Full wwPDB EM Validation Report

Mar 19, 2024 – 02:33 PM JST

PDB ID	:	5GL1
EMDB ID	:	EMD-9521
Title	:	Structure of RyR1 in an open state
Authors	:	Bai, X.C.; Yan, Z.; Wu, J.P.; Yan, N.
Deposited on	:	2016-07-07
Resolution	:	5.70 Å(reported)

This is a Full wwPDB EM Validation Report for a publicly released PDB entry.

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
https://www.wwpdb.org/validation/2017/EMValidationReportHelp
with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at
http://www.wwpdb.org/validation/2017/FAQs#types.

The following versions of software and data (see references ⓘ) were used in the production of this report:

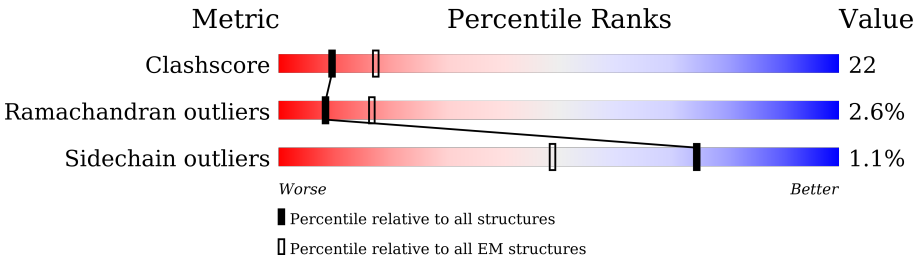
EMDB validation analysis	:	0.0.1.dev70
MolProbity	:	4.02b-467
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ	:	1.9.13
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.36

1 Overall quality at a glance

The following experimental techniques were used to determine the structure:
ELECTRON MICROSCOPY

The reported resolution of this entry is 5.70 Å.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.



Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	158937	4297
Ramachandran outliers	154571	4023
Sidechain outliers	154315	3826

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for >=3, 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions <=5% The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion < 40%). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A	5037	26% 41% 28% • 28%
1	C	5037	26% 41% 28% • 28%
1	E	5037	26% 41% 28% • 28%
1	G	5037	26% 41% 29% • 28%
2	B	108	30% 53% 44% • •
2	D	108	30% 56% 40% • •
2	F	108	30% 56% 40% • •
2	H	108	30% 52% 45% • •

2 Entry composition

There are 3 unique types of molecules in this entry. The entry contains 110704 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a protein called Ryanodine receptor 1.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	3645	Total 26843	C 17063	N 4667	O 4956	S 157	0	0
1	C	3645	Total 26843	C 17063	N 4667	O 4956	S 157	0	0
1	E	3645	Total 26843	C 17063	N 4667	O 4956	S 157	0	0
1	G	3645	Total 26843	C 17063	N 4667	O 4956	S 157	0	0

- Molecule 2 is a protein called Peptidyl-prolyl cis-trans isomerase FKBP1A.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	B	107	Total 832	C 527	N 146	O 155	S 4	0	0
2	D	107	Total 832	C 527	N 146	O 155	S 4	0	0
2	F	107	Total 832	C 527	N 146	O 155	S 4	0	0
2	H	107	Total 832	C 527	N 146	O 155	S 4	0	0

- Molecule 3 is ZINC ION (three-letter code: ZN) (formula: Zn).

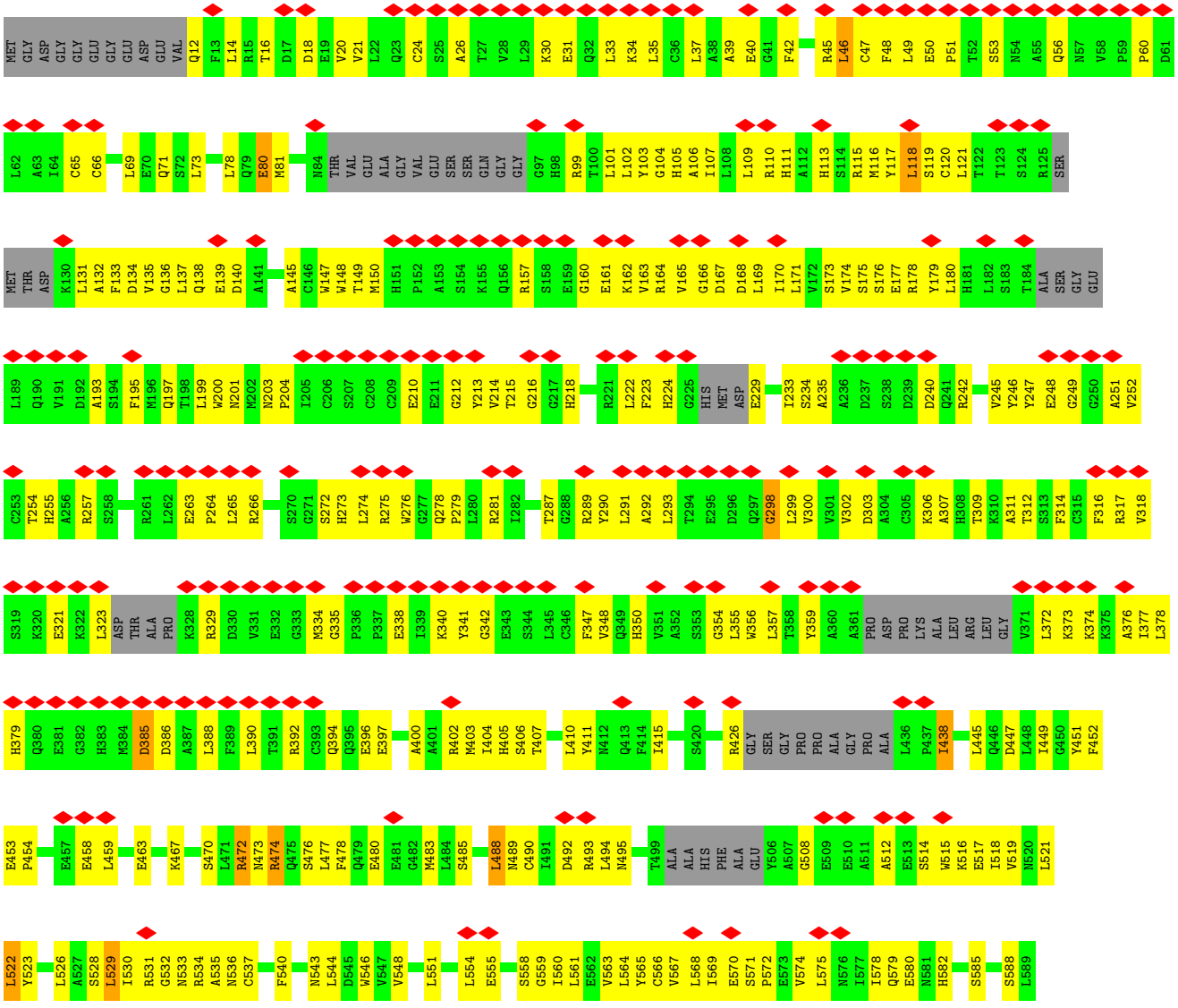
Mol	Chain	Residues	Atoms		AltConf
3	A	1	Total 1	Zn 1	0
3	C	1	Total 1	Zn 1	0
3	E	1	Total 1	Zn 1	0
3	G	1	Total 1	Zn 1	0

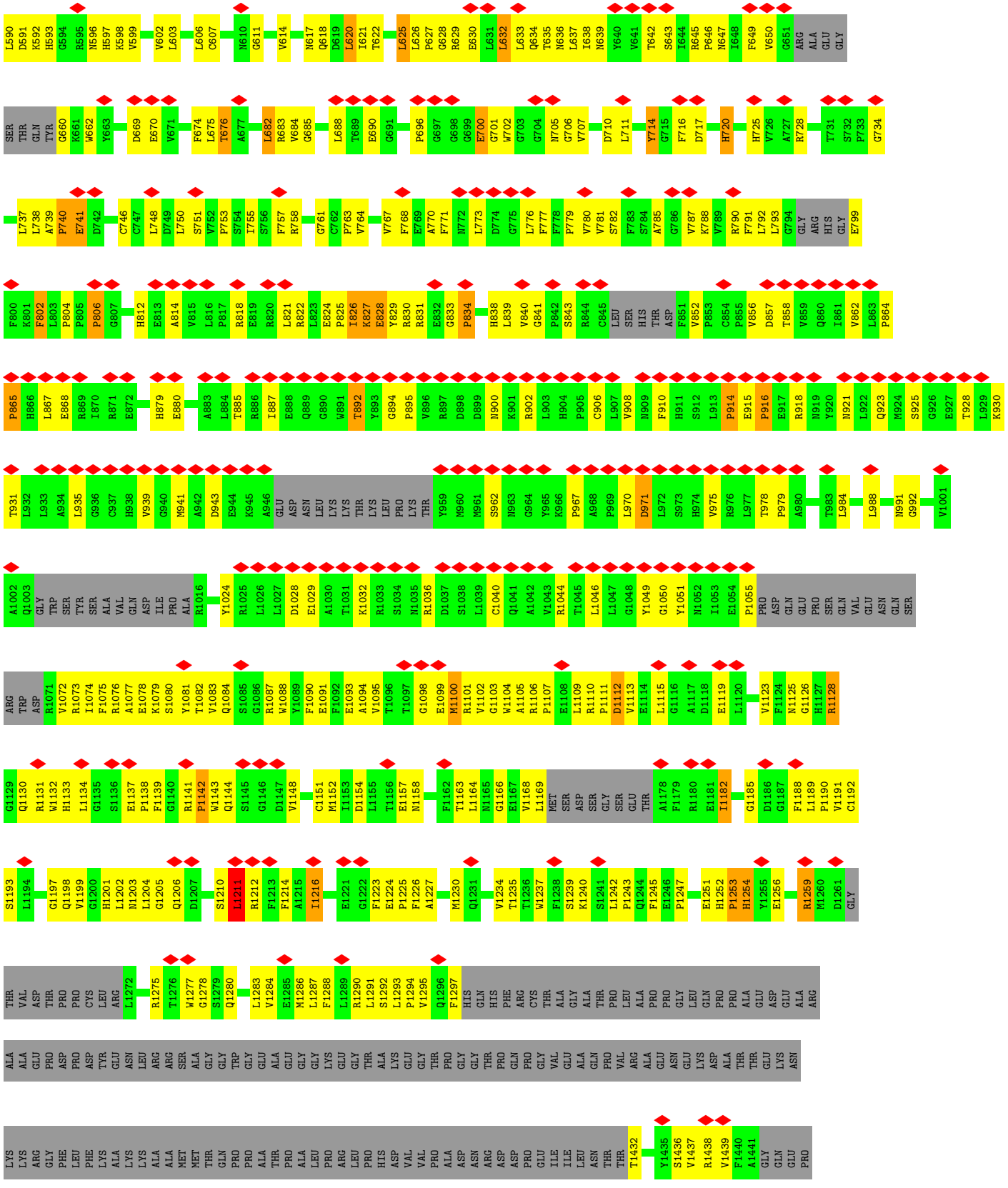
3 Residue-property plots (i)

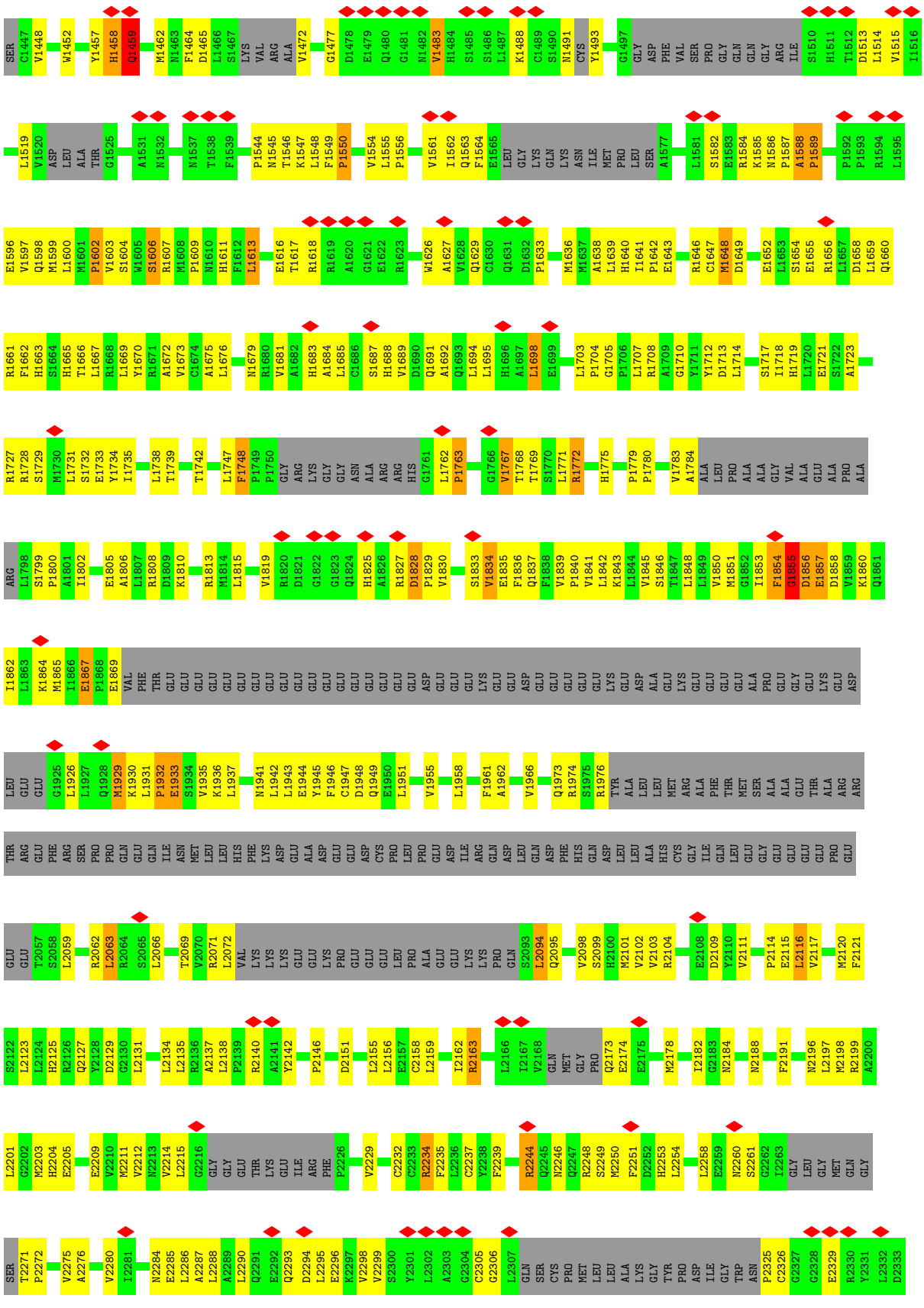
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

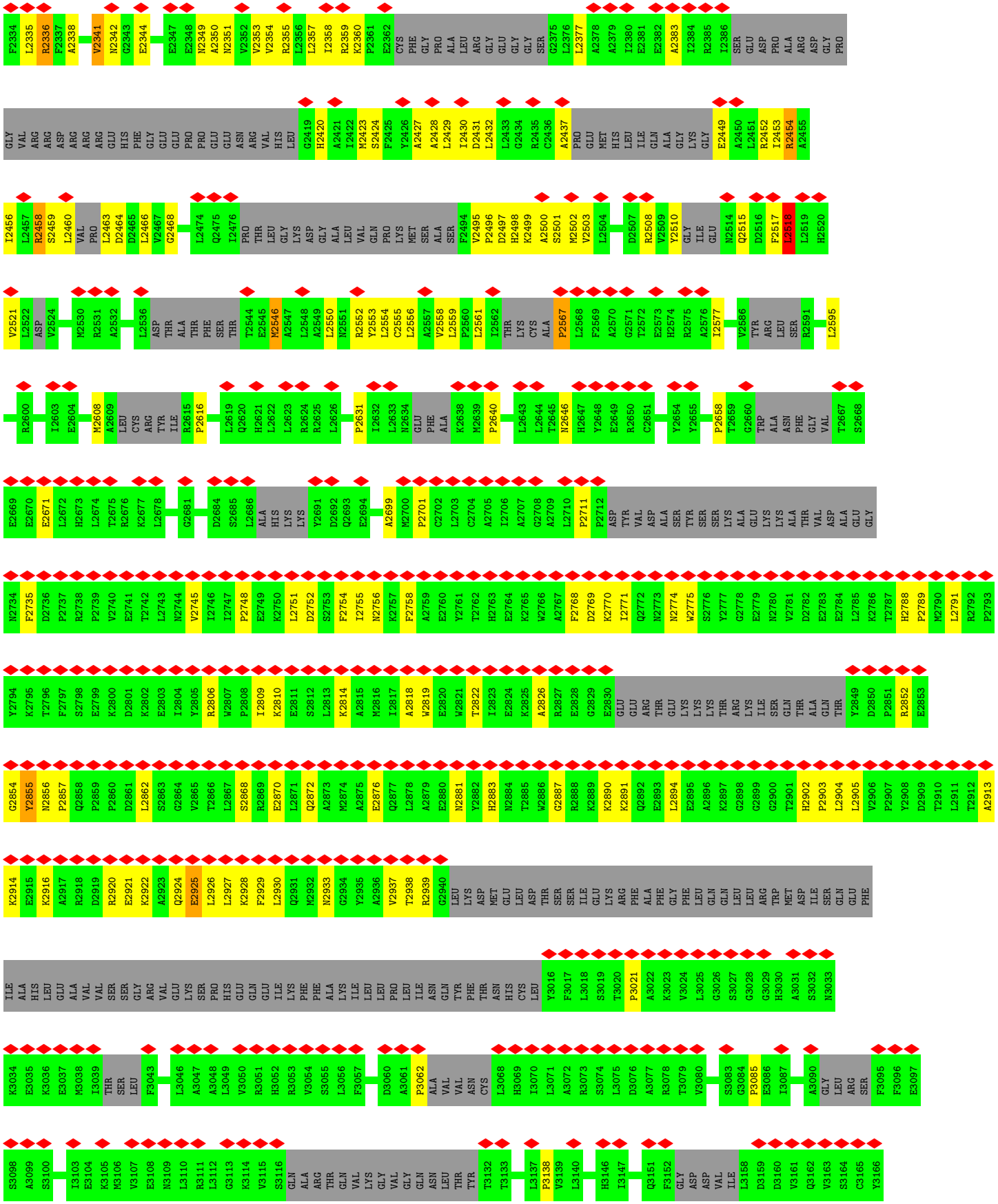
• Molecule 1: Ryanodine receptor 1

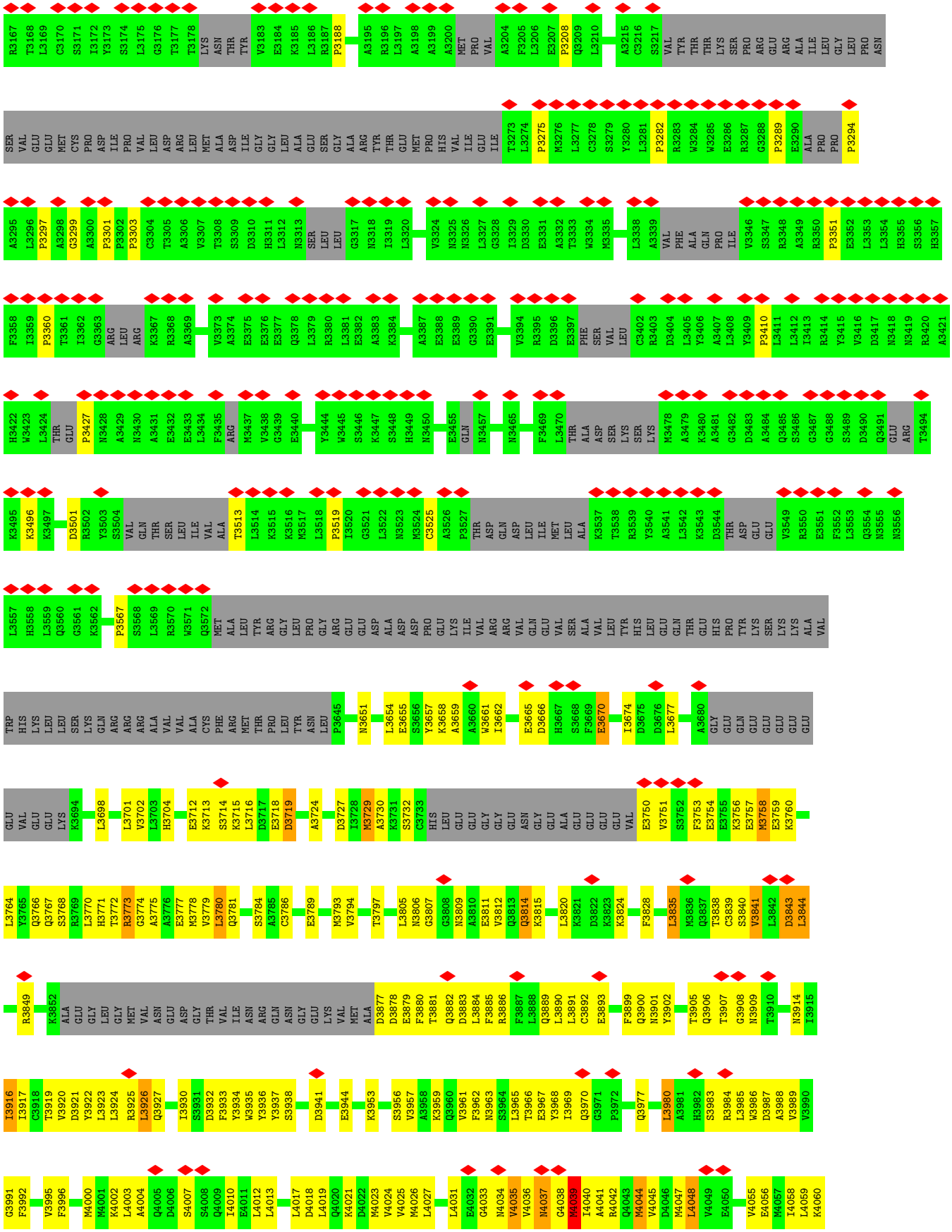
Chain A:

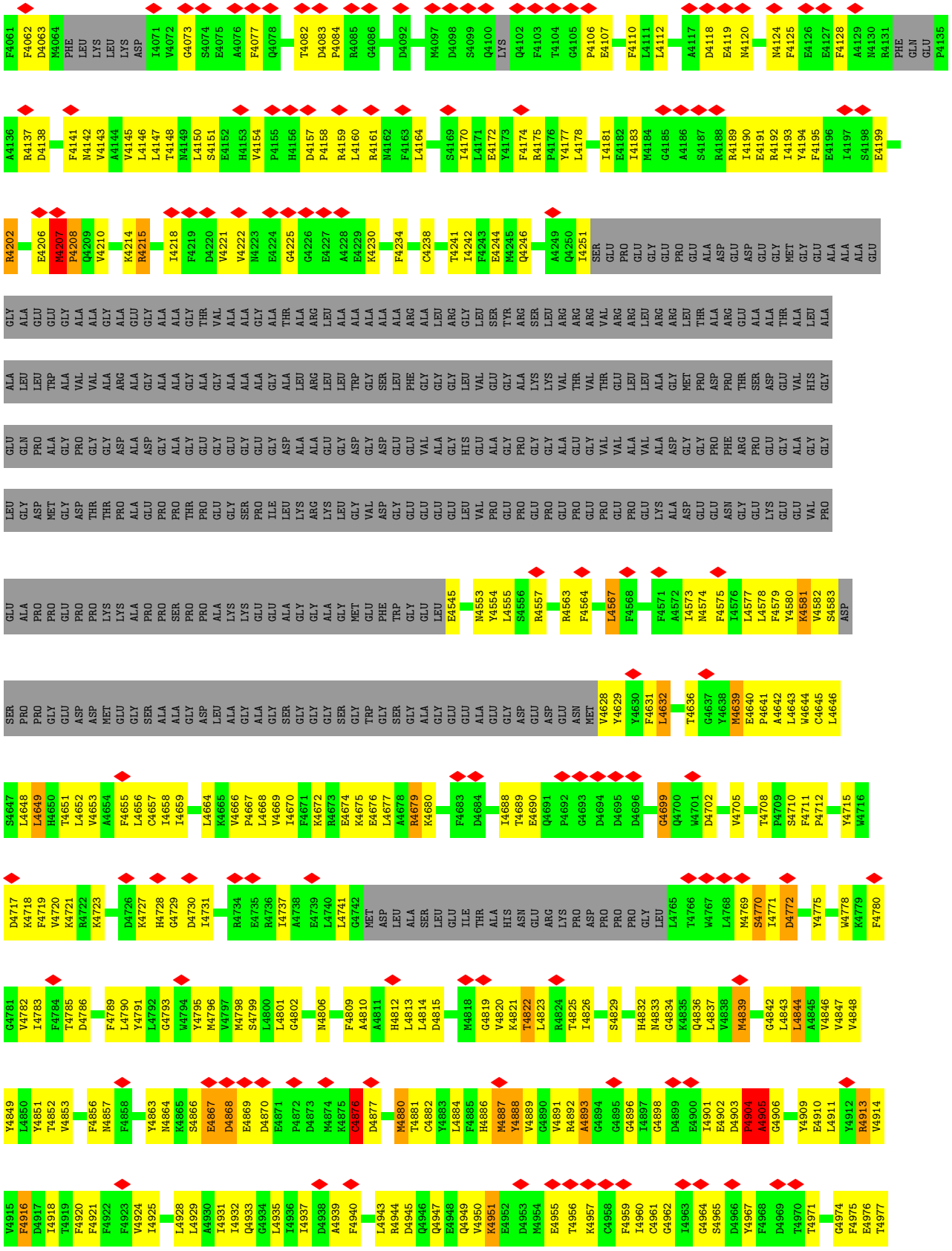


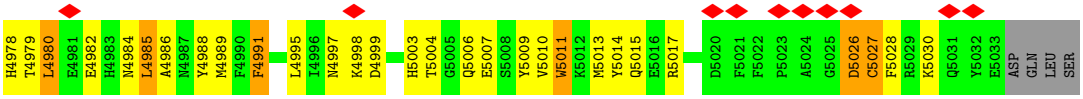

L590 D591 K592 H593 G594 R595 N596 H597 K598 V599 V602 L603 L606 C607 N610 G611 V614 N617 Q618 D619 L620 I621 T622 L625 L626 P627 G628 R629 E630 L631 L632 L633 Q634 T635 N636 L637 I638 N639 Y640 V641 T642 S643 I644 R645 P646 N647 I648 F649 V650 G651 ARG ALA GLU GLY
SER THR GLN TYR G660 K661 W662 Y663 D669 E670 V671 F674 L675 T676 A677 L682 R683 V684 G685 L688 T689 E690 G691 P696 G697 G698 G699 E700 G701 W702 G703 G704 N705 G706 V707 D710 L711 Y714 G715 F716 D717 H720 H725 V726 A727 R728 T731 S732 P733 G734
L737 L738 A739 P740 E741 D742 C746 C747 L748 D749 L750 S751 V752 P753 S754 I755 S756 F757 R758 G761 G762 P763 V764 V767 F768 E769 A770 F771 N772 L773 D774 G775 L776 F777 F778 P779 V780 V781 S782 F783 S784 A785 G786 V787 K788 V789 R790 F791 L792 L793 G794 GLY ARG HIS GLY E799
F800 K801 F802 L803 P804 P805 P806 G807 H812 E813 A814 V815 L816 P817 R818 E819 R820 L821 R822 L823 E824 P825 I826 K827 E828 Y829 R830 R831 E832 G833 P834 H838 L839 V840 G841 P842 S843 R844 C845 LEU SER HIS THR ASP F851 V852 P853 C854 P855 V856 D857 T858 V859 Q860 I861 V862 L863 P864
P865 H866 L867 E868 R869 I870 R871 E872 H879 E880 A883 L884 T885 R886 I887 E888 Q889 Q890 W891 T892 Y893 G894 P895 V896 R897 D898 D899 N900 K901 R902 L903 H904 P905 C906 L907 V908 N909 F910 H911 S912 L913 P914 E915 P916 E917 R918 N919 Y920 N921 L922 Q923 M924 S925 G926 E927 T928 L929 K930
T931 L932 L933 A934 L935 G936 C937 H938 V939 G940 M941 A942 D943 E944 K945 A946 GLU ASP ASN LEU LYS LYS THR LYS LEU PRO LYS THR Y959 M960 M961 S962 N963 G964 Y965 K966 P967 A968 P969 L970 D971 L972 S973 H974 V975 R976 L977 T978 P979 A980 T983 L984 L988 N991 G992 V1001
A1002 Q1003 GLY TRP SER TYR SER ALA VAL GLN ASP ILE PRO ALA R1016 Y1024 R1025 L1026 L1027 D1028 E1029 A1030 T1031 K1032 R1033 S1034 N1035 R1036 D1037 S1038 L1039 C1040 Q1041 A1042 V1043 R1044 T1045 L1046 L1047 G1048 Y1049 G1050 Y1051 N1052 I1053 E1054 P1055 PRO ASP GLN GLU PRO SER GLN VAL GLU ASN GLN SER
ARG TRP ASP R1071 V1072 R1073 I1074 F1075 R1076 A1077 E1078 K1079 S1080 Y1081 T1082 V1083 Q1084 S1085 G1086 R1087 W1088 Y1089 F1090 E1091 F1092 E1093 A1094 V1095 T1096 T1097 G1098 E1099 M1100 R1101 V1102 G1103 W1104 A1105 R1106 P1107 E1108 L1109 R1110 P1111 D1112 V1113 E1114 L1115 G1116 A1117 D1118 E1119 L1120 V1123 F1124 N1125 G1126 H1127 R1128
G1129 Q1130 R1131 W1132 H1133 L1134 G1135 S1136 E1137 P1138 F1139 G1140 R1141 P1142 W1143 Q1144 S1145 G1146 D1147 V1148 C1151 M1152 I1153 D1154 L1155 T1156 E1157 N1158 F1162 T1163 L1164 N1165 G1166 E1167 V1168 L1169 MET SER ASP SER GLY SER GLU THR A1178 F1179 R1180 E1181 I1182 G1185 D1186 G1187 F1188 L1189 P1190 V1191 C1192
S1193 L1194 G1197 Q1198 V1199 G1200 H1201 L1202 N1203 L1204 G1205 Q1206 D1207 S1210 L1211 R1212 F1213 F1214 A1215 I1216 E1221 G1222 F1223 E1224 P1225 F1226 A1227 M1230 Q1231 V1234 T1235 T1236 W1237 F1238 S1239 K1240 S1241 L1242 P1243 Q1244 F1245 E1246 P1247 E1251 H1252 P1253 H1254 Y1255 E1256 R1259 M1260 D1261 GLY
THR VAL ASP THR PRO PRO CYS LEU ARG L1272 R1275 T1276 W1277 G1278 S1279 Q1280 L1283 V1284 E1285 M1286 L1287 F1288 L1289 R1290 L1291 S1292 L1293 P1294 V1295 Q1296 F1297 HIS GLN HIS PHE ARG CYS THR ALA GLY ALA THR PRO LEU ALA PRO PRO GLY LEU GLN PRO PRO ALA GLU ASP GLU ALA ARG
ALA ALA GLU PRO ASP PRO ASP TYR GLU ASN LEU ARG ARG SER ALA GLY GLY TRP GLY GLU ALA GLU GLY GLY LYS GLU GLY GLY THR ALA LYS GLU GLY THR PRO GLY GLY THR PRO GLN PRO GLY VAL GLU ALA GLN PRO VAL ARG ALA GLU ASN GLU LYS ASP ALA THR THR GLU GLU LYS ASN
LYS LYS ARG GLY PHE LEU PHE LYS ALA LYS LYS ALA ALA MET MET THR GLN PRO PRO ALA THR PRO ALA LEU PRO ARG LEU PRO HIS ASP VAL VAL PRO ALA ASP ASN ARG ASP ASP PRO GLU ILE ILE LEU ASN THR THR T1432 Y1435 S1436 V1437 R1438 V1439 F1440 A1441 GLY GLN GLU PRO




F2334 L2335 R2336 P2337 A2338 V2341 N2342 G2343 E2344 E2347 E2348 N2349 A2350 N2351 V2352 V2353 V2354 R2355 L2356 L2357 I2358 R2359 K2360 P2361 E2362 CYS PHE GLY PRO ALA LEU ARG GLY GLU GLY GLY SER G2375 L2376 L2377 A2378 A2379 I2380 E2381 E2382 A2383 I2384 R2385 I2386 SER GLU ASP PRO ALA ARG ASP GLY PRO
GLY VAL ARG ARG ASP ARG ARG ARG GLU HIS PHE GLY GLU GLU PRO PRO GLU GLU GLU ASN ARG VAL HIS LEU G2419 H2420 A2421 I2422 M2423 S2424 F2425 Y2426 A2427 A2428 L2429 I2430 D2431 L2432 L2433 G2434 R2435 C2436 A2437 PRO GLU MET HIS LEU ILE GLN ALA GLY LYS GLY E2449 A2450 L2451 R2452 I2453 R2454 A2455
I2456 L2457 R2458 S2459 L2460 VAL PRO L2463 D2464 D2465 L2466 V2467 G2468 L2474 Q2475 I2476 PRO THR LEU GLY LYS ASP GLY ALA LEU VAL GLN PRO LYS MET SER ALA SER F2494 V2495 P2496 D2497 H2498 K2499 A2500 S2501 M2502 V2503 L2504 D2507 R2508 Y2509 Y2510 GLY ILE GLU N2514 Q2515 D2516 F2517 L2518 L2519 H2520
V2521 L2522 ASP V2524 M2530 R2531 A2532 L2536 ASP THR ALA THR PHE SER THR T2544 E2545 M2546 A2547 L2548 A2549 L2550 N2551 R2552 Y2553 L2554 C2555 L2556 A2557 V2558 L2559 P2560 L2561 I2562 THR LYS CYS ALA P2567 L2568 F2569 A2570 G2571 T2572 E2573 H2574 R2575 A2576 I2577 V2586 TYR ARG LEU SER R2591 L2595
R2600 I2603 E2604 M2608 A2609 LEU CYS ARG TYR ILE R2615 P2616 L2619 Q2620 H2621 L2622 L2623 R2624 R2625 L2626 P2631 I2632 L2633 N2634 GLU PHE ALA K2638 M2639 P2640 L2643 L2644 T2645 N2646 H2647 Y2648 E2649 R2650 C2651 Y2654 Y2655 P2658 T2659 G2660 TRP ALA ASN PHE GLY VAL T2667 S2668
E2669 E2670 E2671 L2672 H2673 L2674 T2675 R2676 K2677 L2678 G2681 D2684 S2685 L2686 ALA HIS LYS LYS Y2691 D2692 Q2693 E2694 A2699 M2700 P2701 C2702 L2703 C2704 A2705 I2706 A2707 G2708 A2709 L2710 P2711 P2712 ASP TYR VAL ASP ALA SER TYR SER SER LYS ALA GLU LYS LYS ALA THR VAL ASP ALA GLU GLY
N2734 F2735 D2736 P2737 R2738 P2739 V2740 E2741 T2742 L2743 N2744 V2745 I2746 I2747 P2748 E2749 K2750 L2751 D2752 S2753 F2754 I2755 N2756 K2757 F2758 A2759 E2760 Y2761 T2762 H2763 E2764 K2765 W2766 A2767 F2768 D2769 K2770 I2771 Q2772 N2773 N2774 W2775 S2776 Y2777 G2778 E2779 N2780 V2781 D2782 E2783 E2784 L2785 K2786 T2787 H2788 P2789 M2790 L2791 R2792 P2793
Y2794 K2795 T2796 F2797 S2798 E2799 K2800 D2801 K2802 E2803 I2804 Y2805 R2806 W2807 P2808 I2809 K2810 E2811 S2812 L2813 K2814 A2815 M2816 I2817 A2818 W2819 E2820 W2821 T2822 I2823 E2824 K2825 A2826 R2827 E2828 G2829 E2830 GLU GLU ARG THR GLU LYS LYS LYS THR ARG LYS ILE SER GLN THR ALA GLN THR Y2849 D2850 P2851 R2852 E2853
G2854 Y2855 N2856 P2857 Q2858 P2859 P2860 D2861 L2862 S2863 G2864 V2865 T2866 L2867 S2868 R2869 E2870 L2871 Q2872 A2873 M2874 A2875 E2876 Q2877 L2878 A2879 E2880 N2881 Y2882 H2883 N2884 T2885 W2886 G2887 R2888 K2889 K2890 K2891 Q2892 E2893 L2894 E2895 A2896 K2897 G2898 G2899 G2900 T2901 H2902 P2903 L2904 L2905 V2906 P2907 Y2908 D2909 T2910 L2911 T2912 A2913
K2914 E2915 K2916 A2917 R2918 D2919 R2920 E2921 K2922 A2923 Q2924 E2925 L2926 L2927 K2928 F2929 L2930 Q2931 M2932 N2933 G2934 Y2935 A2936 V2937 T2938 R2939 G2940 LEU LYS ASP MET GLU LEU ASP THR SER SER ILE GLU LYS ARG PHE ALA PHE GLY PHE LEU GLN GLN LEU LEU ARG TRP MET ASP ILE SER GLN GLU PHE
ILE ALA HIS LEU GLU ALA VAL VAL SER SER GLY ARG VAL GLU LYS SER PRO HIS GLU GLN GLU ILE LYS PHE PHE ALA LYS ILE LEU LEU PRO LEU ILE ASN GLN TYR PHE THR ASN HIS CYS LEU Y3016 F3017 L3018 S3019 T3020 P3021 A3022 K3023 V3024 L3025 G3026 S3027 G3028 G3029 H3030 A3031 S3032 N3033
K3034 E3035 K3036 E3037 M3038 I3039 THR SER LEU F3043 L3046 A3047 A3048 L3049 V3050 R3051 H3052 R3053 V3054 S3055 L3056 F3057 D3060 A3061 P3062 ALA VAL VAL ASN CYS L3068 H3069 I3070 L3071 A3072 R3073 S3074 L3075 D3076 A3077 R3078 T3079 V3080 S3083 G3084 P3085 E3086 I3087 A3090 GLY LEU ARG SER F3095 F3096 E3097
S3098 A3099 S3100 I3103 E3104 K3105 M3106 V3107 E3108 N3109 L3110 R3111 L3112 G3113 K3114 V3115 S3116 GLN ALA ARG THR GLN VAL LYS GLY VAL GLY GLN ASN LEU THR TYR T3132 T3133 L3137 P3138 V3139 L3140 H3146 I3147 Q3151 F3152 GLY ASP ASP VAL ILE L3158 D3159 D3160 V3161 Q3162 V3163 S3164 C3165 Y3166

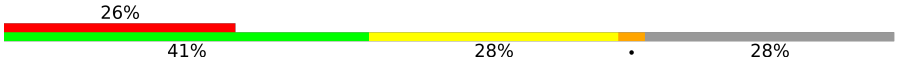


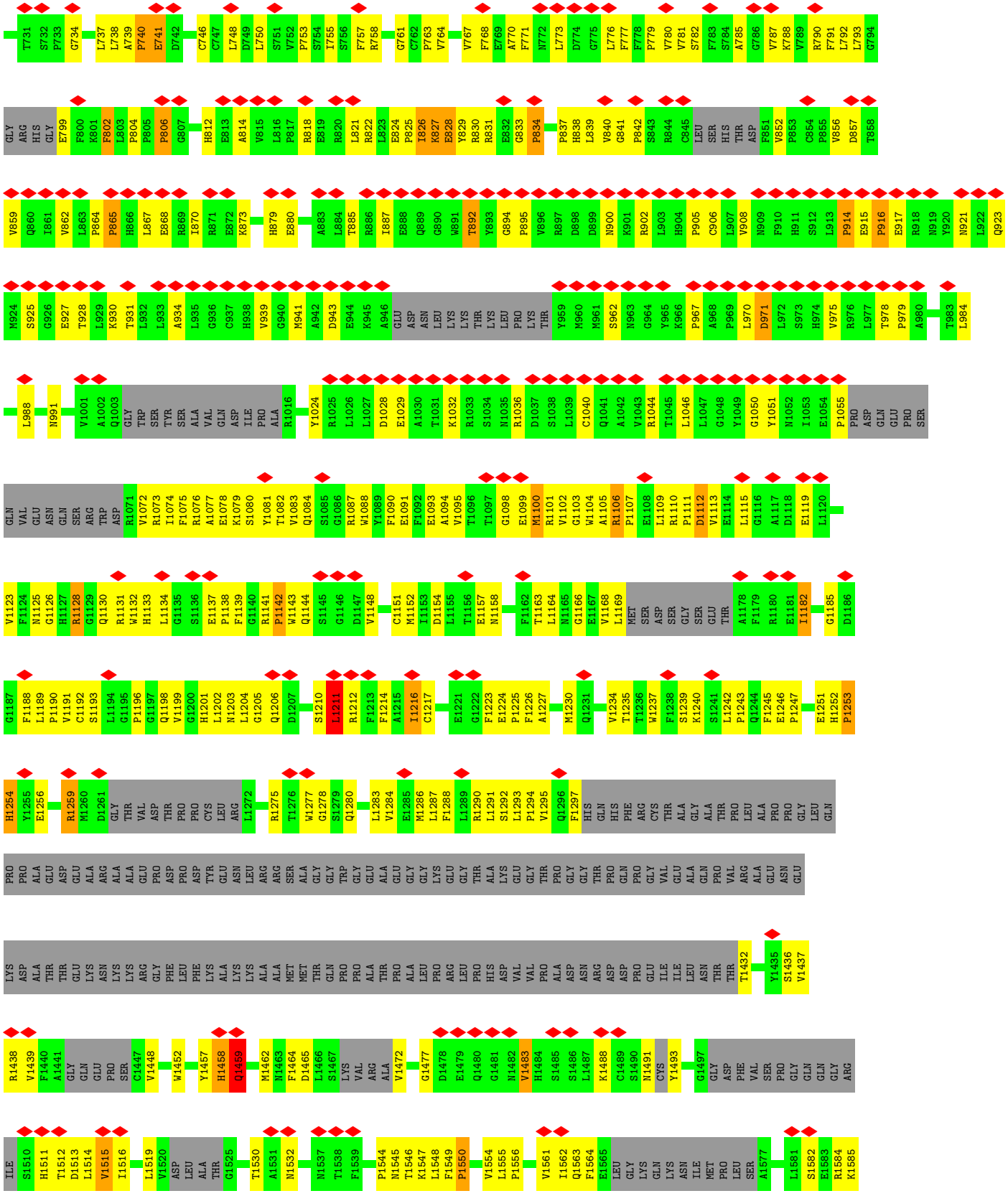


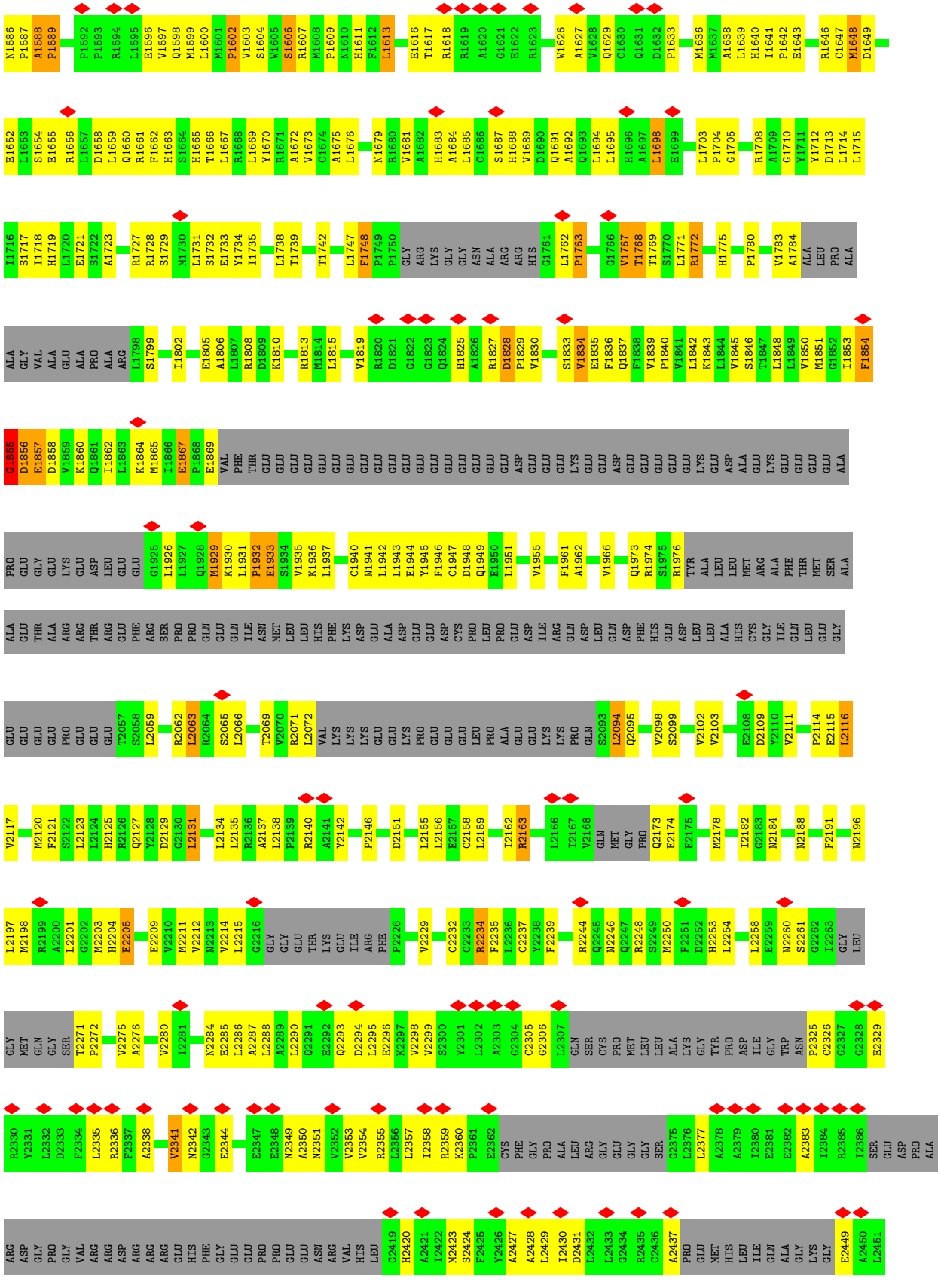


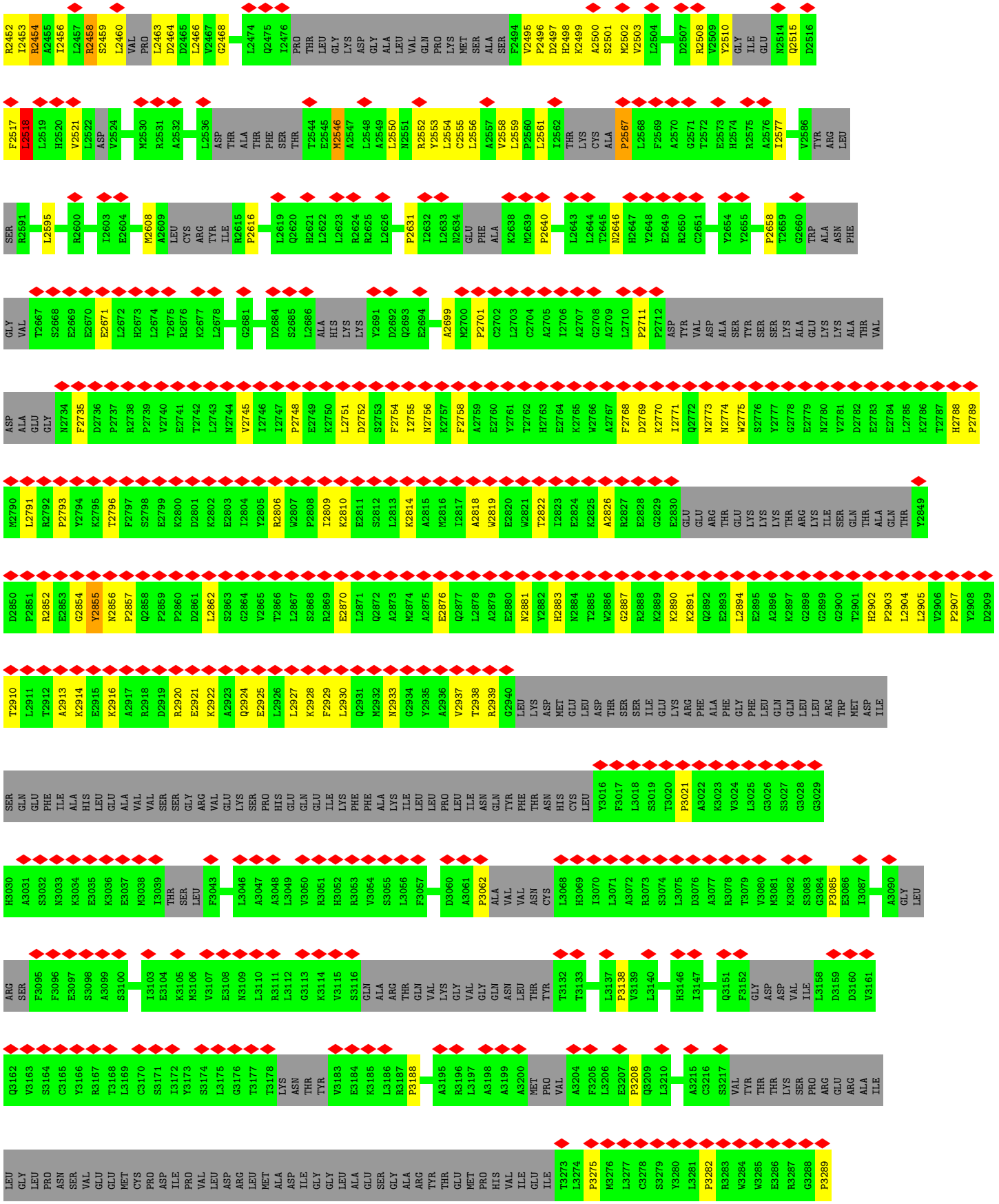
• Molecule 1: Ryanodine receptor 1

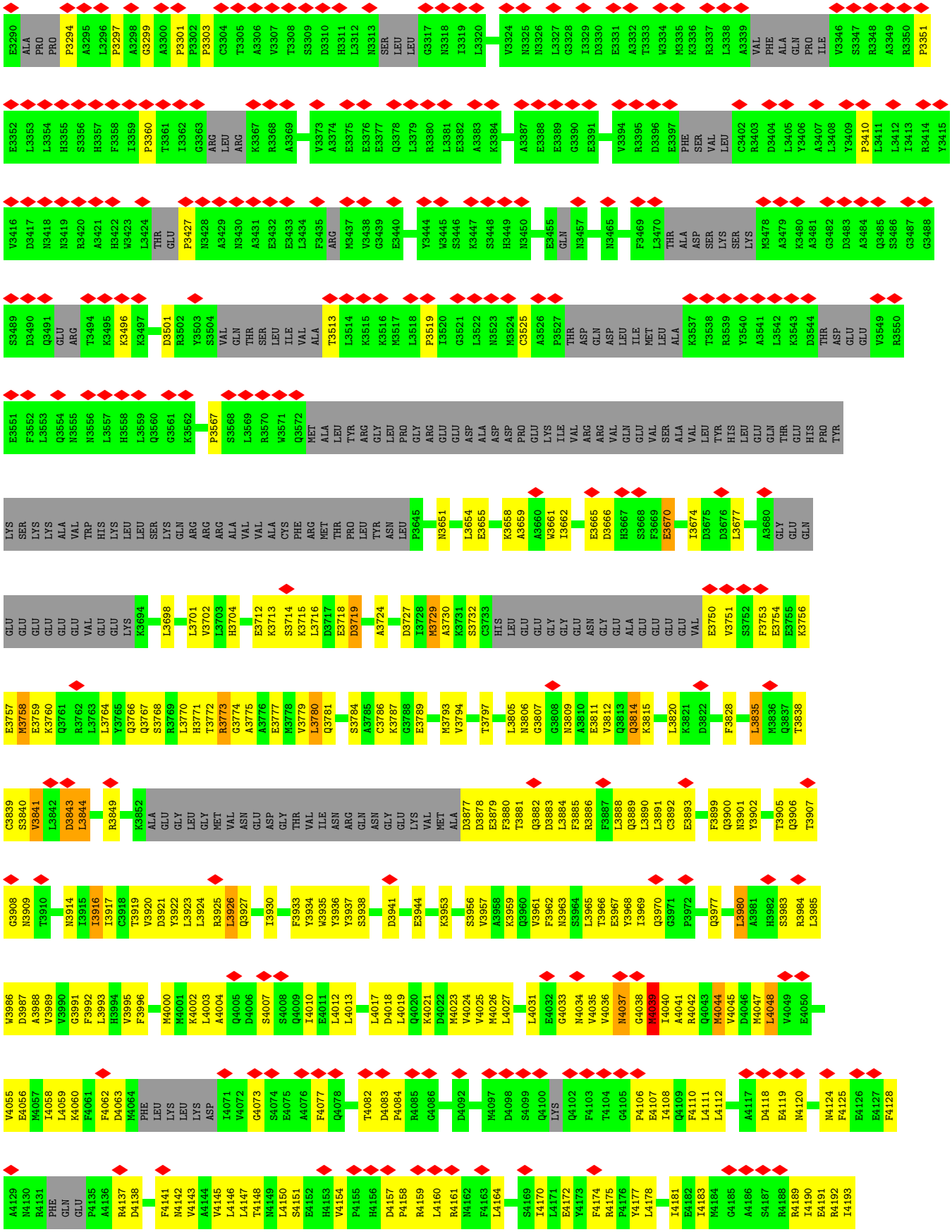
Chain C:

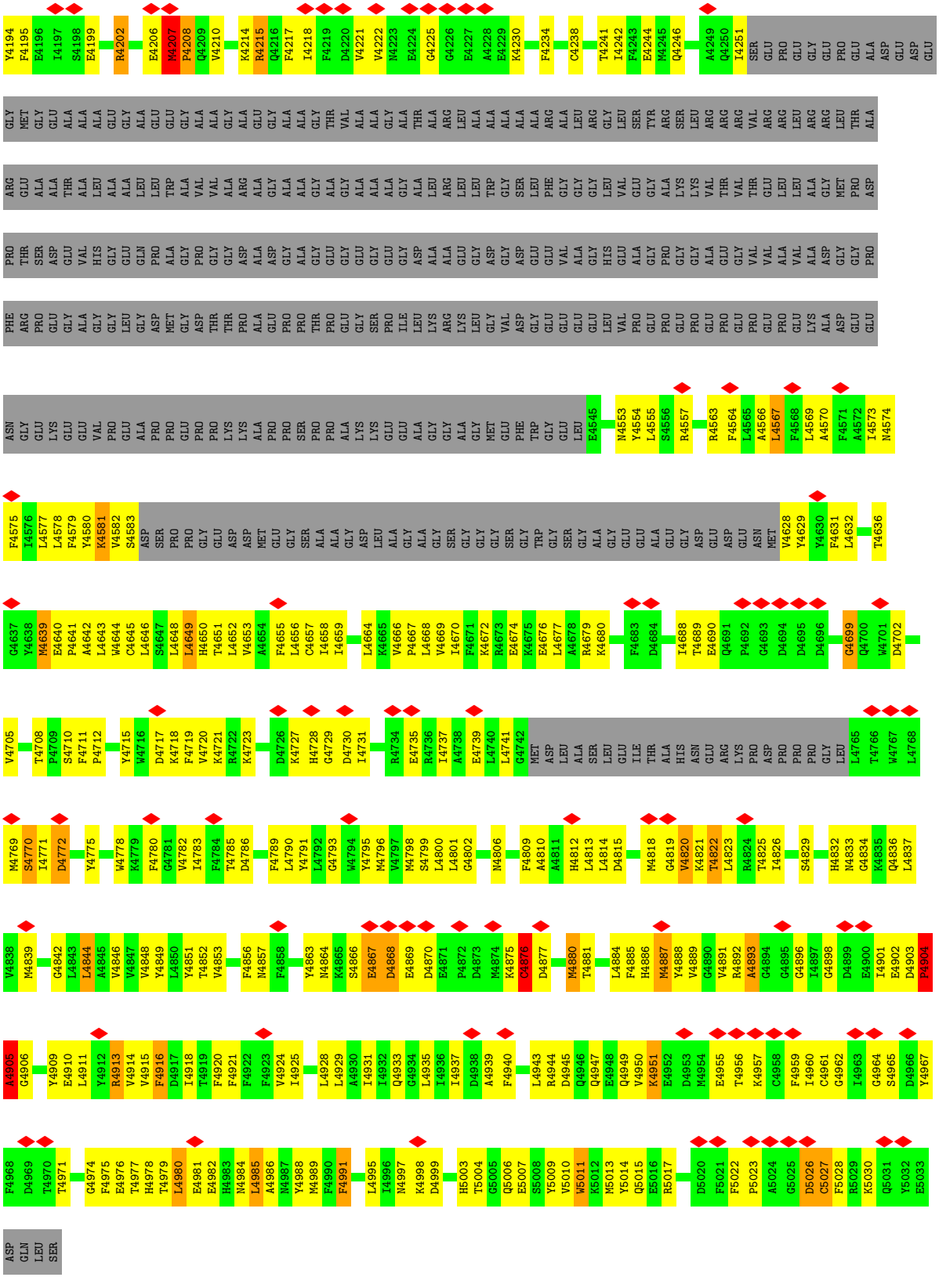






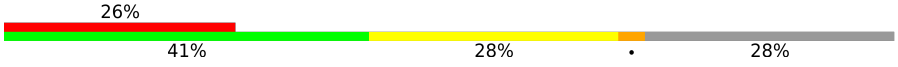


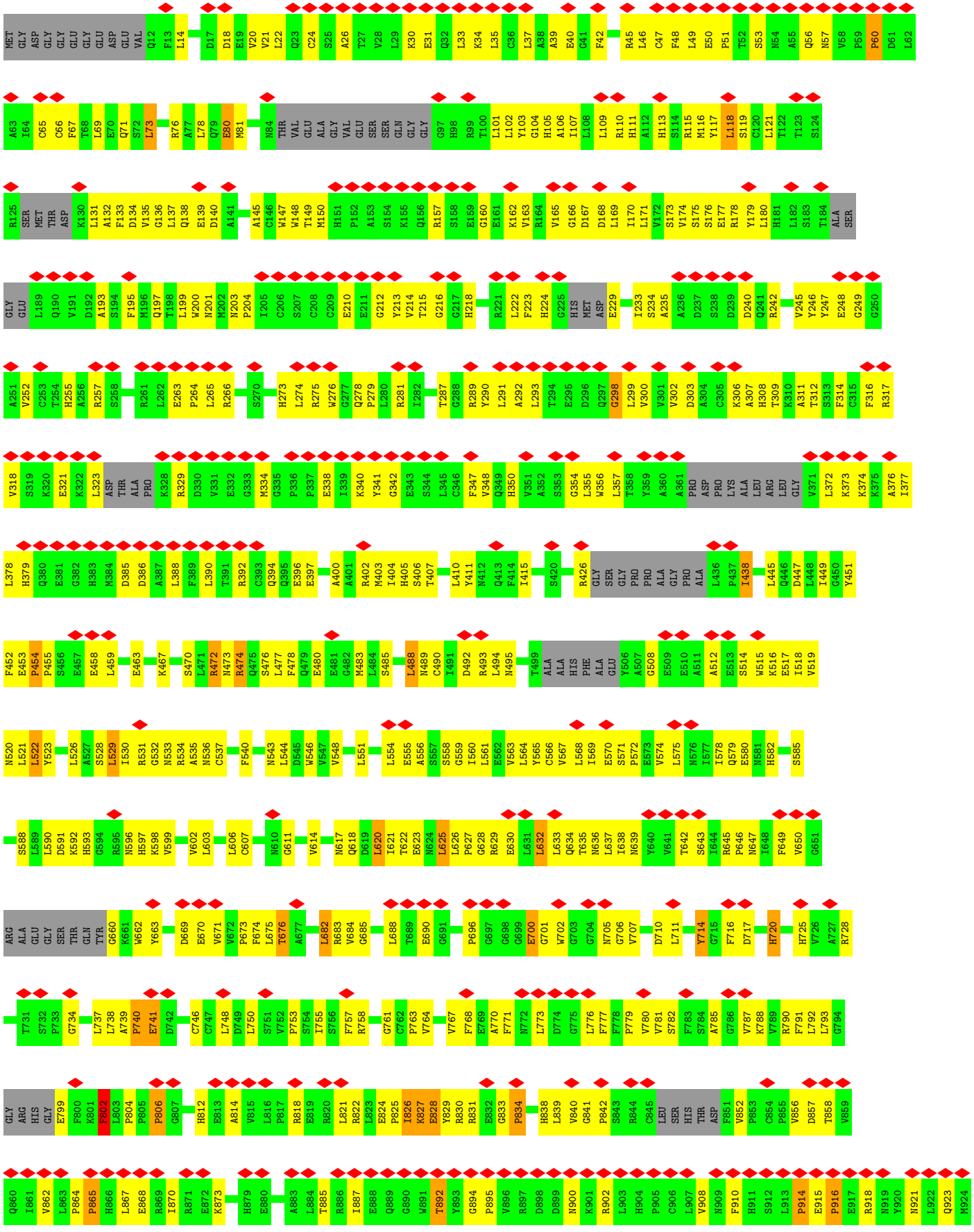


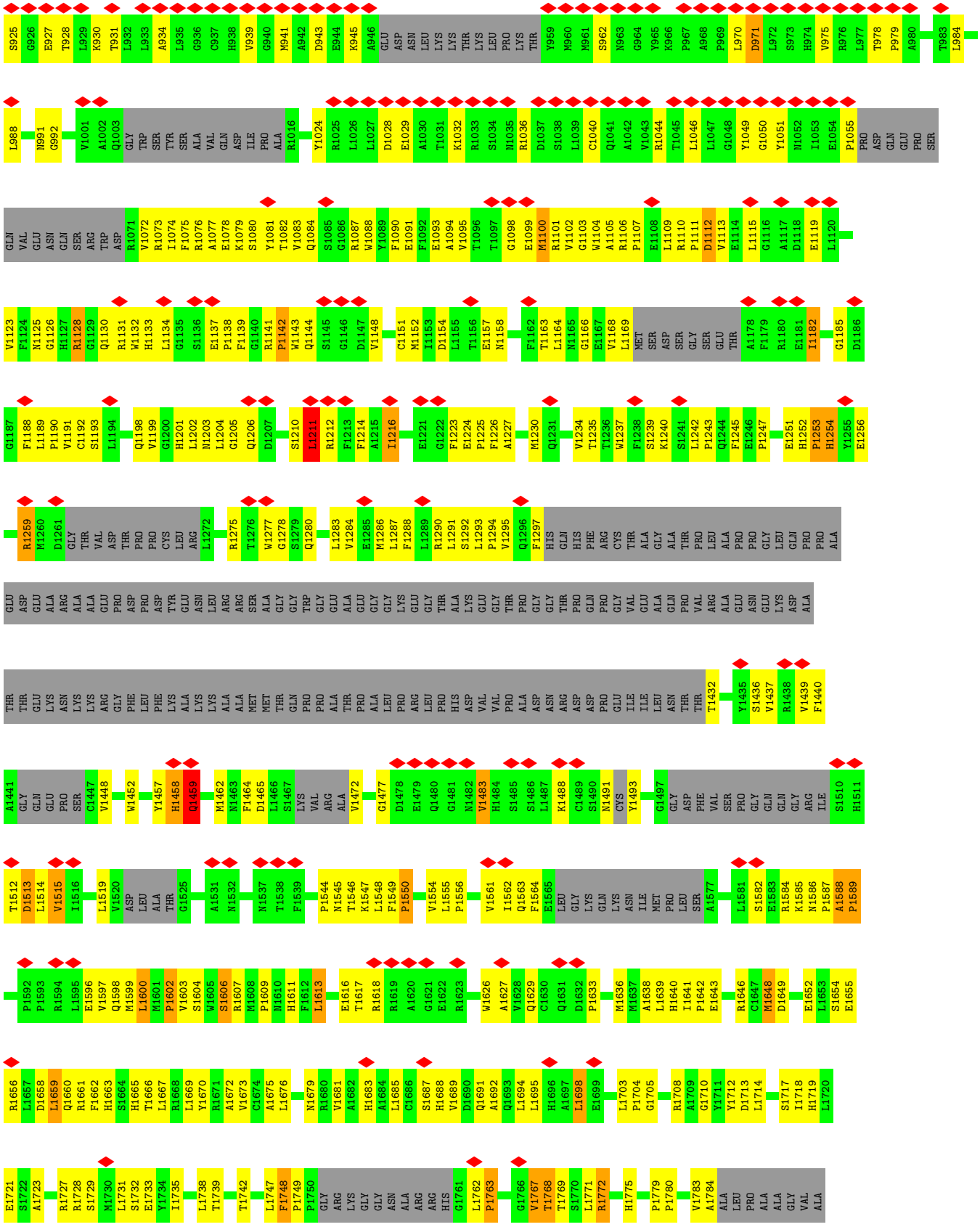


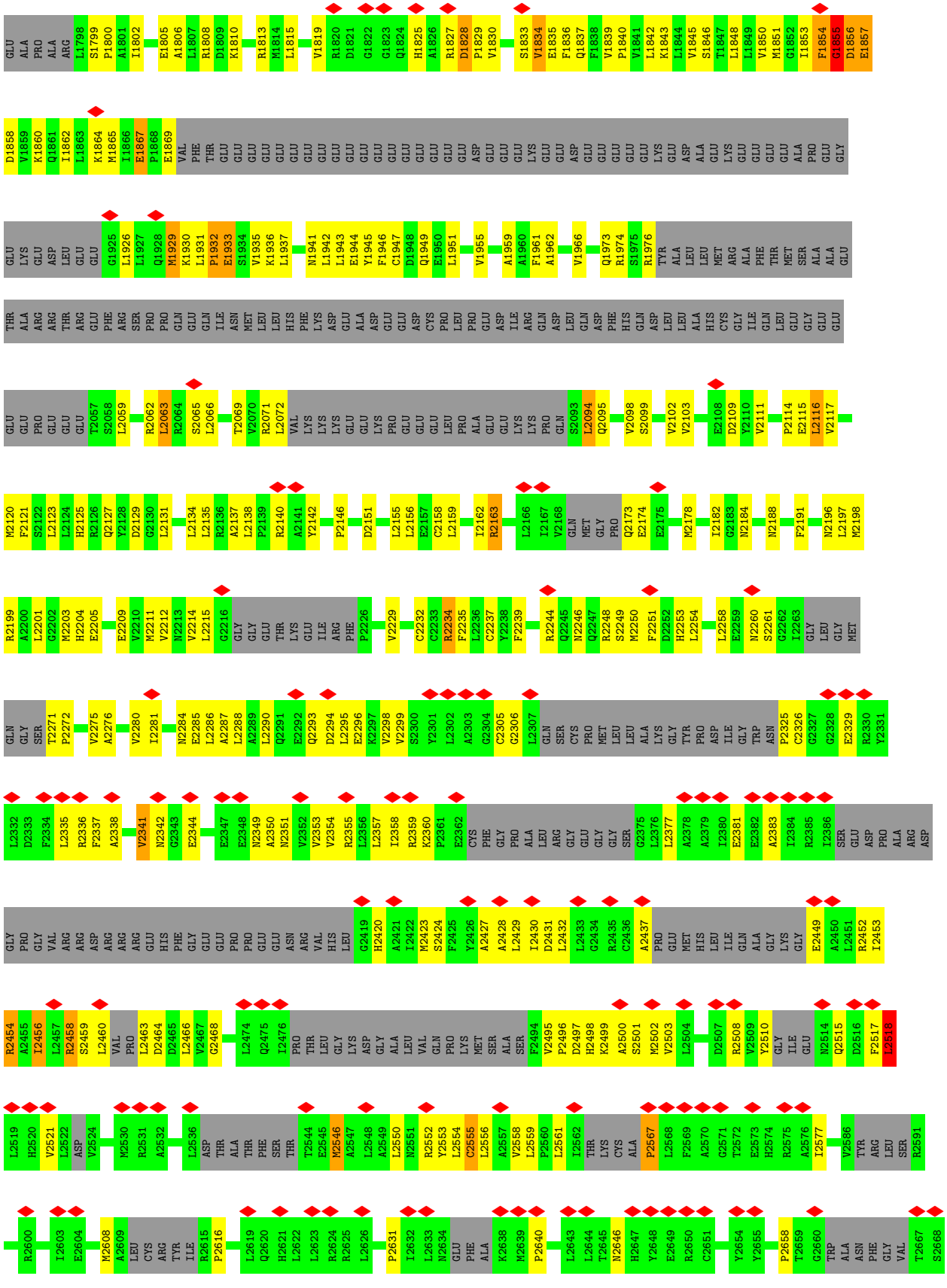
• Molecule 1: Ryanodine receptor 1

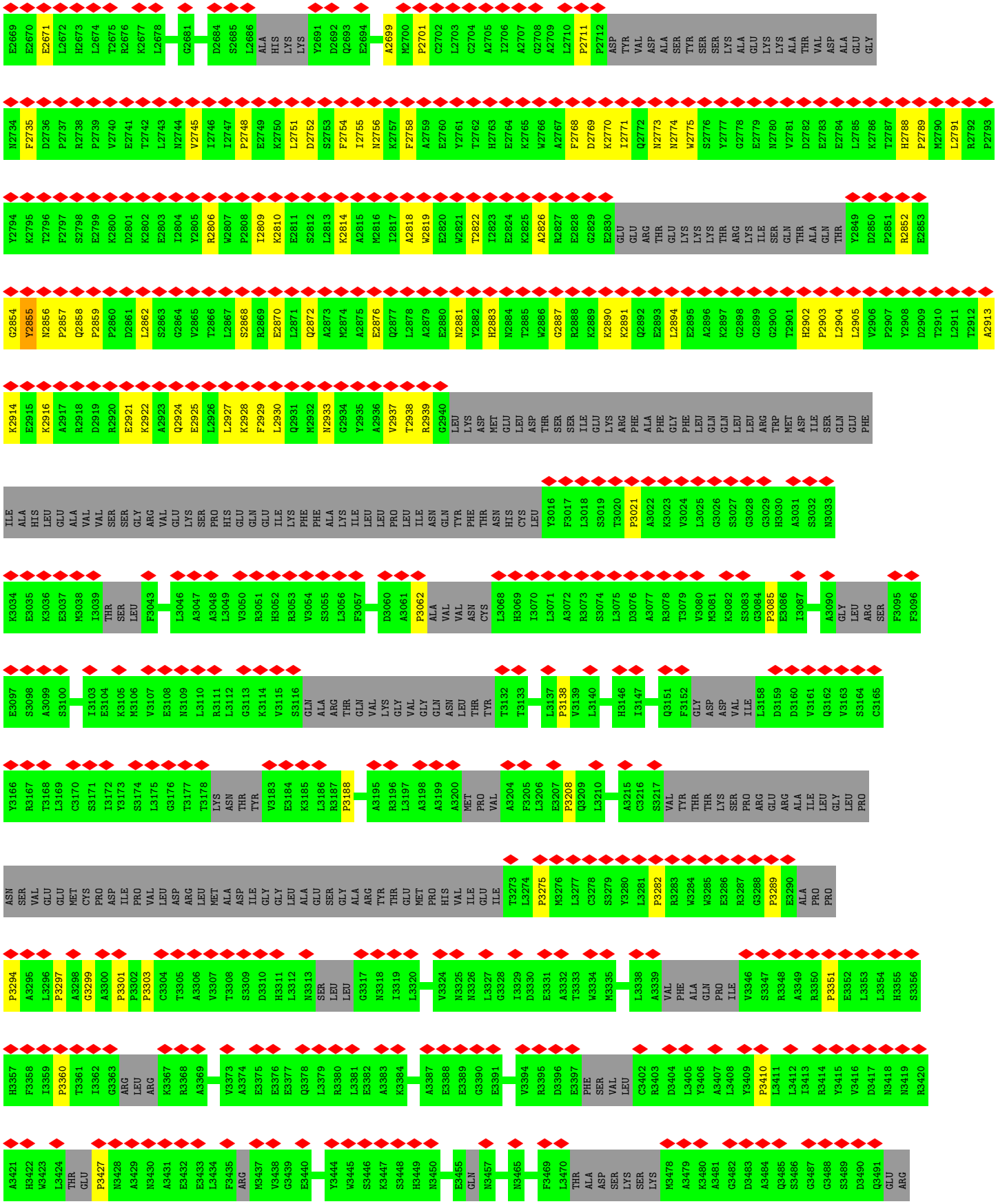
Chain E:

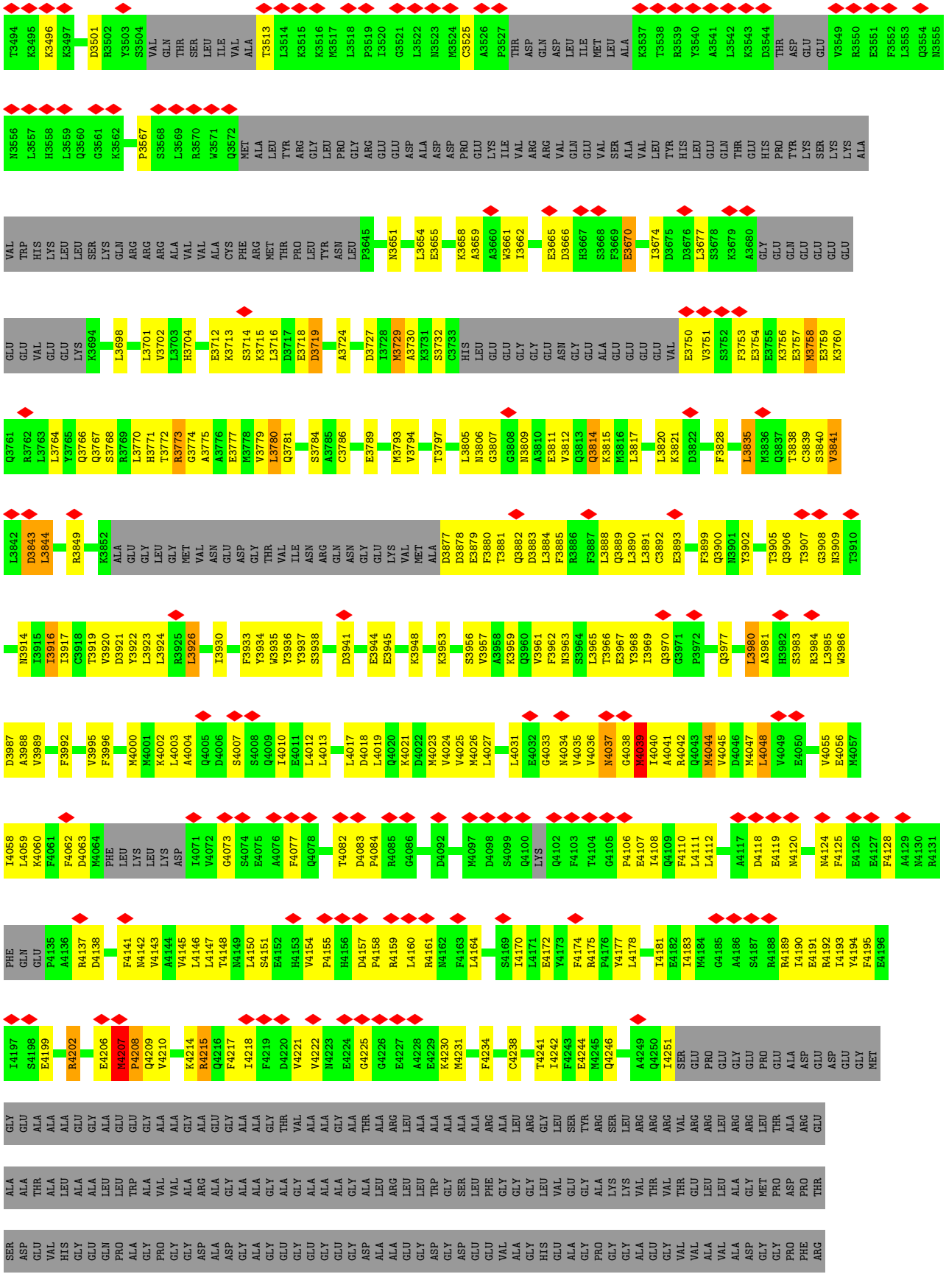


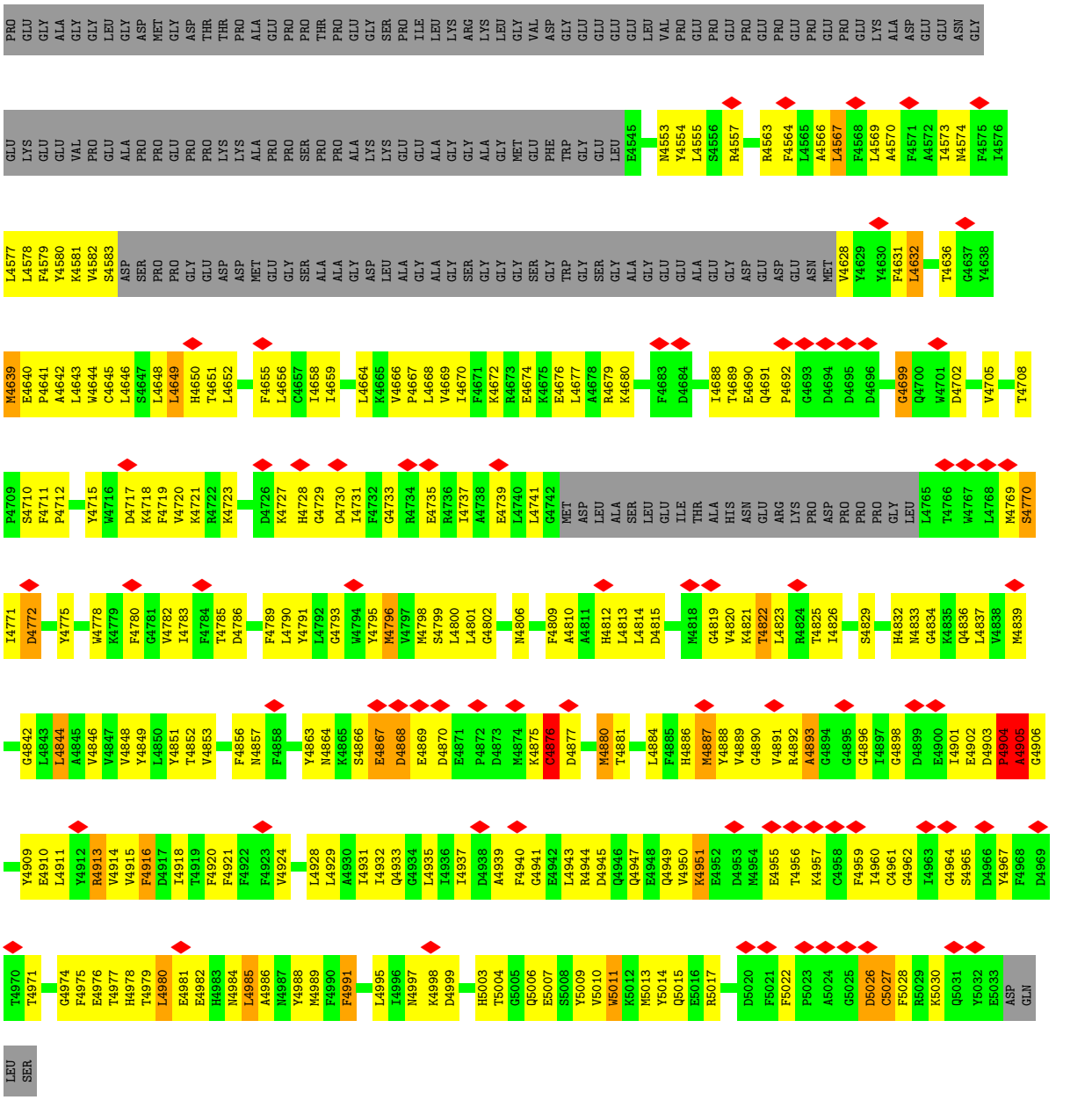

MET GLY ASP GLY GLY GLU GLY GLU ASP GLU VAL Q12 F13 L14 D17 D18 E19 V20 V21 L22 Q23 C24 S25 A26 T27 V28 L29 K30 E31 Q32 L33 K34 L35 C36 L37 A38 A39 E40 G41 F42 R45 L46 C47 F48 L49 E50 P51 T52 S53 N54 A55 Q56 N57 V58 P59 P60 D61 L62
A63 I64 C65 C66 F67 T68 L69 E70 Q71 S72 L73 R76 A77 L78 Q79 E80 M81 N84 THR VAL GLU ALA GLY VAL GLU SER SER GLN GLY GLY G97 H98 R99 T100 L101 L102 Y103 G104 H105 A106 I107 L108 L109 R110 H111 A112 H113 S114 R115 M116 Y117 L118 S119 C120 L121 T122 T123 S124
R125 SER MET THR ASP K130 L131 A132 F133 D134 V135 G136 L137 Q138 E139 D140 A141 A145 C146 W147 W148 T149 M150 H151 P152 A153 S154 K155 Q156 R157 S158 E159 G160 E161 K162 V163 R164 V165 G166 D167 D168 L169 I170 L171 V172 S173 V174 S175 S176 E177 R178 Y179 L180 H181 L182 S183 T184 ALA SER
GLY GLU L189 Q190 V191 D192 A193 S194 F195 M196 Q197 T198 L199 W200 N201 M202 N203 P204 I205 C206 S207 C208 C209 E210 E211 G212 Y213 V214 T215 G216 G217 H218 R221 L222 F223 H224 G225 HIS MET ASP E229 I233 S234 A235 A236 D237 S238 D239 D240 Q241 R242 V245 Y246 Y247 E248 G249 G250
A251 V252 C253 T254 H255 A256 R257 S258 R261 L262 E263 P264 L265 R266 S270 H273 L274 R275 W276 G277 Q278 P279 L280 R281 I282 T287 G288 R289 Y290 L291 A292 L293 T294 E295 D296 Q297 G298 L299 V300 V301 V302 D303 A304 C305 K306 A307 H308 T309 K310 A311 T312 S313 F314 C315 F316 R317
V318 S319 K320 E321 K322 L323 ASP THR ALA PRO K328 R329 D330 V331 E332 G333 M334 G335 P336 P337 E338 I339 K340 Y341 G342 E343 S344 L345 C346 F347 V348 Q349 H350 V351 A352 S353 G354 L355 W356 L357 T358 Y359 A360 A361 PRO ASP PRO LYS ALA LEU ARG LEU GLY V371 L372 K373 K374 K375 A376 I377
L378 H379 Q380 E381 G382 H383 M384 D385 D386 A387 L388 F389 L390 T391 R392 C393 Q394 Q395 E396 E397 A400 A401 R402 M403 I404 H405 S406 T407 L410 Y411 N412 Q413 F414 I415 S420 R426 GLY SER GLY PRO PRO ALA GLY PRO ALA L436 P437 I438 L445 Q446 D447 L448 I449 G450 Y451
F452 E453 P454 P455 S456 E457 E458 L459 E463 K467 S470 L471 R472 N473 R474 Q475 S476 L477 F478 Q479 E480 E481 G482 M483 L484 S485 L488 N489 C490 I491 D492 R493 L494 N495 T499 ALA ALA HIS PHE ALA GLU Y506 A507 G508 E509 E510 A511 A512 E513 S514 W515 K516 E517 I518 V519
N520 L521 L522 Y523 L526 A527 S528 L529 I530 R531 G532 N533 R534 A535 N536 C537 F540 N543 L544 D545 W546 V547 V548 L551 L554 E555 A556 S557 S558 G559 I560 L561 E562 V563 L564 Y565 C566 V567 L568 I569 E570 S571 P572 E573 V574 L575 N576 I577 I578 Q579 E580 N581 H582 S585
S588 L589 L590 D591 K592 H593 G594 R595 N596 H597 K598 V599 V602 L603 L606 C607 N610 G611 V614 N617 Q618 D619 L620 I621 T622 E623 N624 L625 L626 P627 G628 R629 E630 L631 L632 L633 Q634 T635 N636 L637 I638 N639 Y640 V641 T642 S643 I644 R645 P646 N647 I648 F649 V650 G651
ARG ALA GLU GLY SER THR GLN TYR G660 K661 W662 Y663 D669 E670 V671 V672 P673 F674 L675 T676 A677 L682 R683 V684 G685 L688 T689 E690 G691 P696 G697 G698 G699 E700 G701 W702 G703 G704 N705 G706 V707 D710 L711 Y714 G715 F716 D717 H720 H725 V726 A727 R728
T731 S732 P733 G734 L737 L738 A739 P740 E741 D742 C746 G747 L748 D749 L750 S751 V752 P753 S754 I755 S756 F757 R758 G761 C762 P763 V764 V767 F768 E769 A770 F771 N772 L773 D774 G775 L776 F777 F778 P779 V780 V781 S782 F783 S784 A785 G786 V787 K788 Y789 R790 F791 L792 L793 G794
GLY ARG HIS GLY E799 F800 K801 F802 L803 P804 P805 P806 G807 H812 E813 A814 V815 L816 P817 R818 E819 R820 L821 R822 L823 E824 P825 I826 K827 E828 Y829 R830 R831 E832 G833 P834 H838 L839 V840 G841 P842 S843 R844 C845 LEU SER HIS THR ASP F851 V852 P853 C854 P855 V856 D857 T858 V859
Q860 I861 V862 L863 P864 P865 H866 L867 E868 R869 I870 R871 E872 K873 H879 E880 A883 L884 T885 R886 I887 E888 Q889 G890 W891 T892 Y893 G894 P895 V896 R897 D898 D899 N900 K901 R902 L903 H904 P905 C906 L907 V908 N909 F910 H911 S912 L913 P914 E915 P916 E917 R918 N919 Y920 N921 L922 Q923 M924


S925 G926 E927 T928 L929 K930 T931 L932 L933 A934 L935 G936 C937 H938 V939 G940 M941 A942 D943 E944 K945 A946 GLU ASP ASN LEU LYS LYS THR LYS LEU PRO LYS THR Y959 M960 M961 S962 N963 G964 Y965 K966 P967 A968 P969 L970 D971 L972 S973 H974 V975 R976 L977 T978 P979 A980 T983 L984
L988 N991 G992 V1001 A1002 Q1003 GLY TRP SER TYR SER ALA VAL GLN ASP ILE PRO ALA R1016 Y1024 R1025 L1026 L1027 D1028 E1029 A1030 T1031 K1032 R1033 S1034 N1035 R1036 D1037 S1038 L1039 C1040 Q1041 A1042 V1043 R1044 T1045 L1046 L1047 G1048 Y1049 G1050 Y1051 N1052 I1053 E1054 P1055 PRO ASP GLN GLU PRO SER
GLN VAL GLU ASN GLN SER ARG TRP ASP R1071 V1072 R1073 I1074 F1075 R1076 A1077 E1078 K1079 S1080 Y1081 T1082 V1083 Q1084 S1085 G1086 R1087 W1088 Y1089 F1090 E1091 F1092 E1093 A1094 V1095 T1096 T1097 G1098 E1099 M1100 R1101 V1102 G1103 W1104 A1105 R1106 P1107 E1108 L1109 R1110 P1111 D1112 V1113 E1114 L1115 G1116 A1117 D1118 E1119 L1120
V1123 F1124 N1125 G1126 H1127 R1128 G1129 Q1130 R1131 W1132 H1133 L1134 G1135 S1136 E1137 P1138 F1139 G1140 R1141 P1142 W1143 Q1144 S1145 G1146 D1147 V1148 C1151 M1152 I1153 D1154 L1155 T1156 E1157 N1158 F1162 T1163 L1164 N1165 G1166 E1167 V1168 L1169 MET SER ASP SER GLY SER GLU THR A1178 F1179 R1180 E1181 I1182 G1185 D1186
G1187 F1188 L1189 P1190 V1191 C1192 S1193 L1194 Q1198 V1199 G1200 H1201 L1202 N1203 L1204 G1205 Q1206 D1207 S1210 L1211 R1212 F1213 F1214 A1215 I1216 E1221 G1222 F1223 E1224 P1225 F1226 A1227 M1230 Q1231 V1234 T1235 T1236 W1237 F1238 S1239 K1240 S1241 L1242 P1243 Q1244 F1245 E1246 P1247 E1251 H1252 P1253 H1254 Y1255 E1256
R1259 M1260 D1261 GLY THR VAL ASP THR PRO PRO CYS LEU ARG L1272 R1275 T1276 W1277 G1278 S1279 Q1280 L1283 V1284 E1285 M1286 L1287 F1288 L1289 R1290 L1291 S1292 L1293 P1294 V1295 Q1296 F1297 HIS GLN HIS PHE ARG CYS THR ALA GLY ALA THR PRO LEU ALA PRO PRO GLY LEU GLN PRO PRO ALA
GLU ASP GLU ALA ARG ALA ALA GLU PRO ASP PRO ASP TYR GLU ASN LEU ARG ARG SER ALA GLY GLY TRP GLY GLU ALA GLU GLY GLY LYS GLU GLY THR ALA LYS GLU GLY THR PRO GLY GLY THR PRO GLN PRO GLY VAL ARG ALA GLU ASN GLU LYS ASP ALA
THR THR GLU LYS ASN LYS LYS ARG GLY PHE LEU PHE LYS ALA LYS LYS ALA ALA MET MET THR GLN PRO PRO ALA THR PRO ALA LEU LEU PRO ARG LEU PRO HIS ASP VAL VAL PRO ALA ASP ASN ARG ASP ASP PRO GLU ILE ILE LEU ASN THR THR T1432 Y1435 S1436 V1437 R1438 V1439 F1440
A1441 GLY GLN GLU PRO SER C1447 V1448 W1452 Y1457 H1458 Q1459 M1462 N1463 F1464 D1465 L1466 S1467 LYS VAL ARG ALA V1472 G1477 D1478 E1479 Q1480 G1481 N1482 V1483 H1484 S1485 S1486 L1487 K1488 C1489 S1490 N1491 CYS Y1493 G1497 GLY ASP PHE VAL SER PRO GLY GLN GLN GLY ARG ILE S1510 H1511
T1512 D1513 L1514 V1515 I1516 L1519 V1520 ASP LEU ALA THR G1525 A1531 N1532 N1537 T1538 F1539 P1544 N1545 T1546 K1547 L1548 F1549 P1550 V1554 L1555 P1556 V1561 I1562 Q1563 F1564 E1565 LEU GLY LYS GLN LYS ASN ILE MET PRO LEU SER A1577 L1581 S1582 E1583 R1584 K1585 N1586 P1587 A1588 P1589
P1592 P1593 R1594 L1595 E1596 V1597 Q1598 M1599 L1600 M1601 P1602 V1603 S1604 W1605 S1606 R1607 M1608 P1609 N1610 H1611 F1612 L1613 E1616 T1617 R1618 R1619 A1620 G1621 E1622 R1623 W1626 A1627 V1628 Q1629 C1630 Q1631 D1632 P1633 M1636 M1637 A1638 L1639 H1640 I1641 P1642 E1643 R1646 C1647 M1648 D1649 E1652 L1653 S1654 E1655
R1656 L1657 D1658 L1659 Q1660 R1661 F1662 H1663 S1664 H1665 T1666 L1667 R1668 L1669 Y1670 R1671 A1672 V1673 C1674 A1675 L1676 N1679 R1680 V1681 A1682 H1683 A1684 L1685 C1686 S1687 H1688 V1689 D1690 Q1691 A1692 Q1693 L1694 L1695 H1696 A1697 L1698 E1699 L1703 P1704 G1705 R1708 A1709 G1710 Y1711 Y1712 D1713 L1714 S1717 I1718 H1719 L1720
E1721 S1722 A1723 R1727 R1728 S1729 M1730 L1731 S1732 E1733 Y1734 I1735 L1738 T1739 T1742 L1747 F1748 P1749 P1750 GLY ARG LYS GLY GLY ASN ALA ARG ARG HIS G1761 L1762 P1763 G1766 V1767 T1768 T1769 S1770 L1771 R1772 H1775 P1779 P1780 V1783 A1784 ALA LEU PRO ALA ALA GLY VAL ALA



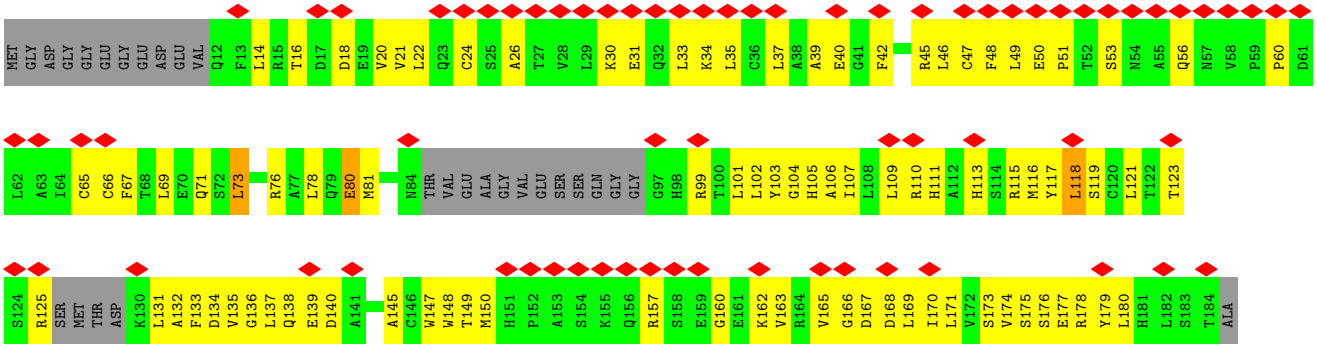


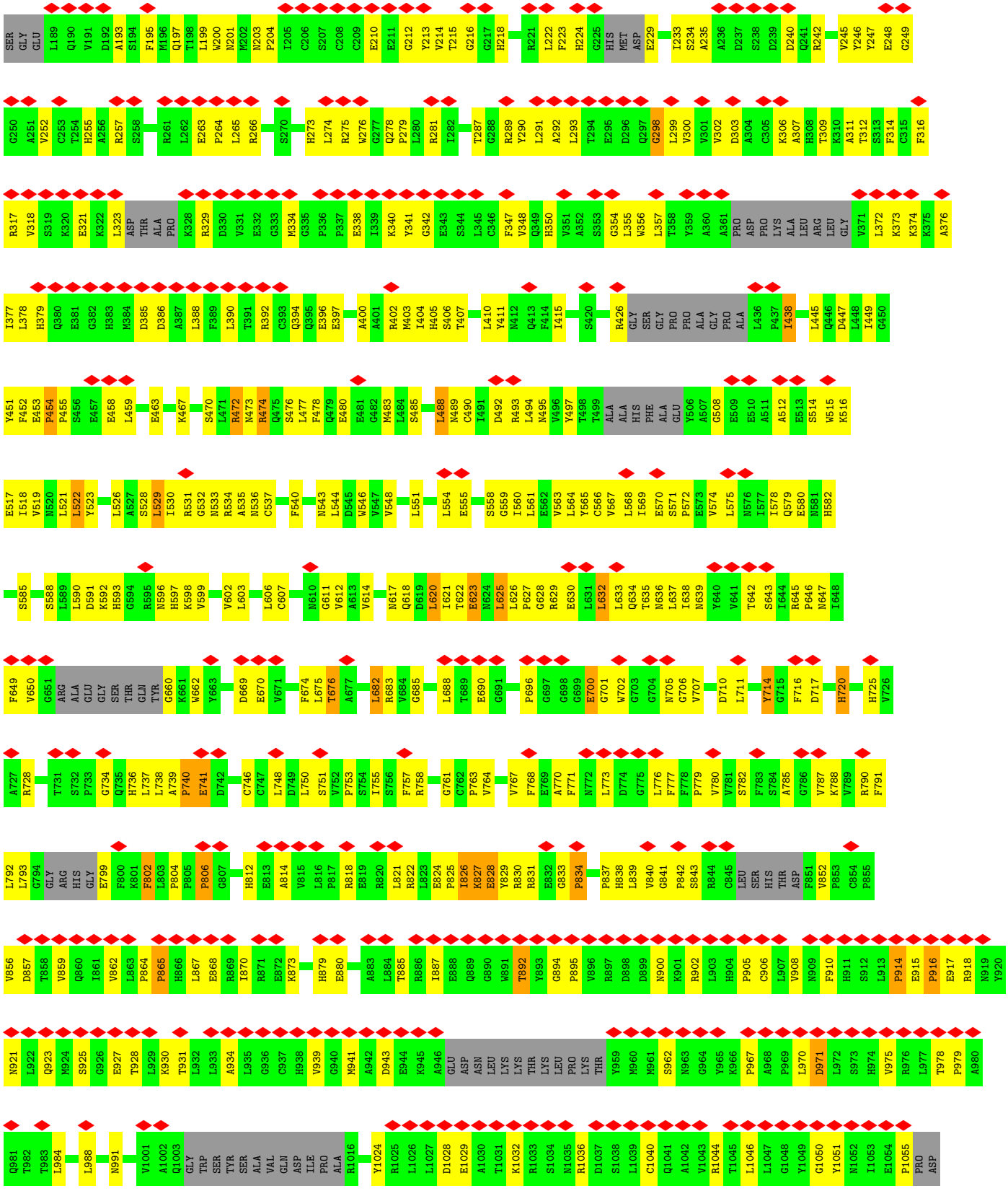


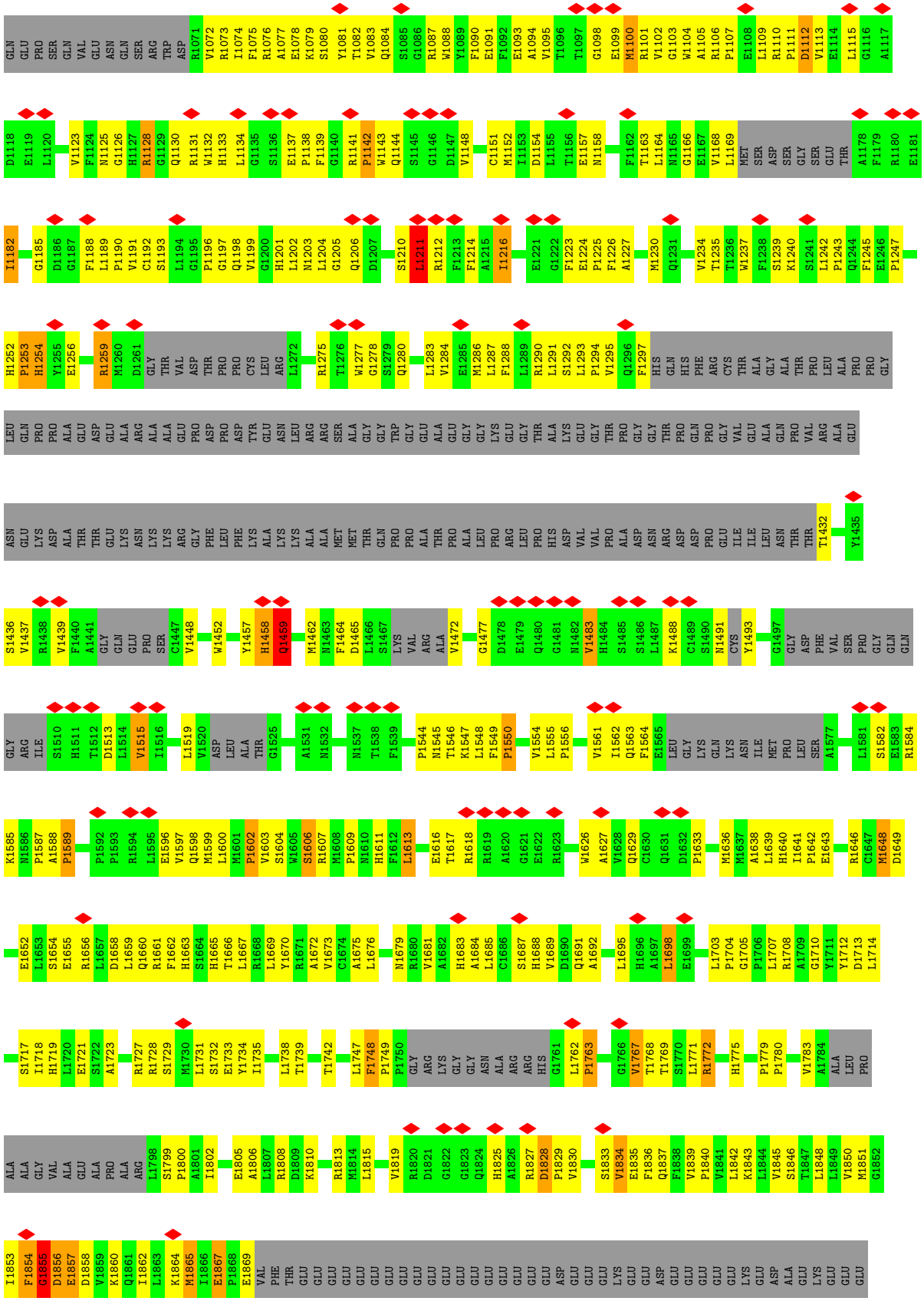


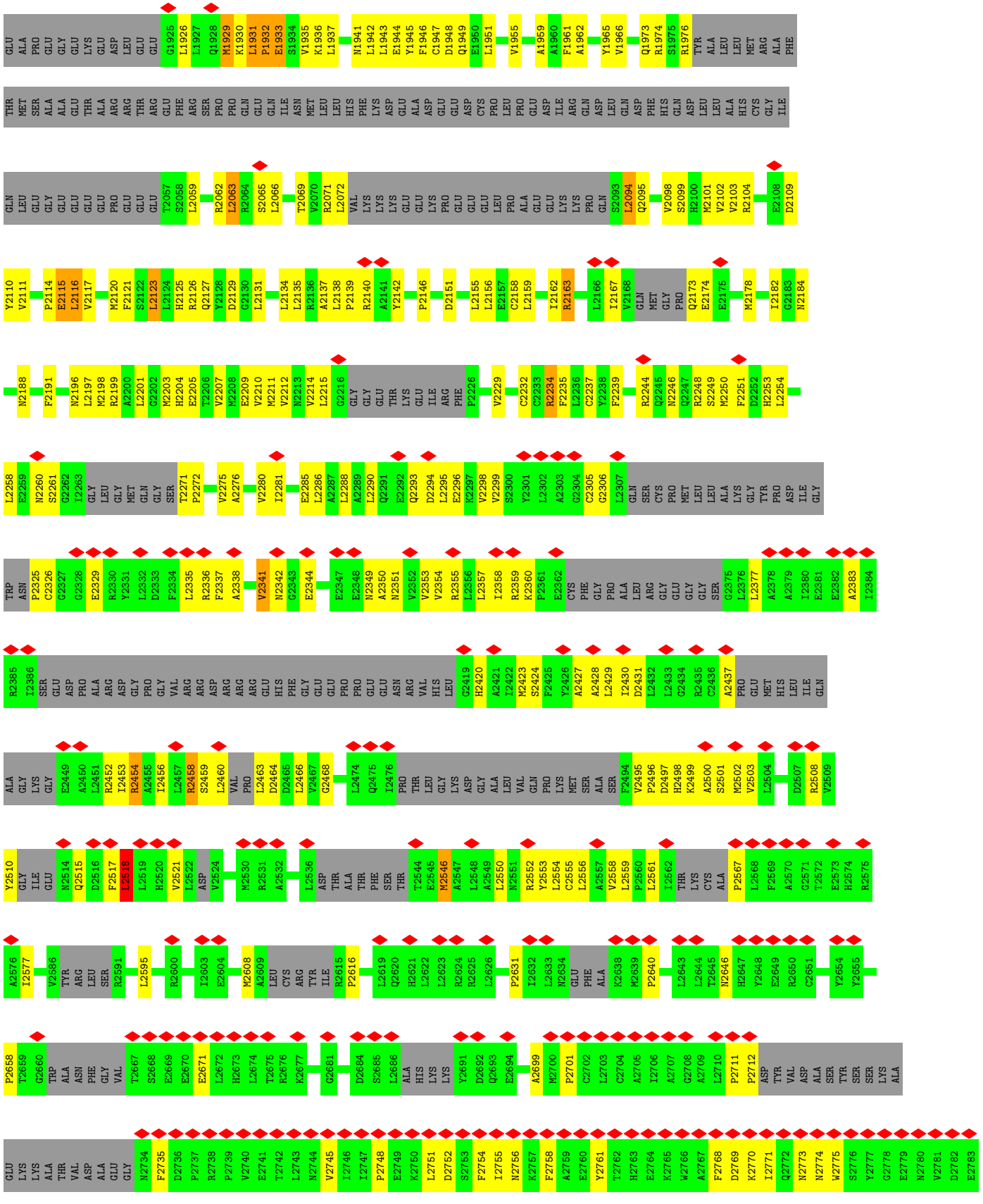
• Molecule 1: Ryanodine receptor 1

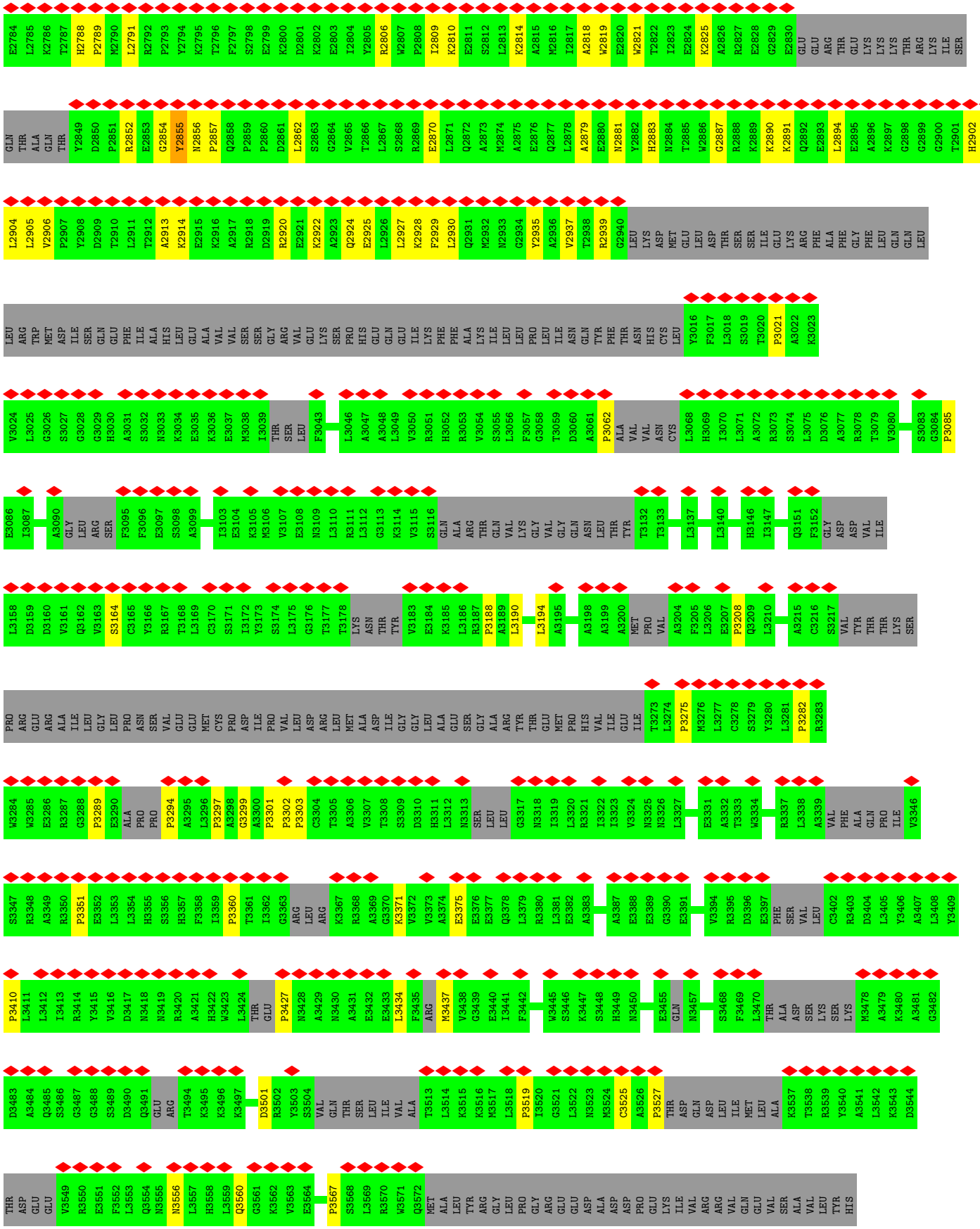
Chain G:

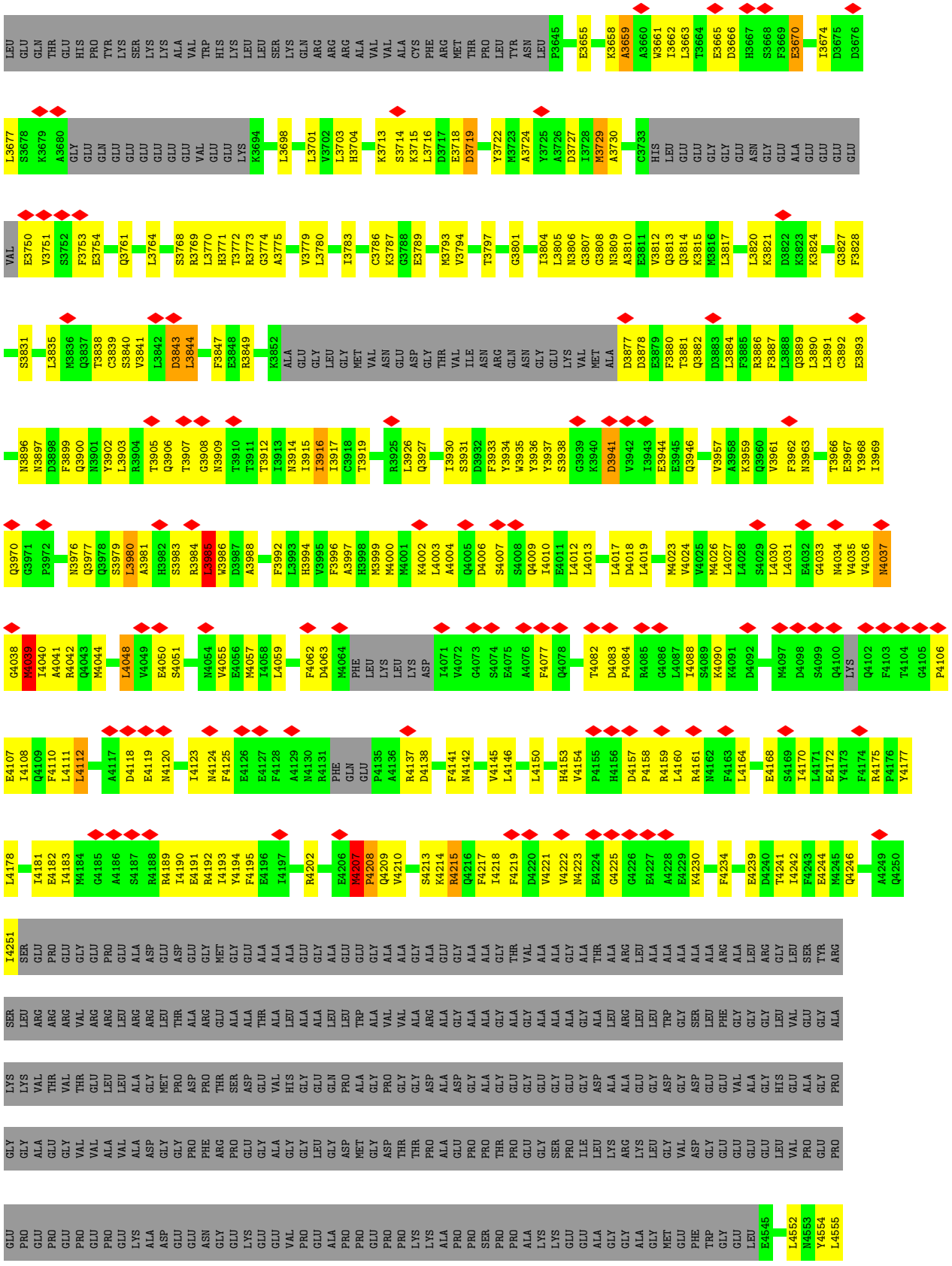


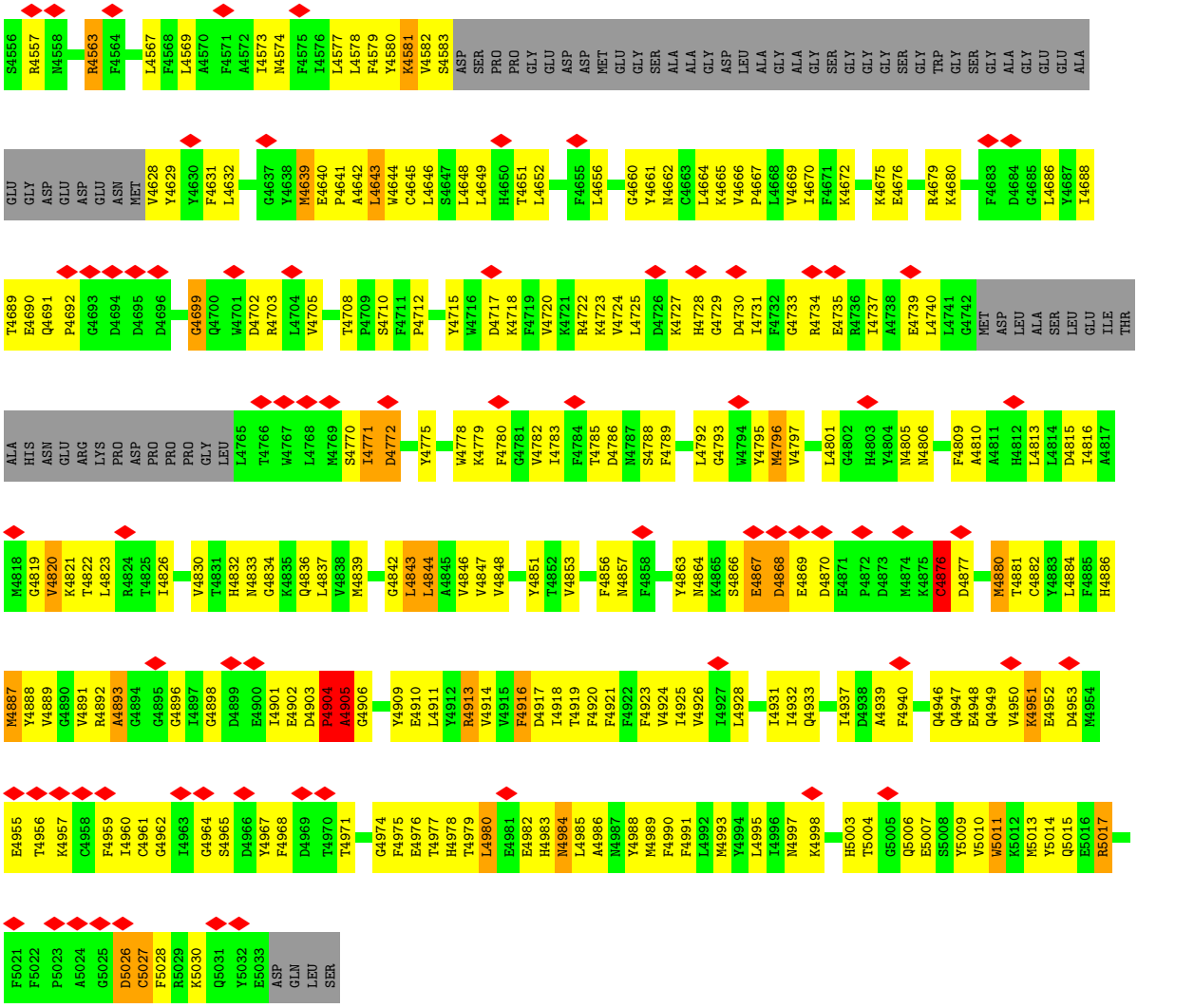






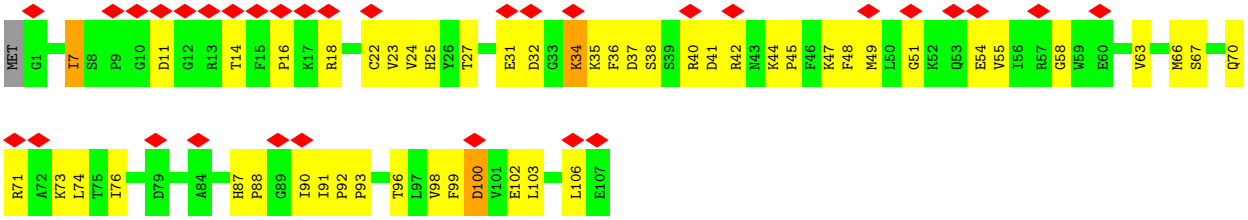

E2784 L2785 K2786 T2787 H2788 P2789 M2790 L2791 R2792 P2793 Y2794 K2795 T2796 F2797 S2798 E2799 K2800 D2801 K2802 E2803 I2804 Y2805 R2806 W2807 P2808 I2809 K2810 E2811 S2812 L2813 K2814 A2815 M2816 I2817 A2818 W2819 E2820 W2821 T2822 I2823 E2824 K2825 A2826 R2827 E2828 G2829 E2830 GLU GLU ARG THR GLU LYS LYS LYS THR ARG LYS ILE SER
GLN THR ALA GLN THR Y2849 D2850 P2851 R2852 E2853 G2854 Y2855 N2856 P2857 Q2858 P2859 P2860 D2861 L2862 S2863 G2864 V2865 T2866 L2867 S2868 R2869 E2870 L2871 Q2872 A2873 M2874 A2875 E2876 Q2877 L2878 A2879 E2880 N2881 Y2882 H2883 N2884 T2885 W2886 G2887 R2888 K2889 K2890 K2891 Q2892 E2893 L2894 E2895 A2896 K2897 G2898 G2899 G2900 T2901 H2902 P2903
L2904 L2905 V2906 P2907 Y2908 D2909 T2910 L2911 T2912 A2913 K2914 E2915 K2916 A2917 R2918 D2919 R2920 E2921 K2922 A2923 Q2924 E2925 L2926 L2927 K2928 F2929 L2930 Q2931 M2932 N2933 G2934 Y2935 A2936 V2937 T2938 R2939 G2940 LEU LYS ASP MET GLU LEU ASP THR SER SER ILE GLU LYS ARG PHE ALA PHE GLY PHE LEU GLN GLN LEU
LEU ARG TRP MET ASP ILE SER GLN GLU PHE ILE ALA HIS LEU GLU ALA VAL VAL SER SER GLY ARG VAL GLU LYS SER PRO HIS GLU GLN GLU ILE LYS PHE PHE ALA LYS ILE LEU LEU PRO LEU ILE ASN GLN TYR PHE THR ASN HIS CYS LEU Y3016 F3017 L3018 S3019 T3020 P3021 A3022 K3023
V3024 L3025 G3026 S3027 G3028 G3029 H3030 A3031 S3032 N3033 K3034 E3035 K3036 E3037 M3038 I3039 THR SER LEU F3043 L3046 A3047 A3048 L3049 V3050 R3051 H3052 R3053 V3054 S3055 L3056 F3057 G3058 T3059 D3060 A3061 P3062 ALA VAL VAL ASN CYS L3068 H3069 I3070 L3071 A3072 R3073 S3074 L3075 D3076 A3077 R3078 T3079 V3080 S3083 G3084 P3085
E3086 I3087 A3090 GLY LEU ARG SER F3095 F3096 E3097 S3098 A3099 I3103 E3104 K3105 M3106 V3107 E3108 N3109 L3110 R3111 L3112 G3113 K3114 V3115 S3116 GLN ALA ARG THR GLN VAL LYS GLY VAL GLY GLN ASN LEU THR TYR T3132 T3133 L3137 L3140 H3146 I3147 Q3151 F3152 GLY ASP ASP VAL ILE
L3158 D3159 D3160 V3161 Q3162 V3163 S3164 C3165 Y3166 R3167 T3168 L3169 C3170 S3171 I3172 Y3173 S3174 L3175 G3176 T3177 T3178 LYS ASN THR TYR V3183 E3184 K3185 L3186 R3187 P3188 A3189 L3190 L3194 A3195 A3198 A3199 A3200 MET PRO VAL A3204 F3205 L3206 E3207 P3208 Q3209 L3210 A3215 C3216 S3217 VAL TYR THR THR LYS SER
PRO ARG GLU ARG ALA ILE LEU GLY GLY LEU PRO ASN SER VAL GLU GLU MET CYS PRO ASP ILE PRO VAL LEU ASP ARG LEU MET ALA ASP ILE GLY GLY LEU ALA GLU SER GLY ALA ARG TYR THR GLU MET PRO HIS VAL ILE GLU ILE T3273 L3274 P3275 M3276 L3277 C3278 S3279 Y3280 L3281 P3282 R3283
W3284 W3285 E3286 R3287 G3288 P3289 E3290 ALA PRO PRO P3294 A3295 L3296 P3297 A3298 G3299 A3300 P3301 P3302 P3303 C3304 T3305 A3306 V3307 T3308 S3309 D3310 H3311 L3312 N3313 SER LEU LEU G3317 N3318 I3319 L3320 R3321 I3322 I3323 V3324 N3325 N3326 L3327 E3331 A3332 T3333 W3334 R3337 L3338 A3339 VAL PHE ALA GLN PRO ILE V3346
S3347 R3348 A3349 R3350 P3351 E3352 L3353 L3354 H3355 S3356 H3357 F3358 I3359 P3360 T3361 I3362 G3363 ARG LEU ARG K3367 R3368 A3369 G3370 K3371 V3372 V3373 A3374 E3375 E3376 E3377 Q3378 L3379 R3380 L3381 E3382 A3383 A3387 E3388 E3389 G3390 E3391 V3394 R3395 D3396 E3397 PHE SER VAL LEU C3402 R3403 D3404 L3405 Y3406 A3407 L3408 Y3409
P3410 L3411 L3412 I3413 R3414 Y3415 V3416 D3417 N3418 N3419 R3420 A3421 H3422 W3423 L3424 THR GLU P3427 N3428 A3429 N3430 A3431 E3432 E3433 L3434 F3435 ARG M3437 V3438 G3439 E3440 I3441 F3442 W3445 S3446 K3447 S3448 H3449 N3450 E3455 GLN N3457 S3468 F3469 L3470 THR ALA ASP SER LYS SER LYS M3478 A3479 K3480 A3481 G3482
D3483 A3484 Q3485 S3486 G3487 G3488 S3489 D3490 Q3491 GLU ARG T3494 K3495 K3496 K3497 D3501 R3502 Y3503 S3504 VAL GLN THR SER LEU ILE VAL ALA T3513 L3514 K3515 K3516 M3517 L3518 P3519 I3520 G3521 L3522 N3523 M3524 C3525 A3526 P3527 THR ASP GLN ASP LEU ILE MET LEU ALA K3537 T3538 R3539 Y3540 A3541 L3542 K3543 D3544
THR ASP GLU GLU V3549 R3550 E3551 F3552 L3553 Q3554 N3555 N3556 L3557 H3558 L3559 Q3560 G3561 K3562 V3563 E3564 P3567 S3568 L3569 R3570 W3571 Q3572 MET ALA LEU TYR ARG GLY LEU PRO GLY ARG GLU GLU ASP ALA ASP ASP PRO GLU LYS ILE VAL ARG ARG VAL GLN GLU VAL SER ALA VAL LEU TYR HIS





• Molecule 2: Peptidyl-prolyl cis-trans isomerase FKBP1A

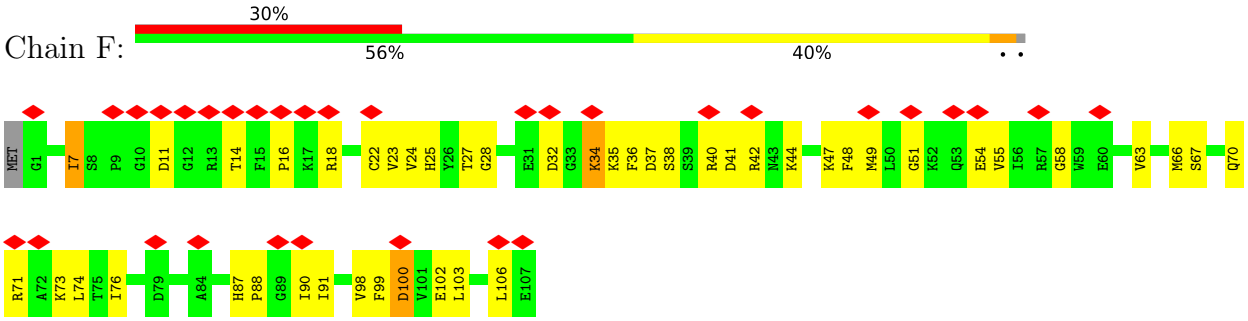
Chain B:



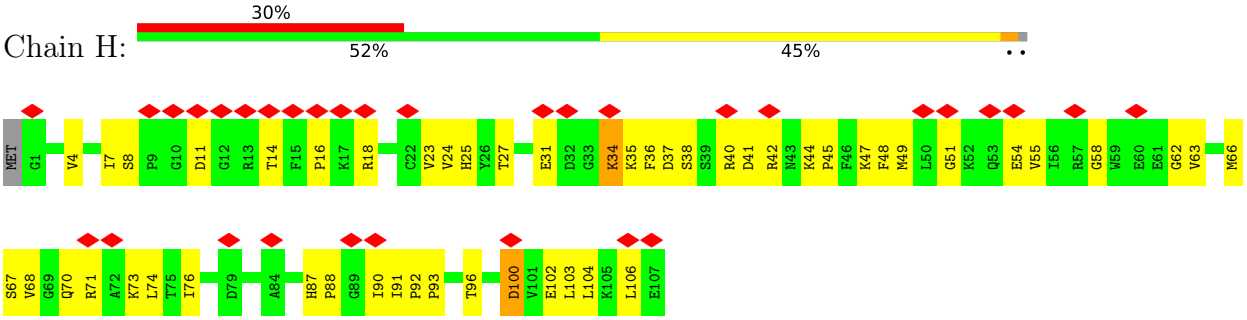
• Molecule 2: Peptidyl-prolyl cis-trans isomerase FKBP1A

Chain D:

• Molecule 2: Peptidyl-prolyl cis-trans isomerase FKBP1A



• Molecule 2: Peptidyl-prolyl cis-trans isomerase FKBP1A



4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	30000	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI POLARA 300	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	40	Depositor
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	Not provided	
Image detector	FEI FALCON II (4k x 4k)	Depositor
Maximum map value	0.243	Depositor
Minimum map value	-0.085	Depositor
Average map value	0.001	Depositor
Map value standard deviation	0.012	Depositor
Recommended contour level	0.075	Depositor
Map size (Å)	482.40002, 482.40002, 482.40002	wwPDB
Map dimensions	360, 360, 360	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.34, 1.34, 1.34	Depositor

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: ZN

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#$\|Z\|$ >5	RMSZ	#$\|Z\|$ >5
1	A	1.21	41/27312 (0.2%)	1.12	151/37004 (0.4%)
1	C	1.20	39/27312 (0.1%)	1.12	154/37004 (0.4%)
1	E	1.21	35/27312 (0.1%)	1.12	158/37004 (0.4%)
1	G	1.21	38/27312 (0.1%)	1.11	145/37004 (0.4%)
2	B	0.91	1/851 (0.1%)	0.93	2/1146 (0.2%)
2	D	0.91	1/851 (0.1%)	0.92	2/1146 (0.2%)
2	F	0.91	1/851 (0.1%)	0.92	2/1146 (0.2%)
2	H	0.93	1/851 (0.1%)	0.90	0/1146
All	All	1.20	157/112652 (0.1%)	1.11	614/152600 (0.4%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand.A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	0	36
1	C	0	35
1	E	0	36
1	G	0	34
All	All	0	141

All (157) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	G	80	GLU	CG-CD	11.12	1.68	1.51
1	G	3661	TRP	CB-CG	10.06	1.68	1.50
1	A	3661	TRP	CB-CG	9.81	1.68	1.50
1	G	1976	ARG	NE-CZ	9.78	1.45	1.33
1	A	741	GLU	CG-CD	9.74	1.66	1.51
1	E	5011	TRP	CB-CG	-9.37	1.33	1.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	5011	TRP	CB-CG	-9.29	1.33	1.50
1	C	5011	TRP	CB-CG	-9.22	1.33	1.50
1	E	3661	TRP	CB-CG	9.18	1.66	1.50
1	C	3661	TRP	CB-CG	9.15	1.66	1.50
1	G	1976	ARG	CD-NE	9.10	1.61	1.46
1	A	2926	LEU	CA-C	-8.45	1.30	1.52
1	G	80	GLU	CD-OE1	8.35	1.34	1.25
1	E	80	GLU	CG-CD	8.15	1.64	1.51
1	E	1976	ARG	NE-CZ	7.84	1.43	1.33
1	A	1976	ARG	CD-NE	7.76	1.59	1.46
1	G	4050	GLU	CD-OE2	7.70	1.34	1.25
1	C	1976	ARG	CD-NE	7.52	1.59	1.46
1	C	80	GLU	CG-CD	7.51	1.63	1.51
1	E	3670	GLU	CD-OE1	-7.43	1.17	1.25
1	C	3670	GLU	CD-OE1	-7.37	1.17	1.25
1	A	3670	GLU	CD-OE1	-7.35	1.17	1.25
1	G	5011	TRP	CB-CG	-7.22	1.37	1.50
1	C	1976	ARG	NE-CZ	7.17	1.42	1.33
1	G	741	GLU	CG-CD	7.17	1.62	1.51
1	G	3670	GLU	CD-OE1	-6.91	1.18	1.25
1	C	741	GLU	CG-CD	6.89	1.62	1.51
1	G	4215	ARG	CD-NE	6.87	1.58	1.46
1	C	1784	ALA	N-CA	6.79	1.59	1.46
1	E	4644	TRP	CB-CG	6.71	1.62	1.50
1	A	4644	TRP	CB-CG	6.66	1.62	1.50
1	C	4644	TRP	CB-CG	6.66	1.62	1.50
1	A	1784	ALA	N-CA	6.59	1.59	1.46
1	A	1867	GLU	CD-OE1	-6.54	1.18	1.25
1	E	80	GLU	CD-OE1	6.54	1.32	1.25
1	A	1976	ARG	NE-CZ	6.53	1.41	1.33
1	E	741	GLU	CG-CD	6.52	1.61	1.51
1	A	80	GLU	CG-CD	6.46	1.61	1.51
1	E	1867	GLU	CD-OE1	-6.44	1.18	1.25
1	C	1867	GLU	CD-OE1	-6.38	1.18	1.25
1	G	1867	GLU	CD-OE1	-6.29	1.18	1.25
1	G	3299	GLY	N-CA	6.27	1.55	1.46
1	G	4909	TYR	CB-CG	6.26	1.61	1.51
1	A	1973	GLN	CG-CD	6.22	1.65	1.51
1	G	1973	GLN	CG-CD	6.20	1.65	1.51
1	G	4644	TRP	CB-CG	6.18	1.61	1.50
1	A	700	GLU	CD-OE1	6.13	1.32	1.25
1	A	4822	THR	CB-CG2	-6.11	1.32	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	4822	THR	CB-CG2	-6.11	1.32	1.52
1	E	4909	TYR	CB-CG	6.08	1.60	1.51
1	E	4967	TYR	CB-CG	-6.07	1.42	1.51
1	A	4967	TYR	CB-CG	-6.03	1.42	1.51
1	G	4967	TYR	CB-CG	-6.03	1.42	1.51
1	C	4967	TYR	CB-CG	-6.00	1.42	1.51
1	A	4191	GLU	CG-CD	5.99	1.60	1.51
1	E	4191	GLU	CG-CD	5.96	1.60	1.51
1	C	700	GLU	CD-OE1	5.96	1.32	1.25
1	C	1973	GLN	CG-CD	5.95	1.64	1.51
1	C	4909	TYR	CB-CG	5.94	1.60	1.51
1	G	700	GLU	CD-OE1	5.92	1.32	1.25
1	E	1973	GLN	CG-CD	5.89	1.64	1.51
1	A	1933	GLU	CG-CD	5.88	1.60	1.51
2	H	100	ASP	CB-CG	5.87	1.64	1.51
1	G	623	GLU	CG-CD	5.86	1.60	1.51
1	E	700	GLU	CD-OE1	5.84	1.32	1.25
1	E	1784	ALA	N-CA	5.83	1.58	1.46
1	G	4699	GLY	N-CA	-5.83	1.37	1.46
1	E	4699	GLY	N-CA	-5.81	1.37	1.46
2	F	100	ASP	CB-CG	5.79	1.64	1.51
2	D	100	ASP	CB-CG	5.78	1.63	1.51
2	B	100	ASP	CB-CG	5.77	1.63	1.51
1	G	3665	GLU	CG-CD	5.76	1.60	1.51
1	C	1933	GLU	CG-CD	5.75	1.60	1.51
1	C	4191	GLU	CG-CD	5.73	1.60	1.51
1	G	4932	ILE	N-CA	-5.72	1.34	1.46
1	A	3299	GLY	N-CA	5.70	1.54	1.46
1	C	3299	GLY	N-CA	5.68	1.54	1.46
1	G	3916	ILE	N-CA	-5.68	1.34	1.46
1	A	4699	GLY	N-CA	-5.68	1.37	1.46
1	A	4909	TYR	CB-CG	5.67	1.60	1.51
1	C	4699	GLY	N-CA	-5.66	1.37	1.46
1	E	3916	ILE	N-CA	-5.63	1.35	1.46
1	E	1933	GLU	CG-CD	5.62	1.60	1.51
1	C	3916	ILE	N-CA	-5.61	1.35	1.46
1	E	3299	GLY	N-CA	5.61	1.54	1.46
1	E	1976	ARG	CD-NE	5.59	1.55	1.46
1	A	3665	GLU	CG-CD	5.59	1.60	1.51
1	A	3916	ILE	N-CA	-5.58	1.35	1.46
1	E	4876	CYS	CB-SG	-5.57	1.72	1.81
1	G	4191	GLU	CG-CD	5.56	1.60	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	G	1933	GLU	CG-CD	5.52	1.60	1.51
1	A	4545	GLU	CG-CD	5.50	1.60	1.51
1	C	3665	GLU	CG-CD	5.50	1.60	1.51
1	G	2577	ILE	N-CA	5.50	1.57	1.46
1	A	2577	ILE	N-CA	5.50	1.57	1.46
1	C	2577	ILE	N-CA	5.49	1.57	1.46
1	A	741	GLU	CD-OE1	5.47	1.31	1.25
1	G	1670	TYR	CG-CD1	-5.47	1.32	1.39
1	E	3665	GLU	CG-CD	5.46	1.60	1.51
1	A	4876	CYS	CB-SG	-5.43	1.73	1.81
1	A	4962	GLY	N-CA	-5.42	1.38	1.46
1	E	2577	ILE	N-CA	5.42	1.57	1.46
1	C	4876	CYS	CB-SG	-5.41	1.73	1.81
1	C	4962	GLY	N-CA	-5.39	1.38	1.46
1	E	4962	GLY	N-CA	-5.39	1.38	1.46
1	C	1670	TYR	CG-CD1	-5.38	1.32	1.39
1	C	2205	GLU	CG-CD	5.38	1.60	1.51
1	G	714	TYR	CG-CD2	5.28	1.46	1.39
1	C	714	TYR	CG-CD2	5.27	1.46	1.39
1	E	4215	ARG	CD-NE	5.26	1.55	1.46
1	A	714	TYR	CG-CD2	5.24	1.46	1.39
1	E	1670	TYR	CG-CD1	-5.23	1.32	1.39
1	E	2855	TYR	CG-CD1	5.21	1.46	1.39
1	G	3164	SER	N-CA	5.20	1.56	1.46
1	A	1670	TYR	CG-CD1	-5.19	1.32	1.39
1	E	1728	ARG	CZ-NH1	5.19	1.39	1.33
1	A	1836	PHE	CB-CG	-5.19	1.42	1.51
1	E	714	TYR	CG-CD2	5.18	1.45	1.39
1	G	1836	PHE	CB-CG	-5.18	1.42	1.51
1	A	2855	TYR	CG-CD1	5.18	1.45	1.39
1	A	529	LEU	CA-CB	-5.18	1.41	1.53
1	C	1836	PHE	CB-CG	-5.18	1.42	1.51
1	E	1836	PHE	CB-CG	-5.17	1.42	1.51
1	G	3525	CYS	CA-CB	-5.17	1.42	1.53
1	E	529	LEU	CA-CB	-5.16	1.41	1.53
1	G	4554	TYR	CB-CG	5.15	1.59	1.51
1	C	117	TYR	CE1-CZ	-5.14	1.31	1.38
1	A	1728	ARG	CZ-NH1	5.14	1.39	1.33
1	A	4888	TYR	CE2-CZ	-5.14	1.31	1.38
1	G	2855	TYR	CG-CD1	5.14	1.45	1.39
1	C	529	LEU	CA-CB	-5.14	1.42	1.53
1	G	4863	TYR	CG-CD2	-5.11	1.32	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	G	4050	GLU	CD-OE1	5.11	1.31	1.25
1	C	5011	TRP	CG-CD1	-5.11	1.29	1.36
1	A	3525	CYS	CA-CB	-5.11	1.42	1.53
1	C	4976	GLU	N-CA	5.10	1.56	1.46
1	G	529	LEU	CA-CB	-5.10	1.42	1.53
1	A	2094	LEU	N-CA	5.09	1.56	1.46
1	A	4554	TYR	CB-CG	5.09	1.59	1.51
1	C	2855	TYR	CG-CD1	5.09	1.45	1.39
1	A	5011	TRP	CG-CD1	-5.08	1.29	1.36
1	A	4976	GLU	N-CA	5.07	1.56	1.46
1	E	3525	CYS	CA-CB	-5.07	1.42	1.53
1	E	2094	LEU	N-CA	5.07	1.56	1.46
1	G	80	GLU	CB-CG	5.07	1.61	1.52
1	E	4554	TYR	CB-CG	5.06	1.59	1.51
1	G	4876	CYS	CB-SG	-5.05	1.73	1.81
1	C	1728	ARG	CZ-NH1	5.04	1.39	1.33
1	A	4575	PHE	CB-CG	5.04	1.59	1.51
1	C	4554	TYR	CB-CG	5.04	1.59	1.51
1	C	4215	ARG	CD-NE	5.04	1.55	1.46
1	C	4575	PHE	CB-CG	5.04	1.59	1.51
1	E	2381	GLU	CD-OE2	-5.02	1.20	1.25
1	C	3525	CYS	CA-CB	-5.01	1.43	1.53
1	G	4962	GLY	N-CA	-5.01	1.38	1.46
1	C	1976	ARG	CZ-NH1	5.00	1.39	1.33
1	A	4932	ILE	N-CA	-5.00	1.36	1.46

All (614) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	G	80	GLU	OE1-CD-OE2	-10.92	110.20	123.30
1	A	1212	ARG	NE-CZ-NH1	10.39	125.49	120.30
1	G	4796	MET	CG-SD-CE	10.33	116.73	100.20
1	G	1976	ARG	CD-NE-CZ	10.23	137.93	123.60
1	C	1212	ARG	NE-CZ-NH1	10.17	125.39	120.30
1	G	1212	ARG	NE-CZ-NH1	10.00	125.30	120.30
1	E	1212	ARG	NE-CZ-NH1	9.74	125.17	120.30
1	A	4159	ARG	NE-CZ-NH2	-9.68	115.46	120.30
1	C	4980	LEU	CB-CG-CD2	-9.59	94.70	111.00
1	A	4980	LEU	CB-CG-CD2	-9.55	94.76	111.00
1	E	4980	LEU	CB-CG-CD2	-9.53	94.80	111.00
1	C	3303	PRO	N-CA-CB	9.52	114.72	103.30
1	E	3303	PRO	N-CA-CB	9.46	114.65	103.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	E	1976	ARG	CD-NE-CZ	9.46	136.84	123.60
1	A	3303	PRO	N-CA-CB	9.35	114.52	103.30
1	C	4159	ARG	NE-CZ-NH2	-9.31	115.64	120.30
1	A	2640	PRO	N-CA-CB	9.29	114.45	103.30
1	C	2640	PRO	N-CA-CB	9.29	114.45	103.30
1	E	2640	PRO	N-CA-CB	9.28	114.44	103.30
1	G	2640	PRO	N-CA-CB	9.27	114.42	103.30
1	A	4909	TYR	CB-CG-CD1	9.25	126.55	121.00
1	G	4112	LEU	CB-CG-CD2	-9.20	95.35	111.00
1	G	4159	ARG	NE-CZ-NH2	-9.20	115.70	120.30
1	E	2497	ASP	CB-CG-OD1	9.13	126.52	118.30
1	G	1076	ARG	NE-CZ-NH1	9.04	124.82	120.30
1	E	4159	ARG	NE-CZ-NH2	-8.99	115.81	120.30
1	A	2567	PRO	N-CA-CB	8.98	114.08	103.30
1	G	4909	TYR	CB-CG-CD1	8.98	126.39	121.00
1	C	4909	TYR	CB-CG-CD1	8.96	126.38	121.00
1	E	2567	PRO	N-CA-CB	8.92	114.00	103.30
1	A	1976	ARG	NE-CZ-NH2	8.92	124.76	120.30
1	E	4909	TYR	CB-CG-CD1	8.85	126.31	121.00
1	G	2497	ASP	CB-CG-OD1	8.85	126.27	118.30
1	C	2497	ASP	CB-CG-OD1	8.81	126.23	118.30
1	E	1076	ARG	NE-CZ-NH1	8.79	124.69	120.30
1	A	1076	ARG	NE-CZ-NH1	8.76	124.68	120.30
1	G	2567	PRO	N-CA-CB	8.75	113.80	103.30
1	C	1076	ARG	NE-CZ-NH1	8.74	124.67	120.30
1	C	3297	PRO	N-CA-CB	8.72	113.76	103.30
1	A	2497	ASP	CB-CG-OD1	8.68	126.11	118.30
1	E	3297	PRO	N-CA-CB	8.65	113.68	103.30
1	C	2567	PRO	N-CA-CB	8.62	113.65	103.30
1	A	3297	PRO	N-CA-CB	8.60	113.61	103.30
1	C	2234	ARG	NE-CZ-NH2	8.52	124.56	120.30
1	E	2234	ARG	NE-CZ-NH2	8.41	124.50	120.30
1	E	4880	MET	CG-SD-CE	8.36	113.58	100.20
1	A	2234	ARG	NE-CZ-NH2	8.34	124.47	120.30
1	G	3303	PRO	N-CA-CB	8.34	113.31	103.30
1	E	3980	LEU	CB-CG-CD1	-8.31	96.88	111.00
1	G	3297	PRO	N-CA-CB	8.24	113.19	103.30
1	G	2234	ARG	NE-CZ-NH2	8.24	124.42	120.30
1	A	3843	ASP	CB-CG-OD1	8.10	125.59	118.30
1	G	66	CYS	CA-CB-SG	8.08	128.55	114.00
1	C	3980	LEU	CB-CG-CD1	-8.07	97.29	111.00
1	A	3980	LEU	CB-CG-CD1	-8.06	97.29	111.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	C	1976	ARG	CD-NE-CZ	8.06	134.89	123.60
1	C	66	CYS	CA-CB-SG	8.03	128.45	114.00
1	E	3843	ASP	CB-CG-OD1	8.01	125.51	118.30
1	E	386	ASP	CB-CG-OD2	7.99	125.49	118.30
1	A	66	CYS	CA-CB-SG	7.99	128.38	114.00
1	E	4564	PHE	CB-CG-CD2	7.96	126.37	120.80
1	A	4913	ARG	NE-CZ-NH2	-7.95	116.32	120.30
1	C	386	ASP	CB-CG-OD2	7.93	125.44	118.30
1	G	3208	PRO	N-CA-CB	7.91	112.79	103.30
1	E	66	CYS	CA-CB-SG	7.90	128.22	114.00
1	A	386	ASP	CB-CG-OD2	7.84	125.36	118.30
1	G	386	ASP	CB-CG-OD2	7.83	125.35	118.30
1	C	4880	MET	CG-SD-CE	7.82	112.70	100.20
1	C	3843	ASP	CB-CG-OD1	7.76	125.28	118.30
1	G	4913	ARG	NE-CZ-NH2	-7.74	116.43	120.30
1	A	1929	MET	CB-CG-SD	7.69	135.46	112.40
1	C	1929	MET	CB-CG-SD	7.68	135.45	112.40
1	C	1976	ARG	NE-CZ-NH2	7.67	124.14	120.30
1	G	115	ARG	NE-CZ-NH2	-7.66	116.47	120.30
1	G	3843	ASP	CB-CG-OD1	7.64	125.18	118.30
1	A	3208	PRO	N-CA-CB	7.62	112.44	103.30
1	E	3208	PRO	N-CA-CB	7.59	112.41	103.30
1	C	2131	LEU	CB-CG-CD1	7.58	123.88	111.00
1	A	3021	PRO	N-CA-CB	7.56	112.37	103.30
1	C	3208	PRO	N-CA-CB	7.53	112.33	103.30
1	E	3021	PRO	N-CA-CB	7.53	112.33	103.30
1	G	1929	MET	CB-CG-SD	7.52	134.95	112.40
1	G	4643	LEU	CB-CG-CD1	-7.50	98.25	111.00
1	E	1929	MET	CB-CG-SD	7.50	134.89	112.40
1	C	3021	PRO	N-CA-CB	7.48	112.28	103.30
1	G	3021	PRO	N-CA-CB	7.47	112.27	103.30
1	G	4039	MET	CB-CG-SD	7.46	134.79	112.40
1	E	4913	ARG	NE-CZ-NH2	-7.46	116.57	120.30
1	C	1728	ARG	NE-CZ-NH2	-7.45	116.58	120.30
1	A	4202	ARG	NE-CZ-NH2	7.42	124.01	120.30
1	A	4790	LEU	CB-CG-CD2	7.38	123.55	111.00
1	A	2131	LEU	CB-CG-CD1	7.33	123.47	111.00
1	G	2458	ARG	NE-CZ-NH2	-7.33	116.64	120.30
1	A	115	ARG	NE-CZ-NH2	-7.29	116.66	120.30
1	C	4564	PHE	CB-CG-CD2	7.28	125.90	120.80
1	G	3729	MET	CG-SD-CE	7.27	111.83	100.20
1	E	2131	LEU	CB-CG-CD1	7.27	123.36	111.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	4564	PHE	CB-CG-CD2	7.26	125.89	120.80
1	G	3301	PRO	N-CA-CB	7.26	112.02	103.30
1	A	2458	ARG	NE-CZ-NH2	-7.24	116.68	120.30
1	C	4790	LEU	CB-CG-CD2	7.23	123.30	111.00
1	A	2926	LEU	CA-C-N	-7.23	101.30	117.20
1	E	115	ARG	NE-CZ-NH2	-7.22	116.69	120.30
1	E	1855	GLY	N-CA-C	-7.21	95.08	113.10
1	C	1855	GLY	N-CA-C	-7.19	95.13	113.10
1	G	2131	LEU	CB-CG-CD1	7.19	123.22	111.00
1	C	1698	LEU	CB-CG-CD2	-7.18	98.79	111.00
1	A	5017	ARG	NE-CZ-NH2	-7.18	116.71	120.30
1	C	3729	MET	CG-SD-CE	7.18	111.68	100.20
1	G	1855	GLY	N-CA-C	-7.17	95.17	113.10
1	C	3085	PRO	N-CA-CB	7.17	111.90	103.30
1	G	2914	LYS	CD-CE-NZ	7.16	128.17	111.70
1	C	4913	ARG	NE-CZ-NH2	-7.16	116.72	120.30
1	E	2458	ARG	NE-CZ-NH2	-7.16	116.72	120.30
1	E	3729	MET	CG-SD-CE	7.15	111.64	100.20
1	E	5017	ARG	NE-CZ-NH2	-7.14	116.73	120.30
1	E	1698	LEU	CB-CG-CD2	-7.12	98.90	111.00
1	A	1855	GLY	N-CA-C	-7.11	95.33	113.10
1	G	1698	LEU	CB-CG-CD2	-7.08	98.96	111.00
1	A	1698	LEU	CB-CG-CD2	-7.07	98.98	111.00
1	A	3085	PRO	N-CA-CB	7.07	111.78	103.30
1	E	1728	ARG	NE-CZ-NH2	-7.06	116.77	120.30
1	C	4202	ARG	NE-CZ-NH2	7.05	123.83	120.30
1	E	4790	LEU	CB-CG-CD2	7.05	122.99	111.00
1	A	1728	ARG	NE-CZ-NH2	-7.03	116.78	120.30
1	G	2769	ASP	CB-CG-OD2	7.03	124.63	118.30
1	E	3085	PRO	N-CA-CB	7.03	111.73	103.30
1	G	3289	PRO	N-CA-CB	7.03	111.73	103.30
1	E	4202	ARG	NE-CZ-NH2	7.03	123.81	120.30
1	G	2711	PRO	N-CA-CB	7.00	111.69	103.30
1	C	2458	ARG	NE-CZ-NH2	-6.99	116.80	120.30
1	G	3085	PRO	N-CA-CB	6.95	111.64	103.30
1	A	1976	ARG	CD-NE-CZ	6.95	133.32	123.60
1	A	4880	MET	CG-SD-CE	6.93	111.28	100.20
1	A	2711	PRO	N-CA-CB	6.92	111.61	103.30
1	A	3729	MET	CG-SD-CE	6.91	111.26	100.20
1	A	5017	ARG	NE-CZ-NH1	6.91	123.75	120.30
1	E	2711	PRO	N-CA-CB	6.89	111.57	103.30
1	A	1867	GLU	OE1-CD-OE2	-6.89	115.03	123.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	C	5017	ARG	NE-CZ-NH2	-6.88	116.86	120.30
1	C	2711	PRO	N-CA-CB	6.86	111.53	103.30
1	E	80	GLU	OE1-CD-OE2	-6.85	115.08	123.30
1	E	4911	LEU	CB-CG-CD2	6.84	122.63	111.00
1	C	180	LEU	CB-CG-CD1	6.84	122.62	111.00
1	G	3427	PRO	N-CA-CB	6.82	111.49	103.30
1	G	2429	LEU	CB-CG-CD1	6.82	122.60	111.00
1	C	1867	GLU	OE1-CD-OE2	-6.82	115.11	123.30
1	G	1728	ARG	NE-CZ-NH2	-6.82	116.89	120.30
1	C	5017	ARG	NE-CZ-NH1	6.81	123.71	120.30
1	C	115	ARG	NE-CZ-NH2	-6.79	116.90	120.30
1	E	5017	ARG	NE-CZ-NH1	6.79	123.70	120.30
1	G	1974	ARG	NE-CZ-NH2	6.79	123.70	120.30
1	G	5026	ASP	CB-CG-OD1	6.79	124.41	118.30
1	E	1867	GLU	OE1-CD-OE2	-6.76	115.19	123.30
1	G	3188	PRO	N-CA-CB	6.75	111.40	103.30
1	E	4207	MET	CB-CG-SD	6.75	132.63	112.40
1	A	1942	LEU	CB-CG-CD2	-6.74	99.54	111.00
1	G	180	LEU	CB-CG-CD1	6.74	122.45	111.00
1	A	4839	MET	CG-SD-CE	6.72	110.95	100.20
1	C	3289	PRO	N-CA-CB	6.72	111.36	103.30
1	G	3980	LEU	CB-CG-CD1	-6.71	99.59	111.00
1	E	3289	PRO	N-CA-CB	6.71	111.35	103.30
1	A	180	LEU	CB-CG-CD1	6.70	122.39	111.00
1	E	180	LEU	CB-CG-CD1	6.69	122.38	111.00
1	A	3289	PRO	N-CA-CB	6.67	111.31	103.30
1	G	1283	LEU	CB-CG-CD2	6.67	122.33	111.00
1	G	2701	PRO	N-CA-CB	6.67	111.30	103.30
1	C	1283	LEU	CB-CG-CD2	6.66	122.32	111.00
1	C	2701	PRO	N-CA-CB	6.66	111.29	103.30
1	C	3301	PRO	N-CA-CB	6.65	111.28	103.30
1	A	3275	PRO	N-CA-CB	6.64	111.26	103.30
1	C	240	ASP	CB-CG-OD2	6.64	124.27	118.30
1	G	620	LEU	CB-CG-CD1	-6.64	99.72	111.00
1	G	3410	PRO	N-CA-CB	6.63	111.26	103.30
1	A	2701	PRO	N-CA-CB	6.63	111.25	103.30
1	E	3301	PRO	N-CA-CB	6.62	111.25	103.30
1	A	1283	LEU	CB-CG-CD2	6.62	122.25	111.00
1	E	2701	PRO	N-CA-CB	6.62	111.24	103.30
1	C	2769	ASP	CB-CG-OD2	6.61	124.25	118.30
1	E	3275	PRO	N-CA-CB	6.60	111.22	103.30
1	A	3301	PRO	N-CA-CB	6.60	111.22	103.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	G	1465	ASP	N-CA-CB	-6.60	98.72	110.60
1	E	1283	LEU	CB-CG-CD2	6.59	122.21	111.00
1	A	1465	ASP	N-CA-CB	-6.59	98.75	110.60
1	G	2234	ARG	NE-CZ-NH1	-6.59	117.01	120.30
1	A	2518	LEU	CA-CB-CG	6.58	130.43	115.30
1	C	2518	LEU	CA-CB-CG	6.58	130.43	115.30
1	C	3275	PRO	N-CA-CB	6.57	111.19	103.30
1	E	1942	LEU	CB-CG-CD2	-6.57	99.84	111.00
1	E	2518	LEU	CA-CB-CG	6.57	130.41	115.30
1	C	3410	PRO	N-CA-CB	6.57	111.18	103.30
1	C	1942	LEU	CB-CG-CD2	-6.55	99.86	111.00
1	C	1465	ASP	N-CA-CB	-6.55	98.82	110.60
1	G	1976	ARG	NE-CZ-NH1	6.54	123.57	120.30
1	E	1465	ASP	N-CA-CB	-6.54	98.83	110.60
1	G	240	ASP	CB-CG-OD2	6.54	124.18	118.30
1	A	3188	PRO	N-CA-CB	6.53	111.14	103.30
1	A	3410	PRO	N-CA-CB	6.52	111.12	103.30
1	E	3410	PRO	N-CA-CB	6.52	111.12	103.30
1	E	2769	ASP	CB-CG-OD2	6.51	124.16	118.30
1	A	240	ASP	CB-CG-OD2	6.51	124.16	118.30
1	E	1211	LEU	CA-CB-CG	6.49	130.23	115.30
1	G	3527	PRO	N-CA-CB	6.49	111.08	103.30
1	E	3188	PRO	N-CA-CB	6.48	111.08	103.30
1	A	488	LEU	CB-CG-CD2	6.47	122.01	111.00
1	A	2454	ARG	NE-CZ-NH2	-6.47	117.06	120.30
1	E	240	ASP	CB-CG-OD2	6.47	124.13	118.30
1	G	2518	LEU	CA-CB-CG	6.47	130.19	115.30
1	G	4911	LEU	CB-CG-CD2	6.46	121.99	111.00
1	G	4207	MET	CB-CG-SD	6.46	131.78	112.40
1	G	3886	ARG	NE-CZ-NH1	6.45	123.53	120.30
1	A	4207	MET	CB-CG-SD	6.44	131.73	112.40
1	C	3188	PRO	N-CA-CB	6.43	111.01	103.30
1	E	3567	PRO	N-CA-CB	6.41	110.99	103.30
1	C	3567	PRO	N-CA-CB	6.41	110.99	103.30
1	A	3567	PRO	N-CA-CB	6.40	110.98	103.30
1	C	1211	LEU	CA-CB-CG	6.40	130.02	115.30
1	E	4202	ARG	NE-CZ-NH1	-6.40	117.10	120.30
1	A	3427	PRO	N-CA-CB	6.40	110.97	103.30
1	E	2234	ARG	NE-CZ-NH1	-6.39	117.11	120.30
1	C	2234	ARG	NE-CZ-NH1	-6.39	117.11	120.30
1	G	1942	LEU	CB-CG-CD2	-6.38	100.16	111.00
1	E	620	LEU	CB-CG-CD1	-6.38	100.16	111.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2769	ASP	CB-CG-OD2	6.37	124.03	118.30
1	G	1211	LEU	CA-CB-CG	6.37	129.96	115.30
1	G	474	ARG	NE-CZ-NH1	6.37	123.48	120.30
1	C	80	GLU	OE1-CD-OE2	-6.37	115.66	123.30
1	E	488	LEU	CB-CG-CD2	6.36	121.82	111.00
1	G	4843	LEU	CB-CG-CD2	-6.36	100.19	111.00
1	E	3427	PRO	N-CA-CB	6.35	110.92	103.30
1	C	620	LEU	CB-CG-CD1	-6.35	100.20	111.00
1	A	2234	ARG	NE-CZ-NH1	-6.34	117.13	120.30
1	G	1867	GLU	OE1-CD-OE2	-6.34	115.69	123.30
1	A	4951	LYS	CD-CE-NZ	6.34	126.28	111.70
1	E	1976	ARG	NE-CZ-NH1	6.33	123.46	120.30
1	A	4159	ARG	NE-CZ-NH1	6.32	123.46	120.30
1	G	3360	PRO	N-CA-CB	6.32	110.88	103.30
1	A	4112	LEU	CB-CG-CD2	-6.32	100.26	111.00
1	C	3427	PRO	N-CA-CB	6.32	110.88	103.30
1	A	2429	LEU	CB-CG-CD1	6.31	121.72	111.00
1	A	474	ARG	NE-CZ-NH1	6.31	123.45	120.30
1	C	4207	MET	CB-CG-SD	6.30	131.31	112.40
1	E	4112	LEU	CB-CG-CD2	-6.30	100.28	111.00
1	G	5017	ARG	NE-CZ-NH1	6.30	123.45	120.30
1	C	488	LEU	CB-CG-CD2	6.29	121.69	111.00
1	E	3844	LEU	CB-CG-CD1	-6.29	100.31	111.00
1	G	3275	PRO	N-CA-CB	6.29	110.84	103.30
1	G	488	LEU	CB-CG-CD2	6.28	121.68	111.00
1	C	4911	LEU	CB-CG-CD2	6.28	121.68	111.00
1	E	971	ASP	CB-CG-OD2	6.28	123.95	118.30
1	C	4159	ARG	NE-CZ-NH1	6.27	123.43	120.30
1	C	4112	LEU	CB-CG-CD2	-6.26	100.35	111.00
1	E	4639	MET	CG-SD-CE	6.25	110.20	100.20
1	G	4639	MET	CG-SD-CE	6.25	110.20	100.20
1	G	3567	PRO	N-CA-CB	6.24	110.78	103.30
1	G	2454	ARG	NE-CZ-NH2	-6.23	117.19	120.30
1	A	1211	LEU	CA-CB-CG	6.21	129.58	115.30
1	A	620	LEU	CB-CG-CD1	-6.20	100.45	111.00
1	G	4887	MET	CG-SD-CE	6.20	110.12	100.20
1	C	4639	MET	CG-SD-CE	6.16	110.06	100.20
1	G	3886	ARG	NE-CZ-NH2	-6.15	117.22	120.30
1	G	4911	LEU	CA-CB-CG	6.15	129.44	115.30
1	A	4887	MET	CA-CB-CG	6.14	123.75	113.30
1	C	3844	LEU	CB-CG-CD1	-6.14	100.55	111.00
1	E	971	ASP	N-CA-C	6.14	127.58	111.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	E	474	ARG	NE-CZ-NH1	6.13	123.37	120.30
1	E	5026	ASP	CB-CG-OD1	6.13	123.82	118.30
1	E	4159	ARG	NE-CZ-NH1	6.13	123.36	120.30
1	C	4191	GLU	OE1-CD-OE2	-6.12	115.95	123.30
1	C	474	ARG	NE-CZ-NH1	6.12	123.36	120.30
1	A	291	LEU	CB-CG-CD1	-6.11	100.61	111.00
1	C	3282	PRO	N-CA-CB	6.11	110.63	103.30
1	A	4639	MET	CG-SD-CE	6.11	109.97	100.20
1	C	4887	MET	CA-CB-CG	6.10	123.68	113.30
1	A	1974	ARG	NE-CZ-NH2	6.09	123.35	120.30
1	G	3282	PRO	N-CA-CB	6.08	110.60	103.30
1	C	2518	LEU	CB-CG-CD2	6.08	121.33	111.00
1	G	291	LEU	CB-CG-CD1	-6.07	100.68	111.00
1	C	472	ARG	NE-CZ-NH2	-6.06	117.27	120.30
1	C	1974	ARG	NE-CZ-NH2	6.06	123.33	120.30
1	A	3844	LEU	CB-CG-CD1	-6.05	100.71	111.00
1	E	3282	PRO	N-CA-CB	6.05	110.56	103.30
1	E	1974	ARG	NE-CZ-NH2	6.05	123.33	120.30
1	A	2518	LEU	CB-CG-CD2	6.05	121.28	111.00
1	G	3985	LEU	CB-CG-CD1	-6.05	100.72	111.00
1	C	4202	ARG	NE-CZ-NH1	-6.03	117.28	120.30
1	G	4112	LEU	CB-CG-CD1	6.03	121.24	111.00
1	C	73	LEU	CB-CG-CD2	-6.02	100.76	111.00
1	E	1659	LEU	CB-CG-CD1	6.02	121.24	111.00
1	E	2518	LEU	CB-CG-CD2	6.02	121.24	111.00
1	A	3282	PRO	N-CA-CB	6.02	110.52	103.30
1	E	472	ARG	NE-CZ-NH2	-6.02	117.29	120.30
1	A	4191	GLU	OE1-CD-OE2	-6.01	116.09	123.30
1	C	1659	LEU	CB-CG-CD1	6.00	121.21	111.00
1	E	4191	GLU	OE1-CD-OE2	-6.00	116.10	123.30
1	G	3062	PRO	N-CA-CB	6.00	110.50	103.30
1	G	4844	LEU	CA-CB-CG	6.00	129.09	115.30
1	E	4951	LYS	CD-CE-NZ	5.99	125.48	111.70
1	C	4951	LYS	CD-CE-NZ	5.99	125.47	111.70
1	A	5026	ASP	CB-CG-OD1	5.98	123.68	118.30
1	E	291	LEU	CB-CG-CD1	-5.98	100.84	111.00
1	C	291	LEU	CB-CG-CD1	-5.97	100.85	111.00
1	A	472	ARG	NE-CZ-NH2	-5.97	117.31	120.30
1	A	1659	LEU	CB-CG-CD1	5.97	121.14	111.00
1	A	625	LEU	CB-CG-CD1	-5.96	100.87	111.00
1	G	1659	LEU	CB-CG-CD1	5.96	121.13	111.00
1	G	2518	LEU	CB-CG-CD2	5.96	121.13	111.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	G	971	ASP	N-CA-C	5.96	127.08	111.00
1	E	4215	ARG	NE-CZ-NH1	5.95	123.28	120.30
1	C	4911	LEU	CA-CB-CG	5.95	128.99	115.30
1	E	2546	MET	CB-CG-SD	5.93	130.19	112.40
1	G	522	LEU	CA-CB-CG	5.93	128.93	115.30
1	A	4887	MET	CG-SD-CE	5.92	109.68	100.20
1	A	522	LEU	CA-CB-CG	5.92	128.92	115.30
1	G	3844	LEU	CB-CG-CD1	-5.91	100.95	111.00
1	C	522	LEU	CA-CB-CG	5.91	128.89	115.30
1	C	4039	MET	CG-SD-CE	5.90	109.64	100.20
1	G	625	LEU	CB-CG-CD1	-5.90	100.97	111.00
1	G	73	LEU	CB-CG-CD2	-5.90	100.97	111.00
1	A	4916	PHE	CB-CG-CD1	-5.89	116.67	120.80
1	E	522	LEU	CA-CB-CG	5.89	128.85	115.30
1	C	2454	ARG	NE-CZ-NH1	5.89	123.25	120.30
1	C	971	ASP	N-CA-C	5.89	126.89	111.00
1	E	1976	ARG	CG-CD-NE	5.89	124.16	111.80
1	C	5026	ASP	CB-CG-OD1	5.88	123.59	118.30
1	G	3351	PRO	N-CA-CB	5.88	110.36	103.30
1	G	474	ARG	NE-CZ-NH2	-5.87	117.36	120.30
1	A	4844	LEU	CA-CB-CG	5.87	128.80	115.30
1	A	971	ASP	N-CA-C	5.87	126.85	111.00
1	E	73	LEU	CB-CG-CD2	-5.87	101.03	111.00
1	E	3138	PRO	N-CA-CB	5.85	110.32	103.30
1	E	2429	LEU	CB-CG-CD1	5.85	120.95	111.00
1	A	3773	ARG	NE-CZ-NH2	5.85	123.22	120.30
1	C	3138	PRO	N-CA-CB	5.84	110.31	103.30
1	E	2163	ARG	NE-CZ-NH2	-5.84	117.38	120.30
1	E	3758	MET	CG-SD-CE	5.83	109.53	100.20
1	C	4887	MET	CG-SD-CE	5.82	109.52	100.20
1	C	4844	LEU	CA-CB-CG	5.82	128.68	115.30
1	C	3360	PRO	N-CA-CB	5.81	110.28	103.30
1	G	1076	ARG	NE-CZ-NH2	-5.81	117.39	120.30
1	G	2546	MET	CB-CG-SD	5.81	129.84	112.40
1	C	2429	LEU	CB-CG-CD1	5.81	120.88	111.00
1	A	2631	PRO	N-CA-CB	5.80	110.26	103.30
1	C	2631	PRO	N-CA-CB	5.79	110.25	103.30
1	G	1112	ASP	CB-CG-OD1	5.79	123.52	118.30
1	E	4039	MET	CB-CG-SD	5.79	129.76	112.40
1	G	4980	LEU	CB-CG-CD2	-5.79	101.16	111.00
1	A	1212	ARG	NE-CZ-NH2	-5.78	117.41	120.30
1	C	2546	MET	CB-CG-SD	5.77	129.72	112.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	E	1112	ASP	CB-CG-OD1	5.77	123.49	118.30
1	E	2454	ARG	NE-CZ-NH1	5.77	123.18	120.30
1	A	3360	PRO	N-CA-CB	5.76	110.21	103.30
1	A	4039	MET	CG-SD-CE	5.76	109.42	100.20
1	E	3360	PRO	N-CA-CB	5.76	110.21	103.30
1	E	4916	PHE	CB-CG-CD1	-5.76	116.77	120.80
1	A	46	LEU	CB-CG-CD1	5.76	120.79	111.00
1	C	3062	PRO	N-CA-CB	5.75	110.20	103.30
1	C	4916	PHE	CB-CG-CD1	-5.75	116.78	120.80
1	G	1212	ARG	NE-CZ-NH2	-5.74	117.43	120.30
1	E	4887	MET	CA-CB-CG	5.73	123.04	113.30
1	A	2546	MET	CB-CG-SD	5.72	129.57	112.40
1	E	3062	PRO	N-CA-CB	5.72	110.17	103.30
1	A	971	ASP	CB-CG-OD2	5.72	123.45	118.30
1	A	4911	LEU	CA-CB-CG	5.72	128.46	115.30
1	E	625	LEU	CB-CG-CD1	-5.72	101.27	111.00
1	A	3138	PRO	N-CA-CB	5.72	110.16	103.30
1	E	2631	PRO	N-CA-CB	5.72	110.16	103.30
1	A	4991	PHE	CB-CG-CD1	-5.71	116.80	120.80
1	G	472	ARG	NE-CZ-NH2	-5.71	117.44	120.30
1	G	3302	PRO	N-CA-CB	5.70	110.14	103.30
1	G	2631	PRO	N-CA-CB	5.70	110.14	103.30
1	A	3758	MET	CG-SD-CE	5.70	109.32	100.20
1	E	2094	LEU	CB-CG-CD2	5.70	120.69	111.00
1	E	3294	PRO	N-CA-CB	5.70	110.14	103.30
1	A	3294	PRO	N-CA-CB	5.70	110.14	103.30
1	A	4039	MET	CB-CG-SD	5.68	129.43	112.40
1	C	4567	LEU	CB-CG-CD2	5.67	120.63	111.00
1	A	3062	PRO	N-CA-CB	5.66	110.09	103.30
1	C	3294	PRO	N-CA-CB	5.66	110.09	103.30
1	A	4567	LEU	CB-CG-CD2	5.65	120.61	111.00
1	E	4976	GLU	OE1-CD-OE2	5.65	130.08	123.30
1	E	2518	LEU	CB-CG-CD1	-5.65	101.40	111.00
1	C	2094	LEU	CB-CG-CD1	-5.64	101.40	111.00
1	E	2094	LEU	CB-CG-CD1	-5.64	101.40	111.00
1	A	3351	PRO	N-CA-CB	5.64	110.07	103.30
1	C	3758	MET	CG-SD-CE	5.63	109.21	100.20
1	G	971	ASP	CB-CG-OD2	5.63	123.37	118.30
1	A	1112	ASP	CB-CG-OD1	5.62	123.36	118.30
1	C	1076	ARG	NE-CZ-NH2	-5.61	117.49	120.30
1	C	4044	MET	CB-CG-SD	-5.61	95.56	112.40
1	E	4911	LEU	CA-CB-CG	5.61	128.21	115.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	4044	MET	CB-CG-SD	-5.61	95.57	112.40
1	C	2094	LEU	CB-CG-CD2	5.61	120.54	111.00
1	C	2116	LEU	CB-CG-CD2	-5.61	101.47	111.00
1	E	4880	MET	CB-CG-SD	5.61	129.22	112.40
1	E	4112	LEU	CB-CG-CD1	5.60	120.53	111.00
1	C	4581	LYS	CD-CE-NZ	5.60	124.58	111.70
1	C	1212	ARG	NE-CZ-NH2	-5.60	117.50	120.30
1	E	4039	MET	CG-SD-CE	5.60	109.16	100.20
1	G	3769	ARG	NE-CZ-NH2	-5.60	117.50	120.30
1	G	4048	LEU	CB-CG-CD2	5.60	120.52	111.00
1	G	2116	LEU	CB-CG-CD2	-5.59	101.49	111.00
1	G	2094	LEU	CB-CG-CD2	5.59	120.51	111.00
1	C	474	ARG	NE-CZ-NH2	-5.59	117.50	120.30
1	C	1112	ASP	CB-CG-OD1	5.59	123.33	118.30
1	A	2094	LEU	CB-CG-CD1	-5.59	101.50	111.00
1	C	625	LEU	CB-CG-CD1	-5.58	101.51	111.00
1	C	2518	LEU	CB-CG-CD1	-5.57	101.53	111.00
1	G	4202	ARG	NE-CZ-NH2	5.57	123.09	120.30
1	G	4916	PHE	CB-CG-CD1	-5.57	116.90	120.80
1	G	2518	LEU	CB-CG-CD1	-5.57	101.54	111.00
1	A	2518	LEU	CB-CG-CD1	-5.56	101.54	111.00
1	E	46	LEU	CB-CG-CD1	5.56	120.45	111.00
1	E	118	LEU	CB-CG-CD2	-5.56	101.55	111.00
1	C	46	LEU	CB-CG-CD1	5.56	120.45	111.00
1	G	180	LEU	CB-CG-CD2	-5.56	101.55	111.00
1	E	4044	MET	CB-CG-SD	-5.55	95.74	112.40
1	C	2454	ARG	NE-CZ-NH2	-5.55	117.53	120.30
1	A	1076	ARG	NE-CZ-NH2	-5.55	117.53	120.30
1	E	474	ARG	NE-CZ-NH2	-5.54	117.53	120.30
1	C	4679	ARG	NE-CZ-NH1	5.54	123.07	120.30
1	G	2123	LEU	CA-CB-CG	-5.54	102.57	115.30
1	A	2658	PRO	N-CA-CB	5.53	109.94	103.30
1	A	2116	LEU	CB-CG-CD2	-5.53	101.60	111.00
1	A	4909	TYR	CE1-CZ-OH	5.53	135.02	120.10
1	C	4976	GLU	OE1-CD-OE2	5.53	129.93	123.30
1	G	46	LEU	CB-CG-CD1	5.53	120.39	111.00
1	A	2094	LEU	CB-CG-CD2	5.52	120.39	111.00
1	C	3351	PRO	N-CA-CB	5.51	109.92	103.30
1	C	4039	MET	CB-CG-SD	5.51	128.94	112.40
1	A	4581	LYS	CD-CE-NZ	5.51	124.37	111.70
1	C	180	LEU	CB-CG-CD2	-5.51	101.63	111.00
1	E	2454	ARG	NE-CZ-NH2	-5.51	117.55	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	4976	GLU	OE1-CD-OE2	5.50	129.90	123.30
1	A	180	LEU	CB-CG-CD2	-5.50	101.66	111.00
1	G	118	LEU	CB-CG-CD2	-5.49	101.66	111.00
1	G	2658	PRO	N-CA-CB	5.49	109.89	103.30
1	A	4202	ARG	NE-CZ-NH1	-5.49	117.56	120.30
1	E	1076	ARG	NE-CZ-NH2	-5.49	117.56	120.30
1	A	474	ARG	NE-CZ-NH2	-5.48	117.56	120.30
1	G	3294	PRO	N-CA-CB	5.48	109.87	103.30
1	C	971	ASP	CB-CG-OD2	5.48	123.23	118.30
1	E	4567	LEU	CB-CG-CD2	5.47	120.30	111.00
1	G	1976	ARG	CG-CD-NE	5.46	123.27	111.80
1	C	1128	ARG	NE-CZ-NH1	5.46	123.03	120.30
1	E	180	LEU	CB-CG-CD2	-5.46	101.72	111.00
1	C	4649	LEU	CB-CG-CD2	-5.45	101.73	111.00
1	E	632	LEU	CB-CG-CD1	5.44	120.25	111.00
1	E	3351	PRO	N-CA-CB	5.44	109.83	103.30
1	E	22	LEU	CB-CG-CD1	-5.44	101.75	111.00
1	C	4991	PHE	CB-CG-CD1	-5.44	116.99	120.80
1	C	2658	PRO	N-CA-CB	5.44	109.82	103.30
1	E	2658	PRO	N-CA-CB	5.44	109.82	103.30
1	C	632	LEU	CB-CG-CD1	5.43	120.23	111.00
1	A	802	PHE	CB-CG-CD1	-5.42	117.00	120.80
1	E	4887	MET	CG-SD-CE	5.42	108.88	100.20
1	E	3773	ARG	NE-CZ-NH2	5.42	123.01	120.30
1	A	4679	ARG	NE-CZ-NH1	5.42	123.01	120.30
1	C	4112	LEU	CB-CG-CD1	5.42	120.21	111.00
1	A	4215	ARG	NE-CZ-NH1	5.42	123.01	120.30
1	G	773	LEU	CA-CB-CG	5.42	127.76	115.30
1	G	4880	MET	CG-SD-CE	5.42	108.87	100.20
1	A	4112	LEU	CB-CG-CD1	5.41	120.20	111.00
1	G	1548	LEU	CB-CG-CD2	5.41	120.19	111.00
1	E	2116	LEU	CB-CG-CD2	-5.41	101.81	111.00
1	C	3773	ARG	NE-CZ-NH2	5.40	123.00	120.30
1	A	1648	MET	CG-SD-CE	-5.40	91.56	100.20
1	G	1128	ARG	NE-CZ-NH1	5.40	123.00	120.30
1	G	4563	ARG	NE-CZ-NH2	5.40	123.00	120.30
1	C	118	LEU	CB-CG-CD2	-5.39	101.83	111.00
1	A	2115	GLU	N-CA-CB	-5.39	100.90	110.60
1	G	2063	LEU	CB-CG-CD1	-5.39	101.84	111.00
1	E	4632	LEU	CA-CB-CG	5.38	127.67	115.30
1	A	1128	ARG	NE-CZ-NH1	5.38	122.99	120.30
1	C	4215	ARG	NE-CZ-NH1	5.38	122.99	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	C	4980	LEU	CD1-CG-CD2	5.38	126.64	110.50
1	E	802	PHE	CB-CG-CD1	-5.38	117.04	120.80
1	E	4679	ARG	NE-CZ-NH1	5.38	122.99	120.30
1	E	4822	THR	CA-CB-CG2	-5.37	104.88	112.40
1	G	4703	ARG	NE-CZ-NH1	5.37	122.99	120.30
1	C	1836	PHE	CB-CG-CD1	-5.37	117.04	120.80
1	C	2163	ARG	NE-CZ-NH2	-5.36	117.62	120.30
1	G	632	LEU	CB-CG-CD1	5.36	120.11	111.00
1	A	4649	LEU	CB-CG-CD2	-5.36	101.90	111.00
1	E	1842	LEU	CB-CG-CD1	5.35	120.10	111.00
1	A	632	LEU	CB-CG-CD1	5.35	120.10	111.00
1	E	4649	LEU	CB-CG-CD2	-5.35	101.91	111.00
1	A	118	LEU	CB-CG-CD2	-5.35	101.91	111.00
1	G	22	LEU	CB-CG-CD1	-5.34	101.92	111.00
1	A	4980	LEU	CD1-CG-CD2	5.34	126.52	110.50
1	A	1836	PHE	CB-CG-CD1	-5.34	117.06	120.80
1	A	2454	ARG	NE-CZ-NH1	5.34	122.97	120.30
1	C	1842	LEU	CB-CG-CD1	5.34	120.07	111.00
1	E	2115	GLU	N-CA-CB	-5.33	101.00	110.60
1	E	4980	LEU	CD1-CG-CD2	5.33	126.49	110.50
1	G	4951	LYS	CD-CE-NZ	5.32	123.94	111.70
1	C	2115	GLU	N-CA-CB	-5.32	101.03	110.60
2	F	32	ASP	CB-CG-OD1	5.32	123.08	118.30
1	E	2497	ASP	CB-CG-OD2	-5.31	113.52	118.30
2	B	32	ASP	CB-CG-OD1	5.30	123.07	118.30
1	G	2115	GLU	N-CA-CB	-5.30	101.05	110.60
1	A	2163	ARG	NE-CZ-NH2	-5.30	117.65	120.30
1	C	2616	PRO	N-CA-CB	5.30	109.66	103.30
1	E	1548	LEU	CB-CG-CD2	5.30	120.01	111.00
1	E	4814	LEU	CB-CG-CD1	5.30	120.01	111.00
1	E	1212	ARG	NE-CZ-NH2	-5.30	117.65	120.30
1	A	1259	ARG	NE-CZ-NH2	-5.29	117.65	120.30
1	E	4844	LEU	CA-CB-CG	5.29	127.47	115.30
1	A	1842	LEU	CB-CG-CD1	5.29	119.99	111.00
1	C	4885	PHE	CB-CG-CD1	-5.29	117.10	120.80
1	G	4909	TYR	CE1-CZ-OH	5.29	134.38	120.10
1	A	2616	PRO	N-CA-CB	5.29	109.64	103.30
1	C	1548	LEU	CB-CG-CD2	5.28	119.97	111.00
1	A	1548	LEU	CB-CG-CD2	5.27	119.96	111.00
1	E	2063	LEU	CB-CG-CD1	-5.27	102.04	111.00
1	G	802	PHE	CB-CG-CD1	-5.27	117.11	120.80
1	G	2616	PRO	N-CA-CB	5.26	109.62	103.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	E	746	CYS	CA-CB-SG	-5.26	104.53	114.00
1	E	4991	PHE	CB-CG-CD1	-5.26	117.12	120.80
1	E	1128	ARG	NE-CZ-NH1	5.26	122.93	120.30
1	A	2926	LEU	O-C-N	5.24	131.08	122.70
1	C	1648	MET	CG-SD-CE	-5.24	91.82	100.20
1	G	1648	MET	CG-SD-CE	-5.24	91.82	100.20
1	C	802	PHE	CB-CG-CD1	-5.23	117.14	120.80
1	G	2094	LEU	CB-CG-CD1	-5.23	102.11	111.00
1	G	1842	LEU	CB-CG-CD1	5.23	119.89	111.00
1	G	4159	ARG	NE-CZ-NH1	5.23	122.92	120.30
1	C	3841	VAL	CG1-CB-CG2	5.23	119.27	110.90
1	C	1259	ARG	NE-CZ-NH2	-5.22	117.69	120.30
1	E	4048	LEU	CB-CG-CD1	-5.21	102.15	111.00
1	C	22	LEU	CB-CG-CD1	-5.21	102.15	111.00
1	G	2163	ARG	NE-CZ-NH2	-5.21	117.70	120.30
1	G	4581	LYS	CD-CE-NZ	5.20	123.67	111.70
1	E	2616	PRO	N-CA-CB	5.20	109.54	103.30
1	C	4800	LEU	CB-CG-CD1	5.20	119.83	111.00
1	E	4796	MET	CG-SD-CE	5.19	108.51	100.20
1	E	3751	VAL	CB-CA-C	-5.19	101.54	111.40
1	E	1259	ARG	NE-CZ-NH2	-5.19	117.71	120.30
1	G	746	CYS	CA-CB-SG	-5.18	104.67	114.00
1	E	1648	MET	CG-SD-CE	-5.17	91.92	100.20
1	A	3780	LEU	CB-CG-CD1	5.17	119.79	111.00
1	G	2712	PRO	N-CA-CB	5.17	109.50	103.30
1	C	4048	LEU	CB-CG-CD1	-5.16	102.22	111.00
1	C	746	CYS	CA-CB-SG	-5.16	104.71	114.00
2	D	32	ASP	CB-CG-OD2	-5.16	113.66	118.30
1	E	3841	VAL	CG1-CB-CG2	5.16	119.16	110.90
1	G	1259	ARG	NE-CZ-NH2	-5.16	117.72	120.30
1	E	4800	LEU	CB-CG-CD1	5.16	119.76	111.00
1	E	773	LEU	CA-CB-CG	5.15	127.16	115.30
1	G	1865	MET	CG-SD-CE	-5.15	91.96	100.20
1	G	4215	ARG	CD-NE-CZ	5.15	130.81	123.60
1	A	3932	ASP	CB-CG-OD2	5.15	122.93	118.30
1	A	3841	VAL	CG1-CB-CG2	5.15	119.13	110.90
1	C	3787	LYS	CD-CE-NZ	5.14	123.53	111.70
1	A	746	CYS	CA-CB-SG	-5.14	104.75	114.00
1	A	2497	ASP	CB-CG-OD2	-5.13	113.68	118.30
1	C	3751	VAL	CB-CA-C	-5.13	101.64	111.40
1	C	773	LEU	CA-CB-CG	5.13	127.10	115.30
1	A	3751	VAL	CB-CA-C	-5.13	101.66	111.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	G	1836	PHE	CB-CG-CD1	-5.13	117.21	120.80
1	C	3729	MET	CB-CG-SD	-5.12	97.02	112.40
1	E	3780	LEU	CB-CG-CD1	5.12	119.71	111.00
1	E	3926	LEU	CB-CG-CD1	5.12	119.71	111.00
1	G	3519	PRO	N-CA-CB	5.12	109.44	103.30
1	C	3780	LEU	CB-CG-CD1	5.11	119.69	111.00
1	A	2244	ARG	NE-CZ-NH1	-5.11	117.75	120.30
1	A	3729	MET	CB-CG-SD	-5.10	97.09	112.40
2	D	32	ASP	CB-CG-OD1	5.10	122.89	118.30
1	E	4769	MET	CG-SD-CE	5.10	108.36	100.20
1	A	4048	LEU	CB-CG-CD1	-5.10	102.33	111.00
1	G	4643	LEU	CA-CB-CG	5.09	127.02	115.30
1	A	4769	MET	CG-SD-CE	5.09	108.35	100.20
1	A	2920	ARG	NE-CZ-NH1	5.09	122.85	120.30
1	A	2063	LEU	CB-CG-CD1	-5.09	102.35	111.00
1	C	1589	PRO	N-CA-C	5.09	125.32	112.10
1	E	4668	LEU	CB-CG-CD1	-5.08	102.36	111.00
1	A	1589	PRO	N-CA-C	5.08	125.31	112.10
1	A	2336	ARG	NE-CZ-NH2	5.08	122.84	120.30
1	E	1600	LEU	CB-CG-CD1	5.08	119.63	111.00
1	E	4215	ARG	CD-NE-CZ	5.08	130.71	123.60
1	A	4632	LEU	CA-CB-CG	5.08	126.97	115.30
1	E	1589	PRO	N-CA-C	5.07	125.29	112.10
1	C	3926	LEU	CB-CG-CD1	5.07	119.62	111.00
1	C	1106	ARG	NE-CZ-NH2	-5.07	117.77	120.30
1	G	4905	ALA	N-CA-CB	5.07	117.19	110.10
1	C	1976	ARG	CG-CD-NE	5.07	122.44	111.80
1	C	2063	LEU	CB-CG-CD1	-5.06	102.39	111.00
1	C	842	PRO	N-CA-C	5.06	125.26	112.10
1	G	1589	PRO	N-CA-C	5.06	125.27	112.10
1	G	2454	ARG	NE-CZ-NH1	5.06	122.83	120.30
1	C	2920	ARG	NE-CZ-NH1	5.06	122.83	120.30
1	G	1931	LEU	CB-CG-CD1	5.06	119.60	111.00
2	B	32	ASP	CB-CG-OD2	-5.05	113.75	118.30
1	E	1836	PHE	CB-CG-CD1	-5.05	117.26	120.80
2	F	32	ASP	CB-CG-OD2	-5.05	113.75	118.30
1	G	842	PRO	N-CA-C	5.05	125.23	112.10
1	C	773	LEU	CB-CG-CD2	5.05	119.58	111.00
1	A	3926	LEU	CB-CG-CD1	5.04	119.57	111.00
1	G	3787	LYS	CD-CE-NZ	5.03	123.28	111.70
1	G	3751	VAL	CB-CA-C	-5.03	101.84	111.40
1	E	2456	ILE	CG1-CB-CG2	-5.03	100.33	111.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	3519	PRO	N-CA-CB	5.03	109.33	103.30
1	E	842	PRO	N-CA-C	5.03	125.17	112.10
1	E	2555	CYS	CA-CB-SG	5.03	123.05	114.00
1	E	3729	MET	CB-CG-SD	-5.03	97.33	112.40
1	G	2497	ASP	CB-CG-OD2	-5.03	113.78	118.30
1	E	4231	MET	CB-CG-SD	5.02	127.47	112.40
1	A	4668	LEU	CB-CG-CD1	-5.01	102.48	111.00
1	C	3519	PRO	N-CA-CB	5.01	109.31	103.30
1	C	4769	MET	CG-SD-CE	5.01	108.22	100.20
1	C	4215	ARG	CD-NE-CZ	5.01	130.61	123.60
1	E	4909	TYR	CE1-CZ-OH	5.01	133.63	120.10
1	A	773	LEU	CB-CG-CD2	5.00	119.51	111.00
1	C	4668	LEU	CB-CG-CD1	-5.00	102.49	111.00

There are no chirality outliers.

All (141) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	1100	MET	Peptide
1	A	1251	GLU	Peptide
1	A	1253	PRO	Peptide
1	A	1464	PHE	Peptide
1	A	1588	ALA	Mainchain,Peptide
1	A	1748	PHE	Peptide
1	A	1828	ASP	Mainchain,Peptide
1	A	1854	PHE	Mainchain,Peptide
1	A	1855	GLY	Peptide
1	A	1856	ASP	Mainchain,Peptide
1	A	1867	GLU	Mainchain,Peptide
1	A	1932	PRO	Peptide
1	A	2567	PRO	Peptide
1	A	31	GLU	Mainchain,Peptide
1	A	329	ARG	Mainchain,Peptide
1	A	4819	GLY	Mainchain,Peptide
1	A	4903	ASP	Mainchain,Peptide
1	A	4904	PRO	Mainchain,Peptide
1	A	4905	ALA	Mainchain,Peptide
1	A	734	GLY	Peptide
1	A	841	GLY	Mainchain,Peptide
1	A	894	GLY	Mainchain,Peptide
1	A	970	LEU	Peptide
1	C	1100	MET	Peptide

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	C	1251	GLU	Peptide
1	C	1253	PRO	Peptide
1	C	1464	PHE	Peptide
1	C	1588	ALA	Mainchain,Peptide
1	C	1748	PHE	Peptide
1	C	1828	ASP	Mainchain,Peptide
1	C	1854	PHE	Mainchain,Peptide
1	C	1855	GLY	Peptide
1	C	1856	ASP	Mainchain,Peptide
1	C	1867	GLU	Mainchain,Peptide
1	C	1932	PRO	Peptide
1	C	2567	PRO	Peptide
1	C	31	GLU	Mainchain,Peptide
1	C	329	ARG	Peptide
1	C	4819	GLY	Mainchain,Peptide
1	C	4903	ASP	Mainchain,Peptide
1	C	4904	PRO	Mainchain,Peptide
1	C	4905	ALA	Mainchain,Peptide
1	C	734	GLY	Peptide
1	C	841	GLY	Mainchain,Peptide
1	C	894	GLY	Mainchain,Peptide
1	C	970	LEU	Peptide
1	E	1100	MET	Peptide
1	E	1251	GLU	Peptide
1	E	1253	PRO	Peptide
1	E	1464	PHE	Peptide
1	E	1588	ALA	Mainchain,Peptide
1	E	1748	PHE	Peptide
1	E	1828	ASP	Mainchain,Peptide
1	E	1854	PHE	Mainchain,Peptide
1	E	1855	GLY	Peptide
1	E	1856	ASP	Mainchain,Peptide
1	E	1867	GLU	Mainchain,Peptide
1	E	1932	PRO	Peptide
1	E	2567	PRO	Peptide
1	E	31	GLU	Mainchain,Peptide
1	E	329	ARG	Mainchain,Peptide
1	E	4819	GLY	Mainchain,Peptide
1	E	4903	ASP	Mainchain,Peptide
1	E	4904	PRO	Mainchain,Peptide
1	E	4905	ALA	Mainchain,Peptide
1	E	734	GLY	Peptide

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	E	841	GLY	Mainchain,Peptide
1	E	894	GLY	Mainchain,Peptide
1	E	970	LEU	Peptide
1	G	1100	MET	Peptide
1	G	1253	PRO	Peptide
1	G	1464	PHE	Peptide
1	G	1588	ALA	Mainchain,Peptide
1	G	1748	PHE	Peptide
1	G	1828	ASP	Mainchain,Peptide
1	G	1854	PHE	Mainchain,Peptide
1	G	1855	GLY	Peptide
1	G	1856	ASP	Mainchain,Peptide
1	G	1867	GLU	Mainchain,Peptide
1	G	1932	PRO	Peptide
1	G	31	GLU	Mainchain,Peptide
1	G	329	ARG	Mainchain,Peptide
1	G	4819	GLY	Mainchain,Peptide
1	G	4903	ASP	Mainchain,Peptide
1	G	4904	PRO	Mainchain,Peptide
1	G	4905	ALA	Mainchain,Peptide
1	G	734	GLY	Peptide
1	G	841	GLY	Mainchain,Peptide
1	G	894	GLY	Mainchain,Peptide
1	G	970	LEU	Peptide

5.2 Too-close contacts (i)

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry-related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	26843	0	24428	1190	0
1	C	26843	0	24428	1200	0
1	E	26843	0	24428	1194	0
1	G	26843	0	24427	1209	0
2	B	832	0	831	58	0
2	D	832	0	831	54	0
2	F	832	0	831	58	0
2	H	832	0	831	58	0
3	A	1	0	0	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
3	C	1	0	0	0	0
3	E	1	0	0	0	0
3	G	1	0	0	0	0
All	All	110704	0	101035	4733	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 22.

All (4733) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:4880:MET:HA	1:G:4578:LEU:HD11	1.26	1.17
1:A:4578:LEU:HD11	1:C:4880:MET:HA	1.18	1.17
1:E:4578:LEU:HD11	1:G:4880:MET:HA	1.25	1.16
1:C:4578:LEU:HD11	1:E:4880:MET:HA	1.17	1.10
1:A:4822:THR:HG22	1:C:4839:MET:SD	1.93	1.08
1:C:4822:THR:HG22	1:E:4839:MET:SD	1.95	1.05
1:A:4931:ILE:HD11	1:G:4940:PHE:CE1	1.96	1.00
1:A:4892:ARG:CZ	1:C:4896:GLY:HA3	1.95	0.97
1:E:1835:GLU:HG3	1:E:1932:PRO:HG2	1.46	0.97
1:C:1835:GLU:HG3	1:C:1932:PRO:HG2	1.45	0.96
1:A:1783:VAL:HG12	2:B:55:VAL:HA	1.47	0.95
1:A:1808:ARG:NH1	1:A:1858:ASP:OD2	2.00	0.95
1:E:626:LEU:O	1:E:629:ARG:NH1	1.99	0.95
1:C:626:LEU:O	1:C:629:ARG:NH1	1.99	0.95
1:E:1808:ARG:NH1	1:E:1858:ASP:OD2	2.00	0.95
1:A:4839:MET:HE3	1:G:4822:THR:O	1.65	0.95
1:G:1808:ARG:NH1	1:G:1858:ASP:OD2	2.00	0.95
1:A:1835:GLU:HG3	1:A:1932:PRO:HG2	1.46	0.94
1:G:1783:VAL:HG12	2:H:55:VAL:HA	1.47	0.94
1:C:4822:THR:CG2	1:E:4839:MET:SD	2.55	0.94
1:G:4192:ARG:HH11	1:G:5028:PHE:HB3	1.33	0.94
1:A:3970:GLN:NE2	1:A:5003:HIS:O	2.01	0.93
1:G:1835:GLU:HG3	1:G:1932:PRO:HG2	1.45	0.93
1:A:626:LEU:O	1:A:629:ARG:NH1	1.99	0.93
1:A:4921:PHE:CZ	1:G:4892:ARG:HA	2.03	0.93
1:C:1294:PRO:HD2	1:C:1584:ARG:HH11	1.34	0.93
1:C:1808:ARG:NH1	1:C:1858:ASP:OD2	2.00	0.93
1:A:1294:PRO:HD2	1:A:1584:ARG:HH11	1.34	0.93
1:C:3970:GLN:NE2	1:C:5003:HIS:O	2.01	0.93
1:G:1294:PRO:HD2	1:G:1584:ARG:HH11	1.34	0.93

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:4822:THR:CG2	1:C:4839:MET:SD	2.56	0.93
1:C:1783:VAL:HG12	2:D:55:VAL:HA	1.52	0.92
1:E:3970:GLN:NE2	1:E:5003:HIS:O	2.02	0.92
1:E:1294:PRO:HD2	1:E:1584:ARG:HH11	1.34	0.92
1:G:626:LEU:O	1:G:629:ARG:NH1	2.01	0.91
1:C:4892:ARG:CZ	1:E:4896:GLY:HA3	2.01	0.90
1:E:1783:VAL:HG12	2:F:55:VAL:HA	1.54	0.90
1:C:4192:ARG:HH11	1:C:5028:PHE:HB3	1.37	0.89
1:A:4192:ARG:HH11	1:A:5028:PHE:HB3	1.36	0.89
1:C:4892:ARG:HA	1:E:4921:PHE:CZ	2.06	0.89
1:A:4896:GLY:HA3	1:G:4892:ARG:CZ	2.03	0.89
1:A:4839:MET:SD	1:G:4822:THR:HG22	2.12	0.89
1:E:4192:ARG:HH11	1:E:5028:PHE:HB3	1.37	0.88
1:A:2456:ILE:HD11	1:C:178:ARG:HH12	1.38	0.88
1:A:2059:LEU:HD22	1:A:2062:ARG:HH12	1.38	0.88
2:D:23:VAL:HG22	2:D:47:LYS:HG2	1.56	0.88
2:F:23:VAL:HG22	2:F:47:LYS:HG2	1.56	0.88
1:A:1436:SER:HA	1:A:1515:VAL:O	1.75	0.87
1:E:4826:ILE:HD11	1:G:4839:MET:SD	2.15	0.87
1:C:2059:LEU:HD22	1:C:2062:ARG:HH12	1.38	0.87
1:A:1439:VAL:N	1:A:1513:ASP:O	2.07	0.87
1:E:2173:GLN:HG2	1:E:2174:GLU:H	1.40	0.87
1:G:2173:GLN:HG2	1:G:2174:GLU:H	1.40	0.87
1:A:4839:MET:CE	1:G:4822:THR:O	2.23	0.87
2:B:23:VAL:HG22	2:B:47:LYS:HG2	1.56	0.87
1:C:4578:LEU:HD11	1:E:4880:MET:CA	2.05	0.86
1:C:2173:GLN:HG2	1:C:2174:GLU:H	1.40	0.86
1:A:2173:GLN:HG2	1:A:2174:GLU:H	1.40	0.86
1:E:2456:ILE:HD11	1:G:178:ARG:HH12	1.39	0.86
1:A:178:ARG:HH12	1:G:2456:ILE:HD11	1.40	0.86
1:C:2456:ILE:HD11	1:E:178:ARG:HH12	1.41	0.86
1:E:674:PHE:HZ	2:F:71:ARG:CZ	1.88	0.86
1:A:289:ARG:NH1	1:A:303:ASP:OD1	2.09	0.85
1:A:1555:LEU:HD12	1:A:1556:PRO:HD2	1.58	0.85
1:C:2922:LYS:HA	1:C:2925:GLU:CG	2.05	0.85
1:A:2459:SER:O	1:C:131:LEU:HD23	1.77	0.85
1:A:2922:LYS:HA	1:A:2925:GLU:CG	2.06	0.85
1:E:2059:LEU:HD22	1:E:2062:ARG:HH12	1.38	0.85
1:G:2059:LEU:HD22	1:G:2062:ARG:HH12	1.38	0.85
1:G:4708:THR:HG22	1:G:4710:SER:H	1.41	0.85
1:C:674:PHE:HZ	2:D:71:ARG:CZ	1.90	0.85

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:3772:THR:OG1	1:C:3773:ARG:NH1	2.10	0.85
1:C:1555:LEU:HD12	1:C:1556:PRO:HD2	1.59	0.85
1:C:289:ARG:NH1	1:C:303:ASP:OD1	2.10	0.85
1:A:3772:THR:OG1	1:A:3773:ARG:NH1	2.10	0.84
1:A:4839:MET:HE3	1:G:4826:ILE:HG13	1.59	0.84
1:A:4839:MET:SD	1:G:4822:THR:CG2	2.65	0.84
1:A:4892:ARG:HA	1:C:4921:PHE:CZ	2.11	0.84
1:A:131:LEU:HD23	1:G:2459:SER:O	1.77	0.84
1:C:2922:LYS:O	1:C:2925:GLU:HB2	1.77	0.84
1:E:289:ARG:NH1	1:E:303:ASP:OD1	2.10	0.84
1:E:674:PHE:CZ	2:F:71:ARG:CZ	2.60	0.84
1:G:289:ARG:NH1	1:G:303:ASP:OD1	2.10	0.84
1:G:1555:LEU:HD12	1:G:1556:PRO:HD2	1.59	0.84
1:G:4780:PHE:HA	1:G:4783:ILE:HD12	1.59	0.84
1:C:4708:THR:HG22	1:C:4710:SER:H	1.41	0.84
1:E:3772:THR:OG1	1:E:3773:ARG:NH1	2.10	0.84
1:C:4172:GLU:HG2	1:C:4175:ARG:HH12	1.43	0.83
1:C:2234:ARG:HH12	1:C:2271:THR:N	1.76	0.83
1:E:4708:THR:HG22	1:E:4710:SER:H	1.41	0.83
1:A:4708:THR:HG22	1:A:4710:SER:H	1.41	0.83
1:E:1555:LEU:HD12	1:E:1556:PRO:HD2	1.59	0.83
1:E:2234:ARG:HH12	1:E:2271:THR:N	1.76	0.83
1:E:2459:SER:O	1:G:131:LEU:HD23	1.79	0.82
1:A:2234:ARG:HH12	1:A:2271:THR:N	1.76	0.82
1:A:674:PHE:HZ	2:B:71:ARG:CZ	1.91	0.82
1:C:674:PHE:CZ	2:D:71:ARG:CZ	2.62	0.82
1:C:2921:GLU:O	1:C:2925:GLU:HG2	1.79	0.82
1:C:4578:LEU:CD1	1:E:4880:MET:HA	2.06	0.82
1:A:2922:LYS:O	1:A:2925:GLU:HB2	1.80	0.82
1:G:2234:ARG:HH12	1:G:2271:THR:N	1.76	0.82
1:G:4708:THR:HG21	1:G:4775:TYR:HB2	1.61	0.82
1:G:4033:GLY:O	1:G:4189:ARG:NH2	2.12	0.82
1:E:495:ASN:ND2	1:E:555:GLU:OE2	2.13	0.81
1:C:4940:PHE:CE1	1:E:4931:ILE:HD11	2.16	0.81
1:G:495:ASN:ND2	1:G:555:GLU:OE2	2.13	0.81
1:C:2459:SER:O	1:E:131:LEU:HD23	1.81	0.81
1:A:4578:LEU:CD1	1:C:4880:MET:HA	2.05	0.81
1:E:702:TRP:HD1	2:F:34:LYS:HZ1	1.27	0.80
1:E:3750:GLU:HA	1:E:3753:PHE:HB3	1.62	0.80
1:C:3750:GLU:HA	1:C:3753:PHE:HB3	1.62	0.80
1:A:674:PHE:CZ	2:B:71:ARG:CZ	2.64	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:4033:GLY:O	1:A:4189:ARG:NH2	2.15	0.80
1:A:4578:LEU:HD11	1:C:4880:MET:CA	2.08	0.80
1:G:4957:LYS:HA	1:G:4964:GLY:HA2	1.62	0.80
1:C:102:LEU:HB2	1:C:105:HIS:CD2	2.17	0.80
1:E:102:LEU:HB2	1:E:105:HIS:CD2	2.17	0.79
1:E:4033:GLY:O	1:E:4189:ARG:NH2	2.15	0.79
1:C:495:ASN:ND2	1:C:555:GLU:OE2	2.14	0.79
1:A:3750:GLU:HA	1:A:3753:PHE:HB3	1.63	0.79
1:G:1032:LYS:HB3	1:G:1036:ARG:HH12	1.48	0.79
1:A:2921:GLU:O	1:A:2925:GLU:HG2	1.82	0.79
1:A:495:ASN:ND2	1:A:555:GLU:OE2	2.14	0.79
1:A:4172:GLU:HG2	1:A:4175:ARG:HH12	1.46	0.79
1:E:4172:GLU:HG2	1:E:4175:ARG:HH12	1.47	0.79
1:G:4033:GLY:HA2	1:G:4189:ARG:HH12	1.46	0.79
1:E:4578:LEU:CD1	1:G:4880:MET:HA	2.08	0.79
1:G:1457:TYR:OH	1:G:1459:GLN:NE2	2.15	0.79
1:A:174:VAL:O	1:G:2452:ARG:NH2	2.16	0.78
1:A:1032:LYS:HB3	1:A:1036:ARG:HH12	1.47	0.78
1:C:4033:GLY:O	1:C:4189:ARG:NH2	2.15	0.78
1:A:102:LEU:HB2	1:A:105:HIS:CD2	2.18	0.78
1:E:3677:LEU:HB2	1:E:3698:LEU:HD12	1.65	0.78
1:G:102:LEU:HB2	1:G:105:HIS:CD2	2.17	0.78
1:G:3772:THR:OG1	1:G:3773:ARG:NH1	2.16	0.78
1:E:675:LEU:HD23	1:E:676:THR:HG23	1.66	0.78
1:A:2463:LEU:N	1:A:2510:TYR:HH	1.81	0.78
1:E:4578:LEU:HD11	1:G:4880:MET:CA	2.10	0.78
1:G:4971:THR:HG23	1:G:4974:GLY:HA3	1.66	0.78
1:A:4880:MET:CA	1:G:4578:LEU:HD11	2.12	0.78
1:G:830:ARG:HD3	1:G:1616:GLU:OE2	1.83	0.78
1:E:830:ARG:HD3	1:E:1616:GLU:OE2	1.84	0.78
1:E:2463:LEU:N	1:E:2510:TYR:HH	1.81	0.78
1:C:2463:LEU:N	1:C:2510:TYR:HH	1.82	0.78
1:E:1032:LYS:HB3	1:E:1036:ARG:HH12	1.48	0.78
1:A:830:ARG:HD3	1:A:1616:GLU:OE2	1.83	0.77
1:C:675:LEU:HD23	1:C:676:THR:HG23	1.66	0.77
1:C:1294:PRO:HD2	1:C:1584:ARG:NH1	1.99	0.77
1:C:3677:LEU:HB2	1:C:3698:LEU:HD12	1.66	0.77
1:E:4780:PHE:HA	1:E:4783:ILE:HD12	1.66	0.77
1:G:1294:PRO:HD2	1:G:1584:ARG:NH1	1.99	0.77
1:G:675:LEU:HD23	1:G:676:THR:HG23	1.66	0.77
1:A:4957:LYS:HA	1:A:4964:GLY:HA2	1.67	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1294:PRO:HD2	1:E:1584:ARG:NH1	2.00	0.77
1:C:4780:PHE:HA	1:C:4783:ILE:HD12	1.67	0.77
1:G:3970:GLN:NE2	1:G:5003:HIS:O	2.17	0.77
1:A:830:ARG:NH1	1:A:1613:LEU:O	2.18	0.76
1:C:830:ARG:NH1	1:C:1613:LEU:O	2.18	0.76
1:A:1294:PRO:HD2	1:A:1584:ARG:NH1	1.99	0.76
1:C:4957:LYS:HA	1:C:4964:GLY:HA2	1.66	0.76
1:E:4889:VAL:O	1:E:4893:ALA:N	2.18	0.76
1:G:830:ARG:NH1	1:G:1613:LEU:O	2.18	0.76
1:C:1032:LYS:HB3	1:C:1036:ARG:HH12	1.48	0.76
1:C:830:ARG:HD3	1:C:1616:GLU:OE2	1.84	0.76
1:G:1078:GLU:HA	1:G:1237:TRP:HZ3	1.50	0.76
1:G:2463:LEU:N	1:G:2510:TYR:HH	1.83	0.76
1:A:355:LEU:HD22	1:A:379:HIS:HA	1.65	0.76
1:A:675:LEU:HD23	1:A:676:THR:HG23	1.66	0.76
1:A:1078:GLU:HA	1:A:1237:TRP:HZ3	1.50	0.76
1:G:1933:GLU:OE2	1:G:2111:VAL:HG12	1.84	0.76
1:E:1078:GLU:HA	1:E:1237:TRP:HZ3	1.50	0.76
1:E:4957:LYS:HA	1:E:4964:GLY:HA2	1.67	0.76
1:A:3677:LEU:HB2	1:A:3698:LEU:HD12	1.66	0.76
1:G:674:PHE:CZ	2:H:71:ARG:CZ	2.69	0.76
1:A:4780:PHE:HA	1:A:4783:ILE:HD12	1.68	0.76
1:A:4880:MET:HA	1:G:4578:LEU:CD1	2.13	0.76
1:G:2924:GLN:HB3	1:G:2928:LYS:HE2	1.68	0.76
1:A:717:ASP:HB2	2:B:7:ILE:HG23	1.69	0.75
1:E:830:ARG:NH1	1:E:1613:LEU:O	2.19	0.75
1:C:717:ASP:HB2	2:D:7:ILE:HG23	1.68	0.75
1:C:1933:GLU:OE2	1:C:2111:VAL:HG12	1.86	0.75
1:A:1933:GLU:OE2	1:A:2111:VAL:HG12	1.86	0.75
1:C:1078:GLU:HA	1:C:1237:TRP:HZ3	1.50	0.75
1:E:1933:GLU:OE2	1:E:2111:VAL:HG12	1.86	0.75
1:G:355:LEU:HD22	1:G:379:HIS:HA	1.66	0.75
1:C:702:TRP:HD1	2:D:34:LYS:HZ1	1.31	0.75
1:C:1931:LEU:O	1:C:1936:LYS:NZ	2.20	0.75
1:C:355:LEU:HD22	1:C:379:HIS:HA	1.68	0.75
2:F:24:VAL:HG12	2:F:103:LEU:HA	1.69	0.75
1:E:717:ASP:HB2	2:F:7:ILE:HG23	1.69	0.75
1:E:1457:TYR:OH	1:E:1459:GLN:NE2	2.19	0.75
1:E:4892:ARG:CZ	1:G:4896:GLY:HA3	2.17	0.74
1:A:1457:TYR:OH	1:A:1459:GLN:NE2	2.19	0.74
1:A:2456:ILE:HD11	1:C:178:ARG:NH1	2.02	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:3882:GLN:HB2	1:C:3957:VAL:HG22	1.70	0.74
1:A:1205:GLY:HA3	1:A:1227:ALA:HB3	1.69	0.74
2:H:23:VAL:HG22	2:H:47:LYS:HG2	1.69	0.74
1:A:4729:GLY:HA2	1:A:4737:ILE:HG13	1.69	0.74
1:E:42:PHE:HB3	1:E:447:ASP:OD2	1.87	0.74
1:E:355:LEU:HD22	1:E:379:HIS:HA	1.68	0.74
1:G:20:VAL:HG12	1:G:204:PRO:HA	1.70	0.74
1:A:20:VAL:HG12	1:A:204:PRO:HA	1.70	0.74
1:A:3882:GLN:HB2	1:A:3957:VAL:HG22	1.70	0.74
1:E:20:VAL:HG12	1:E:204:PRO:HA	1.69	0.74
1:E:3882:GLN:HB2	1:E:3957:VAL:HG22	1.70	0.74
1:C:20:VAL:HG12	1:C:204:PRO:HA	1.70	0.74
1:E:2456:ILE:HD11	1:G:178:ARG:NH1	2.03	0.73
1:E:3756:LYS:NZ	1:E:4999:ASP:OD1	2.20	0.73
1:G:674:PHE:HZ	2:H:71:ARG:CZ	2.02	0.73
1:G:4138:ASP:O	1:G:4142:ASN:ND2	2.21	0.73
1:A:42:PHE:HB3	1:A:447:ASP:OD2	1.87	0.73
1:A:1141:ARG:HH12	1:A:1169:LEU:HD11	1.54	0.73
1:A:1708:ARG:NH2	1:A:1837:GLN:HA	2.04	0.73
2:D:24:VAL:HG12	2:D:103:LEU:HA	1.69	0.73
1:A:4207:MET:HG2	1:A:4208:PRO:HD3	1.71	0.73
1:E:1931:LEU:O	1:E:1936:LYS:NZ	2.19	0.73
1:A:4940:PHE:CE1	1:C:4931:ILE:HD11	2.23	0.73
2:B:24:VAL:HG12	2:B:103:LEU:HA	1.69	0.73
1:C:2456:ILE:HD11	1:E:178:ARG:NH1	2.04	0.73
1:E:1669:LEU:O	1:E:1673:VAL:HG23	1.88	0.73
1:A:2452:ARG:NH2	1:C:174:VAL:O	2.20	0.73
1:C:2452:ARG:NH2	1:E:174:VAL:O	2.21	0.73
1:E:1205:GLY:HA3	1:E:1227:ALA:HB3	1.71	0.73
1:E:4207:MET:HG2	1:E:4208:PRO:HD3	1.71	0.73
1:G:42:PHE:HB3	1:G:447:ASP:OD2	1.88	0.73
1:A:1439:VAL:HB	1:A:1513:ASP:HB2	1.69	0.73
1:C:42:PHE:HB3	1:C:447:ASP:OD2	1.87	0.73
1:E:1075:PHE:HB2	1:E:1192:CYS:HB2	1.71	0.73
1:G:1075:PHE:HB2	1:G:1192:CYS:HB2	1.71	0.73
1:A:4876:CYS:O	1:A:4881:THR:OG1	2.07	0.73
1:C:281:ARG:HG2	1:C:312:THR:HG21	1.71	0.73
1:C:1669:LEU:O	1:C:1673:VAL:HG23	1.89	0.73
1:A:818:ARG:HG2	1:A:1028:ASP:HA	1.71	0.72
1:A:1075:PHE:HB2	1:A:1192:CYS:HB2	1.71	0.72
1:E:4727:LYS:HZ1	1:E:4728:HIS:CE1	2.06	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:4036:VAL:O	1:G:4038:GLY:N	2.22	0.72
1:G:4960:ILE:HD11	1:G:4985:LEU:HB2	1.71	0.72
1:A:683:ARG:HH12	1:A:725:HIS:CD2	2.07	0.72
1:C:818:ARG:HG2	1:C:1028:ASP:HA	1.71	0.72
1:C:4876:CYS:O	1:C:4881:THR:OG1	2.06	0.72
1:G:1669:LEU:O	1:G:1673:VAL:HG23	1.89	0.72
1:G:4961:CYS:SG	1:G:4978:HIS:NE2	2.63	0.72
1:A:674:PHE:HB3	2:B:40:ARG:NH1	2.04	0.72
1:C:1087:ARG:HB3	1:C:1223:PHE:CD1	2.25	0.72
1:E:1087:ARG:HB3	1:E:1223:PHE:CD1	2.24	0.72
1:C:1708:ARG:NH2	1:C:1837:GLN:HA	2.04	0.72
1:E:818:ARG:HG2	1:E:1028:ASP:HA	1.72	0.72
1:E:1708:ARG:NH2	1:E:1837:GLN:HA	2.04	0.72
1:E:2452:ARG:NH2	1:G:174:VAL:O	2.23	0.72
1:E:4729:GLY:HA2	1:E:4737:ILE:HG13	1.69	0.72
1:G:1205:GLY:HA3	1:G:1227:ALA:HB3	1.72	0.72
1:A:178:ARG:NH1	1:G:2456:ILE:HD11	2.03	0.72
1:A:1669:LEU:O	1:A:1673:VAL:HG23	1.89	0.72
1:C:1205:GLY:HA3	1:C:1227:ALA:HB3	1.70	0.72
1:E:674:PHE:HB3	2:F:40:ARG:NH1	2.03	0.72
1:E:4876:CYS:O	1:E:4881:THR:OG1	2.05	0.72
1:G:683:ARG:HH12	1:G:725:HIS:CD2	2.08	0.72
1:A:1087:ARG:HB3	1:A:1223:PHE:CD1	2.25	0.72
1:G:818:ARG:HG2	1:G:1028:ASP:HA	1.72	0.72
1:G:1708:ARG:NH2	1:G:1837:GLN:HA	2.03	0.72
1:A:1931:LEU:O	1:A:1936:LYS:NZ	2.20	0.72
1:A:1941:ASN:O	1:A:1944:GLU:HG2	1.90	0.72
1:C:1075:PHE:HB2	1:C:1192:CYS:HB2	1.71	0.72
1:C:1783:VAL:CG1	2:D:55:VAL:HA	2.19	0.72
1:C:4729:GLY:HA2	1:C:4737:ILE:HG13	1.70	0.72
1:E:1291:LEU:HD23	1:E:1293:LEU:H	1.55	0.72
1:G:1087:ARG:HB3	1:G:1223:PHE:CD1	2.24	0.72
1:A:281:ARG:HG2	1:A:312:THR:HG21	1.71	0.72
1:A:544:LEU:HD12	1:A:574:VAL:HG13	1.72	0.72
1:G:674:PHE:HB3	2:H:40:ARG:NH1	2.04	0.72
1:G:717:ASP:HB2	2:H:7:ILE:HG23	1.72	0.72
1:A:293:LEU:H	1:A:311:ALA:HB1	1.54	0.71
1:C:674:PHE:HB3	2:D:40:ARG:NH1	2.05	0.71
1:C:2922:LYS:HA	1:C:2925:GLU:HG3	1.70	0.71
1:C:4207:MET:HG2	1:C:4208:PRO:HD3	1.71	0.71
1:E:2921:GLU:O	1:E:2925:GLU:HG2	1.89	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:4892:ARG:NH1	1:C:4896:GLY:HA3	2.04	0.71
1:A:4033:GLY:HA2	1:A:4189:ARG:HH12	1.55	0.71
1:C:1032:LYS:HB3	1:C:1036:ARG:NH1	2.05	0.71
1:E:1941:ASN:O	1:E:1944:GLU:HG2	1.90	0.71
1:G:298:GLY:HA3	1:G:377:ILE:HB	1.72	0.71
1:G:1141:ARG:HH12	1:G:1169:LEU:HD11	1.55	0.71
1:A:1032:LYS:HB3	1:A:1036:ARG:NH1	2.05	0.71
1:C:683:ARG:HH12	1:C:725:HIS:CD2	2.07	0.71
1:C:2178:MET:O	1:C:2182:ILE:HG12	1.90	0.71
1:C:1439:VAL:HB	1:C:1513:ASP:HB2	1.71	0.71
1:E:683:ARG:HH12	1:E:725:HIS:CD2	2.07	0.71
1:A:702:TRP:HD1	2:B:34:LYS:HZ1	1.30	0.71
1:C:4643:LEU:HA	1:C:4646:LEU:HB2	1.72	0.71
1:G:3750:GLU:HA	1:G:3753:PHE:HB3	1.72	0.71
1:A:4708:THR:HG21	1:A:4775:TYR:HB2	1.72	0.71
1:C:1941:ASN:O	1:C:1944:GLU:HG2	1.91	0.71
1:E:544:LEU:HD12	1:E:574:VAL:HG13	1.72	0.71
1:E:1032:LYS:HB3	1:E:1036:ARG:NH1	2.05	0.71
1:G:293:LEU:H	1:G:311:ALA:HB1	1.54	0.71
1:G:1783:VAL:CG1	2:H:55:VAL:HA	2.20	0.71
1:A:2178:MET:O	1:A:2182:ILE:HG12	1.91	0.71
1:C:3756:LYS:NZ	1:C:4999:ASP:OD1	2.20	0.71
1:C:4708:THR:HG21	1:C:4775:TYR:HB2	1.72	0.71
1:G:1941:ASN:O	1:G:1944:GLU:HG2	1.91	0.71
1:G:4729:GLY:HA2	1:G:4737:ILE:HG13	1.73	0.71
1:G:4913:ARG:HA	1:G:4916:PHE:HB3	1.71	0.71
1:A:2341:VAL:HG22	1:A:2342:ASN:H	1.56	0.71
1:E:298:GLY:HA3	1:E:377:ILE:HB	1.72	0.71
1:E:1783:VAL:CG1	2:F:55:VAL:HA	2.19	0.71
1:E:2341:VAL:HG22	1:E:2342:ASN:H	1.56	0.71
1:G:674:PHE:CD1	2:H:40:ARG:NH1	2.58	0.71
1:G:1078:GLU:HG2	1:G:1080:SER:H	1.55	0.71
1:C:544:LEU:HD12	1:C:574:VAL:HG13	1.72	0.71
1:E:1078:GLU:HG2	1:E:1080:SER:H	1.55	0.71
1:G:670:GLU:HA	1:G:740:PRO:HB3	1.71	0.71
1:E:293:LEU:H	1:E:311:ALA:HB1	1.54	0.70
1:G:281:ARG:HG2	1:G:312:THR:HG21	1.71	0.70
1:A:670:GLU:HA	1:A:740:PRO:HB3	1.72	0.70
1:A:1078:GLU:HG2	1:A:1080:SER:H	1.55	0.70
1:C:293:LEU:H	1:C:311:ALA:HB1	1.54	0.70
1:C:4138:ASP:O	1:C:4142:ASN:ND2	2.25	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4643:LEU:HA	1:E:4646:LEU:HB2	1.72	0.70
1:E:4708:THR:HG21	1:E:4775:TYR:HB2	1.72	0.70
1:E:4961:CYS:SG	1:E:4978:HIS:NE2	2.61	0.70
1:G:4983:HIS:O	1:G:4985:LEU:N	2.23	0.70
1:A:4643:LEU:HA	1:A:4646:LEU:HB2	1.73	0.70
1:A:298:GLY:HA3	1:A:377:ILE:HB	1.72	0.70
1:A:4138:ASP:O	1:A:4142:ASN:ND2	2.25	0.70
1:E:281:ARG:HG2	1:E:312:THR:HG21	1.72	0.70
1:A:2293:GLN:HA	1:A:2296:GLU:HG2	1.73	0.70
1:C:298:GLY:HA3	1:C:377:ILE:HB	1.72	0.70
1:C:1663:HIS:O	1:C:1666:THR:OG1	2.08	0.70
1:C:2341:VAL:HG22	1:C:2342:ASN:H	1.57	0.70
1:A:3966:THR:O	1:A:3970:GLN:HB2	1.92	0.70
1:C:1291:LEU:HD23	1:C:1293:LEU:H	1.55	0.70
1:E:702:TRP:CD1	2:F:34:LYS:NZ	2.56	0.70
1:E:737:LEU:HD11	2:F:7:ILE:HG22	1.73	0.70
1:E:2178:MET:O	1:E:2182:ILE:HG12	1.90	0.70
1:A:3970:GLN:HE21	1:A:5004:THR:HA	1.56	0.70
1:C:670:GLU:HA	1:C:740:PRO:HB3	1.72	0.70
1:E:3966:THR:O	1:E:3970:GLN:HB2	1.92	0.70
1:G:544:LEU:HD12	1:G:574:VAL:HG13	1.72	0.70
1:G:1032:LYS:HB3	1:G:1036:ARG:NH1	2.05	0.70
1:C:4033:GLY:HA2	1:C:4189:ARG:HH12	1.57	0.70
1:E:670:GLU:HA	1:E:740:PRO:HB3	1.72	0.70
1:A:737:LEU:HD11	2:B:7:ILE:HG22	1.72	0.70
1:A:2922:LYS:HA	1:A:2925:GLU:HG3	1.74	0.70
1:E:4138:ASP:O	1:E:4142:ASN:ND2	2.24	0.70
1:G:1291:LEU:HD23	1:G:1293:LEU:H	1.55	0.70
1:G:2341:VAL:HG22	1:G:2342:ASN:H	1.57	0.70
1:C:2095:GLN:NE2	1:C:2127:GLN:O	2.25	0.70
1:A:2326:CYS:HA	1:A:2329:GLU:HG2	1.74	0.69
1:G:548:VAL:HG21	1:G:582:HIS:HB3	1.73	0.69
1:C:2326:CYS:HA	1:C:2329:GLU:HG2	1.74	0.69
1:A:1102:VAL:HG22	1:A:1192:CYS:HA	1.75	0.69
1:E:2095:GLN:NE2	1:E:2127:GLN:O	2.25	0.69
1:C:1141:ARG:HH12	1:C:1169:LEU:HD11	1.57	0.69
1:E:4033:GLY:HA2	1:E:4189:ARG:HH12	1.56	0.69
1:A:548:VAL:HG21	1:A:582:HIS:HB3	1.73	0.69
1:C:1078:GLU:HG2	1:C:1080:SER:H	1.55	0.69
1:A:1783:VAL:CG1	2:B:55:VAL:HA	2.21	0.69
1:C:3966:THR:O	1:C:3970:GLN:HB2	1.91	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:4154:VAL:HG22	1:C:4157:ASP:OD2	1.92	0.69
1:E:4786:ASP:OD2	1:E:4789:PHE:N	2.26	0.69
1:A:1291:LEU:HD23	1:A:1293:LEU:H	1.55	0.69
1:A:2095:GLN:NE2	1:A:2127:GLN:O	2.25	0.69
1:A:3756:LYS:NZ	1:A:4999:ASP:OD1	2.20	0.69
1:A:4003:LEU:HB2	1:A:4013:LEU:HD12	1.75	0.69
1:C:548:VAL:HG21	1:C:582:HIS:HB3	1.73	0.69
1:C:1102:VAL:HG22	1:C:1192:CYS:HA	1.75	0.69
1:E:1102:VAL:HG22	1:E:1192:CYS:HA	1.75	0.69
1:E:2326:CYS:HA	1:E:2329:GLU:HG2	1.74	0.69
1:E:2922:LYS:O	1:E:2925:GLU:HB2	1.93	0.69
1:G:3677:LEU:HB2	1:G:3698:LEU:HD12	1.75	0.69
1:C:4961:CYS:SG	1:C:4978:HIS:NE2	2.61	0.69
1:G:1102:VAL:HG22	1:G:1192:CYS:HA	1.75	0.69
1:A:4961:CYS:SG	1:A:4978:HIS:NE2	2.61	0.69
1:E:445:LEU:HD21	1:E:522:LEU:HD12	1.75	0.69
1:E:548:VAL:HG21	1:E:582:HIS:HB3	1.74	0.68
1:G:4923:PHE:O	1:G:4928:LEU:HG	1.94	0.68
1:A:1663:HIS:O	1:A:1666:THR:OG1	2.08	0.68
1:G:4563:ARG:NH1	1:G:4815:ASP:OD1	2.27	0.68
2:B:74:LEU:HB2	2:B:99:PHE:HB2	1.74	0.68
1:C:2293:GLN:HA	1:C:2296:GLU:HG2	1.74	0.68
1:C:3970:GLN:HE21	1:C:5004:THR:HA	1.58	0.68
1:C:4892:ARG:HG3	1:E:4921:PHE:CE1	2.28	0.68
1:C:4971:THR:HG23	1:C:4974:GLY:HA3	1.75	0.68
1:E:2460:LEU:HD12	1:G:178:ARG:NH1	2.08	0.68
1:G:289:ARG:HD2	1:G:303:ASP:HA	1.75	0.68
1:G:674:PHE:HB3	2:H:40:ARG:HH12	1.58	0.68
1:G:2178:MET:O	1:G:2182:ILE:HG12	1.91	0.68
1:G:2326:CYS:HA	1:G:2329:GLU:HG2	1.74	0.68
1:C:674:PHE:HZ	2:D:71:ARG:NE	1.92	0.68
1:C:4148:THR:O	1:C:4151:SER:OG	2.11	0.68
1:E:3970:GLN:HE21	1:E:5004:THR:HA	1.57	0.68
1:G:265:LEU:HD12	1:G:279:PRO:HB2	1.75	0.68
1:G:4867:GLU:O	1:G:4869:GLU:N	2.27	0.68
1:G:4986:ALA:O	1:G:4989:MET:HG2	1.93	0.68
1:G:4207:MET:HG2	1:G:4208:PRO:HD3	1.76	0.68
1:A:4154:VAL:HG22	1:A:4157:ASP:OD2	1.92	0.68
1:E:289:ARG:HD2	1:E:303:ASP:HA	1.76	0.68
1:E:674:PHE:HZ	2:F:71:ARG:NE	1.90	0.68
1:E:2293:GLN:HA	1:E:2296:GLU:HG2	1.75	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4154:VAL:HG22	1:E:4157:ASP:OD2	1.92	0.68
1:A:4148:THR:O	1:A:4151:SER:OG	2.12	0.68
1:A:4727:LYS:HZ1	1:A:4728:HIS:CE1	2.11	0.68
1:C:4003:LEU:HB2	1:C:4013:LEU:HD12	1.76	0.68
1:C:4230:LYS:NZ	1:C:4960:ILE:O	2.27	0.68
1:C:4786:ASP:OD2	1:C:4789:PHE:N	2.26	0.68
2:F:74:LEU:HB2	2:F:99:PHE:HB2	1.75	0.68
1:A:674:PHE:HZ	2:B:71:ARG:NE	1.91	0.68
1:A:4786:ASP:OD2	1:A:4789:PHE:N	2.26	0.68
1:C:4655:PHE:O	1:C:4658:ILE:HG13	1.94	0.68
2:D:74:LEU:HB2	2:D:99:PHE:HB2	1.75	0.68
1:A:2059:LEU:HB3	1:A:2062:ARG:NH1	2.09	0.68
1:A:4921:PHE:CE1	1:G:4892:ARG:HG3	2.29	0.68
1:C:702:TRP:CD1	2:D:34:LYS:NZ	2.58	0.68
1:G:1931:LEU:O	1:G:1936:LYS:NZ	2.21	0.68
1:A:168:ASP:OD1	1:A:201:ASN:ND2	2.27	0.67
1:A:2151:ASP:OD1	1:A:2188:ASN:ND2	2.27	0.67
1:A:4867:GLU:O	1:A:4869:GLU:N	2.27	0.67
1:C:289:ARG:HD2	1:C:303:ASP:HA	1.75	0.67
1:E:1708:ARG:HD2	1:E:1837:GLN:HE22	1.59	0.67
1:G:4876:CYS:O	1:G:4881:THR:OG1	2.09	0.67
1:C:4036:VAL:O	1:C:4038:GLY:N	2.27	0.67
1:E:2059:LEU:HB3	1:E:2062:ARG:NH1	2.09	0.67
1:G:2151:ASP:OD1	1:G:2188:ASN:ND2	2.27	0.67
1:A:4230:LYS:NZ	1:A:4960:ILE:O	2.27	0.67
1:E:106:ALA:HB1	1:E:147:TRP:HB3	1.77	0.67
1:E:2151:ASP:OD1	1:E:2188:ASN:ND2	2.27	0.67
1:E:4148:THR:O	1:E:4151:SER:OG	2.11	0.67
1:A:4655:PHE:O	1:A:4658:ILE:HG13	1.95	0.67
1:C:737:LEU:HD11	2:D:7:ILE:HG22	1.74	0.67
1:C:1708:ARG:HD2	1:C:1837:GLN:HE22	1.59	0.67
1:E:4036:VAL:O	1:E:4038:GLY:N	2.27	0.67
1:E:4230:LYS:NZ	1:E:4960:ILE:O	2.27	0.67
1:E:4581:LYS:HD2	1:G:4856:PHE:HZ	1.59	0.67
1:E:4655:PHE:O	1:E:4658:ILE:HG13	1.94	0.67
1:G:3780:LEU:HD11	1:G:3820:LEU:HD21	1.76	0.67
1:C:106:ALA:HB1	1:C:147:TRP:HB3	1.77	0.67
1:C:2151:ASP:OD1	1:C:2188:ASN:ND2	2.27	0.67
1:E:265:LEU:HD12	1:E:279:PRO:HB2	1.77	0.67
1:E:975:VAL:HG21	1:E:1044:ARG:HB3	1.75	0.67
1:A:975:VAL:HG21	1:A:1044:ARG:HB3	1.75	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:4036:VAL:O	1:A:4038:GLY:N	2.27	0.67
1:C:2460:LEU:HD12	1:E:178:ARG:NH1	2.10	0.67
1:E:544:LEU:HD21	1:E:578:ILE:HG13	1.76	0.67
1:E:579:GLN:HB2	1:E:582:HIS:ND1	2.10	0.67
1:G:579:GLN:HB2	1:G:582:HIS:ND1	2.10	0.67
1:G:2059:LEU:HB3	1:G:2062:ARG:NH1	2.09	0.67
1:A:445:LEU:HD21	1:A:522:LEU:HD12	1.76	0.67
1:A:579:GLN:HB2	1:A:582:HIS:ND1	2.10	0.67
1:A:4884:LEU:HA	1:A:4887:MET:HB3	1.77	0.67
1:C:4884:LEU:HA	1:C:4887:MET:HB3	1.77	0.67
1:C:4892:ARG:NH1	1:E:4896:GLY:HA3	2.09	0.67
1:G:717:ASP:OD2	2:H:7:ILE:HA	1.95	0.67
1:A:289:ARG:HD2	1:A:303:ASP:HA	1.75	0.67
1:A:1100:MET:HB2	1:A:1126:GLY:HA3	1.76	0.67
1:C:1457:TYR:OH	1:C:1459:GLN:NE2	2.27	0.67
1:G:975:VAL:HG21	1:G:1044:ARG:HB3	1.76	0.67
1:G:1663:HIS:O	1:G:1666:THR:OG1	2.08	0.67
1:A:544:LEU:HD21	1:A:578:ILE:HG13	1.76	0.67
1:C:975:VAL:HG21	1:C:1044:ARG:HB3	1.76	0.67
2:D:48:PHE:HZ	2:D:63:VAL:HG11	1.59	0.67
1:E:865:PRO:HA	1:E:868:GLU:HB2	1.76	0.67
1:E:4003:LEU:HB2	1:E:4013:LEU:HD12	1.76	0.67
1:G:1703:LEU:HD12	1:G:1704:PRO:HD2	1.77	0.67
1:A:265:LEU:HD12	1:A:279:PRO:HB2	1.76	0.67
1:C:265:LEU:HD12	1:C:279:PRO:HB2	1.75	0.67
1:C:544:LEU:HD21	1:C:578:ILE:HG13	1.76	0.67
1:C:4867:GLU:O	1:C:4869:GLU:N	2.27	0.67
1:E:4867:GLU:O	1:E:4869:GLU:N	2.27	0.67
1:G:1544:PRO:HG2	1:G:1546:THR:HG23	1.77	0.67
1:G:2095:GLN:NE2	1:G:2127:GLN:O	2.28	0.67
1:A:263:GLU:O	1:A:281:ARG:N	2.28	0.66
1:C:445:LEU:HD21	1:C:522:LEU:HD12	1.75	0.66
1:C:2059:LEU:HB3	1:C:2062:ARG:NH1	2.09	0.66
1:E:645:ARG:O	1:E:824:GLU:N	2.28	0.66
1:G:106:ALA:HB1	1:G:147:TRP:HB3	1.77	0.66
1:G:865:PRO:HA	1:G:868:GLU:HB2	1.77	0.66
1:G:4003:LEU:HB2	1:G:4013:LEU:HD12	1.77	0.66
1:A:758:ARG:NH1	1:A:763:PRO:HD3	2.10	0.66
1:A:4971:THR:HG23	1:A:4974:GLY:HA3	1.77	0.66
1:E:1856:ASP:H	1:E:1857:GLU:HB3	1.60	0.66
1:E:2430:ILE:HD13	1:E:2502:MET:HG2	1.78	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:263:GLU:O	1:G:281:ARG:N	2.28	0.66
1:G:445:LEU:HD21	1:G:522:LEU:HD12	1.75	0.66
1:A:2460:LEU:HD12	1:C:178:ARG:NH1	2.10	0.66
1:A:2770:LYS:HG3	1:A:2791:LEU:HD21	1.77	0.66
1:A:4210:VAL:O	1:A:4214:LYS:N	2.28	0.66
1:C:1856:ASP:H	1:C:1857:GLU:HB3	1.61	0.66
1:E:2770:LYS:HG3	1:E:2791:LEU:HD21	1.77	0.66
1:E:4210:VAL:O	1:E:4214:LYS:N	2.28	0.66
1:E:4892:ARG:HA	1:G:4921:PHE:CZ	2.29	0.66
1:A:1513:ASP:C	1:A:1514:LEU:HD12	2.16	0.66
1:C:540:PHE:HA	1:C:543:ASN:HD22	1.61	0.66
1:C:579:GLN:HB2	1:C:582:HIS:ND1	2.10	0.66
1:C:1100:MET:HB2	1:C:1126:GLY:HA3	1.76	0.66
1:A:540:PHE:HA	1:A:543:ASN:HD22	1.61	0.66
1:A:1703:LEU:HD12	1:A:1704:PRO:HD2	1.78	0.66
1:C:1078:GLU:HA	1:C:1237:TRP:CZ3	2.31	0.66
1:C:2770:LYS:HG3	1:C:2791:LEU:HD21	1.77	0.66
1:E:252:VAL:HG23	1:E:257:ARG:HE	1.61	0.66
1:E:1100:MET:HB2	1:E:1126:GLY:HA3	1.76	0.66
1:E:4971:THR:HG23	1:E:4974:GLY:HA3	1.77	0.66
2:F:48:PHE:HZ	2:F:63:VAL:HG11	1.59	0.66
1:G:4884:LEU:HA	1:G:4887:MET:HB3	1.78	0.66
1:C:591:ASP:OD2	1:C:1585:LYS:HG3	1.95	0.66
1:E:674:PHE:HB3	2:F:40:ARG:HH12	1.60	0.66
1:A:591:ASP:OD2	1:A:1585:LYS:HG3	1.95	0.66
1:C:1703:LEU:HD12	1:C:1704:PRO:HD2	1.77	0.66
1:C:2430:ILE:HD13	1:C:2502:MET:HG2	1.78	0.66
1:E:3934:TYR:HB2	1:E:3995:VAL:HG13	1.78	0.66
1:E:168:ASP:OD1	1:E:201:ASN:ND2	2.27	0.66
1:G:168:ASP:OD1	1:G:201:ASN:ND2	2.28	0.66
1:G:591:ASP:OD2	1:G:1585:LYS:HG3	1.95	0.66
1:G:1708:ARG:HD2	1:G:1837:GLN:HE22	1.60	0.66
1:A:865:PRO:HA	1:A:868:GLU:HB2	1.78	0.66
1:C:252:VAL:HG23	1:C:257:ARG:HE	1.61	0.66
1:C:263:GLU:O	1:C:281:ARG:N	2.28	0.66
1:E:4933:GLN:HG2	1:G:4926:VAL:HG13	1.76	0.66
1:G:1100:MET:HB2	1:G:1126:GLY:HA3	1.76	0.66
1:A:1544:PRO:HG2	1:A:1546:THR:HG23	1.78	0.65
1:A:1856:ASP:H	1:A:1857:GLU:HB3	1.61	0.65
1:C:628:GLY:O	1:C:630:GLU:N	2.27	0.65
1:C:758:ARG:NH1	1:C:763:PRO:HD3	2.11	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1544:PRO:HG2	1:C:1546:THR:HG23	1.78	0.65
1:C:2862:LEU:HD21	1:C:2929:PHE:HB2	1.78	0.65
1:E:1703:LEU:HD12	1:E:1704:PRO:HD2	1.77	0.65
1:G:4154:VAL:O	1:G:4154:VAL:HG13	1.96	0.65
1:A:3934:TYR:HB2	1:A:3995:VAL:HG13	1.78	0.65
1:A:4839:MET:SD	1:G:4822:THR:HG23	2.35	0.65
1:C:2922:LYS:HA	1:C:2925:GLU:HG2	1.78	0.65
1:C:4727:LYS:HZ1	1:C:4728:HIS:CE1	2.13	0.65
1:G:252:VAL:HG23	1:G:257:ARG:HE	1.61	0.65
1:G:544:LEU:HD21	1:G:578:ILE:HG13	1.77	0.65
1:G:593:HIS:HB3	1:G:596:ASN:ND2	2.12	0.65
1:G:645:ARG:O	1:G:824:GLU:N	2.28	0.65
1:G:1856:ASP:H	1:G:1857:GLU:HB3	1.61	0.65
1:A:645:ARG:O	1:A:824:GLU:N	2.28	0.65
1:A:2430:ILE:HD13	1:A:2502:MET:HG2	1.78	0.65
1:E:758:ARG:NH1	1:E:763:PRO:HD3	2.11	0.65
1:E:1663:HIS:O	1:E:1666:THR:OG1	2.07	0.65
1:G:628:GLY:O	1:G:630:GLU:N	2.27	0.65
1:G:2770:LYS:HG3	1:G:2791:LEU:HD21	1.77	0.65
1:A:1708:ARG:HD2	1:A:1837:GLN:HE22	1.60	0.65
1:A:2646:ASN:HA	1:A:2699:ALA:HB1	1.79	0.65
1:C:593:HIS:HB3	1:C:596:ASN:ND2	2.12	0.65
1:A:593:HIS:HB3	1:A:596:ASN:ND2	2.12	0.65
1:A:2862:LEU:HD21	1:A:2929:PHE:HB2	1.78	0.65
1:A:4839:MET:SD	1:G:4822:THR:O	2.54	0.65
1:C:3934:TYR:HB2	1:C:3995:VAL:HG13	1.78	0.65
1:E:591:ASP:OD2	1:E:1585:LYS:HG3	1.95	0.65
1:E:1078:GLU:HA	1:E:1237:TRP:CZ3	2.31	0.65
1:G:2293:GLN:HA	1:G:2296:GLU:HG2	1.77	0.65
1:A:178:ARG:NH1	1:G:2460:LEU:HD12	2.12	0.65
1:A:628:GLY:O	1:A:630:GLU:N	2.27	0.65
1:A:3969:ILE:HG12	1:A:3980:LEU:HD11	1.79	0.65
2:B:48:PHE:HZ	2:B:63:VAL:HG11	1.59	0.65
1:E:18:ASP:HB3	1:E:69:LEU:HD12	1.78	0.65
1:G:3966:THR:O	1:G:3970:GLN:N	2.29	0.65
1:A:451:TYR:O	1:A:474:ARG:NH1	2.30	0.65
1:A:1078:GLU:HA	1:A:1237:TRP:CZ3	2.32	0.65
1:E:540:PHE:HA	1:E:543:ASN:HD22	1.61	0.65
1:G:669:ASP:OD2	1:G:790:ARG:HB2	1.96	0.65
1:G:2430:ILE:HD13	1:G:2502:MET:HG2	1.79	0.65
1:C:3969:ILE:HG12	1:C:3980:LEU:HD11	1.79	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1141:ARG:HH12	1:E:1169:LEU:HD11	1.59	0.65
1:E:2862:LEU:HD21	1:E:2929:PHE:HB2	1.79	0.65
1:G:4786:ASP:OD2	1:G:4789:PHE:N	2.29	0.65
1:A:4839:MET:CE	1:G:4826:ILE:HG13	2.27	0.65
1:E:467:LYS:O	1:E:470:SER:OG	2.12	0.65
1:G:540:PHE:HA	1:G:543:ASN:HD22	1.61	0.65
1:G:4107:GLU:HA	1:G:4110:PHE:HB3	1.78	0.65
1:E:669:ASP:OD2	1:E:790:ARG:HB2	1.97	0.65
1:A:669:ASP:OD2	1:A:790:ARG:HB2	1.97	0.64
1:A:4688:ILE:HD12	1:A:4737:ILE:HD12	1.79	0.64
1:C:865:PRO:HA	1:C:868:GLU:HB2	1.77	0.64
1:E:1544:PRO:HG2	1:E:1546:THR:HG23	1.78	0.64
1:E:4884:LEU:HA	1:E:4887:MET:HB3	1.80	0.64
1:G:451:TYR:O	1:G:474:ARG:NH1	2.30	0.64
1:E:263:GLU:O	1:E:281:ARG:N	2.28	0.64
1:E:593:HIS:HB3	1:E:596:ASN:ND2	2.12	0.64
1:A:106:ALA:HB1	1:A:147:TRP:HB3	1.79	0.64
1:A:3914:ASN:HB3	1:A:3917:ILE:HD12	1.79	0.64
1:C:4688:ILE:HD12	1:C:4737:ILE:HD12	1.79	0.64
1:E:451:TYR:O	1:E:474:ARG:NH1	2.31	0.64
1:E:628:GLY:O	1:E:630:GLU:N	2.27	0.64
1:G:4643:LEU:HA	1:G:4646:LEU:HB2	1.80	0.64
1:A:131:LEU:HB3	1:G:2460:LEU:HD21	1.80	0.64
1:A:1115:LEU:HD21	1:A:1123:VAL:HG21	1.80	0.64
1:A:2922:LYS:HA	1:A:2925:GLU:HG2	1.77	0.64
1:C:2646:ASN:HA	1:C:2699:ALA:HB1	1.78	0.64
1:E:3969:ILE:HG12	1:E:3980:LEU:HD11	1.80	0.64
1:G:18:ASP:HB3	1:G:69:LEU:HD12	1.79	0.64
1:G:1436:SER:HA	1:G:1515:VAL:O	1.98	0.64
1:A:674:PHE:HB3	2:B:40:ARG:HH12	1.62	0.64
1:A:4027:LEU:O	1:A:4031:LEU:HD13	1.98	0.64
1:C:168:ASP:OD1	1:C:201:ASN:ND2	2.28	0.64
1:C:669:ASP:OD2	1:C:790:ARG:HB2	1.97	0.64
1:C:1293:LEU:HD23	1:C:1584:ARG:HG2	1.80	0.64
1:E:638:ILE:HG22	1:E:639:ASN:H	1.62	0.64
1:E:4688:ILE:HD12	1:E:4737:ILE:HD12	1.79	0.64
1:G:3914:ASN:HB3	1:G:3917:ILE:HD12	1.78	0.64
1:A:116:MET:HG2	1:A:139:GLU:HG3	1.80	0.64
1:C:3914:ASN:HB3	1:C:3917:ILE:HD12	1.79	0.64
1:G:467:LYS:O	1:G:470:SER:OG	2.12	0.64
1:G:638:ILE:HG22	1:G:639:ASN:H	1.62	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:1561:VAL:HG13	1:G:1562:ILE:HG22	1.80	0.64
1:A:252:VAL:HG23	1:A:257:ARG:HE	1.61	0.64
1:C:2453:ILE:O	1:C:2456:ILE:HG22	1.98	0.64
1:E:4823:LEU:HA	1:E:4826:ILE:HD12	1.79	0.64
1:G:1078:GLU:HB3	1:G:1081:TYR:CD2	2.33	0.64
1:A:4892:ARG:HG3	1:C:4921:PHE:CE1	2.33	0.64
1:C:1115:LEU:HD21	1:C:1123:VAL:HG21	1.80	0.64
1:E:1078:GLU:HB3	1:E:1081:TYR:CD2	2.33	0.64
1:E:2453:ILE:O	1:E:2456:ILE:HG22	1.98	0.64
1:G:116:MET:HG2	1:G:139:GLU:HG3	1.80	0.64
1:G:758:ARG:NH1	1:G:763:PRO:HD3	2.13	0.64
1:G:4933:GLN:O	1:G:4937:ILE:HG12	1.98	0.64
1:A:674:PHE:CD1	2:B:40:ARG:NH1	2.64	0.64
1:C:451:TYR:O	1:C:474:ARG:NH1	2.31	0.64
1:C:1143:TRP:HB3	1:C:1164:LEU:HD11	1.80	0.64
1:A:2922:LYS:C	1:A:2925:GLU:HB2	2.18	0.64
1:A:4035:VAL:HG23	1:A:4036:VAL:H	1.63	0.64
1:C:116:MET:HG2	1:C:139:GLU:HG3	1.80	0.64
1:A:1078:GLU:HB3	1:A:1081:TYR:CD2	2.33	0.63
1:C:4210:VAL:O	1:C:4214:LYS:N	2.28	0.63
2:D:27:THR:HG22	2:D:100:ASP:HB3	1.80	0.63
1:E:1115:LEU:HD21	1:E:1123:VAL:HG21	1.80	0.63
1:E:1293:LEU:HD23	1:E:1584:ARG:HG2	1.80	0.63
1:E:2460:LEU:HD21	1:G:131:LEU:HB3	1.80	0.63
1:E:3702:VAL:HG21	1:E:3773:ARG:HB3	1.80	0.63
1:G:737:LEU:HD13	2:H:8:SER:HB3	1.80	0.63
1:G:2453:ILE:O	1:G:2456:ILE:HG22	1.98	0.63
1:G:2646:ASN:HA	1:G:2699:ALA:HB1	1.81	0.63
1:E:3889:GLN:NE2	1:E:3963:ASN:OD1	2.32	0.63
1:G:3783:ILE:O	1:G:3831:SER:OG	2.11	0.63
1:G:3813:GLN:OE1	1:G:3896:ASN:ND2	2.31	0.63
1:A:2453:ILE:O	1:A:2456:ILE:HG22	1.98	0.63
1:A:3878:ASP:O	1:A:3881:THR:OG1	2.14	0.63
1:A:4986:ALA:O	1:A:4989:MET:HG2	1.99	0.63
1:C:18:ASP:HB3	1:C:69:LEU:HD12	1.79	0.63
1:C:212:GLY:HA2	1:C:341:TYR:H	1.63	0.63
1:C:638:ILE:HG22	1:C:639:ASN:H	1.62	0.63
1:C:4035:VAL:HG23	1:C:4036:VAL:H	1.63	0.63
1:E:1143:TRP:HB3	1:E:1164:LEU:HD11	1.80	0.63
1:E:3892:CYS:HB3	1:E:3900:GLN:HE21	1.63	0.63
1:E:4124:ASN:OD1	1:E:4125:PHE:N	2.31	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4986:ALA:O	1:E:4989:MET:HG2	1.99	0.63
1:G:1104:TRP:HB3	1:G:1188:PHE:HB3	1.81	0.63
1:G:1143:TRP:HB3	1:G:1164:LEU:HD11	1.79	0.63
1:C:263:GLU:HB2	1:C:281:ARG:HB2	1.81	0.63
1:C:646:PRO:HD2	1:C:779:PRO:HG2	1.79	0.63
1:C:2770:LYS:HB3	1:C:2775:TRP:HB2	1.81	0.63
1:C:674:PHE:CD1	2:D:40:ARG:NH1	2.62	0.63
1:C:4027:LEU:O	1:C:4031:LEU:HD13	1.97	0.63
1:E:1104:TRP:HB3	1:E:1188:PHE:HB3	1.81	0.63
1:G:4715:TYR:CE2	1:G:4717:ASP:HB2	2.34	0.63
1:G:4983:HIS:C	1:G:4985:LEU:H	2.01	0.63
1:A:646:PRO:HD2	1:A:779:PRO:HG2	1.80	0.63
1:C:603:LEU:HD23	1:C:606:LEU:HD12	1.80	0.63
1:C:1561:VAL:HG13	1:C:1562:ILE:HG22	1.80	0.63
1:C:3963:ASN:O	1:C:3966:THR:OG1	2.14	0.63
1:C:4889:VAL:O	1:C:4893:ALA:N	2.22	0.63
1:E:603:LEU:HD23	1:E:606:LEU:HD12	1.81	0.63
1:E:2646:ASN:HA	1:E:2699:ALA:HB1	1.80	0.63
1:E:4656:LEU:O	1:E:4659:ILE:HG22	1.97	0.63
1:G:2862:LEU:HD21	1:G:2929:PHE:HB2	1.80	0.63
1:E:3914:ASN:HB3	1:E:3917:ILE:HD12	1.79	0.63
2:F:27:THR:HG22	2:F:100:ASP:HB3	1.80	0.63
1:G:1115:LEU:HD21	1:G:1123:VAL:HG21	1.80	0.63
1:G:4881:THR:HA	1:G:4884:LEU:HG	1.81	0.63
1:A:1561:VAL:HG13	1:A:1562:ILE:HG22	1.80	0.63
1:C:224:HIS:HB2	1:C:247:TYR:CD1	2.34	0.63
1:E:4035:VAL:HG23	1:E:4036:VAL:H	1.63	0.63
1:A:170:ILE:HG12	1:A:197:GLN:HB3	1.79	0.63
1:A:1729:SER:HB2	1:A:2163:ARG:NH1	2.14	0.63
1:A:4656:LEU:O	1:A:4659:ILE:HG22	1.98	0.63
1:C:4656:LEU:O	1:C:4659:ILE:HG22	1.98	0.63
1:E:212:GLY:HA2	1:E:341:TYR:H	1.64	0.63
1:E:263:GLU:HB2	1:E:281:ARG:HB2	1.81	0.63
1:G:170:ILE:HG12	1:G:197:GLN:HB3	1.81	0.63
1:G:603:LEU:HD23	1:G:606:LEU:HD12	1.81	0.63
1:G:674:PHE:CB	2:H:40:ARG:HH12	2.12	0.63
1:G:1729:SER:HB2	1:G:2163:ARG:NH1	2.14	0.63
1:A:3889:GLN:NE2	1:A:3963:ASN:OD1	2.32	0.62
1:A:4868:ASP:OD1	1:A:4869:GLU:N	2.32	0.62
1:A:4889:VAL:O	1:A:4893:ALA:N	2.22	0.62
1:A:4931:ILE:HD11	1:G:4940:PHE:CD1	2.33	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1078:GLU:HB3	1:C:1081:TYR:CD2	2.33	0.62
1:C:4124:ASN:OD1	1:C:4125:PHE:N	2.32	0.62
1:G:4124:ASN:OD1	1:G:4125:PHE:N	2.31	0.62
1:A:224:HIS:HB2	1:A:247:TYR:CD1	2.34	0.62
1:A:1835:GLU:CG	1:A:1932:PRO:HG2	2.27	0.62
1:C:1104:TRP:HB3	1:C:1188:PHE:HB3	1.81	0.62
1:E:2770:LYS:HB3	1:E:2775:TRP:HB2	1.81	0.62
1:E:3962:PHE:O	1:E:3966:THR:HG23	1.99	0.62
1:G:2071:ARG:NH2	1:G:3666:ASP:OD2	2.32	0.62
1:G:3926:LEU:O	1:G:3930:ILE:HG12	1.99	0.62
1:G:4956:THR:O	1:G:4965:SER:N	2.32	0.62
1:A:603:LEU:HD23	1:A:606:LEU:HD12	1.81	0.62
1:A:1143:TRP:HB3	1:A:1164:LEU:HD11	1.79	0.62
1:A:2770:LYS:HB3	1:A:2775:TRP:HB2	1.81	0.62
1:C:2460:LEU:HD21	1:E:131:LEU:HB3	1.80	0.62
1:E:1436:SER:HA	1:E:1515:VAL:O	1.99	0.62
1:E:1561:VAL:HG13	1:E:1562:ILE:HG22	1.80	0.62
1:E:4027:LEU:O	1:E:4031:LEU:HD13	1.98	0.62
1:E:4868:ASP:OD1	1:E:4869:GLU:N	2.32	0.62
1:G:1078:GLU:HA	1:G:1237:TRP:CZ3	2.32	0.62
1:A:669:ASP:HB3	1:A:788:LYS:HZ1	1.64	0.62
1:A:1104:TRP:HB3	1:A:1188:PHE:HB3	1.81	0.62
1:C:3702:VAL:HG21	1:C:3773:ARG:HB3	1.81	0.62
1:C:3962:PHE:O	1:C:3966:THR:HG23	1.99	0.62
1:C:4986:ALA:O	1:C:4989:MET:HG2	1.99	0.62
1:E:116:MET:HG2	1:E:139:GLU:HG3	1.80	0.62
1:G:224:HIS:HB2	1:G:247:TYR:CD1	2.34	0.62
1:G:3884:LEU:O	1:G:3887:PHE:HB3	1.98	0.62
1:G:3900:GLN:NE2	1:G:3967:GLU:O	2.31	0.62
1:G:4160:LEU:O	1:G:4164:LEU:N	2.32	0.62
1:G:4853:VAL:O	1:G:4857:ASN:ND2	2.31	0.62
1:A:263:GLU:HB2	1:A:281:ARG:HB2	1.82	0.62
1:G:1853:ILE:O	1:G:1854:PHE:HB2	1.99	0.62
1:G:2770:LYS:HB3	1:G:2775:TRP:HB2	1.82	0.62
1:C:2452:ARG:NH2	1:E:177:GLU:OE2	2.33	0.62
1:E:1729:SER:HB2	1:E:2163:ARG:NH1	2.14	0.62
2:B:27:THR:HG22	2:B:100:ASP:HB3	1.81	0.62
1:E:1087:ARG:HB3	1:E:1223:PHE:HD1	1.64	0.62
1:E:2071:ARG:NH2	1:E:3666:ASP:OD2	2.33	0.62
1:G:212:GLY:HA2	1:G:341:TYR:H	1.64	0.62
1:G:1087:ARG:HB3	1:G:1223:PHE:HD1	1.65	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:4901:ILE:HD13	1:G:4913:ARG:HH21	1.65	0.62
1:A:2071:ARG:NH2	1:A:3666:ASP:OD2	2.33	0.62
1:E:170:ILE:HG12	1:E:197:GLN:HB3	1.81	0.62
1:E:224:HIS:HB2	1:E:247:TYR:CD1	2.34	0.62
1:E:646:PRO:HD2	1:E:779:PRO:HG2	1.80	0.62
1:G:646:PRO:HD2	1:G:779:PRO:HG2	1.80	0.62
1:G:3892:CYS:HB3	1:G:3900:GLN:HE21	1.65	0.62
1:A:554:LEU:HD13	1:A:1596:GLU:HB3	1.82	0.62
1:A:1293:LEU:HD23	1:A:1584:ARG:HG2	1.81	0.62
1:A:3962:PHE:O	1:A:3966:THR:HG23	1.99	0.62
1:C:554:LEU:HD13	1:C:1596:GLU:HB3	1.82	0.62
1:C:645:ARG:O	1:C:824:GLU:N	2.28	0.62
1:E:554:LEU:HD13	1:E:1596:GLU:HB3	1.82	0.62
1:E:1827:ARG:HG3	1:E:1827:ARG:O	2.00	0.62
1:E:1853:ILE:O	1:E:1854:PHE:HB2	1.99	0.62
1:G:263:GLU:HB2	1:G:281:ARG:HB2	1.81	0.62
1:G:1293:LEU:HD23	1:G:1584:ARG:HG2	1.81	0.62
1:C:1158:ASN:HB3	1:C:1182:ILE:H	1.65	0.62
1:C:1853:ILE:O	1:C:1854:PHE:HB2	1.99	0.62
1:C:2460:LEU:CD1	1:E:178:ARG:NH1	2.62	0.62
1:A:212:GLY:HA2	1:A:341:TYR:H	1.63	0.61
1:A:702:TRP:CD1	2:B:34:LYS:NZ	2.58	0.61
1:A:892:THR:H	1:A:902:ARG:HA	1.65	0.61
1:G:478:PHE:CZ	1:G:483:MET:HB2	2.35	0.61
1:G:4688:ILE:HD12	1:G:4737:ILE:HD12	1.82	0.61
2:H:27:THR:HA	2:H:38:SER:HA	1.82	0.61
1:A:168:ASP:HB3	1:A:199:LEU:HD22	1.82	0.61
1:A:2930:LEU:HB3	1:A:2937:VAL:HG21	1.82	0.61
1:A:4581:LYS:HD2	1:C:4856:PHE:HZ	1.65	0.61
1:E:3965:LEU:HD23	1:E:3968:TYR:HD2	1.65	0.61
1:G:264:PRO:HG3	1:G:274:LEU:HD11	1.82	0.61
1:G:554:LEU:HD13	1:G:1596:GLU:HB3	1.82	0.61
1:A:3702:VAL:HG21	1:A:3773:ARG:HB3	1.81	0.61
1:C:674:PHE:HB3	2:D:40:ARG:HH12	1.64	0.61
1:C:1827:ARG:O	1:C:1827:ARG:HG3	2.01	0.61
1:C:4023:MET:O	1:C:4026:MET:HG2	2.00	0.61
1:E:748:LEU:HD11	1:E:753:PRO:HA	1.82	0.61
1:E:2460:LEU:CD1	1:G:178:ARG:NH1	2.63	0.61
1:A:264:PRO:HG3	1:A:274:LEU:HD11	1.82	0.61
1:C:1729:SER:HB2	1:C:2163:ARG:NH1	2.15	0.61
1:E:478:PHE:CZ	1:E:483:MET:HB2	2.36	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2930:LEU:HB3	1:E:2937:VAL:HG21	1.80	0.61
1:A:4124:ASN:OD1	1:A:4125:PHE:N	2.32	0.61
1:A:4856:PHE:HZ	1:G:4581:LYS:HD2	1.64	0.61
1:C:2237:CYS:HB2	1:C:2275:VAL:HG22	1.83	0.61
1:C:3892:CYS:HB3	1:C:3900:GLN:HE21	1.64	0.61
1:E:264:PRO:HG3	1:E:274:LEU:HD11	1.83	0.61
1:E:2237:CYS:HB2	1:E:2275:VAL:HG22	1.82	0.61
1:G:1158:ASN:HB3	1:G:1182:ILE:H	1.65	0.61
1:A:3892:CYS:HB3	1:A:3900:GLN:HE21	1.64	0.61
1:C:467:LYS:O	1:C:470:SER:OG	2.13	0.61
1:C:1835:GLU:CG	1:C:1932:PRO:HG2	2.26	0.61
1:C:2071:ARG:NH2	1:C:3666:ASP:OD2	2.33	0.61
1:G:1827:ARG:HG3	1:G:1827:ARG:O	2.01	0.61
1:G:4555:LEU:HD22	1:G:4660:GLY:HA3	1.82	0.61
1:G:4847:VAL:HG21	1:G:4928:LEU:HD11	1.83	0.61
1:G:4868:ASP:OD1	1:G:4869:GLU:N	2.32	0.61
1:A:1815:LEU:HD11	1:A:1845:VAL:HG21	1.83	0.61
1:A:3965:LEU:HD23	1:A:3968:TYR:HD2	1.65	0.61
1:A:4023:MET:O	1:A:4026:MET:HG2	2.00	0.61
1:C:478:PHE:CZ	1:C:483:MET:HB2	2.35	0.61
1:C:892:THR:H	1:C:902:ARG:HA	1.65	0.61
1:E:1835:GLU:CG	1:E:1932:PRO:HG2	2.26	0.61
1:E:4063:ASP:HA	1:E:4170:ILE:HG12	1.83	0.61
1:G:214:VAL:HA	1:G:341:TYR:CE1	2.36	0.61
1:G:4190:ILE:HD11	1:G:5026:ASP:HB2	1.81	0.61
1:A:18:ASP:HB3	1:A:69:LEU:HD12	1.81	0.61
1:A:178:ARG:NH1	1:G:2460:LEU:CD1	2.64	0.61
1:A:1827:ARG:HG3	1:A:1827:ARG:O	2.01	0.61
1:C:264:PRO:HG3	1:C:274:LEU:HD11	1.83	0.61
1:C:3889:GLN:NE2	1:C:3963:ASN:OD1	2.32	0.61
1:C:3965:LEU:HD23	1:C:3968:TYR:HD2	1.65	0.61
1:C:4172:GLU:HG2	1:C:4175:ARG:NH1	2.15	0.61
1:E:892:THR:H	1:E:902:ARG:HA	1.65	0.61
1:E:1825:HIS:ND1	1:E:1825:HIS:O	2.34	0.61
1:G:748:LEU:HD11	1:G:753:PRO:HA	1.83	0.61
1:G:892:THR:H	1:G:902:ARG:HA	1.65	0.61
1:A:214:VAL:HA	1:A:341:TYR:CE1	2.36	0.61
1:A:4031:LEU:HD11	1:A:4044:MET:SD	2.41	0.61
1:G:1835:GLU:CG	1:G:1932:PRO:HG2	2.26	0.61
1:G:4642:ALA:O	1:G:4646:LEU:N	2.32	0.61
2:H:48:PHE:HZ	2:H:63:VAL:HG11	1.64	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:478:PHE:CZ	1:A:483:MET:HB2	2.36	0.61
1:A:1856:ASP:H	1:A:1858:ASP:H	1.49	0.61
1:A:2460:LEU:HD21	1:C:131:LEU:HB3	1.82	0.61
1:A:4063:ASP:HA	1:A:4170:ILE:HG12	1.83	0.61
1:C:840:VAL:HG12	1:C:1199:VAL:HG13	1.83	0.61
1:C:1815:LEU:HD11	1:C:1845:VAL:HG21	1.83	0.61
1:E:3893:GLU:HA	1:E:3967:GLU:OE2	2.01	0.61
1:G:1815:LEU:HD11	1:G:1845:VAL:HG21	1.82	0.61
1:C:1825:HIS:ND1	1:C:1825:HIS:O	2.33	0.60
1:C:1856:ASP:H	1:C:1858:ASP:H	1.49	0.60
1:C:4063:ASP:HA	1:C:4170:ILE:HG12	1.83	0.60
1:E:1158:ASN:HB3	1:E:1182:ILE:H	1.65	0.60
1:E:4023:MET:O	1:E:4026:MET:HG2	2.00	0.60
1:G:887:ILE:HG21	1:G:962:SER:HB2	1.83	0.60
1:C:170:ILE:HG12	1:C:197:GLN:HB3	1.81	0.60
1:C:2930:LEU:HB3	1:C:2937:VAL:HG21	1.81	0.60
1:E:533:ASN:OD1	1:E:534:ARG:N	2.34	0.60
1:E:2452:ARG:NH2	1:G:177:GLU:OE2	2.34	0.60
1:G:533:ASN:OD1	1:G:534:ARG:N	2.34	0.60
1:G:3968:TYR:HB2	1:G:3969:ILE:HD12	1.83	0.60
1:A:1853:ILE:O	1:A:1854:PHE:HB2	1.99	0.60
1:C:4031:LEU:HD11	1:C:4044:MET:SD	2.41	0.60
1:G:1825:HIS:ND1	1:G:1825:HIS:O	2.34	0.60
1:G:1856:ASP:H	1:G:1858:ASP:H	1.49	0.60
1:A:1854:PHE:HB3	1:A:1855:GLY:HA2	1.84	0.60
1:A:2237:CYS:HB2	1:A:2275:VAL:HG22	1.82	0.60
1:C:748:LEU:HD11	1:C:753:PRO:HA	1.82	0.60
1:E:214:VAL:HA	1:E:341:TYR:CE1	2.36	0.60
1:E:299:LEU:HB2	1:E:378:LEU:HG	1.84	0.60
1:E:3771:HIS:HD2	1:E:3812:VAL:HG22	1.65	0.60
1:G:2204:HIS:HB3	1:G:2239:PHE:CE2	2.37	0.60
1:G:4030:LEU:HD23	1:G:4044:MET:HE3	1.83	0.60
1:A:1205:GLY:HA2	1:A:1225:PRO:HB2	1.83	0.60
1:A:3771:HIS:HD2	1:A:3812:VAL:HG22	1.64	0.60
1:A:4715:TYR:CE2	1:A:4717:ASP:HB2	2.36	0.60
1:C:1854:PHE:HB3	1:C:1855:GLY:HA2	1.83	0.60
1:E:37:LEU:HD11	1:E:47:CYS:SG	2.42	0.60
1:E:5006:GLN:HA	1:E:5009:TYR:CE2	2.37	0.60
1:G:1854:PHE:HB3	1:G:1855:GLY:HA2	1.84	0.60
1:G:4836:GLN:O	1:G:4839:MET:HG2	2.01	0.60
1:A:748:LEU:HD11	1:A:753:PRO:HA	1.82	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:748:LEU:HD13	1:A:755:ILE:HG13	1.84	0.60
1:A:1825:HIS:ND1	1:A:1825:HIS:O	2.34	0.60
1:A:2204:HIS:HB3	1:A:2239:PHE:CE2	2.37	0.60
1:C:168:ASP:HB3	1:C:199:LEU:HD22	1.83	0.60
1:C:299:LEU:HB2	1:C:378:LEU:HG	1.83	0.60
1:E:168:ASP:HB3	1:E:199:LEU:HD22	1.83	0.60
1:E:674:PHE:CD1	2:F:40:ARG:NH1	2.65	0.60
1:E:840:VAL:HG12	1:E:1199:VAL:HG13	1.83	0.60
1:E:2204:HIS:HB3	1:E:2239:PHE:CE2	2.37	0.60
1:E:2460:LEU:HD21	1:G:131:LEU:CB	2.31	0.60
1:E:4031:LEU:HD11	1:E:4044:MET:SD	2.41	0.60
1:G:4898:GLY:HA2	1:G:4901:ILE:HG22	1.84	0.60
1:A:299:LEU:HB2	1:A:378:LEU:HG	1.83	0.60
1:C:533:ASN:OD1	1:C:534:ARG:N	2.34	0.60
1:C:4715:TYR:CE2	1:C:4717:ASP:HB2	2.36	0.60
1:C:4868:ASP:OD1	1:C:4869:GLU:N	2.32	0.60
1:E:812:HIS:HA	1:E:821:LEU:HD13	1.84	0.60
1:E:2924:GLN:O	1:E:2928:LYS:HB2	2.02	0.60
1:E:4715:TYR:CE2	1:E:4717:ASP:HB2	2.36	0.60
1:C:748:LEU:HD13	1:C:755:ILE:HG13	1.84	0.60
1:C:2204:HIS:HB3	1:C:2239:PHE:CE2	2.37	0.60
1:G:669:ASP:HB3	1:G:788:LYS:NZ	2.16	0.60
1:A:467:LYS:O	1:A:470:SER:OG	2.13	0.60
1:A:533:ASN:OD1	1:A:534:ARG:N	2.34	0.60
1:A:1130:GLN:HE21	1:A:1132:TRP:HE1	1.50	0.60
1:A:2924:GLN:HB3	1:A:2928:LYS:HE2	1.83	0.60
1:A:3938:SER:HB2	1:A:4002:LYS:NZ	2.17	0.60
1:C:214:VAL:HA	1:C:341:TYR:CE1	2.36	0.60
1:C:5006:GLN:HA	1:C:5009:TYR:CE2	2.37	0.60
1:E:215:THR:HG22	1:E:273:HIS:HA	1.84	0.60
1:E:1815:LEU:HD11	1:E:1845:VAL:HG21	1.83	0.60
1:E:1856:ASP:H	1:E:1858:ASP:H	1.50	0.60
1:E:4689:THR:OG1	1:E:4690:GLU:OE1	2.20	0.60
1:G:37:LEU:HD11	1:G:47:CYS:SG	2.42	0.60
1:G:4948:GLU:O	1:G:4952:GLU:N	2.33	0.60
1:A:669:ASP:HB3	1:A:788:LYS:NZ	2.17	0.59
1:A:887:ILE:HG21	1:A:962:SER:HB2	1.84	0.59
1:A:1158:ASN:HB3	1:A:1182:ILE:H	1.65	0.59
1:C:37:LEU:HD11	1:C:47:CYS:SG	2.42	0.59
1:C:4689:THR:OG1	1:C:4690:GLU:OE1	2.20	0.59
1:C:4806:ASN:O	1:C:4809:PHE:HB3	2.02	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:669:ASP:HB3	1:E:788:LYS:NZ	2.17	0.59
1:A:1514:LEU:HD12	1:A:1514:LEU:N	2.17	0.59
1:C:3771:HIS:HD2	1:C:3812:VAL:HG22	1.65	0.59
1:E:700:GLU:HG3	1:E:707:VAL:HB	1.84	0.59
1:E:1854:PHE:HB3	1:E:1855:GLY:HA2	1.84	0.59
1:E:3959:LYS:HE3	1:E:4018:ASP:HB3	1.84	0.59
1:E:4192:ARG:NH1	1:E:5028:PHE:HB3	2.14	0.59
1:G:2237:CYS:HB2	1:G:2275:VAL:HG22	1.83	0.59
1:A:840:VAL:HG12	1:A:1199:VAL:HG13	1.83	0.59
1:A:1729:SER:O	1:A:1732:SER:OG	2.19	0.59
1:A:3959:LYS:HE3	1:A:4018:ASP:HB3	1.85	0.59
1:A:4896:GLY:HA3	1:G:4892:ARG:NH1	2.17	0.59
1:A:5009:TYR:O	1:A:5013:MET:HG2	2.03	0.59
1:C:1087:ARG:HB3	1:C:1223:PHE:HD1	1.65	0.59
1:E:276:TRP:HA	1:E:316:PHE:HB2	1.85	0.59
1:E:396:GLU:OE2	1:E:474:ARG:HG2	2.03	0.59
1:G:168:ASP:HB3	1:G:199:LEU:HD22	1.83	0.59
1:G:674:PHE:HD1	2:H:40:ARG:HH12	1.47	0.59
1:A:37:LEU:HD11	1:A:47:CYS:SG	2.41	0.59
1:A:80:GLU:OE2	1:G:3935:TRP:O	2.20	0.59
1:A:210:GLU:HB2	1:A:213:TYR:HD2	1.67	0.59
1:A:638:ILE:HG22	1:A:639:ASN:H	1.67	0.59
1:A:2460:LEU:CD1	1:C:178:ARG:NH1	2.65	0.59
1:A:3986:TRP:HZ2	1:A:4040:ILE:HG13	1.66	0.59
1:A:5006:GLN:HA	1:A:5009:TYR:CE2	2.37	0.59
1:C:812:HIS:HA	1:C:821:LEU:HD13	1.84	0.59
1:E:3938:SER:HB2	1:E:4002:LYS:NZ	2.17	0.59
1:E:4141:PHE:HE1	1:E:4178:LEU:HA	1.67	0.59
1:G:215:THR:HG22	1:G:273:HIS:HA	1.84	0.59
1:G:669:ASP:HB3	1:G:788:LYS:HZ1	1.68	0.59
1:G:700:GLU:HG3	1:G:707:VAL:HB	1.85	0.59
1:G:3893:GLU:HA	1:G:3967:GLU:OE2	2.03	0.59
2:H:24:VAL:HG12	2:H:103:LEU:HA	1.85	0.59
1:C:210:GLU:HB2	1:C:213:TYR:HD2	1.67	0.59
1:C:669:ASP:HB3	1:C:788:LYS:NZ	2.17	0.59
1:E:717:ASP:OD2	2:F:7:ILE:HA	2.02	0.59
1:E:4940:PHE:CE1	1:G:4931:ILE:HD11	2.38	0.59
1:G:35:LEU:HD11	1:G:49:LEU:HD13	1.84	0.59
1:G:840:VAL:HG12	1:G:1199:VAL:HG13	1.83	0.59
1:G:1806:ALA:O	1:G:1810:LYS:HG2	2.02	0.59
1:G:4573:ILE:O	1:G:4577:LEU:N	2.36	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:4979:THR:O	1:G:4984:ASN:N	2.30	0.59
1:C:396:GLU:OE2	1:C:474:ARG:HG2	2.03	0.59
1:C:3670:GLU:O	1:C:3674:ILE:HG12	2.03	0.59
1:E:2768:PHE:HA	1:E:2771:ILE:HD12	1.84	0.59
1:G:1738:LEU:HB2	1:G:2146:PRO:HD3	1.85	0.59
1:G:5009:TYR:O	1:G:5013:MET:HG2	2.01	0.59
1:A:3893:GLU:HA	1:A:3967:GLU:OE2	2.01	0.59
1:G:4919:THR:O	1:G:4923:PHE:HB2	2.01	0.59
1:A:3670:GLU:O	1:A:3674:ILE:HG12	2.03	0.59
1:A:3965:LEU:HA	1:A:3968:TYR:CD2	2.38	0.59
1:A:4141:PHE:HE1	1:A:4178:LEU:HA	1.67	0.59
1:A:4806:ASN:O	1:A:4809:PHE:HB3	2.03	0.59
1:A:4901:ILE:HD13	1:A:4913:ARG:HH21	1.68	0.59
1:C:1130:GLN:HE21	1:C:1132:TRP:HE1	1.51	0.59
1:C:1738:LEU:HB2	1:C:2146:PRO:HD3	1.85	0.59
1:C:3893:GLU:HA	1:C:3967:GLU:OE2	2.01	0.59
1:C:3938:SER:HB2	1:C:4002:LYS:NZ	2.17	0.59
1:C:3986:TRP:HZ2	1:C:4040:ILE:HG13	1.67	0.59
1:E:35:LEU:HD11	1:E:49:LEU:HD13	1.85	0.59
1:C:700:GLU:HG3	1:C:707:VAL:HB	1.85	0.59
1:C:1105:ALA:HB1	1:C:1109:LEU:HD21	1.85	0.59
1:C:3839:CYS:HB2	1:C:3881:THR:HG22	1.85	0.59
1:C:3965:LEU:HA	1:C:3968:TYR:CD2	2.38	0.59
1:E:3965:LEU:HA	1:E:3968:TYR:CD2	2.38	0.59
1:E:3986:TRP:HZ2	1:E:4040:ILE:HG13	1.67	0.59
1:G:299:LEU:HB2	1:G:378:LEU:HG	1.83	0.59
1:G:2924:GLN:O	1:G:2928:LYS:HB2	2.03	0.59
1:G:4035:VAL:HG23	1:G:4036:VAL:H	1.67	0.59
1:G:4689:THR:OG1	1:G:4690:GLU:OE1	2.20	0.59
1:A:195:PHE:HE2	1:G:2358:ILE:HG21	1.67	0.59
1:A:696:PRO:HD2	1:A:829:TYR:HE2	1.67	0.59
1:A:1662:PHE:O	1:A:1666:THR:HG23	2.03	0.59
1:A:2768:PHE:HA	1:A:2771:ILE:HD12	1.85	0.59
1:C:4933:GLN:O	1:C:4937:ILE:HG12	2.03	0.59
1:G:2288:LEU:O	1:G:3849:ARG:HD3	2.02	0.59
1:A:544:LEU:HD11	1:A:578:ILE:HB	1.85	0.58
1:A:2288:LEU:O	1:A:3849:ARG:HD3	2.03	0.58
1:A:3781:GLN:O	1:A:3784:SER:OG	2.19	0.58
1:C:215:THR:HG22	1:C:273:HIS:HA	1.85	0.58
1:C:696:PRO:HD2	1:C:829:TYR:HE2	1.67	0.58
1:C:2460:LEU:HD21	1:E:131:LEU:CB	2.33	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:4141:PHE:HE1	1:C:4178:LEU:HA	1.67	0.58
1:E:248:GLU:HG3	1:E:372:LEU:HD11	1.85	0.58
1:E:1662:PHE:O	1:E:1666:THR:HG23	2.03	0.58
1:E:3839:CYS:HB2	1:E:3881:THR:HG22	1.85	0.58
1:G:248:GLU:HG3	1:G:372:LEU:HD11	1.85	0.58
1:G:396:GLU:OE2	1:G:474:ARG:HG2	2.03	0.58
1:G:1662:PHE:O	1:G:1666:THR:HG23	2.03	0.58
1:G:4039:MET:HA	1:G:4042:ARG:HE	1.67	0.58
1:A:131:LEU:CB	1:G:2460:LEU:HD21	2.32	0.58
1:A:396:GLU:OE2	1:A:474:ARG:HG2	2.03	0.58
1:A:633:LEU:HD21	1:A:1639:LEU:HD13	1.83	0.58
1:A:812:HIS:HA	1:A:821:LEU:HD13	1.84	0.58
1:A:4190:ILE:HD11	1:A:5026:ASP:HB2	1.85	0.58
1:A:4689:THR:OG1	1:A:4690:GLU:OE1	2.20	0.58
1:C:633:LEU:HD21	1:C:1639:LEU:HD13	1.84	0.58
1:C:1205:GLY:HA2	1:C:1225:PRO:HB2	1.85	0.58
1:C:3959:LYS:HE3	1:C:4018:ASP:HB3	1.85	0.58
1:E:618:GLN:OE1	1:E:1675:ALA:HB2	2.03	0.58
1:G:702:TRP:HE1	2:H:34:LYS:HZ1	1.50	0.58
1:G:812:HIS:HA	1:G:821:LEU:HD13	1.84	0.58
1:G:2294:ASP:O	1:G:2298:VAL:HG23	2.03	0.58
1:G:4007:SER:O	1:G:4010:ILE:HG12	2.02	0.58
1:A:4192:ARG:NH1	1:A:5028:PHE:HB3	2.14	0.58
1:C:887:ILE:HG21	1:C:962:SER:HB2	1.84	0.58
1:C:2288:LEU:O	1:C:3849:ARG:HD3	2.02	0.58
1:C:3781:GLN:O	1:C:3784:SER:OG	2.19	0.58
1:E:3963:ASN:O	1:E:3966:THR:OG1	2.14	0.58
1:G:633:LEU:HD21	1:G:1639:LEU:HD13	1.84	0.58
1:G:1846:SER:O	1:G:1850:VAL:HG23	2.03	0.58
1:A:1806:ALA:O	1:A:1810:LYS:HG2	2.03	0.58
1:A:2452:ARG:NH2	1:C:177:GLU:OE2	2.36	0.58
1:C:1662:PHE:O	1:C:1666:THR:HG23	2.03	0.58
1:C:3926:LEU:O	1:C:3930:ILE:HG12	2.04	0.58
1:C:4581:LYS:HD2	1:E:4856:PHE:HZ	1.66	0.58
1:C:5009:TYR:O	1:C:5013:MET:HG2	2.03	0.58
1:E:633:LEU:HD21	1:E:1639:LEU:HD13	1.84	0.58
1:E:1105:ALA:HB1	1:E:1109:LEU:HD21	1.86	0.58
1:E:1130:GLN:HE21	1:E:1132:TRP:HE1	1.51	0.58
1:G:3889:GLN:NE2	1:G:3963:ASN:OD1	2.31	0.58
1:G:4889:VAL:O	1:G:4893:ALA:N	2.30	0.58
1:A:215:THR:HG22	1:A:273:HIS:HA	1.85	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:618:GLN:OE1	1:A:1675:ALA:HB2	2.03	0.58
1:A:2294:ASP:O	1:A:2298:VAL:HG23	2.04	0.58
1:A:2460:LEU:HD21	1:C:131:LEU:CB	2.33	0.58
1:E:748:LEU:HD13	1:E:755:ILE:HG13	1.84	0.58
1:E:1738:LEU:HB2	1:E:2146:PRO:HD3	1.84	0.58
1:E:2288:LEU:O	1:E:3849:ARG:HD3	2.02	0.58
1:G:544:LEU:HD11	1:G:578:ILE:HB	1.85	0.58
1:G:737:LEU:HD11	2:H:7:ILE:HG22	1.85	0.58
1:A:248:GLU:HG3	1:A:372:LEU:HD11	1.86	0.58
1:A:276:TRP:HA	1:A:316:PHE:HB2	1.85	0.58
1:A:1735:ILE:HD12	1:A:1771:LEU:HD12	1.86	0.58
1:A:1738:LEU:HB2	1:A:2146:PRO:HD3	1.85	0.58
1:A:3839:CYS:HB2	1:A:3881:THR:HG22	1.85	0.58
1:A:4770:SER:O	1:A:4772:ASP:N	2.33	0.58
1:C:544:LEU:HD11	1:C:578:ILE:HB	1.85	0.58
1:C:618:GLN:OE1	1:C:1675:ALA:HB2	2.03	0.58
1:E:1806:ALA:O	1:E:1810:LYS:HG2	2.03	0.58
1:E:3670:GLU:O	1:E:3674:ILE:HG12	2.03	0.58
1:G:276:TRP:HA	1:G:316:PHE:HB2	1.84	0.58
1:G:696:PRO:HD2	1:G:829:TYR:HE2	1.67	0.58
1:G:1735:ILE:HD12	1:G:1771:LEU:HD12	1.85	0.58
1:G:2344:GLU:OE2	1:G:2508:ARG:NH2	2.36	0.58
1:G:4910:GLU:HA	1:G:4913:ARG:HG2	1.86	0.58
1:A:674:PHE:CB	2:B:40:ARG:HH12	2.17	0.58
1:C:276:TRP:HA	1:C:316:PHE:HB2	1.85	0.58
1:C:3984:ARG:NH1	1:E:160:GLY:O	2.36	0.58
1:E:4190:ILE:HD11	1:E:5026:ASP:HB2	1.85	0.58
1:A:700:GLU:HG3	1:A:707:VAL:HB	1.85	0.58
1:A:1943:LEU:HA	1:A:1946:PHE:HD2	1.69	0.58
1:C:1439:VAL:HG22	1:C:1562:ILE:HG13	1.86	0.58
1:C:1806:ALA:O	1:C:1810:LYS:HG2	2.02	0.58
1:E:561:LEU:HD21	1:E:598:LYS:HB3	1.86	0.58
1:E:674:PHE:CB	2:F:40:ARG:HH12	2.16	0.58
1:E:1846:SER:O	1:E:1850:VAL:HG23	2.03	0.58
1:G:402:ARG:NH1	1:G:405:HIS:HD2	2.02	0.58
1:G:618:GLN:OE1	1:G:1675:ALA:HB2	2.03	0.58
1:G:623:GLU:OE1	2:H:88:PRO:HA	2.03	0.58
1:G:1130:GLN:HE21	1:G:1132:TRP:HE1	1.51	0.58
1:G:1783:VAL:CG1	2:H:55:VAL:HG12	2.34	0.58
1:G:2125:HIS:NE2	1:G:2129:ASP:OD2	2.37	0.58
1:G:2768:PHE:HA	1:G:2771:ILE:HD12	1.84	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:35:LEU:HD11	1:A:49:LEU:HD13	1.84	0.58
1:A:302:VAL:HG21	1:A:306:LYS:HD3	1.86	0.58
1:A:1256:GLU:HG2	1:A:1278:GLY:O	2.04	0.58
1:C:35:LEU:HD11	1:C:49:LEU:HD13	1.85	0.58
1:C:103:TYR:O	1:C:160:GLY:N	2.33	0.58
1:C:4901:ILE:HD13	1:C:4913:ARG:HH21	1.69	0.58
1:E:402:ARG:NH1	1:E:405:HIS:HD2	2.02	0.58
1:G:3931:SER:O	1:G:3934:TYR:HB3	2.04	0.58
1:A:1087:ARG:HB3	1:A:1223:PHE:HD1	1.64	0.58
1:G:4839:MET:O	1:G:4843:LEU:N	2.29	0.58
1:C:2294:ASP:O	1:C:2298:VAL:HG23	2.04	0.57
1:E:4901:ILE:HD13	1:E:4913:ARG:HH21	1.69	0.57
1:E:5009:TYR:O	1:E:5013:MET:HG2	2.03	0.57
1:G:2336:ARG:NH1	1:G:2428:ALA:HA	2.19	0.57
1:A:607:CYS:O	1:A:618:GLN:NE2	2.37	0.57
1:A:1439:VAL:HG22	1:A:1562:ILE:HG13	1.86	0.57
1:A:3963:ASN:O	1:A:3966:THR:OG1	2.14	0.57
1:C:1256:GLU:HG2	1:C:1278:GLY:O	2.04	0.57
1:C:1846:SER:O	1:C:1850:VAL:HG23	2.03	0.57
1:E:696:PRO:HD2	1:E:829:TYR:HE2	1.68	0.57
1:E:2294:ASP:O	1:E:2298:VAL:HG23	2.04	0.57
1:E:3781:GLN:O	1:E:3784:SER:OG	2.19	0.57
1:A:103:TYR:O	1:A:160:GLY:N	2.32	0.57
1:A:1846:SER:O	1:A:1850:VAL:HG23	2.03	0.57
1:A:2344:GLU:OE2	1:A:2508:ARG:NH2	2.37	0.57
1:A:3926:LEU:O	1:A:3930:ILE:HG12	2.04	0.57
1:A:4904:PRO:HA	1:A:4905:ALA:C	2.24	0.57
1:C:248:GLU:HG3	1:C:372:LEU:HD11	1.85	0.57
1:C:2344:GLU:OE2	1:C:2508:ARG:NH2	2.38	0.57
1:E:544:LEU:HD11	1:E:578:ILE:HB	1.85	0.57
1:E:607:CYS:HB3	1:E:618:GLN:HE21	1.69	0.57
1:G:1131:ARG:NH1	1:G:1137:GLU:OE1	2.38	0.57
1:G:3897:ASN:HA	1:G:3900:GLN:HB2	1.86	0.57
1:A:4898:GLY:H	1:G:4892:ARG:HH12	1.52	0.57
1:A:4933:GLN:O	1:A:4937:ILE:HG12	2.05	0.57
1:A:4974:GLY:O	1:A:4977:THR:OG1	2.15	0.57
1:C:1735:ILE:HD12	1:C:1771:LEU:HD12	1.86	0.57
1:C:4190:ILE:HD11	1:C:5026:ASP:HB2	1.85	0.57
1:C:4836:GLN:O	1:C:4839:MET:HG2	2.04	0.57
1:E:4555:LEU:HD11	1:E:4656:LEU:HG	1.87	0.57
1:E:4821:LYS:HD3	1:E:4947:GLN:NE2	2.20	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:1205:GLY:HA2	1:G:1225:PRO:HB2	1.87	0.57
1:G:2870:GLU:OE2	1:G:2939:ARG:NH2	2.38	0.57
1:A:1783:VAL:CG1	2:B:55:VAL:HG12	2.34	0.57
1:C:4555:LEU:HD11	1:C:4656:LEU:HG	1.86	0.57
1:G:748:LEU:HD13	1:G:755:ILE:HG13	1.85	0.57
1:G:4893:ALA:HB1	1:G:4896:GLY:HA2	1.86	0.57
1:C:402:ARG:NH1	1:C:405:HIS:HD2	2.02	0.57
1:C:4822:THR:O	1:C:4825:THR:HB	2.04	0.57
1:G:302:VAL:HG21	1:G:306:LYS:HD3	1.86	0.57
1:G:565:TYR:O	1:G:569:ILE:HG12	2.05	0.57
1:G:1105:ALA:HB1	1:G:1109:LEU:HD21	1.85	0.57
1:G:4010:ILE:HA	1:G:4013:LEU:HB3	1.85	0.57
1:A:607:CYS:HB3	1:A:618:GLN:HE21	1.69	0.57
1:A:717:ASP:OD2	2:B:7:ILE:HA	2.04	0.57
1:A:880:GLU:HB3	1:A:967:PRO:HG2	1.86	0.57
1:A:1457:TYR:CG	1:A:1458:HIS:N	2.73	0.57
1:A:4893:ALA:HB1	1:A:4896:GLY:HA2	1.87	0.57
1:C:561:LEU:HD21	1:C:598:LYS:HB3	1.86	0.57
1:C:3878:ASP:O	1:C:3881:THR:OG1	2.14	0.57
1:C:4904:PRO:HA	1:C:4905:ALA:C	2.24	0.57
1:E:3878:ASP:O	1:E:3881:THR:OG1	2.14	0.57
1:E:3926:LEU:O	1:E:3930:ILE:HG12	2.03	0.57
1:E:4888:TYR:OH	1:G:4898:GLY:CA	2.53	0.57
1:G:3761:GLN:HA	1:G:3764:LEU:HD12	1.87	0.57
1:A:402:ARG:NH1	1:A:405:HIS:HD2	2.02	0.57
1:C:1457:TYR:CG	1:C:1458:HIS:N	2.73	0.57
1:C:2768:PHE:HA	1:C:2771:ILE:HD12	1.84	0.57
1:C:4793:GLY:HA2	1:C:4796:MET:HG2	1.86	0.57
1:C:4910:GLU:OE2	1:C:4914:VAL:HG21	2.04	0.57
1:E:1131:ARG:NH1	1:E:1137:GLU:OE1	2.38	0.57
1:G:561:LEU:HD21	1:G:598:LYS:HB3	1.87	0.57
1:G:1617:THR:O	1:G:1618:ARG:NH2	2.38	0.57
1:A:229:GLU:HA	1:A:249:GLY:HA2	1.87	0.57
1:A:4793:GLY:HA2	1:A:4796:MET:HG2	1.87	0.57
1:E:103:TYR:OH	1:E:167:ASP:OD2	2.23	0.57
1:E:1439:VAL:HG22	1:E:1562:ILE:HG13	1.86	0.57
1:E:4770:SER:O	1:E:4772:ASP:N	2.33	0.57
1:E:4910:GLU:OE2	1:E:4914:VAL:HG21	2.04	0.57
1:E:4933:GLN:O	1:E:4937:ILE:HG12	2.03	0.57
1:G:210:GLU:HB2	1:G:213:TYR:HD2	1.68	0.57
1:G:1439:VAL:HG22	1:G:1562:ILE:HG13	1.86	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:4154:VAL:HG22	1:G:4157:ASP:OD2	2.04	0.57
1:A:1695:LEU:HA	1:A:1698:LEU:HD13	1.87	0.57
1:C:921:ASN:O	1:C:925:SER:N	2.26	0.57
1:C:4974:GLY:O	1:C:4977:THR:OG1	2.16	0.57
1:E:643:SER:HA	1:E:782:SER:HA	1.87	0.57
1:E:4836:GLN:O	1:E:4839:MET:HG2	2.05	0.57
1:G:1256:GLU:HG2	1:G:1278:GLY:O	2.04	0.57
1:G:4192:ARG:NH1	1:G:5028:PHE:HB3	2.13	0.57
1:G:4924:VAL:HG13	1:G:4928:LEU:HD12	1.87	0.57
1:A:1131:ARG:NH1	1:A:1137:GLU:OE1	2.38	0.56
1:A:1731:LEU:HA	1:A:1772:ARG:HD3	1.87	0.56
1:A:2098:VAL:O	1:A:2102:VAL:HG23	2.05	0.56
1:A:4822:THR:O	1:A:4825:THR:HB	2.05	0.56
1:C:103:TYR:OH	1:C:167:ASP:OD2	2.23	0.56
1:C:476:SER:O	1:C:480:GLU:HG3	2.05	0.56
1:E:533:ASN:HB3	1:E:536:ASN:HD22	1.70	0.56
1:E:2344:GLU:OE2	1:E:2508:ARG:NH2	2.38	0.56
1:G:1719:HIS:CD2	1:G:1802:ILE:HG23	2.40	0.56
1:A:216:GLY:HA3	1:A:264:PRO:HD3	1.86	0.56
1:A:1439:VAL:O	1:A:1513:ASP:N	2.31	0.56
1:C:302:VAL:HG21	1:C:306:LYS:HD3	1.87	0.56
1:C:3935:TRP:HB2	1:E:76:ARG:HG3	1.87	0.56
1:C:4021:LYS:O	1:C:4025:VAL:HG23	2.06	0.56
1:E:210:GLU:HB2	1:E:213:TYR:HD2	1.67	0.56
1:E:216:GLY:HA3	1:E:264:PRO:HD3	1.87	0.56
1:E:607:CYS:O	1:E:618:GLN:NE2	2.37	0.56
1:G:229:GLU:HA	1:G:249:GLY:HA2	1.87	0.56
1:G:1491:ASN:O	1:G:1493:TYR:N	2.38	0.56
1:G:1731:LEU:HA	1:G:1772:ARG:HD3	1.87	0.56
1:G:4974:GLY:O	1:G:4977:THR:OG1	2.17	0.56
1:A:476:SER:O	1:A:480:GLU:HG3	2.05	0.56
1:A:565:TYR:O	1:A:569:ILE:HG12	2.05	0.56
1:A:1105:ALA:HB1	1:A:1109:LEU:HD21	1.86	0.56
1:A:2059:LEU:HB3	1:A:2062:ARG:HH12	1.68	0.56
1:A:2123:LEU:O	1:A:2127:GLN:HG2	2.05	0.56
1:A:4154:VAL:HG13	1:A:4160:LEU:HD22	1.87	0.56
1:A:4567:LEU:HD12	1:A:4815:ASP:OD2	2.05	0.56
1:A:4853:VAL:O	1:A:4857:ASN:ND2	2.38	0.56
1:C:607:CYS:O	1:C:618:GLN:NE2	2.37	0.56
1:C:674:PHE:CB	2:D:40:ARG:HH12	2.18	0.56
1:C:1943:LEU:HA	1:C:1946:PHE:HD2	1.70	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:4567:LEU:HD12	1:C:4815:ASP:OD2	2.05	0.56
1:C:4832:HIS:NE2	1:C:4939:ALA:HB1	2.21	0.56
1:E:476:SER:O	1:E:480:GLU:HG3	2.05	0.56
1:E:565:TYR:O	1:E:569:ILE:HG12	2.05	0.56
1:E:1256:GLU:HG2	1:E:1278:GLY:O	2.04	0.56
1:E:1617:THR:O	1:E:1618:ARG:NH2	2.38	0.56
1:E:1862:ILE:O	1:E:1865:MET:HB3	2.06	0.56
1:E:2059:LEU:HB3	1:E:2062:ARG:HH12	1.68	0.56
1:E:4181:ILE:HG12	1:E:4195:PHE:HE1	1.70	0.56
1:E:4853:VAL:O	1:E:4857:ASN:ND2	2.38	0.56
1:E:4904:PRO:HA	1:E:4905:ALA:C	2.24	0.56
1:G:476:SER:O	1:G:480:GLU:HG3	2.05	0.56
1:G:643:SER:HA	1:G:782:SER:HA	1.87	0.56
1:G:1457:TYR:CG	1:G:1458:HIS:N	2.73	0.56
1:G:4806:ASN:O	1:G:4809:PHE:HB3	2.05	0.56
1:G:4904:PRO:HA	1:G:4905:ALA:C	2.25	0.56
1:A:561:LEU:HD21	1:A:598:LYS:HB3	1.86	0.56
1:C:1083:VAL:HG11	1:C:1088:TRP:CZ2	2.41	0.56
1:C:1719:HIS:CD2	1:C:1802:ILE:HG23	2.40	0.56
1:C:4192:ARG:NH1	1:C:5028:PHE:HB3	2.15	0.56
1:E:1457:TYR:CG	1:E:1458:HIS:N	2.73	0.56
1:E:3935:TRP:HB2	1:G:76:ARG:HG3	1.87	0.56
1:E:3984:ARG:NH1	1:G:160:GLY:O	2.35	0.56
1:G:3794:VAL:O	1:G:3797:THR:OG1	2.20	0.56
1:A:103:TYR:OH	1:A:167:ASP:OD2	2.24	0.56
1:A:1719:HIS:CD2	1:A:1802:ILE:HG23	2.40	0.56
1:A:4021:LYS:O	1:A:4025:VAL:HG23	2.06	0.56
1:C:607:CYS:HB3	1:C:618:GLN:HE21	1.70	0.56
1:C:1714:LEU:HA	1:C:1717:SER:HB3	1.88	0.56
1:C:4181:ILE:HG12	1:C:4195:PHE:HE1	1.71	0.56
1:E:224:HIS:HB3	1:E:229:GLU:HG2	1.88	0.56
1:E:4021:LYS:O	1:E:4025:VAL:HG23	2.06	0.56
1:G:1695:LEU:HA	1:G:1698:LEU:HD13	1.87	0.56
1:G:4107:GLU:O	1:G:4111:LEU:N	2.38	0.56
1:A:1294:PRO:HB3	1:A:1547:LYS:HB3	1.88	0.56
1:C:533:ASN:HB3	1:C:536:ASN:HD22	1.70	0.56
1:C:643:SER:HA	1:C:782:SER:HA	1.87	0.56
1:C:1491:ASN:O	1:C:1493:TYR:N	2.38	0.56
1:E:302:VAL:HG21	1:E:306:LYS:HD3	1.86	0.56
1:E:1083:VAL:HG11	1:E:1088:TRP:CZ2	2.40	0.56
1:E:1735:ILE:HD12	1:E:1771:LEU:HD12	1.86	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4974:GLY:O	1:E:4977:THR:OG1	2.15	0.56
1:G:103:TYR:OH	1:G:167:ASP:OD2	2.23	0.56
1:G:607:CYS:O	1:G:618:GLN:NE2	2.38	0.56
1:G:1943:LEU:HA	1:G:1946:PHE:HD2	1.71	0.56
1:G:4145:VAL:HG13	1:G:4194:TYR:HB2	1.87	0.56
1:G:4181:ILE:HG12	1:G:4195:PHE:HE1	1.69	0.56
1:G:4864:ASN:HB2	1:G:4902:GLU:HG3	1.88	0.56
1:A:643:SER:HA	1:A:782:SER:HA	1.88	0.56
1:A:4910:GLU:OE2	1:A:4914:VAL:HG21	2.06	0.56
1:C:717:ASP:OD2	2:D:7:ILE:HA	2.05	0.56
1:C:2125:HIS:NE2	1:C:2129:ASP:OD2	2.39	0.56
1:E:2123:LEU:O	1:E:2127:GLN:HG2	2.06	0.56
1:E:4898:GLY:HA2	1:E:4901:ILE:HG22	1.87	0.56
1:G:150:MET:SD	1:G:169:LEU:HD22	2.45	0.56
1:G:216:GLY:HA3	1:G:264:PRO:HD3	1.86	0.56
1:G:4574:ASN:ND2	1:G:4813:LEU:HD23	2.21	0.56
1:A:1714:LEU:HA	1:A:1717:SER:HB3	1.88	0.56
1:A:4172:GLU:HG2	1:A:4175:ARG:NH1	2.20	0.56
1:A:4555:LEU:HD11	1:A:4656:LEU:HG	1.86	0.56
1:C:224:HIS:HB3	1:C:229:GLU:HG2	1.88	0.56
1:C:2098:VAL:O	1:C:2102:VAL:HG23	2.06	0.56
1:C:2212:VAL:HG22	1:C:2260:ASN:HD21	1.71	0.56
1:C:3980:LEU:HD22	1:C:3985:LEU:HD22	1.87	0.56
1:E:1205:GLY:HA2	1:E:1225:PRO:HB2	1.88	0.56
1:E:1731:LEU:HA	1:E:1772:ARG:HD3	1.87	0.56
1:E:2125:HIS:NE2	1:E:2129:ASP:OD2	2.39	0.56
1:E:3793:MET:O	1:E:3797:THR:HG23	2.06	0.56
1:E:3965:LEU:O	1:E:3969:ILE:HD12	2.06	0.56
1:G:224:HIS:HB3	1:G:229:GLU:HG2	1.88	0.56
1:G:3814:GLN:HG3	1:G:3815:LYS:N	2.19	0.56
1:A:670:GLU:HB3	1:A:788:LYS:H	1.71	0.56
1:A:921:ASN:O	1:A:925:SER:N	2.26	0.56
1:A:1491:ASN:O	1:A:1493:TYR:N	2.38	0.56
1:C:565:TYR:O	1:C:569:ILE:HG12	2.05	0.56
1:C:1617:THR:O	1:C:1618:ARG:NH2	2.39	0.56
1:E:150:MET:SD	1:E:169:LEU:HD22	2.45	0.56
1:E:229:GLU:HA	1:E:249:GLY:HA2	1.87	0.56
1:E:2098:VAL:O	1:E:2102:VAL:HG23	2.06	0.56
1:E:2212:VAL:HG22	1:E:2260:ASN:HD21	1.71	0.56
1:E:4007:SER:O	1:E:4010:ILE:HG12	2.05	0.56
1:G:1856:ASP:N	1:G:1857:GLU:HB3	2.21	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:1862:ILE:O	1:G:1865:MET:HB3	2.06	0.56
1:G:3902:TYR:HE1	1:G:3908:GLY:H	1.54	0.56
1:A:1617:THR:O	1:A:1618:ARG:NH2	2.38	0.56
1:A:4007:SER:O	1:A:4010:ILE:HG12	2.06	0.56
1:C:1585:LYS:HB3	1:C:1587:PRO:HD2	1.88	0.56
1:C:1695:LEU:HA	1:C:1698:LEU:HD13	1.87	0.56
1:C:1856:ASP:N	1:C:1857:GLU:HB3	2.21	0.56
1:C:2137:ALA:HA	1:C:2140:ARG:NH1	2.22	0.56
1:E:1491:ASN:O	1:E:1493:TYR:N	2.38	0.56
1:G:490:CYS:O	1:G:494:LEU:HG	2.06	0.56
1:G:2123:LEU:O	1:G:2127:GLN:HG2	2.06	0.56
1:G:4720:VAL:HA	1:G:4723:LYS:HE2	1.88	0.56
1:A:224:HIS:HB3	1:A:229:GLU:HG2	1.88	0.55
1:A:526:LEU:O	1:A:530:ILE:HG13	2.07	0.55
1:C:880:GLU:HB3	1:C:967:PRO:HG2	1.87	0.55
1:C:1131:ARG:NH1	1:C:1137:GLU:OE1	2.38	0.55
1:C:2358:ILE:HG21	1:E:195:PHE:HE2	1.71	0.55
1:C:3793:MET:O	1:C:3797:THR:HG23	2.06	0.55
1:C:3965:LEU:O	1:C:3969:ILE:HD12	2.05	0.55
1:C:4007:SER:O	1:C:4010:ILE:HG12	2.06	0.55
1:E:4806:ASN:O	1:E:4809:PHE:HB3	2.05	0.55
1:G:2771:ILE:HG23	1:G:2852:ARG:HB2	1.88	0.55
1:A:1708:ARG:HH11	1:A:1712:TYR:HE2	1.54	0.55
1:A:2276:ALA:O	1:A:2280:VAL:HG23	2.06	0.55
2:B:37:ASP:OD1	2:B:38:SER:N	2.39	0.55
1:C:1839:VAL:HB	1:C:1840:PRO:HD3	1.89	0.55
1:C:2059:LEU:HB3	1:C:2062:ARG:HH12	1.69	0.55
1:C:2191:PHE:HE1	1:C:2239:PHE:HD1	1.54	0.55
1:C:2336:ARG:NH1	1:C:2428:ALA:HA	2.21	0.55
1:C:3786:CYS:SG	1:C:3794:VAL:HG22	2.46	0.55
1:C:3806:ASN:OD1	1:C:3807:GLY:N	2.40	0.55
1:C:4230:LYS:HD2	1:C:4959:PHE:O	2.07	0.55
1:E:2137:ALA:HA	1:E:2140:ARG:NH1	2.21	0.55
1:E:2276:ALA:O	1:E:2280:VAL:HG23	2.06	0.55
1:E:4832:HIS:NE2	1:E:4939:ALA:HB1	2.22	0.55
2:H:49:MET:N	2:H:54:GLU:OE2	2.40	0.55
1:A:533:ASN:HB3	1:A:536:ASN:HD22	1.71	0.55
1:A:1245:PHE:HA	1:A:1604:SER:HA	1.88	0.55
1:A:2212:VAL:HG22	1:A:2260:ASN:HD21	1.71	0.55
1:A:4898:GLY:HA2	1:A:4901:ILE:HG22	1.88	0.55
1:C:229:GLU:HA	1:C:249:GLY:HA2	1.87	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:826:ILE:HG22	1:C:827:LYS:HG2	1.89	0.55
1:C:4893:ALA:HB1	1:C:4896:GLY:HA2	1.89	0.55
1:E:2771:ILE:HG23	1:E:2852:ARG:HB2	1.87	0.55
2:F:87:HIS:CE1	2:F:90:ILE:HD13	2.42	0.55
1:G:526:LEU:O	1:G:530:ILE:HG13	2.06	0.55
1:G:607:CYS:HB3	1:G:618:GLN:HE21	1.70	0.55
1:G:1125:ASN:ND2	1:G:1130:GLN:O	2.27	0.55
1:A:2137:ALA:HA	1:A:2140:ARG:NH1	2.21	0.55
1:C:150:MET:SD	1:C:169:LEU:HD22	2.46	0.55
1:E:490:CYS:O	1:E:494:LEU:HG	2.07	0.55
1:E:1719:HIS:CD2	1:E:1802:ILE:HG23	2.40	0.55
1:E:1856:ASP:N	1:E:1857:GLU:HB3	2.21	0.55
1:E:4230:LYS:HD2	1:E:4959:PHE:O	2.06	0.55
1:E:4241:THR:O	1:E:4244:GLU:HB3	2.06	0.55
1:E:4888:TYR:OH	1:G:4898:GLY:O	2.23	0.55
1:G:2098:VAL:O	1:G:2102:VAL:HG23	2.06	0.55
1:A:490:CYS:O	1:A:494:LEU:HG	2.07	0.55
1:A:2336:ARG:NH1	1:A:2428:ALA:HA	2.21	0.55
1:A:3760:LYS:O	1:A:3764:LEU:HG	2.07	0.55
1:A:3793:MET:O	1:A:3797:THR:HG23	2.06	0.55
1:A:4181:ILE:HG12	1:A:4195:PHE:HE1	1.71	0.55
1:C:526:LEU:O	1:C:530:ILE:HG13	2.07	0.55
1:C:1930:LYS:O	1:C:1931:LEU:HD12	2.07	0.55
1:C:2758:PHE:HD2	1:C:2809:ILE:HD13	1.72	0.55
1:C:4853:VAL:O	1:C:4857:ASN:ND2	2.38	0.55
2:D:87:HIS:CE1	2:D:90:ILE:HD13	2.42	0.55
1:E:2191:PHE:HE1	1:E:2239:PHE:HD1	1.54	0.55
1:E:2336:ARG:NH1	1:E:2428:ALA:HA	2.22	0.55
1:E:2556:LEU:HD23	1:E:2559:LEU:HD12	1.88	0.55
1:E:4154:VAL:HG13	1:E:4160:LEU:HD22	1.88	0.55
1:G:166:GLY:O	1:G:201:ASN:ND2	2.40	0.55
1:G:533:ASN:HB3	1:G:536:ASN:HD22	1.71	0.55
1:G:1649:ASP:OD1	1:G:1652:GLU:HB2	2.06	0.55
1:G:1937:LEU:HD12	1:G:2116:LEU:HD12	1.88	0.55
1:G:3805:LEU:HB3	1:G:3890:LEU:HB3	1.89	0.55
1:G:4782:VAL:O	1:G:4785:THR:OG1	2.17	0.55
1:A:1141:ARG:HH12	1:A:1169:LEU:CD1	2.19	0.55
1:A:1667:LEU:HD23	1:A:1710:GLY:HA3	1.89	0.55
1:A:2125:HIS:NE2	1:A:2129:ASP:OD2	2.39	0.55
1:A:3786:CYS:SG	1:A:3794:VAL:HG22	2.46	0.55
1:A:3984:ARG:NH1	1:C:160:GLY:O	2.38	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:4839:MET:CE	1:G:4826:ILE:CG1	2.84	0.55
1:C:490:CYS:O	1:C:494:LEU:HG	2.06	0.55
1:C:1731:LEU:HA	1:C:1772:ARG:HD3	1.87	0.55
1:C:1862:ILE:O	1:C:1865:MET:HB3	2.06	0.55
1:C:2556:LEU:HD23	1:C:2559:LEU:HD12	1.88	0.55
1:E:826:ILE:HG22	1:E:827:LYS:HG2	1.89	0.55
1:E:3786:CYS:SG	1:E:3794:VAL:HG22	2.46	0.55
1:E:4567:LEU:HD12	1:E:4815:ASP:OD2	2.06	0.55
1:G:212:GLY:O	1:G:340:LYS:HA	2.07	0.55
1:G:1083:VAL:HG11	1:G:1088:TRP:CZ2	2.41	0.55
1:A:1862:ILE:O	1:A:1865:MET:HB3	2.06	0.55
1:A:2556:LEU:HD23	1:A:2559:LEU:HD12	1.88	0.55
1:C:2123:LEU:O	1:C:2127:GLN:HG2	2.05	0.55
1:C:4849:TYR:O	1:C:4853:VAL:HG23	2.06	0.55
1:G:1585:LYS:HB3	1:G:1587:PRO:HD2	1.88	0.55
1:G:1714:LEU:HA	1:G:1717:SER:HB3	1.88	0.55
1:A:3806:ASN:OD1	1:A:3807:GLY:N	2.40	0.55
1:A:4077:PHE:CZ	1:A:4125:PHE:HA	2.42	0.55
1:C:2276:ALA:O	1:C:2280:VAL:HG23	2.06	0.55
1:C:4154:VAL:HG13	1:C:4160:LEU:HD22	1.88	0.55
1:C:4241:THR:O	1:C:4244:GLU:HB3	2.07	0.55
1:C:4898:GLY:HA2	1:C:4901:ILE:HG22	1.87	0.55
1:E:887:ILE:HG21	1:E:962:SER:HB2	1.89	0.55
1:E:1783:VAL:CG1	2:F:55:VAL:HG12	2.37	0.55
1:E:1930:LYS:O	1:E:1931:LEU:HD12	2.07	0.55
1:G:1143:TRP:HB3	1:G:1164:LEU:CD1	2.37	0.55
2:H:25:HIS:O	2:H:102:GLU:N	2.35	0.55
1:A:212:GLY:O	1:A:340:LYS:HA	2.07	0.55
1:A:1083:VAL:HG11	1:A:1088:TRP:CZ2	2.42	0.55
1:A:1856:ASP:N	1:A:1857:GLU:HB3	2.21	0.55
1:A:3965:LEU:O	1:A:3969:ILE:HD12	2.07	0.55
1:C:216:GLY:HA3	1:C:264:PRO:HD3	1.87	0.55
1:C:915:GLU:HB3	1:C:923:GLN:HB2	1.89	0.55
1:C:4864:ASN:HB2	1:C:4902:GLU:HG3	1.89	0.55
1:E:669:ASP:HB3	1:E:788:LYS:HZ1	1.72	0.55
1:E:702:TRP:HD1	2:F:34:LYS:NZ	2.01	0.55
1:E:915:GLU:HB3	1:E:923:GLN:HB2	1.88	0.55
1:E:1143:TRP:HB3	1:E:1164:LEU:CD1	2.37	0.55
1:E:2924:GLN:HB3	1:E:2928:LYS:HE2	1.89	0.55
1:G:1245:PHE:HA	1:G:1604:SER:HA	1.89	0.55
1:G:1712:TYR:HD2	1:G:1840:PRO:HB2	1.72	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:1930:LYS:O	1:G:1931:LEU:HD12	2.07	0.55
1:G:2212:VAL:HG22	1:G:2260:ASN:HD21	1.72	0.55
2:H:27:THR:HG22	2:H:100:ASP:HB3	1.88	0.55
1:A:512:ALA:O	1:A:515:TRP:HB3	2.07	0.55
1:A:915:GLU:HB3	1:A:923:GLN:HB2	1.89	0.55
1:C:790:ARG:HA	1:C:1627:ALA:HA	1.89	0.55
1:C:5027:CYS:HB3	1:C:5030:LYS:HB3	1.89	0.55
1:E:1695:LEU:HA	1:E:1698:LEU:HD13	1.87	0.55
1:E:1714:LEU:HA	1:E:1717:SER:HB3	1.88	0.55
1:E:1810:LYS:HD3	1:E:1813:ARG:HH12	1.72	0.55
1:E:3760:LYS:O	1:E:3764:LEU:HG	2.07	0.55
1:E:5027:CYS:HB3	1:E:5030:LYS:HB3	1.89	0.55
2:F:37:ASP:OD1	2:F:38:SER:N	2.39	0.55
1:G:1839:VAL:HB	1:G:1840:PRO:HD3	1.89	0.55
1:A:1930:LYS:O	1:A:1931:LEU:HD12	2.07	0.54
1:C:1245:PHE:HA	1:C:1604:SER:HA	1.88	0.54
1:E:512:ALA:O	1:E:515:TRP:HB3	2.06	0.54
1:E:674:PHE:HD1	2:F:40:ARG:HH12	1.52	0.54
1:E:1585:LYS:HB3	1:E:1587:PRO:HD2	1.88	0.54
1:E:1714:LEU:O	1:E:1718:ILE:HG12	2.07	0.54
2:F:38:SER:HB3	2:F:41:ASP:OD2	2.07	0.54
1:G:880:GLU:HB3	1:G:967:PRO:HG2	1.87	0.54
1:G:915:GLU:HB3	1:G:923:GLN:HB2	1.89	0.54
1:G:1708:ARG:HH11	1:G:1712:TYR:HE2	1.55	0.54
1:G:2191:PHE:HE1	1:G:2239:PHE:HD1	1.53	0.54
1:G:2276:ALA:O	1:G:2280:VAL:HG23	2.06	0.54
2:H:37:ASP:OD1	2:H:38:SER:N	2.41	0.54
2:H:67:SER:N	2:H:70:GLN:OE1	2.33	0.54
1:A:1243:PRO:HB3	1:A:1606:SER:HA	1.90	0.54
1:A:2771:ILE:HG23	1:A:2852:ARG:HB2	1.89	0.54
1:A:4832:HIS:NE2	1:A:4939:ALA:HB1	2.22	0.54
2:B:38:SER:HB3	2:B:41:ASP:OD2	2.07	0.54
1:C:670:GLU:HB3	1:C:788:LYS:H	1.71	0.54
1:C:1143:TRP:HB3	1:C:1164:LEU:CD1	2.37	0.54
1:E:645:ARG:HD3	1:E:826:ILE:HG13	1.90	0.54
1:E:1245:PHE:HA	1:E:1604:SER:HA	1.89	0.54
1:E:3806:ASN:OD1	1:E:3807:GLY:N	2.40	0.54
1:E:4849:TYR:O	1:E:4853:VAL:HG23	2.06	0.54
1:G:826:ILE:HG22	1:G:827:LYS:HG2	1.89	0.54
1:G:1739:THR:O	1:G:1742:THR:OG1	2.20	0.54
1:G:2059:LEU:HB3	1:G:2062:ARG:HH12	1.69	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:2137:ALA:HA	1:G:2140:ARG:NH1	2.22	0.54
1:G:3774:GLY:HA2	1:G:3815:LYS:NZ	2.22	0.54
1:A:4241:THR:O	1:A:4244:GLU:HB3	2.06	0.54
1:A:4666:VAL:HB	1:A:4667:PRO:HD3	1.89	0.54
1:C:37:LEU:HB2	1:C:200:TRP:CZ3	2.43	0.54
1:C:834:PRO:HD2	1:C:838:HIS:HE2	1.73	0.54
1:C:1111:PRO:HG3	1:C:1609:PRO:HG3	1.89	0.54
1:C:1714:LEU:O	1:C:1718:ILE:HG12	2.08	0.54
2:D:37:ASP:OD1	2:D:38:SER:N	2.40	0.54
1:E:622:THR:HB	1:E:626:LEU:HD12	1.89	0.54
1:E:4077:PHE:CZ	1:E:4125:PHE:HA	2.42	0.54
1:E:4928:LEU:O	1:E:4931:ILE:HG22	2.08	0.54
1:G:739:ALA:O	1:G:741:GLU:N	2.40	0.54
1:G:834:PRO:HD2	1:G:838:HIS:HE2	1.72	0.54
1:G:1111:PRO:HG3	1:G:1609:PRO:HG3	1.89	0.54
1:A:4849:TYR:O	1:A:4853:VAL:HG23	2.06	0.54
1:C:645:ARG:HD3	1:C:826:ILE:HG13	1.89	0.54
1:C:1294:PRO:HB3	1:C:1547:LYS:HB3	1.89	0.54
1:C:2496:PRO:HB3	1:C:2552:ARG:HD2	1.90	0.54
2:D:38:SER:HB3	2:D:41:ASP:OD2	2.07	0.54
1:E:526:LEU:O	1:E:530:ILE:HG13	2.07	0.54
1:E:1943:LEU:HA	1:E:1946:PHE:HD2	1.71	0.54
1:E:4864:ASN:HB2	1:E:4902:GLU:HG3	1.90	0.54
1:G:512:ALA:O	1:G:515:TRP:HB3	2.07	0.54
1:G:4222:VAL:HG11	1:G:4950:VAL:HA	1.89	0.54
1:G:4580:TYR:HB2	1:G:4631:PHE:HD1	1.73	0.54
1:A:37:LEU:HB2	1:A:200:TRP:CZ3	2.42	0.54
1:A:1438:ARG:HA	1:A:1514:LEU:HA	1.90	0.54
1:A:1585:LYS:HB3	1:A:1587:PRO:HD2	1.88	0.54
1:A:1810:LYS:HD3	1:A:1813:ARG:HH12	1.71	0.54
1:A:2191:PHE:HE1	1:A:2239:PHE:HD1	1.54	0.54
1:C:166:GLY:O	1:C:201:ASN:ND2	2.40	0.54
1:C:1810:LYS:HD3	1:C:1813:ARG:HH12	1.72	0.54
1:C:4077:PHE:CZ	1:C:4125:PHE:HA	2.42	0.54
1:E:1667:LEU:HD23	1:E:1710:GLY:HA3	1.89	0.54
1:G:670:GLU:HB3	1:G:788:LYS:H	1.71	0.54
1:G:1714:LEU:O	1:G:1718:ILE:HG12	2.07	0.54
1:G:4664:LEU:O	1:G:4667:PRO:HD2	2.08	0.54
1:G:4844:LEU:HD11	1:G:4891:VAL:HG13	1.88	0.54
1:A:645:ARG:HD3	1:A:826:ILE:HG13	1.90	0.54
1:A:650:VAL:O	1:A:777:PHE:N	2.41	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1240:LYS:HZ3	1:A:1242:LEU:HB2	1.73	0.54
1:A:1714:LEU:O	1:A:1718:ILE:HG12	2.07	0.54
1:A:2515:GLN:NE2	1:A:2608:MET:O	2.40	0.54
1:C:512:ALA:O	1:C:515:TRP:HB3	2.07	0.54
1:E:103:TYR:O	1:E:160:GLY:N	2.33	0.54
1:E:670:GLU:HB3	1:E:788:LYS:H	1.71	0.54
1:E:790:ARG:HA	1:E:1627:ALA:HA	1.89	0.54
1:E:834:PRO:HD2	1:E:838:HIS:HE2	1.73	0.54
1:E:1649:ASP:OD1	1:E:1652:GLU:HB2	2.07	0.54
1:G:37:LEU:HB2	1:G:200:TRP:CZ3	2.42	0.54
1:G:645:ARG:HD3	1:G:826:ILE:HG13	1.90	0.54
1:G:1294:PRO:HB3	1:G:1547:LYS:HB3	1.90	0.54
1:G:2134:LEU:O	1:G:2138:LEU:HG	2.07	0.54
1:G:4770:SER:O	1:G:4772:ASP:N	2.33	0.54
1:G:4965:SER:HA	1:G:4975:PHE:CD1	2.43	0.54
1:G:5009:TYR:O	1:G:5013:MET:N	2.39	0.54
2:H:58:GLY:HA3	2:H:76:ILE:HG23	1.90	0.54
1:A:3980:LEU:HD22	1:A:3985:LEU:HD22	1.88	0.54
1:A:4720:VAL:HA	1:A:4723:LYS:NZ	2.23	0.54
1:C:116:MET:HA	1:C:139:GLU:HA	1.90	0.54
1:C:563:VAL:O	1:C:567:VAL:HG23	2.08	0.54
1:C:622:THR:HB	1:C:626:LEU:HD12	1.90	0.54
1:C:1808:ARG:HB2	1:C:1854:PHE:CE1	2.43	0.54
1:C:3930:ILE:HG22	1:C:3995:VAL:HG11	1.89	0.54
1:E:212:GLY:O	1:E:340:LYS:HA	2.08	0.54
1:G:103:TYR:O	1:G:160:GLY:N	2.33	0.54
1:G:622:THR:HB	1:G:626:LEU:HD12	1.90	0.54
1:G:688:LEU:HG	1:G:710:ASP:HB3	1.90	0.54
1:G:1808:ARG:HB2	1:G:1854:PHE:CE1	2.43	0.54
1:G:4024:VAL:HA	1:G:4027:LEU:HD12	1.89	0.54
2:H:87:HIS:CE1	2:H:90:ILE:HD13	2.43	0.54
1:A:559:GLY:O	1:A:563:VAL:HG23	2.08	0.54
1:A:1046:LEU:O	1:A:1050:GLY:N	2.41	0.54
1:A:1143:TRP:HB3	1:A:1164:LEU:CD1	2.37	0.54
1:A:4782:VAL:O	1:A:4785:THR:OG1	2.20	0.54
1:A:4921:PHE:CE2	1:G:4892:ARG:HA	2.43	0.54
2:B:87:HIS:CE1	2:B:90:ILE:HD13	2.42	0.54
1:C:212:GLY:O	1:C:340:LYS:HA	2.07	0.54
1:C:1205:GLY:HA3	1:C:1227:ALA:H	1.73	0.54
2:D:38:SER:HB3	2:D:41:ASP:CG	2.28	0.54
1:E:166:GLY:O	1:E:201:ASN:ND2	2.41	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1243:PRO:HB3	1:E:1606:SER:HA	1.90	0.54
1:E:1292:SER:HB2	1:E:1602:PRO:HG3	1.90	0.54
1:E:3930:ILE:HG22	1:E:3995:VAL:HG11	1.89	0.54
1:E:4793:GLY:HA2	1:E:4796:MET:HG2	1.90	0.54
2:F:38:SER:HB3	2:F:41:ASP:CG	2.28	0.54
1:G:1729:SER:O	1:G:1732:SER:OG	2.19	0.54
1:A:116:MET:HA	1:A:139:GLU:HA	1.90	0.54
1:A:150:MET:SD	1:A:169:LEU:HD22	2.47	0.54
1:A:166:GLY:O	1:A:201:ASN:ND2	2.40	0.54
1:A:826:ILE:HG22	1:A:827:LYS:HG2	1.90	0.54
1:A:1649:ASP:OD1	1:A:1652:GLU:HB2	2.07	0.54
1:A:1937:LEU:HD12	1:A:2116:LEU:HD12	1.90	0.54
1:C:559:GLY:O	1:C:563:VAL:HG23	2.08	0.54
1:C:705:ASN:OD1	1:C:706:GLY:N	2.41	0.54
1:C:1125:ASN:ND2	1:C:1130:GLN:O	2.26	0.54
1:C:1805:GLU:OE1	1:C:1808:ARG:NE	2.35	0.54
1:C:2771:ILE:HG23	1:C:2852:ARG:HB2	1.89	0.54
1:E:688:LEU:HG	1:E:710:ASP:HB3	1.90	0.54
1:E:4044:MET:HA	1:E:4047:MET:HG2	1.90	0.54
1:E:4666:VAL:HB	1:E:4667:PRO:HD3	1.90	0.54
1:G:1141:ARG:HH12	1:G:1169:LEU:CD1	2.20	0.54
1:G:1243:PRO:HB3	1:G:1606:SER:HA	1.90	0.54
1:G:1810:LYS:HD3	1:G:1813:ARG:HH12	1.72	0.54
1:A:790:ARG:HA	1:A:1627:ALA:HA	1.89	0.54
1:A:4044:MET:HA	1:A:4047:MET:HG2	1.90	0.54
1:A:4161:ARG:HA	1:A:4164:LEU:HB3	1.90	0.54
1:A:5027:CYS:HB3	1:A:5030:LYS:HB3	1.89	0.54
1:C:2134:LEU:O	1:C:2138:LEU:HG	2.08	0.54
1:C:3767:GLN:OE1	1:C:3809:ASN:ND2	2.34	0.54
1:E:705:ASN:OD1	1:E:706:GLY:N	2.41	0.54
1:E:1457:TYR:CZ	1:E:1459:GLN:NE2	2.76	0.54
1:E:1712:TYR:HD2	1:E:1840:PRO:HB2	1.73	0.54
1:E:2758:PHE:HD2	1:E:2809:ILE:HD13	1.72	0.54
1:E:3935:TRP:O	1:G:80:GLU:OE2	2.26	0.54
1:G:705:ASN:OD1	1:G:706:GLY:N	2.41	0.54
1:G:2158:CYS:SG	1:G:2184:ASN:ND2	2.81	0.54
1:G:2927:LEU:HD22	1:G:2937:VAL:HG11	1.90	0.54
1:C:1783:VAL:CG1	2:D:55:VAL:HG12	2.38	0.53
1:C:4044:MET:HA	1:C:4047:MET:HG2	1.90	0.53
1:C:4699:GLY:HA2	1:C:4702:ASP:HB2	1.90	0.53
1:C:4798:MET:SD	1:C:4801:LEU:HD12	2.48	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:4823:LEU:HA	1:C:4826:ILE:HD12	1.90	0.53
2:D:18:ARG:NH1	2:D:51:GLY:HA3	2.24	0.53
2:D:25:HIS:CG	2:D:40:ARG:HE	2.27	0.53
1:E:650:VAL:O	1:E:777:PHE:N	2.40	0.53
1:E:1839:VAL:HB	1:E:1840:PRO:HD3	1.90	0.53
1:E:1937:LEU:HD12	1:E:2116:LEU:HD12	1.91	0.53
1:E:4581:LYS:HZ3	1:G:4877:ASP:HA	1.73	0.53
1:A:45:ARG:NH2	1:A:139:GLU:OE2	2.42	0.53
1:A:1808:ARG:HB2	1:A:1854:PHE:CE1	2.43	0.53
1:A:2758:PHE:HD2	1:A:2809:ILE:HD13	1.72	0.53
1:A:4230:LYS:HD2	1:A:4959:PHE:O	2.08	0.53
1:A:4823:LEU:HA	1:A:4826:ILE:HD12	1.90	0.53
1:C:45:ARG:NH2	1:C:139:GLU:OE2	2.42	0.53
1:C:1243:PRO:HB3	1:C:1606:SER:HA	1.90	0.53
1:C:1292:SER:HB2	1:C:1602:PRO:HG3	1.91	0.53
1:C:1562:ILE:HG12	1:C:1563:GLN:O	2.09	0.53
1:E:739:ALA:O	1:E:741:GLU:N	2.42	0.53
1:E:1808:ARG:HB2	1:E:1854:PHE:CE1	2.43	0.53
1:E:3767:GLN:OE1	1:E:3809:ASN:ND2	2.34	0.53
1:G:2095:GLN:HG3	1:G:2127:GLN:OE1	2.08	0.53
1:G:2099:SER:O	1:G:2103:VAL:HG23	2.08	0.53
1:G:3768:SER:HA	1:G:3771:HIS:HB3	1.89	0.53
1:A:1292:SER:HB2	1:A:1602:PRO:HG3	1.90	0.53
1:A:1712:TYR:HD2	1:A:1840:PRO:HB2	1.73	0.53
1:A:1839:VAL:HB	1:A:1840:PRO:HD3	1.90	0.53
1:C:400:ALA:O	1:C:404:ILE:HG13	2.09	0.53
1:C:650:VAL:O	1:C:777:PHE:N	2.41	0.53
1:C:1436:SER:HA	1:C:1515:VAL:O	2.08	0.53
1:C:1649:ASP:OD1	1:C:1652:GLU:HB2	2.07	0.53
1:C:1830:VAL:HG12	1:C:1834:VAL:HA	1.90	0.53
1:C:1833:SER:O	1:C:1835:GLU:N	2.41	0.53
1:C:3760:LYS:O	1:C:3764:LEU:HG	2.07	0.53
1:C:3841:VAL:HG12	1:C:3843:ASP:H	1.73	0.53
1:C:4720:VAL:HA	1:C:4723:LYS:NZ	2.23	0.53
1:E:110:ARG:HG2	1:E:117:TYR:CD1	2.44	0.53
1:E:3841:VAL:HG12	1:E:3843:ASP:H	1.73	0.53
1:E:3980:LEU:HD22	1:E:3985:LEU:HD22	1.89	0.53
1:G:102:LEU:HB2	1:G:105:HIS:HD2	1.72	0.53
1:G:110:ARG:HG2	1:G:117:TYR:CD1	2.43	0.53
1:G:790:ARG:HA	1:G:1627:ALA:HA	1.89	0.53
1:G:1562:ILE:HG12	1:G:1563:GLN:O	2.09	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:1667:LEU:HD23	1:G:1710:GLY:HA3	1.90	0.53
1:G:1830:VAL:HG12	1:G:1834:VAL:HA	1.90	0.53
1:G:2214:VAL:HG11	1:G:2229:VAL:HG21	1.90	0.53
1:G:3984:ARG:O	1:G:3986:TRP:N	2.41	0.53
1:A:3930:ILE:HG22	1:A:3995:VAL:HG11	1.89	0.53
2:B:38:SER:HB3	2:B:41:ASP:CG	2.28	0.53
1:C:138:GLN:HG2	1:C:140:ASP:H	1.73	0.53
1:C:739:ALA:O	1:C:741:GLU:N	2.41	0.53
1:C:1141:ARG:HH12	1:C:1169:LEU:CD1	2.21	0.53
1:E:37:LEU:HB2	1:E:200:TRP:CZ3	2.43	0.53
1:E:1125:ASN:ND2	1:E:1130:GLN:O	2.27	0.53
1:E:1294:PRO:HB3	1:E:1547:LYS:HB3	1.91	0.53
1:E:1439:VAL:O	1:E:1512:THR:HB	2.08	0.53
1:E:1477:GLY:HA2	1:E:1483:VAL:HA	1.90	0.53
1:E:1729:SER:O	1:E:1732:SER:OG	2.19	0.53
1:E:4956:THR:O	1:E:4965:SER:N	2.42	0.53
1:G:116:MET:HA	1:G:139:GLU:HA	1.90	0.53
1:G:314:PHE:HE1	1:G:378:LEU:HD21	1.73	0.53
1:G:3905:THR:HG23	1:G:3907:THR:HG23	1.90	0.53
1:G:4242:ILE:O	1:G:4246:GLN:HG2	2.09	0.53
1:A:563:VAL:O	1:A:567:VAL:HG23	2.08	0.53
1:A:705:ASN:OD1	1:A:706:GLY:N	2.41	0.53
1:A:1679:ASN:O	1:A:1683:HIS:ND1	2.41	0.53
1:A:4798:MET:SD	1:A:4801:LEU:HD12	2.49	0.53
1:E:638:ILE:HG22	1:E:639:ASN:N	2.24	0.53
1:E:2099:SER:O	1:E:2103:VAL:HG23	2.09	0.53
1:E:4849:TYR:HA	1:E:4852:THR:HG22	1.90	0.53
1:G:45:ARG:NH2	1:G:139:GLU:OE2	2.42	0.53
1:G:1046:LEU:O	1:G:1050:GLY:N	2.41	0.53
1:G:1240:LYS:O	1:G:1607:ARG:HA	2.09	0.53
1:G:4251:ILE:HG22	1:G:4557:ARG:HH11	1.74	0.53
1:A:24:CYS:SG	1:A:26:ALA:HB2	2.49	0.53
1:A:622:THR:HB	1:A:626:LEU:HD12	1.90	0.53
1:A:2099:SER:O	1:A:2103:VAL:HG23	2.08	0.53
1:A:2496:PRO:HB3	1:A:2552:ARG:HD2	1.90	0.53
2:B:16:PRO:HD3	2:B:66:MET:O	2.09	0.53
1:C:1641:ILE:HG23	1:C:1643:GLU:O	2.09	0.53
1:C:1667:LEU:HD23	1:C:1710:GLY:HA3	1.90	0.53
1:C:1712:TYR:HD2	1:C:1840:PRO:HB2	1.73	0.53
1:C:2099:SER:O	1:C:2103:VAL:HG23	2.09	0.53
1:C:4161:ARG:HA	1:C:4164:LEU:HB3	1.91	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:138:GLN:HG2	1:E:140:ASP:H	1.73	0.53
1:E:563:VAL:O	1:E:567:VAL:HG23	2.08	0.53
1:E:2496:PRO:HB3	1:E:2552:ARG:HD2	1.91	0.53
1:E:4161:ARG:HA	1:E:4164:LEU:HB3	1.90	0.53
1:E:4699:GLY:HA2	1:E:4702:ASP:HB2	1.91	0.53
1:G:33:LEU:HD21	1:G:51:PRO:HB3	1.91	0.53
1:G:674:PHE:HZ	2:H:71:ARG:NE	2.05	0.53
1:A:400:ALA:O	1:A:404:ILE:HG13	2.09	0.53
1:A:3841:VAL:HG12	1:A:3843:ASP:H	1.73	0.53
1:A:4928:LEU:O	1:A:4931:ILE:HG22	2.08	0.53
1:C:4928:LEU:O	1:C:4931:ILE:HG22	2.08	0.53
1:E:314:PHE:HE1	1:E:378:LEU:HD21	1.74	0.53
1:E:1079:LYS:NZ	1:E:1107:PRO:HB2	2.23	0.53
1:E:1830:VAL:HG12	1:E:1834:VAL:HA	1.91	0.53
1:E:2095:GLN:HG3	1:E:2127:GLN:OE1	2.08	0.53
1:E:2515:GLN:NE2	1:E:2608:MET:O	2.40	0.53
1:G:563:VAL:O	1:G:567:VAL:HG23	2.07	0.53
1:G:636:ASN:OD1	1:G:637:LEU:N	2.42	0.53
1:G:1205:GLY:HA3	1:G:1227:ALA:H	1.74	0.53
1:G:4666:VAL:HB	1:G:4667:PRO:HD3	1.91	0.53
1:A:314:PHE:HE1	1:A:378:LEU:HD21	1.73	0.53
1:A:1111:PRO:HG3	1:A:1609:PRO:HG3	1.89	0.53
1:A:1562:ILE:HG12	1:A:1563:GLN:O	2.09	0.53
1:A:2134:LEU:O	1:A:2138:LEU:HG	2.09	0.53
1:A:4864:ASN:HB2	1:A:4902:GLU:HG3	1.89	0.53
1:C:638:ILE:HG22	1:C:639:ASN:N	2.24	0.53
1:C:688:LEU:HG	1:C:710:ASP:HB3	1.90	0.53
1:C:1079:LYS:NZ	1:C:1107:PRO:HB2	2.24	0.53
1:C:1477:GLY:HA2	1:C:1483:VAL:HA	1.90	0.53
1:C:2924:GLN:HB3	1:C:2928:LYS:HE2	1.91	0.53
1:E:45:ARG:NH2	1:E:139:GLU:OE2	2.42	0.53
1:E:559:GLY:O	1:E:563:VAL:HG23	2.08	0.53
1:E:1111:PRO:HG3	1:E:1609:PRO:HG3	1.90	0.53
1:E:1259:ARG:NH2	1:E:1599:MET:O	2.42	0.53
1:E:1805:GLU:OE1	1:E:1808:ARG:NE	2.35	0.53
1:E:2745:VAL:HG21	1:E:2818:ALA:HB2	1.91	0.53
1:E:4154:VAL:HG13	1:E:4154:VAL:O	2.08	0.53
1:G:400:ALA:O	1:G:404:ILE:HG13	2.09	0.53
1:G:717:ASP:CG	2:H:7:ILE:HA	2.29	0.53
1:G:1641:ILE:HG23	1:G:1643:GLU:O	2.09	0.53
1:G:4702:ASP:O	1:G:4705:VAL:HG12	2.07	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:18:ARG:NH1	2:H:51:GLY:HA3	2.23	0.53
1:A:597:HIS:NE2	1:A:598:LYS:NZ	2.57	0.53
1:A:4699:GLY:HA2	1:A:4702:ASP:HB2	1.89	0.53
1:A:4821:LYS:HD3	1:A:4947:GLN:NE2	2.24	0.53
2:B:25:HIS:CG	2:B:40:ARG:HE	2.27	0.53
1:C:1072:VAL:HB	1:C:1607:ARG:HH12	1.74	0.53
2:D:16:PRO:HD3	2:D:66:MET:O	2.09	0.53
1:G:597:HIS:NE2	1:G:598:LYS:NZ	2.57	0.53
1:G:650:VAL:O	1:G:777:PHE:N	2.41	0.53
1:G:2205:GLU:O	1:G:2209:GLU:HG2	2.09	0.53
1:G:2515:GLN:NE2	1:G:2608:MET:O	2.40	0.53
1:G:4004:ALA:HB3	1:G:4110:PHE:HZ	1.73	0.53
1:G:4217:PHE:HZ	1:G:4234:PHE:HA	1.74	0.53
1:A:636:ASN:ND2	2:B:35:LYS:HD3	2.24	0.53
1:A:674:PHE:HD1	2:B:40:ARG:HH12	1.52	0.53
1:A:1125:ASN:ND2	1:A:1130:GLN:O	2.27	0.53
1:A:1805:GLU:OE1	1:A:1808:ARG:NE	2.35	0.53
1:A:2158:CYS:SG	1:A:2184:ASN:ND2	2.82	0.53
1:A:2214:VAL:HG11	1:A:2229:VAL:HG21	1.91	0.53
1:C:110:ARG:HG2	1:C:117:TYR:CD1	2.44	0.53
1:C:2515:GLN:NE2	1:C:2608:MET:O	2.40	0.53
1:C:4965:SER:HA	1:C:4975:PHE:CD1	2.44	0.53
1:E:4004:ALA:HB3	1:E:4110:PHE:HZ	1.74	0.53
2:F:18:ARG:NH1	2:F:51:GLY:HA3	2.24	0.53
1:G:24:CYS:SG	1:G:26:ALA:HB2	2.49	0.53
1:G:2553:TYR:HD1	1:G:2556:LEU:HD12	1.74	0.53
1:G:3771:HIS:HD2	1:G:3812:VAL:HG22	1.72	0.53
1:G:3827:GLY:O	1:G:3831:SER:N	2.41	0.53
1:A:33:LEU:HD21	1:A:51:PRO:HB3	1.91	0.52
1:A:110:ARG:HG2	1:A:117:TYR:CD1	2.43	0.52
1:A:138:GLN:HG2	1:A:140:ASP:H	1.73	0.52
1:A:1294:PRO:HG3	1:A:1549:PHE:HE1	1.75	0.52
1:A:3916:ILE:HA	1:A:3919:THR:HG22	1.91	0.52
1:A:3935:TRP:HB2	1:C:76:ARG:HG3	1.89	0.52
1:A:4154:VAL:HG13	1:A:4154:VAL:O	2.09	0.52
1:C:669:ASP:HB3	1:C:788:LYS:HZ1	1.72	0.52
1:C:1516:ILE:O	1:C:1530:THR:OG1	2.26	0.52
1:C:1705:GLY:O	1:C:1708:ARG:HB3	2.09	0.52
1:C:1729:SER:O	1:C:1732:SER:OG	2.19	0.52
1:C:4666:VAL:HB	1:C:4667:PRO:HD3	1.90	0.52
1:E:116:MET:HA	1:E:139:GLU:HA	1.90	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4720:VAL:HA	1:E:4723:LYS:NZ	2.23	0.52
2:F:25:HIS:CG	2:F:40:ARG:HE	2.27	0.52
1:G:1072:VAL:HB	1:G:1607:ARG:HH12	1.74	0.52
1:G:1079:LYS:NZ	1:G:1107:PRO:HB2	2.24	0.52
1:G:1259:ARG:NH2	1:G:1599:MET:O	2.42	0.52
1:G:3882:GLN:HB2	1:G:3957:VAL:HG22	1.91	0.52
1:G:3903:LEU:HD22	1:G:3915:ILE:HD12	1.91	0.52
1:G:4648:LEU:HA	1:G:4651:THR:HB	1.91	0.52
1:A:688:LEU:HG	1:A:710:ASP:HB3	1.90	0.52
1:A:1641:ILE:HG23	1:A:1643:GLU:O	2.09	0.52
2:B:18:ARG:NH1	2:B:51:GLY:HA3	2.24	0.52
1:C:24:CYS:SG	1:C:26:ALA:HB2	2.49	0.52
1:C:4821:LYS:HD3	1:C:4947:GLN:NE2	2.23	0.52
1:E:1046:LEU:O	1:E:1050:GLY:N	2.42	0.52
1:E:2158:CYS:SG	1:E:2184:ASN:ND2	2.82	0.52
1:E:4893:ALA:HB1	1:E:4896:GLY:HA2	1.91	0.52
1:G:37:LEU:HB2	1:G:200:TRP:HZ3	1.75	0.52
1:G:614:VAL:O	1:G:614:VAL:HG13	2.09	0.52
1:G:2377:LEU:HD12	1:G:2468:GLY:HA2	1.92	0.52
1:G:3962:PHE:O	1:G:3966:THR:HG23	2.09	0.52
2:H:25:HIS:CG	2:H:40:ARG:HE	2.26	0.52
1:A:37:LEU:HB2	1:A:200:TRP:HZ3	1.74	0.52
1:A:739:ALA:O	1:A:741:GLU:N	2.42	0.52
1:A:1259:ARG:NH2	1:A:1599:MET:O	2.42	0.52
1:C:1046:LEU:O	1:C:1050:GLY:N	2.41	0.52
1:C:4154:VAL:HG13	1:C:4154:VAL:O	2.09	0.52
1:C:4640:GLU:HB3	1:C:4641:PRO:HD3	1.92	0.52
1:E:638:ILE:HB	1:E:1636:MET:HB2	1.91	0.52
1:E:857:ASP:O	1:E:991:ASN:ND2	2.42	0.52
1:E:4965:SER:HA	1:E:4975:PHE:CD1	2.44	0.52
1:G:1252:HIS:ND1	1:G:1253:PRO:HD2	2.24	0.52
1:G:1856:ASP:H	1:G:1858:ASP:N	2.07	0.52
1:A:1202:LEU:HD21	1:A:1204:LEU:HG	1.90	0.52
1:A:1240:LYS:O	1:A:1607:ARG:HA	2.09	0.52
1:A:4640:GLU:HB3	1:A:4641:PRO:HD3	1.92	0.52
1:A:4956:THR:O	1:A:4965:SER:N	2.43	0.52
1:C:33:LEU:HD21	1:C:51:PRO:HB3	1.91	0.52
1:C:404:ILE:HG12	1:C:478:PHE:HD2	1.74	0.52
1:C:590:LEU:HB2	1:C:599:VAL:HG11	1.92	0.52
1:C:617:ASN:O	1:C:621:ILE:HG12	2.10	0.52
1:C:1294:PRO:HG3	1:C:1549:PHE:HE1	1.74	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2205:GLU:O	1:C:2209:GLU:HG2	2.09	0.52
1:C:2922:LYS:C	1:C:2925:GLU:HB2	2.30	0.52
1:C:3768:SER:HA	1:C:3771:HIS:HB3	1.91	0.52
1:C:4810:ALA:O	1:C:4813:LEU:HG	2.10	0.52
1:E:617:ASN:O	1:E:621:ILE:HG12	2.10	0.52
1:E:1205:GLY:HA3	1:E:1227:ALA:H	1.75	0.52
1:E:3916:ILE:HA	1:E:3919:THR:HG22	1.92	0.52
1:G:138:GLN:HG2	1:G:140:ASP:H	1.74	0.52
1:G:617:ASN:O	1:G:621:ILE:HG12	2.10	0.52
1:G:2758:PHE:HD2	1:G:2809:ILE:HD13	1.73	0.52
1:G:3793:MET:O	1:G:3797:THR:HG23	2.09	0.52
1:A:1247:PRO:HA	1:A:1602:PRO:HA	1.92	0.52
1:A:1830:VAL:HG12	1:A:1834:VAL:HA	1.91	0.52
1:A:4221:VAL:O	1:A:4225:GLY:N	2.43	0.52
1:C:622:THR:O	1:C:626:LEU:N	2.42	0.52
1:C:857:ASP:O	1:C:991:ASN:ND2	2.43	0.52
1:C:1259:ARG:NH2	1:C:1599:MET:O	2.42	0.52
1:C:1688:HIS:O	1:C:1688:HIS:ND1	2.43	0.52
1:E:33:LEU:HD21	1:E:51:PRO:HB3	1.92	0.52
1:E:1141:ARG:HH12	1:E:1169:LEU:CD1	2.22	0.52
1:E:1562:ILE:HG12	1:E:1563:GLN:O	2.09	0.52
1:E:2755:ILE:HD13	1:E:2810:LYS:HG2	1.91	0.52
2:F:25:HIS:O	2:F:102:GLU:N	2.39	0.52
1:G:638:ILE:HG22	1:G:639:ASN:N	2.24	0.52
1:G:1477:GLY:HA2	1:G:1483:VAL:HA	1.91	0.52
1:G:2059:LEU:HD22	1:G:2062:ARG:NH1	2.19	0.52
1:G:3841:VAL:HG12	1:G:3843:ASP:H	1.74	0.52
1:A:614:VAL:HG13	1:A:614:VAL:O	2.10	0.52
1:A:636:ASN:OD1	1:A:637:LEU:N	2.42	0.52
1:A:834:PRO:HD2	1:A:838:HIS:HE2	1.73	0.52
1:A:1692:ALA:HA	1:A:1695:LEU:HD12	1.92	0.52
1:A:3877:ASP:O	1:A:3880:PHE:HB3	2.10	0.52
1:C:716:PHE:H	1:C:738:LEU:HD13	1.75	0.52
1:C:1240:LYS:O	1:C:1607:ARG:HA	2.09	0.52
1:C:1856:ASP:H	1:C:1858:ASP:N	2.08	0.52
1:C:3877:ASP:O	1:C:3880:PHE:HB3	2.10	0.52
1:C:4892:ARG:HH12	1:E:4898:GLY:H	1.57	0.52
1:E:1240:LYS:O	1:E:1607:ARG:HA	2.09	0.52
1:E:4146:LEU:O	1:E:4150:LEU:HG	2.09	0.52
1:G:1103:GLY:HA3	1:G:1123:VAL:HA	1.92	0.52
1:A:716:PHE:H	1:A:738:LEU:HD13	1.75	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1252:HIS:ND1	1:A:1253:PRO:HD2	2.24	0.52
1:A:1477:GLY:HA2	1:A:1483:VAL:HA	1.90	0.52
1:A:4965:SER:HA	1:A:4975:PHE:CD1	2.45	0.52
1:E:299:LEU:HD23	1:E:357:LEU:HD13	1.92	0.52
1:E:1210:SER:HA	1:E:1214:PHE:HB3	1.92	0.52
1:E:1294:PRO:HG3	1:E:1549:PHE:HE1	1.75	0.52
1:E:2205:GLU:O	1:E:2209:GLU:HG2	2.09	0.52
1:E:2902:HIS:CG	1:E:2903:PRO:HD2	2.45	0.52
1:E:4172:GLU:HG2	1:E:4175:ARG:NH1	2.20	0.52
1:G:857:ASP:O	1:G:991:ASN:ND2	2.43	0.52
1:G:1292:SER:HB2	1:G:1602:PRO:HG3	1.91	0.52
1:G:1692:ALA:HA	1:G:1695:LEU:HD12	1.92	0.52
1:G:1931:LEU:CD2	1:G:1935:VAL:HG11	2.39	0.52
1:A:617:ASN:O	1:A:621:ILE:HG12	2.10	0.52
1:A:1079:LYS:NZ	1:A:1107:PRO:HB2	2.25	0.52
1:A:1103:GLY:HA3	1:A:1123:VAL:HA	1.92	0.52
1:A:1931:LEU:CD2	1:A:1935:VAL:HG11	2.40	0.52
1:A:2205:GLU:O	1:A:2209:GLU:HG2	2.09	0.52
1:A:2377:LEU:HD12	1:A:2468:GLY:HA2	1.92	0.52
1:A:2902:HIS:CG	1:A:2903:PRO:HD2	2.45	0.52
1:C:1937:LEU:HD12	1:C:2116:LEU:HD12	1.91	0.52
1:C:4583:SER:N	1:C:4628:VAL:O	2.41	0.52
1:E:1072:VAL:HB	1:E:1607:ARG:HH12	1.74	0.52
1:E:1688:HIS:ND1	1:E:1688:HIS:O	2.43	0.52
1:E:1705:GLY:O	1:E:1708:ARG:HB3	2.09	0.52
1:E:2924:GLN:O	1:E:2928:LYS:CB	2.58	0.52
1:G:404:ILE:HG12	1:G:478:PHE:HD2	1.74	0.52
1:G:1805:GLU:OE1	1:G:1808:ARG:NE	2.35	0.52
1:G:3813:GLN:NE2	1:G:3890:LEU:O	2.40	0.52
1:G:4210:VAL:O	1:G:4214:LYS:N	2.39	0.52
1:A:638:ILE:HB	1:A:1636:MET:HB2	1.91	0.52
1:A:1072:VAL:HB	1:A:1607:ARG:HH12	1.75	0.52
1:A:1240:LYS:NZ	1:A:1242:LEU:O	2.43	0.52
1:A:2755:ILE:HD13	1:A:2810:LYS:HG2	1.92	0.52
1:A:4839:MET:HE3	1:G:4826:ILE:CG1	2.35	0.52
1:C:614:VAL:HG13	1:C:614:VAL:O	2.09	0.52
1:C:1240:LYS:NZ	1:C:1242:LEU:O	2.43	0.52
1:C:1247:PRO:HA	1:C:1602:PRO:HA	1.91	0.52
1:C:1658:ASP:OD1	1:C:1661:ARG:NH2	2.43	0.52
1:C:2158:CYS:SG	1:C:2184:ASN:ND2	2.82	0.52
1:C:2377:LEU:HD12	1:C:2468:GLY:HA2	1.92	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:24:CYS:SG	1:E:26:ALA:HB2	2.49	0.52
1:E:252:VAL:HA	1:E:255:HIS:ND1	2.25	0.52
1:E:1252:HIS:ND1	1:E:1253:PRO:HD2	2.25	0.52
1:E:1641:ILE:HG23	1:E:1643:GLU:O	2.09	0.52
1:E:1931:LEU:CD2	1:E:1935:VAL:HG11	2.40	0.52
1:E:2214:VAL:HG11	1:E:2229:VAL:HG21	1.92	0.52
1:E:2377:LEU:HD12	1:E:2468:GLY:HA2	1.92	0.52
1:E:4640:GLU:HB3	1:E:4641:PRO:HD3	1.92	0.52
1:E:4795:TYR:O	1:E:4812:HIS:HE1	1.92	0.52
1:G:233:ILE:HD12	1:G:242:ARG:HB3	1.92	0.52
1:G:299:LEU:HD23	1:G:357:LEU:HD13	1.92	0.52
1:G:921:ASN:O	1:G:925:SER:N	2.26	0.52
1:G:4039:MET:HG3	1:G:4040:ILE:N	2.25	0.52
1:G:4150:LEU:O	1:G:4154:VAL:HG12	2.09	0.52
1:G:4583:SER:N	1:G:4628:VAL:O	2.41	0.52
1:A:3985:LEU:O	1:A:3988:ALA:HB3	2.10	0.52
1:C:4844:LEU:O	1:C:4848:VAL:HG23	2.10	0.52
1:E:3877:ASP:O	1:E:3880:PHE:HB3	2.09	0.52
1:E:4651:THR:HG23	1:E:4799:SER:HB3	1.90	0.52
1:G:252:VAL:HA	1:G:255:HIS:ND1	2.25	0.52
1:G:265:LEU:HD22	1:G:309:THR:HG23	1.92	0.52
1:G:1294:PRO:HG3	1:G:1549:PHE:HE1	1.75	0.52
1:G:1833:SER:O	1:G:1835:GLU:N	2.42	0.52
1:G:2902:HIS:CG	1:G:2903:PRO:HD2	2.45	0.52
1:G:4077:PHE:CZ	1:G:4125:PHE:HA	2.44	0.52
1:A:828:GLU:O	1:A:840:VAL:HG23	2.11	0.51
1:A:4651:THR:HG23	1:A:4799:SER:HB3	1.92	0.51
1:A:4795:TYR:O	1:A:4812:HIS:HE1	1.93	0.51
1:C:314:PHE:HE1	1:C:378:LEU:HD21	1.74	0.51
1:C:523:TYR:CE1	1:C:560:ILE:HG12	2.45	0.51
1:C:597:HIS:NE2	1:C:598:LYS:NZ	2.57	0.51
1:C:793:LEU:HB3	1:C:812:HIS:HB2	1.91	0.51
1:C:2902:HIS:CG	1:C:2903:PRO:HD2	2.45	0.51
1:C:4770:SER:O	1:C:4772:ASP:N	2.34	0.51
1:C:4956:THR:O	1:C:4965:SER:N	2.43	0.51
1:E:233:ILE:HD12	1:E:242:ARG:HB3	1.92	0.51
1:E:404:ILE:HG12	1:E:478:PHE:HD2	1.75	0.51
1:E:3768:SER:HA	1:E:3771:HIS:HB3	1.91	0.51
1:G:590:LEU:HB2	1:G:599:VAL:HG11	1.92	0.51
1:G:793:LEU:HB3	1:G:812:HIS:HB2	1.91	0.51
1:G:1734:TYR:OH	1:G:1948:ASP:OD1	2.18	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:2922:LYS:O	1:G:2925:GLU:HB2	2.10	0.51
1:A:590:LEU:HB2	1:A:599:VAL:HG11	1.92	0.51
1:A:622:THR:HG21	1:A:1681:VAL:HG13	1.93	0.51
1:A:622:THR:O	1:A:626:LEU:N	2.42	0.51
1:A:1205:GLY:HA3	1:A:1227:ALA:H	1.75	0.51
1:A:2059:LEU:HD22	1:A:2062:ARG:NH1	2.18	0.51
1:A:3767:GLN:OE1	1:A:3809:ASN:ND2	2.34	0.51
1:C:2745:VAL:HG21	1:C:2818:ALA:HB2	1.91	0.51
1:C:2755:ILE:HD13	1:C:2810:LYS:HG2	1.93	0.51
1:E:400:ALA:O	1:E:404:ILE:HG13	2.09	0.51
1:E:597:HIS:NE2	1:E:598:LYS:NZ	2.57	0.51
1:E:614:VAL:O	1:E:614:VAL:HG13	2.10	0.51
1:E:2134:LEU:O	1:E:2138:LEU:HG	2.08	0.51
1:G:1240:LYS:NZ	1:G:1242:LEU:HB2	2.25	0.51
1:G:2556:LEU:HD23	1:G:2559:LEU:HD12	1.91	0.51
1:G:3750:GLU:O	1:G:3754:GLU:N	2.43	0.51
1:G:4031:LEU:HD23	1:G:4153:HIS:CD2	2.45	0.51
1:A:255:HIS:HB3	1:A:257:ARG:HG2	1.93	0.51
1:A:407:THR:HA	1:A:410:LEU:HG	1.92	0.51
1:A:4146:LEU:O	1:A:4150:LEU:HG	2.09	0.51
1:C:252:VAL:HG23	1:C:257:ARG:NE	2.26	0.51
1:C:638:ILE:HB	1:C:1636:MET:HB2	1.90	0.51
1:C:4004:ALA:HB3	1:C:4110:PHE:HZ	1.75	0.51
1:C:4146:LEU:O	1:C:4150:LEU:HG	2.10	0.51
1:E:675:LEU:O	1:E:676:THR:OG1	2.27	0.51
1:E:1103:GLY:HA3	1:E:1123:VAL:HA	1.92	0.51
1:E:2358:ILE:HG21	1:G:195:PHE:HE2	1.75	0.51
1:E:3698:LEU:O	1:E:3702:VAL:HG23	2.10	0.51
1:E:3729:MET:HE2	1:E:3770:LEU:HD13	1.91	0.51
1:G:1240:LYS:NZ	1:G:1242:LEU:O	2.43	0.51
1:G:4150:LEU:HB3	1:G:4160:LEU:HD21	1.92	0.51
2:H:16:PRO:HD3	2:H:66:MET:O	2.10	0.51
1:A:2121:PHE:CD1	1:A:3701:LEU:HD12	2.46	0.51
1:A:4844:LEU:O	1:A:4848:VAL:HG23	2.10	0.51
1:C:407:THR:HA	1:C:410:LEU:HG	1.93	0.51
1:C:3750:GLU:O	1:C:3754:GLU:N	2.43	0.51
1:C:3905:THR:HG23	1:C:3907:THR:HG23	1.91	0.51
1:C:4177:TYR:HA	1:C:4199:GLU:OE2	2.10	0.51
1:C:4795:TYR:O	1:C:4812:HIS:HE1	1.93	0.51
1:C:4826:ILE:HG12	1:E:4839:MET:HE3	1.93	0.51
1:E:37:LEU:HB2	1:E:200:TRP:HZ3	1.75	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4782:VAL:O	1:E:4785:THR:OG1	2.21	0.51
1:E:4798:MET:SD	1:E:4801:LEU:HD12	2.50	0.51
1:G:1202:LEU:HD21	1:G:1204:LEU:HG	1.92	0.51
1:G:3670:GLU:O	1:G:3674:ILE:HG12	2.11	0.51
1:G:4645:CYS:O	1:G:4649:LEU:N	2.39	0.51
1:A:233:ILE:HD12	1:A:242:ARG:HB3	1.92	0.51
1:A:1856:ASP:H	1:A:1858:ASP:N	2.07	0.51
1:A:2358:ILE:HG21	1:C:195:PHE:HE2	1.76	0.51
1:A:3727:ASP:O	1:A:3730:ALA:HB3	2.11	0.51
2:B:25:HIS:O	2:B:102:GLU:N	2.38	0.51
2:B:27:THR:HA	2:B:38:SER:HA	1.92	0.51
2:B:58:GLY:HA3	2:B:76:ILE:HG23	1.92	0.51
1:C:1205:GLY:HA3	1:C:1227:ALA:CB	2.40	0.51
1:C:1931:LEU:CD2	1:C:1935:VAL:HG11	2.40	0.51
1:C:3698:LEU:O	1:C:3702:VAL:HG23	2.10	0.51
1:C:4849:TYR:HA	1:C:4852:THR:HG22	1.92	0.51
1:E:523:TYR:CE1	1:E:560:ILE:HG12	2.46	0.51
1:E:1240:LYS:NZ	1:E:1242:LEU:HB2	2.25	0.51
1:E:1658:ASP:OD1	1:E:1661:ARG:NH2	2.43	0.51
1:E:1692:ALA:HA	1:E:1695:LEU:HD12	1.92	0.51
1:E:1708:ARG:HH11	1:E:1712:TYR:HE2	1.57	0.51
1:E:1833:SER:O	1:E:1835:GLU:N	2.42	0.51
1:E:2121:PHE:CD1	1:E:3701:LEU:HD12	2.46	0.51
1:E:2495:VAL:HA	1:E:2498:HIS:HD2	1.76	0.51
1:E:4177:TYR:HA	1:E:4199:GLU:OE2	2.10	0.51
1:G:559:GLY:O	1:G:563:VAL:HG23	2.10	0.51
1:G:1688:HIS:ND1	1:G:1688:HIS:O	2.44	0.51
1:A:793:LEU:HB3	1:A:812:HIS:HB2	1.91	0.51
1:A:2305:CYS:HB2	1:A:2325:PRO:HG2	1.93	0.51
1:A:3729:MET:HE2	1:A:3770:LEU:HD13	1.92	0.51
1:C:1202:LEU:HD21	1:C:1204:LEU:HG	1.92	0.51
1:C:1210:SER:HA	1:C:1214:PHE:HB3	1.93	0.51
1:C:1708:ARG:HH11	1:C:1712:TYR:HE2	1.58	0.51
1:C:2553:TYR:HD1	1:C:2556:LEU:HD12	1.76	0.51
1:E:102:LEU:HB2	1:E:105:HIS:HD2	1.72	0.51
1:E:636:ASN:OD1	1:E:637:LEU:N	2.43	0.51
1:E:1247:PRO:HA	1:E:1602:PRO:HA	1.91	0.51
1:E:2244:ARG:HH11	1:E:2248:ARG:HH21	1.58	0.51
1:E:4107:GLU:HA	1:E:4110:PHE:HB3	1.93	0.51
1:E:4844:LEU:O	1:E:4848:VAL:HG23	2.11	0.51
1:G:638:ILE:HB	1:G:1636:MET:HB2	1.92	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:1210:SER:HA	1:G:1214:PHE:HB3	1.93	0.51
1:G:4146:LEU:O	1:G:4150:LEU:HG	2.09	0.51
1:A:113:HIS:CE1	1:A:402:ARG:HB3	2.46	0.51
1:A:132:ALA:HB1	1:A:193:ALA:O	2.11	0.51
1:A:4580:TYR:HB2	1:A:4631:PHE:HD1	1.76	0.51
1:C:113:HIS:CE1	1:C:402:ARG:HB3	2.46	0.51
1:C:173:SER:O	1:C:177:GLU:HA	2.11	0.51
1:C:1115:LEU:HD21	1:C:1123:VAL:HG11	1.93	0.51
1:C:1962:ALA:O	1:C:1966:VAL:HG23	2.11	0.51
1:C:3729:MET:HE2	1:C:3770:LEU:HD13	1.92	0.51
2:D:58:GLY:HA3	2:D:76:ILE:HG23	1.92	0.51
1:E:1240:LYS:NZ	1:E:1242:LEU:O	2.43	0.51
2:F:16:PRO:HD3	2:F:66:MET:O	2.09	0.51
1:G:255:HIS:HB3	1:G:257:ARG:HG2	1.93	0.51
1:A:265:LEU:HD22	1:A:309:THR:HG23	1.93	0.51
1:A:299:LEU:HD23	1:A:357:LEU:HD13	1.92	0.51
1:A:523:TYR:CE1	1:A:560:ILE:HG12	2.45	0.51
1:A:1163:THR:HG22	1:A:1168:VAL:HA	1.93	0.51
1:A:1240:LYS:NZ	1:A:1242:LEU:HB2	2.25	0.51
1:A:1658:ASP:OD1	1:A:1661:ARG:NH2	2.43	0.51
1:A:3750:GLU:O	1:A:3754:GLU:N	2.43	0.51
1:C:1780:PRO:HB2	2:D:42:ARG:NH2	2.25	0.51
1:C:3727:ASP:O	1:C:3730:ALA:HB3	2.11	0.51
1:C:3839:CYS:SG	1:C:3840:SER:N	2.84	0.51
1:C:3935:TRP:O	1:E:80:GLU:OE2	2.28	0.51
1:C:4107:GLU:HA	1:C:4110:PHE:HB3	1.93	0.51
1:C:4651:THR:HG23	1:C:4799:SER:HB3	1.92	0.51
1:C:4892:ARG:HH22	1:E:4920:PHE:HD2	1.57	0.51
1:E:590:LEU:HB2	1:E:599:VAL:HG11	1.93	0.51
1:G:625:LEU:HB3	1:G:632:LEU:HD23	1.93	0.51
1:G:2755:ILE:HD13	1:G:2810:LYS:HG2	1.92	0.51
1:G:4241:THR:O	1:G:4244:GLU:HB3	2.10	0.51
1:G:4665:LYS:O	1:G:4669:VAL:N	2.40	0.51
1:A:252:VAL:HG23	1:A:257:ARG:NE	2.25	0.51
1:A:252:VAL:HA	1:A:255:HIS:ND1	2.25	0.51
1:A:404:ILE:HG12	1:A:478:PHE:HD2	1.75	0.51
1:A:4004:ALA:HB3	1:A:4110:PHE:HZ	1.74	0.51
1:A:4905:ALA:N	1:A:4906:GLY:HA3	2.26	0.51
1:C:37:LEU:HB2	1:C:200:TRP:HZ3	1.75	0.51
1:C:265:LEU:HD22	1:C:309:THR:HG23	1.93	0.51
1:C:1079:LYS:HZ2	1:C:1107:PRO:HB2	1.76	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1103:GLY:HA3	1:C:1123:VAL:HA	1.92	0.51
1:C:1240:LYS:HZ3	1:C:1242:LEU:HB2	1.76	0.51
1:E:132:ALA:HB1	1:E:193:ALA:O	2.11	0.51
1:E:793:LEU:HB3	1:E:812:HIS:HB2	1.91	0.51
1:E:921:ASN:O	1:E:925:SER:N	2.26	0.51
1:E:1115:LEU:HD21	1:E:1123:VAL:HG11	1.93	0.51
1:E:1202:LEU:HD21	1:E:1204:LEU:HG	1.92	0.51
1:E:1962:ALA:O	1:E:1966:VAL:HG23	2.11	0.51
1:G:264:PRO:O	1:G:266:ARG:N	2.44	0.51
1:G:523:TYR:CE1	1:G:560:ILE:HG12	2.46	0.51
1:G:1658:ASP:OD1	1:G:1661:ARG:NH2	2.43	0.51
1:G:3847:PHE:HE1	1:G:3946:GLN:HG2	1.75	0.51
1:G:4905:ALA:N	1:G:4906:GLY:HA3	2.26	0.51
1:A:638:ILE:HG22	1:A:639:ASN:N	2.25	0.51
1:A:1833:SER:O	1:A:1835:GLU:N	2.41	0.51
1:C:255:HIS:HB3	1:C:257:ARG:HG2	1.93	0.51
1:C:276:TRP:CD1	1:C:318:VAL:HG23	2.46	0.51
1:C:1252:HIS:ND1	1:C:1253:PRO:HD2	2.25	0.51
1:C:2059:LEU:HD22	1:C:2062:ARG:NH1	2.18	0.51
1:E:1856:ASP:H	1:E:1858:ASP:N	2.08	0.51
1:E:2254:LEU:O	1:E:2258:LEU:HG	2.11	0.51
1:E:2819:TRP:CH2	1:E:2881:ASN:HB2	2.46	0.51
1:E:3750:GLU:O	1:E:3754:GLU:N	2.43	0.51
1:E:4822:THR:O	1:E:4825:THR:HB	2.11	0.51
1:G:173:SER:O	1:G:177:GLU:HA	2.11	0.51
1:G:716:PHE:H	1:G:738:LEU:HD13	1.74	0.51
2:H:14:THR:HG22	2:H:106:LEU:HD12	1.93	0.51
1:A:1077:ALA:HB2	1:A:1190:PRO:HG2	1.94	0.50
1:A:2553:TYR:HD1	1:A:2556:LEU:HD12	1.76	0.50
1:A:2745:VAL:HG21	1:A:2818:ALA:HB2	1.91	0.50
1:A:4151:SER:HA	1:A:4160:LEU:HD21	1.94	0.50
1:C:252:VAL:HA	1:C:255:HIS:ND1	2.25	0.50
1:C:299:LEU:HD23	1:C:357:LEU:HD13	1.92	0.50
1:C:828:GLU:O	1:C:840:VAL:HG23	2.10	0.50
1:C:1240:LYS:NZ	1:C:1242:LEU:HB2	2.26	0.50
1:C:1679:ASN:O	1:C:1683:HIS:ND1	2.41	0.50
1:C:4580:TYR:HB2	1:C:4631:PHE:HD1	1.76	0.50
1:C:4721:LYS:HD3	1:C:4741:LEU:HB3	1.93	0.50
1:C:4905:ALA:N	1:C:4906:GLY:HA3	2.25	0.50
1:E:622:THR:HG21	1:E:1681:VAL:HG13	1.94	0.50
1:E:1810:LYS:HD2	1:E:1813:ARG:HH22	1.76	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2553:TYR:HD1	1:E:2556:LEU:HD12	1.76	0.50
1:E:3839:CYS:SG	1:E:3840:SER:N	2.84	0.50
2:F:27:THR:HA	2:F:38:SER:HA	1.93	0.50
1:G:252:VAL:HG23	1:G:257:ARG:NE	2.25	0.50
1:G:626:LEU:HB2	1:G:627:PRO:HD3	1.93	0.50
1:G:1115:LEU:HD21	1:G:1123:VAL:HG11	1.93	0.50
1:G:1247:PRO:HA	1:G:1602:PRO:HA	1.91	0.50
1:G:1810:LYS:HD2	1:G:1813:ARG:HH22	1.76	0.50
1:G:2116:LEU:O	1:G:2120:MET:HG3	2.10	0.50
1:G:2819:TRP:CH2	1:G:2881:ASN:HB2	2.47	0.50
1:G:2890:LYS:HE3	1:G:2894:LEU:HD11	1.93	0.50
1:A:2774:ASN:OD1	1:A:2852:ARG:NE	2.44	0.50
1:A:2819:TRP:CH2	1:A:2881:ASN:HB2	2.46	0.50
1:A:3753:PHE:O	1:A:3757:GLU:N	2.44	0.50
1:A:4177:TYR:HA	1:A:4199:GLU:OE2	2.10	0.50
1:A:4676:GLU:O	1:A:4680:LYS:HG3	2.11	0.50
1:C:1768:THR:O	1:C:1769:THR:OG1	2.22	0.50
1:C:2062:ARG:O	1:C:2065:SER:OG	2.22	0.50
1:C:2254:LEU:O	1:C:2258:LEU:HG	2.11	0.50
1:E:1735:ILE:CD1	1:E:1771:LEU:HD12	2.42	0.50
1:E:3935:TRP:CB	1:G:76:ARG:HG3	2.41	0.50
2:F:58:GLY:HA3	2:F:76:ILE:HG23	1.92	0.50
1:G:394:GLN:HB3	1:G:397:GLU:HG2	1.93	0.50
1:G:588:SER:O	1:G:592:LYS:HG3	2.12	0.50
1:G:3835:LEU:O	1:G:3839:CYS:N	2.43	0.50
1:G:4221:VAL:O	1:G:4225:GLY:N	2.44	0.50
1:G:4876:CYS:HA	1:G:4882:CYS:HB3	1.93	0.50
1:A:173:SER:O	1:A:177:GLU:HA	2.11	0.50
1:A:3768:SER:HA	1:A:3771:HIS:HB3	1.91	0.50
1:C:1692:ALA:HA	1:C:1695:LEU:HD12	1.92	0.50
1:C:2214:VAL:HG11	1:C:2229:VAL:HG21	1.92	0.50
1:C:2495:VAL:HA	1:C:2498:HIS:HD2	1.76	0.50
1:C:2774:ASN:OD1	1:C:2852:ARG:NE	2.44	0.50
1:C:3835:LEU:HD22	1:C:3884:LEU:CD1	2.41	0.50
1:C:3916:ILE:HA	1:C:3919:THR:HG22	1.93	0.50
1:E:173:SER:O	1:E:177:GLU:HA	2.11	0.50
1:E:252:VAL:HG23	1:E:257:ARG:NE	2.26	0.50
1:G:1029:GLU:HA	1:G:1032:LYS:HB2	1.93	0.50
1:G:1253:PRO:O	1:G:1254:HIS:HB2	2.11	0.50
1:G:4578:LEU:HG	1:G:4578:LEU:O	2.12	0.50
1:A:394:GLN:HB3	1:A:397:GLU:HG2	1.93	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:588:SER:O	1:A:592:LYS:HG3	2.11	0.50
1:A:1166:GLY:HA3	1:A:1216:ILE:HD12	1.93	0.50
1:A:1962:ALA:O	1:A:1966:VAL:HG23	2.11	0.50
1:A:4573:ILE:O	1:A:4577:LEU:HB2	2.11	0.50
1:C:622:THR:HG21	1:C:1681:VAL:HG13	1.93	0.50
1:C:716:PHE:N	1:C:738:LEU:HD13	2.27	0.50
1:E:218:HIS:HE1	1:E:392:ARG:HB2	1.76	0.50
1:E:1163:THR:HG22	1:E:1168:VAL:HA	1.93	0.50
1:E:2774:ASN:OD1	1:E:2852:ARG:NE	2.45	0.50
1:E:3774:GLY:HA2	1:E:3815:LYS:NZ	2.26	0.50
1:G:113:HIS:CE1	1:G:402:ARG:HB3	2.46	0.50
1:G:132:ALA:HB1	1:G:193:ALA:O	2.11	0.50
1:G:622:THR:HG21	1:G:1681:VAL:HG13	1.93	0.50
1:G:828:GLU:O	1:G:840:VAL:HG23	2.11	0.50
1:G:1163:THR:HG22	1:G:1168:VAL:HA	1.93	0.50
1:G:5013:MET:O	1:G:5017:ARG:N	2.40	0.50
1:A:276:TRP:CD1	1:A:318:VAL:HG23	2.47	0.50
1:A:1253:PRO:O	1:A:1254:HIS:HB2	2.12	0.50
1:A:1705:GLY:O	1:A:1708:ARG:HB3	2.11	0.50
1:A:3698:LEU:O	1:A:3702:VAL:HG23	2.10	0.50
1:A:4583:SER:N	1:A:4628:VAL:O	2.41	0.50
1:C:102:LEU:HB2	1:C:105:HIS:HD2	1.72	0.50
1:C:218:HIS:HE1	1:C:392:ARG:HB2	1.76	0.50
1:C:492:ASP:OD1	1:C:546:TRP:NE1	2.43	0.50
1:C:588:SER:O	1:C:592:LYS:HG3	2.11	0.50
1:C:1514:LEU:HD12	1:C:1514:LEU:N	2.26	0.50
1:C:2121:PHE:CD1	1:C:3701:LEU:HD12	2.46	0.50
1:C:2819:TRP:CH2	1:C:2881:ASN:HB2	2.47	0.50
1:E:113:HIS:CE1	1:E:402:ARG:HB3	2.46	0.50
1:E:716:PHE:H	1:E:738:LEU:HD13	1.75	0.50
1:E:3727:ASP:O	1:E:3730:ALA:HB3	2.11	0.50
1:E:3891:LEU:HB3	1:E:3899:PHE:HE2	1.77	0.50
1:E:4905:ALA:N	1:E:4906:GLY:HA3	2.26	0.50
1:G:110:ARG:HG2	1:G:117:TYR:CE1	2.47	0.50
1:A:716:PHE:N	1:A:738:LEU:HD13	2.27	0.50
1:A:1115:LEU:HD21	1:A:1123:VAL:HG11	1.94	0.50
1:A:1210:SER:HA	1:A:1214:PHE:HB3	1.94	0.50
1:A:1688:HIS:ND1	1:A:1688:HIS:O	2.44	0.50
1:A:3835:LEU:HD22	1:A:3884:LEU:CD1	2.42	0.50
1:A:3935:TRP:O	1:C:80:GLU:OE2	2.29	0.50
1:C:675:LEU:O	1:C:676:THR:OG1	2.27	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1163:THR:HG22	1:C:1168:VAL:HA	1.93	0.50
1:C:3774:GLY:HA2	1:C:3815:LYS:NZ	2.26	0.50
1:C:3879:GLU:OE2	1:C:3883:ASP:OD2	2.30	0.50
1:C:3935:TRP:CB	1:E:76:ARG:HG3	2.42	0.50
1:C:4221:VAL:O	1:C:4225:GLY:N	2.44	0.50
1:E:42:PHE:HB2	1:E:403:MET:SD	2.52	0.50
1:E:265:LEU:HD22	1:E:309:THR:HG23	1.94	0.50
1:E:276:TRP:CD1	1:E:318:VAL:HG23	2.46	0.50
1:E:622:THR:O	1:E:626:LEU:N	2.42	0.50
1:E:828:GLU:O	1:E:840:VAL:HG23	2.10	0.50
1:E:4906:GLY:H	1:E:4910:GLU:HG3	1.76	0.50
1:G:118:LEU:HA	1:G:137:LEU:HD23	1.94	0.50
1:G:622:THR:O	1:G:626:LEU:N	2.42	0.50
1:G:1679:ASN:O	1:G:1683:HIS:ND1	2.40	0.50
1:G:1962:ALA:O	1:G:1966:VAL:HG23	2.11	0.50
1:G:2254:LEU:O	1:G:2258:LEU:HG	2.11	0.50
1:G:4172:GLU:HG2	1:G:4175:ARG:HH12	1.76	0.50
1:G:4182:GLU:HB2	1:G:4983:HIS:CE1	2.47	0.50
1:G:4984:ASN:O	1:G:4985:LEU:HB3	2.11	0.50
1:A:118:LEU:HA	1:A:137:LEU:HD23	1.94	0.50
1:A:218:HIS:HE1	1:A:392:ARG:HB2	1.76	0.50
1:A:702:TRP:HD1	2:B:34:LYS:NZ	2.04	0.50
1:A:1828:ASP:HB3	1:A:1829:PRO:C	2.32	0.50
1:A:4836:GLN:O	1:A:4839:MET:HG2	2.11	0.50
1:C:3753:PHE:O	1:C:3757:GLU:N	2.44	0.50
1:C:4906:GLY:H	1:C:4910:GLU:HG3	1.77	0.50
1:E:625:LEU:HB3	1:E:632:LEU:HD23	1.94	0.50
1:E:716:PHE:N	1:E:738:LEU:HD13	2.27	0.50
1:E:1166:GLY:HA3	1:E:1216:ILE:HD12	1.94	0.50
1:E:1783:VAL:HG12	2:F:54:GLU:O	2.12	0.50
1:E:4221:VAL:O	1:E:4225:GLY:N	2.44	0.50
1:E:4676:GLU:O	1:E:4680:LYS:HG3	2.12	0.50
1:G:150:MET:HG2	1:G:171:LEU:HD23	1.94	0.50
1:G:702:TRP:CD1	2:H:34:LYS:NZ	2.79	0.50
1:G:2495:VAL:HA	1:G:2498:HIS:HD2	1.77	0.50
1:A:472:ARG:NE	1:A:532:GLY:O	2.45	0.50
1:A:764:VAL:O	1:A:764:VAL:HG12	2.12	0.50
1:A:1780:PRO:HB2	2:B:42:ARG:NH2	2.27	0.50
1:A:2095:GLN:HG3	1:A:2127:GLN:OE1	2.11	0.50
1:A:2254:LEU:O	1:A:2258:LEU:HG	2.12	0.50
1:A:4145:VAL:HG13	1:A:4194:TYR:HD2	1.77	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:4810:ALA:O	1:A:4813:LEU:HG	2.11	0.50
1:C:233:ILE:HD12	1:C:242:ARG:HB3	1.92	0.50
1:C:4676:GLU:O	1:C:4680:LYS:HG3	2.12	0.50
1:C:4905:ALA:H	1:C:4906:GLY:HA3	1.77	0.50
1:E:407:THR:HA	1:E:410:LEU:HG	1.93	0.50
1:E:588:SER:O	1:E:592:LYS:HG3	2.11	0.50
1:E:1029:GLU:HA	1:E:1032:LYS:HB2	1.94	0.50
1:E:1685:LEU:O	1:E:1689:VAL:HG12	2.12	0.50
1:E:2059:LEU:HD22	1:E:2062:ARG:NH1	2.18	0.50
1:E:2735:PHE:HD2	1:E:2891:LYS:HD2	1.77	0.50
1:G:1166:GLY:HA3	1:G:1216:ILE:HD12	1.94	0.50
1:G:3698:LEU:HB3	1:G:3773:ARG:HE	1.77	0.50
1:G:3727:ASP:O	1:G:3730:ALA:HB3	2.11	0.50
1:A:173:SER:HG	1:A:175:SER:HG	1.57	0.50
1:A:1685:LEU:O	1:A:1689:VAL:HG12	2.12	0.50
1:A:2517:PHE:O	1:A:2521:VAL:HG23	2.12	0.50
1:C:132:ALA:HB1	1:C:193:ALA:O	2.11	0.50
1:C:3985:LEU:O	1:C:3988:ALA:HB3	2.11	0.50
1:C:4979:THR:O	1:C:4984:ASN:N	2.30	0.50
1:E:118:LEU:HA	1:E:137:LEU:HD23	1.94	0.50
1:E:255:HIS:HB3	1:E:257:ARG:HG2	1.93	0.50
1:E:3879:GLU:OE2	1:E:3883:ASP:OD2	2.30	0.50
1:G:1663:HIS:CE1	1:G:1667:LEU:HD11	2.47	0.50
1:G:1705:GLY:O	1:G:1708:ARG:HB3	2.11	0.50
1:G:2496:PRO:HB3	1:G:2552:ARG:HD2	1.92	0.50
1:G:4834:GLY:O	1:G:4837:LEU:HB3	2.12	0.50
1:A:626:LEU:HB2	1:A:627:PRO:HD3	1.93	0.49
1:A:1024:TYR:HB3	1:A:1032:LYS:HD3	1.94	0.49
1:A:1767:VAL:C	1:A:1768:THR:HG1	2.15	0.49
1:A:3774:GLY:HA2	1:A:3815:LYS:NZ	2.27	0.49
1:A:3879:GLU:OE2	1:A:3883:ASP:OD2	2.30	0.49
1:A:3891:LEU:HB3	1:A:3899:PHE:HE2	1.77	0.49
1:A:4107:GLU:HA	1:A:4110:PHE:HB3	1.93	0.49
1:C:472:ARG:NE	1:C:532:GLY:O	2.45	0.49
1:C:1457:TYR:C	1:C:1458:HIS:CG	2.86	0.49
1:C:1810:LYS:HD2	1:C:1813:ARG:HH22	1.76	0.49
1:C:1933:GLU:O	1:C:1936:LYS:HB2	2.12	0.49
1:C:3921:ASP:O	1:C:3924:LEU:HB2	2.12	0.49
1:E:626:LEU:HB2	1:E:627:PRO:HD3	1.93	0.49
1:E:2173:GLN:HG2	1:E:2174:GLU:N	2.19	0.49
1:E:3753:PHE:O	1:E:3757:GLU:N	2.44	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4892:ARG:HH22	1:G:4920:PHE:HD2	1.60	0.49
2:F:14:THR:HG22	2:F:106:LEU:HD12	1.94	0.49
1:G:2066:LEU:O	1:G:2069:THR:OG1	2.30	0.49
1:G:2121:PHE:CD1	1:G:3701:LEU:HD12	2.46	0.49
1:G:2774:ASN:OD1	1:G:2852:ARG:NE	2.45	0.49
1:G:4137:ARG:HD2	1:G:4177:TYR:CZ	2.45	0.49
1:G:4946:GLN:HA	1:G:4949:GLN:HB3	1.94	0.49
1:A:1810:LYS:HD2	1:A:1813:ARG:HH22	1.76	0.49
1:A:2214:VAL:HG11	1:A:2229:VAL:CG2	2.42	0.49
2:B:74:LEU:HD23	2:B:76:ILE:HD11	1.94	0.49
1:C:34:LYS:HB2	1:C:53:SER:HB2	1.94	0.49
1:C:702:TRP:HD1	2:D:34:LYS:NZ	2.04	0.49
1:C:1077:ALA:HB2	1:C:1190:PRO:HG2	1.94	0.49
1:C:1663:HIS:CE1	1:C:1667:LEU:HD11	2.47	0.49
1:E:764:VAL:O	1:E:764:VAL:HG12	2.12	0.49
1:E:1679:ASN:O	1:E:1683:HIS:ND1	2.41	0.49
1:E:1933:GLU:O	1:E:1936:LYS:HB2	2.13	0.49
1:E:2671:GLU:CB	1:E:2913:ALA:H	2.26	0.49
1:E:3835:LEU:HD22	1:E:3884:LEU:CD1	2.42	0.49
2:F:54:GLU:HG3	2:F:55:VAL:HG13	1.94	0.49
1:G:407:THR:HA	1:G:410:LEU:HG	1.93	0.49
1:G:1448:VAL:HG13	1:G:1554:VAL:HA	1.94	0.49
1:A:2890:LYS:HE3	1:A:2894:LEU:HD11	1.94	0.49
1:A:3905:THR:HG23	1:A:3907:THR:HG23	1.92	0.49
1:A:4849:TYR:HA	1:A:4852:THR:HG22	1.92	0.49
1:A:5006:GLN:O	1:A:5010:VAL:HG23	2.12	0.49
1:C:42:PHE:HB2	1:C:403:MET:SD	2.52	0.49
1:C:118:LEU:HA	1:C:137:LEU:HD23	1.94	0.49
1:C:119:SER:O	1:C:136:GLY:N	2.31	0.49
1:C:597:HIS:HB2	1:C:1665:HIS:CD2	2.48	0.49
1:C:1253:PRO:O	1:C:1254:HIS:HB2	2.12	0.49
2:D:27:THR:HA	2:D:38:SER:HA	1.93	0.49
1:E:150:MET:HG2	1:E:171:LEU:HD23	1.95	0.49
1:E:492:ASP:OD1	1:E:546:TRP:NE1	2.43	0.49
1:E:636:ASN:ND2	2:F:35:LYS:HD3	2.27	0.49
1:E:1663:HIS:CE1	1:E:1667:LEU:HD11	2.48	0.49
1:E:1767:VAL:C	1:E:1768:THR:HG1	2.15	0.49
1:E:2517:PHE:O	1:E:2521:VAL:HG23	2.13	0.49
1:E:2890:LYS:HE3	1:E:2894:LEU:HD11	1.94	0.49
1:G:2517:PHE:O	1:G:2521:VAL:HG23	2.13	0.49
1:G:3716:LEU:N	1:G:3789:GLU:OE2	2.45	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:4842:GLY:O	1:G:4846:VAL:HG23	2.13	0.49
1:A:42:PHE:HB2	1:A:403:MET:SD	2.53	0.49
1:A:245:VAL:HG12	1:A:376:ALA:HB3	1.95	0.49
1:A:2173:GLN:OE1	1:A:2173:GLN:N	2.46	0.49
1:C:394:GLN:HB3	1:C:397:GLU:HG2	1.93	0.49
1:C:1029:GLU:HA	1:C:1032:LYS:HB2	1.93	0.49
1:C:1245:PHE:HD2	1:C:1290:ARG:HH11	1.61	0.49
1:C:2890:LYS:HE3	1:C:2894:LEU:HD11	1.94	0.49
1:C:4573:ILE:O	1:C:4577:LEU:HB2	2.11	0.49
1:E:1077:ALA:HB2	1:E:1190:PRO:HG2	1.95	0.49
1:E:1253:PRO:O	1:E:1254:HIS:HB2	2.12	0.49
1:G:516:LYS:HG3	1:G:517:GLU:N	2.27	0.49
1:G:2173:GLN:OE1	1:G:2173:GLN:N	2.45	0.49
1:A:1029:GLU:HA	1:A:1032:LYS:HB2	1.93	0.49
1:A:1457:TYR:C	1:A:1458:HIS:CG	2.86	0.49
1:A:2854:GLY:O	1:A:2856:ASN:ND2	2.46	0.49
1:A:4677:LEU:HA	1:A:4680:LYS:HD2	1.95	0.49
1:C:110:ARG:HG2	1:C:117:TYR:CE1	2.48	0.49
1:C:342:GLY:N	1:C:390:LEU:O	2.46	0.49
1:C:1685:LEU:O	1:C:1689:VAL:HG12	2.13	0.49
1:C:1767:VAL:C	1:C:1768:THR:HG1	2.16	0.49
1:C:4151:SER:HA	1:C:4160:LEU:HD21	1.94	0.49
1:C:4730:ASP:OD1	1:C:4731:ILE:N	2.46	0.49
1:E:597:HIS:HB2	1:E:1665:HIS:CD2	2.47	0.49
1:E:1245:PHE:HD2	1:E:1290:ARG:HH11	1.61	0.49
1:E:2173:GLN:OE1	1:E:2173:GLN:N	2.45	0.49
1:E:3905:THR:HG23	1:E:3907:THR:HG23	1.93	0.49
1:E:5006:GLN:O	1:E:5010:VAL:HG23	2.12	0.49
1:G:42:PHE:HB2	1:G:403:MET:SD	2.52	0.49
1:G:1762:LEU:HD12	1:G:1763:PRO:HD2	1.94	0.49
1:G:2125:HIS:CE1	1:G:3724:ALA:HB1	2.48	0.49
1:G:4905:ALA:H	1:G:4906:GLY:HA3	1.78	0.49
1:A:597:HIS:HB2	1:A:1665:HIS:CD2	2.48	0.49
1:A:639:ASN:ND2	1:A:676:THR:OG1	2.45	0.49
1:A:1933:GLU:O	1:A:1936:LYS:HB2	2.12	0.49
1:A:2420:HIS:ND1	1:A:2423:MET:SD	2.75	0.49
1:A:3662:ILE:O	1:A:3662:ILE:HG22	2.13	0.49
1:C:264:PRO:O	1:C:266:ARG:N	2.44	0.49
1:C:1024:TYR:HB3	1:C:1032:LYS:HD3	1.95	0.49
1:C:1556:PRO:HA	1:C:1561:VAL:HG23	1.93	0.49
1:C:1783:VAL:HG12	2:D:54:GLU:O	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:4642:ALA:O	1:C:4646:LEU:N	2.44	0.49
1:C:4677:LEU:HD23	1:C:4711:PHE:CE1	2.48	0.49
1:C:4688:ILE:HG21	1:C:4728:HIS:HB3	1.95	0.49
1:E:472:ARG:NE	1:E:532:GLY:O	2.46	0.49
1:E:1074:ILE:HA	1:E:1193:SER:HA	1.95	0.49
1:G:34:LYS:HB2	1:G:53:SER:HB2	1.94	0.49
1:G:245:VAL:HG12	1:G:376:ALA:HB3	1.95	0.49
1:G:472:ARG:NE	1:G:532:GLY:O	2.46	0.49
1:G:1141:ARG:NH1	1:G:1169:LEU:HD11	2.26	0.49
1:G:1685:LEU:O	1:G:1689:VAL:HG12	2.12	0.49
1:G:1933:GLU:O	1:G:1936:LYS:HB2	2.12	0.49
1:G:2244:ARG:HH11	1:G:2248:ARG:HH21	1.60	0.49
1:G:2883:HIS:HE1	1:G:2904:LEU:O	1.95	0.49
1:G:4567:LEU:HD12	1:G:4815:ASP:OD2	2.12	0.49
1:A:110:ARG:HG2	1:A:117:TYR:CE1	2.48	0.49
1:A:452:PHE:O	1:A:528:SER:OG	2.31	0.49
1:A:1245:PHE:HD2	1:A:1290:ARG:HH11	1.61	0.49
1:A:1734:TYR:OH	1:A:1948:ASP:OD1	2.19	0.49
1:A:2735:PHE:HD2	1:A:2891:LYS:HD2	1.78	0.49
1:A:3921:ASP:O	1:A:3924:LEU:HB2	2.12	0.49
1:A:4730:ASP:OD1	1:A:4731:ILE:N	2.45	0.49
1:A:4920:PHE:HD2	1:G:4892:ARG:HH22	1.61	0.49
2:B:49:MET:N	2:B:54:GLU:OE2	2.46	0.49
1:C:1828:ASP:HB3	1:C:1829:PRO:C	2.32	0.49
1:C:2095:GLN:HG3	1:C:2127:GLN:OE1	2.11	0.49
1:C:2735:PHE:HD2	1:C:2891:LYS:HD2	1.77	0.49
2:D:74:LEU:HD23	2:D:76:ILE:HD11	1.94	0.49
1:E:1277:TRP:HB2	1:E:1562:ILE:O	2.13	0.49
1:E:1712:TYR:CD2	1:E:1840:PRO:HB2	2.48	0.49
1:E:4573:ILE:O	1:E:4577:LEU:HB2	2.13	0.49
1:E:4574:ASN:ND2	1:E:4813:LEU:HD23	2.27	0.49
1:G:218:HIS:HE1	1:G:392:ARG:HB2	1.76	0.49
1:G:1457:TYR:C	1:G:1458:HIS:CG	2.86	0.49
1:G:1556:PRO:HA	1:G:1561:VAL:HG23	1.93	0.49
1:G:2173:GLN:HG2	1:G:2174:GLU:N	2.20	0.49
1:G:4031:LEU:HD11	1:G:4044:MET:SD	2.53	0.49
1:G:4843:LEU:O	1:G:4847:VAL:HG23	2.13	0.49
1:A:1735:ILE:CD1	1:A:1771:LEU:HD12	2.42	0.49
1:A:3839:CYS:SG	1:A:3840:SER:N	2.84	0.49
1:A:4906:GLY:H	1:A:4910:GLU:HG3	1.77	0.49
1:C:150:MET:HG2	1:C:171:LEU:HD23	1.95	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:245:VAL:HG12	1:C:376:ALA:HB3	1.95	0.49
1:C:636:ASN:OD1	1:C:637:LEU:N	2.43	0.49
1:C:1130:GLN:NE2	1:C:1132:TRP:HE1	2.11	0.49
1:C:3891:LEU:HB3	1:C:3899:PHE:HE2	1.77	0.49
1:E:516:LYS:HG3	1:E:517:GLU:N	2.27	0.49
1:E:1457:TYR:C	1:E:1458:HIS:CG	2.86	0.49
1:E:1739:THR:O	1:E:1742:THR:OG1	2.21	0.49
1:E:4055:VAL:HA	1:E:4058:ILE:HG12	1.95	0.49
1:E:4677:LEU:HA	1:E:4680:LYS:HD2	1.94	0.49
1:E:4721:LYS:HD3	1:E:4741:LEU:HB3	1.94	0.49
1:E:4905:ALA:H	1:E:4906:GLY:HA3	1.78	0.49
1:G:276:TRP:CD1	1:G:318:VAL:HG23	2.47	0.49
1:G:451:TYR:HD2	1:G:452:PHE:CE2	2.31	0.49
1:G:458:GLU:HG2	1:G:458:GLU:O	2.13	0.49
1:G:1077:ALA:HB2	1:G:1190:PRO:HG2	1.94	0.49
1:G:4027:LEU:O	1:G:4031:LEU:HD13	2.13	0.49
1:G:4666:VAL:O	1:G:4670:ILE:HG12	2.13	0.49
1:G:4688:ILE:HG21	1:G:4728:HIS:HB3	1.94	0.49
2:H:23:VAL:HG12	2:H:104:LEU:HD12	1.95	0.49
1:A:34:LYS:HB2	1:A:53:SER:HB2	1.93	0.49
1:A:625:LEU:HB3	1:A:632:LEU:HD23	1.94	0.49
1:A:636:ASN:HD21	2:B:35:LYS:HD3	1.78	0.49
1:A:1457:TYR:CZ	1:A:1459:GLN:NE2	2.81	0.49
1:A:2244:ARG:HH11	1:A:2248:ARG:HH21	1.59	0.49
1:A:2495:VAL:HA	1:A:2498:HIS:HD2	1.77	0.49
1:A:2671:GLU:CB	1:A:2913:ALA:H	2.26	0.49
1:A:4877:ASP:O	1:G:4581:LYS:CE	2.61	0.49
1:C:626:LEU:HB2	1:C:627:PRO:HD3	1.93	0.49
1:C:1166:GLY:HA3	1:C:1216:ILE:HD12	1.95	0.49
1:C:1448:VAL:HG13	1:C:1554:VAL:HA	1.94	0.49
1:C:2671:GLU:CB	1:C:2913:ALA:H	2.26	0.49
1:E:3985:LEU:O	1:E:3988:ALA:HB3	2.11	0.49
1:E:4242:ILE:O	1:E:4246:GLN:HG2	2.13	0.49
1:E:4888:TYR:OH	1:G:4898:GLY:HA3	2.13	0.49
1:G:1240:LYS:HZ3	1:G:1242:LEU:HB2	1.78	0.49
1:G:3835:LEU:HD21	1:G:3880:PHE:HE2	1.77	0.49
1:G:3927:GLN:NE2	1:G:3988:ALA:O	2.36	0.49
1:A:162:LYS:HB2	1:A:164:ARG:HH12	1.77	0.49
1:A:635:THR:OG1	1:A:1638:ALA:O	2.26	0.49
1:A:1074:ILE:HA	1:A:1193:SER:HA	1.95	0.49
1:A:1448:VAL:HG13	1:A:1554:VAL:HA	1.93	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:3996:PHE:CE2	1:A:4019:LEU:HD22	2.48	0.49
1:A:4886:HIS:O	1:A:4891:VAL:N	2.42	0.49
1:A:4905:ALA:H	1:A:4906:GLY:HA3	1.78	0.49
1:C:1084:GLN:NE2	1:C:1185:GLY:O	2.46	0.49
1:C:1712:TYR:CD2	1:C:1840:PRO:HB2	2.48	0.49
1:C:4581:LYS:CE	1:E:4877:ASP:O	2.61	0.49
1:E:312:THR:O	1:E:314:PHE:N	2.41	0.49
1:E:394:GLN:HB3	1:E:397:GLU:HG2	1.94	0.49
1:E:1780:PRO:HB2	2:F:42:ARG:NH2	2.28	0.49
1:E:3921:ASP:O	1:E:3924:LEU:HB2	2.12	0.49
1:E:4727:LYS:NZ	1:E:4728:HIS:CE1	2.80	0.49
1:G:312:THR:O	1:G:314:PHE:N	2.41	0.49
1:G:1073:ARG:C	1:G:1074:ILE:HG13	2.33	0.49
1:G:1093:GLU:HA	1:G:1148:VAL:HG13	1.95	0.49
1:G:3713:LYS:O	1:G:3715:LYS:N	2.46	0.49
1:G:4217:PHE:CZ	1:G:4234:PHE:HA	2.48	0.49
1:G:4230:LYS:NZ	1:G:4960:ILE:O	2.45	0.49
1:A:516:LYS:HG3	1:A:517:GLU:N	2.28	0.48
1:C:674:PHE:HD1	2:D:40:ARG:HH12	1.50	0.48
1:C:1074:ILE:HA	1:C:1193:SER:HA	1.95	0.48
1:C:1735:ILE:CD1	1:C:1771:LEU:HD12	2.42	0.48
1:C:2854:GLY:O	1:C:2856:ASN:ND2	2.46	0.48
1:C:3713:LYS:O	1:C:3715:LYS:N	2.46	0.48
1:C:4141:PHE:CE1	1:C:4178:LEU:HA	2.48	0.48
1:C:4145:VAL:HG13	1:C:4194:TYR:HD2	1.77	0.48
1:E:459:LEU:HD11	1:E:463:GLU:OE1	2.12	0.48
1:E:4181:ILE:HG12	1:E:4195:PHE:CE1	2.48	0.48
1:E:4887:MET:HA	1:E:4891:VAL:HG23	1.95	0.48
1:G:1245:PHE:HD2	1:G:1290:ARG:HH11	1.61	0.48
1:G:1780:PRO:HB2	2:H:42:ARG:NH2	2.28	0.48
1:G:4034:ASN:HD21	1:G:4040:ILE:CG2	2.26	0.48
1:A:473:ASN:O	1:A:477:LEU:HG	2.13	0.48
1:A:1663:HIS:CE1	1:A:1667:LEU:HD11	2.47	0.48
1:A:3713:LYS:O	1:A:3715:LYS:N	2.46	0.48
1:A:4721:LYS:HD3	1:A:4741:LEU:HB3	1.95	0.48
1:C:458:GLU:O	1:C:458:GLU:HG2	2.13	0.48
1:C:473:ASN:O	1:C:477:LEU:HG	2.13	0.48
1:C:764:VAL:O	1:C:764:VAL:HG12	2.12	0.48
1:C:1277:TRP:HB2	1:C:1562:ILE:O	2.13	0.48
1:E:1556:PRO:HA	1:E:1561:VAL:HG23	1.94	0.48
1:E:3713:LYS:O	1:E:3715:LYS:N	2.46	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:1712:TYR:CD2	1:G:1840:PRO:HB2	2.48	0.48
1:G:1767:VAL:C	1:G:1768:THR:HG1	2.16	0.48
1:G:1828:ASP:HB3	1:G:1829:PRO:C	2.33	0.48
2:H:38:SER:HB3	2:H:41:ASP:CG	2.33	0.48
1:A:264:PRO:O	1:A:266:ARG:N	2.43	0.48
1:A:1641:ILE:HD12	1:A:1642:PRO:HD2	1.96	0.48
1:A:1712:TYR:CD2	1:A:1840:PRO:HB2	2.48	0.48
1:A:3935:TRP:CB	1:C:76:ARG:HG3	2.44	0.48
1:A:4688:ILE:HG21	1:A:4728:HIS:HB3	1.95	0.48
1:A:4826:ILE:O	1:A:4829:SER:HB2	2.13	0.48
2:B:54:GLU:HG3	2:B:55:VAL:HG13	1.94	0.48
1:C:452:PHE:O	1:C:528:SER:OG	2.31	0.48
1:C:5006:GLN:O	1:C:5010:VAL:HG23	2.13	0.48
2:D:54:GLU:HG3	2:D:55:VAL:HG13	1.94	0.48
1:E:34:LYS:HB2	1:E:53:SER:HB2	1.94	0.48
1:E:473:ASN:O	1:E:477:LEU:HG	2.13	0.48
1:E:1295:VAL:O	1:E:1547:LYS:HA	2.13	0.48
1:E:1448:VAL:HG13	1:E:1554:VAL:HA	1.93	0.48
1:E:2214:VAL:HG11	1:E:2229:VAL:CG2	2.44	0.48
2:F:49:MET:N	2:F:54:GLU:OE2	2.46	0.48
1:G:1074:ILE:HA	1:G:1193:SER:HA	1.95	0.48
1:G:2214:VAL:HG11	1:G:2229:VAL:CG2	2.44	0.48
1:A:195:PHE:HE2	1:G:2358:ILE:CG2	2.27	0.48
1:A:1079:LYS:HZ2	1:A:1107:PRO:HB2	1.78	0.48
1:A:4234:PHE:CZ	1:A:4988:TYR:HB2	2.49	0.48
1:A:4642:ALA:O	1:A:4646:LEU:N	2.44	0.48
1:A:4677:LEU:HD23	1:A:4711:PHE:CE1	2.49	0.48
1:C:1830:VAL:HG13	1:C:1837:GLN:HB3	1.95	0.48
1:C:2214:VAL:HG11	1:C:2229:VAL:CG2	2.43	0.48
1:C:2517:PHE:O	1:C:2521:VAL:HG23	2.13	0.48
1:C:4677:LEU:HA	1:C:4680:LYS:HD2	1.94	0.48
1:E:235:ALA:HB2	1:E:257:ARG:HD3	1.95	0.48
1:E:245:VAL:HG12	1:E:376:ALA:HB3	1.95	0.48
1:E:452:PHE:O	1:E:528:SER:OG	2.31	0.48
1:E:4141:PHE:CE1	1:E:4178:LEU:HA	2.48	0.48
1:E:4730:ASP:OD1	1:E:4731:ILE:N	2.46	0.48
1:G:597:HIS:HB2	1:G:1665:HIS:CD2	2.48	0.48
1:G:1024:TYR:HB3	1:G:1032:LYS:HD3	1.94	0.48
1:G:2754:PHE:CZ	1:G:2930:LEU:HD23	2.48	0.48
1:A:458:GLU:HG2	1:A:458:GLU:O	2.13	0.48
1:A:1093:GLU:HA	1:A:1148:VAL:HG13	1.95	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:4039:MET:HA	1:A:4042:ARG:HH11	1.78	0.48
1:A:4839:MET:HB3	1:G:4823:LEU:CD1	2.44	0.48
2:B:14:THR:HG22	2:B:106:LEU:HD12	1.95	0.48
1:C:1293:LEU:HD23	1:C:1584:ARG:CG	2.44	0.48
1:C:4702:ASP:OD1	1:C:4778:TRP:NE1	2.31	0.48
2:D:14:THR:HG22	2:D:106:LEU:HD12	1.95	0.48
2:D:25:HIS:O	2:D:102:GLU:N	2.39	0.48
1:E:1073:ARG:C	1:E:1074:ILE:HG13	2.34	0.48
1:E:1112:ASP:OD1	1:E:1606:SER:HB3	2.14	0.48
1:E:2854:GLY:O	1:E:2856:ASN:ND2	2.46	0.48
1:E:4979:THR:O	1:E:4984:ASN:N	2.30	0.48
1:G:636:ASN:HD21	2:H:35:LYS:HD3	1.79	0.48
1:G:764:VAL:O	1:G:764:VAL:HG12	2.13	0.48
1:G:1277:TRP:HB2	1:G:1562:ILE:O	2.13	0.48
1:G:2305:CYS:HB2	1:G:2325:PRO:HG2	1.96	0.48
1:G:2854:GLY:O	1:G:2856:ASN:ND2	2.46	0.48
1:G:3729:MET:HE2	1:G:3770:LEU:HD22	1.96	0.48
1:G:4921:PHE:CD1	1:G:4925:ILE:HG13	2.49	0.48
1:G:4951:LYS:O	1:G:4955:GLU:HG2	2.13	0.48
1:G:5027:CYS:HB3	1:G:5030:LYS:HB3	1.95	0.48
1:A:1739:THR:O	1:A:1742:THR:OG1	2.21	0.48
1:C:625:LEU:HB3	1:C:632:LEU:HD23	1.95	0.48
1:C:791:PHE:HB2	1:C:1626:TRP:HB2	1.95	0.48
1:C:2173:GLN:N	1:C:2173:GLN:OE1	2.46	0.48
1:C:2358:ILE:CG2	1:E:195:PHE:HE2	2.27	0.48
1:C:4782:VAL:O	1:C:4785:THR:OG1	2.21	0.48
1:E:519:VAL:HG22	1:E:523:TYR:CE2	2.48	0.48
1:E:3811:GLU:HA	1:E:3814:GLN:HG2	1.95	0.48
1:E:4039:MET:HA	1:E:4042:ARG:HH11	1.78	0.48
1:G:452:PHE:O	1:G:528:SER:OG	2.32	0.48
1:G:519:VAL:HG22	1:G:523:TYR:CE2	2.49	0.48
1:G:1098:GLY:HA3	1:G:1198:GLN:HE21	1.78	0.48
1:G:1112:ASP:OD1	1:G:1606:SER:HB3	2.14	0.48
1:G:1641:ILE:HD12	1:G:1642:PRO:HD2	1.96	0.48
1:G:2142:TYR:HE1	1:G:2196:ASN:HD22	1.62	0.48
1:G:3729:MET:CE	1:G:3770:LEU:HD22	2.44	0.48
1:G:4141:PHE:HE1	1:G:4178:LEU:HA	1.78	0.48
1:G:4640:GLU:HB3	1:G:4641:PRO:HD3	1.95	0.48
1:A:160:GLY:O	1:G:3984:ARG:NH1	2.43	0.48
1:A:519:VAL:HG22	1:A:523:TYR:CE2	2.48	0.48
1:A:1073:ARG:C	1:A:1074:ILE:HG13	2.34	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1830:VAL:HG13	1:A:1837:GLN:HB3	1.96	0.48
1:C:355:LEU:HB2	1:C:378:LEU:HB3	1.96	0.48
1:C:1098:GLY:HA3	1:C:1198:GLN:HE21	1.78	0.48
1:C:3835:LEU:O	1:C:3839:CYS:N	2.46	0.48
1:E:107:ILE:H	1:E:148:TRP:H	1.62	0.48
1:E:720:HIS:HB2	1:E:728:ARG:O	2.14	0.48
1:E:1828:ASP:HB3	1:E:1829:PRO:C	2.33	0.48
1:G:1735:ILE:CD1	1:G:1771:LEU:HD12	2.43	0.48
1:G:2383:ALA:HB1	1:G:2423:MET:SD	2.54	0.48
1:G:3768:SER:O	1:G:3772:THR:HG23	2.13	0.48
1:G:3810:ALA:HA	1:G:3813:GLN:HB2	1.94	0.48
1:G:4730:ASP:OD1	1:G:4731:ILE:N	2.46	0.48
1:A:492:ASP:OD1	1:A:546:TRP:NE1	2.42	0.48
1:A:3882:GLN:HE22	1:A:3956:SER:HB3	1.78	0.48
1:C:235:ALA:HB2	1:C:257:ARG:HD3	1.95	0.48
1:C:1295:VAL:O	1:C:1547:LYS:HA	2.14	0.48
1:C:2870:GLU:OE2	1:C:2939:ARG:NH2	2.47	0.48
1:C:2927:LEU:HD23	1:C:2930:LEU:HD12	1.96	0.48
1:C:3662:ILE:HG22	1:C:3662:ILE:O	2.14	0.48
1:C:4055:VAL:HA	1:C:4058:ILE:HG12	1.95	0.48
1:C:4242:ILE:O	1:C:4246:GLN:HG2	2.13	0.48
1:C:4727:LYS:NZ	1:C:4728:HIS:CE1	2.80	0.48
1:E:1084:GLN:NE2	1:E:1185:GLY:O	2.46	0.48
1:E:1762:LEU:HD12	1:E:1763:PRO:HD2	1.96	0.48
1:E:3662:ILE:HG22	1:E:3662:ILE:O	2.14	0.48
1:E:4580:TYR:HB2	1:E:4631:PHE:HD1	1.78	0.48
1:E:4778:TRP:O	1:E:4782:VAL:HG23	2.14	0.48
1:G:1295:VAL:O	1:G:1547:LYS:HA	2.14	0.48
1:G:2771:ILE:HD11	1:G:2857:PRO:HD2	1.96	0.48
1:G:3780:LEU:HG	1:G:3828:PHE:CE1	2.48	0.48
1:G:3835:LEU:HD22	1:G:3884:LEU:HD13	1.95	0.48
1:A:342:GLY:N	1:A:390:LEU:O	2.46	0.48
1:A:451:TYR:HD2	1:A:452:PHE:CE2	2.32	0.48
1:A:593:HIS:HB3	1:A:596:ASN:HD22	1.79	0.48
1:A:2927:LEU:HD23	1:A:2930:LEU:HD12	1.95	0.48
1:A:4578:LEU:HG	1:A:4578:LEU:O	2.14	0.48
1:A:4727:LYS:NZ	1:A:4728:HIS:CE1	2.80	0.48
1:A:4821:LYS:HD3	1:A:4947:GLN:HE22	1.79	0.48
1:A:4839:MET:HB3	1:G:4823:LEU:HD12	1.96	0.48
1:C:215:THR:O	1:C:218:HIS:HB3	2.14	0.48
1:C:593:HIS:HB3	1:C:596:ASN:HD22	1.79	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1073:ARG:C	1:C:1074:ILE:HG13	2.33	0.48
1:C:1093:GLU:HA	1:C:1148:VAL:HG13	1.96	0.48
1:C:4234:PHE:CZ	1:C:4988:TYR:HB2	2.49	0.48
1:E:110:ARG:HG2	1:E:117:TYR:CE1	2.48	0.48
1:E:355:LEU:HB2	1:E:378:LEU:HB3	1.96	0.48
1:E:1641:ILE:HD12	1:E:1642:PRO:HD2	1.96	0.48
1:E:4039:MET:HA	1:E:4042:ARG:HE	1.79	0.48
1:E:4945:ASP:O	1:E:4949:GLN:HB2	2.14	0.48
2:F:74:LEU:HD23	2:F:76:ILE:HD11	1.95	0.48
1:G:178:ARG:HD3	1:G:195:PHE:CE1	2.49	0.48
1:G:785:ALA:HA	1:G:1633:PRO:HD3	1.96	0.48
1:G:791:PHE:HB2	1:G:1626:TRP:HB2	1.95	0.48
1:G:2671:GLU:CB	1:G:2913:ALA:H	2.27	0.48
1:G:2735:PHE:HD2	1:G:2891:LYS:HD2	1.78	0.48
1:G:2883:HIS:NE2	1:G:2906:VAL:O	2.36	0.48
1:G:3980:LEU:HA	1:G:3983:SER:HB2	1.96	0.48
1:G:4779:LYS:O	1:G:4783:ILE:HG13	2.13	0.48
1:G:4844:LEU:O	1:G:4848:VAL:HG23	2.14	0.48
1:A:1556:PRO:HA	1:A:1561:VAL:HG23	1.94	0.48
1:A:3953:LYS:O	1:A:3957:VAL:HG23	2.14	0.48
1:A:4242:ILE:O	1:A:4246:GLN:HG2	2.13	0.48
1:A:4672:LYS:O	1:A:4676:GLU:HG3	2.14	0.48
1:A:4826:ILE:HG12	1:C:4839:MET:HE3	1.96	0.48
1:C:1511:HIS:CE1	1:C:1532:ASN:HD21	2.31	0.48
1:C:1641:ILE:HD12	1:C:1642:PRO:HD2	1.96	0.48
1:C:2121:PHE:CE1	1:C:3701:LEU:HD12	2.49	0.48
1:C:4039:MET:HA	1:C:4042:ARG:HH11	1.78	0.48
2:D:49:MET:N	2:D:54:GLU:OE2	2.46	0.48
1:E:342:GLY:N	1:E:390:LEU:O	2.46	0.48
1:E:4677:LEU:HD23	1:E:4711:PHE:CE1	2.49	0.48
1:G:3980:LEU:HB3	1:G:3985:LEU:HD22	1.96	0.48
1:A:119:SER:O	1:A:136:GLY:N	2.31	0.47
1:A:215:THR:O	1:A:218:HIS:HB3	2.14	0.47
1:A:1931:LEU:HD22	1:A:1935:VAL:HG11	1.96	0.47
1:A:2159:LEU:O	1:A:2162:ILE:HG22	2.14	0.47
1:A:3835:LEU:O	1:A:3839:CYS:N	2.46	0.47
1:A:3923:LEU:HD12	1:A:3961:VAL:HG12	1.96	0.47
1:A:4055:VAL:HA	1:A:4058:ILE:HG12	1.95	0.47
1:A:4141:PHE:CE1	1:A:4178:LEU:HA	2.48	0.47
1:A:4702:ASP:O	1:A:4705:VAL:HG12	2.14	0.47
1:A:4702:ASP:OD1	1:A:4778:TRP:NE1	2.32	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:3780:LEU:HD11	1:C:3820:LEU:HD21	1.96	0.47
1:C:3811:GLU:HA	1:C:3814:GLN:HG2	1.96	0.47
1:C:3996:PHE:CE2	1:C:4019:LEU:HD22	2.49	0.47
1:E:451:TYR:HD2	1:E:452:PHE:CE2	2.31	0.47
1:E:639:ASN:ND2	1:E:676:THR:OG1	2.45	0.47
1:E:1130:GLN:NE2	1:E:1132:TRP:HE1	2.11	0.47
1:E:4234:PHE:CZ	1:E:4988:TYR:HB2	2.49	0.47
1:E:4833:ASN:OD1	1:E:4836:GLN:HG2	2.14	0.47
1:G:107:ILE:H	1:G:148:TRP:H	1.62	0.47
1:G:636:ASN:ND2	2:H:35:LYS:HD3	2.28	0.47
1:G:2295:LEU:HD22	1:G:2335:LEU:CD2	2.44	0.47
1:G:3996:PHE:CE2	1:G:4019:LEU:HD22	2.49	0.47
1:A:489:ASN:HB3	1:A:493:ARG:HH22	1.78	0.47
1:A:1112:ASP:OD1	1:A:1606:SER:HB3	2.14	0.47
1:A:1762:LEU:HD12	1:A:1763:PRO:HD2	1.95	0.47
1:A:2121:PHE:CE1	1:A:3701:LEU:HD12	2.49	0.47
1:A:2351:ASN:O	1:A:2355:ARG:HG2	2.14	0.47
1:A:2353:VAL:HG12	1:A:2357:LEU:HD11	1.97	0.47
1:A:4898:GLY:HA3	1:G:4888:TYR:OH	2.14	0.47
1:C:16:THR:OG1	1:C:99:ARG:O	2.21	0.47
1:C:107:ILE:H	1:C:148:TRP:H	1.62	0.47
1:C:178:ARG:HD3	1:C:195:PHE:CE1	2.49	0.47
1:C:4181:ILE:HG12	1:C:4195:PHE:CE1	2.48	0.47
1:C:4826:ILE:CG1	1:E:4839:MET:CE	2.92	0.47
1:E:489:ASN:HB3	1:E:493:ARG:HH22	1.78	0.47
1:E:682:LEU:HG	1:E:682:LEU:O	2.14	0.47
1:E:1024:TYR:HB3	1:E:1032:LYS:HD3	1.95	0.47
1:E:1098:GLY:HA3	1:E:1198:GLN:HE21	1.79	0.47
1:E:1293:LEU:HD23	1:E:1584:ARG:CG	2.44	0.47
1:E:4024:VAL:HA	1:E:4027:LEU:HD12	1.97	0.47
1:G:489:ASN:HB3	1:G:493:ARG:HH22	1.79	0.47
1:G:931:THR:HA	1:G:934:ALA:HB3	1.96	0.47
1:G:1084:GLN:NE2	1:G:1185:GLY:O	2.47	0.47
1:G:1252:HIS:CG	1:G:1253:PRO:HD2	2.49	0.47
1:G:2745:VAL:HG21	1:G:2818:ALA:HB2	1.95	0.47
1:G:3775:ALA:O	1:G:3779:VAL:HG23	2.14	0.47
1:A:229:GLU:HG3	1:A:248:GLU:C	2.34	0.47
1:A:2295:LEU:HD22	1:A:2335:LEU:CD2	2.44	0.47
1:A:4039:MET:HA	1:A:4042:ARG:HE	1.79	0.47
1:A:4137:ARG:HD2	1:A:4177:TYR:CZ	2.50	0.47
1:C:531:ARG:HG2	1:C:566:CYS:SG	2.55	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:720:HIS:HB2	1:C:728:ARG:O	2.14	0.47
1:C:1739:THR:O	1:C:1742:THR:OG1	2.21	0.47
1:C:4003:LEU:CB	1:C:4013:LEU:HD12	2.44	0.47
1:C:4563:ARG:NH1	1:C:4815:ASP:OD1	2.47	0.47
1:C:4645:CYS:O	1:C:4649:LEU:N	2.45	0.47
1:E:531:ARG:HG2	1:E:566:CYS:SG	2.55	0.47
1:E:1088:TRP:CZ3	1:E:1226:PHE:HD1	2.33	0.47
1:E:2870:GLU:OE2	1:E:2939:ARG:NH2	2.47	0.47
1:E:3835:LEU:O	1:E:3839:CYS:N	2.47	0.47
1:E:4145:VAL:HG13	1:E:4194:TYR:HD2	1.78	0.47
1:G:531:ARG:HG2	1:G:566:CYS:SG	2.54	0.47
1:G:3970:GLN:HE21	1:G:5004:THR:HA	1.77	0.47
1:G:4234:PHE:HZ	1:G:4988:TYR:HB2	1.77	0.47
1:A:150:MET:HG2	1:A:171:LEU:HD23	1.95	0.47
1:A:178:ARG:HD3	1:A:195:PHE:CE1	2.49	0.47
1:A:355:LEU:HB2	1:A:378:LEU:HB3	1.96	0.47
1:A:857:ASP:O	1:A:991:ASN:ND2	2.47	0.47
1:A:1205:GLY:HA3	1:A:1227:ALA:CB	2.40	0.47
1:A:1729:SER:O	1:A:1733:GLU:HG2	2.14	0.47
1:A:1961:PHE:CZ	1:A:2063:LEU:HD22	2.49	0.47
1:A:2870:GLU:OE2	1:A:2939:ARG:NH2	2.47	0.47
1:C:451:TYR:HD2	1:C:452:PHE:CE2	2.31	0.47
1:C:489:ASN:HB3	1:C:493:ARG:HH22	1.78	0.47
1:C:519:VAL:HG22	1:C:523:TYR:CE2	2.48	0.47
1:C:1762:LEU:HD12	1:C:1763:PRO:HD2	1.96	0.47
1:C:4039:MET:HA	1:C:4042:ARG:HE	1.79	0.47
1:C:4826:ILE:CG1	1:E:4839:MET:HE3	2.44	0.47
1:C:4888:TYR:OH	1:E:4898:GLY:HA3	2.15	0.47
1:E:862:VAL:HA	1:E:930:LYS:NZ	2.30	0.47
1:E:2121:PHE:CE1	1:E:3701:LEU:HD12	2.49	0.47
1:E:3501:ASP:HA	1:G:1224:GLU:OE2	2.13	0.47
1:E:4642:ALA:O	1:E:4646:LEU:N	2.44	0.47
1:G:355:LEU:HB2	1:G:378:LEU:HB3	1.97	0.47
1:G:473:ASN:O	1:G:477:LEU:HG	2.13	0.47
1:G:1457:TYR:CZ	1:G:1459:GLN:NE2	2.82	0.47
1:G:2351:ASN:O	1:G:2355:ARG:HG2	2.14	0.47
1:G:3677:LEU:O	1:G:3698:LEU:N	2.47	0.47
1:G:3959:LYS:HE3	1:G:4018:ASP:HB3	1.96	0.47
1:G:4192:ARG:NH1	1:G:5028:PHE:HD2	2.12	0.47
1:G:4230:LYS:HD2	1:G:4959:PHE:O	2.14	0.47
1:G:5011:TRP:O	1:G:5015:GLN:HG2	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:177:GLU:OE2	1:G:2452:ARG:NH2	2.46	0.47
1:A:758:ARG:NE	1:A:804:PRO:HG3	2.29	0.47
1:A:1514:LEU:N	1:A:1514:LEU:CD1	2.77	0.47
1:C:459:LEU:HD11	1:C:463:GLU:OE1	2.13	0.47
1:C:636:ASN:ND2	2:D:35:LYS:HD3	2.28	0.47
1:C:639:ASN:ND2	1:C:676:THR:OG1	2.45	0.47
1:C:1432:THR:N	1:C:1519:LEU:O	2.48	0.47
1:C:2295:LEU:HD22	1:C:2335:LEU:CD2	2.44	0.47
1:C:2351:ASN:O	1:C:2355:ARG:HG2	2.14	0.47
1:C:3902:TYR:HE1	1:C:3908:GLY:H	1.62	0.47
1:C:4578:LEU:O	1:C:4578:LEU:HG	2.15	0.47
2:D:87:HIS:HB3	2:D:91:ILE:H	1.80	0.47
1:E:1729:SER:O	1:E:1733:GLU:HG2	2.14	0.47
1:E:3780:LEU:HD11	1:E:3820:LEU:HD21	1.96	0.47
1:E:3882:GLN:HE22	1:E:3956:SER:HB3	1.78	0.47
1:E:4672:LYS:O	1:E:4676:GLU:HG3	2.14	0.47
1:E:4886:HIS:O	1:E:4890:GLY:N	2.48	0.47
1:G:2353:VAL:HG12	1:G:2357:LEU:HD11	1.96	0.47
1:G:3190:LEU:O	1:G:3194:LEU:N	2.46	0.47
1:G:3835:LEU:HD22	1:G:3884:LEU:CD1	2.44	0.47
1:G:3891:LEU:HB3	1:G:3899:PHE:HE2	1.80	0.47
1:G:4580:TYR:HB2	1:G:4631:PHE:CD1	2.49	0.47
1:A:39:ALA:HA	1:A:48:PHE:CE2	2.50	0.47
1:A:134:ASP:OD1	1:A:135:VAL:N	2.48	0.47
1:A:682:LEU:O	1:A:682:LEU:HG	2.14	0.47
1:A:720:HIS:HB2	1:A:728:ARG:O	2.14	0.47
1:A:1084:GLN:NE2	1:A:1185:GLY:O	2.48	0.47
1:A:1295:VAL:O	1:A:1547:LYS:HA	2.14	0.47
1:A:3811:GLU:HA	1:A:3814:GLN:HG2	1.96	0.47
1:A:4181:ILE:HG12	1:A:4195:PHE:CE1	2.48	0.47
1:A:4207:MET:HG2	1:A:4208:PRO:CD	2.42	0.47
1:A:4642:ALA:O	1:A:4646:LEU:HG	2.15	0.47
1:C:516:LYS:HG3	1:C:517:GLU:N	2.28	0.47
1:C:931:THR:HA	1:C:934:ALA:HB3	1.97	0.47
1:C:1112:ASP:OD1	1:C:1606:SER:HB3	2.14	0.47
1:C:1457:TYR:CZ	1:C:1459:GLN:NE2	2.83	0.47
1:C:2244:ARG:HH11	1:C:2248:ARG:HH21	1.60	0.47
1:C:4672:LYS:O	1:C:4676:GLU:HG3	2.14	0.47
1:C:4945:ASP:O	1:C:4949:GLN:HB2	2.14	0.47
1:E:229:GLU:HG3	1:E:248:GLU:C	2.34	0.47
1:E:892:THR:N	1:E:902:ARG:HA	2.29	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1093:GLU:HA	1:E:1148:VAL:HG13	1.96	0.47
1:E:2351:ASN:O	1:E:2355:ARG:HG2	2.14	0.47
1:E:2383:ALA:HB1	1:E:2423:MET:SD	2.55	0.47
1:E:4688:ILE:HG21	1:E:4728:HIS:HB3	1.95	0.47
1:E:4822:THR:HG22	1:G:4839:MET:SD	2.55	0.47
1:G:1072:VAL:HB	1:G:1607:ARG:NH1	2.30	0.47
1:G:4666:VAL:HA	1:G:4669:VAL:HG12	1.95	0.47
1:A:102:LEU:HB2	1:A:105:HIS:HD2	1.72	0.47
1:A:249:GLY:O	1:A:252:VAL:HG12	2.15	0.47
1:A:1277:TRP:HB2	1:A:1562:ILE:O	2.13	0.47
1:A:1294:PRO:CB	1:A:1547:LYS:HB3	2.45	0.47
1:A:1432:THR:N	1:A:1519:LEU:O	2.48	0.47
1:A:2173:GLN:HG2	1:A:2174:GLU:N	2.20	0.47
1:A:2437:ALA:HB1	1:A:2454:ARG:CZ	2.45	0.47
1:A:4877:ASP:O	1:G:4581:LYS:HE2	2.15	0.47
1:A:4877:ASP:HA	1:G:4581:LYS:HZ3	1.80	0.47
1:C:102:LEU:HB2	1:C:105:HIS:NE2	2.29	0.47
1:C:682:LEU:HG	1:C:682:LEU:O	2.14	0.47
1:C:758:ARG:NE	1:C:804:PRO:HG3	2.30	0.47
1:C:862:VAL:HA	1:C:930:LYS:NZ	2.30	0.47
1:C:943:ASP:HB3	1:C:1050:GLY:HA3	1.96	0.47
1:C:1072:VAL:HB	1:C:1607:ARG:NH1	2.30	0.47
1:C:1106:ARG:HE	1:C:1188:PHE:HE1	1.62	0.47
1:C:1516:ILE:C	1:C:1530:THR:OG1	2.52	0.47
1:C:1961:PHE:CZ	1:C:2063:LEU:HD22	2.50	0.47
1:C:3938:SER:HB2	1:C:4002:LYS:HZ2	1.79	0.47
1:E:1775:HIS:ND1	1:E:1775:HIS:O	2.48	0.47
1:E:1830:VAL:HG13	1:E:1837:GLN:HB3	1.95	0.47
1:E:2159:LEU:O	1:E:2162:ILE:HG22	2.15	0.47
1:E:2927:LEU:HD23	1:E:2930:LEU:HD12	1.95	0.47
1:E:3996:PHE:CE2	1:E:4019:LEU:HD22	2.48	0.47
1:E:4137:ARG:HD2	1:E:4177:TYR:CZ	2.49	0.47
1:G:215:THR:O	1:G:218:HIS:HB3	2.14	0.47
1:G:235:ALA:HB2	1:G:257:ARG:HD3	1.96	0.47
1:G:342:GLY:N	1:G:390:LEU:O	2.47	0.47
1:G:1130:GLN:NE2	1:G:1132:TRP:HE1	2.11	0.47
1:G:1293:LEU:HD23	1:G:1584:ARG:CG	2.45	0.47
1:G:1830:VAL:HG13	1:G:1837:GLN:HB3	1.96	0.47
1:G:2117:VAL:O	1:G:2120:MET:HB2	2.15	0.47
1:G:2159:LEU:O	1:G:2162:ILE:HG22	2.14	0.47
1:G:3938:SER:HB2	1:G:4002:LYS:NZ	2.30	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:4579:PHE:HB3	1:G:4632:LEU:O	2.14	0.47
1:G:4699:GLY:HA2	1:G:4702:ASP:HB2	1.96	0.47
1:G:4810:ALA:O	1:G:4813:LEU:HG	2.15	0.47
1:G:4826:ILE:O	1:G:4830:VAL:HG23	2.15	0.47
1:A:1101:ARG:HG3	1:A:1193:SER:OG	2.15	0.47
1:A:2383:ALA:HB1	1:A:2423:MET:SD	2.55	0.47
1:A:2427:ALA:O	1:A:2430:ILE:HG22	2.14	0.47
1:A:4945:ASP:O	1:A:4949:GLN:HB2	2.14	0.47
1:C:449:ILE:O	1:C:453:GLU:HG2	2.15	0.47
1:C:1101:ARG:HG3	1:C:1193:SER:OG	2.15	0.47
1:C:3882:GLN:HE22	1:C:3956:SER:HB3	1.78	0.47
1:C:3953:LYS:O	1:C:3957:VAL:HG23	2.14	0.47
1:C:4702:ASP:O	1:C:4705:VAL:HG12	2.15	0.47
1:C:4833:ASN:OD1	1:C:4836:GLN:HG2	2.14	0.47
1:E:1432:THR:N	1:E:1519:LEU:O	2.48	0.47
1:E:2353:VAL:HG12	1:E:2357:LEU:HD11	1.97	0.47
1:E:2437:ALA:HB1	1:E:2454:ARG:CZ	2.44	0.47
1:G:134:ASP:OD1	1:G:135:VAL:N	2.48	0.47
1:G:675:LEU:O	1:G:676:THR:OG1	2.27	0.47
1:G:943:ASP:HB3	1:G:1050:GLY:HA3	1.96	0.47
1:G:1088:TRP:CZ3	1:G:1226:PHE:HD1	2.33	0.47
1:G:1931:LEU:HD22	1:G:1935:VAL:HG11	1.97	0.47
1:G:2198:MET:HE3	1:G:2203:MET:SD	2.55	0.47
1:G:4672:LYS:O	1:G:4676:GLU:HG3	2.15	0.47
1:G:4906:GLY:H	1:G:4910:GLU:HG3	1.80	0.47
2:H:87:HIS:HB3	2:H:91:ILE:H	1.79	0.47
1:A:1072:VAL:HB	1:A:1607:ARG:NH1	2.30	0.47
1:A:1768:THR:C	1:A:1769:THR:HG1	2.15	0.47
1:A:1775:HIS:ND1	1:A:1775:HIS:O	2.48	0.47
1:A:4778:TRP:O	1:A:4782:VAL:HG23	2.14	0.47
1:C:39:ALA:HA	1:C:48:PHE:CE2	2.49	0.47
1:C:134:ASP:OD1	1:C:135:VAL:N	2.48	0.47
1:C:737:LEU:HD11	2:D:7:ILE:CG2	2.44	0.47
1:C:1088:TRP:CZ3	1:C:1226:PHE:HD1	2.33	0.47
1:C:1775:HIS:ND1	1:C:1775:HIS:O	2.48	0.47
1:C:2159:LEU:O	1:C:2162:ILE:HG22	2.15	0.47
1:C:2353:VAL:HG12	1:C:2357:LEU:HD11	1.97	0.47
1:C:2437:ALA:HB1	1:C:2454:ARG:CZ	2.45	0.47
1:C:3923:LEU:HD12	1:C:3961:VAL:HG12	1.97	0.47
1:C:4913:ARG:O	1:C:4916:PHE:HB3	2.15	0.47
1:E:178:ARG:HD3	1:E:195:PHE:CE1	2.50	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:458:GLU:O	1:E:458:GLU:HG2	2.13	0.47
1:E:758:ARG:NE	1:E:804:PRO:HG3	2.30	0.47
1:E:1931:LEU:HD22	1:E:1935:VAL:HG11	1.97	0.47
1:E:2066:LEU:O	1:E:2069:THR:OG1	2.31	0.47
1:E:2295:LEU:HD22	1:E:2335:LEU:CD2	2.44	0.47
1:E:3992:PHE:HB2	1:E:4023:MET:CE	2.45	0.47
1:E:4207:MET:HG2	1:E:4208:PRO:CD	2.42	0.47
1:G:449:ILE:O	1:G:453:GLU:HG2	2.15	0.47
1:G:758:ARG:NE	1:G:804:PRO:HG3	2.30	0.47
1:G:2427:ALA:O	1:G:2430:ILE:HG22	2.15	0.47
1:A:449:ILE:O	1:A:453:GLU:HG2	2.15	0.47
1:A:2211:MET:O	1:A:2215:LEU:HG	2.15	0.47
1:A:4913:ARG:O	1:A:4916:PHE:HB3	2.15	0.47
1:C:149:THR:HG23	1:C:174:VAL:HG22	1.97	0.47
1:C:229:GLU:HG3	1:C:248:GLU:C	2.34	0.47
1:C:1734:TYR:OH	1:C:1948:ASP:OD1	2.19	0.47
1:C:2499:LYS:O	1:C:2503:VAL:HG23	2.15	0.47
1:C:3655:GLU:O	1:C:3658:LYS:HB3	2.16	0.47
1:C:4137:ARG:HD2	1:C:4177:TYR:CZ	2.49	0.47
1:C:4778:TRP:O	1:C:4782:VAL:HG23	2.15	0.47
1:E:215:THR:O	1:E:218:HIS:HB3	2.14	0.47
1:E:1154:ASP:HB3	1:E:1157:GLU:HB3	1.97	0.47
1:E:1961:PHE:CZ	1:E:2063:LEU:HD22	2.49	0.47
1:E:2211:MET:O	1:E:2215:LEU:HG	2.15	0.47
1:E:4003:LEU:CB	1:E:4013:LEU:HD12	2.45	0.47
1:G:4642:ALA:O	1:G:4646:LEU:HG	2.15	0.47
1:A:737:LEU:HD11	2:B:7:ILE:CG2	2.43	0.46
1:A:1252:HIS:CG	1:A:1253:PRO:HD2	2.50	0.46
1:A:2771:ILE:HD11	1:A:2857:PRO:HD2	1.97	0.46
1:A:4581:LYS:CE	1:C:4877:ASP:O	2.63	0.46
1:C:1154:ASP:HB3	1:C:1157:GLU:HB3	1.97	0.46
1:C:1931:LEU:HD22	1:C:1935:VAL:HG11	1.97	0.46
1:E:102:LEU:HB2	1:E:105:HIS:NE2	2.29	0.46
1:E:264:PRO:O	1:E:266:ARG:N	2.43	0.46
1:E:737:LEU:HB3	1:E:738:LEU:H	1.56	0.46
1:E:791:PHE:HB2	1:E:1626:TRP:HB2	1.95	0.46
1:E:1106:ARG:HE	1:E:1188:PHE:HE1	1.63	0.46
1:E:3780:LEU:HG	1:E:3828:PHE:CE1	2.51	0.46
1:E:3989:VAL:HG13	1:E:4023:MET:HE2	1.98	0.46
1:E:4702:ASP:O	1:E:4705:VAL:HG12	2.15	0.46
1:G:39:ALA:HA	1:G:48:PHE:CE2	2.50	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:149:THR:HG23	1:G:174:VAL:HG22	1.97	0.46
1:G:229:GLU:HG3	1:G:248:GLU:C	2.35	0.46
1:G:3804:ILE:O	1:G:3809:ASN:ND2	2.48	0.46
1:G:3906:GLN:HB3	1:G:3912:THR:HA	1.96	0.46
1:G:3916:ILE:O	1:G:3919:THR:HG22	2.15	0.46
1:G:4024:VAL:O	1:G:4027:LEU:HB2	2.15	0.46
1:G:4920:PHE:O	1:G:4924:VAL:HB	2.15	0.46
2:H:38:SER:HB3	2:H:41:ASP:OD2	2.14	0.46
1:A:195:PHE:CE2	1:G:2358:ILE:HG21	2.50	0.46
1:A:634:GLN:HG3	1:A:1640:HIS:CE1	2.50	0.46
1:A:943:ASP:HB3	1:A:1050:GLY:HA3	1.96	0.46
1:A:1093:GLU:HA	1:A:1148:VAL:HG22	1.97	0.46
1:A:3780:LEU:HG	1:A:3828:PHE:CE1	2.50	0.46
1:C:1729:SER:O	1:C:1733:GLU:HG2	2.15	0.46
1:C:2383:ALA:HB1	1:C:2423:MET:SD	2.55	0.46
1:C:3501:ASP:HA	1:E:1224:GLU:OE2	2.15	0.46
2:D:88:PRO:O	2:D:90:ILE:HD12	2.16	0.46
1:E:593:HIS:HB3	1:E:596:ASN:HD22	1.79	0.46
1:E:1072:VAL:HB	1:E:1607:ARG:NH1	2.30	0.46
1:E:4664:LEU:O	1:E:4667:PRO:HD2	2.16	0.46
1:E:4822:THR:O	1:E:4826:ILE:HG13	2.15	0.46
1:G:634:GLN:HG3	1:G:1640:HIS:CE1	2.50	0.46
1:G:1294:PRO:CB	1:G:1547:LYS:HB3	2.46	0.46
1:G:2553:TYR:CD1	1:G:2556:LEU:HD12	2.50	0.46
1:G:4023:MET:O	1:G:4026:MET:HG2	2.15	0.46
1:G:4720:VAL:O	1:G:4724:VAL:HG23	2.14	0.46
1:G:4991:PHE:O	1:G:4995:LEU:HG	2.16	0.46
1:A:350:HIS:O	1:A:354:GLY:HA2	2.15	0.46
1:A:791:PHE:HB2	1:A:1626:TRP:HB2	1.95	0.46
1:A:1943:LEU:HD11	1:A:2098:VAL:HG22	1.97	0.46
1:A:2748:PRO:HD2	1:A:2751:LEU:HD12	1.97	0.46
1:A:3655:GLU:O	1:A:3658:LYS:HB3	2.16	0.46
1:A:4039:MET:CA	1:A:4042:ARG:HH11	2.29	0.46
1:C:824:GLU:CD	1:C:825:PRO:HD2	2.36	0.46
1:C:3780:LEU:HG	1:C:3828:PHE:CE1	2.50	0.46
1:C:4574:ASN:ND2	1:C:4813:LEU:HD23	2.31	0.46
1:E:489:ASN:HB3	1:E:493:ARG:NH2	2.30	0.46
1:E:634:GLN:HG3	1:E:1640:HIS:CE1	2.50	0.46
1:E:931:THR:HA	1:E:934:ALA:HB3	1.97	0.46
1:E:1439:VAL:O	1:E:1513:ASP:N	2.44	0.46
1:E:2059:LEU:CD2	1:E:2062:ARG:HH12	2.20	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2305:CYS:HB2	1:E:2325:PRO:HG2	1.97	0.46
1:E:3655:GLU:O	1:E:3658:LYS:HB3	2.15	0.46
1:E:3923:LEU:HD12	1:E:3961:VAL:HG12	1.97	0.46
1:E:3953:LYS:O	1:E:3957:VAL:HG23	2.14	0.46
1:E:3986:TRP:HD1	1:E:4047:MET:SD	2.39	0.46
1:E:4039:MET:CA	1:E:4042:ARG:HH11	2.29	0.46
2:F:87:HIS:HB3	2:F:91:ILE:H	1.80	0.46
1:G:249:GLY:O	1:G:252:VAL:HG12	2.15	0.46
1:G:1951:LEU:O	1:G:1955:VAL:HG23	2.16	0.46
1:G:2437:ALA:HB1	1:G:2454:ARG:CZ	2.44	0.46
1:G:4239:GLU:OE2	1:G:5014:TYR:HE1	1.98	0.46
1:G:4778:TRP:O	1:G:4782:VAL:HG23	2.16	0.46
1:G:4976:GLU:O	1:G:4980:LEU:N	2.48	0.46
2:H:54:GLU:HG3	2:H:55:VAL:HG13	1.97	0.46
1:A:531:ARG:HG2	1:A:566:CYS:SG	2.55	0.46
1:A:824:GLU:CD	1:A:825:PRO:HD2	2.36	0.46
1:A:3780:LEU:HD11	1:A:3820:LEU:HD21	1.96	0.46
1:A:4674:GLU:OE2	1:A:4712:PRO:HA	2.15	0.46
1:C:2427:ALA:O	1:C:2430:ILE:HG22	2.14	0.46
1:E:1141:ARG:NH1	1:E:1169:LEU:HD11	2.28	0.46
1:E:1294:PRO:CB	1:E:1547:LYS:HB3	2.46	0.46
1:E:2290:LEU:HD11	1:E:2349:ASN:OD1	2.16	0.46
1:E:2427:ALA:O	1:E:2430:ILE:HG22	2.15	0.46
1:E:4151:SER:HA	1:E:4160:LEU:HD21	1.96	0.46
1:G:1775:HIS:ND1	1:G:1775:HIS:O	2.48	0.46
1:G:2173:GLN:CG	1:G:2174:GLU:H	2.21	0.46
1:A:107:ILE:H	1:A:148:TRP:H	1.63	0.46
1:A:149:THR:HG23	1:A:174:VAL:HG22	1.97	0.46
1:A:1130:GLN:NE2	1:A:1132:TRP:HE1	2.11	0.46
1:A:3992:PHE:HB2	1:A:4023:MET:CE	2.45	0.46
1:C:792:LEU:HB3	1:C:799:GLU:O	2.16	0.46
1:C:2211:MET:O	1:C:2215:LEU:HG	2.15	0.46
1:C:2305:CYS:HB2	1:C:2325:PRO:HG2	1.97	0.46
1:C:4886:HIS:O	1:C:4891:VAL:N	2.42	0.46
1:E:39:ALA:HA	1:E:48:PHE:CE2	2.50	0.46
1:E:134:ASP:OD1	1:E:135:VAL:N	2.48	0.46
1:E:449:ILE:O	1:E:453:GLU:HG2	2.16	0.46
1:E:785:ALA:HA	1:E:1633:PRO:HD3	1.98	0.46
1:E:1252:HIS:CG	1:E:1253:PRO:HD2	2.50	0.46
1:E:3902:TYR:HE1	1:E:3908:GLY:H	1.62	0.46
1:E:4642:ALA:O	1:E:4646:LEU:HG	2.14	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:682:LEU:O	1:G:682:LEU:HG	2.16	0.46
1:G:1106:ARG:HE	1:G:1188:PHE:HE1	1.63	0.46
1:G:1961:PHE:CZ	1:G:2063:LEU:HD22	2.51	0.46
1:G:2062:ARG:O	1:G:2065:SER:OG	2.21	0.46
1:G:2290:LEU:HD11	1:G:2349:ASN:OD1	2.16	0.46
1:G:4059:LEU:HA	1:G:4062:PHE:HD2	1.79	0.46
1:G:4725:LEU:O	1:G:4734:ARG:NH2	2.49	0.46
1:A:489:ASN:HB3	1:A:493:ARG:NH2	2.30	0.46
1:A:785:ALA:HA	1:A:1633:PRO:HD3	1.97	0.46
1:A:2553:TYR:CD1	1:A:2556:LEU:HD12	2.51	0.46
1:A:3775:ALA:O	1:A:3779:VAL:HG23	2.15	0.46
1:A:3989:VAL:HG13	1:A:4023:MET:HE2	1.98	0.46
1:A:4979:THR:O	1:A:4984:ASN:N	2.30	0.46
1:C:249:GLY:O	1:C:252:VAL:HG12	2.15	0.46
1:C:892:THR:N	1:C:902:ARG:HA	2.30	0.46
1:C:1128:ARG:N	1:C:1142:PRO:HB3	2.31	0.46
1:C:1252:HIS:CG	1:C:1253:PRO:HD2	2.50	0.46
1:C:3775:ALA:O	1:C:3779:VAL:HG23	2.16	0.46
1:C:3986:TRP:HD1	1:C:4047:MET:SD	2.39	0.46
1:C:3992:PHE:HB2	1:C:4023:MET:CE	2.45	0.46
1:C:4039:MET:CA	1:C:4042:ARG:HH11	2.29	0.46
1:E:21:VAL:CG2	1:E:203:ASN:HB3	2.46	0.46
1:E:1951:LEU:O	1:E:1955:VAL:HG23	2.16	0.46
1:E:2358:ILE:CG2	1:G:195:PHE:HE2	2.29	0.46
1:E:4583:SER:N	1:E:4628:VAL:O	2.42	0.46
1:E:4674:GLU:OE2	1:E:4712:PRO:HA	2.16	0.46
1:E:4913:ARG:O	1:E:4916:PHE:HB3	2.15	0.46
1:G:102:LEU:HB2	1:G:105:HIS:NE2	2.29	0.46
1:G:1729:SER:O	1:G:1733:GLU:HG2	2.15	0.46
1:G:1783:VAL:HG12	2:H:54:GLU:O	2.16	0.46
1:G:2748:PRO:HD2	1:G:2751:LEU:HD12	1.96	0.46
1:G:3934:TYR:HD1	1:G:3999:MET:HG2	1.80	0.46
1:G:4207:MET:HG2	1:G:4208:PRO:CD	2.44	0.46
1:G:5004:THR:O	1:G:5007:GLU:HG2	2.16	0.46
2:H:76:ILE:O	2:H:96:THR:HG23	2.16	0.46
1:A:312:THR:O	1:A:314:PHE:N	2.41	0.46
1:A:675:LEU:O	1:A:676:THR:OG1	2.27	0.46
1:A:1098:GLY:HA3	1:A:1198:GLN:HE21	1.79	0.46
1:A:1779:PRO:HA	1:A:1780:PRO:HD3	1.78	0.46
1:A:1840:PRO:O	1:A:1843:LYS:HB3	2.16	0.46
1:A:2499:LYS:O	1:A:2503:VAL:HG23	2.15	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:4207:MET:HG2	1:C:4208:PRO:CD	2.42	0.46
1:C:4642:ALA:O	1:C:4646:LEU:HG	2.15	0.46
1:C:4888:TYR:OH	1:E:4898:GLY:CA	2.64	0.46
1:C:4980:LEU:HA	1:C:4984:ASN:HA	1.98	0.46
1:E:792:LEU:HB3	1:E:799:GLU:O	2.16	0.46
1:E:1101:ARG:HG3	1:E:1193:SER:OG	2.15	0.46
1:E:2173:GLN:CG	1:E:2174:GLU:H	2.22	0.46
1:E:2499:LYS:O	1:E:2503:VAL:HG23	2.15	0.46
1:G:489:ASN:HB3	1:G:493:ARG:NH2	2.31	0.46
1:G:862:VAL:HA	1:G:930:LYS:NZ	2.31	0.46
1:G:2431:ASP:HB2	1:G:2501:SER:CB	2.46	0.46
1:G:4712:PRO:O	1:G:4718:LYS:HD2	2.16	0.46
1:G:4887:MET:HA	1:G:4891:VAL:HG23	1.97	0.46
1:G:4914:VAL:O	1:G:4918:ILE:HG13	2.15	0.46
1:A:107:ILE:HD12	1:A:109:LEU:HD21	1.98	0.46
1:A:2198:MET:HE3	1:A:2203:MET:SD	2.56	0.46
1:A:3777:GLU:O	1:A:3781:GLN:HG3	2.16	0.46
1:A:3902:TYR:HE1	1:A:3908:GLY:H	1.62	0.46
1:A:4666:VAL:O	1:A:4670:ILE:HG12	2.15	0.46
2:B:87:HIS:HB3	2:B:91:ILE:H	1.80	0.46
1:C:21:VAL:CG2	1:C:203:ASN:HB3	2.46	0.46
1:C:223:PHE:O	1:C:388:LEU:HD23	2.16	0.46
1:C:1141:ARG:NH1	1:C:1169:LEU:HD11	2.27	0.46
1:E:14:LEU:HD12	1:E:163:VAL:HG12	1.97	0.46
1:E:1768:THR:O	1:E:1769:THR:OG1	2.23	0.46
1:E:2771:ILE:HD11	1:E:2857:PRO:HD2	1.96	0.46
1:G:492:ASP:OD1	1:G:546:TRP:NE1	2.42	0.46
1:G:2788:HIS:CG	1:G:2789:PRO:HD2	2.51	0.46
1:G:3891:LEU:HB3	1:G:3899:PHE:CE2	2.50	0.46
1:G:3906:GLN:HG2	1:G:3909:ASN:HB2	1.98	0.46
1:G:3996:PHE:HE2	1:G:4019:LEU:HD22	1.80	0.46
1:A:21:VAL:CG2	1:A:203:ASN:HB3	2.46	0.46
1:A:276:TRP:CD1	1:A:276:TRP:O	2.69	0.46
1:A:1082:THR:HG22	1:A:1189:LEU:HG	1.98	0.46
1:A:2350:ALA:O	1:A:2354:VAL:HG23	2.16	0.46
1:A:4929:LEU:O	1:A:4933:GLN:HG3	2.15	0.46
2:B:88:PRO:O	2:B:90:ILE:HD12	2.16	0.46
1:C:564:LEU:O	1:C:568:LEU:HG	2.16	0.46
1:C:2059:LEU:CD2	1:C:2062:ARG:HH12	2.20	0.46
1:C:2350:ALA:O	1:C:2354:VAL:HG23	2.16	0.46
1:C:2553:TYR:CD1	1:C:2556:LEU:HD12	2.51	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:3938:SER:OG	1:E:80:GLU:OE1	2.30	0.46
2:F:88:PRO:O	2:F:90:ILE:HD12	2.16	0.46
1:G:223:PHE:O	1:G:388:LEU:HD23	2.16	0.46
1:G:792:LEU:HB3	1:G:799:GLU:O	2.16	0.46
1:G:1101:ARG:HG3	1:G:1193:SER:OG	2.15	0.46
1:G:1432:THR:N	1:G:1519:LEU:O	2.49	0.46
1:G:1638:ALA:HA	1:G:1649:ASP:HA	1.98	0.46
1:G:3937:TYR:O	1:G:3941:ASP:N	2.47	0.46
1:A:451:TYR:CZ	1:A:474:ARG:HD2	2.51	0.46
1:A:649:PHE:HB3	1:A:776:LEU:HB3	1.98	0.46
1:A:1128:ARG:N	1:A:1142:PRO:HB3	2.31	0.46
1:A:1293:LEU:HD23	1:A:1584:ARG:CG	2.45	0.46
1:A:4003:LEU:CB	1:A:4013:LEU:HD12	2.44	0.46
1:A:4717:ASP:O	1:A:4720:VAL:HG23	2.16	0.46
1:A:4888:TYR:OH	1:C:4898:GLY:HA3	2.16	0.46
1:C:690:GLU:CG	1:C:1459:GLN:OE1	2.64	0.46
1:C:2460:LEU:HD12	1:E:178:ARG:CZ	2.45	0.46
1:C:4717:ASP:O	1:C:4720:VAL:HG23	2.16	0.46
1:C:4951:LYS:O	1:C:4955:GLU:HG2	2.16	0.46
1:E:292:ALA:HB3	1:E:302:VAL:HG11	1.98	0.46
1:E:350:HIS:O	1:E:354:GLY:HA2	2.16	0.46
1:E:1093:GLU:HA	1:E:1148:VAL:HG22	1.97	0.46
1:E:2250:MET:HA	1:E:2253:HIS:HD2	1.81	0.46
1:E:2929:PHE:O	1:E:2933:ASN:ND2	2.47	0.46
1:E:3916:ILE:O	1:E:3920:VAL:HG23	2.16	0.46
1:E:3938:SER:OG	1:G:80:GLU:OE1	2.27	0.46
1:E:4951:LYS:O	1:E:4955:GLU:HG2	2.16	0.46
1:G:445:LEU:CD2	1:G:522:LEU:HD12	2.44	0.46
1:G:2211:MET:O	1:G:2215:LEU:HG	2.16	0.46
1:A:459:LEU:HD11	1:A:463:GLU:OE1	2.15	0.45
1:A:1638:ALA:HA	1:A:1649:ASP:HA	1.97	0.45
1:A:3724:ALA:O	1:A:3727:ASP:HB2	2.16	0.45
1:A:3977:GLN:HE22	1:A:4033:GLY:H	1.63	0.45
1:A:3986:TRP:HD1	1:A:4047:MET:SD	2.39	0.45
1:A:4712:PRO:O	1:A:4718:LYS:HD2	2.16	0.45
2:B:44:LYS:HA	2:B:45:PRO:HD3	1.86	0.45
1:C:276:TRP:CD1	1:C:276:TRP:O	2.69	0.45
1:C:489:ASN:HB3	1:C:493:ARG:NH2	2.30	0.45
1:C:1294:PRO:CB	1:C:1547:LYS:HB3	2.45	0.45
1:C:1713:ASP:OD1	1:C:1714:LEU:N	2.49	0.45
1:C:2748:PRO:HD2	1:C:2751:LEU:HD12	1.98	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2883:HIS:HE1	1:C:2904:LEU:O	1.99	0.45
1:C:3989:VAL:HG13	1:C:4023:MET:HE2	1.98	0.45
1:C:4712:PRO:O	1:C:4718:LYS:HD2	2.15	0.45
1:E:249:GLY:O	1:E:252:VAL:HG12	2.15	0.45
1:E:824:GLU:CD	1:E:825:PRO:HD2	2.36	0.45
1:E:2553:TYR:CD1	1:E:2556:LEU:HD12	2.51	0.45
1:E:2819:TRP:HH2	1:E:2881:ASN:HB2	1.81	0.45
1:E:4222:VAL:HG11	1:E:4950:VAL:HA	1.99	0.45
1:E:4578:LEU:CD1	1:G:4880:MET:CA	2.85	0.45
1:E:4648:LEU:O	1:E:4652:LEU:N	2.47	0.45
1:E:4810:ALA:O	1:E:4813:LEU:HG	2.16	0.45
1:G:14:LEU:HD12	1:G:163:VAL:HG12	1.98	0.45
1:G:1598:GLN:O	1:G:1600:LEU:N	2.49	0.45
1:G:2499:LYS:O	1:G:2503:VAL:HG23	2.15	0.45
1:G:4821:LYS:HD3	1:G:4947:GLN:NE2	2.31	0.45
1:G:4832:HIS:NE2	1:G:4939:ALA:HB1	2.31	0.45
2:H:88:PRO:O	2:H:90:ILE:HD12	2.16	0.45
1:A:2431:ASP:HB2	1:A:2501:SER:CB	2.46	0.45
1:A:2883:HIS:HE1	1:A:2904:LEU:O	1.99	0.45
1:C:649:PHE:HB3	1:C:776:LEU:HB3	1.98	0.45
1:C:2290:LEU:HD11	1:C:2349:ASN:OD1	2.16	0.45
1:C:2771:ILE:HD11	1:C:2857:PRO:HD2	1.97	0.45
1:C:4581:LYS:HD2	1:E:4856:PHE:CZ	2.50	0.45
1:E:1224:GLU:HA	1:E:1225:PRO:HD3	1.64	0.45
1:E:2431:ASP:HB2	1:E:2501:SER:CB	2.46	0.45
1:G:16:THR:OG1	1:G:99:ARG:O	2.20	0.45
1:G:21:VAL:CG2	1:G:203:ASN:HB3	2.46	0.45
1:G:833:GLY:HA3	1:G:838:HIS:CD2	2.52	0.45
1:G:1660:GLN:NE2	1:G:1704:PRO:HB2	2.31	0.45
1:G:2350:ALA:O	1:G:2354:VAL:HG23	2.16	0.45
1:G:3371:LYS:O	1:G:3375:GLU:N	2.44	0.45
1:G:3936:TYR:HD2	1:G:3937:TYR:CE2	2.34	0.45
1:G:4209:GLN:HG3	1:G:4213:SER:HB2	1.99	0.45
1:G:4727:LYS:NZ	1:G:4728:HIS:CE1	2.84	0.45
1:A:750:LEU:O	1:A:751:SER:OG	2.33	0.45
1:A:792:LEU:HB3	1:A:799:GLU:O	2.16	0.45
1:A:1713:ASP:OD1	1:A:1714:LEU:N	2.49	0.45
1:A:2290:LEU:HD11	1:A:2349:ASN:OD1	2.16	0.45
1:A:3698:LEU:O	1:A:3701:LEU:HB3	2.17	0.45
1:A:3916:ILE:O	1:A:3920:VAL:HG23	2.17	0.45
1:A:4234:PHE:HZ	1:A:4988:TYR:HB2	1.81	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1090:PHE:CE1	1:C:1151:CYS:HB3	2.51	0.45
1:C:1438:ARG:HA	1:C:1514:LEU:HA	1.98	0.45
1:C:2117:VAL:O	1:C:2120:MET:HB2	2.16	0.45
1:C:2198:MET:HE3	1:C:2203:MET:SD	2.56	0.45
1:C:3724:ALA:O	1:C:3727:ASP:HB2	2.17	0.45
1:C:4024:VAL:HA	1:C:4027:LEU:HD12	1.98	0.45
1:C:4578:LEU:CD1	1:E:4880:MET:CA	2.83	0.45
1:C:4674:GLU:OE2	1:C:4712:PRO:HA	2.16	0.45
1:E:451:TYR:CZ	1:E:474:ARG:HD2	2.51	0.45
1:E:1840:PRO:O	1:E:1843:LYS:HB3	2.16	0.45
1:E:2883:HIS:HE1	1:E:2904:LEU:O	1.99	0.45
1:E:3775:ALA:O	1:E:3779:VAL:HG23	2.15	0.45
1:E:3977:GLN:HE22	1:E:4033:GLY:H	1.64	0.45
1:G:451:TYR:CZ	1:G:474:ARG:HD2	2.52	0.45
1:G:459:LEU:HD11	1:G:463:GLU:OE1	2.15	0.45
1:G:1093:GLU:HA	1:G:1148:VAL:HG22	1.98	0.45
1:G:2420:HIS:ND1	1:G:2423:MET:SD	2.76	0.45
1:G:3434:LEU:O	1:G:3437:MET:N	2.49	0.45
1:G:3655:GLU:O	1:G:3658:LYS:HB3	2.15	0.45
1:A:119:SER:OG	1:A:136:GLY:O	2.25	0.45
1:A:223:PHE:O	1:A:388:LEU:HD23	2.16	0.45
1:A:1106:ARG:HE	1:A:1188:PHE:HE1	1.63	0.45
1:A:2248:ARG:HA	1:A:2286:LEU:HD22	1.99	0.45
1:C:478:PHE:CD1	1:C:529:LEU:HD21	2.51	0.45
1:C:785:ALA:HA	1:C:1633:PRO:HD3	1.97	0.45
1:C:2066:LEU:O	1:C:2069:THR:OG1	2.31	0.45
1:C:2745:VAL:HB	1:C:2814:LYS:HB3	1.98	0.45
1:E:478:PHE:CD1	1:E:529:LEU:HD21	2.52	0.45
1:E:558:SER:O	1:E:561:LEU:HB3	2.16	0.45
1:E:2062:ARG:O	1:E:2065:SER:OG	2.21	0.45
1:E:2745:VAL:HB	1:E:2814:LYS:HB3	1.98	0.45
1:E:3698:LEU:O	1:E:3701:LEU:HB3	2.17	0.45
1:E:4563:ARG:NH1	1:E:4815:ASP:OD1	2.47	0.45
2:F:58:GLY:HA3	2:F:76:ILE:CG2	2.46	0.45
1:G:720:HIS:HB2	1:G:728:ARG:O	2.16	0.45
1:G:1154:ASP:HB3	1:G:1157:GLU:HB3	1.97	0.45
1:G:1729:SER:HB2	1:G:2163:ARG:HH11	1.81	0.45
1:G:4213:SER:O	1:G:4217:PHE:N	2.42	0.45
1:G:4886:HIS:O	1:G:4891:VAL:N	2.45	0.45
1:A:833:GLY:HA3	1:A:838:HIS:CD2	2.52	0.45
1:A:2822:THR:HG1	1:A:2938:THR:HG1	1.63	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:4664:LEU:O	1:A:4667:PRO:HD2	2.16	0.45
1:A:4980:LEU:HA	1:A:4984:ASN:HA	1.98	0.45
1:C:451:TYR:CZ	1:C:474:ARG:HD2	2.52	0.45
1:C:634:GLN:HG3	1:C:1640:HIS:CE1	2.50	0.45
1:C:737:LEU:HB3	1:C:738:LEU:H	1.56	0.45
1:C:1834:VAL:HG13	1:C:1835:GLU:N	2.32	0.45
1:E:943:ASP:HB3	1:E:1050:GLY:HA3	1.97	0.45
1:E:1240:LYS:HZ3	1:E:1242:LEU:HB2	1.80	0.45
1:E:1648:MET:SD	1:E:1656:ARG:NH2	2.89	0.45
1:E:2117:VAL:O	1:E:2120:MET:HB2	2.17	0.45
1:E:3724:ALA:O	1:E:3727:ASP:HB2	2.16	0.45
1:E:4823:LEU:HA	1:E:4826:ILE:CD1	2.44	0.45
1:E:4929:LEU:O	1:E:4933:GLN:HG3	2.17	0.45
1:G:478:PHE:CD1	1:G:529:LEU:HD21	2.52	0.45
1:G:593:HIS:HB3	1:G:596:ASN:HD22	1.79	0.45
1:G:1079:LYS:HZ2	1:G:1107:PRO:HB2	1.81	0.45
1:G:1840:PRO:O	1:G:1843:LYS:HB3	2.16	0.45
1:G:2059:LEU:CD2	1:G:2062:ARG:HH12	2.20	0.45
1:G:2250:MET:HA	1:G:2253:HIS:HD2	1.81	0.45
1:A:372:LEU:O	1:A:374:LYS:N	2.50	0.45
1:A:564:LEU:O	1:A:568:LEU:HG	2.16	0.45
1:A:1660:GLN:NE2	1:A:1704:PRO:HB2	2.31	0.45
1:A:2142:TYR:HE1	1:A:2196:ASN:HD22	1.64	0.45
1:A:4024:VAL:HA	1:A:4027:LEU:HD12	1.97	0.45
1:A:4578:LEU:HG	1:C:4880:MET:HB2	1.99	0.45
1:A:4579:PHE:HB3	1:A:4632:LEU:O	2.17	0.45
1:C:274:LEU:HA	1:C:278:GLN:NE2	2.32	0.45
1:C:445:LEU:CD2	1:C:522:LEU:HD12	2.44	0.45
1:C:839:LEU:HD22	1:C:1075:PHE:CE1	2.52	0.45
1:C:1082:THR:HG22	1:C:1189:LEU:HG	1.98	0.45
1:C:1093:GLU:HA	1:C:1148:VAL:HG22	1.98	0.45
1:C:1598:GLN:O	1:C:1600:LEU:N	2.49	0.45
1:C:2271:THR:HA	1:C:2272:PRO:HD2	1.85	0.45
1:C:3969:ILE:CG1	1:C:3980:LEU:HD11	2.46	0.45
1:C:4579:PHE:HB3	1:C:4632:LEU:O	2.17	0.45
1:C:4826:ILE:O	1:C:4829:SER:HB2	2.16	0.45
1:C:4915:VAL:HA	1:C:4918:ILE:HD12	1.97	0.45
2:D:67:SER:N	2:D:70:GLN:OE1	2.37	0.45
1:E:24:CYS:HB3	1:E:200:TRP:CE3	2.52	0.45
1:E:149:THR:HG23	1:E:174:VAL:HG22	1.98	0.45
1:E:274:LEU:HA	1:E:278:GLN:NE2	2.32	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:649:PHE:HB3	1:E:776:LEU:HB3	1.98	0.45
1:E:833:GLY:HA3	1:E:838:HIS:CD2	2.52	0.45
1:E:839:LEU:HD22	1:E:1075:PHE:CE1	2.52	0.45
1:E:2460:LEU:HD12	1:G:178:ARG:CZ	2.46	0.45
1:E:3777:GLU:O	1:E:3781:GLN:HG3	2.16	0.45
1:E:4702:ASP:OD1	1:E:4778:TRP:NE1	2.31	0.45
1:E:4712:PRO:O	1:E:4718:LYS:HD2	2.16	0.45
1:G:1713:ASP:OD1	1:G:1714:LEU:N	2.49	0.45
1:G:4000:MET:O	1:G:4004:ALA:N	2.49	0.45
1:G:4735:GLU:O	1:G:4739:GLU:N	2.48	0.45
1:A:24:CYS:HB3	1:A:200:TRP:CE3	2.52	0.45
1:A:758:ARG:HA	1:A:763:PRO:HA	1.97	0.45
1:A:1090:PHE:CE1	1:A:1151:CYS:HB3	2.52	0.45
1:A:1292:SER:O	1:A:1294:PRO:HD3	2.17	0.45
1:A:1294:PRO:CD	1:A:1584:ARG:HH11	2.19	0.45
1:A:2272:PRO:O	1:A:2275:VAL:HB	2.17	0.45
1:A:4214:LYS:HE2	1:A:4985:LEU:HD23	1.98	0.45
1:C:312:THR:O	1:C:314:PHE:N	2.41	0.45
1:C:533:ASN:OD1	1:C:535:ALA:N	2.41	0.45
1:C:599:VAL:O	1:C:602:VAL:HB	2.17	0.45
1:C:1805:GLU:O	1:C:1808:ARG:HG2	2.17	0.45
1:C:1840:PRO:O	1:C:1843:LYS:HB3	2.16	0.45
1:C:2114:PRO:O	1:C:3704:HIS:NE2	2.40	0.45
1:C:2431:ASP:HB2	1:C:2501:SER:CB	2.46	0.45
1:C:2556:LEU:HD23	1:C:2559:LEU:CD1	2.47	0.45
1:C:3698:LEU:O	1:C:3701:LEU:HB3	2.17	0.45
1:C:3777:GLU:O	1:C:3781:GLN:HG3	2.16	0.45
1:C:3916:ILE:O	1:C:3920:VAL:HG23	2.17	0.45
1:C:3996:PHE:O	1:C:4000:MET:HG2	2.17	0.45
1:C:4222:VAL:HG11	1:C:4950:VAL:HA	1.99	0.45
1:C:4234:PHE:HZ	1:C:4988:TYR:HB2	1.82	0.45
1:E:111:HIS:NE2	1:E:113:HIS:HB3	2.32	0.45
1:E:1079:LYS:HZ2	1:E:1107:PRO:HB2	1.80	0.45
1:E:1805:GLU:O	1:E:1808:ARG:HG2	2.17	0.45
1:E:4924:VAL:HA	1:E:4928:LEU:HD12	1.99	0.45
1:G:350:HIS:O	1:G:354:GLY:HA2	2.17	0.45
1:G:533:ASN:OD1	1:G:535:ALA:N	2.41	0.45
1:G:558:SER:O	1:G:561:LEU:HB3	2.17	0.45
1:G:2756:ASN:OD1	1:G:2806:ARG:NH2	2.49	0.45
1:G:4039:MET:HG3	1:G:4040:ILE:H	1.81	0.45
1:G:4108:ILE:O	1:G:4111:LEU:HB3	2.16	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:4733:GLY:O	1:G:4737:ILE:HG12	2.17	0.45
1:A:111:HIS:NE2	1:A:113:HIS:HB3	2.32	0.45
1:A:2244:ARG:NH1	1:A:2285:GLU:OE1	2.50	0.45
1:A:4222:VAL:HG11	1:A:4950:VAL:HA	1.99	0.45
1:A:4574:ASN:ND2	1:A:4813:LEU:HD23	2.31	0.45
1:C:24:CYS:HB3	1:C:200:TRP:CE3	2.52	0.45
1:C:111:HIS:NE2	1:C:113:HIS:HB3	2.32	0.45
1:C:438:ILE:HG23	1:C:518:ILE:HD11	1.98	0.45
1:C:558:SER:O	1:C:561:LEU:HB3	2.16	0.45
1:C:768:PHE:HB3	1:C:771:PHE:HE2	1.82	0.45
1:C:941:MET:HA	1:C:1051:TYR:HD1	1.82	0.45
1:C:2819:TRP:HH2	1:C:2881:ASN:HB2	1.81	0.45
1:C:4143:VAL:O	1:C:4147:LEU:HG	2.17	0.45
1:C:4648:LEU:O	1:C:4652:LEU:N	2.47	0.45
1:E:564:LEU:O	1:E:568:LEU:HG	2.16	0.45
1:E:662:TRP:CZ3	1:E:814:ALA:HB2	2.52	0.45
1:E:1128:ARG:N	1:E:1142:PRO:HB3	2.31	0.45
1:E:1713:ASP:OD1	1:E:1714:LEU:N	2.50	0.45
1:E:4666:VAL:O	1:E:4670:ILE:HG12	2.16	0.45
1:E:4915:VAL:HA	1:E:4918:ILE:HD12	1.98	0.45
1:G:1848:LEU:O	1:G:1851:MET:HG2	2.17	0.45
1:G:2232:CYS:O	1:G:2235:PHE:HB3	2.17	0.45
1:G:4786:ASP:OD2	1:G:4788:SER:HB3	2.16	0.45
1:G:4946:GLN:O	1:G:4950:VAL:HG23	2.17	0.45
1:A:102:LEU:HB2	1:A:105:HIS:NE2	2.31	0.45
1:A:1130:GLN:HB2	1:A:1138:PRO:HA	1.99	0.45
1:A:1951:LEU:O	1:A:1955:VAL:HG23	2.16	0.45
1:A:2232:CYS:O	1:A:2235:PHE:HB3	2.17	0.45
1:A:4648:LEU:O	1:A:4652:LEU:N	2.47	0.45
1:A:4802:GLY:HA2	1:A:4809:PHE:HB2	1.99	0.45
1:C:887:ILE:CG2	1:C:962:SER:HB2	2.47	0.45
1:C:2173:GLN:HG2	1:C:2174:GLU:N	2.19	0.45
1:C:4664:LEU:O	1:C:4667:PRO:HD2	2.16	0.45
1:C:4666:VAL:O	1:C:4670:ILE:HG12	2.16	0.45
2:D:58:GLY:HA3	2:D:76:ILE:CG2	2.47	0.45
1:E:223:PHE:O	1:E:388:LEU:HD23	2.16	0.45
1:E:234:SER:O	1:E:242:ARG:HG2	2.17	0.45
1:E:445:LEU:CD2	1:E:522:LEU:HD12	2.44	0.45
1:E:2296:GLU:HA	1:E:2299:VAL:HG22	1.99	0.45
1:E:2350:ALA:O	1:E:2354:VAL:HG23	2.17	0.45
1:E:4579:PHE:HB3	1:E:4632:LEU:O	2.16	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:107:ILE:HD12	1:G:109:LEU:HD21	1.99	0.45
1:G:111:HIS:NE2	1:G:113:HIS:HB3	2.32	0.45
1:G:290:TYR:HB2	1:G:307:ALA:CB	2.47	0.45
1:G:438:ILE:HG23	1:G:518:ILE:HD11	1.98	0.45
1:G:716:PHE:N	1:G:738:LEU:HD13	2.31	0.45
1:G:824:GLU:CD	1:G:825:PRO:HD2	2.36	0.45
1:G:1205:GLY:HA3	1:G:1227:ALA:CB	2.43	0.45
1:G:1234:VAL:HG12	1:G:1235:THR:O	2.17	0.45
1:G:1805:GLU:O	1:G:1808:ARG:HG2	2.17	0.45
1:G:2752:ASP:HA	1:G:2755:ILE:HD12	1.99	0.45
1:G:3997:ALA:HB1	1:G:4057:MET:HB2	1.99	0.45
1:A:16:THR:OG1	1:A:99:ARG:O	2.18	0.45
1:A:1234:VAL:HG12	1:A:1235:THR:O	2.17	0.45
1:A:1735:ILE:HD11	1:A:2156:LEU:HD11	1.99	0.45
1:A:3936:TYR:HD2	1:A:3937:TYR:CD2	2.35	0.45
1:A:4181:ILE:HD11	1:A:4193:ILE:HD11	1.99	0.45
2:B:58:GLY:HA3	2:B:76:ILE:CG2	2.47	0.45
1:C:234:SER:O	1:C:242:ARG:HG2	2.17	0.45
1:C:275:ARG:HA	1:C:338:GLU:OE1	2.17	0.45
1:C:290:TYR:HB2	1:C:307:ALA:CB	2.47	0.45
1:C:788:LYS:HD3	1:C:1629:GLN:OE1	2.17	0.45
1:C:1660:GLN:NE2	1:C:1704:PRO:HB2	2.32	0.45
1:C:3977:GLN:HE22	1:C:4033:GLY:H	1.63	0.45
1:C:4921:PHE:HA	1:C:4925:ILE:CG1	2.47	0.45
1:E:275:ARG:HA	1:E:338:GLU:OE1	2.17	0.45
1:E:276:TRP:CD1	1:E:276:TRP:O	2.69	0.45
1:E:768:PHE:HB3	1:E:771:PHE:HE2	1.82	0.45
1:E:856:VAL:O	1:E:991:ASN:ND2	2.48	0.45
1:E:1074:ILE:HB	1:E:1239:SER:OG	2.17	0.45
1:E:1158:ASN:ND2	1:E:1182:ILE:O	2.50	0.45
1:E:1638:ALA:HA	1:E:1649:ASP:HA	1.98	0.45
1:E:1735:ILE:HD11	1:E:2156:LEU:HD11	1.98	0.45
1:E:2748:PRO:HD2	1:E:2751:LEU:HD12	1.98	0.45
1:E:3936:TYR:HD2	1:E:3937:TYR:CD2	2.35	0.45
1:E:4717:ASP:O	1:E:4720:VAL:HG23	2.17	0.45
1:E:4980:LEU:HA	1:E:4984:ASN:HA	1.98	0.45
1:G:24:CYS:HB3	1:G:200:TRP:CE3	2.52	0.45
1:G:119:SER:O	1:G:136:GLY:N	2.31	0.45
1:G:941:MET:HA	1:G:1051:TYR:HD1	1.82	0.45
1:G:1943:LEU:HD11	1:G:2098:VAL:HG22	1.99	0.45
1:G:4648:LEU:O	1:G:4652:LEU:N	2.46	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:4851:TYR:HB3	1:G:4916:PHE:CZ	2.52	0.45
1:A:478:PHE:CD1	1:A:529:LEU:HD21	2.52	0.44
1:A:714:TYR:HB2	1:A:757:PHE:CD2	2.52	0.44
1:A:788:LYS:HD3	1:A:1629:GLN:OE1	2.17	0.44
1:A:839:LEU:HD22	1:A:1075:PHE:CE1	2.52	0.44
1:A:1598:GLN:O	1:A:1600:LEU:N	2.49	0.44
1:A:1805:GLU:O	1:A:1808:ARG:HG2	2.17	0.44
1:A:2117:VAL:O	1:A:2120:MET:HB2	2.17	0.44
1:A:2250:MET:HA	1:A:2253:HIS:HD2	1.81	0.44
1:A:2756:ASN:OD1	1:A:2806:ARG:NH2	2.51	0.44
1:A:4143:VAL:O	1:A:4147:LEU:HG	2.17	0.44
1:A:4881:THR:HA	1:A:4884:LEU:HG	1.99	0.44
1:A:4892:ARG:HH22	1:C:4920:PHE:HD2	1.63	0.44
1:A:4991:PHE:O	1:A:4995:LEU:HG	2.17	0.44
1:C:73:LEU:O	1:C:105:HIS:HB3	2.17	0.44
1:C:350:HIS:O	1:C:354:GLY:HA2	2.17	0.44
1:C:530:ILE:HG12	1:C:540:PHE:HE2	1.82	0.44
1:C:662:TRP:CZ3	1:C:814:ALA:HB2	2.52	0.44
1:C:748:LEU:HD21	1:C:777:PHE:HD2	1.82	0.44
1:C:1074:ILE:HB	1:C:1239:SER:OG	2.18	0.44
1:C:1087:ARG:HH11	1:C:1223:PHE:HE1	1.65	0.44
1:C:2248:ARG:HA	1:C:2286:LEU:HD22	1.98	0.44
1:C:2788:HIS:CG	1:C:2789:PRO:HD2	2.52	0.44
1:C:4581:LYS:HE2	1:E:4877:ASP:O	2.17	0.44
1:C:4821:LYS:HD3	1:C:4947:GLN:HE22	1.80	0.44
1:C:4997:ASN:OD1	1:C:4998:LYS:N	2.50	0.44
2:D:11:ASP:OD1	2:D:67:SER:HB2	2.18	0.44
2:D:22:CYS:O	2:D:47:LYS:HA	2.17	0.44
1:E:107:ILE:HD12	1:E:109:LEU:HD21	1.99	0.44
1:E:748:LEU:HD13	1:E:755:ILE:CG1	2.47	0.44
1:E:1090:PHE:CE1	1:E:1151:CYS:HB3	2.51	0.44
1:E:4039:MET:HG3	1:E:4040:ILE:N	2.32	0.44
2:F:74:LEU:O	2:F:98:VAL:HA	2.17	0.44
1:G:839:LEU:HD22	1:G:1075:PHE:CE1	2.52	0.44
1:G:1128:ARG:N	1:G:1142:PRO:HB3	2.31	0.44
1:G:1143:TRP:HE3	1:G:1144:GLN:O	2.01	0.44
2:H:11:ASP:OD1	2:H:67:SER:HB2	2.17	0.44
2:H:74:LEU:HD23	2:H:76:ILE:HD11	1.99	0.44
1:A:103:TYR:CE2	1:A:157:ARG:HB3	2.52	0.44
1:A:599:VAL:O	1:A:602:VAL:HB	2.17	0.44
1:A:941:MET:HA	1:A:1051:TYR:HD1	1.83	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1141:ARG:NH1	1:A:1169:LEU:HD11	2.26	0.44
1:A:2059:LEU:CD2	1:A:2062:ARG:HH12	2.20	0.44
1:A:2788:HIS:CG	1:A:2789:PRO:HD2	2.52	0.44
1:A:3906:GLN:HG2	1:A:3909:ASN:HB2	2.00	0.44
1:A:4892:ARG:HH12	1:C:4898:GLY:H	1.64	0.44
1:C:292:ALA:HB3	1:C:302:VAL:HG11	1.99	0.44
1:C:2116:LEU:O	1:C:2120:MET:HG3	2.17	0.44
1:C:2250:MET:HA	1:C:2253:HIS:HD2	1.81	0.44
1:C:3835:LEU:HD22	1:C:3884:LEU:HD11	2.00	0.44
1:C:4991:PHE:O	1:C:4995:LEU:HG	2.17	0.44
1:E:233:ILE:O	1:E:257:ARG:HD2	2.17	0.44
1:E:2244:ARG:NH1	1:E:2285:GLU:OE1	2.50	0.44
1:E:2248:ARG:HA	1:E:2286:LEU:HD22	1.98	0.44
1:E:3811:GLU:O	1:E:3814:GLN:HG3	2.18	0.44
1:E:4056:GLU:O	1:E:4060:LYS:HG2	2.18	0.44
2:F:22:CYS:O	2:F:47:LYS:HA	2.18	0.44
1:G:276:TRP:CD1	1:G:276:TRP:O	2.70	0.44
1:G:639:ASN:ND2	1:G:676:THR:OG1	2.46	0.44
1:G:1158:ASN:ND2	1:G:1182:ILE:O	2.50	0.44
1:G:4686:LEU:HD13	1:G:4692:PRO:HD3	2.00	0.44
1:A:35:LEU:HD12	1:A:35:LEU:O	2.17	0.44
1:A:161:GLU:OE1	1:G:3984:ARG:NH1	2.51	0.44
1:A:274:LEU:HA	1:A:278:GLN:NE2	2.32	0.44
1:A:561:LEU:CD2	1:A:598:LYS:HB3	2.48	0.44
1:A:887:ILE:CG2	1:A:962:SER:HB2	2.47	0.44
1:A:1729:SER:HB2	1:A:2163:ARG:HH11	1.81	0.44
1:A:3996:PHE:O	1:A:4000:MET:HG2	2.17	0.44
1:A:4645:CYS:O	1:A:4649:LEU:N	2.45	0.44
1:A:4887:MET:HA	1:A:4891:VAL:HG23	1.99	0.44
1:A:4924:VAL:HA	1:A:4928:LEU:HD12	1.99	0.44
1:C:35:LEU:HD12	1:C:35:LEU:O	2.18	0.44
1:C:107:ILE:HD12	1:C:109:LEU:HD21	1.99	0.44
1:C:561:LEU:CD2	1:C:598:LYS:HB3	2.48	0.44
1:C:1943:LEU:HD11	1:C:2098:VAL:HG22	1.99	0.44
1:C:1951:LEU:O	1:C:1955:VAL:HG23	2.16	0.44
1:C:2244:ARG:NH1	1:C:2285:GLU:OE1	2.50	0.44
1:C:3811:GLU:O	1:C:3814:GLN:HG3	2.18	0.44
1:E:290:TYR:HB2	1:E:307:ALA:CB	2.48	0.44
1:E:2271:THR:HA	1:E:2272:PRO:HD2	1.85	0.44
1:E:2272:PRO:O	1:E:2275:VAL:HB	2.17	0.44
1:E:2420:HIS:ND1	1:E:2423:MET:SD	2.76	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2556:LEU:HD23	1:E:2559:LEU:CD1	2.48	0.44
1:E:2756:ASN:OD1	1:E:2806:ARG:NH2	2.51	0.44
1:E:3996:PHE:O	1:E:4000:MET:HG2	2.17	0.44
1:G:121:LEU:O	1:G:133:PHE:HB3	2.18	0.44
1:G:203:ASN:OD1	1:G:204:PRO:HD2	2.18	0.44
1:G:674:PHE:HD1	2:H:40:ARG:NH1	2.09	0.44
1:G:1090:PHE:CE1	1:G:1151:CYS:HB3	2.51	0.44
1:G:1294:PRO:CD	1:G:1584:ARG:HH11	2.19	0.44
1:G:2558:VAL:O	1:G:2561:LEU:HG	2.16	0.44
1:G:2825:LYS:HA	1:G:2935:TYR:CD1	2.52	0.44
1:G:4041:ALA:O	1:G:4044:MET:HB3	2.18	0.44
1:G:4251:ILE:HG22	1:G:4557:ARG:NH1	2.32	0.44
1:A:558:SER:O	1:A:561:LEU:HB3	2.17	0.44
1:A:593:HIS:HA	1:A:1597:VAL:HB	1.99	0.44
1:A:1848:LEU:O	1:A:1851:MET:HG2	2.18	0.44
1:A:4856:PHE:CZ	1:G:4581:LYS:HD2	2.47	0.44
1:C:233:ILE:O	1:C:257:ARG:HD2	2.17	0.44
1:C:1439:VAL:O	1:C:1513:ASP:N	2.49	0.44
1:C:4842:GLY:O	1:C:4846:VAL:HG23	2.18	0.44
1:C:4881:THR:HA	1:C:4884:LEU:HG	2.00	0.44
1:E:533:ASN:OD1	1:E:535:ALA:N	2.42	0.44
1:E:567:VAL:O	1:E:571:SER:OG	2.27	0.44
1:E:599:VAL:O	1:E:602:VAL:HB	2.17	0.44
1:E:685:GLY:O	1:E:780:VAL:HB	2.17	0.44
1:E:1848:LEU:O	1:E:1851:MET:HG2	2.18	0.44
1:E:3980:LEU:HA	1:E:3983:SER:OG	2.17	0.44
1:E:4881:THR:HA	1:E:4884:LEU:HG	1.98	0.44
1:G:274:LEU:HA	1:G:278:GLN:NE2	2.32	0.44
1:G:292:ALA:HB3	1:G:302:VAL:HG11	1.99	0.44
1:G:564:LEU:O	1:G:568:LEU:HG	2.16	0.44
1:G:599:VAL:O	1:G:602:VAL:HB	2.17	0.44
1:G:1834:VAL:HG13	1:G:1835:GLU:N	2.32	0.44
1:G:2500:ALA:HA	1:G:2556:LEU:HD21	1.99	0.44
1:A:530:ILE:HG12	1:A:540:PHE:HE2	1.83	0.44
1:A:931:THR:O	1:A:935:LEU:N	2.44	0.44
1:A:4888:TYR:OH	1:C:4898:GLY:CA	2.65	0.44
2:B:11:ASP:OD1	2:B:67:SER:HB2	2.18	0.44
1:C:173:SER:HG	1:C:175:SER:HG	1.63	0.44
1:C:714:TYR:HB2	1:C:757:PHE:CD2	2.53	0.44
1:C:1930:LYS:HG2	1:C:1931:LEU:N	2.33	0.44
1:C:2272:PRO:O	1:C:2275:VAL:HB	2.18	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:3839:CYS:SG	1:C:3922:TYR:CE1	3.11	0.44
1:C:3936:TYR:HD2	1:C:3937:TYR:CD2	2.35	0.44
1:C:4851:TYR:HB3	1:C:4916:PHE:CZ	2.53	0.44
1:E:73:LEU:O	1:E:105:HIS:HB3	2.17	0.44
1:E:788:LYS:HD3	1:E:1629:GLN:OE1	2.17	0.44
1:E:4844:LEU:HD11	1:E:4891:VAL:HG13	1.99	0.44
1:E:4931:ILE:O	1:E:4935:LEU:HB2	2.18	0.44
2:F:7:ILE:HD12	2:F:71:ARG:HG2	2.00	0.44
1:G:35:LEU:HD12	1:G:35:LEU:O	2.18	0.44
1:G:685:GLY:O	1:G:780:VAL:HB	2.18	0.44
1:G:4218:ILE:HG22	1:G:4950:VAL:HG13	2.00	0.44
1:A:275:ARG:HA	1:A:338:GLU:OE1	2.17	0.44
1:A:662:TRP:CZ3	1:A:814:ALA:HB2	2.52	0.44
1:A:685:GLY:O	1:A:780:VAL:HB	2.17	0.44
1:A:892:THR:N	1:A:902:ARG:HA	2.30	0.44
1:A:1158:ASN:ND2	1:A:1182:ILE:O	2.50	0.44
1:A:3811:GLU:O	1:A:3814:GLN:HG3	2.18	0.44
1:A:3969:ILE:CG1	1:A:3980:LEU:HD11	2.46	0.44
1:C:2929:PHE:O	1:C:2933:ASN:ND2	2.47	0.44
1:C:4056:GLU:O	1:C:4060:LYS:HG2	2.17	0.44
1:C:4181:ILE:HD11	1:C:4193:ILE:HD11	2.00	0.44
1:C:4826:ILE:HG13	1:E:4839:MET:HE1	1.99	0.44
2:D:7:ILE:HD12	2:D:71:ARG:HG2	2.00	0.44
1:E:1598:GLN:O	1:E:1600:LEU:N	2.49	0.44
1:G:234:SER:O	1:G:242:ARG:HG2	2.16	0.44
1:G:372:LEU:O	1:G:374:LYS:N	2.51	0.44
1:G:892:THR:N	1:G:902:ARG:HA	2.30	0.44
1:G:1292:SER:O	1:G:1294:PRO:HD3	2.18	0.44
1:G:4816:ILE:HG13	1:G:4823:LEU:HD22	2.00	0.44
1:G:4921:PHE:HA	1:G:4925:ILE:HG12	2.00	0.44
1:A:235:ALA:HB2	1:A:257:ARG:HD3	1.99	0.44
1:A:314:PHE:HB3	1:A:348:VAL:CG1	2.48	0.44
1:A:2296:GLU:HA	1:A:2299:VAL:HG22	1.99	0.44
1:A:2819:TRP:HH2	1:A:2881:ASN:HB2	1.82	0.44
1:A:4056:GLU:O	1:A:4060:LYS:HG2	2.17	0.44
1:A:4582:VAL:HB	1:A:4628:VAL:HG12	2.00	0.44
1:C:758:ARG:HA	1:C:763:PRO:HA	1.99	0.44
1:C:1158:ASN:ND2	1:C:1182:ILE:O	2.50	0.44
1:C:1201:HIS:CD2	1:C:1202:LEU:H	2.35	0.44
1:C:1638:ALA:HA	1:C:1649:ASP:HA	1.99	0.44
1:C:1848:LEU:O	1:C:1851:MET:HG2	2.18	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2142:TYR:HE1	1:C:2196:ASN:HD22	1.65	0.44
1:C:2431:ASP:HB2	1:C:2501:SER:HA	2.00	0.44
1:E:35:LEU:HD12	1:E:35:LEU:O	2.18	0.44
1:E:50:GLU:CD	1:E:51:PRO:HD2	2.38	0.44
1:E:438:ILE:HG23	1:E:518:ILE:HD11	1.98	0.44
1:E:941:MET:HA	1:E:1051:TYR:HD1	1.83	0.44
1:E:1292:SER:O	1:E:1294:PRO:HD3	2.18	0.44
1:E:1660:GLN:NE2	1:E:1704:PRO:HB2	2.32	0.44
1:E:2232:CYS:O	1:E:2235:PHE:HB3	2.17	0.44
1:E:2788:HIS:CG	1:E:2789:PRO:HD2	2.53	0.44
1:E:4234:PHE:HZ	1:E:4988:TYR:HB2	1.82	0.44
1:E:4910:GLU:HA	1:E:4913:ARG:HG2	1.99	0.44
1:G:50:GLU:CD	1:G:51:PRO:HD2	2.38	0.44
1:G:275:ARG:HA	1:G:338:GLU:OE1	2.18	0.44
1:G:593:HIS:HA	1:G:1597:VAL:HB	1.99	0.44
1:G:887:ILE:CG2	1:G:962:SER:HB2	2.47	0.44
1:G:2248:ARG:HA	1:G:2286:LEU:HD22	1.99	0.44
1:G:2902:HIS:H	1:G:2905:LEU:HD12	1.83	0.44
1:A:104:GLY:HA2	1:A:150:MET:O	2.18	0.44
1:A:119:SER:HB2	1:A:145:ALA:HB1	2.00	0.44
1:A:121:LEU:O	1:A:133:PHE:HB3	2.18	0.44
1:A:233:ILE:O	1:A:257:ARG:HD2	2.17	0.44
1:A:1143:TRP:HE3	1:A:1144:GLN:O	2.01	0.44
1:A:1154:ASP:HB3	1:A:1157:GLU:HB3	1.98	0.44
1:A:1687:SER:OG	2:B:36:PHE:HB2	2.18	0.44
1:A:1834:VAL:HG13	1:A:1835:GLU:N	2.32	0.44
1:A:2066:LEU:O	1:A:2069:THR:OG1	2.31	0.44
1:A:2358:ILE:CG2	1:C:195:PHE:HE2	2.30	0.44
1:A:4563:ARG:NH1	1:A:4815:ASP:OD1	2.47	0.44
1:A:4581:LYS:HZ3	1:C:4877:ASP:HA	1.83	0.44
1:A:4715:TYR:CG	1:A:4715:TYR:O	2.71	0.44
1:A:4791:TYR:OH	1:A:4815:ASP:HA	2.18	0.44
1:C:14:LEU:HD12	1:C:163:VAL:HG12	1.99	0.44
1:C:672:VAL:O	1:C:680:THR:OG1	2.30	0.44
1:C:833:GLY:HA3	1:C:838:HIS:CD2	2.52	0.44
1:C:1234:VAL:HG12	1:C:1235:THR:O	2.18	0.44
1:C:2232:CYS:O	1:C:2235:PHE:HB3	2.17	0.44
1:C:4931:ILE:O	1:C:4935:LEU:HB2	2.18	0.44
1:C:4984:ASN:O	1:C:4985:LEU:HB2	2.18	0.44
2:D:74:LEU:O	2:D:98:VAL:HA	2.18	0.44
1:E:663:TYR:OH	1:E:802:PHE:O	2.30	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1234:VAL:HG12	1:E:1235:THR:O	2.17	0.44
1:E:1858:ASP:O	1:E:1862:ILE:HG12	2.18	0.44
1:E:4791:TYR:OH	1:E:4815:ASP:HA	2.18	0.44
2:F:67:SER:N	2:F:70:GLN:OE1	2.37	0.44
1:G:1082:THR:HG22	1:G:1189:LEU:HG	1.98	0.44
1:G:1687:SER:HG	2:H:36:PHE:HB2	1.83	0.44
1:G:2114:PRO:O	1:G:3704:HIS:NE2	2.39	0.44
1:A:445:LEU:HD23	1:A:521:LEU:HG	2.00	0.44
1:A:862:VAL:HA	1:A:930:LYS:NZ	2.33	0.44
1:A:1074:ILE:HB	1:A:1239:SER:OG	2.18	0.44
1:A:3496:LYS:O	1:A:3513:THR:N	2.51	0.44
1:A:3838:THR:O	1:A:3839:CYS:SG	2.76	0.44
1:A:4910:GLU:HA	1:A:4913:ARG:HG2	2.00	0.44
1:A:4997:ASN:OD1	1:A:4998:LYS:N	2.50	0.44
2:B:22:CYS:O	2:B:47:LYS:HA	2.17	0.44
2:B:67:SER:N	2:B:70:GLN:OE1	2.37	0.44
1:C:411:TYR:O	1:C:415:ILE:HG13	2.18	0.44
1:C:635:THR:OG1	1:C:1638:ALA:O	2.31	0.44
1:C:1655:GLU:OE1	1:C:1655:GLU:N	2.50	0.44
1:C:1735:ILE:HD11	1:C:2156:LEU:HD11	1.99	0.44
1:C:2197:LEU:O	1:C:2201:LEU:HG	2.18	0.44
1:C:2756:ASN:OD1	1:C:2806:ARG:NH2	2.51	0.44
1:C:4582:VAL:HB	1:C:4628:VAL:HG12	2.00	0.44
1:C:4929:LEU:O	1:C:4933:GLN:HG3	2.17	0.44
1:E:569:ILE:HG22	1:E:570:GLU:OE2	2.18	0.44
1:E:1205:GLY:HA3	1:E:1227:ALA:CB	2.43	0.44
1:E:2752:ASP:HA	1:E:2755:ILE:HD12	2.00	0.44
1:E:4251:ILE:HG12	1:E:4553:ASN:HB3	2.00	0.44
2:F:11:ASP:OD1	2:F:67:SER:HB2	2.17	0.44
1:G:71:GLN:O	1:G:107:ILE:HA	2.18	0.44
1:G:73:LEU:O	1:G:105:HIS:HB3	2.17	0.44
1:G:662:TRP:CZ3	1:G:814:ALA:HB2	2.52	0.44
1:G:788:LYS:HD3	1:G:1629:GLN:OE1	2.17	0.44
1:G:1074:ILE:HB	1:G:1239:SER:OG	2.17	0.44
1:G:2244:ARG:NH1	1:G:2285:GLU:OE1	2.50	0.44
1:G:4676:GLU:O	1:G:4680:LYS:HG3	2.17	0.44
1:A:35:LEU:HD13	1:A:49:LEU:HB3	2.00	0.43
1:A:292:ALA:HB3	1:A:302:VAL:HG11	1.99	0.43
1:A:1655:GLU:OE1	1:A:1655:GLU:N	2.51	0.43
1:A:1783:VAL:HG11	2:B:55:VAL:HG12	1.99	0.43
1:A:2460:LEU:HD12	1:C:178:ARG:CZ	2.48	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:4251:ILE:HG12	1:A:4553:ASN:HB3	1.99	0.43
1:C:2296:GLU:HA	1:C:2299:VAL:HG22	1.99	0.43
1:C:2924:GLN:O	1:C:2928:LYS:HB2	2.18	0.43
1:C:3916:ILE:O	1:C:3919:THR:HG22	2.18	0.43
1:C:4251:ILE:HG12	1:C:4553:ASN:HB3	2.00	0.43
1:C:4924:VAL:HA	1:C:4928:LEU:HD12	2.00	0.43
1:E:21:VAL:HG12	1:E:65:CYS:O	2.18	0.43
1:E:1201:HIS:CD2	1:E:1202:LEU:H	2.35	0.43
1:E:1586:ASN:O	1:E:1588:ALA:N	2.49	0.43
1:E:1655:GLU:OE1	1:E:1655:GLU:N	2.51	0.43
1:E:1666:THR:O	1:E:1669:LEU:HB3	2.18	0.43
1:E:1834:VAL:HG13	1:E:1835:GLU:N	2.31	0.43
1:E:3838:THR:O	1:E:3839:CYS:SG	2.76	0.43
1:E:4842:GLY:O	1:E:4846:VAL:HG23	2.18	0.43
1:G:21:VAL:HG23	1:G:203:ASN:HB3	1.99	0.43
1:G:748:LEU:HD13	1:G:755:ILE:CG1	2.47	0.43
1:G:1655:GLU:N	1:G:1655:GLU:OE1	2.51	0.43
1:G:1808:ARG:HB2	1:G:1854:PHE:HE1	1.83	0.43
1:G:2137:ALA:HA	1:G:2140:ARG:HH11	1.82	0.43
1:G:4715:TYR:O	1:G:4715:TYR:CG	2.70	0.43
1:A:222:LEU:HB3	1:A:388:LEU:HD22	2.00	0.43
1:A:438:ILE:HG23	1:A:518:ILE:HD11	1.99	0.43
1:A:768:PHE:HB3	1:A:771:PHE:HE2	1.82	0.43
1:A:1858:ASP:O	1:A:1862:ILE:HG12	2.17	0.43
1:A:3501:ASP:HA	1:C:1224:GLU:OE2	2.18	0.43
1:A:3839:CYS:SG	1:A:3922:TYR:CE1	3.11	0.43
1:A:4251:ILE:HG22	1:A:4557:ARG:NH1	2.33	0.43
1:C:104:GLY:HA2	1:C:150:MET:O	2.19	0.43
1:C:1224:GLU:HA	1:C:1225:PRO:HD3	1.63	0.43
1:C:2137:ALA:HA	1:C:2140:ARG:HH11	1.83	0.43
1:C:3970:GLN:HE21	1:C:5004:THR:CA	2.30	0.43
1:C:4214:LYS:HE2	1:C:4985:LEU:HD23	1.99	0.43
1:C:4888:TYR:OH	1:E:4898:GLY:O	2.36	0.43
1:E:21:VAL:HG23	1:E:203:ASN:HB3	1.99	0.43
1:E:706:GLY:H	1:E:711:LEU:HD22	1.83	0.43
1:E:714:TYR:HB2	1:E:757:PHE:CD2	2.53	0.43
1:E:748:LEU:HD21	1:E:777:PHE:HD2	1.82	0.43
1:E:984:LEU:O	1:E:988:LEU:HG	2.18	0.43
1:E:1082:THR:HG22	1:E:1189:LEU:HG	1.98	0.43
1:E:2142:TYR:HE1	1:E:2196:ASN:HD22	1.65	0.43
1:E:2338:ALA:O	1:E:2349:ASN:ND2	2.51	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4735:GLU:O	1:E:4739:GLU:N	2.50	0.43
1:G:314:PHE:HB3	1:G:348:VAL:CG1	2.49	0.43
1:G:454:PRO:HA	1:G:455:PRO:HD3	1.87	0.43
1:G:530:ILE:HG12	1:G:540:PHE:HE2	1.83	0.43
1:G:649:PHE:HB3	1:G:776:LEU:HB3	1.98	0.43
1:G:1858:ASP:O	1:G:1862:ILE:HG12	2.17	0.43
1:G:3786:CYS:SG	1:G:3794:VAL:HG22	2.58	0.43
1:G:3840:SER:OG	1:G:3878:ASP:OD1	2.26	0.43
1:A:21:VAL:HG23	1:A:203:ASN:HB3	1.99	0.43
1:A:290:TYR:HB2	1:A:307:ALA:CB	2.47	0.43
1:A:1201:HIS:CD2	1:A:1202:LEU:H	2.35	0.43
1:A:1224:GLU:OE2	1:G:3501:ASP:CB	2.67	0.43
1:A:2197:LEU:O	1:A:2201:LEU:HG	2.19	0.43
1:A:2556:LEU:HD23	1:A:2559:LEU:CD1	2.47	0.43
1:A:3835:LEU:HD22	1:A:3884:LEU:HD11	2.01	0.43
1:C:203:ASN:OD1	1:C:204:PRO:HD2	2.18	0.43
1:C:276:TRP:CZ3	1:C:338:GLU:HB3	2.54	0.43
1:C:748:LEU:HD13	1:C:755:ILE:CG1	2.47	0.43
1:C:1292:SER:O	1:C:1294:PRO:HD3	2.17	0.43
1:C:3496:LYS:O	1:C:3513:THR:N	2.51	0.43
1:C:3716:LEU:N	1:C:3789:GLU:OE2	2.51	0.43
1:C:3980:LEU:HA	1:C:3983:SER:OG	2.18	0.43
1:C:4578:LEU:HG	1:E:4880:MET:HB2	1.99	0.43
1:C:4826:ILE:HG12	1:E:4839:MET:CE	2.47	0.43
1:C:4834:GLY:O	1:C:4837:LEU:HB3	2.18	0.43
2:D:38:SER:O	2:D:41:ASP:HB2	2.18	0.43
2:D:73:LYS:HA	2:D:99:PHE:O	2.19	0.43
1:E:121:LEU:O	1:E:133:PHE:HB3	2.18	0.43
1:E:530:ILE:HG12	1:E:540:PHE:HE2	1.83	0.43
1:E:758:ARG:HA	1:E:763:PRO:HA	2.00	0.43
1:E:2116:LEU:O	1:E:2120:MET:HG3	2.17	0.43
1:E:2198:MET:HE3	1:E:2203:MET:SD	2.58	0.43
1:E:3496:LYS:O	1:E:3513:THR:N	2.52	0.43
1:G:69:LEU:HD13	1:G:101:LEU:HD11	2.00	0.43
1:G:3914:ASN:OD1	1:G:3916:ILE:HB	2.18	0.43
1:G:4801:LEU:O	1:G:4805:ASN:N	2.45	0.43
1:G:4913:ARG:O	1:G:4917:ASP:N	2.46	0.43
1:A:234:SER:O	1:A:242:ARG:HG2	2.19	0.43
1:A:1087:ARG:HH11	1:A:1223:PHE:HE1	1.65	0.43
1:A:2116:LEU:O	1:A:2120:MET:HG3	2.17	0.43
1:A:3980:LEU:HA	1:A:3983:SER:OG	2.17	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:4951:LYS:O	1:A:4955:GLU:HG2	2.18	0.43
1:A:4984:ASN:O	1:A:4985:LEU:HB2	2.18	0.43
2:B:7:ILE:HD12	2:B:71:ARG:HG2	2.00	0.43
1:C:758:ARG:HH12	1:C:763:PRO:HD3	1.82	0.43
1:C:2173:GLN:CG	1:C:2174:GLU:H	2.21	0.43
1:C:2793:PRO:O	1:C:2796:THR:OG1	2.29	0.43
1:C:3906:GLN:HG2	1:C:3909:ASN:HB2	2.00	0.43
1:E:314:PHE:HB3	1:E:348:VAL:CG1	2.48	0.43
1:E:788:LYS:HB2	1:E:1629:GLN:HG3	2.00	0.43
1:E:1143:TRP:HE3	1:E:1144:GLN:O	2.01	0.43
1:E:2142:TYR:CE2	1:E:2197:LEU:HB2	2.54	0.43
1:E:3839:CYS:SG	1:E:3922:TYR:CE1	3.11	0.43
1:E:3969:ILE:CG1	1:E:3980:LEU:HD11	2.46	0.43
1:E:4984:ASN:O	1:E:4985:LEU:HB2	2.18	0.43
1:E:4991:PHE:O	1:E:4995:LEU:HG	2.18	0.43
2:F:73:LYS:HA	2:F:99:PHE:O	2.19	0.43
1:G:411:TYR:O	1:G:415:ILE:HG13	2.18	0.43
1:G:1666:THR:O	1:G:1669:LEU:HB3	2.19	0.43
1:G:1768:THR:O	1:G:1769:THR:OG1	2.23	0.43
1:G:3969:ILE:CD1	1:G:3980:LEU:HD11	2.48	0.43
1:G:4661:TYR:HA	1:G:4664:LEU:HB3	2.00	0.43
1:G:4887:MET:HA	1:G:4891:VAL:CG2	2.48	0.43
1:A:411:TYR:O	1:A:415:ILE:HG13	2.18	0.43
1:A:569:ILE:HG22	1:A:570:GLU:OE2	2.18	0.43
1:A:660:GLY:HA2	1:A:750:LEU:HD22	2.00	0.43
1:A:748:LEU:HD13	1:A:755:ILE:CG1	2.47	0.43
1:A:858:THR:HG21	1:A:992:GLY:HA2	2.01	0.43
1:A:1074:ILE:HG22	1:A:1075:PHE:N	2.34	0.43
1:A:2745:VAL:HB	1:A:2814:LYS:HB3	1.99	0.43
1:A:2902:HIS:H	1:A:2905:LEU:HD12	1.83	0.43
1:C:50:GLU:CD	1:C:51:PRO:HD2	2.38	0.43
1:C:121:LEU:O	1:C:133:PHE:HB3	2.18	0.43
1:C:706:GLY:H	1:C:711:LEU:HD22	1.83	0.43
1:C:1078:GLU:HB2	1:C:1235:THR:OG1	2.19	0.43
1:C:1152:MET:SD	1:C:1223:PHE:HD2	2.42	0.43
1:C:4202:ARG:O	1:C:4206:GLU:HG2	2.19	0.43
1:C:4580:TYR:HB2	1:C:4631:PHE:CD1	2.53	0.43
1:C:4715:TYR:O	1:C:4715:TYR:CG	2.71	0.43
1:E:71:GLN:O	1:E:107:ILE:HA	2.18	0.43
1:E:411:TYR:O	1:E:415:ILE:HG13	2.19	0.43
1:E:758:ARG:HH12	1:E:763:PRO:HD3	1.82	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1040:CYS:O	1:E:1044:ARG:N	2.52	0.43
1:G:21:VAL:HG12	1:G:65:CYS:O	2.18	0.43
1:G:35:LEU:HD13	1:G:49:LEU:HB3	2.00	0.43
1:G:103:TYR:CE2	1:G:157:ARG:HB3	2.54	0.43
1:G:178:ARG:HB2	1:G:193:ALA:HB1	2.01	0.43
1:G:317:ARG:HG3	1:G:356:TRP:CH2	2.53	0.43
1:G:768:PHE:HB3	1:G:771:PHE:HE2	1.82	0.43
1:G:864:PRO:HG2	1:G:867:LEU:HD12	2.01	0.43
1:G:1091:GLU:HB2	1:G:1203:ASN:O	2.18	0.43
1:G:1201:HIS:CD2	1:G:1202:LEU:H	2.35	0.43
1:G:1685:LEU:HD23	1:G:1685:LEU:HA	1.75	0.43
1:G:2155:LEU:HD13	1:G:2188:ASN:OD1	2.19	0.43
1:G:2272:PRO:O	1:G:2275:VAL:HB	2.18	0.43
1:G:2296:GLU:HA	1:G:2299:VAL:HG22	1.99	0.43
1:G:3962:PHE:HZ	1:G:3992:PHE:CE2	2.36	0.43
1:G:4552:LEU:O	1:G:4555:LEU:HB3	2.18	0.43
1:A:706:GLY:H	1:A:711:LEU:HD22	1.83	0.43
1:A:1040:CYS:O	1:A:1044:ARG:N	2.52	0.43
1:A:1704:PRO:HG2	1:A:1707:LEU:HD12	2.01	0.43
1:A:2142:TYR:CE2	1:A:2197:LEU:HB2	2.54	0.43
1:A:2752:ASP:HA	1:A:2755:ILE:HD12	2.00	0.43
1:A:2929:PHE:O	1:A:2933:ASN:ND2	2.47	0.43
1:A:3716:LEU:N	1:A:3789:GLU:OE2	2.51	0.43
1:A:4010:ILE:HA	1:A:4013:LEU:HB3	2.01	0.43
1:A:4581:LYS:HD2	1:C:4856:PHE:CZ	2.50	0.43
1:A:4813:LEU:HD12	1:A:4814:LEU:N	2.34	0.43
1:C:119:SER:HB2	1:C:145:ALA:HB1	2.01	0.43
1:C:569:ILE:HG22	1:C:570:GLU:OE2	2.18	0.43
1:C:1143:TRP:HE3	1:C:1144:GLN:O	2.01	0.43
1:C:1666:THR:O	1:C:1669:LEU:HB3	2.19	0.43
1:E:276:TRP:CZ3	1:E:338:GLU:HB3	2.54	0.43
1:E:372:LEU:O	1:E:374:LYS:N	2.50	0.43
1:E:572:PRO:O	1:E:575:LEU:HB2	2.19	0.43
1:E:623:GLU:OE1	2:F:88:PRO:HA	2.18	0.43
1:E:1105:ALA:HB3	1:E:1191:VAL:HG21	2.00	0.43
1:E:1130:GLN:HB2	1:E:1138:PRO:HA	2.00	0.43
1:E:2155:LEU:HD13	1:E:2188:ASN:OD1	2.18	0.43
1:E:2902:HIS:H	1:E:2905:LEU:HD12	1.83	0.43
1:E:3835:LEU:HD22	1:E:3884:LEU:HD11	2.00	0.43
1:E:4143:VAL:O	1:E:4147:LEU:HG	2.17	0.43
1:E:4251:ILE:HG22	1:E:4557:ARG:NH1	2.33	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4997:ASN:OD1	1:E:4998:LYS:N	2.51	0.43
1:G:1297:PHE:HB2	1:G:1545:ASN:HA	2.01	0.43
1:G:1930:LYS:HG2	1:G:1931:LEU:N	2.33	0.43
1:G:4013:LEU:O	1:G:4017:LEU:HG	2.18	0.43
1:G:4036:VAL:HG12	1:G:4037:ASN:N	2.34	0.43
1:A:287:THR:O	1:A:405:HIS:CE1	2.72	0.43
1:A:548:VAL:O	1:A:551:LEU:HG	2.18	0.43
1:A:748:LEU:HD21	1:A:777:PHE:HD2	1.83	0.43
1:A:2123:LEU:HA	1:A:2123:LEU:HD23	1.77	0.43
1:A:2137:ALA:HA	1:A:2140:ARG:HH11	1.83	0.43
1:A:2338:ALA:O	1:A:2349:ASN:ND2	2.51	0.43
1:C:633:LEU:HD22	1:C:1663:HIS:HD2	1.84	0.43
1:C:2142:TYR:CE2	1:C:2197:LEU:HB2	2.53	0.43
1:C:3756:LYS:O	1:C:3760:LYS:HB2	2.18	0.43
1:C:3758:MET:HG3	1:C:3759:GLU:N	2.34	0.43
1:E:104:GLY:HA2	1:E:150:MET:O	2.18	0.43
1:E:1074:ILE:HG22	1:E:1075:PHE:N	2.34	0.43
1:E:1091:GLU:HB2	1:E:1203:ASN:O	2.18	0.43
1:E:1514:LEU:HD12	1:E:1514:LEU:N	2.34	0.43
1:E:1930:LYS:HG2	1:E:1931:LEU:N	2.34	0.43
1:E:3716:LEU:N	1:E:3789:GLU:OE2	2.51	0.43
1:E:3906:GLN:HG2	1:E:3909:ASN:HB2	2.01	0.43
1:E:4202:ARG:O	1:E:4206:GLU:HG2	2.19	0.43
1:E:4715:TYR:CG	1:E:4715:TYR:O	2.71	0.43
2:F:38:SER:O	2:F:41:ASP:HB2	2.18	0.43
1:G:561:LEU:CD2	1:G:598:LYS:HB3	2.48	0.43
1:G:569:ILE:HG22	1:G:570:GLU:OE2	2.19	0.43
1:G:714:TYR:HB2	1:G:757:PHE:CD2	2.53	0.43
1:G:748:LEU:HD21	1:G:777:PHE:HD2	1.82	0.43
1:G:1040:CYS:O	1:G:1044:ARG:N	2.51	0.43
1:G:2142:TYR:HE1	1:G:2196:ASN:ND2	2.17	0.43
1:G:2855:TYR:CD2	1:G:2857:PRO:HD3	2.54	0.43
1:G:4988:TYR:O	1:G:4991:PHE:HB3	2.17	0.43
1:A:80:GLU:OE1	1:G:3938:SER:OG	2.35	0.43
1:A:1088:TRP:CZ3	1:A:1226:PHE:HD1	2.36	0.43
1:A:1691:GLN:O	1:A:1695:LEU:HG	2.19	0.43
1:A:4833:ASN:OD1	1:A:4836:GLN:HG2	2.19	0.43
1:C:21:VAL:HG12	1:C:65:CYS:O	2.18	0.43
1:C:71:GLN:O	1:C:107:ILE:HA	2.18	0.43
1:C:222:LEU:HB3	1:C:388:LEU:HD22	2.00	0.43
1:C:593:HIS:HA	1:C:1597:VAL:HB	1.99	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:984:LEU:O	1:C:988:LEU:HG	2.19	0.43
1:C:1687:SER:OG	2:D:36:PHE:HB2	2.19	0.43
1:C:1808:ARG:HB2	1:C:1854:PHE:HE1	1.82	0.43
1:C:4251:ILE:HG22	1:C:4557:ARG:NH1	2.33	0.43
1:C:4910:GLU:HA	1:C:4913:ARG:HG2	2.00	0.43
1:E:245:VAL:HG21	1:E:300:VAL:HA	2.01	0.43
1:E:287:THR:O	1:E:405:HIS:CE1	2.72	0.43
1:E:317:ARG:HG3	1:E:356:TRP:CH2	2.54	0.43
1:E:660:GLY:HA2	1:E:750:LEU:HD22	2.00	0.43
1:E:1835:GLU:OE2	1:E:1935:VAL:HG23	2.18	0.43
1:E:3756:LYS:O	1:E:3760:LYS:HB2	2.19	0.43
1:E:3891:LEU:HB3	1:E:3899:PHE:CE2	2.53	0.43
1:E:4041:ALA:O	1:E:4044:MET:HB3	2.19	0.43
1:E:4645:CYS:O	1:E:4649:LEU:N	2.45	0.43
1:G:1459:GLN:HE21	1:G:1459:GLN:HB2	1.60	0.43
1:G:1676:LEU:HG	1:G:1721:GLU:OE2	2.18	0.43
1:G:1835:GLU:OE2	1:G:1935:VAL:HG23	2.18	0.43
1:G:2360:LYS:HA	1:G:2360:LYS:HD2	1.89	0.43
1:G:3935:TRP:HZ2	1:G:3994:HIS:HE1	1.66	0.43
1:G:4976:GLU:HB2	1:G:4980:LEU:HD12	1.99	0.43
1:G:4983:HIS:C	1:G:4985:LEU:N	2.67	0.43
1:A:717:ASP:CG	2:B:7:ILE:HA	2.39	0.43
1:A:788:LYS:HB2	1:A:1629:GLN:HG3	2.00	0.43
1:C:372:LEU:O	1:C:374:LYS:N	2.51	0.43
1:C:685:GLY:O	1:C:780:VAL:HB	2.18	0.43
1:C:1723:ALA:O	1:C:1727:ARG:HB2	2.19	0.43
1:C:2155:LEU:HD13	1:C:2188:ASN:OD1	2.19	0.43
1:C:2902:HIS:H	1:C:2905:LEU:HD12	1.83	0.43
1:C:2907:PRO:O	1:C:2910:THR:OG1	2.24	0.43
1:C:4039:MET:HG3	1:C:4040:ILE:N	2.34	0.43
1:C:4802:GLY:HA2	1:C:4809:PHE:HB2	2.00	0.43
1:E:60:PRO:O	1:E:290:TYR:OH	2.33	0.43
1:E:203:ASN:OD1	1:E:204:PRO:HD2	2.18	0.43
1:E:702:TRP:HZ2	1:E:1640:HIS:HD1	1.67	0.43
1:E:1087:ARG:HH11	1:E:1223:PHE:HE1	1.65	0.43
1:E:1848:LEU:HD12	1:E:1851:MET:SD	2.59	0.43
1:E:4826:ILE:O	1:E:4829:SER:HB2	2.18	0.43
1:E:4851:TYR:HB3	1:E:4916:PHE:CZ	2.53	0.43
1:G:104:GLY:HA2	1:G:150:MET:O	2.19	0.43
1:G:572:PRO:O	1:G:575:LEU:HB2	2.19	0.43
1:G:758:ARG:HH12	1:G:763:PRO:HD3	1.83	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:1078:GLU:HB2	1:G:1235:THR:OG1	2.18	0.43
1:G:1110:ARG:HB2	1:G:1113:VAL:HG23	2.01	0.43
1:G:1152:MET:SD	1:G:1223:PHE:HD2	2.42	0.43
1:G:2424:SER:HA	1:G:2427:ALA:HB3	2.00	0.43
1:G:3877:ASP:O	1:G:3880:PHE:HB3	2.19	0.43
1:G:4555:LEU:HD11	1:G:4656:LEU:HG	1.99	0.43
1:G:4737:ILE:O	1:G:4740:LEU:HB3	2.19	0.43
1:A:21:VAL:HG12	1:A:65:CYS:O	2.18	0.43
1:A:116:MET:HE2	1:A:139:GLU:OE2	2.19	0.43
1:A:179:TYR:OH	1:G:2359:ARG:CZ	2.66	0.43
1:A:317:ARG:HG3	1:A:356:TRP:CH2	2.53	0.43
1:A:864:PRO:HG2	1:A:867:LEU:HD12	2.01	0.43
1:A:1930:LYS:HG2	1:A:1931:LEU:N	2.33	0.43
1:A:4039:MET:HG3	1:A:4040:ILE:N	2.34	0.43
1:A:4843:LEU:O	1:A:4847:VAL:HG23	2.18	0.43
2:B:73:LYS:HA	2:B:99:PHE:O	2.19	0.43
1:C:287:THR:O	1:C:405:HIS:CE1	2.72	0.43
1:C:1287:LEU:HD13	1:C:1556:PRO:HD3	2.01	0.43
1:C:4836:GLN:HB3	1:C:4935:LEU:HD11	2.00	0.43
1:C:4887:MET:HA	1:C:4891:VAL:HG23	1.99	0.43
1:E:103:TYR:CE2	1:E:157:ARG:HB3	2.54	0.43
1:E:178:ARG:HB2	1:E:193:ALA:HB1	2.01	0.43
1:E:222:LEU:HB3	1:E:388:LEU:HD22	2.00	0.43
1:E:445:LEU:HD23	1:E:521:LEU:HG	2.01	0.43
1:E:647:ASN:N	1:E:822:ARG:O	2.52	0.43
1:E:717:ASP:CG	2:F:7:ILE:HA	2.39	0.43
1:E:737:LEU:HD11	2:F:7:ILE:CG2	2.44	0.43
1:E:1152:MET:SD	1:E:1223:PHE:HD2	2.42	0.43
1:E:1294:PRO:O	1:E:1584:ARG:NE	2.52	0.43
1:E:1440:PHE:CB	1:E:1512:THR:HG22	2.49	0.43
1:E:1691:GLN:O	1:E:1695:LEU:HG	2.19	0.43
1:E:3758:MET:HG3	1:E:3759:GLU:N	2.34	0.43
1:E:4181:ILE:HD11	1:E:4193:ILE:HD11	2.01	0.43
1:E:4826:ILE:HD11	1:G:4839:MET:CE	2.48	0.43
1:E:4836:GLN:HB3	1:E:4935:LEU:HD11	2.01	0.43
1:E:4892:ARG:HG3	1:G:4921:PHE:CE1	2.54	0.43
1:E:4920:PHE:O	1:E:4924:VAL:HB	2.19	0.43
1:G:145:ALA:HA	1:G:175:SER:HB3	2.01	0.43
1:G:317:ARG:N	1:G:347:PHE:O	2.52	0.43
1:G:758:ARG:HA	1:G:763:PRO:HA	2.01	0.43
1:G:1735:ILE:HD11	1:G:2156:LEU:HD11	2.01	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:1762:LEU:HD21	1:G:1860:LYS:NZ	2.34	0.43
1:G:2123:LEU:HD23	1:G:2123:LEU:HA	1.72	0.43
1:G:2197:LEU:O	1:G:2201:LEU:HG	2.19	0.43
1:G:3817:LEU:HD11	1:G:3821:LYS:HE2	2.00	0.43
1:G:4183:ILE:HD13	1:G:4193:ILE:HD13	2.01	0.43
1:A:50:GLU:CD	1:A:51:PRO:HD2	2.38	0.42
1:A:1078:GLU:HB2	1:A:1235:THR:OG1	2.18	0.42
1:A:2500:ALA:HA	1:A:2556:LEU:HD21	2.01	0.42
1:A:2876:GLU:OE2	1:A:2916:LYS:HD3	2.19	0.42
1:A:3758:MET:HG3	1:A:3759:GLU:N	2.34	0.42
1:A:4059:LEU:HA	1:A:4062:PHE:HD2	1.84	0.42
1:A:4218:ILE:HG22	1:A:4950:VAL:HG13	2.01	0.42
1:A:4238:CYS:O	1:A:4242:ILE:HG13	2.19	0.42
2:B:38:SER:O	2:B:41:ASP:HB2	2.18	0.42
1:C:21:VAL:HG23	1:C:203:ASN:HB3	1.99	0.42
1:C:445:LEU:HD23	1:C:521:LEU:HG	2.01	0.42
1:C:717:ASP:CG	2:D:7:ILE:HA	2.39	0.42
1:C:788:LYS:HB2	1:C:1629:GLN:HG3	2.00	0.42
1:C:1074:ILE:HG22	1:C:1075:PHE:N	2.34	0.42
1:C:1294:PRO:O	1:C:1584:ARG:NE	2.52	0.42
1:C:1845:VAL:HG13	1:C:1854:PHE:HE2	1.84	0.42
1:C:1855:GLY:O	1:C:1858:ASP:HB2	2.19	0.42
1:C:2458:ARG:O	1:C:2464:ASP:N	2.52	0.42
1:C:4059:LEU:HA	1:C:4062:PHE:HD2	1.84	0.42
1:C:4208:PRO:HG2	1:C:4210:VAL:HG23	2.01	0.42
1:C:4791:TYR:OH	1:C:4815:ASP:HA	2.19	0.42
1:E:317:ARG:N	1:E:347:PHE:O	2.52	0.42
1:E:561:LEU:CD2	1:E:598:LYS:HB3	2.48	0.42
1:E:1723:ALA:O	1:E:1727:ARG:HB2	2.19	0.42
1:E:4010:ILE:HA	1:E:4013:LEU:HB3	2.01	0.42
1:G:233:ILE:O	1:G:257:ARG:HD2	2.18	0.42
1:G:642:THR:OG1	1:G:1617:THR:HG21	2.19	0.42
1:G:984:LEU:O	1:G:988:LEU:HG	2.18	0.42
1:G:1087:ARG:HH11	1:G:1223:PHE:HE1	1.65	0.42
1:G:1130:GLN:HB2	1:G:1138:PRO:HA	2.00	0.42
1:G:1294:PRO:O	1:G:1584:ARG:NE	2.52	0.42
1:G:2094:LEU:O	1:G:2098:VAL:HG23	2.19	0.42
1:G:2556:LEU:HD23	1:G:2559:LEU:CD1	2.49	0.42
1:G:3724:ALA:O	1:G:3727:ASP:HB2	2.19	0.42
1:G:3933:PHE:O	1:G:3937:TYR:HD2	2.01	0.42
1:G:4033:GLY:HA2	1:G:4189:ARG:NH1	2.25	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:4582:VAL:HB	1:G:4628:VAL:HG12	2.01	0.42
1:A:984:LEU:O	1:A:988:LEU:HG	2.19	0.42
1:A:1152:MET:SD	1:A:1223:PHE:HD2	2.42	0.42
1:A:2155:LEU:HD13	1:A:2188:ASN:OD1	2.19	0.42
1:A:4851:TYR:HB3	1:A:4916:PHE:CZ	2.54	0.42
1:A:4898:GLY:CA	1:G:4888:TYR:OH	2.67	0.42
1:A:4920:PHE:O	1:A:4924:VAL:HB	2.20	0.42
1:C:548:VAL:O	1:C:551:LEU:HG	2.18	0.42
1:C:771:PHE:HE1	1:C:1472:VAL:HG13	1.84	0.42
1:C:1586:ASN:O	1:C:1588:ALA:N	2.49	0.42
1:C:1768:THR:C	1:C:1769:THR:HG1	2.20	0.42
1:C:1858:ASP:O	1:C:1862:ILE:HG12	2.18	0.42
1:C:2424:SER:HA	1:C:2427:ALA:HB3	2.01	0.42
1:C:2500:ALA:HA	1:C:2556:LEU:HD21	2.00	0.42
1:E:514:SER:O	1:E:518:ILE:HG13	2.19	0.42
1:E:548:VAL:O	1:E:551:LEU:HG	2.18	0.42
1:E:607:CYS:HB2	1:E:1672:ALA:HB1	2.01	0.42
1:E:771:PHE:HE1	1:E:1472:VAL:HG13	1.84	0.42
1:E:1087:ARG:HD2	1:E:1223:PHE:CE1	2.54	0.42
1:E:1689:VAL:HG22	1:E:1694:LEU:HD11	2.01	0.42
1:E:2137:ALA:HA	1:E:2140:ARG:HH11	1.83	0.42
1:E:2197:LEU:O	1:E:2201:LEU:HG	2.18	0.42
1:E:4055:VAL:O	1:E:4059:LEU:HG	2.19	0.42
1:G:340:LYS:HG3	1:G:342:GLY:N	2.35	0.42
1:G:660:GLY:HA2	1:G:750:LEU:HD22	2.01	0.42
1:G:828:GLU:HG3	1:G:840:VAL:HG21	2.01	0.42
1:G:1687:SER:OG	2:H:36:PHE:HB2	2.20	0.42
1:G:4141:PHE:CE1	1:G:4178:LEU:HA	2.54	0.42
1:A:178:ARG:CZ	1:G:2460:LEU:HD12	2.49	0.42
1:A:203:ASN:OD1	1:A:204:PRO:HD2	2.18	0.42
1:A:533:ASN:OD1	1:A:535:ALA:N	2.42	0.42
1:A:1835:GLU:OE2	1:A:1935:VAL:HG23	2.18	0.42
1:A:3916:ILE:O	1:A:3919:THR:HG22	2.19	0.42
1:A:4013:LEU:O	1:A:4017:LEU:HG	2.19	0.42
1:A:4582:VAL:HG12	1:A:4629:TYR:HD1	1.85	0.42
1:A:4717:ASP:O	1:A:4719:PHE:N	2.48	0.42
1:C:314:PHE:HB3	1:C:348:VAL:CG1	2.49	0.42
1:C:1091:GLU:HB2	1:C:1203:ASN:O	2.18	0.42
1:C:1105:ALA:HB3	1:C:1191:VAL:HG21	2.00	0.42
1:C:5022:PHE:HA	1:C:5023:PRO:HD3	1.93	0.42
1:E:520:ASN:HB2	1:E:556:ALA:HB1	2.01	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:593:HIS:HA	1:E:1597:VAL:HB	2.00	0.42
1:E:633:LEU:HD22	1:E:1663:HIS:HD2	1.85	0.42
1:E:887:ILE:CG2	1:E:962:SER:HB2	2.48	0.42
1:E:1227:ALA:HA	1:E:1230:MET:HG2	2.01	0.42
1:E:1459:GLN:HE21	1:E:1459:GLN:HB2	1.54	0.42
1:E:1943:LEU:HD11	1:E:2098:VAL:HG22	2.00	0.42
1:E:2431:ASP:HB2	1:E:2501:SER:HA	2.01	0.42
1:E:3916:ILE:O	1:E:3919:THR:HG22	2.19	0.42
1:E:4034:ASN:HD21	1:E:4040:ILE:CG2	2.33	0.42
1:E:4041:ALA:O	1:E:4045:VAL:HG23	2.20	0.42
1:E:4073:GLY:H	1:E:4128:PHE:HE2	1.68	0.42
1:E:4214:LYS:HE2	1:E:4985:LEU:HD23	1.99	0.42
1:E:4710:SER:OG	1:E:4772:ASP:OD2	2.35	0.42
1:G:245:VAL:HG21	1:G:300:VAL:HA	2.01	0.42
1:G:670:GLU:O	1:G:787:VAL:HG13	2.19	0.42
1:G:788:LYS:HB2	1:G:1629:GLN:HG3	2.00	0.42
1:G:927:GLU:O	1:G:930:LYS:HB2	2.19	0.42
1:G:1074:ILE:HG22	1:G:1075:PHE:N	2.34	0.42
1:G:4013:LEU:O	1:G:4017:LEU:N	2.52	0.42
1:G:4118:ASP:O	1:G:4120:ASN:N	2.52	0.42
1:G:4832:HIS:CE1	1:G:4833:ASN:HB2	2.54	0.42
2:H:7:ILE:HG13	2:H:73:LYS:N	2.35	0.42
2:H:11:ASP:OD2	2:H:68:VAL:HB	2.20	0.42
1:A:14:LEU:HD12	1:A:163:VAL:HG12	2.00	0.42
1:A:71:GLN:O	1:A:107:ILE:HA	2.18	0.42
1:A:359:TYR:OH	1:A:385:ASP:OD2	2.28	0.42
1:A:737:LEU:HB3	1:A:738:LEU:H	1.56	0.42
1:A:1676:LEU:HG	1:A:1721:GLU:OE2	2.19	0.42
2:B:92:PRO:HA	2:B:93:PRO:HD3	1.91	0.42
1:C:35:LEU:HD13	1:C:49:LEU:HB3	2.00	0.42
1:C:103:TYR:CE2	1:C:157:ARG:HB3	2.54	0.42
1:C:245:VAL:HG21	1:C:300:VAL:HA	2.01	0.42
1:C:1040:CYS:O	1:C:1044:ARG:N	2.52	0.42
1:C:1130:GLN:HB2	1:C:1138:PRO:HA	2.00	0.42
1:C:1864:LYS:NZ	1:C:1869:GLU:C	2.73	0.42
1:C:2338:ALA:O	1:C:2349:ASN:ND2	2.52	0.42
1:C:4013:LEU:O	1:C:4017:LEU:HG	2.19	0.42
1:C:4653:VAL:O	1:C:4657:CYS:N	2.45	0.42
1:C:4920:PHE:O	1:C:4924:VAL:HB	2.19	0.42
1:E:1133:HIS:CE1	1:E:1134:LEU:HG	2.55	0.42
1:E:1687:SER:OG	2:F:36:PHE:HB2	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2359:ARG:CZ	1:G:179:TYR:OH	2.67	0.42
1:G:1227:ALA:HA	1:G:1230:MET:HG2	2.01	0.42
1:G:1855:GLY:O	1:G:1858:ASP:HB2	2.19	0.42
1:G:2142:TYR:CE2	1:G:2197:LEU:HB2	2.54	0.42
1:G:2806:ARG:HB3	1:G:2810:LYS:HE3	2.01	0.42
1:G:4137:ARG:HD2	1:G:4177:TYR:CE2	2.55	0.42
1:G:4997:ASN:OD1	1:G:4998:LYS:N	2.52	0.42
1:A:771:PHE:HE1	1:A:1472:VAL:HG13	1.84	0.42
1:A:1119:GLU:C	1:A:1133:HIS:HE2	2.22	0.42
1:A:1452:TRP:HB3	1:A:1550:PRO:HA	2.02	0.42
1:A:2258:LEU:HA	1:A:2261:SER:OG	2.20	0.42
1:A:2431:ASP:HB2	1:A:2501:SER:HA	2.01	0.42
1:A:3718:GLU:HG3	1:A:3719:ASP:N	2.35	0.42
1:A:4073:GLY:H	1:A:4128:PHE:HE2	1.67	0.42
1:A:4826:ILE:CG1	1:C:4839:MET:CE	2.98	0.42
1:A:5004:THR:O	1:A:5007:GLU:HG2	2.20	0.42
2:B:42:ARG:C	2:B:44:LYS:H	2.23	0.42
2:B:74:LEU:O	2:B:98:VAL:HA	2.18	0.42
1:C:702:TRP:HZ2	1:C:1640:HIS:HD1	1.68	0.42
1:C:1835:GLU:OE2	1:C:1935:VAL:HG23	2.18	0.42
1:C:1857:GLU:O	1:C:1860:LYS:HB2	2.20	0.42
1:C:3811:GLU:HG2	1:C:3812:VAL:N	2.35	0.42
2:D:16:PRO:HG3	2:D:106:LEU:HD21	2.02	0.42
1:E:35:LEU:HD13	1:E:49:LEU:HB3	2.00	0.42
1:E:1808:ARG:HB2	1:E:1854:PHE:HE1	1.84	0.42
1:G:287:THR:O	1:G:405:HIS:CE1	2.72	0.42
1:G:514:SER:O	1:G:518:ILE:HG13	2.19	0.42
1:G:548:VAL:O	1:G:551:LEU:HG	2.19	0.42
1:G:580:GLU:HB3	1:G:620:LEU:HD11	2.02	0.42
1:G:1799:SER:HA	1:G:1800:PRO:HD2	1.92	0.42
1:G:2819:TRP:HH2	1:G:2881:ASN:HB2	1.84	0.42
1:G:2879:ALA:HB2	1:G:2920:ARG:HA	2.00	0.42
1:G:3968:TYR:O	1:G:3976:ASN:ND2	2.52	0.42
1:G:4219:PHE:O	1:G:4223:ASN:HB2	2.19	0.42
1:G:4789:PHE:O	1:G:4793:GLY:N	2.46	0.42
1:A:178:ARG:HB2	1:A:193:ALA:HB1	2.01	0.42
1:A:216:GLY:HA3	1:A:264:PRO:CD	2.50	0.42
1:A:245:VAL:HG21	1:A:300:VAL:HA	2.00	0.42
1:A:276:TRP:CZ3	1:A:338:GLU:HB3	2.54	0.42
1:A:1834:VAL:HG13	1:A:1835:GLU:H	1.85	0.42
1:A:2745:VAL:CG2	1:A:2818:ALA:HB2	2.50	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2855:TYR:CD2	1:A:2857:PRO:HD3	2.55	0.42
1:A:3756:LYS:O	1:A:3760:LYS:HB2	2.19	0.42
1:A:3970:GLN:HE21	1:A:5004:THR:CA	2.29	0.42
1:A:4888:TYR:OH	1:C:4898:GLY:O	2.38	0.42
1:C:402:ARG:NH1	1:C:405:HIS:CD2	2.86	0.42
1:C:1110:ARG:HB2	1:C:1113:VAL:HG23	2.00	0.42
1:C:1459:GLN:HE21	1:C:1459:GLN:HB2	1.56	0.42
1:C:1676:LEU:HG	1:C:1721:GLU:OE2	2.19	0.42
1:C:1819:VAL:HG22	1:C:1926:LEU:HD13	2.01	0.42
1:C:2855:TYR:CD2	1:C:2857:PRO:HD3	2.54	0.42
1:C:3732:SER:HB2	1:C:3766:GLN:HB3	2.02	0.42
1:C:4876:CYS:HB2	1:C:4877:ASP:H	1.54	0.42
1:C:4944:ARG:O	1:C:4947:GLN:HB2	2.20	0.42
1:C:4978:HIS:ND1	1:C:4982:GLU:OE1	2.53	0.42
1:E:864:PRO:HG2	1:E:867:LEU:HD12	2.01	0.42
1:E:1297:PHE:HB2	1:E:1545:ASN:HA	2.01	0.42
1:E:2460:LEU:HD21	1:G:131:LEU:HB2	2.01	0.42
1:E:2855:TYR:CD2	1:E:2857:PRO:HD3	2.55	0.42
1:E:4013:LEU:O	1:E:4017:LEU:HG	2.20	0.42
1:E:4826:ILE:HG12	1:G:4839:MET:HE1	2.00	0.42
1:E:4941:GLY:O	1:E:4945:ASP:HB2	2.19	0.42
1:G:276:TRP:CZ3	1:G:338:GLU:HB3	2.54	0.42
1:G:706:GLY:H	1:G:711:LEU:HD22	1.84	0.42
1:G:1087:ARG:HD2	1:G:1223:PHE:CE1	2.55	0.42
1:G:1723:ALA:O	1:G:1727:ARG:HB2	2.19	0.42
1:G:2338:ALA:O	1:G:2349:ASN:ND2	2.52	0.42
1:G:2458:ARG:O	1:G:2464:ASP:N	2.53	0.42
1:G:3806:ASN:OD1	1:G:3807:GLY:N	2.52	0.42
1:G:4048:LEU:HA	1:G:4051:SER:OG	2.20	0.42
1:G:4055:VAL:O	1:G:4059:LEU:HG	2.19	0.42
1:G:4582:VAL:HG12	1:G:4629:TYR:HD1	1.84	0.42
1:G:4639:MET:HG3	1:G:4640:GLU:N	2.34	0.42
1:G:4792:LEU:O	1:G:4795:TYR:HB3	2.19	0.42
1:A:317:ARG:N	1:A:347:PHE:O	2.52	0.42
1:A:828:GLU:HG3	1:A:840:VAL:HG21	2.01	0.42
1:A:910:PHE:CG	1:A:918:ARG:HB3	2.55	0.42
1:A:1091:GLU:HB2	1:A:1203:ASN:O	2.19	0.42
1:A:1762:LEU:HD21	1:A:1860:LYS:NZ	2.34	0.42
1:A:2430:ILE:HG23	1:A:2501:SER:HB2	2.01	0.42
1:A:4710:SER:OG	1:A:4772:ASP:OD2	2.36	0.42
1:A:4914:VAL:O	1:A:4918:ILE:HG13	2.20	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:4921:PHE:HA	1:A:4925:ILE:CG1	2.49	0.42
1:C:178:ARG:HB2	1:C:193:ALA:HB1	2.01	0.42
1:C:647:ASN:N	1:C:822:ARG:O	2.52	0.42
1:C:660:GLY:HA2	1:C:750:LEU:HD22	2.01	0.42
1:C:758:ARG:HD3	1:C:761:GLY:HA2	2.02	0.42
1:C:1087:ARG:HD2	1:C:1223:PHE:CE1	2.54	0.42
1:C:1648:MET:SD	1:C:1656:ARG:NH2	2.92	0.42
1:C:2123:LEU:HD23	1:C:2123:LEU:HA	1.77	0.42
1:C:3651:ASN:HA	1:C:3654:LEU:HD12	2.02	0.42
1:C:4073:GLY:H	1:C:4128:PHE:HE2	1.68	0.42
1:C:4717:ASP:O	1:C:4719:PHE:N	2.48	0.42
1:E:145:ALA:HA	1:E:175:SER:HB3	2.02	0.42
1:E:175:SER:OG	1:E:176:SER:N	2.53	0.42
1:E:1099:GLU:H	1:E:1198:GLN:NE2	2.18	0.42
1:E:1110:ARG:HB2	1:E:1113:VAL:HG23	2.01	0.42
1:E:1768:THR:C	1:E:1769:THR:HG1	2.18	0.42
1:E:4208:PRO:HG2	1:E:4210:VAL:HG23	2.02	0.42
1:G:102:LEU:HD23	1:G:162:LYS:HA	2.01	0.42
1:G:222:LEU:HB3	1:G:388:LEU:HD22	2.00	0.42
1:G:771:PHE:HE1	1:G:1472:VAL:HG13	1.84	0.42
1:G:1848:LEU:HD12	1:G:1851:MET:SD	2.59	0.42
1:G:2431:ASP:HB2	1:G:2501:SER:HA	2.00	0.42
1:G:2821:TRP:CD1	1:G:2939:ARG:HA	2.55	0.42
1:G:4090:LYS:CB	1:G:4112:LEU:HD21	2.50	0.42
1:G:4949:GLN:NE2	1:G:4953:ASP:OD1	2.52	0.42
2:H:92:PRO:HA	2:H:93:PRO:HD3	1.89	0.42
1:A:175:SER:OG	1:A:176:SER:N	2.53	0.42
1:A:514:SER:O	1:A:518:ILE:HG13	2.19	0.42
1:A:537:CYS:HB3	1:A:571:SER:HB3	2.02	0.42
1:A:647:ASN:N	1:A:822:ARG:O	2.53	0.42
1:A:1689:VAL:HG22	1:A:1694:LEU:HD11	2.01	0.42
1:A:3651:ASN:HA	1:A:3654:LEU:HD12	2.02	0.42
1:A:4202:ARG:O	1:A:4206:GLU:HG2	2.19	0.42
1:A:4208:PRO:HG2	1:A:4210:VAL:HG23	2.01	0.42
1:A:4834:GLY:O	1:A:4837:LEU:HB3	2.20	0.42
1:A:5011:TRP:O	1:A:5015:GLN:HG2	2.20	0.42
1:C:116:MET:HE2	1:C:139:GLU:OE2	2.20	0.42
1:C:1237:TRP:CD1	1:C:1611:HIS:HA	2.55	0.42
1:C:1654:SER:HB2	1:C:1704:PRO:HB3	2.02	0.42
1:C:1762:LEU:HD21	1:C:1860:LYS:NZ	2.35	0.42
1:C:2094:LEU:O	1:C:2098:VAL:HG23	2.20	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2258:LEU:HA	1:C:2261:SER:OG	2.20	0.42
1:C:2822:THR:HG1	1:C:2938:THR:HG1	1.68	0.42
1:C:3838:THR:C	1:C:3839:CYS:SG	2.98	0.42
1:C:4238:CYS:O	1:C:4242:ILE:HG13	2.19	0.42
1:E:670:GLU:O	1:E:787:VAL:HG13	2.19	0.42
1:E:1654:SER:HB2	1:E:1704:PRO:HB3	2.02	0.42
1:E:1779:PRO:HA	1:E:1780:PRO:HD3	1.78	0.42
1:E:1819:VAL:HG22	1:E:1926:LEU:HD13	2.02	0.42
1:E:1834:VAL:HG13	1:E:1835:GLU:H	1.84	0.42
1:E:2437:ALA:HB1	1:E:2454:ARG:NE	2.35	0.42
1:E:4717:ASP:O	1:E:4719:PHE:N	2.48	0.42
1:E:4887:MET:HA	1:E:4891:VAL:CG2	2.49	0.42
1:G:78:LEU:HA	1:G:81:MET:HG2	2.02	0.42
1:G:119:SER:HB2	1:G:145:ALA:HB1	2.01	0.42
1:G:633:LEU:HD22	1:G:1663:HIS:HD2	1.84	0.42
1:G:1133:HIS:CE1	1:G:1134:LEU:HG	2.55	0.42
1:G:1648:MET:SD	1:G:1656:ARG:NH2	2.93	0.42
1:G:1748:PHE:HA	1:G:1749:PRO:HD2	1.75	0.42
1:G:1783:VAL:HG11	2:H:55:VAL:HG12	2.02	0.42
1:G:2110:TYR:O	1:G:2110:TYR:CD2	2.73	0.42
1:G:2199:ARG:NE	1:G:2249:SER:OG	2.51	0.42
1:G:2258:LEU:HA	1:G:2261:SER:OG	2.20	0.42
1:G:4088:ILE:O	1:G:4123:ILE:N	2.45	0.42
1:G:4990:PHE:O	1:G:4993:MET:HG2	2.19	0.42
1:A:69:LEU:HD13	1:A:101:LEU:HD11	2.00	0.42
1:A:145:ALA:HA	1:A:175:SER:HB3	2.02	0.42
1:A:1245:PHE:CE2	1:A:1646:ARG:NH1	2.88	0.42
1:A:1287:LEU:HD13	1:A:1556:PRO:HD3	2.02	0.42
1:A:1654:SER:HB2	1:A:1704:PRO:HB3	2.02	0.42
1:A:1666:THR:O	1:A:1669:LEU:HB3	2.19	0.42
1:A:1855:GLY:O	1:A:1858:ASP:HB2	2.19	0.42
1:A:2094:LEU:O	1:A:2098:VAL:HG23	2.19	0.42
1:A:4839:MET:HE2	1:G:4826:ILE:CG1	2.50	0.42
1:A:4887:MET:HA	1:A:4891:VAL:CG2	2.50	0.42
1:C:102:LEU:HD23	1:C:162:LYS:HA	2.02	0.42
1:C:317:ARG:HG3	1:C:356:TRP:CH2	2.54	0.42
1:C:572:PRO:O	1:C:575:LEU:HB2	2.19	0.42
1:C:1099:GLU:H	1:C:1198:GLN:NE2	2.18	0.42
1:C:1729:SER:HB2	1:C:2163:ARG:HH11	1.82	0.42
1:C:4036:VAL:HG12	1:C:4037:ASN:N	2.35	0.42
1:C:4943:LEU:O	1:C:4947:GLN:HG2	2.20	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:454:PRO:HA	1:E:455:PRO:HD3	1.86	0.42
1:E:1078:GLU:HB2	1:E:1235:THR:OG1	2.18	0.42
1:E:1855:GLY:O	1:E:1858:ASP:HB2	2.19	0.42
1:E:1856:ASP:H	1:E:1857:GLU:CB	2.30	0.42
1:E:2258:LEU:HA	1:E:2261:SER:OG	2.20	0.42
1:E:2358:ILE:HG21	1:G:195:PHE:CE2	2.55	0.42
1:E:3811:GLU:HG2	1:E:3812:VAL:N	2.35	0.42
1:E:3838:THR:C	1:E:3839:CYS:SG	2.98	0.42
1:E:3933:PHE:O	1:E:3937:TYR:HD2	2.03	0.42
1:E:4636:THR:O	1:E:4639:MET:HE2	2.20	0.42
1:E:4943:LEU:O	1:E:4947:GLN:HG2	2.20	0.42
1:G:828:GLU:OE2	1:G:831:ARG:HA	2.20	0.42
1:G:975:VAL:HG21	1:G:1044:ARG:CB	2.47	0.42
1:G:1616:GLU:HG3	1:G:1617:THR:HG23	2.02	0.42
1:G:1864:LYS:NZ	1:G:1869:GLU:C	2.73	0.42
1:G:2745:VAL:HB	1:G:2814:LYS:HB3	2.00	0.42
1:G:3703:LEU:HD23	1:G:3703:LEU:O	2.19	0.42
1:A:246:TYR:CE2	1:A:373:LYS:HD3	2.54	0.42
1:A:1105:ALA:HB3	1:A:1191:VAL:HG21	2.00	0.42
1:A:1133:HIS:CE1	1:A:1134:LEU:HG	2.55	0.42
1:A:1648:MET:SD	1:A:1656:ARG:NH2	2.93	0.42
1:A:1808:ARG:HB2	1:A:1854:PHE:HE1	1.83	0.42
1:A:1945:TYR:O	1:A:1949:GLN:HG2	2.20	0.42
1:A:2424:SER:HA	1:A:2427:ALA:HB3	2.01	0.42
1:A:3881:THR:O	1:A:3885:PHE:HD2	2.03	0.42
1:A:3891:LEU:HB3	1:A:3899:PHE:CE2	2.53	0.42
1:A:4041:ALA:O	1:A:4044:MET:HB3	2.19	0.42
1:A:4823:LEU:HG	1:A:4826:ILE:HD12	2.01	0.42
1:A:4842:GLY:O	1:A:4846:VAL:HG23	2.20	0.42
1:C:828:GLU:HG3	1:C:840:VAL:HG21	2.01	0.42
1:C:927:GLU:O	1:C:930:LYS:HB2	2.20	0.42
1:C:1288:PHE:O	1:C:1603:VAL:HG13	2.20	0.42
1:C:2752:ASP:HA	1:C:2755:ILE:HD12	2.01	0.42
1:C:2876:GLU:OE2	1:C:2916:LYS:HD3	2.20	0.42
1:C:3891:LEU:HB3	1:C:3899:PHE:CE2	2.54	0.42
1:C:4041:ALA:O	1:C:4045:VAL:HG23	2.20	0.42
1:E:119:SER:HB2	1:E:145:ALA:HB1	2.01	0.42
1:E:1783:VAL:HG11	2:F:55:VAL:HG12	2.01	0.42
1:E:2463:LEU:N	1:E:2510:TYR:OH	2.50	0.42
1:E:2806:ARG:HB3	1:E:2810:LYS:HE3	2.02	0.42
1:E:4154:VAL:HA	1:E:4155:PRO:HD2	1.88	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:537:CYS:HB3	1:G:571:SER:HB3	2.02	0.42
1:G:612:VAL:HA	1:G:2167:ILE:HG23	2.02	0.42
1:G:1452:TRP:HB3	1:G:1550:PRO:HA	2.02	0.42
1:G:1748:PHE:HE1	1:G:2072:LEU:C	2.23	0.42
1:G:1857:GLU:O	1:G:1860:LYS:HB2	2.20	0.42
1:G:3774:GLY:HA2	1:G:3815:LYS:HZ1	1.85	0.42
1:G:3980:LEU:HA	1:G:3983:SER:CB	2.50	0.42
1:G:4675:LYS:O	1:G:4679:ARG:HG2	2.20	0.42
1:G:5006:GLN:O	1:G:5010:VAL:HG23	2.19	0.42
1:A:2359:ARG:CZ	1:C:179:TYR:OH	2.68	0.41
1:A:2449:GLU:O	1:A:2452:ARG:HB2	2.20	0.41
1:A:4041:ALA:O	1:A:4045:VAL:HG23	2.20	0.41
1:C:40:GLU:OE2	1:C:406:SER:HB2	2.20	0.41
1:C:246:TYR:CE2	1:C:373:LYS:HD3	2.55	0.41
1:C:346:CYS:O	1:C:388:LEU:HB2	2.19	0.41
1:C:582:HIS:O	1:C:585:SER:HB2	2.20	0.41
1:C:1245:PHE:CE2	1:C:1646:ARG:NH1	2.88	0.41
1:C:1294:PRO:CD	1:C:1584:ARG:HH11	2.19	0.41
1:C:1297:PHE:HB2	1:C:1545:ASN:HA	2.02	0.41
1:C:1457:TYR:O	1:C:1458:HIS:CG	2.73	0.41
1:C:2142:TYR:CD2	1:C:2197:LEU:HD12	2.55	0.41
1:C:2558:VAL:O	1:C:2561:LEU:HG	2.20	0.41
1:C:2887:GLY:O	1:C:2891:LYS:HG3	2.20	0.41
1:C:3881:THR:O	1:C:3885:PHE:HD2	2.03	0.41
1:C:4710:SER:OG	1:C:4772:ASP:OD2	2.36	0.41
1:C:4892:ARG:CZ	1:E:4896:GLY:CA	2.87	0.41
1:E:78:LEU:HA	1:E:81:MET:HG2	2.02	0.41
1:E:1119:GLU:C	1:E:1133:HIS:HE2	2.22	0.41
1:E:1452:TRP:HB3	1:E:1550:PRO:HA	2.02	0.41
1:E:2458:ARG:O	1:E:2464:ASP:N	2.53	0.41
1:E:4208:PRO:HB2	1:E:4209:GLN:H	1.61	0.41
1:E:5011:TRP:O	1:E:5015:GLN:HG2	2.20	0.41
1:G:445:LEU:HD23	1:G:521:LEU:HG	2.01	0.41
1:G:582:HIS:O	1:G:585:SER:HB2	2.20	0.41
1:G:758:ARG:HD3	1:G:761:GLY:HA2	2.01	0.41
1:G:910:PHE:CG	1:G:918:ARG:HB3	2.55	0.41
1:G:1457:TYR:O	1:G:1458:HIS:CG	2.73	0.41
1:G:1834:VAL:HG13	1:G:1835:GLU:H	1.85	0.41
1:G:2123:LEU:HD23	1:G:2126:ARG:HD2	2.02	0.41
1:G:2336:ARG:HH11	1:G:2431:ASP:HB3	1.84	0.41
1:G:3838:THR:OG1	1:G:3839:CYS:N	2.53	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:4164:LEU:O	1:G:4168:GLU:N	2.53	0.41
2:H:38:SER:O	2:H:41:ASP:HB2	2.19	0.41
1:A:73:LEU:O	1:A:105:HIS:HB3	2.19	0.41
1:A:1294:PRO:O	1:A:1584:ARG:NE	2.52	0.41
1:A:1845:VAL:HG13	1:A:1854:PHE:HE2	1.84	0.41
1:A:2142:TYR:CD2	1:A:2197:LEU:HD12	2.55	0.41
1:A:2458:ARG:O	1:A:2464:ASP:N	2.52	0.41
1:A:3732:SER:HB2	1:A:3766:GLN:HB3	2.01	0.41
1:A:4034:ASN:HD21	1:A:4040:ILE:CG2	2.33	0.41
1:A:4036:VAL:HG12	1:A:4037:ASN:N	2.36	0.41
1:A:4055:VAL:O	1:A:4059:LEU:HG	2.20	0.41
1:A:4058:ILE:HG13	1:A:4059:LEU:N	2.35	0.41
1:C:165:VAL:HG13	1:C:204:PRO:HD3	2.01	0.41
1:C:317:ARG:N	1:C:347:PHE:O	2.52	0.41
1:C:537:CYS:HB3	1:C:571:SER:HB3	2.02	0.41
1:C:670:GLU:O	1:C:787:VAL:HG13	2.19	0.41
1:C:768:PHE:HB3	1:C:771:PHE:CE2	2.56	0.41
1:C:864:PRO:HG2	1:C:867:LEU:HD12	2.02	0.41
1:C:1119:GLU:C	1:C:1133:HIS:HE2	2.21	0.41
1:C:1514:LEU:N	1:C:1514:LEU:CD1	2.84	0.41
1:C:4010:ILE:HA	1:C:4013:LEU:HB3	2.01	0.41
1:C:4047:MET:HG3	1:C:4048:LEU:N	2.36	0.41
1:C:4055:VAL:O	1:C:4059:LEU:HG	2.20	0.41
1:C:4636:THR:O	1:C:4639:MET:HE2	2.20	0.41
1:C:4866:SER:O	1:C:4868:ASP:N	2.53	0.41
1:C:5011:TRP:O	1:C:5015:GLN:HG2	2.20	0.41
1:E:927:GLU:O	1:E:930:LYS:HB2	2.19	0.41
1:E:1245:PHE:CE2	1:E:1646:ARG:NH1	2.88	0.41
1:E:2868:SER:O	1:E:2872:GLN:N	2.48	0.41
1:E:3651:ASN:HA	1:E:3654:LEU:HD12	2.02	0.41
1:E:3718:GLU:HG3	1:E:3719:ASP:N	2.35	0.41
1:E:4059:LEU:HA	1:E:4062:PHE:HD2	1.84	0.41
1:E:4062:PHE:O	1:E:4170:ILE:HG21	2.20	0.41
1:E:4183:ILE:HD13	1:E:4193:ILE:HD13	2.03	0.41
1:E:4691:GLN:HA	1:E:4692:PRO:HD2	1.86	0.41
1:G:246:TYR:CE2	1:G:373:LYS:HD3	2.55	0.41
1:G:1105:ALA:HB3	1:G:1191:VAL:HG21	2.00	0.41
1:G:1603:VAL:HG12	1:G:1604:SER:O	2.20	0.41
1:G:2142:TYR:CD2	1:G:2197:LEU:HD12	2.55	0.41
1:G:2430:ILE:HG23	1:G:2501:SER:HB2	2.01	0.41
1:G:2887:GLY:O	1:G:2891:LYS:HG3	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:3839:CYS:HB2	1:G:3881:THR:HG22	2.02	0.41
1:G:3969:ILE:HG12	1:G:3980:LEU:HD11	2.03	0.41
1:G:4720:VAL:HG12	1:G:4724:VAL:HG23	2.00	0.41
1:A:758:ARG:HH12	1:A:763:PRO:HD3	1.83	0.41
1:A:828:GLU:OE2	1:A:831:ARG:HA	2.20	0.41
1:A:1856:ASP:N	1:A:1858:ASP:H	2.18	0.41
1:A:1864:LYS:NZ	1:A:1869:GLU:C	2.73	0.41
1:A:2299:VAL:O	1:A:2360:LYS:HE2	2.21	0.41
1:A:2868:SER:O	1:A:2872:GLN:N	2.48	0.41
1:A:3811:GLU:HG2	1:A:3812:VAL:N	2.34	0.41
1:A:3838:THR:C	1:A:3839:CYS:SG	2.99	0.41
1:A:4047:MET:HG3	1:A:4048:LEU:N	2.35	0.41
1:A:4943:LEU:O	1:A:4947:GLN:HG2	2.20	0.41
1:A:4978:HIS:ND1	1:A:4982:GLU:OE1	2.53	0.41
1:C:607:CYS:HB2	1:C:1672:ALA:HB1	2.02	0.41
1:C:828:GLU:OE2	1:C:831:ARG:HA	2.20	0.41
1:C:1246:GLU:HA	1:C:1247:PRO:HD3	1.90	0.41
1:C:1647:CYS:O	1:C:1648:MET:HG3	2.20	0.41
1:C:1691:GLN:O	1:C:1695:LEU:HG	2.19	0.41
1:C:4566:ALA:HA	1:C:4569:LEU:HD12	2.03	0.41
1:E:582:HIS:O	1:E:585:SER:HB2	2.20	0.41
1:E:1667:LEU:HD23	1:E:1710:GLY:C	2.41	0.41
1:E:1676:LEU:HG	1:E:1721:GLU:OE2	2.20	0.41
1:E:2500:ALA:HA	1:E:2556:LEU:HD21	2.01	0.41
1:E:2515:GLN:O	1:E:2518:LEU:HB3	2.20	0.41
1:E:2745:VAL:CG2	1:E:2818:ALA:HB2	2.50	0.41
1:E:4834:GLY:O	1:E:4837:LEU:HB3	2.20	0.41
1:E:4863:TYR:HD2	1:E:4876:CYS:SG	2.44	0.41
1:E:4866:SER:O	1:E:4868:ASP:N	2.54	0.41
1:E:5011:TRP:O	1:E:5014:TYR:HB3	2.20	0.41
1:G:165:VAL:HG13	1:G:204:PRO:HD3	2.02	0.41
1:G:696:PRO:HD2	1:G:829:TYR:CE2	2.52	0.41
1:G:702:TRP:HZ2	1:G:1640:HIS:HD1	1.67	0.41
1:G:1704:PRO:HG2	1:G:1707:LEU:HD12	2.02	0.41
1:G:3556:ASN:O	1:G:3560:GLN:N	2.54	0.41
1:G:4161:ARG:HA	1:G:4164:LEU:HB3	2.03	0.41
1:G:4710:SER:OG	1:G:4772:ASP:OD2	2.33	0.41
1:A:445:LEU:CD2	1:A:522:LEU:HD12	2.44	0.41
1:A:684:VAL:HG22	1:A:781:VAL:HG13	2.02	0.41
1:A:2558:VAL:O	1:A:2561:LEU:HG	2.20	0.41
1:A:4880:MET:CA	1:G:4578:LEU:CD1	2.89	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:669:ASP:CB	1:C:788:LYS:NZ	2.83	0.41
1:C:4058:ILE:HG13	1:C:4059:LEU:N	2.35	0.41
1:C:4218:ILE:HG22	1:C:4950:VAL:HG13	2.02	0.41
1:C:4823:LEU:HG	1:C:4826:ILE:HD12	2.02	0.41
1:E:858:THR:HG21	1:E:992:GLY:HA2	2.02	0.41
1:E:870:ILE:HA	1:E:873:LYS:HB3	2.02	0.41
1:E:1585:LYS:HD3	1:E:1596:GLU:OE2	2.21	0.41
1:E:1748:PHE:HE1	1:E:2072:LEU:C	2.23	0.41
1:E:3881:THR:O	1:E:3885:PHE:HD2	2.03	0.41
1:E:4036:VAL:HG12	1:E:4037:ASN:N	2.36	0.41
1:E:4174:PHE:HA	1:E:4177:TYR:CD2	2.56	0.41
1:E:4217:PHE:CZ	1:E:4234:PHE:HA	2.56	0.41
1:E:4218:ILE:HG22	1:E:4950:VAL:HG13	2.01	0.41
1:E:4251:ILE:HG22	1:E:4557:ARG:HH11	1.85	0.41
1:E:4944:ARG:O	1:E:4947:GLN:HB2	2.20	0.41
1:G:78:LEU:O	1:G:81:MET:HG2	2.21	0.41
1:G:216:GLY:HA3	1:G:264:PRO:CD	2.49	0.41
1:G:647:ASN:N	1:G:822:ARG:O	2.52	0.41
1:G:768:PHE:HB3	1:G:771:PHE:CE2	2.56	0.41
1:G:856:VAL:O	1:G:991:ASN:ND2	2.50	0.41
1:G:879:HIS:NE2	1:G:906:CYS:O	2.53	0.41
1:G:1585:LYS:HD3	1:G:1596:GLU:OE2	2.20	0.41
1:G:1845:VAL:HG13	1:G:1854:PHE:HE2	1.85	0.41
1:G:2862:LEU:HD11	1:G:2929:PHE:HD1	1.85	0.41
1:G:4006:ASP:HB2	1:G:4009:GLN:HG2	2.02	0.41
1:G:4866:SER:O	1:G:4868:ASP:N	2.53	0.41
1:A:12:GLN:O	1:A:165:VAL:HG23	2.21	0.41
1:A:102:LEU:HD23	1:A:162:LYS:HA	2.03	0.41
1:A:340:LYS:HG3	1:A:342:GLY:N	2.35	0.41
1:A:515:TRP:HA	1:A:518:ILE:HD12	2.02	0.41
1:A:633:LEU:HD22	1:A:1663:HIS:HD2	1.84	0.41
1:A:975:VAL:HG21	1:A:1044:ARG:CB	2.47	0.41
1:A:1719:HIS:CG	1:A:1802:ILE:HG23	2.56	0.41
1:A:1819:VAL:HG22	1:A:1926:LEU:HD13	2.02	0.41
1:A:1848:LEU:HD12	1:A:1851:MET:SD	2.60	0.41
2:B:16:PRO:HG3	2:B:106:LEU:HD21	2.03	0.41
1:C:78:LEU:HA	1:C:81:MET:HG2	2.02	0.41
1:C:642:THR:OG1	1:C:1617:THR:HG21	2.20	0.41
1:C:879:HIS:NE2	1:C:906:CYS:O	2.53	0.41
1:C:1834:VAL:HG13	1:C:1835:GLU:H	1.84	0.41
1:C:2349:ASN:O	1:C:2353:VAL:HG23	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:4041:ALA:O	1:C:4044:MET:HB3	2.19	0.41
1:C:4217:PHE:CZ	1:C:4234:PHE:HA	2.56	0.41
1:C:4863:TYR:HD2	1:C:4876:CYS:SG	2.44	0.41
1:E:669:ASP:CB	1:E:788:LYS:NZ	2.83	0.41
1:E:768:PHE:HB3	1:E:771:PHE:CE2	2.56	0.41
1:E:945:LYS:HA	1:E:1049:TYR:HA	2.03	0.41
1:E:1237:TRP:CD1	1:E:1611:HIS:HA	2.56	0.41
1:E:1287:LEU:HD13	1:E:1556:PRO:HD3	2.01	0.41
1:E:1729:SER:HB2	1:E:2163:ARG:HH11	1.82	0.41
1:E:1762:LEU:HD21	1:E:1860:LYS:NZ	2.34	0.41
1:E:2094:LEU:O	1:E:2098:VAL:HG23	2.21	0.41
1:E:2430:ILE:HG23	1:E:2501:SER:HB2	2.01	0.41
1:E:2887:GLY:O	1:E:2891:LYS:HG3	2.20	0.41
1:E:5004:THR:O	1:E:5007:GLU:HG2	2.21	0.41
1:G:40:GLU:OE2	1:G:406:SER:HB2	2.20	0.41
1:G:1072:VAL:HG22	1:G:1196:PRO:HD3	2.03	0.41
1:G:1099:GLU:H	1:G:1198:GLN:NE2	2.18	0.41
1:G:1245:PHE:CE2	1:G:1646:ARG:NH1	2.88	0.41
1:G:1691:GLN:O	1:G:1695:LEU:HG	2.19	0.41
1:G:2299:VAL:O	1:G:2360:LYS:HE2	2.20	0.41
1:G:3977:GLN:NE2	1:G:4030:LEU:O	2.54	0.41
2:H:4:VAL:HG21	2:H:62:GLY:HA3	2.01	0.41
1:A:607:CYS:HB2	1:A:1672:ALA:HB1	2.01	0.41
1:A:768:PHE:HB3	1:A:771:PHE:CE2	2.56	0.41
1:A:1723:ALA:O	1:A:1727:ARG:HB2	2.20	0.41
1:A:3922:TYR:HA	1:A:3925:ARG:HG2	2.02	0.41
1:A:3933:PHE:O	1:A:3937:TYR:HD2	2.03	0.41
1:A:4653:VAL:O	1:A:4657:CYS:N	2.46	0.41
1:A:4866:SER:O	1:A:4868:ASP:N	2.54	0.41
1:C:69:LEU:HD13	1:C:101:LEU:HD11	2.01	0.41
1:C:340:LYS:HG3	1:C:342:GLY:N	2.36	0.41
1:C:514:SER:O	1:C:518:ILE:HG13	2.20	0.41
1:C:515:TRP:HA	1:C:518:ILE:HD12	2.02	0.41
1:C:580:GLU:HB3	1:C:620:LEU:HD11	2.03	0.41
1:C:1616:GLU:HG3	1:C:1617:THR:HG23	2.02	0.41
1:C:1689:VAL:HG22	1:C:1694:LEU:HD11	2.01	0.41
1:C:3886:ARG:O	1:C:3890:LEU:HD13	2.21	0.41
1:C:3927:GLN:HE21	1:C:3991:GLY:HA3	1.86	0.41
1:C:4137:ARG:HD2	1:C:4177:TYR:CE2	2.56	0.41
1:C:4582:VAL:HG12	1:C:4629:TYR:HD1	1.85	0.41
1:C:4735:GLU:O	1:C:4739:GLU:N	2.50	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:40:GLU:OE2	1:E:406:SER:HB2	2.20	0.41
1:E:111:HIS:CD2	1:E:113:HIS:HB3	2.56	0.41
1:E:642:THR:OG1	1:E:1617:THR:HG21	2.20	0.41
1:E:758:ARG:HD3	1:E:761:GLY:HA2	2.03	0.41
1:E:826:ILE:O	1:E:828:GLU:N	2.54	0.41
1:E:828:GLU:HG3	1:E:840:VAL:HG21	2.02	0.41
1:E:1457:TYR:O	1:E:1458:HIS:CG	2.73	0.41
1:E:1857:GLU:O	1:E:1860:LYS:HB2	2.20	0.41
1:E:1945:TYR:O	1:E:1949:GLN:HG2	2.21	0.41
1:E:2349:ASN:O	1:E:2353:VAL:HG23	2.21	0.41
1:E:2876:GLU:OE2	1:E:2916:LYS:HD3	2.20	0.41
1:E:4578:LEU:HG	1:E:4578:LEU:O	2.20	0.41
1:E:4580:TYR:HB2	1:E:4631:PHE:CD1	2.56	0.41
1:G:485:SER:O	1:G:488:LEU:HB3	2.21	0.41
1:G:1237:TRP:CD1	1:G:1611:HIS:HA	2.56	0.41
1:G:1856:ASP:H	1:G:1857:GLU:CB	2.31	0.41
1:G:1959:ALA:O	1:G:1962:ALA:HB3	2.20	0.41
1:G:4157:ASP:O	1:G:4161:ARG:NE	2.53	0.41
1:G:4820:VAL:HG12	1:G:4821:LYS:H	1.85	0.41
1:A:40:GLU:OE2	1:A:406:SER:HB2	2.20	0.41
1:A:120:CYS:HA	1:A:135:VAL:HA	2.03	0.41
1:A:879:HIS:NE2	1:A:906:CYS:O	2.53	0.41
1:A:1288:PHE:O	1:A:1603:VAL:HG13	2.21	0.41
1:A:1293:LEU:HB3	1:A:1584:ARG:HE	1.86	0.41
1:A:1297:PHE:HB2	1:A:1545:ASN:HA	2.03	0.41
1:A:1857:GLU:O	1:A:1860:LYS:HB2	2.20	0.41
1:A:2349:ASN:O	1:A:2353:VAL:HG23	2.21	0.41
1:A:4137:ARG:HD2	1:A:4177:TYR:CE2	2.56	0.41
1:A:4183:ILE:HD13	1:A:4193:ILE:HD13	2.03	0.41
1:A:4581:LYS:HE2	1:C:4877:ASP:O	2.21	0.41
1:A:4931:ILE:O	1:A:4935:LEU:HB2	2.19	0.41
1:C:485:SER:O	1:C:488:LEU:HB3	2.21	0.41
1:C:1293:LEU:HB3	1:C:1584:ARG:HE	1.86	0.41
1:C:1676:LEU:O	1:C:1676:LEU:HD23	2.21	0.41
1:C:1748:PHE:HE1	1:C:2072:LEU:C	2.24	0.41
1:C:1848:LEU:HD12	1:C:1851:MET:SD	2.60	0.41
1:C:2284:ASN:HA	1:C:2287:ALA:HB3	2.02	0.41
1:C:2806:ARG:HB3	1:C:2810:LYS:HE3	2.02	0.41
1:C:4034:ASN:HD21	1:C:4040:ILE:CG2	2.32	0.41
1:C:4174:PHE:HA	1:C:4177:TYR:CD2	2.56	0.41
1:C:4813:LEU:HD12	1:C:4814:LEU:N	2.35	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:4875:LYS:O	1:C:4877:ASP:N	2.54	0.41
1:C:5011:TRP:O	1:C:5014:TYR:HB3	2.20	0.41
2:D:92:PRO:HA	2:D:93:PRO:HD3	1.91	0.41
1:E:165:VAL:HG13	1:E:204:PRO:HD3	2.02	0.41
1:E:537:CYS:HB3	1:E:571:SER:HB3	2.03	0.41
1:E:580:GLU:HB3	1:E:620:LEU:HD11	2.03	0.41
1:E:590:LEU:HD13	1:E:599:VAL:HB	2.03	0.41
1:E:910:PHE:CG	1:E:918:ARG:HB3	2.55	0.41
1:E:1616:GLU:HG3	1:E:1617:THR:HG23	2.02	0.41
1:E:1864:LYS:NZ	1:E:1869:GLU:C	2.73	0.41
1:E:1944:GLU:HA	1:E:1947:CYS:SG	2.61	0.41
1:E:2114:PRO:O	1:E:3704:HIS:NE2	2.40	0.41
1:E:2142:TYR:CD2	1:E:2197:LEU:HD12	2.55	0.41
1:E:2284:ASN:HA	1:E:2287:ALA:HB3	2.02	0.41
1:E:3732:SER:HB2	1:E:3766:GLN:HB3	2.03	0.41
1:E:4666:VAL:HA	1:E:4669:VAL:HG12	2.03	0.41
2:F:16:PRO:HG3	2:F:106:LEU:HD21	2.02	0.41
1:G:39:ALA:HB3	1:G:137:LEU:HD11	2.03	0.41
1:G:515:TRP:HA	1:G:518:ILE:HD12	2.02	0.41
1:G:843:SER:HA	1:G:1197:GLY:HA2	2.03	0.41
1:G:1077:ALA:HB3	1:G:1189:LEU:HB3	2.03	0.41
1:G:1819:VAL:HG22	1:G:1926:LEU:HD13	2.02	0.41
1:G:1937:LEU:HD11	1:G:2115:GLU:OE1	2.21	0.41
1:G:2293:GLN:O	1:G:2296:GLU:HG2	2.21	0.41
1:G:3659:ALA:O	1:G:3663:LEU:HG	2.20	0.41
1:G:3718:GLU:HG3	1:G:3719:ASP:N	2.36	0.41
1:G:3722:TYR:HE2	1:G:3797:THR:HG22	1.86	0.41
1:G:3838:THR:C	1:G:3839:CYS:SG	2.99	0.41
1:G:4234:PHE:CZ	1:G:4988:TYR:HB2	2.55	0.41
1:A:356:TRP:O	1:A:378:LEU:HA	2.21	0.41
1:A:758:ARG:HD3	1:A:761:GLY:HA2	2.02	0.41
1:A:856:VAL:O	1:A:991:ASN:ND2	2.48	0.41
1:A:1094:ALA:HB1	1:A:1143:TRP:CZ3	2.56	0.41
1:A:1230:MET:HB2	1:A:1828:ASP:OD1	2.20	0.41
1:A:1275:ARG:HG2	1:A:1564:PHE:CD2	2.56	0.41
1:A:1585:LYS:HD3	1:A:1596:GLU:OE2	2.20	0.41
1:A:2284:ASN:HA	1:A:2287:ALA:HB3	2.02	0.41
1:A:2335:LEU:HB2	1:A:2432:LEU:HD11	2.03	0.41
1:A:3984:ARG:O	1:A:3984:ARG:HG2	2.21	0.41
1:A:4062:PHE:O	1:A:4170:ILE:HG21	2.20	0.41
1:A:4118:ASP:O	1:A:4120:ASN:N	2.53	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:145:ALA:HA	1:C:175:SER:HB3	2.01	0.41
1:C:1077:ALA:HB3	1:C:1189:LEU:HB3	2.03	0.41
1:C:2299:VAL:O	1:C:2360:LYS:HE2	2.20	0.41
1:C:2745:VAL:CG2	1:C:2818:ALA:HB2	2.50	0.41
1:C:2754:PHE:CZ	1:C:2930:LEU:HD23	2.56	0.41
1:C:3888:LEU:HA	1:C:3888:LEU:HD23	1.84	0.41
1:C:4666:VAL:HA	1:C:4669:VAL:HG12	2.03	0.41
1:E:67:PHE:HA	1:E:110:ARG:O	2.21	0.41
1:E:69:LEU:HD13	1:E:101:LEU:HD11	2.01	0.41
1:E:246:TYR:CE2	1:E:373:LYS:HD3	2.55	0.41
1:E:684:VAL:HG22	1:E:781:VAL:HG13	2.02	0.41
1:E:2773:ASN:HB3	1:E:2775:TRP:CD1	2.56	0.41
1:E:2822:THR:HG1	1:E:2938:THR:HG1	1.62	0.41
1:E:4238:CYS:O	1:E:4242:ILE:HG13	2.20	0.41
1:E:4914:VAL:O	1:E:4918:ILE:HG13	2.21	0.41
1:G:116:MET:HE2	1:G:139:GLU:OE2	2.21	0.41
1:G:1287:LEU:HD13	1:G:1556:PRO:HD3	2.02	0.41
1:G:1654:SER:HB2	1:G:1704:PRO:HB3	2.02	0.41
1:G:1965:TYR:CE1	1:G:2063:LEU:HD11	2.56	0.41
1:G:2349:ASN:O	1:G:2353:VAL:HG23	2.20	0.41
1:G:2761:TYR:CZ	1:G:2862:LEU:HD13	2.55	0.41
1:G:3976:ASN:O	1:G:3979:SER:HB3	2.20	0.41
1:G:4796:MET:HG3	1:G:4797:VAL:N	2.35	0.41
1:A:78:LEU:HD12	1:A:81:MET:SD	2.61	0.41
1:A:78:LEU:O	1:A:81:MET:HG2	2.21	0.41
1:A:121:LEU:HD12	1:A:136:GLY:HA3	2.03	0.41
1:A:178:ARG:CZ	1:G:2456:ILE:HD11	2.51	0.41
1:A:485:SER:O	1:A:488:LEU:HB3	2.21	0.41
1:A:572:PRO:O	1:A:575:LEU:HB2	2.19	0.41
1:A:582:HIS:O	1:A:585:SER:HB2	2.20	0.41
1:A:642:THR:OG1	1:A:1617:THR:HG21	2.20	0.41
1:A:670:GLU:O	1:A:787:VAL:HG13	2.20	0.41
1:A:1077:ALA:HB3	1:A:1189:LEU:HB3	2.03	0.41
1:A:1110:ARG:HB2	1:A:1113:VAL:HG23	2.02	0.41
1:A:1237:TRP:CD1	1:A:1611:HIS:HA	2.56	0.41
1:A:1457:TYR:O	1:A:1458:HIS:CG	2.74	0.41
1:A:1586:ASN:O	1:A:1588:ALA:N	2.49	0.41
1:A:1667:LEU:HD23	1:A:1710:GLY:C	2.42	0.41
1:A:1679:ASN:HB3	1:A:1799:SER:H	1.86	0.41
1:A:2114:PRO:O	1:A:3704:HIS:NE2	2.40	0.41
1:A:2204:HIS:ND1	1:A:2250:MET:SD	2.94	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2456:ILE:HD11	1:C:178:ARG:CZ	2.51	0.41
1:A:2554:LEU:HD11	1:A:2595:LEU:HA	2.03	0.41
1:A:2887:GLY:O	1:A:2891:LYS:HG3	2.20	0.41
1:A:4580:TYR:HB2	1:A:4631:PHE:CD1	2.53	0.41
1:A:4863:TYR:HD2	1:A:4876:CYS:SG	2.44	0.41
1:A:4876:CYS:HA	1:A:4882:CYS:HB3	2.03	0.41
1:A:4944:ARG:O	1:A:4947:GLN:HB2	2.20	0.41
1:C:454:PRO:HA	1:C:455:PRO:HD3	1.86	0.41
1:C:684:VAL:HG22	1:C:781:VAL:HG13	2.03	0.41
1:C:856:VAL:O	1:C:991:ASN:ND2	2.50	0.41
1:C:1024:TYR:CD1	1:C:1032:LYS:HG2	2.56	0.41
1:C:1072:VAL:HG22	1:C:1196:PRO:HD3	2.03	0.41
1:C:1230:MET:HB2	1:C:1828:ASP:OD1	2.21	0.41
1:C:1275:ARG:HG2	1:C:1564:PHE:CD2	2.56	0.41
1:C:1667:LEU:HD23	1:C:1710:GLY:C	2.41	0.41
1:C:1945:TYR:O	1:C:1949:GLN:HG2	2.21	0.41
1:C:2359:ARG:CZ	1:E:179:TYR:OH	2.68	0.41
1:C:2420:HIS:ND1	1:C:2423:MET:SD	2.76	0.41
1:C:2430:ILE:HG23	1:C:2501:SER:HB2	2.01	0.41
1:C:3984:ARG:O	1:C:3984:ARG:HG2	2.21	0.41
1:C:4062:PHE:O	1:C:4170:ILE:HG21	2.20	0.41
1:C:4887:MET:HA	1:C:4891:VAL:CG2	2.51	0.41
1:C:4914:VAL:O	1:C:4918:ILE:HG13	2.21	0.41
1:C:4991:PHE:CE2	1:C:4995:LEU:HD11	2.56	0.41
1:C:5004:THR:O	1:C:5007:GLU:HG2	2.20	0.41
1:E:121:LEU:HD12	1:E:136:GLY:HA3	2.02	0.41
1:E:635:THR:OG1	1:E:1638:ALA:O	2.31	0.41
1:E:671:VAL:HG12	1:E:673:PRO:HG3	2.03	0.41
1:E:1077:ALA:HB3	1:E:1189:LEU:HB3	2.03	0.41
1:E:1275:ARG:HG2	1:E:1564:PHE:CD2	2.56	0.41
1:E:1288:PHE:O	1:E:1603:VAL:HG13	2.21	0.41
1:E:1676:LEU:HD23	1:E:1676:LEU:O	2.21	0.41
1:E:1719:HIS:CG	1:E:1802:ILE:HG23	2.55	0.41
1:E:1829:PRO:HB3	1:E:1834:VAL:H	1.86	0.41
1:E:2754:PHE:CZ	1:E:2930:LEU:HD23	2.56	0.41
1:E:3888:LEU:HA	1:E:3888:LEU:HD23	1.84	0.41
1:E:3981:ALA:HA	1:E:3986:TRP:HH2	1.86	0.41
1:E:4047:MET:HG3	1:E:4048:LEU:N	2.35	0.41
1:E:4566:ALA:HA	1:E:4569:LEU:HD12	2.03	0.41
1:E:4570:ALA:HB2	1:E:4650:HIS:CE1	2.56	0.41
1:E:4875:LYS:O	1:E:4877:ASP:N	2.54	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4977:THR:HA	1:E:4981:GLU:OE1	2.21	0.41
1:E:5022:PHE:HD1	1:E:5022:PHE:HA	1.75	0.41
2:F:42:ARG:C	2:F:44:LYS:H	2.24	0.41
1:G:607:CYS:HB2	1:G:1672:ALA:HB1	2.02	0.41
1:G:635:THR:OG1	1:G:1638:ALA:O	2.32	0.41
1:G:750:LEU:O	1:G:751:SER:OG	2.33	0.41
1:G:826:ILE:O	1:G:828:GLU:N	2.54	0.41
1:G:1094:ALA:HB1	1:G:1143:TRP:CZ3	2.56	0.41
1:G:2101:MET:SD	1:G:2104:ARG:HD2	2.61	0.41
1:G:2515:GLN:O	1:G:2518:LEU:HB3	2.20	0.41
1:G:2745:VAL:CG2	1:G:2818:ALA:HB2	2.51	0.41
1:G:3957:VAL:O	1:G:3961:VAL:HG23	2.20	0.41
1:G:4063:ASP:HA	1:G:4170:ILE:HG12	2.03	0.41
1:G:4722:ARG:O	1:G:4725:LEU:HG	2.21	0.41
1:G:4727:LYS:HZ1	1:G:4728:HIS:CE1	2.38	0.41
1:G:4968:PHE:HB2	1:G:4975:PHE:HD1	1.86	0.41
2:H:44:LYS:HA	2:H:45:PRO:HD3	1.90	0.41
1:A:580:GLU:HB3	1:A:620:LEU:HD11	2.03	0.41
1:A:1087:ARG:HD2	1:A:1223:PHE:CE1	2.55	0.41
1:A:1099:GLU:H	1:A:1198:GLN:NE2	2.19	0.41
1:C:426:ARG:NH2	1:C:508:GLY:O	2.54	0.41
1:C:870:ILE:HA	1:C:873:LYS:HB3	2.03	0.41
1:C:1094:ALA:HB1	1:C:1143:TRP:CZ3	2.56	0.41
1:C:1452:TRP:HB3	1:C:1550:PRO:HA	2.03	0.41
1:C:1937:LEU:O	1:C:1940:CYS:SG	2.69	0.41
1:C:1944:GLU:HA	1:C:1947:CYS:SG	2.61	0.41
1:C:2204:HIS:ND1	1:C:2250:MET:SD	2.94	0.41
1:C:2456:ILE:HD11	1:E:178:ARG:HH22	1.87	0.41
1:C:3901:ASN:O	1:C:3905:THR:HG22	2.21	0.41
1:C:4108:ILE:O	1:C:4111:LEU:HB3	2.21	0.41
1:C:4118:ASP:O	1:C:4120:ASN:N	2.54	0.41
1:E:485:SER:O	1:E:488:LEU:HB3	2.21	0.41
1:E:636:ASN:HD21	2:F:35:LYS:HD3	1.85	0.41
1:E:1094:ALA:HB1	1:E:1143:TRP:CZ3	2.56	0.41
1:E:1293:LEU:HB3	1:E:1584:ARG:HE	1.87	0.41
1:E:1959:ALA:O	1:E:1962:ALA:HB3	2.22	0.41
1:E:1966:VAL:O	1:E:1966:VAL:HG12	2.21	0.41
1:E:3712:GLU:O	1:E:3713:LYS:HD2	2.21	0.41
1:E:4137:ARG:HD2	1:E:4177:TYR:CE2	2.56	0.41
1:E:4802:GLY:HA2	1:E:4809:PHE:HB2	2.02	0.41
1:E:4892:ARG:NH1	1:G:4896:GLY:HA3	2.35	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4978:HIS:ND1	1:E:4982:GLU:OE1	2.53	0.41
1:G:175:SER:OG	1:G:176:SER:N	2.53	0.41
1:G:1275:ARG:HG2	1:G:1564:PHE:CD2	2.56	0.41
1:G:1779:PRO:HA	1:G:1780:PRO:HD3	1.79	0.41
1:G:2251:PHE:HA	1:G:2254:LEU:HG	2.03	0.41
1:G:2550:LEU:O	1:G:2554:LEU:N	2.54	0.41
1:G:2773:ASN:HB3	1:G:2775:TRP:CD1	2.56	0.41
1:G:3662:ILE:HG22	1:G:3662:ILE:O	2.21	0.41
1:G:3838:THR:O	1:G:3839:CYS:SG	2.76	0.41
1:G:4569:LEU:O	1:G:4573:ILE:HG13	2.20	0.41
1:G:4662:ASN:O	1:G:4667:PRO:HD3	2.20	0.41
2:H:31:GLU:HG2	2:H:96:THR:HB	2.02	0.41
1:A:272:SER:HB2	1:A:335:GLY:HA3	2.03	0.40
1:A:1748:PHE:HE1	1:A:2072:LEU:C	2.24	0.40
1:A:2550:LEU:O	1:A:2554:LEU:N	2.54	0.40
1:A:2754:PHE:CZ	1:A:2930:LEU:HD23	2.56	0.40
1:A:4174:PHE:HA	1:A:4177:TYR:CD2	2.56	0.40
1:C:111:HIS:CD2	1:C:113:HIS:HB3	2.56	0.40
1:C:1679:ASN:HB3	1:C:1799:SER:H	1.86	0.40
1:C:2550:LEU:O	1:C:2554:LEU:N	2.54	0.40
1:C:3933:PHE:O	1:C:3937:TYR:HD2	2.03	0.40
1:E:1603:VAL:HG12	1:E:1604:SER:O	2.20	0.40
1:E:2204:HIS:ND1	1:E:2250:MET:SD	2.94	0.40
1:E:2251:PHE:HA	1:E:2254:LEU:HG	2.03	0.40
1:E:4118:ASP:O	1:E:4120:ASN:N	2.54	0.40
1:E:4823:LEU:HG	1:E:4826:ILE:HD12	2.02	0.40
1:E:4932:ILE:O	1:E:4935:LEU:HB3	2.20	0.40
2:F:28:GLY:HA2	2:F:99:PHE:CD1	2.57	0.40
1:G:67:PHE:HA	1:G:110:ARG:O	2.21	0.40
1:G:78:LEU:HD12	1:G:81:MET:SD	2.61	0.40
1:G:111:HIS:CD2	1:G:113:HIS:HB3	2.56	0.40
1:G:2281:ILE:HD11	1:G:2337:PHE:HB3	2.02	0.40
1:G:3839:CYS:SG	1:G:3840:SER:N	2.94	0.40
1:G:3981:ALA:HA	1:G:3986:TRP:HH2	1.86	0.40
1:G:4691:GLN:HA	1:G:4692:PRO:HD2	1.88	0.40
1:G:4847:VAL:HG11	1:G:4924:VAL:HG22	2.02	0.40
1:G:4978:HIS:ND1	1:G:4982:GLU:OE1	2.54	0.40
1:A:165:VAL:HG13	1:A:204:PRO:HD3	2.03	0.40
1:A:826:ILE:O	1:A:828:GLU:N	2.54	0.40
1:A:843:SER:HA	1:A:1197:GLY:HA2	2.03	0.40
1:A:1046:LEU:HA	1:A:1049:TYR:HB2	2.04	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1603:VAL:HG12	1:A:1604:SER:O	2.22	0.40
1:A:1676:LEU:O	1:A:1676:LEU:HD23	2.21	0.40
1:A:1685:LEU:HA	1:A:1685:LEU:HD23	1.76	0.40
1:A:1829:PRO:HB3	1:A:1834:VAL:H	1.86	0.40
1:A:1944:GLU:HA	1:A:1947:CYS:SG	2.61	0.40
1:A:2199:ARG:NE	1:A:2249:SER:OG	2.52	0.40
1:A:2251:PHE:HA	1:A:2254:LEU:HG	2.03	0.40
1:A:3712:GLU:O	1:A:3713:LYS:HD2	2.21	0.40
1:A:3805:LEU:HB3	1:A:3890:LEU:HB3	2.03	0.40
1:A:4666:VAL:HA	1:A:4669:VAL:HG12	2.02	0.40
1:A:4839:MET:CB	1:G:4823:LEU:CD1	2.99	0.40
1:C:123:THR:HB	1:C:125:ARG:HH21	1.86	0.40
1:C:905:PRO:HB2	1:C:917:GLU:HB3	2.04	0.40
1:C:1100:MET:HE1	1:C:1199:VAL:O	2.22	0.40
1:C:1457:TYR:O	1:C:1458:HIS:ND1	2.54	0.40
1:C:2449:GLU:O	1:C:2452:ARG:HB2	2.20	0.40
1:C:3985:LEU:O	1:C:3989:VAL:HG23	2.21	0.40
1:E:78:LEU:O	1:E:81:MET:HG2	2.22	0.40
1:E:224:HIS:N	1:E:229:GLU:O	2.42	0.40
1:E:321:GLU:HG2	1:E:323:LEU:HG	2.03	0.40
1:E:828:GLU:OE2	1:E:831:ARG:HA	2.20	0.40
1:E:1679:ASN:HB3	1:E:1799:SER:H	1.86	0.40
1:E:1748:PHE:HA	1:E:1749:PRO:HD2	1.76	0.40
1:E:2198:MET:HB3	1:E:2239:PHE:HE1	1.86	0.40
1:E:2199:ARG:NE	1:E:2249:SER:OG	2.52	0.40
1:E:2335:LEU:HB2	1:E:2432:LEU:HD11	2.02	0.40
1:E:2449:GLU:O	1:E:2452:ARG:HB2	2.20	0.40
1:E:3985:LEU:O	1:E:3989:VAL:HG23	2.21	0.40
1:E:4175:ARG:O	1:E:4178:LEU:HB3	2.21	0.40
1:E:4582:VAL:HB	1:E:4628:VAL:HG12	2.03	0.40
1:E:4669:VAL:O	1:E:4672:LYS:HB3	2.22	0.40
1:G:321:GLU:HG2	1:G:323:LEU:HG	2.03	0.40
1:G:356:TRP:O	1:G:378:LEU:HA	2.21	0.40
1:G:426:ARG:NH2	1:G:508:GLY:O	2.54	0.40
1:G:497:TYR:HB2	1:G:515:TRP:CH2	2.57	0.40
1:G:1293:LEU:HB3	1:G:1584:ARG:HE	1.86	0.40
1:G:1945:TYR:O	1:G:1949:GLN:HG2	2.21	0.40
1:G:2210:VAL:O	1:G:2214:VAL:HG23	2.22	0.40
1:G:4770:SER:OG	1:G:4771:ILE:N	2.53	0.40
1:A:131:LEU:HB2	1:G:2460:LEU:HD21	2.02	0.40
1:A:321:GLU:HG2	1:A:323:LEU:HG	2.03	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:598:LYS:HD3	1:A:598:LYS:HA	1.87	0.40
1:A:1841:VAL:O	1:A:1845:VAL:HG23	2.21	0.40
1:A:2293:GLN:CA	1:A:2296:GLU:HG2	2.47	0.40
1:A:3775:ALA:HA	1:A:3778:MET:HG2	2.03	0.40
1:A:3886:ARG:O	1:A:3890:LEU:HD13	2.21	0.40
1:A:3927:GLN:HE21	1:A:3991:GLY:HA3	1.87	0.40
1:A:4175:ARG:O	1:A:4178:LEU:HB3	2.21	0.40
1:A:4578:LEU:CD1	1:C:4880:MET:CA	2.83	0.40
1:A:4636:THR:O	1:A:4639:MET:HE2	2.21	0.40
1:A:4675:LYS:O	1:A:4679:ARG:HG2	2.21	0.40
2:B:31:GLU:HG2	2:B:96:THR:HB	2.02	0.40
1:C:39:ALA:HB3	1:C:137:LEU:HD11	2.03	0.40
1:C:175:SER:OG	1:C:176:SER:N	2.53	0.40
1:C:216:GLY:HA3	1:C:264:PRO:CD	2.50	0.40
1:C:831:ARG:O	1:C:837:PRO:HA	2.22	0.40
1:C:1133:HIS:CE1	1:C:1134:LEU:HG	2.55	0.40
1:C:1585:LYS:HD3	1:C:1596:GLU:OE2	2.21	0.40
1:C:3805:LEU:HB3	1:C:3890:LEU:HB3	2.03	0.40
1:C:4183:ILE:HD13	1:C:4193:ILE:HD13	2.03	0.40
1:C:4570:ALA:HB2	1:C:4650:HIS:CE1	2.57	0.40
1:C:4669:VAL:O	1:C:4672:LYS:HB3	2.21	0.40
1:E:57:ASN:OD1	1:E:308:HIS:ND1	2.54	0.40
1:E:102:LEU:HD23	1:E:162:LYS:HA	2.02	0.40
1:E:1864:LYS:HZ2	1:E:1869:GLU:C	2.25	0.40
1:E:2281:ILE:HD11	1:E:2337:PHE:CG	2.56	0.40
1:E:2424:SER:HA	1:E:2427:ALA:HB3	2.02	0.40
1:E:2550:LEU:O	1:E:2554:LEU:N	2.54	0.40
1:E:2558:VAL:O	1:E:2561:LEU:HG	2.21	0.40
1:E:2858:GLN:HA	1:E:2859:PRO:HD2	1.93	0.40
1:E:3805:LEU:HB3	1:E:3890:LEU:HB3	2.03	0.40
1:E:3945:GLU:O	1:E:3948:LYS:HB2	2.22	0.40
1:E:4108:ILE:O	1:E:4111:LEU:HB3	2.21	0.40
1:E:4991:PHE:CE2	1:E:4995:LEU:HD11	2.56	0.40
1:G:590:LEU:HD13	1:G:599:VAL:HB	2.04	0.40
1:G:725:HIS:ND1	1:G:725:HIS:O	2.54	0.40
1:G:870:ILE:HA	1:G:873:LYS:HB3	2.03	0.40
1:G:905:PRO:HB2	1:G:917:GLU:HB3	2.03	0.40
1:G:1288:PHE:O	1:G:1603:VAL:HG13	2.21	0.40
1:G:1681:VAL:O	1:G:1684:ALA:HB3	2.21	0.40
1:G:2207:VAL:O	1:G:2211:MET:HG2	2.22	0.40
1:G:2251:PHE:CD1	1:G:2254:LEU:HD12	2.57	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:2554:LEU:HD11	1:G:2595:LEU:HA	2.04	0.40
1:G:4820:VAL:HG12	1:G:4821:LYS:N	2.36	0.40
1:A:251:ALA:O	1:A:254:THR:OG1	2.33	0.40
1:A:426:ARG:NH2	1:A:508:GLY:O	2.54	0.40
1:A:1647:CYS:O	1:A:1648:MET:HG3	2.20	0.40
1:A:1681:VAL:O	1:A:1684:ALA:HB3	2.22	0.40
1:A:1958:LEU:HD11	1:A:3657:TYR:CE2	2.57	0.40
1:A:2101:MET:SD	1:A:2104:ARG:HD2	2.61	0.40
1:A:2251:PHE:CD1	1:A:2254:LEU:HD12	2.57	0.40
1:A:2515:GLN:O	1:A:2518:LEU:HB3	2.20	0.40
1:A:4826:ILE:CG1	1:C:4839:MET:HE3	2.52	0.40
1:A:4991:PHE:CE2	1:A:4995:LEU:HD11	2.56	0.40
1:C:120:CYS:HA	1:C:135:VAL:HA	2.04	0.40
1:C:1216:ILE:HG22	1:C:1217:CYS:N	2.37	0.40
1:C:1862:ILE:HG23	1:C:1865:MET:HE2	2.03	0.40
1:C:2131:LEU:O	1:C:2134:LEU:HB3	2.22	0.40
1:C:2554:LEU:HD11	1:C:2595:LEU:HA	2.03	0.40
1:C:2773:ASN:HB3	1:C:2775:TRP:CD1	2.56	0.40
1:C:3838:THR:O	1:C:3839:CYS:SG	2.76	0.40
1:C:3922:TYR:HA	1:C:3925:ARG:HG2	2.03	0.40
1:C:3989:VAL:O	1:C:3993:LEU:HG	2.22	0.40
1:C:4818:MET:O	1:C:4820:VAL:HA	2.22	0.40
1:E:1024:TYR:CD1	1:E:1032:LYS:HG2	2.56	0.40
1:E:1457:TYR:O	1:E:1458:HIS:ND1	2.55	0.40
1:E:1719:HIS:CD2	1:E:1800:PRO:HG2	2.57	0.40
1:E:1845:VAL:HG13	1:E:1854:PHE:HE2	1.85	0.40
1:E:2251:PHE:CD1	1:E:2254:LEU:HD12	2.57	0.40
1:E:2299:VAL:O	1:E:2360:LYS:HE2	2.20	0.40
1:E:4733:GLY:O	1:E:4737:ILE:HG12	2.21	0.40
1:E:4995:LEU:HD21	1:E:5007:GLU:HB2	2.02	0.40
1:G:669:ASP:CB	1:G:788:LYS:NZ	2.83	0.40
1:G:1719:HIS:CD2	1:G:1800:PRO:HG2	2.56	0.40
1:G:1944:GLU:HA	1:G:1947:CYS:SG	2.61	0.40
1:G:1966:VAL:O	1:G:1966:VAL:HG12	2.21	0.40
1:G:2204:HIS:ND1	1:G:2250:MET:SD	2.94	0.40
1:G:3801:GLY:HA3	1:G:3887:PHE:HE1	1.86	0.40
1:G:4989:MET:HG3	1:G:4990:PHE:N	2.37	0.40
1:A:33:LEU:HD23	1:A:35:LEU:HD23	2.03	0.40
1:A:1719:HIS:CD2	1:A:1800:PRO:HG2	2.56	0.40
1:A:3901:ASN:O	1:A:3905:THR:HG22	2.21	0.40
1:A:4995:LEU:HD21	1:A:5007:GLU:HB2	2.04	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:5011:TRP:O	1:A:5014:TYR:HB3	2.20	0.40
1:C:78:LEU:O	1:C:81:MET:HG2	2.22	0.40
1:C:248:GLU:HG2	1:C:252:VAL:HG11	2.03	0.40
1:C:321:GLU:HG2	1:C:323:LEU:HG	2.03	0.40
1:C:590:LEU:HD13	1:C:599:VAL:HB	2.04	0.40
1:C:1073:ARG:O	1:C:1074:ILE:HG13	2.22	0.40
1:C:1275:ARG:HG2	1:C:1564:PHE:HB3	2.03	0.40
1:C:1681:VAL:O	1:C:1684:ALA:HB3	2.22	0.40
1:C:1694:LEU:HB3	1:C:1715:LEU:HD12	2.04	0.40
1:C:2515:GLN:O	1:C:2518:LEU:HB3	2.20	0.40
1:C:3712:GLU:O	1:C:3713:LYS:HD2	2.21	0.40
1:C:3718:GLU:HG3	1:C:3719:ASP:N	2.35	0.40
1:C:4175:ARG:O	1:C:4178:LEU:HB3	2.21	0.40
1:C:4977:THR:HA	1:C:4981:GLU:OE1	2.21	0.40
1:E:216:GLY:HA3	1:E:264:PRO:CD	2.50	0.40
1:E:426:ARG:NH2	1:E:508:GLY:O	2.54	0.40
1:E:598:LYS:HD3	1:E:598:LYS:HA	1.87	0.40
1:E:975:VAL:HG21	1:E:1044:ARG:CB	2.47	0.40
1:E:1046:LEU:HA	1:E:1049:TYR:HB2	2.04	0.40
1:E:1230:MET:HB2	1:E:1828:ASP:OD1	2.22	0.40
1:E:2456:ILE:HD11	1:G:178:ARG:CZ	2.52	0.40
1:E:3817:LEU:HD11	1:E:3821:LYS:HE2	2.02	0.40
1:E:4058:ILE:HG13	1:E:4059:LEU:N	2.35	0.40
1:G:123:THR:HB	1:G:125:ARG:HH21	1.86	0.40
1:G:737:LEU:HB3	1:G:738:LEU:H	1.50	0.40
1:G:831:ARG:O	1:G:837:PRO:HA	2.22	0.40
1:G:1201:HIS:CD2	1:G:1202:LEU:N	2.89	0.40
1:G:1667:LEU:HD23	1:G:1710:GLY:C	2.41	0.40
1:G:1719:HIS:CG	1:G:1802:ILE:HG23	2.56	0.40

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
1	A	3483/5037 (69%)	3132 (90%)	258 (7%)	93 (3%)	5 31
1	C	3483/5037 (69%)	3133 (90%)	254 (7%)	96 (3%)	5 30
1	E	3483/5037 (69%)	3134 (90%)	255 (7%)	94 (3%)	5 31
1	G	3483/5037 (69%)	3137 (90%)	252 (7%)	94 (3%)	5 31
2	B	105/108 (97%)	95 (90%)	9 (9%)	1 (1%)	15 54
2	D	105/108 (97%)	95 (90%)	9 (9%)	1 (1%)	15 54
2	F	105/108 (97%)	96 (91%)	8 (8%)	1 (1%)	15 54
2	H	105/108 (97%)	97 (92%)	8 (8%)	0	100 100
All	All	14352/20580 (70%)	12919 (90%)	1053 (7%)	380 (3%)	8 31

All (380) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	806	PRO
1	A	900	ASN
1	A	914	PRO
1	A	916	PRO
1	A	971	ASP
1	A	1211	LEU
1	A	1216	ILE
1	A	1459	GLN
1	A	1763	PRO
1	A	1767	VAL
1	A	2341	VAL
1	A	3714	SER
1	A	4012	LEU
1	A	4037	ASN
1	A	4083	ASP
1	A	4084	PRO
1	A	4820	VAL
1	A	4868	ASP
1	A	4904	PRO
1	C	806	PRO
1	C	914	PRO
1	C	916	PRO
1	C	971	ASP
1	C	1211	LEU
1	C	1216	ILE
1	C	1459	GLN
1	C	1763	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	C	1767	VAL
1	C	2341	VAL
1	C	3714	SER
1	C	4012	LEU
1	C	4037	ASN
1	C	4083	ASP
1	C	4084	PRO
1	C	4820	VAL
1	C	4868	ASP
1	C	4904	PRO
1	E	806	PRO
1	E	914	PRO
1	E	916	PRO
1	E	971	ASP
1	E	1211	LEU
1	E	1216	ILE
1	E	1459	GLN
1	E	1763	PRO
1	E	1767	VAL
1	E	2341	VAL
1	E	4012	LEU
1	E	4037	ASN
1	E	4083	ASP
1	E	4084	PRO
1	E	4820	VAL
1	E	4868	ASP
1	E	4904	PRO
1	G	806	PRO
1	G	914	PRO
1	G	916	PRO
1	G	971	ASP
1	G	1211	LEU
1	G	1216	ILE
1	G	1459	GLN
1	G	1763	PRO
1	G	1767	VAL
1	G	2341	VAL
1	G	3714	SER
1	G	3985	LEU
1	G	4012	LEU
1	G	4037	ASN
1	G	4083	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	G	4084	PRO
1	G	4771	ILE
1	G	4820	VAL
1	G	4868	ASP
1	G	4904	PRO
1	A	334	MET
1	A	385	ASP
1	A	767	VAL
1	A	770	ALA
1	A	826	ILE
1	A	895	PRO
1	A	1483	VAL
1	A	1488	LYS
1	A	1582	SER
1	A	3844	LEU
1	A	3941	ASP
1	A	3944	GLU
1	A	4119	GLU
1	A	4770	SER
1	A	4771	ILE
1	A	4772	ASP
1	A	4870	ASP
1	A	4985	LEU
1	A	5027	CYS
1	C	334	MET
1	C	385	ASP
1	C	767	VAL
1	C	770	ALA
1	C	826	ILE
1	C	895	PRO
1	C	900	ASN
1	C	1483	VAL
1	C	1488	LYS
1	C	1582	SER
1	C	3844	LEU
1	C	3941	ASP
1	C	3944	GLU
1	C	4119	GLU
1	C	4770	SER
1	C	4771	ILE
1	C	4772	ASP
1	C	4870	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	C	4985	LEU
1	C	5027	CYS
1	E	334	MET
1	E	385	ASP
1	E	767	VAL
1	E	770	ALA
1	E	826	ILE
1	E	895	PRO
1	E	900	ASN
1	E	1483	VAL
1	E	1488	LYS
1	E	1582	SER
1	E	3714	SER
1	E	3844	LEU
1	E	3944	GLU
1	E	4119	GLU
1	E	4770	SER
1	E	4771	ILE
1	E	4772	ASP
1	E	4870	ASP
1	E	4985	LEU
1	E	5027	CYS
1	G	334	MET
1	G	385	ASP
1	G	767	VAL
1	G	770	ALA
1	G	826	ILE
1	G	895	PRO
1	G	900	ASN
1	G	1483	VAL
1	G	1488	LYS
1	G	1582	SER
1	G	4119	GLU
1	G	4870	ASP
1	G	4984	ASN
1	G	5027	CYS
1	A	30	LYS
1	A	611	GLY
1	A	682	LEU
1	A	690	GLU
1	A	834	PRO
1	A	1206	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	1254	HIS
1	A	1280	GLN
1	A	1606	SER
1	A	1772	ARG
1	A	1834	VAL
1	A	1857	GLU
1	A	2246	ASN
1	A	2466	LEU
1	A	3719	ASP
1	A	4158	PRO
1	A	4208	PRO
1	A	4867	GLU
1	A	4876	CYS
1	A	4893	ALA
1	C	30	LYS
1	C	611	GLY
1	C	682	LEU
1	C	690	GLU
1	C	834	PRO
1	C	1206	GLN
1	C	1254	HIS
1	C	1280	GLN
1	C	1512	THR
1	C	1606	SER
1	C	1772	ARG
1	C	1834	VAL
1	C	1857	GLU
1	C	2246	ASN
1	C	2466	LEU
1	C	3719	ASP
1	C	4158	PRO
1	C	4208	PRO
1	C	4867	GLU
1	C	4876	CYS
1	C	4893	ALA
1	E	30	LYS
1	E	611	GLY
1	E	682	LEU
1	E	690	GLU
1	E	834	PRO
1	E	1206	GLN
1	E	1254	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	E	1280	GLN
1	E	1462	MET
1	E	1606	SER
1	E	1772	ARG
1	E	1834	VAL
1	E	1857	GLU
1	E	2246	ASN
1	E	2466	LEU
1	E	3719	ASP
1	E	3941	ASP
1	E	4158	PRO
1	E	4208	PRO
1	E	4867	GLU
1	E	4876	CYS
1	G	30	LYS
1	G	611	GLY
1	G	682	LEU
1	G	690	GLU
1	G	834	PRO
1	G	1206	GLN
1	G	1254	HIS
1	G	1280	GLN
1	G	1606	SER
1	G	1747	LEU
1	G	1772	ARG
1	G	1834	VAL
1	G	1857	GLU
1	G	2246	ASN
1	G	2466	LEU
1	G	3659	ALA
1	G	3719	ASP
1	G	3844	LEU
1	G	3944	GLU
1	G	4158	PRO
1	G	4208	PRO
1	G	4772	ASP
1	G	4867	GLU
1	G	4876	CYS
1	G	4893	ALA
1	A	56	GLN
1	A	701	GLY
1	A	827	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	852	VAL
1	A	885	THR
1	A	1095	VAL
1	A	1284	VAL
1	A	1286	MET
1	A	1462	MET
1	A	1747	LEU
1	A	2546	MET
1	A	2826	ALA
1	A	3659	ALA
1	A	4905	ALA
1	C	56	GLN
1	C	701	GLY
1	C	827	LYS
1	C	828	GLU
1	C	852	VAL
1	C	885	THR
1	C	1095	VAL
1	C	1284	VAL
1	C	1286	MET
1	C	1462	MET
1	C	1747	LEU
1	C	2306	GLY
1	C	2546	MET
1	C	2826	ALA
1	C	3659	ALA
1	E	56	GLN
1	E	701	GLY
1	E	827	LYS
1	E	828	GLU
1	E	852	VAL
1	E	885	THR
1	E	1095	VAL
1	E	1284	VAL
1	E	1286	MET
1	E	1747	LEU
1	E	2306	GLY
1	E	2546	MET
1	E	2826	ALA
1	E	3659	ALA
1	E	4905	ALA
1	G	56	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	G	701	GLY
1	G	720	HIS
1	G	827	LYS
1	G	828	GLU
1	G	852	VAL
1	G	885	THR
1	G	1095	VAL
1	G	1284	VAL
1	G	1286	MET
1	G	1462	MET
1	G	2306	GLY
1	G	2546	MET
1	G	3941	ASP
1	G	4207	MET
1	G	4905	ALA
1	A	298	GLY
1	A	676	THR
1	A	720	HIS
1	A	802	PHE
1	A	828	GLU
1	A	1139	PHE
1	A	1182	ILE
1	A	1550	PRO
1	A	2109	ASP
1	A	4207	MET
1	C	298	GLY
1	C	676	THR
1	C	720	HIS
1	C	802	PHE
1	C	1139	PHE
1	C	1182	ILE
1	C	1550	PRO
1	C	2109	ASP
1	C	4207	MET
1	C	4905	ALA
1	E	298	GLY
1	E	676	THR
1	E	720	HIS
1	E	802	PHE
1	E	908	VAL
1	E	1139	PHE
1	E	1182	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	E	1550	PRO
1	E	2109	ASP
1	E	4207	MET
1	E	4893	ALA
1	G	298	GLY
1	G	676	THR
1	G	736	HIS
1	G	802	PHE
1	G	1139	PHE
1	G	1182	ILE
1	G	1515	VAL
1	G	1550	PRO
1	G	2109	ASP
1	A	1613	LEU
1	A	2306	GLY
1	C	581	ASN
1	C	1515	VAL
1	C	1613	LEU
1	C	1768	THR
1	E	1515	VAL
1	E	1613	LEU
1	E	1768	THR
1	G	1613	LEU
1	A	908	VAL
1	A	1602	PRO
1	C	908	VAL
1	C	1602	PRO
1	E	1589	PRO
1	E	1602	PRO
1	G	908	VAL
1	G	1589	PRO
1	G	1602	PRO
1	G	3808	GLY
1	A	1589	PRO
1	C	60	PRO
1	C	1589	PRO
1	E	60	PRO
1	A	60	PRO
1	A	438	ILE
1	A	1142	PRO
1	A	1437	VAL
1	C	438	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	C	1142	PRO
1	C	1437	VAL
1	E	438	ILE
1	E	1142	PRO
1	E	1437	VAL
1	G	60	PRO
1	G	438	ILE
1	G	740	PRO
1	G	1142	PRO
1	G	1437	VAL
1	A	740	PRO
1	C	740	PRO
1	E	740	PRO
1	A	4035	VAL
2	B	7	ILE
2	D	7	ILE
2	F	7	ILE

5.3.2 Protein sidechains (i)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	2502/4276 (58%)	2472 (99%)	30 (1%)	71	83
1	C	2504/4276 (59%)	2476 (99%)	28 (1%)	73	84
1	E	2501/4276 (58%)	2472 (99%)	29 (1%)	71	83
1	G	2501/4276 (58%)	2474 (99%)	27 (1%)	73	84
2	B	89/90 (99%)	88 (99%)	1 (1%)	73	84
2	D	89/90 (99%)	88 (99%)	1 (1%)	73	84
2	F	89/90 (99%)	88 (99%)	1 (1%)	73	84
2	H	89/90 (99%)	88 (99%)	1 (1%)	73	84
All	All	10364/17464 (59%)	10246 (99%)	118 (1%)	74	84

All (118) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	46	LEU
1	A	454	PRO
1	A	806	PRO
1	A	865	PRO
1	A	892	THR
1	A	914	PRO
1	A	916	PRO
1	A	928	THR
1	A	939	VAL
1	A	978	THR
1	A	979	PRO
1	A	1055	PRO
1	A	1211	LEU
1	A	1458	HIS
1	A	1459	GLN
1	A	1929	MET
1	A	2135	LEU
1	A	2518	LEU
1	A	2555	CYS
1	A	2914	LYS
1	A	2925	GLU
1	A	3814	GLN
1	A	3824	LYS
1	A	3835	LEU
1	A	3987	ASP
1	A	4039	MET
1	A	4082	THR
1	A	4106	PRO
1	A	4207	MET
1	A	4215	ARG
2	B	34	LYS
1	C	454	PRO
1	C	806	PRO
1	C	859	VAL
1	C	865	PRO
1	C	892	THR
1	C	914	PRO
1	C	916	PRO
1	C	928	THR
1	C	939	VAL
1	C	978	THR
1	C	979	PRO
1	C	1055	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	C	1211	LEU
1	C	1458	HIS
1	C	1459	GLN
1	C	1929	MET
1	C	2135	LEU
1	C	2518	LEU
1	C	2555	CYS
1	C	2914	LYS
1	C	3814	GLN
1	C	3835	LEU
1	C	3987	ASP
1	C	4039	MET
1	C	4082	THR
1	C	4106	PRO
1	C	4207	MET
1	C	4215	ARG
2	D	34	LYS
1	E	454	PRO
1	E	806	PRO
1	E	865	PRO
1	E	892	THR
1	E	914	PRO
1	E	916	PRO
1	E	928	THR
1	E	939	VAL
1	E	978	THR
1	E	979	PRO
1	E	1055	PRO
1	E	1211	LEU
1	E	1458	HIS
1	E	1459	GLN
1	E	1513	ASP
1	E	1659	LEU
1	E	1929	MET
1	E	2135	LEU
1	E	2518	LEU
1	E	2555	CYS
1	E	2914	LYS
1	E	3814	GLN
1	E	3835	LEU
1	E	3987	ASP
1	E	4039	MET

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	E	4082	THR
1	E	4106	PRO
1	E	4207	MET
1	E	4215	ARG
2	F	34	LYS
1	G	454	PRO
1	G	806	PRO
1	G	859	VAL
1	G	865	PRO
1	G	892	THR
1	G	914	PRO
1	G	916	PRO
1	G	928	THR
1	G	939	VAL
1	G	978	THR
1	G	979	PRO
1	G	1055	PRO
1	G	1211	LEU
1	G	1458	HIS
1	G	1459	GLN
1	G	1513	ASP
1	G	1929	MET
1	G	2135	LEU
1	G	2139	PRO
1	G	2518	LEU
1	G	2555	CYS
1	G	3824	LYS
1	G	4039	MET
1	G	4082	THR
1	G	4106	PRO
1	G	4207	MET
1	G	4215	ARG
2	H	34	LYS

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (155) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	113	HIS
1	A	201	ASN
1	A	224	HIS
1	A	278	GLN
1	A	379	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	380	GLN
1	A	405	HIS
1	A	536	ASN
1	A	543	ASN
1	A	596	ASN
1	A	678	GLN
1	A	725	HIS
1	A	1127	HIS
1	A	1130	GLN
1	A	1201	HIS
1	A	1203	ASN
1	A	1459	GLN
1	A	1532	ASN
1	A	1631	GLN
1	A	1719	HIS
1	A	2184	ASN
1	A	2196	ASN
1	A	2253	HIS
1	A	2260	ASN
1	A	2498	HIS
1	A	2856	ASN
1	A	3771	HIS
1	A	3837	GLN
1	A	3882	GLN
1	A	3895	HIS
1	A	3896	ASN
1	A	3900	GLN
1	A	3906	GLN
1	A	3970	GLN
1	A	3994	HIS
1	A	3998	HIS
1	A	4857	ASN
1	A	4947	GLN
2	B	87	HIS
1	C	113	HIS
1	C	201	ASN
1	C	224	HIS
1	C	278	GLN
1	C	379	HIS
1	C	380	GLN
1	C	405	HIS
1	C	536	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	C	543	ASN
1	C	596	ASN
1	C	678	GLN
1	C	725	HIS
1	C	1127	HIS
1	C	1130	GLN
1	C	1201	HIS
1	C	1203	ASN
1	C	1459	GLN
1	C	1532	ASN
1	C	1631	GLN
1	C	1719	HIS
1	C	2184	ASN
1	C	2196	ASN
1	C	2253	HIS
1	C	2260	ASN
1	C	2498	HIS
1	C	2856	ASN
1	C	3699	HIS
1	C	3771	HIS
1	C	3837	GLN
1	C	3882	GLN
1	C	3895	HIS
1	C	3896	ASN
1	C	3900	GLN
1	C	3906	GLN
1	C	3970	GLN
1	C	3994	HIS
1	C	3998	HIS
1	C	4947	GLN
2	D	87	HIS
1	E	113	HIS
1	E	201	ASN
1	E	224	HIS
1	E	278	GLN
1	E	379	HIS
1	E	380	GLN
1	E	405	HIS
1	E	536	ASN
1	E	543	ASN
1	E	596	ASN
1	E	678	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	E	725	HIS
1	E	1127	HIS
1	E	1130	GLN
1	E	1201	HIS
1	E	1203	ASN
1	E	1459	GLN
1	E	1631	GLN
1	E	1719	HIS
1	E	2184	ASN
1	E	2196	ASN
1	E	2253	HIS
1	E	2260	ASN
1	E	2498	HIS
1	E	2856	ASN
1	E	3699	HIS
1	E	3771	HIS
1	E	3837	GLN
1	E	3882	GLN
1	E	3895	HIS
1	E	3896	ASN
1	E	3900	GLN
1	E	3906	GLN
1	E	3970	GLN
1	E	3994	HIS
1	E	3998	HIS
1	E	4857	ASN
1	E	4947	GLN
2	F	87	HIS
1	G	113	HIS
1	G	201	ASN
1	G	224	HIS
1	G	278	GLN
1	G	379	HIS
1	G	380	GLN
1	G	405	HIS
1	G	536	ASN
1	G	543	ASN
1	G	596	ASN
1	G	678	GLN
1	G	725	HIS
1	G	1127	HIS
1	G	1130	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	G	1201	HIS
1	G	1203	ASN
1	G	1459	GLN
1	G	1631	GLN
1	G	1719	HIS
1	G	2184	ASN
1	G	2196	ASN
1	G	2253	HIS
1	G	2260	ASN
1	G	2498	HIS
1	G	2856	ASN
1	G	3771	HIS
1	G	3809	ASN
1	G	3896	ASN
1	G	3970	GLN
1	G	3994	HIS
1	G	3998	HIS
1	G	4034	ASN
1	G	4142	ASN
1	G	4728	HIS
1	G	4886	HIS
1	G	4947	GLN
1	G	4984	ASN
2	H	87	HIS

5.3.3 RNA

There are no RNA molecules in this entry.

5.4 Non-standard residues in protein, DNA, RNA chains

There are no non-standard protein/DNA/RNA residues in this entry.

5.5 Carbohydrates

There are no monosaccharides in this entry.

5.6 Ligand geometry

Of 4 ligands modelled in this entry, 4 are monoatomic - leaving 0 for Mogul analysis.

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.

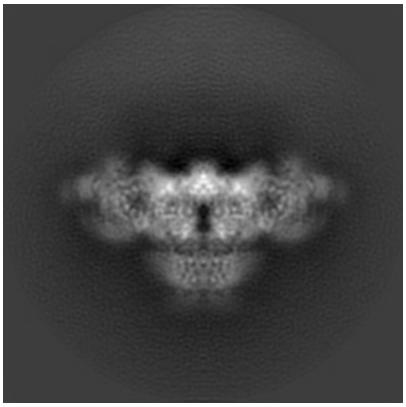
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-9521. These allow visual inspection of the internal detail of the map and identification of artifacts.

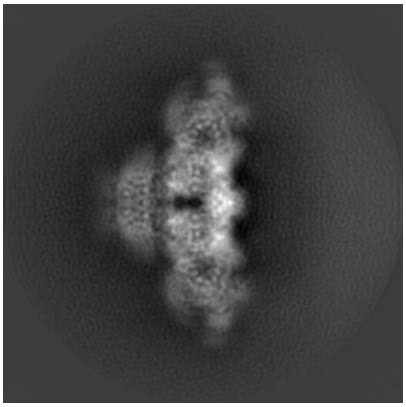
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections

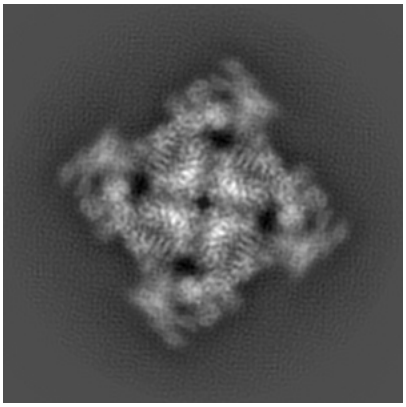
6.1.1 Primary map



X



Y

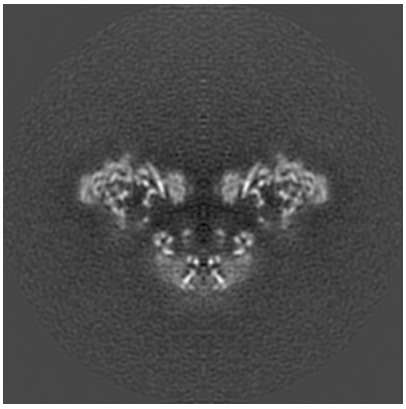


Z

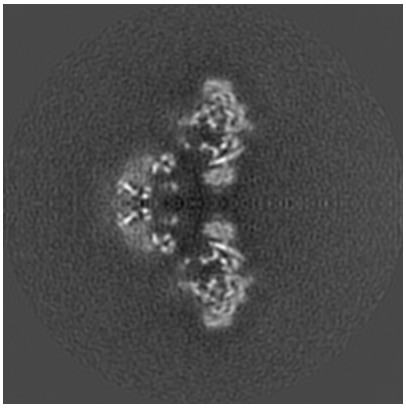
The images above show the map projected in three orthogonal directions.

6.2 Central slices

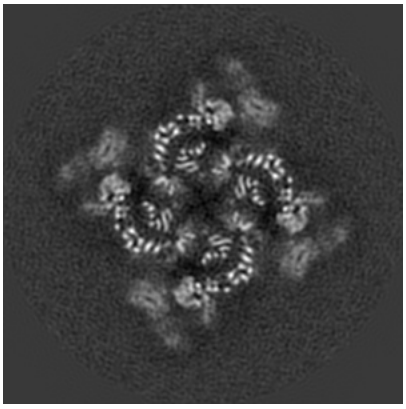
6.2.1 Primary map



X Index: 180



Y Index: 180

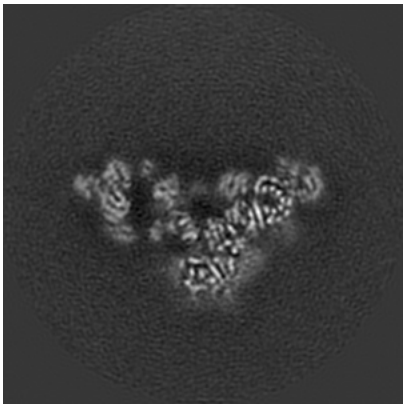


Z Index: 180

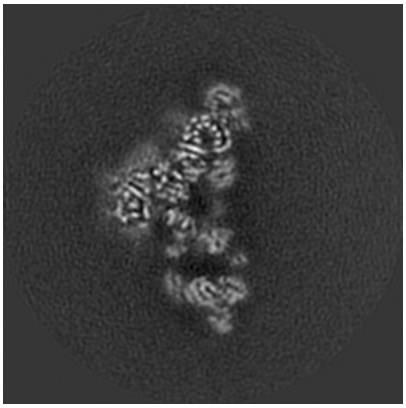
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

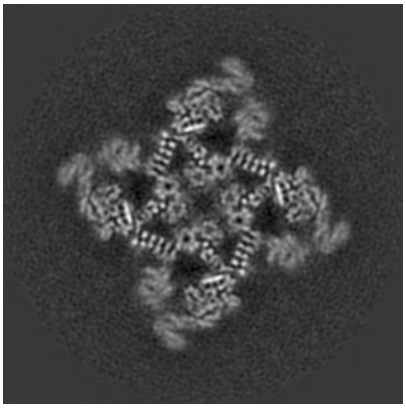
6.3.1 Primary map



X Index: 169



Y Index: 191

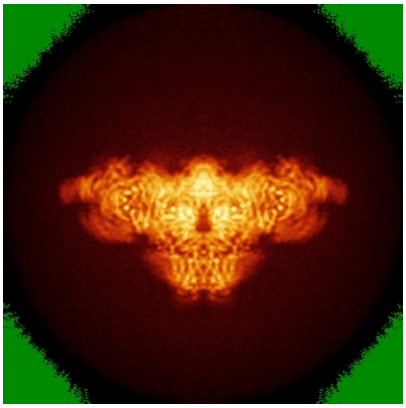


Z Index: 190

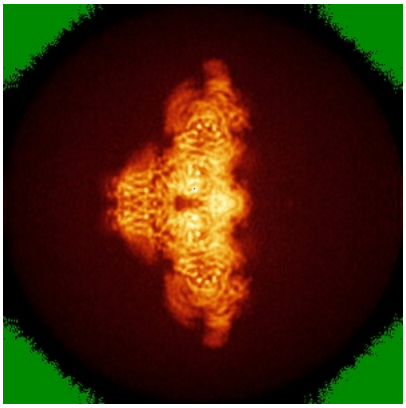
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) (i)

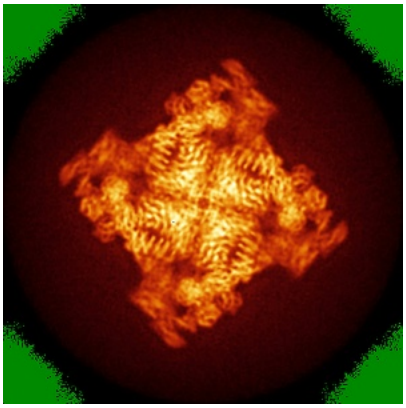
6.4.1 Primary map



X



Y

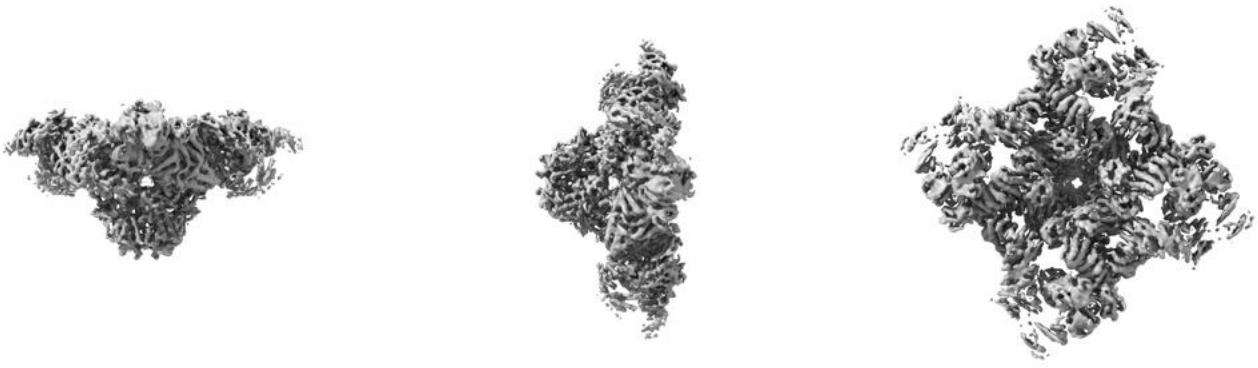


Z

The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

6.5 Orthogonal surface views (i)

6.5.1 Primary map



X Y Z

The images above show the 3D surface view of the map at the recommended contour level 0.075. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

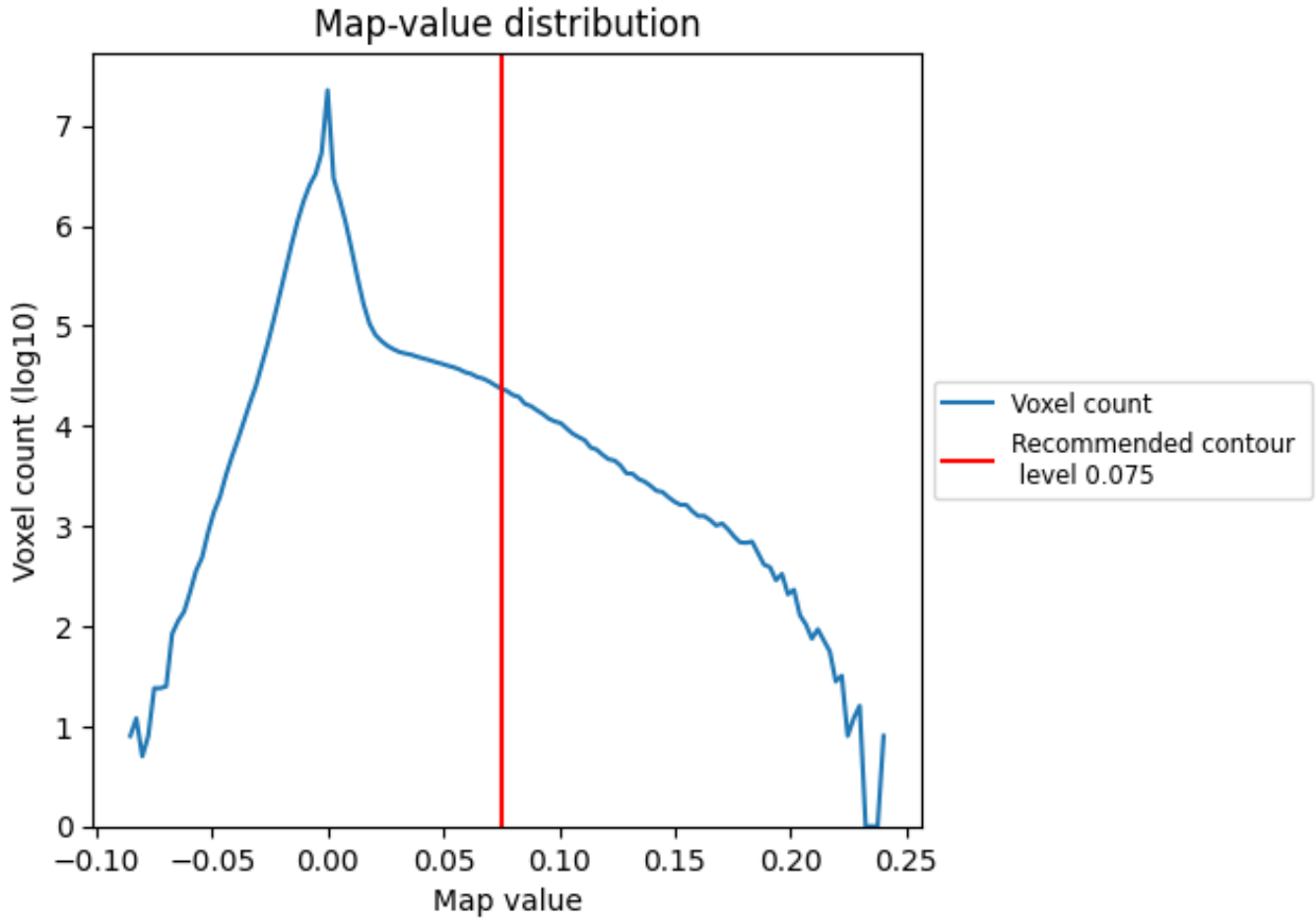
6.6 Mask visualisation (i)

This section was not generated. No masks/segmentation were deposited.

7 Map analysis

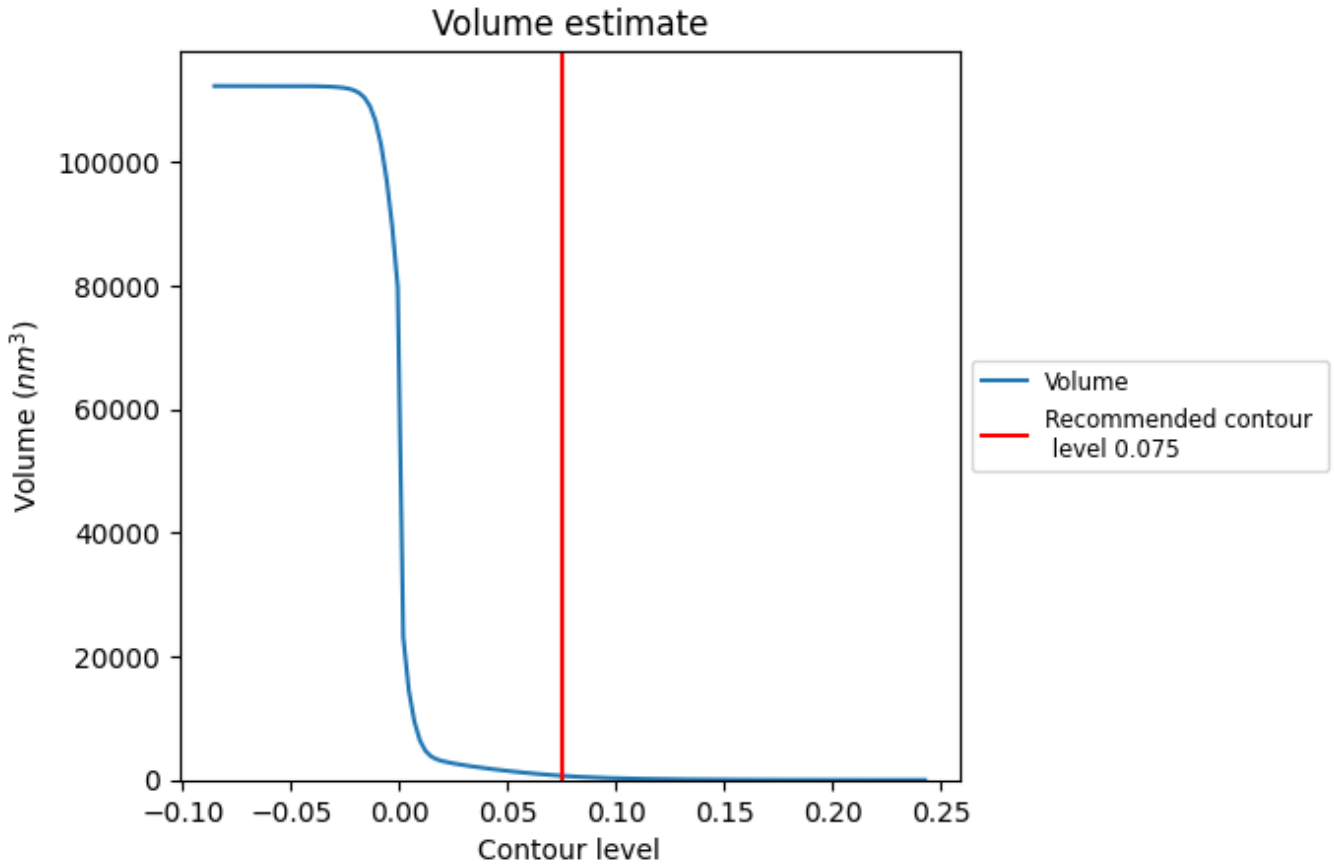
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

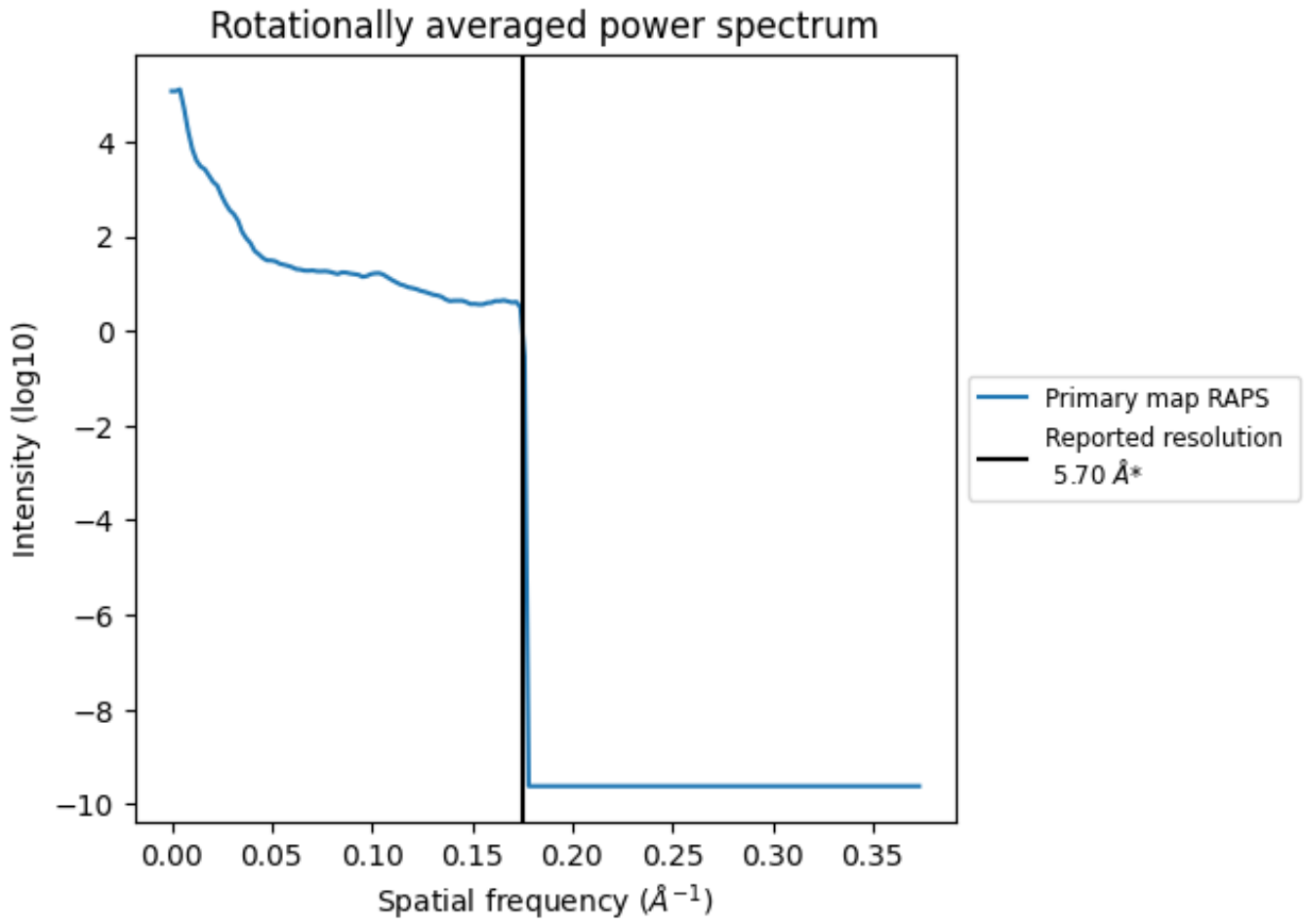
7.2 Volume estimate



The volume at the recommended contour level is 679 nm^3; this corresponds to an approximate mass of 613 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum (i)



*Reported resolution corresponds to spatial frequency of 0.175 Å^{-1}

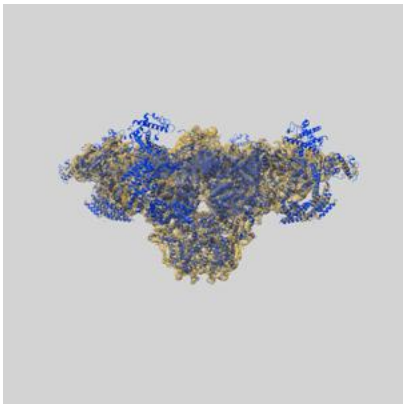
8 Fourier-Shell correlation

This section was not generated. No FSC curve or half-maps provided.

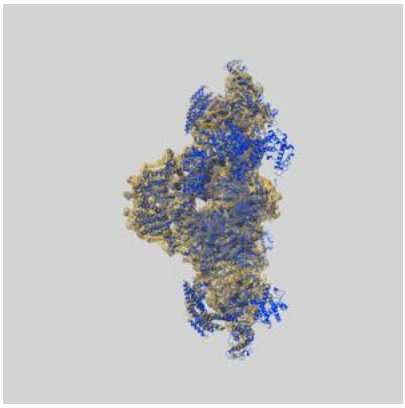
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-9521 and PDB model 5GL1. Per-residue inclusion information can be found in section 3 on page 4.

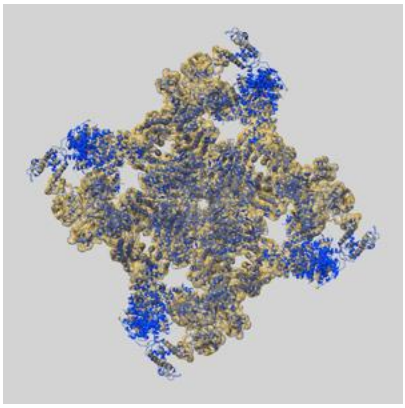
9.1 Map-model overlay



X



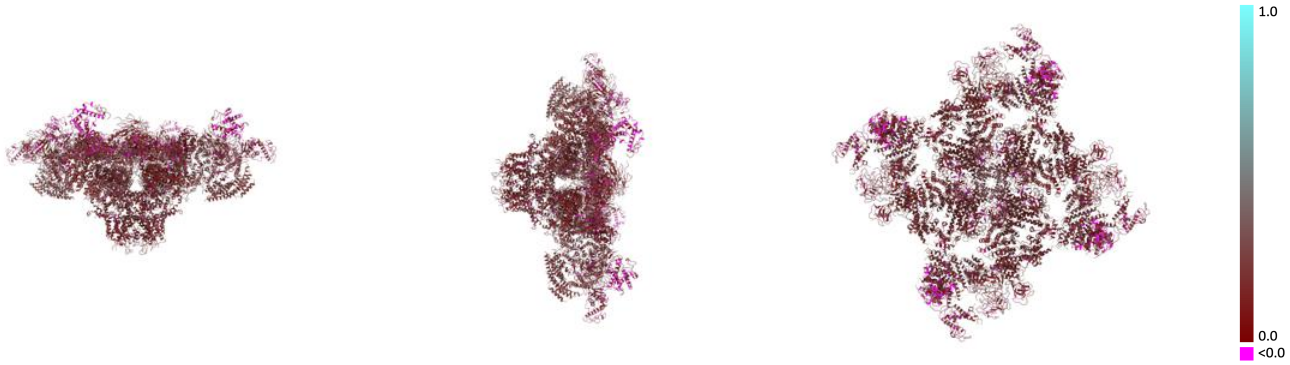
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.075 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

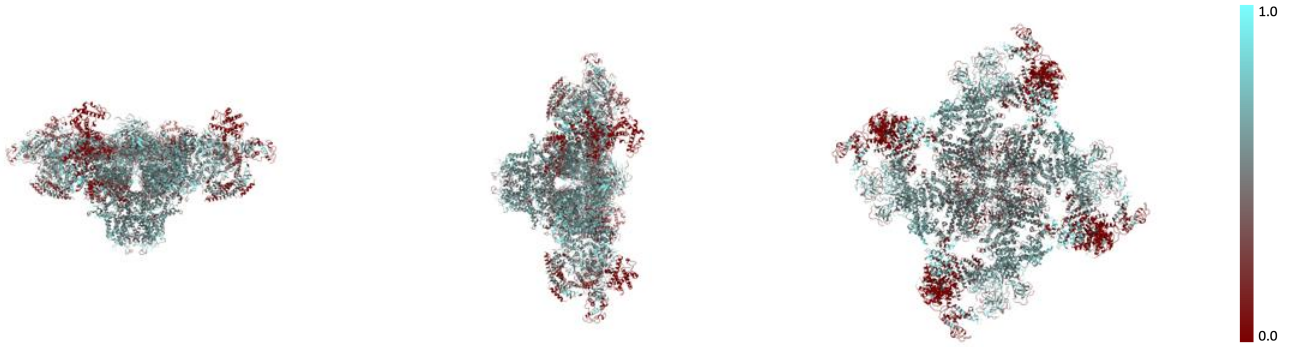
9.2 Q-score mapped to coordinate model (i)



X Y Z

The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

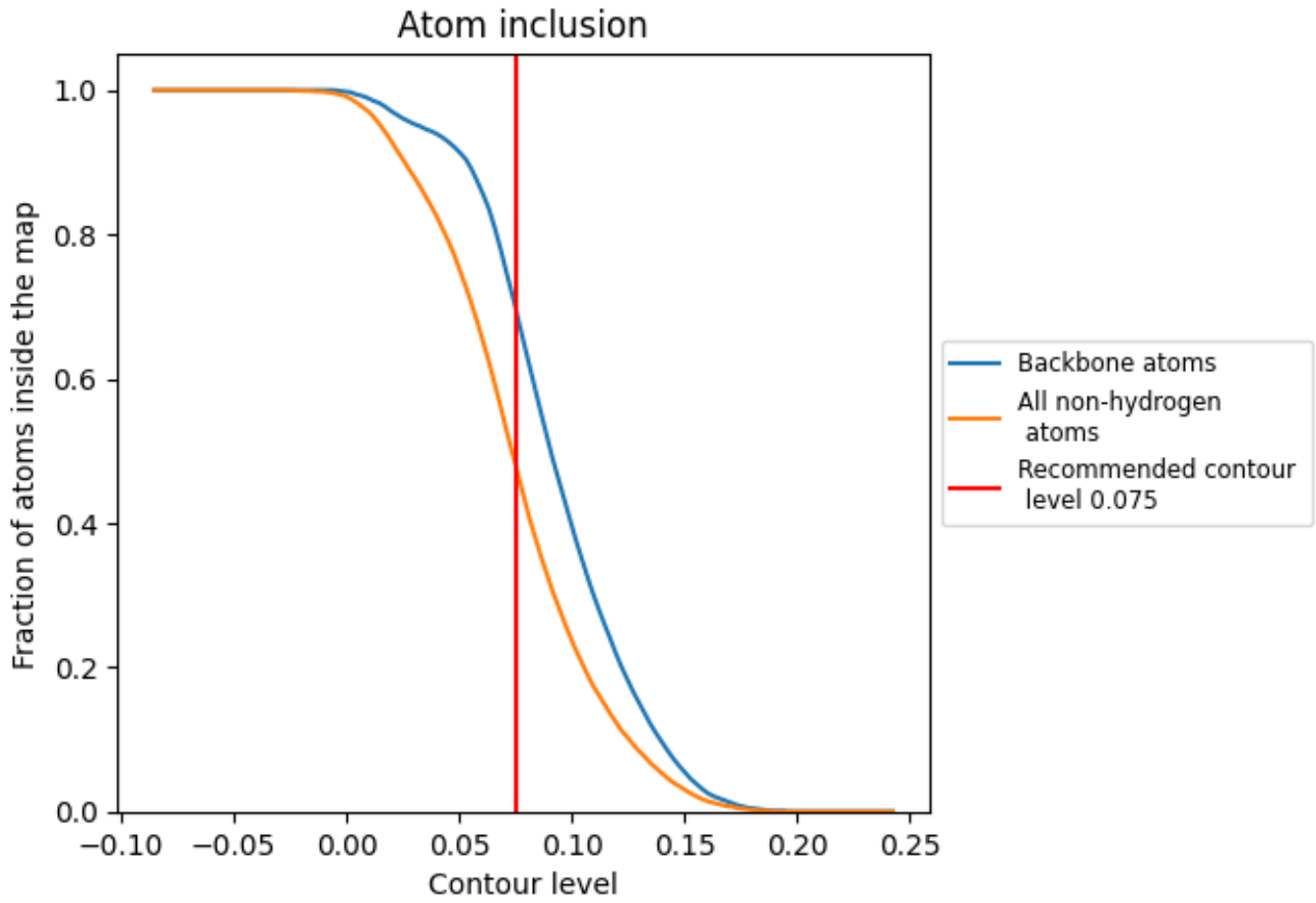
9.3 Atom inclusion mapped to coordinate model (i)



X Y Z

The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.075).

9.4 Atom inclusion (i)



At the recommended contour level, 70% of all backbone atoms, 48% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary

The table lists the average atom inclusion at the recommended contour level (0.075) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.4830	0.2010
A	0.4820	0.2020
B	0.4990	0.2060
C	0.4820	0.2010
D	0.4990	0.2080
E	0.4820	0.2010
F	0.5000	0.2050
G	0.4820	0.2010
H	0.4970	0.2040