



Full wwPDB EM Validation Report ⓘ

Mar 9, 2026 – 09:08 AM UTC

PDB ID : 7UA9 / pdb_00007ua9
EMDB ID : EMD-26416
Title : Structure of dephosphorylated human RyR2 in the open state
Authors : Miotto, M.C.; Marks, A.R.
Deposited on : 2022-03-11
Resolution : 3.59 Å(reported)
Based on initial model : 7U9Q

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

We welcome your comments at validation@mail.wwpdb.org

A user guide is available at

<https://www.wwpdb.org/validation/2017/EMValidationReportHelp>
with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

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

EMDB validation analysis : 0.0.1.dev132
Mogul : 2022.3.0, CSD as543be (2022)
MolProbity : 4-5-2 with Phenix2.0
Buster-report : wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics : 202505.v01 (Using data in the EMDb archive up until May 2025)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.49

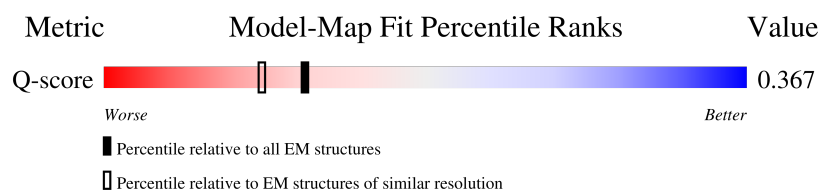
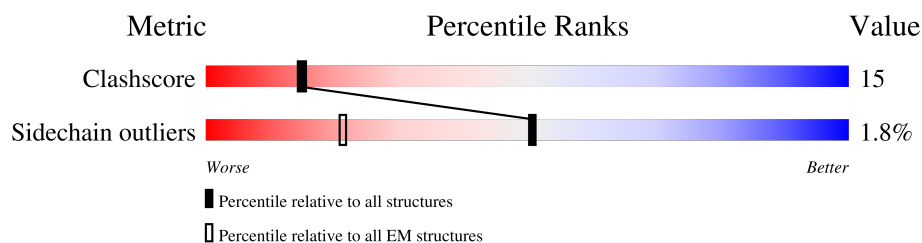
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

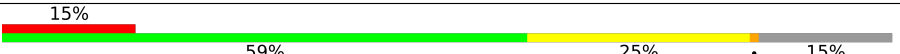
The reported resolution of this entry is 3.59 Å.

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)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Sidechain outliers	223484	23102	-
Q-score	-	25397	12565 (3.09 - 4.09)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$. 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	E	108	 81% 15% . .
1	F	108	 78% 18% . .
1	G	108	 76% 19% . .
1	H	108	 75% 21% . .
2	A	4967	 15% 59% 25% . 15%

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Mol	Chain	Length	Quality of chain
2	B	4967	15% 59% 25% • 15%
2	C	4967	15% 59% 25% • 15%
2	D	4967	15% 59% 25% • 15%

2 Entry composition

There are 6 unique types of molecules in this entry. The entry contains 138656 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
1	E	107	Total	C	N	O	S	0	0
			818	516	144	154	4		
1	F	107	Total	C	N	O	S	0	0
			818	516	144	154	4		
1	G	107	Total	C	N	O	S	0	0
			818	516	144	154	4		
1	H	107	Total	C	N	O	S	0	0
			818	516	144	154	4		

- Molecule 2 is a protein called Ryanodine receptor 2.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	A	4224	Total	C	N	O	S	2	0
			33771	21516	5745	6280	230		
2	B	4224	Total	C	N	O	S	2	0
			33771	21516	5745	6280	230		
2	C	4224	Total	C	N	O	S	2	0
			33771	21516	5745	6280	230		
2	D	4224	Total	C	N	O	S	2	0
			33771	21516	5745	6280	230		

- Molecule 3 is ZINC ION (CCD ID: ZN) (formula: Zn) (labeled as "Ligand of Interest" by depositor).

Mol	Chain	Residues	Atoms		AltConf
3	A	1	Total	Zn	0
			1	1	
3	B	1	Total	Zn	0
			1	1	
3	C	1	Total	Zn	0
			1	1	
3	D	1	Total	Zn	0
			1	1	

- # ATP

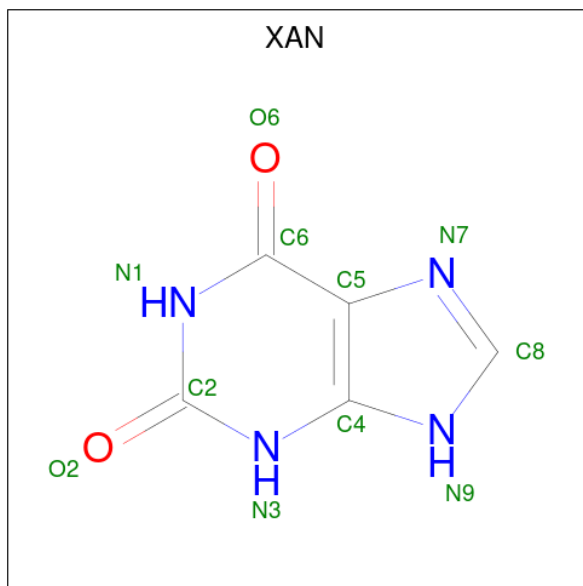
- Molecule 5 is CALCIUM ION (CCD ID: CA) (formula: Ca) (labeled as "Ligand of Interest" by depositor).

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Mol	Chain	Residues	Atoms		AltConf
5	C	1	Total	Ca	0
			1	1	
5	D	1	Total	Ca	0
			1	1	

- Molecule 6 is XANTHINE (CCD ID: XAN) (formula: $C_5H_4N_4O_2$) (labeled as "Ligand of Interest" by depositor).

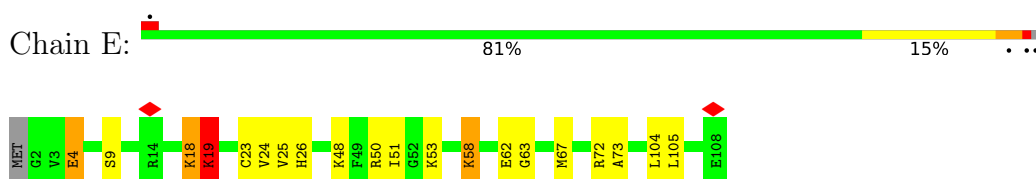


Mol	Chain	Residues	Atoms				AltConf
6	A	1	Total	C	N	O	0
			11	5	4	2	
6	B	1	Total	C	N	O	0
			11	5	4	2	
6	C	1	Total	C	N	O	0
			11	5	4	2	
6	D	1	Total	C	N	O	0
			11	5	4	2	

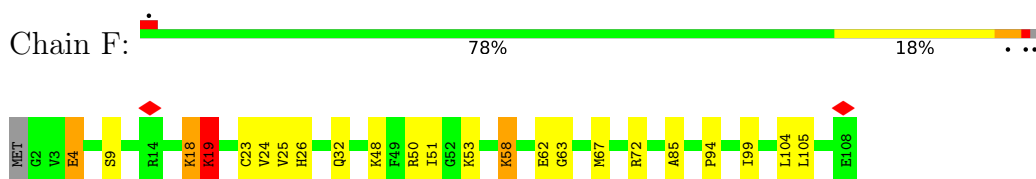
3 Residue-property plots [i](#)

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.

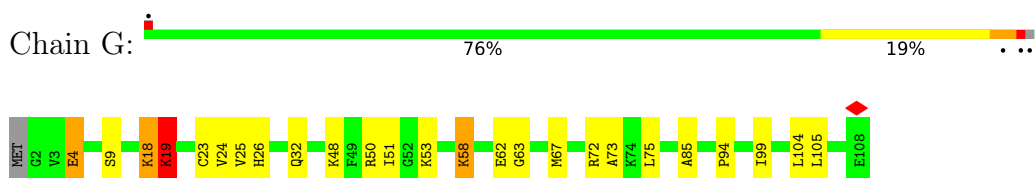
- Molecule 1: Peptidyl-prolyl cis-trans isomerase FKBP1B



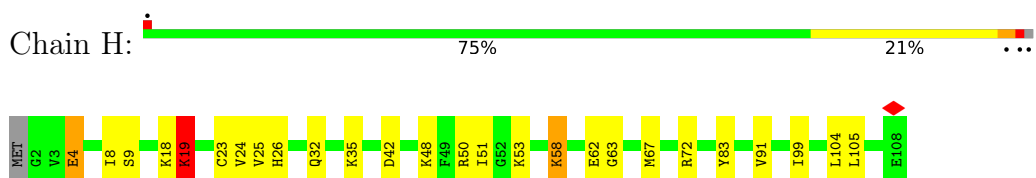
- Molecule 1: Peptidyl-prolyl cis-trans isomerase FKBP1B



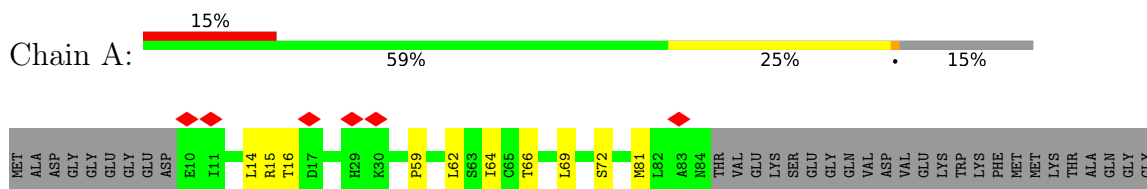
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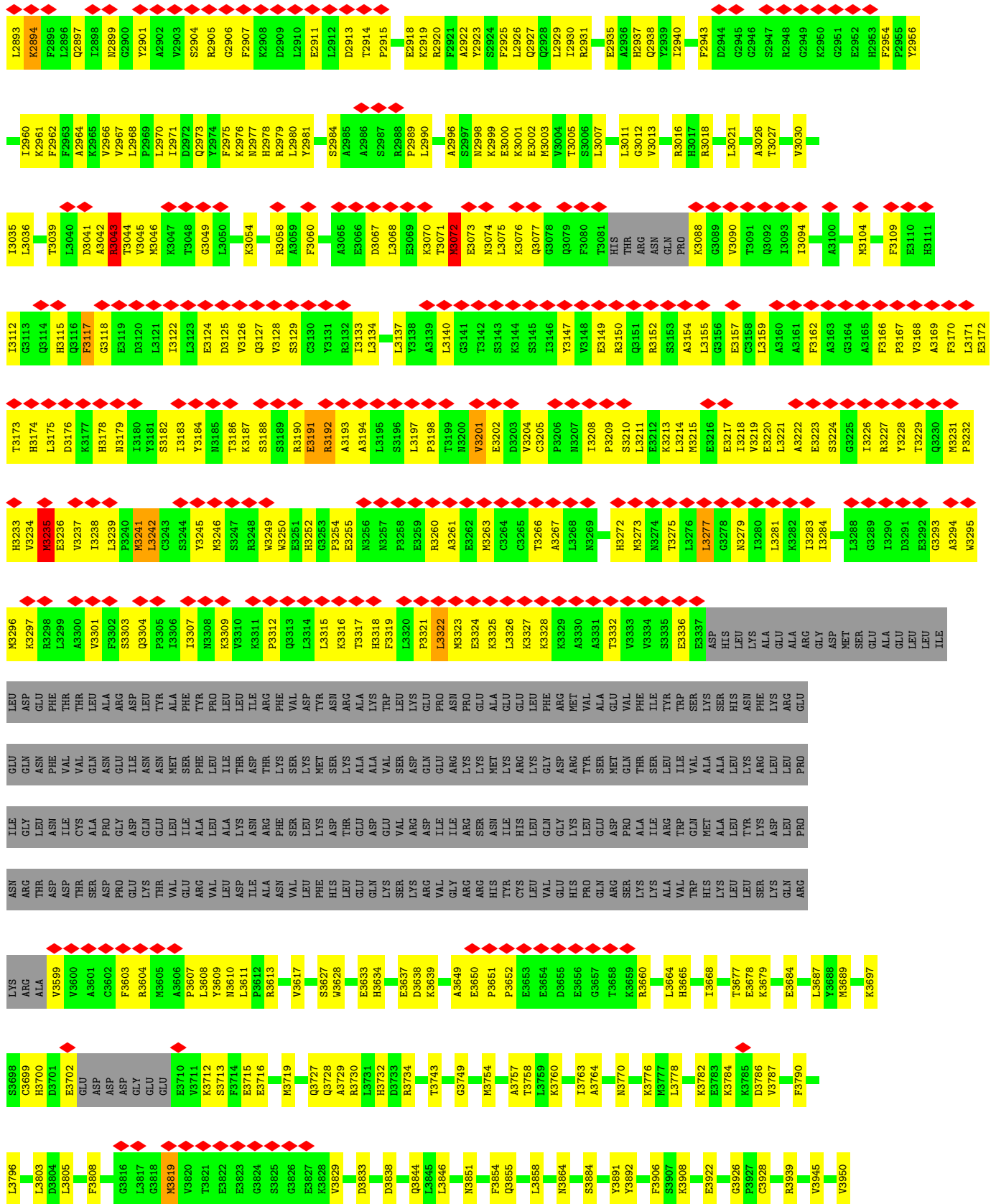


- Molecule 2: Ryanodine receptor 2



GLU	ASP	VAL	LEU	ALA	ASP	R1414	D1415	D1418	M1421	Y1426	Y1427	Y1428	F1433	P1434	G1435	Q1436	G1444	W1445	D1471	E1472	K1473	H1477	K1481	R1482	M1487	A1490	S1495	P1496	G1497	R1500	N1501	N1502	N1503	G1504	L1505	A1522	K1525	V1533	E1534	A1542	V1543	F1544												
A1545	Q1546	S1549	P1550	N1551	V1552	F1553	Q1554	F1555	E1556	R1559	V1563	P1565	L1566	L1570	E1574	H1575	K1576	Q1581	R1585	D1586	E1587	F1603	R1614	L1618	V1619	Q1620	Q1626	F1627	M1628	S1629	L1630	L1644	L1651	H1656	L1660	N1669	H1670	R1671	D1681	Q1684														
MET	LYS	THR	ALA	HIS	GLY	HIS	LEU	VAL	PRO	ASP	VAL	ASP	LYS	LYS	LYS	GLU	ALA	THR	LYS	PRO	PHE	ASN	ASN	HIS	LYS	ARG	LEU	LYS	GLN	ARG	PHE	LEU	LEU	ARG	PRO	LYS	ASN	PRO	ASP	TYR	ASP	ASP	ALA	ARG	LEU	THR								
W1250	L1251	E1269	I1277	D1278	L1283	K1284	Q1287	K1288	G1291	S1292	Q1293	N1294	S1295	I1299	R1303	L1304	S1305	M1306	P1307	I1308	K1316	THR	VAL	ALA	GLY	GLY	LEU	PRO	GLY	ALA	LEU	PHE	GLY	GLY	LYS	ASN	ASP	LEU	ASP	TYR	ASP	ASP	ASP	ASP	VAL	LEU								
R1119	P1124	L1128	G1129	A1134	D1138	K1141	R1144	W1145	V1161	M1165	V1166	T1172	M1173	F1175	T1176	L1177	I1181	L1182	D1185	L1190	A1191	F1192	K1193	D1194	F1195	D1196	V1204	Q1211	V1212	D1220	T1223	L1224	K1225	E1234	G1235	Y1236	R1245	D1246	M1249															
G1019	I1020	R1027	R1028	N1029	L1032	V1033	P1034	L1037	L1038	D1039	T1042	K1043	K1047	D1048	L1049	L1050	R1051	R1055	Y1062	M1063	L1064	E1065	A1066	P1067	D1068	Q1069	D1070	H1071	A1072	A1073	R1074	A1075	E1076	V1077	C1078	G1082	R1086	R1100	H1101	Y1102	E1106	T1107	A1008	R1009	D1010	I1011	I1012	T942	L943	L944	C948			
S765	R769	P774	A585	L586	N587	I588	L600	G603	G605	R606	N607	H608	L611	Q629	H630	L644	L648	S654	M655	L661	A668	Q669	Y670	W673	Y674	Y675	M678	V679	W713	V718	L732	P875	P876	L877	L878	E879	R880	R882	E883	K884	L885													
A886	T889	H890	E891	L892	W893	W894	N895	K896	K897	L898	E899	L900	G901	W902	Q903	Y904	P906	V907	R908	D909	D910	N911	K912	R913	Q914	H915	P916	C917	L918	V919	E920	F921	S922	K923	L924	Q927	E928	R929	N930	N931	N932	L933	Q934	N935	S936	L937	R938	T939	K941	L940	T942	L943	L944	C948
I952	E955	H956	A957	E958	D959	V961	K962	K963	M964	K965	L966	P967	K968	N969	Y970	Q971	T973	S974	G975	Y976	K977	P978	A979	P980	M981	S982	L983	S984	P985	I986	K987	L988	Q992	E993	M995	D997	E1001	N1005	V1006	W1007	A1008	R1009	D1010	I1011	I1012	T942	L943	L944	C948					
V574	L579	A585	L586	N587	I588	L600	G603	G605	R606	N607	H608	L611	Q629	H630	L644	L648	S654	M655	L661	A668	Q669	Y670	W673	Y674	Y675	M678	V679	W713	V718	L732	P875	P876	L877	L878	E879	R880	R882	E883	K884	L885														
R414	I419	V423	L436	A440	K441	A442	S443	D446	N447	L448	V452	H460	L479	R480	K483	H484	R485	L488	F489	H493	D503	R504	V507	F514	A515	R520	E521	A522	G523	E524	S525	W526	I541	G542	G543	S552	L555	R561	L562															
R332	S333	K335	E336	K337	L338	D339	V340	G341	V342	R343	K344	E345	G350	T351	S352	E353	T363	Q364	H365	V366	L370	W371	L372	Q375	S376	V377	D378	VAL	LYS	SER	VAL	ARG	MET	GLY	S386	T387	Q388	R389	K390	A391	I392	H394	H395	E396	M399	I403	S404	E411	E412	S413				
Y227	L228	R235	G239	H240	W241	D242	E243	V247	G250	E251	H252	G253	E254	E255	Q256	R257	R258	H261	Y262	E263	A271	R272	S273	L277	G286	R290	W291	S307	L308	M309	E310	D311	L315	L316	M317	D318	K319	A322	D323	V324	T327	A328	F329	T330	F331									
GLY	H110	R111	T112	L113	L114	Y115	A118	R122	H123	S124	Y125	S126	G127	C131	R137	S138	S139	T140	D141	K142	Q150	T153	T161	P164	A165	S166	E171	R176	D179	D180	S188	E189	R190	G197	N198	V203	A215	P216	I217	S218	E222	A223	A224											

L2833	S2834	R2835	D2836	L2837	H2838	A2839	N2840	L2841	E2842	N2843	N2844	A2845	E2846	N2847	Y2848	H2849	N2850	L2851	N2852	K2853	K2854	N2855	K2856	K2857	N2858	E2859	L2860	E2861	L2862	S2863	S2864	G2865	G2866	N2867	P2868	L2869	L2870	L2871	P2872	Y2873	D2874	D2875	L2876	L2877	L2878	A2879	E2880	E2881	K2882	A2883	K2884	D2885	R2886	E2887	K2888	A2889	Q2890	L2891	L2892
R2772	W2773	P2774	L2775	K2776	E2777	K2780	L2781	N2782	L2783	A2784	N2785	L2786	W2787	R2788	L2789	E2790	R2791	L2792	E2793	L2794	G2795	L2796	L2797	N2798	L2799	L2800	Y2801	N2802	ARG	THR	ARG	ARG	ILE	SER	GLN	THR	SER	GLN	VAL	VAL	VAL	ASP	ALA	ALA	HIS	G2820	Y2821	S2822	P2823	R2824	A2825	I2826	D2827	N2828	S2829	N2830	V2831	L2832	
L2712	L2713	P2714	E2715	K2716	L2717	E2718	Y2719	F2720	L2721	N2722	K2723	Y2724	L2725	E2726	H2727	S2728	H2729	D2730	K2731	L2732	S2733	K2734	D2735	K2736	L2737	L2738	N2739	G2740	W2741	L2742	Y2743	G2744	E2745	L2746	Y2747	S2748	D2749	S2750	S2751	K2752	L2753	Q2754	P2755	L2756	N2757	K2758	P2759	Y2760	K2761	L2762	L2763	S2764	E2765	K2766	E2767	K2768	E2769	L2770	Y2771
L2648	F2649	D2650	A2651	L2652	S2653	Q2654	K2655	E2656	Y2657	E2658	Q2659	L2660	F2662	K2663	L2664	A2665	L2666	P2667	C2668	Y2672	L2676	F2677	P2678	L2679	N2680	E2682	K2683	Y2684	W2685	S2686	K2687	N2688	E2689	E2690	K2691	Q2692	S2693	S2694	M2695	D2696	S2697	E2698	G2699	N2700	F2701	N2702	L2703	Q2704	P2705	Y2706	D2707	L2708	S2709	N2710	L2711				
L2576	L2580	R2581	P2582	S2583	M2584	Q2585	H2587	M2588	L2589	R2590	L2591	L2592	V2593	F2594	D2595	V2596	L2599	N2600	E2601	H2602	A2603	K2604	M2605	P2606	K2608	L2609	L2610	T2611	H2613	R2616	C2617	W2618	K2619	L2623	G2626	W2627	G2631	E2635	L2638	S2641	R2642	K2643	L2644	F2645	W2646	G2647													
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SER	GLY	SER	SER	LYS	THR	LEU	ASP	THR	GLU	E2377	D2378	D2379	D2380	H2383	N2384	G2385	I2388	M2389	T2390	F2391	D2397	R2401	E2402	A2403	M2406	I2409	E2415	R2418	L2419	R2420	R2424	S2425	L2426	D2431	G2434	V2435	L2438	M2442	P2443	T2444	I2445	V2451	V2452	E2453															
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R2068	Q2071	E2072	R2082	L2087	Q2091	E2114	D2115	T2116	L2117	L2119	S2122	L2123	I2126	R2127	S2128	L2129	M2134	G2135	E2146	M2147	M2149	V2154	M2167	V2171	V2174	V2178	G2181	E2183	S2184	K2185	E2186	L2187	N2192	F2199	Y2202	L2206																							
E1990	E1991	I1992	I1993	L1997	E2001	E2010	LEU	GLU	ASP	GLY	SER	LEU	ASP	GLY	ASN	SER	ASP	LEU	THR	ILE	GLY	ARG	LEU	LEU	LEU	VAL	GLU	LYS	VAL	THR	TVR	LEU	LYS	LYS	GLN	ALA	GLU	LYS	PRO	VAL	SER	ASP	K2053	K2054	I2062	T2065	M2066	V2067											
L1685	I1689	E1690	K1691	N1692	Y1693	M1694	Y1702	L1706	L1711	Y1714	R1718	L1719	M1720	M1721	M1722	Y1727	P1728	M1729	E1732	K1745	L1748	I1751	G1752	L1753	L1757	R1758	M1761	S1765	P1766	N1773	P1780	E1781	F1782	L1787	K1788	S1789	K1790	Q1793	M1794	L1795	T1796																		
E1797	K1800	F1825	M1831	G1832	I1833	F1834	D1838	I1842	L1843	Q1844	L1845	F1851	K1852	E1853	A1854	ALA	THR	PRO	GLU	GLU	GLU	ASP	THR	LEU	GLU	LYS	GLY	ALA	GLY	GLU	GLU	GLU	ASP	ALA	LYS	GLY	LYS	ARG	P1889	M1890	K1890	L1898																	

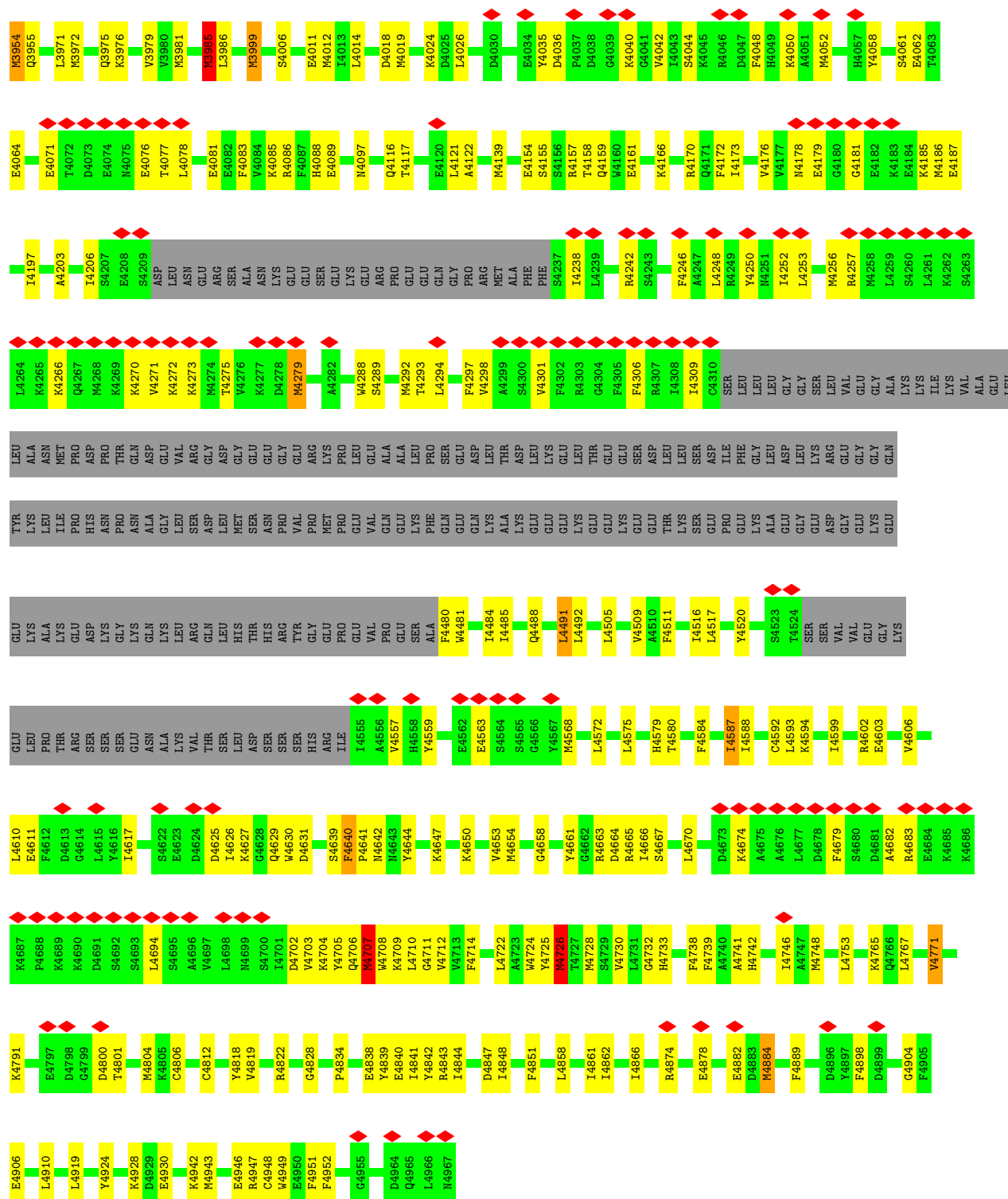


[illegible]



N2830	V2831	T2832	L2833	S2834	R2835	D2836	L2837	H2838	A2839	N2840	A2841	E2842	M2843	N2844	A2845	E2846	N2847	Y2848	H2849	N2850	L2851	N2852	A2853	K2854	K2855	K2856	K2857	N2858	E2859	L2860	E2861	S2862	K2863	G2864	G2865	G2866	N2867	H2868	P2869	L2870	L2871	V2872	P2873	Y2874	D2875	T2876	L2877	L2878	A2879	K2880	E2881	K2882	A2883	D2884	D2885	R2886	E2887	K2888	A2889
E2769	L2770	Y2771	R2772	N2773	P2774	L2775	K2776	E2777	K2780	T2781	M2782	L2783	A2784	N2785	G2786	N2787	R2788	L2789	E2790	R2791	T2792	R2793	E2794	G2795	D2796	S2797	N2798	A2799	L2800	Y2801	N2802	ARG	THR	ARG	ARG	ILE	SER	GLN	THR	SER	GLN	VAL	SER	VAL	ASP	ALA	ALA	HIS	G2820	Y2821	S2822	P2823	R2824	A2825	L2826	D2827	N2828	S2829	
S2709	N2710	L2711	L2712	L2713	P2714	E2715	L2716	L2717	E2718	Y2719	F2720	L2721	N2722	K2723	Y2724	A2725	E2726	H2727	S2728	H2729	D2730	K2731	W2732	S2733	M2734	D2735	K2736	L2737	A2738	N2739	G2740	W2741	L2742	Y2743	G2744	E2745	L2746	Y2747	S2748	D2749	S2750	S2751	K2752	G2753	Q2754	P2755	L2756	M2757	K2758	P2759	Y2760	K2761	L2762	L2763	S2764	E2765	K2766	E2767	K2768
L2644	F2645	W2646	G2647	L2648	F2649	L2650	A2651	L2652	S2653	Q2654	K2655	L2656	E2657	E2658	Q2659	E2660	L2661	K2662	L2663	L2664	A2665	L2666	P2667	C2668	Y2672	L2676	P2677	P2678	N2681	E2682	S2683	N2684	Y2685	S2686	S2687	M2688	C2689	E2690	K2691	Q2692	S2693	S2694	M2695	D2696	S2697	S2698	G2699	N2700	F2701	N2702	P2703	Q2704	P2705	V2706	D2707	T2708			
R2566	I2569	I2576	L2580	G2581	F2582	S2583	N2584	M2585	K2586	H2587	L2588	L2589	R2590	L2591	L2592	V2593	F2594	D2595	V2596	L2599	D2599	E2601	L2602	A2603	K2604	H2605	L2606	L2607	K2608	L2609	L2610	T2611	N2612	H2613	R2616	C2617	K2618	K2619	L2623	G2626	V2627	G2631	E2635	L2638	S2641	R2642	K2643												
P2364	ASN	SER	GLY	SER	SER	LYS	THR	LEU	ASP	THR	GLU	E2377	E2378	D2379	D2380	H2383	H2384	G2385	I2388	M2389	T2390	F2391	D2397	R2401	C2402	A2403	M2406	I2409	E2415	R2418	I2419	R2420	R2424	S2425	L2426	D2431	G2434	V2435	I2438	M2442	P2443	T2444	I2445	V2451															
V2452	E2453	D2454	D2455	S2456	S2457	A2458	G2459	F2460	K2465	N2468	F2471	V2475	Y2476	G2477	L2478	E2479	V2480	Q2481	D2482	F2483	D2495	L2496	R2497	T2504	S2508	M2512	C2521	L2525	P2526	L2527	R2530	G2537	T2538	H2541	L2544	L2545	L2549	H2550	T2551	V2552	L2555	S2556	K2557																
F2199	L2229	P2232	K2233	N2234	N2248	N2251	E2252	R2258	E2263	R2267	L2274	N2279	Y2285	W2290	G2295	E2296	R2297	V2319	L2323	L2324	L2325	R2326	P2328	E2329	L2335	E2338	N2341	G2342	L2343	N2347	E2348	L2352	L2353	R2359	P2362	S2363																							
I2062	T2065	N2066	R2067	R2068	Q2071	E2072	R2082	L2087	Q2091	E2114	D2115	T2116	L2117	L2118	L2119	S2122	L2123	I2126	R2127	S2128	L2129	M2134	G2135	M2142	G2145	I2149	V2154	M2167	V2171	V2174	V2178	G2181	G2182	E2183	S2184	K2185	E2186	L2187	M2192																				
K1983	S1984	E1985	P1989	E1990	E1991	I1992	R1993	L1997	E2001	E2010	LEU	ASP	GLU	ASP	GLY	SER	LEU	ASN	SER	ASP	LEU	THR	R1943	Y1944	M1945	E1946	V1947	M1948	Q1949	A1950	L1951	S1954	A1955	A1956	L1957	T1958	A1959	R1960	K1961	T1962	K1963	E1964	F1965	R1966	S1967	Q1972	M1975	N1978	F1979	K1980	D1981	D1982							
H1794	L1795	T1796	E1797	K1800	F1825	M1831	G1832	I1833	F1834	D1838	I1842	L1843	Q1844	L1845	L1711	K1851	E1852	E1853	ALA	THR	PRO	GLU	GLU	GLU	SER	ARG	ASP	THR	LEU	GLU	LYS	GLU	LEU	VAL	ASP	ALA	LYS	LEU	GLN	GLY	ALA	GLY	GLU	GLU	GLU	ALA	LYS	GLY	GLY	ASP	LYS	ARG							
R1671	D1681	Q1684	L1685	I1689	E1690	N1691	K1692	Y1693	M1694	L1697	I1842	L1843	Q1844	L1845	L1711	K1851	E1852	E1853	ALA	THR	PRO	GLU	GLU	GLU	SER	ARG	ASP	THR	LEU	GLU	LYS	GLU	LEU	VAL	ASP	ALA	LYS	LEU	GLN	GLY	ALA	GLY	GLU	GLU	GLU	ALA	LYS	GLY	GLY	ASP	LYS	ARG							





• Molecule 2: Ryanodine receptor 2

Chain C: 15% 59% 25% 15%





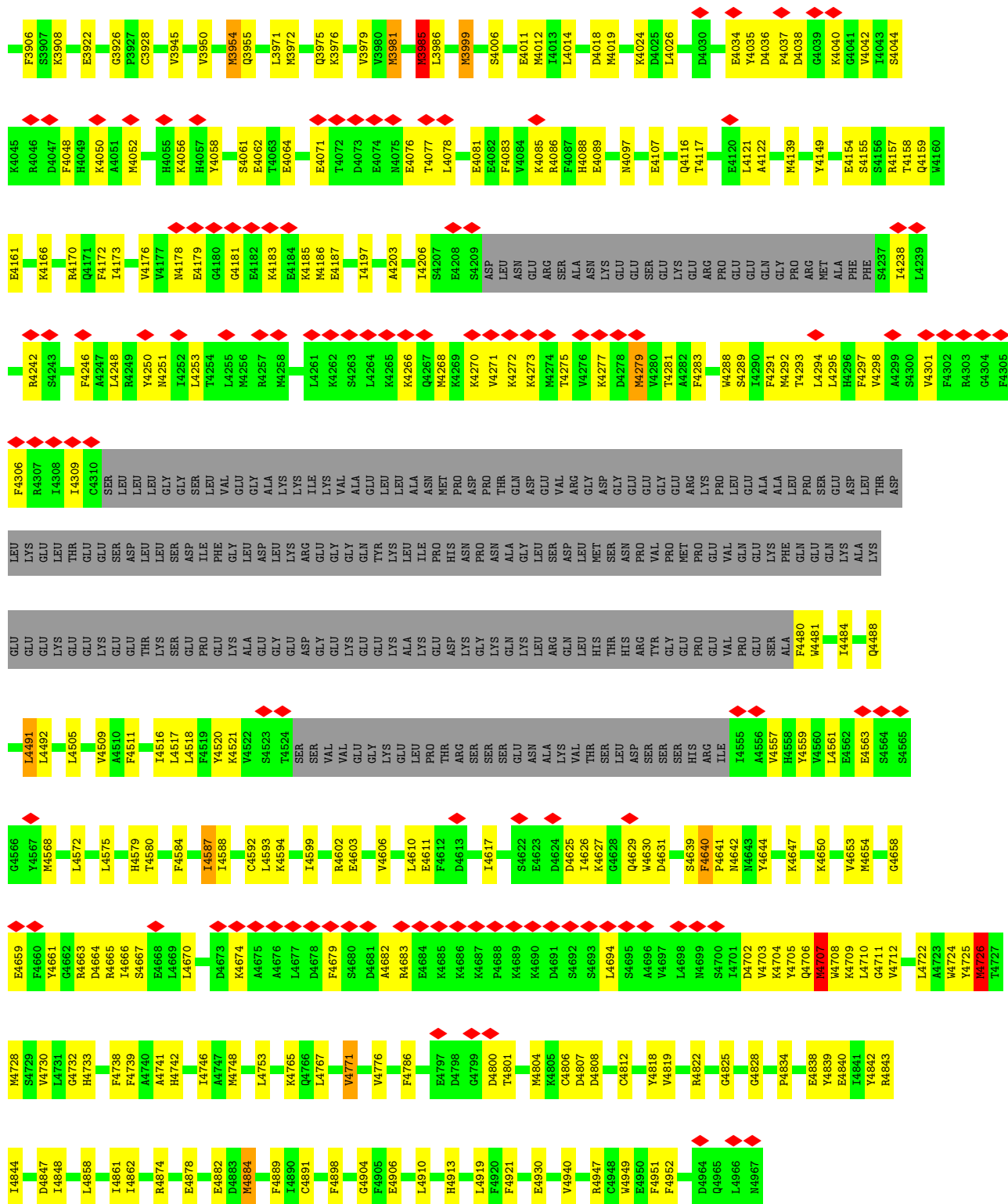


L3803	D3804	L3805	F3808	G3816	L3817	G3818	M3819	V3820	F3821	F3822	E3823	G3824	S3825	G3826	E3827	K3828	V3829	D3833	D3838	Q3844	L3845	L3846	N3851	F3854	Q3855	L3858	N3864	S3884	Y3891	Y3892	F3906	S3907	K3908	E3922	G3926	F3927	C3928	R3939	V3945	V3950	M3954																
LEU	PRO	ASN	THR	ASP	THR	SER	ASP	PRO	GLY	GLU	THR	VAL	GLU	VAL	ILE	ALA	ASN	VAL	PHE	HIS	LEU	GLN	LYS	SER	LYS	ARG	GLY	ARG	GLY	GLU	PRO	GLN	ARG	HIS	PRO	ARG	TRP	ALA	ALA	ALA	LEU	LYS	ARG	LEU													
ARG	GLU	GLN	ASN	PHE	VAL	VAL	ASN	GLY	GLU	ASP	ILE	ASN	ASN	TYR	PRO	LEU	ILE	THR	ASP	THR	ASN	ARG	PHE	LYS	SER	LYS	MET	SER	ASN	ARG	ALA	LYS	TRP	SER	LYS	ASP	GLN	GLY	GLU	VAL	ASP	GLY	GLU														
P3232	H3233	V3234	K3235	V3237	I3238	L3239	K3240	K3241	K3242	C3243	S3244	Y3245	K3247	R3248	W3249	K3250	E3251	H3252	G3253	P3254	E3255	N3256	N3257	P3258	E3259	R3260	A3261	E3262	K3263	C3264	C3265	T3266	A3267	L3268	N3269	S3270	E3271	H3272	K3273	N3274	T3275	L3276	L3277	G3278	N3279	T3280	L3281	K3282	I3283	I3284	L3288	G3289	D3291	Q3293			
A3294	W3295	M3296	K3297	R3298	L3299	A3300	V3301	F3302	S3303	Q3304	P3305	L3306	N3307	N3308	K3309	V3310	K3311	P3312	Q3313	L3314	L3315	K3316	T3317	H3318	F3319	L3320	P3321	L3322	M3323	E3324	K3325	L3326	K3327	K3328	K3329	A3330	A3331	T3332	V3333	V3334	S3335	E3336	E3337	ASP	HIS	LEU	LYS	ALA	ALA	ALA	ARG	ASP	MET	SER	GLU	ALA	LEU
LEU	ILE	ASP	GLU	ASN	PHE	THR	THR	ASN	GLU	ALA	ASP	ASN	TYR	PRO	LEU	ILE	THR	ASP	ILE	ASN	ARG	THR	LYS	PHE	VAL	ASP	GLN	PRO	ILE	ARG	ASN	PRO	LYS	GLU	VAL	ARG	ARG	MET	VAL	VAL	PHE	LYS	ILE	TYR	TRP	SER	LYS	ASP	GLY	GLY	MET	SER	GLU	ALA	LEU		
ARG	GLU	GLN	ASN	PHE	VAL	VAL	ASN	GLY	GLU	ASP	ILE	ASN	ASN	TYR	PRO	LEU	ILE	THR	ASP	THR	ASN	ARG	PHE	LYS	SER	LYS	MET	SER	ASN	ARG	ALA	LYS	VAL	SER	LYS	ASP	GLN	GLY	GLU	VAL	THR	SER	ILE	THR	VAL	TRP	VAL	ASP	GLY	GLY	ASP	GLY	GLU	LEU			
LEU	PRO	ILE	GLY	LEU	ASN	CYS	PRO	ALA	ASP	GLY	ASP	GLN	GLU	TYR	ALA	LYS	ASN	PHE	LYS	LEU	LYS	THR	GLU	GLU	VAL	ARG	ASP	ASP	ILE	ILE	ARG	SER	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY	GLY			
GLN	ARG	LYS	ARG	ALA	V3599	V3600	A3601	C3602	F3603	R3604	M3605	A3606	L3608	Y3609	N3610	L3611	R3612	R3613	V3617	S3627	W3628	E3633	H3634	E3637	D3638	K3639	A3649	E3650	P3651	P3652	E3653	E3654	E3655	E3656	G3657	T3658	K3659	R3660	L3664	H3665	I3668	T3677	E3678	K3679	E3684	L3687	Y3688	M3689									
K3697	S3698	C3699	H3700	R3701	E3702	GLU	ASP	ASP	ASP	GLY	GLU	E3710	K3711	K3712	E3715	E3716	L3725	Y3726	Q3727	Q3728	A3729	R3730	L3731	H3732	D3733	R3734	G3749	M3754	A3757	K3760	I3763	A3764	N3770	K3776	M3777	L3778	K3782	E3783	K3784	K3785	D3786	V3787	F3790	L3796													
F2895	L2896	Q2897	L2898	N2899	G2900	Y2901	A2902	V2903	S2904	R2905	G2906	F2907	K2908	D2909	L2910	E2911	L2912	D2913	T2914	P2915	E2918	K2919	L2920	F2921	A2922	Y2923	S2924	F2925	L2926	Q2927	Q2928	L2929	L2930	R2931	E2935	A2936	H2937	Q2938	Y2939	I2940	F2943	I2944	G2945	G2946	S2947	R2948	T3027	G2949	S3028	K2950	G2951	E2952	H2953	F2954	P2955	Y2956	I2960









4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	36491	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	Depositor
Minimum defocus (nm)	500	Depositor
Maximum defocus (nm)	1200	Depositor
Magnification	Not provided	
Image detector	GATAN K3 BIOQUANTUM (6k x 4k)	Depositor
Maximum map value	0.549	Depositor
Minimum map value	-0.006	Depositor
Average map value	0.012	Depositor
Map value standard deviation	0.029	Depositor
Recommended contour level	0.13	Depositor
Map size (Å)	428.544, 428.544, 428.544	wwPDB
Map dimensions	512, 512, 512	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	0.837, 0.837, 0.837	Depositor

5 Model quality

5.1 Standard geometry

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

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	E	0.15	0/834	0.53	1/1123 (0.1%)
1	F	0.15	0/834	0.53	1/1123 (0.1%)
1	G	0.15	0/834	0.53	1/1123 (0.1%)
1	H	0.15	0/834	0.53	1/1123 (0.1%)
2	A	0.39	8/34511 (0.0%)	0.50	25/46614 (0.1%)
2	B	0.39	8/34511 (0.0%)	0.50	23/46614 (0.0%)
2	C	0.39	8/34511 (0.0%)	0.50	23/46614 (0.0%)
2	D	0.39	8/34511 (0.0%)	0.50	24/46614 (0.1%)
All	All	0.39	32/141380 (0.0%)	0.50	99/190948 (0.1%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
2	A	0	7
2	B	0	7
2	C	0	7
2	D	0	7
All	All	0	28

All (32) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	3117	PHE	CD1-CE1	29.31	2.26	1.38
2	D	3117	PHE	CD1-CE1	29.31	2.26	1.38
2	A	3117	PHE	CD1-CE1	29.28	2.26	1.38
2	C	3117	PHE	CD1-CE1	29.26	2.26	1.38
2	B	3117	PHE	CD2-CE2	27.68	2.21	1.38
2	C	3117	PHE	CD2-CE2	27.67	2.21	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	A	3117	PHE	CD2-CE2	27.66	2.21	1.38
2	D	3117	PHE	CD2-CE2	27.64	2.21	1.38
2	A	3117	PHE	CE2-CZ	26.66	2.18	1.38
2	C	3117	PHE	CE2-CZ	26.63	2.18	1.38
2	B	3117	PHE	CE2-CZ	26.63	2.18	1.38
2	D	3117	PHE	CE2-CZ	26.62	2.18	1.38
2	B	3117	PHE	CE1-CZ	26.41	2.17	1.38
2	C	3117	PHE	CE1-CZ	26.41	2.17	1.38
2	D	3117	PHE	CE1-CZ	26.41	2.17	1.38
2	A	3117	PHE	CE1-CZ	26.40	2.17	1.38
2	C	3117	PHE	CG-CD1	19.68	1.80	1.38
2	B	3117	PHE	CG-CD1	19.67	1.80	1.38
2	D	3117	PHE	CG-CD1	19.67	1.80	1.38
2	A	3117	PHE	CG-CD1	19.64	1.80	1.38
2	C	3117	PHE	CG-CD2	19.05	1.78	1.38
2	B	3117	PHE	CG-CD2	19.04	1.78	1.38
2	D	3117	PHE	CG-CD2	19.02	1.78	1.38
2	A	3117	PHE	CG-CD2	19.02	1.78	1.38
2	D	3043	ARG	CD-NE	17.22	1.70	1.46
2	C	3043	ARG	CD-NE	17.16	1.70	1.46
2	B	3043	ARG	CD-NE	17.16	1.70	1.46
2	A	3043	ARG	CD-NE	17.14	1.70	1.46
2	C	3043	ARG	NE-CZ	11.28	1.45	1.33
2	A	3043	ARG	NE-CZ	11.27	1.45	1.33
2	D	3043	ARG	NE-CZ	11.24	1.45	1.33
2	B	3043	ARG	NE-CZ	11.21	1.45	1.33

All (99) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	A	3043	ARG	CD-NE-CZ	21.97	155.15	124.40
2	B	3043	ARG	CD-NE-CZ	21.96	155.15	124.40
2	D	3043	ARG	CD-NE-CZ	21.95	155.13	124.40
2	C	3043	ARG	CD-NE-CZ	21.95	155.13	124.40
2	B	3043	ARG	CG-CD-NE	11.05	136.30	112.00
2	C	3043	ARG	CG-CD-NE	11.04	136.28	112.00
2	A	3043	ARG	CG-CD-NE	11.04	136.28	112.00
2	D	3043	ARG	CG-CD-NE	11.01	136.23	112.00
2	D	4726	MET	CB-CG-SD	7.46	135.09	112.70
2	B	4726	MET	CB-CG-SD	7.45	135.05	112.70
2	B	1533	VAL	CA-C-N	7.45	132.00	120.68
2	B	1533	VAL	C-N-CA	7.45	132.00	120.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	A	4726	MET	CB-CG-SD	7.45	135.03	112.70
2	C	1533	VAL	CA-C-N	7.45	132.00	120.68
2	C	1533	VAL	C-N-CA	7.45	132.00	120.68
2	C	4726	MET	CB-CG-SD	7.44	135.02	112.70
2	A	1533	VAL	CA-C-N	7.42	131.96	120.68
2	A	1533	VAL	C-N-CA	7.42	131.96	120.68
2	D	1533	VAL	CA-C-N	7.39	131.92	120.68
2	D	1533	VAL	C-N-CA	7.39	131.92	120.68
2	A	3072	MET	CB-CG-SD	7.15	134.16	112.70
2	B	3072	MET	CB-CG-SD	7.15	134.16	112.70
2	D	3072	MET	CB-CG-SD	7.15	134.16	112.70
2	A	4707	MET	CB-CG-SD	7.15	134.14	112.70
2	D	4707	MET	CB-CG-SD	7.15	134.14	112.70
2	B	4707	MET	CB-CG-SD	7.14	134.13	112.70
2	C	4707	MET	CB-CG-SD	7.14	134.12	112.70
2	C	3072	MET	CB-CG-SD	7.14	134.11	112.70
2	C	4707	MET	CA-CB-CG	7.05	128.20	114.10
2	A	4707	MET	CA-CB-CG	7.04	128.19	114.10
2	D	4707	MET	CA-CB-CG	7.04	128.18	114.10
2	B	4707	MET	CA-CB-CG	7.04	128.18	114.10
2	B	3235	MET	CB-CG-SD	6.84	133.23	112.70
2	A	3235	MET	CB-CG-SD	6.84	133.23	112.70
2	C	3235	MET	CB-CG-SD	6.84	133.22	112.70
2	D	3235	MET	CB-CG-SD	6.84	133.21	112.70
2	C	3235	MET	CA-CB-CG	6.69	127.48	114.10
2	B	3235	MET	CA-CB-CG	6.69	127.47	114.10
2	A	3235	MET	CA-CB-CG	6.68	127.46	114.10
2	D	3235	MET	CA-CB-CG	6.67	127.44	114.10
2	D	2066	MET	CB-CG-SD	6.65	132.65	112.70
2	A	2066	MET	CB-CG-SD	6.64	132.64	112.70
2	C	2066	MET	CB-CG-SD	6.64	132.62	112.70
2	B	2066	MET	CB-CG-SD	6.63	132.60	112.70
2	D	2681	MET	CB-CG-SD	6.53	132.28	112.70
2	D	2689	MET	CB-CG-SD	6.52	132.26	112.70
2	A	2681	MET	CB-CG-SD	6.52	132.25	112.70
2	C	2681	MET	CB-CG-SD	6.51	132.24	112.70
2	C	2689	MET	CB-CG-SD	6.51	132.24	112.70
2	B	2689	MET	CB-CG-SD	6.51	132.22	112.70
2	B	2681	MET	CB-CG-SD	6.51	132.22	112.70
2	A	2689	MET	CB-CG-SD	6.50	132.21	112.70
2	C	3192	ARG	CB-CG-CD	6.20	125.56	111.30
2	D	3192	ARG	CB-CG-CD	6.20	125.55	111.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	A	3192	ARG	CB-CG-CD	6.19	125.54	111.30
2	B	3192	ARG	CB-CG-CD	6.18	125.51	111.30
2	C	241	MET	CB-CG-SD	5.82	130.17	112.70
2	B	241	MET	CB-CG-SD	5.82	130.16	112.70
2	B	520	ARG	CB-CA-C	-5.81	101.19	110.84
2	A	241	MET	CB-CG-SD	5.81	130.12	112.70
2	D	241	MET	CB-CG-SD	5.81	130.12	112.70
2	D	520	ARG	CB-CA-C	-5.81	101.20	110.84
2	C	3192	ARG	CA-CB-CG	5.80	125.70	114.10
2	B	3192	ARG	CA-CB-CG	5.80	125.69	114.10
2	D	3192	ARG	CA-CB-CG	5.80	125.69	114.10
2	A	520	ARG	CB-CA-C	-5.79	101.23	110.84
2	C	520	ARG	CB-CA-C	-5.78	101.25	110.84
2	A	3192	ARG	CA-CB-CG	5.77	125.64	114.10
2	C	3192	ARG	N-CA-CB	5.77	118.59	109.82
2	B	3192	ARG	N-CA-CB	5.76	118.57	109.82
2	D	3192	ARG	N-CA-CB	5.74	118.55	109.82
2	A	3192	ARG	N-CA-CB	5.74	118.54	109.82
2	B	3985	MET	CB-CG-SD	5.58	129.45	112.70
2	A	3985	MET	CB-CG-SD	5.58	129.44	112.70
2	D	3985	MET	CB-CG-SD	5.58	129.43	112.70
2	C	3985	MET	CB-CG-SD	5.57	129.40	112.70
2	A	2689	MET	CA-CB-CG	5.38	124.85	114.10
2	C	2689	MET	CA-CB-CG	5.36	124.82	114.10
2	B	2689	MET	CA-CB-CG	5.36	124.82	114.10
2	D	2689	MET	CA-CB-CG	5.35	124.79	114.10
2	B	494	MET	CB-CG-SD	5.34	128.73	112.70
2	D	494	MET	CB-CG-SD	5.34	128.72	112.70
2	B	469	HIS	CB-CA-C	-5.34	101.93	110.79
2	A	494	MET	CB-CG-SD	5.33	128.67	112.70
2	C	494	MET	CB-CG-SD	5.33	128.68	112.70
2	C	469	HIS	CB-CA-C	-5.32	101.96	110.79
2	D	469	HIS	CB-CA-C	-5.31	101.97	110.79
2	A	469	HIS	CB-CA-C	-5.31	101.98	110.79
1	F	19	LYS	CB-CG-CD	5.06	122.94	111.30
2	D	3117	PHE	CD1-CG-CD2	5.04	126.16	118.60
1	H	19	LYS	CB-CG-CD	5.04	122.89	111.30
1	G	19	LYS	CB-CG-CD	5.04	122.88	111.30
2	A	3117	PHE	CD1-CG-CD2	5.03	126.15	118.60
1	E	19	LYS	CB-CG-CD	5.02	122.86	111.30
2	B	3117	PHE	CD1-CG-CD2	5.02	126.14	118.60
2	C	3117	PHE	CD1-CG-CD2	5.02	126.14	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	D	469	HIS	N-CA-CB	5.02	117.50	110.12
2	A	469	HIS	N-CA-CB	5.02	117.50	110.12
2	A	2192	MET	CB-CG-SD	5.00	127.70	112.70

There are no chirality outliers.

All (28) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
2	A	2754	GLN	Peptide
2	A	2772	ARG	Sidechain
2	A	2828	MET	Peptide
2	A	3043	ARG	Sidechain
2	A	3191	GLU	Peptide
2	A	4640	PHE	Peptide
2	A	469	HIS	Peptide
2	B	2754	GLN	Peptide
2	B	2772	ARG	Sidechain
2	B	2828	MET	Peptide
2	B	3043	ARG	Sidechain
2	B	3191	GLU	Peptide
2	B	4640	PHE	Peptide
2	B	469	HIS	Peptide
2	C	2754	GLN	Peptide
2	C	2772	ARG	Sidechain
2	C	2828	MET	Peptide
2	C	3043	ARG	Sidechain
2	C	3191	GLU	Peptide
2	C	4640	PHE	Peptide
2	C	469	HIS	Peptide
2	D	2754	GLN	Peptide
2	D	2772	ARG	Sidechain
2	D	2828	MET	Peptide
2	D	3043	ARG	Sidechain
2	D	3191	GLU	Peptide
2	D	4640	PHE	Peptide
2	D	469	HIS	Peptide

5.2 Too-close contacts

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	E	818	0	821	14	0
1	F	818	0	821	15	0
1	G	818	0	821	17	0
1	H	818	0	821	19	0
2	A	33771	0	33453	1038	0
2	B	33771	0	33453	1035	0
2	C	33771	0	33453	1032	0
2	D	33771	0	33453	1039	0
3	A	1	0	0	0	0
3	B	1	0	0	0	0
3	C	1	0	0	0	0
3	D	1	0	0	0	0
4	A	62	0	24	2	0
4	B	62	0	24	2	0
4	C	62	0	24	2	0
4	D	62	0	24	2	0
5	A	1	0	0	0	0
5	B	1	0	0	0	0
5	C	1	0	0	0	0
5	D	1	0	0	0	0
6	A	11	0	4	0	0
6	B	11	0	4	0	0
6	C	11	0	4	0	0
6	D	11	0	4	0	0
All	All	138656	0	137208	4129	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 15.

All (4129) 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:D:3117:PHE:CG	2:D:3117:PHE:CD1	1.80	1.67
2:B:3117:PHE:CD2	2:B:3117:PHE:CG	1.78	1.66
2:B:3117:PHE:CG	2:B:3117:PHE:CD1	1.80	1.66
2:D:3117:PHE:CG	2:D:3117:PHE:CD2	1.78	1.63
2:C:3117:PHE:CD2	2:C:3117:PHE:CG	1.78	1.62
2:A:3117:PHE:CD1	2:A:3117:PHE:CG	1.80	1.62
2:A:3117:PHE:CG	2:A:3117:PHE:CD2	1.78	1.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:3117:PHE:CG	2:C:3117:PHE:CD1	1.80	1.60
2:A:3043:ARG:NE	2:A:3043:ARG:CD	1.70	1.54
2:D:3043:ARG:NE	2:D:3043:ARG:CD	1.70	1.54
2:B:3043:ARG:CD	2:B:3043:ARG:NE	1.70	1.49
2:C:3043:ARG:NE	2:C:3043:ARG:CD	1.70	1.49
2:C:3043:ARG:NE	2:C:3117:PHE:CD2	1.94	1.36
2:A:3043:ARG:NE	2:A:3117:PHE:CD2	1.94	1.36
2:A:3117:PHE:CE1	2:A:3117:PHE:CZ	2.17	1.32
2:B:3043:ARG:NE	2:B:3117:PHE:CD2	1.94	1.32
2:C:3043:ARG:NE	2:C:3117:PHE:CE2	1.97	1.32
2:D:3043:ARG:NE	2:D:3117:PHE:CD2	1.93	1.32
2:D:3043:ARG:NE	2:D:3117:PHE:CE2	1.97	1.32
2:B:3117:PHE:CE1	2:B:3117:PHE:CZ	2.17	1.32
2:B:3117:PHE:CZ	2:B:3117:PHE:CE2	2.18	1.32
2:C:3117:PHE:CE2	2:C:3117:PHE:CZ	2.18	1.32
2:A:3117:PHE:CZ	2:A:3117:PHE:CE2	2.18	1.31
2:D:3117:PHE:CE1	2:D:3117:PHE:CZ	2.17	1.31
2:C:3117:PHE:CZ	2:C:3117:PHE:CE1	2.17	1.31
2:A:3043:ARG:NE	2:A:3117:PHE:CE2	1.97	1.30
2:B:3043:ARG:NE	2:B:3117:PHE:CE2	1.97	1.30
2:D:3117:PHE:CE2	2:D:3117:PHE:CZ	2.18	1.30
2:D:3117:PHE:CD2	2:D:3117:PHE:CE2	2.21	1.28
2:B:3117:PHE:CD2	2:B:3117:PHE:CE2	2.21	1.28
2:A:3117:PHE:CD2	2:A:3117:PHE:CE2	2.21	1.27
2:C:3117:PHE:CD2	2:C:3117:PHE:CE2	2.21	1.26
2:A:3117:PHE:CD1	2:A:3117:PHE:CE1	2.26	1.24
2:C:3117:PHE:CD1	2:C:3117:PHE:CE1	2.26	1.24
2:B:3117:PHE:CD1	2:B:3117:PHE:CE1	2.26	1.24
2:D:3043:ARG:NE	2:D:3117:PHE:CG	2.06	1.23
2:C:3043:ARG:NE	2:C:3117:PHE:CG	2.06	1.23
2:A:3043:ARG:NE	2:A:3117:PHE:CG	2.06	1.22
2:D:3117:PHE:CD1	2:D:3117:PHE:CE1	2.26	1.22
2:B:3043:ARG:NE	2:B:3117:PHE:CG	2.06	1.22
2:D:3043:ARG:NE	2:D:3117:PHE:CD1	2.12	1.17
2:A:3043:ARG:NE	2:A:3117:PHE:CD1	2.12	1.16
2:C:3043:ARG:NE	2:C:3117:PHE:CZ	2.14	1.16
2:A:3043:ARG:NE	2:A:3117:PHE:CZ	2.14	1.15
2:B:3043:ARG:NE	2:B:3117:PHE:CD1	2.12	1.15
2:D:3043:ARG:NE	2:D:3117:PHE:CZ	2.14	1.15
2:C:3043:ARG:NE	2:C:3117:PHE:CD1	2.12	1.15
2:B:3043:ARG:NE	2:B:3117:PHE:CZ	2.14	1.15

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:3043:ARG:NE	2:D:3117:PHE:CE1	2.21	1.09
2:C:3043:ARG:NE	2:C:3117:PHE:CE1	2.20	1.09
2:A:3043:ARG:NE	2:A:3117:PHE:CE1	2.20	1.09
2:B:3043:ARG:NE	2:B:3117:PHE:CE1	2.20	1.08
2:C:3043:ARG:CZ	2:C:3117:PHE:CE1	2.41	1.03
2:B:3043:ARG:CZ	2:B:3117:PHE:CE1	2.41	1.03
2:D:3043:ARG:CZ	2:D:3117:PHE:CE1	2.41	1.03
2:A:3043:ARG:CZ	2:A:3117:PHE:CE1	2.41	1.02
2:C:3043:ARG:CD	2:C:3117:PHE:CE1	2.42	1.02
2:D:3043:ARG:CD	2:D:3117:PHE:CE1	2.43	1.02
2:A:3043:ARG:CZ	2:A:3117:PHE:CZ	2.43	1.01
2:C:3043:ARG:CZ	2:C:3117:PHE:CZ	2.43	1.01
2:B:3043:ARG:CD	2:B:3117:PHE:CE1	2.42	1.01
2:B:3043:ARG:CZ	2:B:3117:PHE:CZ	2.43	1.01
2:A:3043:ARG:CD	2:A:3117:PHE:CE1	2.43	1.01
2:D:3043:ARG:CZ	2:D:3117:PHE:CZ	2.43	1.01
2:D:4275:THR:O	2:D:4279:MET:HB2	1.64	0.98
2:A:4275:THR:O	2:A:4279:MET:HB2	1.64	0.97
2:C:4275:THR:O	2:C:4279:MET:HB2	1.64	0.97
2:C:3043:ARG:CD	2:C:3117:PHE:CD1	2.48	0.97
2:B:3043:ARG:CD	2:B:3117:PHE:CD1	2.48	0.96
2:D:3043:ARG:CD	2:D:3117:PHE:CD1	2.48	0.96
2:D:3172:GLU:HA	2:D:3211:LEU:HD22	1.49	0.95
2:A:3043:ARG:CD	2:A:3117:PHE:CD1	2.48	0.95
2:C:3043:ARG:HD2	2:C:3117:PHE:CE1	2.02	0.95
2:C:3172:GLU:HA	2:C:3211:LEU:HD22	1.49	0.95
2:B:4275:THR:O	2:B:4279:MET:HB2	1.64	0.94
2:D:3043:ARG:HD2	2:D:3117:PHE:CE1	2.02	0.94
2:A:3188:SER:O	2:A:3192:ARG:NH1	2.02	0.93
2:A:3043:ARG:HD2	2:A:3117:PHE:CD1	2.04	0.93
2:B:3188:SER:O	2:B:3192:ARG:NH1	2.02	0.93
2:C:3043:ARG:HD2	2:C:3117:PHE:CD1	2.04	0.93
2:B:3043:ARG:HD2	2:B:3117:PHE:CE1	2.02	0.93
2:B:3172:GLU:HA	2:B:3211:LEU:HD22	1.49	0.93
2:C:3188:SER:O	2:C:3192:ARG:NH1	2.02	0.92
2:D:3043:ARG:HD2	2:D:3117:PHE:CD1	2.04	0.92
2:A:3043:ARG:HD2	2:A:3117:PHE:CE1	2.02	0.92
2:A:3172:GLU:HA	2:A:3211:LEU:HD22	1.49	0.92
2:B:3043:ARG:HD2	2:B:3117:PHE:CD1	2.04	0.92
2:D:3188:SER:O	2:D:3192:ARG:NH1	2.02	0.91
2:C:3043:ARG:CZ	2:C:3117:PHE:CD1	2.56	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:3215:MET:SD	2:D:3272:HIS:NE2	2.47	0.88
2:A:3215:MET:SD	2:A:3272:HIS:NE2	2.47	0.88
2:B:3043:ARG:CZ	2:B:3117:PHE:CD1	2.56	0.88
2:B:3215:MET:SD	2:B:3272:HIS:NE2	2.47	0.88
2:C:3215:MET:SD	2:C:3272:HIS:NE2	2.47	0.88
2:D:3043:ARG:CZ	2:D:3117:PHE:CD1	2.56	0.87
2:A:3043:ARG:CZ	2:A:3117:PHE:CD1	2.56	0.87
2:B:3043:ARG:NH1	2:B:3117:PHE:CE1	2.43	0.87
2:C:3043:ARG:NH1	2:C:3117:PHE:CE1	2.43	0.87
2:D:3043:ARG:NH1	2:D:3117:PHE:CE1	2.43	0.86
2:A:3043:ARG:NH1	2:A:3117:PHE:CE1	2.43	0.86
2:A:3043:ARG:CD	2:A:3117:PHE:CZ	2.59	0.86
2:C:15:ARG:HE	2:C:16:THR:H	1.21	0.86
2:D:1500:ARG:HD2	2:D:1501:ASN:H	1.40	0.86
2:B:15:ARG:HE	2:B:16:THR:H	1.21	0.85
2:B:3043:ARG:CD	2:B:3117:PHE:CZ	2.59	0.85
2:A:1500:ARG:HD2	2:A:1501:ASN:H	1.40	0.85
2:C:3043:ARG:CD	2:C:3117:PHE:CZ	2.59	0.85
2:D:3043:ARG:CD	2:D:3117:PHE:CZ	2.59	0.85
2:D:2979:ARG:HH22	2:D:3035:ILE:HG23	1.41	0.85
2:D:2913:ASP:HB3	2:D:2919:LYS:HG3	1.59	0.85
2:C:1500:ARG:HD2	2:C:1501:ASN:H	1.40	0.84
2:A:15:ARG:HE	2:A:16:THR:H	1.21	0.84
2:B:1500:ARG:HD2	2:B:1501:ASN:H	1.40	0.84
2:C:2913:ASP:HB3	2:C:2919:LYS:HG3	1.59	0.84
2:C:3122:ILE:HG13	2:C:3127:GLN:HG2	1.60	0.84
2:B:2979:ARG:HH22	2:B:3035:ILE:HG23	1.41	0.84
2:A:2913:ASP:HB3	2:A:2919:LYS:HG3	1.59	0.83
2:B:3043:ARG:CZ	2:B:3117:PHE:CE2	2.61	0.83
2:A:3043:ARG:CZ	2:A:3117:PHE:CE2	2.61	0.83
2:C:2979:ARG:HH22	2:C:3035:ILE:HG23	1.41	0.83
2:D:1564:MET:HE3	2:D:1565:PRO:HD2	1.60	0.83
2:B:2913:ASP:HB3	2:B:2919:LYS:HG3	1.59	0.82
2:B:3122:ILE:HG13	2:B:3127:GLN:HG2	1.60	0.82
2:D:3122:ILE:HG13	2:D:3127:GLN:HG2	1.60	0.82
2:D:2769:GLU:HA	2:D:2772:ARG:HG2	1.60	0.82
2:A:2979:ARG:HH22	2:A:3035:ILE:HG23	1.41	0.82
2:B:1086:ARG:HH21	2:B:1251:LEU:HD13	1.45	0.82
2:A:2841:ALA:HA	2:A:2844:MET:HG2	1.61	0.82
2:A:3043:ARG:NH1	2:A:3117:PHE:CD1	2.48	0.82
2:A:1564:MET:HE3	2:A:1565:PRO:HD2	1.60	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1086:ARG:HH21	2:C:1251:LEU:HD13	1.45	0.82
2:C:3043:ARG:CZ	2:C:3117:PHE:CE2	2.61	0.82
2:D:3043:ARG:CZ	2:D:3117:PHE:CE2	2.61	0.82
2:C:2736:LYS:HA	2:C:2741:TRP:HE3	1.45	0.82
2:D:15:ARG:HE	2:D:16:THR:H	1.21	0.82
2:C:3043:ARG:NH1	2:C:3117:PHE:CD1	2.48	0.81
2:B:2736:LYS:HA	2:B:2741:TRP:HE3	1.45	0.81
2:B:2769:GLU:HA	2:B:2772:ARG:HG2	1.60	0.81
2:C:1564:MET:HE3	2:C:1565:PRO:HD2	1.60	0.81
2:C:2841:ALA:HA	2:C:2844:MET:HG2	1.61	0.81
2:A:1086:ARG:HH21	2:A:1251:LEU:HD13	1.45	0.81
2:A:2830:ASN:ND2	2:B:1434:PRO:O	2.14	0.81
2:B:2841:ALA:HA	2:B:2844:MET:HG2	1.61	0.81
2:C:2769:GLU:HA	2:C:2772:ARG:HG2	1.60	0.81
2:D:3043:ARG:NH1	2:D:3117:PHE:CD1	2.48	0.81
2:A:2769:GLU:HA	2:A:2772:ARG:HG2	1.60	0.81
2:A:3043:ARG:CD	2:A:3117:PHE:CG	2.64	0.81
2:B:932:ASN:HA	2:B:935:MET:HG3	1.62	0.81
2:B:3043:ARG:NH1	2:B:3117:PHE:CD1	2.48	0.81
2:A:932:ASN:HA	2:A:935:MET:HG3	1.62	0.81
2:A:3122:ILE:HG13	2:A:3127:GLN:HG2	1.60	0.81
2:D:3043:ARG:CD	2:D:3117:PHE:CG	2.64	0.81
2:B:1564:MET:HE3	2:B:1565:PRO:HD2	1.60	0.81
2:D:2841:ALA:HA	2:D:2844:MET:HG2	1.61	0.81
2:B:3250:TRP:CG	2:B:3273:MET:HE1	2.16	0.81
2:A:2736:LYS:HA	2:A:2741:TRP:HE3	1.45	0.81
2:A:2830:ASN:HD22	2:B:1435:GLY:HA3	1.43	0.81
2:C:3250:TRP:CG	2:C:3273:MET:HE1	2.16	0.81
2:C:3805:LEU:HD23	2:D:76:ARG:HH22	1.45	0.81
2:D:932:ASN:HA	2:D:935:MET:HG3	1.62	0.81
2:A:3250:TRP:CG	2:A:3273:MET:HE1	2.16	0.80
2:B:3043:ARG:CD	2:B:3117:PHE:CG	2.64	0.80
2:C:3043:ARG:CD	2:C:3117:PHE:CG	2.64	0.80
2:C:932:ASN:HA	2:C:935:MET:HG3	1.62	0.80
2:D:2736:LYS:HA	2:D:2741:TRP:HE3	1.45	0.80
2:D:3250:TRP:CG	2:D:3273:MET:HE1	2.16	0.80
2:B:332:ARG:HH21	2:B:338:LEU:HD23	1.47	0.80
2:D:1086:ARG:HH21	2:D:1251:LEU:HD13	1.45	0.80
2:D:332:ARG:HH21	2:D:338:LEU:HD23	1.47	0.78
2:B:948:CYS:HB3	2:B:1064:LEU:HD12	1.64	0.78
2:D:3950:VAL:O	2:D:3954:MET:HB2	1.84	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:1038:LEU:O	2:D:1043:LYS:NZ	2.17	0.78
2:A:3950:VAL:O	2:A:3954:MET:HB2	1.84	0.78
2:C:948:CYS:HB3	2:C:1064:LEU:HD12	1.64	0.78
2:A:332:ARG:HH21	2:A:338:LEU:HD23	1.47	0.78
2:C:3950:VAL:O	2:C:3954:MET:HB2	1.84	0.77
2:A:3945:VAL:HG23	2:A:4006:SER:HB3	1.67	0.77
2:A:1038:LEU:O	2:A:1043:LYS:NZ	2.17	0.77
2:B:897:LYS:O	2:B:902:TRP:HB2	1.85	0.77
2:C:332:ARG:HH21	2:C:338:LEU:HD23	1.47	0.77
2:D:897:LYS:O	2:D:902:TRP:HB2	1.85	0.77
2:A:897:LYS:O	2:A:902:TRP:HB2	1.85	0.77
2:A:948:CYS:HB3	2:A:1064:LEU:HD12	1.64	0.77
2:B:3950:VAL:O	2:B:3954:MET:HB2	1.84	0.77
2:D:948:CYS:HB3	2:D:1064:LEU:HD12	1.65	0.77
2:B:3945:VAL:HG23	2:B:4006:SER:HB3	1.67	0.77
2:A:4834:PRO:HB3	2:A:4843:ARG:HD3	1.67	0.77
2:C:3183:ILE:O	2:C:3187:LYS:HB2	1.85	0.77
2:C:3945:VAL:HG23	2:C:4006:SER:HB3	1.67	0.77
2:A:1732:GLU:HB2	2:A:1753:LEU:HD21	1.67	0.77
2:D:3183:ILE:O	2:D:3187:LYS:HB2	1.85	0.77
2:C:1038:LEU:O	2:C:1043:LYS:NZ	2.17	0.77
2:D:3945:VAL:HG23	2:D:4006:SER:HB3	1.67	0.77
2:B:1038:LEU:O	2:B:1043:LYS:NZ	2.17	0.77
2:C:126:SER:HA	2:C:414:ARG:HH12	1.50	0.76
2:D:188:SER:HB3	2:D:190:ARG:HD3	1.67	0.76
2:B:3183:ILE:O	2:B:3187:LYS:HB2	1.85	0.76
2:B:4834:PRO:HB3	2:B:4843:ARG:HD3	1.67	0.76
2:C:897:LYS:O	2:C:902:TRP:HB2	1.85	0.76
2:A:188:SER:HB3	2:A:190:ARG:HD3	1.67	0.76
2:B:1732:GLU:HB2	2:B:1753:LEU:HD21	1.67	0.76
2:D:1732:GLU:HB2	2:D:1753:LEU:HD21	1.67	0.76
2:B:126:SER:HA	2:B:414:ARG:HH12	1.50	0.76
2:C:3218:ILE:HG22	2:C:3279:ASN:ND2	2.01	0.76
2:B:188:SER:HB3	2:B:190:ARG:HD3	1.67	0.76
2:B:3043:ARG:HB2	2:B:3117:PHE:CE2	2.21	0.76
2:C:4834:PRO:HB3	2:C:4843:ARG:HD3	1.67	0.76
2:D:3218:ILE:HG22	2:D:3279:ASN:ND2	2.01	0.75
2:A:4641:PRO:HB3	2:A:4644:TYR:HB3	1.67	0.75
2:C:3043:ARG:HB2	2:C:3117:PHE:CE2	2.21	0.75
2:D:3844:GLN:HG3	2:D:3922:GLU:HG3	1.68	0.75
2:C:1732:GLU:HB2	2:C:1753:LEU:HD21	1.67	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:877:HIS:HA	2:D:880:ARG:NH1	2.02	0.75
2:D:4834:PRO:HB3	2:D:4843:ARG:HD3	1.67	0.75
2:B:4641:PRO:HB3	2:B:4644:TYR:HB3	1.67	0.75
2:C:3844:GLN:HG3	2:C:3922:GLU:HG3	1.68	0.75
2:A:877:HIS:HA	2:A:880:ARG:NH1	2.02	0.75
2:B:2828:MET:HB3	2:B:2894:LYS:HE2	1.69	0.75
2:A:2828:MET:HB3	2:A:2894:LYS:HE2	1.69	0.74
2:A:3218:ILE:HG22	2:A:3279:ASN:ND2	2.01	0.74
2:C:188:SER:HB3	2:C:190:ARG:HD3	1.67	0.74
2:D:3043:ARG:HB2	2:D:3117:PHE:CE2	2.21	0.74
2:D:4641:PRO:HB3	2:D:4644:TYR:HB3	1.67	0.74
2:B:3218:ILE:HG22	2:B:3279:ASN:ND2	2.01	0.74
2:D:3043:ARG:CD	2:D:3117:PHE:CE2	2.70	0.74
2:A:3043:ARG:HB2	2:A:3117:PHE:CE2	2.21	0.74
2:A:3183:ILE:O	2:A:3187:LYS:HB2	1.85	0.74
2:C:3043:ARG:CD	2:C:3117:PHE:CE2	2.70	0.74
2:C:4641:PRO:HB3	2:C:4644:TYR:HB3	1.67	0.74
2:A:126:SER:HA	2:A:414:ARG:HH12	1.50	0.74
2:A:3043:ARG:CD	2:A:3117:PHE:CE2	2.70	0.74
2:B:3043:ARG:CD	2:B:3117:PHE:CE2	2.70	0.74
2:D:2828:MET:HB3	2:D:2894:LYS:HE2	1.69	0.74
2:A:4818:TYR:CE1	2:B:4847:ASP:OD1	2.41	0.74
2:B:3043:ARG:CD	2:B:3117:PHE:CD2	2.71	0.74
2:D:126:SER:HA	2:D:414:ARG:HH12	1.50	0.73
2:B:4279:MET:CE	2:C:4484:ILE:HG22	2.18	0.73
2:C:2599:LEU:HB2	2:C:2655:LYS:HZ1	1.52	0.73
2:A:3222:ALA:HB2	2:A:3279:ASN:OD1	1.88	0.73
2:A:3844:GLN:HG3	2:A:3922:GLU:HG3	1.68	0.73
2:B:2688:MET:HB2	2:B:2689:MET:HE2	1.70	0.73
2:C:877:HIS:HA	2:C:880:ARG:NH1	2.02	0.73
2:D:3222:ALA:HB2	2:D:3279:ASN:OD1	1.88	0.73
2:B:3844:GLN:HG3	2:B:3922:GLU:HG3	1.68	0.73
2:C:2426:LEU:O	2:D:142:LYS:NZ	2.19	0.73
2:A:3043:ARG:CD	2:A:3117:PHE:CD2	2.71	0.73
2:B:943:LEU:HB3	2:B:948:CYS:HB2	1.71	0.73
2:D:943:LEU:HB3	2:D:948:CYS:HB2	1.71	0.73
2:D:3235:MET:HE1	2:D:3295:TRP:CZ2	2.24	0.73
2:C:3013:VAL:O	2:C:3018:ARG:NH2	2.22	0.73
2:C:3043:ARG:CD	2:C:3117:PHE:CD2	2.71	0.73
2:C:3175:LEU:HB3	2:C:3178:HIS:HE2	1.54	0.73
2:C:943:LEU:HB3	2:C:948:CYS:HB2	1.71	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:2828:MET:HB3	2:C:2894:LYS:HE2	1.69	0.73
2:C:3018:ARG:HG3	2:C:3021:LEU:HD12	1.71	0.73
2:C:3222:ALA:HB2	2:C:3279:ASN:OD1	1.88	0.73
2:C:3235:MET:HE1	2:C:3295:TRP:CZ2	2.24	0.73
2:B:877:HIS:HA	2:B:880:ARG:NH1	2.02	0.73
2:B:3222:ALA:HB2	2:B:3279:ASN:OD1	1.88	0.73
2:A:943:LEU:HB3	2:A:948:CYS:HB2	1.71	0.73
2:A:3018:ARG:HG3	2:A:3021:LEU:HD12	1.71	0.73
2:A:3175:LEU:HB3	2:A:3178:HIS:HE2	1.54	0.73
2:D:3043:ARG:CD	2:D:3117:PHE:CD2	2.71	0.73
2:B:992:GLN:NE2	2:B:1064:LEU:O	2.22	0.72
2:B:3018:ARG:HG3	2:B:3021:LEU:HD12	1.71	0.72
2:B:3175:LEU:HB3	2:B:3178:HIS:HE2	1.54	0.72
2:B:3235:MET:HE1	2:B:3295:TRP:CZ2	2.24	0.72
2:D:3175:LEU:HB3	2:D:3178:HIS:HE2	1.54	0.72
2:A:992:GLN:NE2	2:A:1064:LEU:O	2.22	0.72
2:C:992:GLN:NE2	2:C:1064:LEU:O	2.22	0.72
2:C:3235:MET:C	2:C:3235:MET:HE2	2.15	0.72
2:A:3235:MET:HE1	2:A:3295:TRP:CZ2	2.24	0.72
2:B:3235:MET:HE1	2:B:3295:TRP:HZ2	1.55	0.72
1:H:83:TYR:OH	2:D:1768:PHE:O	2.05	0.72
2:B:235:ARG:NH2	2:B:412:GLU:OE2	2.23	0.72
2:B:4279:MET:HE1	2:C:4484:ILE:HG22	1.70	0.72
2:D:235:ARG:NH2	2:D:412:GLU:OE2	2.23	0.72
2:D:992:GLN:NE2	2:D:1064:LEU:O	2.22	0.72
2:D:2688:MET:HB2	2:D:2689:MET:HE2	1.70	0.72
2:A:3235:MET:HE1	2:A:3295:TRP:HZ2	1.55	0.72
2:D:3235:MET:C	2:D:3235:MET:HE2	2.15	0.72
2:D:3235:MET:HE1	2:D:3295:TRP:HZ2	1.55	0.72
2:B:3013:VAL:O	2:B:3018:ARG:NH2	2.22	0.72
2:C:2688:MET:HB2	2:C:2689:MET:HE2	1.70	0.72
2:D:3018:ARG:HG3	2:D:3021:LEU:HD12	1.71	0.72
1:F:58:LYS:NZ	1:F:62:GLU:OE2	2.23	0.72
2:A:317:MET:HE3	2:A:322:ALA:HA	1.72	0.72
2:D:608:HIS:HB2	2:D:1656:HIS:HD2	1.54	0.72
1:H:58:LYS:NZ	1:H:62:GLU:OE2	2.23	0.71
2:B:3235:MET:HE2	2:B:3235:MET:C	2.15	0.71
2:D:317:MET:HE3	2:D:322:ALA:HA	1.72	0.71
2:A:4818:TYR:HB2	2:B:4844:ILE:HG23	1.71	0.71
2:B:608:HIS:HB2	2:B:1656:HIS:HD2	1.55	0.71
2:A:2688:MET:HB2	2:A:2689:MET:HE2	1.70	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:3235:MET:C	2:A:3235:MET:HE2	2.15	0.71
2:D:2657:TYR:HA	2:D:2662:PHE:HE2	1.56	0.71
2:A:235:ARG:NH2	2:A:412:GLU:OE2	2.23	0.71
2:C:608:HIS:HB2	2:C:1656:HIS:HD2	1.55	0.71
2:A:59:PRO:O	2:A:319:LYS:NZ	2.23	0.71
2:A:608:HIS:HB2	2:A:1656:HIS:HD2	1.55	0.71
2:A:3279:ASN:O	2:A:3283:ILE:HD12	1.91	0.71
2:C:1937:GLN:HG2	2:C:3609:TYR:HA	1.72	0.71
2:C:3235:MET:HE1	2:C:3295:TRP:HZ2	1.55	0.71
2:D:1937:GLN:HG2	2:D:3609:TYR:HA	1.72	0.71
2:B:59:PRO:O	2:B:319:LYS:NZ	2.23	0.71
2:B:3279:ASN:O	2:B:3283:ILE:HD12	1.91	0.71
2:C:235:ARG:NH2	2:C:412:GLU:OE2	2.23	0.71
1:E:58:LYS:NZ	1:E:62:GLU:OE2	2.23	0.71
1:G:58:LYS:NZ	1:G:62:GLU:OE2	2.23	0.71
2:B:3043:ARG:NH2	2:B:3117:PHE:CE2	2.59	0.71
2:B:4580:THR:OG1	2:B:4733:HIS:NE2	2.18	0.71
2:C:317:MET:HE3	2:C:322:ALA:HA	1.72	0.71
2:B:1937:GLN:HG2	2:B:3609:TYR:HA	1.72	0.70
2:C:59:PRO:O	2:C:319:LYS:NZ	2.23	0.70
2:C:2657:TYR:HA	2:C:2662:PHE:HE2	1.56	0.70
2:D:3013:VAL:O	2:D:3018:ARG:NH2	2.22	0.70
2:B:317:MET:HE3	2:B:322:ALA:HA	1.72	0.70
2:B:2657:TYR:HA	2:B:2662:PHE:HE2	1.56	0.70
2:C:1711:LEU:HD22	2:C:1831:MET:HE1	1.72	0.70
2:C:2465:LYS:NZ	2:C:2495:ASP:OD2	2.24	0.70
2:D:3043:ARG:NH2	2:D:3117:PHE:CE2	2.59	0.70
2:B:1711:LEU:HD22	2:B:1831:MET:HE1	1.72	0.70
2:C:1074:ARG:HH11	2:C:1076:GLU:HA	1.56	0.70
2:D:4563:GLU:HG2	2:D:4568:MET:HB2	1.73	0.70
2:A:1937:GLN:HG2	2:A:3609:TYR:HA	1.72	0.70
2:C:3043:ARG:NH2	2:C:3117:PHE:CE2	2.59	0.70
2:D:2890:GLN:O	2:D:2894:LYS:HG2	1.92	0.70
2:A:1039:ASP:OD1	2:A:1042:THR:OG1	2.08	0.70
2:A:3043:ARG:NH2	2:A:3117:PHE:CE2	2.59	0.70
2:D:3016:ARG:O	2:D:3018:ARG:NE	2.25	0.70
2:A:494:MET:HE2	2:A:494:MET:HA	1.74	0.70
2:A:2657:TYR:HA	2:A:2662:PHE:HE2	1.56	0.70
2:B:905:GLY:HA3	2:B:914:GLN:HB3	1.74	0.70
2:D:1074:ARG:HH11	2:D:1076:GLU:HA	1.57	0.70
2:A:1711:LEU:HD22	2:A:1831:MET:HE1	1.73	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:494:MET:HE2	2:B:494:MET:HA	1.74	0.70
2:C:905:GLY:HA3	2:C:914:GLN:HB3	1.74	0.70
2:B:3016:ARG:O	2:B:3018:ARG:NE	2.25	0.70
2:D:59:PRO:O	2:D:319:LYS:NZ	2.23	0.70
2:B:4563:GLU:HG2	2:B:4568:MET:HB2	1.73	0.70
2:C:4563:GLU:HG2	2:C:4568:MET:HB2	1.73	0.69
2:D:494:MET:HE2	2:D:494:MET:HA	1.74	0.69
2:A:4580:THR:OG1	2:A:4733:HIS:NE2	2.18	0.69
2:C:3016:ARG:O	2:C:3018:ARG:NE	2.25	0.69
2:A:3013:VAL:O	2:A:3018:ARG:NH2	2.22	0.69
2:C:2890:GLN:O	2:C:2894:LYS:HG2	1.92	0.69
2:A:911:ASN:OD1	2:A:912:LYS:N	2.25	0.69
2:A:2736:LYS:HA	2:A:2741:TRP:CE3	2.27	0.69
2:A:2996:ALA:O	2:A:3001:LYS:NZ	2.25	0.69
2:B:911:ASN:OD1	2:B:912:LYS:N	2.25	0.69
2:C:2996:ALA:O	2:C:3001:LYS:NZ	2.25	0.69
2:D:3043:ARG:CZ	2:D:3117:PHE:CD2	2.76	0.69
2:B:875:PRO:HD2	2:B:878:LEU:HD12	1.75	0.69
2:C:494:MET:HE2	2:C:494:MET:HA	1.74	0.69
2:D:2465:LYS:NZ	2:D:2495:ASP:OD2	2.25	0.69
2:D:2996:ALA:O	2:D:3001:LYS:NZ	2.25	0.69
2:D:3279:ASN:O	2:D:3283:ILE:HD12	1.91	0.69
2:A:905:GLY:HA3	2:A:914:GLN:HB3	1.74	0.69
2:A:4563:GLU:HG2	2:A:4568:MET:HB2	1.73	0.69
2:B:2996:ALA:O	2:B:3001:LYS:NZ	2.25	0.69
2:C:875:PRO:HD2	2:C:878:LEU:HD12	1.75	0.69
2:D:911:ASN:OD1	2:D:912:LYS:N	2.25	0.69
2:B:4884:MET:HE1	2:B:4889:PHE:HD1	1.58	0.69
2:C:911:ASN:OD1	2:C:912:LYS:N	2.25	0.69
2:C:3279:ASN:O	2:C:3283:ILE:HD12	1.91	0.69
2:D:905:GLY:HA3	2:D:914:GLN:HB3	1.74	0.69
2:A:2465:LYS:NZ	2:A:2495:ASP:OD2	2.24	0.69
2:A:2890:GLN:O	2:A:2894:LYS:HG2	1.92	0.69
2:D:2736:LYS:HA	2:D:2741:TRP:CE3	2.27	0.69
2:A:4727:THR:OG1	2:D:4295:LEU:HD21	1.93	0.69
2:B:2736:LYS:HA	2:B:2741:TRP:CE3	2.27	0.68
2:A:3043:ARG:CZ	2:A:3117:PHE:CD2	2.76	0.68
2:D:3043:ARG:CZ	2:D:3117:PHE:CG	2.77	0.68
2:D:1711:LEU:HD22	2:D:1831:MET:HE1	1.73	0.68
2:A:875:PRO:HD2	2:A:878:LEU:HD12	1.74	0.68
2:A:901:GLY:O	2:A:913:ARG:NH2	2.27	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:2601:GLU:HA	2:C:2604:LYS:HZ3	1.58	0.68
2:D:1039:ASP:OD1	2:D:1042:THR:OG1	2.07	0.68
2:A:4884:MET:HE1	2:A:4889:PHE:HD1	1.58	0.68
2:C:2736:LYS:HA	2:C:2741:TRP:CE3	2.27	0.68
2:B:2890:GLN:O	2:B:2894:LYS:HG2	1.92	0.68
2:C:2905:ARG:HD3	2:C:2907:PHE:H	1.59	0.68
2:C:1039:ASP:OD1	2:C:1042:THR:OG1	2.08	0.68
2:D:875:PRO:HD2	2:D:878:LEU:HD12	1.75	0.68
2:D:4884:MET:HE1	2:D:4889:PHE:HD1	1.58	0.68
2:A:1074:ARG:HH11	2:A:1076:GLU:HA	1.57	0.68
2:A:3700:HIS:ND1	2:A:3702:GLU:OE1	2.27	0.68
2:D:2905:ARG:HD3	2:D:2907:PHE:H	1.59	0.68
2:A:2978:HIS:HB3	2:A:2981:TYR:HB3	1.76	0.67
2:A:3242:LEU:O	2:A:3246:MET:HG2	1.94	0.67
2:C:901:GLY:O	2:C:913:ARG:NH2	2.27	0.67
2:C:3043:ARG:CZ	2:C:3117:PHE:CD2	2.76	0.67
2:A:15:ARG:NE	2:A:16:THR:H	1.92	0.67
2:A:3016:ARG:O	2:A:3018:ARG:NE	2.25	0.67
2:B:901:GLY:O	2:B:913:ARG:NH2	2.27	0.67
2:B:3043:ARG:CZ	2:B:3117:PHE:CD2	2.76	0.67
2:C:4884:MET:HE1	2:C:4889:PHE:HD1	1.58	0.67
2:D:2978:HIS:HB3	2:D:2981:TYR:HB3	1.76	0.67
2:A:1500:ARG:CD	2:A:1501:ASN:H	2.07	0.67
2:A:2481:GLN:NE2	2:A:2537:GLY:O	2.28	0.67
2:B:3242:LEU:O	2:B:3246:MET:HG2	1.94	0.67
2:B:3700:HIS:ND1	2:B:3702:GLU:OE1	2.27	0.67
2:D:901:GLY:O	2:D:913:ARG:NH2	2.27	0.67
2:D:2481:GLN:NE2	2:D:2537:GLY:O	2.28	0.67
2:A:3043:ARG:CZ	2:A:3117:PHE:CG	2.77	0.67
2:B:1074:ARG:HH11	2:B:1076:GLU:HA	1.56	0.67
2:B:3043:ARG:CZ	2:B:3117:PHE:CG	2.77	0.67
2:C:2978:HIS:HB3	2:C:2981:TYR:HB3	1.76	0.67
2:D:2650:ASP:O	2:D:2654:GLN:NE2	2.28	0.67
2:C:3043:ARG:CZ	2:C:3117:PHE:CG	2.77	0.67
2:D:1500:ARG:CD	2:D:1501:ASN:H	2.07	0.67
2:B:2481:GLN:NE2	2:B:2537:GLY:O	2.28	0.67
2:B:4664:ASP:HA	2:B:4674:LYS:HZ1	1.60	0.67
2:C:3242:LEU:O	2:C:3246:MET:HG2	1.94	0.67
2:D:2610:LEU:HA	2:D:2613:HIS:CE1	2.29	0.67
2:A:4818:TYR:CE1	2:B:4847:ASP:CG	2.72	0.67
2:B:4822:ARG:NH2	2:C:4829:ASP:OD1	2.27	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1039:ASP:OD1	2:B:1042:THR:OG1	2.07	0.67
2:D:3700:HIS:ND1	2:D:3702:GLU:OE1	2.27	0.67
2:A:2826:ILE:HG13	2:A:2828:MET:HE1	1.77	0.67
2:C:2481:GLN:NE2	2:C:2537:GLY:O	2.28	0.67
2:C:2576:ILE:O	2:C:2580:LEU:HB2	1.95	0.67
2:B:2465:LYS:NZ	2:B:2495:ASP:OD2	2.25	0.67
2:D:2826:ILE:HG13	2:D:2828:MET:HE1	1.77	0.67
2:A:2576:ILE:O	2:A:2580:LEU:HB2	1.95	0.66
2:B:1500:ARG:CD	2:B:1501:ASN:H	2.07	0.66
2:B:2905:ARG:HD3	2:B:2907:PHE:H	1.59	0.66
2:B:3174:HIS:CD2	2:B:3175:LEU:HG	2.30	0.66
2:C:3700:HIS:ND1	2:C:3702:GLU:OE1	2.27	0.66
2:A:882:ARG:NH2	2:A:883:GLU:OE1	2.28	0.66
2:A:2610:LEU:HA	2:A:2613:HIS:CE1	2.30	0.66
2:B:2650:ASP:O	2:B:2654:GLN:NE2	2.28	0.66
2:A:2943:PHE:HB2	2:A:2956:TYR:OH	1.96	0.66
2:B:882:ARG:NH2	2:B:883:GLU:OE1	2.28	0.66
2:B:2978:HIS:HB3	2:B:2981:TYR:HB3	1.77	0.66
2:C:2610:LEU:HA	2:C:2613:HIS:CE1	2.30	0.66
2:D:2943:PHE:HB2	2:D:2956:TYR:OH	1.96	0.66
2:B:2791:ARG:NH2	2:B:2899:ASN:O	2.23	0.66
2:B:4822:ARG:NE	2:C:4825:GLY:O	2.28	0.66
2:C:15:ARG:NE	2:C:16:THR:H	1.92	0.66
2:D:882:ARG:NH2	2:D:883:GLU:OE1	2.29	0.66
2:D:4018:ASP:OD1	2:D:4019:MET:N	2.29	0.66
2:B:644:LEU:HD13	2:B:1630:LEU:HD21	1.78	0.66
2:B:983:LEU:HD12	2:B:1055:ARG:HB3	1.78	0.66
2:B:4018:ASP:OD1	2:B:4019:MET:N	2.29	0.66
2:C:882:ARG:NH2	2:C:883:GLU:OE1	2.28	0.66
2:C:983:LEU:HD12	2:C:1055:ARG:HB3	1.78	0.66
2:C:2688:MET:HB2	2:C:2689:MET:CE	2.25	0.66
2:C:4018:ASP:OD1	2:C:4019:MET:N	2.29	0.66
2:C:4580:THR:OG1	2:C:4733:HIS:NE2	2.18	0.66
2:A:2650:ASP:O	2:A:2654:GLN:NE2	2.28	0.66
2:B:2943:PHE:HB2	2:B:2956:TYR:OH	1.96	0.66
2:C:2650:ASP:O	2:C:2654:GLN:NE2	2.28	0.66
2:C:3174:HIS:CD2	2:C:3175:LEU:HG	2.30	0.66
2:D:1029:ASN:ND2	4:D:5005:ATP:O1G	2.29	0.66
2:D:2591:ARG:NH2	2:D:2875:ASP:OD1	2.28	0.66
2:D:2688:MET:HB2	2:D:2689:MET:CE	2.25	0.66
2:D:3242:LEU:O	2:D:3246:MET:HG2	1.94	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:893:TRP:HB3	2:A:917:CYS:HB3	1.77	0.66
2:A:1029:ASN:ND2	4:A:5005:ATP:O1G	2.29	0.66
2:B:2576:ILE:O	2:B:2580:LEU:HB2	1.95	0.66
2:A:2688:MET:HB2	2:A:2689:MET:CE	2.25	0.66
2:B:1842:ILE:HD12	2:B:1845:LEU:HD12	1.77	0.66
2:B:2263:GLU:OE2	2:B:2327:ARG:NH2	2.29	0.66
2:B:2651:ALA:O	2:B:2655:LYS:HG2	1.96	0.66
2:B:2688:MET:HB2	2:B:2689:MET:CE	2.25	0.66
2:C:1500:ARG:CD	2:C:1501:ASN:H	2.07	0.66
2:C:2856:LYS:HA	2:C:2859:GLU:HG2	1.78	0.66
2:D:3174:HIS:CD2	2:D:3175:LEU:HG	2.30	0.66
2:A:2591:ARG:NH2	2:A:2875:ASP:OD1	2.28	0.66
2:A:2601:GLU:HA	2:A:2604:LYS:HZ3	1.61	0.66
2:B:2591:ARG:NH2	2:B:2875:ASP:OD1	2.28	0.66
2:C:2591:ARG:NH2	2:C:2875:ASP:OD1	2.28	0.66
2:C:2651:ALA:O	2:C:2655:LYS:HG2	1.96	0.66
2:C:4014:LEU:HD13	2:C:4122:ALA:HB2	1.78	0.66
2:D:3249:TRP:HA	2:D:3252:HIS:HB2	1.78	0.66
2:A:2856:LYS:HA	2:A:2859:GLU:HG2	1.78	0.66
2:A:2905:ARG:HD3	2:A:2907:PHE:H	1.59	0.66
2:B:2610:LEU:HA	2:B:2613:HIS:CE1	2.30	0.66
2:B:2618:TRP:CD1	2:B:2619:LYS:HZ2	2.13	0.66
2:C:893:TRP:HB3	2:C:917:CYS:HB3	1.77	0.66
2:C:2263:GLU:OE2	2:C:2327:ARG:NH2	2.29	0.66
2:C:2714:PRO:HG2	2:C:2717:LEU:HD23	1.78	0.66
2:D:3043:ARG:HD3	2:D:3117:PHE:CG	2.31	0.66
1:H:19:LYS:HA	1:H:19:LYS:HE2	1.79	0.65
2:A:983:LEU:HD12	2:A:1055:ARG:HB3	1.78	0.65
2:B:2984:SER:HA	2:B:2989:PRO:HB2	1.78	0.65
2:D:2714:PRO:HG2	2:D:2717:LEU:HD23	1.78	0.65
2:D:2856:LYS:HA	2:D:2859:GLU:HG2	1.78	0.65
2:B:893:TRP:HB3	2:B:917:CYS:HB3	1.77	0.65
2:B:1029:ASN:ND2	4:B:5005:ATP:O1G	2.29	0.65
2:B:2684:ASN:HD22	2:B:2911:GLU:HB3	1.62	0.65
2:B:2826:ILE:HG13	2:B:2828:MET:HE1	1.77	0.65
2:C:1842:ILE:HD12	2:C:1845:LEU:HD12	1.77	0.65
2:C:1964:GLU:HA	2:C:1975:MET:HE1	1.79	0.65
2:C:2826:ILE:HG13	2:C:2828:MET:HE1	1.77	0.65
2:C:3198:PRO:HG2	2:C:3204:VAL:HA	1.79	0.65
2:D:2576:ILE:O	2:D:2580:LEU:HB2	1.95	0.65
2:D:2984:SER:HA	2:D:2989:PRO:HB2	1.78	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:3174:HIS:CD2	2:A:3175:LEU:HG	2.30	0.65
2:B:15:ARG:NE	2:B:16:THR:H	1.92	0.65
2:C:2684:ASN:HD22	2:C:2911:GLU:HB3	1.62	0.65
2:C:4036:ASP:OD1	2:C:4040:LYS:NZ	2.30	0.65
2:D:2263:GLU:OE2	2:D:2327:ARG:NH2	2.29	0.65
2:D:4036:ASP:OD1	2:D:4040:LYS:NZ	2.30	0.65
2:D:4250:TYR:HA	2:D:4253:LEU:HB2	1.78	0.65
2:C:392:ILE:HG13	2:C:393:MET:H	1.62	0.65
2:C:644:LEU:HD13	2:C:1630:LEU:HD21	1.78	0.65
2:C:1029:ASN:ND2	4:C:5005:ATP:O1G	2.29	0.65
2:C:2968:LEU:HD21	2:C:3011:LEU:HD21	1.79	0.65
2:D:3198:PRO:HG2	2:D:3204:VAL:HA	1.79	0.65
2:D:4014:LEU:HD13	2:D:4122:ALA:HB2	1.78	0.65
1:G:19:LYS:HE2	1:G:19:LYS:HA	1.78	0.65
2:B:1964:GLU:HA	2:B:1975:MET:HE1	1.79	0.65
2:B:2856:LYS:HA	2:B:2859:GLU:HG2	1.78	0.65
2:B:2968:LEU:HD21	2:B:3011:LEU:HD21	1.79	0.65
2:B:3803:LEU:HB2	2:B:3884:SER:HB2	1.79	0.65
2:C:2521:CYS:HA	2:C:2525:LEU:HD12	1.79	0.65
2:D:2791:ARG:NH2	2:D:2899:ASN:O	2.23	0.65
2:A:2263:GLU:OE2	2:A:2327:ARG:NH2	2.29	0.65
2:C:3249:TRP:HA	2:C:3252:HIS:HB2	1.77	0.65
2:D:983:LEU:HD12	2:D:1055:ARG:HB3	1.78	0.65
2:A:1964:GLU:HA	2:A:1975:MET:HE1	1.79	0.65
2:B:2714:PRO:HG2	2:B:2717:LEU:HD23	1.78	0.65
2:B:3198:PRO:HG2	2:B:3204:VAL:HA	1.79	0.65
2:B:4036:ASP:OD1	2:B:4040:LYS:NZ	2.30	0.65
2:C:2943:PHE:HB2	2:C:2956:TYR:OH	1.96	0.65
2:C:3043:ARG:HD3	2:C:3117:PHE:CG	2.31	0.65
2:A:392:ILE:HG13	2:A:393:MET:H	1.61	0.65
2:A:2684:ASN:HD22	2:A:2911:GLU:HB3	1.62	0.65
2:A:4018:ASP:OD1	2:A:4019:MET:N	2.29	0.65
2:A:4664:ASP:HA	2:A:4674:LYS:HZ1	1.62	0.65
2:B:890:HIS:HA	2:B:893:TRP:HE3	1.61	0.65
2:B:2652:LEU:HG	2:B:2662:PHE:CE1	2.32	0.65
2:C:654:SER:HG	2:C:837:SER:HG	1.43	0.65
2:C:890:HIS:HA	2:C:893:TRP:HE3	1.61	0.65
2:C:2929:LEU:HD21	2:C:2971:ILE:HG12	1.79	0.65
2:D:332:ARG:HH22	2:D:337:LYS:HA	1.62	0.65
2:D:1964:GLU:HA	2:D:1975:MET:HE1	1.78	0.65
2:D:3803:LEU:HB2	2:D:3884:SER:HB2	1.79	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:1842:ILE:HD12	2:A:1845:LEU:HD12	1.77	0.65
2:A:2984:SER:HA	2:A:2989:PRO:HB2	1.78	0.65
2:A:3198:PRO:HG2	2:A:3204:VAL:HA	1.79	0.65
2:B:4250:TYR:HA	2:B:4253:LEU:HB2	1.78	0.65
2:C:938:GLU:HA	2:C:941:LYS:HB3	1.79	0.65
2:C:2984:SER:HA	2:C:2989:PRO:HB2	1.78	0.65
2:D:644:LEU:HD13	2:D:1630:LEU:HD21	1.78	0.65
2:D:2929:LEU:HD21	2:D:2971:ILE:HG12	1.79	0.65
2:C:3803:LEU:HB2	2:C:3884:SER:HB2	1.79	0.65
2:D:890:HIS:HA	2:D:893:TRP:HE3	1.61	0.65
2:A:644:LEU:HD13	2:A:1630:LEU:HD21	1.78	0.64
2:A:890:HIS:HA	2:A:893:TRP:HE3	1.61	0.64
2:A:2929:LEU:HD21	2:A:2971:ILE:HG12	1.79	0.64
2:B:392:ILE:HG13	2:B:393:MET:H	1.62	0.64
2:B:1114:ARG:NH1	2:B:1128:LEU:O	2.29	0.64
2:C:3187:LYS:HE3	2:C:3197:LEU:HD11	1.79	0.64
2:D:2652:LEU:HG	2:D:2662:PHE:CE1	2.32	0.64
2:A:332:ARG:HH22	2:A:337:LYS:HA	1.62	0.64
2:A:654:SER:OG	2:A:837:SER:OG	2.15	0.64
2:A:2642:ARG:HH12	2:A:2682:GLU:HB2	1.62	0.64
2:A:2651:ALA:O	2:A:2655:LYS:HG2	1.96	0.64
2:A:3249:TRP:HA	2:A:3252:HIS:HB2	1.77	0.64
2:A:3803:LEU:HB2	2:A:3884:SER:HB2	1.79	0.64
2:A:4014:LEU:HD13	2:A:4122:ALA:HB2	1.78	0.64
2:B:3249:TRP:HA	2:B:3252:HIS:HB2	1.78	0.64
2:D:1842:ILE:HD12	2:D:1845:LEU:HD12	1.77	0.64
2:D:2968:LEU:HD21	2:D:3011:LEU:HD21	1.79	0.64
2:A:3805:LEU:HD23	2:B:76:ARG:HH22	1.62	0.64
2:B:2521:CYS:HA	2:B:2525:LEU:HD12	1.79	0.64
2:B:4014:LEU:HD13	2:B:4122:ALA:HB2	1.78	0.64
2:C:2642:ARG:HH12	2:C:2682:GLU:HB2	1.63	0.64
2:D:938:GLU:HA	2:D:941:LYS:HB3	1.79	0.64
2:A:3043:ARG:HD3	2:A:3117:PHE:CG	2.31	0.64
2:A:3187:LYS:HE3	2:A:3197:LEU:HD11	1.79	0.64
2:D:893:TRP:HB3	2:D:917:CYS:HB3	1.77	0.64
2:D:2684:ASN:HD22	2:D:2911:GLU:HB3	1.62	0.64
2:A:4511:PHE:HZ	2:A:4746:ILE:HD12	1.63	0.64
2:B:1100:ARG:NH1	2:B:1234:GLU:O	2.30	0.64
2:B:1144:ARG:NH1	2:B:1191:ALA:O	2.31	0.64
2:C:2652:LEU:HG	2:C:2662:PHE:CE1	2.32	0.64
2:A:2714:PRO:HG2	2:A:2717:LEU:HD23	1.78	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:4250:TYR:HA	2:A:4253:LEU:HB2	1.78	0.64
2:B:4511:PHE:HZ	2:B:4746:ILE:HD12	1.63	0.64
2:D:3187:LYS:HE3	2:D:3197:LEU:HD11	1.79	0.64
2:D:4664:ASP:HA	2:D:4674:LYS:HZ1	1.61	0.64
2:A:4814:MET:HE2	2:B:4841:ILE:HD13	1.79	0.64
2:C:988:LEU:H	2:C:1055:ARG:HH21	1.46	0.64
2:D:392:ILE:HG13	2:D:393:MET:H	1.62	0.64
2:D:654:SER:OG	2:D:837:SER:OG	2.15	0.64
2:D:2642:ARG:HH12	2:D:2682:GLU:HB2	1.62	0.64
2:D:4580:THR:OG1	2:D:4733:HIS:NE2	2.18	0.64
2:B:3043:ARG:HD3	2:B:3117:PHE:CG	2.31	0.64
2:C:4664:ASP:HA	2:C:4674:LYS:HZ1	1.60	0.64
2:D:1144:ARG:NH1	2:D:1191:ALA:O	2.31	0.64
2:A:2968:LEU:HD21	2:A:3011:LEU:HD21	1.79	0.64
2:A:3152:ARG:NH2	2:A:3236:GLU:HB3	2.13	0.64
2:B:938:GLU:HA	2:B:941:LYS:HB3	1.79	0.64
2:B:2929:LEU:HD21	2:B:2971:ILE:HG12	1.79	0.64
2:C:503:ASP:HA	2:C:561:ARG:HH12	1.63	0.64
2:D:963:LYS:HE2	2:D:977:LYS:HE3	1.80	0.64
2:D:1100:ARG:NH1	2:D:1234:GLU:O	2.31	0.64
1:F:19:LYS:HE2	1:F:19:LYS:HA	1.78	0.64
2:A:2652:LEU:HG	2:A:2662:PHE:CE1	2.32	0.64
2:C:332:ARG:HH22	2:C:337:LYS:HA	1.62	0.64
2:C:1100:ARG:NH1	2:C:1234:GLU:O	2.30	0.64
2:C:3152:ARG:NH2	2:C:3236:GLU:HB3	2.13	0.64
2:C:4250:TYR:HA	2:C:4253:LEU:HB2	1.78	0.64
2:D:15:ARG:NE	2:D:16:THR:H	1.92	0.64
2:D:2651:ALA:O	2:D:2655:LYS:HG2	1.96	0.64
2:A:605:GLY:HA2	2:A:1585:ARG:HD2	1.80	0.63
2:C:654:SER:OG	2:C:837:SER:OG	2.15	0.63
2:D:2657:TYR:HA	2:D:2662:PHE:CE2	2.33	0.63
2:D:4511:PHE:HZ	2:D:4746:ILE:HD12	1.63	0.63
2:A:938:GLU:HA	2:A:941:LYS:HB3	1.79	0.63
2:B:3152:ARG:NH2	2:B:3236:GLU:HB3	2.13	0.63
2:C:605:GLY:HA2	2:C:1585:ARG:HD2	1.80	0.63
2:D:503:ASP:HA	2:D:561:ARG:HH12	1.63	0.63
2:D:988:LEU:H	2:D:1055:ARG:HH21	1.46	0.63
2:B:988:LEU:H	2:B:1055:ARG:HH21	1.46	0.63
2:C:1246:ASP:OD1	2:C:1693:TYR:OH	2.17	0.63
2:A:4036:ASP:OD1	2:A:4040:LYS:NZ	2.30	0.63
2:B:605:GLY:HA2	2:B:1585:ARG:HD2	1.80	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:963:LYS:HE2	2:B:977:LYS:HE3	1.80	0.63
2:B:2926:LEU:HA	2:B:2929:LEU:HB3	1.80	0.63
2:D:605:GLY:HA2	2:D:1585:ARG:HD2	1.80	0.63
2:A:2768:LYS:HE3	2:A:2772:ARG:HH12	1.64	0.63
2:C:4511:PHE:HZ	2:C:4746:ILE:HD12	1.63	0.63
2:D:3639:LYS:HD2	2:D:4683:ARG:HH12	1.64	0.63
2:A:2521:CYS:HA	2:A:2525:LEU:HD12	1.79	0.63
2:A:4773:LEU:HD22	2:D:4753:LEU:HD22	1.80	0.63
2:C:1114:ARG:NH1	2:C:1128:LEU:O	2.29	0.63
2:D:3152:ARG:NH2	2:D:3236:GLU:HB3	2.13	0.63
2:B:332:ARG:HH22	2:B:337:LYS:HA	1.62	0.63
2:B:503:ASP:HA	2:B:561:ARG:HH12	1.63	0.63
2:D:2926:LEU:HA	2:D:2929:LEU:HB3	1.80	0.63
2:A:4726:MET:HB3	2:D:4291:PHE:CZ	2.34	0.63
2:B:2768:LYS:HE3	2:B:2772:ARG:HH12	1.64	0.63
2:C:1844:GLN:NE2	2:C:1851:PHE:O	2.32	0.63
2:C:4173:ILE:HG23	2:C:4884:MET:HE2	1.81	0.63
2:D:2521:CYS:HA	2:D:2525:LEU:HD12	1.79	0.63
2:A:1844:GLN:NE2	2:A:1851:PHE:O	2.32	0.62
2:A:3784:LYS:HG2	2:A:3786:ASP:HB2	1.81	0.62
2:B:64:ILE:HA	2:B:123:HIS:HE2	1.64	0.62
2:B:2642:ARG:HH12	2:B:2682:GLU:HB2	1.63	0.62
2:B:3187:LYS:HE3	2:B:3197:LEU:HD11	1.79	0.62
2:D:3784:LYS:HG2	2:D:3786:ASP:HB2	1.81	0.62
2:D:4173:ILE:HG23	2:D:4884:MET:HE2	1.81	0.62
1:E:19:LYS:HA	1:E:19:LYS:HE2	1.79	0.62
2:A:64:ILE:HA	2:A:123:HIS:HE2	1.64	0.62
2:A:1100:ARG:NH1	2:A:1234:GLU:O	2.31	0.62
2:B:1246:ASP:OD1	2:B:1693:TYR:OH	2.17	0.62
2:B:3639:LYS:HD2	2:B:4683:ARG:HH12	1.64	0.62
2:C:2497:ARG:NH2	2:C:2878:THR:OG1	2.32	0.62
2:A:14:LEU:HD21	2:A:216:PRO:HG3	1.81	0.62
2:A:963:LYS:HE2	2:A:977:LYS:HE3	1.80	0.62
2:B:2497:ARG:NH2	2:B:2878:THR:OG1	2.33	0.62
2:C:3639:LYS:HD2	2:C:4683:ARG:HH12	1.64	0.62
2:D:2741:TRP:HB3	2:D:2754:GLN:HB2	1.81	0.62
2:A:1114:ARG:NH1	2:A:1128:LEU:O	2.29	0.62
2:B:1943:ARG:NH1	2:B:1964:GLU:OE2	2.32	0.62
2:B:2071:GLN:O	2:B:3660:ARG:NH2	2.33	0.62
2:C:3122:ILE:HD12	2:C:3126:VAL:HG13	1.81	0.62
2:D:1114:ARG:NH1	2:D:1128:LEU:O	2.29	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:4173:ILE:HG23	2:A:4884:MET:HE2	1.81	0.62
2:B:235:ARG:NH1	2:B:273:SER:OG	2.33	0.62
2:C:2926:LEU:HA	2:C:2929:LEU:HB3	1.80	0.62
2:C:3187:LYS:NZ	2:C:3191:GLU:O	2.33	0.62
2:D:14:LEU:HD21	2:D:216:PRO:HG3	1.81	0.62
2:D:235:ARG:NH1	2:D:273:SER:OG	2.33	0.62
2:D:1246:ASP:OD1	2:D:1693:TYR:OH	2.17	0.62
2:D:2497:ARG:NH2	2:D:2878:THR:OG1	2.32	0.62
2:A:3122:ILE:HD12	2:A:3126:VAL:HG13	1.81	0.62
2:B:3173:THR:HG23	2:B:3202:GLU:HG3	1.82	0.62
2:B:4173:ILE:HG23	2:B:4884:MET:HE2	1.81	0.62
2:A:503:ASP:OD1	2:A:561:ARG:NH2	2.33	0.62
2:A:988:LEU:H	2:A:1055:ARG:HH21	1.46	0.62
2:A:3173:THR:HG23	2:A:3202:GLU:HG3	1.81	0.62
2:A:4491:LEU:HD11	2:D:4283:PHE:CZ	2.34	0.62
2:B:15:ARG:HD3	2:B:111:ARG:O	2.00	0.62
2:B:4767:LEU:O	2:B:4771:VAL:HG13	2.00	0.62
2:C:2071:GLN:O	2:C:3660:ARG:NH2	2.33	0.62
2:C:2657:TYR:HA	2:C:2662:PHE:CE2	2.34	0.62
2:D:2601:GLU:HA	2:D:2604:LYS:HZ3	1.64	0.62
2:A:503:ASP:HA	2:A:561:ARG:HH12	1.63	0.62
2:A:801:ARG:HG2	2:A:1618:LEU:HA	1.82	0.62
2:B:801:ARG:HG2	2:B:1618:LEU:HA	1.82	0.62
2:C:64:ILE:HA	2:C:123:HIS:HE2	1.64	0.62
2:C:1144:ARG:NH1	2:C:1191:ALA:O	2.31	0.62
2:D:801:ARG:HD3	2:D:1618:LEU:HD12	1.82	0.62
2:A:2071:GLN:O	2:A:3660:ARG:NH2	2.33	0.62
2:A:2926:LEU:HA	2:A:2929:LEU:HB3	1.80	0.62
2:B:713:TRP:HH2	2:B:1251:LEU:HD21	1.65	0.62
2:A:1246:ASP:OD1	2:A:1693:TYR:OH	2.17	0.62
2:A:2497:ARG:NH2	2:A:2878:THR:OG1	2.33	0.62
2:B:503:ASP:OD1	2:B:561:ARG:NH2	2.33	0.62
2:B:1844:GLN:NE2	2:B:1851:PHE:O	2.32	0.62
2:B:2657:TYR:HA	2:B:2662:PHE:CE2	2.33	0.62
2:B:2979:ARG:HH21	2:B:3039:THR:HG23	1.64	0.62
2:B:3784:LYS:HG2	2:B:3786:ASP:HB2	1.81	0.62
2:C:2768:LYS:HE3	2:C:2772:ARG:HH12	1.64	0.62
2:D:2071:GLN:O	2:D:3660:ARG:NH2	2.33	0.62
2:A:235:ARG:NH1	2:A:273:SER:OG	2.33	0.61
2:A:912:LYS:HZ2	2:A:914:GLN:HB2	1.65	0.61
2:A:2742:ILE:O	2:A:2754:GLN:N	2.33	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:2830:ASN:ND2	2:B:1435:GLY:HA3	2.15	0.61
2:B:2742:ILE:O	2:B:2754:GLN:N	2.33	0.61
2:C:15:ARG:HD3	2:C:111:ARG:O	2.00	0.61
2:D:891:GLU:HA	2:D:894:VAL:HG22	1.82	0.61
2:D:2768:LYS:HE3	2:D:2772:ARG:HH12	1.64	0.61
2:D:3187:LYS:NZ	2:D:3191:GLU:O	2.33	0.61
2:D:4767:LEU:O	2:D:4771:VAL:HG13	2.00	0.61
2:A:15:ARG:HD3	2:A:111:ARG:O	2.00	0.61
2:A:1144:ARG:NH1	2:A:1191:ALA:O	2.31	0.61
2:B:3187:LYS:NZ	2:B:3191:GLU:O	2.33	0.61
2:C:235:ARG:NH1	2:C:273:SER:OG	2.33	0.61
2:C:2741:TRP:HB3	2:C:2754:GLN:HB2	1.81	0.61
2:C:3174:HIS:CE1	2:C:3211:LEU:HD21	2.35	0.61
2:C:4767:LEU:O	2:C:4771:VAL:HG13	2.00	0.61
2:D:1165:MET:HB3	2:D:1236:TYR:CE1	2.35	0.61
2:D:2979:ARG:HH21	2:D:3039:THR:HG23	1.64	0.61
2:C:3784:LYS:HG2	2:C:3786:ASP:HB2	1.81	0.61
2:D:503:ASP:OD1	2:D:561:ARG:NH2	2.33	0.61
2:D:1844:GLN:NE2	2:D:1851:PHE:O	2.32	0.61
2:D:2618:TRP:CD1	2:D:2619:LYS:HZ2	2.18	0.61
2:A:713:TRP:HH2	2:A:1251:LEU:HD21	1.65	0.61
2:A:891:GLU:HA	2:A:894:VAL:HG22	1.82	0.61
2:A:2979:ARG:HH21	2:A:3039:THR:HG23	1.64	0.61
2:B:137:ARG:NH2	2:B:198:ASN:OD1	2.33	0.61
2:B:891:GLU:HA	2:B:894:VAL:HG22	1.82	0.61
2:B:2765:GLU:HA	2:B:2768:LYS:HB2	1.83	0.61
2:B:3174:HIS:CE1	2:B:3211:LEU:HD21	2.35	0.61
2:C:713:TRP:HH2	2:C:1251:LEU:HD21	1.65	0.61
2:C:2943:PHE:HB2	2:C:2956:TYR:HH	1.65	0.61
2:C:4187:GLU:OE2	2:C:4947:ARG:NH2	2.34	0.61
2:D:713:TRP:HH2	2:D:1251:LEU:HD21	1.65	0.61
2:D:1010:ASP:OD1	2:D:1013:ARG:NH2	2.34	0.61
2:D:1943:ARG:NH1	2:D:1964:GLU:OE2	2.32	0.61
2:A:3639:LYS:HD2	2:A:4683:ARG:HH12	1.64	0.61
2:B:1165:MET:HB3	2:B:1236:TYR:CE1	2.35	0.61
2:C:963:LYS:HE2	2:C:977:LYS:HE3	1.80	0.61
2:C:2787:TRP:HD1	2:C:2904:SER:O	1.84	0.61
2:C:2979:ARG:HH21	2:C:3039:THR:HG23	1.64	0.61
2:D:801:ARG:HG2	2:D:1618:LEU:HA	1.82	0.61
2:A:2787:TRP:HD1	2:A:2904:SER:O	1.84	0.61
2:B:1010:ASP:OD1	2:B:1013:ARG:NH2	2.34	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3122:ILE:HD12	2:B:3126:VAL:HG13	1.81	0.61
2:C:14:LEU:HD21	2:C:216:PRO:HG3	1.81	0.61
2:C:891:GLU:HA	2:C:894:VAL:HG22	1.83	0.61
2:C:1943:ARG:NH1	2:C:1964:GLU:OE2	2.32	0.61
2:D:64:ILE:HA	2:D:123:HIS:HE2	1.64	0.61
2:D:2742:ILE:O	2:D:2754:GLN:N	2.33	0.61
2:D:3174:HIS:CE1	2:D:3211:LEU:HD21	2.35	0.61
2:A:801:ARG:HD3	2:A:1618:LEU:HD12	1.82	0.61
2:A:1010:ASP:OD1	2:A:1013:ARG:NH2	2.34	0.61
2:A:2657:TYR:HA	2:A:2662:PHE:CE2	2.34	0.61
2:B:2720:PHE:HD1	2:B:2899:ASN:HD22	1.49	0.61
2:B:2731:LYS:HA	2:B:2734:MET:HE2	1.83	0.61
2:C:1165:MET:HB3	2:C:1236:TYR:CE1	2.35	0.61
2:D:2787:TRP:HD1	2:D:2904:SER:O	1.84	0.61
2:D:3293:GLY:H	2:D:3296:MET:HE3	1.66	0.61
2:A:4767:LEU:O	2:A:4771:VAL:HG13	2.00	0.61
2:B:2741:TRP:HB3	2:B:2754:GLN:HB2	1.81	0.61
2:B:3001:LYS:HE3	2:B:3044:THR:HG21	1.83	0.61
2:B:3293:GLY:H	2:B:3296:MET:HE3	1.65	0.61
2:C:66:THR:HG22	2:C:217:ILE:HG13	1.82	0.61
2:D:3926:GLY:O	2:D:3928:CYS:N	2.34	0.61
2:A:2720:PHE:HD1	2:A:2899:ASN:HD22	1.49	0.61
2:B:3926:GLY:O	2:B:3928:CYS:N	2.34	0.61
2:D:1685:LEU:HD22	2:D:1706:LEU:HB2	1.82	0.61
2:D:2765:GLU:HA	2:D:2768:LYS:HB2	1.83	0.61
2:D:3173:THR:HG23	2:D:3202:GLU:HG3	1.81	0.61
2:A:2741:TRP:HB3	2:A:2754:GLN:HB2	1.81	0.60
2:A:3187:LYS:NZ	2:A:3191:GLU:O	2.33	0.60
2:B:14:LEU:HD21	2:B:216:PRO:HG3	1.81	0.60
2:B:801:ARG:HD3	2:B:1618:LEU:HD12	1.82	0.60
2:B:2415:GLU:OE1	2:B:2418:ARG:NH1	2.34	0.60
2:B:2787:TRP:HD1	2:B:2904:SER:O	1.84	0.60
2:C:801:ARG:HG2	2:C:1618:LEU:HA	1.82	0.60
2:D:1119:ARG:NH2	2:D:1196:ASP:OD1	2.34	0.60
2:D:4187:GLU:OE2	2:D:4947:ARG:NH2	2.34	0.60
2:D:4639:SER:HB3	2:D:4642:ASN:HD21	1.66	0.60
2:A:137:ARG:NH2	2:A:198:ASN:OD1	2.33	0.60
2:A:1574:GLU:OE2	2:A:1581:GLN:NE2	2.34	0.60
2:B:4139:MET:HB3	2:B:4951:PHE:HA	1.84	0.60
2:C:137:ARG:NH2	2:C:198:ASN:OD1	2.33	0.60
2:C:3173:THR:HG23	2:C:3202:GLU:HG3	1.81	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:4743:LEU:HD23	2:D:4776:VAL:HG13	1.83	0.60
2:D:15:ARG:HD3	2:D:111:ARG:O	2.00	0.60
2:D:1102:TYR:HD1	2:D:1165:MET:HG3	1.67	0.60
2:D:2736:LYS:HE2	2:D:2756:LEU:HB3	1.84	0.60
2:D:2833:LEU:HD23	2:D:2897:GLN:HE22	1.66	0.60
2:A:1898:LEU:HD13	2:A:1902:VAL:HG12	1.84	0.60
2:A:2731:LYS:HA	2:A:2734:MET:HE2	1.83	0.60
2:A:3293:GLY:H	2:A:3296:MET:HE3	1.66	0.60
2:A:4639:SER:HB3	2:A:4642:ASN:HD21	1.66	0.60
2:C:801:ARG:HD3	2:C:1618:LEU:HD12	1.82	0.60
2:C:1119:ARG:NH2	2:C:1196:ASP:OD1	2.34	0.60
2:C:3293:GLY:H	2:C:3296:MET:HE3	1.66	0.60
2:C:3926:GLY:O	2:C:3928:CYS:N	2.34	0.60
2:D:66:THR:HG22	2:D:217:ILE:HG13	1.82	0.60
2:D:912:LYS:HZ2	2:D:914:GLN:HB2	1.65	0.60
2:D:3122:ILE:HD12	2:D:3126:VAL:HG13	1.81	0.60
2:A:1421:MET:O	2:A:1576:LYS:NZ	2.35	0.60
2:B:1685:LEU:HD22	2:B:1706:LEU:HB2	1.82	0.60
2:C:2415:GLU:OE1	2:C:2418:ARG:NH1	2.34	0.60
2:C:3318:HIS:C	2:C:3321:PRO:HD2	2.26	0.60
2:C:4639:SER:HB3	2:C:4642:ASN:HD21	1.66	0.60
2:D:137:ARG:NH2	2:D:198:ASN:OD1	2.33	0.60
2:D:2841:ALA:HB1	2:D:2886:ARG:HH22	1.66	0.60
2:A:4187:GLU:OE2	2:A:4947:ARG:NH2	2.34	0.60
2:B:1574:GLU:OE2	2:B:1581:GLN:NE2	2.34	0.60
2:C:1102:TYR:HD1	2:C:1165:MET:HG3	1.67	0.60
2:C:4617:ILE:HD13	2:C:4666:ILE:HD11	1.84	0.60
2:D:1898:LEU:HD13	2:D:1902:VAL:HG12	1.83	0.60
2:D:2720:PHE:HD1	2:D:2899:ASN:HD22	1.49	0.60
2:A:1165:MET:HB3	2:A:1236:TYR:CE1	2.35	0.60
2:A:2765:GLU:HA	2:A:2768:LYS:HB2	1.83	0.60
2:A:4639:SER:O	2:A:4642:ASN:ND2	2.35	0.60
2:D:4617:ILE:HD13	2:D:4666:ILE:HD11	1.83	0.60
2:A:1685:LEU:HD22	2:A:1706:LEU:HB2	1.82	0.60
2:A:2415:GLU:OE1	2:A:2418:ARG:NH1	2.34	0.60
2:B:4187:GLU:OE2	2:B:4947:ARG:NH2	2.34	0.60
2:C:1010:ASP:OD1	2:C:1013:ARG:NH2	2.34	0.60
2:C:1685:LEU:HD22	2:C:1706:LEU:HB2	1.82	0.60
2:C:3001:LYS:HE3	2:C:3044:THR:HG21	1.83	0.60
2:C:4639:SER:O	2:C:4642:ASN:ND2	2.35	0.60
2:D:4639:SER:O	2:D:4642:ASN:ND2	2.35	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:2445:ILE:HA	2:A:2451:VAL:HA	1.84	0.60
2:A:3174:HIS:CE1	2:A:3211:LEU:HD21	2.35	0.60
2:B:4639:SER:HB3	2:B:4642:ASN:HD21	1.66	0.60
2:C:2445:ILE:HA	2:C:2451:VAL:HA	1.84	0.60
2:C:2736:LYS:HE2	2:C:2756:LEU:HB3	1.84	0.60
2:D:2415:GLU:OE1	2:D:2418:ARG:NH1	2.34	0.60
2:D:2445:ILE:HA	2:D:2451:VAL:HA	1.84	0.60
2:A:1102:TYR:HD1	2:A:1165:MET:HG3	1.67	0.60
2:A:2833:LEU:HD23	2:A:2897:GLN:HE22	1.66	0.60
2:B:1102:TYR:HD1	2:B:1165:MET:HG3	1.67	0.60
2:B:2732:TRP:O	2:B:2732:TRP:HD1	1.85	0.60
2:B:3245:TYR:O	2:B:3249:TRP:HE3	1.85	0.60
2:C:2732:TRP:O	2:C:2732:TRP:HD1	1.85	0.60
2:D:2731:LYS:HA	2:D:2734:MET:HE2	1.83	0.60
2:A:2678:PRO:HB3	2:A:2922:ALA:HB2	1.84	0.60
2:B:2736:LYS:HE2	2:B:2756:LEU:HB3	1.84	0.60
2:B:2833:LEU:HD23	2:B:2897:GLN:HE22	1.66	0.60
2:C:1574:GLU:OE2	2:C:1581:GLN:NE2	2.34	0.60
2:D:1574:GLU:OE2	2:D:1581:GLN:NE2	2.34	0.60
2:D:4139:MET:HB3	2:D:4951:PHE:HA	1.84	0.60
2:A:3926:GLY:O	2:A:3928:CYS:N	2.34	0.59
2:A:4139:MET:HB3	2:A:4951:PHE:HA	1.84	0.59
2:B:1119:ARG:NH2	2:B:1196:ASP:OD1	2.34	0.59
2:B:2841:ALA:HB1	2:B:2886:ARG:HH22	1.66	0.59
2:C:1245:ARG:NH1	2:C:1692:LYS:O	2.35	0.59
2:C:2765:GLU:HA	2:C:2768:LYS:HB2	1.83	0.59
2:A:4617:ILE:HD13	2:A:4666:ILE:HD11	1.84	0.59
2:B:66:THR:HG22	2:B:217:ILE:HG13	1.82	0.59
2:B:1245:ARG:NH1	2:B:1692:LYS:O	2.35	0.59
2:B:2445:ILE:HA	2:B:2451:VAL:HA	1.84	0.59
2:B:2678:PRO:HB3	2:B:2922:ALA:HB2	1.84	0.59
2:B:3002:GLU:O	2:B:3005:THR:OG1	2.19	0.59
2:C:1016:TRP:HB3	2:C:1032:LEU:HD11	1.84	0.59
2:C:2720:PHE:HD1	2:C:2899:ASN:HD22	1.49	0.59
2:D:3001:LYS:HE3	2:D:3044:THR:HG21	1.83	0.59
2:D:3002:GLU:O	2:D:3005:THR:OG1	2.19	0.59
2:D:3245:TYR:O	2:D:3249:TRP:HE3	1.85	0.59
2:D:3318:HIS:C	2:D:3321:PRO:HD2	2.27	0.59
2:A:370:LEU:HD22	2:A:395:HIS:HA	1.84	0.59
2:A:2732:TRP:O	2:A:2732:TRP:HD1	1.85	0.59
2:A:2736:LYS:HE2	2:A:2756:LEU:HB3	1.84	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1795:LEU:HD23	2:B:1842:ILE:HD11	1.85	0.59
2:B:4639:SER:O	2:B:4642:ASN:ND2	2.35	0.59
2:C:930:ASN:HB3	2:C:934:GLN:HE22	1.67	0.59
2:C:2833:LEU:HD23	2:C:2897:GLN:HE22	1.66	0.59
2:C:3846:LEU:HB3	2:C:3854:PHE:CE2	2.37	0.59
2:D:1795:LEU:HD23	2:D:1842:ILE:HD11	1.85	0.59
2:A:1119:ARG:NH2	2:A:1196:ASP:OD1	2.34	0.59
2:A:2618:TRP:CD1	2:A:2619:LYS:HZ2	2.19	0.59
2:B:1898:LEU:HD13	2:B:1902:VAL:HG12	1.83	0.59
2:C:2426:LEU:HD12	2:D:143:LEU:HD11	1.84	0.59
2:C:3245:TYR:O	2:C:3249:TRP:HE3	1.85	0.59
2:D:555:LEU:HD22	2:D:585:ALA:HB1	1.85	0.59
2:D:1016:TRP:HB3	2:D:1032:LEU:HD11	1.84	0.59
2:D:894:VAL:HA	2:D:918:LEU:HD23	1.84	0.59
2:D:1245:ARG:NH1	2:D:1692:LYS:O	2.36	0.59
2:A:718:VAL:HG23	2:A:793:SER:HB3	1.85	0.59
2:A:1245:ARG:NH1	2:A:1692:LYS:O	2.35	0.59
2:A:2841:ALA:HB1	2:A:2886:ARG:HH22	1.66	0.59
2:A:3179:ASN:HA	2:A:3260:ARG:HH22	1.67	0.59
2:B:1421:MET:O	2:B:1576:LYS:NZ	2.35	0.59
2:B:3846:LEU:HB3	2:B:3854:PHE:CE2	2.37	0.59
2:C:2731:LYS:HA	2:C:2734:MET:HE2	1.83	0.59
2:C:2742:ILE:O	2:C:2754:GLN:N	2.33	0.59
2:C:2841:ALA:HB1	2:C:2886:ARG:HH22	1.67	0.59
2:C:3728:GLN:OE1	2:C:3770:ASN:ND2	2.33	0.59
2:D:4640:PHE:CD2	2:D:4641:PRO:HD3	2.38	0.59
2:A:66:THR:HG22	2:A:217:ILE:HG13	1.82	0.59
2:A:661:LEU:O	2:A:788:PHE:N	2.30	0.59
2:A:3001:LYS:HE3	2:A:3044:THR:HG21	1.83	0.59
2:A:3318:HIS:C	2:A:3321:PRO:HD2	2.27	0.59
2:A:3846:LEU:HB3	2:A:3854:PHE:CE2	2.37	0.59
2:B:2149:ILE:HG21	2:B:2167:MET:HE1	1.85	0.59
2:C:503:ASP:OD1	2:C:561:ARG:NH2	2.33	0.59
2:C:661:LEU:O	2:C:788:PHE:N	2.30	0.59
2:C:1898:LEU:HD13	2:C:1902:VAL:HG12	1.83	0.59
2:D:930:ASN:HB3	2:D:934:GLN:HE22	1.67	0.59
2:A:962:LYS:HB3	2:A:981:MET:HA	1.85	0.59
2:A:3245:TYR:O	2:A:3249:TRP:HE3	1.85	0.59
2:B:555:LEU:HD22	2:B:585:ALA:HB1	1.85	0.59
2:B:4617:ILE:HD13	2:B:4666:ILE:HD11	1.84	0.59
2:D:962:LYS:HB3	2:D:981:MET:HA	1.85	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:1500:ARG:NH2	2:D:1505:LEU:HD22	2.18	0.59
2:D:2149:ILE:HG21	2:D:2167:MET:HE1	1.85	0.59
2:D:2732:TRP:O	2:D:2732:TRP:HD1	1.85	0.59
2:A:1943:ARG:NH1	2:A:1964:GLU:OE2	2.32	0.59
2:B:247:VAL:O	2:B:272:ARG:NH1	2.36	0.59
2:C:247:VAL:O	2:C:272:ARG:NH1	2.36	0.59
2:D:247:VAL:O	2:D:272:ARG:NH1	2.36	0.59
2:D:4511:PHE:CZ	2:D:4746:ILE:HD12	2.38	0.59
2:A:1500:ARG:NH2	2:A:1505:LEU:HD22	2.18	0.59
2:A:2149:ILE:HG21	2:A:2167:MET:HE1	1.85	0.59
2:B:912:LYS:HZ2	2:B:914:GLN:HB2	1.66	0.59
2:B:1016:TRP:HB3	2:B:1032:LEU:HD11	1.84	0.59
2:B:3318:HIS:C	2:B:3321:PRO:HD2	2.27	0.59
2:B:4818:TYR:CE2	2:B:4819:VAL:HG23	2.38	0.59
2:C:370:LEU:HD22	2:C:395:HIS:HA	1.84	0.59
2:C:894:VAL:HA	2:C:918:LEU:HD23	1.84	0.59
2:C:1500:ARG:NH2	2:C:1505:LEU:HD22	2.18	0.59
2:C:1795:LEU:HD23	2:C:1842:ILE:HD11	1.85	0.59
2:C:2149:ILE:HG21	2:C:2167:MET:HE1	1.85	0.59
2:C:2689:MET:HE2	2:C:2689:MET:N	2.18	0.59
2:C:2791:ARG:NH2	2:C:2899:ASN:O	2.23	0.59
2:D:2599:LEU:HB2	2:D:2655:LYS:NZ	2.18	0.59
2:D:2678:PRO:HB3	2:D:2922:ALA:HB2	1.84	0.59
2:D:3846:LEU:HB3	2:D:3854:PHE:CE2	2.37	0.59
2:A:3043:ARG:HD3	2:A:3117:PHE:CD2	2.38	0.58
2:A:4818:TYR:CE2	2:A:4819:VAL:HG23	2.38	0.58
2:B:2593:VAL:HA	2:B:2644:LEU:HD21	1.85	0.58
2:C:2678:PRO:HB3	2:C:2922:ALA:HB2	1.84	0.58
2:C:4511:PHE:CZ	2:C:4746:ILE:HD12	2.38	0.58
2:C:4679:PHE:HA	2:C:4682:ALA:HB3	1.85	0.58
2:D:608:HIS:HB2	2:D:1656:HIS:CD2	2.38	0.58
2:D:3179:ASN:HA	2:D:3260:ARG:HH22	1.67	0.58
2:A:2659:GLN:HG3	2:A:2663:LYS:NZ	2.18	0.58
2:A:2689:MET:HE2	2:A:2689:MET:N	2.18	0.58
2:A:4279:MET:HE1	2:B:4484:ILE:HG22	1.85	0.58
2:A:4640:PHE:CD2	2:A:4641:PRO:HD3	2.38	0.58
2:B:4511:PHE:CZ	2:B:4746:ILE:HD12	2.38	0.58
2:C:4139:MET:HB3	2:C:4951:PHE:HA	1.84	0.58
2:C:4818:TYR:CE2	2:C:4819:VAL:HG23	2.38	0.58
2:D:2635:GLU:HA	2:D:2638:LEU:HB2	1.85	0.58
2:D:2659:GLN:HG3	2:D:2663:LYS:NZ	2.18	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:3250:TRP:NE1	2:D:3255:GLU:OE2	2.33	0.58
2:B:930:ASN:HB3	2:B:934:GLN:HE22	1.68	0.58
2:B:2599:LEU:HB2	2:B:2655:LYS:NZ	2.18	0.58
2:B:2689:MET:HE2	2:B:2689:MET:N	2.18	0.58
2:C:718:VAL:HG23	2:C:793:SER:HB3	1.85	0.58
2:C:2593:VAL:HA	2:C:2644:LEU:HD21	1.85	0.58
2:D:1963:LYS:HB2	2:D:1966:ARG:HH21	1.69	0.58
2:D:2689:MET:HE2	2:D:2689:MET:N	2.18	0.58
2:D:3071:THR:HA	2:D:3074:ASN:ND2	2.19	0.58
2:D:4818:TYR:CE2	2:D:4819:VAL:HG23	2.38	0.58
2:A:1016:TRP:HB3	2:A:1032:LEU:HD11	1.84	0.58
2:A:2599:LEU:HB2	2:A:2655:LYS:NZ	2.18	0.58
2:C:1421:MET:O	2:C:1576:LYS:NZ	2.35	0.58
2:C:2739:ASN:HB2	2:C:2741:TRP:CZ3	2.39	0.58
2:C:2849:HIS:CE1	2:C:2877:LEU:HD11	2.39	0.58
2:D:718:VAL:HG23	2:D:793:SER:HB3	1.85	0.58
2:A:1795:LEU:HD23	2:A:1842:ILE:HD11	1.85	0.58
2:A:1963:LYS:HB2	2:A:1966:ARG:HH21	1.69	0.58
2:A:2833:LEU:HB2	2:A:2838[A]:HIS:NE2	2.19	0.58
2:A:3985:MET:HE2	2:A:3985:MET:HA	1.86	0.58
2:B:894:VAL:HA	2:B:918:LEU:HD23	1.84	0.58
2:B:1500:ARG:NH2	2:B:1505:LEU:HD22	2.18	0.58
2:B:2943:PHE:CE1	2:B:2954:PHE:HE1	2.21	0.58
2:B:3179:ASN:HA	2:B:3260:ARG:HH22	1.67	0.58
2:C:2599:LEU:HB2	2:C:2655:LYS:NZ	2.18	0.58
2:C:3179:ASN:HA	2:C:3260:ARG:HH22	1.67	0.58
2:D:2739:ASN:HB2	2:D:2741:TRP:CZ3	2.39	0.58
2:D:2849:HIS:CE1	2:D:2877:LEU:HD11	2.39	0.58
2:A:608:HIS:HB2	2:A:1656:HIS:CD2	2.38	0.58
2:A:894:VAL:HA	2:A:918:LEU:HD23	1.84	0.58
2:A:4511:PHE:CZ	2:A:4746:ILE:HD12	2.38	0.58
2:C:2830:ASN:ND2	2:D:1434:PRO:O	2.37	0.58
2:C:3985:MET:HE2	2:C:3985:MET:HA	1.86	0.58
2:D:2552:VAL:HG13	2:D:2569:ILE:HD11	1.85	0.58
2:A:247:VAL:O	2:A:272:ARG:NH1	2.36	0.58
2:A:930:ASN:HB3	2:A:934:GLN:HE22	1.67	0.58
2:A:3294:ALA:HA	2:A:3297:LYS:HE2	1.85	0.58
2:B:2772:ARG:O	2:B:2776:LYS:N	2.27	0.58
2:C:2943:PHE:CE1	2:C:2954:PHE:HE1	2.21	0.58
2:D:3235:MET:HE2	2:D:3235:MET:O	2.04	0.58
1:H:4:GLU:OE1	1:H:4:GLU:N	2.37	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:8:ILE:HA	2:D:730:LEU:HD11	1.85	0.58
2:A:2443:PRO:HD3	2:A:2512:MET:HG2	1.86	0.58
2:A:3072:MET:HB3	2:A:3076:LYS:NZ	2.19	0.58
2:B:370:LEU:HD22	2:B:395:HIS:HA	1.84	0.58
2:B:1963:LYS:HB2	2:B:1966:ARG:HH21	1.69	0.58
2:B:2552:VAL:HG13	2:B:2569:ILE:HD11	1.85	0.58
2:B:2589:LEU:O	2:B:2593:VAL:HG23	2.04	0.58
2:B:2849:HIS:CE1	2:B:2877:LEU:HD11	2.39	0.58
2:B:3985:MET:HE2	2:B:3985:MET:HA	1.86	0.58
2:B:4593:LEU:HG	2:B:4594:LYS:HE3	1.86	0.58
2:C:3805:LEU:HD21	2:C:3891:TYR:HB2	1.85	0.58
2:C:4640:PHE:CD2	2:C:4641:PRO:HD3	2.38	0.58
2:D:370:LEU:HD22	2:D:395:HIS:HA	1.84	0.58
2:D:3072:MET:HB3	2:D:3076:LYS:NZ	2.19	0.58
2:A:555:LEU:HD22	2:A:585:ALA:HB1	1.85	0.58
2:A:2791:ARG:NH2	2:A:2899:ASN:O	2.23	0.58
2:A:2943:PHE:CE1	2:A:2954:PHE:HE1	2.21	0.58
2:B:115:TYR:HB3	2:B:164:PRO:HD3	1.86	0.58
2:B:3147:TYR:HD1	2:B:3150:ARG:HH22	1.52	0.58
2:B:4884:MET:HE1	2:B:4889:PHE:CD1	2.39	0.58
2:D:115:TYR:HB3	2:D:164:PRO:HD3	1.86	0.58
2:D:3728:GLN:OE1	2:D:3770:ASN:ND2	2.33	0.58
2:A:2296:GLU:HG3	2:A:2390:THR:HG22	1.86	0.58
2:A:2849:HIS:CE1	2:A:2877:LEU:HD11	2.39	0.58
2:A:4593:LEU:HG	2:A:4594:LYS:HE3	1.86	0.58
2:B:2443:PRO:HD3	2:B:2512:MET:HG2	1.86	0.58
2:B:3117:PHE:CD1	2:B:3117:PHE:CA	2.87	0.58
2:C:555:LEU:HD22	2:C:585:ALA:HB1	1.85	0.58
2:C:962:LYS:HB3	2:C:981:MET:HA	1.84	0.58
2:C:2635:GLU:HA	2:C:2638:LEU:HB2	1.85	0.58
2:C:2659:GLN:HG3	2:C:2663:LYS:NZ	2.18	0.58
2:C:3071:THR:HA	2:C:3074:ASN:ND2	2.19	0.58
2:D:4679:PHE:HA	2:D:4682:ALA:HB3	1.85	0.58
2:A:995:MET:HE1	2:A:1067:PRO:HD2	1.86	0.57
2:A:1959:ALA:O	2:A:1966:ARG:NH2	2.37	0.57
2:A:3071:THR:HA	2:A:3074:ASN:ND2	2.19	0.57
2:B:2943:PHE:HB2	2:B:2956:TYR:HH	1.69	0.57
2:B:3043:ARG:HD3	2:B:3117:PHE:CD2	2.38	0.57
2:B:3294:ALA:HA	2:B:3297:LYS:HE2	1.85	0.57
2:C:1963:LYS:HB2	2:C:1966:ARG:HH21	1.69	0.57
2:C:4083:PHE:HD1	2:C:4086:ARG:HH21	1.52	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:1421:MET:O	2:D:1576:LYS:NZ	2.35	0.57
2:D:1959:ALA:O	2:D:1966:ARG:NH2	2.37	0.57
2:D:2943:PHE:CE1	2:D:2954:PHE:HE1	2.21	0.57
1:E:4:GLU:N	1:E:4:GLU:OE1	2.37	0.57
2:A:2833:LEU:HB2	2:A:2838[B]:HIS:NE2	2.19	0.57
2:A:3117:PHE:CD1	2:A:3117:PHE:CA	2.87	0.57
2:A:3147:TYR:HD1	2:A:3150:ARG:HH22	1.52	0.57
2:B:962:LYS:HB3	2:B:981:MET:HA	1.85	0.57
2:C:2589:LEU:O	2:C:2593:VAL:HG23	2.04	0.57
2:C:2772:ARG:O	2:C:2776:LYS:N	2.27	0.57
2:C:3072:MET:HB3	2:C:3076:LYS:NZ	2.19	0.57
2:D:3985:MET:HE2	2:D:3985:MET:HA	1.86	0.57
2:A:2589:LEU:O	2:A:2593:VAL:HG23	2.04	0.57
2:B:2296:GLU:HG3	2:B:2390:THR:HG22	1.86	0.57
2:B:2981:TYR:O	2:B:2984:SER:OG	2.21	0.57
2:B:4640:PHE:CD2	2:B:4641:PRO:HD3	2.38	0.57
2:B:4703:VAL:O	2:B:4707:MET:HB2	2.05	0.57
2:C:995:MET:HE1	2:C:1067:PRO:HD2	1.86	0.57
2:C:1975:MET:HA	2:C:1978:ASN:OD1	2.04	0.57
2:D:4083:PHE:HD1	2:D:4086:ARG:HH21	1.52	0.57
2:D:4593:LEU:HG	2:D:4594:LYS:HE3	1.86	0.57
2:A:3013:VAL:HA	2:A:3016:ARG:HD3	1.87	0.57
2:B:2065:THR:HG23	2:B:2066:MET:HE3	1.87	0.57
2:B:2659:GLN:HG3	2:B:2663:LYS:NZ	2.18	0.57
2:B:3072:MET:HB3	2:B:3076:LYS:NZ	2.19	0.57
2:C:115:TYR:HB3	2:C:164:PRO:HD3	1.86	0.57
2:C:608:HIS:HB2	2:C:1656:HIS:CD2	2.38	0.57
2:C:3043:ARG:HD3	2:C:3117:PHE:CD2	2.38	0.57
2:D:2443:PRO:HD3	2:D:2512:MET:HG2	1.86	0.57
2:D:3043:ARG:HD3	2:D:3117:PHE:CD2	2.38	0.57
2:A:370:LEU:HB2	2:A:393:MET:HE3	1.86	0.57
2:A:2635:GLU:HA	2:A:2638:LEU:HB2	1.85	0.57
2:A:3805:LEU:HD21	2:A:3891:TYR:HB2	1.85	0.57
2:B:718:VAL:HG23	2:B:793:SER:HB3	1.84	0.57
2:B:2739:ASN:HB2	2:B:2741:TRP:CZ3	2.39	0.57
2:B:3608:LEU:HA	2:B:3611:LEU:HD12	1.86	0.57
2:C:2552:VAL:HG13	2:C:2569:ILE:HD11	1.85	0.57
2:C:2618:TRP:CD1	2:C:2619:LYS:HZ2	2.21	0.57
2:C:3117:PHE:CD1	2:C:3117:PHE:CA	2.87	0.57
2:C:3117:PHE:CD1	2:C:3117:PHE:CB	2.79	0.57
2:C:3608:LEU:HA	2:C:3611:LEU:HD12	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:4521:LYS:HZ3	2:D:4808:ASP:CG	2.12	0.57
2:C:4703:VAL:O	2:C:4707:MET:HB2	2.05	0.57
2:C:4884:MET:HE1	2:C:4889:PHE:CD1	2.39	0.57
2:D:2296:GLU:HG3	2:D:2390:THR:HG22	1.86	0.57
2:D:3294:ALA:HA	2:D:3297:LYS:HE2	1.86	0.57
2:A:2065:THR:HG23	2:A:2066:MET:HE3	1.87	0.57
2:A:4083:PHE:HD1	2:A:4086:ARG:HH21	1.52	0.57
2:C:3002:GLU:O	2:C:3005:THR:OG1	2.19	0.57
2:D:1963:LYS:HA	2:D:1966:ARG:HE	1.70	0.57
2:D:2593:VAL:HA	2:D:2644:LEU:HD21	1.85	0.57
2:D:3013:VAL:HA	2:D:3016:ARG:HD3	1.87	0.57
2:A:996:VAL:HG11	2:A:1051:ARG:HG2	1.87	0.57
2:A:2552:VAL:HG13	2:A:2569:ILE:HD11	1.85	0.57
2:A:3002:GLU:O	2:A:3005:THR:OG1	2.19	0.57
2:B:608:HIS:HB2	2:B:1656:HIS:CD2	2.38	0.57
2:B:3805:LEU:HD21	2:B:3891:TYR:HB2	1.85	0.57
2:B:4679:PHE:HA	2:B:4682:ALA:HB3	1.85	0.57
2:C:2296:GLU:HG3	2:C:2390:THR:HG22	1.86	0.57
2:C:3294:ALA:HA	2:C:3297:LYS:HE2	1.86	0.57
2:D:2232:PRO:HG2	2:D:2379:ASP:HA	1.87	0.57
2:D:2589:LEU:O	2:D:2593:VAL:HG23	2.04	0.57
2:A:2739:ASN:HB2	2:A:2741:TRP:CZ3	2.39	0.57
2:A:3000:GLU:HA	2:A:3003:MET:HG2	1.87	0.57
2:A:4703:VAL:O	2:A:4707:MET:HB2	2.05	0.57
2:C:3235:MET:HE2	2:C:3235:MET:O	2.04	0.57
2:D:655:MET:HG2	2:D:794:PHE:HE1	1.70	0.57
2:D:3805:LEU:HD21	2:D:3891:TYR:HB2	1.85	0.57
2:A:842:GLN:HB2	2:A:1603:PHE:HB2	1.87	0.57
2:A:2593:VAL:HA	2:A:2644:LEU:HD21	1.85	0.57
2:A:3117:PHE:CD1	2:A:3117:PHE:CB	2.79	0.57
2:A:4520:TYR:HE2	2:A:4559:TYR:HB3	1.70	0.57
2:B:370:LEU:HB2	2:B:393:MET:HE3	1.87	0.57
2:B:1959:ALA:O	2:B:1966:ARG:NH2	2.37	0.57
2:B:4083:PHE:HD1	2:B:4086:ARG:HH21	1.52	0.57
2:C:4187:GLU:OE1	2:C:4949:TRP:NE1	2.38	0.57
2:D:995:MET:HE1	2:D:1067:PRO:HD2	1.86	0.57
2:D:1975:MET:HA	2:D:1978:ASN:OD1	2.04	0.57
2:D:3117:PHE:CD1	2:D:3117:PHE:CA	2.87	0.57
2:D:4520:TYR:HE2	2:D:4559:TYR:HB3	1.70	0.57
1:F:4:GLU:OE1	1:F:4:GLU:N	2.37	0.56
2:A:115:TYR:HB3	2:A:164:PRO:HD3	1.86	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:992:GLN:HG3	2:A:1066:ALA:HB2	1.87	0.56
2:A:1129:GLY:HA3	2:A:1145:TRP:HB3	1.87	0.56
2:A:4048:PHE:O	2:A:4052:MET:HG3	2.05	0.56
2:B:878:LEU:HD23	2:B:881:ILE:HD11	1.87	0.56
2:B:3000:GLU:HA	2:B:3003:MET:HG2	1.87	0.56
2:C:996:VAL:HG11	2:C:1051:ARG:HG2	1.87	0.56
2:C:1959:ALA:O	2:C:1966:ARG:NH2	2.37	0.56
2:C:2443:PRO:HD3	2:C:2512:MET:HG2	1.86	0.56
2:C:3013:VAL:HA	2:C:3016:ARG:HD3	1.87	0.56
2:C:3147:TYR:HD1	2:C:3150:ARG:HH22	1.52	0.56
2:D:1129:GLY:HA3	2:D:1145:TRP:HB3	1.87	0.56
2:D:2689:MET:HE2	2:D:2689:MET:H	1.70	0.56
1:G:4:GLU:OE1	1:G:4:GLU:N	2.37	0.56
2:B:995:MET:HE1	2:B:1067:PRO:HD2	1.86	0.56
2:B:996:VAL:HG11	2:B:1051:ARG:HG2	1.87	0.56
2:B:1975:MET:HA	2:B:1978:ASN:OD1	2.04	0.56
2:B:3728:GLN:OE1	2:B:3770:ASN:ND2	2.33	0.56
2:C:370:LEU:HB2	2:C:393:MET:HE3	1.87	0.56
2:C:2232:PRO:HG2	2:C:2379:ASP:HA	1.87	0.56
2:A:655:MET:HG2	2:A:794:PHE:HE1	1.70	0.56
2:A:1975:MET:HA	2:A:1978:ASN:OD1	2.04	0.56
2:A:1978:ASN:HB3	2:A:1983:LYS:HE3	1.87	0.56
2:A:2981:TYR:O	2:A:2984:SER:OG	2.21	0.56
2:A:4256:MET:SD	2:B:4703:VAL:HG23	2.45	0.56
2:B:2635:GLU:HA	2:B:2638:LEU:HB2	1.85	0.56
2:B:3071:THR:HA	2:B:3074:ASN:ND2	2.19	0.56
2:B:3117:PHE:CD2	2:B:3117:PHE:CB	2.79	0.56
2:B:4048:PHE:O	2:B:4052:MET:HG3	2.05	0.56
2:C:878:LEU:HD23	2:C:881:ILE:HD11	1.87	0.56
2:C:902:TRP:HZ3	2:C:913:ARG:HA	1.71	0.56
2:D:2772:ARG:O	2:D:2776:LYS:N	2.27	0.56
2:D:4610:LEU:HD21	2:D:4670:LEU:HD11	1.88	0.56
2:A:387:ILE:HG21	2:A:389:ARG:HE	1.71	0.56
2:A:3218:ILE:HD13	2:A:3221:LEU:HD21	1.88	0.56
2:A:4187:GLU:OE1	2:A:4949:TRP:NE1	2.38	0.56
2:A:4679:PHE:HA	2:A:4682:ALA:HB3	1.85	0.56
2:B:387:ILE:HG21	2:B:389:ARG:HE	1.71	0.56
2:B:3013:VAL:HA	2:B:3016:ARG:HD3	1.87	0.56
2:B:3072:MET:SD	2:B:3140:LEU:HG	2.46	0.56
2:B:3235:MET:HE2	2:B:3235:MET:O	2.04	0.56
2:C:2065:THR:HG23	2:C:2066:MET:HE3	1.87	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:4520:TYR:HE2	2:C:4559:TYR:HB3	1.70	0.56
2:D:603:LYS:NZ	2:D:1574:GLU:OE2	2.39	0.56
2:D:3072:MET:SD	2:D:3140:LEU:HG	2.46	0.56
2:A:878:LEU:HD23	2:A:881:ILE:HD11	1.87	0.56
2:A:3072:MET:SD	2:A:3140:LEU:HG	2.46	0.56
2:A:4610:LEU:HD21	2:A:4670:LEU:HD11	1.88	0.56
2:B:118:ALA:HA	2:B:161:THR:HA	1.87	0.56
2:B:4610:LEU:HD21	2:B:4670:LEU:HD11	1.88	0.56
2:C:4048:PHE:O	2:C:4052:MET:HG3	2.06	0.56
2:C:4593:LEU:HG	2:C:4594:LYS:HE3	1.86	0.56
2:D:902:TRP:HZ3	2:D:913:ARG:HA	1.71	0.56
2:D:3147:TYR:HD1	2:D:3150:ARG:HH22	1.52	0.56
2:D:3218:ILE:HD13	2:D:3221:LEU:HD21	1.88	0.56
2:D:4703:VAL:O	2:D:4707:MET:HB2	2.05	0.56
2:A:3235:MET:HE2	2:A:3235:MET:O	2.04	0.56
2:B:137:ARG:NE	2:B:139:SER:OG	2.39	0.56
2:B:992:GLN:HG3	2:B:1066:ALA:HB2	1.88	0.56
2:C:2134:MET:HE3	2:C:2135:GLY:H	1.70	0.56
2:C:3218:ILE:HD13	2:C:3221:LEU:HD21	1.88	0.56
2:D:996:VAL:HG13	2:D:1050:LEU:HD22	1.88	0.56
2:D:3000:GLU:HA	2:D:3003:MET:HG2	1.87	0.56
2:D:3608:LEU:HA	2:D:3611:LEU:HD12	1.86	0.56
2:A:964:MET:H	2:A:979:ALA:HB1	1.71	0.56
2:A:2232:PRO:HG2	2:A:2379:ASP:HA	1.86	0.56
2:A:3608:LEU:HA	2:A:3611:LEU:HD12	1.86	0.56
2:B:661:LEU:O	2:B:788:PHE:N	2.30	0.56
2:B:899:GLU:HG3	2:B:900:LEU:HD12	1.88	0.56
2:B:902:TRP:HZ3	2:B:913:ARG:HA	1.71	0.56
2:B:964:MET:H	2:B:979:ALA:HB1	1.71	0.56
2:B:4661:TYR:HB3	2:B:4665:ARG:NH2	2.21	0.56
2:C:3000:GLU:HA	2:C:3003:MET:HG2	1.87	0.56
2:C:4610:LEU:HD21	2:C:4670:LEU:HD11	1.88	0.56
2:D:1490:ALA:HB1	2:D:1505:LEU:HD21	1.88	0.56
2:A:2772:ARG:O	2:A:2776:LYS:N	2.27	0.56
2:A:3729:ALA:HA	2:A:3732:HIS:CE1	2.41	0.56
2:A:3939:ARG:NH2	2:B:172:GLY:O	2.39	0.56
2:A:4661:TYR:HB3	2:A:4665:ARG:NH2	2.21	0.56
2:B:882:ARG:HH12	2:B:886:ALA:HB2	1.71	0.56
2:B:2134:MET:HE3	2:B:2135:GLY:H	1.70	0.56
2:B:2759:PRO:HG2	2:B:2762:LEU:HD13	1.88	0.56
2:B:2787:TRP:NE1	2:B:2840:MET:SD	2.75	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:4520:TYR:HE2	2:B:4559:TYR:HB3	1.70	0.56
2:C:964:MET:H	2:C:979:ALA:HB1	1.71	0.56
2:C:996:VAL:HG13	2:C:1050:LEU:HD22	1.88	0.56
2:C:1963:LYS:HA	2:C:1966:ARG:HE	1.70	0.56
2:D:118:ALA:HA	2:D:161:THR:HA	1.87	0.56
2:D:2704:GLN:HA	2:D:2854:LYS:HZ2	1.70	0.56
2:D:2763:LEU:O	2:D:2768:LYS:HD2	2.06	0.56
2:A:375:GLN:OE1	2:A:392:ILE:HB	2.06	0.56
2:A:4884:MET:HE1	2:A:4889:PHE:CD1	2.39	0.56
2:B:842:GLN:HB2	2:B:1603:PHE:HB2	1.87	0.56
2:B:1978:ASN:HB3	2:B:1983:LYS:HE3	1.87	0.56
2:B:3218:ILE:HD13	2:B:3221:LEU:HD21	1.88	0.56
2:C:899:GLU:HG3	2:C:900:LEU:HD12	1.88	0.56
2:C:1564:MET:CE	2:C:1565:PRO:HD2	2.35	0.56
2:C:3072:MET:SD	2:C:3140:LEU:HG	2.46	0.56
2:D:2134:MET:HE3	2:D:2135:GLY:H	1.70	0.56
2:D:2599:LEU:HB2	2:D:2655:LYS:HZ1	1.71	0.56
2:D:4048:PHE:O	2:D:4052:MET:HG3	2.05	0.56
2:A:882:ARG:HH12	2:A:886:ALA:HB2	1.71	0.56
2:A:902:TRP:HZ3	2:A:913:ARG:HA	1.71	0.56
2:A:3190:ARG:HH21	2:A:3193:ALA:HB3	1.71	0.56
2:B:2232:PRO:HG2	2:B:2379:ASP:HA	1.87	0.56
2:C:603:LYS:NZ	2:C:1574:GLU:OE2	2.39	0.56
2:C:842:GLN:HB2	2:C:1603:PHE:HB2	1.87	0.56
2:D:1685:LEU:O	2:D:1689:ILE:HG12	2.06	0.56
2:D:1718:ARG:NH2	2:D:1758:ARG:HH11	2.04	0.56
2:D:2065:THR:HG23	2:D:2066:MET:HE3	1.87	0.56
2:A:118:ALA:HA	2:A:161:THR:HA	1.88	0.55
2:A:603:LYS:NZ	2:A:1574:GLU:OE2	2.39	0.55
2:A:2689:MET:HE2	2:A:2689:MET:H	1.70	0.55
2:A:2763:LEU:O	2:A:2768:LYS:HD2	2.06	0.55
2:B:1718:ARG:NH2	2:B:1758:ARG:HH11	2.04	0.55
2:B:3729:ALA:HA	2:B:3732:HIS:CE1	2.41	0.55
2:C:241:MET:HE1	2:C:404:SER:OG	2.06	0.55
2:C:309:MET:HE3	2:C:315:LEU:HB3	1.88	0.55
2:C:2443:PRO:HG3	2:C:2454:PRO:HD2	1.87	0.55
2:D:370:LEU:HB2	2:D:393:MET:HE3	1.86	0.55
2:D:882:ARG:HH12	2:D:886:ALA:HB2	1.71	0.55
2:D:921:PHE:HB2	2:D:929:ARG:HG3	1.88	0.55
2:D:1978:ASN:HB3	2:D:1983:LYS:HE3	1.87	0.55
2:A:1963:LYS:HA	2:A:1966:ARG:HE	1.70	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:655:MET:HG2	2:B:794:PHE:HE1	1.70	0.55
2:B:996:VAL:HG13	2:B:1050:LEU:HD22	1.88	0.55
2:B:2763:LEU:O	2:B:2768:LYS:HD2	2.06	0.55
2:C:655:MET:HG2	2:C:794:PHE:HE1	1.70	0.55
2:C:1685:LEU:O	2:C:1689:ILE:HG12	2.06	0.55
2:C:2689:MET:HE2	2:C:2689:MET:H	1.70	0.55
2:C:2763:LEU:O	2:C:2768:LYS:HD2	2.06	0.55
2:D:309:MET:HE3	2:D:315:LEU:HB3	1.89	0.55
2:D:4661:TYR:HB3	2:D:4665:ARG:NH2	2.21	0.55
2:A:2443:PRO:HG3	2:A:2454:PRO:HD2	1.88	0.55
2:B:603:LYS:NZ	2:B:1574:GLU:OE2	2.39	0.55
2:B:1685:LEU:O	2:B:1689:ILE:HG12	2.06	0.55
2:B:4520:TYR:CE2	2:B:4559:TYR:HB3	2.42	0.55
2:C:3190:ARG:HH21	2:C:3193:ALA:HB3	1.71	0.55
2:C:3729:ALA:HA	2:C:3732:HIS:CE1	2.41	0.55
2:D:992:GLN:HG3	2:D:1066:ALA:HB2	1.87	0.55
2:D:996:VAL:HG11	2:D:1051:ARG:HG2	1.87	0.55
2:A:241:MET:HE1	2:A:404:SER:OG	2.06	0.55
2:A:2134:MET:HE3	2:A:2135:GLY:H	1.70	0.55
2:A:2759:PRO:HG2	2:A:2762:LEU:HD13	1.88	0.55
2:A:3325:LYS:HA	2:A:3328:LYS:HE2	1.88	0.55
2:B:375:GLN:OE1	2:B:392:ILE:HB	2.06	0.55
2:C:387:ILE:HG21	2:C:389:ARG:HE	1.71	0.55
2:C:1978:ASN:HB3	2:C:1983:LYS:HE3	1.87	0.55
2:C:3068:LEU:O	2:C:3072:MET:HE3	2.06	0.55
2:C:3250:TRP:HE3	2:C:3309:LYS:HZ3	1.54	0.55
2:D:899:GLU:HG3	2:D:900:LEU:HD12	1.88	0.55
2:D:3325:LYS:HA	2:D:3328:LYS:HE2	1.88	0.55
2:A:921:PHE:HB2	2:A:929:ARG:HG3	1.88	0.55
2:A:3068:LEU:O	2:A:3072:MET:HE3	2.06	0.55
2:B:1129:GLY:HA3	2:B:1145:TRP:HB3	1.87	0.55
2:B:2689:MET:HE2	2:B:2689:MET:H	1.70	0.55
2:B:4187:GLU:OE1	2:B:4949:TRP:NE1	2.38	0.55
2:C:3697:LYS:HA	2:C:3700:HIS:CD2	2.42	0.55
2:D:964:MET:H	2:D:979:ALA:HB1	1.71	0.55
2:D:2918:GLU:HA	2:D:2923:TYR:CD2	2.41	0.55
2:A:1552:VAL:HG22	2:A:1553:PHE:HD2	1.72	0.55
2:A:1685:LEU:O	2:A:1689:ILE:HG12	2.06	0.55
2:A:2918:GLU:HA	2:A:2923:TYR:CD2	2.41	0.55
2:A:3312:PRO:HA	2:A:3315:LEU:HD13	1.89	0.55
2:A:3697:LYS:HA	2:A:3700:HIS:CD2	2.42	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1490:ALA:HB1	2:B:1505:LEU:HD21	1.88	0.55
2:B:1963:LYS:HA	2:B:1966:ARG:HE	1.70	0.55
2:B:2599:LEU:HB2	2:B:2655:LYS:HZ2	1.71	0.55
2:B:2918:GLU:HA	2:B:2923:TYR:CD2	2.41	0.55
2:C:118:ALA:HA	2:C:161:THR:HA	1.87	0.55
2:C:882:ARG:HH12	2:C:886:ALA:HB2	1.71	0.55
2:C:3312:PRO:HA	2:C:3315:LEU:HD13	1.89	0.55
2:D:842:GLN:HB2	2:D:1603:PHE:HB2	1.87	0.55
2:D:878:LEU:HD23	2:D:881:ILE:HD11	1.87	0.55
2:D:2541:HIS:HB3	2:D:2544:LEU:HB3	1.88	0.55
2:D:2836:ASP:OD2	2:D:2837:LEU:N	2.40	0.55
2:D:2981:TYR:O	2:D:2984:SER:OG	2.21	0.55
2:A:996:VAL:HG13	2:A:1050:LEU:HD22	1.88	0.55
2:A:2787:TRP:NE1	2:A:2840:MET:SD	2.75	0.55
2:A:2836:ASP:OD2	2:A:2837:LEU:N	2.40	0.55
2:A:4294:LEU:HD12	2:B:4714:PHE:CD1	2.42	0.55
2:B:890:HIS:HA	2:B:893:TRP:CE3	2.42	0.55
2:B:2443:PRO:HG3	2:B:2454:PRO:HD2	1.87	0.55
2:B:2541:HIS:HB3	2:B:2544:LEU:HB3	1.88	0.55
2:B:2704:GLN:HA	2:B:2854:LYS:HZ2	1.72	0.55
2:C:1008:ALA:O	2:C:1012:ILE:HG12	2.07	0.55
2:C:1129:GLY:HA3	2:C:1145:TRP:HB3	1.87	0.55
2:C:2918:GLU:HA	2:C:2923:TYR:CD2	2.41	0.55
2:C:4520:TYR:CE2	2:C:4559:TYR:HB3	2.42	0.55
2:D:3190:ARG:HH21	2:D:3193:ALA:HB3	1.71	0.55
2:A:4520:TYR:CE2	2:A:4559:TYR:HB3	2.42	0.55
2:B:309:MET:HE3	2:B:315:LEU:HB3	1.88	0.55
2:B:1552:VAL:HG22	2:B:1553:PHE:HD2	1.72	0.55
2:B:3190:ARG:HH21	2:B:3193:ALA:HB3	1.71	0.55
2:D:15:ARG:HH21	2:D:16:THR:HB	1.72	0.55
2:D:2710:ASN:OD1	2:D:2711:ILE:N	2.40	0.55
2:D:3697:LYS:HA	2:D:3700:HIS:CD2	2.42	0.55
2:B:2478:ILE:HD12	2:B:2527:LEU:HD11	1.88	0.55
2:C:992:GLN:HG3	2:C:1066:ALA:HB2	1.88	0.55
2:C:1490:ALA:HB1	2:C:1505:LEU:HD21	1.88	0.55
2:C:2759:PRO:HG2	2:C:2762:LEU:HD13	1.88	0.55
2:C:3325:LYS:HA	2:C:3328:LYS:HE2	1.88	0.55
2:C:4661:TYR:HB3	2:C:4665:ARG:NH2	2.21	0.55
2:D:3729:ALA:HA	2:D:3732:HIS:CE1	2.41	0.55
2:A:3728:GLN:OE1	2:A:3770:ASN:ND2	2.33	0.55
2:B:2659:GLN:HG3	2:B:2663:LYS:HZ1	1.72	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:2704:GLN:HA	2:C:2854:LYS:HZ2	1.72	0.55
2:D:137:ARG:NE	2:D:139:SER:OG	2.39	0.55
2:D:2759:PRO:HG2	2:D:2762:LEU:HD13	1.88	0.55
2:D:3068:LEU:O	2:D:3072:MET:HE3	2.06	0.55
2:D:3125:ASP:HA	2:D:3128:VAL:HG12	1.89	0.55
2:A:137:ARG:NE	2:A:139:SER:OG	2.39	0.54
2:A:899:GLU:HG3	2:A:900:LEU:HD12	1.88	0.54
2:A:1008:ALA:O	2:A:1012:ILE:HG12	2.07	0.54
2:A:3315:LEU:HA	2:A:3319:PHE:HB3	1.89	0.54
2:B:2710:ASN:OD1	2:B:2711:ILE:N	2.40	0.54
2:B:3312:PRO:HA	2:B:3315:LEU:HD13	1.89	0.54
2:B:4294:LEU:HD12	2:C:4714:PHE:CD1	2.42	0.54
2:C:521:GLU:H	2:C:521:GLU:CD	2.15	0.54
2:C:4071:GLU:OE1	2:C:4086:ARG:NH2	2.30	0.54
2:D:375:GLN:OE1	2:D:392:ILE:HB	2.06	0.54
2:D:387:ILE:HG21	2:D:389:ARG:HE	1.71	0.54
2:D:668:ALA:HB2	2:D:1012:ILE:HD11	1.89	0.54
2:D:1220:ASP:O	2:D:1223:THR:OG1	2.26	0.54
2:D:3315:LEU:HA	2:D:3319:PHE:HB3	1.89	0.54
2:D:4520:TYR:CE2	2:D:4559:TYR:HB3	2.42	0.54
2:A:2192:MET:HA	2:A:2192:MET:HE3	1.89	0.54
2:B:921:PHE:HB2	2:B:929:ARG:HG3	1.88	0.54
2:B:1001:GLU:OE2	2:B:1005:ASN:ND2	2.36	0.54
2:B:2608:LYS:O	2:B:2612:ASN:ND2	2.40	0.54
2:C:375:GLN:OE1	2:C:392:ILE:HB	2.06	0.54
2:C:2608:LYS:O	2:C:2612:ASN:ND2	2.40	0.54
2:D:514:PHE:HD2	2:D:526:TRP:HB2	1.72	0.54
2:D:1552:VAL:HG22	2:D:1553:PHE:HD2	1.72	0.54
2:D:2478:ILE:HD12	2:D:2527:LEU:HD11	1.88	0.54
2:D:3312:PRO:HA	2:D:3315:LEU:HD13	1.89	0.54
2:D:3637:GLU:HG2	2:D:3697:LYS:HE2	1.90	0.54
2:A:15:ARG:HH21	2:A:16:THR:HB	1.72	0.54
2:A:1490:ALA:HB1	2:A:1505:LEU:HD21	1.88	0.54
2:A:3125:ASP:HA	2:A:3128:VAL:HG12	1.89	0.54
2:A:3272:HIS:O	2:A:3275:THR:OG1	2.25	0.54
2:B:241:MET:HE1	2:B:404:SER:OG	2.06	0.54
2:B:1176:THR:HG22	2:B:1181:ILE:HD13	1.89	0.54
2:B:2192:MET:HA	2:B:2192:MET:HE3	1.89	0.54
2:B:3323:MET:HE2	2:B:3323:MET:N	2.23	0.54
2:C:1718:ARG:NH2	2:C:1758:ARG:HH11	2.04	0.54
2:C:2192:MET:HA	2:C:2192:MET:HE3	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:2787:TRP:NE1	2:C:2840:MET:SD	2.75	0.54
2:D:2720:PHE:HB2	2:D:2901:TYR:HE2	1.73	0.54
2:D:3323:MET:N	2:D:3323:MET:HE2	2.23	0.54
2:D:4579:HIS:NE2	2:D:4725:TYR:OH	2.40	0.54
2:A:2478:ILE:HD12	2:A:2527:LEU:HD11	1.88	0.54
2:A:3250:TRP:NE1	2:A:3255:GLU:OE2	2.33	0.54
2:B:3325:LYS:HA	2:B:3328:LYS:HE2	1.88	0.54
2:B:3697:LYS:HA	2:B:3700:HIS:CD2	2.42	0.54
2:B:4186:MET:HE2	2:B:4952:PHE:CG	2.42	0.54
2:C:1176:THR:HG22	2:C:1181:ILE:HD13	1.89	0.54
2:D:4884:MET:HE1	2:D:4889:PHE:CD1	2.39	0.54
2:A:1001:GLU:OE2	2:A:1005:ASN:ND2	2.36	0.54
2:A:2541:HIS:HB3	2:A:2544:LEU:HB3	1.88	0.54
2:A:3637:GLU:HG2	2:A:3697:LYS:HE2	1.90	0.54
2:B:514:PHE:HD2	2:B:526:TRP:HB2	1.72	0.54
2:B:1008:ALA:O	2:B:1012:ILE:HG12	2.07	0.54
2:B:2642:ARG:NH1	2:B:2682:GLU:HB2	2.23	0.54
2:B:2720:PHE:HB2	2:B:2901:TYR:HE2	1.73	0.54
2:C:921:PHE:HB2	2:C:929:ARG:HG3	1.88	0.54
2:C:2418:ARG:HD3	2:D:189:GLU:OE1	2.08	0.54
2:C:2836:ASP:OD2	2:C:2837:LEU:N	2.40	0.54
2:D:2443:PRO:HG3	2:D:2454:PRO:HD2	1.88	0.54
2:D:2943:PHE:HB2	2:D:2956:TYR:HH	1.72	0.54
2:A:2608:LYS:O	2:A:2612:ASN:ND2	2.40	0.54
2:A:4723:ALA:HB1	2:D:4294:LEU:HD22	1.90	0.54
2:B:4186:MET:HE2	2:B:4952:PHE:CD2	2.42	0.54
2:C:917:CYS:HA	2:C:924:LEU:HD12	1.90	0.54
2:C:2710:ASN:OD1	2:C:2711:ILE:N	2.40	0.54
2:D:521:GLU:H	2:D:521:GLU:CD	2.15	0.54
2:D:1008:ALA:O	2:D:1012:ILE:HG12	2.07	0.54
2:D:4186:MET:HE2	2:D:4952:PHE:CD2	2.42	0.54
2:A:309:MET:HE3	2:A:315:LEU:HB3	1.89	0.54
2:A:1718:ARG:NH2	2:A:1758:ARG:HH11	2.04	0.54
2:A:2704:GLN:HA	2:A:2854:LYS:HZ2	1.72	0.54
2:A:2943:PHE:HE2	2:A:3021:LEU:HD22	1.73	0.54
2:B:3068:LEU:O	2:B:3072:MET:HE3	2.06	0.54
2:A:514:PHE:HD2	2:A:526:TRP:HB2	1.72	0.54
2:A:1793:GLN:NE2	2:A:1797:GLU:OE2	2.41	0.54
2:A:2325:ILE:HD13	2:A:2426:LEU:HD11	1.90	0.54
2:A:2710:ASN:OD1	2:A:2711:ILE:N	2.40	0.54
2:A:2830:ASN:HB2	2:B:1435:GLY:HA3	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:4186:MET:HE2	2:A:4952:PHE:CG	2.42	0.54
2:B:15:ARG:HH21	2:B:16:THR:HB	1.72	0.54
2:B:2998:ASN:OD1	2:B:2999:LYS:N	2.41	0.54
2:B:3122:ILE:HG23	2:B:3122:ILE:O	2.08	0.54
2:B:3322:LEU:HB3	2:B:3323:MET:HE2	1.90	0.54
2:C:307:SER:HB2	2:C:327:THR:HG22	1.90	0.54
2:C:737:ILE:HD12	2:C:1482:ARG:HD3	1.90	0.54
2:C:2642:ARG:NH1	2:C:2682:GLU:HB2	2.23	0.54
2:D:1176:THR:HG22	2:D:1181:ILE:HD13	1.89	0.54
2:D:1958:THR:HA	2:D:1961:LYS:HG2	1.90	0.54
2:D:2608:LYS:O	2:D:2612:ASN:ND2	2.40	0.54
2:D:4186:MET:HE2	2:D:4952:PHE:CG	2.42	0.54
2:A:737:ILE:HD12	2:A:1482:ARG:HD3	1.90	0.54
2:A:2720:PHE:HB2	2:A:2901:TYR:HE2	1.73	0.54
2:A:3122:ILE:O	2:A:3122:ILE:HG23	2.08	0.54
2:A:3218:ILE:C	2:A:3279:ASN:HD21	2.16	0.54
2:B:521:GLU:H	2:B:521:GLU:CD	2.15	0.54
2:B:2325:ILE:HD13	2:B:2426:LEU:HD11	1.90	0.54
2:B:3188:SER:OG	2:B:3191:GLU:HG3	2.08	0.54
2:C:423:VAL:HG22	2:C:494:MET:HE1	1.90	0.54
2:C:514:PHE:HD2	2:C:526:TRP:HB2	1.72	0.54
2:C:2541:HIS:HB3	2:C:2544:LEU:HB3	1.88	0.54
2:D:2943:PHE:HE2	2:D:3021:LEU:HD22	1.73	0.54
2:D:2998:ASN:OD1	2:D:2999:LYS:N	2.41	0.54
2:D:3122:ILE:HG23	2:D:3122:ILE:O	2.08	0.54
2:A:131:CYS:SG	2:A:150:GLN:HB2	2.48	0.54
2:A:4625:ASP:O	2:A:4629:GLN:NE2	2.41	0.54
2:A:4858:LEU:HA	2:A:4861:ILE:HB	1.90	0.54
2:B:737:ILE:HD12	2:B:1482:ARG:HD3	1.90	0.54
2:B:882:ARG:HG3	2:B:937:LEU:HD21	1.90	0.54
2:B:917:CYS:HA	2:B:924:LEU:HD12	1.90	0.54
2:B:3637:GLU:HG2	2:B:3697:LYS:HE2	1.90	0.54
2:C:882:ARG:HG3	2:C:937:LEU:HD21	1.90	0.54
2:C:2478:ILE:HD12	2:C:2527:LEU:HD11	1.88	0.54
2:C:3315:LEU:HA	2:C:3319:PHE:HB3	1.89	0.54
2:C:3323:MET:HE2	2:C:3323:MET:N	2.23	0.54
2:C:4186:MET:HE2	2:C:4952:PHE:CG	2.42	0.54
2:D:2325:ILE:HD13	2:D:2426:LEU:HD11	1.90	0.54
2:D:4187:GLU:OE1	2:D:4949:TRP:NE1	2.38	0.54
2:A:1161:VAL:HG21	2:A:1225:LYS:HE3	1.90	0.53
2:A:3174:HIS:HE1	2:A:3211:LEU:HD21	1.73	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:3323:MET:HE2	2:A:3323:MET:N	2.23	0.53
2:B:423:VAL:HG22	2:B:494:MET:HE1	1.90	0.53
2:B:2943:PHE:HE2	2:B:3021:LEU:HD22	1.73	0.53
2:B:3012:GLY:O	2:B:3016:ARG:HD2	2.09	0.53
2:B:3117:PHE:CD1	2:B:3117:PHE:CB	2.79	0.53
2:B:3174:HIS:HE1	2:B:3211:LEU:HD21	1.73	0.53
2:C:668:ALA:HB2	2:C:1012:ILE:HD11	1.89	0.53
2:C:2325:ILE:HD13	2:C:2426:LEU:HD11	1.90	0.53
2:C:3637:GLU:HG2	2:C:3697:LYS:HE2	1.90	0.53
2:C:4625:ASP:O	2:C:4629:GLN:NE2	2.41	0.53
2:C:4903:HIS:HE1	2:D:4183:LYS:HG2	1.73	0.53
2:D:1793:GLN:NE2	2:D:1797:GLU:OE2	2.41	0.53
2:D:2192:MET:HA	2:D:2192:MET:HE3	1.89	0.53
2:D:3322:LEU:HB3	2:D:3323:MET:HE2	1.90	0.53
2:D:4625:ASP:O	2:D:4629:GLN:NE2	2.41	0.53
2:D:4858:LEU:HA	2:D:4861:ILE:HB	1.90	0.53
2:A:4480:PHE:CE2	2:D:4268:MET:HG3	2.43	0.53
2:B:2765:GLU:HA	2:B:2768:LYS:HD3	1.89	0.53
2:B:2836:ASP:OD2	2:B:2837:LEU:N	2.40	0.53
2:C:1628:MET:HE1	2:C:1702:TYR:OH	2.09	0.53
2:C:2765:GLU:HA	2:C:2768:LYS:HD3	1.89	0.53
2:C:4903:HIS:CE1	2:D:4183:LYS:HG2	2.44	0.53
1:H:24:VAL:HG22	1:H:48:LYS:HG2	1.90	0.53
2:A:423:VAL:HG22	2:A:494:MET:HE1	1.90	0.53
2:A:1564:MET:CE	2:A:1565:PRO:HD2	2.35	0.53
2:A:1958:THR:HA	2:A:1961:LYS:HG2	1.90	0.53
2:A:2998:ASN:OD1	2:A:2999:LYS:N	2.41	0.53
2:A:4186:MET:HE2	2:A:4952:PHE:CD2	2.43	0.53
2:B:3218:ILE:C	2:B:3279:ASN:HD21	2.16	0.53
2:C:1552:VAL:HG22	2:C:1553:PHE:HD2	1.72	0.53
2:C:2848:TYR:HE2	2:C:2888:LYS:HZ1	1.55	0.53
2:C:3125:ASP:HA	2:C:3128:VAL:HG12	1.90	0.53
2:D:423:VAL:HG22	2:D:494:MET:HE1	1.90	0.53
2:D:890:HIS:HA	2:D:893:TRP:CE3	2.42	0.53
2:D:1034:PRO:HG2	2:D:1037:LEU:HD13	1.91	0.53
2:D:3012:GLY:O	2:D:3016:ARG:HD2	2.08	0.53
2:D:3250:TRP:HE3	2:D:3309:LYS:HZ3	1.56	0.53
2:A:882:ARG:HG3	2:A:937:LEU:HD21	1.90	0.53
2:A:1176:THR:HG22	2:A:1181:ILE:HD13	1.89	0.53
2:A:1721:MET:HE1	2:A:2127:ARG:HH11	1.74	0.53
2:A:2642:ARG:NH1	2:A:2682:GLU:HB2	2.22	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:2765:GLU:HA	2:A:2768:LYS:HD3	1.89	0.53
2:B:1793:GLN:NE2	2:B:1797:GLU:OE2	2.41	0.53
2:C:2943:PHE:HE2	2:C:3021:LEU:HD22	1.73	0.53
2:C:4186:MET:HE2	2:C:4952:PHE:CD2	2.42	0.53
2:D:917:CYS:HA	2:D:924:LEU:HD12	1.90	0.53
2:D:920:GLU:OE2	2:D:975:GLY:N	2.38	0.53
2:D:1006:VAL:HA	2:D:1009:ARG:NH1	2.24	0.53
2:D:2642:ARG:NH1	2:D:2682:GLU:HB2	2.23	0.53
2:A:3322:LEU:HB3	2:A:3323:MET:HE2	1.89	0.53
2:B:668:ALA:HB2	2:B:1012:ILE:HD11	1.89	0.53
2:B:810:GLU:CD	2:B:1614:ARG:HH21	2.17	0.53
2:B:3315:LEU:HA	2:B:3319:PHE:HB3	1.89	0.53
2:C:1006:VAL:HA	2:C:1009:ARG:NH1	2.24	0.53
2:C:2720:PHE:HB2	2:C:2901:TYR:HE2	1.73	0.53
2:D:241:MET:HE1	2:D:404:SER:OG	2.06	0.53
2:D:3188:SER:OG	2:D:3191:GLU:HG3	2.08	0.53
2:A:668:ALA:HB2	2:A:1012:ILE:HD11	1.89	0.53
2:A:2999:LYS:NZ	2:A:3003:MET:HB3	2.24	0.53
2:B:131:CYS:SG	2:B:150:GLN:HB2	2.48	0.53
2:B:1628:MET:HE1	2:B:1702:TYR:OH	2.09	0.53
2:B:2999:LYS:NZ	2:B:3003:MET:HB3	2.24	0.53
2:B:3125:ASP:HA	2:B:3128:VAL:HG12	1.89	0.53
2:B:3272:HIS:O	2:B:3275:THR:OG1	2.25	0.53
2:D:131:CYS:SG	2:D:150:GLN:HB2	2.48	0.53
2:D:3218:ILE:C	2:D:3279:ASN:HD21	2.16	0.53
2:D:3238:ILE:HG22	2:D:3242:LEU:HD23	1.89	0.53
2:A:16:THR:HA	2:A:69:LEU:HB2	1.91	0.53
2:A:810:GLU:CD	2:A:1614:ARG:HH21	2.17	0.53
2:A:3188:SER:OG	2:A:3191:GLU:HG3	2.08	0.53
2:A:4252:ILE:HB	2:B:4707:MET:HE3	1.89	0.53
2:B:902:TRP:CZ3	2:B:913:ARG:HA	2.44	0.53
2:B:3238:ILE:HG22	2:B:3242:LEU:HD23	1.89	0.53
2:C:15:ARG:HH21	2:C:16:THR:HB	1.72	0.53
2:D:1564:MET:CE	2:D:1565:PRO:HD2	2.35	0.53
2:D:2999:LYS:NZ	2:D:3003:MET:HB3	2.24	0.53
2:A:2642:ARG:HG2	2:A:2676:LEU:HD13	1.91	0.53
2:C:131:CYS:SG	2:C:150:GLN:HB2	2.48	0.53
2:C:1161:VAL:HG21	2:C:1225:LYS:HE3	1.90	0.53
2:C:2998:ASN:OD1	2:C:2999:LYS:N	2.41	0.53
2:C:3012:GLY:O	2:C:3016:ARG:HD2	2.09	0.53
2:C:3322:LEU:HB3	2:C:3323:MET:HE2	1.89	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:654:SER:HG	2:D:837:SER:HG	1.52	0.53
2:D:737:ILE:HD12	2:D:1482:ARG:HD3	1.90	0.53
1:F:24:VAL:HG22	1:F:48:LYS:HG2	1.90	0.53
2:A:521:GLU:H	2:A:521:GLU:CD	2.15	0.53
2:A:804:LEU:HD13	2:A:832:LEU:HD21	1.91	0.53
2:A:902:TRP:CZ3	2:A:913:ARG:HA	2.44	0.53
2:A:917:CYS:HA	2:A:924:LEU:HD12	1.90	0.53
2:A:4155:SER:O	2:A:4159:GLN:HG2	2.09	0.53
2:A:4818:TYR:CD1	2:B:4847:ASP:OD1	2.62	0.53
2:B:15:ARG:HA	2:B:113:LEU:HD13	1.90	0.53
2:B:769:ARG:HG2	2:B:774:PRO:HA	1.91	0.53
2:C:15:ARG:HA	2:C:113:LEU:HD13	1.90	0.53
2:C:804:LEU:HD13	2:C:832:LEU:HD21	1.91	0.53
2:D:606:ARG:HH11	2:D:644:LEU:HD21	1.74	0.53
2:D:1628:MET:HE1	2:D:1702:TYR:OH	2.09	0.53
2:A:1220:ASP:O	2:A:1223:THR:OG1	2.26	0.53
2:A:3043:ARG:CG	2:A:3117:PHE:CZ	2.92	0.53
2:A:4252:ILE:HD12	2:B:4707:MET:HE1	1.90	0.53
2:B:307:SER:HB2	2:B:327:THR:HG22	1.90	0.53
2:B:606:ARG:HH11	2:B:644:LEU:HD21	1.74	0.53
2:B:2290:TRP:CZ2	2:B:2388:ILE:HG12	2.44	0.53
2:B:2642:ARG:HG2	2:B:2676:LEU:HD13	1.90	0.53
2:B:3043:ARG:CG	2:B:3117:PHE:CZ	2.92	0.53
2:B:3152:ARG:NH2	2:B:3233:HIS:HA	2.24	0.53
2:C:15:ARG:NH1	2:C:111:ARG:HG3	2.24	0.53
2:C:137:ARG:NE	2:C:139:SER:OG	2.39	0.53
2:C:1034:PRO:HG2	2:C:1037:LEU:HD13	1.91	0.53
2:C:1945:ASN:O	2:C:1949:GLN:HG2	2.09	0.53
2:C:3122:ILE:HG23	2:C:3122:ILE:O	2.08	0.53
2:D:2642:ARG:HG2	2:D:2676:LEU:HD13	1.91	0.53
2:D:3043:ARG:CG	2:D:3117:PHE:CZ	2.92	0.53
2:D:3152:ARG:NH2	2:D:3233:HIS:HA	2.24	0.53
1:H:91:VAL:HG21	2:D:1768:PHE:CE1	2.44	0.52
2:A:606:ARG:HH11	2:A:644:LEU:HD21	1.74	0.52
2:A:1006:VAL:HA	2:A:1009:ARG:NH1	2.24	0.52
2:A:3012:GLY:O	2:A:3016:ARG:HD2	2.09	0.52
2:B:1006:VAL:HA	2:B:1009:ARG:NH1	2.24	0.52
2:B:4858:LEU:HA	2:B:4861:ILE:HB	1.90	0.52
2:C:2599:LEU:HD12	2:C:2661:LEU:HD11	1.92	0.52
2:D:804:LEU:HD13	2:D:832:LEU:HD21	1.91	0.52
2:D:1161:VAL:HG21	2:D:1225:LYS:HE3	1.90	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:2290:TRP:CZ2	2:D:2388:ILE:HG12	2.44	0.52
2:A:15:ARG:NH1	2:A:111:ARG:HG3	2.24	0.52
2:A:1034:PRO:HG2	2:A:1037:LEU:HD13	1.91	0.52
2:A:1628:MET:HE1	2:A:1702:TYR:OH	2.09	0.52
2:A:2833:LEU:CD2	2:A:2897:GLN:HE22	2.23	0.52
2:B:15:ARG:NH1	2:B:111:ARG:HG3	2.24	0.52
2:B:804:LEU:HD13	2:B:832:LEU:HD21	1.91	0.52
2:B:920:GLU:OE2	2:B:975:GLY:N	2.38	0.52
2:B:2646:TRP:HH2	2:B:2925:PHE:HA	1.74	0.52
2:B:4579:HIS:NE2	2:B:4725:TYR:OH	2.40	0.52
2:C:2274:LEU:HG	2:C:2329:GLU:HG3	1.92	0.52
2:D:1287:GLN:NE2	2:D:1549:SER:O	2.43	0.52
2:A:307:SER:HB2	2:A:327:THR:HG22	1.90	0.52
2:A:2274:LEU:HG	2:A:2329:GLU:HG3	1.92	0.52
2:B:1220:ASP:O	2:B:1223:THR:OG1	2.26	0.52
2:B:4625:ASP:O	2:B:4629:GLN:NE2	2.41	0.52
2:C:122:ARG:HD3	2:C:127:GLY:HA2	1.91	0.52
2:C:679:VAL:HA	2:C:800:VAL:HG12	1.91	0.52
2:C:2642:ARG:HG2	2:C:2676:LEU:HD13	1.90	0.52
2:D:1721:MET:HE1	2:D:2127:ARG:HH11	1.74	0.52
2:D:2765:GLU:HA	2:D:2768:LYS:HD3	1.89	0.52
2:D:4155:SER:O	2:D:4159:GLN:HG2	2.09	0.52
2:D:4181:GLY:O	2:D:4185:LYS:N	2.41	0.52
2:B:1161:VAL:HG21	2:B:1225:LYS:HE3	1.90	0.52
2:B:1958:THR:HA	2:B:1961:LYS:HG2	1.90	0.52
2:B:2646:TRP:CH2	2:B:2925:PHE:HA	2.45	0.52
2:B:4704:LYS:O	2:B:4707:MET:HB3	2.09	0.52
2:C:810:GLU:CD	2:C:1614:ARG:HH21	2.17	0.52
2:C:1001:GLU:OE2	2:C:1005:ASN:ND2	2.36	0.52
2:C:3218:ILE:C	2:C:3279:ASN:HD21	2.16	0.52
2:C:3238:ILE:HG22	2:C:3242:LEU:HD23	1.89	0.52
2:C:4858:LEU:HA	2:C:4861:ILE:HB	1.90	0.52
2:D:15:ARG:NH1	2:D:111:ARG:HG3	2.24	0.52
2:D:679:VAL:HA	2:D:800:VAL:HG12	1.91	0.52
2:D:882:ARG:HG3	2:D:937:LEU:HD21	1.90	0.52
2:D:2787:TRP:NE1	2:D:2840:MET:SD	2.75	0.52
1:G:24:VAL:HG22	1:G:48:LYS:HG2	1.90	0.52
1:G:50:ARG:HH21	1:G:53:LYS:HZ2	1.58	0.52
2:B:16:THR:HA	2:B:69:LEU:HB2	1.91	0.52
2:B:122:ARG:HD3	2:B:127:GLY:HA2	1.91	0.52
2:B:2791:ARG:HE	2:B:2792:THR:H	1.58	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2833:LEU:CD2	2:B:2897:GLN:HE22	2.23	0.52
2:B:3250:TRP:NE1	2:B:3255:GLU:OE2	2.33	0.52
2:C:769:ARG:HG2	2:C:774:PRO:HA	1.91	0.52
2:C:1958:THR:HA	2:C:1961:LYS:HG2	1.90	0.52
2:C:2833:LEU:HB2	2:C:2838[A]:HIS:NE2	2.24	0.52
2:C:2999:LYS:NZ	2:C:3003:MET:HB3	2.24	0.52
2:C:4704:LYS:O	2:C:4707:MET:HB3	2.09	0.52
2:D:2791:ARG:HE	2:D:2792:THR:H	1.58	0.52
2:D:4704:LYS:O	2:D:4707:MET:HB3	2.09	0.52
2:A:122:ARG:HD3	2:A:127:GLY:HA2	1.91	0.52
2:A:1964:GLU:HG3	2:A:1975:MET:HE3	1.91	0.52
2:A:3214:LEU:O	2:A:3218:ILE:HG12	2.10	0.52
2:A:3238:ILE:HG22	2:A:3242:LEU:HD23	1.89	0.52
2:B:1048:ASP:OD1	2:B:1049:SER:N	2.43	0.52
2:B:2123:LEU:HD13	2:B:2167:MET:HG2	1.92	0.52
2:C:867:VAL:HG11	2:C:942:THR:HG23	1.91	0.52
2:C:1964:GLU:HG3	2:C:1975:MET:HE3	1.91	0.52
2:C:3188:SER:OG	2:C:3191:GLU:HG3	2.08	0.52
2:D:2692:GLN:HG2	2:D:2695:MET:HB2	1.92	0.52
2:D:3272:HIS:O	2:D:3275:THR:OG1	2.25	0.52
2:A:3072:MET:HB3	2:A:3076:LYS:HZ2	1.74	0.52
2:B:2599:LEU:HD12	2:B:2661:LEU:HD11	1.92	0.52
2:B:3012:GLY:HA3	2:B:3060:PHE:HE1	1.75	0.52
2:B:3152:ARG:HA	2:B:3155:LEU:HD12	1.92	0.52
2:C:890:HIS:HA	2:C:893:TRP:CE3	2.42	0.52
2:C:1721:MET:HE1	2:C:2127:ARG:HH11	1.74	0.52
2:C:2123:LEU:HD13	2:C:2167:MET:HG2	1.92	0.52
2:C:2791:ARG:HE	2:C:2792:THR:H	1.58	0.52
2:C:4155:SER:O	2:C:4159:GLN:HG2	2.09	0.52
2:D:769:ARG:HG2	2:D:774:PRO:HA	1.91	0.52
2:D:2646:TRP:HH2	2:D:2925:PHE:HA	1.74	0.52
2:A:769:ARG:HG2	2:A:774:PRO:HA	1.90	0.52
2:A:1945:ASN:O	2:A:1949:GLN:HG2	2.09	0.52
2:A:2178:VAL:HG21	2:A:2192:MET:HG3	1.92	0.52
2:A:2290:TRP:CZ2	2:A:2388:ILE:HG12	2.45	0.52
2:B:2692:GLN:HG2	2:B:2695:MET:HB2	1.92	0.52
2:C:16:THR:HA	2:C:69:LEU:HB2	1.91	0.52
2:C:2290:TRP:CZ2	2:C:2388:ILE:HG12	2.44	0.52
2:C:2833:LEU:CD2	2:C:2897:GLN:HE22	2.23	0.52
2:C:3939:ARG:NH2	2:D:172:GLY:O	2.43	0.52
2:C:4181:GLY:O	2:C:4185:LYS:N	2.41	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:15:ARG:HA	2:D:113:LEU:HD13	1.90	0.52
2:D:307:SER:HB2	2:D:327:THR:HG22	1.90	0.52
2:D:3152:ARG:HA	2:D:3155:LEU:HD12	1.92	0.52
2:D:3728:GLN:O	2:D:3732:HIS:ND1	2.40	0.52
1:E:24:VAL:HG22	1:E:48:LYS:HG2	1.90	0.52
1:H:35:LYS:HA	2:D:647:ARG:NH2	2.24	0.52
2:A:2229:LEU:HD13	2:A:2297:ARG:HB2	1.92	0.52
2:B:1011:ARG:HB3	2:B:1016:TRP:HB2	1.91	0.52
2:B:2618:TRP:HD1	2:B:2619:LYS:HZ2	1.56	0.52
2:C:902:TRP:CZ3	2:C:913:ARG:HA	2.44	0.52
2:C:1220:ASP:O	2:C:1223:THR:OG1	2.26	0.52
2:C:3041:ASP:O	2:C:3045:VAL:HG23	2.10	0.52
2:C:3152:ARG:HA	2:C:3155:LEU:HD12	1.92	0.52
2:D:902:TRP:CZ3	2:D:913:ARG:HA	2.44	0.52
2:D:2229:LEU:HD13	2:D:2297:ARG:HB2	1.92	0.52
2:D:3155:LEU:O	2:D:3159:LEU:HG	2.10	0.52
2:D:3174:HIS:HE1	2:D:3211:LEU:HD21	1.73	0.52
2:D:3214:LEU:O	2:D:3218:ILE:HG12	2.10	0.52
2:A:890:HIS:HA	2:A:893:TRP:CE3	2.42	0.52
2:A:1048:ASP:OD1	2:A:1049:SER:N	2.43	0.52
2:A:3715:GLU:OE2	2:A:4647:LYS:HE2	2.10	0.52
2:B:867:VAL:HG11	2:B:942:THR:HG23	1.91	0.52
2:B:1945:ASN:O	2:B:1949:GLN:HG2	2.09	0.52
2:B:2178:VAL:HG21	2:B:2192:MET:HG3	1.92	0.52
2:B:4071:GLU:OE1	2:B:4086:ARG:NH2	2.30	0.52
2:B:4155:SER:O	2:B:4159:GLN:HG2	2.09	0.52
2:C:920:GLU:OE2	2:C:975:GLY:N	2.38	0.52
2:C:2538:THR:OG1	2:C:2584:MET:SD	2.68	0.52
2:D:1945:ASN:O	2:D:1949:GLN:HG2	2.09	0.52
2:D:2645:PHE:HZ	2:D:2970:LEU:HD21	1.75	0.52
2:A:1727:VAL:HG11	2:A:1926:VAL:HG21	1.93	0.51
2:A:2581:ARG:HG2	2:A:2582:PRO:HD2	1.92	0.51
2:A:2586:GLN:HA	2:A:2589:LEU:HG	1.93	0.51
2:A:2646:TRP:HH2	2:A:2925:PHE:HA	1.74	0.51
2:A:4809:MET:SD	2:D:4518:LEU:HA	2.50	0.51
2:B:1721:MET:HE1	2:B:2127:ARG:HH11	1.74	0.51
2:B:2581:ARG:HG2	2:B:2582:PRO:HD2	1.92	0.51
2:B:3715:GLU:OE2	2:B:4647:LYS:HE2	2.10	0.51
2:C:494:MET:HA	2:C:494:MET:CE	2.40	0.51
2:C:1007:TRP:NE1	4:C:5005:ATP:O1B	2.40	0.51
2:C:3043:ARG:CG	2:C:3117:PHE:CZ	2.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:3174:HIS:HE1	2:C:3211:LEU:HD21	1.73	0.51
2:D:16:THR:HA	2:D:69:LEU:HB2	1.91	0.51
2:A:1722:ASN:O	2:A:1919:ARG:NH2	2.44	0.51
2:A:2123:LEU:HD13	2:A:2167:MET:HG2	1.92	0.51
2:A:2538:THR:OG1	2:A:2584:MET:SD	2.68	0.51
2:A:3152:ARG:NH2	2:A:3233:HIS:HA	2.24	0.51
2:B:1034:PRO:HG2	2:B:1037:LEU:HD13	1.91	0.51
2:B:2610:LEU:HD23	2:B:2613:HIS:HE1	1.75	0.51
2:C:1011:ARG:HB3	2:C:1016:TRP:HB2	1.92	0.51
2:C:1048:ASP:OD1	2:C:1049:SER:N	2.43	0.51
2:C:2646:TRP:CH2	2:C:2925:PHE:HA	2.45	0.51
2:C:3152:ARG:NH2	2:C:3233:HIS:HA	2.24	0.51
2:C:3214:LEU:O	2:C:3218:ILE:HG12	2.10	0.51
2:D:810:GLU:CD	2:D:1614:ARG:HH21	2.17	0.51
2:D:1048:ASP:OD1	2:D:1049:SER:N	2.43	0.51
2:A:15:ARG:HA	2:A:113:LEU:HD13	1.90	0.51
2:A:679:VAL:HA	2:A:800:VAL:HG12	1.91	0.51
2:A:2646:TRP:CH2	2:A:2925:PHE:HA	2.45	0.51
2:A:4704:LYS:O	2:A:4707:MET:HB3	2.09	0.51
2:B:2586:GLN:HA	2:B:2589:LEU:HG	1.92	0.51
2:C:552:SER:HB2	2:C:588:ILE:HD12	1.93	0.51
2:C:1287:GLN:NE2	2:C:1549:SER:O	2.43	0.51
2:C:2659:GLN:HG3	2:C:2663:LYS:HZ1	1.74	0.51
2:C:3155:LEU:O	2:C:3159:LEU:HG	2.10	0.51
2:D:655:MET:HG3	2:D:1619:VAL:HG11	1.92	0.51
2:D:2586:GLN:HA	2:D:2589:LEU:HG	1.92	0.51
2:D:2956:TYR:HD2	2:D:2960:ILE:HG12	1.75	0.51
2:D:3715:GLU:OE2	2:D:4647:LYS:HE2	2.10	0.51
2:B:679:VAL:HA	2:B:800:VAL:HG12	1.91	0.51
2:B:1722:ASN:O	2:B:1919:ARG:NH2	2.44	0.51
2:B:2274:LEU:HG	2:B:2329:GLU:HG3	1.92	0.51
2:B:2389:MET:CE	2:B:2460:PHE:HD1	2.24	0.51
2:B:3041:ASP:O	2:B:3045:VAL:HG23	2.10	0.51
2:B:3214:LEU:O	2:B:3218:ILE:HG12	2.10	0.51
2:B:4181:GLY:O	2:B:4185:LYS:N	2.41	0.51
2:C:2610:LEU:HD23	2:C:2613:HIS:HE1	1.75	0.51
2:C:2692:GLN:HG2	2:C:2695:MET:HB2	1.92	0.51
2:C:2956:TYR:HD2	2:C:2960:ILE:HG12	1.75	0.51
2:C:3250:TRP:NE1	2:C:3255:GLU:OE2	2.33	0.51
2:D:1001:GLU:OE2	2:D:1005:ASN:ND2	2.36	0.51
2:D:2833:LEU:CD2	2:D:2897:GLN:HE22	2.23	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:3012:GLY:HA3	2:D:3060:PHE:HE1	1.75	0.51
2:A:2681:MET:HA	2:A:2681:MET:CE	2.41	0.51
2:A:2927:GLN:HB3	2:A:2931:ARG:NH2	2.26	0.51
2:B:882:ARG:HG2	2:B:882:ARG:HH11	1.76	0.51
2:B:3155:LEU:O	2:B:3159:LEU:HG	2.10	0.51
2:C:2586:GLN:HA	2:C:2589:LEU:HG	1.92	0.51
2:D:552:SER:HB2	2:D:588:ILE:HD12	1.93	0.51
2:D:2599:LEU:HD12	2:D:2661:LEU:HD11	1.92	0.51
2:D:2610:LEU:HD23	2:D:2613:HIS:HE1	1.75	0.51
2:D:2927:GLN:HB3	2:D:2931:ARG:NH2	2.26	0.51
2:A:2389:MET:CE	2:A:2460:PHE:HD1	2.24	0.51
2:A:2692:GLN:HG2	2:A:2695:MET:HB2	1.92	0.51
2:A:3041:ASP:O	2:A:3045:VAL:HG23	2.10	0.51
2:B:494:MET:HA	2:B:494:MET:CE	2.40	0.51
2:B:3149:GLU:OE1	2:B:3152:ARG:NH1	2.43	0.51
2:C:4056:LYS:NZ	2:D:4659:GLU:O	2.43	0.51
2:D:122:ARG:HD3	2:D:127:GLY:HA2	1.92	0.51
2:D:494:MET:HA	2:D:494:MET:CE	2.40	0.51
2:D:1964:GLU:HG3	2:D:1975:MET:HE3	1.91	0.51
2:D:2646:TRP:CH2	2:D:2925:PHE:HA	2.45	0.51
2:D:3041:ASP:O	2:D:3045:VAL:HG23	2.10	0.51
2:D:3072:MET:HB3	2:D:3076:LYS:HZ2	1.76	0.51
2:D:3851:ASN:O	2:D:3855:GLN:HG3	2.11	0.51
2:A:2791:ARG:HE	2:A:2792:THR:H	1.58	0.51
2:A:3117:PHE:CD2	2:A:3117:PHE:CB	2.79	0.51
2:A:3155:LEU:O	2:A:3159:LEU:HG	2.10	0.51
2:B:655:MET:HG3	2:B:1619:VAL:HG11	1.92	0.51
2:B:3727:GLN:HG2	2:B:3730:ARG:NH2	2.26	0.51
2:B:4838:GLU:OE1	2:B:4838:GLU:N	2.36	0.51
2:C:606:ARG:HH11	2:C:644:LEU:HD21	1.74	0.51
2:C:655:MET:HG3	2:C:1619:VAL:HG11	1.92	0.51
2:C:2681:MET:HA	2:C:2681:MET:CE	2.41	0.51
2:D:394:HIS:CE1	2:D:396:GLU:HG3	2.46	0.51
2:D:2114:GLU:HG2	2:D:2115:ASP:N	2.26	0.51
2:D:2251:ASN:HB2	2:D:3819:MET:HE1	1.93	0.51
2:D:2538:THR:OG1	2:D:2584:MET:SD	2.68	0.51
2:D:4203:ALA:HA	2:D:4206:ILE:HG12	1.92	0.51
2:A:480:ARG:NH2	2:A:3678:GLU:OE2	2.44	0.51
2:A:882:ARG:HH11	2:A:882:ARG:HG2	1.76	0.51
2:A:2788:ARG:NH1	2:A:2905:ARG:O	2.44	0.51
2:A:3152:ARG:HA	2:A:3155:LEU:HD12	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:3851:ASN:O	2:A:3855:GLN:HG3	2.11	0.51
2:B:983:LEU:CD1	2:B:1055:ARG:HB3	2.41	0.51
2:B:1727:VAL:HG11	2:B:1926:VAL:HG21	1.93	0.51
2:B:1964:GLU:HG3	2:B:1975:MET:HE3	1.91	0.51
2:B:2229:LEU:HD13	2:B:2297:ARG:HB2	1.92	0.51
2:B:2681:MET:HA	2:B:2681:MET:CE	2.41	0.51
2:B:2927:GLN:HB3	2:B:2931:ARG:NH2	2.26	0.51
2:C:1722:ASN:O	2:C:1919:ARG:NH2	2.44	0.51
2:C:1727:VAL:HG11	2:C:1926:VAL:HG21	1.92	0.51
2:C:1793:GLN:NE2	2:C:1797:GLU:OE2	2.41	0.51
2:C:2341:ASN:OD1	2:C:2342:GLY:N	2.44	0.51
2:D:1722:ASN:O	2:D:1919:ARG:NH2	2.44	0.51
2:D:2123:LEU:HD13	2:D:2167:MET:HG2	1.92	0.51
2:D:2178:VAL:HG21	2:D:2192:MET:HG3	1.92	0.51
2:D:2389:MET:CE	2:D:2460:PHE:HD1	2.24	0.51
2:A:2341:ASN:OD1	2:A:2342:GLY:N	2.44	0.51
2:A:3727:GLN:HG2	2:A:3730:ARG:NH2	2.26	0.51
2:B:2538:THR:OG1	2:B:2584:MET:SD	2.68	0.51
2:B:2741:TRP:CD1	2:B:2754:GLN:HG3	2.46	0.51
2:B:3122:ILE:HD11	2:B:3127:GLN:HA	1.93	0.51
2:B:4203:ALA:HA	2:B:4206:ILE:HG12	1.92	0.51
2:C:394:HIS:CE1	2:C:396:GLU:HG3	2.46	0.51
2:C:2581:ARG:HG2	2:C:2582:PRO:HD2	1.92	0.51
2:C:2645:PHE:HZ	2:C:2970:LEU:HD21	1.75	0.51
2:C:2741:TRP:CD1	2:C:2754:GLN:HG3	2.46	0.51
2:C:2927:GLN:HB3	2:C:2931:ARG:NH2	2.26	0.51
2:C:3149:GLU:OE1	2:C:3152:ARG:NH1	2.43	0.51
2:D:3118:GLY:O	2:D:3122:ILE:HG22	2.11	0.51
2:A:308:LEU:HD13	2:A:393:MET:HG2	1.93	0.51
2:A:983:LEU:HD13	2:A:986:ILE:HD12	1.93	0.51
2:A:1011:ARG:HB3	2:A:1016:TRP:HB2	1.92	0.51
2:A:2599:LEU:HD12	2:A:2661:LEU:HD11	1.91	0.51
2:A:3122:ILE:HD11	2:A:3127:GLN:HA	1.93	0.51
2:B:2341:ASN:OD1	2:B:2342:GLY:N	2.44	0.51
2:B:2758:LYS:HD3	2:B:2763:LEU:HA	1.93	0.51
2:C:2646:TRP:HH2	2:C:2925:PHE:HA	1.74	0.51
2:C:3851:ASN:O	2:C:3855:GLN:HG3	2.11	0.51
2:C:4203:ALA:HA	2:C:4206:ILE:HG12	1.92	0.51
2:D:867:VAL:HG11	2:D:942:THR:HG23	1.91	0.51
2:D:1047:LYS:O	2:D:1051:ARG:HG3	2.11	0.51
2:D:2788:ARG:NH1	2:D:2905:ARG:O	2.44	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:1681:ASP:HB2	2:A:1684:GLN:HG3	1.93	0.50
2:A:2956:TYR:HD2	2:A:2960:ILE:HG12	1.75	0.50
2:A:3012:GLY:HA3	2:A:3060:PHE:HE1	1.75	0.50
2:A:3149:GLU:OE1	2:A:3152:ARG:NH1	2.43	0.50
2:B:1681:ASP:HB2	2:B:1684:GLN:HG3	1.93	0.50
2:C:308:LEU:HD13	2:C:393:MET:HG2	1.93	0.50
2:C:3012:GLY:HA3	2:C:3060:PHE:HE1	1.74	0.50
2:C:3715:GLU:OE2	2:C:4647:LYS:HE2	2.10	0.50
2:D:1681:ASP:HB2	2:D:1684:GLN:HG3	1.93	0.50
2:D:2274:LEU:HG	2:D:2329:GLU:HG3	1.91	0.50
2:A:494:MET:HA	2:A:494:MET:CE	2.40	0.50
2:B:3851:ASN:O	2:B:3855:GLN:HG3	2.11	0.50
2:C:1047:LYS:O	2:C:1051:ARG:HG3	2.12	0.50
2:C:3272:HIS:O	2:C:3275:THR:OG1	2.25	0.50
2:D:2581:ARG:HG2	2:D:2582:PRO:HD2	1.92	0.50
2:D:2848:TYR:HE2	2:D:2888:LYS:HZ1	1.58	0.50
2:D:3227:ARG:HG2	2:D:3229:THR:H	1.76	0.50
2:A:867:VAL:HG11	2:A:942:THR:HG23	1.91	0.50
2:A:1007:TRP:NE1	4:A:5005:ATP:O1B	2.40	0.50
2:A:2114:GLU:HG2	2:A:2115:ASP:N	2.26	0.50
2:A:2645:PHE:HZ	2:A:2970:LEU:HD21	1.75	0.50
2:A:2758:LYS:HD3	2:A:2763:LEU:HA	1.94	0.50
2:B:1564:MET:CE	2:B:1565:PRO:HD2	2.35	0.50
2:C:829:LYS:NZ	2:C:1037:LEU:O	2.44	0.50
2:C:2178:VAL:HG21	2:C:2192:MET:HG3	1.92	0.50
2:C:2758:LYS:HD3	2:C:2763:LEU:HA	1.93	0.50
2:C:2768:LYS:HE3	2:C:2772:ARG:NH1	2.27	0.50
2:C:2833:LEU:HB2	2:C:2838[B]:HIS:NE2	2.25	0.50
2:C:3227:ARG:HG2	2:C:3229:THR:H	1.76	0.50
2:D:1011:ARG:HB3	2:D:1016:TRP:HB2	1.92	0.50
2:D:2681:MET:HA	2:D:2681:MET:CE	2.41	0.50
2:A:829:LYS:NZ	2:A:1037:LEU:O	2.44	0.50
2:A:2251:ASN:HB2	2:A:3819:MET:HE1	1.93	0.50
2:A:2594:PHE:HB3	2:A:2695:MET:HE1	1.94	0.50
2:A:3118:GLY:O	2:A:3122:ILE:HG22	2.11	0.50
2:A:3166:PHE:CE2	2:A:3168:VAL:HB	2.47	0.50
2:C:2114:GLU:HG2	2:C:2115:ASP:N	2.26	0.50
2:C:2389:MET:CE	2:C:2460:PHE:HD1	2.24	0.50
2:C:2788:ARG:NH1	2:C:2905:ARG:O	2.44	0.50
2:C:3117:PHE:CD2	2:C:3117:PHE:CB	2.79	0.50
2:C:3219:VAL:O	2:C:3222:ALA:HB3	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:4248:LEU:HG	2:C:4297:PHE:CE1	2.47	0.50
2:D:480:ARG:NH2	2:D:3678:GLU:OE2	2.44	0.50
2:D:2594:PHE:HB3	2:D:2695:MET:HE1	1.94	0.50
2:D:3042:ALA:H	2:D:3117:PHE:HD2	1.58	0.50
2:D:3122:ILE:HD11	2:D:3127:GLN:HA	1.93	0.50
1:F:50:ARG:HH21	1:F:53:LYS:HZ2	1.59	0.50
2:A:552:SER:HB2	2:A:588:ILE:HD12	1.93	0.50
2:A:983:LEU:CD1	2:A:1055:ARG:HB3	2.41	0.50
2:A:2610:LEU:HD23	2:A:2613:HIS:HE1	1.75	0.50
2:A:4579:HIS:NE2	2:A:4725:TYR:OH	2.40	0.50
2:A:4732:GLY:HA2	2:A:4738:PHE:HB2	1.94	0.50
2:B:394:HIS:CE1	2:B:396:GLU:HG3	2.46	0.50
2:B:552:SER:HB2	2:B:588:ILE:HD12	1.93	0.50
2:B:1047:LYS:O	2:B:1051:ARG:HG3	2.12	0.50
2:B:2251:ASN:HB2	2:B:3819:MET:HE1	1.93	0.50
2:B:2645:PHE:HZ	2:B:2970:LEU:HD21	1.75	0.50
2:B:2788:ARG:NH1	2:B:2905:ARG:O	2.44	0.50
2:C:983:LEU:HD13	2:C:986:ILE:HD12	1.93	0.50
2:C:3727:GLN:HG2	2:C:3730:ARG:NH2	2.26	0.50
2:D:2341:ASN:OD1	2:D:2342:GLY:N	2.44	0.50
2:D:2758:LYS:HD3	2:D:2763:LEU:HA	1.94	0.50
2:A:655:MET:HG3	2:A:1619:VAL:HG11	1.92	0.50
2:A:2580:LEU:O	2:A:2616:ARG:NH1	2.45	0.50
2:B:1943:ARG:O	2:B:1947:VAL:HG23	2.11	0.50
2:B:2956:TYR:HD2	2:B:2960:ILE:HG12	1.75	0.50
2:B:3227:ARG:HG2	2:B:3229:THR:H	1.76	0.50
2:C:983:LEU:CD1	2:C:1055:ARG:HB3	2.41	0.50
2:C:2229:LEU:HD13	2:C:2297:ARG:HB2	1.92	0.50
2:D:983:LEU:HD13	2:D:986:ILE:HD12	1.93	0.50
2:D:2741:TRP:CD1	2:D:2754:GLN:HG3	2.46	0.50
2:D:3727:GLN:HG2	2:D:3730:ARG:NH2	2.26	0.50
2:A:878:LEU:HA	2:A:881:ILE:HG12	1.94	0.50
2:A:3112:ILE:HG13	2:A:3118:GLY:HA2	1.94	0.50
2:A:4248:LEU:HG	2:A:4297:PHE:CE1	2.47	0.50
2:A:4726:MET:HB3	2:D:4291:PHE:CE1	2.46	0.50
2:C:1436:GLN:HG2	2:C:1552:VAL:HG23	1.94	0.50
2:C:3118:GLY:O	2:C:3122:ILE:HG22	2.11	0.50
2:C:3166:PHE:CE2	2:C:3168:VAL:HB	2.47	0.50
2:D:3043:ARG:HH22	2:D:3115:HIS:CE1	2.30	0.50
2:D:3112:ILE:HG13	2:D:3118:GLY:HA2	1.94	0.50
2:A:1047:LYS:O	2:A:1051:ARG:HG3	2.11	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:2686:VAL:O	2:A:2688:MET:HG2	2.12	0.50
2:A:2741:TRP:CD1	2:A:2754:GLN:HG3	2.46	0.50
2:A:3316:LYS:O	2:A:3317:THR:OG1	2.28	0.50
2:A:4203:ALA:HA	2:A:4206:ILE:HG12	1.92	0.50
2:B:2594:PHE:HB3	2:B:2695:MET:HE1	1.94	0.50
2:B:3166:PHE:CE2	2:B:3168:VAL:HB	2.47	0.50
2:B:3219:VAL:O	2:B:3222:ALA:HB3	2.12	0.50
2:C:893:TRP:CD1	2:C:897:LYS:HZ1	2.30	0.50
2:C:1681:ASP:HB2	2:C:1684:GLN:HG3	1.93	0.50
2:C:2251:ASN:HB2	2:C:3819:MET:HE1	1.93	0.50
2:D:2886:ARG:O	2:D:2890:GLN:HG2	2.12	0.50
2:D:3149:GLU:OE1	2:D:3152:ARG:NH1	2.43	0.50
2:A:3043:ARG:HH22	2:A:3115:HIS:CE1	2.30	0.50
2:B:330:THR:HG23	2:B:366:VAL:HG12	1.93	0.50
2:B:480:ARG:NH2	2:B:3678:GLU:OE2	2.44	0.50
2:B:483:LYS:NZ	2:B:543:GLY:O	2.45	0.50
2:B:1019:GLY:HA2	2:B:1028:ARG:HH21	1.77	0.50
2:B:2768:LYS:HE3	2:B:2772:ARG:NH1	2.27	0.50
2:B:3042:ALA:H	2:B:3117:PHE:HD2	1.59	0.50
2:C:15:ARG:HE	2:C:16:THR:HG22	1.77	0.50
2:C:480:ARG:NH2	2:C:3678:GLU:OE2	2.44	0.50
2:C:483:LYS:NZ	2:C:543:GLY:O	2.45	0.50
2:C:3026:ALA:O	2:C:3030:VAL:HG13	2.12	0.50
2:C:3122:ILE:HD11	2:C:3127:GLN:HA	1.93	0.50
2:D:878:LEU:HA	2:D:881:ILE:HG12	1.94	0.50
2:D:1943:ARG:O	2:D:1947:VAL:HG23	2.11	0.50
2:A:394:HIS:CE1	2:A:396:GLU:HG3	2.46	0.49
2:A:1287:GLN:NE2	2:A:1549:SER:O	2.42	0.49
2:A:3728:GLN:O	2:A:3732:HIS:ND1	2.40	0.49
2:A:4828:GLY:HA2	2:A:4843:ARG:HH22	1.77	0.49
2:B:337:LYS:NZ	2:B:371:TRP:HE1	2.10	0.49
2:B:829:LYS:NZ	2:B:1037:LEU:O	2.44	0.49
2:B:3026:ALA:O	2:B:3030:VAL:HG13	2.12	0.49
2:B:3118:GLY:O	2:B:3122:ILE:HG22	2.11	0.49
2:B:3613:ARG:O	2:B:3617:VAL:HG23	2.12	0.49
2:D:2119:LEU:HD13	2:D:2154:VAL:HG23	1.94	0.49
2:D:2681:MET:HA	2:D:2681:MET:HE3	1.94	0.49
2:D:3699:CYS:HB2	2:D:3764:ALA:HB1	1.94	0.49
2:A:483:LYS:NZ	2:A:543:GLY:O	2.45	0.49
2:A:920:GLU:OE2	2:A:975:GLY:N	2.38	0.49
2:A:2769:GLU:HA	2:A:2772:ARG:CG	2.38	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2681:MET:HA	2:B:2681:MET:HE3	1.94	0.49
2:C:337:LYS:NZ	2:C:371:TRP:HE1	2.10	0.49
2:C:882:ARG:HG2	2:C:882:ARG:HH11	1.76	0.49
2:C:2580:LEU:O	2:C:2616:ARG:NH1	2.45	0.49
2:C:2594:PHE:HB3	2:C:2695:MET:HE1	1.94	0.49
2:C:3613:ARG:O	2:C:3617:VAL:HG23	2.13	0.49
2:D:1007:TRP:NE1	4:D:5005:ATP:O1B	2.40	0.49
2:D:1727:VAL:HG11	2:D:1926:VAL:HG21	1.93	0.49
2:D:2727:HIS:O	2:D:2731:LYS:HG2	2.12	0.49
2:D:4732:GLY:HA2	2:D:4738:PHE:HB2	1.94	0.49
1:F:25:VAL:HG12	1:F:104:LEU:HA	1.93	0.49
2:A:2964:ALA:HA	2:A:2968:LEU:HD12	1.94	0.49
2:B:983:LEU:HD13	2:B:986:ILE:HD12	1.93	0.49
2:B:2114:GLU:HG2	2:B:2115:ASP:N	2.26	0.49
2:B:2348:GLU:O	2:B:2352:LYS:HG2	2.13	0.49
2:B:3072:MET:HB3	2:B:3076:LYS:HZ2	1.76	0.49
2:B:4154:GLU:O	2:B:4158:THR:HG23	2.12	0.49
2:C:988:LEU:H	2:C:1055:ARG:NH2	2.10	0.49
2:C:1943:ARG:O	2:C:1947:VAL:HG23	2.11	0.49
2:D:290:ARG:HB2	2:D:343:ARG:HH21	1.78	0.49
2:D:483:LYS:NZ	2:D:543:GLY:O	2.45	0.49
2:D:829:LYS:NZ	2:D:1037:LEU:O	2.44	0.49
2:D:3166:PHE:CE2	2:D:3168:VAL:HB	2.47	0.49
2:D:3219:VAL:O	2:D:3222:ALA:HB3	2.12	0.49
2:D:4828:GLY:HA2	2:D:4843:ARG:HH22	1.77	0.49
2:A:3026:ALA:O	2:A:3030:VAL:HG13	2.12	0.49
2:A:3117:PHE:CD1	2:A:3117:PHE:HA	2.47	0.49
2:B:308:LEU:HD13	2:B:393:MET:HG2	1.93	0.49
2:B:2119:LEU:HD13	2:B:2154:VAL:HG23	1.94	0.49
2:B:2460:PHE:CZ	2:B:2465:LYS:HG3	2.48	0.49
2:B:2686:VAL:O	2:B:2688:MET:HG2	2.12	0.49
2:B:2705:PRO:HD2	2:B:2854:LYS:HZ2	1.77	0.49
2:B:4732:GLY:HA2	2:B:4738:PHE:HB2	1.94	0.49
2:C:878:LEU:HA	2:C:881:ILE:HG12	1.94	0.49
2:C:3117:PHE:CD1	2:C:3117:PHE:HA	2.47	0.49
2:C:4579:HIS:NE2	2:C:4725:TYR:OH	2.40	0.49
2:D:330:THR:HG23	2:D:366:VAL:HG12	1.93	0.49
2:D:4898:PHE:O	2:D:4904:GLY:HA3	2.13	0.49
1:H:25:VAL:HG12	1:H:104:LEU:HA	1.93	0.49
2:A:290:ARG:HB2	2:A:343:ARG:HH21	1.78	0.49
2:A:330:THR:HG23	2:A:366:VAL:HG12	1.93	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:1943:ARG:O	2:A:1947:VAL:HG23	2.11	0.49
2:A:1997:LEU:O	2:A:2001:GLU:HG2	2.12	0.49
2:A:2119:LEU:HD13	2:A:2154:VAL:HG23	1.94	0.49
2:A:2705:PRO:HD2	2:A:2854:LYS:HZ2	1.77	0.49
2:A:2727:HIS:O	2:A:2731:LYS:HG2	2.13	0.49
2:A:2768:LYS:HE3	2:A:2772:ARG:NH1	2.27	0.49
2:A:2999:LYS:HZ1	2:A:3003:MET:HB3	1.78	0.49
2:B:2580:LEU:O	2:B:2616:ARG:NH1	2.45	0.49
2:B:3250:TRP:HE3	2:B:3309:LYS:HZ3	1.60	0.49
2:C:1997:LEU:O	2:C:2001:GLU:HG2	2.12	0.49
2:C:2119:LEU:HD13	2:C:2154:VAL:HG23	1.94	0.49
2:C:2348:GLU:O	2:C:2352:LYS:HG2	2.13	0.49
2:C:3699:CYS:HB2	2:C:3764:ALA:HB1	1.94	0.49
2:D:337:LYS:NZ	2:D:371:TRP:HE1	2.10	0.49
2:D:1019:GLY:HA2	2:D:1028:ARG:HH21	1.77	0.49
2:D:2964:ALA:HA	2:D:2968:LEU:HD12	1.94	0.49
2:D:4248:LEU:HG	2:D:4297:PHE:CE1	2.47	0.49
2:A:15:ARG:HE	2:A:16:THR:HG22	1.77	0.49
2:A:3699:CYS:HB2	2:A:3764:ALA:HB1	1.94	0.49
2:A:4154:GLU:O	2:A:4158:THR:HG23	2.12	0.49
2:B:290:ARG:HB2	2:B:343:ARG:HH21	1.78	0.49
2:B:878:LEU:HA	2:B:881:ILE:HG12	1.94	0.49
2:B:1287:GLN:NE2	2:B:1549:SER:O	2.42	0.49
2:B:3112:ILE:HG13	2:B:3118:GLY:HA2	1.94	0.49
2:B:4248:LEU:HG	2:B:4297:PHE:CE1	2.47	0.49
2:C:330:THR:HG23	2:C:366:VAL:HG12	1.93	0.49
2:C:912:LYS:HZ2	2:C:914:GLN:HB2	1.78	0.49
2:C:1019:GLY:HA2	2:C:1028:ARG:HH21	1.77	0.49
2:C:2635:GLU:OE2	2:C:2680:TYR:OH	2.24	0.49
2:C:2886:ARG:O	2:C:2890:GLN:HG2	2.12	0.49
2:C:4898:PHE:O	2:C:4904:GLY:HA3	2.13	0.49
2:D:882:ARG:HG2	2:D:882:ARG:HH11	1.76	0.49
2:D:1997:LEU:O	2:D:2001:GLU:HG2	2.12	0.49
2:D:2460:PHE:CZ	2:D:2465:LYS:HG3	2.48	0.49
2:D:3316:LYS:O	2:D:3317:THR:OG1	2.28	0.49
1:G:25:VAL:HG12	1:G:104:LEU:HA	1.93	0.49
1:H:50:ARG:HH21	1:H:53:LYS:HZ2	1.61	0.49
2:A:337:LYS:NZ	2:A:371:TRP:HE1	2.10	0.49
2:A:2460:PHE:CZ	2:A:2465:LYS:HG3	2.48	0.49
2:A:2886:ARG:O	2:A:2890:GLN:HG2	2.12	0.49
2:A:4800:ASP:OD1	2:A:4801:THR:N	2.46	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1436:GLN:HG2	2:B:1552:VAL:HG23	1.94	0.49
2:B:3088:LYS:HG3	2:B:3090:VAL:HG12	1.95	0.49
2:B:3117:PHE:CD1	2:B:3117:PHE:HA	2.47	0.49
2:D:987:LYS:NZ	2:D:988:LEU:O	2.44	0.49
2:D:2686:VAL:O	2:D:2688:MET:HG2	2.12	0.49
2:D:2768:LYS:HE3	2:D:2772:ARG:NH1	2.27	0.49
2:D:3209:PRO:HB3	2:D:3213:LYS:NZ	2.28	0.49
2:D:4154:GLU:O	2:D:4158:THR:HG23	2.12	0.49
2:D:4179:GLU:OE1	2:D:4179:GLU:N	2.46	0.49
2:A:3042:ALA:H	2:A:3117:PHE:HD2	1.59	0.49
2:A:3227:ARG:HG2	2:A:3229:THR:H	1.76	0.49
2:A:4181:GLY:O	2:A:4185:LYS:N	2.41	0.49
2:B:997:ASP:OD1	2:B:1047:LYS:NZ	2.46	0.49
2:B:2964:ALA:HA	2:B:2968:LEU:HD12	1.94	0.49
2:B:4828:GLY:HA2	2:B:4843:ARG:HH22	1.77	0.49
2:B:4898:PHE:O	2:B:4904:GLY:HA3	2.13	0.49
2:C:2727:HIS:O	2:C:2731:LYS:HG2	2.13	0.49
2:C:2981:TYR:O	2:C:2984:SER:OG	2.21	0.49
2:C:3070:LYS:O	2:C:3073:GLU:HG3	2.13	0.49
2:C:3187:LYS:NZ	2:C:3191:GLU:OE1	2.46	0.49
2:C:3651:PRO:HB2	2:C:3652:PRO:HD3	1.95	0.49
2:C:4179:GLU:N	2:C:4179:GLU:OE1	2.46	0.49
2:C:4517:LEU:O	2:C:4520:TYR:HB2	2.13	0.49
2:C:4640:PHE:CG	2:C:4641:PRO:HD3	2.48	0.49
2:D:308:LEU:C	2:D:309:MET:HE2	2.38	0.49
2:D:988:LEU:H	2:D:1055:ARG:NH2	2.10	0.49
2:D:2580:LEU:O	2:D:2616:ARG:NH1	2.45	0.49
2:D:2914:THR:N	2:D:2915:PRO:HD2	2.28	0.49
2:D:4702:ASP:HB3	2:D:4705:TYR:HB3	1.94	0.49
1:E:25:VAL:HG12	1:E:104:LEU:HA	1.93	0.49
2:A:1124:PRO:HD2	2:A:1594:VAL:HG23	1.95	0.49
2:A:2460:PHE:HZ	2:A:2465:LYS:HG3	1.78	0.49
2:B:2886:ARG:O	2:B:2890:GLN:HG2	2.12	0.49
2:B:2999:LYS:HZ2	2:B:3003:MET:HB3	1.78	0.49
2:B:3070:LYS:O	2:B:3073:GLU:HG3	2.13	0.49
2:B:3209:PRO:HB3	2:B:3213:LYS:NZ	2.28	0.49
2:C:1124:PRO:HD2	2:C:1594:VAL:HG23	1.95	0.49
2:C:1748:LEU:HD22	2:C:1851:PHE:HD1	1.77	0.49
2:C:2681:MET:HA	2:C:2681:MET:HE3	1.94	0.49
2:C:3042:ALA:H	2:C:3117:PHE:HD2	1.59	0.49
2:C:3088:LYS:HG3	2:C:3090:VAL:HG12	1.95	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:15:ARG:HE	2:D:16:THR:HG22	1.77	0.49
2:D:3026:ALA:O	2:D:3030:VAL:HG13	2.12	0.49
2:D:3613:ARG:O	2:D:3617:VAL:HG23	2.12	0.49
2:A:2348:GLU:O	2:A:2352:LYS:HG2	2.13	0.49
2:A:3209:PRO:HB3	2:A:3213:LYS:NZ	2.28	0.49
2:A:3613:ARG:O	2:A:3617:VAL:HG23	2.13	0.49
2:A:3665:HIS:HB2	2:A:3734:ARG:HG2	1.95	0.49
2:A:4658:GLY:C	2:A:4663:ARG:HD2	2.38	0.49
2:A:4702:ASP:HB3	2:A:4705:TYR:HB3	1.94	0.49
2:B:3043:ARG:HH22	2:B:3115:HIS:CE1	2.30	0.49
2:B:4702:ASP:HB3	2:B:4705:TYR:HB3	1.94	0.49
2:C:290:ARG:HB2	2:C:343:ARG:HH21	1.77	0.49
2:C:2460:PHE:HZ	2:C:2465:LYS:HG3	1.78	0.49
2:C:2591:ARG:NH2	2:C:2876:THR:OG1	2.45	0.49
2:C:2964:ALA:HA	2:C:2968:LEU:HD12	1.94	0.49
2:C:4828:GLY:HA2	2:C:4843:ARG:HH22	1.77	0.49
2:D:1436:GLN:HG2	2:D:1552:VAL:HG23	1.94	0.49
2:A:1910:LEU:HD13	2:A:2062:ILE:HG12	1.95	0.48
2:A:3088:LYS:HG3	2:A:3090:VAL:HG12	1.95	0.48
2:A:4517:LEU:O	2:A:4520:TYR:HB2	2.13	0.48
2:B:1714:TYR:CZ	2:B:1761:MET:HG3	2.48	0.48
2:B:2769:GLU:HA	2:B:2772:ARG:CG	2.38	0.48
2:B:2848:TYR:HE2	2:B:2888:LYS:HZ1	1.60	0.48
2:B:2914:THR:N	2:B:2915:PRO:HD2	2.28	0.48
2:C:218:SER:HB3	2:C:286:GLY:HA3	1.95	0.48
2:C:308:LEU:C	2:C:309:MET:HE2	2.38	0.48
2:C:2769:GLU:HA	2:C:2772:ARG:CG	2.38	0.48
2:C:3043:ARG:HH22	2:C:3115:HIS:CE1	2.30	0.48
2:C:4154:GLU:O	2:C:4158:THR:HG23	2.12	0.48
2:C:4702:ASP:HB3	2:C:4705:TYR:HB3	1.94	0.48
2:C:4732:GLY:HA2	2:C:4738:PHE:HB2	1.94	0.48
2:D:983:LEU:CD1	2:D:1055:ARG:HB3	2.41	0.48
2:D:1910:LEU:HD13	2:D:2062:ILE:HG12	1.95	0.48
2:A:218:SER:HB3	2:A:286:GLY:HA3	1.95	0.48
2:A:2335:LEU:HD11	2:A:2343:LEU:HD13	1.96	0.48
2:A:2914:THR:N	2:A:2915:PRO:HD2	2.28	0.48
2:A:3219:VAL:O	2:A:3222:ALA:HB3	2.12	0.48
2:B:654:SER:OG	2:B:837:SER:OG	2.16	0.48
2:B:3665:HIS:HB2	2:B:3734:ARG:HG2	1.95	0.48
2:B:3985:MET:HB3	2:B:3999:MET:HE1	1.95	0.48
2:C:3665:HIS:HB2	2:C:3734:ARG:HG2	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:1714:TYR:CZ	2:D:1761:MET:HG3	2.48	0.48
2:D:2905:ARG:HH11	2:D:2906:GLY:H	1.60	0.48
2:D:4071:GLU:OE1	2:D:4086:ARG:NH2	2.30	0.48
2:A:3070:LYS:O	2:A:3073:GLU:HG3	2.13	0.48
2:B:227:TYR:CG	2:B:352:SER:HB3	2.48	0.48
2:B:1124:PRO:HD2	2:B:1594:VAL:HG23	1.95	0.48
2:B:2460:PHE:HZ	2:B:2465:LYS:HG3	1.78	0.48
2:B:4179:GLU:OE1	2:B:4179:GLU:N	2.46	0.48
2:B:4480:PHE:O	2:B:4484:ILE:HG23	2.13	0.48
2:C:2686:VAL:O	2:C:2688:MET:HG2	2.12	0.48
2:C:2914:THR:N	2:C:2915:PRO:HD2	2.28	0.48
2:C:3112:ILE:HG13	2:C:3118:GLY:HA2	1.94	0.48
2:C:4172:PHE:O	2:C:4176:VAL:HG22	2.14	0.48
2:C:4283:PHE:CZ	2:D:4491:LEU:HD11	2.48	0.48
2:C:4480:PHE:O	2:C:4484:ILE:HG23	2.13	0.48
2:D:308:LEU:HD13	2:D:393:MET:HG2	1.93	0.48
2:D:2068:ARG:NH1	2:D:2072:GLU:OE2	2.47	0.48
2:D:2295:GLY:HA3	2:D:2391:PHE:HE2	1.78	0.48
2:D:2460:PHE:HZ	2:D:2465:LYS:HG3	1.78	0.48
2:D:2768:LYS:HB3	2:D:2772:ARG:NH1	2.29	0.48
1:H:42:ASP:OD1	2:D:688:ALA:HB1	2.12	0.48
2:A:2681:MET:HA	2:A:2681:MET:HE3	1.94	0.48
2:A:4172:PHE:O	2:A:4176:VAL:HG22	2.14	0.48
2:B:15:ARG:HE	2:B:16:THR:HG22	1.77	0.48
2:B:4517:LEU:O	2:B:4520:TYR:HB2	2.13	0.48
2:B:4658:GLY:C	2:B:4663:ARG:HD2	2.38	0.48
2:C:3171:LEU:HD23	2:C:3214:LEU:HD13	1.96	0.48
2:C:3209:PRO:HB3	2:C:3213:LYS:NZ	2.28	0.48
2:D:3171:LEU:HD23	2:D:3214:LEU:HD13	1.96	0.48
2:A:227:TYR:CG	2:A:352:SER:HB3	2.48	0.48
2:A:1444:GLY:HA3	2:A:1487:MET:HA	1.96	0.48
2:A:2149:ILE:HD13	2:A:2167:MET:CE	2.44	0.48
2:A:2174:VAL:O	2:A:2178:VAL:HG23	2.13	0.48
2:A:3042:ALA:C	2:A:3046:MET:HE3	2.39	0.48
2:B:308:LEU:C	2:B:309:MET:HE2	2.38	0.48
2:B:1997:LEU:O	2:B:2001:GLU:HG2	2.12	0.48
2:B:2149:ILE:HD13	2:B:2167:MET:CE	2.44	0.48
2:B:2295:GLY:HA3	2:B:2391:PHE:HE2	1.78	0.48
2:B:2905:ARG:HH11	2:B:2906:GLY:H	1.60	0.48
2:B:4481:TRP:CE3	2:B:4484:ILE:HD11	2.49	0.48
2:C:15:ARG:HA	2:C:113:LEU:CD1	2.43	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:227:TYR:CG	2:C:352:SER:HB3	2.48	0.48
2:C:987:LYS:NZ	2:C:988:LEU:O	2.44	0.48
2:C:1444:GLY:HA3	2:C:1487:MET:HA	1.96	0.48
2:C:2460:PHE:CZ	2:C:2465:LYS:HG3	2.48	0.48
2:D:176:ARG:HB2	2:D:179:ASP:HB2	1.96	0.48
2:D:1748:LEU:HD22	2:D:1851:PHE:HD1	1.77	0.48
2:D:1788:LYS:HG3	2:D:1834:PHE:CE1	2.49	0.48
2:D:2335:LEU:HD11	2:D:2343:LEU:HD13	1.96	0.48
2:D:2927:GLN:HB3	2:D:2931:ARG:HH22	1.79	0.48
2:D:3117:PHE:CD1	2:D:3117:PHE:HA	2.47	0.48
2:D:4481:TRP:CE3	2:D:4484:ILE:HD11	2.49	0.48
2:A:1748:LEU:HD22	2:A:1851:PHE:HD1	1.77	0.48
2:A:4481:TRP:CE3	2:A:4484:ILE:HD11	2.49	0.48
2:B:1748:LEU:HD22	2:B:1851:PHE:HD1	1.77	0.48
2:B:2068:ARG:NH1	2:B:2072:GLU:OE2	2.47	0.48
2:B:2335:LEU:HD11	2:B:2343:LEU:HD13	1.96	0.48
2:B:3042:ALA:C	2:B:3046:MET:HE3	2.39	0.48
2:B:4640:PHE:CG	2:B:4641:PRO:HD3	2.48	0.48
2:B:4800:ASP:OD1	2:B:4801:THR:N	2.46	0.48
2:C:176:ARG:HB2	2:C:179:ASP:HB2	1.96	0.48
2:C:1714:TYR:CZ	2:C:1761:MET:HG3	2.48	0.48
2:C:2801:TYR:OH	2:D:1497:GLY:HA3	2.13	0.48
2:C:4272:LYS:HD2	2:C:4273:LYS:HG2	1.96	0.48
2:C:4481:TRP:CE3	2:C:4484:ILE:HD11	2.49	0.48
2:D:15:ARG:HA	2:D:113:LEU:CD1	2.44	0.48
2:D:1989:PRO:HD2	2:D:1992:ILE:HD12	1.96	0.48
2:D:3070:LYS:O	2:D:3073:GLU:HG3	2.13	0.48
2:D:3187:LYS:NZ	2:D:3191:GLU:OE1	2.46	0.48
2:D:4480:PHE:O	2:D:4484:ILE:HG23	2.13	0.48
1:H:9:SER:HB2	1:H:72:ARG:HB3	1.95	0.48
2:A:176:ARG:HB2	2:A:179:ASP:HB2	1.96	0.48
2:A:941:LYS:HA	2:A:944:LEU:HD12	1.96	0.48
2:A:1436:GLN:HG2	2:A:1552:VAL:HG23	1.94	0.48
2:A:2768:LYS:HB3	2:A:2772:ARG:NH1	2.29	0.48
2:A:2927:GLN:HB3	2:A:2931:ARG:HH22	1.79	0.48
2:A:3002:GLU:CD	2:A:3049:GLY:HA2	2.39	0.48
2:B:881:ILE:HG21	2:B:1062:TYR:CE1	2.49	0.48
2:B:988:LEU:H	2:B:1055:ARG:NH2	2.10	0.48
2:C:1788:LYS:HG3	2:C:1834:PHE:CE1	2.49	0.48
2:C:2174:VAL:O	2:C:2178:VAL:HG23	2.13	0.48
2:C:3042:ALA:C	2:C:3046:MET:HE3	2.39	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:4800:ASP:OD1	2:C:4801:THR:N	2.46	0.48
2:D:218:SER:HB3	2:D:286:GLY:HA3	1.95	0.48
2:D:227:TYR:CG	2:D:352:SER:HB3	2.48	0.48
2:D:291:TRP:CD1	2:D:353:GLU:HB3	2.49	0.48
2:D:1124:PRO:HD2	2:D:1594:VAL:HG23	1.95	0.48
2:D:3117:PHE:CD2	2:D:3117:PHE:CB	2.79	0.48
2:D:3218:ILE:HA	2:D:3221:LEU:HG	1.95	0.48
2:D:4272:LYS:HD2	2:D:4273:LYS:HG2	1.95	0.48
2:D:4517:LEU:O	2:D:4520:TYR:HB2	2.13	0.48
2:A:503:ASP:O	2:A:507:VAL:HG13	2.14	0.48
2:A:1019:GLY:HA2	2:A:1028:ARG:HH21	1.77	0.48
2:A:4179:GLU:OE1	2:A:4179:GLU:N	2.46	0.48
2:A:4480:PHE:O	2:A:4484:ILE:HG23	2.13	0.48
2:B:3171:LEU:HD23	2:B:3214:LEU:HD13	1.96	0.48
2:C:1306:MET:HE2	2:C:1570:LEU:HB3	1.96	0.48
2:C:1522:ALA:O	2:C:1525:LYS:HG2	2.14	0.48
2:C:2068:ARG:NH1	2:C:2072:GLU:OE2	2.47	0.48
2:C:2455:ASP:OD2	2:C:2457:SER:OG	2.32	0.48
2:C:2927:GLN:HB3	2:C:2931:ARG:HH22	1.79	0.48
2:C:3985:MET:HB3	2:C:3999:MET:HE1	1.95	0.48
2:C:4248:LEU:HD22	2:D:4711:GLY:HA2	1.95	0.48
2:C:4822:ARG:NH2	2:D:4825:GLY:O	2.46	0.48
2:D:661:LEU:O	2:D:788:PHE:N	2.30	0.48
2:D:2348:GLU:O	2:D:2352:LYS:HG2	2.13	0.48
2:D:2788:ARG:HB2	2:D:2904:SER:OG	2.14	0.48
2:A:480:ARG:HE	2:A:3678:GLU:HG2	1.79	0.48
2:A:1522:ALA:O	2:A:1525:LYS:HG2	2.14	0.48
2:A:1714:TYR:CZ	2:A:1761:MET:HG3	2.48	0.48
2:A:2935:GLU:O	2:A:2938:GLN:HG3	2.14	0.48
2:A:3171:LEU:HD23	2:A:3214:LEU:HD13	1.96	0.48
2:A:3187:LYS:NZ	2:A:3191:GLU:OE1	2.46	0.48
2:B:15:ARG:HA	2:B:113:LEU:CD1	2.43	0.48
2:B:218:SER:HB3	2:B:286:GLY:HA3	1.95	0.48
2:B:1306:MET:HE2	2:B:1570:LEU:HB3	1.96	0.48
2:B:1522:ALA:O	2:B:1525:LYS:HG2	2.14	0.48
2:B:1910:LEU:HD13	2:B:2062:ILE:HG12	1.95	0.48
2:B:2927:GLN:HB3	2:B:2931:ARG:HH22	1.79	0.48
2:B:2935:GLU:O	2:B:2938:GLN:HG3	2.14	0.48
2:B:3187:LYS:NZ	2:B:3191:GLU:OE1	2.46	0.48
2:B:3699:CYS:HB2	2:B:3764:ALA:HB1	1.94	0.48
2:C:2295:GLY:HA3	2:C:2391:PHE:HE2	1.78	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:3728:GLN:O	2:C:3732:HIS:ND1	2.40	0.48
2:D:503:ASP:O	2:D:507:VAL:HG13	2.14	0.48
2:D:2591:ARG:NH2	2:D:2876:THR:OG1	2.45	0.48
2:D:3067:ASP:O	2:D:3070:LYS:HG2	2.14	0.48
2:D:3088:LYS:HG3	2:D:3090:VAL:HG12	1.95	0.48
2:A:308:LEU:C	2:A:309:MET:HE2	2.38	0.48
2:B:176:ARG:HB2	2:B:179:ASP:HB2	1.96	0.48
2:B:3002:GLU:CD	2:B:3049:GLY:HA2	2.39	0.48
2:C:291:TRP:CD1	2:C:353:GLU:HB3	2.49	0.48
2:C:399:MET:SD	2:C:399:MET:N	2.87	0.48
2:C:1175:PHE:HB2	2:C:1182:LEU:HD12	1.96	0.48
2:C:1989:PRO:HD2	2:C:1992:ILE:HD12	1.96	0.48
2:C:2456:MET:HE2	2:C:2456:MET:HB3	1.66	0.48
2:C:2788:ARG:HB2	2:C:2904:SER:OG	2.14	0.48
2:D:941:LYS:HA	2:D:944:LEU:HD12	1.96	0.48
2:D:3651:PRO:HB2	2:D:3652:PRO:HD3	1.95	0.48
2:D:4640:PHE:CG	2:D:4641:PRO:HD3	2.48	0.48
2:D:4800:ASP:OD1	2:D:4801:THR:N	2.46	0.48
2:A:291:TRP:CD1	2:A:353:GLU:HB3	2.49	0.47
2:A:1989:PRO:HD2	2:A:1992:ILE:HD12	1.96	0.47
2:A:2295:GLY:HA3	2:A:2391:PHE:HE2	1.78	0.47
2:A:2551:THR:O	2:A:2555:LEU:HG	2.14	0.47
2:A:4898:PHE:O	2:A:4904:GLY:HA3	2.13	0.47
2:B:2727:HIS:O	2:B:2731:LYS:HG2	2.12	0.47
2:B:2788:ARG:HB2	2:B:2904:SER:OG	2.14	0.47
2:B:3218:ILE:HA	2:B:3221:LEU:HG	1.95	0.47
2:B:4157:ARG:O	2:B:4161:GLU:HG2	2.14	0.47
2:B:4172:PHE:O	2:B:4176:VAL:HG22	2.14	0.47
2:C:3218:ILE:HA	2:C:3221:LEU:HG	1.96	0.47
2:C:3231:MET:HE3	2:C:3234:VAL:HG22	1.96	0.47
2:C:3986:LEU:HG	2:C:3999:MET:SD	2.54	0.47
2:D:893:TRP:CD1	2:D:897:LYS:HZ1	2.32	0.47
2:D:895:MET:HG3	2:D:896:ASN:N	2.29	0.47
2:D:2551:THR:O	2:D:2555:LEU:HG	2.14	0.47
2:D:3002:GLU:CD	2:D:3049:GLY:HA2	2.39	0.47
2:D:3986:LEU:HG	2:D:3999:MET:SD	2.54	0.47
1:G:9:SER:HB2	1:G:72:ARG:HB3	1.95	0.47
2:A:2681:MET:HG3	2:A:2914:THR:HG22	1.96	0.47
2:A:2773:TRP:HB3	2:A:2774:PRO:HD3	1.96	0.47
2:A:3234:VAL:HA	2:A:3237:VAL:HG12	1.96	0.47
2:A:3651:PRO:HB2	2:A:3652:PRO:HD3	1.95	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:3787:VAL:HG12	2:A:3864:ASN:HB3	1.96	0.47
2:B:291:TRP:CD1	2:B:353:GLU:HB3	2.49	0.47
2:B:480:ARG:HE	2:B:3678:GLU:HG2	1.79	0.47
2:B:1444:GLY:HA3	2:B:1487:MET:HA	1.96	0.47
2:B:3250:TRP:CD2	2:B:3273:MET:HE1	2.50	0.47
2:B:3732:HIS:O	2:B:3776:LYS:NZ	2.47	0.47
2:C:1415:ASP:OD2	2:C:1559:ARG:NH2	2.35	0.47
2:C:1910:LEU:HD13	2:C:2062:ILE:HG12	1.95	0.47
2:C:2149:ILE:HD13	2:C:2167:MET:CE	2.44	0.47
2:C:3067:ASP:O	2:C:3070:LYS:HG2	2.14	0.47
2:C:4658:GLY:C	2:C:4663:ARG:HD2	2.38	0.47
2:D:2174:VAL:O	2:D:2178:VAL:HG23	2.13	0.47
2:D:2424:ARG:NH2	2:D:2476:TYR:O	2.47	0.47
2:D:4658:GLY:C	2:D:4663:ARG:HD2	2.38	0.47
1:F:9:SER:HB2	1:F:72:ARG:HB3	1.95	0.47
2:A:261:HIS:CD2	2:A:263:GLU:HG3	2.49	0.47
2:A:895:MET:HG3	2:A:896:ASN:N	2.29	0.47
2:A:1175:PHE:HB2	2:A:1182:LEU:HD12	1.97	0.47
2:A:3067:ASP:O	2:A:3070:LYS:HG2	2.14	0.47
2:A:3154:ALA:O	2:A:3157:GLU:HG3	2.15	0.47
2:A:3249:TRP:HB3	2:A:3266:THR:HG21	1.97	0.47
2:A:4587:ILE:HD13	2:A:4726:MET:HG2	1.96	0.47
2:B:261:HIS:CD2	2:B:263:GLU:HG3	2.50	0.47
2:B:412:GLU:HG3	2:B:488:LEU:HD11	1.96	0.47
2:B:941:LYS:HA	2:B:944:LEU:HD12	1.96	0.47
2:B:2768:LYS:HB3	2:B:2772:ARG:NH1	2.29	0.47
2:B:3217:GLU:O	2:B:3220:GLU:HG3	2.14	0.47
2:B:3324:GLU:HG2	2:B:3327:LYS:HE3	1.96	0.47
2:B:4579:HIS:HE2	2:B:4725:TYR:HH	1.57	0.47
2:C:2335:LEU:HD11	2:C:2343:LEU:HD13	1.96	0.47
2:C:2585:MET:O	2:C:2589:LEU:HG	2.15	0.47
2:C:2905:ARG:HH11	2:C:2906:GLY:H	1.60	0.47
2:C:4522:VAL:HG13	2:D:4786:PHE:CZ	2.50	0.47
2:D:3117:PHE:CD1	2:D:3117:PHE:CB	2.79	0.47
2:D:3665:HIS:HB2	2:D:3734:ARG:HG2	1.95	0.47
2:D:3985:MET:HB3	2:D:3999:MET:HE1	1.95	0.47
2:A:988:LEU:H	2:A:1055:ARG:NH2	2.10	0.47
2:A:997:ASP:OD1	2:A:1047:LYS:NZ	2.46	0.47
2:A:2627:TRP:O	2:A:2631:GLY:N	2.48	0.47
2:B:2455:ASP:OD2	2:B:2457:SER:OG	2.32	0.47
2:B:2591:ARG:NH2	2:B:2876:THR:OG1	2.45	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3651:PRO:HB2	2:B:3652:PRO:HD3	1.95	0.47
2:B:4252:ILE:HB	2:C:4707:MET:HE3	1.95	0.47
2:C:2549:LEU:HD11	2:C:2580:LEU:HD11	1.97	0.47
2:C:2594:PHE:CB	2:C:2695:MET:HE1	2.45	0.47
2:D:881:ILE:HG21	2:D:1062:TYR:CE1	2.49	0.47
2:D:1444:GLY:HA3	2:D:1487:MET:HA	1.96	0.47
2:D:2935:GLU:O	2:D:2938:GLN:HG3	2.14	0.47
2:D:3732:HIS:O	2:D:3776:LYS:NZ	2.47	0.47
2:A:2424:ARG:HE	2:A:2476:TYR:HA	1.80	0.47
2:A:4157:ARG:O	2:A:4161:GLU:HG2	2.14	0.47
2:A:4509:VAL:HG13	2:A:4575:LEU:HD22	1.97	0.47
2:A:4584:PHE:O	2:A:4588:ILE:HG13	2.14	0.47
2:B:62:LEU:O	2:B:66:THR:HG23	2.15	0.47
2:B:3067:ASP:O	2:B:3070:LYS:HG2	2.14	0.47
2:B:3154:ALA:O	2:B:3157:GLU:HG3	2.15	0.47
2:B:3684:GLU:HB3	2:B:3689:MET:HE1	1.97	0.47
2:B:3778:LEU:HD13	2:B:3854:PHE:HD1	1.80	0.47
2:C:323:ASP:OD1	2:C:324:VAL:N	2.48	0.47
2:C:808:HIS:NE2	2:C:832:LEU:HB3	2.30	0.47
2:C:2830:ASN:HD22	2:D:1435:GLY:HA3	1.79	0.47
2:D:480:ARG:HE	2:D:3678:GLU:HG2	1.79	0.47
2:D:2833:LEU:HB2	2:D:2838[A]:HIS:NE2	2.29	0.47
2:D:3042:ALA:C	2:D:3046:MET:HE3	2.39	0.47
2:A:15:ARG:HA	2:A:113:LEU:CD1	2.44	0.47
2:A:1939:ASN:ND2	2:A:1989:PRO:HG2	2.30	0.47
2:A:2068:ARG:NH1	2:A:2072:GLU:OE2	2.46	0.47
2:A:4640:PHE:CG	2:A:4641:PRO:HD3	2.48	0.47
2:B:1989:PRO:HD2	2:B:1992:ILE:HD12	1.96	0.47
2:B:3249:TRP:HB3	2:B:3266:THR:HG21	1.97	0.47
2:B:4587:ILE:HD13	2:B:4726:MET:HG2	1.96	0.47
2:B:4694:LEU:HD23	2:B:4694:LEU:H	1.79	0.47
2:C:3324:GLU:HG2	2:C:3327:LYS:HE3	1.96	0.47
2:C:4930:GLU:OE1	2:C:4930:GLU:N	2.34	0.47
2:D:2627:TRP:O	2:D:2631:GLY:N	2.48	0.47
2:D:3249:TRP:HB3	2:D:3266:THR:HG21	1.97	0.47
2:D:3664:LEU:O	2:D:3668:ILE:HG13	2.15	0.47
2:D:4172:PHE:O	2:D:4176:VAL:HG22	2.14	0.47
2:D:4584:PHE:O	2:D:4588:ILE:HG13	2.14	0.47
2:D:4694:LEU:HD23	2:D:4694:LEU:H	1.80	0.47
2:A:412:GLU:HG3	2:A:488:LEU:HD11	1.96	0.47
2:A:808:HIS:NE2	2:A:832:LEU:HB3	2.30	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:824:GLU:HA	2:A:1020:ILE:HD12	1.97	0.47
2:A:877:HIS:CA	2:A:880:ARG:NH1	2.76	0.47
2:A:881:ILE:HG21	2:A:1062:TYR:CE1	2.49	0.47
2:A:1306:MET:HE2	2:A:1570:LEU:HB3	1.96	0.47
2:A:1788:LYS:HG3	2:A:1834:PHE:CE1	2.49	0.47
2:A:2788:ARG:HB2	2:A:2904:SER:OG	2.14	0.47
2:A:2905:ARG:HH11	2:A:2906:GLY:H	1.60	0.47
2:A:3217:GLU:O	2:A:3220:GLU:HG3	2.14	0.47
2:A:3250:TRP:CD2	2:A:3273:MET:HE1	2.50	0.47
2:A:3985:MET:HB3	2:A:3999:MET:HE1	1.95	0.47
2:A:3986:LEU:HG	2:A:3999:MET:SD	2.54	0.47
2:A:4694:LEU:HD23	2:A:4694:LEU:H	1.80	0.47
2:A:4818:TYR:CD2	2:A:4819:VAL:HG23	2.50	0.47
2:B:895:MET:HG3	2:B:896:ASN:N	2.29	0.47
2:B:993:GLU:HG2	2:B:1051:ARG:HH12	1.80	0.47
2:B:1007:TRP:NE1	4:B:5005:ATP:O1B	2.40	0.47
2:B:1175:PHE:HB2	2:B:1182:LEU:HD12	1.97	0.47
2:B:2353:ILE:HG12	2:B:2359:ARG:HE	1.80	0.47
2:B:2551:THR:O	2:B:2555:LEU:HG	2.14	0.47
2:B:2585:MET:O	2:B:2589:LEU:HG	2.15	0.47
2:B:2609:LEU:HA	2:B:2612:ASN:HD21	1.80	0.47
2:B:2641:SER:HA	2:B:2644:LEU:HD12	1.97	0.47
2:B:2681:MET:HG3	2:B:2914:THR:HG22	1.96	0.47
2:B:3316:LYS:O	2:B:3317:THR:OG1	2.28	0.47
2:B:3986:LEU:HG	2:B:3999:MET:SD	2.54	0.47
2:B:4664:ASP:OD2	2:B:4674:LYS:NZ	2.48	0.47
2:B:4725:TYR:CD1	2:B:4742:HIS:HD2	2.33	0.47
2:C:881:ILE:HG21	2:C:1062:TYR:CE1	2.49	0.47
2:C:1006:VAL:HA	2:C:1009:ARG:HH12	1.80	0.47
2:C:2641:SER:HA	2:C:2644:LEU:HD12	1.97	0.47
2:C:2768:LYS:HB3	2:C:2772:ARG:NH1	2.29	0.47
2:C:2935:GLU:O	2:C:2938:GLN:HG3	2.14	0.47
2:C:3002:GLU:CD	2:C:3049:GLY:HA2	2.39	0.47
2:C:3234:VAL:HA	2:C:3237:VAL:HG12	1.96	0.47
2:C:3664:LEU:O	2:C:3668:ILE:HG13	2.15	0.47
2:C:4157:ARG:O	2:C:4161:GLU:HG2	2.14	0.47
2:C:4818:TYR:CD2	2:C:4819:VAL:HG23	2.50	0.47
2:D:62:LEU:O	2:D:66:THR:HG23	2.15	0.47
2:D:261:HIS:CD2	2:D:263:GLU:HG3	2.49	0.47
2:D:927:GLN:HG2	2:D:928:GLU:N	2.30	0.47
2:D:1306:MET:HE2	2:D:1570:LEU:HB3	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:2594:PHE:CB	2:D:2695:MET:HE1	2.45	0.47
2:D:3054:LYS:HB3	2:D:3058:ARG:HH12	1.80	0.47
2:D:3217:GLU:O	2:D:3220:GLU:HG3	2.14	0.47
2:D:3231:MET:HE3	2:D:3234:VAL:HG22	1.96	0.47
2:D:3324:GLU:HG2	2:D:3327:LYS:HE3	1.96	0.47
2:D:4157:ARG:O	2:D:4161:GLU:HG2	2.14	0.47
2:D:4166:LYS:O	2:D:4170:ARG:HG2	2.15	0.47
2:D:4509:VAL:HG13	2:D:4575:LEU:HD22	1.97	0.47
2:A:3054:LYS:HB3	2:A:3058:ARG:HH12	1.80	0.47
2:A:4272:LYS:HD2	2:A:4273:LYS:HG2	1.95	0.47
2:B:2248:MET:HE3	2:B:2248:MET:HB2	1.71	0.47
2:B:2424:ARG:HE	2:B:2476:TYR:HA	1.80	0.47
2:B:2594:PHE:CB	2:B:2695:MET:HE1	2.45	0.47
2:B:3109:PHE:CE2	2:B:3162:PHE:HD1	2.33	0.47
2:B:4584:PHE:O	2:B:4588:ILE:HG13	2.14	0.47
2:C:2248:MET:HB2	2:C:2248:MET:HE3	1.71	0.47
2:C:2681:MET:HG3	2:C:2914:THR:HG22	1.96	0.47
2:C:2773:TRP:HB3	2:C:2774:PRO:HD3	1.96	0.47
2:C:3732:HIS:O	2:C:3776:LYS:NZ	2.47	0.47
2:C:4042:VAL:HB	2:C:4077:THR:HB	1.97	0.47
2:D:824:GLU:HA	2:D:1020:ILE:HD12	1.97	0.47
2:D:1006:VAL:HA	2:D:1009:ARG:HH12	1.80	0.47
2:D:2609:LEU:HA	2:D:2612:ASN:HD21	1.80	0.47
2:D:3154:ALA:O	2:D:3157:GLU:HG3	2.15	0.47
2:D:3778:LEU:HD13	2:D:3854:PHE:HD1	1.80	0.47
2:D:4481:TRP:HA	2:D:4484:ILE:HG12	1.97	0.47
2:D:4818:TYR:CD2	2:D:4819:VAL:HG23	2.50	0.47
1:E:9:SER:HB2	1:E:72:ARG:HB3	1.95	0.47
2:A:323:ASP:OD1	2:A:324:VAL:N	2.48	0.47
2:A:2641:SER:HA	2:A:2644:LEU:HD12	1.97	0.47
2:A:3324:GLU:OE1	2:A:3328:LYS:NZ	2.48	0.47
2:B:2174:VAL:O	2:B:2178:VAL:HG23	2.13	0.47
2:B:3231:MET:HE3	2:B:3234:VAL:HG22	1.96	0.47
2:B:4042:VAL:HB	2:B:4077:THR:HB	1.97	0.47
2:B:4818:TYR:CD2	2:B:4819:VAL:HG23	2.50	0.47
2:C:2732:TRP:O	2:C:2732:TRP:CD1	2.67	0.47
2:C:4038:ASP:HB3	2:C:4040:LYS:HZ2	1.79	0.47
2:D:562:LEU:HD11	2:D:600:LEU:HD22	1.97	0.47
2:D:1522:ALA:O	2:D:1525:LYS:HG2	2.14	0.47
2:D:2149:ILE:HD13	2:D:2167:MET:CE	2.44	0.47
2:D:2641:SER:HA	2:D:2644:LEU:HD12	1.97	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:3684:GLU:HB3	2:D:3689:MET:HE1	1.97	0.47
2:D:4664:ASP:OD2	2:D:4674:LYS:NZ	2.48	0.47
2:A:2591:ARG:NH2	2:A:2876:THR:OG1	2.45	0.47
2:A:3218:ILE:HA	2:A:3221:LEU:HG	1.95	0.47
2:A:3664:LEU:O	2:A:3668:ILE:HG13	2.15	0.47
2:A:4166:LYS:O	2:A:4170:ARG:HG2	2.15	0.47
2:B:611:LEU:HD22	2:B:1660:LEU:HD22	1.97	0.47
2:B:1788:LYS:HG3	2:B:1834:PHE:CE1	2.49	0.47
2:C:674:TYR:CE1	2:C:756:SER:HB2	2.50	0.47
2:C:895:MET:HG3	2:C:896:ASN:N	2.29	0.47
2:C:941:LYS:HA	2:C:944:LEU:HD12	1.96	0.47
2:C:952:ILE:HA	2:C:1062:TYR:HA	1.97	0.47
2:C:1269:GLU:HB2	2:C:1288:LYS:HE3	1.97	0.47
2:C:3109:PHE:CE2	2:C:3162:PHE:HD1	2.33	0.47
2:C:3159:LEU:HD13	2:C:3241:MET:SD	2.55	0.47
2:C:4584:PHE:O	2:C:4588:ILE:HG13	2.14	0.47
2:C:4725:TYR:CD1	2:C:4742:HIS:HD2	2.33	0.47
2:D:611:LEU:HD22	2:D:1660:LEU:HD22	1.97	0.47
2:A:2549:LEU:HD11	2:A:2580:LEU:HD11	1.97	0.46
2:A:2732:TRP:O	2:A:2732:TRP:CD1	2.67	0.46
2:A:3324:GLU:HG2	2:A:3327:LYS:HE3	1.96	0.46
2:B:411:GLU:OE2	2:B:485:ARG:NE	2.38	0.46
2:B:987:LYS:NZ	2:B:988:LEU:O	2.44	0.46
2:B:2773:TRP:HB3	2:B:2774:PRO:HD3	1.96	0.46
2:B:4248:LEU:HB3	2:C:4630:TRP:CH2	2.50	0.46
2:B:4272:LYS:HD2	2:B:4273:LYS:HG2	1.95	0.46
2:B:4509:VAL:HG13	2:B:4575:LEU:HD22	1.97	0.46
2:C:503:ASP:O	2:C:507:VAL:HG13	2.14	0.46
2:C:3154:ALA:O	2:C:3157:GLU:HG3	2.15	0.46
2:C:3316:LYS:O	2:C:3317:THR:OG1	2.28	0.46
2:C:4166:LYS:O	2:C:4170:ARG:HG2	2.15	0.46
2:C:4481:TRP:HA	2:C:4484:ILE:HG12	1.97	0.46
2:C:4664:ASP:OD2	2:C:4674:LYS:NZ	2.48	0.46
2:D:323:ASP:OD1	2:D:324:VAL:N	2.48	0.46
2:D:674:TYR:CE1	2:D:756:SER:HB2	2.50	0.46
2:D:808:HIS:NE2	2:D:832:LEU:HB3	2.30	0.46
2:D:1175:PHE:HB2	2:D:1182:LEU:HD12	1.97	0.46
2:D:2353:ILE:HG12	2:D:2359:ARG:HE	1.80	0.46
2:D:2681:MET:HG3	2:D:2914:THR:HG22	1.96	0.46
2:D:3250:TRP:CD2	2:D:3273:MET:HE1	2.50	0.46
2:D:3787:VAL:HG12	2:D:3864:ASN:HB3	1.96	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:15:ARG:HH11	2:A:112:THR:C	2.23	0.46
2:A:378:ASP:OD2	2:A:389:ARG:NH2	2.49	0.46
2:A:579:LEU:HD22	2:A:586:LEU:HD23	1.97	0.46
2:A:674:TYR:CE1	2:A:756:SER:HB2	2.50	0.46
2:A:2594:PHE:CB	2:A:2695:MET:HE1	2.45	0.46
2:B:15:ARG:HD3	2:B:112:THR:HA	1.98	0.46
2:B:1269:GLU:HB2	2:B:1288:LYS:HE3	1.97	0.46
2:B:3221:LEU:HD12	2:B:3283:ILE:HD11	1.98	0.46
2:C:378:ASP:OD2	2:C:389:ARG:NH2	2.49	0.46
2:C:562:LEU:HD11	2:C:600:LEU:HD22	1.97	0.46
2:C:1939:ASN:ND2	2:C:1989:PRO:HG2	2.30	0.46
2:C:2182:GLY:HA3	2:C:2185:LYS:HE2	1.98	0.46
2:C:2609:LEU:HA	2:C:2612:ASN:HD21	1.80	0.46
2:C:2975:PHE:HD2	2:C:3039:THR:HG21	1.81	0.46
2:C:3684:GLU:HB3	2:C:3689:MET:HE1	1.97	0.46
2:D:399:MET:SD	2:D:399:MET:N	2.87	0.46
2:D:2732:TRP:O	2:D:2732:TRP:CD1	2.67	0.46
2:D:2975:PHE:HD2	2:D:3039:THR:HG21	1.81	0.46
2:D:3109:PHE:CE2	2:D:3162:PHE:HD1	2.33	0.46
2:A:62:LEU:O	2:A:66:THR:HG23	2.15	0.46
2:A:2353:ILE:HG12	2:A:2359:ARG:HE	1.80	0.46
2:A:2585:MET:O	2:A:2589:LEU:HG	2.15	0.46
2:A:3221:LEU:HD12	2:A:3283:ILE:HD11	1.98	0.46
2:A:4071:GLU:OE1	2:A:4086:ARG:NH2	2.30	0.46
2:A:4481:TRP:HA	2:A:4484:ILE:HG12	1.97	0.46
2:A:4725:TYR:CD1	2:A:4742:HIS:HD2	2.33	0.46
2:A:4838:GLU:OE1	2:A:4838:GLU:N	2.36	0.46
2:B:503:ASP:O	2:B:507:VAL:HG13	2.14	0.46
2:B:824:GLU:HA	2:B:1020:ILE:HD12	1.97	0.46
2:B:1118:SER:HB3	2:B:1204:VAL:HG11	1.98	0.46
2:B:2627:TRP:O	2:B:2631:GLY:N	2.48	0.46
2:B:3234:VAL:HA	2:B:3237:VAL:HG12	1.96	0.46
2:B:3664:LEU:O	2:B:3668:ILE:HG13	2.15	0.46
2:B:3787:VAL:HG12	2:B:3864:ASN:HB3	1.96	0.46
2:C:251:GLU:HB2	2:C:256:GLN:NE2	2.30	0.46
2:C:261:HIS:CD2	2:C:263:GLU:HG3	2.49	0.46
2:C:2551:THR:O	2:C:2555:LEU:HG	2.14	0.46
2:C:3249:TRP:HB3	2:C:3266:THR:HG21	1.97	0.46
2:C:3324:GLU:OE1	2:C:3328:LYS:NZ	2.48	0.46
2:C:4509:VAL:HG13	2:C:4575:LEU:HD22	1.97	0.46
2:D:579:LEU:HD22	2:D:586:LEU:HD23	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:2585:MET:O	2:D:2589:LEU:HG	2.15	0.46
2:D:2773:TRP:HB3	2:D:2774:PRO:HD3	1.96	0.46
2:D:2833:LEU:HB2	2:D:2838[B]:HIS:NE2	2.30	0.46
2:D:2956:TYR:CD2	2:D:2960:ILE:HG12	2.50	0.46
2:D:2980:LEU:HG	2:D:2990:LEU:HB2	1.97	0.46
2:A:952:ILE:HA	2:A:1062:TYR:HA	1.97	0.46
2:A:3159:LEU:HD13	2:A:3241:MET:SD	2.55	0.46
2:B:952:ILE:HA	2:B:1062:TYR:HA	1.97	0.46
2:B:3159:LEU:HD13	2:B:3241:MET:SD	2.55	0.46
2:B:4178:ASN:HB3	2:B:4179:GLU:OE1	2.16	0.46
2:C:541:ILE:HD13	2:C:574:VAL:HG13	1.97	0.46
2:C:3217:GLU:O	2:C:3220:GLU:HG3	2.14	0.46
2:D:15:ARG:HD3	2:D:112:THR:HA	1.98	0.46
2:D:877:HIS:CA	2:D:880:ARG:NH1	2.77	0.46
2:D:1435:GLY:N	2:D:1501:ASN:OD1	2.35	0.46
2:A:251:GLU:HB2	2:A:256:GLN:NE2	2.30	0.46
2:A:611:LEU:HD22	2:A:1660:LEU:HD22	1.97	0.46
2:A:987:LYS:NZ	2:A:988:LEU:O	2.44	0.46
2:A:1782:PHE:HE2	2:A:1787:LEU:HD13	1.81	0.46
2:A:2129:LEU:HD13	2:A:2142:MET:HG3	1.98	0.46
2:A:2609:LEU:HA	2:A:2612:ASN:HD21	1.80	0.46
2:A:3109:PHE:CE2	2:A:3162:PHE:HD1	2.33	0.46
2:A:3231:MET:HE3	2:A:3234:VAL:HG22	1.96	0.46
2:A:4107:GLU:OE1	2:A:4149:TYR:OH	2.27	0.46
2:A:4664:ASP:OD2	2:A:4674:LYS:NZ	2.48	0.46
2:B:15:ARG:HH11	2:B:112:THR:C	2.23	0.46
2:B:1939:ASN:ND2	2:B:1989:PRO:HG2	2.30	0.46
2:B:2182:GLY:HA3	2:B:2185:LYS:HE2	1.97	0.46
2:B:2549:LEU:HD11	2:B:2580:LEU:HD11	1.97	0.46
2:B:3054:LYS:HB3	2:B:3058:ARG:HH12	1.80	0.46
2:B:4481:TRP:HA	2:B:4484:ILE:HG12	1.97	0.46
2:B:4650:LYS:HA	2:B:4653:VAL:HG22	1.98	0.46
2:C:412:GLU:HG3	2:C:488:LEU:HD11	1.96	0.46
2:C:907:VAL:HB	2:C:912:LYS:HZ3	1.81	0.46
2:C:1194:ASP:OD1	2:C:1195:PHE:N	2.48	0.46
2:C:2353:ILE:HG12	2:C:2359:ARG:HE	1.80	0.46
2:D:378:ASP:OD2	2:D:389:ARG:NH2	2.49	0.46
2:D:2232:PRO:C	2:D:2234:MET:H	2.24	0.46
2:D:3159:LEU:HD13	2:D:3241:MET:SD	2.55	0.46
2:A:15:ARG:HD3	2:A:112:THR:HA	1.98	0.46
2:A:993:GLU:HG2	2:A:1051:ARG:HH12	1.80	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:3684:GLU:HB3	2:A:3689:MET:HE1	1.97	0.46
2:A:3749:GLY:HA2	2:A:3796:LEU:HG	1.98	0.46
2:B:541:ILE:HD13	2:B:574:VAL:HG13	1.97	0.46
2:B:579:LEU:HD22	2:B:586:LEU:HD23	1.97	0.46
2:B:808:HIS:NE2	2:B:832:LEU:HB3	2.30	0.46
2:B:893:TRP:CD1	2:B:897:LYS:HZ1	2.33	0.46
2:B:927:GLN:HG2	2:B:928:GLU:N	2.30	0.46
2:B:2504:THR:O	2:B:2508:SER:N	2.45	0.46
2:B:3324:GLU:OE1	2:B:3328:LYS:NZ	2.48	0.46
2:C:15:ARG:HH11	2:C:112:THR:C	2.23	0.46
2:C:927:GLN:HG2	2:C:928:GLU:N	2.30	0.46
2:C:1782:PHE:HE2	2:C:1787:LEU:HD13	1.81	0.46
2:C:2129:LEU:HD13	2:C:2142:MET:HG3	1.98	0.46
2:C:3250:TRP:CD2	2:C:3273:MET:HE1	2.50	0.46
2:C:3787:VAL:HG12	2:C:3864:ASN:HB3	1.96	0.46
2:C:4587:ILE:HD13	2:C:4726:MET:HG2	1.97	0.46
2:D:81:MET:HE3	2:D:81:MET:HB3	1.84	0.46
2:D:250:GLY:HA2	2:D:257:ARG:HD3	1.98	0.46
2:D:251:GLU:HB2	2:D:256:GLN:NE2	2.30	0.46
2:D:2504:THR:O	2:D:2508:SER:N	2.45	0.46
2:D:2549:LEU:HD11	2:D:2580:LEU:HD11	1.97	0.46
2:D:3261:ALA:C	2:D:3263:MET:H	2.24	0.46
2:D:4042:VAL:HB	2:D:4077:THR:HB	1.97	0.46
2:D:4650:LYS:HA	2:D:4653:VAL:HG22	1.98	0.46
2:A:927:GLN:HG2	2:A:928:GLU:N	2.30	0.46
2:A:1006:VAL:HA	2:A:1009:ARG:HH12	1.80	0.46
2:A:2787:TRP:CD1	2:A:2904:SER:O	2.68	0.46
2:A:3778:LEU:HD13	2:A:3854:PHE:HD1	1.80	0.46
2:A:4042:VAL:HB	2:A:4077:THR:HB	1.97	0.46
2:A:4248:LEU:HB3	2:B:4630:TRP:CZ3	2.51	0.46
2:B:251:GLU:HB2	2:B:256:GLN:NE2	2.30	0.46
2:B:674:TYR:CE1	2:B:756:SER:HB2	2.50	0.46
2:B:2980:LEU:HG	2:B:2990:LEU:HB2	1.97	0.46
2:B:4166:LYS:O	2:B:4170:ARG:HG2	2.15	0.46
2:C:824:GLU:HA	2:C:1020:ILE:HD12	1.97	0.46
2:C:877:HIS:CA	2:C:880:ARG:NH1	2.76	0.46
2:C:997:ASP:OD1	2:C:1047:LYS:NZ	2.46	0.46
2:C:1118:SER:HB3	2:C:1204:VAL:HG11	1.98	0.46
2:C:4026:LEU:HD21	2:C:4052:MET:HG2	1.98	0.46
2:C:4078:LEU:HD23	2:C:4078:LEU:H	1.80	0.46
2:D:3324:GLU:OE1	2:D:3328:LYS:NZ	2.48	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:4725:TYR:CD1	2:D:4742:HIS:HD2	2.33	0.46
2:A:250:GLY:HA2	2:A:257:ARG:HD3	1.98	0.46
2:A:1118:SER:HB3	2:A:1204:VAL:HG11	1.98	0.46
2:A:2649:PHE:HZ	2:A:2967:VAL:HG22	1.80	0.46
2:B:1685:LEU:HB3	2:B:1706:LEU:HD12	1.98	0.46
2:B:2424:ARG:NH2	2:B:2476:TYR:O	2.47	0.46
2:C:15:ARG:HD3	2:C:112:THR:HA	1.98	0.46
2:C:62:LEU:O	2:C:66:THR:HG23	2.15	0.46
2:C:250:GLY:HA2	2:C:257:ARG:HD3	1.98	0.46
2:C:611:LEU:HD22	2:C:1660:LEU:HD22	1.97	0.46
2:C:2627:TRP:O	2:C:2631:GLY:N	2.48	0.46
2:C:2956:TYR:CD2	2:C:2960:ILE:HG12	2.50	0.46
2:C:3778:LEU:HD13	2:C:3854:PHE:HD1	1.80	0.46
2:D:1782:PHE:HE2	2:D:1787:LEU:HD13	1.81	0.46
2:D:2182:GLY:HA3	2:D:2185:LYS:HE2	1.98	0.46
2:D:3221:LEU:HD12	2:D:3283:ILE:HD11	1.97	0.46
2:D:4587:ILE:HD13	2:D:4726:MET:HG2	1.96	0.46
2:A:1269:GLU:HB2	2:A:1288:LYS:HE3	1.97	0.46
2:A:2833:LEU:HD23	2:A:2897:GLN:NE2	2.31	0.46
2:A:3122:ILE:HG21	2:A:3167:PRO:HG3	1.98	0.46
2:A:4178:ASN:HB3	2:A:4179:GLU:OE1	2.16	0.46
2:A:4650:LYS:HA	2:A:4653:VAL:HG22	1.98	0.46
2:B:323:ASP:OD1	2:B:324:VAL:N	2.48	0.46
2:B:378:ASP:OD2	2:B:389:ARG:NH2	2.49	0.46
2:B:2601:GLU:HA	2:B:2604:LYS:HZ1	1.81	0.46
2:B:2728:SER:HA	2:B:2731:LYS:HE3	1.98	0.46
2:B:2956:TYR:CD2	2:B:2960:ILE:HG12	2.50	0.46
2:B:3054:LYS:HB3	2:B:3058:ARG:NH1	2.31	0.46
2:B:3627:SER:HB2	2:B:3628:TRP:HD1	1.81	0.46
2:C:2666:LEU:HD13	2:C:2966:VAL:HA	1.97	0.46
2:C:4178:ASN:HB3	2:C:4179:GLU:OE1	2.16	0.46
2:C:4694:LEU:HD23	2:C:4694:LEU:H	1.79	0.46
2:D:412:GLU:HG3	2:D:488:LEU:HD11	1.96	0.46
2:D:993:GLU:HG2	2:D:1051:ARG:HH12	1.80	0.46
2:D:1939:ASN:ND2	2:D:1989:PRO:HG2	2.30	0.46
2:D:3234:VAL:HA	2:D:3237:VAL:HG12	1.96	0.46
2:A:2824:ARG:HH22	2:B:1502:ASN:ND2	2.13	0.46
2:A:2956:TYR:CD2	2:A:2960:ILE:HG12	2.50	0.46
2:A:3054:LYS:HB3	2:A:3058:ARG:NH1	2.31	0.46
2:B:399:MET:SD	2:B:399:MET:N	2.86	0.46
2:B:562:LEU:HD11	2:B:600:LEU:HD22	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:934:GLN:O	2:B:938:GLU:OE1	2.34	0.46
2:B:2129:LEU:HD13	2:B:2142:MET:HG3	1.98	0.46
2:B:2720:PHE:HB2	2:B:2901:TYR:CE2	2.51	0.46
2:B:2975:PHE:HD2	2:B:3039:THR:HG21	1.81	0.46
2:C:1685:LEU:HB3	2:C:1706:LEU:HD12	1.98	0.46
2:C:2649:PHE:HZ	2:C:2967:VAL:HG22	1.80	0.46
2:C:3627:SER:HB2	2:C:3628:TRP:HD1	1.81	0.46
2:C:4492:LEU:HD22	2:C:4592:CYS:SG	2.56	0.46
2:C:4818:TYR:O	2:C:4819:VAL:HB	2.16	0.46
2:D:1194:ASP:OD1	2:D:1195:PHE:N	2.48	0.46
2:D:3183:ILE:HG23	2:D:3184:TYR:CD1	2.51	0.46
2:A:1194:ASP:OD1	2:A:1195:PHE:N	2.48	0.45
2:A:2285:TYR:HA	2:A:2362:PRO:HA	1.98	0.45
2:A:2599:LEU:HB2	2:A:2655:LYS:HZ1	1.81	0.45
2:A:2980:LEU:HG	2:A:2990:LEU:HB2	1.97	0.45
2:A:3183:ILE:HG23	2:A:3184:TYR:CD1	2.51	0.45
2:A:4078:LEU:HD23	2:A:4078:LEU:H	1.81	0.45
2:A:4631:ASP:OD1	2:A:4708:TRP:NE1	2.45	0.45
2:B:2126:ILE:HD11	2:B:2145:GLY:HA3	1.98	0.45
2:B:2232:PRO:C	2:B:2234:MET:H	2.24	0.45
2:B:3183:ILE:HG23	2:B:3184:TYR:CD1	2.51	0.45
2:B:3326:LEU:HD21	2:B:3336:GLU:HB3	1.98	0.45
2:B:3749:GLY:HA2	2:B:3796:LEU:HG	1.98	0.45
2:C:514:PHE:CD2	2:C:526:TRP:HB2	2.51	0.45
2:C:629:GLN:OE1	2:C:1669:ASN:ND2	2.49	0.45
2:C:2232:PRO:C	2:C:2234:MET:H	2.24	0.45
2:C:2397:ASP:O	2:C:2401:ARG:HG3	2.17	0.45
2:D:2580:LEU:HD23	2:D:2581:ARG:O	2.16	0.45
2:D:3226:ILE:HD11	2:D:3235:MET:HB3	1.97	0.45
2:D:3749:GLY:HA2	2:D:3796:LEU:HG	1.98	0.45
2:A:541:ILE:HD13	2:A:574:VAL:HG13	1.98	0.45
2:A:934:GLN:O	2:A:938:GLU:OE1	2.34	0.45
2:A:1497:GLY:HA3	2:D:2801:TYR:OH	2.16	0.45
2:A:2182:GLY:HA3	2:A:2185:LYS:HE2	1.98	0.45
2:A:2232:PRO:C	2:A:2234:MET:H	2.24	0.45
2:A:2397:ASP:O	2:A:2401:ARG:HG3	2.16	0.45
2:A:2975:PHE:HD2	2:A:3039:THR:HG21	1.81	0.45
2:A:3170:PHE:HD2	2:A:3208:ILE:HG12	1.81	0.45
2:A:3226:ILE:HD11	2:A:3235:MET:HB3	1.97	0.45
2:B:250:GLY:HA2	2:B:257:ARG:HD3	1.98	0.45
2:B:2841:ALA:CA	2:B:2844:MET:HG2	2.41	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:4026:LEU:HD21	2:B:4052:MET:HG2	1.98	0.45
2:C:480:ARG:HE	2:C:3678:GLU:HG2	1.79	0.45
2:C:3054:LYS:HB3	2:C:3058:ARG:HH12	1.80	0.45
2:C:3072:MET:HB3	2:C:3076:LYS:HZ2	1.81	0.45
2:C:3226:ILE:HD11	2:C:3235:MET:HB3	1.97	0.45
2:D:1269:GLU:HB2	2:D:1288:LYS:HE3	1.97	0.45
2:D:1554:GLN:NE2	2:D:1556:GLU:OE2	2.35	0.45
2:D:2409:ILE:HD12	2:D:2420:ARG:HE	1.81	0.45
2:A:3975:GLN:O	2:A:3979:VAL:HG23	2.17	0.45
2:A:4579:HIS:HE2	2:A:4725:TYR:HH	1.57	0.45
2:A:4818:TYR:O	2:A:4819:VAL:HB	2.16	0.45
2:A:4930:GLU:OE1	2:A:4930:GLU:N	2.34	0.45
2:B:630:HIS:CE1	2:B:1671:ARG:HE	2.35	0.45
2:B:1782:PHE:HE2	2:B:1787:LEU:HD13	1.81	0.45
2:B:2652:LEU:HB3	2:B:2962:PHE:CE1	2.52	0.45
2:B:3134:LEU:HB2	2:B:3162:PHE:CE2	2.52	0.45
2:C:479:LEU:O	2:C:483:LYS:HG2	2.17	0.45
2:C:993:GLU:HG2	2:C:1051:ARG:HH12	1.80	0.45
2:C:2418:ARG:HD3	2:D:189:GLU:CD	2.41	0.45
2:C:3183:ILE:HG23	2:C:3184:TYR:CD1	2.51	0.45
2:C:3261:ALA:C	2:C:3263:MET:H	2.24	0.45
2:C:3326:LEU:HD21	2:C:3336:GLU:HB3	1.98	0.45
2:D:629:GLN:OE1	2:D:1669:ASN:ND2	2.49	0.45
2:D:2129:LEU:HD13	2:D:2142:MET:HG3	1.98	0.45
2:D:2424:ARG:HE	2:D:2476:TYR:HA	1.80	0.45
2:D:3054:LYS:HB3	2:D:3058:ARG:NH1	2.31	0.45
2:D:3627:SER:HB2	2:D:3628:TRP:HD1	1.81	0.45
2:D:4078:LEU:HD23	2:D:4078:LEU:H	1.81	0.45
2:D:4492:LEU:HD22	2:D:4592:CYS:SG	2.56	0.45
2:D:4818:TYR:O	2:D:4819:VAL:HB	2.16	0.45
2:D:4838:GLU:OE1	2:D:4838:GLU:N	2.36	0.45
2:D:4840:GLU:OE2	2:D:4844:ILE:HD11	2.17	0.45
2:A:562:LEU:HD11	2:A:600:LEU:HD22	1.97	0.45
2:A:629:GLN:OE1	2:A:1669:ASN:ND2	2.49	0.45
2:A:889:ILE:HA	2:A:892:LEU:HD12	1.98	0.45
2:A:2580:LEU:HD23	2:A:2581:ARG:O	2.16	0.45
2:A:3134:LEU:HB2	2:A:3162:PHE:CE2	2.52	0.45
2:A:3627:SER:HB2	2:A:3628:TRP:HD1	1.81	0.45
2:A:4818:TYR:CD1	2:A:4822:ARG:HD3	2.52	0.45
2:B:1194:ASP:OD1	2:B:1195:PHE:N	2.48	0.45
2:B:1481:LYS:HB3	2:B:1481:LYS:HE3	1.81	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3122:ILE:HG21	2:B:3167:PRO:HG3	1.98	0.45
2:B:3332:THR:OG1	2:B:3336:GLU:OE2	2.34	0.45
2:C:934:GLN:O	2:C:938:GLU:OE1	2.34	0.45
2:C:1921:ARG:O	2:C:1925:ILE:HG13	2.17	0.45
2:C:3221:LEU:HD12	2:C:3283:ILE:HD11	1.98	0.45
2:C:3281:LEU:HA	2:C:3284:ILE:HG12	1.98	0.45
2:C:3303:SER:O	2:C:3307:ILE:HG12	2.17	0.45
2:C:3808:PHE:HB2	2:C:3829:VAL:HG21	1.99	0.45
2:D:479:LEU:O	2:D:483:LYS:HG2	2.17	0.45
2:D:1921:ARG:O	2:D:1925:ILE:HG13	2.17	0.45
2:D:2285:TYR:HA	2:D:2362:PRO:HA	1.98	0.45
2:D:3281:LEU:HA	2:D:3284:ILE:HG12	1.98	0.45
2:A:399:MET:SD	2:A:399:MET:N	2.87	0.45
2:A:2126:ILE:HD11	2:A:2145:GLY:HA3	1.98	0.45
2:A:3281:LEU:HA	2:A:3284:ILE:HG12	1.98	0.45
2:A:3303:SER:O	2:A:3307:ILE:HG12	2.17	0.45
2:B:629:GLN:OE1	2:B:1669:ASN:ND2	2.49	0.45
2:B:2409:ILE:HD12	2:B:2420:ARG:HE	1.81	0.45
2:B:4818:TYR:CD1	2:B:4822:ARG:HD3	2.52	0.45
2:C:2126:ILE:HD11	2:C:2145:GLY:HA3	1.98	0.45
2:C:3170:PHE:HD2	2:C:3208:ILE:HG12	1.81	0.45
2:C:3599:VAL:O	2:C:3603:PHE:HD2	2.00	0.45
2:C:4252:ILE:HD13	2:D:4710:LEU:HB2	1.98	0.45
2:C:4650:LYS:HA	2:C:4653:VAL:HG22	1.98	0.45
2:C:4818:TYR:CD1	2:C:4822:ARG:HD3	2.52	0.45
2:D:872:ILE:C	2:D:941:LYS:HZ2	2.25	0.45
2:D:952:ILE:HA	2:D:1062:TYR:HA	1.97	0.45
2:D:2649:PHE:HZ	2:D:2967:VAL:HG22	1.80	0.45
2:D:2999:LYS:HZ1	2:D:3003:MET:HB3	1.82	0.45
1:E:50:ARG:HH21	1:E:53:LYS:HZ2	1.64	0.45
2:A:479:LEU:O	2:A:483:LYS:HG2	2.17	0.45
2:A:2424:ARG:NH2	2:A:2476:TYR:O	2.47	0.45
2:A:3808:PHE:HB2	2:A:3829:VAL:HG21	1.99	0.45
2:A:4654:MET:HE1	2:A:4667:SER:HB2	1.99	0.45
2:B:895:MET:O	2:B:899:GLU:N	2.44	0.45
2:B:1921:ARG:O	2:B:1925:ILE:HG13	2.17	0.45
2:B:2285:TYR:HA	2:B:2362:PRO:HA	1.98	0.45
2:B:2580:LEU:HD23	2:B:2581:ARG:O	2.17	0.45
2:B:2701:PHE:HZ	2:B:2853:ALA:HB1	1.82	0.45
2:B:3075:LEU:HD21	2:B:3094:ILE:HD12	1.99	0.45
2:B:3303:SER:O	2:B:3307:ILE:HG12	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3975:GLN:O	2:B:3979:VAL:HG23	2.17	0.45
2:B:4728:MET:HE2	2:B:4741:ALA:HB3	1.99	0.45
2:C:579:LEU:HD22	2:C:586:LEU:HD23	1.97	0.45
2:C:889:ILE:HA	2:C:892:LEU:HD12	1.98	0.45
2:C:2285:TYR:HA	2:C:2362:PRO:HA	1.98	0.45
2:C:3975:GLN:O	2:C:3979:VAL:HG23	2.17	0.45
2:D:3134:LEU:HB2	2:D:3162:PHE:CE2	2.52	0.45
2:D:3137:LEU:HD21	2:D:3159:LEU:HA	1.99	0.45
2:A:630:HIS:CE1	2:A:1671:ARG:HE	2.35	0.45
2:A:904:TYR:HA	2:A:915:HIS:O	2.17	0.45
2:A:2701:PHE:HZ	2:A:2853:ALA:HB1	1.82	0.45
2:A:4822:ARG:HB3	2:B:4851:PHE:CD2	2.52	0.45
2:B:3808:PHE:HB2	2:B:3829:VAL:HG21	1.99	0.45
2:C:2652:LEU:HB3	2:C:2962:PHE:CE1	2.52	0.45
2:C:3749:GLY:HA2	2:C:3796:LEU:HG	1.98	0.45
2:D:2126:ILE:HD11	2:D:2145:GLY:HA3	1.98	0.45
2:D:2455:ASP:OD2	2:D:2457:SER:OG	2.32	0.45
2:D:2666:LEU:HD13	2:D:2966:VAL:HA	1.98	0.45
2:D:2701:PHE:HZ	2:D:2853:ALA:HB1	1.82	0.45
2:D:3122:ILE:HG21	2:D:3167:PRO:HG3	1.98	0.45
2:D:3808:PHE:HB2	2:D:3829:VAL:HG21	1.99	0.45
2:A:1921:ARG:O	2:A:1925:ILE:HG13	2.17	0.45
2:A:2659:GLN:C	2:A:2663:LYS:HZ2	2.25	0.45
2:A:2765:GLU:O	2:A:2769:GLU:N	2.49	0.45
2:B:932:ASN:HA	2:B:935:MET:CG	2.41	0.45
2:B:2666:LEU:HD13	2:B:2966:VAL:HA	1.98	0.45
2:B:3170:PHE:HD2	2:B:3208:ILE:HG12	1.81	0.45
2:B:3226:ILE:HD11	2:B:3235:MET:HB3	1.97	0.45
2:B:4631:ASP:OD1	2:B:4708:TRP:NE1	2.45	0.45
2:B:4818:TYR:O	2:B:4819:VAL:HB	2.16	0.45
2:C:630:HIS:CE1	2:C:1671:ARG:HE	2.34	0.45
2:C:2701:PHE:HZ	2:C:2853:ALA:HB1	1.82	0.45
2:C:2980:LEU:HG	2:C:2990:LEU:HB2	1.97	0.45
2:C:3054:LYS:HB3	2:C:3058:ARG:NH1	2.31	0.45
2:C:3137:LEU:HD21	2:C:3159:LEU:HA	1.99	0.45
2:C:3205:CYS:O	2:C:3208:ILE:HG22	2.17	0.45
2:C:4840:GLU:OE2	2:C:4844:ILE:HD11	2.17	0.45
2:D:15:ARG:HH11	2:D:112:THR:C	2.23	0.45
2:D:541:ILE:HD13	2:D:574:VAL:HG13	1.97	0.45
2:D:762:SER:OG	2:D:763:ALA:N	2.50	0.45
2:D:2186:GLU:CD	2:D:2187:ILE:H	2.25	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:3170:PHE:HD2	2:D:3208:ILE:HG12	1.81	0.45
1:G:24:VAL:HG12	1:G:105:LEU:HD12	1.99	0.45
2:A:877:HIS:O	2:A:881:ILE:HG12	2.17	0.45
2:A:2743:TYR:CD1	2:A:2757:MET:HB3	2.52	0.45
2:A:2833:LEU:HB2	2:A:2838[A]:HIS:HE2	1.82	0.45
2:A:3326:LEU:HD21	2:A:3336:GLU:HB3	1.98	0.45
2:A:4492:LEU:HD22	2:A:4592:CYS:SG	2.56	0.45
2:A:4840:GLU:OE2	2:A:4844:ILE:HD11	2.17	0.45
2:B:872:ILE:C	2:B:941:LYS:HZ2	2.24	0.45
2:B:2295:GLY:HA3	2:B:2391:PHE:CE2	2.52	0.45
2:B:2431:ASP:O	2:B:2435:VAL:HG23	2.17	0.45
2:B:3281:LEU:HA	2:B:3284:ILE:HG12	1.98	0.45
2:B:4866:ILE:HD12	2:C:4857:ILE:HD11	1.98	0.45
2:C:2424:ARG:HE	2:C:2476:TYR:HA	1.80	0.45
2:C:2424:ARG:NH2	2:C:2476:TYR:O	2.47	0.45
2:C:2426:LEU:CD1	2:D:143:LEU:HD11	2.46	0.45
2:C:2431:ASP:O	2:C:2435:VAL:HG23	2.17	0.45
2:C:2580:LEU:HD23	2:C:2581:ARG:O	2.17	0.45
2:C:3129:SER:O	2:C:3133:ILE:HG13	2.17	0.45
2:D:877:HIS:O	2:D:881:ILE:HG12	2.17	0.45
2:D:1685:LEU:HB3	2:D:1706:LEU:HD12	1.98	0.45
2:D:2652:LEU:HB3	2:D:2962:PHE:CE1	2.52	0.45
2:D:2937:HIS:O	2:D:2940:ILE:HG22	2.17	0.45
2:D:3599:VAL:O	2:D:3603:PHE:HD2	2.00	0.45
2:D:3892:TYR:HD2	2:D:3906:PHE:HE2	1.64	0.45
1:E:24:VAL:HG12	1:E:105:LEU:HD12	1.98	0.45
1:E:50:ARG:HH21	1:E:53:LYS:NZ	2.15	0.45
2:A:335:LYS:HE3	2:A:371:TRP:CG	2.52	0.45
2:A:2431:ASP:O	2:A:2435:VAL:HG23	2.17	0.45
2:A:2827:ASP:OD2	2:B:1434:PRO:HB2	2.17	0.45
2:A:3261:ALA:C	2:A:3263:MET:H	2.24	0.45
2:A:3732:HIS:O	2:A:3776:LYS:NZ	2.47	0.45
2:A:4026:LEU:HD21	2:A:4052:MET:HG2	1.98	0.45
2:B:1006:VAL:HA	2:B:1009:ARG:HH12	1.80	0.45
2:B:2456:MET:HE2	2:B:2456:MET:HB3	1.66	0.45
2:B:3137:LEU:HD21	2:B:3159:LEU:HA	1.99	0.45
2:B:4488:GLN:HA	2:B:4491:LEU:HD23	1.99	0.45
2:C:515:ALA:HB2	2:C:523:GLY:HA3	1.99	0.45
2:C:872:ILE:C	2:C:941:LYS:HZ2	2.24	0.45
2:D:3205:CYS:O	2:D:3208:ILE:HG22	2.17	0.45
2:D:4516:ILE:HG21	2:D:4572:LEU:HB2	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:24:VAL:HG12	1:F:105:LEU:HD12	1.99	0.44
2:A:2652:LEU:HB3	2:A:2962:PHE:CE1	2.52	0.44
2:A:2728:SER:HA	2:A:2731:LYS:HE3	1.98	0.44
2:A:3713:SER:OG	2:A:3715:GLU:OE1	2.33	0.44
2:B:479:LEU:O	2:B:483:LYS:HG2	2.17	0.44
2:B:514:PHE:CD2	2:B:526:TRP:HB2	2.51	0.44
2:B:521:GLU:OE1	2:B:521:GLU:N	2.35	0.44
2:B:2603:ALA:C	2:B:2606:PRO:HD2	2.43	0.44
2:B:2649:PHE:HZ	2:B:2967:VAL:HG22	1.80	0.44
2:B:3261:ALA:C	2:B:3263:MET:H	2.24	0.44
2:B:4078:LEU:HD23	2:B:4078:LEU:H	1.81	0.44
2:B:4654:MET:HE1	2:B:4667:SER:HB2	1.99	0.44
2:C:762:SER:OG	2:C:763:ALA:N	2.50	0.44
2:C:2295:GLY:HA3	2:C:2391:PHE:CE2	2.52	0.44
2:C:2409:ILE:HD12	2:C:2420:ARG:HE	1.81	0.44
2:C:2610:LEU:HA	2:C:2613:HIS:HE1	1.80	0.44
2:C:4728:MET:HE2	2:C:4741:ALA:HB3	1.99	0.44
2:D:514:PHE:CD2	2:D:526:TRP:HB2	2.51	0.44
2:D:934:GLN:O	2:D:938:GLU:OE1	2.34	0.44
2:D:1118:SER:HB3	2:D:1204:VAL:HG11	1.98	0.44
2:D:2456:MET:HE2	2:D:2456:MET:HB3	1.66	0.44
2:D:2720:PHE:HB2	2:D:2901:TYR:CE2	2.51	0.44
2:D:2723:LYS:HB3	2:D:2723:LYS:HE2	1.83	0.44
2:D:3228:TYR:O	2:D:3232:PRO:HB3	2.17	0.44
2:D:3975:GLN:O	2:D:3979:VAL:HG23	2.17	0.44
2:D:4818:TYR:CD1	2:D:4822:ARG:HD3	2.52	0.44
2:A:855:VAL:HG23	2:A:1078:CYS:HB3	1.99	0.44
2:A:1415:ASP:OD2	2:A:1559:ARG:NH2	2.35	0.44
2:A:2186:GLU:CD	2:A:2187:ILE:H	2.25	0.44
2:A:2937:HIS:O	2:A:2940:ILE:HG22	2.17	0.44
2:A:3205:CYS:O	2:A:3208:ILE:HG22	2.17	0.44
2:A:3892:TYR:HD2	2:A:3906:PHE:HE2	1.64	0.44
2:A:4660:PHE:HA	2:D:4056:LYS:HZ2	1.83	0.44
2:B:904:TYR:HA	2:B:915:HIS:O	2.17	0.44
2:B:2610:LEU:HA	2:B:2613:HIS:HE1	1.80	0.44
2:B:3129:SER:O	2:B:3133:ILE:HG13	2.17	0.44
2:B:4679:PHE:HD1	2:B:4682:ALA:HB3	1.82	0.44
2:C:2728:SER:HA	2:C:2731:LYS:HE3	1.98	0.44
2:C:3228:TYR:O	2:C:3232:PRO:HB3	2.17	0.44
2:D:889:ILE:HA	2:D:892:LEU:HD12	1.98	0.44
2:D:904:TYR:HA	2:D:915:HIS:O	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:2082:ARG:HG3	2:D:3687:LEU:HD22	1.99	0.44
2:D:3303:SER:O	2:D:3307:ILE:HG12	2.17	0.44
2:D:3833:ASP:OD2	2:D:3908:LYS:HB3	2.18	0.44
2:D:4178:ASN:HB3	2:D:4179:GLU:OE1	2.16	0.44
2:D:4238:ILE:HG22	2:D:4242:ARG:HE	1.83	0.44
1:E:23:CYS:SG	1:E:51:ILE:HD11	2.58	0.44
1:H:23:CYS:SG	1:H:51:ILE:HD11	2.58	0.44
2:A:515:ALA:HB2	2:A:523:GLY:HA3	1.99	0.44
2:A:932:ASN:HA	2:A:935:MET:CG	2.41	0.44
2:A:2409:ILE:HD12	2:A:2420:ARG:HE	1.81	0.44
2:A:2603:ALA:C	2:A:2606:PRO:HD2	2.43	0.44
2:A:2824:ARG:NH2	2:B:1502:ASN:ND2	2.66	0.44
2:A:3027:THR:O	2:A:3030:VAL:HG22	2.18	0.44
2:A:4728:MET:HE2	2:A:4741:ALA:HB3	1.99	0.44
2:B:515:ALA:HB2	2:B:523:GLY:HA3	1.99	0.44
2:B:877:HIS:O	2:B:881:ILE:HG12	2.17	0.44
2:B:988:LEU:HD23	2:B:1051:ARG:HH12	1.82	0.44
2:B:2397:ASP:O	2:B:2401:ARG:HG3	2.17	0.44
2:B:2937:HIS:O	2:B:2940:ILE:HG22	2.17	0.44
2:B:3228:TYR:O	2:B:3232:PRO:HB3	2.17	0.44
2:B:3239:LEU:HD12	2:B:3295:TRP:HH2	1.82	0.44
2:B:4492:LEU:HD22	2:B:4592:CYS:SG	2.56	0.44
2:C:2720:PHE:HB2	2:C:2901:TYR:CE2	2.51	0.44
2:C:4679:PHE:HD1	2:C:4682:ALA:HB3	1.82	0.44
2:D:335:LYS:HE3	2:D:371:TRP:CG	2.52	0.44
2:D:630:HIS:CE1	2:D:1671:ARG:HE	2.35	0.44
2:D:1426:TYR:CD1	2:D:1564:MET:HB3	2.52	0.44
2:D:4726:MET:HA	2:D:4726:MET:CE	2.48	0.44
2:A:762:SER:OG	2:A:763:ALA:N	2.50	0.44
2:A:2666:LEU:HD13	2:A:2966:VAL:HA	1.98	0.44
2:A:2720:PHE:HB2	2:A:2901:TYR:CE2	2.51	0.44
2:A:3075:LEU:HD21	2:A:3094:ILE:HD12	1.99	0.44
2:A:3137:LEU:HD21	2:A:3159:LEU:HA	1.99	0.44
2:A:3239:LEU:HD12	2:A:3295:TRP:HH2	1.82	0.44
2:A:4739:PHE:HA	2:A:4742:HIS:ND1	2.33	0.44
2:B:889:ILE:HA	2:B:892:LEU:HD12	1.98	0.44
2:B:3027:THR:O	2:B:3030:VAL:HG22	2.18	0.44
2:B:3074:ASN:HA	2:B:3077:GLN:HG3	1.99	0.44
2:B:3728:GLN:O	2:B:3732:HIS:ND1	2.40	0.44
2:C:877:HIS:HA	2:C:880:ARG:HH11	1.80	0.44
2:C:904:TYR:HA	2:C:915:HIS:O	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:2743:TYR:CD1	2:C:2757:MET:HB3	2.53	0.44
2:C:3134:LEU:HB2	2:C:3162:PHE:CE2	2.52	0.44
2:C:3892:TYR:HD2	2:C:3906:PHE:HE2	1.64	0.44
2:C:4516:ILE:HG21	2:C:4572:LEU:HB2	1.99	0.44
2:D:2582:PRO:O	2:D:2585:MET:HG2	2.18	0.44
2:D:2768:LYS:HB3	2:D:2772:ARG:CZ	2.47	0.44
2:A:1225:LYS:HB2	2:A:1225:LYS:HE2	1.84	0.44
2:A:1685:LEU:HB3	2:A:1706:LEU:HD12	1.98	0.44
2:A:2582:PRO:O	2:A:2585:MET:HG2	2.18	0.44
2:A:2791:ARG:HD2	2:A:2901:TYR:HE1	1.83	0.44
2:B:335:LYS:HE3	2:B:371:TRP:CG	2.52	0.44
2:B:896:ASN:HA	2:B:899:GLU:HG2	1.99	0.44
2:B:2705:PRO:HD3	2:B:2854:LYS:HG3	2.00	0.44
2:B:3205:CYS:O	2:B:3208:ILE:HG22	2.17	0.44
2:C:335:LYS:HE3	2:C:371:TRP:CG	2.52	0.44
2:C:877:HIS:O	2:C:881:ILE:HG12	2.17	0.44
2:C:988:LEU:HD23	2:C:1051:ARG:HH12	1.82	0.44
2:C:1113:MET:HE2	2:C:1211:GLN:HB3	2.00	0.44
2:C:3239:LEU:HD12	2:C:3295:TRP:HH2	1.82	0.44
2:D:3074:ASN:HA	2:D:3077:GLN:HG3	1.99	0.44
2:D:3075:LEU:HD21	2:D:3094:ILE:HD12	1.99	0.44
2:D:3273:MET:HE2	2:D:3273:MET:HB3	1.81	0.44
2:D:4026:LEU:HD21	2:D:4052:MET:HG2	1.98	0.44
2:D:4728:MET:HE2	2:D:4741:ALA:HB3	1.99	0.44
1:F:50:ARG:HH21	1:F:53:LYS:NZ	2.15	0.44
2:A:271:ALA:HB2	2:A:488:LEU:HD22	1.99	0.44
2:A:1426:TYR:CD1	2:A:1564:MET:HB3	2.52	0.44
2:A:2062:ILE:HA	2:A:2065:THR:HG22	2.00	0.44
2:A:2926:LEU:CD1	2:A:2929:LEU:HD23	2.48	0.44
2:A:3129:SER:O	2:A:3133:ILE:HG13	2.17	0.44
2:A:4814:MET:HE2	2:B:4841:ILE:CD1	2.45	0.44
2:B:1077:VAL:HG13	2:B:1077:VAL:O	2.18	0.44
2:B:1426:TYR:CD1	2:B:1564:MET:HB3	2.52	0.44
2:B:2062:ILE:HA	2:B:2065:THR:HG22	2.00	0.44
2:B:2841:ALA:CB	2:B:2886:ARG:HH22	2.30	0.44
2:B:3833:ASP:OD2	2:B:3908:LYS:HB3	2.18	0.44
2:B:4726:MET:HA	2:B:4726:MET:CE	2.48	0.44
2:C:1086:ARG:HH21	2:C:1251:LEU:CD1	2.24	0.44
2:C:2062:ILE:HA	2:C:2065:THR:HG22	2.00	0.44
2:C:2582:PRO:O	2:C:2585:MET:HG2	2.18	0.44
2:C:2926:LEU:HB3	2:C:3003:MET:CE	2.48	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:3122:ILE:HG21	2:C:3167:PRO:HG3	1.98	0.44
2:C:3650:GLU:HB2	2:C:3651:PRO:HD3	2.00	0.44
2:C:4011:GLU:HG2	2:C:4121:LEU:HD13	2.00	0.44
2:C:4044:SER:HA	2:C:4076:GLU:O	2.18	0.44
2:C:4726:MET:CE	2:C:4726:MET:HA	2.48	0.44
2:D:1745:LYS:HA	2:D:1745:LYS:HD2	1.78	0.44
2:D:2062:ILE:HA	2:D:2065:THR:HG22	2.00	0.44
2:D:2397:ASP:O	2:D:2401:ARG:HG3	2.16	0.44
2:D:2603:ALA:C	2:D:2606:PRO:HD2	2.43	0.44
2:D:3892:TYR:CD2	2:D:3906:PHE:HE2	2.35	0.44
2:D:4011:GLU:HG2	2:D:4121:LEU:HD13	2.00	0.44
2:D:4306:PHE:HD1	2:D:4309:ILE:HD11	1.82	0.44
2:D:4488:GLN:HA	2:D:4491:LEU:HD23	1.99	0.44
1:H:24:VAL:HG12	1:H:105:LEU:HD12	1.99	0.44
1:H:35:LYS:HA	2:D:647:ARG:HH22	1.82	0.44
2:A:893:TRP:CD1	2:A:897:LYS:HZ1	2.35	0.44
2:A:3599:VAL:O	2:A:3603:PHE:HD2	2.00	0.44
2:A:4044:SER:HA	2:A:4076:GLU:O	2.18	0.44
2:B:1113:MET:HE2	2:B:1211:GLN:HB3	2.00	0.44
2:B:2732:TRP:O	2:B:2732:TRP:CD1	2.67	0.44
2:B:2926:LEU:HB3	2:B:3003:MET:CE	2.48	0.44
2:B:3892:TYR:HD2	2:B:3906:PHE:HE2	1.64	0.44
2:B:4630:TRP:CZ2	2:B:4711:GLY:HA3	2.53	0.44
2:C:866:PRO:HB3	2:C:1009:ARG:NH1	2.33	0.44
2:C:893:TRP:HD1	2:C:897:LYS:HZ1	1.65	0.44
2:C:2263:GLU:O	2:C:2267:ARG:HG3	2.18	0.44
2:C:2641:SER:HB2	2:C:2676:LEU:HD21	2.00	0.44
2:C:2705:PRO:HD3	2:C:2854:LYS:HG3	2.00	0.44
2:C:2791:ARG:HD2	2:C:2901:TYR:HE1	1.83	0.44
2:C:3224:SER:OG	2:C:3226:ILE:HG23	2.18	0.44
2:C:4488:GLN:HA	2:C:4491:LEU:HD23	2.00	0.44
2:D:504:ARG:O	2:D:507:VAL:HG22	2.18	0.44
2:D:997:ASP:OD1	2:D:1047:LYS:NZ	2.46	0.44
2:D:1106:GLU:HG2	2:D:1161:VAL:HG22	2.00	0.44
2:D:2659:GLN:C	2:D:2663:LYS:HZ2	2.25	0.44
2:D:2743:TYR:CD1	2:D:2757:MET:HB3	2.52	0.44
2:D:3042:ALA:O	2:D:3046:MET:HG2	2.18	0.44
2:D:3326:LEU:HD21	2:D:3336:GLU:HB3	1.98	0.44
2:D:4081:GLU:O	2:D:4085:LYS:HG2	2.17	0.44
2:D:4085:LYS:HA	2:D:4089:GLU:OE1	2.18	0.44
2:D:4602:ARG:NH1	2:D:4712:VAL:HG13	2.33	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:3228:TYR:O	2:A:3232:PRO:HB3	2.17	0.44
2:A:4246:PHE:O	2:A:4246:PHE:HD1	2.01	0.44
2:A:4516:ILE:HG21	2:A:4572:LEU:HB2	1.99	0.44
2:A:4602:ARG:NH1	2:A:4712:VAL:HG13	2.33	0.44
2:A:4814:MET:CE	2:B:4841:ILE:HD13	2.45	0.44
2:B:855:VAL:HG23	2:B:1078:CYS:HB3	1.99	0.44
2:B:2791:ARG:HD2	2:B:2901:TYR:HE1	1.83	0.44
2:B:3224:SER:OG	2:B:3226:ILE:HG23	2.18	0.44
2:B:4011:GLU:HG2	2:B:4121:LEU:CD1	2.48	0.44
2:B:4246:PHE:HD1	2:B:4246:PHE:O	2.01	0.44
2:B:4306:PHE:HD1	2:B:4309:ILE:HD11	1.82	0.44
2:B:4516:ILE:HG21	2:B:4572:LEU:HB2	1.99	0.44
2:C:365:HIS:HB2	2:C:393:MET:HE2	2.00	0.44
2:C:1106:GLU:HG2	2:C:1161:VAL:HG22	2.00	0.44
2:C:2768:LYS:HB3	2:C:2772:ARG:CZ	2.48	0.44
2:C:4630:TRP:CZ2	2:C:4711:GLY:HA3	2.53	0.44
2:D:2926:LEU:HB3	2:D:3003:MET:CE	2.48	0.44
2:D:3124:GLU:C	2:D:3126:VAL:H	2.26	0.44
2:D:3650:GLU:HB2	2:D:3651:PRO:HD3	2.00	0.44
1:G:23:CYS:SG	1:G:51:ILE:HD11	2.58	0.44
2:A:514:PHE:CD2	2:A:526:TRP:HB2	2.51	0.44
2:A:866:PRO:HB3	2:A:1009:ARG:NH1	2.33	0.44
2:A:896:ASN:HA	2:A:899:GLU:HG2	1.99	0.44
2:A:2122:SER:O	2:A:2126:ILE:HG12	2.18	0.44
2:A:2455:ASP:OD2	2:A:2457:SER:OG	2.32	0.44
2:A:2926:LEU:HB3	2:A:3003:MET:CE	2.48	0.44
2:A:2926:LEU:HD12	2:A:2929:LEU:HD23	2.00	0.44
2:A:3833:ASP:OD2	2:A:3908:LYS:HB3	2.18	0.44
2:A:3892:TYR:CD2	2:A:3906:PHE:HE2	2.35	0.44
2:A:4630:TRP:CZ2	2:A:4711:GLY:HA3	2.53	0.44
2:B:365:HIS:HB2	2:B:393:MET:HE2	2.00	0.44
2:B:504:ARG:O	2:B:507:VAL:HG22	2.18	0.44
2:B:762:SER:OG	2:B:763:ALA:N	2.50	0.44
2:B:885:LEU:O	2:B:889:ILE:HG23	2.18	0.44
2:B:3124:GLU:C	2:B:3126:VAL:H	2.26	0.44
2:B:3184:TYR:OH	2:B:3204:VAL:HG11	2.18	0.44
2:B:3599:VAL:O	2:B:3603:PHE:HD2	2.00	0.44
2:B:4081:GLU:O	2:B:4085:LYS:HG2	2.17	0.44
2:B:4840:GLU:OE2	2:B:4844:ILE:HD11	2.17	0.44
2:C:271:ALA:HB2	2:C:488:LEU:HD22	1.99	0.44
2:C:855:VAL:HG23	2:C:1078:CYS:HB3	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1077:VAL:O	2:C:1077:VAL:HG13	2.18	0.44
2:C:1426:TYR:CD1	2:C:1564:MET:HB3	2.52	0.44
2:C:2603:ALA:C	2:C:2606:PRO:HD2	2.43	0.44
2:C:3074:ASN:HA	2:C:3077:GLN:HG3	1.99	0.44
2:C:3124:GLU:C	2:C:3126:VAL:H	2.26	0.44
2:A:504:ARG:O	2:A:507:VAL:HG22	2.18	0.43
2:A:1308:ILE:HD12	2:A:1445:TRP:CZ3	2.53	0.43
2:A:1435:GLY:N	2:A:1501:ASN:OD1	2.35	0.43
2:B:271:ALA:HB2	2:B:488:LEU:HD22	2.00	0.43
2:B:4839:TYR:HA	2:B:4842:TYR:HD2	1.83	0.43
2:C:253:GLY:O	2:C:257:ARG:HG2	2.18	0.43
2:C:1308:ILE:HD12	2:C:1445:TRP:CZ3	2.53	0.43
2:C:3184:TYR:OH	2:C:3204:VAL:HG11	2.18	0.43
2:C:4011:GLU:HG2	2:C:4121:LEU:CD1	2.48	0.43
2:C:4238:ILE:HG22	2:C:4242:ARG:HE	1.83	0.43
2:C:4306:PHE:HD1	2:C:4309:ILE:HD11	1.82	0.43
2:C:4739:PHE:HA	2:C:4742:HIS:ND1	2.33	0.43
2:D:896:ASN:HA	2:D:899:GLU:HG2	1.99	0.43
2:D:2926:LEU:CD1	2:D:2929:LEU:HD23	2.48	0.43
2:D:3027:THR:O	2:D:3030:VAL:HG22	2.18	0.43
2:D:4654:MET:HE1	2:D:4667:SER:HB2	1.99	0.43
1:G:50:ARG:HH21	1:G:53:LYS:NZ	2.15	0.43
1:H:50:ARG:HH21	1:H:53:LYS:NZ	2.15	0.43
2:A:2082:ARG:HG3	2:A:3687:LEU:HD22	1.99	0.43
2:A:3273:MET:O	2:A:3277:LEU:HD23	2.19	0.43
2:A:3650:GLU:HB2	2:A:3651:PRO:HD3	2.00	0.43
2:A:4085:LYS:HA	2:A:4089:GLU:OE1	2.18	0.43
2:A:4238:ILE:HG22	2:A:4242:ARG:HE	1.83	0.43
2:B:1963:LYS:HD2	2:B:1963:LYS:O	2.18	0.43
2:B:2263:GLU:O	2:B:2267:ARG:HG3	2.18	0.43
2:B:2642:ARG:NH1	2:B:2682:GLU:OE1	2.51	0.43
2:B:3254:PRO:HG3	2:B:3267:ALA:HA	2.01	0.43
2:C:1963:LYS:O	2:C:1963:LYS:HD2	2.18	0.43
2:C:2723:LYS:HB3	2:C:2723:LYS:HE2	1.83	0.43
2:C:2833:LEU:HD23	2:C:2897:GLN:NE2	2.31	0.43
2:C:3892:TYR:CD2	2:C:3906:PHE:HE2	2.35	0.43
2:C:4602:ARG:NH1	2:C:4712:VAL:HG13	2.33	0.43
2:C:4654:MET:HE1	2:C:4667:SER:HB2	1.99	0.43
2:D:988:LEU:HD23	2:D:1051:ARG:HH12	1.82	0.43
2:D:1308:ILE:HD12	2:D:1445:TRP:CZ3	2.53	0.43
2:D:3184:TYR:OH	2:D:3204:VAL:HG11	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:4044:SER:HA	2:D:4076:GLU:O	2.18	0.43
2:D:4679:PHE:HD1	2:D:4682:ALA:HB3	1.82	0.43
2:D:4839:TYR:HA	2:D:4842:TYR:HD2	1.83	0.43
2:A:872:ILE:HB	2:A:941:LYS:HD3	2.01	0.43
2:A:3042:ALA:O	2:A:3046:MET:HG2	2.18	0.43
2:A:3074:ASN:HA	2:A:3077:GLN:HG3	1.99	0.43
2:A:3182:SER:O	2:A:3186:THR:HG23	2.19	0.43
2:A:3219:VAL:O	2:A:3223:GLU:OE1	2.37	0.43
2:A:3332:THR:OG1	2:A:3336:GLU:OE2	2.34	0.43
2:A:4011:GLU:HG2	2:A:4121:LEU:CD1	2.48	0.43
2:A:4279:MET:CE	2:B:4484:ILE:HG22	2.47	0.43
2:A:4679:PHE:HD1	2:A:4682:ALA:HB3	1.82	0.43
2:A:4839:TYR:HA	2:A:4842:TYR:HD2	1.82	0.43
2:B:1434:PRO:HG3	2:B:1503:ASN:HA	2.00	0.43
2:B:2833:LEU:HD23	2:B:2897:GLN:NE2	2.31	0.43
2:B:2920:ARG:HD2	2:B:3000:GLU:OE2	2.18	0.43
2:B:3219:VAL:O	2:B:3223:GLU:OE1	2.37	0.43
2:C:885:LEU:O	2:C:889:ILE:HG23	2.18	0.43
2:C:2186:GLU:CD	2:C:2187:ILE:H	2.25	0.43
2:C:2587:HIS:HA	2:C:2590:ARG:HG2	2.00	0.43
2:C:2756:LEU:HA	2:C:2756:LEU:HD12	1.79	0.43
2:C:2937:HIS:O	2:C:2940:ILE:HG22	2.17	0.43
2:C:2954:PHE:CD2	2:C:2961:LYS:NZ	2.87	0.43
2:C:3833:ASP:OD2	2:C:3908:LYS:HB3	2.17	0.43
2:C:4906:GLU:O	2:C:4910:LEU:HB2	2.18	0.43
2:D:2263:GLU:O	2:D:2267:ARG:HG3	2.18	0.43
2:D:2434:GLY:O	2:D:2438:ILE:HG13	2.18	0.43
2:D:2765:GLU:O	2:D:2769:GLU:N	2.49	0.43
2:D:4011:GLU:HG2	2:D:4121:LEU:CD1	2.48	0.43
2:A:872:ILE:C	2:A:941:LYS:HZ2	2.27	0.43
2:A:2894:LYS:HZ2	2:A:2894:LYS:HG3	1.70	0.43
2:A:4297:PHE:O	2:A:4301:VAL:HG23	2.19	0.43
2:B:866:PRO:HB3	2:B:1009:ARG:NH1	2.33	0.43
2:B:1435:GLY:N	2:B:1501:ASN:OD1	2.35	0.43
2:B:2122:SER:O	2:B:2126:ILE:HG12	2.18	0.43
2:B:2743:TYR:CD1	2:B:2757:MET:HB3	2.52	0.43
2:B:2768:LYS:HB3	2:B:2772:ARG:CZ	2.47	0.43
2:B:4085:LYS:HA	2:B:4089:GLU:OE1	2.18	0.43
2:B:4602:ARG:NH1	2:B:4712:VAL:HG13	2.33	0.43
2:C:504:ARG:O	2:C:507:VAL:HG22	2.18	0.43
2:C:1834:PHE:HD1	2:C:1838:ASP:HB3	1.84	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:2434:GLY:O	2:C:2438:ILE:HG13	2.18	0.43
2:C:2642:ARG:NH1	2:C:2682:GLU:OE1	2.51	0.43
2:C:3182:SER:O	2:C:3186:THR:HG23	2.19	0.43
2:C:3332:THR:OG1	2:C:3336:GLU:OE2	2.34	0.43
2:C:4081:GLU:O	2:C:4085:LYS:HG2	2.17	0.43
2:D:515:ALA:HB2	2:D:523:GLY:HA3	1.99	0.43
2:D:866:PRO:HB3	2:D:1009:ARG:NH1	2.33	0.43
2:D:1077:VAL:O	2:D:1077:VAL:HG13	2.18	0.43
2:D:2587:HIS:HA	2:D:2590:ARG:HG2	2.00	0.43
2:D:2769:GLU:HA	2:D:2772:ARG:CG	2.38	0.43
2:D:2954:PHE:CD2	2:D:2961:LYS:NZ	2.87	0.43
2:D:3981:MET:HE3	2:D:3981:MET:HB3	1.94	0.43
2:D:4627:LYS:HB3	2:D:4627:LYS:HE3	1.86	0.43
2:D:4630:TRP:CZ2	2:D:4711:GLY:HA3	2.53	0.43
2:D:4906:GLU:O	2:D:4910:LEU:HB2	2.18	0.43
1:F:23:CYS:SG	1:F:51:ILE:HD11	2.58	0.43
2:A:253:GLY:O	2:A:257:ARG:HG2	2.18	0.43
2:A:988:LEU:HD23	2:A:1051:ARG:HH12	1.82	0.43
2:A:1745:LYS:HA	2:A:1745:LYS:HD2	1.78	0.43
2:A:1963:LYS:HD2	2:A:1963:LYS:O	2.18	0.43
2:A:2295:GLY:HA3	2:A:2391:PHE:CE2	2.52	0.43
2:A:2841:ALA:CB	2:A:2886:ARG:HH22	2.30	0.43
2:A:3184:TYR:OH	2:A:3204:VAL:HG11	2.18	0.43
2:A:3254:PRO:HG3	2:A:3267:ALA:HA	2.01	0.43
2:A:4726:MET:HA	2:A:4726:MET:CE	2.48	0.43
2:B:76:ARG:HA	2:B:76:ARG:HD3	1.79	0.43
2:B:877:HIS:CA	2:B:880:ARG:NH1	2.77	0.43
2:B:2582:PRO:O	2:B:2585:MET:HG2	2.18	0.43
2:B:3650:GLU:HB2	2:B:3651:PRO:HD3	2.00	0.43
2:B:4044:SER:HA	2:B:4076:GLU:O	2.18	0.43
2:B:4724:TRP:O	2:B:4728:MET:HG2	2.19	0.43
2:B:4739:PHE:HA	2:B:4742:HIS:ND1	2.33	0.43
2:C:799:LYS:NZ	2:C:1620:GLN:OE1	2.52	0.43
2:C:896:ASN:HA	2:C:899:GLU:HG2	1.99	0.43
2:C:4839:TYR:HA	2:C:4842:TYR:HD2	1.82	0.43
2:D:678:MET:HG3	2:D:754:VAL:HG22	2.00	0.43
2:D:2642:ARG:NH1	2:D:2682:GLU:OE1	2.51	0.43
2:D:2648:ILE:O	2:D:2652:LEU:HD13	2.18	0.43
2:D:3332:THR:OG1	2:D:3336:GLU:OE2	2.34	0.43
2:D:4038:ASP:HB3	2:D:4040:LYS:HZ2	1.84	0.43
2:D:4724:TRP:O	2:D:4728:MET:HG2	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:4930:GLU:OE1	2:D:4930:GLU:N	2.34	0.43
2:A:799:LYS:NZ	2:A:1620:GLN:OE1	2.52	0.43
2:A:2768:LYS:HB3	2:A:2772:ARG:CZ	2.47	0.43
2:A:3124:GLU:C	2:A:3126:VAL:H	2.26	0.43
2:A:4081:GLU:O	2:A:4085:LYS:HG2	2.17	0.43
2:A:4480:PHE:CZ	2:D:4268:MET:HG3	2.53	0.43
2:A:4488:GLN:HA	2:A:4491:LEU:HD23	2.00	0.43
2:A:4847:ASP:OD1	2:A:4848:ILE:N	2.52	0.43
2:B:678:MET:HG3	2:B:754:VAL:HG22	2.00	0.43
2:B:2082:ARG:HG3	2:B:3687:LEU:HD22	1.99	0.43
2:B:2641:SER:HB2	2:B:2676:LEU:HD21	2.00	0.43
2:B:2668:CYS:O	2:B:2672:VAL:HG23	2.19	0.43
2:B:2980:LEU:HD23	2:B:2990:LEU:HD13	2.01	0.43
2:B:4297:PHE:O	2:B:4301:VAL:HG23	2.19	0.43
2:C:448:PRO:O	2:C:452:VAL:HG23	2.19	0.43
2:C:895:MET:HG3	2:C:896:ASN:H	1.84	0.43
2:C:2765:GLU:O	2:C:2769:GLU:N	2.49	0.43
2:C:2893:LEU:O	2:C:2897:GLN:OE1	2.37	0.43
2:C:3027:THR:O	2:C:3030:VAL:HG22	2.18	0.43
2:C:4085:LYS:HA	2:C:4089:GLU:OE1	2.18	0.43
2:D:15:ARG:CZ	2:D:113:LEU:HD12	2.48	0.43
2:D:2122:SER:O	2:D:2126:ILE:HG12	2.18	0.43
2:D:2705:PRO:HD3	2:D:2854:LYS:HG3	2.00	0.43
2:D:2728:SER:HA	2:D:2731:LYS:HE3	1.98	0.43
2:D:2791:ARG:HD2	2:D:2901:TYR:HE1	1.83	0.43
2:D:3190:ARG:HH21	2:D:3193:ALA:CB	2.32	0.43
2:D:3224:SER:OG	2:D:3226:ILE:HG23	2.18	0.43
2:D:3239:LEU:HD12	2:D:3295:TRP:HH2	1.82	0.43
2:D:3254:PRO:HG3	2:D:3267:ALA:HA	2.00	0.43
2:D:4505:LEU:O	2:D:4509:VAL:HG23	2.19	0.43
2:A:15:ARG:CZ	2:A:113:LEU:HD12	2.48	0.43
2:A:732:LEU:HB3	2:A:779:PHE:CZ	2.53	0.43
2:A:2943:PHE:HB2	2:A:2956:TYR:HH	1.82	0.43
2:A:2954:PHE:CD2	2:A:2961:LYS:NZ	2.87	0.43
2:A:4505:LEU:O	2:A:4509:VAL:HG23	2.19	0.43
2:B:15:ARG:CZ	2:B:113:LEU:HD12	2.48	0.43
2:B:872:ILE:HB	2:B:941:LYS:HD3	2.00	0.43
2:B:2186:GLU:CD	2:B:2187:ILE:H	2.25	0.43
2:B:2659:GLN:C	2:B:2663:LYS:HZ2	2.27	0.43
2:B:2893:LEU:O	2:B:2897:GLN:OE1	2.37	0.43
2:B:3273:MET:O	2:B:3277:LEU:HD23	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:4930:GLU:OE1	2:B:4930:GLU:N	2.34	0.43
2:C:2082:ARG:HG3	2:C:3687:LEU:HD22	1.99	0.43
2:C:2648:ILE:O	2:C:2652:LEU:HD13	2.18	0.43
2:C:4297:PHE:O	2:C:4301:VAL:HG23	2.19	0.43
2:C:4874:ARG:HG2	2:C:4878:GLU:OE2	2.19	0.43
2:D:253:GLY:O	2:D:257:ARG:HG2	2.18	0.43
2:D:855:VAL:HG23	2:D:1078:CYS:HB3	1.99	0.43
2:D:1963:LYS:HD2	2:D:1963:LYS:O	2.18	0.43
2:D:1967:SER:O	2:D:1972:GLN:NE2	2.52	0.43
2:D:2582:PRO:HG3	2:D:2627:TRP:HZ3	1.84	0.43
2:D:3649:ALA:C	2:D:3652:PRO:HD2	2.44	0.43
2:D:4294:LEU:O	2:D:4298:VAL:HG23	2.18	0.43
2:D:4739:PHE:HA	2:D:4742:HIS:ND1	2.33	0.43
2:D:4767:LEU:HD11	2:D:4862:ILE:HG23	2.01	0.43
2:A:1077:VAL:O	2:A:1077:VAL:HG13	2.18	0.43
2:A:2434:GLY:O	2:A:2438:ILE:HG13	2.18	0.43
2:A:2649:PHE:CZ	2:A:2967:VAL:HG22	2.54	0.43
2:A:2664:LEU:O	2:A:2667:PRO:HD2	2.19	0.43
2:A:2668:CYS:O	2:A:2672:VAL:HG23	2.19	0.43
2:A:4306:PHE:HD1	2:A:4309:ILE:HD11	1.82	0.43
2:B:419:ILE:O	2:B:423:VAL:HG23	2.19	0.43
2:B:799:LYS:NZ	2:B:1620:GLN:OE1	2.52	0.43
2:B:877:HIS:HA	2:B:880:ARG:HH11	1.81	0.43
2:B:1308:ILE:HD12	2:B:1445:TRP:CZ3	2.53	0.43
2:B:2434:GLY:O	2:B:2438:ILE:HG13	2.18	0.43
2:B:2756:LEU:HD12	2:B:2756:LEU:HA	1.79	0.43
2:B:2926:LEU:CD1	2:B:2929:LEU:HD23	2.48	0.43
2:B:3169:ALA:O	2:B:3172:GLU:N	2.51	0.43
2:B:4011:GLU:HG2	2:B:4121:LEU:HD13	2.00	0.43
2:C:932:ASN:HA	2:C:935:MET:CG	2.41	0.43
2:C:2066:MET:HE2	2:C:2066:MET:HA	2.01	0.43
2:C:2122:SER:O	2:C:2126:ILE:HG12	2.18	0.43
2:C:2668:CYS:O	2:C:2672:VAL:HG23	2.19	0.43
2:C:2761:LYS:HA	2:C:2761:LYS:HD3	1.74	0.43
2:C:2980:LEU:HD23	2:C:2990:LEU:HD13	2.01	0.43
2:C:3042:ALA:O	2:C:3046:MET:HG2	2.18	0.43
2:C:4767:LEU:HD11	2:C:4862:ILE:HG23	2.01	0.43
2:C:4818:TYR:CE1	2:C:4822:ARG:HD3	2.54	0.43
2:D:271:ALA:HB2	2:D:488:LEU:HD22	1.99	0.43
2:D:648:LEU:HD13	2:D:1626:GLN:NE2	2.34	0.43
2:D:2295:GLY:HA3	2:D:2391:PHE:CE2	2.52	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:2926:LEU:HD12	2:D:2929:LEU:HD23	2.00	0.43
2:D:3273:MET:O	2:D:3277:LEU:HD23	2.19	0.43
2:D:4116:GLN:O	2:D:4117:THR:C	2.62	0.43
2:D:4557:VAL:O	2:D:4557:VAL:HG13	2.19	0.43
2:D:4847:ASP:OD1	2:D:4848:ILE:N	2.52	0.43
2:A:1834:PHE:HD1	2:A:1838:ASP:HB3	1.84	0.43
2:A:2920:ARG:HD2	2:A:3000:GLU:OE2	2.18	0.43
2:A:4266:LYS:O	2:A:4270:LYS:HG2	2.19	0.43
2:B:253:GLY:O	2:B:257:ARG:HG2	2.18	0.43
2:B:448:PRO:O	2:B:452:VAL:HG23	2.19	0.43
2:B:648:LEU:HD13	2:B:1626:GLN:NE2	2.34	0.43
2:B:1834:PHE:HD1	2:B:1838:ASP:HB3	1.84	0.43
2:B:2343:LEU:HD21	2:B:2468:MET:HE1	2.01	0.43
2:B:3604:ARG:HG2	2:B:3604:ARG:O	2.19	0.43
2:B:4557:VAL:O	2:B:4557:VAL:HG13	2.19	0.43
2:B:4847:ASP:OD1	2:B:4848:ILE:N	2.52	0.43
2:C:15:ARG:CZ	2:C:113:LEU:HD12	2.48	0.43
2:C:912:LYS:NZ	2:C:914:GLN:HB2	2.34	0.43
2:C:2926:LEU:HD12	2:C:2929:LEU:HD23	2.00	0.43
2:C:3075:LEU:HD21	2:C:3094:ILE:HD12	1.99	0.43
2:C:3254:PRO:HG3	2:C:3267:ALA:HA	2.01	0.43
2:D:365:HIS:HB2	2:D:393:MET:HE2	2.00	0.43
2:D:1113:MET:HE2	2:D:1211:GLN:HB3	2.00	0.43
2:D:1434:PRO:HG3	2:D:1503:ASN:HA	2.00	0.43
2:D:1788:LYS:HD3	2:D:1833:ILE:HG22	2.01	0.43
2:D:2066:MET:HA	2:D:2066:MET:HE2	2.01	0.43
2:D:2431:ASP:O	2:D:2435:VAL:HG23	2.17	0.43
2:D:2610:LEU:HA	2:D:2613:HIS:HE1	1.80	0.43
2:D:2668:CYS:O	2:D:2672:VAL:HG23	2.19	0.43
2:D:4874:ARG:HG2	2:D:4878:GLU:OE2	2.19	0.43
2:A:365:HIS:HB2	2:A:393:MET:HE2	2.00	0.43
2:A:885:LEU:O	2:A:889:ILE:HG23	2.18	0.43
2:A:895:MET:O	2:A:899:GLU:N	2.44	0.43
2:A:2635:GLU:OE2	2:A:2680:TYR:OH	2.24	0.43
2:A:2648:ILE:O	2:A:2652:LEU:HD13	2.18	0.43
2:A:2705:PRO:HD3	2:A:2854:LYS:HG3	2.00	0.43
2:A:3955:GLN:NE2	2:A:3972:MET:HG2	2.34	0.43
2:B:1304:LEU:HD23	2:B:1304:LEU:HA	1.89	0.43
2:B:1757:LEU:HD22	2:B:2117:ILE:HD11	2.01	0.43
2:B:1796:THR:HG22	2:B:1800:LYS:HZ1	1.84	0.43
2:B:2649:PHE:CZ	2:B:2967:VAL:HG22	2.54	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3210:SER:O	2:B:3214:LEU:HD12	2.19	0.43
2:B:3892:TYR:CD2	2:B:3906:PHE:HE2	2.35	0.43
2:B:4294:LEU:O	2:B:4298:VAL:HG23	2.19	0.43
2:B:4767:LEU:HD11	2:B:4862:ILE:HG23	2.01	0.43
2:C:1549:SER:OG	2:C:1551:ASN:O	2.37	0.43
2:C:1757:LEU:HD22	2:C:2117:ILE:HD11	2.01	0.43
2:C:2659:GLN:C	2:C:2663:LYS:HZ2	2.26	0.43
2:C:2741:TRP:HB3	2:C:2754:GLN:CB	2.47	0.43
2:D:732:LEU:HB3	2:D:779:PHE:CZ	2.53	0.43
2:D:2641:SER:HB2	2:D:2676:LEU:HD21	2.00	0.43
2:D:2787:TRP:CD1	2:D:2904:SER:O	2.68	0.43
2:D:2920:ARG:HD2	2:D:3000:GLU:OE2	2.18	0.43
2:D:3134:LEU:HB2	2:D:3162:PHE:HE2	1.84	0.43
2:A:678:MET:HG3	2:A:754:VAL:HG22	2.00	0.42
2:A:1113:MET:HE2	2:A:1211:GLN:HB3	2.00	0.42
2:A:1434:PRO:HG3	2:A:1503:ASN:HA	2.00	0.42
2:A:1796:THR:HG22	2:A:1800:LYS:HZ1	1.84	0.42
2:A:3190:ARG:HH21	2:A:3193:ALA:CB	2.31	0.42
2:A:3224:SER:OG	2:A:3226:ILE:HG23	2.18	0.42
2:A:4116:GLN:O	2:A:4117:THR:C	2.62	0.42
2:B:732:LEU:HB3	2:B:779:PHE:CZ	2.53	0.42
2:B:3190:ARG:HH21	2:B:3193:ALA:CB	2.31	0.42
2:B:3260:ARG:HE	2:B:3263:MET:HG3	1.84	0.42
2:B:4874:ARG:HG2	2:B:4878:GLU:OE2	2.19	0.42
2:C:732:LEU:HB3	2:C:779:PHE:CZ	2.53	0.42
2:C:872:ILE:HB	2:C:941:LYS:HD3	2.00	0.42
2:C:1967:SER:O	2:C:1972:GLN:NE2	2.52	0.42
2:C:2649:PHE:CZ	2:C:2967:VAL:HG22	2.54	0.42
2:C:2664:LEU:O	2:C:2667:PRO:HD2	2.19	0.42
2:C:2926:LEU:CD1	2:C:2929:LEU:HD23	2.48	0.42
2:C:4288:TRP:O	2:C:4292:MET:HG3	2.19	0.42
2:D:895:MET:HG3	2:D:896:ASN:H	1.84	0.42
2:D:988:LEU:HD23	2:D:993:GLU:HG2	2.01	0.42
2:D:2741:TRP:HB3	2:D:2754:GLN:CB	2.47	0.42
2:D:3169:ALA:O	2:D:3172:GLU:N	2.51	0.42
2:D:4246:PHE:O	2:D:4246:PHE:HD1	2.01	0.42
2:D:4818:TYR:CE1	2:D:4822:ARG:HD3	2.54	0.42
2:A:1015:GLY:HA3	2:A:1027:ARG:HH22	1.84	0.42
2:A:3633:GLU:OE1	2:A:3634:HIS:N	2.52	0.42
2:A:4011:GLU:HG2	2:A:4121:LEU:HD13	2.00	0.42
2:A:4294:LEU:O	2:A:4298:VAL:HG23	2.18	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:919:VAL:HG12	2:B:920:GLU:N	2.35	0.42
2:B:1106:GLU:HG2	2:B:1161:VAL:HG22	2.00	0.42
2:B:3042:ALA:O	2:B:3046:MET:HG2	2.18	0.42
2:B:3182:SER:O	2:B:3186:THR:HG23	2.19	0.42
2:C:2884:LYS:HG3	2:C:2885:ASP:H	1.85	0.42
2:C:4246:PHE:O	2:C:4246:PHE:HD1	2.01	0.42
2:D:419:ILE:O	2:D:423:VAL:HG23	2.19	0.42
2:D:448:PRO:O	2:D:452:VAL:HG23	2.18	0.42
2:D:872:ILE:HB	2:D:941:LYS:HD3	2.00	0.42
2:D:3129:SER:O	2:D:3133:ILE:HG13	2.17	0.42
2:D:4266:LYS:O	2:D:4270:LYS:HG2	2.19	0.42
2:A:648:LEU:HD13	2:A:1626:GLN:NE2	2.34	0.42
2:A:2682:GLU:HB3	2:A:2919:LYS:HE3	2.01	0.42
2:A:3638:ASP:OD2	2:A:4683:ARG:HD3	2.19	0.42
2:A:4627:LYS:HB3	2:A:4627:LYS:HE3	1.86	0.42
2:A:4767:LEU:HD11	2:A:4862:ILE:HG23	2.01	0.42
2:B:675:TYR:HB3	2:B:822:CYS:SG	2.59	0.42
2:B:1428:TYR:HB3	2:B:1566:LEU:HD22	2.01	0.42
2:B:1951:LEU:HD23	2:B:1951:LEU:HA	1.95	0.42
2:B:2587:HIS:HA	2:B:2590:ARG:HG2	2.00	0.42
2:B:2623:LEU:HB3	2:B:2626:GLY:H	1.85	0.42
2:B:2648:ILE:O	2:B:2652:LEU:HD13	2.18	0.42
2:B:3001:LYS:HD2	2:B:3041:ASP:HB2	2.01	0.42
2:B:3134:LEU:HB2	2:B:3162:PHE:HE2	1.84	0.42
2:B:3954:MET:HB3	2:B:3971:LEU:CD2	2.49	0.42
2:C:648:LEU:HD13	2:C:1626:GLN:NE2	2.34	0.42
2:C:2383:HIS:CE1	2:C:2458:ALA:HB2	2.55	0.42
2:C:2920:ARG:HD2	2:C:3000:GLU:OE2	2.18	0.42
2:C:3025:ASP:O	2:C:3028:SER:OG	2.30	0.42
2:C:3190:ARG:HH21	2:C:3193:ALA:CB	2.31	0.42
2:C:4557:VAL:HG13	2:C:4557:VAL:O	2.19	0.42
2:D:799:LYS:NZ	2:D:1620:GLN:OE1	2.52	0.42
2:D:912:LYS:NZ	2:D:914:GLN:HB2	2.34	0.42
2:D:919:VAL:HG12	2:D:920:GLU:N	2.35	0.42
2:D:1299:ILE:HG12	2:D:1546:GLN:HB2	2.01	0.42
1:E:26:HIS:ND1	1:E:105:LEU:HD11	2.35	0.42
2:A:419:ILE:O	2:A:423:VAL:HG23	2.19	0.42
2:A:912:LYS:NZ	2:A:914:GLN:HB2	2.34	0.42
2:A:919:VAL:HG12	2:A:920:GLU:N	2.35	0.42
2:A:1299:ILE:HG12	2:A:1546:GLN:HB2	2.01	0.42
2:A:1487:MET:HE1	2:A:1544:PHE:CD2	2.55	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:2642:ARG:NH1	2:A:2682:GLU:OE1	2.51	0.42
2:A:3210:SER:O	2:A:3214:LEU:HD12	2.19	0.42
2:A:4818:TYR:CE1	2:A:4822:ARG:HD3	2.54	0.42
2:A:4906:GLU:O	2:A:4910:LEU:HB2	2.18	0.42
2:B:3689:MET:HE2	2:B:3754:MET:HG2	2.01	0.42
2:B:4238:ILE:HG22	2:B:4242:ARG:HE	1.83	0.42
2:B:4505:LEU:O	2:B:4509:VAL:HG23	2.19	0.42
2:C:111:ARG:H	2:C:111:ARG:HG2	1.67	0.42
2:C:1929:SER:OG	2:C:3617:VAL:HG13	2.19	0.42
2:C:2582:PRO:HG3	2:C:2627:TRP:HZ3	1.84	0.42
2:C:3060:PHE:CZ	2:C:3104:MET:HE1	2.55	0.42
2:C:3260:ARG:HE	2:C:3263:MET:HG3	1.84	0.42
2:C:3763:ILE:HD11	2:C:3838:ASP:O	2.20	0.42
2:C:3954:MET:HB3	2:C:3971:LEU:CD2	2.49	0.42
2:C:3955:GLN:NE2	2:C:3972:MET:HG2	2.34	0.42
2:C:4505:LEU:O	2:C:4509:VAL:HG23	2.19	0.42
2:C:4630:TRP:CE2	2:C:4711:GLY:HA3	2.55	0.42
2:D:309:MET:HE2	2:D:309:MET:N	2.35	0.42
2:D:885:LEU:O	2:D:889:ILE:HG23	2.18	0.42
2:D:2593:VAL:HG22	2:D:2644:LEU:HD21	2.01	0.42
2:D:3219:VAL:O	2:D:3223:GLU:OE1	2.37	0.42
2:D:3260:ARG:HE	2:D:3263:MET:HG3	1.84	0.42
2:D:3976:LYS:HG3	2:D:4097:ASN:ND2	2.35	0.42
1:F:26:HIS:ND1	1:F:105:LEU:HD11	2.35	0.42
1:G:63:GLY:O	1:G:67:MET:HG3	2.19	0.42
2:A:2263:GLU:O	2:A:2267:ARG:HG3	2.18	0.42
2:A:2582:PRO:HG3	2:A:2627:TRP:HZ3	1.84	0.42
2:A:2623:LEU:HB3	2:A:2626:GLY:H	1.85	0.42
2:A:2893:LEU:O	2:A:2897:GLN:OE1	2.37	0.42
2:A:2980:LEU:HD23	2:A:2990:LEU:HD13	2.01	0.42
2:A:3260:ARG:HE	2:A:3263:MET:HG3	1.84	0.42
2:B:15:ARG:HH22	2:B:72:SER:HB3	1.84	0.42
2:B:228:LEU:HD21	2:B:277:LEU:HD13	2.01	0.42
2:B:1549:SER:OG	2:B:1551:ASN:O	2.37	0.42
2:B:2754:GLN:HA	2:B:2755:PRO:HD3	1.88	0.42
2:B:3955:GLN:NE2	2:B:3972:MET:HG2	2.34	0.42
2:B:4603:GLU:HA	2:B:4606:VAL:HG12	2.02	0.42
2:C:419:ILE:O	2:C:423:VAL:HG23	2.19	0.42
2:C:678:MET:HG3	2:C:754:VAL:HG22	2.00	0.42
2:C:713:TRP:CH2	2:C:1251:LEU:HD21	2.51	0.42
2:C:2966:VAL:O	2:C:2970:LEU:N	2.47	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:228:LEU:HD21	2:D:277:LEU:HD13	2.01	0.42
2:D:932:ASN:HA	2:D:935:MET:CG	2.41	0.42
2:A:329:PHE:HB3	2:A:363:ILE:HD11	2.01	0.42
2:A:1172:THR:HB	2:A:1190:LEU:HD22	2.02	0.42
2:A:1304:LEU:HD23	2:A:1304:LEU:HA	1.89	0.42
2:A:2343:LEU:HD21	2:A:2468:MET:HE1	2.01	0.42
2:A:2587:HIS:HA	2:A:2590:ARG:HG2	2.00	0.42
2:A:3060:PHE:CZ	2:A:3104:MET:HE1	2.55	0.42
2:A:3169:ALA:O	2:A:3172:GLU:N	2.51	0.42
2:A:3325:LYS:HA	2:A:3328:LYS:CE	2.50	0.42
2:A:3976:LYS:HG3	2:A:4097:ASN:ND2	2.35	0.42
2:A:4024:LYS:HB2	2:A:4088:HIS:CD2	2.55	0.42
2:A:4197:ILE:HG13	2:A:4919:LEU:HD11	2.02	0.42
2:A:4791:LYS:HE3	2:A:4791:LYS:HB3	1.87	0.42
2:A:4874:ARG:HG2	2:A:4878:GLU:OE2	2.19	0.42
2:B:895:MET:HG3	2:B:896:ASN:H	1.84	0.42
2:B:1015:GLY:HA3	2:B:1027:ARG:HH22	1.84	0.42
2:B:1487:MET:HE1	2:B:1544:PHE:CD2	2.55	0.42
2:B:2682:GLU:HB3	2:B:2919:LYS:HE3	2.02	0.42
2:B:2918:GLU:OE1	2:B:2918:GLU:N	2.51	0.42
2:B:2926:LEU:HD12	2:B:2929:LEU:HD23	2.00	0.42
2:B:2954:PHE:CD2	2:B:2961:LYS:NZ	2.87	0.42
2:B:4256:MET:SD	2:C:4703:VAL:HG23	2.60	0.42
2:B:4765:LYS:HD2	2:B:4765:LYS:HA	1.82	0.42
2:C:675:TYR:HB3	2:C:822:CYS:SG	2.60	0.42
2:C:972:LEU:HD13	2:C:978:PRO:HD3	2.02	0.42
2:C:1690:GLU:CD	2:C:1790:LYS:HE3	2.45	0.42
2:C:2828:MET:H	2:C:2828:MET:HE2	1.84	0.42
2:C:3134:LEU:HB2	2:C:3162:PHE:HE2	1.84	0.42
2:C:3604:ARG:O	2:C:3604:ARG:HG2	2.19	0.42
2:C:3790:PHE:HE1	2:C:3858:LEU:HD23	1.85	0.42
2:C:3976:LYS:HG3	2:C:4097:ASN:ND2	2.35	0.42
2:C:4024:LYS:HB2	2:C:4088:HIS:CD2	2.55	0.42
2:C:4266:LYS:O	2:C:4270:LYS:HG2	2.19	0.42
2:C:4294:LEU:O	2:C:4298:VAL:HG23	2.18	0.42
2:C:4847:ASP:OD1	2:C:4848:ILE:N	2.52	0.42
2:D:877:HIS:HA	2:D:880:ARG:HH11	1.80	0.42
2:D:2841:ALA:CB	2:D:2886:ARG:HH22	2.30	0.42
2:D:3025:ASP:O	2:D:3028:SER:OG	2.30	0.42
2:D:3182:SER:O	2:D:3186:THR:HG23	2.19	0.42
2:D:4058:TYR:HD2	2:D:4062:GLU:HB3	1.85	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:63:GLY:O	1:F:67:MET:HG3	2.20	0.42
2:A:448:PRO:O	2:A:452:VAL:HG23	2.18	0.42
2:A:3134:LEU:HB2	2:A:3162:PHE:HE2	1.84	0.42
2:A:4288:TRP:O	2:A:4292:MET:HG3	2.19	0.42
2:A:4630:TRP:CE2	2:A:4711:GLY:HA3	2.55	0.42
2:B:1929:SER:OG	2:B:3617:VAL:HG13	2.19	0.42
2:B:2593:VAL:HG22	2:B:2644:LEU:HD21	2.01	0.42
2:B:2828:MET:H	2:B:2828:MET:HE2	1.84	0.42
2:B:3633:GLU:OE1	2:B:3634:HIS:N	2.52	0.42
2:B:4279:MET:HE2	2:C:4484:ILE:HG22	2.01	0.42
2:B:4818:TYR:CE1	2:B:4822:ARG:HD3	2.54	0.42
2:C:1714:TYR:CE2	2:C:1761:MET:HG3	2.55	0.42
2:C:1796:THR:HG22	2:C:1800:LYS:HZ1	1.84	0.42
2:C:2343:LEU:HD21	2:C:2468:MET:HE1	2.01	0.42
2:C:2678:PRO:HB2	2:C:2981:TYR:CZ	2.55	0.42
2:C:4743:LEU:CD2	2:D:4776:VAL:HG13	2.47	0.42
2:D:329:PHE:HB3	2:D:363:ILE:HD11	2.01	0.42
2:D:675:TYR:HB3	2:D:822:CYS:SG	2.60	0.42
2:D:1016:TRP:CE3	2:D:1029:ASN:HB2	2.54	0.42
2:D:2649:PHE:CZ	2:D:2967:VAL:HG22	2.54	0.42
2:D:2833:LEU:HD23	2:D:2897:GLN:NE2	2.31	0.42
2:D:3060:PHE:CZ	2:D:3104:MET:HE1	2.55	0.42
2:D:3210:SER:O	2:D:3214:LEU:HD12	2.19	0.42
2:D:3712:LYS:HB3	2:D:3716:GLU:HB2	2.02	0.42
2:D:3954:MET:HB3	2:D:3971:LEU:CD2	2.49	0.42
2:D:4024:LYS:HB2	2:D:4088:HIS:CD2	2.55	0.42
2:D:4297:PHE:O	2:D:4301:VAL:HG23	2.19	0.42
2:A:988:LEU:HD23	2:A:993:GLU:HG2	2.01	0.42
2:A:1106:GLU:HG2	2:A:1161:VAL:HG22	2.00	0.42
2:A:1825:PHE:CE1	2:A:1842:ILE:HG12	2.55	0.42
2:A:1967:SER:O	2:A:1972:GLN:NE2	2.52	0.42
2:A:2325:ILE:CD1	2:A:2426:LEU:HD11	2.50	0.42
2:A:2538:THR:HG21	2:A:2545:ILE:HD12	2.02	0.42
2:B:992:GLN:HA	2:B:995:MET:HE3	2.02	0.42
2:B:1788:LYS:HD3	2:B:1833:ILE:HG22	2.01	0.42
2:B:2319:VAL:O	2:B:2323:LEU:HG	2.20	0.42
2:B:2664:LEU:O	2:B:2667:PRO:HD2	2.19	0.42
2:B:4197:ILE:HG13	2:B:4919:LEU:HD11	2.02	0.42
2:C:411:GLU:OE2	2:C:485:ARG:NE	2.38	0.42
2:C:919:VAL:HG12	2:C:920:GLU:N	2.35	0.42
2:C:1016:TRP:CE3	2:C:1029:ASN:HB2	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1435:GLY:N	2:C:1501:ASN:OD1	2.35	0.42
2:C:2782:MET:HG2	2:C:2787:TRP:CE3	2.55	0.42
2:C:3273:MET:O	2:C:3277:LEU:HD23	2.19	0.42
2:C:3649:ALA:C	2:C:3652:PRO:HD2	2.44	0.42
2:C:4603:GLU:HA	2:C:4606:VAL:HG12	2.02	0.42
2:C:4631:ASP:OD1	2:C:4708:TRP:NE1	2.45	0.42
2:C:4724:TRP:O	2:C:4728:MET:HG2	2.19	0.42
2:D:1172:THR:HB	2:D:1190:LEU:HD22	2.02	0.42
2:D:1834:PHE:HD1	2:D:1838:ASP:HB3	1.84	0.42
2:D:2325:ILE:CD1	2:D:2426:LEU:HD11	2.50	0.42
2:D:2343:LEU:HD21	2:D:2468:MET:HE1	2.01	0.42
2:D:2893:LEU:O	2:D:2897:GLN:OE1	2.37	0.42
2:D:2980:LEU:HD23	2:D:2990:LEU:HD13	2.01	0.42
2:D:3208:ILE:HA	2:D:3209:PRO:HD3	1.88	0.42
2:D:3604:ARG:O	2:D:3604:ARG:HG2	2.19	0.42
2:D:3638:ASP:OD2	2:D:4683:ARG:HD3	2.20	0.42
2:D:4288:TRP:O	2:D:4292:MET:HG3	2.19	0.42
2:A:334:SER:OG	2:A:338:LEU:HD22	2.20	0.42
2:A:372:LEU:HD11	2:A:391:ALA:HB1	2.02	0.42
2:A:992:GLN:HA	2:A:995:MET:HE3	2.02	0.42
2:A:2641:SER:HB2	2:A:2676:LEU:HD21	2.00	0.42
2:A:2973:GLN:HA	2:A:2976:LYS:HE2	2.02	0.42
2:A:3649:ALA:C	2:A:3652:PRO:HD2	2.44	0.42
2:A:3689:MET:HE2	2:A:3754:MET:HG2	2.01	0.42
2:A:3712:LYS:HB3	2:A:3716:GLU:HB2	2.02	0.42
2:A:3763:ILE:HD11	2:A:3838:ASP:O	2.20	0.42
2:A:4061:SER:O	2:A:4064:GLU:HG3	2.20	0.42
2:A:4786:PHE:CE2	2:D:4520:TYR:HD2	2.38	0.42
2:B:334:SER:OG	2:B:338:LEU:HD22	2.20	0.42
2:B:2444:THR:O	2:B:2452:VAL:HG12	2.20	0.42
2:B:3060:PHE:CZ	2:B:3104:MET:HE1	2.55	0.42
2:B:3649:ALA:C	2:B:3652:PRO:HD2	2.44	0.42
2:B:3763:ILE:HD11	2:B:3838:ASP:O	2.20	0.42
2:B:3976:LYS:HG3	2:B:4097:ASN:ND2	2.35	0.42
2:B:4024:LYS:HB2	2:B:4088:HIS:CD2	2.55	0.42
2:B:4288:TRP:O	2:B:4292:MET:HG3	2.19	0.42
2:B:4630:TRP:CE2	2:B:4711:GLY:HA3	2.55	0.42
2:B:4906:GLU:O	2:B:4910:LEU:HB2	2.18	0.42
2:C:895:MET:O	2:C:899:GLU:N	2.44	0.42
2:C:1825:PHE:CE1	2:C:1842:ILE:HG12	2.55	0.42
2:C:2444:THR:O	2:C:2452:VAL:HG12	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:2538:THR:HG21	2:C:2545:ILE:HD12	2.02	0.42
2:C:2841:ALA:CB	2:C:2886:ARG:HH22	2.30	0.42
2:C:3633:GLU:OE1	2:C:3634:HIS:N	2.52	0.42
2:C:4116:GLN:O	2:C:4117:THR:C	2.62	0.42
2:D:2383:HIS:CE1	2:D:2458:ALA:HB2	2.55	0.42
2:D:2444:THR:O	2:D:2452:VAL:HG12	2.20	0.42
2:D:2678:PRO:HB2	2:D:2981:TYR:CZ	2.55	0.42
1:E:63:GLY:O	1:E:67:MET:HG3	2.19	0.42
1:G:26:HIS:ND1	1:G:105:LEU:HD11	2.35	0.42
2:A:228:LEU:HD21	2:A:277:LEU:HD13	2.01	0.42
2:A:895:MET:HG3	2:A:896:ASN:H	1.84	0.42
2:A:1427:TYR:HB2	2:A:1563:VAL:HG11	2.02	0.42
2:A:2841:ALA:HA	2:A:2844:MET:HE3	2.02	0.42
2:A:3790:PHE:HE1	2:A:3858:LEU:HD23	1.85	0.42
2:A:3954:MET:HB3	2:A:3971:LEU:CD2	2.49	0.42
2:B:1299:ILE:HG12	2:B:1546:GLN:HB2	2.01	0.42
2:B:1745:LYS:HA	2:B:1745:LYS:HD2	1.78	0.42
2:B:2066:MET:HE2	2:B:2066:MET:HA	2.01	0.42
2:B:2252:GLU:H	2:B:3819:MET:HE1	1.85	0.42
2:B:2383:HIS:CE1	2:B:2458:ALA:HB2	2.55	0.42
2:B:2741:TRP:HB3	2:B:2754:GLN:CB	2.47	0.42
2:B:3231:MET:O	2:B:3235:MET:HG3	2.20	0.42
2:B:3325:LYS:HA	2:B:3328:LYS:CE	2.50	0.42
2:C:988:LEU:HD23	2:C:993:GLU:HG2	2.01	0.42
2:C:992:GLN:HA	2:C:995:MET:HE3	2.02	0.42
2:C:1283:LEU:HB2	2:C:1555:PHE:HB2	2.02	0.42
2:C:1788:LYS:HD3	2:C:1833:ILE:HG22	2.01	0.42
2:C:2319:VAL:O	2:C:2323:LEU:HG	2.20	0.42
2:C:2593:VAL:HG22	2:C:2644:LEU:HD21	2.01	0.42
2:C:2682:GLU:HB3	2:C:2919:LYS:HE3	2.02	0.42
2:C:3210:SER:O	2:C:3214:LEU:HD12	2.19	0.42
2:C:4197:ILE:HG13	2:C:4919:LEU:HD11	2.02	0.42
2:C:4838:GLU:OE1	2:C:4838:GLU:N	2.36	0.42
2:D:1427:TYR:HB2	2:D:1563:VAL:HG11	2.02	0.42
2:D:1714:TYR:CE2	2:D:1761:MET:HG3	2.55	0.42
2:D:2664:LEU:O	2:D:2667:PRO:HD2	2.19	0.42
2:D:2841:ALA:HA	2:D:2844:MET:HE3	2.02	0.42
2:D:3324:GLU:O	2:D:3327:LYS:HB3	2.20	0.42
2:D:4061:SER:O	2:D:4064:GLU:HG3	2.20	0.42
2:D:4197:ILE:HG13	2:D:4919:LEU:HD11	2.02	0.42
2:D:4603:GLU:HA	2:D:4606:VAL:HG12	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:4630:TRP:CE2	2:D:4711:GLY:HA3	2.55	0.42
2:A:15:ARG:HH22	2:A:72:SER:HB3	1.84	0.41
2:A:125:TYR:O	2:A:414:ARG:NH1	2.53	0.41
2:A:1283:LEU:HB2	2:A:1555:PHE:HB2	2.02	0.41
2:A:1549:SER:OG	2:A:1551:ASN:O	2.37	0.41
2:A:1554:GLN:NE2	2:A:1556:GLU:OE2	2.35	0.41
2:A:2171:VAL:HG21	2:A:2199:PHE:CE2	2.55	0.41
2:A:2646:TRP:HA	2:A:2646:TRP:CE3	2.55	0.41
2:A:4277:LYS:O	2:A:4281:THR:HG23	2.20	0.41
2:A:4603:GLU:HA	2:A:4606:VAL:HG12	2.02	0.41
2:A:4660:PHE:HA	2:D:4056:LYS:NZ	2.34	0.41
2:A:4724:TRP:O	2:A:4728:MET:HG2	2.19	0.41
2:B:844:ARG:HB2	2:B:847:THR:OG1	2.20	0.41
2:B:1016:TRP:CE3	2:B:1029:ASN:HB2	2.54	0.41
2:B:1714:TYR:CE2	2:B:1761:MET:HG3	2.55	0.41
2:B:2782:MET:HG2	2:B:2787:TRP:CE3	2.55	0.41
2:B:3122:ILE:HG12	2:B:3167:PRO:HG3	2.02	0.41
2:C:562:LEU:HD21	2:C:600:LEU:HD22	2.02	0.41
2:C:626:ARG:NH2	2:C:1667:LEU:O	2.53	0.41
2:C:3122:ILE:HG12	2:C:3167:PRO:HG3	2.02	0.41
2:C:3219:VAL:O	2:C:3223:GLU:OE1	2.37	0.41
2:C:3231:MET:O	2:C:3235:MET:HG3	2.20	0.41
2:C:3638:ASP:OD2	2:C:4683:ARG:HD3	2.20	0.41
2:C:4058:TYR:HD2	2:C:4062:GLU:HB3	1.85	0.41
2:C:4587:ILE:CD1	2:C:4726:MET:HG2	2.50	0.41
2:C:4708:TRP:O	2:C:4712:VAL:HG23	2.20	0.41
2:D:1428:TYR:HB3	2:D:1566:LEU:HD22	2.01	0.41
2:D:2761:LYS:HA	2:D:2761:LYS:HD3	1.74	0.41
2:D:2782:MET:HG2	2:D:2787:TRP:CE3	2.55	0.41
2:D:3001:LYS:HD2	2:D:3041:ASP:HB2	2.01	0.41
2:D:3763:ILE:HD11	2:D:3838:ASP:O	2.20	0.41
2:D:4107:GLU:OE1	2:D:4149:TYR:OH	2.27	0.41
2:D:4575:LEU:HD23	2:D:4575:LEU:HA	1.95	0.41
2:D:4587:ILE:CD1	2:D:4726:MET:HG2	2.50	0.41
2:D:4631:ASP:OD1	2:D:4708:TRP:NE1	2.45	0.41
2:D:4806:CYS:HA	2:D:4812:CYS:HB2	2.02	0.41
2:A:675:TYR:HB3	2:A:822:CYS:SG	2.60	0.41
2:A:1714:TYR:CE2	2:A:1761:MET:HG3	2.55	0.41
2:A:2592:LEU:HD22	2:A:2606:PRO:HB3	2.02	0.41
2:A:3604:ARG:O	2:A:3604:ARG:HG2	2.19	0.41
2:A:4806:CYS:HA	2:A:4812:CYS:HB2	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:309:MET:HE2	2:B:309:MET:N	2.35	0.41
2:B:329:PHE:HB3	2:B:363:ILE:HD11	2.01	0.41
2:B:372:LEU:HD11	2:B:391:ALA:HB1	2.02	0.41
2:B:562:LEU:HD21	2:B:600:LEU:HD22	2.02	0.41
2:B:988:LEU:HD23	2:B:993:GLU:HG2	2.01	0.41
2:B:2538:THR:HG21	2:B:2545:ILE:HD12	2.02	0.41
2:B:2791:ARG:HE	2:B:2792:THR:N	2.18	0.41
2:B:4266:LYS:O	2:B:4270:LYS:HG2	2.19	0.41
2:B:4708:TRP:O	2:B:4712:VAL:HG23	2.20	0.41
2:C:309:MET:HE2	2:C:309:MET:N	2.35	0.41
2:C:372:LEU:HD11	2:C:391:ALA:HB1	2.02	0.41
2:C:1428:TYR:HB3	2:C:1566:LEU:HD22	2.02	0.41
2:C:1434:PRO:HG3	2:C:1503:ASN:HA	2.00	0.41
2:C:2066:MET:SD	2:C:2087:LEU:HD23	2.61	0.41
2:C:2620:TYR:OH	2:C:2632:ALA:O	2.37	0.41
2:C:2754:GLN:HA	2:C:2755:PRO:HD3	1.88	0.41
2:C:2999:LYS:HZ2	2:C:3003:MET:HB3	1.85	0.41
2:C:3301:VAL:HA	2:C:3304:GLN:OE1	2.20	0.41
2:D:125:TYR:O	2:D:414:ARG:NH1	2.53	0.41
2:D:895:MET:O	2:D:899:GLU:N	2.44	0.41
2:D:919:VAL:HG12	2:D:920:GLU:H	1.85	0.41
2:D:1718:ARG:HD3	2:D:1831:MET:HA	2.03	0.41
2:D:2171:VAL:HG21	2:D:2199:PHE:CE2	2.55	0.41
2:D:2252:GLU:H	2:D:3819:MET:HE1	1.85	0.41
2:D:2319:VAL:O	2:D:2323:LEU:HG	2.20	0.41
2:D:2849:HIS:CD2	2:D:2874:TYR:HB2	2.55	0.41
2:D:3955:GLN:NE2	2:D:3972:MET:HG2	2.34	0.41
2:D:4708:TRP:O	2:D:4712:VAL:HG23	2.20	0.41
1:H:63:GLY:O	1:H:67:MET:HG3	2.19	0.41
2:A:670:TYR:O	2:A:673:TRP:NE1	2.54	0.41
2:A:2319:VAL:O	2:A:2323:LEU:HG	2.20	0.41
2:A:2480:VAL:HB	2:A:2483:PHE:HB3	2.02	0.41
2:A:2596:VAL:O	2:A:2599:LEU:HD22	2.21	0.41
2:A:3778:LEU:HD11	2:A:3782:LYS:HE3	2.02	0.41
2:A:4557:VAL:HG13	2:A:4557:VAL:O	2.19	0.41
2:A:4808:ASP:CG	2:D:4521:LYS:HZ3	2.27	0.41
2:B:242:ASP:OD1	2:B:243:GLU:N	2.53	0.41
2:B:1177:LEU:HB2	2:B:1182:LEU:HD21	2.03	0.41
2:B:1690:GLU:CD	2:B:1790:LYS:HE3	2.45	0.41
2:B:2066:MET:SD	2:B:2087:LEU:HD23	2.61	0.41
2:B:2480:VAL:HB	2:B:2483:PHE:HB3	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2557:LYS:HB2	2:B:2557:LYS:HE2	1.85	0.41
2:B:2582:PRO:HG3	2:B:2627:TRP:HZ3	1.84	0.41
2:B:2841:ALA:HA	2:B:2844:MET:HE3	2.02	0.41
2:B:2849:HIS:CD2	2:B:2874:TYR:HB2	2.55	0.41
2:C:125:TYR:O	2:C:414:ARG:NH1	2.53	0.41
2:C:258:ARG:NH1	2:C:317:MET:HA	2.36	0.41
2:C:1487:MET:HE1	2:C:1544:PHE:CD2	2.55	0.41
2:C:2591:ARG:HH22	2:C:2876:THR:HG1	1.68	0.41
2:C:2623:LEU:HB3	2:C:2626:GLY:H	1.85	0.41
2:C:3001:LYS:HD2	2:C:3041:ASP:HB2	2.01	0.41
2:C:3324:GLU:O	2:C:3327:LYS:HB3	2.20	0.41
2:C:4277:LYS:O	2:C:4281:THR:HG23	2.21	0.41
2:D:674:TYR:HE1	2:D:756:SER:HB2	1.85	0.41
2:D:844:ARG:HB2	2:D:847:THR:OG1	2.21	0.41
2:D:1487:MET:HE1	2:D:1544:PHE:CD2	2.55	0.41
2:D:2623:LEU:HB3	2:D:2626:GLY:H	1.85	0.41
1:E:18:LYS:HA	1:E:18:LYS:HE3	2.03	0.41
1:F:18:LYS:HA	1:F:18:LYS:HE3	2.02	0.41
1:G:67:MET:HE3	1:G:73:ALA:HB3	2.03	0.41
2:A:309:MET:HE2	2:A:309:MET:N	2.35	0.41
2:A:674:TYR:HE1	2:A:756:SER:HB2	1.85	0.41
2:A:1718:ARG:HD3	2:A:1831:MET:HA	2.02	0.41
2:A:1788:LYS:HD3	2:A:1833:ILE:HG22	2.01	0.41
2:A:1958:THR:O	2:A:1962:THR:HG22	2.21	0.41
2:A:2385:GLY:O	2:A:2389:MET:HG3	2.20	0.41
2:A:2593:VAL:HG22	2:A:2644:LEU:HD21	2.01	0.41
2:A:2678:PRO:HB2	2:A:2981:TYR:CZ	2.55	0.41
2:A:2754:GLN:HA	2:A:2755:PRO:HD3	1.88	0.41
2:A:3122:ILE:HG12	2:A:3167:PRO:HG3	2.02	0.41
2:A:3324:GLU:O	2:A:3327:LYS:HB3	2.20	0.41
2:A:4707:MET:O	2:A:4707:MET:HE2	2.21	0.41
2:B:520:ARG:HG2	2:B:524:GLU:HG2	2.03	0.41
2:B:936:SER:O	2:B:939:THR:HB	2.20	0.41
2:B:1825:PHE:CE1	2:B:1842:ILE:HG12	2.55	0.41
2:B:2884:LYS:HG3	2:B:2885:ASP:H	1.85	0.41
2:B:2888:LYS:HE2	2:B:2888:LYS:HB2	1.92	0.41
2:B:3301:VAL:HA	2:B:3304:GLN:OE1	2.21	0.41
2:B:4061:SER:O	2:B:4064:GLU:HG3	2.20	0.41
2:C:334:SER:OG	2:C:338:LEU:HD22	2.20	0.41
2:C:489:PHE:CD2	2:C:494:MET:HG3	2.56	0.41
2:C:972:LEU:HD23	2:C:972:LEU:H	1.86	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1299:ILE:HG12	2:C:1546:GLN:HB2	2.01	0.41
2:D:15:ARG:HH22	2:D:72:SER:HB3	1.84	0.41
2:D:111:ARG:H	2:D:111:ARG:HG2	1.67	0.41
2:D:520:ARG:HG2	2:D:524:GLU:HG2	2.03	0.41
2:D:948:CYS:HA	2:D:1067:PRO:HD3	2.02	0.41
2:D:992:GLN:HA	2:D:995:MET:HE3	2.02	0.41
2:D:1825:PHE:CE1	2:D:1842:ILE:HG12	2.55	0.41
2:D:1929:SER:OG	2:D:3617:VAL:HG13	2.19	0.41
2:D:2066:MET:SD	2:D:2087:LEU:HD23	2.61	0.41
2:D:2538:THR:HG21	2:D:2545:ILE:HD12	2.02	0.41
2:D:2726:GLU:OE2	2:D:2821:TYR:OH	2.24	0.41
2:D:2828:MET:HE2	2:D:2828:MET:H	1.84	0.41
2:D:4277:LYS:O	2:D:4281:THR:HG23	2.21	0.41
2:D:4611:GLU:HA	2:D:4653:VAL:HG12	2.03	0.41
2:D:4726:MET:O	2:D:4730:VAL:HG13	2.21	0.41
2:A:411:GLU:OE2	2:A:485:ARG:NE	2.38	0.41
2:A:520:ARG:HG2	2:A:524:GLU:HG2	2.03	0.41
2:A:737:ILE:HG21	2:A:1534:GLU:OE2	2.21	0.41
2:A:919:VAL:HG12	2:A:920:GLU:H	1.85	0.41
2:A:1016:TRP:CE3	2:A:1029:ASN:HB2	2.54	0.41
2:A:1690:GLU:CD	2:A:1790:LYS:HE3	2.45	0.41
2:A:2383:HIS:CE1	2:A:2458:ALA:HB2	2.55	0.41
2:A:2828:MET:HE2	2:A:2828:MET:H	1.84	0.41
2:A:2849:HIS:CD2	2:A:2874:TYR:HB2	2.55	0.41
2:A:3001:LYS:HD2	2:A:3041:ASP:HB2	2.01	0.41
2:A:3607:PRO:HD2	2:A:3610:ASN:OD1	2.21	0.41
2:A:4252:ILE:HD12	2:B:4707:MET:CE	2.50	0.41
2:A:4587:ILE:CD1	2:A:4726:MET:HG2	2.50	0.41
2:B:489:PHE:CD2	2:B:494:MET:HG3	2.56	0.41
2:B:1958:THR:O	2:B:1962:THR:HG22	2.21	0.41
2:B:3757:ALA:HA	2:B:3760:LYS:HE2	2.03	0.41
2:C:15:ARG:HH22	2:C:72:SER:HB3	1.84	0.41
2:C:737:ILE:HG21	2:C:1534:GLU:OE2	2.21	0.41
2:C:936:SER:O	2:C:939:THR:HB	2.20	0.41
2:C:1284:LYS:HE2	2:C:1433:PHE:CZ	2.56	0.41
2:C:2252:GLU:H	2:C:3819:MET:HE1	1.85	0.41
2:C:2480:VAL:HB	2:C:2483:PHE:HB3	2.02	0.41
2:C:2592:LEU:HD22	2:C:2606:PRO:HB3	2.02	0.41
2:C:2787:TRP:CD1	2:C:2904:SER:O	2.68	0.41
2:C:2841:ALA:HA	2:C:2844:MET:HE3	2.02	0.41
2:C:3689:MET:HE2	2:C:3754:MET:HG2	2.01	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:4611:GLU:HA	2:C:4653:VAL:HG12	2.03	0.41
2:D:242:ASP:OD1	2:D:243:GLU:N	2.53	0.41
2:D:1284:LYS:HE2	2:D:1433:PHE:CZ	2.56	0.41
2:D:1757:LEU:HD22	2:D:2117:ILE:HD11	2.01	0.41
2:D:2618:TRP:CH2	2:D:2977:ASN:HB3	2.56	0.41
2:D:4706:GLN:O	2:D:4710:LEU:HG	2.21	0.41
2:A:785:ASP:OD2	2:A:786:GLY:N	2.54	0.41
2:A:936:SER:O	2:A:939:THR:HB	2.20	0.41
2:A:956:HIS:O	2:A:960:LYS:HG2	2.21	0.41
2:A:972:LEU:HD23	2:A:972:LEU:H	1.86	0.41
2:A:1765:SER:HA	2:A:1766:PRO:HD3	1.93	0.41
2:A:1929:SER:OG	2:A:3617:VAL:HG13	2.20	0.41
2:A:2566:ARG:HA	2:A:2569:ILE:HG22	2.03	0.41
2:A:3231:MET:O	2:A:3235:MET:HG3	2.20	0.41
2:A:4858:LEU:HD23	2:A:4861:ILE:HD12	2.02	0.41
2:B:692:HIS:H	2:B:795:SER:HG	1.69	0.41
2:B:919:VAL:HG12	2:B:920:GLU:H	1.85	0.41
2:B:1415:ASP:OD2	2:B:1559:ARG:NH2	2.35	0.41
2:B:1967:SER:O	2:B:1972:GLN:NE2	2.52	0.41
2:B:2385:GLY:O	2:B:2389:MET:HG3	2.20	0.41
2:B:2526:PRO:O	2:B:2530:ARG:HG3	2.21	0.41
2:B:2678:PRO:HB2	2:B:2981:TYR:CZ	2.55	0.41
2:B:3638:ASP:OD2	2:B:4683:ARG:HD3	2.20	0.41
2:C:1108:VAL:HB	2:C:1212:VAL:HB	2.02	0.41
2:C:1172:THR:HB	2:C:1190:LEU:HD22	2.02	0.41
2:C:1745:LYS:HA	2:C:1745:LYS:HD2	1.78	0.41
2:C:2566:ARG:HA	2:C:2569:ILE:HG22	2.03	0.41
2:C:2618:TRP:CH2	2:C:2977:ASN:HB3	2.56	0.41
2:C:2646:TRP:CE3	2:C:2646:TRP:HA	2.55	0.41
2:C:2894:LYS:HZ2	2:C:2894:LYS:HG3	1.67	0.41
2:C:3677:THR:O	2:C:3679:LYS:NZ	2.54	0.41
2:C:3757:ALA:HA	2:C:3760:LYS:HE2	2.03	0.41
2:C:3778:LEU:HD13	2:C:3854:PHE:CD1	2.56	0.41
2:D:956:HIS:O	2:D:960:LYS:HG2	2.21	0.41
2:D:1415:ASP:OD2	2:D:1559:ARG:NH2	2.35	0.41
2:D:1690:GLU:CD	2:D:1790:LYS:HE3	2.45	0.41
2:D:2566:ARG:HA	2:D:2569:ILE:HG22	2.03	0.41
2:D:3778:LEU:HD11	2:D:3782:LYS:HE3	2.02	0.41
2:D:4707:MET:HE2	2:D:4707:MET:O	2.21	0.41
2:A:844:ARG:HB2	2:A:847:THR:OG1	2.20	0.41
2:A:877:HIS:HA	2:A:880:ARG:HH11	1.80	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:1284:LYS:HE2	2:A:1433:PHE:CZ	2.56	0.41
2:A:1428:TYR:HB3	2:A:1566:LEU:HD22	2.01	0.41
2:A:1444:GLY:CA	2:A:1487:MET:HG2	2.51	0.41
2:A:1914:CYS:SG	2:A:2091:GLN:NE2	2.88	0.41
2:A:2066:MET:SD	2:A:2087:LEU:HD23	2.61	0.41
2:A:2252:GLU:H	2:A:3819:MET:HE1	1.85	0.41
2:A:2504:THR:O	2:A:2508:SER:N	2.45	0.41
2:A:2782:MET:HG2	2:A:2787:TRP:CE3	2.55	0.41
2:B:125:TYR:O	2:B:414:ARG:NH1	2.53	0.41
2:B:258:ARG:NH1	2:B:317:MET:HA	2.36	0.41
2:B:737:ILE:HG21	2:B:1534:GLU:OE2	2.21	0.41
2:B:785:ASP:OD2	2:B:786:GLY:N	2.54	0.41
2:B:948:CYS:HA	2:B:1067:PRO:HD3	2.02	0.41
2:B:956:HIS:O	2:B:960:LYS:HG2	2.21	0.41
2:B:1718:ARG:HD3	2:B:1831:MET:HA	2.02	0.41
2:B:2596:VAL:O	2:B:2599:LEU:HD22	2.21	0.41
2:B:3677:THR:O	2:B:3679:LYS:NZ	2.54	0.41
2:B:3790:PHE:HE1	2:B:3858:LEU:HD23	1.85	0.41
2:B:4250:TYR:HE1	2:B:4257:ARG:HE	1.69	0.41
2:B:4753:LEU:HD21	2:C:4769:LEU:HB3	2.03	0.41
2:C:670:TYR:O	2:C:673:TRP:NE1	2.53	0.41
2:C:785:ASP:OD2	2:C:786:GLY:N	2.54	0.41
2:C:1177:LEU:HB2	2:C:1182:LEU:HD21	2.03	0.41
2:C:2385:GLY:O	2:C:2389:MET:HG3	2.20	0.41
2:C:3208:ILE:HA	2:C:3209:PRO:HD3	1.88	0.41
2:C:3325:LYS:HA	2:C:3328:LYS:CE	2.50	0.41
2:C:4291:PHE:CZ	2:D:4726:MET:HB3	2.56	0.41
2:C:4858:LEU:HD23	2:C:4861:ILE:HD12	2.02	0.41
2:D:334:SER:OG	2:D:338:LEU:HD22	2.20	0.41
2:D:785:ASP:OD2	2:D:786:GLY:N	2.54	0.41
2:D:1129:GLY:H	2:D:1134:ALA:HB3	1.86	0.41
2:D:1177:LEU:HB2	2:D:1182:LEU:HD21	2.03	0.41
2:D:2682:GLU:HB3	2:D:2919:LYS:HE3	2.01	0.41
2:D:2884:LYS:HG3	2:D:2885:ASP:H	1.85	0.41
2:D:3231:MET:O	2:D:3235:MET:HG3	2.20	0.41
2:D:3325:LYS:HA	2:D:3328:LYS:CE	2.50	0.41
2:D:4306:PHE:HA	2:D:4309:ILE:HG12	2.03	0.41
2:D:4765:LYS:HD2	2:D:4765:LYS:HA	1.82	0.41
1:H:26:HIS:ND1	1:H:105:LEU:HD11	2.35	0.41
2:A:241:MET:HA	2:A:241:MET:HE2	2.03	0.41
2:A:948:CYS:HA	2:A:1067:PRO:HD3	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:972:LEU:HD13	2:A:978:PRO:HD3	2.02	0.41
2:A:2886:ARG:HE	2:A:2890:GLN:HG2	1.86	0.41
2:A:2888:LYS:HE2	2:A:2888:LYS:HB2	1.92	0.41
2:A:3273:MET:HB3	2:A:3273:MET:HE2	1.82	0.41
2:A:3301:VAL:HA	2:A:3304:GLN:OE1	2.21	0.41
2:A:4251:ASN:C	2:A:4251:ASN:HD22	2.29	0.41
2:A:4306:PHE:HA	2:A:4309:ILE:HG12	2.03	0.41
2:A:4599:ILE:HG13	2:A:4709:LYS:NZ	2.36	0.41
2:A:4611:GLU:HA	2:A:4653:VAL:HG12	2.03	0.41
2:B:1427:TYR:HB2	2:B:1563:VAL:HG11	2.02	0.41
2:B:1957:LEU:HD21	2:B:1960:ARG:HH21	1.86	0.41
2:B:2646:TRP:HA	2:B:2646:TRP:CE3	2.55	0.41
2:B:2787:TRP:CD1	2:B:2904:SER:O	2.68	0.41
2:B:4587:ILE:HD11	2:B:4722:LEU:O	2.21	0.41
2:B:4611:GLU:HA	2:B:4653:VAL:HG12	2.03	0.41
2:B:4858:LEU:HD23	2:B:4861:ILE:HD12	2.02	0.41
2:C:228:LEU:HD21	2:C:277:LEU:HD13	2.01	0.41
2:C:242:ASP:OD1	2:C:243:GLU:N	2.53	0.41
2:C:329:PHE:HB3	2:C:363:ILE:HD11	2.01	0.41
2:C:844:ARG:HB2	2:C:847:THR:OG1	2.21	0.41
2:C:3725:LEU:HD23	2:C:3725:LEU:HA	1.96	0.41
2:D:670:TYR:O	2:D:673:TRP:NE1	2.53	0.41
2:D:936:SER:O	2:D:939:THR:HB	2.20	0.41
2:D:1015:GLY:HA3	2:D:1027:ARG:HH22	1.85	0.41
2:D:2403:ALA:HB2	2:D:2475:VAL:HG22	2.02	0.41
2:D:2585:MET:CE	2:D:2613:HIS:HD2	2.34	0.41
2:D:2646:TRP:HA	2:D:2646:TRP:CE3	2.55	0.41
2:D:2926:LEU:O	2:D:2930:ILE:HG12	2.21	0.41
2:D:3306:ILE:O	2:D:3310:VAL:HG23	2.21	0.41
2:D:3677:THR:O	2:D:3679:LYS:NZ	2.54	0.41
2:D:3689:MET:HE2	2:D:3754:MET:HG2	2.01	0.41
2:D:3778:LEU:HD13	2:D:3854:PHE:CD1	2.56	0.41
2:D:3846:LEU:HB3	2:D:3854:PHE:HE2	1.86	0.41
2:D:4587:ILE:HD11	2:D:4722:LEU:O	2.21	0.41
1:G:18:LYS:HE3	1:G:18:LYS:HA	2.03	0.41
1:G:85:ALA:O	1:G:94:PRO:HB3	2.21	0.41
2:A:215:ALA:HA	2:A:216:PRO:HD3	1.98	0.41
2:A:436:LEU:HD23	2:A:436:LEU:HA	1.92	0.41
2:A:750:ARG:HH11	2:A:750:ARG:HG2	1.85	0.41
2:A:924:LEU:HD22	2:A:929:ARG:HB2	2.03	0.41
2:A:1129:GLY:H	2:A:1134:ALA:HB3	1.86	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:1138:ASP:OD2	2:A:1141:LYS:HE2	2.21	0.41
2:A:1177:LEU:HB2	2:A:1182:LEU:HD21	2.03	0.41
2:A:1644:LEU:HB3	2:A:1651:LEU:HD13	2.03	0.41
2:A:1757:LEU:HD22	2:A:2117:ILE:HD11	2.01	0.41
2:A:1957:LEU:HD21	2:A:1960:ARG:HH21	1.86	0.41
2:A:2066:MET:HA	2:A:2066:MET:HE2	2.01	0.41
2:A:2471:PHE:CE2	2:A:2475:VAL:HG21	2.56	0.41
2:A:2526:PRO:O	2:A:2530:ARG:HG3	2.21	0.41
2:A:2759:PRO:HB3	2:A:2821:TYR:CD1	2.56	0.41
2:A:2884:LYS:HG3	2:A:2885:ASP:H	1.85	0.41
2:A:3191:GLU:HA	2:A:3194:ALA:HB3	2.03	0.41
2:A:4250:TYR:HE1	2:A:4257:ARG:HE	1.69	0.41
2:A:4726:MET:O	2:A:4730:VAL:HG13	2.21	0.41
2:A:4924:TYR:CZ	2:A:4928:LYS:HD2	2.56	0.41
2:B:670:TYR:O	2:B:673:TRP:NE1	2.54	0.41
2:B:881:ILE:HD13	2:B:1062:TYR:CZ	2.56	0.41
2:B:924:LEU:HD22	2:B:929:ARG:HB2	2.03	0.41
2:B:1172:THR:HB	2:B:1190:LEU:HD22	2.02	0.41
2:B:1284:LYS:HE2	2:B:1433:PHE:CZ	2.56	0.41
2:B:1444:GLY:HA3	2:B:1487:MET:HG2	2.03	0.41
2:B:2171:VAL:HG21	2:B:2199:PHE:CE2	2.56	0.41
2:B:2325:ILE:CD1	2:B:2426:LEU:HD11	2.50	0.41
2:B:2585:MET:CE	2:B:2613:HIS:HD2	2.34	0.41
2:B:2765:GLU:O	2:B:2769:GLU:N	2.49	0.41
2:B:3195:LEU:HD23	2:B:3195:LEU:HA	1.93	0.41
2:B:3712:LYS:HB3	2:B:3716:GLU:HB2	2.02	0.41
2:B:4116:GLN:O	2:B:4117:THR:C	2.62	0.41
2:B:4289:SER:O	2:B:4293:THR:HG23	2.21	0.41
2:B:4627:LYS:HB3	2:B:4627:LYS:HE3	1.86	0.41
2:B:4706:GLN:O	2:B:4710:LEU:HG	2.21	0.41
2:B:4726:MET:O	2:B:4730:VAL:HG13	2.21	0.41
2:B:4806:CYS:HA	2:B:4812:CYS:HB2	2.02	0.41
2:B:4924:TYR:CZ	2:B:4928:LYS:HD2	2.56	0.41
2:C:520:ARG:HG2	2:C:524:GLU:HG2	2.03	0.41
2:C:750:ARG:HG2	2:C:750:ARG:HH11	1.85	0.41
2:C:1427:TYR:HB2	2:C:1563:VAL:HG11	2.02	0.41
2:C:1644:LEU:HB3	2:C:1651:LEU:HD13	2.03	0.41
2:C:1718:ARG:HD3	2:C:1831:MET:HA	2.03	0.41
2:C:2171:VAL:HG21	2:C:2199:PHE:CE2	2.56	0.41
2:C:2403:ALA:HB2	2:C:2475:VAL:HG22	2.02	0.41
2:C:2471:PHE:CE2	2:C:2475:VAL:HG21	2.56	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:2596:VAL:O	2:C:2599:LEU:HD22	2.21	0.41
2:C:2791:ARG:HE	2:C:2792:THR:N	2.18	0.41
2:C:2973:GLN:HA	2:C:2976:LYS:HE2	2.02	0.41
2:C:3250:TRP:CZ2	2:C:3270:SER:HB2	2.56	0.41
2:C:4250:TYR:HE1	2:C:4257:ARG:HE	1.69	0.41
2:C:4306:PHE:HA	2:C:4309:ILE:HG12	2.03	0.41
2:C:4726:MET:O	2:C:4730:VAL:HG13	2.21	0.41
2:C:4765:LYS:HD2	2:C:4765:LYS:HA	1.82	0.41
2:C:4806:CYS:HA	2:C:4812:CYS:HB2	2.02	0.41
2:D:76:ARG:HA	2:D:76:ARG:HD3	1.79	0.41
2:D:161:THR:HG23	2:D:186:VAL:HG22	2.03	0.41
2:D:258:ARG:NH1	2:D:317:MET:HA	2.36	0.41
2:D:372:LEU:HD11	2:D:391:ALA:HB1	2.02	0.41
2:D:737:ILE:HG21	2:D:1534:GLU:OE2	2.21	0.41
2:D:750:ARG:HG2	2:D:750:ARG:HH11	1.85	0.41
2:D:972:LEU:HD23	2:D:972:LEU:H	1.85	0.41
2:D:972:LEU:HD13	2:D:978:PRO:HD3	2.02	0.41
2:D:1303:ARG:HA	2:D:1542:ALA:HA	2.03	0.41
2:D:2471:PHE:CE2	2:D:2475:VAL:HG21	2.56	0.41
2:D:2596:VAL:O	2:D:2599:LEU:HD22	2.21	0.41
2:D:2658:GLU:OE1	2:D:2661:LEU:N	2.30	0.41
2:D:2756:LEU:HD12	2:D:2756:LEU:HA	1.79	0.41
2:D:3301:VAL:HA	2:D:3304:GLN:OE1	2.21	0.41
2:D:3633:GLU:OE1	2:D:3634:HIS:N	2.52	0.41
2:D:3725:LEU:HD23	2:D:3725:LEU:HA	1.96	0.41
2:A:881:ILE:HD13	2:A:1062:TYR:CZ	2.56	0.41
2:A:2830:ASN:CB	2:B:1435:GLY:HA3	2.50	0.41
2:A:3757:ALA:HA	2:A:3760:LYS:HE2	2.03	0.41
2:A:4058:TYR:HD2	2:A:4062:GLU:HB3	1.85	0.41
2:A:4587:ILE:HD11	2:A:4722:LEU:O	2.21	0.41
2:B:674:TYR:HE1	2:B:756:SER:HB2	1.85	0.41
2:B:2403:ALA:HB2	2:B:2475:VAL:HG22	2.02	0.41
2:B:2566:ARG:HA	2:B:2569:ILE:HG22	2.03	0.41
2:B:2618:TRP:CH2	2:B:2977:ASN:HB3	2.56	0.41
2:B:3324:GLU:O	2:B:3327:LYS:HB3	2.20	0.41
2:B:4035:TYR:CZ	2:B:4050:LYS:HB3	2.56	0.41
2:B:4707:MET:HE2	2:B:4707:MET:O	2.21	0.41
2:C:881:ILE:HD13	2:C:1062:TYR:CZ	2.56	0.41
2:C:1138:ASP:OD2	2:C:1141:LYS:HE2	2.21	0.41
2:C:1303:ARG:HA	2:C:1542:ALA:HA	2.03	0.41
2:C:1444:GLY:CA	2:C:1487:MET:HG2	2.51	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:2849:HIS:CD2	2:C:2874:TYR:HB2	2.55	0.41
2:C:4587:ILE:HD11	2:C:4722:LEU:O	2.21	0.41
2:C:4943:MET:HB3	2:C:4948:CYS:HB2	2.03	0.41
2:D:436:LEU:HD23	2:D:436:LEU:HA	1.92	0.41
2:D:489:PHE:CD2	2:D:494:MET:HG3	2.56	0.41
2:D:1283:LEU:HB2	2:D:1555:PHE:HB2	2.02	0.41
2:D:2480:VAL:HB	2:D:2483:PHE:HB3	2.02	0.41
2:D:2759:PRO:HB3	2:D:2821:TYR:CD1	2.56	0.41
2:D:2760:TYR:OH	2:D:2772:ARG:NH1	2.54	0.41
2:D:3790:PHE:HE1	2:D:3858:LEU:HD23	1.85	0.41
2:A:489:PHE:CD2	2:A:494:MET:HG3	2.56	0.40
2:A:2248:MET:HE3	2:A:2248:MET:HB2	1.71	0.40
2:A:2403:ALA:HB2	2:A:2475:VAL:HG22	2.02	0.40
2:A:2444:THR:O	2:A:2452:VAL:HG12	2.20	0.40
2:A:2456:MET:HB3	2:A:2456:MET:HE2	1.66	0.40
2:A:2760:TYR:OH	2:A:2772:ARG:NH1	2.54	0.40
2:A:3743:THR:HB	2:A:3758:THR:HG21	2.03	0.40
2:B:241:MET:HE2	2:B:241:MET:HA	2.03	0.40
2:B:1944:TYR:O	2:B:1948:MET:HG3	2.21	0.40
2:B:2471:PHE:CE2	2:B:2475:VAL:HG21	2.56	0.40
2:B:2592:LEU:HD22	2:B:2606:PRO:HB3	2.03	0.40
2:B:2610:LEU:HD23	2:B:2613:HIS:CE1	2.55	0.40
2:B:2886:ARG:HE	2:B:2890:GLN:HG2	1.86	0.40
2:B:4058:TYR:HD2	2:B:4062:GLU:HB3	1.85	0.40
2:C:956:HIS:O	2:C:960:LYS:HG2	2.21	0.40
2:C:1444:GLY:HA3	2:C:1487:MET:HG2	2.03	0.40
2:C:1944:TYR:O	2:C:1948:MET:HG3	2.21	0.40
2:C:2325:ILE:CD1	2:C:2426:LEU:HD11	2.50	0.40
2:C:2504:THR:O	2:C:2508:SER:N	2.45	0.40
2:C:2884:LYS:O	2:C:2887:GLU:HG3	2.22	0.40
2:C:2926:LEU:O	2:C:2930:ILE:HG12	2.21	0.40
2:C:3712:LYS:HB3	2:C:3716:GLU:HB2	2.02	0.40
2:C:4706:GLN:O	2:C:4710:LEU:HG	2.21	0.40
2:C:4827:ILE:HG13	2:C:4831:ILE:HG12	2.04	0.40
2:C:4942:LYS:O	2:C:4946:GLU:HG3	2.22	0.40
2:D:881:ILE:HD13	2:D:1062:TYR:CZ	2.56	0.40
2:D:1944:TYR:O	2:D:1948:MET:HG3	2.21	0.40
2:D:2385:GLY:O	2:D:2389:MET:HG3	2.20	0.40
2:D:2610:LEU:HD23	2:D:2613:HIS:CE1	2.55	0.40
2:D:2884:LYS:HG3	2:D:2885:ASP:N	2.36	0.40
2:D:3757:ALA:HA	2:D:3760:LYS:HE2	2.03	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:63:GLY:HA3	1:G:75:LEU:HD21	2.03	0.40
1:H:32:GLN:HA	1:H:99:ILE:HD13	2.03	0.40
2:A:81:MET:HE3	2:A:81:MET:HB3	1.84	0.40
2:A:242:ASP:OD1	2:A:243:GLU:N	2.53	0.40
2:A:881:ILE:HD13	2:A:1062:TYR:CE1	2.57	0.40
2:A:1166:VAL:HA	2:A:1173:MET:HG2	2.03	0.40
2:A:1303:ARG:HA	2:A:1542:ALA:HA	2.03	0.40
2:A:1979:PHE:CG	2:A:1993:ARG:HG2	2.56	0.40
2:A:3719:MET:HA	2:A:3719:MET:HE2	2.04	0.40
2:B:750:ARG:HH11	2:B:750:ARG:HG2	1.85	0.40
2:B:920:GLU:N	2:B:974:SER:HB3	2.37	0.40
2:B:972:LEU:H	2:B:972:LEU:HD23	1.86	0.40
2:B:1138:ASP:OD2	2:B:1141:LYS:HE2	2.21	0.40
2:B:1166:VAL:HA	2:B:1173:MET:HG2	2.03	0.40
2:B:2973:GLN:HA	2:B:2976:LYS:HE2	2.02	0.40
2:B:3172:GLU:HG2	2:B:3175:LEU:HB2	2.03	0.40
2:B:3176:ASP:HB3	2:B:3201:VAL:HG21	2.04	0.40
2:B:3306:ILE:O	2:B:3310:VAL:HG23	2.21	0.40
2:B:4306:PHE:HA	2:B:4309:ILE:HG12	2.03	0.40
2:B:4484:ILE:HG13	2:B:4485:ILE:N	2.36	0.40
2:C:270:HIS:CD2	2:C:491:GLU:HG3	2.56	0.40
2:C:919:VAL:HG12	2:C:920:GLU:H	1.85	0.40
2:C:948:CYS:HA	2:C:1067:PRO:HD3	2.02	0.40
2:C:1129:GLY:H	2:C:1134:ALA:HB3	1.86	0.40
2:C:1166:VAL:HA	2:C:1173:MET:HG2	2.03	0.40
2:C:2759:PRO:HB3	2:C:2821:TYR:CD1	2.56	0.40
2:C:3306:ILE:O	2:C:3310:VAL:HG23	2.21	0.40
2:C:4707:MET:O	2:C:4707:MET:HE2	2.21	0.40
2:D:1549:SER:OG	2:D:1551:ASN:O	2.37	0.40
2:D:2841:ALA:HA	2:D:2844:MET:CG	2.43	0.40
2:D:2888:LYS:HE2	2:D:2888:LYS:HB2	1.91	0.40
2:D:3122:ILE:HG12	2:D:3167:PRO:HG3	2.02	0.40
2:D:4599:ILE:HG13	2:D:4709:LYS:NZ	2.36	0.40
2:D:4891:CYS:HB3	2:D:4913:HIS:CE1	2.57	0.40
1:G:32:GLN:HA	1:G:99:ILE:HD13	2.04	0.40
2:A:258:ARG:NH1	2:A:317:MET:HA	2.36	0.40
2:A:562:LEU:HD21	2:A:600:LEU:HD22	2.02	0.40
2:A:877:HIS:HB3	2:A:880:ARG:HH12	1.86	0.40
2:A:1108:VAL:HB	2:A:1212:VAL:HB	2.02	0.40
2:A:1766:PRO:HG3	2:A:1780:PRO:HB3	2.03	0.40
2:A:2585:MET:CE	2:A:2613:HIS:HD2	2.33	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:2659:GLN:HG3	2:A:2663:LYS:HZ1	1.87	0.40
2:A:2756:LEU:HD12	2:A:2756:LEU:HA	1.79	0.40
2:A:3176:ASP:HB3	2:A:3201:VAL:HG21	2.03	0.40
2:A:3250:TRP:HE3	2:A:3309:LYS:HZ3	1.68	0.40
2:A:4706:GLN:O	2:A:4710:LEU:HG	2.21	0.40
2:B:1108:VAL:HB	2:B:1212:VAL:HB	2.02	0.40
2:B:1444:GLY:CA	2:B:1487:MET:HG2	2.51	0.40
2:B:2884:LYS:HG3	2:B:2885:ASP:N	2.36	0.40
2:B:3607:PRO:HD2	2:B:3610:ASN:OD1	2.21	0.40
2:B:3778:LEU:HD13	2:B:3854:PHE:CD1	2.56	0.40
2:B:3882:GLN:HE21	2:B:3882:GLN:HB3	1.74	0.40
2:B:4587:ILE:CD1	2:B:4726:MET:HG2	2.50	0.40
2:B:4599:ILE:HG13	2:B:4709:LYS:NZ	2.36	0.40
2:C:161:THR:HG23	2:C:186:VAL:HG22	2.03	0.40
2:C:290:ARG:HH21	2:C:350:GLY:HA3	1.87	0.40
2:C:924:LEU:HD22	2:C:929:ARG:HB2	2.03	0.40
2:C:2526:PRO:O	2:C:2530:ARG:HG3	2.21	0.40
2:C:2884:LYS:HG3	2:C:2885:ASP:N	2.36	0.40
2:C:3778:LEU:HD11	2:C:3782:LYS:HE3	2.02	0.40
2:C:4522:VAL:HG22	2:D:4807:ASP:O	2.22	0.40
2:D:241:MET:HA	2:D:241:MET:HE2	2.03	0.40
2:D:1086:ARG:HH21	2:D:1251:LEU:CD1	2.24	0.40
2:D:1444:GLY:CA	2:D:1487:MET:HG2	2.51	0.40
2:D:2884:LYS:O	2:D:2887:GLU:HG3	2.21	0.40
2:D:2886:ARG:HE	2:D:2890:GLN:HG2	1.86	0.40
2:D:3191:GLU:HA	2:D:3194:ALA:HB3	2.02	0.40
1:F:32:GLN:HA	1:F:99:ILE:HD13	2.03	0.40
2:A:1009:ARG:C	2:A:1013:ARG:HE	2.30	0.40
2:A:1017:THR:HG23	2:A:1028:ARG:HG2	2.04	0.40
2:A:1444:GLY:HA3	2:A:1487:MET:HG2	2.03	0.40
2:A:2618:TRP:CH2	2:A:2977:ASN:HB3	2.56	0.40
2:A:3007:LEU:HD23	2:A:3036:LEU:HD11	2.04	0.40
2:A:3208:ILE:HA	2:A:3209:PRO:HD3	1.88	0.40
2:A:3677:THR:O	2:A:3679:LYS:NZ	2.54	0.40
2:A:4035:TYR:CZ	2:A:4050:LYS:HB3	2.56	0.40
2:A:4708:TRP:O	2:A:4712:VAL:HG23	2.20	0.40
2:B:972:LEU:HD13	2:B:978:PRO:HD3	2.02	0.40
2:B:1283:LEU:HB2	2:B:1555:PHE:HB2	2.02	0.40
2:B:1554:GLN:NE2	2:B:1556:GLU:OE2	2.35	0.40
2:B:1914:CYS:SG	2:B:2091:GLN:NE2	2.88	0.40
2:B:2926:LEU:O	2:B:2930:ILE:HG12	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3778:LEU:HD11	2:B:3782:LYS:HE3	2.02	0.40
2:B:4942:LYS:O	2:B:4946:GLU:HG3	2.22	0.40
2:C:674:TYR:HE1	2:C:756:SER:HB2	1.86	0.40
2:C:713:TRP:CE2	2:C:1600:PRO:HD3	2.56	0.40
2:C:920:GLU:N	2:C:974:SER:HB3	2.37	0.40
2:C:1015:GLY:HA3	2:C:1027:ARG:HH22	1.85	0.40
2:C:1979:PHE:CG	2:C:1993:ARG:HG2	2.56	0.40
2:C:3007:LEU:HD23	2:C:3036:LEU:HD11	2.04	0.40
2:C:3760:LYS:HE2	2:C:3760:LYS:HB2	1.94	0.40
2:D:562:LEU:HD21	2:D:600:LEU:HD22	2.02	0.40
2:D:881:ILE:HD13	2:D:1062:TYR:CE1	2.57	0.40
2:D:924:LEU:HD22	2:D:929:ARG:HB2	2.04	0.40
2:D:963:LYS:O	2:D:964:MET:HE2	2.22	0.40
2:D:1166:VAL:HA	2:D:1173:MET:HG2	2.03	0.40
2:D:2526:PRO:O	2:D:2530:ARG:HG3	2.21	0.40
2:D:2592:LEU:HD22	2:D:2606:PRO:HB3	2.02	0.40
2:D:2756:LEU:HD11	2:D:2763:LEU:CD1	2.52	0.40
2:D:3007:LEU:HD23	2:D:3036:LEU:HD11	2.04	0.40
2:D:3719:MET:HE2	2:D:3719:MET:HA	2.04	0.40
2:D:4251:ASN:C	2:D:4251:ASN:HD22	2.29	0.40
2:D:4921:PHE:HE2	2:D:4940:VAL:HG11	1.87	0.40
1:E:67:MET:HE3	1:E:73:ALA:HB3	2.03	0.40
1:F:85:ALA:O	1:F:94:PRO:HB3	2.21	0.40
2:A:290:ARG:HH21	2:A:350:GLY:HA3	1.87	0.40
2:A:2202:TYR:O	2:A:2206:ILE:HG12	2.22	0.40
2:A:2756:LEU:HD11	2:A:2763:LEU:CD1	2.52	0.40
2:A:2756:LEU:HD11	2:A:2763:LEU:HD11	2.03	0.40
2:A:2884:LYS:O	2:A:2887:GLU:HG3	2.22	0.40
2:A:2926:LEU:O	2:A:2930:ILE:HG12	2.21	0.40
2:B:713:TRP:CE2	2:B:1600:PRO:HD3	2.56	0.40
2:B:980:PRO:HB2	2:B:981:MET:SD	2.62	0.40
2:B:1177:LEU:HD12	2:B:1177:LEU:HA	1.91	0.40
2:B:1697:LEU:HD23	2:B:1697:LEU:HA	1.91	0.40
2:B:1979:PHE:CG	2:B:1993:ARG:HG2	2.56	0.40
2:B:2443:PRO:HB3	2:B:2452:VAL:O	2.22	0.40
2:B:2756:LEU:HD11	2:B:2763:LEU:CD1	2.52	0.40
2:B:2870:LEU:HD21	2:B:2881:GLU:HB2	2.04	0.40
2:B:3007:LEU:HD23	2:B:3036:LEU:HD11	2.04	0.40
2:B:3191:GLU:HA	2:B:3194:ALA:HB3	2.03	0.40
2:B:4791:LYS:HE3	2:B:4791:LYS:HB3	1.87	0.40
2:B:4943:MET:HB3	2:B:4948:CYS:HB2	2.03	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1957:LEU:HD21	2:C:1960:ARG:HH21	1.86	0.40
2:C:1958:THR:O	2:C:1962:THR:HG22	2.21	0.40
2:C:2756:LEU:HD11	2:C:2763:LEU:HD11	2.03	0.40
2:C:2759:PRO:HB3	2:C:2821:TYR:CE1	2.56	0.40
2:C:2760:TYR:OH	2:C:2772:ARG:NH1	2.54	0.40
2:C:2886:ARG:HE	2:C:2890:GLN:HG2	1.86	0.40
2:C:3607:PRO:HD2	2:C:3610:ASN:OD1	2.21	0.40
2:C:4891:CYS:HB3	2:C:4913:HIS:CE1	2.57	0.40
2:C:4924:TYR:CZ	2:C:4928:LYS:HD2	2.56	0.40
2:D:713:TRP:CE2	2:D:1600:PRO:HD3	2.56	0.40
2:D:893:TRP:HD1	2:D:897:LYS:HZ1	1.69	0.40
2:D:1009:ARG:C	2:D:1013:ARG:HE	2.30	0.40
2:D:1108:VAL:HB	2:D:1212:VAL:HB	2.02	0.40
2:D:2618:TRP:HD1	2:D:2619:LYS:HZ2	1.63	0.40
2:D:4034:GLU:O	2:D:4037:PRO:HD3	2.22	0.40
2:D:4035:TYR:CZ	2:D:4050:LYS:HB3	2.56	0.40
2:D:4289:SER:O	2:D:4293:THR:HG23	2.21	0.40
2:D:4520:TYR:HD1	2:D:4561:LEU:HD13	1.87	0.40

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

There are no protein backbone outliers to report in this entry.

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	E	88/89 (99%)	84 (96%)	4 (4%)	24	51
1	F	88/89 (99%)	84 (96%)	4 (4%)	24	51
1	G	88/89 (99%)	84 (96%)	4 (4%)	24	51

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	H	88/89 (99%)	84 (96%)	4 (4%)	24	51
2	A	3675/4358 (84%)	3610 (98%)	65 (2%)	51	68
2	B	3708/4358 (85%)	3643 (98%)	65 (2%)	51	68
2	C	3708/4358 (85%)	3643 (98%)	65 (2%)	51	68
2	D	3708/4358 (85%)	3643 (98%)	65 (2%)	51	68
All	All	15151/17788 (85%)	14875 (98%)	276 (2%)	51	68

All (276) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	E	4	GLU
1	E	18	LYS
1	E	19	LYS
1	E	58	LYS
1	F	4	GLU
1	F	18	LYS
1	F	19	LYS
1	F	58	LYS
1	G	4	GLU
1	G	18	LYS
1	G	19	LYS
1	G	58	LYS
1	H	4	GLU
1	H	18	LYS
1	H	19	LYS
1	H	58	LYS
2	A	153	THR
2	A	203	VAL
2	A	241	MET
2	A	309	MET
2	A	393	MET
2	A	403	ILE
2	A	469	HIS
2	A	494	MET
2	A	765	SER
2	A	895	MET
2	A	1173	MET
2	A	1249	MET
2	A	1481	LYS
2	A	1564	MET

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Mol	Chain	Res	Type
2	A	1694	MET
2	A	1720	MET
2	A	1729	MET
2	A	1751	ILE
2	A	1761	MET
2	A	1933	VAL
2	A	2066	MET
2	A	2142	MET
2	A	2192	MET
2	A	2234	MET
2	A	2248	MET
2	A	2279	MET
2	A	2347	MET
2	A	2406	MET
2	A	2442	MET
2	A	2589	LEU
2	A	2681	MET
2	A	2688	MET
2	A	2689	MET
2	A	2754	GLN
2	A	2758	LYS
2	A	2761	LYS
2	A	2772	ARG
2	A	2828	MET
2	A	2840	MET
2	A	2894	LYS
2	A	3072	MET
2	A	3201	VAL
2	A	3235	MET
2	A	3241	MET
2	A	3242	LEU
2	A	3277	LEU
2	A	3322	LEU
2	A	3819	MET
2	A	3954	MET
2	A	3981	MET
2	A	3985	MET
2	A	3999	MET
2	A	4012	MET
2	A	4271	VAL
2	A	4279	MET
2	A	4491	LEU

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Mol	Chain	Res	Type
2	A	4587	ILE
2	A	4626	ILE
2	A	4707	MET
2	A	4726	MET
2	A	4748	MET
2	A	4771	VAL
2	A	4804	MET
2	A	4882	GLU
2	A	4884	MET
2	B	153	THR
2	B	203	VAL
2	B	241	MET
2	B	309	MET
2	B	393	MET
2	B	403	ILE
2	B	469	HIS
2	B	494	MET
2	B	765	SER
2	B	895	MET
2	B	1173	MET
2	B	1249	MET
2	B	1481	LYS
2	B	1564	MET
2	B	1694	MET
2	B	1720	MET
2	B	1729	MET
2	B	1751	ILE
2	B	1761	MET
2	B	1933	VAL
2	B	2066	MET
2	B	2142	MET
2	B	2192	MET
2	B	2234	MET
2	B	2248	MET
2	B	2279	MET
2	B	2347	MET
2	B	2406	MET
2	B	2442	MET
2	B	2589	LEU
2	B	2681	MET
2	B	2688	MET
2	B	2689	MET

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Mol	Chain	Res	Type
2	B	2754	GLN
2	B	2758	LYS
2	B	2761	LYS
2	B	2772	ARG
2	B	2828	MET
2	B	2840	MET
2	B	2894	LYS
2	B	3072	MET
2	B	3201	VAL
2	B	3235	MET
2	B	3241	MET
2	B	3242	LEU
2	B	3277	LEU
2	B	3322	LEU
2	B	3819	MET
2	B	3954	MET
2	B	3981	MET
2	B	3985	MET
2	B	3999	MET
2	B	4012	MET
2	B	4271	VAL
2	B	4279	MET
2	B	4491	LEU
2	B	4587	ILE
2	B	4626	ILE
2	B	4707	MET
2	B	4726	MET
2	B	4748	MET
2	B	4771	VAL
2	B	4804	MET
2	B	4882	GLU
2	B	4884	MET
2	C	153	THR
2	C	203	VAL
2	C	241	MET
2	C	309	MET
2	C	393	MET
2	C	403	ILE
2	C	469	HIS
2	C	494	MET
2	C	765	SER
2	C	895	MET

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Mol	Chain	Res	Type
2	C	1173	MET
2	C	1249	MET
2	C	1481	LYS
2	C	1564	MET
2	C	1694	MET
2	C	1720	MET
2	C	1729	MET
2	C	1751	ILE
2	C	1761	MET
2	C	1933	VAL
2	C	2066	MET
2	C	2142	MET
2	C	2192	MET
2	C	2234	MET
2	C	2248	MET
2	C	2279	MET
2	C	2347	MET
2	C	2406	MET
2	C	2442	MET
2	C	2589	LEU
2	C	2681	MET
2	C	2688	MET
2	C	2689	MET
2	C	2754	GLN
2	C	2758	LYS
2	C	2761	LYS
2	C	2772	ARG
2	C	2828	MET
2	C	2840	MET
2	C	2894	LYS
2	C	3072	MET
2	C	3201	VAL
2	C	3235	MET
2	C	3241	MET
2	C	3242	LEU
2	C	3277	LEU
2	C	3322	LEU
2	C	3819	MET
2	C	3954	MET
2	C	3981	MET
2	C	3985	MET
2	C	3999	MET

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Mol	Chain	Res	Type
2	C	4012	MET
2	C	4271	VAL
2	C	4279	MET
2	C	4491	LEU
2	C	4587	ILE
2	C	4626	ILE
2	C	4707	MET
2	C	4726	MET
2	C	4748	MET
2	C	4771	VAL
2	C	4804	MET
2	C	4882	GLU
2	C	4884	MET
2	D	153	THR
2	D	203	VAL
2	D	241	MET
2	D	309	MET
2	D	393	MET
2	D	403	ILE
2	D	469	HIS
2	D	494	MET
2	D	765	SER
2	D	895	MET
2	D	1173	MET
2	D	1249	MET
2	D	1481	LYS
2	D	1564	MET
2	D	1694	MET
2	D	1720	MET
2	D	1729	MET
2	D	1751	ILE
2	D	1761	MET
2	D	1933	VAL
2	D	2066	MET
2	D	2142	MET
2	D	2192	MET
2	D	2234	MET
2	D	2248	MET
2	D	2279	MET
2	D	2347	MET
2	D	2406	MET
2	D	2442	MET

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Mol	Chain	Res	Type
2	D	2589	LEU
2	D	2681	MET
2	D	2688	MET
2	D	2689	MET
2	D	2754	GLN
2	D	2758	LYS
2	D	2761	LYS
2	D	2772	ARG
2	D	2828	MET
2	D	2840	MET
2	D	2894	LYS
2	D	3072	MET
2	D	3201	VAL
2	D	3235	MET
2	D	3241	MET
2	D	3242	LEU
2	D	3277	LEU
2	D	3322	LEU
2	D	3819	MET
2	D	3954	MET
2	D	3981	MET
2	D	3985	MET
2	D	3999	MET
2	D	4012	MET
2	D	4271	VAL
2	D	4279	MET
2	D	4491	LEU
2	D	4587	ILE
2	D	4626	ILE
2	D	4707	MET
2	D	4726	MET
2	D	4748	MET
2	D	4771	VAL
2	D	4804	MET
2	D	4882	GLU
2	D	4884	MET

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (141) such sidechains are listed below:

Mol	Chain	Res	Type
2	A	23	GLN
2	A	117	HIS

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Mol	Chain	Res	Type
2	A	150	GLN
2	A	635	ASN
2	A	1026	ASN
2	A	1126	GLN
2	A	1169	ASN
2	A	1178	ASN
2	A	1581	GLN
2	A	1656	HIS
2	A	1905	GLN
2	A	2654	GLN
2	A	2684	ASN
2	A	2849	HIS
2	A	2927	GLN
2	A	2995	HIS
2	A	3111	HIS
2	A	3174	HIS
2	A	3185	ASN
2	A	3279	ASN
2	A	3286	ASN
2	A	3775	GLN
2	A	3811	GLN
2	A	3850	HIS
2	A	3869	ASN
2	A	3955	GLN
2	A	3992	ASN
2	A	4009	ASN
2	A	4171	GLN
2	A	4489	GLN
2	A	4642	ASN
2	A	4742	HIS
2	A	4879	GLN
2	B	23	GLN
2	B	117	HIS
2	B	150	GLN
2	B	256	GLN
2	B	506	HIS
2	B	635	ASN
2	B	658	ASN
2	B	932	ASN
2	B	934	GLN
2	B	1126	GLN
2	B	1169	ASN

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Mol	Chain	Res	Type
2	B	1178	ASN
2	B	1581	GLN
2	B	1656	HIS
2	B	1905	GLN
2	B	2118	ASN
2	B	2654	GLN
2	B	2684	ASN
2	B	2849	HIS
2	B	2927	GLN
2	B	3111	HIS
2	B	3174	HIS
2	B	3279	ASN
2	B	3286	ASN
2	B	3775	GLN
2	B	3811	GLN
2	B	3850	HIS
2	B	3869	ASN
2	B	3903	GLN
2	B	3955	GLN
2	B	3992	ASN
2	B	4171	GLN
2	B	4489	GLN
2	B	4493	ASN
2	B	4642	ASN
2	B	4742	HIS
2	C	23	GLN
2	C	117	HIS
2	C	256	GLN
2	C	635	ASN
2	C	808	HIS
2	C	932	ASN
2	C	934	GLN
2	C	1126	GLN
2	C	1169	ASN
2	C	1178	ASN
2	C	1581	GLN
2	C	1656	HIS
2	C	1905	GLN
2	C	2118	ASN
2	C	2211	GLN
2	C	2251	ASN
2	C	2309	ASN

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Mol	Chain	Res	Type
2	C	2654	GLN
2	C	2849	HIS
2	C	2927	GLN
2	C	3111	HIS
2	C	3174	HIS
2	C	3286	ASN
2	C	3775	GLN
2	C	3811	GLN
2	C	3850	HIS
2	C	3869	ASN
2	C	3903	GLN
2	C	3955	GLN
2	C	3992	ASN
2	C	4171	GLN
2	C	4642	ASN
2	C	4742	HIS
2	C	4879	GLN
2	C	4903	HIS
2	D	23	GLN
2	D	117	HIS
2	D	150	GLN
2	D	256	GLN
2	D	635	ASN
2	D	808	HIS
2	D	932	ASN
2	D	949	HIS
2	D	1026	ASN
2	D	1126	GLN
2	D	1169	ASN
2	D	1178	ASN
2	D	1581	GLN
2	D	1656	HIS
2	D	1905	GLN
2	D	2211	GLN
2	D	2654	GLN
2	D	2684	ASN
2	D	2849	HIS
2	D	2927	GLN
2	D	2995	HIS
2	D	3174	HIS
2	D	3185	ASN
2	D	3279	ASN

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Mol	Chain	Res	Type
2	D	3286	ASN
2	D	3775	GLN
2	D	3811	GLN
2	D	3850	HIS
2	D	3869	ASN
2	D	3903	GLN
2	D	3955	GLN
2	D	3992	ASN
2	D	4009	ASN
2	D	4171	GLN
2	D	4489	GLN
2	D	4514	ASN
2	D	4642	ASN

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 oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 20 ligands modelled in this entry, 8 are monoatomic - leaving 12 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	$\# Z > 2$
6	XAN	A	5004	-	12,12,12	1.78	5 (41%)	14,17,17	2.32	6 (42%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
4	ATP	A	5005	-	32,33,33	0.26	0	48,52,52	0.30	0
4	ATP	A	5002	-	32,33,33	0.26	0	48,52,52	0.27	0
4	ATP	C	5002	-	32,33,33	0.26	0	48,52,52	0.27	0
4	ATP	B	5005	-	32,33,33	0.26	0	48,52,52	0.30	0
4	ATP	C	5005	-	32,33,33	0.25	0	48,52,52	0.30	0
4	ATP	D	5005	-	32,33,33	0.25	0	48,52,52	0.30	0
6	XAN	C	5004	-	12,12,12	1.78	5 (41%)	14,17,17	2.32	6 (42%)
6	XAN	D	5004	-	12,12,12	1.78	5 (41%)	14,17,17	2.31	6 (42%)
4	ATP	D	5002	-	32,33,33	0.25	0	48,52,52	0.27	0
6	XAN	B	5004	-	12,12,12	1.78	5 (41%)	14,17,17	2.31	6 (42%)
4	ATP	B	5002	-	32,33,33	0.25	0	48,52,52	0.27	0

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
6	XAN	A	5004	-	-	-	0/2/2/2
4	ATP	A	5005	-	-	6/22/38/38	0/3/3/3
4	ATP	A	5002	-	-	9/22/38/38	0/3/3/3
4	ATP	C	5002	-	-	9/22/38/38	0/3/3/3
4	ATP	B	5005	-	-	6/22/38/38	0/3/3/3
4	ATP	C	5005	-	-	6/22/38/38	0/3/3/3
4	ATP	D	5005	-	-	6/22/38/38	0/3/3/3
6	XAN	C	5004	-	-	-	0/2/2/2
6	XAN	D	5004	-	-	-	0/2/2/2
4	ATP	D	5002	-	-	9/22/38/38	0/3/3/3
6	XAN	B	5004	-	-	-	0/2/2/2
4	ATP	B	5002	-	-	9/22/38/38	0/3/3/3

All (20) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	A	5004	XAN	C6-N1	-3.27	1.32	1.38
6	B	5004	XAN	C6-N1	-3.26	1.32	1.38
6	C	5004	XAN	C6-N1	-3.26	1.32	1.38
6	D	5004	XAN	C6-N1	-3.25	1.32	1.38
6	B	5004	XAN	O6-C6	-2.47	1.18	1.23
6	C	5004	XAN	O6-C6	-2.47	1.18	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	D	5004	XAN	O6-C6	-2.42	1.19	1.23
6	A	5004	XAN	O6-C6	-2.42	1.19	1.23
6	A	5004	XAN	C5-N7	-2.33	1.34	1.39
6	C	5004	XAN	C5-N7	-2.33	1.34	1.39
6	B	5004	XAN	C5-N7	-2.32	1.34	1.39
6	D	5004	XAN	C5-N7	-2.32	1.34	1.39
6	D	5004	XAN	C5-C4	-2.10	1.34	1.38
6	C	5004	XAN	C5-C4	-2.10	1.34	1.38
6	A	5004	XAN	C5-C4	-2.09	1.34	1.38
6	B	5004	XAN	O2-C2	-2.09	1.18	1.23
6	B	5004	XAN	C5-C4	-2.08	1.34	1.38
6	D	5004	XAN	O2-C2	-2.06	1.19	1.23
6	A	5004	XAN	O2-C2	-2.06	1.19	1.23
6	C	5004	XAN	O2-C2	-2.05	1.19	1.23

All (24) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	C	5004	XAN	C6-N1-C2	-4.62	120.00	126.37
6	A	5004	XAN	C6-N1-C2	-4.62	120.01	126.37
6	D	5004	XAN	C6-N1-C2	-4.61	120.03	126.37
6	B	5004	XAN	C6-N1-C2	-4.58	120.06	126.37
6	A	5004	XAN	N9-C8-N7	-4.28	108.01	112.98
6	B	5004	XAN	N9-C8-N7	-4.26	108.03	112.98
6	C	5004	XAN	N9-C8-N7	-4.26	108.04	112.98
6	D	5004	XAN	N9-C8-N7	-4.25	108.04	112.98
6	C	5004	XAN	N1-C2-N3	2.77	120.10	115.74
6	A	5004	XAN	N1-C2-N3	2.76	120.08	115.74
6	D	5004	XAN	N1-C2-N3	2.76	120.07	115.74
6	B	5004	XAN	N1-C2-N3	2.74	120.05	115.74
6	B	5004	XAN	C8-N7-C5	2.71	108.05	104.38
6	C	5004	XAN	C8-N7-C5	2.69	108.02	104.38
6	D	5004	XAN	C8-N7-C5	2.69	108.02	104.38
6	A	5004	XAN	C8-N7-C5	2.68	108.00	104.38
6	A	5004	XAN	C5-C6-N1	2.66	120.02	113.25
6	D	5004	XAN	C5-C6-N1	2.66	120.02	113.25
6	C	5004	XAN	C5-C6-N1	2.65	120.00	113.25
6	B	5004	XAN	C5-C6-N1	2.64	119.97	113.25
6	A	5004	XAN	O6-C6-C5	-2.49	119.97	126.53
6	D	5004	XAN	O6-C6-C5	-2.48	119.99	126.53
6	C	5004	XAN	O6-C6-C5	-2.47	120.00	126.53
6	B	5004	XAN	O6-C6-C5	-2.47	120.02	126.53

There are no chirality outliers.

All (60) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
4	A	5002	ATP	PB-O3B-PG-O2G
4	A	5002	ATP	C5'-O5'-PA-O1A
4	A	5002	ATP	C5'-O5'-PA-O2A
4	B	5002	ATP	PB-O3B-PG-O2G
4	B	5002	ATP	C5'-O5'-PA-O1A
4	B	5002	ATP	C5'-O5'-PA-O2A
4	C	5002	ATP	PB-O3B-PG-O2G
4	C	5002	ATP	C5'-O5'-PA-O1A
4	C	5002	ATP	C5'-O5'-PA-O2A
4	D	5002	ATP	PB-O3B-PG-O2G
4	D	5002	ATP	C5'-O5'-PA-O1A
4	D	5002	ATP	C5'-O5'-PA-O2A
4	A	5002	ATP	C4'-C5'-O5'-PA
4	B	5002	ATP	C4'-C5'-O5'-PA
4	C	5002	ATP	C4'-C5'-O5'-PA
4	D	5002	ATP	C4'-C5'-O5'-PA
4	A	5005	ATP	C3'-C4'-C5'-O5'
4	B	5005	ATP	C3'-C4'-C5'-O5'
4	C	5005	ATP	C3'-C4'-C5'-O5'
4	D	5005	ATP	C3'-C4'-C5'-O5'
4	A	5005	ATP	O4'-C4'-C5'-O5'
4	B	5005	ATP	O4'-C4'-C5'-O5'
4	C	5005	ATP	O4'-C4'-C5'-O5'
4	D	5005	ATP	O4'-C4'-C5'-O5'
4	A	5002	ATP	PA-O3A-PB-O3B
4	B	5002	ATP	PA-O3A-PB-O3B
4	C	5002	ATP	PA-O3A-PB-O3B
4	D	5002	ATP	PA-O3A-PB-O3B
4	A	5002	ATP	C5'-O5'-PA-O3A
4	B	5002	ATP	C5'-O5'-PA-O3A
4	C	5002	ATP	C5'-O5'-PA-O3A
4	D	5002	ATP	C5'-O5'-PA-O3A
4	A	5005	ATP	PB-O3A-PA-O2A
4	B	5005	ATP	PB-O3A-PA-O2A
4	C	5005	ATP	PB-O3A-PA-O2A
4	D	5005	ATP	PB-O3A-PA-O2A
4	A	5005	ATP	O4'-C1'-N9-C4
4	B	5005	ATP	O4'-C1'-N9-C4
4	C	5005	ATP	O4'-C1'-N9-C4
4	D	5005	ATP	O4'-C1'-N9-C4

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Mol	Chain	Res	Type	Atoms
4	A	5005	ATP	O4'-C1'-N9-C8
4	B	5005	ATP	O4'-C1'-N9-C8
4	C	5005	ATP	O4'-C1'-N9-C8
4	D	5005	ATP	O4'-C1'-N9-C8
4	A	5005	ATP	PB-O3A-PA-O1A
4	B	5005	ATP	PB-O3A-PA-O1A
4	C	5005	ATP	PB-O3A-PA-O1A
4	D	5005	ATP	PB-O3A-PA-O1A
4	A	5002	ATP	PB-O3B-PG-O1G
4	B	5002	ATP	PB-O3B-PG-O1G
4	C	5002	ATP	PB-O3B-PG-O1G
4	D	5002	ATP	PB-O3B-PG-O1G
4	A	5002	ATP	PB-O3B-PG-O3G
4	B	5002	ATP	PB-O3B-PG-O3G
4	C	5002	ATP	PB-O3B-PG-O3G
4	D	5002	ATP	PB-O3B-PG-O3G
4	A	5002	ATP	PA-O3A-PB-O1B
4	B	5002	ATP	PA-O3A-PB-O1B
4	C	5002	ATP	PA-O3A-PB-O1B
4	D	5002	ATP	PA-O3A-PB-O1B

There are no ring outliers.

4 monomers are involved in 8 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
4	A	5005	ATP	2	0
4	B	5005	ATP	2	0
4	C	5005	ATP	2	0
4	D	5005	ATP	2	0

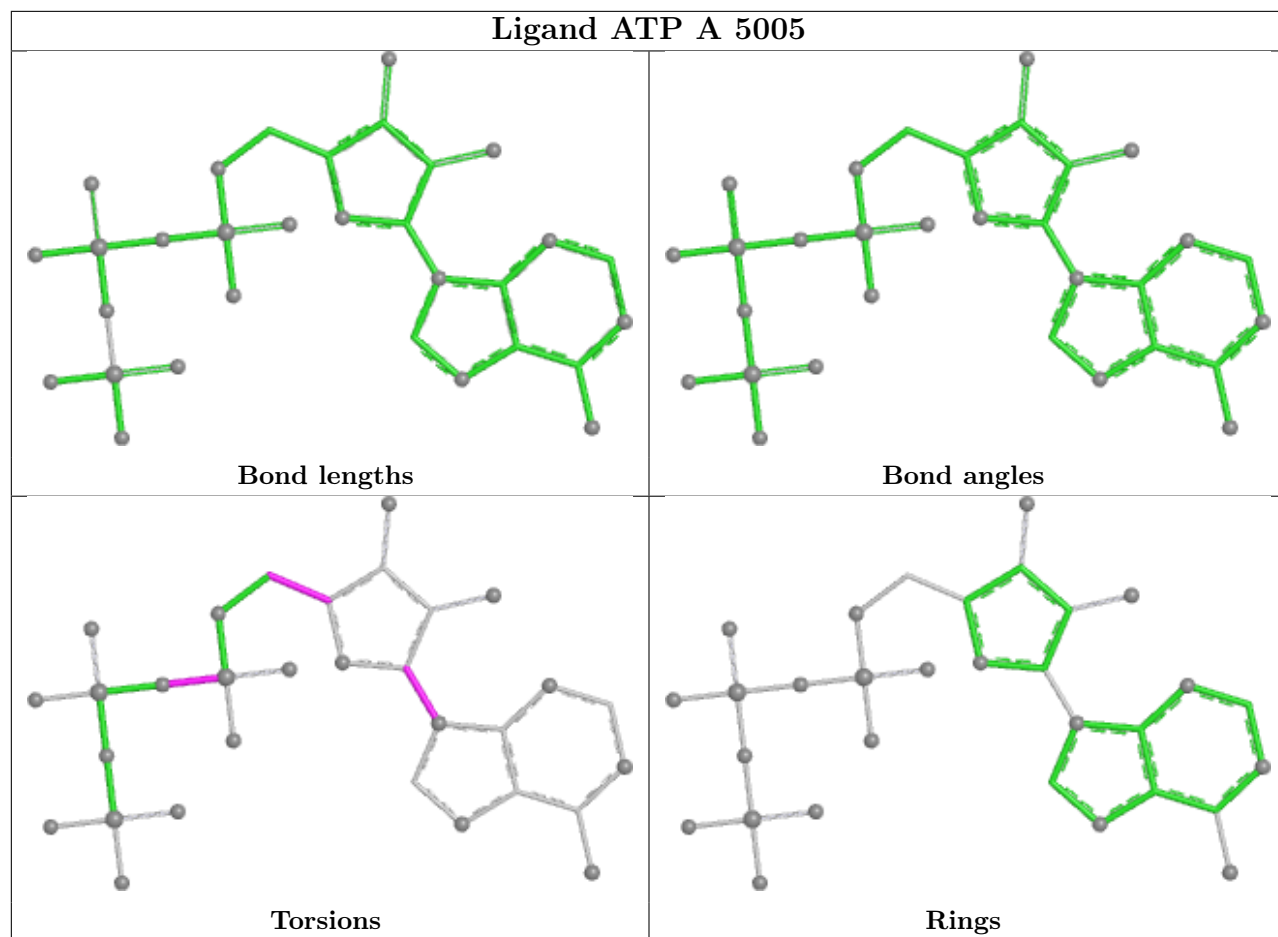
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. 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.

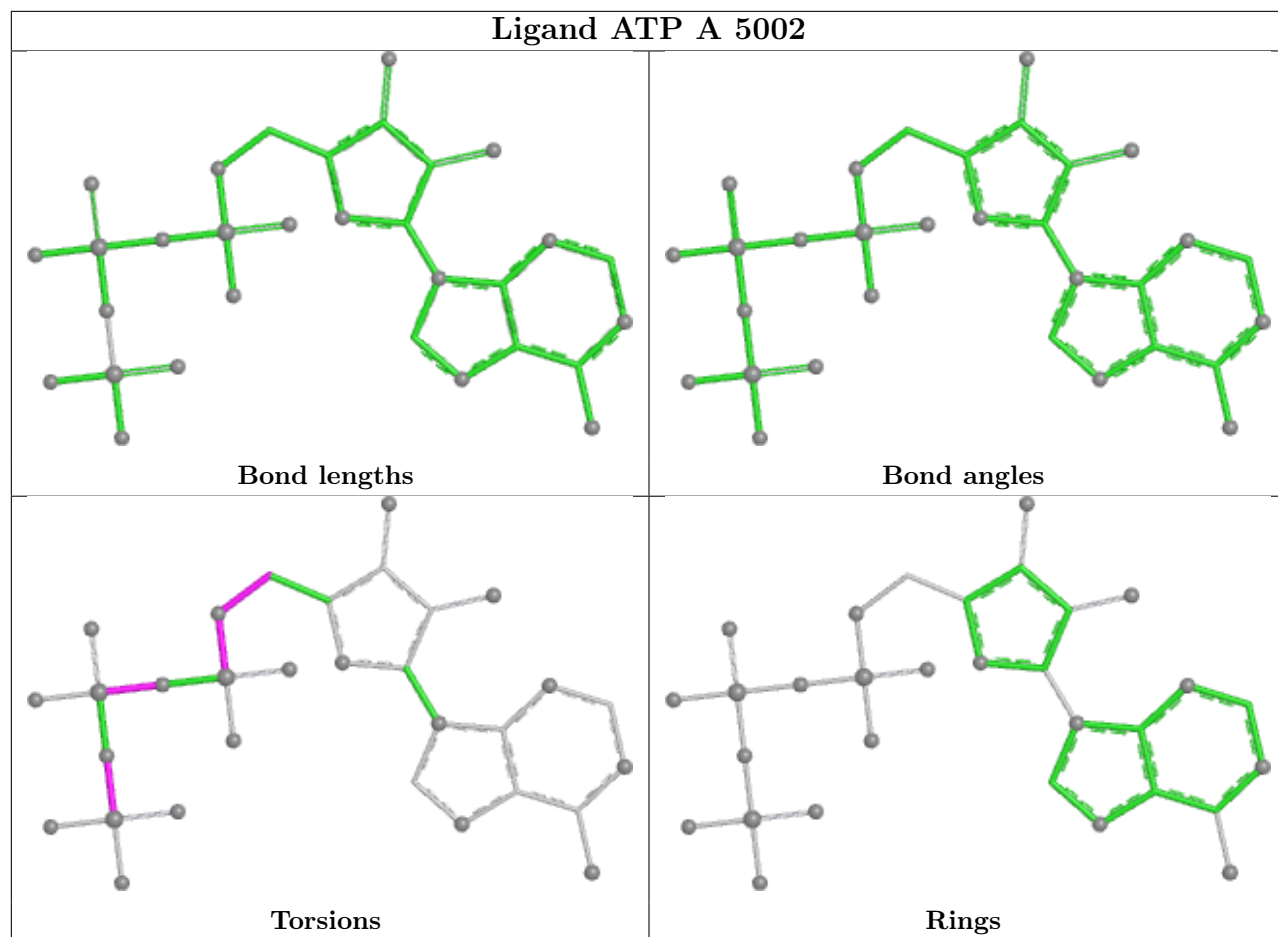
Bond lengths

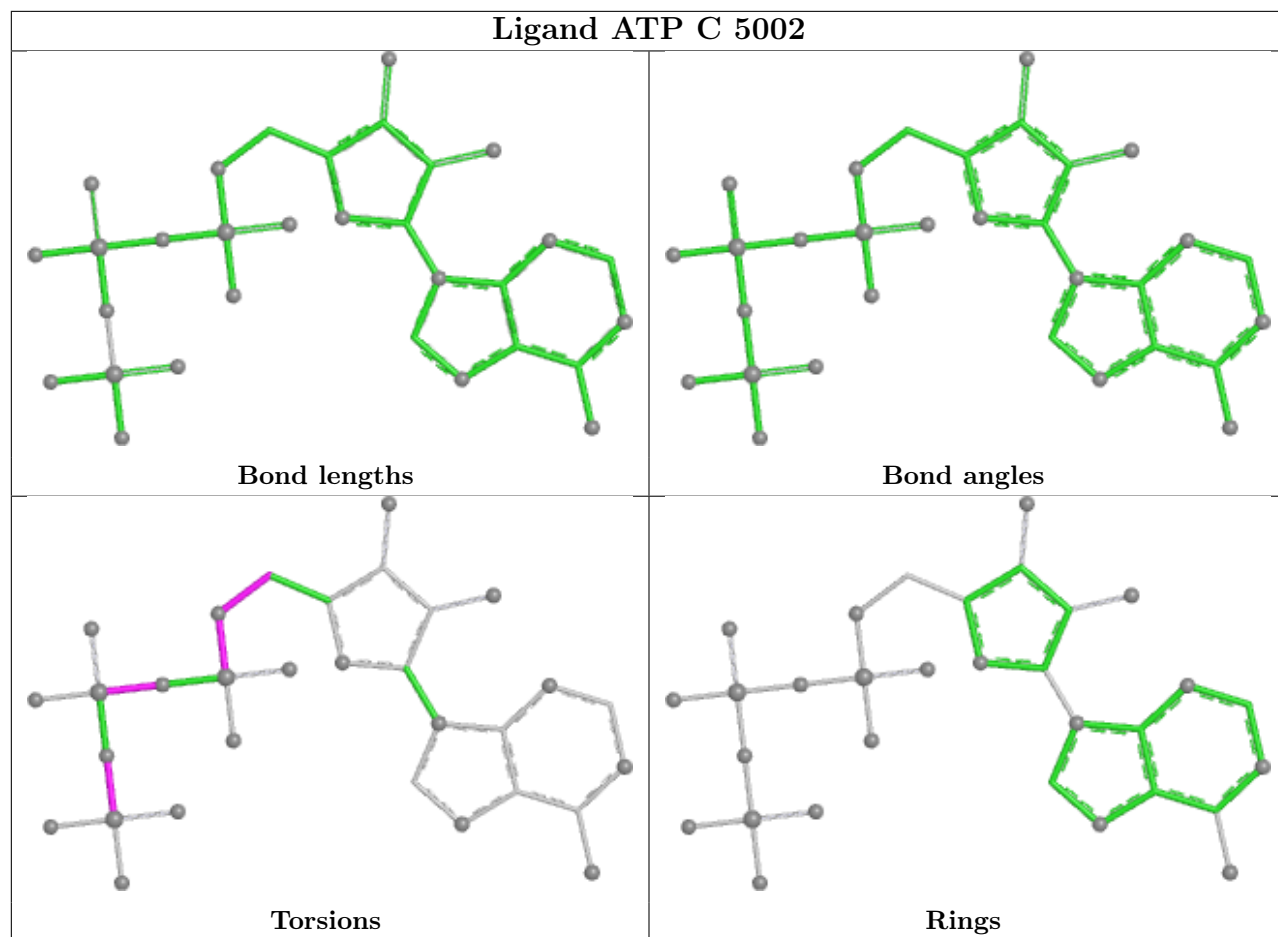
Bond angles

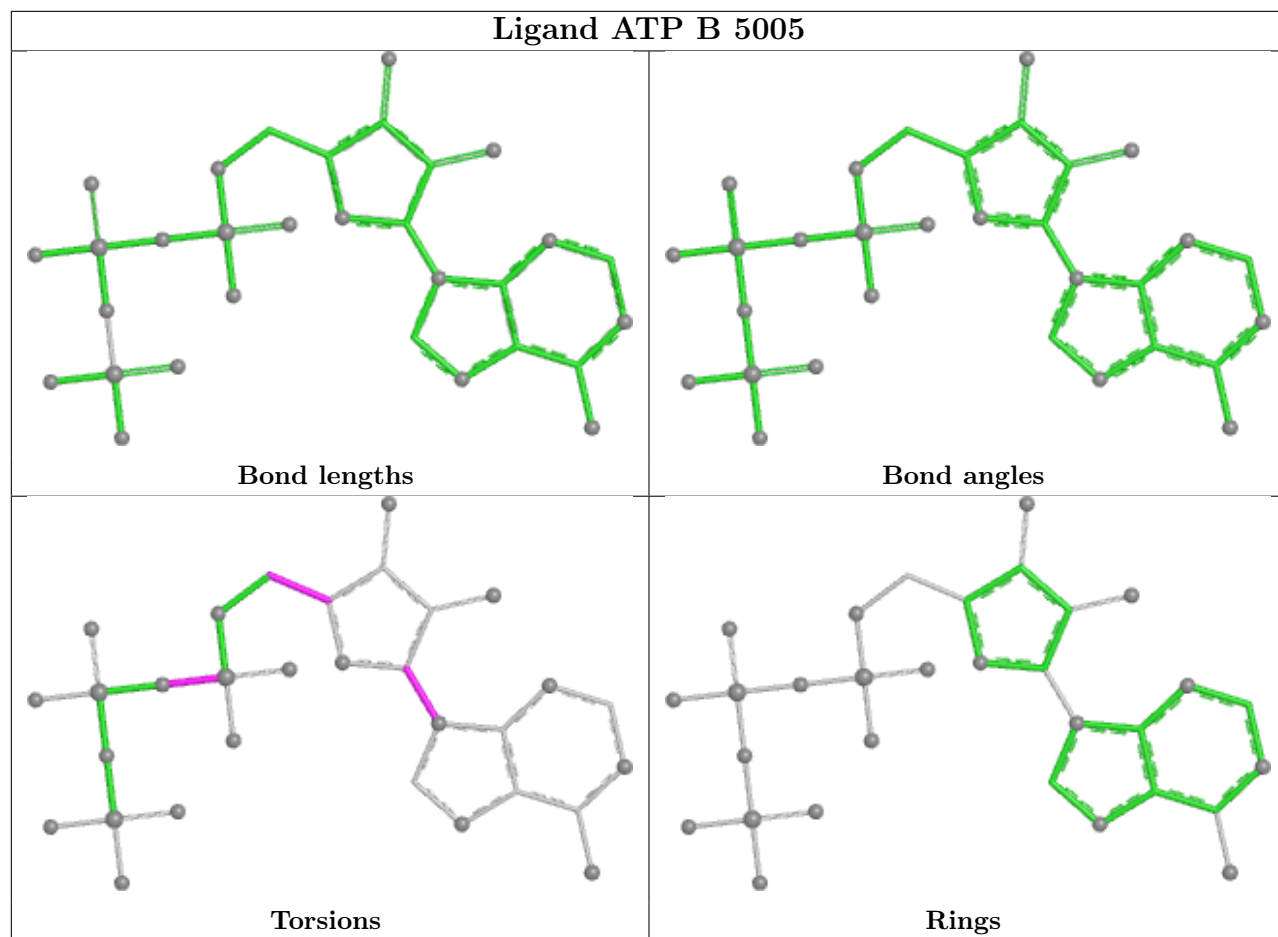
Torsions

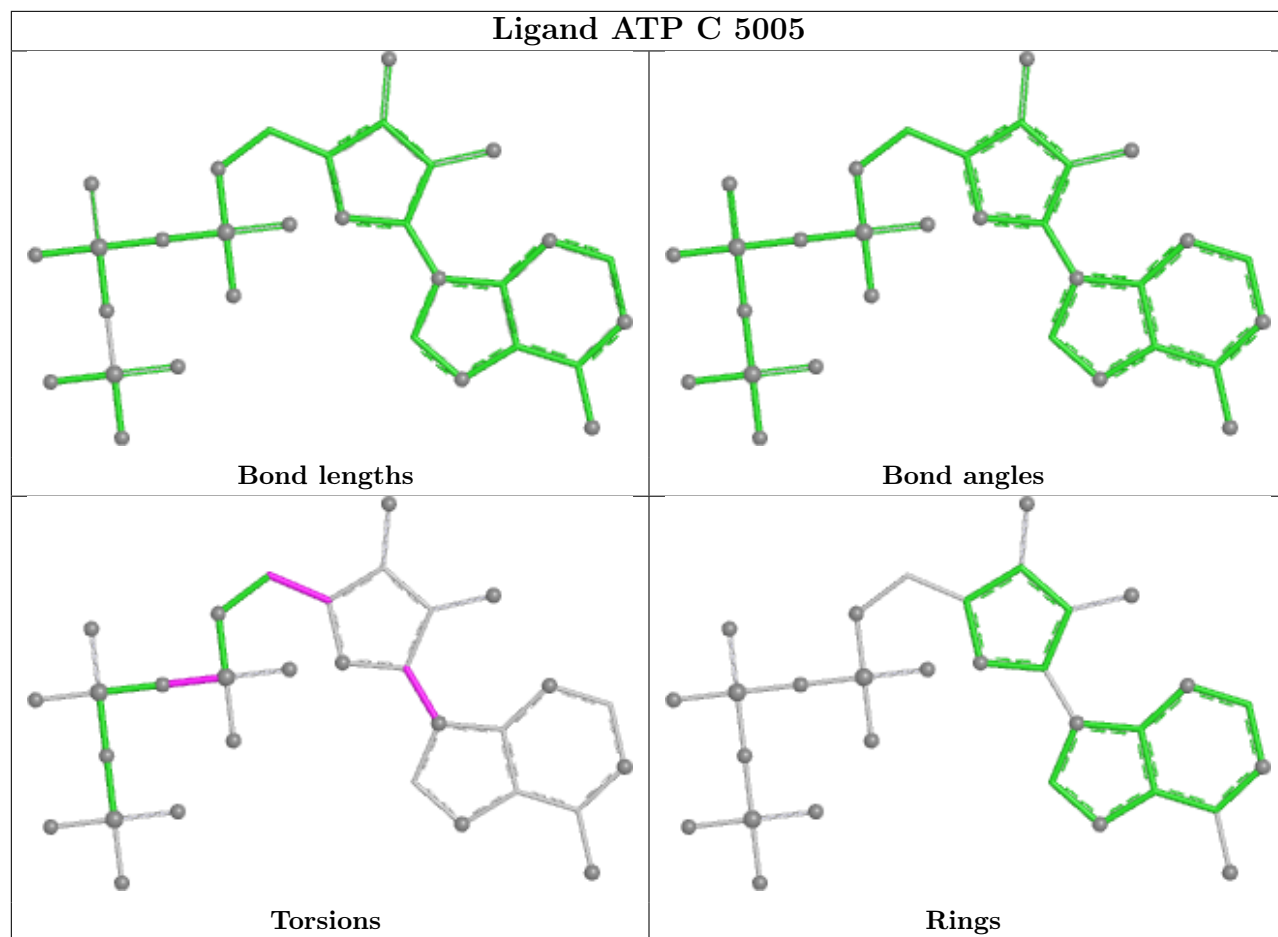
Rings

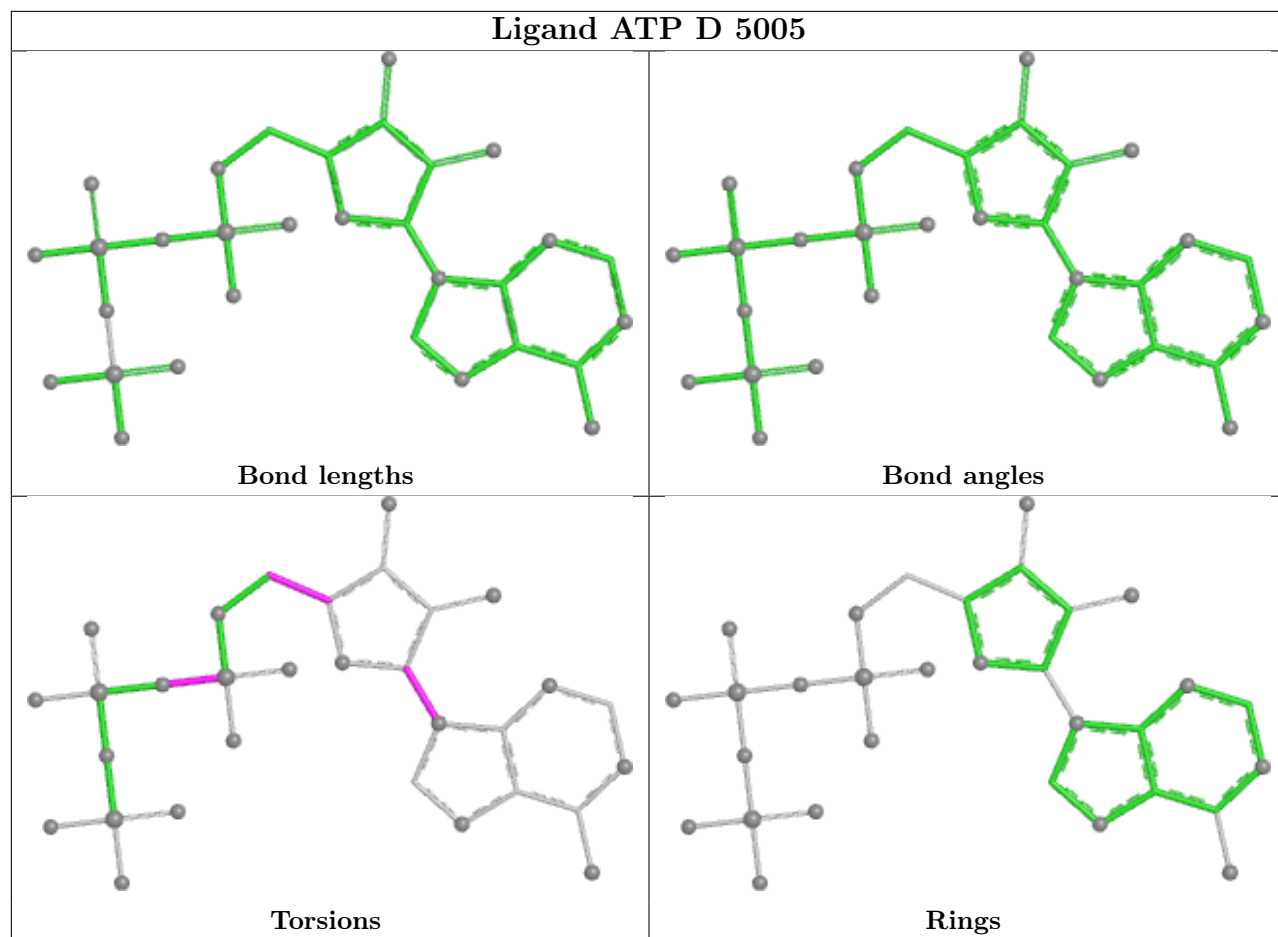








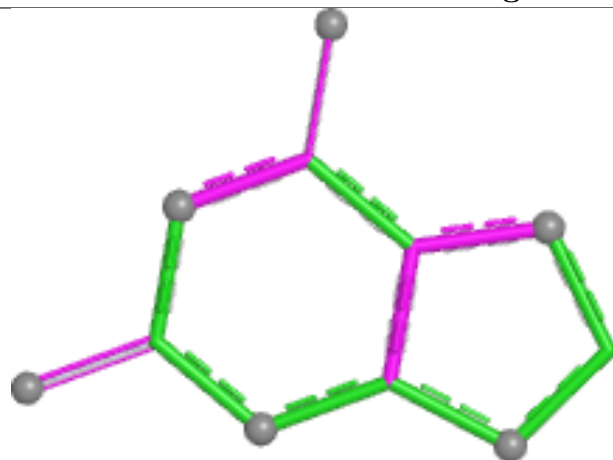




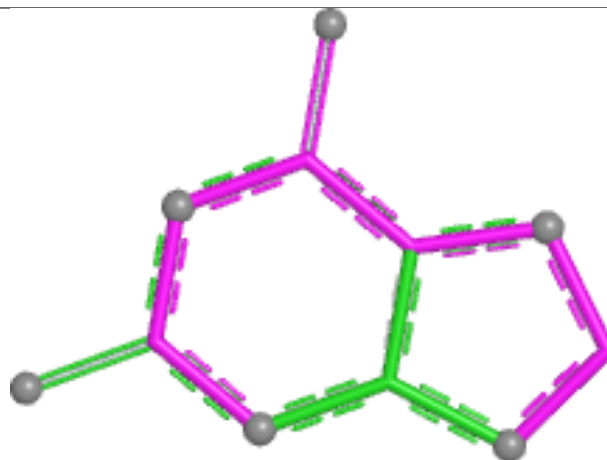
The figure displays four panels illustrating different types of bond analysis for a bicyclic molecule. The molecule is shown in a 3D perspective view, with atoms represented by grey spheres and bonds by colored lines. The panels are arranged in a 2x2 grid:

- Bond lengths:** The bonds are colored magenta and green, indicating different lengths.
- Bond angles:** The bonds are colored magenta and green, indicating different angles.
- Torsions:** The bonds are colored grey, indicating different torsional angles.
- Rings:** The bonds are colored green, indicating different ring structures.

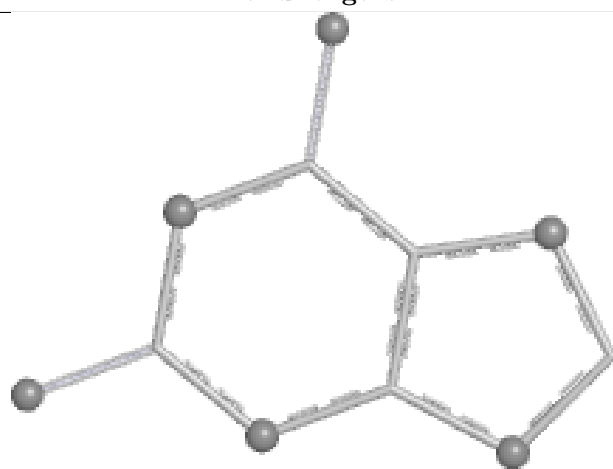
Ligand XAN D 5004



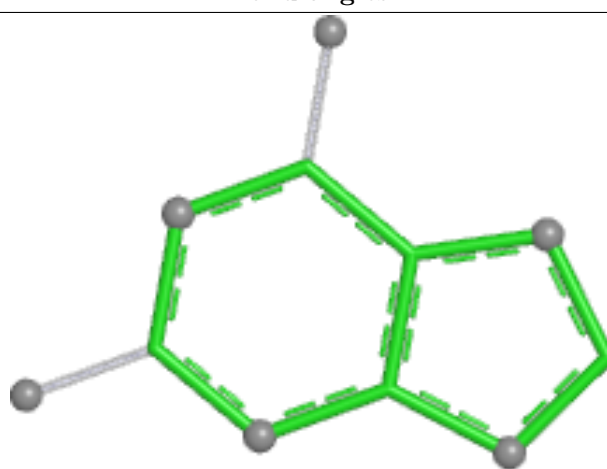
Bond lengths



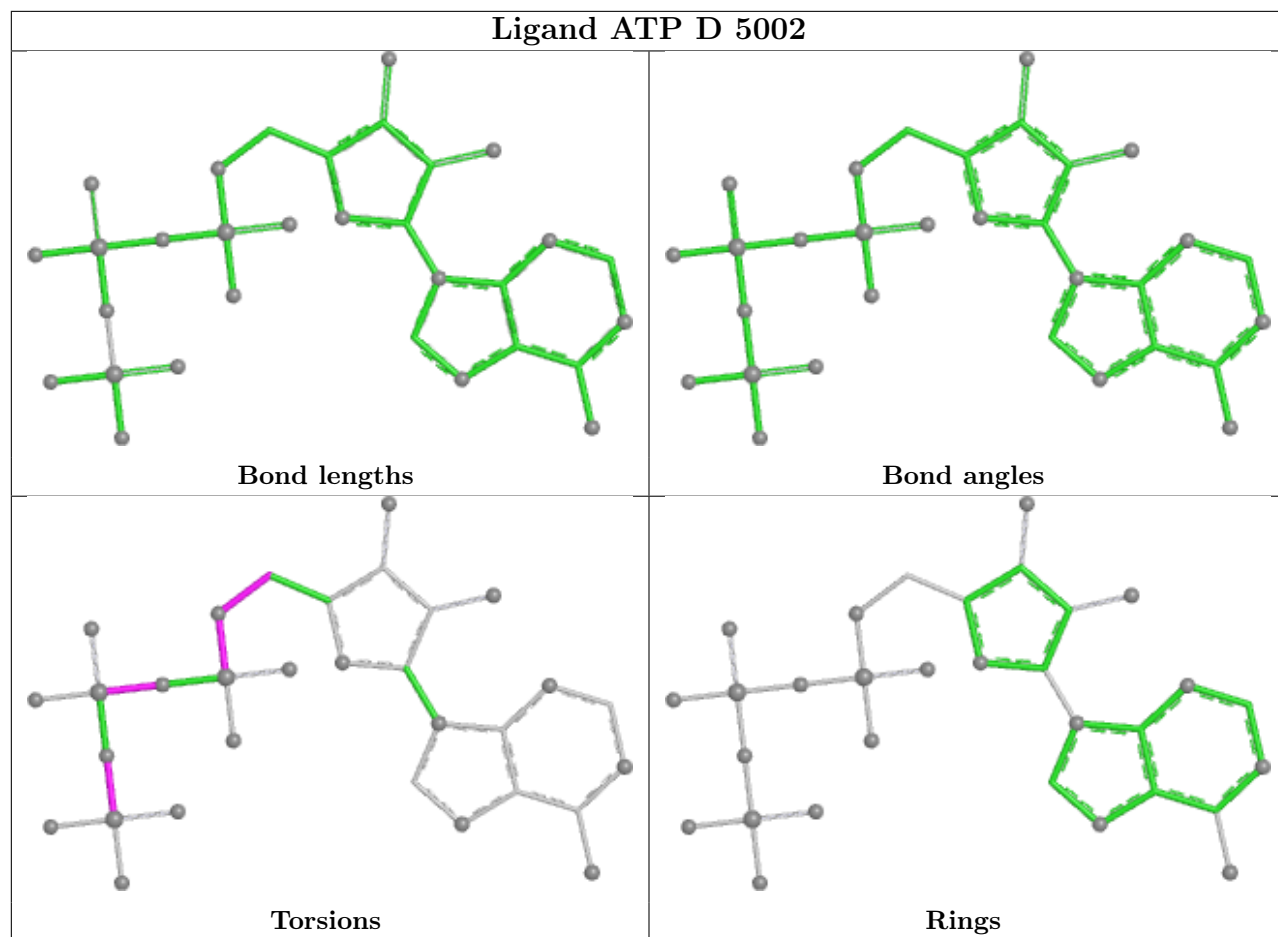
Bond angles



Torsions

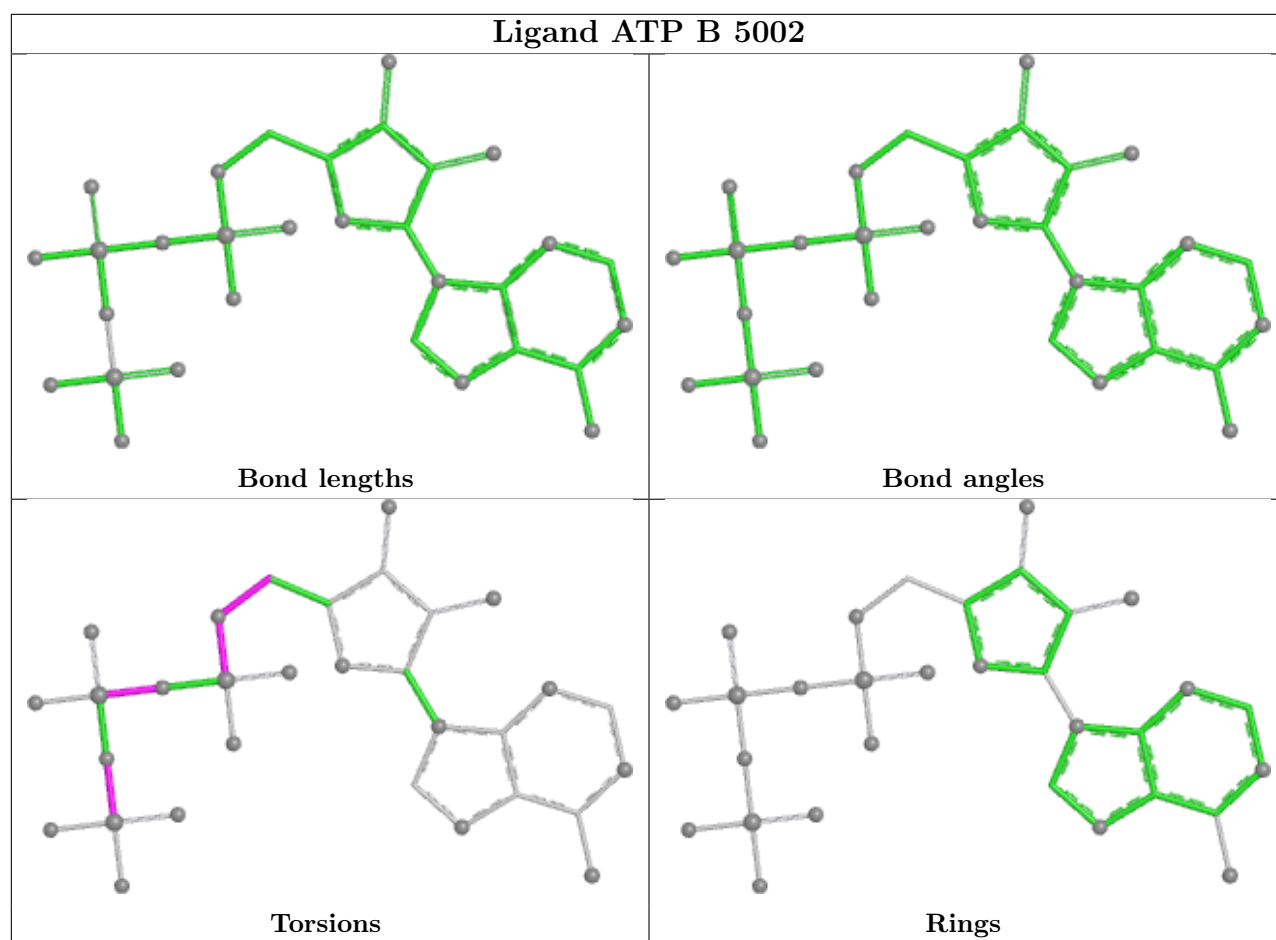


Rings



The figure displays four panels illustrating different types of bond analysis for a bicyclic molecule. The molecule consists of two fused rings, one six-membered and one five-membered, with three substituents. The panels are labeled as follows:

- Bond lengths:** Shows the molecule with magenta and green bonds, representing different bond length categories.
- Bond angles:** Shows the molecule with magenta and green bonds, representing different bond angle categories.
- Torsions:** Shows the molecule with grey bonds, representing different torsion categories.
- Rings:** Shows the molecule with green bonds, representing different ring categories.



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.

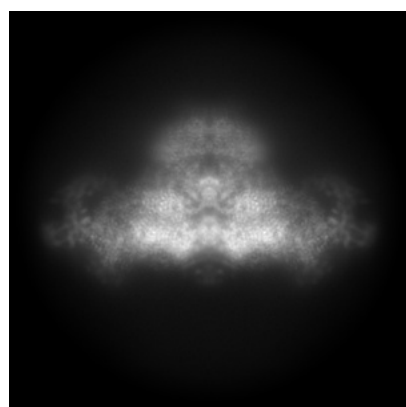
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-26416. These allow visual inspection of the internal detail of the map and identification of artifacts.

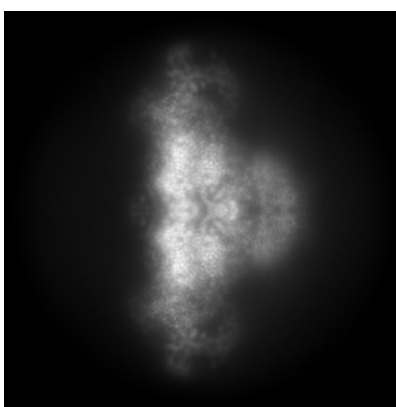
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

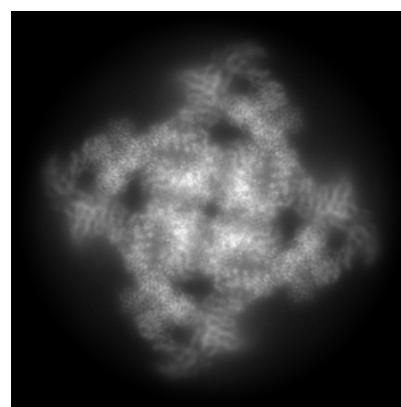
6.1.1 Primary map



X



Y

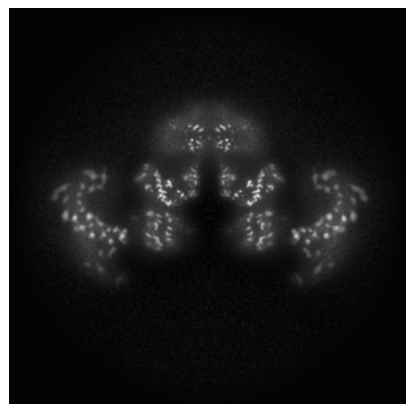


Z

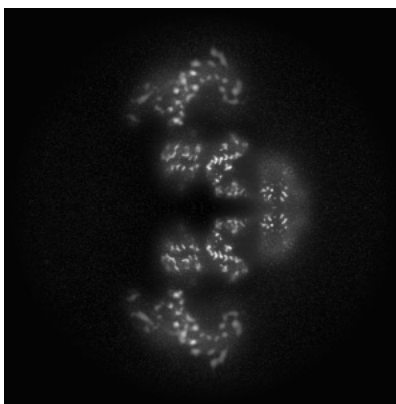
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

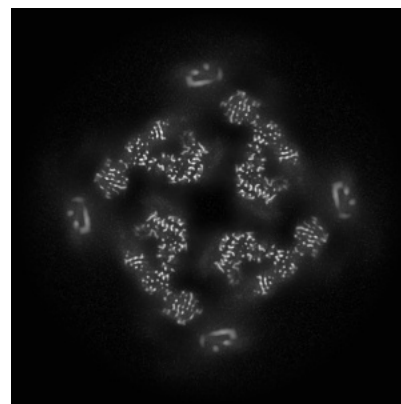
6.2.1 Primary map



X Index: 256



Y Index: 256

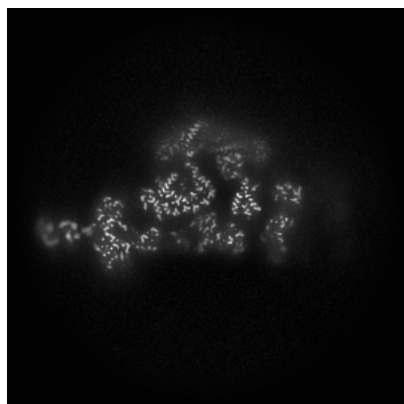


Z Index: 256

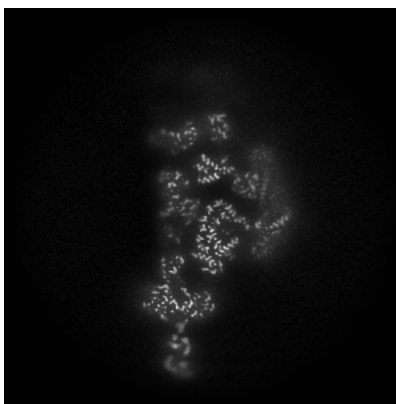
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

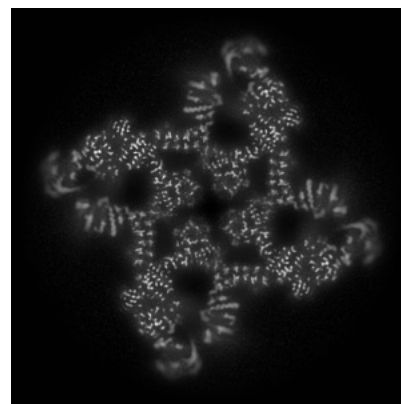
6.3.1 Primary map



X Index: 206



Y Index: 306

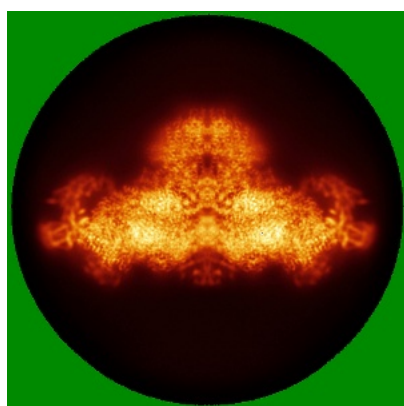


Z Index: 227

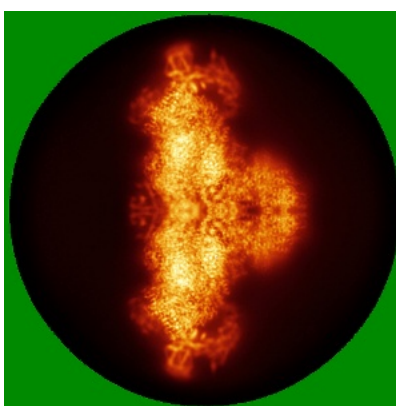
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) [i](#)

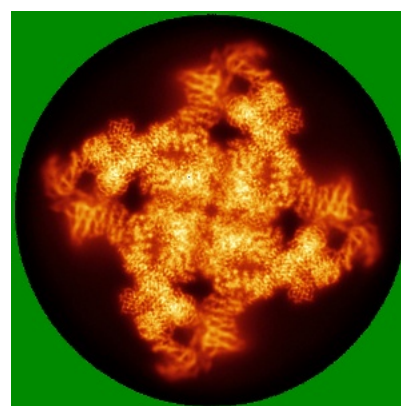
6.4.1 Primary map



X



Y

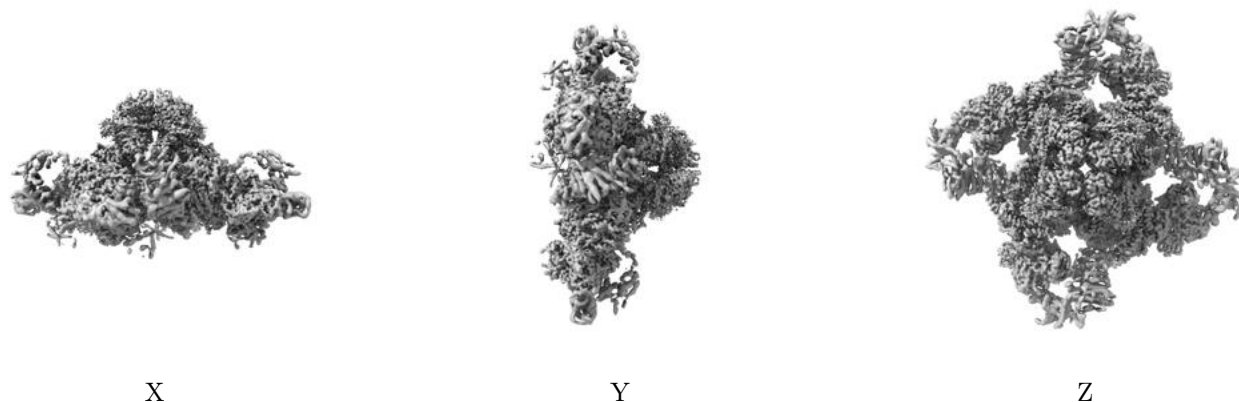


Z

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

6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.13. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

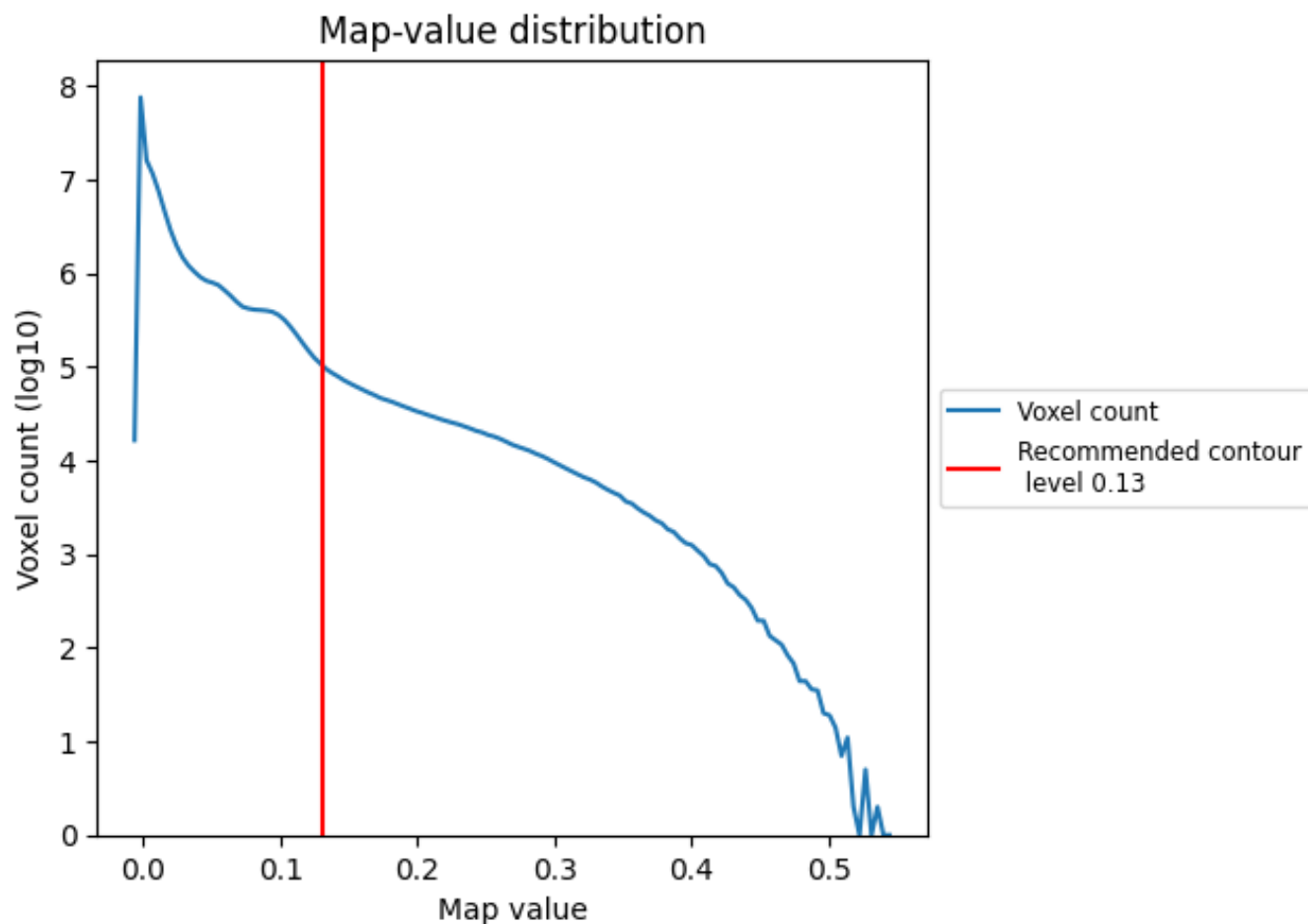
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

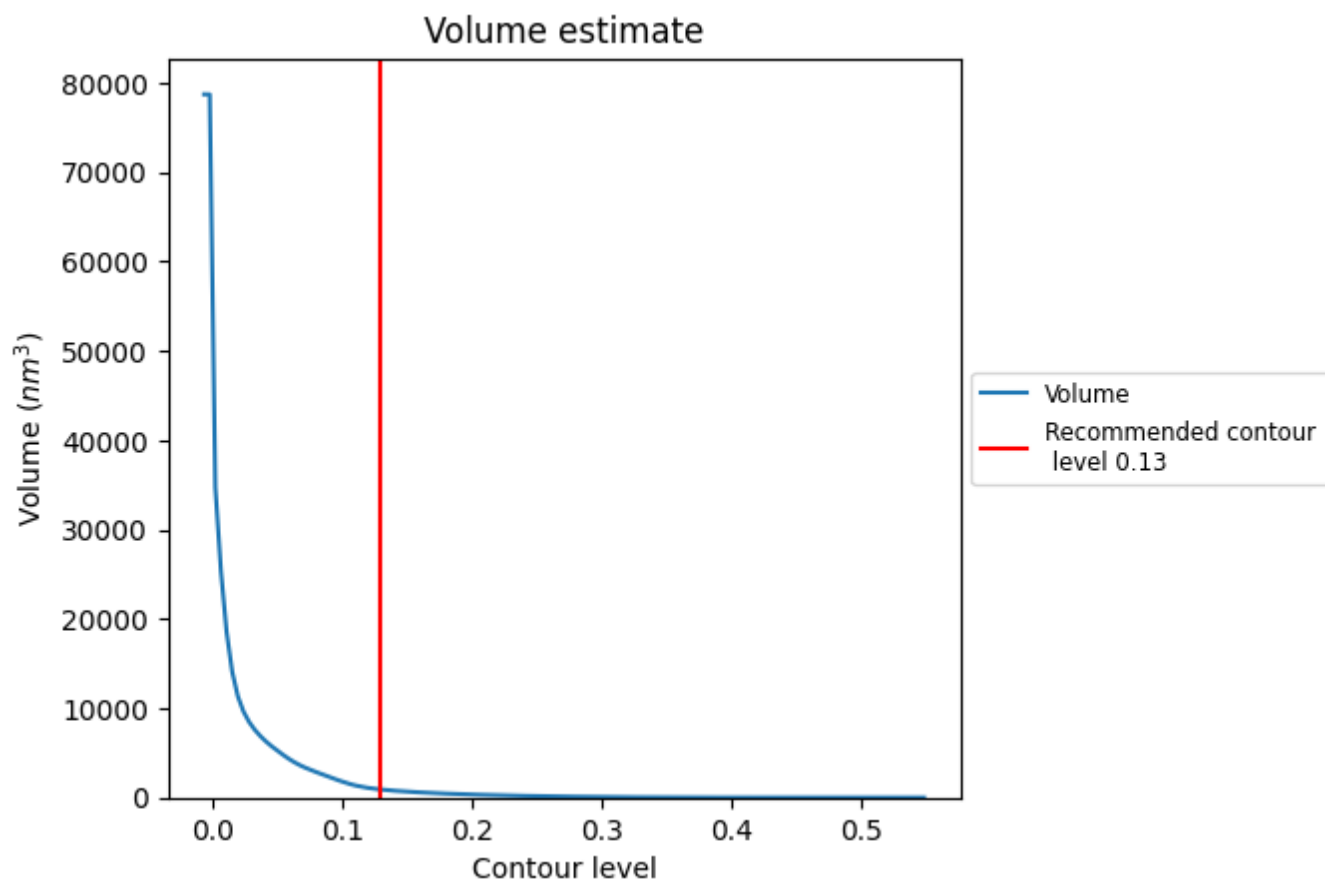
This section contains the results of statistical analysis of the map.

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.

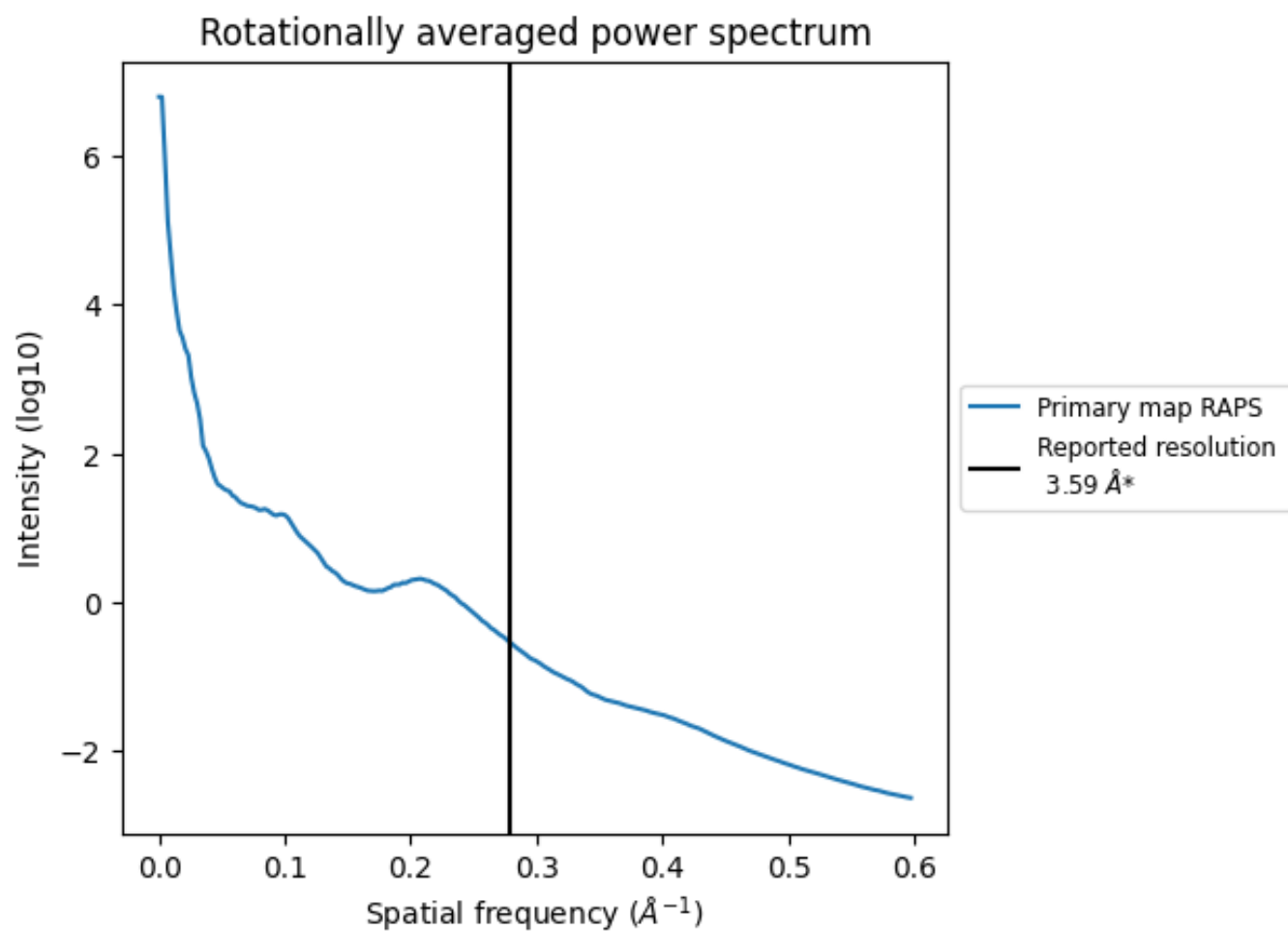
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 901 nm^3 ; this corresponds to an approximate mass of 814 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 ⓘ



*Reported resolution corresponds to spatial frequency of 0.279 Å⁻¹

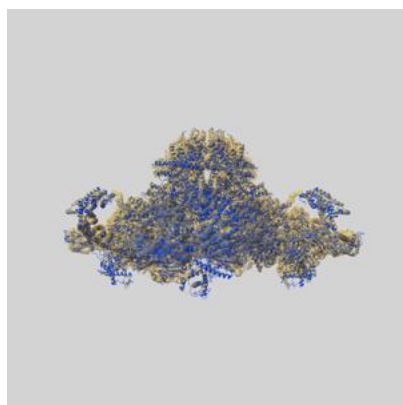
8 Fourier-Shell correlation ⓘ

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

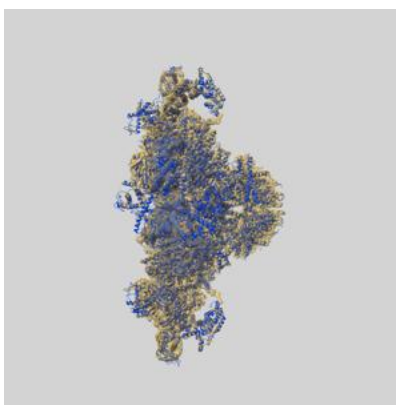
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-26416 and PDB model 7UA9. Per-residue inclusion information can be found in section [3](#) on page [7](#).

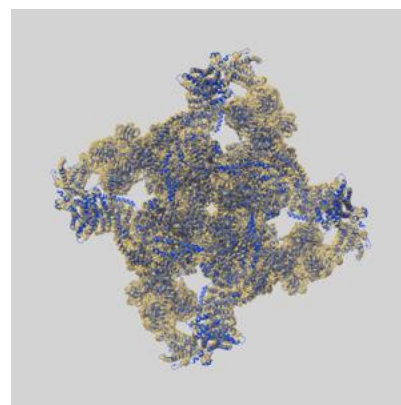
9.1 Map-model overlay [i](#)



X



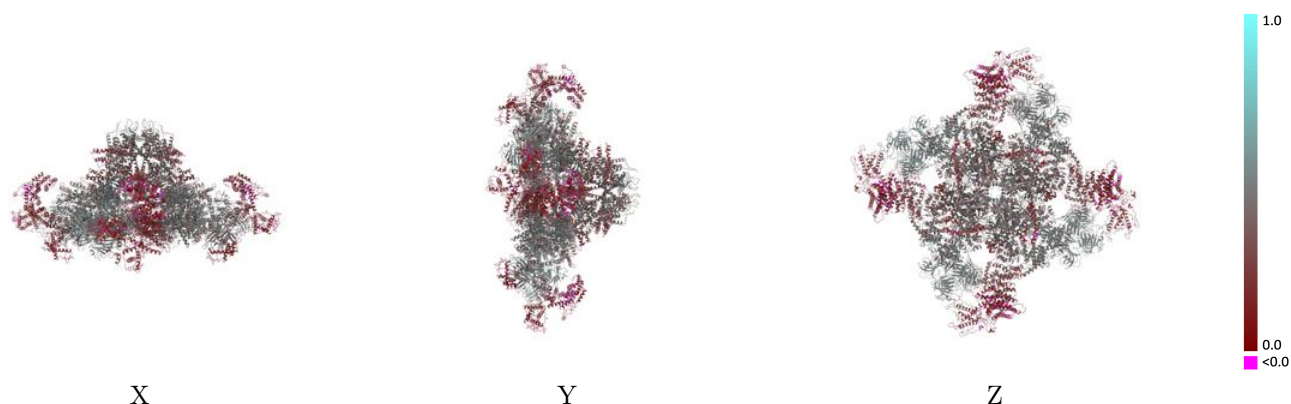
Y



Z

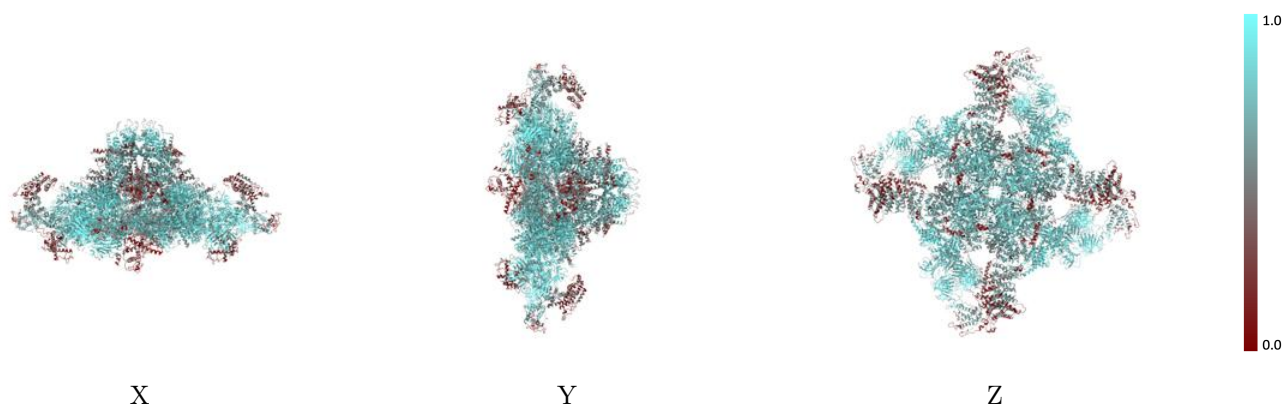
The images above show the 3D surface view of the map at the recommended contour level 0.13 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



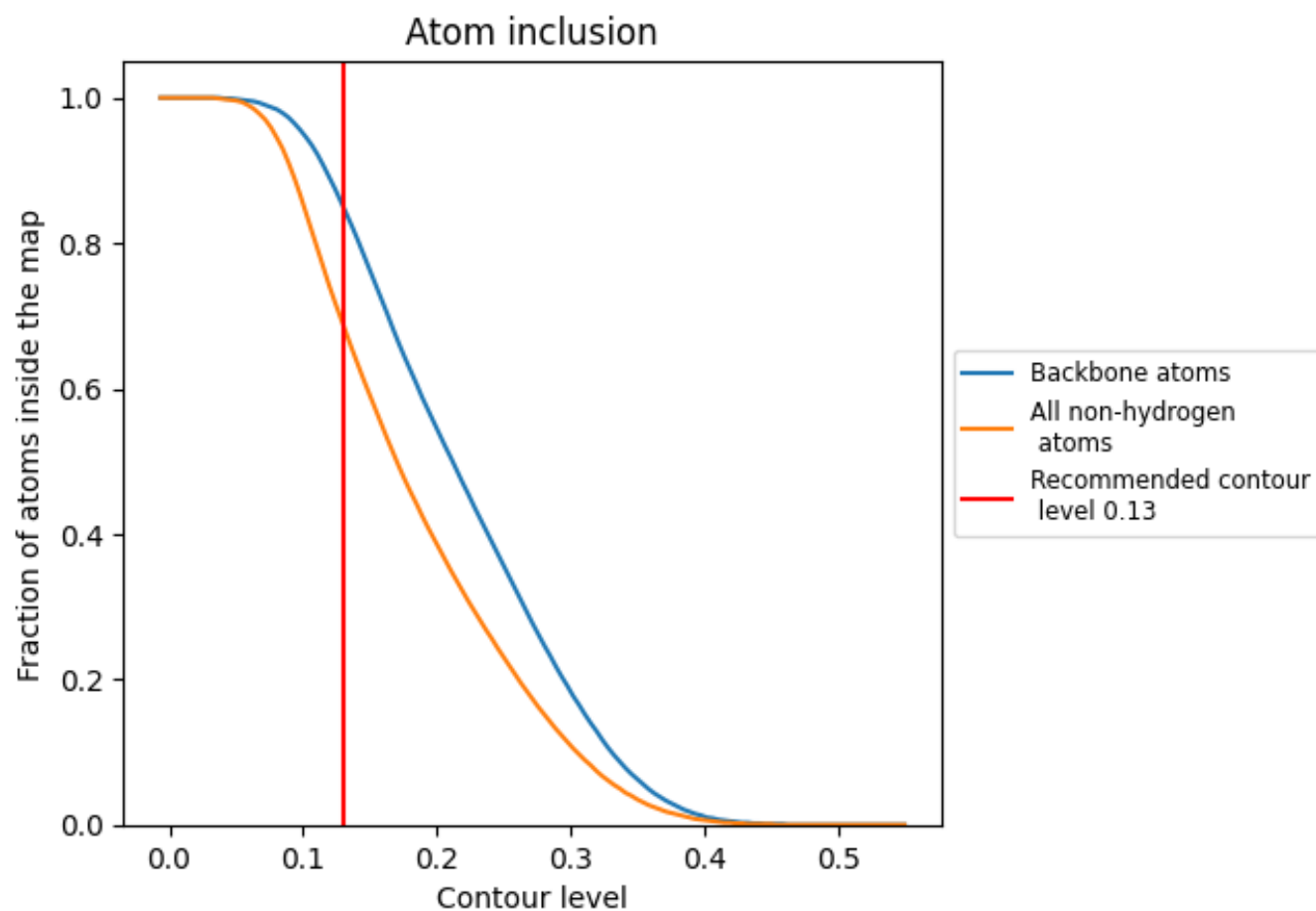
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (0.13).

9.4 Atom inclusion [i](#)



At the recommended contour level, 85% of all backbone atoms, 69% 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 (0.13) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.6870	0.3670
A	0.6900	0.3740
B	0.6770	0.3560
C	0.6860	0.3720
D	0.6770	0.3530
E	0.8610	0.5070
F	0.8620	0.4990
G	0.8470	0.5000
H	0.8510	0.5010

1.0

0.0

<0.0