899 OH TYR A 385 27.180 29.185 12.048 1.00 10.15 O

ATOM 2900 N HIS A 386 23.013 28.965 4.614 1.00 19.38 N

ATOM 2901 CA HIS A 386 22.104 29.959 4.075 1.00 18.88 C

ATOM 2902 C HIS A 386 20.842 29.881 4.927 1.00 19.47 C

ATOM 2903 O HIS A 386 19.848 29.247 4.560 1.00 19.34 O

ATOM 2904 CB HIS A 386 21.821 29.650 2.612 1.00 22.74 C

ATOM 2905 CG HIS A 386 22.961 29.992 1.707 1.00 27.08 C

ATOM 2906 ND1 HIS A 386 22.839 30.863 0.646 1.00 30.22 N

ATOM 2907 CD2 HIS A 386 24.262 29.618 1.742 1.00 26.51 C

ATOM 2908 CE1 HIS A 386 24.016 31.014 0.065 1.00 29.42 C

ATOM 2909 NE2 HIS A 386 24.898 30.270 0.711 1.00 27.57 N

ATOM 2910 N TRP A 387 20.922 30.534 6.086 1.00 18.91 N

ATOM 2911 CA TRP A 387 19.859 30.591 7.086 1.00 15.82 C

ATOM 2912 C TRP A 387 18.860 31.747 6.918 1.00 16.20 C

ATOM 2913 O TRP A 387 18.422 32.341 7.903 1.00 17.73 O

ATOM 2914 CB TRP A 387 20.511 30.661 8.466 1.00 9.07 C

ATOM 2915 CG TRP A 387 21.199 29.399 8.803 1.00 8.84 C

ATOM 2916 CD1 TRP A 387 21.183 28.231 8.072 1.00 10.96 C

ATOM 2917 CD2 TRP A 387 21.969 29.124 9.982 1.00 10.44 C

ATOM 2918 NE1 TRP A 387 21.897 27.248 8.733 1.00 11.72 N

ATOM 2919 CE2 TRP A 387 22.389 27.770 9.907 1.00 13.09 C

ATOM 2920 CE3 TRP A 387 22.348 29.887 11.099 1.00 10.81 C

ATOM 2921 CZ2 TRP A 387 23.170 27.172 10.911 1.00 11.15 C

ATOM 2922 CZ3 TRP A 387 23.118 29.290 12.092 1.00 8.01 C

ATOM 2923 CH2 TRP A 387 23.519 27.947 11.989 1.00 9.03 C

ATOM 2924 N HIS A 388 18.497 32.056 5.676 1.00 17.40 N

ATOM 2925 CA HIS A 388 17.538 33.127 5.389 1.00 19.15 C

ATOM 2926 C HIS A 388 16.143 32.943 6.051 1.00 19.12 C

ATOM 2927 O HIS A 388 15.424 33.916 6.283 1.00 17.10 O

ATOM 2928 CB HIS A 388 17.411 33.306 3.874 1.00 19.05 C

ATOM 2929 CG HIS A 388 18.749 33.745 3.281 1.00 20.23 C

ATOM 2930 ND1 HIS A 388 19.578 32.891 2.563 1.00 20.24 N

ATOM 2931 CD2 HIS A 388 19.338 35.005 3.424 1.00 19.45 C

ATOM 2932 CE1 HIS A 388 20.670 33.641 2.277 1.00 17.87 C

ATOM 2933 NE2 HIS A 388 20.580 34.855 2.756 1.00 17.69 N

ATOM 2934 N PRO A 389 15.725 31.691 6.323 1.00 19.55 N

ATOM 2935 CA PRO A 389 14.417 31.544 6.972 1.00 18.66 C

ATOM 2936 C PRO A 389 14.449 32.237 8.345 1.00 17.43 C

ATOM 2937 O PRO A 389 13.403 32.494 8.942 1.00 18.39 O

ATOM 2938 CB PRO A 389 14.245 30.031 7.129 1.00 18.28 C

ATOM 2939 CG PRO A 389 15.216 29.414 6.175 1.00 17.62 C

ATOM 2940 CD PRO A 389 16.347 30.387 6.023 1.00 20.02 C

ATOM 2941 N LEU A 390 15.654 32.532 8.834 1.00 14.73 N

ATOM 2942 CA LEU A 390 15.836 33.188 10.127 1.00 14.15 C

ATOM 2943 C LEU A 390 15.199 34.574 10.186 1.00 14.32 C

ATOM 2944 O LEU A 390 14.605 34.954 11.188 1.00 13.90 O

ATOM 2945 CB LEU A 390 17.325 33.319 10.443 1.00 15.67 C

ATOM 2946 CG LEU A 390 17.940 32.234 11.329 1.00 17.81 C

ATOM 2947 CD1 LEU A 390 19.445 32.446 11.442 1.00 18.34 C

ATOM 2948 CD2 LEU A 390 17.272 32.264 12.693 1.00 14.92 C

ATOM 2949 N LEU A 391 15.342 35.327 9.102 1.00 14.60 N

ATOM 2950 CA LEU A 391 14.816 36.685 8.997 1.00 13.94 C

ATOM 2951 C LEU A 391 13.315 36.795 9.155 1.00 18.30 C

ATOM 2952 O LEU A 391 12.569 35.939 8.686 1.00 19.30 O

ATOM 2953 CB LEU A 391 15.181 37.285 7.644 1.00 11.09 C

ATOM 2954 CG LEU A 391 16.595 37.077 7.115 1.00 7.28 C

ATOM 2955 CD1 LEU A 391 16.632 37.353 5.622 1.00 4.71 C

ATOM 2956 CD2 LEU A 391 17.528 37.992 7.857 1.00 5.79 C

ATOM 2957 N PRO A 392 12.854 37.871 9.816 1.00 22.25 N

ATOM 2958 CA PRO A 392 11.436 38.150 10.057 1.00 24.88 C

ATOM 2959 C PRO A 392 10.811 38.872 8.848 1.00 25.91 C

ATOM 2960 O PRO A 392 11.484 39.090 7.838 1.00 22.39 O

ATOM 2961 CB PRO A 392 11.458 39.015 11.320 1.00 25.18 C

ATOM 2962 CG PRO A 392 12.748 39.749 11.240 1.00 23.08 C

ATOM 2963 CD PRO A 392 13.715 38.906 10.419 1.00 25.13 C

ATOM 2964 N ASP A 393 9.534 39.242 8.957 1.00 27.59 N

ATOM 2965 CA ASP A 393 8.842 39.916 7.865 1.00 29.29 C

ATOM 2966 C ASP A 393 9.064 41.423 7.930 1.00 27.91 C

ATOM 2967 O ASP A 393 8.929 42.132 6.928 1.00 26.78 O

ATOM 2968 CB ASP A 393 7.353 39.561 7.898 1.00 36.46 C

ATOM 2969 CG ASP A 393 7.086 38.095 7.503 1.00 41.74 C

ATOM 2970 OD1 ASP A 393 6.234 37.437 8.155 1.00 43.35 O

ATOM 2971 OD2 ASP A 393 7.725 37.603 6.541 1.00 44.06 O

ATOM 2972 N THR A 394 9.422 41.901 9.118 1.00 26.37 N

ATOM 2973 CA THR A 394 9.729 43.311 9.336 1.00 24.35 C

ATOM 2974 C THR A 394 10.728 43.393 10.483 1.00 23.56 C

ATOM 2975 O THR A 394 10.731 42.554 11.386 1.00 23.12 O

ATOM 2976 CB THR A 394 8.493 44.141 9.709 1.00 23.37 C

ATOM 2977 OG1 THR A 394 7.786 43.478 10.759 1.00 24.13 O

ATOM 2978 CG2 THR A 394 7.586 44.333 8.499 1.00 21.34 C

ATOM 2979 N PHE A 395 11.593 44.398 10.430 1.00 20.82 N

ATOM 2980 CA PHE A 395 12.586 44.593 11.468 1.00 17.29 C

ATOM 2981 C PHE A 395 12.067 45.679 12.403 1.00 19.67 C

ATOM 2982 O PHE A 395 11.958 46.845 12.024 1.00 18.04 O

ATOM 2983 CB PHE A 395 13.910 44.960 10.808 1.00 12.56 C

ATOM 2984 CG PHE A 395 14.385 43.916 9.832 1.00 10.12 C

ATOM 2985 CD1 PHE A 395 14.000 43.973 8.501 1.00 8.95 C

ATOM 2986 CD2 PHE A 395 15.153 42.833 10.261 1.00 7.86 C

ATOM 2987 CE1 PHE A 395 14.371 42.961 7.605 1.00 9.04 C

ATOM 2988 CE2 PHE A 395 15.519 41.827 9.378 1.00 6.42 C

ATOM 2989 CZ PHE A 395 15.131 41.883 8.047 1.00 5.60 C

ATOM 2990 N ASN A 396 11.728 45.278 13.625 1.00 20.84 N

ATOM 2991 CA ASN A 396 11.175 46.207 14.600 1.00 24.04 C

ATOM 2992 C ASN A 396 12.168 46.756 15.604 1.00 25.61 C

ATOM 2993 O ASN A 396 12.527 46.084 16.570 1.00 25.96 O

ATOM 2994 CB ASN A 396 10.017 45.550 15.351 1.00 22.74 C

ATOM 2995 CG ASN A 396 9.204 44.625 14.469 1.00 20.52 C

ATOM 2996 OD1 ASN A 396 8.972 44.920 13.291 1.00 17.75 O

ATOM 2997 ND2 ASN A 396 8.765 43.500 15.031 1.00 16.86 N

ATOM 2998 N ILE A 397 12.588 47.994 15.366 1.00 28.44 N

ATOM 2999 CA ILE A 397 13.531 48.678 16.234 1.00 34.09 C

ATOM 3000 C ILE A 397 12.768 49.783 16.961 1.00 34.98 C

ATOM 3001 O ILE A 397 12.354 50.771 16.349 1.00 35.68 O

ATOM 3002 CB ILE A 397 14.718 49.288 15.410 1.00 34.98 C

ATOM 3003 CG1 ILE A 397 15.553 48.160 14.787 1.00 32.64 C

ATOM 3004 CG2 ILE A 397 15.594 50.168 16.303 1.00 32.02 C

ATOM 3005 CD1 ILE A 397 15.531 48.145 13.274 1.00 32.97 C

ATOM 3006 N GLU A 398 12.571 49.594 18.263 1.00 38.27 N

ATOM 3007 CA GLU A 398 11.848 50.549 19.092 1.00 41.64 C

ATOM 3008 C GLU A 398 10.355 50.573 18.738 1.00 42.90 C

ATOM 3009 O GLU A 398 9.652 49.565 18.890 1.00 41.88 O

ATOM 3010 CB GLU A 398 12.453 51.944 18.930 1.00 44.20 C

ATOM 3011 CG GLU A 398 13.010 52.512 20.215 1.00 49.37 C

ATOM 3012 CD GLU A 398 13.284 54.006 20.134 1.00 53.28 C

ATOM 3013 OE1 GLU A 398 14.325 54.393 19.552 1.00 55.67 O

ATOM 3014 OE2 GLU A 398 12.457 54.791 20.653 1.00 54.40 O

ATOM 3015 N ASP A 399 9.885 51.723 18.256 1.00 43.88 N

ATOM 3016 CA ASP A 399 8.488 51.908 17.880 1.00 44.49 C

ATOM 3017 C ASP A 399 8.190 51.446 16.469 1.00 42.66 C

ATOM 3018 O ASP A 399 7.064 51.031 16.169 1.00 43.53 O

ATOM 3019 CB ASP A 399 8.102 53.380 17.998 1.00 47.94 C

ATOM 3020 CG ASP A 399 7.478 53.712 19.341 1.00 52.65 C

ATOM 3021 OD1 ASP A 399 7.444 52.832 20.233 1.00 52.87 O

ATOM 3022 OD2 ASP A 399 7.019 54.862 19.502 1.00 55.78 O

ATOM 3023 N GLN A 400 9.200 51.515 15.609 1.00 38.84 N

ATOM 3024 CA GLN A 400 9.050 51.135 14.210 1.00 35.55 C

ATOM 3025 C GLN A 400 8.922 49.657 13.879 1.00 32.80 C

ATOM 3026 O GLN A 400 9.018 48.778 14.739 1.00 31.61 O

ATOM 3027 CB GLN A 400 10.205 51.706 13.394 1.00 37.52 C

ATOM 3028 CG GLN A 400 10.405 53.203 13.549 1.00 38.60 C

ATOM 3029 CD GLN A 400 9.171 53.991 13.186 1.00 38.40 C

ATOM 3030 OE1 GLN A 400 8.807 54.099 12.011 1.00 37.69 O

ATOM 3031 NE2 GLN A 400 8.509 54.544 14.197 1.00 39.89 N

ATOM 3032 N GLU A 401 8.701 49.422 12.593 1.00 32.82 N

ATOM 3033 CA GLU A 401 8.558 48.095 11.995 1.00 33.82 C

ATOM 3034 C GLU A 401 8.955 48.324 10.537 1.00 31.91 C

ATOM 3035 O GLU A 401 8.126 48.725 9.720 1.00 33.05 O

ATOM 3036 CB GLU A 401 7.104 47.615 12.070 1.00 34.43 C

ATOM 3037 CG GLU A 401 6.694 47.067 13.441 1.00 40.64 C

ATOM 3038 CD GLU A 401 5.482 46.145 13.381 1.00 41.66 C

ATOM 3039 OE1 GLU A 401 5.045 45.638 14.444 1.00 39.59 O

ATOM 3040 OE2 GLU A 401 4.972 45.927 12.261 1.00 43.84 O

ATOM 3041 N TYR A 402 10.227 48.092 10.218 1.00 29.58 N

ATOM 3042 CA TYR A 402 10.726 48.318 8.864 1.00 25.80 C

ATOM 3043 C TYR A 402 10.627 47.138 7.920 1.00 22.98 C

ATOM 3044 O TYR A 402 10.952 46.016 8.279 1.00 23.26 O

ATOM 3045 CB TYR A 402 12.182 48.780 8.918 1.00 25.60 C

ATOM 3046 CG TYR A 402 12.419 50.004 9.781 1.00 22.79 C

ATOM 3047 CD1 TYR A 402 12.403 51.275 9.225 1.00 22.06 C

ATOM 3048 CD2 TYR A 402 12.658 49.889 11.154 1.00 21.74 C

ATOM 3049 CE1 TYR A 402 12.613 52.397 10.007 1.00 21.90 C

ATOM 3050 CE2 TYR A 402 12.871 51.014 11.944 1.00 19.61 C

ATOM 3051 CZ TYR A 402 12.847 52.262 11.362 1.00 19.96 C

ATOM 3052 OH TYR A 402 13.063 53.391 12.117 1.00 20.80 O

ATOM 3053 N SER A 403 10.185 47.407 6.703 1.00 21.90 N

ATOM 3054 CA SER A 403 10.074 46.367 5.693 1.00 22.55 C

ATOM 3055 C SER A 403 11.474 46.141 5.159 1.00 23.28 C

ATOM 3056 O SER A 403 12.363 46.928 5.426 1.00 26.72 O

ATOM 3057 CB SER A 403 9.172 46.832 4.554 1.00 21.33 C

ATOM 3058 OG SER A 403 9.709 47.962 3.897 1.00 15.54 O

ATOM 3059 N PHE A 404 11.682 45.070 4.413 1.00 24.12 N

ATOM 3060 CA PHE A 404 12.996 44.816 3.855 1.00 26.10 C

ATOM 3061 C PHE A 404 13.391 46.026 3.030 1.00 29.18 C

ATOM 3062 O PHE A 404 14.477 46.577 3.186 1.00 31.29 O

ATOM 3063 CB PHE A 404 12.977 43.587 2.953 1.00 25.77 C

ATOM 3064 CG PHE A 404 13.234 42.304 3.679 1.00 27.71 C

ATOM 3065 CD1 PHE A 404 12.332 41.835 4.631 1.00 28.50 C

ATOM 3066 CD2 PHE A 404 14.388 41.580 3.440 1.00 27.12 C

ATOM 3067 CE1 PHE A 404 12.577 40.668 5.334 1.00 27.68 C

ATOM 3068 CE2 PHE A 404 14.638 40.414 4.143 1.00 29.15 C

ATOM 3069 CZ PHE A 404 13.728 39.958 5.093 1.00 27.87 C

ATOM 3070 N LYS A 405 12.496 46.442 2.148 1.00 30.61 N

ATOM 3071 CA LYS A 405 12.755 47.581 1.287 1.00 32.59 C

ATOM 3072 C LYS A 405 13.356 48.772 2.043 1.00 32.66 C

ATOM 3073 O LYS A 405 14.283 49.419 1.554 1.00 34.73 O

ATOM 3074 CB LYS A 405 11.452 47.988 0.585 1.00 35.39 C

ATOM 3075 CG LYS A 405 11.619 48.407 -0.871 1.00 41.00 C

ATOM 3076 CD LYS A 405 11.959 49.896 -0.982 1.00 46.45 C

ATOM 3077 CE LYS A 405 12.180 50.318 -2.426 1.00 49.22 C

ATOM 3078 NZ LYS A 405 10.960 50.065 -3.251 1.00 53.00 N

ATOM 3079 N GLN A 406 12.839 49.061 3.237 1.00 31.60 N

ATOM 3080 CA GLN A 406 13.329 50.201 4.021 1.00 30.47 C

ATOM 3081 C GLN A 406 14.568 49.891 4.846 1.00 28.96 C

ATOM 3082 O GLN A 406 15.363 50.786 5.139 1.00 28.81 O

ATOM 3083 CB GLN A 406 12.250 50.745 4.971 1.00 28.79 C

ATOM 3084 CG GLN A 406 10.824 50.354 4.632 1.00 34.25 C

ATOM 3085 CD GLN A 406 9.810 51.020 5.548 1.00 35.07 C

ATOM 3086 OE1 GLN A 406 9.307 50.413 6.506 1.00 36.96 O

ATOM 3087 NE2 GLN A 406 9.504 52.274 5.257 1.00 32.48 N

ATOM 3088 N PHE A 407 14.742 48.627 5.217 1.00 25.16 N

ATOM 3089 CA PHE A 407 15.882 48.237 6.031 1.00 23.05 C

ATOM 3090 C PHE A 407 17.204 48.119 5.279 1.00 22.56 C

ATOM 3091 O PHE A 407 18.253 48.475 5.807 1.00 20.77 O

ATOM 3092 CB PHE A 407 15.585 46.921 6.732 1.00 23.15 C

ATOM 3093 CG PHE A 407 16.359 46.721 8.002 1.00 24.46 C

ATOM 3094 CD1 PHE A 407 16.166 47.566 9.087 1.00 24.56 C

ATOM 3095 CD2 PHE A 407 17.271 45.672 8.124 1.00 24.39 C

ATOM 3096 CE1 PHE A 407 16.867 47.371 10.280 1.00 26.73 C

ATOM 3097 CE2 PHE A 407 17.975 45.467 9.309 1.00 25.42 C

ATOM 3098 CZ PHE A 407 17.773 46.319 10.389 1.00 27.16 C

ATOM 3099 N LEU A 408 17.152 47.622 4.050 1.00 22.75 N

ATOM 3100 CA LEU A 408 18.352 47.448 3.244 1.00 24.91 C

ATOM 3101 C LEU A 408 19.125 48.741 2.995 1.00 24.98 C

ATOM 3102 O LEU A 408 18.540 49.782 2.701 1.00 24.26 O

ATOM 3103 CB LEU A 408 17.990 46.772 1.918 1.00 23.74 C

ATOM 3104 CG LEU A 408 17.664 45.273 2.013 1.00 22.26 C

ATOM 3105 CD1 LEU A 408 18.597 44.503 1.119 1.00 21.86 C

ATOM 3106 CD2 LEU A 408 17.798 44.789 3.438 1.00 20.64 C

ATOM 3107 N TYR A 409 20.449 48.642 3.114 1.00 27.04 N

ATOM 3108 CA TYR A 409 21.369 49.757 2.937 1.00 30.49 C

ATOM 3109 C TYR A 409 20.892 51.050 3.566 1.00 30.29 C

ATOM 3110 O TYR A 409 21.058 52.117 2.989 1.00 32.77 O

ATOM 3111 CB TYR A 409 21.677 50.026 1.453 1.00 34.04 C

ATOM 3112 CG TYR A 409 21.056 49.075 0.474 1.00 41.10 C

ATOM 3113 CD1 TYR A 409 19.795 49.330 -0.067 1.00 47.15 C

ATOM 3114 CD2 TYR A 409 21.724 47.929 0.078 1.00 43.42 C

ATOM 3115 CE1 TYR A 409 19.209 48.461 -0.976 1.00 49.45 C

ATOM 3116 CE2 TYR A 409 21.160 47.055 -0.822 1.00 49.94 C

ATOM 3117 CZ TYR A 409 19.900 47.322 -1.351 1.00 52.45 C

ATOM 3118 OH TYR A 409 19.331 46.437 -2.246 1.00 53.59 O

ATOM 3119 N ASN A 410 20.312 50.972 4.751 1.00 29.45 N

ATOM 3120 CA ASN A 410 19.840 52.180 5.392 1.00 30.13 C

ATOM 3121 C ASN A 410 20.486 52.345 6.740 1.00 30.56 C

ATOM 3122 O ASN A 410 19.983 51.855 7.741 1.00 29.74 O

ATOM 3123 CB ASN A 410 18.321 52.151 5.551 1.00 32.66 C

ATOM 3124 CG ASN A 410 17.741 53.526 5.852 1.00 37.71 C

ATOM 3125 OD1 ASN A 410 18.438 54.398 6.361 1.00 38.71 O

ATOM 3126 ND2 ASN A 410 16.466 53.726 5.534 1.00 42.03 N

ATOM 3127 N ASN A 411 21.603 53.055 6.770 1.00 32.40 N

ATOM 3128 CA ASN A 411 22.309 53.267 8.020 1.00 31.94 C

ATOM 3129 C ASN A 411 21.779 54.465 8.809 1.00 29.08 C

ATOM 3130 O ASN A 411 22.229 54.734 9.921 1.00 28.51 O

ATOM 3131 CB ASN A 411 23.814 53.401 7.751 1.00 35.82 C

ATOM 3132 CG ASN A 411 24.444 52.091 7.247 1.00 38.46 C

ATOM 3133 OD1 ASN A 411 24.130 51.006 7.741 1.00 37.99 O

ATOM 3134 ND2 ASN A 411 25.335 52.198 6.261 1.00 40.24 N

ATOM 3135 N SER A 412 20.815 55.178 8.241 1.00 28.06 N

ATOM 3136 CA SER A 412 20.222 56.315 8.941 1.00 27.99 C

ATOM 3137 C SER A 412 19.452 55.724 10.100 1.00 25.42 C

ATOM 3138 O SER A 412 19.359 56.306 11.172 1.00 25.27 O

ATOM 3139 CB SER A 412 19.240 57.089 8.057 1.00 28.44 C

ATOM 3140 OG SER A 412 19.385 56.764 6.690 1.00 31.60 O

ATOM 3141 N ILE A 413 18.891 54.550 9.864 1.00 25.33 N

ATOM 3142 CA ILE A 413 18.125 53.853 10.886 1.00 26.28 C

ATOM 3143 C ILE A 413 19.017 53.631 12.097 1.00 25.17 C

ATOM 3144 O ILE A 413 18.628 53.913 13.229 1.00 24.91 O

ATOM 3145 CB ILE A 413 17.627 52.477 10.377 1.00 26.49 C

ATOM 3146 CG1 ILE A 413 16.644 52.668 9.217 1.00 25.27 C

ATOM 3147 CG2 ILE A 413 16.964 51.708 11.505 1.00 25.71 C

ATOM 3148 CD1 ILE A 413 16.112 51.360 8.653 1.00 23.39 C

ATOM 3149 N LEU A 414 20.219 53.126 11.850 1.00 24.28 N

ATOM 3150 CA LEU A 414 21.153 52.872 12.925 1.00 23.32 C

ATOM 3151 C LEU A 414 21.465 54.184 13.640 1.00 24.28 C

ATOM 3152 O LEU A 414 21.335 54.286 14.864 1.00 23.54 O

ATOM 3153 CB LEU A 414 22.428 52.258 12.371 1.00 21.22 C

ATOM 3154 CG LEU A 414 23.448 51.936 13.449 1.00 20.54 C

ATOM 3155 CD1 LEU A 414 22.852 50.888 14.372 1.00 18.45 C

ATOM 3156 CD2 LEU A 414 24.754 51.466 12.802 1.00 19.53 C

ATOM 3157 N LEU A 415 21.870 55.188 12.875 1.00 24.02 N

ATOM 3158 CA LEU A 415 22.202 56.483 13.457 1.00 27.05 C

ATOM 3159 C LEU A 415 20.989 57.078 14.154 1.00 28.25 C

ATOM 3160 O LEU A 415 21.105 57.939 15.018 1.00 29.12 O

ATOM 3161 CB LEU A 415 22.676 57.443 12.367 1.00 24.55 C

ATOM 3162 CG LEU A 415 24.141 57.302 11.967 1.00 23.20 C

ATOM 3163 CD1 LEU A 415 24.574 58.541 11.204 1.00 22.49 C

ATOM 3164 CD2 LEU A 415 24.991 57.107 13.206 1.00 19.55 C

ATOM 3165 N GLU A 416 19.820 56.600 13.765 1.00 32.25 N

ATOM 3166 CA GLU A 416 18.565 57.079 14.315 1.00 35.73 C

ATOM 3167 C GLU A 416 18.361 56.635 15.756 1.00 33.25 C

ATOM 3168 O GLU A 416 18.301 57.444 16.681 1.00 32.45 O

ATOM 3169 CB GLU A 416 17.410 56.551 13.457 1.00 43.69 C

ATOM 3170 CG GLU A 416 16.037 57.102 13.810 1.00 53.10 C

ATOM 3171 CD GLU A 416 15.899 58.560 13.417 1.00 61.07 C

ATOM 3172 OE1 GLU A 416 16.591 58.980 12.459 1.00 62.84 O

ATOM 3173 OE2 GLU A 416 15.108 59.286 14.063 1.00 66.36 O

ATOM 3174 N HIS A 417 18.257 55.328 15.932 1.00 30.08 N

ATOM 3175 CA HIS A 417 18.015 54.754 17.234 1.00 26.90 C

ATOM 3176 C HIS A 417 19.255 54.507 18.083 1.00 26.87 C

ATOM 3177 O HIS A 417 19.183 54.546 19.308 1.00 27.26 O

ATOM 3178 CB HIS A 417 17.214 53.468 17.045 1.00 26.89 C

ATOM 3179 CG HIS A 417 16.053 53.619 16.106 1.00 25.93 C

ATOM 3180 ND1 HIS A 417 14.786 53.955 16.535 1.00 25.02 N

ATOM 3181 CD2 HIS A 417 15.976 53.505 14.757 1.00 23.79 C

ATOM 3182 CE1 HIS A 417 13.978 54.042 15.492 1.00 24.09 C

ATOM 3183 NE2 HIS A 417 14.677 53.774 14.402 1.00 23.58 N

ATOM 3184 N GLY A 418 20.395 54.264 17.446 1.00 25.47 N

ATOM 3185 CA GLY A 418 21.603 54.027 18.205 1.00 23.72 C

ATOM 3186 C GLY A 418 21.803 52.562 18.525 1.00 25.07 C

ATOM 3187 O GLY A 418 20.871 51.758 18.455 1.00 24.42 O

ATOM 3188 N LEU A 419 23.035 52.223 18.886 1.00 25.27 N

ATOM 3189 CA LEU A 419 23.399 50.854 19.200 1.00 23.50 C

ATOM 3190 C LEU A 419 22.637 50.268 20.373 1.00 22.11 C

ATOM 3191 O LEU A 419 22.313 49.087 20.370 1.00 21.75 O

ATOM 3192 CB LEU A 419 24.907 50.766 19.468 1.00 24.78 C

ATOM 3193 CG LEU A 419 25.705 50.226 18.289 1.00 24.81 C

ATOM 3194 CD1 LEU A 419 25.389 48.770 18.094 1.00 27.82 C

ATOM 3195 CD2 LEU A 419 25.328 50.979 17.038 1.00 27.88 C

ATOM 3196 N THR A 420 22.354 51.093 21.375 1.00 23.88 N

ATOM 3197 CA THR A 420 21.657 50.634 22.572 1.00 24.12 C

ATOM 3198 C THR A 420 20.240 50.205 22.233 1.00 25.09 C

ATOM 3199 O THR A 420 19.749 49.181 22.733 1.00 24.50 O

ATOM 3200 CB THR A 420 21.615 51.738 23.639 1.00 22.45 C

ATOM 3201 OG1 THR A 420 22.856 52.448 23.626 1.00 19.57 O

ATOM 3202 CG2 THR A 420 21.409 51.155 25.008 1.00 21.03 C

ATOM 3203 N GLN A 421 19.600 50.984 21.363 1.00 26.11 N

ATOM 3204 CA GLN A 421 18.234 50.703 20.937 1.00 28.16 C

ATOM 3205 C GLN A 421 18.176 49.457 20.052 1.00 26.36 C

ATOM 3206 O GLN A 421 17.231 48.678 20.129 1.00 26.45 O

ATOM 3207 CB GLN A 421 17.675 51.897 20.168 1.00 31.43 C

ATOM 3208 CG GLN A 421 16.173 51.859 20.016 1.00 38.67 C

ATOM 3209 CD GLN A 421 15.476 51.921 21.352 1.00 42.68 C

ATOM 3210 OE1 GLN A 421 14.939 50.913 21.839 1.00 40.94 O

ATOM 3211 NE2 GLN A 421 15.481 53.113 21.961 1.00 43.06 N

ATOM 3212 N PHE A 422 19.189 49.291 19.204 1.00 24.89 N

ATOM 3213 CA PHE A 422 19.287 48.149 18.306 1.00 20.47 C

ATOM 3214 C PHE A 422 19.491 46.880 19.112 1.00 21.02 C

ATOM 3215 O PHE A 422 18.848 45.867 18.850 1.00 21.74 O

ATOM 3216 CB PHE A 422 20.461 48.331 17.345 1.00 19.50 C

ATOM 3217 CG PHE A 422 20.058 48.840 15.998 1.00 17.15 C

ATOM 3218 CD1 PHE A 422 19.462 50.098 15.871 1.00 16.32 C

ATOM 3219 CD2 PHE A 422 20.242 48.059 14.859 1.00 15.56 C

ATOM 3220 CE1 PHE A 422 19.056 50.568 14.631 1.00 14.52 C

ATOM 3221 CE2 PHE A 422 19.834 48.520 13.611 1.00 15.70 C

ATOM 3222 CZ PHE A 422 19.241 49.774 13.496 1.00 17.02 C

ATOM 3223 N VAL A 423 20.398 46.934 20.082 1.00 20.25 N

ATOM 3224 CA VAL A 423 20.672 45.791 20.954 1.00 21.29 C

ATOM 3225 C VAL A 423 19.404 45.414 21.745 1.00 23.19 C

ATOM 3226 O VAL A 423 19.035 44.242 21.835 1.00 24.02 O

ATOM 3227 CB VAL A 423 21.832 46.095 21.966 1.00 20.47 C

ATOM 3228 CG1 VAL A 423 22.147 44.865 22.821 1.00 16.68 C

ATOM 3229 CG2 VAL A 423 23.069 46.535 21.215 1.00 18.69 C

ATOM 3230 N GLU A 424 18.726 46.406 22.311 1.00 23.98 N

ATOM 3231 CA GLU A 424 17.512 46.131 23.078 1.00 25.37 C

ATOM 3232 C GLU A 424 16.386 45.576 22.211 1.00 24.31 C

ATOM 3233 O GLU A 424 15.726 44.605 22.579 1.00 24.36 O

ATOM 3234 CB GLU A 424 17.041 47.401 23.790 1.00 27.18 C

ATOM 3235 CG GLU A 424 17.764 47.644 25.109 1.00 32.84 C

ATOM 3236 CD GLU A 424 17.576 49.048 25.628 1.00 34.74 C

ATOM 3237 OE1 GLU A 424 17.103 49.905 24.847 1.00 36.62 O

ATOM 3238 OE2 GLU A 424 17.899 49.292 26.811 1.00 36.12 O

ATOM 3239 N SER A 425 16.188 46.190 21.050 1.00 24.21 N

ATOM 3240 CA SER A 425 15.146 45.792 20.120 1.00 22.39 C

ATOM 3241 C SER A 425 15.382 44.433 19.485 1.00 23.57 C

ATOM 3242 O SER A 425 14.459 43.626 19.395 1.00 26.30 O

ATOM 3243 CB SER A 425 15.005 46.838 19.017 1.00 19.66 C

ATOM 3244 OG SER A 425 14.586 48.070 19.559 1.00 25.87 O

ATOM 3245 N PHE A 426 16.615 44.180 19.051 1.00 22.07 N

ATOM 3246 CA PHE A 426 16.946 42.926 18.393 1.00 21.25 C

ATOM 3247 C PHE A 426 17.061 41.749 19.345 1.00 20.15 C

ATOM 3248 O PHE A 426 16.999 40.600 18.916 1.00 19.64 O

ATOM 3249 CB PHE A 426 18.229 43.088 17.592 1.00 23.92 C

ATOM 3250 CG PHE A 426 18.024 43.754 16.262 1.00 25.85 C

ATOM 3251 CD1 PHE A 426 16.750 43.855 15.711 1.00 27.90 C

ATOM 3252 CD2 PHE A 426 19.098 44.272 15.558 1.00 27.60 C

ATOM 3253 CE1 PHE A 426 16.553 44.460 14.477 1.00 27.83 C

ATOM 3254 CE2 PHE A 426 18.913 44.877 14.329 1.00 29.94 C

ATOM 3255 CZ PHE A 426 17.636 44.973 13.784 1.00 29.05 C

ATOM 3256 N THR A 427 17.240 42.041 20.633 1.00 20.65 N

ATOM 3257 CA THR A 427 17.314 41.018 21.694 1.00 18.48 C

ATOM 3258 C THR A 427 15.874 40.569 22.013 1.00 18.44 C

ATOM 3259 O THR A 427 15.647 39.492 22.554 1.00 18.58 O

ATOM 3260 CB THR A 427 17.913 41.599 23.005 1.00 15.30 C

ATOM 3261 OG1 THR A 427 19.253 42.031 22.767 1.00 14.13 O

ATOM 3262 CG2 THR A 427 17.904 40.566 24.114 1.00 11.11 C

ATOM 3263 N ARG A 428 14.912 41.421 21.673 1.00 19.80 N

ATOM 3264 CA ARG A 428 13.500 41.156 21.925 1.00 23.13 C

ATOM 3265 C ARG A 428 12.755 40.514 20.759 1.00 20.14 C

ATOM 3266 O ARG A 428 11.756 39.848 20.966 1.00 20.52 O

ATOM 3267 CB ARG A 428 12.784 42.464 22.305 1.00 25.35 C

ATOM 3268 CG ARG A 428 12.792 42.762 23.792 1.00 27.73 C

ATOM 3269 CD ARG A 428 12.140 44.092 24.132 1.00 29.83 C

ATOM 3270 NE ARG A 428 12.023 44.994 22.993 1.00 33.23 N

ATOM 3271 CZ ARG A 428 12.443 46.256 23.005 1.00 38.11 C

ATOM 3272 NH1 ARG A 428 13.008 46.756 24.104 1.00 38.26 N

ATOM 3273 NH2 ARG A 428 12.292 47.026 21.927 1.00 37.85 N

ATOM 3274 N GLN A 429 13.230 40.718 19.539 1.00 19.05 N

ATOM 3275 CA GLN A 429 12.547 40.168 18.384 1.00 16.73 C

ATOM 3276 C GLN A 429 12.922 38.738 18.017 1.00 18.86 C

ATOM 3277 O GLN A 429 14.073 38.443 17.693 1.00 20.90 O

ATOM 3278 CB GLN A 429 12.773 41.059 17.177 1.00 14.57 C

ATOM 3279 CG GLN A 429 12.346 40.402 15.898 1.00 15.18 C

ATOM 3280 CD GLN A 429 12.136 41.395 14.786 1.00 18.03 C

ATOM 3281 OE1 GLN A 429 12.569 42.555 14.869 1.00 19.21 O

ATOM 3282 NE2 GLN A 429 11.471 40.951 13.726 1.00 19.79 N

ATOM 3283 N ILE A 430 11.937 37.847 18.057 1.00 18.88 N

ATOM 3284 CA ILE A 430 12.160 36.454 17.707 1.00 15.85 C

ATOM 3285 C ILE A 430 12.472 36.337 16.206 1.00 15.35 C

ATOM 3286 O ILE A 430 12.028 37.139 15.390 1.00 13.34 O

ATOM 3287 CB ILE A 430 10.916 35.574 18.066 1.00 15.89 C

ATOM 3288 CG1 ILE A 430 11.272 34.094 17.930 1.00 16.05 C

ATOM 3289 CG2 ILE A 430 9.728 35.902 17.148 1.00 12.97 C

ATOM 3290 CD1 ILE A 430 11.460 33.389 19.246 1.00 13.27 C

ATOM 3291 N ALA A 431 13.253 35.323 15.863 1.00 17.05 N

ATOM 3292 CA ALA A 431 13.646 35.058 14.483 1.00 17.12 C

ATOM 3293 C ALA A 431 12.967 33.759 14.032 1.00 16.52 C

ATOM 3294 O ALA A 431 12.562 32.938 14.859 1.00 17.74 O

ATOM 3295 CB ALA A 431 15.174 34.925 14.390 1.00 14.48 C

ATOM 3296 N GLY A 432 12.854 33.565 12.725 1.00 15.37 N

ATOM 3297 CA GLY A 432 12.204 32.371 12.218 1.00 16.85 C

ATOM 3298 C GLY A 432 12.873 31.023 12.419 1.00 18.13 C

ATOM 3299 O GLY A 432 14.053 30.921 12.721 1.00 20.77 O

ATOM 3300 N ARG A 433 12.093 29.966 12.244 1.00 19.74 N

ATOM 3301 CA ARG A 433 12.608 28.611 12.367 1.00 21.92 C

ATOM 3302 C ARG A 433 13.255 28.332 11.026 1.00 23.67 C

ATOM 3303 O ARG A 433 12.859 28.919 10.024 1.00 26.09 O

ATOM 3304 CB ARG A 433 11.462 27.628 12.602 1.00 24.03 C

ATOM 3305 CG ARG A 433 11.895 26.175 12.599 1.00 27.53 C

ATOM 3306 CD ARG A 433 10.785 25.246 13.037 1.00 31.16 C

ATOM 3307 NE ARG A 433 11.177 24.436 14.191 1.00 37.14 N

ATOM 3308 CZ ARG A 433 10.488 23.385 14.631 1.00 37.88 C

ATOM 3309 NH1 ARG A 433 9.370 23.017 14.009 1.00 39.18 N

ATOM 3310 NH2 ARG A 433 10.905 22.713 15.700 1.00 36.11 N

ATOM 3311 N VAL A 434 14.249 27.453 10.986 1.00 25.77 N

ATOM 3312 CA VAL A 434 14.923 27.157 9.716 1.00 25.31 C

ATOM 3313 C VAL A 434 14.532 25.815 9.067 1.00 27.80 C

ATOM 3314 O VAL A 434 14.286 25.753 7.859 1.00 27.15 O

ATOM 3315 CB VAL A 434 16.476 27.216 9.886 1.00 23.84 C

ATOM 3316 CG1 VAL A 434 17.163 26.825 8.589 1.00 22.37 C

ATOM 3317 CG2 VAL A 434 16.916 28.620 10.314 1.00 18.82 C

ATOM 3318 N ALA A 435 14.449 24.756 9.874 1.00 30.23 N

ATOM 3319 CA ALA A 435 14.121 23.413 9.377 1.00 31.52 C

ATOM 3320 C ALA A 435 12.641 23.000 9.263 1.00 32.00 C

ATOM 3321 O ALA A 435 12.338 21.934 8.734 1.00 34.46 O

ATOM 3322 CB ALA A 435 14.876 22.367 10.219 1.00 32.01 C

ATOM 3323 N GLY A 436 11.716 23.812 9.746 1.00 32.11 N

ATOM 3324 CA GLY A 436 10.318 23.419 9.655 1.00 33.14 C

ATOM 3325 C GLY A 436 9.758 23.200 8.250 1.00 31.91 C

ATOM 3326 O GLY A 436 8.960 22.286 8.015 1.00 31.94 O

ATOM 3327 N GLY A 437 10.192 24.040 7.315 1.00 31.83 N

ATOM 3328 CA GLY A 437 9.702 23.982 5.950 1.00 26.43 C

ATOM 3329 C GLY A 437 9.011 25.314 5.697 1.00 25.29 C

ATOM 3330 O GLY A 437 8.750 26.064 6.646 1.00 27.66 O

ATOM 3331 N ARG A 438 8.736 25.621 4.434 1.00 23.71 N

ATOM 3332 CA ARG A 438 8.060 26.862 4.023 1.00 22.44 C

ATOM 3333 C ARG A 438 8.209 28.094 4.933 1.00 22.03 C

ATOM 3334 O ARG A 438 7.206 28.647 5.406 1.00 18.39 O

ATOM 3335 CB ARG A 438 6.562 26.601 3.820 1.00 19.88 C

ATOM 3336 CG ARG A 438 6.210 25.279 3.194 1.00 18.16 C

ATOM 3337 CD ARG A 438 4.725 25.208 2.928 1.00 20.95 C

ATOM 3338 NE ARG A 438 4.427 24.484 1.695 1.00 25.21 N

ATOM 3339 CZ ARG A 438 3.540 23.492 1.603 1.00 26.64 C

ATOM 3340 NH1 ARG A 438 2.852 23.099 2.676 1.00 28.26 N

ATOM 3341 NH2 ARG A 438 3.344 22.882 0.440 1.00 26.15 N

ATOM 3342 N ASN A 439 9.442 28.538 5.172 1.00 20.75 N

ATOM 3343 CA ASN A 439 9.652 29.707 6.013 1.00 18.95 C

ATOM 3344 C ASN A 439 10.674 30.675 5.448 1.00 19.63 C

ATOM 3345 O ASN A 439 11.257 31.463 6.192 1.00 21.25 O

ATOM 3346 CB ASN A 439 10.073 29.306 7.428 1.00 16.76 C

ATOM 3347 CG ASN A 439 9.579 30.295 8.480 1.00 17.23 C

ATOM 3348 OD1 ASN A 439 8.691 31.113 8.222 1.00 15.43 O

ATOM 3349 ND2 ASN A 439 10.149 30.218 9.675 1.00 16.14 N

ATOM 3350 N VAL A 440 10.906 30.613 4.143 1.00 18.77 N

ATOM 3351 CA VAL A 440 11.848 31.533 3.525 1.00 21.98 C

ATOM 3352 C VAL A 440 11.111 32.841 3.168 1.00 23.07 C

ATOM 3353 O VAL A 440 10.164 32.844 2.367 1.00 22.77 O

ATOM 3354 CB VAL A 440 12.480 30.916 2.246 1.00 20.94 C

ATOM 3355 CG1 VAL A 440 13.239 31.999 1.448 1.00 22.91 C

ATOM 3356 CG2 VAL A 440 13.425 29.783 2.627 1.00 18.78 C

ATOM 3357 N PRO A 441 11.556 33.974 3.746 1.00 23.29 N

ATOM 3358 CA PRO A 441 10.900 35.258 3.456 1.00 24.06 C

ATOM 3359 C PRO A 441 10.825 35.497 1.947 1.00 22.24 C

ATOM 3360 O PRO A 441 11.815 35.314 1.247 1.00 22.89 O

ATOM 3361 CB PRO A 441 11.793 36.283 4.155 1.00 21.89 C

ATOM 3362 CG PRO A 441 12.542 35.501 5.202 1.00 21.72 C

ATOM 3363 CD PRO A 441 12.714 34.123 4.648 1.00 22.00 C

ATOM 3364 N ILE A 442 9.662 35.892 1.447 1.00 21.85 N

ATOM 3365 CA ILE A 442 9.516 36.132 0.014 1.00 22.48 C

ATOM 3366 C ILE A 442 10.367 37.306 -0.480 1.00 20.32 C

ATOM 3367 O ILE A 442 10.713 37.389 -1.658 1.00 18.94 O

ATOM 3368 CB ILE A 442 8.037 36.372 -0.347 1.00 22.82 C

ATOM 3369 CG1 ILE A 442 7.277 35.050 -0.211 1.00 24.84 C

ATOM 3370 CG2 ILE A 442 7.920 36.965 -1.735 1.00 18.40 C

ATOM 3371 CD1 ILE A 442 5.920 35.023 -0.855 1.00 27.43 C

ATOM 3372 N ALA A 443 10.716 38.206 0.432 1.00 18.62 N

ATOM 3373 CA ALA A 443 11.527 39.361 0.090 1.00 17.28 C

ATOM 3374 C ALA A 443 12.945 38.948 -0.292 1.00 17.56 C

ATOM 3375 O ALA A 443 13.713 39.737 -0.822 1.00 16.58 O

ATOM 3376 CB ALA A 443 11.572 40.306 1.264 1.00 15.07 C

ATOM 3377 N VAL A 444 13.262 37.686 -0.051 1.00 21.68 N

ATOM 3378 CA VAL A 444 14.592 37.141 -0.302 1.00 22.06 C

ATOM 3379 C VAL A 444 14.531 35.823 -1.118 1.00 22.18 C

ATOM 3380 O VAL A 444 15.411 34.975 -1.017 1.00 26.07 O

ATOM 3381 CB VAL A 444 15.299 36.927 1.098 1.00 21.93 C

ATOM 3382 CG1 VAL A 444 15.358 35.441 1.462 1.00 21.87 C

ATOM 3383 CG2 VAL A 444 16.667 37.591 1.124 1.00 22.90 C

ATOM 3384 N GLN A 445 13.506 35.655 -1.949 1.00 22.20 N

ATOM 3385 CA GLN A 445 13.384 34.421 -2.728 1.00 20.04 C

ATOM 3386 C GLN A 445 14.435 34.195 -3.817 1.00 18.89 C

ATOM 3387 O GLN A 445 14.738 33.047 -4.161 1.00 22.06 O

ATOM 3388 CB GLN A 445 11.963 34.275 -3.329 1.00 19.25 C

ATOM 3389 CG GLN A 445 11.447 35.441 -4.157 1.00 19.01 C

ATOM 3390 CD GLN A 445 10.274 35.040 -5.062 1.00 19.80 C

ATOM 3391 OE1 GLN A 445 9.932 33.861 -5.168 1.00 19.75 O

ATOM 3392 NE2 GLN A 445 9.659 36.025 -5.713 1.00 16.95 N

ATOM 3393 N ALA A 446 14.995 35.263 -4.374 1.00 17.36 N

ATOM 3394 CA ALA A 446 16.023 35.097 -5.403 1.00 15.49 C

ATOM 3395 C ALA A 446 17.199 34.343 -4.803 1.00 15.08 C

ATOM 3396 O ALA A 446 17.713 33.417 -5.397 1.00 14.99 O

ATOM 3397 CB ALA A 446 16.484 36.441 -5.912 1.00 13.28 C

ATOM 3398 N VAL A 447 17.603 34.762 -3.610 1.00 17.19 N

ATOM 3399 CA VAL A 447 18.704 34.166 -2.863 1.00 17.61 C

ATOM 3400 C VAL A 447 18.514 32.656 -2.700 1.00 19.16 C

ATOM 3401 O VAL A 447 19.452 31.870 -2.892 1.00 18.65 O

ATOM 3402 CB VAL A 447 18.826 34.847 -1.462 1.00 17.50 C

ATOM 3403 CG1 VAL A 447 20.146 34.482 -0.805 1.00 19.41 C

ATOM 3404 CG2 VAL A 447 18.708 36.372 -1.613 1.00 14.85 C

ATOM 3405 N ALA A 448 17.300 32.253 -2.342 1.00 20.04 N

ATOM 3406 CA ALA A 448 16.981 30.833 -2.161 1.00 21.50 C

ATOM 3407 C ALA A 448 16.983 30.064 -3.495 1.00 21.59 C

ATOM 3408 O ALA A 448 17.448 28.917 -3.565 1.00 21.98 O

ATOM 3409 CB ALA A 448 15.622 30.683 -1.470 1.00 20.40 C

ATOM 3410 N LYS A 449 16.458 30.684 -4.550 1.00 20.73 N

ATOM 3411 CA LYS A 449 16.432 30.029 -5.849 1.00 21.75 C

ATOM 3412 C LYS A 449 17.865 29.711 -6.261 1.00 18.78 C

ATOM 3413 O LYS A 449 18.191 28.591 -6.627 1.00 17.46 O

ATOM 3414 CB LYS A 449 15.774 30.940 -6.886 1.00 23.09 C

ATOM 3415 CG LYS A 449 15.049 30.178 -7.987 1.00 22.59 C

ATOM 3416 CD LYS A 449 15.117 30.947 -9.305 1.00 23.08 C

ATOM 3417 CE LYS A 449 14.650 30.100 -10.483 1.00 23.71 C

ATOM 3418 NZ LYS A 449 15.706 29.175 -10.982 1.00 24.45 N

ATOM 3419 N ALA A 450 18.714 30.721 -6.178 1.00 20.57 N

ATOM 3420 CA ALA A 450 20.122 30.598 -6.524 1.00 21.11 C

ATOM 3421 C ALA A 450 20.818 29.524 -5.692 1.00 19.81 C

ATOM 3422 O ALA A 450 21.616 28.760 -6.218 1.00 20.23 O

ATOM 3423 CB ALA A 450 20.821 31.941 -6.326 1.00 20.30 C

ATOM 3424 N SER A 451 20.530 29.469 -4.396 1.00 18.36 N

ATOM 3425 CA SER A 451 21.169 28.455 -3.572 1.00 15.19 C

ATOM 3426 C SER A 451 20.909 27.141 -4.267 1.00 15.11 C

ATOM 3427 O SER A 451 21.824 26.353 -4.466 1.00 18.55 O

ATOM 3428 CB SER A 451 20.602 28.428 -2.145 1.00 14.76 C

ATOM 3429 OG SER A 451 20.749 29.684 -1.486 1.00 15.41 O

ATOM 3430 N ILE A 452 19.661 26.916 -4.666 1.00 17.38 N

ATOM 3431 CA ILE A 452 19.299 25.679 -5.364 1.00 17.91 C

ATOM 3432 C ILE A 452 20.086 25.479 -6.675 1.00 16.57 C

ATOM 3433 O ILE A 452 20.704 24.431 -6.887 1.00 12.54 O

ATOM 3434 CB ILE A 452 17.789 25.650 -5.705 1.00 15.60 C

ATOM 3435 CG1 ILE A 452 16.960 25.802 -4.437 1.00 14.64 C

ATOM 3436 CG2 ILE A 452 17.437 24.331 -6.371 1.00 16.82 C

ATOM 3437 CD1 ILE A 452 15.489 25.529 -4.644 1.00 8.25 C

ATOM 3438 N ASP A 453 20.050 26.508 -7.526 1.00 16.49 N

ATOM 3439 CA ASP A 453 20.705 26.512 -8.828 1.00 19.47 C

ATOM 3440 C ASP A 453 22.195 26.297 -8.768 1.00 19.52 C

ATOM 3441 O ASP A 453 22.725 25.381 -9.397 1.00 22.59 O

ATOM 3442 CB ASP A 453 20.444 27.837 -9.541 1.00 21.79 C

ATOM 3443 CG ASP A 453 18.968 28.075 -9.831 1.00 24.81 C

ATOM 3444 OD1 ASP A 453 18.240 27.091 -10.127 1.00 25.54 O

ATOM 3445 OD2 ASP A 453 18.545 29.249 -9.765 1.00 23.28 O

ATOM 3446 N GLN A 454 22.870 27.164 -8.028 1.00 20.14 N

ATOM 3447 CA GLN A 454 24.311 27.091 -7.870 1.00 18.41 C

ATOM 3448 C GLN A 454 24.764 25.739 -7.389 1.00 18.57 C

ATOM 3449 O GLN A 454 25.789 25.264 -7.840 1.00 20.27 O

ATOM 3450 CB GLN A 454 24.774 28.152 -6.898 1.00 21.48 C

ATOM 3451 CG GLN A 454 24.830 29.518 -7.524 1.00 23.02 C

ATOM 3452 CD GLN A 454 24.702 30.622 -6.499 1.00 25.45 C

ATOM 3453 OE1 GLN A 454 24.821 31.803 -6.835 1.00 26.61 O

ATOM 3454 NE2 GLN A 454 24.453 30.247 -5.238 1.00 21.83 N

ATOM 3455 N SER A 455 24.005 25.127 -6.478 1.00 17.70 N

ATOM 3456 CA SER A 455 24.315 23.797 -5.946 1.00 15.63 C

ATOM 3457 C SER A 455 24.322 22.749 -7.044 1.00 16.41 C

ATOM 3458 O SER A 455 25.103 21.797 -6.994 1.00 18.28 O

ATOM 3459 CB SER A 455 23.278 23.381 -4.915 1.00 14.14 C

ATOM 3460 OG SER A 455 23.351 24.212 -3.780 1.00 21.39 O

ATOM 3461 N ARG A 456 23.429 22.928 -8.022 1.00 15.37 N

ATOM 3462 CA ARG A 456 23.287 22.021 -9.163 1.00 14.05 C

ATOM 3463 C ARG A 456 24.423 22.327 -10.131 1.00 14.21 C

ATOM 3464 O ARG A 456 24.973 21.447 -10.803 1.00 8.56 O

ATOM 3465 CB ARG A 456 21.940 22.267 -9.863 1.00 14.95 C

ATOM 3466 CG ARG A 456 20.713 21.780 -9.090 1.00 15.98 C

ATOM 3467 CD ARG A 456 19.391 22.228 -9.714 1.00 14.29 C

ATOM 3468 NE ARG A 456 18.250 21.788 -8.912 1.00 16.23 N

ATOM 3469 CZ ARG A 456 16.979 21.808 -9.312 1.00 15.40 C

ATOM 3470 NH1 ARG A 456 16.661 22.252 -10.515 1.00 13.75 N

ATOM 3471 NH2 ARG A 456 16.026 21.377 -8.505 1.00 11.16 N

ATOM 3472 N GLU A 457 24.753 23.610 -10.176 1.00 15.40 N

ATOM 3473 CA GLU A 457 25.808 24.135 -11.017 1.00 19.23 C

ATOM 3474 C GLU A 457 27.146 23.500 -10.603 1.00 18.98 C

ATOM 3475 O GLU A 457 27.956 23.108 -11.443 1.00 19.98 O

ATOM 3476 CB GLU A 457 25.862 25.648 -10.835 1.00 23.75 C

ATOM 3477 CG GLU A 457 26.209 26.437 -12.075 1.00 36.04 C

ATOM 3478 CD GLU A 457 26.850 27.797 -11.746 1.00 44.16 C

ATOM 3479 OE1 GLU A 457 28.092 27.944 -11.915 1.00 46.69 O

ATOM 3480 OE2 GLU A 457 26.108 28.715 -11.314 1.00 46.19 O

ATOM 3481 N MET A 458 27.363 23.391 -9.295 1.00 16.66 N

ATOM 3482 CA MET A 458 28.590 22.824 -8.745 1.00 13.30 C

ATOM 3483 C MET A 458 28.525 21.307 -8.671 1.00 12.70 C

ATOM 3484 O MET A 458 29.297 20.670 -7.941 1.00 13.02 O

ATOM 3485 CB MET A 458 28.839 23.412 -7.349 1.00 9.38 C

ATOM 3486 CG MET A 458 28.931 24.934 -7.331 1.00 8.63 C

ATOM 3487 SD MET A 458 29.393 25.633 -5.730 1.00 12.45 S

ATOM 3488 CE MET A 458 27.875 25.627 -4.886 1.00 8.27 C

ATOM 3489 N LYS A 459 27.594 20.740 -9.429 1.00 11.60 N

ATOM 3490 CA LYS A 459 27.395 19.294 -9.476 1.00 12.67 C

ATOM 3491 C LYS A 459 27.356 18.593 -8.106 1.00 13.15 C

ATOM 3492 O LYS A 459 28.012 17.565 -7.915 1.00 13.60 O

ATOM 3493 CB LYS A 459 28.479 18.640 -10.347 1.00 10.69 C

ATOM 3494 CG LYS A 459 28.507 19.130 -11.775 1.00 9.82 C

ATOM 3495 CD LYS A 459 27.163 18.968 -12.439 1.00 11.32 C

ATOM 3496 CE LYS A 459 26.781 17.497 -12.520 1.00 15.86 C

ATOM 3497 NZ LYS A 459 27.462 16.765 -13.645 1.00 15.04 N

ATOM 3498 N TYR A 460 26.581 19.129 -7.166 1.00 13.18 N

ATOM 3499 CA TYR A 460 26.474 18.524 -5.845 1.00 14.30 C

ATOM 3500 C TYR A 460 25.903 17.110 -5.915 1.00 15.79 C

ATOM 3501 O TYR A 460 25.241 16.742 -6.875 1.00 15.84 O

ATOM 3502 CB TYR A 460 25.559 19.364 -4.974 1.00 13.70 C

ATOM 3503 CG TYR A 460 26.248 20.347 -4.068 1.00 13.64 C

ATOM 3504 CD1 TYR A 460 27.203 21.233 -4.558 1.00 15.56 C

ATOM 3505 CD2 TYR A 460 25.922 20.418 -2.724 1.00 12.50 C

ATOM 3506 CE1 TYR A 460 27.813 22.168 -3.719 1.00 13.11 C

ATOM 3507 CE2 TYR A 460 26.522 21.344 -1.887 1.00 13.94 C

ATOM 3508 CZ TYR A 460 27.464 22.215 -2.385 1.00 11.90 C

ATOM 3509 OH TYR A 460 28.049 23.119 -1.536 1.00 11.94 O

ATOM 3510 N GLN A 461 26.154 16.319 -4.885 1.00 21.45 N

ATOM 3511 CA GLN A 461 25.640 14.953 -4.838 1.00 25.07 C

ATOM 3512 C GLN A 461 24.345 14.985 -4.025 1.00 26.98 C

ATOM 3513 O GLN A 461 24.114 15.937 -3.279 1.00 30.12 O

ATOM 3514 CB GLN A 461 26.668 14.019 -4.181 1.00 25.94 C

ATOM 3515 CG GLN A 461 27.560 13.284 -5.175 1.00 25.73 C

ATOM 3516 CD GLN A 461 28.660 12.516 -4.488 1.00 27.60 C

ATOM 3517 OE1 GLN A 461 28.414 11.536 -3.771 1.00 26.14 O

ATOM 3518 NE2 GLN A 461 29.890 12.964 -4.690 1.00 32.50 N

ATOM 3519 N SER A 462 23.512 13.950 -4.160 1.00 26.61 N

ATOM 3520 CA SER A 462 22.232 13.887 -3.460 1.00 23.84 C

ATOM 3521 C SER A 462 22.310 13.957 -1.935 1.00 23.74 C

ATOM 3522 O SER A 462 23.349 13.697 -1.336 1.00 20.78 O

ATOM 3523 CB SER A 462 21.504 12.624 -3.849 1.00 24.00 C

ATOM 3524 OG SER A 462 21.980 11.570 -3.047 1.00 25.62 O

ATOM 3525 N LEU A 463 21.183 14.309 -1.319 1.00 22.99 N

ATOM 3526 CA LEU A 463 21.096 14.438 0.126 1.00 20.05 C

ATOM 3527 C LEU A 463 21.446 13.159 0.880 1.00 18.14 C

ATOM 3528 O LEU A 463 21.914 13.203 2.010 1.00 17.29 O

ATOM 3529 CB LEU A 463 19.682 14.885 0.531 1.00 19.65 C

ATOM 3530 CG LEU A 463 19.171 14.330 1.878 1.00 20.02 C

ATOM 3531 CD1 LEU A 463 19.753 15.133 3.038 1.00 19.48 C

ATOM 3532 CD2 LEU A 463 17.658 14.357 1.914 1.00 17.05 C

ATOM 3533 N ASN A 464 21.216 12.009 0.273 1.00 18.35 N

ATOM 3534 CA ASN A 464 21.502 10.782 0.990 1.00 17.98 C

ATOM 3535 C ASN A 464 22.960 10.432 0.854 1.00 18.99 C

ATOM 3536 O ASN A 464 23.501 9.688 1.677 1.00 18.53 O

ATOM 3537 CB ASN A 464 20.614 9.643 0.490 1.00 18.06 C

ATOM 3538 CG ASN A 464 19.296 9.553 1.256 1.00 16.46 C

ATOM 3539 OD1 ASN A 464 18.353 8.899 0.815 1.00 14.52 O

ATOM 3540 ND2 ASN A 464 19.230 10.217 2.413 1.00 13.68 N

ATOM 3541 N GLU A 465 23.593 10.993 -0.180 1.00 20.29 N

ATOM 3542 CA GLU A 465 25.012 10.775 -0.434 1.00 17.84 C

ATOM 3543 C GLU A 465 25.728 11.473 0.693 1.00 16.06 C

ATOM 3544 O GLU A 465 26.615 10.898 1.312 1.00 17.48 O

ATOM 3545 CB GLU A 465 25.433 11.382 -1.777 1.00 20.49 C

ATOM 3546 CG GLU A 465 25.332 10.424 -2.962 1.00 27.02 C

ATOM 3547 CD GLU A 465 25.572 8.963 -2.579 1.00 32.07 C

ATOM 3548 OE1 GLU A 465 26.257 8.700 -1.574 1.00 37.07 O

ATOM 3549 OE2 GLU A 465 25.078 8.064 -3.285 1.00 37.23 O

ATOM 3550 N TYR A 466 25.317 12.711 0.967 1.00 14.99 N

ATOM 3551 CA TYR A 466 25.916 13.513 2.041 1.00 13.98 C

ATOM 3552 C TYR A 466 25.538 12.979 3.418 1.00 14.49 C

ATOM 3553 O TYR A 466 26.311 13.109 4.361 1.00 17.88 O

ATOM 3554 CB TYR A 466 25.522 14.993 1.918 1.00 9.08 C

ATOM 3555 CG TYR A 466 26.341 15.752 0.891 1.00 10.71 C

ATOM 3556 CD1 TYR A 466 27.645 16.166 1.170 1.00 13.30 C

ATOM 3557 CD2 TYR A 466 25.827 16.033 -0.374 1.00 12.47 C

ATOM 3558 CE1 TYR A 466 28.421 16.845 0.204 1.00 13.56 C

ATOM 3559 CE2 TYR A 466 26.589 16.708 -1.347 1.00 12.41 C

ATOM 3560 CZ TYR A 466 27.881 17.105 -1.048 1.00 12.47 C

ATOM 3561 OH TYR A 466 28.641 17.749 -1.990 1.00 11.77 O

ATOM 3562 N ARG A 467 24.364 12.370 3.537 1.00 14.47 N

ATOM 3563 CA ARG A 467 23.948 11.811 4.816 1.00 15.51 C

ATOM 3564 C ARG A 467 24.846 10.631 5.109 1.00 16.65 C

ATOM 3565 O ARG A 467 25.362 10.510 6.223 1.00 18.76 O

ATOM 3566 CB ARG A 467 22.493 11.344 4.774 1.00 14.53 C

ATOM 3567 CG ARG A 467 21.503 12.397 5.193 1.00 12.65 C

ATOM 3568 CD ARG A 467 20.091 11.856 5.132 1.00 12.05 C

ATOM 3569 NE ARG A 467 19.813 11.012 6.287 1.00 9.57 N

ATOM 3570 CZ ARG A 467 19.688 11.459 7.534 1.00 10.06 C

ATOM 3571 NH1 ARG A 467 19.813 12.756 7.809 1.00 11.23 N

ATOM 3572 NH2 ARG A 467 19.456 10.604 8.518 1.00 6.50 N

ATOM 3573 N LYS A 468 25.040 9.774 4.098 1.00 16.26 N

ATOM 3574 CA LYS A 468 25.891 8.573 4.223 1.00 15.65 C

ATOM 3575 C LYS A 468 27.323 8.974 4.548 1.00 17.97 C

ATOM 3576 O LYS A 468 27.984 8.358 5.384 1.00 21.54 O

ATOM 3577 CB LYS A 468 25.901 7.765 2.925 1.00 10.28 C

ATOM 3578 CG LYS A 468 25.022 6.545 2.938 1.00 2.00 C

ATOM 3579 CD LYS A 468 24.275 6.478 1.652 1.00 2.00 C

ATOM 3580 CE LYS A 468 24.703 5.296 0.829 1.00 5.55 C

ATOM 3581 NZ LYS A 468 24.794 5.611 -0.631 1.00 8.98 N

ATOM 3582 N ARG A 469 27.784 10.022 3.878 1.00 19.84 N

ATOM 3583 CA ARG A 469 29.129 10.535 4.064 1.00 20.82 C

ATOM 3584 C ARG A 469 29.347 11.015 5.502 1.00 21.41 C

ATOM 3585 O ARG A 469 30.453 10.886 6.055 1.00 23.81 O

ATOM 3586 CB ARG A 469 29.371 11.661 3.048 1.00 20.87 C

ATOM 3587 CG ARG A 469 30.548 12.587 3.315 1.00 22.51 C

ATOM 3588 CD ARG A 469 31.879 11.884 3.240 1.00 18.29 C

ATOM 3589 NE ARG A 469 32.582 12.088 4.500 1.00 18.49 N

ATOM 3590 CZ ARG A 469 33.485 13.035 4.718 1.00 18.33 C

ATOM 3591 NH1 ARG A 469 33.823 13.890 3.764 1.00 17.90 N

ATOM 3592 NH2 ARG A 469 34.035 13.139 5.910 1.00 18.98 N

ATOM 3593 N PHE A 470 28.300 11.541 6.128 1.00 20.33 N

ATOM 3594 CA PHE A 470 28.456 12.016 7.495 1.00 21.12 C

ATOM 3595 C PHE A 470 27.949 11.050 8.560 1.00 22.07 C

ATOM 3596 O PHE A 470 27.535 11.451 9.644 1.00 21.72 O

ATOM 3597 CB PHE A 470 27.833 13.405 7.647 1.00 19.24 C

ATOM 3598 CG PHE A 470 28.752 14.509 7.211 1.00 19.94 C

ATOM 3599 CD1 PHE A 470 29.657 15.064 8.100 1.00 21.83 C

ATOM 3600 CD2 PHE A 470 28.767 14.943 5.895 1.00 20.37 C

ATOM 3601 CE1 PHE A 470 30.567 16.024 7.687 1.00 19.47 C

ATOM 3602 CE2 PHE A 470 29.668 15.898 5.476 1.00 18.27 C

ATOM 3603 CZ PHE A 470 30.572 16.439 6.375 1.00 18.32 C

ATOM 3604 N SER A 471 28.019 9.762 8.238 1.00 24.78 N

ATOM 3605 CA SER A 471 27.618 8.684 9.146 1.00 26.77 C

ATOM 3606 C SER A 471 26.148 8.694 9.552 1.00 27.35 C

ATOM 3607 O SER A 471 25.792 8.317 10.677 1.00 27.18 O

ATOM 3608 CB SER A 471 28.495 8.696 10.401 1.00 25.43 C

ATOM 3609 OG SER A 471 29.801 8.239 10.102 1.00 25.99 O

ATOM 3610 N LEU A 472 25.297 9.117 8.627 1.00 26.99 N

ATOM 3611 CA LEU A 472 23.871 9.162 8.880 1.00 25.97 C

ATOM 3612 C LEU A 472 23.208 8.114 7.991 1.00 27.20 C

ATOM 3613 O LEU A 472 23.766 7.727 6.955 1.00 24.35 O

ATOM 3614 CB LEU A 472 23.330 10.566 8.576 1.00 22.90 C

ATOM 3615 CG LEU A 472 24.003 11.718 9.333 1.00 20.70 C

ATOM 3616 CD1 LEU A 472 23.245 12.993 9.055 1.00 20.80 C

ATOM 3617 CD2 LEU A 472 24.046 11.439 10.840 1.00 18.25 C

ATOM 3618 N LYS A 473 22.037 7.634 8.414 1.00 28.46 N

ATOM 3619 CA LYS A 473 21.291 6.632 7.653 1.00 26.48 C

ATOM 3620 C LYS A 473 20.444 7.330 6.602 1.00 24.95 C

ATOM 3621 O LYS A 473 19.688 8.255 6.910 1.00 26.36 O

ATOM 3622 CB LYS A 473 20.392 5.840 8.587 1.00 30.27 C

ATOM 3623 CG LYS A 473 20.396 4.350 8.333 1.00 36.81 C

ATOM 3624 CD LYS A 473 19.448 3.646 9.289 1.00 43.34 C

ATOM 3625 CE LYS A 473 17.995 3.942 8.931 1.00 47.88 C

ATOM 3626 NZ LYS A 473 17.078 2.837 9.350 1.00 50.54 N

ATOM 3627 N PRO A 474 20.555 6.904 5.339 1.00 21.45 N

ATOM 3628 CA PRO A 474 19.756 7.556 4.293 1.00 20.66 C

ATOM 3629 C PRO A 474 18.231 7.476 4.506 1.00 21.02 C

ATOM 3630 O PRO A 474 17.701 6.480 5.018 1.00 21.15 O

ATOM 3631 CB PRO A 474 20.194 6.854 3.011 1.00 17.98 C

ATOM 3632 CG PRO A 474 21.483 6.165 3.362 1.00 18.44 C

ATOM 3633 CD PRO A 474 21.398 5.825 4.807 1.00 19.62 C

ATOM 3634 N TYR A 475 17.533 8.544 4.129 1.00 21.88 N

ATOM 3635 CA TYR A 475 16.076 8.598 4.245 1.00 19.19 C

ATOM 3636 C TYR A 475 15.472 7.677 3.197 1.00 19.04 C

ATOM 3637 O TYR A 475 15.866 7.690 2.032 1.00 17.86 O

ATOM 3638 CB TYR A 475 15.568 10.019 4.019 1.00 15.05 C

ATOM 3639 CG TYR A 475 15.809 10.939 5.186 1.00 14.98 C

ATOM 3640 CD1 TYR A 475 16.328 12.220 4.986 1.00 16.49 C

ATOM 3641 CD2 TYR A 475 15.513 10.541 6.486 1.00 12.03 C

ATOM 3642 CE1 TYR A 475 16.541 13.087 6.052 1.00 14.60 C

ATOM 3643 CE2 TYR A 475 15.724 11.394 7.556 1.00 13.01 C

ATOM 3644 CZ TYR A 475 16.237 12.669 7.332 1.00 14.78 C

ATOM 3645 OH TYR A 475 16.437 13.541 8.379 1.00 14.29 O

ATOM 3646 N THR A 476 14.500 6.886 3.625 1.00 20.61 N

ATOM 3647 CA THR A 476 13.844 5.929 2.752 1.00 22.66 C

ATOM 3648 C THR A 476 12.602 6.465 2.047 1.00 22.19 C

ATOM 3649 O THR A 476 12.112 5.857 1.103 1.00 21.04 O

ATOM 3650 CB THR A 476 13.440 4.711 3.546 1.00 23.64 C

ATOM 3651 OG1 THR A 476 12.373 5.081 4.420 1.00 28.07 O

ATOM 3652 CG2 THR A 476 14.607 4.203 4.393 1.00 23.87 C

ATOM 3653 N SER A 477 12.095 7.599 2.509 1.00 24.20 N

ATOM 3654 CA SER A 477 10.912 8.215 1.910 1.00 24.59 C

ATOM 3655 C SER A 477 10.923 9.728 2.159 1.00 22.44 C

ATOM 3656 O SER A 477 11.638 10.200 3.044 1.00 23.30 O

ATOM 3657 CB SER A 477 9.642 7.595 2.514 1.00 26.72 C

ATOM 3658 OG SER A 477 9.676 7.589 3.942 1.00 26.32 O

ATOM 3659 N PHE A 478 10.148 10.488 1.385 1.00 19.31 N

ATOM 3660 CA PHE A 478 10.081 11.935 1.597 1.00 19.97 C

ATOM 3661 C PHE A 478 9.337 12.262 2.879 1.00 21.03 C

ATOM 3662 O PHE A 478 9.489 13.355 3.422 1.00 21.98 O

ATOM 3663 CB PHE A 478 9.371 12.631 0.449 1.00 17.44 C

ATOM 3664 CG PHE A 478 10.128 12.588 -0.841 1.00 19.84 C

ATOM 3665 CD1 PHE A 478 9.976 11.522 -1.714 1.00 17.91 C

ATOM 3666 CD2 PHE A 478 10.973 13.618 -1.192 1.00 17.11 C

ATOM 3667 CE1 PHE A 478 10.650 11.492 -2.906 1.00 16.74 C

ATOM 3668 CE2 PHE A 478 11.645 13.578 -2.386 1.00 16.77 C

ATOM 3669 CZ PHE A 478 11.483 12.520 -3.241 1.00 14.82 C

ATOM 3670 N GLU A 479 8.530 11.311 3.350 1.00 22.91 N

ATOM 3671 CA GLU A 479 7.753 11.474 4.576 1.00 23.03 C

ATOM 3672 C GLU A 479 8.653 11.336 5.800 1.00 22.50 C

ATOM 3673 O GLU A 479 8.394 11.936 6.848 1.00 21.06 O

ATOM 3674 CB GLU A 479 6.645 10.428 4.643 1.00 26.36 C

ATOM 3675 CG GLU A 479 5.463 10.694 3.722 1.00 33.34 C

ATOM 3676 CD GLU A 479 4.158 10.047 4.218 1.00 36.80 C

ATOM 3677 OE1 GLU A 479 4.125 8.805 4.404 1.00 38.36 O

ATOM 3678 OE2 GLU A 479 3.163 10.784 4.418 1.00 37.47 O

ATOM 3679 N GLU A 480 9.711 10.541 5.661 1.00 22.22 N

ATOM 3680 CA GLU A 480 10.655 10.335 6.751 1.00 23.38 C

ATOM 3681 C GLU A 480 11.574 11.538 6.850 1.00 22.58 C

ATOM 3682 O GLU A 480 12.074 11.874 7.935 1.00 21.33 O

ATOM 3683 CB GLU A 480 11.498 9.091 6.504 1.00 28.47 C

ATOM 3684 CG GLU A 480 12.645 8.958 7.485 1.00 33.21 C

ATOM 3685 CD GLU A 480 13.413 7.672 7.304 1.00 36.79 C

ATOM 3686 OE1 GLU A 480 14.123 7.267 8.248 1.00 41.05 O

ATOM 3687 OE2 GLU A 480 13.311 7.071 6.216 1.00 39.85 O

ATOM 3688 N LEU A 481 11.796 12.169 5.699 1.00 18.20 N

ATOM 3689 CA LEU A 481 12.630 13.344 5.619 1.00 15.60 C

ATOM 3690 C LEU A 481 11.915 14.529 6.270 1.00 17.73 C

ATOM 3691 O LEU A 481 12.469 15.188 7.141 1.00 17.12 O

ATOM 3692 CB LEU A 481 12.945 13.664 4.161 1.00 11.87 C

ATOM 3693 CG LEU A 481 13.344 15.123 3.907 1.00 10.97 C

ATOM 3694 CD1 LEU A 481 14.595 15.440 4.712 1.00 11.66 C

ATOM 3695 CD2 LEU A 481 13.581 15.365 2.424 1.00 7.15 C

ATOM 3696 N THR A 482 10.669 14.776 5.864 1.00 20.57 N

ATOM 3697 CA THR A 482 9.878 15.905 6.387 1.00 21.40 C

ATOM 3698 C THR A 482 9.142 15.638 7.693 1.00 23.12 C

ATOM 3699 O THR A 482 8.892 16.566 8.476 1.00 23.30 O

ATOM 3700 CB THR A 482 8.808 16.379 5.378 1.00 19.89 C

ATOM 3701 OG1 THR A 482 7.807 15.365 5.240 1.00 20.26 O

ATOM 3702 CG2 THR A 482 9.423 16.664 4.017 1.00 17.99 C

ATOM 3703 N GLY A 483 8.769 14.382 7.921 1.00 23.93 N

ATOM 3704 CA GLY A 483 8.059 14.047 9.142 1.00 28.24 C

ATOM 3705 C GLY A 483 6.569 14.370 9.075 1.00 29.66 C

ATOM 3706 O GLY A 483 5.852 14.238 10.068 1.00 30.57 O

ATOM 3707 N GLU A 484 6.103 14.800 7.906 1.00 28.68 N

ATOM 3708 CA GLU A 484 4.696 15.118 7.717 1.00 26.70 C

ATOM 3709 C GLU A 484 4.213 14.474 6.407 1.00 25.74 C

ATOM 3710 O GLU A 484 4.870 13.577 5.895 1.00 25.33 O

ATOM 3711 CB GLU A 484 4.490 16.635 7.716 1.00 25.19 C

ATOM 3712 CG GLU A 484 5.523 17.388 6.926 1.00 26.75 C

ATOM 3713 CD GLU A 484 5.078 17.646 5.503 1.00 29.53 C

ATOM 3714 OE1 GLU A 484 5.468 16.866 4.596 1.00 27.05 O

ATOM 3715 OE2 GLU A 484 4.333 18.632 5.303 1.00 31.38 O

ATOM 3716 N LYS A 485 3.080 14.924 5.862 1.00 25.84 N

ATOM 3717 CA LYS A 485 2.540 14.314 4.645 1.00 21.52 C

ATOM 3718 C LYS A 485 2.390 15.205 3.431 1.00 20.29 C

ATOM 3719 O LYS A 485 2.577 14.748 2.305 1.00 16.20 O

ATOM 3720 CB LYS A 485 1.175 13.694 4.940 1.00 24.75 C

ATOM 3721 CG LYS A 485 1.179 12.643 6.037 1.00 26.67 C

ATOM 3722 CD LYS A 485 0.167 11.549 5.768 1.00 26.75 C

ATOM 3723 CE LYS A 485 0.155 10.553 6.914 1.00 31.11 C

ATOM 3724 NZ LYS A 485 0.555 9.187 6.451 1.00 35.37 N

ATOM 3725 N GLU A 486 2.044 16.470 3.654 1.00 22.43 N

ATOM 3726 CA GLU A 486 1.831 17.412 2.549 1.00 24.83 C

ATOM 3727 C GLU A 486 3.057 17.792 1.726 1.00 25.34 C

ATOM 3728 O GLU A 486 3.052 17.621 0.497 1.00 23.90 O

ATOM 3729 CB GLU A 486 1.164 18.687 3.058 1.00 26.11 C

ATOM 3730 CG GLU A 486 0.570 19.539 1.946 1.00 28.70 C

ATOM 3731 CD GLU A 486 -0.023 20.852 2.456 1.00 32.76 C

ATOM 3732 OE1 GLU A 486 -0.076 21.829 1.675 1.00 34.03 O

ATOM 3733 OE2 GLU A 486 -0.436 20.909 3.637 1.00 34.92 O

ATOM 3734 N MET A 487 4.088 18.327 2.392 1.00 23.18 N

ATOM 3735 CA MET A 487 5.316 18.729 1.705 1.00 19.25 C

ATOM 3736 C MET A 487 5.975 17.506 1.092 1.00 17.20 C

ATOM 3737 O MET A 487 6.539 17.589 -0.002 1.00 13.63 O

ATOM 3738 CB MET A 487 6.279 19.422 2.672 1.00 18.78 C

ATOM 3739 CG MET A 487 6.050 20.924 2.786 1.00 17.11 C

ATOM 3740 SD MET A 487 6.872 21.667 4.214 1.00 18.13 S

ATOM 3741 CE MET A 487 7.167 20.213 5.290 1.00 19.60 C

ATOM 3742 N ALA A 488 5.886 16.377 1.802 1.00 15.22 N

ATOM 3743 CA ALA A 488 6.449 15.099 1.344 1.00 15.67 C

ATOM 3744 C ALA A 488 5.810 14.681 0.022 1.00 17.25 C

ATOM 3745 O ALA A 488 6.477 14.201 -0.896 1.00 16.36 O

ATOM 3746 CB ALA A 488 6.216 14.012 2.394 1.00 10.47 C

ATOM 3747 N ALA A 489 4.497 14.851 -0.054 1.00 20.73 N

ATOM 3748 CA ALA A 489 3.748 14.527 -1.252 1.00 20.98 C

ATOM 3749 C ALA A 489 4.199 15.459 -2.374 1.00 23.05 C

ATOM 3750 O ALA A 489 4.379 15.041 -3.519 1.00 25.69 O

ATOM 3751 CB ALA A 489 2.294 14.721 -0.980 1.00 17.54 C

ATOM 3752 N GLU A 490 4.374 16.729 -2.027 1.00 25.51 N

ATOM 3753 CA GLU A 490 4.792 17.744 -2.977 1.00 28.28 C

ATOM 3754 C GLU A 490 6.165 17.411 -3.552 1.00 27.11 C

ATOM 3755 O GLU A 490 6.385 17.493 -4.766 1.00 24.49 O

ATOM 3756 CB GLU A 490 4.841 19.101 -2.270 1.00 36.16 C

ATOM 3757 CG GLU A 490 3.499 19.729 -2.047 1.00 45.29 C

ATOM 3758 CD GLU A 490 2.874 20.189 -3.348 1.00 53.65 C

ATOM 3759 OE1 GLU A 490 2.868 21.421 -3.590 1.00 57.60 O

ATOM 3760 OE2 GLU A 490 2.397 19.319 -4.127 1.00 57.47 O

ATOM 3761 N LEU A 491 7.086 17.037 -2.662 1.00 25.68 N

ATOM 3762 CA LEU A 491 8.449 16.706 -3.051 1.00 24.76 C

ATOM 3763 C LEU A 491 8.477 15.420 -3.852 1.00 26.13 C

ATOM 3764 O LEU A 491 9.165 15.335 -4.870 1.00 26.34 O

ATOM 3765 CB LEU A 491 9.333 16.567 -1.814 1.00 21.25 C

ATOM 3766 CG LEU A 491 9.572 17.894 -1.100 1.00 20.33 C

ATOM 3767 CD1 LEU A 491 10.124 17.661 0.313 1.00 14.52 C

ATOM 3768 CD2 LEU A 491 10.522 18.737 -1.953 1.00 17.53 C

ATOM 3769 N LYS A 492 7.709 14.428 -3.404 1.00 26.48 N

ATOM 3770 CA LYS A 492 7.651 13.137 -4.080 1.00 25.43 C

ATOM 3771 C LYS A 492 7.171 13.277 -5.521 1.00 23.93 C

ATOM 3772 O LYS A 492 7.602 12.549 -6.413 1.00 21.99 O

ATOM 3773 CB LYS A 492 6.720 12.198 -3.334 1.00 25.31 C

ATOM 3774 CG LYS A 492 6.265 11.049 -4.189 1.00 27.66 C

ATOM 3775 CD LYS A 492 6.370 9.751 -3.443 1.00 32.84 C

ATOM 3776 CE LYS A 492 7.445 8.890 -4.045 1.00 37.17 C

ATOM 3777 NZ LYS A 492 7.545 7.613 -3.290 1.00 42.81 N

ATOM 3778 N ALA A 493 6.269 14.221 -5.744 1.00 24.24 N

ATOM 3779 CA ALA A 493 5.730 14.455 -7.076 1.00 24.51 C

ATOM 3780 C ALA A 493 6.754 15.188 -7.941 1.00 25.66 C

ATOM 3781 O ALA A 493 6.694 15.115 -9.173 1.00 25.93 O

ATOM 3782 CB ALA A 493 4.442 15.276 -6.985 1.00 21.75 C

ATOM 3783 N LEU A 494 7.688 15.889 -7.291 1.00 24.63 N

ATOM 3784 CA LEU A 494 8.714 16.645 -7.998 1.00 23.12 C

ATOM 3785 C LEU A 494 9.966 15.817 -8.292 1.00 25.27 C

ATOM 3786 O LEU A 494 10.450 15.797 -9.416 1.00 25.55 O

ATOM 3787 CB LEU A 494 9.127 17.876 -7.185 1.00 20.87 C

ATOM 3788 CG LEU A 494 8.256 19.135 -7.130 1.00 18.47 C

ATOM 3789 CD1 LEU A 494 8.654 19.920 -5.890 1.00 14.75 C

ATOM 3790 CD2 LEU A 494 8.427 20.006 -8.388 1.00 13.03 C

ATOM 3791 N TYR A 495 10.483 15.129 -7.281 1.00 26.34 N

ATOM 3792 CA TYR A 495 11.701 14.342 -7.437 1.00 27.38 C

ATOM 3793 C TYR A 495 11.503 12.865 -7.775 1.00 30.57 C

ATOM 3794 O TYR A 495 12.313 12.287 -8.502 1.00 30.98 O

ATOM 3795 CB TYR A 495 12.555 14.456 -6.166 1.00 23.79 C

ATOM 3796 CG TYR A 495 13.128 15.836 -5.922 1.00 19.92 C

ATOM 3797 CD1 TYR A 495 12.524 16.717 -5.039 1.00 19.93 C

ATOM 3798 CD2 TYR A 495 14.275 16.254 -6.570 1.00 21.32 C

ATOM 3799 CE1 TYR A 495 13.048 17.979 -4.809 1.00 19.76 C

ATOM 3800 CE2 TYR A 495 14.809 17.512 -6.348 1.00 19.86 C

ATOM 3801 CZ TYR A 495 14.191 18.369 -5.466 1.00 20.76 C

ATOM 3802 OH TYR A 495 14.725 19.619 -5.235 1.00 21.50 O

ATOM 3803 N SER A 496 10.444 12.259 -7.234 1.00 33.02 N

ATOM 3804 CA SER A 496 10.133 10.839 -7.459 1.00 33.93 C

ATOM 3805 C SER A 496 10.916 9.916 -6.518 1.00 33.40 C

ATOM 3806 O SER A 496 10.334 9.165 -5.731 1.00 32.92 O

ATOM 3807 CB SER A 496 10.424 10.447 -8.907 1.00 35.07 C

ATOM 3808 OG SER A 496 9.884 11.398 -9.804 1.00 40.83 O

ATOM 3809 N ASP A 497 12.241 9.978 -6.614 1.00 32.69 N

ATOM 3810 CA ASP A 497 13.132 9.168 -5.788 1.00 31.48 C

ATOM 3811 C ASP A 497 13.636 10.020 -4.608 1.00 29.78 C

ATOM 3812 O ASP A 497 13.933 11.209 -4.769 1.00 28.75 O

ATOM 3813 CB ASP A 497 14.321 8.685 -6.642 1.00 33.55 C

ATOM 3814 CG ASP A 497 15.039 7.468 -6.055 1.00 35.24 C

ATOM 3815 OD1 ASP A 497 15.753 6.775 -6.813 1.00 36.46 O

ATOM 3816 OD2 ASP A 497 14.902 7.200 -4.843 1.00 36.88 O

ATOM 3817 N ILE A 498 13.707 9.422 -3.421 1.00 27.44 N

ATOM 3818 CA ILE A 498 14.204 10.134 -2.244 1.00 24.43 C

ATOM 3819 C ILE A 498 15.732 10.186 -2.410 1.00 28.11 C

ATOM 3820 O ILE A 498 16.417 11.070 -1.870 1.00 29.79 O

ATOM 3821 CB ILE A 498 13.842 9.382 -0.928 1.00 19.69 C

ATOM 3822 CG1 ILE A 498 14.342 10.158 0.296 1.00 15.76 C

ATOM 3823 CG2 ILE A 498 14.457 7.997 -0.936 1.00 14.37 C

ATOM 3824 CD1 ILE A 498 13.906 11.601 0.350 1.00 10.83 C

ATOM 3825 N ASP A 499 16.252 9.228 -3.179 1.00 28.20 N

ATOM 3826 CA ASP A 499 17.680 9.132 -3.462 1.00 26.84 C

ATOM 3827 C ASP A 499 18.130 10.144 -4.518 1.00 25.71 C

ATOM 3828 O ASP A 499 19.277 10.128 -4.939 1.00 26.69 O

ATOM 3829 CB ASP A 499 18.015 7.731 -3.948 1.00 26.64 C

ATOM 3830 CG ASP A 499 18.008 6.715 -2.834 1.00 28.97 C

ATOM 3831 OD1 ASP A 499 18.001 7.119 -1.645 1.00 27.01 O

ATOM 3832 OD2 ASP A 499 18.010 5.503 -3.160 1.00 33.39 O

ATOM 3833 N VAL A 500 17.224 11.013 -4.951 1.00 24.86 N

ATOM 3834 CA VAL A 500 17.551 12.030 -5.948 1.00 24.97 C

ATOM 3835 C VAL A 500 17.347 13.397 -5.294 1.00 23.20 C

ATOM 3836 O VAL A 500 17.696 14.438 -5.865 1.00 20.17 O

ATOM 3837 CB VAL A 500 16.630 11.916 -7.197 1.00 25.36 C

ATOM 3838 CG1 VAL A 500 16.604 13.231 -7.965 1.00 24.82 C

ATOM 3839 CG2 VAL A 500 17.106 10.800 -8.085 1.00 24.19 C

ATOM 3840 N MET A 501 16.763 13.362 -4.093 1.00 22.96 N

ATOM 3841 CA MET A 501 16.485 14.551 -3.299 1.00 22.63 C

ATOM 3842 C MET A 501 17.769 15.365 -3.112 1.00 25.03 C

ATOM 3843 O MET A 501 18.848 14.818 -2.812 1.00 26.63 O

ATOM 3844 CB MET A 501 15.924 14.140 -1.936 1.00 21.10 C

ATOM 3845 CG MET A 501 15.585 15.297 -1.031 1.00 24.60 C

ATOM 3846 SD MET A 501 14.723 16.656 -1.866 1.00 25.79 S

ATOM 3847 CE MET A 501 14.233 17.654 -0.445 1.00 24.48 C

ATOM 3848 N GLU A 502 17.648 16.676 -3.291 1.00 21.59 N

ATOM 3849 CA GLU A 502 18.781 17.554 -3.164 1.00 17.29 C

ATOM 3850 C GLU A 502 19.009 17.995 -1.745 1.00 19.49 C

ATOM 3851 O GLU A 502 18.074 18.186 -0.978 1.00 20.77 O

ATOM 3852 CB GLU A 502 18.581 18.763 -4.041 1.00 15.94 C

ATOM 3853 CG GLU A 502 18.534 18.429 -5.499 1.00 16.09 C

ATOM 3854 CD GLU A 502 18.171 19.641 -6.338 1.00 21.43 C

ATOM 3855 OE1 GLU A 502 19.106 20.328 -6.808 1.00 20.23 O

ATOM 3856 OE2 GLU A 502 16.953 19.905 -6.519 1.00 25.35 O

ATOM 3857 N LEU A 503 20.281 18.175 -1.418 1.00 23.66 N

ATOM 3858 CA LEU A 503 20.723 18.588 -0.092 1.00 23.21 C

ATOM 3859 C LEU A 503 20.122 19.906 0.444 1.00 23.43 C

ATOM 3860 O LEU A 503 19.358 19.913 1.423 1.00 23.24 O

ATOM 3861 CB LEU A 503 22.255 18.675 -0.090 1.00 19.77 C

ATOM 3862 CG LEU A 503 22.895 19.134 1.219 1.00 21.63 C

ATOM 3863 CD1 LEU A 503 22.587 18.122 2.323 1.00 22.21 C

ATOM 3864 CD2 LEU A 503 24.391 19.304 1.025 1.00 19.23 C

ATOM 3865 N TYR A 504 20.478 21.018 -0.193 1.00 24.88 N

ATOM 3866 CA TYR A 504 20.007 22.334 0.240 1.00 27.42 C

ATOM 3867 C TYR A 504 18.525 22.421 0.611 1.00 26.91 C

ATOM 3868 O TYR A 504 18.189 22.776 1.747 1.00 27.44 O

ATOM 3869 CB TYR A 504 20.317 23.399 -0.806 1.00 27.01 C

ATOM 3870 CG TYR A 504 19.766 24.721 -0.385 1.00 26.02 C

ATOM 3871 CD1 TYR A 504 20.165 25.293 0.822 1.00 26.23 C

ATOM 3872 CD2 TYR A 504 18.785 25.363 -1.143 1.00 27.86 C

ATOM 3873 CE1 TYR A 504 19.597 26.473 1.281 1.00 30.47 C

ATOM 3874 CE2 TYR A 504 18.202 26.556 -0.698 1.00 29.84 C

ATOM 3875 CZ TYR A 504 18.612 27.104 0.521 1.00 30.05 C

ATOM 3876 OH TYR A 504 18.035 28.258 0.998 1.00 29.06 O

ATOM 3877 N PRO A 505 17.618 22.125 -0.343 1.00 26.52 N

ATOM 3878 CA PRO A 505 16.183 22.192 -0.014 1.00 24.58 C

ATOM 3879 C PRO A 505 15.873 21.264 1.167 1.00 22.28 C

ATOM 3880 O PRO A 505 15.223 21.648 2.137 1.00 22.55 O

ATOM 3881 CB PRO A 505 15.487 21.712 -1.289 1.00 23.39 C

ATOM 3882 CG PRO A 505 16.499 21.846 -2.367 1.00 24.89 C

ATOM 3883 CD PRO A 505 17.853 21.711 -1.737 1.00 25.95 C

ATOM 3884 N ALA A 506 16.357 20.034 1.066 1.00 20.42 N

ATOM 3885 CA ALA A 506 16.154 19.036 2.097 1.00 19.20 C

ATOM 3886 C ALA A 506 16.459 19.586 3.484 1.00 20.05 C

ATOM 3887 O ALA A 506 15.782 19.234 4.449 1.00 20.87 O

ATOM 3888 CB ALA A 506 17.020 17.807 1.818 1.00 15.41 C

ATOM 3889 N LEU A 507 17.467 20.452 3.597 1.00 20.81 N

ATOM 3890 CA LEU A 507 17.831 20.999 4.907 1.00 19.06 C

ATOM 3891 C LEU A 507 16.769 21.910 5.509 1.00 19.88 C

ATOM 3892 O LEU A 507 16.488 21.852 6.703 1.00 18.48 O

ATOM 3893 CB LEU A 507 19.159 21.742 4.806 1.00 18.33 C

ATOM 3894 CG LEU A 507 20.408 20.850 4.885 1.00 18.38 C

ATOM 3895 CD1 LEU A 507 21.608 21.561 4.267 1.00 14.53 C

ATOM 3896 CD2 LEU A 507 20.698 20.501 6.342 1.00 16.62 C

ATOM 3897 N LEU A 508 16.169 22.737 4.660 1.00 22.84 N

ATOM 3898 CA LEU A 508 15.134 23.697 5.053 1.00 22.36 C

ATOM 3899 C LEU A 508 13.750 23.069 5.248 1.00 21.48 C

ATOM 3900 O LEU A 508 12.852 23.670 5.840 1.00 22.60 O

ATOM 3901 CB LEU A 508 15.040 24.782 3.975 1.00 19.06 C

ATOM 3902 CG LEU A 508 16.362 25.472 3.704 1.00 14.62 C

ATOM 3903 CD1 LEU A 508 16.175 26.662 2.769 1.00 14.97 C

ATOM 3904 CD2 LEU A 508 16.913 25.909 5.055 1.00 16.85 C

ATOM 3905 N VAL A 509 13.594 21.850 4.759 1.00 21.96 N

ATOM 3906 CA VAL A 509 12.324 21.145 4.808 1.00 22.76 C

ATOM 3907 C VAL A 509 12.339 19.949 5.775 1.00 21.94 C

ATOM 3908 O VAL A 509 11.302 19.380 6.101 1.00 23.29 O

ATOM 3909 CB VAL A 509 11.972 20.691 3.349 1.00 23.18 C

ATOM 3910 CG1 VAL A 509 11.851 19.186 3.261 1.00 22.17 C

ATOM 3911 CG2 VAL A 509 10.713 21.392 2.874 1.00 25.42 C

ATOM 3912 N GLU A 510 13.529 19.595 6.242 1.00 22.44 N

ATOM 3913 CA GLU A 510 13.729 18.467 7.136 1.00 21.82 C

ATOM 3914 C GLU A 510 12.936 18.542 8.426 1.00 21.79 C

ATOM 3915 O GLU A 510 12.706 19.615 8.965 1.00 23.13 O

ATOM 3916 CB GLU A 510 15.213 18.342 7.467 1.00 22.43 C

ATOM 3917 CG GLU A 510 15.683 16.916 7.678 1.00 28.24 C

ATOM 3918 CD GLU A 510 16.974 16.858 8.464 1.00 31.15 C

ATOM 3919 OE1 GLU A 510 17.399 17.928 8.959 1.00 32.57 O

ATOM 3920 OE2 GLU A 510 17.556 15.755 8.584 1.00 29.48 O

ATOM 3921 N LYS A 511 12.523 17.389 8.932 1.00 20.96 N

ATOM 3922 CA LYS A 511 11.766 17.352 10.167 1.00 20.44 C

ATOM 3923 C LYS A 511 12.633 17.873 11.299 1.00 18.60 C

ATOM 3924 O LYS A 511 13.668 17.286 11.626 1.00 19.93 O

ATOM 3925 CB LYS A 511 11.330 15.920 10.484 1.00 26.21 C

ATOM 3926 CG LYS A 511 10.704 15.764 11.857 1.00 31.57 C

ATOM 3927 CD LYS A 511 10.650 14.314 12.293 1.00 35.76 C

ATOM 3928 CE LYS A 511 10.715 14.221 13.812 1.00 42.74 C

ATOM 3929 NZ LYS A 511 10.485 12.840 14.322 1.00 44.66 N

ATOM 3930 N PRO A 512 12.240 19.001 11.898 1.00 15.79 N

ATOM 3931 CA PRO A 512 13.008 19.571 13.000 1.00 17.46 C

ATOM 3932 C PRO A 512 13.114 18.592 14.152 1.00 21.66 C

ATOM 3933 O PRO A 512 12.297 17.665 14.276 1.00 24.09 O

ATOM 3934 CB PRO A 512 12.211 20.799 13.398 1.00 12.87 C

ATOM 3935 CG PRO A 512 11.407 21.113 12.237 1.00 12.45 C

ATOM 3936 CD PRO A 512 11.085 19.836 11.560 1.00 12.46 C

ATOM 3937 N ARG A 513 14.142 18.766 14.978 1.00 24.42 N

ATOM 3938 CA ARG A 513 14.292 17.916 16.149 1.00 24.62 C

ATOM 3939 C ARG A 513 13.206 18.505 17.056 1.00 25.19 C

ATOM 3940 O ARG A 513 12.717 19.603 16.788 1.00 24.17 O

ATOM 3941 CB ARG A 513 15.693 18.083 16.752 1.00 23.63 C

ATOM 3942 CG ARG A 513 16.550 16.823 16.710 1.00 20.40 C

ATOM 3943 CD ARG A 513 17.660 16.922 15.672 1.00 23.45 C

ATOM 3944 NE ARG A 513 18.409 15.673 15.557 1.00 23.18 N

ATOM 3945 CZ ARG A 513 19.722 15.569 15.717 1.00 26.30 C

ATOM 3946 NH1 ARG A 513 20.451 16.642 15.997 1.00 27.32 N

ATOM 3947 NH2 ARG A 513 20.310 14.386 15.608 1.00 27.11 N

ATOM 3948 N PRO A 514 12.814 17.797 18.128 1.00 25.88 N

ATOM 3949 CA PRO A 514 11.769 18.284 19.049 1.00 25.71 C

ATOM 3950 C PRO A 514 11.951 19.724 19.561 1.00 26.65 C

ATOM 3951 O PRO A 514 12.833 19.987 20.386 1.00 27.37 O

ATOM 3952 CB PRO A 514 11.797 17.272 20.192 1.00 25.14 C

ATOM 3953 CG PRO A 514 12.401 16.049 19.605 1.00 26.33 C

ATOM 3954 CD PRO A 514 13.363 16.498 18.554 1.00 26.51 C

ATOM 3955 N ASP A 515 11.112 20.641 19.070 1.00 25.42 N

ATOM 3956 CA ASP A 515 11.164 22.052 19.461 1.00 25.97 C

ATOM 3957 C ASP A 515 12.487 22.723 19.112 1.00 26.10 C

ATOM 3958 O ASP A 515 12.849 23.752 19.698 1.00 26.47 O

ATOM 3959 CB ASP A 515 10.932 22.193 20.959 1.00 30.46 C

ATOM 3960 CG ASP A 515 9.468 22.129 21.329 1.00 34.12 C

ATOM 3961 OD1 ASP A 515 8.635 22.650 20.558 1.00 35.35 O

ATOM 3962 OD2 ASP A 515 9.152 21.560 22.397 1.00 38.36 O

ATOM 3963 N ALA A 516 13.203 22.128 18.159 1.00 22.38 N

ATOM 3964 CA ALA A 516 14.492 22.622 17.714 1.00 17.28 C

ATOM 3965 C ALA A 516 14.309 23.419 16.437 1.00 17.41 C

ATOM 3966 O ALA A 516 13.285 23.303 15.764 1.00 16.57 O

ATOM 3967 CB ALA A 516 15.434 21.448 17.475 1.00 15.29 C

ATOM 3968 N ILE A 517 15.315 24.223 16.114 1.00 15.92 N

ATOM 3969 CA ILE A 517 15.302 25.061 14.928 1.00 12.53 C

ATOM 3970 C ILE A 517 15.845 24.340 13.691 1.00 13.69 C

ATOM 3971 O ILE A 517 15.543 24.735 12.559 1.00 10.25 O

ATOM 3972 CB ILE A 517 16.148 26.307 15.178 1.00 11.12 C

ATOM 3973 CG1 ILE A 517 16.052 27.248 13.984 1.00 9.55 C

ATOM 3974 CG2 ILE A 517 17.594 25.900 15.426 1.00 8.56 C

ATOM 3975 CD1 ILE A 517 16.621 28.615 14.262 1.00 9.95 C

ATOM 3976 N PHE A 518 16.636 23.285 13.931 1.00 15.58 N

ATOM 3977 CA PHE A 518 17.278 22.484 12.873 1.00 17.00 C

ATOM 3978 C PHE A 518 16.939 20.992 12.873 1.00 15.08 C

ATOM 3979 O PHE A 518 16.443 20.446 13.852 1.00 11.63 O

ATOM 3980 CB PHE A 518 18.816 22.526 12.978 1.00 17.88 C

ATOM 3981 CG PHE A 518 19.427 23.880 12.846 1.00 15.50 C

ATOM 3982 CD1 PHE A 518 18.945 24.801 11.945 1.00 16.19 C

ATOM 3983 CD2 PHE A 518 20.516 24.212 13.630 1.00 17.25 C

ATOM 3984 CE1 PHE A 518 19.541 26.046 11.831 1.00 18.71 C

ATOM 3985 CE2 PHE A 518 21.121 25.446 13.525 1.00 19.29 C

ATOM 3986 CZ PHE A 518 20.633 26.371 12.624 1.00 18.68 C

ATOM 3987 N GLY A 519 17.293 20.347 11.763 1.00 16.82 N

ATOM 3988 CA GLY A 519 17.120 18.917 11.610 1.00 17.59 C

ATOM 3989 C GLY A 519 18.473 18.272 11.905 1.00 17.68 C

ATOM 3990 O GLY A 519 19.467 18.969 12.109 1.00 15.09 O

ATOM 3991 N GLU A 520 18.505 16.943 11.925 1.00 19.30 N

ATOM 3992 CA GLU A 520 19.713 16.166 12.216 1.00 22.12 C

ATOM 3993 C GLU A 520 20.828 16.355 11.162 1.00 21.65 C

ATOM 3994 O GLU A 520 22.007 16.448 11.517 1.00 19.58 O

ATOM 3995 CB GLU A 520 19.328 14.675 12.368 1.00 24.91 C

ATOM 3996 CG GLU A 520 20.478 13.659 12.463 1.00 28.30 C

ATOM 3997 CD GLU A 520 20.158 12.354 11.719 1.00 30.64 C

ATOM 3998 OE1 GLU A 520 20.469 11.262 12.248 1.00 29.17 O

ATOM 3999 OE2 GLU A 520 19.590 12.427 10.599 1.00 31.98 O

ATOM 4000 N THR A 521 20.453 16.418 9.880 1.00 20.39 N

ATOM 4001 CA THR A 521 21.419 16.621 8.794 1.00 18.56 C

ATOM 4002 C THR A 521 22.154 17.956 8.956 1.00 19.37 C

ATOM 4003 O THR A 521 23.376 18.031 8.791 1.00 19.05 O

ATOM 4004 CB THR A 521 20.727 16.600 7.401 1.00 18.34 C

ATOM 4005 OG1 THR A 521 19.931 15.418 7.282 1.00 18.29 O

ATOM 4006 CG2 THR A 521 21.750 16.574 6.287 1.00 15.40 C

ATOM 4007 N MET A 522 21.403 19.003 9.290 1.00 19.13 N

ATOM 4008 CA MET A 522 21.970 20.330 9.493 1.00 18.79 C

ATOM 4009 C MET A 522 23.013 20.350 10.607 1.00 18.38 C

ATOM 4010 O MET A 522 24.094 20.896 10.439 1.00 22.44 O

ATOM 4011 CB MET A 522 20.863 21.322 9.828 1.00 16.85 C

ATOM 4012 CG MET A 522 21.357 22.751 9.928 1.00 17.71 C

ATOM 4013 SD MET A 522 21.962 23.372 8.359 1.00 21.28 S

ATOM 4014 CE MET A 522 20.482 24.121 7.713 1.00 20.74 C

ATOM 4015 N VAL A 523 22.687 19.757 11.746 1.00 17.46 N

ATOM 4016 CA VAL A 523 23.600 19.727 12.869 1.00 16.94 C

ATOM 4017 C VAL A 523 24.732 18.763 12.681 1.00 18.70 C

ATOM 4018 O VAL A 523 25.816 18.991 13.184 1.00 20.74 O

ATOM 4019 CB VAL A 523 22.899 19.308 14.140 1.00 18.11 C

ATOM 4020 CG1 VAL A 523 23.927 19.040 15.228 1.00 17.50 C

ATOM 4021 CG2 VAL A 523 21.907 20.374 14.558 1.00 21.12 C

ATOM 4022 N GLU A 524 24.477 17.681 11.965 1.00 19.58 N

ATOM 4023 CA GLU A 524 25.480 16.649 11.749 1.00 20.39 C

ATOM 4024 C GLU A 524 26.529 17.014 10.711 1.00 21.82 C

ATOM 4025 O GLU A 524 27.655 16.489 10.738 1.00 23.56 O

ATOM 4026 CB GLU A 524 24.799 15.335 11.344 1.00 23.86 C

ATOM 4027 CG GLU A 524 24.280 14.501 12.514 1.00 26.32 C

ATOM 4028 CD GLU A 524 25.206 14.527 13.726 1.00 27.35 C

ATOM 4029 OE1 GLU A 524 26.315 13.944 13.659 1.00 28.72 O

ATOM 4030 OE2 GLU A 524 24.818 15.131 14.750 1.00 26.56 O

ATOM 4031 N LEU A 525 26.167 17.895 9.783 1.00 18.92 N

ATOM 4032 CA LEU A 525 27.104 18.313 8.746 1.00 16.81 C

ATOM 4033 C LEU A 525 27.865 19.536 9.228 1.00 17.32 C

ATOM 4034 O LEU A 525 29.079 19.639 9.067 1.00 18.34 O

ATOM 4035 CB LEU A 525 26.358 18.697 7.473 1.00 15.82 C

ATOM 4036 CG LEU A 525 25.619 17.640 6.671 1.00 18.75 C

ATOM 4037 CD1 LEU A 525 26.227 17.574 5.284 1.00 16.49 C

ATOM 4038 CD2 LEU A 525 25.691 16.286 7.376 1.00 19.72 C

ATOM 4039 N GLY A 526 27.124 20.468 9.818 1.00 16.69 N

ATOM 4040 CA GLY A 526 27.711 21.703 10.277 1.00 14.28 C

ATOM 4041 C GLY A 526 28.664 21.665 11.452 1.00 14.28 C

ATOM 4042 O GLY A 526 29.612 22.454 11.489 1.00 16.08 O

ATOM 4043 N ALA A 527 28.416 20.790 12.420 1.00 10.85 N

ATOM 4044 CA ALA A 527 29.269 20.713 13.582 1.00 9.46 C

ATOM 4045 C ALA A 527 30.729 20.394 13.230 1.00 14.34 C

ATOM 4046 O ALA A 527 31.650 21.069 13.705 1.00 17.05 O

ATOM 4047 CB ALA A 527 28.721 19.699 14.538 1.00 8.65 C

ATOM 4048 N PRO A 528 30.970 19.366 12.394 1.00 11.57 N

ATOM 4049 CA PRO A 528 32.355 19.028 12.033 1.00 10.72 C

ATOM 4050 C PRO A 528 33.113 20.168 11.316 1.00 11.63 C

ATOM 4051 O PRO A 528 34.236 20.515 11.691 1.00 10.16 O

ATOM 4052 CB PRO A 528 32.207 17.781 11.165 1.00 12.50 C

ATOM 4053 CG PRO A 528 30.823 17.275 11.449 1.00 11.24 C

ATOM 4054 CD PRO A 528 29.997 18.462 11.771 1.00 8.36 C

ATOM 4055 N PHE A 529 32.485 20.739 10.290 1.00 13.33 N

ATOM 4056 CA PHE A 529 33.049 21.846 9.526 1.00 11.79 C

ATOM 4057 C PHE A 529 33.290 23.014 10.448 1.00 11.33 C

ATOM 4058 O PHE A 529 34.243 23.756 10.287 1.00 11.72 O

ATOM 4059 CB PHE A 529 32.060 22.343 8.483 1.00 15.59 C

ATOM 4060 CG PHE A 529 31.858 21.419 7.318 1.00 19.46 C

ATOM 4061 CD1 PHE A 529 30.579 21.225 6.798 1.00 19.78 C

ATOM 4062 CD2 PHE A 529 32.938 20.826 6.681 1.00 19.12 C

ATOM 4063 CE1 PHE A 529 30.382 20.472 5.668 1.00 20.19 C

ATOM 4064 CE2 PHE A 529 32.750 20.070 5.544 1.00 18.60 C

ATOM 4065 CZ PHE A 529 31.470 19.893 5.034 1.00 20.60 C

ATOM 4066 N SER A 530 32.382 23.191 11.397 1.00 14.55 N

ATOM 4067 CA SER A 530 32.443 24.293 12.340 1.00 15.20 C

ATOM 4068 C SER A 530 33.593 24.235 13.325 1.00 17.32 C

ATOM 4069 O SER A 530 34.408 25.150 13.360 1.00 18.44 O

ATOM 4070 CB SER A 530 31.130 24.400 13.097 1.00 13.69 C

ATOM 4071 OG SER A 530 31.086 25.622 13.798 1.00 15.65 O

ATOM 4072 N LEU A 531 33.661 23.181 14.136 1.00 19.09 N

ATOM 4073 CA LEU A 531 34.744 23.058 15.117 1.00 21.27 C

ATOM 4074 C LEU A 531 36.126 22.973 14.435 1.00 22.29 C

ATOM 4075 O LEU A 531 37.137 23.469 14.949 1.00 20.56 O

ATOM 4076 CB LEU A 531 34.520 21.827 15.999 1.00 22.74 C

ATOM 4077 CG LEU A 531 33.289 21.827 16.907 1.00 25.30 C

ATOM 4078 CD1 LEU A 531 32.964 20.384 17.288 1.00 25.64 C

ATOM 4079 CD2 LEU A 531 33.547 22.667 18.152 1.00 25.32 C

ATOM 4080 N LYS A 532 36.169 22.337 13.271 1.00 23.58 N

ATOM 4081 CA LYS A 532 37.418 22.217 12.539 1.00 24.24 C

ATOM 4082 C LYS A 532 37.991 23.606 12.307 1.00 22.61 C

ATOM 4083 O LYS A 532 39.161 23.840 12.550 1.00 27.89 O

ATOM 4084 CB LYS A 532 37.194 21.503 11.194 1.00 26.31 C

ATOM 4085 CG LYS A 532 38.327 20.571 10.772 1.00 27.98 C

ATOM 4086 CD LYS A 532 39.646 21.267 10.953 1.00 28.23 C

ATOM 4087 CE LYS A 532 40.676 20.360 11.554 1.00 27.96 C

ATOM 4088 NZ LYS A 532 41.713 20.178 10.522 1.00 30.73 N

ATOM 4089 N GLY A 533 37.175 24.541 11.854 1.00 20.74 N

ATOM 4090 CA GLY A 533 37.688 25.872 11.612 1.00 19.07 C

ATOM 4091 C GLY A 533 37.846 26.763 12.833 1.00 21.02 C

ATOM 4092 O GLY A 533 38.563 27.775 12.776 1.00 22.20 O

ATOM 4093 N LEU A 534 37.169 26.399 13.924 1.00 21.20 N

ATOM 4094 CA LEU A 534 37.202 27.149 15.186 1.00 19.36 C

ATOM 4095 C LEU A 534 38.416 26.683 15.971 1.00 18.48 C

ATOM 4096 O LEU A 534 39.192 27.487 16.464 1.00 17.27 O

ATOM 4097 CB LEU A 534 35.925 26.865 16.004 1.00 17.20 C

ATOM 4098 CG LEU A 534 34.996 27.995 16.458 1.00 17.62 C

ATOM 4099 CD1 LEU A 534 34.968 29.092 15.407 1.00 12.80 C

ATOM 4100 CD2 LEU A 534 33.598 27.452 16.711 1.00 13.22 C

ATOM 4101 N MET A 535 38.563 25.366 16.082 1.00 18.50 N

ATOM 4102 CA MET A 535 39.680 24.778 16.805 1.00 20.23 C

ATOM 4103 C MET A 535 40.899 24.708 15.908 1.00 19.66 C

ATOM 4104 O MET A 535 42.030 24.690 16.387 1.00 18.31 O

ATOM 4105 CB MET A 535 39.322 23.378 17.292 1.00 20.10 C

ATOM 4106 CG MET A 535 38.529 23.375 18.602 1.00 21.35 C

ATOM 4107 SD MET A 535 38.605 24.951 19.517 1.00 20.82 S

ATOM 4108 CE MET A 535 39.323 24.397 21.021 1.00 21.38 C

ATOM 4109 N GLY A 536 40.656 24.696 14.602 1.00 18.55 N

ATOM 4110 CA GLY A 536 41.743 24.625 13.648 1.00 16.92 C

ATOM 4111 C GLY A 536 42.582 25.884 13.578 1.00 17.54 C

ATOM 4112 O GLY A 536 43.651 25.848 12.993 1.00 20.86 O

ATOM 4113 N ASN A 537 42.125 26.984 14.177 1.00 15.77 N

ATOM 4114 CA ASN A 537 42.872 28.251 14.148 1.00 15.23 C

ATOM 4115 C ASN A 537 44.220 28.174 14.871 1.00 19.36 C

ATOM 4116 O ASN A 537 44.343 27.577 15.954 1.00 19.42 O

ATOM 4117 CB ASN A 537 42.025 29.387 14.760 1.00 14.07 C

ATOM 4118 CG ASN A 537 42.678 30.780 14.620 1.00 14.93 C

ATOM 4119 OD1 ASN A 537 43.535 31.158 15.422 1.00 17.46 O

ATOM 4120 ND2 ASN A 537 42.256 31.546 13.615 1.00 10.92 N

ATOM 4121 N PRO A 538 45.256 28.791 14.278 1.00 18.74 N

ATOM 4122 CA PRO A 538 46.606 28.813 14.843 1.00 17.16 C

ATOM 4123 C PRO A 538 46.677 29.236 16.308 1.00 17.35 C

ATOM 4124 O PRO A 538 47.421 28.638 17.078 1.00 18.89 O

ATOM 4125 CB PRO A 538 47.358 29.787 13.938 1.00 14.60 C

ATOM 4126 CG PRO A 538 46.297 30.533 13.194 1.00 16.18 C

ATOM 4127 CD PRO A 538 45.203 29.530 13.009 1.00 18.79 C

ATOM 4128 N ILE A 539 45.915 30.256 16.702 1.00 16.89 N

ATOM 4129 CA ILE A 539 45.977 30.729 18.090 1.00 17.14 C

ATOM 4130 C ILE A 539 45.632 29.669 19.118 1.00 15.61 C

ATOM 4131 O ILE A 539 45.841 29.867 20.313 1.00 15.36 O

ATOM 4132 CB ILE A 539 45.065 31.983 18.345 1.00 17.43 C

ATOM 4133 CG1 ILE A 539 43.582 31.588 18.361 1.00 13.86 C

ATOM 4134 CG2 ILE A 539 45.357 33.062 17.308 1.00 15.87 C

ATOM 4135 CD1 ILE A 539 42.850 32.137 19.552 1.00 9.64 C

ATOM 4136 N CYS A 540 45.117 28.539 18.640 1.00 16.10 N

ATOM 4137 CA CYS A 540 44.728 27.440 19.511 1.00 15.37 C

ATOM 4138 C CYS A 540 45.840 26.413 19.590 1.00 14.49 C

ATOM 4139 O CYS A 540 45.777 25.493 20.402 1.00 17.10 O

ATOM 4140 CB CYS A 540 43.456 26.778 18.981 1.00 15.56 C

ATOM 4141 SG CYS A 540 41.985 27.771 19.211 1.00 19.65 S

ATOM 4142 N SER A 541 46.849 26.565 18.727 1.00 14.22 N

ATOM 4143 CA SER A 541 47.990 25.658 18.709 1.00 10.84 C

ATOM 4144 C SER A 541 48.829 25.910 19.953 1.00 12.49 C

ATOM 4145 O SER A 541 48.863 27.016 20.494 1.00 13.35 O

ATOM 4146 CB SER A 541 48.826 25.821 17.425 1.00 12.04 C

ATOM 4147 OG SER A 541 49.280 27.139 17.214 1.00 12.24 O

ATOM 4148 N PRO A 542 49.536 24.883 20.423 1.00 13.62 N

ATOM 4149 CA PRO A 542 50.353 25.033 21.626 1.00 12.90 C

ATOM 4150 C PRO A 542 51.310 26.218 21.653 1.00 15.78 C

ATOM 4151 O PRO A 542 51.354 26.947 22.644 1.00 16.51 O

ATOM 4152 CB PRO A 542 51.057 23.691 21.737 1.00 13.20 C

ATOM 4153 CG PRO A 542 50.196 22.757 20.970 1.00 10.44 C

ATOM 4154 CD PRO A 542 49.633 23.534 19.852 1.00 10.85 C

ATOM 4155 N GLN A 543 52.065 26.420 20.576 1.00 17.01 N

ATOM 4156 CA GLN A 543 53.002 27.536 20.524 1.00 16.63 C

ATOM 4157 C GLN A 543 52.281 28.878 20.667 1.00 17.21 C

ATOM 4158 O GLN A 543 52.882 29.864 21.073 1.00 18.44 O

ATOM 4159 CB GLN A 543 53.789 27.528 19.207 1.00 18.06 C

ATOM 4160 CG GLN A 543 55.028 26.624 19.175 1.00 25.25 C

ATOM 4161 CD GLN A 543 55.929 26.722 20.423 1.00 27.68 C

ATOM 4162 OE1 GLN A 543 55.447 26.708 21.558 1.00 32.68 O

ATOM 4163 NE2 GLN A 543 57.240 26.804 20.208 1.00 26.29 N

ATOM 4164 N TYR A 544 50.990 28.923 20.351 1.00 15.58 N

ATOM 4165 CA TYR A 544 50.252 30.174 20.442 1.00 11.87 C

ATOM 4166 C TYR A 544 49.444 30.378 21.722 1.00 12.77 C

ATOM 4167 O TYR A 544 49.314 31.504 22.196 1.00 12.09 O

ATOM 4168 CB TYR A 544 49.313 30.296 19.252 1.00 7.71 C

ATOM 4169 CG TYR A 544 49.942 30.870 18.023 1.00 6.28 C

ATOM 4170 CD1 TYR A 544 49.787 32.215 17.700 1.00 7.33 C

ATOM 4171 CD2 TYR A 544 50.662 30.063 17.151 1.00 7.39 C

ATOM 4172 CE1 TYR A 544 50.336 32.739 16.533 1.00 6.59 C

ATOM 4173 CE2 TYR A 544 51.214 30.572 15.984 1.00 5.57 C

ATOM 4174 CZ TYR A 544 51.048 31.910 15.679 1.00 8.26 C

ATOM 4175 OH TYR A 544 51.604 32.413 14.522 1.00 13.62 O

ATOM 4176 N TRP A 545 48.904 29.294 22.274 1.00 11.75 N

ATOM 4177 CA TRP A 545 48.069 29.373 23.463 1.00 11.66 C

ATOM 4178 C TRP A 545 48.803 29.620 24.761 1.00 10.70 C

ATOM 4179 O TRP A 545 49.002 28.694 25.543 1.00 11.24 O

ATOM 4180 CB TRP A 545 47.233 28.107 23.617 1.00 15.52 C

ATOM 4181 CG TRP A 545 46.030 28.316 24.485 1.00 19.92 C

ATOM 4182 CD1 TRP A 545 45.726 27.654 25.642 1.00 19.05 C

ATOM 4183 CD2 TRP A 545 44.948 29.241 24.253 1.00 20.54 C

ATOM 4184 NE1 TRP A 545 44.525 28.108 26.144 1.00 19.22 N

ATOM 4185 CE2 TRP A 545 44.025 29.077 25.311 1.00 21.21 C

ATOM 4186 CE3 TRP A 545 44.673 30.190 23.252 1.00 18.94 C

ATOM 4187 CZ2 TRP A 545 42.839 29.828 25.400 1.00 20.86 C

ATOM 4188 CZ3 TRP A 545 43.499 30.938 23.338 1.00 18.02 C

ATOM 4189 CH2 TRP A 545 42.596 30.750 24.408 1.00 21.57 C

ATOM 4190 N LYS A 546 49.181 30.870 24.997 1.00 9.21 N

ATOM 4191 CA LYS A 546 49.883 31.261 26.206 1.00 10.08 C

ATOM 4192 C LYS A 546 49.775 32.776 26.353 1.00 10.33 C

ATOM 4193 O LYS A 546 49.643 33.509 25.371 1.00 7.78 O

ATOM 4194 CB LYS A 546 51.352 30.825 26.152 1.00 13.72 C

ATOM 4195 CG LYS A 546 52.055 31.004 24.803 1.00 13.60 C

ATOM 4196 CD LYS A 546 53.544 30.680 24.919 1.00 15.11 C

ATOM 4197 CE LYS A 546 53.849 29.196 24.667 1.00 15.96 C

ATOM 4198 NZ LYS A 546 55.178 29.018 23.981 1.00 17.05 N

ATOM 4199 N PRO A 547 49.866 33.271 27.591 1.00 8.45 N

ATOM 4200 CA PRO A 547 49.755 34.702 27.876 1.00 7.60 C

ATOM 4201 C PRO A 547 50.534 35.651 26.989 1.00 11.06 C

ATOM 4202 O PRO A 547 49.990 36.624 26.466 1.00 13.34 O

ATOM 4203 CB PRO A 547 50.165 34.801 29.334 1.00 2.51 C

ATOM 4204 CG PRO A 547 49.854 33.469 29.898 1.00 4.71 C

ATOM 4205 CD PRO A 547 50.101 32.481 28.812 1.00 6.41 C

ATOM 4206 N SER A 548 51.812 35.365 26.813 1.00 11.76 N

ATOM 4207 CA SER A 548 52.669 36.234 26.038 1.00 9.33 C

ATOM 4208 C SER A 548 52.134 36.556 24.668 1.00 8.92 C

ATOM 4209 O SER A 548 52.388 37.644 24.150 1.00 9.97 O

ATOM 4210 CB SER A 548 54.041 35.616 25.901 1.00 11.93 C

ATOM 4211 OG SER A 548 53.938 34.398 25.194 1.00 18.69 O

ATOM 4212 N THR A 549 51.396 35.629 24.069 1.00 9.69 N

ATOM 4213 CA THR A 549 50.875 35.871 22.717 1.00 9.36 C

ATOM 4214 C THR A 549 49.851 36.959 22.699 1.00 9.46 C

ATOM 4215 O THR A 549 49.679 37.639 21.697 1.00 12.56 O

ATOM 4216 CB THR A 549 50.213 34.642 22.097 1.00 5.35 C

ATOM 4217 OG1 THR A 549 51.102 33.533 22.161 1.00 10.60 O

ATOM 4218 CG2 THR A 549 49.906 34.898 20.658 1.00 4.47 C

ATOM 4219 N PHE A 550 49.185 37.132 23.833 1.00 12.29 N

ATOM 4220 CA PHE A 550 48.127 38.113 23.974 1.00 12.96 C

ATOM 4221 C PHE A 550 48.495 39.297 24.871 1.00 14.86 C

ATOM 4222 O PHE A 550 47.621 39.947 25.466 1.00 16.82 O

ATOM 4223 CB PHE A 550 46.875 37.380 24.478 1.00 8.96 C

ATOM 4224 CG PHE A 550 46.626 36.051 23.776 1.00 8.29 C

ATOM 4225 CD1 PHE A 550 46.857 34.837 24.435 1.00 7.47 C

ATOM 4226 CD2 PHE A 550 46.165 36.013 22.457 1.00 5.03 C

ATOM 4227 CE1 PHE A 550 46.636 33.615 23.801 1.00 2.04 C

ATOM 4228 CE2 PHE A 550 45.940 34.796 21.816 1.00 5.51 C

ATOM 4229 CZ PHE A 550 46.176 33.593 22.491 1.00 4.63 C

ATOM 4230 N GLY A 551 49.796 39.581 24.939 1.00 16.79 N

ATOM 4231 CA GLY A 551 50.308 40.685 25.737 1.00 14.69 C

ATOM 4232 C GLY A 551 50.293 40.420 27.223 1.00 15.60 C

ATOM 4233 O GLY A 551 50.240 41.370 28.011 1.00 15.96 O

ATOM 4234 N GLY A 552 50.328 39.152 27.620 1.00 15.16 N

ATOM 4235 CA GLY A 552 50.307 38.857 29.042 1.00 19.07 C

ATOM 4236 C GLY A 552 49.017 38.268 29.594 1.00 22.61 C

ATOM 4237 O GLY A 552 48.095 37.936 28.852 1.00 23.78 O

ATOM 4238 N GLU A 553 48.957 38.127 30.915 1.00 25.38 N

ATOM 4239 CA GLU A 553 47.790 37.553 31.573 1.00 26.33 C

ATOM 4240 C GLU A 553 46.566 38.462 31.512 1.00 24.10 C

ATOM 4241 O GLU A 553 45.435 38.006 31.680 1.00 22.93 O

ATOM 4242 CB GLU A 553 48.126 37.205 33.025 1.00 29.94 C

ATOM 4243 CG GLU A 553 48.934 35.916 33.188 1.00 40.19 C

ATOM 4244 CD GLU A 553 48.238 34.683 32.596 1.00 48.05 C

ATOM 4245 OE1 GLU A 553 47.144 34.828 32.009 1.00 51.70 O

ATOM 4246 OE2 GLU A 553 48.786 33.563 32.718 1.00 51.03 O

ATOM 4247 N VAL A 554 46.783 39.748 31.260 1.00 22.01 N

ATOM 4248 CA VAL A 554 45.673 40.688 31.163 1.00 19.30 C

ATOM 4249 C VAL A 554 44.956 40.472 29.822 1.00 20.38 C

ATOM 4250 O VAL A 554 43.724 40.434 29.765 1.00 20.98 O

ATOM 4251 CB VAL A 554 46.172 42.141 31.275 1.00 16.36 C

ATOM 4252 CG1 VAL A 554 45.044 43.110 31.004 1.00 16.64 C

ATOM 4253 CG2 VAL A 554 46.729 42.376 32.655 1.00 16.24 C

ATOM 4254 N GLY A 555 45.732 40.319 28.749 1.00 20.76 N

ATOM 4255 CA GLY A 555 45.156 40.082 27.431 1.00 18.91 C

ATOM 4256 C GLY A 555 44.543 38.689 27.352 1.00 19.21 C

ATOM 4257 O GLY A 555 43.453 38.493 26.806 1.00 20.97 O

ATOM 4258 N PHE A 556 45.257 37.700 27.878 1.00 18.81 N

ATOM 4259 CA PHE A 556 44.753 36.336 27.899 1.00 17.67 C

ATOM 4260 C PHE A 556 43.363 36.324 28.595 1.00 20.72 C

ATOM 4261 O PHE A 556 42.411 35.717 28.110 1.00 20.53 O

ATOM 4262 CB PHE A 556 45.743 35.442 28.655 1.00 11.15 C

ATOM 4263 CG PHE A 556 45.771 34.009 28.169 1.00 12.39 C

ATOM 4264 CD1 PHE A 556 45.476 33.693 26.843 1.00 11.81 C

ATOM 4265 CD2 PHE A 556 46.095 32.966 29.037 1.00 7.97 C

ATOM 4266 CE1 PHE A 556 45.513 32.363 26.400 1.00 8.90 C

ATOM 4267 CE2 PHE A 556 46.127 31.641 28.595 1.00 3.97 C

ATOM 4268 CZ PHE A 556 45.835 31.344 27.282 1.00 6.53 C

ATOM 4269 N LYS A 557 43.253 37.015 29.726 1.00 22.76 N

ATOM 4270 CA LYS A 557 42.001 37.069 30.479 1.00 23.42 C

ATOM 4271 C LYS A 557 40.837 37.632 29.671 1.00 24.04 C

ATOM 4272 O LYS A 557 39.697 37.165 29.785 1.00 25.61 O

ATOM 4273 CB LYS A 557 42.188 37.902 31.751 1.00 22.65 C

ATOM 4274 CG LYS A 557 40.910 38.128 32.565 1.00 24.22 C

ATOM 4275 CD LYS A 557 40.883 37.293 33.859 1.00 27.28 C

ATOM 4276 CE LYS A 557 40.219 38.044 35.022 1.00 26.28 C

ATOM 4277 NZ LYS A 557 40.490 39.503 34.954 1.00 29.34 N

ATOM 4278 N ILE A 558 41.114 38.644 28.858 1.00 23.03 N

ATOM 4279 CA ILE A 558 40.066 39.249 28.041 1.00 19.06 C

ATOM 4280 C ILE A 558 39.370 38.153 27.235 1.00 19.88 C

ATOM 4281 O ILE A 558 38.150 38.114 27.132 1.00 20.25 O

ATOM 4282 CB ILE A 558 40.662 40.269 27.067 1.00 15.45 C

ATOM 4283 CG1 ILE A 558 41.278 41.425 27.848 1.00 11.24 C

ATOM 4284 CG2 ILE A 558 39.602 40.718 26.092 1.00 15.53 C

ATOM 4285 CD1 ILE A 558 41.815 42.519 26.973 1.00 15.84 C

ATOM 4286 N ILE A 559 40.184 37.262 26.678 1.00 17.99 N

ATOM 4287 CA ILE A 559 39.711 36.152 25.875 1.00 14.67 C

ATOM 4288 C ILE A 559 38.960 35.129 26.693 1.00 15.60 C

ATOM 4289 O ILE A 559 37.821 34.790 26.397 1.00 18.75 O

ATOM 4290 CB ILE A 559 40.875 35.408 25.246 1.00 11.91 C

ATOM 4291 CG1 ILE A 559 41.661 36.353 24.337 1.00 12.58 C

ATOM 4292 CG2 ILE A 559 40.362 34.158 24.562 1.00 9.52 C

ATOM 4293 CD1 ILE A 559 42.631 35.639 23.398 1.00 13.58 C

ATOM 4294 N ASN A 560 39.618 34.628 27.726 1.00 15.95 N

ATOM 4295 CA ASN A 560 39.034 33.604 28.568 1.00 16.27 C

ATOM 4296 C ASN A 560 37.802 33.993 29.409 1.00 17.07 C

ATOM 4297 O ASN A 560 37.183 33.136 30.034 1.00 17.86 O

ATOM 4298 CB ASN A 560 40.144 32.999 29.419 1.00 18.06 C

ATOM 4299 CG ASN A 560 41.139 32.210 28.584 1.00 17.68 C

ATOM 4300 OD1 ASN A 560 40.755 31.299 27.861 1.00 23.41 O

ATOM 4301 ND2 ASN A 560 42.414 32.564 28.669 1.00 18.61 N

ATOM 4302 N THR A 561 37.438 35.271 29.417 1.00 17.96 N

ATOM 4303 CA THR A 561 36.232 35.734 30.125 1.00 18.79 C

ATOM 4304 C THR A 561 35.307 36.485 29.148 1.00 16.64 C

ATOM 4305 O THR A 561 34.508 37.311 29.565 1.00 18.97 O

ATOM 4306 CB THR A 561 36.546 36.740 31.280 1.00 19.45 C

ATOM 4307 OG1 THR A 561 36.958 37.995 30.715 1.00 20.77 O

ATOM 4308 CG2 THR A 561 37.623 36.202 32.206 1.00 17.76 C

ATOM 4309 N ALA A 562 35.416 36.209 27.854 1.00 17.12 N

ATOM 4310 CA ALA A 562 34.601 36.915 26.870 1.00 17.84 C

ATOM 4311 C ALA A 562 33.225 36.293 26.768 1.00 19.10 C

ATOM 4312 O ALA A 562 33.051 35.114 27.089 1.00 21.19 O

ATOM 4313 CB ALA A 562 35.291 36.899 25.504 1.00 14.26 C

ATOM 4314 N SER A 563 32.257 37.081 26.307 1.00 18.42 N

ATOM 4315 CA SER A 563 30.881 36.617 26.156 1.00 20.38 C

ATOM 4316 C SER A 563 30.090 37.662 25.371 1.00 20.16 C

ATOM 4317 O SER A 563 30.538 38.803 25.252 1.00 22.61 O

ATOM 4318 CB SER A 563 30.237 36.405 27.540 1.00 22.24 C

ATOM 4319 OG SER A 563 30.024 37.626 28.233 1.00 21.04 O

ATOM 4320 N ILE A 564 28.929 37.293 24.835 1.00 17.33 N

ATOM 4321 CA ILE A 564 28.136 38.269 24.091 1.00 18.28 C

ATOM 4322 C ILE A 564 27.625 39.373 25.024 1.00 17.80 C

ATOM 4323 O ILE A 564 27.450 40.510 24.602 1.00 19.07 O

ATOM 4324 CB ILE A 564 26.927 37.611 23.320 1.00 17.06 C

ATOM 4325 CG1 ILE A 564 26.393 38.608 22.280 1.00 11.91 C

ATOM 4326 CG2 ILE A 564 25.801 37.185 24.288 1.00 14.11 C

ATOM 4327 CD1 ILE A 564 27.416 39.054 21.269 1.00 2.46 C

ATOM 4328 N GLN A 565 27.402 39.037 26.294 1.00 16.18 N

ATOM 4329 CA GLN A 565 26.941 40.023 27.266 1.00 15.84 C

ATOM 4330 C GLN A 565 28.029 41.085 27.524 1.00 15.36 C

ATOM 4331 O GLN A 565 27.773 42.288 27.398 1.00 12.01 O

ATOM 4332 CB GLN A 565 26.566 39.333 28.589 1.00 17.41 C

ATOM 4333 CG GLN A 565 26.013 40.288 29.644 1.00 21.21 C

ATOM 4334 CD GLN A 565 24.740 41.020 29.185 1.00 26.63 C

ATOM 4335 OE1 GLN A 565 23.623 40.555 29.428 1.00 26.60 O

ATOM 4336 NE2 GLN A 565 24.911 42.167 28.521 1.00 28.84 N

ATOM 4337 N SER A 566 29.236 40.626 27.880 1.00 14.41 N

ATOM 4338 CA SER A 566 30.366 41.506 28.167 1.00 13.72 C

ATOM 4339 C SER A 566 30.879 42.187 26.902 1.00 15.53 C

ATOM 4340 O SER A 566 31.560 43.209 26.957 1.00 14.25 O

ATOM 4341 CB SER A 566 31.500 40.722 28.813 1.00 10.99 C

ATOM 4342 OG SER A 566 32.441 40.351 27.834 1.00 16.31 O

ATOM 4343 N LEU A 567 30.551 41.615 25.750 1.00 17.97 N

ATOM 4344 CA LEU A 567 30.963 42.216 24.498 1.00 21.30 C

ATOM 4345 C LEU A 567 30.101 43.469 24.394 1.00 22.84 C

ATOM 4346 O LEU A 567 30.598 44.596 24.365 1.00 22.51 O

ATOM 4347 CB LEU A 567 30.668 41.286 23.321 1.00 18.51 C

ATOM 4348 CG LEU A 567 31.002 41.997 22.014 1.00 19.69 C

ATOM 4349 CD1 LEU A 567 32.512 42.015 21.855 1.00 20.12 C

ATOM 4350 CD2 LEU A 567 30.330 41.324 20.839 1.00 20.31 C

ATOM 4351 N ILE A 568 28.789 43.246 24.371 1.00 24.59 N

ATOM 4352 CA ILE A 568 27.807 44.316 24.285 1.00 24.78 C

ATOM 4353 C ILE A 568 27.803 45.166 25.562 1.00 27.57 C

ATOM 4354 O ILE A 568 27.310 46.293 25.571 1.00 31.63 O

ATOM 4355 CB ILE A 568 26.399 43.723 24.009 1.00 22.77 C

ATOM 4356 CG1 ILE A 568 26.263 43.426 22.508 1.00 22.54 C

ATOM 4357 CG2 ILE A 568 25.300 44.673 24.490 1.00 23.67 C

ATOM 4358 CD1 ILE A 568 26.303 41.939 22.141 1.00 18.17 C

ATOM 4359 N CYS A 569 28.381 44.653 26.642 1.00 27.03 N

ATOM 4360 CA CYS A 569 28.402 45.435 27.865 1.00 28.37 C

ATOM 4361 C CYS A 569 29.568 46.443 27.971 1.00 25.39 C

ATOM 4362 O CYS A 569 29.369 47.541 28.501 1.00 24.95 O

ATOM 4363 CB CYS A 569 28.342 44.498 29.078 1.00 31.50 C

ATOM 4364 SG CYS A 569 28.044 45.365 30.658 1.00 39.29 S

ATOM 4365 N ASN A 570 30.760 46.097 27.467 1.00 22.96 N

ATOM 4366 CA ASN A 570 31.909 47.028 27.514 1.00 20.80 C

ATOM 4367 C ASN A 570 31.891 47.983 26.335 1.00 23.89 C

ATOM 4368 O ASN A 570 32.708 48.899 26.292 1.00 26.76 O

ATOM 4369 CB ASN A 570 33.283 46.329 27.441 1.00 12.37 C

ATOM 4370 CG ASN A 570 33.357 45.072 28.277 1.00 12.00 C

ATOM 4371 OD1 ASN A 570 33.024 45.093 29.448 1.00 13.75 O

ATOM 4372 ND2 ASN A 570 33.804 43.967 27.677 1.00 5.45 N

ATOM 4373 N ASN A 571 30.971 47.782 25.388 1.00 25.86 N

ATOM 4374 CA ASN A 571 30.950 48.598 24.176 1.00 24.14 C

ATOM 4375 C ASN A 571 29.724 49.407 23.840 1.00 25.27 C

ATOM 4376 O ASN A 571 29.816 50.324 23.019 1.00 27.23 O

ATOM 4377 CB ASN A 571 31.268 47.722 22.965 1.00 23.35 C

ATOM 4378 CG ASN A 571 32.655 47.136 23.023 1.00 21.58 C

ATOM 4379 OD1 ASN A 571 33.652 47.858 23.019 1.00 26.07 O

ATOM 4380 ND2 ASN A 571 32.729 45.824 23.084 1.00 20.11 N

ATOM 4381 N VAL A 572 28.575 49.067 24.417 1.00 23.94 N

ATOM 4382 CA VAL A 572 27.355 49.818 24.119 1.00 21.79 C

ATOM 4383 C VAL A 572 26.840 50.522 25.367 1.00 22.49 C

ATOM 4384 O VAL A 572 26.739 49.928 26.441 1.00 23.90 O

ATOM 4385 CB VAL A 572 26.248 48.907 23.527 1.00 17.03 C

ATOM 4386 CG1 VAL A 572 25.155 49.751 22.958 1.00 15.18 C

ATOM 4387 CG2 VAL A 572 26.830 48.003 22.428 1.00 15.40 C

ATOM 4388 N LYS A 573 26.526 51.801 25.213 1.00 22.54 N

ATOM 4389 CA LYS A 573 26.045 52.630 26.307 1.00 23.77 C

ATOM 4390 C LYS A 573 24.892 52.046 27.158 1.00 25.77 C

ATOM 4391 O LYS A 573 23.878 51.575 26.636 1.00 25.90 O

ATOM 4392 CB LYS A 573 25.650 53.983 25.727 1.00 23.48 C

ATOM 4393 CG LYS A 573 25.734 55.142 26.669 1.00 28.12 C

ATOM 4394 CD LYS A 573 24.935 56.285 26.079 1.00 33.59 C

ATOM 4395 CE LYS A 573 24.792 57.434 27.055 1.00 39.88 C

ATOM 4396 NZ LYS A 573 24.816 58.762 26.357 1.00 43.99 N

ATOM 4397 N GLY A 574 25.063 52.083 28.478 1.00 26.78 N

ATOM 4398 CA GLY A 574 24.039 51.585 29.385 1.00 26.52 C

ATOM 4399 C GLY A 574 24.125 50.101 29.677 1.00 27.29 C

ATOM 4400 O GLY A 574 23.373 49.553 30.492 1.00 25.49 O

ATOM 4401 N CYS A 575 25.079 49.449 29.023 1.00 28.55 N

ATOM 4402 CA CYS A 575 25.258 48.017 29.174 1.00 25.92 C

ATOM 4403 C CYS A 575 23.879 47.379 29.081 1.00 23.25 C

ATOM 4404 O CYS A 575 23.380 46.819 30.053 1.00 21.70 O

ATOM 4405 CB CYS A 575 25.930 47.657 30.510 1.00 25.72 C

ATOM 4406 SG CYS A 575 26.061 45.836 30.760 1.00 39.07 S

ATOM 4407 N PRO A 576 23.236 47.477 27.897 1.00 21.18 N

ATOM 4408 CA PRO A 576 21.905 46.884 27.725 1.00 18.69 C

ATOM 4409 C PRO A 576 21.999 45.367 27.857 1.00 18.62 C

ATOM 4410 O PRO A 576 22.926 44.742 27.342 1.00 20.82 O

ATOM 4411 CB PRO A 576 21.491 47.314 26.319 1.00 13.54 C

ATOM 4412 CG PRO A 576 22.782 47.575 25.617 1.00 17.16 C

ATOM 4413 CD PRO A 576 23.708 48.125 26.659 1.00 17.29 C

ATOM 4414 N PHE A 577 21.058 44.770 28.567 1.00 17.46 N

ATOM 4415 CA PHE A 577 21.098 43.333 28.712 1.00 16.21 C

ATOM 4416 C PHE A 577 20.948 42.755 27.325 1.00 14.49 C

ATOM 4417 O PHE A 577 20.211 43.300 26.502 1.00 16.11 O

ATOM 4418 CB PHE A 577 19.959 42.841 29.606 1.00 16.58 C

ATOM 4419 CG PHE A 577 19.646 41.390 29.428 1.00 15.33 C

ATOM 4420 CD1 PHE A 577 20.080 40.457 30.349 1.00 16.79 C

ATOM 4421 CD2 PHE A 577 18.933 40.960 28.329 1.00 16.89 C

ATOM 4422 CE1 PHE A 577 19.811 39.110 30.175 1.00 19.59 C

ATOM 4423 CE2 PHE A 577 18.656 39.626 28.143 1.00 18.68 C

ATOM 4424 CZ PHE A 577 19.094 38.693 29.065 1.00 20.11 C

ATOM 4425 N THR A 578 21.663 41.672 27.055 1.00 13.49 N

ATOM 4426 CA THR A 578 21.561 41.025 25.756 1.00 13.80 C

ATOM 4427 C THR A 578 21.742 39.518 25.879 1.00 16.50 C

ATOM 4428 O THR A 578 22.360 39.025 26.833 1.00 16.32 O

ATOM 4429 CB THR A 578 22.554 41.587 24.731 1.00 10.89 C

ATOM 4430 OG1 THR A 578 21.967 41.485 23.428 1.00 9.53 O

ATOM 4431 CG2 THR A 578 23.857 40.820 24.761 1.00 7.39 C

ATOM 4432 N SER A 579 21.185 38.798 24.906 1.00 16.53 N

ATOM 4433 CA SER A 579 21.214 37.353 24.902 1.00 14.47 C

ATOM 4434 C SER A 579 20.993 36.885 23.476 1.00 15.79 C

ATOM 4435 O SER A 579 20.685 37.690 22.610 1.00 14.67 O

ATOM 4436 CB SER A 579 20.095 36.848 25.809 1.00 15.77 C

ATOM 4437 OG SER A 579 19.726 35.520 25.486 1.00 28.62 O

ATOM 4438 N PHE A 580 21.162 35.591 23.220 1.00 18.06 N

ATOM 4439 CA PHE A 580 20.935 35.080 21.876 1.00 19.14 C

ATOM 4440 C PHE A 580 19.532 34.477 21.740 1.00 20.78 C

ATOM 4441 O PHE A 580 19.159 33.949 20.686 1.00 20.24 O

ATOM 4442 CB PHE A 580 22.008 34.053 21.502 1.00 21.24 C

ATOM 4443 CG PHE A 580 23.255 34.678 20.917 1.00 25.94 C

ATOM 4444 CD1 PHE A 580 24.523 34.211 21.268 1.00 30.56 C

ATOM 4445 CD2 PHE A 580 23.166 35.768 20.065 1.00 23.30 C

ATOM 4446 CE1 PHE A 580 25.672 34.829 20.783 1.00 30.61 C

ATOM 4447 CE2 PHE A 580 24.304 36.386 19.579 1.00 25.22 C

ATOM 4448 CZ PHE A 580 25.557 35.920 19.939 1.00 29.59 C

ATOM 4449 N ASN A 581 18.752 34.558 22.814 1.00 20.80 N

ATOM 4450 CA ASN A 581 17.395 34.041 22.793 1.00 22.38 C

ATOM 4451 C ASN A 581 16.467 35.071 23.392 1.00 23.49 C

ATOM 4452 O ASN A 581 16.893 35.899 24.205 1.00 22.40 O

ATOM 4453 CB ASN A 581 17.296 32.744 23.589 1.00 24.92 C

ATOM 4454 CG ASN A 581 17.871 32.877 24.973 1.00 24.72 C

ATOM 4455 OD1 ASN A 581 17.395 33.675 25.778 1.00 23.44 O

ATOM 4456 ND2 ASN A 581 18.906 32.093 25.263 1.00 29.25 N

ATOM 4457 N VAL A 582 15.204 35.023 22.975 1.00 24.90 N

ATOM 4458 CA VAL A 582 14.187 35.939 23.477 1.00 27.37 C

ATOM 4459 C VAL A 582 13.917 35.588 24.947 1.00 30.66 C

ATOM 4460 O VAL A 582 13.590 34.438 25.277 1.00 29.54 O

ATOM 4461 CB VAL A 582 12.887 35.824 22.664 1.00 20.53 C

ATOM 4462 CG1 VAL A 582 11.820 36.635 23.332 1.00 23.29 C

ATOM 4463 CG2 VAL A 582 13.103 36.318 21.239 1.00 17.17 C

ATOM 4464 N GLN A 583 14.066 36.583 25.819 1.00 37.78 N

ATOM 4465 CA GLN A 583 13.904 36.391 27.263 1.00 45.18 C

ATOM 4466 C GLN A 583 12.455 36.294 27.763 1.00 46.64 C

ATOM 4467 O GLN A 583 11.857 37.316 28.142 1.00 44.35 O

ATOM 4468 CB GLN A 583 14.674 37.493 28.023 1.00 46.87 C

ATOM 4469 CG GLN A 583 14.241 38.941 27.697 1.00 53.38 C

ATOM 4470 CD GLN A 583 14.833 39.487 26.397 1.00 55.15 C

ATOM 4471 OE1 GLN A 583 14.116 40.025 25.538 1.00 54.08 O

ATOM 4472 NE2 GLN A 583 16.146 39.351 26.250 1.00 57.45 N

TER 4473 GLN A 583

ATOM 4474 N ALA B1033 67.229 49.605 23.683 1.00 38.56 N

ATOM 4475 CA ALA B1033 66.369 50.059 24.812 1.00 38.16 C

ATOM 4476 C ALA B1033 65.436 48.909 25.149 1.00 38.33 C

ATOM 4477 O ALA B1033 64.919 48.800 26.269 1.00 39.21 O

ATOM 4478 CB ALA B1033 65.565 51.291 24.397 1.00 37.75 C

ATOM 4479 N ASN B1034 65.228 48.052 24.159 1.00 34.99 N

ATOM 4480 CA ASN B1034 64.379 46.897 24.329 1.00 35.14 C

ATOM 4481 C ASN B1034 64.965 46.039 25.444 1.00 34.58 C

ATOM 4482 O ASN B1034 66.058 45.500 25.304 1.00 39.06 O

ATOM 4483 CB ASN B1034 64.333 46.113 23.019 1.00 33.41 C

ATOM 4484 CG ASN B1034 63.337 44.967 23.048 1.00 33.36 C

ATOM 4485 OD1 ASN B1034 62.812 44.571 22.014 1.00 38.44 O

ATOM 4486 ND2 ASN B1034 63.082 44.424 24.225 1.00 36.71 N

ATOM 4487 N PRO B1035 64.255 45.930 26.579 1.00 32.07 N

ATOM 4488 CA PRO B1035 64.698 45.132 27.728 1.00 30.74 C

ATOM 4489 C PRO B1035 64.809 43.645 27.422 1.00 30.64 C

ATOM 4490 O PRO B1035 65.339 42.877 28.222 1.00 31.14 O

ATOM 4491 CB PRO B1035 63.646 45.406 28.796 1.00 32.33 C

ATOM 4492 CG PRO B1035 62.459 45.912 28.055 1.00 33.61 C

ATOM 4493 CD PRO B1035 62.974 46.609 26.834 1.00 31.14 C

ATOM 4494 N CYS B1036 64.296 43.233 26.274 1.00 30.42 N

ATOM 4495 CA CYS B1036 64.375 41.829 25.889 1.00 32.54 C

ATOM 4496 C CYS B1036 65.552 41.636 24.935 1.00 32.65 C

ATOM 4497 O CYS B1036 65.825 40.518 24.477 1.00 31.24 O

ATOM 4498 CB CYS B1036 63.068 41.372 25.222 1.00 34.58 C

ATOM 4499 SG CYS B1036 61.709 40.945 26.366 1.00 31.66 S

ATOM 4500 N CYS B1037 66.248 42.738 24.663 1.00 30.83 N

ATOM 4501 CA CYS B1037 67.412 42.767 23.775 1.00 29.37 C

ATOM 4502 C CYS B1037 68.508 41.800 24.209 1.00 26.99 C

ATOM 4503 O CYS B1037 69.276 41.321 23.384 1.00 26.11 O

ATOM 4504 CB CYS B1037 68.001 44.187 23.737 1.00 31.47 C

ATOM 4505 SG CYS B1037 67.312 45.304 22.462 1.00 37.35 S

ATOM 4506 N SER B1038 68.565 41.519 25.508 1.00 26.22 N

ATOM 4507 CA SER B1038 69.585 40.647 26.091 1.00 26.62 C

ATOM 4508 C SER B1038 69.314 39.128 25.972 1.00 28.92 C

ATOM 4509 O SER B1038 70.129 38.308 26.424 1.00 29.16 O

ATOM 4510 CB SER B1038 69.771 41.041 27.560 1.00 23.03 C

ATOM 4511 OG SER B1038 69.456 39.971 28.430 1.00 18.81 O

ATOM 4512 N ASN B1039 68.188 38.773 25.338 1.00 30.66 N

ATOM 4513 CA ASN B1039 67.746 37.379 25.154 1.00 31.89 C

ATOM 4514 C ASN B1039 67.751 36.641 26.507 1.00 31.71 C

ATOM 4515 O ASN B1039 68.347 35.564 26.647 1.00 33.15 O

ATOM 4516 CB ASN B1039 68.640 36.652 24.135 1.00 34.26 C

ATOM 4517 CG ASN B1039 68.798 37.435 22.834 1.00 38.11 C

ATOM 4518 OD1 ASN B1039 68.030 37.264 21.886 1.00 39.84 O

ATOM 4519 ND2 ASN B1039 69.802 38.303 22.787 1.00 41.51 N

ATOM 4520 N PRO B1040 67.049 37.211 27.509 1.00 27.34 N

ATOM 4521 CA PRO B1040 66.935 36.679 28.869 1.00 24.45 C

ATOM 4522 C PRO B1040 66.363 35.272 29.004 1.00 25.93 C

ATOM 4523 O PRO B1040 66.961 34.405 29.638 1.00 28.54 O

ATOM 4524 CB PRO B1040 66.064 37.709 29.588 1.00 23.27 C

ATOM 4525 CG PRO B1040 66.104 38.936 28.733 1.00 23.47 C

ATOM 4526 CD PRO B1040 66.259 38.444 27.341 1.00 25.31 C

ATOM 4527 N CYS B1041 65.201 35.038 28.409 1.00 24.34 N

ATOM 4528 CA CYS B1041 64.571 33.737 28.528 1.00 22.03 C

ATOM 4529 C CYS B1041 65.375 32.612 27.937 1.00 18.48 C

ATOM 4530 O CYS B1041 65.828 32.697 26.804 1.00 20.11 O

ATOM 4531 CB CYS B1041 63.180 33.757 27.889 1.00 23.34 C

ATOM 4532 SG CYS B1041 62.173 35.189 28.372 1.00 24.29 S

ATOM 4533 N GLN B1042 65.520 31.555 28.722 1.00 16.53 N

ATOM 4534 CA GLN B1042 66.237 30.360 28.327 1.00 19.23 C

ATOM 4535 C GLN B1042 65.202 29.250 28.113 1.00 20.99 C

ATOM 4536 O GLN B1042 64.077 29.350 28.590 1.00 23.62 O

ATOM 4537 CB GLN B1042 67.208 29.930 29.441 1.00 17.74 C

ATOM 4538 CG GLN B1042 68.249 30.973 29.820 1.00 15.49 C

ATOM 4539 CD GLN B1042 68.842 31.643 28.603 1.00 12.50 C

ATOM 4540 OE1 GLN B1042 69.223 30.973 27.647 1.00 12.21 O

ATOM 4541 NE2 GLN B1042 68.922 32.967 28.629 1.00 8.64 N

ATOM 4542 N ASN B1043 65.584 28.207 27.383 1.00 18.85 N

ATOM 4543 CA ASN B1043 64.724 27.057 27.142 1.00 20.31 C

ATOM 4544 C ASN B1043 63.411 27.201 26.358 1.00 21.90 C

ATOM 4545 O ASN B1043 62.434 26.497 26.638 1.00 22.80 O

ATOM 4546 CB ASN B1043 64.450 26.393 28.481 1.00 19.42 C

ATOM 4547 CG ASN B1043 65.720 25.945 29.163 1.00 20.83 C

ATOM 4548 OD1 ASN B1043 66.449 25.088 28.647 1.00 16.60 O

ATOM 4549 ND2 ASN B1043 65.999 26.522 30.330 1.00 22.13 N

ATOM 4550 N ARG B1044 63.393 28.090 25.369 1.00 22.78 N

ATOM 4551 CA ARG B1044 62.209 28.309 24.533 1.00 21.85 C

ATOM 4552 C ARG B1044 61.130 29.219 25.135 1.00 19.74 C

ATOM 4553 O ARG B1044 60.045 29.364 24.580 1.00 18.23 O

ATOM 4554 CB ARG B1044 61.619 26.959 24.136 1.00 20.07 C

ATOM 4555 CG ARG B1044 62.537 26.175 23.225 1.00 12.93 C

ATOM 4556 CD ARG B1044 62.376 26.650 21.815 1.00 9.92 C

ATOM 4557 NE ARG B1044 61.622 25.686 21.020 1.00 12.18 N

ATOM 4558 CZ ARG B1044 60.686 26.016 20.125 1.00 13.84 C

ATOM 4559 NH1 ARG B1044 60.395 27.292 19.921 1.00 12.12 N

ATOM 4560 NH2 ARG B1044 60.048 25.083 19.420 1.00 9.29 N

ATOM 4561 N GLY B1045 61.469 29.842 26.260 1.00 21.68 N

ATOM 4562 CA GLY B1045 60.578 30.758 26.940 1.00 23.63 C

ATOM 4563 C GLY B1045 60.505 32.066 26.184 1.00 25.98 C

ATOM 4564 O GLY B1045 61.508 32.552 25.657 1.00 20.93 O

ATOM 4565 N GLU B1046 59.307 32.643 26.147 1.00 30.26 N

ATOM 4566 CA GLU B1046 59.069 33.889 25.430 1.00 33.22 C

ATOM 4567 C GLU B1046 59.299 35.131 26.272 1.00 32.32 C

ATOM 4568 O GLU B1046 58.760 35.245 27.375 1.00 32.46 O

ATOM 4569 CB GLU B1046 57.635 33.915 24.907 1.00 36.75 C

ATOM 4570 CG GLU B1046 57.033 32.546 24.649 1.00 44.98 C

ATOM 4571 CD GLU B1046 56.408 32.443 23.258 1.00 49.58 C

ATOM 4572 OE1 GLU B1046 56.151 33.523 22.659 1.00 46.59 O

ATOM 4573 OE2 GLU B1046 56.181 31.292 22.782 1.00 47.83 O

ATOM 4574 N CYS B1047 60.092 36.067 25.747 1.00 31.97 N

ATOM 4575 CA CYS B1047 60.367 37.322 26.459 1.00 29.52 C

ATOM 4576 C CYS B1047 59.361 38.383 26.041 1.00 26.94 C

ATOM 4577 O CYS B1047 59.188 38.644 24.845 1.00 24.80 O

ATOM 4578 CB CYS B1047 61.778 37.854 26.165 1.00 28.53 C

ATOM 4579 SG CYS B1047 62.278 39.212 27.286 1.00 31.27 S

ATOM 4580 N MET B1048 58.720 39.000 27.034 1.00 24.57 N

ATOM 4581 CA MET B1048 57.730 40.039 26.797 1.00 22.95 C

ATOM 4582 C MET B1048 58.077 41.229 27.674 1.00 20.90 C

ATOM 4583 O MET B1048 58.183 41.078 28.891 1.00 20.23 O

ATOM 4584 CB MET B1048 56.340 39.517 27.161 1.00 27.04 C

ATOM 4585 CG MET B1048 55.197 40.384 26.653 1.00 34.20 C

ATOM 4586 SD MET B1048 53.643 40.121 27.534 1.00 33.99 S

ATOM 4587 CE MET B1048 54.248 40.001 29.236 1.00 36.37 C

ATOM 4588 N SER B1049 58.253 42.401 27.054 1.00 20.18 N

ATOM 4589 CA SER B1049 58.589 43.638 27.778 1.00 17.90 C

ATOM 4590 C SER B1049 57.423 44.135 28.612 1.00 21.44 C

ATOM 4591 O SER B1049 56.389 44.560 28.082 1.00 24.24 O

ATOM 4592 CB SER B1049 59.019 44.760 26.820 1.00 14.31 C

ATOM 4593 OG SER B1049 58.102 44.960 25.759 1.00 14.01 O

ATOM 4594 N THR B1050 57.610 44.092 29.925 1.00 22.25 N

ATOM 4595 CA THR B1050 56.601 44.507 30.885 1.00 20.60 C

ATOM 4596 C THR B1050 56.981 45.856 31.516 1.00 22.25 C

ATOM 4597 O THR B1050 57.403 45.912 32.665 1.00 23.71 O

ATOM 4598 CB THR B1050 56.493 43.432 31.960 1.00 20.49 C

ATOM 4599 OG1 THR B1050 57.570 43.582 32.888 1.00 25.13 O

ATOM 4600 CG2 THR B1050 56.604 42.040 31.324 1.00 23.47 C

ATOM 4601 N GLY B1051 56.821 46.942 30.769 1.00 20.71 N

ATOM 4602 CA GLY B1051 57.212 48.237 31.283 1.00 23.38 C

ATOM 4603 C GLY B1051 58.378 48.674 30.418 1.00 27.76 C

ATOM 4604 O GLY B1051 58.894 47.863 29.644 1.00 31.17 O

ATOM 4605 N PHE B1052 58.810 49.927 30.534 1.00 30.25 N

ATOM 4606 CA PHE B1052 59.894 50.431 29.690 1.00 33.02 C

ATOM 4607 C PHE B1052 61.271 49.827 29.836 1.00 35.34 C

ATOM 4608 O PHE B1052 62.094 49.959 28.929 1.00 36.15 O

ATOM 4609 CB PHE B1052 60.032 51.933 29.850 1.00 32.87 C

ATOM 4610 CG PHE B1052 59.204 52.705 28.897 1.00 31.97 C

ATOM 4611 CD1 PHE B1052 58.184 53.519 29.355 1.00 31.36 C

ATOM 4612 CD2 PHE B1052 59.445 52.627 27.537 1.00 31.86 C

ATOM 4613 CE1 PHE B1052 57.415 54.248 28.470 1.00 32.11 C

ATOM 4614 CE2 PHE B1052 58.681 53.352 26.640 1.00 32.11 C

ATOM 4615 CZ PHE B1052 57.664 54.165 27.106 1.00 32.31 C

ATOM 4616 N ASP B1053 61.542 49.186 30.964 1.00 36.49 N

ATOM 4617 CA ASP B1053 62.856 48.591 31.162 1.00 40.09 C

ATOM 4618 C ASP B1053 62.739 47.340 32.012 1.00 38.67 C

ATOM 4619 O ASP B1053 63.634 47.015 32.789 1.00 37.99 O

ATOM 4620 CB ASP B1053 63.809 49.595 31.835 1.00 46.73 C

ATOM 4621 CG ASP B1053 64.472 50.567 30.830 1.00 54.21 C

ATOM 4622 OD1 ASP B1053 64.876 50.146 29.709 1.00 55.60 O

ATOM 4623 OD2 ASP B1053 64.593 51.766 31.184 1.00 55.73 O

ATOM 4624 N GLN B1054 61.612 46.653 31.869 1.00 38.04 N

ATOM 4625 CA GLN B1054 61.367 45.413 32.599 1.00 36.64 C

ATOM 4626 C GLN B1054 60.788 44.436 31.595 1.00 30.39 C

ATOM 4627 O GLN B1054 60.215 44.842 30.591 1.00 27.93 O

ATOM 4628 CB GLN B1054 60.374 45.627 33.748 1.00 41.94 C

ATOM 4629 CG GLN B1054 60.897 46.507 34.869 1.00 49.54 C

ATOM 4630 CD GLN B1054 60.248 47.890 34.885 1.00 54.92 C

ATOM 4631 OE1 GLN B1054 59.971 48.476 33.834 1.00 59.13 O

ATOM 4632 NE2 GLN B1054 60.004 48.418 36.083 1.00 57.52 N

ATOM 4633 N TYR B1055 60.966 43.152 31.855 1.00 25.84 N

ATOM 4634 CA TYR B1055 60.442 42.135 30.968 1.00 24.24 C

ATOM 4635 C TYR B1055 59.852 40.999 31.797 1.00 21.91 C

ATOM 4636 O TYR B1055 59.833 41.051 33.028 1.00 21.34 O

ATOM 4637 CB TYR B1055 61.548 41.602 30.053 1.00 26.16 C

ATOM 4638 CG TYR B1055 62.536 40.724 30.772 1.00 30.77 C

ATOM 4639 CD1 TYR B1055 62.341 39.349 30.860 1.00 30.76 C

ATOM 4640 CD2 TYR B1055 63.653 41.278 31.397 1.00 31.76 C

ATOM 4641 CE1 TYR B1055 63.235 38.553 31.559 1.00 34.77 C

ATOM 4642 CE2 TYR B1055 64.548 40.495 32.094 1.00 30.53 C

ATOM 4643 CZ TYR B1055 64.339 39.138 32.174 1.00 33.26 C

ATOM 4644 OH TYR B1055 65.233 38.367 32.877 1.00 35.48 O

ATOM 4645 N LYS B1056 59.383 39.969 31.113 1.00 18.91 N

ATOM 4646 CA LYS B1056 58.788 38.838 31.776 1.00 17.48 C

ATOM 4647 C LYS B1056 58.945 37.644 30.845 1.00 16.85 C

ATOM 4648 O LYS B1056 58.873 37.788 29.621 1.00 17.46 O

ATOM 4649 CB LYS B1056 57.320 39.163 32.047 1.00 17.70 C

ATOM 4650 CG LYS B1056 56.420 37.974 32.169 1.00 17.98 C

ATOM 4651 CD LYS B1056 56.268 37.561 33.599 1.00 19.99 C

ATOM 4652 CE LYS B1056 55.929 36.082 33.706 1.00 25.33 C

ATOM 4653 NZ LYS B1056 55.884 35.682 35.144 1.00 27.96 N

ATOM 4654 N CYS B1057 59.183 36.467 31.409 1.00 17.45 N

ATOM 4655 CA CYS B1057 59.355 35.274 30.578 1.00 19.14 C

ATOM 4656 C CYS B1057 58.177 34.344 30.689 1.00 18.69 C

ATOM 4657 O CYS B1057 57.778 33.980 31.794 1.00 19.92 O

ATOM 4658 CB CYS B1057 60.626 34.490 30.961 1.00 19.74 C

ATOM 4659 SG CYS B1057 62.213 35.200 30.407 1.00 24.65 S

ATOM 4660 N ASP B1058 57.613 33.973 29.541 1.00 19.78 N

ATOM 4661 CA ASP B1058 56.488 33.048 29.508 1.00 21.11 C

ATOM 4662 C ASP B1058 57.133 31.674 29.386 1.00 20.50 C

ATOM 4663 O ASP B1058 57.672 31.308 28.332 1.00 17.36 O

ATOM 4664 CB ASP B1058 55.572 33.329 28.307 1.00 22.76 C

ATOM 4665 CG ASP B1058 54.216 32.661 28.439 1.00 20.22 C

ATOM 4666 OD1 ASP B1058 54.030 31.856 29.367 1.00 19.27 O

ATOM 4667 OD2 ASP B1058 53.326 32.935 27.614 1.00 23.10 O

ATOM 4668 N CYS B1059 57.085 30.940 30.495 1.00 23.22 N

ATOM 4669 CA CYS B1059 57.680 29.621 30.590 1.00 28.89 C

ATOM 4670 C CYS B1059 56.692 28.485 30.320 1.00 28.85 C

ATOM 4671 O CYS B1059 57.029 27.308 30.480 1.00 28.85 O

ATOM 4672 CB CYS B1059 58.341 29.448 31.968 1.00 31.90 C

ATOM 4673 SG CYS B1059 59.773 30.552 32.324 1.00 37.57 S

ATOM 4674 N THR B1060 55.485 28.845 29.889 1.00 27.52 N

ATOM 4675 CA THR B1060 54.450 27.864 29.566 1.00 25.13 C

ATOM 4676 C THR B1060 55.015 26.682 28.759 1.00 24.01 C

ATOM 4677 O THR B1060 55.693 26.877 27.739 1.00 25.06 O

ATOM 4678 CB THR B1060 53.316 28.512 28.729 1.00 26.26 C

ATOM 4679 OG1 THR B1060 52.969 29.779 29.297 1.00 26.63 O

ATOM 4680 CG2 THR B1060 52.089 27.614 28.687 1.00 24.57 C

ATOM 4681 N ARG B1061 54.734 25.469 29.238 1.00 20.02 N

ATOM 4682 CA ARG B1061 55.152 24.227 28.595 1.00 16.54 C

ATOM 4683 C ARG B1061 56.635 24.079 28.257 1.00 15.83 C

ATOM 4684 O ARG B1061 56.998 23.244 27.429 1.00 13.45 O

ATOM 4685 CB ARG B1061 54.344 24.031 27.317 1.00 18.60 C

ATOM 4686 CG ARG B1061 52.995 23.404 27.524 1.00 15.59 C

ATOM 4687 CD ARG B1061 52.112 23.613 26.309 1.00 14.32 C

ATOM 4688 NE ARG B1061 51.128 24.639 26.586 1.00 12.15 N

ATOM 4689 CZ ARG B1061 50.871 25.640 25.765 1.00 19.02 C

ATOM 4690 NH1 ARG B1061 51.533 25.729 24.618 1.00 20.60 N

ATOM 4691 NH2 ARG B1061 49.978 26.563 26.100 1.00 19.76 N

ATOM 4692 N THR B1062 57.494 24.882 28.881 1.00 16.83 N

ATOM 4693 CA THR B1062 58.932 24.816 28.610 1.00 15.94 C

ATOM 4694 C THR B1062 59.657 23.725 29.386 1.00 16.75 C

ATOM 4695 O THR B1062 60.702 23.244 28.951 1.00 17.88 O

ATOM 4696 CB THR B1062 59.638 26.146 28.945 1.00 15.50 C

ATOM 4697 OG1 THR B1062 59.237 26.577 30.253 1.00 17.00 O

ATOM 4698 CG2 THR B1062 59.313 27.213 27.901 1.00 8.38 C

ATOM 4699 N GLY B1063 59.099 23.350 30.532 1.00 18.16 N

ATOM 4700 CA GLY B1063 59.707 22.345 31.383 1.00 18.72 C

ATOM 4701 C GLY B1063 60.432 23.022 32.544 1.00 20.36 C

ATOM 4702 O GLY B1063 60.954 22.352 33.439 1.00 18.39 O

ATOM 4703 N PHE B1064 60.460 24.356 32.529 1.00 21.47 N

ATOM 4704 CA PHE B1064 61.131 25.132 33.568 1.00 22.14 C

ATOM 4705 C PHE B1064 60.291 26.298 34.029 1.00 23.24 C

ATOM 4706 O PHE B1064 59.335 26.686 33.369 1.00 26.56 O

ATOM 4707 CB PHE B1064 62.452 25.720 33.054 1.00 23.41 C

ATOM 4708 CG PHE B1064 63.343 24.728 32.366 1.00 23.26 C

ATOM 4709 CD1 PHE B1064 62.930 24.084 31.209 1.00 21.63 C

ATOM 4710 CD2 PHE B1064 64.598 24.450 32.870 1.00 22.02 C

ATOM 4711 CE1 PHE B1064 63.746 23.188 30.575 1.00 21.58 C

ATOM 4712 CE2 PHE B1064 65.421 23.554 32.241 1.00 22.77 C

ATOM 4713 CZ PHE B1064 64.998 22.921 31.093 1.00 22.83 C

ATOM 4714 N TYR B1065 60.679 26.860 35.165 1.00 24.88 N

ATOM 4715 CA TYR B1065 60.032 28.034 35.727 1.00 26.23 C

ATOM 4716 C TYR B1065 61.195 28.947 36.107 1.00 26.99 C

ATOM 4717 O TYR B1065 62.341 28.643 35.770 1.00 27.63 O

ATOM 4718 CB TYR B1065 59.155 27.686 36.951 1.00 25.92 C

ATOM 4719 CG TYR B1065 59.782 26.796 38.003 1.00 29.22 C

ATOM 4720 CD1 TYR B1065 60.010 27.271 39.284 1.00 26.90 C

ATOM 4721 CD2 TYR B1065 60.100 25.463 37.730 1.00 32.15 C

ATOM 4722 CE1 TYR B1065 60.535 26.457 40.269 1.00 28.68 C

ATOM 4723 CE2 TYR B1065 60.630 24.636 38.710 1.00 31.59 C

ATOM 4724 CZ TYR B1065 60.845 25.142 39.985 1.00 32.50 C

ATOM 4725 OH TYR B1065 61.382 24.340 40.979 1.00 34.47 O

ATOM 4726 N GLY B1066 60.913 30.063 36.775 1.00 27.77 N

ATOM 4727 CA GLY B1066 61.974 30.980 37.156 1.00 26.46 C

ATOM 4728 C GLY B1066 61.965 32.198 36.256 1.00 26.68 C

ATOM 4729 O GLY B1066 61.612 32.112 35.083 1.00 28.41 O

ATOM 4730 N GLU B1067 62.362 33.338 36.801 1.00 27.75 N

ATOM 4731 CA GLU B1067 62.374 34.577 36.044 1.00 28.72 C

ATOM 4732 C GLU B1067 62.777 34.381 34.595 1.00 31.85 C

ATOM 4733 O GLU B1067 62.165 34.963 33.692 1.00 31.77 O

ATOM 4734 CB GLU B1067 63.311 35.584 36.702 1.00 29.24 C

ATOM 4735 CG GLU B1067 63.208 36.989 36.126 1.00 36.71 C

ATOM 4736 CD GLU B1067 64.397 37.878 36.501 1.00 42.10 C

ATOM 4737 OE1 GLU B1067 65.332 37.381 37.174 1.00 43.46 O

ATOM 4738 OE2 GLU B1067 64.395 39.077 36.125 1.00 43.28 O

ATOM 4739 N ASN B1068 63.797 33.545 34.386 1.00 35.98 N

ATOM 4740 CA ASN B1068 64.351 33.270 33.056 1.00 38.58 C

ATOM 4741 C ASN B1068 64.097 31.868 32.481 1.00 37.68 C

ATOM 4742 O ASN B1068 64.710 31.491 31.489 1.00 37.58 O

ATOM 4743 CB ASN B1068 65.864 33.544 33.071 1.00 41.46 C

ATOM 4744 CG ASN B1068 66.195 34.996 33.418 1.00 47.34 C

ATOM 4745 OD1 ASN B1068 65.769 35.912 32.726 1.00 47.90 O

ATOM 4746 ND2 ASN B1068 66.956 35.208 34.490 1.00 52.85 N

ATOM 4747 N CYS B1069 63.202 31.101 33.092 1.00 36.92 N

ATOM 4748 CA CYS B1069 62.903 29.753 32.603 1.00 38.50 C

ATOM 4749 C CYS B1069 64.104 28.841 32.738 1.00 37.41 C

ATOM 4750 O CYS B1069 64.411 28.088 31.810 1.00 35.89 O

ATOM 4751 CB CYS B1069 62.522 29.765 31.118 1.00 38.93 C

ATOM 4752 SG CYS B1069 60.926 30.511 30.644 1.00 41.07 S

ATOM 4753 N THR B1070 64.788 28.897 33.875 1.00 38.46 N

ATOM 4754 CA THR B1070 65.970 28.056 34.047 1.00 38.55 C

ATOM 4755 C THR B1070 65.856 27.021 35.157 1.00 37.71 C

ATOM 4756 O THR B1070 66.639 26.072 35.201 1.00 38.15 O

ATOM 4757 CB THR B1070 67.230 28.905 34.286 1.00 37.13 C

ATOM 4758 OG1 THR B1070 67.080 29.641 35.503 1.00 37.66 O

ATOM 4759 CG2 THR B1070 67.461 29.870 33.112 1.00 36.07 C

ATOM 4760 N THR B1071 64.882 27.194 36.045 1.00 37.68 N

ATOM 4761 CA THR B1071 64.673 26.244 37.133 1.00 38.69 C

ATOM 4762 C THR B1071 63.885 25.076 36.550 1.00 37.77 C

ATOM 4763 O THR B1071 62.690 25.184 36.294 1.00 37.84 O

ATOM 4764 CB THR B1071 63.868 26.874 38.285 1.00 38.92 C

ATOM 4765 OG1 THR B1071 64.497 28.096 38.705 1.00 39.74 O

ATOM 4766 CG2 THR B1071 63.783 25.906 39.457 1.00 37.21 C

ATOM 4767 N PRO B1072 64.544 23.933 36.352 1.00 38.07 N

ATOM 4768 CA PRO B1072 63.849 22.779 35.782 1.00 39.96 C

ATOM 4769 C PRO B1072 62.869 22.109 36.732 1.00 41.36 C

ATOM 4770 O PRO B1072 63.046 22.131 37.949 1.00 41.69 O

ATOM 4771 CB PRO B1072 64.986 21.846 35.380 1.00 40.03 C

ATOM 4772 CG PRO B1072 66.064 22.152 36.370 1.00 38.50 C

ATOM 4773 CD PRO B1072 65.946 23.627 36.681 1.00 38.01 C

ATOM 4774 N GLU B1073 61.831 21.517 36.158 1.00 42.94 N

ATOM 4775 CA GLU B1073 60.826 20.820 36.944 1.00 44.80 C

ATOM 4776 C GLU B1073 61.359 19.426 37.203 1.00 44.32 C

ATOM 4777 O GLU B1073 62.257 18.965 36.507 1.00 43.31 O

ATOM 4778 CB GLU B1073 59.510 20.718 36.175 1.00 48.05 C

ATOM 4779 CG GLU B1073 58.760 22.026 36.038 1.00 51.97 C

ATOM 4780 CD GLU B1073 57.792 21.992 34.880 1.00 55.43 C

ATOM 4781 OE1 GLU B1073 57.611 20.897 34.300 1.00 58.13 O

ATOM 4782 OE2 GLU B1073 57.215 23.051 34.550 1.00 58.50 O

ATOM 4783 N PHE B1074 60.795 18.753 38.196 1.00 44.39 N

ATOM 4784 CA PHE B1074 61.241 17.416 38.526 1.00 43.73 C

ATOM 4785 C PHE B1074 61.351 16.534 37.281 1.00 43.23 C

ATOM 4786 O PHE B1074 62.456 16.189 36.862 1.00 42.69 O

ATOM 4787 CB PHE B1074 60.291 16.773 39.531 1.00 44.27 C

ATOM 4788 CG PHE B1074 60.739 15.415 39.995 1.00 46.64 C

ATOM 4789 CD1 PHE B1074 61.959 15.257 40.643 1.00 46.34 C

ATOM 4790 CD2 PHE B1074 59.952 14.292 39.777 1.00 45.86 C

ATOM 4791 CE1 PHE B1074 62.389 14.002 41.068 1.00 43.78 C

ATOM 4792 CE2 PHE B1074 60.380 13.037 40.201 1.00 47.40 C

ATOM 4793 CZ PHE B1074 61.603 12.897 40.848 1.00 44.29 C

ATOM 4794 N LEU B1075 60.214 16.176 36.687 1.00 42.67 N

ATOM 4795 CA LEU B1075 60.219 15.315 35.503 1.00 42.46 C

ATOM 4796 C LEU B1075 61.200 15.789 34.430 1.00 40.72 C

ATOM 4797 O LEU B1075 61.755 14.977 33.691 1.00 40.95 O

ATOM 4798 CB LEU B1075 58.809 15.200 34.903 1.00 46.24 C

ATOM 4799 CG LEU B1075 58.766 14.729 33.434 1.00 53.91 C

ATOM 4800 CD1 LEU B1075 59.340 13.301 33.332 1.00 54.66 C

ATOM 4801 CD2 LEU B1075 57.330 14.790 32.876 1.00 53.69 C

ATOM 4802 N THR B1076 61.410 17.098 34.343 1.00 38.07 N

ATOM 4803 CA THR B1076 62.340 17.656 33.366 1.00 36.21 C

ATOM 4804 C THR B1076 63.756 17.157 33.671 1.00 38.81 C

ATOM 4805 O THR B1076 64.486 16.734 32.776 1.00 38.08 O

ATOM 4806 CB THR B1076 62.346 19.209 33.417 1.00 34.40 C

ATOM 4807 OG1 THR B1076 61.121 19.715 32.889 1.00 28.02 O

ATOM 4808 CG2 THR B1076 63.494 19.774 32.598 1.00 32.93 C

ATOM 4809 N ARG B1077 64.128 17.207 34.949 1.00 39.24 N

ATOM 4810 CA ARG B1077 65.446 16.779 35.401 1.00 39.99 C

ATOM 4811 C ARG B1077 65.733 15.335 35.033 1.00 38.99 C

ATOM 4812 O ARG B1077 66.857 14.993 34.680 1.00 39.31 O

ATOM 4813 CB ARG B1077 65.570 16.951 36.916 1.00 41.49 C

ATOM 4814 CG ARG B1077 64.692 18.052 37.474 1.00 48.07 C

ATOM 4815 CD ARG B1077 64.864 18.202 38.968 1.00 51.60 C

ATOM 4816 NE ARG B1077 65.977 19.090 39.275 1.00 58.27 N

ATOM 4817 CZ ARG B1077 66.659 19.063 40.416 1.00 62.90 C

ATOM 4818 NH1 ARG B1077 66.341 18.186 41.366 1.00 63.15 N

ATOM 4819 NH2 ARG B1077 67.663 19.912 40.609 1.00 64.26 N

ATOM 4820 N ILE B1078 64.717 14.489 35.114 1.00 38.64 N

ATOM 4821 CA ILE B1078 64.888 13.078 34.788 1.00 42.66 C

ATOM 4822 C ILE B1078 65.122 12.860 33.297 1.00 43.10 C

ATOM 4823 O ILE B1078 65.935 12.019 32.895 1.00 42.63 O

ATOM 4824 CB ILE B1078 63.653 12.257 35.203 1.00 42.54 C

ATOM 4825 CG1 ILE B1078 63.637 12.079 36.725 1.00 42.53 C

ATOM 4826 CG2 ILE B1078 63.661 10.908 34.479 1.00 41.39 C

ATOM 4827 CD1 ILE B1078 63.321 13.349 37.498 1.00 40.07 C

ATOM 4828 N LYS B1079 64.391 13.613 32.481 1.00 43.58 N

ATOM 4829 CA LYS B1079 64.513 13.506 31.039 1.00 44.67 C

ATOM 4830 C LYS B1079 65.848 14.108 30.601 1.00 45.87 C

ATOM 4831 O LYS B1079 66.422 13.708 29.585 1.00 47.76 O

ATOM 4832 CB LYS B1079 63.335 14.218 30.367 1.00 44.05 C

ATOM 4833 CG LYS B1079 61.967 13.664 30.786 1.00 48.84 C

ATOM 4834 CD LYS B1079 60.836 14.663 30.490 1.00 53.19 C

ATOM 4835 CE LYS B1079 59.505 13.967 30.169 1.00 52.63 C

ATOM 4836 NZ LYS B1079 58.733 14.690 29.103 1.00 55.05 N

ATOM 4837 N LEU B1080 66.350 15.052 31.390 1.00 45.05 N

ATOM 4838 CA LEU B1080 67.620 15.704 31.094 1.00 45.45 C

ATOM 4839 C LEU B1080 68.775 14.733 31.309 1.00 48.79 C

ATOM 4840 O LEU B1080 69.772 14.763 30.582 1.00 49.31 O

ATOM 4841 CB LEU B1080 67.808 16.931 31.989 1.00 43.48 C

ATOM 4842 CG LEU B1080 67.091 18.217 31.555 1.00 42.75 C

ATOM 4843 CD1 LEU B1080 67.641 19.417 32.334 1.00 39.22 C

ATOM 4844 CD2 LEU B1080 67.269 18.417 30.049 1.00 40.76 C

ATOM 4845 N LEU B1081 68.634 13.871 32.312 1.00 49.63 N

ATOM 4846 CA LEU B1081 69.661 12.886 32.630 1.00 50.21 C

ATOM 4847 C LEU B1081 69.713 11.766 31.593 1.00 51.91 C

ATOM 4848 O LEU B1081 70.784 11.420 31.095 1.00 54.19 O

ATOM 4849 CB LEU B1081 69.399 12.281 34.014 1.00 49.85 C

ATOM 4850 CG LEU B1081 70.011 12.976 35.234 1.00 51.80 C

ATOM 4851 CD1 LEU B1081 70.058 14.489 35.018 1.00 53.04 C

ATOM 4852 CD2 LEU B1081 69.187 12.636 36.466 1.00 50.94 C

ATOM 4853 N LEU B1082 68.551 11.210 31.264 1.00 50.67 N

ATOM 4854 CA LEU B1082 68.464 10.110 30.306 1.00 49.77 C

ATOM 4855 C LEU B1082 68.533 10.561 28.854 1.00 49.93 C

ATOM 4856 O LEU B1082 68.237 9.787 27.942 1.00 51.10 O

ATOM 4857 CB LEU B1082 67.165 9.325 30.518 1.00 51.04 C

ATOM 4858 CG LEU B1082 66.850 8.789 31.918 1.00 50.39 C

ATOM 4859 CD1 LEU B1082 67.732 9.463 32.955 1.00 48.72 C

ATOM 4860 CD2 LEU B1082 65.377 9.040 32.227 1.00 50.30 C

ATOM 4861 N LYS B1083 68.917 11.812 28.643 1.00 48.00 N

ATOM 4862 CA LYS B1083 69.020 12.357 27.296 1.00 46.80 C

ATOM 4863 C LYS B1083 70.464 12.270 26.794 1.00 46.72 C

ATOM 4864 O LYS B1083 71.366 12.892 27.349 1.00 46.88 O

ATOM 4865 CB LYS B1083 68.549 13.813 27.294 1.00 45.29 C

ATOM 4866 CG LYS B1083 68.190 14.343 25.927 1.00 45.26 C

ATOM 4867 CD LYS B1083 68.733 15.744 25.725 1.00 42.43 C

ATOM 4868 CE LYS B1083 68.433 16.237 24.323 1.00 41.32 C

ATOM 4869 NZ LYS B1083 67.135 16.962 24.266 1.00 42.44 N

ATOM 4870 N PRO B1084 70.701 11.490 25.734 1.00 45.99 N

ATOM 4871 CA PRO B1084 72.063 11.370 25.212 1.00 45.10 C

ATOM 4872 C PRO B1084 72.346 12.530 24.271 1.00 45.03 C

ATOM 4873 O PRO B1084 71.443 13.020 23.595 1.00 45.69 O

ATOM 4874 CB PRO B1084 72.040 10.035 24.489 1.00 46.02 C

ATOM 4875 CG PRO B1084 70.622 9.932 23.975 1.00 45.52 C

ATOM 4876 CD PRO B1084 69.740 10.688 24.955 1.00 45.27 C

ATOM 4877 N THR B1085 73.597 12.966 24.213 1.00 44.88 N

ATOM 4878 CA THR B1085 73.939 14.085 23.353 1.00 43.85 C

ATOM 4879 C THR B1085 73.841 13.705 21.873 1.00 42.93 C

ATOM 4880 O THR B1085 74.010 12.538 21.509 1.00 42.33 O

ATOM 4881 CB THR B1085 75.353 14.618 23.695 1.00 43.83 C

ATOM 4882 OG1 THR B1085 76.316 14.064 22.794 1.00 44.22 O

ATOM 4883 CG2 THR B1085 75.727 14.240 25.120 1.00 42.64 C

ATOM 4884 N PRO B1086 73.535 14.693 21.004 1.00 43.69 N

ATOM 4885 CA PRO B1086 73.402 14.511 19.549 1.00 39.12 C

ATOM 4886 C PRO B1086 74.583 13.763 18.954 1.00 37.26 C

ATOM 4887 O PRO B1086 74.424 12.971 18.020 1.00 35.34 O

ATOM 4888 CB PRO B1086 73.322 15.936 19.012 1.00 40.07 C

ATOM 4889 CG PRO B1086 72.793 16.743 20.150 1.00 40.39 C

ATOM 4890 CD PRO B1086 73.286 16.091 21.412 1.00 42.83 C

ATOM 4891 N ASN B1087 75.761 14.044 19.515 1.00 36.21 N

ATOM 4892 CA ASN B1087 77.034 13.449 19.099 1.00 35.15 C

ATOM 4893 C ASN B1087 77.182 12.008 19.554 1.00 33.95 C

ATOM 4894 O ASN B1087 77.978 11.252 19.002 1.00 33.88 O

ATOM 4895 CB ASN B1087 78.204 14.252 19.662 1.00 34.16 C

ATOM 4896 CG ASN B1087 78.186 15.689 19.217 1.00 33.00 C

ATOM 4897 OD1 ASN B1087 78.587 16.003 18.097 1.00 31.72 O

ATOM 4898 ND2 ASN B1087 77.719 16.577 20.091 1.00 34.66 N

ATOM 4899 N THR B1088 76.433 11.648 20.585 1.00 34.73 N

ATOM 4900 CA THR B1088 76.451 10.293 21.117 1.00 34.40 C

ATOM 4901 C THR B1088 75.619 9.432 20.163 1.00 34.94 C

ATOM 4902 O THR B1088 76.065 8.366 19.706 1.00 34.33 O

ATOM 4903 CB THR B1088 75.821 10.252 22.531 1.00 35.42 C

ATOM 4904 OG1 THR B1088 76.687 10.915 23.466 1.00 33.36 O

ATOM 4905 CG2 THR B1088 75.580 8.816 22.966 1.00 32.56 C

ATOM 4906 N VAL B1089 74.416 9.925 19.860 1.00 33.57 N

ATOM 4907 CA VAL B1089 73.481 9.252 18.960 1.00 32.99 C

ATOM 4908 C VAL B1089 74.096 9.102 17.570 1.00 32.70 C

ATOM 4909 O VAL B1089 74.061 8.024 16.973 1.00 30.85 O

ATOM 4910 CB VAL B1089 72.168 10.053 18.835 1.00 32.26 C

ATOM 4911 CG1 VAL B1089 71.235 9.358 17.865 1.00 29.47 C

ATOM 4912 CG2 VAL B1089 71.517 10.208 20.204 1.00 31.85 C

ATOM 4913 N HIS B1090 74.652 10.199 17.065 1.00 32.48 N

ATOM 4914 CA HIS B1090 75.299 10.194 15.766 1.00 35.98 C

ATOM 4915 C HIS B1090 76.345 9.078 15.737 1.00 34.92 C

ATOM 4916 O HIS B1090 76.491 8.374 14.734 1.00 37.07 O

ATOM 4917 CB HIS B1090 75.984 11.545 15.503 1.00 40.86 C

ATOM 4918 CG HIS B1090 76.605 11.659 14.140 1.00 44.65 C

ATOM 4919 ND1 HIS B1090 76.417 10.716 13.150 1.00 48.03 N

ATOM 4920 CD2 HIS B1090 77.420 12.599 13.606 1.00 46.68 C

ATOM 4921 CE1 HIS B1090 77.088 11.070 12.069 1.00 46.19 C

ATOM 4922 NE2 HIS B1090 77.705 12.210 12.320 1.00 46.23 N

ATOM 4923 N TYR B1091 77.072 8.925 16.841 1.00 30.67 N

ATOM 4924 CA TYR B1091 78.099 7.898 16.952 1.00 26.59 C

ATOM 4925 C TYR B1091 77.500 6.493 16.835 1.00 25.38 C

ATOM 4926 O TYR B1091 78.043 5.616 16.144 1.00 21.09 O

ATOM 4927 CB TYR B1091 78.823 8.037 18.286 1.00 28.36 C

ATOM 4928 CG TYR B1091 79.973 7.077 18.426 1.00 31.58 C

ATOM 4929 CD1 TYR B1091 81.270 7.467 18.121 1.00 31.42 C

ATOM 4930 CD2 TYR B1091 79.754 5.760 18.832 1.00 35.24 C

ATOM 4931 CE1 TYR B1091 82.323 6.575 18.213 1.00 32.90 C

ATOM 4932 CE2 TYR B1091 80.798 4.858 18.927 1.00 34.49 C

ATOM 4933 CZ TYR B1091 82.083 5.271 18.618 1.00 35.33 C

ATOM 4934 OH TYR B1091 83.126 4.373 18.727 1.00 35.86 O

ATOM 4935 N ILE B1092 76.373 6.281 17.507 1.00 21.02 N

ATOM 4936 CA ILE B1092 75.727 4.988 17.455 1.00 16.89 C

ATOM 4937 C ILE B1092 75.068 4.764 16.103 1.00 16.05 C

ATOM 4938 O ILE B1092 75.022 3.638 15.616 1.00 15.32 O

ATOM 4939 CB ILE B1092 74.684 4.847 18.564 1.00 16.70 C

ATOM 4940 CG1 ILE B1092 75.388 4.830 19.920 1.00 16.26 C

ATOM 4941 CG2 ILE B1092 73.914 3.540 18.397 1.00 16.81 C

ATOM 4942 CD1 ILE B1092 74.646 5.575 20.999 1.00 16.21 C

ATOM 4943 N LEU B1093 74.572 5.837 15.492 1.00 13.86 N

ATOM 4944 CA LEU B1093 73.912 5.753 14.185 1.00 11.66 C

ATOM 4945 C LEU B1093 74.898 5.464 13.076 1.00 10.66 C

ATOM 4946 O LEU B1093 74.531 4.951 12.027 1.00 5.95 O

ATOM 4947 CB LEU B1093 73.197 7.063 13.864 1.00 10.10 C

ATOM 4948 CG LEU B1093 71.669 7.029 13.887 1.00 9.85 C

ATOM 4949 CD1 LEU B1093 71.151 5.574 14.017 1.00 3.44 C

ATOM 4950 CD2 LEU B1093 71.188 7.898 15.035 1.00 2.39 C

ATOM 4951 N THR B1094 76.156 5.806 13.324 1.00 14.90 N

ATOM 4952 CA THR B1094 77.221 5.616 12.343 1.00 18.81 C

ATOM 4953 C THR B1094 78.225 4.508 12.682 1.00 21.24 C

ATOM 4954 O THR B1094 79.140 4.253 11.903 1.00 20.70 O

ATOM 4955 CB THR B1094 78.012 6.942 12.098 1.00 18.44 C

ATOM 4956 OG1 THR B1094 78.677 7.336 13.306 1.00 18.47 O

ATOM 4957 CG2 THR B1094 77.077 8.059 11.647 1.00 13.54 C

ATOM 4958 N HIS B1095 78.066 3.851 13.831 1.00 26.21 N

ATOM 4959 CA HIS B1095 78.980 2.765 14.201 1.00 30.59 C

ATOM 4960 C HIS B1095 78.226 1.455 14.450 1.00 29.52 C

ATOM 4961 O HIS B1095 77.002 1.429 14.432 1.00 29.82 O

ATOM 4962 CB HIS B1095 79.796 3.153 15.438 1.00 35.53 C

ATOM 4963 CG HIS B1095 80.851 4.181 15.164 1.00 41.26 C

ATOM 4964 ND1 HIS B1095 82.128 3.854 14.759 1.00 42.28 N

ATOM 4965 CD2 HIS B1095 80.818 5.534 15.239 1.00 43.83 C

ATOM 4966 CE1 HIS B1095 82.836 4.958 14.597 1.00 41.99 C

ATOM 4967 NE2 HIS B1095 82.064 5.992 14.882 1.00 42.51 N

ATOM 4968 N PHE B1096 78.964 0.375 14.687 1.00 30.94 N

ATOM 4969 CA PHE B1096 78.367 -0.943 14.911 1.00 31.97 C

ATOM 4970 C PHE B1096 77.597 -1.384 13.669 1.00 33.72 C

ATOM 4971 O PHE B1096 76.412 -1.729 13.730 1.00 35.47 O

ATOM 4972 CB PHE B1096 77.431 -0.902 16.111 1.00 32.70 C

ATOM 4973 CG PHE B1096 77.908 -0.015 17.210 1.00 32.20 C

ATOM 4974 CD1 PHE B1096 77.400 1.264 17.356 1.00 32.40 C

ATOM 4975 CD2 PHE B1096 78.870 -0.458 18.096 1.00 32.19 C

ATOM 4976 CE1 PHE B1096 77.847 2.087 18.368 1.00 35.42 C

ATOM 4977 CE2 PHE B1096 79.323 0.354 19.106 1.00 33.05 C

ATOM 4978 CZ PHE B1096 78.811 1.631 19.246 1.00 34.84 C

ATOM 4979 N LYS B1097 78.288 -1.371 12.538 1.00 34.92 N

ATOM 4980 CA LYS B1097 77.683 -1.747 11.281 1.00 38.04 C

ATOM 4981 C LYS B1097 77.022 -3.114 11.373 1.00 37.94 C

ATOM 4982 O LYS B1097 75.945 -3.324 10.817 1.00 39.77 O

ATOM 4983 CB LYS B1097 78.737 -1.753 10.176 1.00 40.49 C

ATOM 4984 CG LYS B1097 78.318 -2.525 8.932 1.00 47.25 C

ATOM 4985 CD LYS B1097 78.336 -1.638 7.698 1.00 51.43 C

ATOM 4986 CE LYS B1097 79.053 -2.343 6.559 1.00 56.49 C

ATOM 4987 NZ LYS B1097 79.558 -1.393 5.530 1.00 60.17 N

ATOM 4988 N GLY B1098 77.665 -4.040 12.082 1.00 37.88 N

ATOM 4989 CA GLY B1098 77.122 -5.383 12.221 1.00 35.16 C

ATOM 4990 C GLY B1098 75.742 -5.398 12.849 1.00 34.10 C

ATOM 4991 O GLY B1098 74.883 -6.186 12.454 1.00 32.49 O

ATOM 4992 N VAL B1099 75.550 -4.519 13.833 1.00 33.48 N

ATOM 4993 CA VAL B1099 74.291 -4.367 14.556 1.00 31.34 C

ATOM 4994 C VAL B1099 73.207 -3.770 13.674 1.00 29.09 C

ATOM 4995 O VAL B1099 72.092 -4.295 13.593 1.00 29.90 O

ATOM 4996 CB VAL B1099 74.477 -3.441 15.757 1.00 32.65 C

ATOM 4997 CG1 VAL B1099 73.133 -3.030 16.312 1.00 35.84 C

ATOM 4998 CG2 VAL B1099 75.295 -4.135 16.801 1.00 32.64 C

ATOM 4999 N TRP B1100 73.538 -2.650 13.038 1.00 26.88 N

ATOM 5000 CA TRP B1100 72.609 -1.980 12.146 1.00 24.72 C

ATOM 5001 C TRP B1100 72.221 -2.914 11.025 1.00 25.06 C

ATOM 5002 O TRP B1100 71.138 -2.811 10.470 1.00 26.95 O

ATOM 5003 CB TRP B1100 73.245 -0.717 11.587 1.00 16.37 C

ATOM 5004 CG TRP B1100 73.310 0.306 12.628 1.00 12.40 C

ATOM 5005 CD1 TRP B1100 74.417 0.940 13.077 1.00 13.41 C

ATOM 5006 CD2 TRP B1100 72.223 0.775 13.426 1.00 7.50 C

ATOM 5007 NE1 TRP B1100 74.094 1.779 14.109 1.00 8.93 N

ATOM 5008 CE2 TRP B1100 72.750 1.696 14.345 1.00 7.50 C

ATOM 5009 CE3 TRP B1100 70.855 0.505 13.451 1.00 8.37 C

ATOM 5010 CZ2 TRP B1100 71.961 2.352 15.284 1.00 8.02 C

ATOM 5011 CZ3 TRP B1100 70.066 1.154 14.384 1.00 9.07 C

ATOM 5012 CH2 TRP B1100 70.622 2.068 15.289 1.00 9.12 C

ATOM 5013 N ASN B1101 73.114 -3.839 10.709 1.00 27.08 N

ATOM 5014 CA ASN B1101 72.876 -4.801 9.655 1.00 28.94 C

ATOM 5015 C ASN B1101 71.767 -5.761 10.035 1.00 29.73 C

ATOM 5016 O ASN B1101 71.120 -6.344 9.178 1.00 28.63 O

ATOM 5017 CB ASN B1101 74.150 -5.581 9.379 1.00 31.87 C

ATOM 5018 CG ASN B1101 74.438 -5.686 7.913 1.00 39.28 C

ATOM 5019 OD1 ASN B1101 75.486 -5.232 7.429 1.00 44.39 O

ATOM 5020 ND2 ASN B1101 73.501 -6.280 7.179 1.00 41.27 N

ATOM 5021 N ILE B1102 71.563 -5.920 11.336 1.00 31.08 N

ATOM 5022 CA ILE B1102 70.548 -6.812 11.870 1.00 31.26 C

ATOM 5023 C ILE B1102 69.244 -6.033 11.937 1.00 33.11 C

ATOM 5024 O ILE B1102 68.228 -6.438 11.370 1.00 33.31 O

ATOM 5025 CB ILE B1102 70.946 -7.287 13.283 1.00 32.49 C

ATOM 5026 CG1 ILE B1102 72.012 -8.375 13.183 1.00 30.64 C

ATOM 5027 CG2 ILE B1102 69.740 -7.835 14.023 1.00 31.92 C

ATOM 5028 CD1 ILE B1102 72.651 -8.692 14.514 1.00 31.93 C

ATOM 5029 N VAL B1103 69.286 -4.909 12.645 1.00 32.82 N

ATOM 5030 CA VAL B1103 68.127 -4.046 12.772 1.00 33.55 C

ATOM 5031 C VAL B1103 67.574 -3.784 11.377 1.00 34.62 C

ATOM 5032 O VAL B1103 66.378 -3.907 11.133 1.00 36.46 O

ATOM 5033 CB VAL B1103 68.525 -2.708 13.394 1.00 31.87 C

ATOM 5034 CG1 VAL B1103 67.291 -1.817 13.585 1.00 31.82 C

ATOM 5035 CG2 VAL B1103 69.245 -2.965 14.699 1.00 30.10 C

ATOM 5036 N ASN B1104 68.473 -3.435 10.465 1.00 36.08 N

ATOM 5037 CA ASN B1104 68.121 -3.125 9.084 1.00 37.33 C

ATOM 5038 C ASN B1104 67.388 -4.231 8.359 1.00 37.17 C

ATOM 5039 O ASN B1104 66.864 -4.007 7.270 1.00 38.80 O

ATOM 5040 CB ASN B1104 69.375 -2.771 8.277 1.00 37.58 C

ATOM 5041 CG ASN B1104 69.832 -1.346 8.502 1.00 37.04 C

ATOM 5042 OD1 ASN B1104 69.226 -0.603 9.281 1.00 38.08 O

ATOM 5043 ND2 ASN B1104 70.905 -0.954 7.821 1.00 33.60 N

ATOM 5044 N ASN B1105 67.356 -5.425 8.936 1.00 36.85 N

ATOM 5045 CA ASN B1105 66.668 -6.522 8.274 1.00 39.03 C

ATOM 5046 C ASN B1105 65.553 -7.090 9.127 1.00 38.22 C

ATOM 5047 O ASN B1105 65.131 -8.226 8.956 1.00 38.61 O

ATOM 5048 CB ASN B1105 67.662 -7.611 7.870 1.00 41.41 C

ATOM 5049 CG ASN B1105 68.491 -7.213 6.650 1.00 46.52 C

ATOM 5050 OD1 ASN B1105 68.165 -7.560 5.512 1.00 46.39 O

ATOM 5051 ND2 ASN B1105 69.567 -6.472 6.888 1.00 50.13 N

ATOM 5052 N ILE B1105B 65.082 -6.276 10.056 1.00 37.67 N

ATOM 5053 CA ILE B1105B 63.987 -6.659 10.919 1.00 37.00 C

ATOM 5054 C ILE B1105B 62.940 -5.579 10.701 1.00 37.86 C

ATOM 5055 O ILE B1105B 62.920 -4.567 11.406 1.00 38.86 O

ATOM 5056 CB ILE B1105B 64.396 -6.668 12.403 1.00 38.50 C

ATOM 5057 CG1 ILE B1105B 65.353 -7.831 12.675 1.00 37.90 C

ATOM 5058 CG2 ILE B1105B 63.155 -6.779 13.283 1.00 36.99 C

ATOM 5059 CD1 ILE B1105B 66.414 -7.512 13.711 1.00 36.59 C

ATOM 5060 N PRO B1106 62.079 -5.765 9.690 1.00 36.58 N

ATOM 5061 CA PRO B1106 61.016 -4.823 9.353 1.00 36.13 C

ATOM 5062 C PRO B1106 60.433 -4.031 10.533 1.00 36.83 C

ATOM 5063 O PRO B1106 60.371 -2.807 10.481 1.00 37.02 O

ATOM 5064 CB PRO B1106 59.988 -5.710 8.664 1.00 35.65 C

ATOM 5065 CG PRO B1106 60.828 -6.706 7.934 1.00 33.68 C

ATOM 5066 CD PRO B1106 62.079 -6.915 8.767 1.00 35.73 C

ATOM 5067 N PHE B1107 60.013 -4.714 11.594 1.00 36.26 N

ATOM 5068 CA PHE B1107 59.435 -4.020 12.744 1.00 37.26 C

ATOM 5069 C PHE B1107 60.452 -3.216 13.566 1.00 35.85 C

ATOM 5070 O PHE B1107 60.116 -2.181 14.151 1.00 36.72 O

ATOM 5071 CB PHE B1107 58.707 -5.025 13.642 1.00 41.75 C

ATOM 5072 CG PHE B1107 59.363 -5.239 14.966 1.00 44.87 C

ATOM 5073 CD1 PHE B1107 59.443 -4.206 15.890 1.00 49.80 C

ATOM 5074 CD2 PHE B1107 59.928 -6.461 15.277 1.00 47.80 C

ATOM 5075 CE1 PHE B1107 60.080 -4.383 17.105 1.00 51.13 C

ATOM 5076 CE2 PHE B1107 60.570 -6.653 16.492 1.00 50.65 C

ATOM 5077 CZ PHE B1107 60.646 -5.610 17.407 1.00 51.37 C

ATOM 5078 N LEU B1108 61.686 -3.704 13.617 1.00 34.84 N

ATOM 5079 CA LEU B1108 62.758 -3.038 14.353 1.00 32.72 C

ATOM 5080 C LEU B1108 63.168 -1.805 13.565 1.00 31.78 C

ATOM 5081 O LEU B1108 63.334 -0.722 14.125 1.00 31.27 O

ATOM 5082 CB LEU B1108 63.964 -3.963 14.483 1.00 32.43 C

ATOM 5083 CG LEU B1108 64.369 -4.414 15.881 1.00 33.74 C

ATOM 5084 CD1 LEU B1108 65.686 -5.165 15.778 1.00 32.68 C

ATOM 5085 CD2 LEU B1108 64.504 -3.220 16.809 1.00 33.18 C

ATOM 5086 N ARG B1109 63.326 -1.979 12.257 1.00 29.68 N

ATOM 5087 CA ARG B1109 63.713 -0.880 11.386 1.00 29.22 C

ATOM 5088 C ARG B1109 62.662 0.230 11.348 1.00 30.95 C

ATOM 5089 O ARG B1109 62.990 1.398 11.139 1.00 32.00 O

ATOM 5090 CB ARG B1109 63.962 -1.389 9.970 1.00 25.58 C

ATOM 5091 CG ARG B1109 64.489 -0.313 9.049 1.00 27.32 C

ATOM 5092 CD ARG B1109 64.348 -0.691 7.583 1.00 25.26 C

ATOM 5093 NE ARG B1109 64.607 0.441 6.688 1.00 23.31 N

ATOM 5094 CZ ARG B1109 64.452 0.392 5.370 1.00 22.44 C

ATOM 5095 NH1 ARG B1109 64.041 -0.738 4.810 1.00 23.37 N

ATOM 5096 NH2 ARG B1109 64.691 1.460 4.610 1.00 20.56 N

ATOM 5097 N SER B1110 61.398 -0.134 11.535 1.00 31.89 N

ATOM 5098 CA SER B1110 60.329 0.853 11.528 1.00 30.66 C

ATOM 5099 C SER B1110 60.423 1.596 12.831 1.00 30.68 C

ATOM 5100 O SER B1110 60.348 2.819 12.861 1.00 32.29 O

ATOM 5101 CB SER B1110 58.963 0.185 11.434 1.00 31.31 C

ATOM 5102 OG SER B1110 58.753 -0.344 10.141 1.00 35.98 O

ATOM 5103 N LEU B1111 60.608 0.841 13.908 1.00 29.34 N

ATOM 5104 CA LEU B1111 60.707 1.410 15.243 1.00 28.99 C

ATOM 5105 C LEU B1111 61.758 2.500 15.336 1.00 24.36 C

ATOM 5106 O LEU B1111 61.552 3.510 16.009 1.00 24.53 O

ATOM 5107 CB LEU B1111 61.015 0.314 16.261 1.00 33.97 C

ATOM 5108 CG LEU B1111 60.213 0.404 17.561 1.00 36.40 C

ATOM 5109 CD1 LEU B1111 60.507 -0.817 18.413 1.00 37.73 C

ATOM 5110 CD2 LEU B1111 60.571 1.684 18.311 1.00 36.90 C

ATOM 5111 N ILE B1112 62.888 2.292 14.673 1.00 21.52 N

ATOM 5112 CA ILE B1112 63.958 3.284 14.689 1.00 20.78 C

ATOM 5113 C ILE B1112 63.554 4.556 13.909 1.00 20.94 C

ATOM 5114 O ILE B1112 63.560 5.669 14.456 1.00 20.23 O

ATOM 5115 CB ILE B1112 65.278 2.698 14.090 1.00 17.42 C

ATOM 5116 CG1 ILE B1112 65.508 1.269 14.600 1.00 18.45 C

ATOM 5117 CG2 ILE B1112 66.461 3.570 14.479 1.00 17.12 C

ATOM 5118 CD1 ILE B1112 66.290 1.172 15.905 1.00 16.54 C

ATOM 5119 N MET B1113 63.182 4.374 12.643 1.00 20.63 N

ATOM 5120 CA MET B1113 62.795 5.477 11.769 1.00 20.27 C

ATOM 5121 C MET B1113 61.691 6.350 12.347 1.00 21.57 C

ATOM 5122 O MET B1113 61.693 7.569 12.179 1.00 19.23 O

ATOM 5123 CB MET B1113 62.345 4.941 10.414 1.00 19.63 C

ATOM 5124 CG MET B1113 62.217 6.022 9.374 1.00 20.72 C

ATOM 5125 SD MET B1113 63.848 6.384 8.784 1.00 22.16 S

ATOM 5126 CE MET B1113 63.810 8.146 8.744 1.00 20.94 C

ATOM 5127 N LYS B1114 60.734 5.714 13.012 1.00 24.79 N

ATOM 5128 CA LYS B1114 59.628 6.438 13.612 1.00 27.77 C

ATOM 5129 C LYS B1114 60.197 7.370 14.670 1.00 28.86 C

ATOM 5130 O LYS B1114 59.764 8.516 14.792 1.00 28.46 O

ATOM 5131 CB LYS B1114 58.632 5.469 14.249 1.00 29.54 C

ATOM 5132 CG LYS B1114 57.516 6.160 15.014 1.00 33.44 C

ATOM 5133 CD LYS B1114 56.610 5.163 15.698 1.00 35.68 C

ATOM 5134 CE LYS B1114 55.605 4.584 14.721 1.00 38.65 C

ATOM 5135 NZ LYS B1114 54.684 3.624 15.388 1.00 41.52 N

ATOM 5136 N TYR B1115 61.170 6.880 15.433 1.00 29.66 N

ATOM 5137 CA TYR B1115 61.783 7.702 16.450 1.00 30.47 C

ATOM 5138 C TYR B1115 62.613 8.784 15.756 1.00 29.07 C

ATOM 5139 O TYR B1115 62.676 9.920 16.223 1.00 30.31 O

ATOM 5140 CB TYR B1115 62.678 6.864 17.366 1.00 36.85 C

ATOM 5141 CG TYR B1115 63.889 7.637 17.851 1.00 45.81 C

ATOM 5142 CD1 TYR B1115 63.821 8.454 18.981 1.00 47.75 C

ATOM 5143 CD2 TYR B1115 65.094 7.582 17.151 1.00 47.96 C

ATOM 5144 CE1 TYR B1115 64.918 9.200 19.394 1.00 49.24 C

ATOM 5145 CE2 TYR B1115 66.196 8.323 17.554 1.00 49.64 C

ATOM 5146 CZ TYR B1115 66.109 9.129 18.678 1.00 52.53 C

ATOM 5147 OH TYR B1115 67.223 9.853 19.086 1.00 54.75 O

ATOM 5148 N VAL B1116 63.260 8.459 14.643 1.00 24.49 N

ATOM 5149 CA VAL B1116 64.033 9.501 13.992 1.00 25.18 C

ATOM 5150 C VAL B1116 63.057 10.591 13.547 1.00 29.10 C

ATOM 5151 O VAL B1116 63.207 11.760 13.915 1.00 33.37 O

ATOM 5152 CB VAL B1116 64.872 8.976 12.776 1.00 24.36 C

ATOM 5153 CG1 VAL B1116 65.173 7.475 12.937 1.00 19.69 C

ATOM 5154 CG2 VAL B1116 64.180 9.309 11.469 1.00 16.77 C

ATOM 5155 N LEU B1117 62.027 10.196 12.803 1.00 28.69 N

ATOM 5156 CA LEU B1117 61.002 11.122 12.306 1.00 27.32 C

ATOM 5157 C LEU B1117 60.307 11.999 13.362 1.00 28.23 C

ATOM 5158 O LEU B1117 59.895 13.112 13.049 1.00 28.23 O

ATOM 5159 CB LEU B1117 59.915 10.339 11.553 1.00 26.29 C

ATOM 5160 CG LEU B1117 59.965 10.124 10.036 1.00 26.50 C

ATOM 5161 CD1 LEU B1117 61.157 10.853 9.426 1.00 28.50 C

ATOM 5162 CD2 LEU B1117 60.062 8.634 9.749 1.00 27.50 C

ATOM 5163 N THR B1118 60.165 11.507 14.598 1.00 30.12 N

ATOM 5164 CA THR B1118 59.472 12.263 15.652 1.00 32.18 C

ATOM 5165 C THR B1118 60.366 13.036 16.613 1.00 34.46 C

ATOM 5166 O THR B1118 60.099 14.204 16.931 1.00 38.29 O

ATOM 5167 CB THR B1118 58.586 11.355 16.512 1.00 29.38 C

ATOM 5168 OG1 THR B1118 59.086 10.019 16.459 1.00 32.08 O

ATOM 5169 CG2 THR B1118 57.163 11.386 16.026 1.00 29.70 C

ATOM 5170 N SER B1119 61.409 12.374 17.097 1.00 32.17 N

ATOM 5171 CA SER B1119 62.345 12.998 18.015 1.00 32.44 C

ATOM 5172 C SER B1119 62.771 14.347 17.464 1.00 34.79 C

ATOM 5173 O SER B1119 63.022 15.288 18.217 1.00 35.19 O

ATOM 5174 CB SER B1119 63.570 12.117 18.165 1.00 30.02 C

ATOM 5175 OG SER B1119 64.071 11.779 16.886 1.00 28.87 O

ATOM 5176 N ARG B1120 62.834 14.422 16.138 1.00 38.09 N

ATOM 5177 CA ARG B1120 63.244 15.623 15.422 1.00 40.94 C

ATOM 5178 C ARG B1120 62.181 16.707 15.414 1.00 44.73 C

ATOM 5179 O ARG B1120 62.359 17.786 15.985 1.00 45.45 O

ATOM 5180 CB ARG B1120 63.577 15.263 13.976 1.00 39.67 C

ATOM 5181 CG ARG B1120 64.939 15.717 13.522 1.00 39.99 C

ATOM 5182 CD ARG B1120 66.012 14.733 13.945 1.00 39.57 C

ATOM 5183 NE ARG B1120 67.303 15.387 14.153 1.00 39.07 N

ATOM 5184 CZ ARG B1120 68.481 14.779 14.037 1.00 38.62 C

ATOM 5185 NH1 ARG B1120 68.539 13.491 13.715 1.00 39.59 N

ATOM 5186 NH2 ARG B1120 69.601 15.459 14.238 1.00 38.84 N

ATOM 5187 N SER B1121 61.073 16.388 14.753 1.00 47.86 N

ATOM 5188 CA SER B1121 59.940 17.296 14.568 1.00 49.30 C

ATOM 5189 C SER B1121 59.511 18.227 15.693 1.00 46.34 C

ATOM 5190 O SER B1121 59.031 19.325 15.415 1.00 47.59 O

ATOM 5191 CB SER B1121 58.723 16.505 14.080 1.00 52.35 C

ATOM 5192 OG SER B1121 58.830 16.292 12.678 1.00 54.21 O

ATOM 5193 N TYR B1122 59.674 17.809 16.942 1.00 41.30 N

ATOM 5194 CA TYR B1122 59.283 18.654 18.071 1.00 38.53 C

ATOM 5195 C TYR B1122 60.072 19.975 18.186 1.00 35.77 C

ATOM 5196 O TYR B1122 59.703 20.856 18.963 1.00 33.84 O

ATOM 5197 CB TYR B1122 59.415 17.868 19.376 1.00 41.19 C

ATOM 5198 CG TYR B1122 60.756 18.050 20.075 1.00 43.93 C

ATOM 5199 CD1 TYR B1122 61.029 19.197 20.824 1.00 43.33 C

ATOM 5200 CD2 TYR B1122 61.751 17.074 19.985 1.00 43.90 C

ATOM 5201 CE1 TYR B1122 62.249 19.368 21.460 1.00 41.62 C

ATOM 5202 CE2 TYR B1122 62.973 17.239 20.618 1.00 43.05 C

ATOM 5203 CZ TYR B1122 63.216 18.387 21.355 1.00 42.67 C

ATOM 5204 OH TYR B1122 64.431 18.540 21.990 1.00 42.39 O

ATOM 5205 N LEU B1123 61.155 20.104 17.413 1.00 33.30 N

ATOM 5206 CA LEU B1123 62.003 21.304 17.419 1.00 25.55 C

ATOM 5207 C LEU B1123 61.473 22.418 16.519 1.00 25.11 C

ATOM 5208 O LEU B1123 61.982 23.530 16.549 1.00 25.21 O

ATOM 5209 CB LEU B1123 63.409 20.949 16.943 1.00 22.44 C

ATOM 5210 CG LEU B1123 64.517 20.673 17.947 1.00 19.41 C

ATOM 5211 CD1 LEU B1123 64.538 21.737 19.042 1.00 21.26 C

ATOM 5212 CD2 LEU B1123 64.303 19.306 18.516 1.00 17.16 C

ATOM 5213 N ILE B1124 60.470 22.113 15.700 1.00 26.78 N

ATOM 5214 CA ILE B1124 59.888 23.102 14.780 1.00 22.81 C

ATOM 5215 C ILE B1124 58.579 23.659 15.326 1.00 21.66 C

ATOM 5216 O ILE B1124 57.828 22.948 15.980 1.00 20.06 O

ATOM 5217 CB ILE B1124 59.616 22.478 13.378 1.00 19.69 C

ATOM 5218 CG1 ILE B1124 60.934 22.033 12.737 1.00 17.82 C

ATOM 5219 CG2 ILE B1124 58.900 23.470 12.498 1.00 13.17 C

ATOM 5220 CD1 ILE B1124 62.040 23.067 12.878 1.00 14.41 C

ATOM 5221 N ASP B1125 58.336 24.944 15.085 1.00 24.30 N

ATOM 5222 CA ASP B1125 57.103 25.599 15.524 1.00 26.27 C

ATOM 5223 C ASP B1125 56.127 25.429 14.356 1.00 27.01 C

ATOM 5224 O ASP B1125 56.397 25.899 13.250 1.00 28.79 O

ATOM 5225 CB ASP B1125 57.325 27.102 15.785 1.00 27.76 C

ATOM 5226 CG ASP B1125 58.096 27.383 17.085 1.00 34.67 C

ATOM 5227 OD1 ASP B1125 58.328 26.429 17.881 1.00 35.44 O

ATOM 5228 OD2 ASP B1125 58.471 28.567 17.299 1.00 32.44 O

ATOM 5229 N SER B1126 54.998 24.765 14.581 1.00 24.87 N

ATOM 5230 CA SER B1126 54.041 24.552 13.505 1.00 23.92 C

ATOM 5231 C SER B1126 52.624 24.464 14.027 1.00 25.93 C

ATOM 5232 O SER B1126 52.295 23.550 14.773 1.00 29.94 O

ATOM 5233 CB SER B1126 54.381 23.264 12.751 1.00 24.95 C

ATOM 5234 OG SER B1126 53.910 23.286 11.408 1.00 29.41 O

ATOM 5235 N PRO B1127 51.746 25.401 13.635 1.00 27.30 N

ATOM 5236 CA PRO B1127 51.935 26.553 12.740 1.00 22.03 C

ATOM 5237 C PRO B1127 53.116 27.481 13.085 1.00 22.10 C

ATOM 5238 O PRO B1127 53.518 27.615 14.251 1.00 18.88 O

ATOM 5239 CB PRO B1127 50.591 27.288 12.804 1.00 22.78 C

ATOM 5240 CG PRO B1127 49.611 26.271 13.253 1.00 23.27 C

ATOM 5241 CD PRO B1127 50.357 25.313 14.132 1.00 26.70 C

ATOM 5242 N PRO B1128 53.681 28.142 12.055 1.00 23.68 N

ATOM 5243 CA PRO B1128 54.810 29.063 12.196 1.00 20.27 C

ATOM 5244 C PRO B1128 54.524 30.270 13.083 1.00 21.08 C

ATOM 5245 O PRO B1128 53.376 30.655 13.295 1.00 19.86 O

ATOM 5246 CB PRO B1128 55.130 29.472 10.762 1.00 17.07 C

ATOM 5247 CG PRO B1128 53.896 29.230 10.025 1.00 19.23 C

ATOM 5248 CD PRO B1128 53.261 28.027 10.652 1.00 21.84 C

ATOM 5249 N THR B1129 55.608 30.872 13.565 1.00 23.68 N

ATOM 5250 CA THR B1129 55.567 32.025 14.450 1.00 19.34 C

ATOM 5251 C THR B1129 56.134 33.325 13.843 1.00 19.24 C

ATOM 5252 O THR B1129 55.421 34.040 13.131 1.00 20.97 O

ATOM 5253 CB THR B1129 56.305 31.689 15.754 1.00 17.76 C

ATOM 5254 OG1 THR B1129 57.444 30.874 15.455 1.00 16.60 O

ATOM 5255 CG2 THR B1129 55.398 30.900 16.673 1.00 17.86 C

ATOM 5256 N TYR B1130 57.408 33.621 14.093 1.00 18.30 N

ATOM 5257 CA TYR B1130 58.006 34.873 13.613 1.00 18.06 C

ATOM 5258 C TYR B1130 58.506 34.920 12.184 1.00 16.94 C

ATOM 5259 O TYR B1130 58.519 33.911 11.473 1.00 19.32 O

ATOM 5260 CB TYR B1130 59.179 35.281 14.516 1.00 17.37 C

ATOM 5261 CG TYR B1130 59.010 34.889 15.953 1.00 18.60 C

ATOM 5262 CD1 TYR B1130 59.470 33.662 16.417 1.00 18.61 C

ATOM 5263 CD2 TYR B1130 58.344 35.723 16.841 1.00 18.60 C

ATOM 5264 CE1 TYR B1130 59.267 33.270 17.736 1.00 21.20 C

ATOM 5265 CE2 TYR B1130 58.134 35.341 18.169 1.00 22.69 C

ATOM 5266 CZ TYR B1130 58.594 34.107 18.610 1.00 22.35 C

ATOM 5267 OH TYR B1130 58.369 33.709 19.916 1.00 22.34 O

ATOM 5268 N ASN B1131 58.904 36.121 11.772 1.00 12.82 N

ATOM 5269 CA ASN B1131 59.497 36.311 10.467 1.00 13.90 C

ATOM 5270 C ASN B1131 60.501 37.478 10.568 1.00 13.48 C

ATOM 5271 O ASN B1131 60.776 37.953 11.672 1.00 12.63 O

ATOM 5272 CB ASN B1131 58.417 36.508 9.401 1.00 13.95 C

ATOM 5273 CG ASN B1131 57.636 37.756 9.584 1.00 16.73 C

ATOM 5274 OD1 ASN B1131 56.528 37.867 9.085 1.00 23.52 O

ATOM 5275 ND2 ASN B1131 58.201 38.719 10.285 1.00 17.60 N

ATOM 5276 N VAL B1132 61.083 37.917 9.456 1.00 10.96 N

ATOM 5277 CA VAL B1132 62.060 38.992 9.531 1.00 10.85 C

ATOM 5278 C VAL B1132 61.534 40.281 10.132 1.00 13.74 C

ATOM 5279 O VAL B1132 62.306 41.041 10.717 1.00 17.47 O

ATOM 5280 CB VAL B1132 62.672 39.343 8.149 1.00 11.29 C

ATOM 5281 CG1 VAL B1132 61.679 40.124 7.305 1.00 9.71 C

ATOM 5282 CG2 VAL B1132 63.918 40.180 8.349 1.00 7.05 C

ATOM 5283 N HIS B1133 60.230 40.535 10.004 1.00 13.96 N

ATOM 5284 CA HIS B1133 59.632 41.770 10.516 1.00 10.92 C

ATOM 5285 C HIS B1133 58.926 41.675 11.867 1.00 11.99 C

ATOM 5286 O HIS B1133 58.616 42.689 12.489 1.00 11.48 O

ATOM 5287 CB HIS B1133 58.647 42.303 9.490 1.00 12.22 C

ATOM 5288 CG HIS B1133 59.295 42.915 8.293 1.00 16.48 C

ATOM 5289 ND1 HIS B1133 58.610 43.175 7.125 1.00 20.23 N

ATOM 5290 CD2 HIS B1133 60.569 43.328 8.080 1.00 18.11 C

ATOM 5291 CE1 HIS B1133 59.428 43.722 6.244 1.00 20.24 C

ATOM 5292 NE2 HIS B1133 60.624 43.826 6.802 1.00 21.32 N

ATOM 5293 N TYR B1134 58.678 40.456 12.336 1.00 13.33 N

ATOM 5294 CA TYR B1134 57.963 40.263 13.597 1.00 9.66 C

ATOM 5295 C TYR B1134 58.688 39.388 14.607 1.00 7.80 C

ATOM 5296 O TYR B1134 58.960 38.215 14.342 1.00 7.33 O

ATOM 5297 CB TYR B1134 56.550 39.690 13.312 1.00 5.26 C

ATOM 5298 CG TYR B1134 55.638 40.665 12.611 1.00 2.00 C

ATOM 5299 CD1 TYR B1134 55.582 40.730 11.220 1.00 2.00 C

ATOM 5300 CD2 TYR B1134 54.877 41.579 13.348 1.00 5.85 C

ATOM 5301 CE1 TYR B1134 54.787 41.702 10.572 1.00 4.22 C

ATOM 5302 CE2 TYR B1134 54.071 42.556 12.720 1.00 3.85 C

ATOM 5303 CZ TYR B1134 54.027 42.619 11.331 1.00 6.04 C

ATOM 5304 OH TYR B1134 53.223 43.587 10.735 1.00 2.00 O

ATOM 5305 N GLY B1135 58.991 39.977 15.763 1.00 7.91 N

ATOM 5306 CA GLY B1135 59.657 39.246 16.829 1.00 11.92 C

ATOM 5307 C GLY B1135 58.660 38.755 17.876 1.00 14.18 C

ATOM 5308 O GLY B1135 59.021 38.150 18.898 1.00 11.75 O

ATOM 5309 N TYR B1136 57.387 39.050 17.616 1.00 16.83 N

ATOM 5310 CA TYR B1136 56.286 38.642 18.477 1.00 13.10 C

ATOM 5311 C TYR B1136 55.242 38.059 17.531 1.00 13.77 C

ATOM 5312 O TYR B1136 55.142 38.502 16.383 1.00 13.94 O

ATOM 5313 CB TYR B1136 55.725 39.859 19.199 1.00 12.28 C

ATOM 5314 CG TYR B1136 55.275 40.962 18.265 1.00 9.18 C

ATOM 5315 CD1 TYR B1136 54.012 40.936 17.693 1.00 8.83 C

ATOM 5316 CD2 TYR B1136 56.097 42.039 17.979 1.00 6.95 C

ATOM 5317 CE1 TYR B1136 53.581 41.953 16.866 1.00 9.19 C

ATOM 5318 CE2 TYR B1136 55.673 43.067 17.147 1.00 7.08 C

ATOM 5319 CZ TYR B1136 54.407 43.017 16.593 1.00 7.65 C

ATOM 5320 OH TYR B1136 53.948 44.024 15.769 1.00 9.11 O

ATOM 5321 N LYS B1137 54.480 37.069 18.000 1.00 15.48 N

ATOM 5322 CA LYS B1137 53.446 36.439 17.173 1.00 12.85 C

ATOM 5323 C LYS B1137 52.366 37.426 16.774 1.00 11.55 C

ATOM 5324 O LYS B1137 51.860 38.184 17.600 1.00 11.65 O

ATOM 5325 CB LYS B1137 52.817 35.258 17.910 1.00 12.48 C

ATOM 5326 CG LYS B1137 53.865 34.233 18.284 1.00 19.41 C

ATOM 5327 CD LYS B1137 53.291 32.896 18.711 1.00 21.45 C

ATOM 5328 CE LYS B1137 54.086 32.313 19.859 1.00 18.70 C

ATOM 5329 NZ LYS B1137 53.913 33.162 21.072 1.00 20.07 N

ATOM 5330 N SER B1138 52.026 37.423 15.493 1.00 10.05 N

ATOM 5331 CA SER B1138 50.998 38.311 14.982 1.00 10.71 C

ATOM 5332 C SER B1138 50.299 37.594 13.842 1.00 11.47 C

ATOM 5333 O SER B1138 50.818 36.625 13.301 1.00 14.25 O

ATOM 5334 CB SER B1138 51.620 39.619 14.479 1.00 9.35 C

ATOM 5335 OG SER B1138 52.347 39.388 13.286 1.00 15.47 O

ATOM 5336 N TRP B1139 49.121 38.064 13.467 1.00 10.87 N

ATOM 5337 CA TRP B1139 48.404 37.421 12.386 1.00 8.91 C

ATOM 5338 C TRP B1139 49.107 37.675 11.075 1.00 10.64 C

ATOM 5339 O TRP B1139 49.093 36.821 10.175 1.00 11.18 O

ATOM 5340 CB TRP B1139 46.971 37.937 12.256 1.00 7.77 C

ATOM 5341 CG TRP B1139 46.218 37.074 11.325 1.00 6.65 C

ATOM 5342 CD1 TRP B1139 46.010 37.274 9.985 1.00 6.95 C

ATOM 5343 CD2 TRP B1139 45.678 35.789 11.628 1.00 7.76 C

ATOM 5344 NE1 TRP B1139 45.379 36.179 9.439 1.00 8.70 N

ATOM 5345 CE2 TRP B1139 45.165 35.255 10.431 1.00 7.60 C

ATOM 5346 CE3 TRP B1139 45.581 35.035 12.803 1.00 8.52 C

ATOM 5347 CZ2 TRP B1139 44.567 34.003 10.377 1.00 10.68 C

ATOM 5348 CZ3 TRP B1139 44.987 33.790 12.750 1.00 8.55 C

ATOM 5349 CH2 TRP B1139 44.489 33.286 11.543 1.00 12.89 C

ATOM 5350 N GLU B1140 49.698 38.864 10.962 1.00 8.06 N

ATOM 5351 CA GLU B1140 50.375 39.243 9.749 1.00 5.01 C

ATOM 5352 C GLU B1140 51.451 38.225 9.516 1.00 6.89 C

ATOM 5353 O GLU B1140 51.594 37.703 8.395 1.00 6.98 O

ATOM 5354 CB GLU B1140 51.002 40.597 9.898 1.00 4.98 C

ATOM 5355 CG GLU B1140 51.878 40.922 8.744 1.00 11.37 C

ATOM 5356 CD GLU B1140 51.112 40.917 7.477 1.00 14.36 C

ATOM 5357 OE1 GLU B1140 51.731 40.763 6.404 1.00 17.78 O

ATOM 5358 OE2 GLU B1140 49.876 41.072 7.563 1.00 22.12 O

ATOM 5359 N ALA B1141 52.198 37.935 10.586 1.00 3.60 N

ATOM 5360 CA ALA B1141 53.296 36.979 10.527 1.00 3.54 C

ATOM 5361 C ALA B1141 52.765 35.635 10.114 1.00 5.85 C

ATOM 5362 O ALA B1141 53.192 35.092 9.105 1.00 8.41 O

ATOM 5363 CB ALA B1141 53.968 36.871 11.861 1.00 3.77 C

ATOM 5364 N PHE B1142 51.827 35.103 10.885 1.00 5.48 N

ATOM 5365 CA PHE B1142 51.257 33.809 10.568 1.00 7.10 C

ATOM 5366 C PHE B1142 50.540 33.653 9.207 1.00 11.22 C

ATOM 5367 O PHE B1142 50.544 32.563 8.622 1.00 9.48 O

ATOM 5368 CB PHE B1142 50.257 33.371 11.629 1.00 6.04 C

ATOM 5369 CG PHE B1142 49.317 32.339 11.121 1.00 6.92 C

ATOM 5370 CD1 PHE B1142 49.692 31.007 11.086 1.00 9.16 C

ATOM 5371 CD2 PHE B1142 48.123 32.707 10.517 1.00 8.28 C

ATOM 5372 CE1 PHE B1142 48.901 30.075 10.450 1.00 9.60 C

ATOM 5373 CE2 PHE B1142 47.318 31.774 9.873 1.00 6.10 C

ATOM 5374 CZ PHE B1142 47.705 30.465 9.837 1.00 7.70 C

ATOM 5375 N SER B1143 49.911 34.714 8.702 1.00 14.51 N

ATOM 5376 CA SER B1143 49.166 34.583 7.446 1.00 16.91 C

ATOM 5377 C SER B1143 49.894 34.938 6.150 1.00 16.34 C

ATOM 5378 O SER B1143 49.567 34.388 5.096 1.00 15.70 O

ATOM 5379 CB SER B1143 47.840 35.362 7.525 1.00 17.21 C

ATOM 5380 OG SER B1143 48.060 36.737 7.732 1.00 18.33 O

ATOM 5381 N ASN B1144 50.879 35.832 6.220 1.00 15.77 N

ATOM 5382 CA ASN B1144 51.613 36.229 5.015 1.00 14.41 C

ATOM 5383 C ASN B1144 52.584 35.137 4.548 1.00 14.96 C

ATOM 5384 O ASN B1144 53.610 34.853 5.183 1.00 18.17 O

ATOM 5385 CB ASN B1144 52.360 37.545 5.249 1.00 11.76 C

ATOM 5386 CG ASN B1144 52.639 38.293 3.963 1.00 9.83 C

ATOM 5387 OD1 ASN B1144 52.882 37.671 2.930 1.00 3.57 O

ATOM 5388 ND2 ASN B1144 52.608 39.627 4.031 1.00 12.59 N

ATOM 5389 N LEU B1145 52.238 34.522 3.424 1.00 12.07 N

ATOM 5390 CA LEU B1145 53.025 33.451 2.843 1.00 7.12 C

ATOM 5391 C LEU B1145 54.233 33.928 2.065 1.00 6.87 C

ATOM 5392 O LEU B1145 55.049 33.123 1.642 1.00 7.21 O

ATOM 5393 CB LEU B1145 52.119 32.621 1.932 1.00 7.08 C

ATOM 5394 CG LEU B1145 51.010 31.916 2.716 1.00 3.75 C

ATOM 5395 CD1 LEU B1145 50.386 30.812 1.875 1.00 3.57 C

ATOM 5396 CD2 LEU B1145 51.627 31.351 4.007 1.00 2.65 C

ATOM 5397 N SER B1146 54.355 35.237 1.884 1.00 9.49 N

ATOM 5398 CA SER B1146 55.471 35.824 1.137 1.00 11.49 C

ATOM 5399 C SER B1146 56.792 35.837 1.907 1.00 13.29 C

ATOM 5400 O SER B1146 57.859 36.014 1.323 1.00 12.63 O

ATOM 5401 CB SER B1146 55.132 37.258 0.743 1.00 12.17 C

ATOM 5402 OG SER B1146 54.436 37.280 -0.488 1.00 19.78 O

ATOM 5403 N TYR B1147 56.700 35.656 3.223 1.00 15.00 N

ATOM 5404 CA TYR B1147 57.851 35.673 4.120 1.00 13.53 C

ATOM 5405 C TYR B1147 58.422 34.291 4.359 1.00 14.05 C

ATOM 5406 O TYR B1147 57.710 33.300 4.305 1.00 15.80 O

ATOM 5407 CB TYR B1147 57.452 36.176 5.514 1.00 16.19 C

ATOM 5408 CG TYR B1147 57.131 37.640 5.684 1.00 15.80 C

ATOM 5409 CD1 TYR B1147 55.814 38.068 5.736 1.00 11.23 C

ATOM 5410 CD2 TYR B1147 58.143 38.575 5.908 1.00 16.46 C

ATOM 5411 CE1 TYR B1147 55.502 39.386 6.014 1.00 14.89 C

ATOM 5412 CE2 TYR B1147 57.845 39.903 6.188 1.00 18.18 C

ATOM 5413 CZ TYR B1147 56.514 40.308 6.242 1.00 18.33 C

ATOM 5414 OH TYR B1147 56.183 41.627 6.526 1.00 15.50 O

ATOM 5415 N TYR B1148 59.712 34.239 4.656 1.00 13.49 N

ATOM 5416 CA TYR B1148 60.353 32.990 5.023 1.00 9.42 C

ATOM 5417 C TYR B1148 60.060 33.106 6.515 1.00 11.21 C

ATOM 5418 O TYR B1148 60.165 34.219 7.070 1.00 9.96 O

ATOM 5419 CB TYR B1148 61.875 33.064 4.853 1.00 7.93 C

ATOM 5420 CG TYR B1148 62.437 32.681 3.498 1.00 5.51 C

ATOM 5421 CD1 TYR B1148 62.303 31.385 2.988 1.00 3.75 C

ATOM 5422 CD2 TYR B1148 63.081 33.622 2.724 1.00 2.00 C

ATOM 5423 CE1 TYR B1148 62.787 31.053 1.750 1.00 2.00 C

ATOM 5424 CE2 TYR B1148 63.571 33.299 1.488 1.00 4.47 C

ATOM 5425 CZ TYR B1148 63.418 32.017 0.999 1.00 2.00 C

ATOM 5426 OH TYR B1148 63.890 31.741 -0.258 1.00 2.00 O

ATOM 5427 N THR B1149 59.694 32.004 7.171 1.00 12.24 N

ATOM 5428 CA THR B1149 59.427 32.049 8.619 1.00 13.36 C

ATOM 5429 C THR B1149 60.767 32.126 9.366 1.00 13.49 C

ATOM 5430 O THR B1149 61.830 32.148 8.731 1.00 15.63 O

ATOM 5431 CB THR B1149 58.609 30.811 9.103 1.00 12.56 C

ATOM 5432 OG1 THR B1149 58.331 30.941 10.498 1.00 15.03 O

ATOM 5433 CG2 THR B1149 59.369 29.523 8.867 1.00 12.93 C

ATOM 5434 N ARG B1150 60.735 32.172 10.695 1.00 12.19 N

ATOM 5435 CA ARG B1150 61.975 32.272 11.461 1.00 10.79 C

ATOM 5436 C ARG B1150 62.036 31.405 12.732 1.00 11.64 C

ATOM 5437 O ARG B1150 61.160 31.491 13.584 1.00 13.04 O

ATOM 5438 CB ARG B1150 62.219 33.738 11.836 1.00 5.65 C

ATOM 5439 CG ARG B1150 62.804 34.603 10.733 1.00 3.76 C

ATOM 5440 CD ARG B1150 64.312 34.373 10.546 1.00 5.35 C

ATOM 5441 NE ARG B1150 65.141 35.135 11.484 1.00 2.00 N

ATOM 5442 CZ ARG B1150 65.470 36.411 11.325 1.00 2.00 C

ATOM 5443 NH1 ARG B1150 65.042 37.074 10.272 1.00 2.00 N

ATOM 5444 NH2 ARG B1150 66.238 37.011 12.213 1.00 2.00 N

ATOM 5445 N ALA B1151 63.083 30.592 12.858 1.00 11.57 N

ATOM 5446 CA ALA B1151 63.271 29.734 14.035 1.00 11.46 C

ATOM 5447 C ALA B1151 63.479 30.596 15.288 1.00 10.35 C

ATOM 5448 O ALA B1151 63.089 30.233 16.406 1.00 9.53 O

ATOM 5449 CB ALA B1151 64.495 28.782 13.817 1.00 7.12 C

ATOM 5450 N LEU B1152 64.098 31.746 15.083 1.00 12.11 N

ATOM 5451 CA LEU B1152 64.374 32.656 16.181 1.00 14.18 C

ATOM 5452 C LEU B1152 64.026 34.044 15.729 1.00 14.58 C

ATOM 5453 O LEU B1152 64.415 34.488 14.642 1.00 14.30 O

ATOM 5454 CB LEU B1152 65.853 32.614 16.580 1.00 17.80 C

ATOM 5455 CG LEU B1152 66.249 31.489 17.531 1.00 18.20 C

ATOM 5456 CD1 LEU B1152 67.753 31.452 17.634 1.00 21.13 C

ATOM 5457 CD2 LEU B1152 65.599 31.710 18.907 1.00 16.34 C

ATOM 5458 N PRO B1153 63.286 34.760 16.573 1.00 15.20 N

ATOM 5459 CA PRO B1153 62.857 36.128 16.281 1.00 10.42 C

ATOM 5460 C PRO B1153 64.042 37.003 15.953 1.00 10.61 C

ATOM 5461 O PRO B1153 65.134 36.823 16.486 1.00 12.59 O

ATOM 5462 CB PRO B1153 62.163 36.569 17.573 1.00 12.02 C

ATOM 5463 CG PRO B1153 62.589 35.575 18.619 1.00 6.46 C

ATOM 5464 CD PRO B1153 62.819 34.300 17.891 1.00 10.69 C

ATOM 5465 N PRO B1154 63.858 37.953 15.044 1.00 11.03 N

ATOM 5466 CA PRO B1154 65.004 38.811 14.739 1.00 11.50 C

ATOM 5467 C PRO B1154 65.361 39.683 15.958 1.00 15.27 C

ATOM 5468 O PRO B1154 64.552 39.841 16.881 1.00 21.69 O

ATOM 5469 CB PRO B1154 64.526 39.651 13.565 1.00 5.53 C

ATOM 5470 CG PRO B1154 63.061 39.611 13.651 1.00 8.59 C

ATOM 5471 CD PRO B1154 62.676 38.294 14.247 1.00 8.89 C

ATOM 5472 N VAL B1155 66.573 40.230 15.978 1.00 15.82 N

ATOM 5473 CA VAL B1155 66.996 41.093 17.069 1.00 11.61 C

ATOM 5474 C VAL B1155 66.277 42.422 16.890 1.00 10.93 C

ATOM 5475 O VAL B1155 66.215 42.959 15.778 1.00 8.54 O

ATOM 5476 CB VAL B1155 68.535 41.334 17.038 1.00 9.09 C

ATOM 5477 CG1 VAL B1155 68.941 42.280 18.151 1.00 3.90 C

ATOM 5478 CG2 VAL B1155 69.285 40.014 17.148 1.00 5.97 C

ATOM 5479 N ALA B1156 65.734 42.952 17.982 1.00 14.97 N

ATOM 5480 CA ALA B1156 65.020 44.232 17.929 1.00 19.39 C

ATOM 5481 C ALA B1156 65.882 45.302 17.251 1.00 21.46 C

ATOM 5482 O ALA B1156 67.105 45.293 17.357 1.00 21.29 O

ATOM 5483 CB ALA B1156 64.609 44.682 19.337 1.00 16.82 C

ATOM 5484 N ASP B1157 65.230 46.223 16.551 1.00 26.91 N

ATOM 5485 CA ASP B1157 65.928 47.282 15.840 1.00 29.91 C

ATOM 5486 C ASP B1157 66.546 48.307 16.772 1.00 33.76 C

ATOM 5487 O ASP B1157 67.537 48.953 16.421 1.00 34.50 O

ATOM 5488 CB ASP B1157 64.971 47.972 14.875 1.00 27.91 C

ATOM 5489 CG ASP B1157 64.750 47.165 13.620 1.00 31.60 C

ATOM 5490 OD1 ASP B1157 65.416 46.122 13.479 1.00 35.40 O

ATOM 5491 OD2 ASP B1157 63.922 47.555 12.773 1.00 33.25 O

ATOM 5492 N ASP B1158 65.963 48.460 17.960 1.00 37.81 N

ATOM 5493 CA ASP B1158 66.478 49.420 18.931 1.00 38.51 C

ATOM 5494 C ASP B1158 67.451 48.779 19.935 1.00 36.86 C

ATOM 5495 O ASP B1158 67.700 49.313 21.013 1.00 36.05 O

ATOM 5496 CB ASP B1158 65.312 50.112 19.648 1.00 40.85 C

ATOM 5497 CG ASP B1158 64.775 49.305 20.804 1.00 46.19 C

ATOM 5498 OD1 ASP B1158 64.288 48.180 20.575 1.00 48.70 O

ATOM 5499 OD2 ASP B1158 64.837 49.800 21.947 1.00 48.99 O

ATOM 5500 N CYS B1159 68.002 47.627 19.570 1.00 34.05 N

ATOM 5501 CA CYS B1159 68.968 46.966 20.429 1.00 33.92 C

ATOM 5502 C CYS B1159 70.305 47.718 20.285 1.00 34.67 C

ATOM 5503 O CYS B1159 70.588 48.292 19.229 1.00 34.89 O

ATOM 5504 CB CYS B1159 69.111 45.499 20.015 1.00 32.94 C

ATOM 5505 SG CYS B1159 67.815 44.408 20.698 1.00 33.86 S

ATOM 5506 N PRO B1160 71.135 47.731 21.348 1.00 32.61 N

ATOM 5507 CA PRO B1160 72.436 48.416 21.343 1.00 31.72 C

ATOM 5508 C PRO B1160 73.517 47.827 20.415 1.00 32.97 C

ATOM 5509 O PRO B1160 74.364 48.555 19.875 1.00 33.36 O

ATOM 5510 CB PRO B1160 72.857 48.388 22.805 1.00 29.26 C

ATOM 5511 CG PRO B1160 72.164 47.200 23.370 1.00 30.15 C

ATOM 5512 CD PRO B1160 70.864 47.076 22.641 1.00 30.79 C

ATOM 5513 N THR B1161 73.498 46.516 20.230 1.00 32.65 N

ATOM 5514 CA THR B1161 74.471 45.879 19.360 1.00 33.07 C

ATOM 5515 C THR B1161 73.752 44.984 18.361 1.00 32.96 C

ATOM 5516 O THR B1161 72.578 44.655 18.539 1.00 34.28 O

ATOM 5517 CB THR B1161 75.511 45.052 20.172 1.00 35.77 C

ATOM 5518 OG1 THR B1161 74.859 44.004 20.899 1.00 36.59 O

ATOM 5519 CG2 THR B1161 76.232 45.944 21.153 1.00 36.90 C

ATOM 5520 N PRO B1162 74.450 44.585 17.288 1.00 32.17 N

ATOM 5521 CA PRO B1162 73.887 43.725 16.240 1.00 31.22 C

ATOM 5522 C PRO B1162 73.318 42.405 16.733 1.00 30.18 C

ATOM 5523 O PRO B1162 72.324 41.912 16.188 1.00 32.04 O

ATOM 5524 CB PRO B1162 75.048 43.523 15.269 1.00 31.65 C

ATOM 5525 CG PRO B1162 75.985 44.678 15.536 1.00 32.26 C

ATOM 5526 CD PRO B1162 75.848 44.958 17.004 1.00 33.84 C

ATOM 5527 N MET B1163 73.948 41.832 17.755 1.00 28.45 N

ATOM 5528 CA MET B1163 73.489 40.570 18.301 1.00 26.91 C

ATOM 5529 C MET B1163 72.776 40.738 19.623 1.00 27.24 C

ATOM 5530 O MET B1163 72.629 39.782 20.368 1.00 29.21 O

ATOM 5531 CB MET B1163 74.654 39.609 18.472 1.00 24.04 C

ATOM 5532 CG MET B1163 75.447 39.393 17.189 1.00 28.20 C

ATOM 5533 SD MET B1163 74.797 38.128 16.019 1.00 25.14 S

ATOM 5534 CE MET B1163 75.489 38.682 14.530 1.00 22.09 C

ATOM 5535 N GLY B1164 72.331 41.951 19.926 1.00 27.80 N

ATOM 5536 CA GLY B1164 71.616 42.154 21.172 1.00 29.06 C

ATOM 5537 C GLY B1164 72.273 43.146 22.095 1.00 28.43 C

ATOM 5538 O GLY B1164 72.054 44.345 21.954 1.00 30.54 O

ATOM 5539 N VAL B1165 73.064 42.648 23.046 1.00 27.33 N

ATOM 5540 CA VAL B1165 73.773 43.511 23.992 1.00 28.07 C

ATOM 5541 C VAL B1165 75.282 43.228 24.016 1.00 29.88 C

ATOM 5542 O VAL B1165 76.080 44.071 24.442 1.00 30.58 O

ATOM 5543 CB VAL B1165 73.228 43.346 25.439 1.00 27.06 C

ATOM 5544 CG1 VAL B1165 71.845 43.982 25.549 1.00 26.42 C

ATOM 5545 CG2 VAL B1165 73.200 41.870 25.836 1.00 24.64 C

ATOM 5546 N LYS B1166 75.661 42.035 23.562 1.00 29.54 N

ATOM 5547 CA LYS B1166 77.060 41.611 23.525 1.00 26.92 C

ATOM 5548 C LYS B1166 77.769 42.077 22.252 1.00 27.71 C

ATOM 5549 O LYS B1166 77.129 42.274 21.204 1.00 24.29 O

ATOM 5550 CB LYS B1166 77.150 40.083 23.604 1.00 24.11 C

ATOM 5551 CG LYS B1166 76.903 39.519 24.975 1.00 25.05 C

ATOM 5552 CD LYS B1166 76.798 38.014 24.910 1.00 22.13 C

ATOM 5553 CE LYS B1166 76.977 37.399 26.296 1.00 27.20 C

ATOM 5554 NZ LYS B1166 75.985 36.304 26.552 1.00 26.75 N

ATOM 5555 N GLY B1167 79.092 42.245 22.355 1.00 27.41 N

ATOM 5556 CA GLY B1167 79.886 42.677 21.216 1.00 27.02 C

ATOM 5557 C GLY B1167 79.949 44.182 21.015 1.00 27.43 C

ATOM 5558 O GLY B1167 79.552 44.955 21.888 1.00 27.25 O

ATOM 5559 N ASN B1168 80.447 44.597 19.854 1.00 28.60 N

ATOM 5560 CA ASN B1168 80.570 46.011 19.541 1.00 32.45 C

ATOM 5561 C ASN B1168 79.412 46.490 18.667 1.00 33.27 C

ATOM 5562 O ASN B1168 78.636 45.692 18.142 1.00 31.65 O

ATOM 5563 CB ASN B1168 81.903 46.297 18.824 1.00 36.39 C

ATOM 5564 CG ASN B1168 83.092 45.622 19.490 1.00 39.86 C

ATOM 5565 OD1 ASN B1168 83.340 45.799 20.682 1.00 43.11 O

ATOM 5566 ND2 ASN B1168 83.837 44.842 18.715 1.00 43.96 N

ATOM 5567 N LYS B1169 79.311 47.808 18.514 1.00 35.00 N

ATOM 5568 CA LYS B1169 78.262 48.402 17.704 1.00 36.90 C

ATOM 5569 C LYS B1169 78.207 47.764 16.316 1.00 35.77 C

ATOM 5570 O LYS B1169 77.173 47.782 15.649 1.00 33.50 O

ATOM 5571 CB LYS B1169 78.497 49.907 17.576 1.00 40.26 C

ATOM 5572 CG LYS B1169 78.843 50.585 18.890 1.00 45.22 C

ATOM 5573 CD LYS B1169 77.610 51.196 19.530 1.00 50.50 C

ATOM 5574 CE LYS B1169 77.914 51.757 20.915 1.00 54.14 C

ATOM 5575 NZ LYS B1169 78.226 53.223 20.885 1.00 56.27 N

ATOM 5576 N GLU B1170 79.321 47.184 15.889 1.00 36.17 N

ATOM 5577 CA GLU B1170 79.366 46.565 14.578 1.00 36.68 C

ATOM 5578 C GLU B1170 80.109 45.244 14.534 1.00 32.62 C

ATOM 5579 O GLU B1170 81.143 45.082 15.172 1.00 31.22 O

ATOM 5580 CB GLU B1170 80.000 47.520 13.575 1.00 41.09 C

ATOM 5581 CG GLU B1170 79.110 48.669 13.192 1.00 51.94 C

ATOM 5582 CD GLU B1170 79.910 49.898 12.817 1.00 58.06 C

ATOM 5583 OE1 GLU B1170 79.893 50.881 13.597 1.00 61.27 O

ATOM 5584 OE2 GLU B1170 80.557 49.875 11.742 1.00 62.01 O

ATOM 5585 N LEU B1171 79.555 44.304 13.774 1.00 29.43 N

ATOM 5586 CA LEU B1171 80.151 42.989 13.594 1.00 24.96 C

ATOM 5587 C LEU B1171 81.399 43.203 12.749 1.00 24.29 C

ATOM 5588 O LEU B1171 81.553 44.248 12.111 1.00 21.23 O

ATOM 5589 CB LEU B1171 79.185 42.069 12.844 1.00 23.58 C

ATOM 5590 CG LEU B1171 78.469 40.914 13.545 1.00 24.55 C

ATOM 5591 CD1 LEU B1171 78.430 41.073 15.071 1.00 23.65 C

ATOM 5592 CD2 LEU B1171 77.068 40.856 12.969 1.00 23.65 C

ATOM 5593 N PRO B1172 82.301 42.208 12.716 1.00 23.36 N

ATOM 5594 CA PRO B1172 83.534 42.311 11.936 1.00 20.93 C

ATOM 5595 C PRO B1172 83.262 42.381 10.449 1.00 22.26 C

ATOM 5596 O PRO B1172 82.278 41.849 9.949 1.00 22.62 O

ATOM 5597 CB PRO B1172 84.306 41.054 12.311 1.00 18.40 C

ATOM 5598 CG PRO B1172 83.290 40.102 12.740 1.00 22.32 C

ATOM 5599 CD PRO B1172 82.206 40.910 13.401 1.00 23.55 C

ATOM 5600 N ASP B1173 84.143 43.062 9.741 1.00 25.33 N

ATOM 5601 CA ASP B1173 84.011 43.194 8.308 1.00 26.30 C

ATOM 5602 C ASP B1173 83.724 41.828 7.716 1.00 25.78 C

ATOM 5603 O ASP B1173 84.467 40.868 7.969 1.00 25.08 O

ATOM 5604 CB ASP B1173 85.308 43.736 7.724 1.00 31.37 C

ATOM 5605 CG ASP B1173 85.158 44.185 6.285 1.00 37.62 C

ATOM 5606 OD1 ASP B1173 85.683 45.267 5.955 1.00 41.42 O

ATOM 5607 OD2 ASP B1173 84.521 43.463 5.483 1.00 41.27 O

ATOM 5608 N SER B1174 82.645 41.738 6.941 1.00 25.55 N

ATOM 5609 CA SER B1174 82.270 40.483 6.285 1.00 25.82 C

ATOM 5610 C SER B1174 83.337 40.051 5.252 1.00 25.07 C

ATOM 5611 O SER B1174 83.581 38.859 5.053 1.00 23.55 O

ATOM 5612 CB SER B1174 80.911 40.645 5.594 1.00 26.80 C

ATOM 5613 OG SER B1174 80.957 41.666 4.604 1.00 25.45 O

ATOM 5614 N LYS B1175 83.959 41.030 4.596 1.00 23.65 N

ATOM 5615 CA LYS B1175 85.005 40.756 3.623 1.00 22.66 C

ATOM 5616 C LYS B1175 86.211 40.146 4.327 1.00 21.62 C

ATOM 5617 O LYS B1175 86.856 39.269 3.781 1.00 21.21 O

ATOM 5618 CB LYS B1175 85.415 42.044 2.909 1.00 23.89 C

ATOM 5619 CG LYS B1175 86.476 41.843 1.826 1.00 26.62 C

ATOM 5620 CD LYS B1175 87.144 43.173 1.474 1.00 30.85 C

ATOM 5621 CE LYS B1175 88.638 43.012 1.234 1.00 32.39 C

ATOM 5622 NZ LYS B1175 88.935 43.123 -0.216 1.00 35.79 N

ATOM 5623 N GLU B1176 86.507 40.616 5.539 1.00 23.72 N

ATOM 5624 CA GLU B1176 87.622 40.099 6.340 1.00 24.42 C

ATOM 5625 C GLU B1176 87.293 38.676 6.754 1.00 21.29 C

ATOM 5626 O GLU B1176 88.131 37.793 6.681 1.00 19.17 O

ATOM 5627 CB GLU B1176 87.831 40.947 7.604 1.00 32.95 C

ATOM 5628 CG GLU B1176 89.249 41.507 7.790 1.00 41.87 C

ATOM 5629 CD GLU B1176 89.646 42.452 6.654 1.00 49.77 C

ATOM 5630 OE1 GLU B1176 90.450 42.051 5.767 1.00 52.06 O

ATOM 5631 OE2 GLU B1176 89.139 43.598 6.650 1.00 51.97 O

ATOM 5632 N VAL B1177 86.059 38.473 7.202 1.00 20.50 N

ATOM 5633 CA VAL B1177 85.599 37.156 7.608 1.00 18.81 C

ATOM 5634 C VAL B1177 85.694 36.229 6.399 1.00 20.61 C

ATOM 5635 O VAL B1177 86.199 35.099 6.480 1.00 20.85 O

ATOM 5636 CB VAL B1177 84.137 37.200 8.060 1.00 16.69 C

ATOM 5637 CG1 VAL B1177 83.676 35.785 8.382 1.00 15.72 C

ATOM 5638 CG2 VAL B1177 83.985 38.126 9.270 1.00 13.95 C

ATOM 5639 N LEU B1178 85.201 36.735 5.271 1.00 20.99 N

ATOM 5640 CA LEU B1178 85.194 36.012 4.007 1.00 20.10 C

ATOM 5641 C LEU B1178 86.589 35.521 3.647 1.00 20.07 C

ATOM 5642 O LEU B1178 86.813 34.332 3.465 1.00 20.77 O

ATOM 5643 CB LEU B1178 84.679 36.931 2.900 1.00 19.07 C

ATOM 5644 CG LEU B1178 84.099 36.353 1.607 1.00 17.08 C

ATOM 5645 CD1 LEU B1178 84.626 37.151 0.431 1.00 13.88 C

ATOM 5646 CD2 LEU B1178 84.451 34.908 1.469 1.00 14.83 C

ATOM 5647 N GLU B1179 87.530 36.448 3.563 1.00 20.09 N

ATOM 5648 CA GLU B1179 88.893 36.109 3.189 1.00 21.31 C

ATOM 5649 C GLU B1179 89.712 35.329 4.212 1.00 20.10 C

ATOM 5650 O GLU B1179 90.428 34.408 3.852 1.00 22.03 O

ATOM 5651 CB GLU B1179 89.646 37.374 2.783 1.00 20.11 C

ATOM 5652 CG GLU B1179 89.320 37.798 1.380 1.00 23.10 C

ATOM 5653 CD GLU B1179 89.739 39.214 1.105 1.00 26.94 C

ATOM 5654 OE1 GLU B1179 90.084 39.922 2.077 1.00 30.13 O

ATOM 5655 OE2 GLU B1179 89.721 39.627 -0.076 1.00 28.21 O

ATOM 5656 N LYS B1180 89.607 35.665 5.483 1.00 19.73 N

ATOM 5657 CA LYS B1180 90.405 34.960 6.478 1.00 20.98 C

ATOM 5658 C LYS B1180 90.058 33.494 6.775 1.00 21.79 C

ATOM 5659 O LYS B1180 90.951 32.697 7.029 1.00 24.05 O

ATOM 5660 CB LYS B1180 90.417 35.747 7.791 1.00 22.06 C

ATOM 5661 CG LYS B1180 90.939 37.163 7.650 1.00 25.15 C

ATOM 5662 CD LYS B1180 91.385 37.699 8.995 1.00 30.34 C

ATOM 5663 CE LYS B1180 92.347 38.862 8.830 1.00 34.66 C

ATOM 5664 NZ LYS B1180 91.737 40.135 9.321 1.00 35.85 N

ATOM 5665 N VAL B1181 88.784 33.121 6.765 1.00 21.32 N

ATOM 5666 CA VAL B1181 88.450 31.738 7.076 1.00 19.56 C

ATOM 5667 C VAL B1181 87.492 31.050 6.117 1.00 19.74 C

ATOM 5668 O VAL B1181 87.241 29.858 6.271 1.00 17.44 O

ATOM 5669 CB VAL B1181 87.862 31.591 8.508 1.00 21.24 C

ATOM 5670 CG1 VAL B1181 88.951 31.793 9.549 1.00 20.99 C

ATOM 5671 CG2 VAL B1181 86.719 32.575 8.710 1.00 23.03 C

ATOM 5672 N LEU B1182 86.969 31.770 5.123 1.00 19.89 N

ATOM 5673 CA LEU B1182 86.032 31.151 4.181 1.00 19.90 C

ATOM 5674 C LEU B1182 86.564 30.825 2.769 1.00 21.26 C

ATOM 5675 O LEU B1182 86.308 29.726 2.265 1.00 21.29 O

ATOM 5676 CB LEU B1182 84.759 32.004 4.092 1.00 16.24 C

ATOM 5677 CG LEU B1182 83.930 32.109 5.389 1.00 13.64 C

ATOM 5678 CD1 LEU B1182 82.683 32.932 5.128 1.00 13.42 C

ATOM 5679 CD2 LEU B1182 83.552 30.719 5.913 1.00 10.04 C

ATOM 5680 N LEU B1183 87.293 31.755 2.137 1.00 20.68 N

ATOM 5681 CA LEU B1183 87.842 31.525 0.794 1.00 18.62 C

ATOM 5682 C LEU B1183 88.776 30.319 0.780 1.00 19.97 C

ATOM 5683 O LEU B1183 89.588 30.140 1.696 1.00 20.23 O

ATOM 5684 CB LEU B1183 88.615 32.746 0.323 1.00 18.92 C

ATOM 5685 CG LEU B1183 87.811 34.002 0.039 1.00 20.12 C

ATOM 5686 CD1 LEU B1183 88.629 34.954 -0.844 1.00 15.70 C

ATOM 5687 CD2 LEU B1183 86.492 33.590 -0.624 1.00 19.67 C

ATOM 5688 N ARG B1184 88.672 29.508 -0.270 1.00 19.72 N

ATOM 5689 CA ARG B1184 89.487 28.308 -0.406 1.00 19.13 C

ATOM 5690 C ARG B1184 90.839 28.514 -1.069 1.00 19.63 C

ATOM 5691 O ARG B1184 90.918 29.099 -2.147 1.00 21.76 O

ATOM 5692 CB ARG B1184 88.705 27.259 -1.199 1.00 18.99 C

ATOM 5693 CG ARG B1184 89.530 26.389 -2.133 1.00 15.26 C

ATOM 5694 CD ARG B1184 88.687 25.929 -3.300 1.00 16.53 C

ATOM 5695 NE ARG B1184 87.592 25.061 -2.869 1.00 18.50 N

ATOM 5696 CZ ARG B1184 86.551 24.732 -3.630 1.00 17.33 C

ATOM 5697 NH1 ARG B1184 86.466 25.200 -4.860 1.00 16.28 N

ATOM 5698 NH2 ARG B1184 85.596 23.936 -3.163 1.00 16.41 N

ATOM 5699 N ARG B1185 91.901 28.032 -0.425 1.00 20.61 N

ATOM 5700 CA ARG B1185 93.244 28.135 -1.000 1.00 23.42 C

ATOM 5701 C ARG B1185 93.458 26.853 -1.822 1.00 23.52 C

ATOM 5702 O ARG B1185 93.755 26.883 -3.017 1.00 26.09 O

ATOM 5703 CB ARG B1185 94.305 28.257 0.096 1.00 20.90 C

ATOM 5704 CG ARG B1185 93.753 28.634 1.456 1.00 22.81 C

ATOM 5705 CD ARG B1185 93.717 30.137 1.689 1.00 24.31 C

ATOM 5706 NE ARG B1185 92.764 30.489 2.744 1.00 27.69 N

ATOM 5707 CZ ARG B1185 92.488 31.730 3.145 1.00 29.48 C

ATOM 5708 NH1 ARG B1185 93.085 32.776 2.594 1.00 30.56 N

ATOM 5709 NH2 ARG B1185 91.592 31.930 4.098 1.00 32.30 N

ATOM 5710 N GLU B1186 93.335 25.719 -1.165 1.00 23.44 N

ATOM 5711 CA GLU B1186 93.456 24.462 -1.863 1.00 26.27 C

ATOM 5712 C GLU B1186 92.141 23.731 -1.764 1.00 26.48 C

ATOM 5713 O GLU B1186 91.473 23.792 -0.733 1.00 27.97 O

ATOM 5714 CB GLU B1186 94.551 23.623 -1.260 1.00 31.57 C

ATOM 5715 CG GLU B1186 95.613 23.272 -2.273 1.00 44.60 C

ATOM 5716 CD GLU B1186 96.606 22.253 -1.750 1.00 53.15 C

ATOM 5717 OE1 GLU B1186 97.086 22.431 -0.605 1.00 57.80 O

ATOM 5718 OE2 GLU B1186 96.900 21.274 -2.477 1.00 55.72 O

ATOM 5719 N PHE B1187 91.767 23.030 -2.831 1.00 23.05 N

ATOM 5720 CA PHE B1187 90.520 22.285 -2.834 1.00 20.27 C

ATOM 5721 C PHE B1187 90.539 21.145 -1.812 1.00 19.16 C

ATOM 5722 O PHE B1187 91.415 20.290 -1.836 1.00 19.49 O

ATOM 5723 CB PHE B1187 90.247 21.720 -4.224 1.00 16.25 C

ATOM 5724 CG PHE B1187 89.042 20.805 -4.289 1.00 17.43 C

ATOM 5725 CD1 PHE B1187 89.200 19.424 -4.271 1.00 15.96 C

ATOM 5726 CD2 PHE B1187 87.755 21.321 -4.412 1.00 17.01 C

ATOM 5727 CE1 PHE B1187 88.111 18.565 -4.377 1.00 15.12 C

ATOM 5728 CE2 PHE B1187 86.666 20.460 -4.518 1.00 19.25 C

ATOM 5729 CZ PHE B1187 86.854 19.076 -4.501 1.00 16.19 C

ATOM 5730 N ILE B1188 89.568 21.150 -0.906 1.00 19.69 N

ATOM 5731 CA ILE B1188 89.458 20.105 0.111 1.00 19.63 C

ATOM 5732 C ILE B1188 88.298 19.163 -0.271 1.00 21.47 C

ATOM 5733 O ILE B1188 87.120 19.530 -0.191 1.00 20.43 O

ATOM 5734 CB ILE B1188 89.204 20.725 1.516 1.00 16.96 C

ATOM 5735 CG1 ILE B1188 90.382 21.637 1.884 1.00 15.14 C

ATOM 5736 CG2 ILE B1188 88.984 19.622 2.559 1.00 10.83 C

ATOM 5737 CD1 ILE B1188 90.080 22.617 2.982 1.00 18.09 C

ATOM 5738 N PRO B1189 88.620 17.930 -0.697 1.00 20.62 N

ATOM 5739 CA PRO B1189 87.577 16.975 -1.085 1.00 19.55 C

ATOM 5740 C PRO B1189 86.758 16.529 0.102 1.00 19.92 C

ATOM 5741 O PRO B1189 87.203 16.604 1.235 1.00 21.05 O

ATOM 5742 CB PRO B1189 88.356 15.817 -1.689 1.00 19.01 C

ATOM 5743 CG PRO B1189 89.673 15.870 -0.980 1.00 17.29 C

ATOM 5744 CD PRO B1189 89.966 17.345 -0.816 1.00 19.22 C

ATOM 5745 N ASP B1190 85.556 16.046 -0.166 1.00 21.00 N

ATOM 5746 CA ASP B1190 84.698 15.602 0.903 1.00 21.05 C

ATOM 5747 C ASP B1190 85.081 14.180 1.309 1.00 20.21 C

ATOM 5748 O ASP B1190 85.113 13.277 0.462 1.00 21.70 O

ATOM 5749 CB ASP B1190 83.221 15.670 0.458 1.00 24.82 C

ATOM 5750 CG ASP B1190 82.300 14.822 1.338 1.00 30.08 C

ATOM 5751 OD1 ASP B1190 82.245 15.070 2.572 1.00 28.86 O

ATOM 5752 OD2 ASP B1190 81.644 13.899 0.796 1.00 31.60 O

ATOM 5753 N PRO B1191 85.414 13.970 2.604 1.00 16.30 N

ATOM 5754 CA PRO B1191 85.785 12.642 3.104 1.00 14.64 C

ATOM 5755 C PRO B1191 84.670 11.610 2.905 1.00 18.31 C

ATOM 5756 O PRO B1191 84.942 10.403 2.865 1.00 20.53 O

ATOM 5757 CB PRO B1191 86.082 12.867 4.577 1.00 11.69 C

ATOM 5758 CG PRO B1191 85.554 14.189 4.886 1.00 15.24 C

ATOM 5759 CD PRO B1191 85.495 14.993 3.651 1.00 12.49 C

ATOM 5760 N GLN B1192 83.426 12.088 2.767 1.00 18.03 N

ATOM 5761 CA GLN B1192 82.258 11.230 2.578 1.00 16.43 C

ATOM 5762 C GLN B1192 82.082 10.723 1.162 1.00 16.34 C

ATOM 5763 O GLN B1192 81.266 9.839 0.907 1.00 20.53 O

ATOM 5764 CB GLN B1192 80.999 11.964 2.992 1.00 16.95 C

ATOM 5765 CG GLN B1192 80.985 12.316 4.448 1.00 21.44 C

ATOM 5766 CD GLN B1192 79.587 12.369 5.023 1.00 23.31 C

ATOM 5767 OE1 GLN B1192 79.300 13.196 5.888 1.00 27.79 O

ATOM 5768 NE2 GLN B1192 78.707 11.486 4.552 1.00 23.43 N

ATOM 5769 N GLY B1193 82.834 11.276 0.228 1.00 13.75 N

ATOM 5770 CA GLY B1193 82.729 10.805 -1.139 1.00 13.00 C

ATOM 5771 C GLY B1193 81.699 11.514 -1.988 1.00 13.66 C

ATOM 5772 O GLY B1193 81.512 11.184 -3.143 1.00 12.96 O

ATOM 5773 N SER B1194 81.024 12.498 -1.422 1.00 14.29 N

ATOM 5774 CA SER B1194 80.019 13.237 -2.166 1.00 16.50 C

ATOM 5775 C SER B1194 80.540 13.646 -3.550 1.00 17.60 C

ATOM 5776 O SER B1194 81.588 14.276 -3.656 1.00 20.82 O

ATOM 5777 CB SER B1194 79.625 14.485 -1.378 1.00 19.85 C

ATOM 5778 OG SER B1194 78.821 14.167 -0.251 1.00 21.99 O

ATOM 5779 N ASN B1195 79.810 13.300 -4.607 1.00 16.22 N

ATOM 5780 CA ASN B1195 80.233 13.651 -5.956 1.00 16.49 C

ATOM 5781 C ASN B1195 79.384 14.797 -6.458 1.00 17.15 C

ATOM 5782 O ASN B1195 78.744 15.483 -5.661 1.00 18.48 O

ATOM 5783 CB ASN B1195 80.106 12.454 -6.899 1.00 17.03 C

ATOM 5784 CG ASN B1195 78.732 11.832 -6.862 1.00 18.87 C

ATOM 5785 OD1 ASN B1195 77.811 12.386 -6.271 1.00 21.64 O

ATOM 5786 ND2 ASN B1195 78.586 10.668 -7.484 1.00 18.37 N

ATOM 5787 N MET B1196 79.370 15.001 -7.776 1.00 19.04 N

ATOM 5788 CA MET B1196 78.610 16.100 -8.385 1.00 19.38 C

ATOM 5789 C MET B1196 77.120 15.775 -8.623 1.00 20.25 C

ATOM 5790 O MET B1196 76.290 16.683 -8.741 1.00 20.74 O

ATOM 5791 CB MET B1196 79.291 16.540 -9.693 1.00 18.87 C

ATOM 5792 CG MET B1196 80.594 17.320 -9.510 1.00 13.43 C

ATOM 5793 SD MET B1196 80.590 18.476 -8.096 1.00 22.99 S

ATOM 5794 CE MET B1196 79.986 20.001 -8.894 1.00 13.64 C

ATOM 5795 N MET B1197 76.781 14.486 -8.697 1.00 18.85 N

ATOM 5796 CA MET B1197 75.391 14.085 -8.852 1.00 16.41 C

ATOM 5797 C MET B1197 74.708 14.492 -7.546 1.00 18.60 C

ATOM 5798 O MET B1197 73.521 14.812 -7.516 1.00 23.32 O

ATOM 5799 CB MET B1197 75.263 12.570 -9.018 1.00 16.22 C

ATOM 5800 CG MET B1197 75.584 12.040 -10.403 1.00 18.32 C

ATOM 5801 SD MET B1197 74.696 12.916 -11.704 1.00 23.81 S

ATOM 5802 CE MET B1197 73.119 12.038 -11.639 1.00 17.96 C

ATOM 5803 N PHE B1198 75.465 14.480 -6.455 1.00 16.45 N

ATOM 5804 CA PHE B1198 74.923 14.844 -5.157 1.00 15.32 C

ATOM 5805 C PHE B1198 74.838 16.340 -5.021 1.00 16.00 C

ATOM 5806 O PHE B1198 73.803 16.862 -4.649 1.00 19.42 O

ATOM 5807 CB PHE B1198 75.786 14.284 -4.017 1.00 14.31 C

ATOM 5808 CG PHE B1198 75.491 14.891 -2.673 1.00 12.86 C

ATOM 5809 CD1 PHE B1198 74.538 14.337 -1.834 1.00 14.64 C

ATOM 5810 CD2 PHE B1198 76.149 16.041 -2.255 1.00 15.41 C

ATOM 5811 CE1 PHE B1198 74.245 14.933 -0.589 1.00 15.39 C

ATOM 5812 CE2 PHE B1198 75.861 16.643 -1.012 1.00 13.78 C

ATOM 5813 CZ PHE B1198 74.910 16.086 -0.186 1.00 10.98 C

ATOM 5814 N ALA B1199 75.923 17.037 -5.335 1.00 18.24 N

ATOM 5815 CA ALA B1199 75.942 18.494 -5.197 1.00 18.46 C

ATOM 5816 C ALA B1199 74.853 19.171 -6.010 1.00 17.22 C

ATOM 5817 O ALA B1199 74.127 20.018 -5.482 1.00 18.10 O

ATOM 5818 CB ALA B1199 77.327 19.061 -5.576 1.00 16.85 C

ATOM 5819 N PHE B1200 74.734 18.792 -7.282 1.00 16.11 N

ATOM 5820 CA PHE B1200 73.715 19.361 -8.175 1.00 15.46 C

ATOM 5821 C PHE B1200 72.282 18.883 -7.858 1.00 17.02 C

ATOM 5822 O PHE B1200 71.307 19.573 -8.171 1.00 17.06 O

ATOM 5823 CB PHE B1200 74.051 19.017 -9.617 1.00 14.52 C

ATOM 5824 CG PHE B1200 75.153 19.842 -10.182 1.00 16.65 C

ATOM 5825 CD1 PHE B1200 75.032 21.213 -10.243 1.00 17.89 C

ATOM 5826 CD2 PHE B1200 76.322 19.248 -10.649 1.00 16.93 C

ATOM 5827 CE1 PHE B1200 76.055 21.987 -10.760 1.00 20.04 C

ATOM 5828 CE2 PHE B1200 77.351 20.015 -11.166 1.00 16.21 C

ATOM 5829 CZ PHE B1200 77.219 21.382 -11.222 1.00 18.10 C

ATOM 5830 N PHE B1201 72.151 17.690 -7.276 1.00 15.66 N

ATOM 5831 CA PHE B1201 70.842 17.179 -6.896 1.00 12.30 C

ATOM 5832 C PHE B1201 70.319 18.104 -5.801 1.00 13.43 C

ATOM 5833 O PHE B1201 69.224 18.651 -5.902 1.00 15.77 O

ATOM 5834 CB PHE B1201 70.948 15.759 -6.345 1.00 12.61 C

ATOM 5835 CG PHE B1201 69.606 15.126 -6.061 1.00 13.93 C

ATOM 5836 CD1 PHE B1201 68.940 14.394 -7.041 1.00 11.28 C

ATOM 5837 CD2 PHE B1201 68.994 15.303 -4.831 1.00 11.66 C

ATOM 5838 CE1 PHE B1201 67.711 13.870 -6.793 1.00 8.48 C

ATOM 5839 CE2 PHE B1201 67.759 14.776 -4.586 1.00 7.95 C

ATOM 5840 CZ PHE B1201 67.118 14.064 -5.562 1.00 8.95 C

ATOM 5841 N ALA B1202 71.115 18.267 -4.749 1.00 13.15 N

ATOM 5842 CA ALA B1202 70.784 19.140 -3.630 1.00 10.65 C

ATOM 5843 C ALA B1202 70.458 20.554 -4.120 1.00 10.08 C

ATOM 5844 O ALA B1202 69.543 21.199 -3.610 1.00 8.68 O

ATOM 5845 CB ALA B1202 71.943 19.179 -2.657 1.00 8.71 C

ATOM 5846 N GLN B1203 71.217 21.043 -5.098 1.00 9.12 N

ATOM 5847 CA GLN B1203 70.960 22.374 -5.666 1.00 10.74 C

ATOM 5848 C GLN B1203 69.615 22.431 -6.427 1.00 10.91 C

ATOM 5849 O GLN B1203 68.795 23.308 -6.175 1.00 7.01 O

ATOM 5850 CB GLN B1203 72.099 22.784 -6.610 1.00 8.98 C

ATOM 5851 CG GLN B1203 72.119 24.267 -6.893 1.00 12.64 C

ATOM 5852 CD GLN B1203 72.801 24.630 -8.197 1.00 14.36 C

ATOM 5853 OE1 GLN B1203 72.933 25.819 -8.530 1.00 17.47 O

ATOM 5854 NE2 GLN B1203 73.241 23.621 -8.942 1.00 12.32 N

ATOM 5855 N HIS B1204 69.418 21.500 -7.364 1.00 10.97 N

ATOM 5856 CA HIS B1204 68.198 21.402 -8.144 1.00 10.51 C

ATOM 5857 C HIS B1204 66.980 21.233 -7.240 1.00 11.68 C

ATOM 5858 O HIS B1204 65.960 21.884 -7.430 1.00 10.89 O

ATOM 5859 CB HIS B1204 68.273 20.201 -9.077 1.00 11.96 C

ATOM 5860 CG HIS B1204 67.067 20.043 -9.957 1.00 13.47 C

ATOM 5861 ND1 HIS B1204 65.998 19.234 -9.627 1.00 12.36 N

ATOM 5862 CD2 HIS B1204 66.767 20.586 -11.164 1.00 9.56 C

ATOM 5863 CE1 HIS B1204 65.092 19.285 -10.588 1.00 10.63 C

ATOM 5864 NE2 HIS B1204 65.538 20.099 -11.532 1.00 11.75 N

ATOM 5865 N PHE B1205 67.102 20.348 -6.262 1.00 12.10 N

ATOM 5866 CA PHE B1205 66.024 20.058 -5.317 1.00 16.65 C

ATOM 5867 C PHE B1205 65.720 21.214 -4.350 1.00 15.69 C

ATOM 5868 O PHE B1205 64.585 21.670 -4.259 1.00 18.36 O

ATOM 5869 CB PHE B1205 66.371 18.755 -4.553 1.00 17.94 C

ATOM 5870 CG PHE B1205 65.583 18.532 -3.275 1.00 21.63 C

ATOM 5871 CD1 PHE B1205 64.216 18.260 -3.307 1.00 25.56 C

ATOM 5872 CD2 PHE B1205 66.225 18.537 -2.042 1.00 20.14 C

ATOM 5873 CE1 PHE B1205 63.510 17.996 -2.131 1.00 24.20 C

ATOM 5874 CE2 PHE B1205 65.531 18.275 -0.871 1.00 19.37 C

ATOM 5875 CZ PHE B1205 64.175 18.004 -0.913 1.00 22.90 C

ATOM 5876 N THR B1206 66.727 21.688 -3.635 1.00 15.38 N

ATOM 5877 CA THR B1206 66.509 22.769 -2.691 1.00 13.71 C

ATOM 5878 C THR B1206 66.025 24.030 -3.371 1.00 14.12 C

ATOM 5879 O THR B1206 65.507 24.919 -2.707 1.00 15.37 O

ATOM 5880 CB THR B1206 67.806 23.117 -1.887 1.00 15.32 C

ATOM 5881 OG1 THR B1206 68.762 23.761 -2.741 1.00 11.88 O

ATOM 5882 CG2 THR B1206 68.421 21.857 -1.286 1.00 12.91 C

ATOM 5883 N HIS B1207 66.161 24.111 -4.688 1.00 14.66 N

ATOM 5884 CA HIS B1207 65.776 25.337 -5.385 1.00 17.13 C

ATOM 5885 C HIS B1207 64.321 25.482 -5.792 1.00 17.01 C

ATOM 5886 O HIS B1207 63.959 26.382 -6.555 1.00 17.25 O

ATOM 5887 CB HIS B1207 66.690 25.573 -6.587 1.00 20.13 C

ATOM 5888 CG HIS B1207 67.994 26.215 -6.215 1.00 24.68 C

ATOM 5889 ND1 HIS B1207 68.717 25.832 -5.104 1.00 26.87 N

ATOM 5890 CD2 HIS B1207 68.685 27.232 -6.781 1.00 24.32 C

ATOM 5891 CE1 HIS B1207 69.797 26.585 -5.000 1.00 27.65 C

ATOM 5892 NE2 HIS B1207 69.802 27.442 -6.006 1.00 28.29 N

ATOM 5893 N GLN B1208 63.481 24.585 -5.288 1.00 15.07 N

ATOM 5894 CA GLN B1208 62.073 24.690 -5.562 1.00 14.55 C

ATOM 5895 C GLN B1208 61.478 25.428 -4.365 1.00 18.33 C

ATOM 5896 O GLN B1208 60.481 26.144 -4.517 1.00 20.59 O

ATOM 5897 CB GLN B1208 61.449 23.323 -5.717 1.00 13.51 C

ATOM 5898 CG GLN B1208 61.421 22.516 -4.474 1.00 12.90 C

ATOM 5899 CD GLN B1208 61.007 21.118 -4.792 1.00 18.44 C

ATOM 5900 OE1 GLN B1208 59.803 20.835 -4.976 1.00 19.78 O

ATOM 5901 NE2 GLN B1208 61.994 20.218 -4.886 1.00 13.11 N

ATOM 5902 N PHE B1209 62.086 25.280 -3.181 1.00 15.85 N

ATOM 5903 CA PHE B1209 61.570 25.992 -2.018 1.00 14.43 C

ATOM 5904 C PHE B1209 62.419 27.164 -1.529 1.00 14.08 C

ATOM 5905 O PHE B1209 61.971 27.929 -0.675 1.00 15.46 O

ATOM 5906 CB PHE B1209 61.250 25.033 -0.852 1.00 14.46 C

ATOM 5907 CG PHE B1209 62.324 24.029 -0.541 1.00 13.04 C

ATOM 5908 CD1 PHE B1209 62.161 22.703 -0.890 1.00 14.21 C

ATOM 5909 CD2 PHE B1209 63.450 24.395 0.177 1.00 12.56 C

ATOM 5910 CE1 PHE B1209 63.098 21.762 -0.528 1.00 15.82 C

ATOM 5911 CE2 PHE B1209 64.388 23.468 0.542 1.00 12.05 C

ATOM 5912 CZ PHE B1209 64.217 22.146 0.192 1.00 15.08 C

ATOM 5913 N PHE B1210 63.634 27.298 -2.065 1.00 13.60 N

ATOM 5914 CA PHE B1210 64.553 28.408 -1.733 1.00 10.06 C

ATOM 5915 C PHE B1210 64.532 29.299 -2.979 1.00 11.81 C

ATOM 5916 O PHE B1210 65.292 29.097 -3.929 1.00 12.55 O

ATOM 5917 CB PHE B1210 65.986 27.914 -1.522 1.00 7.21 C

ATOM 5918 CG PHE B1210 66.187 27.154 -0.260 1.00 7.43 C

ATOM 5919 CD1 PHE B1210 65.405 27.422 0.855 1.00 9.26 C

ATOM 5920 CD2 PHE B1210 67.159 26.179 -0.177 1.00 5.11 C

ATOM 5921 CE1 PHE B1210 65.595 26.727 2.029 1.00 10.29 C

ATOM 5922 CE2 PHE B1210 67.359 25.485 0.983 1.00 7.54 C

ATOM 5923 CZ PHE B1210 66.582 25.752 2.089 1.00 11.27 C

ATOM 5924 N LYS B1211 63.633 30.267 -2.994 1.00 12.95 N

ATOM 5925 CA LYS B1211 63.498 31.158 -4.137 1.00 12.84 C

ATOM 5926 C LYS B1211 63.280 32.547 -3.571 1.00 13.83 C

ATOM 5927 O LYS B1211 62.163 33.080 -3.589 1.00 12.78 O

ATOM 5928 CB LYS B1211 62.313 30.711 -4.998 1.00 7.41 C

ATOM 5929 CG LYS B1211 62.314 29.209 -5.211 1.00 8.22 C

ATOM 5930 CD LYS B1211 61.322 28.768 -6.264 1.00 8.81 C

ATOM 5931 CE LYS B1211 59.997 29.492 -6.115 1.00 9.30 C

ATOM 5932 NZ LYS B1211 59.195 29.372 -7.367 1.00 8.11 N

ATOM 5933 N THR B1212 64.358 33.123 -3.047 1.00 13.26 N

ATOM 5934 CA THR B1212 64.260 34.434 -2.451 1.00 15.69 C

ATOM 5935 C THR B1212 63.688 35.454 -3.440 1.00 20.09 C

ATOM 5936 O THR B1212 64.021 35.452 -4.630 1.00 19.05 O

ATOM 5937 CB THR B1212 65.626 34.894 -1.926 1.00 12.65 C

ATOM 5938 OG1 THR B1212 65.933 34.149 -0.741 1.00 13.83 O

ATOM 5939 CG2 THR B1212 65.611 36.390 -1.597 1.00 8.27 C

ATOM 5940 N ASP B1213 62.791 36.298 -2.939 1.00 23.31 N

ATOM 5941 CA ASP B1213 62.183 37.337 -3.748 1.00 25.68 C

ATOM 5942 C ASP B1213 63.021 38.572 -3.486 1.00 28.17 C

ATOM 5943 O ASP B1213 62.714 39.387 -2.613 1.00 26.72 O

ATOM 5944 CB ASP B1213 60.739 37.588 -3.326 1.00 27.23 C

ATOM 5945 CG ASP B1213 59.999 38.504 -4.294 1.00 28.96 C

ATOM 5946 OD1 ASP B1213 60.625 38.991 -5.276 1.00 26.90 O

ATOM 5947 OD2 ASP B1213 58.788 38.731 -4.065 1.00 30.06 O

ATOM 5948 N HIS B1214 64.094 38.690 -4.261 1.00 32.69 N

ATOM 5949 CA HIS B1214 65.037 39.789 -4.131 1.00 36.28 C

ATOM 5950 C HIS B1214 64.433 41.180 -4.330 1.00 37.40 C

ATOM 5951 O HIS B1214 65.012 42.178 -3.888 1.00 37.43 O

ATOM 5952 CB HIS B1214 66.209 39.547 -5.086 1.00 39.01 C

ATOM 5953 CG HIS B1214 67.003 38.314 -4.764 1.00 40.20 C

ATOM 5954 ND1 HIS B1214 67.688 38.159 -3.575 1.00 40.77 N

ATOM 5955 CD2 HIS B1214 67.203 37.173 -5.464 1.00 40.36 C

ATOM 5956 CE1 HIS B1214 68.274 36.976 -3.558 1.00 40.31 C

ATOM 5957 NE2 HIS B1214 67.995 36.356 -4.690 1.00 40.49 N

ATOM 5958 N LYS B1215 63.270 41.249 -4.982 1.00 38.94 N

ATOM 5959 CA LYS B1215 62.612 42.532 -5.202 1.00 37.19 C

ATOM 5960 C LYS B1215 62.101 43.035 -3.851 1.00 35.54 C

ATOM 5961 O LYS B1215 62.070 44.240 -3.601 1.00 35.81 O

ATOM 5962 CB LYS B1215 61.443 42.381 -6.184 1.00 40.60 C

ATOM 5963 CG LYS B1215 61.595 41.241 -7.181 1.00 47.14 C

ATOM 5964 CD LYS B1215 61.096 41.664 -8.558 1.00 51.04 C

ATOM 5965 CE LYS B1215 62.045 41.212 -9.665 1.00 51.71 C

ATOM 5966 NZ LYS B1215 61.419 41.338 -11.016 1.00 52.35 N

ATOM 5967 N ARG B1216 61.728 42.106 -2.971 1.00 30.71 N

ATOM 5968 CA ARG B1216 61.216 42.477 -1.663 1.00 26.65 C

ATOM 5969 C ARG B1216 62.296 42.550 -0.582 1.00 24.67 C

ATOM 5970 O ARG B1216 62.350 43.503 0.201 1.00 25.29 O

ATOM 5971 CB ARG B1216 60.144 41.485 -1.213 1.00 27.61 C

ATOM 5972 CG ARG B1216 58.925 41.395 -2.086 1.00 25.74 C

ATOM 5973 CD ARG B1216 57.956 40.415 -1.455 1.00 31.66 C

ATOM 5974 NE ARG B1216 56.688 40.362 -2.164 1.00 31.95 N

ATOM 5975 CZ ARG B1216 55.770 41.303 -2.076 1.00 29.63 C

ATOM 5976 NH1 ARG B1216 55.994 42.357 -1.306 1.00 31.36 N

ATOM 5977 NH2 ARG B1216 54.650 41.195 -2.768 1.00 30.62 N

ATOM 5978 N GLY B1217 63.149 41.536 -0.526 1.00 21.87 N

ATOM 5979 CA GLY B1217 64.178 41.518 0.494 1.00 19.35 C

ATOM 5980 C GLY B1217 64.569 40.082 0.749 1.00 19.31 C

ATOM 5981 O GLY B1217 63.883 39.166 0.301 1.00 21.13 O

ATOM 5982 N PRO B1218 65.664 39.850 1.475 1.00 19.13 N

ATOM 5983 CA PRO B1218 66.136 38.491 1.775 1.00 17.92 C

ATOM 5984 C PRO B1218 65.171 37.612 2.581 1.00 16.61 C

ATOM 5985 O PRO B1218 65.156 36.386 2.425 1.00 16.97 O

ATOM 5986 CB PRO B1218 67.453 38.728 2.514 1.00 18.72 C

ATOM 5987 CG PRO B1218 67.319 40.142 3.075 1.00 19.87 C

ATOM 5988 CD PRO B1218 66.525 40.893 2.063 1.00 18.30 C

ATOM 5989 N GLY B1219 64.385 38.236 3.451 1.00 14.47 N

ATOM 5990 CA GLY B1219 63.442 37.480 4.246 1.00 14.31 C

ATOM 5991 C GLY B1219 62.161 37.117 3.509 1.00 16.00 C

ATOM 5992 O GLY B1219 61.232 36.615 4.123 1.00 18.54 O

ATOM 5993 N PHE B1220 62.112 37.365 2.202 1.00 15.04 N

ATOM 5994 CA PHE B1220 60.935 37.063 1.382 1.00 13.97 C

ATOM 5995 C PHE B1220 61.171 35.939 0.365 1.00 11.65 C

ATOM 5996 O PHE B1220 62.262 35.823 -0.189 1.00 9.81 O

ATOM 5997 CB PHE B1220 60.477 38.333 0.650 1.00 15.23 C

ATOM 5998 CG PHE B1220 59.991 39.411 1.574 1.00 21.28 C

ATOM 5999 CD1 PHE B1220 60.881 40.330 2.120 1.00 18.74 C

ATOM 6000 CD2 PHE B1220 58.647 39.470 1.947 1.00 22.83 C

ATOM 6001 CE1 PHE B1220 60.449 41.287 3.025 1.00 19.68 C

ATOM 6002 CE2 PHE B1220 58.200 40.430 2.859 1.00 23.80 C

ATOM 6003 CZ PHE B1220 59.107 41.337 3.398 1.00 22.37 C

ATOM 6004 N THR B1221 60.135 35.140 0.106 1.00 9.61 N

ATOM 6005 CA THR B1221 60.226 34.020 -0.826 1.00 8.82 C

ATOM 6006 C THR B1221 59.184 34.096 -1.936 1.00 10.37 C

ATOM 6007 O THR B1221 58.177 34.782 -1.793 1.00 11.82 O

ATOM 6008 CB THR B1221 60.035 32.692 -0.076 1.00 8.24 C

ATOM 6009 OG1 THR B1221 60.092 31.589 -0.995 1.00 9.49 O

ATOM 6010 CG2 THR B1221 58.704 32.699 0.645 1.00 6.00 C

ATOM 6011 N ARG B1222 59.443 33.408 -3.046 1.00 12.13 N

ATOM 6012 CA ARG B1222 58.516 33.358 -4.182 1.00 11.88 C

ATOM 6013 C ARG B1222 57.913 31.942 -4.260 1.00 13.17 C

ATOM 6014 O ARG B1222 56.980 31.684 -5.032 1.00 11.49 O

ATOM 6015 CB ARG B1222 59.239 33.654 -5.491 1.00 14.78 C

ATOM 6016 CG ARG B1222 59.837 35.016 -5.582 1.00 20.57 C

ATOM 6017 CD ARG B1222 60.803 35.070 -6.737 1.00 30.86 C

ATOM 6018 NE ARG B1222 60.100 35.154 -8.014 1.00 44.50 N

ATOM 6019 CZ ARG B1222 60.706 35.176 -9.198 1.00 49.94 C

ATOM 6020 NH1 ARG B1222 62.029 35.118 -9.266 1.00 54.46 N

ATOM 6021 NH2 ARG B1222 59.996 35.270 -10.314 1.00 51.18 N

ATOM 6022 N GLY B1223 58.470 31.023 -3.470 1.00 11.76 N

ATOM 6023 CA GLY B1223 57.959 29.671 -3.442 1.00 12.26 C

ATOM 6024 C GLY B1223 56.832 29.632 -2.421 1.00 14.52 C

ATOM 6025 O GLY B1223 57.001 29.171 -1.279 1.00 15.92 O

ATOM 6026 N LEU B1224 55.670 30.131 -2.834 1.00 14.56 N

ATOM 6027 CA LEU B1224 54.507 30.188 -1.960 1.00 10.63 C

ATOM 6028 C LEU B1224 53.937 28.813 -1.608 1.00 10.65 C

ATOM 6029 O LEU B1224 52.921 28.714 -0.922 1.00 11.71 O

ATOM 6030 CB LEU B1224 53.437 31.099 -2.582 1.00 11.27 C

ATOM 6031 CG LEU B1224 53.815 32.599 -2.768 1.00 12.22 C

ATOM 6032 CD1 LEU B1224 52.610 33.364 -3.288 1.00 6.24 C

ATOM 6033 CD2 LEU B1224 54.301 33.243 -1.476 1.00 4.57 C

ATOM 6034 N GLY B1225 54.605 27.752 -2.053 1.00 9.73 N

ATOM 6035 CA GLY B1225 54.145 26.415 -1.726 1.00 11.95 C

ATOM 6036 C GLY B1225 54.847 25.970 -0.447 1.00 14.64 C

ATOM 6037 O GLY B1225 54.427 25.002 0.224 1.00 14.79 O

ATOM 6038 N HIS B1226 55.924 26.687 -0.104 1.00 11.69 N

ATOM 6039 CA HIS B1226 56.700 26.396 1.092 1.00 11.35 C

ATOM 6040 C HIS B1226 57.094 24.912 1.267 1.00 12.09 C

ATOM 6041 O HIS B1226 57.113 24.377 2.378 1.00 10.47 O

ATOM 6042 CB HIS B1226 55.958 26.916 2.328 1.00 10.20 C

ATOM 6043 CG HIS B1226 56.084 28.399 2.513 1.00 11.53 C

ATOM 6044 ND1 HIS B1226 56.968 28.972 3.404 1.00 7.22 N

ATOM 6045 CD2 HIS B1226 55.485 29.430 1.866 1.00 10.43 C

ATOM 6046 CE1 HIS B1226 56.912 30.287 3.295 1.00 6.60 C

ATOM 6047 NE2 HIS B1226 56.022 30.591 2.370 1.00 4.99 N

ATOM 6048 N GLY B1227 57.436 24.264 0.156 1.00 11.25 N

ATOM 6049 CA GLY B1227 57.852 22.881 0.219 1.00 9.87 C

ATOM 6050 C GLY B1227 58.040 22.224 -1.129 1.00 11.31 C

ATOM 6051 O GLY B1227 58.121 22.885 -2.180 1.00 9.76 O

ATOM 6052 N VAL B1228 58.123 20.898 -1.071 1.00 11.80 N

ATOM 6053 CA VAL B1228 58.285 20.051 -2.243 1.00 9.74 C

ATOM 6054 C VAL B1228 57.007 19.975 -3.070 1.00 9.40 C

ATOM 6055 O VAL B1228 56.319 18.960 -3.024 1.00 13.25 O

ATOM 6056 CB VAL B1228 58.635 18.623 -1.802 1.00 8.50 C

ATOM 6057 CG1 VAL B1228 59.051 17.795 -2.994 1.00 10.36 C

ATOM 6058 CG2 VAL B1228 59.699 18.668 -0.745 1.00 3.29 C

ATOM 6059 N ASP B1229 56.669 21.020 -3.809 1.00 7.12 N

ATOM 6060 CA ASP B1229 55.462 20.978 -4.629 1.00 5.92 C

ATOM 6061 C ASP B1229 55.880 20.747 -6.080 1.00 6.95 C

ATOM 6062 O ASP B1229 55.044 20.643 -6.976 1.00 3.56 O

ATOM 6063 CB ASP B1229 54.692 22.284 -4.498 1.00 5.49 C

ATOM 6064 CG ASP B1229 55.524 23.484 -4.917 1.00 10.29 C

ATOM 6065 OD1 ASP B1229 56.509 23.273 -5.656 1.00 9.48 O

ATOM 6066 OD2 ASP B1229 55.208 24.637 -4.516 1.00 14.25 O

ATOM 6067 N LEU B1230 57.199 20.652 -6.276 1.00 9.81 N

ATOM 6068 CA LEU B1230 57.815 20.437 -7.585 1.00 8.00 C

ATOM 6069 C LEU B1230 57.474 21.554 -8.548 1.00 7.74 C

ATOM 6070 O LEU B1230 57.229 21.315 -9.727 1.00 7.62 O

ATOM 6071 CB LEU B1230 57.361 19.109 -8.207 1.00 8.68 C

ATOM 6072 CG LEU B1230 57.719 17.789 -7.534 1.00 8.31 C

ATOM 6073 CD1 LEU B1230 58.262 16.893 -8.628 1.00 9.12 C

ATOM 6074 CD2 LEU B1230 58.720 17.995 -6.389 1.00 3.93 C

ATOM 6075 N ASN B1231 57.448 22.779 -8.051 1.00 7.80 N

ATOM 6076 CA ASN B1231 57.143 23.893 -8.930 1.00 11.25 C

ATOM 6077 C ASN B1231 58.323 24.161 -9.838 1.00 11.54 C

ATOM 6078 O ASN B1231 58.174 24.848 -10.834 1.00 11.58 O

ATOM 6079 CB ASN B1231 56.808 25.159 -8.131 1.00 14.60 C

ATOM 6080 CG ASN B1231 58.017 25.753 -7.431 1.00 22.69 C

ATOM 6081 OD1 ASN B1231 58.831 26.458 -8.051 1.00 26.14 O

ATOM 6082 ND2 ASN B1231 58.149 25.472 -6.129 1.00 26.16 N

ATOM 6083 N HIS B1232 59.501 23.625 -9.498 1.00 13.36 N

ATOM 6084 CA HIS B1232 60.691 23.847 -10.319 1.00 11.29 C

ATOM 6085 C HIS B1232 60.666 23.039 -11.623 1.00 9.89 C

ATOM 6086 O HIS B1232 61.534 23.191 -12.491 1.00 10.13 O

ATOM 6087 CB HIS B1232 61.955 23.555 -9.508 1.00 8.46 C

ATOM 6088 CG HIS B1232 62.107 22.129 -9.093 1.00 11.24 C

ATOM 6089 ND1 HIS B1232 61.097 21.422 -8.487 1.00 14.24 N

ATOM 6090 CD2 HIS B1232 63.176 21.299 -9.129 1.00 12.85 C

ATOM 6091 CE1 HIS B1232 61.535 20.219 -8.160 1.00 15.72 C

ATOM 6092 NE2 HIS B1232 62.795 20.119 -8.540 1.00 12.86 N

ATOM 6093 N ILE B1233 59.631 22.219 -11.764 1.00 7.00 N

ATOM 6094 CA ILE B1233 59.435 21.366 -12.931 1.00 5.50 C

ATOM 6095 C ILE B1233 58.194 21.861 -13.667 1.00 5.74 C

ATOM 6096 O ILE B1233 58.201 22.061 -14.889 1.00 3.59 O

ATOM 6097 CB ILE B1233 59.161 19.884 -12.501 1.00 3.86 C

ATOM 6098 CG1 ILE B1233 60.430 19.243 -11.964 1.00 3.71 C

ATOM 6099 CG2 ILE B1233 58.662 19.050 -13.663 1.00 2.00 C

ATOM 6100 CD1 ILE B1233 60.164 17.876 -11.345 1.00 4.88 C

ATOM 6101 N TYR B1234 57.133 22.049 -12.883 1.00 8.66 N

ATOM 6102 CA TYR B1234 55.822 22.471 -13.364 1.00 7.51 C

ATOM 6103 C TYR B1234 55.491 23.966 -13.352 1.00 10.23 C

ATOM 6104 O TYR B1234 54.553 24.383 -14.035 1.00 11.51 O

ATOM 6105 CB TYR B1234 54.771 21.739 -12.559 1.00 2.00 C

ATOM 6106 CG TYR B1234 54.911 20.268 -12.633 1.00 2.00 C

ATOM 6107 CD1 TYR B1234 54.808 19.605 -13.854 1.00 5.13 C

ATOM 6108 CD2 TYR B1234 55.145 19.523 -11.493 1.00 2.00 C

ATOM 6109 CE1 TYR B1234 54.931 18.221 -13.933 1.00 2.00 C

ATOM 6110 CE2 TYR B1234 55.272 18.145 -11.555 1.00 5.97 C

ATOM 6111 CZ TYR B1234 55.157 17.501 -12.775 1.00 4.72 C

ATOM 6112 OH TYR B1234 55.212 16.140 -12.811 1.00 5.72 O

ATOM 6113 N GLY B1235 56.224 24.761 -12.570 1.00 13.37 N

ATOM 6114 CA GLY B1235 55.954 26.190 -12.499 1.00 14.78 C

ATOM 6115 C GLY B1235 55.145 26.547 -11.263 1.00 15.58 C

ATOM 6116 O GLY B1235 54.360 25.733 -10.770 1.00 15.71 O

ATOM 6117 N GLU B1236 55.339 27.769 -10.762 1.00 18.16 N

ATOM 6118 CA GLU B1236 54.634 28.248 -9.578 1.00 17.37 C

ATOM 6119 C GLU B1236 53.227 28.611 -9.976 1.00 17.52 C

ATOM 6120 O GLU B1236 52.286 28.349 -9.233 1.00 22.31 O

ATOM 6121 CB GLU B1236 55.310 29.489 -8.992 1.00 17.86 C

ATOM 6122 CG GLU B1236 56.263 29.213 -7.834 1.00 24.14 C

ATOM 6123 CD GLU B1236 55.562 28.842 -6.534 1.00 25.86 C

ATOM 6124 OE1 GLU B1236 54.644 29.598 -6.125 1.00 26.93 O

ATOM 6125 OE2 GLU B1236 55.938 27.805 -5.917 1.00 27.02 O

ATOM 6126 N THR B1237 53.081 29.212 -11.150 1.00 15.84 N

ATOM 6127 CA THR B1237 51.773 29.626 -11.619 1.00 16.19 C

ATOM 6128 C THR B1237 51.121 28.694 -12.640 1.00 16.68 C

ATOM 6129 O THR B1237 51.796 28.034 -13.432 1.00 14.74 O

ATOM 6130 CB THR B1237 51.830 31.063 -12.224 1.00 18.58 C

ATOM 6131 OG1 THR B1237 52.528 31.052 -13.482 1.00 15.62 O

ATOM 6132 CG2 THR B1237 52.541 32.006 -11.270 1.00 17.21 C

ATOM 6133 N LEU B1238 49.790 28.655 -12.589 1.00 18.17 N

ATOM 6134 CA LEU B1238 48.951 27.875 -13.501 1.00 17.70 C

ATOM 6135 C LEU B1238 49.256 28.354 -14.912 1.00 18.70 C

ATOM 6136 O LEU B1238 49.271 27.580 -15.873 1.00 18.27 O

ATOM 6137 CB LEU B1238 47.476 28.154 -13.201 1.00 15.23 C

ATOM 6138 CG LEU B1238 46.501 26.993 -13.200 1.00 13.08 C

ATOM 6139 CD1 LEU B1238 45.260 27.406 -13.918 1.00 13.25 C

ATOM 6140 CD2 LEU B1238 47.122 25.798 -13.868 1.00 14.61 C

ATOM 6141 N ASP B1239 49.488 29.656 -15.018 1.00 21.04 N

ATOM 6142 CA ASP B1239 49.793 30.274 -16.289 1.00 23.79 C

ATOM 6143 C ASP B1239 51.067 29.694 -16.885 1.00 22.50 C

ATOM 6144 O ASP B1239 51.127 29.397 -18.085 1.00 19.64 O

ATOM 6145 CB ASP B1239 49.941 31.776 -16.102 1.00 30.99 C

ATOM 6146 CG ASP B1239 49.509 32.544 -17.325 1.00 38.08 C

ATOM 6147 OD1 ASP B1239 48.323 32.960 -17.385 1.00 41.19 O

ATOM 6148 OD2 ASP B1239 50.358 32.724 -18.231 1.00 42.05 O

ATOM 6149 N ARG B1240 52.085 29.553 -16.034 1.00 21.11 N

ATOM 6150 CA ARG B1240 53.371 28.994 -16.436 1.00 18.01 C

ATOM 6151 C ARG B1240 53.197 27.499 -16.718 1.00 17.58 C

ATOM 6152 O ARG B1240 53.691 26.981 -17.716 1.00 17.00 O

ATOM 6153 CB ARG B1240 54.409 29.199 -15.326 1.00 15.52 C

ATOM 6154 CG ARG B1240 55.848 28.941 -15.758 1.00 14.64 C

ATOM 6155 CD ARG B1240 56.814 29.367 -14.684 1.00 15.62 C

ATOM 6156 NE ARG B1240 58.209 29.051 -14.998 1.00 17.15 N

ATOM 6157 CZ ARG B1240 59.052 29.884 -15.607 1.00 15.80 C

ATOM 6158 NH1 ARG B1240 58.626 31.087 -15.970 1.00 14.98 N

ATOM 6159 NH2 ARG B1240 60.325 29.531 -15.821 1.00 12.27 N

ATOM 6160 N GLN B1241 52.475 26.814 -15.838 1.00 15.25 N

ATOM 6161 CA GLN B1241 52.248 25.390 -15.996 1.00 14.80 C

ATOM 6162 C GLN B1241 51.579 25.052 -17.326 1.00 16.44 C

ATOM 6163 O GLN B1241 51.930 24.081 -17.989 1.00 15.13 O

ATOM 6164 CB GLN B1241 51.385 24.875 -14.850 1.00 17.75 C

ATOM 6165 CG GLN B1241 51.142 23.378 -14.870 1.00 19.06 C

ATOM 6166 CD GLN B1241 49.799 23.019 -14.302 1.00 19.53 C

ATOM 6167 OE1 GLN B1241 49.562 23.147 -13.089 1.00 20.51 O

ATOM 6168 NE2 GLN B1241 48.899 22.569 -15.169 1.00 17.98 N

ATOM 6169 N HIS B1242 50.608 25.857 -17.723 1.00 18.84 N

ATOM 6170 CA HIS B1242 49.914 25.589 -18.971 1.00 19.26 C

ATOM 6171 C HIS B1242 50.784 25.850 -20.190 1.00 17.65 C

ATOM 6172 O HIS B1242 50.567 25.259 -21.244 1.00 18.17 O

ATOM 6173 CB HIS B1242 48.627 26.416 -19.035 1.00 23.52 C

ATOM 6174 CG HIS B1242 47.544 25.914 -18.126 1.00 25.37 C

ATOM 6175 ND1 HIS B1242 47.706 24.804 -17.324 1.00 29.28 N

ATOM 6176 CD2 HIS B1242 46.295 26.365 -17.893 1.00 24.66 C

ATOM 6177 CE1 HIS B1242 46.600 24.591 -16.637 1.00 26.93 C

ATOM 6178 NE2 HIS B1242 45.727 25.523 -16.962 1.00 26.43 N

ATOM 6179 N LYS B1243 51.773 26.729 -20.040 1.00 17.41 N

ATOM 6180 CA LYS B1243 52.684 27.061 -21.138 1.00 16.17 C

ATOM 6181 C LYS B1243 53.674 25.935 -21.364 1.00 16.22 C

ATOM 6182 O LYS B1243 54.166 25.750 -22.485 1.00 14.86 O

ATOM 6183 CB LYS B1243 53.460 28.346 -20.832 1.00 17.27 C

ATOM 6184 CG LYS B1243 52.788 29.615 -21.330 1.00 18.80 C

ATOM 6185 CD LYS B1243 53.080 30.817 -20.449 1.00 21.85 C

ATOM 6186 CE LYS B1243 53.248 32.074 -21.290 1.00 23.85 C

ATOM 6187 NZ LYS B1243 53.480 33.289 -20.455 1.00 28.06 N

ATOM 6188 N LEU B1244 53.960 25.192 -20.289 1.00 15.48 N

ATOM 6189 CA LEU B1244 54.906 24.079 -20.330 1.00 13.54 C

ATOM 6190 C LEU B1244 54.231 22.774 -20.719 1.00 15.82 C

ATOM 6191 O LEU B1244 54.901 21.836 -21.151 1.00 17.69 O

ATOM 6192 CB LEU B1244 55.602 23.905 -18.963 1.00 10.00 C

ATOM 6193 CG LEU B1244 56.448 25.086 -18.452 1.00 8.77 C

ATOM 6194 CD1 LEU B1244 56.838 24.913 -16.984 1.00 4.37 C

ATOM 6195 CD2 LEU B1244 57.679 25.204 -19.327 1.00 8.17 C

ATOM 6196 N ARG B1245 52.906 22.718 -20.592 1.00 16.89 N

ATOM 6197 CA ARG B1245 52.163 21.495 -20.893 1.00 15.37 C

ATOM 6198 C ARG B1245 51.809 21.243 -22.353 1.00 16.31 C

ATOM 6199 O ARG B1245 51.471 22.155 -23.118 1.00 17.01 O

ATOM 6200 CB ARG B1245 50.895 21.438 -20.040 1.00 14.10 C

ATOM 6201 CG ARG B1245 51.181 21.225 -18.567 1.00 13.66 C

ATOM 6202 CD ARG B1245 49.917 21.269 -17.738 1.00 14.67 C

ATOM 6203 NE ARG B1245 48.885 20.401 -18.294 1.00 15.22 N

ATOM 6204 CZ ARG B1245 47.696 20.219 -17.735 1.00 15.00 C

ATOM 6205 NH1 ARG B1245 47.411 20.849 -16.613 1.00 17.34 N

ATOM 6206 NH2 ARG B1245 46.801 19.411 -18.288 1.00 16.01 N

ATOM 6207 N LEU B1246 51.885 19.969 -22.717 1.00 16.73 N

ATOM 6208 CA LEU B1246 51.587 19.513 -24.056 1.00 15.86 C

ATOM 6209 C LEU B1246 50.067 19.444 -24.252 1.00 18.84 C

ATOM 6210 O LEU B1246 49.548 19.721 -25.347 1.00 20.28 O

ATOM 6211 CB LEU B1246 52.205 18.130 -24.258 1.00 11.94 C

ATOM 6212 CG LEU B1246 52.027 17.486 -25.637 1.00 13.00 C

ATOM 6213 CD1 LEU B1246 52.441 18.469 -26.735 1.00 6.46 C

ATOM 6214 CD2 LEU B1246 52.840 16.192 -25.700 1.00 13.64 C

ATOM 6215 N PHE B1247 49.364 19.072 -23.185 1.00 21.17 N

ATOM 6216 CA PHE B1247 47.910 18.946 -23.217 1.00 21.44 C

ATOM 6217 C PHE B1247 47.408 17.759 -24.030 1.00 24.97 C

ATOM 6218 O PHE B1247 46.374 17.830 -24.693 1.00 26.36 O

ATOM 6219 CB PHE B1247 47.296 20.233 -23.729 1.00 15.92 C

ATOM 6220 CG PHE B1247 47.303 21.315 -22.714 1.00 14.27 C

ATOM 6221 CD1 PHE B1247 48.075 22.443 -22.889 1.00 14.17 C

ATOM 6222 CD2 PHE B1247 46.575 21.182 -21.547 1.00 13.34 C

ATOM 6223 CE1 PHE B1247 48.123 23.417 -21.909 1.00 15.39 C

ATOM 6224 CE2 PHE B1247 46.617 22.151 -20.563 1.00 10.85 C

ATOM 6225 CZ PHE B1247 47.387 23.266 -20.738 1.00 12.86 C

ATOM 6226 N LYS B1248 48.164 16.669 -23.963 1.00 28.18 N

ATOM 6227 CA LYS B1248 47.837 15.421 -24.636 1.00 31.32 C

ATOM 6228 C LYS B1248 48.546 14.369 -23.807 1.00 29.60 C

ATOM 6229 O LYS B1248 49.769 14.360 -23.720 1.00 30.91 O

ATOM 6230 CB LYS B1248 48.356 15.410 -26.081 1.00 34.57 C

ATOM 6231 CG LYS B1248 48.779 16.786 -26.594 1.00 44.35 C

ATOM 6232 CD LYS B1248 48.278 17.064 -28.002 1.00 48.03 C

ATOM 6233 CE LYS B1248 48.558 18.504 -28.413 1.00 49.94 C

ATOM 6234 NZ LYS B1248 48.080 18.767 -29.807 1.00 54.29 N

ATOM 6235 N ASP B1249 47.768 13.509 -23.165 1.00 28.91 N

ATOM 6236 CA ASP B1249 48.319 12.449 -22.331 1.00 29.13 C

ATOM 6237 C ASP B1249 48.945 12.952 -21.033 1.00 27.21 C

ATOM 6238 O ASP B1249 49.686 12.230 -20.379 1.00 26.41 O

ATOM 6239 CB ASP B1249 49.352 11.653 -23.122 1.00 31.64 C

ATOM 6240 CG ASP B1249 48.774 11.056 -24.383 1.00 34.12 C

ATOM 6241 OD1 ASP B1249 49.242 11.434 -25.471 1.00 33.94 O

ATOM 6242 OD2 ASP B1249 47.854 10.215 -24.285 1.00 37.00 O

ATOM 6243 N GLY B1250 48.640 14.192 -20.672 1.00 25.22 N

ATOM 6244 CA GLY B1250 49.160 14.771 -19.445 1.00 23.64 C

ATOM 6245 C GLY B1250 50.644 15.080 -19.483 1.00 21.51 C

ATOM 6246 O GLY B1250 51.268 15.379 -18.466 1.00 18.69 O

ATOM 6247 N LYS B1251 51.208 15.023 -20.676 1.00 20.96 N

ATOM 6248 CA LYS B1251 52.627 15.267 -20.861 1.00 19.74 C

ATOM 6249 C LYS B1251 53.089 16.712 -20.806 1.00 19.16 C

ATOM 6250 O LYS B1251 52.299 17.650 -20.950 1.00 20.61 O

ATOM 6251 CB LYS B1251 53.084 14.650 -22.186 1.00 19.08 C

ATOM 6252 CG LYS B1251 53.662 13.264 -22.011 1.00 20.27 C

ATOM 6253 CD LYS B1251 53.457 12.402 -23.239 1.00 17.88 C

ATOM 6254 CE LYS B1251 53.751 10.945 -22.920 1.00 17.73 C

ATOM 6255 NZ LYS B1251 53.838 10.118 -24.148 1.00 19.80 N

ATOM 6256 N LEU B1252 54.394 16.857 -20.590 1.00 18.41 N

ATOM 6257 CA LEU B1252 55.076 18.140 -20.542 1.00 16.08 C

ATOM 6258 C LEU B1252 55.667 18.345 -21.961 1.00 15.90 C

ATOM 6259 O LEU B1252 56.160 17.401 -22.579 1.00 13.90 O

ATOM 6260 CB LEU B1252 56.215 18.069 -19.512 1.00 17.14 C

ATOM 6261 CG LEU B1252 56.191 18.763 -18.143 1.00 17.44 C

ATOM 6262 CD1 LEU B1252 54.823 19.298 -17.819 1.00 16.64 C

ATOM 6263 CD2 LEU B1252 56.640 17.771 -17.081 1.00 17.92 C

ATOM 6264 N LYS B1253 55.583 19.559 -22.490 1.00 15.49 N

ATOM 6265 CA LYS B1253 56.153 19.854 -23.792 1.00 16.73 C

ATOM 6266 C LYS B1253 57.661 19.566 -23.739 1.00 18.81 C

ATOM 6267 O LYS B1253 58.304 19.737 -22.702 1.00 18.27 O

ATOM 6268 CB LYS B1253 55.970 21.328 -24.126 1.00 18.45 C

ATOM 6269 CG LYS B1253 54.676 21.694 -24.803 1.00 22.29 C

ATOM 6270 CD LYS B1253 54.432 23.191 -24.662 1.00 23.99 C

ATOM 6271 CE LYS B1253 53.923 23.804 -25.956 1.00 26.53 C

ATOM 6272 NZ LYS B1253 53.622 25.261 -25.789 1.00 29.36 N

ATOM 6273 N TYR B1254 58.229 19.161 -24.868 1.00 19.23 N

ATOM 6274 CA TYR B1254 59.650 18.864 -24.947 1.00 17.39 C

ATOM 6275 C TYR B1254 60.109 18.959 -26.410 1.00 18.33 C

ATOM 6276 O TYR B1254 59.306 19.206 -27.304 1.00 20.01 O

ATOM 6277 CB TYR B1254 59.903 17.460 -24.400 1.00 16.80 C

ATOM 6278 CG TYR B1254 59.288 16.376 -25.234 1.00 17.15 C

ATOM 6279 CD1 TYR B1254 60.014 15.752 -26.241 1.00 20.29 C

ATOM 6280 CD2 TYR B1254 57.967 15.999 -25.046 1.00 20.47 C

ATOM 6281 CE1 TYR B1254 59.443 14.780 -27.044 1.00 19.64 C

ATOM 6282 CE2 TYR B1254 57.378 15.028 -25.839 1.00 20.74 C

ATOM 6283 CZ TYR B1254 58.126 14.420 -26.839 1.00 22.04 C

ATOM 6284 OH TYR B1254 57.565 13.445 -27.635 1.00 21.31 O

ATOM 6285 N GLN B1255 61.400 18.775 -26.654 1.00 19.46 N

ATOM 6286 CA GLN B1255 61.936 18.830 -28.012 1.00 18.39 C

ATOM 6287 C GLN B1255 62.920 17.688 -28.179 1.00 18.27 C

ATOM 6288 O GLN B1255 63.444 17.167 -27.195 1.00 18.13 O

ATOM 6289 CB GLN B1255 62.646 20.164 -28.276 1.00 17.52 C

ATOM 6290 CG GLN B1255 63.908 20.396 -27.435 1.00 18.79 C

ATOM 6291 CD GLN B1255 64.576 21.727 -27.735 1.00 18.61 C

ATOM 6292 OE1 GLN B1255 64.780 22.078 -28.900 1.00 21.88 O

ATOM 6293 NE2 GLN B1255 64.918 22.475 -26.687 1.00 18.76 N

ATOM 6294 N VAL B1256 63.155 17.286 -29.423 1.00 18.83 N

ATOM 6295 CA VAL B1256 64.090 16.204 -29.699 1.00 16.84 C

ATOM 6296 C VAL B1256 65.278 16.747 -30.476 1.00 18.49 C

ATOM 6297 O VAL B1256 65.130 17.247 -31.596 1.00 19.67 O

ATOM 6298 CB VAL B1256 63.426 15.067 -30.507 1.00 15.08 C

ATOM 6299 CG1 VAL B1256 64.438 13.994 -30.818 1.00 10.80 C

ATOM 6300 CG2 VAL B1256 62.267 14.477 -29.725 1.00 14.73 C

ATOM 6301 N ILE B1257 66.451 16.673 -29.856 1.00 19.86 N

ATOM 6302 CA ILE B1257 67.689 17.139 -30.472 1.00 20.69 C

ATOM 6303 C ILE B1257 68.653 15.977 -30.603 1.00 21.82 C

ATOM 6304 O ILE B1257 69.053 15.364 -29.610 1.00 23.53 O

ATOM 6305 CB ILE B1257 68.391 18.209 -29.642 1.00 19.29 C

ATOM 6306 CG1 ILE B1257 67.429 19.352 -29.321 1.00 17.83 C

ATOM 6307 CG2 ILE B1257 69.591 18.717 -30.408 1.00 19.29 C

ATOM 6308 CD1 ILE B1257 67.858 20.204 -28.144 1.00 13.69 C

ATOM 6309 N GLY B1258 69.034 15.680 -31.835 1.00 22.48 N

ATOM 6310 CA GLY B1258 69.944 14.579 -32.053 1.00 21.87 C

ATOM 6311 C GLY B1258 69.401 13.316 -31.434 1.00 20.93 C

ATOM 6312 O GLY B1258 70.123 12.600 -30.760 1.00 22.12 O

ATOM 6313 N GLY B1259 68.119 13.054 -31.653 1.00 22.38 N

ATOM 6314 CA GLY B1259 67.504 11.850 -31.111 1.00 22.48 C

ATOM 6315 C GLY B1259 67.358 11.796 -29.596 1.00 22.56 C

ATOM 6316 O GLY B1259 67.060 10.735 -29.046 1.00 19.95 O

ATOM 6317 N GLU B1260 67.555 12.933 -28.928 1.00 22.67 N

ATOM 6318 CA GLU B1260 67.442 13.009 -27.478 1.00 21.35 C

ATOM 6319 C GLU B1260 66.357 13.982 -27.048 1.00 19.30 C

ATOM 6320 O GLU B1260 66.143 14.993 -27.701 1.00 17.52 O

ATOM 6321 CB GLU B1260 68.778 13.438 -26.888 1.00 25.30 C

ATOM 6322 CG GLU B1260 69.848 12.388 -27.034 1.00 29.78 C

ATOM 6323 CD GLU B1260 69.659 11.218 -26.075 1.00 33.29 C

ATOM 6324 OE1 GLU B1260 69.569 11.465 -24.851 1.00 36.37 O

ATOM 6325 OE2 GLU B1260 69.607 10.053 -26.540 1.00 35.89 O

ATOM 6326 N VAL B1261 65.688 13.682 -25.937 1.00 17.96 N

ATOM 6327 CA VAL B1261 64.608 14.533 -25.423 1.00 16.45 C

ATOM 6328 C VAL B1261 65.090 15.599 -24.441 1.00 16.09 C

ATOM 6329 O VAL B1261 65.664 15.289 -23.400 1.00 16.40 O

ATOM 6330 CB VAL B1261 63.501 13.685 -24.712 1.00 15.60 C

ATOM 6331 CG1 VAL B1261 62.654 14.562 -23.817 1.00 11.96 C

ATOM 6332 CG2 VAL B1261 62.613 12.998 -25.741 1.00 11.17 C

ATOM 6333 N TYR B1262 64.848 16.859 -24.784 1.00 17.61 N

ATOM 6334 CA TYR B1262 65.232 17.980 -23.930 1.00 20.42 C

ATOM 6335 C TYR B1262 64.051 18.958 -23.732 1.00 19.41 C

ATOM 6336 O TYR B1262 63.069 18.934 -24.468 1.00 15.08 O

ATOM 6337 CB TYR B1262 66.428 18.729 -24.546 1.00 23.45 C

ATOM 6338 CG TYR B1262 67.713 17.935 -24.621 1.00 23.72 C

ATOM 6339 CD1 TYR B1262 68.057 17.233 -25.782 1.00 24.49 C

ATOM 6340 CD2 TYR B1262 68.598 17.911 -23.552 1.00 23.29 C

ATOM 6341 CE1 TYR B1262 69.250 16.530 -25.874 1.00 24.44 C

ATOM 6342 CE2 TYR B1262 69.798 17.210 -23.633 1.00 25.64 C

ATOM 6343 CZ TYR B1262 70.122 16.524 -24.797 1.00 25.68 C

ATOM 6344 OH TYR B1262 71.327 15.862 -24.893 1.00 24.33 O

ATOM 6345 N PRO B1263 64.141 19.829 -22.717 1.00 19.05 N

ATOM 6346 CA PRO B1263 63.059 20.778 -22.484 1.00 17.92 C

ATOM 6347 C PRO B1263 62.832 21.621 -23.732 1.00 21.96 C

ATOM 6348 O PRO B1263 63.721 21.763 -24.575 1.00 22.79 O

ATOM 6349 CB PRO B1263 63.564 21.620 -21.316 1.00 15.78 C

ATOM 6350 CG PRO B1263 64.572 20.800 -20.658 1.00 16.95 C

ATOM 6351 CD PRO B1263 65.225 19.994 -21.736 1.00 19.19 C

ATOM 6352 N PRO B1264 61.620 22.179 -23.873 1.00 23.14 N

ATOM 6353 CA PRO B1264 61.271 23.017 -25.024 1.00 20.95 C

ATOM 6354 C PRO B1264 62.023 24.333 -24.937 1.00 20.48 C

ATOM 6355 O PRO B1264 62.740 24.571 -23.972 1.00 18.47 O

ATOM 6356 CB PRO B1264 59.765 23.202 -24.893 1.00 22.46 C

ATOM 6357 CG PRO B1264 59.462 22.928 -23.454 1.00 20.19 C

ATOM 6358 CD PRO B1264 60.498 22.011 -22.931 1.00 20.19 C

ATOM 6359 N THR B1265 61.866 25.183 -25.941 1.00 22.17 N

ATOM 6360 CA THR B1265 62.550 26.467 -25.930 1.00 23.89 C

ATOM 6361 C THR B1265 61.627 27.579 -25.456 1.00 23.97 C

ATOM 6362 O THR B1265 60.406 27.434 -25.465 1.00 23.49 O

ATOM 6363 CB THR B1265 63.084 26.842 -27.333 1.00 25.11 C

ATOM 6364 OG1 THR B1265 61.993 26.895 -28.273 1.00 25.01 O

ATOM 6365 CG2 THR B1265 64.128 25.823 -27.785 1.00 22.59 C

ATOM 6366 N VAL B1266 62.228 28.693 -25.053 1.00 23.95 N

ATOM 6367 CA VAL B1266 61.480 29.845 -24.587 1.00 24.48 C

ATOM 6368 C VAL B1266 60.731 30.470 -25.757 1.00 26.39 C

ATOM 6369 O VAL B1266 59.702 31.118 -25.576 1.00 26.24 O

ATOM 6370 CB VAL B1266 62.425 30.903 -23.993 1.00 23.71 C

ATOM 6371 CG1 VAL B1266 61.700 32.230 -23.853 1.00 24.20 C

ATOM 6372 CG2 VAL B1266 62.950 30.435 -22.648 1.00 25.68 C

ATOM 6373 N LYS B1267 61.254 30.270 -26.963 1.00 29.05 N

ATOM 6374 CA LYS B1267 60.631 30.829 -28.155 1.00 31.15 C

ATOM 6375 C LYS B1267 59.359 30.061 -28.496 1.00 31.94 C

ATOM 6376 O LYS B1267 58.440 30.608 -29.101 1.00 32.94 O

ATOM 6377 CB LYS B1267 61.618 30.801 -29.339 1.00 31.71 C

ATOM 6378 CG LYS B1267 61.010 30.425 -30.699 1.00 32.17 C

ATOM 6379 CD LYS B1267 61.574 31.280 -31.841 1.00 29.65 C

ATOM 6380 CE LYS B1267 61.166 30.744 -33.208 1.00 30.35 C

ATOM 6381 NZ LYS B1267 62.021 31.236 -34.317 1.00 23.67 N

ATOM 6382 N ASP B1268 59.296 28.801 -28.083 1.00 33.88 N

ATOM 6383 CA ASP B1268 58.134 27.977 -28.378 1.00 35.04 C

ATOM 6384 C ASP B1268 57.081 27.918 -27.291 1.00 31.72 C

ATOM 6385 O ASP B1268 55.921 27.677 -27.580 1.00 33.16 O

ATOM 6386 CB ASP B1268 58.572 26.551 -28.709 1.00 41.76 C

ATOM 6387 CG ASP B1268 57.397 25.585 -28.810 1.00 47.92 C

ATOM 6388 OD1 ASP B1268 56.659 25.630 -29.824 1.00 50.16 O

ATOM 6389 OD2 ASP B1268 57.216 24.782 -27.870 1.00 48.68 O

ATOM 6390 N THR B1269 57.473 28.149 -26.048 1.00 29.71 N

ATOM 6391 CA THR B1269 56.536 28.066 -24.934 1.00 25.73 C

ATOM 6392 C THR B1269 56.132 29.413 -24.376 1.00 25.36 C

ATOM 6393 O THR B1269 55.070 29.539 -23.778 1.00 23.55 O

ATOM 6394 CB THR B1269 57.135 27.269 -23.784 1.00 24.97 C

ATOM 6395 OG1 THR B1269 58.405 27.840 -23.446 1.00 26.49 O

ATOM 6396 CG2 THR B1269 57.313 25.815 -24.167 1.00 21.97 C

ATOM 6397 N GLN B1270 56.995 30.406 -24.554 1.00 26.12 N

ATOM 6398 CA GLN B1270 56.743 31.761 -24.069 1.00 28.02 C

ATOM 6399 C GLN B1270 56.929 31.914 -22.569 1.00 27.69 C

ATOM 6400 O GLN B1270 56.598 32.959 -22.006 1.00 27.98 O

ATOM 6401 CB GLN B1270 55.332 32.214 -24.436 1.00 30.53 C

ATOM 6402 CG GLN B1270 55.293 33.201 -25.578 1.00 34.34 C

ATOM 6403 CD GLN B1270 55.621 32.548 -26.896 1.00 37.36 C

ATOM 6404 OE1 GLN B1270 55.897 31.349 -26.955 1.00 41.20 O

ATOM 6405 NE2 GLN B1270 55.589 33.327 -27.968 1.00 41.01 N

ATOM 6406 N VAL B1271 57.446 30.881 -21.913 1.00 27.09 N

ATOM 6407 CA VAL B1271 57.655 30.977 -20.479 1.00 27.66 C

ATOM 6408 C VAL B1271 58.964 31.726 -20.249 1.00 28.86 C

ATOM 6409 O VAL B1271 59.948 31.496 -20.957 1.00 29.48 O

ATOM 6410 CB VAL B1271 57.692 29.575 -19.804 1.00 25.43 C

ATOM 6411 CG1 VAL B1271 56.996 28.550 -20.683 1.00 25.37 C

ATOM 6412 CG2 VAL B1271 59.108 29.158 -19.525 1.00 24.05 C

ATOM 6413 N GLU B1272 58.955 32.646 -19.280 1.00 29.63 N

ATOM 6414 CA GLU B1272 60.128 33.452 -18.942 1.00 30.20 C

ATOM 6415 C GLU B1272 61.231 32.702 -18.204 1.00 25.82 C

ATOM 6416 O GLU B1272 61.000 32.030 -17.198 1.00 21.60 O

ATOM 6417 CB GLU B1272 59.703 34.644 -18.106 1.00 37.38 C

ATOM 6418 CG GLU B1272 58.253 34.998 -18.280 1.00 48.25 C

ATOM 6419 CD GLU B1272 58.066 36.472 -18.537 1.00 55.42 C

ATOM 6420 OE1 GLU B1272 57.988 37.239 -17.549 1.00 58.55 O

ATOM 6421 OE2 GLU B1272 58.005 36.858 -19.724 1.00 58.49 O

ATOM 6422 N MET B1273 62.443 32.855 -18.720 1.00 22.43 N

ATOM 6423 CA MET B1273 63.625 32.219 -18.171 1.00 18.73 C

ATOM 6424 C MET B1273 64.693 33.296 -18.045 1.00 19.18 C

ATOM 6425 O MET B1273 64.622 34.333 -18.701 1.00 18.87 O

ATOM 6426 CB MET B1273 64.130 31.126 -19.120 1.00 17.53 C

ATOM 6427 CG MET B1273 63.251 29.908 -19.212 1.00 14.73 C

ATOM 6428 SD MET B1273 63.133 29.069 -17.642 1.00 15.27 S

ATOM 6429 CE MET B1273 64.840 28.440 -17.383 1.00 9.96 C

ATOM 6430 N ILE B1274 65.686 33.058 -17.205 1.00 20.30 N

ATOM 6431 CA ILE B1274 66.746 34.025 -17.062 1.00 21.49 C

ATOM 6432 C ILE B1274 67.960 33.525 -17.827 1.00 23.27 C

ATOM 6433 O ILE B1274 68.560 32.518 -17.458 1.00 22.69 O

ATOM 6434 CB ILE B1274 67.132 34.243 -15.598 1.00 21.48 C

ATOM 6435 CG1 ILE B1274 66.004 34.982 -14.876 1.00 21.49 C

ATOM 6436 CG2 ILE B1274 68.418 35.063 -15.528 1.00 19.93 C

ATOM 6437 CD1 ILE B1274 66.045 34.823 -13.372 1.00 23.73 C

ATOM 6438 N TYR B1275 68.297 34.231 -18.902 1.00 24.66 N

ATOM 6439 CA TYR B1275 69.439 33.887 -19.738 1.00 24.73 C

ATOM 6440 C TYR B1275 70.167 35.161 -20.124 1.00 27.77 C

ATOM 6441 O TYR B1275 69.540 36.197 -20.346 1.00 29.93 O

ATOM 6442 CB TYR B1275 68.981 33.201 -21.037 1.00 22.34 C

ATOM 6443 CG TYR B1275 68.668 31.739 -20.900 1.00 20.08 C

ATOM 6444 CD1 TYR B1275 67.384 31.264 -21.130 1.00 18.85 C

ATOM 6445 CD2 TYR B1275 69.645 30.836 -20.496 1.00 18.77 C

ATOM 6446 CE1 TYR B1275 67.081 29.932 -20.959 1.00 15.42 C

ATOM 6447 CE2 TYR B1275 69.350 29.508 -20.321 1.00 16.04 C

ATOM 6448 CZ TYR B1275 68.064 29.062 -20.555 1.00 14.54 C

ATOM 6449 OH TYR B1275 67.758 27.735 -20.403 1.00 18.15 O

ATOM 6450 N PRO B1276 71.507 35.113 -20.176 1.00 32.42 N

ATOM 6451 CA PRO B1276 72.208 36.339 -20.569 1.00 31.09 C

ATOM 6452 C PRO B1276 71.814 36.658 -22.024 1.00 32.45 C

ATOM 6453 O PRO B1276 71.445 35.763 -22.787 1.00 33.23 O

ATOM 6454 CB PRO B1276 73.685 35.977 -20.410 1.00 31.74 C

ATOM 6455 CG PRO B1276 73.727 34.471 -20.418 1.00 31.17 C

ATOM 6456 CD PRO B1276 72.429 34.009 -19.846 1.00 31.61 C

ATOM 6457 N PRO B1277 71.894 37.937 -22.423 1.00 34.76 N

ATOM 6458 CA PRO B1277 71.539 38.379 -23.776 1.00 36.47 C

ATOM 6459 C PRO B1277 72.214 37.658 -24.937 1.00 36.64 C

ATOM 6460 O PRO B1277 71.698 37.671 -26.050 1.00 38.64 O

ATOM 6461 CB PRO B1277 71.882 39.870 -23.773 1.00 34.69 C

ATOM 6462 CG PRO B1277 72.821 40.050 -22.631 1.00 33.83 C

ATOM 6463 CD PRO B1277 72.372 39.061 -21.602 1.00 35.65 C

ATOM 6464 N HIS B1278 73.354 37.029 -24.697 1.00 36.51 N

ATOM 6465 CA HIS B1278 74.048 36.365 -25.790 1.00 38.64 C

ATOM 6466 C HIS B1278 73.665 34.914 -26.052 1.00 37.71 C

ATOM 6467 O HIS B1278 74.264 34.267 -26.912 1.00 40.08 O

ATOM 6468 CB HIS B1278 75.570 36.467 -25.591 1.00 39.80 C

ATOM 6469 CG HIS B1278 76.082 35.709 -24.407 1.00 41.84 C

ATOM 6470 ND1 HIS B1278 76.138 36.255 -23.143 1.00 43.15 N

ATOM 6471 CD2 HIS B1278 76.557 34.442 -24.292 1.00 42.78 C

ATOM 6472 CE1 HIS B1278 76.622 35.359 -22.297 1.00 43.58 C

ATOM 6473 NE2 HIS B1278 76.884 34.251 -22.970 1.00 43.55 N

ATOM 6474 N ILE B1279 72.671 34.397 -25.337 1.00 35.08 N

ATOM 6475 CA ILE B1279 72.267 33.009 -25.540 1.00 32.69 C

ATOM 6476 C ILE B1279 71.293 32.866 -26.707 1.00 33.70 C

ATOM 6477 O ILE B1279 70.246 33.519 -26.742 1.00 32.09 O

ATOM 6478 CB ILE B1279 71.619 32.405 -24.268 1.00 32.29 C

ATOM 6479 CG1 ILE B1279 72.572 32.534 -23.072 1.00 28.11 C

ATOM 6480 CG2 ILE B1279 71.281 30.934 -24.514 1.00 32.09 C

ATOM 6481 CD1 ILE B1279 73.824 31.662 -23.181 1.00 24.27 C

ATOM 6482 N PRO B1280 71.638 32.008 -27.684 1.00 35.02 N

ATOM 6483 CA PRO B1280 70.836 31.735 -28.881 1.00 35.72 C

ATOM 6484 C PRO B1280 69.493 31.094 -28.519 1.00 38.65 C

ATOM 6485 O PRO B1280 69.439 30.137 -27.737 1.00 39.59 O

ATOM 6486 CB PRO B1280 71.722 30.795 -29.695 1.00 34.23 C

ATOM 6487 CG PRO B1280 72.587 30.149 -28.689 1.00 33.13 C

ATOM 6488 CD PRO B1280 72.873 31.211 -27.677 1.00 32.36 C

ATOM 6489 N GLU B1281 68.419 31.627 -29.092 1.00 38.55 N

ATOM 6490 CA GLU B1281 67.075 31.135 -28.835 1.00 39.81 C

ATOM 6491 C GLU B1281 66.924 29.614 -28.776 1.00 37.75 C

ATOM 6492 O GLU B1281 66.154 29.101 -27.968 1.00 38.87 O

ATOM 6493 CB GLU B1281 66.118 31.702 -29.880 1.00 42.47 C

ATOM 6494 CG GLU B1281 65.896 33.195 -29.767 1.00 45.77 C

ATOM 6495 CD GLU B1281 65.015 33.734 -30.874 1.00 50.30 C

ATOM 6496 OE1 GLU B1281 64.818 33.021 -31.885 1.00 51.91 O

ATOM 6497 OE2 GLU B1281 64.523 34.874 -30.731 1.00 50.90 O

ATOM 6498 N ASN B1282 67.653 28.902 -29.628 1.00 34.99 N

ATOM 6499 CA ASN B1282 67.590 27.444 -29.676 1.00 33.11 C

ATOM 6500 C ASN B1282 68.286 26.776 -28.475 1.00 32.51 C

ATOM 6501 O ASN B1282 68.250 25.551 -28.306 1.00 31.26 O

ATOM 6502 CB ASN B1282 68.198 26.945 -31.003 1.00 34.45 C

ATOM 6503 CG ASN B1282 69.721 26.969 -31.011 1.00 34.84 C

ATOM 6504 OD1 ASN B1282 70.351 27.971 -30.677 1.00 36.67 O

ATOM 6505 ND2 ASN B1282 70.316 25.855 -31.398 1.00 37.22 N

ATOM 6506 N LEU B1283 68.906 27.591 -27.632 1.00 28.83 N

ATOM 6507 CA LEU B1283 69.613 27.091 -26.466 1.00 25.89 C

ATOM 6508 C LEU B1283 68.922 27.538 -25.188 1.00 24.59 C

ATOM 6509 O LEU B1283 69.215 27.049 -24.095 1.00 24.85 O

ATOM 6510 CB LEU B1283 71.055 27.589 -26.486 1.00 26.65 C

ATOM 6511 CG LEU B1283 72.030 26.691 -27.249 1.00 25.88 C

ATOM 6512 CD1 LEU B1283 73.426 27.202 -27.041 1.00 24.62 C

ATOM 6513 CD2 LEU B1283 71.900 25.244 -26.788 1.00 24.21 C

ATOM 6514 N GLN B1284 68.011 28.487 -25.328 1.00 20.96 N

ATOM 6515 CA GLN B1284 67.258 28.979 -24.198 1.00 19.37 C

ATOM 6516 C GLN B1284 66.165 27.971 -23.842 1.00 20.39 C

ATOM 6517 O GLN B1284 65.056 28.054 -24.368 1.00 19.37 O

ATOM 6518 CB GLN B1284 66.621 30.306 -24.558 1.00 18.84 C

ATOM 6519 CG GLN B1284 67.614 31.411 -24.818 1.00 19.90 C

ATOM 6520 CD GLN B1284 66.946 32.720 -25.130 1.00 18.60 C

ATOM 6521 OE1 GLN B1284 67.222 33.331 -26.142 1.00 20.20 O

ATOM 6522 NE2 GLN B1284 66.057 33.156 -24.256 1.00 21.97 N

ATOM 6523 N PHE B1285 66.479 27.025 -22.955 1.00 19.80 N

ATOM 6524 CA PHE B1285 65.512 26.014 -22.529 1.00 19.91 C

ATOM 6525 C PHE B1285 64.503 26.565 -21.515 1.00 17.41 C

ATOM 6526 O PHE B1285 64.833 27.393 -20.677 1.00 15.66 O

ATOM 6527 CB PHE B1285 66.251 24.813 -21.948 1.00 27.56 C

ATOM 6528 CG PHE B1285 67.021 24.029 -22.973 1.00 35.75 C

ATOM 6529 CD1 PHE B1285 67.592 22.807 -22.651 1.00 37.18 C

ATOM 6530 CD2 PHE B1285 67.157 24.504 -24.266 1.00 38.94 C

ATOM 6531 CE1 PHE B1285 68.280 22.077 -23.607 1.00 39.88 C

ATOM 6532 CE2 PHE B1285 67.846 23.778 -25.223 1.00 40.63 C

ATOM 6533 CZ PHE B1285 68.404 22.567 -24.893 1.00 40.64 C

ATOM 6534 N ALA B1286 63.267 26.095 -21.620 1.00 15.10 N

ATOM 6535 CA ALA B1286 62.194 26.527 -20.756 1.00 11.14 C

ATOM 6536 C ALA B1286 61.808 25.417 -19.788 1.00 11.57 C

ATOM 6537 O ALA B1286 61.334 24.358 -20.186 1.00 14.66 O

ATOM 6538 CB ALA B1286 61.002 26.914 -21.597 1.00 7.55 C

ATOM 6539 N VAL B1287 62.044 25.673 -18.507 1.00 10.58 N

ATOM 6540 CA VAL B1287 61.754 24.704 -17.456 1.00 11.57 C

ATOM 6541 C VAL B1287 60.885 25.330 -16.346 1.00 11.50 C

ATOM 6542 O VAL B1287 60.514 26.498 -16.447 1.00 11.65 O

ATOM 6543 CB VAL B1287 63.050 24.103 -16.858 1.00 3.98 C

ATOM 6544 CG1 VAL B1287 63.789 23.379 -17.923 1.00 2.00 C

ATOM 6545 CG2 VAL B1287 63.931 25.197 -16.287 1.00 2.00 C

ATOM 6546 N GLY B1288 60.564 24.571 -15.301 1.00 11.44 N

ATOM 6547 CA GLY B1288 59.733 25.153 -14.266 1.00 16.23 C

ATOM 6548 C GLY B1288 60.370 26.326 -13.555 1.00 15.79 C

ATOM 6549 O GLY B1288 59.737 27.363 -13.337 1.00 11.76 O

ATOM 6550 N GLN B1289 61.618 26.134 -13.143 1.00 18.26 N

ATOM 6551 CA GLN B1289 62.347 27.191 -12.464 1.00 18.09 C

ATOM 6552 C GLN B1289 63.023 28.093 -13.487 1.00 17.59 C

ATOM 6553 O GLN B1289 63.830 27.642 -14.295 1.00 16.00 O

ATOM 6554 CB GLN B1289 63.380 26.580 -11.532 1.00 15.74 C

ATOM 6555 CG GLN B1289 63.164 26.946 -10.087 1.00 11.40 C

ATOM 6556 CD GLN B1289 63.951 28.168 -9.718 1.00 8.87 C

ATOM 6557 OE1 GLN B1289 64.332 28.955 -10.588 1.00 9.39 O

ATOM 6558 NE2 GLN B1289 64.212 28.338 -8.430 1.00 11.40 N

ATOM 6559 N GLU B1290 62.680 29.369 -13.454 1.00 21.18 N

ATOM 6560 CA GLU B1290 63.228 30.325 -14.406 1.00 26.10 C

ATOM 6561 C GLU B1290 64.730 30.492 -14.348 1.00 25.08 C

ATOM 6562 O GLU B1290 65.329 31.055 -15.259 1.00 26.88 O

ATOM 6563 CB GLU B1290 62.583 31.679 -14.198 1.00 28.81 C

ATOM 6564 CG GLU B1290 62.428 32.018 -12.742 1.00 41.34 C

ATOM 6565 CD GLU B1290 62.606 33.492 -12.467 1.00 47.19 C

ATOM 6566 OE1 GLU B1290 62.120 34.300 -13.288 1.00 51.05 O

ATOM 6567 OE2 GLU B1290 63.228 33.840 -11.440 1.00 48.05 O

ATOM 6568 N VAL B1291 65.351 29.991 -13.295 1.00 25.53 N

ATOM 6569 CA VAL B1291 66.793 30.152 -13.151 1.00 22.44 C

ATOM 6570 C VAL B1291 67.679 28.932 -13.474 1.00 19.71 C

ATOM 6571 O VAL B1291 68.901 29.048 -13.507 1.00 22.24 O

ATOM 6572 CB VAL B1291 67.099 30.667 -11.722 1.00 19.49 C

ATOM 6573 CG1 VAL B1291 67.473 29.512 -10.816 1.00 16.94 C

ATOM 6574 CG2 VAL B1291 68.183 31.713 -11.774 1.00 20.26 C

ATOM 6575 N PHE B1292 67.065 27.781 -13.736 1.00 19.22 N

ATOM 6576 CA PHE B1292 67.799 26.547 -14.036 1.00 19.11 C

ATOM 6577 C PHE B1292 68.519 26.511 -15.384 1.00 22.07 C

ATOM 6578 O PHE B1292 69.109 25.486 -15.755 1.00 24.43 O

ATOM 6579 CB PHE B1292 66.858 25.338 -13.944 1.00 15.56 C

ATOM 6580 CG PHE B1292 66.428 25.020 -12.544 1.00 14.76 C

ATOM 6581 CD1 PHE B1292 66.795 25.847 -11.485 1.00 10.58 C

ATOM 6582 CD2 PHE B1292 65.660 23.897 -12.283 1.00 14.37 C

ATOM 6583 CE1 PHE B1292 66.404 25.557 -10.190 1.00 12.23 C

ATOM 6584 CE2 PHE B1292 65.263 23.598 -10.986 1.00 15.17 C

ATOM 6585 CZ PHE B1292 65.637 24.433 -9.932 1.00 12.65 C

ATOM 6586 N GLY B1293 68.491 27.616 -16.118 1.00 22.81 N

ATOM 6587 CA GLY B1293 69.168 27.620 -17.402 1.00 25.43 C

ATOM 6588 C GLY B1293 70.561 28.189 -17.266 1.00 26.45 C

ATOM 6589 O GLY B1293 71.334 28.227 -18.228 1.00 26.69 O

ATOM 6590 N LEU B1294 70.886 28.622 -16.052 1.00 26.36 N

ATOM 6591 CA LEU B1294 72.177 29.224 -15.779 1.00 26.09 C

ATOM 6592 C LEU B1294 73.264 28.240 -15.343 1.00 25.92 C

ATOM 6593 O LEU B1294 74.421 28.619 -15.128 1.00 27.87 O

ATOM 6594 CB LEU B1294 71.984 30.325 -14.742 1.00 26.54 C

ATOM 6595 CG LEU B1294 71.070 31.436 -15.284 1.00 25.72 C

ATOM 6596 CD1 LEU B1294 70.921 32.547 -14.246 1.00 21.35 C

ATOM 6597 CD2 LEU B1294 71.655 31.976 -16.608 1.00 21.82 C

ATOM 6598 N VAL B1295 72.899 26.970 -15.220 1.00 23.25 N

ATOM 6599 CA VAL B1295 73.870 25.972 -14.824 1.00 19.67 C

ATOM 6600 C VAL B1295 73.482 24.653 -15.452 1.00 14.00 C

ATOM 6601 O VAL B1295 72.422 24.120 -15.159 1.00 13.04 O

ATOM 6602 CB VAL B1295 73.918 25.814 -13.279 1.00 20.72 C

ATOM 6603 CG1 VAL B1295 75.031 24.850 -12.891 1.00 20.87 C

ATOM 6604 CG2 VAL B1295 74.139 27.167 -12.611 1.00 21.01 C

ATOM 6605 N PRO B1296 74.320 24.138 -16.361 1.00 8.23 N

ATOM 6606 CA PRO B1296 74.107 22.870 -17.062 1.00 9.20 C

ATOM 6607 C PRO B1296 73.830 21.674 -16.123 1.00 10.40 C

ATOM 6608 O PRO B1296 73.187 20.697 -16.520 1.00 6.41 O

ATOM 6609 CB PRO B1296 75.388 22.696 -17.874 1.00 7.64 C

ATOM 6610 CG PRO B1296 75.920 24.059 -18.026 1.00 4.56 C

ATOM 6611 CD PRO B1296 75.535 24.820 -16.819 1.00 4.76 C

ATOM 6612 N GLY B1297 74.335 21.751 -14.890 1.00 10.40 N

ATOM 6613 CA GLY B1297 74.099 20.689 -13.923 1.00 9.62 C

ATOM 6614 C GLY B1297 72.650 20.727 -13.437 1.00 10.77 C

ATOM 6615 O GLY B1297 72.041 19.691 -13.140 1.00 11.69 O

ATOM 6616 N LEU B1298 72.099 21.933 -13.335 1.00 10.34 N

ATOM 6617 CA LEU B1298 70.718 22.127 -12.929 1.00 8.08 C

ATOM 6618 C LEU B1298 69.840 21.714 -14.090 1.00 9.06 C

ATOM 6619 O LEU B1298 68.810 21.097 -13.882 1.00 14.58 O

ATOM 6620 CB LEU B1298 70.448 23.595 -12.607 1.00 8.00 C

ATOM 6621 CG LEU B1298 70.035 23.922 -11.176 1.00 6.45 C

ATOM 6622 CD1 LEU B1298 70.631 22.914 -10.195 1.00 6.80 C

ATOM 6623 CD2 LEU B1298 70.486 25.317 -10.856 1.00 4.07 C

ATOM 6624 N MET B1299 70.240 22.055 -15.313 1.00 10.12 N

ATOM 6625 CA MET B1299 69.469 21.688 -16.509 1.00 14.75 C

ATOM 6626 C MET B1299 69.537 20.171 -16.827 1.00 15.50 C

ATOM 6627 O MET B1299 68.722 19.608 -17.594 1.00 13.52 O

ATOM 6628 CB MET B1299 69.955 22.508 -17.717 1.00 17.35 C

ATOM 6629 CG MET B1299 69.031 22.454 -18.951 1.00 21.33 C

ATOM 6630 SD MET B1299 67.480 23.429 -18.818 1.00 26.29 S

ATOM 6631 CE MET B1299 68.124 24.943 -18.137 1.00 22.36 C

ATOM 6632 N MET B1300 70.515 19.506 -16.227 1.00 18.05 N

ATOM 6633 CA MET B1300 70.683 18.074 -16.428 1.00 17.03 C

ATOM 6634 C MET B1300 69.552 17.391 -15.676 1.00 16.54 C

ATOM 6635 O MET B1300 68.831 16.563 -16.249 1.00 19.86 O

ATOM 6636 CB MET B1300 72.055 17.624 -15.900 1.00 15.38 C

ATOM 6637 CG MET B1300 72.383 16.161 -16.105 1.00 12.95 C

ATOM 6638 SD MET B1300 73.495 15.594 -14.814 1.00 19.53 S

ATOM 6639 CE MET B1300 72.798 14.002 -14.442 1.00 24.54 C

ATOM 6640 N TYR B1301 69.373 17.760 -14.405 1.00 13.83 N

ATOM 6641 CA TYR B1301 68.312 17.160 -13.581 1.00 14.09 C

ATOM 6642 C TYR B1301 66.946 17.557 -14.094 1.00 11.42 C

ATOM 6643 O TYR B1301 66.025 16.762 -14.080 1.00 12.02 O

ATOM 6644 CB TYR B1301 68.468 17.558 -12.115 1.00 14.00 C

ATOM 6645 CG TYR B1301 69.377 16.614 -11.366 1.00 14.11 C

ATOM 6646 CD1 TYR B1301 69.004 15.295 -11.176 1.00 13.77 C

ATOM 6647 CD2 TYR B1301 70.603 17.041 -10.848 1.00 14.26 C

ATOM 6648 CE1 TYR B1301 69.813 14.414 -10.482 1.00 16.21 C

ATOM 6649 CE2 TYR B1301 71.425 16.173 -10.155 1.00 13.93 C

ATOM 6650 CZ TYR B1301 71.022 14.854 -9.970 1.00 17.15 C

ATOM 6651 OH TYR B1301 71.795 13.966 -9.247 1.00 15.38 O

ATOM 6652 N ALA B1302 66.840 18.797 -14.553 1.00 10.09 N

ATOM 6653 CA ALA B1302 65.625 19.334 -15.138 1.00 10.92 C

ATOM 6654 C ALA B1302 65.098 18.442 -16.292 1.00 12.97 C

ATOM 6655 O ALA B1302 63.879 18.194 -16.391 1.00 15.18 O

ATOM 6656 CB ALA B1302 65.902 20.747 -15.649 1.00 6.21 C

ATOM 6657 N THR B1303 66.016 17.993 -17.161 1.00 13.08 N

ATOM 6658 CA THR B1303 65.720 17.124 -18.314 1.00 9.41 C

ATOM 6659 C THR B1303 65.368 15.707 -17.838 1.00 8.51 C

ATOM 6660 O THR B1303 64.444 15.066 -18.343 1.00 4.76 O

ATOM 6661 CB THR B1303 66.950 17.020 -19.232 1.00 8.60 C

ATOM 6662 OG1 THR B1303 67.409 18.336 -19.564 1.00 6.73 O

ATOM 6663 CG2 THR B1303 66.618 16.261 -20.490 1.00 6.90 C

ATOM 6664 N ILE B1304 66.117 15.228 -16.860 1.00 6.38 N

ATOM 6665 CA ILE B1304 65.874 13.915 -16.322 1.00 8.07 C

ATOM 6666 C ILE B1304 64.474 13.819 -15.690 1.00 11.26 C

ATOM 6667 O ILE B1304 63.761 12.824 -15.880 1.00 14.39 O

ATOM 6668 CB ILE B1304 66.969 13.541 -15.300 1.00 6.88 C

ATOM 6669 CG1 ILE B1304 68.241 13.130 -16.049 1.00 3.51 C

ATOM 6670 CG2 ILE B1304 66.498 12.386 -14.413 1.00 5.62 C

ATOM 6671 CD1 ILE B1304 69.440 12.952 -15.165 1.00 5.78 C

ATOM 6672 N TRP B1305 64.065 14.853 -14.957 1.00 12.84 N

ATOM 6673 CA TRP B1305 62.744 14.870 -14.312 1.00 11.89 C

ATOM 6674 C TRP B1305 61.599 15.133 -15.302 1.00 11.91 C

ATOM 6675 O TRP B1305 60.490 14.699 -15.071 1.00 11.47 O

ATOM 6676 CB TRP B1305 62.731 15.895 -13.172 1.00 12.64 C

ATOM 6677 CG TRP B1305 63.382 15.383 -11.908 1.00 14.39 C

ATOM 6678 CD1 TRP B1305 64.530 15.846 -11.328 1.00 12.87 C

ATOM 6679 CD2 TRP B1305 62.857 14.379 -11.015 1.00 16.03 C

ATOM 6680 NE1 TRP B1305 64.746 15.204 -10.128 1.00 10.09 N

ATOM 6681 CE2 TRP B1305 63.738 14.303 -9.908 1.00 12.04 C

ATOM 6682 CE3 TRP B1305 61.725 13.543 -11.044 1.00 12.06 C

ATOM 6683 CZ2 TRP B1305 63.524 13.430 -8.837 1.00 10.06 C

ATOM 6684 CZ3 TRP B1305 61.518 12.683 -9.990 1.00 10.77 C

ATOM 6685 CH2 TRP B1305 62.415 12.632 -8.893 1.00 10.86 C

ATOM 6686 N LEU B1306 61.878 15.843 -16.396 1.00 13.33 N

ATOM 6687 CA LEU B1306 60.888 16.100 -17.435 1.00 13.98 C

ATOM 6688 C LEU B1306 60.633 14.745 -18.082 1.00 17.47 C

ATOM 6689 O LEU B1306 59.494 14.318 -18.250 1.00 18.75 O

ATOM 6690 CB LEU B1306 61.450 17.060 -18.500 1.00 14.17 C

ATOM 6691 CG LEU B1306 60.576 17.640 -19.637 1.00 11.93 C

ATOM 6692 CD1 LEU B1306 61.473 18.164 -20.731 1.00 10.45 C

ATOM 6693 CD2 LEU B1306 59.635 16.600 -20.213 1.00 13.23 C

ATOM 6694 N ARG B1307 61.720 14.076 -18.446 1.00 19.01 N

ATOM 6695 CA ARG B1307 61.647 12.765 -19.073 1.00 18.91 C

ATOM 6696 C ARG B1307 60.834 11.809 -18.199 1.00 18.92 C

ATOM 6697 O ARG B1307 60.059 10.981 -18.708 1.00 18.14 O

ATOM 6698 CB ARG B1307 63.061 12.206 -19.265 1.00 20.88 C

ATOM 6699 CG ARG B1307 63.478 12.050 -20.715 1.00 22.40 C

ATOM 6700 CD ARG B1307 64.654 12.948 -21.053 1.00 20.93 C

ATOM 6701 NE ARG B1307 65.929 12.234 -20.994 1.00 21.80 N

ATOM 6702 CZ ARG B1307 66.902 12.360 -21.896 1.00 23.16 C

ATOM 6703 NH1 ARG B1307 66.761 13.172 -22.936 1.00 20.99 N

ATOM 6704 NH2 ARG B1307 68.032 11.679 -21.749 1.00 24.98 N

ATOM 6705 N GLU B1308 61.014 11.930 -16.883 1.00 16.76 N

ATOM 6706 CA GLU B1308 60.314 11.063 -15.941 1.00 16.16 C

ATOM 6707 C GLU B1308 58.821 11.383 -15.894 1.00 17.11 C

ATOM 6708 O GLU B1308 57.980 10.475 -15.869 1.00 19.10 O

ATOM 6709 CB GLU B1308 60.944 11.173 -14.544 1.00 14.48 C

ATOM 6710 CG GLU B1308 60.240 10.380 -13.437 1.00 18.73 C

ATOM 6711 CD GLU B1308 60.302 8.842 -13.610 1.00 23.25 C

ATOM 6712 OE1 GLU B1308 59.481 8.135 -12.966 1.00 21.92 O

ATOM 6713 OE2 GLU B1308 61.162 8.331 -14.371 1.00 22.32 O

ATOM 6714 N HIS B1309 58.473 12.660 -15.905 1.00 13.74 N

ATOM 6715 CA HIS B1309 57.066 12.999 -15.862 1.00 12.77 C

ATOM 6716 C HIS B1309 56.312 12.326 -17.016 1.00 13.71 C

ATOM 6717 O HIS B1309 55.340 11.624 -16.794 1.00 18.05 O

ATOM 6718 CB HIS B1309 56.862 14.495 -15.924 1.00 13.25 C

ATOM 6719 CG HIS B1309 55.443 14.874 -16.127 1.00 15.28 C

ATOM 6720 ND1 HIS B1309 54.539 14.933 -15.091 1.00 19.99 N

ATOM 6721 CD2 HIS B1309 54.739 15.117 -17.255 1.00 18.12 C

ATOM 6722 CE1 HIS B1309 53.336 15.195 -15.570 1.00 19.51 C

ATOM 6723 NE2 HIS B1309 53.432 15.310 -16.882 1.00 17.88 N

ATOM 6724 N ASN B1310 56.747 12.532 -18.249 1.00 12.38 N

ATOM 6725 CA ASN B1310 56.094 11.901 -19.399 1.00 10.69 C

ATOM 6726 C ASN B1310 56.220 10.360 -19.400 1.00 13.33 C

ATOM 6727 O ASN B1310 55.364 9.651 -19.943 1.00 12.79 O

ATOM 6728 CB ASN B1310 56.673 12.469 -20.694 1.00 10.19 C

ATOM 6729 CG ASN B1310 56.473 13.946 -20.799 1.00 11.15 C

ATOM 6730 OD1 ASN B1310 55.811 14.540 -19.955 1.00 10.27 O

ATOM 6731 ND2 ASN B1310 57.042 14.556 -21.827 1.00 11.85 N

ATOM 6732 N ARG B1311 57.296 9.844 -18.814 1.00 13.23 N

ATOM 6733 CA ARG B1311 57.485 8.400 -18.732 1.00 13.40 C

ATOM 6734 C ARG B1311 56.313 7.803 -17.938 1.00 14.81 C

ATOM 6735 O ARG B1311 55.649 6.851 -18.377 1.00 12.83 O

ATOM 6736 CB ARG B1311 58.803 8.076 -18.018 1.00 13.01 C

ATOM 6737 CG ARG B1311 59.187 6.599 -18.045 1.00 10.08 C

ATOM 6738 CD ARG B1311 60.157 6.251 -16.941 1.00 6.96 C

ATOM 6739 NE ARG B1311 59.732 5.032 -16.273 1.00 11.24 N

ATOM 6740 CZ ARG B1311 59.465 4.945 -14.973 1.00 17.52 C

ATOM 6741 NH1 ARG B1311 59.576 6.014 -14.177 1.00 16.23 N

ATOM 6742 NH2 ARG B1311 59.054 3.791 -14.464 1.00 16.76 N

ATOM 6743 N VAL B1312 56.078 8.372 -16.759 1.00 15.44 N

ATOM 6744 CA VAL B1312 54.997 7.933 -15.898 1.00 14.13 C

ATOM 6745 C VAL B1312 53.648 8.192 -16.569 1.00 15.15 C

ATOM 6746 O VAL B1312 52.681 7.476 -16.317 1.00 15.07 O

ATOM 6747 CB VAL B1312 55.046 8.658 -14.551 1.00 12.19 C

ATOM 6748 CG1 VAL B1312 53.774 8.374 -13.768 1.00 9.81 C

ATOM 6749 CG2 VAL B1312 56.277 8.214 -13.764 1.00 9.53 C

ATOM 6750 N CYS B1313 53.592 9.208 -17.427 1.00 15.12 N

ATOM 6751 CA CYS B1313 52.365 9.538 -18.143 1.00 17.24 C

ATOM 6752 C CYS B1313 51.991 8.395 -19.075 1.00 18.34 C

ATOM 6753 O CYS B1313 50.814 8.142 -19.321 1.00 18.71 O

ATOM 6754 CB CYS B1313 52.548 10.817 -18.956 1.00 17.97 C

ATOM 6755 SG CYS B1313 52.149 12.286 -18.003 1.00 24.13 S

ATOM 6756 N ASP B1314 52.993 7.705 -19.603 1.00 19.00 N

ATOM 6757 CA ASP B1314 52.731 6.593 -20.500 1.00 18.33 C

ATOM 6758 C ASP B1314 52.266 5.434 -19.656 1.00 19.22 C

ATOM 6759 O ASP B1314 51.368 4.696 -20.033 1.00 20.44 O

ATOM 6760 CB ASP B1314 53.993 6.194 -21.251 1.00 20.20 C

ATOM 6761 CG ASP B1314 54.402 7.221 -22.274 1.00 26.39 C

ATOM 6762 OD1 ASP B1314 53.530 8.015 -22.692 1.00 29.12 O

ATOM 6763 OD2 ASP B1314 55.593 7.242 -22.659 1.00 29.80 O

ATOM 6764 N ILE B1315 52.889 5.267 -18.499 1.00 18.82 N

ATOM 6765 CA ILE B1315 52.516 4.176 -17.615 1.00 14.66 C

ATOM 6766 C ILE B1315 51.071 4.344 -17.217 1.00 15.82 C

ATOM 6767 O ILE B1315 50.308 3.392 -17.266 1.00 18.97 O

ATOM 6768 CB ILE B1315 53.379 4.150 -16.344 1.00 12.63 C

ATOM 6769 CG1 ILE B1315 54.813 3.709 -16.690 1.00 9.21 C

ATOM 6770 CG2 ILE B1315 52.735 3.255 -15.308 1.00 8.78 C

ATOM 6771 CD1 ILE B1315 55.860 4.199 -15.690 1.00 3.29 C

ATOM 6772 N LEU B1316 50.691 5.565 -16.849 1.00 16.80 N

ATOM 6773 CA LEU B1316 49.318 5.862 -16.421 1.00 17.10 C

ATOM 6774 C LEU B1316 48.263 5.663 -17.520 1.00 18.19 C

ATOM 6775 O LEU B1316 47.213 5.086 -17.266 1.00 17.51 O

ATOM 6776 CB LEU B1316 49.237 7.294 -15.870 1.00 11.82 C

ATOM 6777 CG LEU B1316 49.761 7.442 -14.438 1.00 9.15 C

ATOM 6778 CD1 LEU B1316 49.358 8.794 -13.854 1.00 6.26 C

ATOM 6779 CD2 LEU B1316 49.239 6.289 -13.587 1.00 5.27 C

ATOM 6780 N LYS B1317 48.544 6.140 -18.729 1.00 19.88 N

ATOM 6781 CA LYS B1317 47.621 5.993 -19.855 1.00 22.79 C

ATOM 6782 C LYS B1317 47.415 4.508 -20.175 1.00 24.33 C

ATOM 6783 O LYS B1317 46.351 4.082 -20.622 1.00 25.41 O

ATOM 6784 CB LYS B1317 48.188 6.695 -21.091 1.00 23.83 C

ATOM 6785 CG LYS B1317 47.428 6.413 -22.377 1.00 25.09 C

ATOM 6786 CD LYS B1317 47.503 7.608 -23.321 1.00 27.98 C

ATOM 6787 CE LYS B1317 46.147 7.912 -23.939 1.00 32.95 C

ATOM 6788 NZ LYS B1317 45.337 8.812 -23.065 1.00 36.44 N

ATOM 6789 N GLN B1318 48.465 3.732 -19.956 1.00 25.59 N

ATOM 6790 CA GLN B1318 48.442 2.311 -20.205 1.00 24.85 C

ATOM 6791 C GLN B1318 47.397 1.663 -19.311 1.00 24.01 C

ATOM 6792 O GLN B1318 46.594 0.862 -19.752 1.00 24.00 O

ATOM 6793 CB GLN B1318 49.812 1.734 -19.898 1.00 28.06 C

ATOM 6794 CG GLN B1318 49.847 0.247 -19.927 1.00 36.99 C

ATOM 6795 CD GLN B1318 50.479 -0.261 -21.187 1.00 42.68 C

ATOM 6796 OE1 GLN B1318 51.504 -0.948 -21.141 1.00 45.54 O

ATOM 6797 NE2 GLN B1318 49.881 0.078 -22.334 1.00 44.72 N

ATOM 6798 N GLU B1319 47.417 2.017 -18.040 1.00 25.32 N

ATOM 6799 CA GLU B1319 46.477 1.460 -17.079 1.00 26.91 C

ATOM 6800 C GLU B1319 45.085 2.123 -17.143 1.00 26.48 C

ATOM 6801 O GLU B1319 44.067 1.490 -16.834 1.00 26.39 O

ATOM 6802 CB GLU B1319 47.039 1.627 -15.666 1.00 29.75 C

ATOM 6803 CG GLU B1319 48.398 1.039 -15.471 1.00 36.51 C

ATOM 6804 CD GLU B1319 48.335 -0.464 -15.301 1.00 43.96 C

ATOM 6805 OE1 GLU B1319 47.648 -0.940 -14.361 1.00 45.46 O

ATOM 6806 OE2 GLU B1319 48.971 -1.169 -16.117 1.00 47.00 O

ATOM 6807 N HIS B1320 45.052 3.395 -17.546 1.00 22.71 N

ATOM 6808 CA HIS B1320 43.817 4.160 -17.600 1.00 16.25 C

ATOM 6809 C HIS B1320 43.513 4.791 -18.940 1.00 15.77 C

ATOM 6810 O HIS B1320 43.559 6.024 -19.088 1.00 17.13 O

ATOM 6811 CB HIS B1320 43.864 5.234 -16.530 1.00 15.49 C

ATOM 6812 CG HIS B1320 43.965 4.686 -15.144 1.00 16.90 C

ATOM 6813 ND1 HIS B1320 42.911 4.065 -14.515 1.00 18.78 N

ATOM 6814 CD2 HIS B1320 44.973 4.716 -14.240 1.00 18.13 C

ATOM 6815 CE1 HIS B1320 43.255 3.744 -13.283 1.00 17.52 C

ATOM 6816 NE2 HIS B1320 44.504 4.129 -13.092 1.00 19.82 N

ATOM 6817 N PRO B1321 43.185 3.958 -19.940 1.00 15.35 N

ATOM 6818 CA PRO B1321 42.861 4.427 -21.297 1.00 15.82 C

ATOM 6819 C PRO B1321 41.660 5.392 -21.307 1.00 14.48 C

ATOM 6820 O PRO B1321 41.461 6.159 -22.257 1.00 13.47 O

ATOM 6821 CB PRO B1321 42.577 3.137 -22.069 1.00 14.12 C

ATOM 6822 CG PRO B1321 42.287 2.104 -21.016 1.00 14.72 C

ATOM 6823 CD PRO B1321 43.100 2.494 -19.822 1.00 15.03 C

ATOM 6824 N GLU B1322 40.884 5.347 -20.226 1.00 14.57 N

ATOM 6825 CA GLU B1322 39.706 6.191 -20.056 1.00 16.98 C

ATOM 6826 C GLU B1322 40.042 7.547 -19.454 1.00 18.41 C

ATOM 6827 O GLU B1322 39.165 8.399 -19.327 1.00 21.14 O

ATOM 6828 CB GLU B1322 38.700 5.499 -19.146 1.00 15.73 C

ATOM 6829 CG GLU B1322 39.217 4.194 -18.574 1.00 18.06 C

ATOM 6830 CD GLU B1322 40.031 4.380 -17.298 1.00 15.30 C

ATOM 6831 OE1 GLU B1322 39.694 5.254 -16.483 1.00 11.86 O

ATOM 6832 OE2 GLU B1322 41.010 3.641 -17.102 1.00 20.08 O

ATOM 6833 N TRP B1323 41.302 7.754 -19.086 1.00 18.95 N

ATOM 6834 CA TRP B1323 41.710 9.018 -18.489 1.00 19.00 C

ATOM 6835 C TRP B1323 42.029 10.112 -19.501 1.00 20.24 C

ATOM 6836 O TRP B1323 42.570 9.851 -20.577 1.00 19.25 O

ATOM 6837 CB TRP B1323 42.920 8.792 -17.594 1.00 17.77 C

ATOM 6838 CG TRP B1323 42.557 8.255 -16.264 1.00 14.83 C

ATOM 6839 CD1 TRP B1323 41.350 7.758 -15.886 1.00 12.04 C

ATOM 6840 CD2 TRP B1323 43.404 8.180 -15.115 1.00 15.66 C

ATOM 6841 NE1 TRP B1323 41.388 7.376 -14.565 1.00 13.92 N

ATOM 6842 CE2 TRP B1323 42.639 7.625 -14.068 1.00 15.76 C

ATOM 6843 CE3 TRP B1323 44.738 8.532 -14.867 1.00 14.17 C

ATOM 6844 CZ2 TRP B1323 43.160 7.410 -12.793 1.00 16.99 C

ATOM 6845 CZ3 TRP B1323 45.257 8.320 -13.602 1.00 12.71 C

ATOM 6846 CH2 TRP B1323 44.468 7.765 -12.579 1.00 17.17 C

ATOM 6847 N GLY B1324 41.702 11.345 -19.126 1.00 20.53 N

ATOM 6848 CA GLY B1324 41.958 12.484 -19.983 1.00 19.98 C

ATOM 6849 C GLY B1324 43.316 13.092 -19.707 1.00 20.22 C

ATOM 6850 O GLY B1324 44.030 12.662 -18.798 1.00 19.67 O

ATOM 6851 N ASP B1325 43.666 14.102 -20.492 1.00 18.66 N

ATOM 6852 CA ASP B1325 44.948 14.758 -20.334 1.00 20.62 C

ATOM 6853 C ASP B1325 45.151 15.384 -18.957 1.00 22.22 C

ATOM 6854 O ASP B1325 46.212 15.215 -18.355 1.00 25.23 O

ATOM 6855 CB ASP B1325 45.132 15.828 -21.406 1.00 20.04 C

ATOM 6856 CG ASP B1325 46.264 16.779 -21.092 1.00 20.25 C

ATOM 6857 OD1 ASP B1325 47.427 16.385 -21.260 1.00 21.73 O

ATOM 6858 OD2 ASP B1325 45.995 17.924 -20.679 1.00 21.25 O

ATOM 6859 N GLU B1326 44.150 16.094 -18.444 1.00 19.37 N

ATOM 6860 CA GLU B1326 44.322 16.731 -17.149 1.00 16.78 C

ATOM 6861 C GLU B1326 44.524 15.753 -16.016 1.00 17.47 C

ATOM 6862 O GLU B1326 45.403 15.955 -15.168 1.00 18.23 O

ATOM 6863 CB GLU B1326 43.155 17.659 -16.830 1.00 14.66 C

ATOM 6864 CG GLU B1326 43.538 19.138 -16.937 1.00 15.96 C

ATOM 6865 CD GLU B1326 44.031 19.701 -15.630 1.00 17.08 C

ATOM 6866 OE1 GLU B1326 44.714 20.746 -15.643 1.00 18.79 O

ATOM 6867 OE2 GLU B1326 43.736 19.094 -14.578 1.00 17.90 O

ATOM 6868 N GLN B1327 43.736 14.686 -15.988 1.00 16.44 N

ATOM 6869 CA GLN B1327 43.894 13.724 -14.913 1.00 15.09 C

ATOM 6870 C GLN B1327 45.204 12.924 -15.008 1.00 14.09 C

ATOM 6871 O GLN B1327 45.724 12.476 -13.989 1.00 13.09 O

ATOM 6872 CB GLN B1327 42.703 12.776 -14.851 1.00 14.94 C

ATOM 6873 CG GLN B1327 42.826 11.767 -13.714 1.00 13.69 C

ATOM 6874 CD GLN B1327 41.515 11.113 -13.331 1.00 12.02 C

ATOM 6875 OE1 GLN B1327 41.333 10.751 -12.187 1.00 17.95 O

ATOM 6876 NE2 GLN B1327 40.602 10.960 -14.281 1.00 6.78 N

ATOM 6877 N LEU B1328 45.738 12.732 -16.214 1.00 13.49 N

ATOM 6878 CA LEU B1328 46.999 12.001 -16.355 1.00 12.90 C

ATOM 6879 C LEU B1328 48.127 12.899 -15.836 1.00 11.65 C

ATOM 6880 O LEU B1328 48.946 12.480 -15.025 1.00 13.69 O

ATOM 6881 CB LEU B1328 47.255 11.630 -17.818 1.00 13.08 C

ATOM 6882 CG LEU B1328 46.553 10.388 -18.389 1.00 12.72 C

ATOM 6883 CD1 LEU B1328 46.694 10.407 -19.900 1.00 11.75 C

ATOM 6884 CD2 LEU B1328 47.147 9.115 -17.824 1.00 10.62 C

ATOM 6885 N PHE B1329 48.149 14.141 -16.300 1.00 10.16 N

ATOM 6886 CA PHE B1329 49.153 15.108 -15.872 1.00 8.97 C

ATOM 6887 C PHE B1329 49.162 15.314 -14.363 1.00 10.29 C

ATOM 6888 O PHE B1329 50.225 15.315 -13.741 1.00 13.88 O

ATOM 6889 CB PHE B1329 48.921 16.476 -16.534 1.00 5.14 C

ATOM 6890 CG PHE B1329 49.653 17.597 -15.861 1.00 6.19 C

ATOM 6891 CD1 PHE B1329 50.945 17.936 -16.262 1.00 8.34 C

ATOM 6892 CD2 PHE B1329 49.088 18.266 -14.773 1.00 7.13 C

ATOM 6893 CE1 PHE B1329 51.671 18.918 -15.586 1.00 8.17 C

ATOM 6894 CE2 PHE B1329 49.798 19.261 -14.075 1.00 6.37 C

ATOM 6895 CZ PHE B1329 51.096 19.586 -14.480 1.00 9.36 C

ATOM 6896 N GLN B1330 47.979 15.509 -13.781 1.00 11.68 N

ATOM 6897 CA GLN B1330 47.844 15.758 -12.339 1.00 13.31 C

ATOM 6898 C GLN B1330 48.303 14.591 -11.485 1.00 13.56 C

ATOM 6899 O GLN B1330 48.928 14.785 -10.445 1.00 15.86 O

ATOM 6900 CB GLN B1330 46.386 16.087 -11.968 1.00 14.73 C

ATOM 6901 CG GLN B1330 45.865 17.430 -12.461 1.00 18.85 C

ATOM 6902 CD GLN B1330 46.536 18.613 -11.787 1.00 23.15 C

ATOM 6903 OE1 GLN B1330 47.126 18.476 -10.704 1.00 27.36 O

ATOM 6904 NE2 GLN B1330 46.461 19.787 -12.431 1.00 22.36 N

ATOM 6905 N THR B1331 47.966 13.379 -11.911 1.00 14.75 N

ATOM 6906 CA THR B1331 48.348 12.182 -11.176 1.00 13.39 C

ATOM 6907 C THR B1331 49.849 11.951 -11.290 1.00 13.11 C

ATOM 6908 O THR B1331 50.470 11.522 -10.321 1.00 14.97 O

ATOM 6909 CB THR B1331 47.572 10.944 -11.675 1.00 12.75 C

ATOM 6910 OG1 THR B1331 46.177 11.276 -11.774 1.00 11.39 O

ATOM 6911 CG2 THR B1331 47.734 9.775 -10.700 1.00 9.74 C

ATOM 6912 N SER B1332 50.432 12.234 -12.457 1.00 12.68 N

ATOM 6913 CA SER B1332 51.881 12.081 -12.643 1.00 11.83 C

ATOM 6914 C SER B1332 52.583 13.021 -11.653 1.00 11.30 C

ATOM 6915 O SER B1332 53.477 12.619 -10.907 1.00 12.43 O

ATOM 6916 CB SER B1332 52.293 12.459 -14.071 1.00 12.51 C

ATOM 6917 OG SER B1332 51.999 11.436 -15.005 1.00 12.85 O

ATOM 6918 N ARG B1333 52.193 14.283 -11.658 1.00 6.83 N

ATOM 6919 CA ARG B1333 52.808 15.207 -10.745 1.00 7.89 C

ATOM 6920 C ARG B1333 52.746 14.716 -9.292 1.00 8.90 C

ATOM 6921 O ARG B1333 53.646 14.970 -8.506 1.00 12.87 O

ATOM 6922 CB ARG B1333 52.137 16.568 -10.850 1.00 4.93 C

ATOM 6923 CG ARG B1333 52.566 17.509 -9.737 1.00 7.92 C

ATOM 6924 CD ARG B1333 52.052 18.896 -9.996 1.00 12.96 C

ATOM 6925 NE ARG B1333 52.759 19.904 -9.227 1.00 14.35 N

ATOM 6926 CZ ARG B1333 52.638 21.196 -9.464 1.00 15.03 C

ATOM 6927 NH1 ARG B1333 51.835 21.591 -10.439 1.00 18.39 N

ATOM 6928 NH2 ARG B1333 53.321 22.085 -8.750 1.00 15.57 N

ATOM 6929 N LEU B1334 51.676 14.028 -8.922 1.00 8.79 N

ATOM 6930 CA LEU B1334 51.543 13.535 -7.557 1.00 9.54 C

ATOM 6931 C LEU B1334 52.562 12.413 -7.310 1.00 11.45 C

ATOM 6932 O LEU B1334 53.148 12.304 -6.231 1.00 11.53 O

ATOM 6933 CB LEU B1334 50.106 13.032 -7.325 1.00 5.61 C

ATOM 6934 CG LEU B1334 49.090 14.102 -6.907 1.00 6.21 C

ATOM 6935 CD1 LEU B1334 47.857 13.433 -6.282 1.00 5.80 C

ATOM 6936 CD2 LEU B1334 49.737 15.068 -5.908 1.00 3.78 C

ATOM 6937 N ILE B1335 52.773 11.591 -8.334 1.00 14.48 N

ATOM 6938 CA ILE B1335 53.714 10.472 -8.279 1.00 15.37 C

ATOM 6939 C ILE B1335 55.157 10.992 -8.198 1.00 15.46 C

ATOM 6940 O ILE B1335 55.945 10.513 -7.384 1.00 16.10 O

ATOM 6941 CB ILE B1335 53.532 9.546 -9.531 1.00 17.28 C

ATOM 6942 CG1 ILE B1335 52.211 8.763 -9.407 1.00 15.29 C

ATOM 6943 CG2 ILE B1335 54.708 8.569 -9.663 1.00 18.30 C

ATOM 6944 CD1 ILE B1335 51.835 7.963 -10.641 1.00 14.48 C

ATOM 6945 N LEU B1336 55.496 11.979 -9.029 1.00 15.51 N

ATOM 6946 CA LEU B1336 56.846 12.553 -9.020 1.00 14.27 C

ATOM 6947 C LEU B1336 57.148 13.226 -7.685 1.00 12.31 C

ATOM 6948 O LEU B1336 58.307 13.254 -7.256 1.00 13.52 O

ATOM 6949 CB LEU B1336 57.028 13.553 -10.174 1.00 12.19 C

ATOM 6950 CG LEU B1336 57.783 12.996 -11.396 1.00 11.18 C

ATOM 6951 CD1 LEU B1336 56.961 11.893 -12.071 1.00 2.74 C

ATOM 6952 CD2 LEU B1336 58.086 14.130 -12.369 1.00 7.78 C

ATOM 6953 N ILE B1337 56.119 13.767 -7.034 1.00 8.96 N

ATOM 6954 CA ILE B1337 56.311 14.386 -5.732 1.00 9.55 C

ATOM 6955 C ILE B1337 56.666 13.258 -4.742 1.00 11.80 C

ATOM 6956 O ILE B1337 57.555 13.403 -3.894 1.00 13.05 O

ATOM 6957 CB ILE B1337 55.039 15.103 -5.238 1.00 6.13 C

ATOM 6958 CG1 ILE B1337 54.795 16.366 -6.055 1.00 10.07 C

ATOM 6959 CG2 ILE B1337 55.204 15.534 -3.795 1.00 4.30 C

ATOM 6960 CD1 ILE B1337 53.645 17.216 -5.529 1.00 3.11 C

ATOM 6961 N GLY B1338 55.974 12.125 -4.863 1.00 12.36 N

ATOM 6962 CA GLY B1338 56.243 10.990 -3.983 1.00 12.26 C

ATOM 6963 C GLY B1338 57.605 10.335 -4.201 1.00 10.57 C

ATOM 6964 O GLY B1338 58.245 9.888 -3.253 1.00 7.68 O

ATOM 6965 N GLU B1339 58.019 10.257 -5.465 1.00 11.82 N

ATOM 6966 CA GLU B1339 59.317 9.712 -5.848 1.00 12.29 C

ATOM 6967 C GLU B1339 60.427 10.618 -5.267 1.00 12.83 C

ATOM 6968 O GLU B1339 61.425 10.143 -4.716 1.00 14.01 O

ATOM 6969 CB GLU B1339 59.442 9.709 -7.355 1.00 9.72 C

ATOM 6970 CG GLU B1339 58.666 8.630 -8.051 1.00 17.28 C

ATOM 6971 CD GLU B1339 59.181 8.398 -9.469 1.00 20.55 C

ATOM 6972 OE1 GLU B1339 58.828 9.180 -10.387 1.00 20.65 O

ATOM 6973 OE2 GLU B1339 59.959 7.437 -9.657 1.00 23.33 O

ATOM 6974 N THR B1340 60.247 11.925 -5.418 1.00 11.15 N

ATOM 6975 CA THR B1340 61.206 12.888 -4.909 1.00 10.23 C

ATOM 6976 C THR B1340 61.375 12.759 -3.378 1.00 10.18 C

ATOM 6977 O THR B1340 62.489 12.775 -2.880 1.00 11.48 O

ATOM 6978 CB THR B1340 60.762 14.327 -5.287 1.00 8.65 C

ATOM 6979 OG1 THR B1340 60.698 14.438 -6.709 1.00 3.91 O

ATOM 6980 CG2 THR B1340 61.723 15.372 -4.721 1.00 5.75 C

ATOM 6981 N ILE B1341 60.274 12.614 -2.639 1.00 12.09 N

ATOM 6982 CA ILE B1341 60.328 12.500 -1.166 1.00 10.92 C

ATOM 6983 C ILE B1341 61.033 11.192 -0.762 1.00 11.92 C

ATOM 6984 O ILE B1341 61.746 11.136 0.252 1.00 10.59 O

ATOM 6985 CB ILE B1341 58.888 12.535 -0.535 1.00 6.00 C

ATOM 6986 CG1 ILE B1341 58.110 13.757 -1.054 1.00 2.34 C

ATOM 6987 CG2 ILE B1341 58.989 12.519 0.973 1.00 2.69 C

ATOM 6988 CD1 ILE B1341 57.532 14.669 0.011 1.00 2.00 C

ATOM 6989 N LYS B1342 60.839 10.166 -1.597 1.00 12.95 N

ATOM 6990 CA LYS B1342 61.393 8.819 -1.422 1.00 15.46 C

ATOM 6991 C LYS B1342 62.917 8.825 -1.560 1.00 18.00 C

ATOM 6992 O LYS B1342 63.653 8.323 -0.684 1.00 18.41 O

ATOM 6993 CB LYS B1342 60.792 7.893 -2.495 1.00 13.11 C

ATOM 6994 CG LYS B1342 61.527 6.584 -2.723 1.00 7.98 C

ATOM 6995 CD LYS B1342 61.218 5.622 -1.582 1.00 5.21 C

ATOM 6996 CE LYS B1342 61.786 4.259 -1.846 1.00 2.94 C

ATOM 6997 NZ LYS B1342 61.546 3.473 -0.620 1.00 6.10 N

ATOM 6998 N ILE B1343 63.368 9.387 -2.686 1.00 19.66 N

ATOM 6999 CA ILE B1343 64.791 9.519 -3.031 1.00 17.84 C

ATOM 7000 C ILE B1343 65.520 10.447 -2.055 1.00 18.65 C

ATOM 7001 O ILE B1343 66.619 10.143 -1.597 1.00 19.63 O

ATOM 7002 CB ILE B1343 64.958 10.100 -4.449 1.00 16.18 C

ATOM 7003 CG1 ILE B1343 64.529 9.073 -5.496 1.00 13.54 C

ATOM 7004 CG2 ILE B1343 66.391 10.526 -4.666 1.00 18.98 C

ATOM 7005 CD1 ILE B1343 64.389 9.658 -6.885 1.00 14.09 C

ATOM 7006 N VAL B1344 64.910 11.575 -1.727 1.00 15.77 N

ATOM 7007 CA VAL B1344 65.540 12.491 -0.806 1.00 15.66 C

ATOM 7008 C VAL B1344 65.769 11.835 0.559 1.00 17.65 C

ATOM 7009 O VAL B1344 66.756 12.124 1.228 1.00 19.78 O

ATOM 7010 CB VAL B1344 64.696 13.763 -0.632 1.00 15.00 C

ATOM 7011 CG1 VAL B1344 65.293 14.658 0.438 1.00 14.56 C

ATOM 7012 CG2 VAL B1344 64.632 14.499 -1.936 1.00 11.91 C

ATOM 7013 N ILE B1345 64.889 10.936 0.980 1.00 16.77 N

ATOM 7014 CA ILE B1345 65.068 10.320 2.297 1.00 17.52 C

ATOM 7015 C ILE B1345 65.860 8.990 2.313 1.00 19.92 C

ATOM 7016 O ILE B1345 66.517 8.646 3.312 1.00 16.95 O

ATOM 7017 CB ILE B1345 63.687 10.100 2.999 1.00 15.99 C

ATOM 7018 CG1 ILE B1345 63.074 11.456 3.390 1.00 13.11 C

ATOM 7019 CG2 ILE B1345 63.864 9.184 4.216 1.00 11.39 C

ATOM 7020 CD1 ILE B1345 61.661 11.372 3.970 1.00 9.79 C

ATOM 7021 N GLU B1346 65.835 8.249 1.207 1.00 19.86 N

ATOM 7022 CA GLU B1346 66.529 6.976 1.196 1.00 19.74 C

ATOM 7023 C GLU B1346 67.839 6.937 0.423 1.00 20.93 C

ATOM 7024 O GLU B1346 68.611 5.988 0.554 1.00 24.11 O

ATOM 7025 CB GLU B1346 65.569 5.926 0.698 1.00 19.42 C

ATOM 7026 CG GLU B1346 64.332 5.907 1.531 1.00 24.75 C

ATOM 7027 CD GLU B1346 63.558 4.641 1.357 1.00 29.48 C

ATOM 7028 OE1 GLU B1346 64.082 3.702 0.721 1.00 31.33 O

ATOM 7029 OE2 GLU B1346 62.423 4.582 1.853 1.00 33.01 O

ATOM 7030 N ASP B1347 68.099 7.968 -0.372 1.00 19.53 N

ATOM 7031 CA ASP B1347 69.318 8.034 -1.145 1.00 17.07 C

ATOM 7032 C ASP B1347 70.110 9.213 -0.624 1.00 19.20 C

ATOM 7033 O ASP B1347 71.116 9.038 0.063 1.00 22.89 O

ATOM 7034 CB ASP B1347 69.025 8.259 -2.634 1.00 18.80 C

ATOM 7035 CG ASP B1347 68.463 7.026 -3.333 1.00 19.45 C

ATOM 7036 OD1 ASP B1347 68.900 5.895 -3.052 1.00 20.91 O

ATOM 7037 OD2 ASP B1347 67.577 7.197 -4.192 1.00 22.17 O

ATOM 7038 N TYR B1348 69.627 10.411 -0.958 1.00 18.54 N

ATOM 7039 CA TYR B1348 70.247 11.689 -0.598 1.00 14.29 C

ATOM 7040 C TYR B1348 70.622 11.838 0.872 1.00 13.46 C

ATOM 7041 O TYR B1348 71.803 11.955 1.206 1.00 11.58 O

ATOM 7042 CB TYR B1348 69.315 12.803 -1.044 1.00 12.40 C

ATOM 7043 CG TYR B1348 69.814 14.205 -0.861 1.00 14.70 C

ATOM 7044 CD1 TYR B1348 70.488 14.868 -1.883 1.00 19.10 C

ATOM 7045 CD2 TYR B1348 69.473 14.931 0.271 1.00 15.28 C

ATOM 7046 CE1 TYR B1348 70.795 16.243 -1.784 1.00 18.10 C

ATOM 7047 CE2 TYR B1348 69.769 16.292 0.383 1.00 16.00 C

ATOM 7048 CZ TYR B1348 70.420 16.945 -0.647 1.00 17.26 C

ATOM 7049 OH TYR B1348 70.635 18.303 -0.554 1.00 15.94 O

ATOM 7050 N VAL B1349 69.629 11.824 1.757 1.00 15.28 N

ATOM 7051 CA VAL B1349 69.915 11.960 3.186 1.00 17.05 C

ATOM 7052 C VAL B1349 70.682 10.734 3.668 1.00 19.46 C

ATOM 7053 O VAL B1349 71.556 10.843 4.526 1.00 22.81 O

ATOM 7054 CB VAL B1349 68.645 12.073 4.058 1.00 12.60 C

ATOM 7055 CG1 VAL B1349 69.050 12.144 5.530 1.00 7.44 C

ATOM 7056 CG2 VAL B1349 67.842 13.285 3.664 1.00 11.76 C

ATOM 7057 N GLN B1350 70.349 9.567 3.123 1.00 17.39 N

ATOM 7058 CA GLN B1350 71.025 8.341 3.511 1.00 15.96 C

ATOM 7059 C GLN B1350 72.541 8.513 3.418 1.00 18.58 C

ATOM 7060 O GLN B1350 73.283 8.157 4.343 1.00 20.80 O

ATOM 7061 CB GLN B1350 70.586 7.199 2.602 1.00 15.39 C

ATOM 7062 CG GLN B1350 71.113 5.838 3.024 1.00 15.19 C

ATOM 7063 CD GLN B1350 70.590 5.405 4.371 1.00 18.56 C

ATOM 7064 OE1 GLN B1350 69.401 5.136 4.524 1.00 21.21 O

ATOM 7065 NE2 GLN B1350 71.477 5.337 5.361 1.00 18.24 N

ATOM 7066 N HIS B1351 72.990 9.065 2.293 1.00 17.58 N

ATOM 7067 CA HIS B1351 74.403 9.289 2.035 1.00 14.82 C

ATOM 7068 C HIS B1351 74.936 10.397 2.926 1.00 14.33 C

ATOM 7069 O HIS B1351 76.006 10.282 3.516 1.00 13.35 O

ATOM 7070 CB HIS B1351 74.602 9.681 0.573 1.00 15.10 C

ATOM 7071 CG HIS B1351 75.865 10.443 0.323 1.00 17.65 C

ATOM 7072 ND1 HIS B1351 77.111 9.850 0.338 1.00 17.40 N

ATOM 7073 CD2 HIS B1351 76.079 11.749 0.037 1.00 16.84 C

ATOM 7074 CE1 HIS B1351 78.036 10.753 0.073 1.00 14.80 C

ATOM 7075 NE2 HIS B1351 77.434 11.913 -0.115 1.00 14.50 N

ATOM 7076 N LEU B1352 74.164 11.472 3.010 1.00 14.86 N

ATOM 7077 CA LEU B1352 74.514 12.651 3.792 1.00 15.32 C

ATOM 7078 C LEU B1352 74.773 12.366 5.254 1.00 16.33 C

ATOM 7079 O LEU B1352 75.765 12.804 5.810 1.00 17.36 O

ATOM 7080 CB LEU B1352 73.383 13.656 3.709 1.00 15.76 C

ATOM 7081 CG LEU B1352 73.780 15.103 3.619 1.00 15.51 C

ATOM 7082 CD1 LEU B1352 74.902 15.229 2.589 1.00 16.18 C

ATOM 7083 CD2 LEU B1352 72.545 15.913 3.237 1.00 15.66 C

ATOM 7084 N SER B1353 73.850 11.643 5.876 1.00 17.97 N

ATOM 7085 CA SER B1353 73.929 11.293 7.292 1.00 18.93 C

ATOM 7086 C SER B1353 75.090 10.368 7.655 1.00 19.47 C

ATOM 7087 O SER B1353 75.673 10.486 8.729 1.00 20.28 O

ATOM 7088 CB SER B1353 72.612 10.634 7.736 1.00 20.80 C

ATOM 7089 OG SER B1353 72.406 9.372 7.095 1.00 20.94 O

ATOM 7090 N GLY B1354 75.412 9.435 6.767 1.00 20.94 N

ATOM 7091 CA GLY B1354 76.486 8.498 7.046 1.00 22.21 C

ATOM 7092 C GLY B1354 76.030 7.411 8.002 1.00 22.32 C

ATOM 7093 O GLY B1354 76.826 6.620 8.483 1.00 24.34 O

ATOM 7094 N TYR B1355 74.737 7.379 8.273 1.00 21.77 N

ATOM 7095 CA TYR B1355 74.171 6.401 9.172 1.00 21.12 C

ATOM 7096 C TYR B1355 74.284 5.025 8.559 1.00 23.16 C

ATOM 7097 O TYR B1355 74.291 4.874 7.336 1.00 22.11 O

ATOM 7098 CB TYR B1355 72.690 6.715 9.437 1.00 24.89 C

ATOM 7099 CG TYR B1355 72.437 7.989 10.223 1.00 23.12 C

ATOM 7100 CD1 TYR B1355 73.463 8.614 10.907 1.00 25.59 C

ATOM 7101 CD2 TYR B1355 71.183 8.571 10.263 1.00 20.83 C

ATOM 7102 CE1 TYR B1355 73.253 9.784 11.611 1.00 27.59 C

ATOM 7103 CE2 TYR B1355 70.960 9.742 10.963 1.00 22.91 C

ATOM 7104 CZ TYR B1355 71.998 10.350 11.639 1.00 27.21 C

ATOM 7105 OH TYR B1355 71.798 11.522 12.356 1.00 27.06 O

ATOM 7106 N HIS B1356 74.377 4.020 9.426 1.00 28.49 N

ATOM 7107 CA HIS B1356 74.447 2.621 9.006 1.00 29.47 C

ATOM 7108 C HIS B1356 73.020 2.110 9.051 1.00 30.06 C

ATOM 7109 O HIS B1356 72.695 1.049 8.510 1.00 29.78 O

ATOM 7110 CB HIS B1356 75.336 1.811 9.952 1.00 31.01 C

ATOM 7111 CG HIS B1356 76.795 1.978 9.673 1.00 34.23 C

ATOM 7112 ND1 HIS B1356 77.713 2.260 10.662 1.00 34.06 N

ATOM 7113 CD2 HIS B1356 77.486 1.954 8.509 1.00 33.52 C

ATOM 7114 CE1 HIS B1356 78.908 2.403 10.118 1.00 34.28 C

ATOM 7115 NE2 HIS B1356 78.798 2.225 8.814 1.00 34.39 N

ATOM 7116 N PHE B1357 72.170 2.882 9.720 1.00 30.29 N

ATOM 7117 CA PHE B1357 70.766 2.556 9.805 1.00 30.46 C

ATOM 7118 C PHE B1357 70.146 2.968 8.462 1.00 29.82 C

ATOM 7119 O PHE B1357 70.396 4.069 7.965 1.00 27.40 O

ATOM 7120 CB PHE B1357 70.107 3.329 10.937 1.00 31.43 C

ATOM 7121 CG PHE B1357 68.611 3.260 10.904 1.00 34.97 C

ATOM 7122 CD1 PHE B1357 67.957 2.037 11.065 1.00 34.27 C

ATOM 7123 CD2 PHE B1357 67.851 4.413 10.713 1.00 33.98 C

ATOM 7124 CE1 PHE B1357 66.581 1.960 11.039 1.00 32.66 C

ATOM 7125 CE2 PHE B1357 66.475 4.344 10.687 1.00 34.25 C

ATOM 7126 CZ PHE B1357 65.837 3.109 10.852 1.00 34.41 C

ATOM 7127 N LYS B1358 69.354 2.075 7.876 1.00 28.46 N

ATOM 7128 CA LYS B1358 68.715 2.332 6.591 1.00 28.32 C

ATOM 7129 C LYS B1358 67.432 3.130 6.750 1.00 28.52 C

ATOM 7130 O LYS B1358 66.422 2.618 7.224 1.00 27.30 O

ATOM 7131 CB LYS B1358 68.403 1.016 5.890 1.00 31.03 C

ATOM 7132 CG LYS B1358 68.508 1.093 4.390 1.00 34.88 C

ATOM 7133 CD LYS B1358 68.183 -0.252 3.759 1.00 41.84 C

ATOM 7134 CE LYS B1358 69.049 -0.511 2.535 1.00 46.39 C

ATOM 7135 NZ LYS B1358 68.733 -1.806 1.855 1.00 49.37 N

ATOM 7136 N LEU B1359 67.486 4.394 6.344 1.00 29.03 N

ATOM 7137 CA LEU B1359 66.342 5.285 6.436 1.00 28.31 C

ATOM 7138 C LEU B1359 65.193 4.748 5.617 1.00 29.06 C

ATOM 7139 O LEU B1359 65.401 4.067 4.605 1.00 27.92 O

ATOM 7140 CB LEU B1359 66.719 6.677 5.945 1.00 24.90 C

ATOM 7141 CG LEU B1359 67.781 7.254 6.859 1.00 22.00 C

ATOM 7142 CD1 LEU B1359 68.059 8.673 6.469 1.00 26.94 C

ATOM 7143 CD2 LEU B1359 67.313 7.168 8.297 1.00 21.71 C

ATOM 7144 N LYS B1360 63.979 5.065 6.063 1.00 30.01 N

ATOM 7145 CA LYS B1360 62.773 4.609 5.387 1.00 30.04 C

ATOM 7146 C LYS B1360 61.725 5.695 5.185 1.00 29.58 C

ATOM 7147 O LYS B1360 61.372 6.426 6.133 1.00 27.23 O

ATOM 7148 CB LYS B1360 62.144 3.459 6.167 1.00 29.69 C

ATOM 7149 CG LYS B1360 61.495 2.422 5.285 1.00 32.74 C

ATOM 7150 CD LYS B1360 60.943 1.281 6.123 1.00 33.66 C

ATOM 7151 CE LYS B1360 59.555 1.598 6.694 1.00 37.78 C

ATOM 7152 NZ LYS B1360 58.713 0.389 6.937 1.00 31.88 N

ATOM 7153 N PHE B1361 61.248 5.801 3.942 1.00 27.98 N

ATOM 7154 CA PHE B1361 60.196 6.750 3.600 1.00 26.24 C

ATOM 7155 C PHE B1361 58.899 5.949 3.669 1.00 22.92 C

ATOM 7156 O PHE B1361 58.588 5.175 2.765 1.00 21.75 O

ATOM 7157 CB PHE B1361 60.373 7.333 2.195 1.00 24.45 C

ATOM 7158 CG PHE B1361 59.192 8.153 1.739 1.00 24.29 C

ATOM 7159 CD1 PHE B1361 58.596 9.087 2.600 1.00 23.08 C

ATOM 7160 CD2 PHE B1361 58.670 7.998 0.460 1.00 20.33 C

ATOM 7161 CE1 PHE B1361 57.496 9.855 2.184 1.00 20.69 C

ATOM 7162 CE2 PHE B1361 57.578 8.759 0.046 1.00 18.36 C

ATOM 7163 CZ PHE B1361 56.992 9.689 0.908 1.00 17.46 C

ATOM 7164 N ASP B1362 58.172 6.140 4.767 1.00 23.30 N

ATOM 7165 CA ASP B1362 56.919 5.461 5.033 1.00 21.55 C

ATOM 7166 C ASP B1362 56.019 6.393 5.836 1.00 22.22 C

ATOM 7167 O ASP B1362 56.113 6.436 7.058 1.00 22.17 O

ATOM 7168 CB ASP B1362 57.207 4.209 5.843 1.00 22.05 C

ATOM 7169 CG ASP B1362 55.958 3.444 6.208 1.00 24.46 C

ATOM 7170 OD1 ASP B1362 54.843 3.800 5.765 1.00 23.65 O

ATOM 7171 OD2 ASP B1362 56.101 2.457 6.950 1.00 28.45 O

ATOM 7172 N PRO B1363 55.154 7.171 5.159 1.00 22.72 N

ATOM 7173 CA PRO B1363 54.253 8.092 5.874 1.00 22.41 C

ATOM 7174 C PRO B1363 53.393 7.462 6.979 1.00 24.09 C

ATOM 7175 O PRO B1363 52.933 8.162 7.885 1.00 26.18 O

ATOM 7176 CB PRO B1363 53.401 8.713 4.760 1.00 23.13 C

ATOM 7177 CG PRO B1363 54.241 8.572 3.518 1.00 23.28 C

ATOM 7178 CD PRO B1363 55.005 7.274 3.694 1.00 22.83 C

ATOM 7179 N GLU B1364 53.190 6.147 6.913 1.00 25.52 N

ATOM 7180 CA GLU B1364 52.374 5.434 7.899 1.00 25.49 C

ATOM 7181 C GLU B1364 52.960 5.415 9.302 1.00 23.15 C

ATOM 7182 O GLU B1364 52.228 5.243 10.272 1.00 23.40 O

ATOM 7183 CB GLU B1364 52.133 3.992 7.448 1.00 27.63 C

ATOM 7184 CG GLU B1364 51.976 3.834 5.939 1.00 38.87 C

ATOM 7185 CD GLU B1364 51.012 2.712 5.570 1.00 45.04 C

ATOM 7186 OE1 GLU B1364 50.491 2.693 4.430 1.00 46.25 O

ATOM 7187 OE2 GLU B1364 50.776 1.841 6.436 1.00 48.32 O

ATOM 7188 N LEU B1365 54.274 5.597 9.408 1.00 22.81 N

ATOM 7189 CA LEU B1365 54.967 5.583 10.697 1.00 20.90 C

ATOM 7190 C LEU B1365 54.531 6.747 11.574 1.00 21.75 C

ATOM 7191 O LEU B1365 54.735 6.740 12.794 1.00 23.27 O

ATOM 7192 CB LEU B1365 56.489 5.640 10.493 1.00 21.50 C

ATOM 7193 CG LEU B1365 57.187 4.468 9.778 1.00 22.13 C

ATOM 7194 CD1 LEU B1365 58.575 4.878 9.346 1.00 22.48 C

ATOM 7195 CD2 LEU B1365 57.281 3.273 10.701 1.00 22.00 C

ATOM 7196 N LEU B1366 53.907 7.739 10.947 1.00 20.96 N

ATOM 7197 CA LEU B1366 53.449 8.919 11.661 1.00 19.37 C

ATOM 7198 C LEU B1366 51.951 8.910 11.915 1.00 19.31 C

ATOM 7199 O LEU B1366 51.435 9.772 12.625 1.00 20.56 O

ATOM 7200 CB LEU B1366 53.819 10.169 10.864 1.00 18.24 C

ATOM 7201 CG LEU B1366 55.308 10.518 10.943 1.00 18.29 C

ATOM 7202 CD1 LEU B1366 55.685 11.445 9.793 1.00 16.50 C

ATOM 7203 CD2 LEU B1366 55.603 11.165 12.298 1.00 17.57 C

ATOM 7204 N PHE B1367 51.263 7.922 11.352 1.00 18.81 N

ATOM 7205 CA PHE B1367 49.812 7.827 11.470 1.00 20.37 C

ATOM 7206 C PHE B1367 49.237 7.704 12.877 1.00 24.42 C

ATOM 7207 O PHE B1367 48.084 8.061 13.112 1.00 26.43 O

ATOM 7208 CB PHE B1367 49.287 6.674 10.612 1.00 15.59 C

ATOM 7209 CG PHE B1367 49.260 6.975 9.137 1.00 13.26 C

ATOM 7210 CD1 PHE B1367 48.843 6.015 8.225 1.00 10.51 C

ATOM 7211 CD2 PHE B1367 49.702 8.200 8.654 1.00 11.61 C

ATOM 7212 CE1 PHE B1367 48.876 6.264 6.859 1.00 8.56 C

ATOM 7213 CE2 PHE B1367 49.737 8.460 7.290 1.00 10.01 C

ATOM 7214 CZ PHE B1367 49.325 7.492 6.390 1.00 8.15 C

ATOM 7215 N ASN B1368 50.021 7.195 13.815 1.00 29.36 N

ATOM 7216 CA ASN B1368 49.540 7.056 15.187 1.00 32.15 C

ATOM 7217 C ASN B1368 50.291 8.048 16.056 1.00 31.56 C

ATOM 7218 O ASN B1368 50.366 7.906 17.275 1.00 30.68 O

ATOM 7219 CB ASN B1368 49.765 5.625 15.690 1.00 38.83 C

ATOM 7220 CG ASN B1368 51.215 5.152 15.534 1.00 46.18 C

ATOM 7221 OD1 ASN B1368 51.974 5.629 14.669 1.00 48.75 O

ATOM 7222 ND2 ASN B1368 51.603 4.199 16.376 1.00 48.39 N

ATOM 7223 N GLN B1369 50.828 9.073 15.402 1.00 31.19 N

ATOM 7224 CA GLN B1369 51.608 10.098 16.076 1.00 31.01 C

ATOM 7225 C GLN B1369 50.953 11.459 15.957 1.00 30.23 C

ATOM 7226 O GLN B1369 50.043 11.659 15.162 1.00 31.59 O

ATOM 7227 CB GLN B1369 53.017 10.161 15.471 1.00 31.66 C

ATOM 7228 CG GLN B1369 54.144 9.982 16.480 1.00 32.86 C

ATOM 7229 CD GLN B1369 54.080 8.653 17.237 1.00 32.39 C

ATOM 7230 OE1 GLN B1369 53.888 7.584 16.653 1.00 32.89 O

ATOM 7231 NE2 GLN B1369 54.253 8.723 18.542 1.00 30.97 N

ATOM 7232 N GLN B1370 51.420 12.400 16.764 1.00 29.79 N

ATOM 7233 CA GLN B1370 50.893 13.751 16.717 1.00 29.46 C

ATOM 7234 C GLN B1370 51.816 14.482 15.759 1.00 27.23 C

ATOM 7235 O GLN B1370 52.978 14.701 16.070 1.00 30.03 O

ATOM 7236 CB GLN B1370 50.950 14.374 18.101 1.00 29.99 C

ATOM 7237 CG GLN B1370 49.727 14.067 18.928 1.00 34.17 C

ATOM 7238 CD GLN B1370 49.677 14.904 20.163 1.00 36.25 C

ATOM 7239 OE1 GLN B1370 50.123 14.480 21.221 1.00 41.30 O

ATOM 7240 NE2 GLN B1370 49.136 16.110 20.042 1.00 39.54 N

ATOM 7241 N PHE B1371 51.308 14.850 14.589 1.00 25.64 N

ATOM 7242 CA PHE B1371 52.137 15.513 13.587 1.00 22.87 C

ATOM 7243 C PHE B1371 51.326 16.468 12.715 1.00 20.80 C

ATOM 7244 O PHE B1371 50.220 16.146 12.298 1.00 19.72 O

ATOM 7245 CB PHE B1371 52.796 14.443 12.723 1.00 24.44 C

ATOM 7246 CG PHE B1371 53.792 14.976 11.748 1.00 27.88 C

ATOM 7247 CD1 PHE B1371 55.076 15.323 12.161 1.00 27.70 C

ATOM 7248 CD2 PHE B1371 53.458 15.124 10.418 1.00 26.97 C

ATOM 7249 CE1 PHE B1371 56.014 15.813 11.256 1.00 26.33 C

ATOM 7250 CE2 PHE B1371 54.396 15.615 9.511 1.00 30.73 C

ATOM 7251 CZ PHE B1371 55.677 15.959 9.937 1.00 26.39 C

ATOM 7252 N GLN B1372 51.877 17.648 12.449 1.00 20.01 N

ATOM 7253 CA GLN B1372 51.189 18.642 11.629 1.00 18.13 C

ATOM 7254 C GLN B1372 51.572 18.502 10.181 1.00 16.96 C

ATOM 7255 O GLN B1372 52.721 18.699 9.817 1.00 19.58 O

ATOM 7256 CB GLN B1372 51.524 20.058 12.084 1.00 15.12 C

ATOM 7257 CG GLN B1372 51.046 20.370 13.495 1.00 13.78 C

ATOM 7258 CD GLN B1372 49.537 20.268 13.654 1.00 13.12 C

ATOM 7259 OE1 GLN B1372 48.775 20.976 12.986 1.00 14.56 O

ATOM 7260 NE2 GLN B1372 49.099 19.386 14.553 1.00 9.69 N

ATOM 7261 N TYR B1373 50.595 18.152 9.356 1.00 18.74 N

ATOM 7262 CA TYR B1373 50.817 17.986 7.930 1.00 17.49 C

ATOM 7263 C TYR B1373 50.840 19.329 7.233 1.00 15.54 C

ATOM 7264 O TYR B1373 49.995 19.613 6.379 1.00 16.63 O

ATOM 7265 CB TYR B1373 49.734 17.080 7.332 1.00 14.33 C

ATOM 7266 CG TYR B1373 49.973 15.655 7.706 1.00 12.95 C

ATOM 7267 CD1 TYR B1373 49.139 14.998 8.593 1.00 16.89 C

ATOM 7268 CD2 TYR B1373 51.095 14.993 7.248 1.00 15.97 C

ATOM 7269 CE1 TYR B1373 49.422 13.706 9.023 1.00 18.72 C

ATOM 7270 CE2 TYR B1373 51.394 13.703 7.667 1.00 17.60 C

ATOM 7271 CZ TYR B1373 50.556 13.067 8.554 1.00 20.79 C

ATOM 7272 OH TYR B1373 50.874 11.792 8.969 1.00 25.11 O

ATOM 7273 N GLN B1374 51.805 20.154 7.625 1.00 12.70 N

ATOM 7274 CA GLN B1374 51.984 21.471 7.031 1.00 14.81 C

ATOM 7275 C GLN B1374 53.440 21.945 7.195 1.00 16.41 C

ATOM 7276 O GLN B1374 54.229 21.325 7.939 1.00 15.52 O

ATOM 7277 CB GLN B1374 50.994 22.483 7.638 1.00 11.51 C

ATOM 7278 CG GLN B1374 51.383 23.027 8.978 1.00 15.82 C

ATOM 7279 CD GLN B1374 50.327 23.943 9.548 1.00 18.40 C

ATOM 7280 OE1 GLN B1374 50.339 25.152 9.300 1.00 20.42 O

ATOM 7281 NE2 GLN B1374 49.401 23.379 10.321 1.00 20.48 N

ATOM 7282 N ASN B1375 53.796 23.019 6.486 1.00 13.20 N

ATOM 7283 CA ASN B1375 55.144 23.530 6.556 1.00 10.03 C

ATOM 7284 C ASN B1375 55.255 24.982 6.133 1.00 11.59 C

ATOM 7285 O ASN B1375 54.371 25.535 5.470 1.00 12.28 O

ATOM 7286 CB ASN B1375 56.060 22.664 5.698 1.00 8.68 C

ATOM 7287 CG ASN B1375 57.535 22.878 5.994 1.00 8.14 C

ATOM 7288 OD1 ASN B1375 57.963 22.892 7.158 1.00 9.88 O

ATOM 7289 ND2 ASN B1375 58.321 23.040 4.933 1.00 4.14 N

ATOM 7290 N ARG B1376 56.361 25.592 6.549 1.00 12.19 N

ATOM 7291 CA ARG B1376 56.672 26.974 6.254 1.00 9.42 C

ATOM 7292 C ARG B1376 58.199 27.035 6.217 1.00 11.37 C

ATOM 7293 O ARG B1376 58.863 26.896 7.247 1.00 12.23 O

ATOM 7294 CB ARG B1376 56.117 27.873 7.359 1.00 7.95 C

ATOM 7295 CG ARG B1376 56.048 29.362 6.997 1.00 8.39 C

ATOM 7296 CD ARG B1376 54.986 29.657 5.948 1.00 9.20 C

ATOM 7297 NE ARG B1376 54.064 30.709 6.376 1.00 8.49 N

ATOM 7298 CZ ARG B1376 52.892 30.466 6.954 1.00 9.07 C

ATOM 7299 NH1 ARG B1376 52.520 29.214 7.159 1.00 14.89 N

ATOM 7300 NH2 ARG B1376 52.110 31.453 7.359 1.00 2.27 N

ATOM 7301 N ILE B1377 58.743 27.205 5.013 1.00 12.44 N

ATOM 7302 CA ILE B1377 60.188 27.285 4.798 1.00 8.12 C

ATOM 7303 C ILE B1377 60.805 28.351 5.693 1.00 8.06 C

ATOM 7304 O ILE B1377 60.369 29.506 5.690 1.00 6.37 O

ATOM 7305 CB ILE B1377 60.495 27.586 3.319 1.00 3.97 C

ATOM 7306 CG1 ILE B1377 59.981 26.439 2.475 1.00 2.00 C

ATOM 7307 CG2 ILE B1377 61.986 27.708 3.078 1.00 5.29 C

ATOM 7308 CD1 ILE B1377 60.712 25.207 2.728 1.00 2.19 C

ATOM 7309 N ALA B1378 61.815 27.941 6.462 1.00 6.38 N

ATOM 7310 CA ALA B1378 62.512 28.832 7.383 1.00 7.27 C

ATOM 7311 C ALA B1378 63.648 29.592 6.725 1.00 6.45 C

ATOM 7312 O ALA B1378 64.298 29.084 5.814 1.00 8.40 O

ATOM 7313 CB ALA B1378 63.050 28.022 8.556 1.00 8.07 C

ATOM 7314 N SER B1379 63.900 30.810 7.183 1.00 7.13 N

ATOM 7315 CA SER B1379 65.000 31.561 6.605 1.00 11.19 C

ATOM 7316 C SER B1379 66.318 30.891 6.973 1.00 12.25 C

ATOM 7317 O SER B1379 67.197 30.729 6.134 1.00 13.09 O

ATOM 7318 CB SER B1379 65.013 33.004 7.101 1.00 12.55 C

ATOM 7319 OG SER B1379 65.884 33.783 6.290 1.00 14.83 O

ATOM 7320 N GLU B1380 66.450 30.500 8.235 1.00 14.26 N

ATOM 7321 CA GLU B1380 67.674 29.862 8.694 1.00 15.81 C

ATOM 7322 C GLU B1380 67.973 28.588 7.912 1.00 15.43 C

ATOM 7323 O GLU B1380 69.129 28.275 7.644 1.00 20.21 O

ATOM 7324 CB GLU B1380 67.586 29.562 10.189 1.00 13.73 C

ATOM 7325 CG GLU B1380 67.463 30.813 11.032 1.00 12.36 C

ATOM 7326 CD GLU B1380 66.026 31.101 11.409 1.00 15.02 C

ATOM 7327 OE1 GLU B1380 65.130 30.409 10.870 1.00 12.08 O

ATOM 7328 OE2 GLU B1380 65.789 32.011 12.239 1.00 13.57 O

ATOM 7329 N PHE B1381 66.941 27.845 7.544 1.00 14.41 N

ATOM 7330 CA PHE B1381 67.161 26.627 6.779 1.00 14.03 C

ATOM 7331 C PHE B1381 67.814 27.039 5.478 1.00 11.94 C

ATOM 7332 O PHE B1381 68.783 26.446 5.057 1.00 13.14 O

ATOM 7333 CB PHE B1381 65.831 25.934 6.491 1.00 16.47 C

ATOM 7334 CG PHE B1381 65.970 24.560 5.903 1.00 15.57 C

ATOM 7335 CD1 PHE B1381 66.984 23.717 6.308 1.00 17.37 C

ATOM 7336 CD2 PHE B1381 65.052 24.100 4.974 1.00 16.54 C

ATOM 7337 CE1 PHE B1381 67.070 22.446 5.798 1.00 17.78 C

ATOM 7338 CE2 PHE B1381 65.134 22.840 4.466 1.00 14.32 C

ATOM 7339 CZ PHE B1381 66.138 22.009 4.875 1.00 18.49 C

ATOM 7340 N ASN B1382 67.272 28.078 4.855 1.00 13.50 N

ATOM 7341 CA ASN B1382 67.796 28.608 3.597 1.00 10.54 C

ATOM 7342 C ASN B1382 69.247 29.052 3.768 1.00 12.08 C

ATOM 7343 O ASN B1382 70.075 28.807 2.905 1.00 13.69 O

ATOM 7344 CB ASN B1382 66.931 29.782 3.141 1.00 9.77 C

ATOM 7345 CG ASN B1382 67.401 30.381 1.846 1.00 9.97 C

ATOM 7346 OD1 ASN B1382 68.526 30.832 1.747 1.00 17.86 O

ATOM 7347 ND2 ASN B1382 66.544 30.395 0.848 1.00 10.77 N

ATOM 7348 N THR B1383 69.558 29.703 4.889 1.00 15.64 N

ATOM 7349 CA THR B1383 70.923 30.159 5.171 1.00 15.63 C

ATOM 7350 C THR B1383 71.876 28.962 5.357 1.00 13.80 C

ATOM 7351 O THR B1383 72.968 28.922 4.801 1.00 14.92 O

ATOM 7352 CB THR B1383 70.973 31.090 6.454 1.00 15.16 C

ATOM 7353 OG1 THR B1383 70.429 32.384 6.151 1.00 17.96 O

ATOM 7354 CG2 THR B1383 72.398 31.330 6.885 1.00 17.29 C

ATOM 7355 N LEU B1384 71.452 27.971 6.117 1.00 11.73 N

ATOM 7356 CA LEU B1384 72.299 26.823 6.357 1.00 13.26 C

ATOM 7357 C LEU B1384 72.517 25.950 5.124 1.00 14.21 C

ATOM 7358 O LEU B1384 73.357 25.036 5.148 1.00 16.90 O

ATOM 7359 CB LEU B1384 71.711 25.973 7.488 1.00 10.49 C

ATOM 7360 CG LEU B1384 70.421 25.191 7.211 1.00 12.88 C

ATOM 7361 CD1 LEU B1384 70.725 23.820 6.544 1.00 8.22 C

ATOM 7362 CD2 LEU B1384 69.689 25.000 8.530 1.00 9.90 C

ATOM 7363 N TYR B1385 71.778 26.232 4.051 1.00 12.25 N

ATOM 7364 CA TYR B1385 71.855 25.416 2.842 1.00 12.32 C

ATOM 7365 C TYR B1385 72.743 25.955 1.740 1.00 15.09 C

ATOM 7366 O TYR B1385 72.862 25.348 0.677 1.00 16.65 O

ATOM 7367 CB TYR B1385 70.444 25.144 2.284 1.00 11.61 C

ATOM 7368 CG TYR B1385 70.125 23.657 2.101 1.00 14.14 C

ATOM 7369 CD1 TYR B1385 69.294 22.975 2.998 1.00 11.42 C

ATOM 7370 CD2 TYR B1385 70.679 22.931 1.046 1.00 11.55 C

ATOM 7371 CE1 TYR B1385 69.033 21.614 2.841 1.00 8.83 C

ATOM 7372 CE2 TYR B1385 70.427 21.587 0.886 1.00 9.26 C

ATOM 7373 CZ TYR B1385 69.605 20.928 1.776 1.00 9.68 C

ATOM 7374 OH TYR B1385 69.343 19.585 1.568 1.00 10.59 O

ATOM 7375 N HIS B1386 73.376 27.094 1.979 1.00 18.54 N

ATOM 7376 CA HIS B1386 74.276 27.679 0.986 1.00 18.95 C

ATOM 7377 C HIS B1386 75.566 26.851 1.009 1.00 20.06 C

ATOM 7378 O HIS B1386 76.588 27.239 1.604 1.00 17.63 O

ATOM 7379 CB HIS B1386 74.533 29.146 1.332 1.00 24.40 C

ATOM 7380 CG HIS B1386 73.365 30.044 1.048 1.00 25.56 C

ATOM 7381 ND1 HIS B1386 73.445 31.125 0.195 1.00 29.86 N

ATOM 7382 CD2 HIS B1386 72.075 29.987 1.458 1.00 26.06 C

ATOM 7383 CE1 HIS B1386 72.258 31.696 0.090 1.00 28.70 C

ATOM 7384 NE2 HIS B1386 71.408 31.024 0.849 1.00 27.88 N

ATOM 7385 N TRP B1387 75.475 25.689 0.352 1.00 19.13 N

ATOM 7386 CA TRP B1387 76.548 24.700 0.259 1.00 15.37 C

ATOM 7387 C TRP B1387 77.508 24.918 -0.912 1.00 16.37 C

ATOM 7388 O TRP B1387 77.893 23.971 -1.605 1.00 15.92 O

ATOM 7389 CB TRP B1387 75.916 23.321 0.163 1.00 10.17 C

ATOM 7390 CG TRP B1387 75.250 22.920 1.418 1.00 11.19 C

ATOM 7391 CD1 TRP B1387 75.260 23.600 2.611 1.00 12.63 C

ATOM 7392 CD2 TRP B1387 74.490 21.723 1.648 1.00 12.40 C

ATOM 7393 NE1 TRP B1387 74.553 22.898 3.568 1.00 13.23 N

ATOM 7394 CE2 TRP B1387 74.072 21.743 3.003 1.00 13.10 C

ATOM 7395 CE3 TRP B1387 74.122 20.636 0.844 1.00 11.22 C

ATOM 7396 CZ2 TRP B1387 73.310 20.721 3.562 1.00 13.76 C

ATOM 7397 CZ3 TRP B1387 73.366 19.621 1.406 1.00 10.53 C

ATOM 7398 CH2 TRP B1387 72.970 19.669 2.751 1.00 11.41 C

ATOM 7399 N HIS B1388 77.910 26.171 -1.121 1.00 19.28 N

ATOM 7400 CA HIS B1388 78.818 26.498 -2.224 1.00 20.00 C

ATOM 7401 C HIS B1388 80.211 25.844 -2.094 1.00 19.56 C

ATOM 7402 O HIS B1388 80.898 25.624 -3.093 1.00 14.74 O

ATOM 7403 CB HIS B1388 78.902 28.020 -2.386 1.00 19.54 C

ATOM 7404 CG HIS B1388 77.523 28.562 -2.790 1.00 19.40 C

ATOM 7405 ND1 HIS B1388 76.683 29.198 -1.885 1.00 18.67 N

ATOM 7406 CD2 HIS B1388 76.927 28.468 -4.059 1.00 17.58 C

ATOM 7407 CE1 HIS B1388 75.597 29.492 -2.624 1.00 17.33 C

ATOM 7408 NE2 HIS B1388 75.687 29.091 -3.860 1.00 18.32 N

ATOM 7409 N PRO B1389 80.653 25.548 -0.856 1.00 19.19 N

ATOM 7410 CA PRO B1389 81.963 24.904 -0.739 1.00 18.47 C

ATOM 7411 C PRO B1389 81.946 23.567 -1.490 1.00 18.50 C

ATOM 7412 O PRO B1389 83.006 23.002 -1.794 1.00 21.45 O

ATOM 7413 CB PRO B1389 82.148 24.704 0.774 1.00 17.95 C

ATOM 7414 CG PRO B1389 81.211 25.678 1.416 1.00 17.24 C

ATOM 7415 CD PRO B1389 80.049 25.829 0.462 1.00 19.18 C

ATOM 7416 N LEU B1390 80.744 23.070 -1.789 1.00 16.57 N

ATOM 7417 CA LEU B1390 80.569 21.795 -2.497 1.00 15.80 C

ATOM 7418 C LEU B1390 81.213 21.783 -3.883 1.00 13.37 C

ATOM 7419 O LEU B1390 81.832 20.799 -4.292 1.00 10.86 O

ATOM 7420 CB LEU B1390 79.073 21.470 -2.639 1.00 17.03 C

ATOM 7421 CG LEU B1390 78.474 20.506 -1.598 1.00 19.78 C

ATOM 7422 CD1 LEU B1390 76.993 20.298 -1.880 1.00 19.62 C

ATOM 7423 CD2 LEU B1390 79.189 19.165 -1.634 1.00 17.35 C

ATOM 7424 N LEU B1391 81.051 22.891 -4.594 1.00 12.48 N

ATOM 7425 CA LEU B1391 81.570 23.054 -5.942 1.00 13.85 C

ATOM 7426 C LEU B1391 83.071 22.913 -6.079 1.00 17.14 C

ATOM 7427 O LEU B1391 83.828 23.341 -5.224 1.00 19.00 O

ATOM 7428 CB LEU B1391 81.180 24.424 -6.489 1.00 11.50 C

ATOM 7429 CG LEU B1391 79.794 24.986 -6.201 1.00 7.52 C

ATOM 7430 CD1 LEU B1391 79.824 26.475 -6.443 1.00 4.71 C

ATOM 7431 CD2 LEU B1391 78.775 24.314 -7.090 1.00 8.58 C

ATOM 7432 N PRO B1392 83.517 22.307 -7.184 1.00 21.96 N

ATOM 7433 CA PRO B1392 84.931 22.092 -7.486 1.00 24.63 C

ATOM 7434 C PRO B1392 85.519 23.324 -8.171 1.00 24.54 C

ATOM 7435 O PRO B1392 84.821 24.332 -8.341 1.00 19.16 O

ATOM 7436 CB PRO B1392 84.913 20.858 -8.397 1.00 26.97 C

ATOM 7437 CG PRO B1392 83.591 20.947 -9.123 1.00 22.50 C

ATOM 7438 CD PRO B1392 82.640 21.738 -8.231 1.00 25.34 C

ATOM 7439 N ASP B1393 86.793 23.232 -8.569 1.00 26.41 N

ATOM 7440 CA ASP B1393 87.482 24.349 -9.227 1.00 29.40 C

ATOM 7441 C ASP B1393 87.257 24.326 -10.734 1.00 26.76 C

ATOM 7442 O ASP B1393 87.384 25.346 -11.417 1.00 25.54 O

ATOM 7443 CB ASP B1393 88.974 24.317 -8.906 1.00 35.90 C

ATOM 7444 CG ASP B1393 89.262 24.668 -7.451 1.00 41.94 C

ATOM 7445 OD1 ASP B1393 90.166 24.027 -6.860 1.00 42.03 O

ATOM 7446 OD2 ASP B1393 88.581 25.581 -6.910 1.00 43.82 O

ATOM 7447 N THR B1394 86.914 23.148 -11.240 1.00 24.41 N

ATOM 7448 CA THR B1394 86.586 22.965 -12.653 1.00 24.42 C

ATOM 7449 C THR B1394 85.567 21.822 -12.771 1.00 23.12 C

ATOM 7450 O THR B1394 85.561 20.892 -11.964 1.00 23.53 O

ATOM 7451 CB THR B1394 87.819 22.631 -13.523 1.00 23.22 C

ATOM 7452 OG1 THR B1394 88.599 21.627 -12.878 1.00 24.31 O

ATOM 7453 CG2 THR B1394 88.661 23.868 -13.756 1.00 22.74 C

ATOM 7454 N PHE B1395 84.693 21.909 -13.763 1.00 18.68 N

ATOM 7455 CA PHE B1395 83.698 20.878 -13.974 1.00 17.36 C

ATOM 7456 C PHE B1395 84.215 19.970 -15.091 1.00 20.06 C

ATOM 7457 O PHE B1395 84.320 20.374 -16.252 1.00 20.56 O

ATOM 7458 CB PHE B1395 82.364 21.550 -14.302 1.00 11.22 C

ATOM 7459 CG PHE B1395 81.910 22.478 -13.220 1.00 9.56 C

ATOM 7460 CD1 PHE B1395 82.295 23.803 -13.220 1.00 8.70 C

ATOM 7461 CD2 PHE B1395 81.170 22.010 -12.145 1.00 7.89 C

ATOM 7462 CE1 PHE B1395 81.962 24.650 -12.174 1.00 6.27 C

ATOM 7463 CE2 PHE B1395 80.835 22.854 -11.096 1.00 6.22 C

ATOM 7464 CZ PHE B1395 81.236 24.177 -11.114 1.00 4.16 C

ATOM 7465 N ASN B1396 84.554 18.737 -14.728 1.00 21.46 N

ATOM 7466 CA ASN B1396 85.129 17.809 -15.697 1.00 24.93 C

ATOM 7467 C ASN B1396 84.161 16.804 -16.259 1.00 26.78 C

ATOM 7468 O ASN B1396 83.862 15.795 -15.620 1.00 26.96 O

ATOM 7469 CB ASN B1396 86.332 17.046 -15.093 1.00 23.84 C

ATOM 7470 CG ASN B1396 87.145 17.888 -14.085 1.00 22.20 C

ATOM 7471 OD1 ASN B1396 87.419 19.085 -14.294 1.00 16.58 O

ATOM 7472 ND2 ASN B1396 87.537 17.248 -12.988 1.00 19.76 N

ATOM 7473 N ILE B1397 83.700 17.084 -17.474 1.00 30.74 N

ATOM 7474 CA ILE B1397 82.765 16.219 -18.191 1.00 34.68 C

ATOM 7475 C ILE B1397 83.537 15.540 -19.322 1.00 34.63 C

ATOM 7476 O ILE B1397 83.961 16.190 -20.271 1.00 34.42 O

ATOM 7477 CB ILE B1397 81.584 17.044 -18.766 1.00 33.90 C

ATOM 7478 CG1 ILE B1397 80.791 17.659 -17.613 1.00 33.08 C

ATOM 7479 CG2 ILE B1397 80.669 16.160 -19.601 1.00 33.52 C

ATOM 7480 CD1 ILE B1397 80.822 19.159 -17.578 1.00 32.35 C

ATOM 7481 N GLU B1398 83.735 14.232 -19.194 1.00 38.14 N

ATOM 7482 CA GLU B1398 84.471 13.459 -20.185 1.00 42.23 C

ATOM 7483 C GLU B1398 85.958 13.836 -20.216 1.00 42.53 C

ATOM 7484 O GLU B1398 86.684 13.668 -19.232 1.00 41.01 O

ATOM 7485 CB GLU B1398 83.851 13.661 -21.564 1.00 43.56 C

ATOM 7486 CG GLU B1398 83.340 12.383 -22.173 1.00 49.13 C

ATOM 7487 CD GLU B1398 83.072 12.497 -23.664 1.00 53.56 C

ATOM 7488 OE1 GLU B1398 82.037 13.085 -24.048 1.00 55.42 O

ATOM 7489 OE2 GLU B1398 83.899 11.994 -24.454 1.00 54.18 O

ATOM 7490 N ASP B1399 86.399 14.361 -21.352 1.00 43.48 N

ATOM 7491 CA ASP B1399 87.787 14.759 -21.536 1.00 44.50 C

ATOM 7492 C ASP B1399 88.066 16.153 -20.993 1.00 44.07 C

ATOM 7493 O ASP B1399 89.163 16.429 -20.513 1.00 44.28 O

ATOM 7494 CB ASP B1399 88.139 14.728 -23.026 1.00 47.07 C

ATOM 7495 CG ASP B1399 88.809 13.433 -23.435 1.00 52.57 C

ATOM 7496 OD1 ASP B1399 88.881 12.506 -22.595 1.00 54.20 O

ATOM 7497 OD2 ASP B1399 89.266 13.343 -24.596 1.00 55.70 O

ATOM 7498 N GLN B1400 87.060 17.021 -21.068 1.00 41.85 N

ATOM 7499 CA GLN B1400 87.178 18.409 -20.639 1.00 36.88 C

ATOM 7500 C GLN B1400 87.333 18.677 -19.157 1.00 35.51 C

ATOM 7501 O GLN B1400 87.287 17.770 -18.320 1.00 34.29 O

ATOM 7502 CB GLN B1400 85.983 19.212 -21.151 1.00 36.01 C

ATOM 7503 CG GLN B1400 85.804 19.149 -22.650 1.00 36.70 C

ATOM 7504 CD GLN B1400 87.074 19.498 -23.391 1.00 37.82 C

ATOM 7505 OE1 GLN B1400 87.484 20.662 -23.449 1.00 37.65 O

ATOM 7506 NE2 GLN B1400 87.713 18.489 -23.958 1.00 38.70 N

ATOM 7507 N GLU B1401 87.529 19.963 -18.874 1.00 33.81 N

ATOM 7508 CA GLU B1401 87.694 20.517 -17.532 1.00 33.14 C

ATOM 7509 C GLU B1401 87.274 21.986 -17.692 1.00 30.72 C

ATOM 7510 O GLU B1401 88.074 22.844 -18.053 1.00 30.48 O

ATOM 7511 CB GLU B1401 89.160 20.428 -17.093 1.00 35.36 C

ATOM 7512 CG GLU B1401 89.603 19.037 -16.611 1.00 40.08 C

ATOM 7513 CD GLU B1401 90.845 19.090 -15.715 1.00 42.33 C

ATOM 7514 OE1 GLU B1401 91.260 18.028 -15.186 1.00 41.34 O

ATOM 7515 OE2 GLU B1401 91.400 20.202 -15.542 1.00 44.01 O

ATOM 7516 N TYR B1402 86.007 22.268 -17.430 1.00 28.71 N

ATOM 7517 CA TYR B1402 85.501 23.611 -17.609 1.00 25.21 C

ATOM 7518 C TYR B1402 85.614 24.497 -16.396 1.00 23.92 C

ATOM 7519 O TYR B1402 85.352 24.075 -15.279 1.00 23.57 O

ATOM 7520 CB TYR B1402 84.043 23.555 -18.057 1.00 24.06 C

ATOM 7521 CG TYR B1402 83.817 22.735 -19.307 1.00 21.09 C

ATOM 7522 CD1 TYR B1402 83.879 23.322 -20.562 1.00 21.96 C

ATOM 7523 CD2 TYR B1402 83.549 21.373 -19.233 1.00 19.56 C

ATOM 7524 CE1 TYR B1402 83.678 22.572 -21.712 1.00 22.95 C

ATOM 7525 CE2 TYR B1402 83.348 20.612 -20.378 1.00 20.00 C

ATOM 7526 CZ TYR B1402 83.412 21.217 -21.611 1.00 21.84 C

ATOM 7527 OH TYR B1402 83.208 20.480 -22.754 1.00 24.12 O

ATOM 7528 N SER B1403 86.006 25.740 -16.630 1.00 23.14 N

ATOM 7529 CA SER B1403 86.127 26.708 -15.562 1.00 23.21 C

ATOM 7530 C SER B1403 84.726 27.219 -15.321 1.00 24.70 C

ATOM 7531 O SER B1403 83.829 26.970 -16.120 1.00 27.76 O

ATOM 7532 CB SER B1403 86.998 27.871 -16.007 1.00 24.24 C

ATOM 7533 OG SER B1403 86.318 28.678 -16.957 1.00 22.48 O

ATOM 7534 N PHE B1404 84.532 27.931 -14.224 1.00 26.64 N

ATOM 7535 CA PHE B1404 83.226 28.488 -13.918 1.00 27.94 C

ATOM 7536 C PHE B1404 82.756 29.336 -15.101 1.00 28.72 C

ATOM 7537 O PHE B1404 81.661 29.156 -15.617 1.00 29.10 O

ATOM 7538 CB PHE B1404 83.320 29.342 -12.648 1.00 26.76 C

ATOM 7539 CG PHE B1404 83.084 28.570 -11.392 1.00 27.90 C

ATOM 7540 CD1 PHE B1404 84.044 27.690 -10.923 1.00 26.88 C

ATOM 7541 CD2 PHE B1404 81.880 28.695 -10.693 1.00 29.86 C

ATOM 7542 CE1 PHE B1404 83.817 26.932 -9.770 1.00 28.84 C

ATOM 7543 CE2 PHE B1404 81.640 27.946 -9.542 1.00 30.57 C

ATOM 7544 CZ PHE B1404 82.611 27.060 -9.078 1.00 30.27 C

ATOM 7545 N LYS B1405 83.615 30.250 -15.528 1.00 31.74 N

ATOM 7546 CA LYS B1405 83.328 31.149 -16.634 1.00 33.13 C

ATOM 7547 C LYS B1405 82.742 30.414 -17.830 1.00 34.31 C

ATOM 7548 O LYS B1405 81.793 30.900 -18.457 1.00 36.20 O

ATOM 7549 CB LYS B1405 84.610 31.870 -17.061 1.00 35.98 C

ATOM 7550 CG LYS B1405 84.424 33.326 -17.444 1.00 40.93 C

ATOM 7551 CD LYS B1405 84.117 33.479 -18.935 1.00 46.38 C

ATOM 7552 CE LYS B1405 83.878 34.934 -19.342 1.00 48.26 C

ATOM 7553 NZ LYS B1405 85.063 35.789 -19.038 1.00 51.41 N

ATOM 7554 N GLN B1406 83.303 29.247 -18.151 1.00 32.61 N

ATOM 7555 CA GLN B1406 82.834 28.468 -19.293 1.00 30.37 C

ATOM 7556 C GLN B1406 81.593 27.654 -18.997 1.00 28.56 C

ATOM 7557 O GLN B1406 80.790 27.402 -19.896 1.00 30.02 O

ATOM 7558 CB GLN B1406 83.919 27.498 -19.795 1.00 31.04 C

ATOM 7559 CG GLN B1406 85.354 27.884 -19.468 1.00 33.96 C

ATOM 7560 CD GLN B1406 86.378 27.003 -20.177 1.00 34.22 C

ATOM 7561 OE1 GLN B1406 86.923 26.068 -19.593 1.00 34.83 O

ATOM 7562 NE2 GLN B1406 86.641 27.301 -21.441 1.00 33.65 N

ATOM 7563 N PHE B1407 81.436 27.238 -17.745 1.00 25.72 N

ATOM 7564 CA PHE B1407 80.305 26.409 -17.367 1.00 23.88 C

ATOM 7565 C PHE B1407 78.969 27.132 -17.254 1.00 24.34 C

ATOM 7566 O PHE B1407 77.937 26.630 -17.707 1.00 23.55 O

ATOM 7567 CB PHE B1407 80.601 25.699 -16.057 1.00 22.46 C

ATOM 7568 CG PHE B1407 79.864 24.402 -15.905 1.00 24.91 C

ATOM 7569 CD1 PHE B1407 80.065 23.362 -16.815 1.00 25.50 C

ATOM 7570 CD2 PHE B1407 78.966 24.214 -14.859 1.00 23.14 C

ATOM 7571 CE1 PHE B1407 79.383 22.148 -16.678 1.00 26.76 C

ATOM 7572 CE2 PHE B1407 78.279 23.008 -14.710 1.00 24.40 C

ATOM 7573 CZ PHE B1407 78.485 21.969 -15.621 1.00 25.84 C

ATOM 7574 N LEU B1408 78.989 28.314 -16.652 1.00 24.49 N

ATOM 7575 CA LEU B1408 77.775 29.101 -16.457 1.00 25.87 C

ATOM 7576 C LEU B1408 76.978 29.371 -17.731 1.00 27.39 C

ATOM 7577 O LEU B1408 77.542 29.686 -18.778 1.00 29.75 O

ATOM 7578 CB LEU B1408 78.128 30.418 -15.764 1.00 23.80 C

ATOM 7579 CG LEU B1408 78.488 30.279 -14.279 1.00 24.32 C

ATOM 7580 CD1 LEU B1408 77.503 31.102 -13.492 1.00 24.32 C

ATOM 7581 CD2 LEU B1408 78.462 28.809 -13.816 1.00 23.22 C

ATOM 7582 N TYR B1409 75.657 29.254 -17.621 1.00 27.57 N

ATOM 7583 CA TYR B1409 74.740 29.462 -18.735 1.00 31.53 C

ATOM 7584 C TYR B1409 75.226 28.883 -20.055 1.00 32.09 C

ATOM 7585 O TYR B1409 75.053 29.504 -21.109 1.00 33.52 O

ATOM 7586 CB TYR B1409 74.425 30.949 -18.958 1.00 35.03 C

ATOM 7587 CG TYR B1409 75.061 31.897 -17.992 1.00 40.65 C

ATOM 7588 CD1 TYR B1409 76.293 32.478 -18.270 1.00 45.50 C

ATOM 7589 CD2 TYR B1409 74.434 32.218 -16.799 1.00 44.89 C

ATOM 7590 CE1 TYR B1409 76.893 33.356 -17.381 1.00 47.70 C

ATOM 7591 CE2 TYR B1409 75.019 33.090 -15.900 1.00 49.66 C

ATOM 7592 CZ TYR B1409 76.252 33.659 -16.199 1.00 51.47 C

ATOM 7593 OH TYR B1409 76.850 34.523 -15.310 1.00 53.93 O

ATOM 7594 N ASN B1410 75.828 27.702 -20.019 1.00 30.76 N

ATOM 7595 CA ASN B1410 76.293 27.112 -21.258 1.00 30.71 C

ATOM 7596 C ASN B1410 75.667 25.756 -21.472 1.00 31.46 C

ATOM 7597 O ASN B1410 76.198 24.745 -21.032 1.00 32.39 O

ATOM 7598 CB ASN B1410 77.812 26.985 -21.267 1.00 32.35 C

ATOM 7599 CG ASN B1410 78.350 26.722 -22.656 1.00 36.71 C

ATOM 7600 OD1 ASN B1410 77.606 26.278 -23.522 1.00 34.59 O

ATOM 7601 ND2 ASN B1410 79.635 26.996 -22.877 1.00 42.53 N

ATOM 7602 N ASN B1411 74.536 25.730 -22.163 1.00 31.83 N

ATOM 7603 CA ASN B1411 73.844 24.477 -22.406 1.00 32.44 C

ATOM 7604 C ASN B1411 74.339 23.722 -23.637 1.00 29.71 C

ATOM 7605 O ASN B1411 73.885 22.611 -23.921 1.00 27.68 O

ATOM 7606 CB ASN B1411 72.342 24.741 -22.486 1.00 36.29 C

ATOM 7607 CG ASN B1411 71.779 25.273 -21.176 1.00 37.44 C

ATOM 7608 OD1 ASN B1411 72.129 24.792 -20.087 1.00 35.44 O

ATOM 7609 ND2 ASN B1411 70.908 26.273 -21.276 1.00 38.07 N

ATOM 7610 N SER B1412 75.277 24.326 -24.358 1.00 28.54 N

ATOM 7611 CA SER B1412 75.864 23.676 -25.525 1.00 28.57 C

ATOM 7612 C SER B1412 76.666 22.507 -24.985 1.00 25.47 C

ATOM 7613 O SER B1412 76.758 21.464 -25.616 1.00 22.67 O

ATOM 7614 CB SER B1412 76.807 24.616 -26.296 1.00 28.10 C

ATOM 7615 OG SER B1412 76.581 25.984 -25.994 1.00 31.37 O

ATOM 7616 N ILE B1413 77.246 22.702 -23.806 1.00 25.05 N

ATOM 7617 CA ILE B1413 78.034 21.664 -23.151 1.00 25.54 C

ATOM 7618 C ILE B1413 77.147 20.441 -22.924 1.00 24.56 C

ATOM 7619 O ILE B1413 77.545 19.312 -23.216 1.00 23.14 O

ATOM 7620 CB ILE B1413 78.578 22.124 -21.777 1.00 26.62 C

ATOM 7621 CG1 ILE B1413 79.518 23.315 -21.936 1.00 24.63 C

ATOM 7622 CG2 ILE B1413 79.326 20.986 -21.109 1.00 26.47 C

ATOM 7623 CD1 ILE B1413 80.029 23.832 -20.591 1.00 25.93 C

ATOM 7624 N LEU B1414 75.949 20.669 -22.394 1.00 23.12 N

ATOM 7625 CA LEU B1414 75.030 19.575 -22.167 1.00 21.71 C

ATOM 7626 C LEU B1414 74.720 18.899 -23.496 1.00 22.79 C

ATOM 7627 O LEU B1414 74.885 17.693 -23.633 1.00 23.92 O

ATOM 7628 CB LEU B1414 73.744 20.083 -21.530 1.00 19.29 C

ATOM 7629 CG LEU B1414 72.745 18.963 -21.198 1.00 20.10 C

ATOM 7630 CD1 LEU B1414 73.313 18.004 -20.171 1.00 16.75 C

ATOM 7631 CD2 LEU B1414 71.463 19.577 -20.678 1.00 21.33 C

ATOM 7632 N LEU B1415 74.281 19.682 -24.477 1.00 25.21 N

ATOM 7633 CA LEU B1415 73.961 19.144 -25.807 1.00 26.37 C

ATOM 7634 C LEU B1415 75.165 18.481 -26.449 1.00 28.05 C

ATOM 7635 O LEU B1415 75.041 17.665 -27.355 1.00 27.65 O

ATOM 7636 CB LEU B1415 73.484 20.257 -26.727 1.00 23.41 C

ATOM 7637 CG LEU B1415 72.031 20.630 -26.498 1.00 21.91 C

ATOM 7638 CD1 LEU B1415 71.567 21.508 -27.650 1.00 24.28 C

ATOM 7639 CD2 LEU B1415 71.193 19.368 -26.373 1.00 18.32 C

ATOM 7640 N GLU B1416 76.339 18.858 -25.969 1.00 33.60 N

ATOM 7641 CA GLU B1416 77.603 18.334 -26.473 1.00 35.98 C

ATOM 7642 C GLU B1416 77.840 16.888 -26.065 1.00 32.11 C

ATOM 7643 O GLU B1416 77.903 15.992 -26.897 1.00 31.21 O

ATOM 7644 CB GLU B1416 78.758 19.193 -25.943 1.00 43.54 C

ATOM 7645 CG GLU B1416 80.105 18.839 -26.515 1.00 52.99 C

ATOM 7646 CD GLU B1416 80.211 19.232 -27.971 1.00 60.29 C

ATOM 7647 OE1 GLU B1416 79.515 20.197 -28.368 1.00 62.16 O

ATOM 7648 OE2 GLU B1416 80.983 18.574 -28.712 1.00 65.60 O

ATOM 7649 N HIS B1417 77.957 16.683 -24.764 1.00 28.39 N

ATOM 7650 CA HIS B1417 78.237 15.373 -24.238 1.00 25.78 C

ATOM 7651 C HIS B1417 77.026 14.491 -24.020 1.00 25.81 C

ATOM 7652 O HIS B1417 77.126 13.266 -24.107 1.00 26.80 O

ATOM 7653 CB HIS B1417 79.049 15.538 -22.947 1.00 25.28 C

ATOM 7654 CG HIS B1417 80.216 16.476 -23.089 1.00 25.69 C

ATOM 7655 ND1 HIS B1417 81.477 16.056 -23.466 1.00 22.77 N

ATOM 7656 CD2 HIS B1417 80.303 17.817 -22.936 1.00 24.51 C

ATOM 7657 CE1 HIS B1417 82.285 17.095 -23.539 1.00 20.44 C

ATOM 7658 NE2 HIS B1417 81.599 18.176 -23.222 1.00 21.25 N

ATOM 7659 N GLY B1418 75.877 15.102 -23.753 1.00 24.67 N

ATOM 7660 CA GLY B1418 74.684 14.316 -23.517 1.00 23.20 C

ATOM 7661 C GLY B1418 74.509 13.921 -22.058 1.00 24.55 C

ATOM 7662 O GLY B1418 75.455 13.909 -21.272 1.00 22.76 O

ATOM 7663 N LEU B1419 73.275 13.589 -21.702 1.00 25.58 N

ATOM 7664 CA LEU B1419 72.931 13.208 -20.341 1.00 25.08 C

ATOM 7665 C LEU B1419 73.716 12.026 -19.806 1.00 25.12 C

ATOM 7666 O LEU B1419 74.064 11.993 -18.625 1.00 23.87 O

ATOM 7667 CB LEU B1419 71.432 12.915 -20.250 1.00 26.47 C

ATOM 7668 CG LEU B1419 70.663 14.066 -19.608 1.00 27.38 C

ATOM 7669 CD1 LEU B1419 71.119 14.219 -18.170 1.00 27.74 C

ATOM 7670 CD2 LEU B1419 70.924 15.364 -20.370 1.00 30.93 C

ATOM 7671 N THR B1420 73.986 11.055 -20.675 1.00 25.94 N

ATOM 7672 CA THR B1420 74.724 9.861 -20.278 1.00 26.17 C

ATOM 7673 C THR B1420 76.133 10.215 -19.833 1.00 26.54 C

ATOM 7674 O THR B1420 76.617 9.716 -18.811 1.00 25.82 O

ATOM 7675 CB THR B1420 74.807 8.855 -21.438 1.00 24.93 C

ATOM 7676 OG1 THR B1420 73.577 8.889 -22.169 1.00 23.99 O

ATOM 7677 CG2 THR B1420 75.039 7.436 -20.906 1.00 22.97 C

ATOM 7678 N GLN B1421 76.774 11.087 -20.608 1.00 26.76 N

ATOM 7679 CA GLN B1421 78.128 11.535 -20.323 1.00 26.89 C

ATOM 7680 C GLN B1421 78.184 12.369 -19.050 1.00 26.54 C

ATOM 7681 O GLN B1421 79.129 12.250 -18.274 1.00 26.42 O

ATOM 7682 CB GLN B1421 78.665 12.351 -21.493 1.00 29.57 C

ATOM 7683 CG GLN B1421 80.165 12.511 -21.468 1.00 38.28 C

ATOM 7684 CD GLN B1421 80.896 11.183 -21.608 1.00 42.21 C

ATOM 7685 OE1 GLN B1421 81.505 10.681 -20.653 1.00 41.49 O

ATOM 7686 NE2 GLN B1421 80.844 10.608 -22.808 1.00 43.67 N

ATOM 7687 N PHE B1422 77.167 13.218 -18.843 1.00 26.22 N

ATOM 7688 CA PHE B1422 77.078 14.072 -17.656 1.00 20.87 C

ATOM 7689 C PHE B1422 76.919 13.226 -16.410 1.00 21.12 C

ATOM 7690 O PHE B1422 77.617 13.432 -15.427 1.00 20.24 O

ATOM 7691 CB PHE B1422 75.896 15.010 -17.781 1.00 16.58 C

ATOM 7692 CG PHE B1422 76.274 16.358 -18.247 1.00 14.02 C

ATOM 7693 CD1 PHE B1422 76.877 16.522 -19.480 1.00 11.98 C

ATOM 7694 CD2 PHE B1422 76.054 17.461 -17.448 1.00 15.16 C

ATOM 7695 CE1 PHE B1422 77.254 17.747 -19.915 1.00 13.62 C

ATOM 7696 CE2 PHE B1422 76.427 18.706 -17.866 1.00 15.40 C

ATOM 7697 CZ PHE B1422 77.033 18.851 -19.115 1.00 18.22 C

ATOM 7698 N VAL B1423 75.994 12.268 -16.471 1.00 22.61 N

ATOM 7699 CA VAL B1423 75.738 11.350 -15.367 1.00 22.84 C

ATOM 7700 C VAL B1423 77.017 10.566 -15.038 1.00 23.99 C

ATOM 7701 O VAL B1423 77.402 10.465 -13.869 1.00 25.26 O

ATOM 7702 CB VAL B1423 74.593 10.346 -15.710 1.00 20.01 C

ATOM 7703 CG1 VAL B1423 74.317 9.433 -14.530 1.00 16.30 C

ATOM 7704 CG2 VAL B1423 73.329 11.105 -16.061 1.00 19.18 C

ATOM 7705 N GLU B1424 77.684 10.027 -16.057 1.00 24.57 N

ATOM 7706 CA GLU B1424 78.905 9.253 -15.821 1.00 26.49 C

ATOM 7707 C GLU B1424 80.054 10.104 -15.273 1.00 25.36 C

ATOM 7708 O GLU B1424 80.786 9.682 -14.364 1.00 23.14 O

ATOM 7709 CB GLU B1424 79.357 8.565 -17.109 1.00 27.84 C

ATOM 7710 CG GLU B1424 78.657 7.270 -17.368 1.00 31.64 C

ATOM 7711 CD GLU B1424 78.885 6.795 -18.769 1.00 34.54 C

ATOM 7712 OE1 GLU B1424 79.380 7.595 -19.591 1.00 35.83 O

ATOM 7713 OE2 GLU B1424 78.572 5.619 -19.049 1.00 37.05 O

ATOM 7714 N SER B1425 80.192 11.307 -15.824 1.00 24.31 N

ATOM 7715 CA SER B1425 81.246 12.221 -15.425 1.00 22.40 C

ATOM 7716 C SER B1425 81.029 12.821 -14.053 1.00 23.62 C

ATOM 7717 O SER B1425 81.976 12.920 -13.265 1.00 25.31 O

ATOM 7718 CB SER B1425 81.369 13.344 -16.443 1.00 20.75 C

ATOM 7719 OG SER B1425 81.800 12.836 -17.693 1.00 27.95 O

ATOM 7720 N PHE B1426 79.785 13.206 -13.760 1.00 22.23 N

ATOM 7721 CA PHE B1426 79.473 13.832 -12.479 1.00 19.95 C

ATOM 7722 C PHE B1426 79.406 12.841 -11.331 1.00 19.76 C

ATOM 7723 O PHE B1426 79.531 13.227 -10.170 1.00 20.07 O

ATOM 7724 CB PHE B1426 78.175 14.626 -12.586 1.00 22.78 C

ATOM 7725 CG PHE B1426 78.349 15.992 -13.201 1.00 25.01 C

ATOM 7726 CD1 PHE B1426 79.606 16.579 -13.278 1.00 26.63 C

ATOM 7727 CD2 PHE B1426 77.263 16.678 -13.707 1.00 24.92 C

ATOM 7728 CE1 PHE B1426 79.774 17.813 -13.847 1.00 25.02 C

ATOM 7729 CE2 PHE B1426 77.427 17.914 -14.276 1.00 28.05 C

ATOM 7730 CZ PHE B1426 78.686 18.483 -14.347 1.00 27.84 C

ATOM 7731 N THR B1427 79.203 11.567 -11.662 1.00 18.90 N

ATOM 7732 CA THR B1427 79.163 10.480 -10.677 1.00 17.94 C

ATOM 7733 C THR B1427 80.606 10.168 -10.242 1.00 18.49 C

ATOM 7734 O THR B1427 80.848 9.643 -9.156 1.00 17.08 O

ATOM 7735 CB THR B1427 78.530 9.196 -11.299 1.00 15.68 C

ATOM 7736 OG1 THR B1427 77.180 9.483 -11.682 1.00 11.50 O

ATOM 7737 CG2 THR B1427 78.559 8.020 -10.310 1.00 10.96 C

ATOM 7738 N ARG B1428 81.556 10.519 -11.107 1.00 21.26 N

ATOM 7739 CA ARG B1428 82.982 10.288 -10.862 1.00 24.35 C

ATOM 7740 C ARG B1428 83.726 11.449 -10.179 1.00 22.11 C

ATOM 7741 O ARG B1428 84.733 11.230 -9.503 1.00 21.90 O

ATOM 7742 CB ARG B1428 83.690 9.965 -12.184 1.00 25.43 C

ATOM 7743 CG ARG B1428 83.732 8.490 -12.506 1.00 28.97 C

ATOM 7744 CD ARG B1428 84.376 8.211 -13.863 1.00 32.52 C

ATOM 7745 NE ARG B1428 84.447 9.385 -14.737 1.00 36.18 N

ATOM 7746 CZ ARG B1428 84.005 9.400 -15.997 1.00 39.82 C

ATOM 7747 NH1 ARG B1428 83.459 8.298 -16.518 1.00 40.42 N

ATOM 7748 NH2 ARG B1428 84.124 10.499 -16.742 1.00 38.14 N

ATOM 7749 N GLN B1429 83.233 12.675 -10.353 1.00 19.64 N

ATOM 7750 CA GLN B1429 83.890 13.835 -9.774 1.00 16.58 C

ATOM 7751 C GLN B1429 83.538 14.135 -8.340 1.00 16.94 C

ATOM 7752 O GLN B1429 82.382 14.404 -8.031 1.00 19.90 O

ATOM 7753 CB GLN B1429 83.589 15.070 -10.596 1.00 16.01 C

ATOM 7754 CG GLN B1429 84.001 16.323 -9.907 1.00 13.84 C

ATOM 7755 CD GLN B1429 84.277 17.414 -10.878 1.00 15.34 C

ATOM 7756 OE1 GLN B1429 83.872 17.341 -12.038 1.00 15.24 O

ATOM 7757 NE2 GLN B1429 84.972 18.448 -10.420 1.00 18.62 N

ATOM 7758 N ILE B1430 84.543 14.113 -7.471 1.00 17.02 N

ATOM 7759 CA ILE B1430 84.326 14.409 -6.061 1.00 17.03 C

ATOM 7760 C ILE B1430 83.958 15.888 -5.868 1.00 16.34 C

ATOM 7761 O ILE B1430 84.354 16.754 -6.649 1.00 17.89 O

ATOM 7762 CB ILE B1430 85.600 14.054 -5.194 1.00 18.17 C

ATOM 7763 CG1 ILE B1430 85.243 14.101 -3.704 1.00 18.41 C

ATOM 7764 CG2 ILE B1430 86.756 15.022 -5.469 1.00 12.63 C

ATOM 7765 CD1 ILE B1430 84.944 12.735 -3.090 1.00 16.76 C

ATOM 7766 N ALA B1431 83.173 16.170 -4.842 1.00 15.81 N

ATOM 7767 CA ALA B1431 82.787 17.540 -4.543 1.00 17.47 C

ATOM 7768 C ALA B1431 83.481 17.956 -3.240 1.00 16.91 C

ATOM 7769 O ALA B1431 83.914 17.104 -2.464 1.00 17.27 O

ATOM 7770 CB ALA B1431 81.286 17.638 -4.393 1.00 15.44 C

ATOM 7771 N GLY B1432 83.577 19.261 -3.000 1.00 16.31 N

ATOM 7772 CA GLY B1432 84.236 19.746 -1.797 1.00 17.62 C

ATOM 7773 C GLY B1432 83.578 19.513 -0.443 1.00 19.63 C

ATOM 7774 O GLY B1432 82.382 19.243 -0.337 1.00 18.64 O

ATOM 7775 N ARG B1433 84.384 19.613 0.611 1.00 21.23 N

ATOM 7776 CA ARG B1433 83.888 19.454 1.967 1.00 22.34 C

ATOM 7777 C ARG B1433 83.228 20.788 2.298 1.00 24.58 C

ATOM 7778 O ARG B1433 83.591 21.821 1.734 1.00 25.39 O

ATOM 7779 CB ARG B1433 85.040 19.181 2.930 1.00 21.66 C

ATOM 7780 CG ARG B1433 84.634 19.105 4.384 1.00 26.59 C

ATOM 7781 CD ARG B1433 85.784 18.642 5.250 1.00 30.92 C

ATOM 7782 NE ARG B1433 85.432 17.462 6.032 1.00 37.39 N

ATOM 7783 CZ ARG B1433 86.111 17.049 7.101 1.00 39.10 C

ATOM 7784 NH1 ARG B1433 87.175 17.735 7.501 1.00 39.82 N

ATOM 7785 NH2 ARG B1433 85.732 15.954 7.762 1.00 36.94 N

ATOM 7786 N VAL B1434 82.256 20.779 3.201 1.00 25.13 N

ATOM 7787 CA VAL B1434 81.582 22.016 3.549 1.00 25.19 C

ATOM 7788 C VAL B1434 81.998 22.612 4.919 1.00 28.92 C

ATOM 7789 O VAL B1434 82.266 23.814 5.026 1.00 29.22 O

ATOM 7790 CB VAL B1434 80.049 21.801 3.497 1.00 23.34 C

ATOM 7791 CG1 VAL B1434 79.311 23.051 3.934 1.00 21.51 C

ATOM 7792 CG2 VAL B1434 79.642 21.410 2.094 1.00 19.62 C

ATOM 7793 N ALA B1435 82.095 21.769 5.948 1.00 30.46 N

ATOM 7794 CA ALA B1435 82.429 22.234 7.296 1.00 32.22 C

ATOM 7795 C ALA B1435 83.905 22.353 7.696 1.00 33.04 C

ATOM 7796 O ALA B1435 84.220 22.842 8.775 1.00 34.63 O

ATOM 7797 CB ALA B1435 81.698 21.361 8.320 1.00 32.94 C

ATOM 7798 N GLY B1436 84.819 21.914 6.852 1.00 34.05 N

ATOM 7799 CA GLY B1436 86.217 22.000 7.230 1.00 32.59 C

ATOM 7800 C GLY B1436 86.753 23.396 7.463 1.00 30.14 C

ATOM 7801 O GLY B1436 87.565 23.613 8.352 1.00 32.51 O

ATOM 7802 N GLY B1437 86.286 24.343 6.661 1.00 30.42 N

ATOM 7803 CA GLY B1437 86.751 25.717 6.758 1.00 27.38 C

ATOM 7804 C GLY B1437 87.422 26.050 5.433 1.00 25.86 C

ATOM 7805 O GLY B1437 87.672 25.137 4.641 1.00 25.96 O

ATOM 7806 N ARG B1438 87.698 27.331 5.185 1.00 23.29 N

ATOM 7807 CA ARG B1438 88.357 27.794 3.951 1.00 22.85 C

ATOM 7808 C ARG B1438 88.200 26.940 2.666 1.00 21.70 C

ATOM 7809 O ARG B1438 89.200 26.536 2.065 1.00 21.15 O

ATOM 7810 CB ARG B1438 89.860 27.987 4.209 1.00 21.03 C

ATOM 7811 CG ARG B1438 90.216 28.486 5.584 1.00 19.05 C

ATOM 7812 CD ARG B1438 91.696 28.787 5.682 1.00 21.98 C

ATOM 7813 NE ARG B1438 91.926 29.976 6.496 1.00 25.28 N

ATOM 7814 CZ ARG B1438 92.832 30.059 7.467 1.00 24.31 C

ATOM 7815 NH1 ARG B1438 93.604 29.015 7.745 1.00 24.65 N

ATOM 7816 NH2 ARG B1438 92.944 31.180 8.172 1.00 23.94 N

ATOM 7817 N ASN B1439 86.970 26.686 2.229 1.00 18.99 N

ATOM 7818 CA ASN B1439 86.769 25.894 1.035 1.00 17.45 C

ATOM 7819 C ASN B1439 85.729 26.469 0.100 1.00 18.42 C

ATOM 7820 O ASN B1439 85.167 25.749 -0.723 1.00 18.98 O

ATOM 7821 CB ASN B1439 86.382 24.461 1.391 1.00 18.13 C

ATOM 7822 CG ASN B1439 86.915 23.448 0.397 1.00 15.54 C

ATOM 7823 OD1 ASN B1439 87.776 23.756 -0.434 1.00 13.17 O

ATOM 7824 ND2 ASN B1439 86.401 22.232 0.474 1.00 15.42 N

ATOM 7825 N VAL B1440 85.464 27.763 0.217 1.00 19.16 N

ATOM 7826 CA VAL B1440 84.508 28.407 -0.679 1.00 21.32 C

ATOM 7827 C VAL B1440 85.242 28.803 -1.966 1.00 22.55 C

ATOM 7828 O VAL B1440 86.207 29.579 -1.941 1.00 24.91 O

ATOM 7829 CB VAL B1440 83.898 29.680 -0.038 1.00 20.45 C

ATOM 7830 CG1 VAL B1440 83.081 30.427 -1.070 1.00 20.74 C

ATOM 7831 CG2 VAL B1440 83.032 29.308 1.155 1.00 19.32 C

ATOM 7832 N PRO B1441 84.808 28.266 -3.111 1.00 21.99 N

ATOM 7833 CA PRO B1441 85.463 28.601 -4.380 1.00 21.08 C

ATOM 7834 C PRO B1441 85.474 30.096 -4.584 1.00 21.12 C

ATOM 7835 O PRO B1441 84.454 30.753 -4.417 1.00 21.75 O

ATOM 7836 CB PRO B1441 84.613 27.906 -5.425 1.00 19.77 C

ATOM 7837 CG PRO B1441 83.928 26.817 -4.687 1.00 22.57 C

ATOM 7838 CD PRO B1441 83.696 27.331 -3.296 1.00 23.26 C

ATOM 7839 N ILE B1442 86.627 30.637 -4.946 1.00 23.48 N

ATOM 7840 CA ILE B1442 86.745 32.079 -5.165 1.00 23.98 C

ATOM 7841 C ILE B1442 85.864 32.598 -6.301 1.00 20.06 C

ATOM 7842 O ILE B1442 85.481 33.769 -6.317 1.00 18.09 O

ATOM 7843 CB ILE B1442 88.224 32.469 -5.427 1.00 24.54 C

ATOM 7844 CG1 ILE B1442 89.014 32.315 -4.130 1.00 27.11 C

ATOM 7845 CG2 ILE B1442 88.334 33.908 -5.888 1.00 19.60 C

ATOM 7846 CD1 ILE B1442 90.281 33.123 -4.092 1.00 31.12 C

ATOM 7847 N ALA B1443 85.536 31.719 -7.240 1.00 19.43 N

ATOM 7848 CA ALA B1443 84.690 32.095 -8.368 1.00 19.93 C

ATOM 7849 C ALA B1443 83.262 32.443 -7.916 1.00 20.49 C

ATOM 7850 O ALA B1443 82.467 32.995 -8.683 1.00 17.43 O

ATOM 7851 CB ALA B1443 84.647 30.954 -9.366 1.00 18.71 C

ATOM 7852 N VAL B1444 82.956 32.142 -6.657 1.00 23.10 N

ATOM 7853 CA VAL B1444 81.621 32.371 -6.093 1.00 22.55 C

ATOM 7854 C VAL B1444 81.668 33.152 -4.754 1.00 22.03 C

ATOM 7855 O VAL B1444 80.762 33.049 -3.932 1.00 24.91 O

ATOM 7856 CB VAL B1444 80.910 30.962 -5.918 1.00 21.21 C

ATOM 7857 CG1 VAL B1444 80.863 30.532 -4.466 1.00 21.89 C

ATOM 7858 CG2 VAL B1444 79.538 30.991 -6.517 1.00 22.74 C

ATOM 7859 N GLN B1445 82.714 33.949 -4.544 1.00 21.18 N

ATOM 7860 CA GLN B1445 82.856 34.692 -3.290 1.00 19.58 C

ATOM 7861 C GLN B1445 81.818 35.773 -3.015 1.00 18.03 C

ATOM 7862 O GLN B1445 81.570 36.100 -1.858 1.00 18.75 O

ATOM 7863 CB GLN B1445 84.271 35.289 -3.165 1.00 18.07 C

ATOM 7864 CG GLN B1445 84.796 36.070 -4.355 1.00 16.53 C

ATOM 7865 CD GLN B1445 85.891 37.036 -3.940 1.00 17.81 C

ATOM 7866 OE1 GLN B1445 86.186 37.163 -2.753 1.00 20.08 O

ATOM 7867 NE2 GLN B1445 86.496 37.725 -4.911 1.00 17.33 N

ATOM 7868 N ALA B1446 81.218 36.335 -4.063 1.00 19.16 N

ATOM 7869 CA ALA B1446 80.175 37.352 -3.893 1.00 16.42 C

ATOM 7870 C ALA B1446 79.014 36.710 -3.136 1.00 15.79 C

ATOM 7871 O ALA B1446 78.506 37.264 -2.163 1.00 15.67 O

ATOM 7872 CB ALA B1446 79.698 37.841 -5.248 1.00 11.93 C

ATOM 7873 N VAL B1447 78.613 35.526 -3.598 1.00 16.96 N

ATOM 7874 CA VAL B1447 77.520 34.761 -2.997 1.00 17.56 C

ATOM 7875 C VAL B1447 77.743 34.555 -1.496 1.00 18.36 C

ATOM 7876 O VAL B1447 76.827 34.719 -0.700 1.00 20.33 O

ATOM 7877 CB VAL B1447 77.368 33.383 -3.700 1.00 18.12 C

ATOM 7878 CG1 VAL B1447 76.028 32.749 -3.357 1.00 18.53 C

ATOM 7879 CG2 VAL B1447 77.473 33.562 -5.200 1.00 16.79 C

ATOM 7880 N ALA B1448 78.967 34.207 -1.116 1.00 19.92 N

ATOM 7881 CA ALA B1448 79.308 33.988 0.292 1.00 21.84 C

ATOM 7882 C ALA B1448 79.283 35.290 1.113 1.00 20.32 C

ATOM 7883 O ALA B1448 78.812 35.315 2.256 1.00 18.71 O

ATOM 7884 CB ALA B1448 80.689 33.325 0.399 1.00 21.37 C

ATOM 7885 N LYS B1449 79.802 36.367 0.536 1.00 21.29 N

ATOM 7886 CA LYS B1449 79.806 37.652 1.233 1.00 22.83 C

ATOM 7887 C LYS B1449 78.369 38.042 1.563 1.00 20.25 C

ATOM 7888 O LYS B1449 78.049 38.371 2.700 1.00 17.05 O

ATOM 7889 CB LYS B1449 80.457 38.732 0.361 1.00 22.65 C

ATOM 7890 CG LYS B1449 81.199 39.812 1.139 1.00 22.51 C

ATOM 7891 CD LYS B1449 81.075 41.160 0.443 1.00 22.36 C

ATOM 7892 CE LYS B1449 81.585 42.298 1.296 1.00 23.08 C

ATOM 7893 NZ LYS B1449 80.493 42.910 2.096 1.00 24.38 N

ATOM 7894 N ALA B1450 77.512 37.986 0.548 1.00 21.56 N

ATOM 7895 CA ALA B1450 76.099 38.304 0.682 1.00 21.35 C

ATOM 7896 C ALA B1450 75.432 37.406 1.732 1.00 22.37 C

ATOM 7897 O ALA B1450 74.602 37.854 2.520 1.00 23.32 O

ATOM 7898 CB ALA B1450 75.412 38.126 -0.651 1.00 20.41 C

ATOM 7899 N SER B1451 75.772 36.126 1.748 1.00 21.24 N

ATOM 7900 CA SER B1451 75.148 35.275 2.739 1.00 20.13 C

ATOM 7901 C SER B1451 75.412 35.960 4.078 1.00 20.06 C

ATOM 7902 O SER B1451 74.489 36.163 4.874 1.00 22.52 O

ATOM 7903 CB SER B1451 75.740 33.850 2.727 1.00 19.35 C

ATOM 7904 OG SER B1451 75.538 33.166 1.482 1.00 19.71 O

ATOM 7905 N ILE B1452 76.662 36.362 4.309 1.00 19.62 N

ATOM 7906 CA ILE B1452 77.015 37.012 5.577 1.00 17.53 C

ATOM 7907 C ILE B1452 76.212 38.280 5.822 1.00 17.02 C

ATOM 7908 O ILE B1452 75.583 38.442 6.874 1.00 15.07 O

ATOM 7909 CB ILE B1452 78.520 37.370 5.649 1.00 11.69 C

ATOM 7910 CG1 ILE B1452 79.361 36.109 5.519 1.00 11.67 C

ATOM 7911 CG2 ILE B1452 78.832 38.015 6.972 1.00 10.87 C

ATOM 7912 CD1 ILE B1452 80.826 36.344 5.663 1.00 9.33 C

ATOM 7913 N ASP B1453 76.238 39.162 4.831 1.00 17.05 N

ATOM 7914 CA ASP B1453 75.559 40.444 4.885 1.00 19.36 C

ATOM 7915 C ASP B1453 74.067 40.365 5.103 1.00 19.97 C

ATOM 7916 O ASP B1453 73.538 40.982 6.013 1.00 22.85 O

ATOM 7917 CB ASP B1453 75.815 41.210 3.599 1.00 21.61 C

ATOM 7918 CG ASP B1453 77.284 41.454 3.344 1.00 25.42 C

ATOM 7919 OD1 ASP B1453 78.024 41.719 4.329 1.00 24.08 O

ATOM 7920 OD2 ASP B1453 77.677 41.380 2.149 1.00 26.30 O

ATOM 7921 N GLN B1454 73.386 39.625 4.246 1.00 21.21 N

ATOM 7922 CA GLN B1454 71.947 39.467 4.338 1.00 20.29 C

ATOM 7923 C GLN B1454 71.499 38.919 5.686 1.00 19.66 C

ATOM 7924 O GLN B1454 70.449 39.308 6.190 1.00 20.29 O

ATOM 7925 CB GLN B1454 71.471 38.553 3.231 1.00 23.48 C

ATOM 7926 CG GLN B1454 71.417 39.239 1.901 1.00 22.33 C

ATOM 7927 CD GLN B1454 71.461 38.256 0.771 1.00 25.77 C

ATOM 7928 OE1 GLN B1454 71.229 38.630 -0.375 1.00 27.52 O

ATOM 7929 NE2 GLN B1454 71.758 36.979 1.081 1.00 22.78 N

ATOM 7930 N SER B1455 72.293 38.018 6.262 1.00 18.34 N

ATOM 7931 CA SER B1455 71.986 37.430 7.568 1.00 16.28 C

ATOM 7932 C SER B1455 72.007 38.489 8.655 1.00 17.40 C

ATOM 7933 O SER B1455 71.262 38.392 9.633 1.00 20.83 O

ATOM 7934 CB SER B1455 73.004 36.358 7.933 1.00 15.25 C

ATOM 7935 OG SER B1455 72.938 35.288 7.016 1.00 21.94 O

ATOM 7936 N ARG B1456 72.885 39.478 8.491 1.00 16.25 N

ATOM 7937 CA ARG B1456 73.026 40.584 9.437 1.00 13.97 C

ATOM 7938 C ARG B1456 71.880 41.556 9.173 1.00 11.56 C

ATOM 7939 O ARG B1456 71.353 42.186 10.079 1.00 7.61 O

ATOM 7940 CB ARG B1456 74.365 41.298 9.211 1.00 12.81 C

ATOM 7941 CG ARG B1456 75.574 40.451 9.499 1.00 13.14 C

ATOM 7942 CD ARG B1456 76.877 41.117 9.066 1.00 14.06 C

ATOM 7943 NE ARG B1456 78.050 40.331 9.457 1.00 15.13 N

ATOM 7944 CZ ARG B1456 79.298 40.782 9.468 1.00 15.07 C

ATOM 7945 NH1 ARG B1456 79.571 42.030 9.106 1.00 14.08 N

ATOM 7946 NH2 ARG B1456 80.271 39.985 9.863 1.00 13.79 N

ATOM 7947 N GLU B1457 71.520 41.654 7.900 1.00 14.40 N

ATOM 7948 CA GLU B1457 70.449 42.502 7.412 1.00 18.52 C

ATOM 7949 C GLU B1457 69.112 42.038 8.030 1.00 19.09 C

ATOM 7950 O GLU B1457 68.269 42.844 8.441 1.00 19.35 O

ATOM 7951 CB GLU B1457 70.400 42.387 5.882 1.00 24.83 C

ATOM 7952 CG GLU B1457 69.942 43.641 5.147 1.00 37.11 C

ATOM 7953 CD GLU B1457 69.305 43.320 3.792 1.00 46.76 C

ATOM 7954 OE1 GLU B1457 68.067 43.507 3.644 1.00 48.31 O

ATOM 7955 OE2 GLU B1457 70.048 42.875 2.881 1.00 50.32 O

ATOM 7956 N MET B1458 68.929 40.727 8.090 1.00 15.45 N

ATOM 7957 CA MET B1458 67.732 40.144 8.650 1.00 12.97 C

ATOM 7958 C MET B1458 67.842 40.004 10.170 1.00 13.49 C

ATOM 7959 O MET B1458 67.132 39.209 10.798 1.00 16.30 O

ATOM 7960 CB MET B1458 67.511 38.783 8.004 1.00 12.17 C

ATOM 7961 CG MET B1458 67.449 38.844 6.489 1.00 9.15 C

ATOM 7962 SD MET B1458 66.989 37.269 5.816 1.00 12.83 S

ATOM 7963 CE MET B1458 68.531 36.455 5.638 1.00 11.17 C

ATOM 7964 N LYS B1459 68.750 40.768 10.758 1.00 11.56 N

ATOM 7965 CA LYS B1459 68.940 40.756 12.195 1.00 10.53 C

ATOM 7966 C LYS B1459 69.008 39.388 12.847 1.00 10.80 C

ATOM 7967 O LYS B1459 68.375 39.173 13.871 1.00 9.58 O

ATOM 7968 CB LYS B1459 67.834 41.562 12.859 1.00 10.65 C

ATOM 7969 CG LYS B1459 67.828 43.017 12.458 1.00 12.92 C

ATOM 7970 CD LYS B1459 69.207 43.659 12.599 1.00 12.33 C

ATOM 7971 CE LYS B1459 69.643 43.744 14.056 1.00 15.07 C

ATOM 7972 NZ LYS B1459 68.937 44.831 14.811 1.00 17.52 N

ATOM 7973 N TYR B1460 69.790 38.478 12.270 1.00 13.96 N

ATOM 7974 CA TYR B1460 69.955 37.128 12.826 1.00 15.01 C

ATOM 7975 C TYR B1460 70.524 37.169 14.247 1.00 16.77 C

ATOM 7976 O TYR B1460 71.129 38.157 14.663 1.00 17.66 O

ATOM 7977 CB TYR B1460 70.897 36.313 11.946 1.00 11.93 C

ATOM 7978 CG TYR B1460 70.187 35.440 10.956 1.00 11.62 C

ATOM 7979 CD1 TYR B1460 69.207 35.965 10.115 1.00 14.43 C

ATOM 7980 CD2 TYR B1460 70.495 34.089 10.845 1.00 11.16 C

ATOM 7981 CE1 TYR B1460 68.541 35.161 9.179 1.00 13.18 C

ATOM 7982 CE2 TYR B1460 69.842 33.271 9.912 1.00 14.44 C

ATOM 7983 CZ TYR B1460 68.859 33.816 9.081 1.00 13.56 C

ATOM 7984 OH TYR B1460 68.177 33.036 8.169 1.00 13.96 O

ATOM 7985 N GLN B1461 70.314 36.097 14.996 1.00 19.53 N

ATOM 7986 CA GLN B1461 70.827 36.021 16.351 1.00 23.09 C

ATOM 7987 C GLN B1461 72.117 35.221 16.274 1.00 26.72 C

ATOM 7988 O GLN B1461 72.334 34.503 15.297 1.00 28.99 O

ATOM 7989 CB GLN B1461 69.822 35.337 17.273 1.00 24.14 C

ATOM 7990 CG GLN B1461 68.933 36.320 18.022 1.00 26.73 C

ATOM 7991 CD GLN B1461 67.851 35.628 18.800 1.00 27.88 C

ATOM 7992 OE1 GLN B1461 68.128 34.897 19.751 1.00 28.73 O

ATOM 7993 NE2 GLN B1461 66.605 35.842 18.397 1.00 33.05 N

ATOM 7994 N SER B1462 72.972 35.355 17.292 1.00 27.32 N

ATOM 7995 CA SER B1462 74.263 34.672 17.323 1.00 24.70 C

ATOM 7996 C SER B1462 74.195 33.148 17.182 1.00 24.41 C

ATOM 7997 O SER B1462 73.150 32.528 17.411 1.00 23.97 O

ATOM 7998 CB SER B1462 74.988 35.027 18.610 1.00 23.06 C

ATOM 7999 OG SER B1462 74.579 34.153 19.644 1.00 24.73 O

ATOM 8000 N LEU B1463 75.326 32.551 16.809 1.00 23.33 N

ATOM 8001 CA LEU B1463 75.403 31.110 16.627 1.00 19.96 C

ATOM 8002 C LEU B1463 75.082 30.318 17.882 1.00 19.24 C

ATOM 8003 O LEU B1463 74.601 29.190 17.792 1.00 19.61 O

ATOM 8004 CB LEU B1463 76.790 30.716 16.144 1.00 21.84 C

ATOM 8005 CG LEU B1463 77.286 29.361 16.659 1.00 21.71 C

ATOM 8006 CD1 LEU B1463 76.769 28.261 15.743 1.00 21.47 C

ATOM 8007 CD2 LEU B1463 78.805 29.336 16.717 1.00 21.31 C

ATOM 8008 N ASN B1464 75.355 30.878 19.056 1.00 19.87 N

ATOM 8009 CA ASN B1464 75.077 30.140 20.289 1.00 19.74 C

ATOM 8010 C ASN B1464 73.618 30.247 20.677 1.00 20.62 C

ATOM 8011 O ASN B1464 73.092 29.399 21.419 1.00 19.10 O

ATOM 8012 CB ASN B1464 75.973 30.619 21.424 1.00 17.14 C

ATOM 8013 CG ASN B1464 77.259 29.829 21.500 1.00 14.50 C

ATOM 8014 OD1 ASN B1464 78.237 30.277 22.092 1.00 13.51 O

ATOM 8015 ND2 ASN B1464 77.265 28.644 20.894 1.00 10.88 N

ATOM 8016 N GLU B1465 72.969 31.290 20.159 1.00 21.64 N

ATOM 8017 CA GLU B1465 71.547 31.498 20.396 1.00 20.50 C

ATOM 8018 C GLU B1465 70.805 30.386 19.646 1.00 18.79 C

ATOM 8019 O GLU B1465 69.897 29.760 20.195 1.00 20.33 O

ATOM 8020 CB GLU B1465 71.114 32.864 19.865 1.00 21.71 C

ATOM 8021 CG GLU B1465 71.302 34.005 20.851 1.00 28.99 C

ATOM 8022 CD GLU B1465 71.105 33.582 22.291 1.00 32.85 C

ATOM 8023 OE1 GLU B1465 70.465 32.534 22.517 1.00 39.43 O

ATOM 8024 OE2 GLU B1465 71.589 34.295 23.198 1.00 37.54 O

ATOM 8025 N TYR B1466 71.203 30.145 18.392 1.00 15.21 N

ATOM 8026 CA TYR B1466 70.599 29.101 17.574 1.00 13.39 C

ATOM 8027 C TYR B1466 70.998 27.710 18.060 1.00 15.02 C

ATOM 8028 O TYR B1466 70.230 26.759 17.918 1.00 16.20 O

ATOM 8029 CB TYR B1466 70.987 29.284 16.104 1.00 10.90 C

ATOM 8030 CG TYR B1466 70.148 30.346 15.401 1.00 12.59 C

ATOM 8031 CD1 TYR B1466 68.840 30.080 15.000 1.00 13.51 C

ATOM 8032 CD2 TYR B1466 70.647 31.627 15.182 1.00 12.09 C

ATOM 8033 CE1 TYR B1466 68.049 31.057 14.410 1.00 12.48 C

ATOM 8034 CE2 TYR B1466 69.861 32.614 14.586 1.00 12.13 C

ATOM 8035 CZ TYR B1466 68.564 32.319 14.205 1.00 12.37 C

ATOM 8036 OH TYR B1466 67.784 33.288 13.622 1.00 10.25 O

ATOM 8037 N ARG B1467 72.187 27.589 18.648 1.00 15.64 N

ATOM 8038 CA ARG B1467 72.649 26.297 19.155 1.00 15.90 C

ATOM 8039 C ARG B1467 71.778 25.935 20.337 1.00 14.98 C

ATOM 8040 O ARG B1467 71.290 24.815 20.437 1.00 15.24 O

ATOM 8041 CB ARG B1467 74.121 26.369 19.586 1.00 14.67 C

ATOM 8042 CG ARG B1467 75.111 25.988 18.488 1.00 12.35 C

ATOM 8043 CD ARG B1467 76.547 26.019 18.997 1.00 12.55 C

ATOM 8044 NE ARG B1467 76.855 24.845 19.812 1.00 9.61 N

ATOM 8045 CZ ARG B1467 76.944 23.611 19.333 1.00 11.34 C

ATOM 8046 NH1 ARG B1467 76.753 23.383 18.038 1.00 11.23 N

ATOM 8047 NH2 ARG B1467 77.198 22.594 20.147 1.00 9.02 N

ATOM 8048 N LYS B1468 71.585 26.912 21.220 1.00 16.00 N

ATOM 8049 CA LYS B1468 70.757 26.758 22.423 1.00 15.94 C

ATOM 8050 C LYS B1468 69.326 26.417 22.031 1.00 17.81 C

ATOM 8051 O LYS B1468 68.697 25.549 22.619 1.00 22.21 O

ATOM 8052 CB LYS B1468 70.740 28.061 23.234 1.00 10.63 C

ATOM 8053 CG LYS B1468 71.571 28.042 24.494 1.00 3.85 C

ATOM 8054 CD LYS B1468 72.316 29.323 24.614 1.00 3.68 C

ATOM 8055 CE LYS B1468 71.944 30.078 25.865 1.00 3.54 C

ATOM 8056 NZ LYS B1468 71.856 31.556 25.591 1.00 7.50 N

ATOM 8057 N ARG B1469 68.828 27.119 21.027 1.00 18.36 N

ATOM 8058 CA ARG B1469 67.484 26.930 20.524 1.00 18.78 C

ATOM 8059 C ARG B1469 67.263 25.513 20.008 1.00 20.13 C

ATOM 8060 O ARG B1469 66.166 24.965 20.125 1.00 21.36 O

ATOM 8061 CB ARG B1469 67.245 27.963 19.424 1.00 20.20 C

ATOM 8062 CG ARG B1469 66.039 27.748 18.524 1.00 22.77 C

ATOM 8063 CD ARG B1469 64.710 27.761 19.258 1.00 18.71 C

ATOM 8064 NE ARG B1469 64.025 26.504 18.984 1.00 19.44 N

ATOM 8065 CZ ARG B1469 63.128 26.328 18.021 1.00 18.14 C

ATOM 8066 NH1 ARG B1469 62.792 27.329 17.229 1.00 18.98 N

ATOM 8067 NH2 ARG B1469 62.583 25.141 17.842 1.00 19.34 N

ATOM 8068 N PHE B1470 68.309 24.904 19.455 1.00 21.64 N

ATOM 8069 CA PHE B1470 68.178 23.555 18.920 1.00 22.20 C

ATOM 8070 C PHE B1470 68.719 22.467 19.831 1.00 23.27 C

ATOM 8071 O PHE B1470 69.155 21.406 19.365 1.00 23.02 O

ATOM 8072 CB PHE B1470 68.794 23.468 17.515 1.00 19.24 C

ATOM 8073 CG PHE B1470 67.854 23.927 16.432 1.00 20.74 C

ATOM 8074 CD1 PHE B1470 66.929 23.044 15.874 1.00 21.14 C

ATOM 8075 CD2 PHE B1470 67.833 25.257 16.023 1.00 19.51 C

ATOM 8076 CE1 PHE B1470 65.994 23.478 14.930 1.00 19.21 C

ATOM 8077 CE2 PHE B1470 66.903 25.695 15.086 1.00 18.10 C

ATOM 8078 CZ PHE B1470 65.979 24.797 14.538 1.00 17.71 C

ATOM 8079 N SER B1471 68.673 22.750 21.133 1.00 22.73 N

ATOM 8080 CA SER B1471 69.095 21.812 22.174 1.00 24.94 C

ATOM 8081 C SER B1471 70.558 21.420 22.133 1.00 26.00 C

ATOM 8082 O SER B1471 70.917 20.287 22.449 1.00 26.71 O

ATOM 8083 CB SER B1471 68.237 20.544 22.117 1.00 25.00 C

ATOM 8084 OG SER B1471 66.920 20.806 22.576 1.00 28.20 O

ATOM 8085 N LEU B1472 71.403 22.364 21.744 1.00 27.40 N

ATOM 8086 CA LEU B1472 72.833 22.118 21.666 1.00 25.29 C

ATOM 8087 C LEU B1472 73.507 22.990 22.729 1.00 26.81 C

ATOM 8088 O LEU B1472 72.955 24.018 23.147 1.00 28.44 O

ATOM 8089 CB LEU B1472 73.346 22.456 20.254 1.00 22.97 C

ATOM 8090 CG LEU B1472 72.658 21.762 19.060 1.00 20.45 C

ATOM 8091 CD1 LEU B1472 73.411 22.051 17.777 1.00 17.52 C

ATOM 8092 CD2 LEU B1472 72.587 20.264 19.290 1.00 18.00 C

ATOM 8093 N LYS B1473 74.684 22.566 23.183 1.00 27.26 N

ATOM 8094 CA LYS B1473 75.441 23.307 24.194 1.00 26.36 C

ATOM 8095 C LYS B1473 76.263 24.411 23.531 1.00 23.23 C

ATOM 8096 O LYS B1473 77.021 24.160 22.595 1.00 22.78 O

ATOM 8097 CB LYS B1473 76.365 22.356 24.941 1.00 30.76 C

ATOM 8098 CG LYS B1473 76.352 22.536 26.435 1.00 36.48 C

ATOM 8099 CD LYS B1473 77.333 21.586 27.096 1.00 43.12 C

ATOM 8100 CE LYS B1473 78.778 21.994 26.814 1.00 46.92 C

ATOM 8101 NZ LYS B1473 79.679 21.547 27.918 1.00 49.38 N

ATOM 8102 N PRO B1474 76.117 25.652 23.998 1.00 20.18 N

ATOM 8103 CA PRO B1474 76.889 26.730 23.378 1.00 20.14 C

ATOM 8104 C PRO B1474 78.402 26.537 23.445 1.00 20.49 C

ATOM 8105 O PRO B1474 78.931 26.022 24.430 1.00 21.90 O

ATOM 8106 CB PRO B1474 76.419 27.982 24.123 1.00 19.34 C

ATOM 8107 CG PRO B1474 75.140 27.593 24.779 1.00 17.88 C

ATOM 8108 CD PRO B1474 75.252 26.142 25.081 1.00 19.14 C

ATOM 8109 N TYR B1475 79.093 26.937 22.380 1.00 20.31 N

ATOM 8110 CA TYR B1475 80.547 26.822 22.306 1.00 17.12 C

ATOM 8111 C TYR B1475 81.153 27.839 23.252 1.00 19.41 C

ATOM 8112 O TYR B1475 80.726 28.996 23.308 1.00 21.59 O

ATOM 8113 CB TYR B1475 81.029 27.088 20.887 1.00 14.57 C

ATOM 8114 CG TYR B1475 80.806 25.935 19.930 1.00 14.89 C

ATOM 8115 CD1 TYR B1475 80.336 26.161 18.643 1.00 15.97 C

ATOM 8116 CD2 TYR B1475 81.065 24.621 20.306 1.00 12.47 C

ATOM 8117 CE1 TYR B1475 80.133 25.115 17.751 1.00 13.51 C

ATOM 8118 CE2 TYR B1475 80.860 23.563 19.419 1.00 10.46 C

ATOM 8119 CZ TYR B1475 80.395 23.822 18.143 1.00 10.91 C

ATOM 8120 OH TYR B1475 80.195 22.796 17.250 1.00 7.12 O

ATOM 8121 N THR B1476 82.159 27.411 23.999 1.00 21.66 N

ATOM 8122 CA THR B1476 82.804 28.278 24.971 1.00 22.70 C

ATOM 8123 C THR B1476 84.016 29.030 24.445 1.00 23.04 C

ATOM 8124 O THR B1476 84.469 29.977 25.088 1.00 22.38 O

ATOM 8125 CB THR B1476 83.220 27.472 26.200 1.00 22.91 C

ATOM 8126 OG1 THR B1476 84.372 26.688 25.872 1.00 28.38 O

ATOM 8127 CG2 THR B1476 82.080 26.534 26.639 1.00 22.34 C

ATOM 8128 N SER B1477 84.534 28.613 23.288 1.00 23.68 N

ATOM 8129 CA SER B1477 85.702 29.255 22.669 1.00 24.14 C

ATOM 8130 C SER B1477 85.683 29.044 21.166 1.00 22.88 C

ATOM 8131 O SER B1477 84.995 28.145 20.686 1.00 24.28 O

ATOM 8132 CB SER B1477 87.015 28.676 23.233 1.00 26.75 C

ATOM 8133 OG SER B1477 87.055 27.255 23.182 1.00 26.12 O

ATOM 8134 N PHE B1478 86.443 29.850 20.423 1.00 20.01 N

ATOM 8135 CA PHE B1478 86.489 29.689 18.970 1.00 19.32 C

ATOM 8136 C PHE B1478 87.233 28.425 18.602 1.00 22.22 C

ATOM 8137 O PHE B1478 87.092 27.914 17.494 1.00 23.29 O

ATOM 8138 CB PHE B1478 87.181 30.863 18.300 1.00 15.20 C

ATOM 8139 CG PHE B1478 86.406 32.130 18.375 1.00 18.28 C

ATOM 8140 CD1 PHE B1478 86.519 32.958 19.484 1.00 18.16 C

ATOM 8141 CD2 PHE B1478 85.555 32.501 17.346 1.00 17.60 C

ATOM 8142 CE1 PHE B1478 85.803 34.130 19.566 1.00 14.54 C

ATOM 8143 CE2 PHE B1478 84.828 33.680 17.425 1.00 16.65 C

ATOM 8144 CZ PHE B1478 84.958 34.490 18.536 1.00 15.77 C

ATOM 8145 N GLU B1479 88.039 27.931 19.535 1.00 23.55 N

ATOM 8146 CA GLU B1479 88.830 26.724 19.322 1.00 23.54 C

ATOM 8147 C GLU B1479 87.962 25.481 19.422 1.00 21.61 C

ATOM 8148 O GLU B1479 88.256 24.445 18.819 1.00 18.39 O

ATOM 8149 CB GLU B1479 89.939 26.643 20.368 1.00 27.60 C

ATOM 8150 CG GLU B1479 91.090 27.597 20.154 1.00 34.89 C

ATOM 8151 CD GLU B1479 92.375 27.091 20.786 1.00 38.60 C

ATOM 8152 OE1 GLU B1479 92.407 26.933 22.032 1.00 39.30 O

ATOM 8153 OE2 GLU B1479 93.349 26.852 20.034 1.00 42.20 O

ATOM 8154 N GLU B1480 86.898 25.592 20.209 1.00 21.75 N

ATOM 8155 CA GLU B1480 85.982 24.480 20.399 1.00 24.19 C

ATOM 8156 C GLU B1480 85.076 24.391 19.203 1.00 22.66 C

ATOM 8157 O GLU B1480 84.649 23.300 18.803 1.00 21.70 O

ATOM 8158 CB GLU B1480 85.125 24.679 21.634 1.00 29.30 C

ATOM 8159 CG GLU B1480 84.070 23.600 21.786 1.00 33.99 C

ATOM 8160 CD GLU B1480 83.273 23.743 23.065 1.00 38.64 C

ATOM 8161 OE1 GLU B1480 82.623 22.762 23.478 1.00 42.29 O

ATOM 8162 OE2 GLU B1480 83.294 24.840 23.660 1.00 41.60 O

ATOM 8163 N LEU B1481 84.787 25.560 18.645 1.00 18.15 N

ATOM 8164 CA LEU B1481 83.949 25.672 17.475 1.00 16.05 C

ATOM 8165 C LEU B1481 84.663 25.072 16.244 1.00 17.18 C

ATOM 8166 O LEU B1481 84.103 24.231 15.542 1.00 15.68 O

ATOM 8167 CB LEU B1481 83.614 27.151 17.238 1.00 13.98 C

ATOM 8168 CG LEU B1481 83.236 27.492 15.796 1.00 13.24 C

ATOM 8169 CD1 LEU B1481 81.992 26.658 15.435 1.00 14.52 C

ATOM 8170 CD2 LEU B1481 82.985 28.981 15.624 1.00 7.41 C

ATOM 8171 N THR B1482 85.907 25.492 16.003 1.00 19.51 N

ATOM 8172 CA THR B1482 86.689 25.029 14.849 1.00 20.12 C

ATOM 8173 C THR B1482 87.443 23.730 15.051 1.00 19.78 C

ATOM 8174 O THR B1482 87.661 22.991 14.101 1.00 21.47 O

ATOM 8175 CB THR B1482 87.719 26.080 14.420 1.00 21.23 C

ATOM 8176 OG1 THR B1482 88.670 26.259 15.471 1.00 22.32 O

ATOM 8177 CG2 THR B1482 87.047 27.429 14.138 1.00 20.16 C

ATOM 8178 N GLY B1483 87.851 23.461 16.283 1.00 21.21 N

ATOM 8179 CA GLY B1483 88.584 22.241 16.560 1.00 26.64 C

ATOM 8180 C GLY B1483 90.070 22.343 16.219 1.00 28.89 C

ATOM 8181 O GLY B1483 90.811 21.361 16.289 1.00 30.17 O

ATOM 8182 N GLU B1484 90.513 23.535 15.835 1.00 28.38 N

ATOM 8183 CA GLU B1484 91.907 23.762 15.506 1.00 25.70 C

ATOM 8184 C GLU B1484 92.403 25.045 16.217 1.00 25.13 C

ATOM 8185 O GLU B1484 91.792 25.485 17.194 1.00 23.31 O

ATOM 8186 CB GLU B1484 92.072 23.841 13.985 1.00 23.11 C

ATOM 8187 CG GLU B1484 90.999 24.616 13.304 1.00 24.82 C

ATOM 8188 CD GLU B1484 91.415 26.055 13.031 1.00 29.93 C

ATOM 8189 OE1 GLU B1484 91.085 26.942 13.859 1.00 26.32 O

ATOM 8190 OE2 GLU B1484 92.070 26.296 11.982 1.00 31.04 O

ATOM 8191 N LYS B1485 93.503 25.639 15.747 1.00 24.09 N

ATOM 8192 CA LYS B1485 94.046 26.827 16.408 1.00 20.88 C

ATOM 8193 C LYS B1485 94.184 28.064 15.559 1.00 18.78 C

ATOM 8194 O LYS B1485 94.015 29.162 16.063 1.00 16.64 O

ATOM 8195 CB LYS B1485 95.411 26.527 17.033 1.00 21.71 C

ATOM 8196 CG LYS B1485 95.449 25.336 17.970 1.00 22.36 C

ATOM 8197 CD LYS B1485 96.457 25.547 19.077 1.00 25.48 C

ATOM 8198 CE LYS B1485 96.492 24.377 20.042 1.00 28.57 C

ATOM 8199 NZ LYS B1485 96.092 24.782 21.430 1.00 33.70 N

ATOM 8200 N GLU B1486 94.502 27.893 14.281 1.00 21.09 N

ATOM 8201 CA GLU B1486 94.687 29.032 13.367 1.00 23.17 C

ATOM 8202 C GLU B1486 93.441 29.849 13.015 1.00 23.56 C

ATOM 8203 O GLU B1486 93.418 31.059 13.228 1.00 24.24 O

ATOM 8204 CB GLU B1486 95.350 28.570 12.074 1.00 24.86 C

ATOM 8205 CG GLU B1486 95.892 29.711 11.254 1.00 27.74 C

ATOM 8206 CD GLU B1486 96.403 29.250 9.915 1.00 30.37 C

ATOM 8207 OE1 GLU B1486 96.455 30.074 8.977 1.00 31.93 O

ATOM 8208 OE2 GLU B1486 96.747 28.054 9.801 1.00 33.71 O

ATOM 8209 N MET B1487 92.425 29.195 12.451 1.00 22.76 N

ATOM 8210 CA MET B1487 91.185 29.870 12.098 1.00 19.68 C

ATOM 8211 C MET B1487 90.529 30.434 13.360 1.00 18.27 C

ATOM 8212 O MET B1487 89.914 31.513 13.325 1.00 15.81 O

ATOM 8213 CB MET B1487 90.229 28.893 11.406 1.00 20.78 C

ATOM 8214 CG MET B1487 90.349 28.878 9.908 1.00 19.38 C

ATOM 8215 SD MET B1487 89.737 27.355 9.183 1.00 19.65 S

ATOM 8216 CE MET B1487 89.282 26.361 10.562 1.00 18.77 C

ATOM 8217 N ALA B1488 90.656 29.690 14.464 1.00 16.53 N

ATOM 8218 CA ALA B1488 90.096 30.097 15.760 1.00 16.66 C

ATOM 8219 C ALA B1488 90.712 31.429 16.197 1.00 17.32 C

ATOM 8220 O ALA B1488 90.018 32.347 16.663 1.00 16.06 O

ATOM 8221 CB ALA B1488 90.368 29.026 16.803 1.00 10.32 C

ATOM 8222 N ALA B1489 92.025 31.523 16.034 1.00 18.84 N

ATOM 8223 CA ALA B1489 92.757 32.728 16.380 1.00 19.67 C

ATOM 8224 C ALA B1489 92.250 33.858 15.528 1.00 21.86 C

ATOM 8225 O ALA B1489 92.014 34.960 16.016 1.00 23.27 O

ATOM 8226 CB ALA B1489 94.202 32.527 16.113 1.00 16.94 C

ATOM 8227 N GLU B1490 92.087 33.558 14.246 1.00 25.17 N

ATOM 8228 CA GLU B1490 91.629 34.527 13.262 1.00 28.16 C

ATOM 8229 C GLU B1490 90.264 35.047 13.614 1.00 25.20 C

ATOM 8230 O GLU B1490 90.013 36.247 13.554 1.00 24.39 O

ATOM 8231 CB GLU B1490 91.596 33.884 11.877 1.00 34.75 C

ATOM 8232 CG GLU B1490 92.969 33.714 11.280 1.00 45.35 C

ATOM 8233 CD GLU B1490 93.570 35.045 10.879 1.00 54.08 C

ATOM 8234 OE1 GLU B1490 93.495 35.362 9.679 1.00 59.42 O

ATOM 8235 OE2 GLU B1490 94.104 35.776 11.746 1.00 56.67 O

ATOM 8236 N LEU B1491 89.388 34.129 13.992 1.00 23.98 N

ATOM 8237 CA LEU B1491 88.023 34.473 14.346 1.00 25.11 C

ATOM 8238 C LEU B1491 87.988 35.247 15.655 1.00 26.20 C

ATOM 8239 O LEU B1491 87.278 36.257 15.772 1.00 24.54 O

ATOM 8240 CB LEU B1491 87.172 33.195 14.452 1.00 21.49 C

ATOM 8241 CG LEU B1491 86.915 32.527 13.100 1.00 18.43 C

ATOM 8242 CD1 LEU B1491 86.407 31.125 13.290 1.00 13.59 C

ATOM 8243 CD2 LEU B1491 85.925 33.377 12.308 1.00 15.87 C

ATOM 8244 N LYS B1492 88.779 34.781 16.624 1.00 25.93 N

ATOM 8245 CA LYS B1492 88.823 35.418 17.932 1.00 25.14 C

ATOM 8246 C LYS B1492 89.304 36.854 17.834 1.00 23.17 C

ATOM 8247 O LYS B1492 88.896 37.713 18.617 1.00 23.34 O

ATOM 8248 CB LYS B1492 89.733 34.644 18.871 1.00 25.88 C

ATOM 8249 CG LYS B1492 90.188 35.473 20.045 1.00 27.69 C

ATOM 8250 CD LYS B1492 90.155 34.673 21.307 1.00 32.02 C

ATOM 8251 CE LYS B1492 89.166 35.270 22.267 1.00 34.98 C

ATOM 8252 NZ LYS B1492 89.112 34.456 23.507 1.00 38.45 N

ATOM 8253 N ALA B1493 90.172 37.114 16.867 1.00 22.61 N

ATOM 8254 CA ALA B1493 90.698 38.453 16.671 1.00 23.25 C

ATOM 8255 C ALA B1493 89.660 39.358 15.988 1.00 24.67 C

ATOM 8256 O ALA B1493 89.718 40.583 16.121 1.00 25.88 O

ATOM 8257 CB ALA B1493 91.963 38.384 15.841 1.00 21.78 C

ATOM 8258 N LEU B1494 88.713 38.747 15.271 1.00 24.78 N

ATOM 8259 CA LEU B1494 87.669 39.476 14.561 1.00 22.99 C

ATOM 8260 C LEU B1494 86.438 39.718 15.436 1.00 25.42 C

ATOM 8261 O LEU B1494 85.953 40.847 15.548 1.00 26.10 O

ATOM 8262 CB LEU B1494 87.235 38.703 13.308 1.00 20.06 C

ATOM 8263 CG LEU B1494 88.124 38.641 12.053 1.00 18.35 C

ATOM 8264 CD1 LEU B1494 87.780 37.386 11.258 1.00 12.68 C

ATOM 8265 CD2 LEU B1494 87.924 39.899 11.186 1.00 13.61 C

ATOM 8266 N TYR B1495 85.940 38.664 16.076 1.00 26.35 N

ATOM 8267 CA TYR B1495 84.728 38.773 16.890 1.00 27.37 C

ATOM 8268 C TYR B1495 84.946 39.087 18.370 1.00 30.51 C

ATOM 8269 O TYR B1495 84.153 39.816 18.980 1.00 31.72 O

ATOM 8270 CB TYR B1495 83.876 37.480 16.755 1.00 24.76 C

ATOM 8271 CG TYR B1495 83.254 37.254 15.376 1.00 18.95 C

ATOM 8272 CD1 TYR B1495 83.824 36.378 14.476 1.00 17.43 C

ATOM 8273 CD2 TYR B1495 82.109 37.931 14.980 1.00 19.21 C

ATOM 8274 CE1 TYR B1495 83.276 36.184 13.229 1.00 18.51 C

ATOM 8275 CE2 TYR B1495 81.553 37.739 13.727 1.00 16.78 C

ATOM 8276 CZ TYR B1495 82.143 36.864 12.863 1.00 17.47 C

ATOM 8277 OH TYR B1495 81.607 36.644 11.625 1.00 17.48 O

ATOM 8278 N SER B1496 86.008 38.531 18.949 1.00 32.06 N

ATOM 8279 CA SER B1496 86.314 38.736 20.368 1.00 33.32 C

ATOM 8280 C SER B1496 85.552 37.761 21.272 1.00 33.59 C

ATOM 8281 O SER B1496 86.156 36.969 21.999 1.00 36.05 O

ATOM 8282 CB SER B1496 85.978 40.168 20.789 1.00 34.15 C

ATOM 8283 OG SER B1496 86.506 41.109 19.873 1.00 40.85 O

ATOM 8284 N ASP B1497 84.223 37.833 21.224 1.00 34.72 N

ATOM 8285 CA ASP B1497 83.348 36.973 22.026 1.00 32.03 C

ATOM 8286 C ASP B1497 82.861 35.812 21.163 1.00 29.75 C

ATOM 8287 O ASP B1497 82.539 36.019 19.992 1.00 29.37 O

ATOM 8288 CB ASP B1497 82.140 37.785 22.534 1.00 32.97 C

ATOM 8289 CG ASP B1497 81.513 37.205 23.801 1.00 35.16 C

ATOM 8290 OD1 ASP B1497 80.806 37.947 24.525 1.00 33.74 O

ATOM 8291 OD2 ASP B1497 81.725 36.002 24.071 1.00 38.12 O

ATOM 8292 N ILE B1498 82.822 34.599 21.725 1.00 26.76 N

ATOM 8293 CA ILE B1498 82.344 33.443 20.971 1.00 23.33 C

ATOM 8294 C ILE B1498 80.817 33.598 20.935 1.00 25.59 C

ATOM 8295 O ILE B1498 80.137 33.145 20.009 1.00 27.78 O

ATOM 8296 CB ILE B1498 82.761 32.118 21.661 1.00 18.31 C

ATOM 8297 CG1 ILE B1498 82.241 30.904 20.876 1.00 16.41 C

ATOM 8298 CG2 ILE B1498 82.266 32.111 23.069 1.00 13.04 C

ATOM 8299 CD1 ILE B1498 82.668 30.860 19.420 1.00 11.79 C

ATOM 8300 N ASP B1499 80.293 34.285 21.945 1.00 25.91 N

ATOM 8301 CA ASP B1499 78.858 34.540 22.063 1.00 25.43 C

ATOM 8302 C ASP B1499 78.393 35.629 21.083 1.00 26.18 C

ATOM 8303 O ASP B1499 77.247 36.058 21.139 1.00 26.14 O

ATOM 8304 CB ASP B1499 78.520 34.980 23.490 1.00 25.30 C

ATOM 8305 CG ASP B1499 78.559 33.836 24.494 1.00 26.87 C

ATOM 8306 OD1 ASP B1499 78.601 32.658 24.084 1.00 26.51 O

ATOM 8307 OD2 ASP B1499 78.547 34.119 25.711 1.00 29.61 O

ATOM 8308 N VAL B1500 79.287 36.081 20.202 1.00 25.43 N

ATOM 8309 CA VAL B1500 78.947 37.106 19.219 1.00 22.62 C

ATOM 8310 C VAL B1500 79.129 36.502 17.833 1.00 20.59 C

ATOM 8311 O VAL B1500 78.730 37.076 16.815 1.00 19.94 O

ATOM 8312 CB VAL B1500 79.848 38.344 19.373 1.00 24.28 C

ATOM 8313 CG1 VAL B1500 79.799 39.209 18.097 1.00 27.49 C

ATOM 8314 CG2 VAL B1500 79.397 39.153 20.570 1.00 23.97 C

ATOM 8315 N MET B1501 79.728 35.320 17.817 1.00 19.83 N

ATOM 8316 CA MET B1501 79.973 34.589 16.582 1.00 21.11 C

ATOM 8317 C MET B1501 78.690 34.411 15.768 1.00 22.32 C

ATOM 8318 O MET B1501 77.615 34.085 16.296 1.00 24.19 O

ATOM 8319 CB MET B1501 80.576 33.224 16.909 1.00 22.68 C

ATOM 8320 CG MET B1501 80.862 32.348 15.709 1.00 24.26 C

ATOM 8321 SD MET B1501 81.850 33.202 14.502 1.00 23.71 S

ATOM 8322 CE MET B1501 82.258 31.842 13.442 1.00 25.70 C

ATOM 8323 N GLU B1502 78.809 34.617 14.467 1.00 21.45 N

ATOM 8324 CA GLU B1502 77.661 34.495 13.588 1.00 19.82 C

ATOM 8325 C GLU B1502 77.444 33.089 13.089 1.00 20.47 C

ATOM 8326 O GLU B1502 78.381 32.360 12.802 1.00 21.08 O

ATOM 8327 CB GLU B1502 77.792 35.442 12.401 1.00 16.09 C

ATOM 8328 CG GLU B1502 77.863 36.878 12.810 1.00 15.07 C

ATOM 8329 CD GLU B1502 78.219 37.769 11.666 1.00 19.44 C

ATOM 8330 OE1 GLU B1502 77.308 38.122 10.903 1.00 19.68 O

ATOM 8331 OE2 GLU B1502 79.407 38.118 11.524 1.00 24.00 O

ATOM 8332 N LEU B1503 76.171 32.735 12.984 1.00 25.07 N

ATOM 8333 CA LEU B1503 75.732 31.426 12.532 1.00 23.49 C

ATOM 8334 C LEU B1503 76.316 30.968 11.195 1.00 22.23 C

ATOM 8335 O LEU B1503 77.103 30.030 11.154 1.00 21.45 O

ATOM 8336 CB LEU B1503 74.204 31.420 12.463 1.00 21.23 C

ATOM 8337 CG LEU B1503 73.603 30.109 11.973 1.00 23.33 C

ATOM 8338 CD1 LEU B1503 73.980 29.015 12.950 1.00 24.23 C

ATOM 8339 CD2 LEU B1503 72.089 30.228 11.836 1.00 20.66 C

ATOM 8340 N TYR B1504 75.935 31.633 10.105 1.00 25.43 N

ATOM 8341 CA TYR B1504 76.407 31.249 8.764 1.00 27.13 C

ATOM 8342 C TYR B1504 77.906 30.909 8.620 1.00 26.55 C

ATOM 8343 O TYR B1504 78.259 29.802 8.192 1.00 25.83 O

ATOM 8344 CB TYR B1504 76.062 32.322 7.743 1.00 25.87 C

ATOM 8345 CG TYR B1504 76.627 31.961 6.412 1.00 26.76 C

ATOM 8346 CD1 TYR B1504 76.252 30.770 5.799 1.00 26.85 C

ATOM 8347 CD2 TYR B1504 77.572 32.772 5.781 1.00 27.02 C

ATOM 8348 CE1 TYR B1504 76.798 30.387 4.585 1.00 29.33 C

ATOM 8349 CE2 TYR B1504 78.130 32.399 4.561 1.00 28.31 C

ATOM 8350 CZ TYR B1504 77.739 31.202 3.967 1.00 30.09 C

ATOM 8351 OH TYR B1504 78.282 30.813 2.754 1.00 33.11 O

ATOM 8352 N PRO B1505 78.803 31.871 8.936 1.00 26.50 N

ATOM 8353 CA PRO B1505 80.225 31.550 8.809 1.00 24.21 C

ATOM 8354 C PRO B1505 80.542 30.352 9.703 1.00 22.99 C

ATOM 8355 O PRO B1505 81.147 29.377 9.265 1.00 24.57 O

ATOM 8356 CB PRO B1505 80.946 32.828 9.283 1.00 23.03 C

ATOM 8357 CG PRO B1505 79.961 33.904 9.194 1.00 23.93 C

ATOM 8358 CD PRO B1505 78.598 33.256 9.401 1.00 26.69 C

ATOM 8359 N ALA B1506 80.106 30.427 10.953 1.00 20.94 N

ATOM 8360 CA ALA B1506 80.361 29.357 11.907 1.00 20.57 C

ATOM 8361 C ALA B1506 80.064 27.970 11.343 1.00 20.24 C

ATOM 8362 O ALA B1506 80.754 27.005 11.660 1.00 21.26 O

ATOM 8363 CB ALA B1506 79.560 29.589 13.184 1.00 17.36 C

ATOM 8364 N LEU B1507 79.051 27.871 10.491 1.00 21.00 N

ATOM 8365 CA LEU B1507 78.686 26.580 9.916 1.00 20.42 C

ATOM 8366 C LEU B1507 79.739 26.039 8.941 1.00 19.35 C

ATOM 8367 O LEU B1507 80.037 24.847 8.931 1.00 18.91 O

ATOM 8368 CB LEU B1507 77.313 26.686 9.227 1.00 20.91 C

ATOM 8369 CG LEU B1507 76.070 26.635 10.140 1.00 15.63 C

ATOM 8370 CD1 LEU B1507 74.916 27.300 9.416 1.00 11.75 C

ATOM 8371 CD2 LEU B1507 75.736 25.193 10.514 1.00 11.82 C

ATOM 8372 N LEU B1508 80.308 26.925 8.135 1.00 20.43 N

ATOM 8373 CA LEU B1508 81.323 26.555 7.152 1.00 21.16 C

ATOM 8374 C LEU B1508 82.726 26.348 7.749 1.00 22.46 C

ATOM 8375 O LEU B1508 83.618 25.790 7.116 1.00 21.11 O

ATOM 8376 CB LEU B1508 81.383 27.658 6.097 1.00 20.66 C

ATOM 8377 CG LEU B1508 80.091 27.917 5.313 1.00 16.17 C

ATOM 8378 CD1 LEU B1508 80.355 28.879 4.148 1.00 12.22 C

ATOM 8379 CD2 LEU B1508 79.575 26.606 4.798 1.00 14.38 C

ATOM 8380 N VAL B1509 82.898 26.792 8.984 1.00 24.96 N

ATOM 8381 CA VAL B1509 84.183 26.737 9.676 1.00 24.31 C

ATOM 8382 C VAL B1509 84.191 25.761 10.865 1.00 23.87 C

ATOM 8383 O VAL B1509 85.242 25.464 11.436 1.00 24.21 O

ATOM 8384 CB VAL B1509 84.551 28.192 10.150 1.00 25.56 C

ATOM 8385 CG1 VAL B1509 84.832 28.232 11.656 1.00 25.21 C

ATOM 8386 CG2 VAL B1509 85.716 28.710 9.353 1.00 27.58 C

ATOM 8387 N GLU B1510 83.012 25.270 11.224 1.00 22.73 N

ATOM 8388 CA GLU B1510 82.840 24.333 12.334 1.00 23.01 C

ATOM 8389 C GLU B1510 83.649 23.045 12.188 1.00 22.67 C

ATOM 8390 O GLU B1510 83.848 22.538 11.086 1.00 23.24 O

ATOM 8391 CB GLU B1510 81.366 23.968 12.466 1.00 21.60 C

ATOM 8392 CG GLU B1510 80.899 23.725 13.867 1.00 26.86 C

ATOM 8393 CD GLU B1510 79.590 22.962 13.894 1.00 30.06 C

ATOM 8394 OE1 GLU B1510 79.181 22.469 12.816 1.00 30.39 O

ATOM 8395 OE2 GLU B1510 78.974 22.861 14.983 1.00 27.88 O

ATOM 8396 N LYS B1511 84.117 22.516 13.313 1.00 22.39 N

ATOM 8397 CA LYS B1511 84.878 21.276 13.293 1.00 21.13 C

ATOM 8398 C LYS B1511 83.993 20.154 12.762 1.00 19.47 C

ATOM 8399 O LYS B1511 82.976 19.791 13.366 1.00 18.27 O

ATOM 8400 CB LYS B1511 85.349 20.916 14.690 1.00 24.67 C

ATOM 8401 CG LYS B1511 85.931 19.530 14.770 1.00 29.35 C

ATOM 8402 CD LYS B1511 86.053 19.060 16.203 1.00 35.01 C

ATOM 8403 CE LYS B1511 85.932 17.542 16.290 1.00 41.84 C

ATOM 8404 NZ LYS B1511 86.176 17.019 17.671 1.00 45.48 N

ATOM 8405 N PRO B1512 84.354 19.615 11.598 1.00 17.82 N

ATOM 8406 CA PRO B1512 83.574 18.532 10.999 1.00 18.12 C

ATOM 8407 C PRO B1512 83.520 17.342 11.922 1.00 20.41 C

ATOM 8408 O PRO B1512 84.371 17.196 12.794 1.00 23.65 O

ATOM 8409 CB PRO B1512 84.327 18.213 9.712 1.00 16.20 C

ATOM 8410 CG PRO B1512 85.122 19.441 9.424 1.00 15.18 C

ATOM 8411 CD PRO B1512 85.489 20.016 10.755 1.00 14.61 C

ATOM 8412 N ARG B1513 82.503 16.505 11.759 1.00 24.06 N

ATOM 8413 CA ARG B1513 82.404 15.294 12.572 1.00 25.28 C

ATOM 8414 C ARG B1513 83.479 14.403 11.932 1.00 26.35 C

ATOM 8415 O ARG B1513 83.927 14.687 10.822 1.00 27.19 O

ATOM 8416 CB ARG B1513 81.012 14.665 12.432 1.00 24.92 C

ATOM 8417 CG ARG B1513 80.175 14.688 13.702 1.00 21.88 C

ATOM 8418 CD ARG B1513 79.008 15.670 13.599 1.00 21.89 C

ATOM 8419 NE ARG B1513 78.267 15.735 14.852 1.00 22.48 N

ATOM 8420 CZ ARG B1513 76.951 15.573 14.958 1.00 26.50 C

ATOM 8421 NH1 ARG B1513 76.215 15.339 13.877 1.00 26.91 N

ATOM 8422 NH2 ARG B1513 76.361 15.624 16.152 1.00 26.52 N

ATOM 8423 N PRO B1514 83.909 13.330 12.613 1.00 24.81 N

ATOM 8424 CA PRO B1514 84.940 12.427 12.079 1.00 26.48 C

ATOM 8425 C PRO B1514 84.732 11.950 10.643 1.00 28.37 C

ATOM 8426 O PRO B1514 83.877 11.096 10.397 1.00 29.30 O

ATOM 8427 CB PRO B1514 84.936 11.259 13.052 1.00 25.60 C

ATOM 8428 CG PRO B1514 84.412 11.835 14.325 1.00 26.22 C

ATOM 8429 CD PRO B1514 83.431 12.900 13.936 1.00 27.04 C

ATOM 8430 N ASP B1515 85.533 12.487 9.712 1.00 28.70 N

ATOM 8431 CA ASP B1515 85.469 12.142 8.278 1.00 27.73 C

ATOM 8432 C ASP B1515 84.133 12.478 7.653 1.00 26.48 C

ATOM 8433 O ASP B1515 83.752 11.884 6.643 1.00 25.98 O

ATOM 8434 CB ASP B1515 85.729 10.661 8.067 1.00 29.42 C

ATOM 8435 CG ASP B1515 87.185 10.324 8.146 1.00 34.56 C

ATOM 8436 OD1 ASP B1515 88.004 11.143 7.678 1.00 36.90 O

ATOM 8437 OD2 ASP B1515 87.516 9.247 8.679 1.00 39.00 O

ATOM 8438 N ALA B1516 83.433 13.430 8.269 1.00 22.19 N

ATOM 8439 CA ALA B1516 82.126 13.874 7.823 1.00 17.77 C

ATOM 8440 C ALA B1516 82.281 15.190 7.085 1.00 16.71 C

ATOM 8441 O ALA B1516 83.286 15.879 7.229 1.00 18.19 O

ATOM 8442 CB ALA B1516 81.208 14.047 9.020 1.00 14.82 C

ATOM 8443 N ILE B1517 81.271 15.532 6.301 1.00 14.77 N

ATOM 8444 CA ILE B1517 81.277 16.752 5.514 1.00 12.33 C

ATOM 8445 C ILE B1517 80.757 17.959 6.292 1.00 15.27 C

ATOM 8446 O ILE B1517 81.124 19.101 5.984 1.00 12.84 O

ATOM 8447 CB ILE B1517 80.412 16.557 4.258 1.00 11.45 C

ATOM 8448 CG1 ILE B1517 80.472 17.798 3.385 1.00 11.40 C

ATOM 8449 CG2 ILE B1517 78.974 16.242 4.647 1.00 2.92 C

ATOM 8450 CD1 ILE B1517 79.969 17.550 1.972 1.00 14.35 C

ATOM 8451 N PHE B1518 79.913 17.687 7.302 1.00 17.73 N

ATOM 8452 CA PHE B1518 79.267 18.715 8.143 1.00 15.00 C

ATOM 8453 C PHE B1518 79.607 18.647 9.622 1.00 15.24 C

ATOM 8454 O PHE B1518 80.069 17.633 10.146 1.00 13.32 O

ATOM 8455 CB PHE B1518 77.738 18.587 8.131 1.00 18.10 C

ATOM 8456 CG PHE B1518 77.097 18.714 6.792 1.00 17.66 C

ATOM 8457 CD1 PHE B1518 77.564 19.627 5.859 1.00 18.88 C

ATOM 8458 CD2 PHE B1518 76.001 17.916 6.474 1.00 16.27 C

ATOM 8459 CE1 PHE B1518 76.948 19.741 4.616 1.00 19.58 C

ATOM 8460 CE2 PHE B1518 75.382 18.019 5.245 1.00 18.47 C

ATOM 8461 CZ PHE B1518 75.854 18.930 4.309 1.00 19.29 C

ATOM 8462 N GLY B1519 79.285 19.742 10.298 1.00 16.80 N

ATOM 8463 CA GLY B1519 79.474 19.819 11.731 1.00 18.45 C

ATOM 8464 C GLY B1519 78.146 19.485 12.401 1.00 17.33 C

ATOM 8465 O GLY B1519 77.125 19.288 11.731 1.00 15.33 O

ATOM 8466 N GLU B1520 78.160 19.425 13.727 1.00 19.28 N

ATOM 8467 CA GLU B1520 76.958 19.104 14.497 1.00 21.54 C

ATOM 8468 C GLU B1520 75.824 20.129 14.311 1.00 20.18 C

ATOM 8469 O GLU B1520 74.661 19.766 14.159 1.00 17.36 O

ATOM 8470 CB GLU B1520 77.336 18.971 15.989 1.00 23.83 C

ATOM 8471 CG GLU B1520 76.168 18.848 16.972 1.00 26.43 C

ATOM 8472 CD GLU B1520 76.461 19.515 18.313 1.00 28.36 C

ATOM 8473 OE1 GLU B1520 76.152 18.902 19.364 1.00 28.71 O

ATOM 8474 OE2 GLU B1520 77.000 20.650 18.309 1.00 28.36 O

ATOM 8475 N THR B1521 76.178 21.407 14.309 1.00 20.96 N

ATOM 8476 CA THR B1521 75.193 22.475 14.158 1.00 19.99 C

ATOM 8477 C THR B1521 74.425 22.371 12.838 1.00 19.53 C

ATOM 8478 O THR B1521 73.203 22.572 12.794 1.00 17.19 O

ATOM 8479 CB THR B1521 75.866 23.862 14.241 1.00 19.42 C

ATOM 8480 OG1 THR B1521 76.798 23.901 15.338 1.00 15.34 O

ATOM 8481 CG2 THR B1521 74.804 24.926 14.428 1.00 19.15 C

ATOM 8482 N MET B1522 75.159 22.051 11.770 1.00 20.26 N

ATOM 8483 CA MET B1522 74.592 21.904 10.433 1.00 19.99 C

ATOM 8484 C MET B1522 73.566 20.781 10.403 1.00 20.90 C

ATOM 8485 O MET B1522 72.455 20.943 9.894 1.00 23.38 O

ATOM 8486 CB MET B1522 75.687 21.590 9.424 1.00 17.52 C

ATOM 8487 CG MET B1522 75.177 21.408 8.019 1.00 16.22 C

ATOM 8488 SD MET B1522 74.524 22.947 7.372 1.00 19.66 S

ATOM 8489 CE MET B1522 76.053 23.756 6.697 1.00 19.69 C

ATOM 8490 N VAL B1523 73.940 19.640 10.956 1.00 18.65 N

ATOM 8491 CA VAL B1523 73.040 18.504 10.983 1.00 20.66 C

ATOM 8492 C VAL B1523 71.882 18.668 11.960 1.00 21.76 C

ATOM 8493 O VAL B1523 70.771 18.220 11.690 1.00 22.09 O

ATOM 8494 CB VAL B1523 73.799 17.227 11.373 1.00 21.37 C

ATOM 8495 CG1 VAL B1523 72.803 16.091 11.614 1.00 20.14 C

ATOM 8496 CG2 VAL B1523 74.800 16.862 10.278 1.00 21.35 C

ATOM 8497 N GLU B1524 72.156 19.303 13.098 1.00 22.84 N

ATOM 8498 CA GLU B1524 71.162 19.510 14.150 1.00 21.67 C

ATOM 8499 C GLU B1524 70.102 20.554 13.820 1.00 22.21 C

ATOM 8500 O GLU B1524 68.984 20.500 14.346 1.00 24.55 O

ATOM 8501 CB GLU B1524 71.856 19.894 15.458 1.00 22.51 C

ATOM 8502 CG GLU B1524 72.357 18.703 16.274 1.00 25.62 C

ATOM 8503 CD GLU B1524 71.448 17.479 16.186 1.00 25.97 C

ATOM 8504 OE1 GLU B1524 70.348 17.499 16.780 1.00 27.12 O

ATOM 8505 OE2 GLU B1524 71.839 16.490 15.525 1.00 26.85 O

ATOM 8506 N LEU B1525 70.445 21.513 12.966 1.00 20.50 N

ATOM 8507 CA LEU B1525 69.486 22.541 12.572 1.00 17.61 C

ATOM 8508 C LEU B1525 68.722 22.097 11.326 1.00 19.17 C

ATOM 8509 O LEU B1525 67.496 22.264 11.225 1.00 20.31 O

ATOM 8510 CB LEU B1525 70.209 23.842 12.254 1.00 15.12 C

ATOM 8511 CG LEU B1525 70.957 24.576 13.361 1.00 17.44 C

ATOM 8512 CD1 LEU B1525 70.337 25.952 13.514 1.00 16.11 C

ATOM 8513 CD2 LEU B1525 70.915 23.810 14.662 1.00 16.10 C

ATOM 8514 N GLY B1526 69.463 21.520 10.382 1.00 18.56 N

ATOM 8515 CA GLY B1526 68.882 21.096 9.123 1.00 17.17 C

ATOM 8516 C GLY B1526 67.934 19.919 9.106 1.00 16.24 C

ATOM 8517 O GLY B1526 66.997 19.906 8.314 1.00 16.63 O

ATOM 8518 N ALA B1527 68.184 18.923 9.947 1.00 15.08 N

ATOM 8519 CA ALA B1527 67.318 17.752 9.994 1.00 13.52 C

ATOM 8520 C ALA B1527 65.853 18.107 10.373 1.00 15.38 C

ATOM 8521 O ALA B1527 64.901 17.692 9.697 1.00 17.23 O

ATOM 8522 CB ALA B1527 67.901 16.713 10.969 1.00 10.08 C

ATOM 8523 N PRO B1528 65.648 18.873 11.456 1.00 12.00 N

ATOM 8524 CA PRO B1528 64.262 19.201 11.806 1.00 12.36 C

ATOM 8525 C PRO B1528 63.507 19.892 10.667 1.00 12.18 C

ATOM 8526 O PRO B1528 62.442 19.441 10.255 1.00 11.80 O

ATOM 8527 CB PRO B1528 64.401 20.079 13.050 1.00 11.74 C

ATOM 8528 CG PRO B1528 65.782 19.764 13.585 1.00 10.78 C

ATOM 8529 CD PRO B1528 66.619 19.439 12.402 1.00 9.17 C

ATOM 8530 N PHE B1529 64.079 20.986 10.161 1.00 15.58 N

ATOM 8531 CA PHE B1529 63.492 21.764 9.061 1.00 14.30 C

ATOM 8532 C PHE B1529 63.250 20.854 7.854 1.00 13.25 C

ATOM 8533 O PHE B1529 62.269 20.983 7.133 1.00 13.61 O

ATOM 8534 CB PHE B1529 64.461 22.855 8.598 1.00 17.16 C

ATOM 8535 CG PHE B1529 64.639 23.992 9.562 1.00 19.49 C

ATOM 8536 CD1 PHE B1529 65.898 24.523 9.771 1.00 20.38 C

ATOM 8537 CD2 PHE B1529 63.559 24.576 10.195 1.00 18.33 C

ATOM 8538 CE1 PHE B1529 66.085 25.620 10.590 1.00 22.73 C

ATOM 8539 CE2 PHE B1529 63.739 25.684 11.023 1.00 19.23 C

ATOM 8540 CZ PHE B1529 65.004 26.204 11.217 1.00 20.17 C

ATOM 8541 N SER B1530 64.186 19.951 7.628 1.00 13.05 N

ATOM 8542 CA SER B1530 64.110 19.055 6.508 1.00 13.10 C

ATOM 8543 C SER B1530 62.963 18.063 6.579 1.00 16.41 C

ATOM 8544 O SER B1530 62.115 18.053 5.707 1.00 17.60 O

ATOM 8545 CB SER B1530 65.437 18.310 6.358 1.00 12.23 C

ATOM 8546 OG SER B1530 65.506 17.588 5.140 1.00 12.13 O

ATOM 8547 N LEU B1531 62.934 17.219 7.602 1.00 19.74 N

ATOM 8548 CA LEU B1531 61.875 16.223 7.708 1.00 20.52 C

ATOM 8549 C LEU B1531 60.518 16.885 7.836 1.00 21.97 C

ATOM 8550 O LEU B1531 59.519 16.386 7.322 1.00 22.62 O

ATOM 8551 CB LEU B1531 62.109 15.312 8.908 1.00 22.05 C

ATOM 8552 CG LEU B1531 63.323 14.391 8.844 1.00 25.39 C

ATOM 8553 CD1 LEU B1531 63.755 14.054 10.263 1.00 26.37 C

ATOM 8554 CD2 LEU B1531 62.993 13.129 8.045 1.00 25.33 C

ATOM 8555 N LYS B1532 60.465 18.005 8.540 1.00 21.77 N

ATOM 8556 CA LYS B1532 59.197 18.697 8.683 1.00 24.03 C

ATOM 8557 C LYS B1532 58.593 18.981 7.294 1.00 23.78 C

ATOM 8558 O LYS B1532 57.413 18.735 7.064 1.00 29.24 O

ATOM 8559 CB LYS B1532 59.396 19.994 9.466 1.00 26.31 C

ATOM 8560 CG LYS B1532 58.279 20.287 10.443 1.00 28.02 C

ATOM 8561 CD LYS B1532 56.942 20.157 9.738 1.00 29.80 C

ATOM 8562 CE LYS B1532 55.860 19.616 10.648 1.00 30.97 C

ATOM 8563 NZ LYS B1532 54.744 20.609 10.753 1.00 30.91 N

ATOM 8564 N GLY B1533 59.397 19.472 6.362 1.00 21.33 N

ATOM 8565 CA GLY B1533 58.874 19.751 5.037 1.00 20.46 C

ATOM 8566 C GLY B1533 58.707 18.550 4.113 1.00 20.03 C

ATOM 8567 O GLY B1533 57.948 18.598 3.150 1.00 19.49 O

ATOM 8568 N LEU B1534 59.427 17.476 4.405 1.00 21.15 N

ATOM 8569 CA LEU B1534 59.376 16.241 3.617 1.00 19.77 C

ATOM 8570 C LEU B1534 58.172 15.408 4.072 1.00 18.20 C

ATOM 8571 O LEU B1534 57.398 14.915 3.260 1.00 17.39 O

ATOM 8572 CB LEU B1534 60.668 15.435 3.834 1.00 17.89 C

ATOM 8573 CG LEU B1534 61.577 15.021 2.679 1.00 14.69 C

ATOM 8574 CD1 LEU B1534 61.517 16.067 1.603 1.00 12.45 C

ATOM 8575 CD2 LEU B1534 63.000 14.843 3.183 1.00 12.96 C

ATOM 8576 N MET B1535 58.037 15.252 5.381 1.00 18.25 N

ATOM 8577 CA MET B1535 56.929 14.495 5.954 1.00 21.38 C

ATOM 8578 C MET B1535 55.683 15.381 6.080 1.00 20.81 C

ATOM 8579 O MET B1535 54.555 14.883 6.106 1.00 17.89 O

ATOM 8580 CB MET B1535 57.323 13.956 7.337 1.00 22.50 C

ATOM 8581 CG MET B1535 58.203 12.704 7.326 1.00 20.77 C

ATOM 8582 SD MET B1535 58.119 11.765 5.809 1.00 22.35 S

ATOM 8583 CE MET B1535 57.478 10.229 6.370 1.00 19.82 C

ATOM 8584 N GLY B1536 55.907 16.693 6.142 1.00 19.09 N

ATOM 8585 CA GLY B1536 54.813 17.635 6.267 1.00 17.80 C

ATOM 8586 C GLY B1536 53.961 17.745 5.015 1.00 18.06 C

ATOM 8587 O GLY B1536 52.887 18.329 5.060 1.00 18.92 O

ATOM 8588 N ASN B1537 54.426 17.186 3.899 1.00 16.84 N

ATOM 8589 CA ASN B1537 53.670 17.250 2.647 1.00 15.71 C

ATOM 8590 C ASN B1537 52.311 16.526 2.723 1.00 18.95 C

ATOM 8591 O ASN B1537 52.177 15.451 3.323 1.00 19.42 O

ATOM 8592 CB ASN B1537 54.504 16.675 1.486 1.00 14.54 C

ATOM 8593 CG ASN B1537 53.842 16.883 0.115 1.00 15.36 C

ATOM 8594 OD1 ASN B1537 52.906 16.160 -0.271 1.00 16.41 O

ATOM 8595 ND2 ASN B1537 54.338 17.860 -0.628 1.00 10.48 N

ATOM 8596 N PRO B1538 51.276 17.122 2.105 1.00 20.98 N

ATOM 8597 CA PRO B1538 49.930 16.548 2.097 1.00 17.39 C

ATOM 8598 C PRO B1538 49.871 15.101 1.615 1.00 17.46 C

ATOM 8599 O PRO B1538 49.136 14.300 2.184 1.00 19.87 O

ATOM 8600 CB PRO B1538 49.143 17.483 1.178 1.00 17.12 C

ATOM 8601 CG PRO B1538 50.185 18.277 0.423 1.00 16.83 C

ATOM 8602 CD PRO B1538 51.329 18.396 1.361 1.00 18.86 C

ATOM 8603 N ILE B1539 50.630 14.753 0.574 1.00 16.57 N

ATOM 8604 CA ILE B1539 50.570 13.382 0.070 1.00 17.60 C

ATOM 8605 C ILE B1539 50.939 12.329 1.116 1.00 16.68 C

ATOM 8606 O ILE B1539 50.720 11.146 0.900 1.00 16.24 O

ATOM 8607 CB ILE B1539 51.468 13.165 -1.211 1.00 18.18 C

ATOM 8608 CG1 ILE B1539 52.962 13.191 -0.860 1.00 14.38 C

ATOM 8609 CG2 ILE B1539 51.127 14.196 -2.270 1.00 17.07 C

ATOM 8610 CD1 ILE B1539 53.756 12.084 -1.534 1.00 6.73 C

ATOM 8611 N CYS B1540 51.481 12.768 2.248 1.00 17.66 N

ATOM 8612 CA CYS B1540 51.898 11.856 3.312 1.00 16.28 C

ATOM 8613 C CYS B1540 50.817 11.741 4.358 1.00 15.85 C

ATOM 8614 O CYS B1540 50.930 10.931 5.275 1.00 18.85 O

ATOM 8615 CB CYS B1540 53.176 12.350 4.000 1.00 15.93 C

ATOM 8616 SG CYS B1540 54.690 12.256 3.031 1.00 14.61 S

ATOM 8617 N SER B1541 49.781 12.568 4.232 1.00 14.75 N

ATOM 8618 CA SER B1541 48.672 12.533 5.167 1.00 11.61 C

ATOM 8619 C SER B1541 47.855 11.281 4.866 1.00 12.13 C

ATOM 8620 O SER B1541 47.849 10.784 3.734 1.00 12.38 O

ATOM 8621 CB SER B1541 47.814 13.818 5.050 1.00 12.94 C

ATOM 8622 OG SER B1541 47.267 14.048 3.755 1.00 11.74 O

ATOM 8623 N PRO B1542 47.160 10.742 5.874 1.00 12.70 N

ATOM 8624 CA PRO B1542 46.343 9.538 5.702 1.00 13.10 C

ATOM 8625 C PRO B1542 45.370 9.571 4.530 1.00 14.83 C

ATOM 8626 O PRO B1542 45.294 8.598 3.778 1.00 16.36 O

ATOM 8627 CB PRO B1542 45.628 9.396 7.038 1.00 12.08 C

ATOM 8628 CG PRO B1542 46.482 10.109 7.996 1.00 10.76 C

ATOM 8629 CD PRO B1542 47.102 11.244 7.254 1.00 13.13 C

ATOM 8630 N GLN B1543 44.632 10.673 4.366 1.00 16.77 N

ATOM 8631 CA GLN B1543 43.669 10.763 3.264 1.00 19.39 C

ATOM 8632 C GLN B1543 44.350 10.686 1.897 1.00 18.88 C

ATOM 8633 O GLN B1543 43.713 10.347 0.898 1.00 20.19 O

ATOM 8634 CB GLN B1543 42.844 12.059 3.341 1.00 18.99 C

ATOM 8635 CG GLN B1543 41.630 12.010 4.293 1.00 23.88 C

ATOM 8636 CD GLN B1543 40.756 10.772 4.147 1.00 25.08 C

ATOM 8637 OE1 GLN B1543 41.234 9.644 4.220 1.00 29.79 O

ATOM 8638 NE2 GLN B1543 39.460 10.983 3.956 1.00 27.21 N

ATOM 8639 N TYR B1544 45.647 10.981 1.856 1.00 16.27 N

ATOM 8640 CA TYR B1544 46.384 10.956 0.597 1.00 13.22 C

ATOM 8641 C TYR B1544 47.198 9.682 0.350 1.00 13.54 C

ATOM 8642 O TYR B1544 47.305 9.226 -0.795 1.00 12.90 O

ATOM 8643 CB TYR B1544 47.315 12.174 0.516 1.00 10.15 C

ATOM 8644 CG TYR B1544 46.642 13.418 -0.017 1.00 7.85 C

ATOM 8645 CD1 TYR B1544 46.635 13.698 -1.387 1.00 7.57 C

ATOM 8646 CD2 TYR B1544 45.967 14.292 0.840 1.00 8.29 C

ATOM 8647 CE1 TYR B1544 45.963 14.812 -1.895 1.00 6.08 C

ATOM 8648 CE2 TYR B1544 45.288 15.410 0.349 1.00 4.67 C

ATOM 8649 CZ TYR B1544 45.290 15.660 -1.020 1.00 8.86 C

ATOM 8650 OH TYR B1544 44.593 16.736 -1.518 1.00 13.28 O

ATOM 8651 N TRP B1545 47.760 9.107 1.413 1.00 12.26 N

ATOM 8652 CA TRP B1545 48.591 7.907 1.284 1.00 12.93 C

ATOM 8653 C TRP B1545 47.847 6.596 1.009 1.00 11.89 C

ATOM 8654 O TRP B1545 47.584 5.808 1.921 1.00 8.89 O

ATOM 8655 CB TRP B1545 49.459 7.729 2.534 1.00 16.89 C

ATOM 8656 CG TRP B1545 50.692 6.891 2.282 1.00 20.50 C

ATOM 8657 CD1 TRP B1545 51.042 5.730 2.923 1.00 19.89 C

ATOM 8658 CD2 TRP B1545 51.734 7.152 1.325 1.00 19.66 C

ATOM 8659 NE1 TRP B1545 52.233 5.261 2.425 1.00 20.41 N

ATOM 8660 CE2 TRP B1545 52.679 6.112 1.446 1.00 19.76 C

ATOM 8661 CE3 TRP B1545 51.957 8.164 0.382 1.00 16.86 C

ATOM 8662 CZ2 TRP B1545 53.828 6.054 0.664 1.00 19.31 C

ATOM 8663 CZ3 TRP B1545 53.091 8.103 -0.391 1.00 17.34 C

ATOM 8664 CH2 TRP B1545 54.018 7.054 -0.246 1.00 19.50 C

ATOM 8665 N LYS B1546 47.520 6.373 -0.258 1.00 11.22 N

ATOM 8666 CA LYS B1546 46.823 5.173 -0.675 1.00 9.42 C

ATOM 8667 C LYS B1546 46.900 5.101 -2.189 1.00 9.03 C

ATOM 8668 O LYS B1546 47.002 6.118 -2.870 1.00 8.69 O

ATOM 8669 CB LYS B1546 45.356 5.193 -0.198 1.00 13.33 C

ATOM 8670 CG LYS B1546 44.584 6.524 -0.405 1.00 12.92 C

ATOM 8671 CD LYS B1546 43.128 6.396 0.011 1.00 15.01 C

ATOM 8672 CE LYS B1546 42.941 6.664 1.496 1.00 15.06 C

ATOM 8673 NZ LYS B1546 41.639 7.337 1.751 1.00 14.89 N

ATOM 8674 N PRO B1547 46.825 3.887 -2.736 1.00 8.60 N

ATOM 8675 CA PRO B1547 46.895 3.634 -4.174 1.00 7.98 C

ATOM 8676 C PRO B1547 46.096 4.545 -5.095 1.00 11.21 C

ATOM 8677 O PRO B1547 46.642 5.111 -6.052 1.00 13.15 O

ATOM 8678 CB PRO B1547 46.463 2.180 -4.299 1.00 2.74 C

ATOM 8679 CG PRO B1547 46.808 1.580 -3.008 1.00 5.32 C

ATOM 8680 CD PRO B1547 46.645 2.643 -1.971 1.00 7.59 C

ATOM 8681 N SER B1548 44.804 4.675 -4.812 1.00 13.26 N

ATOM 8682 CA SER B1548 43.918 5.484 -5.645 1.00 12.47 C

ATOM 8683 C SER B1548 44.446 6.881 -5.930 1.00 11.49 C

ATOM 8684 O SER B1548 44.223 7.409 -7.020 1.00 12.08 O

ATOM 8685 CB SER B1548 42.536 5.577 -5.002 1.00 12.73 C

ATOM 8686 OG SER B1548 42.642 6.189 -3.729 1.00 20.84 O

ATOM 8687 N THR B1549 45.152 7.478 -4.968 1.00 11.14 N

ATOM 8688 CA THR B1549 45.676 8.827 -5.161 1.00 9.68 C

ATOM 8689 C THR B1549 46.701 8.875 -6.268 1.00 10.42 C

ATOM 8690 O THR B1549 46.878 9.903 -6.921 1.00 11.67 O

ATOM 8691 CB THR B1549 46.348 9.376 -3.893 1.00 6.19 C

ATOM 8692 OG1 THR B1549 45.471 9.192 -2.776 1.00 11.55 O

ATOM 8693 CG2 THR B1549 46.668 10.850 -4.060 1.00 2.00 C

ATOM 8694 N PHE B1550 47.369 7.749 -6.483 1.00 12.23 N

ATOM 8695 CA PHE B1550 48.413 7.678 -7.490 1.00 12.75 C

ATOM 8696 C PHE B1550 48.040 6.803 -8.680 1.00 14.27 C

ATOM 8697 O PHE B1550 48.906 6.196 -9.322 1.00 16.41 O

ATOM 8698 CB PHE B1550 49.715 7.190 -6.828 1.00 11.38 C

ATOM 8699 CG PHE B1550 49.998 7.838 -5.482 1.00 8.97 C

ATOM 8700 CD1 PHE B1550 49.783 7.132 -4.287 1.00 8.55 C

ATOM 8701 CD2 PHE B1550 50.453 9.153 -5.405 1.00 3.75 C

ATOM 8702 CE1 PHE B1550 50.018 7.740 -3.038 1.00 5.80 C

ATOM 8703 CE2 PHE B1550 50.687 9.754 -4.171 1.00 5.56 C

ATOM 8704 CZ PHE B1550 50.468 9.046 -2.983 1.00 5.75 C

ATOM 8705 N GLY B1551 46.747 6.760 -8.977 1.00 15.69 N

ATOM 8706 CA GLY B1551 46.253 5.976 -10.091 1.00 14.37 C

ATOM 8707 C GLY B1551 46.280 4.484 -9.847 1.00 14.04 C

ATOM 8708 O GLY B1551 46.294 3.722 -10.803 1.00 13.62 O

ATOM 8709 N GLY B1552 46.287 4.060 -8.587 1.00 12.03 N

ATOM 8710 CA GLY B1552 46.302 2.638 -8.331 1.00 17.91 C

ATOM 8711 C GLY B1552 47.598 2.080 -7.771 1.00 21.53 C

ATOM 8712 O GLY B1552 48.501 2.818 -7.416 1.00 23.92 O

ATOM 8713 N GLU B1553 47.687 0.759 -7.697 1.00 24.48 N

ATOM 8714 CA GLU B1553 48.860 0.102 -7.150 1.00 25.43 C

ATOM 8715 C GLU B1553 50.052 0.210 -8.078 1.00 23.50 C

ATOM 8716 O GLU B1553 51.187 0.047 -7.641 1.00 23.26 O

ATOM 8717 CB GLU B1553 48.554 -1.374 -6.862 1.00 31.46 C

ATOM 8718 CG GLU B1553 47.801 -1.635 -5.544 1.00 41.81 C

ATOM 8719 CD GLU B1553 48.477 -0.994 -4.319 1.00 49.68 C

ATOM 8720 OE1 GLU B1553 49.534 -0.333 -4.480 1.00 52.38 O

ATOM 8721 OE2 GLU B1553 47.944 -1.154 -3.194 1.00 52.90 O

ATOM 8722 N VAL B1554 49.801 0.480 -9.355 1.00 19.60 N

ATOM 8723 CA VAL B1554 50.894 0.616 -10.307 1.00 18.22 C

ATOM 8724 C VAL B1554 51.600 1.963 -10.072 1.00 21.02 C

ATOM 8725 O VAL B1554 52.845 2.037 -10.065 1.00 22.73 O

ATOM 8726 CB VAL B1554 50.389 0.515 -11.765 1.00 17.24 C

ATOM 8727 CG1 VAL B1554 51.503 0.858 -12.740 1.00 14.72 C

ATOM 8728 CG2 VAL B1554 49.896 -0.890 -12.040 1.00 15.59 C

ATOM 8729 N GLY B1555 50.810 3.022 -9.866 1.00 19.76 N

ATOM 8730 CA GLY B1555 51.375 4.332 -9.601 1.00 18.70 C

ATOM 8731 C GLY B1555 52.025 4.352 -8.226 1.00 18.85 C

ATOM 8732 O GLY B1555 53.121 4.871 -8.046 1.00 20.92 O

ATOM 8733 N PHE B1556 51.342 3.779 -7.246 1.00 18.24 N

ATOM 8734 CA PHE B1556 51.855 3.719 -5.882 1.00 18.23 C

ATOM 8735 C PHE B1556 53.240 3.049 -5.869 1.00 20.28 C

ATOM 8736 O PHE B1556 54.159 3.512 -5.198 1.00 22.85 O

ATOM 8737 CB PHE B1556 50.866 2.940 -4.990 1.00 13.19 C

ATOM 8738 CG PHE B1556 50.871 3.366 -3.550 1.00 11.33 C

ATOM 8739 CD1 PHE B1556 51.112 4.685 -3.199 1.00 12.56 C

ATOM 8740 CD2 PHE B1556 50.634 2.443 -2.537 1.00 10.96 C

ATOM 8741 CE1 PHE B1556 51.107 5.082 -1.851 1.00 12.87 C

ATOM 8742 CE2 PHE B1556 50.627 2.830 -1.185 1.00 8.35 C

ATOM 8743 CZ PHE B1556 50.867 4.151 -0.843 1.00 7.91 C

ATOM 8744 N LYS B1557 53.385 1.965 -6.623 1.00 22.35 N

ATOM 8745 CA LYS B1557 54.647 1.221 -6.700 1.00 22.02 C

ATOM 8746 C LYS B1557 55.779 2.057 -7.262 1.00 22.05 C

ATOM 8747 O LYS B1557 56.907 1.945 -6.818 1.00 26.23 O

ATOM 8748 CB LYS B1557 54.478 -0.031 -7.567 1.00 22.99 C

ATOM 8749 CG LYS B1557 55.746 -0.799 -7.817 1.00 22.18 C

ATOM 8750 CD LYS B1557 55.754 -2.097 -7.048 1.00 24.94 C

ATOM 8751 CE LYS B1557 56.390 -3.225 -7.855 1.00 25.22 C

ATOM 8752 NZ LYS B1557 56.136 -3.063 -9.301 1.00 30.70 N

ATOM 8753 N ILE B1558 55.487 2.888 -8.254 1.00 20.36 N

ATOM 8754 CA ILE B1558 56.514 3.732 -8.837 1.00 17.46 C

ATOM 8755 C ILE B1558 57.225 4.500 -7.724 1.00 17.95 C

ATOM 8756 O ILE B1558 58.448 4.596 -7.706 1.00 21.06 O

ATOM 8757 CB ILE B1558 55.881 4.726 -9.803 1.00 16.54 C

ATOM 8758 CG1 ILE B1558 55.251 3.970 -10.965 1.00 12.84 C

ATOM 8759 CG2 ILE B1558 56.911 5.771 -10.229 1.00 18.07 C

ATOM 8760 CD1 ILE B1558 54.824 4.849 -12.107 1.00 18.88 C

ATOM 8761 N ILE B1559 56.431 5.029 -6.797 1.00 15.79 N

ATOM 8762 CA ILE B1559 56.906 5.808 -5.676 1.00 13.09 C

ATOM 8763 C ILE B1559 57.672 4.975 -4.676 1.00 13.85 C

ATOM 8764 O ILE B1559 58.789 5.287 -4.299 1.00 16.77 O

ATOM 8765 CB ILE B1559 55.742 6.404 -4.895 1.00 11.28 C

ATOM 8766 CG1 ILE B1559 54.934 7.312 -5.794 1.00 12.52 C

ATOM 8767 CG2 ILE B1559 56.259 7.120 -3.655 1.00 10.04 C

ATOM 8768 CD1 ILE B1559 53.969 8.183 -5.023 1.00 16.94 C

ATOM 8769 N ASN B1560 57.035 3.920 -4.213 1.00 14.25 N

ATOM 8770 CA ASN B1560 57.627 3.074 -3.207 1.00 13.55 C

ATOM 8771 C ASN B1560 58.861 2.286 -3.638 1.00 13.34 C

ATOM 8772 O ASN B1560 59.473 1.612 -2.817 1.00 14.54 O

ATOM 8773 CB ASN B1560 56.534 2.152 -2.653 1.00 18.51 C

ATOM 8774 CG ASN B1560 55.492 2.914 -1.807 1.00 16.79 C

ATOM 8775 OD1 ASN B1560 55.855 3.625 -0.884 1.00 21.53 O

ATOM 8776 ND2 ASN B1560 54.209 2.765 -2.131 1.00 17.05 N

ATOM 8777 N THR B1561 59.237 2.380 -4.916 1.00 13.72 N

ATOM 8778 CA THR B1561 60.431 1.695 -5.448 1.00 12.59 C

ATOM 8779 C THR B1561 61.430 2.685 -6.049 1.00 15.32 C

ATOM 8780 O THR B1561 62.483 2.293 -6.538 1.00 20.94 O

ATOM 8781 CB THR B1561 60.114 0.636 -6.571 1.00 7.37 C

ATOM 8782 OG1 THR B1561 59.539 1.276 -7.718 1.00 2.00 O

ATOM 8783 CG2 THR B1561 59.206 -0.441 -6.055 1.00 2.00 C

ATOM 8784 N ALA B1562 61.103 3.966 -6.019 1.00 19.48 N

ATOM 8785 CA ALA B1562 61.989 4.982 -6.571 1.00 22.11 C

ATOM 8786 C ALA B1562 63.370 4.931 -5.926 1.00 22.87 C

ATOM 8787 O ALA B1562 63.498 4.623 -4.729 1.00 23.37 O

ATOM 8788 CB ALA B1562 61.372 6.388 -6.374 1.00 20.58 C

ATOM 8789 N SER B1563 64.387 5.250 -6.731 1.00 23.40 N

ATOM 8790 CA SER B1563 65.788 5.307 -6.303 1.00 24.10 C

ATOM 8791 C SER B1563 66.499 6.277 -7.263 1.00 22.06 C

ATOM 8792 O SER B1563 66.042 6.466 -8.390 1.00 19.75 O

ATOM 8793 CB SER B1563 66.435 3.916 -6.349 1.00 25.65 C

ATOM 8794 OG SER B1563 66.763 3.523 -7.674 1.00 27.94 O

ATOM 8795 N ILE B1564 67.587 6.912 -6.824 1.00 21.39 N

ATOM 8796 CA ILE B1564 68.291 7.852 -7.703 1.00 18.55 C

ATOM 8797 C ILE B1564 68.919 7.065 -8.834 1.00 17.96 C

ATOM 8798 O ILE B1564 69.281 7.621 -9.873 1.00 17.10 O

ATOM 8799 CB ILE B1564 69.414 8.651 -6.982 1.00 15.48 C

ATOM 8800 CG1 ILE B1564 69.991 9.686 -7.943 1.00 10.87 C

ATOM 8801 CG2 ILE B1564 70.537 7.740 -6.556 1.00 12.03 C

ATOM 8802 CD1 ILE B1564 68.950 10.624 -8.513 1.00 12.47 C

ATOM 8803 N GLN B1565 69.025 5.758 -8.631 1.00 17.07 N

ATOM 8804 CA GLN B1565 69.605 4.911 -9.641 1.00 20.16 C

ATOM 8805 C GLN B1565 68.542 4.593 -10.666 1.00 20.20 C

ATOM 8806 O GLN B1565 68.761 4.749 -11.863 1.00 22.01 O

ATOM 8807 CB GLN B1565 70.125 3.611 -9.046 1.00 23.53 C

ATOM 8808 CG GLN B1565 70.449 2.585 -10.131 1.00 33.80 C

ATOM 8809 CD GLN B1565 71.529 3.065 -11.109 1.00 38.35 C

ATOM 8810 OE1 GLN B1565 72.715 2.842 -10.869 1.00 45.16 O

ATOM 8811 NE2 GLN B1565 71.125 3.725 -12.207 1.00 36.99 N

ATOM 8812 N SER B1566 67.386 4.137 -10.204 1.00 18.24 N

ATOM 8813 CA SER B1566 66.323 3.814 -11.136 1.00 17.34 C

ATOM 8814 C SER B1566 65.815 5.094 -11.806 1.00 15.93 C

ATOM 8815 O SER B1566 65.198 5.042 -12.864 1.00 16.20 O

ATOM 8816 CB SER B1566 65.190 3.040 -10.427 1.00 18.64 C

ATOM 8817 OG SER B1566 64.307 3.878 -9.696 1.00 27.44 O

ATOM 8818 N LEU B1567 66.099 6.253 -11.213 1.00 15.04 N

ATOM 8819 CA LEU B1567 65.660 7.518 -11.812 1.00 15.22 C

ATOM 8820 C LEU B1567 66.532 7.808 -13.046 1.00 15.68 C

ATOM 8821 O LEU B1567 66.062 8.346 -14.058 1.00 12.66 O

ATOM 8822 CB LEU B1567 65.736 8.669 -10.783 1.00 8.65 C

ATOM 8823 CG LEU B1567 65.624 10.092 -11.356 1.00 8.92 C

ATOM 8824 CD1 LEU B1567 64.241 10.310 -11.927 1.00 7.53 C

ATOM 8825 CD2 LEU B1567 65.926 11.135 -10.287 1.00 2.00 C

ATOM 8826 N ILE B1568 67.800 7.411 -12.962 1.00 20.34 N

ATOM 8827 CA ILE B1568 68.754 7.614 -14.050 1.00 23.13 C

ATOM 8828 C ILE B1568 68.637 6.505 -15.079 1.00 23.85 C

ATOM 8829 O ILE B1568 68.710 6.753 -16.288 1.00 26.09 O

ATOM 8830 CB ILE B1568 70.217 7.637 -13.528 1.00 21.73 C

ATOM 8831 CG1 ILE B1568 70.613 9.067 -13.151 1.00 17.09 C

ATOM 8832 CG2 ILE B1568 71.158 7.025 -14.571 1.00 23.15 C

ATOM 8833 CD1 ILE B1568 69.753 9.644 -12.017 1.00 8.74 C

ATOM 8834 N CYS B1569 68.453 5.285 -14.585 1.00 24.23 N

ATOM 8835 CA CYS B1569 68.339 4.106 -15.432 1.00 24.58 C

ATOM 8836 C CYS B1569 67.186 4.195 -16.430 1.00 23.73 C

ATOM 8837 O CYS B1569 67.388 4.009 -17.635 1.00 24.58 O

ATOM 8838 CB CYS B1569 68.191 2.862 -14.560 1.00 28.23 C

ATOM 8839 SG CYS B1569 68.375 1.299 -15.478 1.00 38.66 S

ATOM 8840 N ASN B1570 65.985 4.494 -15.948 1.00 23.66 N

ATOM 8841 CA ASN B1570 64.822 4.618 -16.833 1.00 22.64 C

ATOM 8842 C ASN B1570 64.850 5.768 -17.851 1.00 22.13 C

ATOM 8843 O ASN B1570 64.237 5.665 -18.905 1.00 21.55 O

ATOM 8844 CB ASN B1570 63.552 4.729 -16.000 1.00 23.26 C

ATOM 8845 CG ASN B1570 63.315 3.505 -15.162 1.00 21.09 C

ATOM 8846 OD1 ASN B1570 63.430 2.394 -15.652 1.00 21.78 O

ATOM 8847 ND2 ASN B1570 62.990 3.698 -13.891 1.00 21.68 N

ATOM 8848 N ASN B1571 65.565 6.850 -17.550 1.00 20.72 N

ATOM 8849 CA ASN B1571 65.614 7.989 -18.458 1.00 20.09 C

ATOM 8850 C ASN B1571 66.903 8.310 -19.177 1.00 18.56 C

ATOM 8851 O ASN B1571 66.875 8.963 -20.215 1.00 17.79 O

ATOM 8852 CB ASN B1571 65.160 9.243 -17.737 1.00 22.41 C

ATOM 8853 CG ASN B1571 63.740 9.166 -17.347 1.00 23.85 C

ATOM 8854 OD1 ASN B1571 62.850 9.361 -18.170 1.00 26.60 O

ATOM 8855 ND2 ASN B1571 63.499 8.851 -16.088 1.00 29.40 N

ATOM 8856 N VAL B1572 68.039 7.910 -18.633 1.00 15.48 N

ATOM 8857 CA VAL B1572 69.267 8.202 -19.335 1.00 13.91 C

ATOM 8858 C VAL B1572 69.635 6.977 -20.182 1.00 17.00 C

ATOM 8859 O VAL B1572 69.537 5.834 -19.714 1.00 14.89 O

ATOM 8860 CB VAL B1572 70.381 8.567 -18.349 1.00 10.24 C

ATOM 8861 CG1 VAL B1572 71.689 8.855 -19.086 1.00 8.79 C

ATOM 8862 CG2 VAL B1572 69.960 9.774 -17.566 1.00 11.78 C

ATOM 8863 N LYS B1573 70.016 7.234 -21.437 1.00 18.18 N

ATOM 8864 CA LYS B1573 70.419 6.203 -22.393 1.00 19.87 C

ATOM 8865 C LYS B1573 71.614 5.417 -21.871 1.00 20.99 C

ATOM 8866 O LYS B1573 72.599 5.994 -21.404 1.00 20.01 O

ATOM 8867 CB LYS B1573 70.804 6.851 -23.721 1.00 24.93 C

ATOM 8868 CG LYS B1573 70.687 5.942 -24.921 1.00 30.23 C

ATOM 8869 CD LYS B1573 71.128 6.647 -26.193 1.00 34.40 C

ATOM 8870 CE LYS B1573 71.244 5.644 -27.319 1.00 39.84 C

ATOM 8871 NZ LYS B1573 71.421 6.315 -28.633 1.00 47.21 N

ATOM 8872 N GLY B1574 71.530 4.096 -21.974 1.00 21.72 N

ATOM 8873 CA GLY B1574 72.598 3.248 -21.501 1.00 23.21 C

ATOM 8874 C GLY B1574 72.409 2.953 -20.033 1.00 27.21 C

ATOM 8875 O GLY B1574 73.232 2.270 -19.438 1.00 31.65 O

ATOM 8876 N CYS B1575 71.327 3.459 -19.445 1.00 28.80 N

ATOM 8877 CA CYS B1575 71.064 3.229 -18.030 1.00 31.70 C

ATOM 8878 C CYS B1575 72.451 3.227 -17.391 1.00 31.78 C

ATOM 8879 O CYS B1575 72.972 2.176 -16.961 1.00 32.05 O

ATOM 8880 CB CYS B1575 70.351 1.873 -17.824 1.00 33.42 C

ATOM 8881 SG CYS B1575 70.325 1.248 -16.094 1.00 44.45 S

ATOM 8882 N PRO B1576 73.057 4.423 -17.289 1.00 30.59 N

ATOM 8883 CA PRO B1576 74.395 4.444 -16.697 1.00 27.13 C

ATOM 8884 C PRO B1576 74.275 4.271 -15.206 1.00 23.88 C

ATOM 8885 O PRO B1576 73.222 4.551 -14.634 1.00 28.44 O

ATOM 8886 CB PRO B1576 74.960 5.809 -17.104 1.00 25.41 C

ATOM 8887 CG PRO B1576 73.759 6.660 -17.452 1.00 27.86 C

ATOM 8888 CD PRO B1576 72.539 5.773 -17.575 1.00 27.63 C

ATOM 8889 N PHE B1577 75.327 3.764 -14.587 1.00 21.43 N

ATOM 8890 CA PHE B1577 75.320 3.601 -13.147 1.00 20.28 C

ATOM 8891 C PHE B1577 75.522 4.990 -12.525 1.00 19.96 C

ATOM 8892 O PHE B1577 76.314 5.798 -13.026 1.00 19.02 O

ATOM 8893 CB PHE B1577 76.447 2.675 -12.690 1.00 19.05 C

ATOM 8894 CG PHE B1577 76.801 2.831 -11.238 1.00 17.49 C

ATOM 8895 CD1 PHE B1577 76.132 2.106 -10.268 1.00 13.81 C

ATOM 8896 CD2 PHE B1577 77.785 3.728 -10.842 1.00 17.68 C

ATOM 8897 CE1 PHE B1577 76.432 2.271 -8.934 1.00 16.08 C

ATOM 8898 CE2 PHE B1577 78.093 3.900 -9.503 1.00 15.74 C

ATOM 8899 CZ PHE B1577 77.416 3.171 -8.548 1.00 16.77 C

ATOM 8900 N THR B1578 74.805 5.253 -11.437 1.00 17.66 N

ATOM 8901 CA THR B1578 74.887 6.526 -10.746 1.00 20.07 C

ATOM 8902 C THR B1578 74.816 6.305 -9.241 1.00 20.98 C

ATOM 8903 O THR B1578 74.317 5.276 -8.783 1.00 23.52 O

ATOM 8904 CB THR B1578 73.735 7.473 -11.179 1.00 20.61 C

ATOM 8905 OG1 THR B1578 74.163 8.833 -11.041 1.00 28.48 O

ATOM 8906 CG2 THR B1578 72.508 7.279 -10.314 1.00 20.81 C

ATOM 8907 N SER B1579 75.312 7.278 -8.478 1.00 20.08 N

ATOM 8908 CA SER B1579 75.329 7.212 -7.016 1.00 18.35 C

ATOM 8909 C SER B1579 75.625 8.602 -6.420 1.00 17.16 C

ATOM 8910 O SER B1579 76.110 9.496 -7.113 1.00 16.52 O

ATOM 8911 CB SER B1579 76.394 6.207 -6.565 1.00 16.12 C

ATOM 8912 OG SER B1579 75.969 5.513 -5.406 1.00 23.77 O

ATOM 8913 N PHE B1580 75.325 8.794 -5.141 1.00 17.80 N

ATOM 8914 CA PHE B1580 75.582 10.082 -4.502 1.00 19.59 C

ATOM 8915 C PHE B1580 76.979 10.139 -3.896 1.00 20.19 C

ATOM 8916 O PHE B1580 77.287 11.024 -3.109 1.00 16.91 O

ATOM 8917 CB PHE B1580 74.529 10.364 -3.419 1.00 19.88 C

ATOM 8918 CG PHE B1580 73.236 10.898 -3.960 1.00 18.44 C

ATOM 8919 CD1 PHE B1580 72.017 10.397 -3.513 1.00 20.80 C

ATOM 8920 CD2 PHE B1580 73.239 11.882 -4.933 1.00 14.71 C

ATOM 8921 CE1 PHE B1580 70.827 10.875 -4.035 1.00 21.14 C

ATOM 8922 CE2 PHE B1580 72.069 12.362 -5.454 1.00 14.20 C

ATOM 8923 CZ PHE B1580 70.858 11.861 -5.009 1.00 21.37 C

ATOM 8924 N ASN B1581 77.816 9.171 -4.244 1.00 24.82 N

ATOM 8925 CA ASN B1581 79.184 9.152 -3.744 1.00 30.32 C

ATOM 8926 C ASN B1581 80.145 8.556 -4.753 1.00 30.31 C

ATOM 8927 O ASN B1581 79.794 7.663 -5.529 1.00 27.66 O

ATOM 8928 CB ASN B1581 79.296 8.412 -2.395 1.00 35.62 C

ATOM 8929 CG ASN B1581 79.020 6.933 -2.510 1.00 38.87 C

ATOM 8930 OD1 ASN B1581 79.813 6.192 -3.086 1.00 40.12 O

ATOM 8931 ND2 ASN B1581 77.887 6.488 -1.951 1.00 40.07 N

ATOM 8932 N VAL B1582 81.349 9.118 -4.753 1.00 34.20 N

ATOM 8933 CA VAL B1582 82.442 8.714 -5.621 1.00 38.23 C

ATOM 8934 C VAL B1582 82.737 7.252 -5.335 1.00 42.68 C

ATOM 8935 O VAL B1582 83.417 6.927 -4.357 1.00 41.39 O

ATOM 8936 CB VAL B1582 83.716 9.526 -5.319 1.00 36.07 C

ATOM 8937 CG1 VAL B1582 84.756 9.190 -6.325 1.00 41.17 C

ATOM 8938 CG2 VAL B1582 83.437 11.019 -5.342 1.00 33.43 C

ATOM 8939 N GLN B1583 82.212 6.369 -6.181 1.00 49.76 N

ATOM 8940 CA GLN B1583 82.419 4.939 -5.990 1.00 53.74 C

ATOM 8941 C GLN B1583 83.898 4.689 -5.706 1.00 56.00 C

ATOM 8942 O GLN B1583 84.701 4.612 -6.672 1.00 57.41 O

ATOM 8943 CB GLN B1583 81.939 4.136 -7.223 1.00 56.42 C

ATOM 8944 CG GLN B1583 82.393 4.659 -8.592 1.00 59.94 C

ATOM 8945 CD GLN B1583 81.716 5.964 -8.993 1.00 61.97 C

ATOM 8946 OE1 GLN B1583 82.389 6.969 -9.255 1.00 62.69 O

ATOM 8947 NE2 GLN B1583 80.383 5.955 -9.041 1.00 61.05 N

TER 8948 GLN B1583