



Full wwPDB EM Validation Report ⓘ

Mar 28, 2026 – 08:39 PM UTC

PDB ID : 7U9Q / pdb_00007u9q
EMDB ID : EMD-26405
Title : Structure of PKA phosphorylated human RyR2 in the closed state
Authors : Miotto, M.C.; Marks, A.R.
Deposited on : 2022-03-11
Resolution : 3.11 Å(reported)
Based on initial model : 7U9X

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:

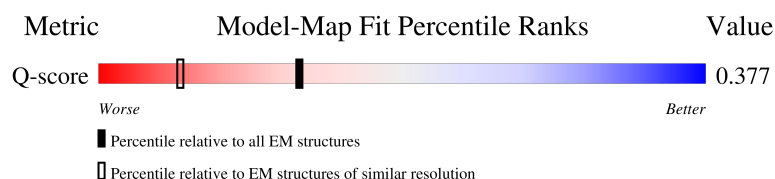
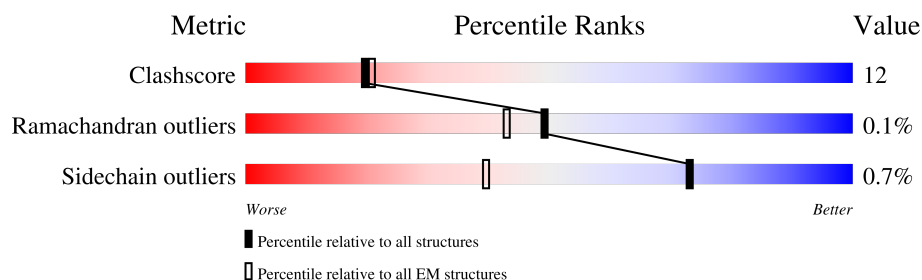
EMDB validation analysis : 0.0.1.dev132
Mogul : 2022.3.0, CSD as543be (2022)
MolProbity : 4-5-2 with Phenix2.0
Buster-report : wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics : 202505.v01 (Using data 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 3.11 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	-
Ramachandran outliers	224038	23583	-
Sidechain outliers	223484	23102	-
Q-score	-	25397	14465 (2.61 - 3.61)

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	80% 17% ...
1	F	108	79% 19% ...
1	G	108	79% 19% ...
1	H	108	77% 20% ...

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Mol	Chain	Length	Quality of chain
2	A	4967	13% 61% 23% 15%
2	B	4967	13% 62% 23% 15%
2	C	4967	13% 62% 23% 15%
2	D	4967	13% 61% 23% 15%

2 Entry composition

There are 4 unique types of molecules in this entry. The entry contains 138608 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	H	107	Total	C	N	O	S	0	0
			818	516	144	154	4		
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		

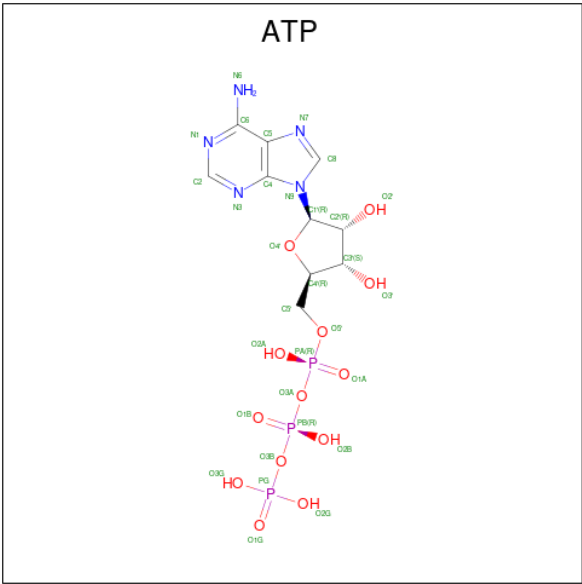
- Molecule 2 is a protein called Ryanodine receptor 2.

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

- 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	D	1	Total	Zn	0
			1	1	
3	B	1	Total	Zn	0
			1	1	
3	C	1	Total	Zn	0
			1	1	

- Molecule 4 is ADENOSINE-5'-TRIPHOSPHATE (CCD ID: ATP) (formula: C₁₀H₁₆N₅O₁₃P₃) (labeled as "Ligand of Interest" by depositor).



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

3 Residue-property plots

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

Chain H: 



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

Chain E: 



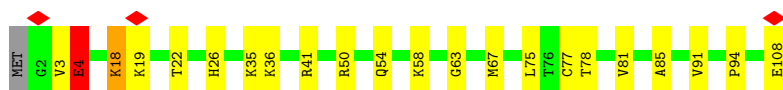
- Molecule 1: Peptidyl-prolyl cis-trans isomerase FKBP1B

Chain F: 



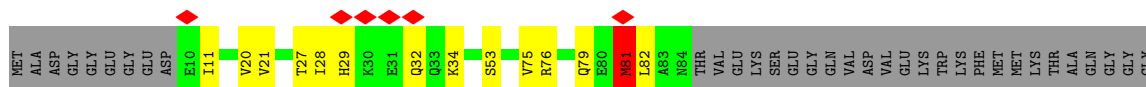
- Molecule 1: Peptidyl-prolyl cis-trans isomerase FKBP1B

Chain G: 

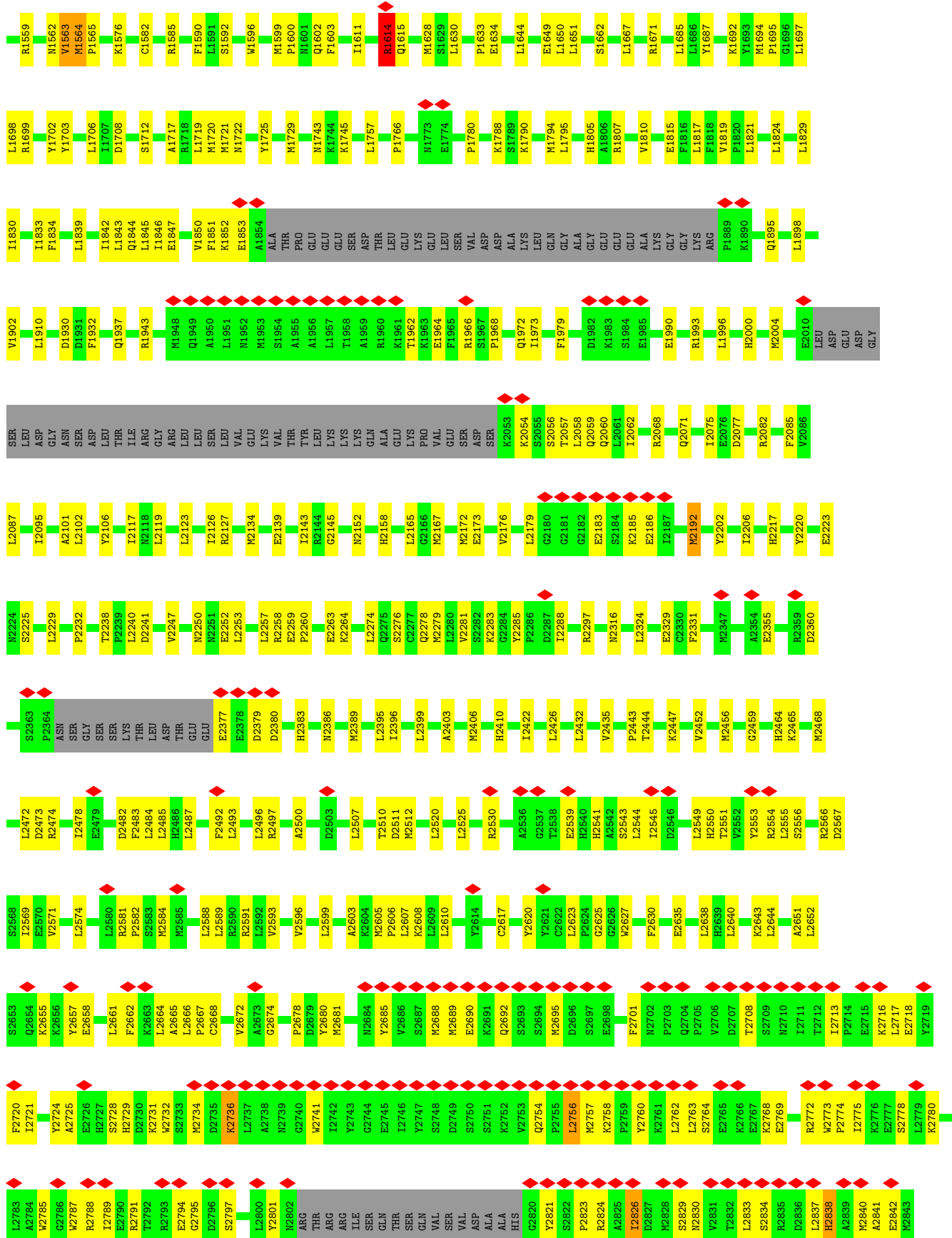


- Molecule 2: Ryanodine receptor 2

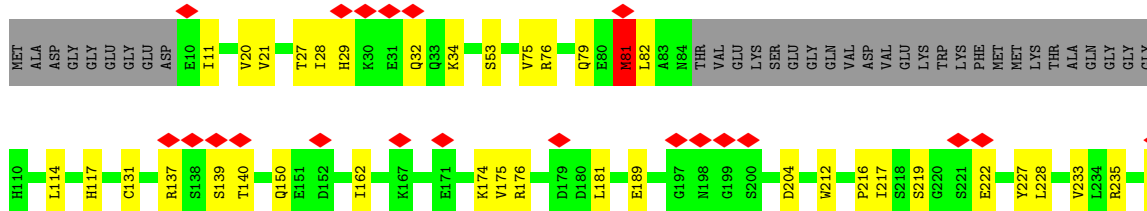
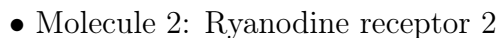
Chain A: 













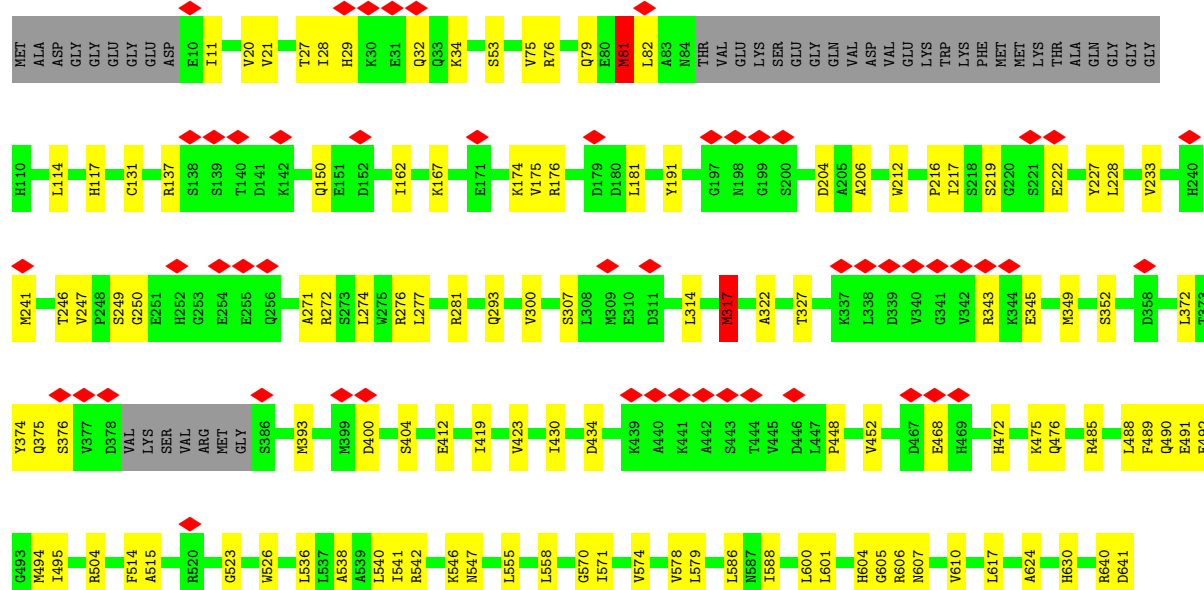
E2861	E2862	K2863	G2864	G2865	G2866	N2867	H2868	H2869	L2870	L2871	L2872	F2873	Y2874	D2875	T2876	L2877	T2878	A2879	K2880	E2881	K2882	A2883	D2884	D2885	K2886	E2887	K2888	A2889	Q2890	D2891	L2892	L2893	K2894	F2895	D2896	D2897	L2898	L2899	G2900	Y2901	A2902	K2903	S2904	R2905	G2906	F2907	L2908	A2909	K2910	E2911	L2912	L2913	T2914	P2915	G2916	L2917	E2918	R2919	K2920
S2797	L2800	Y2801	N2802	ARG	THR	ARG	ARG	ARG	ILE	SER	GLN	THR	SER	GLN	VAL	SER	VAL	ASP	ALA	ALA	HIS	G2820	Y2821	S2822	P2823	R2824	A2825	L2826	D2827	M2828	S2829	N2830	V2831	L2832	R2833	S2834	R2835	D2836	L2837	H2838	A2839	M2840	A2841	E2842	H2843	A2844	A2845		H2849	V2852	A2853	K2854	K2855	K2856	K2857	M2858	E2859	L2860	
V2672	A2673	G2674	A2675	P2678	M2681	H2684	Y2685	V2686	S2687	M2688	M2689	E2690	K2691	Q2692	S2693	S2694	M2695	D2696	S2697	E2698	F2701	N2702	P2703	Q2704	P2705	V2706	D2707	S2708	S2709	N2710	L2711	T2712	L2713	P2714	E2715	E2716	K2716	L2717	E2718	Y2719	F2720	L2721	Y2724	A2725	E2726	H2727	S2728	H2729	K2731	L2732	S2733	M2734	D2735	K2736					
L2737	A2738	N2739	G2740	N2741	L2742	Y2743	G2744	E2745	L2746	Y2747	S2748	D2749	S2750	S2751	K2752	Y2753	Q2754	P2755	L2756	K2757	K2758	P2759	Y2760	K2761	L2762	L2763	S2764	E2765	K2766	E2767	E2768	E2769	L2770	Y2771	R2772	L2773	L2774	L2775	K2776	E2777	S2778	L2779	L2780	T2781	L2782	A2783	L2784	L2785	G2786	N2787	L2788	L2789	E2790	R2791	L2792	R2793	E2794	D2796	
K1788	S1789	K1790		M1794	L1795	H1805	A1806	R1807		V1810	E1815	F1816	L1817	F1818	V1819	P1820	L1821		L1824		L1829	I1830	I1833	F1834		L1839	I1842	L1843	Q1844	L1845	I1846	E1847		V1850	F1851	K1852	E1853	A1854	ALA	THR	PRO	GLU	GLU	SER	ASP	THR	LEU	GLU	LYS	LEU	GLU	VAL	ASP						
ASP	ALA	LYS	LEU	GLN	GLY	ALA	GLY	GLU	GLU	ALA	LYS	GLY	LYS	ARG	P1889	K1890	E1891		Q1895		L1898	V1902	L1910	D1915	D1930	D1931	F1932	Q1937	R1943		M1948	Q1949	A1950	L1951	N1952	M1953	S1954	A1955	A1956	L1957	T1958	A1959	R1960	K1961	T1962	K1963	F1964	R1965	S1966	P1968									
Q1972	I1973	F1979		D1982	K1983	T2057	L2058	Q2059	Q2060	E1990	R1993	L1996	H2000	M2004	E2010	LEU	ASP	GLU	ASP	GLY	SER	LEU	ASP	ASN	SER	ASP	THR	ILE	ARG	GLY	ARG	LEU	SER	LEU	VAL	GLU	LYS	VAL	THR	TYR	LEU	LYS	LYS	GLN	ALA	GLU	LYS	PRO	VAL										
GLU	SER	ASP	SER	K2053	K2054	S2055	S2056	T2057	L2058	Q2059	Q2060	L2061	L2062	R2068	Q2071	L2075	E2076	D2077	R2082	F2085	V2086	L2087	R2090	L2095	A2101	L2102	Y2106	L2117	N2118	L2119	L2123	L2126	R2127	M2134	E2139	L2143	K2144	G2145	N2152	Q2157	H2158																		
L2165	G2166	M2167		E2172	M2173	V2176	L2179	G2180	G2181	G2182	S2183	K2185	E2186	M2192	Y2202	L2206	H2217	Y2220	E2223	S2224	S2225	L2229	P2232	T2238	P2239	L2240	D2241	V2247	N2250	N2251	E2252	L2253	L2257	R2258	E2259	P2260	E2263	K2264	L2274	Q2275	S2276	G2277																	
Q2278	K2279	L2280	V2281	S2282	K2283	G2284	V2285	D2286	D2287	L2288	R2297	E2314	E2315	E2316	L2324	E2329	G2330	F2331	G2336	G2337	E2338	M2347	A2354	E2355	D2356	R2359	D2360	S2363	P2364	ASN	SER	GLY	SER	LYS	THR	ASP	THR	GLU	E2377	E2378	D2379	D2380	H2383	N2386															
M2389	L2395	I2396	L2399	A2403	M2406	H2410	R2418	I2422	L2426	D2431	L2432	V2435	P2443	T2444	K2447	V2452	M2456	G2459	H2464	K2465	M2468	L2472	D2473	R2474	I2478	E2479	D2482	F2483	L2484	L2485	H2486	L2487	F2492	L2493	L2496	R2497																							
A2500	D2503	L2507	T2510	D2511	M2512	L2520	L2525	R2530	L2534	F2535	A2536	Q2537	T2538	E2539	H2540	H2541	A2542	S2543	L2544	T2545	D2546	L2549	H2550	T2551	Y2552	L2553	R2554	L2555	S2556	R2566	D2567	S2568	T2569	E2570	V2571	L2574	S2575	L2576	Q2579	L2580	R2581	P2582	S2583	M2584	L2588	L2589	R2590												
R2591	L2592	V2593	V2596	L2599	K2603	K2604	M2605	P2606	L2607	K2608	L2609	L2610	Y2614	E2615	R2616	C2617	Y2620	L2623	P2624	G2625	G2626	V2627	F2630	S2634	E2635	L2638	H2639	L2640	K2643	L2644	A2651	L2652	S2653	Q2654	K2655	R2656	E2658	L2661	F2662	K2663	A2665	L2666	P2667	C2668															
V2672	A2673	K2674	A2675	P2678	M2681	H2684	Y2685	V2686	S2687	M2688	M2689	E2690	K2691	Q2692	S2693	S2694	M2695	D2696	S2697	E2698	F2701	N2702	P2703	Q2704	P2705	V2706	D2707	S2708	S2709	N2710	L2711	T2712	L2713	P2714	E2715	E2716	K2716	L2717	E2718	Y2719	F2720	L2721	Y2724	A2725	E2726	H2727	S2728	H2729	K2731	L2732	S2733	M2734	D2735	K2736					





D2934	D2935	A2936	H2937	H2938	H2939	T2940	L2941	F2942	F2943	D2944	D2945	G2946	S2947	T2948	T2949	K2950	G2951	H2952	H2953	F2954	F2955	F2956	F2963	A2964	K2965	V2966	L2967	L2968	L2969	L2970	L2971	L2972	L2973	F2974	F2975	F2976	F2977	F2978	F2979	K2980	K2981	K2982	K2983	K2984	K2985	K2986	K2987	K2988	K2989	K2990	K2991	K2992	K2993	K2994	E3000	K3001	E3002	M3003	V3004																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
V2872	P2873	Y2874	D2875	T2876	L2877	T2878	A2879	K2880	E2881	K2882	A2883	K2884	D2885	K2886	E2887	K2888	A2889	Q2890	D2891	L2892	L2893	K2894	L2895	L2896	Q2897	N2898	N2899	G2900	Y2901	A2902	V2903	S2904	L2905	G2906	F2907	K2908	D2909	L2910	E2911	L2912	D2913	T2914	P2915	S2916	L2917	E2918	K2919	R2920	Y2923	S2924	F2925	L2926	Q2927	Q2928	L2929	Y2932	Y2933																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
GLN	VAL	SER	VAL	ASP	ALA	ALA	HIS	G2820	Y2821	S2822	P2823	R2824	A2825	T2826	D2827	M2828	S2829	N2830	V2831	T2832	L2833	S2834	R2835	D2836	L2837	H2838	A2839	M2840	A2841	E2842	M2843	M2844	A2845	E2846	N2847	H2848	N2849	N2850	T2851	N2852	A2853	K2854	K2855	K2856	K2857	N2858	E2859	L2860	E2861	S2862	K2863	G2864	G2865	G2866	N2867	H2868	P2869	L2870	L2871																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
D2749	S2750	S2751	K2752	V2753	Q2754	F2755	L2756	K2757	K2758	F2759	Y2760	K2761	L2762	L2763	S2764	E2765	K2766	E2767	K2768	E2769																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																

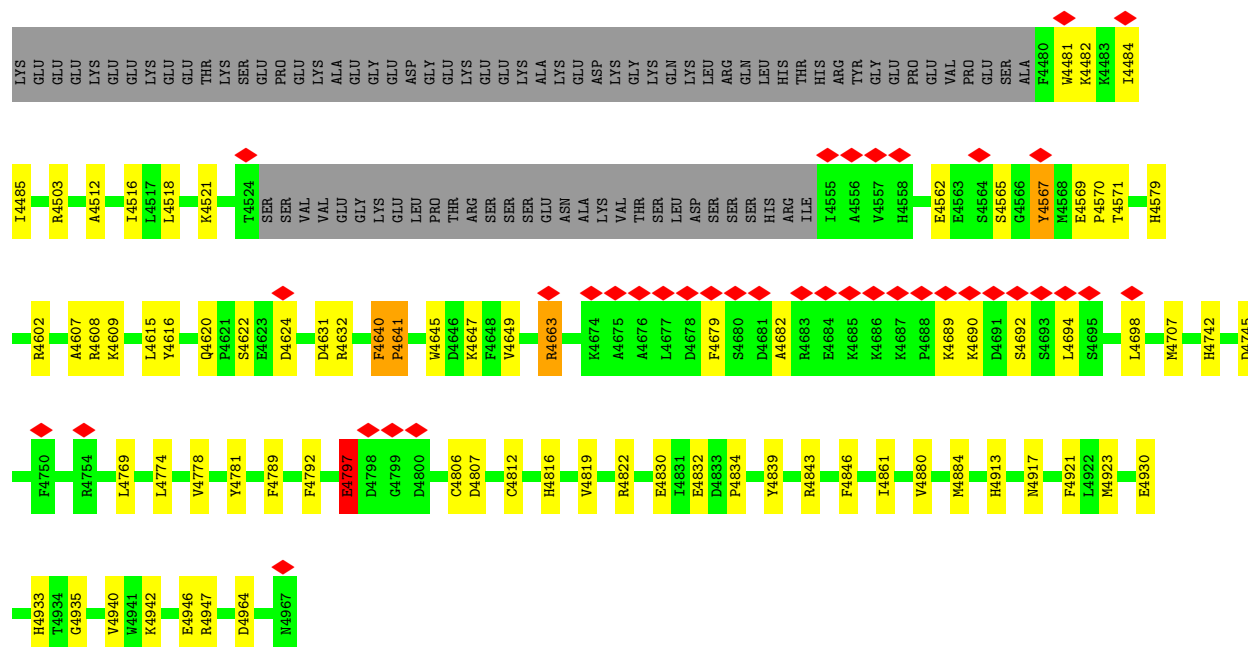
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T4077	L3967	C3847	A3601	A3294	A3163	V3090	L3011
L4078	L3968	E3848	C3602	M3296	A3164	T3091	G3012
D4079	K3969	F3854	F3603	K3297	A3165	Q3092	V3013
Y4080	M3972	Q3851	R3604	S3303	F3166	Q3093	L3014
E4081	D3973	N3861	M3605	K3235	F3167	Y3096	V3015
R4086	L3974	N3864	Q3727	E3236	V3168	H3017	R3016
D4093	Q3975	A3606	Q3728	V3237	A3169	R3018	H3017
L4094	K3976	A3729	A3607	V3238	F3170	L3101	R3018
D3977	R3874	T3875	L3608	L3239	P3171	L3102	L3019
K3978	V3875	L3731	VAL	P3240	E3172	P3103	R3024
V3979	R3880	H3732	LEU	K3241	T3173	M3104	D3025
V3980	P3612	ASP	ASP	L3242	F3174	F3109	A3026
M3985	R3615	ALA	ARG	M3246	H3174	ASP	T3027
S4006	E3625	ASN	PHE	S3247	L3175	VAL	S3028
M4012	W3628	LEU	SER	R3248	D3176	H3115	T3029
L4013	I3629	LEU	LEU	W3249	K3177	Q3116	V3030
L4014	T3758	THR	ASP	N3250	H3178	F3117	L3033
K4015	T3765	GLU	ALA	P3254	F3179	G3118	L3036
F4016	L3766	ASP	ALA	E3255	I3180	E3119	G3037
F4032	M3777	VAL	VAL	K3256	Y3184	D3120	L3040
K4033	L3778	SER	SER	N3257	N3185	L3121	D3041
E4034	L3796	ARG	GLN	P3258	T3186	I3122	A3042
G4039	C3800	GLY	VAL	R3259	S3189	L3123	R3043
K4040	L3805	ARG	ARG	K3328	R3190	E3124	D3049
G4041	N3806	THR	THR	K3329	E3191	D3125	D3049
V4042	L3806	CYS	CYS	A3330	A3193	V3126	A3059
L4043	R3810	LEU	LEU	A3331	A3194	E3127	F3060
S4044	E3815	GLN	GLN	T3332	L3195	S3129	L3061
K4045	G3816	GLY	GLY	T3333	S3196	C3130	D3062
R4046	L3817	ASP	ASP	V3334	L3197	Y3131	A3069
D4047	G3818	THR	THR	S3335	F3198	R3132	F3060
F4048	L3819	ALA	ALA	E3336	T3199	S3136	L3062
H4049	M3819	GLN	GLN	E3337	N3200	L3137	E3066
K4050	V3820	LEU	LEU	ASP	V3201	Y3138	D3067
A4051	T3821	ARG	ARG	HIS	E3202	A3139	L3068
M4052	E3822	TRP	TRP	LEU	G3141	L3140	E3069
S4054	E3823	VAL	VAL	LEU	T3142	G3141	R3070
H4055	E3824	HIS	HIS	ALA	V3204	S3143	T3071
K4056	G3824	LYS	LYS	GLU	C3205	K3144	K3072
H4057	G3825	LEU	LEU	ASP	T3208	S3145	E3073
Q4060	S3825	LEU	LEU	ASP	P3209	I3146	R3074
Q4064	G3826	LYS	LYS	ASP	S3210	Y3147	L3075
F4065	E3827	LEU	LEU	MET	S3211	V3148	K3076
E4071	K3828	PRO	PRO	SER	E3212	E3149	Q3077
T4072	V3829	ASN	ASN	GLU	K3213	R3150	G3078
D4073	L3830	ARG	ARG	LEU	L3214	Q3151	Q3079
E4074	F3834	ALA	ALA	LEU	M3215	R3152	F3080
	F3835	GLU	GLU	LEU	E3216	S3153	T3081
	F3840	ASP	ASP	LEU	V3219	A3154	HIS
		ASP	ASP	LEU	A3222	G3155	THR
		GLY	GLY	ASP	S3223	E3157	ASN
		GLU	GLU	GLU	G3225	C3158	GLN
							PRO



L642	L643	L644	Q645	R646	R647	S654	M655	L661	Q669	Y670	K671	K672	W673	Y674	Y675	E676	L677	M678	W679	D680	H682	V695	Y703	G709	W713	G717	V718	F723	F727	I737	I755	S756	S793	V800	T646	R801	F802	L803	H808	L814	P815	P816	Q830	Y831	E832	D833	Y834	K835	N836	L837	H838	Q839	Y840	K841	Q842	E843	R844	L851	G852	P853	S856	L857	T858	P866	T869	L874	P875	P876	H877	L878	E879	R880	I881	R882	E883	K884	E887	N888	I889	H890	P790
L892	W893	V894	K897	I898	E899	W902	Q903	Y904	P906	Y907	R908	D909	D910	N911	K912	R913	Q914	H915	P916	C917	L918	V919	P978	E920	F921	K922	K923	L924	P925	E926	Q927	E928	R929	N930	Y931	N932	L933	Q934	M935	S936	L937	E938	T939	L940	K941	T942	L943	L944	A945	G947	C948	H949	V950	G951	I952	S953																									
D954	E955	H956	A957	E958	D959	K960	V961	K962	K963	M964	K965	L966	P967	K968	N969	Y970	L972	T973	S974	G975	Y976	K977	P978	A979	D982	L983	I986	Q982	Y996	D997	K998	L999	M1002	V1006	W1007	A1008	D1009	D1010	R1011	Q1014	G1015	W1016	I1020	Q1021	Q1022	R1027	R1028	M1029	P1030																																
R1031	Y1035	T1036	L1037	L1038	D1039	R1041	T1042	K1043	K1044	S1045	N1046	D1048	S1049	L1050	R1051	E1052	A1053	V1054	R1055	T1056	L1057	Y1062	H1063	L1064	E1065	P1067	D1068	Q1069	D1070	H1071	A1072	A1073	R1074	A1075	E1076	V1077	C1078	S1079	G1080	T1081	E1082	E1083	R1086	I1089	R1100	Y1101	Y1102	E1106	R1114																																
S1118	R1119	L1128	G1129	A1134	K1141	A1142	Q1143	R1144	W1145	E1150	R1154	M1165	E1170	E1180	I1181	L1182	L1183	D1184	D1185	S1186	L1187	S1188	A1191	D1194	F1195	D1196	D1199	V1204	R1214	E1234	G1235	Y1236	F1239	N1242	M1249	W1250	L1251	P1262	H1265																																										
E1266	H1267	I1268	R1272	I1273	I1277	D1278	C1282	L1283	G1291	S1292	Q1293	N1294	S1295	N1296	M1300	R1303	L1304	K1316	THR	VAL	ALA	GLY	GLY	LEU	PRO	GLY	ALA	GLY	PHE	LEU	ARG	GLY	PRO	ASN	ASP	LEU	GLU	TYR	GLU	ASP	TYR	GLU	ASP	THR	GLU	VAL	VAL	LEU	THR	ALA																															
HIS	GLY	HIS	LEU	VAL	PRO	ASP	ARG	VAL	ASP	LYS	GLU	ALA	THR	PRO	GLU	PHE	ASN	HIS	LYS	ASP	TYR	ALA	GLN	GLY	LEU	ARG	GLY	LEU	PHE	LEU	ARG	THR	LYS	PRO	ASP	TYR	GLU	ASP	THR	SER	THR	SER	HIS	ALA	ALA	SER	ASP	GLU	VAL	VAL	LEU																														
ALA	ASP	ASP	R1414	D1415	D1416	Y1417	D1418	F1419	L1420	M1421	Y1427	Y1428	R1431	G1435	Q1436	N1440	G1444	W1445	I1446	D1471	E1472	K1473	G1474	K1475	R1482	M1487	M1494	S1495	P1496	Q1497	Q1498	G1499	R1500	N1501	N1502	N1503	G1504	L1505	S1515	Q1532	V1533	E1534	A1542	V1543	F1544	Q1546																																			
S1549	V1552	F1553	Q1554	F1555	E1556	R1559	M1562	V1563	M1564	P1565	K1576	C1582	R1585	F1590	L1591	S1592	W1596	M1599	P1600	M1601	F1602	F1603	V1608	I1611	R1614	Q1615	L1618	M1628	S1629	L1630	P1633	E1634	L1644	E1649	L1650	L1651	S1662	L1667																																											
R1671	L1685	L1686	Y1687	M1694	P1695	G1696	L1697	L1698	R1699	Y1702	Y1703	L1706	I1707	D1708	S1712	A1717	R1718	L1719	M1720	M1721	M1722	Y1725	M1729	M1743	K1744	K1745	L1757	P1766	S1767	F1768	E1774	P1780	K1788	S1789	K1790	M1794	L1795	L1804	H1805	A1806	R1807	V1810																																							
E1815	F1816	L1817	F1818	Y1819	P1820	L1821	L1824	L1829	I1830	I1833	F1834	L1839	I1842	L1843	Q1844	L1845	I1846	E1847	V1850	F1851	K1852	E1853	A1854	ALA	THR	PRO	GLU	GLU	GLY	ASP	THR	LEU	GLU	LYS	GLU	LEU	SER	VAL	ASP	ASP	ALA	LYS	LEU	GLN	GLY	ALA	GLY	GLU	GLU	GLU	ALA																														
LYS	GLY	GLY	LYS	ARG	P1889	K1890	E1891	Q1895	L1898	V1902	L1910	D1915	F1928	S1929	D1930	D1931	F1932	Q1937	R1943	M1948	Q1949	A1950	L1951	M1952	M1953	S1954	A1955	A1956	L1957	T1958	K1961	T1962	K1963	E1964	F1965	R1966	S1967	P1968	Q1972	I1973	F1979	D1982	K1983	S1984	E1985																																				
E1990	E1991	I1992	R1993	D1994	Q1995	L1996	H2000	M2004	E2010	LEU	ASP	GLU	ASP	GLY	SER	LEU	ASP	ASN	SER	ASP	LEU	THR	ILE	ARG	GLY	ARG	LEU	LEU	VAL	LYS	VAL	THR	LEU	LYS	LYS	LYS	GLN	ALA	GLU	LYS	PRO	VAL	GLU	SER	ASP	SER	K2053	K2054	S2055	T2057																															

ASN	GLN	PRD	K3088	G3089	V3090	T3091	V3013	L3014	V3015	R3016	H3017	R3018	I3019	N3024	D3025	A3026	S3028	I3029	V3030	L3033	L3036	L3040	D3041	L3122	L3123	E3124	D3125	V3126	Q3127	V3128	S3129	C3130	F3131	R3132	S3136	L3137	Y3138	A3139	L3140	G3141	T3142	S3143	K3144	S3145	L3146	V3147	V3148	E3149	R3150	Q3151	R3152	S3153	A3154				
M3003	V3004	C3009	K3010	L3011	G3012	V3013	L3014	V3015	R3016	H3017	R3018	I3019	N3024	D3025	A3026	S3028	I3029	V3030	L3033	L3036	L3040	D3041	L3122	L3123	E3124	D3125	V3126	Q3127	V3128	S3129	C3130	F3131	R3132	S3136	L3137	Y3138	A3139	L3140	G3141	T3142	S3143	K3144	S3145	L3146	V3147	V3148	E3149	R3150	Q3151	R3152	S3153	A3154					
E2935	A2936	H2937	Q2938	Y2939	I2940	L2941	E2942	F2943	D2944	G2945	G2946	S2947	R2948	G2949	K2950	G2951	E2952	H2953	F2954	P2955	Y2956	E2957	K2961	A2964	K2965	V2966	V2967	L2968	P2969	L2970	I2971	D2972	F2975	N2976	H2978	R2979	L2980	Y2981	F2982	L2983	S2984	S2987	R2988	P2989	L2990	C2991	S2992	G2993	G2994	E3000	K3001	E3002					
L2871	V2872	P2873	Y2874	D2875	T2876	L2877	T2878	A2879	K2880	E2881	K2882	A2883	K2884	D2885	R2886	E2887	K2888	A2889	Q2890	D2891	I2892	L2893	K2894	F2895	L2896	Q2897	L2898	N2899	G2900	Y2901	A2902	V2903	S2904	R2905	G2906	F2907	K2908	D2909	L2910	E2911	L2912	D2913	T2914	P2915	S2916	I2917	E2918	R2919	K2920	Y2923	S2924	F2925	L2926	Q2927	Q2928	L2929	Y2932
THR	SER	GLN	VAL	SER	VAL	ASP	ALA	ALA	HIS	G2820	Y2821	S2822	P2823	R2824	A2825	I2826	D2827	M2828	S2829	N2830	T2831	T2832	L2833	S2834	R2835	D2836	H2838	A2839	M2840	A2841	E2842	M2843	M2844	A2845	E2846	N2847	Y2848	H2849	V2852	A2853	K2854	K2855	K2856	K2857	M2858	E2859	L2860	E2861	S2862	K2863	G2864	G2865	G2866	N2867	H2868	P2869	L2870
Y2747	S2748	D2749	S2750	K2751	V2752	Q2754	P2755	K2757	K2758	P2759	V2760	K2761	L2762	L2763	S2764	E2765	K2766	K2767	K2768	E2769	R2772	V2773	T2774	L2775	K2776	E2777	S2778	L2779	K2780	L2783	A2784	V2785	G2786	V2787	R2788	I2789	E2790	R2791	T2792	E2794	G2795	D2796	S2797	L2800	Y2801	N2802	ARG	THR	ARG	ARG	ILE	SER	GLN				
Y2685	V2686	S2687	M2688	M2689	E2690	K2691	Q2692	S2693	S2694	M2695	D2696	S2697	E2698	G2699	N2700	V2692	F2690	E2695	L2698	H2699	L2640	A2651	L2652	S2653	Q2654	K2655	V2656	Y2657	E2658	L2661	K2662	K2663	L2664	A2665	L2666	P2667	C2668	V2672	G2673	G2674	A2675	P2678	M2681	V2684													
L2507	S2508	GLN	A2509	D2510	M2511	L2520	L2525	R2530	A2535	E2539	H2540	H2541	A2542	C2543	L2544	I2545	D2546	L2549	H2550	T2551	V2552	R2553	R2554	L2555	S2556	R2566	D2567	S2568	I2569	E2570	V2571	L2574	R2581	P2582	S2583	M2584	M2585	L2588	L2589	R2590	R2591	L2592	V2593	V2596	L2599	A2603											
I2396	L2399	A2403	M2406	H2410	L2422	L2426	D2431	L2432	V2435	P2443	T2444	K2447	V2452	M2456	G2459	H2464	K2465	M2468	L2472	D2473	R2474	L2478	E2479	D2482	F2483	L2484	L2485	H2486	L2487	F2492	L2493	P2494	D2495	L2496	R2497	A2500	D2503																				
V2176	L2179	G2180	G2181	G2182	E2183	S2184	K2185	E2186	M2192	V2193	A2194	Y2202	I2206	H2217	Y2220	L2221	E2223	H2224	S2225	L2229	P2232	S2237	T2238	L2240	D2241	ASN	SER	GLY	SER	M2248	D2249	N2250	N2251	THR	LEU	ASP	THR	GLU	E2377	E2378	D2379	D2380	H2383	N2386	M2389	L2395											
L2058	Q2059	Q2060	L2061	L2062	R2068	Q2071	L2075	E2076	D2077	L2080	V2081	R2082	F2085	V2086	L2087	R2090	L2095	A2101	L2102	Y2106	T2117	M2118	L2119	L2123	L2126	R2127	M2134	V2247	M2248	SER	N2250	N2251	E2252	R2144	G2145	N2152	Q2157	H2158	L2165	G2166	N2167	M2172	E2173	Q2276	Q2277	M2279											





4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	94476	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)	400	Depositor
Maximum defocus (nm)	1200	Depositor
Magnification	Not provided	
Image detector	GATAN K3 BIOQUANTUM (6k x 4k)	Depositor
Maximum map value	0.590	Depositor
Minimum map value	-0.009	Depositor
Average map value	0.010	Depositor
Map value standard deviation	0.028	Depositor
Recommended contour level	0.13	Depositor
Map size (Å)	425.984, 425.984, 425.984	wwPDB
Map dimensions	512, 512, 512	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	0.832, 0.832, 0.832	Depositor

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: ZN, 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	0.18	0/834	0.53	2/1123 (0.2%)
1	F	0.18	0/834	0.53	2/1123 (0.2%)
1	G	0.17	0/834	0.54	2/1123 (0.2%)
1	H	0.18	0/834	0.53	2/1123 (0.2%)
2	A	0.17	0/34511	0.52	13/46614 (0.0%)
2	B	0.17	0/34511	0.52	12/46614 (0.0%)
2	C	0.17	0/34511	0.52	10/46614 (0.0%)
2	D	0.17	0/34511	0.52	12/46614 (0.0%)
All	All	0.17	0/141380	0.52	55/190948 (0.0%)

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	2
2	B	0	2
2	C	0	2
2	D	0	2
All	All	0	8

There are no bond length outliers.

All (55) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	C	1563	VAL	CA-C-N	11.83	136.52	120.67
2	C	1563	VAL	C-N-CA	11.83	136.52	120.67
2	B	1563	VAL	CA-C-N	11.81	136.50	120.67
2	B	1563	VAL	C-N-CA	11.81	136.50	120.67

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	D	1563	VAL	CA-C-N	11.80	136.48	120.67
2	D	1563	VAL	C-N-CA	11.80	136.48	120.67
2	A	1563	VAL	CA-C-N	11.80	136.48	120.67
2	A	1563	VAL	C-N-CA	11.80	136.48	120.67
1	F	4	GLU	CA-CB-CG	8.81	131.72	114.10
1	G	4	GLU	CA-CB-CG	8.79	131.68	114.10
1	H	4	GLU	CA-CB-CG	8.79	131.68	114.10
1	E	4	GLU	CA-CB-CG	8.78	131.66	114.10
1	E	4	GLU	CB-CG-CD	7.23	124.89	112.60
1	H	4	GLU	CB-CG-CD	7.20	124.84	112.60
1	F	4	GLU	CB-CG-CD	7.19	124.82	112.60
1	G	4	GLU	CB-CG-CD	7.18	124.81	112.60
2	B	4797	GLU	CA-CB-CG	6.35	126.81	114.10
2	C	4797	GLU	CA-CB-CG	6.35	126.80	114.10
2	A	4797	GLU	CA-CB-CG	6.33	126.75	114.10
2	D	4797	GLU	CA-CB-CG	6.32	126.73	114.10
2	D	81	MET	CB-CG-SD	6.03	130.78	112.70
2	C	81	MET	CB-CG-SD	6.03	130.78	112.70
2	A	81	MET	CB-CG-SD	6.02	130.77	112.70
2	B	81	MET	CB-CG-SD	6.02	130.77	112.70
2	B	3296	MET	CB-CG-SD	-6.00	94.70	112.70
2	D	3296	MET	CB-CG-SD	-5.99	94.72	112.70
2	C	3296	MET	CB-CG-SD	-5.98	94.75	112.70
2	A	3296	MET	CB-CG-SD	-5.98	94.75	112.70
2	A	844	ARG	CB-CG-CD	5.79	124.63	111.30
2	C	844	ARG	CB-CG-CD	5.79	124.62	111.30
2	B	844	ARG	CB-CG-CD	5.79	124.61	111.30
2	D	844	ARG	CB-CG-CD	5.78	124.59	111.30
2	C	1614	ARG	CA-CB-CG	5.77	125.64	114.10
2	A	1614	ARG	CA-CB-CG	5.76	125.63	114.10
2	D	1614	ARG	CA-CB-CG	5.74	125.58	114.10
2	B	1614	ARG	CA-CB-CG	5.73	125.56	114.10
2	A	317	MET	CA-CB-CG	5.63	125.35	114.10
2	A	2736	LYS	CD-CE-NZ	-5.62	93.90	111.90
2	C	2736	LYS	CD-CE-NZ	-5.62	93.91	111.90
2	D	2736	LYS	CD-CE-NZ	-5.62	93.92	111.90
2	C	317	MET	CA-CB-CG	5.62	125.33	114.10
2	B	2736	LYS	CD-CE-NZ	-5.61	93.97	111.90
2	B	317	MET	CA-CB-CG	5.60	125.31	114.10
2	D	317	MET	CA-CB-CG	5.59	125.28	114.10
2	B	4482	LYS	N-CA-C	-5.34	106.82	113.55
2	D	4482	LYS	N-CA-C	-5.32	106.84	113.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	A	4482	LYS	N-CA-C	-5.31	106.86	113.55
2	A	4797	GLU	CB-CG-CD	5.08	121.23	112.60
2	D	4797	GLU	CB-CG-CD	5.07	121.22	112.60
2	B	4797	GLU	CB-CG-CD	5.05	121.19	112.60
2	C	4797	GLU	CB-CG-CD	5.05	121.18	112.60
2	B	2756	LEU	CA-C-O	-5.04	113.39	119.59
2	A	2756	LEU	CA-C-O	-5.03	113.41	119.59
2	D	2756	LEU	CA-C-O	-5.01	113.43	119.59
2	A	4663	ARG	CG-CD-NE	5.01	123.02	112.00

There are no chirality outliers.

All (8) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
2	A	1009	ARG	Sidechain
2	A	4640	PHE	Peptide
2	B	1009	ARG	Sidechain
2	B	4640	PHE	Peptide
2	C	1009	ARG	Sidechain
2	C	4640	PHE	Peptide
2	D	1009	ARG	Sidechain
2	D	4640	PHE	Peptide

5.2 Too-close contacts [i](#)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	E	818	0	821	15	0
1	F	818	0	821	16	0
1	G	818	0	821	15	0
1	H	818	0	821	17	0
2	A	33771	0	33455	873	0
2	B	33771	0	33455	862	0
2	C	33771	0	33455	865	0
2	D	33771	0	33455	871	0
3	A	1	0	0	0	0
3	B	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
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
All	All	138608	0	137200	3440	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 12.

All (3440) 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:A:2732:TRP:CD1	2:A:2736:LYS:HZ1	1.89	0.91
2:C:4663:ARG:HG2	2:C:4663:ARG:HH11	1.37	0.90
2:B:2732:TRP:CD1	2:B:2736:LYS:HZ1	1.90	0.89
2:D:4797:GLU:N	2:D:4797:GLU:OE1	2.07	0.88
2:C:2732:TRP:CD1	2:C:2736:LYS:HZ1	1.90	0.88
2:B:2830:ASN:HB3	2:C:1549:SER:HB2	1.55	0.88
2:C:4797:GLU:OE1	2:C:4797:GLU:N	2.07	0.88
2:A:2456:MET:HE2	2:A:2511:ASP:HB2	1.56	0.88
2:B:2456:MET:HE2	2:B:2511:ASP:HB2	1.56	0.88
2:B:4797:GLU:OE1	2:B:4797:GLU:N	2.07	0.88
2:D:2456:MET:HE2	2:D:2511:ASP:HB2	1.56	0.87
2:B:4663:ARG:HH11	2:B:4663:ARG:HG2	1.37	0.87
2:A:4797:GLU:OE1	2:A:4797:GLU:N	2.07	0.87
2:D:4663:ARG:HG2	2:D:4663:ARG:HH11	1.37	0.87
2:B:1564:MET:HE3	2:B:1565:PRO:HD2	1.57	0.86
2:A:4663:ARG:HG2	2:A:4663:ARG:HH11	1.37	0.86
2:D:2732:TRP:CD1	2:D:2736:LYS:HZ1	1.91	0.86
2:C:1564:MET:HE3	2:C:1565:PRO:HD2	1.57	0.86
2:D:1564:MET:HE3	2:D:1565:PRO:HD2	1.57	0.86
2:C:2456:MET:HE2	2:C:2511:ASP:HB2	1.56	0.86
2:D:3171:LEU:HB3	2:D:3211:LEU:HB2	1.58	0.86
2:C:2854:LYS:HG2	2:C:2858:MET:HE1	1.58	0.85
2:C:3171:LEU:HB3	2:C:3211:LEU:HB2	1.58	0.85
2:A:1564:MET:HE3	2:A:1565:PRO:HD2	1.57	0.85
2:B:2854:LYS:HG2	2:B:2858:MET:HE1	1.58	0.84
2:D:2854:LYS:HG2	2:D:2858:MET:HE1	1.58	0.84
2:A:3171:LEU:HB3	2:A:3211:LEU:HB2	1.58	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:2854:LYS:HG2	2:A:2858:MET:HE1	1.58	0.83
2:B:3171:LEU:HB3	2:B:3211:LEU:HB2	1.58	0.82
2:D:2923:TYR:O	2:D:2927:GLN:NE2	2.13	0.81
2:B:2923:TYR:O	2:B:2927:GLN:NE2	2.14	0.81
2:C:2923:TYR:O	2:C:2927:GLN:NE2	2.14	0.81
2:A:2923:TYR:O	2:A:2927:GLN:NE2	2.14	0.81
2:D:2732:TRP:CG	2:D:2736:LYS:HZ1	2.00	0.79
2:B:2732:TRP:CG	2:B:2736:LYS:HZ1	2.00	0.79
2:B:904:TYR:OH	2:B:923:LYS:NZ	2.16	0.79
2:C:904:TYR:OH	2:C:923:LYS:NZ	2.16	0.79
2:A:3294:ALA:HA	2:A:3297:LYS:HE2	1.64	0.79
2:A:3292:GLU:HB2	2:A:3296:MET:HE2	1.65	0.79
2:B:3294:ALA:HA	2:B:3297:LYS:HE2	1.64	0.79
2:C:2732:TRP:CG	2:C:2736:LYS:HZ1	2.00	0.79
2:A:904:TYR:OH	2:A:923:LYS:NZ	2.16	0.79
2:D:904:TYR:OH	2:D:923:LYS:NZ	2.16	0.79
2:D:2179:LEU:O	2:D:2183:GLU:HB2	1.83	0.78
2:B:2360:ASP:OD2	2:B:2383:HIS:ND1	2.14	0.78
2:A:2732:TRP:CG	2:A:2736:LYS:HZ1	2.02	0.78
2:B:2824:ARG:NH1	2:C:1502:ASN:OD1	2.16	0.78
2:C:2179:LEU:O	2:C:2183:GLU:HB2	1.83	0.78
2:C:3294:ALA:HA	2:C:3297:LYS:HE2	1.64	0.78
2:D:3294:ALA:HA	2:D:3297:LYS:HE2	1.64	0.77
2:C:3292:GLU:HB2	2:C:3296:MET:HE2	1.65	0.77
2:D:3292:GLU:HB2	2:D:3296:MET:HE2	1.65	0.77
2:B:2179:LEU:O	2:B:2183:GLU:HB2	1.84	0.77
2:A:2640:LEU:HD23	2:A:2643:LYS:HZ3	1.50	0.77
2:A:2179:LEU:O	2:A:2183:GLU:HB2	1.84	0.77
2:B:3292:GLU:HB2	2:B:3296:MET:HE2	1.65	0.77
2:D:2640:LEU:HD23	2:D:2643:LYS:HZ3	1.49	0.77
2:B:2640:LEU:HD23	2:B:2643:LYS:HZ3	1.49	0.77
2:B:3227:ARG:HE	2:B:3290:ILE:HG12	1.50	0.76
2:A:2953:HIS:ND1	2:A:2953:HIS:O	2.19	0.76
2:A:1498:GLN:HB2	2:D:2794:GLU:HG3	1.67	0.76
2:B:2953:HIS:ND1	2:B:2953:HIS:O	2.19	0.76
2:C:3227:ARG:HE	2:C:3290:ILE:HG12	1.50	0.76
2:A:3227:ARG:HE	2:A:3290:ILE:HG12	1.50	0.76
2:D:3227:ARG:HE	2:D:3290:ILE:HG12	1.50	0.75
2:D:1502:ASN:OD1	2:C:2824:ARG:NH1	2.20	0.75
2:A:3205:CYS:HB2	2:A:3208:ILE:HB	1.69	0.75
2:D:2953:HIS:ND1	2:D:2953:HIS:O	2.19	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:670:TYR:O	2:D:673:TRP:NE1	2.20	0.74
2:B:4481:TRP:HA	2:B:4484:ILE:HG12	1.70	0.74
2:C:2953:HIS:ND1	2:C:2953:HIS:O	2.19	0.74
2:A:670:TYR:O	2:A:673:TRP:NE1	2.20	0.74
2:C:670:TYR:O	2:C:673:TRP:NE1	2.20	0.74
2:A:4481:TRP:HA	2:A:4484:ILE:HG12	1.70	0.74
2:D:2856:LYS:HA	2:D:2859:GLU:HG3	1.70	0.74
2:D:3205:CYS:HB2	2:D:3208:ILE:HB	1.69	0.74
2:B:670:TYR:O	2:B:673:TRP:NE1	2.20	0.74
2:C:3205:CYS:HB2	2:C:3208:ILE:HB	1.69	0.74
2:A:2360:ASP:OD2	2:A:2383:HIS:ND1	2.14	0.74
2:D:1283:LEU:HB2	2:D:1555:PHE:HB2	1.70	0.73
2:A:2406:MET:HE3	2:A:2410:HIS:CE1	2.24	0.73
2:D:2360:ASP:OD2	2:D:2383:HIS:ND1	2.14	0.73
2:B:2406:MET:HE3	2:B:2410:HIS:CE1	2.24	0.73
2:A:2856:LYS:HA	2:A:2859:GLU:HG3	1.70	0.73
2:D:1788:LYS:HD2	2:D:1833:ILE:HG22	1.71	0.73
2:D:2406:MET:HE3	2:D:2410:HIS:CE1	2.24	0.73
2:C:2640:LEU:HD23	2:C:2643:LYS:HZ3	1.50	0.73
2:C:4481:TRP:HA	2:C:4484:ILE:HG12	1.70	0.73
2:C:2360:ASP:OD2	2:C:2383:HIS:ND1	2.14	0.73
2:A:2830:ASN:HB3	2:B:1549:SER:HB2	1.70	0.73
2:B:2824:ARG:NH2	2:C:1502:ASN:O	2.21	0.73
2:C:1788:LYS:HD2	2:C:1833:ILE:HG22	1.70	0.73
2:A:1129:GLY:HA3	2:A:1145:TRP:HB3	1.71	0.73
2:A:1283:LEU:HB2	2:A:1555:PHE:HB2	1.70	0.73
2:D:491:GLU:OE2	2:D:546:LYS:NZ	2.22	0.73
2:A:1788:LYS:HD2	2:A:1833:ILE:HG22	1.71	0.72
2:B:1283:LEU:HB2	2:B:1555:PHE:HB2	1.70	0.72
2:C:491:GLU:OE2	2:C:546:LYS:NZ	2.22	0.72
2:C:1129:GLY:HA3	2:C:1145:TRP:HB3	1.71	0.72
2:C:2856:LYS:HA	2:C:2859:GLU:HG3	1.70	0.72
2:A:491:GLU:OE2	2:A:546:LYS:NZ	2.22	0.72
1:F:35:LYS:NZ	2:B:640:ARG:O	2.22	0.72
2:D:1129:GLY:HA3	2:D:1145:TRP:HB3	1.71	0.72
2:D:4481:TRP:HA	2:D:4484:ILE:HG12	1.70	0.72
2:B:3205:CYS:HB2	2:B:3208:ILE:HB	1.69	0.72
2:C:2905:ARG:HD2	2:C:2906:GLY:H	1.54	0.72
2:D:281:ARG:NH1	2:D:345:GLU:OE2	2.23	0.72
2:B:491:GLU:OE2	2:B:546:LYS:NZ	2.22	0.72
2:B:1129:GLY:HA3	2:B:1145:TRP:HB3	1.71	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:2905:ARG:HD2	2:A:2906:GLY:H	1.54	0.72
2:C:824:GLU:OE1	2:C:1028:ARG:NH1	2.23	0.72
2:C:1283:LEU:HB2	2:C:1555:PHE:HB2	1.70	0.72
2:C:2406:MET:HE3	2:C:2410:HIS:CE1	2.24	0.72
2:C:281:ARG:NH1	2:C:345:GLU:OE2	2.23	0.71
2:A:824:GLU:OE1	2:A:1028:ARG:NH1	2.23	0.71
2:A:2143:ILE:HG13	2:A:2192:MET:HE1	1.72	0.71
2:A:2666:LEU:HD11	2:A:2969:PRO:HB2	1.72	0.71
2:B:2856:LYS:HA	2:B:2859:GLU:HG3	1.70	0.71
2:B:3701:ASP:OD2	2:B:3727:GLN:NE2	2.23	0.71
2:B:1788:LYS:HD2	2:B:1833:ILE:HG22	1.70	0.71
2:C:876:PRO:HA	2:C:879:GLU:HG3	1.72	0.71
2:B:281:ARG:NH1	2:B:345:GLU:OE2	2.23	0.71
2:A:281:ARG:NH1	2:A:345:GLU:OE2	2.23	0.71
2:D:2143:ILE:HG13	2:D:2192:MET:HE1	1.72	0.71
2:D:3701:ASP:OD2	2:D:3727:GLN:NE2	2.23	0.71
2:D:2905:ARG:HD2	2:D:2906:GLY:H	1.54	0.71
2:B:2143:ILE:HG13	2:B:2192:MET:HE1	1.72	0.71
2:B:2905:ARG:HD2	2:B:2906:GLY:H	1.54	0.71
2:C:2935:GLU:HB3	2:C:2939:TYR:HE1	1.56	0.71
2:D:824:GLU:OE1	2:D:1028:ARG:NH1	2.23	0.71
2:D:2935:GLU:HB3	2:D:2939:TYR:HE1	1.56	0.71
2:D:876:PRO:HA	2:D:879:GLU:HG3	1.72	0.70
2:D:3944:VAL:HG13	2:D:3978:MET:HE3	1.73	0.70
2:D:2666:LEU:HD11	2:D:2969:PRO:HB2	1.72	0.70
2:C:2736:LYS:HG3	2:C:2741:TRP:CD1	2.26	0.70
2:A:2842:GLU:HA	2:A:2886:ARG:HH22	1.56	0.70
2:B:2769:GLU:HA	2:B:2772:ARG:HB2	1.74	0.70
2:D:76:ARG:NH1	2:C:3890:TRP:O	2.25	0.70
2:B:3139:ALA:O	2:B:3143:SER:HB3	1.92	0.70
2:B:3944:VAL:HG13	2:B:3978:MET:HE3	1.73	0.70
2:B:3955:GLN:NE2	2:B:3972:MET:SD	2.65	0.70
2:C:3944:VAL:HG13	2:C:3978:MET:HE3	1.74	0.70
2:C:3955:GLN:NE2	2:C:3972:MET:SD	2.65	0.70
2:A:3955:GLN:NE2	2:A:3972:MET:SD	2.65	0.70
2:D:2736:LYS:HG3	2:D:2741:TRP:CD1	2.26	0.70
2:A:876:PRO:HA	2:A:879:GLU:HG3	1.72	0.70
2:A:2935:GLU:HB3	2:A:2939:TYR:HE1	1.56	0.70
2:A:3139:ALA:O	2:A:3143:SER:HB3	1.92	0.70
2:A:4579:HIS:CE1	2:A:4742:HIS:CD2	2.80	0.70
2:B:2666:LEU:HD11	2:B:2969:PRO:HB2	1.72	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:2769:GLU:HA	2:C:2772:ARG:HB2	1.74	0.70
2:C:2842:GLU:HA	2:C:2886:ARG:HH22	1.56	0.70
2:A:2769:GLU:HA	2:A:2772:ARG:HB2	1.74	0.70
2:B:876:PRO:HA	2:B:879:GLU:HG3	1.72	0.70
2:C:3139:ALA:O	2:C:3143:SER:HB3	1.92	0.70
2:C:3701:ASP:OD2	2:C:3727:GLN:NE2	2.23	0.70
2:B:2736:LYS:HG3	2:B:2741:TRP:CD1	2.26	0.70
2:C:2143:ILE:HG13	2:C:2192:MET:HE1	1.72	0.70
2:D:2769:GLU:HA	2:D:2772:ARG:HB2	1.74	0.69
2:B:2935:GLU:HB3	2:B:2939:TYR:HE1	1.56	0.69
2:A:2736:LYS:HG3	2:A:2741:TRP:CD1	2.26	0.69
2:C:2666:LEU:HD11	2:C:2969:PRO:HB2	1.72	0.69
2:A:1503:ASN:OD1	2:D:2824:ARG:NH2	2.23	0.69
2:D:1503:ASN:OD1	2:C:2824:ARG:NH2	2.24	0.69
2:A:3969:LYS:NZ	2:A:4086:ARG:O	2.26	0.69
2:A:3701:ASP:OD2	2:A:3727:GLN:NE2	2.23	0.69
2:A:3944:VAL:HG13	2:A:3978:MET:HE3	1.73	0.69
2:D:3139:ALA:O	2:D:3143:SER:HB3	1.92	0.69
2:B:2842:GLU:HA	2:B:2886:ARG:HH22	1.56	0.69
2:D:2842:GLU:HA	2:D:2886:ARG:HH22	1.56	0.69
2:D:4521:LYS:HE2	2:D:4562:GLU:HB3	1.75	0.69
2:B:2127:ARG:NH2	2:B:2165:LEU:O	2.26	0.69
2:C:2688:MET:SD	2:C:2905:ARG:NH1	2.66	0.69
2:A:878:LEU:HD11	2:A:950:VAL:HG11	1.75	0.69
2:D:3955:GLN:NE2	2:D:3972:MET:SD	2.65	0.69
2:D:3969:LYS:NZ	2:D:4086:ARG:O	2.26	0.69
2:B:2688:MET:SD	2:B:2905:ARG:NH1	2.66	0.69
2:B:3969:LYS:NZ	2:B:4086:ARG:O	2.26	0.69
2:C:3969:LYS:NZ	2:C:4086:ARG:O	2.26	0.69
2:C:2127:ARG:NH2	2:C:2165:LEU:O	2.26	0.68
2:D:2688:MET:SD	2:D:2905:ARG:NH1	2.66	0.68
2:D:1790:LYS:HG2	2:D:1794:MET:HE2	1.74	0.68
2:B:824:GLU:OE1	2:B:1028:ARG:NH1	2.23	0.68
2:A:880:ARG:HG3	2:A:881:ILE:HD12	1.75	0.68
2:A:2688:MET:SD	2:A:2905:ARG:NH1	2.66	0.68
2:D:1503:ASN:CG	2:C:2824:ARG:HH22	2.02	0.68
2:B:878:LEU:HD11	2:B:950:VAL:HG11	1.75	0.68
2:A:2127:ARG:NH2	2:A:2165:LEU:O	2.26	0.68
2:C:2185:LYS:O	2:C:2186:GLU:HG3	1.94	0.68
2:A:4521:LYS:HE2	2:A:4562:GLU:HB3	1.75	0.68
2:D:880:ARG:HG3	2:D:881:ILE:HD12	1.75	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:2127:ARG:NH2	2:D:2165:LEU:O	2.26	0.68
2:C:880:ARG:HG3	2:C:881:ILE:HD12	1.75	0.68
2:C:1790:LYS:HG2	2:C:1794:MET:HE2	1.74	0.68
2:A:1790:LYS:HG2	2:A:1794:MET:HE2	1.74	0.68
2:A:2435:VAL:O	2:A:2465:LYS:NZ	2.27	0.68
2:D:1114:ARG:NH1	2:D:1128:LEU:O	2.27	0.68
1:F:22:THR:HG22	1:F:50:ARG:HG2	1.76	0.68
2:D:2185:LYS:O	2:D:2186:GLU:HG3	1.94	0.68
2:D:2435:VAL:O	2:D:2465:LYS:NZ	2.27	0.67
2:B:2826:ILE:HD13	2:C:1501:ASN:HB2	1.77	0.67
2:B:4521:LYS:HE2	2:B:4562:GLU:HB3	1.75	0.67
2:D:878:LEU:HD11	2:D:950:VAL:HG11	1.75	0.67
2:C:4521:LYS:HE2	2:C:4562:GLU:HB3	1.75	0.67
2:B:1790:LYS:HG2	2:B:1794:MET:HE2	1.74	0.67
2:B:4834:PRO:HB3	2:B:4843:ARG:HD3	1.76	0.67
2:C:2435:VAL:O	2:C:2465:LYS:NZ	2.27	0.67
2:D:4834:PRO:HB3	2:D:4843:ARG:HD3	1.76	0.67
2:B:880:ARG:HG3	2:B:881:ILE:HD12	1.75	0.67
1:G:22:THR:HG22	1:G:50:ARG:HG2	1.76	0.67
2:B:2185:LYS:O	2:B:2186:GLU:HG3	1.94	0.67
2:B:2435:VAL:O	2:B:2465:LYS:NZ	2.27	0.67
2:C:3926:GLY:HA2	2:C:4935:GLY:HA3	1.77	0.67
2:B:3926:GLY:HA2	2:B:4935:GLY:HA3	1.77	0.67
2:A:1114:ARG:NH1	2:A:1128:LEU:O	2.27	0.67
2:A:1501:ASN:HB2	2:D:2826:ILE:HD13	1.76	0.67
1:E:22:THR:HG22	1:E:50:ARG:HG2	1.76	0.67
2:D:2920:ARG:HH12	2:D:3000:GLU:HG3	1.60	0.67
2:B:2593:VAL:HA	2:B:2644:LEU:HD13	1.77	0.67
2:B:4607:ALA:HB1	2:B:4649:VAL:HG21	1.77	0.67
2:C:878:LEU:HD11	2:C:950:VAL:HG11	1.75	0.67
2:C:2593:VAL:HA	2:C:2644:LEU:HD13	1.77	0.66
2:A:2185:LYS:O	2:A:2186:GLU:HG3	1.94	0.66
2:C:1114:ARG:NH1	2:C:1128:LEU:O	2.27	0.66
2:D:4622:SER:OG	2:D:4624:ASP:OD2	2.13	0.66
2:C:1031:ARG:HE	2:C:1042:THR:HG21	1.61	0.66
2:B:1031:ARG:HE	2:B:1042:THR:HG21	1.61	0.66
2:A:4834:PRO:HB3	2:A:4843:ARG:HD3	1.76	0.66
2:D:2943:PHE:HZ	2:D:2955:PRO:HD2	1.60	0.66
2:D:4707:MET:HG3	2:C:4252:ILE:HG21	1.77	0.66
2:B:1114:ARG:NH1	2:B:1128:LEU:O	2.27	0.66
2:C:2139:GLU:HA	2:C:2192:MET:HE3	1.78	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:2139:GLU:HA	2:A:2192:MET:HE3	1.78	0.66
2:D:2057:THR:HB	2:D:2060:GLN:HG3	1.78	0.66
2:D:2085:PHE:HB3	2:D:3691:TYR:HE2	1.61	0.66
2:B:2139:GLU:HA	2:B:2192:MET:HE3	1.78	0.66
2:B:2920:ARG:HH12	2:B:3000:GLU:HG3	1.60	0.66
2:D:3926:GLY:HA2	2:D:4935:GLY:HA3	1.77	0.66
2:C:2658:GLU:OE1	2:C:2661:LEU:N	2.25	0.66
2:A:1843:LEU:HD23	2:A:1846:ILE:HD12	1.78	0.66
2:D:2658:GLU:OE1	2:D:2661:LEU:N	2.25	0.66
2:C:2085:PHE:HB3	2:C:3691:TYR:HE2	1.61	0.66
2:A:2920:ARG:HH12	2:A:3000:GLU:HG3	1.60	0.66
2:A:3926:GLY:HA2	2:A:4935:GLY:HA3	1.77	0.66
2:A:1031:ARG:HE	2:A:1042:THR:HG21	1.61	0.66
2:A:2057:THR:HB	2:A:2060:GLN:HG3	1.78	0.66
2:D:1843:LEU:HD23	2:D:1846:ILE:HD12	1.78	0.66
2:B:2943:PHE:HZ	2:B:2955:PRO:HD2	1.60	0.66
2:C:4834:PRO:HB3	2:C:4843:ARG:HD3	1.76	0.66
2:A:1910:LEU:HD13	2:A:2062:ILE:HG12	1.78	0.65
2:C:1910:LEU:HD13	2:C:2062:ILE:HG12	1.78	0.65
2:C:2057:THR:HB	2:C:2060:GLN:HG3	1.78	0.65
2:C:2920:ARG:HH12	2:C:3000:GLU:HG3	1.60	0.65
2:C:2943:PHE:HZ	2:C:2955:PRO:HD2	1.60	0.65
2:A:2085:PHE:HB3	2:A:3691:TYR:HE2	1.61	0.65
2:D:1910:LEU:HD13	2:D:2062:ILE:HG12	1.78	0.65
2:B:1910:LEU:HD13	2:B:2062:ILE:HG12	1.78	0.65
2:B:2057:THR:HB	2:B:2060:GLN:HG3	1.78	0.65
1:H:22:THR:HG22	1:H:50:ARG:HG2	1.76	0.65
2:A:2975:PHE:O	2:A:2979:ARG:NE	2.23	0.65
2:D:2139:GLU:HA	2:D:2192:MET:HE3	1.78	0.65
2:C:842:GLN:HE22	2:C:1602:GLN:HG3	1.62	0.65
2:A:372:LEU:HA	2:A:393:MET:HG2	1.79	0.65
2:D:1501:ASN:HB2	2:C:2826:ILE:HD13	1.77	0.65
2:A:276:ARG:HG3	2:A:300:VAL:HG22	1.79	0.65
2:A:2658:GLU:OE1	2:A:2661:LEU:N	2.25	0.65
2:D:372:LEU:HA	2:D:393:MET:HG2	1.79	0.65
2:C:4622:SER:OG	2:C:4624:ASP:OD2	2.13	0.65
2:A:2593:VAL:HA	2:A:2644:LEU:HD13	1.77	0.65
2:D:2593:VAL:HA	2:D:2644:LEU:HD13	1.77	0.65
2:D:4607:ALA:HB1	2:D:4649:VAL:HG21	1.77	0.65
2:C:4607:ALA:HB1	2:C:4649:VAL:HG21	1.78	0.65
2:B:1843:LEU:HD23	2:B:1846:ILE:HD12	1.78	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:4622:SER:OG	2:B:4624:ASP:OD2	2.13	0.65
2:A:4607:ALA:HB1	2:A:4649:VAL:HG21	1.77	0.65
2:B:276:ARG:HG3	2:B:300:VAL:HG22	1.79	0.65
2:A:2943:PHE:HZ	2:A:2955:PRO:HD2	1.60	0.65
2:A:4622:SER:OG	2:A:4624:ASP:OD2	2.13	0.65
2:D:1757:LEU:HD22	2:D:2117:ILE:HD11	1.79	0.65
2:D:3292:GLU:HB2	2:D:3296:MET:CE	2.27	0.65
2:B:842:GLN:HE22	2:B:1602:GLN:HG3	1.62	0.64
2:B:2975:PHE:HB3	2:B:2979:ARG:HH21	1.62	0.64
2:B:4187:GLU:OE2	2:B:4947:ARG:NH2	2.30	0.64
2:A:842:GLN:HE22	2:A:1602:GLN:HG3	1.62	0.64
2:A:2975:PHE:HB3	2:A:2979:ARG:HH21	1.62	0.64
2:D:842:GLN:HE22	2:D:1602:GLN:HG3	1.62	0.64
2:B:2126:ILE:HD11	2:B:2145:GLY:HA3	1.80	0.64
2:C:2975:PHE:HB3	2:C:2979:ARG:HH21	1.62	0.64
2:A:2651:ALA:O	2:A:2655:LYS:HG2	1.98	0.64
2:A:4852:PHE:HE1	2:D:4862:ILE:HD13	1.63	0.64
2:D:2975:PHE:HB3	2:D:2979:ARG:HH21	1.62	0.64
2:B:3292:GLU:HB2	2:B:3296:MET:CE	2.27	0.64
2:C:1757:LEU:HD22	2:C:2117:ILE:HD11	1.79	0.64
2:A:2126:ILE:HD11	2:A:2145:GLY:HA3	1.80	0.64
2:D:1031:ARG:HE	2:D:1042:THR:HG21	1.61	0.64
2:C:1843:LEU:HD23	2:C:1846:ILE:HD12	1.78	0.64
2:D:2126:ILE:HD11	2:D:2145:GLY:HA3	1.80	0.64
2:D:2651:ALA:O	2:D:2655:LYS:HG2	1.98	0.64
2:C:3292:GLU:HB2	2:C:3296:MET:CE	2.27	0.64
2:A:167:LYS:HE2	2:D:240:HIS:HB3	1.80	0.64
2:A:1757:LEU:HD22	2:A:2117:ILE:HD11	1.79	0.64
2:B:2658:GLU:OE1	2:B:2661:LEU:N	2.25	0.64
2:C:81:MET:HE3	2:C:82:LEU:N	2.13	0.64
2:C:4187:GLU:OE2	2:C:4947:ARG:NH2	2.30	0.64
2:A:2778:SER:OG	2:A:2888:LYS:NZ	2.24	0.64
2:A:3292:GLU:HB2	2:A:3296:MET:CE	2.27	0.64
2:A:4187:GLU:OE2	2:A:4947:ARG:NH2	2.30	0.64
2:D:1043:LYS:HG2	2:D:1047:LYS:HE2	1.79	0.64
2:D:1549:SER:HB2	2:C:2830:ASN:HB3	1.80	0.64
2:B:2085:PHE:HB3	2:B:3691:TYR:HE2	1.61	0.64
2:C:1043:LYS:HG2	2:C:1047:LYS:HE2	1.79	0.64
2:A:81:MET:HE3	2:A:82:LEU:N	2.13	0.64
2:D:276:ARG:HG3	2:D:300:VAL:HG22	1.79	0.64
2:B:2975:PHE:O	2:B:2979:ARG:NE	2.23	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:1795:LEU:HA	2:D:1821:LEU:HD21	1.80	0.64
2:B:1757:LEU:HD22	2:B:2117:ILE:HD11	1.79	0.64
2:B:2541:HIS:HB3	2:B:2544:LEU:HD21	1.80	0.64
2:A:4579:HIS:HE1	2:A:4742:HIS:CD2	2.15	0.63
2:B:2824:ARG:NH2	2:C:1503:ASN:OD1	2.23	0.63
2:D:4187:GLU:OE2	2:D:4947:ARG:NH2	2.30	0.63
2:C:2126:ILE:HD11	2:C:2145:GLY:HA3	1.80	0.63
2:A:1503:ASN:CG	2:D:2824:ARG:HH22	2.06	0.63
2:D:2553:TYR:O	2:D:2556:SER:OG	2.15	0.63
2:D:81:MET:HE3	2:D:82:LEU:N	2.13	0.63
2:B:1043:LYS:HG2	2:B:1047:LYS:HE2	1.79	0.63
2:B:2223:GLU:OE2	2:B:2264:LYS:NZ	2.28	0.63
2:C:276:ARG:HG3	2:C:300:VAL:HG22	1.79	0.63
2:D:3945:VAL:HG23	2:D:4006:SER:HB3	1.81	0.63
2:B:3945:VAL:HG23	2:B:4006:SER:HB3	1.81	0.63
2:C:2403:ALA:O	2:C:2474:ARG:NH2	2.31	0.63
2:A:3261:ALA:O	2:A:3262:GLU:HG3	1.99	0.63
2:D:2403:ALA:O	2:D:2474:ARG:NH2	2.31	0.63
2:D:3172:GLU:OE2	2:D:3266:THR:OG1	2.17	0.63
2:B:372:LEU:HA	2:B:393:MET:HG2	1.79	0.63
2:C:372:LEU:HA	2:C:393:MET:HG2	1.79	0.63
2:C:3172:GLU:OE2	2:C:3266:THR:OG1	2.17	0.63
2:A:1043:LYS:HG2	2:A:1047:LYS:HE2	1.79	0.63
2:D:3261:ALA:O	2:D:3262:GLU:HG3	1.99	0.63
2:A:1795:LEU:HA	2:A:1821:LEU:HD21	1.80	0.63
2:A:2833:LEU:HB2	2:A:2838[B]:HIS:CE1	2.34	0.63
2:A:3172:GLU:OE2	2:A:3266:THR:OG1	2.17	0.63
2:D:2975:PHE:O	2:D:2979:ARG:NE	2.23	0.63
2:C:1795:LEU:HA	2:C:1821:LEU:HD21	1.80	0.63
2:B:2651:ALA:O	2:B:2655:LYS:HG2	1.98	0.63
2:C:2651:ALA:O	2:C:2655:LYS:HG2	1.98	0.63
2:C:3227:ARG:HB2	2:C:3230:GLN:HG2	1.81	0.63
2:C:3945:VAL:HG23	2:C:4006:SER:HB3	1.81	0.63
2:D:137:ARG:HH12	2:D:204:ASP:HB3	1.64	0.62
2:D:2935:GLU:O	2:D:2939:TYR:HD1	1.82	0.62
2:C:2541:HIS:HB3	2:C:2544:LEU:HD21	1.80	0.62
2:A:137:ARG:HH12	2:A:204:ASP:HB3	1.64	0.62
2:B:81:MET:HE3	2:B:82:LEU:N	2.13	0.62
2:B:2497:ARG:HH12	2:B:2877:LEU:HA	1.65	0.62
2:A:2545:ILE:HD11	2:A:2584:MET:HG2	1.81	0.62
2:D:2545:ILE:HD11	2:D:2584:MET:HG2	1.81	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2403:ALA:O	2:B:2474:ARG:NH2	2.31	0.62
2:C:977:LYS:HZ3	2:C:979:ALA:HB2	1.65	0.62
2:C:3261:ALA:O	2:C:3262:GLU:HG3	1.99	0.62
2:A:2935:GLU:O	2:A:2939:TYR:HD1	1.82	0.62
2:A:3227:ARG:HB2	2:A:3230:GLN:HG2	1.81	0.62
2:C:137:ARG:HH12	2:C:204:ASP:HB3	1.64	0.62
2:A:2541:HIS:HB3	2:A:2544:LEU:HD21	1.80	0.62
2:D:1041:ARG:HA	2:D:1044:LYS:HZ3	1.64	0.62
2:D:2982:PHE:O	2:D:3001:LYS:NZ	2.33	0.62
2:C:2935:GLU:O	2:C:2939:TYR:HD1	1.82	0.62
2:D:2541:HIS:HB3	2:D:2544:LEU:HD21	1.80	0.62
2:B:3728:GLN:HG2	2:B:3765:ILE:HA	1.82	0.62
2:D:3184:TYR:CD1	2:D:3192:ARG:HD3	2.35	0.62
2:B:977:LYS:HZ3	2:B:979:ALA:HB2	1.64	0.62
2:B:1795:LEU:HA	2:B:1821:LEU:HD21	1.80	0.62
2:B:2545:ILE:HD11	2:B:2584:MET:HG2	1.81	0.62
2:B:2935:GLU:O	2:B:2939:TYR:HD1	1.82	0.62
2:D:3227:ARG:HB2	2:D:3230:GLN:HG2	1.81	0.62
2:C:2497:ARG:HH12	2:C:2877:LEU:HA	1.65	0.62
2:A:2497:ARG:HH12	2:A:2877:LEU:HA	1.65	0.62
2:A:3945:VAL:HG23	2:A:4006:SER:HB3	1.81	0.62
2:B:3184:TYR:CD1	2:B:3192:ARG:HD3	2.35	0.62
2:C:241:MET:HE1	2:C:404:SER:HB3	1.82	0.62
2:A:2982:PHE:O	2:A:3001:LYS:NZ	2.33	0.61
2:A:3184:TYR:CD1	2:A:3192:ARG:HD3	2.35	0.61
2:B:3261:ALA:O	2:B:3262:GLU:HG3	1.99	0.61
2:C:3728:GLN:HG2	2:C:3765:ILE:HA	1.81	0.61
2:A:1844:GLN:NE2	2:A:1851:PHE:O	2.34	0.61
2:A:2553:TYR:O	2:A:2556:SER:OG	2.15	0.61
2:B:2681:MET:HE3	2:B:2919:LYS:HE2	1.82	0.61
2:B:3227:ARG:HB2	2:B:3230:GLN:HG2	1.81	0.61
2:C:2982:PHE:O	2:C:3001:LYS:NZ	2.33	0.61
2:A:2403:ALA:O	2:A:2474:ARG:NH2	2.31	0.61
2:A:2826:ILE:HD13	2:B:1501:ASN:HB2	1.82	0.61
2:B:1844:GLN:NE2	2:B:1851:PHE:O	2.34	0.61
2:B:2982:PHE:O	2:B:3001:LYS:NZ	2.33	0.61
2:C:2545:ILE:HD11	2:C:2584:MET:HG2	1.81	0.61
2:A:2623:LEU:HD23	2:A:2625:GLY:H	1.66	0.61
2:A:3004:VAL:HG13	2:A:3036:LEU:HD11	1.82	0.61
2:D:1844:GLN:NE2	2:D:1851:PHE:O	2.34	0.61
2:C:2257:LEU:HB2	2:C:2316:ASN:HD21	1.66	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:3015:VAL:HB	2:A:3029:ILE:HG21	1.82	0.61
2:D:241:MET:HE1	2:D:404:SER:HB3	1.82	0.61
2:D:3004:VAL:HG13	2:D:3036:LEU:HD11	1.82	0.61
2:D:3728:GLN:HG2	2:D:3765:ILE:HA	1.82	0.61
2:B:2257:LEU:HB2	2:B:2316:ASN:HD21	1.66	0.61
2:D:1842:ILE:HD12	2:D:1845:LEU:HD12	1.83	0.61
2:B:137:ARG:HH12	2:B:204:ASP:HB3	1.64	0.61
2:C:1844:GLN:NE2	2:C:1851:PHE:O	2.34	0.61
2:C:2732:TRP:CD1	2:C:2736:LYS:NZ	2.67	0.61
2:C:3015:VAL:HB	2:C:3029:ILE:HG21	1.82	0.61
2:D:3924:ILE:HD12	2:D:3985:MET:HE3	1.83	0.61
2:C:3141:GLY:O	2:C:3152:ARG:NH2	2.34	0.61
1:H:35:LYS:NZ	2:D:640:ARG:O	2.34	0.61
2:A:2257:LEU:HB2	2:A:2316:ASN:HD21	1.66	0.61
2:A:2824:ARG:NH2	2:B:1503:ASN:OD1	2.28	0.61
2:A:3072:MET:SD	2:A:3136:SER:HA	2.41	0.61
2:D:3015:VAL:HB	2:D:3029:ILE:HG21	1.82	0.61
2:C:3184:TYR:CD1	2:C:3192:ARG:HD3	2.35	0.60
2:D:2623:LEU:HD23	2:D:2625:GLY:H	1.66	0.60
2:B:241:MET:HE1	2:B:404:SER:HB3	1.82	0.60
2:B:1842:ILE:HD12	2:B:1845:LEU:HD12	1.83	0.60
2:D:3072:MET:SD	2:D:3136:SER:HA	2.41	0.60
2:B:894:VAL:HA	2:B:915:HIS:HE1	1.67	0.60
2:B:3172:GLU:OE2	2:B:3266:THR:OG1	2.17	0.60
2:C:877:HIS:O	2:C:1062:TYR:OH	2.15	0.60
2:C:2553:TYR:O	2:C:2556:SER:OG	2.15	0.60
2:C:3924:ILE:HD12	2:C:3985:MET:HE3	1.83	0.60
2:A:2833:LEU:HB2	2:A:2838[A]:HIS:CE1	2.35	0.60
2:A:4769:LEU:HD22	2:D:4753:LEU:HD21	1.82	0.60
2:B:2789:ILE:HD11	2:B:2901:TYR:HB3	1.83	0.60
2:A:241:MET:HE1	2:A:404:SER:HB3	1.82	0.60
2:A:877:HIS:O	2:A:1062:TYR:OH	2.15	0.60
2:D:2497:ARG:HH12	2:D:2877:LEU:HA	1.65	0.60
2:B:3004:VAL:HG13	2:B:3036:LEU:HD11	1.82	0.60
2:C:2778:SER:OG	2:C:2888:LYS:NZ	2.24	0.60
2:A:3728:GLN:HG2	2:A:3765:ILE:HA	1.82	0.60
2:D:2223:GLU:OE2	2:D:2264:LYS:NZ	2.29	0.60
2:B:2708:THR:HB	2:B:2780:LYS:HB3	1.84	0.60
2:C:894:VAL:HA	2:C:915:HIS:HE1	1.67	0.60
2:B:2688:MET:HE3	2:B:2689:MET:HE3	1.83	0.60
2:B:3072:MET:SD	2:B:3136:SER:HA	2.41	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1842:ILE:HD12	2:C:1845:LEU:HD12	1.83	0.60
2:C:2688:MET:HE3	2:C:2689:MET:HE3	1.83	0.60
2:C:3004:VAL:HG13	2:C:3036:LEU:HD11	1.82	0.60
2:A:3141:GLY:O	2:A:3152:ARG:NH2	2.34	0.60
2:C:2834:SER:O	2:C:2838[A]:HIS:HB2	2.02	0.60
2:D:2257:LEU:HB2	2:D:2316:ASN:HD21	1.66	0.60
2:B:2599:LEU:HD11	2:B:2652:LEU:HD12	1.84	0.60
2:B:2623:LEU:HD23	2:B:2625:GLY:H	1.66	0.60
2:B:2732:TRP:HH2	2:B:2756:LEU:HB3	1.67	0.60
2:A:972:LEU:HD11	2:A:976:TYR:HB3	1.83	0.60
2:A:2708:THR:HB	2:A:2780:LYS:HB3	1.84	0.60
2:D:2681:MET:HE3	2:D:2919:LYS:HE2	1.82	0.60
2:B:3015:VAL:HB	2:B:3029:ILE:HG21	1.82	0.60
2:B:4279:MET:HA	2:B:4279:MET:HE2	1.83	0.60
2:C:2681:MET:HE3	2:C:2919:LYS:HE2	1.82	0.60
2:C:4279:MET:HE2	2:C:4279:MET:HA	1.83	0.60
2:A:894:VAL:HA	2:A:915:HIS:HE1	1.67	0.59
2:A:1842:ILE:HD12	2:A:1845:LEU:HD12	1.83	0.59
2:D:894:VAL:HA	2:D:915:HIS:HE1	1.66	0.59
2:B:972:LEU:HD11	2:B:976:TYR:HB3	1.83	0.59
2:B:3924:ILE:HD12	2:B:3985:MET:HE3	1.83	0.59
2:C:972:LEU:HD11	2:C:976:TYR:HB3	1.83	0.59
2:A:2000:HIS:CE1	2:A:2004:MET:HE3	2.37	0.59
2:A:2688:MET:HE3	2:A:2689:MET:HE3	1.83	0.59
2:D:992:GLN:HG2	2:D:1064:LEU:HD11	1.85	0.59
2:D:2688:MET:HE3	2:D:2689:MET:HE3	1.83	0.59
2:D:3130:CYS:HB3	2:D:3162:PHE:HZ	1.67	0.59
2:B:2225:SER:HB2	2:B:2240:LEU:HD13	1.85	0.59
2:B:3043:ARG:NH1	2:B:3115:HIS:O	2.35	0.59
2:C:2500:ALA:HB2	2:C:2555:LEU:HD11	1.84	0.59
2:C:2708:THR:HB	2:C:2780:LYS:HB3	1.84	0.59
2:C:2975:PHE:O	2:C:2979:ARG:NE	2.23	0.59
2:C:3805:LEU:HD11	2:C:3887:ASP:HB3	1.85	0.59
2:A:2681:MET:HE3	2:A:2919:LYS:HE2	1.83	0.59
2:D:2789:ILE:HD11	2:D:2901:TYR:HB3	1.83	0.59
2:D:4921:PHE:HE2	2:D:4940:VAL:HG11	1.67	0.59
2:C:2789:ILE:HD11	2:C:2901:TYR:HB3	1.83	0.59
2:C:3072:MET:SD	2:C:3136:SER:HA	2.41	0.59
2:D:893:TRP:CD1	2:D:897:LYS:HZ3	2.21	0.59
2:C:2225:SER:HB2	2:C:2240:LEU:HD13	1.85	0.59
2:C:2917:ILE:HB	2:C:2920:ARG:HH21	1.66	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:3043:ARG:NH1	2:C:3115:HIS:O	2.35	0.59
2:A:2789:ILE:HD11	2:A:2901:TYR:HB3	1.83	0.59
2:A:3130:CYS:HB3	2:A:3162:PHE:HZ	1.67	0.59
2:B:2000:HIS:CE1	2:B:2004:MET:HE3	2.37	0.59
2:B:3805:LEU:HD11	2:B:3887:ASP:HB3	1.85	0.59
2:C:2623:LEU:HD23	2:C:2625:GLY:H	1.66	0.59
2:A:2599:LEU:HD11	2:A:2652:LEU:HD12	1.84	0.59
2:A:3043:ARG:NH1	2:A:3115:HIS:O	2.35	0.59
2:A:3184:TYR:HD1	2:A:3192:ARG:HD3	1.67	0.59
2:D:972:LEU:HD11	2:D:976:TYR:HB3	1.83	0.59
2:D:2917:ILE:HB	2:D:2920:ARG:HH21	1.67	0.59
2:B:2917:ILE:HB	2:B:2920:ARG:HH21	1.66	0.59
2:B:3184:TYR:HD1	2:B:3192:ARG:HD3	1.68	0.59
2:C:1041:ARG:HA	2:C:1044:LYS:HZ3	1.67	0.59
2:A:2500:ALA:HB2	2:A:2555:LEU:HD11	1.84	0.59
2:D:996:VAL:HG12	2:D:1051:ARG:NH1	2.18	0.59
2:D:2732:TRP:HH2	2:D:2756:LEU:HB3	1.67	0.59
2:C:992:GLN:HG2	2:C:1064:LEU:HD11	1.84	0.59
2:A:680:ASP:OD1	2:A:801:ARG:NH2	2.36	0.59
2:A:992:GLN:HG2	2:A:1064:LEU:HD11	1.84	0.59
2:A:2732:TRP:HH2	2:A:2756:LEU:HB3	1.67	0.59
2:A:4279:MET:HE2	2:A:4279:MET:HA	1.84	0.59
2:D:2708:THR:HB	2:D:2780:LYS:HB3	1.84	0.59
2:D:2732:TRP:CD1	2:D:2736:LYS:NZ	2.67	0.59
2:D:3184:TYR:HD1	2:D:3192:ARG:HD3	1.67	0.59
2:D:3805:LEU:HD11	2:D:3887:ASP:HB3	1.85	0.59
2:C:680:ASP:OD1	2:C:801:ARG:NH2	2.36	0.59
1:H:3:VAL:HG12	1:H:77:CYS:HA	1.84	0.59
2:A:434:ASP:OD1	2:A:504:ARG:NE	2.35	0.59
2:A:3924:ILE:HD12	2:A:3985:MET:HE3	1.83	0.59
2:D:2000:HIS:CE1	2:D:2004:MET:HE3	2.37	0.59
2:B:2732:TRP:CD1	2:B:2736:LYS:NZ	2.67	0.59
2:C:2000:HIS:CE1	2:C:2004:MET:HE3	2.37	0.59
2:A:1721:MET:HE1	2:A:2127:ARG:HD2	1.85	0.58
2:A:1766:PRO:HG3	2:A:1780:PRO:HB3	1.85	0.58
2:A:2225:SER:HB2	2:A:2240:LEU:HD13	1.85	0.58
2:A:2791:ARG:NH1	2:A:2901:TYR:OH	2.36	0.58
2:D:983:LEU:HD13	2:D:986:ILE:HD12	1.85	0.58
2:B:983:LEU:HD13	2:B:986:ILE:HD12	1.85	0.58
2:B:1766:PRO:HG3	2:B:1780:PRO:HB3	1.85	0.58
2:A:2223:GLU:OE2	2:A:2264:LYS:NZ	2.28	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:3:VAL:HG12	1:G:77:CYS:HA	1.84	0.58
2:D:2225:SER:HB2	2:D:2240:LEU:HD13	1.84	0.58
2:D:3043:ARG:NH1	2:D:3115:HIS:O	2.35	0.58
2:D:4279:MET:HE2	2:D:4279:MET:HA	1.83	0.58
2:B:1119:ARG:NH2	2:B:1196:ASP:OD1	2.36	0.58
2:B:1721:MET:HE1	2:B:2127:ARG:HD2	1.85	0.58
2:B:2553:TYR:O	2:B:2556:SER:OG	2.15	0.58
2:B:2791:ARG:NH1	2:B:2901:TYR:OH	2.36	0.58
2:C:983:LEU:HD13	2:C:986:ILE:HD12	1.85	0.58
2:A:3805:LEU:HD11	2:A:3887:ASP:HB3	1.85	0.58
2:D:680:ASP:OD1	2:D:801:ARG:NH2	2.36	0.58
2:D:997:ASP:HA	2:D:1051:ARG:HH12	1.68	0.58
2:B:996:VAL:HG12	2:B:1051:ARG:NH1	2.18	0.58
2:C:997:ASP:HA	2:C:1051:ARG:HH12	1.68	0.58
2:C:2834:SER:O	2:C:2838[B]:HIS:HB2	2.03	0.58
2:C:3130:CYS:HB3	2:C:3162:PHE:HZ	1.67	0.58
2:C:3184:TYR:HD1	2:C:3192:ARG:HD3	1.68	0.58
2:A:2917:ILE:HB	2:A:2920:ARG:HH21	1.67	0.58
2:A:2929:LEU:HD21	2:A:2970:LEU:HD11	1.86	0.58
2:D:4579:HIS:CE1	2:D:4742:HIS:ND1	2.72	0.58
2:C:824:GLU:HA	2:C:1020:ILE:HD12	1.85	0.58
2:C:894:VAL:HG12	2:C:918:LEU:HA	1.85	0.58
2:C:2599:LEU:HD11	2:C:2652:LEU:HD12	1.84	0.58
2:A:875:PRO:HB2	2:A:878:LEU:HD13	1.85	0.58
2:A:1119:ARG:NH2	2:A:1196:ASP:OD1	2.37	0.58
2:A:4921:PHE:HE2	2:A:4940:VAL:HG11	1.67	0.58
2:D:894:VAL:HG12	2:D:918:LEU:HA	1.85	0.58
2:D:1502:ASN:O	2:C:2824:ARG:NH2	2.37	0.58
2:D:2500:ALA:HB2	2:D:2555:LEU:HD11	1.84	0.58
2:B:3141:GLY:O	2:B:3152:ARG:NH2	2.34	0.58
2:C:3778:LEU:HD13	2:C:3854:PHE:HD1	1.69	0.58
2:A:156:GLU:OE1	2:D:2418:ARG:NH2	2.26	0.58
2:A:983:LEU:HD13	2:A:986:ILE:HD12	1.85	0.58
2:D:2966:VAL:HG12	2:D:2970:LEU:HD23	1.85	0.58
2:D:3192:ARG:HG2	2:D:3197:LEU:HG	1.86	0.58
2:B:2202:TYR:O	2:B:2206:ILE:HG12	2.03	0.58
2:B:3209:PRO:HB2	2:B:3214:LEU:HG	1.86	0.58
2:C:2202:TYR:O	2:C:2206:ILE:HG12	2.04	0.58
2:A:3209:PRO:HB2	2:A:3214:LEU:HG	1.86	0.58
2:D:1766:PRO:HG3	2:D:1780:PRO:HB3	1.85	0.58
2:D:2202:TYR:O	2:D:2206:ILE:HG12	2.04	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:2791:ARG:NH1	2:D:2901:TYR:OH	2.36	0.58
2:B:2701:PHE:HE2	2:B:2867:ASN:HD21	1.52	0.58
2:B:3695:MET:HE3	2:B:3731:LEU:HD22	1.86	0.58
2:C:434:ASP:OD1	2:C:504:ARG:NE	2.35	0.58
2:C:555:LEU:HD12	2:C:588:ILE:HD11	1.86	0.58
2:C:1766:PRO:HG3	2:C:1780:PRO:HB3	1.85	0.58
2:C:3315:LEU:HD12	2:C:3319:PHE:CD2	2.39	0.58
2:A:996:VAL:HG12	2:A:1051:ARG:NH1	2.18	0.58
2:A:997:ASP:HA	2:A:1051:ARG:HH12	1.68	0.58
2:A:2202:TYR:O	2:A:2206:ILE:HG12	2.04	0.58
2:A:2966:VAL:HG12	2:A:2970:LEU:HD23	1.86	0.58
2:A:3192:ARG:HG2	2:A:3197:LEU:HG	1.86	0.58
2:D:4055:HIS:CE1	2:D:4057:HIS:HB2	2.39	0.58
2:B:824:GLU:HA	2:B:1020:ILE:HD12	1.85	0.58
2:B:2824:ARG:HH22	2:C:1503:ASN:CG	2.08	0.58
2:B:3130:CYS:HB3	2:B:3162:PHE:HZ	1.67	0.58
2:C:2791:ARG:NH1	2:C:2901:TYR:OH	2.36	0.58
2:C:2966:VAL:HG12	2:C:2970:LEU:HD23	1.86	0.58
2:C:3142:THR:O	2:C:3144:LYS:NZ	2.35	0.58
2:A:1041:ARG:HA	2:A:1044:LYS:HZ3	1.68	0.58
2:A:2732:TRP:CD1	2:A:2736:LYS:NZ	2.67	0.58
2:D:2778:SER:OG	2:D:2888:LYS:NZ	2.24	0.58
2:D:3209:PRO:HB2	2:D:3214:LEU:HG	1.86	0.58
2:B:894:VAL:HG12	2:B:918:LEU:HA	1.85	0.58
2:B:997:ASP:HA	2:B:1051:ARG:HH12	1.68	0.58
2:B:1415:ASP:OD2	2:B:1559:ARG:NH2	2.37	0.58
2:B:2500:ALA:HB2	2:B:2555:LEU:HD11	1.84	0.58
2:B:2929:LEU:HD21	2:B:2970:LEU:HD11	1.86	0.58
2:B:4579:HIS:CE1	2:B:4742:HIS:ND1	2.72	0.58
2:C:4921:PHE:HE2	2:C:4940:VAL:HG11	1.67	0.58
2:A:977:LYS:HZ3	2:A:979:ALA:HB2	1.68	0.58
2:A:2591:ARG:NH2	2:A:2695:MET:HB2	2.19	0.58
2:A:2824:ARG:NH1	2:B:1502:ASN:OD1	2.36	0.58
2:D:1119:ARG:NH2	2:D:1196:ASP:OD1	2.36	0.58
2:D:2599:LEU:HD11	2:D:2652:LEU:HD12	1.84	0.58
2:B:992:GLN:HG2	2:B:1064:LEU:HD11	1.84	0.58
2:C:646:THR:HG21	2:C:1702:TYR:OH	2.04	0.58
2:C:2591:ARG:NH2	2:C:2695:MET:HB2	2.19	0.58
2:C:2732:TRP:HH2	2:C:2756:LEU:HB3	1.67	0.58
2:C:4579:HIS:CE1	2:C:4742:HIS:ND1	2.72	0.58
2:A:3695:MET:HE3	2:A:3731:LEU:HD22	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:3861:GLN:HB3	2:A:3864:ASN:HD22	1.69	0.57
2:D:3142:THR:O	2:D:3144:LYS:NZ	2.35	0.57
2:C:893:TRP:CD1	2:C:897:LYS:HZ3	2.21	0.57
2:C:2701:PHE:HE2	2:C:2867:ASN:HD21	1.52	0.57
2:C:2943:PHE:CZ	2:C:2955:PRO:HD2	2.39	0.57
2:A:555:LEU:HD12	2:A:588:ILE:HD11	1.86	0.57
1:E:3:VAL:HG12	1:E:77:CYS:HA	1.84	0.57
2:D:875:PRO:HB2	2:D:878:LEU:HD13	1.85	0.57
2:C:233:VAL:HG12	2:C:274:LEU:HD22	1.87	0.57
2:C:996:VAL:HG12	2:C:1051:ARG:NH1	2.18	0.57
2:C:3688:TYR:CD2	2:C:3754:MET:HE3	2.39	0.57
2:C:4930:GLU:HA	2:C:4933:HIS:CE1	2.40	0.57
2:A:1415:ASP:OD2	2:A:1559:ARG:NH2	2.37	0.57
2:A:3315:LEU:HD12	2:A:3319:PHE:CD2	2.39	0.57
1:G:18:LYS:HB2	1:G:18:LYS:NZ	2.19	0.57
2:D:2591:ARG:NH2	2:D:2695:MET:HB2	2.19	0.57
2:D:3323:MET:HA	2:D:3323:MET:HE3	1.86	0.57
2:B:894:VAL:HB	2:B:972:LEU:HB3	1.86	0.57
2:C:3861:GLN:HB3	2:C:3864:ASN:HD22	1.69	0.57
2:A:2603:ALA:C	2:A:2606:PRO:HD2	2.29	0.57
2:A:4055:HIS:CE1	2:A:4057:HIS:HB2	2.39	0.57
1:F:3:VAL:HG12	1:F:77:CYS:HA	1.84	0.57
2:D:1721:MET:HE1	2:D:2127:ARG:HD2	1.85	0.57
2:D:1943:ARG:NH1	2:D:1964:GLU:OE1	2.35	0.57
2:D:2834:SER:O	2:D:2838[A]:HIS:HB2	2.05	0.57
2:D:3688:TYR:CD2	2:D:3754:MET:HE3	2.39	0.57
2:D:4930:GLU:HA	2:D:4933:HIS:CE1	2.40	0.57
2:B:2603:ALA:C	2:B:2606:PRO:HD2	2.30	0.57
2:B:3315:LEU:HD12	2:B:3319:PHE:CD2	2.39	0.57
2:B:3688:TYR:CD2	2:B:3754:MET:HE3	2.39	0.57
2:B:3861:GLN:HB3	2:B:3864:ASN:HD22	1.69	0.57
2:C:889:ILE:HG22	2:C:893:TRP:CZ3	2.40	0.57
2:C:2760:TYR:O	2:C:2768:LYS:NZ	2.37	0.57
2:C:2845:ALA:HB1	2:C:2885:ASP:HB3	1.87	0.57
2:C:3192:ARG:HG2	2:C:3197:LEU:HG	1.86	0.57
2:C:3209:PRO:HB2	2:C:3214:LEU:HG	1.86	0.57
2:C:4055:HIS:CE1	2:C:4057:HIS:HB2	2.39	0.57
2:C:4913:HIS:O	4:C:5002:ATP:N6	2.38	0.57
2:A:3323:MET:HA	2:A:3323:MET:HE3	1.86	0.57
2:B:240:HIS:HB3	2:C:167:LYS:HE2	1.86	0.57
2:B:2845:ALA:HB1	2:B:2885:ASP:HB3	1.87	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3013:VAL:O	2:B:3018:ARG:NH2	2.37	0.57
2:B:3192:ARG:HG2	2:B:3197:LEU:HG	1.86	0.57
2:C:1415:ASP:OD2	2:C:1559:ARG:NH2	2.37	0.57
2:C:3695:MET:HE3	2:C:3731:LEU:HD22	1.86	0.57
2:A:1515:SER:O	2:A:1532:GLN:NE2	2.37	0.57
2:A:4913:HIS:O	4:A:5002:ATP:N6	2.38	0.57
2:D:1415:ASP:OD2	2:D:1559:ARG:NH2	2.37	0.57
2:B:646:THR:HG21	2:B:1702:TYR:OH	2.04	0.57
2:B:3142:THR:O	2:B:3144:LYS:NZ	2.35	0.57
2:A:824:GLU:HA	2:A:1020:ILE:HD12	1.85	0.57
2:A:839:GLU:HB3	2:A:851:LEU:HD12	1.87	0.57
2:D:1273:ILE:HB	2:D:1282:CYS:HB2	1.87	0.57
2:D:2929:LEU:HD21	2:D:2970:LEU:HD11	1.86	0.57
2:D:3141:GLY:O	2:D:3152:ARG:NH2	2.34	0.57
2:D:3695:MET:HE3	2:D:3731:LEU:HD22	1.86	0.57
2:B:875:PRO:HB2	2:B:878:LEU:HD13	1.85	0.57
2:B:2760:TYR:O	2:B:2768:LYS:NZ	2.37	0.57
2:B:2841:ALA:HA	2:B:2844:MET:HG3	1.87	0.57
2:B:3246:MET:SD	2:B:3306:ILE:HD12	2.45	0.57
2:B:4055:HIS:CE1	2:B:4057:HIS:HB2	2.39	0.57
2:C:875:PRO:HB2	2:C:878:LEU:HD13	1.85	0.57
2:C:1273:ILE:HB	2:C:1282:CYS:HB2	1.87	0.57
2:C:3025:ASP:O	2:C:3028:SER:OG	2.17	0.57
2:A:1433:PHE:HB3	2:D:2830:ASN:CG	2.29	0.57
2:D:646:THR:HG21	2:D:1702:TYR:OH	2.04	0.57
2:D:4913:HIS:O	4:D:5002:ATP:N6	2.38	0.57
2:B:233:VAL:HG12	2:B:274:LEU:HD22	1.87	0.57
2:B:3146:ILE:O	2:B:3150:ARG:NH1	2.38	0.57
2:B:4913:HIS:O	4:B:5002:ATP:N6	2.38	0.57
2:C:1119:ARG:NH2	2:C:1196:ASP:OD1	2.37	0.57
2:C:1515:SER:O	2:C:1532:GLN:NE2	2.37	0.57
2:C:1721:MET:HE1	2:C:2127:ARG:HD2	1.85	0.57
2:C:3246:MET:SD	2:C:3306:ILE:HD12	2.45	0.57
2:C:3323:MET:HA	2:C:3323:MET:HE3	1.86	0.57
2:A:2845:ALA:HB1	2:A:2885:ASP:HB3	1.87	0.57
2:D:2845:ALA:HB1	2:D:2885:ASP:HB3	1.87	0.57
2:D:3013:VAL:O	2:D:3018:ARG:NH2	2.37	0.57
2:B:893:TRP:CD1	2:B:897:LYS:HZ3	2.22	0.57
2:B:1515:SER:O	2:B:1532:GLN:NE2	2.37	0.57
2:B:2591:ARG:NH2	2:B:2695:MET:HB2	2.19	0.57
2:B:3323:MET:HA	2:B:3323:MET:HE3	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:3013:VAL:O	2:A:3018:ARG:NH2	2.37	0.57
2:A:3688:TYR:CD2	2:A:3754:MET:HE3	2.39	0.57
2:D:3173:THR:HG23	2:D:3201:VAL:HG22	1.87	0.57
2:D:4698:LEU:HD11	2:C:4264:LEU:HD21	1.87	0.57
2:B:1041:ARG:HA	2:B:1044:LYS:HZ3	1.70	0.57
2:B:4806:CYS:HA	2:B:4812:CYS:HB2	1.87	0.57
2:C:3273:MET:O	2:C:3277:LEU:HG	2.05	0.57
2:A:114:LEU:HD12	2:A:117:HIS:HE1	1.70	0.56
2:D:839:GLU:HB3	2:D:851:LEU:HD12	1.87	0.56
2:D:889:ILE:HG22	2:D:893:TRP:CZ3	2.40	0.56
2:D:3315:LEU:HD12	2:D:3319:PHE:CD2	2.39	0.56
2:B:2966:VAL:HG12	2:B:2970:LEU:HD23	1.86	0.56
2:C:2603:ALA:C	2:C:2606:PRO:HD2	2.29	0.56
2:A:2841:ALA:HA	2:A:2844:MET:HG3	1.87	0.56
2:A:2868:HIS:HB3	2:A:2871:LEU:HB2	1.87	0.56
2:D:2868:HIS:HB3	2:D:2871:LEU:HB2	1.87	0.56
2:B:2868:HIS:HB3	2:B:2871:LEU:HB2	1.87	0.56
2:B:3173:THR:HG23	2:B:3201:VAL:HG22	1.87	0.56
2:B:4921:PHE:HE2	2:B:4940:VAL:HG11	1.67	0.56
2:C:3013:VAL:O	2:C:3018:ARG:NH2	2.37	0.56
2:A:3891:TYR:O	2:A:3895:LYS:NZ	2.38	0.56
1:F:36:LYS:HB2	2:B:647:ARG:HH12	1.71	0.56
2:D:894:VAL:HB	2:D:972:LEU:HB3	1.86	0.56
2:D:1440:ASN:HB3	2:D:1546:GLN:HB3	1.88	0.56
2:D:2603:ALA:C	2:D:2606:PRO:HD2	2.29	0.56
2:D:2943:PHE:CZ	2:D:2955:PRO:HD2	2.39	0.56
2:D:3215:MET:SD	2:D:3279:ASN:ND2	2.76	0.56
2:B:430:ILE:HG23	2:B:504:ARG:HD2	1.87	0.56
2:B:836:HIS:HB2	2:B:841:LYS:HE3	1.87	0.56
2:B:2447:LYS:NZ	2:B:2862:SER:O	2.38	0.56
2:B:2549:LEU:HD13	2:B:2588:LEU:HD22	1.87	0.56
2:B:2943:PHE:CZ	2:B:2955:PRO:HD2	2.39	0.56
2:B:3141:GLY:HA3	2:B:3237:VAL:HG11	1.88	0.56
2:B:4930:GLU:HA	2:B:4933:HIS:CE1	2.40	0.56
2:C:839:GLU:HB3	2:C:851:LEU:HD12	1.87	0.56
2:C:894:VAL:HB	2:C:972:LEU:HB3	1.86	0.56
2:C:2868:HIS:HB3	2:C:2871:LEU:HB2	1.87	0.56
2:C:2929:LEU:HD21	2:C:2970:LEU:HD11	1.86	0.56
2:A:894:VAL:HG12	2:A:918:LEU:HA	1.85	0.56
2:A:1721:MET:SD	2:A:2127:ARG:NH1	2.79	0.56
2:A:2447:LYS:NZ	2:A:2862:SER:O	2.38	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:3141:GLY:HA3	2:A:3237:VAL:HG11	1.88	0.56
2:D:233:VAL:HG12	2:D:274:LEU:HD22	1.87	0.56
2:D:555:LEU:HD12	2:D:588:ILE:HD11	1.86	0.56
2:D:824:GLU:HA	2:D:1020:ILE:HD12	1.85	0.56
2:D:2596:VAL:HG21	2:D:2610:LEU:HD11	1.88	0.56
2:D:3778:LEU:HD13	2:D:3854:PHE:HD1	1.69	0.56
2:B:889:ILE:HG22	2:B:893:TRP:CZ3	2.40	0.56
2:A:1433:PHE:HB3	2:D:2830:ASN:ND2	2.20	0.56
2:A:2760:TYR:O	2:A:2768:LYS:NZ	2.37	0.56
2:A:2943:PHE:CZ	2:A:2955:PRO:HD2	2.39	0.56
2:A:4930:GLU:HA	2:A:4933:HIS:CE1	2.40	0.56
1:E:18:LYS:HB2	1:E:18:LYS:NZ	2.19	0.56
2:D:2701:PHE:HE2	2:D:2867:ASN:HD21	1.52	0.56
2:D:2834:SER:O	2:D:2838[B]:HIS:HB2	2.06	0.56
2:B:3273:MET:O	2:B:3277:LEU:HG	2.05	0.56
2:B:3778:LEU:HD13	2:B:3854:PHE:HD1	1.69	0.56
2:A:962:LYS:HG3	2:A:982:ASP:H	1.71	0.56
2:A:1273:ILE:HB	2:A:1282:CYS:HB2	1.87	0.56
2:D:962:LYS:HG3	2:D:982:ASP:H	1.71	0.56
2:B:555:LEU:HD12	2:B:588:ILE:HD11	1.86	0.56
2:B:1721:MET:SD	2:B:2127:ARG:NH1	2.79	0.56
2:C:2841:ALA:HA	2:C:2844:MET:HG3	1.87	0.56
1:H:18:LYS:HB2	1:H:18:LYS:NZ	2.19	0.56
1:H:36:LYS:HB2	2:D:647:ARG:HH12	1.71	0.56
2:A:894:VAL:HB	2:A:972:LEU:HB3	1.86	0.56
2:D:2760:TYR:O	2:D:2768:LYS:NZ	2.37	0.56
2:D:3246:MET:SD	2:D:3306:ILE:HD12	2.45	0.56
2:D:3912:VAL:O	2:D:3916:VAL:HG23	2.06	0.56
2:B:3215:MET:SD	2:B:3279:ASN:ND2	2.76	0.56
2:B:3891:TYR:O	2:B:3895:LYS:NZ	2.38	0.56
2:C:3173:THR:HG23	2:C:3201:VAL:HG22	1.87	0.56
2:A:233:VAL:HG12	2:A:274:LEU:HD22	1.87	0.56
2:A:646:THR:HG21	2:A:1702:TYR:OH	2.04	0.56
2:A:889:ILE:HG22	2:A:893:TRP:CZ3	2.40	0.56
2:A:893:TRP:CD1	2:A:897:LYS:HZ3	2.23	0.56
2:A:919:VAL:HG11	2:A:923:LYS:HD3	1.88	0.56
2:A:2785:TRP:HB2	2:A:2787:TRP:CD1	2.41	0.56
2:A:4806:CYS:HA	2:A:4812:CYS:HB2	1.87	0.56
2:D:114:LEU:HD12	2:D:117:HIS:HE1	1.71	0.56
2:B:680:ASP:OD1	2:B:801:ARG:NH2	2.36	0.56
2:B:839:GLU:HB3	2:B:851:LEU:HD12	1.87	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1431:ARG:NE	2:B:1556:GLU:OE2	2.39	0.56
2:C:2106:TYR:OH	2:C:2158:HIS:ND1	2.29	0.56
2:A:1440:ASN:HB3	2:A:1546:GLN:HB3	1.88	0.56
2:A:2549:LEU:HD13	2:A:2588:LEU:HD22	1.87	0.56
2:A:2596:VAL:HG21	2:A:2610:LEU:HD11	1.88	0.56
2:A:2701:PHE:HE2	2:A:2867:ASN:HD21	1.52	0.56
2:A:3200:ASN:HB2	2:A:3203:ASP:HB2	1.88	0.56
2:D:2841:ALA:HA	2:D:2844:MET:HG3	1.87	0.56
2:D:3985:MET:HE2	2:D:3985:MET:HA	1.88	0.56
2:C:1419:PHE:HE2	2:C:1562:ASN:HB3	1.71	0.56
2:C:1431:ARG:NE	2:C:1556:GLU:OE2	2.39	0.56
2:A:430:ILE:HG23	2:A:504:ARG:HD2	1.87	0.56
2:A:2980:LEU:HD21	2:A:2989:PRO:HB3	1.88	0.56
2:A:3173:THR:HG23	2:A:3201:VAL:HG22	1.87	0.56
2:A:3215:MET:SD	2:A:3279:ASN:ND2	2.76	0.56
2:A:4503:ARG:NH1	2:A:4745:ASP:OD2	2.39	0.56
2:D:891:GLU:O	2:D:894:VAL:HG22	2.06	0.56
2:D:1419:PHE:HE2	2:D:1562:ASN:HB3	1.71	0.56
2:D:2549:LEU:HD13	2:D:2588:LEU:HD22	1.87	0.56
2:B:891:GLU:O	2:B:894:VAL:HG22	2.06	0.56
2:B:1273:ILE:HB	2:B:1282:CYS:HB2	1.87	0.56
2:B:3912:VAL:O	2:B:3916:VAL:HG23	2.06	0.56
2:C:114:LEU:HD12	2:C:117:HIS:HE1	1.70	0.56
2:C:2596:VAL:HG21	2:C:2610:LEU:HD11	1.88	0.56
2:C:2785:TRP:HB2	2:C:2787:TRP:CD1	2.41	0.56
2:C:3912:VAL:O	2:C:3916:VAL:HG23	2.06	0.56
2:A:1419:PHE:HE2	2:A:1562:ASN:HB3	1.71	0.55
2:A:3146:ILE:O	2:A:3150:ARG:NH1	2.38	0.55
2:A:3778:LEU:HD13	2:A:3854:PHE:HD1	1.69	0.55
2:D:430:ILE:HG23	2:D:504:ARG:HD2	1.87	0.55
2:D:2829:SER:OG	2:D:2830:ASN:ND2	2.39	0.55
2:D:3141:GLY:HA3	2:D:3237:VAL:HG11	1.88	0.55
2:D:3200:ASN:HB2	2:D:3203:ASP:HB2	1.88	0.55
2:D:3273:MET:O	2:D:3277:LEU:HG	2.05	0.55
2:C:1721:MET:SD	2:C:2127:ARG:NH1	2.79	0.55
2:C:3146:ILE:O	2:C:3150:ARG:NH1	2.38	0.55
2:C:3200:ASN:HB2	2:C:3203:ASP:HB2	1.88	0.55
2:A:2829:SER:OG	2:A:2830:ASN:ND2	2.39	0.55
2:A:3246:MET:SD	2:A:3306:ILE:HD12	2.45	0.55
1:G:35:LYS:NZ	2:C:640:ARG:O	2.39	0.55
2:D:836:HIS:HB2	2:D:841:LYS:HE3	1.87	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:3891:TYR:O	2:D:3895:LYS:NZ	2.38	0.55
2:B:434:ASP:OD1	2:B:504:ARG:NE	2.35	0.55
2:B:4503:ARG:NH1	2:B:4745:ASP:OD2	2.39	0.55
2:B:4579:HIS:HE1	2:B:4742:HIS:CE1	2.25	0.55
2:C:2447:LYS:NZ	2:C:2862:SER:O	2.38	0.55
2:C:4579:HIS:HE1	2:C:4742:HIS:CE1	2.25	0.55
2:C:4806:CYS:HA	2:C:4812:CYS:HB2	1.87	0.55
2:D:919:VAL:HG11	2:D:923:LYS:HD3	1.88	0.55
2:D:4809:MET:HG2	2:C:4518:LEU:HA	1.89	0.55
2:B:2377:GLU:OE2	2:B:2383:HIS:NE2	2.40	0.55
2:B:2778:SER:OG	2:B:2888:LYS:NZ	2.24	0.55
2:B:2852:TRP:CD1	2:B:2856:LYS:HZ1	2.24	0.55
2:A:836:HIS:HB2	2:A:841:LYS:HE3	1.88	0.55
2:A:3985:MET:HE2	2:A:3985:MET:HA	1.88	0.55
2:A:4240:THR:HG22	2:A:4308:ILE:HD12	1.89	0.55
2:D:434:ASP:OD1	2:D:504:ARG:NE	2.35	0.55
2:D:1721:MET:SD	2:D:2127:ARG:NH1	2.79	0.55
2:D:1932:PHE:HZ	2:D:1979:PHE:HE2	1.54	0.55
2:D:2106:TYR:OH	2:D:2158:HIS:ND1	2.29	0.55
2:D:2833:LEU:HB3	2:D:2837:LEU:HD22	1.89	0.55
2:B:919:VAL:HG11	2:B:923:LYS:HD3	1.88	0.55
2:B:927:GLN:NE2	2:B:928:GLU:HG2	2.22	0.55
2:C:962:LYS:HG3	2:C:982:ASP:H	1.71	0.55
2:C:2833:LEU:HB3	2:C:2837:LEU:HD22	1.89	0.55
2:C:3141:GLY:HA3	2:C:3237:VAL:HG11	1.88	0.55
2:A:1551:ASN:HB2	2:D:2830:ASN:OD1	2.06	0.55
1:F:18:LYS:NZ	1:F:18:LYS:HB2	2.19	0.55
2:D:2980:LEU:HD21	2:D:2989:PRO:HB3	1.88	0.55
2:D:4240:THR:HG22	2:D:4308:ILE:HD12	1.89	0.55
2:D:4806:CYS:HA	2:D:4812:CYS:HB2	1.87	0.55
2:B:114:LEU:HD12	2:B:117:HIS:HE1	1.71	0.55
2:B:4240:THR:HG22	2:B:4308:ILE:HD12	1.89	0.55
2:C:430:ILE:HG23	2:C:504:ARG:HD2	1.87	0.55
2:C:2760:TYR:HA	2:C:2763:LEU:HD13	1.89	0.55
2:C:3985:MET:HE2	2:C:3985:MET:HA	1.88	0.55
2:A:891:GLU:O	2:A:894:VAL:HG22	2.06	0.55
2:A:1708:ASP:HA	2:A:1712:SER:HB2	1.89	0.55
2:D:2447:LYS:NZ	2:D:2862:SER:O	2.38	0.55
2:D:4503:ARG:NH1	2:D:4745:ASP:OD2	2.39	0.55
2:B:1979:PHE:HB2	2:B:3628:TRP:HZ2	1.72	0.55
2:B:2760:TYR:HA	2:B:2763:LEU:HD13	1.89	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2785:TRP:HB2	2:B:2787:TRP:CD1	2.41	0.55
2:B:2833:LEU:HB3	2:B:2837:LEU:HD22	1.89	0.55
2:C:836:HIS:HB2	2:C:841:LYS:HE3	1.87	0.55
2:C:891:GLU:O	2:C:894:VAL:HG22	2.06	0.55
2:C:2980:LEU:HD21	2:C:2989:PRO:HB3	1.88	0.55
2:A:3273:MET:O	2:A:3277:LEU:HG	2.05	0.55
2:D:2785:TRP:HB2	2:D:2787:TRP:CD1	2.41	0.55
2:B:962:LYS:HG3	2:B:982:ASP:H	1.71	0.55
2:B:3200:ASN:HB2	2:B:3203:ASP:HB2	1.88	0.55
2:C:1979:PHE:HB2	2:C:3628:TRP:HZ2	1.72	0.55
2:C:2549:LEU:HD13	2:C:2588:LEU:HD22	1.87	0.55
2:C:4240:THR:HG22	2:C:4308:ILE:HD12	1.89	0.55
2:A:1979:PHE:HB2	2:A:3628:TRP:HZ2	1.72	0.55
2:A:2377:GLU:OE2	2:A:2383:HIS:NE2	2.40	0.55
2:A:3250:TRP:O	2:A:3256:ASN:ND2	2.40	0.55
2:A:3912:VAL:O	2:A:3916:VAL:HG23	2.06	0.55
2:D:1141:LYS:O	2:D:1143:GLN:NE2	2.40	0.55
2:D:1895:GLN:NE2	2:D:2068:ARG:HH22	2.05	0.55
2:B:1440:ASN:HB3	2:B:1546:GLN:HB3	1.88	0.55
2:B:2724:TYR:HD2	2:B:2775:ILE:HG12	1.72	0.55
2:C:927:GLN:NE2	2:C:928:GLU:HG2	2.21	0.55
2:C:1141:LYS:O	2:C:1143:GLN:NE2	2.40	0.55
2:D:1708:ASP:HA	2:D:1712:SER:HB2	1.89	0.55
2:D:2852:TRP:CD1	2:D:2856:LYS:HZ1	2.23	0.55
2:B:2980:LEU:HD21	2:B:2989:PRO:HB3	1.88	0.55
2:B:3250:TRP:O	2:B:3256:ASN:ND2	2.40	0.55
2:B:4620:GLN:OE1	2:B:4632:ARG:NH2	2.34	0.55
2:C:1708:ASP:HA	2:C:1712:SER:HB2	1.89	0.55
2:C:1932:PHE:HZ	2:C:1979:PHE:HE2	1.55	0.55
2:C:1943:ARG:NH1	2:C:1964:GLU:OE1	2.35	0.55
2:C:3891:TYR:O	2:C:3895:LYS:NZ	2.38	0.55
2:C:4792:PHE:HB3	2:C:4843:ARG:HH21	1.72	0.55
2:A:2724:TYR:HD2	2:A:2775:ILE:HG12	1.72	0.55
2:A:4792:PHE:HB3	2:A:4843:ARG:HH21	1.72	0.55
2:D:943:LEU:HD21	2:D:999:LEU:HD11	1.89	0.55
2:D:3254:PRO:HD3	2:D:3266:THR:O	2.08	0.55
2:B:2596:VAL:HG21	2:B:2610:LEU:HD11	1.88	0.55
2:B:4792:PHE:HB3	2:B:4843:ARG:HH21	1.72	0.55
2:C:2713:ILE:HG21	2:C:2721:ILE:HD11	1.89	0.55
2:A:1662:SER:OG	2:A:1708:ASP:OD2	2.22	0.54
2:A:2556:SER:HB2	2:A:2605:MET:HE1	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:2833:LEU:HB3	2:A:2837:LEU:HD22	1.89	0.54
2:A:4707:MET:HG3	2:D:4252:ILE:HG21	1.89	0.54
2:D:881:ILE:HG23	2:D:884:LYS:HE2	1.89	0.54
2:D:927:GLN:NE2	2:D:928:GLU:HG2	2.22	0.54
2:D:2377:GLU:OE2	2:D:2383:HIS:NE2	2.40	0.54
2:D:4792:PHE:HB3	2:D:4843:ARG:HH21	1.72	0.54
2:B:2829:SER:OG	2:B:2830:ASN:ND2	2.39	0.54
2:C:1844:GLN:NE2	2:C:1853:GLU:OE1	2.41	0.54
2:C:2605:MET:CG	2:C:2606:PRO:HD3	2.37	0.54
2:C:2829:SER:OG	2:C:2830:ASN:ND2	2.39	0.54
2:A:4517:LEU:O	2:B:4809:MET:HG2	2.06	0.54
2:D:977:LYS:HZ3	2:D:979:ALA:HB2	1.71	0.54
2:D:2556:SER:HB2	2:D:2605:MET:HE1	1.89	0.54
2:D:4579:HIS:HE1	2:D:4742:HIS:CE1	2.25	0.54
2:B:938:GLU:HA	2:B:941:LYS:HB2	1.90	0.54
2:B:1708:ASP:HA	2:B:1712:SER:HB2	1.89	0.54
2:B:4252:ILE:HG21	2:C:4707:MET:HG3	1.89	0.54
2:C:866:PRO:HB3	2:C:1002:ASN:OD1	2.07	0.54
2:A:579:LEU:HD22	2:A:586:LEU:HD23	1.90	0.54
2:D:247:VAL:O	2:D:272:ARG:NH1	2.40	0.54
2:D:4707:MET:HG3	2:C:4252:ILE:CG2	2.37	0.54
2:B:1419:PHE:HE2	2:B:1562:ASN:HB3	1.71	0.54
2:B:1895:GLN:HE22	2:B:2068:ARG:HH22	1.55	0.54
2:C:1895:GLN:NE2	2:C:2068:ARG:HH22	2.05	0.54
2:A:927:GLN:NE2	2:A:928:GLU:HG2	2.22	0.54
2:A:938:GLU:HA	2:A:941:LYS:HB2	1.90	0.54
2:B:1895:GLN:NE2	2:B:2068:ARG:HH22	2.05	0.54
2:C:1440:ASN:HB3	2:C:1546:GLN:HB3	1.88	0.54
2:C:2724:TYR:HD2	2:C:2775:ILE:HG12	1.72	0.54
2:A:640:ARG:O	1:E:35:LYS:NZ	2.40	0.54
2:A:4756:ILE:HG23	2:B:4861:ILE:HG21	1.89	0.54
2:D:2386:ASN:HA	2:D:2389:MET:HE2	1.89	0.54
2:B:247:VAL:O	2:B:272:ARG:NH1	2.41	0.54
2:B:2713:ILE:HG21	2:B:2721:ILE:HD11	1.89	0.54
2:C:247:VAL:O	2:C:272:ARG:NH1	2.40	0.54
2:A:866:PRO:HB3	2:A:1002:ASN:OD1	2.07	0.54
2:A:881:ILE:HG23	2:A:884:LYS:HE2	1.89	0.54
2:D:890:HIS:HA	2:D:893:TRP:HE3	1.73	0.54
2:D:3250:TRP:O	2:D:3256:ASN:ND2	2.40	0.54
2:B:2605:MET:CG	2:B:2606:PRO:HD3	2.37	0.54
2:B:3985:MET:HE2	2:B:3985:MET:HA	1.88	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:943:LEU:HD21	2:C:999:LEU:HD11	1.89	0.54
2:A:468:GLU:HA	2:A:475:LYS:HZ1	1.73	0.54
2:A:943:LEU:HD21	2:A:999:LEU:HD11	1.89	0.54
2:A:1943:ARG:NH1	2:A:1964:GLU:OE1	2.35	0.54
2:A:2713:ILE:HG21	2:A:2721:ILE:HD11	1.89	0.54
2:D:866:PRO:HB3	2:D:1002:ASN:OD1	2.07	0.54
2:D:1844:GLN:NE2	2:D:1853:GLU:OE1	2.41	0.54
2:B:881:ILE:HG23	2:B:884:LYS:HE2	1.89	0.54
2:B:3025:ASP:O	2:B:3028:SER:OG	2.17	0.54
2:C:881:ILE:HG23	2:C:884:LYS:HE2	1.89	0.54
2:C:2386:ASN:HA	2:C:2389:MET:HE2	1.89	0.54
2:A:1141:LYS:O	2:A:1143:GLN:NE2	2.40	0.54
2:A:2386:ASN:HA	2:A:2389:MET:HE2	1.89	0.54
2:A:3254:PRO:HD3	2:A:3266:THR:O	2.08	0.54
2:D:579:LEU:HD22	2:D:586:LEU:HD23	1.90	0.54
2:D:1515:SER:O	2:D:1532:GLN:NE2	2.37	0.54
2:D:2605:MET:CG	2:D:2606:PRO:HD3	2.37	0.54
2:D:4014:LEU:HD13	2:D:4122:ALA:HB2	1.89	0.54
2:B:866:PRO:HB3	2:B:1002:ASN:OD1	2.07	0.54
2:B:890:HIS:HA	2:B:893:TRP:HE3	1.73	0.54
2:B:943:LEU:HD21	2:B:999:LEU:HD11	1.89	0.54
2:B:2232:PRO:HB2	2:B:2379:ASP:HA	1.90	0.54
2:C:3254:PRO:HD3	2:C:3266:THR:O	2.08	0.54
2:A:247:VAL:O	2:A:272:ARG:NH1	2.41	0.54
2:A:890:HIS:HA	2:A:893:TRP:HE3	1.73	0.54
2:A:1420:LEU:HD21	2:A:1559:ARG:HH12	1.73	0.54
2:A:1498:GLN:O	2:A:1500:ARG:NH1	2.41	0.54
2:A:1962:THR:HG23	2:A:1966:ARG:HE	1.73	0.54
2:A:2605:MET:CG	2:A:2606:PRO:HD3	2.37	0.54
2:A:2760:TYR:HA	2:A:2763:LEU:HD13	1.89	0.54
2:A:4867:ILE:HD12	2:D:4867:ILE:HD13	1.90	0.54
2:D:935:MET:O	2:D:939:THR:OG1	2.17	0.54
2:D:938:GLU:HA	2:D:941:LYS:HB2	1.90	0.54
2:D:1431:ARG:NE	2:D:1556:GLU:OE2	2.39	0.54
2:D:3025:ASP:O	2:D:3028:SER:OG	2.17	0.54
2:B:877:HIS:O	2:B:1062:TYR:OH	2.15	0.54
2:B:1851:PHE:HZ	2:B:2058:LEU:HD13	1.73	0.54
2:B:2556:SER:HB2	2:B:2605:MET:HE1	1.89	0.54
2:B:2824:ARG:CZ	2:C:1502:ASN:O	2.55	0.54
2:A:940:LEU:HA	2:A:943:LEU:HD12	1.90	0.54
2:A:1895:GLN:HE22	2:A:2068:ARG:HH22	1.56	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:1932:PHE:HZ	2:A:1979:PHE:HE2	1.55	0.54
2:A:4620:GLN:OE1	2:A:4632:ARG:NH2	2.34	0.54
2:D:2724:TYR:HD2	2:D:2775:ILE:HG12	1.72	0.54
2:B:1141:LYS:O	2:B:1143:GLN:NE2	2.40	0.54
2:B:2834:SER:O	2:B:2838[A]:HIS:HB2	2.08	0.54
2:C:919:VAL:HG11	2:C:923:LYS:HD3	1.88	0.54
2:C:4014:LEU:HD13	2:C:4122:ALA:HB2	1.89	0.54
2:A:423:VAL:HB	2:A:494:MET:HE1	1.90	0.53
2:A:4484:ILE:HG13	2:A:4485:ILE:HD12	1.90	0.53
2:D:1498:GLN:O	2:D:1500:ARG:NH1	2.41	0.53
2:B:2102:LEU:HD23	2:B:3625:GLU:HB2	1.90	0.53
2:C:423:VAL:HB	2:C:494:MET:HE1	1.90	0.53
2:C:713:TRP:HH2	2:C:1251:LEU:HD21	1.73	0.53
2:C:890:HIS:HA	2:C:893:TRP:HE3	1.73	0.53
2:C:1895:GLN:HE22	2:C:2068:ARG:HH22	1.56	0.53
2:C:2102:LEU:HD23	2:C:3625:GLU:HB2	1.90	0.53
2:C:2377:GLU:OE2	2:C:2383:HIS:NE2	2.40	0.53
2:C:3250:TRP:O	2:C:3256:ASN:ND2	2.40	0.53
2:A:1851:PHE:HZ	2:A:2058:LEU:HD13	1.73	0.53
2:D:1100:ARG:NH2	2:D:1234:GLU:O	2.42	0.53
2:D:1895:GLN:HE22	2:D:2068:ARG:HH22	1.56	0.53
2:D:2674:GLY:HA3	2:D:2977:ASN:HD22	1.74	0.53
2:D:3146:ILE:O	2:D:3150:ARG:NH1	2.38	0.53
2:C:271:ALA:HB2	2:C:488:LEU:HD22	1.91	0.53
2:C:1100:ARG:NH2	2:C:1234:GLU:O	2.42	0.53
2:C:1498:GLN:O	2:C:1500:ARG:NH1	2.41	0.53
2:C:1962:THR:HG23	2:C:1966:ARG:HE	1.73	0.53
2:C:2852:TRP:CD1	2:C:2856:LYS:HZ1	2.26	0.53
2:A:1895:GLN:NE2	2:A:2068:ARG:HH22	2.05	0.53
2:A:3796:LEU:HD22	2:A:3835:PHE:HZ	1.73	0.53
2:A:4694:LEU:HD21	2:D:4264:LEU:HG	1.90	0.53
2:D:1079:SER:OG	2:D:1083:GLU:O	2.27	0.53
2:D:1979:PHE:HB2	2:D:3628:TRP:HZ2	1.72	0.53
2:B:423:VAL:HB	2:B:494:MET:HE1	1.90	0.53
2:B:579:LEU:HD22	2:B:586:LEU:HD23	1.90	0.53
2:B:1844:GLN:NE2	2:B:1853:GLU:OE1	2.41	0.53
2:B:1932:PHE:HZ	2:B:1979:PHE:HE2	1.54	0.53
2:B:2386:ASN:HA	2:B:2389:MET:HE2	1.89	0.53
2:C:4620:GLN:OE1	2:C:4632:ARG:NH2	2.34	0.53
2:A:930:ASN:HA	2:A:933:LEU:HD13	1.91	0.53
2:A:2102:LEU:HD23	2:A:3625:GLU:HB2	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:3743:THR:HB	2:A:3758:THR:HG21	1.90	0.53
2:A:4283:PHE:HE2	2:B:4495:PHE:HE2	1.57	0.53
2:D:938:GLU:HG3	2:D:941:LYS:HE2	1.91	0.53
2:D:2102:LEU:HD23	2:D:3625:GLU:HB2	1.90	0.53
2:D:2760:TYR:HA	2:D:2763:LEU:HD13	1.89	0.53
2:D:3796:LEU:HD22	2:D:3835:PHE:HZ	1.74	0.53
2:B:713:TRP:HH2	2:B:1251:LEU:HD21	1.73	0.53
2:B:938:GLU:HG3	2:B:941:LYS:HE2	1.91	0.53
2:B:3254:PRO:HD3	2:B:3266:THR:O	2.08	0.53
2:C:3025:ASP:O	2:C:3029:ILE:HD12	2.09	0.53
2:C:4503:ARG:NH1	2:C:4745:ASP:OD2	2.39	0.53
2:A:938:GLU:HG3	2:A:941:LYS:HE2	1.91	0.53
2:A:1844:GLN:NE2	2:A:1853:GLU:OE1	2.41	0.53
1:G:36:LYS:HB2	2:C:647:ARG:HH12	1.72	0.53
2:D:423:VAL:HB	2:D:494:MET:HE1	1.90	0.53
2:D:2787:TRP:HH2	2:D:2840:MET:HB3	1.74	0.53
2:D:2874:TYR:OH	2:D:2886:ARG:NH2	2.42	0.53
2:D:3025:ASP:O	2:D:3029:ILE:HD12	2.09	0.53
2:D:4484:ILE:HG13	2:D:4485:ILE:HD12	1.90	0.53
2:B:930:ASN:HA	2:B:933:LEU:HD13	1.91	0.53
2:B:1498:GLN:O	2:B:1500:ARG:NH1	2.41	0.53
2:B:1943:ARG:NH1	2:B:1964:GLU:OE1	2.35	0.53
2:B:2627:TRP:HB2	2:B:2630:PHE:HB2	1.91	0.53
2:B:2732:TRP:O	2:B:2736:LYS:NZ	2.41	0.53
2:B:3025:ASP:O	2:B:3029:ILE:HD12	2.09	0.53
2:C:317:MET:HE1	2:C:322:ALA:HA	1.91	0.53
2:C:2232:PRO:HB2	2:C:2379:ASP:HA	1.90	0.53
2:C:2627:TRP:HB2	2:C:2630:PHE:HB2	1.91	0.53
2:C:3796:LEU:HD22	2:C:3835:PHE:HZ	1.74	0.53
2:A:883:GLU:OE2	2:A:929:ARG:NH2	2.42	0.53
2:A:1100:ARG:NH2	2:A:1234:GLU:O	2.42	0.53
2:D:317:MET:HE1	2:D:322:ALA:HA	1.91	0.53
2:D:930:ASN:HA	2:D:933:LEU:HD13	1.91	0.53
2:D:1420:LEU:HD21	2:D:1559:ARG:HH12	1.73	0.53
2:D:2172:MET:O	2:D:2176:VAL:N	2.38	0.53
2:D:2713:ILE:HG21	2:D:2721:ILE:HD11	1.89	0.53
2:B:2787:TRP:HH2	2:B:2840:MET:HB3	1.74	0.53
2:B:3796:LEU:HD22	2:B:3835:PHE:HZ	1.74	0.53
2:C:579:LEU:HD22	2:C:586:LEU:HD23	1.90	0.53
2:C:887:GLU:O	2:C:976:TYR:OH	2.27	0.53
2:C:915:HIS:NE2	2:C:917:CYS:HB2	2.24	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:930:ASN:HA	2:C:933:LEU:HD13	1.91	0.53
2:C:938:GLU:HA	2:C:941:LYS:HB2	1.90	0.53
2:C:4484:ILE:HG13	2:C:4485:ILE:HD12	1.90	0.53
2:A:915:HIS:NE2	2:A:917:CYS:HB2	2.24	0.53
2:A:1431:ARG:NE	2:A:1556:GLU:OE2	2.39	0.53
2:B:1100:ARG:NH2	2:B:1234:GLU:O	2.42	0.53
2:B:2605:MET:HG2	2:B:2606:PRO:HD3	1.91	0.53
2:B:4484:ILE:HG13	2:B:4485:ILE:HD12	1.90	0.53
2:C:940:LEU:HA	2:C:943:LEU:HD12	1.90	0.53
2:C:2223:GLU:OE2	2:C:2264:LYS:NZ	2.29	0.53
2:C:2556:SER:HB2	2:C:2605:MET:HE1	1.89	0.53
2:C:2605:MET:HG2	2:C:2606:PRO:HD3	1.91	0.53
2:C:2787:TRP:HH2	2:C:2840:MET:HB3	1.74	0.53
2:A:2674:GLY:HA3	2:A:2977:ASN:HD22	1.74	0.53
2:A:2874:TYR:OH	2:A:2886:ARG:NH2	2.42	0.53
2:D:3743:THR:HB	2:D:3758:THR:HG21	1.90	0.53
2:B:317:MET:HE1	2:B:322:ALA:HA	1.91	0.53
2:B:1420:LEU:HD21	2:B:1559:ARG:HH12	1.73	0.53
2:C:1420:LEU:HD21	2:C:1559:ARG:HH12	1.73	0.53
2:C:2874:TYR:OH	2:C:2886:ARG:NH2	2.42	0.53
2:A:233:VAL:HG22	2:A:276:ARG:HG2	1.91	0.53
2:A:4014:LEU:HD13	2:A:4122:ALA:HB2	1.89	0.53
2:D:713:TRP:HH2	2:D:1251:LEU:HD21	1.73	0.53
2:D:887:GLU:O	2:D:976:TYR:OH	2.27	0.53
2:D:915:HIS:NE2	2:D:917:CYS:HB2	2.24	0.53
2:D:4177:VAL:HG11	2:D:4880:VAL:HA	1.91	0.53
2:B:3743:THR:HB	2:B:3758:THR:HG21	1.90	0.53
2:C:679:VAL:HG13	2:C:800:VAL:HG12	1.91	0.53
2:C:938:GLU:HG3	2:C:941:LYS:HE2	1.91	0.53
2:A:2666:LEU:HD13	2:A:2966:VAL:HA	1.91	0.53
2:A:2732:TRP:O	2:A:2736:LYS:NZ	2.41	0.53
2:A:2787:TRP:HH2	2:A:2840:MET:HB3	1.74	0.53
2:D:966:LEU:HD22	2:D:970:TYR:HD2	1.74	0.53
2:B:1144:ARG:NH2	2:B:1191:ALA:O	2.42	0.53
2:B:1962:THR:HG23	2:B:1966:ARG:HE	1.73	0.53
2:C:1144:ARG:NH2	2:C:1191:ALA:O	2.42	0.53
2:C:2935:GLU:HB3	2:C:2939:TYR:CE1	2.43	0.53
2:A:1144:ARG:NH2	2:A:1191:ALA:O	2.42	0.52
2:A:2232:PRO:HB2	2:A:2379:ASP:HA	1.90	0.52
2:A:2824:ARG:HH22	2:B:1503:ASN:CG	2.16	0.52
2:A:2852:TRP:CD1	2:A:2856:LYS:HZ1	2.27	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:3145:SER:HB3	2:A:3148:VAL:HG12	1.91	0.52
2:A:3297:LYS:HD2	2:A:3334:VAL:HA	1.91	0.52
2:A:3602:CYS:HA	2:A:3605:MET:HE1	1.91	0.52
2:D:1851:PHE:HZ	2:D:2058:LEU:HD13	1.73	0.52
2:D:2497:ARG:HH22	2:D:2877:LEU:HD13	1.74	0.52
2:D:2666:LEU:HD13	2:D:2966:VAL:HA	1.91	0.52
2:D:3273:MET:HA	2:D:3276:LEU:HG	1.90	0.52
2:D:3602:CYS:HA	2:D:3605:MET:HE1	1.91	0.52
2:B:915:HIS:NE2	2:B:917:CYS:HB2	2.24	0.52
2:B:2666:LEU:HD13	2:B:2966:VAL:HA	1.91	0.52
2:B:4014:LEU:HD13	2:B:4122:ALA:HB2	1.89	0.52
2:C:1851:PHE:HZ	2:C:2058:LEU:HD13	1.73	0.52
2:A:27:THR:OG1	2:A:32:GLN:OE1	2.27	0.52
2:A:966:LEU:HD22	2:A:970:TYR:HD2	1.75	0.52
2:A:2718:GLU:HA	2:A:2721:ILE:HD12	1.91	0.52
2:A:3284:ILE:O	2:A:3288:LEU:HG	2.10	0.52
2:D:940:LEU:HA	2:D:943:LEU:HD12	1.90	0.52
2:D:1962:THR:HG23	2:D:1966:ARG:HE	1.73	0.52
2:D:2232:PRO:HB2	2:D:2379:ASP:HA	1.90	0.52
2:D:2718:GLU:HA	2:D:2721:ILE:HD12	1.91	0.52
2:D:2895:PHE:O	2:D:2899:ASN:ND2	2.29	0.52
2:D:4579:HIS:CE1	2:D:4742:HIS:CE1	2.98	0.52
2:B:2849:HIS:CD2	2:B:2852:TRP:HE3	2.27	0.52
2:B:3033:LEU:HD13	2:B:3104:MET:HE3	1.92	0.52
2:B:3327:LYS:HA	2:B:3330:ALA:HB2	1.91	0.52
2:C:943:LEU:HA	2:C:946:LEU:HD23	1.92	0.52
2:C:2172:MET:O	2:C:2176:VAL:N	2.38	0.52
2:C:2252:GLU:HB2	2:C:3819:MET:SD	2.50	0.52
2:C:2849:HIS:CD2	2:C:2852:TRP:HE3	2.27	0.52
2:A:1071:HIS:CD2	2:D:2986:ALA:HB1	2.45	0.52
2:A:2591:ARG:HH22	2:A:2695:MET:HB2	1.74	0.52
2:A:3033:LEU:HD13	2:A:3104:MET:HE3	1.92	0.52
2:A:4267:GLN:HG3	2:A:4270:LYS:HZ3	1.74	0.52
2:D:3033:LEU:HD13	2:D:3104:MET:HE3	1.91	0.52
2:D:3284:ILE:O	2:D:3288:LEU:HG	2.10	0.52
2:B:679:VAL:HG13	2:B:800:VAL:HG12	1.91	0.52
2:B:2252:GLU:HB2	2:B:3819:MET:SD	2.50	0.52
2:B:2278:GLN:HA	2:B:2281:VAL:HG22	1.91	0.52
2:B:2544:LEU:HD23	2:B:2544:LEU:H	1.74	0.52
2:B:2834:SER:O	2:B:2838[B]:HIS:HB2	2.09	0.52
2:B:2935:GLU:HB3	2:B:2939:TYR:CE1	2.43	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:966:LEU:HD22	2:C:970:TYR:HD2	1.74	0.52
2:C:1079:SER:OG	2:C:1083:GLU:O	2.27	0.52
2:C:2544:LEU:HD23	2:C:2544:LEU:H	1.74	0.52
2:A:1303:ARG:HA	2:A:1542:ALA:HA	1.91	0.52
2:A:4847:ASP:OD2	2:D:4818:TYR:OH	2.22	0.52
2:D:271:ALA:HB2	2:D:488:LEU:HD22	1.91	0.52
2:D:943:LEU:HA	2:D:946:LEU:HD23	1.92	0.52
2:D:3297:LYS:HD2	2:D:3334:VAL:HA	1.91	0.52
2:B:940:LEU:HA	2:B:943:LEU:HD12	1.90	0.52
2:B:966:LEU:HD22	2:B:970:TYR:HD2	1.74	0.52
2:B:2874:TYR:OH	2:B:2886:ARG:NH2	2.42	0.52
2:B:3159:LEU:HD12	2:B:3241:MET:SD	2.50	0.52
2:B:3297:LYS:HD2	2:B:3334:VAL:HA	1.91	0.52
2:C:1303:ARG:HA	2:C:1542:ALA:HA	1.91	0.52
2:A:271:ALA:HB2	2:A:488:LEU:HD22	1.91	0.52
2:A:943:LEU:HA	2:A:946:LEU:HD23	1.92	0.52
2:A:1047:LYS:O	2:A:1051:ARG:HD3	2.10	0.52
2:A:2593:VAL:HG21	2:A:2640:LEU:HD22	1.92	0.52
2:A:3273:MET:HA	2:A:3276:LEU:HG	1.90	0.52
2:D:883:GLU:OE2	2:D:929:ARG:NH2	2.42	0.52
2:D:934:GLN:HG3	2:D:937:LEU:HD12	1.92	0.52
2:D:1144:ARG:NH2	2:D:1191:ALA:O	2.42	0.52
2:D:2278:GLN:HA	2:D:2281:VAL:HG22	1.91	0.52
2:B:2553:TYR:HE1	2:B:2606:PRO:HG3	1.75	0.52
2:B:3145:SER:HB3	2:B:3148:VAL:HG12	1.91	0.52
2:B:3284:ILE:O	2:B:3288:LEU:HG	2.10	0.52
2:C:233:VAL:HG22	2:C:276:ARG:HG2	1.91	0.52
2:C:1047:LYS:O	2:C:1051:ARG:HD3	2.10	0.52
2:C:1154:ARG:H	2:C:1182:LEU:HD22	1.75	0.52
2:C:2278:GLN:HA	2:C:2281:VAL:HG22	1.91	0.52
2:C:3033:LEU:HD13	2:C:3104:MET:HE3	1.92	0.52
2:C:3297:LYS:HD2	2:C:3334:VAL:HA	1.91	0.52
2:C:3327:LYS:HA	2:C:3330:ALA:HB2	1.91	0.52
2:A:2544:LEU:HD23	2:A:2544:LEU:H	1.74	0.52
2:A:2553:TYR:HE1	2:A:2606:PRO:HG3	1.75	0.52
2:A:4177:VAL:HG11	2:A:4880:VAL:HA	1.91	0.52
2:D:3145:SER:HB3	2:D:3148:VAL:HG12	1.91	0.52
2:B:27:THR:OG1	2:B:32:GLN:OE1	2.27	0.52
2:B:233:VAL:HG22	2:B:276:ARG:HG2	1.91	0.52
2:B:2674:GLY:HA3	2:B:2977:ASN:HD22	1.74	0.52
2:B:4177:VAL:HG11	2:B:4880:VAL:HA	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:934:GLN:HG3	2:C:937:LEU:HD12	1.92	0.52
2:C:3273:MET:HA	2:C:3276:LEU:HG	1.90	0.52
2:A:317:MET:HE1	2:A:322:ALA:HA	1.91	0.52
2:A:713:TRP:HH2	2:A:1251:LEU:HD21	1.73	0.52
2:A:1079:SER:OG	2:A:1083:GLU:O	2.27	0.52
2:A:3920:LEU:HD22	2:A:3935:LEU:HD21	1.92	0.52
2:A:4616:TYR:HE2	2:A:4632:ARG:HG2	1.75	0.52
2:D:27:THR:OG1	2:D:32:GLN:OE1	2.27	0.52
2:D:4620:GLN:OE1	2:D:4632:ARG:NH2	2.34	0.52
2:B:887:GLU:O	2:B:976:TYR:OH	2.27	0.52
2:B:934:GLN:HG3	2:B:937:LEU:HD12	1.92	0.52
2:B:943:LEU:HA	2:B:946:LEU:HD23	1.92	0.52
2:B:3273:MET:HA	2:B:3276:LEU:HG	1.90	0.52
2:C:27:THR:OG1	2:C:32:GLN:OE1	2.27	0.52
2:C:2593:VAL:HG21	2:C:2640:LEU:HD22	1.92	0.52
2:C:2674:GLY:HA3	2:C:2977:ASN:HD22	1.74	0.52
2:C:3159:LEU:HD12	2:C:3241:MET:SD	2.50	0.52
2:C:3743:THR:HB	2:C:3758:THR:HG21	1.90	0.52
2:A:412:GLU:HG3	2:A:488:LEU:HD11	1.92	0.52
2:A:2497:ARG:HH22	2:A:2877:LEU:HD13	1.74	0.52
2:A:2935:GLU:HB3	2:A:2939:TYR:CE1	2.42	0.52
2:D:233:VAL:HG22	2:D:276:ARG:HG2	1.91	0.52
2:D:1047:LYS:O	2:D:1051:ARG:HD3	2.10	0.52
2:D:2544:LEU:HD23	2:D:2544:LEU:H	1.74	0.52
2:D:2593:VAL:HG21	2:D:2640:LEU:HD22	1.92	0.52
2:C:2666:LEU:HD13	2:C:2966:VAL:HA	1.91	0.52
2:A:34:LYS:N	2:A:53:SER:OG	2.37	0.52
2:A:2678:PRO:HD3	2:A:2978:HIS:NE2	2.25	0.52
2:D:2605:MET:HG2	2:D:2606:PRO:HD3	1.91	0.52
2:D:3159:LEU:HD12	2:D:3241:MET:SD	2.50	0.52
2:B:412:GLU:HG3	2:B:488:LEU:HD11	1.92	0.52
2:B:1047:LYS:O	2:B:1051:ARG:HD3	2.10	0.52
2:B:2593:VAL:HG21	2:B:2640:LEU:HD22	1.92	0.52
2:C:891:GLU:HA	2:C:894:VAL:HG22	1.92	0.52
2:C:2553:TYR:HE1	2:C:2606:PRO:HG3	1.75	0.52
1:H:83:TYR:OH	2:D:1768:PHE:O	2.19	0.52
2:A:2605:MET:HG2	2:A:2606:PRO:HD3	1.91	0.52
1:E:22:THR:OG1	1:E:108:GLU:HG3	2.10	0.52
2:D:679:VAL:HG13	2:D:800:VAL:HG12	1.91	0.52
2:D:2591:ARG:HH22	2:D:2695:MET:HB2	1.74	0.52
2:D:2678:PRO:HD3	2:D:2978:HIS:NE2	2.25	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:4267:GLN:HG3	2:D:4270:LYS:HZ3	1.75	0.52
2:B:1303:ARG:HA	2:B:1542:ALA:HA	1.91	0.52
2:B:3602:CYS:HA	2:B:3605:MET:HE1	1.91	0.52
2:B:4689:LYS:HG3	2:B:4690:LYS:H	1.75	0.52
2:C:2718:GLU:HA	2:C:2721:ILE:HD12	1.91	0.52
2:A:934:GLN:HG3	2:A:937:LEU:HD12	1.92	0.51
2:A:2252:GLU:HB2	2:A:3819:MET:SD	2.50	0.51
2:A:2627:TRP:HB2	2:A:2630:PHE:HB2	1.91	0.51
2:A:3025:ASP:O	2:A:3029:ILE:HD12	2.09	0.51
2:D:2627:TRP:HB2	2:D:2630:PHE:HB2	1.91	0.51
2:D:2935:GLU:HB3	2:D:2939:TYR:CE1	2.43	0.51
2:B:676:GLU:HB3	2:B:803:LEU:HB2	1.92	0.51
2:B:883:GLU:OE2	2:B:929:ARG:NH2	2.42	0.51
2:B:1154:ARG:H	2:B:1182:LEU:HD22	1.75	0.51
2:B:2497:ARG:HH22	2:B:2877:LEU:HD13	1.74	0.51
2:B:3920:LEU:HD22	2:B:3935:LEU:HD21	1.92	0.51
2:B:4616:TYR:HE2	2:B:4632:ARG:HG2	1.75	0.51
2:C:883:GLU:OE2	2:C:929:ARG:NH2	2.42	0.51
2:C:4177:VAL:HG11	2:C:4880:VAL:HA	1.91	0.51
2:C:4689:LYS:HG3	2:C:4690:LYS:H	1.75	0.51
2:A:2250:ASN:HB3	2:A:2253:LEU:HB2	1.92	0.51
2:D:2252:GLU:HB2	2:D:3819:MET:SD	2.50	0.51
2:C:2732:TRP:O	2:C:2736:LYS:NZ	2.41	0.51
2:A:891:GLU:HA	2:A:894:VAL:HG22	1.92	0.51
2:A:2172:MET:O	2:A:2176:VAL:N	2.38	0.51
2:A:3159:LEU:HD12	2:A:3241:MET:SD	2.50	0.51
2:D:1788:LYS:HE3	2:D:1834:PHE:HA	1.93	0.51
2:B:271:ALA:HB2	2:B:488:LEU:HD22	1.91	0.51
2:B:2591:ARG:HH22	2:B:2695:MET:HB2	1.74	0.51
2:A:679:VAL:HG13	2:A:800:VAL:HG12	1.91	0.51
1:F:4:GLU:C	1:F:4:GLU:OE1	2.54	0.51
1:G:22:THR:OG1	1:G:108:GLU:HG3	2.10	0.51
2:D:2581:ARG:HG2	2:D:2630:PHE:CE1	2.46	0.51
2:D:2732:TRP:O	2:D:2736:LYS:NZ	2.41	0.51
2:D:4616:TYR:HE2	2:D:4632:ARG:HG2	1.75	0.51
2:B:2250:ASN:HB3	2:B:2253:LEU:HB2	1.92	0.51
2:B:4579:HIS:CE1	2:B:4742:HIS:CE1	2.98	0.51
2:C:2591:ARG:HH22	2:C:2695:MET:HB2	1.74	0.51
1:H:4:GLU:C	1:H:4:GLU:OE1	2.54	0.51
2:A:3237:VAL:HG12	2:A:3241:MET:HE2	1.93	0.51
2:A:3327:LYS:HA	2:A:3330:ALA:HB2	1.91	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:412:GLU:HG3	2:D:488:LEU:HD11	1.92	0.51
2:D:877:HIS:O	2:D:1062:TYR:OH	2.15	0.51
2:D:1303:ARG:HA	2:D:1542:ALA:HA	1.91	0.51
2:D:2054:LYS:NZ	2:D:2056:SER:OG	2.31	0.51
2:D:3270:SER:HA	2:D:3273:MET:HG3	1.93	0.51
2:D:3324:GLU:OE2	2:D:3325:LYS:HG3	2.10	0.51
2:B:2718:GLU:HA	2:B:2721:ILE:HD12	1.91	0.51
2:C:3145:SER:HB3	2:C:3148:VAL:HG12	1.91	0.51
2:C:3237:VAL:HG12	2:C:3241:MET:HE2	1.93	0.51
2:C:3284:ILE:O	2:C:3288:LEU:HG	2.10	0.51
2:C:3602:CYS:HA	2:C:3605:MET:HE1	1.91	0.51
2:C:3920:LEU:HD22	2:C:3935:LEU:HD21	1.92	0.51
2:C:4579:HIS:CE1	2:C:4742:HIS:CE1	2.98	0.51
2:A:655:MET:HE1	2:A:836:HIS:CD2	2.46	0.51
2:A:887:GLU:O	2:A:976:TYR:OH	2.27	0.51
2:A:1788:LYS:HE3	2:A:1834:PHE:HA	1.93	0.51
2:A:2794:GLU:HG3	2:B:1498:GLN:HB2	1.91	0.51
2:A:3324:GLU:OE2	2:A:3325:LYS:HG3	2.10	0.51
2:D:878:LEU:HD23	2:D:940:LEU:HD22	1.93	0.51
2:D:1154:ARG:H	2:D:1182:LEU:HD22	1.75	0.51
2:D:1165:MET:HE3	2:D:1236:TYR:CE2	2.46	0.51
2:D:2553:TYR:HE1	2:D:2606:PRO:HG3	1.75	0.51
2:D:4689:LYS:HG3	2:D:4690:LYS:H	1.75	0.51
2:D:4720:LEU:HD23	2:C:4294:LEU:HD21	1.92	0.51
2:B:808:HIS:CE1	2:B:832:LEU:HB3	2.46	0.51
2:B:3729:ALA:HA	2:B:3732:HIS:CD2	2.46	0.51
2:C:3215:MET:SD	2:C:3279:ASN:ND2	2.76	0.51
2:A:808:HIS:CE1	2:A:832:LEU:HB3	2.46	0.51
1:E:4:GLU:OE1	1:E:4:GLU:C	2.54	0.51
2:D:536:LEU:O	2:D:540:LEU:HG	2.11	0.51
2:D:2250:ASN:HB3	2:D:2253:LEU:HB2	1.92	0.51
2:D:3327:LYS:HA	2:D:3330:ALA:HB2	1.91	0.51
2:D:4267:GLN:HG3	2:D:4270:LYS:NZ	2.26	0.51
2:C:878:LEU:HD23	2:C:940:LEU:HD22	1.93	0.51
2:A:1154:ARG:H	2:A:1182:LEU:HD22	1.75	0.51
2:A:1184:ASP:OD2	2:A:1188:SER:OG	2.29	0.51
2:A:2849:HIS:CD2	2:A:2852:TRP:HE3	2.27	0.51
2:A:3977:ASP:HA	2:A:3980:VAL:HG12	1.92	0.51
2:A:4689:LYS:HG3	2:A:4690:LYS:H	1.76	0.51
2:D:808:HIS:CE1	2:D:832:LEU:HB3	2.46	0.51
2:D:1184:ASP:OD2	2:D:1188:SER:OG	2.29	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:2849:HIS:CD2	2:D:2852:TRP:HE3	2.27	0.51
2:C:676:GLU:HB3	2:C:803:LEU:HB2	1.92	0.51
2:C:1184:ASP:OD2	2:C:1188:SER:OG	2.29	0.51
2:C:2274:LEU:HD21	2:C:2329:GLU:HG2	1.93	0.51
2:C:3069:GLU:O	2:C:3072:MET:HB2	2.11	0.51
2:A:1165:MET:HE3	2:A:1236:TYR:CE2	2.46	0.51
2:A:3270:SER:HA	2:A:3273:MET:HG3	1.93	0.51
1:F:22:THR:OG1	1:F:108:GLU:HG3	2.10	0.51
2:D:1421:MET:HE2	2:D:1576:LYS:HD2	1.93	0.51
2:D:3729:ALA:HA	2:D:3732:HIS:CD2	2.46	0.51
2:B:515:ALA:HB2	2:B:523:GLY:HA3	1.93	0.51
2:B:891:GLU:HA	2:B:894:VAL:HG22	1.92	0.51
2:B:3237:VAL:HG12	2:B:3241:MET:HE2	1.93	0.51
2:B:3324:GLU:OE2	2:B:3325:LYS:HG3	2.10	0.51
2:C:2497:ARG:HH22	2:C:2877:LEU:HD13	1.74	0.51
2:C:2717:LEU:O	2:C:2721:ILE:HG13	2.11	0.51
2:C:3324:GLU:OE2	2:C:3325:LYS:HG3	2.10	0.51
2:A:536:LEU:O	2:A:540:LEU:HG	2.11	0.51
2:A:2824:ARG:NH2	2:B:1502:ASN:O	2.44	0.51
2:A:4194:GLU:CD	2:A:4608:ARG:HH22	2.19	0.51
2:D:2119:LEU:HB2	2:D:2152:ASN:ND2	2.26	0.51
2:D:3920:LEU:HD22	2:D:3935:LEU:HD21	1.92	0.51
2:C:412:GLU:HG3	2:C:488:LEU:HD11	1.92	0.51
1:H:22:THR:OG1	1:H:108:GLU:HG3	2.11	0.50
2:A:2119:LEU:HB2	2:A:2152:ASN:ND2	2.27	0.50
2:A:2278:GLN:HA	2:A:2281:VAL:HG22	1.91	0.50
2:D:2274:LEU:HD21	2:D:2329:GLU:HG2	1.93	0.50
2:D:4194:GLU:CD	2:D:4608:ARG:HH22	2.19	0.50
2:B:1079:SER:OG	2:B:1083:GLU:O	2.27	0.50
2:C:1421:MET:HE2	2:C:1576:LYS:HD2	1.93	0.50
2:C:1788:LYS:HE3	2:C:1834:PHE:HA	1.93	0.50
2:C:3729:ALA:HA	2:C:3732:HIS:CD2	2.46	0.50
2:A:2581:ARG:HG2	2:A:2630:PHE:CE1	2.46	0.50
2:A:3250:TRP:HE1	2:A:3270:SER:HA	1.76	0.50
2:A:3264:CYS:SG	2:A:3265:CYS:N	2.84	0.50
2:D:249:SER:OG	2:D:250:GLY:N	2.44	0.50
2:D:3237:VAL:HG12	2:D:3241:MET:HE2	1.93	0.50
2:C:2119:LEU:HB2	2:C:2152:ASN:ND2	2.27	0.50
2:A:515:ALA:HB2	2:A:523:GLY:HA3	1.93	0.50
2:A:2176:VAL:HG22	2:A:2220:TYR:CE2	2.47	0.50
2:A:3142:THR:O	2:A:3144:LYS:NZ	2.35	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:1016:TRP:CE3	2:D:1029:ASN:HB2	2.47	0.50
2:D:2496:LEU:HD13	2:D:2520:LEU:HD13	1.94	0.50
2:D:3250:TRP:HE1	2:D:3270:SER:HA	1.76	0.50
2:D:4200:MET:HE2	2:D:4923:MET:HE1	1.94	0.50
2:B:1184:ASP:OD2	2:B:1188:SER:OG	2.29	0.50
2:B:2119:LEU:HB2	2:B:2152:ASN:ND2	2.27	0.50
2:B:2432:LEU:HB3	2:B:2472:LEU:HD21	1.94	0.50
2:B:2830:ASN:HB2	2:C:1435:GLY:HA3	1.94	0.50
2:B:3977:ASP:HA	2:B:3980:VAL:HG12	1.93	0.50
2:C:515:ALA:HB2	2:C:523:GLY:HA3	1.93	0.50
2:C:1016:TRP:CE3	2:C:1029:ASN:HB2	2.47	0.50
2:C:2250:ASN:HB3	2:C:2253:LEU:HB2	1.92	0.50
2:C:2678:PRO:HD3	2:C:2978:HIS:NE2	2.25	0.50
2:C:3977:ASP:HA	2:C:3980:VAL:HG12	1.92	0.50
2:C:4267:GLN:HG3	2:C:4270:LYS:NZ	2.26	0.50
2:A:2456:MET:SD	2:A:2456:MET:N	2.76	0.50
2:A:3729:ALA:HA	2:A:3732:HIS:CD2	2.46	0.50
2:A:3958:LEU:HB2	2:A:3968:LEU:HD13	1.93	0.50
1:G:4:GLU:C	1:G:4:GLU:OE1	2.54	0.50
2:D:676:GLU:HB3	2:D:803:LEU:HB2	1.92	0.50
2:B:2176:VAL:HG22	2:B:2220:TYR:CE2	2.47	0.50
2:B:2456:MET:SD	2:B:2456:MET:N	2.76	0.50
2:C:249:SER:OG	2:C:250:GLY:N	2.44	0.50
2:A:676:GLU:HB3	2:A:803:LEU:HB2	1.92	0.50
2:A:695:VAL:O	2:A:727:PHE:N	2.44	0.50
2:D:655:MET:HE1	2:D:836:HIS:CD2	2.46	0.50
2:D:703:TYR:HD2	2:D:858:THR:HA	1.77	0.50
2:D:2176:VAL:HG22	2:D:2220:TYR:CE2	2.47	0.50
2:D:2971:ILE:HG23	2:D:2975:PHE:CE2	2.47	0.50
2:D:3069:GLU:O	2:D:3072:MET:HB2	2.11	0.50
2:B:655:MET:HE1	2:B:836:HIS:CD2	2.46	0.50
2:B:2717:LEU:O	2:B:2721:ILE:HG13	2.11	0.50
2:B:3270:SER:HA	2:B:3273:MET:HG3	1.93	0.50
2:B:4267:GLN:HG3	2:B:4270:LYS:NZ	2.26	0.50
2:C:448:PRO:HB2	2:C:452:VAL:HG23	1.94	0.50
2:C:1165:MET:HE3	2:C:1236:TYR:CE2	2.46	0.50
2:C:2176:VAL:HG22	2:C:2220:TYR:CE2	2.47	0.50
2:C:4616:TYR:HE2	2:C:4632:ARG:HG2	1.75	0.50
2:A:899:GLU:HB2	2:A:970:TYR:HD1	1.76	0.50
2:A:4194:GLU:HG2	2:A:4645:TRP:HZ3	1.77	0.50
2:D:1144:ARG:HG2	2:D:1150:GLU:O	2.11	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:1435:GLY:HA3	2:C:2830:ASN:HB2	1.94	0.50
2:D:2541:HIS:HB3	2:D:2544:LEU:CD2	2.42	0.50
2:B:1144:ARG:HG2	2:B:1150:GLU:O	2.11	0.50
2:B:2581:ARG:HG2	2:B:2630:PHE:CE1	2.46	0.50
2:B:2678:PRO:HD3	2:B:2978:HIS:NE2	2.25	0.50
2:B:3264:CYS:SG	2:B:3265:CYS:N	2.84	0.50
2:B:3319:PHE:O	2:B:3323:MET:N	2.39	0.50
2:B:3875:VAL:HG21	2:B:3940:LEU:HB2	1.93	0.50
2:B:4194:GLU:HG2	2:B:4645:TRP:HZ3	1.77	0.50
2:C:536:LEU:O	2:C:540:LEU:HG	2.11	0.50
2:A:1016:TRP:CE3	2:A:1029:ASN:HB2	2.47	0.50
2:A:3875:VAL:HG21	2:A:3940:LEU:HB2	1.93	0.50
2:D:448:PRO:HB2	2:D:452:VAL:HG23	1.94	0.50
2:D:2432:LEU:HB3	2:D:2472:LEU:HD21	1.94	0.50
2:D:2484:LEU:O	2:D:2487:LEU:HG	2.11	0.50
2:B:1016:TRP:CE3	2:B:1029:ASN:HB2	2.47	0.50
2:B:1788:LYS:HE3	2:B:1834:PHE:HA	1.93	0.50
2:C:1564:MET:CE	2:C:1565:PRO:HD2	2.38	0.50
2:C:2432:LEU:HB3	2:C:2472:LEU:HD21	1.94	0.50
2:A:1421:MET:HE2	2:A:1576:LYS:HD2	1.93	0.50
2:A:2274:LEU:HD21	2:A:2329:GLU:HG2	1.93	0.50
2:A:2541:HIS:HB3	2:A:2544:LEU:CD2	2.42	0.50
2:D:891:GLU:HA	2:D:894:VAL:HG22	1.92	0.50
2:D:2157:GLN:O	2:D:3615:ARG:NH2	2.38	0.50
2:D:2717:LEU:O	2:D:2721:ILE:HG13	2.11	0.50
2:D:3977:ASP:HA	2:D:3980:VAL:HG12	1.93	0.50
2:D:4194:GLU:HG2	2:D:4645:TRP:HZ3	1.77	0.50
2:B:1165:MET:HE3	2:B:1236:TYR:CE2	2.46	0.50
2:B:1421:MET:HE2	2:B:1576:LYS:HD2	1.93	0.50
2:B:2971:ILE:HG23	2:B:2975:PHE:CE2	2.47	0.50
2:C:2541:HIS:HB3	2:C:2544:LEU:CD2	2.42	0.50
2:C:2581:ARG:HG2	2:C:2630:PHE:CE1	2.46	0.50
2:C:2756:LEU:HD13	2:C:2758:LYS:HE3	1.94	0.50
2:C:3958:LEU:HB2	2:C:3968:LEU:HD13	1.93	0.50
2:C:4194:GLU:HG2	2:C:4645:TRP:HZ3	1.77	0.50
2:A:1144:ARG:HG2	2:A:1150:GLU:O	2.11	0.50
2:A:2496:LEU:HD13	2:A:2520:LEU:HD13	1.94	0.50
2:A:2717:LEU:O	2:A:2721:ILE:HG13	2.11	0.50
2:A:3069:GLU:O	2:A:3072:MET:HB2	2.11	0.50
2:A:3972:MET:HE3	2:A:4094:ILE:HD12	1.94	0.50
2:D:1614:ARG:HD2	2:D:1614:ARG:O	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:2582:PRO:HG3	2:D:2617:CYS:SG	2.52	0.50
2:D:3958:LEU:HB2	2:D:3968:LEU:HD13	1.93	0.50
2:B:249:SER:OG	2:B:250:GLY:N	2.44	0.50
2:B:899:GLU:HB2	2:B:970:TYR:HD1	1.76	0.50
2:B:2484:LEU:O	2:B:2487:LEU:HG	2.11	0.50
2:C:891:GLU:HB3	2:C:978:PRO:HB3	1.94	0.50
2:C:908:ARG:NH2	4:C:5003:ATP:O1A	2.43	0.50
2:A:75:VAL:O	2:A:79:GLN:HG2	2.12	0.49
2:A:878:LEU:HD23	2:A:940:LEU:HD22	1.93	0.49
2:A:1703:TYR:OH	2:A:1824:LEU:HB3	2.12	0.49
2:A:2432:LEU:HB3	2:A:2472:LEU:HD21	1.94	0.49
2:A:2484:LEU:O	2:A:2487:LEU:HG	2.11	0.49
2:A:2980:LEU:O	2:A:2984:SER:N	2.44	0.49
2:A:4200:MET:HE2	2:A:4923:MET:HE1	1.94	0.49
2:A:4860:ALA:HB2	2:D:4863:GLN:OE1	2.11	0.49
2:D:3664:LEU:O	2:D:3668:ILE:HG13	2.11	0.49
2:B:703:TYR:HD2	2:B:858:THR:HA	1.77	0.49
2:B:1614:ARG:HD2	2:B:1614:ARG:O	2.12	0.49
2:B:1685:LEU:HD22	2:B:1706:LEU:HB2	1.94	0.49
2:B:2106:TYR:OH	2:B:2158:HIS:ND1	2.29	0.49
2:C:655:MET:HE1	2:C:836:HIS:CD2	2.46	0.49
2:C:703:TYR:HD2	2:C:858:THR:HA	1.77	0.49
2:C:1144:ARG:HG2	2:C:1150:GLU:O	2.11	0.49
2:C:3664:LEU:O	2:C:3668:ILE:HG13	2.11	0.49
2:A:76:ARG:NH1	2:D:3890:TRP:O	2.44	0.49
2:A:1990:GLU:HA	2:A:1993:ARG:HB2	1.94	0.49
2:B:448:PRO:HB2	2:B:452:VAL:HG23	1.94	0.49
2:B:536:LEU:O	2:B:540:LEU:HG	2.11	0.49
2:B:4194:GLU:CD	2:B:4608:ARG:HH22	2.19	0.49
2:C:808:HIS:CE1	2:C:832:LEU:HB3	2.46	0.49
2:C:2484:LEU:O	2:C:2487:LEU:HG	2.12	0.49
2:A:908:ARG:NH2	4:A:5003:ATP:O1A	2.44	0.49
2:A:2937:HIS:HB2	2:A:3014:LEU:HD21	1.94	0.49
2:A:3664:LEU:O	2:A:3668:ILE:HG13	2.11	0.49
2:D:1703:TYR:OH	2:D:1824:LEU:HB3	2.12	0.49
2:D:3264:CYS:SG	2:D:3265:CYS:N	2.84	0.49
2:B:897:LYS:HA	2:B:902:TRP:HE3	1.78	0.49
2:B:898:ILE:HG23	2:B:969:ASN:O	2.13	0.49
2:B:931:TYR:O	2:B:935:MET:HG2	2.12	0.49
2:B:2895:PHE:O	2:B:2899:ASN:ND2	2.29	0.49
2:B:3958:LEU:HB2	2:B:3968:LEU:HD13	1.93	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1614:ARG:O	2:C:1614:ARG:HD2	2.12	0.49
2:C:3972:MET:HE3	2:C:4094:ILE:HD12	1.94	0.49
2:A:3145:SER:O	2:A:3149:GLU:HG2	2.13	0.49
2:D:898:ILE:HG23	2:D:969:ASN:O	2.13	0.49
2:D:1662:SER:OG	2:D:1708:ASP:OD2	2.21	0.49
2:D:1990:GLU:HA	2:D:1993:ARG:HB2	1.94	0.49
2:D:3145:SER:O	2:D:3149:GLU:HG2	2.13	0.49
2:B:878:LEU:HD23	2:B:940:LEU:HD22	1.93	0.49
2:B:1703:TYR:OH	2:B:1824:LEU:HB3	2.12	0.49
2:B:2496:LEU:HD13	2:B:2520:LEU:HD13	1.94	0.49
2:B:2980:LEU:O	2:B:2984:SER:N	2.44	0.49
2:B:4173:ILE:HD13	2:B:4884:MET:HE2	1.95	0.49
2:C:768:PHE:O	2:C:775:VAL:HG12	2.13	0.49
2:C:2259:GLU:O	2:C:2263:GLU:HG2	2.13	0.49
2:C:2980:LEU:O	2:C:2984:SER:N	2.44	0.49
2:C:3270:SER:HA	2:C:3273:MET:HG3	1.93	0.49
2:C:4194:GLU:CD	2:C:4608:ARG:HH22	2.19	0.49
2:C:4200:MET:HE2	2:C:4923:MET:HE1	1.94	0.49
2:A:891:GLU:HB3	2:A:978:PRO:HB3	1.94	0.49
2:A:897:LYS:HA	2:A:902:TRP:HE3	1.78	0.49
2:A:898:ILE:HG23	2:A:969:ASN:O	2.13	0.49
2:A:3888:PHE:HD2	2:A:3906:PHE:CE1	2.31	0.49
2:A:4173:ILE:HD13	2:A:4884:MET:HE2	1.95	0.49
2:D:75:VAL:O	2:D:79:GLN:HG2	2.12	0.49
2:D:897:LYS:HA	2:D:902:TRP:HE3	1.78	0.49
2:D:3216:GLU:HA	2:D:3219:VAL:HG22	1.94	0.49
2:B:2582:PRO:HG3	2:B:2617:CYS:SG	2.52	0.49
2:B:4267:GLN:HG3	2:B:4270:LYS:HZ3	1.78	0.49
2:C:34:LYS:N	2:C:53:SER:OG	2.37	0.49
2:C:899:GLU:HB2	2:C:970:TYR:HD1	1.77	0.49
2:C:3250:TRP:HE1	2:C:3270:SER:HA	1.76	0.49
2:A:703:TYR:HD2	2:A:858:THR:HA	1.77	0.49
2:A:1006:VAL:HG22	2:A:1009:ARG:HH12	1.78	0.49
2:A:2717:LEU:HD21	2:A:2789:ILE:HG21	1.94	0.49
2:D:515:ALA:HB2	2:D:523:GLY:HA3	1.93	0.49
2:D:2591:ARG:HH12	2:D:2695:MET:HA	1.78	0.49
2:B:3213:LYS:HA	2:B:3216:GLU:HG3	1.94	0.49
2:B:3250:TRP:HE1	2:B:3270:SER:HA	1.76	0.49
2:B:3664:LEU:O	2:B:3668:ILE:HG13	2.11	0.49
2:C:897:LYS:HA	2:C:902:TRP:HE3	1.78	0.49
2:C:898:ILE:HG23	2:C:969:ASN:O	2.13	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:3264:CYS:SG	2:C:3265:CYS:N	2.84	0.49
2:C:3875:VAL:HG21	2:C:3940:LEU:HB2	1.93	0.49
2:A:448:PRO:HB2	2:A:452:VAL:HG23	1.94	0.49
2:A:555:LEU:HD11	2:A:578:VAL:HG11	1.94	0.49
2:A:935:MET:O	2:A:939:THR:OG1	2.17	0.49
2:A:2756:LEU:HD13	2:A:2758:LYS:HE3	1.94	0.49
2:A:2971:ILE:HG23	2:A:2975:PHE:CE2	2.47	0.49
2:D:1428:TYR:OH	2:D:1444:GLY:O	2.31	0.49
2:D:3888:PHE:HD2	2:D:3906:PHE:CE1	2.31	0.49
2:B:2274:LEU:HD21	2:B:2329:GLU:HG2	1.93	0.49
2:C:876:PRO:HA	2:C:879:GLU:CG	2.42	0.49
2:C:931:TYR:O	2:C:935:MET:HG2	2.12	0.49
2:C:2496:LEU:HD13	2:C:2520:LEU:HD13	1.94	0.49
2:A:2582:PRO:HG3	2:A:2617:CYS:SG	2.52	0.49
2:A:2591:ARG:HH12	2:A:2695:MET:HA	1.78	0.49
2:D:899:GLU:HB2	2:D:970:TYR:HD1	1.77	0.49
2:D:2259:GLU:O	2:D:2263:GLU:HG2	2.13	0.49
2:D:2756:LEU:HD13	2:D:2758:LYS:HE3	1.94	0.49
2:D:3213:LYS:HA	2:D:3216:GLU:HG3	1.95	0.49
2:B:1990:GLU:HA	2:B:1993:ARG:HB2	1.94	0.49
2:C:1644:LEU:HD23	2:C:1651:LEU:HA	1.95	0.49
2:C:2591:ARG:HH12	2:C:2695:MET:HA	1.78	0.49
2:C:2937:HIS:HB2	2:C:3014:LEU:HD21	1.94	0.49
2:C:2971:ILE:HG23	2:C:2975:PHE:CE2	2.47	0.49
2:A:1614:ARG:O	2:A:1614:ARG:HD2	2.12	0.49
2:A:3179:ASN:O	2:A:3185:ASN:ND2	2.46	0.49
2:D:2984:SER:OG	2:D:2994:GLY:O	2.28	0.49
2:D:3009:CYS:O	2:D:3013:VAL:HG23	2.13	0.49
2:D:3875:VAL:HG21	2:D:3940:LEU:HB2	1.93	0.49
2:B:75:VAL:O	2:B:79:GLN:HG2	2.12	0.49
2:B:768:PHE:O	2:B:775:VAL:HG12	2.13	0.49
2:B:2756:LEU:HD13	2:B:2758:LYS:HE3	1.94	0.49
2:B:3069:GLU:O	2:B:3072:MET:HB2	2.11	0.49
2:C:75:VAL:O	2:C:79:GLN:HG2	2.12	0.49
2:C:1703:TYR:OH	2:C:1824:LEU:HB3	2.12	0.49
2:C:1990:GLU:HA	2:C:1993:ARG:HB2	1.94	0.49
2:C:4942:LYS:O	2:C:4946:GLU:HG3	2.13	0.49
2:A:902:TRP:HA	2:A:913:ARG:HB3	1.95	0.49
2:A:4267:GLN:HG3	2:A:4270:LYS:NZ	2.26	0.49
1:E:78:THR:HG22	1:E:81:VAL:HG22	1.95	0.49
2:D:1644:LEU:HD23	2:D:1651:LEU:HA	1.95	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:2937:HIS:HB2	2:D:3014:LEU:HD21	1.94	0.49
2:B:902:TRP:HA	2:B:913:ARG:HB3	1.95	0.49
2:B:1006:VAL:HG22	2:B:1009:ARG:HH12	1.78	0.49
2:C:816:PRO:HB2	2:C:819:TYR:CD1	2.48	0.49
2:C:3216:GLU:HA	2:C:3219:VAL:HG22	1.94	0.49
2:C:4203:ALA:HA	2:C:4206:ILE:HG12	1.95	0.49
2:C:4267:GLN:HG3	2:C:4270:LYS:HZ3	1.78	0.49
1:H:78:THR:HG22	1:H:81:VAL:HG22	1.95	0.48
2:A:81:MET:HE3	2:A:81:MET:C	2.38	0.48
2:A:768:PHE:O	2:A:775:VAL:HG12	2.13	0.48
2:A:1644:LEU:HD23	2:A:1651:LEU:HA	1.95	0.48
2:A:4045:LYS:HE3	2:A:4078:LEU:HD22	1.96	0.48
1:G:78:THR:HG22	1:G:81:VAL:HG22	1.95	0.48
2:B:1239:PHE:O	2:B:1807:ARG:NH1	2.45	0.48
2:B:3216:GLU:HA	2:B:3219:VAL:HG22	1.94	0.48
2:B:3888:PHE:HD2	2:B:3906:PHE:CE1	2.31	0.48
2:B:3972:MET:HE3	2:B:4094:ILE:HD12	1.94	0.48
2:C:81:MET:HE3	2:C:81:MET:C	2.38	0.48
2:C:695:VAL:O	2:C:727:PHE:N	2.44	0.48
2:C:3009:CYS:O	2:C:3013:VAL:HG23	2.13	0.48
2:C:3145:SER:O	2:C:3149:GLU:HG2	2.13	0.48
2:A:2106:TYR:OH	2:A:2158:HIS:ND1	2.29	0.48
2:A:4042:VAL:HG12	2:A:4077:THR:HB	1.95	0.48
2:A:4203:ALA:HA	2:A:4206:ILE:HG12	1.95	0.48
2:A:4690:LYS:HG3	2:A:4692:SER:H	1.78	0.48
1:F:78:THR:HG22	1:F:81:VAL:HG22	1.95	0.48
2:D:931:TYR:O	2:D:935:MET:HG2	2.12	0.48
2:D:1685:LEU:HD22	2:D:1706:LEU:HB2	1.94	0.48
2:D:3972:MET:HE3	2:D:4094:ILE:HD12	1.94	0.48
2:D:4042:VAL:HG12	2:D:4077:THR:HB	1.95	0.48
2:D:4579:HIS:HE1	2:D:4742:HIS:ND1	2.12	0.48
2:B:1743:ASN:HB3	2:B:1745:LYS:HD3	1.96	0.48
2:B:2259:GLU:O	2:B:2263:GLU:HG2	2.13	0.48
2:B:2717:LEU:HD21	2:B:2789:ILE:HG21	1.94	0.48
2:B:3145:SER:O	2:B:3149:GLU:HG2	2.13	0.48
2:B:3179:ASN:O	2:B:3185:ASN:ND2	2.46	0.48
2:B:4200:MET:HE2	2:B:4923:MET:HE1	1.94	0.48
2:B:4690:LYS:HG3	2:B:4692:SER:H	1.78	0.48
2:B:4942:LYS:O	2:B:4946:GLU:HG3	2.13	0.48
2:C:2582:PRO:HG3	2:C:2617:CYS:SG	2.52	0.48
2:C:3179:ASN:O	2:C:3185:ASN:ND2	2.46	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:3213:LYS:HA	2:C:3216:GLU:HG3	1.95	0.48
2:A:931:TYR:O	2:A:935:MET:HG2	2.12	0.48
2:A:996:VAL:HG12	2:A:1051:ARG:HH11	1.78	0.48
2:A:3216:GLU:HA	2:A:3219:VAL:HG22	1.94	0.48
2:A:4044:SER:HA	2:A:4077:THR:HG22	1.95	0.48
2:D:768:PHE:O	2:D:775:VAL:HG12	2.13	0.48
2:D:902:TRP:HA	2:D:913:ARG:HB3	1.95	0.48
2:D:3179:ASN:O	2:D:3185:ASN:ND2	2.46	0.48
2:D:4569:GLU:HB3	2:D:4570:PRO:HD3	1.95	0.48
2:B:876:PRO:HA	2:B:879:GLU:CG	2.42	0.48
2:B:966:LEU:HB3	2:B:971:GLN:HB2	1.95	0.48
2:B:4044:SER:HA	2:B:4077:THR:HG22	1.96	0.48
2:B:4754:ARG:O	2:B:4758:SER:OG	2.27	0.48
2:C:1428:TYR:OH	2:C:1444:GLY:O	2.31	0.48
2:C:3888:PHE:HD2	2:C:3906:PHE:CE1	2.31	0.48
2:A:2259:GLU:O	2:A:2263:GLU:HG2	2.13	0.48
2:A:2905:ARG:NH2	2:A:2907:PHE:O	2.47	0.48
2:D:3166:PHE:CE2	2:D:3168:VAL:HB	2.49	0.48
2:B:227:TYR:CG	2:B:352:SER:HB3	2.49	0.48
2:B:695:VAL:O	2:B:727:PHE:N	2.44	0.48
2:B:891:GLU:HB3	2:B:978:PRO:HB3	1.94	0.48
2:B:1446:ILE:HG12	2:B:1542:ALA:HB2	1.95	0.48
2:B:1644:LEU:HD23	2:B:1651:LEU:HA	1.95	0.48
2:B:2473:ASP:OD2	2:B:2530:ARG:NH2	2.47	0.48
2:B:4569:GLU:HB3	2:B:4570:PRO:HD3	1.95	0.48
2:C:555:LEU:HD11	2:C:578:VAL:HG11	1.94	0.48
2:C:2905:ARG:NH2	2:C:2907:PHE:O	2.47	0.48
2:C:3840:PHE:HE1	2:C:3874:THR:HG23	1.79	0.48
2:A:1046:ASN:OD1	2:A:1047:LYS:N	2.47	0.48
2:A:3166:PHE:CE2	2:A:3168:VAL:HB	2.49	0.48
2:D:81:MET:HE3	2:D:81:MET:C	2.38	0.48
2:D:2355:GLU:OE1	2:D:2355:GLU:N	2.47	0.48
2:D:2607:LEU:HD22	2:D:2664:LEU:HB3	1.95	0.48
2:D:2657:TYR:HA	2:D:2662:PHE:CZ	2.49	0.48
2:B:908:ARG:NH2	4:B:5003:ATP:O1A	2.43	0.48
2:B:1428:TYR:OH	2:B:1444:GLY:O	2.31	0.48
2:B:1564:MET:CE	2:B:1565:PRO:HD2	2.38	0.48
2:B:2591:ARG:HH12	2:B:2695:MET:HA	1.78	0.48
2:B:3320:LEU:O	2:B:3323:MET:HB2	2.13	0.48
2:B:3890:TRP:O	2:C:76:ARG:NH1	2.45	0.48
2:B:4579:HIS:HE1	2:B:4742:HIS:ND1	2.12	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:915:HIS:HD1	2:C:918:LEU:HD13	1.78	0.48
2:C:996:VAL:HG12	2:C:1051:ARG:HH11	1.78	0.48
2:A:227:TYR:CG	2:A:352:SER:HB3	2.49	0.48
2:A:1428:TYR:OH	2:A:1444:GLY:O	2.31	0.48
2:A:2355:GLU:OE1	2:A:2355:GLU:N	2.47	0.48
2:A:4569:GLU:HB3	2:A:4570:PRO:HD3	1.96	0.48
2:D:1006:VAL:HG22	2:D:1009:ARG:HH12	1.78	0.48
2:D:1743:ASN:HB3	2:D:1745:LYS:HD3	1.96	0.48
2:D:3012:GLY:O	2:D:3016:ARG:HG3	2.14	0.48
2:D:3184:TYR:HE2	2:D:3201:VAL:HA	1.78	0.48
2:D:4851:PHE:CD2	2:C:4822:ARG:HG2	2.48	0.48
2:B:2607:LEU:HD22	2:B:2664:LEU:HB3	1.95	0.48
2:C:1685:LEU:HD22	2:C:1706:LEU:HB2	1.94	0.48
2:C:1743:ASN:HB3	2:C:1745:LYS:HD3	1.96	0.48
2:C:2717:LEU:HD21	2:C:2789:ILE:HG21	1.94	0.48
2:C:3012:GLY:O	2:C:3016:ARG:HG3	2.14	0.48
2:C:3166:PHE:CE2	2:C:3168:VAL:HB	2.49	0.48
2:A:966:LEU:HB3	2:A:971:GLN:HB2	1.95	0.48
2:A:2895:PHE:O	2:A:2899:ASN:ND2	2.29	0.48
2:A:3319:PHE:O	2:A:3323:MET:N	2.39	0.48
2:A:3320:LEU:O	2:A:3323:MET:HB2	2.14	0.48
2:A:4197:ILE:HG12	2:A:4923:MET:HE3	1.96	0.48
2:D:2057:THR:HG22	2:D:2059:GLN:H	1.78	0.48
2:B:555:LEU:HD11	2:B:578:VAL:HG11	1.94	0.48
2:B:915:HIS:HD1	2:B:918:LEU:HD13	1.78	0.48
2:B:936:SER:O	2:B:940:LEU:HD12	2.14	0.48
2:B:2157:GLN:O	2:B:3615:ARG:NH2	2.38	0.48
2:B:2937:HIS:HB2	2:B:3014:LEU:HD21	1.94	0.48
2:C:1628:MET:HE3	2:C:1687:TYR:HD2	1.79	0.48
2:C:1662:SER:OG	2:C:1708:ASP:OD2	2.22	0.48
2:C:1729:MET:HE1	2:C:1930:ASP:HB2	1.96	0.48
2:C:3184:TYR:HE2	2:C:3201:VAL:HA	1.78	0.48
2:A:647:ARG:HH12	1:E:36:LYS:HB2	1.79	0.48
2:A:3906:PHE:HD2	2:A:3967:LEU:HD21	1.79	0.48
2:D:891:GLU:HB3	2:D:978:PRO:HB3	1.94	0.48
2:D:1729:MET:HE1	2:D:1930:ASP:HB2	1.96	0.48
2:D:4942:LYS:O	2:D:4946:GLU:HG3	2.13	0.48
2:B:81:MET:HE3	2:B:81:MET:C	2.38	0.48
2:B:2057:THR:HG22	2:B:2059:GLN:H	1.78	0.48
2:B:2791:ARG:HE	2:B:2795:GLY:C	2.22	0.48
2:B:3012:GLY:O	2:B:3016:ARG:HG3	2.14	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3166:PHE:CE2	2:B:3168:VAL:HB	2.49	0.48
2:C:374:TYR:OH	2:C:400:ASP:OD2	2.31	0.48
2:C:966:LEU:HB3	2:C:971:GLN:HB2	1.95	0.48
2:C:1006:VAL:HG22	2:C:1009:ARG:HH12	1.78	0.48
2:C:2736:LYS:HG3	2:C:2741:TRP:NE1	2.29	0.48
2:C:2791:ARG:HE	2:C:2795:GLY:C	2.22	0.48
2:C:3290:ILE:O	2:C:3292:GLU:N	2.47	0.48
2:A:11:ILE:HG12	2:A:176:ARG:HH11	1.79	0.48
2:A:162:ILE:HD12	2:A:175:VAL:HG21	1.96	0.48
2:A:1446:ILE:HG12	2:A:1542:ALA:HB2	1.95	0.48
2:A:3009:CYS:O	2:A:3013:VAL:HG23	2.13	0.48
2:A:3213:LYS:HA	2:A:3216:GLU:HG3	1.95	0.48
2:A:4271:VAL:HG23	2:A:4278:ASP:OD1	2.14	0.48
2:D:1046:ASN:OD1	2:D:1047:LYS:N	2.47	0.48
2:D:1628:MET:HE3	2:D:1687:TYR:HD2	1.79	0.48
2:D:2717:LEU:HD21	2:D:2789:ILE:HG21	1.95	0.48
2:D:2905:ARG:NH2	2:D:2907:PHE:O	2.47	0.48
2:D:4609:LYS:HD2	2:D:4615:LEU:HD22	1.96	0.48
2:B:816:PRO:HB2	2:B:819:TYR:CD1	2.48	0.48
2:B:1628:MET:HE3	2:B:1687:TYR:HD2	1.79	0.48
2:B:2657:TYR:HA	2:B:2662:PHE:CZ	2.49	0.48
2:B:3290:ILE:O	2:B:3292:GLU:N	2.47	0.48
2:C:162:ILE:HD12	2:C:175:VAL:HG21	1.96	0.48
2:C:936:SER:O	2:C:940:LEU:HD12	2.14	0.48
2:C:4569:GLU:HB3	2:C:4570:PRO:HD3	1.95	0.48
2:A:490:GLN:HG2	2:A:495:ILE:HG13	1.96	0.48
2:A:1628:MET:HE3	2:A:1687:TYR:HD2	1.79	0.48
2:A:1685:LEU:HD22	2:A:1706:LEU:HB2	1.94	0.48
2:D:769:ARG:HG2	2:D:774:PRO:HA	1.96	0.48
2:D:3649:ALA:C	2:D:3652:PRO:HD2	2.39	0.48
2:D:3840:PHE:HE1	2:D:3874:THR:HG23	1.78	0.48
2:D:4173:ILE:HD13	2:D:4884:MET:HE2	1.95	0.48
2:D:4197:ILE:HG12	2:D:4923:MET:HE3	1.96	0.48
2:D:4203:ALA:HA	2:D:4206:ILE:HG12	1.95	0.48
2:B:996:VAL:HG12	2:B:1051:ARG:HH11	1.78	0.48
2:B:1662:SER:OG	2:B:1708:ASP:OD2	2.22	0.48
2:B:2355:GLU:N	2:B:2355:GLU:OE1	2.47	0.48
2:B:2905:ARG:NH2	2:B:2907:PHE:O	2.47	0.48
2:B:4271:VAL:HG23	2:B:4278:ASP:OD1	2.14	0.48
2:C:2379:ASP:OD1	2:C:2380:ASP:N	2.47	0.48
2:C:2984:SER:OG	2:C:2994:GLY:O	2.28	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:3320:LEU:O	2:C:3323:MET:HB2	2.14	0.48
2:A:769:ARG:HG2	2:A:774:PRO:HA	1.96	0.47
2:A:2468:MET:O	2:A:2472:LEU:HD23	2.14	0.47
2:A:2607:LEU:HD22	2:A:2664:LEU:HB3	1.95	0.47
2:A:3012:GLY:O	2:A:3016:ARG:HG3	2.14	0.47
2:A:3184:TYR:HE2	2:A:3201:VAL:HA	1.78	0.47
2:A:3712:LYS:O	2:A:3717:LYS:NZ	2.46	0.47
2:D:28:ILE:HG22	2:D:29:HIS:CD2	2.49	0.47
2:D:816:PRO:HB2	2:D:819:TYR:CD1	2.48	0.47
2:D:966:LEU:HB3	2:D:971:GLN:HB2	1.95	0.47
2:B:966:LEU:HD12	2:B:978:PRO:HD2	1.96	0.47
2:B:1046:ASN:OD1	2:B:1047:LYS:N	2.47	0.47
2:B:2541:HIS:HB3	2:B:2544:LEU:CD2	2.42	0.47
2:B:2731:LYS:HA	2:B:2734:MET:HE2	1.96	0.47
2:B:4203:ALA:HA	2:B:4206:ILE:HG12	1.95	0.47
2:B:4819:VAL:HG12	2:B:4830:GLU:HG3	1.96	0.47
2:C:1046:ASN:OD1	2:C:1047:LYS:N	2.47	0.47
2:C:1937:GLN:NE2	2:C:3608:LEU:O	2.46	0.47
2:C:2607:LEU:HD22	2:C:2664:LEU:HB3	1.95	0.47
2:C:3906:PHE:HD2	2:C:3967:LEU:HD21	1.79	0.47
2:C:4173:ILE:HD13	2:C:4884:MET:HE2	1.95	0.47
2:C:4609:LYS:HD2	2:C:4615:LEU:HD22	1.96	0.47
2:A:28:ILE:HG22	2:A:29:HIS:CD2	2.49	0.47
2:A:661:LEU:O	2:A:788:PHE:N	2.47	0.47
2:A:966:LEU:HD12	2:A:978:PRO:HD2	1.97	0.47
2:A:1427:TYR:HB2	2:A:1563:VAL:HG11	1.96	0.47
2:A:1720:MET:SD	2:A:2127:ARG:HB3	2.55	0.47
2:A:1743:ASN:HB3	2:A:1745:LYS:HD3	1.96	0.47
2:A:3213:LYS:O	2:A:3216:GLU:HG3	2.15	0.47
2:D:2980:LEU:O	2:D:2984:SER:N	2.44	0.47
2:D:4044:SER:HA	2:D:4077:THR:HG22	1.96	0.47
2:B:2259:GLU:OE2	2:B:3806:ASN:ND2	2.47	0.47
2:B:2736:LYS:HG3	2:B:2741:TRP:NE1	2.29	0.47
2:C:902:TRP:HA	2:C:913:ARG:HB3	1.95	0.47
2:C:1041:ARG:HA	2:C:1044:LYS:NZ	2.29	0.47
2:C:1446:ILE:HG12	2:C:1542:ALA:HB2	1.95	0.47
2:C:3712:LYS:O	2:C:3717:LYS:NZ	2.46	0.47
2:C:4045:LYS:HE3	2:C:4078:LEU:HD22	1.96	0.47
2:A:307:SER:HB3	2:A:327:THR:HG22	1.96	0.47
2:A:816:PRO:HB2	2:A:819:TYR:CD1	2.48	0.47
2:A:936:SER:O	2:A:940:LEU:HD12	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:1937:GLN:NE2	2:A:3608:LEU:O	2.46	0.47
2:A:2473:ASP:OD2	2:A:2530:ARG:NH2	2.47	0.47
2:D:555:LEU:HD11	2:D:578:VAL:HG11	1.94	0.47
2:D:936:SER:O	2:D:940:LEU:HD12	2.14	0.47
2:D:2259:GLU:OE2	2:D:3806:ASN:ND2	2.47	0.47
2:D:4045:LYS:HE3	2:D:4078:LEU:HD22	1.95	0.47
2:B:3009:CYS:O	2:B:3013:VAL:HG23	2.13	0.47
2:B:3184:TYR:HE2	2:B:3201:VAL:HA	1.78	0.47
2:B:3840:PHE:HE1	2:B:3874:THR:HG23	1.78	0.47
2:C:692:HIS:HE1	2:C:717:GLY:HA3	1.80	0.47
2:C:2057:THR:HG22	2:C:2059:GLN:H	1.78	0.47
2:C:2355:GLU:OE1	2:C:2355:GLU:N	2.47	0.47
2:C:2468:MET:O	2:C:2472:LEU:HD23	2.14	0.47
2:C:2754:GLN:O	2:C:2757:MET:HE1	2.15	0.47
2:C:3650:GLU:HB2	2:C:3651:PRO:HD3	1.96	0.47
2:A:2259:GLU:OE2	2:A:3806:ASN:ND2	2.47	0.47
2:A:2830:ASN:OD1	2:B:1551:ASN:HB2	2.13	0.47
2:D:34:LYS:N	2:D:53:SER:OG	2.37	0.47
2:D:162:ILE:HD12	2:D:175:VAL:HG21	1.96	0.47
2:D:227:TYR:CG	2:D:352:SER:HB3	2.49	0.47
2:D:490:GLN:HG2	2:D:495:ILE:HG13	1.96	0.47
2:D:2468:MET:O	2:D:2472:LEU:HD23	2.14	0.47
2:D:2478:ILE:HG21	2:D:2484:LEU:HD13	1.96	0.47
2:D:2791:ARG:HE	2:D:2795:GLY:C	2.22	0.47
2:D:3290:ILE:O	2:D:3292:GLU:N	2.47	0.47
2:D:4048:PHE:HZ	2:D:4080:TYR:HB3	1.80	0.47
2:C:490:GLN:HG2	2:C:495:ILE:HG13	1.96	0.47
2:C:661:LEU:O	2:C:788:PHE:N	2.47	0.47
2:C:3213:LYS:O	2:C:3216:GLU:HG3	2.14	0.47
2:C:4044:SER:HA	2:C:4077:THR:HG22	1.96	0.47
2:C:4690:LYS:HG3	2:C:4692:SER:H	1.78	0.47
2:A:877:HIS:HA	2:A:880:ARG:NH1	2.30	0.47
2:A:915:HIS:HD1	2:A:918:LEU:HD13	1.78	0.47
2:A:1041:ARG:HA	2:A:1044:LYS:NZ	2.29	0.47
2:A:1729:MET:HE1	2:A:1930:ASP:HB2	1.96	0.47
2:A:2492:PHE:O	2:A:2496:LEU:N	2.45	0.47
2:A:2657:TYR:HA	2:A:2662:PHE:CZ	2.49	0.47
2:A:3649:ALA:C	2:A:3652:PRO:HD2	2.39	0.47
2:A:4259:LEU:HD21	2:B:4701:ILE:HD13	1.96	0.47
2:A:4819:VAL:HG12	2:A:4830:GLU:HG3	1.96	0.47
2:D:307:SER:HB3	2:D:327:THR:HG22	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:3712:LYS:O	2:D:3717:LYS:NZ	2.46	0.47
2:B:2754:GLN:O	2:B:2757:MET:HE1	2.14	0.47
2:B:3213:LYS:O	2:B:3216:GLU:HG3	2.15	0.47
2:A:2179:LEU:O	2:A:2183:GLU:CB	2.60	0.47
2:A:2754:GLN:O	2:A:2757:MET:HE1	2.14	0.47
2:A:2872:VAL:HG23	2:A:2877:LEU:HD22	1.96	0.47
2:A:3013:VAL:HA	2:A:3016:ARG:HD3	1.97	0.47
2:D:11:ILE:HG12	2:D:176:ARG:HH11	1.79	0.47
2:D:842:GLN:HB2	2:D:1603:PHE:HB2	1.97	0.47
2:D:1446:ILE:HG12	2:D:1542:ALA:HB2	1.95	0.47
2:B:11:ILE:HG12	2:B:176:ARG:HH11	1.79	0.47
2:B:28:ILE:HG22	2:B:29:HIS:CD2	2.49	0.47
2:B:2172:MET:O	2:B:2176:VAL:N	2.38	0.47
2:B:2379:ASP:OD1	2:B:2380:ASP:N	2.47	0.47
2:B:2635:GLU:HA	2:B:2638:LEU:HB2	1.96	0.47
2:B:3042:ALA:HB1	2:B:3121:LEU:HB2	1.97	0.47
2:B:4045:LYS:HE3	2:B:4078:LEU:HD22	1.95	0.47
2:C:227:TYR:CG	2:C:352:SER:HB3	2.49	0.47
2:C:4789:PHE:HE1	2:C:4839:TYR:HB3	1.80	0.47
2:A:1239:PHE:O	2:A:1807:ARG:NH1	2.45	0.47
2:A:2478:ILE:HG21	2:A:2484:LEU:HD13	1.96	0.47
2:A:2731:LYS:HA	2:A:2734:MET:HE2	1.96	0.47
2:A:3042:ALA:HB1	2:A:3121:LEU:HB2	1.96	0.47
2:A:3840:PHE:HE1	2:A:3874:THR:HG23	1.79	0.47
2:A:4609:LYS:HD2	2:A:4615:LEU:HD22	1.96	0.47
2:A:4942:LYS:O	2:A:4946:GLU:HG3	2.13	0.47
2:D:877:HIS:HA	2:D:880:ARG:NH1	2.30	0.47
2:D:915:HIS:HD1	2:D:918:LEU:HD13	1.78	0.47
2:D:1720:MET:SD	2:D:2127:ARG:HB3	2.55	0.47
2:D:1968:PRO:O	2:D:1972:GLN:HG3	2.15	0.47
2:D:2456:MET:SD	2:D:2456:MET:N	2.76	0.47
2:D:2984:SER:HA	2:D:2989:PRO:HB2	1.97	0.47
2:D:4690:LYS:HG3	2:D:4692:SER:H	1.78	0.47
2:D:4789:PHE:HE1	2:D:4839:TYR:HB3	1.80	0.47
2:B:162:ILE:HD12	2:B:175:VAL:HG21	1.96	0.47
2:B:490:GLN:HG2	2:B:495:ILE:HG13	1.96	0.47
2:B:692:HIS:HE1	2:B:717:GLY:HA3	1.80	0.47
2:B:713:TRP:CE2	2:B:1600:PRO:HD3	2.50	0.47
2:B:877:HIS:HA	2:B:880:ARG:NH1	2.30	0.47
2:B:2331:PHE:HD1	2:B:2395:LEU:HD21	1.80	0.47
2:B:2468:MET:O	2:B:2472:LEU:HD23	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3649:ALA:C	2:B:3652:PRO:HD2	2.39	0.47
2:B:3650:GLU:HB2	2:B:3651:PRO:HD3	1.96	0.47
2:B:4774:LEU:O	2:B:4778:VAL:HG23	2.15	0.47
2:C:713:TRP:CE2	2:C:1600:PRO:HD3	2.50	0.47
2:C:2259:GLU:OE2	2:C:3806:ASN:ND2	2.47	0.47
2:C:2473:ASP:OD2	2:C:2530:ARG:NH2	2.47	0.47
2:C:2657:TYR:HA	2:C:2662:PHE:CZ	2.49	0.47
2:C:2664:LEU:O	2:C:2667:PRO:HD2	2.15	0.47
2:C:2731:LYS:HA	2:C:2734:MET:HE2	1.96	0.47
2:C:4271:VAL:HG23	2:C:4278:ASP:OD1	2.14	0.47
2:C:4819:VAL:HG12	2:C:4830:GLU:HG3	1.96	0.47
1:H:26:HIS:NE2	1:H:41:ARG:HG2	2.30	0.47
2:A:2057:THR:HG22	2:A:2059:GLN:H	1.78	0.47
2:A:3143:SER:O	2:A:3152:ARG:NH1	2.48	0.47
2:A:4652:LYS:NZ	2:A:4945:GLN:OE1	2.35	0.47
2:D:11:ILE:HG12	2:D:176:ARG:HD2	1.97	0.47
2:D:962:LYS:HD2	2:D:982:ASP:HB2	1.97	0.47
2:D:1498:GLN:HB2	2:C:2794:GLU:HG3	1.96	0.47
2:D:4271:VAL:HG23	2:D:4278:ASP:OD1	2.14	0.47
2:D:4512:ALA:O	2:D:4516:ILE:HG13	2.15	0.47
2:B:962:LYS:HD2	2:B:982:ASP:HB2	1.97	0.47
2:B:1041:ARG:HA	2:B:1044:LYS:NZ	2.29	0.47
2:C:28:ILE:HG22	2:C:29:HIS:CD2	2.49	0.47
2:C:1427:TYR:HB2	2:C:1563:VAL:HG11	1.96	0.47
2:C:3952:ALA:HB1	2:C:4012:MET:HE3	1.97	0.47
2:A:2331:PHE:HD1	2:A:2395:LEU:HD21	1.80	0.47
1:F:26:HIS:NE2	1:F:41:ARG:HG2	2.30	0.47
2:D:1552:VAL:HG12	2:D:1553:PHE:HD2	1.80	0.47
2:D:2635:GLU:HA	2:D:2638:LEU:HB2	1.96	0.47
2:D:2664:LEU:O	2:D:2667:PRO:HD2	2.15	0.47
2:D:2872:VAL:HG23	2:D:2877:LEU:HD22	1.96	0.47
2:D:3320:LEU:O	2:D:3323:MET:HB2	2.14	0.47
2:B:1500:ARG:HG2	2:B:1505:LEU:HG	1.97	0.47
2:B:1720:MET:SD	2:B:2127:ARG:HB3	2.55	0.47
2:B:2478:ILE:HG21	2:B:2484:LEU:HD13	1.96	0.47
2:C:1500:ARG:HG2	2:C:1505:LEU:HG	1.97	0.47
2:C:2925:PHE:HZ	2:C:2970:LEU:HD13	1.80	0.47
2:C:3649:ALA:C	2:C:3652:PRO:HD2	2.39	0.47
2:C:4512:ALA:O	2:C:4516:ILE:HG13	2.15	0.47
2:A:2482:ASP:OD1	2:A:2483:PHE:N	2.48	0.47
2:A:2635:GLU:HA	2:A:2638:LEU:HB2	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:2791:ARG:HE	2:A:2795:GLY:C	2.22	0.47
2:A:4872:GLU:CD	2:D:4874:ARG:HD2	2.40	0.47
2:D:713:TRP:CE2	2:D:1600:PRO:HD3	2.50	0.47
2:D:996:VAL:HG12	2:D:1051:ARG:HH11	1.78	0.47
2:D:2473:ASP:OD2	2:D:2530:ARG:NH2	2.47	0.47
2:D:3100:ALA:O	2:D:3104:MET:HG3	2.15	0.47
2:B:4512:ALA:O	2:B:4516:ILE:HG13	2.15	0.47
2:C:11:ILE:HG12	2:C:176:ARG:HH11	1.79	0.47
2:C:1239:PHE:O	2:C:1807:ARG:NH1	2.45	0.47
2:C:3100:ALA:O	2:C:3104:MET:HG3	2.15	0.47
2:C:3155:LEU:O	2:C:3159:LEU:HD23	2.15	0.47
2:A:1154:ARG:NH2	2:A:1180:GLU:OE2	2.48	0.46
2:A:1552:VAL:HG12	2:A:1553:PHE:HD2	1.80	0.46
2:A:4774:LEU:O	2:A:4778:VAL:HG23	2.15	0.46
2:D:222:GLU:HB3	2:D:349:MET:HG3	1.97	0.46
2:D:374:TYR:OH	2:D:400:ASP:OD2	2.31	0.46
2:D:661:LEU:O	2:D:788:PHE:N	2.47	0.46
2:D:908:ARG:NH2	4:D:5003:ATP:O1A	2.43	0.46
2:B:842:GLN:HB2	2:B:1603:PHE:HB2	1.97	0.46
2:B:2884:LYS:HA	2:B:2887:GLU:HG3	1.97	0.46
2:B:2925:PHE:HZ	2:B:2970:LEU:HD13	1.80	0.46
2:B:3100:ALA:O	2:B:3104:MET:HG3	2.15	0.46
2:B:3903:GLN:HG3	2:B:3967:LEU:HD22	1.96	0.46
2:B:3906:PHE:HD2	2:B:3967:LEU:HD21	1.79	0.46
2:B:3952:ALA:HB1	2:B:4012:MET:HE3	1.97	0.46
2:B:4042:VAL:HG12	2:B:4077:THR:HB	1.95	0.46
2:B:4789:PHE:HE1	2:B:4839:TYR:HB3	1.80	0.46
2:C:842:GLN:HB2	2:C:1603:PHE:HB2	1.97	0.46
2:C:877:HIS:HA	2:C:880:ARG:NH1	2.30	0.46
2:C:2396:ILE:HD13	2:C:2468:MET:HE1	1.97	0.46
2:C:2872:VAL:HG23	2:C:2877:LEU:HD22	1.96	0.46
2:C:4042:VAL:HG12	2:C:4077:THR:HB	1.95	0.46
2:C:4197:ILE:HG12	2:C:4923:MET:HE3	1.96	0.46
2:A:11:ILE:HG12	2:A:176:ARG:HD2	1.97	0.46
2:A:114:LEU:HB2	2:A:117:HIS:CE1	2.51	0.46
2:A:713:TRP:CE2	2:A:1600:PRO:HD3	2.50	0.46
2:A:897:LYS:HB3	2:A:902:TRP:HB2	1.98	0.46
2:A:1549:SER:HB2	2:D:2830:ASN:HB3	1.96	0.46
2:A:4789:PHE:HE1	2:A:4839:TYR:HB3	1.80	0.46
2:D:674:TYR:CE1	2:D:756:SER:HB2	2.51	0.46
2:D:2396:ILE:HD13	2:D:2468:MET:HE1	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:2736:LYS:HG3	2:D:2741:TRP:NE1	2.29	0.46
2:D:2971:ILE:HG23	2:D:2975:PHE:CD2	2.51	0.46
2:D:3074:ASN:HA	2:D:3077:GLN:HG3	1.98	0.46
2:D:3155:LEU:O	2:D:3159:LEU:HD23	2.15	0.46
2:D:3906:PHE:HD2	2:D:3967:LEU:HD21	1.79	0.46
2:D:4832:GLU:O	2:D:4843:ARG:NH2	2.48	0.46
2:B:1154:ARG:NH2	2:B:1180:GLU:OE2	2.48	0.46
2:B:4197:ILE:HG12	2:B:4923:MET:HE3	1.96	0.46
2:C:11:ILE:HG12	2:C:176:ARG:HD2	1.97	0.46
2:C:769:ARG:HG2	2:C:774:PRO:HA	1.96	0.46
2:C:1118:SER:HA	2:C:1134:ALA:HA	1.97	0.46
2:C:2478:ILE:HG21	2:C:2484:LEU:HD13	1.96	0.46
2:C:2984:SER:HA	2:C:2989:PRO:HB2	1.97	0.46
2:C:3074:ASN:HA	2:C:3077:GLN:HG3	1.98	0.46
2:C:3177:LYS:HE2	2:C:3178:HIS:CE1	2.51	0.46
2:C:3903:GLN:HG3	2:C:3967:LEU:HD22	1.96	0.46
2:C:4832:GLU:O	2:C:4843:ARG:NH2	2.48	0.46
2:A:2607:LEU:HD11	2:A:2665:ALA:HA	1.97	0.46
2:A:2720:PHE:HB2	2:A:2901:TYR:CE2	2.51	0.46
2:A:2724:TYR:CD2	2:A:2775:ILE:HG12	2.51	0.46
2:A:2834:SER:O	2:A:2838[A]:HIS:HB2	2.15	0.46
2:A:2856:LYS:HA	2:A:2859:GLU:CG	2.44	0.46
2:A:4048:PHE:HZ	2:A:4080:TYR:HB3	1.80	0.46
2:A:4512:ALA:O	2:A:4516:ILE:HG13	2.15	0.46
2:D:692:HIS:HE1	2:D:717:GLY:HA3	1.80	0.46
2:D:1590:PHE:CE2	2:D:1592:SER:HB3	2.51	0.46
2:D:2482:ASP:OD1	2:D:2483:PHE:N	2.48	0.46
2:D:3013:VAL:HA	2:D:3016:ARG:HD3	1.97	0.46
2:D:3213:LYS:O	2:D:3216:GLU:HG3	2.15	0.46
2:D:3650:GLU:HB2	2:D:3651:PRO:HD3	1.96	0.46
2:B:1968:PRO:O	2:B:1972:GLN:HG3	2.15	0.46
2:B:2482:ASP:OD1	2:B:2483:PHE:N	2.48	0.46
2:B:2664:LEU:O	2:B:2667:PRO:HD2	2.15	0.46
2:B:2872:VAL:HG23	2:B:2877:LEU:HD22	1.96	0.46
2:B:4609:LYS:HD2	2:B:4615:LEU:HD22	1.96	0.46
2:B:4832:GLU:O	2:B:4843:ARG:NH2	2.48	0.46
2:C:962:LYS:HD2	2:C:982:ASP:HB2	1.97	0.46
2:C:1552:VAL:HG12	2:C:1553:PHE:HD2	1.80	0.46
2:C:2635:GLU:HA	2:C:2638:LEU:HB2	1.97	0.46
2:C:2681:MET:HE2	2:C:2914:THR:HA	1.97	0.46
2:C:3805:LEU:HD21	2:C:3888:PHE:HA	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:4482:LYS:N	2:C:4482:LYS:HD2	2.31	0.46
2:C:4774:LEU:O	2:C:4778:VAL:HG23	2.15	0.46
2:A:222:GLU:HB3	2:A:349:MET:HG3	1.97	0.46
2:A:240:HIS:HB3	2:B:167:LYS:HE2	1.97	0.46
2:A:962:LYS:HD2	2:A:982:ASP:HB2	1.97	0.46
2:A:2664:LEU:O	2:A:2667:PRO:HD2	2.15	0.46
2:A:2984:SER:OG	2:A:2994:GLY:O	2.28	0.46
2:A:3100:ALA:O	2:A:3104:MET:HG3	2.15	0.46
2:D:869:THR:OG1	2:D:941:LYS:HB3	2.15	0.46
2:D:2754:GLN:O	2:D:2757:MET:HE1	2.14	0.46
2:D:2797:SER:HB3	2:D:2801:TYR:CE2	2.51	0.46
2:D:3042:ALA:HB1	2:D:3121:LEU:HB2	1.96	0.46
2:D:3235:MET:HA	2:D:3239:LEU:HD23	1.97	0.46
2:D:4774:LEU:O	2:D:4778:VAL:HG23	2.15	0.46
2:B:114:LEU:HB2	2:B:117:HIS:CE1	2.51	0.46
2:B:307:SER:HB3	2:B:327:THR:HG22	1.96	0.46
2:B:601:LEU:HB3	2:B:642:LEU:HD11	1.98	0.46
2:B:2980:LEU:CD2	2:B:2990:LEU:HG	2.46	0.46
2:B:4640:PHE:CD2	2:B:4641:PRO:HD3	2.51	0.46
2:C:1932:PHE:CZ	2:C:1996:LEU:HB2	2.51	0.46
2:C:4107:GLU:OE1	2:C:4147:ARG:NH1	2.43	0.46
2:C:4579:HIS:HE1	2:C:4742:HIS:ND1	2.12	0.46
2:A:692:HIS:HE1	2:A:717:GLY:HA3	1.80	0.46
2:A:1590:PHE:CE2	2:A:1592:SER:HB3	2.51	0.46
2:A:1844:GLN:HE22	2:A:1852:LYS:HA	1.81	0.46
2:A:3650:GLU:HB2	2:A:3651:PRO:HD3	1.96	0.46
2:A:4640:PHE:CD2	2:A:4641:PRO:HD3	2.51	0.46
2:D:1154:ARG:NH2	2:D:1180:GLU:OE2	2.48	0.46
2:D:2720:PHE:HB2	2:D:2901:TYR:CE2	2.51	0.46
2:D:2980:LEU:CD2	2:D:2990:LEU:HG	2.46	0.46
2:D:4482:LYS:HD2	2:D:4482:LYS:N	2.31	0.46
2:D:4819:VAL:HG12	2:D:4830:GLU:HG3	1.96	0.46
2:B:2984:SER:OG	2:B:2994:GLY:O	2.28	0.46
2:B:3122:ILE:HD11	2:B:3127:GLN:HA	1.98	0.46
2:C:1720:MET:SD	2:C:2127:ARG:HB3	2.55	0.46
2:C:3013:VAL:HA	2:C:3016:ARG:HD3	1.97	0.46
2:C:3042:ALA:HB1	2:C:3121:LEU:HB2	1.96	0.46
2:C:4640:PHE:CD2	2:C:4641:PRO:HD3	2.51	0.46
2:A:842:GLN:HB2	2:A:1603:PHE:HB2	1.97	0.46
2:A:1968:PRO:O	2:A:1972:GLN:HG3	2.15	0.46
2:A:2379:ASP:OD1	2:A:2380:ASP:N	2.47	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:2925:PHE:HZ	2:A:2970:LEU:HD13	1.80	0.46
2:A:3122:ILE:HD11	2:A:3127:GLN:HA	1.98	0.46
2:A:3290:ILE:O	2:A:3292:GLU:N	2.47	0.46
2:A:3903:GLN:HG3	2:A:3967:LEU:HD22	1.96	0.46
2:A:4294:LEU:HD22	2:B:4719:PHE:CE2	2.50	0.46
1:E:26:HIS:NE2	1:E:41:ARG:HG2	2.30	0.46
1:G:91:VAL:HG21	2:C:1768:PHE:CE1	2.51	0.46
2:D:897:LYS:HB3	2:D:902:TRP:HB2	1.98	0.46
2:D:1500:ARG:HG2	2:D:1505:LEU:HG	1.97	0.46
2:D:1694:MET:SD	2:D:1695:PRO:HD2	2.56	0.46
2:D:2731:LYS:HA	2:D:2734:MET:HE2	1.96	0.46
2:D:3952:ALA:HB1	2:D:4012:MET:HE3	1.97	0.46
2:B:769:ARG:HG2	2:B:774:PRO:HA	1.96	0.46
2:B:1118:SER:HA	2:B:1134:ALA:HA	1.97	0.46
2:B:1844:GLN:HE22	2:B:1852:LYS:HA	1.81	0.46
2:B:3074:ASN:HA	2:B:3077:GLN:HG3	1.98	0.46
2:C:307:SER:HB3	2:C:327:THR:HG22	1.96	0.46
2:C:1154:ARG:NH2	2:C:1180:GLU:OE2	2.48	0.46
2:C:1829:LEU:HD11	2:C:1839:LEU:HD13	1.97	0.46
2:C:2482:ASP:OD1	2:C:2483:PHE:N	2.48	0.46
2:C:2797:SER:HB3	2:C:2801:TYR:CE2	2.51	0.46
2:C:3072:MET:HE3	2:C:3072:MET:HB3	1.69	0.46
2:C:4048:PHE:HZ	2:C:4080:TYR:HB3	1.80	0.46
2:C:4641:PRO:O	2:C:4647:LYS:NZ	2.35	0.46
2:A:674:TYR:CE1	2:A:756:SER:HB2	2.51	0.46
2:A:3074:ASN:HA	2:A:3077:GLN:HG3	1.98	0.46
2:D:114:LEU:HB2	2:D:117:HIS:CE1	2.51	0.46
2:D:2316:ASN:OD1	2:D:3810:ARG:NH1	2.49	0.46
2:D:2681:MET:HE2	2:D:2914:THR:HA	1.97	0.46
2:D:2724:TYR:CD2	2:D:2775:ILE:HG12	2.51	0.46
2:D:4640:PHE:CD2	2:D:4641:PRO:HD3	2.51	0.46
2:B:1427:TYR:HB2	2:B:1563:VAL:HG11	1.96	0.46
2:B:1729:MET:HE1	2:B:1930:ASP:HB2	1.96	0.46
2:B:1910:LEU:HD22	2:B:2062:ILE:HD11	1.97	0.46
2:B:2316:ASN:OD1	2:B:3810:ARG:NH1	2.49	0.46
2:B:3155:LEU:O	2:B:3159:LEU:HD23	2.15	0.46
2:B:3712:LYS:O	2:B:3717:LYS:NZ	2.46	0.46
2:C:114:LEU:HB2	2:C:117:HIS:CE1	2.51	0.46
2:C:695:VAL:HG11	2:C:755:ILE:HG21	1.98	0.46
2:C:869:THR:OG1	2:C:941:LYS:HB3	2.15	0.46
2:C:1590:PHE:CE2	2:C:1592:SER:HB3	2.51	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1968:PRO:O	2:C:1972:GLN:HG3	2.15	0.46
2:C:2157:GLN:O	2:C:3615:ARG:NH2	2.38	0.46
2:C:2331:PHE:HD1	2:C:2395:LEU:HD21	1.80	0.46
2:C:2724:TYR:CD2	2:C:2775:ILE:HG12	2.51	0.46
2:C:3232:PRO:HA	2:C:3235:MET:HE2	1.97	0.46
2:A:249:SER:OG	2:A:250:GLY:N	2.44	0.46
2:A:1500:ARG:HG2	2:A:1505:LEU:HG	1.97	0.46
2:A:1932:PHE:CZ	2:A:1996:LEU:HB2	2.51	0.46
2:A:2736:LYS:HG3	2:A:2741:TRP:NE1	2.29	0.46
2:A:2895:PHE:HA	2:A:2898:ILE:HG22	1.98	0.46
2:D:966:LEU:HD12	2:D:978:PRO:HD2	1.97	0.46
2:D:1427:TYR:HB2	2:D:1563:VAL:HG11	1.96	0.46
2:D:2331:PHE:HD1	2:D:2395:LEU:HD21	1.80	0.46
2:D:3805:LEU:HD21	2:D:3888:PHE:HA	1.98	0.46
2:D:4652:LYS:NZ	2:D:4945:GLN:OE1	2.35	0.46
2:D:4679:PHE:O	2:D:4682:ALA:C	2.59	0.46
2:B:34:LYS:N	2:B:53:SER:OG	2.37	0.46
2:B:756:SER:OG	2:B:769:ARG:HB2	2.16	0.46
2:B:869:THR:OG1	2:B:941:LYS:HB3	2.15	0.46
2:B:2984:SER:HA	2:B:2989:PRO:HB2	1.97	0.46
2:B:3232:PRO:HA	2:B:3235:MET:HE2	1.97	0.46
2:C:756:SER:OG	2:C:769:ARG:HB2	2.16	0.46
2:C:2068:ARG:HA	2:C:2071:GLN:HG2	1.98	0.46
2:C:3296:MET:HE3	2:C:3296:MET:HB2	1.76	0.46
2:A:1829:LEU:HD11	2:A:1839:LEU:HD13	1.97	0.46
2:A:2316:ASN:OD1	2:A:3810:ARG:NH1	2.49	0.46
2:A:2681:MET:HE2	2:A:2914:THR:HA	1.97	0.46
2:A:2971:ILE:HG23	2:A:2975:PHE:CD2	2.51	0.46
2:A:2980:LEU:CD2	2:A:2990:LEU:HG	2.46	0.46
2:A:3025:ASP:O	2:A:3028:SER:OG	2.17	0.46
2:A:3952:ALA:HB1	2:A:4012:MET:HE3	1.97	0.46
2:A:4832:GLU:O	2:A:4843:ARG:NH2	2.48	0.46
2:D:541:ILE:HG22	2:D:547:ASN:HB3	1.98	0.46
2:D:1065:GLU:O	2:D:1065:GLU:HG2	2.16	0.46
2:D:1910:LEU:HD22	2:D:2062:ILE:HD11	1.98	0.46
2:D:2068:ARG:HA	2:D:2071:GLN:HG2	1.98	0.46
2:D:2736:LYS:HD3	2:D:2736:LYS:N	2.31	0.46
2:D:3232:PRO:HA	2:D:3235:MET:HE2	1.97	0.46
2:D:3903:GLN:HG3	2:D:3967:LEU:HD22	1.96	0.46
2:B:897:LYS:HB3	2:B:902:TRP:HB2	1.98	0.46
2:C:966:LEU:HD12	2:C:978:PRO:HD2	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1106:GLU:HB3	2:C:1214:ARG:HB2	1.98	0.46
2:C:2856:LYS:HA	2:C:2859:GLU:CG	2.44	0.46
2:C:2884:LYS:HA	2:C:2887:GLU:HG3	1.97	0.46
2:C:4778:VAL:HG12	2:C:4816:HIS:HB3	1.98	0.46
2:A:869:THR:OG1	2:A:941:LYS:HB3	2.15	0.46
2:A:1694:MET:SD	2:A:1695:PRO:HD2	2.56	0.46
2:A:3152:ARG:HA	2:A:3155:LEU:HD12	1.98	0.46
2:A:3235:MET:HA	2:A:3239:LEU:HD23	1.98	0.46
2:A:3324:GLU:CD	2:A:3325:LYS:HG3	2.41	0.46
2:A:4482:LYS:N	2:A:4482:LYS:HD2	2.31	0.46
2:D:1829:LEU:HD11	2:D:1839:LEU:HD13	1.97	0.46
2:D:2379:ASP:OD1	2:D:2380:ASP:N	2.47	0.46
2:D:3122:ILE:HD11	2:D:3127:GLN:HA	1.98	0.46
2:B:1590:PHE:CE2	2:B:1592:SER:HB3	2.51	0.46
2:B:1932:PHE:CZ	2:B:1996:LEU:HB2	2.51	0.46
2:B:2396:ILE:HD11	2:B:2432:LEU:HD21	1.98	0.46
2:B:2681:MET:HE2	2:B:2914:THR:HA	1.97	0.46
2:B:2736:LYS:HD3	2:B:2736:LYS:N	2.31	0.46
2:B:3235:MET:HA	2:B:3239:LEU:HD23	1.97	0.46
2:B:4482:LYS:HD2	2:B:4482:LYS:N	2.31	0.46
2:C:2736:LYS:HD3	2:C:2736:LYS:N	2.31	0.46
2:C:2895:PHE:HA	2:C:2898:ILE:HG22	1.98	0.46
2:C:3918:ASN:HA	2:C:3921:THR:HG22	1.98	0.46
2:A:601:LEU:HB3	2:A:642:LEU:HD11	1.98	0.45
2:A:756:SER:OG	2:A:769:ARG:HB2	2.16	0.45
2:D:1118:SER:HA	2:D:1134:ALA:HA	1.97	0.45
2:D:2075:ILE:HG22	2:D:2077:ASP:H	1.81	0.45
2:D:2238:THR:HG22	2:D:2240:LEU:H	1.82	0.45
2:D:2247:VAL:HG11	2:D:2257:LEU:HD21	1.98	0.45
2:D:2925:PHE:HZ	2:D:2970:LEU:HD13	1.80	0.45
2:D:3143:SER:O	2:D:3152:ARG:NH1	2.48	0.45
2:D:3177:LYS:HE2	2:D:3178:HIS:CE1	2.51	0.45
2:B:11:ILE:HG12	2:B:176:ARG:HD2	1.97	0.45
2:B:1106:GLU:HB3	2:B:1214:ARG:HB2	1.98	0.45
2:B:2068:ARG:HA	2:B:2071:GLN:HG2	1.98	0.45
2:B:2797:SER:HB3	2:B:2801:TYR:CE2	2.51	0.45
2:B:2895:PHE:HA	2:B:2898:ILE:HG22	1.98	0.45
2:B:3013:VAL:HA	2:B:3016:ARG:HD3	1.97	0.45
2:C:1694:MET:SD	2:C:1695:PRO:HD2	2.56	0.45
2:C:2247:VAL:HG11	2:C:2257:LEU:HD21	1.98	0.45
2:C:2607:LEU:HD11	2:C:2665:ALA:HA	1.97	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:2732:TRP:CH2	2:C:2756:LEU:HB3	2.51	0.45
2:C:3074:ASN:HD21	2:C:3093:ILE:HD11	1.81	0.45
2:C:3961:ASP:OD2	2:C:3963:SER:OG	2.32	0.45
1:H:8:ILE:HA	2:D:730:LEU:HD11	1.97	0.45
2:A:661:LEU:HD12	2:A:673:TRP:CD1	2.51	0.45
2:A:695:VAL:HG11	2:A:755:ILE:HG21	1.98	0.45
2:A:1979:PHE:HB2	2:A:3628:TRP:CZ2	2.51	0.45
2:A:2238:THR:HG22	2:A:2240:LEU:H	1.82	0.45
2:A:2443:PRO:HD3	2:A:2512:MET:HG3	1.97	0.45
2:A:2797:SER:HB3	2:A:2801:TYR:CE2	2.51	0.45
1:F:36:LYS:NZ	2:B:1681:ASP:OD2	2.32	0.45
1:G:26:HIS:NE2	1:G:41:ARG:HG2	2.30	0.45
2:D:1041:ARG:HA	2:D:1044:LYS:NZ	2.29	0.45
2:D:2179:LEU:O	2:D:2183:GLU:CB	2.60	0.45
2:D:2895:PHE:HA	2:D:2898:ILE:HG22	1.98	0.45
2:B:222:GLU:HB3	2:B:349:MET:HG3	1.97	0.45
2:B:374:TYR:OH	2:B:400:ASP:OD2	2.31	0.45
2:B:674:TYR:CE1	2:B:756:SER:HB2	2.51	0.45
2:B:1829:LEU:HD11	2:B:1839:LEU:HD13	1.97	0.45
2:B:2551:THR:O	2:B:2555:LEU:HD13	2.16	0.45
2:B:2688:MET:CE	2:B:2689:MET:HE3	2.47	0.45
2:B:2720:PHE:HB2	2:B:2901:TYR:CE2	2.51	0.45
2:B:3324:GLU:CD	2:B:3325:LYS:HG3	2.41	0.45
2:C:1242:ASN:HB3	2:C:1807:ARG:HG3	1.99	0.45
2:C:1649:GLU:HG2	2:C:1650:LEU:N	2.32	0.45
2:C:2396:ILE:HD11	2:C:2432:LEU:HD21	1.98	0.45
2:C:2720:PHE:HB2	2:C:2901:TYR:CE2	2.51	0.45
2:C:3324:GLU:CD	2:C:3325:LYS:HG3	2.41	0.45
1:H:54:GLN:HG3	1:H:58:LYS:NZ	2.32	0.45
2:A:605:GLY:HA2	2:A:1585:ARG:HG3	1.99	0.45
2:A:2241:ASP:CG	2:A:2297:ARG:HH22	2.24	0.45
2:A:2258:ARG:HH22	2:A:3810:ARG:HD2	1.82	0.45
2:A:4679:PHE:O	2:A:4682:ALA:C	2.59	0.45
1:E:54:GLN:HG3	1:E:58:LYS:NZ	2.32	0.45
2:D:1937:GLN:NE2	2:D:3608:LEU:O	2.46	0.45
2:D:2258:ARG:HH22	2:D:3810:ARG:HD2	1.82	0.45
2:D:2757:MET:SD	2:D:2757:MET:N	2.90	0.45
2:D:4046:ARG:HG3	2:D:4050:LYS:NZ	2.32	0.45
2:B:605:GLY:HA2	2:B:1585:ARG:HG3	1.99	0.45
2:B:2716:LYS:HG3	2:B:2717:LEU:HD12	1.99	0.45
2:B:3143:SER:O	2:B:3152:ARG:NH1	2.48	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3805:LEU:HD21	2:B:3888:PHE:HA	1.98	0.45
2:C:1065:GLU:HG2	2:C:1065:GLU:O	2.16	0.45
2:C:2981:TYR:O	2:C:2984:SER:OG	2.34	0.45
2:C:3062:ASP:OD1	2:C:3132:ARG:NH2	2.50	0.45
2:C:3235:MET:HA	2:C:3239:LEU:HD23	1.97	0.45
2:A:2884:LYS:HA	2:A:2887:GLU:HG3	1.98	0.45
2:D:644:LEU:HB3	2:D:1630:LEU:HD11	1.99	0.45
2:D:1979:PHE:HB2	2:D:3628:TRP:CZ2	2.51	0.45
2:D:2241:ASP:CG	2:D:2297:ARG:HH22	2.24	0.45
2:D:2607:LEU:HD11	2:D:2665:ALA:HA	1.97	0.45
2:D:2981:TYR:O	2:D:2984:SER:OG	2.34	0.45
2:B:935:MET:O	2:B:939:THR:OG1	2.17	0.45
2:B:1552:VAL:HG12	2:B:1553:PHE:HD2	1.80	0.45
2:B:1694:MET:SD	2:B:1695:PRO:HD2	2.56	0.45
2:B:1937:GLN:NE2	2:B:3608:LEU:O	2.46	0.45
2:B:2247:VAL:HG11	2:B:2257:LEU:HD21	1.98	0.45
2:B:2443:PRO:HD3	2:B:2512:MET:HG3	1.97	0.45
2:B:2724:TYR:CD2	2:B:2775:ILE:HG12	2.51	0.45
2:B:2830:ASN:HB3	2:C:1549:SER:CB	2.39	0.45
2:C:2075:ILE:HG22	2:C:2077:ASP:H	1.81	0.45
2:C:2980:LEU:CD2	2:C:2990:LEU:HG	2.46	0.45
2:C:3143:SER:O	2:C:3152:ARG:NH1	2.48	0.45
2:A:541:ILE:HG22	2:A:547:ASN:HB3	1.98	0.45
2:A:2543:SER:HB3	2:A:2879:ALA:HB2	1.99	0.45
2:A:3232:PRO:HA	2:A:3235:MET:HE2	1.97	0.45
2:A:4906:GLU:OE2	2:B:4182:GLU:HG3	2.17	0.45
1:G:54:GLN:HG3	1:G:58:LYS:NZ	2.32	0.45
2:D:1268:ILE:HD11	2:D:1300:MET:HE2	1.99	0.45
2:D:1844:GLN:HE22	2:D:1852:LYS:HA	1.81	0.45
2:D:2283:LYS:HD3	2:D:2285:TYR:HE1	1.82	0.45
2:D:2443:PRO:HD3	2:D:2512:MET:HG3	1.98	0.45
2:D:2821:TYR:O	2:D:2823:PRO:HD3	2.17	0.45
2:D:3918:ASN:HA	2:D:3921:THR:HG22	1.98	0.45
2:B:317:MET:C	2:B:317:MET:HE3	2.42	0.45
2:B:921:PHE:HB3	2:B:929:ARG:HG3	1.98	0.45
2:B:1649:GLU:HG2	2:B:1650:LEU:N	2.32	0.45
2:B:2396:ILE:HD13	2:B:2468:MET:HE1	1.97	0.45
2:B:2507:LEU:HA	2:B:2510:THR:HG23	1.99	0.45
2:B:2550:HIS:CE1	2:B:2875:ASP:HB3	2.52	0.45
2:B:2607:LEU:HD11	2:B:2665:ALA:HA	1.97	0.45
2:B:4045:LYS:HZ1	2:B:4072:THR:HA	1.81	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:4048:PHE:HZ	2:B:4080:TYR:HB3	1.80	0.45
2:B:4679:PHE:O	2:B:4682:ALA:C	2.59	0.45
2:B:4778:VAL:HG12	2:B:4816:HIS:HB3	1.98	0.45
2:C:674:TYR:CE1	2:C:756:SER:HB2	2.51	0.45
2:C:4046:ARG:HG3	2:C:4050:LYS:NZ	2.32	0.45
2:A:317:MET:HE3	2:A:317:MET:C	2.42	0.45
2:A:2068:ARG:HA	2:A:2071:GLN:HG2	1.98	0.45
2:A:2736:LYS:HD3	2:A:2736:LYS:N	2.31	0.45
2:A:2757:MET:N	2:A:2757:MET:SD	2.90	0.45
2:A:3155:LEU:O	2:A:3159:LEU:HD23	2.15	0.45
2:D:1932:PHE:CZ	2:D:1996:LEU:HB2	2.51	0.45
2:D:2444:THR:O	2:D:2452:VAL:N	2.42	0.45
2:D:2884:LYS:HA	2:D:2887:GLU:HG3	1.97	0.45
2:D:3319:PHE:O	2:D:3323:MET:N	2.39	0.45
2:B:274:LEU:HD23	2:B:274:LEU:HA	1.85	0.45
2:B:661:LEU:O	2:B:788:PHE:N	2.47	0.45
2:B:695:VAL:HG11	2:B:755:ILE:HG21	1.98	0.45
2:B:888:ASN:O	2:B:892:LEU:HD23	2.17	0.45
2:B:1242:ASN:ND2	2:B:1805:HIS:O	2.50	0.45
2:B:4264:LEU:HD21	2:C:4698:LEU:HD11	1.99	0.45
2:C:222:GLU:HB3	2:C:349:MET:HG3	1.97	0.45
2:C:605:GLY:HA2	2:C:1585:ARG:HG3	1.99	0.45
2:C:2316:ASN:OD1	2:C:3810:ARG:NH1	2.49	0.45
2:C:2895:PHE:O	2:C:2899:ASN:ND2	2.29	0.45
2:C:2932:TYR:CD2	2:C:2967:VAL:HG21	2.51	0.45
2:A:2172:MET:O	2:A:2176:VAL:HG23	2.17	0.45
2:A:3125:ASP:O	2:A:3128:VAL:HG12	2.17	0.45
2:A:3177:LYS:HE2	2:A:3178:HIS:CE1	2.51	0.45
2:D:756:SER:OG	2:D:769:ARG:HB2	2.16	0.45
2:D:888:ASN:HA	2:D:891:GLU:HB2	1.99	0.45
2:D:943:LEU:O	2:D:948:CYS:N	2.43	0.45
2:D:967:PRO:O	2:D:971:GLN:HB3	2.17	0.45
2:D:1239:PHE:O	2:D:1807:ARG:NH1	2.45	0.45
2:D:1242:ASN:HB3	2:D:1807:ARG:HG3	1.99	0.45
2:D:1262:PRO:HD3	2:D:1590:PHE:HE1	1.82	0.45
2:D:1962:THR:O	2:D:1966:ARG:HG3	2.17	0.45
2:D:2543:SER:HB3	2:D:2879:ALA:HB2	1.99	0.45
2:D:3152:ARG:HA	2:D:3155:LEU:HD12	1.98	0.45
2:B:541:ILE:HG22	2:B:547:ASN:HB3	1.98	0.45
2:B:661:LEU:HD12	2:B:673:TRP:CD1	2.51	0.45
2:B:2172:MET:O	2:B:2176:VAL:HG23	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2324:LEU:HD23	2:B:2399:LEU:HD21	1.98	0.45
2:B:2757:MET:N	2:B:2757:MET:SD	2.90	0.45
2:B:2788:ARG:HB2	2:B:2904:SER:OG	2.17	0.45
2:B:2971:ILE:HG23	2:B:2975:PHE:CD2	2.51	0.45
2:B:3152:ARG:HA	2:B:3155:LEU:HD12	1.98	0.45
2:B:3177:LYS:HE2	2:B:3178:HIS:CE1	2.50	0.45
2:C:317:MET:HE3	2:C:317:MET:C	2.42	0.45
2:C:601:LEU:HB3	2:C:642:LEU:HD11	1.98	0.45
2:C:644:LEU:HB3	2:C:1630:LEU:HD11	1.99	0.45
2:C:778:MET:HG3	2:C:780:GLU:OE2	2.17	0.45
2:C:888:ASN:HA	2:C:891:GLU:HB2	1.99	0.45
2:C:897:LYS:HB3	2:C:902:TRP:HB2	1.98	0.45
2:C:1719:LEU:HD21	2:C:1830:ILE:HD12	1.99	0.45
2:C:1844:GLN:HE22	2:C:1852:LYS:HA	1.81	0.45
2:C:2238:THR:HG22	2:C:2240:LEU:H	1.82	0.45
2:C:2324:LEU:HD23	2:C:2399:LEU:HD21	1.98	0.45
2:C:2971:ILE:HG23	2:C:2975:PHE:CD2	2.51	0.45
2:C:4679:PHE:O	2:C:4682:ALA:C	2.59	0.45
2:A:644:LEU:HB3	2:A:1630:LEU:HD11	1.99	0.45
2:A:1118:SER:HA	2:A:1134:ALA:HA	1.97	0.45
2:A:1962:THR:O	2:A:1966:ARG:HG3	2.17	0.45
2:A:2075:ILE:HG22	2:A:2077:ASP:H	1.81	0.45
2:A:2550:HIS:CE1	2:A:2875:ASP:HB3	2.52	0.45
2:A:2932:TYR:CD2	2:A:2967:VAL:HG21	2.51	0.45
2:A:3805:LEU:HD21	2:A:3888:PHE:HA	1.98	0.45
2:D:601:LEU:HB3	2:D:642:LEU:HD11	1.98	0.45
2:D:1242:ASN:ND2	2:D:1805:HIS:O	2.50	0.45
2:D:3074:ASN:HD21	2:D:3093:ILE:HD11	1.81	0.45
2:B:181:LEU:N	2:B:212:TRP:O	2.39	0.45
2:B:1719:LEU:HD21	2:B:1830:ILE:HD12	1.99	0.45
2:B:1898:LEU:HD22	2:B:1902:VAL:HG11	1.99	0.45
2:B:2422:ILE:O	2:B:2426:LEU:HG	2.17	0.45
2:B:2935:GLU:O	2:B:2939:TYR:CD1	2.67	0.45
2:B:3062:ASP:OD1	2:B:3132:ARG:NH2	2.50	0.45
2:C:888:ASN:O	2:C:892:LEU:HD23	2.17	0.45
2:C:956:HIS:O	2:C:960:LYS:HG3	2.17	0.45
2:C:1910:LEU:HD22	2:C:2062:ILE:HD11	1.97	0.45
2:C:2443:PRO:HD3	2:C:2512:MET:HG3	1.98	0.45
2:C:2507:LEU:HA	2:C:2510:THR:HG23	1.99	0.45
2:C:2716:LYS:HG3	2:C:2717:LEU:HD12	1.99	0.45
2:C:4044:SER:O	2:C:4048:PHE:HD2	2.00	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:876:PRO:HA	2:A:879:GLU:CG	2.42	0.45
2:A:956:HIS:O	2:A:960:LYS:HG3	2.17	0.45
2:A:1242:ASN:HB3	2:A:1807:ARG:HG3	1.99	0.45
2:A:2247:VAL:HG11	2:A:2257:LEU:HD21	1.98	0.45
2:A:2324:LEU:HD23	2:A:2399:LEU:HD21	1.98	0.45
2:A:2396:ILE:HD13	2:A:2468:MET:HE1	1.97	0.45
2:A:2824:ARG:HA	2:A:2824:ARG:HD2	1.64	0.45
2:A:2984:SER:HA	2:A:2989:PRO:HB2	1.97	0.45
2:A:4046:ARG:HG3	2:A:4050:LYS:NZ	2.32	0.45
1:F:54:GLN:HG3	1:F:58:LYS:NZ	2.31	0.45
2:D:317:MET:HE3	2:D:317:MET:C	2.42	0.45
2:D:605:GLY:HA2	2:D:1585:ARG:HG3	1.99	0.45
2:D:2324:LEU:HD23	2:D:2399:LEU:HD21	1.98	0.45
2:D:4778:VAL:HG12	2:D:4816:HIS:HB3	1.98	0.45
2:B:778:MET:HG3	2:B:780:GLU:OE2	2.17	0.45
2:B:1962:THR:O	2:B:1966:ARG:HG3	2.17	0.45
2:B:1979:PHE:HB2	2:B:3628:TRP:CZ2	2.52	0.45
2:B:2238:THR:HG22	2:B:2240:LEU:H	1.82	0.45
2:B:4044:SER:O	2:B:4048:PHE:HD2	2.00	0.45
2:C:2551:THR:O	2:C:2555:LEU:HD13	2.17	0.45
2:C:2824:ARG:HA	2:C:2824:ARG:HD2	1.64	0.45
2:A:778:MET:HG3	2:A:780:GLU:OE2	2.17	0.45
2:A:1065:GLU:O	2:A:1065:GLU:HG2	2.16	0.45
2:A:1719:LEU:HD21	2:A:1830:ILE:HD12	1.99	0.45
2:A:1910:LEU:HD22	2:A:2062:ILE:HD11	1.97	0.45
2:A:2054:LYS:NZ	2:A:2056:SER:OG	2.31	0.45
2:A:2134:MET:HE3	2:A:2192:MET:HG3	1.98	0.45
2:A:2283:LYS:HD3	2:A:2285:TYR:HE1	1.82	0.45
2:A:2716:LYS:HG3	2:A:2717:LEU:HD12	1.99	0.45
2:D:375:GLN:O	2:D:376:SER:OG	2.33	0.45
2:D:778:MET:HG3	2:D:780:GLU:OE2	2.17	0.45
2:D:1719:LEU:HD21	2:D:1830:ILE:HD12	1.99	0.45
2:D:2551:THR:O	2:D:2555:LEU:HD13	2.16	0.45
2:D:2690:GLU:CD	2:D:2692:GLN:HE21	2.25	0.45
2:B:644:LEU:HB3	2:B:1630:LEU:HD11	1.99	0.45
2:B:853:PRO:HD3	2:B:1086:ARG:HB2	1.99	0.45
2:B:1065:GLU:O	2:B:1065:GLU:HG2	2.16	0.45
2:B:2525:LEU:HD12	2:B:2569:ILE:HG22	1.99	0.45
2:B:2589:LEU:O	2:B:2593:VAL:HG13	2.17	0.45
2:B:2605:MET:HA	2:B:2608:LYS:HE2	1.99	0.45
2:C:1262:PRO:HD3	2:C:1590:PHE:HE1	1.82	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1962:THR:O	2:C:1966:ARG:HG3	2.17	0.45
2:C:2241:ASP:CG	2:C:2297:ARG:HH22	2.24	0.45
2:C:2492:PHE:O	2:C:2496:LEU:N	2.45	0.45
2:C:2657:TYR:HA	2:C:2662:PHE:CE2	2.52	0.45
2:C:2757:MET:N	2:C:2757:MET:SD	2.90	0.45
2:C:2821:TYR:O	2:C:2823:PRO:HD3	2.17	0.45
2:C:3122:ILE:HD11	2:C:3127:GLN:HA	1.98	0.45
2:C:3976:LYS:HD2	2:C:4093:ASP:OD2	2.17	0.45
2:A:219:SER:H	2:A:349:MET:CE	2.30	0.44
2:A:888:ASN:HA	2:A:891:GLU:HB2	1.99	0.44
2:A:1649:GLU:HG2	2:A:1650:LEU:N	2.32	0.44
2:A:2173:GLU:HA	2:A:2176:VAL:HB	2.00	0.44
2:A:2500:ALA:HB1	2:A:2554:ARG:HH22	1.82	0.44
2:A:2525:LEU:HD12	2:A:2569:ILE:HG22	2.00	0.44
2:A:2605:MET:HA	2:A:2608:LYS:HE2	1.99	0.44
2:A:2729:HIS:CD2	2:A:2760:TYR:HB2	2.52	0.44
2:A:2981:TYR:O	2:A:2984:SER:OG	2.34	0.44
2:A:3074:ASN:HD21	2:A:3093:ILE:HD11	1.81	0.44
2:A:3976:LYS:HD2	2:A:4093:ASP:OD2	2.17	0.44
2:A:4183:LYS:HB3	2:D:4906:GLU:OE2	2.17	0.44
2:A:4778:VAL:HG12	2:A:4816:HIS:HB3	1.98	0.44
2:D:661:LEU:HD12	2:D:673:TRP:CD1	2.51	0.44
2:D:695:VAL:HG11	2:D:755:ILE:HG21	1.98	0.44
2:D:3976:LYS:HD2	2:D:4093:ASP:OD2	2.17	0.44
2:B:472:HIS:O	2:B:476:GLN:HG2	2.17	0.44
2:B:888:ASN:HA	2:B:891:GLU:HB2	1.99	0.44
2:B:1268:ILE:HD11	2:B:1300:MET:HE2	1.99	0.44
2:B:1419:PHE:CE2	2:B:1562:ASN:HB3	2.52	0.44
2:B:2075:ILE:HG22	2:B:2077:ASP:H	1.81	0.44
2:B:2731:LYS:O	2:B:2734:MET:HG2	2.17	0.44
2:C:181:LEU:N	2:C:212:TRP:O	2.39	0.44
2:C:661:LEU:HD12	2:C:673:TRP:CD1	2.51	0.44
2:C:853:PRO:HD3	2:C:1086:ARG:HB2	1.99	0.44
2:C:904:TYR:HB2	2:C:918:LEU:HD23	1.99	0.44
2:C:934:GLN:HA	2:C:937:LEU:HD12	1.99	0.44
2:C:1077:VAL:O	2:C:1077:VAL:HG13	2.18	0.44
2:C:1697:LEU:HD23	2:C:1697:LEU:HA	1.87	0.44
2:C:2422:ILE:O	2:C:2426:LEU:HG	2.17	0.44
2:C:3125:ASP:O	2:C:3128:VAL:HG12	2.17	0.44
2:C:3178:HIS:CD2	2:C:3263:MET:HA	2.53	0.44
1:H:91:VAL:HG21	2:D:1768:PHE:CE1	2.52	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:967:PRO:O	2:A:971:GLN:HB3	2.17	0.44
2:A:1262:PRO:HD3	2:A:1590:PHE:HE1	1.82	0.44
2:A:1501:ASN:CB	2:D:2826:ILE:HD13	2.45	0.44
2:A:1553:PHE:HE1	2:A:1555:PHE:CE2	2.35	0.44
2:A:2551:THR:O	2:A:2555:LEU:HD13	2.16	0.44
2:A:2690:GLU:CD	2:A:2692:GLN:HE21	2.25	0.44
2:A:2821:TYR:O	2:A:2823:PRO:HD3	2.17	0.44
2:D:1077:VAL:O	2:D:1077:VAL:HG13	2.18	0.44
2:D:1106:GLU:HB3	2:D:1214:ARG:HB2	1.98	0.44
2:D:1553:PHE:HE1	2:D:1555:PHE:CE2	2.35	0.44
2:D:2525:LEU:HD12	2:D:2569:ILE:HG22	1.99	0.44
2:D:2550:HIS:CE1	2:D:2875:ASP:HB3	2.52	0.44
2:D:2731:LYS:O	2:D:2734:MET:HG2	2.17	0.44
2:D:3324:GLU:CD	2:D:3325:LYS:HG3	2.41	0.44
2:B:2690:GLU:CD	2:B:2692:GLN:HE21	2.25	0.44
2:C:921:PHE:HB3	2:C:929:ARG:HG3	1.98	0.44
2:C:2134:MET:HE3	2:C:2192:MET:HG3	1.98	0.44
2:C:2543:SER:HB3	2:C:2879:ALA:HB2	1.99	0.44
2:C:2550:HIS:CE1	2:C:2875:ASP:HB3	2.52	0.44
2:C:2685:TYR:HB2	2:C:2909:ASP:OD1	2.17	0.44
2:A:472:HIS:O	2:A:476:GLN:HG2	2.17	0.44
2:A:1898:LEU:HD22	2:A:1902:VAL:HG11	1.99	0.44
2:A:2422:ILE:O	2:A:2426:LEU:HG	2.17	0.44
2:A:3918:ASN:HA	2:A:3921:THR:HG22	1.98	0.44
2:A:4044:SER:O	2:A:4048:PHE:HD2	2.00	0.44
2:D:219:SER:H	2:D:349:MET:CE	2.30	0.44
2:D:228:LEU:HD21	2:D:277:LEU:HD13	1.99	0.44
2:D:246:THR:HG22	2:D:247:VAL:O	2.17	0.44
2:D:586:LEU:HD22	2:D:617:LEU:HD23	2.00	0.44
2:D:904:TYR:HB2	2:D:918:LEU:HD23	1.99	0.44
2:D:921:PHE:HB3	2:D:929:ARG:HG3	1.98	0.44
2:D:2082:ARG:HH12	2:D:3685:ASP:CG	2.26	0.44
2:D:2134:MET:HE3	2:D:2192:MET:HG3	1.98	0.44
2:D:2396:ILE:HD11	2:D:2432:LEU:HD21	1.98	0.44
2:D:2500:ALA:HB1	2:D:2554:ARG:HH22	1.82	0.44
2:D:3125:ASP:O	2:D:3128:VAL:HG12	2.17	0.44
2:B:967:PRO:O	2:B:971:GLN:HB3	2.17	0.44
2:B:2241:ASP:CG	2:B:2297:ARG:HH22	2.24	0.44
2:B:2821:TYR:O	2:B:2823:PRO:HD3	2.17	0.44
2:B:3918:ASN:HA	2:B:3921:THR:HG22	1.98	0.44
2:B:4046:ARG:HG3	2:B:4050:LYS:NZ	2.32	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:607:ASN:HB3	2:C:610:VAL:HG23	2.00	0.44
2:C:1553:PHE:HE1	2:C:1555:PHE:CE2	2.35	0.44
2:C:2172:MET:O	2:C:2176:VAL:HG23	2.17	0.44
2:C:2258:ARG:HH22	2:C:3810:ARG:HD2	1.82	0.44
2:C:2589:LEU:O	2:C:2593:VAL:HG13	2.17	0.44
2:C:2690:GLU:CD	2:C:2692:GLN:HE21	2.25	0.44
2:C:2788:ARG:HB2	2:C:2904:SER:OG	2.17	0.44
2:C:3109:PHE:O	2:C:3165:ALA:HB2	2.17	0.44
2:C:3697:LYS:HG3	2:C:3700:HIS:HE2	1.83	0.44
2:A:228:LEU:HD21	2:A:277:LEU:HD13	1.99	0.44
2:A:246:THR:HG22	2:A:247:VAL:O	2.18	0.44
2:A:607:ASN:HB3	2:A:610:VAL:HG23	2.00	0.44
2:A:1564:MET:CE	2:A:1565:PRO:HD2	2.38	0.44
2:A:2507:LEU:HA	2:A:2510:THR:HG23	1.99	0.44
2:D:1649:GLU:HG2	2:D:1650:LEU:N	2.32	0.44
2:D:3062:ASP:OD1	2:D:3132:ARG:NH2	2.50	0.44
2:D:3961:ASP:OD2	2:D:3963:SER:OG	2.32	0.44
2:B:246:THR:HG22	2:B:247:VAL:O	2.18	0.44
2:B:2134:MET:HE3	2:B:2192:MET:HG3	1.98	0.44
2:B:2567:ASP:O	2:B:2571:VAL:HG23	2.18	0.44
2:B:2657:TYR:HA	2:B:2662:PHE:CE2	2.52	0.44
2:B:2728:SER:HA	2:B:2731:LYS:NZ	2.33	0.44
2:B:2981:TYR:O	2:B:2984:SER:OG	2.34	0.44
2:B:3137:LEU:HA	2:B:3140:LEU:HD12	1.99	0.44
2:C:2179:LEU:O	2:C:2183:GLU:CB	2.60	0.44
2:C:2444:THR:O	2:C:2452:VAL:N	2.42	0.44
2:C:3152:ARG:HA	2:C:3155:LEU:HD12	1.98	0.44
2:A:586:LEU:HD22	2:A:617:LEU:HD23	2.00	0.44
2:A:888:ASN:O	2:A:892:LEU:HD23	2.17	0.44
2:A:1268:ILE:HD11	2:A:1300:MET:HE2	1.99	0.44
2:A:2396:ILE:HD11	2:A:2432:LEU:HD21	1.98	0.44
2:A:2589:LEU:O	2:A:2593:VAL:HG13	2.17	0.44
2:A:4060:GLN:O	2:A:4064:GLU:OE1	2.36	0.44
2:A:4172:PHE:CZ	2:A:4189:PHE:HA	2.53	0.44
2:D:641:ASP:OD2	2:D:641:ASP:N	2.51	0.44
2:D:934:GLN:HA	2:D:937:LEU:HD12	1.99	0.44
2:D:2507:LEU:HA	2:D:2510:THR:HG23	1.99	0.44
2:D:2657:TYR:HA	2:D:2662:PHE:CE2	2.52	0.44
2:D:2788:ARG:HB2	2:D:2904:SER:OG	2.17	0.44
2:D:2932:TYR:CD2	2:D:2967:VAL:HG21	2.52	0.44
2:D:3697:LYS:HG3	2:D:3700:HIS:HE2	1.83	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:4964:ASP:OD1	2:D:4964:ASP:N	2.50	0.44
2:B:1262:PRO:HD3	2:B:1590:PHE:HE1	1.82	0.44
2:B:2932:TYR:CD2	2:B:2967:VAL:HG21	2.51	0.44
2:B:3125:ASP:O	2:B:3128:VAL:HG12	2.17	0.44
2:B:4652:LYS:NZ	2:B:4945:GLN:OE1	2.35	0.44
2:C:967:PRO:O	2:C:971:GLN:HB3	2.17	0.44
2:C:1436:GLN:NE2	2:C:1546:GLN:O	2.51	0.44
2:C:2082:ARG:HH12	2:C:3685:ASP:CG	2.26	0.44
2:C:2456:MET:SD	2:C:2456:MET:N	2.76	0.44
2:C:2525:LEU:HD12	2:C:2569:ILE:HG22	2.00	0.44
2:A:374:TYR:OH	2:A:400:ASP:OD2	2.31	0.44
2:A:3228:TYR:CE1	2:A:3232:PRO:HB3	2.53	0.44
2:A:4522:VAL:HG12	2:B:4807:ASP:O	2.18	0.44
2:D:1419:PHE:CE2	2:D:1562:ASN:HB3	2.52	0.44
2:D:2567:ASP:O	2:D:2571:VAL:HG23	2.18	0.44
2:D:2716:LYS:HG3	2:D:2717:LEU:HD12	1.99	0.44
2:D:2729:HIS:CD2	2:D:2760:TYR:HB2	2.52	0.44
2:D:3109:PHE:O	2:D:3165:ALA:HB2	2.17	0.44
2:D:3178:HIS:CD2	2:D:3263:MET:HA	2.53	0.44
2:D:3668:ILE:HD13	2:D:3736:ALA:HB2	1.99	0.44
2:D:4044:SER:O	2:D:4048:PHE:HD2	2.00	0.44
2:D:4641:PRO:O	2:D:4647:LYS:NZ	2.35	0.44
2:B:586:LEU:HD22	2:B:617:LEU:HD23	2.00	0.44
2:B:934:GLN:HA	2:B:937:LEU:HD12	2.00	0.44
2:B:943:LEU:O	2:B:948:CYS:N	2.43	0.44
2:B:2258:ARG:HH22	2:B:3810:ARG:HD2	1.82	0.44
2:B:2497:ARG:NH2	2:B:2870:LEU:HA	2.33	0.44
2:B:2852:TRP:O	2:B:2856:LYS:HE2	2.17	0.44
2:B:3668:ILE:HD13	2:B:3736:ALA:HB2	1.98	0.44
2:C:2620:TYR:HB2	2:C:2627:TRP:CD1	2.53	0.44
2:C:2764:SER:O	2:C:2768:LYS:HG3	2.18	0.44
2:C:3148:VAL:O	2:C:3152:ARG:HG3	2.18	0.44
2:C:3319:PHE:O	2:C:3323:MET:N	2.39	0.44
2:C:4172:PHE:CZ	2:C:4189:PHE:HA	2.53	0.44
2:A:669:GLN:HE22	2:A:671:LYS:HG2	1.83	0.44
2:A:853:PRO:HD3	2:A:1086:ARG:HB2	2.00	0.44
2:A:921:PHE:HB3	2:A:929:ARG:HG3	1.98	0.44
2:A:1106:GLU:HB3	2:A:1214:ARG:HB2	1.98	0.44
2:A:1242:ASN:ND2	2:A:1805:HIS:O	2.50	0.44
2:A:2567:ASP:O	2:A:2571:VAL:HG23	2.18	0.44
2:A:4828:GLY:C	2:D:4822:ARG:HH12	2.26	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:181:LEU:N	2:D:212:TRP:O	2.39	0.44
2:D:888:ASN:O	2:D:892:LEU:HD23	2.17	0.44
2:D:2668:CYS:O	2:D:2672:VAL:HG23	2.18	0.44
2:B:1242:ASN:HB3	2:B:1807:ARG:HG3	1.99	0.44
2:B:1553:PHE:HE1	2:B:1555:PHE:CE2	2.35	0.44
2:B:2492:PHE:O	2:B:2496:LEU:N	2.45	0.44
2:B:2685:TYR:HB2	2:B:2909:ASP:OD1	2.17	0.44
2:B:3290:ILE:C	2:B:3292:GLU:H	2.26	0.44
2:B:3926:GLY:CA	2:B:4935:GLY:HA3	2.47	0.44
2:C:472:HIS:O	2:C:476:GLN:HG2	2.17	0.44
2:C:541:ILE:HG22	2:C:547:ASN:HB3	1.98	0.44
2:C:1242:ASN:ND2	2:C:1805:HIS:O	2.50	0.44
2:C:1268:ILE:HD11	2:C:1300:MET:HE2	1.99	0.44
2:C:1419:PHE:CE2	2:C:1562:ASN:HB3	2.52	0.44
2:C:1651:LEU:HD12	2:C:1698:LEU:HG	2.00	0.44
2:C:2500:ALA:HB1	2:C:2554:ARG:NH2	2.33	0.44
2:C:2605:MET:HA	2:C:2608:LYS:HE2	1.99	0.44
2:C:2731:LYS:O	2:C:2734:MET:HG2	2.17	0.44
2:C:3290:ILE:C	2:C:3292:GLU:H	2.26	0.44
2:A:903:GLN:O	2:A:915:HIS:N	2.51	0.44
2:A:1089:ARG:HH21	2:A:1596:TRP:CG	2.36	0.44
2:A:2657:TYR:HA	2:A:2662:PHE:CE2	2.52	0.44
2:A:2666:LEU:HB3	2:A:2667:PRO:HD3	2.00	0.44
2:A:2678:PRO:HB2	2:A:2981:TYR:CE2	2.53	0.44
2:A:2852:TRP:O	2:A:2856:LYS:HE2	2.17	0.44
1:F:63:GLY:HA3	1:F:75:LEU:HD21	2.00	0.44
1:G:63:GLY:HA3	1:G:75:LEU:HD21	2.00	0.44
2:D:3228:TYR:CE1	2:D:3232:PRO:HB3	2.53	0.44
2:B:293:GLN:HB2	2:B:343:ARG:HH22	1.83	0.44
2:B:607:ASN:HB3	2:B:610:VAL:HG23	2.00	0.44
2:B:669:GLN:HE22	2:B:671:LYS:HG2	1.83	0.44
2:B:904:TYR:HB2	2:B:918:LEU:HD23	1.99	0.44
2:B:2173:GLU:HA	2:B:2176:VAL:HB	2.00	0.44
2:B:2543:SER:HB3	2:B:2879:ALA:HB2	1.99	0.44
2:B:3148:VAL:O	2:B:3152:ARG:HG3	2.18	0.44
2:B:3976:LYS:HD2	2:B:4093:ASP:OD2	2.17	0.44
2:C:219:SER:H	2:C:349:MET:CE	2.30	0.44
2:C:669:GLN:HE22	2:C:671:LYS:HG2	1.83	0.44
2:C:1898:LEU:HD22	2:C:1902:VAL:HG11	1.98	0.44
2:C:2668:CYS:O	2:C:2672:VAL:HG23	2.18	0.44
2:C:2678:PRO:HB2	2:C:2981:TYR:CE2	2.53	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:63:GLY:HA3	1:H:75:LEU:HD21	2.00	0.44
2:A:293:GLN:HB2	2:A:343:ARG:HH22	1.83	0.44
2:A:2728:SER:HA	2:A:2731:LYS:NZ	2.33	0.44
2:A:2731:LYS:O	2:A:2734:MET:HG2	2.17	0.44
2:A:2788:ARG:HB2	2:A:2904:SER:OG	2.17	0.44
2:A:2834:SER:O	2:A:2838[B]:HIS:HB2	2.17	0.44
2:A:3137:LEU:HA	2:A:3140:LEU:HD12	1.99	0.44
2:D:607:ASN:HB3	2:D:610:VAL:HG23	2.00	0.44
2:D:956:HIS:O	2:D:960:LYS:HG3	2.17	0.44
2:D:1725:TYR:CE2	2:D:2101:ALA:HB1	2.53	0.44
2:D:1847:GLU:HG3	2:D:1850:VAL:H	1.83	0.44
2:D:1898:LEU:HD22	2:D:1902:VAL:HG11	1.98	0.44
2:D:2422:ILE:O	2:D:2426:LEU:HG	2.17	0.44
2:D:2685:TYR:HB2	2:D:2909:ASP:OD1	2.17	0.44
2:D:2688:MET:CE	2:D:2689:MET:HE3	2.47	0.44
2:D:2764:SER:O	2:D:2768:LYS:HG3	2.18	0.44
2:B:903:GLN:O	2:B:915:HIS:N	2.51	0.44
2:B:3061:LEU:HD13	2:B:3126:VAL:HG13	2.00	0.44
2:B:3124:GLU:C	2:B:3126:VAL:H	2.26	0.44
2:B:3178:HIS:CD2	2:B:3263:MET:HA	2.53	0.44
2:C:228:LEU:HD21	2:C:277:LEU:HD13	2.00	0.44
2:C:314:LEU:HD21	2:C:393:MET:HE2	2.00	0.44
2:C:570:GLY:O	2:C:574:VAL:HG23	2.18	0.44
2:C:2728:SER:HA	2:C:2731:LYS:NZ	2.33	0.44
2:C:2935:GLU:O	2:C:2939:TYR:CD1	2.67	0.44
2:C:4616:TYR:CE2	2:C:4632:ARG:HG2	2.53	0.44
2:A:2688:MET:CE	2:A:2689:MET:HE3	2.47	0.43
2:A:2849:HIS:HD2	2:A:2852:TRP:HE3	1.65	0.43
2:A:3062:ASP:OD1	2:A:3132:ARG:NH2	2.50	0.43
2:A:3668:ILE:HD13	2:A:3736:ALA:HB2	1.98	0.43
2:D:876:PRO:HA	2:D:879:GLU:CG	2.42	0.43
2:D:903:GLN:O	2:D:915:HIS:N	2.51	0.43
2:D:1760:ARG:HE	2:D:1760:ARG:HB3	1.68	0.43
2:D:2589:LEU:O	2:D:2593:VAL:HG13	2.17	0.43
2:D:2605:MET:HA	2:D:2608:LYS:HE2	1.99	0.43
2:D:2620:TYR:HB2	2:D:2627:TRP:CD1	2.53	0.43
2:D:2678:PRO:HB2	2:D:2981:TYR:CE2	2.53	0.43
2:B:1651:LEU:HD12	2:B:1698:LEU:HG	2.00	0.43
2:B:1847:GLU:HG3	2:B:1850:VAL:H	1.83	0.43
2:B:2283:LYS:HD3	2:B:2285:TYR:HE1	1.82	0.43
2:B:2729:HIS:CD2	2:B:2760:TYR:HB2	2.52	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:4060:GLN:O	2:B:4064:GLU:OE1	2.36	0.43
2:B:4304:GLY:O	2:B:4308:ILE:HG12	2.18	0.43
2:C:897:LYS:HB2	2:C:915:HIS:CE1	2.53	0.43
2:C:903:GLN:O	2:C:915:HIS:N	2.51	0.43
2:C:2852:TRP:O	2:C:2856:LYS:HE2	2.17	0.43
2:C:2927:GLN:OE1	2:C:3003:MET:HG2	2.18	0.43
2:C:2967:VAL:HA	2:C:2970:LEU:HG	2.00	0.43
2:C:3228:TYR:CE1	2:C:3232:PRO:HB3	2.53	0.43
2:A:314:LEU:HD21	2:A:393:MET:HE2	2.00	0.43
2:A:897:LYS:HB2	2:A:915:HIS:CE1	2.53	0.43
2:A:1077:VAL:O	2:A:1077:VAL:HG13	2.18	0.43
2:A:1089:ARG:HH21	2:A:1596:TRP:CD1	2.36	0.43
2:A:1502:ASN:OD1	2:D:2824:ARG:NH1	2.51	0.43
2:A:1699:ARG:O	2:A:1703:TYR:HB2	2.18	0.43
2:A:2497:ARG:NH2	2:A:2870:LEU:HA	2.33	0.43
2:A:3016:ARG:O	2:A:3018:ARG:NH1	2.51	0.43
2:A:3061:LEU:HD13	2:A:3126:VAL:HG13	2.00	0.43
2:A:3100:ALA:C	2:A:3103:PRO:HD2	2.44	0.43
2:A:3109:PHE:O	2:A:3165:ALA:HB2	2.18	0.43
2:D:189:GLU:OE2	2:C:2322:ARG:NH2	2.44	0.43
2:D:669:GLN:HE22	2:D:671:LYS:HG2	1.83	0.43
2:D:1118:SER:HB3	2:D:1204:VAL:HG11	2.00	0.43
2:D:1651:LEU:HD12	2:D:1698:LEU:HG	2.00	0.43
2:D:1915:ASP:OD1	2:D:2090:ARG:NH1	2.51	0.43
2:D:2500:ALA:HB1	2:D:2554:ARG:NH2	2.33	0.43
2:D:3187:LYS:O	2:D:3188:SER:OG	2.34	0.43
2:B:2179:LEU:O	2:B:2183:GLU:CB	2.60	0.43
2:B:2678:PRO:HB2	2:B:2981:TYR:CE2	2.53	0.43
2:B:2764:SER:O	2:B:2768:LYS:HG3	2.18	0.43
2:B:3109:PHE:O	2:B:3165:ALA:HB2	2.17	0.43
2:C:2283:LYS:HD3	2:C:2285:TYR:HE1	1.82	0.43
2:C:2497:ARG:NH2	2:C:2870:LEU:HA	2.33	0.43
2:C:2975:PHE:CE2	2:C:3036:LEU:HD13	2.53	0.43
2:C:3124:GLU:C	2:C:3126:VAL:H	2.26	0.43
2:C:3137:LEU:HA	2:C:3140:LEU:HD12	1.99	0.43
2:C:4060:GLN:O	2:C:4064:GLU:OE1	2.36	0.43
2:C:4565:SER:HB2	2:C:4567:TYR:CD2	2.54	0.43
2:A:904:TYR:HB2	2:A:918:LEU:HD23	1.99	0.43
2:A:1717:ALA:HA	2:A:1720:MET:HE2	1.99	0.43
2:A:2967:VAL:HA	2:A:2970:LEU:HG	2.01	0.43
2:A:3178:HIS:CD2	2:A:3263:MET:HA	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:314:LEU:HD21	2:D:393:MET:HE2	2.00	0.43
2:D:853:PRO:HD3	2:D:1086:ARG:HB2	1.99	0.43
2:D:3016:ARG:O	2:D:3018:ARG:NH1	2.51	0.43
2:D:4177:VAL:HB	2:D:4880:VAL:HG22	2.00	0.43
2:B:219:SER:H	2:B:349:MET:CE	2.30	0.43
2:B:1089:ARG:HH21	2:B:1596:TRP:CG	2.36	0.43
2:B:1717:ALA:HA	2:B:1720:MET:HE2	1.99	0.43
2:B:2500:ALA:HB1	2:B:2554:ARG:NH2	2.33	0.43
2:B:2666:LEU:HB3	2:B:2667:PRO:HD3	2.00	0.43
2:B:2975:PHE:CE2	2:B:3036:LEU:HD13	2.53	0.43
2:B:3100:ALA:C	2:B:3103:PRO:HD2	2.44	0.43
2:B:3228:TYR:CE1	2:B:3232:PRO:HB3	2.53	0.43
2:C:641:ASP:OD2	2:C:641:ASP:N	2.51	0.43
2:C:1725:TYR:CE2	2:C:2101:ALA:HB1	2.53	0.43
2:C:2500:ALA:HB1	2:C:2554:ARG:HH22	1.83	0.43
2:C:2729:HIS:CD2	2:C:2760:TYR:HB2	2.52	0.43
2:C:3061:LEU:HD13	2:C:3126:VAL:HG13	2.00	0.43
2:A:641:ASP:N	2:A:641:ASP:OD2	2.51	0.43
2:A:1725:TYR:CE2	2:A:2101:ALA:HB1	2.53	0.43
2:A:2685:TYR:HB2	2:A:2909:ASP:OD1	2.17	0.43
2:A:3148:VAL:O	2:A:3152:ARG:HG3	2.18	0.43
2:A:3846:LEU:HD13	2:A:3854:PHE:CZ	2.53	0.43
1:E:63:GLY:HA3	1:E:75:LEU:HD21	2.00	0.43
2:D:114:LEU:HA	2:D:174:LYS:HA	2.00	0.43
2:D:1089:ARG:HH21	2:D:1596:TRP:CD1	2.36	0.43
2:D:1810:VAL:HB	2:D:1817:LEU:HD13	2.00	0.43
2:D:3148:VAL:O	2:D:3152:ARG:HG3	2.18	0.43
2:D:4565:SER:HB2	2:D:4567:TYR:CD2	2.54	0.43
2:B:114:LEU:HA	2:B:174:LYS:HA	2.00	0.43
2:B:314:LEU:HD21	2:B:393:MET:HE2	2.00	0.43
2:B:956:HIS:O	2:B:960:LYS:HG3	2.17	0.43
2:B:1077:VAL:HG13	2:B:1077:VAL:O	2.18	0.43
2:B:1725:TYR:CE2	2:B:2101:ALA:HB1	2.53	0.43
2:B:2620:TYR:HB2	2:B:2627:TRP:CD1	2.53	0.43
2:B:2927:GLN:OE1	2:B:3003:MET:HG2	2.18	0.43
2:B:3278:GLY:O	2:B:3281:LEU:HG	2.19	0.43
2:B:3777:MET:SD	2:B:3846:LEU:HD21	2.59	0.43
2:B:3846:LEU:HD13	2:B:3854:PHE:CZ	2.53	0.43
2:C:1979:PHE:HB2	2:C:3628:TRP:CZ2	2.52	0.43
2:C:2791:ARG:HA	2:C:2901:TYR:HA	2.01	0.43
2:C:3926:GLY:CA	2:C:4935:GLY:HA3	2.47	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:4177:VAL:HB	2:C:4880:VAL:HG22	1.99	0.43
2:A:934:GLN:HA	2:A:937:LEU:HD12	1.99	0.43
2:A:3278:GLY:O	2:A:3281:LEU:HG	2.19	0.43
2:A:3777:MET:SD	2:A:3846:LEU:HD21	2.59	0.43
2:A:3961:ASP:OD2	2:A:3963:SER:OG	2.32	0.43
2:A:4304:GLY:O	2:A:4308:ILE:HG12	2.18	0.43
2:D:570:GLY:O	2:D:574:VAL:HG23	2.18	0.43
2:D:897:LYS:HB2	2:D:915:HIS:CE1	2.53	0.43
2:D:1089:ARG:HH21	2:D:1596:TRP:CG	2.36	0.43
2:D:2728:SER:HA	2:D:2731:LYS:NZ	2.33	0.43
2:D:3061:LEU:HD13	2:D:3126:VAL:HG13	2.00	0.43
2:B:228:LEU:HD21	2:B:277:LEU:HD13	2.00	0.43
2:B:3074:ASN:HD21	2:B:3093:ILE:HD11	1.81	0.43
2:C:246:THR:HG22	2:C:247:VAL:O	2.18	0.43
2:C:1421:MET:HA	2:C:1421:MET:HE3	2.00	0.43
2:C:2567:ASP:O	2:C:2571:VAL:HG23	2.18	0.43
2:C:3846:LEU:HD13	2:C:3854:PHE:CZ	2.54	0.43
2:C:4304:GLY:O	2:C:4308:ILE:HG12	2.18	0.43
2:A:1436:GLN:NE2	2:A:1546:GLN:O	2.51	0.43
2:A:1810:VAL:HB	2:A:1817:LEU:HD13	2.00	0.43
2:A:2500:ALA:HB1	2:A:2554:ARG:NH2	2.33	0.43
2:A:3612:PRO:HG2	2:A:3615:ARG:HG3	2.01	0.43
2:A:4045:LYS:NZ	2:A:4072:THR:HA	2.34	0.43
2:D:472:HIS:O	2:D:476:GLN:HG2	2.17	0.43
2:D:1564:MET:CE	2:D:1565:PRO:HD2	2.38	0.43
2:D:1815:GLU:O	2:D:1819:VAL:HB	2.19	0.43
2:D:2852:TRP:O	2:D:2856:LYS:HE2	2.17	0.43
2:D:2967:VAL:HA	2:D:2970:LEU:HG	2.01	0.43
2:D:3138:TYR:CZ	2:D:3209:PRO:HD3	2.54	0.43
2:D:3278:GLY:O	2:D:3281:LEU:HG	2.19	0.43
2:D:3846:LEU:HD13	2:D:3854:PHE:CZ	2.54	0.43
2:D:4172:PHE:CZ	2:D:4189:PHE:HA	2.53	0.43
2:B:2668:CYS:O	2:B:2672:VAL:HG23	2.18	0.43
2:B:2791:ARG:HA	2:B:2901:TYR:HA	2.01	0.43
2:B:3138:TYR:CZ	2:B:3209:PRO:HD3	2.54	0.43
2:B:4781:TYR:HD1	2:B:4846:PHE:CE1	2.37	0.43
2:C:2758:LYS:HB2	2:C:2762:LEU:HB2	2.01	0.43
2:A:1815:GLU:O	2:A:1819:VAL:HB	2.19	0.43
2:A:1847:GLU:HG3	2:A:1850:VAL:H	1.83	0.43
2:A:2444:THR:O	2:A:2452:VAL:N	2.42	0.43
2:A:2668:CYS:O	2:A:2672:VAL:HG23	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:2764:SER:O	2:A:2768:LYS:HG3	2.18	0.43
2:A:2975:PHE:CE2	2:A:3036:LEU:HD13	2.53	0.43
2:A:4252:ILE:HG21	2:B:4707:MET:HG3	2.01	0.43
2:D:558:LEU:HG	2:D:571:ILE:HG23	2.01	0.43
2:D:737:ILE:HG21	2:D:1534:GLU:OE1	2.19	0.43
2:D:1421:MET:HE3	2:D:1421:MET:HA	2.00	0.43
2:D:2172:MET:O	2:D:2176:VAL:HG23	2.17	0.43
2:D:3956:MET:HG2	2:D:4065:PHE:CZ	2.54	0.43
2:D:4060:GLN:O	2:D:4064:GLU:OE1	2.36	0.43
2:B:2856:LYS:HA	2:B:2859:GLU:CG	2.44	0.43
2:B:3129:SER:HA	2:B:3132:ARG:HE	1.84	0.43
2:B:4172:PHE:CZ	2:B:4189:PHE:HA	2.53	0.43
2:B:4565:SER:HB2	2:B:4567:TYR:CD2	2.53	0.43
2:C:114:LEU:HA	2:C:174:LYS:HA	2.00	0.43
2:C:293:GLN:HB2	2:C:343:ARG:HH22	1.83	0.43
2:C:586:LEU:HD22	2:C:617:LEU:HD23	2.00	0.43
2:C:943:LEU:O	2:C:948:CYS:N	2.43	0.43
2:C:1089:ARG:HH21	2:C:1596:TRP:CG	2.36	0.43
2:C:1282:CYS:SG	2:C:1556:GLU:HG2	2.59	0.43
2:C:3138:TYR:CZ	2:C:3209:PRO:HD3	2.54	0.43
2:C:4045:LYS:NZ	2:C:4072:THR:HA	2.34	0.43
2:C:4136:ILE:HG23	2:C:4150:PHE:HE1	1.83	0.43
2:A:274:LEU:HD23	2:A:274:LEU:HA	1.85	0.43
2:A:654:SER:O	2:A:655:MET:HE2	2.19	0.43
2:A:2833:LEU:HB2	2:A:2838[B]:HIS:ND1	2.33	0.43
2:A:4283:PHE:HE2	2:B:4495:PHE:CE2	2.36	0.43
2:D:20:VAL:HG12	2:D:216:PRO:HA	2.00	0.43
2:D:1282:CYS:SG	2:D:1556:GLU:HG2	2.59	0.43
2:D:3100:ALA:C	2:D:3103:PRO:HD2	2.44	0.43
2:D:3137:LEU:HA	2:D:3140:LEU:HD12	1.99	0.43
2:D:4136:ILE:HG23	2:D:4150:PHE:HE1	1.83	0.43
2:D:4304:GLY:O	2:D:4308:ILE:HG12	2.18	0.43
2:B:485:ARG:O	2:B:489:PHE:HB2	2.18	0.43
2:B:2082:ARG:HH12	2:B:3685:ASP:CG	2.26	0.43
2:B:2967:VAL:HA	2:B:2970:LEU:HG	2.01	0.43
2:C:485:ARG:O	2:C:489:PHE:HB2	2.18	0.43
2:C:1717:ALA:HA	2:C:1720:MET:HE2	1.99	0.43
2:C:3016:ARG:O	2:C:3018:ARG:NH1	2.51	0.43
2:C:3668:ILE:HD13	2:C:3736:ALA:HB2	1.99	0.43
2:C:4781:TYR:HD1	2:C:4846:PHE:CE1	2.37	0.43
2:A:485:ARG:O	2:A:489:PHE:HB2	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:570:GLY:O	2:A:574:VAL:HG23	2.18	0.43
2:A:737:ILE:HG21	2:A:1534:GLU:OE1	2.19	0.43
2:A:1282:CYS:SG	2:A:1556:GLU:HG2	2.59	0.43
2:A:1651:LEU:HD12	2:A:1698:LEU:HG	2.00	0.43
2:A:2229:LEU:HD12	2:A:2297:ARG:HB3	2.01	0.43
2:A:2925:PHE:CZ	2:A:2970:LEU:HD13	2.54	0.43
2:A:3016:ARG:HA	2:A:3096:TYR:OH	2.19	0.43
2:A:3129:SER:HA	2:A:3132:ARG:HE	1.84	0.43
2:A:3800:CYS:O	2:A:3880:ARG:NH2	2.52	0.43
2:A:4177:VAL:HB	2:A:4880:VAL:HG22	2.00	0.43
2:D:485:ARG:O	2:D:489:PHE:HB2	2.18	0.43
2:D:654:SER:O	2:D:655:MET:HE2	2.19	0.43
2:D:675:TYR:CE1	2:D:790:PRO:HB3	2.54	0.43
2:D:1699:ARG:O	2:D:1703:TYR:HB2	2.18	0.43
2:D:2229:LEU:HD12	2:D:2297:ARG:HB3	2.01	0.43
2:D:2638:LEU:HD23	2:D:2638:LEU:HA	1.83	0.43
2:D:2791:ARG:HA	2:D:2901:TYR:HA	2.01	0.43
2:D:2849:HIS:HD2	2:D:2852:TRP:HE3	1.65	0.43
2:D:3016:ARG:HA	2:D:3096:TYR:OH	2.19	0.43
2:D:3612:PRO:HG2	2:D:3615:ARG:HG3	2.01	0.43
2:D:4107:GLU:OE1	2:D:4147:ARG:NH1	2.43	0.43
2:B:20:VAL:HG12	2:B:216:PRO:HA	2.00	0.43
2:B:570:GLY:O	2:B:574:VAL:HG23	2.18	0.43
2:B:675:TYR:CE1	2:B:790:PRO:HB3	2.54	0.43
2:B:897:LYS:HB2	2:B:915:HIS:CE1	2.53	0.43
2:B:1118:SER:HB3	2:B:1204:VAL:HG11	2.00	0.43
2:B:2500:ALA:HB1	2:B:2554:ARG:HH22	1.82	0.43
2:B:2849:HIS:HD2	2:B:2852:TRP:HE3	1.65	0.43
2:B:3697:LYS:HG3	2:B:3700:HIS:HE2	1.83	0.43
2:B:4045:LYS:NZ	2:B:4072:THR:HA	2.34	0.43
2:B:4964:ASP:N	2:B:4964:ASP:OD1	2.50	0.43
2:C:675:TYR:CE1	2:C:790:PRO:HB3	2.54	0.43
2:C:1699:ARG:O	2:C:1703:TYR:HB2	2.18	0.43
2:C:2666:LEU:HB3	2:C:2667:PRO:HD3	2.00	0.43
2:C:2925:PHE:CZ	2:C:2970:LEU:HD13	2.54	0.43
2:A:114:LEU:HA	2:A:174:LYS:HA	2.00	0.43
2:A:2791:ARG:HA	2:A:2901:TYR:HA	2.01	0.43
2:A:2975:PHE:HB3	2:A:2979:ARG:NH2	2.32	0.43
2:A:3956:MET:HG2	2:A:4065:PHE:CZ	2.54	0.43
2:D:293:GLN:HB2	2:D:343:ARG:HH22	1.83	0.43
2:D:1433:PHE:HB3	2:C:2830:ASN:ND2	2.34	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:2666:LEU:HB3	2:D:2667:PRO:HD3	2.00	0.43
2:D:3830:LEU:HD11	2:D:3909:ALA:HB2	2.01	0.43
2:B:1089:ARG:HH21	2:B:1596:TRP:CD1	2.36	0.43
2:B:1979:PHE:CD1	2:B:1993:ARG:HG2	2.54	0.43
2:B:2054:LYS:NZ	2:B:2056:SER:OG	2.31	0.43
2:B:3612:PRO:HG2	2:B:3615:ARG:HG3	2.01	0.43
2:B:4177:VAL:HB	2:B:4880:VAL:HG22	2.00	0.43
2:C:2173:GLU:HA	2:C:2176:VAL:HB	2.00	0.43
2:C:3777:MET:SD	2:C:3846:LEU:HD21	2.59	0.43
2:A:1048:ASP:OD1	2:A:1049:SER:N	2.52	0.42
2:A:1421:MET:HE3	2:A:1421:MET:HA	2.00	0.42
2:A:2123:LEU:HD13	2:A:2167:MET:HE2	2.01	0.42
2:A:2758:LYS:HB2	2:A:2762:LEU:HB2	2.00	0.42
2:A:3011:LEU:HD23	2:A:3011:LEU:HA	1.94	0.42
2:A:3697:LYS:HG3	2:A:3700:HIS:HE2	1.83	0.42
2:A:3890:TRP:O	2:B:76:ARG:NH1	2.52	0.42
2:D:468:GLU:HA	2:D:475:LYS:NZ	2.34	0.42
2:D:898:ILE:HD13	2:D:918:LEU:HD21	2.01	0.42
2:D:1048:ASP:OD1	2:D:1049:SER:N	2.52	0.42
2:D:2492:PHE:O	2:D:2496:LEU:N	2.45	0.42
2:D:2497:ARG:NH2	2:D:2870:LEU:HA	2.33	0.42
2:D:2975:PHE:CE2	2:D:3036:LEU:HD13	2.53	0.42
2:D:3290:ILE:C	2:D:3292:GLU:H	2.26	0.42
2:B:558:LEU:HG	2:B:571:ILE:HG23	2.01	0.42
2:B:1048:ASP:OD1	2:B:1049:SER:N	2.52	0.42
2:B:2758:LYS:HB2	2:B:2762:LEU:HB2	2.00	0.42
2:B:3016:ARG:HA	2:B:3096:TYR:OH	2.19	0.42
2:B:3800:CYS:O	2:B:3880:ARG:NH2	2.52	0.42
2:B:3956:MET:HG2	2:B:4065:PHE:CZ	2.54	0.42
2:B:4107:GLU:OE1	2:B:4147:ARG:NH1	2.43	0.42
2:B:4264:LEU:HG	2:C:4694:LEU:HD21	2.00	0.42
2:C:20:VAL:HG12	2:C:216:PRO:HA	1.99	0.42
2:C:274:LEU:HD23	2:C:274:LEU:HA	1.85	0.42
2:C:1048:ASP:OD1	2:C:1049:SER:N	2.52	0.42
2:C:2729:HIS:O	2:C:2732:TRP:HB3	2.19	0.42
2:C:3100:ALA:C	2:C:3103:PRO:HD2	2.44	0.42
2:C:3830:LEU:HD11	2:C:3909:ALA:HB2	2.01	0.42
2:A:20:VAL:HG12	2:A:216:PRO:HA	2.00	0.42
2:A:1973:ILE:HB	2:A:3608:LEU:HD21	2.01	0.42
2:A:4136:ILE:HG23	2:A:4150:PHE:HE1	1.83	0.42
2:A:4807:ASP:O	2:D:4522:VAL:HG12	2.18	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:4834:PRO:HB3	2:A:4843:ARG:HH11	1.85	0.42
2:D:2758:LYS:HB2	2:D:2762:LEU:HB2	2.00	0.42
2:D:4043:ILE:HG23	2:D:4048:PHE:CE2	2.55	0.42
2:B:3016:ARG:O	2:B:3018:ARG:NH1	2.51	0.42
2:C:1847:GLU:HG3	2:C:1850:VAL:H	1.83	0.42
2:C:1915:ASP:OD1	2:C:2090:ARG:NH1	2.51	0.42
2:C:1979:PHE:CD1	2:C:1993:ARG:HG2	2.54	0.42
2:C:2773:TRP:HB3	2:C:2774:PRO:HD3	2.02	0.42
2:C:2968:LEU:HB2	2:C:2969:PRO:HD3	2.01	0.42
2:C:3972:MET:O	2:C:4094:ILE:HD11	2.20	0.42
2:A:606:ARG:HH21	2:A:1633:PRO:HD2	1.84	0.42
2:A:814:LEU:HD12	2:A:815:PRO:HD2	2.02	0.42
2:A:3027:THR:HA	2:A:3030:VAL:HG12	2.02	0.42
2:A:3124:GLU:C	2:A:3126:VAL:H	2.26	0.42
2:A:3830:LEU:HD11	2:A:3909:ALA:HB2	2.01	0.42
2:A:4107:GLU:OE1	2:A:4147:ARG:NH1	2.43	0.42
2:A:4565:SER:HB2	2:A:4567:TYR:CD2	2.54	0.42
2:D:1717:ALA:HA	2:D:1720:MET:HE2	1.99	0.42
2:D:2173:GLU:HA	2:D:2176:VAL:HB	2.00	0.42
2:D:2732:TRP:CH2	2:D:2756:LEU:HB3	2.51	0.42
2:D:4136:ILE:HG22	2:D:4917:ASN:HB3	2.01	0.42
2:D:4616:TYR:CE2	2:D:4632:ARG:HG2	2.53	0.42
2:D:4781:TYR:HD1	2:D:4846:PHE:CE1	2.37	0.42
2:B:2729:HIS:O	2:B:2732:TRP:HB3	2.19	0.42
2:C:630:HIS:CE1	2:C:1671:ARG:HE	2.38	0.42
2:C:2688:MET:CE	2:C:2689:MET:HE3	2.47	0.42
2:C:3016:ARG:HA	2:C:3096:TYR:OH	2.19	0.42
2:A:2620:TYR:HB2	2:A:2627:TRP:CD1	2.53	0.42
2:A:4616:TYR:CE2	2:A:4632:ARG:HG2	2.53	0.42
2:D:630:HIS:CE1	2:D:1671:ARG:HE	2.38	0.42
2:D:695:VAL:O	2:D:727:PHE:N	2.44	0.42
2:D:1973:ILE:HB	2:D:3608:LEU:HD21	2.02	0.42
2:D:2689:MET:HE1	2:D:2785:TRP:HB3	2.02	0.42
2:D:2927:GLN:OE1	2:D:3003:MET:HG2	2.18	0.42
2:D:3228:TYR:H	2:D:3290:ILE:HG21	1.85	0.42
2:B:468:GLU:HA	2:B:475:LYS:HZ1	1.85	0.42
2:B:814:LEU:HD12	2:B:815:PRO:HD2	2.02	0.42
2:B:1699:ARG:O	2:B:1703:TYR:HB2	2.19	0.42
2:B:3304:GLN:HB3	2:B:3305:PRO:HD3	2.01	0.42
2:C:1089:ARG:HH21	2:C:1596:TRP:CD1	2.36	0.42
2:C:1118:SER:HB3	2:C:1204:VAL:HG11	2.00	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1272:ARG:NH2	2:C:1582:CYS:SG	2.93	0.42
2:C:3027:THR:HA	2:C:3030:VAL:HG12	2.02	0.42
2:C:3612:PRO:HG2	2:C:3615:ARG:HG3	2.01	0.42
2:C:3956:MET:HG2	2:C:4065:PHE:CZ	2.54	0.42
2:A:558:LEU:HG	2:A:571:ILE:HG23	2.00	0.42
2:A:675:TYR:CE1	2:A:790:PRO:HB3	2.54	0.42
2:A:2258:ARG:HB3	2:A:2260:PRO:HD2	2.02	0.42
2:A:3010:LYS:O	2:A:3014:LEU:HD23	2.20	0.42
2:A:3175:LEU:O	2:A:3175:LEU:HD23	2.19	0.42
2:A:4136:ILE:HG22	2:A:4917:ASN:HB3	2.01	0.42
2:A:4781:TYR:HD1	2:A:4846:PHE:CE1	2.37	0.42
1:E:63:GLY:O	1:E:67:MET:HG2	2.20	0.42
2:D:856:SER:HB3	2:D:1078:CYS:SG	2.60	0.42
2:D:881:ILE:HD13	2:D:1062:TYR:CZ	2.55	0.42
2:D:2773:TRP:HB3	2:D:2774:PRO:HD3	2.02	0.42
2:D:4048:PHE:CZ	2:D:4080:TYR:HB3	2.55	0.42
2:B:538:ALA:O	2:B:542:ARG:HB2	2.20	0.42
2:B:2925:PHE:CZ	2:B:2970:LEU:HD13	2.54	0.42
2:B:4043:ILE:HG23	2:B:4048:PHE:CE2	2.55	0.42
2:C:654:SER:O	2:C:655:MET:HE2	2.19	0.42
2:C:856:SER:HB3	2:C:1078:CYS:SG	2.60	0.42
2:C:881:ILE:HD13	2:C:1062:TYR:CZ	2.55	0.42
2:C:2935:GLU:O	2:C:2938:GLN:N	2.53	0.42
2:C:3010:LYS:O	2:C:3014:LEU:HD23	2.20	0.42
2:C:3175:LEU:HD23	2:C:3175:LEU:O	2.19	0.42
2:A:2935:GLU:O	2:A:2938:GLN:N	2.53	0.42
2:A:3222:ALA:HB1	2:A:3282:LYS:HG2	2.02	0.42
2:A:3972:MET:O	2:A:4094:ILE:HD11	2.19	0.42
1:E:19:LYS:HD3	1:E:19:LYS:HA	1.85	0.42
2:D:814:LEU:HD12	2:D:815:PRO:HD2	2.01	0.42
2:D:1979:PHE:CD1	2:D:1993:ARG:HG2	2.54	0.42
2:D:3124:GLU:C	2:D:3126:VAL:H	2.26	0.42
2:D:3129:SER:HA	2:D:3132:ARG:HE	1.84	0.42
2:D:3777:MET:SD	2:D:3846:LEU:HD21	2.59	0.42
2:B:131:CYS:SG	2:B:150:GLN:HB2	2.60	0.42
2:B:641:ASP:OD2	2:B:641:ASP:N	2.51	0.42
2:B:718:VAL:HG23	2:B:793:SER:HB3	2.01	0.42
2:B:1973:ILE:HB	2:B:3608:LEU:HD21	2.02	0.42
2:B:3175:LEU:O	2:B:3175:LEU:HD23	2.19	0.42
2:B:3210:SER:OG	2:B:3213:LYS:NZ	2.48	0.42
2:B:3972:MET:O	2:B:4094:ILE:HD11	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:4616:TYR:CE2	2:B:4632:ARG:HG2	2.53	0.42
2:C:2638:LEU:HD23	2:C:2638:LEU:HA	1.83	0.42
2:C:3129:SER:HA	2:C:3132:ARG:HE	1.84	0.42
2:C:3304:GLN:HB3	2:C:3305:PRO:HD3	2.01	0.42
2:A:1249:MET:HB2	2:A:1599:MET:HB3	2.02	0.42
2:A:1272:ARG:NH2	2:A:1582:CYS:SG	2.93	0.42
2:A:2729:HIS:O	2:A:2732:TRP:HB3	2.19	0.42
2:A:2927:GLN:OE1	2:A:3003:MET:HG2	2.18	0.42
2:A:3138:TYR:CZ	2:A:3209:PRO:HD3	2.54	0.42
1:F:63:GLY:O	1:F:67:MET:HG2	2.20	0.42
2:D:2925:PHE:CZ	2:D:2970:LEU:HD13	2.54	0.42
2:D:3187:LYS:O	2:D:3191:GLU:HB2	2.20	0.42
2:B:630:HIS:CE1	2:B:1671:ARG:HE	2.38	0.42
2:B:737:ILE:HG21	2:B:1534:GLU:OE1	2.19	0.42
2:B:2258:ARG:HB3	2:B:2260:PRO:HD2	2.02	0.42
2:B:3222:ALA:HB1	2:B:3282:LYS:HG2	2.02	0.42
2:B:3600:VAL:O	2:B:3604:ARG:HD3	2.20	0.42
2:C:919:VAL:HG12	2:C:920:GLU:N	2.35	0.42
2:C:2248:MET:HE3	2:C:2248:MET:HB2	1.90	0.42
2:C:2849:HIS:HD2	2:C:2852:TRP:HE3	1.65	0.42
2:A:630:HIS:CE1	2:A:1671:ARG:HE	2.38	0.42
2:A:1697:LEU:HD23	2:A:1697:LEU:HA	1.87	0.42
2:A:1839:LEU:HA	2:A:1842:ILE:HG22	2.02	0.42
2:A:1979:PHE:CD1	2:A:1993:ARG:HG2	2.54	0.42
2:A:3159:LEU:HB3	2:A:3241:MET:HG2	2.02	0.42
2:A:3602:CYS:HA	2:A:3605:MET:CE	2.50	0.42
2:A:3955:GLN:HG2	2:A:4016:PHE:CE2	2.55	0.42
2:A:4602:ARG:NH1	2:A:4631:ASP:OD1	2.53	0.42
2:D:1272:ARG:NH2	2:D:1582:CYS:SG	2.93	0.42
2:D:1304:LEU:HD23	2:D:1304:LEU:HA	1.92	0.42
2:D:2935:GLU:O	2:D:2938:GLN:N	2.53	0.42
2:D:3027:THR:HA	2:D:3030:VAL:HG12	2.02	0.42
2:D:4045:LYS:NZ	2:D:4072:THR:HA	2.34	0.42
2:B:919:VAL:HG12	2:B:920:GLU:N	2.34	0.42
2:B:1421:MET:HA	2:B:1421:MET:HE3	2.00	0.42
2:B:1719:LEU:HA	2:B:1722:ASN:HB2	2.02	0.42
2:B:2571:VAL:HA	2:B:2574:LEU:CD2	2.50	0.42
2:B:3159:LEU:HB3	2:B:3241:MET:HG2	2.02	0.42
2:B:3830:LEU:HD11	2:B:3909:ALA:HB2	2.01	0.42
2:B:4136:ILE:HG22	2:B:4917:ASN:HB3	2.01	0.42
2:B:4136:ILE:HG23	2:B:4150:PHE:HE1	1.83	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:737:ILE:HG21	2:C:1534:GLU:OE1	2.19	0.42
2:C:814:LEU:HD12	2:C:815:PRO:HD2	2.02	0.42
2:C:1719:LEU:HA	2:C:1722:ASN:HB2	2.02	0.42
2:C:1819:VAL:HG23	2:C:1902:VAL:HG22	2.01	0.42
2:C:3159:LEU:HB3	2:C:3241:MET:HG2	2.02	0.42
2:C:3228:TYR:H	2:C:3290:ILE:HG21	1.85	0.42
2:C:3600:VAL:O	2:C:3604:ARG:HD3	2.20	0.42
2:C:3800:CYS:O	2:C:3880:ARG:NH2	2.52	0.42
2:A:1014:GLN:O	2:A:1027:ARG:NH2	2.53	0.42
2:A:1118:SER:HB3	2:A:1204:VAL:HG11	2.00	0.42
2:A:2095:ILE:HD11	2:A:3629:ILE:HG23	2.02	0.42
2:A:2571:VAL:HA	2:A:2574:LEU:CD2	2.50	0.42
2:A:2772:ARG:HA	2:A:2772:ARG:HD3	1.90	0.42
2:A:2935:GLU:O	2:A:2939:TYR:CD1	2.67	0.42
2:A:3210:SER:OG	2:A:3213:LYS:NZ	2.48	0.42
2:D:965:LYS:HA	2:D:977:LYS:HZ1	1.85	0.42
2:D:1047:LYS:C	2:D:1051:ARG:HD3	2.45	0.42
2:D:2123:LEU:HD13	2:D:2167:MET:HE2	2.01	0.42
2:D:2729:HIS:O	2:D:2732:TRP:HB3	2.19	0.42
2:D:2935:GLU:O	2:D:2939:TYR:CD1	2.67	0.42
2:D:3042:ALA:HB3	2:D:3117:PHE:HB3	2.02	0.42
2:D:3972:MET:O	2:D:4094:ILE:HD11	2.19	0.42
2:D:4602:ARG:NH1	2:D:4631:ASP:OD1	2.53	0.42
2:B:654:SER:O	2:B:655:MET:HE2	2.19	0.42
2:B:1819:VAL:HG23	2:B:1902:VAL:HG22	2.02	0.42
2:B:2539:GLU:HB2	2:B:2581:ARG:HD3	2.02	0.42
2:B:3027:THR:HA	2:B:3030:VAL:HG12	2.02	0.42
2:C:558:LEU:HG	2:C:571:ILE:HG23	2.00	0.42
2:C:898:ILE:HD13	2:C:918:LEU:HD21	2.01	0.42
2:C:1047:LYS:C	2:C:1051:ARG:HD3	2.45	0.42
2:C:1810:VAL:HB	2:C:1817:LEU:HD13	2.00	0.42
2:C:1973:ILE:HB	2:C:3608:LEU:HD21	2.01	0.42
2:C:4048:PHE:CZ	2:C:4080:TYR:HB3	2.55	0.42
2:C:4602:ARG:NH1	2:C:4631:ASP:OD1	2.53	0.42
2:A:943:LEU:O	2:A:948:CYS:N	2.43	0.42
2:A:2689:MET:HE1	2:A:2785:TRP:HB3	2.02	0.42
2:A:2732:TRP:CH2	2:A:2756:LEU:HB3	2.51	0.42
2:A:2773:TRP:HB3	2:A:2774:PRO:HD3	2.02	0.42
1:G:26:HIS:CD2	1:G:41:ARG:HG2	2.55	0.42
2:D:606:ARG:HH21	2:D:1633:PRO:HD2	1.84	0.42
2:D:919:VAL:HG12	2:D:920:GLU:N	2.34	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:3932:GLN:HG2	2:D:3985:MET:HE2	2.01	0.42
2:D:3955:GLN:HG2	2:D:4016:PHE:CE2	2.55	0.42
2:B:709:GLY:HA3	2:B:723:PHE:CD1	2.55	0.42
2:B:881:ILE:HD13	2:B:1062:TYR:CZ	2.55	0.42
2:B:1272:ARG:NH2	2:B:1582:CYS:SG	2.93	0.42
2:B:1810:VAL:HB	2:B:1817:LEU:HD13	2.00	0.42
2:B:2095:ILE:HD11	2:B:3629:ILE:HG23	2.02	0.42
2:B:2773:TRP:HB3	2:B:2774:PRO:HD3	2.02	0.42
2:B:3138:TYR:CG	2:B:3208:ILE:HG13	2.55	0.42
2:B:3246:MET:HE3	2:B:3276:LEU:HD11	2.02	0.42
2:C:538:ALA:O	2:C:542:ARG:HB2	2.20	0.42
2:C:1021:GLN:NE2	2:C:1022:GLN:O	2.53	0.42
2:C:1487:MET:HE1	2:C:1544:PHE:CG	2.55	0.42
2:C:1815:GLU:O	2:C:1819:VAL:HB	2.19	0.42
2:C:2095:ILE:HD11	2:C:3629:ILE:HG23	2.02	0.42
2:C:2123:LEU:HD13	2:C:2167:MET:HE2	2.01	0.42
2:C:3246:MET:HE3	2:C:3276:LEU:HD11	2.02	0.42
2:C:3955:GLN:HG2	2:C:4016:PHE:CE2	2.55	0.42
1:H:63:GLY:O	1:H:67:MET:HG2	2.20	0.41
2:A:709:GLY:HA3	2:A:723:PHE:CD1	2.55	0.41
2:A:856:SER:HB3	2:A:1078:CYS:SG	2.60	0.41
2:A:881:ILE:HD13	2:A:1062:TYR:CZ	2.55	0.41
2:A:1497:GLY:O	2:A:1499:GLY:N	2.53	0.41
2:A:1719:LEU:HA	2:A:1722:ASN:HB2	2.02	0.41
2:A:2082:ARG:HH12	2:A:3685:ASP:CG	2.26	0.41
2:A:4043:ILE:HG23	2:A:4048:PHE:CE2	2.55	0.41
1:G:63:GLY:O	1:G:67:MET:HG2	2.20	0.41
2:D:1014:GLN:O	2:D:1027:ARG:NH2	2.53	0.41
2:D:1265:HIS:CE1	2:D:1268:ILE:HG13	2.55	0.41
2:D:1839:LEU:HA	2:D:1842:ILE:HG22	2.02	0.41
2:D:2389:MET:HG3	2:D:2464:HIS:CE1	2.55	0.41
2:D:2891:ASP:OD1	2:D:2892:ILE:N	2.53	0.41
2:D:3600:VAL:O	2:D:3604:ARG:HD3	2.20	0.41
2:D:3800:CYS:O	2:D:3880:ARG:NH2	2.52	0.41
2:B:419:ILE:HG21	2:B:492:GLU:HG3	2.02	0.41
2:B:1497:GLY:O	2:B:1499:GLY:N	2.53	0.41
2:B:1815:GLU:O	2:B:1819:VAL:HB	2.19	0.41
2:B:1839:LEU:HA	2:B:1842:ILE:HG22	2.02	0.41
2:B:3228:TYR:H	2:B:3290:ILE:HG21	1.85	0.41
2:B:4602:ARG:NH1	2:B:4631:ASP:OD1	2.53	0.41
2:C:468:GLU:HA	2:C:475:LYS:NZ	2.34	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:514:PHE:HD2	2:C:526:TRP:HB2	1.85	0.41
2:C:1014:GLN:O	2:C:1027:ARG:NH2	2.53	0.41
2:C:2772:ARG:HA	2:C:2772:ARG:HD3	1.90	0.41
2:C:3187:LYS:O	2:C:3191:GLU:HB2	2.20	0.41
2:C:4964:ASP:N	2:C:4964:ASP:OD1	2.50	0.41
2:A:375:GLN:O	2:A:376:SER:OG	2.32	0.41
2:A:538:ALA:O	2:A:542:ARG:HB2	2.20	0.41
2:A:600:LEU:O	2:A:604:HIS:HB2	2.20	0.41
2:A:1265:HIS:CE1	2:A:1268:ILE:HG13	2.55	0.41
2:A:2891:ASP:OD1	2:A:2892:ILE:N	2.53	0.41
2:A:2968:LEU:HB2	2:A:2969:PRO:HD3	2.01	0.41
2:A:3001:LYS:HD3	2:A:3041:ASP:CG	2.45	0.41
2:A:3237:VAL:O	2:A:3240:PRO:HD2	2.21	0.41
2:A:3249:TRP:HE3	2:A:3266:THR:HG21	1.86	0.41
2:A:3279:ASN:O	2:A:3283:ILE:HD12	2.21	0.41
2:D:600:LEU:O	2:D:604:HIS:HB2	2.20	0.41
2:D:1249:MET:HB2	2:D:1599:MET:HB3	2.02	0.41
2:D:1497:GLY:O	2:D:1499:GLY:N	2.53	0.41
2:D:1719:LEU:HA	2:D:1722:ASN:HB2	2.02	0.41
2:D:2689:MET:O	2:D:2689:MET:HG3	2.20	0.41
2:D:3304:GLN:HB3	2:D:3305:PRO:HD3	2.01	0.41
2:B:468:GLU:HA	2:B:475:LYS:NZ	2.34	0.41
2:B:606:ARG:HH21	2:B:1633:PRO:HD2	1.84	0.41
2:B:2935:GLU:O	2:B:2938:GLN:N	2.53	0.41
2:B:2939:TYR:CD2	2:B:2956:TYR:CD2	3.09	0.41
2:B:3246:MET:SD	2:B:3247:SER:N	2.93	0.41
2:B:3279:ASN:O	2:B:3283:ILE:HD12	2.21	0.41
2:C:131:CYS:SG	2:C:150:GLN:HB2	2.60	0.41
2:C:2229:LEU:HD12	2:C:2297:ARG:HB3	2.01	0.41
2:C:2721:ILE:HG22	2:C:2772:ARG:HH11	1.85	0.41
2:C:3138:TYR:CG	2:C:3208:ILE:HG13	2.55	0.41
2:C:3246:MET:SD	2:C:3247:SER:N	2.93	0.41
2:C:4043:ILE:HG23	2:C:4048:PHE:CE2	2.55	0.41
2:C:4305:PHE:HA	2:C:4308:ILE:HG12	2.03	0.41
2:A:468:GLU:HA	2:A:475:LYS:NZ	2.34	0.41
2:A:898:ILE:HD13	2:A:918:LEU:HD21	2.01	0.41
2:A:919:VAL:HG12	2:A:920:GLU:N	2.35	0.41
2:A:1021:GLN:NE2	2:A:1022:GLN:O	2.53	0.41
2:A:3932:GLN:HG2	2:A:3985:MET:HE2	2.01	0.41
2:A:4045:LYS:HZ1	2:A:4072:THR:HA	1.85	0.41
2:D:538:ALA:O	2:D:542:ARG:HB2	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:718:VAL:HG23	2:D:793:SER:HB3	2.01	0.41
2:D:2095:ILE:HD11	2:D:3629:ILE:HG23	2.02	0.41
2:D:2571:VAL:HA	2:D:2574:LEU:CD2	2.50	0.41
2:D:3000:GLU:HA	2:D:3003:MET:HE2	2.03	0.41
2:D:3249:TRP:HE3	2:D:3266:THR:HG21	1.86	0.41
2:B:2389:MET:HG3	2:B:2464:HIS:CE1	2.55	0.41
2:B:2721:ILE:HG22	2:B:2772:ARG:HH11	1.85	0.41
2:B:3010:LYS:O	2:B:3014:LEU:HD23	2.20	0.41
2:B:3249:TRP:HE3	2:B:3266:THR:HG21	1.86	0.41
2:C:419:ILE:HG21	2:C:492:GLU:HG3	2.02	0.41
2:C:606:ARG:HH21	2:C:1633:PRO:HD2	1.84	0.41
2:C:964:MET:O	2:C:977:LYS:NZ	2.53	0.41
2:C:1839:LEU:HA	2:C:1842:ILE:HG22	2.02	0.41
2:C:2389:MET:HG3	2:C:2464:HIS:CE1	2.55	0.41
2:C:2689:MET:O	2:C:2689:MET:HG3	2.20	0.41
2:C:2716:LYS:O	2:C:2901:TYR:OH	2.39	0.41
2:C:3278:GLY:O	2:C:3281:LEU:HG	2.19	0.41
1:H:26:HIS:CD2	1:H:41:ARG:HG2	2.55	0.41
2:A:718:VAL:HG23	2:A:793:SER:HB3	2.01	0.41
2:A:1102:TYR:HD1	2:A:1165:MET:HG2	1.85	0.41
2:A:2539:GLU:HB2	2:A:2581:ARG:HD3	2.02	0.41
2:A:2566:ARG:HA	2:A:2569:ILE:HG12	2.02	0.41
2:A:2760:TYR:HD1	2:A:2763:LEU:HD22	1.86	0.41
2:A:3304:GLN:HB3	2:A:3305:PRO:HD3	2.01	0.41
2:D:21:VAL:HG13	2:D:217:ILE:HG13	2.02	0.41
2:D:419:ILE:HG21	2:D:492:GLU:HG3	2.02	0.41
2:D:1021:GLN:NE2	2:D:1022:GLN:O	2.53	0.41
2:D:1585:ARG:NE	2:D:1634:GLU:OE1	2.53	0.41
2:D:2062:ILE:HG21	2:D:2087:LEU:HG	2.02	0.41
2:D:2389:MET:HE1	2:D:2459:GLY:C	2.46	0.41
2:D:2566:ARG:HA	2:D:2569:ILE:HG12	2.02	0.41
2:D:2968:LEU:HB2	2:D:2969:PRO:HD3	2.01	0.41
2:D:3001:LYS:HD3	2:D:3041:ASP:CG	2.45	0.41
2:D:3154:ALA:O	2:D:3157:GLU:HG3	2.21	0.41
2:D:3246:MET:SD	2:D:3247:SER:N	2.93	0.41
2:D:4305:PHE:HA	2:D:4308:ILE:HG12	2.03	0.41
2:B:856:SER:HB3	2:B:1078:CYS:SG	2.60	0.41
2:B:1021:GLN:NE2	2:B:1022:GLN:O	2.53	0.41
2:B:1436:GLN:NE2	2:B:1546:GLN:O	2.51	0.41
2:B:1915:ASP:OD1	2:B:2090:ARG:NH1	2.51	0.41
2:B:2229:LEU:HD12	2:B:2297:ARG:HB3	2.01	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2389:MET:HE1	2:B:2459:GLY:C	2.45	0.41
2:B:2566:ARG:HA	2:B:2569:ILE:HG12	2.03	0.41
2:B:2968:LEU:HB2	2:B:2969:PRO:HD3	2.01	0.41
2:B:3154:ALA:O	2:B:3157:GLU:HG3	2.21	0.41
2:B:3684:GLU:OE1	2:B:3754:MET:HG3	2.21	0.41
2:C:2054:LYS:NZ	2:C:2056:SER:OG	2.31	0.41
2:C:2725:ALA:HB1	2:C:2760:TYR:CZ	2.56	0.41
2:C:2939:TYR:CD2	2:C:2956:TYR:CD2	3.09	0.41
2:C:3000:GLU:HA	2:C:3003:MET:HE2	2.03	0.41
2:A:1419:PHE:CE2	2:A:1562:ASN:HB3	2.52	0.41
2:A:2725:ALA:HB1	2:A:2760:TYR:CZ	2.56	0.41
2:A:3246:MET:HG2	2:A:3276:LEU:HD22	2.02	0.41
2:A:3600:VAL:O	2:A:3604:ARG:HD3	2.20	0.41
2:A:4166:LYS:O	2:A:4170:ARG:HG3	2.21	0.41
2:D:514:PHE:HD2	2:D:526:TRP:HB2	1.85	0.41
2:D:709:GLY:HA3	2:D:723:PHE:CD1	2.55	0.41
2:D:882:ARG:CZ	2:D:933:LEU:HD23	2.51	0.41
2:D:2539:GLU:HB2	2:D:2581:ARG:HD3	2.02	0.41
2:D:2716:LYS:O	2:D:2901:TYR:OH	2.39	0.41
2:D:2760:TYR:HD1	2:D:2763:LEU:HD22	1.86	0.41
2:D:2859:GLU:O	2:D:2862:SER:OG	2.27	0.41
2:D:3159:LEU:HB3	2:D:3241:MET:HG2	2.02	0.41
2:D:3602:CYS:HA	2:D:3605:MET:CE	2.50	0.41
2:D:4261:LEU:HG	2:D:4263:SER:HB2	2.03	0.41
2:B:191:TYR:N	2:B:206:ALA:O	2.54	0.41
2:B:882:ARG:CZ	2:B:933:LEU:HD23	2.51	0.41
2:B:924:LEU:O	2:B:925:PRO:C	2.64	0.41
2:B:1047:LYS:C	2:B:1051:ARG:HD3	2.45	0.41
2:B:1064:LEU:HD12	2:B:1064:LEU:O	2.21	0.41
2:B:1102:TYR:HD1	2:B:1165:MET:HG2	1.85	0.41
2:B:1585:ARG:NE	2:B:1634:GLU:OE1	2.53	0.41
2:B:4048:PHE:CZ	2:B:4080:TYR:HB3	2.55	0.41
2:C:999:LEU:HD12	2:C:1050:LEU:HD21	2.03	0.41
2:C:1102:TYR:HD1	2:C:1165:MET:HG2	1.85	0.41
2:C:2566:ARG:HA	2:C:2569:ILE:HG12	2.03	0.41
2:C:2785:TRP:HE3	2:C:2787:TRP:NE1	2.19	0.41
2:A:1611:ILE:CG2	2:A:1615:GLN:HG3	2.50	0.41
2:A:4261:LEU:HG	2:A:4263:SER:HB2	2.03	0.41
1:E:26:HIS:CD2	1:E:41:ARG:HG2	2.55	0.41
1:F:26:HIS:CD2	1:F:41:ARG:HG2	2.55	0.41
2:D:131:CYS:SG	2:D:150:GLN:HB2	2.60	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:235:ARG:HH22	2:D:412:GLU:CD	2.29	0.41
2:D:1611:ILE:CG2	2:D:1615:GLN:HG3	2.51	0.41
2:D:2258:ARG:HB3	2:D:2260:PRO:HD2	2.01	0.41
2:D:2276:SER:HB2	2:D:2288:ILE:O	2.21	0.41
2:D:2721:ILE:HG22	2:D:2772:ARG:HH11	1.85	0.41
2:D:2725:ALA:HB1	2:D:2760:TYR:CZ	2.56	0.41
2:D:2785:TRP:HE3	2:D:2787:TRP:NE1	2.19	0.41
2:D:3175:LEU:O	2:D:3175:LEU:HD23	2.19	0.41
2:D:4834:PRO:HB3	2:D:4843:ARG:HH11	1.85	0.41
2:B:898:ILE:HD13	2:B:918:LEU:HD21	2.01	0.41
2:B:1265:HIS:CE1	2:B:1268:ILE:HG13	2.56	0.41
2:B:1282:CYS:SG	2:B:1556:GLU:HG2	2.59	0.41
2:B:2123:LEU:HD13	2:B:2167:MET:HE2	2.01	0.41
2:B:2248:MET:HE3	2:B:2248:MET:HB2	1.90	0.41
2:B:2785:TRP:HE3	2:B:2787:TRP:NE1	2.19	0.41
2:B:3011:LEU:HD23	2:B:3011:LEU:HA	1.94	0.41
2:B:3237:VAL:O	2:B:3240:PRO:HD2	2.21	0.41
2:B:3955:GLN:HG2	2:B:4016:PHE:CE2	2.55	0.41
2:B:4166:LYS:O	2:B:4170:ARG:HG3	2.21	0.41
2:B:4834:PRO:HB3	2:B:4843:ARG:HH11	1.85	0.41
2:C:21:VAL:HG13	2:C:217:ILE:HG13	2.02	0.41
2:C:2222:LEU:C	2:C:2264:LYS:HZ2	2.29	0.41
2:C:2571:VAL:HA	2:C:2574:LEU:CD2	2.50	0.41
2:C:2689:MET:HE1	2:C:2785:TRP:HB3	2.02	0.41
2:C:4834:PRO:HB3	2:C:4843:ARG:HH11	1.85	0.41
2:A:21:VAL:HG13	2:A:217:ILE:HG13	2.02	0.41
2:A:514:PHE:HD2	2:A:526:TRP:HB2	1.85	0.41
2:A:1585:ARG:NE	2:A:1634:GLU:OE1	2.53	0.41
2:A:2276:SER:HB2	2:A:2288:ILE:O	2.21	0.41
2:A:2389:MET:HG3	2:A:2464:HIS:CE1	2.55	0.41
2:A:2939:TYR:CD2	2:A:2956:TYR:CD2	3.09	0.41
2:A:3246:MET:SD	2:A:3247:SER:N	2.93	0.41
2:A:3246:MET:HE3	2:A:3276:LEU:HD11	2.02	0.41
2:A:3684:GLU:OE1	2:A:3754:MET:HG3	2.21	0.41
2:D:999:LEU:HD12	2:D:1050:LEU:HD21	2.03	0.41
2:D:1064:LEU:O	2:D:1064:LEU:HD12	2.21	0.41
2:D:1102:TYR:HD1	2:D:1165:MET:HG2	1.85	0.41
2:D:1487:MET:HE1	2:D:1544:PHE:CG	2.55	0.41
2:D:1819:VAL:HG23	2:D:1902:VAL:HG22	2.01	0.41
2:D:3010:LYS:O	2:D:3014:LEU:HD23	2.20	0.41
2:D:3138:TYR:CG	2:D:3208:ILE:HG13	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:3246:MET:HE3	2:D:3276:LEU:HD11	2.02	0.41
2:B:514:PHE:HD2	2:B:526:TRP:HB2	1.85	0.41
2:B:2276:SER:HB2	2:B:2288:ILE:O	2.21	0.41
2:B:3311:LYS:H	2:B:3314:LEU:HD23	1.86	0.41
2:B:3602:CYS:HA	2:B:3605:MET:CE	2.50	0.41
2:C:624:ALA:HB2	2:C:1667:LEU:HD12	2.02	0.41
2:C:718:VAL:HG23	2:C:793:SER:HB3	2.01	0.41
2:C:2176:VAL:HG22	2:C:2220:TYR:CZ	2.56	0.41
2:C:3042:ALA:HB3	2:C:3117:PHE:HB3	2.02	0.41
2:C:3178:HIS:NE2	2:C:3263:MET:HA	2.36	0.41
2:A:467:ASP:O	2:A:475:LYS:NZ	2.44	0.41
2:A:882:ARG:CZ	2:A:933:LEU:HD23	2.51	0.41
2:A:924:LEU:O	2:A:925:PRO:C	2.64	0.41
2:A:964:MET:O	2:A:977:LYS:NZ	2.53	0.41
2:A:1819:VAL:HG23	2:A:1902:VAL:HG22	2.02	0.41
2:A:3187:LYS:O	2:A:3191:GLU:HB2	2.20	0.41
2:A:3311:LYS:H	2:A:3314:LEU:HD23	1.86	0.41
2:A:4650:LYS:HG2	2:A:4670:LEU:HD22	2.03	0.41
1:F:43:ARG:HA	2:B:1682:GLU:OE1	2.21	0.41
2:D:964:MET:O	2:D:977:LYS:NZ	2.53	0.41
2:D:1245:ARG:HD3	2:D:1692:LYS:HB3	2.03	0.41
2:D:1436:GLN:NE2	2:D:1546:GLN:O	2.51	0.41
2:D:2176:VAL:HG22	2:D:2220:TYR:CZ	2.55	0.41
2:D:3279:ASN:O	2:D:3283:ILE:HD12	2.20	0.41
2:B:992:GLN:O	2:B:996:VAL:HG23	2.21	0.41
2:B:2176:VAL:HG22	2:B:2220:TYR:CZ	2.56	0.41
2:B:2732:TRP:CH2	2:B:2756:LEU:HB3	2.50	0.41
2:B:2826:ILE:HD13	2:C:1501:ASN:CB	2.48	0.41
2:B:3114:GLN:HE22	2:B:3115:HIS:CE1	2.39	0.41
2:B:3246:MET:HG2	2:B:3276:LEU:HD22	2.03	0.41
2:B:3932:GLN:HG2	2:B:3985:MET:HE2	2.01	0.41
2:B:4641:PRO:O	2:B:4647:LYS:NZ	2.35	0.41
2:C:737:ILE:HD13	2:C:1482:ARG:HD3	2.03	0.41
2:C:2891:ASP:OD1	2:C:2892:ILE:N	2.53	0.41
2:C:3137:LEU:HB3	2:C:3159:LEU:HD11	2.03	0.41
2:C:3154:ALA:O	2:C:3157:GLU:HG3	2.21	0.41
2:C:3222:ALA:HB1	2:C:3282:LYS:HG2	2.02	0.41
2:C:4567:TYR:O	2:C:4571:THR:OG1	2.23	0.41
2:A:131:CYS:SG	2:A:150:GLN:HB2	2.60	0.41
2:A:235:ARG:HH22	2:A:412:GLU:CD	2.29	0.41
2:A:419:ILE:HG21	2:A:492:GLU:HG3	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:624:ALA:HB2	2:A:1667:LEU:HD12	2.02	0.41
2:A:677:LEU:HD12	2:A:801:ARG:O	2.21	0.41
2:A:977:LYS:NZ	2:A:979:ALA:HB2	2.36	0.41
2:A:2172:MET:HE1	2:A:2217:HIS:CG	2.56	0.41
2:A:2638:LEU:HD23	2:A:2638:LEU:HA	1.83	0.41
2:A:2785:TRP:HE3	2:A:2787:TRP:NE1	2.19	0.41
2:A:3042:ALA:HB3	2:A:3117:PHE:HB3	2.02	0.41
2:A:3138:TYR:CG	2:A:3208:ILE:HG13	2.55	0.41
2:A:3154:ALA:O	2:A:3157:GLU:HG3	2.21	0.41
2:A:3228:TYR:H	2:A:3290:ILE:HG21	1.85	0.41
2:A:3661:VAL:HB	2:A:3665:HIS:HB3	2.03	0.41
2:A:3715:GLU:O	2:A:3719:MET:HG2	2.21	0.41
2:A:4649:VAL:O	2:A:4653:VAL:HG23	2.21	0.41
2:D:737:ILE:HD13	2:D:1482:ARG:HD3	2.03	0.41
2:D:1891:GLU:HB3	2:D:1895:GLN:HB2	2.03	0.41
2:D:2972:ASP:O	2:D:2976:LYS:HG2	2.21	0.41
2:D:4187:GLU:OE1	2:D:4949:TRP:NE1	2.46	0.41
2:D:4649:VAL:O	2:D:4653:VAL:HG23	2.21	0.41
2:B:600:LEU:O	2:B:604:HIS:HB2	2.20	0.41
2:B:677:LEU:HD12	2:B:801:ARG:O	2.21	0.41
2:B:933:LEU:O	2:B:937:LEU:HG	2.21	0.41
2:B:999:LEU:HD12	2:B:1050:LEU:HD21	2.03	0.41
2:B:1014:GLN:O	2:B:1027:ARG:NH2	2.53	0.41
2:B:1267:HIS:CE1	2:B:1296:ASN:H	2.39	0.41
2:B:1444:GLY:HA3	2:B:1487:MET:HA	2.03	0.41
2:B:1487:MET:HE1	2:B:1544:PHE:CG	2.55	0.41
2:B:2062:ILE:HG21	2:B:2087:LEU:HG	2.02	0.41
2:B:2689:MET:HE1	2:B:2785:TRP:HB3	2.02	0.41
2:B:2785:TRP:HB2	2:B:2787:TRP:HD1	1.85	0.41
2:B:3001:LYS:HD3	2:B:3041:ASP:CG	2.45	0.41
2:B:3042:ALA:HB3	2:B:3117:PHE:HB3	2.02	0.41
2:B:3848:GLU:HA	2:B:3922:GLU:OE2	2.21	0.41
2:B:4305:PHE:HA	2:B:4308:ILE:HG12	2.03	0.41
2:C:882:ARG:CZ	2:C:933:LEU:HD23	2.50	0.41
2:C:1064:LEU:HD12	2:C:1064:LEU:O	2.21	0.41
2:C:1249:MET:HB2	2:C:1599:MET:HB3	2.02	0.41
2:C:1494:MET:HG3	2:C:1500:ARG:HD2	2.03	0.41
2:C:2062:ILE:HG21	2:C:2087:LEU:HG	2.02	0.41
2:C:2172:MET:HE1	2:C:2217:HIS:CG	2.56	0.41
2:C:2258:ARG:HB3	2:C:2260:PRO:HD2	2.02	0.41
2:C:2276:SER:HB2	2:C:2288:ILE:O	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:2972:ASP:O	2:C:2976:LYS:HG2	2.21	0.41
2:C:3183:ILE:HD11	2:C:3187:LYS:HE2	2.03	0.41
2:C:3249:TRP:HE3	2:C:3266:THR:HG21	1.85	0.41
2:C:3279:ASN:O	2:C:3283:ILE:HD12	2.20	0.41
2:C:3932:GLN:HG2	2:C:3985:MET:HE2	2.01	0.41
1:H:85:ALA:O	1:H:94:PRO:HB3	2.21	0.41
2:A:992:GLN:O	2:A:996:VAL:HG23	2.21	0.41
2:A:1047:LYS:C	2:A:1051:ARG:HD3	2.45	0.41
2:A:1245:ARG:HD3	2:A:1692:LYS:HB3	2.03	0.41
2:A:2721:ILE:HG22	2:A:2772:ARG:HH11	1.85	0.41
2:A:3846:LEU:HB3	2:A:3854:PHE:CE2	2.56	0.41
2:A:3926:GLY:CA	2:A:4935:GLY:HA3	2.47	0.41
1:E:85:ALA:O	1:E:94:PRO:HB3	2.21	0.41
2:D:2172:MET:HE1	2:D:2217:HIS:CG	2.56	0.41
2:D:2939:TYR:CD2	2:D:2956:TYR:CD2	3.09	0.41
2:D:3222:ALA:HB1	2:D:3282:LYS:HG2	2.02	0.41
2:D:4250:TYR:O	2:D:4254:THR:HG23	2.21	0.41
2:B:964:MET:O	2:B:977:LYS:NZ	2.53	0.41
2:B:1427:TYR:HB2	2:B:1563:VAL:CG1	2.51	0.41
2:B:2194:ALA:HA	2:B:2237:SER:HB3	2.03	0.41
2:B:4522:VAL:HG12	2:C:4807:ASP:O	2.21	0.41
2:C:191:TYR:N	2:C:206:ALA:O	2.54	0.41
2:C:709:GLY:HA3	2:C:723:PHE:CD1	2.55	0.41
2:C:893:TRP:HD1	2:C:897:LYS:HZ3	1.66	0.41
2:C:992:GLN:O	2:C:996:VAL:HG23	2.21	0.41
2:C:1608:VAL:HA	2:C:1618:LEU:O	2.21	0.41
2:C:1928:PHE:HE1	2:C:1995:GLN:HG2	1.86	0.41
2:C:2077:ASP:HB3	2:C:2080:LEU:HB3	2.03	0.41
2:C:2760:TYR:HD1	2:C:2763:LEU:HD22	1.86	0.41
2:C:3766:LEU:O	2:C:3845:LEU:HD22	2.21	0.41
2:C:4136:ILE:HG22	2:C:4917:ASN:HB3	2.01	0.41
2:A:1064:LEU:HD12	2:A:1064:LEU:O	2.21	0.40
2:A:1427:TYR:HB2	2:A:1563:VAL:CG1	2.51	0.40
2:A:1487:MET:HE1	2:A:1544:PHE:CG	2.55	0.40
1:G:85:ALA:O	1:G:94:PRO:HB3	2.21	0.40
2:D:3302:PHE:O	2:D:3305:PRO:HD2	2.22	0.40
2:D:3715:GLU:O	2:D:3719:MET:HG2	2.21	0.40
2:D:4650:LYS:HG2	2:D:4670:LEU:HD22	2.03	0.40
2:B:1707:ILE:HG23	2:B:1827:THR:HG21	2.03	0.40
2:B:2077:ASP:HB3	2:B:2080:LEU:HB3	2.03	0.40
2:B:2891:ASP:OD1	2:B:2892:ILE:N	2.53	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2972:ASP:O	2:B:2976:LYS:HG2	2.21	0.40
2:B:3296:MET:HE3	2:B:3296:MET:HB2	1.76	0.40
2:B:3661:VAL:HB	2:B:3665:HIS:HB3	2.03	0.40
2:B:4094:ILE:O	2:B:4098:VAL:HG23	2.21	0.40
2:B:4756:ILE:HG23	2:C:4861:ILE:HG21	2.02	0.40
2:C:600:LEU:O	2:C:604:HIS:HB2	2.20	0.40
2:C:1304:LEU:HD23	2:C:1304:LEU:HA	1.92	0.40
2:C:2194:ALA:HA	2:C:2237:SER:HB3	2.03	0.40
2:C:4021:LEU:HD22	2:C:4128:TYR:CE2	2.56	0.40
2:C:4079:ASP:HB3	2:C:4082:GLU:HG3	2.03	0.40
2:C:4261:LEU:HG	2:C:4263:SER:HB2	2.03	0.40
2:C:4663:ARG:HG2	2:C:4663:ARG:NH1	2.17	0.40
2:A:1291:GLY:HA2	2:D:2835:ARG:HH12	1.85	0.40
2:A:2689:MET:O	2:A:2689:MET:HG3	2.20	0.40
2:A:2855:LYS:HA	2:A:2858:MET:HE2	2.04	0.40
2:A:3910:ILE:HG23	2:A:3974:LEU:HB2	2.03	0.40
2:A:4021:LEU:HD22	2:A:4128:TYR:CE2	2.56	0.40
2:A:4305:PHE:HA	2:A:4308:ILE:HG12	2.02	0.40
2:D:677:LEU:HD12	2:D:801:ARG:O	2.21	0.40
2:D:992:GLN:O	2:D:996:VAL:HG23	2.21	0.40
2:D:2939:TYR:HD2	2:D:2956:TYR:HD2	1.70	0.40
2:D:3011:LEU:HD23	2:D:3011:LEU:HA	1.94	0.40
2:D:3246:MET:HG2	2:D:3276:LEU:HD22	2.02	0.40
2:D:3684:GLU:OE1	2:D:3754:MET:HG3	2.21	0.40
2:D:4021:LEU:HD22	2:D:4128:TYR:CE2	2.56	0.40
2:D:4197:ILE:HG23	2:D:4923:MET:HE2	2.03	0.40
2:B:21:VAL:HG13	2:B:217:ILE:HG13	2.02	0.40
2:B:375:GLN:O	2:B:376:SER:OG	2.33	0.40
2:B:624:ALA:HB2	2:B:1667:LEU:HD12	2.02	0.40
2:B:698:ALA:HB2	2:B:791:VAL:HG11	2.03	0.40
2:B:1611:ILE:CG2	2:B:1615:GLN:HG3	2.51	0.40
2:B:1697:LEU:HD23	2:B:1697:LEU:HA	1.87	0.40
2:B:2172:MET:HE1	2:B:2217:HIS:CG	2.56	0.40
2:B:2833:LEU:HB2	2:B:2838[B]:HIS:CE1	2.55	0.40
2:B:3766:LEU:O	2:B:3845:LEU:HD22	2.21	0.40
2:B:4753:LEU:HD21	2:C:4769:LEU:HD22	2.03	0.40
2:C:1497:GLY:O	2:C:1499:GLY:N	2.53	0.40
2:C:1891:GLU:HB3	2:C:1895:GLN:HB2	2.03	0.40
2:C:2939:TYR:HD2	2:C:2956:TYR:HD2	1.70	0.40
2:C:3602:CYS:HA	2:C:3605:MET:CE	2.50	0.40
2:C:3661:VAL:HB	2:C:3665:HIS:HB3	2.03	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:3846:LEU:HB3	2:C:3854:PHE:CE2	2.56	0.40
2:C:3846:LEU:HD23	2:C:3846:LEU:HA	1.96	0.40
2:A:698:ALA:HB2	2:A:791:VAL:HG11	2.03	0.40
2:A:1444:GLY:HA3	2:A:1487:MET:HA	2.03	0.40
2:A:1494:MET:HG3	2:A:1500:ARG:HD2	2.03	0.40
2:A:2389:MET:HE1	2:A:2459:GLY:C	2.45	0.40
2:A:2605:MET:HG3	2:A:2606:PRO:HD3	2.04	0.40
2:A:3137:LEU:HB3	2:A:3159:LEU:HD11	2.03	0.40
2:A:3290:ILE:C	2:A:3292:GLU:H	2.26	0.40
2:A:3302:PHE:O	2:A:3305:PRO:HD2	2.22	0.40
2:A:3766:LEU:O	2:A:3845:LEU:HD22	2.21	0.40
2:A:3986:LEU:HD22	2:A:3989:ASN:ND2	2.37	0.40
2:A:4048:PHE:CZ	2:A:4080:TYR:HB3	2.55	0.40
2:A:4250:TYR:O	2:A:4254:THR:HG23	2.21	0.40
1:F:85:ALA:O	1:F:94:PRO:HB3	2.21	0.40
2:D:139:SER:O	2:D:140:THR:OG1	2.33	0.40
2:D:698:ALA:HB2	2:D:791:VAL:HG11	2.04	0.40
2:D:933:LEU:O	2:D:937:LEU:HG	2.21	0.40
2:D:3097:THR:HG22	2:D:3102:LEU:HG	2.04	0.40
2:D:3237:VAL:O	2:D:3240:PRO:HD2	2.21	0.40
2:D:3661:VAL:HB	2:D:3665:HIS:HB3	2.03	0.40
2:D:3840:PHE:CE1	2:D:3874:THR:HG23	2.56	0.40
2:D:3910:ILE:HG23	2:D:3974:LEU:HB2	2.03	0.40
2:B:1249:MET:HB2	2:B:1599:MET:HB3	2.02	0.40
2:B:1608:VAL:HA	2:B:1618:LEU:O	2.21	0.40
2:B:3951:PHE:HZ	2:B:3974:LEU:HG	1.87	0.40
2:B:4649:VAL:O	2:B:4653:VAL:HG23	2.21	0.40
2:C:677:LEU:HD12	2:C:801:ARG:O	2.21	0.40
2:C:1265:HIS:CE1	2:C:1268:ILE:HG13	2.55	0.40
2:C:1267:HIS:CE1	2:C:1296:ASN:H	2.40	0.40
2:C:1444:GLY:HA3	2:C:1487:MET:HA	2.03	0.40
2:C:1611:ILE:CG2	2:C:1615:GLN:HG3	2.51	0.40
2:C:3303:SER:HA	2:C:3306:ILE:CG1	2.52	0.40
2:A:737:ILE:HD13	2:A:1482:ARG:HD3	2.03	0.40
2:A:967:PRO:O	2:A:971:GLN:CB	2.70	0.40
2:A:2176:VAL:HG22	2:A:2220:TYR:CZ	2.56	0.40
2:A:2635:GLU:OE2	2:A:2680:TYR:OH	2.34	0.40
2:A:2957:GLU:O	2:A:2961:LYS:HG2	2.22	0.40
2:A:3644:LEU:HD23	2:A:3644:LEU:HA	1.94	0.40
2:D:274:LEU:HD23	2:D:274:LEU:HA	1.85	0.40
2:D:891:GLU:HG2	2:D:978:PRO:HG3	2.03	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:1494:MET:HG3	2:D:1500:ARG:HD2	2.03	0.40
2:D:2785:TRP:HB2	2:D:2787:TRP:HD1	1.85	0.40
2:D:2856:LYS:HA	2:D:2859:GLU:CG	2.44	0.40
2:D:3229:THR:HA	2:D:3232:PRO:HG3	2.04	0.40
2:B:1678:SER:HB2	2:B:1768:PHE:CE2	2.57	0.40
2:B:2725:ALA:HB1	2:B:2760:TYR:CZ	2.55	0.40
2:B:2760:TYR:HD1	2:B:2763:LEU:HD22	1.86	0.40
2:B:2833:LEU:HB2	2:B:2838[A]:HIS:CE1	2.56	0.40
2:B:2855:LYS:HA	2:B:2858:MET:HE2	2.04	0.40
2:B:3000:GLU:HA	2:B:3003:MET:HE2	2.03	0.40
2:B:3910:ILE:HG23	2:B:3974:LEU:HB2	2.04	0.40
2:B:4137:GLU:OE1	2:B:4958:PHE:HB2	2.22	0.40
2:C:830:GLU:OE1	2:C:830:GLU:N	2.54	0.40
2:C:967:PRO:O	2:C:971:GLN:CB	2.70	0.40
2:C:2389:MET:HE1	2:C:2459:GLY:C	2.46	0.40
2:C:2539:GLU:HB2	2:C:2581:ARG:HD3	2.02	0.40
2:C:2957:GLU:O	2:C:2961:LYS:HG2	2.22	0.40
2:C:3302:PHE:O	2:C:3305:PRO:HD2	2.22	0.40
2:C:4250:TYR:O	2:C:4254:THR:HG23	2.21	0.40
2:A:933:LEU:O	2:A:937:LEU:HG	2.21	0.40
2:A:999:LEU:HD12	2:A:1050:LEU:HD21	2.03	0.40
2:A:1081:THR:HG23	2:A:1082:GLY:H	1.86	0.40
2:A:1685:LEU:HD23	2:A:1685:LEU:HA	1.95	0.40
2:A:2062:ILE:HG21	2:A:2087:LEU:HG	2.02	0.40
2:A:3000:GLU:HA	2:A:3003:MET:HE2	2.03	0.40
2:A:3178:HIS:NE2	2:A:3263:MET:HA	2.36	0.40
2:A:4197:ILE:HG23	2:A:4923:MET:HE2	2.03	0.40
2:A:4481:TRP:CG	2:A:4484:ILE:HD11	2.56	0.40
2:D:624:ALA:HB2	2:D:1667:LEU:HD12	2.02	0.40
2:D:1608:VAL:HA	2:D:1618:LEU:O	2.21	0.40
2:D:2824:ARG:HA	2:D:2824:ARG:HD2	1.64	0.40
2:D:2855:LYS:HA	2:D:2858:MET:HE2	2.04	0.40
2:D:3926:GLY:CA	2:D:4935:GLY:HA3	2.47	0.40
2:D:4079:ASP:HB3	2:D:4082:GLU:HG3	2.03	0.40
2:D:4481:TRP:CG	2:D:4484:ILE:HD11	2.56	0.40
2:D:4503:ARG:NH2	2:D:4721:TYR:HE2	2.20	0.40
2:B:3171:LEU:HD23	2:B:3171:LEU:HA	1.93	0.40
2:B:3303:SER:HA	2:B:3306:ILE:CG1	2.52	0.40
2:B:3846:LEU:HB3	2:B:3854:PHE:CE2	2.56	0.40
2:B:3846:LEU:HD23	2:B:3846:LEU:HA	1.96	0.40
2:B:4503:ARG:NH2	2:B:4721:TYR:HE2	2.20	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:375:GLN:O	2:C:376:SER:OG	2.33	0.40
2:C:996:VAL:HG22	2:C:1054:VAL:HG21	2.04	0.40
2:C:1427:TYR:HB2	2:C:1563:VAL:CG1	2.51	0.40
2:C:1585:ARG:NE	2:C:1634:GLU:OE1	2.53	0.40
2:C:2581:ARG:HB2	2:C:2584:MET:HE1	2.04	0.40
2:C:3001:LYS:HD3	2:C:3041:ASP:CG	2.45	0.40
2:C:3097:THR:HG22	2:C:3102:LEU:HG	2.04	0.40
2:C:3246:MET:HG2	2:C:3276:LEU:HD22	2.02	0.40
2:C:3311:LYS:H	2:C:3314:LEU:HD23	1.86	0.40
2:C:3951:PHE:HZ	2:C:3974:LEU:HG	1.87	0.40

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	E	105/108 (97%)	103 (98%)	2 (2%)	0	100	100
1	F	105/108 (97%)	103 (98%)	2 (2%)	0	100	100
1	G	105/108 (97%)	103 (98%)	2 (2%)	0	100	100
1	H	105/108 (97%)	103 (98%)	2 (2%)	0	100	100
2	A	4198/4967 (84%)	4052 (96%)	142 (3%)	4 (0%)	48	77
2	B	4198/4967 (84%)	4052 (96%)	142 (3%)	4 (0%)	48	77
2	C	4198/4967 (84%)	4052 (96%)	142 (3%)	4 (0%)	48	77
2	D	4198/4967 (84%)	4050 (96%)	144 (3%)	4 (0%)	48	77
All	All	17212/20300 (85%)	16618 (96%)	578 (3%)	16 (0%)	49	77

All (16) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	A	2988	ARG
2	A	3292	GLU
2	A	4641	PRO
2	D	2988	ARG
2	D	3292	GLU
2	D	4641	PRO
2	B	2988	ARG
2	B	3292	GLU
2	B	4641	PRO
2	C	2988	ARG
2	C	3292	GLU
2	C	4641	PRO
2	A	1498	GLN
2	D	1498	GLN
2	B	1498	GLN
2	C	1498	GLN

5.3.2 Protein sidechains ⓘ

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%)	85 (97%)	3 (3%)	32	60
1	F	88/89 (99%)	85 (97%)	3 (3%)	32	60
1	G	88/89 (99%)	85 (97%)	3 (3%)	32	60
1	H	88/89 (99%)	85 (97%)	3 (3%)	32	60
2	A	3708/4358 (85%)	3685 (99%)	23 (1%)	78	81
2	B	3708/4358 (85%)	3685 (99%)	23 (1%)	78	81
2	C	3708/4358 (85%)	3685 (99%)	23 (1%)	78	81
2	D	3708/4358 (85%)	3685 (99%)	23 (1%)	78	81
All	All	15184/17788 (85%)	15080 (99%)	104 (1%)	73	80

All (104) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	H	4	GLU
1	H	18	LYS
1	H	19	LYS
2	A	81	MET
2	A	317	MET
2	A	844	ARG
2	A	946	LEU
2	A	949	HIS
2	A	1421	MET
2	A	1564	MET
2	A	1614	ARG
2	A	2192	MET
2	A	2279	MET
2	A	2485	LEU
2	A	2493	LEU
2	A	2826	ILE
2	A	2838[A]	HIS
2	A	2838[B]	HIS
2	A	3072	MET
2	A	3314	LEU
2	A	3985	MET
2	A	4256	MET
2	A	4268	MET
2	A	4567	TYR
2	A	4663	ARG
2	A	4797	GLU
1	E	4	GLU
1	E	18	LYS
1	E	19	LYS
1	F	4	GLU
1	F	18	LYS
1	F	19	LYS
1	G	4	GLU
1	G	18	LYS
1	G	19	LYS
2	D	81	MET
2	D	317	MET
2	D	844	ARG
2	D	946	LEU
2	D	949	HIS
2	D	1421	MET
2	D	1564	MET
2	D	1614	ARG

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Mol	Chain	Res	Type
2	D	2192	MET
2	D	2279	MET
2	D	2485	LEU
2	D	2493	LEU
2	D	2826	ILE
2	D	2838[A]	HIS
2	D	2838[B]	HIS
2	D	3072	MET
2	D	3314	LEU
2	D	3985	MET
2	D	4256	MET
2	D	4268	MET
2	D	4567	TYR
2	D	4663	ARG
2	D	4797	GLU
2	B	81	MET
2	B	317	MET
2	B	844	ARG
2	B	946	LEU
2	B	949	HIS
2	B	1421	MET
2	B	1564	MET
2	B	1614	ARG
2	B	2192	MET
2	B	2279	MET
2	B	2485	LEU
2	B	2493	LEU
2	B	2826	ILE
2	B	2838[A]	HIS
2	B	2838[B]	HIS
2	B	3072	MET
2	B	3314	LEU
2	B	3985	MET
2	B	4256	MET
2	B	4268	MET
2	B	4567	TYR
2	B	4663	ARG
2	B	4797	GLU
2	C	81	MET
2	C	317	MET
2	C	844	ARG
2	C	946	LEU

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Mol	Chain	Res	Type
2	C	949	HIS
2	C	1421	MET
2	C	1564	MET
2	C	1614	ARG
2	C	2192	MET
2	C	2279	MET
2	C	2485	LEU
2	C	2493	LEU
2	C	2826	ILE
2	C	2838[A]	HIS
2	C	2838[B]	HIS
2	C	3072	MET
2	C	3314	LEU
2	C	3985	MET
2	C	4256	MET
2	C	4268	MET
2	C	4567	TYR
2	C	4663	ARG
2	C	4797	GLU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (135) such sidechains are listed below:

Mol	Chain	Res	Type
1	H	66	GLN
2	A	117	HIS
2	A	193	HIS
2	A	669	GLN
2	A	776	GLN
2	A	836	HIS
2	A	888	ASN
2	A	927	GLN
2	A	1626	GLN
2	A	1836	ASN
2	A	1844	GLN
2	A	2410	HIS
2	A	2464	HIS
2	A	2540	HIS
2	A	2550	HIS
2	A	2600	ASN
2	A	2692	GLN
2	A	2830	ASN
2	A	2867	ASN

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Mol	Chain	Res	Type
2	A	2973	GLN
2	A	2977	ASN
2	A	3114	GLN
2	A	3178	HIS
2	A	3767	ASN
2	A	3775	GLN
2	A	3864	ASN
2	A	3901	GLN
2	A	3998	GLN
2	A	4579	HIS
2	A	4742	HIS
2	A	4933	HIS
2	A	4936	GLN
2	A	4967	ASN
1	E	66	GLN
1	F	66	GLN
1	G	66	GLN
2	D	117	HIS
2	D	193	HIS
2	D	669	GLN
2	D	776	GLN
2	D	781	ASN
2	D	836	HIS
2	D	888	ASN
2	D	927	GLN
2	D	1026	ASN
2	D	1626	GLN
2	D	1836	ASN
2	D	1844	GLN
2	D	2410	HIS
2	D	2464	HIS
2	D	2540	HIS
2	D	2600	ASN
2	D	2692	GLN
2	D	2830	ASN
2	D	2867	ASN
2	D	2973	GLN
2	D	2977	ASN
2	D	3114	GLN
2	D	3178	HIS
2	D	3256	ASN
2	D	3767	ASN

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Mol	Chain	Res	Type
2	D	3864	ASN
2	D	3901	GLN
2	D	3998	GLN
2	D	4579	HIS
2	D	4742	HIS
2	D	4933	HIS
2	D	4967	ASN
2	B	117	HIS
2	B	193	HIS
2	B	240	HIS
2	B	669	GLN
2	B	776	GLN
2	B	836	HIS
2	B	888	ASN
2	B	914	GLN
2	B	927	GLN
2	B	1626	GLN
2	B	1836	ASN
2	B	1844	GLN
2	B	2217	HIS
2	B	2410	HIS
2	B	2464	HIS
2	B	2540	HIS
2	B	2600	ASN
2	B	2692	GLN
2	B	2830	ASN
2	B	2867	ASN
2	B	2973	GLN
2	B	2977	ASN
2	B	3114	GLN
2	B	3178	HIS
2	B	3256	ASN
2	B	3767	ASN
2	B	3775	GLN
2	B	3864	ASN
2	B	3901	GLN
2	B	3955	GLN
2	B	3998	GLN
2	B	4579	HIS
2	B	4742	HIS
2	B	4933	HIS
2	B	4936	GLN

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Mol	Chain	Res	Type
2	B	4967	ASN
2	C	117	HIS
2	C	193	HIS
2	C	669	GLN
2	C	776	GLN
2	C	836	HIS
2	C	1026	ASN
2	C	1071	HIS
2	C	1626	GLN
2	C	1836	ASN
2	C	1844	GLN
2	C	2410	HIS
2	C	2464	HIS
2	C	2540	HIS
2	C	2600	ASN
2	C	2692	GLN
2	C	2830	ASN
2	C	2867	ASN
2	C	2973	GLN
2	C	2977	ASN
2	C	3114	GLN
2	C	3178	HIS
2	C	3767	ASN
2	C	3864	ASN
2	C	3901	GLN
2	C	3998	GLN
2	C	4498	ASN
2	C	4579	HIS
2	C	4742	HIS
2	C	4933	HIS
2	C	4936	GLN
2	C	4967	ASN

5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 12 ligands modelled in this entry, 4 are monoatomic - leaving 8 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
4	ATP	A	5003	-	32,33,33	0.26	0	48,52,52	0.29	0
4	ATP	C	5003	-	32,33,33	0.25	0	48,52,52	0.29	0
4	ATP	A	5002	-	32,33,33	0.26	0	48,52,52	0.34	0
4	ATP	B	5003	-	32,33,33	0.25	0	48,52,52	0.29	0
4	ATP	D	5002	-	32,33,33	0.26	0	48,52,52	0.34	0
4	ATP	D	5003	-	32,33,33	0.25	0	48,52,52	0.29	0
4	ATP	C	5002	-	32,33,33	0.27	0	48,52,52	0.34	0
4	ATP	B	5002	-	32,33,33	0.27	0	48,52,52	0.34	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
4	ATP	A	5003	-	-	11/22/38/38	0/3/3/3
4	ATP	C	5003	-	-	11/22/38/38	0/3/3/3
4	ATP	A	5002	-	-	5/22/38/38	0/3/3/3
4	ATP	B	5003	-	-	11/22/38/38	0/3/3/3
4	ATP	D	5002	-	-	5/22/38/38	0/3/3/3
4	ATP	D	5003	-	-	11/22/38/38	0/3/3/3
4	ATP	C	5002	-	-	5/22/38/38	0/3/3/3
4	ATP	B	5002	-	-	5/22/38/38	0/3/3/3

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

All (64) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
4	A	5002	ATP	O4'-C4'-C5'-O5'
4	A	5003	ATP	C5'-O5'-PA-O1A
4	A	5003	ATP	C5'-O5'-PA-O3A
4	D	5002	ATP	O4'-C4'-C5'-O5'
4	D	5003	ATP	C5'-O5'-PA-O1A
4	D	5003	ATP	C5'-O5'-PA-O3A
4	B	5002	ATP	O4'-C4'-C5'-O5'
4	B	5003	ATP	C5'-O5'-PA-O1A
4	B	5003	ATP	C5'-O5'-PA-O3A
4	C	5002	ATP	O4'-C4'-C5'-O5'
4	C	5003	ATP	C5'-O5'-PA-O1A
4	C	5003	ATP	C5'-O5'-PA-O3A
4	A	5002	ATP	C3'-C4'-C5'-O5'
4	D	5002	ATP	C3'-C4'-C5'-O5'
4	B	5002	ATP	C3'-C4'-C5'-O5'
4	C	5002	ATP	C3'-C4'-C5'-O5'
4	A	5003	ATP	O4'-C1'-N9-C8
4	D	5003	ATP	O4'-C1'-N9-C8
4	B	5003	ATP	O4'-C1'-N9-C8
4	C	5003	ATP	O4'-C1'-N9-C8
4	A	5003	ATP	O4'-C1'-N9-C4
4	D	5003	ATP	O4'-C1'-N9-C4
4	B	5003	ATP	O4'-C1'-N9-C4
4	C	5003	ATP	O4'-C1'-N9-C4
4	A	5002	ATP	PB-O3A-PA-O5'
4	A	5003	ATP	PB-O3A-PA-O5'
4	D	5002	ATP	PB-O3A-PA-O5'
4	D	5003	ATP	PB-O3A-PA-O5'
4	B	5002	ATP	PB-O3A-PA-O5'
4	B	5003	ATP	PB-O3A-PA-O5'
4	C	5002	ATP	PB-O3A-PA-O5'
4	C	5003	ATP	PB-O3A-PA-O5'
4	A	5003	ATP	PG-O3B-PB-O3A
4	D	5003	ATP	PG-O3B-PB-O3A
4	B	5003	ATP	PG-O3B-PB-O3A
4	C	5003	ATP	PG-O3B-PB-O3A
4	A	5003	ATP	PA-O3A-PB-O2B
4	D	5003	ATP	PA-O3A-PB-O2B
4	B	5003	ATP	PA-O3A-PB-O2B

Continued on next page...

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Mol	Chain	Res	Type	Atoms
4	C	5003	ATP	PA-O3A-PB-O2B
4	A	5003	ATP	C5'-O5'-PA-O2A
4	D	5003	ATP	C5'-O5'-PA-O2A
4	B	5003	ATP	C5'-O5'-PA-O2A
4	C	5003	ATP	C5'-O5'-PA-O2A
4	A	5002	ATP	PG-O3B-PB-O3A
4	D	5002	ATP	PG-O3B-PB-O3A
4	C	5002	ATP	PG-O3B-PB-O3A
4	B	5002	ATP	PG-O3B-PB-O3A
4	A	5002	ATP	PG-O3B-PB-O1B
4	A	5003	ATP	PG-O3B-PB-O1B
4	D	5002	ATP	PG-O3B-PB-O1B
4	D	5003	ATP	PG-O3B-PB-O1B
4	B	5002	ATP	PG-O3B-PB-O1B
4	B	5003	ATP	PG-O3B-PB-O1B
4	C	5002	ATP	PG-O3B-PB-O1B
4	C	5003	ATP	PG-O3B-PB-O1B
4	A	5003	ATP	PG-O3B-PB-O2B
4	A	5003	ATP	PA-O3A-PB-O1B
4	D	5003	ATP	PG-O3B-PB-O2B
4	D	5003	ATP	PA-O3A-PB-O1B
4	B	5003	ATP	PG-O3B-PB-O2B
4	B	5003	ATP	PA-O3A-PB-O1B
4	C	5003	ATP	PG-O3B-PB-O2B
4	C	5003	ATP	PA-O3A-PB-O1B

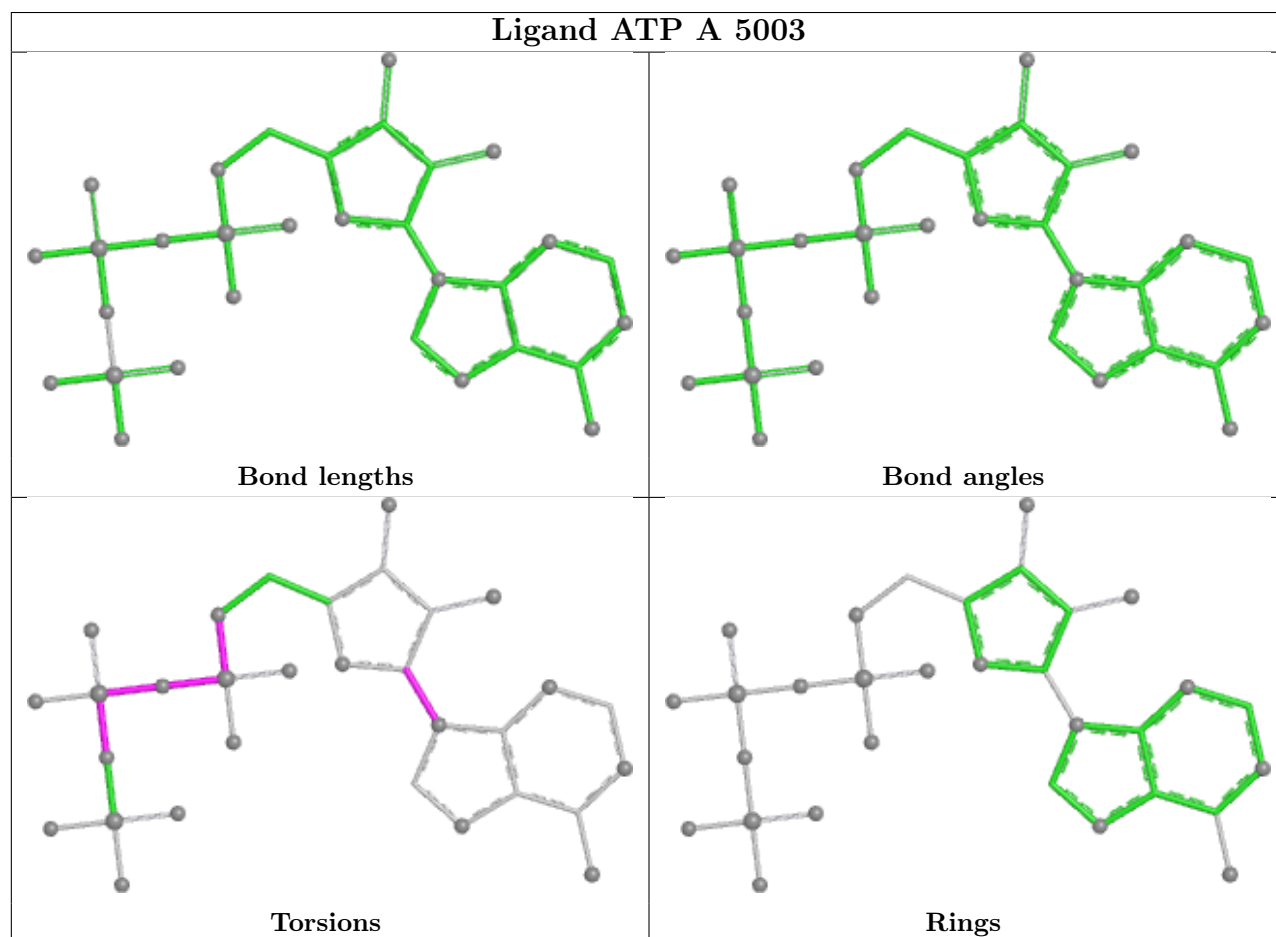
There are no ring outliers.

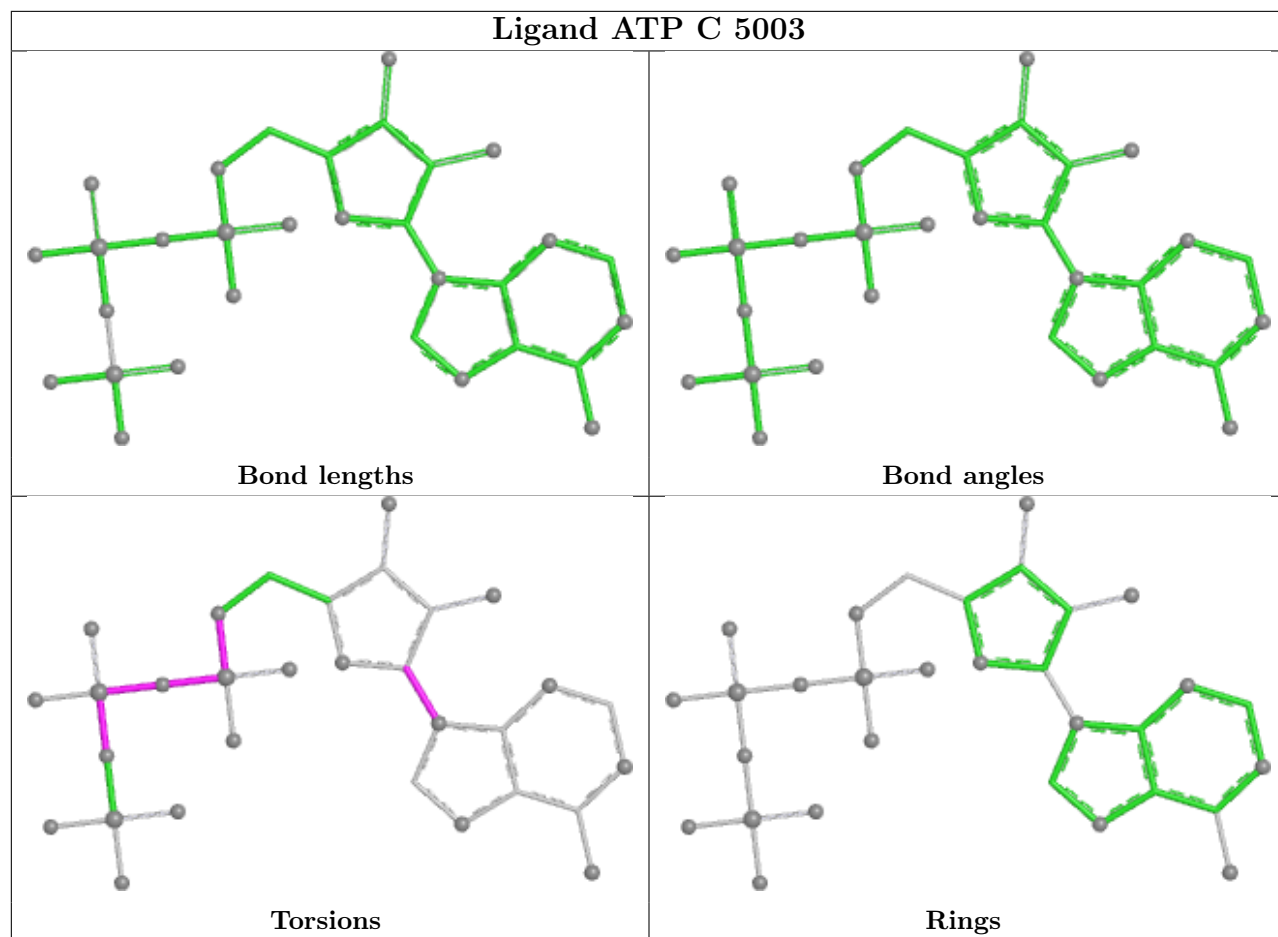
8 monomers are involved in 8 short contacts:

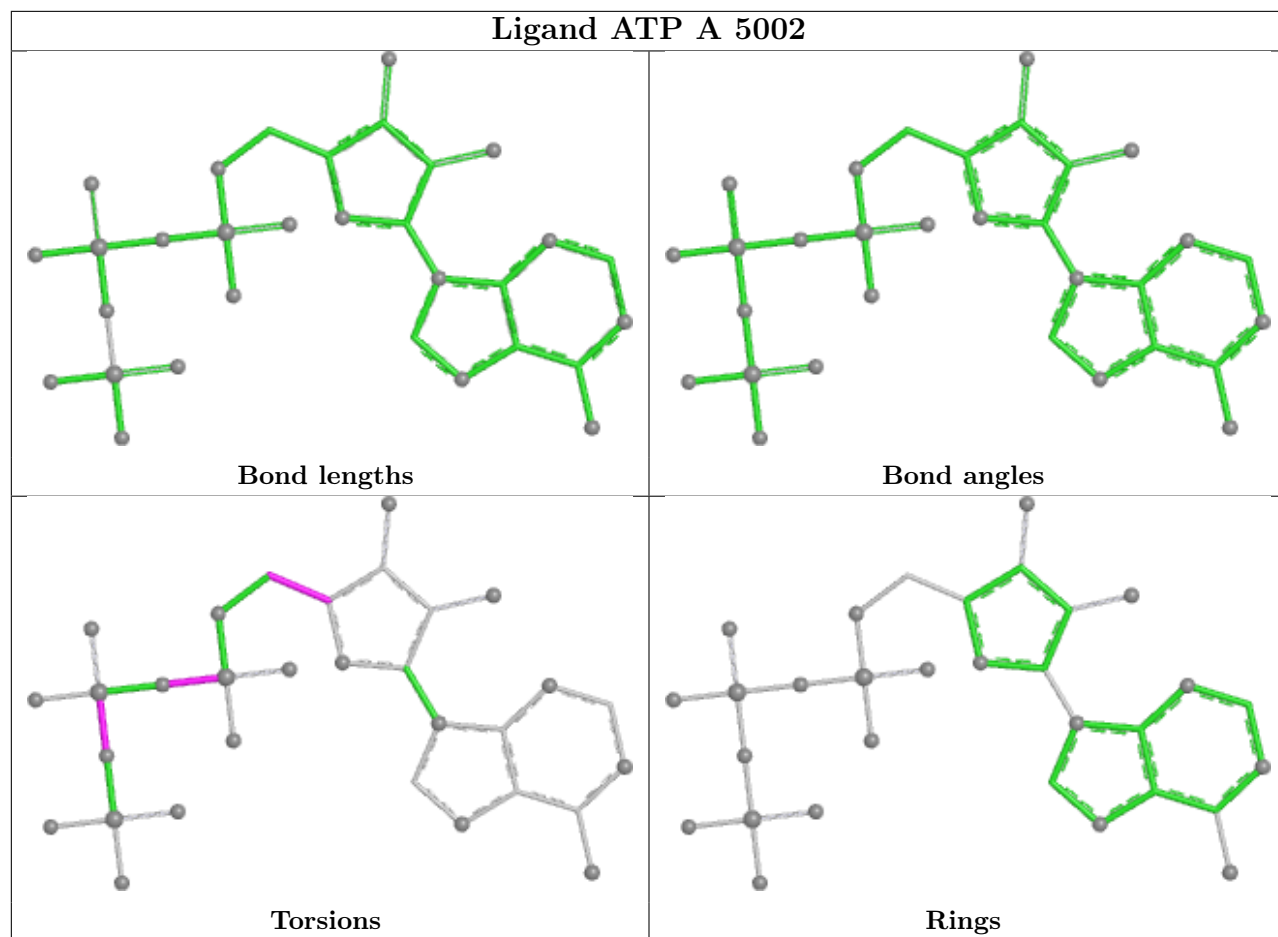
Mol	Chain	Res	Type	Clashes	Symm-Clashes
4	A	5003	ATP	1	0
4	C	5003	ATP	1	0
4	A	5002	ATP	1	0
4	B	5003	ATP	1	0
4	D	5002	ATP	1	0
4	D	5003	ATP	1	0
4	C	5002	ATP	1	0
4	B	5002	ATP	1	0

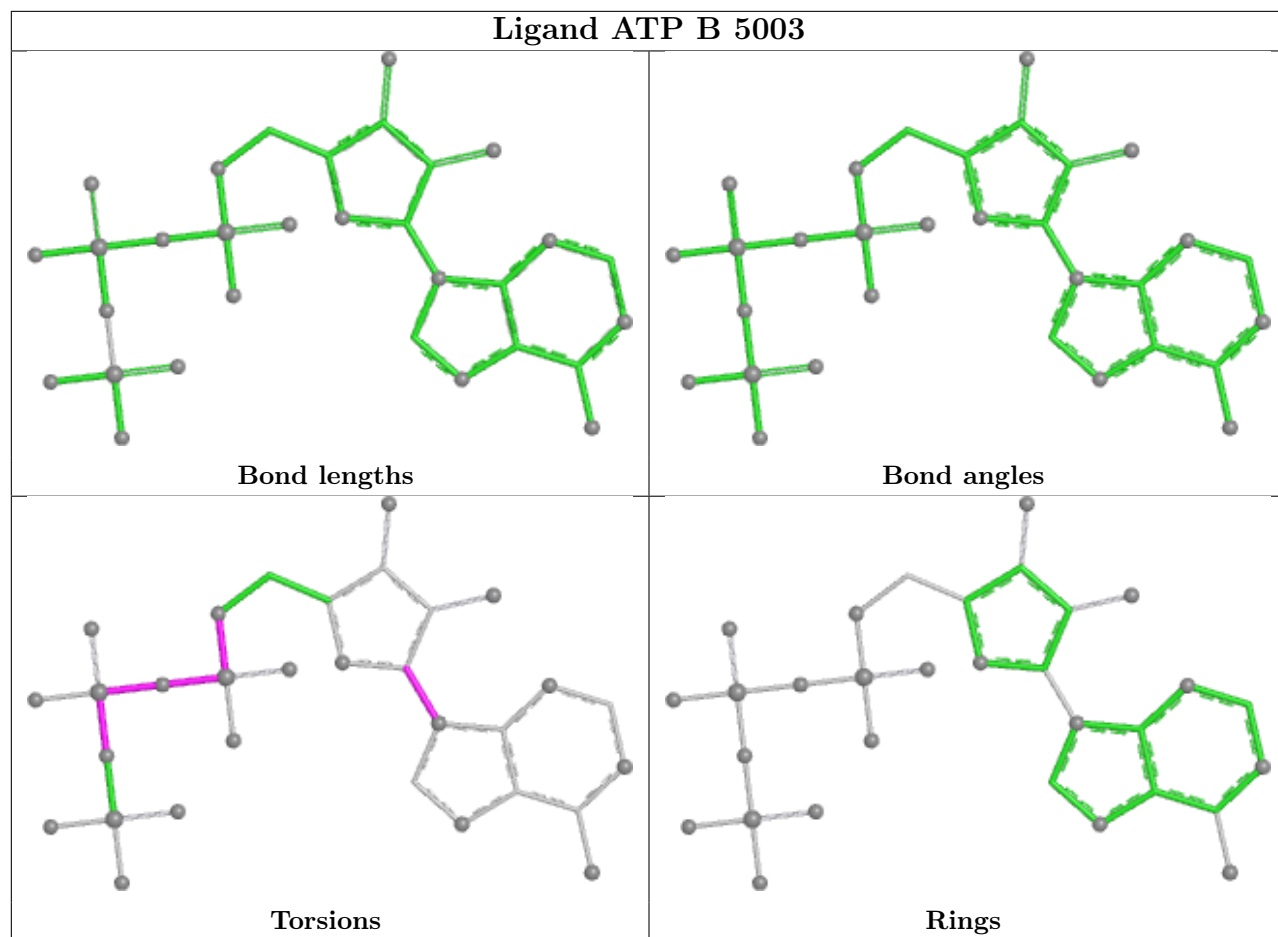
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will

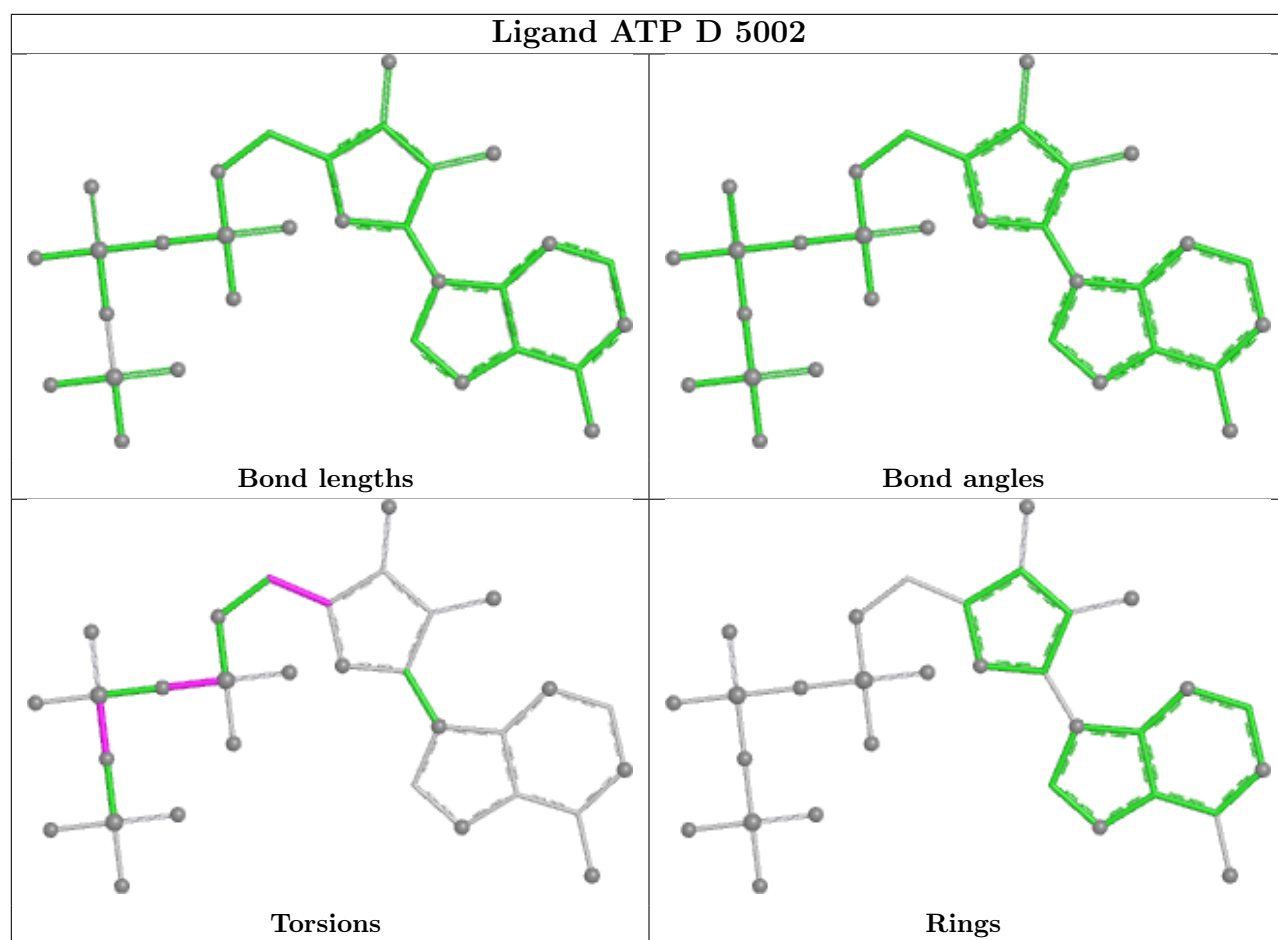
also be included. For torsion angles, if less than 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

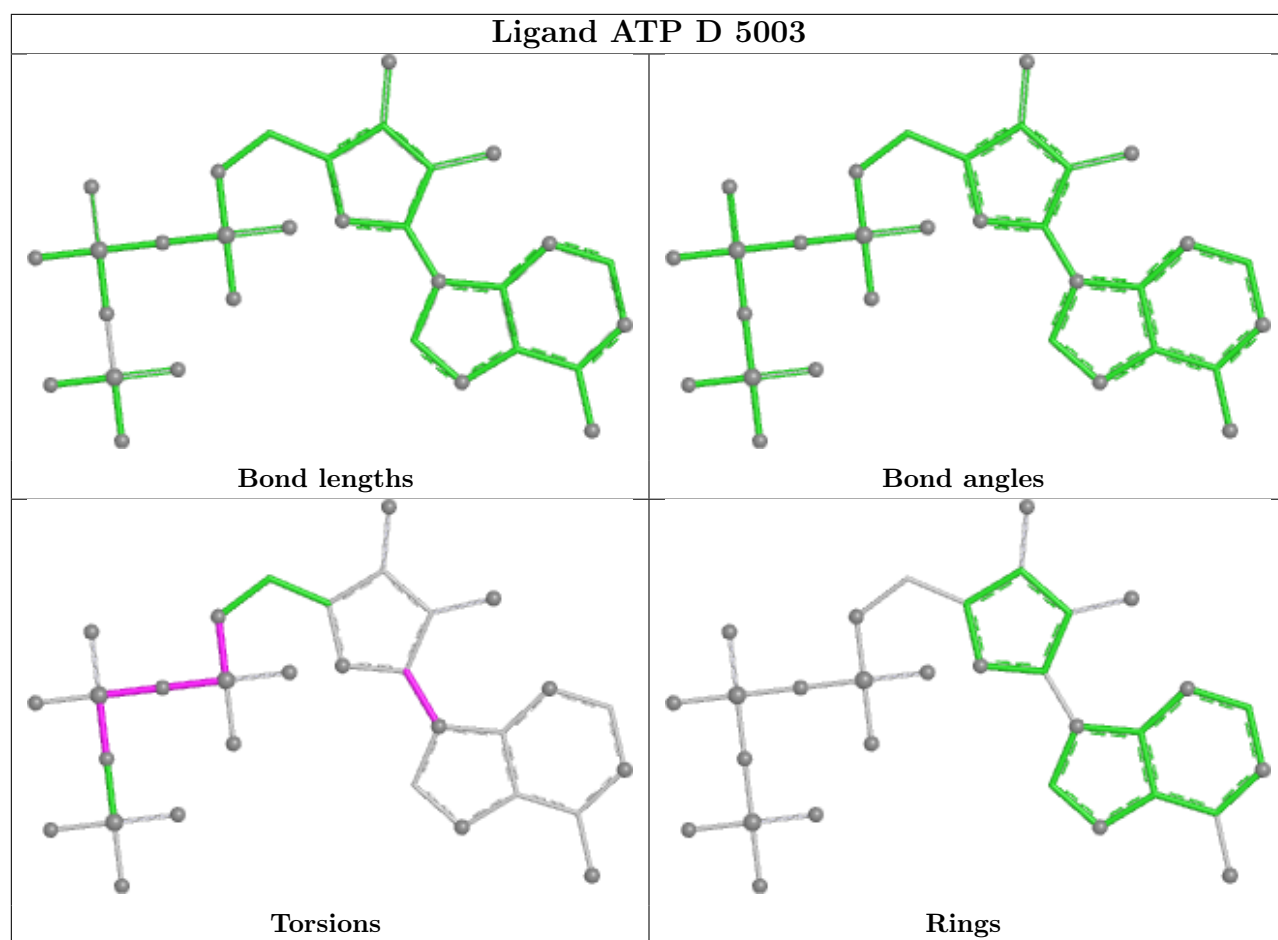


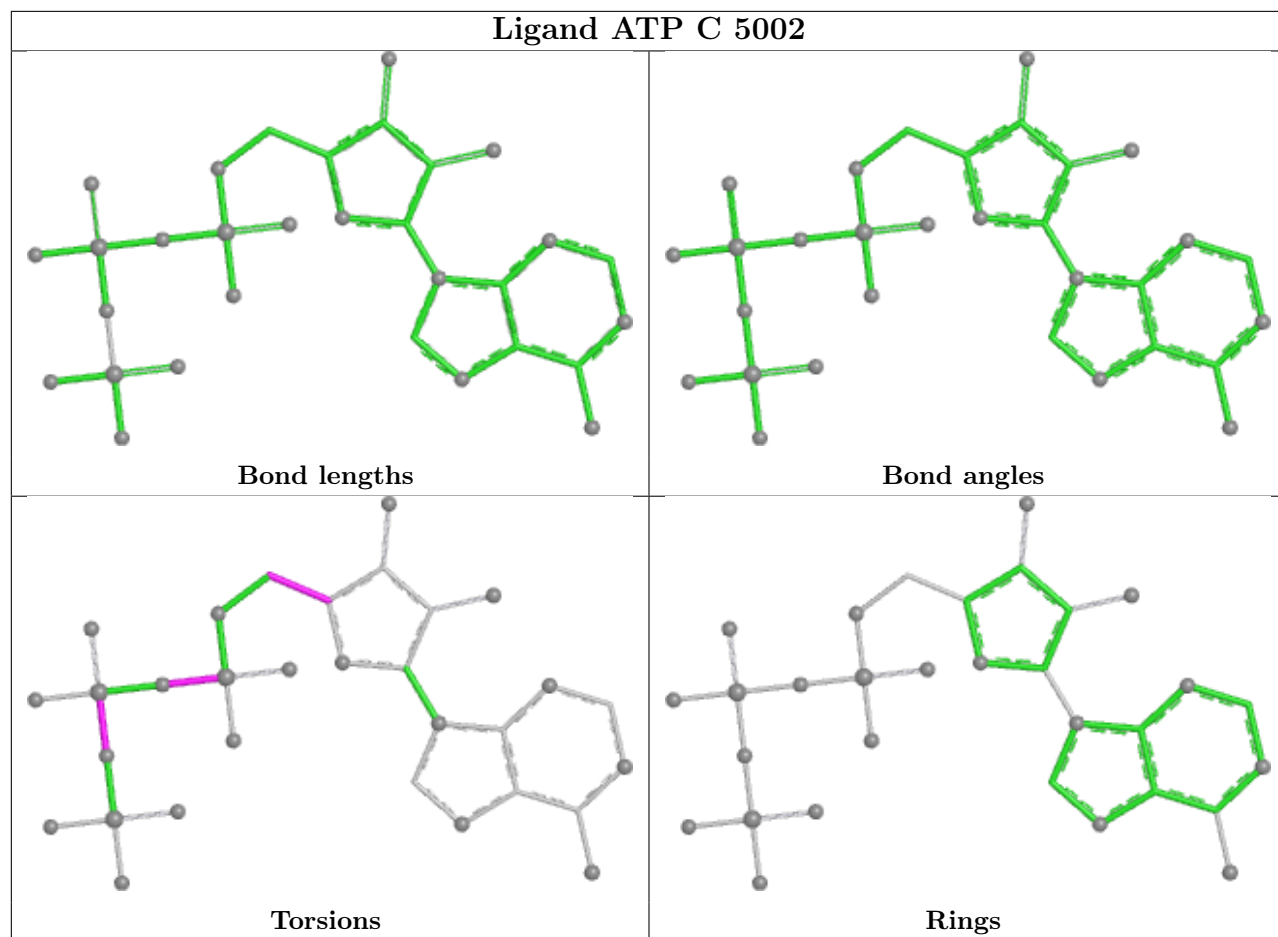


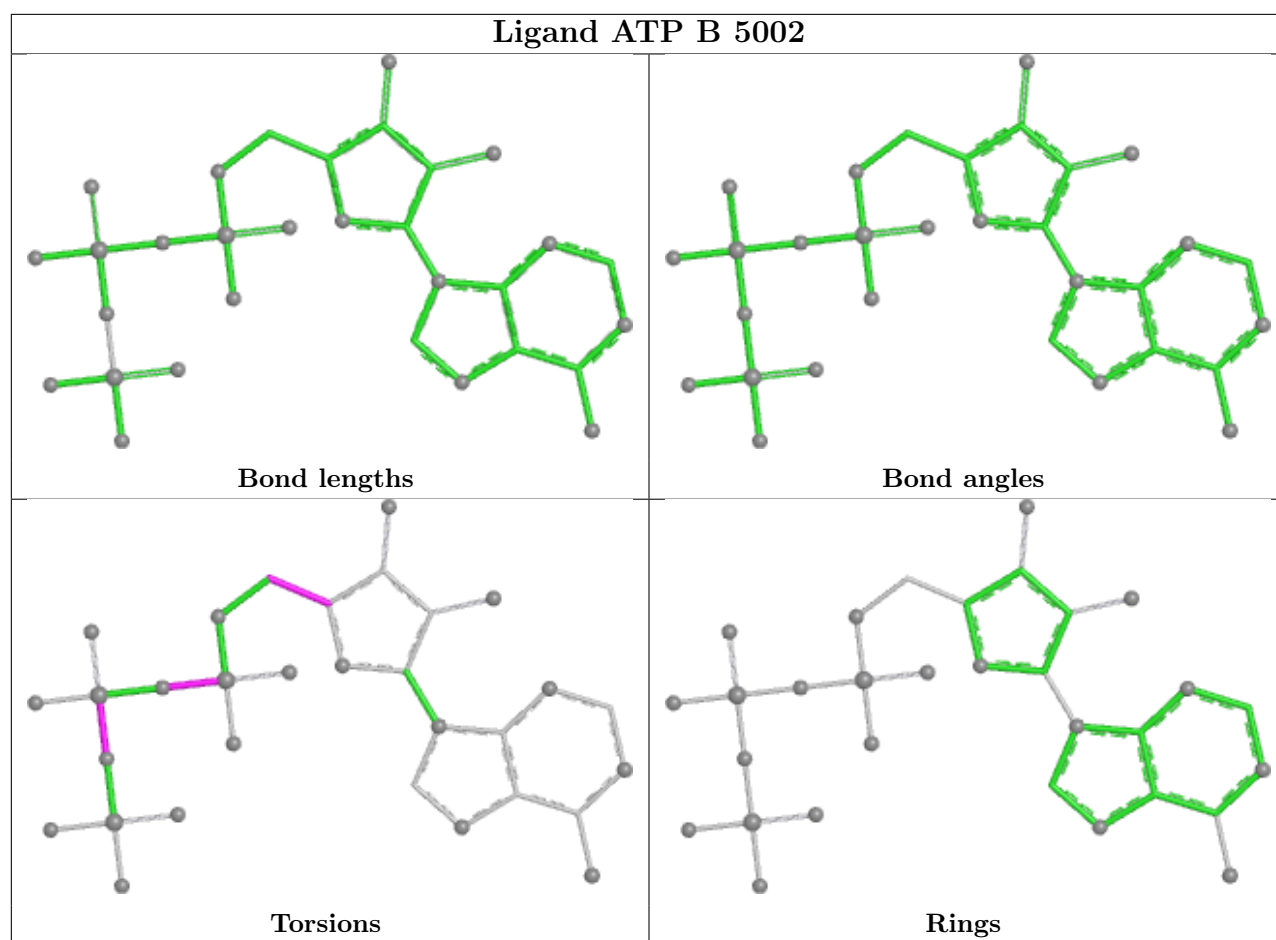












5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

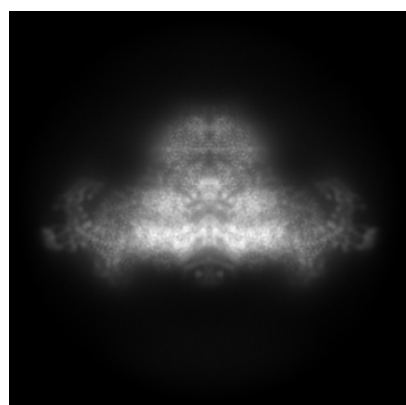
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-26405. These allow visual inspection of the internal detail of the map and identification of artifacts.

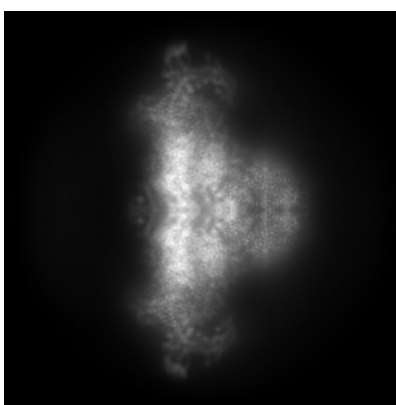
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

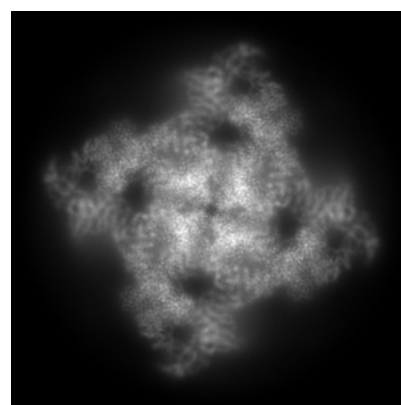
6.1.1 Primary map



X



Y

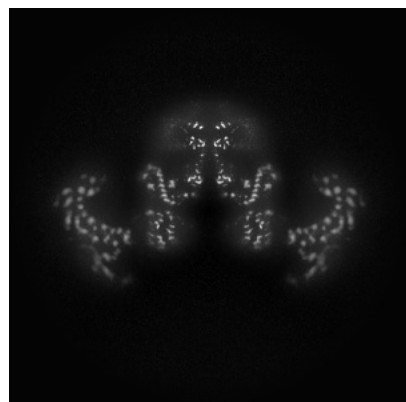


Z

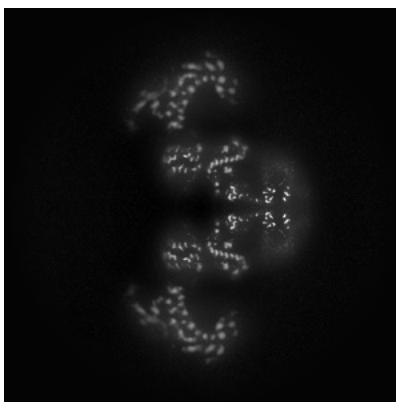
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

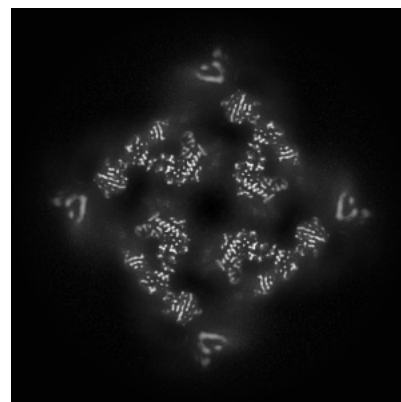
6.2.1 Primary map



X Index: 256



Y Index: 256

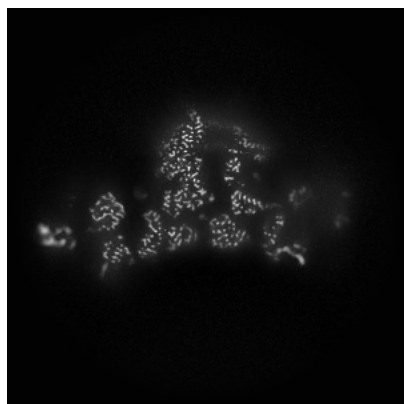


Z Index: 256

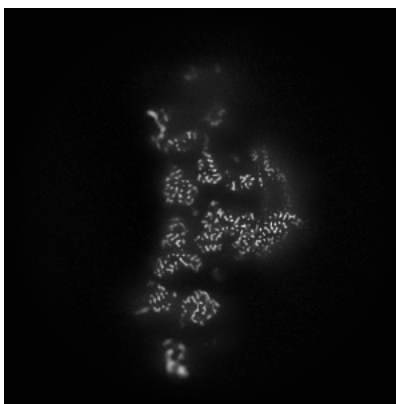
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

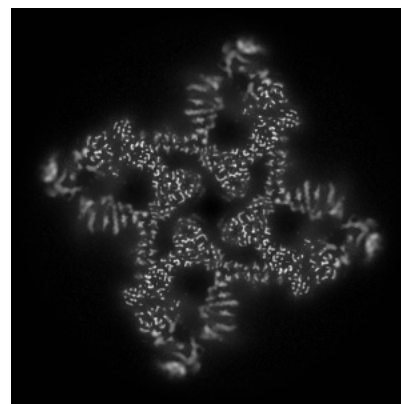
6.3.1 Primary map



X Index: 219



Y Index: 293

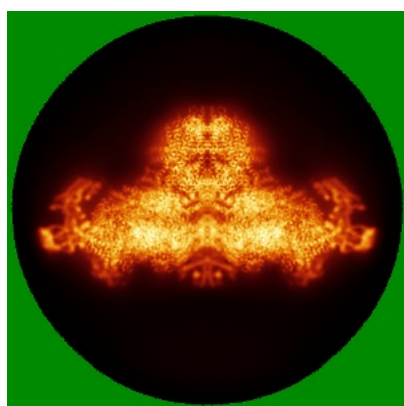


Z Index: 224

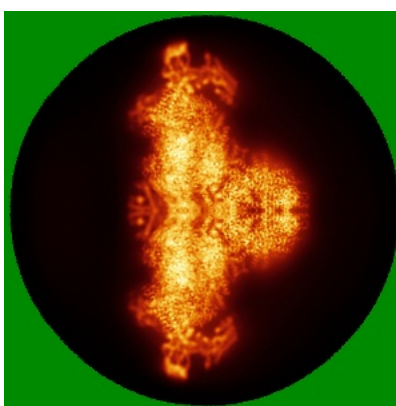
The images above show the largest variance slices of the map in three orthogonal directions.

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

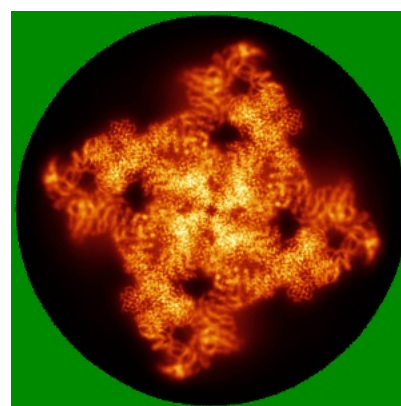
6.4.1 Primary map



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.

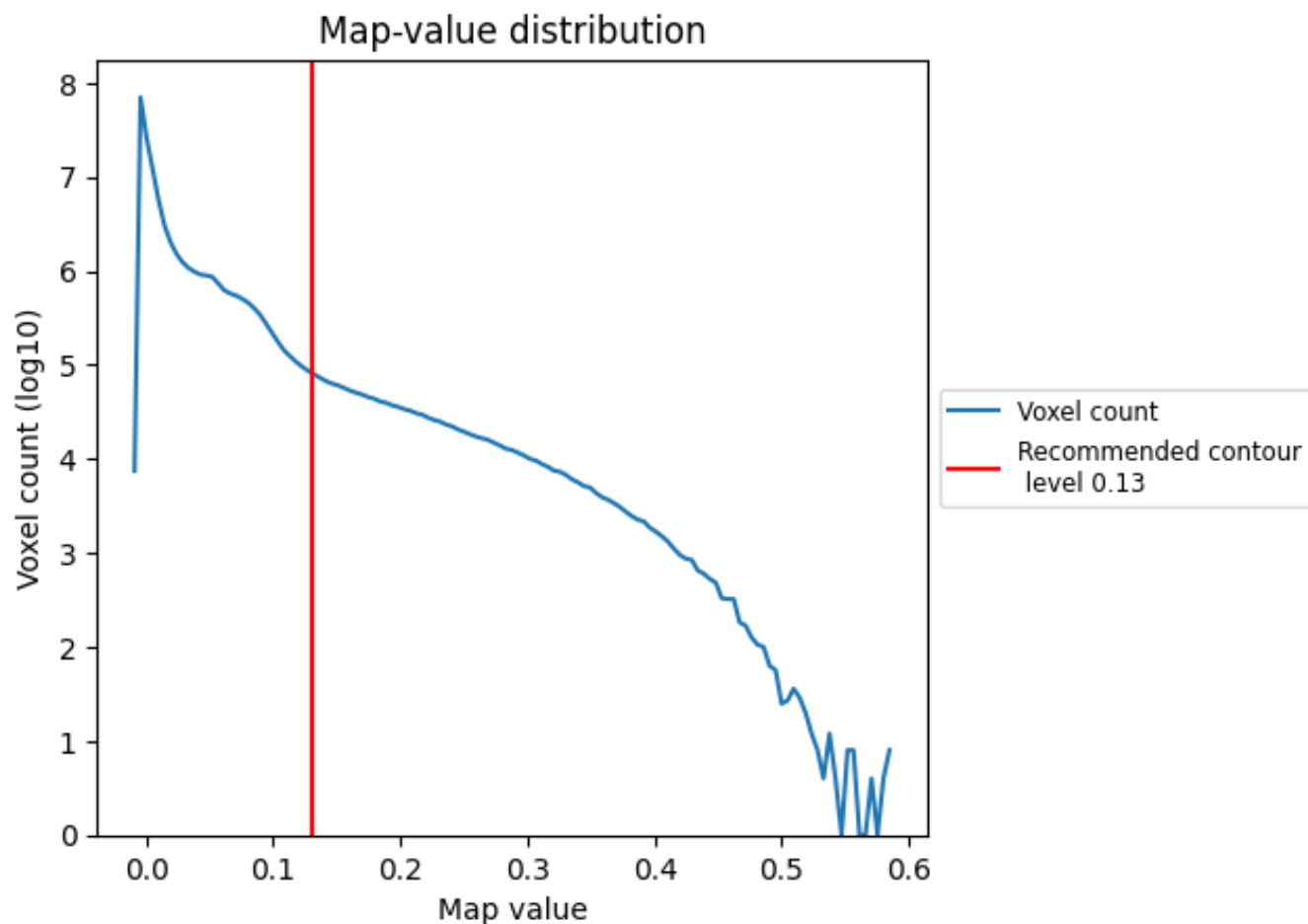
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

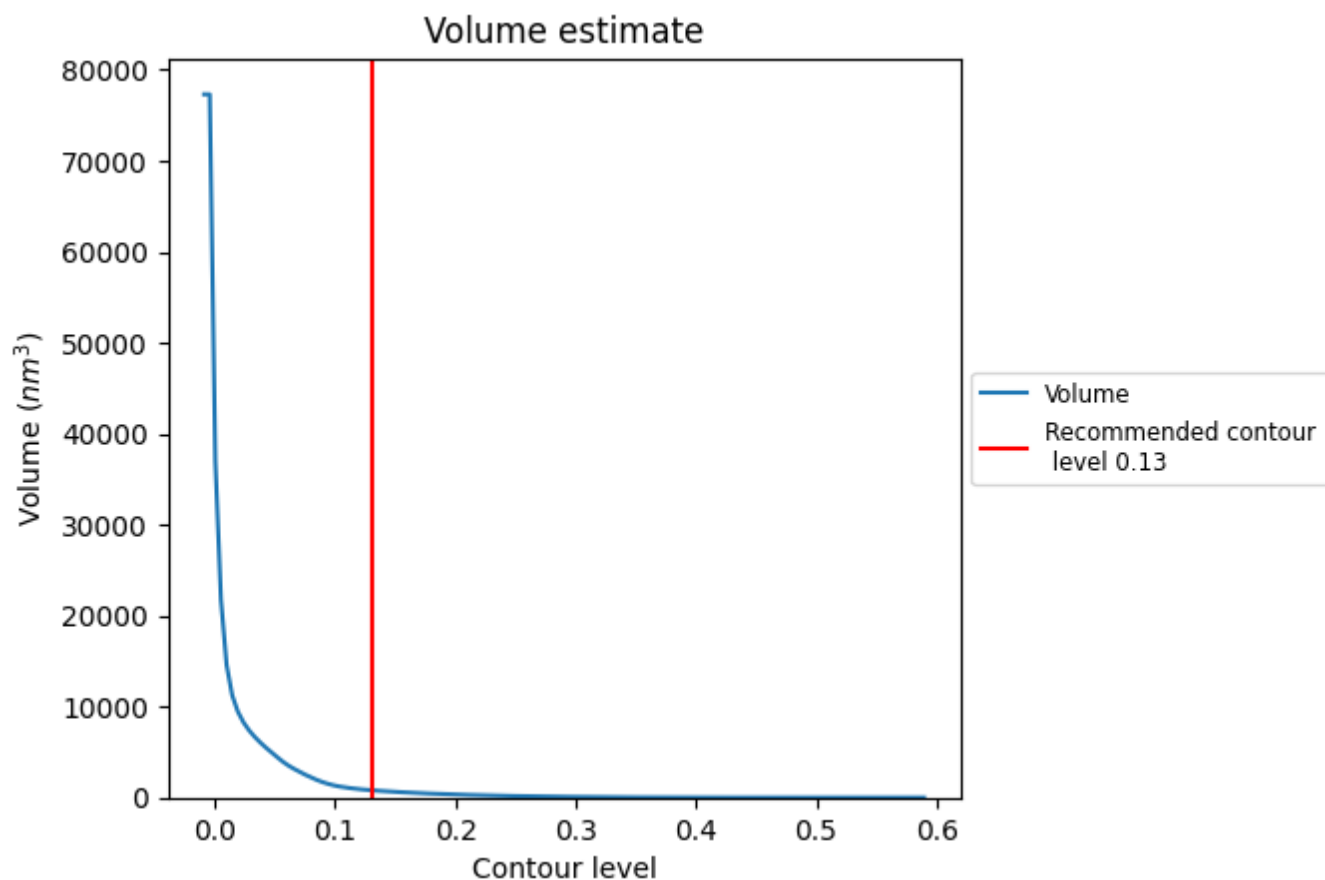
This section contains the results of statistical analysis of the map.

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.

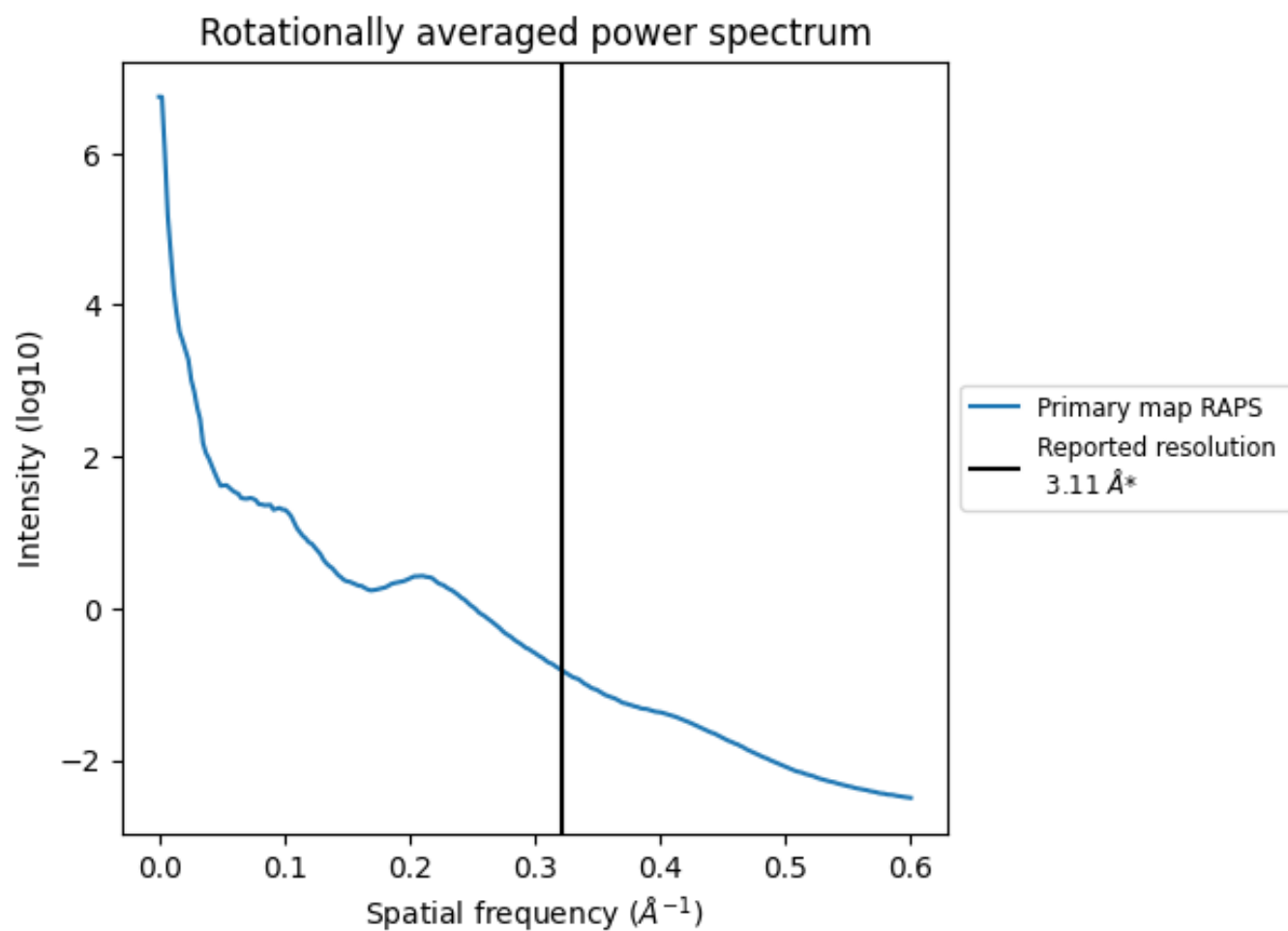
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 805 nm^3 ; this corresponds to an approximate mass of 728 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 0.322 Å⁻¹

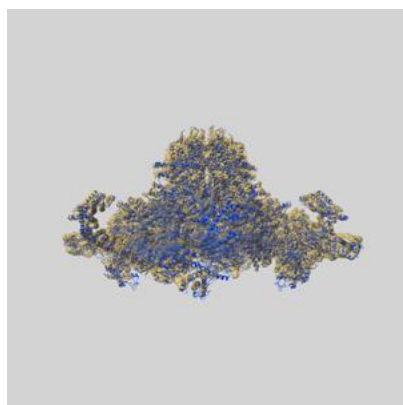
8 Fourier-Shell correlation

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

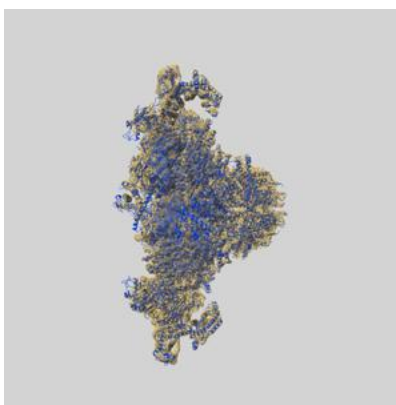
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-26405 and PDB model 7U9Q. Per-residue inclusion information can be found in section 3 on page 6.

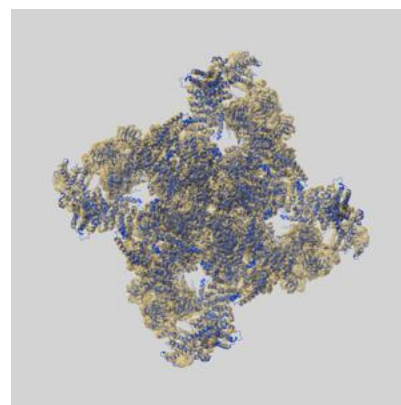
9.1 Map-model overlay [i](#)



X



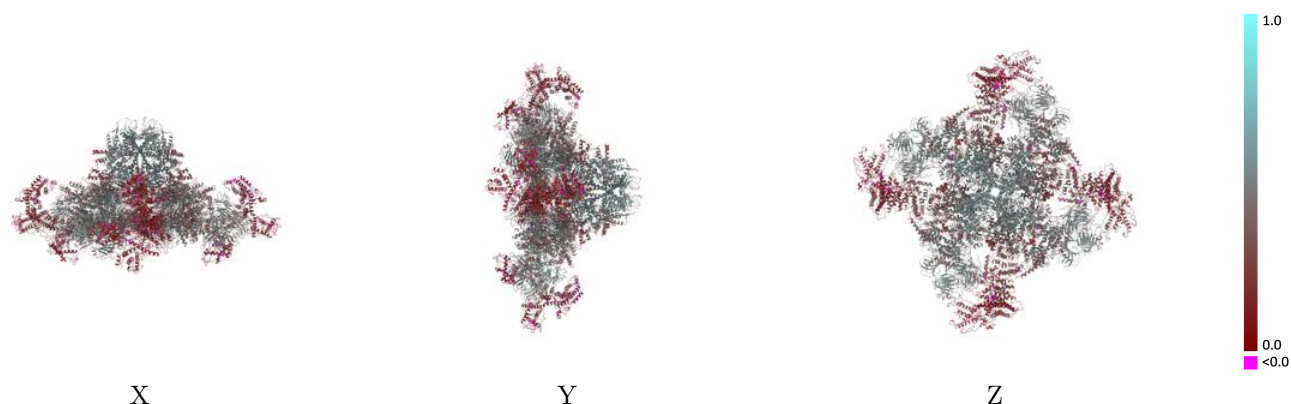
Y



Z

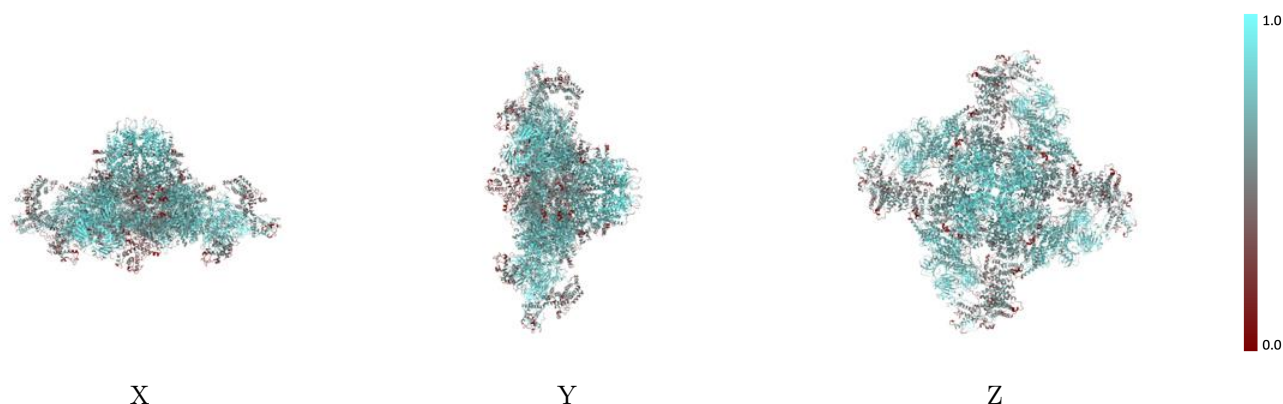
The images above show the 3D surface view of the map at the recommended contour level 0.13 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



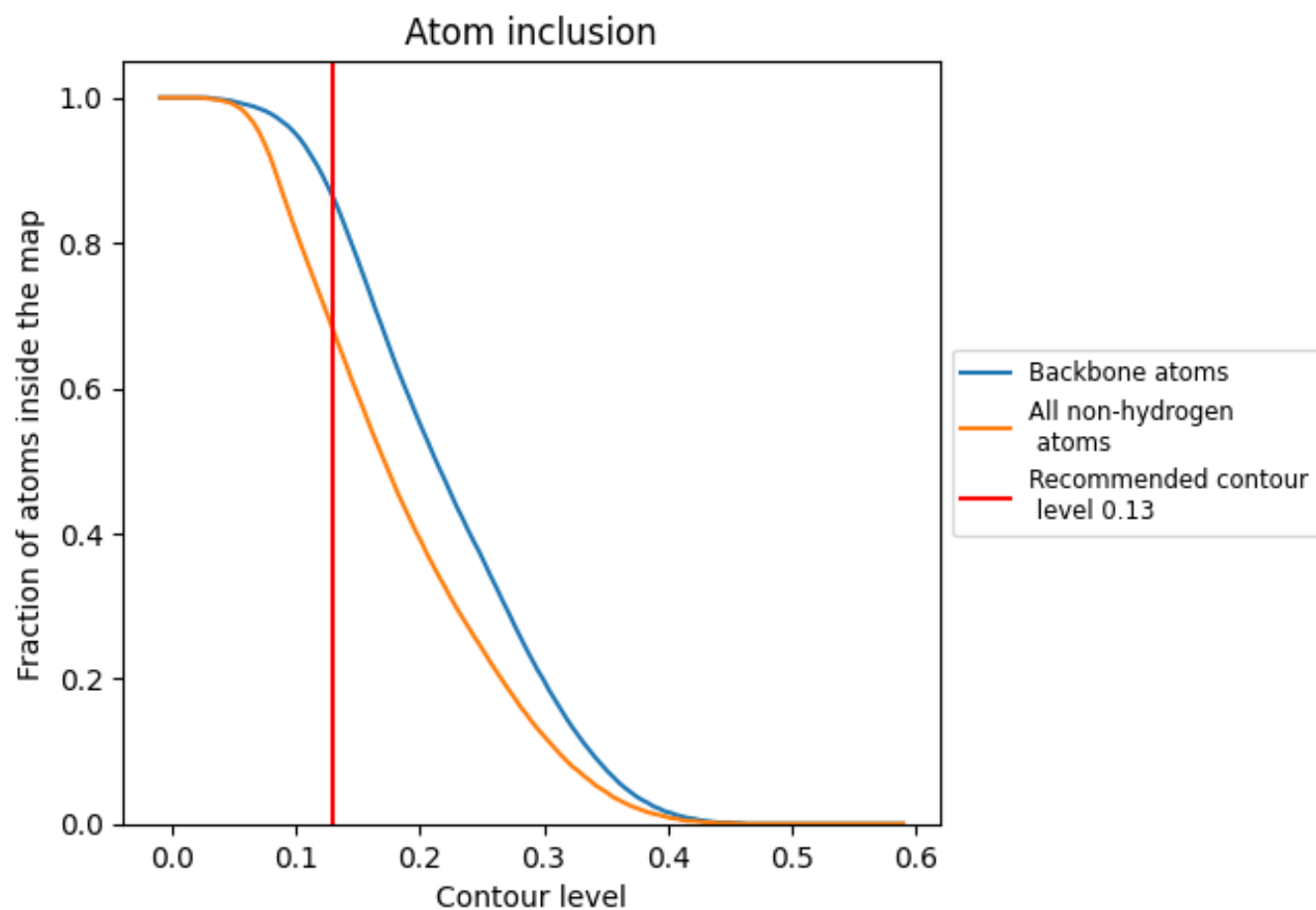
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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, 86% of all backbone atoms, 68% 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	0.6810	0.3770
A	0.6830	0.3810
B	0.6700	0.3640
C	0.6810	0.3790
D	0.6780	0.3740
E	0.7980	0.4950
F	0.7870	0.4900
G	0.7890	0.5020
H	0.8090	0.5130

