



## Full wwPDB EM Validation Report ⓘ

Nov 20, 2022 – 02:53 pm GMT

PDB ID : 4V8V  
EMDB ID : EMD-2358  
Title : Structure and conformational variability of the Mycobacterium tuberculosis fatty acid synthase multienzyme complex  
Authors : Ciccarelli, L.; Connell, S.R.; Enderle, M.; Mills, D.J.; Vonck, J.; Grininger, M.  
Deposited on : 2013-04-18  
Resolution : 20.00 Å(reported)  
Based on initial model : 4B3Y

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

We welcome your comments at [validation@mail.wwpdb.org](mailto:validation@mail.wwpdb.org)

A user guide is available at

<https://www.wwpdb.org/validation/2017/EMValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

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

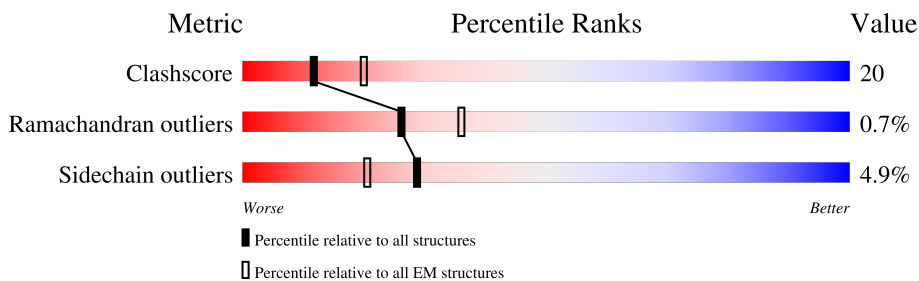
EMDB validation analysis : 0.0.1.dev43  
Mogul : 1.8.4, CSD as541be (2020)  
MolProbity : 4.02b-467  
buster-report : 1.1.7 (2018)  
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)  
MapQ : 1.9.9  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)  
Validation Pipeline (wwPDB-VP) : 2.31.2

# 1 Overall quality at a glance i

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

The reported resolution of this entry is 20.00 Å.

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



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

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

Mol	Chain	Length	Quality of chain
1	A	3089	
1	B	3089	
1	C	3089	
1	D	3089	
1	E	3089	
1	F	3089	

## 2 Entry composition [i](#)

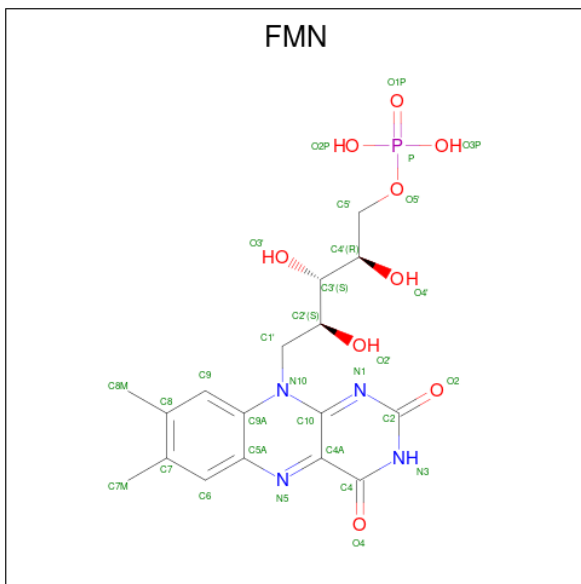
There are 2 unique types of molecules in this entry. The entry contains 125856 atoms, of which 0 are hydrogens and 0 are deuteriums.

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 TYPE-I FATTY ACID SYNTHASE.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	A	2822	Total 20945	C 13219	N 3662	O 3998	S 66	0	0
1	B	2822	Total 20945	C 13219	N 3662	O 3998	S 66	0	0
1	C	2822	Total 20945	C 13219	N 3662	O 3998	S 66	0	0
1	D	2822	Total 20945	C 13219	N 3662	O 3998	S 66	0	0
1	E	2822	Total 20945	C 13219	N 3662	O 3998	S 66	0	0
1	F	2822	Total 20945	C 13219	N 3662	O 3998	S 66	0	0

- Molecule 2 is FLAVIN MONONUCLEOTIDE (three-letter code: FMN) (formula: C<sub>17</sub>H<sub>21</sub>N<sub>4</sub>O<sub>9</sub>P).



Mol	Chain	Residues	Atoms					AltConf
			Total	C	N	O	P	
2	A	1	Total 31	C 17	N 4	O 9	P 1	0

*Continued on next page...*

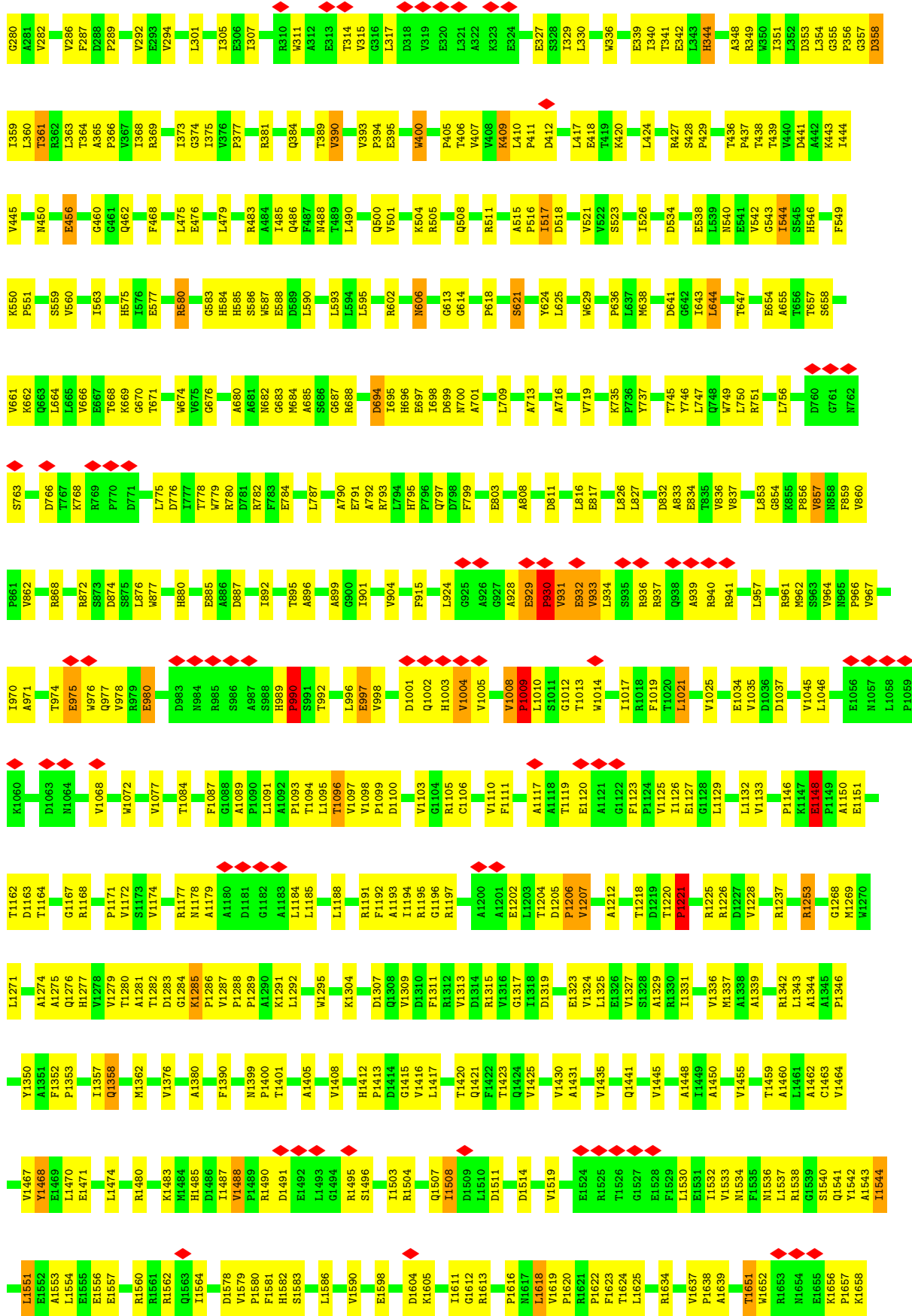
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<b>Mol</b>	<b>Chain</b>	<b>Residues</b>	<b>Atoms</b>					<b>AltConf</b>
2	B	1	Total	C	N	O	P	0
			31	17	4	9	1	
2	C	1	Total	C	N	O	P	0
			31	17	4	9	1	
2	D	1	Total	C	N	O	P	0
			31	17	4	9	1	
2	E	1	Total	C	N	O	P	0
			31	17	4	9	1	
2	F	1	Total	C	N	O	P	0
			31	17	4	9	1	



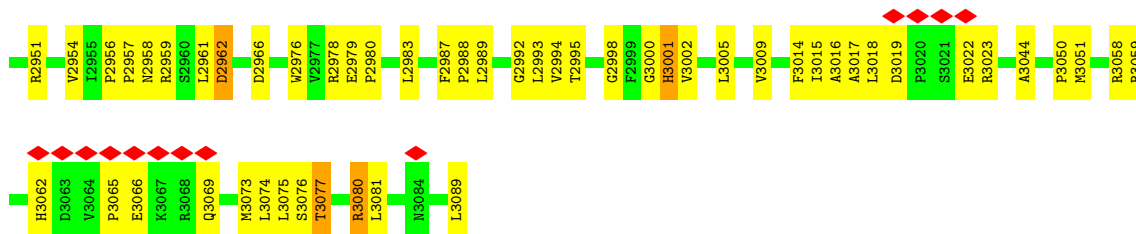




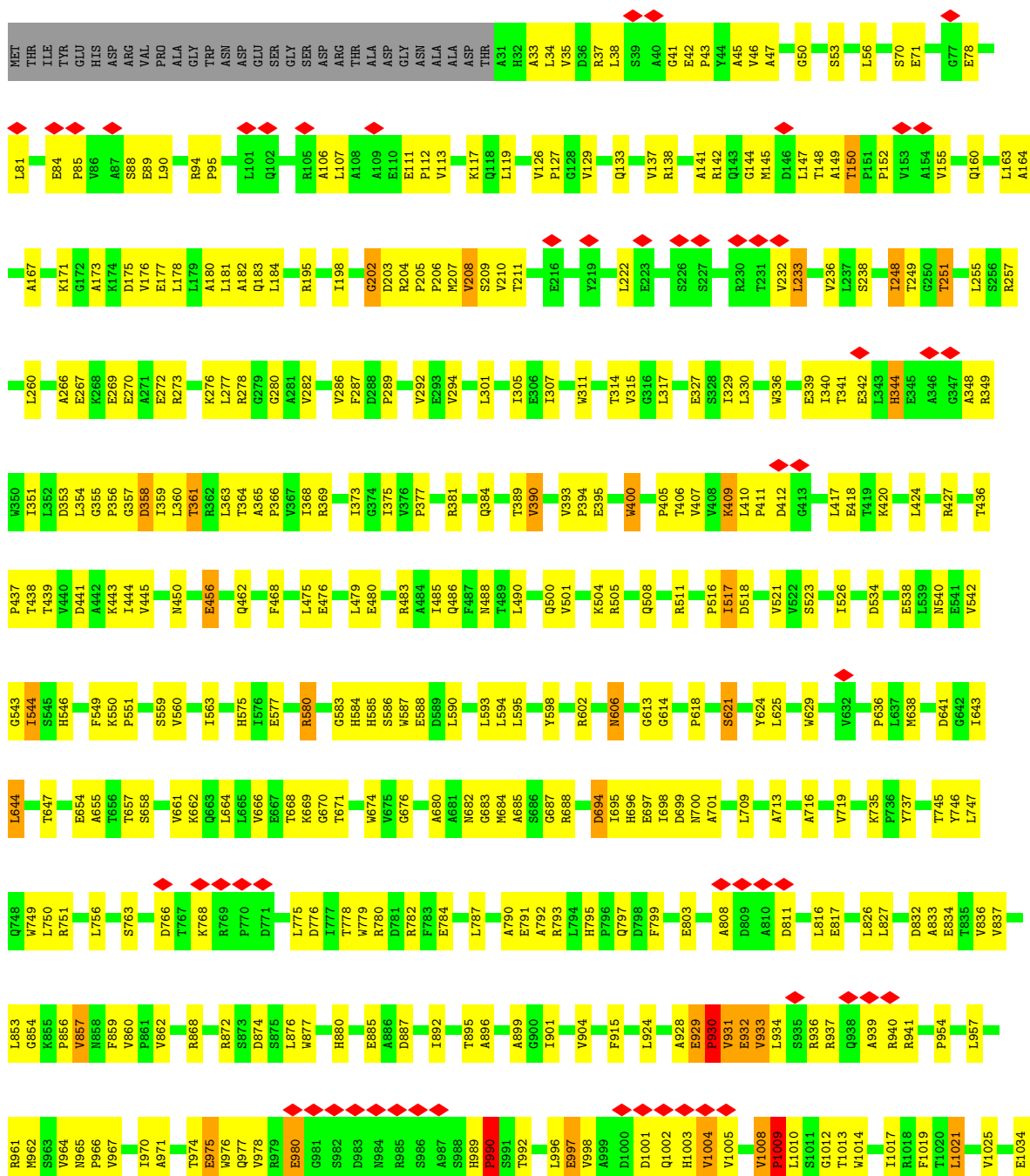




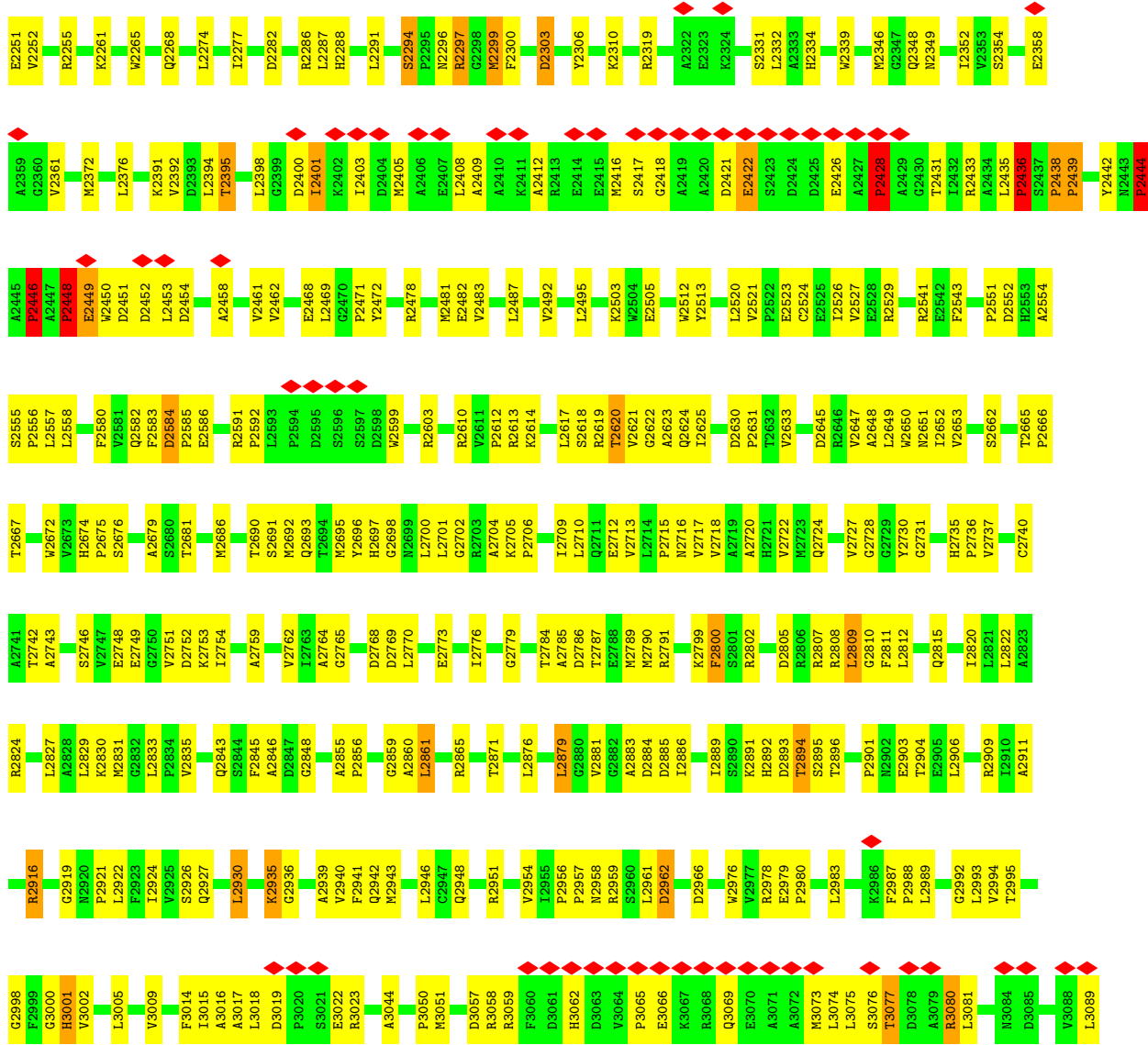
L1659	L1660	C1661	R1662	K1663	I1666	E1667	L1668	M1671	Q1672	F1673	A1674	M1679	D1684	L1685	L1686	F1687	E1690	A1691	A1692	G1693	G1694	L1695	R1699	F1700	V1701	E1702	I1703	G1704	V1705	K1706	T1710	V1711	A1712	G1713	L1714	L1719	F1722	E1723	V1724	S1725	E1730	V1731	L1732	M1733	E1734	S1735	R1736	D1737					
L1741	D1745	THR	ASP	PRO	GLU	PRO	GLU	PRO	GLY	ASP	ALA	THR	ALA	ASP	ALA	PRO	GLU	ALA	PRO	ALA	ALA	ALA	ALA	PRO	PRO	PRO	VAL	VAL	VAL	ALA	PRO	ALA	ALA	PRO	PRO	PRO	ASP	ASP	ALA	THR	PHE	ASP	ALA	ALA	ASP	ALA	THR	VAL	VAL	LEU			
ILE	ALA	LEU	SER	ALA	LYS	ARG	VAL	ILE	GLN	ILE	ASP	THR	ILE	ILE	SER	ILE	THR	GLY	ALA	SER	SER	SER	ALA	LEU	LEU	ALA	VAL	ALA	ILE	GLY	SER	GLY	ILE	VAL	ASP	GLY	PRO	ALA	ALA	ALA	TRP	GLU	ALA	ASP	LYS	GLY	VAL	GLN	VAL				
THR	LYS	LEU	ALA	ARG	GLY	THR	TYR	PRO	PHE	GLY	PRO	VAL	ALA	ILE	ASN	ASP	GLN	THR	ALA	THR	ALA	VAL	LEU	ARG	LYS	PRO	ALA	ALA	ILE	THR	GLU	THR	GLY	VAL	VAL	GLY	GLY	PRO	GLY	ALA	ALA	ALA	HIS	VAL	VAL	GLY	VAL	PHE	GLN	ALA			
GLY	THR	ARG	GLU	GLY	SER	VAL	ARG	GLY	GLY	GLY	LEU	GLY	HIS	ALA	GLY	ALA	ALA	ALA	ALA	ALA	ASP	VAL	GLY	ASP	ASP	VAL	VAL	ASP	VAL	ALA	ALA	VAL	ASP	VAL	VAL	VAL	VAL	VAL	VAL	VAL	VAL	VAL	VAL	VAL	VAL	VAL	VAL	VAL	VAL	ASP			
S1983	A1984	A1985	L1986	L1987	E1988	F1989	K1992	H1993	P1996	L2000	R2005	L2008	N2009	Q2010	L2011	G2012	L2013	S2014	D2015	V2016	T2017	T2018	T2019	P2020	E2021	A2022	A2023	T2024	E2027	V2032	T2047	A2053	V2054	V2055	F2056	D2057	D2058	R2059	W2060	L2067	L2070	E2074	D2079	A2080	Q2081	W2082	E2083						
Q2084	L2085	S2086	R2088	F2089	E2090	G2091	T2092	H2093	G2094	V2095	W2096	A2097	T2098	Q2099	A2100	W2101	W2102	W2103	Q2104	G2105	L2108	A2109	A2110	G2111	R2112	W2113	W2114	H2115	L2118	F2119	L2122	A2123	A2124	G2125	A2126	E2127	W2128	P2129	Y2134	E2137	V2140	V2141	T2163	V2164	L2165	A2166	T2167	R2170	D2173				
D2174	R2175	L2176	K2180	R2188	F2189	T2192	H2193	W2194	W2195	V2196	P2197	D2205	L2209	V2210	W2211	W2212	G2213	T2215	E2216	K2229	P2234	L2236	L2237	F2238	R2244	V2245	A2246	G2247	D2248	M2249	S2250	E2251	V2252	R2255	K2261	W2265	Q2268	L2274	I2277	D2282													
R2286	L2287	H2288	L2291	S2294	P2295	M2296	R2297	G2298	M2299	F2300	D2303	Y2306	K2310	R2319	S2331	L2332	A2333	H2334	W2339	M2346	G2347	Q2348	M2349	T2352	V2353	S2354	A2355	V2356	E2357	E2358	A2359	G2360	V2361	M2372	L2376	K2391	V2392	D2393	L2394	T2395	L2398	G2399	D2400	I2401	K2402								
I2403	D2404	M2405	A2406	L2408	A2409	A2412	M2416	S2417	G2418	A2419	A2420	D2421	E2422	S2423	D2424	D2425	E2426	A2427	P2428	T2431	L2432	R2433	A2434	L2435	P2436	S2437	P2438	P2439	Y2442	N2443	P2444	A2445	P2446	A2447	E2448	E2449	W2450	D2451	D2452	L2453	D2454	A2458	V2461	V2462	E2468	L2469	G2470	P2471	Y2472	R2478			
M2481	E2482	V2483	L2487	V2492	L2495	L2496	K2503	W2504	E2505	W2512	Y2513	L2520	V2521	P2522	E2523	C2524	E2525	V2527	E2528	G2529	W2530	A2533	R2541	E2542	F2543	D2550	P2551	D2552	H2553	A2554	L2557	L2558	F2580	V2581	Q2582	F2583	D2584	P2585	E2586	R2591	P2592	D2595	W2599										
R2603	R2610	V2611	P2612	R2613	K2614	L2617	S2618	R2619	T2620	W2621	G2622	A2623	Q2624	L2625	D2630	P2631	V2633	D2645	R2646	V2647	A2648	L2649	W2650	N2651	L2652	V2653	S2662	P2666	T2667	W2672	V2673	H2674	P2675	S2676	A2679	S2680	T2681	M2686	T2690	S2691	M2692	Q2693	T2694	W2695	Y2696	H2697	G2698	N2699					
L2700	L2701	G2702	R2703	A2704	K2705	P2706	T2709	N2710	L2711	Q2711	E2712	W2713	L2714	P2715	N2716	V2717	W2718	A2719	A2720	H2721	M2722	M2723	Q2724	V2727	G2728	R2729	Y2730	G2731	H2735	P2736	V2737	C2740	A2741	T2742	A2743	S2746	L2747	K2748	E2749	G2750	V2751	D2752	K2753	L2754	A2759	V2762	L2763	F2764	A2764	G2765	D2768	D2769	L2770
E2773	L2776	G2779	T2784	A2785	D2786	T2787	E2788	D2789	M2790	R2791	K2799	F2800	S2801	R2802	D2805	R2806	R2807	R2808	L2809	G2810	F2811	L2812	Q2815	T2820	L2821	L2822	R2823	R2824	L2827	A2828	L2829	K2830	M2831	G2832	L2833	P2834	V2835	L2836	Q2843	S2844	F2845	A2846	D2847	F2841	G2848	M2843	G2859	L2860	L2861	Q2848	Q2948		
R2865	T2871	L2876	L2879	G2880	G2881	G2882	G2883	D2884	D2885	L2886	T2889	S2890	K2891	H2892	D2893	T2894	T2896	P2901	R2902	E2903	L2906	R2909	L2910	A2911	R2916	G2919	R2920	L2921	L2922	F2923	L2924	V2925	S2926	Q2927	L2930	K2935	G2936	A2939	V2940	F2941	Q2942	M2943	L2946	C2947	Q2948								



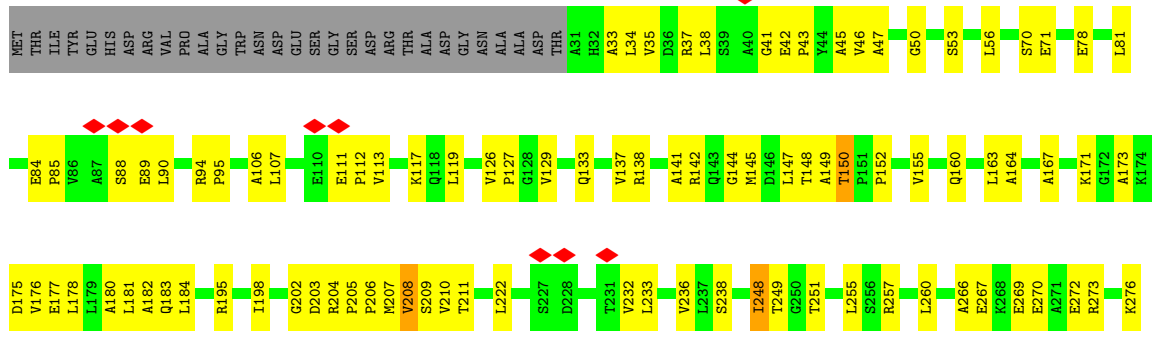
• Molecule 1: TYPE-I FATTY ACID SYNTHASE

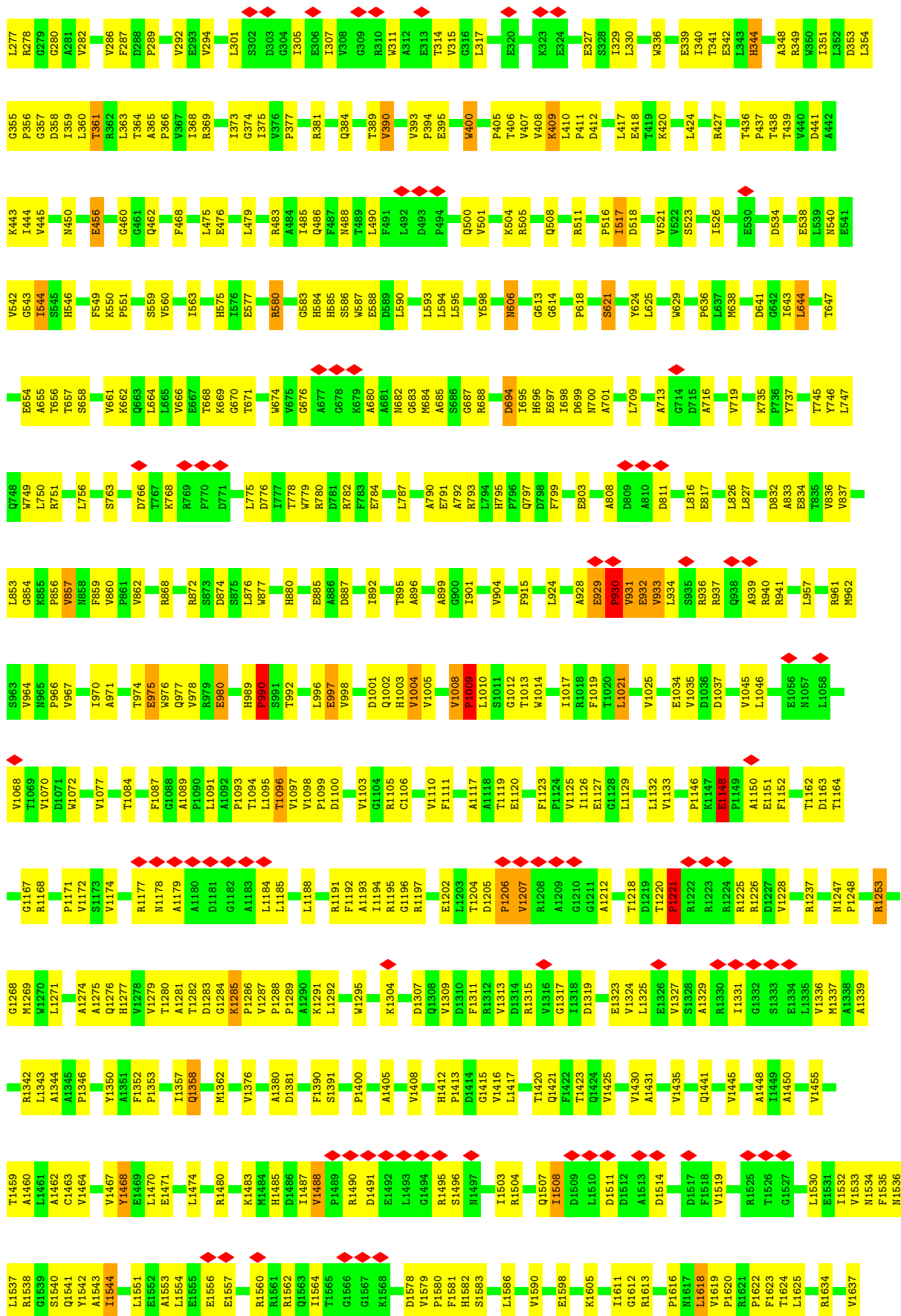




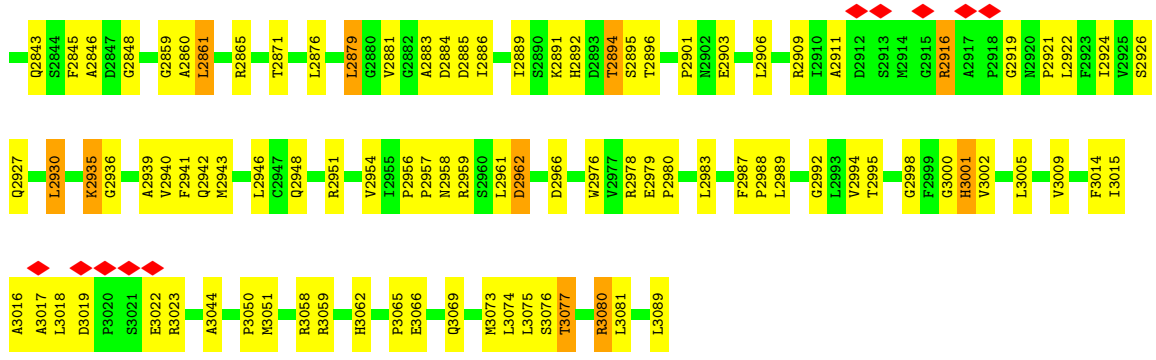


● Molecule 1: TYPE-I FATTY ACID SYNTHASE

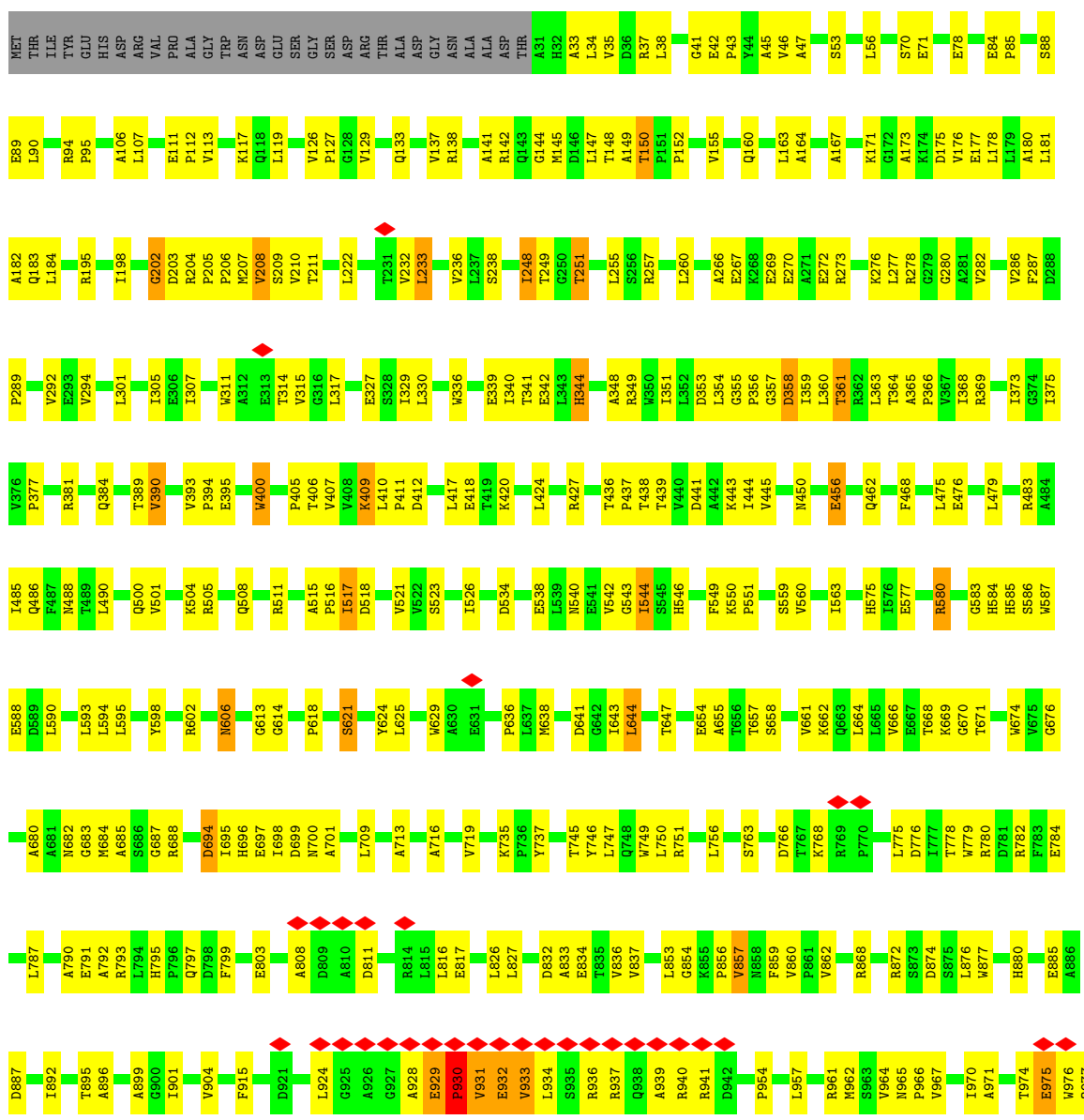




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A2759	P2471	P2585	P2471	I2403	I2165	Q2081	ALA	ALA	ALA	PHE	L1732	A1647
V2762	Y2472	E2586	Y2472	A2404	A2166	W2082	GLY	HIS	LEU	ASP	N1733	N1734
L2763	R2478	R2591	R2478	M2406	T2167	E2083	ALA	VAL	GLY	ALA	E1735	T1651
A2764	M2481	P2592	M2481	A2407	R2170	Q2084	SER	THR	LEU	ASP	R1652	W1652
G2765	E2482	L2593	E2482	L2408	D2173	L2085	GLY	VAL	LEU	ALA	K1656	K1656
D2768	V2483	L2594	V2483	A2409	R2287	S2086	VAL	PHE	GLY	THR	P1657	P1657
D2769	L2487	D2595	L2487	A2412	H2288	Q2087	VAL	VAL	GLN	ALA	K1658	K1658
L2770	V2492	S2596	V2492	R2414	R2175	F2088	ASP	LEU	VAL	LEU	A1739	A1739
E2773	L2495	S2597	L2495	E2414	L2176	E2090	S1983	GLY	THR	ILE	V1740	V1740
L2776	L2496	D2598	L2496	E2415	K2180	T2091	A1984	THR	ALA	ALA	L1741	L1741
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K2705	K2503	R2603	K2503	S2417	F2189	H2094	L1986	GLY	ALA	ALA	THR	THR
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L2709	E2505	R2611	E2505	A2419	L2193	T2098	K1992	VAL	PRO	LYS	PRO	PRO
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Q2711	Y2513	K2614	Y2513	D2421	V2195	A2100	L2000	GLY	GLN	PRO	PRO	PRO
W2713	L2520	L2617	L2520	E2422	W2197	W2102	A2004	ASP	VAL	ILE	ALA	ALA
L2714	V2521	S2618	V2521	S2423	A2198	Q2103	R2005	GLY	LEU	ALA	ASP	ASP
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M2716	E2523	T2620	E2523	E2426	L2209	A2106	L2008	ALA	ALA	SER	ALA	ALA
F2800	E2524	R2621	E2524	A2427	V2210	R2107	L2008	ILE	ILE	THR	THR	THR
A2718	W2526	G2622	W2526	L2427	F2211	L2108	N2009	GLY	ASN	ALA	ALA	ALA
G2719	V2527	A2623	V2527	P2428	W2212	A2109	Q2010	ALA	ASP	SER	ASP	ASP
H2720	E2528	Q2624	E2528	P2429	G2213	A2110	Q2010	LEU	GLN	ILE	ALA	ALA
H2721	R2529	L2625	R2529	T2431	G2214	G2111	L2011	ALA	ALA	THR	ALA	ALA
M2722	Y2530	D2630	Y2530	L2432	W2339	R2112	G2012	ARG	ARG	ASP	GLU	GLU
Q2723	A2533	P2631	A2533	R2433	Q2348	R2113	L2013	THR	THR	ALA	ALA	ALA
P2724	R2541	T2632	R2541	L2435	I2352	F2113	S2014	VAL	VAL	SER	SER	SER
V2727	E2542	W2633	E2542	P2436	T2236	W2114	V2015	ASP	ASP	PRO	PRO	PRO
G2728	F2543	D2645	F2543	S2437	P2234	L2118	V2016	VAL	VAL	SER	ALA	ALA
Y2730	P2543	R2647	P2543	P2439	L2237	F2119	V2017	LYS	LYS	ARG	ALA	ALA
G2731	P2551	L2648	P2551	Y2442	F2238	T2122	P2020	THR	THR	ALA	ALA	ALA
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P2736	A2554	M2650	A2554	P2444	V2245	A2124	T2047	VAL	VAL	ASN	ALA	ALA
V2737	S2555	N2651	S2555	A2445	A2246	G2125	V2053	ALA	ALA	GLN	ALA	ALA
L2820	P2556	L2652	P2556	P2446	G2247	A2126	A2053	ILE	ILE	LEU	ALA	ALA
L2822	L2557	V2653	L2557	A2447	E2127	A2127	V2054	THR	THR	GLY	ALA	ALA
A2823	L2558	S2662	L2558	P2448	R2128	V2128	V2055	VAL	VAL	SER	ALA	ALA
R2824	L2563	P2666	L2563	E2449	V2252	F2129	D2057	ALA	ALA	GLU	ALA	ALA
L2827	F2567	T2667	F2567	W2450	V2252	G2130	F2056	THR	THR	LEU	ALA	ALA
L2829	F2567	T2667	F2567	D2451	R2285	R2131	D2058	ARG	ARG	LEU	ALA	ALA
K2830	E2574	W2672	E2574	D2452	K2261	G2132	R2059	THR	THR	LEU	ALA	ALA
G2832	F2580	S2676	F2580	L2453	W2265	R2133	W2060	GLY	GLY	SER	ALA	ALA
P2834	V2581	A2679	V2581	D2454	L2285	R2134	L2067	TRP	TRP	GLY	ALA	ALA
V2835	Q2582	S2680	Q2582	V2455	L2398	E2137	L2070	GLU	GLU	ILE	ALA	ALA
		P2457		D2456	G2399	V2140	E2074	LEU	LEU	ASP	ALA	ALA
		A2458		P2457	D2400	V2141		PRO	PRO	ASP	ASP	ASP



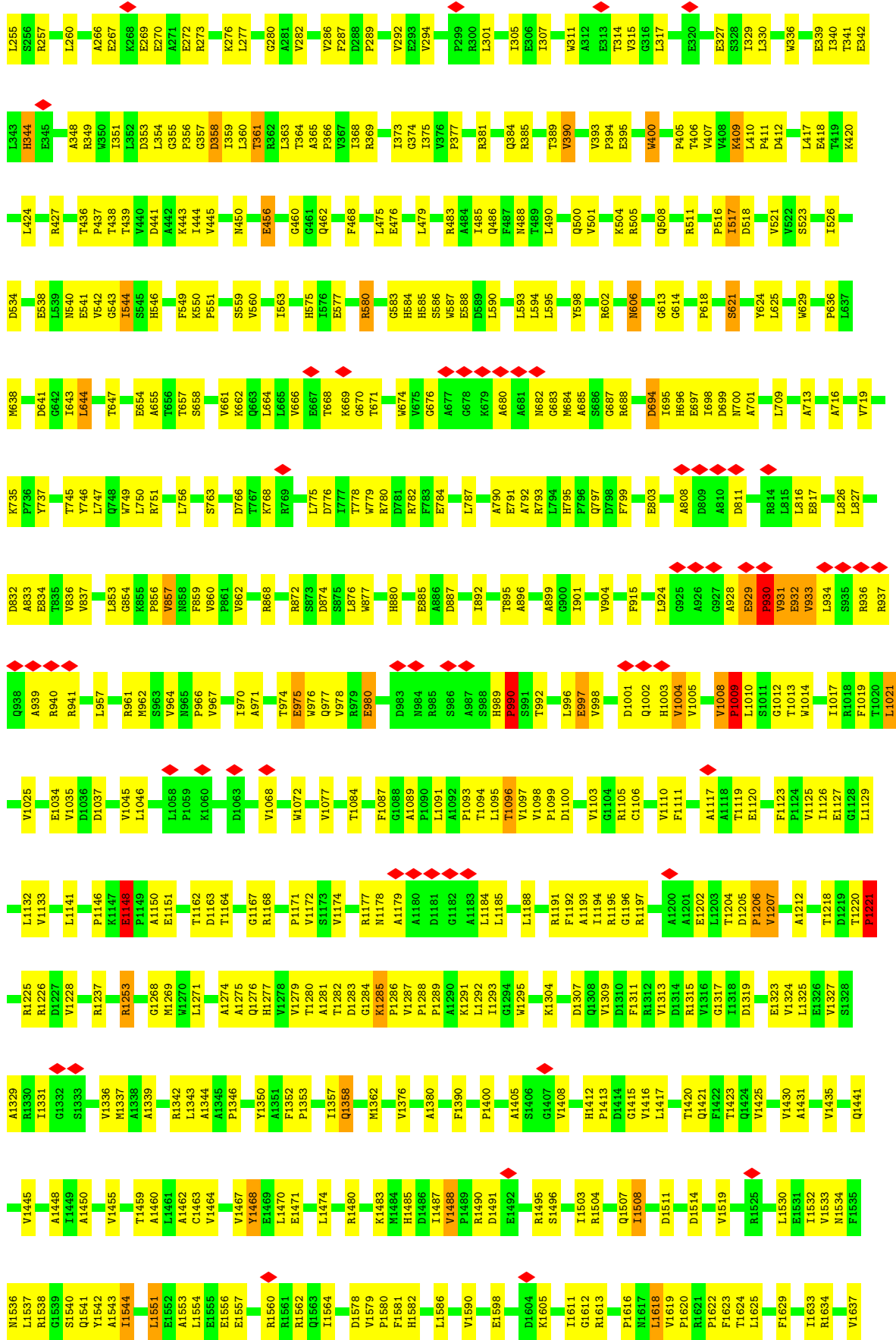
● Molecule 1: TYPE-I FATTY ACID SYNTHASE













L2833	L2834	V2835	Q2843	S2844	F2845	A2846	D2847	G2848	G2859	A2860	L2861	R2865	T2871	L2876	L2879	G2880	V2881	G2882	A2883	D2884	D2885	I2886	I2889	S2890	K2891	H2892	D2893	T2894	S2895	T2896	P2901	N2902	E2903	L2906	R2909	I2910	A2911	R2916	G2919	N2920	P2921	L2922	F2923	L2924	V2925	Q2927
L2930	K2935	G2936	A2939	V2940	F2941	Q2942	M2943	L2946	G2947	Q2948	R2951	V2954	L2955	P2956	P2957	N2958	R2959	S2960	L2961	D2962	D2966	W2976	S2977	R2978	E2979	P2980	L2983	F2987	P2988	L2989	G2992	L2993	V2994	T2995	G2998	F2999	G3000	H3001	V3002	L3005	V3009	F3014	I3015	A3016		
A3017	L3018	D3019	P3020	S3021	E3022	R3023	A3044	P3050	M3051	D3057	R3058	R3059	H3062	P3065	E3066	Q3069	M3073	L3074	L3075	S3076	T3077	R3080	L3081	L3089																						

## 4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	4337	Depositor
Resolution determination method	Not provided	
CTF correction method	Not provided	
Microscope	FEI POLARA 300	Depositor
Voltage (kV)	200	Depositor
Electron dose ( $e^-/\text{\AA}^2$ )	Not provided	
Minimum defocus (nm)	1800	Depositor
Maximum defocus (nm)	4500	Depositor
Magnification	59000	Depositor
Image detector	KODAK SO-163 FILM	Depositor
Maximum map value	10.361	Depositor
Minimum map value	-2.852	Depositor
Average map value	0.000	Depositor
Map value standard deviation	1.000	Depositor
Recommended contour level	1.8	Depositor
Map size ( $\text{\AA}$ )	456.0, 456.0, 456.0	wwPDB
Map dimensions	200, 200, 200	wwPDB
Map angles ( $^\circ$ )	90.0, 90.0, 90.0	wwPDB
Pixel spacing ( $\text{\AA}$ )	2.28, 2.28, 2.28	Depositor

## 5 Model quality i

### 5.1 Standard geometry i

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

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
1	A	0.39	27/21335 (0.1%)	0.51	13/29037 (0.0%)
1	B	0.39	27/21335 (0.1%)	0.51	13/29037 (0.0%)
1	C	0.39	27/21335 (0.1%)	0.51	13/29037 (0.0%)
1	D	0.39	27/21335 (0.1%)	0.51	13/29037 (0.0%)
1	E	0.39	27/21335 (0.1%)	0.51	13/29037 (0.0%)
1	F	0.39	27/21335 (0.1%)	0.51	13/29037 (0.0%)
All	All	0.39	162/128010 (0.1%)	0.51	78/174222 (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
1	A	0	5
1	B	0	5
1	C	0	5
1	D	0	5
1	E	0	5
1	F	0	5
All	All	0	30

All (162) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	E	2442	TYR	CB-CG	-6.38	1.42	1.51
1	A	2442	TYR	CB-CG	-6.36	1.42	1.51
1	B	2442	TYR	CB-CG	-6.35	1.42	1.51
1	F	2442	TYR	CB-CG	-6.33	1.42	1.51
1	D	2442	TYR	CB-CG	-6.31	1.42	1.51
1	C	2442	TYR	CB-CG	-6.28	1.42	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	2134	TYR	CB-CG	-6.25	1.42	1.51
1	C	2134	TYR	CB-CG	-6.23	1.42	1.51
1	A	2134	TYR	CB-CG	-6.22	1.42	1.51
1	F	2134	TYR	CB-CG	-6.21	1.42	1.51
1	D	2134	TYR	CB-CG	-6.19	1.42	1.51
1	E	2134	TYR	CB-CG	-6.18	1.42	1.51
1	B	2089	PHE	CB-CG	-5.45	1.42	1.51
1	C	2089	PHE	CB-CG	-5.44	1.42	1.51
1	D	2089	PHE	CB-CG	-5.44	1.42	1.51
1	B	2119	PHE	CB-CG	-5.43	1.42	1.51
1	A	2119	PHE	CB-CG	-5.42	1.42	1.51
1	C	2119	PHE	CB-CG	-5.42	1.42	1.51
1	F	2119	PHE	CB-CG	-5.42	1.42	1.51
1	D	2119	PHE	CB-CG	-5.41	1.42	1.51
1	E	2089	PHE	CB-CG	-5.41	1.42	1.51
1	E	2119	PHE	CB-CG	-5.40	1.42	1.51
1	F	2089	PHE	CB-CG	-5.40	1.42	1.51
1	D	975	GLU	CB-CG	-5.39	1.42	1.52
1	C	975	GLU	CB-CG	-5.37	1.42	1.52
1	A	2089	PHE	CB-CG	-5.37	1.42	1.51
1	F	2090	GLU	CB-CG	-5.36	1.42	1.52
1	E	2090	GLU	CB-CG	-5.36	1.42	1.52
1	B	975	GLU	CB-CG	-5.36	1.42	1.52
1	F	975	GLU	CB-CG	-5.35	1.42	1.52
1	C	2090	GLU	CB-CG	-5.35	1.42	1.52
1	A	2426	GLU	CB-CG	-5.34	1.42	1.52
1	C	2083	GLU	CB-CG	-5.34	1.42	1.52
1	B	2426	GLU	CB-CG	-5.33	1.42	1.52
1	E	975	GLU	CB-CG	-5.33	1.42	1.52
1	A	975	GLU	CB-CG	-5.32	1.42	1.52
1	F	2426	GLU	CB-CG	-5.32	1.42	1.52
1	B	2090	GLU	CB-CG	-5.32	1.42	1.52
1	E	2426	GLU	CB-CG	-5.32	1.42	1.52
1	D	997	GLU	CB-CG	-5.31	1.42	1.52
1	E	1202	GLU	CB-CG	-5.31	1.42	1.52
1	C	932	GLU	CB-CG	-5.31	1.42	1.52
1	C	2426	GLU	CB-CG	-5.30	1.42	1.52
1	D	2090	GLU	CB-CG	-5.30	1.42	1.52
1	D	980	GLU	CB-CG	-5.30	1.42	1.52
1	A	2083	GLU	CB-CG	-5.30	1.42	1.52
1	A	2090	GLU	CB-CG	-5.30	1.42	1.52
1	D	2127	GLU	CB-CG	-5.30	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	E	980	GLU	CB-CG	-5.30	1.42	1.52
1	A	997	GLU	CB-CG	-5.30	1.42	1.52
1	F	2449	GLU	CB-CG	-5.30	1.42	1.52
1	A	1202	GLU	CB-CG	-5.29	1.42	1.52
1	D	1202	GLU	CB-CG	-5.28	1.42	1.52
1	E	2083	GLU	CB-CG	-5.28	1.42	1.52
1	F	997	GLU	CB-CG	-5.28	1.42	1.52
1	B	2127	GLU	CB-CG	-5.28	1.42	1.52
1	F	1202	GLU	CB-CG	-5.28	1.42	1.52
1	E	2127	GLU	CB-CG	-5.28	1.42	1.52
1	C	980	GLU	CB-CG	-5.28	1.42	1.52
1	D	2083	GLU	CB-CG	-5.28	1.42	1.52
1	D	2422	GLU	CB-CG	-5.28	1.42	1.52
1	B	932	GLU	CB-CG	-5.27	1.42	1.52
1	B	2422	GLU	CB-CG	-5.27	1.42	1.52
1	C	2449	GLU	CB-CG	-5.27	1.42	1.52
1	B	997	GLU	CB-CG	-5.27	1.42	1.52
1	C	929	GLU	CB-CG	-5.27	1.42	1.52
1	A	2422	GLU	CB-CG	-5.26	1.42	1.52
1	D	2426	GLU	CB-CG	-5.26	1.42	1.52
1	E	932	GLU	CB-CG	-5.26	1.42	1.52
1	E	2449	GLU	CB-CG	-5.26	1.42	1.52
1	A	2127	GLU	CB-CG	-5.26	1.42	1.52
1	D	932	GLU	CB-CG	-5.26	1.42	1.52
1	D	2449	GLU	CB-CG	-5.25	1.42	1.52
1	B	980	GLU	CB-CG	-5.25	1.42	1.52
1	C	997	GLU	CB-CG	-5.25	1.42	1.52
1	D	929	GLU	CB-CG	-5.25	1.42	1.52
1	C	1202	GLU	CB-CG	-5.24	1.42	1.52
1	F	2422	GLU	CB-CG	-5.24	1.42	1.52
1	A	932	GLU	CB-CG	-5.24	1.42	1.52
1	A	2449	GLU	CB-CG	-5.24	1.42	1.52
1	F	929	GLU	CB-CG	-5.24	1.42	1.52
1	F	2083	GLU	CB-CG	-5.24	1.42	1.52
1	F	980	GLU	CB-CG	-5.24	1.42	1.52
1	B	929	GLU	CB-CG	-5.24	1.42	1.52
1	E	997	GLU	CB-CG	-5.24	1.42	1.52
1	F	932	GLU	CB-CG	-5.23	1.42	1.52
1	A	980	GLU	CB-CG	-5.23	1.42	1.52
1	B	1202	GLU	CB-CG	-5.23	1.42	1.52
1	F	2127	GLU	CB-CG	-5.23	1.42	1.52
1	B	2449	GLU	CB-CG	-5.23	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	F	998	VAL	CB-CG1	-5.22	1.41	1.52
1	E	2422	GLU	CB-CG	-5.22	1.42	1.52
1	C	2422	GLU	CB-CG	-5.21	1.42	1.52
1	E	929	GLU	CB-CG	-5.21	1.42	1.52
1	C	2127	GLU	CB-CG	-5.21	1.42	1.52
1	B	2083	GLU	CB-CG	-5.20	1.42	1.52
1	E	998	VAL	CB-CG1	-5.20	1.42	1.52
1	C	998	VAL	CB-CG1	-5.19	1.42	1.52
1	A	998	VAL	CB-CG2	-5.18	1.42	1.52
1	A	929	GLU	CB-CG	-5.18	1.42	1.52
1	D	998	VAL	CB-CG2	-5.18	1.42	1.52
1	B	931	VAL	CB-CG1	-5.16	1.42	1.52
1	A	1005	VAL	CB-CG1	-5.16	1.42	1.52
1	B	998	VAL	CB-CG2	-5.15	1.42	1.52
1	D	1005	VAL	CB-CG2	-5.14	1.42	1.52
1	D	933	VAL	CB-CG1	-5.14	1.42	1.52
1	B	2095	VAL	CB-CG2	-5.14	1.42	1.52
1	B	1005	VAL	CB-CG1	-5.14	1.42	1.52
1	B	933	VAL	CB-CG2	-5.13	1.42	1.52
1	D	2114	VAL	CB-CG1	-5.13	1.42	1.52
1	E	933	VAL	CB-CG2	-5.13	1.42	1.52
1	E	2096	VAL	CB-CG2	-5.13	1.42	1.52
1	E	2095	VAL	CB-CG1	-5.12	1.42	1.52
1	C	1005	VAL	CB-CG2	-5.12	1.42	1.52
1	E	2114	VAL	CB-CG1	-5.12	1.42	1.52
1	F	1005	VAL	CB-CG1	-5.12	1.42	1.52
1	C	978	VAL	CB-CG2	-5.11	1.42	1.52
1	D	2096	VAL	CB-CG1	-5.11	1.42	1.52
1	D	931	VAL	CB-CG2	-5.11	1.42	1.52
1	F	933	VAL	CB-CG1	-5.10	1.42	1.52
1	F	2095	VAL	CB-CG2	-5.10	1.42	1.52
1	F	2096	VAL	CB-CG1	-5.10	1.42	1.52
1	A	931	VAL	CB-CG2	-5.09	1.42	1.52
1	E	1005	VAL	CB-CG1	-5.09	1.42	1.52
1	E	1207	VAL	CB-CG2	-5.09	1.42	1.52
1	A	978	VAL	CB-CG2	-5.08	1.42	1.52
1	B	978	VAL	CB-CG1	-5.08	1.42	1.52
1	C	931	VAL	CB-CG1	-5.08	1.42	1.52
1	F	978	VAL	CB-CG1	-5.08	1.42	1.52
1	A	2114	VAL	CB-CG1	-5.08	1.42	1.52
1	B	2114	VAL	CB-CG1	-5.08	1.42	1.52
1	D	1207	VAL	CB-CG2	-5.08	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	933	VAL	CB-CG2	-5.07	1.42	1.52
1	F	931	VAL	CB-CG2	-5.07	1.42	1.52
1	E	978	VAL	CB-CG2	-5.07	1.42	1.52
1	F	2114	VAL	CB-CG2	-5.07	1.42	1.52
1	A	1207	VAL	CB-CG1	-5.07	1.42	1.52
1	C	2096	VAL	CB-CG2	-5.07	1.42	1.52
1	C	933	VAL	CB-CG1	-5.07	1.42	1.52
1	C	2114	VAL	CB-CG1	-5.07	1.42	1.52
1	A	2096	VAL	CB-CG1	-5.06	1.42	1.52
1	B	1008	VAL	CB-CG1	-5.06	1.42	1.52
1	B	1207	VAL	CB-CG1	-5.06	1.42	1.52
1	C	1008	VAL	CB-CG2	-5.06	1.42	1.52
1	F	1207	VAL	CB-CG2	-5.06	1.42	1.52
1	A	2095	VAL	CB-CG2	-5.05	1.42	1.52
1	E	931	VAL	CB-CG1	-5.05	1.42	1.52
1	E	1008	VAL	CB-CG2	-5.05	1.42	1.52
1	D	2095	VAL	CB-CG1	-5.05	1.42	1.52
1	C	1004	VAL	CB-CG2	-5.05	1.42	1.52
1	D	978	VAL	CB-CG2	-5.05	1.42	1.52
1	D	1004	VAL	CB-CG2	-5.05	1.42	1.52
1	B	2096	VAL	CB-CG1	-5.04	1.42	1.52
1	C	1207	VAL	CB-CG2	-5.04	1.42	1.52
1	C	2095	VAL	CB-CG1	-5.03	1.42	1.52
1	E	1004	VAL	CB-CG1	-5.03	1.42	1.52
1	A	1004	VAL	CB-CG1	-5.02	1.42	1.52
1	A	1008	VAL	CB-CG2	-5.01	1.42	1.52
1	B	1004	VAL	CB-CG1	-5.01	1.42	1.52
1	D	1008	VAL	CB-CG2	-5.01	1.42	1.52
1	F	1008	VAL	CB-CG2	-5.01	1.42	1.52
1	F	1004	VAL	CB-CG2	-5.00	1.42	1.52

All (78) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	930	PRO	N-CA-CB	7.04	111.75	103.30
1	B	930	PRO	N-CA-CB	7.01	111.71	103.30
1	D	930	PRO	N-CA-CB	6.99	111.69	103.30
1	E	930	PRO	N-CA-CB	6.98	111.68	103.30
1	A	930	PRO	N-CA-CB	6.97	111.66	103.30
1	F	930	PRO	N-CA-CB	6.93	111.62	103.30
1	B	2438	PRO	N-CA-CB	6.32	110.88	103.30
1	B	1206	PRO	N-CA-CB	6.28	110.83	103.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	D	1206	PRO	N-CA-CB	6.27	110.82	103.30
1	F	1206	PRO	N-CA-CB	6.26	110.82	103.30
1	E	1206	PRO	N-CA-CB	6.26	110.81	103.30
1	C	1206	PRO	N-CA-CB	6.25	110.80	103.30
1	A	1206	PRO	N-CA-CB	6.25	110.79	103.30
1	A	2438	PRO	N-CA-CB	6.25	110.79	103.30
1	F	2438	PRO	N-CA-CB	6.22	110.77	103.30
1	D	2438	PRO	N-CA-CB	6.21	110.76	103.30
1	E	2438	PRO	N-CA-CB	6.21	110.75	103.30
1	C	2438	PRO	N-CA-CB	6.20	110.74	103.30
1	D	2428	PRO	N-CA-CB	6.12	110.64	103.30
1	B	2428	PRO	N-CA-CB	6.11	110.63	103.30
1	C	2428	PRO	N-CA-CB	6.11	110.63	103.30
1	A	2428	PRO	N-CA-CB	6.11	110.63	103.30
1	E	2444	PRO	N-CA-CB	6.10	110.62	103.30
1	F	2444	PRO	N-CA-CB	6.10	110.62	103.30
1	A	2444	PRO	N-CA-CB	6.09	110.60	103.30
1	F	2428	PRO	N-CA-CB	6.08	110.60	103.30
1	E	2428	PRO	N-CA-CB	6.08	110.59	103.30
1	B	2444	PRO	N-CA-CB	6.08	110.59	103.30
1	C	2444	PRO	N-CA-CB	6.07	110.58	103.30
1	D	2444	PRO	N-CA-CB	6.07	110.58	103.30
1	C	2439	PRO	N-CA-CB	6.01	110.51	103.30
1	A	2446	PRO	N-CA-CB	6.01	110.51	103.30
1	D	2446	PRO	N-CA-CB	6.00	110.51	103.30
1	B	2446	PRO	N-CA-CB	5.98	110.48	103.30
1	F	2446	PRO	N-CA-CB	5.96	110.46	103.30
1	C	2446	PRO	N-CA-CB	5.94	110.43	103.30
1	A	2448	PRO	N-CA-CB	5.93	110.42	103.30
1	F	2439	PRO	N-CA-CB	5.91	110.39	103.30
1	E	2446	PRO	N-CA-CB	5.90	110.38	103.30
1	E	2448	PRO	N-CA-CB	5.90	110.38	103.30
1	D	2129	PRO	N-CA-CB	5.90	110.38	103.30
1	D	2439	PRO	N-CA-CB	5.90	110.38	103.30
1	F	2448	PRO	N-CA-CB	5.90	110.38	103.30
1	E	2439	PRO	N-CA-CB	5.89	110.37	103.30
1	A	2439	PRO	N-CA-CB	5.89	110.36	103.30
1	F	2129	PRO	N-CA-CB	5.89	110.36	103.30
1	C	2448	PRO	N-CA-CB	5.88	110.36	103.30
1	B	2129	PRO	N-CA-CB	5.88	110.36	103.30
1	A	2129	PRO	N-CA-CB	5.88	110.35	103.30
1	C	2129	PRO	N-CA-CB	5.87	110.35	103.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	2129	PRO	N-CA-CB	5.87	110.34	103.30
1	D	2448	PRO	N-CA-CB	5.86	110.33	103.30
1	B	2448	PRO	N-CA-CB	5.84	110.31	103.30
1	B	2439	PRO	N-CA-CB	5.84	110.31	103.30
1	A	1009	PRO	N-CA-CB	5.82	110.28	103.30
1	C	1009	PRO	N-CA-CB	5.78	110.24	103.30
1	F	1009	PRO	N-CA-CB	5.78	110.24	103.30
1	B	990	PRO	N-CA-CB	5.77	110.22	103.30
1	B	1009	PRO	N-CA-CB	5.75	110.20	103.30
1	D	1009	PRO	N-CA-CB	5.75	110.20	103.30
1	E	1009	PRO	N-CA-CB	5.73	110.18	103.30
1	C	990	PRO	N-CA-CB	5.73	110.18	103.30
1	E	990	PRO	N-CA-CB	5.73	110.17	103.30
1	D	990	PRO	N-CA-CB	5.72	110.17	103.30
1	F	990	PRO	N-CA-CB	5.71	110.16	103.30
1	A	990	PRO	N-CA-CB	5.68	110.11	103.30
1	B	1221	PRO	N-CA-CB	5.63	110.05	103.30
1	A	1221	PRO	N-CA-CB	5.61	110.03	103.30
1	C	1221	PRO	N-CA-CB	5.60	110.02	103.30
1	F	2436	PRO	N-CA-CB	5.59	110.01	103.30
1	D	1221	PRO	N-CA-CB	5.58	110.00	103.30
1	F	1221	PRO	N-CA-CB	5.57	109.98	103.30
1	A	2436	PRO	N-CA-CB	5.53	109.94	103.30
1	E	2436	PRO	N-CA-CB	5.53	109.93	103.30
1	B	2436	PRO	N-CA-CB	5.52	109.92	103.30
1	D	2436	PRO	N-CA-CB	5.51	109.92	103.30
1	C	2436	PRO	N-CA-CB	5.51	109.91	103.30
1	E	1221	PRO	N-CA-CB	5.50	109.91	103.30

There are no chirality outliers.

All (30) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	1148	GLU	Peptide
1	A	150	THR	Peptide
1	A	202	GLY	Peptide
1	A	2584	ASP	Peptide
1	A	357	GLY	Peptide
1	B	1148	GLU	Peptide
1	B	150	THR	Peptide
1	B	202	GLY	Peptide
1	B	2584	ASP	Peptide

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Mol	Chain	Res	Type	Group
1	B	357	GLY	Peptide
1	C	1148	GLU	Peptide
1	C	150	THR	Peptide
1	C	202	GLY	Peptide
1	C	2584	ASP	Peptide
1	C	357	GLY	Peptide
1	D	1148	GLU	Peptide
1	D	150	THR	Peptide
1	D	202	GLY	Peptide
1	D	2584	ASP	Peptide
1	D	357	GLY	Peptide
1	E	1148	GLU	Peptide
1	E	150	THR	Peptide
1	E	202	GLY	Peptide
1	E	2584	ASP	Peptide
1	E	357	GLY	Peptide
1	F	1148	GLU	Peptide
1	F	150	THR	Peptide
1	F	202	GLY	Peptide
1	F	2584	ASP	Peptide
1	F	357	GLY	Peptide

## 5.2 Too-close contacts [i](#)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	20945	0	20595	881	0
1	B	20945	0	20595	872	0
1	C	20945	0	20595	872	0
1	D	20945	0	20595	873	0
1	E	20945	0	20595	878	0
1	F	20945	0	20595	878	0
2	A	31	0	19	4	0
2	B	31	0	19	5	0
2	C	31	0	19	4	0
2	D	31	0	19	4	0
2	E	31	0	19	4	0
2	F	31	0	19	5	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
All	All	125856	0	123684	4910	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 20.

All (4910) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1013:THR:HG23	1:A:1014:TRP:H	1.15	1.10
1:E:1013:THR:HG23	1:E:1014:TRP:H	1.15	1.09
1:A:2112:ARG:H	1:A:2115:HIS:CG	1.73	1.07
1:C:2094:HIS:CG	1:C:2096:VAL:HG22	1.90	1.06
1:D:1013:THR:HG23	1:D:1014:TRP:H	1.15	1.06
1:F:1013:THR:HG23	1:F:1014:TRP:H	1.15	1.06
1:E:2094:HIS:CG	1:E:2096:VAL:HG22	1.90	1.06
1:A:2094:HIS:CG	1:A:2096:VAL:HG12	1.90	1.06
1:C:2112:ARG:H	1:C:2115:HIS:CG	1.73	1.06
1:E:2112:ARG:H	1:E:2115:HIS:CG	1.73	1.06
1:F:2112:ARG:H	1:F:2115:HIS:CG	1.73	1.06
1:C:1013:THR:HG23	1:C:1014:TRP:H	1.15	1.05
1:B:2112:ARG:H	1:B:2115:HIS:CG	1.73	1.05
1:D:2094:HIS:CG	1:D:2096:VAL:HG12	1.90	1.05
1:B:2094:HIS:CG	1:B:2096:VAL:HG12	1.90	1.05
1:F:2094:HIS:CG	1:F:2096:VAL:HG12	1.90	1.05
1:D:2112:ARG:H	1:D:2115:HIS:CG	1.73	1.05
1:B:1013:THR:HG23	1:B:1014:TRP:H	1.15	1.03
1:F:992:THR:CG2	1:F:996:LEU:CG	2.39	1.01
1:B:992:THR:CG2	1:B:996:LEU:CG	2.39	1.01
1:A:992:THR:CG2	1:A:996:LEU:CG	2.39	1.01
1:C:992:THR:CG2	1:C:996:LEU:CG	2.39	1.01
1:E:992:THR:CG2	1:E:996:LEU:CG	2.39	1.00
1:C:2433:ARG:HA	1:C:2524:CYS:HB3	1.44	1.00
1:A:2433:ARG:HA	1:A:2524:CYS:HB3	1.44	1.00
1:D:2433:ARG:HA	1:D:2524:CYS:HB3	1.44	1.00
1:D:992:THR:CG2	1:D:996:LEU:CG	2.39	0.99
1:B:2433:ARG:HA	1:B:2524:CYS:HB3	1.44	0.99
1:E:792:ALA:O	1:E:2433:ARG:CG	2.12	0.98
1:E:2433:ARG:HA	1:E:2524:CYS:HB3	1.44	0.98
1:A:1220:THR:HG22	1:A:1221:PRO:N	1.78	0.98
1:C:792:ALA:O	1:C:2433:ARG:CG	2.12	0.98
1:E:1220:THR:HG22	1:E:1221:PRO:N	1.78	0.98

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2433:ARG:HA	1:F:2524:CYS:HB3	1.44	0.98
1:D:792:ALA:O	1:D:2433:ARG:CG	2.12	0.98
1:F:792:ALA:O	1:F:2433:ARG:CG	2.12	0.98
1:C:3080:ARG:HH11	1:C:3080:ARG:HG3	1.29	0.98
1:A:792:ALA:O	1:A:2433:ARG:CG	2.11	0.98
1:D:1220:THR:HG22	1:D:1221:PRO:N	1.78	0.97
1:F:1220:THR:HG22	1:F:1221:PRO:N	1.77	0.97
1:F:3080:ARG:HH11	1:F:3080:ARG:HG3	1.29	0.97
1:C:407:VAL:HB	1:C:933:VAL:HG11	1.47	0.97
1:B:792:ALA:O	1:B:2433:ARG:CG	2.12	0.96
1:D:407:VAL:HB	1:D:933:VAL:HG11	1.47	0.96
1:A:407:VAL:HB	1:A:933:VAL:HG21	1.47	0.96
1:C:1220:THR:HG22	1:C:1221:PRO:N	1.78	0.96
1:E:3080:ARG:HH11	1:E:3080:ARG:HG3	1.29	0.96
1:B:1220:THR:HG22	1:B:1221:PRO:N	1.77	0.96
1:B:3080:ARG:HH11	1:B:3080:ARG:HG3	1.29	0.95
1:E:992:THR:HG21	1:E:996:LEU:CG	1.97	0.94
1:A:3080:ARG:HH11	1:A:3080:ARG:HG3	1.29	0.94
1:D:992:THR:HG21	1:D:996:LEU:CG	1.97	0.94
1:F:407:VAL:HB	1:F:933:VAL:HG11	1.47	0.94
1:F:992:THR:HG21	1:F:996:LEU:CG	1.97	0.94
1:A:992:THR:HG21	1:A:996:LEU:CG	1.97	0.94
1:D:3080:ARG:HG3	1:D:3080:ARG:HH11	1.29	0.94
1:C:992:THR:HG21	1:C:996:LEU:CG	1.97	0.93
1:D:793:ARG:O	1:D:2435:LEU:CG	2.17	0.93
1:F:793:ARG:O	1:F:2435:LEU:CG	2.17	0.93
1:B:992:THR:HG21	1:B:996:LEU:CG	1.97	0.93
1:B:1003:HIS:CG	1:B:1004:VAL:H	1.86	0.93
1:B:1012:GLY:O	1:B:1013:THR:HG22	1.69	0.93
1:C:2100:ALA:O	1:C:2103:TRP:CG	2.22	0.93
1:A:2100:ALA:O	1:A:2103:TRP:CG	2.22	0.93
1:B:793:ARG:O	1:B:2435:LEU:CG	2.17	0.93
1:B:2100:ALA:O	1:B:2103:TRP:CG	2.22	0.93
1:C:1012:GLY:O	1:C:1013:THR:HG22	1.69	0.93
1:C:1013:THR:HG23	1:C:1014:TRP:N	1.84	0.93
1:D:1012:GLY:O	1:D:1013:THR:HG22	1.69	0.93
1:F:1003:HIS:CG	1:F:1004:VAL:H	1.86	0.93
1:D:2100:ALA:O	1:D:2103:TRP:CG	2.22	0.93
1:F:2100:ALA:O	1:F:2103:TRP:CG	2.22	0.92
1:A:793:ARG:O	1:A:2435:LEU:CG	2.16	0.92
1:E:2100:ALA:O	1:E:2103:TRP:CG	2.22	0.92

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1013:THR:HG23	1:D:1014:TRP:N	1.84	0.92
1:B:407:VAL:HB	1:B:933:VAL:HG21	1.47	0.92
1:C:793:ARG:O	1:C:2435:LEU:CG	2.17	0.92
1:C:1003:HIS:CG	1:C:1004:VAL:H	1.86	0.92
1:E:407:VAL:HB	1:E:933:VAL:HG21	1.47	0.92
1:E:793:ARG:O	1:E:2435:LEU:CG	2.17	0.92
1:D:1003:HIS:CG	1:D:1004:VAL:H	1.86	0.92
1:F:1012:GLY:O	1:F:1013:THR:HG22	1.69	0.91
1:A:1012:GLY:O	1:A:1013:THR:HG22	1.69	0.91
1:F:1013:THR:HG23	1:F:1014:TRP:N	1.84	0.91
1:E:1013:THR:HG23	1:E:1014:TRP:N	1.84	0.90
1:B:1013:THR:HG23	1:B:1014:TRP:N	1.84	0.90
1:E:1012:GLY:O	1:E:1013:THR:HG22	1.69	0.90
1:E:1003:HIS:CG	1:E:1004:VAL:H	1.86	0.90
1:A:1013:THR:HG23	1:A:1014:TRP:N	1.84	0.89
1:A:1003:HIS:CG	1:A:1004:VAL:H	1.86	0.89
1:E:931:VAL:HG13	1:E:934:LEU:H	1.40	0.87
1:C:931:VAL:HG13	1:C:934:LEU:H	1.40	0.86
1:B:931:VAL:HG11	1:B:933:VAL:CG2	2.06	0.86
1:F:931:VAL:HG23	1:F:934:LEU:H	1.40	0.86
1:C:931:VAL:HG11	1:C:933:VAL:CG1	2.06	0.86
1:A:931:VAL:HG23	1:A:934:LEU:H	1.40	0.85
1:C:2105:GLY:O	1:C:2108:LEU:CG	2.24	0.85
1:C:3077:THR:HA	1:D:2865:ARG:HD3	1.57	0.85
1:F:2105:GLY:O	1:F:2108:LEU:CG	2.24	0.85
1:A:2105:GLY:O	1:A:2108:LEU:CG	2.25	0.85
1:A:3077:THR:HA	1:F:2865:ARG:HD3	1.57	0.85
1:E:931:VAL:HG11	1:E:933:VAL:CG2	2.06	0.85
1:A:1218:THR:HG23	1:A:1441:GLN:OE1	1.77	0.85
1:B:2105:GLY:O	1:B:2108:LEU:CG	2.24	0.85
1:D:931:VAL:HG21	1:D:933:VAL:CG1	2.06	0.85
1:D:2105:GLY:O	1:D:2108:LEU:CG	2.24	0.85
1:A:931:VAL:HG21	1:A:933:VAL:CG2	2.06	0.85
1:B:3077:THR:HA	1:E:2865:ARG:HD3	1.57	0.85
1:D:1218:THR:HG23	1:D:1441:GLN:OE1	1.77	0.85
1:C:1218:THR:HG23	1:C:1441:GLN:OE1	1.77	0.84
1:F:1218:THR:HG23	1:F:1441:GLN:OE1	1.77	0.84
1:B:2865:ARG:HD3	1:E:3077:THR:HA	1.57	0.84
1:E:2105:GLY:O	1:E:2108:LEU:CG	2.25	0.84
1:D:931:VAL:HG23	1:D:934:LEU:H	1.40	0.84
1:F:992:THR:HG22	1:F:996:LEU:CG	2.07	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2865:ARG:HD3	1:F:3077:THR:HA	1.57	0.84
1:B:1218:THR:HG23	1:B:1441:GLN:OE1	1.77	0.84
1:F:931:VAL:HG21	1:F:933:VAL:CG1	2.06	0.84
1:A:992:THR:HG22	1:A:996:LEU:CG	2.07	0.84
1:B:931:VAL:HG13	1:B:934:LEU:H	1.40	0.84
1:C:992:THR:HG22	1:C:996:LEU:CG	2.07	0.83
1:D:992:THR:HG22	1:D:996:LEU:CG	2.07	0.83
1:E:992:THR:HG22	1:E:996:LEU:CG	2.07	0.83
1:E:1218:THR:HG23	1:E:1441:GLN:OE1	1.77	0.83
1:B:43:PRO:HG2	1:B:348:ALA:HA	1.60	0.83
1:B:992:THR:HG22	1:B:996:LEU:CG	2.07	0.83
1:A:43:PRO:HG2	1:A:348:ALA:HA	1.60	0.83
1:C:2865:ARG:HD3	1:D:3077:THR:HA	1.58	0.83
1:B:1538:ARG:HH11	1:B:1722:PRO:HB3	1.43	0.83
1:E:43:PRO:HG2	1:E:348:ALA:HA	1.60	0.83
1:F:1538:ARG:HH11	1:F:1722:PRO:HB3	1.43	0.82
1:B:2016:VAL:HG13	1:B:2020:PRO:HG3	1.62	0.82
1:E:2016:VAL:HG13	1:E:2020:PRO:HG3	1.62	0.82
1:D:2016:VAL:HG13	1:D:2020:PRO:HG3	1.62	0.82
1:C:1538:ARG:HH11	1:C:1722:PRO:HB3	1.43	0.81
1:D:43:PRO:HG2	1:D:348:ALA:HA	1.60	0.81
1:D:1538:ARG:HH11	1:D:1722:PRO:HB3	1.43	0.81
1:A:1538:ARG:HH11	1:A:1722:PRO:HB3	1.43	0.81
1:E:2730:TYR:OH	1:E:3059:ARG:NH1	2.14	0.81
1:F:46:VAL:HB	1:F:155:VAL:HG13	1.63	0.81
1:A:2730:TYR:OH	1:A:3059:ARG:NH1	2.14	0.81
1:C:43:PRO:HG2	1:C:348:ALA:HA	1.60	0.81
1:F:43:PRO:HG2	1:F:348:ALA:HA	1.61	0.81
1:D:2730:TYR:OH	1:D:3059:ARG:NH1	2.14	0.81
1:F:138:ARG:NH2	1:F:175:ASP:OD2	2.14	0.81
1:A:2016:VAL:HG13	1:A:2020:PRO:HG3	1.62	0.81
1:C:967:VAL:HA	1:C:970:ILE:HB	1.63	0.81
1:F:967:VAL:HA	1:F:970:ILE:HB	1.63	0.81
1:C:46:VAL:HB	1:C:155:VAL:HG13	1.63	0.81
1:E:46:VAL:HB	1:E:155:VAL:HG13	1.63	0.81
1:E:138:ARG:NH2	1:E:175:ASP:OD2	2.14	0.81
1:B:46:VAL:HB	1:B:155:VAL:HG13	1.63	0.80
1:C:931:VAL:CG1	1:C:933:VAL:CG1	2.60	0.80
1:D:138:ARG:NH2	1:D:175:ASP:OD2	2.14	0.80
1:E:967:VAL:HA	1:E:970:ILE:HB	1.63	0.80
1:F:2016:VAL:HG13	1:F:2020:PRO:HG3	1.62	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:138:ARG:NH2	1:A:175:ASP:OD2	2.14	0.80
1:F:931:VAL:CG2	1:F:933:VAL:CG1	2.60	0.80
1:B:138:ARG:NH2	1:B:175:ASP:OD2	2.14	0.80
1:B:967:VAL:HA	1:B:970:ILE:HB	1.63	0.80
1:C:2610:ARG:HH12	1:C:2700:LEU:HD11	1.47	0.80
1:E:1538:ARG:HH11	1:E:1722:PRO:HB3	1.43	0.80
1:A:931:VAL:CG2	1:A:933:VAL:CG2	2.60	0.80
1:C:138:ARG:NH2	1:C:175:ASP:OD2	2.14	0.80
1:F:2730:TYR:OH	1:F:3059:ARG:NH1	2.14	0.80
1:C:2730:TYR:OH	1:C:3059:ARG:NH1	2.14	0.80
1:D:967:VAL:HA	1:D:970:ILE:HB	1.63	0.80
1:B:931:VAL:CG1	1:B:933:VAL:CG2	2.60	0.80
1:C:2016:VAL:HG13	1:C:2020:PRO:HG3	1.62	0.80
1:E:931:VAL:CG1	1:E:933:VAL:CG2	2.60	0.80
1:A:46:VAL:HB	1:A:155:VAL:HG13	1.63	0.80
1:A:967:VAL:HA	1:A:970:ILE:HB	1.63	0.79
1:D:931:VAL:CG2	1:D:933:VAL:CG1	2.60	0.79
1:E:931:VAL:HG11	1:E:933:VAL:HG23	1.65	0.79
1:B:2730:TYR:OH	1:B:3059:ARG:NH1	2.14	0.79
1:F:273:ARG:HB2	1:F:282:VAL:H	1.47	0.79
1:A:273:ARG:HB2	1:A:282:VAL:H	1.47	0.79
1:D:1220:THR:CG2	1:D:1221:PRO:N	2.46	0.79
1:A:2450:TRP:CG	1:A:3016:ALA:HB1	2.18	0.79
1:C:273:ARG:HB2	1:C:282:VAL:H	1.47	0.79
1:B:273:ARG:HB2	1:B:282:VAL:H	1.47	0.79
1:B:2610:ARG:HH12	1:B:2700:LEU:HD11	1.47	0.79
1:D:2610:ARG:HH12	1:D:2700:LEU:HD11	1.47	0.79
1:F:2450:TRP:CG	1:F:3016:ALA:HB1	2.18	0.79
1:D:46:VAL:HB	1:D:155:VAL:HG13	1.63	0.79
1:F:2610:ARG:HH12	1:F:2700:LEU:HD11	1.47	0.79
1:C:2450:TRP:CG	1:C:3016:ALA:HB1	2.18	0.78
1:F:1329:ALA:HB3	1:F:1337:MET:H	1.48	0.78
1:E:2450:TRP:CG	1:E:3016:ALA:HB1	2.18	0.78
1:D:273:ARG:HB2	1:D:282:VAL:H	1.47	0.78
1:D:971:ALA:O	1:D:974:THR:HG22	1.84	0.78
1:E:2610:ARG:HH12	1:E:2700:LEU:HD11	1.47	0.78
1:A:971:ALA:O	1:A:974:THR:HG22	1.84	0.78
1:F:931:VAL:HG21	1:F:933:VAL:HG13	1.65	0.78
1:B:971:ALA:O	1:B:974:THR:HG22	1.84	0.78
1:B:2450:TRP:CG	1:B:3016:ALA:HB1	2.18	0.78
1:E:1329:ALA:HB3	1:E:1337:MET:H	1.49	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:931:VAL:HG11	1:B:933:VAL:HG23	1.65	0.77
1:B:2451:ASP:CG	1:B:2454:ASP:OD2	2.22	0.77
1:C:971:ALA:O	1:C:974:THR:HG22	1.84	0.77
1:D:2450:TRP:CG	1:D:3016:ALA:HB1	2.18	0.77
1:F:1220:THR:CG2	1:F:1221:PRO:N	2.46	0.77
1:E:273:ARG:HB2	1:E:282:VAL:H	1.47	0.77
1:F:971:ALA:O	1:F:974:THR:HG22	1.84	0.77
1:D:931:VAL:HG21	1:D:933:VAL:HG13	1.65	0.77
1:A:1329:ALA:HB3	1:A:1337:MET:H	1.48	0.77
1:A:931:VAL:CG2	1:A:933:VAL:HG23	2.15	0.77
1:B:1329:ALA:HB3	1:B:1337:MET:H	1.48	0.77
1:E:971:ALA:O	1:E:974:THR:HG22	1.84	0.77
1:A:2451:ASP:CG	1:A:2454:ASP:OD2	2.22	0.77
1:C:931:VAL:CG1	1:C:933:VAL:HG13	2.15	0.77
1:C:2112:ARG:O	1:C:2115:HIS:CG	2.38	0.77
1:D:2451:ASP:CG	1:D:2454:ASP:OD2	2.22	0.77
1:A:931:VAL:HG21	1:A:933:VAL:HG23	1.64	0.77
1:A:2610:ARG:HH12	1:A:2700:LEU:HD11	1.47	0.77
1:E:2451:ASP:CG	1:E:2454:ASP:OD2	2.22	0.77
1:F:931:VAL:CG2	1:F:933:VAL:HG13	2.15	0.77
1:E:1220:THR:CG2	1:E:1221:PRO:N	2.46	0.76
1:B:1003:HIS:CG	1:B:1004:VAL:N	2.53	0.76
1:E:931:VAL:CG1	1:E:933:VAL:HG23	2.15	0.76
1:A:2557:LEU:O	1:A:2613:ARG:N	2.18	0.76
1:A:2645:ASP:OD2	1:A:2691:SER:N	2.19	0.76
1:C:931:VAL:HG11	1:C:933:VAL:HG13	1.65	0.76
1:C:1003:HIS:CG	1:C:1004:VAL:N	2.53	0.76
1:C:2451:ASP:CG	1:C:2454:ASP:OD2	2.22	0.76
1:C:934:LEU:O	1:C:937:ARG:CG	2.34	0.76
1:C:1220:THR:CG2	1:C:1221:PRO:N	2.46	0.76
1:B:2112:ARG:O	1:B:2115:HIS:CG	2.38	0.76
1:D:2112:ARG:O	1:D:2115:HIS:CG	2.38	0.76
1:F:934:LEU:O	1:F:937:ARG:CG	2.34	0.76
1:A:934:LEU:O	1:A:937:ARG:CG	2.34	0.76
1:D:2645:ASP:OD2	1:D:2691:SER:N	2.19	0.76
1:E:2557:LEU:O	1:E:2613:ARG:N	2.18	0.76
1:D:931:VAL:CG2	1:D:933:VAL:HG13	2.15	0.76
1:F:2451:ASP:CG	1:F:2454:ASP:OD2	2.23	0.76
1:B:1097:VAL:HB	1:B:1146:PRO:HB2	1.68	0.76
1:D:934:LEU:O	1:D:937:ARG:CG	2.34	0.76
1:D:1329:ALA:HB3	1:D:1337:MET:H	1.49	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2112:ARG:O	1:F:2115:HIS:CG	2.38	0.76
1:A:1695:LEU:HD23	1:B:257:ARG:HH12	1.51	0.75
1:A:2112:ARG:O	1:A:2115:HIS:CG	2.38	0.75
1:D:1097:VAL:HB	1:D:1146:PRO:HB2	1.68	0.75
1:D:1695:LEU:HD23	1:E:257:ARG:HH12	1.50	0.75
1:E:2112:ARG:O	1:E:2115:HIS:CG	2.38	0.75
1:E:1695:LEU:HD23	1:F:257:ARG:HH12	1.51	0.75
1:B:1695:LEU:HD23	1:C:257:ARG:HH12	1.50	0.75
1:C:2645:ASP:OD2	1:C:2691:SER:N	2.19	0.75
1:A:257:ARG:HH12	1:C:1695:LEU:HD23	1.51	0.75
1:A:1097:VAL:HB	1:A:1146:PRO:HB2	1.68	0.75
1:B:934:LEU:O	1:B:937:ARG:CG	2.34	0.75
1:B:2557:LEU:O	1:B:2613:ARG:N	2.18	0.75
1:C:1329:ALA:HB3	1:C:1337:MET:H	1.49	0.75
1:D:257:ARG:HH12	1:F:1695:LEU:HD23	1.51	0.75
1:A:1556:GLU:OE2	1:A:1560:ARG:NH2	2.20	0.75
1:B:931:VAL:CG1	1:B:933:VAL:HG23	2.15	0.74
1:F:445:VAL:HG13	1:F:475:LEU:HD21	1.69	0.74
1:F:1097:VAL:HB	1:F:1146:PRO:HB2	1.68	0.74
1:D:445:VAL:HG13	1:D:475:LEU:HD21	1.69	0.74
1:E:33:ALA:HB2	1:E:390:VAL:HA	1.69	0.74
1:C:33:ALA:HB2	1:C:390:VAL:HA	1.70	0.74
1:E:934:LEU:O	1:E:937:ARG:CG	2.34	0.74
1:B:1220:THR:CG2	1:B:1221:PRO:N	2.46	0.74
1:D:3015:ILE:HG12	1:D:3023:ARG:HG3	1.69	0.74
1:E:445:VAL:HG13	1:E:475:LEU:HD21	1.69	0.74
1:F:2645:ASP:OD2	1:F:2691:SER:N	2.19	0.74
1:A:33:ALA:HB2	1:A:390:VAL:HA	1.70	0.74
1:B:1556:GLU:OE2	1:B:1560:ARG:NH2	2.20	0.74
1:C:3015:ILE:HG12	1:C:3023:ARG:HG3	1.69	0.74
1:E:1097:VAL:HB	1:E:1146:PRO:HB2	1.68	0.74
1:C:2700:LEU:HD22	1:D:2697:HIS:HD2	1.53	0.74
1:D:1556:GLU:OE2	1:D:1560:ARG:NH2	2.20	0.74
1:C:1097:VAL:HB	1:C:1146:PRO:HB2	1.68	0.74
1:E:1556:GLU:OE2	1:E:1560:ARG:NH2	2.20	0.74
1:E:2645:ASP:OD2	1:E:2691:SER:N	2.19	0.74
1:E:3015:ILE:HG12	1:E:3023:ARG:HG3	1.69	0.74
1:B:3015:ILE:HG12	1:B:3023:ARG:HG3	1.69	0.74
1:C:2053:ALA:O	1:C:2807:ARG:NH2	2.21	0.73
1:D:2557:LEU:O	1:D:2613:ARG:N	2.18	0.73
1:A:2697:HIS:HD2	1:F:2700:LEU:HD22	1.53	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2645:ASP:OD2	1:B:2691:SER:N	2.19	0.73
1:D:437:PRO:HG3	1:D:876:LEU:HB3	1.70	0.73
1:D:2096:VAL:O	1:D:2099:GLN:CG	2.37	0.73
1:F:1168:ARG:N	1:F:1194:ILE:O	2.21	0.73
1:F:3015:ILE:HG12	1:F:3023:ARG:HG3	1.69	0.73
1:A:1220:THR:CG2	1:A:1221:PRO:N	2.46	0.73
1:B:2053:ALA:O	1:B:2807:ARG:NH2	2.21	0.73
1:C:1556:GLU:OE2	1:C:1560:ARG:NH2	2.20	0.73
1:E:1168:ARG:N	1:E:1194:ILE:O	2.21	0.73
1:A:2096:VAL:O	1:A:2099:GLN:CG	2.37	0.73
1:A:2700:LEU:HD22	1:F:2697:HIS:HD2	1.53	0.73
1:C:2612:PRO:O	1:D:2603:ARG:NH2	2.22	0.73
1:D:33:ALA:HB2	1:D:390:VAL:HA	1.70	0.73
1:F:33:ALA:HB2	1:F:390:VAL:HA	1.70	0.73
1:B:2603:ARG:NH2	1:E:2612:PRO:O	2.22	0.73
1:F:2053:ALA:O	1:F:2807:ARG:NH2	2.21	0.73
1:A:437:PRO:HG3	1:A:876:LEU:HB3	1.70	0.73
1:A:445:VAL:HG13	1:A:475:LEU:HD21	1.69	0.73
1:B:2700:LEU:HD22	1:E:2697:HIS:HD2	1.53	0.73
1:B:2883:ALA:O	1:B:2916:ARG:NH1	2.22	0.73
1:C:445:VAL:HG13	1:C:475:LEU:HD21	1.69	0.73
1:C:2845:PHE:HD1	1:D:2731:GLY:HA2	1.54	0.73
1:E:1003:HIS:CG	1:E:1004:VAL:N	2.53	0.73
1:E:2883:ALA:O	1:E:2916:ARG:NH1	2.22	0.73
1:F:1556:GLU:OE2	1:F:1560:ARG:NH2	2.20	0.73
1:A:3015:ILE:HG12	1:A:3023:ARG:HG3	1.69	0.73
1:B:936:ARG:HB3	1:B:941:ARG:HB3	1.71	0.73
1:F:2883:ALA:O	1:F:2916:ARG:NH1	2.22	0.73
1:A:2731:GLY:HA2	1:F:2845:PHE:HD1	1.54	0.72
1:B:445:VAL:HG13	1:B:475:LEU:HD21	1.69	0.72
1:B:2096:VAL:O	1:B:2099:GLN:CG	2.36	0.72
1:C:1168:ARG:N	1:C:1194:ILE:O	2.21	0.72
1:D:2053:ALA:O	1:D:2807:ARG:NH2	2.21	0.72
1:E:437:PRO:HG3	1:E:876:LEU:HB3	1.70	0.72
1:E:2096:VAL:O	1:E:2099:GLN:CG	2.37	0.72
1:F:2096:VAL:O	1:F:2099:GLN:CG	2.37	0.72
1:A:2612:PRO:O	1:F:2603:ARG:NH2	2.22	0.72
1:B:437:PRO:HG3	1:B:876:LEU:HB3	1.71	0.72
1:B:1168:ARG:N	1:B:1194:ILE:O	2.21	0.72
1:B:2998:GLY:N	1:B:3002:VAL:O	2.23	0.72
1:C:936:ARG:HB3	1:C:941:ARG:HB3	1.71	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1400:PRO:HD2	1:D:1416:VAL:HG22	1.72	0.72
1:E:936:ARG:HB3	1:E:941:ARG:HB3	1.71	0.72
1:A:2845:PHE:HD1	1:F:2731:GLY:HA2	1.54	0.72
1:B:2612:PRO:O	1:E:2603:ARG:NH2	2.22	0.72
1:C:2096:VAL:O	1:C:2099:GLN:CG	2.36	0.72
1:C:2557:LEU:O	1:C:2613:ARG:N	2.18	0.72
1:C:2603:ARG:NH2	1:D:2612:PRO:O	2.22	0.72
1:D:1168:ARG:N	1:D:1194:ILE:O	2.21	0.72
1:D:2998:GLY:N	1:D:3002:VAL:O	2.23	0.72
1:B:2845:PHE:HD1	1:E:2731:GLY:HA2	1.54	0.72
1:E:2053:ALA:O	1:E:2807:ARG:NH2	2.21	0.72
1:F:70:SER:OG	1:F:142:ARG:NH2	2.23	0.72
1:A:1253:ARG:HH11	1:A:1253:ARG:HG3	1.55	0.72
1:A:2883:ALA:O	1:A:2916:ARG:NH1	2.22	0.72
1:B:2103:TRP:CG	1:B:2104:GLN:N	2.58	0.72
1:C:437:PRO:HG3	1:C:876:LEU:HB3	1.70	0.72
1:D:1237:ARG:NH1	1:E:95:PRO:HB2	2.05	0.72
1:E:70:SER:OG	1:E:142:ARG:NH2	2.23	0.72
1:F:2103:TRP:CG	1:F:2104:GLN:N	2.58	0.72
1:A:2603:ARG:NH2	1:F:2612:PRO:O	2.22	0.72
1:B:1218:THR:CG2	1:B:1441:GLN:OE1	2.38	0.72
1:E:1253:ARG:HG3	1:E:1253:ARG:HH11	1.55	0.72
1:A:2053:ALA:O	1:A:2807:ARG:NH2	2.21	0.72
1:B:1400:PRO:HD2	1:B:1416:VAL:HG22	1.72	0.72
1:C:1218:THR:CG2	1:C:1441:GLN:OE1	2.38	0.72
1:D:2883:ALA:O	1:D:2916:ARG:NH1	2.22	0.72
1:A:2998:GLY:N	1:A:3002:VAL:O	2.23	0.72
1:B:33:ALA:HB2	1:B:390:VAL:HA	1.69	0.72
1:C:2883:ALA:O	1:C:2916:ARG:NH1	2.22	0.72
1:E:2103:TRP:CG	1:E:2104:GLN:N	2.58	0.72
1:C:2268:GLN:OE1	1:C:2319:ARG:NH1	2.23	0.72
1:B:2268:GLN:OE1	1:B:2319:ARG:NH1	2.23	0.71
1:C:3075:LEU:HD23	1:D:2861:LEU:HD21	1.72	0.71
1:F:1253:ARG:HH11	1:F:1253:ARG:HG3	1.55	0.71
1:B:2731:GLY:HA2	1:E:2845:PHE:HD1	1.54	0.71
1:B:2861:LEU:HD21	1:E:3075:LEU:HD23	1.72	0.71
1:D:1253:ARG:HH11	1:D:1253:ARG:HG3	1.54	0.71
1:F:437:PRO:HG3	1:F:876:LEU:HB3	1.70	0.71
1:F:936:ARG:HB3	1:F:941:ARG:HB3	1.71	0.71
1:A:936:ARG:HB3	1:A:941:ARG:HB3	1.71	0.71
1:A:1168:ARG:N	1:A:1194:ILE:O	2.21	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:70:SER:OG	1:B:142:ARG:NH2	2.23	0.71
1:B:1253:ARG:HH11	1:B:1253:ARG:HG3	1.54	0.71
1:B:2697:HIS:HD2	1:E:2700:LEU:HD22	1.53	0.71
1:D:95:PRO:HB2	1:F:1237:ARG:NH1	2.05	0.71
1:F:2557:LEU:O	1:F:2613:ARG:N	2.18	0.71
1:A:1390:PHE:HA	1:E:2282:ASP:HB3	1.72	0.71
1:A:2268:GLN:OE1	1:A:2319:ARG:NH1	2.23	0.71
1:D:1218:THR:CG2	1:D:1441:GLN:OE1	2.38	0.71
1:C:2697:HIS:HD2	1:D:2700:LEU:HD22	1.53	0.71
1:A:70:SER:OG	1:A:142:ARG:NH2	2.23	0.71
1:A:1400:PRO:HD2	1:A:1416:VAL:HG22	1.72	0.71
1:C:2731:GLY:HA2	1:D:2845:PHE:HD1	1.54	0.71
1:C:2998:GLY:N	1:C:3002:VAL:O	2.23	0.71
1:E:1218:THR:CG2	1:E:1441:GLN:OE1	2.38	0.71
1:E:2998:GLY:N	1:E:3002:VAL:O	2.23	0.71
1:F:1218:THR:CG2	1:F:1441:GLN:OE1	2.38	0.71
1:F:2268:GLN:OE1	1:F:2319:ARG:NH1	2.23	0.71
1:A:3075:LEU:HD23	1:F:2861:LEU:HD21	1.72	0.71
1:C:70:SER:OG	1:C:142:ARG:NH2	2.23	0.71
1:E:1400:PRO:HD2	1:E:1416:VAL:HG22	1.72	0.71
1:A:1237:ARG:NH1	1:B:95:PRO:HB2	2.05	0.71
1:D:2103:TRP:CG	1:D:2104:GLN:N	2.58	0.71
1:D:2268:GLN:OE1	1:D:2319:ARG:NH1	2.23	0.71
1:F:1400:PRO:HD2	1:F:1416:VAL:HG22	1.72	0.71
1:A:1218:THR:CG2	1:A:1441:GLN:OE1	2.38	0.71
1:B:1390:PHE:HA	1:D:2282:ASP:HB3	1.72	0.71
1:B:2282:ASP:HB3	1:D:1390:PHE:HA	1.72	0.71
1:C:1253:ARG:HH11	1:C:1253:ARG:HG3	1.54	0.71
1:A:95:PRO:HB2	1:C:1237:ARG:NH1	2.05	0.71
1:A:2743:ALA:HB1	1:A:2940:VAL:HG23	1.73	0.71
1:B:1237:ARG:NH1	1:C:95:PRO:HB2	2.05	0.71
1:C:1400:PRO:HD2	1:C:1416:VAL:HG22	1.72	0.71
1:C:2282:ASP:HB3	1:F:1390:PHE:HA	1.72	0.71
1:E:580:ARG:HD2	1:E:614:GLY:HA3	1.73	0.71
1:F:2215:THR:HB	1:F:2229:LYS:HB2	1.73	0.71
1:F:2743:ALA:HB1	1:F:2940:VAL:HG23	1.73	0.71
1:A:1507:GLN:O	1:A:1562:ARG:NH1	2.24	0.70
1:C:2861:LEU:HD21	1:D:3075:LEU:HD23	1.72	0.70
1:D:70:SER:OG	1:D:142:ARG:NH2	2.23	0.70
1:D:580:ARG:HD2	1:D:614:GLY:HA3	1.73	0.70
1:E:1237:ARG:NH1	1:F:95:PRO:HB2	2.05	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1634:ARG:HH11	1:E:1639:ALA:H	1.39	0.70
1:E:2268:GLN:OE1	1:E:2319:ARG:NH1	2.23	0.70
1:E:2743:ALA:HB1	1:E:2940:VAL:HG23	1.73	0.70
1:B:1634:ARG:HH11	1:B:1639:ALA:H	1.39	0.70
1:C:580:ARG:HD2	1:C:614:GLY:HA3	1.72	0.70
1:D:1634:ARG:HH11	1:D:1639:ALA:H	1.39	0.70
1:E:1507:GLN:O	1:E:1562:ARG:NH1	2.24	0.70
1:F:2998:GLY:N	1:F:3002:VAL:O	2.23	0.70
1:A:974:THR:HG21	1:A:977:GLN:HB3	1.74	0.70
1:A:2861:LEU:HD21	1:F:3075:LEU:HD23	1.72	0.70
1:D:1003:HIS:CG	1:D:1004:VAL:N	2.53	0.70
1:D:1507:GLN:O	1:D:1562:ARG:NH1	2.24	0.70
1:B:2215:THR:HB	1:B:2229:LYS:HB2	1.74	0.70
1:B:2558:LEU:HG	1:B:2612:PRO:HA	1.73	0.70
1:B:3075:LEU:HD23	1:E:2861:LEU:HD21	1.72	0.70
1:C:1390:PHE:HA	1:F:2282:ASP:HB3	1.72	0.70
1:F:2558:LEU:HG	1:F:2612:PRO:HA	1.73	0.70
1:B:1507:GLN:O	1:B:1562:ARG:NH1	2.24	0.70
1:C:1507:GLN:O	1:C:1562:ARG:NH1	2.24	0.70
1:C:2860:ALA:HB3	1:C:2906:LEU:HD21	1.73	0.70
1:D:936:ARG:HB3	1:D:941:ARG:HB3	1.72	0.70
1:A:2103:TRP:CG	1:A:2104:GLN:N	2.58	0.70
1:D:1177:ARG:HB2	1:D:1184:LEU:HD23	1.74	0.70
1:E:2860:ALA:HB3	1:E:2906:LEU:HD21	1.73	0.70
1:A:580:ARG:HD2	1:A:614:GLY:HA3	1.73	0.70
1:A:2215:THR:HB	1:A:2229:LYS:HB2	1.74	0.70
1:C:1634:ARG:HH11	1:C:1639:ALA:H	1.39	0.70
1:D:2860:ALA:HB3	1:D:2906:LEU:HD21	1.73	0.70
1:F:137:VAL:HG22	1:F:354:LEU:HD13	1.74	0.70
1:A:2282:ASP:HB3	1:E:1390:PHE:HA	1.72	0.70
1:B:1177:ARG:HB2	1:B:1184:LEU:HD23	1.74	0.70
1:B:2743:ALA:HB1	1:B:2940:VAL:HG23	1.73	0.70
1:E:2558:LEU:HG	1:E:2612:PRO:HA	1.74	0.70
1:F:580:ARG:HD2	1:F:614:GLY:HA3	1.72	0.70
1:F:2860:ALA:HB3	1:F:2906:LEU:HD21	1.73	0.70
1:A:1634:ARG:HH11	1:A:1639:ALA:H	1.39	0.70
1:B:137:VAL:HG22	1:B:354:LEU:HD13	1.74	0.70
1:C:137:VAL:HG22	1:C:354:LEU:HD13	1.74	0.70
1:E:137:VAL:HG22	1:E:354:LEU:HD13	1.74	0.70
1:A:2860:ALA:HB3	1:A:2906:LEU:HD21	1.73	0.69
1:C:2215:THR:HB	1:C:2229:LYS:HB2	1.73	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2558:LEU:HG	1:C:2612:PRO:HA	1.73	0.69
1:E:1724:TYR:OH	1:F:267:GLU:OE2	2.07	0.69
1:F:1012:GLY:O	1:F:1013:THR:CG2	2.41	0.69
1:F:1507:GLN:O	1:F:1562:ARG:NH1	2.24	0.69
1:A:2558:LEU:HG	1:A:2612:PRO:HA	1.73	0.69
1:E:1035:VAL:HG12	1:E:1037:ASP:H	1.57	0.69
1:F:1177:ARG:HB2	1:F:1184:LEU:HD23	1.74	0.69
1:A:1003:HIS:CG	1:A:1004:VAL:N	2.53	0.69
1:D:1046:LEU:HD13	1:D:1129:LEU:HD22	1.75	0.69
1:D:2085:LEU:O	1:D:2088:ARG:CG	2.40	0.69
1:C:2085:LEU:O	1:C:2088:ARG:CG	2.41	0.69
1:D:2215:THR:HB	1:D:2229:LYS:HB2	1.73	0.69
1:E:1012:GLY:O	1:E:1013:THR:CG2	2.41	0.69
1:F:2946:LEU:HD11	1:F:2992:GLY:HA3	1.75	0.69
1:E:974:THR:HG21	1:E:977:GLN:HB3	1.74	0.69
1:B:2085:LEU:O	1:B:2088:ARG:CG	2.41	0.69
1:B:2647:VAL:HG22	1:B:2769:ASP:HB2	1.75	0.69
1:C:2743:ALA:HB1	1:C:2940:VAL:HG23	1.73	0.69
1:D:137:VAL:HG22	1:D:354:LEU:HD13	1.74	0.69
1:D:2946:LEU:HD11	1:D:2992:GLY:HA3	1.75	0.69
1:F:1634:ARG:HH11	1:F:1639:ALA:H	1.39	0.69
1:B:580:ARG:HD2	1:B:614:GLY:HA3	1.73	0.69
1:C:1177:ARG:HB2	1:C:1184:LEU:HD23	1.74	0.69
1:F:974:THR:HG21	1:F:977:GLN:HB3	1.74	0.69
1:F:2085:LEU:O	1:F:2088:ARG:CG	2.40	0.69
1:A:137:VAL:HG22	1:A:354:LEU:HD13	1.74	0.69
1:A:1035:VAL:HG12	1:A:1037:ASP:H	1.57	0.69
1:A:2909:ARG:HB3	1:F:3075:LEU:HD21	1.75	0.69
1:C:1035:VAL:HG12	1:C:1037:ASP:H	1.57	0.69
1:C:1046:LEU:HD13	1:C:1129:LEU:HD22	1.75	0.69
1:C:2103:TRP:CG	1:C:2104:GLN:N	2.58	0.69
1:D:2558:LEU:HG	1:D:2612:PRO:HA	1.73	0.69
1:D:2647:VAL:HG22	1:D:2769:ASP:HB2	1.75	0.69
1:E:2215:THR:HB	1:E:2229:LYS:HB2	1.73	0.69
1:A:1012:GLY:O	1:A:1013:THR:CG2	2.41	0.68
1:A:2702:GLY:HA3	1:F:2557:LEU:HG	1.76	0.68
1:B:1035:VAL:HG12	1:B:1037:ASP:H	1.57	0.68
1:C:2647:VAL:HG22	1:C:2769:ASP:HB2	1.75	0.68
1:E:1046:LEU:HD13	1:E:1129:LEU:HD22	1.75	0.68
1:F:1046:LEU:HD13	1:F:1129:LEU:HD22	1.75	0.68
1:C:974:THR:HG21	1:C:977:GLN:HB3	1.74	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1046:LEU:HD13	1:A:1129:LEU:HD22	1.75	0.68
1:A:2946:LEU:HD11	1:A:2992:GLY:HA3	1.75	0.68
1:B:2946:LEU:HD11	1:B:2992:GLY:HA3	1.75	0.68
1:C:2909:ARG:HB3	1:D:3075:LEU:HD21	1.76	0.68
1:D:1035:VAL:HG12	1:D:1037:ASP:H	1.57	0.68
1:D:2743:ALA:HB1	1:D:2940:VAL:HG23	1.73	0.68
1:C:269:GLU:HB3	1:C:282:VAL:HA	1.75	0.68
1:D:974:THR:HG21	1:D:977:GLN:HB3	1.74	0.68
1:E:340:ILE:HD13	1:E:364:THR:HG21	1.75	0.68
1:B:511:ARG:HD3	1:B:543:GLY:HA3	1.76	0.68
1:D:340:ILE:HD13	1:D:364:THR:HG21	1.75	0.68
1:D:1008:VAL:HG22	1:D:1019:PHE:HB3	1.76	0.68
1:B:1046:LEU:HD13	1:B:1129:LEU:HD22	1.75	0.68
1:B:3075:LEU:HD21	1:E:2909:ARG:HB3	1.75	0.68
1:E:1177:ARG:HB2	1:E:1184:LEU:HD23	1.74	0.68
1:F:2647:VAL:HG22	1:F:2769:ASP:HB2	1.75	0.68
1:A:340:ILE:HD13	1:A:364:THR:HG21	1.75	0.68
1:A:1177:ARG:HB2	1:A:1184:LEU:HD23	1.74	0.68
1:A:2085:LEU:O	1:A:2088:ARG:CG	2.41	0.68
1:B:1002:GLN:O	1:B:1003:HIS:CG	2.47	0.68
1:B:1164:THR:N	1:B:1167:GLY:O	2.25	0.68
1:C:1008:VAL:HG22	1:C:1019:PHE:HB3	1.76	0.68
1:C:1012:GLY:O	1:C:1013:THR:CG2	2.41	0.68
1:C:2702:GLY:HA3	1:D:2557:LEU:HG	1.76	0.68
1:D:511:ARG:HD3	1:D:543:GLY:HA3	1.76	0.68
1:C:1488:VAL:HG21	1:C:1580:PRO:HD2	1.76	0.68
1:D:269:GLU:HB3	1:D:282:VAL:HA	1.75	0.68
1:E:2085:LEU:O	1:E:2088:ARG:CG	2.41	0.68
1:B:269:GLU:HB3	1:B:282:VAL:HA	1.75	0.68
1:C:1164:THR:N	1:C:1167:GLY:O	2.25	0.68
1:C:2557:LEU:HG	1:D:2702:GLY:HA3	1.76	0.68
1:F:1035:VAL:HG12	1:F:1037:ASP:H	1.57	0.68
1:B:1012:GLY:O	1:B:1013:THR:CG2	2.41	0.68
1:B:2557:LEU:HG	1:E:2702:GLY:HA3	1.76	0.68
1:B:2860:ALA:HB3	1:B:2906:LEU:HD21	1.73	0.68
1:D:1002:GLN:O	1:D:1003:HIS:CG	2.47	0.68
1:E:269:GLU:HB3	1:E:282:VAL:HA	1.75	0.68
1:A:2126:ALA:O	1:A:2129:PRO:CG	2.43	0.67
1:A:2647:VAL:HG22	1:A:2769:ASP:HB2	1.75	0.67
1:C:1002:GLN:O	1:C:1003:HIS:CG	2.47	0.67
1:C:2946:LEU:HD11	1:C:2992:GLY:HA3	1.75	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1008:VAL:HG22	1:E:1019:PHE:HB3	1.76	0.67
1:E:2946:LEU:HD11	1:E:2992:GLY:HA3	1.75	0.67
1:B:340:ILE:HD13	1:B:364:THR:HG21	1.75	0.67
1:C:340:ILE:HD13	1:C:364:THR:HG21	1.75	0.67
1:B:2112:ARG:N	1:B:2115:HIS:CG	2.57	0.67
1:E:931:VAL:CG1	1:E:933:VAL:HG22	2.25	0.67
1:E:2112:ARG:N	1:E:2115:HIS:CG	2.57	0.67
1:F:1412:HIS:ND1	1:F:1415:GLY:O	2.26	0.67
1:F:2081:GLN:O	1:F:2084:GLN:CG	2.43	0.67
1:A:511:ARG:HD3	1:A:543:GLY:HA3	1.76	0.67
1:B:931:VAL:CG1	1:B:933:VAL:HG22	2.25	0.67
1:B:974:THR:HG21	1:B:977:GLN:HB3	1.74	0.67
1:B:2126:ALA:O	1:B:2129:PRO:CG	2.43	0.67
1:B:2909:ARG:HB3	1:E:3075:LEU:HD21	1.76	0.67
1:D:1164:THR:N	1:D:1167:GLY:O	2.25	0.67
1:D:1488:VAL:HG21	1:D:1580:PRO:HD2	1.76	0.67
1:E:2094:HIS:CG	1:E:2096:VAL:CG2	2.75	0.67
1:F:1164:THR:N	1:F:1167:GLY:O	2.25	0.67
1:A:792:ALA:HA	1:A:799:PHE:HE2	1.60	0.67
1:C:2126:ALA:O	1:C:2129:PRO:CG	2.43	0.67
1:D:931:VAL:CG2	1:D:933:VAL:HG12	2.25	0.67
1:E:1002:GLN:O	1:E:1003:HIS:CG	2.47	0.67
1:E:2647:VAL:HG22	1:E:2769:ASP:HB2	1.75	0.67
1:F:792:ALA:HA	1:F:799:PHE:HE2	1.60	0.67
1:F:1002:GLN:O	1:F:1003:HIS:CG	2.47	0.67
1:F:1008:VAL:HG22	1:F:1019:PHE:HB3	1.76	0.67
1:C:2081:GLN:O	1:C:2084:GLN:CG	2.43	0.67
1:D:2112:ARG:N	1:D:2115:HIS:CG	2.57	0.67
1:D:2126:ALA:O	1:D:2129:PRO:CG	2.43	0.67
1:E:2081:GLN:O	1:E:2084:GLN:CG	2.43	0.67
1:B:1488:VAL:HG12	1:B:1490:ARG:NH1	2.10	0.67
1:C:931:VAL:CG1	1:C:933:VAL:HG12	2.24	0.67
1:D:3080:ARG:HH11	1:D:3080:ARG:CG	2.07	0.67
1:A:1008:VAL:HG22	1:A:1019:PHE:HB3	1.76	0.67
1:A:2081:GLN:O	1:A:2084:GLN:CG	2.43	0.67
1:C:683:GLY:HA2	1:C:700:ASN:HB2	1.77	0.67
1:C:792:ALA:HA	1:C:799:PHE:HE2	1.60	0.67
1:D:1012:GLY:O	1:D:1013:THR:CG2	2.41	0.67
1:F:269:GLU:HB3	1:F:282:VAL:HA	1.75	0.67
1:A:511:ARG:HB2	1:A:540:ASN:HB2	1.78	0.66
1:B:3080:ARG:HH11	1:B:3080:ARG:CG	2.07	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1358:GLN:HG2	1:C:1423:THR:HG23	1.78	0.66
1:E:1164:THR:N	1:E:1167:GLY:O	2.25	0.66
1:E:2126:ALA:O	1:E:2129:PRO:CG	2.43	0.66
1:F:511:ARG:HB2	1:F:540:ASN:HB2	1.77	0.66
1:F:511:ARG:HD3	1:F:543:GLY:HA3	1.76	0.66
1:A:1167:GLY:HA3	1:A:1195:ARG:HA	1.78	0.66
1:B:1412:HIS:ND1	1:B:1415:GLY:O	2.26	0.66
1:B:2081:GLN:O	1:B:2084:GLN:CG	2.43	0.66
1:D:1488:VAL:HG12	1:D:1490:ARG:NH1	2.10	0.66
1:D:2081:GLN:O	1:D:2084:GLN:CG	2.43	0.66
1:E:1358:GLN:HG2	1:E:1423:THR:HG23	1.78	0.66
1:B:666:VAL:HG21	1:B:904:VAL:HB	1.78	0.66
1:D:683:GLY:HA2	1:D:700:ASN:HB2	1.78	0.66
1:D:1167:GLY:HA3	1:D:1195:ARG:HA	1.78	0.66
1:D:1168:ARG:HB2	1:D:1197:ARG:HB2	1.77	0.66
1:A:269:GLU:HB3	1:A:282:VAL:HA	1.75	0.66
1:A:1002:GLN:O	1:A:1003:HIS:CG	2.47	0.66
1:B:511:ARG:HB2	1:B:540:ASN:HB2	1.77	0.66
1:C:1168:ARG:HB2	1:C:1197:ARG:HB2	1.77	0.66
1:F:1488:VAL:HG12	1:F:1490:ARG:NH1	2.10	0.66
1:F:1488:VAL:HG21	1:F:1580:PRO:HD2	1.77	0.66
1:A:1412:HIS:ND1	1:A:1415:GLY:O	2.25	0.66
1:A:1488:VAL:HG21	1:A:1580:PRO:HD2	1.76	0.66
1:B:1008:VAL:HG12	1:B:1019:PHE:HB3	1.76	0.66
1:D:792:ALA:HA	1:D:799:PHE:HE2	1.60	0.66
1:E:666:VAL:HG21	1:E:904:VAL:HB	1.78	0.66
1:E:1132:LEU:HD11	1:E:1192:PHE:HB3	1.78	0.66
1:E:1412:HIS:HD2	1:E:1413:PRO:HD2	1.61	0.66
1:F:666:VAL:HG21	1:F:904:VAL:HB	1.78	0.66
1:F:1412:HIS:HD2	1:F:1413:PRO:HD2	1.61	0.66
1:A:1084:THR:HG21	1:A:1274:ALA:HA	1.78	0.66
1:A:1132:LEU:HD11	1:A:1192:PHE:HB3	1.78	0.66
1:B:35:VAL:HG11	1:B:147:LEU:HB3	1.78	0.66
1:C:1167:GLY:HA3	1:C:1195:ARG:HA	1.78	0.66
1:C:1488:VAL:HG12	1:C:1490:ARG:NH1	2.10	0.66
1:B:1132:LEU:HD11	1:B:1192:PHE:HB3	1.78	0.66
1:C:997:GLU:O	1:C:1009:PRO:N	2.29	0.66
1:F:340:ILE:HD13	1:F:364:THR:HG21	1.75	0.66
1:A:997:GLU:O	1:A:1009:PRO:N	2.29	0.66
1:A:2679:ALA:HB3	1:A:2762:VAL:HG12	1.78	0.66
1:B:1167:GLY:HA3	1:B:1195:ARG:HA	1.78	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1168:ARG:HB2	1:B:1197:ARG:HB2	1.77	0.66
1:C:511:ARG:HD3	1:C:543:GLY:HA3	1.76	0.66
1:D:997:GLU:O	1:D:1009:PRO:N	2.29	0.66
1:D:2012:GLY:C	1:E:2591:ARG:HH12	1.99	0.66
1:D:2591:ARG:HH12	1:F:2012:GLY:C	2.00	0.66
1:E:792:ALA:HA	1:E:799:PHE:HE2	1.60	0.66
1:E:997:GLU:O	1:E:1009:PRO:N	2.29	0.66
1:E:1167:GLY:HA3	1:E:1195:ARG:HA	1.78	0.66
1:E:2679:ALA:HB3	1:E:2762:VAL:HG12	1.78	0.66
1:A:931:VAL:CG2	1:A:933:VAL:HG22	2.25	0.66
1:C:3075:LEU:HD21	1:D:2909:ARG:HB3	1.75	0.66
1:D:35:VAL:HG11	1:D:147:LEU:HB3	1.77	0.66
1:F:931:VAL:CG2	1:F:933:VAL:HG12	2.24	0.66
1:F:2094:HIS:CG	1:F:2096:VAL:CG1	2.75	0.66
1:F:2679:ALA:HB3	1:F:2762:VAL:HG12	1.78	0.66
1:A:3075:LEU:HD21	1:F:2909:ARG:HB3	1.75	0.66
1:D:511:ARG:HB2	1:D:540:ASN:HB2	1.77	0.66
1:E:511:ARG:HB2	1:E:540:ASN:HB2	1.78	0.66
1:E:511:ARG:HD3	1:E:543:GLY:HA3	1.76	0.66
1:F:683:GLY:HA2	1:F:700:ASN:HB2	1.78	0.66
1:F:1167:GLY:HA3	1:F:1195:ARG:HA	1.78	0.66
1:F:2126:ALA:O	1:F:2129:PRO:CG	2.43	0.66
1:A:203:ASP:OD1	1:A:204:ARG:N	2.29	0.65
1:A:1358:GLN:HG2	1:A:1423:THR:HG23	1.78	0.65
1:A:2557:LEU:HG	1:F:2702:GLY:HA3	1.76	0.65
1:B:1534:ASN:HB2	1:B:1543:ALA:HB3	1.78	0.65
1:B:2679:ALA:HB3	1:B:2762:VAL:HG12	1.78	0.65
1:C:2094:HIS:CG	1:C:2096:VAL:CG2	2.75	0.65
1:C:2706:PRO:HG2	1:C:2709:ILE:HG23	1.79	0.65
1:E:1084:THR:HG21	1:E:1274:ALA:HA	1.78	0.65
1:E:2012:GLY:C	1:F:2591:ARG:HH12	2.00	0.65
1:A:1168:ARG:HB2	1:A:1197:ARG:HB2	1.77	0.65
1:C:203:ASP:OD1	1:C:204:ARG:N	2.30	0.65
1:C:1534:ASN:HB2	1:C:1543:ALA:HB3	1.79	0.65
1:D:450:ASN:HA	1:D:483:ARG:HH11	1.62	0.65
1:D:1084:THR:HG21	1:D:1274:ALA:HA	1.78	0.65
1:E:1488:VAL:HG12	1:E:1490:ARG:NH1	2.10	0.65
1:E:2706:PRO:HG2	1:E:2709:ILE:HG23	1.79	0.65
1:A:35:VAL:HG11	1:A:147:LEU:HB3	1.78	0.65
1:B:1358:GLN:HG2	1:B:1423:THR:HG23	1.78	0.65
1:C:2876:LEU:HD11	1:C:2886:ILE:HD11	1.79	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:643:ILE:HD12	1:D:915:PHE:HZ	1.62	0.65
1:D:1724:TYR:OH	1:E:267:GLU:OE2	2.08	0.65
1:A:683:GLY:HA2	1:A:700:ASN:HB2	1.77	0.65
1:A:1488:VAL:HG12	1:A:1490:ARG:NH1	2.10	0.65
1:B:2012:GLY:C	1:C:2591:ARG:HH12	1.99	0.65
1:B:2702:GLY:HA3	1:E:2557:LEU:HG	1.76	0.65
1:C:1412:HIS:HD2	1:C:1413:PRO:HD2	1.61	0.65
1:D:1358:GLN:HG2	1:D:1423:THR:HG23	1.78	0.65
1:E:2876:LEU:HD11	1:E:2886:ILE:HD11	1.79	0.65
1:A:1536:ASN:HA	1:A:1679:TRP:HB3	1.79	0.65
1:B:203:ASP:OD1	1:B:204:ARG:N	2.30	0.65
1:B:643:ILE:HD12	1:B:915:PHE:HZ	1.62	0.65
1:B:683:GLY:HA2	1:B:700:ASN:HB2	1.77	0.65
1:B:997:GLU:O	1:B:1009:PRO:N	2.29	0.65
1:C:1536:ASN:HA	1:C:1679:TRP:HB3	1.78	0.65
1:E:1488:VAL:HG21	1:E:1580:PRO:HD2	1.77	0.65
1:A:643:ILE:HD12	1:A:915:PHE:HZ	1.62	0.65
1:C:511:ARG:HB2	1:C:540:ASN:HB2	1.78	0.65
1:E:203:ASP:OD1	1:E:204:ARG:N	2.30	0.65
1:E:450:ASN:HA	1:E:483:ARG:HH11	1.62	0.65
1:A:1412:HIS:HD2	1:A:1413:PRO:HD2	1.61	0.65
1:A:2591:ARG:HH12	1:C:2012:GLY:C	1.99	0.65
1:B:2094:HIS:CG	1:B:2096:VAL:CG1	2.75	0.65
1:D:2679:ALA:HB3	1:D:2762:VAL:HG12	1.78	0.65
1:E:1168:ARG:HB2	1:E:1197:ARG:HB2	1.77	0.65
1:E:1534:ASN:HB2	1:E:1543:ALA:HB3	1.79	0.65
1:E:1536:ASN:HA	1:E:1679:TRP:HB3	1.79	0.65
1:F:56:LEU:HD22	1:F:119:LEU:HD13	1.79	0.65
1:F:997:GLU:O	1:F:1009:PRO:N	2.29	0.65
1:F:1132:LEU:HD11	1:F:1192:PHE:HB3	1.78	0.65
1:F:1358:GLN:HG2	1:F:1423:THR:HG23	1.78	0.65
1:A:929:GLU:O	1:A:930:PRO:CG	2.45	0.65
1:A:2652:ILE:HG12	1:A:2722:VAL:HG22	1.79	0.65
1:A:2876:LEU:HD11	1:A:2886:ILE:HD11	1.79	0.65
1:B:1084:THR:HG21	1:B:1274:ALA:HA	1.78	0.65
1:F:42:GLU:HB3	1:F:349:ARG:HG3	1.79	0.65
1:F:929:GLU:O	1:F:930:PRO:CG	2.45	0.65
1:F:1534:ASN:HB2	1:F:1543:ALA:HB3	1.78	0.65
1:A:1534:ASN:HB2	1:A:1543:ALA:HB3	1.79	0.65
1:A:2252:VAL:HA	1:A:2255:ARG:HE	1.62	0.65
1:C:1132:LEU:HD11	1:C:1192:PHE:HB3	1.78	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:3080:ARG:HH11	1:C:3080:ARG:CG	2.07	0.65
1:D:1412:HIS:HD2	1:D:1413:PRO:HD2	1.61	0.65
1:D:2876:LEU:HD11	1:D:2886:ILE:HD11	1.79	0.65
1:F:1168:ARG:HB2	1:F:1197:ARG:HB2	1.77	0.65
1:C:666:VAL:HG21	1:C:904:VAL:HB	1.78	0.65
1:E:35:VAL:HG11	1:E:147:LEU:HB3	1.78	0.65
1:E:643:ILE:HD12	1:E:915:PHE:HZ	1.62	0.65
1:F:1084:THR:HG21	1:F:1274:ALA:HA	1.78	0.65
1:A:56:LEU:HD22	1:A:119:LEU:HD13	1.79	0.64
1:A:2012:GLY:C	1:B:2591:ARG:HH12	1.99	0.64
1:B:929:GLU:O	1:B:930:PRO:CG	2.45	0.64
1:B:1488:VAL:HG21	1:B:1580:PRO:HD2	1.77	0.64
1:C:35:VAL:HG11	1:C:147:LEU:HB3	1.78	0.64
1:D:42:GLU:HB3	1:D:349:ARG:HG3	1.79	0.64
1:D:1534:ASN:HB2	1:D:1543:ALA:HB3	1.78	0.64
1:F:450:ASN:HA	1:F:483:ARG:HH11	1.62	0.64
1:A:793:ARG:HD3	1:A:2435:LEU:CG	2.27	0.64
1:A:2706:PRO:HG2	1:A:2709:ILE:HG23	1.78	0.64
1:B:1412:HIS:HD2	1:B:1413:PRO:HD2	1.61	0.64
1:D:666:VAL:HG21	1:D:904:VAL:HB	1.78	0.64
1:D:929:GLU:O	1:D:930:PRO:CG	2.45	0.64
1:D:1132:LEU:HD11	1:D:1192:PHE:HB3	1.78	0.64
1:D:2652:ILE:HG12	1:D:2722:VAL:HG22	1.79	0.64
1:E:2252:VAL:HA	1:E:2255:ARG:HE	1.62	0.64
1:F:35:VAL:HG11	1:F:147:LEU:HB3	1.78	0.64
1:B:42:GLU:HB3	1:B:349:ARG:HG3	1.79	0.64
1:B:450:ASN:HA	1:B:483:ARG:HH11	1.62	0.64
1:B:792:ALA:HA	1:B:799:PHE:HE2	1.60	0.64
1:C:929:GLU:O	1:C:930:PRO:CG	2.45	0.64
1:C:2652:ILE:HG12	1:C:2722:VAL:HG22	1.79	0.64
1:D:793:ARG:HD3	1:D:2435:LEU:CG	2.27	0.64
1:E:2652:ILE:HG12	1:E:2722:VAL:HG22	1.79	0.64
1:A:666:VAL:HG21	1:A:904:VAL:HB	1.78	0.64
1:C:2252:VAL:HA	1:C:2255:ARG:HE	1.62	0.64
1:E:683:GLY:HA2	1:E:700:ASN:HB2	1.77	0.64
1:F:1536:ASN:HA	1:F:1679:TRP:HB3	1.78	0.64
1:A:450:ASN:HA	1:A:483:ARG:HH11	1.62	0.64
1:A:1164:THR:N	1:A:1167:GLY:O	2.25	0.64
1:A:2112:ARG:N	1:A:2115:HIS:CG	2.57	0.64
1:C:1084:THR:HG21	1:C:1274:ALA:HA	1.78	0.64
1:F:643:ILE:HD12	1:F:915:PHE:HZ	1.62	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:793:ARG:HD3	1:F:2435:LEU:CG	2.27	0.64
1:F:1003:HIS:CG	1:F:1004:VAL:N	2.53	0.64
1:D:203:ASP:OD1	1:D:204:ARG:N	2.29	0.64
1:E:929:GLU:O	1:E:930:PRO:CG	2.45	0.64
1:F:2112:ARG:N	1:F:2115:HIS:CG	2.57	0.64
1:B:793:ARG:HD3	1:B:2435:LEU:CG	2.27	0.64
1:C:56:LEU:HD22	1:C:119:LEU:HD13	1.79	0.64
1:C:793:ARG:HD3	1:C:2435:LEU:CG	2.27	0.64
1:D:2252:VAL:HA	1:D:2255:ARG:HE	1.62	0.64
1:D:2706:PRO:HG2	1:D:2709:ILE:HG23	1.79	0.64
1:F:203:ASP:OD1	1:F:204:ARG:N	2.29	0.64
1:F:2706:PRO:HG2	1:F:2709:ILE:HG23	1.79	0.64
1:F:2876:LEU:HD11	1:F:2886:ILE:HD11	1.79	0.64
1:B:2176:LEU:HG	1:B:2180:LYS:HE3	1.80	0.64
1:C:42:GLU:HB3	1:C:349:ARG:HG3	1.79	0.64
1:C:360:LEU:HD12	1:C:363:LEU:HD23	1.80	0.64
1:C:450:ASN:HA	1:C:483:ARG:HH11	1.62	0.64
1:C:2679:ALA:HB3	1:C:2762:VAL:HG12	1.78	0.64
1:D:56:LEU:HD22	1:D:119:LEU:HD13	1.79	0.64
1:D:2094:HIS:CG	1:D:2096:VAL:CG1	2.75	0.64
1:E:3080:ARG:HH11	1:E:3080:ARG:CG	2.07	0.64
1:F:2176:LEU:HG	1:F:2180:LYS:HE3	1.80	0.64
1:F:2652:ILE:HG12	1:F:2722:VAL:HG22	1.79	0.64
1:A:803:GLU:OE1	1:A:2431:THR:HG22	1.98	0.64
1:B:56:LEU:HD22	1:B:119:LEU:HD13	1.79	0.64
1:B:2876:LEU:HD11	1:B:2886:ILE:HD11	1.79	0.64
1:E:56:LEU:HD22	1:E:119:LEU:HD13	1.79	0.64
1:E:500:GLN:O	1:E:504:LYS:N	2.24	0.64
1:E:803:GLU:OE1	1:E:2431:THR:HG22	1.98	0.64
1:A:42:GLU:HB3	1:A:349:ARG:HG3	1.79	0.63
1:B:1536:ASN:HA	1:B:1679:TRP:HB3	1.78	0.63
1:D:1536:ASN:HA	1:D:1679:TRP:HB3	1.79	0.63
1:B:2252:VAL:HA	1:B:2255:ARG:HE	1.62	0.63
1:C:803:GLU:OE1	1:C:2431:THR:HG22	1.98	0.63
1:A:974:THR:CG2	1:A:977:GLN:HB3	2.29	0.63
1:B:1072:TRP:NE1	1:B:1077:VAL:HG22	2.14	0.63
1:C:643:ILE:HD12	1:C:915:PHE:HZ	1.62	0.63
1:E:2948:GLN:HG2	1:E:2951:ARG:HH21	1.64	0.63
1:F:2297:ARG:H	1:F:2297:ARG:HD3	1.64	0.63
1:A:3073:MET:O	1:F:2865:ARG:NH2	2.32	0.63
1:B:2652:ILE:HG12	1:B:2722:VAL:HG22	1.79	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2865:ARG:NH2	1:E:3073:MET:O	2.32	0.63
1:C:2173:ASP:OD2	1:C:2799:LYS:NZ	2.32	0.63
1:E:238:SER:OG	1:E:249:THR:OG1	2.15	0.63
1:E:793:ARG:HD3	1:E:2435:LEU:CG	2.27	0.63
1:E:1376:VAL:HA	1:E:1470:LEU:HD13	1.81	0.63
1:F:1376:VAL:HA	1:F:1470:LEU:HD13	1.81	0.63
1:A:892:ILE:HG22	2:A:4000:FMN:HM82	1.80	0.63
1:A:1417:LEU:O	1:A:1423:THR:OG1	2.14	0.63
1:A:2094:HIS:CG	1:A:2096:VAL:CG1	2.75	0.63
1:A:2865:ARG:NH2	1:F:3073:MET:O	2.32	0.63
1:B:3073:MET:O	1:E:2865:ARG:NH2	2.32	0.63
1:E:1417:LEU:O	1:E:1423:THR:OG1	2.14	0.63
1:A:1622:PRO:HD3	1:A:1685:LEU:HD11	1.81	0.63
1:B:2173:ASP:OD2	1:B:2799:LYS:NZ	2.32	0.63
1:B:2706:PRO:HG2	1:B:2709:ILE:HG23	1.79	0.63
1:C:1412:HIS:ND1	1:C:1415:GLY:O	2.26	0.63
1:E:585:HIS:CD2	1:E:586:SER:H	2.17	0.63
1:E:1622:PRO:HD3	1:E:1685:LEU:HD11	1.81	0.63
1:A:939:ALA:O	1:A:940:ARG:CG	2.47	0.63
1:B:585:HIS:CD2	1:B:586:SER:H	2.17	0.63
1:B:664:LEU:HD13	1:B:701:ALA:HB1	1.81	0.63
1:C:2865:ARG:NH2	1:D:3073:MET:O	2.32	0.63
1:E:974:THR:CG2	1:E:977:GLN:HB3	2.29	0.63
1:E:1315:ARG:HH21	1:E:1323:GLU:HG2	1.64	0.63
1:F:750:LEU:HD12	1:F:827:LEU:HD11	1.81	0.63
1:F:892:ILE:HG22	2:F:4000:FMN:HM82	1.80	0.63
1:F:1315:ARG:HH21	1:F:1323:GLU:HG2	1.64	0.63
1:A:585:HIS:CD2	1:A:586:SER:H	2.17	0.63
1:A:2752:ASP:HB3	1:F:2752:ASP:HB3	1.81	0.63
1:B:750:LEU:HD12	1:B:827:LEU:HD11	1.81	0.63
1:B:1315:ARG:HH21	1:B:1323:GLU:HG2	1.64	0.63
1:B:2092:THR:HA	1:B:2189:PHE:HB2	1.81	0.63
1:B:2948:GLN:HG2	1:B:2951:ARG:HH21	1.64	0.63
1:C:974:THR:CG2	1:C:977:GLN:HB3	2.29	0.63
1:C:2112:ARG:N	1:C:2115:HIS:CG	2.57	0.63
1:D:939:ALA:O	1:D:940:ARG:CG	2.47	0.63
1:D:974:THR:CG2	1:D:977:GLN:HB3	2.29	0.63
1:D:1072:TRP:NE1	1:D:1077:VAL:HG22	2.14	0.63
1:D:2176:LEU:HG	1:D:2180:LYS:HE3	1.80	0.63
1:E:892:ILE:HG22	2:E:4000:FMN:HM82	1.80	0.63
1:E:2096:VAL:HG23	1:E:2097:ALA:N	2.14	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:585:HIS:CD2	1:F:586:SER:H	2.17	0.63
1:F:2047:THR:OG1	1:F:2205:ASP:OD2	2.17	0.63
1:F:2092:THR:HA	1:F:2189:PHE:HB2	1.81	0.63
1:A:2092:THR:HA	1:A:2189:PHE:HB2	1.81	0.63
1:B:974:THR:CG2	1:B:977:GLN:HB3	2.29	0.63
1:C:3073:MET:O	1:D:2865:ARG:NH2	2.32	0.63
1:D:750:LEU:HD12	1:D:827:LEU:HD11	1.81	0.63
1:D:2173:ASP:OD2	1:D:2799:LYS:NZ	2.32	0.63
1:D:2948:GLN:HG2	1:D:2951:ARG:HH21	1.64	0.63
1:E:360:LEU:HD12	1:E:363:LEU:HD23	1.80	0.63
1:E:2092:THR:HA	1:E:2189:PHE:HB2	1.81	0.63
1:F:803:GLU:OE1	1:F:2431:THR:HG22	1.98	0.63
1:F:974:THR:CG2	1:F:977:GLN:HB3	2.29	0.63
1:F:1095:LEU:HD12	1:F:1096:THR:H	1.64	0.63
1:F:2252:VAL:HA	1:F:2255:ARG:HE	1.62	0.63
1:A:2086:SER:O	1:A:2089:PHE:CG	2.52	0.62
1:A:2092:THR:HG23	1:A:2092:THR:O	1.99	0.62
1:A:2297:ARG:H	1:A:2297:ARG:HD3	1.64	0.62
1:B:803:GLU:OE1	1:B:2431:THR:HG22	1.98	0.62
1:B:1702:GLU:OE2	1:B:1711:VAL:HG13	1.99	0.62
1:B:2047:THR:OG1	1:B:2205:ASP:OD2	2.17	0.62
1:B:2086:SER:O	1:B:2089:PHE:CG	2.52	0.62
1:C:1376:VAL:HA	1:C:1470:LEU:HD13	1.81	0.62
1:D:2297:ARG:HD3	1:D:2297:ARG:H	1.64	0.62
1:E:939:ALA:O	1:E:940:ARG:CG	2.47	0.62
1:E:1702:GLU:OE2	1:E:1711:VAL:HG13	1.99	0.62
1:E:2176:LEU:HG	1:E:2180:LYS:HE3	1.80	0.62
1:A:2173:ASP:OD2	1:A:2799:LYS:NZ	2.32	0.62
1:B:939:ALA:O	1:B:940:ARG:CG	2.47	0.62
1:C:939:ALA:O	1:C:940:ARG:CG	2.47	0.62
1:C:1072:TRP:NE1	1:C:1077:VAL:HG22	2.14	0.62
1:C:1095:LEU:HD12	1:C:1096:THR:H	1.64	0.62
1:D:500:GLN:O	1:D:504:LYS:N	2.24	0.62
1:D:1376:VAL:HA	1:D:1470:LEU:HD13	1.81	0.62
1:D:2096:VAL:HG13	1:D:2097:ALA:N	2.14	0.62
1:E:1072:TRP:NE1	1:E:1077:VAL:HG22	2.14	0.62
1:E:2297:ARG:HD3	1:E:2297:ARG:H	1.64	0.62
1:A:1072:TRP:NE1	1:A:1077:VAL:HG22	2.14	0.62
1:B:2092:THR:O	1:B:2092:THR:HG23	1.99	0.62
1:C:585:HIS:CD2	1:C:586:SER:H	2.17	0.62
1:C:924:LEU:O	1:C:929:GLU:N	2.30	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1315:ARG:HH21	1:C:1323:GLU:HG2	1.64	0.62
1:D:1095:LEU:HD12	1:D:1096:THR:H	1.64	0.62
1:D:1622:PRO:HD3	1:D:1685:LEU:HD11	1.81	0.62
1:E:42:GLU:HB3	1:E:349:ARG:HG3	1.79	0.62
1:E:932:GLU:O	1:E:936:ARG:CG	2.48	0.62
1:F:2096:VAL:HG13	1:F:2097:ALA:N	2.14	0.62
1:B:1095:LEU:HD12	1:B:1096:THR:H	1.64	0.62
1:B:1376:VAL:HA	1:B:1470:LEU:HD13	1.81	0.62
1:B:1417:LEU:O	1:B:1423:THR:OG1	2.14	0.62
1:C:2092:THR:HG23	1:C:2092:THR:O	1.99	0.62
1:D:1417:LEU:O	1:D:1423:THR:OG1	2.14	0.62
1:F:939:ALA:O	1:F:940:ARG:CG	2.47	0.62
1:F:2086:SER:O	1:F:2089:PHE:CG	2.52	0.62
1:A:1315:ARG:HH21	1:A:1323:GLU:HG2	1.64	0.62
1:A:3080:ARG:HH11	1:A:3080:ARG:CG	2.07	0.62
1:B:360:LEU:HD12	1:B:363:LEU:HD23	1.80	0.62
1:B:892:ILE:HG22	2:B:4000:FMN:HM82	1.80	0.62
1:B:1431:ALA:HB3	1:B:1459:THR:HG21	1.82	0.62
1:C:932:GLU:O	1:C:936:ARG:CG	2.48	0.62
1:C:1622:PRO:HD3	1:C:1685:LEU:HD11	1.81	0.62
1:D:2047:THR:OG1	1:D:2205:ASP:OD2	2.17	0.62
1:D:2086:SER:O	1:D:2089:PHE:CG	2.52	0.62
1:E:664:LEU:HD13	1:E:701:ALA:HB1	1.81	0.62
1:F:1431:ALA:HB3	1:F:1459:THR:HG21	1.82	0.62
1:A:1725:SER:HB3	1:B:260:LEU:HD13	1.82	0.62
1:B:932:GLU:O	1:B:936:ARG:CG	2.47	0.62
1:B:1725:SER:HB3	1:C:260:LEU:HD13	1.82	0.62
1:C:2047:THR:OG1	1:C:2205:ASP:OD2	2.17	0.62
1:D:932:GLU:O	1:D:936:ARG:CG	2.47	0.62
1:F:932:GLU:O	1:F:936:ARG:CG	2.48	0.62
1:F:1702:GLU:OE2	1:F:1711:VAL:HG13	1.99	0.62
1:F:2765:GLY:HA2	1:F:2940:VAL:HG21	1.82	0.62
1:A:971:ALA:O	1:A:974:THR:CG2	2.48	0.62
1:A:1431:ALA:HB3	1:A:1459:THR:HG21	1.82	0.62
1:B:2297:ARG:HD3	1:B:2297:ARG:H	1.64	0.62
1:D:803:GLU:OE1	1:D:2431:THR:HG22	1.98	0.62
1:E:2092:THR:HG23	1:E:2092:THR:O	1.99	0.62
1:F:971:ALA:O	1:F:974:THR:CG2	2.48	0.62
1:A:2047:THR:OG1	1:A:2205:ASP:OD2	2.17	0.62
1:C:2237:LEU:HB2	1:C:2287:LEU:HD11	1.82	0.62
1:D:585:HIS:CD2	1:D:586:SER:H	2.17	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:892:ILE:HG22	2:D:4000:FMN:HM82	1.80	0.62
1:D:1315:ARG:HH21	1:D:1323:GLU:HG2	1.64	0.62
1:F:360:LEU:HD12	1:F:363:LEU:HD23	1.80	0.62
1:A:932:GLU:O	1:A:936:ARG:CG	2.48	0.62
1:A:2096:VAL:HG13	1:A:2097:ALA:N	2.14	0.62
1:B:2558:LEU:HD21	1:E:2610:ARG:HB2	1.82	0.62
1:B:2610:ARG:HB2	1:E:2558:LEU:HD21	1.82	0.62
1:B:2765:GLY:HA2	1:B:2940:VAL:HG21	1.81	0.62
1:D:664:LEU:HD13	1:D:701:ALA:HB1	1.81	0.62
1:E:1013:THR:CG2	1:E:1014:TRP:H	1.96	0.62
1:E:1695:LEU:CD2	1:F:257:ARG:HH12	2.13	0.62
1:E:2047:THR:OG1	1:E:2205:ASP:OD2	2.17	0.62
1:F:1072:TRP:NE1	1:F:1077:VAL:HG22	2.14	0.62
1:A:1095:LEU:HD12	1:A:1096:THR:H	1.64	0.62
1:A:1702:GLU:OE2	1:A:1711:VAL:HG13	1.99	0.62
1:A:2176:LEU:HG	1:A:2180:LYS:HE3	1.80	0.62
1:B:1622:PRO:HD3	1:B:1685:LEU:HD11	1.81	0.62
1:B:2096:VAL:HG13	1:B:2097:ALA:N	2.14	0.62
1:C:892:ILE:HG22	2:C:4000:FMN:HM82	1.80	0.62
1:C:971:ALA:O	1:C:974:THR:CG2	2.48	0.62
1:C:2752:ASP:HB3	1:D:2752:ASP:HB3	1.81	0.62
1:D:971:ALA:O	1:D:974:THR:CG2	2.48	0.62
1:D:2092:THR:HA	1:D:2189:PHE:HB2	1.81	0.62
1:D:3058:ARG:HB2	1:D:3089:LEU:HB2	1.82	0.62
1:F:1353:PRO:HG3	1:F:1702:GLU:OE2	2.00	0.62
1:F:2092:THR:HG23	1:F:2092:THR:O	1.99	0.62
1:A:34:LEU:H	1:A:393:VAL:HG21	1.65	0.61
1:A:360:LEU:HD12	1:A:363:LEU:HD23	1.80	0.61
1:A:1695:LEU:CD2	1:B:257:ARG:HH12	2.13	0.61
1:C:203:ASP:O	1:C:205:PRO:HD3	2.00	0.61
1:D:1412:HIS:ND1	1:D:1415:GLY:O	2.26	0.61
1:D:2237:LEU:HB2	1:D:2287:LEU:HD11	1.82	0.61
1:E:1095:LEU:HD12	1:E:1096:THR:H	1.64	0.61
1:F:34:LEU:O	1:F:38:LEU:N	2.25	0.61
1:F:2237:LEU:HB2	1:F:2287:LEU:HD11	1.82	0.61
1:A:1353:PRO:HG3	1:A:1702:GLU:OE2	2.00	0.61
1:B:34:LEU:H	1:B:393:VAL:HG21	1.65	0.61
1:B:203:ASP:O	1:B:205:PRO:HD3	2.01	0.61
1:B:680:ALA:HA	1:B:685:ALA:HB2	1.83	0.61
1:B:3058:ARG:HB2	1:B:3089:LEU:HB2	1.82	0.61
1:C:238:SER:OG	1:C:249:THR:OG1	2.15	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:680:ALA:HA	1:C:685:ALA:HB2	1.83	0.61
1:C:1417:LEU:O	1:C:1423:THR:OG1	2.14	0.61
1:C:2086:SER:O	1:C:2089:PHE:CG	2.52	0.61
1:D:164:ALA:HA	1:D:178:LEU:HD13	1.82	0.61
1:D:360:LEU:HD12	1:D:363:LEU:HD23	1.80	0.61
1:D:1725:SER:HB3	1:E:260:LEU:HD13	1.82	0.61
1:E:2086:SER:O	1:E:2089:PHE:CG	2.53	0.61
1:E:2173:ASP:OD2	1:E:2799:LYS:NZ	2.32	0.61
1:E:2765:GLY:HA2	1:E:2940:VAL:HG21	1.82	0.61
1:F:34:LEU:H	1:F:393:VAL:HG21	1.65	0.61
1:F:924:LEU:O	1:F:929:GLU:N	2.30	0.61
1:F:1622:PRO:HD3	1:F:1685:LEU:HD11	1.81	0.61
1:A:257:ARG:HH12	1:C:1695:LEU:CD2	2.13	0.61
1:B:2237:LEU:HB2	1:B:2287:LEU:HD11	1.82	0.61
1:C:409:LYS:HD2	1:C:933:VAL:HA	1.82	0.61
1:C:2765:GLY:HA2	1:C:2940:VAL:HG21	1.82	0.61
1:F:203:ASP:O	1:F:205:PRO:HD3	2.00	0.61
1:F:2173:ASP:OD2	1:F:2799:LYS:NZ	2.32	0.61
1:F:2948:GLN:HG2	1:F:2951:ARG:HH21	1.64	0.61
1:A:260:LEU:HD13	1:C:1725:SER:HB3	1.82	0.61
1:A:750:LEU:HD12	1:A:827:LEU:HD11	1.81	0.61
1:A:2469:LEU:HD11	1:A:2653:VAL:HB	1.83	0.61
1:B:1695:LEU:CD2	1:C:257:ARG:HH12	2.13	0.61
1:C:34:LEU:O	1:C:38:LEU:N	2.25	0.61
1:C:2096:VAL:HG23	1:C:2097:ALA:N	2.14	0.61
1:C:2469:LEU:HD11	1:C:2653:VAL:HB	1.82	0.61
1:C:2948:GLN:HG2	1:C:2951:ARG:HH21	1.64	0.61
1:D:106:ALA:HB1	1:D:112:PRO:HB2	1.82	0.61
1:D:260:LEU:HD13	1:F:1725:SER:HB3	1.82	0.61
1:D:409:LYS:HD2	1:D:933:VAL:HA	1.82	0.61
1:D:1353:PRO:HG3	1:D:1702:GLU:OE2	2.00	0.61
1:A:664:LEU:HD13	1:A:701:ALA:HB1	1.81	0.61
1:C:511:ARG:HH11	1:C:543:GLY:HA3	1.65	0.61
1:C:1702:GLU:OE2	1:C:1711:VAL:HG13	1.99	0.61
1:C:2092:THR:HA	1:C:2189:PHE:HB2	1.81	0.61
1:C:2558:LEU:HD21	1:D:2610:ARG:HB2	1.82	0.61
1:D:2765:GLY:HA2	1:D:2940:VAL:HG21	1.82	0.61
1:E:1353:PRO:HG3	1:E:1702:GLU:OE2	2.00	0.61
1:A:438:THR:HA	1:A:880:HIS:HE1	1.66	0.61
1:A:2948:GLN:HG2	1:A:2951:ARG:HH21	1.64	0.61
1:B:438:THR:HA	1:B:880:HIS:HE1	1.66	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:971:ALA:O	1:B:974:THR:CG2	2.48	0.61
1:B:2334:HIS:HD2	1:B:2391:LYS:HG3	1.66	0.61
1:C:106:ALA:HB1	1:C:112:PRO:HB2	1.82	0.61
1:C:1353:PRO:HG3	1:C:1702:GLU:OE2	2.00	0.61
1:C:2297:ARG:H	1:C:2297:ARG:HD3	1.64	0.61
1:C:2372:MET:HB3	1:C:2394:LEU:HD22	1.83	0.61
1:D:257:ARG:HH12	1:F:1695:LEU:CD2	2.13	0.61
1:D:1702:GLU:OE2	1:D:1711:VAL:HG13	1.99	0.61
1:D:2212:TRP:HA	1:D:2229:LYS:HD3	1.83	0.61
1:A:511:ARG:HH11	1:A:543:GLY:HA3	1.66	0.61
1:B:511:ARG:HH11	1:B:543:GLY:HA3	1.65	0.61
1:C:438:THR:HA	1:C:880:HIS:HE1	1.66	0.61
1:C:3058:ARG:HB2	1:C:3089:LEU:HB2	1.82	0.61
1:D:203:ASP:O	1:D:205:PRO:HD3	2.01	0.61
1:D:680:ALA:HA	1:D:685:ALA:HB2	1.83	0.61
1:D:2092:THR:HG23	1:D:2092:THR:O	1.99	0.61
1:D:2469:LEU:HD11	1:D:2653:VAL:HB	1.82	0.61
1:E:203:ASP:O	1:E:205:PRO:HD3	2.01	0.61
1:E:488:ASN:HA	1:E:521:VAL:HB	1.83	0.61
1:E:2212:TRP:HA	1:E:2229:LYS:HD3	1.83	0.61
1:B:106:ALA:HB1	1:B:112:PRO:HB2	1.82	0.61
1:B:1353:PRO:HG3	1:B:1702:GLU:OE2	2.00	0.61
1:C:664:LEU:HD13	1:C:701:ALA:HB1	1.81	0.61
1:C:980:GLU:HB2	1:C:989:HIS:HB2	1.83	0.61
1:C:2176:LEU:HG	1:C:2180:LYS:HE3	1.80	0.61
1:D:438:THR:HA	1:D:880:HIS:HE1	1.66	0.61
1:D:924:LEU:O	1:D:929:GLU:N	2.30	0.61
1:E:750:LEU:HD12	1:E:827:LEU:HD11	1.81	0.61
1:E:1431:ALA:HB3	1:E:1459:THR:HG21	1.82	0.61
1:F:164:ALA:HA	1:F:178:LEU:HD13	1.82	0.61
1:A:1376:VAL:HA	1:A:1470:LEU:HD13	1.81	0.61
1:A:2610:ARG:HB2	1:F:2558:LEU:HD21	1.82	0.61
1:C:750:LEU:HD12	1:C:827:LEU:HD11	1.81	0.61
1:C:2212:TRP:HA	1:C:2229:LYS:HD3	1.83	0.61
1:D:488:ASN:HA	1:D:521:VAL:HB	1.83	0.61
1:D:575:HIS:HD2	1:D:644:LEU:HD22	1.66	0.61
1:F:126:VAL:HG12	1:F:182:ALA:HB1	1.83	0.61
1:F:664:LEU:HD13	1:F:701:ALA:HB1	1.81	0.61
1:F:1417:LEU:O	1:F:1423:THR:OG1	2.14	0.61
1:A:575:HIS:HD2	1:A:644:LEU:HD22	1.66	0.61
1:A:3058:ARG:HB2	1:A:3089:LEU:HB2	1.82	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:126:VAL:HG12	1:B:182:ALA:HB1	1.83	0.61
1:B:2752:ASP:HB3	1:E:2752:ASP:HB3	1.81	0.61
1:C:488:ASN:HA	1:C:521:VAL:HB	1.83	0.61
1:E:409:LYS:HD2	1:E:933:VAL:HA	1.82	0.61
1:E:438:THR:HA	1:E:880:HIS:HE1	1.66	0.61
1:E:575:HIS:HD2	1:E:644:LEU:HD22	1.66	0.61
1:E:2237:LEU:HB2	1:E:2287:LEU:HD11	1.82	0.61
1:E:2372:MET:HB3	1:E:2394:LEU:HD22	1.83	0.61
1:F:680:ALA:HA	1:F:685:ALA:HB2	1.83	0.61
1:F:1098:VAL:HG12	1:F:1100:ASP:H	1.66	0.61
1:A:2112:ARG:CG	1:A:2114:VAL:HG12	2.31	0.60
1:B:409:LYS:HD2	1:B:933:VAL:HA	1.82	0.60
1:B:2469:LEU:HD11	1:B:2653:VAL:HB	1.82	0.60
1:C:1431:ALA:HB3	1:C:1459:THR:HG21	1.82	0.60
1:C:2712:GLU:HA	1:C:2717:VAL:HG11	1.83	0.60
1:E:1725:SER:HB3	1:F:260:LEU:HD13	1.82	0.60
1:F:575:HIS:HD2	1:F:644:LEU:HD22	1.66	0.60
1:F:980:GLU:HB2	1:F:989:HIS:HB2	1.83	0.60
1:F:2334:HIS:HD2	1:F:2391:LYS:HG3	1.66	0.60
1:F:2647:VAL:HA	1:F:2650:TRP:HD1	1.66	0.60
1:F:3058:ARG:HB2	1:F:3089:LEU:HB2	1.82	0.60
1:A:2712:GLU:HA	1:A:2717:VAL:HG11	1.83	0.60
1:C:1098:VAL:HG12	1:C:1100:ASP:H	1.66	0.60
1:C:2431:THR:O	1:C:2431:THR:HG23	2.01	0.60
1:C:2749:GLU:HB3	1:D:2749:GLU:OE2	2.02	0.60
1:D:688:ARG:O	1:D:872:ARG:NE	2.34	0.60
1:E:164:ALA:HA	1:E:178:LEU:HD13	1.82	0.60
1:E:580:ARG:HG2	1:E:590:LEU:HD21	1.83	0.60
1:E:2334:HIS:HD2	1:E:2391:LYS:HG3	1.66	0.60
1:E:3058:ARG:HB2	1:E:3089:LEU:HB2	1.82	0.60
1:B:575:HIS:HD2	1:B:644:LEU:HD22	1.66	0.60
1:B:980:GLU:HB2	1:B:989:HIS:HB2	1.83	0.60
1:D:2112:ARG:CG	1:D:2114:VAL:HG12	2.31	0.60
1:E:971:ALA:O	1:E:974:THR:CG2	2.48	0.60
1:F:409:LYS:HD2	1:F:933:VAL:HA	1.82	0.60
1:F:2800:PHE:HE1	1:F:2812:LEU:HD22	1.67	0.60
1:A:488:ASN:HA	1:A:521:VAL:HB	1.83	0.60
1:A:2212:TRP:HA	1:A:2229:LYS:HD3	1.83	0.60
1:A:2372:MET:HB3	1:A:2394:LEU:HD22	1.83	0.60
1:A:2558:LEU:HD21	1:F:2610:ARG:HB2	1.82	0.60
1:B:1532:ILE:HA	1:B:1544:ILE:HG12	1.83	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2372:MET:HB3	1:B:2394:LEU:HD22	1.83	0.60
1:C:126:VAL:HG12	1:C:182:ALA:HB1	1.83	0.60
1:C:1532:ILE:HA	1:C:1544:ILE:HG12	1.83	0.60
1:C:2610:ARG:HB2	1:D:2558:LEU:HD21	1.82	0.60
1:C:2647:VAL:HA	1:C:2650:TRP:HD1	1.66	0.60
1:D:511:ARG:HH11	1:D:543:GLY:HA3	1.66	0.60
1:D:1532:ILE:HA	1:D:1544:ILE:HG12	1.83	0.60
1:F:1537:LEU:HB2	1:F:1541:GLN:H	1.67	0.60
1:A:2056:PHE:HZ	1:A:2180:LYS:HE2	1.67	0.60
1:C:34:LEU:H	1:C:393:VAL:HG21	1.65	0.60
1:C:688:ARG:O	1:C:872:ARG:NE	2.34	0.60
1:D:580:ARG:HG2	1:D:590:LEU:HD21	1.83	0.60
1:D:980:GLU:HB2	1:D:989:HIS:HB2	1.83	0.60
1:E:106:ALA:HB1	1:E:112:PRO:HB2	1.82	0.60
1:E:1412:HIS:ND1	1:E:1415:GLY:O	2.26	0.60
1:E:1537:LEU:HB2	1:E:1541:GLN:H	1.67	0.60
1:E:2686:MET:HE1	1:E:2935:LYS:HG3	1.83	0.60
1:E:2820:ILE:HD13	1:E:2943:MET:HG2	1.84	0.60
1:F:2469:LEU:HD11	1:F:2653:VAL:HB	1.82	0.60
1:A:164:ALA:HA	1:A:178:LEU:HD13	1.82	0.60
1:A:203:ASP:O	1:A:205:PRO:HD3	2.01	0.60
1:A:409:LYS:HD2	1:A:933:VAL:HA	1.82	0.60
1:A:980:GLU:HB2	1:A:989:HIS:HB2	1.83	0.60
1:A:1537:LEU:HB2	1:A:1541:GLN:H	1.67	0.60
1:A:2237:LEU:HB2	1:A:2287:LEU:HD11	1.82	0.60
1:A:2765:GLY:HA2	1:A:2940:VAL:HG21	1.82	0.60
1:B:670:GLY:O	1:B:682:ASN:ND2	2.35	0.60
1:B:688:ARG:O	1:B:872:ARG:NE	2.34	0.60
1:D:1431:ALA:HB3	1:D:1459:THR:HG21	1.82	0.60
1:D:2686:MET:HE1	1:D:2935:LYS:HG3	1.83	0.60
1:A:106:ALA:HB1	1:A:112:PRO:HB2	1.82	0.60
1:A:580:ARG:HG2	1:A:590:LEU:HD21	1.83	0.60
1:C:1537:LEU:HB2	1:C:1541:GLN:H	1.67	0.60
1:D:34:LEU:H	1:D:393:VAL:HG21	1.65	0.60
1:D:670:GLY:O	1:D:682:ASN:ND2	2.35	0.60
1:D:1098:VAL:HG12	1:D:1100:ASP:H	1.66	0.60
1:D:2334:HIS:HD2	1:D:2391:LYS:HG3	1.66	0.60
1:E:1309:VAL:HG22	1:E:1331:ILE:HG12	1.84	0.60
1:E:2056:PHE:HZ	1:E:2180:LYS:HE2	1.67	0.60
1:F:580:ARG:HG2	1:F:590:LEU:HD21	1.83	0.60
1:F:2112:ARG:CG	1:F:2114:VAL:HG22	2.31	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2962:ASP:OD1	1:F:2962:ASP:N	2.34	0.60
1:A:680:ALA:HA	1:A:685:ALA:HB2	1.83	0.60
1:B:34:LEU:O	1:B:38:LEU:N	2.25	0.60
1:B:687:GLY:O	1:B:695:ILE:N	2.34	0.60
1:C:687:GLY:O	1:C:695:ILE:N	2.34	0.60
1:C:1435:VAL:HG11	1:C:1463:CYS:HB3	1.84	0.60
1:C:1989:PHE:HD1	1:C:1992:LYS:HZ3	1.50	0.60
1:C:2800:PHE:HE1	1:C:2812:LEU:HD22	1.67	0.60
1:D:687:GLY:O	1:D:695:ILE:N	2.34	0.60
1:E:2712:GLU:HA	1:E:2717:VAL:HG11	1.83	0.60
1:A:1989:PHE:HD1	1:A:1992:LYS:HZ3	1.49	0.60
1:B:410:LEU:HB3	1:B:1025:VAL:HG21	1.84	0.60
1:B:1098:VAL:HG12	1:B:1100:ASP:H	1.66	0.60
1:C:1701:VAL:HG22	1:C:1732:LEU:HB2	1.84	0.60
1:C:2056:PHE:HZ	1:C:2180:LYS:HE2	1.67	0.60
1:D:2800:PHE:HE1	1:D:2812:LEU:HD22	1.67	0.60
1:E:410:LEU:HB3	1:E:1025:VAL:HG21	1.83	0.60
1:E:670:GLY:O	1:E:682:ASN:ND2	2.35	0.60
1:E:980:GLU:HB2	1:E:989:HIS:HB2	1.83	0.60
1:F:488:ASN:HA	1:F:521:VAL:HB	1.83	0.60
1:F:511:ARG:HH11	1:F:543:GLY:HA3	1.66	0.60
1:F:2056:PHE:HZ	1:F:2180:LYS:HE2	1.67	0.60
1:A:795:HIS:HB3	1:A:799:PHE:CZ	2.37	0.60
1:A:1309:VAL:HG22	1:A:1331:ILE:HG12	1.84	0.60
1:A:1532:ILE:HA	1:A:1544:ILE:HG12	1.83	0.60
1:A:2461:VAL:HG11	1:A:2751:VAL:HG22	1.84	0.60
1:B:580:ARG:HG2	1:B:590:LEU:HD21	1.83	0.60
1:B:836:VAL:HG12	1:B:837:VAL:H	1.67	0.60
1:B:1435:VAL:HG11	1:B:1463:CYS:HB3	1.84	0.60
1:B:2431:THR:HG23	1:B:2431:THR:O	2.01	0.60
1:B:2749:GLU:OE2	1:E:2749:GLU:HB3	2.02	0.60
1:B:2800:PHE:HE1	1:B:2812:LEU:HD22	1.67	0.60
1:C:575:HIS:HD2	1:C:644:LEU:HD22	1.65	0.60
1:D:2651:ASN:HD22	1:D:2718:VAL:HG12	1.67	0.60
1:E:34:LEU:H	1:E:393:VAL:HG21	1.65	0.60
1:E:680:ALA:HA	1:E:685:ALA:HB2	1.83	0.60
1:E:795:HIS:HB3	1:E:799:PHE:CZ	2.37	0.60
1:E:2431:THR:HG23	1:E:2431:THR:O	2.01	0.60
1:F:106:ALA:HB1	1:F:112:PRO:HB2	1.82	0.60
1:F:438:THR:HA	1:F:880:HIS:HE1	1.66	0.60
1:F:2431:THR:O	1:F:2431:THR:HG23	2.01	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2712:GLU:HA	1:F:2717:VAL:HG11	1.83	0.60
1:A:1098:VAL:HG12	1:A:1100:ASP:H	1.66	0.59
1:B:1013:THR:CG2	1:B:1014:TRP:N	2.58	0.59
1:B:1309:VAL:HG22	1:B:1331:ILE:HG12	1.84	0.59
1:B:2212:TRP:HA	1:B:2229:LYS:HD3	1.83	0.59
1:B:2962:ASP:OD1	1:B:2962:ASP:N	2.34	0.59
1:C:795:HIS:HB3	1:C:799:PHE:CZ	2.37	0.59
1:C:2686:MET:HE1	1:C:2935:LYS:HG3	1.83	0.59
1:D:1695:LEU:CD2	1:E:257:ARG:HH12	2.13	0.59
1:D:1701:VAL:HG22	1:D:1732:LEU:HB2	1.84	0.59
1:E:2112:ARG:CG	1:E:2114:VAL:HG12	2.31	0.59
1:E:2469:LEU:HD11	1:E:2653:VAL:HB	1.82	0.59
1:E:2647:VAL:HA	1:E:2650:TRP:HD1	1.66	0.59
1:F:2820:ILE:HD13	1:F:2943:MET:HG2	1.84	0.59
1:A:688:ARG:O	1:A:872:ARG:NE	2.34	0.59
1:B:164:ALA:HA	1:B:178:LEU:HD13	1.82	0.59
1:B:1724:TYR:OH	1:C:267:GLU:OE2	2.07	0.59
1:B:2112:ARG:CG	1:B:2114:VAL:HG12	2.31	0.59
1:B:2749:GLU:HB3	1:E:2749:GLU:OE2	2.02	0.59
1:B:2889:ILE:HG12	1:B:2922:LEU:HB3	1.84	0.59
1:C:164:ALA:HA	1:C:178:LEU:HD13	1.82	0.59
1:C:836:VAL:HG12	1:C:837:VAL:H	1.67	0.59
1:C:2334:HIS:HD2	1:C:2391:LYS:HG3	1.66	0.59
1:D:2461:VAL:HG11	1:D:2751:VAL:HG22	1.84	0.59
1:E:687:GLY:O	1:E:695:ILE:N	2.34	0.59
1:F:410:LEU:HB3	1:F:1025:VAL:HG21	1.84	0.59
1:F:836:VAL:HG12	1:F:837:VAL:H	1.67	0.59
1:F:2372:MET:HB3	1:F:2394:LEU:HD22	1.83	0.59
1:F:2651:ASN:HD22	1:F:2718:VAL:HG12	1.67	0.59
1:F:2667:THR:HG21	1:F:3058:ARG:NH1	2.17	0.59
1:A:2800:PHE:HE1	1:A:2812:LEU:HD22	1.67	0.59
1:D:1656:LYS:HG2	1:D:1660:LEU:HG	1.84	0.59
1:E:1098:VAL:HG12	1:E:1100:ASP:H	1.66	0.59
1:E:1701:VAL:HG22	1:E:1732:LEU:HB2	1.84	0.59
1:F:670:GLY:O	1:F:682:ASN:ND2	2.35	0.59
1:F:2461:VAL:HG11	1:F:2751:VAL:HG22	1.84	0.59
1:A:2667:THR:HG21	1:A:3058:ARG:NH1	2.17	0.59
1:B:924:LEU:O	1:B:929:GLU:N	2.30	0.59
1:B:2651:ASN:HD22	1:B:2718:VAL:HG12	1.67	0.59
1:B:2686:MET:HE1	1:B:2935:LYS:HG3	1.83	0.59
1:B:2712:GLU:HA	1:B:2717:VAL:HG11	1.84	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:410:LEU:HB3	1:C:1025:VAL:HG21	1.83	0.59
1:D:795:HIS:HB3	1:D:799:PHE:CZ	2.37	0.59
1:D:1435:VAL:HG11	1:D:1463:CYS:HB3	1.84	0.59
1:E:126:VAL:HG12	1:E:182:ALA:HB1	1.83	0.59
1:E:511:ARG:HH11	1:E:543:GLY:HA3	1.65	0.59
1:E:1532:ILE:HA	1:E:1544:ILE:HG12	1.83	0.59
1:F:1532:ILE:HA	1:F:1544:ILE:HG12	1.83	0.59
1:F:2521:VAL:HG13	1:F:2529:ARG:HH11	1.68	0.59
1:A:462:GLN:HG3	1:A:468:PHE:HD1	1.68	0.59
1:A:670:GLY:O	1:A:682:ASN:ND2	2.35	0.59
1:A:924:LEU:O	1:A:929:GLU:N	2.30	0.59
1:A:2889:ILE:HG12	1:A:2922:LEU:HB3	1.84	0.59
1:B:1095:LEU:HD22	1:B:1289:PRO:HA	1.85	0.59
1:D:34:LEU:O	1:D:38:LEU:N	2.25	0.59
1:D:126:VAL:HG12	1:D:182:ALA:HB1	1.83	0.59
1:D:2056:PHE:HZ	1:D:2180:LYS:HE2	1.67	0.59
1:D:2431:THR:HG23	1:D:2431:THR:O	2.01	0.59
1:D:2667:THR:HG21	1:D:3058:ARG:NH1	2.17	0.59
1:F:2403:ILE:HG23	1:F:2408:LEU:HD12	1.85	0.59
1:A:1616:PRO:HG3	1:A:1668:LEU:HD13	1.85	0.59
1:A:2431:THR:HG23	1:A:2431:THR:O	2.01	0.59
1:C:462:GLN:HG3	1:C:468:PHE:HD1	1.68	0.59
1:C:1336:VAL:HG12	1:C:1337:MET:HG3	1.85	0.59
1:C:2651:ASN:HD22	1:C:2718:VAL:HG12	1.67	0.59
1:C:2667:THR:HG21	1:C:3058:ARG:NH1	2.17	0.59
1:C:2749:GLU:OE2	1:D:2749:GLU:HB3	2.02	0.59
1:C:2752:ASP:OD2	1:D:2753:LYS:NZ	2.36	0.59
1:D:1008:VAL:HG23	1:D:1008:VAL:O	2.03	0.59
1:E:34:LEU:O	1:E:38:LEU:N	2.25	0.59
1:E:688:ARG:O	1:E:872:ARG:NE	2.34	0.59
1:B:488:ASN:HA	1:B:521:VAL:HB	1.83	0.59
1:B:2403:ILE:HG23	1:B:2408:LEU:HD12	1.85	0.59
1:C:580:ARG:HG2	1:C:590:LEU:HD21	1.83	0.59
1:C:1309:VAL:HG22	1:C:1331:ILE:HG12	1.84	0.59
1:C:2112:ARG:CG	1:C:2114:VAL:HG12	2.31	0.59
1:F:1095:LEU:HD22	1:F:1289:PRO:HA	1.85	0.59
1:F:2212:TRP:HA	1:F:2229:LYS:HD3	1.83	0.59
1:F:3080:ARG:HH11	1:F:3080:ARG:CG	2.07	0.59
1:A:687:GLY:O	1:A:695:ILE:N	2.34	0.59
1:A:2521:VAL:HG13	1:A:2529:ARG:HH11	1.68	0.59
1:A:2647:VAL:HA	1:A:2650:TRP:HD1	1.66	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2651:ASN:HD22	1:A:2718:VAL:HG12	1.67	0.59
1:B:1656:LYS:HG2	1:B:1660:LEU:HG	1.84	0.59
1:B:2056:PHE:HZ	1:B:2180:LYS:HE2	1.67	0.59
1:C:670:GLY:O	1:C:682:ASN:ND2	2.35	0.59
1:C:2748:GLU:HG2	1:D:2753:LYS:HZ2	1.67	0.59
1:C:2820:ILE:HD13	1:C:2943:MET:HG2	1.84	0.59
1:D:836:VAL:HG12	1:D:837:VAL:H	1.67	0.59
1:D:2372:MET:HB3	1:D:2394:LEU:HD22	1.83	0.59
1:E:462:GLN:HG3	1:E:468:PHE:HD1	1.68	0.59
1:E:2667:THR:HG21	1:E:3058:ARG:NH1	2.17	0.59
1:E:3080:ARG:HG3	1:E:3080:ARG:NH1	2.09	0.59
1:F:2686:MET:HE1	1:F:2935:LYS:HG3	1.83	0.59
1:F:2693:GLN:O	1:F:2697:HIS:ND1	2.33	0.59
1:A:1656:LYS:HG2	1:A:1660:LEU:HG	1.85	0.59
1:A:2554:ALA:HB1	1:A:2614:LYS:HZ2	1.66	0.59
1:B:462:GLN:HG3	1:B:468:PHE:HD1	1.68	0.59
1:C:129:VAL:HG13	1:C:356:PRO:HG2	1.85	0.59
1:C:150:THR:O	1:C:152:PRO:HD3	2.03	0.59
1:D:2647:VAL:HA	1:D:2650:TRP:HD1	1.66	0.59
1:A:238:SER:OG	1:A:249:THR:OG1	2.16	0.59
1:A:836:VAL:HG12	1:A:837:VAL:H	1.67	0.59
1:A:1008:VAL:CG2	1:A:1019:PHE:HB3	2.33	0.59
1:A:1435:VAL:HG11	1:A:1463:CYS:HB3	1.84	0.59
1:A:2334:HIS:HD2	1:A:2391:LYS:HG3	1.66	0.59
1:B:1336:VAL:HG12	1:B:1337:MET:HG3	1.85	0.59
1:B:2614:LYS:HZ1	1:E:2583:PHE:HD1	1.51	0.59
1:B:2647:VAL:HA	1:B:2650:TRP:HD1	1.66	0.59
1:B:2667:THR:HG21	1:B:3058:ARG:NH1	2.17	0.59
1:C:1008:VAL:HG23	1:C:1008:VAL:O	2.03	0.59
1:C:2521:VAL:HG13	1:C:2529:ARG:HH11	1.68	0.59
1:E:836:VAL:HG12	1:E:837:VAL:H	1.67	0.59
1:F:462:GLN:HG3	1:F:468:PHE:HD1	1.68	0.59
1:F:784:GLU:OE2	1:F:787:LEU:HD12	2.03	0.59
1:F:1008:VAL:CG2	1:F:1019:PHE:HB3	2.33	0.59
1:A:410:LEU:HB3	1:A:1025:VAL:HG21	1.84	0.58
1:A:2749:GLU:OE2	1:F:2749:GLU:HB3	2.02	0.58
1:B:33:ALA:O	1:B:37:ARG:N	2.35	0.58
1:B:500:GLN:O	1:B:504:LYS:N	2.24	0.58
1:B:795:HIS:HB3	1:B:799:PHE:CZ	2.37	0.58
1:B:1537:LEU:HB2	1:B:1541:GLN:H	1.67	0.58
1:B:2693:GLN:O	1:B:2697:HIS:ND1	2.33	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1656:LYS:HG2	1:C:1660:LEU:HG	1.85	0.58
1:D:1537:LEU:HB2	1:D:1541:GLN:H	1.67	0.58
1:E:2461:VAL:HG11	1:E:2751:VAL:HG22	1.84	0.58
1:F:150:THR:O	1:F:152:PRO:HD3	2.03	0.58
1:F:688:ARG:O	1:F:872:ARG:NE	2.34	0.58
1:F:2889:ILE:HG12	1:F:2922:LEU:HB3	1.85	0.58
1:A:1701:VAL:HG22	1:A:1732:LEU:HB2	1.84	0.58
1:A:2753:LYS:NZ	1:F:2752:ASP:OD2	2.36	0.58
1:D:2521:VAL:HG13	1:D:2529:ARG:HH11	1.68	0.58
1:F:33:ALA:O	1:F:37:ARG:N	2.35	0.58
1:F:129:VAL:HG13	1:F:356:PRO:HG2	1.85	0.58
1:F:735:LYS:HD2	1:F:860:VAL:HG23	1.85	0.58
1:A:784:GLU:OE2	1:A:787:LEU:HD12	2.03	0.58
1:B:1616:PRO:HG3	1:B:1668:LEU:HD13	1.85	0.58
1:C:500:GLN:O	1:C:504:LYS:N	2.24	0.58
1:C:2889:ILE:HG12	1:C:2922:LEU:HB3	1.85	0.58
1:D:150:THR:O	1:D:152:PRO:HD3	2.03	0.58
1:D:1095:LEU:HD22	1:D:1289:PRO:HA	1.85	0.58
1:D:1309:VAL:HG22	1:D:1331:ILE:HG12	1.84	0.58
1:D:2084:GLN:O	1:D:2087:GLN:CG	2.52	0.58
1:D:2820:ILE:HD13	1:D:2943:MET:HG2	1.84	0.58
1:E:1336:VAL:HG12	1:E:1337:MET:HG3	1.85	0.58
1:A:2749:GLU:HB3	1:F:2749:GLU:OE2	2.02	0.58
1:B:735:LYS:HD2	1:B:860:VAL:HG23	1.86	0.58
1:B:2124:ALA:O	1:B:2127:GLU:CG	2.51	0.58
1:C:2403:ILE:HG23	1:C:2408:LEU:HD12	1.85	0.58
1:D:410:LEU:HB3	1:D:1025:VAL:HG21	1.84	0.58
1:E:784:GLU:OE2	1:E:787:LEU:HD12	2.03	0.58
1:E:1087:PHE:HB3	1:F:117:LYS:NZ	2.18	0.58
1:E:2084:GLN:O	1:E:2087:GLN:CG	2.52	0.58
1:E:2521:VAL:HG13	1:E:2529:ARG:HH11	1.68	0.58
1:F:621:SER:OG	1:F:643:ILE:HD13	2.04	0.58
1:F:795:HIS:HB3	1:F:799:PHE:CZ	2.37	0.58
1:F:1656:LYS:HG2	1:F:1660:LEU:HG	1.84	0.58
1:F:2084:GLN:O	1:F:2087:GLN:CG	2.52	0.58
1:A:2686:MET:HE1	1:A:2935:LYS:HG3	1.84	0.58
1:A:2820:ILE:HD13	1:A:2943:MET:HG2	1.84	0.58
1:B:2753:LYS:NZ	1:E:2752:ASP:OD2	2.36	0.58
1:B:2820:ILE:HD13	1:B:2943:MET:HG2	1.84	0.58
1:C:784:GLU:OE2	1:C:787:LEU:HD12	2.03	0.58
1:D:129:VAL:HG13	1:D:356:PRO:HG2	1.85	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2124:ALA:O	1:D:2127:GLU:CG	2.51	0.58
1:F:476:GLU:HA	1:F:479:LEU:HB2	1.86	0.58
1:F:1989:PHE:HD1	1:F:1992:LYS:HZ3	1.50	0.58
1:A:2752:ASP:OD2	1:F:2753:LYS:NZ	2.36	0.58
1:B:1087:PHE:HB3	1:C:117:LYS:NZ	2.19	0.58
1:B:1327:VAL:HB	1:B:1339:ALA:HB3	1.86	0.58
1:B:2461:VAL:HG11	1:B:2751:VAL:HG22	1.84	0.58
1:C:2124:ALA:O	1:C:2127:GLU:CG	2.51	0.58
1:C:2693:GLN:O	1:C:2697:HIS:ND1	2.33	0.58
1:D:784:GLU:OE2	1:D:787:LEU:HD12	2.04	0.58
1:D:2487:LEU:HD11	1:D:2495:LEU:HD12	1.86	0.58
1:D:2712:GLU:HA	1:D:2717:VAL:HG11	1.84	0.58
1:E:735:LYS:HD2	1:E:860:VAL:HG23	1.85	0.58
1:F:500:GLN:O	1:F:504:LYS:N	2.24	0.58
1:F:1327:VAL:HB	1:F:1339:ALA:HB3	1.86	0.58
1:F:2876:LEU:HB3	1:F:2881:VAL:HG12	1.86	0.58
1:A:33:ALA:O	1:A:37:ARG:N	2.35	0.58
1:A:126:VAL:HG12	1:A:182:ALA:HB1	1.83	0.58
1:A:621:SER:OG	1:A:643:ILE:HD13	2.04	0.58
1:A:1087:PHE:HB3	1:B:117:LYS:NZ	2.19	0.58
1:C:2084:GLN:O	1:C:2087:GLN:CG	2.52	0.58
1:C:2487:LEU:HD11	1:C:2495:LEU:HD12	1.86	0.58
1:C:2876:LEU:HB3	1:C:2881:VAL:HG12	1.86	0.58
1:D:1616:PRO:HG3	1:D:1668:LEU:HD13	1.85	0.58
1:E:127:PRO:HG3	1:E:183:GLN:HA	1.86	0.58
1:E:150:THR:O	1:E:152:PRO:HD3	2.03	0.58
1:E:924:LEU:O	1:E:929:GLU:N	2.30	0.58
1:E:1616:PRO:HG3	1:E:1668:LEU:HD13	1.85	0.58
1:E:2487:LEU:HD11	1:E:2495:LEU:HD12	1.86	0.58
1:E:2889:ILE:HG12	1:E:2922:LEU:HB3	1.84	0.58
1:F:1091:LEU:HD13	1:F:1281:ALA:HB3	1.86	0.58
1:A:127:PRO:HG3	1:A:183:GLN:HA	1.85	0.58
1:A:735:LYS:HD2	1:A:860:VAL:HG23	1.85	0.58
1:A:1008:VAL:HG23	1:A:1008:VAL:O	2.03	0.58
1:B:1008:VAL:CG1	1:B:1019:PHE:HB3	2.33	0.58
1:B:1253:ARG:HG3	1:B:1253:ARG:NH1	2.18	0.58
1:B:1701:VAL:HG22	1:B:1732:LEU:HB2	1.84	0.58
1:B:1989:PHE:HD1	1:B:1992:LYS:HZ3	1.49	0.58
1:B:2084:GLN:O	1:B:2087:GLN:CG	2.52	0.58
1:B:2876:LEU:HB3	1:B:2881:VAL:HG12	1.86	0.58
1:C:621:SER:OG	1:C:643:ILE:HD13	2.04	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:238:SER:OG	1:D:249:THR:OG1	2.15	0.58
1:D:476:GLU:HA	1:D:479:LEU:HB2	1.86	0.58
1:D:1087:PHE:HB3	1:E:117:LYS:NZ	2.19	0.58
1:D:2876:LEU:HB3	1:D:2881:VAL:HG12	1.86	0.58
1:E:621:SER:OG	1:E:643:ILE:HD13	2.04	0.58
1:F:127:PRO:HG3	1:F:183:GLN:HA	1.86	0.58
1:F:511:ARG:HD2	1:F:517:ILE:O	2.04	0.58
1:A:117:LYS:NZ	1:C:1087:PHE:HB3	2.18	0.58
1:A:267:GLU:OE2	1:C:1724:TYR:OH	2.07	0.58
1:A:2124:ALA:O	1:A:2127:GLU:CG	2.51	0.58
1:B:2753:LYS:NZ	1:E:2748:GLU:HG2	2.19	0.58
1:B:2787:THR:HA	1:B:2790:MET:HG3	1.86	0.58
1:C:476:GLU:HA	1:C:479:LEU:HB2	1.86	0.58
1:C:1008:VAL:CG2	1:C:1019:PHE:HB3	2.33	0.58
1:F:1616:PRO:HG3	1:F:1668:LEU:HD13	1.85	0.58
1:F:2124:ALA:O	1:F:2127:GLU:CG	2.51	0.58
1:A:34:LEU:O	1:A:38:LEU:N	2.25	0.58
1:A:150:THR:O	1:A:152:PRO:HD3	2.03	0.58
1:A:511:ARG:NH1	1:A:543:GLY:HA3	2.19	0.58
1:A:2787:THR:HA	1:A:2790:MET:HG3	1.86	0.58
1:B:150:THR:O	1:B:152:PRO:HD3	2.03	0.58
1:B:511:ARG:HD2	1:B:517:ILE:O	2.04	0.58
1:B:2554:ALA:HB1	1:B:2614:LYS:NZ	2.19	0.58
1:C:441:ASP:OD2	1:C:443:LYS:HB3	2.04	0.58
1:C:1538:ARG:NH1	1:C:1722:PRO:HB3	2.18	0.58
1:C:2339:TRP:HB2	1:C:2398:LEU:HD11	1.86	0.58
1:D:267:GLU:OE2	1:F:1724:TYR:OH	2.07	0.58
1:D:1008:VAL:CG2	1:D:1019:PHE:HB3	2.33	0.58
1:E:1010:LEU:O	1:E:1017:ILE:N	2.29	0.58
1:E:1095:LEU:HD22	1:E:1289:PRO:HA	1.85	0.58
1:E:1656:LYS:HG2	1:E:1660:LEU:HG	1.85	0.58
1:E:2787:THR:HA	1:E:2790:MET:HG3	1.86	0.58
1:E:2800:PHE:HE1	1:E:2812:LEU:HD22	1.67	0.58
1:F:687:GLY:O	1:F:695:ILE:N	2.34	0.58
1:F:1309:VAL:HG22	1:F:1331:ILE:HG12	1.84	0.58
1:A:1091:LEU:HD13	1:A:1281:ALA:HB3	1.86	0.57
1:A:1253:ARG:HG3	1:A:1253:ARG:NH1	2.18	0.57
1:A:2084:GLN:O	1:A:2087:GLN:CG	2.52	0.57
1:A:2339:TRP:HB2	1:A:2398:LEU:HD11	1.86	0.57
1:C:776:ASP:O	1:C:779:TRP:N	2.31	0.57
1:D:1253:ARG:HG3	1:D:1253:ARG:NH1	2.18	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2339:TRP:HB2	1:D:2398:LEU:HD11	1.86	0.57
1:E:476:GLU:HA	1:E:479:LEU:HB2	1.86	0.57
1:E:2124:ALA:O	1:E:2127:GLU:CG	2.51	0.57
1:E:2554:ALA:HB1	1:E:2614:LYS:NZ	2.19	0.57
1:F:441:ASP:OD2	1:F:443:LYS:HB3	2.04	0.57
1:F:511:ARG:NH1	1:F:543:GLY:HA3	2.19	0.57
1:F:1008:VAL:HG23	1:F:1008:VAL:O	2.03	0.57
1:F:1336:VAL:HG12	1:F:1337:MET:HG3	1.85	0.57
1:A:1336:VAL:HG12	1:A:1337:MET:HG3	1.85	0.57
1:B:441:ASP:OD2	1:B:443:LYS:HB3	2.04	0.57
1:B:476:GLU:HA	1:B:479:LEU:HB2	1.86	0.57
1:C:511:ARG:NH1	1:C:543:GLY:HA3	2.19	0.57
1:C:1616:PRO:HG3	1:C:1668:LEU:HD13	1.85	0.57
1:D:2889:ILE:HG12	1:D:2922:LEU:HB3	1.85	0.57
1:E:511:ARG:HD2	1:E:517:ILE:O	2.04	0.57
1:E:1008:VAL:O	1:E:1008:VAL:HG23	2.03	0.57
1:F:924:LEU:HA	1:F:928:ALA:HB3	1.86	0.57
1:F:1701:VAL:HG22	1:F:1732:LEU:HB2	1.84	0.57
1:B:2845:PHE:CD1	1:E:2731:GLY:HA2	2.39	0.57
1:B:2846:ALA:HA	1:B:3001:HIS:O	2.05	0.57
1:C:2724:GLN:HG2	1:D:3001:HIS:NE2	2.19	0.57
1:D:117:LYS:NZ	1:F:1087:PHE:HB3	2.19	0.57
1:D:924:LEU:HA	1:D:928:ALA:HB3	1.87	0.57
1:E:1008:VAL:CG2	1:E:1019:PHE:HB3	2.33	0.57
1:E:2651:ASN:HD22	1:E:2718:VAL:HG12	1.67	0.57
1:F:1538:ARG:NH1	1:F:1722:PRO:HB3	2.18	0.57
1:F:2983:LEU:HB3	1:F:2987:PHE:O	2.05	0.57
1:A:1095:LEU:HD22	1:A:1289:PRO:HA	1.85	0.57
1:B:1008:VAL:HG13	1:B:1008:VAL:O	2.03	0.57
1:B:1405:ALA:HB3	1:B:1408:VAL:HG23	1.87	0.57
1:C:735:LYS:HD2	1:C:860:VAL:HG23	1.85	0.57
1:C:1537:LEU:HD11	1:C:1714:LEU:HB3	1.86	0.57
1:C:2622:GLY:HA2	1:C:2812:LEU:HD11	1.87	0.57
1:C:2983:LEU:HB3	1:C:2987:PHE:O	2.05	0.57
1:D:462:GLN:HG3	1:D:468:PHE:HD1	1.68	0.57
1:D:1445:VAL:HG23	1:D:1448:ALA:HB2	1.87	0.57
1:D:1537:LEU:HD11	1:D:1714:LEU:HB3	1.87	0.57
1:E:2876:LEU:HB3	1:E:2881:VAL:HG12	1.86	0.57
1:E:2961:LEU:HD23	1:E:2978:ARG:HB3	1.87	0.57
1:F:2787:THR:HA	1:F:2790:MET:HG3	1.86	0.57
1:A:1327:VAL:HB	1:A:1339:ALA:HB3	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2403:ILE:HG23	1:A:2408:LEU:HD12	1.85	0.57
1:A:2583:PHE:HD1	1:F:2614:LYS:HZ1	1.52	0.57
1:C:511:ARG:HD2	1:C:517:ILE:O	2.04	0.57
1:C:1405:ALA:HB3	1:C:1408:VAL:HG23	1.87	0.57
1:C:2753:LYS:NZ	1:D:2748:GLU:HG2	2.19	0.57
1:D:1017:ILE:HG23	1:D:1045:VAL:HG21	1.87	0.57
1:D:1336:VAL:HG12	1:D:1337:MET:HG3	1.85	0.57
1:D:2403:ILE:HG23	1:D:2408:LEU:HD12	1.85	0.57
1:D:2846:ALA:HA	1:D:3001:HIS:O	2.05	0.57
1:E:129:VAL:HG13	1:E:356:PRO:HG2	1.85	0.57
1:E:1091:LEU:HD13	1:E:1281:ALA:HB3	1.86	0.57
1:E:2693:GLN:O	1:E:2697:HIS:ND1	2.33	0.57
1:F:776:ASP:O	1:F:779:TRP:N	2.31	0.57
1:F:1445:VAL:HG23	1:F:1448:ALA:HB2	1.87	0.57
1:A:2753:LYS:NZ	1:F:2748:GLU:HG2	2.19	0.57
1:B:2339:TRP:HB2	1:B:2398:LEU:HD11	1.86	0.57
1:B:2521:VAL:HG13	1:B:2529:ARG:HH11	1.68	0.57
1:C:127:PRO:HG3	1:C:183:GLN:HA	1.86	0.57
1:C:924:LEU:HA	1:C:928:ALA:HB3	1.87	0.57
1:C:2709:ILE:O	1:C:2713:VAL:HG13	2.05	0.57
1:C:3001:HIS:NE2	1:D:2724:GLN:HG2	2.19	0.57
1:E:1405:ALA:HB3	1:E:1408:VAL:HG23	1.86	0.57
1:E:1435:VAL:HG11	1:E:1463:CYS:HB3	1.84	0.57
1:E:1989:PHE:HD1	1:E:1992:LYS:HZ3	1.51	0.57
1:F:2487:LEU:HD11	1:F:2495:LEU:HD12	1.86	0.57
1:A:441:ASP:OD2	1:A:443:LYS:HB3	2.04	0.57
1:A:511:ARG:HD2	1:A:517:ILE:O	2.04	0.57
1:B:776:ASP:O	1:B:779:TRP:N	2.31	0.57
1:B:784:GLU:OE2	1:B:787:LEU:HD12	2.03	0.57
1:B:924:LEU:HA	1:B:928:ALA:HB3	1.86	0.57
1:B:2748:GLU:HG2	1:E:2753:LYS:HZ2	1.69	0.57
1:B:3077:THR:O	1:E:2865:ARG:NH1	2.38	0.57
1:C:475:LEU:O	1:C:479:LEU:N	2.37	0.57
1:C:1017:ILE:HG23	1:C:1045:VAL:HG21	1.87	0.57
1:C:1327:VAL:HB	1:C:1339:ALA:HB3	1.86	0.57
1:C:2461:VAL:HG11	1:C:2751:VAL:HG22	1.84	0.57
1:D:2787:THR:HA	1:D:2790:MET:HG3	1.86	0.57
1:E:2403:ILE:HG23	1:E:2408:LEU:HD12	1.85	0.57
1:E:2846:ALA:HA	1:E:3001:HIS:O	2.05	0.57
1:F:238:SER:OG	1:F:249:THR:OG1	2.15	0.57
1:F:1435:VAL:HG11	1:F:1463:CYS:HB3	1.84	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2487:LEU:HD11	1:A:2495:LEU:HD12	1.86	0.57
1:A:2554:ALA:HB1	1:A:2614:LYS:NZ	2.19	0.57
1:A:2724:GLN:HG2	1:F:3001:HIS:NE2	2.20	0.57
1:A:2876:LEU:HB3	1:A:2881:VAL:HG12	1.86	0.57
1:A:2961:LEU:HD23	1:A:2978:ARG:HB3	1.87	0.57
1:B:1126:ILE:O	1:B:1197:ARG:CG	2.53	0.57
1:B:2748:GLU:HG2	1:E:2753:LYS:NZ	2.19	0.57
1:B:3001:HIS:NE2	1:E:2724:GLN:HG2	2.20	0.57
1:C:2753:LYS:NZ	1:D:2752:ASP:OD2	2.36	0.57
1:D:1538:ARG:NH1	1:D:1722:PRO:HB3	2.18	0.57
1:D:2961:LEU:HD23	1:D:2978:ARG:HB3	1.87	0.57
1:E:924:LEU:HA	1:E:928:ALA:HB3	1.86	0.57
1:E:2709:ILE:O	1:E:2713:VAL:HG13	2.05	0.57
1:F:1537:LEU:HD11	1:F:1714:LEU:HB3	1.87	0.57
1:A:476:GLU:HA	1:A:479:LEU:HB2	1.86	0.57
1:A:1001:ASP:O	1:A:1002:GLN:CG	2.53	0.57
1:A:2709:ILE:O	1:A:2713:VAL:HG13	2.05	0.57
1:A:2748:GLU:HG2	1:F:2753:LYS:NZ	2.19	0.57
1:A:2846:ALA:HA	1:A:3001:HIS:O	2.05	0.57
1:B:127:PRO:HG3	1:B:183:GLN:HA	1.86	0.57
1:B:2521:VAL:HG13	1:B:2529:ARG:NH1	2.20	0.57
1:B:2865:ARG:NH1	1:E:3077:THR:O	2.38	0.57
1:C:1445:VAL:HG23	1:C:1448:ALA:HB2	1.87	0.57
1:D:33:ALA:O	1:D:37:ARG:N	2.35	0.57
1:D:621:SER:OG	1:D:643:ILE:HD13	2.04	0.57
1:D:2554:ALA:HB1	1:D:2614:LYS:HZ2	1.70	0.57
1:D:2622:GLY:HA2	1:D:2812:LEU:HD11	1.87	0.57
1:E:511:ARG:NH1	1:E:543:GLY:HA3	2.19	0.57
1:A:129:VAL:HG13	1:A:356:PRO:HG2	1.85	0.57
1:A:475:LEU:O	1:A:479:LEU:N	2.37	0.57
1:A:1405:ALA:HB3	1:A:1408:VAL:HG23	1.86	0.57
1:A:2865:ARG:NH1	1:F:3077:THR:O	2.38	0.57
1:A:3001:HIS:NE2	1:F:2724:GLN:HG2	2.19	0.57
1:A:3077:THR:O	1:F:2865:ARG:NH1	2.38	0.57
1:C:1095:LEU:HD22	1:C:1289:PRO:HA	1.85	0.57
1:C:2748:GLU:HG2	1:D:2753:LYS:NZ	2.19	0.57
1:D:127:PRO:HG3	1:D:183:GLN:HA	1.86	0.57
1:D:441:ASP:OD2	1:D:443:LYS:HB3	2.04	0.57
1:D:511:ARG:HD2	1:D:517:ILE:O	2.04	0.57
1:D:735:LYS:HD2	1:D:860:VAL:HG23	1.85	0.57
1:D:1126:ILE:O	1:D:1197:ARG:CG	2.53	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2521:VAL:HG13	1:D:2529:ARG:NH1	2.20	0.57
1:D:2962:ASP:OD1	1:D:2962:ASP:N	2.34	0.57
1:E:1017:ILE:HG23	1:E:1045:VAL:HG21	1.87	0.57
1:F:177:GLU:HB3	1:F:317:LEU:HD13	1.87	0.57
1:F:1017:ILE:HG23	1:F:1045:VAL:HG21	1.87	0.57
1:F:2339:TRP:HB2	1:F:2398:LEU:HD11	1.86	0.57
1:F:2622:GLY:HA2	1:F:2812:LEU:HD11	1.87	0.57
1:B:2487:LEU:HD11	1:B:2495:LEU:HD12	1.86	0.56
1:B:2622:GLY:HA2	1:B:2812:LEU:HD11	1.87	0.56
1:B:2709:ILE:O	1:B:2713:VAL:HG13	2.05	0.56
1:C:2865:ARG:NH1	1:D:3077:THR:O	2.38	0.56
1:D:1327:VAL:HB	1:D:1339:ALA:HB3	1.86	0.56
1:E:441:ASP:OD2	1:E:443:LYS:HB3	2.04	0.56
1:E:1537:LEU:HD11	1:E:1714:LEU:HB3	1.86	0.56
1:F:2554:ALA:HB1	1:F:2614:LYS:NZ	2.19	0.56
1:A:1537:LEU:HD11	1:A:1714:LEU:HB3	1.87	0.56
1:B:621:SER:OG	1:B:643:ILE:HD13	2.04	0.56
1:C:2554:ALA:HB1	1:C:2614:LYS:NZ	2.19	0.56
1:D:1637:VAL:HG21	1:D:1671:TRP:CG	2.40	0.56
1:D:1989:PHE:HD1	1:D:1992:LYS:HZ3	1.51	0.56
1:D:2709:ILE:O	1:D:2713:VAL:HG13	2.05	0.56
1:E:1327:VAL:HB	1:E:1339:ALA:HB3	1.86	0.56
1:E:2521:VAL:HG13	1:E:2529:ARG:NH1	2.20	0.56
1:E:2622:GLY:HA2	1:E:2812:LEU:HD11	1.87	0.56
1:F:1001:ASP:O	1:F:1002:GLN:CG	2.53	0.56
1:F:1637:VAL:HG21	1:F:1671:TRP:CG	2.40	0.56
1:A:500:GLN:O	1:A:504:LYS:N	2.24	0.56
1:A:868:ARG:HB3	1:A:872:ARG:HH11	1.70	0.56
1:A:1637:VAL:HG21	1:A:1671:TRP:CG	2.40	0.56
1:B:490:LEU:HD23	1:B:523:SER:HB2	1.87	0.56
1:B:1091:LEU:HD13	1:B:1281:ALA:HB3	1.86	0.56
1:B:1537:LEU:HD11	1:B:1714:LEU:HB3	1.87	0.56
1:B:2724:GLN:HG2	1:E:3001:HIS:NE2	2.19	0.56
1:B:2983:LEU:HB3	1:B:2987:PHE:O	2.05	0.56
1:C:37:ARG:O	1:C:41:GLY:N	2.39	0.56
1:C:2583:PHE:HD1	1:D:2614:LYS:HZ1	1.51	0.56
1:C:2846:ALA:HA	1:C:3001:HIS:O	2.05	0.56
1:C:2961:LEU:HD23	1:C:2978:ARG:HB3	1.87	0.56
1:D:177:GLU:HB3	1:D:317:LEU:HD13	1.87	0.56
1:D:475:LEU:O	1:D:479:LEU:N	2.37	0.56
1:D:511:ARG:NH1	1:D:543:GLY:HA3	2.20	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:776:ASP:O	1:D:779:TRP:N	2.31	0.56
1:D:868:ARG:HB3	1:D:872:ARG:HH11	1.70	0.56
1:D:1001:ASP:O	1:D:1002:GLN:CG	2.53	0.56
1:D:1405:ALA:HB3	1:D:1408:VAL:HG23	1.87	0.56
1:D:2554:ALA:HB1	1:D:2614:LYS:NZ	2.19	0.56
1:E:776:ASP:O	1:E:779:TRP:N	2.31	0.56
1:E:868:ARG:HB3	1:E:872:ARG:HH11	1.70	0.56
1:E:1126:ILE:O	1:E:1197:ARG:CG	2.53	0.56
1:E:1511:ASP:H	1:E:1514:ASP:HB2	1.71	0.56
1:E:2983:LEU:HB3	1:E:2987:PHE:O	2.05	0.56
1:F:490:LEU:HD23	1:F:523:SER:HB2	1.87	0.56
1:F:1126:ILE:O	1:F:1197:ARG:CG	2.53	0.56
1:F:1405:ALA:HB3	1:F:1408:VAL:HG23	1.86	0.56
1:F:2846:ALA:HA	1:F:3001:HIS:O	2.05	0.56
1:A:2957:PRO:HD3	1:A:2980:PRO:HB3	1.88	0.56
1:B:129:VAL:HG13	1:B:356:PRO:HG2	1.85	0.56
1:B:1637:VAL:HG21	1:B:1671:TRP:CG	2.40	0.56
1:C:1511:ASP:H	1:C:1514:ASP:HB2	1.71	0.56
1:D:745:THR:OG1	1:D:834:GLU:O	2.19	0.56
1:E:37:ARG:O	1:E:41:GLY:N	2.39	0.56
1:F:1253:ARG:HG3	1:F:1253:ARG:NH1	2.18	0.56
1:F:2521:VAL:HG13	1:F:2529:ARG:NH1	2.20	0.56
1:A:1420:THR:OG1	1:A:1485:HIS:NE2	2.39	0.56
1:A:1445:VAL:HG23	1:A:1448:ALA:HB2	1.87	0.56
1:A:2521:VAL:HG13	1:A:2529:ARG:NH1	2.20	0.56
1:B:868:ARG:HB3	1:B:872:ARG:HH11	1.70	0.56
1:B:1445:VAL:HG23	1:B:1448:ALA:HB2	1.87	0.56
1:B:2752:ASP:OD2	1:E:2753:LYS:NZ	2.36	0.56
1:C:177:GLU:HB3	1:C:317:LEU:HD13	1.87	0.56
1:C:1091:LEU:HD13	1:C:1281:ALA:HB3	1.86	0.56
1:C:1637:VAL:HG21	1:C:1671:TRP:CG	2.40	0.56
1:D:2957:PRO:HD3	1:D:2980:PRO:HB3	1.88	0.56
1:F:1511:ASP:H	1:F:1514:ASP:HB2	1.71	0.56
1:F:2709:ILE:O	1:F:2713:VAL:HG13	2.05	0.56
1:A:540:ASN:HD21	1:A:544:ILE:HG13	1.71	0.56
1:B:238:SER:OG	1:B:249:THR:OG1	2.15	0.56
1:B:511:ARG:NH1	1:B:543:GLY:HA3	2.19	0.56
1:B:1017:ILE:HG23	1:B:1045:VAL:HG21	1.87	0.56
1:C:868:ARG:HB3	1:C:872:ARG:HH11	1.70	0.56
1:C:1420:THR:OG1	1:C:1485:HIS:NE2	2.38	0.56
1:C:3077:THR:O	1:D:2865:ARG:NH1	2.38	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1637:VAL:HG21	1:E:1671:TRP:CG	2.40	0.56
1:E:2478:ARG:NH1	1:E:2482:GLU:OE1	2.39	0.56
1:E:2481:MET:O	1:E:2959:ARG:NH2	2.39	0.56
1:F:2481:MET:O	1:F:2959:ARG:NH2	2.39	0.56
1:A:1126:ILE:O	1:A:1197:ARG:CG	2.53	0.56
1:A:2693:GLN:O	1:A:2697:HIS:ND1	2.33	0.56
1:C:1126:ILE:O	1:C:1197:ARG:CG	2.53	0.56
1:C:2481:MET:O	1:C:2959:ARG:NH2	2.39	0.56
1:C:2521:VAL:HG13	1:C:2529:ARG:NH1	2.20	0.56
1:C:2787:THR:HA	1:C:2790:MET:HG3	1.86	0.56
1:D:1091:LEU:HD13	1:D:1281:ALA:HB3	1.86	0.56
1:A:2303:ASP:OD1	1:A:2303:ASP:N	2.39	0.56
1:A:2881:VAL:HG13	1:A:2885:ASP:HB2	1.88	0.56
1:B:540:ASN:HD21	1:B:544:ILE:HG13	1.71	0.56
1:C:1001:ASP:O	1:C:1002:GLN:CG	2.53	0.56
1:C:2957:PRO:HD3	1:C:2980:PRO:HB3	1.88	0.56
1:E:1618:LEU:HG	1:E:1619:VAL:HG23	1.88	0.56
1:E:2957:PRO:HD3	1:E:2980:PRO:HB3	1.88	0.56
1:A:2481:MET:O	1:A:2959:ARG:NH2	2.39	0.56
1:B:1001:ASP:O	1:B:1002:GLN:CG	2.53	0.56
1:B:2481:MET:O	1:B:2959:ARG:NH2	2.39	0.56
1:C:2303:ASP:OD1	1:C:2303:ASP:N	2.39	0.56
1:E:1001:ASP:O	1:E:1002:GLN:CG	2.53	0.56
1:E:1087:PHE:HB3	1:F:117:LYS:HZ1	1.69	0.56
1:E:1496:SER:HB3	1:E:1578:ASP:HB3	1.88	0.56
1:A:144:GLY:O	1:A:148:THR:N	2.34	0.56
1:A:2731:GLY:HA2	1:F:2845:PHE:CD1	2.39	0.56
1:B:37:ARG:O	1:B:41:GLY:N	2.39	0.56
1:D:490:LEU:HD23	1:D:523:SER:HB2	1.87	0.56
1:D:540:ASN:HD21	1:D:544:ILE:HG13	1.71	0.56
1:D:2481:MET:O	1:D:2959:ARG:NH2	2.39	0.56
1:D:2881:VAL:HG13	1:D:2885:ASP:HB2	1.88	0.56
1:E:490:LEU:HD23	1:E:523:SER:HB2	1.87	0.56
1:E:2743:ALA:HB3	1:E:2939:ALA:HB3	1.89	0.56
1:A:490:LEU:HD23	1:A:523:SER:HB2	1.87	0.55
1:A:924:LEU:HA	1:A:928:ALA:HB3	1.86	0.55
1:A:2962:ASP:OD1	1:A:2962:ASP:N	2.34	0.55
1:B:177:GLU:HB3	1:B:317:LEU:HD13	1.87	0.55
1:B:1538:ARG:NH1	1:B:1722:PRO:HB3	2.18	0.55
1:B:2961:LEU:HD23	1:B:2978:ARG:HB3	1.87	0.55
1:C:1618:LEU:HG	1:C:1619:VAL:HG23	1.88	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2478:ARG:NH1	1:C:2482:GLU:OE1	2.39	0.55
1:C:2881:VAL:HG13	1:C:2885:ASP:HB2	1.88	0.55
1:D:1511:ASP:H	1:D:1514:ASP:HB2	1.71	0.55
1:D:2983:LEU:HB3	1:D:2987:PHE:O	2.05	0.55
1:F:144:GLY:O	1:F:148:THR:N	2.33	0.55
1:A:177:GLU:HB3	1:A:317:LEU:HD13	1.87	0.55
1:A:1017:ILE:HG23	1:A:1045:VAL:HG21	1.87	0.55
1:A:1496:SER:HB3	1:A:1578:ASP:HB3	1.89	0.55
1:B:2731:GLY:HA2	1:E:2845:PHE:CD1	2.39	0.55
1:C:490:LEU:HD23	1:C:523:SER:HB2	1.87	0.55
1:C:540:ASN:HD21	1:C:544:ILE:HG13	1.71	0.55
1:E:177:GLU:HB3	1:E:317:LEU:HD13	1.87	0.55
1:E:2881:VAL:HG13	1:E:2885:ASP:HB2	1.88	0.55
1:F:868:ARG:HB3	1:F:872:ARG:HH11	1.70	0.55
1:F:2957:PRO:HD3	1:F:2980:PRO:HB3	1.88	0.55
1:A:1511:ASP:H	1:A:1514:ASP:HB2	1.71	0.55
1:B:1420:THR:OG1	1:B:1485:HIS:NE2	2.38	0.55
1:B:2478:ARG:NH1	1:B:2482:GLU:OE1	2.39	0.55
1:C:2704:ALA:O	1:C:2705:LYS:HD3	2.07	0.55
1:D:975:GLU:CG	1:D:976:TRP:N	2.70	0.55
1:D:2303:ASP:N	1:D:2303:ASP:OD1	2.39	0.55
1:D:2478:ARG:NH1	1:D:2482:GLU:OE1	2.39	0.55
1:E:540:ASN:HD21	1:E:544:ILE:HG13	1.71	0.55
1:F:2743:ALA:HB3	1:F:2939:ALA:HB3	1.88	0.55
1:A:975:GLU:CG	1:A:976:TRP:N	2.70	0.55
1:A:2622:GLY:HA2	1:A:2812:LEU:HD11	1.87	0.55
1:A:2810:GLY:HA2	1:A:2896:THR:HA	1.89	0.55
1:B:1496:SER:HB3	1:B:1578:ASP:HB3	1.88	0.55
1:C:33:ALA:O	1:C:37:ARG:N	2.35	0.55
1:E:2339:TRP:HB2	1:E:2398:LEU:HD11	1.86	0.55
1:B:2743:ALA:HB3	1:B:2939:ALA:HB3	1.88	0.55
1:C:2554:ALA:HB1	1:C:2614:LYS:HZ2	1.70	0.55
1:D:551:PRO:HG3	1:D:560:VAL:HG21	1.89	0.55
1:D:2704:ALA:O	1:D:2705:LYS:HD3	2.06	0.55
1:E:1445:VAL:HG23	1:E:1448:ALA:HB2	1.87	0.55
1:E:2704:ALA:O	1:E:2705:LYS:HD3	2.07	0.55
1:E:2810:GLY:HA2	1:E:2896:THR:HA	1.89	0.55
1:F:1420:THR:OG1	1:F:1485:HIS:NE2	2.39	0.55
1:A:2704:ALA:O	1:A:2705:LYS:HD3	2.07	0.55
1:B:975:GLU:CG	1:B:976:TRP:N	2.70	0.55
1:B:2881:VAL:HG13	1:B:2885:ASP:HB2	1.88	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:975:GLU:CG	1:C:976:TRP:N	2.69	0.55
1:C:1253:ARG:HG3	1:C:1253:ARG:NH1	2.18	0.55
1:C:2810:GLY:HA2	1:C:2896:THR:HA	1.89	0.55
1:E:1253:ARG:HG3	1:E:1253:ARG:NH1	2.18	0.55
1:E:1734:SER:HA	1:E:1741:LEU:HD11	1.89	0.55
1:F:2478:ARG:NH1	1:F:2482:GLU:OE1	2.39	0.55
1:F:2961:LEU:HD23	1:F:2978:ARG:HB3	1.87	0.55
1:A:2743:ALA:HB3	1:A:2939:ALA:HB3	1.88	0.55
1:A:2983:LEU:HB3	1:A:2987:PHE:O	2.05	0.55
1:B:737:TYR:HE1	1:B:862:VAL:HA	1.72	0.55
1:C:1690:GLU:O	1:C:1694:GLY:N	2.40	0.55
1:D:37:ARG:O	1:D:41:GLY:N	2.39	0.55
1:E:2303:ASP:N	1:E:2303:ASP:OD1	2.39	0.55
1:F:37:ARG:O	1:F:41:GLY:N	2.39	0.55
1:F:475:LEU:O	1:F:479:LEU:N	2.38	0.55
1:F:1496:SER:HB3	1:F:1578:ASP:HB3	1.88	0.55
1:A:580:ARG:HH11	1:A:614:GLY:HA3	1.72	0.55
1:A:1690:GLU:O	1:A:1694:GLY:N	2.40	0.55
1:A:1734:SER:HA	1:A:1741:LEU:HD11	1.89	0.55
1:B:1511:ASP:H	1:B:1514:ASP:HB2	1.70	0.55
1:E:975:GLU:CG	1:E:976:TRP:N	2.70	0.55
1:E:1357:ILE:HG13	1:E:1710:THR:HG21	1.89	0.55
1:E:2458:ALA:HA	1:E:2824:ARG:HD2	1.89	0.55
1:F:1690:GLU:O	1:F:1694:GLY:N	2.40	0.55
1:F:2704:ALA:O	1:F:2705:LYS:HD3	2.07	0.55
1:A:1357:ILE:HG13	1:A:1710:THR:HG21	1.89	0.55
1:C:551:PRO:HG3	1:C:560:VAL:HG21	1.89	0.55
1:D:2417:SER:O	1:D:2421:ASP:N	2.40	0.55
1:F:975:GLU:CG	1:F:976:TRP:N	2.70	0.55
1:A:37:ARG:O	1:A:41:GLY:N	2.39	0.55
1:B:2704:ALA:O	1:B:2705:LYS:HD3	2.07	0.55
1:B:2957:PRO:HD3	1:B:2980:PRO:HB3	1.88	0.55
1:C:2845:PHE:CD1	1:D:2731:GLY:HA2	2.39	0.55
1:D:2743:ALA:HB3	1:D:2939:ALA:HB3	1.88	0.55
1:E:475:LEU:O	1:E:479:LEU:N	2.37	0.55
1:E:2653:VAL:HA	1:E:3051:MET:HE3	1.89	0.55
1:A:2478:ARG:NH1	1:A:2482:GLU:OE1	2.39	0.54
1:B:475:LEU:O	1:B:479:LEU:N	2.37	0.54
1:B:1690:GLU:O	1:B:1694:GLY:N	2.40	0.54
1:D:176:VAL:O	1:D:180:ALA:N	2.36	0.54
1:E:1690:GLU:O	1:E:1694:GLY:N	2.40	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2303:ASP:OD1	1:F:2303:ASP:N	2.39	0.54
1:B:2458:ALA:HA	1:B:2824:ARG:HD2	1.89	0.54
1:D:737:TYR:HE1	1:D:862:VAL:HA	1.72	0.54
1:E:33:ALA:O	1:E:37:ARG:N	2.35	0.54
1:E:737:TYR:HE1	1:E:862:VAL:HA	1.72	0.54
1:F:1618:LEU:HG	1:F:1619:VAL:HG23	1.88	0.54
1:A:2458:ALA:HA	1:A:2824:ARG:HD2	1.89	0.54
1:B:551:PRO:HG3	1:B:560:VAL:HG21	1.89	0.54
1:B:931:VAL:HG13	1:B:933:VAL:CG2	2.37	0.54
1:C:737:TYR:HE1	1:C:862:VAL:HA	1.72	0.54
1:C:763:SER:O	1:C:766:ASP:N	2.41	0.54
1:C:1496:SER:HB3	1:C:1578:ASP:HB3	1.89	0.54
1:D:668:THR:OG1	1:D:698:ILE:HD11	2.08	0.54
1:D:931:VAL:HG23	1:D:933:VAL:CG1	2.37	0.54
1:E:580:ARG:HH11	1:E:614:GLY:HA3	1.73	0.54
1:F:1734:SER:HA	1:F:1741:LEU:HD11	1.89	0.54
1:A:763:SER:O	1:A:766:ASP:N	2.41	0.54
1:A:2653:VAL:HA	1:A:3051:MET:HE3	1.87	0.54
1:B:2860:ALA:HB1	1:B:3005:LEU:HD13	1.90	0.54
1:C:580:ARG:HH11	1:C:614:GLY:HA3	1.73	0.54
1:C:931:VAL:HG13	1:C:933:VAL:CG1	2.37	0.54
1:C:2458:ALA:HA	1:C:2824:ARG:HD2	1.89	0.54
1:D:1690:GLU:O	1:D:1694:GLY:N	2.40	0.54
1:D:1734:SER:HA	1:D:1741:LEU:HD11	1.89	0.54
1:F:540:ASN:HD21	1:F:544:ILE:HG13	1.71	0.54
1:F:2458:ALA:HA	1:F:2824:ARG:HD2	1.89	0.54
1:F:2881:VAL:HG13	1:F:2885:ASP:HB2	1.88	0.54
1:A:551:PRO:HG3	1:A:560:VAL:HG21	1.89	0.54
1:A:1618:LEU:HG	1:A:1619:VAL:HG23	1.88	0.54
1:B:1226:ARG:HB3	1:B:1282:THR:HG21	1.90	0.54
1:C:2631:PRO:HG3	1:C:2649:LEU:HD13	1.90	0.54
1:D:763:SER:O	1:D:766:ASP:N	2.41	0.54
1:D:1496:SER:HB3	1:D:1578:ASP:HB3	1.89	0.54
1:E:1420:THR:OG1	1:E:1485:HIS:NE2	2.38	0.54
1:F:668:THR:OG1	1:F:698:ILE:HD11	2.08	0.54
1:A:1724:TYR:OH	1:B:267:GLU:OE2	2.07	0.54
1:B:668:THR:OG1	1:B:698:ILE:HD11	2.08	0.54
1:C:273:ARG:HD2	1:C:282:VAL:HG12	1.90	0.54
1:C:716:ALA:HA	1:C:719:VAL:HG23	1.90	0.54
1:C:2731:GLY:HA2	1:D:2845:PHE:CD1	2.39	0.54
1:D:580:ARG:HH11	1:D:614:GLY:HA3	1.72	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2012:GLY:C	1:E:2591:ARG:NH1	2.61	0.54
1:D:2551:PRO:O	1:D:2617:LEU:HB2	2.08	0.54
1:E:668:THR:OG1	1:E:698:ILE:HD11	2.08	0.54
1:A:776:ASP:O	1:A:779:TRP:N	2.31	0.54
1:A:2845:PHE:CD1	1:F:2731:GLY:HA2	2.39	0.54
1:B:1010:LEU:O	1:B:1017:ILE:N	2.29	0.54
1:B:2551:PRO:O	1:B:2617:LEU:HB2	2.08	0.54
1:B:2768:ASP:OD2	1:B:2936:GLY:N	2.41	0.54
1:C:2743:ALA:HB3	1:C:2939:ALA:HB3	1.88	0.54
1:D:273:ARG:HD2	1:D:282:VAL:HG12	1.90	0.54
1:D:2693:GLN:O	1:D:2697:HIS:ND1	2.33	0.54
1:D:2810:GLY:HA2	1:D:2896:THR:HA	1.88	0.54
1:E:368:ILE:HG21	1:E:373:ILE:HG13	1.90	0.54
1:E:551:PRO:HG3	1:E:560:VAL:HG21	1.89	0.54
1:E:2012:GLY:C	1:F:2591:ARG:NH1	2.61	0.54
1:A:1226:ARG:HB3	1:A:1282:THR:HG21	1.90	0.54
1:A:2551:PRO:O	1:A:2617:LEU:HB2	2.08	0.54
1:B:763:SER:O	1:B:766:ASP:N	2.41	0.54
1:B:2012:GLY:C	1:C:2591:ARG:NH1	2.61	0.54
1:B:2492:VAL:HG21	1:B:2527:VAL:HG22	1.90	0.54
1:B:2810:GLY:HA2	1:B:2896:THR:HA	1.88	0.54
1:D:1618:LEU:HG	1:D:1619:VAL:HG23	1.88	0.54
1:E:2551:PRO:O	1:E:2617:LEU:HB2	2.08	0.54
1:F:737:TYR:HE1	1:F:862:VAL:HA	1.72	0.54
1:F:792:ALA:HA	1:F:799:PHE:CE2	2.43	0.54
1:F:1013:THR:CG2	1:F:1014:TRP:N	2.58	0.54
1:A:2492:VAL:HG21	1:A:2527:VAL:HG22	1.90	0.54
1:A:2768:ASP:OD2	1:A:2936:GLY:N	2.41	0.54
1:B:456:GLU:HG2	1:B:486:GLN:HE21	1.73	0.54
1:B:1618:LEU:HG	1:B:1619:VAL:HG23	1.88	0.54
1:B:2303:ASP:N	1:B:2303:ASP:OD1	2.39	0.54
1:B:3018:LEU:O	1:B:3022:GLU:HB2	2.08	0.54
1:C:1151:GLU:HB2	1:C:1179:ALA:HB3	1.90	0.54
1:C:2768:ASP:OD2	1:C:2936:GLY:N	2.41	0.54
1:D:1357:ILE:HG13	1:D:1710:THR:HG21	1.89	0.54
1:D:2860:ALA:HB1	1:D:3005:LEU:HD13	1.90	0.54
1:D:3018:LEU:O	1:D:3022:GLU:HB2	2.08	0.54
1:E:1151:GLU:HB2	1:E:1179:ALA:HB3	1.90	0.54
1:F:580:ARG:HH11	1:F:614:GLY:HA3	1.73	0.54
1:A:624:TYR:HA	1:A:629:TRP:CD1	2.43	0.54
1:A:716:ALA:HA	1:A:719:VAL:HG23	1.90	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2631:PRO:HG3	1:B:2649:LEU:HD13	1.90	0.54
1:C:624:TYR:HA	1:C:629:TRP:CD1	2.43	0.54
1:C:1580:PRO:O	1:C:1583:SER:OG	2.23	0.54
1:C:1734:SER:HA	1:C:1741:LEU:HD11	1.89	0.54
1:D:716:ALA:HA	1:D:719:VAL:HG23	1.90	0.54
1:E:2246:ALA:C	1:E:2255:ARG:HH12	2.11	0.54
1:F:931:VAL:HG23	1:F:933:VAL:CG1	2.37	0.54
1:F:2860:ALA:HB1	1:F:3005:LEU:HD13	1.90	0.54
1:A:668:THR:OG1	1:A:698:ILE:HD11	2.08	0.53
1:A:737:TYR:HE1	1:A:862:VAL:HA	1.72	0.53
1:A:745:THR:HG23	1:A:834:GLU:HA	1.90	0.53
1:B:273:ARG:HD2	1:B:282:VAL:HG12	1.90	0.53
1:C:1488:VAL:HG12	1:C:1490:ARG:HH11	1.73	0.53
1:C:2614:LYS:HZ1	1:D:2583:PHE:HD1	1.51	0.53
1:D:624:TYR:HA	1:D:629:TRP:CD1	2.43	0.53
1:E:33:ALA:O	1:E:37:ARG:HG2	2.08	0.53
1:E:526:ILE:HD12	1:E:549:PHE:HB3	1.90	0.53
1:E:2860:ALA:HB1	1:E:3005:LEU:HD13	1.90	0.53
1:F:526:ILE:HD12	1:F:549:PHE:HB3	1.90	0.53
1:F:763:SER:O	1:F:766:ASP:N	2.41	0.53
1:F:3018:LEU:O	1:F:3022:GLU:HB2	2.08	0.53
1:A:2012:GLY:C	1:B:2591:ARG:NH1	2.61	0.53
1:A:2591:ARG:NH1	1:C:2012:GLY:C	2.61	0.53
1:B:745:THR:HG23	1:B:834:GLU:HA	1.90	0.53
1:B:1151:GLU:HB2	1:B:1179:ALA:HB3	1.90	0.53
1:C:668:THR:OG1	1:C:698:ILE:HD11	2.08	0.53
1:C:1089:ALA:O	1:C:1091:LEU:N	2.41	0.53
1:D:33:ALA:O	1:D:37:ARG:HG2	2.08	0.53
1:D:745:THR:HG23	1:D:834:GLU:HA	1.90	0.53
1:D:1089:ALA:O	1:D:1091:LEU:N	2.42	0.53
1:D:2246:ALA:C	1:D:2255:ARG:HH12	2.11	0.53
1:E:2417:SER:O	1:E:2421:ASP:N	2.40	0.53
1:E:2631:PRO:HG3	1:E:2649:LEU:HD13	1.90	0.53
1:E:3018:LEU:O	1:E:3022:GLU:HB2	2.08	0.53
1:F:1151:GLU:HB2	1:F:1179:ALA:HB3	1.90	0.53
1:F:1226:ARG:HB3	1:F:1282:THR:HG21	1.90	0.53
1:F:2417:SER:O	1:F:2421:ASP:N	2.40	0.53
1:A:1089:ALA:O	1:A:1091:LEU:N	2.42	0.53
1:A:1323:GLU:N	1:A:1343:LEU:O	2.41	0.53
1:A:2246:ALA:C	1:A:2255:ARG:HH12	2.11	0.53
1:A:2860:ALA:HB1	1:A:3005:LEU:HD13	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:526:ILE:HD12	1:B:549:PHE:HB3	1.90	0.53
1:B:2653:VAL:HA	1:B:3051:MET:HE3	1.90	0.53
1:C:456:GLU:HG2	1:C:486:GLN:HE21	1.73	0.53
1:C:2492:VAL:HG21	1:C:2527:VAL:HG22	1.90	0.53
1:D:1425:VAL:HG13	1:D:1474:LEU:HD13	1.91	0.53
1:D:2653:VAL:HA	1:D:3051:MET:HE3	1.91	0.53
1:F:2768:ASP:OD2	1:F:2936:GLY:N	2.41	0.53
1:A:368:ILE:HG21	1:A:373:ILE:HG13	1.90	0.53
1:B:2246:ALA:C	1:B:2255:ARG:HH12	2.12	0.53
1:C:1530:LEU:HD21	1:C:1554:LEU:HD22	1.91	0.53
1:C:2551:PRO:O	1:C:2617:LEU:HB2	2.08	0.53
1:D:2103:TRP:CG	1:D:2919:GLY:O	2.62	0.53
1:E:1323:GLU:N	1:E:1343:LEU:O	2.41	0.53
1:F:551:PRO:HG3	1:F:560:VAL:HG21	1.89	0.53
1:F:1357:ILE:HG13	1:F:1710:THR:HG21	1.89	0.53
1:A:71:GLU:HG2	1:A:142:ARG:NH2	2.24	0.53
1:A:273:ARG:HD2	1:A:282:VAL:HG12	1.90	0.53
1:A:456:GLU:HG2	1:A:486:GLN:HE21	1.73	0.53
1:A:1148:GLU:O	1:A:1150:ALA:N	2.42	0.53
1:B:2103:TRP:CG	1:B:2919:GLY:O	2.62	0.53
1:C:71:GLU:HG2	1:C:142:ARG:NH2	2.24	0.53
1:C:1010:LEU:O	1:C:1017:ILE:N	2.29	0.53
1:D:1420:THR:OG1	1:D:1485:HIS:NE2	2.38	0.53
1:D:2418:GLY:O	1:D:2422:GLU:N	2.40	0.53
1:D:2591:ARG:NH1	1:F:2012:GLY:C	2.61	0.53
1:D:2631:PRO:HG3	1:D:2649:LEU:HD13	1.90	0.53
1:F:2246:ALA:C	1:F:2255:ARG:HH12	2.12	0.53
1:A:588:GLU:HB3	1:A:593:LEU:HD11	1.91	0.53
1:A:931:VAL:HG23	1:A:933:VAL:CG2	2.37	0.53
1:A:1174:VAL:HB	1:A:1188:LEU:HB3	1.91	0.53
1:B:580:ARG:HH11	1:B:614:GLY:HA3	1.72	0.53
1:B:624:TYR:HA	1:B:629:TRP:CD1	2.43	0.53
1:C:2087:GLN:HA	1:C:2090:GLU:CG	2.39	0.53
1:C:2860:ALA:HB1	1:C:3005:LEU:HD13	1.90	0.53
1:D:1226:ARG:HB3	1:D:1282:THR:HG21	1.90	0.53
1:E:1174:VAL:HB	1:E:1188:LEU:HB3	1.91	0.53
1:E:2768:ASP:OD2	1:E:2936:GLY:N	2.41	0.53
1:F:624:TYR:HA	1:F:629:TRP:CD1	2.43	0.53
1:F:1010:LEU:O	1:F:1017:ILE:N	2.30	0.53
1:F:1089:ALA:O	1:F:1091:LEU:N	2.42	0.53
1:F:1530:LEU:HD21	1:F:1554:LEU:HD22	1.91	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2810:GLY:HA2	1:F:2896:THR:HA	1.89	0.53
1:A:2103:TRP:CG	1:A:2919:GLY:O	2.62	0.53
1:B:1148:GLU:O	1:B:1150:ALA:N	2.42	0.53
1:B:1357:ILE:HG13	1:B:1710:THR:HG21	1.89	0.53
1:C:526:ILE:HD12	1:C:549:PHE:HB3	1.90	0.53
1:C:1357:ILE:HG13	1:C:1710:THR:HG21	1.89	0.53
1:C:1425:VAL:HG13	1:C:1474:LEU:HD13	1.91	0.53
1:D:456:GLU:HG2	1:D:486:GLN:HE21	1.73	0.53
1:E:624:TYR:HA	1:E:629:TRP:CD1	2.43	0.53
1:F:273:ARG:HD2	1:F:282:VAL:HG12	1.90	0.53
1:F:2103:TRP:CG	1:F:2919:GLY:O	2.62	0.53
1:F:3080:ARG:HG3	1:F:3080:ARG:NH1	2.09	0.53
1:A:1225:ARG:CG	1:A:1283:ASP:OD1	2.57	0.53
1:A:1425:VAL:HG13	1:A:1474:LEU:HD13	1.91	0.53
1:A:1538:ARG:NH1	1:A:1722:PRO:HB3	2.18	0.53
1:A:1634:ARG:HD2	1:A:1638:PRO:HA	1.91	0.53
1:A:2087:GLN:HA	1:A:2090:GLU:CG	2.39	0.53
1:A:2089:PHE:HA	1:A:2188:ARG:HH11	1.74	0.53
1:B:368:ILE:HG21	1:B:373:ILE:HG13	1.90	0.53
1:D:1530:LEU:HD21	1:D:1554:LEU:HD22	1.91	0.53
1:E:2418:GLY:O	1:E:2422:GLU:N	2.40	0.53
1:F:1148:GLU:O	1:F:1150:ALA:N	2.42	0.53
1:F:1733:ASN:HD22	1:F:1736:ARG:HD2	1.74	0.53
1:F:2631:PRO:HG3	1:F:2649:LEU:HD13	1.90	0.53
1:C:368:ILE:HG21	1:C:373:ILE:HG13	1.90	0.53
1:D:2087:GLN:HA	1:D:2090:GLU:CG	2.39	0.53
1:E:931:VAL:HG13	1:E:933:VAL:CG2	2.37	0.53
1:E:1148:GLU:O	1:E:1150:ALA:N	2.42	0.53
1:E:1425:VAL:HG13	1:E:1474:LEU:HD13	1.91	0.53
1:F:71:GLU:HG2	1:F:142:ARG:NH2	2.24	0.53
1:F:716:ALA:HA	1:F:719:VAL:HG23	1.90	0.53
1:A:3018:LEU:O	1:A:3022:GLU:HB2	2.08	0.53
1:C:745:THR:HG23	1:C:834:GLU:HA	1.90	0.53
1:D:1634:ARG:HD2	1:D:1638:PRO:HA	1.91	0.53
1:D:2740:CYS:HB2	1:D:2998:GLY:HA2	1.91	0.53
1:E:763:SER:O	1:E:766:ASP:N	2.41	0.53
1:E:2492:VAL:HG21	1:E:2527:VAL:HG22	1.90	0.53
1:F:745:THR:HG23	1:F:834:GLU:HA	1.90	0.53
1:A:2737:VAL:HG21	1:F:2715:PRO:HB2	1.91	0.52
1:B:411:PRO:HD2	1:B:1025:VAL:HG11	1.91	0.52
1:B:1089:ALA:O	1:B:1091:LEU:N	2.41	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1734:SER:HA	1:B:1741:LEU:HD11	1.89	0.52
1:C:1174:VAL:HB	1:C:1188:LEU:HB3	1.91	0.52
1:D:1151:GLU:HB2	1:D:1179:ALA:HB3	1.90	0.52
1:E:1226:ARG:HB3	1:E:1282:THR:HG21	1.90	0.52
1:E:1488:VAL:HG12	1:E:1490:ARG:HH11	1.73	0.52
1:E:2215:THR:HG22	1:E:2216:GLU:HG3	1.91	0.52
1:F:208:VAL:HG12	1:F:248:ILE:HG12	1.91	0.52
1:F:1323:GLU:N	1:F:1343:LEU:O	2.41	0.52
1:F:2551:PRO:O	1:F:2617:LEU:HB2	2.08	0.52
1:A:1010:LEU:O	1:A:1017:ILE:N	2.29	0.52
1:B:33:ALA:O	1:B:37:ARG:HG2	2.08	0.52
1:B:1225:ARG:CG	1:B:1283:ASP:OD1	2.57	0.52
1:B:1323:GLU:N	1:B:1343:LEU:O	2.42	0.52
1:C:33:ALA:O	1:C:37:ARG:HG2	2.08	0.52
1:C:3018:LEU:O	1:C:3022:GLU:HB2	2.08	0.52
1:D:961:ARG:NH2	1:D:1196:GLY:O	2.42	0.52
1:D:1323:GLU:N	1:D:1343:LEU:O	2.41	0.52
1:D:2458:ALA:HA	1:D:2824:ARG:HD2	1.89	0.52
1:E:71:GLU:HG2	1:E:142:ARG:NH2	2.24	0.52
1:E:273:ARG:HD2	1:E:282:VAL:HG12	1.90	0.52
1:E:456:GLU:HG2	1:E:486:GLN:HE21	1.73	0.52
1:E:2087:GLN:HA	1:E:2090:GLU:CG	2.39	0.52
1:F:368:ILE:HG21	1:F:373:ILE:HG13	1.90	0.52
1:F:1225:ARG:CG	1:F:1283:ASP:OD1	2.57	0.52
1:A:2215:THR:HG22	1:A:2216:GLU:HG3	1.91	0.52
1:B:961:ARG:NH2	1:B:1196:GLY:O	2.42	0.52
1:B:1733:ASN:HD22	1:B:1736:ARG:HD2	1.74	0.52
1:D:368:ILE:HG21	1:D:373:ILE:HG13	1.90	0.52
1:D:411:PRO:HD2	1:D:1025:VAL:HG11	1.91	0.52
1:D:526:ILE:HD12	1:D:549:PHE:HB3	1.90	0.52
1:E:411:PRO:HD2	1:E:1025:VAL:HG11	1.91	0.52
1:E:1634:ARG:HD2	1:E:1638:PRO:HA	1.91	0.52
1:E:2103:TRP:CG	1:E:2919:GLY:O	2.62	0.52
1:F:456:GLU:HG2	1:F:486:GLN:HE21	1.73	0.52
1:F:588:GLU:HB3	1:F:593:LEU:HD11	1.91	0.52
1:F:1093:PRO:HB3	1:F:1277:HIS:HE1	1.75	0.52
1:F:2087:GLN:HA	1:F:2090:GLU:CG	2.39	0.52
1:F:2492:VAL:HG21	1:F:2527:VAL:HG22	1.90	0.52
1:A:208:VAL:HB	1:A:255:LEU:HD13	1.92	0.52
1:A:930:PRO:CG	1:A:930:PRO:O	2.57	0.52
1:A:1151:GLU:HB2	1:A:1179:ALA:HB3	1.90	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2631:PRO:HG3	1:A:2649:LEU:HD13	1.90	0.52
1:B:1174:VAL:HB	1:B:1188:LEU:HB3	1.91	0.52
1:B:1488:VAL:HG12	1:B:1490:ARG:HH11	1.73	0.52
1:C:1733:ASN:HD22	1:C:1736:ARG:HD2	1.74	0.52
1:C:2246:ALA:C	1:C:2255:ARG:HH12	2.11	0.52
1:C:2715:PRO:HB2	1:D:2737:VAL:HG21	1.92	0.52
1:E:208:VAL:HG12	1:E:248:ILE:HG12	1.92	0.52
1:E:745:THR:HG23	1:E:834:GLU:HA	1.90	0.52
1:E:1119:THR:O	1:E:1123:PHE:HB2	2.10	0.52
1:F:1488:VAL:HG12	1:F:1490:ARG:HH11	1.73	0.52
1:A:208:VAL:HG12	1:A:248:ILE:HG12	1.92	0.52
1:A:2715:PRO:HB2	1:F:2737:VAL:HG21	1.91	0.52
1:B:400:TRP:CZ3	1:B:636:PRO:HB2	2.45	0.52
1:B:716:ALA:HA	1:B:719:VAL:HG23	1.90	0.52
1:B:2698:GLY:HA3	1:B:2705:LYS:HG3	1.92	0.52
1:B:2808:ARG:HB2	1:B:2895:SER:O	2.10	0.52
1:C:1225:ARG:CG	1:C:1283:ASP:OD1	2.57	0.52
1:C:2808:ARG:HB2	1:C:2895:SER:O	2.10	0.52
1:D:2768:ASP:OD2	1:D:2936:GLY:N	2.41	0.52
1:E:400:TRP:CZ3	1:E:636:PRO:HB2	2.45	0.52
1:E:542:VAL:HG11	1:E:964:VAL:HB	1.92	0.52
1:E:588:GLU:HB3	1:E:593:LEU:HD11	1.91	0.52
1:E:961:ARG:NH2	1:E:1196:GLY:O	2.42	0.52
1:E:2089:PHE:HA	1:E:2188:ARG:HH11	1.74	0.52
1:F:33:ALA:O	1:F:37:ARG:HG2	2.09	0.52
1:F:961:ARG:NH2	1:F:1196:GLY:O	2.42	0.52
1:A:33:ALA:O	1:A:37:ARG:HG2	2.08	0.52
1:A:411:PRO:HD2	1:A:1025:VAL:HG11	1.91	0.52
1:A:542:VAL:HG11	1:A:964:VAL:HB	1.92	0.52
1:B:542:VAL:HG11	1:B:964:VAL:HB	1.92	0.52
1:B:2087:GLN:HA	1:B:2090:GLU:CG	2.39	0.52
1:C:961:ARG:NH2	1:C:1196:GLY:O	2.42	0.52
1:C:2103:TRP:CG	1:C:2919:GLY:O	2.62	0.52
1:D:71:GLU:HG2	1:D:142:ARG:NH2	2.24	0.52
1:D:1148:GLU:O	1:D:1150:ALA:N	2.42	0.52
1:D:2492:VAL:HG21	1:D:2527:VAL:HG22	1.90	0.52
1:E:106:ALA:O	1:E:112:PRO:HD2	2.10	0.52
1:E:930:PRO:CG	1:E:930:PRO:O	2.57	0.52
1:F:931:VAL:HG23	1:F:933:VAL:HG13	1.92	0.52
1:F:1425:VAL:HG13	1:F:1474:LEU:HD13	1.91	0.52
1:A:400:TRP:CZ3	1:A:636:PRO:HB2	2.45	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:577:GLU:OE2	2:A:4000:FMN:O3'	2.28	0.52
1:A:1110:VAL:HG13	1:A:1172:VAL:HG11	1.92	0.52
1:A:1530:LEU:HD21	1:A:1554:LEU:HD22	1.91	0.52
1:B:2552:ASP:OD1	1:B:2552:ASP:N	2.43	0.52
1:C:144:GLY:O	1:C:148:THR:N	2.34	0.52
1:C:400:TRP:CZ3	1:C:636:PRO:HB2	2.45	0.52
1:C:1148:GLU:O	1:C:1150:ALA:N	2.42	0.52
1:C:1622:PRO:HD3	1:C:1685:LEU:HD21	1.92	0.52
1:D:588:GLU:HB3	1:D:593:LEU:HD11	1.91	0.52
1:D:792:ALA:HA	1:D:799:PHE:CE2	2.43	0.52
1:E:1089:ALA:O	1:E:1091:LEU:N	2.42	0.52
1:E:1093:PRO:HB3	1:E:1277:HIS:HE1	1.75	0.52
1:E:1110:VAL:HG13	1:E:1172:VAL:HG11	1.92	0.52
1:F:206:PRO:HG2	1:F:294:VAL:HA	1.92	0.52
1:F:400:TRP:CZ3	1:F:636:PRO:HB2	2.45	0.52
1:F:2215:THR:HG22	1:F:2216:GLU:HG3	1.91	0.52
1:F:2698:GLY:HA3	1:F:2705:LYS:HG3	1.92	0.52
1:A:1733:ASN:HD22	1:A:1736:ARG:HD2	1.74	0.52
1:B:208:VAL:HB	1:B:255:LEU:HD13	1.92	0.52
1:B:1287:VAL:O	1:B:1291:LYS:HG3	2.10	0.52
1:B:1530:LEU:HD21	1:B:1554:LEU:HD22	1.91	0.52
1:B:2236:LEU:HD23	1:B:2288:HIS:HB2	1.92	0.52
1:C:1226:ARG:HB3	1:C:1282:THR:HG21	1.90	0.52
1:C:2653:VAL:HA	1:C:3051:MET:HE3	1.92	0.52
1:C:2737:VAL:HG21	1:D:2715:PRO:HB2	1.91	0.52
1:C:3080:ARG:HG3	1:C:3080:ARG:NH1	2.09	0.52
1:D:1093:PRO:HB3	1:D:1277:HIS:HE1	1.75	0.52
1:D:1225:ARG:CG	1:D:1283:ASP:OD1	2.57	0.52
1:D:1622:PRO:HD3	1:D:1685:LEU:HD21	1.92	0.52
1:D:2215:THR:HG22	1:D:2216:GLU:HG3	1.91	0.52
1:E:1538:ARG:NH1	1:E:1722:PRO:HB3	2.18	0.52
1:F:1287:VAL:O	1:F:1291:LYS:HG3	2.10	0.52
1:F:2552:ASP:OD1	1:F:2552:ASP:N	2.43	0.52
1:F:2740:CYS:HB2	1:F:2998:GLY:HA2	1.92	0.52
1:A:1164:THR:HA	1:A:1204:THR:O	2.10	0.52
1:A:1695:LEU:HD23	1:B:257:ARG:NH1	2.23	0.52
1:A:2740:CYS:HB2	1:A:2998:GLY:HA2	1.92	0.52
1:B:71:GLU:HG2	1:B:142:ARG:NH2	2.24	0.52
1:B:206:PRO:HG2	1:B:294:VAL:HA	1.92	0.52
1:B:1087:PHE:HB3	1:C:117:LYS:HZ3	1.74	0.52
1:B:2417:SER:O	1:B:2421:ASP:N	2.40	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2089:PHE:HA	1:C:2188:ARG:HH11	1.74	0.52
1:C:3000:GLY:HA3	1:D:2720:ALA:HB1	1.92	0.52
1:E:208:VAL:HB	1:E:255:LEU:HD13	1.92	0.52
1:E:716:ALA:HA	1:E:719:VAL:HG23	1.90	0.52
1:E:1287:VAL:O	1:E:1291:LYS:HG3	2.10	0.52
1:E:2401:ILE:HG23	1:E:2403:ILE:H	1.75	0.52
1:F:336:TRP:CE2	1:F:360:LEU:HD11	2.45	0.52
1:F:1164:THR:HA	1:F:1204:THR:O	2.10	0.52
1:F:2418:GLY:O	1:F:2422:GLU:N	2.41	0.52
1:A:508:GLN:HA	1:A:540:ASN:HB3	1.92	0.52
1:B:208:VAL:HG12	1:B:248:ILE:HG12	1.92	0.52
1:B:405:PRO:HG3	1:B:625:LEU:HG	1.92	0.52
1:B:1110:VAL:HG13	1:B:1172:VAL:HG11	1.92	0.52
1:B:2583:PHE:HD1	1:E:2614:LYS:HZ1	1.51	0.52
1:B:2737:VAL:HG21	1:E:2715:PRO:HB2	1.92	0.52
1:B:2861:LEU:HD13	1:E:3074:LEU:HB2	1.92	0.52
1:C:411:PRO:HD2	1:C:1025:VAL:HG11	1.91	0.52
1:C:588:GLU:HB3	1:C:593:LEU:HD11	1.91	0.52
1:C:1323:GLU:N	1:C:1343:LEU:O	2.41	0.52
1:C:2720:ALA:HB1	1:D:3000:GLY:HA3	1.92	0.52
1:D:208:VAL:HB	1:D:255:LEU:HD13	1.92	0.52
1:D:931:VAL:HG23	1:D:933:VAL:HG13	1.92	0.52
1:D:1488:VAL:HG12	1:D:1490:ARG:HH11	1.73	0.52
1:E:1225:ARG:CG	1:E:1283:ASP:OD1	2.57	0.52
1:E:1530:LEU:HD21	1:E:1554:LEU:HD22	1.91	0.52
1:F:420:LYS:HB3	1:F:641:ASP:OD2	2.10	0.52
1:F:1174:VAL:HB	1:F:1188:LEU:HB3	1.91	0.52
1:F:1634:ARG:HD2	1:F:1638:PRO:HA	1.91	0.52
1:F:2089:PHE:HA	1:F:2188:ARG:HH11	1.74	0.52
1:A:526:ILE:HD12	1:A:549:PHE:HB3	1.90	0.51
1:A:1287:VAL:O	1:A:1291:LYS:HG3	2.10	0.51
1:A:1488:VAL:HG12	1:A:1490:ARG:HH11	1.73	0.51
1:A:1580:PRO:O	1:A:1583:SER:OG	2.22	0.51
1:A:1622:PRO:HD3	1:A:1685:LEU:HD21	1.92	0.51
1:B:336:TRP:CE2	1:B:360:LEU:HD11	2.45	0.51
1:B:1695:LEU:HD23	1:C:257:ARG:NH1	2.23	0.51
1:C:208:VAL:HB	1:C:255:LEU:HD13	1.92	0.51
1:C:1598:GLU:HG2	1:C:1666:ILE:HD13	1.92	0.51
1:C:2552:ASP:N	1:C:2552:ASP:OD1	2.43	0.51
1:C:2698:GLY:HA3	1:C:2705:LYS:HG3	1.92	0.51
1:D:106:ALA:O	1:D:112:PRO:HD2	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:336:TRP:CE2	1:D:360:LEU:HD11	2.45	0.51
1:D:2089:PHE:HA	1:D:2188:ARG:HH11	1.74	0.51
1:E:931:VAL:HG13	1:E:933:VAL:HG23	1.92	0.51
1:E:1733:ASN:HD22	1:E:1736:ARG:HD2	1.74	0.51
1:E:2690:THR:O	1:E:2693:GLN:HG2	2.11	0.51
1:E:2740:CYS:HB2	1:E:2998:GLY:HA2	1.91	0.51
1:A:2401:ILE:HG23	1:A:2403:ILE:H	1.75	0.51
1:A:2417:SER:O	1:A:2421:ASP:N	2.40	0.51
1:B:1119:THR:O	1:B:1123:PHE:HB2	2.10	0.51
1:B:1634:ARG:HD2	1:B:1638:PRO:HA	1.91	0.51
1:C:106:ALA:O	1:C:112:PRO:HD2	2.10	0.51
1:C:792:ALA:HA	1:C:799:PHE:CE2	2.43	0.51
1:C:1287:VAL:O	1:C:1291:LYS:HG3	2.10	0.51
1:C:1634:ARG:HD2	1:C:1638:PRO:HA	1.91	0.51
1:D:1287:VAL:O	1:D:1291:LYS:HG3	2.10	0.51
1:E:792:ALA:HA	1:E:799:PHE:CE2	2.43	0.51
1:A:206:PRO:HG2	1:A:294:VAL:HA	1.92	0.51
1:A:961:ARG:NH2	1:A:1196:GLY:O	2.42	0.51
1:A:1087:PHE:HB3	1:B:117:LYS:HZ3	1.76	0.51
1:A:2790:MET:HG2	1:A:2809:LEU:HD11	1.93	0.51
1:B:420:LYS:HB3	1:B:641:ASP:OD2	2.10	0.51
1:B:588:GLU:HB3	1:B:593:LEU:HD11	1.91	0.51
1:B:2215:THR:HG22	1:B:2216:GLU:HG3	1.92	0.51
1:C:420:LYS:HB3	1:C:641:ASP:OD2	2.10	0.51
1:D:746:TYR:HA	1:D:749:TRP:HD1	1.76	0.51
1:F:2690:THR:O	1:F:2693:GLN:HG2	2.11	0.51
1:A:746:TYR:HA	1:A:749:TRP:HD1	1.76	0.51
1:A:2418:GLY:O	1:A:2422:GLU:N	2.40	0.51
1:A:2690:THR:O	1:A:2693:GLN:HG2	2.11	0.51
1:A:2720:ALA:HB1	1:F:3000:GLY:HA3	1.92	0.51
1:A:2731:GLY:O	1:F:2846:ALA:N	2.44	0.51
1:B:2089:PHE:HA	1:B:2188:ARG:HH11	1.74	0.51
1:C:1093:PRO:HB3	1:C:1277:HIS:HE1	1.75	0.51
1:D:542:VAL:HG11	1:D:964:VAL:HB	1.92	0.51
1:D:577:GLU:OE2	2:D:4000:FMN:O3'	2.28	0.51
1:D:1110:VAL:HG13	1:D:1172:VAL:HG11	1.92	0.51
1:D:1119:THR:O	1:D:1123:PHE:HB2	2.10	0.51
1:D:1598:GLU:HG2	1:D:1666:ILE:HD13	1.93	0.51
1:E:2236:LEU:HD23	1:E:2288:HIS:HB2	1.92	0.51
1:F:411:PRO:HD2	1:F:1025:VAL:HG11	1.91	0.51
1:A:176:VAL:O	1:A:180:ALA:N	2.36	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:420:LYS:HB3	1:A:641:ASP:OD2	2.10	0.51
1:A:2808:ARG:HB2	1:A:2895:SER:O	2.10	0.51
1:A:2861:LEU:HD13	1:F:3074:LEU:HB2	1.92	0.51
1:B:106:ALA:O	1:B:112:PRO:HD2	2.10	0.51
1:B:577:GLU:OE2	2:B:4000:FMN:O3'	2.28	0.51
1:B:792:ALA:HA	1:B:799:PHE:CE2	2.43	0.51
1:B:1425:VAL:HG13	1:B:1474:LEU:HD13	1.91	0.51
1:C:1164:THR:HA	1:C:1204:THR:O	2.10	0.51
1:C:3074:LEU:HB2	1:D:2861:LEU:HD13	1.92	0.51
1:D:1174:VAL:HB	1:D:1188:LEU:HB3	1.91	0.51
1:A:931:VAL:HG23	1:A:933:VAL:HG23	1.91	0.51
1:A:1317:GLY:H	1:A:1324:VAL:HG12	1.76	0.51
1:A:2753:LYS:HZ2	1:F:2748:GLU:HG2	1.74	0.51
1:A:2846:ALA:N	1:F:2731:GLY:O	2.44	0.51
1:B:1164:THR:HA	1:B:1204:THR:O	2.10	0.51
1:B:1598:GLU:HG2	1:B:1666:ILE:HD13	1.93	0.51
1:D:930:PRO:CG	1:D:930:PRO:O	2.57	0.51
1:D:1164:THR:HA	1:D:1204:THR:O	2.10	0.51
1:F:272:GLU:HB3	1:F:280:GLY:O	2.11	0.51
1:A:257:ARG:NH1	1:C:1695:LEU:HD23	2.23	0.51
1:A:3074:LEU:HB2	1:F:2861:LEU:HD13	1.92	0.51
1:B:2667:THR:HG21	1:B:3058:ARG:HH11	1.76	0.51
1:C:42:GLU:H	1:C:42:GLU:CD	2.14	0.51
1:C:1119:THR:O	1:C:1123:PHE:HB2	2.10	0.51
1:C:2180:LYS:HZ1	1:C:2962:ASP:HB3	1.75	0.51
1:C:2731:GLY:O	1:D:2846:ALA:N	2.44	0.51
1:D:42:GLU:CD	1:D:42:GLU:H	2.14	0.51
1:D:400:TRP:CZ3	1:D:636:PRO:HB2	2.45	0.51
1:D:1733:ASN:HD22	1:D:1736:ARG:HD2	1.74	0.51
1:D:2401:ILE:HG23	1:D:2403:ILE:H	1.76	0.51
1:E:176:VAL:O	1:E:180:ALA:N	2.36	0.51
1:E:336:TRP:CE2	1:E:360:LEU:HD11	2.45	0.51
1:E:420:LYS:HB3	1:E:641:ASP:OD2	2.10	0.51
1:E:577:GLU:OE2	2:E:4000:FMN:O3'	2.28	0.51
1:E:2754:ILE:HA	1:E:2759:ALA:O	2.11	0.51
1:E:2790:MET:HG2	1:E:2809:LEU:HD11	1.93	0.51
1:E:2962:ASP:OD1	1:E:2962:ASP:N	2.34	0.51
1:F:1110:VAL:HG13	1:F:1172:VAL:HG11	1.92	0.51
1:A:1093:PRO:HB3	1:A:1277:HIS:HE1	1.75	0.51
1:A:1119:THR:O	1:A:1123:PHE:HB2	2.10	0.51
1:B:931:VAL:HG13	1:B:933:VAL:HG23	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1622:PRO:HD3	1:B:1685:LEU:HD21	1.92	0.51
1:B:2754:ILE:HA	1:B:2759:ALA:O	2.11	0.51
1:B:2846:ALA:N	1:E:2731:GLY:O	2.44	0.51
1:B:3000:GLY:HA3	1:E:2720:ALA:HB1	1.92	0.51
1:C:577:GLU:OE2	2:C:4000:FMN:O3'	2.28	0.51
1:C:746:TYR:HA	1:C:749:TRP:HD1	1.76	0.51
1:C:2215:THR:HG22	1:C:2216:GLU:HG3	1.91	0.51
1:C:2236:LEU:HD23	1:C:2288:HIS:HB2	1.92	0.51
1:D:2754:ILE:HA	1:D:2759:ALA:O	2.11	0.51
1:E:272:GLU:HB3	1:E:280:GLY:O	2.11	0.51
1:E:746:TYR:HA	1:E:749:TRP:HD1	1.76	0.51
1:F:930:PRO:CG	1:F:930:PRO:O	2.57	0.51
1:F:1119:THR:O	1:F:1123:PHE:HB2	2.10	0.51
1:F:1634:ARG:HH11	1:F:1639:ALA:N	2.08	0.51
1:B:42:GLU:CD	1:B:42:GLU:H	2.14	0.51
1:B:2753:LYS:HZ2	1:E:2748:GLU:HG2	1.76	0.51
1:B:2829:LEU:HD21	1:B:3014:PHE:HE2	1.76	0.51
1:C:2740:CYS:HB2	1:C:2998:GLY:HA2	1.91	0.51
1:D:2361:VAL:HG11	1:D:2398:LEU:HD23	1.93	0.51
1:E:508:GLN:HA	1:E:540:ASN:HB3	1.92	0.51
1:E:780:ARG:HD2	1:E:816:LEU:HB3	1.93	0.51
1:E:1164:THR:HA	1:E:1204:THR:O	2.10	0.51
1:E:1622:PRO:HD3	1:E:1685:LEU:HD21	1.92	0.51
1:F:106:ALA:O	1:F:112:PRO:HD2	2.10	0.51
1:F:577:GLU:OE2	2:F:4000:FMN:O3'	2.28	0.51
1:F:2808:ARG:HB2	1:F:2895:SER:O	2.10	0.51
1:A:106:ALA:O	1:A:112:PRO:HD2	2.10	0.51
1:A:1598:GLU:HG2	1:A:1666:ILE:HD13	1.93	0.51
1:A:3000:GLY:HA3	1:F:2720:ALA:HB1	1.92	0.51
1:C:542:VAL:HG11	1:C:964:VAL:HB	1.92	0.51
1:C:1110:VAL:HG13	1:C:1172:VAL:HG11	1.92	0.51
1:C:2690:THR:O	1:C:2693:GLN:HG2	2.11	0.51
1:D:208:VAL:HG12	1:D:248:ILE:HG12	1.92	0.51
1:D:1317:GLY:H	1:D:1324:VAL:HG12	1.76	0.51
1:E:2808:ARG:HB2	1:E:2895:SER:O	2.10	0.51
1:B:1093:PRO:HB3	1:B:1277:HIS:HE1	1.75	0.50
1:C:508:GLN:HA	1:C:540:ASN:HB3	1.92	0.50
1:C:780:ARG:HD2	1:C:816:LEU:HB3	1.93	0.50
1:C:1986:LEU:HA	1:C:1989:PHE:HD2	1.76	0.50
1:C:2401:ILE:HG23	1:C:2403:ILE:H	1.76	0.50
1:D:117:LYS:HZ1	1:F:1087:PHE:HB3	1.74	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:272:GLU:HB3	1:D:280:GLY:O	2.11	0.50
1:D:780:ARG:HD2	1:D:816:LEU:HB3	1.93	0.50
1:D:2829:LEU:HD21	1:D:3014:PHE:HE2	1.76	0.50
1:E:2662:SER:HB2	1:E:2833:LEU:HD22	1.93	0.50
1:F:1622:PRO:HD3	1:F:1685:LEU:HD21	1.92	0.50
1:F:2754:ILE:HA	1:F:2759:ALA:O	2.11	0.50
1:A:272:GLU:HB3	1:A:280:GLY:O	2.11	0.50
1:A:1986:LEU:HA	1:A:1989:PHE:HD2	1.77	0.50
1:A:2667:THR:HG21	1:A:3058:ARG:HH11	1.76	0.50
1:A:2698:GLY:HA3	1:A:2705:LYS:HG3	1.92	0.50
1:B:272:GLU:HB3	1:B:280:GLY:O	2.11	0.50
1:B:1380:ALA:HB1	1:B:1474:LEU:HD12	1.93	0.50
1:B:1590:VAL:HG11	1:B:1671:TRP:CD2	2.47	0.50
1:B:2401:ILE:HG23	1:B:2403:ILE:H	1.76	0.50
1:B:2790:MET:HG2	1:B:2809:LEU:HD11	1.93	0.50
1:B:3074:LEU:HB2	1:E:2861:LEU:HD13	1.92	0.50
1:C:930:PRO:CG	1:C:930:PRO:O	2.57	0.50
1:C:2962:ASP:OD1	1:C:2962:ASP:N	2.34	0.50
1:D:206:PRO:HG2	1:D:294:VAL:HA	1.92	0.50
1:D:508:GLN:HA	1:D:540:ASN:HB3	1.92	0.50
1:F:208:VAL:HB	1:F:255:LEU:HD13	1.92	0.50
1:F:405:PRO:HG3	1:F:625:LEU:HG	1.93	0.50
1:F:1331:ILE:HG13	1:F:1336:VAL:HG21	1.94	0.50
1:F:2236:LEU:HD23	1:F:2288:HIS:HB2	1.92	0.50
1:A:336:TRP:CE2	1:A:360:LEU:HD11	2.45	0.50
1:A:2245:VAL:HG13	1:A:2255:ARG:CZ	2.41	0.50
1:B:1012:GLY:C	1:B:1013:THR:HG22	2.32	0.50
1:B:1331:ILE:HG13	1:B:1336:VAL:HG21	1.94	0.50
1:B:2140:VAL:HG22	1:B:2165:ILE:HD12	1.94	0.50
1:B:2662:SER:HB2	1:B:2833:LEU:HD22	1.94	0.50
1:B:2690:THR:O	1:B:2693:GLN:HG2	2.11	0.50
1:B:2740:CYS:HB2	1:B:2998:GLY:HA2	1.91	0.50
1:C:1380:ALA:HB1	1:C:1474:LEU:HD12	1.93	0.50
1:D:420:LYS:HB3	1:D:641:ASP:OD2	2.10	0.50
1:D:2236:LEU:HD23	1:D:2288:HIS:HB2	1.92	0.50
1:D:2667:THR:HG21	1:D:3058:ARG:HH11	1.76	0.50
1:E:940:ARG:CG	1:E:940:ARG:O	2.60	0.50
1:E:1317:GLY:H	1:E:1324:VAL:HG12	1.76	0.50
1:E:1380:ALA:HB1	1:E:1474:LEU:HD12	1.93	0.50
1:E:2140:VAL:HG22	1:E:2165:ILE:HD12	1.94	0.50
1:E:2554:ALA:HB1	1:E:2614:LYS:HZ2	1.75	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:508:GLN:HA	1:F:540:ASN:HB3	1.92	0.50
1:F:542:VAL:HG11	1:F:964:VAL:HB	1.92	0.50
1:F:2245:VAL:HG13	1:F:2255:ARG:CZ	2.42	0.50
1:A:42:GLU:H	1:A:42:GLU:CD	2.14	0.50
1:A:1331:ILE:HG13	1:A:1336:VAL:HG21	1.94	0.50
1:A:2140:VAL:HG22	1:A:2165:ILE:HD12	1.93	0.50
1:B:930:PRO:CG	1:B:930:PRO:O	2.57	0.50
1:B:2245:VAL:HG13	1:B:2255:ARG:CZ	2.41	0.50
1:C:176:VAL:O	1:C:180:ALA:N	2.36	0.50
1:C:208:VAL:HG12	1:C:248:ILE:HG12	1.92	0.50
1:C:1012:GLY:C	1:C:1013:THR:HG22	2.32	0.50
1:C:1317:GLY:H	1:C:1324:VAL:HG12	1.76	0.50
1:C:1590:VAL:HG11	1:C:1671:TRP:CD2	2.47	0.50
1:C:2662:SER:HB2	1:C:2833:LEU:HD22	1.93	0.50
1:C:2754:ILE:HA	1:C:2759:ALA:O	2.11	0.50
1:D:2808:ARG:HB2	1:D:2895:SER:O	2.10	0.50
1:E:1634:ARG:HH11	1:E:1639:ALA:N	2.08	0.50
1:E:1986:LEU:HA	1:E:1989:PHE:HD2	1.76	0.50
1:E:2056:PHE:CZ	1:E:2180:LYS:HE2	2.47	0.50
1:E:2261:LYS:HA	1:E:2265:TRP:HB2	1.94	0.50
1:E:2667:THR:HG21	1:E:3058:ARG:HH11	1.76	0.50
1:F:780:ARG:HD2	1:F:816:LEU:HB3	1.93	0.50
1:F:1317:GLY:H	1:F:1324:VAL:HG12	1.76	0.50
1:F:1590:VAL:HG11	1:F:1671:TRP:CD2	2.47	0.50
1:B:1580:PRO:O	1:B:1583:SER:OG	2.22	0.50
1:B:2261:LYS:HA	1:B:2265:TRP:HB2	1.94	0.50
1:B:2720:ALA:HB1	1:E:3000:GLY:HA3	1.92	0.50
1:C:405:PRO:HG3	1:C:625:LEU:HG	1.93	0.50
1:C:2753:LYS:HZ2	1:D:2748:GLU:HG2	1.74	0.50
1:D:144:GLY:O	1:D:148:THR:N	2.34	0.50
1:D:1010:LEU:CG	1:D:1017:ILE:HB	2.42	0.50
1:D:1331:ILE:HG13	1:D:1336:VAL:HG21	1.94	0.50
1:D:2698:GLY:HA3	1:D:2705:LYS:HG3	1.92	0.50
1:E:2698:GLY:HA3	1:E:2705:LYS:HG3	1.92	0.50
1:F:746:TYR:HA	1:F:749:TRP:HD1	1.76	0.50
1:A:1010:LEU:CG	1:A:1017:ILE:HB	2.42	0.50
1:A:1380:ALA:HB1	1:A:1474:LEU:HD12	1.93	0.50
1:A:1711:VAL:HA	1:A:1714:LEU:HG	1.94	0.50
1:A:2754:ILE:HA	1:A:2759:ALA:O	2.11	0.50
1:B:1010:LEU:CG	1:B:1017:ILE:HB	2.42	0.50
1:B:2361:VAL:HG11	1:B:2398:LEU:HD23	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2140:VAL:HG22	1:C:2165:ILE:HD12	1.93	0.50
1:C:2846:ALA:N	1:D:2731:GLY:O	2.44	0.50
1:D:1986:LEU:HA	1:D:1989:PHE:HD2	1.77	0.50
1:D:2245:VAL:HG13	1:D:2255:ARG:CZ	2.41	0.50
1:F:1598:GLU:HG2	1:F:1666:ILE:HD13	1.93	0.50
1:F:2140:VAL:HG22	1:F:2165:ILE:HD12	1.94	0.50
1:A:2236:LEU:HD23	1:A:2288:HIS:HB2	1.92	0.50
1:A:2552:ASP:OD1	1:A:2552:ASP:N	2.43	0.50
1:B:2554:ALA:HB1	1:B:2614:LYS:HZ2	1.76	0.50
1:C:206:PRO:HG2	1:C:294:VAL:HA	1.92	0.50
1:C:2274:LEU:HD23	1:C:2277:ILE:HD12	1.94	0.50
1:C:2361:VAL:HG11	1:C:2398:LEU:HD23	1.93	0.50
1:C:2861:LEU:HD13	1:D:3074:LEU:HB2	1.92	0.50
1:D:405:PRO:HG3	1:D:625:LEU:HG	1.93	0.50
1:E:42:GLU:H	1:E:42:GLU:CD	2.14	0.50
1:E:206:PRO:HG2	1:E:294:VAL:HA	1.92	0.50
1:E:1207:VAL:HG23	1:E:1207:VAL:O	2.12	0.50
1:F:207:MET:HA	1:F:249:THR:HG22	1.94	0.50
1:A:117:LYS:HZ1	1:C:1087:PHE:HB3	1.76	0.50
1:A:780:ARG:HD2	1:A:816:LEU:HB3	1.93	0.50
1:A:1634:ARG:HH11	1:A:1639:ALA:N	2.08	0.50
1:B:940:ARG:CG	1:B:940:ARG:O	2.60	0.50
1:B:1207:VAL:O	1:B:1207:VAL:HG13	2.12	0.50
1:B:1634:ARG:HH11	1:B:1639:ALA:N	2.08	0.50
1:B:2715:PRO:HB2	1:E:2737:VAL:HG21	1.91	0.50
1:C:272:GLU:HB3	1:C:280:GLY:O	2.11	0.50
1:C:336:TRP:CE2	1:C:360:LEU:HD11	2.45	0.50
1:C:2582:GLN:HB3	1:D:2554:ALA:HB2	1.94	0.50
1:D:2690:THR:O	1:D:2693:GLN:HG2	2.11	0.50
1:F:2662:SER:HB2	1:F:2833:LEU:HD22	1.93	0.50
1:F:2790:MET:HG2	1:F:2809:LEU:HD11	1.93	0.50
1:A:405:PRO:HG3	1:A:625:LEU:HG	1.93	0.50
1:A:2582:GLN:HB3	1:F:2554:ALA:HB2	1.94	0.50
1:A:2623:ALA:HB2	1:A:2812:LEU:HD21	1.94	0.50
1:A:2811:PHE:HB3	1:A:2894:THR:HG22	1.94	0.50
1:B:207:MET:HA	1:B:249:THR:HG22	1.94	0.50
1:B:746:TYR:HA	1:B:749:TRP:HD1	1.76	0.50
1:B:1317:GLY:H	1:B:1324:VAL:HG12	1.76	0.50
1:B:2334:HIS:HB3	1:B:2391:LYS:HA	1.94	0.50
1:C:2245:VAL:HG13	1:C:2255:ARG:CZ	2.41	0.50
1:C:2811:PHE:HB3	1:C:2894:THR:HG22	1.94	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1178:ASN:HB2	1:D:1185:LEU:HD11	1.94	0.50
1:D:2261:LYS:HA	1:D:2265:TRP:HB2	1.94	0.50
1:E:1590:VAL:HG11	1:E:1671:TRP:CD2	2.47	0.50
1:E:2557:LEU:HD22	1:E:2613:ARG:HB2	1.94	0.50
1:F:1010:LEU:CG	1:F:1017:ILE:HB	2.42	0.50
1:F:1380:ALA:HB1	1:F:1474:LEU:HD12	1.93	0.50
1:A:2137:GLU:O	1:A:2163:THR:N	2.30	0.49
1:A:2334:HIS:HB3	1:A:2391:LYS:HA	1.94	0.49
1:B:745:THR:OG1	1:B:834:GLU:O	2.19	0.49
1:B:780:ARG:HD2	1:B:816:LEU:HB3	1.93	0.49
1:B:1178:ASN:HB2	1:B:1185:LEU:HD11	1.94	0.49
1:B:1711:VAL:HA	1:B:1714:LEU:HG	1.93	0.49
1:C:1010:LEU:CG	1:C:1017:ILE:HB	2.42	0.49
1:C:2790:MET:HG2	1:C:2809:LEU:HD11	1.93	0.49
1:D:1087:PHE:HB3	1:E:117:LYS:HZ1	1.76	0.49
1:E:1598:GLU:HG2	1:E:1666:ILE:HD13	1.93	0.49
1:E:2118:LEU:O	1:E:2122:ILE:CG1	2.60	0.49
1:E:2811:PHE:HB3	1:E:2894:THR:HG22	1.94	0.49
1:F:42:GLU:H	1:F:42:GLU:CD	2.15	0.49
1:F:133:GLN:HG2	1:F:355:GLY:HA2	1.94	0.49
1:F:2056:PHE:CZ	1:F:2180:LYS:HE2	2.47	0.49
1:F:2334:HIS:HB3	1:F:2391:LYS:HA	1.94	0.49
1:F:2401:ILE:HG23	1:F:2403:ILE:H	1.76	0.49
1:A:2557:LEU:HD22	1:A:2613:ARG:HB2	1.94	0.49
1:B:133:GLN:HG2	1:B:355:GLY:HA2	1.94	0.49
1:B:2554:ALA:HB2	1:E:2582:GLN:HB3	1.94	0.49
1:C:207:MET:HA	1:C:249:THR:HG22	1.94	0.49
1:C:1207:VAL:HG23	1:C:1207:VAL:O	2.12	0.49
1:C:2056:PHE:CZ	1:C:2180:LYS:HE2	2.47	0.49
1:C:2554:ALA:HB2	1:D:2582:GLN:HB3	1.94	0.49
1:D:1590:VAL:HG11	1:D:1671:TRP:CD2	2.47	0.49
1:D:2137:GLU:O	1:D:2163:THR:N	2.30	0.49
1:D:2274:LEU:HD23	1:D:2277:ILE:HD12	1.94	0.49
1:E:1119:THR:HA	1:E:1123:PHE:CD1	2.48	0.49
1:E:1580:PRO:O	1:E:1583:SER:OG	2.22	0.49
1:F:2653:VAL:HA	1:F:3051:MET:HE3	1.92	0.49
1:F:2811:PHE:HB3	1:F:2894:THR:HG22	1.94	0.49
1:F:3080:ARG:CG	1:F:3080:ARG:NH1	2.72	0.49
1:A:1207:VAL:HG13	1:A:1207:VAL:O	2.12	0.49
1:A:2361:VAL:HG11	1:A:2398:LEU:HD23	1.93	0.49
1:B:1291:LYS:HA	1:B:1344:ALA:HB3	1.95	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1986:LEU:HA	1:B:1989:PHE:HD2	1.76	0.49
1:B:2731:GLY:O	1:E:2846:ALA:N	2.44	0.49
1:D:207:MET:HA	1:D:249:THR:HG22	1.94	0.49
1:D:1207:VAL:HG23	1:D:1207:VAL:O	2.12	0.49
1:D:1380:ALA:HB1	1:D:1474:LEU:HD12	1.94	0.49
1:D:1711:VAL:HA	1:D:1714:LEU:HG	1.94	0.49
1:E:1012:GLY:C	1:E:1013:THR:HG22	2.32	0.49
1:E:1212:ALA:O	1:E:1342:ARG:NH2	2.45	0.49
1:E:1695:LEU:HD23	1:F:257:ARG:NH1	2.23	0.49
1:E:1711:VAL:HA	1:E:1714:LEU:HG	1.94	0.49
1:F:1119:THR:HA	1:F:1123:PHE:CD1	2.48	0.49
1:F:1207:VAL:HG23	1:F:1207:VAL:O	2.12	0.49
1:F:1212:ALA:O	1:F:1342:ARG:NH2	2.45	0.49
1:F:2361:VAL:HG11	1:F:2398:LEU:HD23	1.93	0.49
1:B:144:GLY:O	1:B:148:THR:N	2.34	0.49
1:B:1119:THR:HA	1:B:1123:PHE:CD1	2.48	0.49
1:C:2417:SER:O	1:C:2421:ASP:N	2.40	0.49
1:D:2291:LEU:HD21	1:D:2332:LEU:HD22	1.95	0.49
1:D:2790:MET:HG2	1:D:2809:LEU:HD11	1.93	0.49
1:F:2667:THR:HG21	1:F:3058:ARG:HH11	1.76	0.49
1:A:505:ARG:HA	1:A:508:GLN:HB2	1.94	0.49
1:A:2614:LYS:HZ1	1:F:2583:PHE:HD1	1.52	0.49
1:B:2118:LEU:O	1:B:2122:ILE:CG1	2.60	0.49
1:B:2623:ALA:HB2	1:B:2812:LEU:HD21	1.94	0.49
1:C:931:VAL:HG13	1:C:933:VAL:HG13	1.92	0.49
1:C:1119:THR:HA	1:C:1123:PHE:CD1	2.48	0.49
1:C:1637:VAL:HG21	1:C:1671:TRP:CD2	2.48	0.49
1:D:184:LEU:HB3	1:D:311:TRP:HE3	1.78	0.49
1:D:1010:LEU:O	1:D:1017:ILE:N	2.29	0.49
1:D:2056:PHE:CZ	1:D:2180:LYS:HE2	2.47	0.49
1:E:133:GLN:HG2	1:E:355:GLY:HA2	1.94	0.49
1:E:405:PRO:HG3	1:E:625:LEU:HG	1.93	0.49
1:E:2274:LEU:HD23	1:E:2277:ILE:HD12	1.94	0.49
1:E:2361:VAL:HG11	1:E:2398:LEU:HD23	1.93	0.49
1:E:2503:LYS:HE3	1:E:2505:GLU:OE2	2.13	0.49
1:F:2274:LEU:HD23	1:F:2277:ILE:HD12	1.94	0.49
1:A:2180:LYS:HZ1	1:A:2962:ASP:HB3	1.77	0.49
1:A:2662:SER:HB2	1:A:2833:LEU:HD22	1.93	0.49
1:A:2748:GLU:HG2	1:F:2753:LYS:HZ2	1.78	0.49
1:B:508:GLN:HA	1:B:540:ASN:HB3	1.92	0.49
1:B:2503:LYS:HE3	1:B:2505:GLU:OE2	2.13	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2820:ILE:HD12	1:B:2822:LEU:HD21	1.95	0.49
1:C:2667:THR:HG21	1:C:3058:ARG:HH11	1.76	0.49
1:D:1119:THR:HA	1:D:1123:PHE:CD1	2.47	0.49
1:D:2557:LEU:HD22	1:D:2613:ARG:HB2	1.94	0.49
1:D:2811:PHE:HB3	1:D:2894:THR:HG22	1.94	0.49
1:E:1178:ASN:HB2	1:E:1185:LEU:HD11	1.94	0.49
1:F:505:ARG:HA	1:F:508:GLN:HB2	1.94	0.49
1:F:745:THR:OG1	1:F:834:GLU:O	2.19	0.49
1:F:1637:VAL:HG21	1:F:1671:TRP:CD2	2.48	0.49
1:F:2261:LYS:HA	1:F:2265:TRP:HB2	1.94	0.49
1:A:1178:ASN:HB2	1:A:1185:LEU:HD11	1.94	0.49
1:B:1212:ALA:O	1:B:1342:ARG:NH2	2.45	0.49
1:B:2418:GLY:O	1:B:2422:GLU:N	2.40	0.49
1:C:1362:MET:HG3	1:C:1430:VAL:HG21	1.95	0.49
1:C:2118:LEU:O	1:C:2122:ILE:CG1	2.60	0.49
1:C:2623:ALA:HB2	1:C:2812:LEU:HD21	1.94	0.49
1:D:305:ILE:HD13	1:D:327:GLU:HG2	1.95	0.49
1:D:656:THR:HG1	1:D:880:HIS:CE1	2.30	0.49
1:D:1362:MET:HG3	1:D:1430:VAL:HG21	1.95	0.49
1:D:1533:VAL:HG13	1:D:1582:HIS:HB2	1.95	0.49
1:D:1695:LEU:HD23	1:E:257:ARG:NH1	2.23	0.49
1:D:2552:ASP:OD1	1:D:2552:ASP:N	2.43	0.49
1:E:184:LEU:HB3	1:E:311:TRP:HE3	1.78	0.49
1:E:2245:VAL:HG13	1:E:2255:ARG:CZ	2.41	0.49
1:F:1178:ASN:HB2	1:F:1185:LEU:HD11	1.94	0.49
1:A:790:ALA:HB3	1:A:826:LEU:HD21	1.95	0.49
1:A:1590:VAL:HG11	1:A:1671:TRP:CD2	2.47	0.49
1:A:2118:LEU:O	1:A:2122:ILE:CG1	2.60	0.49
1:A:2503:LYS:HE3	1:A:2505:GLU:OE2	2.13	0.49
1:B:790:ALA:HB3	1:B:826:LEU:HD21	1.95	0.49
1:C:1711:VAL:HA	1:C:1714:LEU:HG	1.93	0.49
1:D:505:ARG:HA	1:D:508:GLN:HB2	1.94	0.49
1:D:1212:ALA:O	1:D:1342:ARG:NH2	2.45	0.49
1:D:2140:VAL:HG22	1:D:2165:ILE:HD12	1.93	0.49
1:D:2662:SER:HB2	1:D:2833:LEU:HD22	1.93	0.49
1:E:207:MET:HA	1:E:249:THR:HG22	1.94	0.49
1:E:1331:ILE:HG13	1:E:1336:VAL:HG21	1.94	0.49
1:F:176:VAL:O	1:F:180:ALA:N	2.36	0.49
1:F:790:ALA:HB3	1:F:826:LEU:HD21	1.95	0.49
1:F:2503:LYS:HE3	1:F:2505:GLU:OE2	2.13	0.49
1:B:505:ARG:HA	1:B:508:GLN:HB2	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:868:ARG:HB3	1:B:872:ARG:NH1	2.28	0.49
1:C:505:ARG:HA	1:C:508:GLN:HB2	1.94	0.49
1:C:868:ARG:HB3	1:C:872:ARG:NH1	2.28	0.49
1:C:1533:VAL:HG13	1:C:1582:HIS:HB2	1.95	0.49
1:D:2820:ILE:HD12	1:D:2822:LEU:HD21	1.95	0.49
1:E:2829:LEU:HD21	1:E:3014:PHE:HE2	1.76	0.49
1:A:1111:PHE:HE1	1:A:1129:LEU:HD11	1.78	0.49
1:A:1362:MET:HG3	1:A:1430:VAL:HG21	1.95	0.49
1:A:2554:ALA:HB2	1:F:2582:GLN:HB3	1.94	0.49
1:C:361:THR:HG21	1:C:377:PRO:HG3	1.95	0.49
1:C:1133:VAL:O	1:C:1193:ALA:N	2.42	0.49
1:C:1331:ILE:HG13	1:C:1336:VAL:HG21	1.94	0.49
1:C:1435:VAL:HG22	1:C:1703:ILE:HD12	1.95	0.49
1:C:2291:LEU:HD21	1:C:2332:LEU:HD22	1.95	0.49
1:D:133:GLN:HG2	1:D:355:GLY:HA2	1.94	0.49
1:D:361:THR:HG21	1:D:377:PRO:HG3	1.95	0.49
1:D:2927:GLN:HE22	1:D:2941:PHE:C	2.17	0.49
1:E:505:ARG:HA	1:E:508:GLN:HB2	1.94	0.49
1:E:1637:VAL:HG21	1:E:1671:TRP:CD2	2.48	0.49
1:E:2334:HIS:HB3	1:E:2391:LYS:HA	1.94	0.49
1:E:2623:ALA:HB2	1:E:2812:LEU:HD21	1.94	0.49
1:F:940:ARG:CG	1:F:940:ARG:O	2.60	0.49
1:F:1435:VAL:HG22	1:F:1703:ILE:HD12	1.95	0.49
1:F:2820:ILE:HD12	1:F:2822:LEU:HD21	1.95	0.49
1:F:2829:LEU:HD21	1:F:3014:PHE:HE2	1.77	0.49
1:A:184:LEU:HB3	1:A:311:TRP:HE3	1.78	0.48
1:A:2829:LEU:HD21	1:A:3014:PHE:HE2	1.77	0.48
1:A:2848:GLY:H	1:A:3001:HIS:CD2	2.31	0.48
1:B:1435:VAL:HG22	1:B:1703:ILE:HD12	1.95	0.48
1:C:2261:LYS:HA	1:C:2265:TRP:HB2	1.94	0.48
1:C:2334:HIS:HB3	1:C:2391:LYS:HA	1.94	0.48
1:C:2820:ILE:HD12	1:C:2822:LEU:HD21	1.95	0.48
1:C:2829:LEU:HD21	1:C:3014:PHE:HE2	1.76	0.48
1:C:2848:GLY:H	1:C:3001:HIS:CD2	2.31	0.48
1:D:301:LEU:HD13	1:D:330:LEU:HD22	1.96	0.48
1:D:444:ILE:HD12	1:D:655:ALA:HA	1.95	0.48
1:D:790:ALA:HB3	1:D:826:LEU:HD21	1.95	0.48
1:D:2334:HIS:HB3	1:D:2391:LYS:HA	1.94	0.48
1:E:144:GLY:O	1:E:148:THR:N	2.34	0.48
1:E:2088:ARG:O	1:E:2188:ARG:NH1	2.46	0.48
1:F:1533:VAL:HG13	1:F:1582:HIS:HB2	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1986:LEU:HA	1:F:1989:PHE:HD2	1.76	0.48
1:A:133:GLN:HG2	1:A:355:GLY:HA2	1.94	0.48
1:A:792:ALA:HA	1:A:799:PHE:CE2	2.43	0.48
1:A:868:ARG:HB3	1:A:872:ARG:NH1	2.28	0.48
1:A:1637:VAL:HG21	1:A:1671:TRP:CD2	2.48	0.48
1:A:2274:LEU:HD23	1:A:2277:ILE:HD12	1.94	0.48
1:A:2554:ALA:HB1	1:A:2614:LYS:HD2	1.95	0.48
1:B:444:ILE:HD12	1:B:655:ALA:HA	1.95	0.48
1:B:1996:PRO:O	1:B:2000:LEU:N	2.41	0.48
1:B:2845:PHE:CE1	1:E:2676:SER:HB2	2.49	0.48
1:B:2848:GLY:H	1:B:3001:HIS:CD2	2.31	0.48
1:C:1212:ALA:O	1:C:1342:ARG:NH2	2.45	0.48
1:C:2557:LEU:HD22	1:C:2613:ARG:HB2	1.94	0.48
1:C:2676:SER:HB2	1:D:2845:PHE:CE1	2.49	0.48
1:C:2736:PRO:HG2	1:C:2746:SER:HA	1.96	0.48
1:D:1133:VAL:O	1:D:1193:ALA:N	2.42	0.48
1:D:3065:PRO:O	1:D:3069:GLN:N	2.43	0.48
1:E:790:ALA:HB3	1:E:826:LEU:HD21	1.95	0.48
1:F:1291:LYS:HA	1:F:1344:ALA:HB3	1.95	0.48
1:F:1651:THR:HB	1:F:1656:LYS:HD2	1.95	0.48
1:A:1119:THR:HA	1:A:1123:PHE:CD1	2.47	0.48
1:B:2056:PHE:CZ	1:B:2180:LYS:HE2	2.47	0.48
1:B:2088:ARG:O	1:B:2188:ARG:NH1	2.47	0.48
1:B:2167:THR:HB	1:B:2198:ALA:HB3	1.95	0.48
1:C:184:LEU:HB3	1:C:311:TRP:HE3	1.78	0.48
1:C:1625:LEU:HD11	1:C:1660:LEU:HB3	1.96	0.48
1:C:1634:ARG:HH11	1:C:1639:ALA:N	2.08	0.48
1:C:1651:THR:HB	1:C:1656:LYS:HD2	1.95	0.48
1:C:2503:LYS:HE3	1:C:2505:GLU:OE2	2.13	0.48
1:D:868:ARG:HB3	1:D:872:ARG:NH1	2.28	0.48
1:D:2088:ARG:O	1:D:2188:ARG:NH1	2.47	0.48
1:D:2170:ARG:HB2	1:D:2175:ARG:HG3	1.95	0.48
1:E:1010:LEU:CG	1:E:1017:ILE:HB	2.42	0.48
1:E:1111:PHE:HE1	1:E:1129:LEU:HD11	1.78	0.48
1:E:2094:HIS:O	1:E:2098:THR:HG22	2.14	0.48
1:E:2098:THR:O	1:E:2102:TRP:CG	2.67	0.48
1:E:2554:ALA:HB1	1:E:2614:LYS:HD2	1.95	0.48
1:E:2666:PRO:CB	1:E:2727:VAL:HA	2.44	0.48
1:F:305:ILE:HD13	1:F:327:GLU:HG2	1.95	0.48
1:F:444:ILE:HD12	1:F:655:ALA:HA	1.95	0.48
1:F:2118:LEU:O	1:F:2122:ILE:CG1	2.61	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2167:THR:HB	1:F:2198:ALA:HB3	1.96	0.48
1:F:2170:ARG:HB2	1:F:2175:ARG:HG3	1.96	0.48
1:F:2554:ALA:HB1	1:F:2614:LYS:HD2	1.95	0.48
1:A:305:ILE:HD13	1:A:327:GLU:HG2	1.95	0.48
1:A:2058:ASP:OD1	1:A:2058:ASP:N	2.46	0.48
1:A:2094:HIS:O	1:A:2098:THR:HG22	2.13	0.48
1:A:2676:SER:HB2	1:F:2845:PHE:CE1	2.49	0.48
1:B:1103:VAL:HG21	1:B:1269:MET:SD	2.54	0.48
1:D:257:ARG:NH1	1:F:1695:LEU:HD23	2.23	0.48
1:D:1012:GLY:C	1:D:1013:THR:HG22	2.32	0.48
1:D:2736:PRO:HG2	1:D:2746:SER:HA	1.96	0.48
1:E:1625:LEU:HD11	1:E:1660:LEU:HB3	1.96	0.48
1:E:1996:PRO:O	1:E:2000:LEU:N	2.41	0.48
1:E:2291:LEU:HD21	1:E:2332:LEU:HD22	1.95	0.48
1:F:1111:PHE:HE1	1:F:1129:LEU:HD11	1.78	0.48
1:F:1711:VAL:HA	1:F:1714:LEU:HG	1.94	0.48
1:F:2762:VAL:HG22	1:F:2822:LEU:HB2	1.96	0.48
1:F:2926:SER:HB3	1:F:2976:TRP:HH2	1.79	0.48
1:A:207:MET:HA	1:A:249:THR:HG22	1.94	0.48
1:A:444:ILE:HD12	1:A:655:ALA:HA	1.95	0.48
1:B:1637:VAL:HG21	1:B:1671:TRP:CD2	2.48	0.48
1:B:2274:LEU:HD23	1:B:2277:ILE:HD12	1.94	0.48
1:B:2582:GLN:HB3	1:E:2554:ALA:HB2	1.94	0.48
1:B:2666:PRO:CB	1:B:2727:VAL:HA	2.44	0.48
1:C:940:ARG:CG	1:C:940:ARG:O	2.60	0.48
1:D:1651:THR:HB	1:D:1656:LYS:HD2	1.95	0.48
1:D:2118:LEU:O	1:D:2122:ILE:CG1	2.60	0.48
1:D:2503:LYS:HE3	1:D:2505:GLU:OE2	2.13	0.48
1:E:1103:VAL:HG21	1:E:1269:MET:SD	2.54	0.48
1:E:1362:MET:HG3	1:E:1430:VAL:HG21	1.95	0.48
1:E:2592:PRO:HA	1:E:2599:TRP:CD1	2.49	0.48
1:F:361:THR:HG21	1:F:377:PRO:HG3	1.95	0.48
1:F:2094:HIS:O	1:F:2098:THR:HG22	2.14	0.48
1:A:1625:LEU:HD11	1:A:1660:LEU:HB3	1.96	0.48
1:A:2088:ARG:O	1:A:2188:ARG:NH1	2.47	0.48
1:A:2261:LYS:HA	1:A:2265:TRP:HB2	1.94	0.48
1:A:2667:THR:HB	1:A:3081:LEU:HD11	1.96	0.48
1:A:2762:VAL:HG22	1:A:2822:LEU:HB2	1.96	0.48
1:B:1533:VAL:HG13	1:B:1582:HIS:HB2	1.95	0.48
1:B:2098:THR:O	1:B:2102:TRP:CG	2.67	0.48
1:B:2554:ALA:HB1	1:B:2614:LYS:HD2	1.96	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2811:PHE:HB3	1:B:2894:THR:HG22	1.94	0.48
1:C:2098:THR:O	1:C:2102:TRP:CG	2.67	0.48
1:D:184:LEU:HD13	1:D:311:TRP:HB3	1.96	0.48
1:D:1996:PRO:O	1:D:2000:LEU:N	2.41	0.48
1:D:2167:THR:HB	1:D:2198:ALA:HB3	1.96	0.48
1:E:868:ARG:HB3	1:E:872:ARG:NH1	2.28	0.48
1:E:2060:TRP:HZ2	1:E:2966:ASP:HA	1.79	0.48
1:E:2645:ASP:OD1	1:E:2647:VAL:HG23	2.14	0.48
1:E:2926:SER:HB3	1:E:2976:TRP:HH2	1.79	0.48
1:F:1508:ILE:HB	1:F:1562:ARG:HD3	1.96	0.48
1:F:2557:LEU:HD22	1:F:2613:ARG:HB2	1.94	0.48
1:F:2666:PRO:CB	1:F:2727:VAL:HA	2.44	0.48
1:A:184:LEU:HD13	1:A:311:TRP:HB3	1.96	0.48
1:A:2648:ALA:HA	1:A:2718:VAL:HG13	1.96	0.48
1:A:2926:SER:HB3	1:A:2976:TRP:HH2	1.79	0.48
1:B:501:VAL:HA	1:B:504:LYS:HE2	1.96	0.48
1:B:2170:ARG:HB2	1:B:2175:ARG:HG3	1.96	0.48
1:B:2926:SER:HB3	1:B:2976:TRP:HH2	1.79	0.48
1:C:184:LEU:HD13	1:C:311:TRP:HB3	1.96	0.48
1:C:444:ILE:HD12	1:C:655:ALA:HA	1.95	0.48
1:C:2088:ARG:O	1:C:2188:ARG:NH1	2.47	0.48
1:C:2927:GLN:HE22	1:C:2941:PHE:C	2.17	0.48
1:D:1435:VAL:HG22	1:D:1703:ILE:HD12	1.95	0.48
1:D:1634:ARG:HH11	1:D:1639:ALA:N	2.08	0.48
1:D:1637:VAL:HG21	1:D:1671:TRP:CD2	2.48	0.48
1:D:2180:LYS:NZ	1:D:2962:ASP:HB3	2.29	0.48
1:D:2623:ALA:HB2	1:D:2812:LEU:HD21	1.94	0.48
1:D:2645:ASP:OD1	1:D:2647:VAL:HG23	2.14	0.48
1:F:2180:LYS:NZ	1:F:2962:ASP:HB3	2.29	0.48
1:A:301:LEU:HD13	1:A:330:LEU:HD22	1.96	0.48
1:A:1212:ALA:O	1:A:1342:ARG:NH2	2.45	0.48
1:A:2167:THR:HB	1:A:2198:ALA:HB3	1.96	0.48
1:A:2170:ARG:HB2	1:A:2175:ARG:HG3	1.96	0.48
1:B:361:THR:HG21	1:B:377:PRO:HG3	1.95	0.48
1:B:836:VAL:HG12	1:B:837:VAL:N	2.29	0.48
1:B:1362:MET:HG3	1:B:1430:VAL:HG21	1.95	0.48
1:B:1508:ILE:HB	1:B:1562:ARG:HD3	1.96	0.48
1:B:2557:LEU:HD22	1:B:2613:ARG:HB2	1.94	0.48
1:B:2614:LYS:NZ	1:E:2583:PHE:HB2	2.29	0.48
1:B:2762:VAL:HG22	1:B:2822:LEU:HB2	1.96	0.48
1:C:1103:VAL:HG21	1:C:1269:MET:SD	2.54	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2845:PHE:CE1	1:D:2676:SER:HB2	2.49	0.48
1:D:1467:VAL:HA	1:D:1605:LYS:HD2	1.96	0.48
1:D:1625:LEU:HD11	1:D:1660:LEU:HB3	1.96	0.48
1:D:2094:HIS:O	1:D:2098:THR:HG22	2.13	0.48
1:E:1291:LYS:HA	1:E:1344:ALA:HB3	1.95	0.48
1:E:2648:ALA:HA	1:E:2718:VAL:HG13	1.96	0.48
1:E:2667:THR:HB	1:E:3081:LEU:HD11	1.96	0.48
1:E:2848:GLY:H	1:E:3001:HIS:CD2	2.32	0.48
1:E:2927:GLN:HE22	1:E:2941:PHE:C	2.17	0.48
1:F:184:LEU:HB3	1:F:311:TRP:HE3	1.78	0.48
1:F:501:VAL:HA	1:F:504:LYS:HE2	1.96	0.48
1:F:2736:PRO:HG2	1:F:2746:SER:HA	1.96	0.48
1:A:501:VAL:HA	1:A:504:LYS:HE2	1.96	0.48
1:A:836:VAL:HG12	1:A:837:VAL:N	2.29	0.48
1:A:1533:VAL:HG13	1:A:1582:HIS:HB2	1.95	0.48
1:A:2098:THR:O	1:A:2102:TRP:CG	2.67	0.48
1:B:2291:LEU:HD21	1:B:2332:LEU:HD22	1.95	0.48
1:B:2583:PHE:HB2	1:E:2614:LYS:NZ	2.29	0.48
1:B:2645:ASP:OD1	1:B:2647:VAL:HG23	2.14	0.48
1:C:305:ILE:HD13	1:C:327:GLU:HG2	1.95	0.48
1:C:501:VAL:HA	1:C:504:LYS:HE2	1.96	0.48
1:C:836:VAL:HG12	1:C:837:VAL:N	2.29	0.48
1:D:1103:VAL:HG21	1:D:1269:MET:SD	2.54	0.48
1:D:2592:PRO:HA	1:D:2599:TRP:CD1	2.49	0.48
1:E:803:GLU:OE1	1:E:2431:THR:CG2	2.62	0.48
1:E:1533:VAL:HG13	1:E:1582:HIS:HB2	1.95	0.48
1:E:2891:LYS:HZ1	1:E:2903:GLU:HB3	1.78	0.48
1:F:2848:GLY:H	1:F:3001:HIS:CD2	2.31	0.48
1:A:1012:GLY:C	1:A:1013:THR:HG22	2.32	0.48
1:A:2614:LYS:NZ	1:F:2583:PHE:HB2	2.29	0.48
1:A:2666:PRO:CB	1:A:2727:VAL:HA	2.44	0.48
1:B:171:LYS:HE3	1:B:173:ALA:HB3	1.96	0.48
1:C:133:GLN:HG2	1:C:355:GLY:HA2	1.94	0.48
1:C:670:GLY:HA3	1:C:899:ALA:HB2	1.96	0.48
1:C:832:ASP:O	1:C:836:VAL:HG23	2.14	0.48
1:C:2170:ARG:HB2	1:C:2175:ARG:HG3	1.96	0.48
1:C:2926:SER:HB3	1:C:2976:TRP:HH2	1.79	0.48
1:D:1291:LYS:HA	1:D:1344:ALA:HB3	1.95	0.48
1:E:301:LEU:HD13	1:E:330:LEU:HD22	1.96	0.48
1:F:1012:GLY:C	1:F:1013:THR:HG22	2.32	0.48
1:F:2088:ARG:O	1:F:2188:ARG:NH1	2.47	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2592:PRO:HA	1:F:2599:TRP:CD1	2.49	0.48
1:A:365:ALA:HB3	1:A:366:PRO:HD3	1.96	0.47
1:A:1467:VAL:HA	1:A:1605:LYS:HD2	1.96	0.47
1:A:2056:PHE:CZ	1:A:2180:LYS:HE2	2.47	0.47
1:B:641:ASP:OD1	1:B:641:ASP:N	2.47	0.47
1:B:1467:VAL:HA	1:B:1605:LYS:HD2	1.96	0.47
1:B:2592:PRO:HA	1:B:2599:TRP:CD1	2.49	0.47
1:C:171:LYS:HE3	1:C:173:ALA:HB3	1.96	0.47
1:C:1178:ASN:HB2	1:C:1185:LEU:HD11	1.94	0.47
1:C:1291:LYS:HA	1:C:1344:ALA:HB3	1.95	0.47
1:C:1996:PRO:O	1:C:2000:LEU:N	2.41	0.47
1:C:2000:LEU:HD12	1:F:2000:LEU:HD12	1.96	0.47
1:C:2843:GLN:HG2	1:C:2845:PHE:CZ	2.49	0.47
1:D:2848:GLY:H	1:D:3001:HIS:CD2	2.31	0.47
1:E:361:THR:HG21	1:E:377:PRO:HG3	1.95	0.47
1:E:2843:GLN:HG2	1:E:2845:PHE:CZ	2.49	0.47
1:F:808:ALA:HB3	1:F:811:ASP:HB2	1.96	0.47
1:F:1996:PRO:O	1:F:2000:LEU:N	2.41	0.47
1:F:2667:THR:HB	1:F:3081:LEU:HD11	1.96	0.47
1:A:782:ARG:HD3	1:A:853:LEU:HD22	1.96	0.47
1:A:2348:GLN:O	1:A:2416:MET:HG3	2.15	0.47
1:A:2843:GLN:HG2	1:A:2845:PHE:CZ	2.49	0.47
1:A:2927:GLN:HE22	1:A:2941:PHE:C	2.17	0.47
1:B:184:LEU:HB3	1:B:311:TRP:HE3	1.78	0.47
1:B:936:ARG:O	1:B:941:ARG:N	2.44	0.47
1:B:2728:GLY:HA2	1:E:2848:GLY:HA2	1.97	0.47
1:B:2884:ASP:HA	1:B:2916:ARG:NH1	2.30	0.47
1:C:301:LEU:HD13	1:C:330:LEU:HD22	1.96	0.47
1:C:585:HIS:HD2	1:C:586:SER:H	1.62	0.47
1:C:808:ALA:HB3	1:C:811:ASP:HB2	1.96	0.47
1:C:2614:LYS:NZ	1:D:2583:PHE:HB2	2.29	0.47
1:C:2614:LYS:HG3	1:D:2583:PHE:HB2	1.97	0.47
1:C:2645:ASP:OD1	1:C:2647:VAL:HG23	2.13	0.47
1:D:1111:PHE:HE1	1:D:1129:LEU:HD11	1.78	0.47
1:D:2461:VAL:HG21	1:D:2751:VAL:HG13	1.96	0.47
1:D:2666:PRO:CB	1:D:2727:VAL:HA	2.44	0.47
1:D:3080:ARG:HG3	1:D:3080:ARG:NH1	2.09	0.47
1:E:171:LYS:HE3	1:E:173:ALA:HB3	1.96	0.47
1:E:305:ILE:HD13	1:E:327:GLU:HG2	1.95	0.47
1:E:365:ALA:HB3	1:E:366:PRO:HD3	1.97	0.47
1:E:832:ASP:O	1:E:836:VAL:HG23	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1435:VAL:HG22	1:E:1703:ILE:HD12	1.95	0.47
1:E:2762:VAL:HG22	1:E:2822:LEU:HB2	1.96	0.47
1:E:2820:ILE:HD12	1:E:2822:LEU:HD21	1.95	0.47
1:F:868:ARG:HB3	1:F:872:ARG:NH1	2.28	0.47
1:F:1590:VAL:HG11	1:F:1671:TRP:CE2	2.49	0.47
1:F:2352:ILE:HG12	1:F:2412:ALA:HB1	1.96	0.47
1:F:2623:ALA:HB2	1:F:2812:LEU:HD21	1.94	0.47
1:A:361:THR:HG21	1:A:377:PRO:HG3	1.95	0.47
1:A:683:GLY:CA	1:A:700:ASN:HB2	2.44	0.47
1:A:2180:LYS:NZ	1:A:2962:ASP:HB3	2.29	0.47
1:A:2730:TYR:HH	1:A:3059:ARG:NH1	2.12	0.47
1:A:2845:PHE:CE1	1:F:2676:SER:HB2	2.49	0.47
1:B:305:ILE:HD13	1:B:327:GLU:HG2	1.95	0.47
1:B:647:THR:HG22	1:B:901:ILE:HD11	1.96	0.47
1:B:803:GLU:OE1	1:B:2431:THR:CG2	2.62	0.47
1:B:1276:GLN:HE21	1:B:1292:LEU:HD13	1.79	0.47
1:B:1590:VAL:HG11	1:B:1671:TRP:CE2	2.49	0.47
1:B:1651:THR:HB	1:B:1656:LYS:HD2	1.95	0.47
1:B:2094:HIS:O	1:B:2098:THR:HG22	2.13	0.47
1:C:790:ALA:HB3	1:C:826:LEU:HD21	1.95	0.47
1:C:2210:VAL:HB	1:C:2277:ILE:HD11	1.97	0.47
1:C:2667:THR:HB	1:C:3081:LEU:HD11	1.95	0.47
1:D:641:ASP:OD1	1:D:641:ASP:N	2.47	0.47
1:D:2098:THR:O	1:D:2102:TRP:CG	2.67	0.47
1:D:2376:LEU:HD22	1:D:2392:VAL:HG21	1.96	0.47
1:D:2843:GLN:HG2	1:D:2845:PHE:CZ	2.49	0.47
1:E:674:TRP:CD1	1:E:895:THR:HG21	2.50	0.47
1:E:2170:ARG:HB2	1:E:2175:ARG:HG3	1.95	0.47
1:E:2736:PRO:HG2	1:E:2746:SER:HA	1.96	0.47
1:F:674:TRP:CD1	1:F:895:THR:HG21	2.50	0.47
1:F:832:ASP:O	1:F:836:VAL:HG23	2.14	0.47
1:F:1362:MET:HG3	1:F:1430:VAL:HG21	1.95	0.47
1:A:171:LYS:HE3	1:A:173:ALA:HB3	1.96	0.47
1:A:606:ASN:H	1:A:606:ASN:HD22	1.62	0.47
1:A:1291:LYS:HA	1:A:1344:ALA:HB3	1.95	0.47
1:A:1651:THR:HB	1:A:1656:LYS:HD2	1.96	0.47
1:B:674:TRP:CD1	1:B:895:THR:HG21	2.49	0.47
1:B:2648:ALA:HA	1:B:2718:VAL:HG13	1.96	0.47
1:C:1467:VAL:HA	1:C:1605:LYS:HD2	1.96	0.47
1:C:2094:HIS:O	1:C:2098:THR:HG22	2.13	0.47
1:C:2167:THR:HB	1:C:2198:ALA:HB3	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2180:LYS:NZ	1:C:2962:ASP:HB3	2.29	0.47
1:D:782:ARG:HD3	1:D:853:LEU:HD22	1.96	0.47
1:D:997:GLU:HB3	1:D:1009:PRO:CG	2.44	0.47
1:D:2060:TRP:HZ2	1:D:2966:ASP:HA	1.79	0.47
1:D:2252:VAL:HG22	1:D:2255:ARG:NH2	2.30	0.47
1:D:2667:THR:HB	1:D:3081:LEU:HD11	1.96	0.47
1:E:670:GLY:HA3	1:E:899:ALA:HB2	1.96	0.47
1:E:683:GLY:CA	1:E:700:ASN:HB2	2.44	0.47
1:E:808:ALA:HB3	1:E:811:ASP:HB2	1.96	0.47
1:E:1651:THR:HB	1:E:1656:LYS:HD2	1.95	0.47
1:F:670:GLY:HA3	1:F:899:ALA:HB2	1.96	0.47
1:F:2291:LEU:HD21	1:F:2332:LEU:HD22	1.95	0.47
1:A:647:THR:HG22	1:A:901:ILE:HD11	1.96	0.47
1:A:1276:GLN:HE21	1:A:1292:LEU:HD13	1.79	0.47
1:A:2583:PHE:HB2	1:F:2614:LYS:NZ	2.29	0.47
1:A:2820:ILE:HD12	1:A:2822:LEU:HD21	1.95	0.47
1:B:2376:LEU:HD22	1:B:2392:VAL:HG21	1.97	0.47
1:B:2927:GLN:HE22	1:B:2941:PHE:C	2.17	0.47
1:C:141:ALA:O	1:C:145:MET:HB2	2.14	0.47
1:C:803:GLU:OE1	1:C:2431:THR:CG2	2.62	0.47
1:C:997:GLU:HB3	1:C:1009:PRO:CG	2.45	0.47
1:C:1455:VAL:HB	1:C:1480:ARG:HH12	1.80	0.47
1:C:2728:GLY:HA2	1:D:2848:GLY:HA2	1.97	0.47
1:D:2210:VAL:HB	1:D:2277:ILE:HD11	1.96	0.47
1:D:2989:LEU:HD12	1:D:2989:LEU:HA	1.77	0.47
1:E:444:ILE:HD12	1:E:655:ALA:HA	1.95	0.47
1:E:606:ASN:HD22	1:E:606:ASN:H	1.63	0.47
1:E:782:ARG:HD3	1:E:853:LEU:HD22	1.97	0.47
1:E:1276:GLN:HE21	1:E:1292:LEU:HD13	1.79	0.47
1:E:1590:VAL:HG11	1:E:1671:TRP:CE2	2.50	0.47
1:E:2681:THR:O	1:E:2764:ALA:HA	2.15	0.47
1:F:171:LYS:HE3	1:F:173:ALA:HB3	1.96	0.47
1:F:966:PRO:O	1:F:970:ILE:N	2.48	0.47
1:F:1103:VAL:HG21	1:F:1269:MET:SD	2.54	0.47
1:F:1455:VAL:HB	1:F:1480:ARG:HH12	1.80	0.47
1:F:2060:TRP:HZ2	1:F:2966:ASP:HA	1.79	0.47
1:F:2681:THR:O	1:F:2764:ALA:HA	2.15	0.47
1:F:2927:GLN:HE22	1:F:2941:PHE:C	2.17	0.47
1:A:713:ALA:O	1:A:868:ARG:NH2	2.48	0.47
1:A:803:GLU:OE1	1:A:2431:THR:CG2	2.62	0.47
1:A:1103:VAL:HG21	1:A:1269:MET:SD	2.54	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2461:VAL:HG21	1:A:2751:VAL:HG13	1.96	0.47
1:A:2884:ASP:HA	1:A:2916:ARG:NH1	2.29	0.47
1:B:301:LEU:HD13	1:B:330:LEU:HD22	1.96	0.47
1:B:997:GLU:HB3	1:B:1009:PRO:CG	2.44	0.47
1:B:2352:ILE:HG12	1:B:2412:ALA:HB1	1.96	0.47
1:B:2676:SER:HB2	1:E:2845:PHE:CE1	2.49	0.47
1:C:674:TRP:CD1	1:C:895:THR:HG21	2.50	0.47
1:C:976:TRP:CG	1:C:976:TRP:O	2.68	0.47
1:C:2060:TRP:HZ2	1:C:2966:ASP:HA	1.79	0.47
1:C:2583:PHE:HB2	1:D:2614:LYS:HG3	1.97	0.47
1:C:2666:PRO:CB	1:C:2727:VAL:HA	2.44	0.47
1:C:2773:GLU:HA	1:C:2776:ILE:HG22	1.97	0.47
1:C:2884:ASP:HA	1:C:2916:ARG:NH1	2.30	0.47
1:C:3065:PRO:O	1:C:3069:GLN:N	2.42	0.47
1:D:674:TRP:CD1	1:D:895:THR:HG21	2.49	0.47
1:D:803:GLU:OE1	1:D:2431:THR:CG2	2.62	0.47
1:D:2648:ALA:HA	1:D:2718:VAL:HG13	1.96	0.47
1:E:647:THR:HG22	1:E:901:ILE:HD11	1.96	0.47
1:E:2180:LYS:NZ	1:E:2962:ASP:HB3	2.29	0.47
1:F:184:LEU:HD13	1:F:311:TRP:HB3	1.96	0.47
1:F:997:GLU:HB3	1:F:1009:PRO:CG	2.44	0.47
1:F:2210:VAL:HB	1:F:2277:ILE:HD11	1.96	0.47
1:F:2843:GLN:HG2	1:F:2845:PHE:CZ	2.49	0.47
1:A:141:ALA:O	1:A:145:MET:HB2	2.15	0.47
1:A:808:ALA:HB3	1:A:811:ASP:HB2	1.96	0.47
1:A:832:ASP:O	1:A:836:VAL:HG23	2.14	0.47
1:A:940:ARG:CG	1:A:940:ARG:O	2.60	0.47
1:A:997:GLU:HB3	1:A:1009:PRO:CG	2.44	0.47
1:A:1695:LEU:HD12	1:A:1695:LEU:HA	1.71	0.47
1:A:1996:PRO:O	1:A:2000:LEU:N	2.41	0.47
1:A:2291:LEU:HD21	1:A:2332:LEU:HD22	1.95	0.47
1:A:2592:PRO:HA	1:A:2599:TRP:CD1	2.49	0.47
1:A:2645:ASP:OD1	1:A:2647:VAL:HG23	2.14	0.47
1:B:184:LEU:HD13	1:B:311:TRP:HB3	1.96	0.47
1:B:778:THR:HG21	1:B:854:GLY:HA3	1.97	0.47
1:B:782:ARG:HD3	1:B:853:LEU:HD22	1.97	0.47
1:B:832:ASP:O	1:B:836:VAL:HG23	2.14	0.47
1:B:1072:TRP:HE1	1:B:1077:VAL:HG22	1.80	0.47
1:B:1111:PHE:HE1	1:B:1129:LEU:HD11	1.78	0.47
1:B:2736:PRO:HG2	1:B:2746:SER:HA	1.96	0.47
1:C:365:ALA:HB3	1:C:366:PRO:HD3	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:641:ASP:N	1:C:641:ASP:OD1	2.47	0.47
1:C:936:ARG:O	1:C:941:ARG:N	2.44	0.47
1:C:1111:PHE:HE1	1:C:1129:LEU:HD11	1.78	0.47
1:C:1699:ARG:HG3	1:C:1730:GLU:HB3	1.97	0.47
1:C:2252:VAL:HG22	1:C:2255:ARG:NH2	2.30	0.47
1:C:2352:ILE:HG12	1:C:2412:ALA:HB1	1.96	0.47
1:C:2418:GLY:O	1:C:2422:GLU:N	2.40	0.47
1:C:2554:ALA:HB1	1:C:2614:LYS:HD2	1.95	0.47
1:C:2583:PHE:HB2	1:D:2614:LYS:NZ	2.29	0.47
1:C:2592:PRO:HA	1:C:2599:TRP:CD1	2.49	0.47
1:C:2848:GLY:HA2	1:D:2728:GLY:HA2	1.97	0.47
1:D:210:VAL:HG22	1:D:287:PHE:CD1	2.50	0.47
1:D:501:VAL:HA	1:D:504:LYS:HE2	1.96	0.47
1:D:647:THR:HG22	1:D:901:ILE:HD11	1.96	0.47
1:D:713:ALA:O	1:D:868:ARG:NH2	2.48	0.47
1:D:832:ASP:O	1:D:836:VAL:HG23	2.14	0.47
1:D:940:ARG:CG	1:D:940:ARG:O	2.60	0.47
1:D:1276:GLN:HE21	1:D:1292:LEU:HD13	1.79	0.47
1:D:1590:VAL:HG11	1:D:1671:TRP:CE2	2.50	0.47
1:D:2348:GLN:O	1:D:2416:MET:HG3	2.15	0.47
1:E:184:LEU:HD13	1:E:311:TRP:HB3	1.96	0.47
1:E:778:THR:HG21	1:E:854:GLY:HA3	1.97	0.47
1:E:1634:ARG:NH1	1:E:1639:ALA:H	2.11	0.47
1:F:141:ALA:O	1:F:145:MET:HB2	2.15	0.47
1:F:683:GLY:CA	1:F:700:ASN:HB2	2.44	0.47
1:F:713:ALA:O	1:F:868:ARG:NH2	2.48	0.47
1:F:976:TRP:CG	1:F:976:TRP:O	2.68	0.47
1:F:1467:VAL:HA	1:F:1605:LYS:HD2	1.96	0.47
1:F:2098:THR:O	1:F:2102:TRP:CG	2.67	0.47
1:F:2252:VAL:HG22	1:F:2255:ARG:NH2	2.30	0.47
1:F:2770:LEU:HB3	1:F:2815:GLN:HB3	1.97	0.47
1:A:641:ASP:N	1:A:641:ASP:OD1	2.48	0.47
1:B:210:VAL:HG22	1:B:287:PHE:CD1	2.50	0.47
1:B:365:ALA:O	1:B:369:ARG:N	2.42	0.47
1:B:2252:VAL:HG22	1:B:2255:ARG:NH2	2.30	0.47
1:B:2614:LYS:HG3	1:E:2583:PHE:HB2	1.97	0.47
1:C:210:VAL:HG22	1:C:287:PHE:CD1	2.50	0.47
1:C:602:ARG:NH2	1:C:641:ASP:OD1	2.27	0.47
1:C:745:THR:HG22	1:C:747:LEU:H	1.80	0.47
1:C:1072:TRP:HE1	1:C:1077:VAL:HG22	1.80	0.47
1:C:2989:LEU:HD12	1:C:2989:LEU:HA	1.77	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:171:LYS:HE3	1:D:173:ALA:HB3	1.96	0.47
1:D:606:ASN:H	1:D:606:ASN:HD22	1.62	0.47
1:D:996:LEU:HA	1:D:1010:LEU:HA	1.97	0.47
1:D:2554:ALA:HB1	1:D:2614:LYS:HD2	1.96	0.47
1:D:2681:THR:O	1:D:2764:ALA:HA	2.15	0.47
1:E:836:VAL:HG12	1:E:837:VAL:N	2.29	0.47
1:E:966:PRO:O	1:E:970:ILE:N	2.48	0.47
1:E:1699:ARG:HG3	1:E:1730:GLU:HB3	1.97	0.47
1:E:2096:VAL:HG23	1:E:2097:ALA:H	1.80	0.47
1:F:301:LEU:HD13	1:F:330:LEU:HD22	1.96	0.47
1:F:518:ASP:HA	1:F:543:GLY:O	2.15	0.47
1:F:782:ARG:HD3	1:F:853:LEU:HD22	1.97	0.47
1:F:2648:ALA:HA	1:F:2718:VAL:HG13	1.96	0.47
1:A:674:TRP:CD1	1:A:895:THR:HG21	2.50	0.47
1:A:745:THR:HG22	1:A:747:LEU:H	1.80	0.47
1:A:1435:VAL:HG22	1:A:1703:ILE:HD12	1.95	0.47
1:A:2060:TRP:HZ2	1:A:2966:ASP:HA	1.79	0.47
1:A:2482:GLU:HG2	1:A:2956:PRO:HB3	1.97	0.47
1:B:966:PRO:O	1:B:970:ILE:N	2.48	0.47
1:B:1625:LEU:HD11	1:B:1660:LEU:HB3	1.95	0.47
1:B:2058:ASP:OD1	1:B:2058:ASP:N	2.46	0.47
1:B:2681:THR:O	1:B:2764:ALA:HA	2.15	0.47
1:C:1590:VAL:HG11	1:C:1671:TRP:CE2	2.50	0.47
1:D:1508:ILE:HB	1:D:1562:ARG:HD3	1.97	0.47
1:D:3080:ARG:CG	1:D:3080:ARG:NH1	2.72	0.47
1:E:141:ALA:O	1:E:145:MET:HB2	2.15	0.47
1:E:210:VAL:HG22	1:E:287:PHE:CD1	2.50	0.47
1:E:1455:VAL:HB	1:E:1480:ARG:HH12	1.80	0.47
1:E:1467:VAL:HA	1:E:1605:LYS:HD2	1.96	0.47
1:E:2167:THR:HB	1:E:2198:ALA:HB3	1.96	0.47
1:E:2348:GLN:O	1:E:2416:MET:HG3	2.15	0.47
1:F:210:VAL:HG22	1:F:287:PHE:CD1	2.50	0.47
1:F:1625:LEU:HD11	1:F:1660:LEU:HB3	1.96	0.47
1:F:2348:GLN:O	1:F:2416:MET:HG3	2.15	0.47
1:F:2645:ASP:OD1	1:F:2647:VAL:HG23	2.13	0.47
1:A:198:ILE:HG12	1:C:1087:PHE:CE1	2.50	0.47
1:A:1699:ARG:HG3	1:A:1730:GLU:HB3	1.97	0.47
1:B:141:ALA:O	1:B:145:MET:HB2	2.15	0.47
1:B:647:THR:OG1	2:B:4000:FMN:O3P	2.27	0.47
1:B:2060:TRP:HZ2	1:B:2966:ASP:HA	1.79	0.47
1:B:2785:ALA:HB1	1:B:2809:LEU:HG	1.97	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2648:ALA:HA	1:C:2718:VAL:HG13	1.96	0.47
1:D:670:GLY:HA3	1:D:899:ALA:HB2	1.96	0.47
1:D:966:PRO:O	1:D:970:ILE:N	2.48	0.47
1:D:1072:TRP:HE1	1:D:1077:VAL:HG22	1.80	0.47
1:D:2773:GLU:HA	1:D:2776:ILE:HG22	1.97	0.47
1:D:2926:SER:HB3	1:D:2976:TRP:HH2	1.79	0.47
1:E:996:LEU:HA	1:E:1010:LEU:HA	1.98	0.47
1:E:997:GLU:HB3	1:E:1009:PRO:CG	2.45	0.47
1:F:1072:TRP:HE1	1:F:1077:VAL:HG22	1.80	0.47
1:F:1276:GLN:HE21	1:F:1292:LEU:HD13	1.79	0.47
1:F:2630:ASP:HB3	1:F:2633:VAL:HG23	1.97	0.47
1:F:2800:PHE:CE1	1:F:2812:LEU:HD22	2.50	0.47
1:F:2884:ASP:HA	1:F:2916:ARG:NH1	2.30	0.47
1:A:778:THR:HG21	1:A:854:GLY:HA3	1.97	0.46
1:A:1508:ILE:HB	1:A:1562:ARG:HD3	1.97	0.46
1:A:2352:ILE:HG12	1:A:2412:ALA:HB1	1.96	0.46
1:A:2736:PRO:HG2	1:A:2746:SER:HA	1.96	0.46
1:B:808:ALA:HB3	1:B:811:ASP:HB2	1.96	0.46
1:B:931:VAL:HG13	1:B:934:LEU:N	2.21	0.46
1:B:1450:ALA:N	1:B:1613:ARG:O	2.48	0.46
1:B:2000:LEU:HD12	1:D:2000:LEU:HD12	1.97	0.46
1:B:2482:GLU:HG2	1:B:2956:PRO:HB3	1.97	0.46
1:B:2667:THR:HB	1:B:3081:LEU:HD11	1.96	0.46
1:C:647:THR:HG22	1:C:901:ILE:HD11	1.96	0.46
1:C:1276:GLN:HE21	1:C:1292:LEU:HD13	1.79	0.46
1:C:2376:LEU:HD22	1:C:2392:VAL:HG21	1.97	0.46
1:D:141:ALA:O	1:D:145:MET:HB2	2.15	0.46
1:D:1087:PHE:CE1	1:E:198:ILE:HG12	2.51	0.46
1:D:1723:GLU:C	1:D:1725:SER:H	2.18	0.46
1:D:2762:VAL:HG22	1:D:2822:LEU:HB2	1.96	0.46
1:E:2252:VAL:HG22	1:E:2255:ARG:NH2	2.30	0.46
1:E:2961:LEU:HD22	1:E:2976:TRP:CD1	2.51	0.46
1:F:540:ASN:ND2	1:F:544:ILE:HG13	2.30	0.46
1:F:2785:ALA:HB1	1:F:2809:LEU:HG	1.97	0.46
1:A:1237:ARG:CZ	1:B:95:PRO:HB2	2.46	0.46
1:A:1455:VAL:HB	1:A:1480:ARG:HH12	1.80	0.46
1:A:1619:VAL:HA	1:A:1620:PRO:HD2	1.80	0.46
1:A:2630:ASP:HB3	1:A:2633:VAL:HG23	1.97	0.46
1:A:2681:THR:O	1:A:2764:ALA:HA	2.15	0.46
1:B:2180:LYS:NZ	1:B:2962:ASP:HB3	2.29	0.46
1:B:2252:VAL:HG13	1:B:2255:ARG:HH21	1.81	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2348:GLN:O	1:B:2416:MET:HG3	2.15	0.46
1:B:2461:VAL:HG21	1:B:2751:VAL:HG13	1.96	0.46
1:B:2961:LEU:HD22	1:B:2976:TRP:CD1	2.50	0.46
1:C:713:ALA:O	1:C:868:ARG:NH2	2.48	0.46
1:C:1346:PRO:HG2	1:C:1699:ARG:HD3	1.97	0.46
1:C:1352:PHE:HA	1:C:1353:PRO:HD3	1.72	0.46
1:C:2630:ASP:HB3	1:C:2633:VAL:HG23	1.97	0.46
1:D:1450:ALA:N	1:D:1613:ARG:O	2.48	0.46
1:D:2610:ARG:NH1	1:D:2700:LEU:HD11	2.25	0.46
1:E:501:VAL:HA	1:E:504:LYS:HE2	1.96	0.46
1:E:1723:GLU:C	1:E:1725:SER:H	2.18	0.46
1:E:2785:ALA:HB1	1:E:2809:LEU:HG	1.97	0.46
1:E:2884:ASP:HA	1:E:2916:ARG:NH1	2.29	0.46
1:F:641:ASP:N	1:F:641:ASP:OD1	2.48	0.46
1:A:768:LYS:HA	1:A:775:LEU:HD11	1.98	0.46
1:A:976:TRP:O	1:A:976:TRP:CG	2.68	0.46
1:A:1094:THR:O	1:A:1288:PRO:HG2	2.15	0.46
1:A:2376:LEU:HD22	1:A:2392:VAL:HG21	1.97	0.46
1:B:94:ARG:HG3	1:B:95:PRO:HD3	1.98	0.46
1:B:1455:VAL:HB	1:B:1480:ARG:HH12	1.80	0.46
1:C:518:ASP:HA	1:C:543:GLY:O	2.15	0.46
1:C:778:THR:HG21	1:C:854:GLY:HA3	1.97	0.46
1:C:996:LEU:HA	1:C:1010:LEU:HA	1.97	0.46
1:C:1723:GLU:C	1:C:1725:SER:H	2.18	0.46
1:C:2252:VAL:HG13	1:C:2255:ARG:HH21	1.80	0.46
1:C:2461:VAL:HG21	1:C:2751:VAL:HG13	1.96	0.46
1:C:2543:PHE:HA	1:C:2624:GLN:HE22	1.81	0.46
1:C:2961:LEU:HD22	1:C:2976:TRP:CD1	2.51	0.46
1:D:94:ARG:HG3	1:D:95:PRO:HD3	1.98	0.46
1:E:540:ASN:ND2	1:E:544:ILE:HG13	2.30	0.46
1:E:713:ALA:O	1:E:868:ARG:NH2	2.48	0.46
1:E:976:TRP:CG	1:E:976:TRP:O	2.68	0.46
1:E:1508:ILE:HB	1:E:1562:ARG:HD3	1.96	0.46
1:E:2210:VAL:HB	1:E:2277:ILE:HD11	1.97	0.46
1:F:365:ALA:O	1:F:369:ARG:N	2.42	0.46
1:A:365:ALA:O	1:A:369:ARG:N	2.42	0.46
1:A:2000:LEU:HD12	1:E:2000:LEU:HD12	1.96	0.46
1:B:84:GLU:HB2	1:B:85:PRO:HD3	1.97	0.46
1:B:518:ASP:HA	1:B:543:GLY:O	2.15	0.46
1:B:713:ALA:O	1:B:868:ARG:NH2	2.48	0.46
1:B:976:TRP:O	1:B:976:TRP:CG	2.68	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1346:PRO:HG2	1:B:1699:ARG:HD3	1.98	0.46
1:B:2770:LEU:HB3	1:B:2815:GLN:HB3	1.97	0.46
1:C:2361:VAL:HG21	1:C:2401:ILE:HD11	1.98	0.46
1:D:534:ASP:O	1:D:538:GLU:HG3	2.16	0.46
1:D:808:ALA:HB3	1:D:811:ASP:HB2	1.96	0.46
1:D:1237:ARG:CZ	1:E:95:PRO:HB2	2.46	0.46
1:D:2884:ASP:HA	1:D:2916:ARG:NH1	2.29	0.46
1:E:406:THR:OG1	1:E:418:GLU:OE1	2.34	0.46
1:E:575:HIS:CD2	1:E:644:LEU:HD22	2.49	0.46
1:E:641:ASP:OD1	1:E:641:ASP:N	2.48	0.46
1:E:684:MET:HG3	1:E:895:THR:HA	1.98	0.46
1:E:2252:VAL:HG13	1:E:2255:ARG:HH21	1.80	0.46
1:E:2543:PHE:HA	1:E:2624:GLN:HE22	1.81	0.46
1:F:745:THR:HG22	1:F:747:LEU:H	1.80	0.46
1:F:836:VAL:HG12	1:F:837:VAL:N	2.29	0.46
1:F:2461:VAL:HG21	1:F:2751:VAL:HG13	1.97	0.46
1:F:2482:GLU:HG2	1:F:2956:PRO:HB3	1.97	0.46
1:F:2543:PHE:HA	1:F:2624:GLN:HE22	1.81	0.46
1:A:210:VAL:HG22	1:A:287:PHE:CD1	2.50	0.46
1:A:745:THR:OG1	1:A:834:GLU:O	2.19	0.46
1:A:1346:PRO:HG2	1:A:1699:ARG:HD3	1.98	0.46
1:A:2252:VAL:HG22	1:A:2255:ARG:NH2	2.30	0.46
1:A:2252:VAL:HG13	1:A:2255:ARG:HH21	1.80	0.46
1:A:2697:HIS:CD2	1:F:2700:LEU:HD22	2.43	0.46
1:A:2724:GLN:HG2	1:F:3001:HIS:CE1	2.51	0.46
1:B:540:ASN:ND2	1:B:544:ILE:HG13	2.30	0.46
1:B:1087:PHE:CE1	1:C:198:ILE:HG12	2.51	0.46
1:B:1319:ASP:HB2	1:B:1342:ARG:NH1	2.31	0.46
1:B:2137:GLU:O	1:B:2163:THR:N	2.30	0.46
1:B:2724:GLN:HG2	1:E:3001:HIS:CE1	2.51	0.46
1:B:2843:GLN:HG2	1:B:2845:PHE:CZ	2.49	0.46
1:B:2978:ARG:NH1	1:B:2979:GLU:OE2	2.49	0.46
1:C:84:GLU:HB2	1:C:85:PRO:HD3	1.97	0.46
1:C:2603:ARG:HH12	1:D:2612:PRO:HD2	1.81	0.46
1:C:2612:PRO:HD2	1:D:2603:ARG:HH12	1.81	0.46
1:D:365:ALA:HB3	1:D:366:PRO:HD3	1.96	0.46
1:D:976:TRP:CG	1:D:976:TRP:O	2.68	0.46
1:D:2252:VAL:HG13	1:D:2255:ARG:HH21	1.80	0.46
1:D:2961:LEU:HD22	1:D:2976:TRP:CD1	2.51	0.46
1:E:1072:TRP:CD1	1:E:1097:VAL:HG22	2.51	0.46
1:E:1325:LEU:HD11	1:E:1343:LEU:HD22	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2137:GLU:O	1:E:2163:THR:N	2.30	0.46
1:E:2361:VAL:HG21	1:E:2401:ILE:HD11	1.98	0.46
1:E:2769:ASP:OD1	1:E:2770:LEU:N	2.49	0.46
1:E:2773:GLU:HA	1:E:2776:ILE:HG22	1.97	0.46
1:F:205:PRO:CD	1:F:289:PRO:HB3	2.46	0.46
1:F:365:ALA:HB3	1:F:366:PRO:HD3	1.97	0.46
1:F:606:ASN:H	1:F:606:ASN:HD22	1.62	0.46
1:F:768:LYS:HA	1:F:775:LEU:HD11	1.97	0.46
1:F:803:GLU:OE1	1:F:2431:THR:CG2	2.62	0.46
1:A:518:ASP:HA	1:A:543:GLY:O	2.15	0.46
1:A:966:PRO:O	1:A:970:ILE:N	2.48	0.46
1:A:1590:VAL:HG11	1:A:1671:TRP:CE2	2.50	0.46
1:A:2961:LEU:HD22	1:A:2976:TRP:CD1	2.50	0.46
1:B:670:GLY:HA3	1:B:899:ALA:HB2	1.96	0.46
1:B:683:GLY:CA	1:B:700:ASN:HB2	2.44	0.46
1:B:768:LYS:HA	1:B:775:LEU:HD11	1.98	0.46
1:B:2848:GLY:HA2	1:E:2728:GLY:HA2	1.97	0.46
1:C:111:GLU:HB2	1:C:112:PRO:HD3	1.98	0.46
1:C:167:ALA:HB3	1:C:178:LEU:HD21	1.98	0.46
1:C:684:MET:HG3	1:C:895:THR:HA	1.98	0.46
1:C:768:LYS:HA	1:C:775:LEU:HD11	1.97	0.46
1:C:1072:TRP:CD1	1:C:1097:VAL:HG22	2.51	0.46
1:C:2348:GLN:O	1:C:2416:MET:HG3	2.15	0.46
1:D:222:LEU:HD21	1:D:236:VAL:HA	1.97	0.46
1:D:1094:THR:O	1:D:1288:PRO:HG2	2.15	0.46
1:D:1319:ASP:HB2	1:D:1342:ARG:NH1	2.31	0.46
1:E:518:ASP:HA	1:E:543:GLY:O	2.15	0.46
1:E:2630:ASP:HB3	1:E:2633:VAL:HG23	1.97	0.46
1:E:2978:ARG:NH1	1:E:2979:GLU:OE2	2.49	0.46
1:F:167:ALA:HB3	1:F:178:LEU:HD21	1.98	0.46
1:F:585:HIS:HD2	1:F:586:SER:H	1.62	0.46
1:F:602:ARG:NH2	1:F:641:ASP:OD1	2.27	0.46
1:F:1072:TRP:CD1	1:F:1097:VAL:HG22	2.51	0.46
1:F:1319:ASP:HB2	1:F:1342:ARG:NH1	2.31	0.46
1:F:2773:GLU:HA	1:F:2776:ILE:HG22	1.97	0.46
1:A:670:GLY:HA3	1:A:899:ALA:HB2	1.96	0.46
1:B:176:VAL:O	1:B:180:ALA:N	2.36	0.46
1:B:799:PHE:CZ	1:B:2433:ARG:CG	2.99	0.46
1:B:2210:VAL:HB	1:B:2277:ILE:HD11	1.96	0.46
1:B:2630:ASP:HB3	1:B:2633:VAL:HG23	1.97	0.46
1:C:1508:ILE:HB	1:C:1562:ARG:HD3	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2946:LEU:HD22	1:C:2994:VAL:HG23	1.98	0.46
1:D:406:THR:OG1	1:D:418:GLU:OE1	2.34	0.46
1:D:518:ASP:HA	1:D:543:GLY:O	2.16	0.46
1:D:575:HIS:CD2	1:D:644:LEU:HD22	2.49	0.46
1:D:768:LYS:HA	1:D:775:LEU:HD11	1.98	0.46
1:D:1455:VAL:HB	1:D:1480:ARG:HH12	1.79	0.46
1:D:2361:VAL:HG21	1:D:2401:ILE:HD11	1.98	0.46
1:E:205:PRO:CD	1:E:289:PRO:HB3	2.46	0.46
1:E:222:LEU:HD21	1:E:236:VAL:HA	1.97	0.46
1:E:799:PHE:CZ	1:E:2433:ARG:CG	2.99	0.46
1:E:2461:VAL:HG21	1:E:2751:VAL:HG13	1.96	0.46
1:E:2790:MET:SD	1:E:2800:PHE:HB2	2.56	0.46
1:F:647:THR:HG22	1:F:901:ILE:HD11	1.96	0.46
1:F:799:PHE:CZ	1:F:2433:ARG:CG	2.99	0.46
1:F:1133:VAL:O	1:F:1193:ALA:N	2.42	0.46
1:F:1325:LEU:HD11	1:F:1343:LEU:HD22	1.98	0.46
1:F:1346:PRO:HG2	1:F:1699:ARG:HD3	1.98	0.46
1:F:1450:ALA:N	1:F:1613:ARG:O	2.47	0.46
1:F:2376:LEU:HD22	1:F:2392:VAL:HG21	1.97	0.46
1:A:1450:ALA:N	1:A:1613:ARG:O	2.48	0.46
1:A:2603:ARG:HH12	1:F:2612:PRO:HD2	1.81	0.46
1:A:2619:ARG:HH12	1:A:2779:GLY:HA2	1.81	0.46
1:A:2728:GLY:HA2	1:F:2848:GLY:HA2	1.97	0.46
1:A:2978:ARG:NH1	1:A:2979:GLU:OE2	2.49	0.46
1:B:277:LEU:HD22	1:B:676:GLY:O	2.16	0.46
1:B:1072:TRP:CD1	1:B:1097:VAL:HG22	2.51	0.46
1:B:1094:THR:O	1:B:1288:PRO:HG2	2.15	0.46
1:B:1723:GLU:C	1:B:1725:SER:H	2.18	0.46
1:B:2773:GLU:HA	1:B:2776:ILE:HG22	1.97	0.46
1:C:540:ASN:ND2	1:C:544:ILE:HG13	2.30	0.46
1:C:575:HIS:CD2	1:C:644:LEU:HD22	2.48	0.46
1:C:1304:LYS:O	1:C:1307:ASP:HB2	2.16	0.46
1:C:2762:VAL:HG22	1:C:2822:LEU:HB2	1.96	0.46
1:C:2845:PHE:HD2	1:C:2860:ALA:HA	1.81	0.46
1:D:745:THR:HG22	1:D:747:LEU:H	1.80	0.46
1:D:2790:MET:SD	1:D:2800:PHE:HB2	2.56	0.46
1:D:2946:LEU:HD22	1:D:2994:VAL:HG23	1.98	0.46
1:E:2352:ILE:HG12	1:E:2412:ALA:HB1	1.96	0.46
1:E:2957:PRO:HB3	1:E:2979:GLU:C	2.36	0.46
1:F:406:THR:OG1	1:F:418:GLU:OE1	2.34	0.46
1:F:778:THR:HG21	1:F:854:GLY:HA3	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2252:VAL:HG13	1:F:2255:ARG:HH21	1.81	0.46
1:F:2978:ARG:NH1	1:F:2979:GLU:OE2	2.49	0.46
1:A:111:GLU:HB2	1:A:112:PRO:HD3	1.98	0.46
1:A:1087:PHE:CE1	1:B:198:ILE:HG12	2.51	0.46
1:A:1325:LEU:HD11	1:A:1343:LEU:HD22	1.98	0.46
1:A:2610:ARG:NH1	1:A:2700:LEU:HD21	2.31	0.46
1:B:111:GLU:HB2	1:B:112:PRO:HD3	1.98	0.46
1:B:205:PRO:CD	1:B:289:PRO:HB3	2.46	0.46
1:B:745:THR:HG22	1:B:747:LEU:H	1.80	0.46
1:B:868:ARG:HD3	1:B:872:ARG:HH12	1.81	0.46
1:B:2543:PHE:HA	1:B:2624:GLN:HE22	1.81	0.46
1:C:207:MET:HG3	1:C:292:VAL:HB	1.98	0.46
1:C:222:LEU:HD21	1:C:236:VAL:HA	1.97	0.46
1:C:406:THR:OG1	1:C:418:GLU:OE1	2.34	0.46
1:C:606:ASN:HD22	1:C:606:ASN:H	1.62	0.46
1:C:2096:VAL:HG23	1:C:2097:ALA:H	1.80	0.46
1:C:2790:MET:SD	1:C:2800:PHE:HB2	2.56	0.46
1:D:799:PHE:CZ	1:D:2433:ARG:CG	2.99	0.46
1:D:1634:ARG:NH1	1:D:1639:ALA:H	2.11	0.46
1:D:1699:ARG:HG3	1:D:1730:GLU:HB3	1.97	0.46
1:D:2070:LEU:O	1:D:2074:GLU:HG3	2.16	0.46
1:D:2543:PHE:HA	1:D:2624:GLN:HE22	1.81	0.46
1:D:2630:ASP:HB3	1:D:2633:VAL:HG23	1.97	0.46
1:E:84:GLU:HB2	1:E:85:PRO:HD3	1.97	0.46
1:E:868:ARG:HD3	1:E:872:ARG:HH12	1.81	0.46
1:E:1346:PRO:HG2	1:E:1699:ARG:HD3	1.98	0.46
1:F:1723:GLU:C	1:F:1725:SER:H	2.18	0.46
1:F:2961:LEU:HD22	1:F:2976:TRP:CD1	2.50	0.46
1:A:222:LEU:HD21	1:A:236:VAL:HA	1.97	0.46
1:A:406:THR:OG1	1:A:418:GLU:OE1	2.34	0.46
1:A:2212:TRP:HA	1:A:2229:LYS:HB3	1.98	0.46
1:A:2610:ARG:NH1	1:A:2700:LEU:HD11	2.25	0.46
1:A:2773:GLU:HA	1:A:2776:ILE:HG22	1.97	0.46
1:A:2790:MET:SD	1:A:2800:PHE:HB2	2.56	0.46
1:B:207:MET:HG3	1:B:292:VAL:HB	1.98	0.46
1:B:1352:PHE:HA	1:B:1353:PRO:HD3	1.72	0.46
1:B:2583:PHE:HB2	1:E:2614:LYS:HG3	1.97	0.46
1:B:2610:ARG:NH1	1:B:2700:LEU:HD21	2.31	0.46
1:B:2612:PRO:HD2	1:E:2603:ARG:HH12	1.81	0.46
1:B:2672:TRP:CD1	1:B:2831:MET:HG2	2.51	0.46
1:B:2737:VAL:HG12	1:E:2716:ASN:OD1	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2769:ASP:OD1	1:B:2770:LEU:N	2.49	0.46
1:B:2891:LYS:HG3	1:B:2924:ILE:HD13	1.99	0.46
1:C:745:THR:OG1	1:C:834:GLU:O	2.19	0.46
1:C:1702:GLU:OE1	1:C:1712:ALA:N	2.49	0.46
1:C:2957:PRO:HB3	1:C:2979:GLU:C	2.36	0.46
1:C:2978:ARG:NH1	1:C:2979:GLU:OE2	2.49	0.46
1:D:195:ARG:NH1	1:D:198:ILE:HD12	2.31	0.46
1:D:540:ASN:ND2	1:D:544:ILE:HG13	2.30	0.46
1:D:2770:LEU:HB3	1:D:2815:GLN:HB3	1.97	0.46
1:D:2957:PRO:HB3	1:D:2979:GLU:C	2.36	0.46
1:D:2978:ARG:NH1	1:D:2979:GLU:OE2	2.49	0.46
1:E:94:ARG:HG3	1:E:95:PRO:HD3	1.98	0.46
1:E:936:ARG:O	1:E:941:ARG:N	2.45	0.46
1:E:2619:ARG:NH1	1:E:2779:GLY:HA2	2.31	0.46
1:E:2800:PHE:CE1	1:E:2812:LEU:HD22	2.50	0.46
1:F:1699:ARG:HG3	1:F:1730:GLU:HB3	1.97	0.46
1:F:2891:LYS:HG3	1:F:2924:ILE:HD13	1.98	0.46
1:F:2946:LEU:HD22	1:F:2994:VAL:HG23	1.98	0.46
1:F:3065:PRO:O	1:F:3069:GLN:N	2.42	0.46
1:A:94:ARG:HG3	1:A:95:PRO:HD3	1.98	0.45
1:A:534:ASP:O	1:A:538:GLU:HG3	2.16	0.45
1:A:799:PHE:CZ	1:A:2433:ARG:CG	2.99	0.45
1:A:1483:LYS:O	1:A:1487:ILE:HG23	2.17	0.45
1:A:2086:SER:HA	1:A:2089:PHE:CG	2.52	0.45
1:A:2769:ASP:OD1	1:A:2770:LEU:N	2.49	0.45
1:A:2891:LYS:HG3	1:A:2924:ILE:HD13	1.98	0.45
1:A:2957:PRO:HB3	1:A:2979:GLU:C	2.36	0.45
1:B:167:ALA:HB3	1:B:178:LEU:HD21	1.98	0.45
1:B:602:ARG:NH2	1:B:641:ASP:OD1	2.27	0.45
1:B:1699:ARG:HG3	1:B:1730:GLU:HB3	1.97	0.45
1:B:2603:ARG:HH12	1:E:2612:PRO:HD2	1.81	0.45
1:B:2619:ARG:HH12	1:B:2779:GLY:HA2	1.81	0.45
1:B:2845:PHE:HD2	1:B:2860:ALA:HA	1.81	0.45
1:B:2889:ILE:HD11	1:B:2922:LEU:HD22	1.98	0.45
1:C:277:LEU:HD22	1:C:676:GLY:O	2.16	0.45
1:C:868:ARG:HD3	1:C:872:ARG:HH12	1.81	0.45
1:C:1462:ALA:HB2	1:C:1468:TYR:HE1	1.82	0.45
1:C:2610:ARG:NH1	1:C:2700:LEU:HD21	2.31	0.45
1:C:2724:GLN:HG2	1:D:3001:HIS:CE1	2.51	0.45
1:C:2785:ALA:HB1	1:C:2809:LEU:HG	1.97	0.45
1:D:167:ALA:HB3	1:D:178:LEU:HD21	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:205:PRO:CD	1:D:289:PRO:HB3	2.46	0.45
1:D:2246:ALA:N	1:D:2255:ARG:NH1	2.64	0.45
1:E:534:ASP:O	1:E:538:GLU:HG3	2.16	0.45
1:E:1094:THR:O	1:E:1288:PRO:HG2	2.15	0.45
1:E:1695:LEU:HD12	1:E:1695:LEU:HA	1.70	0.45
1:E:2891:LYS:HG3	1:E:2924:ILE:HD13	1.98	0.45
1:F:868:ARG:HD3	1:F:872:ARG:HH12	1.81	0.45
1:F:1519:VAL:HG13	1:F:1530:LEU:HD23	1.98	0.45
1:F:2070:LEU:O	1:F:2074:GLU:HG3	2.16	0.45
1:F:2086:SER:HA	1:F:2089:PHE:CG	2.52	0.45
1:A:2946:LEU:HD22	1:A:2994:VAL:HG23	1.98	0.45
1:B:47:ALA:O	1:B:353:ASP:HA	2.17	0.45
1:B:406:THR:OG1	1:B:418:GLU:OE1	2.34	0.45
1:B:585:HIS:HD2	1:B:586:SER:H	1.62	0.45
1:B:606:ASN:HD22	1:B:606:ASN:H	1.62	0.45
1:B:2086:SER:HA	1:B:2089:PHE:CG	2.52	0.45
1:B:2716:ASN:OD1	1:E:2737:VAL:HG12	2.16	0.45
1:B:2790:MET:SD	1:B:2800:PHE:HB2	2.56	0.45
1:B:3080:ARG:HG3	1:B:3080:ARG:NH1	2.09	0.45
1:C:205:PRO:CD	1:C:289:PRO:HB3	2.46	0.45
1:C:746:TYR:HB2	1:C:833:ALA:HB1	1.99	0.45
1:C:782:ARG:HD3	1:C:853:LEU:HD22	1.97	0.45
1:C:784:GLU:OE2	1:C:816:LEU:HD21	2.16	0.45
1:C:2482:GLU:HG2	1:C:2956:PRO:HB3	1.97	0.45
1:C:2619:ARG:NH1	1:C:2779:GLY:HA2	2.31	0.45
1:D:351:ILE:HB	1:D:375:ILE:HG12	1.99	0.45
1:D:544:ILE:O	1:D:546:HIS:N	2.41	0.45
1:D:778:THR:HG21	1:D:854:GLY:HA3	1.97	0.45
1:D:836:VAL:HG12	1:D:837:VAL:N	2.29	0.45
1:D:1325:LEU:HD11	1:D:1343:LEU:HD22	1.98	0.45
1:D:2619:ARG:NH1	1:D:2779:GLY:HA2	2.31	0.45
1:E:1237:ARG:CZ	1:F:95:PRO:HB2	2.45	0.45
1:E:2334:HIS:CD2	1:E:2391:LYS:HG3	2.50	0.45
1:E:2889:ILE:HD11	1:E:2922:LEU:HD22	1.98	0.45
1:E:2989:LEU:HD12	1:E:2989:LEU:HA	1.77	0.45
1:F:277:LEU:HD22	1:F:676:GLY:O	2.16	0.45
1:F:534:ASP:O	1:F:538:GLU:HG3	2.16	0.45
1:F:684:MET:HG3	1:F:895:THR:HA	1.98	0.45
1:F:784:GLU:OE2	1:F:816:LEU:HD21	2.16	0.45
1:F:1094:THR:O	1:F:1288:PRO:HG2	2.15	0.45
1:F:1702:GLU:OE1	1:F:1712:ALA:N	2.49	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2096:VAL:HG13	1:F:2097:ALA:H	1.80	0.45
1:F:2246:ALA:N	1:F:2255:ARG:NH1	2.64	0.45
1:F:2790:MET:SD	1:F:2800:PHE:HB2	2.56	0.45
1:A:167:ALA:HB3	1:A:178:LEU:HD21	1.98	0.45
1:A:381:ARG:O	1:A:384:GLN:HG2	2.17	0.45
1:A:585:HIS:CB	1:A:694:ASP:HB2	2.47	0.45
1:A:1284:GLY:HA2	1:A:1343:LEU:HD11	1.99	0.45
1:A:1319:ASP:HB2	1:A:1342:ARG:NH1	2.31	0.45
1:A:1612:GLY:N	1:A:1623:PHE:O	2.48	0.45
1:A:2848:GLY:HA2	1:F:2728:GLY:HA2	1.97	0.45
1:B:365:ALA:HB3	1:B:366:PRO:HD3	1.96	0.45
1:B:684:MET:HG3	1:B:895:THR:HA	1.98	0.45
1:B:1462:ALA:HB2	1:B:1468:TYR:HE1	1.81	0.45
1:B:1612:GLY:N	1:B:1623:PHE:O	2.48	0.45
1:B:2234:PRO:HB2	1:B:2287:LEU:HD13	1.98	0.45
1:B:3001:HIS:CE1	1:E:2724:GLN:HG2	2.51	0.45
1:C:1488:VAL:HB	1:C:1579:VAL:HG22	1.99	0.45
1:C:2234:PRO:HB2	1:C:2287:LEU:HD13	1.98	0.45
1:C:2702:GLY:HA3	1:D:2557:LEU:CG	2.45	0.45
1:D:47:ALA:O	1:D:353:ASP:HA	2.17	0.45
1:D:277:LEU:HD22	1:D:676:GLY:O	2.16	0.45
1:D:1612:GLY:N	1:D:1623:PHE:O	2.48	0.45
1:D:2234:PRO:HB2	1:D:2287:LEU:HD13	1.98	0.45
1:D:2352:ILE:HG12	1:D:2412:ALA:HB1	1.96	0.45
1:E:167:ALA:HB3	1:E:178:LEU:HD21	1.98	0.45
1:E:745:THR:HG22	1:E:747:LEU:H	1.80	0.45
1:E:784:GLU:OE2	1:E:816:LEU:HD21	2.16	0.45
1:E:1319:ASP:HB2	1:E:1342:ARG:NH1	2.31	0.45
1:E:1450:ALA:N	1:E:1613:ARG:O	2.47	0.45
1:E:2610:ARG:NH1	1:E:2700:LEU:HD21	2.31	0.45
1:E:2845:PHE:HD2	1:E:2860:ALA:HA	1.82	0.45
1:F:996:LEU:HA	1:F:1010:LEU:HA	1.97	0.45
1:F:1483:LYS:O	1:F:1487:ILE:HG23	2.17	0.45
1:F:1660:LEU:HD23	1:F:1660:LEU:HA	1.86	0.45
1:F:2212:TRP:HA	1:F:2229:LYS:HB3	1.98	0.45
1:F:2234:PRO:HB2	1:F:2287:LEU:HD13	1.98	0.45
1:A:205:PRO:CD	1:A:289:PRO:HB3	2.46	0.45
1:A:1072:TRP:CD1	1:A:1097:VAL:HG22	2.51	0.45
1:A:1723:GLU:C	1:A:1725:SER:H	2.18	0.45
1:A:2297:ARG:HH22	1:A:2391:LYS:HZ3	1.65	0.45
1:A:2583:PHE:HB2	1:F:2614:LYS:HZ2	1.80	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2583:PHE:HB2	1:F:2614:LYS:HG3	1.97	0.45
1:A:2619:ARG:NH1	1:A:2779:GLY:HA2	2.31	0.45
1:A:2702:GLY:HA3	1:F:2557:LEU:CG	2.45	0.45
1:B:195:ARG:NH1	1:B:198:ILE:HD12	2.31	0.45
1:B:222:LEU:HD21	1:B:236:VAL:HA	1.97	0.45
1:B:2452:ASP:HA	1:B:3017:ALA:HA	1.99	0.45
1:B:2610:ARG:NH1	1:B:2700:LEU:HD11	2.25	0.45
1:B:2619:ARG:NH1	1:B:2779:GLY:HA2	2.31	0.45
1:B:2946:LEU:HD22	1:B:2994:VAL:HG23	1.98	0.45
1:C:351:ILE:HB	1:C:375:ILE:HG12	1.99	0.45
1:C:683:GLY:CA	1:C:700:ASN:HB2	2.44	0.45
1:C:763:SER:HB3	1:C:766:ASP:HB2	1.99	0.45
1:C:1171:PRO:HA	1:C:1191:ARG:HG2	1.99	0.45
1:C:2681:THR:O	1:C:2764:ALA:HA	2.15	0.45
1:C:2800:PHE:CE1	1:C:2812:LEU:HD22	2.50	0.45
1:C:2891:LYS:HZ2	1:C:2903:GLU:HG2	1.82	0.45
1:D:198:ILE:HG12	1:F:1087:PHE:CE1	2.51	0.45
1:D:207:MET:HG3	1:D:292:VAL:HB	1.98	0.45
1:D:550:LYS:HD3	1:D:577:GLU:OE2	2.17	0.45
1:D:746:TYR:HB2	1:D:833:ALA:HB1	1.99	0.45
1:D:1072:TRP:CD1	1:D:1097:VAL:HG22	2.51	0.45
1:D:1226:ARG:CG	1:D:1313:VAL:HG12	2.47	0.45
1:D:2472:TYR:CZ	1:D:2930:LEU:HD22	2.52	0.45
1:E:222:LEU:HD13	1:E:248:ILE:HD12	1.99	0.45
1:E:1087:PHE:CE1	1:F:198:ILE:HG12	2.51	0.45
1:E:1553:ALA:O	1:E:1557:GLU:HG2	2.17	0.45
1:E:2070:LEU:O	1:E:2074:GLU:HG3	2.16	0.45
1:E:2482:GLU:HG2	1:E:2956:PRO:HB3	1.97	0.45
1:E:3080:ARG:CG	1:E:3080:ARG:NH1	2.72	0.45
1:F:84:GLU:HB2	1:F:85:PRO:HD3	1.98	0.45
1:F:585:HIS:CB	1:F:694:ASP:HB2	2.47	0.45
1:F:1634:ARG:NH1	1:F:1639:ALA:H	2.11	0.45
1:F:2137:GLU:O	1:F:2163:THR:N	2.30	0.45
1:F:2889:ILE:HD11	1:F:2922:LEU:HD22	1.98	0.45
1:A:47:ALA:O	1:A:353:ASP:HA	2.17	0.45
1:A:84:GLU:HB2	1:A:85:PRO:HD3	1.98	0.45
1:A:95:PRO:HB2	1:C:1237:ARG:CZ	2.45	0.45
1:A:195:ARG:NH1	1:A:198:ILE:HD12	2.31	0.45
1:A:540:ASN:ND2	1:A:544:ILE:HG13	2.31	0.45
1:A:684:MET:HG3	1:A:895:THR:HA	1.98	0.45
1:A:1304:LYS:O	1:A:1307:ASP:HB2	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1462:ALA:HB2	1:A:1468:TYR:HE1	1.81	0.45
1:A:2361:VAL:HG21	1:A:2401:ILE:HD11	1.98	0.45
1:A:2543:PHE:HA	1:A:2624:GLN:HE22	1.81	0.45
1:A:2612:PRO:HD2	1:F:2603:ARG:HH12	1.81	0.45
1:B:381:ARG:O	1:B:384:GLN:HG2	2.17	0.45
1:B:746:TYR:HB2	1:B:833:ALA:HB1	1.99	0.45
1:B:996:LEU:HA	1:B:1010:LEU:HA	1.97	0.45
1:B:1237:ARG:CZ	1:C:95:PRO:HB2	2.45	0.45
1:B:1304:LYS:O	1:B:1307:ASP:HB2	2.16	0.45
1:B:1325:LEU:HD11	1:B:1343:LEU:HD22	1.98	0.45
1:B:1553:ALA:O	1:B:1557:GLU:HG2	2.17	0.45
1:C:195:ARG:NH1	1:C:198:ILE:HD12	2.31	0.45
1:C:222:LEU:HD13	1:C:248:ILE:HD12	1.99	0.45
1:C:534:ASP:O	1:C:538:GLU:HG3	2.16	0.45
1:C:966:PRO:O	1:C:970:ILE:N	2.48	0.45
1:C:2058:ASP:OD1	1:C:2058:ASP:N	2.46	0.45
1:C:2619:ARG:HH12	1:C:2779:GLY:HA2	1.81	0.45
1:D:95:PRO:HB2	1:F:1237:ARG:CZ	2.46	0.45
1:D:111:GLU:HB2	1:D:112:PRO:HD3	1.98	0.45
1:D:747:LEU:HD22	1:D:751:ARG:CZ	2.47	0.45
1:D:1304:LYS:O	1:D:1307:ASP:HB2	2.16	0.45
1:D:1346:PRO:HG2	1:D:1699:ARG:HD3	1.98	0.45
1:D:2086:SER:HA	1:D:2089:PHE:CG	2.52	0.45
1:D:2785:ALA:HB1	1:D:2809:LEU:HG	1.97	0.45
1:E:585:HIS:CB	1:E:694:ASP:HB2	2.47	0.45
1:E:1634:ARG:NH1	1:E:1639:ALA:N	2.65	0.45
1:E:1672:GLN:HE21	1:E:1672:GLN:HB3	1.58	0.45
1:E:2376:LEU:HD22	1:E:2392:VAL:HG21	1.97	0.45
1:E:2770:LEU:HB3	1:E:2815:GLN:HB3	1.97	0.45
1:F:1285:LYS:HB3	1:F:1286:PRO:HD2	1.99	0.45
1:F:2452:ASP:HA	1:F:3017:ALA:HA	1.99	0.45
1:F:2619:ARG:NH1	1:F:2779:GLY:HA2	2.31	0.45
1:A:277:LEU:HD22	1:A:676:GLY:O	2.16	0.45
1:A:1171:PRO:HA	1:A:1191:ARG:HG2	1.99	0.45
1:A:1553:ALA:O	1:A:1557:GLU:HG2	2.17	0.45
1:A:2210:VAL:HB	1:A:2277:ILE:HD11	1.96	0.45
1:B:2092:THR:O	1:B:2092:THR:CG2	2.64	0.45
1:C:585:HIS:CB	1:C:694:ASP:HB2	2.47	0.45
1:C:2212:TRP:HA	1:C:2229:LYS:HB3	1.98	0.45
1:C:2672:TRP:CD1	1:C:2831:MET:HG2	2.52	0.45
1:C:2716:ASN:OD1	1:D:2737:VAL:HG12	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2845:PHE:CD2	1:C:2860:ALA:HA	2.52	0.45
1:D:868:ARG:HD3	1:D:872:ARG:HH12	1.81	0.45
1:D:1462:ALA:HB2	1:D:1468:TYR:HE1	1.81	0.45
1:D:2092:THR:O	1:D:2092:THR:CG2	2.64	0.45
1:D:2482:GLU:HG2	1:D:2956:PRO:HB3	1.97	0.45
1:D:2619:ARG:HH12	1:D:2779:GLY:HA2	1.81	0.45
1:D:2672:TRP:CD1	1:D:2831:MET:HG2	2.52	0.45
1:E:2212:TRP:HA	1:E:2229:LYS:HB3	1.98	0.45
1:E:2249:MET:O	1:E:2250:SER:OG	2.28	0.45
1:F:1634:ARG:NH1	1:F:1639:ALA:N	2.65	0.45
1:F:2300:PHE:CZ	1:F:2398:LEU:HB3	2.52	0.45
1:A:996:LEU:HA	1:A:1010:LEU:HA	1.97	0.45
1:A:1581:PHE:HB2	1:A:1586:LEU:HD22	1.99	0.45
1:A:1702:GLU:OE1	1:A:1712:ALA:N	2.49	0.45
1:A:2611:VAL:HA	1:A:2612:PRO:HD3	1.86	0.45
1:A:2614:LYS:HG3	1:F:2583:PHE:HB2	1.97	0.45
1:B:550:LYS:HD3	1:B:577:GLU:OE2	2.17	0.45
1:B:1519:VAL:HG13	1:B:1530:LEU:HD23	1.99	0.45
1:B:2472:TYR:CZ	1:B:2930:LEU:HD22	2.52	0.45
1:C:747:LEU:HD22	1:C:751:ARG:CZ	2.47	0.45
1:C:1284:GLY:HA2	1:C:1343:LEU:HD11	1.99	0.45
1:C:2246:ALA:N	1:C:2255:ARG:NH1	2.64	0.45
1:C:2770:LEU:HB3	1:C:2815:GLN:HB3	1.97	0.45
1:D:84:GLU:HB2	1:D:85:PRO:HD3	1.98	0.45
1:D:585:HIS:CB	1:D:694:ASP:HB2	2.47	0.45
1:D:1284:GLY:HA2	1:D:1343:LEU:HD11	1.99	0.45
1:D:2845:PHE:HD2	1:D:2860:ALA:HA	1.82	0.45
1:E:277:LEU:HD22	1:E:676:GLY:O	2.16	0.45
1:E:1605:LYS:H	1:E:1658:LYS:HE2	1.82	0.45
1:E:2086:SER:HA	1:E:2089:PHE:CG	2.52	0.45
1:F:763:SER:HB3	1:F:766:ASP:HB2	1.99	0.45
1:F:2619:ARG:HH12	1:F:2779:GLY:HA2	1.81	0.45
1:F:2845:PHE:HD2	1:F:2860:ALA:HA	1.82	0.45
1:A:2246:ALA:N	1:A:2255:ARG:NH1	2.64	0.45
1:A:2296:ASN:HB3	1:A:2299:MET:SD	2.57	0.45
1:B:534:ASP:O	1:B:538:GLU:HG3	2.16	0.45
1:B:1285:LYS:HB3	1:B:1286:PRO:HD2	1.99	0.45
1:B:2361:VAL:HG21	1:B:2401:ILE:HD11	1.98	0.45
1:B:2879:LEU:HD13	1:B:3009:VAL:HG11	1.98	0.45
1:B:2957:PRO:HB3	1:B:2979:GLU:C	2.36	0.45
1:C:47:ALA:O	1:C:353:ASP:HA	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:94:ARG:HG3	1:C:95:PRO:HD3	1.98	0.45
1:C:511:ARG:CB	1:C:540:ASN:HB2	2.46	0.45
1:C:1319:ASP:HB2	1:C:1342:ARG:NH1	2.31	0.45
1:C:1519:VAL:HG13	1:C:1530:LEU:HD23	1.99	0.45
1:C:3080:ARG:CG	1:C:3080:ARG:NH1	2.72	0.45
1:D:222:LEU:HD13	1:D:248:ILE:HD12	1.99	0.45
1:D:438:THR:HA	1:D:880:HIS:CE1	2.51	0.45
1:D:684:MET:HG3	1:D:895:THR:HA	1.98	0.45
1:D:784:GLU:OE2	1:D:816:LEU:HD21	2.16	0.45
1:E:111:GLU:HB2	1:E:112:PRO:HD3	1.98	0.45
1:E:1171:PRO:HA	1:E:1191:ARG:HG2	1.99	0.45
1:E:1284:GLY:HA2	1:E:1343:LEU:HD11	1.99	0.45
1:E:2234:PRO:HB2	1:E:2287:LEU:HD13	1.98	0.45
1:E:2472:TYR:CZ	1:E:2930:LEU:HD22	2.52	0.45
1:F:207:MET:HG3	1:F:292:VAL:HB	1.98	0.45
1:F:1226:ARG:CG	1:F:1313:VAL:HG12	2.47	0.45
1:F:1684:ASP:HA	1:F:1687:PHE:HD2	1.82	0.45
1:F:2610:ARG:NH1	1:F:2700:LEU:HD21	2.31	0.45
1:F:2957:PRO:HB3	1:F:2979:GLU:C	2.36	0.45
1:A:207:MET:HG3	1:A:292:VAL:HB	1.98	0.45
1:A:746:TYR:HB2	1:A:833:ALA:HB1	1.99	0.45
1:A:2672:TRP:CD1	1:A:2831:MET:HG2	2.52	0.45
1:A:2716:ASN:OD1	1:F:2737:VAL:HG12	2.17	0.45
1:A:2785:ALA:HB1	1:A:2809:LEU:HG	1.97	0.45
1:B:1226:ARG:CG	1:B:1313:VAL:HG12	2.47	0.45
1:B:1488:VAL:HB	1:B:1579:VAL:HG22	1.99	0.45
1:B:1581:PHE:HB2	1:B:1586:LEU:HD22	1.99	0.45
1:B:2246:ALA:N	1:B:2255:ARG:NH1	2.64	0.45
1:B:2958:ASN:HD22	1:B:2976:TRP:HE1	1.65	0.45
1:C:393:VAL:HG12	1:C:394:PRO:N	2.32	0.45
1:C:799:PHE:CZ	1:C:2433:ARG:CG	2.99	0.45
1:C:1483:LYS:O	1:C:1487:ILE:HG23	2.17	0.45
1:C:2070:LEU:O	1:C:2074:GLU:HG3	2.16	0.45
1:C:2300:PHE:CZ	1:C:2398:LEU:HB3	2.52	0.45
1:C:2879:LEU:HD13	1:C:3009:VAL:HG11	1.98	0.45
1:C:3001:HIS:CE1	1:D:2724:GLN:HG2	2.51	0.45
1:D:2845:PHE:CD2	1:D:2860:ALA:HA	2.52	0.45
1:E:1226:ARG:CG	1:E:1313:VAL:HG12	2.47	0.45
1:E:1304:LYS:O	1:E:1307:ASP:HB2	2.16	0.45
1:E:1483:LYS:O	1:E:1487:ILE:HG23	2.17	0.45
1:E:2246:ALA:N	1:E:2255:ARG:NH1	2.64	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2296:ASN:HB3	1:E:2299:MET:SD	2.57	0.45
1:E:2879:LEU:HD13	1:E:3009:VAL:HG11	1.98	0.45
1:F:94:ARG:HG3	1:F:95:PRO:HD3	1.98	0.45
1:F:222:LEU:HD21	1:F:236:VAL:HA	1.97	0.45
1:F:222:LEU:HD13	1:F:248:ILE:HD12	1.99	0.45
1:F:747:LEU:HD22	1:F:751:ARG:CZ	2.47	0.45
1:F:1462:ALA:HB2	1:F:1468:TYR:HE1	1.81	0.45
1:F:2845:PHE:CD2	1:F:2860:ALA:HA	2.52	0.45
1:A:336:TRP:CH2	1:A:360:LEU:HD21	2.52	0.45
1:A:2737:VAL:HG12	1:F:2716:ASN:OD1	2.17	0.45
1:A:2845:PHE:HD2	1:A:2860:ALA:HA	1.82	0.45
1:A:3001:HIS:CE1	1:F:2724:GLN:HG2	2.51	0.45
1:A:3080:ARG:CG	1:A:3080:ARG:NH1	2.72	0.45
1:B:544:ILE:O	1:B:546:HIS:N	2.40	0.45
1:B:1483:LYS:O	1:B:1487:ILE:HG23	2.17	0.45
1:B:1702:GLU:OE1	1:B:1712:ALA:N	2.49	0.45
1:B:2800:PHE:CE1	1:B:2812:LEU:HD22	2.50	0.45
1:C:336:TRP:CH2	1:C:360:LEU:HD21	2.52	0.45
1:C:664:LEU:HB3	1:C:701:ALA:HB1	1.99	0.45
1:C:1226:ARG:CG	1:C:1313:VAL:HG12	2.47	0.45
1:C:1553:ALA:O	1:C:1557:GLU:HG2	2.17	0.45
1:C:1684:ASP:HA	1:C:1687:PHE:HD2	1.82	0.45
1:C:2737:VAL:HG12	1:D:2716:ASN:OD1	2.16	0.45
1:C:2769:ASP:OD1	1:C:2770:LEU:N	2.49	0.45
1:D:381:ARG:O	1:D:384:GLN:HG2	2.17	0.45
1:D:393:VAL:HG12	1:D:394:PRO:N	2.32	0.45
1:D:1553:ALA:O	1:D:1557:GLU:HG2	2.17	0.45
1:D:1684:ASP:HA	1:D:1687:PHE:HD2	1.82	0.45
1:E:336:TRP:CH2	1:E:360:LEU:HD21	2.52	0.45
1:E:1093:PRO:HB3	1:E:1277:HIS:CE1	2.52	0.45
1:F:1284:GLY:HA2	1:F:1343:LEU:HD11	1.99	0.45
1:A:602:ARG:NH2	1:A:641:ASP:OD1	2.27	0.44
1:A:664:LEU:HB3	1:A:701:ALA:HB1	1.99	0.44
1:A:1285:LYS:HB3	1:A:1286:PRO:HD2	1.99	0.44
1:A:2472:TYR:CZ	1:A:2930:LEU:HD22	2.52	0.44
1:B:393:VAL:HG12	1:B:394:PRO:N	2.32	0.44
1:B:438:THR:HA	1:B:880:HIS:CE1	2.51	0.44
1:C:381:ARG:O	1:C:384:GLN:HG2	2.17	0.44
1:C:1094:THR:O	1:C:1288:PRO:HG2	2.16	0.44
1:C:1268:GLY:HA2	1:C:1271:LEU:HD12	1.99	0.44
1:D:1268:GLY:HA2	1:D:1271:LEU:HD12	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1488:VAL:HB	1:D:1579:VAL:HG22	1.99	0.44
1:D:2800:PHE:CE1	1:D:2812:LEU:HD22	2.50	0.44
1:E:207:MET:HG3	1:E:292:VAL:HB	1.98	0.44
1:E:1702:GLU:OE1	1:E:1712:ALA:N	2.49	0.44
1:E:2672:TRP:CD1	1:E:2831:MET:HG2	2.52	0.44
1:F:550:LYS:HD3	1:F:577:GLU:OE2	2.17	0.44
1:F:1304:LYS:O	1:F:1307:ASP:HB2	2.16	0.44
1:F:2296:ASN:HB3	1:F:2299:MET:SD	2.57	0.44
1:F:2299:MET:H	1:F:2299:MET:HG2	1.68	0.44
1:A:747:LEU:HD22	1:A:751:ARG:CZ	2.47	0.44
1:A:936:ARG:O	1:A:941:ARG:N	2.45	0.44
1:A:1605:LYS:H	1:A:1658:LYS:HE2	1.82	0.44
1:A:2070:LEU:O	1:A:2074:GLU:HG3	2.16	0.44
1:A:2462:VAL:HG13	1:A:2835:VAL:HG13	2.00	0.44
1:A:2770:LEU:HB3	1:A:2815:GLN:HB3	1.97	0.44
1:B:1133:VAL:O	1:B:1193:ALA:N	2.42	0.44
1:B:1634:ARG:NH1	1:B:1639:ALA:N	2.65	0.44
1:B:1684:ASP:HA	1:B:1687:PHE:HD2	1.82	0.44
1:B:2300:PHE:CZ	1:B:2398:LEU:HB3	2.52	0.44
1:C:550:LYS:HD3	1:C:577:GLU:OE2	2.17	0.44
1:C:1093:PRO:HB3	1:C:1277:HIS:CE1	2.52	0.44
1:C:1503:ILE:HB	1:C:1542:TYR:HB2	2.00	0.44
1:C:1660:LEU:HD23	1:C:1660:LEU:HA	1.85	0.44
1:C:2472:TYR:CZ	1:C:2930:LEU:HD22	2.52	0.44
1:D:1581:PHE:HB2	1:D:1586:LEU:HD22	1.99	0.44
1:D:1702:GLU:OE1	1:D:1712:ALA:N	2.50	0.44
1:D:2014:SER:H	1:E:2591:ARG:HH12	1.65	0.44
1:D:2452:ASP:HA	1:D:3017:ALA:HA	1.99	0.44
1:D:2610:ARG:NH1	1:D:2700:LEU:HD21	2.31	0.44
1:D:2769:ASP:OD1	1:D:2770:LEU:N	2.49	0.44
1:E:544:ILE:O	1:E:546:HIS:N	2.41	0.44
1:E:763:SER:HB3	1:E:766:ASP:HB2	1.99	0.44
1:E:1268:GLY:HA2	1:E:1271:LEU:HD12	1.99	0.44
1:F:195:ARG:NH1	1:F:198:ILE:HD12	2.31	0.44
1:F:544:ILE:O	1:F:546:HIS:N	2.40	0.44
1:F:2246:ALA:N	1:F:2255:ARG:HH12	2.16	0.44
1:F:2610:ARG:NH1	1:F:2700:LEU:HD11	2.25	0.44
1:F:2672:TRP:CD1	1:F:2831:MET:HG2	2.52	0.44
1:A:2246:ALA:N	1:A:2255:ARG:HH12	2.15	0.44
1:A:2879:LEU:HD13	1:A:3009:VAL:HG11	1.98	0.44
1:A:3065:PRO:O	1:A:3069:GLN:N	2.42	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1093:PRO:HB3	1:B:1277:HIS:CE1	2.52	0.44
1:B:1284:GLY:HA2	1:B:1343:LEU:HD11	1.99	0.44
1:B:2070:LEU:O	1:B:2074:GLU:HG3	2.16	0.44
1:B:2209:LEU:O	1:B:2213:VAL:HG23	2.18	0.44
1:B:2212:TRP:HA	1:B:2229:LYS:HB3	1.98	0.44
1:B:2246:ALA:N	1:B:2255:ARG:HH12	2.15	0.44
1:B:2296:ASN:HB3	1:B:2299:MET:SD	2.57	0.44
1:C:1634:ARG:NH1	1:C:1639:ALA:N	2.65	0.44
1:C:2086:SER:HA	1:C:2089:PHE:CG	2.51	0.44
1:C:2452:ASP:HA	1:C:3017:ALA:HA	1.98	0.44
1:C:2462:VAL:HG13	1:C:2835:VAL:HG13	2.00	0.44
1:C:2889:ILE:HD11	1:C:2922:LEU:HD22	1.98	0.44
1:D:671:THR:HB	1:D:682:ASN:CG	2.38	0.44
1:D:763:SER:HB3	1:D:766:ASP:HB2	1.99	0.44
1:D:2300:PHE:CZ	1:D:2398:LEU:HB3	2.52	0.44
1:D:2471:PRO:HA	1:D:2625:ILE:HA	2.00	0.44
1:D:2891:LYS:HZ2	1:D:2903:GLU:HG2	1.83	0.44
1:E:664:LEU:HB3	1:E:701:ALA:HB1	1.99	0.44
1:E:768:LYS:HA	1:E:775:LEU:HD11	1.97	0.44
1:E:1488:VAL:HB	1:E:1579:VAL:HG22	1.99	0.44
1:E:2619:ARG:HH12	1:E:2779:GLY:HA2	1.81	0.44
1:F:47:ALA:O	1:F:353:ASP:HA	2.17	0.44
1:F:81:LEU:HD23	1:F:81:LEU:HA	1.88	0.44
1:F:511:ARG:CB	1:F:540:ASN:HB2	2.46	0.44
1:F:647:THR:OG1	2:F:4000:FMN:O3P	2.27	0.44
1:A:163:LEU:HD13	1:A:181:LEU:HD23	2.00	0.44
1:A:583:GLY:HA2	1:A:892:ILE:HD13	2.00	0.44
1:A:868:ARG:HD3	1:A:872:ARG:HH12	1.81	0.44
1:A:1226:ARG:CG	1:A:1313:VAL:HG12	2.47	0.44
1:A:2889:ILE:HD11	1:A:2922:LEU:HD22	1.98	0.44
1:B:784:GLU:OE2	1:B:816:LEU:HD21	2.16	0.44
1:B:2096:VAL:HG13	1:B:2097:ALA:H	1.80	0.44
1:B:2903:GLU:OE2	1:B:2995:THR:OG1	2.36	0.44
1:C:1605:LYS:H	1:C:1658:LYS:HE2	1.82	0.44
1:C:1612:GLY:N	1:C:1623:PHE:O	2.48	0.44
1:D:210:VAL:HG22	1:D:287:PHE:HD1	1.82	0.44
1:D:782:ARG:NH1	1:D:857:VAL:HG22	2.33	0.44
1:D:1537:LEU:HD13	1:D:1541:GLN:HB2	2.00	0.44
1:D:2014:SER:N	1:E:2591:ARG:NH1	2.66	0.44
1:D:2096:VAL:HG13	1:D:2097:ALA:H	1.80	0.44
1:D:2462:VAL:HG13	1:D:2835:VAL:HG13	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2891:LYS:HG3	1:D:2924:ILE:HD13	1.99	0.44
1:E:195:ARG:NH1	1:E:198:ILE:HD12	2.31	0.44
1:E:2014:SER:H	1:F:2591:ARG:HH12	1.65	0.44
1:E:2845:PHE:CD2	1:E:2860:ALA:HA	2.52	0.44
1:E:2946:LEU:HD22	1:E:2994:VAL:HG23	1.98	0.44
1:F:111:GLU:HB2	1:F:112:PRO:HD3	1.98	0.44
1:F:381:ARG:O	1:F:384:GLN:HG2	2.17	0.44
1:F:970:ILE:HG23	1:F:992:THR:HG21	2.00	0.44
1:F:1553:ALA:O	1:F:1557:GLU:HG2	2.17	0.44
1:F:1581:PHE:HB2	1:F:1586:LEU:HD22	1.99	0.44
1:F:1605:LYS:H	1:F:1658:LYS:HE2	1.82	0.44
1:F:2769:ASP:OD1	1:F:2770:LEU:N	2.49	0.44
1:F:2958:ASN:HD22	1:F:2976:TRP:HE1	1.65	0.44
1:A:1723:GLU:O	1:A:1725:SER:N	2.51	0.44
1:A:2903:GLU:OE2	1:A:2995:THR:OG1	2.36	0.44
1:B:575:HIS:CD2	1:B:644:LEU:HD22	2.49	0.44
1:B:747:LEU:HD22	1:B:751:ARG:CZ	2.47	0.44
1:B:1723:GLU:O	1:B:1725:SER:N	2.51	0.44
1:B:2845:PHE:CD2	1:B:2860:ALA:HA	2.52	0.44
1:C:88:SER:HB3	1:C:314:THR:OG1	2.18	0.44
1:C:1325:LEU:HD11	1:C:1343:LEU:HD22	1.98	0.44
1:C:1450:ALA:N	1:C:1613:ARG:O	2.48	0.44
1:C:2555:SER:HA	1:C:2556:PRO:HD2	1.85	0.44
1:C:2710:LEU:O	1:C:2713:VAL:HG22	2.18	0.44
1:D:2058:ASP:OD1	1:D:2058:ASP:N	2.46	0.44
1:D:2212:TRP:HA	1:D:2229:LYS:HB3	1.98	0.44
1:D:2580:PHE:HE1	1:D:2603:ARG:HH21	1.66	0.44
1:D:2889:ILE:HD11	1:D:2922:LEU:HD22	1.98	0.44
1:E:47:ALA:O	1:E:353:ASP:HA	2.17	0.44
1:E:163:LEU:HD13	1:E:181:LEU:HD23	2.00	0.44
1:E:393:VAL:HG12	1:E:394:PRO:N	2.32	0.44
1:E:1133:VAL:N	1:E:1193:ALA:O	2.48	0.44
1:E:1285:LYS:HB3	1:E:1286:PRO:HD2	1.99	0.44
1:E:1457:GLU:OE2	1:E:1614:TYR:OH	2.30	0.44
1:E:1519:VAL:HG13	1:E:1530:LEU:HD23	1.99	0.44
1:F:42:GLU:HA	1:F:43:PRO:HD3	1.91	0.44
1:F:88:SER:HB3	1:F:314:THR:OG1	2.18	0.44
1:F:163:LEU:HD13	1:F:181:LEU:HD23	2.00	0.44
1:F:782:ARG:NH1	1:F:857:VAL:HG22	2.33	0.44
1:F:1350:TYR:CD1	1:F:1703:ILE:HD11	2.53	0.44
1:F:1551:LEU:HD13	1:F:1551:LEU:HA	1.79	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2472:TYR:CZ	1:F:2930:LEU:HD22	2.52	0.44
1:A:351:ILE:HB	1:A:375:ILE:HG12	1.99	0.44
1:A:2300:PHE:CZ	1:A:2398:LEU:HB3	2.52	0.44
1:A:2958:ASN:HD22	1:A:2976:TRP:HE1	1.65	0.44
1:B:1171:PRO:HA	1:B:1191:ARG:HG2	1.99	0.44
1:B:2014:SER:N	1:C:2591:ARG:NH1	2.66	0.44
1:B:2580:PHE:HE1	1:B:2603:ARG:HH21	1.66	0.44
1:C:1350:TYR:CD1	1:C:1703:ILE:HD11	2.53	0.44
1:C:2246:ALA:N	1:C:2255:ARG:HH12	2.15	0.44
1:D:936:ARG:O	1:D:941:ARG:N	2.45	0.44
1:D:1171:PRO:HA	1:D:1191:ARG:HG2	1.99	0.44
1:D:2246:ALA:N	1:D:2255:ARG:HH12	2.15	0.44
1:D:2334:HIS:CD2	1:D:2391:LYS:HG3	2.50	0.44
1:D:2879:LEU:HD13	1:D:3009:VAL:HG11	1.98	0.44
1:E:351:ILE:HB	1:E:375:ILE:HG12	1.99	0.44
1:E:412:ASP:H	1:E:1025:VAL:CG2	2.31	0.44
1:E:747:LEU:HD22	1:E:751:ARG:CZ	2.47	0.44
1:E:1350:TYR:CD1	1:E:1703:ILE:HD11	2.53	0.44
1:F:657:THR:HB	1:F:662:LYS:HE3	2.00	0.44
1:F:936:ARG:O	1:F:941:ARG:N	2.45	0.44
1:F:1723:GLU:O	1:F:1725:SER:N	2.51	0.44
1:F:2541:ARG:O	1:F:2621:VAL:HG13	2.18	0.44
1:F:2554:ALA:HB1	1:F:2614:LYS:HZ2	1.81	0.44
1:A:412:ASP:H	1:A:1025:VAL:CG2	2.31	0.44
1:A:782:ARG:NH1	1:A:857:VAL:HG22	2.33	0.44
1:A:784:GLU:OE2	1:A:816:LEU:HD21	2.16	0.44
1:A:1133:VAL:O	1:A:1193:ALA:N	2.42	0.44
1:A:1503:ILE:HB	1:A:1542:TYR:HB2	2.00	0.44
1:A:2452:ASP:HA	1:A:3017:ALA:HA	1.98	0.44
1:A:2471:PRO:HA	1:A:2625:ILE:HA	2.00	0.44
1:B:336:TRP:CH2	1:B:360:LEU:HD21	2.52	0.44
1:B:351:ILE:HB	1:B:375:ILE:HG12	1.99	0.44
1:B:412:ASP:H	1:B:1025:VAL:CG2	2.31	0.44
1:B:657:THR:HB	1:B:662:LYS:HE3	2.00	0.44
1:B:782:ARG:NH1	1:B:857:VAL:HG22	2.33	0.44
1:B:1705:VAL:O	1:B:1735:GLU:HB2	2.18	0.44
1:C:671:THR:HB	1:C:682:ASN:CG	2.38	0.44
1:C:782:ARG:NH1	1:C:857:VAL:HG22	2.33	0.44
1:C:970:ILE:HG23	1:C:992:THR:HG21	2.00	0.44
1:C:1581:PHE:HB2	1:C:1586:LEU:HD22	1.99	0.44
1:C:1723:GLU:O	1:C:1725:SER:N	2.51	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2471:PRO:HA	1:C:2625:ILE:HA	2.00	0.44
1:D:1247:ASN:HA	1:D:1248:PRO:HD3	1.83	0.44
1:D:1519:VAL:HG13	1:D:1530:LEU:HD23	1.98	0.44
1:D:1605:LYS:H	1:D:1658:LYS:HE2	1.82	0.44
1:D:1634:ARG:NH1	1:D:1639:ALA:N	2.65	0.44
1:E:515:ALA:HA	1:E:516:PRO:HD3	1.84	0.44
1:F:336:TRP:CH2	1:F:360:LEU:HD21	2.52	0.44
1:F:412:ASP:H	1:F:1025:VAL:CG2	2.31	0.44
1:F:2879:LEU:HD13	1:F:3009:VAL:HG11	1.98	0.44
1:A:222:LEU:HD13	1:A:248:ILE:HD12	1.99	0.44
1:A:475:LEU:HA	1:A:475:LEU:HD23	1.79	0.44
1:A:550:LYS:HD3	1:A:577:GLU:OE2	2.17	0.44
1:A:1350:TYR:CD1	1:A:1703:ILE:HD11	2.53	0.44
1:A:1537:LEU:HD13	1:A:1541:GLN:HB2	2.00	0.44
1:A:1684:ASP:HA	1:A:1687:PHE:HD2	1.82	0.44
1:A:2234:PRO:HB2	1:A:2287:LEU:HD13	1.98	0.44
1:A:2252:VAL:HG22	1:A:2255:ARG:HH21	1.82	0.44
1:A:2735:HIS:O	1:F:2737:VAL:N	2.51	0.44
1:A:2831:MET:HE2	1:A:2831:MET:HB3	1.87	0.44
1:A:2845:PHE:CD2	1:A:2860:ALA:HA	2.52	0.44
1:B:671:THR:HB	1:B:682:ASN:CG	2.38	0.44
1:B:782:ARG:HH11	1:B:857:VAL:HG22	1.83	0.44
1:B:1350:TYR:CD1	1:B:1703:ILE:HD11	2.53	0.44
1:B:2014:SER:H	1:C:2591:ARG:HH12	1.65	0.44
1:B:2297:ARG:HH22	1:B:2391:LYS:HZ3	1.65	0.44
1:B:2831:MET:HE2	1:B:2831:MET:HB3	1.87	0.44
1:C:50:GLY:O	1:C:53:SER:OG	2.36	0.44
1:C:2252:VAL:HG22	1:C:2255:ARG:HH21	1.82	0.44
1:D:1285:LYS:HB3	1:D:1286:PRO:HD2	1.99	0.44
1:D:1350:TYR:CD1	1:D:1703:ILE:HD11	2.53	0.44
1:D:1483:LYS:O	1:D:1487:ILE:HG23	2.17	0.44
1:D:1582:HIS:HA	1:D:1674:ALA:O	2.18	0.44
1:E:695:ILE:HG22	1:E:697:GLU:HG3	2.00	0.44
1:E:782:ARG:NH1	1:E:857:VAL:HG22	2.33	0.44
1:E:1581:PHE:HB2	1:E:1586:LEU:HD22	1.99	0.44
1:E:2710:LEU:O	1:E:2713:VAL:HG22	2.18	0.44
1:F:1171:PRO:HA	1:F:1191:ARG:HG2	1.99	0.44
1:F:1268:GLY:HA2	1:F:1271:LEU:HD12	1.99	0.44
1:F:2209:LEU:O	1:F:2213:VAL:HG23	2.18	0.44
1:F:2252:VAL:HG22	1:F:2255:ARG:HH21	1.82	0.44
1:F:2710:LEU:O	1:F:2713:VAL:HG22	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:3044:ALA:HB1	1:F:3050:PRO:HB3	2.00	0.44
1:A:344:HIS:CD2	1:A:373:ILE:HG13	2.53	0.44
1:A:516:PRO:HA	1:A:962:MET:SD	2.58	0.44
1:A:782:ARG:HH11	1:A:857:VAL:HG22	1.83	0.44
1:A:857:VAL:HG13	1:A:859:PHE:H	1.83	0.44
1:A:2334:HIS:CD2	1:A:2391:LYS:HG3	2.50	0.44
1:B:210:VAL:HG22	1:B:287:PHE:HD1	1.82	0.44
1:B:222:LEU:HD13	1:B:248:ILE:HD12	1.99	0.44
1:B:763:SER:HB3	1:B:766:ASP:HB2	1.99	0.44
1:C:2557:LEU:CG	1:D:2702:GLY:HA3	2.46	0.44
1:C:2610:ARG:NH1	1:C:2700:LEU:HD11	2.25	0.44
1:D:970:ILE:HG23	1:D:992:THR:HG21	2.00	0.44
1:D:1503:ILE:HB	1:D:1542:TYR:HB2	2.00	0.44
1:E:365:ALA:O	1:E:369:ARG:N	2.42	0.44
1:E:381:ARG:O	1:E:384:GLN:HG2	2.17	0.44
1:E:2209:LEU:O	1:E:2213:VAL:HG23	2.18	0.44
1:E:2471:PRO:HA	1:E:2625:ILE:HA	2.00	0.44
1:F:351:ILE:HB	1:F:375:ILE:HG12	1.99	0.44
1:F:516:PRO:HA	1:F:962:MET:SD	2.58	0.44
1:F:671:THR:HB	1:F:682:ASN:CG	2.38	0.44
1:F:746:TYR:HB2	1:F:833:ALA:HB1	1.99	0.44
1:F:1488:VAL:HB	1:F:1579:VAL:HG22	1.99	0.44
1:F:1503:ILE:HB	1:F:1542:TYR:HB2	2.00	0.44
1:A:657:THR:HB	1:A:662:LYS:HE3	2.00	0.43
1:A:874:ASP:OD2	1:A:877:TRP:CD1	2.71	0.43
1:A:1488:VAL:HB	1:A:1579:VAL:HG22	1.99	0.43
1:A:1582:HIS:HA	1:A:1674:ALA:O	2.18	0.43
1:A:1634:ARG:NH1	1:A:1639:ALA:N	2.65	0.43
1:A:2014:SER:H	1:B:2591:ARG:HH12	1.65	0.43
1:A:2014:SER:N	1:B:2591:ARG:HH12	2.16	0.43
1:A:2014:SER:N	1:B:2591:ARG:NH1	2.66	0.43
1:A:2092:THR:O	1:A:2092:THR:CG2	2.64	0.43
1:A:2700:LEU:HD22	1:F:2697:HIS:CD2	2.43	0.43
1:B:515:ALA:HA	1:B:516:PRO:HD3	1.84	0.43
1:B:585:HIS:CB	1:B:694:ASP:HB2	2.47	0.43
1:B:1503:ILE:HB	1:B:1542:TYR:HB2	2.00	0.43
1:B:1733:ASN:H	1:B:1737:ASP:HB2	1.83	0.43
1:C:344:HIS:CD2	1:C:373:ILE:HG13	2.53	0.43
1:C:516:PRO:HA	1:C:962:MET:SD	2.58	0.43
1:C:583:GLY:HA2	1:C:892:ILE:HD13	2.00	0.43
1:C:695:ILE:HG22	1:C:697:GLU:HG3	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:3044:ALA:HB1	1:C:3050:PRO:HB3	2.00	0.43
1:D:34:LEU:O	1:D:38:LEU:HG	2.18	0.43
1:D:782:ARG:HH11	1:D:857:VAL:HG22	1.83	0.43
1:D:1723:GLU:O	1:D:1725:SER:N	2.51	0.43
1:D:3044:ALA:HB1	1:D:3050:PRO:HB3	2.00	0.43
1:E:88:SER:HB3	1:E:314:THR:OG1	2.18	0.43
1:E:671:THR:HB	1:E:682:ASN:CG	2.38	0.43
1:E:1072:TRP:HE1	1:E:1077:VAL:HG22	1.80	0.43
1:E:2180:LYS:HZ1	1:E:2962:ASP:HB3	1.83	0.43
1:E:2300:PHE:CZ	1:E:2398:LEU:HB3	2.52	0.43
1:E:2580:PHE:HE1	1:E:2603:ARG:HH21	1.66	0.43
1:F:344:HIS:CD2	1:F:373:ILE:HG13	2.53	0.43
1:F:2361:VAL:HG21	1:F:2401:ILE:HD11	1.98	0.43
1:A:210:VAL:HG22	1:A:287:PHE:HD1	1.83	0.43
1:A:393:VAL:HG12	1:A:394:PRO:N	2.32	0.43
1:A:671:THR:HB	1:A:682:ASN:CG	2.38	0.43
1:A:1519:VAL:HG13	1:A:1530:LEU:HD23	1.99	0.43
1:A:2591:ARG:HH12	1:C:2014:SER:H	1.66	0.43
1:B:315:VAL:C	1:B:317:LEU:H	2.22	0.43
1:B:874:ASP:OD2	1:B:877:TRP:CD1	2.72	0.43
1:B:2710:LEU:O	1:B:2713:VAL:HG22	2.18	0.43
1:C:34:LEU:O	1:C:38:LEU:HG	2.18	0.43
1:C:210:VAL:HG22	1:C:287:PHE:HD1	1.82	0.43
1:C:315:VAL:C	1:C:317:LEU:H	2.22	0.43
1:C:857:VAL:HG13	1:C:859:PHE:H	1.83	0.43
1:D:276:LYS:HB3	1:D:587:TRP:CH2	2.53	0.43
1:D:516:PRO:HA	1:D:962:MET:SD	2.58	0.43
1:D:2209:LEU:O	1:D:2213:VAL:HG23	2.18	0.43
1:E:1352:PHE:HA	1:E:1353:PRO:HD3	1.72	0.43
1:E:1462:ALA:HB2	1:E:1468:TYR:HE1	1.81	0.43
1:E:1582:HIS:HA	1:E:1674:ALA:O	2.18	0.43
1:E:2252:VAL:HG22	1:E:2255:ARG:HH21	1.83	0.43
1:E:2541:ARG:O	1:E:2621:VAL:HG13	2.18	0.43
1:E:2836:LEU:HD23	1:E:2836:LEU:HA	1.87	0.43
1:F:856:PRO:HG2	1:F:874:ASP:HB2	2.00	0.43
1:A:34:LEU:O	1:A:38:LEU:HG	2.19	0.43
1:A:2096:VAL:HG13	1:A:2097:ALA:H	1.80	0.43
1:B:583:GLY:HA2	1:B:892:ILE:HD13	2.00	0.43
1:B:1605:LYS:H	1:B:1658:LYS:HE2	1.82	0.43
1:B:2032:VAL:HG11	1:D:2032:VAL:HG11	2.00	0.43
1:B:2296:ASN:ND2	1:B:2395:THR:HG21	2.34	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:874:ASP:OD2	1:C:877:TRP:CD1	2.72	0.43
1:C:1247:ASN:HA	1:C:1248:PRO:HD3	1.83	0.43
1:C:1285:LYS:HB3	1:C:1286:PRO:HD2	1.99	0.43
1:D:664:LEU:HB3	1:D:701:ALA:HB1	1.99	0.43
1:D:2296:ASN:HB3	1:D:2299:MET:SD	2.57	0.43
1:D:2591:ARG:NH1	1:F:2014:SER:N	2.66	0.43
1:E:647:THR:N	2:E:4000:FMN:O3P	2.51	0.43
1:E:746:TYR:HB2	1:E:833:ALA:HB1	1.99	0.43
1:E:1537:LEU:HD13	1:E:1541:GLN:HB2	2.00	0.43
1:E:2092:THR:O	1:E:2092:THR:CG2	2.64	0.43
1:E:3065:PRO:O	1:E:3069:GLN:N	2.43	0.43
1:F:2334:HIS:CD2	1:F:2391:LYS:HG3	2.50	0.43
1:F:2580:PHE:HE1	1:F:2603:ARG:HH21	1.66	0.43
1:A:575:HIS:CD2	1:A:644:LEU:HD22	2.49	0.43
1:A:2710:LEU:O	1:A:2713:VAL:HG22	2.18	0.43
1:A:2737:VAL:N	1:F:2735:HIS:O	2.51	0.43
1:A:3044:ALA:HB1	1:A:3050:PRO:HB3	2.00	0.43
1:B:276:LYS:HB3	1:B:587:TRP:CH2	2.53	0.43
1:B:341:THR:HG23	1:B:344:HIS:ND1	2.34	0.43
1:B:658:SER:HB2	1:B:661:VAL:HG23	2.01	0.43
1:B:2735:HIS:O	1:E:2737:VAL:N	2.51	0.43
1:C:365:ALA:O	1:C:369:ARG:N	2.42	0.43
1:C:2209:LEU:O	1:C:2213:VAL:HG23	2.17	0.43
1:C:2512:TRP:O	1:C:2520:LEU:HD12	2.19	0.43
1:D:336:TRP:CH2	1:D:360:LEU:HD21	2.52	0.43
1:D:580:ARG:HD3	1:D:896:ALA:HB3	2.01	0.43
1:D:657:THR:HB	1:D:662:LYS:HE3	2.00	0.43
1:D:1163:ASP:HA	1:D:1168:ARG:HA	2.01	0.43
1:D:1733:ASN:H	1:D:1737:ASP:HB2	1.83	0.43
1:E:344:HIS:CD2	1:E:373:ILE:HG13	2.53	0.43
1:E:856:PRO:HG2	1:E:874:ASP:HB2	2.00	0.43
1:E:1503:ILE:HB	1:E:1542:TYR:HB2	2.00	0.43
1:E:2115:HIS:HA	1:E:2118:LEU:CG	2.49	0.43
1:E:3044:ALA:HB1	1:E:3050:PRO:HB3	2.00	0.43
1:F:276:LYS:HB3	1:F:587:TRP:CH2	2.53	0.43
1:F:393:VAL:HG12	1:F:394:PRO:N	2.32	0.43
1:F:1582:HIS:HA	1:F:1674:ALA:O	2.18	0.43
1:F:1733:ASN:H	1:F:1737:ASP:HB2	1.83	0.43
1:A:1268:GLY:HA2	1:A:1271:LEU:HD12	1.99	0.43
1:B:88:SER:HB3	1:B:314:THR:OG1	2.18	0.43
1:B:647:THR:N	2:B:4000:FMN:O3P	2.51	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:695:ILE:HG22	1:B:697:GLU:HG3	2.01	0.43
1:B:1268:GLY:HA2	1:B:1271:LEU:HD12	1.99	0.43
1:B:1582:HIS:HA	1:B:1674:ALA:O	2.18	0.43
1:B:2252:VAL:HG22	1:B:2255:ARG:HH21	1.82	0.43
1:B:2471:PRO:HA	1:B:2625:ILE:HA	2.00	0.43
1:C:1117:ALA:HA	1:C:1120:GLU:HB2	2.01	0.43
1:C:1537:LEU:HD13	1:C:1541:GLN:HB2	2.00	0.43
1:C:1582:HIS:HA	1:C:1674:ALA:O	2.18	0.43
1:C:2296:ASN:HB3	1:C:2299:MET:SD	2.57	0.43
1:C:2891:LYS:HG3	1:C:2924:ILE:HD13	1.98	0.43
1:D:340:ILE:HD11	1:D:351:ILE:HD13	2.01	0.43
1:D:412:ASP:H	1:D:1025:VAL:CG2	2.31	0.43
1:D:658:SER:HB2	1:D:661:VAL:HG23	2.00	0.43
1:D:857:VAL:HG13	1:D:859:PHE:H	1.83	0.43
1:D:1317:GLY:O	1:D:1324:VAL:HG12	2.19	0.43
1:D:1705:VAL:O	1:D:1735:GLU:HB2	2.18	0.43
1:D:2958:ASN:HD22	1:D:2976:TRP:HE1	1.65	0.43
1:E:340:ILE:HD11	1:E:351:ILE:HD13	2.01	0.43
1:E:580:ARG:HD3	1:E:896:ALA:HB3	2.01	0.43
1:E:970:ILE:HG23	1:E:992:THR:HG21	2.00	0.43
1:E:1087:PHE:HD2	1:F:117:LYS:HZ1	1.67	0.43
1:E:1317:GLY:O	1:E:1324:VAL:HG12	2.19	0.43
1:E:1612:GLY:N	1:E:1623:PHE:O	2.48	0.43
1:F:1537:LEU:HD13	1:F:1541:GLN:HB2	2.00	0.43
1:F:2092:THR:O	1:F:2092:THR:CG2	2.64	0.43
1:A:695:ILE:HG22	1:A:697:GLU:HG3	2.00	0.43
1:A:763:SER:HB3	1:A:766:ASP:HB2	1.99	0.43
1:A:1072:TRP:HE1	1:A:1077:VAL:HG22	1.80	0.43
1:A:1399:ASN:HA	1:A:1400:PRO:HD3	1.86	0.43
1:A:1733:ASN:H	1:A:1737:ASP:HB2	1.83	0.43
1:A:2591:ARG:HH12	1:C:2014:SER:N	2.16	0.43
1:B:307:ILE:HG22	1:B:311:TRP:CE2	2.54	0.43
1:B:516:PRO:HA	1:B:962:MET:SD	2.58	0.43
1:B:2462:VAL:HG13	1:B:2835:VAL:HG13	2.00	0.43
1:B:2541:ARG:O	1:B:2621:VAL:HG13	2.18	0.43
1:B:2557:LEU:CG	1:E:2702:GLY:HA3	2.46	0.43
1:B:3065:PRO:O	1:B:3069:GLN:N	2.42	0.43
1:C:658:SER:HB2	1:C:661:VAL:HG23	2.01	0.43
1:C:782:ARG:HH11	1:C:857:VAL:HG22	1.83	0.43
1:C:2580:PHE:HE1	1:C:2603:ARG:HH21	1.66	0.43
1:D:81:LEU:HD23	1:D:81:LEU:HA	1.88	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1504:ARG:HA	1:D:1540:SER:O	2.19	0.43
1:D:2903:GLU:OE2	1:D:2995:THR:OG1	2.36	0.43
1:E:34:LEU:O	1:E:38:LEU:HG	2.18	0.43
1:E:276:LYS:HB3	1:E:587:TRP:CH2	2.53	0.43
1:E:315:VAL:C	1:E:317:LEU:H	2.22	0.43
1:E:1163:ASP:HA	1:E:1168:ARG:HA	2.01	0.43
1:E:1733:ASN:H	1:E:1737:ASP:HB2	1.83	0.43
1:E:2297:ARG:HH22	1:E:2391:LYS:HZ3	1.67	0.43
1:E:2831:MET:HE2	1:E:2831:MET:HB3	1.87	0.43
1:F:647:THR:N	2:F:4000:FMN:O3P	2.51	0.43
1:F:2297:ARG:HH12	1:F:2391:LYS:NZ	2.17	0.43
1:F:2512:TRP:O	1:F:2520:LEU:HD12	2.19	0.43
1:F:2706:PRO:O	1:F:2709:ILE:HG12	2.19	0.43
1:A:276:LYS:HB3	1:A:587:TRP:CH2	2.53	0.43
1:A:658:SER:HB2	1:A:661:VAL:HG23	2.00	0.43
1:A:780:ARG:NH1	1:A:817:GLU:OE2	2.52	0.43
1:B:34:LEU:O	1:B:38:LEU:HG	2.19	0.43
1:B:163:LEU:HD13	1:B:181:LEU:HD23	2.00	0.43
1:B:2088:ARG:C	1:B:2188:ARG:NH1	2.72	0.43
1:B:2737:VAL:N	1:E:2735:HIS:O	2.51	0.43
1:C:340:ILE:HD11	1:C:351:ILE:HD13	2.01	0.43
1:C:647:THR:N	2:C:4000:FMN:O3P	2.51	0.43
1:C:1163:ASP:HA	1:C:1168:ARG:HA	2.01	0.43
1:C:2032:VAL:HG11	1:F:2032:VAL:HG11	2.01	0.43
1:C:2674:HIS:HA	1:C:2675:PRO:HD2	1.88	0.43
1:C:2958:ASN:HD22	1:C:2976:TRP:HE1	1.65	0.43
1:D:117:LYS:HZ1	1:F:1087:PHE:HD2	1.67	0.43
1:D:475:LEU:HA	1:D:475:LEU:HD23	1.79	0.43
1:D:647:THR:N	2:D:4000:FMN:O3P	2.51	0.43
1:D:2115:HIS:HA	1:D:2118:LEU:CG	2.49	0.43
1:D:2591:ARG:HH12	1:F:2014:SER:N	2.16	0.43
1:E:550:LYS:HD3	1:E:577:GLU:OE2	2.17	0.43
1:E:2014:SER:N	1:F:2591:ARG:NH1	2.66	0.43
1:F:210:VAL:HG22	1:F:287:PHE:HD1	1.82	0.43
1:F:575:HIS:CD2	1:F:644:LEU:HD22	2.48	0.43
1:F:2471:PRO:HA	1:F:2625:ILE:HA	2.00	0.43
1:F:2810:GLY:HA2	1:F:2896:THR:HG22	2.01	0.43
1:A:511:ARG:CB	1:A:540:ASN:HB2	2.46	0.43
1:A:2088:ARG:C	1:A:2188:ARG:NH1	2.72	0.43
1:A:2209:LEU:O	1:A:2213:VAL:HG23	2.18	0.43
1:A:2297:ARG:HH12	1:A:2391:LYS:NZ	2.17	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:511:ARG:CB	1:B:540:ASN:HB2	2.46	0.43
1:B:857:VAL:HG13	1:B:859:PHE:H	1.83	0.43
1:B:1133:VAL:N	1:B:1193:ALA:O	2.48	0.43
1:B:1504:ARG:HA	1:B:1540:SER:O	2.19	0.43
1:B:1619:VAL:HA	1:B:1620:PRO:HD2	1.80	0.43
1:B:3080:ARG:CG	1:B:3080:ARG:NH1	2.72	0.43
1:C:341:THR:HG23	1:C:344:HIS:ND1	2.34	0.43
1:C:1504:ARG:HA	1:C:1540:SER:O	2.19	0.43
1:C:1672:GLN:HE21	1:C:1672:GLN:HB3	1.58	0.43
1:C:2115:HIS:HA	1:C:2118:LEU:CG	2.49	0.43
1:C:2137:GLU:O	1:C:2163:THR:N	2.30	0.43
1:C:2334:HIS:CD2	1:C:2391:LYS:HG3	2.50	0.43
1:C:2444:PRO:HB2	1:C:2988:PRO:HB3	2.01	0.43
1:C:2706:PRO:O	1:C:2709:ILE:HG12	2.19	0.43
1:D:683:GLY:CA	1:D:700:ASN:HB2	2.44	0.43
1:D:874:ASP:OD2	1:D:877:TRP:CD1	2.72	0.43
1:D:1291:LYS:HZ3	1:D:1346:PRO:HA	1.84	0.43
1:D:2710:LEU:O	1:D:2713:VAL:HG22	2.18	0.43
1:E:1660:LEU:HD23	1:E:1660:LEU:HA	1.85	0.43
1:E:2088:ARG:C	1:E:2188:ARG:NH1	2.72	0.43
1:E:2296:ASN:ND2	1:E:2395:THR:HG21	2.34	0.43
1:E:2444:PRO:HB2	1:E:2988:PRO:HB3	2.01	0.43
1:E:2452:ASP:HA	1:E:3017:ALA:HA	1.99	0.43
1:F:307:ILE:HG22	1:F:311:TRP:CE2	2.54	0.43
1:F:583:GLY:HA2	1:F:892:ILE:HD13	2.00	0.43
1:F:1504:ARG:HA	1:F:1540:SER:O	2.19	0.43
1:F:1705:VAL:O	1:F:1735:GLU:HB2	2.18	0.43
1:F:2462:VAL:HG13	1:F:2835:VAL:HG13	2.00	0.43
1:F:2903:GLU:OE2	1:F:2995:THR:OG1	2.36	0.43
1:F:2989:LEU:HD12	1:F:2989:LEU:HA	1.77	0.43
1:A:580:ARG:HD3	1:A:896:ALA:HB3	2.01	0.43
1:A:585:HIS:HD2	1:A:586:SER:H	1.62	0.43
1:A:1705:VAL:O	1:A:1735:GLU:HB2	2.18	0.43
1:A:2115:HIS:HA	1:A:2118:LEU:CG	2.49	0.43
1:A:2706:PRO:O	1:A:2709:ILE:HG12	2.19	0.43
1:B:1163:ASP:HA	1:B:1168:ARG:HA	2.01	0.43
1:B:1537:LEU:HD13	1:B:1541:GLN:HB2	2.00	0.43
1:B:2115:HIS:HA	1:B:2118:LEU:CG	2.48	0.43
1:B:2512:TRP:O	1:B:2520:LEU:HD12	2.19	0.43
1:B:2695:MET:HG3	1:B:2696:TYR:N	2.34	0.43
1:B:3044:ALA:HB1	1:B:3050:PRO:HB3	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:412:ASP:H	1:C:1025:VAL:CG2	2.31	0.43
1:C:2088:ARG:C	1:C:2188:ARG:NH1	2.72	0.43
1:C:2092:THR:O	1:C:2092:THR:CG2	2.64	0.43
1:D:344:HIS:CD2	1:D:373:ILE:HG13	2.53	0.43
1:D:1117:ALA:HA	1:D:1120:GLU:HB2	2.01	0.43
1:D:2088:ARG:C	1:D:2188:ARG:NH1	2.72	0.43
1:D:2296:ASN:ND2	1:D:2395:THR:HG21	2.34	0.43
1:D:2706:PRO:O	1:D:2709:ILE:HG12	2.19	0.43
1:D:2810:GLY:HA2	1:D:2896:THR:HG22	2.01	0.43
1:E:42:GLU:HA	1:E:43:PRO:HD3	1.91	0.43
1:E:516:PRO:HA	1:E:962:MET:SD	2.58	0.43
1:E:857:VAL:HG13	1:E:859:PHE:H	1.83	0.43
1:E:1705:VAL:O	1:E:1735:GLU:HB2	2.18	0.43
1:E:2557:LEU:HB3	1:E:2613:ARG:HB2	2.01	0.43
1:E:2706:PRO:O	1:E:2709:ILE:HG12	2.19	0.43
1:F:70:SER:HG	1:F:142:ARG:HH22	1.65	0.43
1:F:658:SER:HB2	1:F:661:VAL:HG23	2.00	0.43
1:F:857:VAL:HG13	1:F:859:PHE:H	1.83	0.43
1:F:1612:GLY:N	1:F:1623:PHE:O	2.48	0.43
1:F:2891:LYS:HZ2	1:F:2903:GLU:HG2	1.84	0.43
1:A:856:PRO:HG2	1:A:874:ASP:HB2	2.00	0.43
1:A:970:ILE:HG23	1:A:992:THR:HG21	2.00	0.43
1:A:2541:ARG:O	1:A:2621:VAL:HG13	2.18	0.43
1:A:2591:ARG:NH1	1:C:2014:SER:N	2.66	0.43
1:B:344:HIS:CD2	1:B:373:ILE:HG13	2.53	0.43
1:B:580:ARG:HD3	1:B:896:ALA:HB3	2.01	0.43
1:B:2468:GLU:OE2	1:B:2478:ARG:NH2	2.48	0.43
1:B:2558:LEU:HD11	1:E:2610:ARG:HD2	2.01	0.43
1:C:2891:LYS:HZ1	1:C:2904:THR:N	2.17	0.43
1:D:88:SER:HB3	1:D:314:THR:OG1	2.18	0.43
1:D:341:THR:HG23	1:D:344:HIS:ND1	2.34	0.43
1:D:931:VAL:HG23	1:D:934:LEU:N	2.21	0.43
1:D:2014:SER:N	1:E:2591:ARG:HH12	2.16	0.43
1:D:2252:VAL:HG22	1:D:2255:ARG:HH21	1.82	0.43
1:D:2541:ARG:O	1:D:2621:VAL:HG13	2.18	0.43
1:D:2786:ASP:OD2	1:D:2789:MET:HG2	2.19	0.43
1:E:53:SER:HA	1:E:359:ILE:HG13	2.01	0.43
1:E:585:HIS:HD2	1:E:586:SER:H	1.62	0.43
1:E:1084:THR:CG2	1:E:1274:ALA:HA	2.48	0.43
1:E:2014:SER:N	1:F:2591:ARG:HH12	2.16	0.43
1:E:2246:ALA:N	1:E:2255:ARG:HH12	2.15	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2552:ASP:OD1	1:E:2552:ASP:N	2.43	0.43
1:E:2695:MET:HG3	1:E:2696:TYR:N	2.34	0.43
1:F:44:TYR:O	1:F:153:VAL:N	2.44	0.43
1:F:436:THR:OG1	1:F:437:PRO:HD3	2.19	0.43
1:F:695:ILE:HG22	1:F:697:GLU:HG3	2.00	0.43
1:F:1021:LEU:HB3	1:F:1034:GLU:HG2	2.01	0.43
1:F:2695:MET:HG3	1:F:2696:TYR:N	2.34	0.43
1:A:44:TYR:O	1:A:153:VAL:N	2.44	0.42
1:A:647:THR:N	2:A:4000:FMN:O3P	2.51	0.42
1:A:2244:ARG:HG2	1:A:2245:VAL:N	2.34	0.42
1:A:2428:PRO:O	1:A:2428:PRO:CG	2.67	0.42
1:A:2580:PHE:HE1	1:A:2603:ARG:HH21	1.66	0.42
1:A:2808:ARG:HH21	1:A:2901:PRO:HD3	1.84	0.42
1:B:1317:GLY:O	1:B:1324:VAL:HG12	2.19	0.42
1:B:2846:ALA:O	1:B:2859:GLY:HA3	2.19	0.42
1:C:45:ALA:O	1:C:351:ILE:HA	2.19	0.42
1:C:78:GLU:HB2	1:C:176:VAL:HG21	2.01	0.42
1:C:276:LYS:HB3	1:C:587:TRP:CH2	2.53	0.42
1:C:307:ILE:HG22	1:C:311:TRP:CE2	2.54	0.42
1:C:657:THR:HB	1:C:662:LYS:HE3	2.00	0.42
1:C:709:LEU:HD21	1:C:872:ARG:NE	2.34	0.42
1:C:954:PRO:O	1:C:965:ASN:N	2.52	0.42
1:C:1705:VAL:O	1:C:1735:GLU:HB2	2.18	0.42
1:C:2737:VAL:N	1:D:2735:HIS:O	2.51	0.42
1:C:2786:ASP:OD2	1:C:2789:MET:HG2	2.19	0.42
1:C:2810:GLY:HA2	1:C:2896:THR:HG22	2.01	0.42
1:C:2903:GLU:OE2	1:C:2995:THR:OG1	2.36	0.42
1:D:583:GLY:HA2	1:D:892:ILE:HD13	2.00	0.42
1:D:885:GLU:HG2	1:D:887:ASP:H	1.84	0.42
1:D:1093:PRO:HB3	1:D:1277:HIS:CE1	2.52	0.42
1:D:2297:ARG:HH12	1:D:2391:LYS:NZ	2.17	0.42
1:E:211:THR:HB	1:E:286:VAL:HB	2.01	0.42
1:E:307:ILE:HG22	1:E:311:TRP:CE2	2.54	0.42
1:E:1013:THR:CG2	1:E:1014:TRP:N	2.58	0.42
1:E:1723:GLU:O	1:E:1725:SER:N	2.51	0.42
1:E:2512:TRP:O	1:E:2520:LEU:HD12	2.19	0.42
1:F:34:LEU:O	1:F:38:LEU:HG	2.19	0.42
1:F:475:LEU:HD23	1:F:475:LEU:HA	1.79	0.42
1:F:580:ARG:HD3	1:F:896:ALA:HB3	2.01	0.42
1:F:664:LEU:HB3	1:F:701:ALA:HB1	1.99	0.42
1:F:874:ASP:OD2	1:F:877:TRP:CD1	2.71	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1163:ASP:HA	1:F:1168:ARG:HA	2.01	0.42
1:F:2889:ILE:HB	1:F:2924:ILE:HG12	2.01	0.42
1:A:50:GLY:O	1:A:53:SER:OG	2.36	0.42
1:A:88:SER:HB3	1:A:314:THR:OG1	2.18	0.42
1:A:117:LYS:HZ1	1:C:1087:PHE:HD2	1.67	0.42
1:A:203:ASP:OD2	1:C:1087:PHE:CZ	2.72	0.42
1:A:315:VAL:C	1:A:317:LEU:H	2.22	0.42
1:A:1087:PHE:CZ	1:B:203:ASP:OD2	2.73	0.42
1:A:2096:VAL:CG1	1:A:2097:ALA:N	2.82	0.42
1:A:2753:LYS:HD3	1:A:2753:LYS:HA	1.83	0.42
1:A:2810:GLY:HA2	1:A:2896:THR:HG22	2.01	0.42
1:B:709:LEU:HD21	1:B:872:ARG:NE	2.34	0.42
1:B:780:ARG:NH1	1:B:817:GLU:OE2	2.52	0.42
1:B:1662:ARG:HG3	1:B:1663:LYS:N	2.34	0.42
1:B:2706:PRO:O	1:B:2709:ILE:HG12	2.19	0.42
1:C:163:LEU:HD13	1:C:181:LEU:HD23	2.00	0.42
1:C:544:ILE:O	1:C:546:HIS:N	2.41	0.42
1:C:613:GLY:HA2	2:C:4000:FMN:O5'	2.19	0.42
1:C:780:ARG:NH1	1:C:817:GLU:OE2	2.52	0.42
1:C:2296:ASN:ND2	1:C:2395:THR:HG21	2.34	0.42
1:C:2297:ARG:HH12	1:C:2391:LYS:NZ	2.17	0.42
1:C:2735:HIS:O	1:D:2737:VAL:N	2.51	0.42
1:C:2889:ILE:HB	1:C:2924:ILE:HG12	2.01	0.42
1:D:45:ALA:O	1:D:351:ILE:HA	2.20	0.42
1:D:307:ILE:HG22	1:D:311:TRP:CE2	2.54	0.42
1:D:695:ILE:HG22	1:D:697:GLU:HG3	2.00	0.42
1:D:780:ARG:NH1	1:D:817:GLU:OE2	2.52	0.42
1:D:856:PRO:HG2	1:D:874:ASP:HB2	2.00	0.42
1:E:657:THR:HB	1:E:662:LYS:HE3	2.00	0.42
1:E:780:ARG:NH1	1:E:817:GLU:OE2	2.52	0.42
1:E:931:VAL:HG13	1:E:934:LEU:N	2.21	0.42
1:E:2462:VAL:HG13	1:E:2835:VAL:HG13	2.00	0.42
1:E:2786:ASP:OD2	1:E:2789:MET:HG2	2.19	0.42
1:E:2903:GLU:OE2	1:E:2995:THR:OG1	2.36	0.42
1:F:1352:PHE:HA	1:F:1353:PRO:HD3	1.72	0.42
1:F:2428:PRO:O	1:F:2428:PRO:CG	2.67	0.42
1:A:709:LEU:HD21	1:A:872:ARG:NE	2.34	0.42
1:A:1504:ARG:HA	1:A:1540:SER:O	2.19	0.42
1:A:2452:ASP:CG	1:A:2453:LEU:N	2.73	0.42
1:B:45:ALA:O	1:B:351:ILE:HA	2.20	0.42
1:B:53:SER:HA	1:B:359:ILE:HG13	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1634:ARG:NH1	1:B:1639:ALA:H	2.11	0.42
1:B:2297:ARG:HH12	1:B:2391:LYS:NZ	2.17	0.42
1:B:2610:ARG:HD2	1:E:2558:LEU:HD11	2.01	0.42
1:B:2810:GLY:HA2	1:B:2896:THR:HG22	2.01	0.42
1:C:211:THR:HB	1:C:286:VAL:HB	2.01	0.42
1:C:393:VAL:O	1:C:395:GLU:N	2.52	0.42
1:C:436:THR:OG1	1:C:437:PRO:HD3	2.19	0.42
1:C:2244:ARG:HG2	1:C:2245:VAL:N	2.34	0.42
1:C:2452:ASP:CG	1:C:2453:LEU:N	2.73	0.42
1:C:2541:ARG:O	1:C:2621:VAL:HG13	2.18	0.42
1:D:203:ASP:OD2	1:F:1087:PHE:CZ	2.72	0.42
1:D:315:VAL:C	1:D:317:LEU:H	2.22	0.42
1:D:1662:ARG:HG3	1:D:1663:LYS:N	2.34	0.42
1:D:2444:PRO:HB2	1:D:2988:PRO:HB3	2.01	0.42
1:E:583:GLY:HA2	1:E:892:ILE:HD13	2.00	0.42
1:E:874:ASP:OD2	1:E:877:TRP:CD1	2.72	0.42
1:E:1662:ARG:HG3	1:E:1663:LYS:N	2.34	0.42
1:F:341:THR:HG23	1:F:344:HIS:ND1	2.34	0.42
1:F:709:LEU:HD21	1:F:872:ARG:NE	2.34	0.42
1:F:780:ARG:NH1	1:F:817:GLU:OE2	2.52	0.42
1:F:1117:ALA:HA	1:F:1120:GLU:HB2	2.01	0.42
1:F:2786:ASP:OD2	1:F:2789:MET:HG2	2.19	0.42
1:A:336:TRP:HE3	1:A:339:GLU:OE2	2.03	0.42
1:A:816:LEU:HD23	1:A:816:LEU:HA	1.83	0.42
1:A:1280:THR:O	1:A:1288:PRO:HB3	2.20	0.42
1:A:1551:LEU:HD13	1:A:1551:LEU:HA	1.79	0.42
1:A:2530:TYR:O	1:A:2533:ALA:N	2.52	0.42
1:A:2889:ILE:HG13	1:A:2922:LEU:HD13	2.02	0.42
1:A:2911:ALA:O	1:A:2916:ARG:HB2	2.20	0.42
1:B:664:LEU:HB3	1:B:701:ALA:HB1	1.99	0.42
1:B:970:ILE:HG23	1:B:992:THR:HG21	2.00	0.42
1:B:1084:THR:CG2	1:B:1274:ALA:HA	2.48	0.42
1:B:2452:ASP:CG	1:B:2453:LEU:N	2.73	0.42
1:B:2557:LEU:HB3	1:B:2613:ARG:HB2	2.01	0.42
1:B:2891:LYS:HZ2	1:B:2903:GLU:HG2	1.84	0.42
1:B:2957:PRO:HB3	1:B:2980:PRO:N	2.34	0.42
1:C:856:PRO:HG2	1:C:874:ASP:HB2	2.00	0.42
1:C:931:VAL:HG13	1:C:934:LEU:N	2.21	0.42
1:C:2141:VAL:HG22	1:C:2238:PHE:HD2	1.85	0.42
1:C:2855:ALA:HA	1:C:2856:PRO:HD3	1.93	0.42
1:D:613:GLY:HA2	2:D:4000:FMN:O5'	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1280:THR:O	1:D:1288:PRO:HB3	2.20	0.42
1:D:2141:VAL:HG22	1:D:2238:PHE:HD2	1.84	0.42
1:D:2244:ARG:HG2	1:D:2245:VAL:N	2.34	0.42
1:D:2889:ILE:HB	1:D:2924:ILE:HG12	2.01	0.42
1:D:2891:LYS:NZ	1:D:2903:GLU:HB3	2.35	0.42
1:D:2957:PRO:HB3	1:D:2980:PRO:N	2.34	0.42
1:E:658:SER:HB2	1:E:661:VAL:HG23	2.01	0.42
1:E:1504:ARG:HA	1:E:1540:SER:O	2.19	0.42
1:F:1133:VAL:N	1:F:1193:ALA:O	2.48	0.42
1:F:1317:GLY:O	1:F:1324:VAL:HG12	2.19	0.42
1:A:211:THR:HB	1:A:286:VAL:HB	2.02	0.42
1:A:2512:TRP:O	1:A:2520:LEU:HD12	2.19	0.42
1:A:2737:VAL:HG11	1:F:2715:PRO:HD2	2.02	0.42
1:A:2891:LYS:HZ1	1:A:2903:GLU:HB3	1.84	0.42
1:A:2891:LYS:NZ	1:A:2903:GLU:HB3	2.35	0.42
1:A:2957:PRO:HB3	1:A:2980:PRO:N	2.34	0.42
1:B:336:TRP:HE3	1:B:339:GLU:OE2	2.03	0.42
1:B:475:LEU:HA	1:B:475:LEU:HD23	1.79	0.42
1:B:885:GLU:HG2	1:B:887:ASP:H	1.84	0.42
1:B:1280:THR:O	1:B:1288:PRO:HB3	2.20	0.42
1:B:2805:ASP:OD2	1:B:2807:ARG:HB2	2.20	0.42
1:C:1070:VAL:N	1:C:1152:PHE:O	2.51	0.42
1:C:1280:THR:O	1:C:1288:PRO:HB3	2.20	0.42
1:C:2846:ALA:O	1:C:2859:GLY:HA3	2.19	0.42
1:C:2957:PRO:HB3	1:C:2980:PRO:N	2.35	0.42
1:D:163:LEU:HD13	1:D:181:LEU:HD23	2.00	0.42
1:D:511:ARG:CB	1:D:540:ASN:HB2	2.46	0.42
1:D:1106:CYS:SG	1:D:1174:VAL:HG11	2.60	0.42
1:D:2428:PRO:O	1:D:2428:PRO:CG	2.68	0.42
1:D:2557:LEU:HB3	1:D:2613:ARG:HB2	2.01	0.42
1:D:2911:ALA:O	1:D:2916:ARG:HB2	2.19	0.42
1:E:45:ALA:O	1:E:351:ILE:HA	2.20	0.42
1:E:816:LEU:HD23	1:E:816:LEU:HA	1.82	0.42
1:E:1275:ALA:O	1:E:1279:VAL:HG23	2.20	0.42
1:E:2141:VAL:HG22	1:E:2238:PHE:HD2	1.85	0.42
1:E:2452:ASP:CG	1:E:2453:LEU:N	2.73	0.42
1:E:2530:TYR:O	1:E:2533:ALA:N	2.52	0.42
1:F:107:LEU:HD13	1:F:113:VAL:HB	2.02	0.42
1:F:211:THR:HB	1:F:286:VAL:HB	2.01	0.42
1:F:340:ILE:HD11	1:F:351:ILE:HD13	2.00	0.42
1:F:479:LEU:HD21	1:F:485:ILE:HD11	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1093:PRO:HB3	1:F:1277:HIS:CE1	2.52	0.42
1:F:2055:VAL:HG22	1:F:2194:TRP:CD1	2.55	0.42
1:F:2115:HIS:HA	1:F:2118:LEU:CG	2.49	0.42
1:F:2557:LEU:HB3	1:F:2613:ARG:HB2	2.01	0.42
1:A:340:ILE:HD11	1:A:351:ILE:HD13	2.01	0.42
1:A:436:THR:OG1	1:A:437:PRO:HD3	2.19	0.42
1:A:438:THR:HA	1:A:880:HIS:CE1	2.51	0.42
1:A:559:SER:O	1:A:563:ILE:HG12	2.20	0.42
1:A:1093:PRO:HB3	1:A:1277:HIS:CE1	2.52	0.42
1:A:1163:ASP:HA	1:A:1168:ARG:HA	2.01	0.42
1:A:2444:PRO:HB2	1:A:2988:PRO:HB3	2.01	0.42
1:A:2620:THR:OG1	1:A:2791:ARG:NH2	2.52	0.42
1:A:2695:MET:HG3	1:A:2696:TYR:N	2.34	0.42
1:B:211:THR:HB	1:B:286:VAL:HB	2.01	0.42
1:B:340:ILE:HD11	1:B:351:ILE:HD13	2.01	0.42
1:B:479:LEU:HD21	1:B:485:ILE:HD11	2.02	0.42
1:B:613:GLY:HA2	2:B:4000:FMN:O5'	2.19	0.42
1:B:1275:ALA:O	1:B:1279:VAL:HG23	2.20	0.42
1:B:1656:LYS:N	1:B:1657:PRO:HD2	2.35	0.42
1:B:2449:GLU:O	1:B:2449:GLU:CG	2.68	0.42
1:B:2584:ASP:O	1:B:2586:GLU:N	2.53	0.42
1:B:2800:PHE:CZ	1:B:2812:LEU:HD13	2.55	0.42
1:C:81:LEU:HD23	1:C:81:LEU:HA	1.88	0.42
1:C:885:GLU:HG2	1:C:887:ASP:H	1.84	0.42
1:C:1317:GLY:O	1:C:1324:VAL:HG12	2.19	0.42
1:C:1656:LYS:N	1:C:1657:PRO:HD2	2.35	0.42
1:C:2055:VAL:HG22	1:C:2194:TRP:CD1	2.55	0.42
1:C:2428:PRO:O	1:C:2428:PRO:CG	2.67	0.42
1:C:2911:ALA:O	1:C:2916:ARG:HB2	2.19	0.42
1:D:668:THR:HG23	1:D:683:GLY:HA3	2.02	0.42
1:D:957:LEU:O	1:D:1034:GLU:HB2	2.20	0.42
1:D:1021:LEU:HB3	1:D:1034:GLU:HG2	2.01	0.42
1:D:2286:ARG:HD3	1:D:2331:SER:OG	2.20	0.42
1:D:2892:HIS:HA	1:D:2942:GLN:HE22	1.85	0.42
1:E:479:LEU:HD21	1:E:485:ILE:HD11	2.02	0.42
1:E:782:ARG:HH11	1:E:857:VAL:HG22	1.83	0.42
1:E:1008:VAL:O	1:E:1008:VAL:CG2	2.67	0.42
1:E:1117:ALA:HA	1:E:1120:GLU:HB2	2.01	0.42
1:E:1275:ALA:HB2	1:E:1311:PHE:CE2	2.55	0.42
1:E:2805:ASP:OD2	1:E:2807:ARG:HB2	2.20	0.42
1:E:2958:ASN:HD22	1:E:2976:TRP:HE1	1.65	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:53:SER:HA	1:F:359:ILE:HG13	2.01	0.42
1:F:2244:ARG:HG2	1:F:2245:VAL:N	2.34	0.42
1:F:2808:ARG:HH21	1:F:2901:PRO:HD3	1.85	0.42
1:F:2911:ALA:O	1:F:2916:ARG:HB2	2.19	0.42
1:F:2957:PRO:HB3	1:F:2980:PRO:N	2.34	0.42
1:A:970:ILE:O	1:A:974:THR:HG22	2.20	0.42
1:A:1021:LEU:HB3	1:A:1034:GLU:HG2	2.01	0.42
1:A:2055:VAL:HG22	1:A:2194:TRP:CD1	2.55	0.42
1:A:2557:LEU:HB3	1:A:2613:ARG:HB2	2.02	0.42
1:A:2557:LEU:CG	1:F:2702:GLY:HA3	2.45	0.42
1:A:2558:LEU:HD11	1:F:2610:ARG:HD2	2.01	0.42
1:B:1021:LEU:HB3	1:B:1034:GLU:HG2	2.01	0.42
1:B:1087:PHE:CZ	1:C:203:ASP:OD2	2.72	0.42
1:B:1106:CYS:SG	1:B:1174:VAL:HG11	2.60	0.42
1:B:1275:ALA:HB2	1:B:1311:PHE:CE2	2.55	0.42
1:B:2294:SER:HB3	1:B:2310:LYS:HB2	2.02	0.42
1:B:2891:LYS:NZ	1:B:2903:GLU:HB3	2.35	0.42
1:B:2911:ALA:O	1:B:2916:ARG:HB2	2.20	0.42
1:C:479:LEU:HD21	1:C:485:ILE:HD11	2.02	0.42
1:C:970:ILE:O	1:C:974:THR:HG22	2.20	0.42
1:C:2294:SER:HB3	1:C:2310:LYS:HB2	2.02	0.42
1:D:1120:GLU:HA	1:D:1125:VAL:CG2	2.50	0.42
1:D:1133:VAL:N	1:D:1193:ALA:O	2.48	0.42
1:D:1703:ILE:HG22	1:D:1704:GLY:H	1.85	0.42
1:D:2055:VAL:HG22	1:D:2194:TRP:CD1	2.55	0.42
1:D:2294:SER:HB3	1:D:2310:LYS:HB2	2.02	0.42
1:E:957:LEU:O	1:E:1034:GLU:HB2	2.20	0.42
1:E:1087:PHE:CZ	1:F:203:ASP:OD2	2.72	0.42
1:E:1133:VAL:O	1:E:1193:ALA:N	2.42	0.42
1:E:1280:THR:O	1:E:1288:PRO:HB3	2.20	0.42
1:E:2428:PRO:O	1:E:2428:PRO:CG	2.67	0.42
1:E:2620:THR:OG1	1:E:2791:ARG:NH2	2.53	0.42
1:F:315:VAL:C	1:F:317:LEU:H	2.22	0.42
1:F:559:SER:O	1:F:563:ILE:HG12	2.20	0.42
1:F:613:GLY:HA2	2:F:4000:FMN:O5'	2.19	0.42
1:F:782:ARG:HH11	1:F:857:VAL:HG22	1.83	0.42
1:F:1106:CYS:SG	1:F:1174:VAL:HG11	2.60	0.42
1:F:2088:ARG:C	1:F:2188:ARG:NH1	2.72	0.42
1:F:2096:VAL:CG1	1:F:2097:ALA:N	2.82	0.42
1:F:2300:PHE:HZ	1:F:2398:LEU:HB3	1.85	0.42
1:A:307:ILE:HG22	1:A:311:TRP:CE2	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:393:VAL:O	1:A:395:GLU:N	2.53	0.42
1:A:885:GLU:HG2	1:A:887:ASP:H	1.84	0.42
1:A:1008:VAL:CG2	1:A:1008:VAL:O	2.67	0.42
1:A:1084:THR:CG2	1:A:1274:ALA:HA	2.48	0.42
1:A:2032:VAL:HG11	1:E:2032:VAL:HG11	2.00	0.42
1:A:2300:PHE:HZ	1:A:2398:LEU:HB3	1.85	0.42
1:A:2563:LEU:HD21	1:A:2567:PHE:HB2	2.02	0.42
1:A:2786:ASP:OD2	1:A:2789:MET:HG2	2.19	0.42
1:A:2891:LYS:HZ2	1:A:2903:GLU:HG2	1.84	0.42
1:A:3080:ARG:HG3	1:A:3080:ARG:NH1	2.09	0.42
1:B:107:LEU:HD13	1:B:113:VAL:HB	2.01	0.42
1:B:1228:VAL:HB	1:B:1311:PHE:HB2	2.02	0.42
1:B:2141:VAL:HG22	1:B:2238:PHE:HD2	1.85	0.42
1:B:2558:LEU:HB2	1:E:2701:LEU:HD23	2.02	0.42
1:B:2889:ILE:HG13	1:B:2922:LEU:HD13	2.02	0.42
1:C:1275:ALA:HB2	1:C:1311:PHE:CE2	2.55	0.42
1:C:2354:SER:O	1:C:2358:GLU:HG3	2.20	0.42
1:C:2449:GLU:O	1:C:2449:GLU:CG	2.68	0.42
1:C:2620:THR:OG1	1:C:2791:ARG:NH2	2.52	0.42
1:C:2695:MET:HG3	1:C:2696:TYR:N	2.34	0.42
1:C:2892:HIS:HA	1:C:2942:GLN:HE22	1.85	0.42
1:D:1656:LYS:N	1:D:1657:PRO:HD2	2.35	0.42
1:D:2503:LYS:HG3	1:D:2513:TYR:HB2	2.02	0.42
1:D:2530:TYR:O	1:D:2533:ALA:N	2.52	0.42
1:D:2695:MET:HG3	1:D:2696:TYR:N	2.34	0.42
1:E:210:VAL:HG22	1:E:287:PHE:HD1	1.83	0.42
1:E:885:GLU:HG2	1:E:887:ASP:H	1.84	0.42
1:E:1120:GLU:HA	1:E:1125:VAL:CG2	2.50	0.42
1:E:2452:ASP:CG	1:E:2453:LEU:H	2.23	0.42
1:F:78:GLU:HB2	1:F:176:VAL:HG21	2.01	0.42
1:F:336:TRP:HE3	1:F:339:GLU:OE2	2.03	0.42
1:F:1687:PHE:CE1	1:F:1723:GLU:HG2	2.55	0.42
1:F:2444:PRO:HB2	1:F:2988:PRO:HB3	2.01	0.42
1:F:2452:ASP:CG	1:F:2453:LEU:H	2.23	0.42
1:F:2846:ALA:O	1:F:2859:GLY:HA3	2.20	0.42
1:A:341:THR:HG23	1:A:344:HIS:ND1	2.34	0.42
1:A:756:LEU:HD13	1:A:859:PHE:CD2	2.55	0.42
1:A:1133:VAL:N	1:A:1193:ALA:O	2.48	0.42
1:A:2449:GLU:O	1:A:2449:GLU:CG	2.68	0.42
1:A:2805:ASP:OD2	1:A:2807:ARG:HB2	2.20	0.42
1:B:669:LYS:O	1:B:682:ASN:HB3	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:856:PRO:HG2	1:B:874:ASP:HB2	2.00	0.42
1:B:1120:GLU:HA	1:B:1125:VAL:CG2	2.50	0.42
1:B:2014:SER:N	1:C:2591:ARG:HH12	2.16	0.42
1:B:2244:ARG:HG2	1:B:2245:VAL:N	2.34	0.42
1:B:2428:PRO:O	1:B:2428:PRO:CG	2.67	0.42
1:B:2452:ASP:CG	1:B:2453:LEU:H	2.23	0.42
1:C:1021:LEU:HB3	1:C:1034:GLU:HG2	2.01	0.42
1:C:1662:ARG:HG3	1:C:1663:LYS:N	2.34	0.42
1:C:2300:PHE:HZ	1:C:2398:LEU:HB3	1.85	0.42
1:D:1228:VAL:HB	1:D:1311:PHE:HB2	2.02	0.42
1:D:1275:ALA:HB2	1:D:1311:PHE:CE2	2.55	0.42
1:D:1491:ASP:HB2	1:D:1495:ARG:HB2	2.02	0.42
1:D:1611:ILE:HG23	1:D:1624:THR:HA	2.02	0.42
1:D:2354:SER:O	1:D:2358:GLU:HG3	2.20	0.42
1:D:2512:TRP:O	1:D:2520:LEU:HD12	2.19	0.42
1:E:613:GLY:HA2	2:E:4000:FMN:O5'	2.19	0.42
1:E:668:THR:HG23	1:E:683:GLY:HA3	2.02	0.42
1:E:928:ALA:HB1	1:E:931:VAL:CB	2.50	0.42
1:E:1656:LYS:N	1:E:1657:PRO:HD2	2.35	0.42
1:E:2244:ARG:HG2	1:E:2245:VAL:N	2.34	0.42
1:E:2584:ASP:O	1:E:2586:GLU:N	2.53	0.42
1:E:2889:ILE:HG13	1:E:2922:LEU:HD13	2.02	0.42
1:E:2889:ILE:HB	1:E:2924:ILE:HG12	2.01	0.42
1:E:2911:ALA:O	1:E:2916:ARG:HB2	2.19	0.42
1:E:2957:PRO:HB3	1:E:2980:PRO:N	2.35	0.42
1:A:1106:CYS:SG	1:A:1174:VAL:HG11	2.60	0.42
1:A:1120:GLU:HA	1:A:1125:VAL:CG2	2.50	0.42
1:A:1275:ALA:O	1:A:1279:VAL:HG23	2.20	0.42
1:A:1317:GLY:O	1:A:1324:VAL:HG12	2.19	0.42
1:A:2610:ARG:HD2	1:F:2558:LEU:HD11	2.01	0.42
1:A:2701:LEU:HD23	1:F:2558:LEU:HB2	2.02	0.42
1:A:2845:PHE:N	1:A:3003:SER:O	2.46	0.42
1:B:756:LEU:HD13	1:B:859:PHE:CD2	2.55	0.42
1:B:2286:ARG:HD3	1:B:2331:SER:OG	2.20	0.42
1:B:2614:LYS:HZ2	1:E:2583:PHE:HB2	1.85	0.42
1:B:2786:ASP:OD2	1:B:2789:MET:HG2	2.19	0.42
1:B:2892:HIS:HA	1:B:2942:GLN:HE22	1.85	0.42
1:C:107:LEU:HD13	1:C:113:VAL:HB	2.01	0.42
1:C:1084:THR:CG2	1:C:1274:ALA:HA	2.49	0.42
1:C:1380:ALA:HB1	1:C:1474:LEU:CD1	2.50	0.42
1:C:2503:LYS:HG3	1:C:2513:TYR:HB2	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2805:ASP:OD2	1:C:2807:ARG:HB2	2.20	0.42
1:D:436:THR:OG1	1:D:437:PRO:HD3	2.19	0.42
1:D:585:HIS:HD2	1:D:586:SER:H	1.62	0.42
1:D:709:LEU:HD21	1:D:872:ARG:NE	2.34	0.42
1:D:1580:PRO:O	1:D:1583:SER:OG	2.23	0.42
1:D:2297:ARG:HH22	1:D:2391:LYS:HZ3	1.68	0.42
1:D:2300:PHE:HZ	1:D:2398:LEU:HB3	1.85	0.42
1:D:2800:PHE:CZ	1:D:2812:LEU:HD13	2.55	0.42
1:D:2961:LEU:HD22	1:D:2976:TRP:HD1	1.85	0.42
1:E:1228:VAL:HB	1:E:1311:PHE:HB2	2.02	0.42
1:E:1684:ASP:HA	1:E:1687:PHE:HD2	1.82	0.42
1:E:2055:VAL:HG22	1:E:2194:TRP:CD1	2.55	0.42
1:E:2354:SER:O	1:E:2358:GLU:HG3	2.20	0.42
1:F:488:ASN:OD1	1:F:523:SER:OG	2.34	0.42
1:F:928:ALA:HB1	1:F:931:VAL:CB	2.50	0.42
1:F:970:ILE:O	1:F:974:THR:HG22	2.20	0.42
1:F:2620:THR:OG1	1:F:2791:ARG:NH2	2.53	0.42
1:F:2800:PHE:CZ	1:F:2812:LEU:HD13	2.55	0.42
1:F:2805:ASP:OD2	1:F:2807:ARG:HB2	2.20	0.42
1:A:266:ALA:O	1:A:270:GLU:HG3	2.20	0.41
1:A:668:THR:HG23	1:A:683:GLY:HA3	2.02	0.41
1:A:1117:ALA:HA	1:A:1120:GLU:HB2	2.01	0.41
1:B:1117:ALA:HA	1:B:1120:GLU:HB2	2.01	0.41
1:B:1399:ASN:HA	1:B:1400:PRO:HD3	1.86	0.41
1:B:1706:LYS:HA	1:B:1735:GLU:HG3	2.02	0.41
1:B:2354:SER:O	1:B:2358:GLU:HG3	2.20	0.41
1:B:2620:THR:OG1	1:B:2791:ARG:NH2	2.53	0.41
1:B:2701:LEU:HD23	1:E:2558:LEU:HB2	2.02	0.41
1:C:266:ALA:O	1:C:270:GLU:HG3	2.20	0.41
1:C:369:ARG:HD2	1:C:369:ARG:HA	1.85	0.41
1:C:795:HIS:NE2	1:C:797:GLN:HB2	2.35	0.41
1:C:1637:VAL:HA	1:C:1638:PRO:HD2	1.91	0.41
1:C:1733:ASN:H	1:C:1737:ASP:HB2	1.83	0.41
1:C:2800:PHE:CZ	1:C:2812:LEU:HD13	2.55	0.41
1:D:50:GLY:O	1:D:53:SER:OG	2.36	0.41
1:D:70:SER:HG	1:D:142:ARG:HH22	1.64	0.41
1:D:211:THR:HB	1:D:286:VAL:HB	2.01	0.41
1:D:417:LEU:HD21	1:D:625:LEU:HD21	2.02	0.41
1:D:669:LYS:O	1:D:682:ASN:HB3	2.20	0.41
1:D:1412:HIS:HD2	1:D:1413:PRO:CD	2.31	0.41
1:D:2096:VAL:CG1	1:D:2097:ALA:N	2.82	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2452:ASP:CG	1:D:2453:LEU:N	2.73	0.41
1:D:2584:ASP:O	1:D:2586:GLU:N	2.53	0.41
1:D:2591:ARG:HH12	1:F:2014:SER:H	1.65	0.41
1:D:2889:ILE:HG13	1:D:2922:LEU:HD13	2.02	0.41
1:E:669:LYS:O	1:E:682:ASN:HB3	2.20	0.41
1:E:1460:ALA:O	1:E:1464:VAL:HG22	2.20	0.41
1:E:1491:ASP:HB2	1:E:1495:ARG:HB2	2.02	0.41
1:E:2294:SER:HB3	1:E:2310:LYS:HB2	2.02	0.41
1:E:2297:ARG:HH12	1:E:2391:LYS:NZ	2.17	0.41
1:E:2810:GLY:HA2	1:E:2896:THR:HG22	2.01	0.41
1:F:45:ALA:O	1:F:351:ILE:HA	2.20	0.41
1:F:266:ALA:O	1:F:270:GLU:HG3	2.20	0.41
1:F:1611:ILE:HG23	1:F:1624:THR:HA	2.02	0.41
1:F:1619:VAL:HA	1:F:1620:PRO:HD2	1.80	0.41
1:F:2584:ASP:O	1:F:2586:GLU:N	2.53	0.41
1:F:2889:ILE:HG13	1:F:2922:LEU:HD13	2.02	0.41
1:F:2891:LYS:NZ	1:F:2903:GLU:HB3	2.35	0.41
1:A:613:GLY:HA2	2:A:4000:FMN:O5'	2.19	0.41
1:A:928:ALA:HB1	1:A:931:VAL:CB	2.50	0.41
1:A:1611:ILE:HG23	1:A:1624:THR:HA	2.02	0.41
1:A:1687:PHE:CE1	1:A:1723:GLU:HG2	2.55	0.41
1:A:1703:ILE:HG22	1:A:1704:GLY:H	1.85	0.41
1:A:2555:SER:HA	1:A:2556:PRO:HD2	1.85	0.41
1:B:393:VAL:O	1:B:395:GLU:N	2.52	0.41
1:B:1380:ALA:HB1	1:B:1474:LEU:CD1	2.50	0.41
1:B:1687:PHE:CE1	1:B:1723:GLU:HG2	2.55	0.41
1:B:2055:VAL:HG22	1:B:2194:TRP:CD1	2.55	0.41
1:B:2702:GLY:HA3	1:E:2557:LEU:CG	2.46	0.41
1:C:2492:VAL:HG12	1:C:2526:ILE:HG22	2.02	0.41
1:C:2558:LEU:HB2	1:D:2701:LEU:HD23	2.02	0.41
1:C:2808:ARG:HH21	1:C:2901:PRO:HD3	1.85	0.41
1:D:53:SER:HA	1:D:359:ILE:HG13	2.01	0.41
1:D:160:GLN:HA	1:D:329:ILE:HD13	2.03	0.41
1:D:393:VAL:O	1:D:395:GLU:N	2.52	0.41
1:D:479:LEU:HD21	1:D:485:ILE:HD11	2.02	0.41
1:D:756:LEU:HD13	1:D:859:PHE:CD2	2.55	0.41
1:D:970:ILE:O	1:D:974:THR:HG22	2.20	0.41
1:D:1095:LEU:HD23	1:D:1098:VAL:HA	2.02	0.41
1:D:1275:ALA:O	1:D:1279:VAL:HG23	2.20	0.41
1:D:1380:ALA:HB1	1:D:1474:LEU:CD1	2.50	0.41
1:D:1660:LEU:HD23	1:D:1660:LEU:HA	1.85	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2299:MET:H	1:D:2299:MET:HG2	1.68	0.41
1:D:2710:LEU:HD12	1:D:2713:VAL:HG21	2.03	0.41
1:D:2805:ASP:OD2	1:D:2807:ARG:HB2	2.20	0.41
1:D:2846:ALA:O	1:D:2859:GLY:HA3	2.20	0.41
1:E:78:GLU:HB2	1:E:176:VAL:HG21	2.01	0.41
1:E:795:HIS:NE2	1:E:797:GLN:HB2	2.35	0.41
1:E:1380:ALA:HB1	1:E:1474:LEU:CD1	2.50	0.41
1:E:2096:VAL:CG2	1:E:2097:ALA:N	2.82	0.41
1:F:1280:THR:O	1:F:1288:PRO:HB3	2.20	0.41
1:F:1637:VAL:HA	1:F:1638:PRO:HD2	1.91	0.41
1:F:2452:ASP:CG	1:F:2453:LEU:N	2.73	0.41
1:A:53:SER:HA	1:A:359:ILE:HG13	2.01	0.41
1:A:78:GLU:HB2	1:A:176:VAL:HG21	2.01	0.41
1:A:107:LEU:HD13	1:A:113:VAL:HB	2.02	0.41
1:A:160:GLN:HA	1:A:329:ILE:HD13	2.02	0.41
1:A:1656:LYS:N	1:A:1657:PRO:HD2	2.35	0.41
1:A:2294:SER:HB3	1:A:2310:LYS:HB2	2.02	0.41
1:A:2584:ASP:O	1:A:2586:GLU:N	2.53	0.41
1:B:160:GLN:HA	1:B:329:ILE:HD13	2.02	0.41
1:B:1491:ASP:HB2	1:B:1495:ARG:HB2	2.02	0.41
1:B:1703:ILE:HG22	1:B:1704:GLY:H	1.85	0.41
1:B:2891:LYS:HZ1	1:B:2903:GLU:HB3	1.85	0.41
1:C:53:SER:HA	1:C:359:ILE:HG13	2.01	0.41
1:C:70:SER:HG	1:C:142:ARG:NH2	2.16	0.41
1:C:160:GLN:HA	1:C:329:ILE:HD13	2.02	0.41
1:C:202:GLY:O	1:C:289:PRO:HD2	2.21	0.41
1:C:1228:VAL:HB	1:C:1311:PHE:HB2	2.02	0.41
1:C:1703:ILE:HG22	1:C:1704:GLY:H	1.85	0.41
1:C:1706:LYS:HA	1:C:1735:GLU:HG3	2.03	0.41
1:C:2205:ASP:O	1:C:2209:LEU:HB2	2.21	0.41
1:C:2610:ARG:HD2	1:D:2558:LEU:HD11	2.01	0.41
1:D:1706:LYS:HA	1:D:1735:GLU:HG3	2.03	0.41
1:D:2449:GLU:O	1:D:2449:GLU:CG	2.68	0.41
1:E:341:THR:HG23	1:E:344:HIS:ND1	2.34	0.41
1:E:511:ARG:CB	1:E:540:ASN:HB2	2.46	0.41
1:E:559:SER:O	1:E:563:ILE:HG12	2.20	0.41
1:E:1687:PHE:CE1	1:E:1723:GLU:HG2	2.55	0.41
1:E:2449:GLU:O	1:E:2449:GLU:CG	2.68	0.41
1:E:2503:LYS:HG3	1:E:2513:TYR:HB2	2.02	0.41
1:E:2610:ARG:NH1	1:E:2700:LEU:HD11	2.25	0.41
1:E:2800:PHE:CZ	1:E:2812:LEU:HD13	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2846:ALA:O	1:E:2859:GLY:HA3	2.20	0.41
1:F:393:VAL:O	1:F:395:GLU:N	2.53	0.41
1:F:885:GLU:HG2	1:F:887:ASP:H	1.84	0.41
1:F:957:LEU:O	1:F:1034:GLU:HB2	2.20	0.41
1:F:1013:THR:CG2	1:F:1014:TRP:H	1.96	0.41
1:F:1228:VAL:HB	1:F:1311:PHE:HB2	2.02	0.41
1:F:1460:ALA:O	1:F:1464:VAL:HG22	2.20	0.41
1:F:2134:TYR:HB3	1:F:2189:PHE:HD2	1.85	0.41
1:F:2296:ASN:ND2	1:F:2395:THR:HG21	2.34	0.41
1:F:2297:ARG:HH22	1:F:2391:LYS:HZ3	1.67	0.41
1:F:2354:SER:O	1:F:2358:GLU:HG3	2.20	0.41
1:A:45:ALA:O	1:A:351:ILE:HA	2.20	0.41
1:A:618:PRO:HB3	1:A:915:PHE:HA	2.02	0.41
1:A:795:HIS:NE2	1:A:797:GLN:HB2	2.35	0.41
1:A:2141:VAL:HG22	1:A:2238:PHE:HD2	1.85	0.41
1:A:2735:HIS:O	1:F:2737:VAL:HG23	2.21	0.41
1:A:2800:PHE:CE1	1:A:2812:LEU:HD22	2.50	0.41
1:B:417:LEU:HD21	1:B:625:LEU:HD21	2.02	0.41
1:B:436:THR:OG1	1:B:437:PRO:HD3	2.19	0.41
1:B:795:HIS:NE2	1:B:797:GLN:HB2	2.35	0.41
1:B:1611:ILE:HG23	1:B:1624:THR:HA	2.02	0.41
1:B:2180:LYS:HZ1	1:B:2962:ASP:HB3	1.84	0.41
1:B:2715:PRO:HD2	1:E:2737:VAL:HG11	2.02	0.41
1:B:2961:LEU:HD22	1:B:2976:TRP:HD1	1.85	0.41
1:C:42:GLU:HA	1:C:43:PRO:HD3	1.91	0.41
1:C:488:ASN:OD1	1:C:523:SER:OG	2.34	0.41
1:C:668:THR:HG23	1:C:683:GLY:HA3	2.02	0.41
1:C:957:LEU:O	1:C:1034:GLU:HB2	2.20	0.41
1:C:2557:LEU:HB3	1:C:2613:ARG:HB2	2.01	0.41
1:C:2584:ASP:O	1:C:2586:GLU:N	2.53	0.41
1:D:1087:PHE:CZ	1:E:203:ASP:OD2	2.72	0.41
1:D:1533:VAL:N	1:D:1543:ALA:O	2.52	0.41
1:D:2180:LYS:HZ1	1:D:2962:ASP:HB3	1.84	0.41
1:D:2452:ASP:CG	1:D:2453:LEU:H	2.23	0.41
1:D:2563:LEU:HD21	1:D:2567:PHE:HB2	2.02	0.41
1:E:336:TRP:HE3	1:E:339:GLU:OE2	2.03	0.41
1:E:393:VAL:O	1:E:395:GLU:N	2.53	0.41
1:E:970:ILE:O	1:E:974:THR:HG22	2.20	0.41
1:E:1106:CYS:SG	1:E:1174:VAL:HG11	2.60	0.41
1:E:1412:HIS:CD2	1:E:1413:PRO:HD2	2.49	0.41
1:E:1703:ILE:HG22	1:E:1704:GLY:H	1.85	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2563:LEU:HD21	1:E:2567:PHE:HB2	2.02	0.41
1:F:1120:GLU:HA	1:F:1125:VAL:CG2	2.50	0.41
1:F:1380:ALA:HB1	1:F:1474:LEU:CD1	2.50	0.41
1:F:1462:ALA:HB2	1:F:1468:TYR:CE1	2.56	0.41
1:F:1656:LYS:N	1:F:1657:PRO:HD2	2.35	0.41
1:A:417:LEU:HD21	1:A:625:LEU:HD21	2.02	0.41
1:A:1095:LEU:HD23	1:A:1098:VAL:HA	2.03	0.41
1:A:1380:ALA:HB1	1:A:1474:LEU:CD1	2.50	0.41
1:A:2296:ASN:ND2	1:A:2395:THR:HG21	2.34	0.41
1:B:78:GLU:HB2	1:B:176:VAL:HG21	2.01	0.41
1:B:360:LEU:HA	1:B:363:LEU:HB3	2.02	0.41
1:B:2014:SER:H	1:C:2591:ARG:NH1	2.19	0.41
1:B:2483:VAL:HG13	1:B:2954:VAL:HG11	2.03	0.41
1:B:2700:LEU:HD22	1:E:2697:HIS:CD2	2.43	0.41
1:B:2919:GLY:O	1:B:2921:PRO:HD3	2.21	0.41
1:C:358:ASP:OD2	1:C:361:THR:HB	2.21	0.41
1:C:587:TRP:CZ2	1:C:694:ASP:OD2	2.74	0.41
1:C:709:LEU:HD11	1:C:872:ARG:CZ	2.51	0.41
1:C:928:ALA:HB1	1:C:931:VAL:CB	2.50	0.41
1:C:2134:TYR:HB3	1:C:2189:PHE:HD2	1.85	0.41
1:C:2710:LEU:HD12	1:C:2713:VAL:HG21	2.03	0.41
1:C:2737:VAL:HG11	1:D:2715:PRO:HD2	2.02	0.41
1:C:2770:LEU:CB	1:C:2815:GLN:HB3	2.51	0.41
1:D:266:ALA:O	1:D:270:GLU:HG3	2.20	0.41
1:D:1087:PHE:HD2	1:E:117:LYS:HZ1	1.67	0.41
1:D:2808:ARG:HH21	1:D:2901:PRO:HD3	1.85	0.41
1:E:180:ALA:O	1:E:184:LEU:HG	2.21	0.41
1:E:233:LEU:HB3	1:E:251:THR:OG1	2.21	0.41
1:E:618:PRO:HB3	1:E:915:PHE:HA	2.02	0.41
1:E:745:THR:OG1	1:E:834:GLU:O	2.19	0.41
1:E:793:ARG:HH12	1:E:2523:GLU:CD	2.24	0.41
1:E:1247:ASN:HA	1:E:1248:PRO:HD3	1.83	0.41
1:E:1619:VAL:HA	1:E:1620:PRO:HD2	1.80	0.41
1:E:2134:TYR:HB3	1:E:2189:PHE:HD2	1.85	0.41
1:E:2808:ARG:HH21	1:E:2901:PRO:HD3	1.85	0.41
1:E:2919:GLY:O	1:E:2921:PRO:HD3	2.21	0.41
1:F:202:GLY:O	1:F:289:PRO:HD2	2.20	0.41
1:F:233:LEU:HB3	1:F:251:THR:OG1	2.21	0.41
1:F:756:LEU:HD13	1:F:859:PHE:CD2	2.55	0.41
1:F:2449:GLU:O	1:F:2449:GLU:CG	2.68	0.41
1:A:233:LEU:HB3	1:A:251:THR:OG1	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:358:ASP:OD2	1:A:361:THR:HB	2.21	0.41
1:A:374:GLY:C	1:A:375:ILE:HG13	2.41	0.41
1:A:1275:ALA:HB2	1:A:1311:PHE:CE2	2.55	0.41
1:A:1504:ARG:HA	1:A:1505:PRO:HD2	1.93	0.41
1:A:2098:THR:HG23	1:A:2099:GLN:N	2.36	0.41
1:A:2452:ASP:CG	1:A:2453:LEU:H	2.23	0.41
1:A:2846:ALA:O	1:A:2859:GLY:HA3	2.20	0.41
1:A:2919:GLY:O	1:A:2921:PRO:HD3	2.21	0.41
1:B:709:LEU:HD11	1:B:872:ARG:CZ	2.51	0.41
1:B:957:LEU:O	1:B:1034:GLU:HB2	2.20	0.41
1:B:2205:ASP:O	1:B:2209:LEU:HB2	2.21	0.41
1:B:2300:PHE:HZ	1:B:2398:LEU:HB3	1.85	0.41
1:B:2611:VAL:HA	1:B:2612:PRO:HD3	1.86	0.41
1:B:2891:LYS:HB2	1:B:2893:ASP:OD2	2.21	0.41
1:C:336:TRP:HE3	1:C:339:GLU:OE2	2.03	0.41
1:C:417:LEU:HD21	1:C:625:LEU:HD21	2.02	0.41
1:C:580:ARG:HD3	1:C:896:ALA:HB3	2.01	0.41
1:C:1008:VAL:O	1:C:1008:VAL:CG2	2.67	0.41
1:C:2400:ASP:OD1	1:C:2400:ASP:N	2.45	0.41
1:D:107:LEU:HD13	1:D:113:VAL:HB	2.02	0.41
1:D:436:THR:HG22	1:D:460:GLY:HA3	2.03	0.41
1:D:1237:ARG:HG2	1:D:1237:ARG:HH11	1.86	0.41
1:D:1352:PHE:HA	1:D:1353:PRO:HD3	1.72	0.41
1:D:2919:GLY:O	1:D:2921:PRO:HD3	2.21	0.41
1:E:202:GLY:O	1:E:289:PRO:HD2	2.21	0.41
1:E:266:ALA:O	1:E:270:GLU:HG3	2.20	0.41
1:E:1021:LEU:HB3	1:E:1034:GLU:HG2	2.01	0.41
1:E:1095:LEU:HD23	1:E:1098:VAL:HA	2.02	0.41
1:E:1462:ALA:HB2	1:E:1468:TYR:CE1	2.56	0.41
1:E:1611:ILE:HG23	1:E:1624:THR:HA	2.02	0.41
1:E:1706:LYS:HA	1:E:1735:GLU:HG3	2.03	0.41
1:E:2013:LEU:HD23	1:E:2013:LEU:HA	1.87	0.41
1:E:2014:SER:H	1:F:2591:ARG:NH1	2.19	0.41
1:E:2891:LYS:NZ	1:E:2903:GLU:HB3	2.35	0.41
1:F:587:TRP:CZ2	1:F:694:ASP:OD2	2.74	0.41
1:F:1275:ALA:HB2	1:F:1311:PHE:CE2	2.55	0.41
1:F:1491:ASP:HB2	1:F:1495:ARG:HB2	2.02	0.41
1:F:1662:ARG:HG3	1:F:1663:LYS:N	2.34	0.41
1:F:2563:LEU:HD21	1:F:2567:PHE:HB2	2.02	0.41
1:A:488:ASN:OD1	1:A:523:SER:OG	2.34	0.41
1:A:585:HIS:HB3	1:A:694:ASP:HB2	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1070:VAL:N	1:A:1152:PHE:O	2.52	0.41
1:A:1462:ALA:HB2	1:A:1468:TYR:CE1	2.56	0.41
1:A:1662:ARG:HG3	1:A:1663:LYS:N	2.34	0.41
1:A:2286:ARG:HD3	1:A:2331:SER:OG	2.20	0.41
1:A:2889:ILE:HB	1:A:2924:ILE:HG12	2.01	0.41
1:A:2961:LEU:HD22	1:A:2976:TRP:HD1	1.85	0.41
1:B:428:SER:HA	1:B:429:PRO:HD3	1.94	0.41
1:B:1008:VAL:CG1	1:B:1008:VAL:O	2.68	0.41
1:B:2770:LEU:CB	1:B:2815:GLN:HB3	2.51	0.41
1:B:2989:LEU:HD12	1:B:2989:LEU:HA	1.77	0.41
1:C:438:THR:HA	1:C:880:HIS:CE1	2.51	0.41
1:C:1275:ALA:O	1:C:1279:VAL:HG23	2.20	0.41
1:C:1687:PHE:CE1	1:C:1723:GLU:HG2	2.55	0.41
1:C:2665:THR:HA	1:C:2666:PRO:HD3	1.86	0.41
1:D:336:TRP:HE3	1:D:339:GLU:OE2	2.03	0.41
1:D:374:GLY:C	1:D:375:ILE:HG13	2.41	0.41
1:D:795:HIS:NE2	1:D:797:GLN:HB2	2.35	0.41
1:D:928:ALA:HB1	1:D:931:VAL:CB	2.50	0.41
1:D:2141:VAL:HG22	1:D:2238:PHE:CD2	2.56	0.41
1:D:2620:THR:OG1	1:D:2791:ARG:NH2	2.53	0.41
1:E:438:THR:HA	1:E:880:HIS:CE1	2.51	0.41
1:E:709:LEU:HD21	1:E:872:ARG:NE	2.34	0.41
1:E:2228:LEU:HD23	1:E:2228:LEU:HA	1.86	0.41
1:E:2483:VAL:HG13	1:E:2954:VAL:HG11	2.03	0.41
1:E:2892:HIS:HA	1:E:2942:GLN:HE22	1.85	0.41
1:F:160:GLN:HA	1:F:329:ILE:HD13	2.02	0.41
1:F:374:GLY:C	1:F:375:ILE:HG13	2.41	0.41
1:F:668:THR:HG23	1:F:683:GLY:HA3	2.02	0.41
1:F:793:ARG:HH12	1:F:2523:GLU:CD	2.24	0.41
1:F:795:HIS:NE2	1:F:797:GLN:HB2	2.35	0.41
1:F:1084:THR:CG2	1:F:1274:ALA:HA	2.48	0.41
1:F:2483:VAL:HG13	1:F:2954:VAL:HG11	2.03	0.41
1:A:954:PRO:O	1:A:965:ASN:N	2.52	0.41
1:A:2715:PRO:HD2	1:F:2737:VAL:HG11	2.02	0.41
1:B:266:ALA:O	1:B:270:GLU:HG3	2.20	0.41
1:B:618:PRO:HB3	1:B:915:PHE:HA	2.02	0.41
1:B:970:ILE:O	1:B:974:THR:HG22	2.20	0.41
1:B:1400:PRO:O	1:B:1415:GLY:HA2	2.21	0.41
1:C:1106:CYS:SG	1:C:1174:VAL:HG11	2.60	0.41
1:C:1120:GLU:HA	1:C:1125:VAL:CG2	2.50	0.41
1:C:1399:ASN:HA	1:C:1400:PRO:HD3	1.86	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1400:PRO:O	1:C:1415:GLY:HA2	2.21	0.41
1:C:1460:ALA:O	1:C:1464:VAL:HG22	2.20	0.41
1:C:2297:ARG:HH22	1:C:2391:LYS:HZ3	1.68	0.41
1:C:2558:LEU:HD11	1:D:2610:ARG:HD2	2.01	0.41
1:C:2735:HIS:O	1:D:2737:VAL:HG23	2.21	0.41
1:C:2891:LYS:HB2	1:C:2893:ASP:OD2	2.21	0.41
1:D:78:GLU:HB2	1:D:176:VAL:HG21	2.02	0.41
1:D:559:SER:O	1:D:563:ILE:HG12	2.20	0.41
1:D:594:LEU:O	1:D:598:TYR:HB2	2.21	0.41
1:D:795:HIS:HE2	1:D:797:GLN:HB2	1.86	0.41
1:D:1013:THR:CG2	1:D:1014:TRP:N	2.58	0.41
1:D:1460:ALA:O	1:D:1464:VAL:HG22	2.20	0.41
1:D:1687:PHE:CE1	1:D:1723:GLU:HG2	2.55	0.41
1:D:1695:LEU:HD12	1:D:1695:LEU:HA	1.71	0.41
1:D:2098:THR:HG23	1:D:2099:GLN:N	2.36	0.41
1:D:2405:MET:O	1:D:2409:ALA:HB3	2.21	0.41
1:D:3062:HIS:H	1:D:3066:GLU:HG3	1.86	0.41
1:E:436:THR:OG1	1:E:437:PRO:HD3	2.19	0.41
1:E:1412:HIS:HD2	1:E:1413:PRO:CD	2.31	0.41
1:E:2961:LEU:HD22	1:E:2976:TRP:HD1	1.85	0.41
1:F:1275:ALA:O	1:F:1279:VAL:HG23	2.20	0.41
1:F:1703:ILE:HG22	1:F:1704:GLY:H	1.85	0.41
1:F:2891:LYS:HB2	1:F:2893:ASP:OD2	2.21	0.41
1:F:2919:GLY:O	1:F:2921:PRO:HD3	2.21	0.41
1:A:180:ALA:O	1:A:184:LEU:HG	2.21	0.41
1:A:202:GLY:O	1:A:289:PRO:HD2	2.21	0.41
1:A:479:LEU:HD21	1:A:485:ILE:HD11	2.02	0.41
1:A:594:LEU:O	1:A:598:TYR:HB2	2.21	0.41
1:A:669:LYS:O	1:A:682:ASN:HB3	2.20	0.41
1:A:1099:PRO:HB2	1:A:1295:TRP:HE1	1.86	0.41
1:A:1460:ALA:O	1:A:1464:VAL:HG22	2.20	0.41
1:A:2014:SER:H	1:B:2591:ARG:NH1	2.19	0.41
1:A:2134:TYR:HB3	1:A:2189:PHE:HD2	1.85	0.41
1:A:2354:SER:O	1:A:2358:GLU:HG3	2.20	0.41
1:A:2422:GLU:O	1:A:2422:GLU:CG	2.69	0.41
1:A:2503:LYS:HG3	1:A:2513:TYR:HB2	2.02	0.41
1:A:2558:LEU:HB2	1:F:2701:LEU:HD23	2.02	0.41
1:A:2710:LEU:HD12	1:A:2713:VAL:HG21	2.03	0.41
1:A:2770:LEU:CB	1:A:2815:GLN:HB3	2.51	0.41
1:A:2800:PHE:CZ	1:A:2812:LEU:HD13	2.55	0.41
1:B:50:GLY:O	1:B:53:SER:OG	2.36	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:278:ARG:HD2	1:B:674:TRP:CE3	2.56	0.41
1:B:358:ASP:OD2	1:B:361:THR:HB	2.21	0.41
1:B:374:GLY:C	1:B:375:ILE:HG13	2.41	0.41
1:B:559:SER:O	1:B:563:ILE:HG12	2.20	0.41
1:B:795:HIS:HE2	1:B:797:GLN:HB2	1.86	0.41
1:B:1017:ILE:HG12	1:B:1045:VAL:HG11	2.03	0.41
1:B:1237:ARG:HG2	1:B:1237:ARG:HH11	1.86	0.41
1:B:1460:ALA:O	1:B:1464:VAL:HG22	2.20	0.41
1:B:2098:THR:HG23	1:B:2099:GLN:N	2.36	0.41
1:B:2212:TRP:O	1:B:2229:LYS:HB3	2.21	0.41
1:B:2405:MET:O	1:B:2409:ALA:HB3	2.21	0.41
1:B:2422:GLU:O	1:B:2422:GLU:CG	2.69	0.41
1:B:2444:PRO:HB2	1:B:2988:PRO:HB3	2.01	0.41
1:B:2808:ARG:HH21	1:B:2901:PRO:HD3	1.85	0.41
1:C:133:GLN:O	1:C:137:VAL:HG23	2.21	0.41
1:C:233:LEU:HB3	1:C:251:THR:OG1	2.21	0.41
1:C:559:SER:O	1:C:563:ILE:HG12	2.20	0.41
1:C:618:PRO:HB3	1:C:915:PHE:HA	2.02	0.41
1:C:756:LEU:HD13	1:C:859:PHE:CD2	2.55	0.41
1:C:1634:ARG:NH1	1:C:1639:ALA:H	2.11	0.41
1:C:1719:LEU:O	1:C:1723:GLU:HB3	2.21	0.41
1:C:1986:LEU:HA	1:C:1989:PHE:CD2	2.56	0.41
1:C:2096:VAL:CG2	1:C:2097:ALA:N	2.82	0.41
1:C:2212:TRP:O	1:C:2229:LYS:HB3	2.21	0.41
1:C:2405:MET:O	1:C:2409:ALA:HB3	2.21	0.41
1:C:2452:ASP:CG	1:C:2453:LEU:H	2.24	0.41
1:C:2647:VAL:HA	1:C:2650:TRP:CD1	2.52	0.41
1:C:2701:LEU:HD23	1:D:2558:LEU:HB2	2.02	0.41
1:C:2715:PRO:HD2	1:D:2737:VAL:HG11	2.02	0.41
1:C:2737:VAL:HG23	1:D:2735:HIS:O	2.21	0.41
1:C:2891:LYS:NZ	1:C:2903:GLU:HB3	2.35	0.41
1:C:2919:GLY:O	1:C:2921:PRO:HD3	2.21	0.41
1:C:2961:LEU:HD22	1:C:2976:TRP:HD1	1.85	0.41
1:D:42:GLU:HA	1:D:43:PRO:HD3	1.91	0.41
1:D:278:ARG:HD2	1:D:674:TRP:CE3	2.56	0.41
1:D:587:TRP:CZ2	1:D:694:ASP:OD2	2.74	0.41
1:D:1008:VAL:O	1:D:1008:VAL:CG2	2.67	0.41
1:D:1070:VAL:N	1:D:1152:PHE:O	2.52	0.41
1:D:1353:PRO:HB2	1:D:1707:SER:HB2	2.03	0.41
1:D:2010:GLN:OE1	1:D:2013:LEU:HD11	2.21	0.41
1:D:2422:GLU:O	1:D:2422:GLU:CG	2.69	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2468:GLU:OE2	1:D:2478:ARG:NH2	2.48	0.41
1:D:2555:SER:HA	1:D:2556:PRO:HD2	1.84	0.41
1:D:2591:ARG:NH1	1:F:2014:SER:H	2.18	0.41
1:E:107:LEU:HD13	1:E:113:VAL:HB	2.02	0.41
1:E:273:ARG:HD2	1:E:282:VAL:CG1	2.51	0.41
1:E:278:ARG:HD2	1:E:674:TRP:CE3	2.56	0.41
1:E:360:LEU:HA	1:E:363:LEU:HB3	2.02	0.41
1:E:369:ARG:HD2	1:E:369:ARG:HA	1.85	0.41
1:E:585:HIS:HB3	1:E:694:ASP:HB2	2.03	0.41
1:E:594:LEU:O	1:E:598:TYR:HB2	2.21	0.41
1:E:709:LEU:HD11	1:E:872:ARG:CZ	2.51	0.41
1:E:1099:PRO:HB2	1:E:1295:TRP:HE1	1.86	0.41
1:E:2286:ARG:HD3	1:E:2331:SER:OG	2.20	0.41
1:E:2300:PHE:HZ	1:E:2398:LEU:HB3	1.85	0.41
1:E:2492:VAL:HG12	1:E:2526:ILE:HG22	2.03	0.41
1:E:2674:HIS:HA	1:E:2675:PRO:HD2	1.88	0.41
1:E:2710:LEU:HD12	1:E:2713:VAL:HG21	2.03	0.41
1:F:594:LEU:O	1:F:598:TYR:HB2	2.21	0.41
1:F:669:LYS:O	1:F:682:ASN:HB3	2.20	0.41
1:F:1095:LEU:HD23	1:F:1098:VAL:HA	2.02	0.41
1:F:1237:ARG:HH11	1:F:1237:ARG:HG2	1.86	0.41
1:F:1706:LYS:HA	1:F:1735:GLU:HG3	2.03	0.41
1:F:2141:VAL:HG22	1:F:2238:PHE:HD2	1.85	0.41
1:F:2205:ASP:O	1:F:2209:LEU:HB2	2.21	0.41
1:F:2294:SER:HB3	1:F:2310:LYS:HB2	2.02	0.41
1:F:2405:MET:O	1:F:2409:ALA:HB3	2.21	0.41
1:F:2611:VAL:HA	1:F:2612:PRO:HD3	1.86	0.41
1:F:2961:LEU:HD22	1:F:2976:TRP:HD1	1.85	0.41
1:F:3057:ASP:OD1	1:F:3057:ASP:N	2.54	0.41
1:A:436:THR:HG22	1:A:460:GLY:HA3	2.03	0.41
1:A:544:ILE:O	1:A:546:HIS:N	2.41	0.41
1:A:1087:PHE:CD1	1:B:198:ILE:HG23	2.56	0.41
1:A:1400:PRO:O	1:A:1415:GLY:HA2	2.21	0.41
1:A:2892:HIS:HA	1:A:2942:GLN:HE22	1.85	0.41
1:A:2989:LEU:HD12	1:A:2989:LEU:HA	1.77	0.41
1:B:2672:TRP:CZ3	1:B:2830:LYS:HG2	2.56	0.41
1:B:2889:ILE:HB	1:B:2924:ILE:HG12	2.01	0.41
1:C:594:LEU:O	1:C:598:TYR:HB2	2.21	0.41
1:C:1095:LEU:HD23	1:C:1098:VAL:HA	2.03	0.41
1:C:2618:SER:HB3	1:C:2786:ASP:OD1	2.21	0.41
1:C:3057:ASP:N	1:C:3057:ASP:OD1	2.54	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:180:ALA:O	1:D:184:LEU:HG	2.21	0.41
1:D:198:ILE:HG23	1:F:1087:PHE:CD1	2.56	0.41
1:D:1087:PHE:CD1	1:E:198:ILE:HG23	2.56	0.41
1:D:1619:VAL:HA	1:D:1620:PRO:HD2	1.81	0.41
1:D:1656:LYS:HE2	1:D:1660:LEU:HD21	2.03	0.41
1:D:2492:VAL:HG12	1:D:2526:ILE:HG22	2.03	0.41
1:E:587:TRP:CZ2	1:E:694:ASP:OD2	2.74	0.41
1:E:1237:ARG:HH11	1:E:1237:ARG:HG2	1.86	0.41
1:E:2010:GLN:OE1	1:E:2013:LEU:HD11	2.21	0.41
1:E:2672:TRP:CZ3	1:E:2830:LYS:HG2	2.56	0.41
1:E:2889:ILE:HD12	1:E:2993:LEU:HD23	2.03	0.41
1:F:50:GLY:O	1:F:53:SER:OG	2.36	0.41
1:F:2141:VAL:HG22	1:F:2238:PHE:CD2	2.56	0.41
1:F:2286:ARG:HD3	1:F:2331:SER:OG	2.20	0.41
1:F:2618:SER:HB3	1:F:2786:ASP:OD1	2.21	0.41
1:A:360:LEU:HA	1:A:363:LEU:HB3	2.02	0.40
1:A:709:LEU:HD11	1:A:872:ARG:CZ	2.51	0.40
1:A:793:ARG:HH12	1:A:2523:GLU:CD	2.24	0.40
1:A:2557:LEU:HD23	1:A:2558:LEU:N	2.37	0.40
1:A:2889:ILE:HD12	1:A:2993:LEU:HD23	2.03	0.40
1:B:273:ARG:HD2	1:B:282:VAL:CG1	2.51	0.40
1:B:488:ASN:OD1	1:B:523:SER:OG	2.34	0.40
1:B:668:THR:HG23	1:B:683:GLY:HA3	2.02	0.40
1:B:928:ALA:HB1	1:B:931:VAL:CB	2.50	0.40
1:B:1099:PRO:HB2	1:B:1295:TRP:HE1	1.86	0.40
1:B:2674:HIS:NE2	1:E:2865:ARG:HD2	2.37	0.40
1:B:3062:HIS:H	1:B:3066:GLU:HG3	1.86	0.40
1:C:1491:ASP:HB2	1:C:1495:ARG:HB2	2.02	0.40
1:C:1504:ARG:HA	1:C:1505:PRO:HD2	1.93	0.40
1:C:1533:VAL:N	1:C:1543:ALA:O	2.52	0.40
1:C:2098:THR:HG23	1:C:2099:GLN:N	2.36	0.40
1:C:2889:ILE:HD12	1:C:2993:LEU:HD23	2.03	0.40
1:C:2978:ARG:HG3	1:C:2979:GLU:HG3	2.03	0.40
1:D:369:ARG:HD2	1:D:369:ARG:HA	1.85	0.40
1:D:1400:PRO:O	1:D:1415:GLY:HA2	2.21	0.40
1:D:1637:VAL:HA	1:D:1638:PRO:HD2	1.91	0.40
1:D:1719:LEU:O	1:D:1723:GLU:HB3	2.21	0.40
1:D:2483:VAL:HG13	1:D:2954:VAL:HG11	2.03	0.40
1:E:160:GLN:HA	1:E:329:ILE:HD13	2.02	0.40
1:E:278:ARG:HD2	1:E:674:TRP:HE3	1.87	0.40
1:E:417:LEU:HD21	1:E:625:LEU:HD21	2.02	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:602:ARG:NH2	1:E:641:ASP:OD1	2.28	0.40
1:E:756:LEU:HD13	1:E:859:PHE:CD2	2.55	0.40
1:E:795:HIS:HE2	1:E:797:GLN:HB2	1.86	0.40
1:E:1271:LEU:HB3	1:E:1337:MET:SD	2.61	0.40
1:E:2978:ARG:HG3	1:E:2979:GLU:HG3	2.03	0.40
1:F:436:THR:HG22	1:F:460:GLY:HA3	2.03	0.40
1:F:709:LEU:HD11	1:F:872:ARG:CZ	2.51	0.40
1:F:1017:ILE:HG12	1:F:1045:VAL:HG11	2.03	0.40
1:F:1099:PRO:HB2	1:F:1295:TRP:HE1	1.86	0.40
1:F:1533:VAL:N	1:F:1543:ALA:O	2.52	0.40
1:F:2672:TRP:CZ3	1:F:2830:LYS:HG2	2.56	0.40
1:F:2892:HIS:HA	1:F:2942:GLN:HE22	1.85	0.40
1:F:3062:HIS:H	1:F:3066:GLU:CG	2.35	0.40
1:A:133:GLN:O	1:A:137:VAL:HG23	2.21	0.40
1:A:163:LEU:HD21	1:A:181:LEU:HB3	2.04	0.40
1:A:957:LEU:O	1:A:1034:GLU:HB2	2.20	0.40
1:A:1228:VAL:HB	1:A:1311:PHE:HB2	2.02	0.40
1:A:1491:ASP:HB2	1:A:1495:ARG:HB2	2.02	0.40
1:A:1702:GLU:OE1	1:A:1711:VAL:HG22	2.22	0.40
1:A:2212:TRP:O	1:A:2229:LYS:HB3	2.21	0.40
1:A:2228:LEU:HD23	1:A:2228:LEU:HA	1.86	0.40
1:A:2346:MET:O	1:A:2349:ASN:N	2.55	0.40
1:A:2405:MET:O	1:A:2409:ALA:HB3	2.21	0.40
1:B:793:ARG:HH12	1:B:2523:GLU:CD	2.24	0.40
1:B:1551:LEU:HD13	1:B:1551:LEU:HA	1.79	0.40
1:B:2134:TYR:HB3	1:B:2189:PHE:HD2	1.85	0.40
1:B:2346:MET:O	1:B:2349:ASN:N	2.55	0.40
1:B:2503:LYS:HG3	1:B:2513:TYR:HB2	2.02	0.40
1:B:2735:HIS:O	1:E:2737:VAL:HG23	2.21	0.40
1:B:2737:VAL:HG11	1:E:2715:PRO:HD2	2.02	0.40
1:B:2836:LEU:HD23	1:B:2836:LEU:HA	1.87	0.40
1:C:273:ARG:HD2	1:C:282:VAL:CG1	2.51	0.40
1:C:793:ARG:HH12	1:C:2523:GLU:CD	2.24	0.40
1:C:1353:PRO:HB2	1:C:1707:SER:HB2	2.04	0.40
1:C:2141:VAL:HG22	1:C:2238:PHE:CD2	2.56	0.40
1:C:2346:MET:O	1:C:2349:ASN:N	2.55	0.40
1:D:336:TRP:HE1	1:D:364:THR:HG22	1.86	0.40
1:D:709:LEU:HD11	1:D:872:ARG:CZ	2.51	0.40
1:D:2205:ASP:O	1:D:2209:LEU:HB2	2.21	0.40
1:D:2574:GLU:HG3	1:D:2599:TRP:CE2	2.57	0.40
1:D:2961:LEU:HD13	1:D:2976:TRP:CD1	2.57	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1500:LEU:HD23	1:E:1574:VAL:HG21	2.02	0.40
1:E:1533:VAL:N	1:E:1543:ALA:O	2.52	0.40
1:E:1606:ASP:HA	1:E:1607:PRO:HD3	1.95	0.40
1:E:2141:VAL:HG22	1:E:2238:PHE:CD2	2.56	0.40
1:E:2574:GLU:HG3	1:E:2599:TRP:CE2	2.56	0.40
1:F:417:LEU:HD21	1:F:625:LEU:HD21	2.02	0.40
1:F:438:THR:HA	1:F:880:HIS:CE1	2.51	0.40
1:F:1400:PRO:O	1:F:1415:GLY:HA2	2.21	0.40
1:F:1616:PRO:HG2	1:F:1619:VAL:HB	2.04	0.40
1:F:2346:MET:O	1:F:2349:ASN:N	2.55	0.40
1:A:278:ARG:HD2	1:A:674:TRP:CE3	2.56	0.40
1:A:794:LEU:HD12	1:A:830:TYR:HB3	2.04	0.40
1:A:1017:ILE:HG12	1:A:1045:VAL:HG11	2.03	0.40
1:A:1237:ARG:HH11	1:A:1237:ARG:HG2	1.86	0.40
1:A:1986:LEU:HA	1:A:1989:PHE:CD2	2.56	0.40
1:A:2618:SER:HB3	1:A:2786:ASP:OD1	2.21	0.40
1:A:2891:LYS:HB2	1:A:2893:ASP:OD2	2.21	0.40
1:A:2978:ARG:HG3	1:A:2979:GLU:HG3	2.03	0.40
1:B:1271:LEU:HB3	1:B:1337:MET:SD	2.62	0.40
1:B:2141:VAL:HG22	1:B:2238:PHE:CD2	2.56	0.40
1:B:2530:TYR:O	1:B:2533:ALA:N	2.52	0.40
1:B:2710:LEU:HD12	1:B:2713:VAL:HG21	2.03	0.40
1:B:2889:ILE:HD12	1:B:2993:LEU:HD23	2.03	0.40
1:B:2961:LEU:HD13	1:B:2976:TRP:CD1	2.57	0.40
1:C:278:ARG:HD2	1:C:674:TRP:HE3	1.87	0.40
1:C:1133:VAL:N	1:C:1193:ALA:O	2.48	0.40
1:C:1629:PHE:O	1:C:1633:ILE:HG13	2.22	0.40
1:C:2286:ARG:HD3	1:C:2331:SER:OG	2.20	0.40
1:C:2700:LEU:HD22	1:D:2697:HIS:CD2	2.43	0.40
1:C:2889:ILE:HG13	1:C:2922:LEU:HD13	2.02	0.40
1:C:3062:HIS:H	1:C:3066:GLU:HG3	1.86	0.40
1:D:618:PRO:HB3	1:D:915:PHE:HA	2.02	0.40
1:D:745:THR:HG22	1:D:747:LEU:N	2.37	0.40
1:D:2014:SER:H	1:E:2591:ARG:NH1	2.19	0.40
1:D:2753:LYS:HD3	1:D:2753:LYS:HA	1.83	0.40
1:E:133:GLN:O	1:E:137:VAL:HG23	2.21	0.40
1:E:163:LEU:HD21	1:E:181:LEU:HB3	2.04	0.40
1:E:954:PRO:O	1:E:965:ASN:N	2.52	0.40
1:E:1604:ASP:N	1:E:1604:ASP:OD1	2.55	0.40
1:F:336:TRP:HE1	1:F:364:THR:HG22	1.86	0.40
1:F:358:ASP:OD2	1:F:361:THR:HB	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:381:ARG:O	1:F:385:ARG:HG3	2.22	0.40
1:F:618:PRO:HB3	1:F:915:PHE:HA	2.02	0.40
1:F:1629:PHE:O	1:F:1633:ILE:HG13	2.22	0.40
1:F:2212:TRP:O	1:F:2229:LYS:HB3	2.21	0.40
1:A:381:ARG:O	1:A:385:ARG:HG3	2.22	0.40
1:A:587:TRP:CZ2	1:A:694:ASP:OD2	2.74	0.40
1:A:2495:LEU:HD23	1:A:2495:LEU:HA	1.89	0.40
1:A:2737:VAL:HG23	1:F:2735:HIS:O	2.21	0.40
1:A:3057:ASP:OD1	1:A:3057:ASP:N	2.54	0.40
1:B:81:LEU:HD23	1:B:81:LEU:HA	1.88	0.40
1:B:180:ALA:O	1:B:184:LEU:HG	2.21	0.40
1:B:1087:PHE:CD1	1:C:198:ILE:HG23	2.56	0.40
1:B:1095:LEU:HD23	1:B:1098:VAL:HA	2.02	0.40
1:B:1095:LEU:HD13	1:B:1289:PRO:CB	2.52	0.40
1:B:1598:GLU:HG2	1:B:1666:ILE:HG21	2.04	0.40
1:B:1604:ASP:N	1:B:1604:ASP:OD1	2.55	0.40
1:B:1656:LYS:HE2	1:B:1660:LEU:HD21	2.03	0.40
1:B:1719:LEU:O	1:B:1723:GLU:HB3	2.21	0.40
1:B:2492:VAL:HG12	1:B:2526:ILE:HG22	2.03	0.40
1:B:2737:VAL:HG23	1:E:2735:HIS:O	2.21	0.40
1:C:1462:ALA:HB2	1:C:1468:TYR:CE1	2.56	0.40
1:C:1551:LEU:HD13	1:C:1551:LEU:HA	1.80	0.40
1:C:2251:GLU:H	1:C:2251:GLU:HG3	1.71	0.40
1:C:2483:VAL:HG13	1:C:2954:VAL:HG11	2.03	0.40
1:D:273:ARG:HD2	1:D:282:VAL:CG1	2.51	0.40
1:D:408:VAL:HG23	1:D:418:GLU:HB2	2.04	0.40
1:D:793:ARG:HH12	1:D:2523:GLU:CD	2.24	0.40
1:D:1616:PRO:HG2	1:D:1619:VAL:HB	2.04	0.40
1:D:2672:TRP:CZ3	1:D:2830:LYS:HG2	2.56	0.40
1:D:2697:HIS:HE1	1:D:2773:GLU:OE2	2.05	0.40
1:E:358:ASP:OD2	1:E:361:THR:HB	2.21	0.40
1:E:2503:LYS:HE2	1:E:2514:ASP:O	2.22	0.40
1:F:133:GLN:O	1:F:137:VAL:HG23	2.21	0.40
1:F:180:ALA:O	1:F:184:LEU:HG	2.21	0.40
1:F:541:GLU:HG3	1:F:542:VAL:N	2.37	0.40
1:F:745:THR:HG22	1:F:747:LEU:N	2.37	0.40
1:F:795:HIS:HE2	1:F:797:GLN:HB2	1.86	0.40
1:F:1008:VAL:CG2	1:F:1008:VAL:O	2.67	0.40
1:F:1141:LEU:HD12	1:F:1293:ILE:HA	2.04	0.40
1:F:1656:LYS:HE2	1:F:1660:LEU:HD21	2.04	0.40
1:F:2058:ASP:OD1	1:F:2058:ASP:N	2.46	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2503:LYS:HG3	1:F:2513:TYR:HB2	2.02	0.40
1:F:2555:SER:HA	1:F:2556:PRO:HD2	1.85	0.40
1:F:2770:LEU:CB	1:F:2815:GLN:HB3	2.51	0.40
1:A:256:SER:O	1:A:259:GLU:HB3	2.22	0.40
1:A:1141:LEU:HD12	1:A:1293:ILE:HA	2.04	0.40
1:A:1291:LYS:HZ2	1:A:1346:PRO:N	2.20	0.40
1:A:1360:LYS:HD2	1:A:1398:ASP:HA	2.04	0.40
1:A:1598:GLU:HG2	1:A:1666:ILE:HG21	2.04	0.40
1:A:1672:GLN:HE21	1:A:1672:GLN:HB3	1.58	0.40
1:A:2205:ASP:O	1:A:2209:LEU:HB2	2.21	0.40
1:A:2574:GLU:HG3	1:A:2599:TRP:CE2	2.57	0.40
1:A:2645:ASP:OD2	1:A:2691:SER:HB2	2.22	0.40
1:A:2865:ARG:HD2	1:F:2674:HIS:NE2	2.37	0.40
1:B:202:GLY:O	1:B:289:PRO:HD2	2.21	0.40
1:B:233:LEU:HB3	1:B:251:THR:OG1	2.21	0.40
1:B:436:THR:HG22	1:B:460:GLY:HA3	2.03	0.40
1:B:1702:GLU:OE1	1:B:1711:VAL:HG22	2.22	0.40
1:B:2697:HIS:HE1	1:B:2773:GLU:OE2	2.05	0.40
1:B:2865:ARG:HD2	1:E:2674:HIS:NE2	2.37	0.40
1:C:480:GLU:OE1	1:C:483:ARG:NH2	2.55	0.40
1:C:669:LYS:O	1:C:682:ASN:HB3	2.20	0.40
1:C:2010:GLN:OE1	1:C:2013:LEU:HD11	2.21	0.40
1:C:2468:GLU:OE2	1:C:2478:ARG:NH2	2.48	0.40
1:C:2672:TRP:CZ3	1:C:2830:LYS:HG2	2.56	0.40
1:D:203:ASP:OD2	1:F:1087:PHE:HZ	2.05	0.40
1:D:1099:PRO:HB2	1:D:1295:TRP:HE1	1.86	0.40
1:D:1381:ASP:OD1	1:D:1391:SER:OG	2.22	0.40
1:D:1462:ALA:HB2	1:D:1468:TYR:CE1	2.56	0.40
1:D:1535:PHE:O	1:D:1679:TRP:N	2.48	0.40
1:E:1400:PRO:O	1:E:1415:GLY:HA2	2.21	0.40
1:E:2098:THR:HG23	1:E:2099:GLN:N	2.36	0.40
1:E:2557:LEU:HD23	1:E:2558:LEU:N	2.37	0.40
1:E:2647:VAL:HA	1:E:2650:TRP:CD1	2.53	0.40
1:F:360:LEU:HA	1:F:363:LEU:HB3	2.02	0.40
1:F:1271:LEU:HB3	1:F:1337:MET:SD	2.62	0.40
1:F:1412:HIS:CD2	1:F:1413:PRO:HD2	2.49	0.40
1:F:2503:LYS:HE2	1:F:2514:ASP:O	2.22	0.40
1:F:2710:LEU:HD12	1:F:2713:VAL:HG21	2.03	0.40
1:F:2891:LYS:HZ1	1:F:2903:GLU:HB3	1.86	0.40

There are no symmetry-related clashes.

## 5.3 Torsion angles

### 5.3.1 Protein backbone

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	2818/3089 (91%)	2641 (94%)	159 (6%)	18 (1%)	25	66
1	B	2818/3089 (91%)	2641 (94%)	158 (6%)	19 (1%)	22	63
1	C	2818/3089 (91%)	2642 (94%)	157 (6%)	19 (1%)	22	63
1	D	2818/3089 (91%)	2641 (94%)	158 (6%)	19 (1%)	22	63
1	E	2818/3089 (91%)	2642 (94%)	158 (6%)	18 (1%)	25	66
1	F	2818/3089 (91%)	2642 (94%)	157 (6%)	19 (1%)	22	63
All	All	16908/18534 (91%)	15849 (94%)	947 (6%)	112 (1%)	26	63

All (112) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	930	PRO
1	A	1148	GLU
1	A	2428	PRO
1	A	2436	PRO
1	A	2446	PRO
1	A	2448	PRO
1	B	930	PRO
1	B	1148	GLU
1	B	2428	PRO
1	B	2436	PRO
1	B	2446	PRO
1	B	2448	PRO
1	C	930	PRO
1	C	1148	GLU
1	C	2428	PRO
1	C	2436	PRO
1	C	2446	PRO
1	C	2448	PRO
1	D	930	PRO
1	D	1148	GLU

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	D	2428	PRO
1	D	2436	PRO
1	D	2446	PRO
1	D	2448	PRO
1	E	930	PRO
1	E	1148	GLU
1	E	2428	PRO
1	E	2436	PRO
1	E	2446	PRO
1	E	2448	PRO
1	F	930	PRO
1	F	1148	GLU
1	F	2428	PRO
1	F	2436	PRO
1	F	2446	PRO
1	F	2448	PRO
1	A	990	PRO
1	A	1009	PRO
1	B	990	PRO
1	B	1009	PRO
1	C	990	PRO
1	C	1009	PRO
1	D	990	PRO
1	D	1009	PRO
1	E	990	PRO
1	E	1009	PRO
1	F	990	PRO
1	F	1009	PRO
1	A	1724	TYR
1	B	1724	TYR
1	C	1724	TYR
1	D	1724	TYR
1	E	1724	TYR
1	F	1724	TYR
1	A	149	ALA
1	A	1205	ASP
1	A	1652	TRP
1	A	1705	VAL
1	B	149	ALA
1	B	1205	ASP
1	B	1652	TRP
1	B	1705	VAL

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	C	149	ALA
1	C	1205	ASP
1	C	1652	TRP
1	C	1705	VAL
1	D	149	ALA
1	D	1205	ASP
1	D	1652	TRP
1	D	1705	VAL
1	E	149	ALA
1	E	1205	ASP
1	E	1652	TRP
1	E	1705	VAL
1	F	149	ALA
1	F	1205	ASP
1	F	1652	TRP
1	F	1705	VAL
1	A	89	GLU
1	A	1221	PRO
1	A	2444	PRO
1	B	89	GLU
1	B	1221	PRO
1	B	2444	PRO
1	C	89	GLU
1	C	1221	PRO
1	C	2444	PRO
1	D	89	GLU
1	D	1221	PRO
1	D	2444	PRO
1	E	89	GLU
1	E	1221	PRO
1	E	2444	PRO
1	F	89	GLU
1	F	1221	PRO
1	F	2444	PRO
1	A	1068	VAL
1	A	1285	LYS
1	B	1068	VAL
1	B	1285	LYS
1	C	1068	VAL
1	C	1285	LYS
1	D	1068	VAL
1	D	1285	LYS

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Mol	Chain	Res	Type
1	E	1068	VAL
1	E	1285	LYS
1	F	1068	VAL
1	F	1285	LYS
1	B	2585	PRO
1	C	2585	PRO
1	D	2585	PRO
1	F	2585	PRO

### 5.3.2 Protein sidechains [i](#)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
1	A	2094/2402 (87%)	1992 (95%)	102 (5%)	25 50
1	B	2097/2402 (87%)	1994 (95%)	103 (5%)	25 50
1	C	2094/2402 (87%)	1992 (95%)	102 (5%)	25 50
1	D	2093/2402 (87%)	1991 (95%)	102 (5%)	25 50
1	E	2095/2402 (87%)	1993 (95%)	102 (5%)	25 50
1	F	2094/2402 (87%)	1992 (95%)	102 (5%)	25 50
All	All	12567/14412 (87%)	11954 (95%)	613 (5%)	29 50

All (613) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	90	LEU
1	A	208	VAL
1	A	209	SER
1	A	232	VAL
1	A	233	LEU
1	A	248	ILE
1	A	251	THR
1	A	342	GLU
1	A	344	HIS
1	A	358	ASP

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	A	361	THR
1	A	389	THR
1	A	390	VAL
1	A	400	TRP
1	A	409	LYS
1	A	424	LEU
1	A	427	ARG
1	A	439	THR
1	A	456	GLU
1	A	517	ILE
1	A	544	ILE
1	A	580	ARG
1	A	584	HIS
1	A	595	LEU
1	A	606	ASN
1	A	621	SER
1	A	638	MET
1	A	644	LEU
1	A	654	GLU
1	A	694	ASP
1	A	696	HIS
1	A	699	ASP
1	A	791	GLU
1	A	857	VAL
1	A	930	PRO
1	A	990	PRO
1	A	1009	PRO
1	A	1021	LEU
1	A	1096	THR
1	A	1105	ARG
1	A	1127	GLU
1	A	1162	THR
1	A	1206	PRO
1	A	1221	PRO
1	A	1253	ARG
1	A	1358	GLN
1	A	1421	GLN
1	A	1468	TYR
1	A	1471	GLU
1	A	1488	VAL
1	A	1508	ILE
1	A	1544	ILE

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	A	1551	LEU
1	A	1564	ILE
1	A	1618	LEU
1	A	1651	THR
1	A	1662	ARG
1	A	1672	GLN
1	A	1673	PHE
1	A	1745	ASP
1	A	2059	ARG
1	A	2067	LEU
1	A	2070	LEU
1	A	2129	PRO
1	A	2192	THR
1	A	2196	VAL
1	A	2209	LEU
1	A	2294	SER
1	A	2297	ARG
1	A	2299	MET
1	A	2303	ASP
1	A	2306	TYR
1	A	2395	THR
1	A	2401	ILE
1	A	2428	PRO
1	A	2436	PRO
1	A	2438	PRO
1	A	2439	PRO
1	A	2444	PRO
1	A	2446	PRO
1	A	2448	PRO
1	A	2620	THR
1	A	2692	MET
1	A	2742	THR
1	A	2784	THR
1	A	2800	PHE
1	A	2802	ARG
1	A	2809	LEU
1	A	2827	LEU
1	A	2861	LEU
1	A	2871	THR
1	A	2879	LEU
1	A	2894	THR
1	A	2916	ARG

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	A	2930	LEU
1	A	2935	LYS
1	A	2962	ASP
1	A	3001	HIS
1	A	3019	ASP
1	A	3076	SER
1	A	3077	THR
1	A	3080	ARG
1	B	90	LEU
1	B	208	VAL
1	B	209	SER
1	B	232	VAL
1	B	233	LEU
1	B	248	ILE
1	B	251	THR
1	B	342	GLU
1	B	344	HIS
1	B	358	ASP
1	B	361	THR
1	B	389	THR
1	B	390	VAL
1	B	400	TRP
1	B	409	LYS
1	B	424	LEU
1	B	427	ARG
1	B	439	THR
1	B	456	GLU
1	B	517	ILE
1	B	544	ILE
1	B	580	ARG
1	B	584	HIS
1	B	595	LEU
1	B	606	ASN
1	B	621	SER
1	B	638	MET
1	B	644	LEU
1	B	654	GLU
1	B	694	ASP
1	B	696	HIS
1	B	699	ASP
1	B	791	GLU
1	B	857	VAL

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	B	930	PRO
1	B	990	PRO
1	B	1009	PRO
1	B	1021	LEU
1	B	1096	THR
1	B	1105	ARG
1	B	1127	GLU
1	B	1162	THR
1	B	1206	PRO
1	B	1221	PRO
1	B	1253	ARG
1	B	1358	GLN
1	B	1401	THR
1	B	1421	GLN
1	B	1468	TYR
1	B	1471	GLU
1	B	1488	VAL
1	B	1508	ILE
1	B	1544	ILE
1	B	1551	LEU
1	B	1564	ILE
1	B	1618	LEU
1	B	1651	THR
1	B	1662	ARG
1	B	1672	GLN
1	B	1673	PHE
1	B	1745	ASP
1	B	2059	ARG
1	B	2067	LEU
1	B	2070	LEU
1	B	2129	PRO
1	B	2192	THR
1	B	2196	VAL
1	B	2209	LEU
1	B	2294	SER
1	B	2297	ARG
1	B	2299	MET
1	B	2303	ASP
1	B	2306	TYR
1	B	2395	THR
1	B	2401	ILE
1	B	2428	PRO

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	B	2436	PRO
1	B	2438	PRO
1	B	2439	PRO
1	B	2444	PRO
1	B	2446	PRO
1	B	2448	PRO
1	B	2620	THR
1	B	2692	MET
1	B	2742	THR
1	B	2784	THR
1	B	2800	PHE
1	B	2802	ARG
1	B	2809	LEU
1	B	2827	LEU
1	B	2861	LEU
1	B	2871	THR
1	B	2879	LEU
1	B	2894	THR
1	B	2916	ARG
1	B	2930	LEU
1	B	2935	LYS
1	B	2962	ASP
1	B	3001	HIS
1	B	3019	ASP
1	B	3076	SER
1	B	3077	THR
1	B	3080	ARG
1	C	90	LEU
1	C	208	VAL
1	C	209	SER
1	C	232	VAL
1	C	233	LEU
1	C	248	ILE
1	C	251	THR
1	C	342	GLU
1	C	344	HIS
1	C	358	ASP
1	C	361	THR
1	C	389	THR
1	C	390	VAL
1	C	400	TRP
1	C	409	LYS

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	C	424	LEU
1	C	427	ARG
1	C	439	THR
1	C	456	GLU
1	C	517	ILE
1	C	544	ILE
1	C	580	ARG
1	C	584	HIS
1	C	595	LEU
1	C	606	ASN
1	C	621	SER
1	C	638	MET
1	C	644	LEU
1	C	654	GLU
1	C	694	ASP
1	C	696	HIS
1	C	699	ASP
1	C	791	GLU
1	C	857	VAL
1	C	930	PRO
1	C	990	PRO
1	C	1009	PRO
1	C	1021	LEU
1	C	1096	THR
1	C	1105	ARG
1	C	1127	GLU
1	C	1162	THR
1	C	1206	PRO
1	C	1221	PRO
1	C	1253	ARG
1	C	1358	GLN
1	C	1421	GLN
1	C	1468	TYR
1	C	1471	GLU
1	C	1488	VAL
1	C	1508	ILE
1	C	1544	ILE
1	C	1551	LEU
1	C	1564	ILE
1	C	1618	LEU
1	C	1651	THR
1	C	1662	ARG

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	C	1672	GLN
1	C	1673	PHE
1	C	1745	ASP
1	C	2059	ARG
1	C	2067	LEU
1	C	2070	LEU
1	C	2129	PRO
1	C	2192	THR
1	C	2196	VAL
1	C	2209	LEU
1	C	2294	SER
1	C	2297	ARG
1	C	2299	MET
1	C	2303	ASP
1	C	2306	TYR
1	C	2395	THR
1	C	2401	ILE
1	C	2428	PRO
1	C	2436	PRO
1	C	2438	PRO
1	C	2439	PRO
1	C	2444	PRO
1	C	2446	PRO
1	C	2448	PRO
1	C	2620	THR
1	C	2692	MET
1	C	2742	THR
1	C	2784	THR
1	C	2800	PHE
1	C	2802	ARG
1	C	2809	LEU
1	C	2827	LEU
1	C	2861	LEU
1	C	2871	THR
1	C	2879	LEU
1	C	2894	THR
1	C	2916	ARG
1	C	2930	LEU
1	C	2935	LYS
1	C	2962	ASP
1	C	3001	HIS
1	C	3019	ASP

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	C	3076	SER
1	C	3077	THR
1	C	3080	ARG
1	D	90	LEU
1	D	208	VAL
1	D	209	SER
1	D	232	VAL
1	D	233	LEU
1	D	248	ILE
1	D	251	THR
1	D	342	GLU
1	D	344	HIS
1	D	358	ASP
1	D	361	THR
1	D	389	THR
1	D	390	VAL
1	D	400	TRP
1	D	409	LYS
1	D	424	LEU
1	D	427	ARG
1	D	439	THR
1	D	456	GLU
1	D	517	ILE
1	D	544	ILE
1	D	580	ARG
1	D	584	HIS
1	D	595	LEU
1	D	606	ASN
1	D	621	SER
1	D	638	MET
1	D	644	LEU
1	D	654	GLU
1	D	694	ASP
1	D	696	HIS
1	D	699	ASP
1	D	791	GLU
1	D	857	VAL
1	D	930	PRO
1	D	990	PRO
1	D	1009	PRO
1	D	1021	LEU
1	D	1096	THR

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	D	1105	ARG
1	D	1127	GLU
1	D	1162	THR
1	D	1206	PRO
1	D	1221	PRO
1	D	1253	ARG
1	D	1358	GLN
1	D	1421	GLN
1	D	1468	TYR
1	D	1471	GLU
1	D	1488	VAL
1	D	1508	ILE
1	D	1544	ILE
1	D	1551	LEU
1	D	1564	ILE
1	D	1618	LEU
1	D	1651	THR
1	D	1662	ARG
1	D	1672	GLN
1	D	1673	PHE
1	D	1745	ASP
1	D	2059	ARG
1	D	2067	LEU
1	D	2070	LEU
1	D	2129	PRO
1	D	2192	THR
1	D	2196	VAL
1	D	2209	LEU
1	D	2294	SER
1	D	2297	ARG
1	D	2299	MET
1	D	2303	ASP
1	D	2306	TYR
1	D	2395	THR
1	D	2401	ILE
1	D	2428	PRO
1	D	2436	PRO
1	D	2438	PRO
1	D	2439	PRO
1	D	2444	PRO
1	D	2446	PRO
1	D	2448	PRO

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	D	2620	THR
1	D	2692	MET
1	D	2742	THR
1	D	2784	THR
1	D	2800	PHE
1	D	2802	ARG
1	D	2809	LEU
1	D	2827	LEU
1	D	2861	LEU
1	D	2871	THR
1	D	2879	LEU
1	D	2894	THR
1	D	2916	ARG
1	D	2930	LEU
1	D	2935	LYS
1	D	2962	ASP
1	D	3001	HIS
1	D	3019	ASP
1	D	3076	SER
1	D	3077	THR
1	D	3080	ARG
1	E	90	LEU
1	E	208	VAL
1	E	209	SER
1	E	232	VAL
1	E	233	LEU
1	E	248	ILE
1	E	251	THR
1	E	342	GLU
1	E	344	HIS
1	E	358	ASP
1	E	361	THR
1	E	389	THR
1	E	390	VAL
1	E	400	TRP
1	E	409	LYS
1	E	424	LEU
1	E	427	ARG
1	E	439	THR
1	E	456	GLU
1	E	517	ILE
1	E	544	ILE

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	E	580	ARG
1	E	584	HIS
1	E	595	LEU
1	E	606	ASN
1	E	621	SER
1	E	638	MET
1	E	644	LEU
1	E	654	GLU
1	E	694	ASP
1	E	696	HIS
1	E	699	ASP
1	E	791	GLU
1	E	857	VAL
1	E	930	PRO
1	E	990	PRO
1	E	1009	PRO
1	E	1021	LEU
1	E	1096	THR
1	E	1105	ARG
1	E	1127	GLU
1	E	1162	THR
1	E	1206	PRO
1	E	1221	PRO
1	E	1253	ARG
1	E	1358	GLN
1	E	1421	GLN
1	E	1468	TYR
1	E	1471	GLU
1	E	1488	VAL
1	E	1508	ILE
1	E	1544	ILE
1	E	1551	LEU
1	E	1564	ILE
1	E	1618	LEU
1	E	1651	THR
1	E	1662	ARG
1	E	1672	GLN
1	E	1673	PHE
1	E	1745	ASP
1	E	2059	ARG
1	E	2067	LEU
1	E	2070	LEU

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	E	2129	PRO
1	E	2192	THR
1	E	2196	VAL
1	E	2209	LEU
1	E	2294	SER
1	E	2297	ARG
1	E	2299	MET
1	E	2303	ASP
1	E	2306	TYR
1	E	2395	THR
1	E	2401	ILE
1	E	2428	PRO
1	E	2436	PRO
1	E	2438	PRO
1	E	2439	PRO
1	E	2444	PRO
1	E	2446	PRO
1	E	2448	PRO
1	E	2620	THR
1	E	2692	MET
1	E	2742	THR
1	E	2784	THR
1	E	2800	PHE
1	E	2802	ARG
1	E	2809	LEU
1	E	2827	LEU
1	E	2861	LEU
1	E	2871	THR
1	E	2879	LEU
1	E	2894	THR
1	E	2916	ARG
1	E	2930	LEU
1	E	2935	LYS
1	E	2962	ASP
1	E	3001	HIS
1	E	3019	ASP
1	E	3076	SER
1	E	3077	THR
1	E	3080	ARG
1	F	90	LEU
1	F	208	VAL
1	F	209	SER

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	F	232	VAL
1	F	233	LEU
1	F	248	ILE
1	F	251	THR
1	F	342	GLU
1	F	344	HIS
1	F	358	ASP
1	F	361	THR
1	F	389	THR
1	F	390	VAL
1	F	400	TRP
1	F	409	LYS
1	F	424	LEU
1	F	427	ARG
1	F	439	THR
1	F	456	GLU
1	F	517	ILE
1	F	544	ILE
1	F	580	ARG
1	F	584	HIS
1	F	595	LEU
1	F	606	ASN
1	F	621	SER
1	F	638	MET
1	F	644	LEU
1	F	654	GLU
1	F	694	ASP
1	F	696	HIS
1	F	699	ASP
1	F	791	GLU
1	F	857	VAL
1	F	930	PRO
1	F	990	PRO
1	F	1009	PRO
1	F	1021	LEU
1	F	1096	THR
1	F	1105	ARG
1	F	1127	GLU
1	F	1162	THR
1	F	1206	PRO
1	F	1221	PRO
1	F	1253	ARG

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	F	1358	GLN
1	F	1421	GLN
1	F	1468	TYR
1	F	1471	GLU
1	F	1488	VAL
1	F	1508	ILE
1	F	1544	ILE
1	F	1551	LEU
1	F	1564	ILE
1	F	1618	LEU
1	F	1651	THR
1	F	1662	ARG
1	F	1672	GLN
1	F	1673	PHE
1	F	1745	ASP
1	F	2059	ARG
1	F	2067	LEU
1	F	2070	LEU
1	F	2129	PRO
1	F	2192	THR
1	F	2196	VAL
1	F	2209	LEU
1	F	2294	SER
1	F	2297	ARG
1	F	2299	MET
1	F	2303	ASP
1	F	2306	TYR
1	F	2395	THR
1	F	2401	ILE
1	F	2428	PRO
1	F	2436	PRO
1	F	2438	PRO
1	F	2439	PRO
1	F	2444	PRO
1	F	2446	PRO
1	F	2448	PRO
1	F	2620	THR
1	F	2692	MET
1	F	2742	THR
1	F	2784	THR
1	F	2800	PHE
1	F	2802	ARG

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Mol	Chain	Res	Type
1	F	2809	LEU
1	F	2827	LEU
1	F	2861	LEU
1	F	2871	THR
1	F	2879	LEU
1	F	2894	THR
1	F	2916	ARG
1	F	2930	LEU
1	F	2935	LYS
1	F	2962	ASP
1	F	3001	HIS
1	F	3019	ASP
1	F	3076	SER
1	F	3077	THR
1	F	3080	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (140) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	386	ASN
1	A	486	GLN
1	A	540	ASN
1	A	575	HIS
1	A	585	HIS
1	A	606	ASN
1	A	1057	ASN
1	A	1134	HIS
1	A	1276	GLN
1	A	1277	HIS
1	A	1355	GLN
1	A	1534	ASN
1	A	1582	HIS
1	A	1617	ASN
1	A	1672	GLN
1	A	2288	HIS
1	A	2334	HIS
1	A	2349	ASN
1	A	2651	ASN
1	A	2815	GLN
1	A	2850	HIS
1	A	2927	GLN
1	A	2942	GLN

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	A	2973	HIS
1	B	386	ASN
1	B	486	GLN
1	B	540	ASN
1	B	575	HIS
1	B	585	HIS
1	B	606	ASN
1	B	1057	ASN
1	B	1134	HIS
1	B	1276	GLN
1	B	1277	HIS
1	B	1355	GLN
1	B	1582	HIS
1	B	1617	ASN
1	B	1672	GLN
1	B	2288	HIS
1	B	2334	HIS
1	B	2349	ASN
1	B	2651	ASN
1	B	2815	GLN
1	B	2850	HIS
1	B	2927	GLN
1	B	2942	GLN
1	B	2973	HIS
1	C	386	ASN
1	C	486	GLN
1	C	540	ASN
1	C	575	HIS
1	C	585	HIS
1	C	606	ASN
1	C	1057	ASN
1	C	1134	HIS
1	C	1276	GLN
1	C	1277	HIS
1	C	1355	GLN
1	C	1582	HIS
1	C	1617	ASN
1	C	1672	GLN
1	C	2288	HIS
1	C	2334	HIS
1	C	2349	ASN
1	C	2651	ASN

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	C	2815	GLN
1	C	2850	HIS
1	C	2927	GLN
1	C	2942	GLN
1	C	2973	HIS
1	D	386	ASN
1	D	486	GLN
1	D	540	ASN
1	D	575	HIS
1	D	585	HIS
1	D	1057	ASN
1	D	1134	HIS
1	D	1276	GLN
1	D	1277	HIS
1	D	1355	GLN
1	D	1582	HIS
1	D	1617	ASN
1	D	1672	GLN
1	D	2288	HIS
1	D	2296	ASN
1	D	2334	HIS
1	D	2349	ASN
1	D	2651	ASN
1	D	2815	GLN
1	D	2850	HIS
1	D	2927	GLN
1	D	2942	GLN
1	D	2973	HIS
1	E	386	ASN
1	E	486	GLN
1	E	540	ASN
1	E	575	HIS
1	E	585	HIS
1	E	606	ASN
1	E	1057	ASN
1	E	1134	HIS
1	E	1276	GLN
1	E	1277	HIS
1	E	1355	GLN
1	E	1534	ASN
1	E	1582	HIS
1	E	1617	ASN

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Mol	Chain	Res	Type
1	E	1672	GLN
1	E	2288	HIS
1	E	2334	HIS
1	E	2349	ASN
1	E	2651	ASN
1	E	2815	GLN
1	E	2850	HIS
1	E	2927	GLN
1	E	2942	GLN
1	E	2973	HIS
1	F	386	ASN
1	F	486	GLN
1	F	540	ASN
1	F	575	HIS
1	F	585	HIS
1	F	682	ASN
1	F	1057	ASN
1	F	1134	HIS
1	F	1276	GLN
1	F	1277	HIS
1	F	1355	GLN
1	F	1582	HIS
1	F	1617	ASN
1	F	1672	GLN
1	F	2288	HIS
1	F	2334	HIS
1	F	2349	ASN
1	F	2651	ASN
1	F	2815	GLN
1	F	2850	HIS
1	F	2927	GLN
1	F	2942	GLN
1	F	2973	HIS

### 5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

## 5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

## 5.6 Ligand geometry [i](#)

6 ligands are modelled in this entry.

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
2	FMN	F	4000	-	33,33,33	1.07	2 (6%)	48,50,50	1.25	7 (14%)
2	FMN	E	4000	-	33,33,33	1.07	2 (6%)	48,50,50	1.26	7 (14%)
2	FMN	D	4000	-	33,33,33	1.08	2 (6%)	48,50,50	1.26	8 (16%)
2	FMN	B	4000	-	33,33,33	1.08	2 (6%)	48,50,50	1.26	8 (16%)
2	FMN	A	4000	-	33,33,33	1.06	2 (6%)	48,50,50	1.26	8 (16%)
2	FMN	C	4000	-	33,33,33	1.07	2 (6%)	48,50,50	1.26	8 (16%)

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
2	FMN	F	4000	-	-	5/18/18/18	0/3/3/3
2	FMN	E	4000	-	-	5/18/18/18	0/3/3/3
2	FMN	D	4000	-	-	5/18/18/18	0/3/3/3
2	FMN	B	4000	-	-	5/18/18/18	0/3/3/3
2	FMN	A	4000	-	-	5/18/18/18	0/3/3/3
2	FMN	C	4000	-	-	5/18/18/18	0/3/3/3

All (12) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	4000	FMN	C4A-N5	4.14	1.38	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	F	4000	FMN	C4A-N5	4.12	1.38	1.30
2	E	4000	FMN	C4A-N5	4.10	1.38	1.30
2	A	4000	FMN	C4A-N5	4.09	1.38	1.30
2	D	4000	FMN	C4A-N5	4.08	1.38	1.30
2	C	4000	FMN	C4A-N5	4.08	1.38	1.30
2	C	4000	FMN	C10-N1	2.31	1.37	1.33
2	E	4000	FMN	C10-N1	2.26	1.37	1.33
2	D	4000	FMN	C10-N1	2.25	1.37	1.33
2	B	4000	FMN	C10-N1	2.22	1.37	1.33
2	F	4000	FMN	C10-N1	2.21	1.37	1.33
2	A	4000	FMN	C10-N1	2.18	1.37	1.33

All (46) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	F	4000	FMN	C4-N3-C2	-3.02	120.06	125.64
2	C	4000	FMN	C4-N3-C2	-2.99	120.12	125.64
2	E	4000	FMN	C4-N3-C2	-2.98	120.13	125.64
2	D	4000	FMN	C4-N3-C2	-2.98	120.13	125.64
2	B	4000	FMN	C4-N3-C2	-2.97	120.15	125.64
2	E	4000	FMN	C4A-C10-N10	2.97	120.82	116.48
2	A	4000	FMN	C4-N3-C2	-2.97	120.16	125.64
2	C	4000	FMN	C4A-C10-N10	2.94	120.78	116.48
2	D	4000	FMN	C4A-C10-N10	2.92	120.75	116.48
2	A	4000	FMN	C4A-C10-N10	2.92	120.74	116.48
2	F	4000	FMN	C4A-C10-N10	2.89	120.71	116.48
2	B	4000	FMN	C4A-C10-N10	2.89	120.70	116.48
2	B	4000	FMN	C4A-C4-N3	2.61	119.82	113.19
2	C	4000	FMN	C4A-C4-N3	2.61	119.81	113.19
2	D	4000	FMN	C4A-C4-N3	2.61	119.81	113.19
2	F	4000	FMN	C4A-C4-N3	2.61	119.81	113.19
2	E	4000	FMN	C4A-C4-N3	2.60	119.80	113.19
2	E	4000	FMN	C10-C4A-N5	-2.60	119.34	124.86
2	A	4000	FMN	C4A-C4-N3	2.60	119.79	113.19
2	D	4000	FMN	C10-C4A-N5	-2.58	119.38	124.86
2	A	4000	FMN	C10-C4A-N5	-2.57	119.41	124.86
2	B	4000	FMN	C10-C4A-N5	-2.55	119.44	124.86
2	C	4000	FMN	C10-C4A-N5	-2.55	119.45	124.86
2	F	4000	FMN	C10-C4A-N5	-2.54	119.47	124.86
2	D	4000	FMN	O4-C4-C4A	-2.44	120.13	126.60
2	E	4000	FMN	O4-C4-C4A	-2.42	120.19	126.60
2	B	4000	FMN	O4-C4-C4A	-2.42	120.19	126.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	F	4000	FMN	O4-C4-C4A	-2.40	120.22	126.60
2	C	4000	FMN	O4-C4-C4A	-2.40	120.23	126.60
2	A	4000	FMN	O4-C4-C4A	-2.39	120.26	126.60
2	E	4000	FMN	C4-C4A-N5	2.28	121.48	118.23
2	D	4000	FMN	C4-C4A-N5	2.28	121.47	118.23
2	B	4000	FMN	C4-C4A-N5	2.26	121.45	118.23
2	A	4000	FMN	C4-C4A-N5	2.25	121.44	118.23
2	D	4000	FMN	C9A-C5A-N5	-2.25	119.99	122.43
2	C	4000	FMN	C9A-C5A-N5	-2.23	120.00	122.43
2	C	4000	FMN	C4-C4A-N5	2.23	121.41	118.23
2	F	4000	FMN	C4-C4A-N5	2.21	121.37	118.23
2	F	4000	FMN	C9A-C5A-N5	-2.20	120.04	122.43
2	A	4000	FMN	C9A-C5A-N5	-2.16	120.08	122.43
2	B	4000	FMN	C9A-C5A-N5	-2.16	120.08	122.43
2	E	4000	FMN	C9A-C5A-N5	-2.13	120.12	122.43
2	D	4000	FMN	O2-C2-N1	-2.03	118.47	121.83
2	C	4000	FMN	O2-C2-N1	-2.02	118.47	121.83
2	A	4000	FMN	O2-C2-N1	-2.01	118.50	121.83
2	B	4000	FMN	O2-C2-N1	-2.00	118.51	121.83

There are no chirality outliers.

All (30) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
2	A	4000	FMN	O3'-C3'-C4'-C5'
2	B	4000	FMN	O3'-C3'-C4'-C5'
2	C	4000	FMN	O3'-C3'-C4'-C5'
2	D	4000	FMN	O3'-C3'-C4'-C5'
2	E	4000	FMN	O3'-C3'-C4'-C5'
2	F	4000	FMN	O3'-C3'-C4'-C5'
2	A	4000	FMN	C2'-C3'-C4'-C5'
2	B	4000	FMN	C2'-C3'-C4'-C5'
2	C	4000	FMN	C2'-C3'-C4'-C5'
2	D	4000	FMN	C2'-C3'-C4'-C5'
2	E	4000	FMN	C2'-C3'-C4'-C5'
2	F	4000	FMN	C2'-C3'-C4'-C5'
2	A	4000	FMN	C2'-C3'-C4'-O4'
2	B	4000	FMN	C2'-C3'-C4'-O4'
2	C	4000	FMN	C2'-C3'-C4'-O4'
2	D	4000	FMN	C2'-C3'-C4'-O4'
2	E	4000	FMN	C2'-C3'-C4'-O4'
2	F	4000	FMN	C2'-C3'-C4'-O4'

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Mol	Chain	Res	Type	Atoms
2	C	4000	FMN	O3'-C3'-C4'-O4'
2	A	4000	FMN	C4'-C5'-O5'-P
2	B	4000	FMN	C4'-C5'-O5'-P
2	C	4000	FMN	C4'-C5'-O5'-P
2	D	4000	FMN	C4'-C5'-O5'-P
2	E	4000	FMN	C4'-C5'-O5'-P
2	F	4000	FMN	C4'-C5'-O5'-P
2	A	4000	FMN	O3'-C3'-C4'-O4'
2	B	4000	FMN	O3'-C3'-C4'-O4'
2	D	4000	FMN	O3'-C3'-C4'-O4'
2	E	4000	FMN	O3'-C3'-C4'-O4'
2	F	4000	FMN	O3'-C3'-C4'-O4'

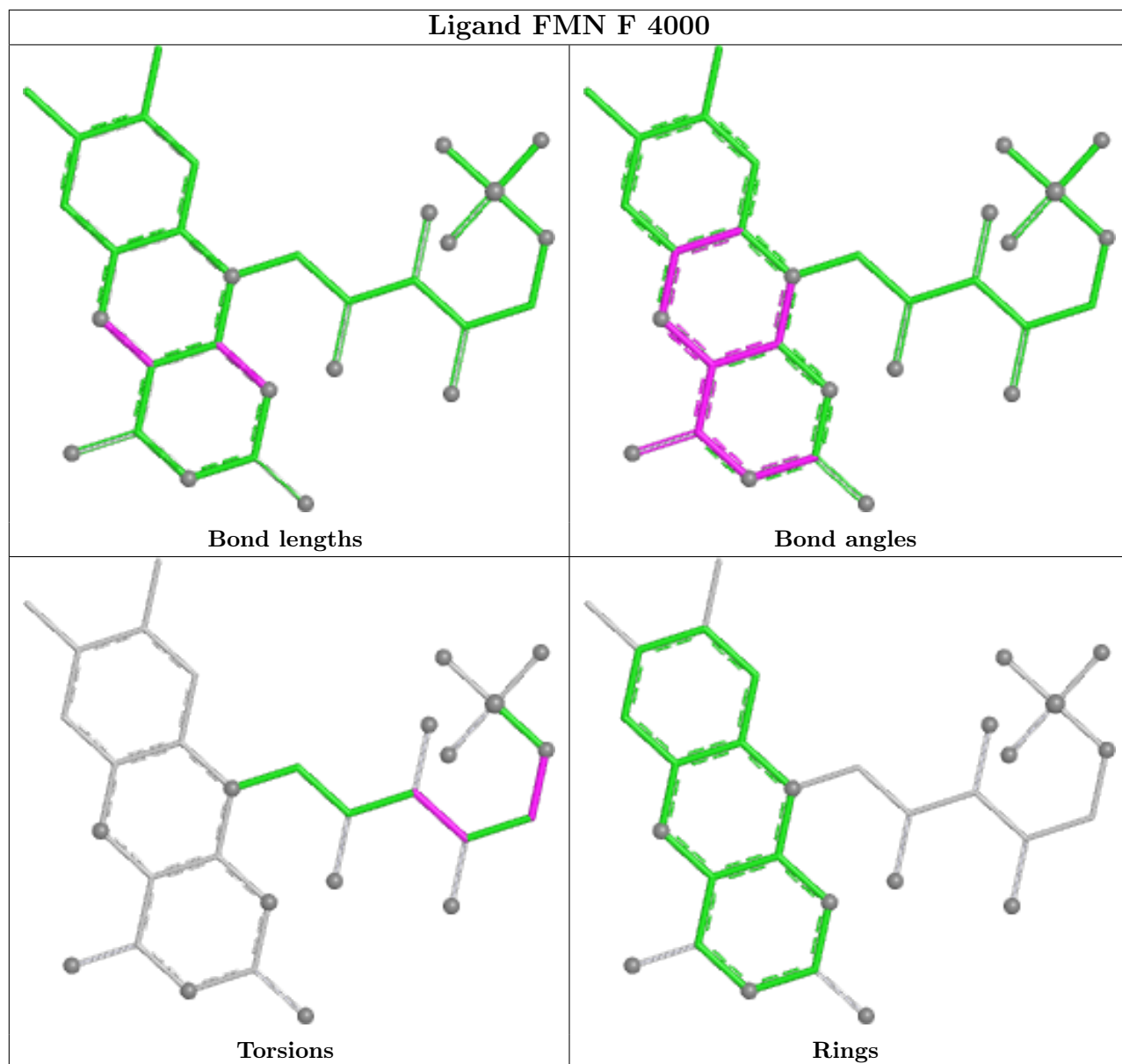
There are no ring outliers.

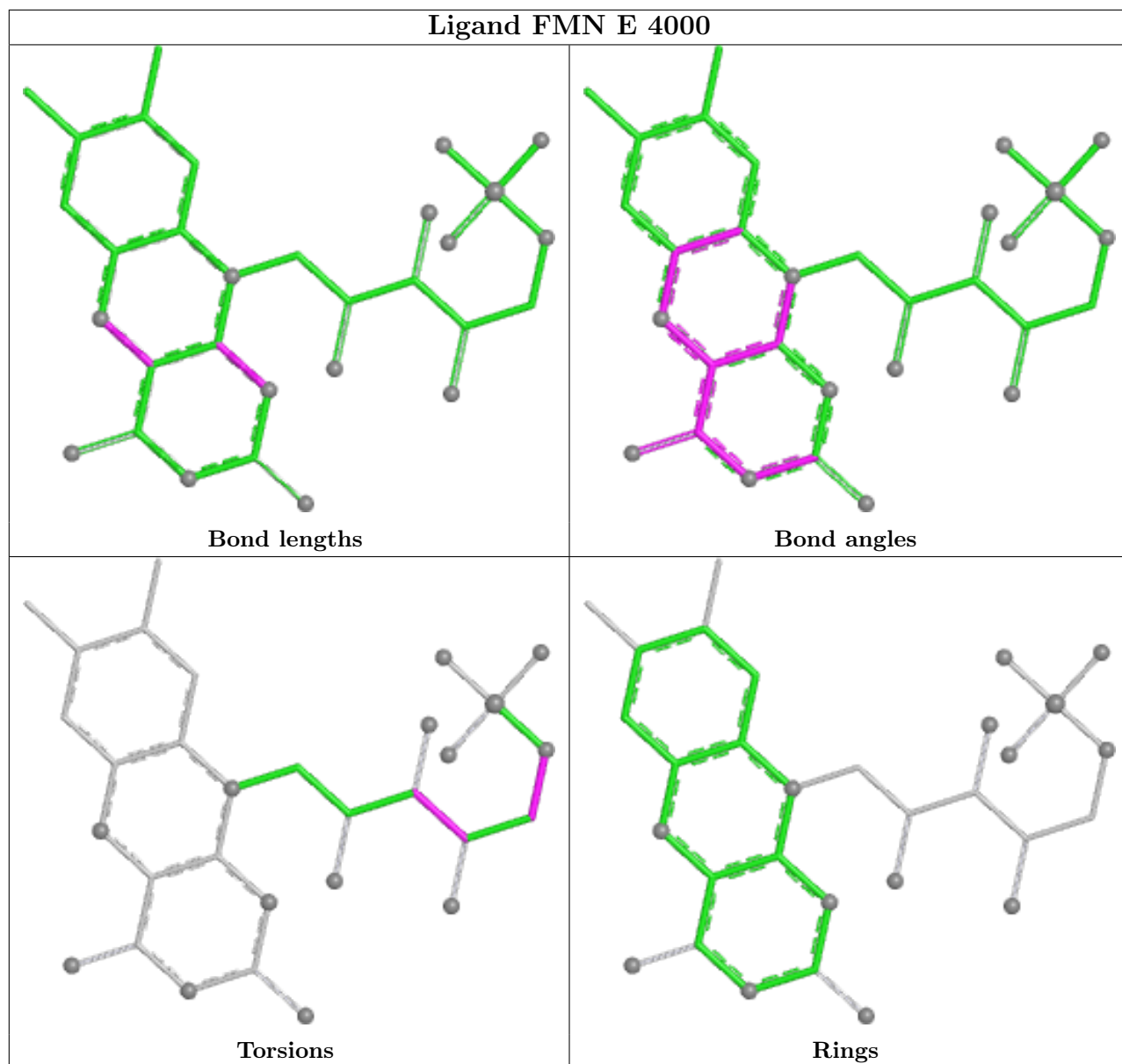
6 monomers are involved in 26 short contacts:

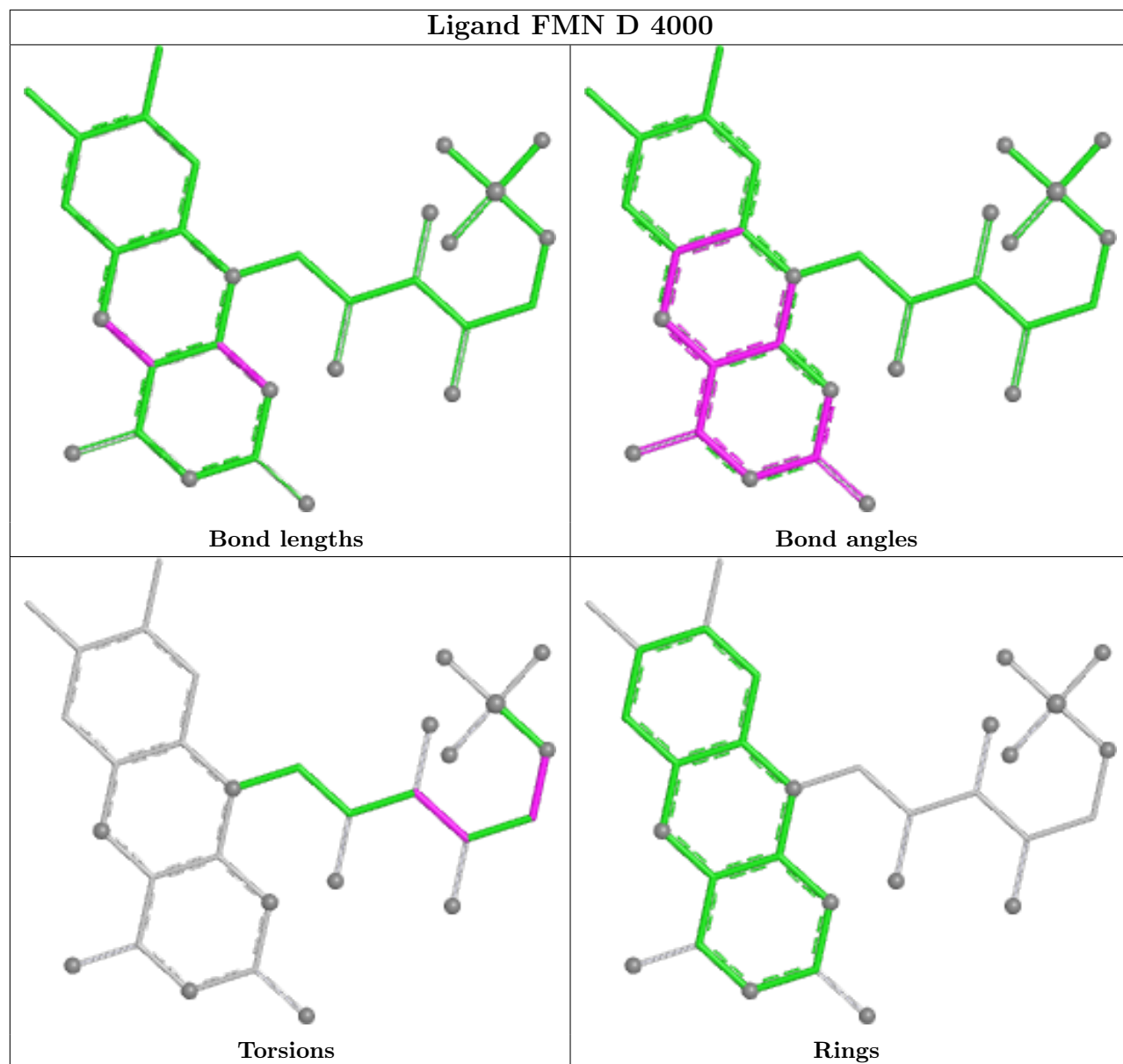
Mol	Chain	Res	Type	Clashes	Symm-Clashes
2	F	4000	FMN	5	0
2	E	4000	FMN	4	0
2	D	4000	FMN	4	0
2	B	4000	FMN	5	0
2	A	4000	FMN	4	0
2	C	4000	FMN	4	0

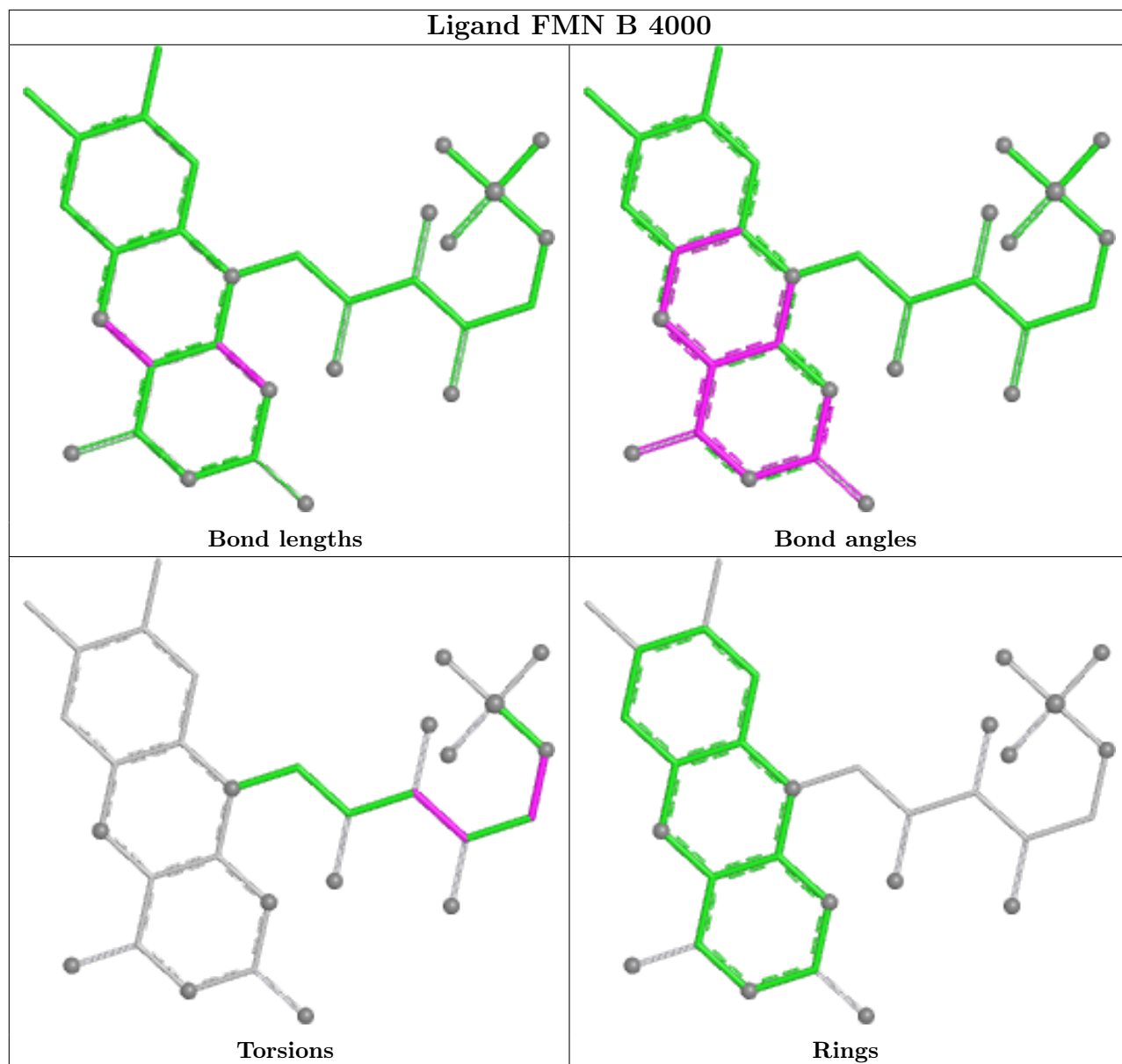
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included.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

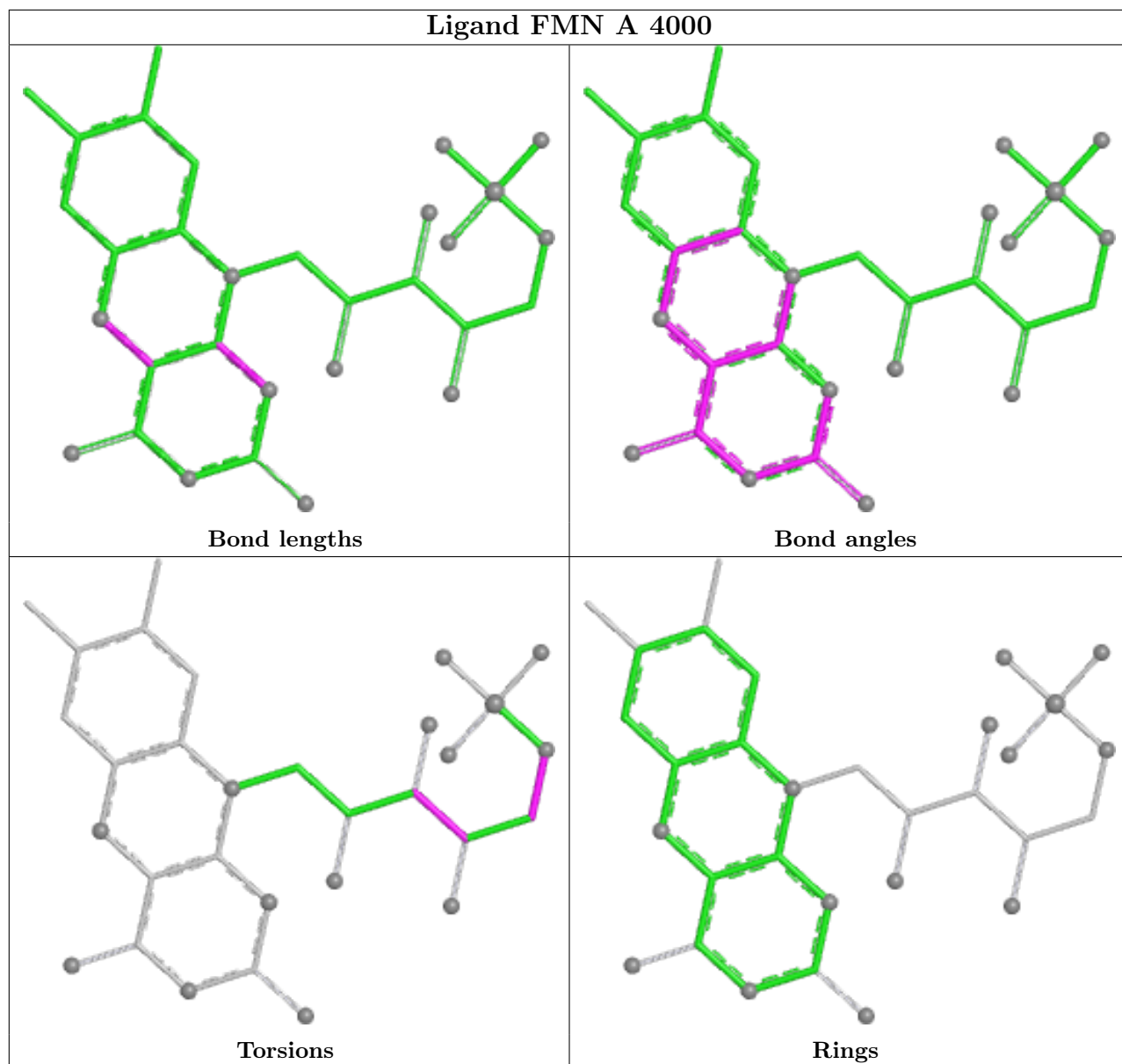


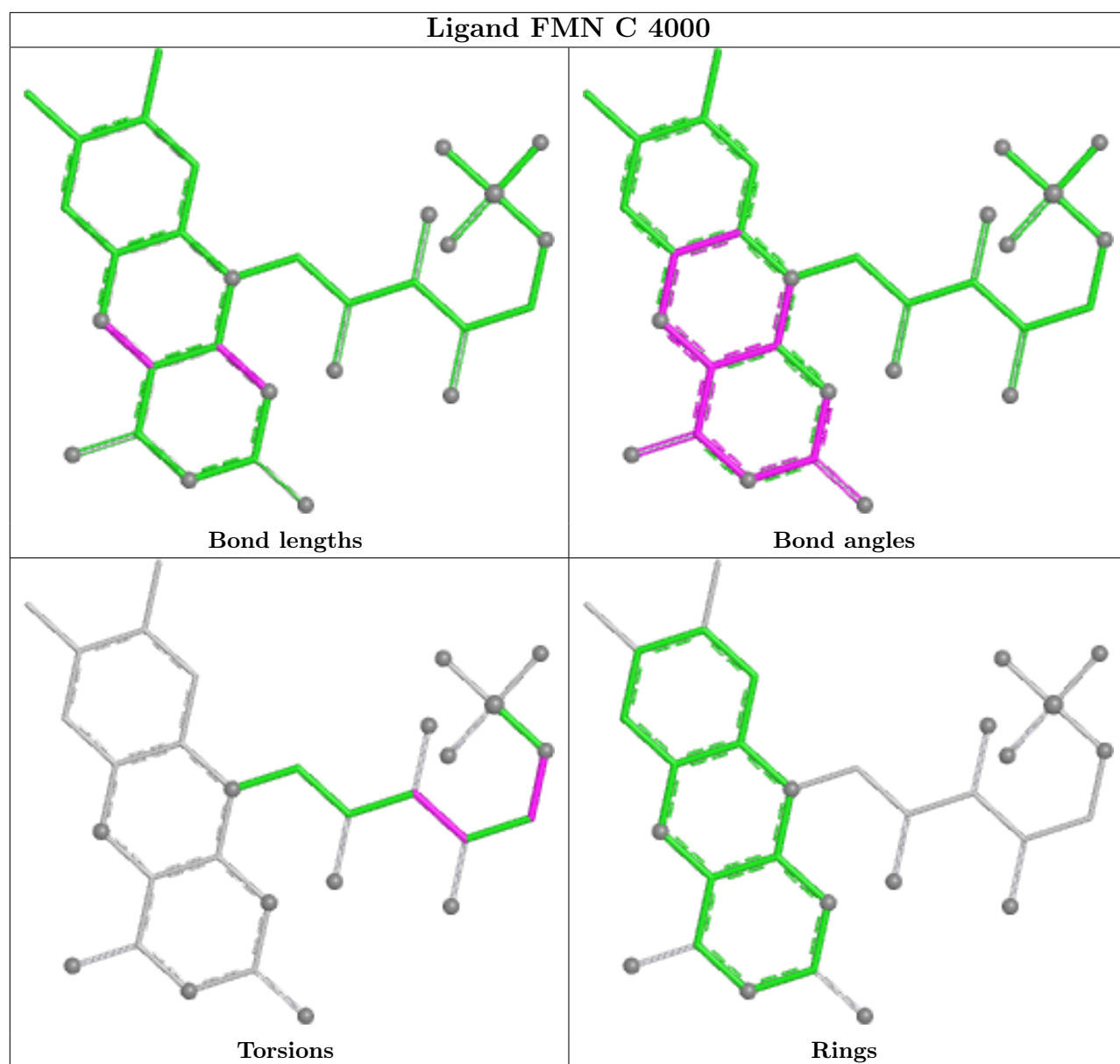












## 5.7 Other polymers [i](#)

There are no such residues in this entry.

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

There are no chain breaks in this entry.

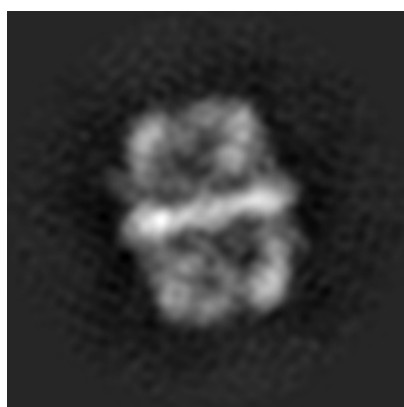
## 6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-2358. These allow visual inspection of the internal detail of the map and identification of artifacts.

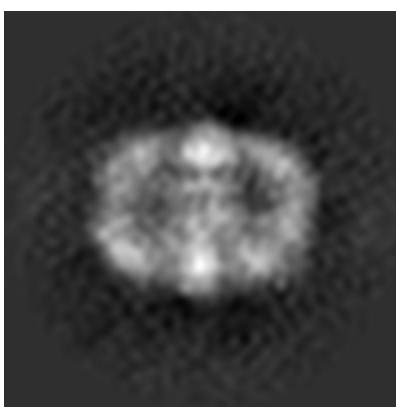
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

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

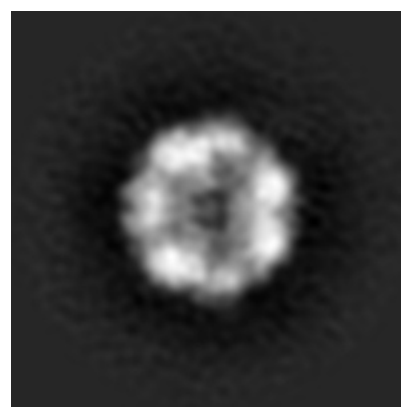
#### 6.1.1 Primary map



X



Y

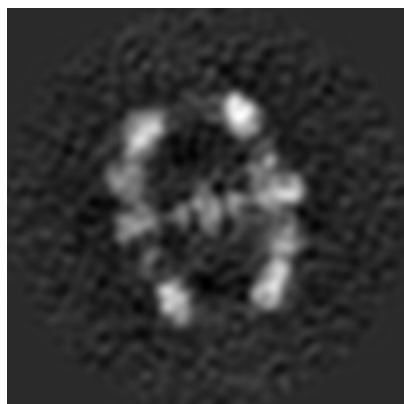


Z

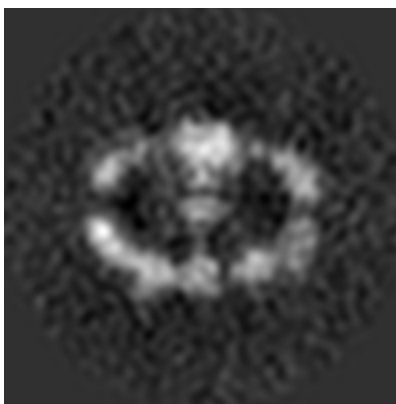
The images above show the map projected in three orthogonal directions.

### 6.2 Central slices [i](#)

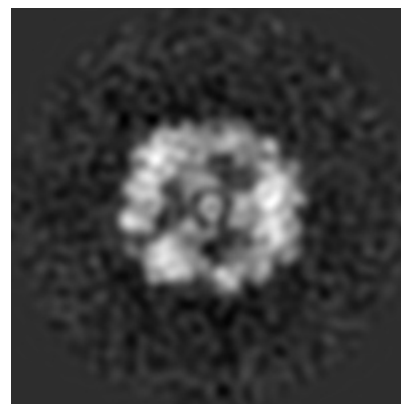
#### 6.2.1 Primary map



X Index: 100



Y Index: 100

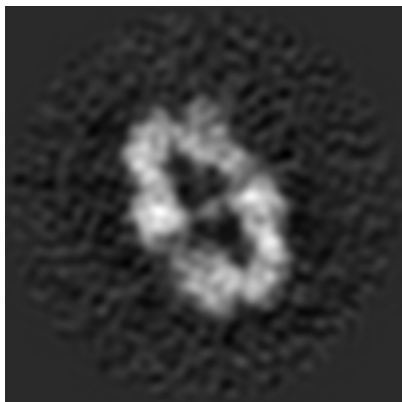


Z Index: 100

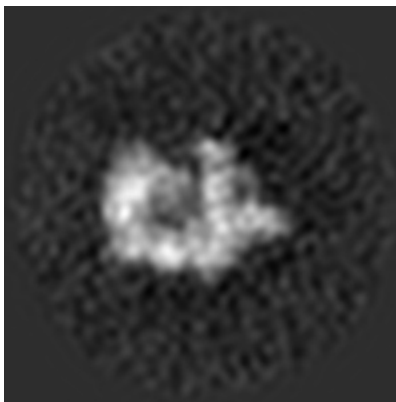
The images above show central slices of the map in three orthogonal directions.

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

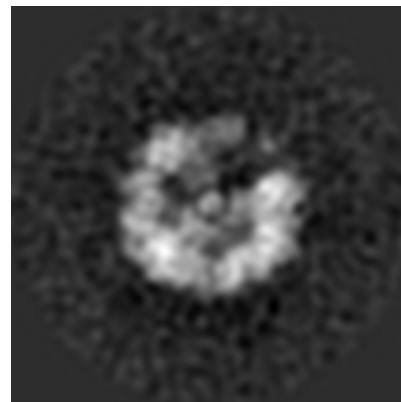
### 6.3.1 Primary map



X Index: 76



Y Index: 131

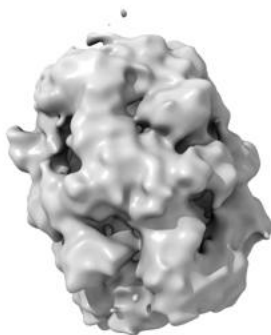


Z Index: 96

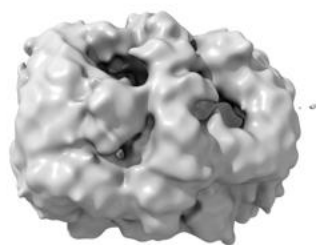
The images above show the largest variance slices of the map in three orthogonal directions.

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

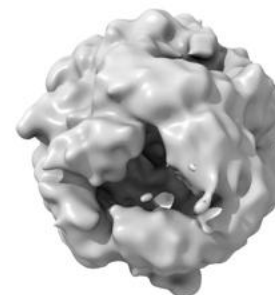
### 6.4.1 Primary map



X



Y



Z

The images above show the 3D surface view of the map at the recommended contour level 1.8. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.



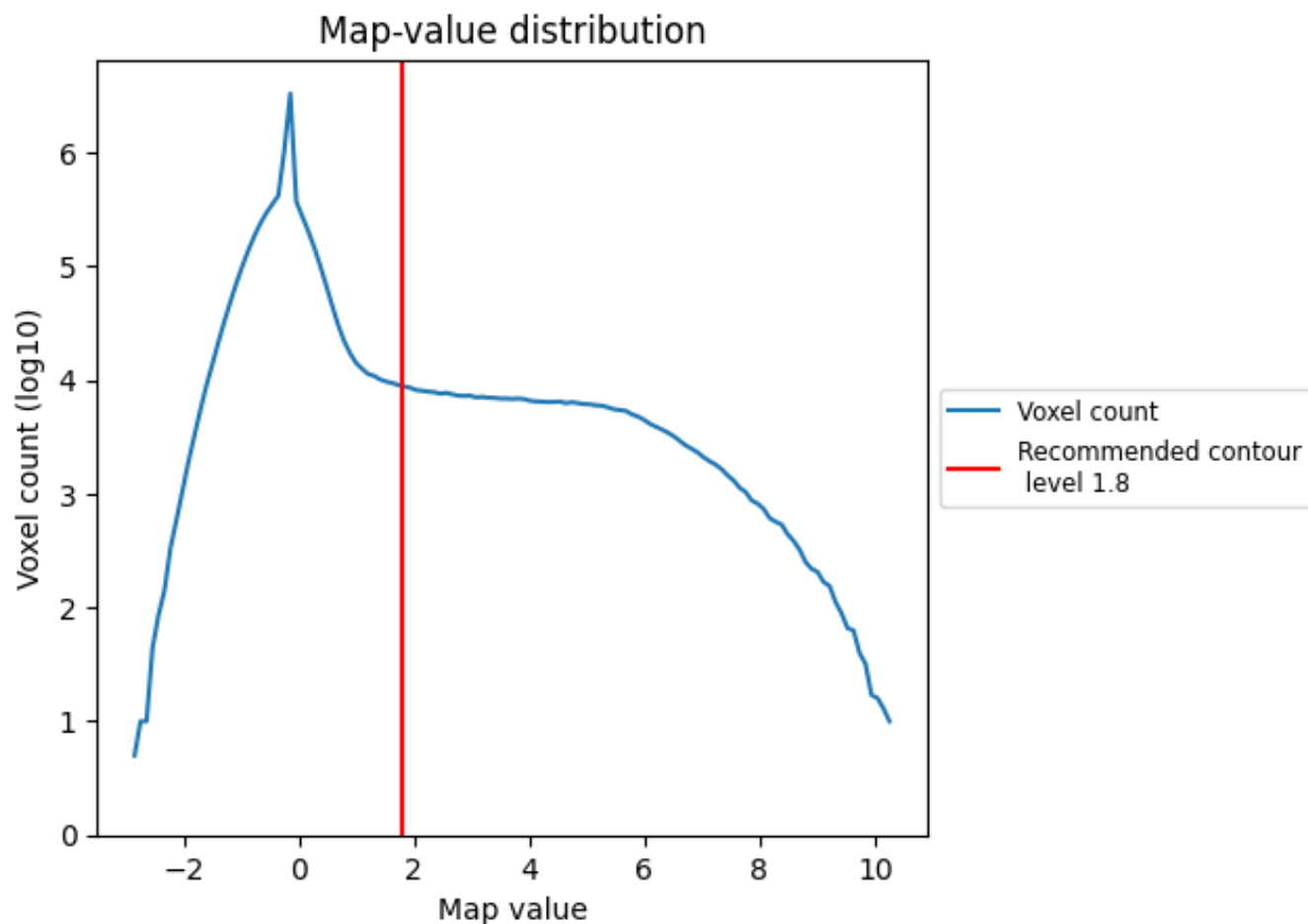
## 6.5 Mask visualisation

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

## 7 Map analysis [i](#)

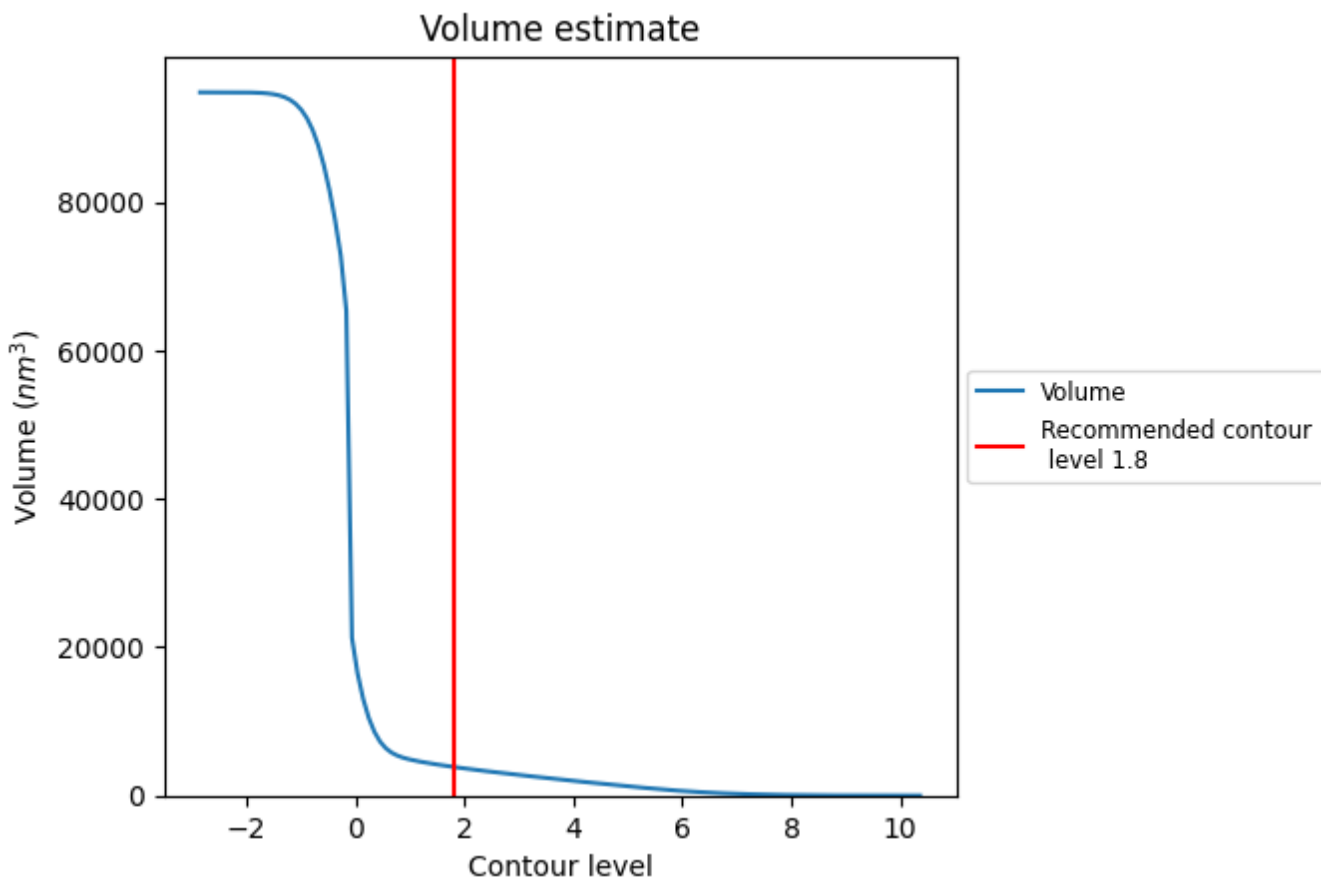
This section contains the results of statistical analysis of the map.

### 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.

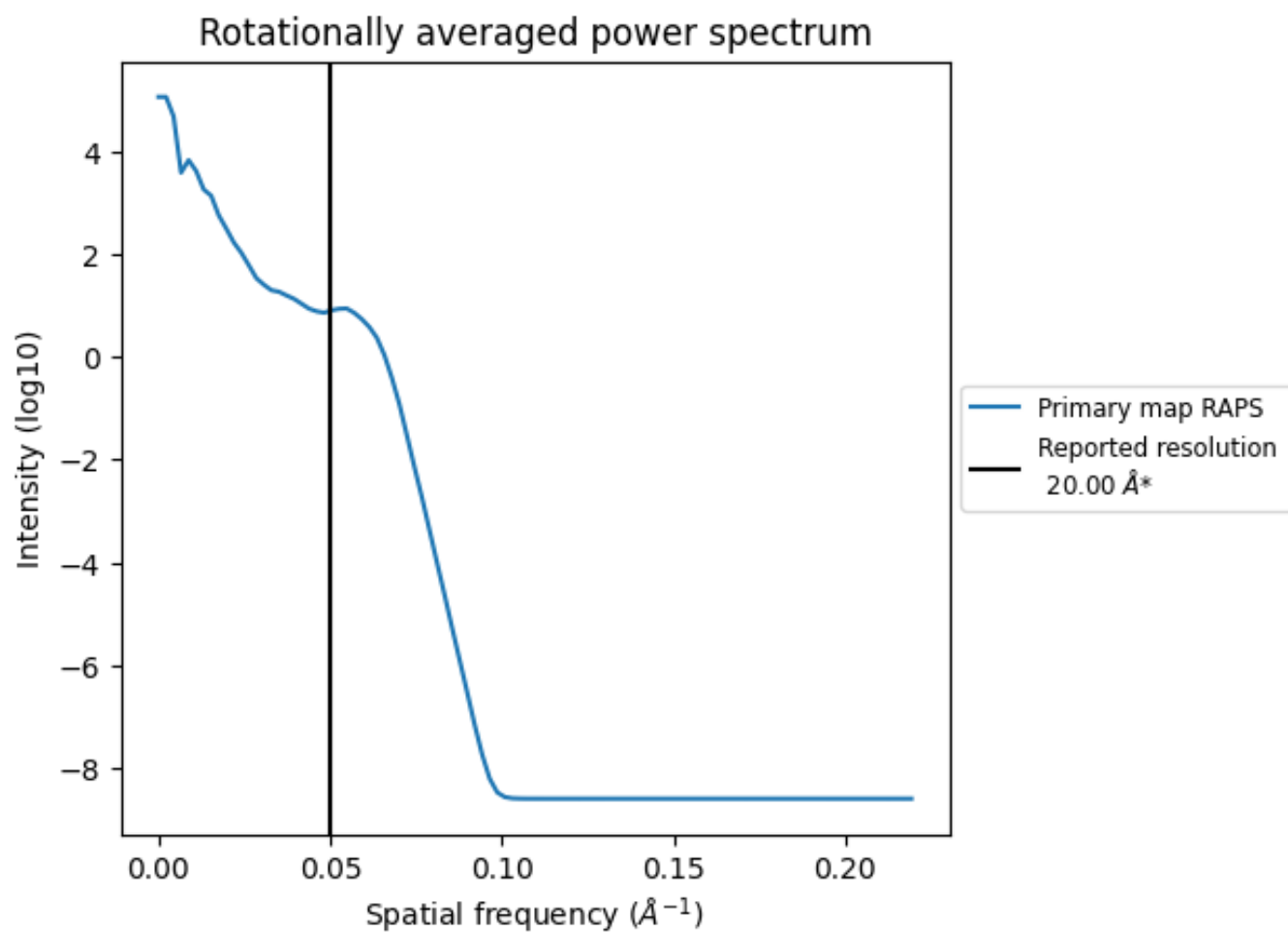
## 7.2 Volume estimate [i](#)



The volume at the recommended contour level is  $3860 \text{ nm}^3$ ; this corresponds to an approximate mass of 3487 kDa.

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

### 7.3 Rotationally averaged power spectrum [i](#)



\*Reported resolution corresponds to spatial frequency of 0.050 Å<sup>-1</sup>

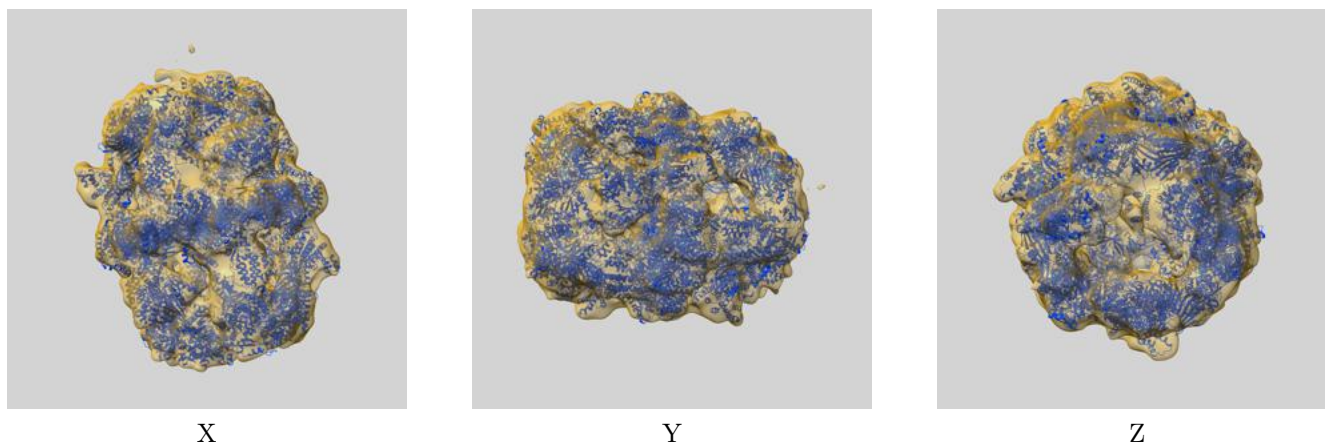
## 8 Fourier-Shell correlation

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

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

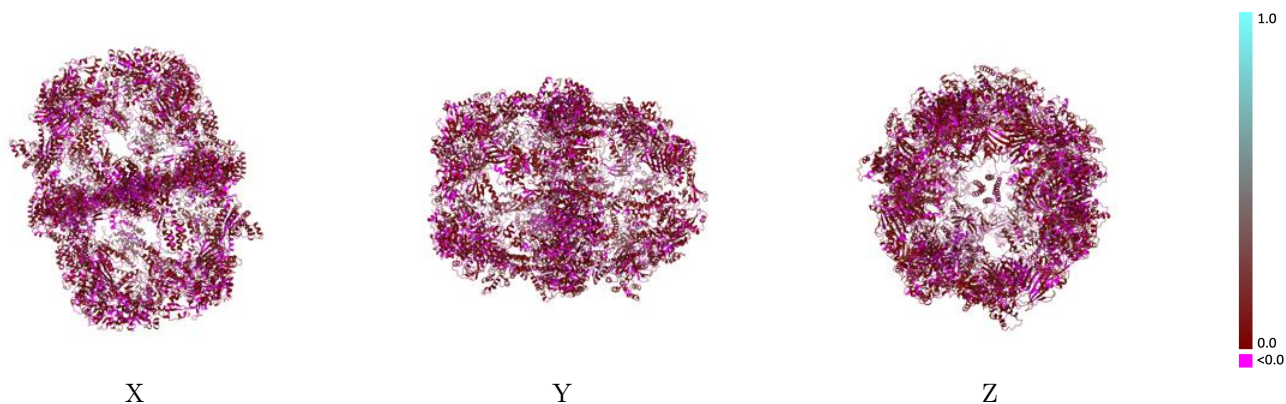
This section contains information regarding the fit between EMDB map EMD-2358 and PDB model 4V8V. Per-residue inclusion information can be found in section 3 on page 5.

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



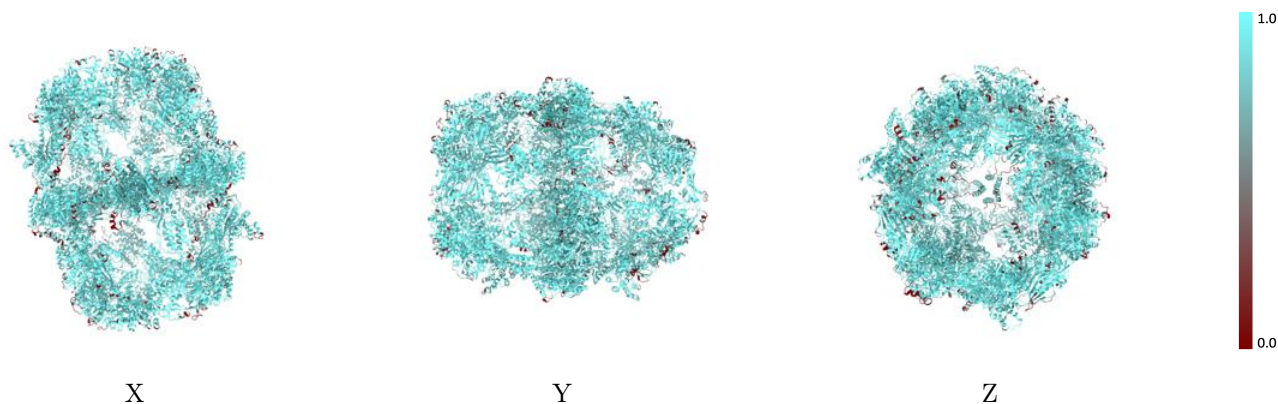
The images above show the 3D surface view of the map at the recommended contour level 1.8 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



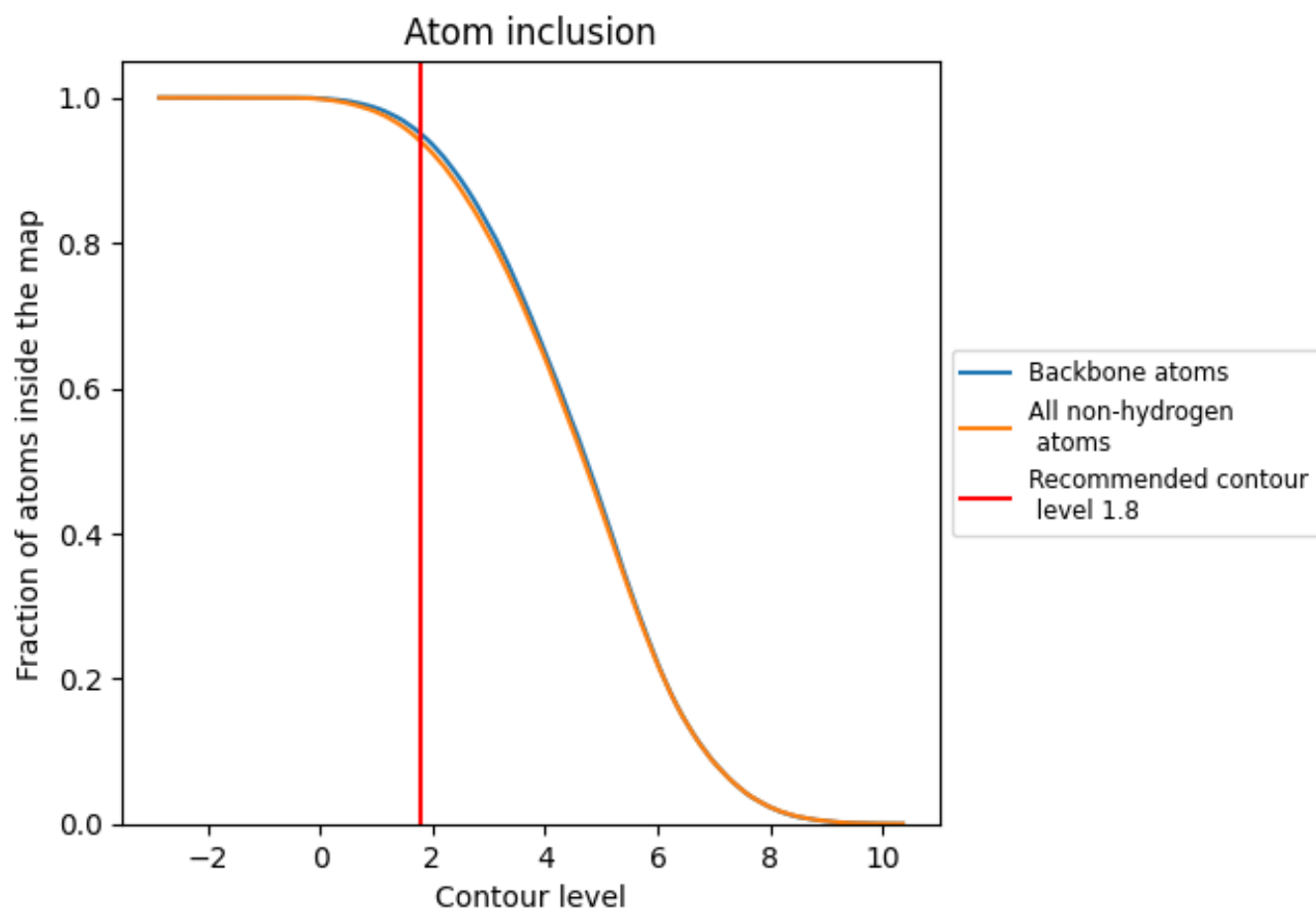
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (1.8).

## 9.4 Atom inclusion [i](#)

















At the recommended contour level, 95% of all backbone atoms, 94% of all non-hydrogen atoms, are inside the map.



## 9.5 Map-model fit summary [i](#)

The table lists the average atom inclusion at the recommended contour level (1.8) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.9391	 0.0500
A	 0.9573	 0.0520
B	 0.9363	 0.0450
C	 0.9278	 0.0440
D	 0.9312	 0.0490
E	 0.9485	 0.0560
F	 0.9336	 0.0520

