



## Full wwPDB EM Validation Report ⓘ

Nov 20, 2022 – 08:38 AM EST

PDB ID : 7M6L  
EMDB ID : EMD-23699  
Title : High resolution structure of the membrane embedded skeletal muscle ryanodine receptor  
Authors : Melville, Z.; Kim, K.; Clarke, O.B.; Marks, A.R.  
Deposited on : 2021-03-25  
Resolution : 3.98 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](mailto: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>.

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

EMDB validation analysis : 0.0.1.dev43  
Mogul : 1.8.5 (274361), CSD as541be (2020)  
MolProbity : 4.02b-467  
buster-report : 1.1.7 (2018)  
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)  
MapQ : 1.9.9  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)  
Validation Pipeline (wwPDB-VP) : 2.31.2

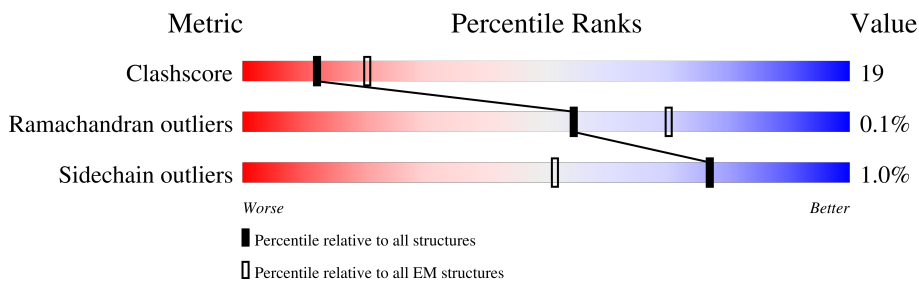
# 1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

*ELECTRON MICROSCOPY*

The reported resolution of this entry is 3.98 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  $\geq 3$ , 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  $\leq 5\%$ . 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	F	108	
1	H	108	
1	J	108	
1	O	108	
2	A	5037	
2	B	5037	
2	G	5037	
2	I	5037	

## 2 Entry composition [i](#)

There are 6 unique types of molecules in this entry. The entry contains 140412 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 Peptidyl-prolyl cis-trans isomerase FKBP1B.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	F	107	818	516	144	154	4	0	0
1	H	107	818	516	144	154	4	0	0
1	J	107	818	516	144	154	4	0	0
1	O	107	818	516	144	154	4	0	0

- Molecule 2 is a protein called Ryanodine receptor 1.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
2	A	4299	34238	21819	5882	6302	235	3	0
2	G	4299	34238	21819	5882	6302	235	3	0
2	B	4299	34238	21819	5882	6302	235	3	0
2	I	4299	34238	21819	5882	6302	235	3	0

- Molecule 3 is ADENOSINE-5'-TRIPHOSPHATE (three-letter code: ATP) (formula:  $C_{10}H_{16}N_5O_{13}P_3$ ).



Mol	Chain	Residues	Atoms					AltConf
3	A	1	Total	C	N	O	P	0
			31	10	5	13	3	
3	G	1	Total	C	N	O	P	0
			31	10	5	13	3	
3	B	1	Total	C	N	O	P	0
			31	10	5	13	3	
3	I	1	Total	C	N	O	P	0
			31	10	5	13	3	

- Molecule 4 is CALCIUM ION (three-letter code: CA) (formula: Ca).

Mol	Chain	Residues	Atoms		AltConf
4	A	1	Total	Ca	0
			1	1	
4	G	1	Total	Ca	0
			1	1	
4	B	1	Total	Ca	0
			1	1	
4	I	1	Total	Ca	0
			1	1	

- Molecule 5 is ZINC ION (three-letter code: ZN) (formula: Zn).

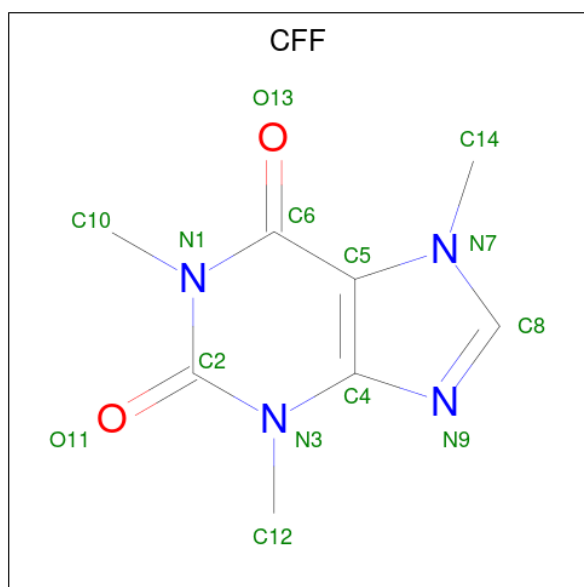
Mol	Chain	Residues	Atoms		AltConf
5	A	1	Total	Zn	0
			1	1	

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Mol	Chain	Residues	Atoms		AltConf
5	G	1	Total	Zn	0
			1	1	
5	B	1	Total	Zn	0
			1	1	
5	I	1	Total	Zn	0
			1	1	

- Molecule 6 is CAFFEINE (three-letter code: CFF) (formula:  $C_8H_{10}N_4O_2$ ).

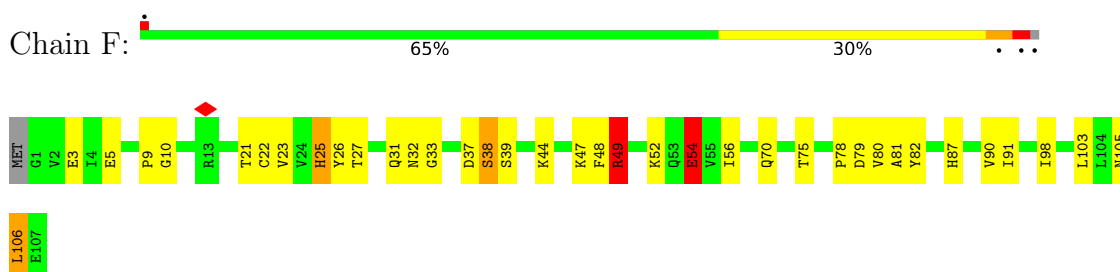


Mol	Chain	Residues	Atoms				AltConf
6	A	1	Total	C	N	O	0
			14	8	4	2	
6	G	1	Total	C	N	O	0
			14	8	4	2	
6	B	1	Total	C	N	O	0
			14	8	4	2	
6	I	1	Total	C	N	O	0
			14	8	4	2	

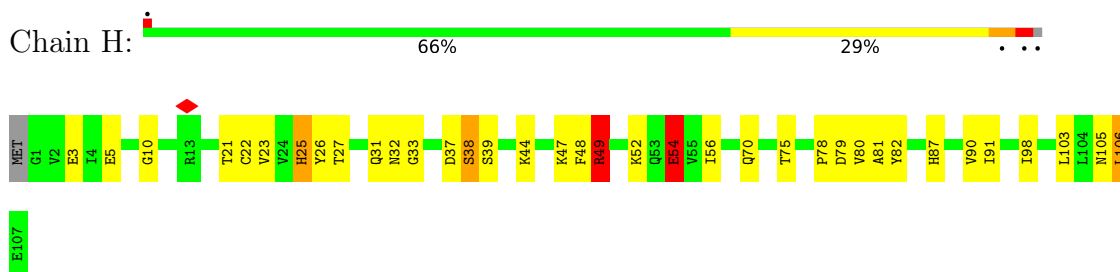
### 3 Residue-property plots [i](#)

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.

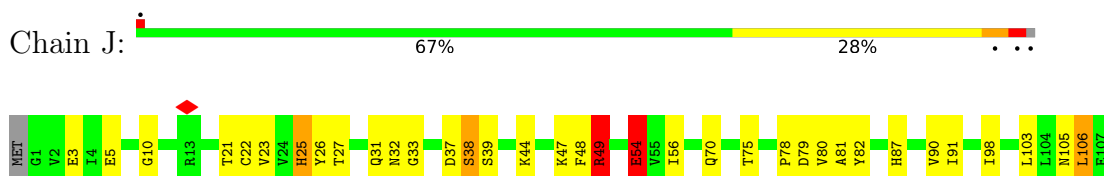
- Molecule 1: Peptidyl-prolyl cis-trans isomerase FKBP1B



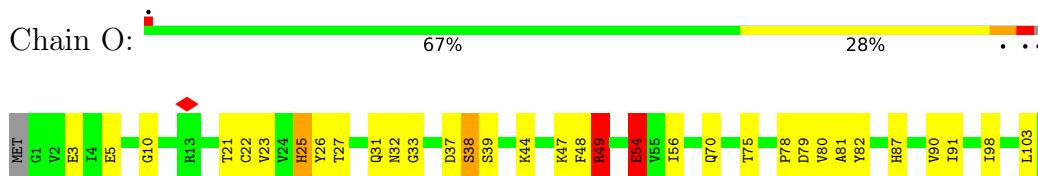
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- Molecule 1: Peptidyl-prolyl cis-trans isomerase FKBP1B



- Molecule 2: Ryanodine receptor 1







V2509	R2588	R2650	K2725	L2785	THR	L2905	W2666	M3038	R3111	V3183	D3252	I3322
V2510	R2589	C2651	LYS	K2786	ALA	V2906	M2967	I3039	L3112	E3184	I3253	I3323
G2511	L2589	R2652	ALA	T2787	GLN	P2907	D2968	K3185	G3113	K3185	A3257	V3324
I2512	R2590	K2653	THR	T2788	THR	Y2908	L2969	L3042	G3113	L3042	A3258	M3325
E2513	R2591	Y2654	VAL	H2789	TYR	D2909	S2970	F3043	VAL	F3043	R3262	M3326
N2514	G2592	Y2655	ASP	P2789	ASP	Y2910	Q2971	C3044	SER	C3044	R3263	L3327
K2515	R2593	D2516	ALA	M2790	PRO	T2911	T2910	K3045	GLN	K3045	L3190	G3328
F2517	S2594	L2518	GLU	L2791	ARG	L2912	F2973	L3046	ALA	L3046	G3191	I3329
L2519	L2595	L2519	GLY	R2792	GLU	A2913	L2974	A3047	THR	A3047	E3192	P3330
H2520	T2596	H2520	GLY	R2793	GLY	K2914	H2976	A3048	GLN	A3048	C3193	E3331
V2521	Q2599	V2521	F2735	P2793	N2855	E2915	E2978	R3053	K3123	A3195	P3267	W3334
L2522	R2600	L2522	D2736	K2795	P2857	K2916	A2979	V3054	G3124	R3196	K3268	M3335
Q2523	D2601	Q2523	R2738	T2796	Q2858	A2917	V2980	V3054	Y3131	L3197	V3269	K3336
V2524	V2603	V2524	P2739	S2797	P2859	R2918	V2981	S3055	T3132	A3198	A3198	L3337
G2525	E2604	G2525	V2740	F2799	P2860	R2919	S2982	L3056	F3133	A3199	I3272	I3338
L2526	E2605	L2526	E2741	E2799	P2861	R2920	S2983	F3057	L3136	T3273	T3273	A3339
F2527	C2606	F2527	T2742	K2800	D2862	R2921	G2984	G3058	L3137	L3274	L3274	F3340
P2528	L2607	P2528	L2743	E2801	S2863	E2921	R2985	T3059	L3137	D3060	P3275	F3341
D2529	M2608	D2529	L2744	K2802	G2864	K2922	V2986	D3061	P3138	A3061	M3276	A3342
M2530	A2609	M2530	L2745	D2803	V2865	A2923	E2987	A3061	T3141	F3205	L3277	I3345
R2531	C2611	R2531	I2746	E2804	L2866	Q2924	K2988	V3065	T3142	L3206	L3277	C3346
A2534	R2612	A2534	L2747	R2805	L2867	E2925	H2991	L3068	L3143	L3207	C3278	R3348
S2535	A2613	S2535	P2748	R2806	S2868	L2926	Q2992	H3069	F3144	A3077	C3279	A3349
L2536	L2614	L2536	E2749	W2807	E2869	L2927	Q2993	R3078	Q3145	R3078	L3280	L3350
D2537	R2615	D2537	K2750	P2808	E2870	L2928	Q2994	R3079	H3146	I3070	P3282	F3351
T2538	S2617	T2538	K2751	P2809	L2871	F2929	E2994	F3010	I3147	L3071	R3283	R3352
F2541	M2618	F2541	L2752	I2809	E2872	L2930	L2995	F3011	T3147	A3072	E3212	L3353
S2542	M2619	S2542	D2753	K2810	Q2872	L2931	K2996	F3012	A3148	R3073	Y3213	W3354
E2545	Q2620	E2545	S2752	E2811	A2873	Q2932	A2999	S3014	G3149	S3074	N3214	H3355
V2553	H2621	V2553	F2754	S2812	M2874	M2932	K3000	D3076	H3150	S3074	A3215	S3356
A2557	L2623	A2557	L2755	L2813	A2875	N2933	K3000	D3076	Q3151	D3076	A3215	R3357
V2558	R2624	V2558	M2756	K2814	E2876	G2934	N3007	A3077	D3152	Y3218	E3290	F3358
L2559	R2625	L2559	K2757	K2815	Q2877	Q2934	Q3008	R3078	D3155	Y3219	A3291	I3359
P2560	L2626	P2560	F2758	A2815	Q2877	Y2935	Y3009	R3079	F3156	T3221	P3292	P3360
L2562	V2627	L2562	F2759	M2816	L2878	A2936	F3010	F3080	F3157	R3225	P3293	R3361
C2563	F2628	C2563	E2760	I2817	A2879	L2938	F3011	M3081	L3158	R3226	P3294	L3362
C2565	D2629	C2565	Y2761	W2819	E2880	T2938	F3012	K3082	D3159	E3226	P3295	L3363
A2570	V2630	A2570	T2762	W2820	N2881	GLY	H3013	G3084	D3160	R3227	L3296	R3364
R2575	N2634	R2575	T2763	W2821	Y2882	LEU	C3014	K3089	Q3161	A3228	P3297	R3365
A2576	E2635	A2576	E2764	T2822	H2883	LYS	L3015	A3090	Q3162	L3229	A3298	V3372
M2579	F2636	M2579	K2765	T2823	N2884	ASP	Y3016	F3017	R3166	L3230	G3299	V3373
V2579	A2637	V2579	W2766	E2824	T2885	LEU	F3017	L3018	T3168	L3232	C3304	E3377
D2580	K2638	D2580	A2767	K2825	G2887	ASP	S3019	S3096	F3024	E3037	C3304	E3377
M2581	M2639	M2581	F2768	A2826	R2888	THR	V3024	E3037	L3025	E3238	T3305	S3309
L2583	P2640	L2583	D2769	R2827	K2889	S2949	L3025	E3037	R3102	E3238	S3309	S3309
H2584	L2641	H2584	W2770	E2828	K2890	S2950	G3026	E3037	I3103	M3239	L3312	L3312
T2585	L2642	T2585	L2771	E2829	K2891	I2951	S3027	E3037	Y3173	C3240	L3313	N3313
E2649	L2644	E2649	Q2772	E2830	K2892	E2952	G3028	E3037	S3174	P3241	S3314	S3314
	T2645		L2771	E2830	E2893	K2954	G3029	E3037	L3175	D3242	L3315	L3315
	N2646		Q2772	GLU	E2894	R2955	H3030	E3037	G3176	P3244	L3316	L3316
	H2647		GLU	ARC	L2894	F2956	N3033	E3037	T3177	V3245	M3317	M3317
	Y2648		GLU	THR	E2895	F2957	K3036	E3037	G3177	E3108	N3318	N3318
	E2649		THR	THR	E2896	G2958	K3036	E3037	T3177	N3109	I3319	I3319
			ARC	THR	E2897	G2898	E3037	E3037	N3180	L3246	L3320	L3320
			LYS	LYS	K2897	L2960	E3037	E3037	T3181	L3246	L3321	R3321
			LYS	LYS	K2898	L2960	E3037	E3037	Y3182	L3249	L3321	R3321
			ILE	ILE	G2899	L2963	E3037	E3037		M3250	L3321	R3321
			SER	SER	G2900	L2964	E3037	E3037		A3251	L3321	R3321
			GLN	GLN	T2901	R2965	E3037	E3037			L3321	R3321
					P2903	L2904	E3037	E3037			L3321	R3321



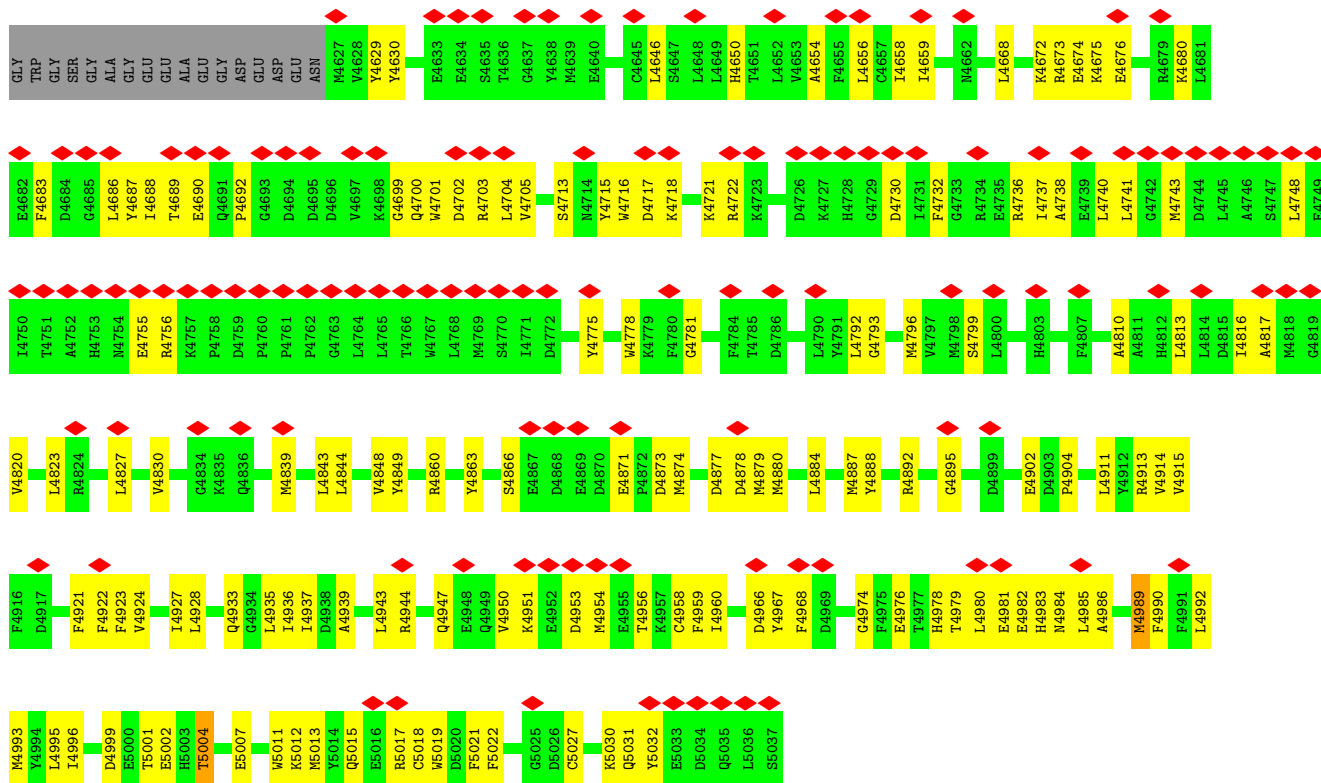


V1501	SER	V1509	PRO	S1510	GLY	C1518	ALA	G1525	LEU	E1543	GLY	T1546	HIS	L1547	ASP	F1548	VAL	V1552	PRO	F1553	GLY	V1554	GLY	T1557	THR	V1561	GLN	I1562	PRO	Q1563	GLY	K1568	GLU	Q1569	GLU	M1571	VAL	I1572	VAL	M1573	ARG	L1574	ALA	P1575	GLU	S1576	ASN	A1577	GLU	A1578	LEU	R1584	ALA	K1585	THR	M1586	GLU	Q1590	GLU	C1591	ASP	L1595	LYS	E1596	ARG	V1597	GLY	Q1598	PHE	M1599	LEU	S1485	ASP	R1607	TYR	M1608	ALA	L1257	LYS	A1258	ALA	M1260	ALA	T1263	MET	V1264	GLN	D1265	GLN	T1266	THR	C1269	PRO	L1270	PRO	R1271	PRO	L1272	ALA	S1279	LEU	S1282	GLY	M1286	THR	L1287	GLY	F1288	GLY	R1290	THR	L1291	PRO	S1292	GLY	F1297	THR	C1303	GLN	T1304	PRO	ALA	GLY	ALA	GLU	ALA	THR	PRO	LEU	ALA	ALA	PRO	GLY	G1218	VAL	E1221	GLN	G1222	LEU	F1223	PRO	F1226	GLU	M1230	GLU	Q1231	ALA	R1232	ALA	P1247	ALA	V1248	GLU	H1252	ASP	P1253	ASP	E1137	ASP	F1138	TYR	G1116	GLY	G1126	GLY	R1131	ALA	M1132	ALA	L1134	GLY	S1136	PRO	E1154	PHE	F1157	LEU	Y1158	PHE	F1159	LEU	Q1144	ALA	Y1122	PRO	F1123	THR	M1125	LYS	G1126	ASN	E1114	GLY	L1115	LEU	G1116	LYS	F1111	ASP	D1112	ARG	V1113	GLU	E1114	ASN	L1115	LEU	S1038	GLY	Q1041	PRO	A1042	ALA	V1043	GLU	R1044	GLU	T1045	GLU	L1046	ALA	G1048	ARG	Y1049	LYS	M1052	GLY	I1053	PRO	K1055	GLY	P1056	PHE	F1056	LEU	D1057	PHE	Q1058	TYR	E1059	ALA	S1008	GLY	Y1007	GLY	R1000	GLY	E1008	THR	E1009	GLY	R1010	PRO	A1015	GLN	R1016	GLU	N1017	GLY	N1018	GLY	P1019	GLY	E1020	GLY	L1021	GLY	Y1024	GLY	L1027	GLY	D1028	GLY	K1032	GLY	N1035	GLY	R1036	GLY	D1037	GLY	S1038	GLY	Q1041	PRO	A1042	ALA	V1043	GLU	R1044	GLU	T1045	GLU	L1046	ALA	G1048	ARG	Y1049	LYS	M1052	GLY	I1053	PRO	K1055	GLY	P1056	PHE	F1056	LEU	D1057	PHE	Q1058	TYR	E1059	ALA	R1018	GLY	N1019	GLY	Y1020	GLY	N1021	GLY	R1022	GLY	Q1023	GLY	N1024	GLY	S1025	GLY	G1026	GLY	E1027	GLY	T1028	GLY	L1029	GLY	K1030	GLY	L1032	GLY	L1033	GLY	R1034	GLY	E1035	GLY	R1036	GLY	R1037	GLY	R1038	GLY	R1039	GLY	R1040	GLY	R1041	GLY	R1042	GLY	R1043	GLY	R1044	GLY	R1045	GLY	R1046	GLY	R1047	GLY	R1048	GLY	R1049	GLY	R1050	GLY	R1051	GLY	R1052	GLY	R1053	GLY	R1054	GLY	R1055	GLY	R1056	GLY	R1057	GLY	R1058	GLY	R1059	GLY	R1060	GLY	R1061	GLY	R1062	GLY	R1063	GLY	R1064	GLY	R1065	GLY	R1066	GLY	R1067	GLY	R1068	GLY	R1069	GLY	R1070	GLY	R1071	GLY	R1072	GLY	R1073	GLY	R1074	GLY	R1075	GLY	R1076	GLY	R1077	GLY	R1078	GLY	R1079	GLY	R1080	GLY	R1081	GLY	R1082	GLY	R1083	GLY	R1084	GLY	R1085	GLY	R1086	GLY	R1087	GLY	R1088	GLY	R1089	GLY	R1090	GLY	R1091	GLY	R1092	GLY	R1093	GLY	R1094	GLY	R1095	GLY	R1096	GLY	R1097	GLY	R1098	GLY	R1099	GLY	R1100	GLY	R1101	GLY	R1102	GLY	R1103	GLY	R1104	GLY	R1105	GLY	R1106	GLY	R1107	GLY	R1108	GLY	R1109	GLY	R1110	GLY	R1111	GLY	R1112	GLY	R1113	GLY	R1114	GLY	R1115	GLY	R1116	GLY	R1117	GLY	R1118	GLY	R1119	GLY	R1120	GLY	R1121	GLY	R1122	GLY	R1123	GLY	R1124	GLY	R1125	GLY	R1126	GLY	R1127	GLY	R1128	GLY	R1129	GLY	R1130	GLY	R1131	GLY	R1132	GLY	R1133	GLY	R1134	GLY	R1135	GLY	R1136	GLY	R1137	GLY	R1138	GLY	R1139	GLY	R1140	GLY	R1141	GLY	R1142	GLY	R1143	GLY	R1144	GLY	R1145	GLY	R1146	GLY	R1147	GLY	R1148	GLY	R1149	GLY	R1150	GLY	R1151	GLY	R1152	GLY	R1153	GLY	R1154	GLY	R1155	GLY	R1156	GLY	R1157	GLY	R1158	GLY	R1159	GLY	R1160	GLY	R1161	GLY	R1162	GLY	R1163	GLY	R1164	GLY	R1165	GLY	R1166	GLY	R1167	GLY	R1168	GLY	R1169	GLY	R1170	GLY	R1171	GLY	R1172	GLY	R1173	GLY	R1174	GLY	R1175	GLY	R1176	GLY	R1177	GLY	R1178	GLY	R1179	GLY	R1180	GLY	R1181	GLY	R1182	GLY	R1183	GLY	R1184	GLY	R1185	GLY	R1186	GLY	R1187	GLY	R1188	GLY	R1189	GLY	R1190	GLY	R1191	GLY	R1192	GLY	R1193	GLY	R1194	GLY	R1195	GLY	R1196	GLY	R1197	GLY	R1198	GLY	R1199	GLY	R1200	GLY	R1201	GLY	R1202	GLY	R1203	GLY	R1204	GLY	R1205	GLY	R1206	GLY	R1207	GLY	R1208	GLY	R1209	GLY	R1210	GLY	R1211	GLY	R1212	GLY	R1213	GLY	R1214	GLY	R1215	GLY	R1216	GLY	R1217	GLY	R1218	GLY	R1219	GLY	R1220	GLY	R1221	GLY	R1222	GLY	R1223	GLY	R1224	GLY	R1225	GLY	R1226	GLY	R1227	GLY	R1228	GLY	R1229	GLY	R1230	GLY	R1231	GLY	R1232	GLY	R1233	GLY	R1234	GLY	R1235	GLY	R1236	GLY	R1237	GLY	R1238	GLY	R1239	GLY	R1240	GLY	R1241	GLY	R1242	GLY	R1243	GLY	R1244	GLY	R1245	GLY	R1246	GLY	R1247	GLY	R1248	GLY	R1249	GLY	R1250	GLY	R1251	GLY	R1252	GLY	R1253	GLY	R1254	GLY	R1255	GLY	R1256	GLY	R1257	GLY	R1258	GLY	R1259	GLY	R1260	GLY	R1261	GLY	R1262	GLY	R1263	GLY	R1264	GLY	R1265	GLY	R1266	GLY	R1267	GLY	R1268	GLY	R1269	GLY	R1270	GLY	R1271	GLY	R1272	GLY	R1273	GLY	R1274	GLY	R1275	GLY	R1276	GLY	R1277	GLY	R1278	GLY	R1279	GLY	R1280	GLY	R1281	GLY	R1282	GLY	R1283	GLY	R1284	GLY	R1285	GLY	R1286	GLY	R1287	GLY	R1288	GLY	R1289	GLY	R1290	GLY	R1291	GLY	R1292	GLY	R1293	GLY	R1294	GLY	R1295	GLY	R1296	GLY	R1297	GLY	R1298	GLY	R1299	GLY	R1300	GLY	R1301	GLY	R1302	GLY	R1303	GLY	R1304	GLY	R1305	GLY	R1306	GLY	R1307	GLY	R1308	GLY	R1309	GLY	R1310	GLY	R1311	GLY	R1312	GLY	R1313	GLY	R1314	GLY	R1315	GLY	R1316	GLY	R1317	GLY	R1318	GLY	R1319	GLY	R1320	GLY	R1321	GLY	R1322	GLY	R1323	GLY	R1324	GLY	R1325	GLY	R1326	GLY	R1327	GLY	R1328	GLY	R1329	GLY	R1330	GLY	R1331	GLY	R1332	GLY	R1333	GLY	R1334	GLY	R1335	GLY	R1336	GLY	R1337	GLY	R1338	GLY	R1339	GLY	R1340	GLY	R1341	GLY	R1342	GLY	R1343	GLY	R1344	GLY	R1345	GLY	R1346	GLY	R1347	GLY	R1348	GLY	R1349	GLY	R1350	GLY	R1351	GLY	R1352	GLY	R1353	GLY	R1354	GLY	R1355	GLY	R1356	GLY	R1357	GLY	R1358	GLY	R1359	GLY	R1360	GLY	R1361	GLY	R1362	GLY	R1363	GLY	R1364	GLY	R1365	GLY	R1366	GLY	R1367	GLY	R1368	GLY	R1369	GLY	R1370	GLY	R1371	GLY	R1372	GLY	R1373	GLY	R1374	GLY	R1375	GLY	R1376	GLY	R1377	GLY	R1378	GLY	R1379	GLY	R1380	GLY	R1381	GLY	R1382	GLY	R1383	GLY	R1384	GLY	R1385	GLY	R1386	GLY	R1387	GLY	R1388	GLY	R1389	GLY	R1390	GLY	R1391	GLY	R1392	GLY	R1393	GLY	R1394	GLY	R1395	GLY	R1396	GLY	R1397	GLY	R1398	GLY	R1399	GLY	R1400	GLY	R1401	GLY	R1402	GLY	R1403	GLY	R1404	GLY	R1405	GLY	R1406	GLY	R1407	GLY	R1408	GLY	R1409	GLY	R1410	GLY	R1411	GLY	R1412	GLY	R1413	GLY	R1414	GLY	R1415	GLY	R1416	GLY	R1417	GLY	R1418	GLY	R1419	GLY	R1420	GLY	R1421	GLY	R1422	GLY	R1423	GLY	R1424	GLY	R1425	GLY	R1426	GLY	R1427	GLY	R1428	GLY	R1429	GLY	R1430	GLY	R1431	GLY	R1432	GLY	R1433	GLY	R1434	GLY	R1435	GLY	R1436	GLY	R1437	GLY	R1438	GLY	R1439	GLY	R1440	GLY	R1441	GLY	R1442	GLY	R1443	GLY	R1444	GLY	R1445	GLY	R1446	GLY	R1447	GLY	R1448	GLY	R1449	GLY	R1450	GLY	R1451	GLY	R1452	GLY	R1453	GLY	R1454	GLY	R1455	GLY	R1456	GLY	R1457	GLY	R1458	GLY	R1459	GLY	R1460	GLY	R1461	GLY	R1462	GLY	R1463	GLY	R1464	GLY	R1465	GLY	R1466	GLY	R1467	GLY	R1468	GLY	R1469	GLY	R1470	GLY	R1471	GLY	R1472	GLY	R1473	GLY	R1474	GLY	R1475	GLY	R1476	GLY	R1477	GLY	R1478	GLY	R1479	GLY	R1480	GLY	R1481	GLY	R1482	GLY	R1483	GLY	R1484	GLY	R1485	GLY	R1486	GLY	R1487	GLY	R1488	GLY	R1489	GLY	R1490	GLY	R1491	GLY	R1492	GLY	R1493	GLY	R1494	GLY	R1495	GLY	R1496	GLY	R1497	GLY	R1498	GLY	R1499	GLY	R1500	GLY	R1501	GLY	R1502	GLY	R1503	GLY	R1504	GLY	R1505	GLY	R1506	GLY	R1507	GLY	R1508	GLY	R1509	GLY	R1510	GLY	R1511	GLY	R1512	GLY	R1513	GLY	R1514	GLY	R1515	GLY	R1516	GLY	R1517	GLY	R1518	GLY	R1519	GLY	R1520	GLY	R1521	GLY	R1522	GLY	R1523	GLY	R1524	GLY	R1525	GLY	R1526	GLY	R1527	GLY	R1528	GLY	R1529	GLY	R1530	GLY	R1531	GLY	R1532	GLY	R1533	GLY	R1534	GLY	R1535	GLY	R1536	GLY	R1537	GLY	R1538	GLY	R1539	GLY	R1540	GLY	R1541	GLY	R1542	GLY	R1543	GLY	R1544	GLY	R1545	GLY	R1546	GLY	R1547	GLY	R1548	GLY	R1549	GLY	R1550	GLY	R1551	GLY	R1552	GLY	R1553	GLY	R1554	GLY	R1555	GLY	R1556	GLY	R1557	GLY	R1558	GLY	R1559	GLY	R1560	GLY	R1561	GLY	R1562	GLY	R1563	GLY	R1564	GLY	R1565	GLY	R1566	GLY	R1567	GLY	R1568	GLY	R1569	GLY	R1570	GLY	R1571	GLY	R1572	GLY	R1573	GLY	R1574	GLY	R1575	GLY	R1576	GLY	R1577	GLY	R1578	GLY	R1579	GLY	R1580	GLY	R1581	GLY	R1582	GLY	R1583	GLY	R1584	GLY	R1585	GLY	R1586	GLY	R1587	GLY	R1588	GLY	R1589	GLY	R1590	GLY	R1591	GLY	R1592	GLY	R1593	GLY	R1594	GLY	R1595	GLY	R1596	GLY	R1597	GLY	R1598	GLY	R1599	GLY	R1600	GLY	R1601	GLY	R1602	GLY	R1603	GLY	R1604	GLY	R1605	GLY	R1606	GLY	R1607	GLY	R1608	GLY	R1609	GLY	R1610	GLY	R1611	GLY	R1612	GLY	R1613	GLY	R1614	GLY	R1615	GLY	R1616	GLY	R1617	GLY	R1618	GLY	R1619	GLY	R1620	GLY	R1621	GLY	R1622	GLY	R1623	GLY	R1624	GLY	R1625	GLY	R1626	GLY	R1627	GLY	R1628	GLY	R1629
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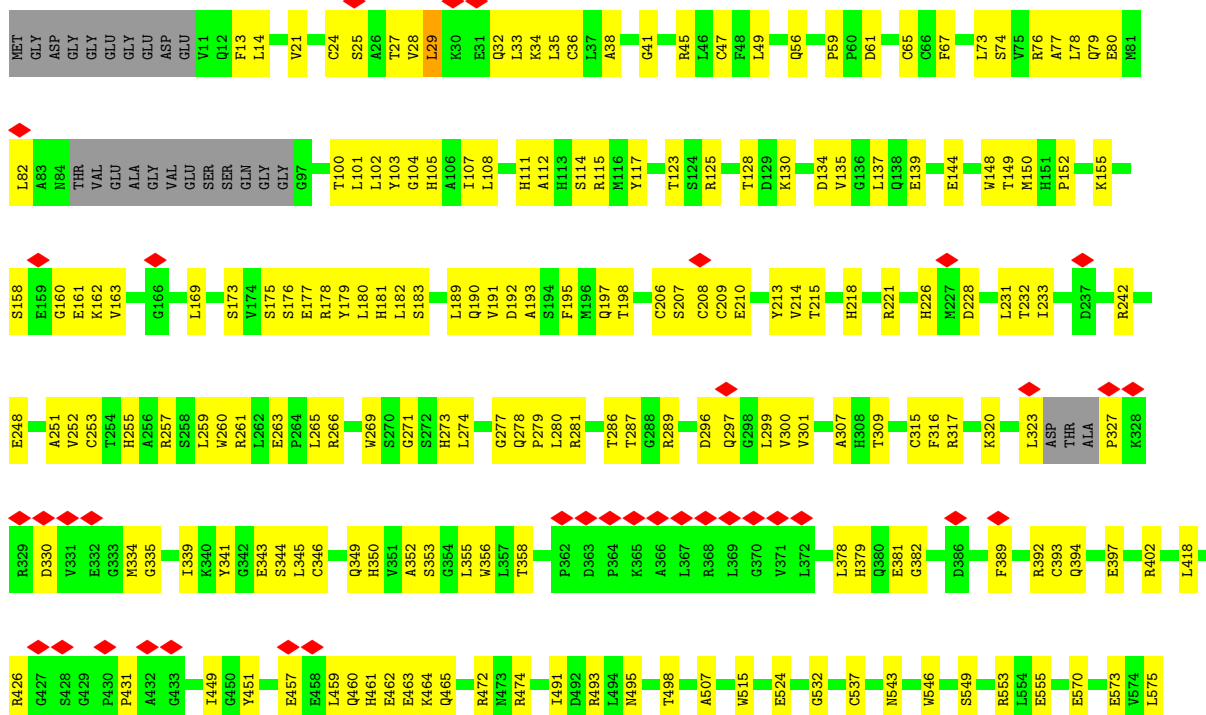








• Molecule 2: Ryanodine receptor 1



















L3136	A3200	T3272	F3341	L3408	ASP	R3550	T3711	K3823	N3901	R3984	S4053
L3137	A3204	T3273	A3342	L3409	ALA	E3551	E3712	K3824	Y3902	L3985	M4054
F3205	F3205	L3274	L3345	P3410	GLN	F3552	K3713	E3825	L3903	W3986	V4055
L3206	F3207	P3275	L3348	L3411	GLY	L3553	S3714	V3826	R3904	Y3987	E4056
E3207	L3209	M3276	L3412	L3412	ARG	M3554	K3715	G3827	N3909	A3988	M4057
P3208	E3207	L3277	R3348	L3413	SER	N3555	L3716	F3829	V3909	V3990	L4058
Q3209	E3207	C3278	A3349	V3416	ASP	N3557	D3719	L3835	N3914	G3991	K4060
L3210	Q3209	S3279	R3350	V3416	GLN	L3557	Y3725	L3842	T3915	F3992	F4061
N3211	L3210	Y3280	F3351	N3419	GLU	H3558	I3728	D3843	L3916	L3993	F4062
E3212	N3211	L3281	E3352	Y3281	ARG	L3559	M3729	L3844	V3920	V3995	V4063
Y3213	E3212	P3282	L3353	H3422	THR	Q3560	I3728	N3845	L3923	F3996	M4064
A3148	Y3213	W3284	L3354	W3423	LYS	G3561	M3729	N3846	L3924	A3997	L4066
O3149	N3214	W3285	H3355	L3424	LYS	E3564	L3735	F3847	L3924	M3999	L4067
Q3150	A3215	E3286	S3356	T3425	ARG	E3569	GLU	E3848	S3929	M4000	K4068
Q3151	A3215	R3287	F3357	E3432	GLY	R3570	GLY	R3849	Y3934	K4002	L4069
F3152	Y3219	E3290	L3358	E3432	ASP	R3570	GLU	R3849	Y3934	L4003	D4070
D3155	T3220	E3290	G3363	E3433	ARG	L3575	GLY	A3853	Y3935	L4003	D4071
V3156	T3221	A3291	R3364	L3434	ARG	G3579	GLY	E3854	Y3936	A4004	L4071
L3158	T3221	P3292	L3365	F3435	S3504	P3580	ASN	G3855	Y3937	Q4005	V4072
O3159	R3225	P3293	R3366	F3435	Y3505	G3581	GLU	L3856	Y3937	Q4006	G4073
R3160	E3226	P3294	L3367	R3436	G3506	R3582	GLU	G3857	Y3938	Q4009	S4074
V3161	R3227	R3295	R3368	R3436	T3507	E3583	GLU	M3858	G3939	L4012	E4075
O3162	A3228	L3296	R3368	F3442	S3508	E3584	GLU	V3859	K3940	L4013	E4076
V3166	I3229	P3297	V3372	I3443	L3509	E3584	VAL	V3860	D3941	L4013	F4077
R3167	I3229	A3298	V3373	W3445	L3510	D3585	GLU	E3861	V3942	D4018	D4078
T3168	G3231	A3298	E3377	L3444	V3511	A3586	GLU	D3862	I3943	L4018	D4079
L3169	G3231	G3299	E3376	L3444	L3511	S3587	GLU	G3863	E3945	Q4020	Y4080
C3170	P3233	A3300	E3377	F3451	K3515	F3588	GLU	T3864	Q3946	K4021	V4081
S3171	E3237	C3304	Q3378	K3452	M3517	R3588	GLU	V3865	G3947	D4022	T4082
L3172	E3238	T3305	L3379	R3453	K3517	R3588	GLU	V3865	K3948	M4023	D4083
T3173	M3239	S3309	R3380	E3455	C3525	K3591	GLU	I3866	N3950	M4026	F4084
S3174	C3240	S3309	R3380	E3455	A3526	I3592	GLU	D3675	N3950	R4085	R4085
L3175	P3241	L3312	L3381	Q3461	F3526	R3593	GLU	D3676	A3951	L4030	G4086
G3176	L3242	N3313	E3382	N3462	P3527	R3594	GLU	L3677	H3771	L4031	L4087
T3177	I3243	S3314	A3383	E3463	D3528	R3595	GLU	L3677	T3772	E4032	L4088
T3178	P3244	S3314	A3383	E3463	D3529	V3596	GLU	E3862	R3773	M4039	S4089
R3179	V3245	L3315	K3384	I3464	Q3530	E3597	GLU	E3862	A3776	I4040	K4090
N3180	L3246	L3316	A3385	N3466	D3531	E3598	GLU	E3862	A3776	V4036	F4093
T3181	L3246	L3317	E3386	N3466	D3531	E3598	GLU	E3862	L3780	V4036	K4091
Y3182	L3249	G3318	A3387	N3467	L3532	H3605	GLU	E3862	G3788	V4036	D4092
V3183	M3250	L3319	E3388	M3467	L3532	H3605	GLU	E3862	G3788	V4036	F4093
E3184	A3251	L3320	E3388	M3467	L3532	H3605	GLU	E3862	G3788	V4036	D4094
K3185	D3252	R3321	E3389	S3468	A3536	E3607	VAL	E3862	H3793	M4039	K4095
L3186	I3253	I3322	G3390	F3469	K3537	E3607	VAL	E3862	T3802	I4040	A4096
R3187	I3253	L3323	E3391	L3470	T3538	E3610	GLU	E3862	S3803	A4041	M4097
L3190	A3257	V3324	E3391	T3471	R3539	H3611	GLU	E3862	S3803	R4042	M4097
G3191	E3258	V3324	N3325	ALA	R3539	H3611	GLU	E3862	S3803	V4045	S4099
E3192	E3258	L3326	N3326	ASP	R3395	Y3540	GLU	E3862	S3803	D4046	Q4100
C3193	R3262	L3327	S3326	SER	R3395	P3612	GLU	E3862	S3803	M4046	K4101
L3194	T3263	L3327	D3328	LYS	D3396	Y3613	GLU	E3862	S3803	M4047	L4101
A3195	Y3263	L3329	SER	SER	D3396	K3614	GLU	E3862	S3803	L4048	Q4102
R3196	E3265	I3329	LYS	LYS	T3545	S3615	GLU	E3862	S3803	V4049	F4103
M3199	M3266	D3330	MET	MET	T3545	S3615	GLU	E3862	S3803	E4050	T4104
H3268	M3266	E3331	ALA	ALA	D3546	E3547	GLU	E3862	S3803	S4051	S4052
A3198	H3268	E3331	LYS	LYS	E3547	E3547	GLU	E3862	S3803	F4106	F4106
I3270	V3269	E3331	ALA	ALA	E3547	E3547	GLU	E3862	S3803	E4107	E4107
A3199	I3270	R3334	C3402	GLY	V3549	V3549	GLU	E3862	S3803	L4108	L4108
L3338	E3271	K3335	R3403	GLY	V3549	V3549	GLU	E3862	S3803	Q4109	Q4109
		R3337	L3405	GLY	V3549	V3549	GLU	E3862	S3803	F4110	F4110
		L3338	L3405	GLY	V3549	V3549	GLU	E3862	S3803	L4111	L4111
										L4112	L4112





## 4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C4	Depositor
Number of particles used	31599	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ( $e^-/\text{\AA}^2$ )	58.34	Depositor
Minimum defocus (nm)	1000	Depositor
Maximum defocus (nm)	2000	Depositor
Magnification	105000	Depositor
Image detector	GATAN K3 BIOQUANTUM (6k x 4k)	Depositor
Maximum map value	0.771	Depositor
Minimum map value	-0.034	Depositor
Average map value	0.012	Depositor
Map value standard deviation	0.023	Depositor
Recommended contour level	0.106	Depositor
Map size (Å)	425.472, 425.472, 425.472	wwPDB
Map dimensions	512, 512, 512	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	0.831, 0.831, 0.831	Depositor

## 5 Model quality [i](#)

### 5.1 Standard geometry [i](#)

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

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	F	0.72	1/834 (0.1%)	0.76	3/1123 (0.3%)
1	H	0.73	1/834 (0.1%)	0.76	3/1123 (0.3%)
1	J	0.73	1/834 (0.1%)	0.76	3/1123 (0.3%)
1	O	0.72	1/834 (0.1%)	0.76	3/1123 (0.3%)
2	A	0.40	0/35023	0.51	6/47448 (0.0%)
2	B	0.40	0/35023	0.51	6/47448 (0.0%)
2	G	0.40	0/35023	0.51	6/47448 (0.0%)
2	I	0.40	0/35023	0.51	6/47448 (0.0%)
All	All	0.41	4/143428 (0.0%)	0.52	36/194284 (0.0%)

All (4) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	H	39	SER	CA-CB	-5.12	1.45	1.52
1	J	39	SER	CA-CB	-5.11	1.45	1.52
1	F	39	SER	CA-CB	-5.08	1.45	1.52
1	O	39	SER	CA-CB	-5.06	1.45	1.52

All (36) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	A	752	VAL	C-N-CA	-9.43	82.41	122.00
2	G	752	VAL	C-N-CA	-9.42	82.42	122.00
2	B	752	VAL	C-N-CA	-9.42	82.42	122.00
2	I	752	VAL	C-N-CA	-9.42	82.42	122.00
2	B	752	VAL	N-CA-C	-7.32	91.23	111.00
2	G	752	VAL	N-CA-C	-7.32	91.25	111.00
2	A	752	VAL	N-CA-C	-7.30	91.28	111.00
2	I	752	VAL	N-CA-C	-7.30	91.28	111.00
1	O	49	ARG	NE-CZ-NH1	5.28	122.94	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	H	49	ARG	NE-CZ-NH1	5.24	122.92	120.30
1	F	49	ARG	NE-CZ-NH1	5.23	122.91	120.30
2	I	29	LEU	CA-CB-CG	5.22	127.31	115.30
2	A	29	LEU	CA-CB-CG	5.22	127.31	115.30
2	G	29	LEU	CA-CB-CG	5.21	127.29	115.30
2	B	29	LEU	CA-CB-CG	5.21	127.29	115.30
1	J	49	ARG	NE-CZ-NH1	5.20	122.90	120.30
2	I	4989	MET	CB-CG-SD	5.20	128.01	112.40
2	A	4989	MET	CB-CG-SD	5.19	127.98	112.40
2	B	4989	MET	CB-CG-SD	5.19	127.98	112.40
2	G	4989	MET	CB-CG-SD	5.18	127.94	112.40
2	I	749	ASP	N-CA-C	-5.14	97.13	111.00
2	I	3999	MET	CA-CB-CG	5.13	122.02	113.30
2	G	749	ASP	N-CA-C	-5.13	97.16	111.00
2	A	749	ASP	N-CA-C	-5.12	97.17	111.00
2	B	749	ASP	N-CA-C	-5.12	97.19	111.00
2	G	3999	MET	CA-CB-CG	5.11	121.99	113.30
2	A	3999	MET	CA-CB-CG	5.11	121.98	113.30
1	J	25	HIS	N-CA-C	-5.10	97.22	111.00
1	F	25	HIS	N-CA-C	-5.10	97.23	111.00
1	O	25	HIS	N-CA-C	-5.10	97.23	111.00
2	B	3999	MET	CA-CB-CG	5.10	121.96	113.30
1	H	25	HIS	N-CA-C	-5.08	97.28	111.00
1	H	54	GLU	CA-CB-CG	5.06	124.53	113.40
1	J	54	GLU	CA-CB-CG	5.06	124.52	113.40
1	F	54	GLU	CA-CB-CG	5.05	124.52	113.40
1	O	54	GLU	CA-CB-CG	5.05	124.51	113.40

There are no chirality outliers.

There are no planarity outliers.

## 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	F	818	0	824	25	0
1	H	818	0	824	24	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	J	818	0	824	23	0
1	O	818	0	824	23	0
2	A	34238	0	33844	1330	0
2	B	34238	0	33844	1337	0
2	G	34238	0	33844	1326	0
2	I	34238	0	33844	1329	0
3	A	31	0	12	5	0
3	B	31	0	12	5	0
3	G	31	0	12	6	0
3	I	31	0	12	6	0
4	A	1	0	0	0	0
4	B	1	0	0	0	0
4	G	1	0	0	0	0
4	I	1	0	0	0	0
5	A	1	0	0	0	0
5	B	1	0	0	0	0
5	G	1	0	0	0	0
5	I	1	0	0	0	0
6	A	14	0	10	2	0
6	B	14	0	10	2	0
6	G	14	0	10	2	0
6	I	14	0	10	2	0
All	All	140412	0	138760	5318	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 19.

All (5318) 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)
2:G:4983:HIS:HB2	3:G:5301:ATP:HN62	1.25	1.01
2:A:4880:MET:SD	2:G:4578:LEU:O	2.19	1.00
2:A:4983:HIS:HB2	3:A:5301:ATP:HN62	1.25	1.00
2:I:4983:HIS:HB2	3:I:5301:ATP:HN62	1.25	0.99
2:A:4935:LEU:CD2	2:G:4944:ARG:NH2	2.27	0.98
2:B:4983:HIS:HB2	3:B:5301:ATP:HN62	1.25	0.98
2:G:4935:LEU:CD2	2:I:4944:ARG:NH2	2.29	0.95
2:B:4944:ARG:NH2	2:I:4935:LEU:CD2	2.30	0.94
2:B:2604:GLU:HB2	2:B:2639:MET:HG3	1.52	0.92
2:I:2604:GLU:HB2	2:I:2639:MET:HG3	1.52	0.92
1:F:54:GLU:OE1	1:F:54:GLU:N	2.03	0.92

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:2604:GLU:HB2	2:A:2639:MET:HG3	1.51	0.92
1:O:54:GLU:N	1:O:54:GLU:OE1	2.03	0.92
1:H:54:GLU:OE1	1:H:54:GLU:N	2.03	0.91
1:J:54:GLU:OE1	1:J:54:GLU:N	2.03	0.91
2:G:2604:GLU:HB2	2:G:2639:MET:HG3	1.51	0.90
2:A:4000:MET:HA	2:A:4003:LEU:HB2	1.54	0.90
2:G:4000:MET:HA	2:G:4003:LEU:HB2	1.54	0.89
2:A:4944:ARG:NH2	2:B:4935:LEU:CD2	2.36	0.89
2:I:4000:MET:HA	2:I:4003:LEU:HB2	1.54	0.89
2:I:4958:CYS:SG	2:I:4978:HIS:CD2	2.66	0.89
2:A:4958:CYS:SG	2:A:4978:HIS:CD2	2.66	0.88
2:B:4578:LEU:O	2:I:4880:MET:SD	2.32	0.88
2:B:4958:CYS:SG	2:B:4978:HIS:CD2	2.66	0.88
2:B:4000:MET:HA	2:B:4003:LEU:HB2	1.54	0.87
2:G:4958:CYS:SG	2:G:4978:HIS:CD2	2.67	0.87
2:A:4578:LEU:O	2:B:4880:MET:SD	2.33	0.87
2:G:4880:MET:SD	2:I:4578:LEU:O	2.32	0.87
2:B:3980:LEU:HD12	2:B:3985:LEU:HD13	1.57	0.86
2:A:4935:LEU:HD23	2:G:4944:ARG:NH2	1.91	0.85
2:A:3980:LEU:HD12	2:A:3985:LEU:HD13	1.57	0.85
2:B:2528:PRO:HA	2:B:2531:ARG:HG2	1.58	0.85
2:G:2528:PRO:HA	2:G:2531:ARG:HG2	1.58	0.85
2:I:2528:PRO:HA	2:I:2531:ARG:HG2	1.57	0.85
2:A:4000:MET:O	2:A:4004:ALA:N	2.10	0.84
2:G:3980:LEU:HD12	2:G:3985:LEU:HD13	1.57	0.84
2:G:4000:MET:O	2:G:4004:ALA:N	2.10	0.84
2:I:4239:GLU:HA	2:I:4242:ILE:HD12	1.59	0.84
2:G:1100:MET:HE2	2:G:1198:GLN:HB3	1.60	0.84
2:I:4000:MET:O	2:I:4004:ALA:N	2.10	0.84
2:A:2528:PRO:HA	2:A:2531:ARG:HG2	1.58	0.84
1:J:49:ARG:HB3	1:J:49:ARG:HH11	1.43	0.84
2:G:4935:LEU:HD21	2:I:4944:ARG:NH2	1.92	0.84
2:I:3980:LEU:HD12	2:I:3985:LEU:HD13	1.57	0.84
1:O:49:ARG:HB3	1:O:49:ARG:HH11	1.43	0.83
2:B:4000:MET:O	2:B:4004:ALA:N	2.10	0.83
2:A:4239:GLU:HA	2:A:4242:ILE:HD12	1.59	0.83
1:F:49:ARG:HB3	1:F:49:ARG:HH11	1.43	0.83
2:G:4239:GLU:HA	2:G:4242:ILE:HD12	1.59	0.82
2:B:4239:GLU:HA	2:B:4242:ILE:HD12	1.59	0.82
2:A:4935:LEU:HD21	2:G:4944:ARG:HH21	1.43	0.82
2:B:1100:MET:HE2	2:B:1198:GLN:HB3	1.60	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:4189:ARG:NE	2:A:5032:TYR:OH	2.13	0.82
1:H:49:ARG:HB3	1:H:49:ARG:HH11	1.43	0.82
2:G:4189:ARG:NE	2:G:5032:TYR:OH	2.13	0.81
2:I:2707:ALA:HB1	2:I:3009:TYR:HD1	1.45	0.81
2:A:4935:LEU:HD21	2:G:4944:ARG:NH2	1.95	0.81
2:G:2707:ALA:HB1	2:G:3009:TYR:HD1	1.45	0.81
2:A:4935:LEU:HD23	2:G:4944:ARG:HH22	1.44	0.81
2:A:3206:LEU:HA	2:A:3246:LEU:HD23	1.63	0.80
2:G:4935:LEU:HD21	2:I:4944:ARG:HH21	1.45	0.80
2:B:4189:ARG:NE	2:B:5032:TYR:OH	2.13	0.80
2:G:4935:LEU:HD23	2:I:4944:ARG:HH22	1.46	0.80
2:I:111:HIS:HD1	2:I:114:SER:HG	1.27	0.80
2:B:2707:ALA:HB1	2:B:3009:TYR:HD1	1.45	0.80
2:I:4189:ARG:NE	2:I:5032:TYR:OH	2.13	0.80
2:B:4944:ARG:NH2	2:I:4935:LEU:HD23	1.97	0.80
2:B:2619:LEU:HD23	2:B:2623:LEU:HB2	1.65	0.79
2:I:2619:LEU:HD23	2:I:2623:LEU:HB2	1.65	0.79
2:B:2165:LEU:HD13	2:B:2174:GLU:HG3	1.64	0.79
2:B:4944:ARG:NH2	2:I:4935:LEU:HD21	1.94	0.79
2:I:4978:HIS:CE1	2:I:4983:HIS:NE2	2.50	0.79
2:A:2707:ALA:HB1	2:A:3009:TYR:HD1	1.45	0.79
2:A:4978:HIS:CE1	2:A:4983:HIS:NE2	2.50	0.79
2:B:4978:HIS:CE1	2:B:4983:HIS:NE2	2.50	0.79
2:I:3206:LEU:HA	2:I:3246:LEU:HD23	1.63	0.79
2:G:4978:HIS:CE1	2:G:4983:HIS:NE2	2.50	0.79
2:I:2165:LEU:HD13	2:I:2174:GLU:HG3	1.64	0.79
2:B:2531:ARG:HA	2:B:2588:ARG:HH21	1.48	0.79
2:G:3206:LEU:HA	2:G:3246:LEU:HD23	1.63	0.78
2:B:3206:LEU:HA	2:B:3246:LEU:HD23	1.63	0.78
2:A:2619:LEU:HD23	2:A:2623:LEU:HB2	1.65	0.78
2:G:4935:LEU:HD23	2:I:4944:ARG:NH2	1.96	0.78
2:B:4944:ARG:HH21	2:I:4935:LEU:HD21	1.46	0.78
2:I:1100:MET:HE2	2:I:1198:GLN:HB3	1.65	0.78
2:G:2619:LEU:HD23	2:G:2623:LEU:HB2	1.65	0.78
2:A:4689:THR:HG22	2:A:4732:PHE:HE2	1.48	0.78
2:I:2640:PRO:O	2:I:2643:LEU:HB3	1.83	0.78
2:G:2165:LEU:HD13	2:G:2174:GLU:HG3	1.64	0.78
2:B:4944:ARG:HH22	2:I:4935:LEU:HD23	1.47	0.78
2:A:2640:PRO:O	2:A:2643:LEU:HB3	1.83	0.78
2:A:4578:LEU:HD13	2:B:4849:TYR:HE1	1.48	0.78
2:I:4689:THR:OG1	2:I:4690:GLU:OE1	2.02	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:2531:ARG:HA	2:A:2588:ARG:HH21	1.48	0.77
2:B:2640:PRO:O	2:B:2643:LEU:HB3	1.83	0.77
2:I:3402:CYS:HA	2:I:3405:LEU:HD12	1.67	0.77
2:I:2447:LYS:HG3	2:I:2450:ALA:H	1.50	0.77
2:A:2165:LEU:HD13	2:A:2174:GLU:HG3	1.64	0.77
2:A:2447:LYS:HG3	2:A:2450:ALA:H	1.50	0.77
2:A:4877:ASP:O	2:G:4582:VAL:HG12	1.84	0.77
2:G:2531:ARG:HA	2:G:2588:ARG:HH21	1.48	0.77
2:B:3402:CYS:HA	2:B:3405:LEU:HD12	1.67	0.77
2:G:2640:PRO:O	2:G:2643:LEU:HB3	1.83	0.77
2:I:4189:ARG:NH1	2:I:4191:GLU:OE2	2.18	0.77
2:A:615:ARG:HH21	2:A:2168:VAL:HG21	1.51	0.76
2:A:4689:THR:OG1	2:A:4690:GLU:OE1	2.02	0.76
2:G:4689:THR:HG22	2:G:4732:PHE:HE2	1.48	0.76
2:G:3402:CYS:HA	2:G:3405:LEU:HD12	1.67	0.76
2:I:4990:PHE:HA	2:I:4993:MET:HE2	1.67	0.76
2:A:73:LEU:O	2:A:105:HIS:ND1	2.18	0.76
2:G:320:LYS:NZ	2:G:381:GLU:OE2	2.19	0.76
2:B:320:LYS:NZ	2:B:381:GLU:OE2	2.19	0.76
2:I:3965:LEU:HB3	2:I:4026:MET:HE1	1.67	0.76
2:A:667:MET:SD	2:A:790:ARG:NH2	2.59	0.76
2:G:4189:ARG:NH1	2:G:4191:GLU:OE2	2.18	0.76
2:I:320:LYS:NZ	2:I:381:GLU:OE2	2.19	0.76
2:I:2531:ARG:HA	2:I:2588:ARG:HH21	1.48	0.76
2:A:1269:CYS:SG	2:A:1563:GLN:NE2	2.59	0.76
2:B:2452:ARG:NH2	2:I:175:SER:O	2.18	0.76
2:I:4689:THR:HG22	2:I:4732:PHE:HE2	1.48	0.76
2:G:667:MET:SD	2:G:790:ARG:NH2	2.59	0.76
2:G:4715:TYR:O	2:G:4718:LYS:NZ	2.15	0.76
2:B:667:MET:SD	2:B:790:ARG:NH2	2.59	0.76
2:B:4189:ARG:NH1	2:B:4191:GLU:OE2	2.18	0.76
2:A:3402:CYS:HA	2:A:3405:LEU:HD12	1.67	0.76
2:G:73:LEU:O	2:G:105:HIS:ND1	2.18	0.76
2:B:615:ARG:HH21	2:B:2168:VAL:HG21	1.50	0.76
2:B:1269:CYS:SG	2:B:1563:GLN:NE2	2.59	0.76
2:A:3965:LEU:HB3	2:A:4026:MET:HE1	1.68	0.75
2:A:4944:ARG:NH2	2:B:4935:LEU:HD23	2.00	0.75
2:G:175:SER:O	2:I:2452:ARG:NH2	2.19	0.75
2:B:221:ARG:NH2	2:B:253:CYS:O	2.19	0.75
2:A:4990:PHE:HA	2:A:4993:MET:HE2	1.67	0.75
2:I:2495:VAL:HG12	2:I:2498:HIS:H	1.50	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:2296:GLU:HA	2:A:2356:LEU:HD21	1.69	0.75
2:A:4944:ARG:NH2	2:B:4935:LEU:HD21	2.00	0.75
1:H:79:ASP:OD1	1:H:80:VAL:N	2.20	0.75
1:J:79:ASP:OD1	1:J:80:VAL:N	2.20	0.75
2:G:2495:VAL:HG12	2:G:2498:HIS:H	1.50	0.75
2:G:3965:LEU:HB3	2:G:4026:MET:HE1	1.69	0.75
2:G:4689:THR:OG1	2:G:4690:GLU:OE1	2.02	0.75
2:B:4990:PHE:HA	2:B:4993:MET:HE2	1.67	0.75
2:I:667:MET:SD	2:I:790:ARG:NH2	2.59	0.75
2:A:4673:ARG:HH22	2:A:4701:TRP:HB3	1.51	0.75
2:G:2447:LYS:HG3	2:G:2450:ALA:H	1.50	0.75
2:B:3053:ARG:NH1	2:B:3131:TYR:OH	2.20	0.75
2:A:3053:ARG:NH1	2:A:3131:TYR:OH	2.20	0.75
2:B:2296:GLU:HA	2:B:2356:LEU:HD21	1.69	0.75
2:I:4902:GLU:O	2:I:4913:ARG:NH2	2.20	0.75
2:A:1087:ARG:HG3	2:A:1154:ASP:HA	1.69	0.75
2:A:2239:PHE:HD2	2:A:2250:MET:HE2	1.52	0.75
2:G:615:ARG:HH21	2:G:2168:VAL:HG21	1.51	0.75
2:B:1087:ARG:HG3	2:B:1154:ASP:HA	1.69	0.75
2:B:4689:THR:OG1	2:B:4690:GLU:OE1	2.02	0.75
2:A:4902:GLU:O	2:A:4913:ARG:NH2	2.20	0.75
2:B:2239:PHE:HD2	2:B:2250:MET:HE2	1.51	0.75
2:B:4689:THR:HG22	2:B:4732:PHE:HE2	1.48	0.75
2:I:111:HIS:ND1	2:I:114:SER:OG	2.17	0.75
2:I:2754:PHE:HD2	2:I:2813:LEU:HD11	1.52	0.75
2:A:4241:THR:O	2:A:4245:MET:HG3	1.87	0.75
1:O:79:ASP:OD1	1:O:80:VAL:N	2.20	0.75
2:B:4241:THR:O	2:B:4245:MET:HG3	1.87	0.75
1:F:79:ASP:OD1	1:F:80:VAL:N	2.20	0.74
2:A:320:LYS:NZ	2:A:381:GLU:OE2	2.19	0.74
2:A:4189:ARG:NH1	2:A:4191:GLU:OE2	2.18	0.74
2:G:4673:ARG:HH22	2:G:4701:TRP:HB3	1.51	0.74
2:G:4990:PHE:HA	2:G:4993:MET:HE2	1.67	0.74
2:B:2447:LYS:HG3	2:B:2450:ALA:H	1.50	0.74
2:B:4673:ARG:HH22	2:B:4701:TRP:HB3	1.51	0.74
2:I:1087:ARG:HG3	2:I:1154:ASP:HA	1.69	0.74
2:A:2495:VAL:HG12	2:A:2498:HIS:H	1.50	0.74
2:A:4944:ARG:HH22	2:B:4935:LEU:HD23	1.52	0.74
2:G:2239:PHE:HD2	2:G:2250:MET:HE2	1.52	0.74
2:I:221:ARG:NH2	2:I:253:CYS:O	2.19	0.74
2:I:3053:ARG:NH1	2:I:3131:TYR:OH	2.20	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:221:ARG:NH2	2:A:253:CYS:O	2.19	0.74
2:G:3208:PRO:HA	2:G:3211:ASN:HB2	1.69	0.74
2:I:2239:PHE:HD2	2:I:2250:MET:HE2	1.51	0.74
2:G:1087:ARG:HG3	2:G:1154:ASP:HA	1.69	0.74
2:B:3965:LEU:HB3	2:B:4026:MET:HE1	1.70	0.74
2:I:1269:CYS:SG	2:I:1563:GLN:NE2	2.59	0.74
2:I:4673:ARG:HH22	2:I:4701:TRP:HB3	1.51	0.74
2:G:221:ARG:NH2	2:G:253:CYS:O	2.19	0.74
2:G:1269:CYS:SG	2:G:1563:GLN:NE2	2.59	0.74
2:G:3053:ARG:NH1	2:G:3131:TYR:OH	2.20	0.74
2:I:3208:PRO:HA	2:I:3211:ASN:HB2	1.69	0.74
2:I:4241:THR:O	2:I:4245:MET:HG3	1.87	0.74
2:A:2243:SER:OG	2:A:2246:ASN:OD1	2.05	0.74
2:A:2754:PHE:HD2	2:A:2813:LEU:HD11	1.51	0.74
1:F:23:VAL:HG12	1:F:47:LYS:HG2	1.70	0.73
2:A:111:HIS:ND1	2:A:114:SER:OG	2.17	0.73
2:B:2243:SER:OG	2:B:2246:ASN:OD1	2.05	0.73
2:B:4902:GLU:O	2:B:4913:ARG:NH2	2.20	0.73
2:I:615:ARG:HH21	2:I:2168:VAL:HG21	1.50	0.73
2:A:4944:ARG:HH21	2:B:4935:LEU:HD21	1.53	0.73
2:G:2754:PHE:HD2	2:G:2813:LEU:HD11	1.51	0.73
2:G:4241:THR:O	2:G:4245:MET:HG3	1.87	0.73
2:G:4902:GLU:O	2:G:4913:ARG:NH2	2.20	0.73
2:B:2288:LEU:HD22	2:B:3853:ALA:HB2	1.70	0.73
2:B:3208:PRO:HA	2:B:3211:ASN:HB2	1.69	0.73
1:H:23:VAL:HG12	1:H:47:LYS:HG2	1.70	0.73
1:O:23:VAL:HG12	1:O:47:LYS:HG2	1.70	0.73
2:G:2296:GLU:HA	2:G:2356:LEU:HD21	1.69	0.73
2:B:111:HIS:ND1	2:B:114:SER:OG	2.17	0.73
2:I:2296:GLU:HA	2:I:2356:LEU:HD21	1.69	0.73
2:I:2288:LEU:HD22	2:I:3853:ALA:HB2	1.70	0.73
2:I:2243:SER:OG	2:I:2246:ASN:OD1	2.05	0.73
1:J:23:VAL:HG12	1:J:47:LYS:HG2	1.70	0.73
2:B:2495:VAL:HG12	2:B:2498:HIS:H	1.50	0.73
2:I:4722:ARG:HG2	2:I:4748:LEU:HD11	1.70	0.73
2:A:3992:PHE:O	2:A:3996:PHE:N	2.22	0.73
2:I:2694:GLU:OE1	2:I:2694:GLU:N	2.22	0.73
2:G:111:HIS:ND1	2:G:114:SER:OG	2.17	0.73
2:B:2754:PHE:HD2	2:B:2813:LEU:HD11	1.51	0.73
2:G:2243:SER:OG	2:G:2246:ASN:OD1	2.05	0.72
2:G:4722:ARG:HG2	2:G:4748:LEU:HD11	1.70	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:3208:PRO:HA	2:A:3211:ASN:HB2	1.69	0.72
2:G:4913:ARG:NH1	2:I:4888:TYR:OH	2.22	0.72
2:B:158:SER:N	2:B:161:GLU:OE2	2.22	0.72
2:B:4722:ARG:HG2	2:B:4748:LEU:HD11	1.71	0.72
2:I:4715:TYR:O	2:I:4718:LYS:NZ	2.15	0.72
2:A:2288:LEU:HD22	2:A:3853:ALA:HB2	1.70	0.72
2:A:2433:LEU:HD13	2:A:2460:LEU:HD21	1.72	0.72
2:A:4715:TYR:O	2:A:4718:LYS:NZ	2.15	0.72
2:G:101:LEU:HB2	2:G:163:VAL:HG21	1.72	0.72
2:G:3992:PHE:HA	2:G:3995:VAL:HB	1.72	0.72
2:B:1115:LEU:HD23	2:B:1123:VAL:HG11	1.72	0.72
2:I:2195:PRO:HA	2:I:2198:MET:HE2	1.72	0.72
2:G:2288:LEU:HD22	2:G:3853:ALA:HB2	1.70	0.71
2:A:1147:ASP:OD1	2:A:1165:ASN:ND2	2.24	0.71
2:B:3992:PHE:O	2:B:3996:PHE:N	2.22	0.71
2:I:1115:LEU:HD23	2:I:1123:VAL:HG11	1.72	0.71
2:I:1230:MET:SD	2:I:1827:ARG:NH2	2.63	0.71
2:A:4035:VAL:HA	2:A:4189:ARG:NH2	2.06	0.71
2:A:4722:ARG:HG2	2:A:4748:LEU:HD11	1.71	0.71
2:B:101:LEU:HB2	2:B:163:VAL:HG21	1.72	0.71
2:I:101:LEU:HB2	2:I:163:VAL:HG21	1.72	0.71
2:A:175:SER:O	2:G:2452:ARG:NH2	2.23	0.71
2:I:3992:PHE:O	2:I:3996:PHE:N	2.22	0.71
2:A:101:LEU:HB2	2:A:163:VAL:HG21	1.72	0.71
2:G:1230:MET:SD	2:G:1827:ARG:NH2	2.64	0.71
2:G:2694:GLU:OE1	2:G:2694:GLU:N	2.22	0.71
2:G:4035:VAL:HA	2:G:4189:ARG:NH2	2.06	0.71
2:I:3992:PHE:HA	2:I:3995:VAL:HB	1.72	0.71
2:G:1115:LEU:HD23	2:G:1123:VAL:HG11	1.72	0.71
2:A:158:SER:N	2:A:161:GLU:OE2	2.23	0.71
2:A:1101:ARG:NH1	2:A:1114:GLU:OE1	2.24	0.71
2:G:2433:LEU:HD13	2:G:2460:LEU:HD21	1.72	0.71
2:A:2195:PRO:HA	2:A:2198:MET:HE2	1.72	0.71
2:B:3550:ARG:HG3	2:B:3597:GLN:HG3	1.73	0.71
2:I:4035:VAL:HA	2:I:4189:ARG:NH2	2.06	0.71
2:A:3283:ARG:HH21	2:A:3287:ARG:HH22	1.37	0.71
2:G:3283:ARG:HH21	2:G:3287:ARG:HH22	1.37	0.71
2:B:2433:LEU:HD13	2:B:2460:LEU:HD21	1.72	0.71
2:B:4035:VAL:HA	2:B:4189:ARG:NH2	2.06	0.71
2:A:1115:LEU:HD23	2:A:1123:VAL:HG11	1.72	0.70
2:A:3992:PHE:HA	2:A:3995:VAL:HB	1.72	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:972:LEU:O	2:G:976:ARG:NH1	2.24	0.70
2:B:2694:GLU:OE1	2:B:2694:GLU:N	2.22	0.70
2:I:4688:ILE:HG23	2:I:4689:THR:HG23	1.73	0.70
2:A:2452:ARG:NH2	2:B:175:SER:O	2.24	0.70
2:B:1230:MET:SD	2:B:1827:ARG:NH2	2.64	0.70
2:G:1147:ASP:OD1	2:G:1165:ASN:ND2	2.24	0.70
2:B:2195:PRO:HA	2:B:2198:MET:HE2	1.72	0.70
2:B:3049:LEU:O	2:B:3053:ARG:NE	2.24	0.70
2:B:3992:PHE:HA	2:B:3995:VAL:HB	1.72	0.70
2:I:158:SER:N	2:I:161:GLU:OE2	2.22	0.70
2:I:1101:ARG:NH1	2:I:1114:GLU:OE1	2.24	0.70
2:A:1018:ASN:HB2	2:A:1021:LEU:HD23	1.73	0.70
2:G:1018:ASN:HB2	2:G:1021:LEU:HD23	1.73	0.70
2:G:3992:PHE:O	2:G:3996:PHE:N	2.22	0.70
2:A:1230:MET:SD	2:A:1827:ARG:NH2	2.64	0.70
2:A:3550:ARG:HG3	2:A:3597:GLN:HG3	1.73	0.70
2:A:4688:ILE:HG23	2:A:4689:THR:HG23	1.73	0.70
2:B:1147:ASP:OD1	2:B:1165:ASN:ND2	2.24	0.70
2:B:4688:ILE:HG23	2:B:4689:THR:HG23	1.74	0.70
2:I:4251:ILE:HA	2:I:4553:ASN:HB3	1.74	0.70
2:B:1101:ARG:NH1	2:B:1114:GLU:OE1	2.24	0.70
2:I:1147:ASP:OD1	2:I:1165:ASN:ND2	2.24	0.70
2:A:2646:ASN:O	2:A:2650:ARG:N	2.24	0.70
2:G:149:THR:HG22	2:G:150:MET:H	1.55	0.70
2:G:1101:ARG:NH1	2:G:1114:GLU:OE1	2.24	0.70
2:G:4688:ILE:HG23	2:G:4689:THR:HG23	1.73	0.70
2:B:4715:TYR:O	2:B:4718:LYS:NZ	2.15	0.70
2:A:149:THR:HG22	2:A:150:MET:H	1.55	0.70
2:B:73:LEU:O	2:B:105:HIS:ND1	2.18	0.70
2:B:3283:ARG:HH21	2:B:3287:ARG:HH22	1.37	0.70
2:I:972:LEU:O	2:I:976:ARG:NH1	2.25	0.70
2:A:3049:LEU:O	2:A:3053:ARG:NE	2.24	0.70
2:B:972:LEU:O	2:B:976:ARG:NH1	2.25	0.70
2:I:3550:ARG:HG3	2:I:3597:GLN:HG3	1.73	0.70
2:A:972:LEU:O	2:A:976:ARG:NH1	2.25	0.70
2:G:4049:VAL:HA	2:G:4052:SER:HB3	1.74	0.70
2:G:4251:ILE:HA	2:G:4553:ASN:HB3	1.74	0.70
2:B:149:THR:HG22	2:B:150:MET:H	1.55	0.70
2:I:73:LEU:O	2:I:105:HIS:ND1	2.18	0.70
2:I:149:THR:HG22	2:I:150:MET:H	1.55	0.69
2:I:1980:LEU:O	2:I:1984:PHE:N	2.25	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:2433:LEU:HD13	2:I:2460:LEU:HD21	1.72	0.69
2:I:2827:ARG:NH2	2:I:2935:TYR:O	2.25	0.69
2:B:4658:ILE:HD13	2:B:4796:MET:HE3	1.75	0.69
1:O:3:GLU:OE1	1:O:75:THR:OG1	2.10	0.69
2:G:4732:PHE:HB3	2:G:4736:ARG:HH11	1.57	0.69
2:I:4049:VAL:HA	2:I:4052:SER:HB3	1.74	0.69
2:G:125:ARG:NH2	2:G:191:VAL:O	2.26	0.69
2:G:465:GLN:N	2:G:465:GLN:OE1	2.26	0.69
2:G:1980:LEU:O	2:G:1984:PHE:N	2.25	0.69
2:I:4658:ILE:HD13	2:I:4796:MET:HE3	1.75	0.69
2:G:3550:ARG:HG3	2:G:3597:GLN:HG3	1.74	0.69
2:G:4658:ILE:HD13	2:G:4796:MET:HE3	1.73	0.69
2:A:125:ARG:NH2	2:A:191:VAL:O	2.26	0.69
2:G:573:GLU:OE1	2:G:573:GLU:N	2.24	0.69
2:G:4843:LEU:HB2	2:I:4823:LEU:HD11	1.75	0.69
2:I:3283:ARG:HH21	2:I:3287:ARG:HH22	1.37	0.69
2:A:104:GLY:H	2:A:150:MET:HB3	1.57	0.69
2:G:2646:ASN:O	2:G:2650:ARG:N	2.24	0.69
2:G:2827:ARG:NH2	2:G:2935:TYR:O	2.25	0.69
2:B:465:GLN:OE1	2:B:465:GLN:N	2.26	0.69
2:B:3995:VAL:O	2:B:3999:MET:HG2	1.92	0.69
2:B:4888:TYR:OH	2:I:4913:ARG:NH1	2.25	0.69
2:I:465:GLN:OE1	2:I:465:GLN:N	2.26	0.69
2:I:2646:ASN:O	2:I:2650:ARG:N	2.24	0.69
2:I:2650:ARG:NH2	2:I:2651:CYS:SG	2.66	0.69
2:A:2608:MET:O	2:A:2612:ARG:NH2	2.26	0.69
2:A:2650:ARG:NH2	2:A:2651:CYS:SG	2.66	0.69
2:A:4049:VAL:HA	2:A:4052:SER:HB3	1.74	0.69
2:A:4732:PHE:HB3	2:A:4736:ARG:HH11	1.57	0.69
2:A:4860:ARG:O	2:A:4874:MET:HE1	1.92	0.69
1:J:3:GLU:OE1	1:J:75:THR:OG1	2.10	0.69
2:G:4860:ARG:O	2:G:4874:MET:HE1	1.93	0.69
2:B:1980:LEU:O	2:B:1984:PHE:N	2.25	0.69
2:B:2646:ASN:O	2:B:2650:ARG:N	2.24	0.69
2:B:2827:ARG:NH2	2:B:2935:TYR:O	2.25	0.69
2:B:4251:ILE:HA	2:B:4553:ASN:HB3	1.74	0.69
2:I:1018:ASN:HB2	2:I:1021:LEU:HD23	1.73	0.69
2:I:4732:PHE:HB3	2:I:4736:ARG:HH11	1.57	0.69
2:A:1100:MET:HE2	2:A:1198:GLN:HB3	1.74	0.69
2:A:2524:VAL:HA	2:A:2528:PRO:HG2	1.75	0.69
2:A:2694:GLU:OE1	2:A:2694:GLU:N	2.22	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:2150:GLU:OE1	2:G:2150:GLU:N	2.25	0.69
2:G:2650:ARG:NH2	2:G:2651:CYS:SG	2.66	0.69
2:I:2608:MET:O	2:I:2612:ARG:NH2	2.26	0.69
2:A:3995:VAL:O	2:A:3999:MET:HG2	1.92	0.69
1:O:32:ASN:OD1	1:O:33:GLY:N	2.26	0.69
2:G:158:SER:N	2:G:161:GLU:OE2	2.22	0.69
1:J:32:ASN:OD1	1:J:33:GLY:N	2.26	0.68
2:G:1012:ASP:HB3	2:G:1015:ALA:HB3	1.74	0.68
2:G:1568:LYS:NZ	2:G:1569:GLN:O	2.26	0.68
2:G:2608:MET:O	2:G:2612:ARG:NH2	2.26	0.68
2:B:2524:VAL:HA	2:B:2528:PRO:HG2	1.75	0.68
2:B:2608:MET:O	2:B:2612:ARG:NH2	2.26	0.68
2:I:1260:MET:SD	2:I:1271:ARG:NH2	2.66	0.68
2:A:1260:MET:SD	2:A:1271:ARG:NH2	2.66	0.68
2:A:2827:ARG:NH2	2:A:2935:TYR:O	2.25	0.68
2:A:4251:ILE:HA	2:A:4553:ASN:HB3	1.74	0.68
2:G:3995:VAL:O	2:G:3999:MET:HG2	1.92	0.68
2:B:2650:ARG:NH2	2:B:2651:CYS:SG	2.66	0.68
2:I:3400:VAL:HG22	2:I:3403:ARG:HH12	1.59	0.68
1:F:3:GLU:OE1	1:F:75:THR:OG1	2.10	0.68
2:A:465:GLN:OE1	2:A:465:GLN:N	2.26	0.68
2:A:3950:ASN:OD1	2:A:3953:LYS:NZ	2.27	0.68
2:G:607:CYS:SG	2:G:608:VAL:N	2.67	0.68
2:G:2524:VAL:HA	2:G:2528:PRO:HG2	1.75	0.68
2:B:3950:ASN:OD1	2:B:3953:LYS:NZ	2.27	0.68
2:I:3995:VAL:O	2:I:3999:MET:HG2	1.92	0.68
1:F:32:ASN:OD1	1:F:33:GLY:N	2.26	0.68
2:A:573:GLU:OE1	2:A:573:GLU:N	2.25	0.68
2:A:1980:LEU:O	2:A:1984:PHE:N	2.25	0.68
2:A:2614:ILE:HD11	2:A:2618:MET:HG2	1.76	0.68
2:B:1568:LYS:NZ	2:B:1569:GLN:O	2.26	0.68
2:I:299:LEU:HD13	2:I:378:LEU:HG	1.76	0.68
2:I:1012:ASP:HB3	2:I:1015:ALA:HB3	1.74	0.68
2:I:3934:TYR:HB2	2:I:3999:MET:HE1	1.75	0.68
2:A:683:ARG:NH2	2:A:709:ASP:OD2	2.27	0.68
2:A:1568:LYS:NZ	2:A:1569:GLN:O	2.26	0.68
1:H:32:ASN:OD1	1:H:33:GLY:N	2.26	0.68
2:G:104:GLY:H	2:G:150:MET:HB3	1.57	0.68
2:G:299:LEU:HD13	2:G:378:LEU:HG	1.76	0.68
2:B:1018:ASN:HB2	2:B:1021:LEU:HD23	1.73	0.68
2:B:2614:ILE:HD11	2:B:2618:MET:HG2	1.76	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:2461:VAL:O	2:A:2510:TYR:OH	2.10	0.68
2:A:3400:VAL:HG22	2:A:3403:ARG:HH12	1.59	0.68
2:G:2195:PRO:HA	2:G:2198:MET:HE2	1.73	0.68
2:B:1012:ASP:HB3	2:B:1015:ALA:HB3	1.74	0.68
2:B:1020:ARG:HB2	2:B:1027:LEU:HD11	1.75	0.68
2:B:4732:PHE:HB3	2:B:4736:ARG:HH11	1.57	0.68
2:I:104:GLY:H	2:I:150:MET:HB3	1.57	0.68
2:I:3950:ASN:OD1	2:I:3953:LYS:NZ	2.27	0.68
2:I:4860:ARG:O	2:I:4874:MET:HE1	1.93	0.68
2:A:2237:CYS:SG	2:A:2241:ARG:NH1	2.67	0.68
1:H:3:GLU:OE1	1:H:75:THR:OG1	2.10	0.68
2:G:3049:LEU:O	2:G:3053:ARG:NE	2.24	0.68
2:B:3934:TYR:HB2	2:B:3999:MET:HE1	1.74	0.68
2:B:4049:VAL:HA	2:B:4052:SER:HB3	1.74	0.68
2:I:1568:LYS:NZ	2:I:1569:GLN:O	2.26	0.68
2:A:1012:ASP:HB3	2:A:1015:ALA:HB3	1.74	0.68
2:A:4177:TYR:CE1	2:A:4199:GLU:HB3	2.29	0.68
2:B:3400:VAL:HG22	2:B:3403:ARG:HH12	1.59	0.68
2:I:4177:TYR:CE1	2:I:4199:GLU:HB3	2.29	0.68
2:A:3984:ARG:HH11	2:A:3986:TRP:HB2	1.59	0.68
2:I:607:CYS:SG	2:I:608:VAL:N	2.67	0.68
2:I:2524:VAL:HA	2:I:2528:PRO:HG2	1.75	0.68
2:I:3049:LEU:O	2:I:3053:ARG:NE	2.24	0.68
2:A:607:CYS:SG	2:A:608:VAL:N	2.67	0.68
2:A:711:LEU:HD12	2:A:1491:ASN:HB3	1.76	0.68
2:B:299:LEU:HD13	2:B:378:LEU:HG	1.76	0.68
2:B:3901:ASN:HA	2:B:3904:ARG:NH2	2.09	0.68
2:I:125:ARG:NH2	2:I:191:VAL:O	2.26	0.68
2:G:676:THR:HG22	2:G:677:ALA:H	1.60	0.67
2:G:3400:VAL:HG22	2:G:3403:ARG:HH12	1.59	0.67
2:G:3950:ASN:OD1	2:G:3953:LYS:NZ	2.27	0.67
2:G:4177:TYR:CE1	2:G:4199:GLU:HB3	2.29	0.67
2:B:125:ARG:NH2	2:B:191:VAL:O	2.26	0.67
2:I:676:THR:HG22	2:I:677:ALA:H	1.59	0.67
2:I:2237:CYS:SG	2:I:2241:ARG:NH1	2.67	0.67
2:G:24:CYS:HB3	2:G:182:LEU:HD22	1.76	0.67
2:G:2237:CYS:SG	2:G:2241:ARG:NH1	2.67	0.67
2:G:3901:ASN:HA	2:G:3904:ARG:NH2	2.09	0.67
2:B:104:GLY:H	2:B:150:MET:HB3	1.58	0.67
2:B:607:CYS:SG	2:B:608:VAL:N	2.67	0.67
2:B:3984:ARG:HH11	2:B:3986:TRP:HB2	1.59	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:4248:ALA:O	2:B:4252:SER:N	2.28	0.67
2:A:676:THR:HG22	2:A:677:ALA:H	1.59	0.67
2:A:3901:ASN:HA	2:A:3904:ARG:NH2	2.09	0.67
2:G:3984:ARG:HH11	2:G:3986:TRP:HB2	1.59	0.67
2:B:2128:TYR:OH	2:B:3676:ASP:OD2	2.11	0.67
2:I:1020:ARG:HB2	2:I:1027:LEU:HD11	1.75	0.67
2:A:1020:ARG:HB2	2:A:1027:LEU:HD11	1.75	0.67
2:A:3552:PHE:O	2:A:3556:ASN:ND2	2.28	0.67
2:A:4823:LEU:HD11	2:B:4843:LEU:HB2	1.75	0.67
2:B:1260:MET:SD	2:B:1271:ARG:NH2	2.66	0.67
2:B:4860:ARG:O	2:B:4874:MET:HE1	1.92	0.67
2:I:3984:ARG:HH11	2:I:3986:TRP:HB2	1.59	0.67
2:A:929:LEU:HD23	2:A:932:LEU:HD12	1.77	0.67
2:A:2128:TYR:OH	2:A:3676:ASP:OD2	2.11	0.67
2:G:711:LEU:HD12	2:G:1491:ASN:HB3	1.77	0.67
2:G:1020:ARG:HB2	2:G:1027:LEU:HD11	1.75	0.67
2:G:1260:MET:SD	2:G:1271:ARG:NH2	2.66	0.67
2:B:676:THR:HG22	2:B:677:ALA:H	1.60	0.67
2:B:4177:TYR:CE1	2:B:4199:GLU:HB3	2.29	0.67
2:I:24:CYS:HB3	2:I:182:LEU:HD22	1.76	0.67
2:G:2128:TYR:OH	2:G:3676:ASP:OD2	2.11	0.67
2:B:2150:GLU:OE1	2:B:2150:GLU:N	2.25	0.67
2:B:2237:CYS:SG	2:B:2241:ARG:NH1	2.67	0.67
2:I:2128:TYR:OH	2:I:3676:ASP:OD2	2.11	0.67
2:I:2461:VAL:O	2:I:2510:TYR:OH	2.10	0.67
2:A:2000:SER:O	2:A:2005:GLN:NE2	2.28	0.67
2:B:4578:LEU:HD13	2:I:4849:TYR:HE1	1.58	0.67
2:I:4248:ALA:O	2:I:4252:SER:N	2.28	0.67
2:A:753:PRO:HG3	2:A:773:LEU:HD11	1.77	0.67
2:A:4248:ALA:O	2:A:4252:SER:N	2.28	0.67
2:B:929:LEU:HD23	2:B:932:LEU:HD12	1.77	0.67
2:I:3552:PHE:O	2:I:3556:ASN:ND2	2.28	0.67
2:B:932:LEU:HD22	2:B:984:LEU:HD11	1.77	0.67
2:B:711:LEU:HD12	2:B:1491:ASN:HB3	1.76	0.67
2:B:3552:PHE:O	2:B:3556:ASN:ND2	2.28	0.67
2:A:299:LEU:HD13	2:A:378:LEU:HG	1.76	0.66
2:G:2000:SER:O	2:G:2005:GLN:NE2	2.28	0.66
2:G:4849:TYR:HE1	2:I:4578:LEU:HD13	1.58	0.66
2:I:711:LEU:HD12	2:I:1491:ASN:HB3	1.76	0.66
2:I:3901:ASN:HA	2:I:3904:ARG:NH2	2.09	0.66
2:A:983:THR:O	2:A:987:ARG:NH1	2.29	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:2823:ILE:HG13	2:A:2937:VAL:HG23	1.77	0.66
2:A:4888:TYR:OH	2:B:4913:ARG:NH1	2.28	0.66
2:G:753:PRO:HG3	2:G:773:LEU:HD11	1.77	0.66
2:B:2823:ILE:HG13	2:B:2937:VAL:HG23	1.78	0.66
2:I:2614:ILE:HD11	2:I:2618:MET:HG2	1.76	0.66
2:A:2165:LEU:HD11	2:A:2177:LEU:HD22	1.77	0.66
2:B:818:ARG:NH1	2:B:1027:LEU:O	2.28	0.66
2:B:2000:SER:O	2:B:2005:GLN:NE2	2.28	0.66
2:I:273:HIS:ND1	2:I:334:MET:O	2.27	0.66
2:I:983:THR:O	2:I:987:ARG:NH1	2.29	0.66
2:A:2150:GLU:N	2:A:2150:GLU:OE1	2.25	0.66
2:I:932:LEU:HD22	2:I:984:LEU:HD11	1.77	0.66
2:I:2000:SER:O	2:I:2005:GLN:NE2	2.28	0.66
2:G:929:LEU:HD23	2:G:932:LEU:HD12	1.77	0.66
2:G:2614:ILE:HD11	2:G:2618:MET:HG2	1.76	0.66
2:B:24:CYS:HB3	2:B:182:LEU:HD22	1.76	0.66
2:B:4823:LEU:HD11	2:I:4843:LEU:HB2	1.77	0.66
2:I:2150:GLU:N	2:I:2150:GLU:OE1	2.25	0.66
2:G:1821:ASP:HA	2:G:1824:GLN:HB2	1.78	0.66
2:B:978:THR:N	2:B:981:GLN:OE1	2.29	0.66
2:B:4582:VAL:HG12	2:I:4877:ASP:O	1.95	0.66
2:I:573:GLU:OE1	2:I:573:GLU:N	2.25	0.66
2:I:818:ARG:NH1	2:I:1027:LEU:O	2.28	0.66
2:I:1821:ASP:HA	2:I:1824:GLN:HB2	1.78	0.66
2:A:978:THR:N	2:A:981:GLN:OE1	2.29	0.66
2:G:932:LEU:HD22	2:G:984:LEU:HD11	1.77	0.66
2:G:2461:VAL:O	2:G:2510:TYR:OH	2.10	0.66
2:I:753:PRO:HG3	2:I:773:LEU:HD11	1.77	0.66
2:A:932:LEU:HD22	2:A:984:LEU:HD11	1.77	0.66
2:A:3010:PHE:O	2:A:3014:CYS:N	2.29	0.66
2:A:4839:MET:SD	2:G:4820:VAL:HG11	2.35	0.66
2:G:983:THR:O	2:G:987:ARG:NH1	2.28	0.66
2:G:2165:LEU:HD11	2:G:2177:LEU:HD22	1.78	0.66
2:G:3934:TYR:HB2	2:G:3999:MET:HE1	1.78	0.66
2:I:3010:PHE:O	2:I:3014:CYS:N	2.29	0.66
2:G:978:THR:N	2:G:981:GLN:OE1	2.29	0.66
2:G:3010:PHE:O	2:G:3014:CYS:N	2.29	0.66
2:G:3552:PHE:O	2:G:3556:ASN:ND2	2.28	0.66
2:I:683:ARG:NH2	2:I:709:ASP:OD2	2.27	0.66
2:I:929:LEU:HD23	2:I:932:LEU:HD12	1.77	0.66
2:I:978:THR:N	2:I:981:GLN:OE1	2.29	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:2823:ILE:HG13	2:I:2937:VAL:HG23	1.78	0.66
2:I:4701:TRP:HE1	2:I:4778:TRP:HA	1.61	0.66
2:A:1695:LEU:HB3	2:A:1810:LYS:HZ3	1.61	0.66
2:G:2788:HIS:HB3	2:G:2791:LEU:HG	1.78	0.66
2:B:4687:TYR:CE2	2:B:4692:PRO:HG3	2.32	0.66
2:B:4701:TRP:HE1	2:B:4778:TRP:HA	1.61	0.66
2:A:779:PRO:HB2	2:A:791:PHE:HZ	1.61	0.65
2:G:779:PRO:HB2	2:G:791:PHE:HZ	1.61	0.65
2:G:4248:ALA:O	2:G:4252:SER:N	2.28	0.65
2:I:2384:ILE:HD13	2:I:2494:PHE:CE1	2.32	0.65
2:I:2788:HIS:HB3	2:I:2791:LEU:HG	1.78	0.65
2:A:1095:VAL:HB	2:A:1199:VAL:HG23	1.78	0.65
2:A:4687:TYR:CE2	2:A:4692:PRO:HG3	2.32	0.65
2:A:4843:LEU:HB2	2:G:4823:LEU:HD11	1.77	0.65
2:G:683:ARG:NH2	2:G:709:ASP:OD2	2.27	0.65
2:G:3150:HIS:HB3	2:G:3152:PHE:CD2	2.31	0.65
2:I:2165:LEU:HD11	2:I:2177:LEU:HD22	1.77	0.65
2:A:24:CYS:HB3	2:A:182:LEU:HD22	1.76	0.65
2:A:818:ARG:NH1	2:A:1027:LEU:O	2.28	0.65
2:A:1821:ASP:HA	2:A:1824:GLN:HB2	1.78	0.65
2:A:4823:LEU:HD12	2:B:4843:LEU:HD22	1.78	0.65
2:B:683:ARG:NH2	2:B:709:ASP:OD2	2.27	0.65
2:B:983:THR:O	2:B:987:ARG:NH1	2.29	0.65
2:I:890:GLY:HA3	2:I:902:ARG:HD3	1.78	0.65
2:A:3950:ASN:HA	2:A:3953:LYS:HZ2	1.61	0.65
2:G:818:ARG:NH1	2:G:1027:LEU:O	2.28	0.65
2:G:1095:VAL:HB	2:G:1199:VAL:HG23	1.78	0.65
2:B:2165:LEU:HD11	2:B:2177:LEU:HD22	1.78	0.65
2:I:779:PRO:HB2	2:I:791:PHE:HZ	1.61	0.65
2:A:2151:ASP:OD2	2:A:2189:LYS:NZ	2.20	0.65
2:A:4578:LEU:HD13	2:B:4849:TYR:CE1	2.31	0.65
2:G:3997:ALA:HB2	2:G:4058:ILE:HG12	1.78	0.65
2:G:4687:TYR:CE2	2:G:4692:PRO:HG3	2.32	0.65
2:G:652:ARG:HD3	2:G:773:LEU:HD13	1.79	0.65
2:G:4715:TYR:HD1	2:G:4717:ASP:H	1.44	0.65
2:B:573:GLU:OE1	2:B:573:GLU:N	2.25	0.65
2:B:779:PRO:HB2	2:B:791:PHE:HZ	1.61	0.65
2:B:3997:ALA:HB2	2:B:4058:ILE:HG12	1.78	0.65
2:I:1095:VAL:HB	2:I:1199:VAL:HG23	1.79	0.65
2:I:4687:TYR:CE2	2:I:4692:PRO:HG3	2.32	0.65
2:A:273:HIS:ND1	2:A:334:MET:O	2.27	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:2384:ILE:HD13	2:G:2494:PHE:CE1	2.32	0.65
2:B:273:HIS:ND1	2:B:334:MET:O	2.27	0.65
2:A:4658:ILE:HD13	2:A:4796:MET:HE3	1.77	0.65
2:G:890:GLY:HA3	2:G:902:ARG:HD3	1.78	0.65
2:G:2537:ASP:O	2:G:2593:ARG:NH2	2.30	0.65
2:G:4701:TRP:HE1	2:G:4778:TRP:HA	1.61	0.65
2:B:652:ARG:HD3	2:B:773:LEU:HD13	1.79	0.65
2:B:1821:ASP:HA	2:B:1824:GLN:HB2	1.78	0.65
2:B:2537:ASP:O	2:B:2593:ARG:NH2	2.30	0.65
2:B:3150:HIS:HB3	2:B:3152:PHE:CD2	2.31	0.65
2:A:3535:LEU:O	2:A:3538:THR:HB	1.97	0.65
2:B:753:PRO:HG3	2:B:773:LEU:HD11	1.77	0.65
2:B:1095:VAL:HB	2:B:1199:VAL:HG23	1.79	0.65
2:B:3535:LEU:O	2:B:3538:THR:HB	1.97	0.65
2:I:652:ARG:HD3	2:I:773:LEU:HD13	1.79	0.65
2:A:1099:GLU:OE2	2:A:1101:ARG:NH2	2.30	0.65
2:A:3150:HIS:HB3	2:A:3152:PHE:CD2	2.31	0.65
2:A:4701:TRP:HE1	2:A:4778:TRP:HA	1.61	0.65
2:G:1099:GLU:OE2	2:G:1101:ARG:NH2	2.30	0.65
2:B:3010:PHE:O	2:B:3014:CYS:N	2.29	0.65
2:B:4237:PHE:HA	2:B:4240:ASP:HB2	1.79	0.65
2:I:2375:GLY:O	2:I:2379:ALA:N	2.29	0.65
2:I:3150:HIS:HB3	2:I:3152:PHE:CD2	2.31	0.65
2:A:4913:ARG:NH1	2:G:4888:TYR:OH	2.29	0.64
2:I:1099:GLU:OE2	2:I:1101:ARG:NH2	2.30	0.64
2:I:2537:ASP:O	2:I:2593:ARG:NH2	2.30	0.64
2:A:3313:ASN:ND2	2:A:3350:ARG:H	1.96	0.64
2:G:3336:LYS:NZ	2:G:3462:ASN:O	2.30	0.64
2:G:4023:MET:HE3	2:G:4026:MET:HG3	1.79	0.64
2:B:1099:GLU:OE2	2:B:1101:ARG:NH2	2.30	0.64
2:I:978:THR:OG1	2:I:981:GLN:NE2	2.30	0.64
2:I:2751:LEU:HD13	2:I:2813:LEU:HB3	1.78	0.64
2:I:3313:ASN:ND2	2:I:3350:ARG:H	1.96	0.64
2:A:2703:LEU:HA	2:A:2706:ILE:HD12	1.80	0.64
2:A:3997:ALA:HB2	2:A:4058:ILE:HG12	1.78	0.64
2:G:2823:ILE:HG13	2:G:2937:VAL:HG23	1.77	0.64
2:I:3535:LEU:O	2:I:3538:THR:HB	1.97	0.64
2:A:2537:ASP:O	2:A:2593:ARG:NH2	2.30	0.64
2:A:3336:LYS:NZ	2:A:3462:ASN:O	2.30	0.64
2:B:890:GLY:HA3	2:B:902:ARG:HD3	1.78	0.64
2:I:3997:ALA:HB2	2:I:4058:ILE:HG12	1.78	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:652:ARG:HD3	2:A:773:LEU:HD13	1.79	0.64
2:A:890:GLY:HA3	2:A:902:ARG:HD3	1.78	0.64
2:A:978:THR:OG1	2:A:981:GLN:NE2	2.30	0.64
2:A:2375:GLY:O	2:A:2379:ALA:N	2.29	0.64
2:A:3374:ALA:O	2:A:3377:GLU:HG3	1.98	0.64
2:A:3632:VAL:O	2:A:3636:PHE:N	2.31	0.64
2:G:4866:SER:HB3	2:G:4873:ASP:HB3	1.79	0.64
2:B:2384:ILE:HD13	2:B:2494:PHE:CE1	2.32	0.64
2:B:2788:HIS:HB3	2:B:2791:LEU:HG	1.78	0.64
2:A:2751:LEU:HD13	2:A:2813:LEU:HB3	1.78	0.64
2:G:2285:GLU:OE1	2:G:2285:GLU:N	2.27	0.64
2:G:2751:LEU:HD13	2:G:2813:LEU:HB3	1.78	0.64
2:B:2151:ASP:OD2	2:B:2189:LYS:NZ	2.20	0.64
2:B:2358:ILE:HD12	2:I:195:PHE:CE1	2.33	0.64
2:B:2751:LEU:HD22	2:B:2813:LEU:HD22	1.80	0.64
2:B:4715:TYR:HD1	2:B:4717:ASP:H	1.44	0.64
2:I:2624:ARG:HH21	2:I:2906:VAL:HG21	1.63	0.64
2:I:3336:LYS:NZ	2:I:3462:ASN:O	2.30	0.64
2:A:1226:PHE:O	2:A:1827:ARG:NH1	2.31	0.64
2:A:2384:ILE:HD13	2:A:2494:PHE:CE1	2.32	0.64
2:A:2751:LEU:HD22	2:A:2813:LEU:HD22	1.80	0.64
2:A:2788:HIS:HB3	2:A:2791:LEU:HG	1.78	0.64
2:A:4023:MET:HE3	2:A:4026:MET:HG3	1.79	0.64
2:G:3535:LEU:O	2:G:3538:THR:HB	1.97	0.64
2:B:3336:LYS:NZ	2:B:3462:ASN:O	2.30	0.64
2:I:1226:PHE:O	2:I:1827:ARG:NH1	2.31	0.64
2:G:317:ARG:HH12	2:G:323:LEU:HD23	1.63	0.64
2:B:2703:LEU:HA	2:B:2706:ILE:HD12	1.80	0.64
2:B:3313:ASN:ND2	2:B:3350:ARG:H	1.96	0.64
2:B:3544:ASP:HB3	2:B:3548:GLU:HB3	1.80	0.64
2:I:2751:LEU:HD22	2:I:2813:LEU:HD22	1.80	0.64
2:I:4237:PHE:HA	2:I:4240:ASP:HB2	1.79	0.64
2:I:4715:TYR:HD1	2:I:4717:ASP:H	1.44	0.64
2:A:3776:ALA:HB1	2:A:3816:MET:HG2	1.80	0.64
2:A:4715:TYR:HD1	2:A:4717:ASP:H	1.44	0.64
2:G:2001:PRO:HA	2:G:3638:MET:HG2	1.80	0.64
2:G:4877:ASP:O	2:I:4582:VAL:HG12	1.97	0.64
2:B:2751:LEU:HD13	2:B:2813:LEU:HB3	1.78	0.64
2:I:2001:PRO:HA	2:I:3638:MET:HG2	1.80	0.64
2:A:2737:PRO:O	2:A:2888:ARG:NH2	2.32	0.63
2:A:5031:GLN:HG2	2:A:5032:TYR:CE1	2.33	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:2703:LEU:HA	2:G:2706:ILE:HD12	1.80	0.63
2:B:61:ASP:OD2	2:B:402:ARG:NH2	2.31	0.63
2:B:978:THR:OG1	2:B:981:GLN:NE2	2.30	0.63
2:A:4215:ARG:NH2	3:A:5301:ATP:O2B	2.31	0.63
2:G:3374:ALA:O	2:G:3377:GLU:HG3	1.98	0.63
2:B:317:ARG:HH12	2:B:323:LEU:HD23	1.63	0.63
2:B:864:PRO:HD2	2:B:867:LEU:HD13	1.81	0.63
2:I:61:ASP:OD2	2:I:402:ARG:NH2	2.31	0.63
2:I:2703:LEU:HA	2:I:2706:ILE:HD12	1.80	0.63
2:I:2737:PRO:O	2:I:2888:ARG:NH2	2.31	0.63
2:I:4215:ARG:NH2	3:I:5301:ATP:O2B	2.31	0.63
2:A:317:ARG:HH12	2:A:323:LEU:HD23	1.63	0.63
2:A:3934:TYR:HB2	2:A:3999:MET:HE1	1.80	0.63
2:A:4089:SER:HA	2:A:4122:MET:HA	1.81	0.63
2:A:4866:SER:HB3	2:A:4873:ASP:HB3	1.79	0.63
2:B:2624:ARG:HH21	2:B:2906:VAL:HG21	1.63	0.63
2:I:5031:GLN:HG2	2:I:5032:TYR:CE1	2.33	0.63
2:A:4237:PHE:HA	2:A:4240:ASP:HB2	1.79	0.63
2:G:1226:PHE:O	2:G:1827:ARG:NH1	2.31	0.63
2:G:2624:ARG:HH21	2:G:2906:VAL:HG21	1.63	0.63
2:G:4157:ASP:H	2:G:4161:ARG:NH1	1.97	0.63
2:B:4023:MET:HE3	2:B:4026:MET:HG3	1.80	0.63
2:B:5031:GLN:HG2	2:B:5032:TYR:CE1	2.34	0.63
2:I:976:ARG:HA	2:I:1044:ARG:HH12	1.64	0.63
2:I:4242:ILE:HA	2:I:4245:MET:SD	2.39	0.63
2:A:2001:PRO:HA	2:A:3638:MET:HG2	1.80	0.63
2:A:3950:ASN:HA	2:A:3953:LYS:NZ	2.14	0.63
2:G:3632:VAL:O	2:G:3636:PHE:N	2.31	0.63
2:G:4215:ARG:NH2	3:G:5301:ATP:O2B	2.31	0.63
2:G:4242:ILE:HA	2:G:4245:MET:SD	2.39	0.63
2:B:3374:ALA:O	2:B:3377:GLU:HG3	1.98	0.63
2:B:4866:SER:HB3	2:B:4873:ASP:HB3	1.79	0.63
2:A:976:ARG:HA	2:A:1044:ARG:HH12	1.64	0.63
2:G:195:PHE:CE1	2:I:2358:ILE:HD12	2.33	0.63
2:G:2751:LEU:HD22	2:G:2813:LEU:HD22	1.80	0.63
2:B:1226:PHE:O	2:B:1827:ARG:NH1	2.31	0.63
2:I:317:ARG:HH12	2:I:323:LEU:HD23	1.63	0.63
2:I:2285:GLU:OE1	2:I:2285:GLU:N	2.27	0.63
2:I:3544:ASP:HB3	2:I:3548:GLU:HB3	1.80	0.63
2:I:4866:SER:HB3	2:I:4873:ASP:HB3	1.79	0.63
2:G:976:ARG:HA	2:G:1044:ARG:HH12	1.64	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:2737:PRO:O	2:G:2888:ARG:NH2	2.32	0.63
2:B:976:ARG:HA	2:B:1044:ARG:HH12	1.64	0.63
2:I:2538:THR:HG23	2:I:2541:PHE:H	1.63	0.63
2:G:899:ASP:HA	2:G:904:HIS:HB3	1.81	0.63
2:G:3776:ALA:HB1	2:G:3816:MET:HG2	1.80	0.63
2:G:3934:TYR:HB2	2:G:3999:MET:CE	2.29	0.63
2:B:4215:ARG:NH2	3:B:5301:ATP:O2B	2.31	0.63
2:I:899:ASP:HA	2:I:904:HIS:HB3	1.81	0.63
2:I:3180:ASN:HB2	2:I:3183:VAL:HG13	1.81	0.63
2:A:4157:ASP:H	2:A:4161:ARG:NH1	1.97	0.63
2:G:173:SER:OG	2:G:176:SER:O	2.09	0.63
2:G:2375:GLY:O	2:G:2379:ALA:N	2.29	0.63
2:G:5031:GLN:HG2	2:G:5032:TYR:CE1	2.34	0.63
2:B:2001:PRO:HA	2:B:3638:MET:HG2	1.80	0.63
2:B:3527:PRO:HA	2:B:3530:GLN:HE22	1.64	0.63
2:B:4242:ILE:HA	2:B:4245:MET:SD	2.39	0.63
2:I:4157:ASP:H	2:I:4161:ARG:NH1	1.97	0.63
2:A:112:ALA:O	2:A:115:ARG:NH1	2.32	0.62
2:A:173:SER:OG	2:A:176:SER:O	2.09	0.62
2:A:180:LEU:O	2:A:198:THR:OG1	2.15	0.62
2:A:864:PRO:HD2	2:A:867:LEU:HD13	1.81	0.62
2:A:2358:ILE:HD12	2:B:195:PHE:CE1	2.34	0.62
2:G:1815:LEU:HD22	2:G:1845:VAL:HG21	1.81	0.62
2:G:3544:ASP:HB2	2:G:3549:VAL:HG13	1.81	0.62
2:B:112:ALA:O	2:B:115:ARG:NH1	2.32	0.62
2:B:2375:GLY:O	2:B:2379:ALA:N	2.29	0.62
2:I:864:PRO:HD2	2:I:867:LEU:HD13	1.81	0.62
2:I:3166:TYR:HA	2:I:3169:LEU:HD12	1.81	0.62
2:I:3374:ALA:O	2:I:3377:GLU:HG3	1.98	0.62
2:I:3527:PRO:O	2:I:3529:ASP:N	2.32	0.62
2:I:3544:ASP:HB2	2:I:3549:VAL:HG13	1.81	0.62
2:A:61:ASP:OD2	2:A:402:ARG:NH2	2.31	0.62
2:A:2538:THR:HG23	2:A:2541:PHE:H	1.63	0.62
2:A:3934:TYR:HB2	2:A:3999:MET:CE	2.29	0.62
2:G:61:ASP:OD2	2:G:402:ARG:NH2	2.31	0.62
2:G:2443:ILE:HD12	2:G:2454:ARG:HD2	1.81	0.62
2:G:2538:THR:HG23	2:G:2541:PHE:H	1.63	0.62
2:G:3313:ASN:ND2	2:G:3350:ARG:H	1.96	0.62
2:B:2737:PRO:O	2:B:2888:ARG:NH2	2.32	0.62
2:B:4088:ILE:O	2:B:4123:ILE:N	2.31	0.62
2:I:4023:MET:HE3	2:I:4026:MET:HG3	1.81	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:3527:PRO:O	2:G:3529:ASP:N	2.32	0.62
2:B:3180:ASN:HB2	2:B:3183:VAL:HG13	1.81	0.62
2:B:3934:TYR:HB2	2:B:3999:MET:CE	2.29	0.62
2:A:899:ASP:HA	2:A:904:HIS:HB3	1.81	0.62
2:G:1717:SER:HA	2:G:1721:GLU:HG3	1.81	0.62
2:G:3180:ASN:HB2	2:G:3183:VAL:HG13	1.81	0.62
2:B:657:THR:OG1	2:B:851:PHE:O	2.18	0.62
2:I:1815:LEU:HD22	2:I:1845:VAL:HG21	1.81	0.62
2:A:1658:ASP:OD1	2:A:1659:LEU:N	2.33	0.62
1:H:49:ARG:HH11	1:H:49:ARG:CB	2.11	0.62
2:B:4089:SER:HA	2:B:4122:MET:HA	1.80	0.62
2:I:1717:SER:HA	2:I:1721:GLU:HG3	1.81	0.62
2:I:3527:PRO:HA	2:I:3530:GLN:HE22	1.64	0.62
2:I:3776:ALA:HB1	2:I:3816:MET:HG2	1.80	0.62
2:I:3934:TYR:HB2	2:I:3999:MET:CE	2.29	0.62
2:A:2359:ARG:NH2	2:B:177:GLU:OE2	2.32	0.62
2:A:2443:ILE:HD12	2:A:2454:ARG:HD2	1.81	0.62
2:A:3166:TYR:HA	2:A:3169:LEU:HD12	1.82	0.62
2:A:4072:VAL:HG13	2:A:4125:PHE:HB2	1.82	0.62
2:A:4209:GLN:OE1	2:A:4209:GLN:N	2.26	0.62
2:A:4582:VAL:HG12	2:B:4877:ASP:O	2.00	0.62
2:G:1658:ASP:OD1	2:G:1659:LEU:N	2.33	0.62
2:G:4157:ASP:N	2:G:4161:ARG:HH12	1.98	0.62
2:G:4237:PHE:HA	2:G:4240:ASP:HB2	1.79	0.62
2:B:3166:TYR:HA	2:B:3169:LEU:HD12	1.82	0.62
2:I:3206:LEU:HD13	2:I:3305:THR:HB	1.82	0.62
2:I:4072:VAL:HG13	2:I:4125:PHE:HB2	1.82	0.62
2:A:2794:TYR:HA	2:A:2797:PHE:HB2	1.82	0.62
2:A:3527:PRO:HA	2:A:3530:GLN:HE22	1.64	0.62
2:A:3544:ASP:HB2	2:A:3549:VAL:HG13	1.81	0.62
1:J:49:ARG:HH11	1:J:49:ARG:CB	2.11	0.62
2:G:2233:CYS:SG	2:G:2270:SER:OG	2.56	0.62
2:G:2430:ILE:HG21	2:G:2502:MET:HE1	1.81	0.62
2:G:4088:ILE:O	2:G:4123:ILE:N	2.32	0.62
2:G:4089:SER:HA	2:G:4122:MET:HA	1.81	0.62
2:B:899:ASP:HA	2:B:904:HIS:HB3	1.81	0.62
2:B:4157:ASP:N	2:B:4161:ARG:HH12	1.98	0.62
2:I:2006:ILE:HD12	2:I:3652:MET:HE3	1.82	0.62
2:I:3937:TYR:CZ	2:I:3943:ILE:HB	2.35	0.62
2:I:4088:ILE:O	2:I:4123:ILE:N	2.32	0.62
2:G:978:THR:OG1	2:G:981:GLN:NE2	2.30	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:3206:LEU:HD13	2:G:3305:THR:HB	1.82	0.62
2:G:3544:ASP:HB3	2:G:3548:GLU:HB3	1.80	0.62
2:B:4157:ASP:H	2:B:4161:ARG:NH1	1.97	0.62
2:I:657:THR:OG1	2:I:851:PHE:O	2.18	0.62
2:I:3950:ASN:HA	2:I:3953:LYS:NZ	2.14	0.62
2:A:1815:LEU:HD22	2:A:1845:VAL:HG21	1.81	0.62
2:A:2621:HIS:O	2:A:2624:ARG:HB3	1.99	0.62
2:A:3180:ASN:HB2	2:A:3183:VAL:HG13	1.81	0.62
2:G:273:HIS:ND1	2:G:334:MET:O	2.27	0.62
2:G:2205:GLU:OE1	2:G:2205:GLU:N	2.33	0.62
2:G:3527:PRO:HA	2:G:3530:GLN:HE22	1.64	0.62
2:B:3776:ALA:HB1	2:B:3816:MET:HG2	1.80	0.62
2:B:4072:VAL:HG13	2:B:4125:PHE:HB2	1.82	0.62
2:I:1658:ASP:OD1	2:I:1659:LEU:N	2.33	0.62
2:I:3632:VAL:O	2:I:3636:PHE:N	2.31	0.62
2:G:657:THR:OG1	2:G:851:PHE:O	2.18	0.62
2:B:173:SER:OG	2:B:176:SER:O	2.09	0.62
2:B:2205:GLU:OE1	2:B:2205:GLU:N	2.33	0.62
2:B:3950:ASN:HA	2:B:3953:LYS:NZ	2.14	0.62
2:I:917:GLU:O	2:I:921:ASN:ND2	2.29	0.62
2:I:2443:ILE:HD12	2:I:2454:ARG:HD2	1.81	0.62
2:I:2621:HIS:O	2:I:2624:ARG:HB3	1.99	0.62
2:I:4089:SER:HA	2:I:4122:MET:HA	1.80	0.62
2:A:2624:ARG:NH2	2:A:2911:LEU:HD12	2.15	0.61
2:G:2624:ARG:NH2	2:G:2911:LEU:HD12	2.15	0.61
2:B:2621:HIS:O	2:B:2624:ARG:HB3	1.99	0.61
2:B:2794:TYR:HA	2:B:2797:PHE:HB2	1.82	0.61
2:I:112:ALA:O	2:I:115:ARG:NH1	2.32	0.61
2:A:265:LEU:HD13	2:A:279:PRO:O	2.00	0.61
2:A:657:THR:OG1	2:A:851:PHE:O	2.18	0.61
2:A:1717:SER:HA	2:A:1721:GLU:HG3	1.81	0.61
2:A:2624:ARG:HH21	2:A:2906:VAL:HG21	1.63	0.61
2:A:4157:ASP:N	2:A:4161:ARG:HH12	1.98	0.61
2:G:2621:HIS:O	2:G:2624:ARG:HB3	1.99	0.61
2:G:2693:GLN:HB3	2:G:2697:ARG:HH12	1.65	0.61
2:B:2538:THR:HG23	2:B:2541:PHE:H	1.63	0.61
2:I:2233:CYS:SG	2:I:2270:SER:OG	2.56	0.61
2:A:2755:ILE:HA	2:A:2809:ILE:HG21	1.81	0.61
2:A:3527:PRO:O	2:A:3529:ASP:N	2.32	0.61
2:A:4242:ILE:HA	2:A:4245:MET:SD	2.39	0.61
2:G:265:LEU:HD13	2:G:279:PRO:O	2.00	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:3937:TYR:CZ	2:G:3943:ILE:HB	2.35	0.61
2:G:3950:ASN:HA	2:G:3953:LYS:NZ	2.14	0.61
2:G:4072:VAL:HG13	2:G:4125:PHE:HB2	1.82	0.61
2:B:2624:ARG:NH2	2:B:2911:LEU:HD12	2.15	0.61
2:B:2755:ILE:HA	2:B:2809:ILE:HG21	1.81	0.61
2:B:3829:PHE:HE1	2:B:3902:TYR:HE2	1.49	0.61
2:A:2205:GLU:N	2:A:2205:GLU:OE1	2.33	0.61
2:A:2430:ILE:HG21	2:A:2502:MET:HE2	1.81	0.61
2:A:2693:GLN:HB3	2:A:2697:ARG:HH12	1.65	0.61
2:A:4849:TYR:HE1	2:G:4578:LEU:HD13	1.65	0.61
2:G:864:PRO:HD2	2:G:867:LEU:HD13	1.81	0.61
2:G:2750[B]:LYS:NZ	2:G:2823:ILE:O	2.28	0.61
2:B:3206:LEU:HD13	2:B:3305:THR:HB	1.82	0.61
2:B:3937:TYR:CZ	2:B:3943:ILE:HB	2.35	0.61
2:I:2205:GLU:N	2:I:2205:GLU:OE1	2.33	0.61
2:I:2430:ILE:HG21	2:I:2502:MET:HE1	1.81	0.61
2:I:3829:PHE:HE1	2:I:3902:TYR:HE2	1.49	0.61
2:I:4700:GLN:HA	2:I:4703:ARG:HG3	1.82	0.61
2:G:3166:TYR:HA	2:G:3169:LEU:HD12	1.82	0.61
2:B:265:LEU:HD13	2:B:279:PRO:O	2.00	0.61
2:A:4658:ILE:HD13	2:A:4796:MET:CE	2.31	0.61
2:G:2689:LYS:O	2:G:2993:GLN:NE2	2.34	0.61
2:G:2755:ILE:HA	2:G:2809:ILE:HG21	1.81	0.61
2:G:2794:TYR:HA	2:G:2797:PHE:HB2	1.82	0.61
2:B:2443:ILE:HD12	2:B:2454:ARG:HD2	1.81	0.61
2:I:2693:GLN:HB3	2:I:2697:ARG:HH12	1.65	0.61
2:I:2794:TYR:HA	2:I:2797:PHE:HB2	1.82	0.61
2:A:47:CYS:HB2	2:A:135:VAL:HG23	1.83	0.61
2:G:3386:GLU:HA	2:G:3389:GLU:HB2	1.83	0.61
2:B:180:LEU:O	2:B:198:THR:OG1	2.15	0.61
2:B:2430:ILE:HG21	2:B:2502:MET:HE1	1.81	0.61
2:B:2689:LYS:O	2:B:2993:GLN:NE2	2.34	0.61
2:B:2693:GLN:HB3	2:B:2697:ARG:HH12	1.65	0.61
2:I:1695:LEU:HB3	2:I:1810:LYS:HZ3	1.64	0.61
1:F:49:ARG:HH11	1:F:49:ARG:CB	2.11	0.61
2:A:3829:PHE:HE1	2:A:3902:TYR:HE2	1.49	0.61
2:A:3937:TYR:CZ	2:A:3943:ILE:HB	2.35	0.61
1:O:49:ARG:HH11	1:O:49:ARG:CB	2.11	0.61
2:G:180:LEU:O	2:G:198:THR:OG1	2.15	0.61
2:G:4700:GLN:HA	2:G:4703:ARG:HG3	1.82	0.61
2:B:1658:ASP:OD1	2:B:1659:LEU:N	2.33	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1695:LEU:HB3	2:B:1810:LYS:HZ3	1.66	0.61
2:B:2461:VAL:O	2:B:2510:TYR:OH	2.10	0.61
2:B:3527:PRO:O	2:B:3529:ASP:N	2.32	0.61
2:A:2458:ARG:NH1	2:A:2509:VAL:O	2.34	0.61
2:G:652:ARG:HH21	2:G:773:LEU:HD13	1.66	0.61
2:B:215:THR:HG22	2:B:273:HIS:HA	1.83	0.61
2:B:1815:LEU:HD22	2:B:1845:VAL:HG21	1.81	0.61
2:B:3544:ASP:HB2	2:B:3549:VAL:HG13	1.81	0.61
2:I:652:ARG:HH21	2:I:773:LEU:HD13	1.66	0.61
2:I:2624:ARG:NH2	2:I:2911:LEU:HD12	2.15	0.61
2:I:4157:ASP:N	2:I:4161:ARG:HH12	1.98	0.61
2:A:2006:ILE:HD12	2:A:3652:MET:HE3	1.82	0.61
2:A:3150:HIS:HB3	2:A:3152:PHE:HD2	1.66	0.61
2:G:3989:VAL:HA	2:G:3992:PHE:HB2	1.83	0.61
2:G:4658:ILE:HD13	2:G:4796:MET:CE	2.31	0.61
2:I:1084:GLN:NE2	2:I:1186:ASP:O	2.33	0.61
2:I:2627:VAL:HG21	2:I:2674:LEU:HD11	1.83	0.61
2:I:2689:LYS:O	2:I:2993:GLN:NE2	2.34	0.61
2:G:27:THR:OG1	2:G:32:GLN:OE1	2.19	0.60
2:G:2592:GLY:O	2:G:2600:ARG:NH2	2.34	0.60
2:B:47:CYS:HB2	2:B:135:VAL:HG23	1.83	0.60
2:B:2006:ILE:HD12	2:B:3652:MET:HE3	1.82	0.60
2:B:3150:HIS:HB3	2:B:3152:PHE:HD2	1.66	0.60
2:I:215:THR:HG22	2:I:273:HIS:HA	1.83	0.60
2:I:3150:HIS:HB3	2:I:3152:PHE:HD2	1.66	0.60
2:I:3534:MET:O	2:I:3538:THR:N	2.26	0.60
2:A:2627:VAL:HG21	2:A:2674:LEU:HD11	1.83	0.60
2:A:3386:GLU:HA	2:A:3389:GLU:HB2	1.83	0.60
2:A:3544:ASP:HB3	2:A:3548:GLU:HB3	1.80	0.60
2:G:112:ALA:O	2:G:115:ARG:NH1	2.33	0.60
2:G:2449:GLU:O	2:G:2453:ILE:HG12	2.02	0.60
2:G:2627:VAL:HG21	2:G:2674:LEU:HD11	1.83	0.60
2:G:2693:GLN:HG3	2:G:2996:LYS:HE3	1.84	0.60
2:G:4046:ASP:HA	2:G:4049:VAL:HG22	1.83	0.60
2:B:652:ARG:HH21	2:B:773:LEU:HD13	1.66	0.60
2:B:2596:THR:O	2:B:2599:GLN:N	2.31	0.60
2:I:27:THR:OG1	2:I:32:GLN:OE1	2.19	0.60
2:I:47:CYS:HB2	2:I:135:VAL:HG23	1.83	0.60
2:I:459:LEU:HD21	2:I:463:GLU:HB2	1.83	0.60
2:I:1770:SER:OG	2:I:1772:ARG:NH1	2.35	0.60
2:I:4046:ASP:HA	2:I:4049:VAL:HG22	1.83	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:215:THR:HG22	2:A:273:HIS:HA	1.83	0.60
2:G:215:THR:HG22	2:G:273:HIS:HA	1.83	0.60
2:G:2006:ILE:HD12	2:G:3652:MET:HE3	1.82	0.60
2:G:3825:GLU:OE2	2:G:3826:VAL:N	2.34	0.60
2:G:3829:PHE:HE1	2:G:3902:TYR:HE2	1.48	0.60
2:B:2333:ASP:HA	2:B:2336:ARG:HE	1.66	0.60
2:B:2868:SER:H	2:B:2871:LEU:HD12	1.67	0.60
2:B:3632:VAL:O	2:B:3636:PHE:N	2.31	0.60
2:B:4046:ASP:HA	2:B:4049:VAL:HG22	1.83	0.60
2:I:461:HIS:NE2	2:I:3707:ARG:HG3	2.17	0.60
2:I:2449:GLU:O	2:I:2453:ILE:HG12	2.01	0.60
2:I:3607:GLU:O	2:I:3611:HIS:ND1	2.34	0.60
2:A:652:ARG:HH21	2:A:773:LEU:HD13	1.66	0.60
2:A:1770:SER:OG	2:A:1772:ARG:NH1	2.34	0.60
2:A:2868:SER:H	2:A:2871:LEU:HD12	1.67	0.60
2:A:3989:VAL:HA	2:A:3992:PHE:HB2	1.83	0.60
2:G:707:VAL:HG23	2:G:782:SER:HB3	1.83	0.60
2:G:2868:SER:H	2:G:2871:LEU:HD12	1.67	0.60
2:B:27:THR:OG1	2:B:32:GLN:OE1	2.19	0.60
2:B:1717:SER:HA	2:B:1721:GLU:HG3	1.81	0.60
2:B:3090:ALA:HA	2:B:3093:ARG:HH21	1.66	0.60
2:B:4687:TYR:CD2	2:B:4692:PRO:HG3	2.36	0.60
2:I:3386:GLU:HA	2:I:3389:GLU:HB2	1.83	0.60
2:A:1084:GLN:NE2	2:A:1186:ASP:O	2.33	0.60
2:A:2333:ASP:HA	2:A:2336:ARG:HE	1.66	0.60
2:A:4046:ASP:HA	2:A:4049:VAL:HG22	1.83	0.60
2:A:4088:ILE:N	2:A:4123:ILE:O	2.29	0.60
2:G:1770:SER:OG	2:G:1772:ARG:NH1	2.34	0.60
2:G:2458:ARG:NH1	2:G:2509:VAL:O	2.34	0.60
2:B:459:LEU:HD21	2:B:463:GLU:HB2	1.83	0.60
2:B:461:HIS:NE2	2:B:3707:ARG:HG3	2.17	0.60
2:B:1770:SER:OG	2:B:1772:ARG:NH1	2.34	0.60
2:B:3607:GLU:O	2:B:3611:HIS:ND1	2.34	0.60
2:B:4700:GLN:HA	2:B:4703:ARG:HG3	1.82	0.60
2:I:707:VAL:HG23	2:I:782:SER:HB3	1.83	0.60
2:I:2693:GLN:HG3	2:I:2996:LYS:HE3	1.84	0.60
2:I:2755:ILE:HA	2:I:2809:ILE:HG21	1.81	0.60
2:I:2868:SER:H	2:I:2871:LEU:HD12	1.67	0.60
2:I:4658:ILE:HD13	2:I:4796:MET:CE	2.31	0.60
2:A:461:HIS:NE2	2:A:3707:ARG:HG3	2.17	0.60
2:A:3206:LEU:HD13	2:A:3305:THR:HB	1.82	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:1695:LEU:HB3	2:G:1810:LYS:HZ3	1.65	0.60
2:B:2504:LEU:O	2:B:2508:ARG:HB2	2.02	0.60
2:B:3147:ILE:O	2:B:3151:GLN:N	2.35	0.60
2:B:4993:MET:HA	2:B:4996:ILE:HG22	1.84	0.60
2:I:265:LEU:HD13	2:I:279:PRO:O	2.01	0.60
2:I:2333:ASP:HA	2:I:2336:ARG:HE	1.66	0.60
2:A:27:THR:OG1	2:A:32:GLN:OE1	2.19	0.60
2:A:2504:LEU:O	2:A:2508:ARG:HB2	2.02	0.60
2:A:2592:GLY:O	2:A:2600:ARG:NH2	2.34	0.60
2:A:4687:TYR:CD2	2:A:4692:PRO:HG3	2.36	0.60
2:A:4700:GLN:HA	2:A:4703:ARG:HG3	1.82	0.60
2:G:47:CYS:HB2	2:G:135:VAL:HG23	1.83	0.60
2:G:261:ARG:NH1	2:G:263:GLU:OE2	2.35	0.60
2:G:2970:SER:HA	2:G:2973:PHE:HB3	1.84	0.60
2:B:1084:GLN:NE2	2:B:1186:ASP:O	2.33	0.60
2:I:261:ARG:NH1	2:I:263:GLU:OE2	2.35	0.60
2:I:3989:VAL:HA	2:I:3992:PHE:HB2	1.83	0.60
2:I:4993:MET:HA	2:I:4996:ILE:HG22	1.84	0.60
2:A:1543:GLU:O	2:A:1546:THR:OG1	2.17	0.60
2:A:2689:LYS:O	2:A:2993:GLN:NE2	2.34	0.60
2:G:3150:HIS:HB3	2:G:3152:PHE:HD2	1.66	0.60
2:G:4230:LYS:HA	2:G:4233:LEU:HB2	1.83	0.60
2:B:2175:GLU:HG3	2:B:2228:MET:HE1	1.83	0.60
2:B:2458:ARG:NH1	2:B:2509:VAL:O	2.34	0.60
2:B:2970:SER:HA	2:B:2973:PHE:HB3	1.84	0.60
2:I:2458:ARG:NH1	2:I:2509:VAL:O	2.34	0.60
2:A:2693:GLN:HG3	2:A:2996:LYS:HE3	1.84	0.60
2:G:459:LEU:HD21	2:G:463:GLU:HB2	1.83	0.60
2:B:1543:GLU:O	2:B:1546:THR:OG1	2.17	0.60
2:B:4088:ILE:N	2:B:4123:ILE:O	2.29	0.60
2:B:4658:ILE:HD13	2:B:4796:MET:CE	2.31	0.60
2:I:2592:GLY:O	2:I:2600:ARG:NH2	2.34	0.60
2:I:3147:ILE:O	2:I:3151:GLN:N	2.35	0.60
2:I:4687:TYR:CD2	2:I:4692:PRO:HG3	2.36	0.60
2:A:261:ARG:NH1	2:A:263:GLU:OE2	2.35	0.60
2:A:3607:GLU:O	2:A:3611:HIS:ND1	2.34	0.60
2:A:3825:GLU:OE2	2:A:3826:VAL:N	2.34	0.60
2:G:2559:LEU:HB3	2:G:2606:CYS:SG	2.42	0.60
2:G:4687:TYR:CD2	2:G:4692:PRO:HG3	2.36	0.60
2:A:2970:SER:HA	2:A:2973:PHE:HB3	1.84	0.59
2:A:3283:ARG:HD3	2:A:3287:ARG:NH2	2.17	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:3450:ASN:HA	2:A:3453:ARG:HG2	1.84	0.59
2:A:4049:VAL:HG11	2:A:4159:ARG:HD2	1.84	0.59
2:G:73:LEU:C	2:G:105:HIS:HD1	2.06	0.59
2:G:3090:ALA:HA	2:G:3093:ARG:HH21	1.66	0.59
2:G:3450:ASN:HA	2:G:3453:ARG:HG2	1.84	0.59
2:G:3607:GLU:O	2:G:3611:HIS:ND1	2.34	0.59
2:G:4049:VAL:HG11	2:G:4159:ARG:HD2	1.85	0.59
2:B:2449:GLU:O	2:B:2453:ILE:HG12	2.01	0.59
2:B:2592:GLY:O	2:B:2600:ARG:NH2	2.34	0.59
2:B:3283:ARG:HD3	2:B:3287:ARG:NH2	2.17	0.59
2:B:3386:GLU:HA	2:B:3389:GLU:HB2	1.83	0.59
2:B:4237:PHE:HD1	2:B:4672:LYS:HZ2	1.50	0.59
2:A:177:GLU:OE2	2:G:2359:ARG:NH2	2.35	0.59
2:G:2504:LEU:O	2:G:2508:ARG:HB2	2.02	0.59
2:G:3879:GLU:OE1	2:G:3879:GLU:N	2.33	0.59
2:B:3065:VAL:HA	2:B:3068:LEU:HD12	1.84	0.59
2:B:4049:VAL:HG11	2:B:4159:ARG:HD2	1.84	0.59
2:I:2504:LEU:O	2:I:2508:ARG:HB2	2.02	0.59
2:I:3825:GLU:OE2	2:I:3826:VAL:N	2.34	0.59
2:A:2449:GLU:O	2:A:2453:ILE:HG12	2.02	0.59
2:A:2596:THR:O	2:A:2599:GLN:N	2.31	0.59
2:A:3090:ALA:HA	2:A:3093:ARG:HH21	1.66	0.59
2:A:3147:ILE:O	2:A:3151:GLN:N	2.35	0.59
2:A:4088:ILE:O	2:A:4123:ILE:N	2.32	0.59
1:O:48:PHE:HB2	1:O:54:GLU:HG2	1.85	0.59
2:G:461:HIS:NE2	2:G:3707:ARG:HG3	2.17	0.59
2:B:261:ARG:NH1	2:B:263:GLU:OE2	2.35	0.59
2:B:2693:GLN:HG3	2:B:2996:LYS:HE3	1.84	0.59
2:B:4230:LYS:HA	2:B:4233:LEU:HB2	1.83	0.59
2:B:4951:LYS:HD2	2:B:4954:MET:HE3	1.84	0.59
2:I:3065:VAL:HA	2:I:3068:LEU:HD12	1.85	0.59
2:A:2285:GLU:OE1	2:A:2285:GLU:N	2.27	0.59
1:H:48:PHE:HB2	1:H:54:GLU:HG2	1.85	0.59
2:B:3825:GLU:OE2	2:B:3826:VAL:N	2.34	0.59
2:B:3934:TYR:O	2:B:3938:SER:HB3	2.02	0.59
2:I:3960:GLN:NE2	2:I:3960:GLN:O	2.35	0.59
2:A:3542:LEU:HD22	2:A:3544:ASP:OD1	2.02	0.59
2:G:3147:ILE:O	2:G:3151:GLN:N	2.35	0.59
2:G:3960:GLN:O	2:G:3960:GLN:NE2	2.35	0.59
2:B:707:VAL:HG23	2:B:782:SER:HB3	1.83	0.59
2:B:709:ASP:OD1	2:B:725:HIS:ND1	2.31	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2559:LEU:HB3	2:B:2606:CYS:SG	2.42	0.59
2:B:3960:GLN:O	2:B:3960:GLN:NE2	2.35	0.59
2:I:3542:LEU:HD22	2:I:3544:ASP:OD1	2.02	0.59
2:A:3934:TYR:O	2:A:3938:SER:HB3	2.02	0.59
2:A:4230:LYS:HA	2:A:4233:LEU:HB2	1.83	0.59
2:G:2151:ASP:OD2	2:G:2189:LYS:NZ	2.20	0.59
2:G:2570:ALA:HB2	2:G:2613:TYR:HB3	1.84	0.59
2:G:3542:LEU:HD22	2:G:3544:ASP:OD1	2.02	0.59
2:G:4157:ASP:H	2:G:4161:ARG:HH12	1.49	0.59
2:G:4993:MET:HA	2:G:4996:ILE:HG22	1.84	0.59
2:B:2627:VAL:HG21	2:B:2674:LEU:HD11	1.83	0.59
2:B:3534:MET:O	2:B:3538:THR:N	2.26	0.59
2:B:3951:PHE:HD2	2:B:4012:LEU:HD21	1.68	0.59
2:I:173:SER:OG	2:I:176:SER:O	2.09	0.59
2:I:176:SER:OG	2:I:178:ARG:NE	2.36	0.59
2:I:2970:SER:HA	2:I:2973:PHE:HB3	1.84	0.59
2:I:4049:VAL:HG11	2:I:4159:ARG:HD2	1.84	0.59
2:A:73:LEU:C	2:A:105:HIS:HD1	2.06	0.59
2:A:459:LEU:HD21	2:A:463:GLU:HB2	1.83	0.59
2:A:2559:LEU:HB3	2:A:2606:CYS:SG	2.42	0.59
2:A:2750[B]:LYS:NZ	2:A:2823:ILE:O	2.28	0.59
2:A:3960:GLN:NE2	2:A:3960:GLN:O	2.35	0.59
2:B:2285:GLU:OE1	2:B:2285:GLU:N	2.27	0.59
2:B:3989:VAL:HA	2:B:3992:PHE:HB2	1.83	0.59
2:I:76:ARG:NH1	2:I:80:GLU:OE2	2.36	0.59
2:I:1183:GLU:OE1	2:I:1183:GLU:N	2.32	0.59
2:I:4157:ASP:H	2:I:4161:ARG:HH12	1.49	0.59
2:A:1183:GLU:OE1	2:A:1183:GLU:N	2.32	0.59
2:G:103:TYR:O	2:G:160:GLY:N	2.35	0.59
2:G:3380:ARG:HH21	2:G:3391:GLU:HG3	1.68	0.59
2:B:3313:ASN:HD22	2:B:3350:ARG:HE	1.51	0.59
2:B:3542:LEU:HD22	2:B:3544:ASP:OD1	2.02	0.59
2:I:3090:ALA:HA	2:I:3093:ARG:HH21	1.66	0.59
2:I:3380:ARG:HH21	2:I:3391:GLU:HG3	1.68	0.59
2:I:4087:LEU:HA	2:I:4124:ASN:HA	1.85	0.59
2:I:4863:TYR:HB2	2:I:4874:MET:HE3	1.85	0.59
2:A:2570:ALA:HB2	2:A:2613:TYR:HB3	1.84	0.59
2:G:4237:PHE:HD1	2:G:4672:LYS:HZ2	1.49	0.59
2:B:176:SER:OG	2:B:178:ARG:NE	2.36	0.59
1:F:48:PHE:HB2	1:F:54:GLU:HG2	1.85	0.59
2:A:176:SER:OG	2:A:178:ARG:NE	2.36	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:3534:MET:O	2:A:3538:THR:N	2.26	0.59
2:A:3879:GLU:OE1	2:A:3879:GLU:N	2.33	0.59
2:A:4843:LEU:HD22	2:G:4823:LEU:HD12	1.84	0.59
2:B:277:GLY:HA2	2:B:315:CYS:HB3	1.85	0.59
2:B:949:ASN:HB3	2:B:974:HIS:NE2	2.18	0.59
2:B:3380:ARG:HH21	2:B:3391:GLU:HG3	1.68	0.59
2:I:103:TYR:O	2:I:160:GLY:N	2.35	0.59
2:A:3065:VAL:HA	2:A:3068:LEU:HD12	1.84	0.58
2:A:3380:ARG:HH21	2:A:3391:GLU:HG3	1.68	0.58
2:A:4237:PHE:HD1	2:A:4672:LYS:HZ2	1.50	0.58
2:A:4993:MET:HA	2:A:4996:ILE:HG22	1.84	0.58
2:G:4087:LEU:HA	2:G:4124:ASN:HA	1.85	0.58
2:I:2751:LEU:HB3	2:I:2813:LEU:HD13	1.85	0.58
2:A:3313:ASN:HD22	2:A:3350:ARG:HE	1.51	0.58
1:J:48:PHE:HB2	1:J:54:GLU:HG2	1.85	0.58
2:G:76:ARG:NH1	2:G:80:GLU:OE2	2.36	0.58
2:G:949:ASN:HB3	2:G:974:HIS:NE2	2.18	0.58
2:B:2751:LEU:HB3	2:B:2813:LEU:HD13	1.85	0.58
2:I:949:ASN:HB3	2:I:974:HIS:NE2	2.18	0.58
2:I:2175:GLU:HG3	2:I:2228:MET:HE1	1.83	0.58
2:I:3879:GLU:OE1	2:I:3879:GLU:N	2.33	0.58
2:I:4230:LYS:HA	2:I:4233:LEU:HB2	1.83	0.58
2:A:103:TYR:O	2:A:160:GLY:N	2.35	0.58
2:G:3283:ARG:HD3	2:G:3287:ARG:NH2	2.17	0.58
2:B:4087:LEU:HA	2:B:4124:ASN:HA	1.85	0.58
2:I:3283:ARG:HD3	2:I:3287:ARG:NH2	2.17	0.58
2:A:76:ARG:NH1	2:A:80:GLU:OE2	2.36	0.58
2:A:949:ASN:HB3	2:A:974:HIS:NE2	2.18	0.58
2:A:2377:LEU:HD21	2:A:2468:GLY:HA3	1.86	0.58
2:A:2954:ARG:HB3	2:A:2957:PHE:HB2	1.86	0.58
2:A:4087:LEU:HA	2:A:4124:ASN:HA	1.85	0.58
2:G:2333:ASP:HA	2:G:2336:ARG:HE	1.66	0.58
2:B:3822:ASP:OD1	2:B:3823:LYS:N	2.37	0.58
2:I:180:LEU:O	2:I:198:THR:OG1	2.15	0.58
2:A:1652:GLU:OE2	2:A:1656:ARG:NH2	2.36	0.58
2:G:176:SER:OG	2:G:178:ARG:NE	2.36	0.58
2:G:1089:TYR:HD2	2:G:1152:MET:HG3	1.69	0.58
2:G:3065:VAL:HA	2:G:3068:LEU:HD12	1.84	0.58
2:G:3323:ILE:HG21	2:G:3408:LEU:HD21	1.85	0.58
2:G:3934:TYR:O	2:G:3938:SER:HB3	2.02	0.58
2:B:2562:ILE:HG22	2:B:2610:LEU:HD21	1.86	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:1089:TYR:HD2	2:I:1152:MET:HG3	1.69	0.58
2:I:2559:LEU:HB3	2:I:2606:CYS:SG	2.42	0.58
2:I:2596:THR:O	2:I:2599:GLN:N	2.31	0.58
2:I:3380:ARG:HA	2:I:3387:ALA:HB1	1.84	0.58
2:I:3951:PHE:HD2	2:I:4012:LEU:HD21	1.68	0.58
2:A:195:PHE:CE1	2:G:2358:ILE:HD12	2.39	0.58
2:A:707:VAL:HG23	2:A:782:SER:HB3	1.83	0.58
2:A:1279:SER:N	2:A:1282:SER:OG	2.36	0.58
2:A:2751:LEU:HB3	2:A:2813:LEU:HD13	1.85	0.58
2:A:3951:PHE:HD2	2:A:4012:LEU:HD21	1.68	0.58
2:G:277:GLY:HA2	2:G:315:CYS:HB3	1.85	0.58
2:G:1084:GLN:NE2	2:G:1186:ASP:O	2.33	0.58
2:G:2377:LEU:HD21	2:G:2468:GLY:HA3	1.86	0.58
2:G:2751:LEU:HB3	2:G:2813:LEU:HD13	1.85	0.58
2:B:1183:GLU:OE1	2:B:1183:GLU:N	2.32	0.58
2:B:3450:ASN:HA	2:B:3453:ARG:HG2	1.84	0.58
2:B:3451:PHE:O	2:B:3455:GLU:HG2	2.03	0.58
2:I:277:GLY:HA2	2:I:315:CYS:HB3	1.85	0.58
2:A:3323:ILE:HG21	2:A:3408:LEU:HD21	1.85	0.58
2:A:3380:ARG:HA	2:A:3387:ALA:HB1	1.84	0.58
2:G:2301:TYR:HB3	2:G:2331:TYR:CZ	2.39	0.58
2:I:1652:GLU:OE2	2:I:1656:ARG:NH2	2.36	0.58
2:A:3053:ARG:HG2	2:A:3056:LEU:HD21	1.85	0.58
2:A:4569:LEU:HD22	2:A:4650:HIS:HB2	1.85	0.58
2:G:4951:LYS:HD2	2:G:4954:MET:HE3	1.85	0.58
2:B:76:ARG:NH1	2:B:80:GLU:OE2	2.36	0.58
2:B:1652:GLU:OE2	2:B:1656:ARG:NH2	2.36	0.58
2:I:2336:ARG:NH1	2:I:2431:ASP:OD2	2.36	0.58
2:A:2336:ARG:NH1	2:A:2431:ASP:OD2	2.36	0.58
2:G:2211:MET:HB2	2:G:2232:CYS:SG	2.44	0.58
2:G:3822:ASP:OD1	2:G:3823:LYS:N	2.37	0.58
2:G:4843:LEU:HD22	2:I:4823:LEU:HD12	1.86	0.58
2:B:917:GLU:O	2:B:921:ASN:ND2	2.29	0.58
2:I:2570:ALA:HB2	2:I:2613:TYR:HB3	1.84	0.58
2:I:3314:SER:O	2:I:3318:ASN:ND2	2.34	0.58
2:I:3450:ASN:HA	2:I:3453:ARG:HG2	1.84	0.58
2:I:3934:TYR:O	2:I:3938:SER:HB3	2.02	0.58
2:G:394:GLN:N	2:G:397:GLU:OE2	2.36	0.58
2:G:3951:PHE:HD2	2:G:4012:LEU:HD21	1.68	0.58
2:B:4157:ASP:H	2:B:4161:ARG:HH12	1.49	0.58
2:I:3313:ASN:HD22	2:I:3350:ARG:HE	1.51	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:4105:GLY:O	2:I:4109:GLN:NE2	2.37	0.58
2:A:1089:TYR:HD2	2:A:1152:MET:HG3	1.69	0.57
2:A:2301:TYR:HB3	2:A:2331:TYR:CZ	2.39	0.57
2:A:3536:ALA:HB2	2:A:3553:LEU:HD11	1.86	0.57
2:G:3380:ARG:HA	2:G:3387:ALA:HB1	1.84	0.57
2:G:3950:ASN:HA	2:G:3953:LYS:HZ2	1.68	0.57
2:B:2750[B]:LYS:NZ	2:B:2823:ILE:O	2.28	0.57
2:B:3536:ALA:HB2	2:B:3553:LEU:HD11	1.86	0.57
2:B:4059:LEU:HD23	2:B:4167:ALA:HB2	1.86	0.57
2:I:2151:ASP:OD2	2:I:2189:LYS:NZ	2.20	0.57
2:I:2954:ARG:HB3	2:I:2957:PHE:HB2	1.86	0.57
2:I:3451:PHE:O	2:I:3455:GLU:HG2	2.04	0.57
2:A:277:GLY:HA2	2:A:315:CYS:HB3	1.85	0.57
2:A:3435:PHE:HD1	2:A:3517:MET:HG3	1.69	0.57
2:A:3822:ASP:OD1	2:A:3823:LYS:N	2.37	0.57
2:G:830:ARG:NH1	2:G:832:GLU:OE1	2.37	0.57
2:G:4105:GLY:O	2:G:4109:GLN:NE2	2.37	0.57
2:B:830:ARG:NH1	2:B:832:GLU:OE1	2.37	0.57
2:B:2211:MET:HB2	2:B:2232:CYS:SG	2.44	0.57
2:B:3380:ARG:HA	2:B:3387:ALA:HB1	1.84	0.57
2:B:3842:LEU:HB3	2:B:3929:SER:OG	2.04	0.57
2:B:4569:LEU:HD22	2:B:4650:HIS:HB2	1.86	0.57
2:I:830:ARG:NH1	2:I:832:GLU:OE1	2.37	0.57
2:I:2377:LEU:HD21	2:I:2468:GLY:HA3	1.86	0.57
2:I:3536:ALA:HB2	2:I:3553:LEU:HD11	1.86	0.57
2:A:266:ARG:NH1	2:A:269:TRP:O	2.37	0.57
2:A:893:TYR:HA	2:A:903:LEU:HD22	1.87	0.57
2:A:4136:ALA:HA	2:A:4139:ILE:HG22	1.87	0.57
2:G:3313:ASN:HD22	2:G:3350:ARG:HE	1.51	0.57
2:G:4059:LEU:HD23	2:G:4167:ALA:HB2	1.86	0.57
2:B:2570:ALA:HB2	2:B:2613:TYR:HB3	1.84	0.57
2:B:2954:ARG:HB3	2:B:2957:PHE:HB2	1.85	0.57
2:B:3435:PHE:HD1	2:B:3517:MET:HG3	1.69	0.57
2:B:3879:GLU:N	2:B:3879:GLU:OE1	2.33	0.57
2:B:4578:LEU:HD13	2:I:4849:TYR:CE1	2.39	0.57
2:I:2562:ILE:HG22	2:I:2610:LEU:HD21	1.86	0.57
2:I:3435:PHE:HD1	2:I:3517:MET:HG3	1.69	0.57
2:I:4136:ALA:HA	2:I:4139:ILE:HG22	1.86	0.57
2:A:849:THR:O	2:A:852:VAL:HG12	2.05	0.57
2:A:2211:MET:HB2	2:A:2232:CYS:SG	2.44	0.57
2:A:2562:ILE:HG22	2:A:2610:LEU:HD21	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:4157:ASP:H	2:A:4161:ARG:HH12	1.49	0.57
2:A:4878:ASP:OD1	2:A:4880:MET:N	2.37	0.57
2:G:613:ALA:HB2	2:G:1676:LEU:HD12	1.87	0.57
2:G:3536:ALA:HB2	2:G:3553:LEU:HD11	1.86	0.57
2:G:4136:ALA:HA	2:G:4139:ILE:HG22	1.86	0.57
2:B:1173:SER:OG	2:B:1174:GLY:N	2.37	0.57
2:B:2696:TYR:HB3	2:B:3000:LYS:HG2	1.87	0.57
2:B:3053:ARG:HG2	2:B:3056:LEU:HD21	1.85	0.57
2:B:3323:ILE:HG21	2:B:3408:LEU:HD21	1.85	0.57
2:B:3324:VAL:O	2:B:3327:LEU:HG	2.05	0.57
2:I:266:ARG:NH1	2:I:269:TRP:O	2.37	0.57
2:I:1173:SER:OG	2:I:1174:GLY:N	2.37	0.57
2:I:4059:LEU:HD23	2:I:4167:ALA:HB2	1.86	0.57
2:I:4951:LYS:HD2	2:I:4954:MET:HE3	1.85	0.57
2:A:3137:LEU:O	2:A:3141:THR:HG23	2.05	0.57
2:A:3451:PHE:O	2:A:3455:GLU:HG2	2.04	0.57
2:G:266:ARG:NH1	2:G:269:TRP:O	2.37	0.57
2:G:618:GLN:OE1	2:G:1678:ASN:ND2	2.38	0.57
2:G:2596:THR:O	2:G:2599:GLN:N	2.31	0.57
2:G:3451:PHE:O	2:G:3455:GLU:HG2	2.04	0.57
2:G:3583:GLU:O	2:G:3585:ASP:N	2.37	0.57
2:B:4823:LEU:HD12	2:I:4843:LEU:HD22	1.87	0.57
2:I:2696:TYR:HB3	2:I:3000:LYS:HG2	1.87	0.57
2:I:4569:LEU:HD22	2:I:4650:HIS:HB2	1.86	0.57
2:A:882:TRP:O	2:A:885:THR:OG1	2.23	0.57
2:A:3583:GLU:O	2:A:3585:ASP:N	2.37	0.57
2:G:1652:GLU:OE2	2:G:1656:ARG:NH2	2.36	0.57
2:G:2531:ARG:HD2	2:G:2588:ARG:HH22	1.69	0.57
2:G:3435:PHE:HD1	2:G:3517:MET:HG3	1.69	0.57
2:G:4085:ARG:HB2	2:G:4087:LEU:HD13	1.87	0.57
2:B:893:TYR:HA	2:B:903:LEU:HD22	1.87	0.57
2:B:1089:TYR:HD2	2:B:1152:MET:HG3	1.69	0.57
2:B:2377:LEU:HD21	2:B:2468:GLY:HA3	1.86	0.57
2:B:2522:LEU:HA	2:B:2526:PHE:HB2	1.86	0.57
2:B:3137:LEU:O	2:B:3141:THR:HG23	2.05	0.57
2:I:3323:ILE:HG21	2:I:3408:LEU:HD21	1.85	0.57
2:A:917:GLU:O	2:A:921:ASN:ND2	2.29	0.57
2:A:1196:PRO:O	2:A:1198:GLN:NE2	2.19	0.57
2:A:2992:GLU:HA	2:A:2995:ILE:HB	1.86	0.57
2:G:4721:LYS:HB3	2:G:4743:MET:SD	2.45	0.57
2:I:2301:TYR:HB3	2:I:2331:TYR:CZ	2.39	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:3822:ASP:OD1	2:I:3823:LYS:N	2.37	0.57
2:I:4087:LEU:O	2:I:4122:MET:HE3	2.05	0.57
2:I:4721:LYS:HB3	2:I:4743:MET:SD	2.45	0.57
2:A:613:ALA:HB2	2:A:1676:LEU:HD12	1.87	0.57
2:A:2522:LEU:HA	2:A:2526:PHE:HB2	1.86	0.57
2:A:3842:LEU:HB3	2:A:3929:SER:OG	2.05	0.57
2:A:4085:ARG:HB2	2:A:4087:LEU:HD13	1.87	0.57
2:G:709:ASP:OD1	2:G:725:HIS:ND1	2.31	0.57
2:G:3842:LEU:HB3	2:G:3929:SER:OG	2.05	0.57
2:G:3997:ALA:O	2:G:4001:MET:HG3	2.04	0.57
2:G:4863:TYR:HB2	2:G:4874:MET:HE3	1.87	0.57
2:B:3368:ARG:HH12	2:B:3401:LEU:HD13	1.69	0.57
2:I:940:GLY:O	2:I:1052:ASN:N	2.38	0.57
2:I:3368:ARG:HH12	2:I:3401:LEU:HD13	1.69	0.57
2:I:3583:GLU:O	2:I:3585:ASP:N	2.37	0.57
2:A:4105:GLY:O	2:A:4109:GLN:NE2	2.37	0.57
2:G:893:TYR:HA	2:G:903:LEU:HD22	1.87	0.57
2:G:2175:GLU:HG3	2:G:2228:MET:HE1	1.87	0.57
2:G:4003:LEU:HD11	2:G:4012:LEU:HD22	1.87	0.57
2:B:575:LEU:HD22	2:B:609:CYS:HB3	1.87	0.57
2:B:849:THR:O	2:B:852:VAL:HG12	2.05	0.57
2:B:2531:ARG:HD2	2:B:2588:ARG:HH22	1.69	0.57
2:B:3950:ASN:HA	2:B:3953:LYS:HZ2	1.68	0.57
2:I:893:TYR:HA	2:I:903:LEU:HD22	1.87	0.57
2:I:3053:ARG:HG2	2:I:3056:LEU:HD21	1.85	0.57
2:I:4209:GLN:OE1	2:I:4209:GLN:N	2.26	0.57
2:A:618:GLN:OE1	2:A:1678:ASN:ND2	2.38	0.57
2:A:830:ARG:NH1	2:A:832:GLU:OE1	2.37	0.57
2:A:4022:ASP:O	2:A:4026:MET:HG2	2.05	0.57
2:G:59:PRO:HB3	2:G:281:ARG:HH11	1.70	0.57
2:G:1116:GLY:O	2:G:1134:LEU:N	2.38	0.57
2:G:2954:ARG:HB3	2:G:2957:PHE:HB2	1.86	0.57
2:B:3887:PHE:O	2:B:3891:LEU:HG	2.05	0.57
2:B:4878:ASP:OD1	2:B:4880:MET:N	2.37	0.57
2:I:952:LYS:HA	2:I:970:LEU:HA	1.87	0.57
2:I:2211:MET:HB2	2:I:2232:CYS:SG	2.44	0.57
2:I:2531:ARG:HD2	2:I:2588:ARG:HH22	1.69	0.57
2:I:3324:VAL:O	2:I:3327:LEU:HG	2.05	0.57
2:I:4085:ARG:HB2	2:I:4087:LEU:HD13	1.87	0.57
2:A:4097:MET:HE2	2:A:4108:ILE:HD13	1.87	0.56
2:G:4569:LEU:HD22	2:G:4650:HIS:HB2	1.85	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:4849:TYR:CE1	2:I:4578:LEU:HD13	2.39	0.56
2:B:266:ARG:NH1	2:B:269:TRP:O	2.37	0.56
2:B:2359:ARG:NH2	2:I:177:GLU:OE2	2.38	0.56
2:B:2382:GLU:O	2:B:2386:ILE:HG12	2.05	0.56
2:B:4136:ALA:HA	2:B:4139:ILE:HG22	1.87	0.56
2:I:3842:LEU:HB3	2:I:3929:SER:OG	2.05	0.56
2:I:4239:GLU:HG2	6:I:5304:CFF:N9	2.20	0.56
2:A:2464:ASP:O	2:A:2467:VAL:HG22	2.05	0.56
2:A:3324:VAL:O	2:A:3327:LEU:HG	2.05	0.56
2:G:652:ARG:HD2	2:G:750:LEU:HB2	1.86	0.56
2:G:849:THR:O	2:G:852:VAL:HG12	2.05	0.56
2:G:923:GLN:NE2	2:G:927:GLU:OE1	2.39	0.56
2:G:2464:ASP:O	2:G:2467:VAL:HG22	2.05	0.56
2:G:2562:ILE:HG22	2:G:2610:LEU:HD21	1.86	0.56
2:G:3053:ARG:HG2	2:G:3056:LEU:HD21	1.85	0.56
2:G:4239:GLU:HG2	6:G:5304:CFF:N9	2.20	0.56
2:B:59:PRO:HB3	2:B:281:ARG:HH11	1.70	0.56
2:B:2301:TYR:HB3	2:B:2331:TYR:CZ	2.39	0.56
2:B:4085:ARG:HB2	2:B:4087:LEU:HD13	1.87	0.56
2:B:4238:CYS:SG	2:B:4989:MET:HG3	2.46	0.56
2:B:4721:LYS:HB3	2:B:4743:MET:SD	2.45	0.56
2:B:4793:GLY:O	2:B:4796:MET:HB2	2.05	0.56
2:I:3997:ALA:O	2:I:4001:MET:HG3	2.04	0.56
2:A:100:THR:OG1	2:A:162:LYS:NZ	2.38	0.56
2:A:923:GLN:NE2	2:A:927:GLU:OE1	2.39	0.56
2:A:940:GLY:O	2:A:1052:ASN:N	2.38	0.56
2:A:2654:TYR:HB2	2:A:2661:TRP:CD1	2.41	0.56
2:A:2696:TYR:HB3	2:A:3000:LYS:HG2	1.87	0.56
2:A:3368:ARG:HH12	2:A:3401:LEU:HD13	1.69	0.56
2:A:3532:LEU:HB3	2:A:3553:LEU:HD22	1.87	0.56
2:A:3725:TYR:O	2:A:3729:MET:HG3	2.06	0.56
2:A:3997:ALA:O	2:A:4001:MET:HG3	2.04	0.56
2:G:840:VAL:HG23	2:G:1199:VAL:HG12	1.87	0.56
2:G:2608:MET:O	2:G:2612:ARG:HG2	2.06	0.56
2:G:2819:TRP:HZ3	2:G:2878:LEU:HD23	1.71	0.56
2:G:4022:ASP:O	2:G:4026:MET:HG2	2.05	0.56
2:B:74:SER:HG	2:B:77:ALA:H	1.52	0.56
2:B:2608:MET:O	2:B:2612:ARG:HG2	2.05	0.56
2:B:2992:GLU:HA	2:B:2995:ILE:HB	1.86	0.56
2:B:4022:ASP:O	2:B:4026:MET:HG2	2.05	0.56
2:B:4105:GLY:O	2:B:4109:GLN:NE2	2.37	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:59:PRO:HB3	2:I:281:ARG:HH11	1.70	0.56
2:I:923:GLN:NE2	2:I:927:GLU:OE1	2.39	0.56
2:I:2992:GLU:HA	2:I:2995:ILE:HB	1.86	0.56
2:I:3137:LEU:O	2:I:3141:THR:HG23	2.05	0.56
2:I:3725:TYR:O	2:I:3729:MET:HG3	2.06	0.56
2:I:4003:LEU:HD11	2:I:4012:LEU:HD22	1.87	0.56
2:A:251:ALA:HB1	2:A:255:HIS:HE2	1.71	0.56
2:A:1230:MET:SD	2:A:1827:ARG:HG3	2.46	0.56
2:A:2531:ARG:HD2	2:A:2588:ARG:HH22	1.69	0.56
2:A:2626:LEU:HA	2:A:2629:ASP:HB2	1.88	0.56
2:A:4059:LEU:HD23	2:A:4167:ALA:HB2	1.86	0.56
2:A:4238:CYS:SG	2:A:4989:MET:HG3	2.46	0.56
2:G:882:TRP:O	2:G:885:THR:OG1	2.23	0.56
2:G:2654:TYR:HB2	2:G:2661:TRP:CD1	2.41	0.56
2:G:5013:MET:HG3	2:G:5018:CYS:HB3	1.87	0.56
2:B:618:GLN:OE1	2:B:1678:ASN:ND2	2.38	0.56
2:B:652:ARG:HD2	2:B:750:LEU:HB2	1.86	0.56
2:B:840:VAL:HG23	2:B:1199:VAL:HG12	1.87	0.56
2:B:882:TRP:O	2:B:885:THR:OG1	2.23	0.56
2:B:923:GLN:NE2	2:B:927:GLU:OE1	2.39	0.56
2:B:2464:ASP:O	2:B:2467:VAL:HG22	2.05	0.56
2:B:2654:TYR:HB2	2:B:2661:TRP:CD1	2.41	0.56
2:B:3314:SER:O	2:B:3318:ASN:ND2	2.34	0.56
2:B:3532:LEU:HB3	2:B:3553:LEU:HD22	1.88	0.56
2:B:4239:GLU:HG2	6:B:5304:CFF:N9	2.19	0.56
2:I:575:LEU:HD22	2:I:609:CYS:HB3	1.87	0.56
2:I:849:THR:O	2:I:852:VAL:HG12	2.05	0.56
2:A:59:PRO:HB3	2:A:281:ARG:HH11	1.70	0.56
2:G:74:SER:HG	2:G:77:ALA:H	1.53	0.56
2:G:2635:GLU:OE1	2:G:2635:GLU:N	2.32	0.56
2:G:4839:MET:SD	2:I:4820:VAL:HG11	2.46	0.56
2:B:872:GLU:OE2	2:B:872:GLU:N	2.36	0.56
2:B:952:LYS:HA	2:B:970:LEU:HA	1.87	0.56
2:B:3725:TYR:O	2:B:3729:MET:HG3	2.06	0.56
2:I:709:ASP:OD1	2:I:725:HIS:ND1	2.31	0.56
2:I:1265:ASP:OD1	2:I:1266:THR:N	2.39	0.56
2:A:4239:GLU:HG2	6:A:5304:CFF:N9	2.20	0.56
2:A:4721:LYS:HB3	2:A:4743:MET:SD	2.45	0.56
2:A:4793:GLY:O	2:A:4796:MET:HB2	2.06	0.56
2:G:177:GLU:OE2	2:I:2359:ARG:NH2	2.38	0.56
2:G:2382:GLU:O	2:G:2386:ILE:HG12	2.05	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:2560:PRO:O	2:G:2563:THR:OG1	2.23	0.56
2:G:2992:GLU:HA	2:G:2995:ILE:HB	1.86	0.56
2:G:3137:LEU:O	2:G:3141:THR:HG23	2.05	0.56
2:G:3368:ARG:HH12	2:G:3401:LEU:HD13	1.69	0.56
2:B:280:LEU:HD21	2:B:316:PHE:CD2	2.41	0.56
2:B:4209:GLN:OE1	2:B:4209:GLN:N	2.26	0.56
2:I:613:ALA:HB2	2:I:1676:LEU:HD12	1.87	0.56
2:I:618:GLN:OE1	2:I:1678:ASN:ND2	2.38	0.56
2:I:1230:MET:SD	2:I:1827:ARG:HG3	2.46	0.56
2:I:2382:GLU:O	2:I:2386:ILE:HG12	2.05	0.56
2:I:2750[B]:LYS:NZ	2:I:2823:ILE:O	2.28	0.56
2:I:4793:GLY:O	2:I:4796:MET:HB2	2.06	0.56
2:A:2191:PHE:CD1	2:A:2198:MET:HE3	2.41	0.56
2:A:2382:GLU:O	2:A:2386:ILE:HG12	2.05	0.56
2:A:2608:MET:O	2:A:2612:ARG:HG2	2.06	0.56
2:A:3886:ARG:HH21	2:A:3890:LEU:HD21	1.70	0.56
1:H:79:ASP:OD1	1:H:80:VAL:HG13	2.05	0.56
1:J:79:ASP:OD1	1:J:80:VAL:HG13	2.05	0.56
2:G:575:LEU:HD22	2:G:609:CYS:HB3	1.87	0.56
2:G:2495:VAL:HG12	2:G:2498:HIS:N	2.21	0.56
2:G:2696:TYR:HB3	2:G:3000:LYS:HG2	1.87	0.56
2:G:3725:TYR:O	2:G:3729:MET:HG3	2.06	0.56
2:G:3826:VAL:HG12	2:G:3909:ASN:HB3	1.88	0.56
2:B:100:THR:OG1	2:B:162:LYS:NZ	2.38	0.56
2:B:4031:LEU:HD11	2:B:4149:ASN:HB3	1.88	0.56
2:B:4820:VAL:HG11	2:I:4839:MET:SD	2.45	0.56
2:I:882:TRP:O	2:I:885:THR:OG1	2.23	0.56
2:I:2654:TYR:HB2	2:I:2661:TRP:CD1	2.41	0.56
2:I:2819:TRP:HZ3	2:I:2878:LEU:HD23	1.71	0.56
2:I:3887:PHE:O	2:I:3891:LEU:HG	2.05	0.56
2:I:5013:MET:HG3	2:I:5018:CYS:HB3	1.88	0.56
2:A:952:LYS:HA	2:A:970:LEU:HA	1.87	0.56
2:A:1116:GLY:O	2:A:1134:LEU:N	2.38	0.56
2:A:3887:PHE:O	2:A:3891:LEU:HG	2.05	0.56
2:A:5013:MET:HG3	2:A:5018:CYS:HB3	1.87	0.56
2:G:251:ALA:HB1	2:G:255:HIS:HE2	1.71	0.56
2:G:940:GLY:O	2:G:1052:ASN:N	2.38	0.56
2:G:952:LYS:HA	2:G:970:LEU:HA	1.87	0.56
2:G:1125:ASN:OD1	2:G:1126:GLY:N	2.39	0.56
2:B:1116:GLY:O	2:B:1134:LEU:N	2.38	0.56
2:B:1156:THR:OG1	2:B:1157:GLU:OE1	2.20	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1279:SER:N	2:B:1282:SER:OG	2.36	0.56
2:B:3046:LEU:O	2:B:3050:VAL:HG12	2.06	0.56
2:B:3826:VAL:HG12	2:B:3909:ASN:HB3	1.88	0.56
2:B:3997:ALA:O	2:B:4001:MET:HG3	2.04	0.56
2:I:4238:CYS:SG	2:I:4989:MET:HG3	2.46	0.56
2:A:840:VAL:HG23	2:A:1199:VAL:HG12	1.87	0.56
2:G:1607:ARG:NH1	2:G:1610:ASN:OD1	2.39	0.56
2:G:2522:LEU:HA	2:G:2526:PHE:HB2	1.86	0.56
2:G:3324:VAL:O	2:G:3327:LEU:HG	2.05	0.56
2:G:4209:GLN:OE1	2:G:4209:GLN:N	2.26	0.56
2:B:613:ALA:HB2	2:B:1676:LEU:HD12	1.87	0.56
2:B:1196:PRO:O	2:B:1198:GLN:NE2	2.19	0.56
2:B:2626:LEU:HA	2:B:2629:ASP:HB2	1.88	0.56
2:B:4003:LEU:HD11	2:B:4012:LEU:HD22	1.87	0.56
2:B:4863:TYR:HB2	2:B:4874:MET:HE3	1.88	0.56
2:I:3046:LEU:O	2:I:3050:VAL:HG12	2.06	0.56
2:I:4022:ASP:O	2:I:4026:MET:HG2	2.05	0.56
2:I:4049:VAL:HG11	2:I:4159:ARG:CD	2.36	0.56
2:I:4237:PHE:HD1	2:I:4672:LYS:HZ2	1.52	0.56
2:A:182:LEU:HB2	2:A:189:LEU:HD23	1.87	0.56
2:A:652:ARG:HD2	2:A:750:LEU:HB2	1.86	0.56
2:A:1125:ASN:OD1	2:A:1126:GLY:N	2.39	0.56
2:A:2478:THR:HG21	2:A:2485:LEU:HA	1.88	0.56
2:A:2620:GLN:O	2:A:2624:ARG:N	2.37	0.56
2:A:3506:GLN:HA	2:A:3511:VAL:HG21	1.88	0.56
2:A:4003:LEU:HD11	2:A:4012:LEU:HD22	1.87	0.56
1:O:79:ASP:OD1	1:O:80:VAL:HG13	2.05	0.56
2:G:1173:SER:OG	2:G:1174:GLY:N	2.37	0.56
2:G:2778:GLY:HA3	2:G:2787:THR:HB	1.88	0.56
2:G:4238:CYS:SG	2:G:4989:MET:HG3	2.45	0.56
2:G:4793:GLY:O	2:G:4796:MET:HB2	2.06	0.56
2:B:3309:SER:HB2	2:B:3348:ARG:HG2	1.87	0.56
2:B:4049:VAL:HG11	2:B:4159:ARG:CD	2.36	0.56
2:I:3532:LEU:HB3	2:I:3553:LEU:HD22	1.87	0.56
2:A:280:LEU:HD21	2:A:316:PHE:CD2	2.41	0.55
2:A:633:LEU:HB3	2:A:1639:LEU:HD11	1.88	0.55
2:G:3532:LEU:HB3	2:G:3553:LEU:HD22	1.88	0.55
2:B:103:TYR:O	2:B:160:GLY:N	2.35	0.55
2:B:1230:MET:SD	2:B:1827:ARG:HG3	2.46	0.55
2:I:652:ARG:HD2	2:I:750:LEU:HB2	1.86	0.55
2:I:2464:ASP:O	2:I:2467:VAL:HG22	2.05	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:2522:LEU:HA	2:I:2526:PHE:HB2	1.86	0.55
2:I:2608:MET:O	2:I:2612:ARG:HG2	2.06	0.55
2:I:3826:VAL:HG12	2:I:3909:ASN:HB3	1.88	0.55
2:I:3886:ARG:HH21	2:I:3890:LEU:HD21	1.70	0.55
2:I:4979:THR:HG23	3:I:5301:ATP:C4	2.41	0.55
2:A:2175:GLU:HG3	2:A:2228:MET:HE1	1.89	0.55
2:A:2296:GLU:O	2:A:2300:SER:N	2.32	0.55
2:A:3358:PHE:HZ	2:A:3412:LEU:HB2	1.71	0.55
2:G:1230:MET:SD	2:G:1827:ARG:HG3	2.46	0.55
2:G:2626:LEU:HA	2:G:2629:ASP:HB2	1.88	0.55
2:B:251:ALA:HB1	2:B:255:HIS:HE2	1.71	0.55
2:B:1125:ASN:OD1	2:B:1126:GLY:N	2.39	0.55
2:B:2495:VAL:HG12	2:B:2498:HIS:N	2.21	0.55
2:I:3950:ASN:HA	2:I:3953:LYS:HZ2	1.72	0.55
2:A:575:LEU:HD22	2:A:609:CYS:HB3	1.87	0.55
2:A:2819:TRP:HZ3	2:A:2878:LEU:HD23	1.71	0.55
2:G:182:LEU:HB2	2:G:189:LEU:HD23	1.87	0.55
2:G:3886:ARG:HH21	2:G:3890:LEU:HD21	1.70	0.55
2:G:4059:LEU:HD22	2:G:4166:LEU:HD23	1.88	0.55
2:B:2478:THR:HG21	2:B:2485:LEU:HA	1.88	0.55
2:B:3886:ARG:HH21	2:B:3890:LEU:HD21	1.70	0.55
2:B:4060:LYS:O	2:B:4064:MET:HG3	2.07	0.55
2:I:280:LEU:HD21	2:I:316:PHE:CD2	2.41	0.55
2:I:1116:GLY:O	2:I:1134:LEU:N	2.38	0.55
2:I:1125:ASN:OD1	2:I:1126:GLY:N	2.39	0.55
2:G:917:GLU:O	2:G:921:ASN:ND2	2.29	0.55
2:G:2191:PHE:CD1	2:G:2198:MET:HE3	2.41	0.55
2:G:4088:ILE:N	2:G:4123:ILE:O	2.29	0.55
2:B:2778:GLY:HA3	2:B:2787:THR:HB	1.88	0.55
2:B:2819:TRP:HZ3	2:B:2878:LEU:HD23	1.71	0.55
2:I:3887:PHE:CZ	2:I:3891:LEU:HD21	2.42	0.55
1:F:79:ASP:OD1	1:F:80:VAL:HG13	2.05	0.55
2:A:1208:VAL:HG11	2:G:3575:LEU:HD11	1.88	0.55
2:A:2751:LEU:O	2:A:2755:ILE:HG13	2.06	0.55
2:A:3046:LEU:O	2:A:3050:VAL:HG12	2.06	0.55
2:A:3309:SER:HB2	2:A:3348:ARG:HG2	1.88	0.55
2:A:3826:VAL:HG12	2:A:3909:ASN:HB3	1.88	0.55
2:A:4031:LEU:HD11	2:A:4149:ASN:HB3	1.88	0.55
2:G:280:LEU:HD21	2:G:316:PHE:CD2	2.41	0.55
2:G:3046:LEU:O	2:G:3050:VAL:HG12	2.06	0.55
2:G:3887:PHE:O	2:G:3891:LEU:HG	2.05	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:59:PRO:HD3	2:B:307:ALA:HB3	1.89	0.55
2:B:2096:GLU:O	2:B:2100:HIS:ND1	2.39	0.55
2:B:2751:LEU:O	2:B:2755:ILE:HG13	2.06	0.55
2:B:3315:LEU:O	2:B:3319:ILE:HG12	2.07	0.55
2:B:3358:PHE:HZ	2:B:3412:LEU:HB2	1.71	0.55
2:B:4979:THR:HG23	3:B:5301:ATP:C4	2.41	0.55
2:I:2419:GLY:O	2:I:2423:MET:N	2.28	0.55
2:I:2495:VAL:HG12	2:I:2498:HIS:N	2.21	0.55
2:A:4059:LEU:HD22	2:A:4166:LEU:HD23	1.88	0.55
2:A:4060:LYS:O	2:A:4064:MET:HG3	2.07	0.55
2:A:4219:PHE:HE1	2:A:4947:GLN:HG3	1.72	0.55
1:H:90:VAL:HG12	1:H:91:ILE:HD13	1.88	0.55
2:G:2638:LYS:HZ1	2:G:2694:GLU:HB2	1.71	0.55
2:G:4878:ASP:OD1	2:G:4880:MET:N	2.37	0.55
2:B:3506:GLN:HA	2:B:3511:VAL:HG21	1.89	0.55
2:B:3887:PHE:CZ	2:B:3891:LEU:HD21	2.42	0.55
2:I:4060:LYS:O	2:I:4064:MET:HG3	2.07	0.55
2:I:4088:ILE:N	2:I:4123:ILE:O	2.29	0.55
1:F:90:VAL:HG12	1:F:91:ILE:HD13	1.88	0.55
2:A:3995:VAL:HG13	2:A:3999:MET:HE3	1.88	0.55
1:J:90:VAL:HG12	1:J:91:ILE:HD13	1.88	0.55
2:G:2475:GLN:OE1	2:G:2493:SER:OG	2.17	0.55
2:B:182:LEU:HB2	2:B:189:LEU:HD23	1.87	0.55
2:B:1265:ASP:OD1	2:B:1266:THR:N	2.39	0.55
2:B:1607:ARG:NH1	2:B:1610:ASN:OD1	2.39	0.55
2:I:56:GLN:O	2:I:309:THR:OG1	2.25	0.55
2:I:100:THR:OG1	2:I:162:LYS:NZ	2.38	0.55
2:I:394:GLN:N	2:I:397:GLU:OE2	2.36	0.55
2:I:2693:GLN:HB3	2:I:2697:ARG:NH1	2.22	0.55
2:A:59:PRO:HD3	2:A:307:ALA:HB3	1.89	0.55
2:A:1607:ARG:NH1	2:A:1610:ASN:OD1	2.39	0.55
2:A:3315:LEU:O	2:A:3319:ILE:HG12	2.07	0.55
2:G:1208:VAL:HG11	2:I:3575:LEU:HD11	1.88	0.55
2:G:3358:PHE:HZ	2:G:3412:LEU:HB2	1.71	0.55
2:G:4979:THR:HG23	3:G:5301:ATP:C4	2.41	0.55
2:B:2615:ARG:NH1	2:B:2617:SER:OG	2.40	0.55
2:I:182:LEU:HB2	2:I:189:LEU:HD23	1.87	0.55
2:I:1607:ARG:NH1	2:I:1610:ASN:OD1	2.39	0.55
2:I:2475:GLN:OE1	2:I:2493:SER:OG	2.17	0.55
2:I:4049:VAL:HG12	2:I:4163:PHE:CZ	2.42	0.55
2:A:3937:TYR:OH	2:A:3943:ILE:N	2.40	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:4142:ASN:HA	2:A:4145:VAL:HG22	1.89	0.55
2:A:4240:ASP:O	2:A:4243:PHE:HB3	2.07	0.55
2:A:4820:VAL:HG11	2:B:4839:MET:SD	2.47	0.55
2:G:633:LEU:HB3	2:G:1639:LEU:HD11	1.88	0.55
2:G:2096:GLU:O	2:G:2100:HIS:ND1	2.39	0.55
2:G:3514:LEU:HD21	2:G:3602:VAL:HG13	1.89	0.55
2:G:4049:VAL:HG11	2:G:4159:ARG:CD	2.36	0.55
2:G:4142:ASN:HA	2:G:4145:VAL:HG22	1.89	0.55
2:B:2191:PHE:CD1	2:B:2198:MET:HE3	2.42	0.55
2:B:2693:GLN:HB3	2:B:2697:ARG:NH1	2.22	0.55
2:B:4219:PHE:HE1	2:B:4947:GLN:HG3	1.72	0.55
2:I:2478:THR:HG21	2:I:2485:LEU:HA	1.88	0.55
2:I:2626:LEU:HA	2:I:2629:ASP:HB2	1.88	0.55
2:I:3309:SER:HB2	2:I:3348:ARG:HG2	1.87	0.55
2:I:4059:LEU:HD22	2:I:4166:LEU:HD23	1.88	0.55
2:I:4104:THR:O	2:I:4108:ILE:HG12	2.07	0.55
2:I:4878:ASP:OD1	2:I:4880:MET:N	2.37	0.55
2:A:1173:SER:OG	2:A:1174:GLY:N	2.37	0.55
2:A:2575:ARG:NH2	2:A:2578:MET:SD	2.80	0.55
2:A:2868:SER:O	2:A:2872:GLN:N	2.36	0.55
2:A:3514:LEU:HD21	2:A:3602:VAL:HG13	1.89	0.55
2:A:4979:THR:HG23	3:A:5301:ATP:C4	2.41	0.55
2:G:2478:THR:HG21	2:G:2485:LEU:HA	1.88	0.55
2:G:3309:SER:HB2	2:G:3348:ARG:HG2	1.87	0.55
2:G:3506:GLN:HA	2:G:3511:VAL:HG21	1.88	0.55
2:G:3965:LEU:HB3	2:G:4026:MET:CE	2.37	0.55
2:B:2423:MET:SD	2:B:2494:PHE:HD1	2.30	0.55
2:B:3575:LEU:HD11	2:I:1208:VAL:HG11	1.87	0.55
2:I:226:HIS:ND1	2:I:226:HIS:O	2.39	0.55
2:I:1263:THR:OG1	2:I:1265:ASP:OD1	2.25	0.55
2:I:2560:PRO:O	2:I:2563:THR:OG1	2.23	0.55
2:I:3358:PHE:HZ	2:I:3412:LEU:HB2	1.71	0.55
2:A:1106:ARG:NH2	2:A:1183:GLU:OE2	2.40	0.54
2:A:2096:GLU:O	2:A:2100:HIS:ND1	2.39	0.54
2:A:2182:ILE:O	2:A:2186:MET:HG2	2.08	0.54
2:A:4104:THR:O	2:A:4108:ILE:HG12	2.07	0.54
2:A:4658:ILE:HG12	2:A:4792:LEU:HB3	1.89	0.54
2:B:2182:ILE:O	2:B:2186:MET:HG2	2.08	0.54
2:B:2575:ARG:NH2	2:B:2578:MET:SD	2.80	0.54
2:B:4059:LEU:HD22	2:B:4166:LEU:HD23	1.88	0.54
2:I:1038:SER:O	2:I:1041:GLN:HG3	2.08	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:2615:ARG:NH1	2:I:2617:SER:OG	2.40	0.54
2:I:3534:MET:HA	2:I:3537:LYS:HB2	1.89	0.54
2:A:4049:VAL:HG12	2:A:4163:PHE:CZ	2.42	0.54
2:A:4951:LYS:HD2	2:A:4954:MET:HE3	1.88	0.54
2:G:1106:ARG:NH2	2:G:1183:GLU:OE2	2.40	0.54
2:G:1263:THR:OG1	2:G:1265:ASP:OD1	2.25	0.54
2:G:1433:TYR:CD2	2:G:1578:ALA:HB2	2.43	0.54
2:G:2336:ARG:NH1	2:G:2431:ASP:OD2	2.36	0.54
2:G:3534:MET:HA	2:G:3537:LYS:HB2	1.89	0.54
2:G:4031:LEU:HD11	2:G:4149:ASN:HB3	1.88	0.54
2:G:4060:LYS:O	2:G:4064:MET:HG3	2.07	0.54
2:G:4240:ASP:O	2:G:4243:PHE:HB3	2.07	0.54
2:B:350:HIS:HD2	2:B:352:ALA:H	1.55	0.54
2:B:1106:ARG:NH2	2:B:1183:GLU:OE2	2.40	0.54
2:B:3534:MET:HA	2:B:3537:LYS:HB2	1.89	0.54
2:B:4142:ASN:HA	2:B:4145:VAL:HG22	1.89	0.54
2:B:4240:ASP:O	2:B:4243:PHE:HB3	2.07	0.54
2:I:251:ALA:HB1	2:I:255:HIS:HE2	1.71	0.54
2:I:840:VAL:HG23	2:I:1199:VAL:HG12	1.87	0.54
2:I:872:GLU:OE2	2:I:872:GLU:N	2.36	0.54
2:I:2751:LEU:O	2:I:2755:ILE:HG13	2.06	0.54
2:I:3315:LEU:O	2:I:3319:ILE:HG12	2.07	0.54
2:I:4142:ASN:HA	2:I:4145:VAL:HG22	1.89	0.54
2:A:1038:SER:O	2:A:1041:GLN:HG3	2.08	0.54
2:A:2495:VAL:HB	2:A:2498:HIS:HB2	1.89	0.54
2:A:2615:ARG:NH1	2:A:2617:SER:OG	2.40	0.54
2:A:3018:LEU:HD13	2:A:3150:HIS:CE1	2.43	0.54
2:A:4823:LEU:CD1	2:B:4843:LEU:HD22	2.36	0.54
2:G:3887:PHE:CZ	2:G:3891:LEU:HD21	2.42	0.54
2:G:4049:VAL:HG12	2:G:4163:PHE:CZ	2.42	0.54
2:B:5013:MET:HG3	2:B:5018:CYS:HB3	1.88	0.54
2:I:350:HIS:HD2	2:I:352:ALA:H	1.55	0.54
2:I:3018:LEU:HD13	2:I:3150:HIS:CE1	2.43	0.54
2:I:3215:ALA:O	2:I:3221:THR:OG1	2.20	0.54
2:I:3514:LEU:HD21	2:I:3602:VAL:HG13	1.89	0.54
2:I:4031:LEU:HD11	2:I:4149:ASN:HB3	1.88	0.54
2:G:2615:ARG:NH1	2:G:2617:SER:OG	2.40	0.54
2:G:2693:GLN:HB3	2:G:2697:ARG:NH1	2.22	0.54
2:G:2751:LEU:O	2:G:2755:ILE:HG13	2.06	0.54
2:G:3097:GLU:OE2	2:G:3167:ARG:NH2	2.41	0.54
2:G:3937:TYR:OH	2:G:3943:ILE:N	2.40	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:226:HIS:ND1	2:B:226:HIS:O	2.39	0.54
2:B:633:LEU:HB3	2:B:1639:LEU:HD11	1.88	0.54
2:B:1263:THR:OG1	2:B:1265:ASP:OD1	2.25	0.54
2:I:73:LEU:C	2:I:105:HIS:HD1	2.06	0.54
2:I:2778:GLY:HA3	2:I:2787:THR:HB	1.88	0.54
2:A:56:GLN:O	2:A:309:THR:OG1	2.25	0.54
2:A:1248:VAL:HG22	2:A:1599:MET:HE3	1.90	0.54
2:A:2693:GLN:HB3	2:A:2697:ARG:NH1	2.22	0.54
2:G:100:THR:OG1	2:G:162:LYS:NZ	2.38	0.54
2:G:4097:MET:HE2	2:G:4108:ILE:HD13	1.88	0.54
2:G:4219:PHE:HE1	2:G:4947:GLN:HG3	1.72	0.54
2:B:4049:VAL:HG12	2:B:4163:PHE:CZ	2.42	0.54
2:I:59:PRO:HD3	2:I:307:ALA:HB3	1.89	0.54
2:I:633:LEU:HB3	2:I:1639:LEU:HD11	1.88	0.54
2:A:2778:GLY:HA3	2:A:2787:THR:HB	1.88	0.54
2:A:3084:GLY:O	2:A:3089:LYS:NZ	2.40	0.54
2:A:3887:PHE:CZ	2:A:3891:LEU:HD21	2.42	0.54
1:O:90:VAL:HG12	1:O:91:ILE:HD13	1.88	0.54
2:G:2575:ARG:NH2	2:G:2578:MET:SD	2.80	0.54
2:G:3527:PRO:HB3	2:G:3569:LEU:HD12	1.90	0.54
2:G:3534:MET:O	2:G:3538:THR:N	2.26	0.54
2:B:3937:TYR:OH	2:B:3943:ILE:N	2.40	0.54
2:B:4104:THR:O	2:B:4108:ILE:HG12	2.07	0.54
2:I:2182:ILE:O	2:I:2186:MET:HG2	2.08	0.54
2:I:2191:PHE:CD1	2:I:2198:MET:HE3	2.42	0.54
2:I:2423:MET:SD	2:I:2494:PHE:HD1	2.30	0.54
2:I:3506:GLN:HA	2:I:3511:VAL:HG21	1.88	0.54
2:I:4097:MET:HE2	2:I:4108:ILE:HD13	1.90	0.54
2:A:228:ASP:OD1	2:A:228:ASP:N	2.40	0.54
2:A:1433:TYR:CD2	2:A:1578:ALA:HB2	2.43	0.54
2:A:2212:VAL:HG22	2:A:2256:TYR:CZ	2.43	0.54
2:A:3090:ALA:HA	2:A:3093:ARG:NH2	2.23	0.54
2:G:1038:SER:O	2:G:1041:GLN:HG3	2.07	0.54
2:G:4658:ILE:HG12	2:G:4792:LEU:HB3	1.89	0.54
2:B:73:LEU:C	2:B:105:HIS:HD1	2.06	0.54
2:B:2336:ARG:NH1	2:B:2431:ASP:OD2	2.36	0.54
2:B:2638:LYS:HZ1	2:B:2694:GLU:HB2	1.72	0.54
2:A:74:SER:HG	2:A:77:ALA:H	1.55	0.54
2:A:3780:LEU:HD11	2:A:3816:MET:HB3	1.90	0.54
2:A:4049:VAL:HG11	2:A:4159:ARG:CD	2.36	0.54
2:A:4888:TYR:CD1	2:B:4914:VAL:HG13	2.42	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2495:VAL:HB	2:B:2498:HIS:HB2	1.89	0.54
2:B:4238:CYS:HA	2:B:4241:THR:OG1	2.08	0.54
2:I:74:SER:HG	2:I:77:ALA:H	1.53	0.54
2:I:1106:ARG:NH2	2:I:1183:GLU:OE2	2.40	0.54
2:I:2096:GLU:O	2:I:2100:HIS:ND1	2.39	0.54
2:I:2495:VAL:HB	2:I:2498:HIS:HB2	1.89	0.54
2:I:2575:ARG:NH2	2:I:2578:MET:SD	2.80	0.54
2:I:3084:GLY:O	2:I:3089:LYS:NZ	2.41	0.54
2:I:3097:GLU:OE2	2:I:3167:ARG:NH2	2.41	0.54
2:I:3103:ILE:HD13	2:I:3168:THR:HG23	1.90	0.54
2:A:2423:MET:SD	2:A:2494:PHE:HD1	2.30	0.54
2:G:59:PRO:HD3	2:G:307:ALA:HB3	1.89	0.54
2:G:1279:SER:N	2:G:1282:SER:OG	2.36	0.54
2:G:2212:VAL:HG22	2:G:2256:TYR:CZ	2.43	0.54
2:G:3018:LEU:HD13	2:G:3150:HIS:CE1	2.43	0.54
2:G:3103:ILE:HD13	2:G:3168:THR:HG23	1.90	0.54
2:B:2620:GLN:O	2:B:2624:ARG:N	2.37	0.54
2:B:3812:VAL:O	2:B:3816:MET:HG3	2.08	0.54
2:I:2212:VAL:HG22	2:I:2256:TYR:CZ	2.43	0.54
2:I:2296:GLU:O	2:I:2300:SER:N	2.31	0.54
2:I:2920:ARG:O	2:I:2924:GLN:HG2	2.08	0.54
2:I:3527:PRO:HB3	2:I:3569:LEU:HD12	1.90	0.54
2:A:14:LEU:H	2:A:163:VAL:HG23	1.73	0.54
2:A:226:HIS:ND1	2:A:226:HIS:O	2.39	0.54
2:A:3812:VAL:O	2:A:3816:MET:HG3	2.08	0.54
2:G:1005:TRP:HA	2:G:1016:ARG:O	2.09	0.54
2:G:2495:VAL:HB	2:G:2498:HIS:HB2	1.89	0.54
2:B:14:LEU:H	2:B:163:VAL:HG23	1.73	0.54
2:B:228:ASP:OD1	2:B:228:ASP:N	2.40	0.54
2:B:1433:TYR:CD2	2:B:1578:ALA:HB2	2.43	0.54
2:B:3527:PRO:HB3	2:B:3569:LEU:HD12	1.90	0.54
2:I:883:ALA:HB1	2:I:905:PRO:HA	1.91	0.54
2:I:3812:VAL:O	2:I:3816:MET:HG3	2.08	0.54
2:I:4219:PHE:HE1	2:I:4947:GLN:HG3	1.72	0.54
2:A:1263:THR:OG1	2:A:1265:ASP:OD1	2.25	0.53
2:A:2635:GLU:OE1	2:A:2635:GLU:N	2.32	0.53
2:G:45:ARG:NH2	2:G:139:GLU:OE2	2.41	0.53
2:G:3084:GLY:O	2:G:3089:LYS:NZ	2.40	0.53
2:B:649:PHE:HB3	2:B:776:LEU:HD13	1.90	0.53
2:B:3018:LEU:HD13	2:B:3150:HIS:CE1	2.43	0.53
2:B:3097:GLU:OE2	2:B:3167:ARG:NH2	2.41	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3583:GLU:O	2:B:3585:ASP:N	2.37	0.53
2:I:1433:TYR:CD2	2:I:1578:ALA:HB2	2.43	0.53
1:F:22:CYS:HB3	1:F:103:LEU:HD11	1.91	0.53
2:A:41:GLY:HA2	2:A:137:LEU:HD12	1.90	0.53
2:A:1005:TRP:HA	2:A:1016:ARG:O	2.08	0.53
2:A:3097:GLU:OE2	2:A:3167:ARG:NH2	2.41	0.53
2:A:3314:SER:O	2:A:3318:ASN:ND2	2.34	0.53
2:G:2620:GLN:O	2:G:2624:ARG:N	2.37	0.53
2:G:2920:ARG:O	2:G:2924:GLN:HG2	2.08	0.53
2:G:3812:VAL:O	2:G:3816:MET:HG3	2.08	0.53
2:G:4237:PHE:HE1	2:G:4668:LEU:HD11	1.73	0.53
2:B:41:GLY:HA2	2:B:137:LEU:HD12	1.90	0.53
2:B:2560:PRO:O	2:B:2563:THR:OG1	2.23	0.53
2:B:2868:SER:O	2:B:2872:GLN:N	2.36	0.53
2:B:3514:LEU:HD21	2:B:3602:VAL:HG13	1.89	0.53
2:B:3995:VAL:HG13	2:B:3999:MET:HE3	1.90	0.53
2:B:4087:LEU:O	2:B:4122:MET:HE3	2.07	0.53
2:I:920:TYR:HA	2:I:923:GLN:HB3	1.90	0.53
2:I:3090:ALA:HA	2:I:3093:ARG:NH2	2.23	0.53
2:A:350:HIS:CD2	2:A:352:ALA:H	2.27	0.53
1:O:22:CYS:HB3	1:O:103:LEU:HD11	1.91	0.53
2:G:649:PHE:HB3	2:G:776:LEU:HD13	1.90	0.53
2:G:1719:HIS:CD2	2:G:1802:ILE:HB	2.44	0.53
2:G:3314:SER:O	2:G:3318:ASN:ND2	2.34	0.53
2:G:3780:LEU:HD11	2:G:3816:MET:HB3	1.90	0.53
2:G:4104:THR:O	2:G:4108:ILE:HG12	2.07	0.53
2:G:5007:GLU:OE1	2:G:5007:GLU:N	2.41	0.53
2:B:76:ARG:NH2	2:B:79:GLN:OE1	2.42	0.53
2:B:1719:HIS:CD2	2:B:1802:ILE:HB	2.44	0.53
2:I:2239:PHE:CD2	2:I:2250:MET:HE2	2.38	0.53
2:I:3937:TYR:OH	2:I:3943:ILE:N	2.40	0.53
2:I:3995:VAL:HG13	2:I:3999:MET:HE3	1.90	0.53
2:I:4658:ILE:HG12	2:I:4792:LEU:HB3	1.89	0.53
2:I:5007:GLU:OE1	2:I:5007:GLU:N	2.41	0.53
2:A:214:VAL:HG22	2:A:341:TYR:CZ	2.44	0.53
2:A:350:HIS:HD2	2:A:352:ALA:H	1.55	0.53
2:A:491:ILE:O	2:A:495:ASN:ND2	2.41	0.53
2:A:4238:CYS:HA	2:A:4241:THR:OG1	2.08	0.53
1:H:54:GLU:H	1:H:54:GLU:CD	2.08	0.53
2:G:2296:GLU:O	2:G:2300:SER:N	2.31	0.53
2:G:2827:ARG:HE	2:G:2934:GLY:HA2	1.74	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:491:ILE:O	2:B:495:ASN:ND2	2.41	0.53
2:B:1038:SER:O	2:B:1041:GLN:HG3	2.08	0.53
2:B:2920:ARG:O	2:B:2924:GLN:HG2	2.08	0.53
2:B:3780:LEU:HD11	2:B:3816:MET:HB3	1.90	0.53
2:I:491:ILE:O	2:I:495:ASN:ND2	2.41	0.53
2:I:1005:TRP:HA	2:I:1016:ARG:O	2.08	0.53
2:I:1279:SER:N	2:I:1282:SER:OG	2.36	0.53
2:I:2827:ARG:HE	2:I:2934:GLY:HA2	1.74	0.53
2:I:2868:SER:O	2:I:2872:GLN:N	2.36	0.53
2:I:4000:MET:HE1	2:I:4061:PHE:HB2	1.90	0.53
2:I:4238:CYS:HA	2:I:4241:THR:OG1	2.08	0.53
2:I:4240:ASP:O	2:I:4243:PHE:HB3	2.07	0.53
2:A:209:CYS:HB2	2:A:273:HIS:NE2	2.24	0.53
2:A:676:THR:HG22	2:A:677:ALA:N	2.23	0.53
2:A:2239:PHE:CD2	2:A:2250:MET:HE2	2.40	0.53
2:A:2495:VAL:HG12	2:A:2498:HIS:N	2.21	0.53
2:A:2920:ARG:O	2:A:2924:GLN:HG2	2.08	0.53
2:A:3534:MET:HA	2:A:3537:LYS:HB2	1.89	0.53
2:A:3965:LEU:HB3	2:A:4026:MET:CE	2.37	0.53
1:J:27:THR:HG23	1:J:38:SER:HB3	1.90	0.53
2:G:76:ARG:NH2	2:G:79:GLN:OE1	2.42	0.53
2:G:107:ILE:HG13	2:G:148:TRP:HB2	1.91	0.53
2:G:1196:PRO:O	2:G:1198:GLN:NE2	2.19	0.53
2:G:3995:VAL:HG13	2:G:3999:MET:HE3	1.89	0.53
2:B:209:CYS:HB2	2:B:273:HIS:NE2	2.24	0.53
2:B:883:ALA:HB1	2:B:905:PRO:HA	1.91	0.53
2:B:2578:MET:O	2:B:2581:SER:OG	2.22	0.53
2:B:3090:ALA:HA	2:B:3093:ARG:NH2	2.23	0.53
2:B:4658:ILE:HG12	2:B:4792:LEU:HB3	1.89	0.53
2:I:14:LEU:H	2:I:163:VAL:HG23	1.74	0.53
2:I:41:GLY:HA2	2:I:137:LEU:HD12	1.90	0.53
2:I:228:ASP:N	2:I:228:ASP:OD1	2.40	0.53
2:I:2929:PHE:HA	2:I:2932:MET:HB2	1.91	0.53
2:I:3206:LEU:HD23	2:I:3207:GLU:HG3	1.91	0.53
1:F:27:THR:HG23	1:F:38:SER:HB3	1.90	0.53
2:A:257:ARG:HA	2:A:286:THR:HG21	1.91	0.53
1:J:22:CYS:HB3	1:J:103:LEU:HD11	1.91	0.53
2:G:289:ARG:HD2	2:G:301:VAL:HG23	1.91	0.53
2:G:491:ILE:O	2:G:495:ASN:ND2	2.41	0.53
2:G:2423:MET:SD	2:G:2494:PHE:HD1	2.30	0.53
2:G:2929:PHE:HA	2:G:2932:MET:HB2	1.91	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:3350:ARG:NH2	2:G:3353:LEU:HD21	2.24	0.53
2:B:1509:ILE:H	2:B:1509:ILE:HD12	1.73	0.53
2:B:3084:GLY:O	2:B:3089:LYS:NZ	2.40	0.53
2:B:3206:LEU:HD23	2:B:3207:GLU:HG3	1.91	0.53
2:B:4701:TRP:CZ2	2:B:4781:GLY:HA3	2.44	0.53
2:I:1196:PRO:O	2:I:1198:GLN:NE2	2.19	0.53
2:I:1509:ILE:HD12	2:I:1509:ILE:H	1.73	0.53
2:I:3038:MET:O	2:I:3042:LEU:HG	2.09	0.53
2:A:920:TYR:HA	2:A:923:GLN:HB3	1.90	0.53
2:A:2827:ARG:HE	2:A:2934:GLY:HA2	1.74	0.53
2:A:3036:LYS:HA	2:A:3039:ILE:HD12	1.91	0.53
2:A:4701:TRP:CZ2	2:A:4781:GLY:HA3	2.44	0.53
2:A:4895:GLY:O	2:G:4892:ARG:NH1	2.40	0.53
2:G:14:LEU:H	2:G:163:VAL:HG23	1.74	0.53
2:G:214:VAL:HG22	2:G:341:TYR:CZ	2.44	0.53
2:G:228:ASP:OD1	2:G:228:ASP:N	2.40	0.53
2:G:1509:ILE:H	2:G:1509:ILE:HD12	1.73	0.53
2:G:2182:ILE:O	2:G:2186:MET:HG2	2.08	0.53
2:G:3676:ASP:OD1	2:G:3677:LEU:N	2.42	0.53
2:B:45:ARG:NH2	2:B:139:GLU:OE2	2.41	0.53
2:B:56:GLN:O	2:B:309:THR:OG1	2.25	0.53
2:B:296:ASP:OD1	2:B:297:GLN:N	2.42	0.53
2:B:350:HIS:CD2	2:B:352:ALA:H	2.27	0.53
2:B:4884:LEU:HD11	2:I:4914:VAL:HG11	1.91	0.53
2:I:76:ARG:NH2	2:I:79:GLN:OE1	2.42	0.53
2:I:3036:LYS:HA	2:I:3039:ILE:HD12	1.91	0.53
2:A:76:ARG:NH2	2:A:79:GLN:OE1	2.42	0.53
2:A:872:GLU:OE2	2:A:872:GLU:N	2.36	0.53
2:A:3212:GLU:OE1	2:A:3212:GLU:N	2.42	0.53
2:G:2648:TYR:HE2	2:G:2706:ILE:HG12	1.74	0.53
2:G:3315:LEU:O	2:G:3319:ILE:HG12	2.07	0.53
2:G:3875:MET:O	2:G:3876:ALA:C	2.47	0.53
2:G:4238:CYS:HA	2:G:4241:THR:OG1	2.08	0.53
2:B:257:ARG:HA	2:B:286:THR:HG21	1.91	0.53
2:B:920:TYR:HA	2:B:923:GLN:HB3	1.90	0.53
2:B:940:GLY:O	2:B:1052:ASN:N	2.38	0.53
2:B:2296:GLU:O	2:B:2300:SER:N	2.32	0.53
2:B:3380:ARG:HD2	2:B:3391:GLU:HG3	1.91	0.53
2:I:350:HIS:CD2	2:I:352:ALA:H	2.27	0.53
2:I:1629:GLN:NE2	2:I:1631:GLN:OE1	2.41	0.53
2:I:3103:ILE:O	2:I:3106:MET:HG2	2.09	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:3182:TYR:HA	2:I:3185:LYS:HD3	1.91	0.53
2:I:3380:ARG:HD2	2:I:3391:GLU:HG3	1.91	0.53
2:I:4035:VAL:HA	2:I:4189:ARG:HH21	1.74	0.53
2:A:1509:ILE:HD12	2:A:1509:ILE:H	1.73	0.53
2:A:3206:LEU:HD23	2:A:3207:GLU:HG3	1.91	0.53
2:A:3527:PRO:HB3	2:A:3569:LEU:HD12	1.90	0.53
2:A:3875:MET:O	2:A:3876:ALA:C	2.47	0.53
1:H:22:CYS:HB3	1:H:103:LEU:HD11	1.91	0.53
2:G:209:CYS:HB2	2:G:273:HIS:NE2	2.24	0.53
2:G:350:HIS:HD2	2:G:352:ALA:H	1.55	0.53
2:G:2115:GLU:OE1	2:G:2115:GLU:N	2.38	0.53
2:G:3038:MET:O	2:G:3042:LEU:HG	2.09	0.53
2:G:3182:TYR:HA	2:G:3185:LYS:HD3	1.91	0.53
2:G:3391:GLU:HA	2:G:3394:VAL:HG22	1.90	0.53
2:B:2590:SER:O	2:B:2600:ARG:NH1	2.42	0.53
2:B:3036:LYS:HA	2:B:3039:ILE:HD12	1.91	0.53
2:B:3103:ILE:HD13	2:B:3168:THR:HG23	1.90	0.53
2:B:3391:GLU:HA	2:B:3394:VAL:HG22	1.90	0.53
2:B:3875:MET:O	2:B:3876:ALA:C	2.47	0.53
2:I:273:HIS:ND1	2:I:335:GLY:O	2.42	0.53
2:I:676:THR:HG22	2:I:677:ALA:N	2.23	0.53
2:I:3532:LEU:HD23	2:I:3535:LEU:HD12	1.91	0.53
2:I:3780:LEU:HD11	2:I:3816:MET:HB3	1.90	0.53
2:A:45:ARG:NH2	2:A:139:GLU:OE2	2.41	0.53
2:A:3182:TYR:HA	2:A:3185:LYS:HD3	1.91	0.53
2:A:3391:GLU:HA	2:A:3394:VAL:HG22	1.90	0.53
2:G:3036:LYS:HA	2:G:3039:ILE:HD12	1.91	0.53
2:G:3137:LEU:HB3	2:G:3138:PRO:HD3	1.91	0.53
2:G:4224:GLU:O	2:G:4230:LYS:HE2	2.09	0.53
2:B:394:GLN:N	2:B:397:GLU:OE2	2.36	0.53
2:B:2212:VAL:HG22	2:B:2256:TYR:CZ	2.43	0.53
2:B:2635:GLU:OE1	2:B:2635:GLU:N	2.32	0.53
2:B:2648:TYR:HE2	2:B:2706:ILE:HG12	1.74	0.53
2:B:3669:PHE:HA	2:B:3672:ARG:HH21	1.74	0.53
2:B:4197:ILE:HD13	2:B:4990:PHE:HB3	1.91	0.53
2:B:4968:PHE:O	2:B:4974:GLY:HA3	2.09	0.53
2:I:214:VAL:HG22	2:I:341:TYR:CZ	2.44	0.53
2:I:2912:THR:HG23	2:I:2915:GLU:H	1.74	0.53
2:A:296:ASP:OD1	2:A:297:GLN:N	2.42	0.52
2:A:649:PHE:HB3	2:A:776:LEU:HD13	1.90	0.52
2:A:1719:HIS:CD2	2:A:1802:ILE:HB	2.44	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:41:GLY:HA2	2:G:137:LEU:HD12	1.90	0.52
2:G:883:ALA:HB1	2:G:905:PRO:HA	1.91	0.52
2:G:2590:SER:O	2:G:2600:ARG:NH1	2.42	0.52
2:G:2912:THR:HG23	2:G:2915:GLU:H	1.74	0.52
2:B:273:HIS:ND1	2:B:335:GLY:O	2.42	0.52
2:B:3107:VAL:O	2:B:3111:ARG:HG2	2.09	0.52
2:B:4237:PHE:HE1	2:B:4668:LEU:HD11	1.74	0.52
2:I:289:ARG:HD2	2:I:301:VAL:HG23	1.91	0.52
2:I:3107:VAL:O	2:I:3111:ARG:HG2	2.09	0.52
2:I:3198:ALA:HB2	2:I:3276:MET:HG3	1.91	0.52
2:I:3391:GLU:HA	2:I:3394:VAL:HG22	1.90	0.52
2:A:883:ALA:HB1	2:A:905:PRO:HA	1.90	0.52
2:A:1260:MET:HB2	2:A:1269:CYS:SG	2.50	0.52
2:A:2648:TYR:HE2	2:A:2706:ILE:HG12	1.74	0.52
2:A:2912:THR:HG23	2:A:2915:GLU:H	1.74	0.52
2:A:4224:GLU:O	2:A:4230:LYS:HE2	2.09	0.52
2:G:350:HIS:CD2	2:G:352:ALA:H	2.27	0.52
2:G:920:TYR:HA	2:G:923:GLN:HB3	1.90	0.52
2:B:2752:ASP:HA	2:B:2755:ILE:HD12	1.90	0.52
2:B:3038:MET:O	2:B:3042:LEU:HG	2.09	0.52
2:B:3212:GLU:OE1	2:B:3212:GLU:N	2.42	0.52
2:B:5007:GLU:N	2:B:5007:GLU:OE1	2.41	0.52
2:I:45:ARG:NH2	2:I:139:GLU:OE2	2.41	0.52
2:I:3137:LEU:HB3	2:I:3138:PRO:HD3	1.91	0.52
2:I:4197:ILE:HD13	2:I:4990:PHE:HB3	1.92	0.52
2:A:2115:GLU:OE1	2:A:2115:GLU:N	2.39	0.52
2:A:2634:ASN:HD21	2:A:2636:PHE:HB2	1.75	0.52
2:A:3038:MET:O	2:A:3042:LEU:HG	2.09	0.52
2:A:3107:VAL:O	2:A:3111:ARG:HG2	2.09	0.52
2:A:4237:PHE:HE1	2:A:4668:LEU:HD11	1.73	0.52
2:A:4243:PHE:O	2:A:4247:ILE:HD12	2.10	0.52
2:A:4968:PHE:O	2:A:4974:GLY:HA3	2.09	0.52
1:H:27:THR:HG23	1:H:38:SER:HB3	1.90	0.52
2:G:1867:GLU:OE2	2:G:1928:GLN:NE2	2.42	0.52
2:G:2634:ASN:HD21	2:G:2636:PHE:HB2	1.75	0.52
2:G:2716:ASP:HB2	2:G:2719:TYR:HD1	1.75	0.52
2:G:3532:LEU:HD23	2:G:3535:LEU:HD12	1.91	0.52
2:G:3669:PHE:HA	2:G:3672:ARG:HH21	1.74	0.52
2:B:289:ARG:HD2	2:B:301:VAL:HG23	1.91	0.52
2:B:3676:ASP:OD1	2:B:3677:LEU:N	2.42	0.52
2:B:4035:VAL:HA	2:B:4189:ARG:HH21	1.74	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:209:CYS:HB2	2:I:273:HIS:NE2	2.24	0.52
2:I:1149:VAL:HG13	2:I:1149:VAL:O	2.10	0.52
2:I:2590:SER:O	2:I:2600:ARG:NH1	2.42	0.52
2:I:4237:PHE:HE1	2:I:4668:LEU:HD11	1.73	0.52
2:I:4968:PHE:O	2:I:4974:GLY:HA3	2.09	0.52
2:I:4976:GLU:O	2:I:4980:LEU:N	2.41	0.52
2:A:862:VAL:O	2:A:864:PRO:HD3	2.10	0.52
2:A:3103:ILE:HD13	2:A:3168:THR:HG23	1.90	0.52
2:A:3350:ARG:NH2	2:A:3353:LEU:HD21	2.24	0.52
2:A:4000:MET:SD	2:A:4001:MET:N	2.83	0.52
2:G:862:VAL:O	2:G:864:PRO:HD3	2.10	0.52
2:G:3148:ALA:HB2	2:G:3196:ARG:HH22	1.75	0.52
2:G:3719:ASP:H	2:G:3793:MET:CE	2.23	0.52
2:G:4035:VAL:HA	2:G:4189:ARG:HH21	1.74	0.52
2:B:1259:ARG:HD2	2:B:1270:LEU:HD22	1.92	0.52
2:B:1867:GLU:OE2	2:B:1928:GLN:NE2	2.43	0.52
2:B:2827:ARG:HE	2:B:2934:GLY:HA2	1.74	0.52
2:B:3350:ARG:NH2	2:B:3353:LEU:HD21	2.24	0.52
2:I:649:PHE:HB3	2:I:776:LEU:HD13	1.90	0.52
2:I:1719:HIS:CD2	2:I:1802:ILE:HB	2.44	0.52
2:I:2175:GLU:OE2	2:I:2227:LYS:NZ	2.42	0.52
2:I:2648:TYR:HE2	2:I:2706:ILE:HG12	1.74	0.52
2:I:3212:GLU:OE1	2:I:3212:GLU:N	2.42	0.52
2:I:3719:ASP:H	2:I:3793:MET:CE	2.23	0.52
2:I:4243:PHE:O	2:I:4247:ILE:HD12	2.10	0.52
2:A:2590:SER:O	2:A:2600:ARG:NH1	2.42	0.52
2:A:2638:LYS:HZ1	2:A:2694:GLU:HB2	1.73	0.52
2:A:2716:ASP:HB2	2:A:2719:TYR:HD1	1.75	0.52
2:A:3103:ILE:O	2:A:3106:MET:HG2	2.09	0.52
2:A:3141:THR:HG22	2:A:3193:CYS:HA	1.92	0.52
2:A:3669:PHE:HA	2:A:3672:ARG:HH21	1.74	0.52
2:A:4197:ILE:HD13	2:A:4990:PHE:HB3	1.91	0.52
2:A:5007:GLU:OE1	2:A:5007:GLU:N	2.41	0.52
2:G:286:THR:HG23	2:G:287:THR:HG23	1.92	0.52
2:G:3206:LEU:HD23	2:G:3207:GLU:HG3	1.91	0.52
2:G:4701:TRP:CZ2	2:G:4781:GLY:HA3	2.44	0.52
2:B:214:VAL:HG22	2:B:341:TYR:CZ	2.44	0.52
2:B:3103:ILE:O	2:B:3106:MET:HG2	2.09	0.52
2:B:4054:ASN:O	2:B:4058:ILE:HG13	2.10	0.52
2:B:4658:ILE:CG1	2:B:4792:LEU:HB3	2.40	0.52
2:I:296:ASP:OD1	2:I:297:GLN:N	2.42	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:1867:GLU:OE2	2:I:1928:GLN:NE2	2.42	0.52
2:I:4054:ASN:O	2:I:4058:ILE:HG13	2.10	0.52
2:I:4142:ASN:OD1	2:I:4143:VAL:N	2.43	0.52
2:A:2560:PRO:O	2:A:2563:THR:OG1	2.23	0.52
2:A:3019:SER:O	2:A:3036:LYS:NZ	2.42	0.52
2:A:3050:VAL:HG23	2:A:3131:TYR:OH	2.10	0.52
2:A:3637:ARG:HH21	2:A:3640:PRO:HD3	1.75	0.52
2:G:56:GLN:O	2:G:309:THR:OG1	2.25	0.52
2:G:296:ASP:OD1	2:G:297:GLN:N	2.42	0.52
2:G:1260:MET:HB2	2:G:1269:CYS:SG	2.49	0.52
2:G:1561:VAL:HG23	2:G:1562:ILE:H	1.74	0.52
2:G:4914:VAL:HG11	2:I:4884:LEU:HD11	1.92	0.52
2:B:1005:TRP:HA	2:B:1016:ARG:O	2.08	0.52
2:I:1259:ARG:HD2	2:I:1270:LEU:HD22	1.92	0.52
2:I:1260:MET:HB2	2:I:1269:CYS:SG	2.49	0.52
2:I:4701:TRP:CZ2	2:I:4781:GLY:HA3	2.44	0.52
2:A:1867:GLU:OE2	2:A:1928:GLN:NE2	2.43	0.52
2:A:2752:ASP:HA	2:A:2755:ILE:HD12	1.90	0.52
2:A:3532:LEU:HD23	2:A:3535:LEU:HD12	1.91	0.52
2:G:1149:VAL:O	2:G:1149:VAL:HG13	2.10	0.52
2:G:1629:GLN:NE2	2:G:1631:GLN:OE1	2.41	0.52
2:G:2992:GLU:HA	2:G:2995:ILE:HD12	1.92	0.52
2:G:3050:VAL:HG23	2:G:3131:TYR:OH	2.10	0.52
2:G:3103:ILE:O	2:G:3106:MET:HG2	2.09	0.52
2:G:3637:ARG:HH21	2:G:3640:PRO:HD3	1.75	0.52
2:G:4054:ASN:O	2:G:4058:ILE:HG13	2.10	0.52
2:B:676:THR:HG22	2:B:677:ALA:N	2.23	0.52
2:I:107:ILE:HG13	2:I:148:TRP:HB2	1.91	0.52
2:I:1928:GLN:OE1	2:I:1928:GLN:N	2.42	0.52
2:I:4000:MET:SD	2:I:4001:MET:N	2.83	0.52
2:I:4658:ILE:CG1	2:I:4792:LEU:HB3	2.40	0.52
2:A:1927:LEU:HD13	2:A:2101:MET:HG3	1.92	0.52
2:A:3148:ALA:HB2	2:A:3196:ARG:HH22	1.75	0.52
2:A:3380:ARG:HD2	2:A:3391:GLU:HG3	1.91	0.52
2:A:4654:ALA:HB1	2:A:4796:MET:HE1	1.92	0.52
2:A:4688:ILE:HD11	2:A:4737:ILE:HG21	1.92	0.52
2:G:3090:ALA:HA	2:G:3093:ARG:NH2	2.23	0.52
2:G:3380:ARG:HD2	2:G:3391:GLU:HG3	1.91	0.52
2:B:652:ARG:HB3	2:B:750:LEU:HD13	1.92	0.52
2:B:1260:MET:HB2	2:B:1269:CYS:SG	2.49	0.52
2:B:3198:ALA:HB2	2:B:3276:MET:HG3	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:4142:ASN:OD1	2:B:4143:VAL:N	2.43	0.52
2:I:102:LEU:HB2	2:I:105:HIS:CD2	2.45	0.52
2:I:257:ARG:HA	2:I:286:THR:HG21	1.91	0.52
2:I:2466:LEU:O	2:I:2470:ILE:HG12	2.10	0.52
2:I:2647:HIS:O	2:I:2651:CYS:N	2.34	0.52
2:I:3050:VAL:HG23	2:I:3131:TYR:OH	2.10	0.52
2:I:3267:PRO:HB2	2:I:3270:ILE:HG12	1.92	0.52
2:I:3875:MET:O	2:I:3876:ALA:C	2.47	0.52
2:I:4229:GLU:HG2	2:I:5019:TRP:HD1	1.75	0.52
2:A:1149:VAL:HG13	2:A:1149:VAL:O	2.10	0.52
2:A:3676:ASP:OD1	2:A:3677:LEU:N	2.42	0.52
2:A:4087:LEU:O	2:A:4122:MET:HE3	2.09	0.52
1:O:27:THR:HG23	1:O:38:SER:HB3	1.90	0.52
2:G:273:HIS:ND1	2:G:335:GLY:O	2.42	0.52
2:G:1927:LEU:HD13	2:G:2101:MET:HG3	1.92	0.52
2:G:2747:ILE:HG12	2:G:2814:LYS:HG3	1.92	0.52
2:G:2758:PHE:HD2	2:G:2809:ILE:HG12	1.75	0.52
2:G:3198:ALA:HB2	2:G:3276:MET:HG3	1.91	0.52
2:G:3212:GLU:OE1	2:G:3212:GLU:N	2.42	0.52
2:G:4914:VAL:HG13	2:I:4888:TYR:CD1	2.45	0.52
2:B:1149:VAL:O	2:B:1149:VAL:HG13	2.10	0.52
2:B:1248:VAL:HG22	2:B:1599:MET:HE3	1.92	0.52
2:B:1928:GLN:N	2:B:1928:GLN:OE1	2.42	0.52
2:B:2466:LEU:O	2:B:2470:ILE:HG12	2.10	0.52
2:B:4000:MET:HE1	2:B:4061:PHE:HB2	1.91	0.52
2:B:4097:MET:HE2	2:B:4108:ILE:HD13	1.90	0.52
2:I:2752:ASP:HA	2:I:2755:ILE:HD12	1.91	0.52
2:A:213:TYR:HA	2:A:339:ILE:O	2.10	0.52
2:A:394:GLN:N	2:A:397:GLU:OE2	2.36	0.52
2:A:2012:PHE:CE2	2:A:2028:ARG:HB2	2.45	0.52
2:A:2992:GLU:HA	2:A:2995:ILE:HD12	1.92	0.52
2:A:4035:VAL:HA	2:A:4189:ARG:HH21	1.74	0.52
2:G:2012:PHE:CE2	2:G:2028:ARG:HB2	2.45	0.52
2:G:2239:PHE:CD2	2:G:2250:MET:HE2	2.40	0.52
2:G:3107:VAL:O	2:G:3111:ARG:HG2	2.09	0.52
2:G:4059:LEU:CD2	2:G:4167:ALA:HB2	2.40	0.52
2:G:4142:ASN:OD1	2:G:4143:VAL:N	2.43	0.52
2:G:4197:ILE:HD13	2:G:4990:PHE:HB3	1.91	0.52
2:G:4968:PHE:O	2:G:4974:GLY:HA3	2.09	0.52
2:B:1935:VAL:HG12	2:B:1939:MET:HE1	1.91	0.52
2:B:2623:LEU:HD21	2:B:2678:LEU:HD11	1.92	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:4654:ALA:HB1	2:B:4796:MET:HE1	1.92	0.52
2:B:4976:GLU:O	2:B:4980:LEU:N	2.41	0.52
2:I:1935:VAL:HG12	2:I:1939:MET:HE1	1.92	0.52
2:I:2747:ILE:HG12	2:I:2814:LYS:HG3	1.92	0.52
2:I:2758:PHE:HD2	2:I:2809:ILE:HG12	1.75	0.52
2:I:3637:ARG:HH21	2:I:3640:PRO:HD3	1.75	0.52
2:I:4068:LEU:HD13	2:I:4111:LEU:HD13	1.92	0.52
2:I:4224:GLU:O	2:I:4230:LYS:HE2	2.09	0.52
2:A:289:ARG:HD2	2:A:301:VAL:HG23	1.91	0.51
2:A:4658:ILE:CG1	2:A:4792:LEU:HB3	2.40	0.51
2:G:213:TYR:HA	2:G:339:ILE:O	2.10	0.51
2:G:257:ARG:HA	2:G:286:THR:HG21	1.91	0.51
2:G:676:THR:HG22	2:G:677:ALA:N	2.23	0.51
2:G:4000:MET:SD	2:G:4001:MET:N	2.83	0.51
2:G:4674:GLU:OE2	2:G:4715:TYR:N	2.28	0.51
2:B:107:ILE:HG13	2:B:148:TRP:HB2	1.91	0.51
2:B:3637:ARG:HH21	2:B:3640:PRO:HD3	1.75	0.51
2:B:4221:VAL:HG23	2:B:4230:LYS:HZ3	1.76	0.51
2:B:4224:GLU:O	2:B:4230:LYS:HE2	2.09	0.51
2:I:3676:ASP:OD1	2:I:3677:LEU:N	2.42	0.51
2:I:3994:HIS:CD2	2:I:4054:ASN:HD21	2.28	0.51
2:I:4059:LEU:CD2	2:I:4167:ALA:HB2	2.40	0.51
1:F:56:ILE:HD12	1:F:81:ALA:HA	1.92	0.51
2:A:107:ILE:HG13	2:A:148:TRP:HB2	1.91	0.51
2:A:273:HIS:ND1	2:A:335:GLY:O	2.42	0.51
2:A:3994:HIS:CD2	2:A:4054:ASN:HD21	2.28	0.51
2:A:4054:ASN:HD22	2:A:4057:MET:HE2	1.75	0.51
2:A:4087:LEU:HD23	2:A:4122:MET:O	2.11	0.51
2:A:4578:LEU:CD1	2:B:4849:TYR:HE1	2.20	0.51
2:A:4863:TYR:HB2	2:A:4874:MET:HE3	1.92	0.51
2:G:515:TRP:CZ3	2:G:555:GLU:HG2	2.45	0.51
2:G:1259:ARG:HD2	2:G:1270:LEU:HD22	1.92	0.51
2:G:1265:ASP:OD1	2:G:1266:THR:N	2.39	0.51
2:G:4000:MET:HE1	2:G:4061:PHE:HB2	1.91	0.51
2:G:4658:ILE:CG1	2:G:4792:LEU:HB3	2.40	0.51
2:B:102:LEU:HB2	2:B:105:HIS:CD2	2.45	0.51
2:B:515:TRP:CZ3	2:B:555:GLU:HG2	2.45	0.51
2:B:3182:TYR:HA	2:B:3185:LYS:HD3	1.91	0.51
2:B:3719:ASP:H	2:B:3793:MET:CE	2.23	0.51
2:B:3994:HIS:CD2	2:B:4054:ASN:HD21	2.28	0.51
2:I:3669:PHE:HA	2:I:3672:ARG:HH21	1.74	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:102:LEU:HB2	2:A:105:HIS:CD2	2.45	0.51
2:A:1259:ARG:HD2	2:A:1270:LEU:HD22	1.92	0.51
2:A:2867:LEU:HD13	2:A:2927:LEU:HD23	1.93	0.51
2:A:3719:ASP:H	2:A:3793:MET:CE	2.23	0.51
2:A:3904:ARG:NH1	2:A:3975:GLY:HA3	2.26	0.51
2:A:5017:ARG:HD2	2:A:5019:TRP:HZ2	1.76	0.51
1:H:56:ILE:HD12	1:H:81:ALA:HA	1.92	0.51
2:G:1156:THR:OG1	2:G:1157:GLU:OE1	2.20	0.51
2:G:2868:SER:O	2:G:2872:GLN:N	2.36	0.51
2:G:4243:PHE:O	2:G:4247:ILE:HD12	2.10	0.51
2:B:210:GLU:OE1	2:B:210:GLU:N	2.43	0.51
2:B:1629:GLN:NE2	2:B:1631:GLN:OE1	2.41	0.51
2:B:3965:LEU:HB3	2:B:4026:MET:CE	2.37	0.51
2:I:2867:LEU:HD13	2:I:2927:LEU:HD23	1.93	0.51
2:I:3904:ARG:NH1	2:I:3975:GLY:HA3	2.26	0.51
2:A:2623:LEU:HD21	2:A:2678:LEU:HD11	1.92	0.51
2:A:3958:ALA:O	2:A:3961:VAL:HG12	2.10	0.51
2:G:813:GLU:OE1	2:G:1017:ARG:NH2	2.44	0.51
2:G:2466:LEU:O	2:G:2470:ILE:HG12	2.10	0.51
2:B:1561:VAL:HG23	2:B:1562:ILE:H	1.74	0.51
2:B:2758:PHE:HD2	2:B:2809:ILE:HG12	1.75	0.51
2:B:3148:ALA:HB2	2:B:3196:ARG:HH22	1.75	0.51
2:B:3445:TRP:HA	2:B:3451:PHE:HD1	1.76	0.51
2:B:3904:ARG:NH1	2:B:3975:GLY:HA3	2.26	0.51
2:B:4054:ASN:HD22	2:B:4057:MET:HE2	1.75	0.51
2:B:4068:LEU:HD13	2:B:4111:LEU:HD13	1.92	0.51
2:B:4676:GLU:HB3	2:B:4680:LYS:NZ	2.26	0.51
2:B:5017:ARG:HD2	2:B:5019:TRP:HZ2	1.76	0.51
2:I:213:TYR:HA	2:I:339:ILE:O	2.10	0.51
2:I:286:THR:HG23	2:I:287:THR:HG23	1.92	0.51
2:I:2012:PHE:CE2	2:I:2028:ARG:HB2	2.45	0.51
2:I:2992:GLU:HA	2:I:2995:ILE:HD12	1.92	0.51
2:I:3148:ALA:HB2	2:I:3196:ARG:HH22	1.75	0.51
2:I:3958:ALA:O	2:I:3961:VAL:HG12	2.10	0.51
2:I:4674:GLU:OE2	2:I:4715:TYR:N	2.28	0.51
2:A:2346:VAL:HG12	2:A:2349:ASN:H	1.76	0.51
2:A:2466:LEU:O	2:A:2470:ILE:HG12	2.10	0.51
2:A:2929:PHE:HA	2:A:2932:MET:HB2	1.91	0.51
2:A:3445:TRP:HA	2:A:3451:PHE:HD1	1.75	0.51
2:A:4142:ASN:OD1	2:A:4143:VAL:N	2.43	0.51
2:G:207:SER:H	2:G:334:MET:HE1	1.76	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:2752:ASP:HA	2:G:2755:ILE:HD12	1.90	0.51
2:G:3904:ARG:NH1	2:G:3975:GLY:HA3	2.26	0.51
2:G:3994:HIS:CD2	2:G:4054:ASN:HD21	2.28	0.51
2:G:4087:LEU:HD23	2:G:4122:MET:O	2.11	0.51
2:G:4221:VAL:HG21	2:G:4959:PHE:HZ	1.76	0.51
2:G:4976:GLU:O	2:G:4980:LEU:N	2.41	0.51
2:G:5017:ARG:HD2	2:G:5019:TRP:HZ2	1.76	0.51
2:B:317:ARG:HG3	2:B:349:GLN:OE1	2.11	0.51
2:B:813:GLU:OE1	2:B:1017:ARG:NH2	2.44	0.51
2:B:2115:GLU:OE1	2:B:2115:GLU:N	2.38	0.51
2:B:3141:THR:HG22	2:B:3193:CYS:HA	1.92	0.51
2:B:3532:LEU:HD23	2:B:3535:LEU:HD12	1.91	0.51
2:B:4243:PHE:O	2:B:4247:ILE:HD12	2.10	0.51
2:B:4688:ILE:HD11	2:B:4737:ILE:HG21	1.92	0.51
2:A:1265:ASP:OD1	2:A:1266:THR:N	2.39	0.51
2:A:3198:ALA:HB2	2:A:3276:MET:HG3	1.91	0.51
2:A:3267:PRO:HB2	2:A:3270:ILE:HG12	1.92	0.51
2:A:3410:PRO:HD3	2:A:3509:LEU:HD13	1.93	0.51
2:A:4229:GLU:HG2	2:A:5019:TRP:HD1	1.75	0.51
2:G:102:LEU:HB2	2:G:105:HIS:CD2	2.45	0.51
2:G:2623:LEU:HD21	2:G:2678:LEU:HD11	1.92	0.51
2:G:2695:LEU:HA	2:G:2698:MET:HG3	1.93	0.51
2:G:4087:LEU:O	2:G:4122:MET:HE3	2.11	0.51
2:G:4654:ALA:HB1	2:G:4796:MET:HE1	1.93	0.51
2:B:1977:TYR:O	2:B:1981:MET:HG2	2.10	0.51
2:B:3137:LEU:HB3	2:B:3138:PRO:HD3	1.91	0.51
2:B:4000:MET:SD	2:B:4001:MET:N	2.83	0.51
2:I:862:VAL:O	2:I:864:PRO:HD3	2.10	0.51
2:I:1561:VAL:HG23	2:I:1562:ILE:H	1.74	0.51
2:I:3350:ARG:NH2	2:I:3353:LEU:HD21	2.24	0.51
2:A:266:ARG:NH2	2:A:330:ASP:HB3	2.26	0.51
2:A:286:THR:HG23	2:A:287:THR:HG23	1.92	0.51
2:A:317:ARG:HG3	2:A:349:GLN:OE1	2.11	0.51
2:A:1144:GLN:N	2:A:1147:ASP:OD2	2.43	0.51
2:A:1561:VAL:HG23	2:A:1562:ILE:H	1.74	0.51
2:A:2695:LEU:HA	2:A:2698:MET:HG3	1.93	0.51
2:A:2747:ILE:HG12	2:A:2814:LYS:HG3	1.92	0.51
2:A:2758:PHE:HD2	2:A:2809:ILE:HG12	1.75	0.51
2:A:2867:LEU:HD23	2:A:2867:LEU:H	1.76	0.51
2:A:2980:VAL:O	2:A:2984:GLY:N	2.43	0.51
2:A:4676:GLU:HB3	2:A:4680:LYS:NZ	2.26	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:2259:GLU:HB3	2:G:2297:LYS:HZ1	1.76	0.51
2:G:2648:TYR:O	2:G:2652:TRP:N	2.44	0.51
2:G:3141:THR:HG22	2:G:3193:CYS:HA	1.92	0.51
2:G:3445:TRP:HA	2:G:3451:PHE:HD1	1.76	0.51
2:G:4229:GLU:HG2	2:G:5019:TRP:HD1	1.75	0.51
2:B:213:TYR:HA	2:B:339:ILE:O	2.10	0.51
2:B:286:THR:HG23	2:B:287:THR:HG23	1.92	0.51
2:B:1157:GLU:OE1	2:B:1157:GLU:N	2.44	0.51
2:B:2929:PHE:HA	2:B:2932:MET:HB2	1.91	0.51
2:I:210:GLU:OE1	2:I:210:GLU:N	2.43	0.51
2:I:317:ARG:HG3	2:I:349:GLN:OE1	2.11	0.51
2:I:1218:GLY:O	2:I:1223:PHE:HB2	2.11	0.51
2:I:1977:TYR:O	2:I:1981:MET:HG2	2.11	0.51
2:I:3445:TRP:HA	2:I:3451:PHE:HD1	1.75	0.51
2:I:4221:VAL:HG21	2:I:4959:PHE:HZ	1.76	0.51
2:A:515:TRP:CZ3	2:A:555:GLU:HG2	2.45	0.51
2:A:1000:ARG:HB2	2:A:1021:LEU:HD11	1.93	0.51
2:A:1218:GLY:O	2:A:1223:PHE:HB2	2.11	0.51
2:A:1935:VAL:HG12	2:A:1939:MET:HE1	1.92	0.51
2:A:4000:MET:HE1	2:A:4061:PHE:HB2	1.92	0.51
2:A:4059:LEU:CD2	2:A:4167:ALA:HB2	2.40	0.51
2:A:4094:GLN:NE2	2:A:4098:ASP:OD2	2.44	0.51
1:J:56:ILE:HD12	1:J:81:ALA:HA	1.92	0.51
2:G:4676:GLU:HB3	2:G:4680:LYS:NZ	2.26	0.51
2:G:4688:ILE:HD11	2:G:4737:ILE:HG21	1.92	0.51
2:B:1000:ARG:HB2	2:B:1021:LEU:HD11	1.93	0.51
2:B:1218:GLY:O	2:B:1223:PHE:HB2	2.11	0.51
2:B:1927:LEU:HD13	2:B:2101:MET:HG3	1.92	0.51
2:B:2026:ASP:N	2:B:2026:ASP:OD1	2.43	0.51
2:B:2239:PHE:CD2	2:B:2250:MET:HE2	2.38	0.51
2:B:2867:LEU:HD23	2:B:2867:LEU:H	1.76	0.51
2:B:4161:ARG:HB3	2:B:4165:GLU:OE2	2.11	0.51
2:B:4229:GLU:HG2	2:B:5019:TRP:HD1	1.75	0.51
2:I:152:PRO:HA	2:I:169:LEU:HA	1.93	0.51
2:I:652:ARG:HB3	2:I:750:LEU:HD13	1.92	0.51
2:I:2634:ASN:HD21	2:I:2636:PHE:HB2	1.75	0.51
2:I:4688:ILE:HD11	2:I:4737:ILE:HG21	1.92	0.51
2:A:103:TYR:CE1	2:A:163:VAL:HG12	2.46	0.51
2:A:3137:LEU:HB3	2:A:3138:PRO:HD3	1.91	0.51
2:G:266:ARG:NH2	2:G:330:ASP:HB3	2.26	0.51
2:G:652:ARG:HB3	2:G:750:LEU:HD13	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2346:VAL:HG12	2:B:2349:ASN:H	1.76	0.51
2:B:2687:ALA:HB1	2:B:2966:TRP:CZ2	2.46	0.51
2:B:2912:THR:HG23	2:B:2915:GLU:H	1.74	0.51
2:B:3050:VAL:HG23	2:B:3131:TYR:OH	2.10	0.51
2:I:1157:GLU:OE1	2:I:1157:GLU:N	2.44	0.51
2:A:155:LYS:O	2:A:158:SER:OG	2.29	0.51
2:A:215:THR:HG1	2:A:218:HIS:CE1	2.29	0.51
2:A:1076:ARG:HH22	2:A:1655:GLU:CD	2.15	0.51
1:O:31:GLN:HA	1:O:98:ILE:HD13	1.93	0.51
1:O:56:ILE:HD12	1:O:81:ALA:HA	1.92	0.51
2:G:317:ARG:HG3	2:G:349:GLN:OE1	2.11	0.51
2:G:3267:PRO:HB2	2:G:3270:ILE:HG12	1.92	0.51
2:G:4094:GLN:NE2	2:G:4098:ASP:OD2	2.44	0.51
2:B:2175:GLU:OE2	2:B:2227:LYS:NZ	2.42	0.51
2:B:2747:ILE:HG12	2:B:2814:LYS:HG3	1.92	0.51
2:B:4097:MET:HE1	2:B:4108:ILE:HA	1.93	0.51
2:I:1248:VAL:HG22	2:I:1599:MET:HE3	1.93	0.51
2:I:1927:LEU:HD13	2:I:2101:MET:HG3	1.92	0.51
2:I:1974:ARG:HB2	2:I:3642:TYR:CE2	2.46	0.51
2:I:2638:LYS:HZ1	2:I:2694:GLU:HB2	1.76	0.51
2:I:2792:ARG:HH21	2:I:2798:SER:H	1.59	0.51
2:I:2980:VAL:O	2:I:2984:GLY:N	2.43	0.51
2:I:3668:SER:O	2:I:3668:SER:OG	2.28	0.51
2:I:4161:ARG:HB3	2:I:4165:GLU:OE2	2.11	0.51
2:A:3323:ILE:HG23	2:A:3335:MET:HE1	1.92	0.50
2:A:3422:HIS:HA	2:A:3425:THR:HG22	1.93	0.50
1:J:31:GLN:HA	1:J:98:ILE:HD13	1.93	0.50
2:G:155:LYS:O	2:G:158:SER:OG	2.30	0.50
2:G:226:HIS:O	2:G:226:HIS:ND1	2.39	0.50
2:G:1000:ARG:HB2	2:G:1021:LEU:HD11	1.93	0.50
2:G:1928:GLN:OE1	2:G:1928:GLN:N	2.42	0.50
2:B:232:THR:HG21	2:B:252:VAL:HB	1.93	0.50
2:B:862:VAL:O	2:B:864:PRO:HD3	2.10	0.50
2:B:1076:ARG:HH22	2:B:1655:GLU:CD	2.14	0.50
2:B:1926:LEU:O	2:B:1929:MET:HG2	2.11	0.50
2:B:2634:ASN:HD21	2:B:2636:PHE:HB2	1.75	0.50
2:B:2980:VAL:O	2:B:2984:GLY:N	2.43	0.50
2:B:2992:GLU:HA	2:B:2995:ILE:HD12	1.92	0.50
2:I:1543:GLU:O	2:I:1546:THR:OG1	2.17	0.50
2:I:2716:ASP:HB2	2:I:2719:TYR:HD1	1.75	0.50
2:I:2862:LEU:HD21	2:I:2929:PHE:HB2	1.94	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:4087:LEU:HD23	2:I:4122:MET:O	2.11	0.50
2:I:5017:ARG:HD2	2:I:5019:TRP:HZ2	1.76	0.50
2:A:152:PRO:HA	2:A:169:LEU:HA	1.93	0.50
2:A:1157:GLU:OE1	2:A:1157:GLU:N	2.44	0.50
1:H:31:GLN:HA	1:H:98:ILE:HD13	1.93	0.50
2:G:152:PRO:HA	2:G:169:LEU:HA	1.93	0.50
2:G:1974:ARG:HB2	2:G:3642:TYR:CE2	2.46	0.50
2:G:2300:SER:O	2:G:2301:TYR:HB2	2.12	0.50
2:G:2582:MET:HA	2:G:2585:THR:HG22	1.94	0.50
2:G:3422:HIS:HA	2:G:3425:THR:HG22	1.94	0.50
2:G:3958:ALA:O	2:G:3961:VAL:HG12	2.10	0.50
2:B:1144:GLN:N	2:B:1147:ASP:OD2	2.43	0.50
2:B:2012:PHE:CE2	2:B:2028:ARG:HB2	2.45	0.50
2:B:2582:MET:HA	2:B:2585:THR:HG22	1.94	0.50
2:B:2862:LEU:HD21	2:B:2929:PHE:HB2	1.94	0.50
2:B:3267:PRO:HB2	2:B:3270:ILE:CG1	2.41	0.50
2:B:3267:PRO:HB2	2:B:3270:ILE:HG12	1.92	0.50
2:B:3958:ALA:O	2:B:3961:VAL:HG12	2.10	0.50
2:B:4087:LEU:HD23	2:B:4122:MET:O	2.11	0.50
2:I:183:SER:HB2	2:I:190:GLN:HB2	1.93	0.50
2:I:813:GLU:OE1	2:I:1017:ARG:NH2	2.44	0.50
2:I:1000:ARG:HB2	2:I:1021:LEU:HD11	1.93	0.50
2:I:3410:PRO:HD3	2:I:3509:LEU:HD13	1.93	0.50
2:A:1926:LEU:O	2:A:1929:MET:HG2	2.12	0.50
2:A:1977:TYR:O	2:A:1981:MET:HG2	2.10	0.50
2:A:2648:TYR:O	2:A:2652:TRP:N	2.44	0.50
2:G:4068:LEU:HD13	2:G:4111:LEU:HD13	1.92	0.50
2:B:152:PRO:HA	2:B:169:LEU:HA	1.93	0.50
2:B:4059:LEU:CD2	2:B:4167:ALA:HB2	2.40	0.50
2:I:515:TRP:CZ3	2:I:555:GLU:HG2	2.45	0.50
2:I:2582:MET:O	2:I:2585:THR:HG22	2.11	0.50
2:I:3111:ARG:HH12	2:I:3175:LEU:HD13	1.76	0.50
2:I:3141:THR:HG22	2:I:3193:CYS:HA	1.92	0.50
2:I:3267:PRO:HB2	2:I:3270:ILE:CG1	2.41	0.50
2:A:232:THR:HG21	2:A:252:VAL:HB	1.93	0.50
2:A:650:VAL:HG21	2:A:662:TRP:CD1	2.47	0.50
2:A:828:GLU:OE2	2:A:828:GLU:N	2.44	0.50
2:A:1629:GLN:NE2	2:A:1631:GLN:OE1	2.41	0.50
2:A:2582:MET:HA	2:A:2585:THR:HG22	1.93	0.50
2:A:4054:ASN:O	2:A:4058:ILE:HG13	2.10	0.50
1:O:78:PRO:HA	1:O:81:ALA:HB3	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:210:GLU:OE1	2:G:210:GLU:N	2.43	0.50
2:G:232:THR:HG21	2:G:252:VAL:HB	1.93	0.50
2:G:959:TYR:CD2	2:G:960:MET:N	2.80	0.50
2:G:1144:GLN:N	2:G:1147:ASP:OD2	2.43	0.50
2:G:1248:VAL:HG22	2:G:1599:MET:HE3	1.94	0.50
2:G:1977:TYR:O	2:G:1981:MET:HG2	2.10	0.50
2:G:2031:LEU:HD11	2:G:3657:TYR:CE1	2.47	0.50
2:G:2346:VAL:HG12	2:G:2349:ASN:H	1.76	0.50
2:G:2867:LEU:HD13	2:G:2927:LEU:HD23	1.93	0.50
2:G:3564:GLU:OE1	2:G:3570:ARG:NH1	2.45	0.50
2:B:660:GLY:HA2	2:B:750:LEU:HD11	1.94	0.50
2:B:959:TYR:CD2	2:B:960:MET:N	2.80	0.50
2:B:2695:LEU:HA	2:B:2698:MET:HG3	1.93	0.50
2:B:3422:HIS:HA	2:B:3425:THR:HG22	1.94	0.50
2:B:3637:ARG:NH2	2:B:3640:PRO:HD3	2.27	0.50
2:I:232:THR:HG21	2:I:252:VAL:HB	1.94	0.50
2:I:2300:SER:O	2:I:2301:TYR:HB2	2.12	0.50
2:I:2623:LEU:HD21	2:I:2678:LEU:HD11	1.92	0.50
2:I:2648:TYR:O	2:I:2652:TRP:N	2.44	0.50
2:A:1008:SER:N	2:A:1018:ASN:O	2.45	0.50
2:A:1928:GLN:OE1	2:A:1928:GLN:N	2.42	0.50
2:A:2582:MET:O	2:A:2585:THR:HG22	2.12	0.50
2:A:2640:PRO:O	2:A:2643:LEU:CB	2.58	0.50
2:A:3416:VAL:HG22	2:A:3423:TRP:HZ3	1.77	0.50
2:A:4068:LEU:HD13	2:A:4111:LEU:HD13	1.92	0.50
2:A:4221:VAL:HG21	2:A:4959:PHE:HZ	1.76	0.50
1:H:78:PRO:HA	1:H:81:ALA:HB3	1.93	0.50
2:G:1183:GLU:OE1	2:G:1183:GLU:N	2.32	0.50
2:G:1543:GLU:O	2:G:1546:THR:OG1	2.17	0.50
2:G:1771:LEU:HG	2:G:2153:MET:HE1	1.93	0.50
2:G:4161:ARG:HB3	2:G:4165:GLU:OE2	2.11	0.50
2:B:103:TYR:CE1	2:B:163:VAL:HG12	2.46	0.50
2:B:183:SER:HB2	2:B:190:GLN:HB2	1.93	0.50
2:B:266:ARG:NH2	2:B:330:ASP:HB3	2.26	0.50
2:B:1155:LEU:HD22	2:B:1184:ILE:HG12	1.94	0.50
2:B:1974:ARG:HB2	2:B:3642:TYR:CE2	2.46	0.50
2:B:2300:SER:O	2:B:2301:TYR:HB2	2.12	0.50
2:B:2828:GLU:OE1	2:B:2828:GLU:N	2.43	0.50
2:B:3111:ARG:HH12	2:B:3175:LEU:HD13	1.76	0.50
2:B:3410:PRO:HD3	2:B:3509:LEU:HD13	1.93	0.50
2:B:3984:ARG:HG3	2:B:3984:ARG:O	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:103:TYR:CE1	2:I:163:VAL:HG12	2.46	0.50
2:I:233:ILE:O	2:I:257:ARG:NH1	2.41	0.50
2:I:660:GLY:HA2	2:I:750:LEU:HD11	1.94	0.50
2:I:880:GLU:OE2	2:I:910:PHE:HB3	2.12	0.50
2:I:1248:VAL:HG22	2:I:1599:MET:CE	2.42	0.50
2:I:2366:PRO:HA	2:I:2369:ARG:CZ	2.41	0.50
2:I:3422:HIS:HA	2:I:3425:THR:HG22	1.93	0.50
2:I:3965:LEU:HB3	2:I:4026:MET:CE	2.37	0.50
2:I:4654:ALA:HB1	2:I:4796:MET:HE1	1.92	0.50
2:A:356:TRP:N	2:A:379:HIS:O	2.45	0.50
2:A:652:ARG:HB3	2:A:750:LEU:HD13	1.92	0.50
2:A:813:GLU:OE1	2:A:1017:ARG:NH2	2.44	0.50
2:A:959:TYR:CD2	2:A:960:MET:N	2.80	0.50
2:A:1815:LEU:HG	2:A:1865:MET:SD	2.52	0.50
2:A:2031:LEU:HD11	2:A:3657:TYR:CE1	2.47	0.50
2:A:2578:MET:O	2:A:2581:SER:OG	2.22	0.50
2:A:2687:ALA:HB1	2:A:2966:TRP:CZ2	2.46	0.50
2:A:3637:ARG:NH2	2:A:3640:PRO:HD3	2.27	0.50
2:A:4914:VAL:HG11	2:G:4884:LEU:HD11	1.93	0.50
2:G:3633:VAL:HA	2:G:3636:PHE:HB2	1.93	0.50
2:B:880:GLU:OE2	2:B:910:PHE:HB3	2.12	0.50
2:B:2648:TYR:O	2:B:2652:TRP:N	2.44	0.50
2:I:4094:GLN:NE2	2:I:4098:ASP:OD2	2.44	0.50
2:A:1870:VAL:HG11	2:A:2091:PRO:HB2	1.94	0.50
2:A:2419:GLY:O	2:A:2423:MET:N	2.28	0.50
2:A:2828:GLU:OE1	2:A:2828:GLU:N	2.43	0.50
2:A:4221:VAL:HG23	2:A:4230:LYS:NZ	2.26	0.50
2:G:358:THR:HG21	2:G:382:GLY:HA3	1.94	0.50
2:G:1076:ARG:HH22	2:G:1655:GLU:CD	2.15	0.50
2:G:2336:ARG:O	2:G:2435:ARG:NH1	2.43	0.50
2:G:2582:MET:O	2:G:2585:THR:HG22	2.12	0.50
2:G:2687:ALA:HB1	2:G:2966:TRP:CZ2	2.46	0.50
2:G:2862:LEU:HD21	2:G:2929:PHE:HB2	1.94	0.50
2:G:2867:LEU:HD23	2:G:2867:LEU:H	1.76	0.50
2:G:2980:VAL:O	2:G:2984:GLY:N	2.43	0.50
2:G:3410:PRO:HD3	2:G:3509:LEU:HD13	1.93	0.50
2:B:358:THR:HG21	2:B:382:GLY:HA3	1.94	0.50
2:B:920:TYR:O	2:B:924:MET:HG3	2.12	0.50
2:B:1815:LEU:HG	2:B:1865:MET:SD	2.52	0.50
2:B:2792:ARG:HH21	2:B:2798:SER:H	1.59	0.50
2:B:2867:LEU:HD13	2:B:2927:LEU:HD23	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3019:SER:O	2:B:3036:LYS:NZ	2.42	0.50
2:B:4221:VAL:HG23	2:B:4230:LYS:NZ	2.26	0.50
2:I:266:ARG:NH2	2:I:330:ASP:HB3	2.26	0.50
2:I:1144:GLN:N	2:I:1147:ASP:OD2	2.43	0.50
2:I:2695:LEU:HA	2:I:2698:MET:HG3	1.93	0.50
2:I:2828:GLU:OE1	2:I:2828:GLU:N	2.43	0.50
1:F:31:GLN:HA	1:F:98:ILE:HD13	1.92	0.50
2:A:920:TYR:O	2:A:924:MET:HG3	2.12	0.50
2:A:1991:THR:O	2:A:1995:THR:HG23	2.12	0.50
2:A:2366:PRO:HA	2:A:2369:ARG:CZ	2.41	0.50
2:A:2862:LEU:HD21	2:A:2929:PHE:HB2	1.94	0.50
2:A:3103:ILE:HA	2:A:3106:MET:SD	2.52	0.50
2:G:103:TYR:CE1	2:G:163:VAL:HG12	2.46	0.50
2:G:872:GLU:OE2	2:G:872:GLU:N	2.36	0.50
2:G:2770:LYS:HE2	2:G:2791:LEU:HD11	1.94	0.50
2:G:4221:VAL:HG23	2:G:4230:LYS:NZ	2.26	0.50
2:B:36:CYS:SG	2:B:65:CYS:HB3	2.52	0.50
2:B:449:ILE:HG12	2:B:524:GLU:OE1	2.12	0.50
2:B:2716:ASP:HB2	2:B:2719:TYR:HD1	1.75	0.50
2:B:3354:LEU:HD11	2:B:3434:LEU:HD22	1.93	0.50
2:B:3416:VAL:HG22	2:B:3423:TRP:HZ3	1.77	0.50
2:B:4094:GLN:NE2	2:B:4098:ASP:OD2	2.44	0.50
2:I:920:TYR:O	2:I:924:MET:HG3	2.12	0.50
2:I:1076:ARG:HH22	2:I:1655:GLU:CD	2.14	0.50
2:I:1155:LEU:HD22	2:I:1184:ILE:HG12	1.94	0.50
2:I:2692:ASP:H	2:I:2696:TYR:HE2	1.60	0.50
2:I:2867:LEU:HD23	2:I:2867:LEU:H	1.76	0.50
2:I:3637:ARG:NH2	2:I:3640:PRO:HD3	2.27	0.50
2:A:2498:HIS:O	2:A:2501:SER:OG	2.28	0.50
2:G:1218:GLY:O	2:G:1223:PHE:HB2	2.11	0.50
2:G:1987:SER:OG	2:G:1990:GLU:HB2	2.12	0.50
2:G:2792:ARG:HH21	2:G:2798:SER:H	1.59	0.50
2:G:3354:LEU:HD11	2:G:3434:LEU:HD22	1.93	0.50
2:B:2582:MET:O	2:B:2585:THR:HG22	2.12	0.50
2:B:4221:VAL:HG21	2:B:4959:PHE:HZ	1.76	0.50
2:I:828:GLU:OE2	2:I:828:GLU:N	2.44	0.50
2:I:986:ASP:OD1	2:I:986:ASP:N	2.44	0.50
2:I:2346:VAL:HG12	2:I:2349:ASN:H	1.76	0.50
2:I:2770:LYS:HE2	2:I:2791:LEU:HD11	1.94	0.50
2:I:4676:GLU:HB3	2:I:4680:LYS:NZ	2.26	0.50
1:F:78:PRO:HA	1:F:81:ALA:HB3	1.93	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:449:ILE:HG12	2:A:524:GLU:OE1	2.12	0.49
2:A:2300:SER:O	2:A:2301:TYR:HB2	2.12	0.49
2:A:3354:LEU:O	2:A:3359:ILE:HG12	2.12	0.49
2:A:4813:LEU:O	2:A:4816:ILE:HG22	2.12	0.49
2:G:650:VAL:HG21	2:G:662:TRP:CD1	2.47	0.49
2:G:920:TYR:O	2:G:924:MET:HG3	2.12	0.49
2:G:1110:ARG:NH2	2:G:1112:ASP:OD2	2.45	0.49
2:G:1155:LEU:HD22	2:G:1184:ILE:HG12	1.94	0.49
2:G:1248:VAL:HG22	2:G:1599:MET:CE	2.42	0.49
2:G:1991:THR:O	2:G:1995:THR:HG23	2.12	0.49
2:G:2366:PRO:HA	2:G:2369:ARG:CZ	2.41	0.49
2:G:3267:PRO:HB2	2:G:3270:ILE:CG1	2.42	0.49
2:B:2366:PRO:HA	2:B:2369:ARG:CZ	2.41	0.49
2:B:4237:PHE:CE1	2:B:4668:LEU:HD11	2.47	0.49
2:B:4878:ASP:OD1	2:B:4879:MET:N	2.46	0.49
2:I:13:PHE:HA	2:I:163:VAL:O	2.12	0.49
2:I:1870:VAL:HG11	2:I:2091:PRO:HB2	1.94	0.49
2:I:2348:GLU:HG2	2:I:3849:ARG:HG3	1.94	0.49
2:I:2582:MET:HA	2:I:2585:THR:HG22	1.93	0.49
2:I:2916:LYS:HD2	2:I:2920:ARG:NH2	2.27	0.49
2:I:3984:ARG:HG3	2:I:3984:ARG:O	2.12	0.49
2:I:4221:VAL:HG23	2:I:4230:LYS:NZ	2.26	0.49
2:I:4830:VAL:HA	2:I:4936:ILE:HD12	1.94	0.49
2:A:650:VAL:HG11	2:A:662:TRP:CE2	2.47	0.49
2:A:981:GLN:O	2:A:985:VAL:HG23	2.12	0.49
2:A:3111:ARG:HH12	2:A:3175:LEU:HD13	1.76	0.49
2:A:3465:ASN:OD1	2:A:3468:SER:N	2.46	0.49
2:G:356:TRP:N	2:G:379:HIS:O	2.45	0.49
2:B:13:PHE:HA	2:B:163:VAL:O	2.12	0.49
2:B:870:ILE:HD11	2:B:1049:TYR:CE2	2.48	0.49
2:B:2770:LYS:HE2	2:B:2791:LEU:HD11	1.94	0.49
2:B:4813:LEU:O	2:B:4816:ILE:HG22	2.12	0.49
2:B:4830:VAL:HA	2:B:4936:ILE:HD12	1.94	0.49
2:I:3465:ASN:OD1	2:I:3468:SER:N	2.46	0.49
2:I:4237:PHE:CE1	2:I:4668:LEU:HD11	2.47	0.49
1:F:10:GLY:HA3	1:F:70:GLN:HB2	1.95	0.49
1:F:82:TYR:CE1	1:F:87:HIS:HB2	2.47	0.49
2:A:277:GLY:HA3	2:A:327:PRO:HD3	1.94	0.49
2:A:358:THR:HG21	2:A:382:GLY:HA3	1.94	0.49
2:A:875:ALA:HA	2:A:878:ILE:HG12	1.94	0.49
2:A:2792:ARG:HH21	2:A:2798:SER:H	1.59	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:3354:LEU:HD11	2:A:3434:LEU:HD22	1.94	0.49
2:A:4161:ARG:HB3	2:A:4165:GLU:OE2	2.11	0.49
2:A:4878:ASP:OD1	2:A:4879:MET:N	2.45	0.49
1:H:82:TYR:CE1	1:H:87:HIS:HB2	2.47	0.49
1:J:78:PRO:HA	1:J:81:ALA:HB3	1.93	0.49
2:G:870:ILE:HD11	2:G:1049:TYR:CE2	2.47	0.49
2:G:986:ASP:OD1	2:G:986:ASP:N	2.44	0.49
2:G:1157:GLU:OE1	2:G:1157:GLU:N	2.44	0.49
2:G:1448:VAL:HG12	2:G:1554:VAL:HG23	1.94	0.49
2:G:3033:ASN:O	2:G:3037:GLU:HG2	2.12	0.49
2:G:3065:VAL:O	2:G:3068:LEU:HB2	2.13	0.49
2:G:3637:ARG:NH2	2:G:3640:PRO:HD3	2.27	0.49
2:G:4830:VAL:HA	2:G:4936:ILE:HD12	1.94	0.49
2:G:4878:ASP:OD1	2:G:4879:MET:N	2.45	0.49
2:B:986:ASP:OD1	2:B:986:ASP:N	2.44	0.49
2:B:1248:VAL:HG22	2:B:1599:MET:CE	2.42	0.49
2:B:1991:THR:O	2:B:1995:THR:HG23	2.12	0.49
2:B:2692:ASP:H	2:B:2696:TYR:HE2	1.60	0.49
2:B:2916:LYS:HD2	2:B:2920:ARG:NH2	2.27	0.49
2:B:3103:ILE:HA	2:B:3106:MET:SD	2.52	0.49
2:B:4888:TYR:CD1	2:I:4914:VAL:HG13	2.47	0.49
2:I:356:TRP:N	2:I:379:HIS:O	2.45	0.49
2:I:358:THR:HG21	2:I:382:GLY:HA3	1.94	0.49
2:I:1815:LEU:HG	2:I:1865:MET:SD	2.52	0.49
2:I:2031:LEU:HD11	2:I:3657:TYR:CE1	2.47	0.49
2:I:4054:ASN:HD22	2:I:4057:MET:HE2	1.75	0.49
2:I:4878:ASP:OD1	2:I:4879:MET:N	2.46	0.49
2:I:4983:HIS:CB	3:I:5301:ATP:HN62	2.12	0.49
1:F:54:GLU:H	1:F:54:GLU:CD	2.08	0.49
2:A:1155:LEU:HD22	2:A:1184:ILE:HG12	1.94	0.49
2:A:1987:SER:OG	2:A:1990:GLU:HB2	2.12	0.49
2:A:2175:GLU:OE2	2:A:2227:LYS:NZ	2.42	0.49
2:G:36:CYS:SG	2:G:65:CYS:HB3	2.52	0.49
2:G:449:ILE:HG12	2:G:524:GLU:OE1	2.12	0.49
2:G:660:GLY:HA2	2:G:750:LEU:HD11	1.94	0.49
2:G:2692:ASP:H	2:G:2696:TYR:HE2	1.60	0.49
2:G:3103:ILE:HA	2:G:3106:MET:SD	2.52	0.49
2:G:3354:LEU:O	2:G:3359:ILE:HG12	2.12	0.49
2:G:4054:ASN:HD22	2:G:4057:MET:HE2	1.77	0.49
2:G:4980:LEU:O	2:G:4984:ASN:ND2	2.46	0.49
2:B:2419:GLY:O	2:B:2423:MET:N	2.28	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:155:LYS:O	2:I:158:SER:OG	2.30	0.49
2:I:1110:ARG:NH2	2:I:1112:ASP:OD2	2.45	0.49
2:I:1980:LEU:HD13	2:I:1995:THR:HG22	1.95	0.49
2:I:3354:LEU:HD11	2:I:3434:LEU:HD22	1.94	0.49
2:I:3354:LEU:O	2:I:3359:ILE:HG12	2.12	0.49
2:I:3633:VAL:HA	2:I:3636:PHE:HB2	1.93	0.49
2:A:36:CYS:SG	2:A:65:CYS:HB3	2.52	0.49
2:A:927:GLU:HA	2:A:930:LYS:HD3	1.94	0.49
2:A:2328:GLY:O	2:A:2332:LEU:HG	2.13	0.49
2:A:2336:ARG:O	2:A:2435:ARG:NH1	2.43	0.49
2:A:2770:LYS:HE2	2:A:2791:LEU:HD11	1.94	0.49
2:A:3984:ARG:O	2:A:3984:ARG:HG3	2.12	0.49
2:G:183:SER:HB2	2:G:190:GLN:HB2	1.93	0.49
2:G:1926:LEU:O	2:G:1929:MET:HG2	2.12	0.49
2:G:3465:ASN:OD1	2:G:3468:SER:N	2.46	0.49
2:G:4675:LYS:HA	2:G:4715:TYR:CD2	2.48	0.49
2:B:356:TRP:N	2:B:379:HIS:O	2.45	0.49
2:B:4980:LEU:O	2:B:4984:ASN:ND2	2.46	0.49
2:B:5017:ARG:HD2	2:B:5019:TRP:CZ2	2.48	0.49
2:I:1987:SER:OG	2:I:1990:GLU:HB2	2.12	0.49
2:A:826:ILE:HG22	2:A:827:LYS:HG2	1.95	0.49
2:A:2026:ASP:OD1	2:A:2026:ASP:N	2.43	0.49
2:A:2692:ASP:H	2:A:2696:TYR:HE2	1.60	0.49
2:A:4227:GLU:O	2:A:4231:MET:HB2	2.13	0.49
2:A:4674:GLU:OE2	2:A:4715:TYR:N	2.28	0.49
2:G:826:ILE:HG22	2:G:827:LYS:HG2	1.95	0.49
2:G:4983:HIS:HB2	3:G:5301:ATP:N6	2.10	0.49
2:B:650:VAL:HG11	2:B:662:TRP:CE2	2.47	0.49
2:B:875:ALA:HA	2:B:878:ILE:HG12	1.94	0.49
2:B:1154:ASP:O	2:B:1158:ASN:N	2.46	0.49
2:B:3511:VAL:O	2:B:3515:LYS:HG2	2.13	0.49
2:I:1154:ASP:O	2:I:1158:ASN:N	2.46	0.49
2:I:2434:GLY:O	2:I:2508:ARG:NE	2.45	0.49
2:I:3103:ILE:HA	2:I:3106:MET:SD	2.52	0.49
2:I:3511:VAL:O	2:I:3515:LYS:HG2	2.13	0.49
2:I:4227:GLU:O	2:I:4231:MET:HB2	2.13	0.49
2:I:4813:LEU:O	2:I:4816:ILE:HG22	2.12	0.49
2:A:210:GLU:OE1	2:A:210:GLU:N	2.43	0.49
2:A:1110:ARG:NH2	2:A:1112:ASP:OD2	2.45	0.49
2:A:1448:VAL:HG12	2:A:1554:VAL:HG23	1.94	0.49
2:A:3033:ASN:O	2:A:3037:GLU:HG2	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:3267:PRO:HB2	2:A:3270:ILE:CG1	2.41	0.49
2:A:3511:VAL:O	2:A:3515:LYS:HG2	2.13	0.49
2:A:4830:VAL:HA	2:A:4936:ILE:HD12	1.94	0.49
2:A:4976:GLU:O	2:A:4980:LEU:N	2.41	0.49
2:A:4980:LEU:O	2:A:4984:ASN:ND2	2.46	0.49
2:G:1297:PHE:CE2	2:G:1525:GLY:HA2	2.48	0.49
2:G:2755:ILE:HG22	2:G:2806:ARG:HG2	1.95	0.49
2:G:3111:ARG:HH12	2:G:3175:LEU:HD13	1.76	0.49
2:G:4227:GLU:O	2:G:4231:MET:HB2	2.13	0.49
2:B:650:VAL:HG21	2:B:662:TRP:CD1	2.47	0.49
2:B:1870:VAL:HG11	2:B:2091:PRO:HB2	1.94	0.49
2:B:3564:GLU:OE1	2:B:3570:ARG:NH1	2.45	0.49
2:I:449:ILE:HG12	2:I:524:GLU:OE1	2.12	0.49
2:I:3564:GLU:OE1	2:I:3570:ARG:NH1	2.45	0.49
2:I:4097:MET:HE1	2:I:4108:ILE:HA	1.95	0.49
2:I:4966:ASP:N	2:I:4966:ASP:OD1	2.46	0.49
2:A:13:PHE:HA	2:A:163:VAL:O	2.12	0.49
2:A:709:ASP:OD1	2:A:725:HIS:ND1	2.31	0.49
2:A:3242:ASP:OD1	2:A:3243:ILE:N	2.46	0.49
2:A:4237:PHE:CE1	2:A:4668:LEU:HD11	2.47	0.49
2:A:4242:ILE:O	2:A:4246:GLN:HG3	2.13	0.49
2:A:4675:LYS:HA	2:A:4715:TYR:CD2	2.48	0.49
2:G:1154:ASP:O	2:G:1158:ASN:N	2.46	0.49
2:G:2828:GLU:OE1	2:G:2828:GLU:N	2.43	0.49
2:G:4056:GLU:O	2:G:4060:LYS:HG2	2.13	0.49
2:G:4966:ASP:OD1	2:G:4966:ASP:N	2.46	0.49
2:G:5017:ARG:HD2	2:G:5019:TRP:CZ2	2.47	0.49
2:B:155:LYS:O	2:B:158:SER:OG	2.29	0.49
2:B:1248:VAL:HG21	2:B:1257:VAL:HG21	1.95	0.49
2:B:2328:GLY:O	2:B:2332:LEU:HG	2.13	0.49
2:B:4056:GLU:O	2:B:4060:LYS:HG2	2.13	0.49
2:B:4675:LYS:HA	2:B:4715:TYR:CD2	2.48	0.49
2:I:192:ASP:OD1	2:I:192:ASP:N	2.45	0.49
2:I:826:ILE:HG22	2:I:827:LYS:HG2	1.95	0.49
2:I:1248:VAL:HG21	2:I:1257:VAL:HG21	1.95	0.49
2:I:1820:ARG:O	2:I:1823:GLY:N	2.46	0.49
2:I:2336:ARG:O	2:I:2435:ARG:NH1	2.43	0.49
2:I:3033:ASN:O	2:I:3037:GLU:HG2	2.12	0.49
2:A:660:GLY:HA2	2:A:750:LEU:HD11	1.94	0.49
2:A:870:ILE:HD11	2:A:1049:TYR:CE2	2.48	0.49
2:A:1974:ARG:HB2	2:A:3642:TYR:CE2	2.46	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:2309:SER:HA	2:A:2324:ASN:HB2	1.95	0.49
2:A:3227:ARG:NH2	2:A:3232:LEU:O	2.46	0.49
2:A:4056:GLU:O	2:A:4060:LYS:HG2	2.13	0.49
2:G:13:PHE:HA	2:G:163:VAL:O	2.12	0.49
2:G:1008:SER:N	2:G:1018:ASN:O	2.45	0.49
2:G:1820:ARG:O	2:G:1823:GLY:N	2.46	0.49
2:G:2026:ASP:N	2:G:2026:ASP:OD1	2.43	0.49
2:G:2175:GLU:OE2	2:G:2227:LYS:NZ	2.42	0.49
2:G:2348:GLU:HG2	2:G:3849:ARG:HG3	1.94	0.49
2:G:2626:LEU:O	2:G:2630:VAL:HG22	2.13	0.49
2:G:4237:PHE:CE1	2:G:4668:LEU:HD11	2.47	0.49
2:G:4813:LEU:O	2:G:4816:ILE:HG22	2.12	0.49
2:B:207:SER:H	2:B:334:MET:HE1	1.78	0.49
2:B:981:GLN:O	2:B:985:VAL:HG23	2.12	0.49
2:B:1110:ARG:NH2	2:B:1112:ASP:OD2	2.45	0.49
2:B:1820:ARG:O	2:B:1823:GLY:N	2.46	0.49
2:B:3233:PRO:HG2	2:B:3239:MET:HB2	1.94	0.49
2:B:3354:LEU:O	2:B:3359:ILE:HG12	2.12	0.49
2:B:3432:GLU:OE2	2:B:3436:ARG:NH2	2.46	0.49
2:I:232:THR:OG1	2:I:248:GLU:OE2	2.30	0.49
2:I:277:GLY:HA3	2:I:327:PRO:HD3	1.94	0.49
2:I:870:ILE:HD11	2:I:1049:TYR:CE2	2.48	0.49
2:I:1156:THR:OG1	2:I:1157:GLU:OE1	2.20	0.49
2:I:1547:LYS:NZ	2:I:1642:PRO:O	2.46	0.49
2:I:2309:SER:HA	2:I:2324:ASN:HB2	1.95	0.49
2:I:2620:GLN:O	2:I:2624:ARG:N	2.37	0.49
2:I:2687:ALA:HB1	2:I:2966:TRP:CZ2	2.46	0.49
2:I:4021:LYS:HG3	2:I:4142:ASN:ND2	2.28	0.49
2:I:4980:LEU:O	2:I:4984:ASN:ND2	2.46	0.49
2:A:2348:GLU:HG2	2:A:3849:ARG:HG3	1.94	0.49
2:A:2755:ILE:HG22	2:A:2806:ARG:HG2	1.95	0.49
2:A:3065:VAL:O	2:A:3068:LEU:HB2	2.13	0.49
2:A:3633:VAL:HA	2:A:3636:PHE:HB2	1.93	0.49
2:A:4214:LYS:HD3	2:A:4234:PHE:HZ	1.78	0.49
2:A:5017:ARG:HD2	2:A:5019:TRP:CZ2	2.48	0.49
2:G:875:ALA:HA	2:G:878:ILE:HG12	1.94	0.49
2:G:2954:ARG:O	2:G:2957:PHE:HB3	2.13	0.49
2:G:3984:ARG:HG3	2:G:3984:ARG:O	2.12	0.49
2:B:206:CYS:SG	2:B:207:SER:N	2.86	0.49
2:B:2792:ARG:HE	2:B:2797:PHE:HA	1.77	0.49
2:B:3227:ARG:NH2	2:B:3232:LEU:O	2.46	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:4674:GLU:OE2	2:B:4715:TYR:N	2.28	0.49
2:B:4892:ARG:NH1	2:I:4895:GLY:O	2.41	0.49
2:I:36:CYS:SG	2:I:65:CYS:HB3	2.52	0.49
2:I:1926:LEU:O	2:I:1929:MET:HG2	2.11	0.49
2:I:1991:THR:O	2:I:1995:THR:HG23	2.12	0.49
2:I:2438:PRO:HG2	2:I:2443:ILE:HD11	1.94	0.49
2:I:2954:ARG:O	2:I:2957:PHE:HB3	2.13	0.49
2:I:3190:LEU:HD21	2:I:3272:ILE:HG23	1.95	0.49
2:I:3233:PRO:HG2	2:I:3239:MET:HB2	1.95	0.49
2:I:4960:ILE:HD11	2:I:4985:LEU:HD23	1.94	0.49
2:A:1561:VAL:HG23	2:A:1562:ILE:N	2.29	0.48
2:A:2384:ILE:HA	2:A:2494:PHE:CE1	2.48	0.48
2:A:2767:ALA:O	2:A:2771:ILE:HG12	2.13	0.48
2:A:4021:LYS:HG3	2:A:4142:ASN:ND2	2.28	0.48
2:G:1980:LEU:HD13	2:G:1995:THR:HG22	1.95	0.48
2:G:2640:PRO:O	2:G:2643:LEU:CB	2.58	0.48
2:G:4960:ILE:HD11	2:G:4985:LEU:HD23	1.94	0.48
2:B:1827:ARG:O	2:B:1829:PRO:HD3	2.13	0.48
2:B:2031:LEU:HD11	2:B:3657:TYR:CE1	2.47	0.48
2:B:2384:ILE:HA	2:B:2494:PHE:CE1	2.48	0.48
2:B:2434:GLY:O	2:B:2508:ARG:NE	2.45	0.48
2:B:3465:ASN:OD1	2:B:3468:SER:N	2.46	0.48
2:I:650:VAL:HG21	2:I:662:TRP:CD1	2.47	0.48
2:I:650:VAL:HG11	2:I:662:TRP:CE2	2.47	0.48
2:I:1008:SER:N	2:I:1018:ASN:O	2.45	0.48
2:I:2153:MET:HA	2:I:2153:MET:HE2	1.95	0.48
2:I:2498:HIS:O	2:I:2501:SER:OG	2.28	0.48
2:A:1156:THR:OG1	2:A:1157:GLU:OE1	2.20	0.48
2:A:2500:ALA:HB2	2:A:2553:TYR:HD1	1.78	0.48
2:A:3053:ARG:CG	2:A:3056:LEU:HD21	2.43	0.48
2:A:3180:ASN:O	2:A:3183:VAL:HG22	2.13	0.48
2:A:3528:THR:OG1	2:A:3561:GLY:N	2.46	0.48
2:A:4849:TYR:CE1	2:G:4578:LEU:HD13	2.46	0.48
2:A:4966:ASP:OD1	2:A:4966:ASP:N	2.46	0.48
1:O:82:TYR:CE1	1:O:87:HIS:HB2	2.47	0.48
2:G:650:VAL:HG11	2:G:662:TRP:CE2	2.47	0.48
2:G:2767:ALA:O	2:G:2771:ILE:HG12	2.13	0.48
2:G:2916:LYS:HD2	2:G:2920:ARG:NH2	2.27	0.48
2:G:3511:VAL:O	2:G:3515:LYS:HG2	2.13	0.48
2:G:3528:THR:OG1	2:G:3561:GLY:N	2.46	0.48
2:B:927:GLU:HA	2:B:930:LYS:HD3	1.94	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1987:SER:OG	2:B:1990:GLU:HB2	2.12	0.48
2:B:2626:LEU:O	2:B:2630:VAL:HG22	2.13	0.48
2:B:3077:ALA:HB3	2:B:3156:VAL:HG12	1.95	0.48
2:B:3242:ASP:OD1	2:B:3243:ILE:N	2.46	0.48
2:I:875:ALA:HA	2:I:878:ILE:HG12	1.94	0.48
2:I:1131:ARG:HB3	2:I:1139:PHE:CD1	2.48	0.48
2:I:1448:VAL:HG12	2:I:1554:VAL:HG23	1.94	0.48
2:I:2687:ALA:HB1	2:I:2966:TRP:CH2	2.48	0.48
2:I:2755:ILE:HG22	2:I:2806:ARG:HG2	1.95	0.48
2:I:3065:VAL:O	2:I:3068:LEU:HB2	2.13	0.48
2:I:3242:ASP:OD1	2:I:3243:ILE:N	2.46	0.48
2:I:5017:ARG:HD2	2:I:5019:TRP:CZ2	2.48	0.48
2:A:183:SER:HB2	2:A:190:GLN:HB2	1.93	0.48
2:A:206:CYS:SG	2:A:207:SER:N	2.86	0.48
2:A:1255:TYR:CD1	2:A:1287:LEU:HD22	2.49	0.48
2:A:2626:LEU:O	2:A:2630:VAL:HG22	2.13	0.48
2:A:2954:ARG:O	2:A:2957:PHE:HB3	2.13	0.48
2:A:4222:VAL:HG21	2:A:4950:VAL:HG13	1.95	0.48
2:G:880:GLU:OE2	2:G:910:PHE:HB3	2.12	0.48
2:G:927:GLU:HA	2:G:930:LYS:HD3	1.94	0.48
2:G:2384:ILE:HA	2:G:2494:PHE:CE1	2.48	0.48
2:G:2434:GLY:O	2:G:2508:ARG:NE	2.45	0.48
2:G:2736:ASP:OD2	2:G:2738:ARG:NH2	2.46	0.48
2:G:3227:ARG:NH2	2:G:3232:LEU:O	2.46	0.48
2:G:3242:ASP:OD1	2:G:3243:ILE:N	2.46	0.48
2:G:3316:LEU:HD13	2:G:3345:ILE:HG23	1.96	0.48
2:G:3943:ILE:HG23	2:G:3948:LYS:HG3	1.96	0.48
2:G:4021:LYS:HG3	2:G:4142:ASN:ND2	2.28	0.48
2:B:2954:ARG:O	2:B:2957:PHE:HB3	2.13	0.48
2:B:3033:ASN:O	2:B:3037:GLU:HG2	2.12	0.48
2:B:3172:ILE:HG21	2:B:3194:LEU:HD13	1.95	0.48
2:B:4021:LYS:HG3	2:B:4142:ASN:ND2	2.28	0.48
2:I:2792:ARG:HE	2:I:2797:PHE:HA	1.77	0.48
2:I:3009:TYR:HD2	2:I:3010:PHE:CD1	2.32	0.48
2:I:3528:THR:OG1	2:I:3561:GLY:N	2.46	0.48
2:I:3943:ILE:HG23	2:I:3948:LYS:HG3	1.95	0.48
2:I:4222:VAL:HG21	2:I:4950:VAL:HG13	1.95	0.48
2:I:4675:LYS:HA	2:I:4715:TYR:CD2	2.48	0.48
2:A:1297:PHE:CE2	2:A:1525:GLY:HA2	2.48	0.48
2:A:1827:ARG:O	2:A:1829:PRO:HD3	2.13	0.48
2:A:2916:LYS:HD2	2:A:2920:ARG:HH21	1.78	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:2916:LYS:HD2	2:A:2920:ARG:NH2	2.27	0.48
2:A:3077:ALA:HB3	2:A:3156:VAL:HG12	1.95	0.48
2:A:3172:ILE:HG21	2:A:3194:LEU:HD13	1.95	0.48
2:A:3334:TRP:O	2:A:3338:LEU:HB2	2.14	0.48
1:O:10:GLY:HA3	1:O:70:GLN:HB2	1.94	0.48
2:G:1547:LYS:NZ	2:G:1642:PRO:O	2.46	0.48
2:G:1815:LEU:HG	2:G:1865:MET:SD	2.52	0.48
2:G:3416:VAL:HG22	2:G:3423:TRP:HZ3	1.77	0.48
2:G:4183:ILE:HD11	2:G:5021:PHE:HB2	1.96	0.48
2:B:826:ILE:HG22	2:B:827:LYS:HG2	1.95	0.48
2:B:1547:LYS:NZ	2:B:1642:PRO:O	2.46	0.48
2:B:3053:ARG:CG	2:B:3056:LEU:HD21	2.43	0.48
2:B:3180:ASN:O	2:B:3183:VAL:HG22	2.13	0.48
2:B:3528:THR:OG1	2:B:3561:GLY:N	2.46	0.48
2:B:3633:VAL:HA	2:B:3636:PHE:HB2	1.93	0.48
2:B:4960:ILE:HD11	2:B:4985:LEU:HD23	1.94	0.48
2:I:2635:GLU:OE1	2:I:2635:GLU:N	2.32	0.48
2:I:2977:LEU:O	2:I:2981:VAL:HG23	2.14	0.48
2:I:4058:ILE:HA	2:I:4061:PHE:CE1	2.48	0.48
2:A:880:GLU:OE2	2:A:910:PHE:HB3	2.12	0.48
2:A:1131:ARG:HB3	2:A:1139:PHE:CD1	2.48	0.48
2:A:2005:GLN:O	2:A:2009:LEU:HD23	2.13	0.48
2:A:2259:GLU:HB3	2:A:2297:LYS:HZ1	1.79	0.48
2:A:2693:GLN:N	2:A:2996:LYS:HZ1	2.10	0.48
2:A:3269:VAL:O	2:A:3272:ILE:N	2.47	0.48
2:A:3432:GLU:OE2	2:A:3436:ARG:NH2	2.46	0.48
2:A:3845:ASN:HA	2:A:3848:GLU:OE1	2.14	0.48
2:A:4686:LEU:HG	2:A:4687:TYR:CD2	2.49	0.48
1:J:82:TYR:CE1	1:J:87:HIS:HB2	2.47	0.48
2:G:277:GLY:HA3	2:G:327:PRO:HD3	1.94	0.48
2:G:2438:PRO:HG2	2:G:2443:ILE:HD11	1.94	0.48
2:G:3190:LEU:HD21	2:G:3272:ILE:HG23	1.95	0.48
2:G:3334:TRP:O	2:G:3338:LEU:HB2	2.13	0.48
2:G:4242:ILE:O	2:G:4246:GLN:HG3	2.13	0.48
2:G:4904:PRO:HB3	2:G:4913:ARG:HD2	1.96	0.48
2:B:1297:PHE:CE2	2:B:1525:GLY:HA2	2.48	0.48
2:B:1561:VAL:HG23	2:B:1562:ILE:N	2.29	0.48
2:B:2640:PRO:O	2:B:2643:LEU:CB	2.58	0.48
2:B:2687:ALA:HB1	2:B:2966:TRP:CH2	2.48	0.48
2:B:3009:TYR:HD2	2:B:3010:PHE:CD1	2.32	0.48
2:B:3363:GLY:O	2:B:3367:LYS:HG2	2.14	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:4738:ALA:O	2:B:4743:MET:HB2	2.14	0.48
2:I:2463:LEU:HA	2:I:2510:TYR:CE2	2.49	0.48
2:I:3432:GLU:OE2	2:I:3436:ARG:NH2	2.46	0.48
2:I:4056:GLU:O	2:I:4060:LYS:HG2	2.13	0.48
2:A:103:TYR:CD1	2:A:163:VAL:HG12	2.49	0.48
2:A:1820:ARG:O	2:A:1823:GLY:N	2.46	0.48
2:A:2463:LEU:HA	2:A:2510:TYR:CE2	2.49	0.48
2:A:2736:ASP:OD2	2:A:2738:ARG:NH2	2.46	0.48
2:A:2776:SER:OG	2:A:2777:TYR:N	2.47	0.48
2:A:3984:ARG:NH1	2:A:3986:TRP:HB2	2.29	0.48
1:J:10:GLY:HA3	1:J:70:GLN:HB2	1.95	0.48
2:G:1248:VAL:HG21	2:G:1257:VAL:HG21	1.95	0.48
2:G:1255:TYR:CD1	2:G:1287:LEU:HD22	2.48	0.48
2:G:2498:HIS:O	2:G:2501:SER:OG	2.28	0.48
2:G:2792:ARG:HE	2:G:2797:PHE:HA	1.77	0.48
2:G:2967:MET:CE	2:G:3045:LYS:HB3	2.43	0.48
2:G:3363:GLY:O	2:G:3367:LYS:HG2	2.14	0.48
2:B:103:TYR:CD1	2:B:163:VAL:HG12	2.49	0.48
2:B:1008:SER:N	2:B:1018:ASN:O	2.45	0.48
2:B:2755:ILE:HG22	2:B:2806:ARG:HG2	1.95	0.48
2:B:2967:MET:CE	2:B:3045:LYS:HB3	2.43	0.48
2:B:3269:VAL:O	2:B:3272:ILE:N	2.47	0.48
2:I:959:TYR:CD2	2:I:960:MET:N	2.80	0.48
2:I:981:GLN:O	2:I:985:VAL:HG23	2.12	0.48
2:I:3156:VAL:HG23	2:I:3157:ILE:HD12	1.96	0.48
2:I:3172:ILE:HG21	2:I:3194:LEU:HD13	1.95	0.48
2:I:4088:ILE:HG23	2:I:4093:PHE:HB2	1.95	0.48
2:I:4183:ILE:HD11	2:I:5021:PHE:HB2	1.96	0.48
2:I:4686:LEU:HG	2:I:4687:TYR:CD2	2.49	0.48
2:A:1248:VAL:HG22	2:A:1599:MET:CE	2.42	0.48
2:A:4960:ILE:HD11	2:A:4985:LEU:HD23	1.94	0.48
1:H:10:GLY:HA3	1:H:70:GLN:HB2	1.95	0.48
2:G:981:GLN:O	2:G:985:VAL:HG23	2.12	0.48
2:G:1720:LEU:HD22	2:G:1851:MET:SD	2.54	0.48
2:G:2463:LEU:HA	2:G:2510:TYR:CE2	2.49	0.48
2:G:3172:ILE:HG21	2:G:3194:LEU:HD13	1.95	0.48
2:B:2005:GLN:O	2:B:2009:LEU:HD23	2.13	0.48
2:B:2277:ALA:HB1	2:B:2337:PHE:HD2	1.79	0.48
2:B:4214:LYS:HD3	2:B:4234:PHE:HZ	1.78	0.48
2:B:4217:PHE:CZ	2:B:4234:PHE:HB2	2.49	0.48
2:I:1297:PHE:CE2	2:I:1525:GLY:HA2	2.48	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:1561:VAL:HG23	2:I:1562:ILE:N	2.28	0.48
2:I:1827:ARG:O	2:I:1829:PRO:HD3	2.13	0.48
2:I:2578:MET:O	2:I:2581:SER:OG	2.22	0.48
2:I:2626:LEU:O	2:I:2630:VAL:HG22	2.13	0.48
2:I:3132:THR:HG23	2:I:3136:LEU:HD13	1.96	0.48
2:I:3227:ARG:NH2	2:I:3232:LEU:O	2.46	0.48
2:I:4018:ASP:OD1	2:I:4019:LEU:N	2.47	0.48
2:I:4217:PHE:CZ	2:I:4234:PHE:HB2	2.49	0.48
2:A:1154:ASP:O	2:A:1158:ASN:N	2.46	0.48
2:A:1248:VAL:HG21	2:A:1257:VAL:HG21	1.95	0.48
2:A:1821:ASP:OD1	2:A:1822:GLY:N	2.47	0.48
2:A:2792:ARG:HE	2:A:2797:PHE:HA	1.77	0.48
2:A:3233:PRO:HG2	2:A:3239:MET:HB2	1.94	0.48
2:A:3363:GLY:O	2:A:3367:LYS:HG2	2.14	0.48
2:A:3564:GLU:OE1	2:A:3570:ARG:NH1	2.45	0.48
2:A:4018:ASP:OD1	2:A:4019:LEU:N	2.47	0.48
2:A:4058:ILE:HA	2:A:4061:PHE:CE1	2.49	0.48
2:A:4217:PHE:CZ	2:A:4234:PHE:HB2	2.49	0.48
2:G:543:ASN:O	2:G:546:TRP:HB3	2.14	0.48
2:G:1827:ARG:O	2:G:1829:PRO:HD3	2.13	0.48
2:G:2328:GLY:O	2:G:2332:LEU:HG	2.13	0.48
2:G:2977:LEU:O	2:G:2981:VAL:HG23	2.14	0.48
2:G:3009:TYR:HD2	2:G:3010:PHE:CD1	2.32	0.48
2:G:3132:THR:HG23	2:G:3136:LEU:HD13	1.96	0.48
2:G:3352:GLU:OE1	2:G:3352:GLU:N	2.41	0.48
2:G:4018:ASP:OD1	2:G:4019:LEU:N	2.47	0.48
2:B:232:THR:OG1	2:B:248:GLU:OE2	2.30	0.48
2:B:472:ARG:NH2	2:B:532:GLY:HA3	2.29	0.48
2:B:1255:TYR:CD1	2:B:1287:LEU:HD22	2.49	0.48
2:B:1980:LEU:HD13	2:B:1995:THR:HG22	1.95	0.48
2:B:2438:PRO:HG2	2:B:2443:ILE:HD11	1.94	0.48
2:B:2500:ALA:HB2	2:B:2553:TYR:HD1	1.79	0.48
2:B:2767:ALA:O	2:B:2771:ILE:HG12	2.13	0.48
2:B:3943:ILE:HG23	2:B:3948:LYS:HG3	1.96	0.48
2:B:4222:VAL:HG21	2:B:4950:VAL:HG13	1.95	0.48
2:B:4686:LEU:HG	2:B:4687:TYR:CD2	2.49	0.48
2:I:1182:ILE:HG13	2:I:1182:ILE:O	2.14	0.48
2:I:2277:ALA:HB1	2:I:2337:PHE:HD2	1.79	0.48
2:I:4904:PRO:HB3	2:I:4913:ARG:HD2	1.96	0.48
2:A:1182:ILE:HG13	2:A:1182:ILE:O	2.14	0.48
2:A:4675:LYS:HA	2:A:4715:TYR:HD2	1.79	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:1870:VAL:HG11	2:G:2091:PRO:HB2	1.94	0.48
2:G:2340:PHE:HB2	2:G:2435:ARG:HB3	1.96	0.48
2:G:2419:GLY:O	2:G:2423:MET:N	2.28	0.48
2:G:3053:ARG:CG	2:G:3056:LEU:HD21	2.44	0.48
2:G:3233:PRO:HG2	2:G:3239:MET:HB2	1.94	0.48
2:G:4217:PHE:CZ	2:G:4234:PHE:HB2	2.49	0.48
2:G:4895:GLY:O	2:I:4892:ARG:NH1	2.43	0.48
2:B:1131:ARG:HB3	2:B:1139:PHE:CD1	2.48	0.48
2:B:1448:VAL:HG12	2:B:1554:VAL:HG23	1.94	0.48
2:B:2463:LEU:HA	2:B:2510:TYR:CE2	2.49	0.48
2:B:3065:VAL:O	2:B:3068:LEU:HB2	2.13	0.48
2:B:4675:LYS:HA	2:B:4715:TYR:HD2	1.79	0.48
2:I:1272:LEU:HD22	2:I:1289:LEU:HD11	1.96	0.48
2:I:2384:ILE:HA	2:I:2494:PHE:CE1	2.48	0.48
2:I:2736:ASP:OD2	2:I:2738:ARG:NH2	2.47	0.48
2:I:3334:TRP:O	2:I:3338:LEU:HB2	2.14	0.48
2:I:3363:GLY:O	2:I:3367:LYS:HG2	2.14	0.48
2:I:3845:ASN:HA	2:I:3848:GLU:OE1	2.14	0.48
2:I:3873:LYS:HD2	2:I:3953:LYS:HE3	1.96	0.48
2:I:4738:ALA:O	2:I:4743:MET:HB2	2.14	0.48
2:A:1053:ILE:HD12	2:A:1053:ILE:H	1.79	0.48
2:A:3215:ALA:O	2:A:3221:THR:OG1	2.20	0.48
2:A:3943:ILE:HG23	2:A:3948:LYS:HG3	1.95	0.48
2:G:1053:ILE:HD12	2:G:1053:ILE:H	1.79	0.48
2:G:1821:ASP:OD1	2:G:1822:GLY:N	2.47	0.48
2:G:2500:ALA:HB2	2:G:2553:TYR:HD1	1.78	0.48
2:G:3156:VAL:HG23	2:G:3157:ILE:HD12	1.96	0.48
2:G:3180:ASN:O	2:G:3183:VAL:HG22	2.13	0.48
2:G:3215:ALA:O	2:G:3221:THR:OG1	2.20	0.48
2:G:4157:ASP:HB3	2:G:4160:LEU:HD12	1.95	0.48
2:B:277:GLY:HA3	2:B:327:PRO:HD3	1.94	0.48
2:B:990:GLU:HG2	2:B:1024:TYR:CG	2.49	0.48
2:B:1272:LEU:HD22	2:B:1289:LEU:HD11	1.96	0.48
2:B:2647:HIS:O	2:B:2651:CYS:N	2.34	0.48
2:B:2916:LYS:HD2	2:B:2920:ARG:HH21	1.78	0.48
2:B:2977:LEU:O	2:B:2981:VAL:HG23	2.14	0.48
2:B:3358:PHE:CE2	2:B:3412:LEU:HD13	2.49	0.48
2:B:4018:ASP:OD1	2:B:4019:LEU:N	2.47	0.48
2:B:4227:GLU:O	2:B:4231:MET:HB2	2.13	0.48
2:B:4904:PRO:HB3	2:B:4913:ARG:HD2	1.96	0.48
2:I:103:TYR:CD1	2:I:163:VAL:HG12	2.49	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:206:CYS:SG	2:I:207:SER:N	2.86	0.48
2:I:214:VAL:HG22	2:I:341:TYR:CE2	2.49	0.48
2:I:990:GLU:HG2	2:I:1024:TYR:CG	2.49	0.48
2:I:1821:ASP:OD1	2:I:1822:GLY:N	2.47	0.48
2:I:2500:ALA:HB2	2:I:2553:TYR:HD1	1.79	0.48
2:I:2640:PRO:O	2:I:2643:LEU:CB	2.58	0.48
2:I:2767:ALA:O	2:I:2771:ILE:HG12	2.13	0.48
2:I:3358:PHE:CE2	2:I:3412:LEU:HD13	2.49	0.48
2:I:3416:VAL:HG22	2:I:3423:TRP:HZ3	1.77	0.48
2:I:4675:LYS:HA	2:I:4715:TYR:HD2	1.79	0.48
2:A:1132:TRP:CZ2	2:A:1136:SER:HB3	2.49	0.47
2:A:1547:LYS:NZ	2:A:1642:PRO:O	2.46	0.47
2:A:1980:LEU:HD13	2:A:1995:THR:HG22	1.95	0.47
2:A:3009:TYR:HD2	2:A:3010:PHE:CD1	2.32	0.47
2:A:4904:PRO:HB3	2:A:4913:ARG:HD2	1.96	0.47
2:G:103:TYR:CD1	2:G:163:VAL:HG12	2.49	0.47
2:G:1733:GLU:HG2	2:G:2201:LEU:HD23	1.96	0.47
2:G:2005:GLN:O	2:G:2009:LEU:HD23	2.13	0.47
2:G:3432:GLU:OE2	2:G:3436:ARG:NH2	2.46	0.47
2:G:4686:LEU:HG	2:G:4687:TYR:CD2	2.49	0.47
2:B:1720:LEU:HD22	2:B:1851:MET:SD	2.54	0.47
2:B:3334:TRP:O	2:B:3338:LEU:HB2	2.14	0.47
2:B:3845:ASN:HA	2:B:3848:GLU:OE1	2.14	0.47
2:B:4058:ILE:HA	2:B:4061:PHE:CE1	2.49	0.47
2:B:4966:ASP:OD1	2:B:4966:ASP:N	2.46	0.47
2:I:927:GLU:HA	2:I:930:LYS:HD3	1.94	0.47
2:I:1255:TYR:CD1	2:I:1287:LEU:HD22	2.48	0.47
2:I:2328:GLY:O	2:I:2332:LEU:HG	2.13	0.47
2:I:3316:LEU:HD13	2:I:3345:ILE:HG23	1.96	0.47
2:I:3533:ILE:HG12	2:I:3596:VAL:HG23	1.96	0.47
2:A:309:THR:O	2:A:313:SER:OG	2.29	0.47
2:A:2340:PHE:HB2	2:A:2435:ARG:HB3	1.96	0.47
2:A:2967:MET:CE	2:A:3045:LYS:HB3	2.43	0.47
2:A:3316:LEU:HD13	2:A:3345:ILE:HG23	1.96	0.47
2:A:4183:ILE:HD11	2:A:5021:PHE:HB2	1.96	0.47
2:A:4221:VAL:HG23	2:A:4230:LYS:HZ3	1.78	0.47
1:O:54:GLU:H	1:O:54:GLU:CD	2.08	0.47
2:G:192:ASP:OD1	2:G:192:ASP:N	2.45	0.47
2:G:1272:LEU:HD22	2:G:1289:LEU:HD11	1.96	0.47
2:G:1561:VAL:HG23	2:G:1562:ILE:N	2.29	0.47
2:G:3845:ASN:HA	2:G:3848:GLU:OE1	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:4235:VAL:HG12	2:G:4992:LEU:HD13	1.97	0.47
2:G:4738:ALA:O	2:G:4743:MET:HB2	2.14	0.47
2:B:457:GLU:OE2	2:B:464:LYS:NZ	2.47	0.47
2:B:1132:TRP:CZ2	2:B:1136:SER:HB3	2.49	0.47
2:B:1821:ASP:OD1	2:B:1822:GLY:N	2.47	0.47
2:B:2336:ARG:O	2:B:2435:ARG:NH1	2.43	0.47
2:B:2340:PHE:HB2	2:B:2435:ARG:HB3	1.96	0.47
2:B:2750[B]:LYS:O	2:B:2935:TYR:OH	2.31	0.47
2:B:3323:ILE:HG23	2:B:3335:MET:HE1	1.96	0.47
2:B:4183:ILE:HD11	2:B:5021:PHE:HB2	1.96	0.47
2:I:1076:ARG:NH1	2:I:1079:LYS:HG3	2.29	0.47
2:I:1771:LEU:HD22	2:I:2144:ILE:HD11	1.96	0.47
2:I:2032:GLN:O	2:I:2036:GLN:HG2	2.14	0.47
2:I:2115:GLU:OE1	2:I:2115:GLU:N	2.38	0.47
2:I:2916:LYS:HD2	2:I:2920:ARG:HH21	1.78	0.47
2:A:1720:LEU:HD22	2:A:1851:MET:SD	2.54	0.47
2:A:2620:GLN:N	2:A:2620:GLN:OE1	2.48	0.47
2:A:2980:VAL:HG13	2:A:2984:GLY:HA2	1.97	0.47
2:A:2992:GLU:O	2:A:2995:ILE:HB	2.15	0.47
2:A:3270:ILE:HG23	2:A:3274:LEU:HD13	1.95	0.47
2:A:3409:TYR:O	2:A:3413:ILE:HG12	2.14	0.47
2:A:3987:ASP:HA	2:A:3990:VAL:HB	1.96	0.47
2:A:4088:ILE:HG23	2:A:4093:PHE:HB2	1.95	0.47
2:A:4189:ARG:NE	2:A:5032:TYR:HH	2.08	0.47
2:G:1076:ARG:NH1	2:G:1079:LYS:HG3	2.29	0.47
2:G:1131:ARG:HB3	2:G:1139:PHE:CD1	2.48	0.47
2:G:3169:LEU:O	2:G:3172:ILE:HG22	2.14	0.47
2:G:3269:VAL:O	2:G:3272:ILE:N	2.47	0.47
2:G:3409:TYR:O	2:G:3413:ILE:HG12	2.14	0.47
2:G:4152:GLU:HG2	2:G:4192:ARG:HH11	1.79	0.47
2:G:4239:GLU:O	2:G:4242:ILE:HB	2.14	0.47
2:B:1442:GLY:O	2:B:1557:THR:OG1	2.30	0.47
2:B:2032:GLN:O	2:B:2036:GLN:HG2	2.14	0.47
2:B:3987:ASP:HA	2:B:3990:VAL:HB	1.97	0.47
2:B:4087:LEU:HB3	2:B:4122:MET:O	2.14	0.47
2:I:1132:TRP:CZ2	2:I:1136:SER:HB3	2.49	0.47
2:I:3053:ARG:CG	2:I:3056:LEU:HD21	2.43	0.47
2:I:3169:LEU:O	2:I:3172:ILE:HG22	2.14	0.47
2:I:3180:ASN:O	2:I:3183:VAL:HG22	2.13	0.47
2:A:2277:ALA:HB1	2:A:2337:PHE:HD2	1.79	0.47
2:A:3132:THR:HG23	2:A:3136:LEU:HD13	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:3358:PHE:CE2	2:A:3412:LEU:HD13	2.49	0.47
2:A:4235:VAL:HG12	2:A:4992:LEU:HD13	1.97	0.47
1:J:106:LEU:HD12	1:J:106:LEU:HA	1.72	0.47
2:G:1074:ILE:HG23	2:G:1115:LEU:HD11	1.97	0.47
2:G:1182:ILE:O	2:G:1182:ILE:HG13	2.14	0.47
2:G:2309:SER:HA	2:G:2324:ASN:HB2	1.95	0.47
2:G:2355:ARG:O	2:G:2359:ARG:HG2	2.14	0.47
2:G:2916:LYS:HD2	2:G:2920:ARG:HH21	1.78	0.47
2:G:2980:VAL:HG13	2:G:2984:GLY:HA2	1.97	0.47
2:G:4214:LYS:HD3	2:G:4234:PHE:HZ	1.78	0.47
2:G:4222:VAL:HG21	2:G:4950:VAL:HG13	1.95	0.47
2:B:1076:ARG:NH1	2:B:1079:LYS:HG3	2.29	0.47
2:B:1182:ILE:O	2:B:1182:ILE:HG13	2.14	0.47
2:B:2309:SER:HA	2:B:2324:ASN:HB2	1.95	0.47
2:B:2487:GLN:NE2	2:B:2545:GLU:OE2	2.44	0.47
2:B:2595:LEU:O	2:B:2596:THR:OG1	2.30	0.47
2:B:3270:ILE:HG23	2:B:3274:LEU:HD13	1.95	0.47
2:B:3873:LYS:HD2	2:B:3953:LYS:HE3	1.96	0.47
2:B:4170:ILE:HG13	2:B:4171:LEU:N	2.30	0.47
2:B:4235:VAL:HG12	2:B:4992:LEU:HD13	1.96	0.47
2:I:457:GLU:OE2	2:I:464:LYS:NZ	2.47	0.47
2:I:2005:GLN:O	2:I:2009:LEU:HD23	2.13	0.47
2:I:2340:PHE:HB2	2:I:2435:ARG:HB3	1.96	0.47
2:I:2620:GLN:N	2:I:2620:GLN:OE1	2.48	0.47
2:I:3409:TYR:O	2:I:3413:ILE:HG12	2.14	0.47
2:I:4180:ARG:NE	2:I:4981:GLU:OE1	2.40	0.47
2:A:214:VAL:HG22	2:A:341:TYR:CE2	2.49	0.47
2:A:543:ASN:O	2:A:546:TRP:HB3	2.14	0.47
2:A:1272:LEU:HD22	2:A:1289:LEU:HD11	1.96	0.47
2:A:1420:ASN:OD1	2:A:1421:ARG:N	2.47	0.47
2:A:2687:ALA:HB1	2:A:2966:TRP:CH2	2.49	0.47
2:A:4152:GLU:HG2	2:A:4192:ARG:HH11	1.79	0.47
2:A:4239:GLU:O	2:A:4242:ILE:HB	2.14	0.47
2:G:1771:LEU:HD22	2:G:2144:ILE:HD11	1.97	0.47
2:G:4087:LEU:HB3	2:G:4122:MET:O	2.14	0.47
2:B:2894:LEU:HD12	2:B:2897:LYS:HE3	1.97	0.47
2:B:4088:ILE:HG23	2:B:4093:PHE:HB2	1.95	0.47
2:B:4569:LEU:CD2	2:B:4650:HIS:HB2	2.44	0.47
2:I:472:ARG:NH2	2:I:532:GLY:HA3	2.29	0.47
2:I:543:ASN:O	2:I:546:TRP:HB3	2.14	0.47
2:I:1720:LEU:HD22	2:I:1851:MET:SD	2.54	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:4157:ASP:HB3	2:I:4160:LEU:HD12	1.95	0.47
2:I:4235:VAL:HG12	2:I:4992:LEU:HD13	1.96	0.47
2:I:4569:LEU:CD2	2:I:4650:HIS:HB2	2.44	0.47
2:I:4701:TRP:CE2	2:I:4781:GLY:HA3	2.50	0.47
2:A:990:GLU:HG2	2:A:1024:TYR:CG	2.49	0.47
2:A:1609:PRO:HD2	2:A:1612:PHE:CE2	2.50	0.47
2:A:2438:PRO:HG2	2:A:2443:ILE:HD11	1.94	0.47
2:A:2487:GLN:NE2	2:A:2545:GLU:OE2	2.44	0.47
2:A:2894:LEU:HD12	2:A:2897:LYS:HE3	1.97	0.47
2:A:3190:LEU:HD21	2:A:3272:ILE:HG23	1.95	0.47
2:G:214:VAL:HG22	2:G:341:TYR:CE2	2.49	0.47
2:G:457:GLU:OE2	2:G:464:LYS:NZ	2.47	0.47
2:G:1008:SER:O	2:G:1019:PRO:HA	2.15	0.47
2:G:1122:TYR:CE1	2:G:1133:HIS:CD2	3.03	0.47
2:G:2277:ALA:HB1	2:G:2337:PHE:HD2	1.79	0.47
2:G:2474:LEU:HD23	2:G:2499:LYS:HZ3	1.79	0.47
2:G:2687:ALA:HB1	2:G:2966:TRP:CH2	2.49	0.47
2:G:2992:GLU:O	2:G:2995:ILE:HB	2.15	0.47
2:G:3533:ILE:HG12	2:G:3596:VAL:HG23	1.96	0.47
2:G:3898:ASP:OD1	2:G:3899:PHE:N	2.48	0.47
2:G:3941:ASP:OD1	2:G:3942:VAL:N	2.48	0.47
2:G:4058:ILE:HA	2:G:4061:PHE:CE1	2.49	0.47
2:B:108:LEU:HD11	2:B:117:TYR:HB3	1.96	0.47
2:B:1720:LEU:O	2:B:1722:SER:N	2.47	0.47
2:I:108:LEU:HD11	2:I:117:TYR:HB3	1.96	0.47
2:I:215:THR:HG1	2:I:218:HIS:CE1	2.32	0.47
2:I:4242:ILE:O	2:I:4246:GLN:HG3	2.13	0.47
2:A:108:LEU:HD11	2:A:117:TYR:HB3	1.97	0.47
2:A:1087:ARG:HB3	2:A:1223:PHE:CD2	2.50	0.47
2:A:1131:ARG:HE	2:A:1137:GLU:HB2	1.80	0.47
2:A:2032:GLN:O	2:A:2036:GLN:HG2	2.14	0.47
2:A:3668:SER:O	2:A:3668:SER:OG	2.27	0.47
2:A:3873:LYS:HD2	2:A:3953:LYS:HE3	1.96	0.47
2:A:3898:ASP:OD1	2:A:3899:PHE:N	2.48	0.47
2:A:4157:ASP:HB3	2:A:4160:LEU:HD12	1.95	0.47
2:A:4170:ILE:HG13	2:A:4171:LEU:N	2.30	0.47
2:A:4211:LYS:O	2:A:4215:ARG:HG2	2.15	0.47
2:A:4672:LYS:HE2	2:A:4672:LYS:HA	1.96	0.47
2:A:4738:ALA:O	2:A:4743:MET:HB2	2.14	0.47
2:G:108:LEU:HD11	2:G:117:TYR:HB3	1.96	0.47
2:G:206:CYS:SG	2:G:207:SER:N	2.86	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:2032:GLN:O	2:G:2036:GLN:HG2	2.14	0.47
2:G:2300:SER:C	2:G:2302:LEU:H	2.18	0.47
2:G:2620:GLN:OE1	2:G:2620:GLN:N	2.47	0.47
2:G:2750[B]:LYS:O	2:G:2935:TYR:OH	2.31	0.47
2:G:2929:PHE:O	2:G:2933:ASN:N	2.48	0.47
2:G:3270:ILE:HG23	2:G:3274:LEU:HD13	1.95	0.47
2:G:3844:LEU:O	2:G:3847:PHE:HB3	2.15	0.47
2:G:4067:LYS:HE3	2:G:4169:SER:HB2	1.97	0.47
2:G:4088:ILE:HG23	2:G:4093:PHE:HB2	1.95	0.47
2:G:4170:ILE:HG13	2:G:4171:LEU:N	2.30	0.47
2:G:4675:LYS:HA	2:G:4715:TYR:HD2	1.79	0.47
2:G:4701:TRP:CE2	2:G:4781:GLY:HA3	2.50	0.47
2:G:4843:LEU:HD22	2:I:4823:LEU:CD1	2.44	0.47
2:G:4983:HIS:CB	3:G:5301:ATP:HN62	2.12	0.47
2:B:192:ASP:N	2:B:192:ASP:OD1	2.45	0.47
2:B:828:GLU:OE2	2:B:828:GLU:N	2.44	0.47
2:B:1053:ILE:H	2:B:1053:ILE:HD12	1.79	0.47
2:B:1087:ARG:HB3	2:B:1223:PHE:CD2	2.50	0.47
2:B:1122:TYR:CE1	2:B:1133:HIS:CD2	3.02	0.47
2:B:1131:ARG:HE	2:B:1137:GLU:HB2	1.80	0.47
2:B:2348:GLU:HG2	2:B:3849:ARG:HG3	1.94	0.47
2:B:2449:GLU:HA	2:B:2452:ARG:HE	1.80	0.47
2:B:2620:GLN:OE1	2:B:2620:GLN:N	2.48	0.47
2:B:2719:TYR:OH	2:B:2953:LYS:O	2.26	0.47
2:B:2740:VAL:HG12	2:B:2881:ASN:ND2	2.29	0.47
2:B:2929:PHE:O	2:B:2933:ASN:N	2.48	0.47
2:B:2992:GLU:O	2:B:2995:ILE:HB	2.15	0.47
2:B:3132:THR:HG23	2:B:3136:LEU:HD13	1.96	0.47
2:B:3156:VAL:HG23	2:B:3157:ILE:HD12	1.96	0.47
2:B:3409:TYR:O	2:B:3413:ILE:HG12	2.14	0.47
2:B:3844:LEU:O	2:B:3847:PHE:HB3	2.15	0.47
2:B:3941:ASP:OD1	2:B:3942:VAL:N	2.48	0.47
2:B:4180:ARG:NE	2:B:4981:GLU:OE1	2.40	0.47
2:B:4239:GLU:O	2:B:4242:ILE:HB	2.14	0.47
2:B:4242:ILE:O	2:B:4246:GLN:HG3	2.13	0.47
2:I:779:PRO:HB2	2:I:791:PHE:CZ	2.48	0.47
2:I:917:GLU:HA	2:I:920:TYR:CE1	2.50	0.47
2:I:1008:SER:O	2:I:1019:PRO:HA	2.15	0.47
2:I:1087:ARG:HB3	2:I:1223:PHE:CD2	2.50	0.47
2:I:1733:GLU:HG2	2:I:2201:LEU:HD23	1.96	0.47
2:I:2449:GLU:HA	2:I:2452:ARG:HE	1.80	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:2601:ASP:O	2:I:2604:GLU:HG3	2.15	0.47
2:I:2894:LEU:HD12	2:I:2897:LYS:HE3	1.97	0.47
2:I:2980:VAL:HG13	2:I:2984:GLY:HA2	1.97	0.47
2:I:3077:ALA:HB3	2:I:3156:VAL:HG12	1.95	0.47
2:I:3269:VAL:O	2:I:3272:ILE:N	2.47	0.47
2:I:3270:ILE:HG23	2:I:3274:LEU:HD13	1.96	0.47
2:I:3844:LEU:O	2:I:3847:PHE:HB3	2.15	0.47
2:I:3898:ASP:OD1	2:I:3899:PHE:N	2.48	0.47
2:I:3962:PHE:CE1	2:I:4023:MET:SD	3.08	0.47
2:I:4170:ILE:HG13	2:I:4171:LEU:N	2.30	0.47
2:A:1733:GLU:HG2	2:A:2201:LEU:HD23	1.96	0.47
2:A:2449:GLU:HA	2:A:2452:ARG:HE	1.80	0.47
2:A:3844:LEU:O	2:A:3847:PHE:HB3	2.15	0.47
2:G:1442:GLY:O	2:G:1557:THR:OG1	2.30	0.47
2:G:1720:LEU:O	2:G:1722:SER:N	2.47	0.47
2:G:4569:LEU:CD2	2:G:4650:HIS:HB2	2.44	0.47
2:G:4699:GLY:O	2:G:4703:ARG:HG3	2.15	0.47
2:B:1276:THR:O	2:B:1282:SER:OG	2.22	0.47
2:B:2355:ARG:O	2:B:2359:ARG:HG2	2.14	0.47
2:B:3282:PRO:HA	2:B:3312:LEU:HD21	1.97	0.47
2:B:3316:LEU:HD13	2:B:3345:ILE:HG23	1.96	0.47
2:I:1053:ILE:H	2:I:1053:ILE:HD12	1.79	0.47
2:I:2026:ASP:OD1	2:I:2026:ASP:N	2.43	0.47
2:I:2300:SER:C	2:I:2302:LEU:H	2.18	0.47
2:I:2776:SER:OG	2:I:2777:TYR:N	2.47	0.47
2:I:3282:PRO:HA	2:I:3312:LEU:HD21	1.97	0.47
2:I:4152:GLU:HG2	2:I:4192:ARG:HH11	1.79	0.47
2:I:4699:GLY:O	2:I:4703:ARG:HG3	2.15	0.47
2:A:192:ASP:OD1	2:A:192:ASP:N	2.45	0.47
2:A:207:SER:H	2:A:334:MET:HE1	1.80	0.47
2:A:2601:ASP:O	2:A:2604:GLU:HG3	2.15	0.47
2:A:2740:VAL:HG12	2:A:2881:ASN:ND2	2.30	0.47
2:A:2977:LEU:O	2:A:2981:VAL:HG23	2.14	0.47
2:A:3045:LYS:O	2:A:3049:LEU:HG	2.15	0.47
2:A:4034:ASN:OD1	2:A:4040:ILE:HB	2.15	0.47
2:G:1132:TRP:CZ2	2:G:1136:SER:HB3	2.49	0.47
2:G:2601:ASP:O	2:G:2604:GLU:HG3	2.15	0.47
2:G:2693:GLN:N	2:G:2996:LYS:HZ1	2.13	0.47
2:G:2776:SER:OG	2:G:2777:TYR:N	2.47	0.47
2:G:3984:ARG:NH1	2:G:3986:TRP:HB2	2.28	0.47
2:G:4672:LYS:HE2	2:G:4672:LYS:HA	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:451:TYR:CZ	2:B:474:ARG:HD2	2.50	0.47
2:B:1201:HIS:CE1	2:B:1203:ASN:HB2	2.50	0.47
2:B:3045:LYS:O	2:B:3049:LEU:HG	2.15	0.47
2:B:3530:GLN:O	2:B:3533:ILE:HB	2.15	0.47
2:I:1122:TYR:CE1	2:I:1133:HIS:CD2	3.02	0.47
2:I:1609:PRO:HD2	2:I:1612:PHE:CE2	2.50	0.47
2:I:2967:MET:CE	2:I:3045:LYS:HB3	2.44	0.47
2:I:4211:LYS:O	2:I:4215:ARG:HG2	2.15	0.47
2:A:3352:GLU:OE1	2:A:3352:GLU:N	2.41	0.47
2:G:472:ARG:NH2	2:G:532:GLY:HA3	2.29	0.47
2:G:1609:PRO:HD2	2:G:1612:PHE:CE2	2.50	0.47
2:G:2449:GLU:HA	2:G:2452:ARG:HE	1.80	0.47
2:G:2578:MET:O	2:G:2581:SER:OG	2.22	0.47
2:G:3077:ALA:HB3	2:G:3156:VAL:HG12	1.95	0.47
2:G:4034:ASN:OD1	2:G:4040:ILE:HB	2.15	0.47
2:G:4062:PHE:HZ	2:G:4143:VAL:HG11	1.80	0.47
2:G:4690:GLU:OE1	2:G:4690:GLU:N	2.49	0.47
2:B:1732:SER:O	2:B:1732:SER:OG	2.30	0.47
2:B:3888:LEU:HD13	2:B:3891:LEU:HD12	1.97	0.47
2:B:4152:GLU:HG2	2:B:4192:ARG:HH11	1.79	0.47
2:B:4156:HIS:HA	2:B:4161:ARG:HH12	1.80	0.47
2:B:4576:ILE:HD12	2:B:4646:LEU:HD12	1.97	0.47
2:I:1201:HIS:CE1	2:I:1203:ASN:HB2	2.50	0.47
2:I:1820:ARG:HD2	2:I:1820:ARG:HA	1.69	0.47
2:I:2750[B]:LYS:H	2:I:2750[B]:LYS:HG3	1.36	0.47
2:I:2992:GLU:O	2:I:2995:ILE:HB	2.15	0.47
2:I:3941:ASP:OD1	2:I:3942:VAL:N	2.48	0.47
2:I:3984:ARG:NH1	2:I:3986:TRP:HB2	2.28	0.47
2:I:4003:LEU:HB3	2:I:4013:LEU:HD12	1.97	0.47
2:I:4214:LYS:HD3	2:I:4234:PHE:HZ	1.78	0.47
2:I:4239:GLU:O	2:I:4242:ILE:HB	2.14	0.47
2:I:4672:LYS:HE2	2:I:4672:LYS:HA	1.96	0.47
2:I:4701:TRP:HA	2:I:4704:LEU:HD23	1.97	0.47
2:A:67:PHE:CD1	2:A:111:HIS:HA	2.50	0.46
2:A:917:GLU:HA	2:A:920:TYR:CE1	2.50	0.46
2:A:1008:SER:O	2:A:1019:PRO:HA	2.15	0.46
2:A:1771:LEU:HD22	2:A:2144:ILE:HD11	1.97	0.46
2:A:2616:PRO:HB3	2:A:2651:CYS:SG	2.56	0.46
2:A:2627:VAL:HG21	2:A:2674:LEU:CD1	2.44	0.46
2:A:2716:ASP:HB2	2:A:2719:TYR:CD1	2.50	0.46
2:A:3941:ASP:OD1	2:A:3942:VAL:N	2.48	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:106:LEU:HD12	1:O:106:LEU:HA	1.72	0.46
2:G:828:GLU:OE2	2:G:828:GLU:N	2.44	0.46
2:G:990:GLU:HG2	2:G:1024:TYR:CG	2.49	0.46
2:G:2579:VAL:HB	2:G:2618:MET:HE1	1.97	0.46
2:G:3358:PHE:CE2	2:G:3412:LEU:HD13	2.49	0.46
2:G:3525:CYS:HA	2:G:3595:ARG:HH12	1.81	0.46
2:G:3873:LYS:HD2	2:G:3953:LYS:HE3	1.96	0.46
2:B:67:PHE:CD1	2:B:111:HIS:HA	2.51	0.46
2:B:543:ASN:O	2:B:546:TRP:HB3	2.14	0.46
2:B:1232:ARG:NH2	2:B:1828:ASP:OD1	2.48	0.46
2:B:2894:LEU:O	2:B:2898:GLY:N	2.48	0.46
2:B:2980:VAL:HG13	2:B:2984:GLY:HA2	1.97	0.46
2:B:3190:LEU:HD21	2:B:3272:ILE:HG23	1.95	0.46
2:B:4003:LEU:HB3	2:B:4013:LEU:HD12	1.97	0.46
2:B:4211:LYS:O	2:B:4215:ARG:HG2	2.15	0.46
2:B:4672:LYS:HE2	2:B:4672:LYS:HA	1.96	0.46
2:B:4690:GLU:OE1	2:B:4690:GLU:N	2.49	0.46
2:B:4699:GLY:O	2:B:4703:ARG:HG3	2.15	0.46
2:I:1074:ILE:HG23	2:I:1115:LEU:HD11	1.97	0.46
2:I:2740:VAL:HG12	2:I:2881:ASN:ND2	2.30	0.46
2:I:3096:PHE:HD2	2:I:3161:VAL:CG1	2.29	0.46
2:I:4690:GLU:OE1	2:I:4690:GLU:N	2.49	0.46
2:A:457:GLU:OE2	2:A:464:LYS:NZ	2.47	0.46
2:A:1074:ILE:HG23	2:A:1115:LEU:HD11	1.97	0.46
2:A:1122:TYR:CE1	2:A:1133:HIS:CD2	3.02	0.46
2:A:1164:LEU:HB2	2:A:1169:LEU:HD11	1.98	0.46
2:A:1714:LEU:O	2:A:1718:ILE:HG12	2.15	0.46
2:A:3156:VAL:HG23	2:A:3157:ILE:HD12	1.96	0.46
2:G:1087:ARG:HB3	2:G:1223:PHE:CD2	2.50	0.46
2:G:1131:ARG:HE	2:G:1137:GLU:HB2	1.80	0.46
2:G:1714:LEU:O	2:G:1718:ILE:HG12	2.16	0.46
2:G:1966:VAL:HG21	2:G:3649:ALA:HB1	1.98	0.46
2:G:2558:VAL:O	2:G:2562:ILE:HG13	2.15	0.46
2:G:2616:PRO:HB3	2:G:2651:CYS:SG	2.55	0.46
2:G:3096:PHE:HD2	2:G:3161:VAL:CG1	2.29	0.46
2:G:3668:SER:O	2:G:3668:SER:OG	2.27	0.46
2:B:214:VAL:HG22	2:B:341:TYR:CE2	2.49	0.46
2:B:2601:ASP:O	2:B:2604:GLU:HG3	2.15	0.46
2:B:3169:LEU:O	2:B:3172:ILE:HG22	2.14	0.46
2:B:3673:MET:SD	2:B:3728:ILE:HD13	2.56	0.46
2:I:67:PHE:CD1	2:I:111:HIS:HA	2.50	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:546:TRP:O	2:I:549:SER:OG	2.32	0.46
2:I:1131:ARG:HE	2:I:1137:GLU:HB2	1.80	0.46
2:I:1442:GLY:O	2:I:1557:THR:OG1	2.30	0.46
2:I:2616:PRO:HB3	2:I:2651:CYS:SG	2.56	0.46
2:I:4827:LEU:O	2:I:4830:VAL:HG22	2.16	0.46
2:A:943:ASP:OD1	2:A:945:LYS:HE3	2.16	0.46
2:A:1059:GLU:OE1	2:A:1059:GLU:N	2.49	0.46
2:A:1076:ARG:NH1	2:A:1079:LYS:HG3	2.29	0.46
2:A:2383:ALA:O	2:A:2387:SER:OG	2.27	0.46
2:A:3673:MET:SD	2:A:3728:ILE:HD13	2.56	0.46
2:A:3888:LEU:HD13	2:A:3891:LEU:HD12	1.97	0.46
2:A:3962:PHE:CE1	2:A:4023:MET:SD	3.08	0.46
2:A:4067:LYS:HE3	2:A:4169:SER:HB2	1.97	0.46
2:A:4569:LEU:CD2	2:A:4650:HIS:HB2	2.44	0.46
2:G:67:PHE:CD1	2:G:111:HIS:HA	2.50	0.46
2:G:2716:ASP:HB2	2:G:2719:TYR:CD1	2.50	0.46
2:G:2740:VAL:HG12	2:G:2881:ASN:ND2	2.29	0.46
2:G:2819:TRP:CH2	2:G:2881:ASN:HB2	2.51	0.46
2:G:2880:GLU:O	2:G:2884:ASN:HB2	2.16	0.46
2:G:2894:LEU:HD12	2:G:2897:LYS:HE3	1.97	0.46
2:G:3326:ASN:OD1	2:G:3329:ILE:HB	2.16	0.46
2:G:3436:ARG:NE	2:G:3598:GLU:OE1	2.30	0.46
2:G:3673:MET:SD	2:G:3728:ILE:HD13	2.56	0.46
2:G:3962:PHE:CE1	2:G:4023:MET:SD	3.08	0.46
2:G:4021:LYS:HA	2:G:4142:ASN:HD21	1.81	0.46
2:G:4211:LYS:O	2:G:4215:ARG:HG2	2.15	0.46
2:B:1771:LEU:HD22	2:B:2144:ILE:HD11	1.96	0.46
2:B:3962:PHE:CE1	2:B:4023:MET:SD	3.08	0.46
2:B:4157:ASP:HB3	2:B:4160:LEU:HD12	1.95	0.46
2:B:4701:TRP:CE2	2:B:4781:GLY:HA3	2.50	0.46
2:I:1575:LEU:HD23	2:I:1575:LEU:HA	1.76	0.46
2:I:1966:VAL:HG21	2:I:3649:ALA:HB1	1.98	0.46
2:I:2366:PRO:HA	2:I:2369:ARG:NH1	2.31	0.46
2:I:2819:TRP:CH2	2:I:2881:ASN:HB2	2.51	0.46
2:I:2929:PHE:O	2:I:2933:ASN:N	2.48	0.46
2:I:3944:GLU:HG3	2:I:3947:GLY:H	1.81	0.46
2:I:3951:PHE:CD2	2:I:4012:LEU:HD21	2.49	0.46
2:I:4817:ALA:HB1	2:I:4827:LEU:HD11	1.98	0.46
2:A:2474:LEU:HD23	2:A:2499:LYS:HZ3	1.79	0.46
2:A:2750[B]:LYS:NZ	2:A:2824:GLU:OE1	2.49	0.46
2:A:2750[B]:LYS:O	2:A:2935:TYR:OH	2.31	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:3169:LEU:O	2:A:3172:ILE:HG22	2.14	0.46
2:A:3525:CYS:HA	2:A:3595:ARG:HH12	1.81	0.46
2:A:4021:LYS:HA	2:A:4142:ASN:HD21	1.81	0.46
2:A:4156:HIS:HA	2:A:4161:ARG:HH12	1.80	0.46
2:G:943:ASP:OD1	2:G:945:LYS:HE3	2.16	0.46
2:G:1164:LEU:HB2	2:G:1169:LEU:HD11	1.98	0.46
2:G:1201:HIS:CE1	2:G:1203:ASN:HB2	2.50	0.46
2:G:1232:ARG:NH2	2:G:1828:ASP:OD1	2.48	0.46
2:G:1420:ASN:OD1	2:G:1421:ARG:N	2.47	0.46
2:G:2767:ALA:HB3	2:G:2857:PRO:HG3	1.97	0.46
2:G:4576:ILE:HD12	2:G:4646:LEU:HD12	1.97	0.46
2:B:233:ILE:O	2:B:257:ARG:NH1	2.41	0.46
2:B:917:GLU:HA	2:B:920:TYR:CE1	2.50	0.46
2:B:1714:LEU:O	2:B:1718:ILE:HG12	2.15	0.46
2:B:2474:LEU:HD23	2:B:2499:LYS:HZ3	1.79	0.46
2:B:2776:SER:OG	2:B:2777:TYR:N	2.47	0.46
2:B:2880:GLU:O	2:B:2884:ASN:HB2	2.16	0.46
2:B:3533:ILE:HG12	2:B:3596:VAL:HG23	1.96	0.46
2:I:1059:GLU:OE1	2:I:1059:GLU:N	2.49	0.46
2:I:2694:GLU:HG2	2:I:2695:LEU:N	2.31	0.46
2:I:2880:GLU:HG2	2:I:2908:TYR:HB3	1.97	0.46
2:I:3987:ASP:HA	2:I:3990:VAL:HB	1.96	0.46
2:I:4087:LEU:HB3	2:I:4122:MET:O	2.14	0.46
2:A:215:THR:H	2:A:218:HIS:CE1	2.34	0.46
2:A:233:ILE:HD12	2:A:242:ARG:HB3	1.98	0.46
2:A:986:ASP:OD1	2:A:986:ASP:N	2.44	0.46
2:A:1232:ARG:NH2	2:A:1828:ASP:OD1	2.48	0.46
2:A:2650:ARG:O	2:A:2661:TRP:HZ2	1.99	0.46
2:A:2750[B]:LYS:H	2:A:2750[B]:LYS:HG3	1.36	0.46
2:A:3078:ARG:HG3	2:A:3079:THR:H	1.81	0.46
2:A:3274:LEU:HD21	2:A:3319:ILE:HD12	1.98	0.46
2:A:4701:TRP:CE2	2:A:4781:GLY:HA3	2.50	0.46
2:G:928:THR:O	2:G:932:LEU:HG	2.16	0.46
2:G:2366:PRO:HA	2:G:2369:ARG:NH1	2.31	0.46
2:G:2514:ASN:ND2	2:G:2516:ASP:HB3	2.31	0.46
2:G:4227:GLU:HA	2:G:4230:LYS:NZ	2.31	0.46
2:B:3553:LEU:HD13	2:B:3596:VAL:HG13	1.98	0.46
2:B:4702:ASP:O	2:B:4705:VAL:HG12	2.16	0.46
2:I:774:ASP:OD1	2:I:774:ASP:N	2.47	0.46
2:I:1232:ARG:NH2	2:I:1828:ASP:OD1	2.48	0.46
2:I:1427:ILE:HD13	2:I:1571:ASN:HA	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:2355:ARG:O	2:I:2359:ARG:HG2	2.14	0.46
2:I:2474:LEU:HD23	2:I:2499:LYS:HZ3	1.79	0.46
2:I:2767:ALA:HB3	2:I:2857:PRO:HG3	1.97	0.46
2:I:2880:GLU:O	2:I:2884:ASN:HB2	2.16	0.46
2:I:3246:LEU:HD13	2:I:3249:LEU:HD11	1.98	0.46
2:I:3530:GLN:O	2:I:3533:ILE:HB	2.15	0.46
2:I:4067:LYS:HE3	2:I:4169:SER:HB2	1.96	0.46
2:A:451:TYR:CZ	2:A:474:ARG:HD2	2.50	0.46
2:A:472:ARG:NH2	2:A:532:GLY:HA3	2.29	0.46
2:A:928:THR:O	2:A:932:LEU:HG	2.16	0.46
2:A:1771:LEU:HG	2:A:2153:MET:HE1	1.97	0.46
2:A:2929:PHE:O	2:A:2933:ASN:N	2.48	0.46
2:A:3070:ILE:O	2:A:3074:SER:N	2.46	0.46
2:A:3530:GLN:O	2:A:3533:ILE:HB	2.15	0.46
2:A:4683:PHE:CE2	2:A:5017:ARG:HG3	2.51	0.46
2:A:4690:GLU:OE1	2:A:4690:GLU:N	2.49	0.46
1:J:54:GLU:H	1:J:54:GLU:CD	2.08	0.46
2:G:2694:GLU:HG2	2:G:2695:LEU:N	2.31	0.46
2:G:3987:ASP:HA	2:G:3990:VAL:HB	1.96	0.46
2:G:4003:LEU:HB3	2:G:4013:LEU:HD12	1.97	0.46
2:G:4817:ALA:HB1	2:G:4827:LEU:HD11	1.98	0.46
2:B:215:THR:HG1	2:B:218:HIS:CE1	2.32	0.46
2:B:581:ASN:OD1	2:B:582:HIS:N	2.49	0.46
2:B:943:ASP:OD1	2:B:945:LYS:HE3	2.16	0.46
2:B:2693:GLN:N	2:B:2996:LYS:HZ1	2.13	0.46
2:B:2694:GLU:HG2	2:B:2695:LEU:N	2.31	0.46
2:B:2716:ASP:HB2	2:B:2719:TYR:CD1	2.51	0.46
2:B:3058:GLY:O	2:B:3061:ALA:HB3	2.16	0.46
2:B:4701:TRP:HA	2:B:4704:LEU:HD23	1.97	0.46
2:I:2558:VAL:O	2:I:2562:ILE:HG13	2.16	0.46
2:I:2585:THR:HA	2:I:2588:ARG:NH1	2.31	0.46
2:I:3326:ASN:OD1	2:I:3329:ILE:HB	2.16	0.46
2:I:3673:MET:SD	2:I:3728:ILE:HD13	2.56	0.46
2:A:2355:ARG:O	2:A:2359:ARG:HG2	2.14	0.46
2:A:2479:LEU:HD13	2:A:2541:PHE:CD2	2.51	0.46
2:A:3058:GLY:O	2:A:3061:ALA:HB3	2.16	0.46
2:A:3282:PRO:HA	2:A:3312:LEU:HD21	1.97	0.46
2:A:3533:ILE:HG12	2:A:3596:VAL:HG23	1.96	0.46
2:A:3901:ASN:HA	2:A:3904:ARG:HH21	1.81	0.46
2:A:4062:PHE:HZ	2:A:4143:VAL:HG11	1.80	0.46
2:A:4227:GLU:HA	2:A:4230:LYS:NZ	2.31	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:4702:ASP:O	2:A:4705:VAL:HG12	2.16	0.46
2:A:4844:LEU:HD11	2:A:4924:VAL:HG13	1.97	0.46
2:G:451:TYR:CZ	2:G:474:ARG:HD2	2.50	0.46
2:G:4827:LEU:O	2:G:4830:VAL:HG22	2.16	0.46
2:B:659:TYR:HB2	2:B:1017:ARG:HH12	1.81	0.46
2:B:774:ASP:OD1	2:B:774:ASP:N	2.47	0.46
2:B:2616:PRO:HB3	2:B:2651:CYS:SG	2.56	0.46
2:B:2880:GLU:HG2	2:B:2908:TYR:HB3	1.98	0.46
2:B:3096:PHE:HD2	2:B:3161:VAL:CG1	2.29	0.46
2:I:1047:LEU:O	2:I:1049:TYR:N	2.49	0.46
2:I:1720:LEU:O	2:I:1722:SER:N	2.47	0.46
2:I:1732:SER:O	2:I:1732:SER:OG	2.30	0.46
2:I:2750[B]:LYS:NZ	2:I:2824:GLU:OE1	2.49	0.46
2:I:2954:ARG:HB3	2:I:2957:PHE:CB	2.46	0.46
2:I:4062:PHE:HZ	2:I:4143:VAL:HG11	1.80	0.46
2:I:4576:ILE:HD12	2:I:4646:LEU:HD12	1.97	0.46
2:A:1987:SER:OG	2:A:1987:SER:O	2.34	0.46
2:A:3096:PHE:HD2	2:A:3161:VAL:CG1	2.29	0.46
2:A:3326:ASN:OD1	2:A:3329:ILE:HB	2.16	0.46
2:A:3365:LEU:HA	2:A:3368:ARG:HG2	1.98	0.46
2:A:3553:LEU:HD13	2:A:3596:VAL:HG13	1.98	0.46
2:A:3944:GLU:HG3	2:A:3947:GLY:H	1.81	0.46
2:G:233:ILE:HD12	2:G:242:ARG:HB3	1.98	0.46
2:G:233:ILE:O	2:G:257:ARG:NH1	2.41	0.46
2:G:2238:TYR:HA	2:G:2241:ARG:NH2	2.31	0.46
2:G:2775:TRP:HA	2:G:2786:LYS:HB3	1.98	0.46
2:G:2871:LEU:HA	2:G:2874:MET:HG2	1.97	0.46
2:G:3045:LYS:O	2:G:3049:LEU:HG	2.15	0.46
2:G:3282:PRO:HA	2:G:3312:LEU:HD21	1.97	0.46
2:G:3530:GLN:O	2:G:3533:ILE:HB	2.15	0.46
2:G:4066:LEU:HD11	2:G:4173:TYR:HB3	1.98	0.46
2:B:928:THR:O	2:B:932:LEU:HG	2.16	0.46
2:B:1733:GLU:HG2	2:B:2201:LEU:HD23	1.96	0.46
2:B:2366:PRO:HA	2:B:2369:ARG:NH1	2.31	0.46
2:B:2650:ARG:O	2:B:2661:TRP:HZ2	1.99	0.46
2:B:3207:GLU:O	2:B:3210:LEU:N	2.45	0.46
2:B:3898:ASP:OD1	2:B:3899:PHE:N	2.48	0.46
2:B:3944:GLU:HG3	2:B:3947:GLY:H	1.81	0.46
2:B:4227:GLU:HA	2:B:4230:LYS:NZ	2.31	0.46
2:I:2238:TYR:HA	2:I:2241:ARG:NH2	2.31	0.46
2:I:2959:PHE:O	2:I:2963:LEU:HD23	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:3365:LEU:HA	2:I:3368:ARG:HG2	1.98	0.46
2:I:4227:GLU:HA	2:I:4230:LYS:NZ	2.31	0.46
2:I:4232:GLU:HG2	2:I:5022:PHE:CZ	2.51	0.46
2:I:4737:ILE:HA	2:I:4740:LEU:HD12	1.98	0.46
2:A:581:ASN:OD1	2:A:582:HIS:N	2.49	0.46
2:A:1147:ASP:HB3	2:A:1164:LEU:HD11	1.98	0.46
2:A:2819:TRP:CH2	2:A:2881:ASN:HB2	2.51	0.46
2:A:2871:LEU:HA	2:A:2874:MET:HG2	1.97	0.46
2:A:3096:PHE:HD2	2:A:3161:VAL:HG13	1.81	0.46
2:A:3246:LEU:HD13	2:A:3249:LEU:HD11	1.98	0.46
2:A:4087:LEU:HB3	2:A:4122:MET:O	2.14	0.46
2:G:1433:TYR:CE2	2:G:1578:ALA:HB2	2.51	0.46
2:G:2959:PHE:O	2:G:2963:LEU:HD23	2.16	0.46
2:G:3078:ARG:HG3	2:G:3079:THR:H	1.81	0.46
2:G:3246:LEU:HD13	2:G:3249:LEU:HD11	1.98	0.46
2:G:3455:GLU:OE1	2:G:3510:ILE:HD11	2.16	0.46
2:G:3904:ARG:HB2	2:G:3914:ASN:ND2	2.31	0.46
2:B:233:ILE:HD12	2:B:242:ARG:HB3	1.98	0.46
2:B:546:TRP:O	2:B:549:SER:OG	2.32	0.46
2:B:652:ARG:HD2	2:B:750:LEU:HD13	1.97	0.46
2:B:1059:GLU:OE1	2:B:1059:GLU:N	2.49	0.46
2:B:1609:PRO:HD2	2:B:1612:PHE:CE2	2.50	0.46
2:B:2627:VAL:HG21	2:B:2674:LEU:CD1	2.44	0.46
2:B:2750[A]:LYS:O	2:B:2935:TYR:OH	2.33	0.46
2:B:2871:LEU:HA	2:B:2874:MET:HG2	1.97	0.46
2:B:2959:PHE:O	2:B:2963:LEU:HD23	2.16	0.46
2:B:4574:ASN:ND2	2:B:4810:ALA:HA	2.31	0.46
2:B:4737:ILE:HA	2:B:4740:LEU:HD12	1.98	0.46
2:B:4827:LEU:O	2:B:4830:VAL:HG22	2.16	0.46
2:I:659:TYR:HB2	2:I:1017:ARG:HH12	1.81	0.46
2:I:1714:LEU:O	2:I:1718:ILE:HG12	2.15	0.46
2:I:2627:VAL:HG21	2:I:2674:LEU:CD1	2.44	0.46
2:I:2871:LEU:HA	2:I:2874:MET:HG2	1.97	0.46
2:I:3284:TRP:HA	2:I:3287:ARG:HH21	1.81	0.46
2:A:1201:HIS:CE1	2:A:1203:ASN:HB2	2.50	0.46
2:A:1966:VAL:HG21	2:A:3649:ALA:HB1	1.98	0.46
2:A:2419:GLY:HA2	2:A:2422:ILE:HB	1.98	0.46
2:A:3207:GLU:O	2:A:3210:LEU:N	2.45	0.46
2:A:3419:ASN:OD1	2:A:3422:HIS:HB3	2.16	0.46
2:A:3455:GLU:OE1	2:A:3510:ILE:HD11	2.16	0.46
2:A:4003:LEU:HB3	2:A:4013:LEU:HD12	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:4817:ALA:HB1	2:A:4827:LEU:HD11	1.98	0.46
2:A:4827:LEU:O	2:A:4830:VAL:HG22	2.16	0.46
2:G:2419:GLY:HA2	2:G:2422:ILE:HB	1.98	0.46
2:G:3400:VAL:HG13	2:G:3403:ARG:HH22	1.81	0.46
2:G:4702:ASP:O	2:G:4705:VAL:HG12	2.16	0.46
2:B:2300:SER:C	2:B:2302:LEU:H	2.18	0.46
2:B:2458:ARG:HA	2:B:2510:TYR:CE1	2.51	0.46
2:B:2775:TRP:HA	2:B:2786:LYS:HB3	1.98	0.46
2:B:3078:ARG:HG3	2:B:3079:THR:H	1.81	0.46
2:B:3274:LEU:HD21	2:B:3319:ILE:HD12	1.98	0.46
2:B:3400:VAL:HG13	2:B:3403:ARG:HH22	1.81	0.46
2:B:3525:CYS:HA	2:B:3595:ARG:HH12	1.81	0.46
2:B:3901:ASN:HA	2:B:3904:ARG:HH21	1.81	0.46
2:B:4080:TYR:HD2	2:B:4096:ALA:HA	1.81	0.46
2:I:2716:ASP:HB2	2:I:2719:TYR:CD1	2.50	0.46
2:I:3320:LEU:O	2:I:3324:VAL:HG23	2.16	0.46
2:I:3400:VAL:HG13	2:I:3403:ARG:HH22	1.81	0.46
2:I:3545:THR:O	2:I:3548:GLU:N	2.49	0.46
2:I:3553:LEU:HD13	2:I:3596:VAL:HG13	1.98	0.46
2:I:4683:PHE:CE2	2:I:5017:ARG:HG3	2.51	0.46
2:A:652:ARG:HD2	2:A:750:LEU:HD13	1.97	0.45
2:A:1464:PHE:CE1	2:A:1553:PHE:HD2	2.34	0.45
2:A:2159:LEU:HD13	2:A:2203:MET:SD	2.56	0.45
1:H:75:THR:HG22	1:H:98:ILE:HG13	1.98	0.45
2:G:659:TYR:HB2	2:G:1017:ARG:HH12	1.81	0.45
2:G:1147:ASP:HB3	2:G:1164:LEU:HD11	1.98	0.45
2:G:2750[B]:LYS:NZ	2:G:2824:GLU:OE1	2.49	0.45
2:G:2954:ARG:HB3	2:G:2957:PHE:CB	2.46	0.45
2:G:3058:GLY:O	2:G:3061:ALA:HB3	2.16	0.45
2:G:3206:LEU:HA	2:G:3246:LEU:CD2	2.42	0.45
2:B:721:LEU:HA	2:B:721:LEU:HD23	1.85	0.45
2:B:887:ILE:HG12	2:B:958:THR:HG23	1.98	0.45
2:B:1074:ILE:HG23	2:B:1115:LEU:HD11	1.97	0.45
2:B:1164:LEU:HB2	2:B:1169:LEU:HD11	1.98	0.45
2:B:1436:SER:HG	2:B:1516:ILE:C	2.18	0.45
2:B:1464:PHE:CE1	2:B:1553:PHE:HD2	2.34	0.45
2:B:1966:VAL:HG21	2:B:3649:ALA:HB1	1.98	0.45
2:B:2479:LEU:HD13	2:B:2541:PHE:CD2	2.51	0.45
2:B:2514:ASN:ND2	2:B:2516:ASP:HB3	2.31	0.45
2:B:2819:TRP:CH2	2:B:2881:ASN:HB2	2.51	0.45
2:B:3903:LEU:HD22	2:B:3915:ILE:HG21	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:4120:ASN:OD1	2:B:4122:MET:HB3	2.17	0.45
2:I:78:LEU:HD23	2:I:82:LEU:HD23	1.99	0.45
2:I:928:THR:O	2:I:932:LEU:HG	2.16	0.45
2:I:3058:GLY:O	2:I:3061:ALA:HB3	2.16	0.45
2:I:4120:ASN:OD1	2:I:4122:MET:HB3	2.17	0.45
2:A:1100:MET:HE2	2:A:1100:MET:HB3	1.84	0.45
2:A:2775:TRP:HA	2:A:2786:LYS:HB3	1.97	0.45
2:A:2880:GLU:HG2	2:A:2908:TYR:HB3	1.97	0.45
2:A:2976:HIS:O	2:A:2980:VAL:HG23	2.16	0.45
2:A:3284:TRP:HA	2:A:3287:ARG:HH21	1.81	0.45
2:A:3873:LYS:HE3	2:A:3873:LYS:HB3	1.45	0.45
2:A:3916:ILE:O	2:A:3920:VAL:HG23	2.17	0.45
2:A:4175:ARG:HG2	2:A:4175:ARG:HH21	1.82	0.45
2:A:4839:MET:HB3	2:G:4823:LEU:HD21	1.97	0.45
1:J:75:THR:HG22	1:J:98:ILE:HG13	1.99	0.45
2:G:917:GLU:HA	2:G:920:TYR:CE1	2.50	0.45
2:G:1047:LEU:O	2:G:1049:TYR:N	2.49	0.45
2:G:1427:ILE:HD13	2:G:1571:ASN:HA	1.98	0.45
2:G:2458:ARG:HA	2:G:2510:TYR:CE1	2.51	0.45
2:G:2650:ARG:O	2:G:2661:TRP:HZ2	1.99	0.45
2:G:2951:ILE:H	2:G:2951:ILE:HD12	1.81	0.45
2:G:3284:TRP:HA	2:G:3287:ARG:HH21	1.81	0.45
2:G:3545:THR:O	2:G:3548:GLU:N	2.49	0.45
2:G:4683:PHE:CE2	2:G:5017:ARG:HG3	2.51	0.45
2:B:215:THR:H	2:B:218:HIS:CE1	2.34	0.45
2:B:1076:ARG:NH2	2:B:1655:GLU:OE1	2.45	0.45
2:B:1771:LEU:HG	2:B:2153:MET:HE1	1.99	0.45
2:B:2259:GLU:HB3	2:B:2297:LYS:HZ3	1.81	0.45
2:B:2951:ILE:H	2:B:2951:ILE:HD12	1.81	0.45
2:B:3246:LEU:HD13	2:B:3249:LEU:HD11	1.98	0.45
2:B:4034:ASN:OD1	2:B:4040:ILE:HB	2.15	0.45
2:B:4817:ALA:HB1	2:B:4827:LEU:HD11	1.98	0.45
2:I:2650:ARG:O	2:I:2661:TRP:HZ2	1.99	0.45
2:I:2775:TRP:HA	2:I:2786:LYS:HB3	1.98	0.45
2:I:2951:ILE:H	2:I:2951:ILE:HD12	1.82	0.45
2:I:4217:PHE:O	2:I:4220:ASP:N	2.49	0.45
2:I:4844:LEU:HD11	2:I:4924:VAL:HG13	1.97	0.45
1:F:75:THR:HG22	1:F:98:ILE:HG13	1.98	0.45
2:A:1076:ARG:NH2	2:A:1655:GLU:OE1	2.45	0.45
2:A:1427:ILE:HD13	2:A:1571:ASN:HA	1.98	0.45
2:A:1577:ALA:O	2:A:1584:ARG:NE	2.45	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:2175:GLU:HA	2:A:2228:MET:HE1	1.99	0.45
2:A:2299:VAL:HG11	2:A:2356:LEU:HG	1.99	0.45
2:A:2366:PRO:HA	2:A:2369:ARG:NH1	2.31	0.45
2:A:2595:LEU:O	2:A:2596:THR:OG1	2.31	0.45
2:A:2641:LEU:O	2:A:2644:LEU:HG	2.17	0.45
2:A:4232:GLU:HG2	2:A:5022:PHE:CZ	2.51	0.45
2:A:4843:LEU:HD22	2:G:4823:LEU:CD1	2.46	0.45
1:O:75:THR:HG22	1:O:98:ILE:HG13	1.99	0.45
2:G:581:ASN:OD1	2:G:582:HIS:N	2.49	0.45
2:G:721:LEU:HA	2:G:721:LEU:HD23	1.85	0.45
2:G:2479:LEU:HD13	2:G:2541:PHE:CD2	2.51	0.45
2:G:2627:VAL:HG21	2:G:2674:LEU:CD1	2.45	0.45
2:G:2894:LEU:O	2:G:2898:GLY:N	2.48	0.45
2:G:3096:PHE:HD2	2:G:3161:VAL:HG13	1.81	0.45
2:G:4730:ASP:OD1	2:G:4730:ASP:N	2.50	0.45
2:B:1427:ILE:HD13	2:B:1571:ASN:HA	1.97	0.45
2:B:2159:LEU:HD13	2:B:2203:MET:SD	2.56	0.45
2:B:2750[B]:LYS:NZ	2:B:2824:GLU:OE1	2.49	0.45
2:B:2816:MET:HE1	2:B:2823:ILE:HG12	1.98	0.45
2:B:3096:PHE:HD2	2:B:3161:VAL:HG13	1.81	0.45
2:B:3455:GLU:OE1	2:B:3510:ILE:HD11	2.17	0.45
2:B:3916:ILE:O	2:B:3920:VAL:HG23	2.17	0.45
2:B:4201:ASN:HB3	2:B:4993:MET:HE3	1.97	0.45
2:I:1164:LEU:HB2	2:I:1169:LEU:HD11	1.98	0.45
2:I:1987:SER:OG	2:I:1987:SER:O	2.34	0.45
2:I:2458:ARG:HA	2:I:2510:TYR:CE1	2.51	0.45
2:I:2479:LEU:HD13	2:I:2541:PHE:CD2	2.51	0.45
2:I:3078:ARG:CG	2:I:3079:THR:H	2.30	0.45
2:I:3078:ARG:HG3	2:I:3079:THR:H	1.81	0.45
2:I:3888:LEU:HD13	2:I:3891:LEU:HD12	1.97	0.45
2:I:4702:ASP:O	2:I:4705:VAL:HG12	2.16	0.45
2:I:5011:TRP:CE2	2:I:5015:GLN:NE2	2.85	0.45
2:A:779:PRO:HB2	2:A:791:PHE:CZ	2.48	0.45
2:A:2434:GLY:O	2:A:2508:ARG:NE	2.45	0.45
2:A:2514:ASN:ND2	2:A:2516:ASP:HB3	2.31	0.45
2:A:2694:GLU:HG2	2:A:2695:LEU:N	2.31	0.45
2:A:2767:ALA:HB3	2:A:2857:PRO:HG3	1.97	0.45
2:A:2880:GLU:O	2:A:2884:ASN:HB2	2.16	0.45
2:A:3409:TYR:OH	2:A:3441:ILE:HG21	2.16	0.45
2:A:4574:ASN:ND2	2:A:4810:ALA:HA	2.31	0.45
2:G:652:ARG:HD2	2:G:750:LEU:HD13	1.97	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:816:LEU:HD21	2:G:851:PHE:HE2	1.82	0.45
2:G:2585:THR:HA	2:G:2588:ARG:NH1	2.31	0.45
2:G:4701:TRP:HA	2:G:4704:LEU:HD23	1.97	0.45
2:G:4863:TYR:HB2	2:G:4874:MET:CE	2.46	0.45
2:B:929:LEU:HA	2:B:932:LEU:HG	1.99	0.45
2:B:988:LEU:HD12	2:B:988:LEU:HA	1.80	0.45
2:B:1008:SER:O	2:B:1019:PRO:HA	2.15	0.45
2:B:2736:ASP:OD2	2:B:2738:ARG:NH2	2.47	0.45
2:B:3365:LEU:HA	2:B:3368:ARG:HG2	1.98	0.45
2:B:3771:HIS:CD2	2:B:3812:VAL:HG22	2.52	0.45
2:B:4067:LYS:HE3	2:B:4169:SER:HB2	1.97	0.45
2:B:4683:PHE:CE2	2:B:5017:ARG:HG3	2.51	0.45
2:I:581:ASN:OD1	2:I:582:HIS:N	2.49	0.45
2:I:2487:GLN:NE2	2:I:2545:GLU:OE2	2.44	0.45
2:I:2883:HIS:NE2	2:I:2906:VAL:O	2.39	0.45
2:A:887:ILE:HG12	2:A:958:THR:HG23	1.99	0.45
2:A:1270:LEU:HD21	2:A:1591:CYS:SG	2.56	0.45
2:A:2153:MET:HA	2:A:2153:MET:HE2	1.99	0.45
2:A:2558:VAL:O	2:A:2562:ILE:HG13	2.15	0.45
2:A:3545:THR:O	2:A:3548:GLU:N	2.49	0.45
2:A:3771:HIS:CD2	2:A:3812:VAL:HG22	2.52	0.45
2:A:3903:LEU:HD22	2:A:3915:ILE:HG21	1.98	0.45
2:A:4066:LEU:HD11	2:A:4173:TYR:HB3	1.98	0.45
2:A:4210:VAL:O	2:A:4214:LYS:HG2	2.17	0.45
2:A:4217:PHE:O	2:A:4220:ASP:N	2.50	0.45
2:A:4699:GLY:O	2:A:4703:ARG:HG3	2.15	0.45
2:A:4701:TRP:HA	2:A:4704:LEU:HD23	1.97	0.45
2:G:849:THR:O	2:G:851:PHE:N	2.50	0.45
2:G:1464:PHE:CE1	2:G:1553:PHE:HD2	2.34	0.45
2:G:2750[A]:LYS:O	2:G:2935:TYR:OH	2.33	0.45
2:G:3274:LEU:HD21	2:G:3319:ILE:HD12	1.98	0.45
2:G:3771:HIS:CD2	2:G:3812:VAL:HG22	2.52	0.45
2:G:3888:LEU:HD13	2:G:3891:LEU:HD12	1.97	0.45
2:G:4156:HIS:HA	2:G:4161:ARG:HH12	1.80	0.45
2:G:4217:PHE:O	2:G:4220:ASP:N	2.49	0.45
2:B:78:LEU:HD23	2:B:82:LEU:HD23	1.99	0.45
2:B:130:LYS:HD2	2:B:130:LYS:HA	1.69	0.45
2:B:1420:ASN:OD1	2:B:1421:ARG:N	2.47	0.45
2:B:1552:VAL:HG21	2:B:1562:ILE:CD1	2.47	0.45
2:B:2641:LEU:O	2:B:2644:LEU:HG	2.17	0.45
2:B:3078:ARG:CG	2:B:3079:THR:H	2.30	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3320:LEU:O	2:B:3324:VAL:HG23	2.16	0.45
2:B:3419:ASN:OD1	2:B:3422:HIS:HB3	2.16	0.45
2:B:3545:THR:O	2:B:3548:GLU:N	2.49	0.45
2:B:4150:LEU:HD23	2:B:4150:LEU:HA	1.82	0.45
2:I:215:THR:H	2:I:218:HIS:CE1	2.34	0.45
2:I:451:TYR:CZ	2:I:474:ARG:HD2	2.50	0.45
2:I:1433:TYR:CE1	2:I:1573:MET:HB2	2.52	0.45
2:I:2534:ALA:HB3	2:I:2588:ARG:HE	1.81	0.45
2:I:3096:PHE:HD2	2:I:3161:VAL:HG13	1.81	0.45
2:I:3455:GLU:OE1	2:I:3510:ILE:HD11	2.16	0.45
2:I:4034:ASN:OD1	2:I:4040:ILE:HB	2.15	0.45
2:I:4221:VAL:HG23	2:I:4230:LYS:HZ3	1.82	0.45
2:I:4863:TYR:HB2	2:I:4874:MET:CE	2.46	0.45
1:F:9:PRO:HD3	2:A:736:HIS:HB2	1.98	0.45
2:A:1047:LEU:O	2:A:1049:TYR:N	2.49	0.45
2:A:2458:ARG:HA	2:A:2510:TYR:CE1	2.51	0.45
2:A:2585:THR:HA	2:A:2588:ARG:NH1	2.31	0.45
2:A:2959:PHE:O	2:A:2963:LEU:HD23	2.16	0.45
2:A:3389:GLU:OE2	2:A:3392:LEU:HD12	2.17	0.45
2:A:3877:ASP:OD2	2:A:3877:ASP:N	2.48	0.45
2:A:3946:GLN:O	2:A:3949:ARG:HD3	2.17	0.45
2:A:4080:TYR:HD2	2:A:4096:ALA:HA	1.81	0.45
2:G:123:THR:OG1	2:G:134:ASP:OD2	2.34	0.45
2:G:1059:GLU:OE1	2:G:1059:GLU:N	2.49	0.45
2:G:1987:SER:OG	2:G:1987:SER:O	2.34	0.45
2:G:2534:ALA:HB3	2:G:2588:ARG:HE	1.81	0.45
2:G:3944:GLU:HG3	2:G:3947:GLY:H	1.81	0.45
2:G:4232:GLU:HG2	2:G:5022:PHE:CZ	2.51	0.45
2:G:4574:ASN:ND2	2:G:4810:ALA:HA	2.31	0.45
2:B:2558:VAL:O	2:B:2562:ILE:HG13	2.15	0.45
2:B:3873:LYS:HE3	2:B:3873:LYS:HB3	1.45	0.45
2:B:4062:PHE:HZ	2:B:4143:VAL:HG11	1.80	0.45
2:I:206:CYS:HB2	2:I:271:GLY:HA3	1.99	0.45
2:I:2207:VAL:HG22	2:I:2232:CYS:SG	2.57	0.45
2:I:2419:GLY:HA2	2:I:2422:ILE:HB	1.98	0.45
2:I:3419:ASN:OD1	2:I:3422:HIS:HB3	2.16	0.45
2:I:4021:LYS:HA	2:I:4142:ASN:HD21	1.81	0.45
2:A:909:ASN:ND2	2:A:912:SER:OG	2.50	0.45
2:A:2300:SER:C	2:A:2302:LEU:H	2.18	0.45
2:A:3320:LEU:O	2:A:3324:VAL:HG23	2.16	0.45
2:A:4576:ILE:HD12	2:A:4646:LEU:HD12	1.97	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:5011:TRP:CE2	2:A:5015:GLN:NE2	2.85	0.45
2:G:134:ASP:N	2:G:134:ASP:OD1	2.50	0.45
2:G:929:LEU:HA	2:G:932:LEU:HG	1.99	0.45
2:G:2159:LEU:HD13	2:G:2203:MET:SD	2.56	0.45
2:G:2487:GLN:NE2	2:G:2545:GLU:OE2	2.44	0.45
2:G:3078:ARG:CG	2:G:3079:THR:H	2.30	0.45
2:G:3320:LEU:O	2:G:3324:VAL:HG23	2.16	0.45
2:G:3409:TYR:OH	2:G:3441:ILE:HG21	2.16	0.45
2:G:4844:LEU:HD11	2:G:4924:VAL:HG13	1.97	0.45
2:G:4986:ALA:HB1	2:G:4990:PHE:CZ	2.52	0.45
2:B:134:ASP:N	2:B:134:ASP:OD1	2.50	0.45
2:B:849:THR:O	2:B:851:PHE:N	2.50	0.45
2:B:1047:LEU:O	2:B:1049:TYR:N	2.49	0.45
2:B:1433:TYR:CE2	2:B:1578:ALA:HB2	2.51	0.45
2:B:1577:ALA:O	2:B:1584:ARG:NE	2.45	0.45
2:B:2419:GLY:HA2	2:B:2422:ILE:HB	1.98	0.45
2:B:3284:TRP:HA	2:B:3287:ARG:HH21	1.81	0.45
2:B:3326:ASN:OD1	2:B:3329:ILE:HB	2.16	0.45
2:B:3904:ARG:HB2	2:B:3914:ASN:ND2	2.31	0.45
2:B:3958:ALA:O	2:B:3962:PHE:CD2	2.70	0.45
2:B:4183:ILE:HD12	2:B:4183:ILE:HA	1.89	0.45
2:B:4730:ASP:OD1	2:B:4730:ASP:N	2.50	0.45
2:B:4986:ALA:HB1	2:B:4990:PHE:CZ	2.52	0.45
2:B:5011:TRP:CE2	2:B:5015:GLN:NE2	2.85	0.45
2:I:233:ILE:HD12	2:I:242:ARG:HB3	1.98	0.45
2:I:652:ARG:HD2	2:I:750:LEU:HD13	1.97	0.45
2:I:909:ASN:ND2	2:I:912:SER:OG	2.50	0.45
2:I:1577:ALA:O	2:I:1584:ARG:NE	2.45	0.45
2:I:2913:ALA:HA	2:I:2916:LYS:HB2	1.99	0.45
2:I:3045:LYS:O	2:I:3049:LEU:HG	2.15	0.45
2:I:3903:LEU:HD22	2:I:3915:ILE:HG21	1.98	0.45
2:I:3904:ARG:HB2	2:I:3914:ASN:ND2	2.31	0.45
2:I:3958:ALA:O	2:I:3962:PHE:CD2	2.70	0.45
2:I:4066:LEU:HD11	2:I:4173:TYR:HB3	1.98	0.45
2:I:4156:HIS:HA	2:I:4161:ARG:HH12	1.80	0.45
2:I:4175:ARG:HG2	2:I:4175:ARG:HH21	1.82	0.45
2:A:659:TYR:HB2	2:A:1017:ARG:HH12	1.81	0.45
2:A:929:LEU:HA	2:A:932:LEU:HG	1.99	0.45
2:A:1552:VAL:HG21	2:A:1562:ILE:CD1	2.47	0.45
2:A:3206:LEU:HA	2:A:3246:LEU:CD2	2.42	0.45
2:A:3372:VAL:HG11	2:A:3397:GLU:OE1	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:206:CYS:HB2	2:G:271:GLY:HA3	1.99	0.45
2:G:779:PRO:HB2	2:G:791:PHE:CZ	2.48	0.45
2:G:1552:VAL:HG21	2:G:1562:ILE:CD1	2.47	0.45
2:G:1575:LEU:HD23	2:G:1575:LEU:HA	1.76	0.45
2:G:2018:GLU:OE1	2:G:2018:GLU:N	2.49	0.45
2:G:2641:LEU:O	2:G:2644:LEU:HG	2.17	0.45
2:G:3916:ILE:O	2:G:3920:VAL:HG23	2.17	0.45
2:G:4097:MET:HE1	2:G:4108:ILE:HA	1.99	0.45
2:G:4120:ASN:OD1	2:G:4122:MET:HB3	2.17	0.45
2:G:4201:ASN:HB3	2:G:4993:MET:HE3	1.99	0.45
2:G:4843:LEU:HB2	2:I:4823:LEU:CD1	2.45	0.45
2:B:38:ALA:HB2	2:B:65:CYS:SG	2.57	0.45
2:B:181:HIS:HA	2:B:198:THR:HG21	1.99	0.45
2:B:839:LEU:O	2:B:1194:LEU:HD22	2.17	0.45
2:B:1270:LEU:HD21	2:B:1591:CYS:SG	2.56	0.45
2:B:2233:CYS:SG	2:B:2270:SER:OG	2.56	0.45
2:B:2238:TYR:HA	2:B:2241:ARG:NH2	2.31	0.45
2:B:2531:ARG:HA	2:B:2588:ARG:NH2	2.26	0.45
2:B:2767:ALA:HB3	2:B:2857:PRO:HG3	1.97	0.45
2:B:3389:GLU:OE2	2:B:3392:LEU:HD12	2.17	0.45
2:I:134:ASP:OD1	2:I:134:ASP:N	2.50	0.45
2:I:943:ASP:OD1	2:I:945:LYS:HE3	2.16	0.45
2:I:2514:ASN:ND2	2:I:2516:ASP:HB3	2.31	0.45
2:I:3771:HIS:CD2	2:I:3812:VAL:HG22	2.52	0.45
2:I:4210:VAL:O	2:I:4214:LYS:HG2	2.17	0.45
2:A:38:ALA:HB2	2:A:65:CYS:SG	2.57	0.45
2:A:232:THR:OG1	2:A:248:GLU:OE2	2.30	0.45
2:A:2954:ARG:HB3	2:A:2957:PHE:CB	2.46	0.45
2:A:3078:ARG:CG	2:A:3079:THR:H	2.30	0.45
2:A:3889:GLN:HG3	2:A:3967:GLU:HG2	1.98	0.45
2:G:181:HIS:HA	2:G:198:THR:HG21	1.99	0.45
2:G:215:THR:H	2:G:218:HIS:CE1	2.34	0.45
2:G:909:ASN:ND2	2:G:912:SER:OG	2.50	0.45
2:G:1270:LEU:HD21	2:G:1591:CYS:SG	2.56	0.45
2:G:2478:THR:HB	2:G:2487:GLN:H	1.82	0.45
2:G:2816:MET:CE	2:G:2823:ILE:HG12	2.47	0.45
2:G:3553:LEU:HD13	2:G:3596:VAL:HG13	1.98	0.45
2:G:3994:HIS:CE1	2:G:3998:HIS:CE1	3.05	0.45
2:G:4217:PHE:CD2	2:G:4234:PHE:CD2	3.05	0.45
2:G:4923:PHE:HA	2:G:4927:ILE:HD11	1.99	0.45
2:B:123:THR:OG1	2:B:134:ASP:OD2	2.34	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:392:ARG:HD2	2:B:393:CYS:H	1.82	0.45
2:B:2153:MET:HE2	2:B:2153:MET:HA	1.98	0.45
2:B:2207:VAL:HG22	2:B:2232:CYS:SG	2.57	0.45
2:B:2585:THR:HA	2:B:2588:ARG:NH1	2.31	0.45
2:B:2913:ALA:HA	2:B:2916:LYS:HB2	1.99	0.45
2:B:2976:HIS:O	2:B:2980:VAL:HG23	2.16	0.45
2:B:4217:PHE:O	2:B:4220:ASP:N	2.49	0.45
2:B:4823:LEU:CD1	2:I:4843:LEU:HD22	2.46	0.45
2:I:1147:ASP:HB3	2:I:1164:LEU:HD11	1.98	0.45
2:I:1270:LEU:HD21	2:I:1591:CYS:SG	2.56	0.45
2:I:1276:THR:O	2:I:1282:SER:OG	2.22	0.45
2:I:1433:TYR:CE2	2:I:1578:ALA:HB2	2.51	0.45
2:I:1464:PHE:CE1	2:I:1553:PHE:HD2	2.34	0.45
2:I:1552:VAL:HG21	2:I:1562:ILE:CD1	2.47	0.45
2:I:2693:GLN:N	2:I:2996:LYS:HZ1	2.15	0.45
2:I:3389:GLU:OE2	2:I:3392:LEU:HD12	2.17	0.45
2:I:4730:ASP:N	2:I:4730:ASP:OD1	2.50	0.45
2:A:181:HIS:HA	2:A:198:THR:HG21	1.99	0.45
2:A:426:ARG:HB3	2:A:431:PRO:HA	1.99	0.45
2:A:774:ASP:OD1	2:A:774:ASP:N	2.47	0.45
2:A:1221:GLU:OE1	2:A:1221:GLU:N	2.50	0.45
2:A:2694:GLU:O	2:A:2698:MET:HG3	2.17	0.45
2:A:2816:MET:CE	2:A:2823:ILE:HG12	2.47	0.45
2:A:2883:HIS:NE2	2:A:2906:VAL:O	2.39	0.45
2:A:2902:HIS:HB2	2:A:2905:LEU:HB2	1.99	0.45
2:A:2951:ILE:H	2:A:2951:ILE:HD12	1.82	0.45
2:A:3904:ARG:HB2	2:A:3914:ASN:ND2	2.31	0.45
2:G:38:ALA:HB2	2:G:65:CYS:SG	2.57	0.45
2:G:883:ALA:HA	2:G:904:HIS:CE1	2.52	0.45
2:G:2207:VAL:HG22	2:G:2232:CYS:SG	2.57	0.45
2:G:2624:ARG:O	2:G:2627:VAL:HB	2.17	0.45
2:G:2902:HIS:HB2	2:G:2905:LEU:HB2	1.99	0.45
2:G:3054:VAL:HG22	2:G:3131:TYR:CG	2.52	0.45
2:G:3958:ALA:O	2:G:3962:PHE:CD2	2.70	0.45
2:G:4080:TYR:HD2	2:G:4096:ALA:HA	1.81	0.45
2:B:816:LEU:HD21	2:B:851:PHE:HE2	1.82	0.45
2:B:2954:ARG:HB3	2:B:2957:PHE:CB	2.46	0.45
2:B:3531:ASP:OD1	2:B:3532:LEU:N	2.46	0.45
2:B:4021:LYS:HA	2:B:4142:ASN:HD21	1.81	0.45
2:B:4175:ARG:HH21	2:B:4175:ARG:HG2	1.82	0.45
2:B:4217:PHE:CD2	2:B:4234:PHE:CD2	3.05	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:839:LEU:O	2:I:1194:LEU:HD22	2.17	0.45
2:I:929:LEU:HA	2:I:932:LEU:HG	1.99	0.45
2:I:1942:LEU:HD23	2:I:1942:LEU:HA	1.83	0.45
2:I:2894:LEU:O	2:I:2898:GLY:N	2.48	0.45
2:I:2902:HIS:HB2	2:I:2905:LEU:HB2	1.99	0.45
2:I:3946:GLN:O	2:I:3949:ARG:HD3	2.17	0.45
2:I:4574:ASN:ND2	2:I:4810:ALA:HA	2.31	0.45
2:A:3400:VAL:HG13	2:A:3403:ARG:HH22	1.81	0.44
2:A:3994:HIS:CE1	2:A:3998:HIS:CE1	3.05	0.44
2:A:4157:ASP:N	2:A:4161:ARG:NH1	2.62	0.44
2:A:4730:ASP:OD1	2:A:4730:ASP:N	2.50	0.44
2:G:2215:LEU:HD23	2:G:2215:LEU:HA	1.87	0.44
2:G:2976:HIS:O	2:G:2980:VAL:HG23	2.16	0.44
2:G:3365:LEU:HA	2:G:3368:ARG:HG2	1.98	0.44
2:G:5011:TRP:CE2	2:G:5015:GLN:NE2	2.85	0.44
2:B:783:PHE:HB2	2:B:787:VAL:HG21	1.99	0.44
2:B:928:THR:O	2:B:931:THR:OG1	2.30	0.44
2:B:2478:THR:HB	2:B:2487:GLN:H	1.82	0.44
2:B:2694:GLU:O	2:B:2698:MET:HG3	2.17	0.44
2:B:3368:ARG:HH11	2:B:3368:ARG:HG3	1.83	0.44
2:B:4210:VAL:O	2:B:4214:LYS:HG2	2.17	0.44
2:I:123:THR:OG1	2:I:134:ASP:OD2	2.34	0.44
2:I:2159:LEU:HD13	2:I:2203:MET:SD	2.56	0.44
2:I:2273:LEU:HD21	2:I:2331:TYR:HA	2.00	0.44
2:I:4083:ASP:HB2	2:I:4122:MET:CE	2.47	0.44
2:I:4217:PHE:CD2	2:I:4234:PHE:CD2	3.05	0.44
2:I:4923:PHE:HA	2:I:4927:ILE:HD11	1.99	0.44
1:F:52:LYS:HE2	1:F:52:LYS:HB3	1.76	0.44
2:A:123:THR:OG1	2:A:134:ASP:OD2	2.34	0.44
2:A:682:LEU:HA	2:A:782:SER:O	2.18	0.44
2:A:959:TYR:CG	2:A:960:MET:N	2.85	0.44
2:A:2238:TYR:HA	2:A:2241:ARG:NH2	2.31	0.44
2:A:2960:LEU:HD22	2:A:3042:LEU:HD11	1.98	0.44
2:A:4120:ASN:OD1	2:A:4122:MET:HB3	2.17	0.44
2:A:4217:PHE:CD2	2:A:4234:PHE:CD2	3.05	0.44
2:A:4953:ASP:HA	2:A:4956:THR:HG22	2.00	0.44
2:G:78:LEU:HD23	2:G:82:LEU:HD23	1.98	0.44
2:G:924:MET:O	2:G:928:THR:OG1	2.30	0.44
2:G:2821:TRP:CZ3	2:G:2874:MET:HB2	2.53	0.44
2:G:2880:GLU:HG2	2:G:2908:TYR:HB3	1.97	0.44
2:G:2883:HIS:NE2	2:G:2906:VAL:O	2.39	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:3419:ASN:OD1	2:G:3422:HIS:HB3	2.16	0.44
2:G:3873:LYS:HB3	2:G:3873:LYS:HE3	1.45	0.44
2:G:3951:PHE:CD2	2:G:4012:LEU:HD21	2.49	0.44
2:G:4210:VAL:O	2:G:4214:LYS:HG2	2.17	0.44
2:B:883:ALA:HA	2:B:904:HIS:CE1	2.52	0.44
2:B:1221:GLU:N	2:B:1221:GLU:OE1	2.50	0.44
2:B:2299:VAL:HG11	2:B:2356:LEU:HG	1.99	0.44
2:B:2960:LEU:HD22	2:B:3042:LEU:HD11	1.98	0.44
2:B:3352:GLU:OE1	2:B:3352:GLU:N	2.41	0.44
2:B:3877:ASP:OD2	2:B:3877:ASP:N	2.48	0.44
2:I:38:ALA:HB2	2:I:65:CYS:SG	2.57	0.44
2:I:378:LEU:HD23	2:I:378:LEU:HA	1.85	0.44
2:I:590:LEU:HG	2:I:599:VAL:HG11	1.99	0.44
2:I:783:PHE:HB2	2:I:787:VAL:HG21	2.00	0.44
2:I:959:TYR:CG	2:I:960:MET:N	2.85	0.44
2:I:2694:GLU:O	2:I:2698:MET:HG3	2.17	0.44
2:I:3158:LEU:O	2:I:3162:GLN:NE2	2.50	0.44
2:I:3274:LEU:HD21	2:I:3319:ILE:HD12	1.98	0.44
2:A:78:LEU:HD23	2:A:82:LEU:HD23	1.99	0.44
2:A:353:SER:O	2:A:355:LEU:N	2.51	0.44
2:A:816:LEU:HD21	2:A:851:PHE:HE2	1.82	0.44
2:A:849:THR:O	2:A:851:PHE:N	2.50	0.44
2:A:2207:VAL:HG22	2:A:2232:CYS:SG	2.57	0.44
2:A:2750[A]:LYS:O	2:A:2935:TYR:OH	2.33	0.44
2:A:4083:ASP:HB2	2:A:4122:MET:CE	2.47	0.44
2:A:4843:LEU:HB2	2:G:4823:LEU:CD1	2.44	0.44
2:G:2299:VAL:HG11	2:G:2356:LEU:HG	1.99	0.44
2:G:2821:TRP:CD1	2:G:2939:ARG:HG3	2.53	0.44
2:G:3171:SER:O	2:G:3174:SER:OG	2.32	0.44
2:G:3372:VAL:HG11	2:G:3397:GLU:OE1	2.17	0.44
2:G:3788:GLY:HA2	2:G:3835:LEU:HD22	1.99	0.44
2:G:3946:GLN:O	2:G:3949:ARG:HD3	2.17	0.44
2:B:682:LEU:HA	2:B:782:SER:O	2.18	0.44
2:B:959:TYR:CG	2:B:960:MET:N	2.85	0.44
2:B:3575:LEU:HD21	2:I:1208:VAL:HG12	2.00	0.44
2:B:3951:PHE:CD2	2:B:4012:LEU:HD21	2.49	0.44
2:B:4232:GLU:HG2	2:B:5022:PHE:CZ	2.51	0.44
2:B:4923:PHE:HA	2:B:4927:ILE:HD11	1.99	0.44
2:I:426:ARG:HB3	2:I:431:PRO:HA	1.99	0.44
2:I:849:THR:O	2:I:851:PHE:N	2.50	0.44
2:I:1221:GLU:OE1	2:I:1221:GLU:N	2.50	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:1469:VAL:HG23	2:I:1492:CYS:HB3	1.99	0.44
2:I:2641:LEU:O	2:I:2644:LEU:HG	2.17	0.44
2:I:2749:GLU:OE2	2:I:2749:GLU:N	2.46	0.44
2:I:3037:GLU:OE2	2:I:3078:ARG:NH2	2.50	0.44
2:I:3409:TYR:OH	2:I:3441:ILE:HG21	2.16	0.44
2:I:3916:ILE:O	2:I:3920:VAL:HG23	2.17	0.44
2:I:4080:TYR:HD2	2:I:4096:ALA:HA	1.81	0.44
2:A:1433:TYR:CE1	2:A:1573:MET:HB2	2.52	0.44
2:A:1433:TYR:CE2	2:A:1578:ALA:HB2	2.51	0.44
2:A:1733:GLU:OE1	2:A:1733:GLU:N	2.51	0.44
2:A:2285:GLU:HG2	2:A:2286:LEU:N	2.33	0.44
2:A:2478:THR:HB	2:A:2487:GLN:H	1.82	0.44
2:A:2821:TRP:CD1	2:A:2939:ARG:HG3	2.53	0.44
2:A:4214:LYS:HD3	2:A:4234:PHE:CZ	2.53	0.44
2:A:4986:ALA:HB1	2:A:4990:PHE:CZ	2.52	0.44
2:G:2285:GLU:HG2	2:G:2286:LEU:N	2.33	0.44
2:G:4148:THR:O	2:G:4151:SER:N	2.51	0.44
2:B:1942:LEU:HD23	2:B:1942:LEU:HA	1.83	0.44
2:B:2534:ALA:HB3	2:B:2588:ARG:HE	1.81	0.44
2:B:2624:ARG:NH2	2:B:2906:VAL:HG21	2.32	0.44
2:B:2821:TRP:CZ3	2:B:2874:MET:HB2	2.53	0.44
2:B:2902:HIS:HB2	2:B:2905:LEU:HB2	1.99	0.44
2:B:3206:LEU:HA	2:B:3246:LEU:CD2	2.42	0.44
2:B:3409:TYR:OH	2:B:3441:ILE:HG21	2.16	0.44
2:B:3984:ARG:NH1	2:B:3986:TRP:HB2	2.29	0.44
2:I:2121:PHE:CZ	2:I:3701:LEU:HB2	2.53	0.44
2:I:2439:GLU:O	2:I:2443:ILE:HG12	2.18	0.44
2:I:2531:ARG:HA	2:I:2588:ARG:NH2	2.26	0.44
2:I:2821:TRP:CZ3	2:I:2874:MET:HB2	2.53	0.44
2:I:3525:CYS:HA	2:I:3595:ARG:HH12	1.81	0.44
2:I:3994:HIS:CE1	2:I:3998:HIS:CE1	3.05	0.44
2:I:5012:LYS:O	2:I:5015:GLN:N	2.51	0.44
2:A:783:PHE:HB2	2:A:787:VAL:HG21	2.00	0.44
2:A:3054:VAL:HG22	2:A:3131:TYR:CG	2.52	0.44
2:A:3071:LEU:O	2:A:3075:LEU:N	2.51	0.44
2:A:4175:ARG:HA	2:A:4178:LEU:HG	2.00	0.44
2:A:4923:PHE:HA	2:A:4927:ILE:HD11	1.99	0.44
2:G:426:ARG:HB3	2:G:431:PRO:HA	1.99	0.44
2:G:971:ASP:N	2:G:971:ASP:OD1	2.51	0.44
2:G:1221:GLU:N	2:G:1221:GLU:OE1	2.50	0.44
2:G:2273:LEU:HD21	2:G:2331:TYR:HA	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:2647:HIS:O	2:G:2651:CYS:N	2.34	0.44
2:G:2912:THR:O	2:G:2916:LYS:N	2.46	0.44
2:G:3050:VAL:HG13	2:G:3050:VAL:O	2.17	0.44
2:G:3143:LEU:O	2:G:3147:ILE:HG12	2.18	0.44
2:G:3534:MET:HA	2:G:3537:LYS:HD3	1.99	0.44
2:G:3889:GLN:HG3	2:G:3967:GLU:HG2	1.98	0.44
2:G:4112:LEU:O	2:G:4115:SER:OG	2.29	0.44
2:B:418:LEU:HD13	2:B:493:ARG:HB3	1.98	0.44
2:B:3054:VAL:HG22	2:B:3131:TYR:CG	2.52	0.44
2:B:3889:GLN:HG3	2:B:3967:GLU:HG2	1.98	0.44
2:B:3994:HIS:CE1	2:B:3998:HIS:CE1	3.05	0.44
2:B:4214:LYS:HD3	2:B:4234:PHE:CZ	2.53	0.44
2:B:4844:LEU:HD11	2:B:4924:VAL:HG13	1.97	0.44
2:B:5012:LYS:O	2:B:5015:GLN:N	2.51	0.44
2:I:392:ARG:HD2	2:I:393:CYS:H	1.82	0.44
2:I:883:ALA:HA	2:I:904:HIS:CE1	2.52	0.44
2:I:2467:VAL:HG12	2:I:2521:VAL:HG22	2.00	0.44
2:I:2750[B]:LYS:O	2:I:2935:TYR:OH	2.31	0.44
2:I:3143:LEU:O	2:I:3147:ILE:HG12	2.18	0.44
2:I:3531:ASP:OD1	2:I:3532:LEU:N	2.46	0.44
2:I:4967:TYR:HD2	2:I:4968:PHE:CE1	2.36	0.44
1:F:26:TYR:HD1	1:F:26:TYR:H	1.66	0.44
2:A:418:LEU:HD13	2:A:493:ARG:HB3	1.98	0.44
2:A:2475:GLN:OE1	2:A:2493:SER:OG	2.17	0.44
2:A:2534:ALA:HB3	2:A:2588:ARG:HE	1.81	0.44
2:A:4080:TYR:CE2	2:A:4095:LYS:HB3	2.53	0.44
2:G:1469:VAL:HG23	2:G:1492:CYS:HB3	1.99	0.44
2:G:1820:ARG:HD2	2:G:1820:ARG:HA	1.69	0.44
2:G:3835:LEU:HD12	2:G:3880:PHE:CZ	2.53	0.44
2:G:3903:LEU:HD22	2:G:3915:ILE:HG21	1.98	0.44
2:G:4175:ARG:HH21	2:G:4175:ARG:HG2	1.82	0.44
2:B:104:GLY:N	2:B:150:MET:HB3	2.30	0.44
2:B:317:ARG:HH12	2:B:323:LEU:HA	1.83	0.44
2:B:931:THR:O	2:B:935:LEU:HD13	2.17	0.44
2:B:1433:TYR:CE1	2:B:1573:MET:HB2	2.52	0.44
2:B:1987:SER:OG	2:B:1987:SER:O	2.34	0.44
2:B:2672:LEU:HD23	2:B:2672:LEU:HA	1.85	0.44
2:B:3037:GLU:OE2	2:B:3078:ARG:NH2	2.50	0.44
2:B:4863:TYR:HB2	2:B:4874:MET:CE	2.47	0.44
2:B:4967:TYR:HD2	2:B:4968:PHE:CE1	2.35	0.44
2:I:181:HIS:HA	2:I:198:THR:HG21	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:2960:LEU:HD22	2:I:3042:LEU:HD11	1.98	0.44
2:I:3019:SER:O	2:I:3036:LYS:NZ	2.42	0.44
2:I:3534:MET:HA	2:I:3537:LYS:HD3	1.99	0.44
2:I:3835:LEU:HD12	2:I:3880:PHE:CZ	2.53	0.44
2:A:67:PHE:HE1	2:A:111:HIS:CD2	2.36	0.44
2:A:378:LEU:HD23	2:A:378:LEU:HA	1.85	0.44
2:A:2624:ARG:O	2:A:2627:VAL:HB	2.18	0.44
2:A:2913:ALA:HA	2:A:2916:LYS:HB2	1.99	0.44
2:A:3534:MET:HA	2:A:3537:LYS:HD3	1.99	0.44
2:A:3958:ALA:O	2:A:3962:PHE:CD2	2.70	0.44
2:A:4737:ILE:HA	2:A:4740:LEU:HD12	1.98	0.44
2:G:459:LEU:HD23	2:G:460:GLN:N	2.33	0.44
2:G:783:PHE:HB2	2:G:787:VAL:HG21	2.00	0.44
2:G:887:ILE:HG12	2:G:958:THR:HG23	1.98	0.44
2:G:1208:VAL:HG12	2:I:3575:LEU:HD21	2.00	0.44
2:G:1433:TYR:CE1	2:G:1573:MET:HB2	2.52	0.44
2:G:1577:ALA:O	2:G:1584:ARG:NE	2.45	0.44
2:G:3983:SER:HB3	2:G:3985:LEU:HD22	2.00	0.44
2:G:4238:CYS:HB3	2:G:4989:MET:HG3	2.00	0.44
2:G:4737:ILE:HA	2:G:4740:LEU:HD12	1.98	0.44
2:B:1733:GLU:OE1	2:B:1733:GLU:N	2.51	0.44
2:B:2273:LEU:HD21	2:B:2331:TYR:HA	2.00	0.44
2:B:4080:TYR:CE2	2:B:4095:LYS:HB3	2.53	0.44
2:I:130:LYS:HA	2:I:130:LYS:HD2	1.69	0.44
2:I:317:ARG:HH12	2:I:323:LEU:HA	1.83	0.44
2:I:515:TRP:CH2	2:I:555:GLU:HG2	2.53	0.44
2:I:971:ASP:OD1	2:I:971:ASP:N	2.51	0.44
2:I:2821:TRP:CD1	2:I:2939:ARG:HG3	2.53	0.44
2:I:3788:GLY:HA2	2:I:3835:LEU:HD22	1.99	0.44
2:I:3889:GLN:HG3	2:I:3967:GLU:HG2	1.98	0.44
2:I:4200:THR:O	2:I:4204:GLN:HG3	2.18	0.44
2:I:4238:CYS:HB3	2:I:4989:MET:HG3	2.00	0.44
2:A:459:LEU:HD23	2:A:460:GLN:N	2.33	0.44
2:A:2381:GLU:HA	2:A:2384:ILE:HG13	1.99	0.44
2:A:2439:GLU:O	2:A:2443:ILE:HG12	2.18	0.44
2:A:2467:VAL:HG12	2:A:2521:VAL:HG22	2.00	0.44
2:A:3368:ARG:HG3	2:A:3368:ARG:HH11	1.82	0.44
2:A:4148:THR:O	2:A:4151:SER:N	2.51	0.44
2:A:4863:TYR:HB2	2:A:4874:MET:CE	2.46	0.44
2:G:317:ARG:HH12	2:G:323:LEU:HA	1.83	0.44
2:G:636:ASN:HB2	2:G:702:TRP:CZ3	2.53	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:931:THR:O	2:G:935:LEU:HD13	2.17	0.44
2:G:2121:PHE:CZ	2:G:3701:LEU:HB2	2.53	0.44
2:G:2694:GLU:O	2:G:2698:MET:HG3	2.17	0.44
2:G:3842:LEU:HD12	2:G:3954:ALA:HB2	2.00	0.44
2:G:4999:ASP:OD2	2:G:5002:GLU:N	2.49	0.44
2:B:426:ARG:HB3	2:B:431:PRO:HA	1.99	0.44
2:B:459:LEU:HD23	2:B:460:GLN:N	2.33	0.44
2:B:909:ASN:ND2	2:B:912:SER:OG	2.50	0.44
2:B:1147:ASP:HB3	2:B:1164:LEU:HD11	1.98	0.44
2:B:2285:GLU:HG2	2:B:2286:LEU:N	2.33	0.44
2:B:2475:GLN:OE1	2:B:2493:SER:OG	2.17	0.44
2:B:3071:LEU:O	2:B:3075:LEU:N	2.51	0.44
2:B:4066:LEU:HD11	2:B:4173:TYR:HB3	1.98	0.44
2:I:418:LEU:HD13	2:I:493:ARG:HB3	1.98	0.44
2:I:816:LEU:HD21	2:I:851:PHE:HE2	1.82	0.44
2:I:1634:LEU:HD12	2:I:1634:LEU:HA	1.79	0.44
2:I:2478:THR:HB	2:I:2487:GLN:H	1.82	0.44
2:I:3054:VAL:HG22	2:I:3131:TYR:CG	2.52	0.44
2:I:3368:ARG:NH2	2:I:3401:LEU:HA	2.33	0.44
2:I:3877:ASP:N	2:I:3877:ASP:OD2	2.48	0.44
2:I:3983:SER:HB3	2:I:3985:LEU:HD22	2.00	0.44
2:A:839:LEU:O	2:A:1194:LEU:HD22	2.17	0.44
2:A:3143:LEU:O	2:A:3147:ILE:HG12	2.18	0.44
2:A:3835:LEU:HD12	2:A:3880:PHE:CZ	2.53	0.44
2:A:4967:TYR:HD2	2:A:4968:PHE:CE1	2.35	0.44
2:G:590:LEU:HG	2:G:599:VAL:HG11	1.99	0.44
2:G:959:TYR:CG	2:G:960:MET:N	2.85	0.44
2:G:2439:GLU:O	2:G:2443:ILE:HG12	2.18	0.44
2:G:3368:ARG:HH11	2:G:3368:ARG:HG3	1.82	0.44
2:G:3389:GLU:OE2	2:G:3392:LEU:HD12	2.17	0.44
2:G:4083:ASP:HB2	2:G:4122:MET:HE3	1.99	0.44
2:G:4967:TYR:HD2	2:G:4968:PHE:CE1	2.35	0.44
2:B:206:CYS:HB2	2:B:271:GLY:HA3	1.99	0.44
2:B:3668:SER:O	2:B:3668:SER:OG	2.27	0.44
2:B:3835:LEU:HD12	2:B:3880:PHE:CZ	2.53	0.44
2:B:4157:ASP:N	2:B:4161:ARG:NH1	2.62	0.44
2:B:4892:ARG:HA	2:I:4921:PHE:CE2	2.53	0.44
2:I:667:MET:HG3	2:I:743:VAL:HG22	2.00	0.44
2:I:2624:ARG:O	2:I:2627:VAL:HB	2.17	0.44
2:I:2625:ARG:HA	2:I:2628:PHE:CE1	2.53	0.44
2:I:2976:HIS:O	2:I:2980:VAL:HG23	2.16	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:3323:ILE:HG23	2:I:3335:MET:HE1	2.00	0.44
2:I:3998:HIS:O	2:I:3999:MET:C	2.57	0.44
2:A:25:SER:OG	2:A:32:GLN:NE2	2.51	0.43
2:A:206:CYS:HB2	2:A:271:GLY:HA3	1.99	0.43
2:A:1152:MET:HB3	2:A:1223:PHE:CE2	2.53	0.43
2:A:3050:VAL:O	2:A:3050:VAL:HG13	2.17	0.43
2:A:3436:ARG:NE	2:A:3598:GLU:OE1	2.30	0.43
2:G:232:THR:OG1	2:G:248:GLU:OE2	2.30	0.43
2:G:353:SER:O	2:G:355:LEU:N	2.51	0.43
2:G:418:LEU:HD13	2:G:493:ARG:HB3	1.98	0.43
2:G:2381:GLU:HA	2:G:2384:ILE:HG13	1.99	0.43
2:G:4157:ASP:N	2:G:4161:ARG:NH1	2.62	0.43
2:B:590:LEU:HG	2:B:599:VAL:HG11	1.99	0.43
2:B:615:ARG:NH2	2:B:2168:VAL:HG21	2.28	0.43
2:B:2816:MET:CE	2:B:2823:ILE:HG12	2.47	0.43
2:B:3143:LEU:O	2:B:3147:ILE:HG12	2.18	0.43
2:B:3372:VAL:HG11	2:B:3397:GLU:OE1	2.17	0.43
2:B:3534:MET:HA	2:B:3537:LYS:HD3	1.99	0.43
2:B:3788:GLY:HA2	2:B:3835:LEU:HD22	1.99	0.43
2:B:4953:ASP:HA	2:B:4956:THR:HG22	2.00	0.43
2:I:636:ASN:HB2	2:I:702:TRP:CZ3	2.53	0.43
2:I:931:THR:O	2:I:935:LEU:HD13	2.17	0.43
2:I:2299:VAL:HG11	2:I:2356:LEU:HG	1.99	0.43
2:I:2816:MET:CE	2:I:2823:ILE:HG12	2.47	0.43
2:I:3859:VAL:O	2:I:3859:VAL:HG13	2.18	0.43
2:A:392:ARG:HD2	2:A:393:CYS:H	1.82	0.43
2:A:636:ASN:HB2	2:A:702:TRP:CZ3	2.53	0.43
2:A:883:ALA:HA	2:A:904:HIS:CE1	2.52	0.43
2:A:1208:VAL:HG12	2:G:3575:LEU:HD21	2.00	0.43
2:A:2273:LEU:HD21	2:A:2331:TYR:HA	2.00	0.43
2:A:3859:VAL:O	2:A:3859:VAL:HG13	2.18	0.43
2:G:392:ARG:HD2	2:G:393:CYS:H	1.82	0.43
2:G:682:LEU:HA	2:G:782:SER:O	2.18	0.43
2:G:935:LEU:HD11	2:G:991:ASN:ND2	2.33	0.43
2:G:1972:ASN:OD1	2:G:1973:GLN:N	2.51	0.43
2:G:2159:LEU:O	2:G:2163:ARG:HG2	2.18	0.43
2:G:3527:PRO:HA	2:G:3530:GLN:NE2	2.32	0.43
2:G:3825:GLU:HG3	2:G:3827:GLY:H	1.83	0.43
2:G:4083:ASP:HB2	2:G:4122:MET:CE	2.47	0.43
2:B:607:CYS:SG	2:B:1672:ALA:HB1	2.58	0.43
2:B:1469:VAL:HG23	2:B:1492:CYS:HB3	1.99	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2599:GLN:O	2:B:2603:ILE:HG13	2.18	0.43
2:B:3018:LEU:HA	2:B:3036:LYS:HE3	2.01	0.43
2:B:3368:ARG:NH2	2:B:3401:LEU:HA	2.33	0.43
2:B:3946:GLN:O	2:B:3949:ARG:HD3	2.17	0.43
2:B:4201:ASN:HB3	2:B:4993:MET:CE	2.48	0.43
2:I:67:PHE:HE1	2:I:111:HIS:CD2	2.36	0.43
2:I:462:GLU:HG2	2:I:463:GLU:OE2	2.18	0.43
2:I:682:LEU:HA	2:I:782:SER:O	2.18	0.43
2:I:2285:GLU:HG2	2:I:2286:LEU:N	2.33	0.43
2:I:2928:LYS:O	2:I:2932:MET:HG2	2.18	0.43
2:I:4080:TYR:CE2	2:I:4095:LYS:HB3	2.53	0.43
2:I:4686:LEU:HD12	2:I:4690:GLU:OE2	2.18	0.43
2:I:4953:ASP:HA	2:I:4956:THR:HG22	2.00	0.43
2:I:4986:ALA:HB1	2:I:4990:PHE:CZ	2.52	0.43
2:A:819:GLU:OE1	2:A:819:GLU:N	2.51	0.43
2:A:3007:ASN:HA	2:A:3070:ILE:HD11	2.00	0.43
2:A:3842:LEU:HD12	2:A:3954:ALA:HB2	1.99	0.43
2:A:3983:SER:HB3	2:A:3985:LEU:HD22	2.00	0.43
2:A:4983:HIS:HB2	3:A:5301:ATP:N6	2.10	0.43
2:A:5027:CYS:H	2:A:5030:LYS:HB3	1.83	0.43
2:G:839:LEU:O	2:G:1194:LEU:HD22	2.17	0.43
2:G:2531:ARG:HA	2:G:2588:ARG:NH2	2.26	0.43
2:G:2960:LEU:HD22	2:G:3042:LEU:HD11	1.98	0.43
2:G:3046:LEU:O	2:G:3050:VAL:N	2.49	0.43
2:G:3269:VAL:O	2:G:3273:THR:N	2.51	0.43
2:G:3368:ARG:NH2	2:G:3401:LEU:HA	2.33	0.43
2:G:4175:ARG:HA	2:G:4178:LEU:HG	2.00	0.43
2:G:4978:HIS:CE1	2:G:4982:GLU:OE1	2.71	0.43
2:G:5027:CYS:H	2:G:5030:LYS:HB3	1.84	0.43
2:B:67:PHE:HE1	2:B:111:HIS:CD2	2.36	0.43
2:B:860:GLN:OE1	2:B:860:GLN:N	2.52	0.43
2:B:2821:TRP:CD1	2:B:2939:ARG:HG3	2.53	0.43
2:B:2825:LYS:HG2	2:B:2935:TYR:CZ	2.54	0.43
2:B:3215:ALA:O	2:B:3221:THR:OG1	2.20	0.43
2:B:3641:LEU:HD13	2:B:3641:LEU:HA	1.91	0.43
2:B:3983:SER:HB3	2:B:3985:LEU:HD22	2.00	0.43
2:B:4083:ASP:HB2	2:B:4122:MET:CE	2.47	0.43
2:B:5027:CYS:H	2:B:5030:LYS:HB3	1.84	0.43
2:I:887:ILE:HG12	2:I:958:THR:HG23	1.98	0.43
2:I:2825:LYS:HG2	2:I:2935:TYR:CZ	2.53	0.43
2:I:2967:MET:HE1	2:I:3045:LYS:HB3	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:3545:THR:O	2:I:3549:VAL:HG22	2.18	0.43
2:I:4148:THR:O	2:I:4151:SER:N	2.51	0.43
2:I:5027:CYS:H	2:I:5030:LYS:HB3	1.84	0.43
2:A:515:TRP:CH2	2:A:555:GLU:HG2	2.53	0.43
2:A:590:LEU:HG	2:A:599:VAL:HG11	1.99	0.43
2:A:607:CYS:SG	2:A:1672:ALA:HB1	2.58	0.43
2:A:860:GLN:OE1	2:A:860:GLN:N	2.52	0.43
2:A:935:LEU:HD11	2:A:991:ASN:ND2	2.33	0.43
2:A:1720:LEU:O	2:A:1722:SER:N	2.47	0.43
2:A:2159:LEU:O	2:A:2163:ARG:HG2	2.18	0.43
2:A:2616:PRO:HD3	2:A:2650:ARG:HH22	1.84	0.43
2:A:2821:TRP:CZ3	2:A:2874:MET:HB2	2.53	0.43
2:A:3018:LEU:HA	2:A:3036:LYS:HE3	2.00	0.43
2:A:3283:ARG:NH2	2:A:3287:ARG:HH22	2.10	0.43
2:A:4586:PRO:HG3	2:A:4629:TYR:CE1	2.54	0.43
1:H:23:VAL:CG2	1:H:105:ASN:H	2.32	0.43
1:O:26:TYR:H	1:O:26:TYR:HD1	1.66	0.43
2:G:231:LEU:O	2:G:260:TRP:NE1	2.45	0.43
2:G:551:LEU:HD23	2:G:551:LEU:HA	1.83	0.43
2:G:2625:ARG:HA	2:G:2628:PHE:CE1	2.53	0.43
2:G:2913:ALA:HA	2:G:2916:LYS:HB2	1.99	0.43
2:G:3071:LEU:O	2:G:3075:LEU:N	2.51	0.43
2:G:4058:ILE:HA	2:G:4061:PHE:CD1	2.54	0.43
2:G:5012:LYS:O	2:G:5015:GLN:N	2.51	0.43
2:B:462:GLU:HG2	2:B:463:GLU:OE2	2.18	0.43
2:B:2439:GLU:O	2:B:2443:ILE:HG12	2.18	0.43
2:B:2616:PRO:HD3	2:B:2650:ARG:HH22	1.84	0.43
2:B:3007:ASN:HA	2:B:3070:ILE:HD11	2.00	0.43
2:B:3768:SER:HA	2:B:3771:HIS:HB3	2.01	0.43
2:B:4983:HIS:HB2	3:B:5301:ATP:N6	2.10	0.43
2:I:607:CYS:SG	2:I:1672:ALA:HB1	2.58	0.43
2:I:1738:LEU:HB3	2:I:1963:GLU:OE2	2.19	0.43
2:I:2298:VAL:HG21	2:I:2334:PHE:CD1	2.54	0.43
2:I:2641:LEU:HD11	2:I:2698:MET:SD	2.59	0.43
2:I:3050:VAL:O	2:I:3050:VAL:HG13	2.17	0.43
2:I:3070:ILE:O	2:I:3074:SER:N	2.46	0.43
2:I:3352:GLU:OE1	2:I:3352:GLU:N	2.41	0.43
2:I:3368:ARG:HG3	2:I:3368:ARG:HH11	1.83	0.43
2:I:3374:ALA:O	2:I:3377:GLU:N	2.51	0.43
2:I:4058:ILE:HA	2:I:4061:PHE:CD1	2.54	0.43
2:A:931:THR:O	2:A:935:LEU:HD13	2.17	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:1297:PHE:HE1	2:A:1548:LEU:HD12	1.84	0.43
2:A:1732:SER:O	2:A:1732:SER:OG	2.30	0.43
2:A:3283:ARG:O	2:A:3287:ARG:NE	2.52	0.43
2:A:3368:ARG:NH2	2:A:3401:LEU:HA	2.33	0.43
2:A:4058:ILE:HA	2:A:4061:PHE:CD1	2.54	0.43
2:A:4184:MET:HB3	2:A:5021:PHE:HA	2.01	0.43
2:G:515:TRP:CH2	2:G:555:GLU:HG2	2.53	0.43
2:G:1733:GLU:N	2:G:1733:GLU:OE1	2.51	0.43
2:G:1738:LEU:HB3	2:G:1963:GLU:OE2	2.19	0.43
2:G:3158:LEU:O	2:G:3162:GLN:NE2	2.50	0.43
2:G:3545:THR:O	2:G:3549:VAL:HG22	2.18	0.43
2:G:4201:ASN:HB3	2:G:4993:MET:CE	2.48	0.43
2:G:4586:PRO:HG3	2:G:4629:TYR:CE1	2.54	0.43
2:G:4939:ALA:O	2:G:4943:LEU:HD23	2.19	0.43
2:G:4953:ASP:HA	2:G:4956:THR:HG22	2.00	0.43
2:B:353:SER:O	2:B:355:LEU:N	2.51	0.43
2:B:935:LEU:HD11	2:B:991:ASN:ND2	2.33	0.43
2:B:1972:ASN:OD1	2:B:1973:GLN:N	2.52	0.43
2:B:2624:ARG:O	2:B:2627:VAL:HB	2.18	0.43
2:B:2625:ARG:HA	2:B:2628:PHE:CE1	2.54	0.43
2:B:2641:LEU:HD11	2:B:2698:MET:SD	2.58	0.43
2:B:2743:LEU:HD12	2:B:2743:LEU:H	1.83	0.43
2:B:3545:THR:O	2:B:3549:VAL:HG22	2.18	0.43
2:B:3825:GLU:HG3	2:B:3827:GLY:H	1.83	0.43
2:I:2024:PRO:HB2	2:I:2026:ASP:OD1	2.18	0.43
2:I:3036:LYS:HD2	2:I:3078:ARG:HD3	2.01	0.43
2:I:3380:ARG:NH2	2:I:3388:GLU:OE1	2.52	0.43
2:I:3842:LEU:HD12	2:I:3954:ALA:HB2	1.99	0.43
2:A:743:VAL:HG11	2:A:801:LYS:HB2	2.01	0.43
2:A:867:LEU:HG	2:A:929:LEU:HD13	2.00	0.43
2:A:870:ILE:O	2:A:874:LEU:HG	2.19	0.43
2:A:949:ASN:HB3	2:A:974:HIS:HE2	1.84	0.43
2:A:1137:GLU:OE1	2:A:1137:GLU:N	2.52	0.43
2:A:1469:VAL:HG23	2:A:1492:CYS:HB3	1.99	0.43
2:A:1738:LEU:HB3	2:A:1963:GLU:OE2	2.19	0.43
2:A:3637:ARG:HD2	2:A:3638:MET:H	1.84	0.43
2:A:4200:THR:O	2:A:4204:GLN:HG3	2.18	0.43
2:A:4939:ALA:O	2:A:4943:LEU:HD23	2.18	0.43
1:J:23:VAL:CG2	1:J:105:ASN:H	2.32	0.43
1:O:23:VAL:CG2	1:O:105:ASN:H	2.32	0.43
2:G:431:PRO:HB3	2:G:507:ALA:HA	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:819:GLU:N	2:G:819:GLU:OE1	2.51	0.43
2:G:2599:GLN:O	2:G:2603:ILE:HG13	2.18	0.43
2:G:2825:LYS:HG2	2:G:2935:TYR:CZ	2.53	0.43
2:G:3036:LYS:HD2	2:G:3078:ARG:HD3	2.01	0.43
2:G:3540:TYR:CE2	2:G:3549:VAL:HG11	2.54	0.43
2:B:664:PHE:CE1	2:B:779:PRO:HB3	2.53	0.43
2:B:819:GLU:OE1	2:B:819:GLU:N	2.51	0.43
2:B:1137:GLU:OE1	2:B:1137:GLU:N	2.52	0.43
2:B:2121:PHE:CZ	2:B:3701:LEU:HB2	2.53	0.43
2:B:2467:VAL:HG12	2:B:2521:VAL:HG22	2.00	0.43
2:B:3380:ARG:NH2	2:B:3388:GLU:OE1	2.52	0.43
2:B:3903:LEU:HD23	2:B:3903:LEU:HA	1.80	0.43
2:I:459:LEU:HD23	2:I:460:GLN:N	2.33	0.43
2:I:870:ILE:O	2:I:874:LEU:HG	2.19	0.43
2:I:1288:PHE:HA	2:I:1553:PHE:CD1	2.54	0.43
2:I:1733:GLU:OE1	2:I:1733:GLU:N	2.51	0.43
2:I:2599:GLN:O	2:I:2603:ILE:HG13	2.19	0.43
2:I:3018:LEU:HA	2:I:3036:LYS:HE3	2.01	0.43
2:I:3071:LEU:O	2:I:3075:LEU:N	2.51	0.43
2:I:4201:ASN:HB3	2:I:4993:MET:CE	2.48	0.43
2:I:4935:LEU:HD23	2:I:4935:LEU:HA	1.86	0.43
2:I:4983:HIS:HB2	3:I:5301:ATP:N6	2.10	0.43
2:A:134:ASP:OD1	2:A:134:ASP:N	2.50	0.43
2:A:954:LYS:HD2	2:A:967:PRO:HG2	2.00	0.43
2:A:1477:GLY:HA2	2:A:1483:VAL:HA	2.01	0.43
2:A:2478:THR:HG22	2:A:2487:GLN:HB2	2.01	0.43
2:A:2825:LYS:HG2	2:A:2935:TYR:CZ	2.54	0.43
2:A:3540:TYR:CE2	2:A:3549:VAL:HG11	2.54	0.43
2:A:3545:THR:O	2:A:3549:VAL:HG22	2.18	0.43
2:A:3788:GLY:HA2	2:A:3835:LEU:HD22	1.99	0.43
2:A:3825:GLU:HG3	2:A:3827:GLY:H	1.83	0.43
2:A:4180:ARG:NE	2:A:4981:GLU:OE1	2.40	0.43
2:A:4201:ASN:HB3	2:A:4993:MET:CE	2.48	0.43
2:A:4686:LEU:HD12	2:A:4690:GLU:OE2	2.18	0.43
2:G:667:MET:HG3	2:G:743:VAL:HG22	2.00	0.43
2:G:2024:PRO:HB2	2:G:2026:ASP:OD1	2.18	0.43
2:G:2616:PRO:HD3	2:G:2650:ARG:HH22	1.84	0.43
2:G:3998:HIS:O	2:G:3999:MET:C	2.57	0.43
2:G:4646:LEU:HD23	2:G:4646:LEU:HA	1.85	0.43
2:B:431:PRO:HB3	2:B:507:ALA:HA	2.00	0.43
2:B:1738:LEU:HB3	2:B:1963:GLU:OE2	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2024:PRO:HB2	2:B:2026:ASP:OD1	2.18	0.43
2:B:2758:PHE:HB3	2:B:2809:ILE:HD13	2.00	0.43
2:B:3540:TYR:CE2	2:B:3549:VAL:HG11	2.54	0.43
2:B:3842:LEU:HD12	2:B:3954:ALA:HB2	2.00	0.43
2:B:4148:THR:O	2:B:4151:SER:N	2.51	0.43
2:B:4175:ARG:HA	2:B:4178:LEU:HG	2.00	0.43
2:B:4200:THR:O	2:B:4204:GLN:HG3	2.18	0.43
2:B:4978:HIS:CE1	2:B:4982:GLU:OE1	2.72	0.43
2:I:353:SER:O	2:I:355:LEU:N	2.51	0.43
2:I:2116:LEU:O	2:I:2120:MET:HG3	2.19	0.43
2:I:2758:PHE:HB3	2:I:2809:ILE:HD13	2.00	0.43
2:I:3283:ARG:O	2:I:3287:ARG:NE	2.52	0.43
2:I:3873:LYS:HE3	2:I:3873:LYS:HB3	1.45	0.43
2:I:3901:ASN:HA	2:I:3904:ARG:HH21	1.81	0.43
2:I:4183:ILE:HD12	2:I:4183:ILE:HA	1.88	0.43
2:I:4231:MET:CG	2:I:4959:PHE:HE2	2.32	0.43
2:I:4978:HIS:CE1	2:I:4982:GLU:OE1	2.71	0.43
1:F:23:VAL:CG2	1:F:105:ASN:H	2.32	0.43
2:A:179:TYR:CD2	2:A:197:GLN:HB3	2.54	0.43
2:A:664:PHE:CE1	2:A:779:PRO:HB3	2.54	0.43
2:A:988:LEU:HD12	2:A:988:LEU:HA	1.79	0.43
2:A:2091:PRO:HB2	2:A:2092:GLN:H	1.69	0.43
2:A:2599:GLN:O	2:A:2603:ILE:HG13	2.18	0.43
2:A:2743:LEU:H	2:A:2743:LEU:HD12	1.83	0.43
2:A:2758:PHE:HB3	2:A:2809:ILE:HD13	2.00	0.43
2:A:3445:TRP:HA	2:A:3451:PHE:CD1	2.54	0.43
2:A:3527:PRO:HA	2:A:3530:GLN:NE2	2.32	0.43
2:A:3614:LYS:HE3	2:A:3614:LYS:HB2	1.76	0.43
2:A:3924:LEU:HD23	2:A:3924:LEU:HA	1.89	0.43
2:A:4201:ASN:HB3	2:A:4993:MET:HE3	2.00	0.43
2:G:67:PHE:HE1	2:G:111:HIS:CD2	2.36	0.43
2:G:207:SER:N	2:G:334:MET:HE1	2.32	0.43
2:G:664:PHE:CE1	2:G:779:PRO:HB3	2.54	0.43
2:G:1137:GLU:OE1	2:G:1137:GLU:N	2.52	0.43
2:G:2116:LEU:O	2:G:2120:MET:HG3	2.19	0.43
2:G:2758:PHE:HB3	2:G:2809:ILE:HD13	2.00	0.43
2:G:4231:MET:CG	2:G:4959:PHE:HE2	2.32	0.43
2:G:4849:TYR:HE1	2:I:4578:LEU:CD1	2.28	0.43
2:B:515:TRP:CH2	2:B:555:GLU:HG2	2.53	0.43
2:B:867:LEU:HG	2:B:929:LEU:HD13	2.00	0.43
2:B:924:MET:O	2:B:928:THR:OG1	2.30	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:983:THR:HB	2:B:1055:PRO:HG3	2.01	0.43
2:B:3171:SER:O	2:B:3174:SER:OG	2.32	0.43
2:B:3283:ARG:NH2	2:B:3287:ARG:HH22	2.10	0.43
2:B:3637:ARG:HD2	2:B:3638:MET:H	1.84	0.43
2:B:4058:ILE:HA	2:B:4061:PHE:CD1	2.54	0.43
2:B:4686:LEU:HD12	2:B:4690:GLU:OE2	2.18	0.43
2:I:1985:THR:O	2:I:1986:MET:HB3	2.19	0.43
2:I:2124:LEU:HD12	2:I:2124:LEU:HA	1.87	0.43
2:I:2460:LEU:HG	2:I:2461:VAL:HG13	2.01	0.43
2:I:2743:LEU:H	2:I:2743:LEU:HD12	1.83	0.43
2:I:3269:VAL:O	2:I:3273:THR:N	2.51	0.43
2:I:3436:ARG:NE	2:I:3598:GLU:OE1	2.30	0.43
2:I:3540:TYR:CE2	2:I:3549:VAL:HG11	2.54	0.43
2:I:4175:ARG:HA	2:I:4178:LEU:HG	2.00	0.43
2:I:4184:MET:HB3	2:I:5021:PHE:HA	2.01	0.43
2:A:2121:PHE:CZ	2:A:3701:LEU:HB2	2.53	0.43
2:A:2298:VAL:HG21	2:A:2334:PHE:CD1	2.54	0.43
2:A:2625:ARG:HA	2:A:2628:PHE:CE1	2.53	0.43
2:A:2860:PRO:HG3	2:A:2929:PHE:HE1	1.84	0.43
2:A:3008:GLN:HG2	2:A:3012:ASN:ND2	2.34	0.43
2:A:3157:ILE:O	2:A:3162:GLN:HG3	2.19	0.43
2:A:3281:LEU:N	2:A:3282:PRO:HD2	2.34	0.43
2:A:3641:LEU:HD13	2:A:3644:LEU:HD12	2.01	0.43
2:A:3951:PHE:CD2	2:A:4012:LEU:HD21	2.49	0.43
2:A:4921:PHE:CE2	2:G:4892:ARG:HA	2.54	0.43
2:G:462:GLU:HG2	2:G:463:GLU:OE2	2.18	0.43
2:G:607:CYS:SG	2:G:1672:ALA:HB1	2.58	0.43
2:G:2362:GLU:HB2	2:G:2369:ARG:NH2	2.34	0.43
2:G:2467:VAL:HG12	2:G:2521:VAL:HG22	2.00	0.43
2:G:2928:LYS:O	2:G:2932:MET:HG2	2.18	0.43
2:G:3007:ASN:HA	2:G:3070:ILE:HD11	2.00	0.43
2:G:3070:ILE:O	2:G:3074:SER:N	2.46	0.43
2:G:4093:PHE:CG	2:G:4123:ILE:HD11	2.54	0.43
2:G:4214:LYS:HD3	2:G:4234:PHE:CZ	2.53	0.43
2:G:4686:LEU:HD12	2:G:4690:GLU:OE2	2.18	0.43
2:B:667:MET:HG3	2:B:743:VAL:HG22	2.01	0.43
2:B:2018:GLU:OE1	2:B:2018:GLU:N	2.49	0.43
2:B:2116:LEU:O	2:B:2120:MET:HG3	2.19	0.43
2:B:2928:LYS:O	2:B:2932:MET:HG2	2.18	0.43
2:B:3050:VAL:HG13	2:B:3050:VAL:O	2.17	0.43
2:B:3998:HIS:O	2:B:3999:MET:C	2.57	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:25:SER:OG	2:I:32:GLN:NE2	2.51	0.43
2:I:104:GLY:N	2:I:150:MET:HB3	2.30	0.43
2:I:867:LEU:HG	2:I:929:LEU:HD13	2.00	0.43
2:I:2259:GLU:HB3	2:I:2297:LYS:HZ1	1.84	0.43
2:I:3132:THR:HG23	2:I:3136:LEU:HB2	2.01	0.43
2:I:3157:ILE:O	2:I:3162:GLN:HG3	2.19	0.43
2:I:3768:SER:HA	2:I:3771:HIS:HB3	2.01	0.43
2:I:4093:PHE:CG	2:I:4123:ILE:HD11	2.54	0.43
2:I:4586:PRO:HG3	2:I:4629:TYR:CE1	2.54	0.43
2:I:4922:PHE:O	2:I:4927:ILE:HG12	2.19	0.43
2:A:233:ILE:O	2:A:257:ARG:NH1	2.41	0.43
2:A:1972:ASN:OD1	2:A:1973:GLN:N	2.51	0.43
2:A:2024:PRO:HB2	2:A:2026:ASP:OD1	2.18	0.43
2:A:2116:LEU:O	2:A:2120:MET:HG3	2.19	0.43
2:A:2452:ARG:NH2	2:B:144:GLU:OE2	2.45	0.43
2:A:3069:HIS:NE2	2:A:3138:PRO:HB2	2.34	0.43
2:A:3751:VAL:O	2:A:3756:LYS:NZ	2.37	0.43
2:A:4995:LEU:HD21	2:A:5007:GLU:HG3	2.01	0.43
2:G:867:LEU:HG	2:G:929:LEU:HD13	2.00	0.43
2:G:954:LYS:HD2	2:G:967:PRO:HG2	2.00	0.43
2:G:1152:MET:HB3	2:G:1223:PHE:CE2	2.53	0.43
2:G:2298:VAL:HG21	2:G:2334:PHE:CD1	2.54	0.43
2:G:2478:THR:HG22	2:G:2487:GLN:HB2	2.01	0.43
2:G:3018:LEU:HA	2:G:3036:LYS:HE3	2.01	0.43
2:G:3157:ILE:O	2:G:3162:GLN:HG3	2.19	0.43
2:G:4080:TYR:CE2	2:G:4095:LYS:HB3	2.53	0.43
2:G:4200:THR:O	2:G:4204:GLN:HG3	2.18	0.43
2:B:1288:PHE:HA	2:B:1553:PHE:CD1	2.54	0.43
2:B:2381:GLU:HA	2:B:2384:ILE:HG13	1.99	0.43
2:B:3158:LEU:O	2:B:3162:GLN:NE2	2.50	0.43
2:B:3847:PHE:HZ	2:B:3943:ILE:HD11	1.84	0.43
2:B:4586:PRO:HG3	2:B:4629:TYR:CE1	2.54	0.43
2:I:144:GLU:HG3	2:I:175:SER:HA	2.01	0.43
2:I:207:SER:H	2:I:334:MET:HE1	1.82	0.43
2:I:431:PRO:HB3	2:I:507:ALA:HA	2.00	0.43
2:I:1152:MET:HB3	2:I:1223:PHE:CE2	2.53	0.43
2:I:3007:ASN:HA	2:I:3070:ILE:HD11	2.00	0.43
2:I:3016:TYR:O	2:I:3019:SER:OG	2.23	0.43
2:I:3281:LEU:N	2:I:3282:PRO:HD2	2.34	0.43
2:I:3372:VAL:HG11	2:I:3397:GLU:OE1	2.17	0.43
2:I:3525:CYS:HA	2:I:3595:ARG:NH1	2.34	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:3825:GLU:HG3	2:I:3827:GLY:H	1.83	0.43
2:I:3923:LEU:HD11	2:I:3962:PHE:CZ	2.54	0.43
2:I:4214:LYS:HD3	2:I:4234:PHE:CZ	2.53	0.43
2:I:4939:ALA:O	2:I:4943:LEU:HD23	2.19	0.43
2:I:4995:LEU:HD21	2:I:5007:GLU:HG3	2.01	0.43
2:A:973:SER:HA	2:A:976:ARG:HH22	1.84	0.42
2:A:1288:PHE:HA	2:A:1553:PHE:CD1	2.54	0.42
2:A:2460:LEU:HG	2:A:2461:VAL:HG13	2.01	0.42
2:A:2712:PRO:HB3	2:A:2956:ALA:HB2	2.01	0.42
2:A:3342:ALA:O	2:A:3345:ILE:HG22	2.19	0.42
2:A:4241:THR:HA	2:A:4244:GLU:OE1	2.19	0.42
2:G:743:VAL:HG11	2:G:801:LYS:HB2	2.01	0.42
2:G:870:ILE:O	2:G:874:LEU:HG	2.19	0.42
2:G:983:THR:HB	2:G:1055:PRO:HG3	2.01	0.42
2:G:1248:VAL:HG23	2:G:1597:VAL:O	2.19	0.42
2:G:1595:LEU:HD12	2:G:1595:LEU:HA	1.78	0.42
2:G:2001:PRO:O	2:G:2005:GLN:HG3	2.19	0.42
2:G:2460:LEU:HG	2:G:2461:VAL:HG13	2.01	0.42
2:G:2860:PRO:HG3	2:G:2929:PHE:HE1	1.84	0.42
2:G:3069:HIS:NE2	2:G:3138:PRO:HB2	2.34	0.42
2:G:3281:LEU:N	2:G:3282:PRO:HD2	2.34	0.42
2:G:3445:TRP:HA	2:G:3451:PHE:CD1	2.54	0.42
2:G:3641:LEU:HD13	2:G:3644:LEU:HD12	2.01	0.42
2:G:3859:VAL:O	2:G:3859:VAL:HG13	2.18	0.42
2:G:4180:ARG:NE	2:G:4981:GLU:OE1	2.40	0.42
2:G:4922:PHE:O	2:G:4927:ILE:HG12	2.19	0.42
2:B:25:SER:OG	2:B:32:GLN:NE2	2.51	0.42
2:B:971:ASP:N	2:B:971:ASP:OD1	2.51	0.42
2:B:1297:PHE:HE1	2:B:1548:LEU:HD12	1.83	0.42
2:B:1595:LEU:HD12	2:B:1595:LEU:HA	1.78	0.42
2:I:179:TYR:CD2	2:I:197:GLN:HB3	2.54	0.42
2:I:2362:GLU:HB2	2:I:2369:ARG:NH2	2.34	0.42
2:I:2478:THR:HG22	2:I:2487:GLN:HB2	2.01	0.42
2:I:3008:GLN:HG2	2:I:3012:ASN:ND2	2.34	0.42
2:I:3637:ARG:HD2	2:I:3638:MET:H	1.84	0.42
2:I:4112:LEU:O	2:I:4115:SER:OG	2.29	0.42
2:A:104:GLY:N	2:A:150:MET:HB3	2.30	0.42
2:A:163:VAL:HG23	2:A:163:VAL:O	2.19	0.42
2:A:317:ARG:HH12	2:A:323:LEU:HA	1.83	0.42
2:A:431:PRO:HB3	2:A:507:ALA:HA	2.00	0.42
2:A:462:GLU:HG2	2:A:463:GLU:OE2	2.18	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:1442:GLY:O	2:A:1557:THR:OG1	2.30	0.42
2:A:2579:VAL:O	2:A:2583:LEU:HG	2.19	0.42
2:A:2928:LYS:O	2:A:2932:MET:HG2	2.18	0.42
2:A:4093:PHE:CG	2:A:4123:ILE:HD11	2.54	0.42
2:A:4978:HIS:CE1	2:A:4982:GLU:OE1	2.71	0.42
2:A:4984:ASN:C	2:A:4986:ALA:H	2.23	0.42
2:A:4999:ASP:OD2	2:A:5002:GLU:N	2.49	0.42
2:A:5012:LYS:O	2:A:5015:GLN:N	2.51	0.42
2:G:860:GLN:OE1	2:G:860:GLN:N	2.52	0.42
2:G:2579:VAL:O	2:G:2583:LEU:HG	2.19	0.42
2:G:2641:LEU:HD11	2:G:2698:MET:SD	2.59	0.42
2:G:2711:PRO:HA	2:G:2712:PRO:HD3	1.89	0.42
2:G:3283:ARG:NH2	2:G:3287:ARG:HH22	2.10	0.42
2:G:3901:ASN:HA	2:G:3904:ARG:HH21	1.81	0.42
2:G:3923:LEU:HD11	2:G:3962:PHE:CZ	2.54	0.42
2:B:973:SER:HA	2:B:976:ARG:HH22	1.85	0.42
2:B:2159:LEU:O	2:B:2163:ARG:HG2	2.18	0.42
2:B:2298:VAL:HG21	2:B:2334:PHE:CD1	2.54	0.42
2:B:2460:LEU:HG	2:B:2461:VAL:HG13	2.01	0.42
2:B:2477:PRO:HD2	2:B:2536:LEU:HD11	2.01	0.42
2:B:3157:ILE:O	2:B:3162:GLN:HG3	2.19	0.42
2:B:3281:LEU:N	2:B:3282:PRO:HD2	2.34	0.42
2:B:3859:VAL:O	2:B:3859:VAL:HG13	2.18	0.42
2:B:4231:MET:CG	2:B:4959:PHE:HE2	2.32	0.42
2:I:163:VAL:HG23	2:I:163:VAL:O	2.19	0.42
2:I:819:GLU:OE1	2:I:819:GLU:N	2.51	0.42
2:I:860:GLN:OE1	2:I:860:GLN:N	2.52	0.42
2:I:988:LEU:HD12	2:I:988:LEU:HA	1.79	0.42
2:I:1137:GLU:OE1	2:I:1137:GLU:N	2.52	0.42
2:I:1290:ARG:HD2	2:I:1549:PHE:CD2	2.55	0.42
2:I:3170:CYS:SG	2:I:3240:CYS:HB2	2.60	0.42
2:I:3542:LEU:O	2:I:3542:LEU:HD23	2.19	0.42
2:I:3641:LEU:HD13	2:I:3644:LEU:HD12	2.00	0.42
2:A:1595:LEU:HD12	2:A:1595:LEU:HA	1.78	0.42
2:A:2233:CYS:SG	2:A:2270:SER:OG	2.56	0.42
2:A:2653:LYS:O	2:A:2657:LEU:HB2	2.20	0.42
2:A:2692:ASP:CG	2:A:2695:LEU:HB2	2.40	0.42
2:A:3036:LYS:HD2	2:A:3078:ARG:HD3	2.01	0.42
2:A:3274:LEU:HB3	2:A:3275:PRO:HD3	2.01	0.42
2:A:4238:CYS:HB3	2:A:4989:MET:HG3	2.00	0.42
2:A:4884:LEU:HD11	2:B:4914:VAL:HG11	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:973:SER:HA	2:G:976:ARG:HH22	1.84	0.42
2:G:1288:PHE:HA	2:G:1553:PHE:CD1	2.54	0.42
2:G:1297:PHE:HE1	2:G:1548:LEU:HD12	1.83	0.42
2:G:1586:ASN:ND2	2:G:1590:GLN:OE1	2.53	0.42
2:G:2692:ASP:CG	2:G:2695:LEU:HB2	2.40	0.42
2:G:3170:CYS:SG	2:G:3240:CYS:HB2	2.60	0.42
2:G:3283:ARG:O	2:G:3287:ARG:NE	2.52	0.42
2:G:3374:ALA:O	2:G:3377:GLU:N	2.51	0.42
2:G:3380:ARG:NH2	2:G:3388:GLU:OE1	2.52	0.42
2:G:3531:ASP:OD1	2:G:3532:LEU:N	2.46	0.42
2:G:3696:ASP:CG	2:G:3773:ARG:HE	2.23	0.42
2:G:3847:PHE:HZ	2:G:3943:ILE:HD11	1.84	0.42
2:G:4713:SER:HB3	2:G:4775:TYR:OH	2.19	0.42
2:G:4933:GLN:O	2:G:4937:ILE:HG12	2.20	0.42
2:B:498:THR:HA	2:B:553:ARG:HH22	1.84	0.42
2:B:636:ASN:HB2	2:B:702:TRP:CZ3	2.53	0.42
2:B:743:VAL:HG11	2:B:801:LYS:HB2	2.01	0.42
2:B:954:LYS:HD2	2:B:967:PRO:HG2	2.00	0.42
2:B:1152:MET:HB3	2:B:1223:PHE:CE2	2.53	0.42
2:B:1290:ARG:HD2	2:B:1549:PHE:CD2	2.55	0.42
2:B:1469:VAL:CG2	2:B:1492:CYS:HB3	2.50	0.42
2:B:1985:THR:O	2:B:1986:MET:HB3	2.19	0.42
2:B:2822:THR:OG1	2:B:2938:THR:OG1	2.36	0.42
2:B:3283:ARG:O	2:B:3287:ARG:NE	2.52	0.42
2:B:3991:GLY:O	2:B:3995:VAL:HG23	2.19	0.42
2:B:4184:MET:HB3	2:B:5021:PHE:HA	2.01	0.42
2:I:935:LEU:HD11	2:I:991:ASN:ND2	2.33	0.42
2:I:1420:ASN:OD1	2:I:1421:ARG:N	2.47	0.42
2:I:1972:ASN:OD1	2:I:1973:GLN:N	2.51	0.42
2:I:2381:GLU:HA	2:I:2384:ILE:CG1	2.49	0.42
2:I:2381:GLU:HA	2:I:2384:ILE:HG13	1.99	0.42
2:I:2616:PRO:HD3	2:I:2650:ARG:HH22	1.84	0.42
2:I:2714:TYR:HE2	2:I:2716:ASP:OD1	2.02	0.42
2:A:144:GLU:HG3	2:A:175:SER:HA	2.01	0.42
2:A:710:ASP:N	2:A:710:ASP:OD1	2.53	0.42
2:A:983:THR:HG22	2:A:987:ARG:HH12	1.85	0.42
2:A:1739:THR:O	2:A:1742:THR:HG22	2.20	0.42
2:A:3046:LEU:O	2:A:3050:VAL:N	2.49	0.42
2:A:3542:LEU:O	2:A:3542:LEU:HD23	2.19	0.42
2:A:3768:SER:HA	2:A:3771:HIS:HB3	2.01	0.42
1:H:26:TYR:H	1:H:26:TYR:HD1	1.66	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:25:SER:OG	2:G:32:GLN:NE2	2.51	0.42
2:G:451:TYR:OH	2:G:474:ARG:HD2	2.20	0.42
2:G:928:THR:O	2:G:931:THR:OG1	2.30	0.42
2:G:1435:TYR:CE1	2:G:1518:CYS:HB2	2.54	0.42
2:G:2712:PRO:HB3	2:G:2956:ALA:HB2	2.01	0.42
2:G:2874:MET:O	2:G:2878:LEU:HG	2.19	0.42
2:G:3542:LEU:O	2:G:3542:LEU:HD23	2.19	0.42
2:B:179:TYR:CD2	2:B:197:GLN:HB3	2.54	0.42
2:B:949:ASN:HB3	2:B:974:HIS:CE1	2.55	0.42
2:B:983:THR:HG22	2:B:987:ARG:HH12	1.85	0.42
2:B:1586:ASN:ND2	2:B:1590:GLN:OE1	2.53	0.42
2:B:1805:GLU:OE1	2:B:1805:GLU:N	2.52	0.42
2:B:3008:GLN:HG2	2:B:3012:ASN:ND2	2.34	0.42
2:B:3069:HIS:NE2	2:B:3138:PRO:HB2	2.34	0.42
2:B:3132:THR:HG23	2:B:3136:LEU:HB2	2.01	0.42
2:B:3947:GLY:HA2	2:B:3950:ASN:HD22	1.84	0.42
2:I:664:PHE:CE1	2:I:779:PRO:HB3	2.53	0.42
2:I:2750[A]:LYS:O	2:I:2935:TYR:OH	2.33	0.42
2:I:2874:MET:O	2:I:2878:LEU:HG	2.19	0.42
2:I:3046:LEU:O	2:I:3050:VAL:N	2.49	0.42
2:I:4177:TYR:HE1	2:I:4199:GLU:HB3	1.82	0.42
2:A:14:LEU:N	2:A:163:VAL:HG23	2.35	0.42
2:A:971:ASP:OD1	2:A:971:ASP:N	2.51	0.42
2:A:1248:VAL:HG23	2:A:1597:VAL:O	2.19	0.42
2:A:1435:TYR:CE1	2:A:1518:CYS:HB2	2.54	0.42
2:A:1717:SER:HA	2:A:1721:GLU:CG	2.48	0.42
2:A:2021:CYS:HB2	2:A:2023:LEU:HD13	2.01	0.42
2:A:2155:LEU:HD12	2:A:2185:ILE:HD13	2.02	0.42
2:A:2332:LEU:O	2:A:2336:ARG:HG3	2.20	0.42
2:A:2576:ALA:HA	2:A:2618:MET:HE1	2.00	0.42
2:A:2641:LEU:HD11	2:A:2698:MET:SD	2.58	0.42
2:A:2714:TYR:HE2	2:A:2716:ASP:OD1	2.02	0.42
2:A:3374:ALA:O	2:A:3377:GLU:N	2.51	0.42
2:A:3388:GLU:O	2:A:3392:LEU:HG	2.20	0.42
2:A:3525:CYS:HA	2:A:3595:ARG:NH1	2.34	0.42
2:A:3923:LEU:HD11	2:A:3962:PHE:CZ	2.54	0.42
2:A:4586:PRO:HG3	2:A:4629:TYR:CZ	2.54	0.42
2:A:4721:LYS:HG3	2:A:4741:LEU:HD22	2.02	0.42
2:G:163:VAL:HG23	2:G:163:VAL:O	2.19	0.42
2:G:689:THR:OG1	2:G:776:LEU:HB2	2.20	0.42
2:G:1286:MET:HE2	2:G:1286:MET:HB3	1.98	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:1717:SER:HA	2:G:1721:GLU:CG	2.48	0.42
2:G:1805:GLU:OE1	2:G:1805:GLU:N	2.52	0.42
2:G:2380:ILE:HD13	2:G:2380:ILE:HA	1.88	0.42
2:G:3342:ALA:O	2:G:3345:ILE:HG22	2.19	0.42
2:G:3637:ARG:HD2	2:G:3638:MET:H	1.84	0.42
2:G:4090:LYS:NZ	2:G:4112:LEU:HD12	2.34	0.42
2:G:4184:MET:HB3	2:G:5021:PHE:HA	2.01	0.42
2:G:4995:LEU:HD21	2:G:5007:GLU:HG3	2.01	0.42
2:B:949:ASN:HB3	2:B:974:HIS:HE2	1.84	0.42
2:B:1477:GLY:HA2	2:B:1483:VAL:HA	2.01	0.42
2:B:3170:CYS:SG	2:B:3240:CYS:HB2	2.60	0.42
2:B:4238:CYS:HB3	2:B:4989:MET:HG3	2.00	0.42
2:B:4646:LEU:HD23	2:B:4646:LEU:HA	1.85	0.42
2:I:1248:VAL:HG23	2:I:1597:VAL:O	2.19	0.42
2:I:1739:THR:O	2:I:1742:THR:HG22	2.20	0.42
2:I:2579:VAL:O	2:I:2583:LEU:HG	2.20	0.42
2:I:3847:PHE:HZ	2:I:3943:ILE:HD11	1.84	0.42
2:I:3991:GLY:O	2:I:3995:VAL:HG23	2.19	0.42
2:A:181:HIS:HA	2:A:198:THR:CG2	2.50	0.42
2:A:949:ASN:HB3	2:A:974:HIS:CE1	2.55	0.42
2:A:1805:GLU:OE1	2:A:1805:GLU:N	2.52	0.42
2:A:2001:PRO:O	2:A:2005:GLN:HG3	2.19	0.42
2:A:2368:LEU:HD12	2:A:2368:LEU:HA	1.86	0.42
2:A:2381:GLU:HA	2:A:2384:ILE:CG1	2.49	0.42
2:A:3991:GLY:O	2:A:3995:VAL:HG23	2.19	0.42
1:O:82:TYR:CD1	1:O:87:HIS:HB2	2.55	0.42
2:G:179:TYR:CD2	2:G:197:GLN:HB3	2.54	0.42
2:G:1089:TYR:CD2	2:G:1152:MET:HG3	2.52	0.42
2:G:1739:THR:O	2:G:1742:THR:HG22	2.20	0.42
2:G:2381:GLU:HA	2:G:2384:ILE:CG1	2.49	0.42
2:G:3008:GLN:HG2	2:G:3012:ASN:ND2	2.34	0.42
2:G:3525:CYS:HA	2:G:3595:ARG:NH1	2.34	0.42
2:G:3962:PHE:O	2:G:4026:MET:SD	2.78	0.42
2:G:4911:LEU:O	2:G:4915:VAL:HG23	2.19	0.42
2:B:1247:PRO:HA	2:B:1598:GLN:HG2	2.01	0.42
2:B:1248:VAL:HG23	2:B:1597:VAL:O	2.19	0.42
2:B:1698:LEU:HG	2:B:1712:TYR:CZ	2.55	0.42
2:B:2001:PRO:O	2:B:2005:GLN:HG3	2.19	0.42
2:B:2579:VAL:O	2:B:2583:LEU:HG	2.19	0.42
2:B:2874:MET:O	2:B:2878:LEU:HG	2.19	0.42
2:B:3725:TYR:HA	2:B:3728:ILE:HD12	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3923:LEU:HD11	2:B:3962:PHE:CZ	2.54	0.42
2:B:4586:PRO:HG3	2:B:4629:TYR:CZ	2.54	0.42
2:B:4911:LEU:O	2:B:4915:VAL:HG23	2.19	0.42
2:I:871:ARG:NE	2:I:922:LEU:HD12	2.35	0.42
2:I:954:LYS:HD2	2:I:967:PRO:HG2	2.00	0.42
2:I:973:SER:HA	2:I:976:ARG:HH22	1.85	0.42
2:I:1469:VAL:CG2	2:I:1492:CYS:HB3	2.50	0.42
2:I:2968:ASP:O	2:I:2971:GLN:HB2	2.20	0.42
2:I:3015:LEU:HB3	2:I:3025:LEU:O	2.20	0.42
2:I:3033:ASN:OD1	2:I:3033:ASN:N	2.53	0.42
2:I:3696:ASP:CG	2:I:3773:ARG:HE	2.23	0.42
2:I:4201:ASN:HB3	2:I:4993:MET:HE3	2.00	0.42
2:A:451:TYR:OH	2:A:474:ARG:HD2	2.20	0.42
2:A:667:MET:HG3	2:A:743:VAL:HG22	2.00	0.42
2:A:1586:ASN:ND2	2:A:1590:GLN:OE1	2.53	0.42
2:A:1668:ARG:HE	2:A:1668:ARG:HB3	1.69	0.42
2:A:1942:LEU:HD23	2:A:1942:LEU:HA	1.83	0.42
2:A:3269:VAL:O	2:A:3273:THR:N	2.51	0.42
2:A:3380:ARG:NH2	2:A:3388:GLU:OE1	2.52	0.42
2:A:3947:GLY:HA2	2:A:3950:ASN:HD22	1.85	0.42
2:G:345:LEU:HD21	2:G:389:PHE:CZ	2.55	0.42
2:G:1290:ARG:HD2	2:G:1549:PHE:CD2	2.55	0.42
2:G:2021:CYS:HB2	2:G:2023:LEU:HD13	2.01	0.42
2:G:3107:VAL:O	2:G:3111:ARG:NH2	2.53	0.42
2:G:3388:GLU:O	2:G:3392:LEU:HG	2.20	0.42
2:B:297:GLN:HB3	2:B:300:VAL:HG13	2.02	0.42
2:B:870:ILE:O	2:B:874:LEU:HG	2.19	0.42
2:B:1007:TYR:CG	2:B:1008:SER:N	2.88	0.42
2:B:2478:THR:HG22	2:B:2487:GLN:HB2	2.01	0.42
2:B:2576:ALA:HA	2:B:2618:MET:HE1	2.01	0.42
2:B:3036:LYS:HD2	2:B:3078:ARG:HD3	2.01	0.42
2:B:3445:TRP:HA	2:B:3451:PHE:CD1	2.54	0.42
2:B:3525:CYS:HA	2:B:3595:ARG:NH1	2.34	0.42
2:B:3614:LYS:HB2	2:B:3614:LYS:HE3	1.77	0.42
2:B:4090:LYS:NZ	2:B:4112:LEU:HD12	2.34	0.42
2:B:4093:PHE:CG	2:B:4123:ILE:HD11	2.54	0.42
2:I:345:LEU:HD21	2:I:389:PHE:CZ	2.55	0.42
2:I:451:TYR:OH	2:I:474:ARG:HD2	2.20	0.42
2:I:949:ASN:HB3	2:I:974:HIS:HE2	1.84	0.42
2:I:1297:PHE:HE1	2:I:1548:LEU:HD12	1.83	0.42
2:I:1586:ASN:ND2	2:I:1590:GLN:OE1	2.53	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:1694:LEU:HD23	2:I:1694:LEU:HA	1.85	0.42
2:I:2159:LEU:O	2:I:2163:ARG:HG2	2.18	0.42
2:I:2562:ILE:HA	2:I:2565:CYS:SG	2.60	0.42
2:I:2672:LEU:HD23	2:I:2672:LEU:HA	1.85	0.42
2:I:2692:ASP:CG	2:I:2695:LEU:HB2	2.40	0.42
2:I:3263:TYR:H	2:I:3326:ASN:HD21	1.67	0.42
2:I:3342:ALA:O	2:I:3345:ILE:HG22	2.19	0.42
2:I:3388:GLU:O	2:I:3392:LEU:HG	2.20	0.42
2:I:3965:LEU:HA	2:I:3968:TYR:CD2	2.55	0.42
2:I:4713:SER:HB3	2:I:4775:TYR:OH	2.20	0.42
2:I:4911:LEU:O	2:I:4915:VAL:HG23	2.19	0.42
2:I:4933:GLN:O	2:I:4937:ILE:HG12	2.20	0.42
2:A:183:SER:HB2	2:A:190:GLN:N	2.35	0.42
2:A:297:GLN:HB3	2:A:300:VAL:HG13	2.02	0.42
2:A:803:LEU:HD23	2:A:804:PRO:O	2.20	0.42
2:A:1252:HIS:CG	2:A:1253:PRO:HD2	2.55	0.42
2:A:2519:LEU:HD21	2:A:2575:ARG:HE	1.85	0.42
2:A:2874:MET:O	2:A:2878:LEU:HG	2.19	0.42
2:A:2894:LEU:O	2:A:2898:GLY:N	2.48	0.42
2:A:2894:LEU:HG	2:A:2899:GLY:HA2	2.02	0.42
2:A:3107:VAL:O	2:A:3111:ARG:NH2	2.53	0.42
2:A:4090:LYS:NZ	2:A:4112:LEU:HD12	2.34	0.42
2:G:144:GLU:HG3	2:G:175:SER:HA	2.01	0.42
2:G:537:CYS:SG	2:G:570:GLU:HB3	2.60	0.42
2:G:1101:ARG:HD2	2:G:1115:LEU:HB2	2.01	0.42
2:G:1247:PRO:HA	2:G:1598:GLN:HG2	2.01	0.42
2:G:1469:VAL:CG2	2:G:1492:CYS:HB3	2.50	0.42
2:G:1479:GLU:HG3	2:G:1480:GLN:H	1.85	0.42
2:G:2383:ALA:O	2:G:2387:SER:OG	2.27	0.42
2:G:2653:LYS:O	2:G:2657:LEU:HB2	2.20	0.42
2:G:3965:LEU:HA	2:G:3968:TYR:CD2	2.55	0.42
2:G:4586:PRO:HG3	2:G:4629:TYR:CZ	2.54	0.42
2:G:4721:LYS:HG3	2:G:4741:LEU:HD22	2.02	0.42
2:G:4921:PHE:CE2	2:I:4892:ARG:HA	2.54	0.42
2:B:14:LEU:N	2:B:163:VAL:HG23	2.35	0.42
2:B:215:THR:OG1	2:B:218:HIS:NE2	2.53	0.42
2:B:231:LEU:O	2:B:260:TRP:NE1	2.45	0.42
2:B:451:TYR:OH	2:B:474:ARG:HD2	2.20	0.42
2:B:710:ASP:OD1	2:B:710:ASP:N	2.53	0.42
2:B:1039:LEU:HD13	2:B:1039:LEU:HA	1.89	0.42
2:B:1479:GLU:HG3	2:B:1480:GLN:H	1.85	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2155:LEU:HD12	2:B:2185:ILE:HD13	2.02	0.42
2:B:2381:GLU:HA	2:B:2384:ILE:CG1	2.49	0.42
2:B:2519:LEU:HD21	2:B:2575:ARG:HE	1.85	0.42
2:B:3527:PRO:HA	2:B:3530:GLN:NE2	2.32	0.42
2:B:4241:THR:HA	2:B:4244:GLU:OE1	2.20	0.42
2:B:4939:ALA:O	2:B:4943:LEU:HD23	2.18	0.42
2:B:4979:THR:HG23	3:B:5301:ATP:N3	2.35	0.42
2:I:183:SER:HB2	2:I:190:GLN:N	2.35	0.42
2:I:259:LEU:HD22	2:I:393:CYS:SG	2.60	0.42
2:I:689:THR:OG1	2:I:776:LEU:HB2	2.20	0.42
2:I:1479:GLU:HG3	2:I:1480:GLN:H	1.85	0.42
2:I:2001:PRO:O	2:I:2005:GLN:HG3	2.19	0.42
2:I:2332:LEU:O	2:I:2336:ARG:HG3	2.20	0.42
2:I:2418:LEU:HG	2:I:2419:GLY:H	1.85	0.42
2:I:2653:LYS:O	2:I:2657:LEU:HB2	2.19	0.42
2:I:3283:ARG:NH2	2:I:3287:ARG:HH22	2.10	0.42
2:I:3725:TYR:HA	2:I:3728:ILE:HD12	2.02	0.42
2:I:4090:LYS:NZ	2:I:4112:LEU:HD12	2.34	0.42
2:I:4656:LEU:HA	2:I:4659:ILE:HG12	2.02	0.42
2:I:4721:LYS:HG3	2:I:4741:LEU:HD22	2.02	0.42
2:A:1155:LEU:HA	2:A:1155:LEU:HD23	1.69	0.42
2:A:1479:GLU:HG3	2:A:1480:GLN:H	1.85	0.42
2:A:2018:GLU:OE1	2:A:2018:GLU:N	2.49	0.42
2:A:2477:PRO:HD2	2:A:2536:LEU:HD11	2.01	0.42
2:A:2968:ASP:O	2:A:2971:GLN:HB2	2.20	0.42
2:A:3033:ASN:N	2:A:3033:ASN:OD1	2.53	0.42
2:A:3132:THR:HG23	2:A:3136:LEU:HB2	2.01	0.42
2:A:3372:VAL:HG21	2:A:3397:GLU:HB3	2.02	0.42
2:A:3802:ILE:O	2:A:3806:ASN:N	2.53	0.42
2:A:4911:LEU:O	2:A:4915:VAL:HG23	2.19	0.42
1:J:82:TYR:CD1	1:J:87:HIS:HB2	2.55	0.42
2:G:669:ASP:CG	2:G:790:ARG:HH12	2.23	0.42
2:G:710:ASP:N	2:G:710:ASP:OD1	2.53	0.42
2:G:803:LEU:HD23	2:G:804:PRO:O	2.20	0.42
2:G:871:ARG:NE	2:G:922:LEU:HD12	2.35	0.42
2:G:3768:SER:HA	2:G:3771:HIS:HB3	2.01	0.42
2:G:3802:ILE:O	2:G:3806:ASN:N	2.53	0.42
2:G:3947:GLY:HA2	2:G:3950:ASN:HD22	1.85	0.42
2:B:183:SER:HB2	2:B:190:GLN:N	2.35	0.42
2:B:779:PRO:HB2	2:B:791:PHE:CZ	2.48	0.42
2:B:2333:ASP:HA	2:B:2336:ARG:NE	2.34	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2562:ILE:HA	2:B:2565:CYS:SG	2.60	0.42
2:B:2714:TYR:HE2	2:B:2716:ASP:OD1	2.02	0.42
2:B:2860:PRO:HG3	2:B:2929:PHE:HE1	1.84	0.42
2:B:2894:LEU:HG	2:B:2899:GLY:HA2	2.02	0.42
2:B:3263:TYR:H	2:B:3326:ASN:HD21	1.67	0.42
2:B:3342:ALA:O	2:B:3345:ILE:HG22	2.19	0.42
2:B:4177:TYR:HE1	2:B:4199:GLU:HB3	1.82	0.42
2:I:498:THR:HA	2:I:553:ARG:HH22	1.84	0.42
2:I:537:CYS:SG	2:I:570:GLU:HB3	2.60	0.42
2:I:669:ASP:CG	2:I:790:ARG:HH12	2.23	0.42
2:I:2021:CYS:HB2	2:I:2023:LEU:HD13	2.01	0.42
2:I:2536:LEU:O	2:I:2542:SER:OG	2.38	0.42
2:I:3069:HIS:NE2	2:I:3138:PRO:HB2	2.34	0.42
2:I:3071:LEU:HA	2:I:3074:SER:OG	2.20	0.42
2:I:3445:TRP:CE2	2:I:3452:LYS:HG2	2.55	0.42
2:I:3962:PHE:O	2:I:4026:MET:SD	2.78	0.42
2:I:4586:PRO:HG3	2:I:4629:TYR:CZ	2.54	0.42
2:A:345:LEU:HD21	2:A:389:PHE:CZ	2.55	0.42
2:A:498:THR:HA	2:A:553:ARG:HH22	1.84	0.42
2:A:2634:ASN:ND2	2:A:2636:PHE:HB2	2.35	0.42
2:A:3445:TRP:CE2	2:A:3452:LYS:HG2	2.55	0.42
2:A:3825:GLU:OE2	2:A:3827:GLY:N	2.53	0.42
2:A:3962:PHE:O	2:A:4026:MET:SD	2.78	0.42
2:G:41:GLY:O	2:G:45:ARG:NH1	2.50	0.42
2:G:183:SER:HB2	2:G:190:GLN:N	2.35	0.42
2:G:543:ASN:O	2:G:546:TRP:CB	2.68	0.42
2:G:568:LEU:HD23	2:G:568:LEU:HA	1.93	0.42
2:G:1634:LEU:HA	2:G:1634:LEU:HD12	1.79	0.42
2:G:1935:VAL:HG12	2:G:1939:MET:HE1	2.02	0.42
2:G:2138:LEU:HA	2:G:2138:LEU:HD23	1.84	0.42
2:G:2175:GLU:HA	2:G:2228:MET:HE1	2.01	0.42
2:G:2332:LEU:O	2:G:2336:ARG:HG3	2.20	0.42
2:G:3249:LEU:O	2:G:3253:ILE:HG23	2.20	0.42
2:G:3445:TRP:CE2	2:G:3452:LYS:HG2	2.55	0.42
2:G:3991:GLY:O	2:G:3995:VAL:HG23	2.19	0.42
2:G:4039:MET:SD	2:G:4040:ILE:HG12	2.60	0.42
2:G:4979:THR:HG23	3:G:5301:ATP:N3	2.35	0.42
2:B:163:VAL:HG23	2:B:163:VAL:O	2.19	0.42
2:B:1435:TYR:CE1	2:B:1518:CYS:HB2	2.54	0.42
2:B:2198:MET:N	2:B:2198:MET:SD	2.93	0.42
2:B:2332:LEU:O	2:B:2336:ARG:HG3	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2418:LEU:HG	2:B:2419:GLY:H	1.85	0.42
2:B:2912:THR:O	2:B:2916:LYS:N	2.46	0.42
2:B:3374:ALA:O	2:B:3377:GLU:N	2.51	0.42
2:B:3388:GLU:O	2:B:3392:LEU:HG	2.20	0.42
2:B:3696:ASP:CG	2:B:3773:ARG:HE	2.23	0.42
2:B:4071:ILE:HG13	2:B:4072:VAL:N	2.35	0.42
2:B:4848:VAL:HG11	2:B:4887:MET:HG2	2.02	0.42
2:B:4855:ALA:O	2:B:4859:PHE:N	2.52	0.42
2:I:543:ASN:O	2:I:546:TRP:CB	2.68	0.42
2:I:710:ASP:N	2:I:710:ASP:OD1	2.53	0.42
2:I:1076:ARG:NH2	2:I:1655:GLU:OE1	2.45	0.42
2:I:1252:HIS:CG	2:I:1253:PRO:HD2	2.55	0.42
2:I:1286:MET:HE2	2:I:1286:MET:HB3	1.99	0.42
2:I:1734:TYR:HB2	2:I:2140:ARG:O	2.20	0.42
2:I:2612:ARG:NE	2:I:2612:ARG:HA	2.35	0.42
2:I:3171:SER:O	2:I:3174:SER:OG	2.32	0.42
2:I:3947:GLY:HA2	2:I:3950:ASN:HD22	1.84	0.42
2:A:102:LEU:HB2	2:A:105:HIS:HD2	1.85	0.41
2:A:214:VAL:HG22	2:A:341:TYR:CE1	2.55	0.41
2:A:681:HIS:HB3	2:A:784:SER:HB3	2.02	0.41
2:A:1297:PHE:CE1	2:A:1548:LEU:HD12	2.55	0.41
2:A:2700:MET:HB3	2:A:2701:PRO:HD3	2.02	0.41
2:A:3037:GLU:OE2	2:A:3078:ARG:NH2	2.50	0.41
2:A:3170:CYS:SG	2:A:3240:CYS:HB2	2.60	0.41
2:A:3847:PHE:HZ	2:A:3943:ILE:HD11	1.84	0.41
2:A:3998:HIS:O	2:A:3999:MET:C	2.57	0.41
2:G:215:THR:HG1	2:G:218:HIS:CE1	2.38	0.41
2:G:719:LEU:HB2	2:G:720:HIS:CE1	2.55	0.41
2:G:1698:LEU:HG	2:G:1712:TYR:CZ	2.55	0.41
2:G:2634:ASN:ND2	2:G:2636:PHE:HB2	2.35	0.41
2:G:2714:TYR:HE2	2:G:2716:ASP:OD1	2.02	0.41
2:G:2743:LEU:HD12	2:G:2743:LEU:H	1.84	0.41
2:G:2822:THR:OG1	2:G:2938:THR:OG1	2.36	0.41
2:G:3015:LEU:HB3	2:G:3025:LEU:O	2.20	0.41
2:G:3443:ILE:HG23	2:G:3605:HIS:CE1	2.55	0.41
2:B:21:VAL:HB	2:B:36:CYS:SG	2.61	0.41
2:B:74:SER:OG	2:B:77:ALA:N	2.45	0.41
2:B:345:LEU:HD21	2:B:389:PHE:CZ	2.55	0.41
2:B:2362:GLU:HB2	2:B:2369:ARG:NH2	2.34	0.41
2:B:2536:LEU:O	2:B:2542:SER:OG	2.38	0.41
2:B:2653:LYS:O	2:B:2657:LEU:HB2	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2692:ASP:CG	2:B:2695:LEU:HB2	2.40	0.41
2:B:2712:PRO:HB3	2:B:2956:ALA:HB2	2.01	0.41
2:B:3962:PHE:O	2:B:4026:MET:SD	2.78	0.41
2:B:4049:VAL:HG12	2:B:4163:PHE:HZ	1.85	0.41
2:B:4721:LYS:HG3	2:B:4741:LEU:HD22	2.02	0.41
2:B:4772:ASP:OD2	2:B:4772:ASP:N	2.46	0.41
2:B:4922:PHE:O	2:B:4927:ILE:HG12	2.19	0.41
2:B:4927:ILE:HG13	2:B:4928:LEU:H	1.85	0.41
2:B:4984:ASN:C	2:B:4986:ALA:H	2.23	0.41
2:I:355:LEU:HB3	2:I:378:LEU:HB3	2.02	0.41
2:I:983:THR:HB	2:I:1055:PRO:HG3	2.01	0.41
2:I:1007:TYR:CG	2:I:1008:SER:N	2.88	0.41
2:I:1679:ASN:ND2	2:I:1797:ARG:O	2.53	0.41
2:I:2198:MET:SD	2:I:2198:MET:N	2.93	0.41
2:I:2297:LYS:O	2:I:2301:TYR:HD2	2.03	0.41
2:I:2333:ASP:HA	2:I:2336:ARG:NE	2.34	0.41
2:I:2712:PRO:HB3	2:I:2956:ALA:HB2	2.01	0.41
2:I:2933:ASN:HB3	2:I:2935:TYR:CD1	2.55	0.41
2:I:3107:VAL:O	2:I:3111:ARG:NH2	2.53	0.41
2:I:3802:ILE:O	2:I:3806:ASN:N	2.53	0.41
2:A:1039:LEU:HD13	2:A:1039:LEU:HA	1.89	0.41
2:A:1236:THR:OG1	2:A:1608:MET:SD	2.74	0.41
2:A:1290:ARG:HD2	2:A:1549:PHE:CD2	2.55	0.41
2:A:1985:THR:O	2:A:1986:MET:HB3	2.19	0.41
2:A:2822:THR:OG1	2:A:2938:THR:OG1	2.36	0.41
2:A:3313:ASN:HD22	2:A:3350:ARG:HB2	1.86	0.41
2:A:3390:GLY:HA2	2:A:3393:LEU:HD12	2.03	0.41
2:A:3965:LEU:HA	2:A:3968:TYR:CD2	2.55	0.41
2:A:4231:MET:CG	2:A:4959:PHE:HE2	2.32	0.41
2:A:4860:ARG:HG2	2:A:4874:MET:HE2	2.01	0.41
1:H:82:TYR:CD1	1:H:87:HIS:HB2	2.55	0.41
1:J:26:TYR:HD1	1:J:26:TYR:H	1.66	0.41
2:G:14:LEU:N	2:G:163:VAL:HG23	2.35	0.41
2:G:181:HIS:HA	2:G:198:THR:CG2	2.50	0.41
2:G:274:LEU:HA	2:G:278:GLN:NE2	2.35	0.41
2:G:2595:LEU:O	2:G:2596:THR:OG1	2.30	0.41
2:G:3071:LEU:HA	2:G:3074:SER:OG	2.20	0.41
2:G:3132:THR:HG23	2:G:3136:LEU:HB2	2.01	0.41
2:G:3903:LEU:HD23	2:G:3903:LEU:HA	1.80	0.41
2:G:4241:THR:HA	2:G:4244:GLU:OE1	2.20	0.41
2:G:4656:LEU:HA	2:G:4659:ILE:HG12	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:28:VAL:O	2:B:29:LEU:HD23	2.21	0.41
2:B:355:LEU:HB3	2:B:378:LEU:HB3	2.03	0.41
2:B:871:ARG:NE	2:B:922:LEU:HD12	2.35	0.41
2:B:2021:CYS:HB2	2:B:2023:LEU:HD13	2.01	0.41
2:B:2512:ILE:HG22	2:B:2517:PHE:CD2	2.55	0.41
2:B:2933:ASN:HB3	2:B:2935:TYR:CD1	2.56	0.41
2:B:3071:LEU:HA	2:B:3074:SER:OG	2.20	0.41
2:B:3269:VAL:O	2:B:3273:THR:N	2.51	0.41
2:B:3274:LEU:HB3	2:B:3275:PRO:HD3	2.02	0.41
2:B:3641:LEU:HD13	2:B:3644:LEU:HD12	2.01	0.41
2:B:3802:ILE:O	2:B:3806:ASN:N	2.53	0.41
2:B:3965:LEU:HA	2:B:3968:TYR:CD2	2.55	0.41
2:B:4578:LEU:CD1	2:I:4849:TYR:HE1	2.27	0.41
2:I:21:VAL:HB	2:I:36:CYS:SG	2.61	0.41
2:I:28:VAL:O	2:I:29:LEU:HD23	2.20	0.41
2:I:215:THR:OG1	2:I:218:HIS:NE2	2.53	0.41
2:I:274:LEU:HA	2:I:278:GLN:NE2	2.35	0.41
2:I:293:LEU:HD11	2:I:355:LEU:HD12	2.02	0.41
2:I:721:LEU:HD23	2:I:721:LEU:HA	1.85	0.41
2:I:1202:LEU:HD12	2:I:1202:LEU:HA	1.79	0.41
2:I:1717:SER:HA	2:I:1721:GLU:CG	2.48	0.41
2:I:2700:MET:HB3	2:I:2701:PRO:HD3	2.02	0.41
2:I:3141:THR:HG21	2:I:3192:GLU:OE1	2.20	0.41
2:I:3249:LEU:O	2:I:3253:ILE:HG23	2.20	0.41
2:I:3257:ALA:HB2	2:I:3322:ILE:HG13	2.03	0.41
2:I:3965:LEU:HD13	2:I:3968:TYR:HD2	1.86	0.41
2:I:4083:ASP:HB2	2:I:4122:MET:HE2	2.01	0.41
2:I:4848:VAL:HG11	2:I:4887:MET:HG2	2.02	0.41
1:F:82:TYR:CD1	1:F:87:HIS:HB2	2.55	0.41
2:A:35:LEU:CB	2:A:49:LEU:HD12	2.51	0.41
2:A:259:LEU:HD22	2:A:393:CYS:SG	2.60	0.41
2:A:543:ASN:O	2:A:546:TRP:CB	2.68	0.41
2:A:871:ARG:NE	2:A:922:LEU:HD12	2.35	0.41
2:A:983:THR:HB	2:A:1055:PRO:HG3	2.01	0.41
2:A:1469:VAL:CG2	2:A:1492:CYS:HB3	2.50	0.41
2:A:1698:LEU:HG	2:A:1712:TYR:CZ	2.55	0.41
2:A:2198:MET:SD	2:A:2198:MET:N	2.93	0.41
2:A:2362:GLU:HB2	2:A:2369:ARG:NH2	2.34	0.41
2:A:2647:HIS:O	2:A:2651:CYS:N	2.34	0.41
2:A:3158:LEU:O	2:A:3162:GLN:NE2	2.50	0.41
2:A:3354:LEU:O	2:A:3358:PHE:HB3	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:3508:SER:O	2:A:3511:VAL:HG22	2.21	0.41
2:A:4045:VAL:O	2:A:4049:VAL:HG13	2.21	0.41
2:A:4823:LEU:CD1	2:B:4843:LEU:HB2	2.47	0.41
2:A:4933:GLN:O	2:A:4937:ILE:HG12	2.20	0.41
2:A:4979:THR:HG23	3:A:5301:ATP:N3	2.35	0.41
2:G:293:LEU:HD11	2:G:355:LEU:HD12	2.02	0.41
2:G:378:LEU:HD23	2:G:378:LEU:HA	1.85	0.41
2:G:2211:MET:HA	2:G:2214:VAL:HG12	2.03	0.41
2:G:2477:PRO:HD2	2:G:2536:LEU:HD11	2.01	0.41
2:G:2894:LEU:HG	2:G:2899:GLY:HA2	2.02	0.41
2:G:3246:LEU:HA	2:G:3249:LEU:HG	2.03	0.41
2:G:3372:VAL:HG21	2:G:3397:GLU:HB3	2.02	0.41
2:G:3508:SER:O	2:G:3511:VAL:HG22	2.21	0.41
2:B:343:GLU:HG2	2:B:344:SER:N	2.35	0.41
2:B:537:CYS:SG	2:B:570:GLU:HB3	2.60	0.41
2:B:689:THR:OG1	2:B:776:LEU:HB2	2.20	0.41
2:B:1252:HIS:CG	2:B:1253:PRO:HD2	2.55	0.41
2:B:1476:MET:HB2	2:B:1485:SER:OG	2.21	0.41
2:B:1679:ASN:ND2	2:B:1797:ARG:O	2.53	0.41
2:B:2138:LEU:HD23	2:B:2138:LEU:HA	1.84	0.41
2:B:3046:LEU:O	2:B:3050:VAL:N	2.49	0.41
2:B:3141:THR:HG21	2:B:3192:GLU:OE1	2.20	0.41
2:B:3313:ASN:HD22	2:B:3350:ARG:HB2	1.86	0.41
2:B:3542:LEU:O	2:B:3542:LEU:HD23	2.19	0.41
2:B:3580:PRO:HA	2:B:3582:ARG:HH11	1.86	0.41
2:I:149:THR:HG22	2:I:150:MET:N	2.30	0.41
2:I:341:TYR:OH	2:I:392:ARG:HD3	2.20	0.41
2:I:343:GLU:HG2	2:I:344:SER:N	2.35	0.41
2:I:904:HIS:N	2:I:905:PRO:HD3	2.35	0.41
2:I:1101:ARG:HD2	2:I:1115:LEU:HB2	2.02	0.41
2:I:2576:ALA:HA	2:I:2618:MET:HE1	2.02	0.41
2:I:2894:LEU:HG	2:I:2899:GLY:HA2	2.02	0.41
2:I:3246:LEU:HA	2:I:3249:LEU:HG	2.03	0.41
2:I:4157:ASP:N	2:I:4161:ARG:NH1	2.62	0.41
2:I:4241:THR:HA	2:I:4244:GLU:OE1	2.20	0.41
2:I:4984:ASN:C	2:I:4986:ALA:H	2.23	0.41
2:A:343:GLU:HG2	2:A:344:SER:N	2.35	0.41
2:A:689:THR:OG1	2:A:776:LEU:HB2	2.20	0.41
2:A:1575:LEU:HA	2:A:1575:LEU:HD23	1.77	0.41
2:A:2418:LEU:HG	2:A:2419:GLY:H	1.85	0.41
2:A:2512:ILE:HG22	2:A:2517:PHE:CD2	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:2531:ARG:HA	2:A:2588:ARG:NH2	2.26	0.41
2:A:2624:ARG:NH2	2:A:2906:VAL:HG21	2.32	0.41
2:A:2670:GLU:HG2	2:A:2913:ALA:H	1.86	0.41
2:A:2886:TRP:O	2:A:2890:LYS:HG2	2.21	0.41
2:A:3162:GLN:CD	2:A:3218:VAL:HB	2.41	0.41
2:A:4039:MET:SD	2:A:4040:ILE:HG12	2.60	0.41
2:A:4922:PHE:O	2:A:4927:ILE:HG12	2.19	0.41
2:G:35:LEU:CB	2:G:49:LEU:HD12	2.51	0.41
2:G:207:SER:OG	2:G:208:CYS:N	2.54	0.41
2:G:259:LEU:HD22	2:G:393:CYS:SG	2.60	0.41
2:G:426:ARG:HG3	2:G:505:GLU:O	2.21	0.41
2:G:498:THR:HA	2:G:553:ARG:HH22	1.84	0.41
2:G:774:ASP:OD1	2:G:774:ASP:N	2.47	0.41
2:G:904:HIS:N	2:G:905:PRO:HD3	2.36	0.41
2:G:1076:ARG:NH2	2:G:1655:GLU:OE1	2.45	0.41
2:G:1985:THR:O	2:G:1986:MET:HB3	2.19	0.41
2:G:2562:ILE:HA	2:G:2565:CYS:SG	2.60	0.41
2:G:3033:ASN:OD1	2:G:3033:ASN:N	2.53	0.41
2:G:3274:LEU:HB3	2:G:3275:PRO:HD3	2.01	0.41
2:G:3313:ASN:HD22	2:G:3350:ARG:HB2	1.86	0.41
2:G:3465:ASN:OD1	2:G:3467:MET:N	2.54	0.41
2:G:4071:ILE:HG13	2:G:4072:VAL:N	2.35	0.41
2:G:4185:GLY:HA3	2:G:4189:ARG:N	2.36	0.41
2:G:4755:GLU:O	2:G:4756:ARG:NE	2.54	0.41
2:G:4984:ASN:C	2:G:4986:ALA:H	2.23	0.41
2:B:1297:PHE:CE1	2:B:1548:LEU:HD12	2.55	0.41
2:B:2968:ASP:O	2:B:2971:GLN:HB2	2.20	0.41
2:B:3067:CYS:HA	2:B:3070:ILE:HG12	2.02	0.41
2:B:3301:PRO:HA	2:B:3302:PRO:HD3	1.91	0.41
2:B:3354:LEU:O	2:B:3358:PHE:HB3	2.21	0.41
2:B:3443:ILE:HG23	2:B:3605:HIS:CE1	2.55	0.41
2:B:4755:GLU:O	2:B:4756:ARG:NE	2.54	0.41
2:B:4933:GLN:O	2:B:4937:ILE:HG12	2.20	0.41
2:I:743:VAL:HG11	2:I:801:LYS:HB2	2.01	0.41
2:I:983:THR:HG22	2:I:987:ARG:HH12	1.85	0.41
2:I:1435:TYR:CE1	2:I:1518:CYS:HB2	2.54	0.41
2:I:1477:GLY:HA2	2:I:1483:VAL:HA	2.01	0.41
2:I:1698:LEU:HG	2:I:1712:TYR:CZ	2.55	0.41
2:I:2156:LEU:HD23	2:I:2156:LEU:HA	1.93	0.41
2:I:2477:PRO:HD2	2:I:2536:LEU:HD11	2.01	0.41
2:I:2886:TRP:O	2:I:2890:LYS:HG2	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:3162:GLN:CD	2:I:3218:VAL:HB	2.41	0.41
2:I:3586:ALA:HA	2:I:3591:LYS:HE2	2.03	0.41
2:I:4979:THR:HG23	3:I:5301:ATP:N3	2.35	0.41
2:A:904:HIS:N	2:A:905:PRO:HD3	2.36	0.41
2:A:1247:PRO:HA	2:A:1598:GLN:HG2	2.02	0.41
2:A:2284:ASN:HB2	2:A:3858:MET:SD	2.61	0.41
2:A:2816:MET:HE1	2:A:2823:ILE:HG12	2.03	0.41
2:A:3263:TYR:H	2:A:3326:ASN:HD21	1.67	0.41
2:A:4713:SER:HB3	2:A:4775:TYR:OH	2.20	0.41
2:A:4848:VAL:HG11	2:A:4887:MET:HG2	2.02	0.41
2:A:4860:ARG:NH2	2:G:4630:TYR:OH	2.45	0.41
2:G:21:VAL:HB	2:G:36:CYS:SG	2.60	0.41
2:G:214:VAL:HG22	2:G:341:TYR:CE1	2.55	0.41
2:G:355:LEU:HB3	2:G:378:LEU:HB3	2.03	0.41
2:G:949:ASN:HB3	2:G:974:HIS:HE2	1.84	0.41
2:G:1476:MET:HB2	2:G:1485:SER:OG	2.21	0.41
2:G:2153:MET:HE2	2:G:2153:MET:HA	2.02	0.41
2:G:2198:MET:N	2:G:2198:MET:SD	2.93	0.41
2:G:2512:ILE:HG22	2:G:2517:PHE:CD2	2.55	0.41
2:G:2612:ARG:HA	2:G:2612:ARG:NE	2.35	0.41
2:G:2700:MET:HB3	2:G:2701:PRO:HD3	2.02	0.41
2:G:3103:ILE:O	2:G:3107:VAL:HG22	2.21	0.41
2:G:4848:VAL:HG11	2:G:4887:MET:HG2	2.02	0.41
2:B:543:ASN:O	2:B:546:TRP:CB	2.68	0.41
2:B:1202:LEU:HD12	2:B:1202:LEU:HA	1.79	0.41
2:B:2290:LEU:HD23	2:B:2290:LEU:HA	1.85	0.41
2:B:2748:PRO:HD2	2:B:2751:LEU:HD12	2.03	0.41
2:B:4045:VAL:O	2:B:4049:VAL:HG13	2.21	0.41
2:I:1247:PRO:HA	2:I:1598:GLN:HG2	2.02	0.41
2:I:2135:LEU:HD11	2:I:3663:LEU:HG	2.03	0.41
2:I:2748:PRO:HD2	2:I:2751:LEU:HD12	2.03	0.41
2:I:3067:CYS:HA	2:I:3070:ILE:HG12	2.03	0.41
2:I:3274:LEU:HB3	2:I:3275:PRO:HD3	2.02	0.41
2:I:3313:ASN:HD22	2:I:3350:ARG:HB2	1.86	0.41
2:I:3719:ASP:H	2:I:3793:MET:HE1	1.85	0.41
2:I:3767:GLN:NE2	2:I:3804:ILE:O	2.54	0.41
2:A:215:THR:OG1	2:A:218:HIS:NE2	2.53	0.41
2:A:355:LEU:HB3	2:A:378:LEU:HB3	2.02	0.41
2:A:669:ASP:CG	2:A:790:ARG:HH12	2.23	0.41
2:A:1476:MET:HB2	2:A:1485:SER:OG	2.21	0.41
2:A:3103:ILE:O	2:A:3107:VAL:HG22	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:3443:ILE:HG23	2:A:3605:HIS:CE1	2.55	0.41
2:A:3540:TYR:HE2	2:A:3549:VAL:HG21	1.86	0.41
2:A:3767:GLN:NE2	2:A:3804:ILE:O	2.54	0.41
2:A:4927:ILE:HG13	2:A:4928:LEU:H	1.85	0.41
2:G:28:VAL:O	2:G:29:LEU:HD23	2.20	0.41
2:G:866:HIS:NE2	2:G:939:VAL:HG23	2.36	0.41
2:G:1297:PHE:CE1	2:G:1548:LEU:HD12	2.55	0.41
2:G:1433:TYR:CD1	2:G:1573:MET:HB2	2.56	0.41
2:G:1839:VAL:HB	2:G:1840:PRO:HD3	2.03	0.41
2:G:2135:LEU:HD11	2:G:3663:LEU:HG	2.03	0.41
2:G:2366:PRO:HA	2:G:2369:ARG:NE	2.36	0.41
2:G:2754:PHE:CZ	2:G:2930:LEU:HG	2.56	0.41
2:G:3067:CYS:HA	2:G:3070:ILE:HG12	2.02	0.41
2:G:3162:GLN:CD	2:G:3218:VAL:HB	2.41	0.41
2:G:3632:VAL:HG22	2:G:3633:VAL:H	1.86	0.41
2:G:3723:MET:HE3	2:G:3723:MET:HB3	1.94	0.41
2:G:4045:VAL:O	2:G:4049:VAL:HG13	2.21	0.41
2:B:35:LEU:CB	2:B:49:LEU:HD12	2.51	0.41
2:B:144:GLU:HG3	2:B:175:SER:HA	2.01	0.41
2:B:1101:ARG:HD2	2:B:1115:LEU:HB2	2.02	0.41
2:B:2284:ASN:HB2	2:B:3858:MET:SD	2.61	0.41
2:B:3033:ASN:OD1	2:B:3033:ASN:N	2.53	0.41
2:B:3107:VAL:O	2:B:3111:ARG:NH2	2.53	0.41
2:B:3465:ASN:OD1	2:B:3467:MET:N	2.54	0.41
2:B:4026:MET:HE3	2:B:4026:MET:HB3	1.64	0.41
2:B:4995:LEU:HD21	2:B:5007:GLU:HG3	2.01	0.41
2:I:14:LEU:N	2:I:163:VAL:HG23	2.35	0.41
2:I:719:LEU:HB2	2:I:720:HIS:CE1	2.56	0.41
2:I:906:CYS:HA	2:I:963:ASN:OD1	2.21	0.41
2:I:1297:PHE:CE1	2:I:1548:LEU:HD12	2.55	0.41
2:I:1476:MET:HB2	2:I:1485:SER:OG	2.21	0.41
2:I:2519:LEU:HD21	2:I:2575:ARG:HE	1.85	0.41
2:I:2595:LEU:O	2:I:2596:THR:OG1	2.30	0.41
2:I:2770:LYS:HD3	2:I:2791:LEU:HD21	2.02	0.41
2:A:28:VAL:O	2:A:29:LEU:HD23	2.21	0.41
2:A:293:LEU:HD11	2:A:355:LEU:HD12	2.02	0.41
2:A:426:ARG:HG3	2:A:505:GLU:O	2.21	0.41
2:A:537:CYS:SG	2:A:570:GLU:HB3	2.60	0.41
2:A:719:LEU:HB2	2:A:720:HIS:CE1	2.55	0.41
2:A:1024:TYR:CZ	2:A:1032:LYS:HG2	2.56	0.41
2:A:1101:ARG:HD2	2:A:1115:LEU:HB2	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:1839:VAL:HB	2:A:1840:PRO:HD3	2.03	0.41
2:A:2186:MET:SD	2:A:2235:PHE:HD2	2.44	0.41
2:A:2244:ARG:CZ	2:A:3860:ASN:HD21	2.34	0.41
2:A:2371:GLU:HA	2:B:128:THR:O	2.19	0.41
2:A:2457:LEU:HD22	2:A:2505:PHE:HE1	1.86	0.41
2:A:2562:ILE:HA	2:A:2565:CYS:SG	2.60	0.41
2:A:2711:PRO:HA	2:A:2712:PRO:HD3	1.89	0.41
2:A:2770:LYS:HD3	2:A:2791:LEU:HD21	2.02	0.41
2:A:3141:THR:HG21	2:A:3192:GLU:OE1	2.20	0.41
2:A:3170:CYS:HA	2:A:3240:CYS:SG	2.61	0.41
2:A:3903:LEU:HD23	2:A:3903:LEU:HA	1.80	0.41
2:G:1252:HIS:CG	2:G:1253:PRO:HD2	2.55	0.41
2:G:2186:MET:SD	2:G:2235:PHE:HD2	2.44	0.41
2:G:2290:LEU:HD23	2:G:2290:LEU:HA	1.85	0.41
2:G:2307:LEU:O	2:G:2307:LEU:HG	2.21	0.41
2:G:2536:LEU:O	2:G:2542:SER:OG	2.38	0.41
2:G:2750[B]:LYS:H	2:G:2750[B]:LYS:HG3	1.36	0.41
2:G:2933:ASN:HB3	2:G:2935:TYR:CD1	2.56	0.41
2:G:3170:CYS:HA	2:G:3240:CYS:SG	2.61	0.41
2:G:3390:GLY:HA2	2:G:3393:LEU:HD12	2.03	0.41
2:G:3540:TYR:HE2	2:G:3549:VAL:HG21	1.86	0.41
2:G:4871:GLU:HG2	2:G:4871:GLU:O	2.21	0.41
2:B:181:HIS:HA	2:B:198:THR:CG2	2.50	0.41
2:B:259:LEU:HD22	2:B:393:CYS:SG	2.60	0.41
2:B:669:ASP:CG	2:B:790:ARG:HH12	2.23	0.41
2:B:1292:SER:HB3	2:B:1596:GLU:HG2	2.03	0.41
2:B:2110:TYR:O	2:B:2112:GLN:NE2	2.53	0.41
2:B:2314:LEU:HA	2:B:2318:TYR:HD2	1.85	0.41
2:B:2475:GLN:HB2	2:B:2488:PRO:HG2	2.03	0.41
2:B:2612:ARG:HA	2:B:2612:ARG:NE	2.35	0.41
2:B:3103:ILE:O	2:B:3107:VAL:HG22	2.21	0.41
2:B:3162:GLN:CD	2:B:3218:VAL:HB	2.41	0.41
2:B:3445:TRP:CE2	2:B:3452:LYS:HG2	2.55	0.41
2:B:3825:GLU:OE2	2:B:3827:GLY:N	2.53	0.41
2:B:4713:SER:HB3	2:B:4775:TYR:OH	2.20	0.41
2:B:4823:LEU:CD1	2:I:4843:LEU:HB2	2.47	0.41
2:I:803:LEU:HD23	2:I:804:PRO:O	2.20	0.41
2:I:1695:LEU:HB3	2:I:1810:LYS:NZ	2.35	0.41
2:I:1805:GLU:OE1	2:I:1805:GLU:N	2.52	0.41
2:I:3354:LEU:O	2:I:3358:PHE:HB3	2.21	0.41
2:I:4039:MET:SD	2:I:4040:ILE:HG12	2.60	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:4189:ARG:NE	2:I:5032:TYR:HH	2.18	0.41
2:I:4927:ILE:HG13	2:I:4928:LEU:H	1.85	0.41
1:F:106:LEU:HD12	1:F:106:LEU:HA	1.72	0.41
2:A:887:ILE:HD12	2:A:887:ILE:HA	1.94	0.41
2:A:2748:PRO:HD2	2:A:2751:LEU:HD12	2.03	0.41
2:A:2766:TRP:CE2	2:A:2770:LYS:HD2	2.56	0.41
2:A:2933:ASN:HB3	2:A:2935:TYR:CD1	2.56	0.41
2:A:3632:VAL:HG22	2:A:3633:VAL:H	1.86	0.41
2:A:3696:ASP:CG	2:A:3773:ARG:HE	2.23	0.41
2:G:1103:GLY:HA3	2:G:1123:VAL:HA	2.03	0.41
2:G:1202:LEU:HD12	2:G:1202:LEU:HA	1.79	0.41
2:G:1454:THR:OG1	2:G:1456:ASP:OD2	2.24	0.41
2:G:1679:ASN:ND2	2:G:1797:ARG:O	2.53	0.41
2:G:2155:LEU:HD12	2:G:2185:ILE:HD13	2.02	0.41
2:G:2314:LEU:HA	2:G:2318:TYR:HD2	1.85	0.41
2:G:2319:PRO:HD3	2:G:2393:ASP:HA	2.03	0.41
2:G:2475:GLN:HB2	2:G:2488:PRO:HG2	2.03	0.41
2:G:2886:TRP:O	2:G:2890:LYS:HG2	2.21	0.41
2:G:3225:ARG:NH2	2:G:3225:ARG:O	2.54	0.41
2:G:3263:TYR:H	2:G:3326:ASN:HD21	1.67	0.41
2:G:4927:ILE:HG13	2:G:4928:LEU:H	1.85	0.41
2:B:214:VAL:HG22	2:B:341:TYR:CE1	2.55	0.41
2:B:274:LEU:HA	2:B:278:GLN:NE2	2.35	0.41
2:B:681:HIS:HB3	2:B:784:SER:HB3	2.02	0.41
2:B:861:ILE:HG21	2:B:930:LYS:HA	2.03	0.41
2:B:906:CYS:HA	2:B:963:ASN:OD1	2.21	0.41
2:B:1433:TYR:CD1	2:B:1573:MET:HB2	2.56	0.41
2:B:2883:HIS:NE2	2:B:2906:VAL:O	2.39	0.41
2:B:3246:LEU:HA	2:B:3249:LEU:HG	2.02	0.41
2:B:3372:VAL:HG21	2:B:3397:GLU:HB3	2.02	0.41
2:B:3390:GLY:HA2	2:B:3393:LEU:HD12	2.02	0.41
2:B:3924:LEU:HA	2:B:3924:LEU:HD23	1.89	0.41
2:B:3970:GLN:HE22	2:B:5004:THR:HA	1.86	0.41
2:B:4049:VAL:HG12	2:B:4163:PHE:CE2	2.56	0.41
2:I:805:PRO:O	2:I:808:TYR:HB2	2.21	0.41
2:I:1024:TYR:CZ	2:I:1032:LYS:HG2	2.56	0.41
2:I:1103:GLY:HA3	2:I:1123:VAL:HA	2.03	0.41
2:I:1292:SER:HB3	2:I:1596:GLU:HG2	2.03	0.41
2:I:1808:ARG:HG3	2:I:1854:PHE:CE1	2.56	0.41
2:I:2138:LEU:HA	2:I:2138:LEU:HD23	1.84	0.41
2:I:2296:GLU:HG3	2:I:2356:LEU:HD11	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:2623:LEU:HD22	2:I:2674:LEU:HG	2.03	0.41
2:I:3206:LEU:HB2	2:I:3280:TYR:OH	2.21	0.41
2:I:3445:TRP:HA	2:I:3451:PHE:CD1	2.54	0.41
2:I:4855:ALA:O	2:I:4859:PHE:N	2.52	0.41
2:A:274:LEU:HA	2:A:278:GLN:NE2	2.35	0.41
2:A:546:TRP:O	2:A:549:SER:OG	2.32	0.41
2:A:721:LEU:HD23	2:A:721:LEU:HA	1.85	0.41
2:A:805:PRO:O	2:A:808:TYR:HB2	2.21	0.41
2:A:870:ILE:HD11	2:A:1049:TYR:CD2	2.56	0.41
2:A:1103:GLY:HA3	2:A:1123:VAL:HA	2.03	0.41
2:A:1122:TYR:HE1	2:A:1133:HIS:CD2	2.39	0.41
2:A:1433:TYR:CD1	2:A:1573:MET:HB2	2.56	0.41
2:A:1996:ARG:HD2	2:A:1997:GLU:N	2.36	0.41
2:A:2110:TYR:O	2:A:2112:GLN:NE2	2.53	0.41
2:A:2138:LEU:HA	2:A:2138:LEU:HD23	1.84	0.41
2:A:2307:LEU:HG	2:A:2307:LEU:O	2.21	0.41
2:A:2457:LEU:O	2:A:2460:LEU:HB3	2.21	0.41
2:A:2475:GLN:HB2	2:A:2488:PRO:HG2	2.03	0.41
2:A:2536:LEU:O	2:A:2542:SER:OG	2.38	0.41
2:A:2754:PHE:CZ	2:A:2930:LEU:HG	2.56	0.41
2:A:3015:LEU:HB3	2:A:3025:LEU:O	2.20	0.41
2:A:3246:LEU:HA	2:A:3249:LEU:HG	2.03	0.41
2:A:3249:LEU:O	2:A:3253:ILE:HG23	2.20	0.41
2:A:3465:ASN:OD1	2:A:3467:MET:N	2.54	0.41
2:A:4185:GLY:HA3	2:A:4189:ARG:N	2.36	0.41
2:A:4843:LEU:HD23	2:A:4928:LEU:HD11	2.03	0.41
1:H:106:LEU:HD12	1:H:106:LEU:HA	1.72	0.41
2:G:320:LYS:HD3	2:G:356:TRP:CZ3	2.56	0.41
2:G:343:GLU:HG2	2:G:344:SER:N	2.35	0.41
2:G:681:HIS:HB3	2:G:784:SER:HB3	2.02	0.41
2:G:983:THR:HG22	2:G:987:ARG:HH12	1.85	0.41
2:G:1734:TYR:HB2	2:G:2140:ARG:O	2.20	0.41
2:G:2296:GLU:HG3	2:G:2356:LEU:HD11	2.03	0.41
2:G:2418:LEU:HG	2:G:2419:GLY:H	1.85	0.41
2:G:2457:LEU:O	2:G:2460:LEU:HB3	2.21	0.41
2:G:2620:GLN:O	2:G:2623:LEU:HB3	2.21	0.41
2:G:2623:LEU:HD22	2:G:2674:LEU:HG	2.03	0.41
2:G:2624:ARG:NH2	2:G:2911:LEU:HA	2.36	0.41
2:G:2748:PRO:HD2	2:G:2751:LEU:HD12	2.03	0.41
2:G:2816:MET:HG2	2:G:2878:LEU:HD21	2.03	0.41
2:G:2968:ASP:O	2:G:2971:GLN:HB2	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:3141:THR:HG21	2:G:3192:GLU:OE1	2.20	0.41
2:G:3206:LEU:HB2	2:G:3280:TYR:OH	2.21	0.41
2:G:3225:ARG:HB3	2:G:3225:ARG:CZ	2.51	0.41
2:G:3586:ALA:HA	2:G:3591:LYS:HE2	2.03	0.41
2:G:3767:GLN:NE2	2:G:3804:ILE:O	2.54	0.41
2:G:3877:ASP:OD2	2:G:3877:ASP:N	2.48	0.41
2:B:207:SER:N	2:B:334:MET:HE1	2.36	0.41
2:B:719:LEU:HB2	2:B:720:HIS:CE1	2.55	0.41
2:B:803:LEU:HD23	2:B:804:PRO:O	2.20	0.41
2:B:805:PRO:O	2:B:808:TYR:HB2	2.21	0.41
2:B:1024:TYR:CZ	2:B:1032:LYS:HG2	2.56	0.41
2:B:1089:TYR:CD2	2:B:1152:MET:HG3	2.52	0.41
2:B:1103:GLY:HA3	2:B:1123:VAL:HA	2.03	0.41
2:B:1734:TYR:HB2	2:B:2140:ARG:O	2.20	0.41
2:B:1839:VAL:HB	2:B:1840:PRO:HD3	2.03	0.41
2:B:2447:LYS:HG3	2:B:2449:GLU:HB3	2.03	0.41
2:B:2498:HIS:O	2:B:2501:SER:OG	2.28	0.41
2:B:2700:MET:HB3	2:B:2701:PRO:HD3	2.03	0.41
2:B:2707:ALA:HB1	2:B:3009:TYR:CD1	2.37	0.41
2:B:3592:ILE:O	2:B:3596:VAL:HG12	2.21	0.41
2:B:3767:GLN:NE2	2:B:3804:ILE:O	2.54	0.41
2:B:3990:VAL:O	2:B:3993:LEU:HB2	2.21	0.41
2:B:4066:LEU:HD11	2:B:4173:TYR:CB	2.51	0.41
2:B:4226:GLY:O	2:B:4230:LYS:HG2	2.21	0.41
2:B:4656:LEU:HA	2:B:4659:ILE:HG12	2.02	0.41
2:I:35:LEU:CB	2:I:49:LEU:HD12	2.51	0.41
2:I:214:VAL:HG22	2:I:341:TYR:CE1	2.55	0.41
2:I:426:ARG:HG3	2:I:505:GLU:O	2.21	0.41
2:I:2155:LEU:HD12	2:I:2185:ILE:HD13	2.02	0.41
2:I:2211:MET:HA	2:I:2214:VAL:HG12	2.02	0.41
2:I:2475:GLN:HB2	2:I:2488:PRO:HG2	2.03	0.41
2:I:2754:PHE:CZ	2:I:2930:LEU:HG	2.56	0.41
2:I:2766:TRP:CE2	2:I:2770:LYS:HD2	2.56	0.41
2:I:3170:CYS:HA	2:I:3240:CYS:SG	2.61	0.41
2:I:3206:LEU:HA	2:I:3246:LEU:CD2	2.42	0.41
2:I:3358:PHE:CZ	2:I:3412:LEU:HD13	2.56	0.41
2:I:3372:VAL:HG21	2:I:3397:GLU:HB3	2.02	0.41
2:I:3465:ASN:OD1	2:I:3467:MET:N	2.54	0.41
2:I:3527:PRO:HA	2:I:3530:GLN:NE2	2.32	0.41
2:I:3825:GLU:OE2	2:I:3827:GLY:N	2.53	0.41
2:I:3924:LEU:HD23	2:I:3924:LEU:HA	1.88	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:3990:VAL:O	2:I:3993:LEU:HB2	2.21	0.41
2:I:4871:GLU:HG2	2:I:4871:GLU:O	2.21	0.41
2:A:21:VAL:HB	2:A:36:CYS:SG	2.61	0.41
2:A:665:GLU:OE1	2:A:800:PHE:HA	2.21	0.41
2:A:861:ILE:HG21	2:A:930:LYS:HA	2.03	0.41
2:A:1007:TYR:CG	2:A:1008:SER:N	2.88	0.41
2:A:1821:ASP:C	2:A:1824:GLN:H	2.24	0.41
2:A:2319:PRO:HD3	2:A:2393:ASP:HA	2.03	0.41
2:A:2447:LYS:HG3	2:A:2449:GLU:HB3	2.03	0.41
2:A:2612:ARG:NE	2:A:2612:ARG:HA	2.35	0.41
2:A:2620:GLN:O	2:A:2623:LEU:HB3	2.21	0.41
2:A:2623:LEU:HD22	2:A:2674:LEU:HG	2.03	0.41
2:A:2624:ARG:NH2	2:A:2911:LEU:HA	2.36	0.41
2:A:2912:THR:O	2:A:2916:LYS:N	2.46	0.41
2:A:3206:LEU:HB2	2:A:3280:TYR:OH	2.21	0.41
2:A:3733:CYS:HB2	2:A:3803:SER:HB2	2.03	0.41
2:A:3886:ARG:HA	2:A:3886:ARG:HD2	1.93	0.41
2:A:3990:VAL:O	2:A:3993:LEU:HB2	2.21	0.41
2:A:4049:VAL:HG12	2:A:4163:PHE:CE2	2.56	0.41
2:A:4152:GLU:HG2	2:A:4192:ARG:NH1	2.36	0.41
2:A:4755:GLU:O	2:A:4756:ARG:NE	2.54	0.41
2:G:820:ARG:HH11	2:G:820:ARG:HG2	1.86	0.41
2:G:949:ASN:HB3	2:G:974:HIS:CE1	2.55	0.41
2:G:1122:TYR:HE1	2:G:1133:HIS:CD2	2.39	0.41
2:G:1692:ALA:O	2:G:1693:GLN:C	2.59	0.41
2:G:1996:ARG:HD2	2:G:1997:GLU:N	2.36	0.41
2:G:2766:TRP:CE2	2:G:2770:LYS:HD2	2.56	0.41
2:G:3037:GLU:OE2	2:G:3078:ARG:NH2	2.50	0.41
2:G:3257:ALA:HB2	2:G:3322:ILE:HG13	2.03	0.41
2:G:3354:LEU:O	2:G:3358:PHE:HB3	2.20	0.41
2:G:3580:PRO:HA	2:G:3582:ARG:HH11	1.86	0.41
2:G:4049:VAL:HG12	2:G:4163:PHE:CE2	2.56	0.41
2:G:4716:TRP:CZ2	6:G:5304:CFF:H143	2.56	0.41
2:G:4960:ILE:HD13	2:G:4983:HIS:HB3	2.03	0.41
2:B:102:LEU:HB2	2:B:105:HIS:HD2	1.85	0.41
2:B:207:SER:OG	2:B:208:CYS:N	2.54	0.41
2:B:341:TYR:OH	2:B:392:ARG:HD3	2.20	0.41
2:B:378:LEU:HD23	2:B:378:LEU:HA	1.85	0.41
2:B:1739:THR:O	2:B:1742:THR:HG22	2.20	0.41
2:B:1808:ARG:HG3	2:B:1854:PHE:CE1	2.56	0.41
2:B:1996:ARG:HD2	2:B:1997:GLU:N	2.36	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2186:MET:SD	2:B:2235:PHE:HD2	2.44	0.41
2:B:2457:LEU:HD22	2:B:2505:PHE:HE1	1.86	0.41
2:B:2624:ARG:HH21	2:B:2911:LEU:HA	1.86	0.41
2:B:2670:GLU:HG2	2:B:2913:ALA:H	1.86	0.41
2:B:3540:TYR:CD2	2:B:3549:VAL:HG11	2.56	0.41
2:B:3577:ARG:NE	2:B:3577:ARG:HA	2.36	0.41
2:B:3586:ALA:HA	2:B:3591:LYS:HE2	2.03	0.41
2:B:4039:MET:SD	2:B:4040:ILE:HG12	2.60	0.41
2:I:297:GLN:HB3	2:I:300:VAL:HG13	2.02	0.41
2:I:980:ALA:O	2:I:983:THR:HB	2.21	0.41
2:I:1692:ALA:O	2:I:1693:GLN:C	2.59	0.41
2:I:2186:MET:SD	2:I:2235:PHE:HD2	2.44	0.41
2:I:2319:PRO:HD3	2:I:2393:ASP:HA	2.03	0.41
2:I:2620:GLN:O	2:I:2623:LEU:HB3	2.21	0.41
2:I:2860:PRO:HG3	2:I:2929:PHE:HE1	1.84	0.41
2:I:3390:GLY:HA2	2:I:3393:LEU:HD12	2.02	0.41
2:I:3903:LEU:HD23	2:I:3903:LEU:HA	1.80	0.41
2:I:3944:GLU:CG	2:I:3947:GLY:H	2.34	0.41
2:A:207:SER:OG	2:A:208:CYS:N	2.54	0.40
2:A:990:GLU:HG2	2:A:1024:TYR:CB	2.52	0.40
2:A:1286:MET:HE2	2:A:1286:MET:HB3	1.97	0.40
2:A:2648:TYR:HB2	2:A:2705:ALA:HB1	2.03	0.40
2:A:2967:MET:O	2:A:2971:GLN:HG2	2.21	0.40
2:A:3069:HIS:ND1	2:A:3142:THR:HG21	2.36	0.40
2:A:3358:PHE:CZ	2:A:3412:LEU:HD13	2.56	0.40
2:A:3934:TYR:HB2	2:A:3999:MET:HE2	2.01	0.40
2:A:4071:ILE:HG13	2:A:4072:VAL:N	2.35	0.40
2:A:4656:LEU:HA	2:A:4659:ILE:HG12	2.02	0.40
2:G:861:ILE:HG21	2:G:930:LYS:HA	2.03	0.40
2:G:1007:TYR:CG	2:G:1008:SER:N	2.88	0.40
2:G:1024:TYR:CZ	2:G:1032:LYS:HG2	2.56	0.40
2:G:1691:GLN:NE2	2:G:1695:LEU:HD11	2.36	0.40
2:G:2719:TYR:OH	2:G:2953:LYS:O	2.26	0.40
2:G:3577:ARG:HA	2:G:3577:ARG:NE	2.36	0.40
2:G:3725:TYR:HA	2:G:3728:ILE:HD12	2.02	0.40
2:G:3965:LEU:HD13	2:G:3968:TYR:HD2	1.86	0.40
2:G:4229:GLU:HG2	2:G:5019:TRP:CD1	2.56	0.40
2:B:320:LYS:HD3	2:B:356:TRP:CZ3	2.56	0.40
2:B:870:ILE:HD11	2:B:1049:TYR:CD2	2.56	0.40
2:B:2244:ARG:CZ	2:B:3860:ASN:HD21	2.34	0.40
2:B:2297:LYS:O	2:B:2301:TYR:HD2	2.04	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2368:LEU:HD12	2:B:2368:LEU:HA	1.86	0.40
2:B:2967:MET:HE1	2:B:3045:LYS:HB3	2.03	0.40
2:B:3225:ARG:O	2:B:3225:ARG:NH2	2.54	0.40
2:B:3249:LEU:O	2:B:3253:ILE:HG23	2.20	0.40
2:B:3937:TYR:CE1	2:B:3943:ILE:HB	2.57	0.40
2:B:3965:LEU:HD13	2:B:3968:TYR:HD2	1.86	0.40
2:I:181:HIS:HA	2:I:198:THR:CG2	2.50	0.40
2:I:861:ILE:HG21	2:I:930:LYS:HA	2.03	0.40
2:I:949:ASN:HB3	2:I:974:HIS:CE1	2.55	0.40
2:I:1433:TYR:CD1	2:I:1573:MET:HB2	2.56	0.40
2:I:2457:LEU:O	2:I:2460:LEU:HB3	2.21	0.40
2:I:2512:ILE:HG22	2:I:2517:PHE:CD2	2.55	0.40
2:I:2648:TYR:HB2	2:I:2705:ALA:HB1	2.03	0.40
2:I:3123:LYS:HB2	2:I:3124:GLY:H	1.76	0.40
2:I:3540:TYR:HE2	2:I:3549:VAL:HG21	1.86	0.40
2:I:3580:PRO:HA	2:I:3582:ARG:HH11	1.86	0.40
2:I:4152:GLU:HG2	2:I:4192:ARG:NH1	2.36	0.40
2:A:320:LYS:HD3	2:A:356:TRP:CZ3	2.56	0.40
2:A:866:HIS:NE2	2:A:939:VAL:HG23	2.36	0.40
2:A:1692:ALA:O	2:A:1693:GLN:C	2.59	0.40
2:A:2290:LEU:HA	2:A:2290:LEU:HD23	1.85	0.40
2:A:2624:ARG:HH21	2:A:2911:LEU:HA	1.86	0.40
2:A:3225:ARG:CZ	2:A:3225:ARG:HB3	2.51	0.40
2:A:3723:MET:HE3	2:A:3723:MET:HB3	1.96	0.40
2:A:4716:TRP:CZ2	6:A:5304:CFF:H143	2.56	0.40
2:A:4871:GLU:HG2	2:A:4871:GLU:O	2.21	0.40
2:G:178:ARG:HB2	2:G:193:ALA:HB1	2.03	0.40
2:G:297:GLN:HB3	2:G:300:VAL:HG13	2.02	0.40
2:G:615:ARG:NH2	2:G:2168:VAL:HG21	2.28	0.40
2:G:1292:SER:HB3	2:G:1596:GLU:HG2	2.03	0.40
2:G:1477:GLY:HA2	2:G:1483:VAL:HA	2.01	0.40
2:G:2284:ASN:HB2	2:G:3858:MET:SD	2.61	0.40
2:G:2416:VAL:HG22	2:G:2417:HIS:N	2.37	0.40
2:G:3540:TYR:CD2	2:G:3549:VAL:HG11	2.57	0.40
2:G:3554:GLN:OE1	2:G:3593:VAL:HG11	2.22	0.40
2:G:3990:VAL:O	2:G:3993:LEU:HB2	2.21	0.40
2:B:33:LEU:O	2:B:34:LYS:HD2	2.21	0.40
2:B:178:ARG:HB2	2:B:193:ALA:HB1	2.03	0.40
2:B:316:PHE:HD1	2:B:346:CYS:SG	2.45	0.40
2:B:990:GLU:HG2	2:B:1024:TYR:CB	2.52	0.40
2:B:1634:LEU:HD12	2:B:1634:LEU:HA	1.79	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1691:GLN:NE2	2:B:1695:LEU:HD11	2.36	0.40
2:B:1692:ALA:O	2:B:1693:GLN:C	2.59	0.40
2:B:1771:LEU:HD12	2:B:1771:LEU:HA	1.97	0.40
2:B:2620:GLN:O	2:B:2623:LEU:HB3	2.21	0.40
2:B:2623:LEU:O	2:B:2627:VAL:HG23	2.21	0.40
2:B:2766:TRP:CE2	2:B:2770:LYS:HD2	2.56	0.40
2:B:3015:LEU:HB3	2:B:3025:LEU:O	2.20	0.40
2:B:3733:CYS:HB2	2:B:3803:SER:HB2	2.03	0.40
2:B:4234:PHE:CD1	2:B:4237:PHE:HD2	2.39	0.40
2:B:4885:PHE:O	2:B:4889:VAL:HG12	2.21	0.40
2:I:1771:LEU:HG	2:I:2153:MET:HE1	2.03	0.40
2:I:1839:VAL:HB	2:I:1840:PRO:HD3	2.03	0.40
2:I:2096:GLU:HB3	2:I:2100:HIS:CE1	2.57	0.40
2:I:2284:ASN:HB2	2:I:3858:MET:SD	2.61	0.40
2:I:2416:VAL:HG22	2:I:2417:HIS:N	2.37	0.40
2:I:2624:ARG:NH2	2:I:2911:LEU:HA	2.36	0.40
2:I:2967:MET:O	2:I:2971:GLN:HG2	2.21	0.40
2:I:4242:ILE:HD11	2:I:4989:MET:SD	2.61	0.40
2:I:4755:GLU:O	2:I:4756:ARG:NE	2.54	0.40
2:I:4885:PHE:O	2:I:4889:VAL:HG12	2.21	0.40
2:A:341:TYR:OH	2:A:392:ARG:HD3	2.20	0.40
2:A:1679:ASN:ND2	2:A:1797:ARG:O	2.53	0.40
2:A:1734:TYR:HB2	2:A:2140:ARG:O	2.20	0.40
2:A:1808:ARG:HG3	2:A:1854:PHE:CE1	2.56	0.40
2:A:2366:PRO:HA	2:A:2369:ARG:NE	2.36	0.40
2:A:3257:ALA:HB2	2:A:3322:ILE:HG13	2.03	0.40
2:A:4150:LEU:HA	2:A:4150:LEU:HD23	1.82	0.40
2:A:4221:VAL:HG13	2:A:4222:VAL:N	2.36	0.40
2:A:4960:ILE:HD13	2:A:4983:HIS:HB3	2.03	0.40
2:G:906:CYS:HA	2:G:963:ASN:OD1	2.21	0.40
2:G:2519:LEU:HD21	2:G:2575:ARG:HE	1.85	0.40
2:G:2749:GLU:OE2	2:G:2749:GLU:N	2.46	0.40
2:G:3970:GLN:HE22	2:G:5004:THR:HA	1.86	0.40
2:B:866:HIS:NE2	2:B:939:VAL:HG23	2.36	0.40
2:B:1668:ARG:HE	2:B:1668:ARG:HB3	1.69	0.40
2:B:2096:GLU:HB3	2:B:2100:HIS:CE1	2.57	0.40
2:B:2886:TRP:O	2:B:2890:LYS:HG2	2.21	0.40
2:B:3123:LYS:HB2	2:B:3124:GLY:H	1.76	0.40
2:B:3170:CYS:HA	2:B:3240:CYS:SG	2.61	0.40
2:B:3604:TYR:O	2:B:3608:GLN:HG2	2.21	0.40
2:B:4242:ILE:HD11	2:B:4989:MET:SD	2.62	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:4843:LEU:HD23	2:B:4928:LEU:HD11	2.03	0.40
2:I:320:LYS:HD3	2:I:356:TRP:CZ3	2.56	0.40
2:I:820:ARG:HH11	2:I:820:ARG:HG2	1.86	0.40
2:I:887:ILE:HD11	2:I:960:MET:CE	2.51	0.40
2:I:3225:ARG:HB3	2:I:3225:ARG:CZ	2.51	0.40
2:I:3527:PRO:O	2:I:3530:GLN:OE1	2.40	0.40
2:I:4049:VAL:HG12	2:I:4163:PHE:CE2	2.56	0.40
2:I:4066:LEU:HD11	2:I:4173:TYR:CB	2.51	0.40
2:I:4221:VAL:HG13	2:I:4222:VAL:N	2.36	0.40
2:I:4226:GLY:O	2:I:4230:LYS:HG2	2.21	0.40
2:I:4716:TRP:CZ2	6:I:5304:CFF:H143	2.56	0.40
2:I:4960:ILE:HD13	2:I:4983:HIS:HB3	2.03	0.40
2:A:149:THR:HG22	2:A:150:MET:N	2.30	0.40
2:A:153:ALA:HB3	2:A:168:ASP:HB2	2.04	0.40
2:A:178:ARG:HB2	2:A:193:ALA:HB1	2.03	0.40
2:A:316:PHE:HD1	2:A:346:CYS:SG	2.45	0.40
2:A:887:ILE:HD11	2:A:960:MET:CE	2.51	0.40
2:A:3225:ARG:NH2	2:A:3225:ARG:O	2.54	0.40
2:A:3580:PRO:HA	2:A:3582:ARG:HH11	1.86	0.40
2:A:3725:TYR:HA	2:A:3728:ILE:HD12	2.02	0.40
2:A:4242:ILE:HD11	2:A:4989:MET:SD	2.62	0.40
2:A:4646:LEU:HD23	2:A:4646:LEU:HA	1.85	0.40
1:H:52:LYS:HB3	1:H:52:LYS:HE2	1.76	0.40
2:G:33:LEU:O	2:G:34:LYS:HD2	2.21	0.40
2:G:215:THR:OG1	2:G:218:HIS:NE2	2.53	0.40
2:G:1821:ASP:C	2:G:1824:GLN:H	2.24	0.40
2:G:2670:GLU:HG2	2:G:2913:ALA:H	1.86	0.40
2:G:3358:PHE:CZ	2:G:3412:LEU:HD13	2.56	0.40
2:G:3825:GLU:OE2	2:G:3827:GLY:N	2.53	0.40
2:G:4650:HIS:ND1	2:G:4799:SER:OG	2.46	0.40
2:B:800:PHE:HB3	2:B:802:PHE:O	2.22	0.40
2:B:1820:ARG:HA	2:B:1820:ARG:HD2	1.69	0.40
2:B:2296:GLU:HG3	2:B:2356:LEU:HD11	2.03	0.40
2:B:2416:VAL:HG22	2:B:2417:HIS:N	2.37	0.40
2:B:2457:LEU:O	2:B:2460:LEU:HB3	2.21	0.40
2:B:2555:CYS:SG	2:B:2599:GLN:HG3	2.62	0.40
2:B:3106:MET:O	2:B:3110:LEU:HG	2.22	0.40
2:B:3508:SER:O	2:B:3511:VAL:HG22	2.21	0.40
2:B:3554:GLN:OE1	2:B:3593:VAL:HG11	2.22	0.40
2:B:4716:TRP:CZ2	6:B:5304:CFF:H143	2.56	0.40
2:I:207:SER:OG	2:I:208:CYS:N	2.54	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:990:GLU:HG2	2:I:1024:TYR:CB	2.52	0.40
2:I:1089:TYR:CD2	2:I:1152:MET:HG3	2.52	0.40
2:I:1691:GLN:NE2	2:I:1695:LEU:HD11	2.36	0.40
2:I:2457:LEU:HD22	2:I:2505:PHE:HE1	1.86	0.40
2:I:3061:ALA:N	2:I:3062:PRO:HD2	2.37	0.40
2:I:3225:ARG:NH2	2:I:3225:ARG:O	2.54	0.40
2:I:3540:TYR:CD2	2:I:3549:VAL:HG11	2.57	0.40
2:I:4229:GLU:HG2	2:I:5019:TRP:CD1	2.56	0.40
2:I:4991:PHE:CZ	2:I:5010:VAL:HG21	2.57	0.40
2:A:1131:ARG:HB3	2:A:1139:PHE:HD1	1.87	0.40
2:A:2135:LEU:HD11	2:A:3663:LEU:HG	2.03	0.40
2:A:2416:VAL:HG22	2:A:2417:HIS:N	2.37	0.40
2:A:2449:GLU:O	2:A:2452:ARG:HG2	2.22	0.40
2:A:2531:ARG:HD2	2:A:2588:ARG:NH2	2.37	0.40
2:A:3033:ASN:HB2	2:A:3078:ARG:HH21	1.87	0.40
2:A:3402:CYS:SG	2:A:3455:GLU:HA	2.62	0.40
2:A:3586:ALA:HA	2:A:3591:LYS:HE2	2.03	0.40
2:A:3937:TYR:CE1	2:A:3943:ILE:HB	2.57	0.40
2:A:4226:GLY:O	2:A:4230:LYS:HG2	2.21	0.40
2:G:24:CYS:HB3	2:G:182:LEU:CD2	2.49	0.40
2:G:316:PHE:HD1	2:G:346:CYS:SG	2.45	0.40
2:G:341:TYR:OH	2:G:392:ARG:HD3	2.20	0.40
2:G:818:ARG:HH22	2:G:1028:ASP:HA	1.87	0.40
2:G:1649:ASP:O	2:G:1652:GLU:HB2	2.22	0.40
2:G:1808:ARG:HG3	2:G:1854:PHE:CE1	2.56	0.40
2:G:2470:ILE:HD11	2:G:2502:MET:HB2	2.03	0.40
2:G:2967:MET:O	2:G:2971:GLN:HG2	2.21	0.40
2:G:3016:TYR:O	2:G:3019:SER:OG	2.23	0.40
2:G:3214:ASN:OD1	2:G:3215:ALA:N	2.55	0.40
2:G:3944:GLU:CG	2:G:3947:GLY:H	2.34	0.40
2:G:4226:GLY:O	2:G:4230:LYS:HG2	2.21	0.40
2:G:4242:ILE:HD11	2:G:4989:MET:SD	2.62	0.40
2:G:4843:LEU:HD23	2:G:4928:LEU:HD11	2.03	0.40
2:B:49:LEU:HD13	2:B:49:LEU:HA	1.98	0.40
2:B:183:SER:HB2	2:B:190:GLN:CA	2.52	0.40
2:B:904:HIS:N	2:B:905:PRO:HD3	2.36	0.40
2:B:980:ALA:O	2:B:983:THR:HB	2.21	0.40
2:B:2199:ARG:NH2	2:B:2245:GLN:HG3	2.37	0.40
2:B:2758:PHE:CD2	2:B:2809:ILE:HG12	2.54	0.40
2:B:3070:ILE:O	2:B:3074:SER:N	2.46	0.40
2:B:3358:PHE:CZ	2:B:3412:LEU:HD13	2.56	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3402:CYS:SG	2:B:3455:GLU:HA	2.62	0.40
2:B:3944:GLU:CG	2:B:3947:GLY:H	2.34	0.40
2:B:4185:GLY:HA3	2:B:4189:ARG:N	2.36	0.40
2:B:4991:PHE:CZ	2:B:5010:VAL:HG21	2.56	0.40
2:I:33:LEU:O	2:I:34:LYS:HD2	2.21	0.40
2:I:102:LEU:HB2	2:I:105:HIS:HD2	1.85	0.40
2:I:183:SER:HB2	2:I:190:GLN:CA	2.52	0.40
2:I:1668:ARG:HE	2:I:1668:ARG:HB3	1.69	0.40
2:I:2244:ARG:CZ	2:I:3860:ASN:HD21	2.34	0.40
2:I:2366:PRO:HA	2:I:2369:ARG:NE	2.36	0.40
2:I:3323:ILE:HG23	2:I:3335:MET:CE	2.52	0.40
2:I:3443:ILE:HG23	2:I:3605:HIS:CE1	2.55	0.40
2:I:3592:ILE:O	2:I:3596:VAL:HG12	2.21	0.40
2:I:3937:TYR:CE1	2:I:3943:ILE:HB	2.57	0.40
2:I:4045:VAL:O	2:I:4049:VAL:HG13	2.21	0.40
2:I:4093:PHE:O	2:I:4097:MET:HG2	2.22	0.40
2:I:4111:LEU:HD23	2:I:4111:LEU:HA	1.84	0.40
2:I:4646:LEU:HD23	2:I:4646:LEU:HA	1.85	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	F	105/108 (97%)	96 (91%)	9 (9%)	0	100	100
1	H	105/108 (97%)	96 (91%)	9 (9%)	0	100	100
1	J	105/108 (97%)	96 (91%)	9 (9%)	0	100	100
1	O	105/108 (97%)	96 (91%)	9 (9%)	0	100	100
2	A	4256/5037 (84%)	3938 (92%)	314 (7%)	4 (0%)	51	83
2	B	4256/5037 (84%)	3936 (92%)	316 (7%)	4 (0%)	51	83

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	G	4256/5037 (84%)	3939 (93%)	313 (7%)	4 (0%)	51	83
2	I	4256/5037 (84%)	3940 (93%)	312 (7%)	4 (0%)	51	83
All	All	17444/20580 (85%)	16137 (92%)	1291 (7%)	16 (0%)	54	83

All (16) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	A	3876	ALA
2	G	3876	ALA
2	B	3876	ALA
2	I	3876	ALA
2	A	1783	VAL
2	G	1783	VAL
2	B	1783	VAL
2	I	1783	VAL
2	A	3896	ASN
2	G	3896	ASN
2	B	3896	ASN
2	I	3896	ASN
2	A	1780	PRO
2	G	1780	PRO
2	B	1780	PRO
2	I	1780	PRO

### 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	F	88/89 (99%)	79 (90%)	9 (10%)	7	28
1	H	88/89 (99%)	79 (90%)	9 (10%)	7	28
1	J	88/89 (99%)	79 (90%)	9 (10%)	7	28
1	O	88/89 (99%)	79 (90%)	9 (10%)	7	28
2	A	3732/4276 (87%)	3702 (99%)	30 (1%)	81	88

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
2	B	3732/4276 (87%)	3702 (99%)	30 (1%)	81	88
2	G	3732/4276 (87%)	3702 (99%)	30 (1%)	81	88
2	I	3732/4276 (87%)	3702 (99%)	30 (1%)	81	88
All	All	15280/17460 (88%)	15124 (99%)	156 (1%)	77	85

All (156) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	F	5	GLU
1	F	21	THR
1	F	25	HIS
1	F	37	ASP
1	F	38	SER
1	F	44	LYS
1	F	49	ARG
1	F	54	GLU
1	F	106	LEU
2	A	749	ASP
2	A	750	LEU
2	A	754	SER
2	A	755	ILE
2	A	877	ASN
2	A	1020	ARG
2	A	1623	ARG
2	A	1687	SER
2	A	1690	ASP
2	A	1691	GLN
2	A	1778	SER
2	A	1783	VAL
2	A	3053	ARG
2	A	3287	ARG
2	A	3854	GLU
2	A	3864	THR
2	A	3865	VAL
2	A	3874	VAL
2	A	3875	MET
2	A	3904	ARG
2	A	3949	ARG
2	A	3965	LEU
2	A	3966	THR
2	A	3967	GLU

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
2	A	3969	ILE
2	A	3970	GLN
2	A	4031	LEU
2	A	4032	GLU
2	A	5001	THR
2	A	5004	THR
1	H	5	GLU
1	H	21	THR
1	H	25	HIS
1	H	37	ASP
1	H	38	SER
1	H	44	LYS
1	H	49	ARG
1	H	54	GLU
1	H	106	LEU
1	J	5	GLU
1	J	21	THR
1	J	25	HIS
1	J	37	ASP
1	J	38	SER
1	J	44	LYS
1	J	49	ARG
1	J	54	GLU
1	J	106	LEU
1	O	5	GLU
1	O	21	THR
1	O	25	HIS
1	O	37	ASP
1	O	38	SER
1	O	44	LYS
1	O	49	ARG
1	O	54	GLU
1	O	106	LEU
2	G	749	ASP
2	G	750	LEU
2	G	754	SER
2	G	755	ILE
2	G	877	ASN
2	G	1020	ARG
2	G	1623	ARG
2	G	1687	SER
2	G	1690	ASP

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
2	G	1691	GLN
2	G	1778	SER
2	G	1783	VAL
2	G	3053	ARG
2	G	3287	ARG
2	G	3854	GLU
2	G	3864	THR
2	G	3865	VAL
2	G	3874	VAL
2	G	3875	MET
2	G	3904	ARG
2	G	3949	ARG
2	G	3965	LEU
2	G	3966	THR
2	G	3967	GLU
2	G	3969	ILE
2	G	3970	GLN
2	G	4031	LEU
2	G	4032	GLU
2	G	5001	THR
2	G	5004	THR
2	B	749	ASP
2	B	750	LEU
2	B	754	SER
2	B	755	ILE
2	B	877	ASN
2	B	1020	ARG
2	B	1623	ARG
2	B	1687	SER
2	B	1690	ASP
2	B	1691	GLN
2	B	1778	SER
2	B	1783	VAL
2	B	3053	ARG
2	B	3287	ARG
2	B	3854	GLU
2	B	3864	THR
2	B	3865	VAL
2	B	3874	VAL
2	B	3875	MET
2	B	3904	ARG
2	B	3949	ARG

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
2	B	3965	LEU
2	B	3966	THR
2	B	3967	GLU
2	B	3969	ILE
2	B	3970	GLN
2	B	4031	LEU
2	B	4032	GLU
2	B	5001	THR
2	B	5004	THR
2	I	749	ASP
2	I	750	LEU
2	I	754	SER
2	I	755	ILE
2	I	877	ASN
2	I	1020	ARG
2	I	1623	ARG
2	I	1687	SER
2	I	1690	ASP
2	I	1691	GLN
2	I	1778	SER
2	I	1783	VAL
2	I	3053	ARG
2	I	3287	ARG
2	I	3854	GLU
2	I	3864	THR
2	I	3865	VAL
2	I	3874	VAL
2	I	3875	MET
2	I	3904	ARG
2	I	3949	ARG
2	I	3965	LEU
2	I	3966	THR
2	I	3967	GLU
2	I	3969	ILE
2	I	3970	GLN
2	I	4031	LEU
2	I	4032	GLU
2	I	5001	THR
2	I	5004	THR

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (56) such sidechains are listed below:

Mol	Chain	Res	Type
2	A	495	ASN
2	A	1299	GLN
2	A	1563	GLN
2	A	1691	GLN
2	A	2247	GLN
2	A	2417	HIS
2	A	2498	HIS
2	A	3313	ASN
2	A	3556	ASN
2	A	3900	GLN
2	A	3970	GLN
2	A	4054	ASN
2	A	4109	GLN
2	A	4946	GLN
2	G	495	ASN
2	G	1299	GLN
2	G	1563	GLN
2	G	1691	GLN
2	G	2247	GLN
2	G	2417	HIS
2	G	2498	HIS
2	G	3313	ASN
2	G	3556	ASN
2	G	3900	GLN
2	G	3970	GLN
2	G	4054	ASN
2	G	4109	GLN
2	G	4946	GLN
2	B	495	ASN
2	B	1299	GLN
2	B	1563	GLN
2	B	1691	GLN
2	B	2247	GLN
2	B	2417	HIS
2	B	2498	HIS
2	B	3313	ASN
2	B	3556	ASN
2	B	3900	GLN
2	B	3970	GLN
2	B	4054	ASN
2	B	4109	GLN
2	B	4946	GLN
2	I	495	ASN

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Mol	Chain	Res	Type
2	I	1299	GLN
2	I	1563	GLN
2	I	1691	GLN
2	I	2247	GLN
2	I	2417	HIS
2	I	2498	HIS
2	I	3313	ASN
2	I	3556	ASN
2	I	3900	GLN
2	I	3970	GLN
2	I	4054	ASN
2	I	4109	GLN
2	I	4946	GLN

### 5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

### 5.4 Non-standard residues in protein, DNA, RNA chains [i](#)

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

### 5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

### 5.6 Ligand geometry [i](#)

Of 16 ligands modelled in this entry, 8 are monoatomic - leaving 8 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. 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  $|Z| > 2$  is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z  > 2$	Counts	RMSZ	$\# Z  > 2$
3	ATP	A	5301	-	26,33,33	0.84	0	31,52,52	1.63	5 (16%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
3	ATP	G	5301	-	26,33,33	0.84	0	31,52,52	1.63	5 (16%)
3	ATP	B	5301	-	26,33,33	0.84	0	31,52,52	1.62	5 (16%)
6	CFF	B	5304	-	8,15,15	2.54	4 (50%)	8,23,23	1.53	1 (12%)
6	CFF	G	5304	-	8,15,15	2.55	4 (50%)	8,23,23	1.54	1 (12%)
3	ATP	I	5301	-	26,33,33	0.83	0	31,52,52	1.63	5 (16%)
6	CFF	A	5304	-	8,15,15	2.54	4 (50%)	8,23,23	1.53	1 (12%)
6	CFF	I	5304	-	8,15,15	2.55	4 (50%)	8,23,23	1.53	1 (12%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
3	ATP	A	5301	-	-	5/18/38/38	0/3/3/3
3	ATP	G	5301	-	-	5/18/38/38	0/3/3/3
3	ATP	B	5301	-	-	5/18/38/38	0/3/3/3
6	CFF	B	5304	-	-	-	0/2/2/2
6	CFF	G	5304	-	-	-	0/2/2/2
3	ATP	I	5301	-	-	5/18/38/38	0/3/3/3
6	CFF	A	5304	-	-	-	0/2/2/2
6	CFF	I	5304	-	-	-	0/2/2/2

All (16) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	B	5304	CFF	C5-C4	-4.57	1.33	1.39
6	I	5304	CFF	C5-C4	-4.55	1.33	1.39
6	A	5304	CFF	C5-C4	-4.55	1.33	1.39
6	G	5304	CFF	C5-C4	-4.53	1.33	1.39
6	G	5304	CFF	C6-N1	-4.25	1.32	1.38
6	I	5304	CFF	C6-N1	-4.22	1.32	1.38
6	A	5304	CFF	C6-N1	-4.19	1.32	1.38
6	B	5304	CFF	C6-N1	-4.16	1.32	1.38
6	B	5304	CFF	O13-C6	-2.42	1.18	1.24
6	I	5304	CFF	O13-C6	-2.40	1.18	1.24
6	A	5304	CFF	O13-C6	-2.39	1.18	1.24
6	G	5304	CFF	O13-C6	-2.37	1.18	1.24
6	I	5304	CFF	C5-C6	-2.30	1.37	1.41
6	A	5304	CFF	C5-C6	-2.30	1.37	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	B	5304	CFF	C5-C6	-2.30	1.37	1.41
6	G	5304	CFF	C5-C6	-2.29	1.37	1.41

All (24) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	B	5301	ATP	PB-O3B-PG	-3.95	119.27	132.83
3	A	5301	ATP	PB-O3B-PG	-3.95	119.28	132.83
3	G	5301	ATP	PB-O3B-PG	-3.94	119.30	132.83
3	I	5301	ATP	PB-O3B-PG	-3.93	119.33	132.83
3	G	5301	ATP	PA-O3A-PB	-3.86	119.56	132.83
3	I	5301	ATP	PA-O3A-PB	-3.86	119.59	132.83
3	A	5301	ATP	PA-O3A-PB	-3.85	119.60	132.83
3	B	5301	ATP	PA-O3A-PB	-3.85	119.61	132.83
3	I	5301	ATP	N3-C2-N1	-3.42	123.33	128.68
3	G	5301	ATP	N3-C2-N1	-3.41	123.35	128.68
3	A	5301	ATP	N3-C2-N1	-3.39	123.38	128.68
3	B	5301	ATP	N3-C2-N1	-3.35	123.45	128.68
3	B	5301	ATP	C3'-C2'-C1'	3.18	105.77	100.98
6	B	5304	CFF	C14-N7-C8	-3.18	110.12	125.43
3	G	5301	ATP	C3'-C2'-C1'	3.18	105.77	100.98
3	I	5301	ATP	C3'-C2'-C1'	3.18	105.77	100.98
3	A	5301	ATP	C3'-C2'-C1'	3.18	105.76	100.98
6	I	5304	CFF	C14-N7-C8	-3.17	110.18	125.43
6	G	5304	CFF	C14-N7-C8	-3.16	110.20	125.43
6	A	5304	CFF	C14-N7-C8	-3.16	110.20	125.43
3	G	5301	ATP	N6-C6-N1	2.17	123.07	118.57
3	I	5301	ATP	N6-C6-N1	2.17	123.07	118.57
3	A	5301	ATP	N6-C6-N1	2.17	123.07	118.57
3	B	5301	ATP	N6-C6-N1	2.14	123.02	118.57

There are no chirality outliers.

All (20) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
3	A	5301	ATP	C5'-O5'-PA-O3A
3	A	5301	ATP	C3'-C4'-C5'-O5'
3	G	5301	ATP	C5'-O5'-PA-O3A
3	G	5301	ATP	C3'-C4'-C5'-O5'
3	B	5301	ATP	C5'-O5'-PA-O3A
3	B	5301	ATP	C3'-C4'-C5'-O5'
3	I	5301	ATP	C5'-O5'-PA-O3A

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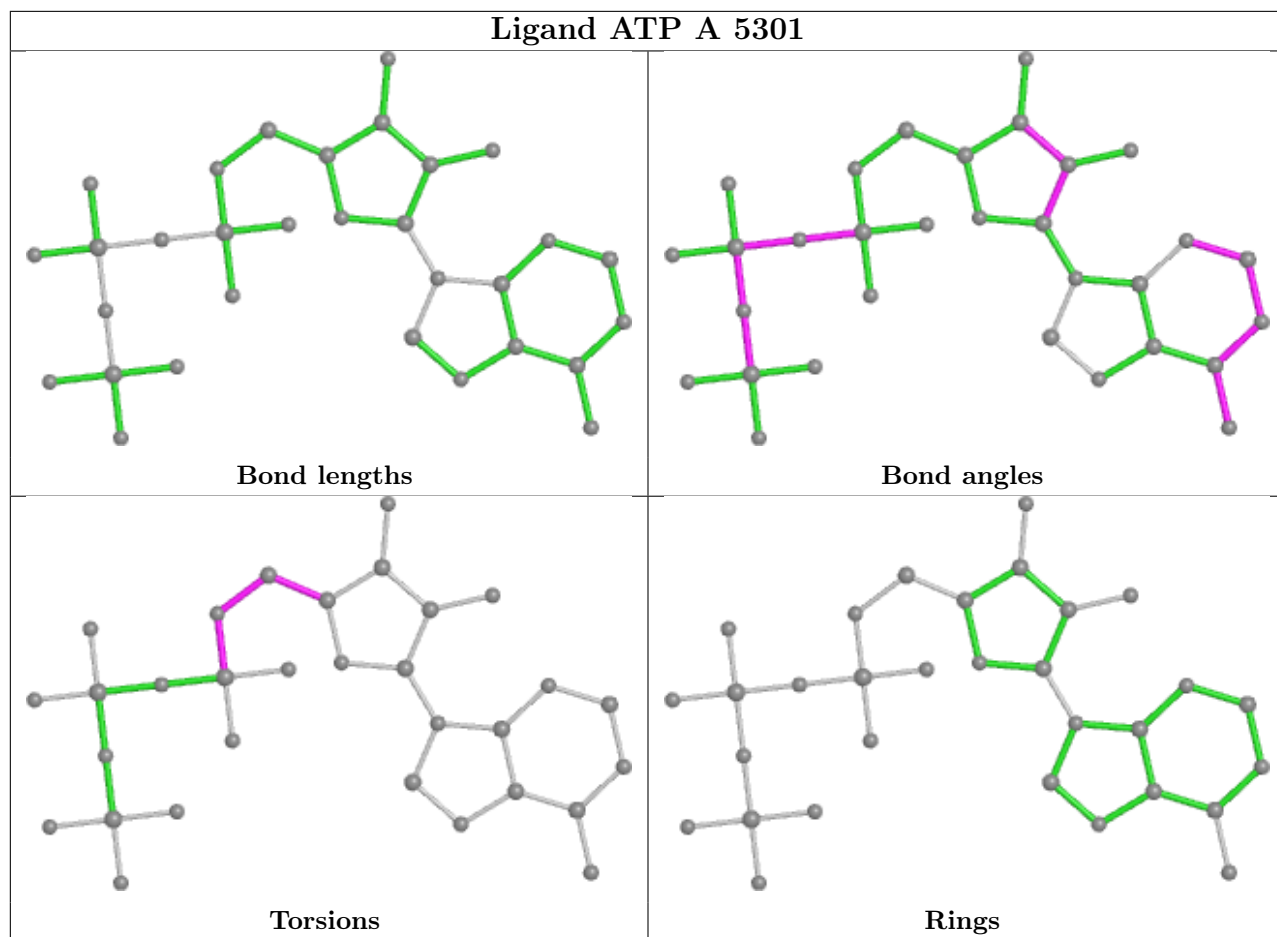
Mol	Chain	Res	Type	Atoms
3	I	5301	ATP	C3'-C4'-C5'-O5'
3	A	5301	ATP	O4'-C4'-C5'-O5'
3	G	5301	ATP	O4'-C4'-C5'-O5'
3	B	5301	ATP	O4'-C4'-C5'-O5'
3	I	5301	ATP	O4'-C4'-C5'-O5'
3	A	5301	ATP	C4'-C5'-O5'-PA
3	G	5301	ATP	C4'-C5'-O5'-PA
3	B	5301	ATP	C4'-C5'-O5'-PA
3	I	5301	ATP	C4'-C5'-O5'-PA
3	A	5301	ATP	C5'-O5'-PA-O1A
3	G	5301	ATP	C5'-O5'-PA-O1A
3	B	5301	ATP	C5'-O5'-PA-O1A
3	I	5301	ATP	C5'-O5'-PA-O1A

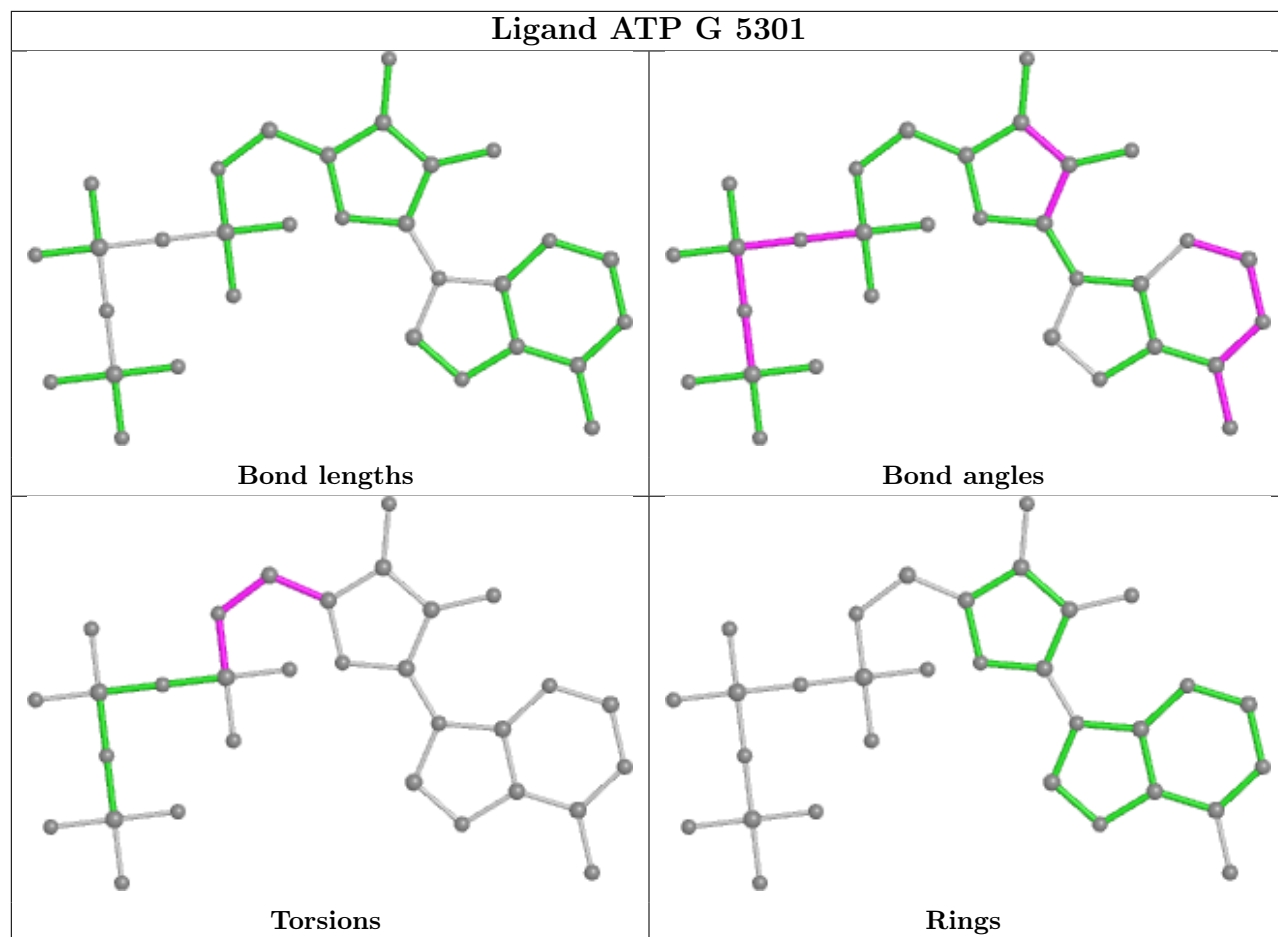
There are no ring outliers.

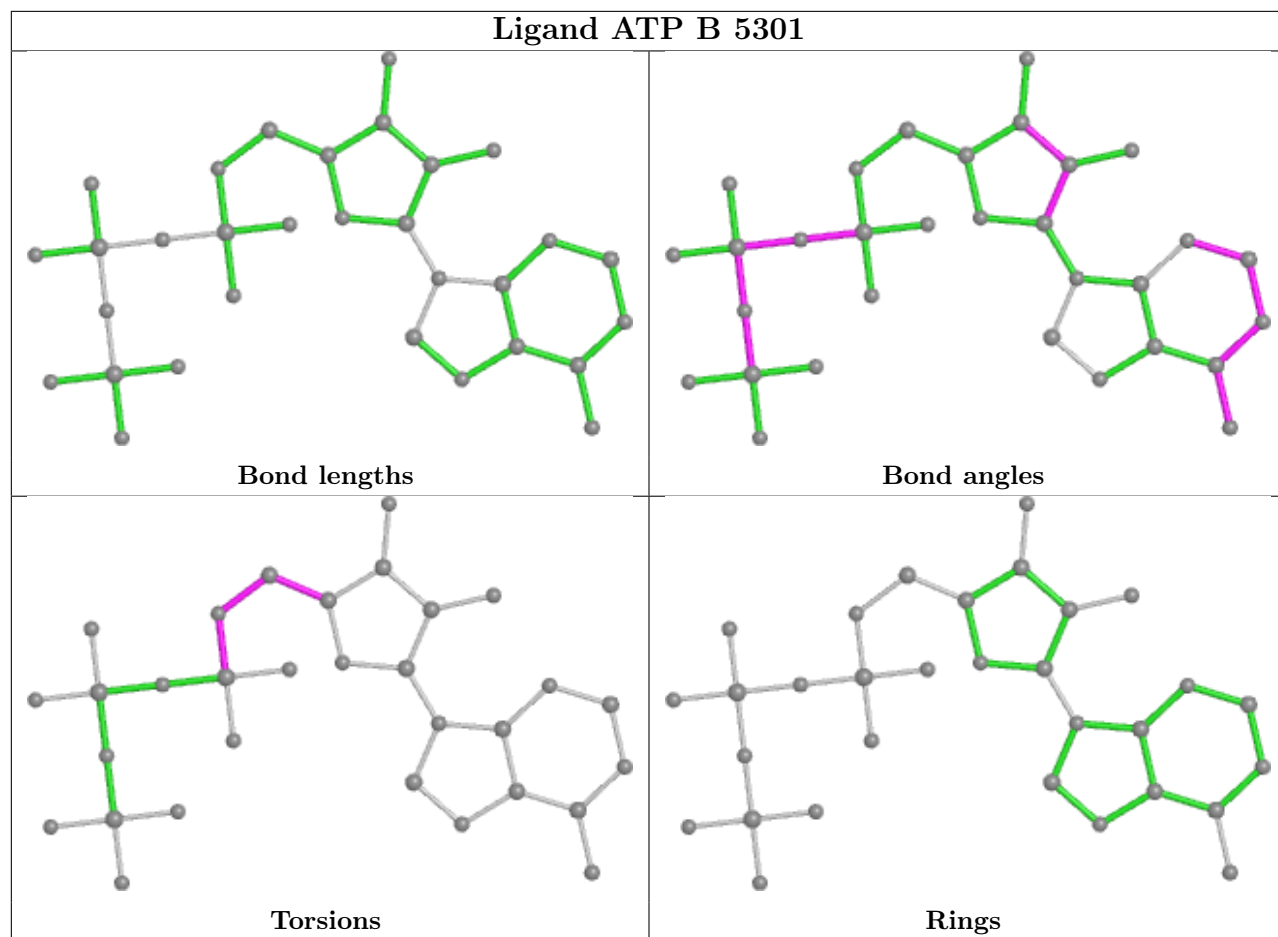
8 monomers are involved in 30 short contacts:

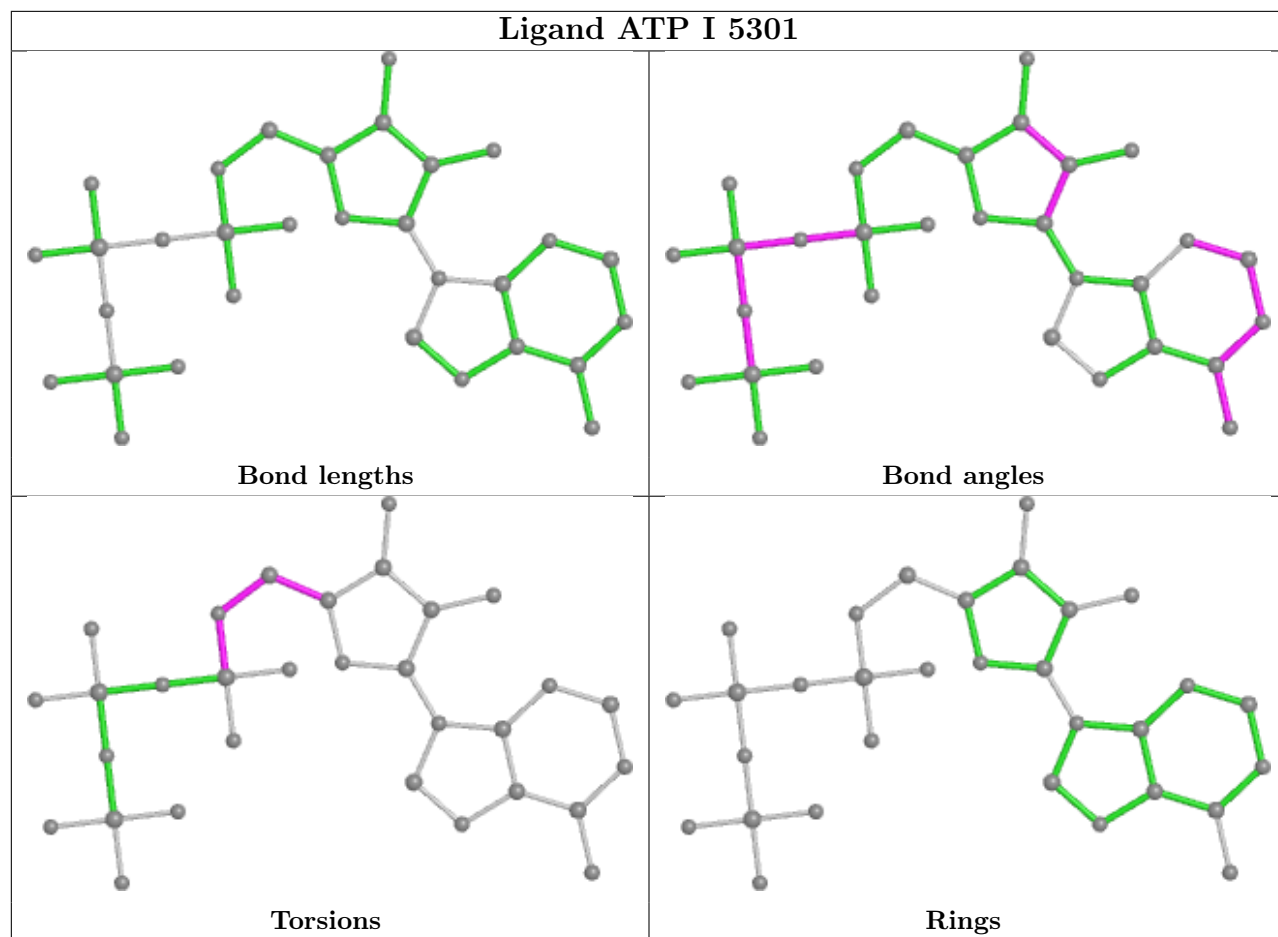
Mol	Chain	Res	Type	Clashes	Symm-Clashes
3	A	5301	ATP	5	0
3	G	5301	ATP	6	0
3	B	5301	ATP	5	0
6	B	5304	CFE	2	0
6	G	5304	CFE	2	0
3	I	5301	ATP	6	0
6	A	5304	CFE	2	0
6	I	5304	CFE	2	0

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.









## 5.7 Other polymers [i](#)

There are no such residues in this entry.

## 5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

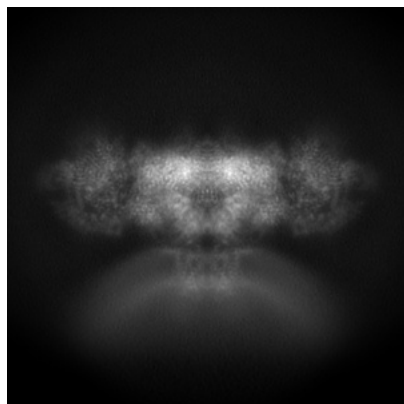
## 6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-23699. These allow visual inspection of the internal detail of the map and identification of artifacts.

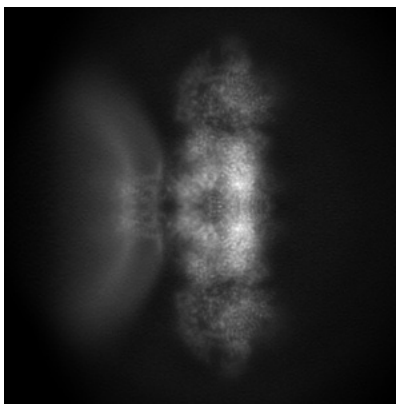
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

### 6.1 Orthogonal projections [i](#)

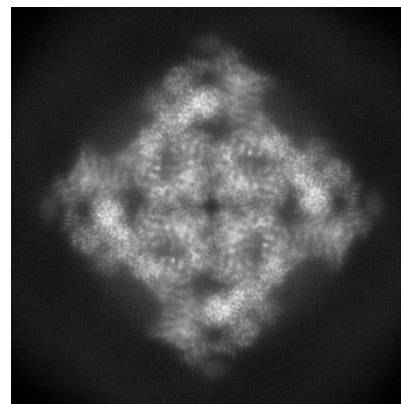
#### 6.1.1 Primary map



X

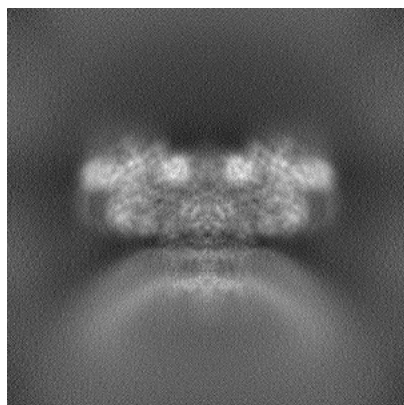


Y

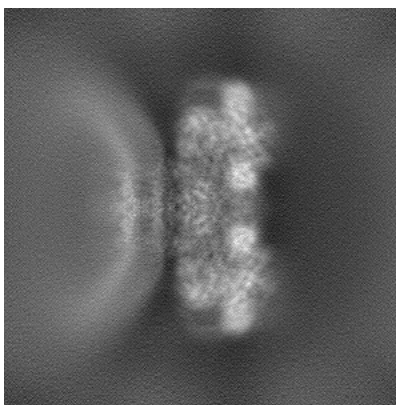


Z

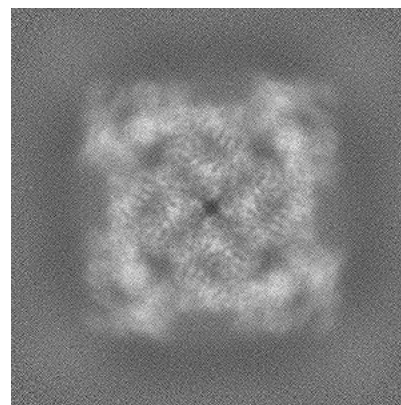
#### 6.1.2 Raw map



X



Y



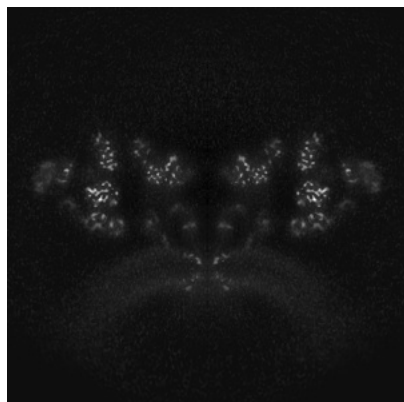
Z

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

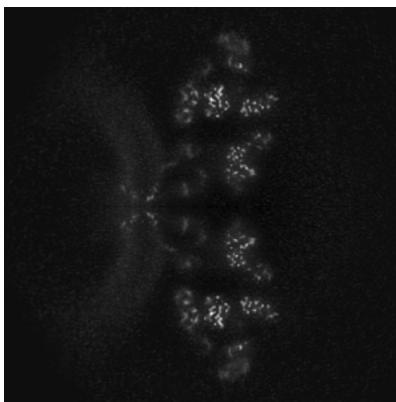


## 6.2 Central slices [i](#)

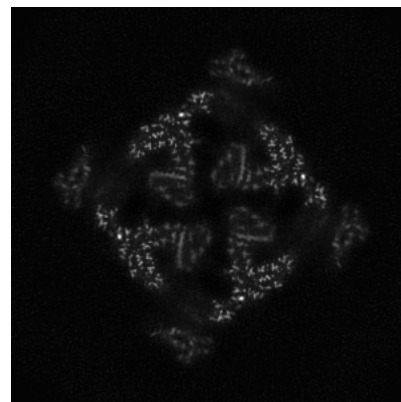
### 6.2.1 Primary map



X Index: 256



Y Index: 256

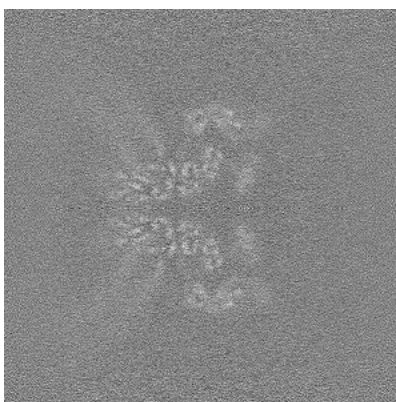


Z Index: 256

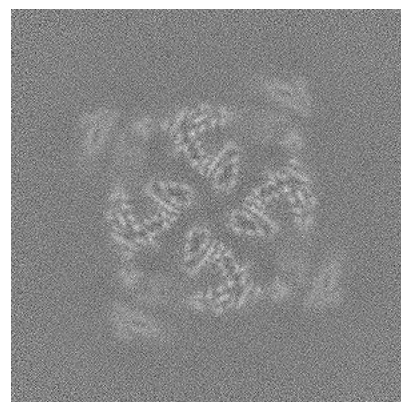
### 6.2.2 Raw map



X Index: 256



Y Index: 256

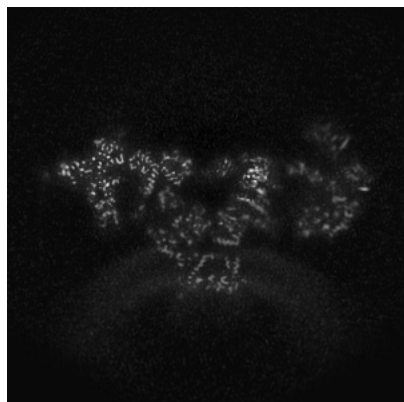


Z Index: 256

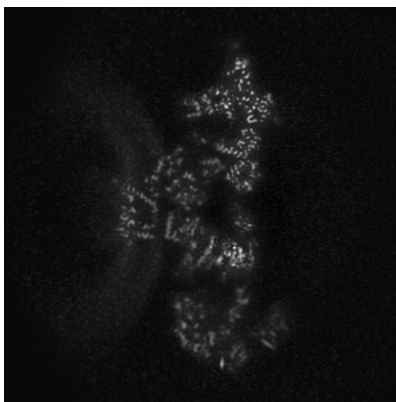
The images above show central slices of the map in three orthogonal directions.

## 6.3 Largest variance slices [i](#)

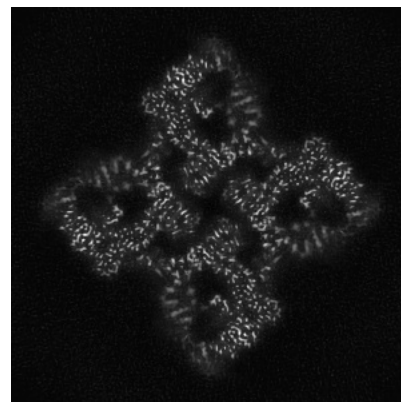
### 6.3.1 Primary map



X Index: 279

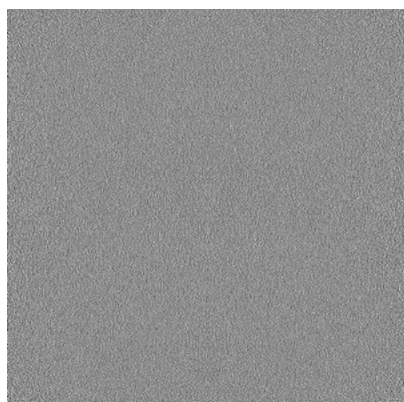


Y Index: 279

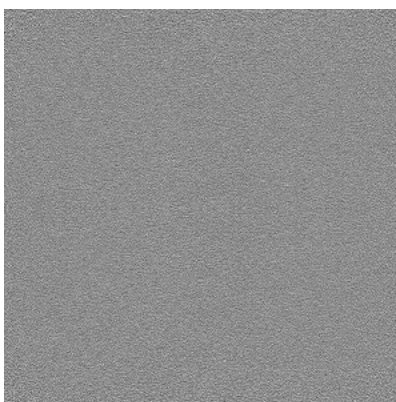


Z Index: 304

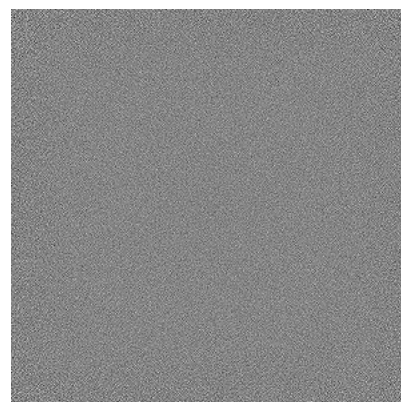
### 6.3.2 Raw map



X Index: 0



Y Index: 0

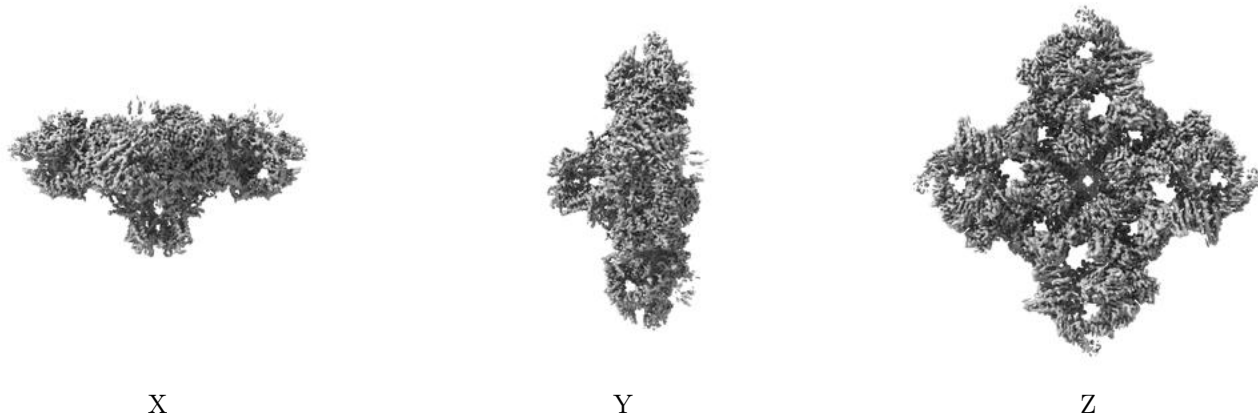


Z Index: 0

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

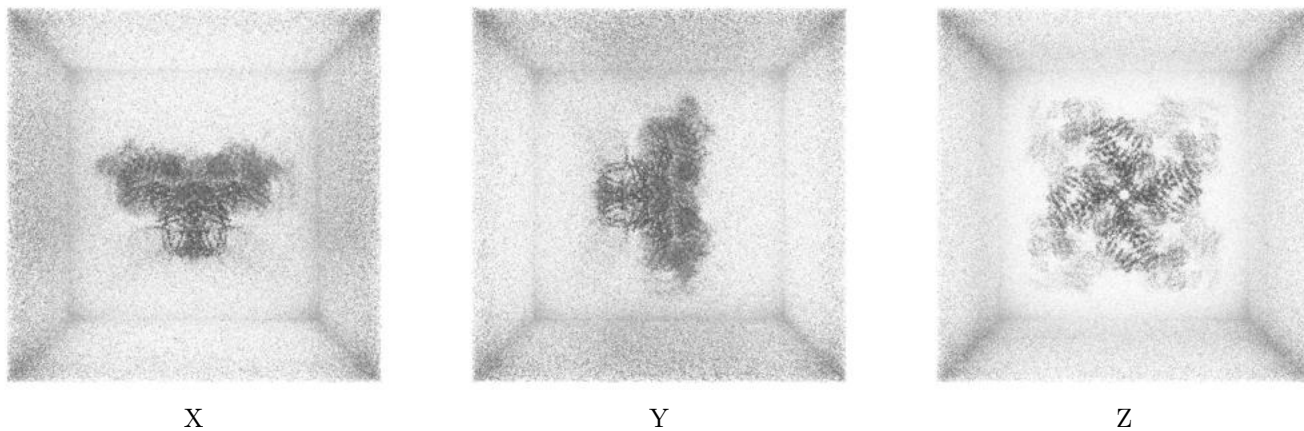
## 6.4 Orthogonal surface views [i](#)

### 6.4.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.106. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

### 6.4.2 Raw map



These images show the 3D surface of the raw map. The raw map's contour level was selected so that its surface encloses the same volume as the primary map does at its recommended contour level.

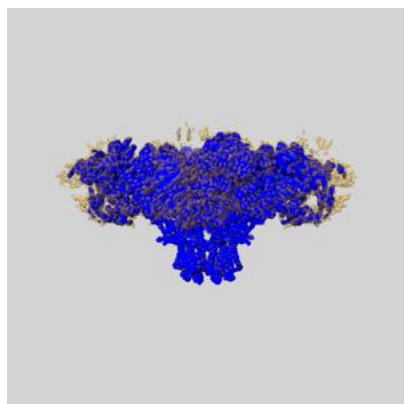
## 6.5 Mask visualisation [i](#)

This section shows the 3D surface view of the primary map at 50% transparency overlaid with the specified mask at 0% transparency

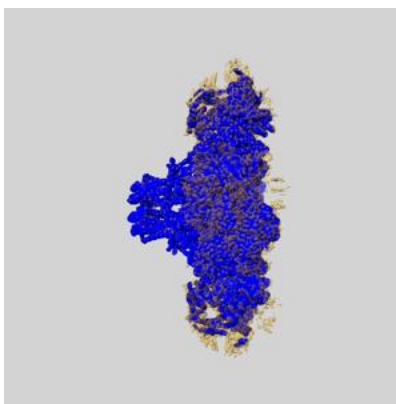
A mask typically either:

- Encompasses the whole structure
- Separates out a domain, a functional unit, a monomer or an area of interest from a larger structure

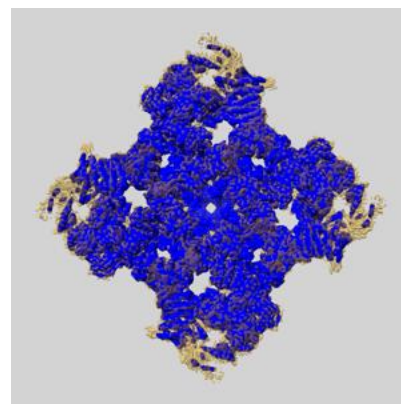
### 6.5.1 emd\_23699\_msk\_1.map [i](#)



X



Y

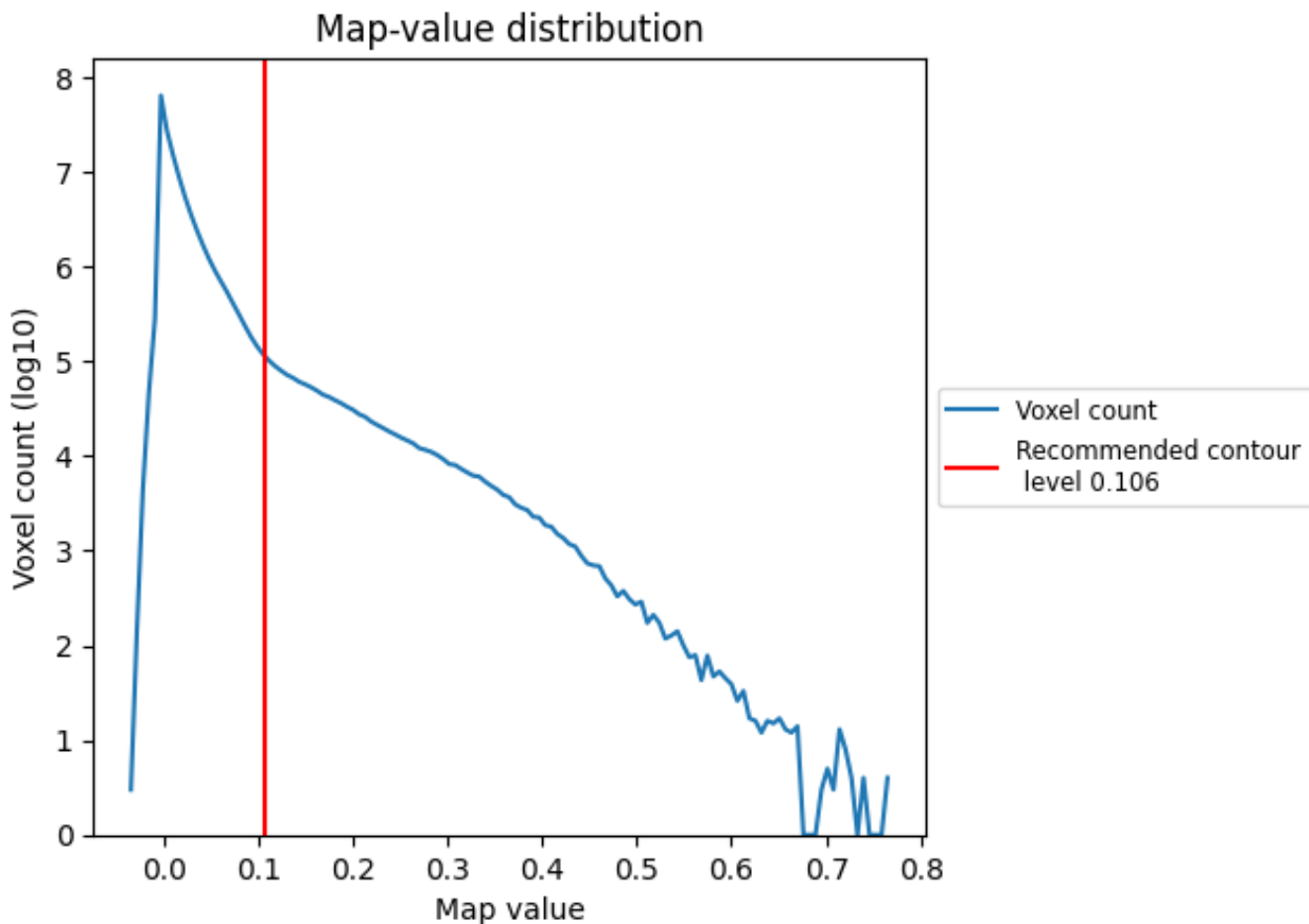


Z

## 7 Map analysis [i](#)

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

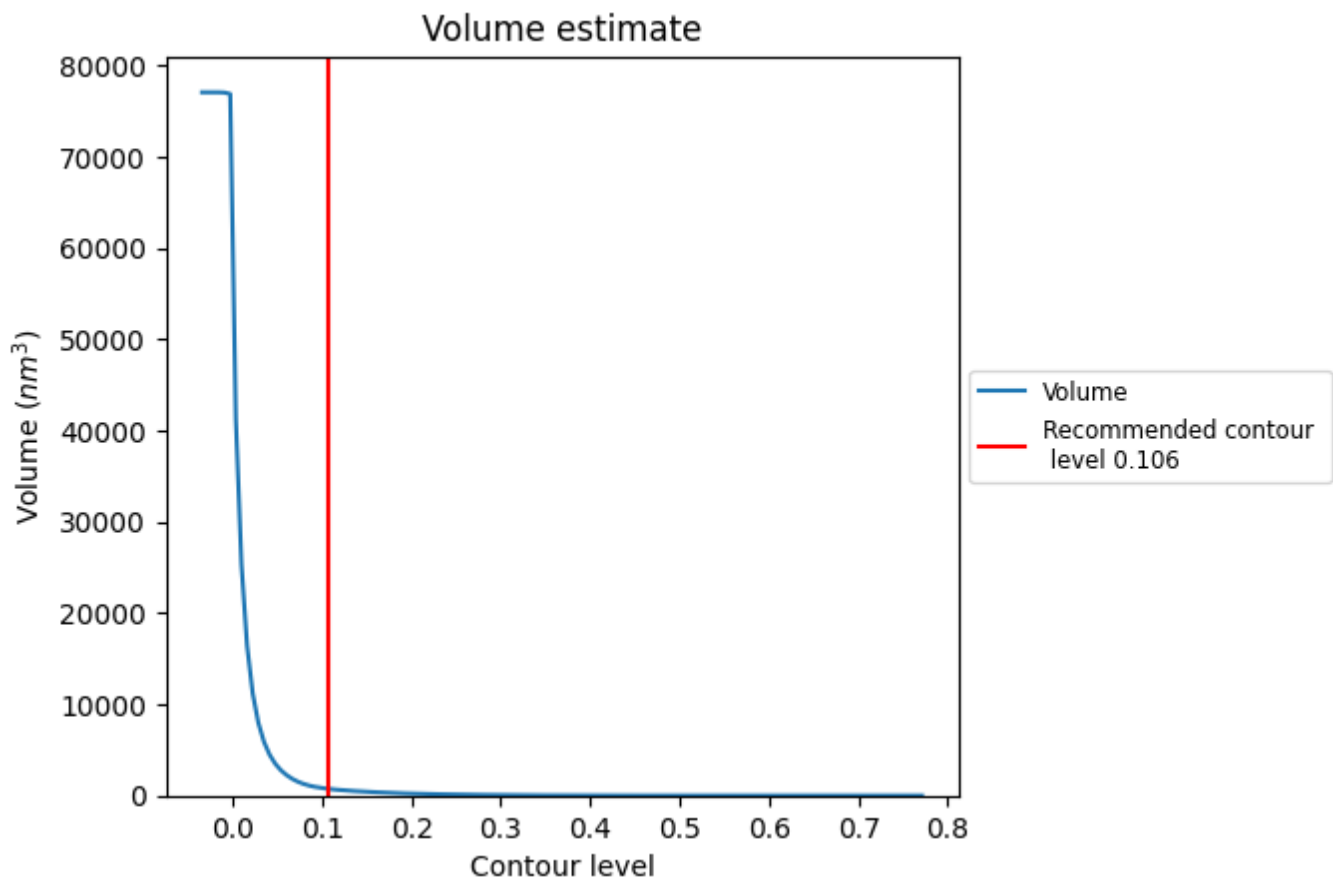
### 7.1 Map-value distribution [i](#)



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.



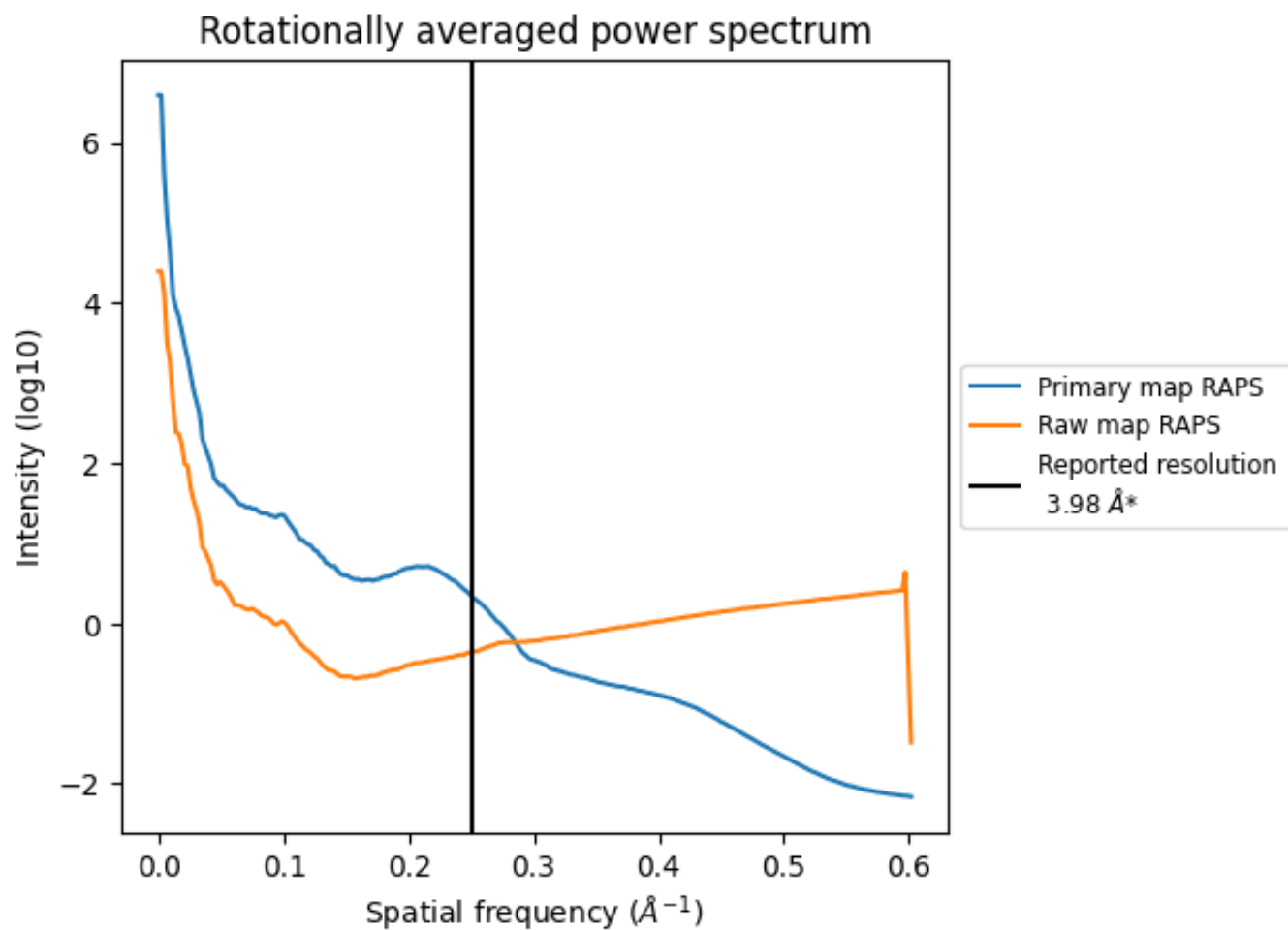
## 7.2 Volume estimate [i](#)



The volume at the recommended contour level is 747  $\text{nm}^3$ ; this corresponds to an approximate mass of 675 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



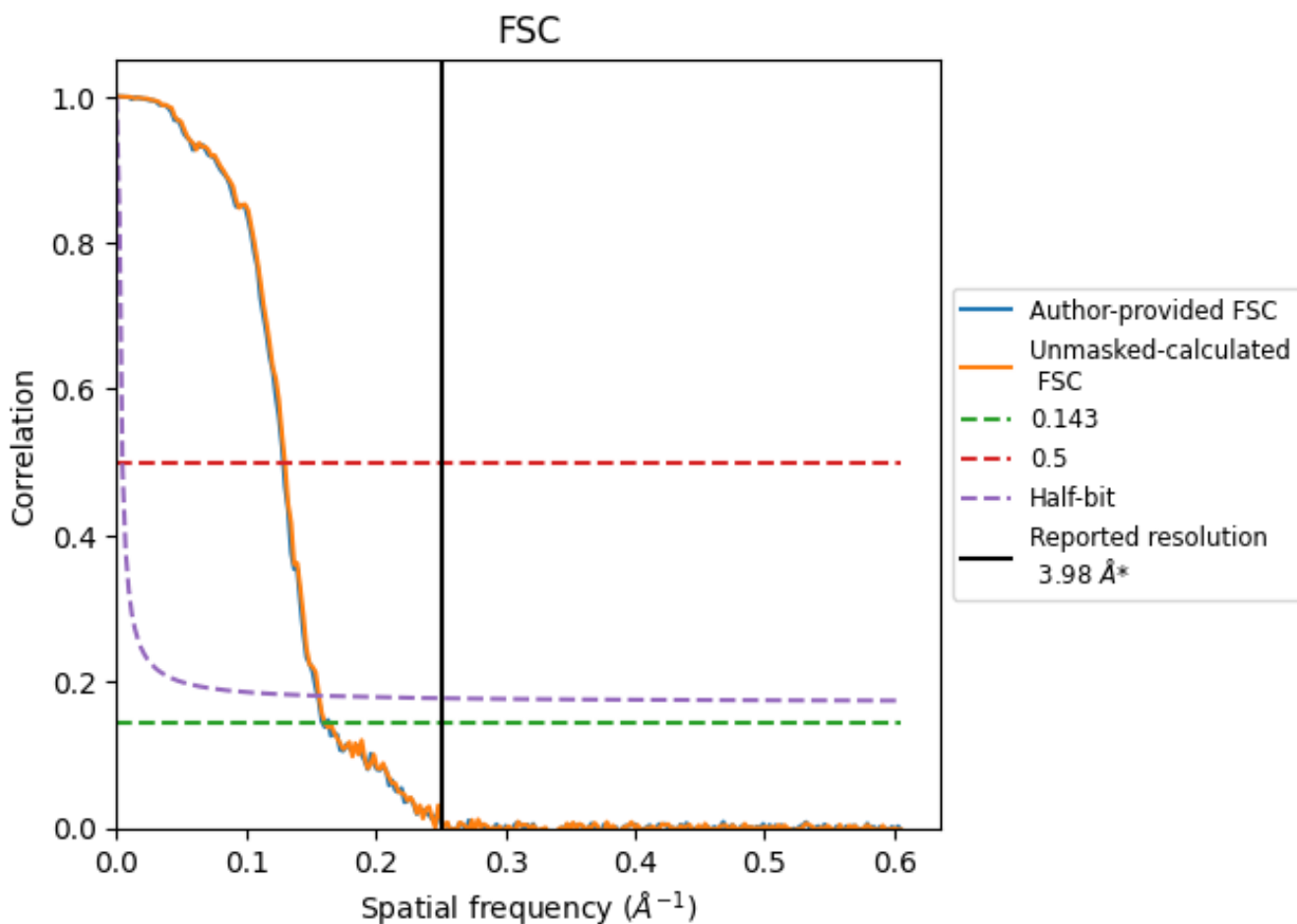
\*Reported resolution corresponds to spatial frequency of 0.251 Å<sup>-1</sup>



## 8 Fourier-Shell correlation [i](#)

Fourier-Shell Correlation (FSC) is the most commonly used method to estimate the resolution of single-particle and subtomogram-averaged maps. The shape of the curve depends on the imposed symmetry, mask and whether or not the two 3D reconstructions used were processed from a common reference. The reported resolution is shown as a black line. A curve is displayed for the half-bit criterion in addition to lines showing the 0.143 gold standard cut-off and 0.5 cut-off.

### 8.1 FSC [i](#)



\*Reported resolution corresponds to spatial frequency of 0.251 Å<sup>-1</sup>

## 8.2 Resolution estimates [i](#)

Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	3.98	-	-
Author-provided FSC curve	6.28	7.78	6.44
Unmasked-calculated*	6.22	7.70	6.40

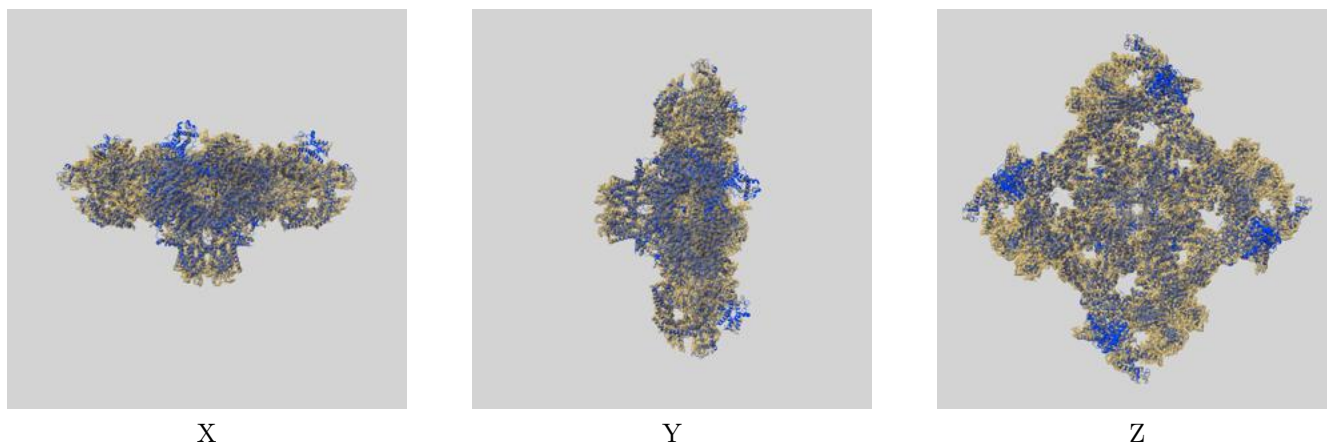
\*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps. The value from author-provided FSC intersecting FSC 0.143 CUT-OFF 6.28 differs from the reported value 3.98 by more than 10 %

The value from deposited half-maps intersecting FSC 0.143 CUT-OFF 6.22 differs from the reported value 3.98 by more than 10 %

## 9 Map-model fit [i](#)

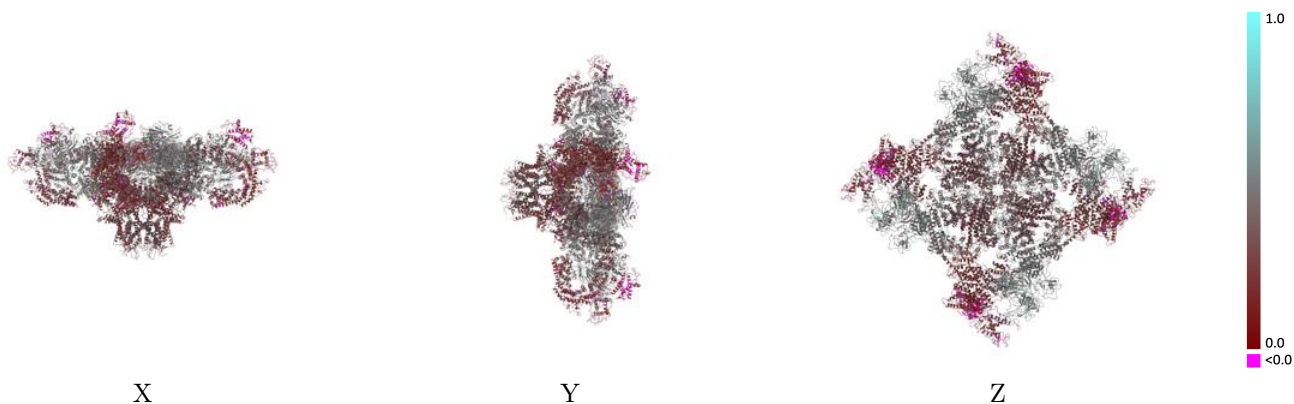
This section contains information regarding the fit between EMDB map EMD-23699 and PDB model 7M6L. Per-residue inclusion information can be found in section 3 on page 6.

### 9.1 Map-model overlay [i](#)



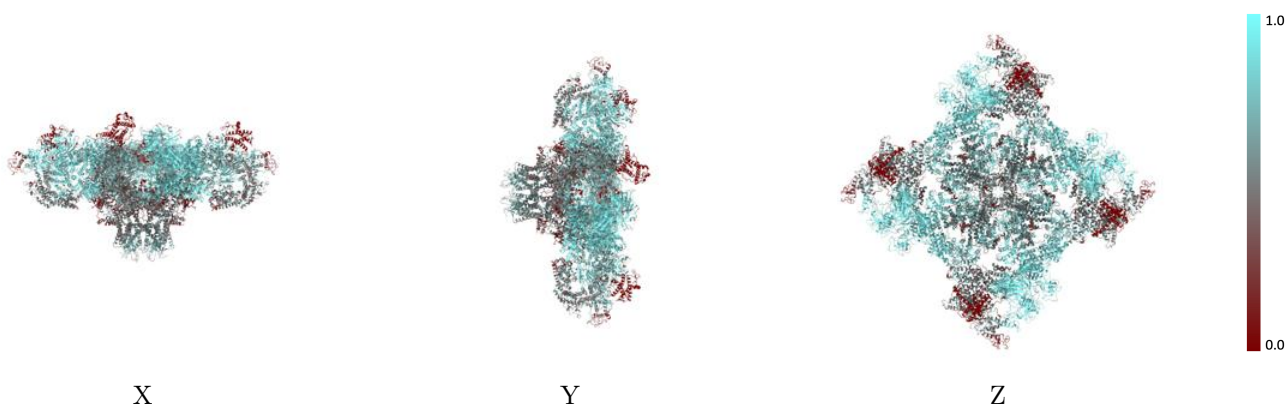
The images above show the 3D surface view of the map at the recommended contour level 0.106 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

## 9.2 Q-score mapped to coordinate model [i](#)



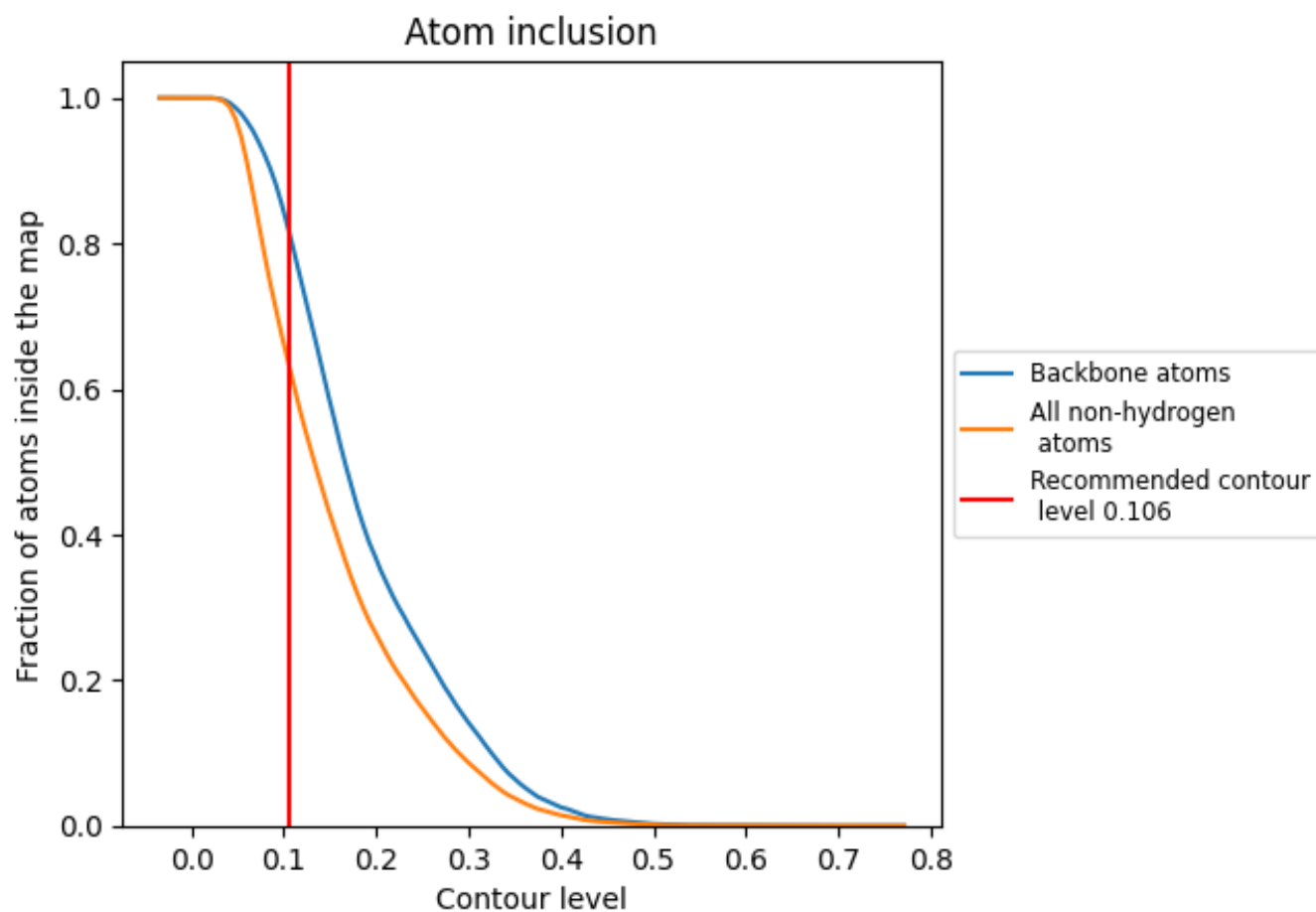
The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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](#)



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 (0.106).



















## 9.4 Atom inclusion [i](#)



At the recommended contour level, 81% of all backbone atoms, 63% 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 (0.106) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.6299	 0.3560
A	 0.6279	 0.3600
B	 0.6243	 0.3500
F	 0.8114	 0.4790
G	 0.6246	 0.3500
H	 0.8002	 0.4790
I	 0.6256	 0.3500
J	 0.8102	 0.4780
O	 0.8089	 0.4800

