



## Full wwPDB EM Validation Report ⓘ

Apr 27, 2024 – 01:04 pm BST

PDB ID : 4V8W  
EMDB ID : EMD-2357  
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 : 17.50 Å(reported)  
Based on initial model : 3ZEN

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.dev92  
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 : 1.9.13  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)  
Validation Pipeline (wwPDB-VP) : 2.36.2

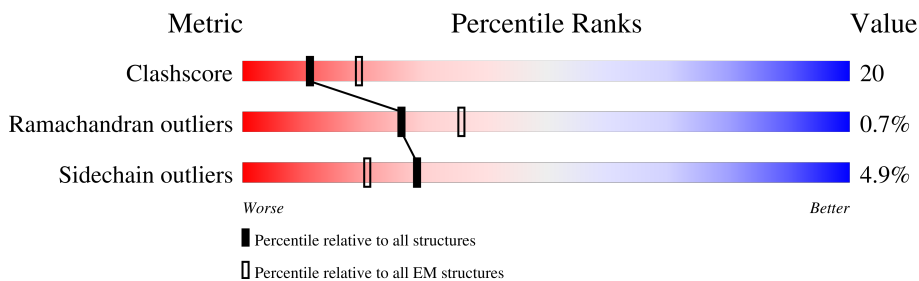
# 1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

*ELECTRON MICROSCOPY*

The reported resolution of this entry is 17.50 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](#)

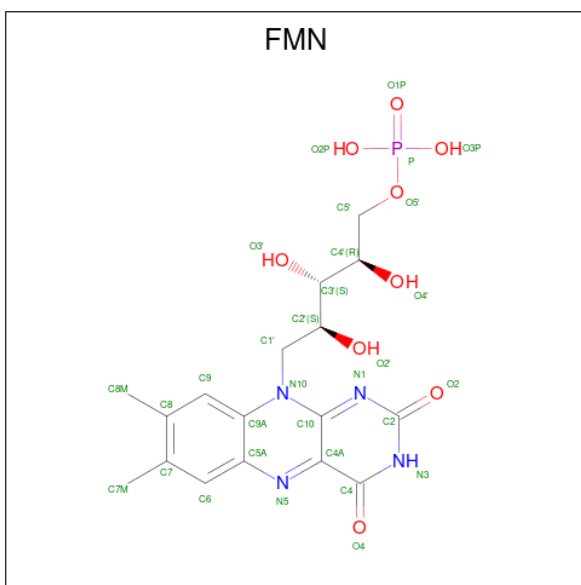
There are 2 unique types of molecules in this entry. The entry contains 123082 atoms, of which 0 are hydrogens and 0 are deuteriums.

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	D	2452	Total	C	N	O	S	0	0
			18171	11459	3176	3473	63		
1	E	2822	Total	C	N	O	S	0	0
			20945	13219	3662	3998	66		
1	F	2822	Total	C	N	O	S	0	0
			20945	13219	3662	3998	66		
1	A	2822	Total	C	N	O	S	0	0
			20945	13219	3662	3998	66		
1	B	2822	Total	C	N	O	S	0	0
			20945	13219	3662	3998	66		
1	C	2822	Total	C	N	O	S	0	0
			20945	13219	3662	3998	66		

- 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	D	1	Total	C	N	O	P	0
			31	17	4	9	1	

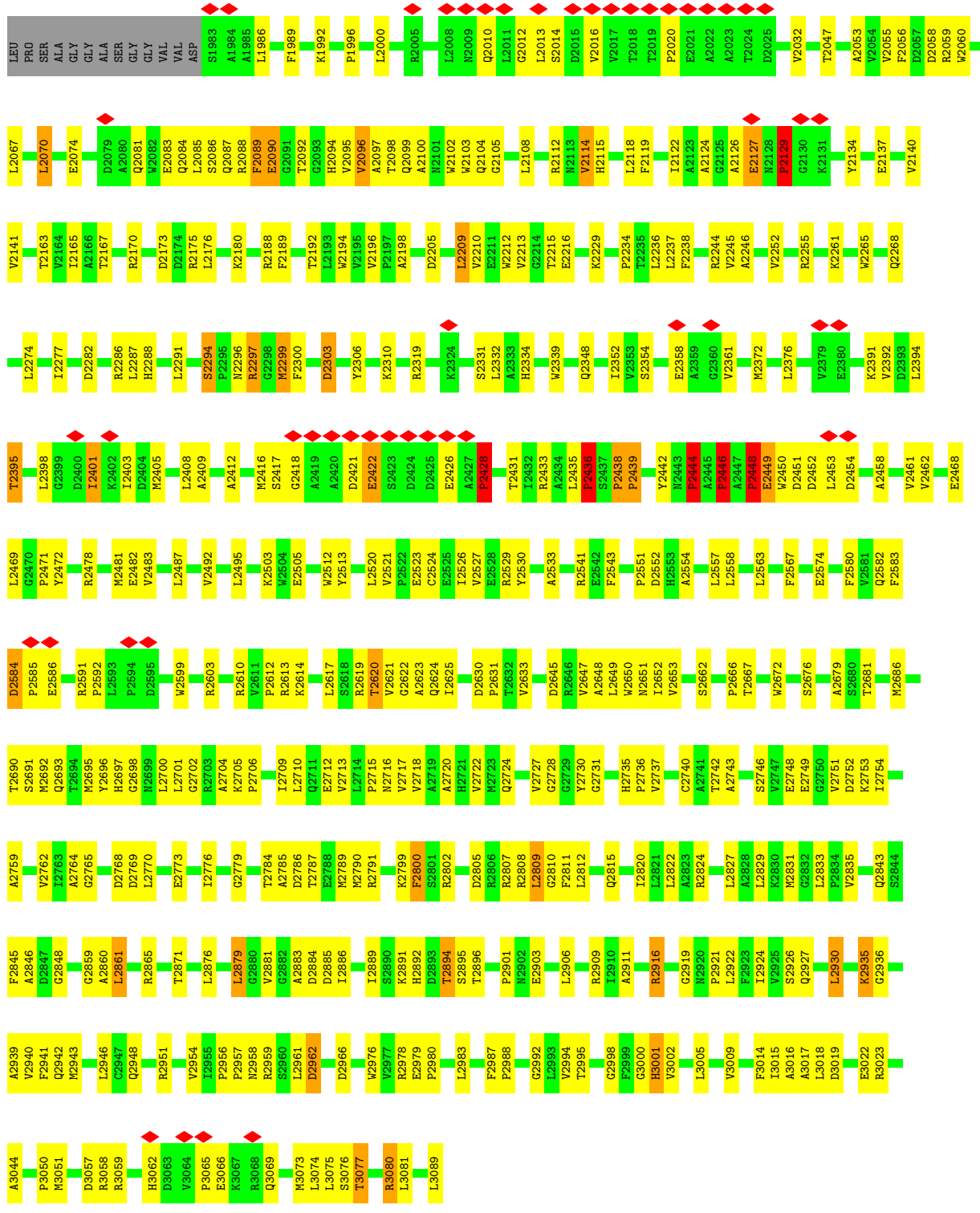
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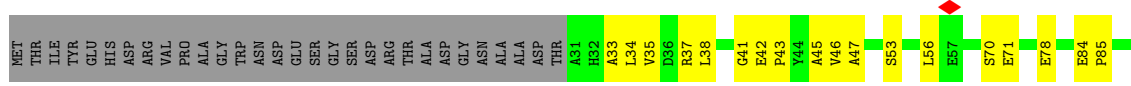
<b>Mol</b>	<b>Chain</b>	<b>Residues</b>	<b>Atoms</b>					<b>AltConf</b>
2	E	1	Total 31	C 17	N 4	O 9	P 1	0
2	F	1	Total 31	C 17	N 4	O 9	P 1	0
2	A	1	Total 31	C 17	N 4	O 9	P 1	0
2	B	1	Total 31	C 17	N 4	O 9	P 1	0
2	C	1	Total 31	C 17	N 4	O 9	P 1	0

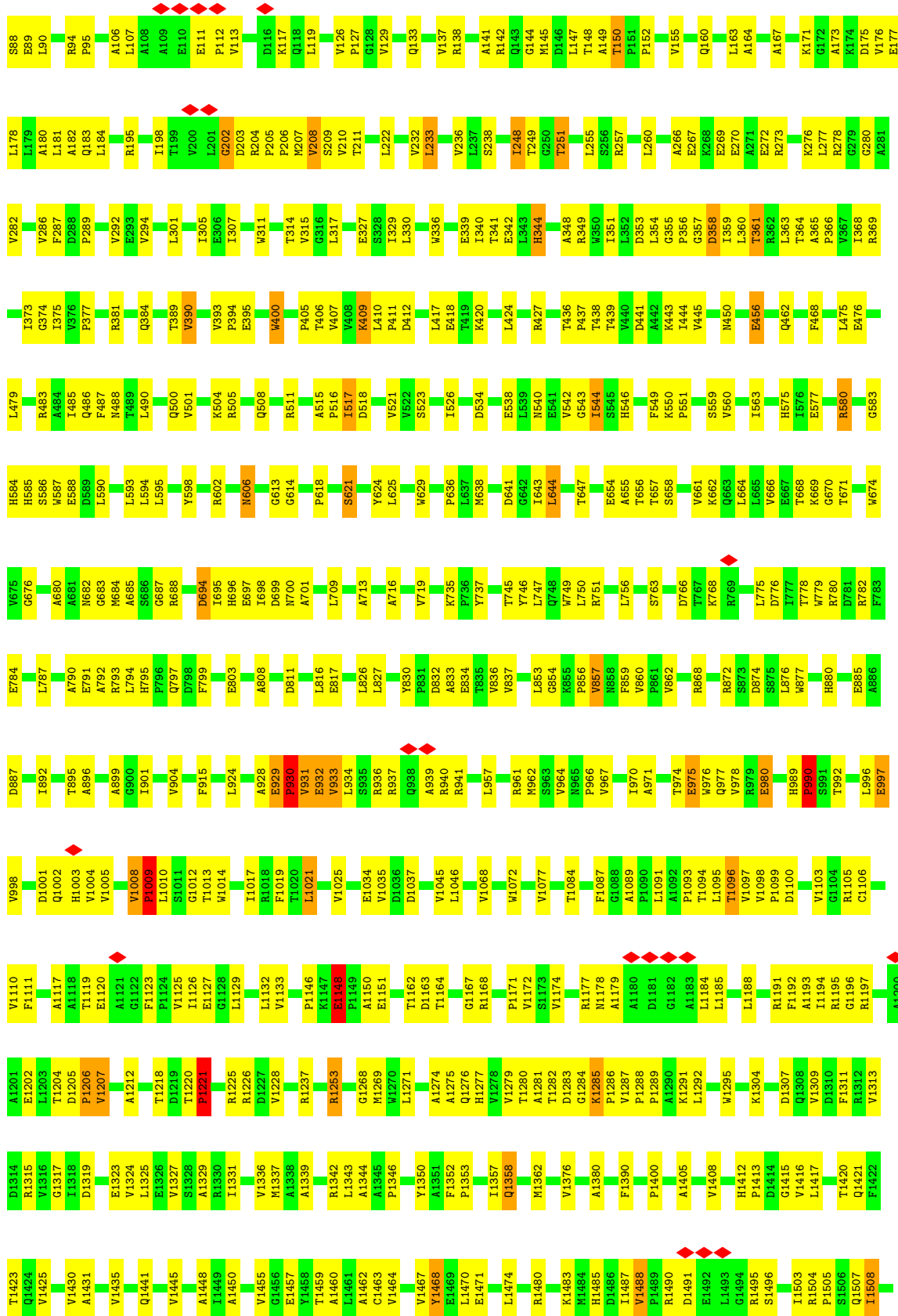






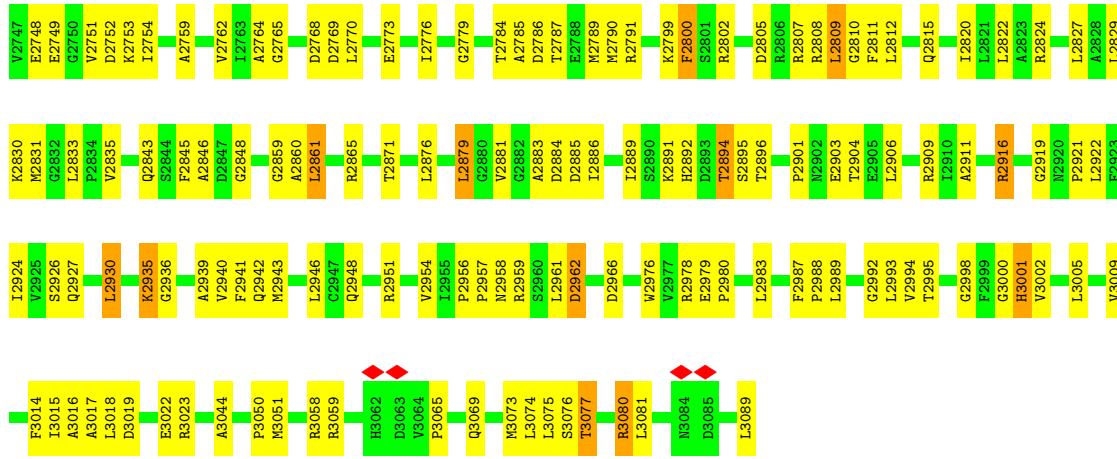
• Molecule 1: TYPE-I FATTY ACID SYNTHASE



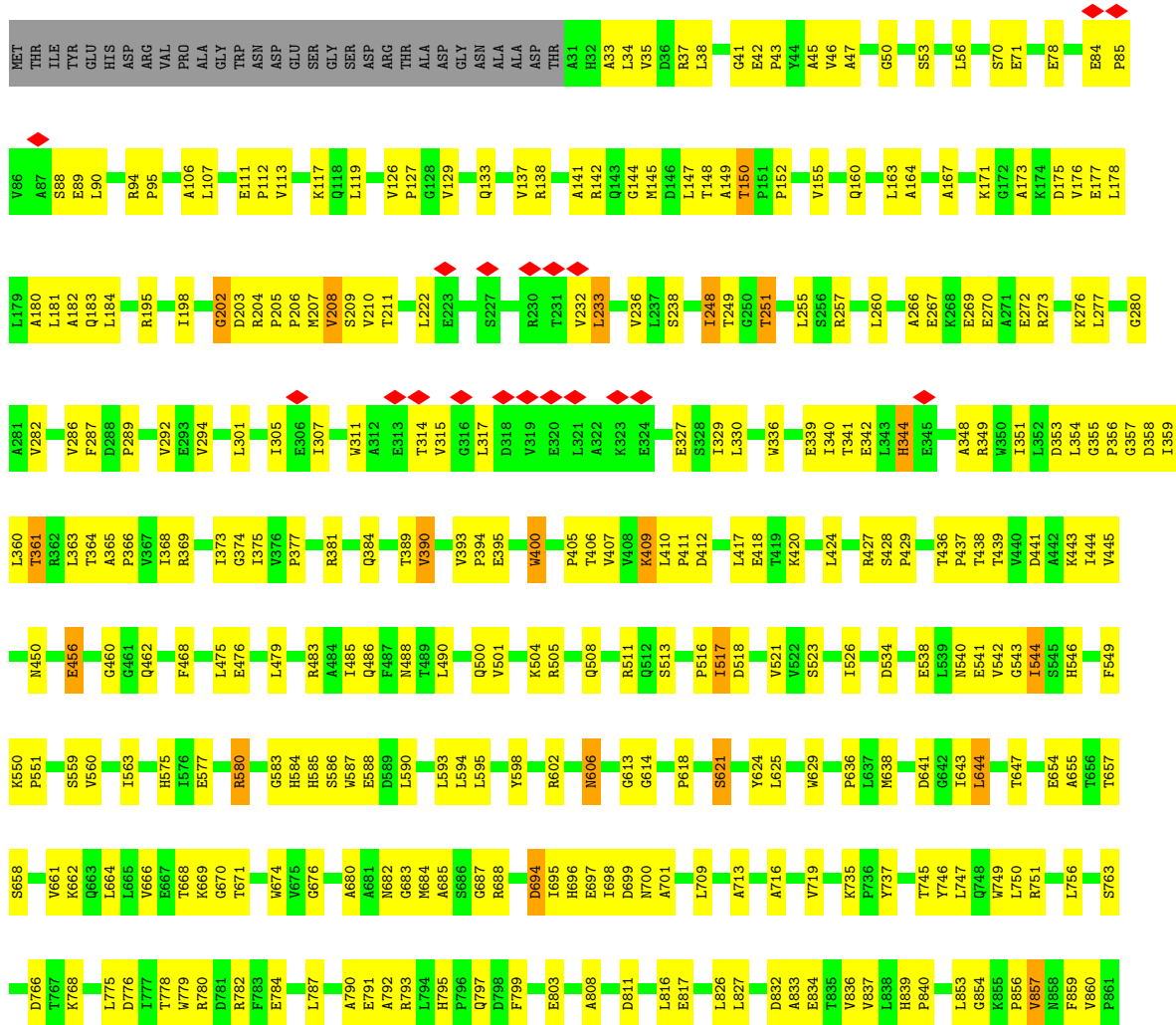




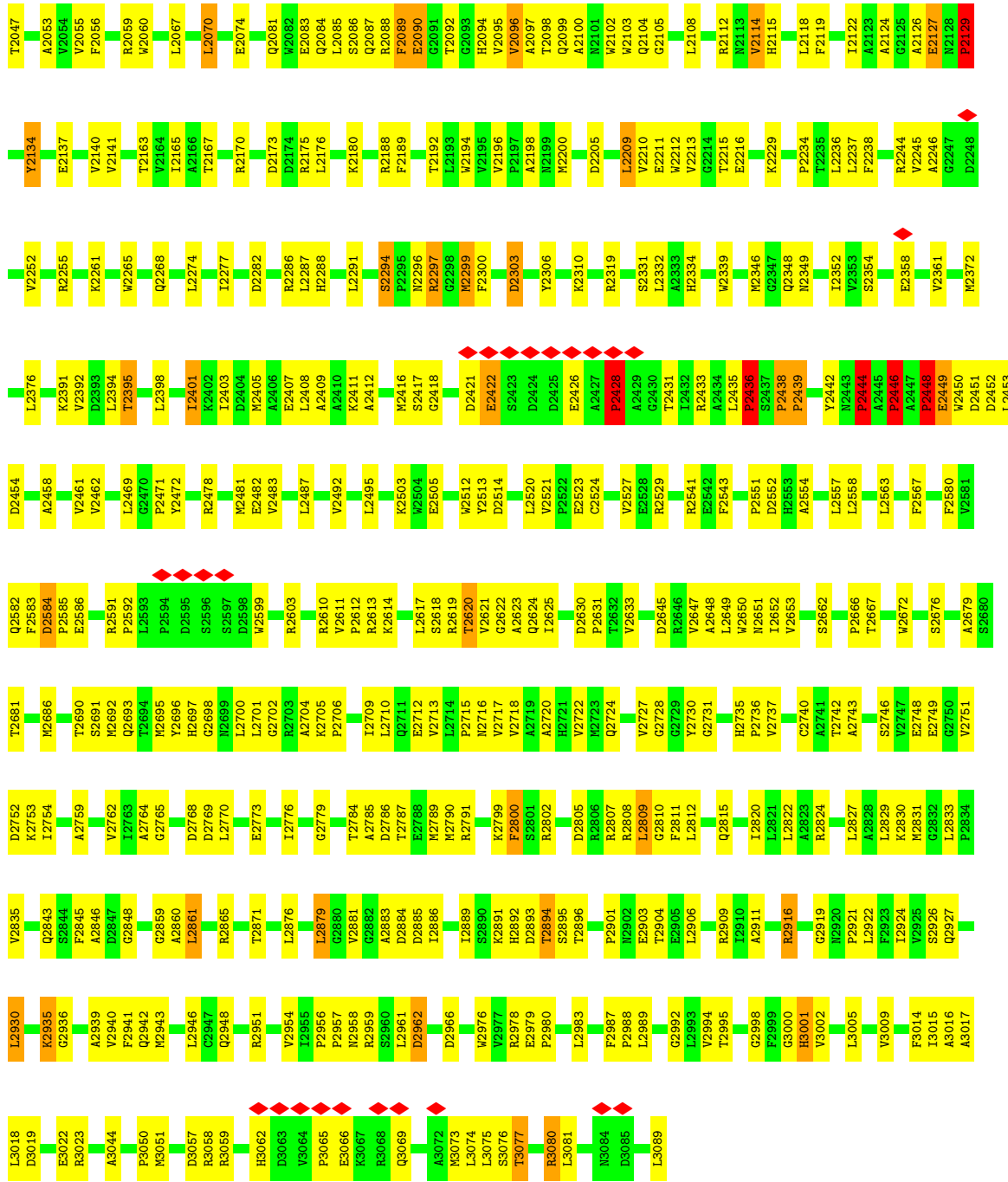




● Molecule 1: TYPE-I FATTY ACID SYNTHASE

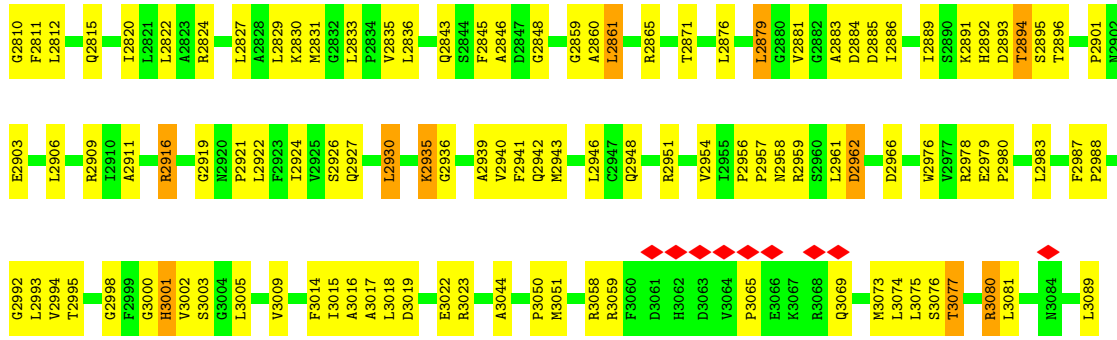






D1491	E1492	R1495	S1496	N1497	T1503	R1504	P1505	Q1506	I1508	D1509	L1510	D1511	D1514	D1517	F1518	A1519	A1520	E1521	I1522	S1523	E1524	R1525	T1526	G1527	E1528	L1530	E1531	V1532	N1533	N1534	F1535	N1536	L1537	R1538	G1539	Q1540	Y1541	A1543	I1544	A1549	G1550	L1551	E1552	A1553	L1554	E1555	E1556	E1557	R1560	R1561																																																																																																																																																																																																																																																																																																																																																																																																				
V176	E177	L178	L179	V286	F287	A180	A181	A182	Q183	L184	R185	I188	G202	D203	R204	P205	P206	M207	V208	S209	V210	T211	L222	T231	V232	L233	V236	L237	S238	L248	T249	G250	T251	L255	S256	R257	L260	A266	E267	R268	E269	E270	A271	E272	R273	K276	L277	R278	G279	G280																																																																																																																																																																																																																																																																																																																																																																																																				
A281	V282	V286	F287	D288	P289	V292	W293	V294	L301	I305	E306	I307	W311	T314	V315	G316	L317	E327	S328	L330	W336	E339	L340	T341	E342	L343	H344	A348	R349	W350	I351	L352	D353	L354	G355	P356	G357	D358	L359	L360	T361	R362	R363	T364	A365	P366	I368	R369	I373	G374	I375	V376	P377	R381	Q384	R385	T389	V390	V393	P394	E395	R398	P399	W400	P405	T406	V407	I408	L410	P411	D412	E417	L418	E419	K420	L424	R427	T436	P437	T438	T439	G440	D441	A442	K443	I444	V445	N450	L456	A460	G461	V462	E468	L475	E476	H584	H585	S586	R483	A484	I485	Q486	F487	M488	L489	Q500	V501	K504	R505	Q508	R511	P516	I517	D518	V521	V522	S523	I526	D534	E538	L539	N540	E541	V542	G543	I544	H546	A655	T656	T657	S658	V661	T767	K768	R769	P770	D771	L775	D776	L776	T777	R780	D781	F783	E784	L787	A790	E791	A792	R793	L794	H795	P796	Q797	F798	D799	E803	A808	D809	A810	D811	L816	E817	L826	L827	Y830	P831	D832	A833	E834	T835	V836	V837	L853	G854	R855	P856	N857	N858	F859	V860	F861	V862	R868	R872	S873	D874	S875	L876	W877	H880	D881	E885	D886	D887	I892	T895	A896	A899	G900	I901	V904	F909	F915	I924	A928	E929	V931	E932	V933	L934	S935	R936	R937	Q938	A939	R940	R941	P954	L957	R961	M962	S963	V964	N965	P966	V967	I970	A971	T974	E975	W976	Q977	V978	K989	H989	P990	T992	L996	E997	V998	D1001	Q1002	H1003	V1004	V1005	V1008	P1009	L1010	G1012	G1013	T1013	W1014	I1017	R1018	F1019	T1020	V1021	V1025	E1034	V1035	D1036	D1037	V1045	L1046	V1068	V1070	D1071	W1072	V1077	T1084	F1087	Q1088	A1089	P1090	L1091	A1092	P1093	T1094	L1095	T1097	V1098	H1098	F1099	D1100	V1103	G1104	R1105	C1106	V1110	F1111	A1117	L1118	E1120	A1121	G1122	F1123	P1124	V1125	I1126	E1127	G1128	L1129	L1132	V1133	P1146	E1147	E1148	P1149	A1150	E1151	F1152	T1162	D1163	T1164	G1167	R1168	P1171	V1172	S1173	V1174	R1177	L1178	A1179	P1286	V1287	P1288	D1181	G1182	A1183	L1184	L1185	L1188	R1191	F1192	A1193	L1194	R1195	G1196	R1197	A1200	A1201	E1202	L1203	T1204	D1205	P1206	V1207	A1212	T1218	D1219	T1220	P1221	R1225	L1226	D1227	V1228	R1237	R1253	G1268	M1269	V1270	L1271	A1274	A1275	Q1276	H1277	V1278	T1279	A1281	T1282	D1283	G1284	K1285	H1286	P1287	S1391	I1487	V1488	P1489	A1290	K1291	L1292	W1295	K1304	P1413	D1307	Q1308	D1414	G1415	V1309	L1417	T1420	Q1421	F1422	T1423	Q1424	V1425	V1430	A1431	E1323	V1324	L1325	E1326	S1328	A1329	R1330	I1331	V1336	M1337	A1338	A1339	R1342	L1343	A1344	A1346	C1346	P1346	Y1350	P1353	E1469	L1470	E1471	L1474	R1480	K1483	M1484	H1485	D1486	I1487	V1488	P1489	R1490	L1495	E1496	R1497	R1560	R1561





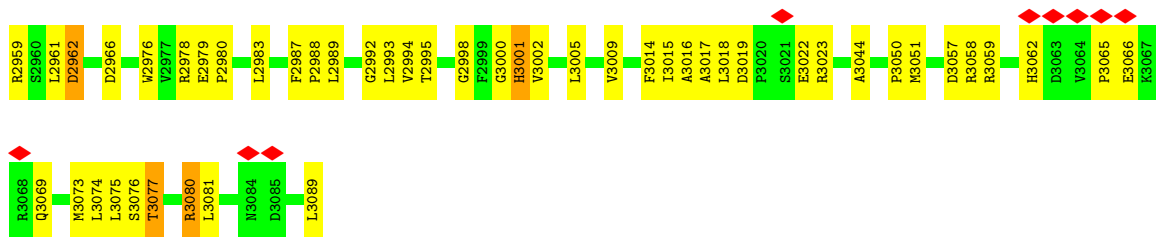








V2881	G2882	A2883	D2884	D2885	L2886	K2799	F2800	S2801	R2802	D2805	F2806	R2807	R2808	L2809	G2728	G2729	L2648	L2649	W2650	N2651	L2652	V2653	S2662	T2665	P2666	T2667	G2740	A2741	L2742	A2743	S2746	V2747	E2748	K2830	M2831	G2832	L2833	F2834	V2835	Q2843	S2844	F2845	A2846	D2847	G2848	A2855	P2856	G2859	A2860	L2861	R2865	T2871	L2876	L2879	G2880
E2712	V2713	L2714	P2715	N2716	Q2624	V2717	V2718	A2719	A2720	H2721	V2722	M2723	Q2724	V2727	G2728	G2729	L2648	L2649	W2650	N2651	L2652	V2653	S2662	T2665	P2666	T2667	C2740	A2741	L2742	A2743	S2746	V2747	E2748	K2830	M2831	G2832	L2833	F2834	V2835	Q2843	S2844	F2845	A2846	D2847	G2848	A2855	P2856	G2859	A2860	L2861	R2865	T2871	L2876	L2879	G2880
E2523	E2524	E2525	E2526	V2527	E2528	R2529	V2530	L2531	L2532	A2533	H2534	W2535	P2536	E2537	Y2442	N2443	Q2444	R2445	P2446	P2447	W2450	D2451	D2452	L2453	D2454	A2458	V2461	V2462	L2469	G2470	Y2472	R2478	M2481	E2482	V2483	L2487	V2492	L2495	K2503	W2504	E2505	W2512	Y2513	L2520	V2521										
R2319	K2324	E2328	S2331	L2332	A2333	H2334	W2339	M2346	Q2347	N2348	T2352	V2353	S2354	E2358	V2361	M2372	L2376	K2391	V2392	D2393	L2394	T2395	L2398	G2399	D2400	I2401	K2402	D2404	M2405	L2408	A2409	A2412	M2416	S2417	G2418	A2419	A2430	E2432	S2423	D2424															
R2101	W2102	W2103	Q2104	G2105	L2108	A2109	A2110	G2111	R2112	N2113	W2114	H2115	L2118	F2119	I2122	A2123	A2124	G2125	A2126	E2127	W2128	P2129	K2131	Y2134	E2137	V2140	V2141	T2163	V2164	I2165	A2166	T2167	R2170	D2173	D2174	R2175	L2176	K2180	R2188	F2189	T2192	L2193	W2194	V2195	V2196	P2197									
A2198	D2205	L2209	V2210	E2211	W2212	W2213	G2214	T2215	E2216	K2229	P2234	L2235	L2236	L2237	F2238	R2244	V2245	A2246	G2247	E2248	V2252	R2255	K2261	W2265	Q2268	L2274	I2277	R2286	L2287	H2288	L2291	S2294	F2295	R2297	G2298	M2299	F2300	D2303	L2306	K2310															
D2425	E2426	A2427	P2428	T2431	L2432	R2433	A2434	L2435	H2436	S2437	P2438	P2439	Y2442	N2443	Q2444	R2445	P2446	P2447	W2450	D2451	D2452	L2453	D2454	A2458	V2461	V2462	L2469	G2470	Y2472	R2478	M2481	E2482	V2483	L2487	V2492	L2495	K2503	W2504	E2505	W2512	Y2513	L2520	V2521												
P2592	E2593	E2594	V2595	E2596	R2599	V2599	L2599	A2599	R2599	E2599	F2599	P2599	L2599	F2599	E2599	F2580	V2581	Q2582	P2583	D2584	P2585	E2586	R2591	P2592	L2593	P2594	D2595	S2596	S2597	D2598	W2599	R2603	R2610	V2611	P2612	R2613	K2614	L2617	S2618																
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E2712	V2713	L2714	P2715	N2716	Q2624	V2717	V2718	A2719	A2720	H2721	V2722	M2723	Q2724	V2727	G2728	G2729	L2648	L2649	W2650	N2651	L2652	V2653	S2662	T2665	P2666	T2667	C2740	A2741	L2742	A2743	S2746	V2747	E2748	K2830	M2831	G2832	L2833	F2834	V2835	Q2843	S2844	F2845	A2846	D2847	G2848	A2855	P2856	G2859	A2860	L2861	R2865	T2871	L2876	L2879	G2880
T2787	E2788	M2789	M2790	R2791	K2799	F2800	S2801	R2802	D2805	F2806	R2807	R2808	L2809	G2728	G2729	L2648	L2649	W2650	N2651	L2652	V2653	S2662	T2665	P2666	T2667	C2740	A2741	L2742	A2743	S2746	V2747	E2748	K2830	M2831	G2832	L2833	F2834	V2835	Q2843	S2844	F2845	A2846	D2847	G2848	A2855	P2856	G2859	A2860	L2861	R2865	T2871	L2876	L2879	G2880	
V2881	G2882	A2883	D2884	D2885	L2886	K2799	F2800	S2801	R2802	D2805	F2806	R2807	R2808	L2809	G2728	G2729	L2648	L2649	W2650	N2651	L2652	V2653	S2662	T2665	P2666	T2667	C2740	A2741	L2742	A2743	S2746	V2747	E2748	K2830	M2831	G2832	L2833	F2834	V2835	Q2843	S2844	F2845	A2846	D2847	G2848	A2855	P2856	G2859	A2860	L2861	R2865	T2871	L2876	L2879	G2880



## 4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	9136	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	9.063	Depositor
Minimum map value	-2.149	Depositor
Average map value	-0.000	Depositor
Map value standard deviation	1.000	Depositor
Recommended contour level	2.0	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	0.41	26/18511 (0.1%)	0.50	13/25179 (0.1%)
1	E	0.39	26/21335 (0.1%)	0.51	13/29037 (0.0%)
1	F	0.39	27/21335 (0.1%)	0.51	13/29037 (0.0%)
All	All	0.40	160/125186 (0.1%)	0.51	78/170364 (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	2
1	E	0	5
1	F	0	5
All	All	0	27

All (160) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	E	2442	TYR	CB-CG	-6.39	1.42	1.51
1	A	2442	TYR	CB-CG	-6.35	1.42	1.51
1	B	2442	TYR	CB-CG	-6.35	1.42	1.51
1	D	2442	TYR	CB-CG	-6.33	1.42	1.51
1	F	2442	TYR	CB-CG	-6.33	1.42	1.51
1	C	2442	TYR	CB-CG	-6.32	1.42	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	2134	TYR	CB-CG	-6.26	1.42	1.51
1	A	2134	TYR	CB-CG	-6.24	1.42	1.51
1	B	2134	TYR	CB-CG	-6.23	1.42	1.51
1	F	2134	TYR	CB-CG	-6.22	1.42	1.51
1	E	2134	TYR	CB-CG	-6.18	1.42	1.51
1	D	2134	TYR	CB-CG	-6.17	1.42	1.51
1	D	2119	PHE	CB-CG	-5.48	1.42	1.51
1	B	2119	PHE	CB-CG	-5.46	1.42	1.51
1	B	2089	PHE	CB-CG	-5.44	1.42	1.51
1	D	2089	PHE	CB-CG	-5.43	1.42	1.51
1	F	2089	PHE	CB-CG	-5.43	1.42	1.51
1	F	2119	PHE	CB-CG	-5.42	1.42	1.51
1	E	2089	PHE	CB-CG	-5.42	1.42	1.51
1	E	2119	PHE	CB-CG	-5.41	1.42	1.51
1	C	975	GLU	CB-CG	-5.40	1.41	1.52
1	C	2119	PHE	CB-CG	-5.39	1.42	1.51
1	C	2089	PHE	CB-CG	-5.38	1.42	1.51
1	F	975	GLU	CB-CG	-5.37	1.42	1.52
1	A	2119	PHE	CB-CG	-5.37	1.42	1.51
1	D	975	GLU	CB-CG	-5.36	1.42	1.52
1	B	975	GLU	CB-CG	-5.36	1.42	1.52
1	A	975	GLU	CB-CG	-5.36	1.42	1.52
1	F	2090	GLU	CB-CG	-5.36	1.42	1.52
1	C	2090	GLU	CB-CG	-5.35	1.42	1.52
1	A	2089	PHE	CB-CG	-5.35	1.42	1.51
1	A	2090	GLU	CB-CG	-5.33	1.42	1.52
1	A	2426	GLU	CB-CG	-5.33	1.42	1.52
1	D	2426	GLU	CB-CG	-5.33	1.42	1.52
1	D	2127	GLU	CB-CG	-5.32	1.42	1.52
1	D	2090	GLU	CB-CG	-5.32	1.42	1.52
1	B	2090	GLU	CB-CG	-5.32	1.42	1.52
1	E	2083	GLU	CB-CG	-5.32	1.42	1.52
1	E	975	GLU	CB-CG	-5.31	1.42	1.52
1	D	980	GLU	CB-CG	-5.31	1.42	1.52
1	E	1202	GLU	CB-CG	-5.31	1.42	1.52
1	A	2127	GLU	CB-CG	-5.30	1.42	1.52
1	B	2426	GLU	CB-CG	-5.30	1.42	1.52
1	C	932	GLU	CB-CG	-5.30	1.42	1.52
1	D	997	GLU	CB-CG	-5.29	1.42	1.52
1	B	2127	GLU	CB-CG	-5.29	1.42	1.52
1	D	1202	GLU	CB-CG	-5.29	1.42	1.52
1	C	2083	GLU	CB-CG	-5.29	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	2083	GLU	CB-CG	-5.29	1.42	1.52
1	E	2090	GLU	CB-CG	-5.29	1.42	1.52
1	E	2426	GLU	CB-CG	-5.29	1.42	1.52
1	C	980	GLU	CB-CG	-5.28	1.42	1.52
1	B	2422	GLU	CB-CG	-5.28	1.42	1.52
1	F	1202	GLU	CB-CG	-5.28	1.42	1.52
1	E	932	GLU	CB-CG	-5.28	1.42	1.52
1	F	980	GLU	CB-CG	-5.28	1.42	1.52
1	F	2127	GLU	CB-CG	-5.28	1.42	1.52
1	B	997	GLU	CB-CG	-5.28	1.42	1.52
1	D	2449	GLU	CB-CG	-5.27	1.42	1.52
1	F	2426	GLU	CB-CG	-5.27	1.42	1.52
1	E	980	GLU	CB-CG	-5.27	1.42	1.52
1	E	2422	GLU	CB-CG	-5.27	1.42	1.52
1	B	932	GLU	CB-CG	-5.27	1.42	1.52
1	A	1202	GLU	CB-CG	-5.27	1.42	1.52
1	D	2083	GLU	CB-CG	-5.27	1.42	1.52
1	F	2083	GLU	CB-CG	-5.27	1.42	1.52
1	C	997	GLU	CB-CG	-5.26	1.42	1.52
1	F	932	GLU	CB-CG	-5.26	1.42	1.52
1	B	2449	GLU	CB-CG	-5.26	1.42	1.52
1	D	932	GLU	CB-CG	-5.26	1.42	1.52
1	A	2422	GLU	CB-CG	-5.26	1.42	1.52
1	A	980	GLU	CB-CG	-5.26	1.42	1.52
1	A	2449	GLU	CB-CG	-5.26	1.42	1.52
1	B	2083	GLU	CB-CG	-5.26	1.42	1.52
1	E	2127	GLU	CB-CG	-5.25	1.42	1.52
1	C	2426	GLU	CB-CG	-5.25	1.42	1.52
1	F	997	GLU	CB-CG	-5.25	1.42	1.52
1	F	2449	GLU	CB-CG	-5.25	1.42	1.52
1	B	980	GLU	CB-CG	-5.25	1.42	1.52
1	B	929	GLU	CB-CG	-5.25	1.42	1.52
1	B	1202	GLU	CB-CG	-5.24	1.42	1.52
1	E	929	GLU	CB-CG	-5.24	1.42	1.52
1	A	929	GLU	CB-CG	-5.24	1.42	1.52
1	E	997	GLU	CB-CG	-5.24	1.42	1.52
1	D	2422	GLU	CB-CG	-5.24	1.42	1.52
1	F	2422	GLU	CB-CG	-5.23	1.42	1.52
1	A	997	GLU	CB-CG	-5.23	1.42	1.52
1	C	1202	GLU	CB-CG	-5.23	1.42	1.52
1	C	2449	GLU	CB-CG	-5.23	1.42	1.52
1	E	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	A	932	GLU	CB-CG	-5.22	1.42	1.52
1	F	929	GLU	CB-CG	-5.22	1.42	1.52
1	E	998	VAL	CB-CG1	-5.21	1.41	1.52
1	C	2422	GLU	CB-CG	-5.21	1.42	1.52
1	C	2127	GLU	CB-CG	-5.21	1.42	1.52
1	C	929	GLU	CB-CG	-5.21	1.42	1.52
1	D	929	GLU	CB-CG	-5.20	1.42	1.52
1	F	998	VAL	CB-CG1	-5.20	1.42	1.52
1	A	998	VAL	CB-CG1	-5.19	1.42	1.52
1	C	998	VAL	CB-CG1	-5.17	1.42	1.52
1	D	998	VAL	CB-CG2	-5.15	1.42	1.52
1	E	933	VAL	CB-CG1	-5.15	1.42	1.52
1	B	933	VAL	CB-CG2	-5.14	1.42	1.52
1	D	1005	VAL	CB-CG1	-5.14	1.42	1.52
1	B	998	VAL	CB-CG1	-5.14	1.42	1.52
1	C	1005	VAL	CB-CG1	-5.13	1.42	1.52
1	D	933	VAL	CB-CG1	-5.13	1.42	1.52
1	F	933	VAL	CB-CG1	-5.12	1.42	1.52
1	B	2095	VAL	CB-CG2	-5.12	1.42	1.52
1	E	2095	VAL	CB-CG1	-5.12	1.42	1.52
1	D	2096	VAL	CB-CG1	-5.12	1.42	1.52
1	B	1005	VAL	CB-CG1	-5.12	1.42	1.52
1	A	1207	VAL	CB-CG2	-5.11	1.42	1.52
1	A	1005	VAL	CB-CG1	-5.11	1.42	1.52
1	C	2096	VAL	CB-CG2	-5.11	1.42	1.52
1	F	931	VAL	CB-CG1	-5.11	1.42	1.52
1	A	2096	VAL	CB-CG2	-5.11	1.42	1.52
1	B	2114	VAL	CB-CG2	-5.11	1.42	1.52
1	A	978	VAL	CB-CG1	-5.10	1.42	1.52
1	D	2114	VAL	CB-CG1	-5.10	1.42	1.52
1	E	1005	VAL	CB-CG1	-5.10	1.42	1.52
1	B	931	VAL	CB-CG1	-5.10	1.42	1.52
1	C	931	VAL	CB-CG1	-5.10	1.42	1.52
1	E	2096	VAL	CB-CG1	-5.10	1.42	1.52
1	A	2095	VAL	CB-CG2	-5.09	1.42	1.52
1	A	931	VAL	CB-CG1	-5.09	1.42	1.52
1	E	978	VAL	CB-CG1	-5.09	1.42	1.52
1	E	1207	VAL	CB-CG2	-5.09	1.42	1.52
1	F	2095	VAL	CB-CG1	-5.09	1.42	1.52
1	C	978	VAL	CB-CG1	-5.09	1.42	1.52
1	E	931	VAL	CB-CG1	-5.08	1.42	1.52
1	F	2096	VAL	CB-CG1	-5.08	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	978	VAL	CB-CG1	-5.08	1.42	1.52
1	B	2096	VAL	CB-CG1	-5.08	1.42	1.52
1	F	978	VAL	CB-CG2	-5.08	1.42	1.52
1	F	2114	VAL	CB-CG2	-5.08	1.42	1.52
1	C	1207	VAL	CB-CG2	-5.08	1.42	1.52
1	C	2095	VAL	CB-CG1	-5.08	1.42	1.52
1	F	1005	VAL	CB-CG1	-5.08	1.42	1.52
1	E	2114	VAL	CB-CG2	-5.07	1.42	1.52
1	B	1207	VAL	CB-CG1	-5.07	1.42	1.52
1	D	931	VAL	CB-CG1	-5.06	1.42	1.52
1	D	2095	VAL	CB-CG2	-5.06	1.42	1.52
1	C	2114	VAL	CB-CG2	-5.06	1.42	1.52
1	C	1008	VAL	CB-CG2	-5.06	1.42	1.52
1	D	978	VAL	CB-CG1	-5.06	1.42	1.52
1	C	1004	VAL	CB-CG1	-5.06	1.42	1.52
1	D	1004	VAL	CB-CG1	-5.05	1.42	1.52
1	D	1207	VAL	CB-CG1	-5.05	1.42	1.52
1	F	1207	VAL	CB-CG1	-5.05	1.42	1.52
1	C	933	VAL	CB-CG2	-5.05	1.42	1.52
1	B	1008	VAL	CB-CG2	-5.04	1.42	1.52
1	A	933	VAL	CB-CG1	-5.04	1.42	1.52
1	B	1004	VAL	CB-CG1	-5.04	1.42	1.52
1	A	1008	VAL	CB-CG1	-5.03	1.42	1.52
1	F	1004	VAL	CB-CG1	-5.03	1.42	1.52
1	A	2114	VAL	CB-CG2	-5.02	1.42	1.52
1	A	1004	VAL	CB-CG1	-5.02	1.42	1.52
1	E	1008	VAL	CB-CG1	-5.01	1.42	1.52
1	F	1008	VAL	CB-CG2	-5.01	1.42	1.52

All (78) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	930	PRO	N-CA-CB	6.99	111.69	103.30
1	C	930	PRO	N-CA-CB	6.98	111.68	103.30
1	F	930	PRO	N-CA-CB	6.97	111.66	103.30
1	A	930	PRO	N-CA-CB	6.96	111.66	103.30
1	D	930	PRO	N-CA-CB	6.96	111.65	103.30
1	B	930	PRO	N-CA-CB	6.96	111.65	103.30
1	F	1206	PRO	N-CA-CB	6.33	110.90	103.30
1	A	2438	PRO	N-CA-CB	6.30	110.86	103.30
1	C	1206	PRO	N-CA-CB	6.29	110.84	103.30
1	B	1206	PRO	N-CA-CB	6.29	110.84	103.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	1206	PRO	N-CA-CB	6.27	110.83	103.30
1	B	2438	PRO	N-CA-CB	6.26	110.82	103.30
1	D	1206	PRO	N-CA-CB	6.24	110.79	103.30
1	D	2438	PRO	N-CA-CB	6.23	110.78	103.30
1	E	2438	PRO	N-CA-CB	6.22	110.77	103.30
1	F	2438	PRO	N-CA-CB	6.21	110.75	103.30
1	A	1206	PRO	N-CA-CB	6.20	110.74	103.30
1	C	2438	PRO	N-CA-CB	6.19	110.72	103.30
1	D	2428	PRO	N-CA-CB	6.13	110.66	103.30
1	E	2444	PRO	N-CA-CB	6.12	110.65	103.30
1	A	2444	PRO	N-CA-CB	6.11	110.63	103.30
1	F	2444	PRO	N-CA-CB	6.11	110.63	103.30
1	C	2444	PRO	N-CA-CB	6.11	110.63	103.30
1	B	2444	PRO	N-CA-CB	6.10	110.62	103.30
1	B	2428	PRO	N-CA-CB	6.09	110.61	103.30
1	C	2428	PRO	N-CA-CB	6.08	110.60	103.30
1	A	2428	PRO	N-CA-CB	6.08	110.60	103.30
1	D	2444	PRO	N-CA-CB	6.08	110.59	103.30
1	E	2428	PRO	N-CA-CB	6.08	110.59	103.30
1	F	2428	PRO	N-CA-CB	6.04	110.55	103.30
1	D	2446	PRO	N-CA-CB	5.99	110.49	103.30
1	C	2439	PRO	N-CA-CB	5.99	110.49	103.30
1	B	2446	PRO	N-CA-CB	5.97	110.47	103.30
1	A	2446	PRO	N-CA-CB	5.96	110.46	103.30
1	F	2446	PRO	N-CA-CB	5.96	110.45	103.30
1	E	2446	PRO	N-CA-CB	5.95	110.44	103.30
1	D	2439	PRO	N-CA-CB	5.95	110.44	103.30
1	C	2446	PRO	N-CA-CB	5.95	110.44	103.30
1	A	2129	PRO	N-CA-CB	5.92	110.41	103.30
1	A	2439	PRO	N-CA-CB	5.91	110.39	103.30
1	C	2129	PRO	N-CA-CB	5.89	110.37	103.30
1	F	2439	PRO	N-CA-CB	5.89	110.36	103.30
1	E	2129	PRO	N-CA-CB	5.88	110.36	103.30
1	C	2448	PRO	N-CA-CB	5.88	110.36	103.30
1	E	2439	PRO	N-CA-CB	5.88	110.36	103.30
1	A	2448	PRO	N-CA-CB	5.88	110.36	103.30
1	F	2129	PRO	N-CA-CB	5.87	110.35	103.30
1	B	2439	PRO	N-CA-CB	5.87	110.35	103.30
1	D	2448	PRO	N-CA-CB	5.87	110.35	103.30
1	E	2448	PRO	N-CA-CB	5.87	110.35	103.30
1	D	2129	PRO	N-CA-CB	5.86	110.34	103.30
1	B	2129	PRO	N-CA-CB	5.86	110.33	103.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	F	2448	PRO	N-CA-CB	5.85	110.32	103.30
1	B	2448	PRO	N-CA-CB	5.85	110.32	103.30
1	A	1009	PRO	N-CA-CB	5.84	110.31	103.30
1	C	1009	PRO	N-CA-CB	5.79	110.24	103.30
1	B	990	PRO	N-CA-CB	5.78	110.24	103.30
1	E	1009	PRO	N-CA-CB	5.78	110.23	103.30
1	F	1009	PRO	N-CA-CB	5.74	110.19	103.30
1	B	1009	PRO	N-CA-CB	5.73	110.18	103.30
1	D	1009	PRO	N-CA-CB	5.73	110.17	103.30
1	D	990	PRO	N-CA-CB	5.71	110.15	103.30
1	F	990	PRO	N-CA-CB	5.70	110.14	103.30
1	A	990	PRO	N-CA-CB	5.70	110.14	103.30
1	C	990	PRO	N-CA-CB	5.70	110.14	103.30
1	E	990	PRO	N-CA-CB	5.68	110.11	103.30
1	C	1221	PRO	N-CA-CB	5.61	110.03	103.30
1	F	1221	PRO	N-CA-CB	5.61	110.03	103.30
1	D	1221	PRO	N-CA-CB	5.59	110.01	103.30
1	B	1221	PRO	N-CA-CB	5.59	110.01	103.30
1	E	1221	PRO	N-CA-CB	5.56	109.97	103.30
1	B	2436	PRO	N-CA-CB	5.55	109.95	103.30
1	E	2436	PRO	N-CA-CB	5.54	109.95	103.30
1	A	1221	PRO	N-CA-CB	5.53	109.94	103.30
1	F	2436	PRO	N-CA-CB	5.53	109.94	103.30
1	A	2436	PRO	N-CA-CB	5.51	109.92	103.30
1	D	2436	PRO	N-CA-CB	5.50	109.90	103.30
1	C	2436	PRO	N-CA-CB	5.50	109.90	103.30

There are no chirality outliers.

All (27) 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
1	B	357	GLY	Peptide
1	C	1148	GLU	Peptide

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Mol	Chain	Res	Type	Group
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	2584	ASP	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	882	0
1	B	20945	0	20595	872	0
1	C	20945	0	20595	896	0
1	D	18171	0	17756	765	0
1	E	20945	0	20595	882	0
1	F	20945	0	20594	1028	0
2	A	31	0	19	4	0
2	B	31	0	19	4	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	4	0
All	All	123082	0	120844	4979	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 (4979) 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:F:1039:ALA:HB2	1:F:1125:VAL:CG1	1.35	1.53
1:F:958:TRP:CH2	1:F:1131:SER:OG	1.76	1.38
1:F:1385:ARG:NH1	1:F:2411:LYS:NZ	1.74	1.36
1:F:953:ALA:CB	1:F:1032:ILE:HD11	1.58	1.33
1:F:2407:GLU:O	1:F:2411:LYS:HG3	1.26	1.29
1:F:1385:ARG:HH11	1:F:2411:LYS:CE	1.46	1.28
1:F:1385:ARG:CD	1:F:2411:LYS:HZ1	1.45	1.28
1:F:953:ALA:CB	1:F:1032:ILE:CD1	2.18	1.21
1:F:513:SER:O	1:F:961:ARG:NH1	1.72	1.19
1:F:1401:THR:HG21	1:C:2286:ARG:NH2	1.57	1.19
1:F:1037:ASP:OD1	1:F:1043:ARG:HG2	1.37	1.18
1:F:1021:LEU:HD22	1:F:1034:GLU:HG3	1.27	1.16
1:F:1038:ALA:O	1:F:1125:VAL:HG12	0.99	1.16
1:F:1039:ALA:CB	1:F:1125:VAL:HG11	1.78	1.14
1:F:1038:ALA:O	1:F:1125:VAL:CG1	1.95	1.13
1:F:1394:HIS:CE1	1:C:2324:LYS:HD3	1.84	1.13
1:E:1013:THR:HG23	1:E:1014:TRP:H	1.15	1.11
1:F:1385:ARG:NH1	1:F:2411:LYS:CE	2.09	1.10
1:A:1013:THR:HG23	1:A:1014:TRP:H	1.15	1.10
1:F:1385:ARG:HD2	1:F:2411:LYS:NZ	1.66	1.09
1:F:1039:ALA:CB	1:F:1125:VAL:CG1	2.32	1.08
1:F:1385:ARG:HD2	1:F:2411:LYS:HZ1	1.18	1.07
1:F:1042:MET:O	1:F:1044:ALA:N	1.87	1.07
1:D:1013:THR:HG23	1:D:1014:TRP:H	1.15	1.07
1:C:1013:THR:HG23	1:C:1014:TRP:H	1.15	1.07
1:F:1039:ALA:HB2	1:F:1125:VAL:CB	1.83	1.07
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:F:1385:ARG:CZ	1:F:2411:LYS:NZ	2.18	1.06
1:F:953:ALA:HB3	1:F:1032:ILE:HD11	1.33	1.06
1:F:2112:ARG:H	1:F:2115:HIS:CG	1.73	1.06
1:A:2094:HIS:CG	1:A:2096:VAL:HG22	1.90	1.06
1:E:2112:ARG:H	1:E:2115:HIS:CG	1.73	1.06
1:B:2094:HIS:CG	1:B:2096:VAL:HG12	1.90	1.06
1:B:2112:ARG:H	1:B:2115:HIS:CG	1.73	1.06
1:C:2112:ARG:H	1:C:2115:HIS:CG	1.73	1.06
1:D:2094:HIS:CG	1:D:2096:VAL:HG12	1.90	1.05
1:F:1013:THR:HG23	1:F:1014:TRP:H	1.15	1.05
1:E:2094:HIS:CG	1:E:2096:VAL:HG12	1.90	1.05
1:F:1037:ASP:CG	1:F:1043:ARG:HG2	1.76	1.05
1:F:2094:HIS:CG	1:F:2096:VAL:HG12	1.90	1.04

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2112:ARG:H	1:D:2115:HIS:CG	1.73	1.04
1:F:1394:HIS:HE1	1:C:2324:LYS:CD	1.70	1.04
1:F:953:ALA:HB3	1:F:1032:ILE:CD1	1.85	1.03
1:B:1013:THR:HG23	1:B:1014:TRP:H	1.15	1.02
1:F:1035:VAL:HG12	1:F:1041:ALA:HB1	1.40	1.02
1:F:1385:ARG:HH11	1:F:2411:LYS:HE2	1.20	1.01
1:F:1394:HIS:HE1	1:C:2324:LYS:HD3	1.13	1.01
1:F:992:THR:CG2	1:F:996:LEU:CG	2.39	1.01
1:E:992:THR:CG2	1:E:996:LEU:CG	2.39	1.01
1:B:992:THR:CG2	1:B:996:LEU:CG	2.39	1.01
1:C:2433:ARG:HA	1:C:2524:CYS:HB3	1.44	1.00
1:D:992:THR:CG2	1:D:996:LEU:CG	2.39	1.00
1:F:1037:ASP:OD1	1:F:1043:ARG:CG	2.08	1.00
1:A:992:THR:CG2	1:A:996:LEU:CG	2.39	1.00
1:D:2433:ARG:HA	1:D:2524:CYS:HB3	1.44	1.00
1:C:992:THR:CG2	1:C:996:LEU:CG	2.39	1.00
1:A:2433:ARG:HA	1:A:2524:CYS:HB3	1.44	0.99
1:E:1220:THR:HG22	1:E:1221:PRO:N	1.78	0.99
1:E:2433:ARG:HA	1:E:2524:CYS:HB3	1.44	0.99
1:B:2433:ARG:HA	1:B:2524:CYS:HB3	1.44	0.99
1:D:1220:THR:HG22	1:D:1221:PRO:N	1.78	0.98
1:E:792:ALA:O	1:E:2433:ARG:CG	2.12	0.98
1:F:792:ALA:O	1:F:2433:ARG:CG	2.12	0.98
1:F:1037:ASP:HA	1:F:1039:ALA:N	1.77	0.98
1:F:2407:GLU:C	1:F:2411:LYS:HG3	1.84	0.98
1:C:792:ALA:O	1:C:2433:ARG:CG	2.12	0.98
1:D:792:ALA:O	1:D:2433:ARG:CG	2.12	0.97
1:F:1385:ARG:HH11	1:F:2411:LYS:NZ	1.42	0.97
1:A:792:ALA:O	1:A:2433:ARG:CG	2.12	0.97
1:F:2433:ARG:HA	1:F:2524:CYS:HB3	1.44	0.97
1:F:953:ALA:HB2	1:F:1032:ILE:HD11	1.46	0.97
1:F:1401:THR:HG21	1:C:2286:ARG:HH22	1.18	0.97
1:C:3080:ARG:HH11	1:C:3080:ARG:HG3	1.29	0.97
1:A:1220:THR:HG22	1:A:1221:PRO:N	1.78	0.97
1:D:407:VAL:HB	1:D:933:VAL:HG11	1.47	0.97
1:F:1220:THR:HG22	1:F:1221:PRO:N	1.78	0.97
1:F:3080:ARG:HH11	1:F:3080:ARG:HG3	1.29	0.97
1:C:1220:THR:HG22	1:C:1221:PRO:N	1.78	0.96
1:C:407:VAL:HB	1:C:933:VAL:HG21	1.47	0.96
1:F:1385:ARG:CD	1:F:2411:LYS:NZ	2.25	0.96
1:B:792:ALA:O	1:B:2433:ARG:CG	2.11	0.96

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1021:LEU:HD22	1:F:1034:GLU:CG	1.96	0.96
1:A:407:VAL:HB	1:A:933:VAL:HG11	1.47	0.96
1:F:1038:ALA:CB	1:F:1126:ILE:HA	1.95	0.95
1:A:3080:ARG:HH11	1:A:3080:ARG:HG3	1.29	0.95
1:E:992:THR:HG21	1:E:996:LEU:CG	1.97	0.95
1:E:3080:ARG:HH11	1:E:3080:ARG:HG3	1.29	0.95
1:F:1039:ALA:CB	1:F:1125:VAL:CB	2.45	0.95
1:D:3080:ARG:HG3	1:D:3080:ARG:HH11	1.29	0.95
1:C:992:THR:HG21	1:C:996:LEU:CG	1.97	0.94
1:B:3080:ARG:HH11	1:B:3080:ARG:HG3	1.29	0.94
1:D:992:THR:HG21	1:D:996:LEU:CG	1.97	0.94
1:F:1385:ARG:CZ	1:F:2411:LYS:HZ1	1.78	0.94
1:F:1385:ARG:NE	1:F:2411:LYS:HZ1	1.65	0.94
1:F:1401:THR:CG2	1:C:2286:ARG:HH22	1.81	0.94
1:F:1020:THR:H	1:F:1035:VAL:HG21	1.31	0.94
1:A:992:THR:HG21	1:A:996:LEU:CG	1.97	0.94
1:B:1220:THR:HG22	1:B:1221:PRO:N	1.77	0.94
1:E:407:VAL:HB	1:E:933:VAL:HG11	1.47	0.94
1:B:1003:HIS:CG	1:B:1004:VAL:H	1.86	0.94
1:F:992:THR:HG21	1:F:996:LEU:CG	1.97	0.93
1:F:793:ARG:O	1:F:2435:LEU:CG	2.17	0.93
1:D:793:ARG:O	1:D:2435:LEU:CG	2.17	0.93
1:A:2100:ALA:O	1:A:2103:TRP:CG	2.22	0.93
1:B:2100:ALA:O	1:B:2103:TRP:CG	2.22	0.93
1:C:2100:ALA:O	1:C:2103:TRP:CG	2.22	0.93
1:B:793:ARG:O	1:B:2435:LEU:CG	2.16	0.93
1:F:1385:ARG:HD2	1:F:2407:GLU:CD	1.89	0.93
1:B:992:THR:HG21	1:B:996:LEU:CG	1.97	0.93
1:B:1012:GLY:O	1:B:1013:THR:HG22	1.69	0.93
1:D:1012:GLY:O	1:D:1013:THR:HG22	1.69	0.93
1:D:1013:THR:HG23	1:D:1014:TRP:N	1.84	0.93
1:A:793:ARG:O	1:A:2435:LEU:CG	2.16	0.93
1:B:407:VAL:HB	1:B:933:VAL:HG21	1.47	0.93
1:E:2100:ALA:O	1:E:2103:TRP:CG	2.22	0.93
1:D:2100:ALA:O	1:D:2103:TRP:CG	2.22	0.93
1:F:1037:ASP:OD2	1:F:1043:ARG:HB2	1.69	0.93
1:C:1012:GLY:O	1:C:1013:THR:HG22	1.69	0.92
1:C:1013:THR:HG23	1:C:1014:TRP:N	1.84	0.92
1:F:2100:ALA:O	1:F:2103:TRP:CG	2.22	0.92
1:C:793:ARG:O	1:C:2435:LEU:CG	2.17	0.92
1:E:793:ARG:O	1:E:2435:LEU:CG	2.16	0.92

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:407:VAL:HB	1:F:933:VAL:HG11	1.47	0.92
1:F:1012:GLY:O	1:F:1013:THR:HG22	1.69	0.92
1:D:1003:HIS:CG	1:D:1004:VAL:H	1.86	0.92
1:F:1385:ARG:NH1	1:F:2411:LYS:HZ3	1.56	0.92
1:F:513:SER:O	1:F:961:ARG:CZ	2.18	0.92
1:C:1003:HIS:CG	1:C:1004:VAL:H	1.86	0.92
1:F:1003:HIS:CG	1:F:1004:VAL:H	1.86	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:F:1037:ASP:HB2	1:F:1041:ALA:HB3	1.50	0.91
1:F:1019:PHE:HE2	1:F:1034:GLU:HG2	1.35	0.91
1:F:1038:ALA:HB2	1:F:1126:ILE:HA	1.54	0.90
1:B:1013:THR:HG23	1:B:1014:TRP:N	1.84	0.90
1:E:1013:THR:HG23	1:E:1014:TRP:N	1.84	0.90
1:A:1013:THR:HG23	1:A:1014:TRP:N	1.84	0.90
1:F:1037:ASP:N	1:F:1038:ALA:HB3	1.85	0.90
1:F:959:ALA:HB1	1:F:1127:GLU:N	1.87	0.90
1:F:2407:GLU:O	1:F:2411:LYS:CG	2.19	0.89
1:E:1012:GLY:O	1:E:1013:THR:HG22	1.69	0.89
1:F:2407:GLU:HB3	1:F:2411:LYS:CE	2.02	0.89
1:F:2407:GLU:CB	1:F:2411:LYS:HE3	2.02	0.89
1:A:1003:HIS:CG	1:A:1004:VAL:H	1.86	0.89
1:E:1003:HIS:CG	1:E:1004:VAL:H	1.86	0.89
1:F:2407:GLU:HB3	1:F:2411:LYS:HE3	1.52	0.89
1:F:1039:ALA:CB	1:F:1125:VAL:HB	2.00	0.89
1:F:1039:ALA:HB2	1:F:1125:VAL:HG11	0.90	0.88
1:F:1385:ARG:HG3	1:F:2407:GLU:OE2	1.73	0.88
1:F:959:ALA:O	1:F:1126:ILE:HG12	1.75	0.87
1:C:931:VAL:HG13	1:C:934:LEU:H	1.40	0.87
1:F:1035:VAL:CG1	1:F:1041:ALA:HB1	2.04	0.86
1:E:931:VAL:HG13	1:E:934:LEU:H	1.40	0.86
1:A:931:VAL:HG13	1:A: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:HG13	1:F:934:LEU:H	1.40	0.86
1:C:2105:GLY:O	1:C:2108:LEU:CG	2.24	0.86
1:F:1385:ARG:CG	1:F:2407:GLU:OE2	2.24	0.85
1:C:931:VAL:HG11	1:C:933:VAL:CG2	2.06	0.85
1:E:2865:ARG:HD3	1:B:3077:THR:HA	1.57	0.85
1:F:2105:GLY:O	1:F:2108:LEU:CG	2.25	0.85
1:A:2105:GLY:O	1:A:2108:LEU:CG	2.24	0.85
1:D:2105:GLY:O	1:D:2108:LEU:CG	2.24	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2105:GLY:O	1:B:2108:LEU:CG	2.25	0.85
1:D:931:VAL:HG11	1:D:933:VAL:CG1	2.06	0.85
1:F:2865:ARG:HD3	1:A:3077:THR:HA	1.57	0.85
1:A:1218:THR:HG23	1:A:1441:GLN:OE1	1.77	0.85
1:C:1218:THR:HG23	1:C:1441:GLN:OE1	1.77	0.85
1:D:2865:ARG:HD3	1:C:3077:THR:HA	1.57	0.85
1:E:931:VAL:HG11	1:E:933:VAL:CG1	2.06	0.85
1:F:513:SER:O	1:F:961:ARG:CD	2.25	0.85
1:F:1037:ASP:HA	1:F:1039:ALA:H	1.42	0.85
1:E:2105:GLY:O	1:E:2108:LEU:CG	2.24	0.85
1:A:931:VAL:HG11	1:A:933:VAL:CG1	2.06	0.85
1:E:3077:THR:HA	1:B:2865:ARG:HD3	1.57	0.85
1:D:931:VAL:HG13	1:D:934:LEU:H	1.40	0.84
1:F:992:THR:HG22	1:F:996:LEU:CG	2.07	0.84
1:C:992:THR:HG22	1:C:996:LEU:CG	2.07	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:F:931:VAL:HG11	1:F:933:VAL:CG1	2.06	0.84
1:D:1218:THR:HG23	1:D:1441:GLN:OE1	1.77	0.84
1:F:1039:ALA:HB3	1:F:1125:VAL:HB	1.57	0.84
1:B:1218:THR:HG23	1:B:1441:GLN:OE1	1.77	0.84
1:B:992:THR:HG22	1:B:996:LEU:CG	2.07	0.84
1:D:3077:THR:HA	1:C:2865:ARG:HD3	1.57	0.84
1:F:1218:THR:HG23	1:F:1441:GLN:OE1	1.77	0.84
1:E:1218:THR:HG23	1:E:1441:GLN:OE1	1.77	0.84
1:F:3077:THR:HA	1:A:2865:ARG:HD3	1.57	0.83
1:A:43:PRO:HG2	1:A:348:ALA:HA	1.60	0.83
1:D:992:THR:HG22	1:D:996:LEU:CG	2.07	0.83
1:F:953:ALA:CB	1:F:1032:ILE:HD12	2.09	0.83
1:F:1385:ARG:CZ	1:F:2411:LYS:HZ3	1.86	0.83
1:F:1038:ALA:C	1:F:1125:VAL:HG12	1.98	0.83
1:E:992:THR:HG22	1:E:996:LEU:CG	2.07	0.83
1:E:43:PRO:HG2	1:E:348:ALA:HA	1.60	0.83
1:F:953:ALA:HB1	1:F:1032:ILE:HD12	1.58	0.83
1:F:1538:ARG:HH11	1:F:1722:PRO:HB3	1.43	0.83
1:B:43:PRO:HG2	1:B:348:ALA:HA	1.60	0.82
1:B:1538:ARG:HH11	1:B:1722:PRO:HB3	1.43	0.82
1:C:1538:ARG:HH11	1:C:1722:PRO:HB3	1.43	0.82
1:F:43:PRO:HG2	1:F:348:ALA:HA	1.60	0.82
1:E:2016:VAL:HG13	1:E:2020:PRO:HG3	1.62	0.82
1:B:2016:VAL:HG13	1:B:2020:PRO:HG3	1.62	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1538:ARG:HH11	1:A:1722:PRO:HB3	1.43	0.82
1:E:2730:TYR:OH	1:E:3059:ARG:NH1	2.14	0.81
1:A:2016:VAL:HG13	1:A:2020:PRO:HG3	1.62	0.81
1:A:2730:TYR:OH	1:A:3059:ARG:NH1	2.14	0.81
1:D:2016:VAL:HG13	1:D:2020:PRO:HG3	1.62	0.81
1:F:953:ALA:HB1	1:F:1032:ILE:CD1	2.10	0.81
1:B:46:VAL:HB	1:B:155:VAL:HG13	1.63	0.81
1:F:138:ARG:NH2	1:F:175:ASP:OD2	2.14	0.81
1:C:2016:VAL:HG13	1:C:2020:PRO:HG3	1.62	0.81
1:F:46:VAL:HB	1:F:155:VAL:HG13	1.63	0.81
1:B:138:ARG:NH2	1:B:175:ASP:OD2	2.14	0.81
1:C:43:PRO:HG2	1:C:348:ALA:HA	1.60	0.81
1:D:1538:ARG:HH11	1:D:1722:PRO:HB3	1.43	0.81
1:E:138:ARG:NH2	1:E:175:ASP:OD2	2.14	0.81
1:F:967:VAL:HA	1:F:970:ILE:HB	1.63	0.81
1:F:2016:VAL:HG13	1:F:2020:PRO:HG3	1.62	0.81
1:D:967:VAL:HA	1:D:970:ILE:HB	1.63	0.80
1:A:138:ARG:NH2	1:A:175:ASP:OD2	2.14	0.80
1:D:2730:TYR:OH	1:D:3059:ARG:NH1	2.14	0.80
1:E:967:VAL:HA	1:E:970:ILE:HB	1.63	0.80
1:B:967:VAL:HA	1:B:970:ILE:HB	1.63	0.80
1:C:46:VAL:HB	1:C:155:VAL:HG13	1.63	0.80
1:C:138:ARG:NH2	1:C:175:ASP:OD2	2.14	0.80
1:C:967:VAL:HA	1:C:970:ILE:HB	1.63	0.80
1:F:931:VAL:CG1	1:F:933:VAL:CG1	2.60	0.80
1:C:931:VAL:CG1	1:C:933:VAL:CG2	2.60	0.80
1:E:46:VAL:HB	1:E:155:VAL:HG13	1.63	0.80
1:F:2730:TYR:OH	1:F:3059:ARG:NH1	2.14	0.80
1:A:46:VAL:HB	1:A:155:VAL:HG13	1.63	0.80
1:B:931:VAL:CG1	1:B:933:VAL:CG2	2.60	0.80
1:E:1538:ARG:HH11	1:E:1722:PRO:HB3	1.43	0.80
1:A:931:VAL:CG1	1:A:933:VAL:CG1	2.60	0.80
1:D:931:VAL:CG1	1:D:933:VAL:CG1	2.60	0.80
1:C:2610:ARG:HH12	1:C:2700:LEU:HD11	1.47	0.80
1:E:931:VAL:CG1	1:E:933:VAL:CG1	2.60	0.80
1:C:2730:TYR:OH	1:C:3059:ARG:NH1	2.14	0.80
1:F:273:ARG:HB2	1:F:282:VAL:H	1.47	0.80
1:B:2730:TYR:OH	1:B:3059:ARG:NH1	2.14	0.80
1:B:2610:ARG:HH12	1:B:2700:LEU:HD11	1.47	0.79
1:E:931:VAL:HG11	1:E:933:VAL:HG13	1.65	0.79
1:A:967:VAL:HA	1:A:970:ILE:HB	1.63	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1220:THR:CG2	1:B:1221:PRO:N	2.46	0.79
1:F:1020:THR:H	1:F:1035:VAL:CG2	1.96	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:F:2450:TRP:CG	1:F:3016:ALA:HB1	2.18	0.79
1:A:1220:THR:CG2	1:A:1221:PRO:N	2.46	0.79
1:A:2450:TRP:CG	1:A:3016:ALA:HB1	2.18	0.79
1:B:273:ARG:HB2	1:B:282:VAL:H	1.47	0.79
1:F:1019:PHE:CE1	1:F:1042:MET:SD	2.76	0.79
1:C:273:ARG:HB2	1:C:282:VAL:H	1.47	0.78
1:E:2610:ARG:HH12	1:E:2700:LEU:HD11	1.47	0.78
1:F:1220:THR:CG2	1:F:1221:PRO:N	2.46	0.78
1:F:2610:ARG:HH12	1:F:2700:LEU:HD11	1.47	0.78
1:D:2610:ARG:HH12	1:D:2700:LEU:HD11	1.47	0.78
1:E:2450:TRP:CG	1:E:3016:ALA:HB1	2.18	0.78
1:E:1329:ALA:HB3	1:E:1337:MET:H	1.48	0.78
1:C:2450:TRP:CG	1:C:3016:ALA:HB1	2.18	0.78
1:D:971:ALA:O	1:D:974:THR:HG22	1.84	0.78
1:A:971:ALA:O	1:A:974:THR:HG22	1.84	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:C:971:ALA:O	1:C:974:THR:HG22	1.84	0.78
1:F:971:ALA:O	1:F:974:THR:HG22	1.84	0.78
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:D:2450:TRP:CG	1:D:3016:ALA:HB1	2.18	0.77
1:F:931:VAL:HG11	1:F:933:VAL:HG13	1.65	0.77
1:F:1037:ASP:OD2	1:F:1043:ARG:CB	2.32	0.77
1:D:931:VAL:HG11	1:D:933:VAL:HG13	1.65	0.77
1:F:958:TRP:HH2	1:F:1131:SER:OG	1.61	0.77
1:A:931:VAL:CG1	1:A:933:VAL:HG13	2.15	0.77
1:B:1329:ALA:HB3	1:B:1337:MET:H	1.48	0.77
1:A:931:VAL:HG11	1:A:933:VAL:HG13	1.64	0.77
1:B:931:VAL:HG11	1:B:933:VAL:HG23	1.65	0.77
1:E:273:ARG:HB2	1:E:282:VAL:H	1.47	0.77
1:B:2451:ASP:CG	1:B:2454:ASP:OD2	2.22	0.77
1:D:2451:ASP:CG	1:D:2454:ASP:OD2	2.22	0.77
1:E:1220:THR:CG2	1:E:1221:PRO:N	2.46	0.77
1:A:1329:ALA:HB3	1:A:1337:MET:H	1.48	0.77
1:A:2610:ARG:HH12	1:A:2700:LEU:HD11	1.47	0.77
1:C:2451:ASP:CG	1:C:2454:ASP:OD2	2.22	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:931:VAL:CG1	1:C:933:VAL:HG23	2.15	0.77
1:C:2112:ARG:O	1:C:2115:HIS:CG	2.38	0.77
1:C:1220:THR:CG2	1:C:1221:PRO:N	2.46	0.76
1:E:931:VAL:CG1	1:E:933:VAL:HG13	2.15	0.76
1:F:931:VAL:CG1	1:F:933:VAL:HG13	2.15	0.76
1:C:1329:ALA:HB3	1:C:1337:MET:H	1.49	0.76
1:D:1003:HIS:CG	1:D:1004:VAL:N	2.53	0.76
1:D:2645:ASP:OD2	1:D:2691:SER:N	2.19	0.76
1:E:2451:ASP:CG	1:E:2454:ASP:OD2	2.22	0.76
1:F:1329:ALA:HB3	1:F:1337:MET:H	1.49	0.76
1:F:2451:ASP:CG	1:F:2454:ASP:OD2	2.22	0.76
1:A:2645:ASP:OD2	1:A:2691:SER:N	2.19	0.76
1:D:1695:LEU:HD23	1:E:257:ARG:HH12	1.50	0.76
1:A:257:ARG:HH12	1:C:1695:LEU:HD23	1.51	0.76
1:A:2557:LEU:O	1:A:2613:ARG:N	2.18	0.76
1:B:1003:HIS:CG	1:B:1004:VAL:N	2.53	0.76
1:E:2112:ARG:O	1:E:2115:HIS:CG	2.38	0.76
1:F:934:LEU:O	1:F:937:ARG:CG	2.34	0.76
1:F:1394:HIS:CE1	1:C:2324:LYS:NZ	2.54	0.76
1:F:1019:PHE:HE1	1:F:1042:MET:SD	2.09	0.76
1:A:1695:LEU:HD23	1:B:257:ARG:HH12	1.51	0.76
1:D:931:VAL:CG1	1:D:933:VAL:HG13	2.15	0.76
1:D:2112:ARG:O	1:D:2115:HIS:CG	2.38	0.76
1:B:1097:VAL:HB	1:B:1146:PRO:HB2	1.68	0.76
1:C:934:LEU:O	1:C:937:ARG:CG	2.34	0.76
1:E:2557:LEU:O	1:E:2613:ARG:N	2.18	0.76
1:D:1329:ALA:HB3	1:D:1337:MET:H	1.48	0.76
1:E:2645:ASP:OD2	1:E:2691:SER:N	2.19	0.76
1:A:934:LEU:O	1:A:937:ARG:CG	2.34	0.76
1:C:931:VAL:HG11	1:C:933:VAL:HG23	1.65	0.76
1:B:931:VAL:CG1	1:B:933:VAL:HG23	2.15	0.75
1:B:2112:ARG:O	1:B:2115:HIS:CG	2.38	0.75
1:D:934:LEU:O	1:D:937:ARG:CG	2.34	0.75
1:F:1035:VAL:CG1	1:F:1042:MET:HG2	2.16	0.75
1:A:2112:ARG:O	1:A:2115:HIS:CG	2.38	0.75
1:B:934:LEU:O	1:B:937:ARG:CG	2.34	0.75
1:F:1028:GLY:O	1:F:1031:PRO:HD3	1.87	0.75
1:F:2112:ARG:O	1:F:2115:HIS:CG	2.38	0.75
1:E:1695:LEU:HD23	1:F:257:ARG:HH12	1.51	0.75
1:E:934:LEU:O	1:E:937:ARG:CG	2.34	0.75
1:C:2645:ASP:OD2	1:C:2691:SER:N	2.19	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1097:VAL:HB	1:D:1146:PRO:HB2	1.68	0.75
1:A:1556:GLU:OE2	1:A:1560:ARG:NH2	2.20	0.75
1:A:1097:VAL:HB	1:A:1146:PRO:HB2	1.68	0.75
1:B:1695:LEU:HD23	1:C:257:ARG:HH12	1.50	0.75
1:E:1097:VAL:HB	1:E:1146:PRO:HB2	1.68	0.74
1:D:445:VAL:HG13	1:D:475:LEU:HD21	1.69	0.74
1:C:1097:VAL:HB	1:C:1146:PRO:HB2	1.68	0.74
1:E:33:ALA:HB2	1:E:390:VAL:HA	1.70	0.74
1:F:957:LEU:O	1:F:1034:GLU:HB3	1.87	0.74
1:F:1556:GLU:OE2	1:F:1560:ARG:NH2	2.20	0.74
1:B:2557:LEU:O	1:B:2613:ARG:N	2.18	0.74
1:C:3015:ILE:HG12	1:C:3023:ARG:HG3	1.69	0.74
1:D:3015:ILE:HG12	1:D:3023:ARG:HG3	1.69	0.74
1:E:3015:ILE:HG12	1:E:3023:ARG:HG3	1.69	0.74
1:A:33:ALA:HB2	1:A:390:VAL:HA	1.70	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:B:1556:GLU:OE2	1:B:1560:ARG:NH2	2.20	0.74
1:C:33:ALA:HB2	1:C:390:VAL:HA	1.69	0.74
1:F:513:SER:C	1:F:961:ARG:NH1	2.40	0.74
1:F:2645:ASP:OD2	1:F:2691:SER:N	2.19	0.74
1:C:1556:GLU:OE2	1:C:1560:ARG:NH2	2.20	0.74
1:D:1556:GLU:OE2	1:D:1560:ARG:NH2	2.20	0.74
1:D:2697:HIS:HD2	1:C:2700:LEU:HD22	1.53	0.74
1:E:445:VAL:HG13	1:E:475:LEU:HD21	1.69	0.74
1:F:960:GLY:HA2	1:F:1126:ILE:HD13	1.70	0.74
1:B:3015:ILE:HG12	1:B:3023:ARG:HG3	1.69	0.74
1:E:1556:GLU:OE2	1:E:1560:ARG:NH2	2.20	0.73
1:F:1037:ASP:CG	1:F:1043:ARG:CG	2.54	0.73
1:B:445:VAL:HG13	1:B:475:LEU:HD21	1.69	0.73
1:D:2603:ARG:NH2	1:C:2612:PRO:O	2.22	0.73
1:F:2053:ALA:O	1:F:2807:ARG:NH2	2.21	0.73
1:F:2700:LEU:HD22	1:A:2697:HIS:HD2	1.53	0.73
1:A:2096:VAL:O	1:A:2099:GLN:CG	2.37	0.73
1:C:2053:ALA:O	1:C:2807:ARG:NH2	2.21	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:E:1168:ARG:N	1:E:1194:ILE:O	2.21	0.73
1:E:2612:PRO:O	1:B:2603:ARG:NH2	2.22	0.73
1:F:3015:ILE:HG12	1:F:3023:ARG:HG3	1.69	0.73
1:F:2697:HIS:HD2	1:A:2700:LEU:HD22	1.53	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:445:VAL:HG13	1:A:475:LEU:HD21	1.69	0.73
1:B:2096:VAL:O	1:B:2099:GLN:CG	2.36	0.73
1:B:2645:ASP:OD2	1:B:2691:SER:N	2.19	0.73
1:F:1037:ASP:CA	1:F:1038:ALA:HB3	2.18	0.73
1:F:2883:ALA:O	1:F:2916:ARG:NH1	2.22	0.73
1:B:2883:ALA:O	1:B:2916:ARG:NH1	2.22	0.73
1:D:2612:PRO:O	1:C:2603:ARG:NH2	2.22	0.73
1:F:2096:VAL:O	1:F:2099:GLN:CG	2.36	0.73
1:C:2557:LEU:O	1:C:2613:ARG:N	2.18	0.73
1:B:2053:ALA:O	1:B:2807:ARG:NH2	2.21	0.73
1:C:437:PRO:HG3	1:C:876:LEU:HB3	1.70	0.73
1:D:2053:ALA:O	1:D:2807:ARG:NH2	2.21	0.73
1:E:2096:VAL:O	1:E:2099:GLN:CG	2.37	0.73
1:F:2557:LEU:O	1:F:2613:ARG:N	2.18	0.73
1:F:2845:PHE:HD1	1:A:2731:GLY:HA2	1.54	0.73
1:D:2557:LEU:O	1:D:2613:ARG:N	2.18	0.72
1:E:2053:ALA:O	1:E:2807:ARG:NH2	2.21	0.72
1:E:2697:HIS:HD2	1:B:2700:LEU:HD22	1.53	0.72
1:A:437:PRO:HG3	1:A:876:LEU:HB3	1.70	0.72
1:A:3015:ILE:HG12	1:A:3023:ARG:HG3	1.69	0.72
1:B:936:ARG:HB3	1:B:941:ARG:HB3	1.71	0.72
1:D:2731:GLY:HA2	1:C:2845:PHE:HD1	1.54	0.72
1:E:2883:ALA:O	1:E:2916:ARG:NH1	2.22	0.72
1:C:445:VAL:HG13	1:C:475:LEU:HD21	1.69	0.72
1:C:2096:VAL:O	1:C:2099:GLN:CG	2.37	0.72
1:D:1400:PRO:HD2	1:D:1416:VAL:HG22	1.72	0.72
1:E:1003:HIS:CG	1:E:1004:VAL:N	2.53	0.72
1:F:33:ALA:HB2	1:F:390:VAL:HA	1.70	0.72
1:B:2998:GLY:N	1:B:3002:VAL:O	2.23	0.72
1:A:2883:ALA:O	1:A:2916:ARG:NH1	2.22	0.72
1:C:936:ARG:HB3	1:C:941:ARG:HB3	1.71	0.72
1:D:1168:ARG:N	1:D:1194:ILE:O	2.21	0.72
1:E:437:PRO:HG3	1:E:876:LEU:HB3	1.70	0.72
1:E:936:ARG:HB3	1:E:941:ARG:HB3	1.71	0.72
1:E:2603:ARG:NH2	1:B:2612:PRO:O	2.22	0.72
1:F:70:SER:OG	1:F:142:ARG:NH2	2.23	0.72
1:A:2053:ALA:O	1:A:2807:ARG:NH2	2.21	0.72
1:B:437:PRO:HG3	1:B:876:LEU:HB3	1.70	0.72
1:C:2883:ALA:O	1:C:2916:ARG:NH1	2.22	0.72
1:D:1237:ARG:NH1	1:E:95:PRO:HB2	2.05	0.72
1:E:1253:ARG:HG3	1:E:1253:ARG:HH11	1.54	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1253:ARG:HH11	1:A:1253:ARG:HG3	1.55	0.72
1:A:2998:GLY:N	1:A:3002:VAL:O	2.23	0.72
1:B:1168:ARG:N	1:B:1194:ILE:O	2.21	0.72
1:F:437:PRO:HG3	1:F:876:LEU:HB3	1.70	0.72
1:F:1020:THR:N	1:F:1035:VAL:HG21	2.03	0.72
1:F:1168:ARG:N	1:F:1194:ILE:O	2.21	0.72
1:F:2103:TRP:CG	1:F:2104:GLN:N	2.58	0.72
1:F:2731:GLY:HA2	1:A:2845:PHE:HD1	1.54	0.72
1:D:2700:LEU:HD22	1:C:2697:HIS:HD2	1.53	0.72
1:D:2998:GLY:N	1:D:3002:VAL:O	2.23	0.72
1:F:936:ARG:HB3	1:F:941:ARG:HB3	1.71	0.72
1:F:1394:HIS:CE1	1:C:2324:LYS:CD	2.56	0.72
1:F:2603:ARG:NH2	1:A:2612:PRO:O	2.22	0.72
1:F:2612:PRO:O	1:A:2603:ARG:NH2	2.22	0.72
1:A:1168:ARG:N	1:A:1194:ILE:O	2.21	0.72
1:B:33:ALA:HB2	1:B:390:VAL:HA	1.69	0.72
1:C:1168:ARG:N	1:C:1194:ILE:O	2.21	0.72
1:E:2731:GLY:HA2	1:B:2845:PHE:HD1	1.54	0.72
1:E:2845:PHE:HD1	1:B:2731:GLY:HA2	1.54	0.72
1:B:1218:THR:CG2	1:B:1441:GLN:OE1	2.38	0.72
1:B:2103:TRP:CG	1:B:2104:GLN:N	2.58	0.72
1:B:2268:GLN:OE1	1:B:2319:ARG:NH1	2.23	0.72
1:D:2103:TRP:CG	1:D:2104:GLN:N	2.58	0.71
1:D:2883:ALA:O	1:D:2916:ARG:NH1	2.22	0.71
1:A:936:ARG:HB3	1:A:941:ARG:HB3	1.71	0.71
1:B:1400:PRO:HD2	1:B:1416:VAL:HG22	1.72	0.71
1:D:1218:THR:CG2	1:D:1441:GLN:OE1	2.38	0.71
1:E:2103:TRP:CG	1:E:2104:GLN:N	2.58	0.71
1:C:1218:THR:CG2	1:C:1441:GLN:OE1	2.38	0.71
1:C:2268:GLN:OE1	1:C:2319:ARG:NH1	2.23	0.71
1:C:2998:GLY:N	1:C:3002:VAL:O	2.23	0.71
1:D:2282:ASP:HB3	1:B:1390:PHE:HA	1.72	0.71
1:F:2268:GLN:OE1	1:F:2319:ARG:NH1	2.23	0.71
1:C:2103:TRP:CG	1:C:2104:GLN:N	2.58	0.71
1:E:1237:ARG:NH1	1:F:95:PRO:HB2	2.05	0.71
1:E:2700:LEU:HD22	1:B:2697:HIS:HD2	1.53	0.71
1:F:959:ALA:O	1:F:1126:ILE:CG1	2.38	0.71
1:A:95:PRO:HB2	1:C:1237:ARG:NH1	2.05	0.71
1:A:1237:ARG:NH1	1:B:95:PRO:HB2	2.05	0.71
1:B:70:SER:OG	1:B:142:ARG:NH2	2.23	0.71
1:D:2861:LEU:HD21	1:C:3075:LEU:HD23	1.72	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:3075:LEU:HD23	1:B:2861:LEU:HD21	1.72	0.71
1:C:580:ARG:HD2	1:C:614:GLY:HA3	1.72	0.71
1:E:2268:GLN:OE1	1:E:2319:ARG:NH1	2.23	0.71
1:F:2861:LEU:HD21	1:A:3075:LEU:HD23	1.72	0.71
1:A:2268:GLN:OE1	1:A:2319:ARG:NH1	2.24	0.71
1:D:1390:PHE:HA	1:B:2282:ASP:HB3	1.72	0.71
1:D:2268:GLN:OE1	1:D:2319:ARG:NH1	2.23	0.71
1:D:3075:LEU:HD23	1:C:2861:LEU:HD21	1.72	0.71
1:F:1218:THR:CG2	1:F:1441:GLN:OE1	2.38	0.71
1:F:2215:THR:HB	1:F:2229:LYS:HB2	1.73	0.71
1:F:2998:GLY:N	1:F:3002:VAL:O	2.23	0.71
1:E:1218:THR:CG2	1:E:1441:GLN:OE1	2.38	0.71
1:E:2743:ALA:HB1	1:E:2940:VAL:HG23	1.73	0.71
1:F:1385:ARG:NH1	1:F:2411:LYS:HE2	1.93	0.71
1:F:1385:ARG:HD2	1:F:2411:LYS:HZ2	1.56	0.71
1:A:2103:TRP:CG	1:A:2104:GLN:N	2.58	0.71
1:E:580:ARG:HD2	1:E:614:GLY:HA3	1.73	0.71
1:F:2743:ALA:HB1	1:F:2940:VAL:HG23	1.73	0.71
1:C:70:SER:OG	1:C:142:ARG:NH2	2.23	0.71
1:D:2845:PHE:HD1	1:C:2731:GLY:HA2	1.54	0.70
1:E:70:SER:OG	1:E:142:ARG:NH2	2.23	0.70
1:E:1507:GLN:O	1:E:1562:ARG:NH1	2.24	0.70
1:E:2998:GLY:N	1:E:3002:VAL:O	2.23	0.70
1:F:1394:HIS:CE1	1:C:2324:LYS:HZ2	2.08	0.70
1:F:2558:LEU:HG	1:F:2612:PRO:HA	1.73	0.70
1:D:580:ARG:HD2	1:D:614:GLY:HA3	1.73	0.70
1:D:1253:ARG:HH11	1:D:1253:ARG:HG3	1.55	0.70
1:D:1634:ARG:HH11	1:D:1639:ALA:H	1.39	0.70
1:E:2282:ASP:HB3	1:A:1390:PHE:HA	1.72	0.70
1:F:1507:GLN:O	1:F:1562:ARG:NH1	2.24	0.70
1:A:1400:PRO:HD2	1:A:1416:VAL:HG22	1.72	0.70
1:B:1507:GLN:O	1:B:1562:ARG:NH1	2.24	0.70
1:E:1634:ARG:HH11	1:E:1639:ALA:H	1.39	0.70
1:F:3075:LEU:HD23	1:A:2861:LEU:HD21	1.72	0.70
1:A:580:ARG:HD2	1:A:614:GLY:HA3	1.73	0.70
1:A:1507:GLN:O	1:A:1562:ARG:NH1	2.24	0.70
1:B:1253:ARG:HH11	1:B:1253:ARG:HG3	1.55	0.70
1:B:2558:LEU:HG	1:B:2612:PRO:HA	1.74	0.70
1:F:1003:HIS:CG	1:F:1004:VAL:N	2.53	0.70
1:F:1022:THR:O	1:F:1033:VAL:HB	1.91	0.70
1:F:1253:ARG:HH11	1:F:1253:ARG:HG3	1.54	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1400:PRO:HD2	1:C:1416:VAL:HG22	1.72	0.70
1:C:1507:GLN:O	1:C:1562:ARG:NH1	2.24	0.70
1:D:2860:ALA:HB3	1:D:2906:LEU:HD21	1.73	0.70
1:E:1400:PRO:HD2	1:E:1416:VAL:HG22	1.72	0.70
1:F:580:ARG:HD2	1:F:614:GLY:HA3	1.72	0.70
1:A:70:SER:OG	1:A:142:ARG:NH2	2.23	0.70
1:A:974:THR:HG21	1:A:977:GLN:HB3	1.74	0.70
1:A:1634:ARG:HH11	1:A:1639:ALA:H	1.39	0.70
1:A:2743:ALA:HB1	1:A:2940:VAL:HG23	1.73	0.70
1:C:1253:ARG:HH11	1:C:1253:ARG:HG3	1.54	0.70
1:D:936:ARG:HB3	1:D:941:ARG:HB3	1.72	0.70
1:D:1507:GLN:O	1:D:1562:ARG:NH1	2.24	0.70
1:F:2282:ASP:HB3	1:C:1390:PHE:HA	1.72	0.70
1:A:1218:THR:CG2	1:A:1441:GLN:OE1	2.38	0.70
1:B:1634:ARG:HH11	1:B:1639:ALA:H	1.39	0.70
1:C:1634:ARG:HH11	1:C:1639:ALA:H	1.39	0.70
1:D:1177:ARG:HB2	1:D:1184:LEU:HD23	1.74	0.70
1:E:1390:PHE:HA	1:A:2282:ASP:HB3	1.72	0.70
1:F:137:VAL:HG22	1:F:354:LEU:HD13	1.74	0.70
1:F:1400:PRO:HD2	1:F:1416:VAL:HG22	1.72	0.70
1:B:1237:ARG:NH1	1:C:95:PRO:HB2	2.05	0.70
1:B:2215:THR:HB	1:B:2229:LYS:HB2	1.74	0.70
1:E:2558:LEU:HG	1:E:2612:PRO:HA	1.74	0.70
1:A:2860:ALA:HB3	1:A:2906:LEU:HD21	1.73	0.70
1:B:2743:ALA:HB1	1:B:2940:VAL:HG23	1.73	0.70
1:E:1035:VAL:HG12	1:E:1037:ASP:H	1.57	0.70
1:F:1035:VAL:HG12	1:F:1041:ALA:CB	2.18	0.70
1:B:137:VAL:HG22	1:B:354:LEU:HD13	1.74	0.70
1:E:974:THR:HG21	1:E:977:GLN:HB3	1.74	0.70
1:E:2861:LEU:HD21	1:B:3075:LEU:HD23	1.72	0.69
1:F:1177:ARG:HB2	1:F:1184:LEU:HD23	1.74	0.69
1:A:2558:LEU:HG	1:A:2612:PRO:HA	1.73	0.69
1:C:2860:ALA:HB3	1:C:2906:LEU:HD21	1.73	0.69
1:E:137:VAL:HG22	1:E:354:LEU:HD13	1.74	0.69
1:E:1724:TYR:OH	1:F:267:GLU:OE2	2.07	0.69
1:D:2085:LEU:O	1:D:2088:ARG:CG	2.40	0.69
1:E:2860:ALA:HB3	1:E:2906:LEU:HD21	1.73	0.69
1:F:1012:GLY:O	1:F:1013:THR:CG2	2.41	0.69
1:A:2215:THR:HB	1:A:2229:LYS:HB2	1.74	0.69
1:B:1177:ARG:HB2	1:B:1184:LEU:HD23	1.74	0.69
1:C:2215:THR:HB	1:C:2229:LYS:HB2	1.74	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2215:THR:HB	1:D:2229:LYS:HB2	1.73	0.69
1:A:1035:VAL:HG12	1:A:1037:ASP:H	1.57	0.69
1:F:1019:PHE:CE2	1:F:1034:GLU:HG2	2.24	0.69
1:B:1035:VAL:HG12	1:B:1037:ASP:H	1.57	0.69
1:C:137:VAL:HG22	1:C:354:LEU:HD13	1.74	0.69
1:D:1046:LEU:HD13	1:D:1129:LEU:HD22	1.75	0.69
1:E:2215:THR:HB	1:E:2229:LYS:HB2	1.73	0.69
1:C:1046:LEU:HD13	1:C:1129:LEU:HD22	1.75	0.69
1:D:1035:VAL:HG12	1:D:1037:ASP:H	1.57	0.69
1:F:2860:ALA:HB3	1:F:2906:LEU:HD21	1.73	0.69
1:F:2946:LEU:HD11	1:F:2992:GLY:HA3	1.75	0.69
1:A:137:VAL:HG22	1:A:354:LEU:HD13	1.74	0.69
1:B:2647:VAL:HG22	1:B:2769:ASP:HB2	1.75	0.69
1:C:2085:LEU:O	1:C:2088:ARG:CG	2.41	0.69
1:C:2558:LEU:HG	1:C:2612:PRO:HA	1.73	0.69
1:F:513:SER:O	1:F:961:ARG:HD2	1.90	0.69
1:D:974:THR:HG21	1:D:977:GLN:HB3	1.74	0.69
1:F:3075:LEU:HD21	1:A:2909:ARG:HB3	1.75	0.69
1:A:1012:GLY:O	1:A:1013:THR:CG2	2.41	0.69
1:C:1177:ARG:HB2	1:C:1184:LEU:HD23	1.74	0.69
1:D:2647:VAL:HG22	1:D:2769:ASP:HB2	1.75	0.68
1:D:2946:LEU:HD11	1:D:2992:GLY:HA3	1.75	0.68
1:E:2085:LEU:O	1:E:2088:ARG:CG	2.41	0.68
1:F:974:THR:HG21	1:F:977:GLN:HB3	1.74	0.68
1:F:2557:LEU:HG	1:A:2702:GLY:HA3	1.76	0.68
1:B:2860:ALA:HB3	1:B:2906:LEU:HD21	1.73	0.68
1:B:2946:LEU:HD11	1:B:2992:GLY:HA3	1.75	0.68
1:C:974:THR:HG21	1:C:977:GLN:HB3	1.74	0.68
1:E:340:ILE:HD13	1:E:364:THR:HG21	1.75	0.68
1:F:1021:LEU:CD2	1:F:1034:GLU:HG3	2.14	0.68
1:F:2647:VAL:HG22	1:F:2769:ASP:HB2	1.75	0.68
1:A:1046:LEU:HD13	1:A:1129:LEU:HD22	1.75	0.68
1:C:2647:VAL:HG22	1:C:2769:ASP:HB2	1.75	0.68
1:C:2743:ALA:HB1	1:C:2940:VAL:HG23	1.73	0.68
1:E:1046:LEU:HD13	1:E:1129:LEU:HD22	1.75	0.68
1:F:1385:ARG:NH1	1:F:2411:LYS:HZ1	1.64	0.68
1:D:2558:LEU:HG	1:D:2612:PRO:HA	1.74	0.68
1:E:2909:ARG:HB3	1:B:3075:LEU:HD21	1.75	0.68
1:F:2085:LEU:O	1:F:2088:ARG:CG	2.40	0.68
1:A:1177:ARG:HB2	1:A:1184:LEU:HD23	1.74	0.68
1:B:511:ARG:HD3	1:B:543:GLY:HA3	1.76	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:580:ARG:HD2	1:B:614:GLY:HA3	1.73	0.68
1:C:1035:VAL:HG12	1:C:1037:ASP:H	1.57	0.68
1:C:2946:LEU:HD11	1:C:2992:GLY:HA3	1.75	0.68
1:D:2743:ALA:HB1	1:D:2940:VAL:HG23	1.73	0.68
1:B:269:GLU:HB3	1:B:282:VAL:HA	1.76	0.68
1:B:1002:GLN:O	1:B:1003:HIS:CG	2.47	0.68
1:B:1012:GLY:O	1:B:1013:THR:CG2	2.41	0.68
1:B:2085:LEU:O	1:B:2088:ARG:CG	2.41	0.68
1:D:3075:LEU:HD21	1:C:2909:ARG:HB3	1.76	0.68
1:E:1008:VAL:HG12	1:E:1019:PHE:HB3	1.76	0.68
1:E:1177:ARG:HB2	1:E:1184:LEU:HD23	1.74	0.68
1:A:267:GLU:OE2	1:C:1724:TYR:OH	2.07	0.68
1:A:2647:VAL:HG22	1:A:2769:ASP:HB2	1.75	0.68
1:C:269:GLU:HB3	1:C:282:VAL:HA	1.75	0.68
1:D:1008:VAL:HG12	1:D:1019:PHE:HB3	1.76	0.68
1:D:2557:LEU:HG	1:C:2702:GLY:HA3	1.76	0.68
1:A:340:ILE:HD13	1:A:364:THR:HG21	1.75	0.68
1:A:2085:LEU:O	1:A:2088:ARG:CG	2.41	0.68
1:C:1008:VAL:HG22	1:C:1019:PHE:HB3	1.76	0.68
1:D:1164:THR:N	1:D:1167:GLY:O	2.25	0.68
1:D:2702:GLY:HA3	1:C:2557:LEU:HG	1.76	0.68
1:A:2946:LEU:HD11	1:A:2992:GLY:HA3	1.75	0.68
1:B:1164:THR:N	1:B:1167:GLY:O	2.25	0.68
1:C:1488:VAL:HG21	1:C:1580:PRO:HD2	1.76	0.68
1:F:1401:THR:CG2	1:C:2286:ARG:NH2	2.42	0.68
1:D:2112:ARG:N	1:D:2115:HIS:CG	2.57	0.67
1:E:2946:LEU:HD11	1:E:2992:GLY:HA3	1.75	0.67
1:F:1634:ARG:HH11	1:F:1639:ALA:H	1.39	0.67
1:A:1003:HIS:CG	1:A:1004:VAL:N	2.53	0.67
1:B:340:ILE:HD13	1:B:364:THR:HG21	1.75	0.67
1:B:1046:LEU:HD13	1:B:1129:LEU:HD22	1.75	0.67
1:D:511:ARG:HD3	1:D:543:GLY:HA3	1.76	0.67
1:D:1002:GLN:O	1:D:1003:HIS:CG	2.47	0.67
1:E:2702:GLY:HA3	1:B:2557:LEU:HG	1.76	0.67
1:F:1002:GLN:O	1:F:1003:HIS:CG	2.47	0.67
1:A:2126:ALA:O	1:A:2129:PRO:CG	2.43	0.67
1:B:931:VAL:CG1	1:B:933:VAL:HG22	2.24	0.67
1:D:1488:VAL:HG21	1:D:1580:PRO:HD2	1.76	0.67
1:E:269:GLU:HB3	1:E:282:VAL:HA	1.75	0.67
1:E:931:VAL:CG1	1:E:933:VAL:HG12	2.25	0.67
1:E:2748:GLU:HG2	1:B:2753:LYS:HZ2	1.60	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1046:LEU:HD13	1:F:1129:LEU:HD22	1.75	0.67
1:F:2081:GLN:O	1:F:2084:GLN:CG	2.43	0.67
1:C:1002:GLN:O	1:C:1003:HIS:CG	2.47	0.67
1:A:792:ALA:HA	1:A:799:PHE:HE2	1.60	0.67
1:B:974:THR:HG21	1:B:977:GLN:HB3	1.74	0.67
1:C:1003:HIS:CG	1:C:1004:VAL:N	2.53	0.67
1:C:1012:GLY:O	1:C:1013:THR:CG2	2.41	0.67
1:D:1012:GLY:O	1:D:1013:THR:CG2	2.41	0.67
1:C:340:ILE:HD13	1:C:364:THR:HG21	1.75	0.67
1:C:1164:THR:N	1:C:1167:GLY:O	2.25	0.67
1:C:2081:GLN:O	1:C:2084:GLN:CG	2.43	0.67
1:B:2126:ALA:O	1:B:2129:PRO:CG	2.43	0.67
1:C:931:VAL:CG1	1:C:933:VAL:HG22	2.25	0.67
1:D:931:VAL:CG1	1:D:933:VAL:HG12	2.25	0.67
1:E:3075:LEU:HD21	1:B:2909:ARG:HB3	1.76	0.67
1:A:1008:VAL:HG12	1:A:1019:PHE:HB3	1.76	0.67
1:F:340:ILE:HD13	1:F:364:THR:HG21	1.75	0.67
1:F:511:ARG:HD3	1:F:543:GLY:HA3	1.76	0.67
1:F:792:ALA:HA	1:F:799:PHE:HE2	1.60	0.67
1:A:269:GLU:HB3	1:A:282:VAL:HA	1.75	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:C:1168:ARG:HB2	1:C:1197:ARG:HB2	1.77	0.67
1:D:683:GLY:HA2	1:D:700:ASN:HB2	1.77	0.66
1:D:1488:VAL:HG12	1:D:1490:ARG:NH1	2.10	0.66
1:D:3080:ARG:HH11	1:D:3080:ARG:CG	2.07	0.66
1:F:2094:HIS:CG	1:F:2096:VAL:CG1	2.75	0.66
1:C:511:ARG:HD3	1:C:543:GLY:HA3	1.76	0.66
1:D:792:ALA:HA	1:D:799:PHE:HE2	1.60	0.66
1:E:2081:GLN:O	1:E:2084:GLN:CG	2.43	0.66
1:F:269:GLU:HB3	1:F:282:VAL:HA	1.75	0.66
1:F:1008:VAL:HG22	1:F:1019:PHE:HB3	1.76	0.66
1:F:2909:ARG:HB3	1:A:3075:LEU:HD21	1.75	0.66
1:B:511:ARG:HB2	1:B:540:ASN:HB2	1.77	0.66
1:B:2081:GLN:O	1:B:2084:GLN:CG	2.43	0.66
1:C:683:GLY:HA2	1:C:700:ASN:HB2	1.78	0.66
1:C:1167:GLY:HA3	1:C:1195:ARG:HA	1.77	0.66
1:C:1358:GLN:HG2	1:C:1423:THR:HG23	1.78	0.66
1:D:1167:GLY:HA3	1:D:1195:ARG:HA	1.78	0.66
1:D:2126:ALA:O	1:D:2129:PRO:CG	2.43	0.66
1:F:511:ARG:HB2	1:F:540:ASN:HB2	1.78	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:666:VAL:HG21	1:F:904:VAL:HB	1.78	0.66
1:A:511:ARG:HD3	1:A:543:GLY:HA3	1.76	0.66
1:A:511:ARG:HB2	1:A:540:ASN:HB2	1.77	0.66
1:A:1002:GLN:O	1:A:1003:HIS:CG	2.47	0.66
1:A:1167:GLY:HA3	1:A:1195:ARG:HA	1.78	0.66
1:B:3080:ARG:HH11	1:B:3080:ARG:CG	2.07	0.66
1:C:792:ALA:HA	1:C:799:PHE:HE2	1.60	0.66
1:C:2094:HIS:CG	1:C:2096:VAL:CG2	2.75	0.66
1:C:2126:ALA:O	1:C:2129:PRO:CG	2.43	0.66
1:D:2081:GLN:O	1:D:2084:GLN:CG	2.43	0.66
1:E:1167:GLY:HA3	1:E:1195:ARG:HA	1.78	0.66
1:E:2112:ARG:N	1:E:2115:HIS:CG	2.57	0.66
1:F:1358:GLN:HG2	1:F:1423:THR:HG23	1.78	0.66
1:F:1488:VAL:HG12	1:F:1490:ARG:NH1	2.10	0.66
1:F:2112:ARG:N	1:F:2115:HIS:CG	2.57	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:B:666:VAL:HG21	1:B:904:VAL:HB	1.78	0.66
1:B:1008:VAL:HG22	1:B:1019:PHE:HB3	1.76	0.66
1:B:1488:VAL:HG12	1:B:1490:ARG:NH1	2.10	0.66
1:C:1488:VAL:HG12	1:C:1490:ARG:NH1	2.10	0.66
1:D:511:ARG:HB2	1:D:540:ASN:HB2	1.77	0.66
1:D:1168:ARG:HB2	1:D:1197:ARG:HB2	1.77	0.66
1:E:511:ARG:HB2	1:E:540:ASN:HB2	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:A:1488:VAL:HG21	1:A:1580:PRO:HD2	1.76	0.66
1:E:792:ALA:HA	1:E:799:PHE:HE2	1.60	0.66
1:E:1132:LEU:HD11	1:E:1192:PHE:HB3	1.78	0.66
1:E:1358:GLN:HG2	1:E:1423:THR:HG23	1.78	0.66
1:E:2679:ALA:HB3	1:E:2762:VAL:HG12	1.78	0.66
1:A:1358:GLN:HG2	1:A:1423:THR:HG23	1.78	0.66
1:A:2081:GLN:O	1:A:2084:GLN:CG	2.43	0.66
1:D:2591:ARG:HH12	1:F:2012:GLY:C	1.99	0.66
1:D:2909:ARG:HB3	1:C:3075:LEU:HD21	1.75	0.66
1:F:1412:HIS:HD2	1:F:1413:PRO:HD2	1.61	0.66
1:F:2126:ALA:O	1:F:2129:PRO:CG	2.43	0.66
1:F:2679:ALA:HB3	1:F:2762:VAL:HG12	1.78	0.66
1:A:1412:HIS:ND1	1:A:1415:GLY:O	2.26	0.66
1:A:2679:ALA:HB3	1:A:2762:VAL:HG12	1.78	0.66
1:B:1412:HIS:ND1	1:B:1415:GLY:O	2.26	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2012:GLY:C	1:E:2591:ARG:HH12	1.99	0.66
1:E:1012:GLY:O	1:E:1013:THR:CG2	2.41	0.66
1:E:1412:HIS:HD2	1:E:1413:PRO:HD2	1.61	0.66
1:E:2012:GLY:C	1:F:2591:ARG:HH12	1.99	0.66
1:E:2094:HIS:CG	1:E:2096:VAL:CG1	2.75	0.66
1:F:1084:THR:HG21	1:F:1274:ALA:HA	1.78	0.66
1:A:931:VAL:CG1	1:A:933:VAL:HG12	2.25	0.66
1:A:1084:THR:HG21	1:A:1274:ALA:HA	1.78	0.66
1:C:997:GLU:O	1:C:1009:PRO:N	2.29	0.66
1:E:997:GLU:O	1:E:1009:PRO:N	2.29	0.66
1:F:1132:LEU:HD11	1:F:1192:PHE:HB3	1.78	0.66
1:A:2112:ARG:N	1:A:2115:HIS:CG	2.57	0.66
1:D:997:GLU:O	1:D:1009:PRO:N	2.29	0.66
1:F:931:VAL:CG1	1:F:933:VAL:HG12	2.25	0.66
1:F:1488:VAL:HG21	1:F:1580:PRO:HD2	1.77	0.66
1:F:2702:GLY:HA3	1:A:2557:LEU:HG	1.76	0.66
1:A:997:GLU:O	1:A:1009:PRO:N	2.29	0.66
1:B:997:GLU:O	1:B:1009:PRO:N	2.29	0.66
1:B:1132:LEU:HD11	1:B:1192:PHE:HB3	1.78	0.66
1:C:1412:HIS:HD2	1:C:1413:PRO:HD2	1.60	0.66
1:E:1084:THR:HG21	1:E:1274:ALA:HA	1.78	0.65
1:F:683:GLY:HA2	1:F:700:ASN:HB2	1.78	0.65
1:B:1167:GLY:HA3	1:B:1195:ARG:HA	1.78	0.65
1:E:511:ARG:HD3	1:E:543:GLY:HA3	1.76	0.65
1:E:666:VAL:HG21	1:E:904:VAL:HB	1.78	0.65
1:A:1168:ARG:HB2	1:A:1197:ARG:HB2	1.77	0.65
1:B:1084:THR:HG21	1:B:1274:ALA:HA	1.78	0.65
1:B:2112:ARG:N	1:B:2115:HIS:CG	2.57	0.65
1:B:2679:ALA:HB3	1:B:2762:VAL:HG12	1.78	0.65
1:C:1536:ASN:HA	1:C:1679:TRP:HB3	1.78	0.65
1:C:3080:ARG:HH11	1:C:3080:ARG:CG	2.07	0.65
1:D:450:ASN:HA	1:D:483:ARG:HH11	1.62	0.65
1:E:203:ASP:OD1	1:E:204:ARG:N	2.29	0.65
1:E:1488:VAL:HG12	1:E:1490:ARG:NH1	2.10	0.65
1:E:2876:LEU:HD11	1:E:2886:ILE:HD11	1.79	0.65
1:F:997:GLU:O	1:F:1009:PRO:N	2.29	0.65
1:B:683:GLY:HA2	1:B:700:ASN:HB2	1.78	0.65
1:B:1168:ARG:HB2	1:B:1197:ARG:HB2	1.77	0.65
1:C:2706:PRO:HG2	1:C:2709:ILE:HG23	1.79	0.65
1:D:643:ILE:HD12	1:D:915:PHE:HZ	1.62	0.65
1:E:1534:ASN:HB2	1:E:1543:ALA:HB3	1.78	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2557:LEU:HG	1:B:2702:GLY:HA3	1.76	0.65
1:E:2706:PRO:HG2	1:E:2709:ILE:HG23	1.79	0.65
1:F:1534:ASN:HB2	1:F:1543:ALA:HB3	1.79	0.65
1:A:643:ILE:HD12	1:A:915:PHE:HZ	1.62	0.65
1:B:792:ALA:HA	1:B:799:PHE:HE2	1.60	0.65
1:C:1534:ASN:HB2	1:C:1543:ALA:HB3	1.79	0.65
1:C:2876:LEU:HD11	1:C:2886:ILE:HD11	1.79	0.65
1:D:2876:LEU:HD11	1:D:2886:ILE:HD11	1.79	0.65
1:E:1168:ARG:HB2	1:E:1197:ARG:HB2	1.77	0.65
1:E:1536:ASN:HA	1:E:1679:TRP:HB3	1.78	0.65
1:A:203:ASP:OD1	1:A:204:ARG:N	2.29	0.65
1:A:1536:ASN:HA	1:A:1679:TRP:HB3	1.79	0.65
1:A:2591:ARG:HH12	1:C:2012:GLY:C	1.99	0.65
1:C:203:ASP:OD1	1:C:204:ARG:N	2.30	0.65
1:D:1358:GLN:HG2	1:D:1423:THR:HG23	1.78	0.65
1:E:683:GLY:HA2	1:E:700:ASN:HB2	1.78	0.65
1:F:1168:ARG:HB2	1:F:1197:ARG:HB2	1.77	0.65
1:A:929:GLU:O	1:A:930:PRO:CG	2.45	0.65
1:A:1488:VAL:HG12	1:A:1490:ARG:NH1	2.10	0.65
1:A:2876:LEU:HD11	1:A:2886:ILE:HD11	1.79	0.65
1:B:203:ASP:OD1	1:B:204:ARG:N	2.30	0.65
1:B:1534:ASN:HB2	1:B:1543:ALA:HB3	1.78	0.65
1:D:1132:LEU:HD11	1:D:1192:PHE:HB3	1.78	0.65
1:D:1534:ASN:HB2	1:D:1543:ALA:HB3	1.78	0.65
1:E:643:ILE:HD12	1:E:915:PHE:HZ	1.62	0.65
1:A:56:LEU:HD22	1:A:119:LEU:HD13	1.79	0.65
1:A:1534:ASN:HB2	1:A:1543:ALA:HB3	1.78	0.65
1:A:2652:ILE:HG12	1:A:2722:VAL:HG22	1.79	0.65
1:B:2012:GLY:C	1:C:2591:ARG:HH12	1.99	0.65
1:C:35:VAL:HG11	1:C:147:LEU:HB3	1.77	0.65
1:C:1084:THR:HG21	1:C:1274:ALA:HA	1.78	0.65
1:D:1084:THR:HG21	1:D:1274:ALA:HA	1.78	0.65
1:F:450:ASN:HA	1:F:483:ARG:HH11	1.62	0.65
1:F:929:GLU:O	1:F:930:PRO:CG	2.45	0.65
1:F:1167:GLY:HA3	1:F:1195:ARG:HA	1.77	0.65
1:A:2094:HIS:CG	1:A:2096:VAL:CG2	2.75	0.65
1:A:2252:VAL:HA	1:A:2255:ARG:HE	1.62	0.65
1:A:2706:PRO:HG2	1:A:2709:ILE:HG23	1.78	0.65
1:B:643:ILE:HD12	1:B:915:PHE:HZ	1.62	0.65
1:C:511:ARG:HB2	1:C:540:ASN:HB2	1.77	0.65
1:D:929:GLU:O	1:D:930:PRO:CG	2.45	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2706:PRO:HG2	1:D:2709:ILE:HG23	1.78	0.65
1:E:450:ASN:HA	1:E:483:ARG:HH11	1.62	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:E:35:VAL:HG11	1:E:147:LEU:HB3	1.78	0.65
1:F:56:LEU:HD22	1:F:119:LEU:HD13	1.79	0.65
1:A:1164:THR:N	1:A:1167:GLY:O	2.25	0.65
1:B:450:ASN:HA	1:B:483:ARG:HH11	1.62	0.65
1:C:2652:ILE:HG12	1:C:2722:VAL:HG22	1.79	0.65
1:F:35:VAL:HG11	1:F:147:LEU:HB3	1.78	0.64
1:A:450:ASN:HA	1:A:483:ARG:HH11	1.62	0.64
1:A:683:GLY:HA2	1:A:700:ASN:HB2	1.77	0.64
1:A:1412:HIS:HD2	1:A:1413:PRO:HD2	1.61	0.64
1:A:2012:GLY:C	1:B:2591:ARG:HH12	1.99	0.64
1:B:793:ARG:HD3	1:B:2435:LEU:CG	2.27	0.64
1:B:1488:VAL:HG21	1:B:1580:PRO:HD2	1.77	0.64
1:D:2652:ILE:HG12	1:D:2722:VAL:HG22	1.79	0.64
1:D:2679:ALA:HB3	1:D:2762:VAL:HG12	1.78	0.64
1:E:1488:VAL:HG21	1:E:1580:PRO:HD2	1.77	0.64
1:F:42:GLU:HB3	1:F:349:ARG:HG3	1.79	0.64
1:F:793:ARG:HD3	1:F:2435:LEU:CG	2.27	0.64
1:F:2876:LEU:HD11	1:F:2886:ILE:HD11	1.79	0.64
1:B:42:GLU:HB3	1:B:349:ARG:HG3	1.79	0.64
1:B:929:GLU:O	1:B:930:PRO:CG	2.45	0.64
1:F:203:ASP:OD1	1:F:204:ARG:N	2.29	0.64
1:F:1164:THR:N	1:F:1167:GLY:O	2.25	0.64
1:A:666:VAL:HG21	1:A:904:VAL:HB	1.78	0.64
1:A:793:ARG:HD3	1:A:2435:LEU:CG	2.27	0.64
1:B:56:LEU:HD22	1:B:119:LEU:HD13	1.79	0.64
1:C:666:VAL:HG21	1:C:904:VAL:HB	1.78	0.64
1:C:793:ARG:HD3	1:C:2435:LEU:CG	2.27	0.64
1:C:1412:HIS:ND1	1:C:1415:GLY:O	2.26	0.64
1:D:666:VAL:HG21	1:D:904:VAL:HB	1.78	0.64
1:E:2252:VAL:HA	1:E:2255:ARG:HE	1.62	0.64
1:E:2652:ILE:HG12	1:E:2722:VAL:HG22	1.79	0.64
1:E:1417:LEU:O	1:E:1423:THR:OG1	2.14	0.64
1:C:450:ASN:HA	1:C:483:ARG:HH11	1.62	0.64
1:D:793:ARG:HD3	1:D:2435:LEU:CG	2.28	0.64
1:D:2094:HIS:CG	1:D:2096:VAL:CG1	2.75	0.64
1:E:929:GLU:O	1:E:930:PRO:CG	2.45	0.64
1:B:1412:HIS:HD2	1:B:1413:PRO:HD2	1.61	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:929:GLU:O	1:C:930:PRO:CG	2.45	0.64
1:D:1412:HIS:HD2	1:D:1413:PRO:HD2	1.61	0.64
1:F:643:ILE:HD12	1:F:915:PHE:HZ	1.62	0.64
1:C:1132:LEU:HD11	1:C:1192:PHE:HB3	1.78	0.64
1:C:2252:VAL:HA	1:C:2255:ARG:HE	1.62	0.64
1:D:2252:VAL:HA	1:D:2255:ARG:HE	1.62	0.64
1:E:34:LEU:O	1:E:38:LEU:N	2.25	0.64
1:F:2176:LEU:HG	1:F:2180:LYS:HE3	1.80	0.64
1:B:2176:LEU:HG	1:B:2180:LYS:HE3	1.80	0.64
1:C:56:LEU:HD22	1:C:119:LEU:HD13	1.79	0.64
1:C:643:ILE:HD12	1:C:915:PHE:HZ	1.62	0.64
1:C:2679:ALA:HB3	1:C:2762:VAL:HG12	1.78	0.64
1:D:500:GLN:O	1:D: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	0.64
1:A:803:GLU:OE1	1:A:2431:THR:HG22	1.98	0.64
1:B:2252:VAL:HA	1:B:2255:ARG:HE	1.62	0.64
1:C:42:GLU:HB3	1:C:349:ARG:HG3	1.79	0.64
1:E:56:LEU:HD22	1:E:119:LEU:HD13	1.78	0.63
1:E:3073:MET:O	1:B:2865:ARG:NH2	2.32	0.63
1:F:1536:ASN:HA	1:F:1679:TRP:HB3	1.78	0.63
1:C:360:LEU:HD12	1:C:363:LEU:HD23	1.80	0.63
1:D:1536:ASN:HA	1:D:1679:TRP:HB3	1.79	0.63
1:E:892:ILE:HG22	2:E:4000:FMN:HM82	1.80	0.63
1:F:2706:PRO:HG2	1:F:2709:ILE:HG23	1.79	0.63
1:F:3073:MET:O	1:A:2865:ARG:NH2	2.32	0.63
1:B:2094:HIS:CG	1:B:2096:VAL:CG1	2.75	0.63
1:F:2865:ARG:NH2	1:A:3073:MET:O	2.32	0.63
1:A:1622:PRO:HD3	1:A:1685:LEU:HD11	1.81	0.63
1:B:1072:TRP:NE1	1:B:1077:VAL:HG22	2.14	0.63
1:B:1417:LEU:O	1:B:1423:THR:OG1	2.14	0.63
1:B:1536:ASN:HA	1:B:1679:TRP:HB3	1.79	0.63
1:B:2706:PRO:HG2	1:B:2709:ILE:HG23	1.79	0.63
1:B:2876:LEU:HD11	1:B:2886:ILE:HD11	1.79	0.63
1:C:2173:ASP:OD2	1:C:2799:LYS:NZ	2.32	0.63
1:E:500:GLN:O	1:E:504:LYS:N	2.24	0.63
1:E:1315:ARG:HH21	1:E:1323:GLU:HG2	1.64	0.63
1:E:1622:PRO:HD3	1:E:1685:LEU:HD11	1.81	0.63
1:F:957:LEU:O	1:F:1034:GLU:CB	2.46	0.63
1:F:2652:ILE:HG12	1:F:2722:VAL:HG22	1.79	0.63
1:A:939:ALA:O	1:A:940:ARG:CG	2.47	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2297:ARG:H	1:A:2297:ARG:HD3	1.64	0.63
1:B:939:ALA:O	1:B:940:ARG:CG	2.47	0.63
1:B:2554:ALA:HB1	1:B:2614:LYS:HZ2	1.62	0.63
1:C:2112:ARG:N	1:C:2115:HIS:CG	2.57	0.63
1:E:585:HIS:CD2	1:E:586:SER:H	2.17	0.63
1:E:974:THR:CG2	1:E:977:GLN:HB3	2.29	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:974:THR:CG2	1:A:977:GLN:HB3	2.29	0.63
1:B:750:LEU:HD12	1:B:827:LEU:HD11	1.81	0.63
1:B:2092:THR:HA	1:B:2189:PHE:HB2	1.81	0.63
1:C:803:GLU:OE1	1:C:2431:THR:HG22	1.98	0.63
1:C:974:THR:CG2	1:C:977:GLN:HB3	2.29	0.63
1:D:803:GLU:OE1	1:D:2431:THR:HG22	1.98	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:3073:MET:O	1:C:2865:ARG:NH2	2.32	0.63
1:E:1072:TRP:NE1	1:E:1077:VAL:HG22	2.14	0.63
1:E:2297:ARG:HD3	1:E:2297:ARG:H	1.64	0.63
1:E:2865:ARG:NH2	1:B:3073:MET:O	2.32	0.63
1:E:3080:ARG:HH11	1:E:3080:ARG:CG	2.07	0.63
1:F:974:THR:CG2	1:F:977:GLN:HB3	2.29	0.63
1:F:1042:MET:O	1:F:1043:ARG:C	2.37	0.63
1:F:1376:VAL:HA	1:F:1470:LEU:HD13	1.81	0.63
1:F:2092:THR:HA	1:F:2189:PHE:HB2	1.81	0.63
1:F:2752:ASP:HB3	1:A:2752:ASP:HB3	1.81	0.63
1:B:585:HIS:CD2	1:B:586:SER:H	2.17	0.63
1:B:1315:ARG:HH21	1:B:1323:GLU:HG2	1.64	0.63
1:C:939:ALA:O	1:C:940:ARG:CG	2.47	0.63
1:D:1072:TRP:NE1	1:D:1077:VAL:HG22	2.14	0.63
1:D:2096:VAL:HG13	1:D:2097:ALA:N	2.14	0.63
1:E:793:ARG:HD3	1:E:2435:LEU:CG	2.27	0.63
1:E:939:ALA:O	1:E:940:ARG:CG	2.47	0.63
1:E:1376:VAL:HA	1:E:1470:LEU:HD13	1.81	0.63
1:F:803:GLU:OE1	1:F:2431:THR:HG22	1.98	0.63
1:F:1622:PRO:HD3	1:F:1685:LEU:HD11	1.81	0.63
1:F:2047:THR:OG1	1:F:2205:ASP:OD2	2.17	0.63
1:A:2086:SER:O	1:A:2089:PHE:CG	2.52	0.63
1:A:2092:THR:HA	1:A:2189:PHE:HB2	1.81	0.63
1:B:1095:LEU:HD12	1:B:1096:THR:H	1.64	0.63
1:B:2047:THR:OG1	1:B:2205:ASP:OD2	2.17	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1376:VAL:HA	1:D:1470:LEU:HD13	1.81	0.63
1:E:1702:GLU:OE2	1:E:1711:VAL:HG13	1.99	0.63
1:E:2096:VAL:HG13	1:E:2097:ALA:N	2.14	0.63
1:E:2176:LEU:HG	1:E:2180:LYS:HE3	1.80	0.63
1:F:750:LEU:HD12	1:F:827:LEU:HD11	1.81	0.63
1:F:1412:HIS:ND1	1:F:1415:GLY:O	2.26	0.63
1:F:2252:VAL:HA	1:F:2255:ARG:HE	1.62	0.63
1:A:2092:THR:HG23	1:A:2092:THR:O	1.99	0.63
1:B:664:LEU:HD13	1:B:701:ALA:HB1	1.81	0.63
1:D:2865:ARG:NH2	1:C:3073:MET:O	2.32	0.62
1:E:360:LEU:HD12	1:E:363:LEU:HD23	1.80	0.62
1:E:932:GLU:O	1:E:936:ARG:CG	2.48	0.62
1:F:585:HIS:CD2	1:F:586:SER:H	2.17	0.62
1:F:1072:TRP:NE1	1:F:1077:VAL:HG22	2.14	0.62
1:F:2086:SER:O	1:F:2089:PHE:CG	2.52	0.62
1:A:892:ILE:HG22	2:A:4000:FMN:HM82	1.80	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:974:THR:CG2	1:B:977:GLN:HB3	2.29	0.62
1:B:1376:VAL:HA	1:B:1470:LEU:HD13	1.81	0.62
1:B:2086:SER:O	1:B:2089:PHE:CG	2.52	0.62
1:B:2173:ASP:OD2	1:B:2799:LYS:NZ	2.32	0.62
1:B:2297:ARG:HD3	1:B:2297:ARG:H	1.64	0.62
1:B:2652:ILE:HG12	1:B:2722:VAL:HG22	1.79	0.62
1:D:2047:THR:OG1	1:D:2205:ASP:OD2	2.17	0.62
1:D:2173:ASP:OD2	1:D:2799:LYS:NZ	2.32	0.62
1:E:42:GLU:HB3	1:E:349:ARG:HG3	1.79	0.62
1:E:2092:THR:HA	1:E:2189:PHE:HB2	1.81	0.62
1:A:585:HIS:CD2	1:A:586:SER:H	2.17	0.62
1:C:1072:TRP:NE1	1:C:1077:VAL:HG22	2.14	0.62
1:C:1315:ARG:HH21	1:C:1323:GLU:HG2	1.64	0.62
1:E:238:SER:OG	1:E:249:THR:OG1	2.16	0.62
1:E:1095:LEU:HD12	1:E:1096:THR:H	1.64	0.62
1:F:34:LEU:O	1:F:38:LEU:N	2.25	0.62
1:F:892:ILE:HG22	2:F:4000:FMN:HM82	1.80	0.62
1:A:1072:TRP:NE1	1:A:1077:VAL:HG22	2.14	0.62
1:A:2096:VAL:HG23	1:A:2097:ALA:N	2.14	0.62
1:A:2173:ASP:OD2	1:A:2799:LYS:NZ	2.32	0.62
1:B:803:GLU:OE1	1:B:2431:THR:HG22	1.98	0.62
1:B:2948:GLN:HG2	1:B:2951:ARG:HH21	1.64	0.62
1:C:1376:VAL:HA	1:C:1470:LEU:HD13	1.81	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:585:HIS:CD2	1:D:586:SER:H	2.17	0.62
1:D:892:ILE:HG22	2:D:4000:FMN:HM82	1.80	0.62
1:E:2092:THR:HG23	1:E:2092:THR:O	1.99	0.62
1:B:3080:ARG:HG3	1:B:3080:ARG:NH1	2.09	0.62
1:D:750:LEU:HD12	1:D:827:LEU:HD11	1.81	0.62
1:D:1095:LEU:HD12	1:D:1096:THR:H	1.64	0.62
1:D:2092:THR:HA	1:D:2189:PHE:HB2	1.81	0.62
1:D:2948:GLN:HG2	1:D:2951:ARG:HH21	1.64	0.62
1:F:932:GLU:O	1:F:936:ARG:CG	2.48	0.62
1:F:2096:VAL:HG13	1:F:2097:ALA:N	2.14	0.62
1:F:2765:GLY:HA2	1:F:2940:VAL:HG21	1.82	0.62
1:A:360:LEU:HD12	1:A:363:LEU:HD23	1.80	0.62
1:B:932:GLU:O	1:B:936:ARG:CG	2.47	0.62
1:B:1431:ALA:HB3	1:B:1459:THR:HG21	1.82	0.62
1:B:1702:GLU:OE2	1:B:1711:VAL:HG13	1.99	0.62
1:C:892:ILE:HG22	2:C:4000:FMN:HM82	1.80	0.62
1:C:1095:LEU:HD12	1:C:1096:THR:H	1.64	0.62
1:C:1417:LEU:O	1:C:1423:THR:OG1	2.14	0.62
1:D:1315:ARG:HH21	1:D:1323:GLU:HG2	1.64	0.62
1:D:2176:LEU:HG	1:D:2180:LYS:HE3	1.80	0.62
1:D:2297:ARG:HD3	1:D:2297:ARG:H	1.64	0.62
1:A:1417:LEU:O	1:A:1423:THR:OG1	2.14	0.62
1:B:360:LEU:HD12	1:B:363:LEU:HD23	1.80	0.62
1:C:238:SER:OG	1:C:249:THR:OG1	2.15	0.62
1:C:932:GLU:O	1:C:936:ARG:CG	2.48	0.62
1:C:2237:LEU:HB2	1:C:2287:LEU:HD11	1.82	0.62
1:D:932:GLU:O	1:D:936:ARG:CG	2.48	0.62
1:D:1417:LEU:O	1:D:1423:THR:OG1	2.14	0.62
1:D:2086:SER:O	1:D:2089:PHE:CG	2.52	0.62
1:E:2173:ASP:OD2	1:E:2799:LYS:NZ	2.32	0.62
1:E:2610:ARG:HB2	1:B:2558:LEU:HD21	1.82	0.62
1:F:2407:GLU:CG	1:F:2411:LYS:HE3	2.29	0.62
1:A:2176:LEU:HG	1:A:2180:LYS:HE3	1.80	0.62
1:B:892:ILE:HG22	2:B:4000:FMN:HM82	1.80	0.62
1:B:2092:THR:O	1:B:2092:THR:HG23	1.99	0.62
1:B:2765:GLY:HA2	1:B:2940:VAL:HG21	1.82	0.62
1:F:939:ALA:O	1:F:940:ARG:CG	2.47	0.62
1:F:971:ALA:O	1:F:974:THR:CG2	2.48	0.62
1:F:2948:GLN:HG2	1:F:2951:ARG:HH21	1.64	0.62
1:A:1353:PRO:HG3	1:A:1702:GLU:OE2	2.00	0.62
1:B:1622:PRO:HD3	1:B:1685:LEU:HD11	1.81	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2092:THR:HG23	1:C:2092:THR:O	1.99	0.62
1:D:971:ALA:O	1:D:974:THR:CG2	2.48	0.62
1:D:2092:THR:HG23	1:D:2092:THR:O	1.99	0.62
1:D:2237:LEU:HB2	1:D:2287:LEU:HD11	1.82	0.62
1:E:664:LEU:HD13	1:E:701:ALA:HB1	1.81	0.62
1:E:1695:LEU:CD2	1:F:257:ARG:HH12	2.13	0.62
1:F:2173:ASP:OD2	1:F:2799:LYS:NZ	2.32	0.62
1:A:971:ALA:O	1:A:974:THR:CG2	2.48	0.62
1:A:1702:GLU:OE2	1:A:1711:VAL:HG13	1.99	0.62
1:B:1725:SER:HB3	1:C:260:LEU:HD13	1.82	0.62
1:C:2086:SER:O	1:C:2089:PHE:CG	2.52	0.62
1:C:2176:LEU:HG	1:C:2180:LYS:HE3	1.80	0.62
1:A:1431:ALA:HB3	1:A:1459:THR:HG21	1.82	0.62
1:C:971:ALA:O	1:C:974:THR:CG2	2.48	0.62
1:C:2047:THR:OG1	1:C:2205:ASP:OD2	2.17	0.62
1:D:1622:PRO:HD3	1:D:1685:LEU:HD11	1.81	0.61
1:D:2752:ASP:HB3	1:C:2752:ASP:HB3	1.81	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:2092:THR:HG23	1:F:2092:THR:O	1.99	0.61
1:A:260:LEU:HD13	1:C:1725:SER:HB3	1.82	0.61
1:A:1725:SER:HB3	1:B:260:LEU:HD13	1.82	0.61
1:B:2237:LEU:HB2	1:B:2287:LEU:HD11	1.82	0.61
1:C:924:LEU:O	1:C:929:GLU:N	2.30	0.61
1:D:409:LYS:HD2	1:D:933:VAL:HA	1.82	0.61
1:F:360:LEU:HD12	1:F:363:LEU:HD23	1.80	0.61
1:A:34:LEU:H	1:A:393:VAL:HG21	1.65	0.61
1:A:932:GLU:O	1:A:936:ARG:CG	2.48	0.61
1:A:1695:LEU:CD2	1:B:257:ARG:HH12	2.13	0.61
1:A:2047:THR:OG1	1:A:2205:ASP:OD2	2.17	0.61
1:B:971:ALA:O	1:B:974:THR:CG2	2.48	0.61
1:C:585:HIS:CD2	1:C:586:SER:H	2.17	0.61
1:C:1622:PRO:HD3	1:C:1685:LEU:HD11	1.81	0.61
1:C:1702:GLU:OE2	1:C:1711:VAL:HG13	1.99	0.61
1:C:2469:LEU:HD11	1:C:2653:VAL:HB	1.82	0.61
1:C:3058:ARG:HB2	1:C:3089:LEU:HB2	1.82	0.61
1:D:664:LEU:HD13	1:D:701:ALA:HB1	1.81	0.61
1:D:1725:SER:HB3	1:E:260:LEU:HD13	1.82	0.61
1:D:2765:GLY:HA2	1:D:2940:VAL:HG21	1.82	0.61
1:D:3058:ARG:HB2	1:D:3089:LEU:HB2	1.82	0.61
1:E:2086:SER:O	1:E:2089:PHE:CG	2.53	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:924:LEU:O	1:F:929:GLU:N	2.30	0.61
1:F:1353:PRO:HG3	1:F:1702:GLU:OE2	2.00	0.61
1:B:680:ALA:HA	1:B:685:ALA:HB2	1.83	0.61
1:B:1695:LEU:CD2	1:C:257:ARG:HH12	2.13	0.61
1:B:2096:VAL:HG13	1:B:2097:ALA:N	2.14	0.61
1:C:106:ALA:HB1	1:C:112:PRO:HB2	1.82	0.61
1:C:409:LYS:HD2	1:C:933:VAL:HA	1.82	0.61
1:C:511:ARG:HH11	1:C:543:GLY:HA3	1.65	0.61
1:C:1353:PRO:HG3	1:C:1702:GLU:OE2	2.00	0.61
1:D:680:ALA:HA	1:D:685:ALA:HB2	1.83	0.61
1:E:203:ASP:O	1:E:205:PRO:HD3	2.01	0.61
1:E:2558:LEU:HD21	1:B:2610:ARG:HB2	1.82	0.61
1:F:664:LEU:HD13	1:F:701:ALA:HB1	1.81	0.61
1:F:1315:ARG:HH21	1:F:1323:GLU:HG2	1.64	0.61
1:F:3058:ARG:HB2	1:F:3089:LEU:HB2	1.82	0.61
1:A:257:ARG:HH12	1:C:1695:LEU:CD2	2.13	0.61
1:A:1095:LEU:HD12	1:A:1096:THR:H	1.64	0.61
1:B:3058:ARG:HB2	1:B:3089:LEU:HB2	1.82	0.61
1:C:203:ASP:O	1:C:205:PRO:HD3	2.01	0.61
1:C:680:ALA:HA	1:C:685:ALA:HB2	1.83	0.61
1:C:750:LEU:HD12	1:C:827:LEU:HD11	1.81	0.61
1:C:2765:GLY:HA2	1:C:2940:VAL:HG21	1.82	0.61
1:C:2948:GLN:HG2	1:C:2951:ARG:HH21	1.64	0.61
1:E:1725:SER:HB3	1:F:260:LEU:HD13	1.82	0.61
1:E:2047:THR:OG1	1:E:2205:ASP:OD2	2.17	0.61
1:F:2237:LEU:HB2	1:F:2287:LEU:HD11	1.82	0.61
1:F:2558:LEU:HD21	1:A:2610:ARG:HB2	1.82	0.61
1:A:2948:GLN:HG2	1:A:2951:ARG:HH21	1.64	0.61
1:B:203:ASP:O	1:B:205:PRO:HD3	2.01	0.61
1:C:2297:ARG:H	1:C:2297:ARG:HD3	1.64	0.61
1:D:1353:PRO:HG3	1:D:1702:GLU:OE2	2.00	0.61
1:E:2237:LEU:HB2	1:E:2287:LEU:HD11	1.82	0.61
1:E:2752:ASP:HB3	1:B:2752:ASP:HB3	1.81	0.61
1:F:34:LEU:H	1:F:393:VAL:HG21	1.65	0.61
1:F:164:ALA:HA	1:F:178:LEU:HD13	1.82	0.61
1:A:438:THR:HA	1:A:880:HIS:HE1	1.66	0.61
1:C:2092:THR:HA	1:C:2189:PHE:HB2	1.81	0.61
1:C:2096:VAL:HG23	1:C:2097:ALA:N	2.14	0.61
1:D:2212:TRP:HA	1:D:2229:LYS:HD3	1.83	0.61
1:E:924:LEU:O	1:E:929:GLU:N	2.30	0.61
1:E:1353:PRO:HG3	1:E:1702:GLU:OE2	2.00	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2765:GLY:HA2	1:E:2940:VAL:HG21	1.82	0.61
1:F:203:ASP:O	1:F:205:PRO:HD3	2.00	0.61
1:F:409:LYS:HD2	1:F:933:VAL:HA	1.82	0.61
1:F:680:ALA:HA	1:F:685:ALA:HB2	1.83	0.61
1:F:1702:GLU:OE2	1:F:1711:VAL:HG13	1.99	0.61
1:A:664:LEU:HD13	1:A:701:ALA:HB1	1.81	0.61
1:A:2469:LEU:HD11	1:A:2653:VAL:HB	1.83	0.61
1:A:2962:ASP:OD1	1:A:2962:ASP:N	2.34	0.61
1:B:34:LEU:O	1:B:38:LEU:N	2.25	0.61
1:B:34:LEU:H	1:B:393:VAL:HG21	1.65	0.61
1:B:438:THR:HA	1:B:880:HIS:HE1	1.66	0.61
1:B:2334:HIS:HD2	1:B:2391:LYS:HG3	1.66	0.61
1:C:488:ASN:HA	1:C:521:VAL:HB	1.83	0.61
1:C:664:LEU:HD13	1:C:701:ALA:HB1	1.81	0.61
1:C:2212:TRP:HA	1:C:2229:LYS:HD3	1.83	0.61
1:E:575:HIS:HD2	1:E:644:LEU:HD22	1.66	0.61
1:E:2212:TRP:HA	1:E:2229:LYS:HD3	1.83	0.61
1:F:961:ARG:HE	1:F:1196:GLY:N	1.97	0.61
1:A:511:ARG:HH11	1:A:543:GLY:HA3	1.65	0.61
1:B:126:VAL:HG12	1:B:182:ALA:HB1	1.83	0.61
1:B:1353:PRO:HG3	1:B:1702:GLU:OE2	2.00	0.61
1:C:438:THR:HA	1:C:880:HIS:HE1	1.66	0.61
1:C:980:GLU:HB2	1:C:989:HIS:HB2	1.83	0.61
1:D:2469:LEU:HD11	1:D:2653:VAL:HB	1.82	0.61
1:D:2558:LEU:HD21	1:C:2610:ARG:HB2	1.82	0.61
1:A:575:HIS:HD2	1:A:644:LEU:HD22	1.66	0.61
1:A:750:LEU:HD12	1:A:827:LEU:HD11	1.81	0.61
1:A:2212:TRP:HA	1:A:2229:LYS:HD3	1.83	0.61
1:C:1431:ALA:HB3	1:C:1459:THR:HG21	1.82	0.61
1:C:2372:MET:HB3	1:C:2394:LEU:HD22	1.83	0.61
1:D:438:THR:HA	1:D:880:HIS:HE1	1.66	0.61
1:D:488:ASN:HA	1:D:521:VAL:HB	1.83	0.61
1:D:1412:HIS:ND1	1:D:1415:GLY:O	2.26	0.61
1:D:1702:GLU:OE2	1:D:1711:VAL:HG13	1.99	0.61
1:E:164:ALA:HA	1:E:178:LEU:HD13	1.82	0.61
1:E:438:THR:HA	1:E:880:HIS:HE1	1.66	0.61
1:E:488:ASN:HA	1:E:521:VAL:HB	1.83	0.61
1:E:971:ALA:O	1:E:974:THR:CG2	2.48	0.61
1:F:1532:ILE:HA	1:F:1544:ILE:HG12	1.83	0.61
1:F:2610:ARG:HB2	1:A:2558:LEU:HD21	1.82	0.61
1:F:2647:VAL:HA	1:F:2650:TRP:HD1	1.66	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:203:ASP:O	1:A:205:PRO:HD3	2.01	0.61
1:A:488:ASN:HA	1:A:521:VAL:HB	1.83	0.61
1:A:1376:VAL:HA	1:A:1470:LEU:HD13	1.81	0.61
1:A:3058:ARG:HB2	1:A:3089:LEU:HB2	1.82	0.61
1:B:106:ALA:HB1	1:B:112:PRO:HB2	1.82	0.61
1:B:511:ARG:HH11	1:B:543:GLY:HA3	1.65	0.61
1:D:980:GLU:HB2	1:D:989:HIS:HB2	1.83	0.60
1:E:3058:ARG:HB2	1:E:3089:LEU:HB2	1.82	0.60
1:F:126:VAL:HG12	1:F:182:ALA:HB1	1.83	0.60
1:A:164:ALA:HA	1:A:178:LEU:HD13	1.83	0.60
1:A:1989:PHE:HD1	1:A:1992:LYS:HZ3	1.49	0.60
1:A:2112:ARG:CG	1:A:2114:VAL:HG22	2.31	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:C:2712:GLU:HA	1:C:2717:VAL:HG11	1.83	0.60
1:D:511:ARG:HH11	1:D:543:GLY:HA3	1.66	0.60
1:D:575:HIS:HD2	1:D:644:LEU:HD22	1.66	0.60
1:D:924:LEU:O	1:D:929:GLU:N	2.30	0.60
1:D:2610:ARG:HB2	1:C:2558:LEU:HD21	1.82	0.60
1:E:687:GLY:O	1:E:695:ILE:N	2.34	0.60
1:E:980:GLU:HB2	1:E:989:HIS:HB2	1.83	0.60
1:F:980:GLU:HB2	1:F:989:HIS:HB2	1.83	0.60
1:F:1095:LEU:HD12	1:F:1096:THR:H	1.64	0.60
1:F:1417:LEU:O	1:F:1423:THR:OG1	2.14	0.60
1:A:924:LEU:O	1:A:929:GLU:N	2.30	0.60
1:A:2765:GLY:HA2	1:A:2940:VAL:HG21	1.82	0.60
1:D:1098:VAL:HG12	1:D:1100:ASP:H	1.66	0.60
1:D:2749:GLU:OE2	1:C:2749:GLU:HB3	2.02	0.60
1:E:580:ARG:HG2	1:E:590:LEU:HD21	1.83	0.60
1:F:575:HIS:HD2	1:F:644:LEU:HD22	1.66	0.60
1:F:1431:ALA:HB3	1:F:1459:THR:HG21	1.81	0.60
1:F:3080:ARG:HH11	1:F:3080:ARG:CG	2.07	0.60
1:A:2372:MET:HB3	1:A:2394:LEU:HD22	1.83	0.60
1:C:164:ALA:HA	1:C:178:LEU:HD13	1.82	0.60
1:C:1098:VAL:HG12	1:C:1100:ASP:H	1.66	0.60
1:D:2686:MET:HE1	1:D:2935:LYS:HG3	1.83	0.60
1:E:2372:MET:HB3	1:E:2394:LEU:HD22	1.83	0.60
1:F:580:ARG:HG2	1:F:590:LEU:HD21	1.83	0.60
1:F:2334:HIS:HD2	1:F:2391:LYS:HG3	1.66	0.60
1:F:2431:THR:O	1:F:2431:THR:HG23	2.01	0.60
1:A:580:ARG:HG2	1:A:590:LEU:HD21	1.83	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1724:TYR:OH	1:B:267:GLU:OE2	2.07	0.60
1:C:687:GLY:O	1:C:695:ILE:N	2.34	0.60
1:C:1532:ILE:HA	1:C:1544:ILE:HG12	1.83	0.60
1:C:2431:THR:O	1:C:2431:THR:HG23	2.01	0.60
1:D:688:ARG:O	1:D:872:ARG:NE	2.34	0.60
1:D:1695:LEU:CD2	1:E:257:ARG:HH12	2.13	0.60
1:D:2112:ARG:CG	1:D:2114:VAL:HG12	2.31	0.60
1:E:409:LYS:HD2	1:E:933:VAL:HA	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:F:511:ARG:HH11	1:F:543:GLY:HA3	1.66	0.60
1:F:2372:MET:HB3	1:F:2394:LEU:HD22	1.83	0.60
1:A:2056:PHE:HZ	1:A:2180:LYS:HE2	1.67	0.60
1:A:2712:GLU:HA	1:A:2717:VAL:HG11	1.83	0.60
1:B:500:GLN:O	1:B:504:LYS:N	2.24	0.60
1:C:2647:VAL:HA	1:C:2650:TRP:HD1	1.66	0.60
1:E:2056:PHE:HZ	1:E:2180:LYS:HE2	1.67	0.60
1:E:2334:HIS:HD2	1:E:2391:LYS:HG3	1.66	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:1020:THR:N	1:F:1035:VAL:CG2	2.59	0.60
1:F:2800:PHE:HE1	1:F:2812:LEU:HD22	1.67	0.60
1:A:409:LYS:HD2	1:A:933:VAL:HA	1.82	0.60
1:A:2237:LEU:HB2	1:A:2287:LEU:HD11	1.82	0.60
1:B:409:LYS:HD2	1:B:933:VAL:HA	1.82	0.60
1:B:1532:ILE:HA	1:B:1544:ILE:HG12	1.83	0.60
1:B:2431:THR:HG23	1:B:2431:THR:O	2.01	0.60
1:D:1431:ALA:HB3	1:D:1459:THR:HG21	1.82	0.60
1:D:2334:HIS:HD2	1:D:2391:LYS:HG3	1.66	0.60
1:E:2712:GLU:HA	1:E:2717:VAL:HG11	1.83	0.60
1:E:2749:GLU:OE2	1:B:2749:GLU:HB3	2.02	0.60
1:E:2820:ILE:HD13	1:E:2943:MET:HG2	1.84	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:B:2372:MET:HB3	1:B:2394:LEU:HD22	1.83	0.60
1:C:2800:PHE:HE1	1:C:2812:LEU:HD22	1.67	0.60
1:D:670:GLY:O	1:D:682:ASN:ND2	2.35	0.60
1:D:1532:ILE:HA	1:D:1544:ILE:HG12	1.83	0.60
1:D:2431:THR:HG23	1:D:2431:THR:O	2.01	0.60
1:E:106:ALA:HB1	1:E:112:PRO:HB2	1.82	0.60
1:E:2647:VAL:HA	1:E:2650:TRP:HD1	1.66	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2686:MET:HE1	1:E:2935:LYS:HG3	1.84	0.60
1:F:2056:PHE:HZ	1:F:2180:LYS:HE2	1.67	0.60
1:A:106:ALA:HB1	1:A:112:PRO:HB2	1.82	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:B:164:ALA:HA	1:B:178:LEU:HD13	1.82	0.60
1:B:670:GLY:O	1:B:682:ASN:ND2	2.35	0.60
1:B:2800:PHE:HE1	1:B:2812:LEU:HD22	1.67	0.60
1:C:34:LEU:H	1:C:393:VAL:HG21	1.65	0.60
1:C:1537:LEU:HB2	1:C:1541:GLN:H	1.67	0.60
1:E:670:GLY:O	1:E:682:ASN:ND2	2.35	0.60
1:E:2469:LEU:HD11	1:E:2653:VAL:HB	1.82	0.60
1:F:2469:LEU:HD11	1:F:2653:VAL:HB	1.82	0.60
1:F:2693:GLN:O	1:F:2697:HIS:ND1	2.33	0.60
1:B:688:ARG:O	1:B:872:ARG:NE	2.34	0.60
1:B:1098:VAL:HG12	1:B:1100:ASP:H	1.66	0.60
1:C:1435:VAL:HG11	1:C:1463:CYS:HB3	1.84	0.60
1:C:2112:ARG:CG	1:C:2114:VAL:HG22	2.31	0.60
1:D:1701:VAL:HG22	1:D:1732:LEU:HB2	1.84	0.60
1:A:680:ALA:HA	1:A:685:ALA:HB2	1.83	0.60
1:A:687:GLY:O	1:A:695:ILE:N	2.34	0.60
1:B:2469:LEU:HD11	1:B:2653:VAL:HB	1.83	0.60
1:C:688:ARG:O	1:C:872:ARG:NE	2.34	0.60
1:C:1701:VAL:HG22	1:C:1732:LEU:HB2	1.84	0.60
1:C:1989:PHE:HD1	1:C:1992:LYS:HZ3	1.50	0.60
1:D:1435:VAL:HG11	1:D:1463:CYS:HB3	1.84	0.59
1:D:2800:PHE:HE1	1:D:2812:LEU:HD22	1.67	0.59
1:E:34:LEU:H	1:E:393:VAL:HG21	1.65	0.59
1:E:1309:VAL:HG22	1:E:1331:ILE:HG12	1.84	0.59
1:F:410:LEU:HB3	1:F:1025:VAL:HG21	1.84	0.59
1:F:1701:VAL:HG22	1:F:1732:LEU:HB2	1.84	0.59
1:F:2651:ASN:HD22	1:F:2718:VAL:HG12	1.67	0.59
1:A:238:SER:OG	1:A:249:THR:OG1	2.15	0.59
1:A:795:HIS:HB3	1:A:799:PHE:CZ	2.37	0.59
1:A:2461:VAL:HG11	1:A:2751:VAL:HG22	1.84	0.59
1:B:580:ARG:HG2	1:B:590:LEU:HD21	1.83	0.59
1:B:2112:ARG:CG	1:B:2114:VAL:HG22	2.31	0.59
1:B:2651:ASN:HD22	1:B:2718:VAL:HG12	1.67	0.59
1:C:126:VAL:HG12	1:C:182:ALA:HB1	1.83	0.59
1:C:410:LEU:HB3	1:C:1025:VAL:HG21	1.84	0.59
1:D:580:ARG:HG2	1:D:590:LEU:HD21	1.83	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2056:PHE:HZ	1:D:2180:LYS:HE2	1.67	0.59
1:E:795:HIS:HB3	1:E:799:PHE:CZ	2.37	0.59
1:F:2712:GLU:HA	1:F:2717:VAL:HG11	1.83	0.59
1:A:2647:VAL:HA	1:A:2650:TRP:HD1	1.66	0.59
1:B:410:LEU:HB3	1:B:1025:VAL:HG21	1.84	0.59
1:B:836:VAL:HG12	1:B:837:VAL:H	1.67	0.59
1:C:34:LEU:O	1:C:38:LEU:N	2.25	0.59
1:C:795:HIS:HB3	1:C:799:PHE:CZ	2.37	0.59
1:C:2056:PHE:HZ	1:C:2180:LYS:HE2	1.67	0.59
1:C:2651:ASN:HD22	1:C:2718:VAL:HG12	1.67	0.59
1:C:2686:MET:HE1	1:C:2935:LYS:HG3	1.84	0.59
1:D:2651:ASN:HD22	1:D:2718:VAL:HG12	1.67	0.59
1:E:680:ALA:HA	1:E:685:ALA:HB2	1.83	0.59
1:F:438:THR:HA	1:F:880:HIS:HE1	1.66	0.59
1:F:488:ASN:HA	1:F:521:VAL:HB	1.83	0.59
1:F:670:GLY:O	1:F:682:ASN:ND2	2.35	0.59
1:F:1098:VAL:HG12	1:F:1100:ASP:H	1.67	0.59
1:F:2667:THR:HG21	1:F:3058:ARG:NH1	2.17	0.59
1:A:2431:THR:HG23	1:A:2431:THR:O	2.01	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:836:VAL:HG12	1:C:837:VAL:H	1.67	0.59
1:D:2753:LYS:NZ	1:C:2752:ASP:OD2	2.36	0.59
1:E:2112:ARG:CG	1:E:2114:VAL:HG22	2.31	0.59
1:F:836:VAL:HG12	1:F:837:VAL:H	1.67	0.59
1:F:2112:ARG:CG	1:F:2114:VAL:HG22	2.31	0.59
1:F:2403:ILE:HG23	1:F:2408:LEU:HD12	1.85	0.59
1:B:1435:VAL:HG11	1:B:1463:CYS:HB3	1.84	0.59
1:B:1724:TYR:OH	1:C:267:GLU:OE2	2.07	0.59
1:D:687:GLY:O	1:D:695:ILE:N	2.34	0.59
1:D:2749:GLU:HB3	1:C:2749:GLU:OE2	2.02	0.59
1:E:1701:VAL:HG22	1:E:1732:LEU:HB2	1.84	0.59
1:E:2749:GLU:HB3	1:B:2749:GLU:OE2	2.02	0.59
1:E:2753:LYS:NZ	1:B:2752:ASP:OD2	2.36	0.59
1:F:688:ARG:O	1:F:872:ARG:NE	2.34	0.59
1:F:2820:ILE:HD13	1:F:2943:MET:HG2	1.84	0.59
1:A:462:GLN:HG3	1:A:468:PHE:HD1	1.68	0.59
1:A:688:ARG:O	1:A:872:ARG:NE	2.34	0.59
1:B:687:GLY:O	1:B:695:ILE:N	2.34	0.59
1:B:1095:LEU:HD22	1:B:1289:PRO:HA	1.85	0.59
1:B:2056:PHE:HZ	1:B:2180:LYS:HE2	1.67	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:580:ARG:HG2	1:C:590:LEU:HD21	1.83	0.59
1:D:1656:LYS:HG2	1:D:1660:LEU:HG	1.85	0.59
1:E:410:LEU:HB3	1:E:1025:VAL:HG21	1.84	0.59
1:E:511:ARG:HH11	1:E:543:GLY:HA3	1.65	0.59
1:E:836:VAL:HG12	1:E:837:VAL:H	1.67	0.59
1:E:1098:VAL:HG12	1:E:1100:ASP:H	1.66	0.59
1:E:3080:ARG:HG3	1:E:3080:ARG:NH1	2.09	0.59
1:F:1095:LEU:HD22	1:F:1289:PRO:HA	1.85	0.59
1:A:126:VAL:HG12	1:A:182:ALA:HB1	1.83	0.59
1:A:1098:VAL:HG12	1:A:1100:ASP:H	1.66	0.59
1:A:1701:VAL:HG22	1:A:1732:LEU:HB2	1.84	0.59
1:A:2800:PHE:HE1	1:A:2812:LEU:HD22	1.67	0.59
1:B:2403:ILE:HG23	1:B:2408:LEU:HD12	1.85	0.59
1:B:2712:GLU:HA	1:B:2717:VAL:HG11	1.84	0.59
1:B:2889:ILE:HG12	1:B:2922:LEU:HB3	1.84	0.59
1:C:670:GLY:O	1:C:682:ASN:ND2	2.35	0.59
1:D:2372:MET:HB3	1:D:2394:LEU:HD22	1.83	0.59
1:D:2461:VAL:HG11	1:D:2751:VAL:HG22	1.84	0.59
1:D:2647:VAL:HA	1:D:2650:TRP:HD1	1.66	0.59
1:F:1385:ARG:NE	1:F:2411:LYS:NZ	2.35	0.59
1:F:2521:VAL:HG13	1:F:2529:ARG:HH11	1.68	0.59
1:B:1309:VAL:HG22	1:B:1331:ILE:HG12	1.84	0.59
1:B:1656:LYS:HG2	1:B:1660:LEU:HG	1.84	0.59
1:B:2647:VAL:HA	1:B:2650:TRP:HD1	1.66	0.59
1:B:2686:MET:HE1	1:B:2935:LYS:HG3	1.84	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:2334:HIS:HD2	1:C:2391:LYS:HG3	1.66	0.59
1:D:836:VAL:HG12	1:D:837:VAL:H	1.67	0.59
1:D:1008:VAL:HG13	1:D:1008:VAL:O	2.03	0.59
1:D:1309:VAL:HG22	1:D:1331:ILE:HG12	1.84	0.59
1:D:2752:ASP:OD2	1:C:2753:LYS:NZ	2.36	0.59
1:F:2212:TRP:HA	1:F:2229:LYS:HD3	1.83	0.59
1:F:2752:ASP:OD2	1:A:2753:LYS:NZ	2.36	0.59
1:F:2889:ILE:HG12	1:F:2922:LEU:HB3	1.84	0.59
1:A:656:THR:OG1	1:A:880:HIS:ND1	2.35	0.59
1:A:670:GLY:O	1:A:682:ASN:ND2	2.35	0.59
1:B:1537:LEU:HB2	1:B:1541:GLN:H	1.67	0.59
1:C:150:THR:O	1:C:152:PRO:HD3	2.03	0.59
1:C:2521:VAL:HG13	1:C:2529:ARG:HH11	1.68	0.59
1:D:795:HIS:HB3	1:D:799:PHE:CZ	2.37	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1532:ILE:HA	1:E:1544:ILE:HG12	1.83	0.59
1:E:2889:ILE:HG12	1:E:2922:LEU:HB3	1.84	0.59
1:F:1989:PHE:HD1	1:F:1992:LYS:HZ3	1.50	0.59
1:A:836:VAL:HG12	1:A:837:VAL:H	1.67	0.59
1:A:2521:VAL:HG13	1:A:2529:ARG:HH11	1.68	0.59
1:A:2889:ILE:HG12	1:A:2922:LEU:HB3	1.84	0.59
1:C:575:HIS:HD2	1:C:644:LEU:HD22	1.66	0.59
1:C:1656:LYS:HG2	1:C:1660:LEU:HG	1.84	0.59
1:D:1013:THR:CG2	1:D:1014:TRP:N	2.58	0.59
1:D:2521:VAL:HG13	1:D:2529:ARG:HH11	1.68	0.59
1:E:126:VAL:HG12	1:E:182:ALA:HB1	1.83	0.59
1:E:462:GLN:HG3	1:E:468:PHE:HD1	1.68	0.59
1:F:1008:VAL:CG2	1:F:1019:PHE:HB3	2.33	0.59
1:F:1435:VAL:HG11	1:F:1463:CYS:HB3	1.84	0.59
1:F:2461:VAL:HG11	1:F:2751:VAL:HG22	1.84	0.59
1:F:2686:MET:HE1	1:F:2935:LYS:HG3	1.83	0.59
1:A:34:LEU:O	1:A:38:LEU:N	2.25	0.59
1:A:1008:VAL:CG1	1:A:1019:PHE:HB3	2.33	0.59
1:A:1616:PRO:HG3	1:A:1668:LEU:HD13	1.85	0.59
1:A:2667:THR:HG21	1:A:3058:ARG:NH1	2.17	0.59
1:B:462:GLN:HG3	1:B:468:PHE:HD1	1.68	0.59
1:B:488:ASN:HA	1:B:521:VAL:HB	1.83	0.59
1:B:735:LYS:HD2	1:B:860:VAL:HG23	1.85	0.59
1:B:795:HIS:HB3	1:B:799:PHE:CZ	2.37	0.59
1:B:2820:ILE:HD13	1:B:2943:MET:HG2	1.84	0.59
1:D:1616:PRO:HG3	1:D:1668:LEU:HD13	1.85	0.58
1:D:2712:GLU:HA	1:D:2717:VAL:HG11	1.84	0.58
1:E:1616:PRO:HG3	1:E:1668:LEU:HD13	1.85	0.58
1:E:1989:PHE:HD1	1:E:1992:LYS:HZ3	1.50	0.58
1:F:784:GLU:OE2	1:F:787:LEU:HD12	2.03	0.58
1:F:1537:LEU:HB2	1:F:1541:GLN:H	1.67	0.58
1:B:656:THR:OG1	1:B:880:HIS:ND1	2.35	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:C:2889:ILE:HG12	1:C:2922:LEU:HB3	1.84	0.58
1:D:2084:GLN:O	1:D:2087:GLN:CG	2.51	0.58
1:D:2667:THR:HG21	1:D:3058:ARG:NH1	2.17	0.58
1:D:2820:ILE:HD13	1:D:2943:MET:HG2	1.84	0.58
1:E:688:ARG:O	1:E:872:ARG:NE	2.34	0.58
1:E:735:LYS:HD2	1:E:860:VAL:HG23	1.85	0.58
1:E:1087:PHE:HB3	1:F:117:LYS:NZ	2.18	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1616:PRO:HG3	1:F:1668:LEU:HD13	1.85	0.58
1:A:410:LEU:HB3	1:A:1025:VAL:HG21	1.84	0.58
1:A:1435:VAL:HG11	1:A:1463:CYS:HB3	1.84	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:1616:PRO:HG3	1:B:1668:LEU:HD13	1.85	0.58
1:C:2667:THR:HG21	1:C:3058:ARG:NH1	2.18	0.58
1:F:735:LYS:HD2	1:F:860:VAL:HG23	1.85	0.58
1:F:2749:GLU:HB3	1:A:2749:GLU:OE2	2.02	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:784:GLU:OE2	1:A:787:LEU:HD12	2.04	0.58
1:C:129:VAL:HG13	1:C:356:PRO:HG2	1.85	0.58
1:C:1253:ARG:HG3	1:C:1253:ARG:NH1	2.18	0.58
1:C:1309:VAL:HG22	1:C:1331:ILE:HG12	1.84	0.58
1:C:2820:ILE:HD13	1:C:2943:MET:HG2	1.84	0.58
1:E:784:GLU:OE2	1:E:787:LEU:HD12	2.03	0.58
1:E:2461:VAL:HG11	1:E:2751:VAL:HG22	1.84	0.58
1:E:2667:THR:HG21	1:E:3058:ARG:NH1	2.17	0.58
1:F:462:GLN:HG3	1:F:468:PHE:HD1	1.68	0.58
1:F:687:GLY:O	1:F:695:ILE:N	2.34	0.58
1:F:1008:VAL:HG23	1:F:1008:VAL:O	2.03	0.58
1:F:1336:VAL:HG12	1:F:1337:MET:HG3	1.85	0.58
1:F:2124:ALA:O	1:F:2127:GLU:CG	2.51	0.58
1:A:1087:PHE:HB3	1:B:117:LYS:NZ	2.18	0.58
1:A:2651:ASN:HD22	1:A:2718:VAL:HG12	1.67	0.58
1:B:1327:VAL:HB	1:B:1339:ALA:HB3	1.86	0.58
1:B:1336:VAL:HG12	1:B:1337:MET:HG3	1.85	0.58
1:C:1008:VAL:CG2	1:C:1019:PHE:HB3	2.33	0.58
1:D:2487:LEU:HD11	1:D:2495:LEU:HD12	1.86	0.58
1:E:2084:GLN:O	1:E:2087:GLN:CG	2.52	0.58
1:E:2124:ALA:O	1:E:2127:GLU:CG	2.51	0.58
1:F:238:SER:OG	1:F:249:THR:OG1	2.15	0.58
1:F:513:SER:O	1:F:961:ARG:NE	2.36	0.58
1:F:621:SER:OG	1:F:643:ILE:HD13	2.04	0.58
1:F:2084:GLN:O	1:F:2087:GLN:CG	2.52	0.58
1:A:1656:LYS:HG2	1:A:1660:LEU:HG	1.85	0.58
1:A:2334:HIS:HD2	1:A:2391:LYS:HG3	1.66	0.58
1:B:1989:PHE:HD1	1:B:1992:LYS:HZ3	1.49	0.58
1:C:621:SER:OG	1:C:643:ILE:HD13	2.04	0.58
1:C:1008:VAL:HG23	1:C:1008:VAL:O	2.03	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:476:GLU:HA	1:D:479:LEU:HB2	1.86	0.58
1:D:2124:ALA:O	1:D:2127:GLU:CG	2.51	0.58
1:E:1656:LYS:HG2	1:E:1660:LEU:HG	1.85	0.58
1:E:2521:VAL:HG13	1:E:2529:ARG:HH11	1.68	0.58
1:F:129:VAL:HG13	1:F:356:PRO:HG2	1.85	0.58
1:F:476:GLU:HA	1:F:479:LEU:HB2	1.86	0.58
1:F:795:HIS:HB3	1:F:799:PHE:CZ	2.37	0.58
1:A:735:LYS:HD2	1:A:860:VAL:HG23	1.85	0.58
1:B:33:ALA:O	1:B:37:ARG:N	2.35	0.58
1:B:150:THR:O	1:B:152:PRO:HD3	2.03	0.58
1:B:1008:VAL:CG2	1:B:1019:PHE:HB3	2.33	0.58
1:B:1013:THR:CG2	1:B:1014:TRP:N	2.58	0.58
1:B:2461:VAL:HG11	1:B:2751:VAL:HG22	1.84	0.58
1:B:2667:THR:HG21	1:B:3058:ARG:NH1	2.17	0.58
1:D:2876:LEU:HB3	1:D:2881:VAL:HG12	1.86	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:2800:PHE:HE1	1:E:2812:LEU:HD22	1.67	0.58
1:F:150:THR:O	1:F:152:PRO:HD3	2.03	0.58
1:F:2749:GLU:OE2	1:A:2749:GLU:HB3	2.02	0.58
1:B:2084:GLN:O	1:B:2087:GLN:CG	2.52	0.58
1:C:476:GLU:HA	1:C:479:LEU:HB2	1.86	0.58
1:C:784:GLU:OE2	1:C:787:LEU:HD12	2.03	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:D:784:GLU:OE2	1:D:787:LEU:HD12	2.04	0.58
1:D:2554:ALA:HB1	1:D:2614:LYS:HZ2	1.69	0.58
1:E:2787:THR:HA	1:E:2790:MET:HG3	1.86	0.58
1:A:127:PRO:HG3	1:A:183:GLN:HA	1.86	0.58
1:A:621:SER:OG	1:A:643:ILE:HD13	2.04	0.58
1:B:511:ARG:HD2	1:B:517:ILE:O	2.04	0.58
1:B:924:LEU:O	1:B:929:GLU:N	2.30	0.58
1:B:2124:ALA:O	1:B:2127:GLU:CG	2.51	0.58
1:B:2693:GLN:O	1:B:2697:HIS:ND1	2.33	0.58
1:B:2876:LEU:HB3	1:B:2881:VAL:HG12	1.86	0.58
1:C:500:GLN:O	1:C:504:LYS:N	2.24	0.58
1:C:776:ASP:O	1:C:779:TRP:N	2.31	0.58
1:C:2461:VAL:HG11	1:C:2751:VAL:HG22	1.84	0.58
1:C:2876:LEU:HB3	1:C:2881:VAL:HG12	1.86	0.58
1:D:410:LEU:HB3	1:D:1025:VAL:HG21	1.84	0.58
1:D:462:GLN:HG3	1:D:468:PHE:HD1	1.68	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1087:PHE:HB3	1:E:117:LYS:NZ	2.18	0.58
1:D:1253:ARG:HG3	1:D:1253:ARG:NH1	2.18	0.58
1:D:1537:LEU:HB2	1:D:1541:GLN:H	1.67	0.58
1:E:776:ASP:O	1:E:779:TRP:N	2.31	0.58
1:E:1008:VAL:CG1	1:E:1019:PHE:HB3	2.33	0.58
1:E:1095:LEU:HD22	1:E:1289:PRO:HA	1.85	0.58
1:E:1336:VAL:HG12	1:E:1337:MET:HG3	1.85	0.58
1:E:1435:VAL:HG11	1:E:1463:CYS:HB3	1.84	0.58
1:E:2554:ALA:HB1	1:E:2614:LYS:NZ	2.19	0.58
1:E:2748:GLU:HG2	1:B:2753:LYS:NZ	2.19	0.58
1:F:1656:LYS:HG2	1:F:1660:LEU:HG	1.84	0.58
1:A:3080:ARG:HG3	1:A:3080:ARG:NH1	2.09	0.58
1:B:476:GLU:HA	1:B:479:LEU:HB2	1.86	0.58
1:B:1087:PHE:HB3	1:C:117:LYS:NZ	2.19	0.58
1:B:2554:ALA:HB1	1:B:2614:LYS:NZ	2.19	0.58
1:B:2787:THR:HA	1:B:2790:MET:HG3	1.86	0.58
1:C:441:ASP:OD2	1:C:443:LYS:HB3	2.04	0.58
1:C:2339:TRP:HB2	1:C:2398:LEU:HD11	1.86	0.58
1:D:1095:LEU:HD22	1:D:1289:PRO:HA	1.85	0.58
1:E:1091:LEU:HD13	1:E:1281:ALA:HB3	1.86	0.58
1:E:2487:LEU:HD11	1:E:2495:LEU:HD12	1.86	0.58
1:F:511:ARG:HD2	1:F:517:ILE:O	2.04	0.58
1:F:1405:ALA:HB3	1:F:1408:VAL:HG23	1.86	0.58
1:A:2787:THR:HA	1:A:2790:MET:HG3	1.86	0.58
1:B:1701:VAL:HG22	1:B:1732:LEU:HB2	1.84	0.58
1:D:924:LEU:HA	1:D:928:ALA:HB3	1.87	0.57
1:D:1538:ARG:NH1	1:D:1722:PRO:HB3	2.18	0.57
1:D:3001:HIS:NE2	1:C:2724:GLN:HG2	2.19	0.57
1:F:958:TRP:CZ2	1:F:1131:SER:OG	2.52	0.57
1:F:2352:ILE:HG12	1:F:2412:ALA:HB1	1.86	0.57
1:F:2787:THR:HA	1:F:2790:MET:HG3	1.86	0.57
1:A:511:ARG:NH1	1:A:543:GLY:HA3	2.19	0.57
1:A:2124:ALA:O	1:A:2127:GLU:CG	2.51	0.57
1:B:784:GLU:OE2	1:B:787:LEU:HD12	2.03	0.57
1:B:1405:ALA:HB3	1:B:1408:VAL:HG23	1.86	0.57
1:C:511:ARG:NH1	1:C:543:GLY:HA3	2.19	0.57
1:C:2403:ILE:HG23	1:C:2408:LEU:HD12	1.85	0.57
1:D:2339:TRP:HB2	1:D:2398:LEU:HD11	1.86	0.57
1:E:621:SER:OG	1:E:643:ILE:HD13	2.04	0.57
1:F:776:ASP:O	1:F:779:TRP:N	2.31	0.57
1:F:2614:LYS:HZ1	1:A:2583:PHE:HD1	1.52	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:117:LYS:NZ	1:C:1087:PHE:HB3	2.19	0.57
1:A:150:THR:O	1:A:152:PRO:HD3	2.03	0.57
1:A:1091:LEU:HD13	1:A:1281:ALA:HB3	1.86	0.57
1:A:1095:LEU:HD22	1:A:1289:PRO:HA	1.85	0.57
1:A:1336:VAL:HG12	1:A:1337:MET:HG3	1.85	0.57
1:A:2403:ILE:HG23	1:A:2408:LEU:HD12	1.85	0.57
1:A:2876:LEU:HB3	1:A:2881:VAL:HG12	1.86	0.57
1:B:776:ASP:O	1:B:779:TRP:N	2.31	0.57
1:B:1253:ARG:HG3	1:B:1253:ARG:NH1	2.18	0.57
1:C:1537:LEU:HD11	1:C:1714:LEU:HB3	1.87	0.57
1:C:2554:ALA:HB1	1:C:2614:LYS:HZ2	1.67	0.57
1:D:1336:VAL:HG12	1:D:1337:MET:HG3	1.85	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:511:ARG:HD2	1:E:517:ILE:O	2.04	0.57
1:E:2961:LEU:HD23	1:E:2978:ARG:HB3	1.87	0.57
1:F:127:PRO:HG3	1:F:183:GLN:HA	1.86	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	2.20	0.57
1:F:1309:VAL:HG22	1:F:1331:ILE:HG12	1.84	0.57
1:F:2748:GLU:HG2	1:A:2753:LYS:NZ	2.19	0.57
1:F:2983:LEU:HB3	1:F:2987:PHE:O	2.05	0.57
1:A:1253:ARG:HG3	1:A:1253:ARG:NH1	2.18	0.57
1:A:2487:LEU:HD11	1:A:2495:LEU:HD12	1.86	0.57
1:B:441:ASP:OD2	1:B:443:LYS:HB3	2.04	0.57
1:B:2521:VAL:HG13	1:B:2529:ARG:HH11	1.68	0.57
1:C:1327:VAL:HB	1:C:1339:ALA:HB3	1.86	0.57
1:D:2846:ALA:HA	1:D:3001:HIS:O	2.05	0.57
1:F:924:LEU:HA	1:F:928:ALA:HB3	1.86	0.57
1:A:2339:TRP:HB2	1:A:2398:LEU:HD11	1.86	0.57
1:C:924:LEU:HA	1:C:928:ALA:HB3	1.87	0.57
1:C:1095:LEU:HD22	1:C:1289:PRO:HA	1.85	0.57
1:C:1538:ARG:NH1	1:C:1722:PRO:HB3	2.18	0.57
1:D:735:LYS:HD2	1:D:860:VAL:HG23	1.85	0.57
1:D:1008:VAL:CG1	1:D:1019:PHE:HB3	2.33	0.57
1:D:1017:ILE:HG23	1:D:1045:VAL:HG21	1.87	0.57
1:D:2403:ILE:HG23	1:D:2408:LEU:HD12	1.85	0.57
1:D:2724:GLN:HG2	1:C:3001:HIS:NE2	2.19	0.57
1:D:2748:GLU:HG2	1:C:2753:LYS:NZ	2.19	0.57
1:E:476:GLU:HA	1:E:479:LEU:HB2	1.86	0.57
1:E:1017:ILE:HG23	1:E:1045:VAL:HG21	1.87	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2651:ASN:HD22	1:E:2718:VAL:HG12	1.67	0.57
1:E:2724:GLN:HG2	1:B:3001:HIS:NE2	2.20	0.57
1:E:2731:GLY:HA2	1:B:2845:PHE:CD1	2.38	0.57
1:E:2846:ALA:HA	1:E:3001:HIS:O	2.05	0.57
1:E:2865:ARG:NH1	1:B:3077:THR:O	2.38	0.57
1:A:2084:GLN:O	1:A:2087:GLN:CG	2.52	0.57
1:B:1008:VAL:O	1:B:1008:VAL:HG23	2.03	0.57
1:C:1405:ALA:HB3	1:C:1408:VAL:HG23	1.86	0.57
1:C:2622:GLY:HA2	1:C:2812:LEU:HD11	1.87	0.57
1:C:2709:ILE:O	1:C:2713:VAL:HG13	2.05	0.57
1:D:511:ARG:HD2	1:D:517:ILE:O	2.04	0.57
1:D:2889:ILE:HG12	1:D:2922:LEU:HB3	1.85	0.57
1:E:2709:ILE:O	1:E:2713:VAL:HG13	2.05	0.57
1:E:2752:ASP:OD2	1:B:2753:LYS:NZ	2.36	0.57
1:E:2876:LEU:HB3	1:E:2881:VAL:HG12	1.86	0.57
1:F:1253:ARG:HG3	1:F:1253:ARG:NH1	2.18	0.57
1:F:1445:VAL:HG23	1:F:1448:ALA:HB2	1.87	0.57
1:F:3001:HIS:NE2	1:A:2724:GLN:HG2	2.19	0.57
1:F:3077:THR:O	1:A:2865:ARG:NH1	2.38	0.57
1:A:441:ASP:OD2	1:A:443:LYS:HB3	2.04	0.57
1:A:1008:VAL:HG13	1:A:1008:VAL:O	2.03	0.57
1:A:2846:ALA:HA	1:A:3001:HIS:O	2.05	0.57
1:B:621:SER:OG	1:B:643:ILE:HD13	2.04	0.57
1:B:2846:ALA:HA	1:B:3001:HIS:O	2.05	0.57
1:C:735:LYS:HD2	1:C:860:VAL:HG23	1.85	0.57
1:C:1017:ILE:HG23	1:C:1045:VAL:HG21	1.87	0.57
1:C:1616:PRO:HG3	1:C:1668:LEU:HD13	1.85	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:E:2403:ILE:HG23	1:E:2408:LEU:HD12	1.85	0.57
1:E:2693:GLN:O	1:E:2697:HIS:ND1	2.33	0.57
1:F:1537:LEU:HD11	1:F:1714:LEU:HB3	1.87	0.57
1:A:511:ARG:HD2	1:A:517:ILE:O	2.04	0.57
1:A:2961:LEU:HD23	1:A:2978:ARG:HB3	1.87	0.57
1:C:2983:LEU:HB3	1:C:2987:PHE:O	2.05	0.57
1:D:1405:ALA:HB3	1:D:1408:VAL:HG23	1.86	0.57
1:D:2961:LEU:HD23	1:D:2978:ARG:HB3	1.87	0.57
1:E:1405:ALA:HB3	1:E:1408:VAL:HG23	1.86	0.57
1:E:2753:LYS:NZ	1:B:2748:GLU:HG2	2.19	0.57
1:F:2865:ARG:NH1	1:A:3077:THR:O	2.38	0.57
1:A:2709:ILE:O	1:A:2713:VAL:HG13	2.05	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2521:VAL:HG13	1:B:2529:ARG:NH1	2.20	0.57
1:C:511:ARG:HD2	1:C:517:ILE:O	2.04	0.57
1:D:621:SER:OG	1:D:643:ILE:HD13	2.04	0.57
1:D:868:ARG:HB3	1:D:872:ARG:HH11	1.70	0.57
1:E:129:VAL:HG13	1:E:356:PRO:HG2	1.85	0.57
1:E:1008:VAL:HG13	1:E:1008:VAL:O	2.03	0.57
1:E:1126:ILE:O	1:E:1197:ARG:CG	2.53	0.57
1:E:1327:VAL:HB	1:E:1339:ALA:HB3	1.86	0.57
1:E:3077:THR:O	1:B:2865:ARG:NH1	2.38	0.57
1:F:2554:ALA:HB1	1:F:2614:LYS:NZ	2.19	0.57
1:F:2753:LYS:NZ	1:A:2748:GLU:HG2	2.19	0.57
1:A:475:LEU:O	1:A:479:LEU:N	2.38	0.57
1:A:1001:ASP:O	1:A:1002:GLN:CG	2.53	0.57
1:A:1405:ALA:HB3	1:A:1408:VAL:HG23	1.86	0.57
1:B:127:PRO:HG3	1:B:183:GLN:HA	1.86	0.57
1:B:1126:ILE:O	1:B:1197:ARG:CG	2.53	0.57
1:B:2622:GLY:HA2	1:B:2812:LEU:HD11	1.86	0.57
1:B:2709:ILE:O	1:B:2713:VAL:HG13	2.05	0.57
1:C:1445:VAL:HG23	1:C:1448:ALA:HB2	1.87	0.57
1:C:2961:LEU:HD23	1:C:2978:ARG:HB3	1.87	0.57
1:D:1126:ILE:O	1:D:1197:ARG:CG	2.53	0.57
1:D:2753:LYS:NZ	1:C:2748:GLU:HG2	2.19	0.57
1:C:127:PRO:HG3	1:C:183:GLN:HA	1.86	0.57
1:C:2846:ALA:HA	1:C:3001:HIS:O	2.05	0.57
1:D:441:ASP:OD2	1:D:443:LYS:HB3	2.04	0.56
1:D:511:ARG:NH1	1:D:543:GLY:HA3	2.19	0.56
1:D:2653:VAL:HA	1:D:3051:MET:HE3	1.87	0.56
1:D:2865:ARG:NH1	1:C:3077:THR:O	2.38	0.56
1:E:441:ASP:OD2	1:E:443:LYS:HB3	2.04	0.56
1:E:1637:VAL:HG21	1:E:1671:TRP:CG	2.40	0.56
1:F:2487:LEU:HD11	1:F:2495:LEU:HD12	1.86	0.56
1:F:2622:GLY:HA2	1:F:2812:LEU:HD11	1.87	0.56
1:B:1537:LEU:HD11	1:B:1714:LEU:HB3	1.87	0.56
1:C:2554:ALA:HB1	1:C:2614:LYS:NZ	2.19	0.56
1:D:1327:VAL:HB	1:D:1339:ALA:HB3	1.86	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	1.50	0.56
1:E:2521:VAL:HG13	1:E:2529:ARG:NH1	2.20	0.56
1:F:500:GLN:O	1:F:504:LYS:N	2.24	0.56
1:F:958:TRP:O	1:F:959:ALA:HB3	2.05	0.56
1:F:1001:ASP:O	1:F:1002:GLN:CG	2.53	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2753:LYS:NZ	1:A:2752:ASP:OD2	2.36	0.56
1:A:1327:VAL:HB	1:A:1339:ALA:HB3	1.86	0.56
1:B:924:LEU:HA	1:B:928:ALA:HB3	1.86	0.56
1:B:1445:VAL:HG23	1:B:1448:ALA:HB2	1.87	0.56
1:C:1013:THR:CG2	1:C:1014:TRP:N	2.58	0.56
1:C:1420:THR:OG1	1:C:1485:HIS:NE2	2.38	0.56
1:D:1001:ASP:O	1:D:1002:GLN:CG	2.54	0.56
1:D:2521:VAL:HG13	1:D:2529:ARG:NH1	2.20	0.56
1:D:2614:LYS:HZ1	1:C:2583:PHE:HD1	1.51	0.56
1:D:2787:THR:HA	1:D:2790:MET:HG3	1.86	0.56
1:E:656:THR:OG1	1:E:880:HIS:ND1	2.35	0.56
1:E:868:ARG:HB3	1:E:872:ARG:HH11	1.70	0.56
1:E:924:LEU:HA	1:E:928:ALA:HB3	1.87	0.56
1:E:1537:LEU:HD11	1:E:1714:LEU:HB3	1.87	0.56
1:E:2957:PRO:HD3	1:E:2980:PRO:HB3	1.88	0.56
1:F:177:GLU:HB3	1:F:317:LEU:HD13	1.87	0.56
1:F:1327:VAL:HB	1:F:1339:ALA:HB3	1.86	0.56
1:F:1511:ASP:H	1:F:1514:ASP:HB2	1.71	0.56
1:F:2407:GLU:CD	1:F:2411:LYS:HZ2	2.08	0.56
1:F:2846:ALA:HA	1:F:3001:HIS:O	2.05	0.56
1:A:129:VAL:HG13	1:A:356:PRO:HG2	1.85	0.56
1:A:540:ASN:HD21	1:A:544:ILE:HG13	1.71	0.56
1:A:868:ARG:HB3	1:A:872:ARG:HH11	1.70	0.56
1:A:1420:THR:OG1	1:A:1485:HIS:NE2	2.39	0.56
1:A:1537:LEU:HD11	1:A:1714:LEU:HB3	1.87	0.56
1:A:2554:ALA:HB1	1:A:2614:LYS:NZ	2.19	0.56
1:B:129:VAL:HG13	1:B:356:PRO:HG2	1.85	0.56
1:B:511:ARG:NH1	1:B:543:GLY:HA3	2.19	0.56
1:B:868:ARG:HB3	1:B:872:ARG:HH11	1.70	0.56
1:B:1091:LEU:HD13	1:B:1281:ALA:HB3	1.86	0.56
1:B:1538:ARG:NH1	1:B:1722:PRO:HB3	2.18	0.56
1:B:2339:TRP:HB2	1:B:2398:LEU:HD11	1.86	0.56
1:C:177:GLU:HB3	1:C:317:LEU:HD13	1.87	0.56
1:C:475:LEU:O	1:C:479:LEU:N	2.37	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:D:3077:THR:O	1:C:2865:ARG:NH1	2.38	0.56
1:E:1511:ASP:H	1:E:1514:ASP:HB2	1.71	0.56
1:E:2622:GLY:HA2	1:E:2812:LEU:HD11	1.87	0.56
1:F:2724:GLN:HG2	1:A:3001:HIS:NE2	2.19	0.56
1:A:476:GLU:HA	1:A:479:LEU:HB2	1.86	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1017:ILE:HG23	1:B:1045:VAL:HG21	1.87	0.56
1:B:2983:LEU:HB3	1:B:2987:PHE:O	2.05	0.56
1:C:1091:LEU:HD13	1:C:1281:ALA:HB3	1.86	0.56
1:C:1511:ASP:H	1:C:1514:ASP:HB2	1.71	0.56
1:C:2787:THR:HA	1:C:2790:MET:HG3	1.86	0.56
1:D:2709:ILE:O	1:D:2713:VAL:HG13	2.05	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:2339:TRP:HB2	1:F:2398:LEU:HD11	1.86	0.56
1:A:1126:ILE:O	1:A:1197:ARG:CG	2.53	0.56
1:A:2957:PRO:HD3	1:A:2980:PRO:HB3	1.88	0.56
1:B:177:GLU:HB3	1:B:317:LEU:HD13	1.87	0.56
1:C:37:ARG:O	1:C:41:GLY:N	2.39	0.56
1:C:1126:ILE:O	1:C:1197:ARG:CG	2.53	0.56
1:D:776:ASP:O	1:D:779:TRP:N	2.31	0.56
1:D:2481:MET:O	1:D:2959:ARG:NH2	2.39	0.56
1:E:2481:MET:O	1:E:2959:ARG:NH2	2.39	0.56
1:F:1013:THR:CG2	1:F:1014:TRP:N	2.58	0.56
1:F:1091:LEU:HD13	1:F:1281:ALA:HB3	1.86	0.56
1:F:1385:ARG:NH1	1:F:2411:LYS:CD	2.69	0.56
1:F:1538:ARG:NH1	1:F:1722:PRO:HB3	2.18	0.56
1:A:500:GLN:O	1:A:504:LYS:N	2.24	0.56
1:A:1445:VAL:HG23	1:A:1448:ALA:HB2	1.87	0.56
1:A:2622:GLY:HA2	1:A:2812:LEU:HD11	1.87	0.56
1:B:37:ARG:O	1:B:41:GLY:N	2.39	0.56
1:B:490:LEU:HD23	1:B:523:SER:HB2	1.87	0.56
1:B:1637:VAL:HG21	1:B:1671:TRP:CG	2.40	0.56
1:C:868:ARG:HB3	1:C:872:ARG:HH11	1.70	0.56
1:C:2521:VAL:HG13	1:C:2529:ARG:NH1	2.20	0.56
1:D:2983:LEU:HB3	1:D:2987:PHE:O	2.05	0.56
1:E:1010:LEU:O	1:E:1017:ILE:N	2.29	0.56
1:E:1496:SER:HB3	1:E:1578:ASP:HB3	1.88	0.56
1:E:2478:ARG:NH1	1:E:2482:GLU:OE1	2.39	0.56
1:F:1637:VAL:HG21	1:F:1671:TRP:CG	2.40	0.56
1:A:1637:VAL:HG21	1:A:1671:TRP:CG	2.40	0.56
1:A:2303:ASP:OD1	1:A:2303:ASP:N	2.39	0.56
1:A:2481:MET:O	1:A:2959:ARG:NH2	2.39	0.56
1:A:2693:GLN:O	1:A:2697:HIS:ND1	2.33	0.56
1:B:540:ASN:HD21	1:B:544:ILE:HG13	1.71	0.56
1:B:2487:LEU:HD11	1:B:2495:LEU:HD12	1.86	0.56
1:D:475:LEU:O	1:D:479:LEU:N	2.37	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:540:ASN:HD21	1:D:544:ILE:HG13	1.71	0.56
1:D:1091:LEU:HD13	1:D:1281:ALA:HB3	1.86	0.56
1:E:37:ARG:O	1:E:41:GLY:N	2.39	0.56
1:E:1618:LEU:HG	1:E:1619:VAL:HG23	1.88	0.56
1:F:1126:ILE:O	1:F:1197:ARG:CG	2.53	0.56
1:F:2521:VAL:HG13	1:F:2529:ARG:NH1	2.20	0.56
1:F:2709:ILE:O	1:F:2713:VAL:HG13	2.05	0.56
1:A:924:LEU:HA	1:A:928:ALA:HB3	1.86	0.56
1:A:2881:VAL:HG13	1:A:2885:ASP:HB2	1.88	0.56
1:C:2303:ASP:OD1	1:C:2303:ASP:N	2.39	0.56
1:C:2881:VAL:HG13	1:C:2885:ASP:HB2	1.88	0.56
1:C:2957:PRO:HD3	1:C:2980:PRO:HB3	1.88	0.56
1:F:37:ARG:O	1:F:41:GLY:N	2.39	0.56
1:F:144:GLY:O	1:F:148:THR:N	2.34	0.56
1:A:2521:VAL:HG13	1:A:2529:ARG:NH1	2.20	0.56
1:C:1001:ASP:O	1:C:1002:GLN:CG	2.53	0.56
1:D:2554:ALA:HB1	1:D:2614:LYS:NZ	2.19	0.56
1:D:2881:VAL:HG13	1:D:2885:ASP:HB2	1.88	0.56
1:E:2881:VAL:HG13	1:E:2885:ASP:HB2	1.88	0.56
1:E:3001:HIS:NE2	1:B:2724:GLN:HG2	2.19	0.56
1:F:2481:MET:O	1:F:2959:ARG:NH2	2.39	0.56
1:A:1511:ASP:H	1:A:1514:ASP:HB2	1.71	0.56
1:B:1001:ASP:O	1:B:1002:GLN:CG	2.53	0.56
1:B:1496:SER:HB3	1:B:1578:ASP:HB3	1.88	0.56
1:C:2478:ARG:NH1	1:C:2482:GLU:OE1	2.39	0.56
1:E:2339:TRP:HB2	1:E:2398:LEU:HD11	1.86	0.55
1:E:2743:ALA:HB3	1:E:2939:ALA:HB3	1.89	0.55
1:F:1037:ASP:OD2	1:F:1043:ARG:N	2.40	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:1017:ILE:HG23	1:A:1045:VAL:HG21	1.87	0.55
1:C:2481:MET:O	1:C:2959:ARG:NH2	2.39	0.55
1:D:975:GLU:CG	1:D:976:TRP:N	2.70	0.55
1:D:2478:ARG:NH1	1:D:2482:GLU:OE1	2.39	0.55
1:D:2962:ASP:OD1	1:D:2962:ASP:N	2.34	0.55
1:E:1001:ASP:O	1:E:1002:GLN:CG	2.53	0.55
1:E:2753:LYS:HZ2	1:B:2748:GLU:HG2	1.71	0.55
1:F:868:ARG:HB3	1:F:872:ARG:HH11	1.70	0.55
1:F:2845:PHE:CD1	1:A:2731:GLY:HA2	2.39	0.55
1:A:2983:LEU:HB3	1:A:2987:PHE:O	2.05	0.55
1:B:745:THR:OG1	1:B:834:GLU:O	2.19	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1511:ASP:H	1:B:1514:ASP:HB2	1.70	0.55
1:B:2481:MET:O	1:B:2959:ARG:NH2	2.39	0.55
1:D:2704:ALA:O	1:D:2705:LYS:HD3	2.07	0.55
1:A:144:GLY:O	1:A:148:THR:N	2.34	0.55
1:A:1496:SER:HB3	1:A:1578:ASP:HB3	1.89	0.55
1:A:2743:ALA:HB3	1:A:2939:ALA:HB3	1.88	0.55
1:B:475:LEU:O	1:B:479:LEU:N	2.37	0.55
1:D:1511:ASP:H	1:D:1514:ASP:HB2	1.71	0.55
1:D:2303:ASP:N	1:D:2303:ASP:OD1	2.39	0.55
1:E:540:ASN:HD21	1:E:544:ILE:HG13	1.71	0.55
1:E:1087:PHE:HB3	1:F:117:LYS:HZ1	1.70	0.55
1:E:1445:VAL:HG23	1:E:1448:ALA:HB2	1.87	0.55
1:E:1734:SER:HA	1:E:1741:LEU:HD11	1.89	0.55
1:F:513:SER:C	1:F:961:ARG:HH11	2.02	0.55
1:F:1496:SER:HB3	1:F:1578:ASP:HB3	1.89	0.55
1:F:2743:ALA:HB3	1:F:2939:ALA:HB3	1.88	0.55
1:A:2810:GLY:HA2	1:A:2896:THR:HA	1.89	0.55
1:B:238:SER:OG	1:B:249:THR:OG1	2.15	0.55
1:B:2478:ARG:NH1	1:B:2482:GLU:OE1	2.39	0.55
1:C:33:ALA:O	1:C:37:ARG:N	2.35	0.55
1:D:551:PRO:HG3	1:D:560:VAL:HG21	1.89	0.55
1:E:475:LEU:O	1:E:479:LEU:N	2.37	0.55
1:E:2810:GLY:HA2	1:E:2896:THR:HA	1.89	0.55
1:F:958:TRP:N	1:F:958:TRP:CD1	2.73	0.55
1:A:37:ARG:O	1:A:41:GLY:N	2.38	0.55
1:A:975:GLU:CG	1:A:976:TRP:N	2.70	0.55
1:C:540:ASN:HD21	1:C:544:ILE:HG13	1.71	0.55
1:C:551:PRO:HG3	1:C:560:VAL:HG21	1.89	0.55
1:C:2704:ALA:O	1:C:2705:LYS:HD3	2.07	0.55
1:E:490:LEU:HD23	1:E:523:SER:HB2	1.87	0.55
1:E:2303:ASP:N	1:E:2303:ASP:OD1	2.39	0.55
1:E:2704:ALA:O	1:E:2705:LYS:HD3	2.07	0.55
1:F:176:VAL:O	1:F:180:ALA:N	2.36	0.55
1:F:975:GLU:CG	1:F:976:TRP:N	2.70	0.55
1:F:2704:ALA:O	1:F:2705:LYS:HD3	2.07	0.55
1:F:2957:PRO:HD3	1:F:2980:PRO:HB3	1.88	0.55
1:A:177:GLU:HB3	1:A:317:LEU:HD13	1.87	0.55
1:B:975:GLU:CG	1:B:976:TRP:N	2.70	0.55
1:B:1420:THR:OG1	1:B:1485:HIS:NE2	2.38	0.55
1:C:1618:LEU:HG	1:C:1619:VAL:HG23	1.88	0.55
1:E:177:GLU:HB3	1:E:317:LEU:HD13	1.87	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:117:LYS:HZ3	1:C:1087:PHE:HB3	1.70	0.55
1:A:2478:ARG:NH1	1:A:2482:GLU:OE1	2.39	0.55
1:B:2704:ALA:O	1:B:2705:LYS:HD3	2.07	0.55
1:C:490:LEU:HD23	1:C:523:SER:HB2	1.87	0.55
1:D:490:LEU:HD23	1:D:523:SER:HB2	1.87	0.55
1:D:737:TYR:HE1	1:D:862:VAL:HA	1.72	0.55
1:D:1724:TYR:OH	1:E:267:GLU:OE2	2.07	0.55
1:E:2458:ALA:HA	1:E:2824:ARG:HD2	1.89	0.55
1:F:1038:ALA:CA	1:F:1126:ILE:HA	2.37	0.55
1:F:2881:VAL:HG13	1:F:2885:ASP:HB2	1.88	0.55
1:B:2743:ALA:HB3	1:B:2939:ALA:HB3	1.88	0.55
1:B:2961:LEU:HD23	1:B:2978:ARG:HB3	1.87	0.55
1:C:975:GLU:CG	1:C:976:TRP:N	2.70	0.55
1:C:1690:GLU:O	1:C:1694:GLY:N	2.40	0.55
1:E:737:TYR:HE1	1:E:862:VAL:HA	1.72	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:A:490:LEU:HD23	1:A:523:SER:HB2	1.87	0.55
1:A:580:ARG:HH11	1:A:614:GLY:HA3	1.72	0.55
1:A:1357:ILE:HG13	1:A:1710:THR:HG21	1.89	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:A:2458:ALA:HA	1:A:2824:ARG:HD2	1.89	0.55
1:B:1087:PHE:HB3	1:C:117:LYS:HZ3	1.71	0.55
1:B:2458:ALA:HA	1:B:2824:ARG:HD2	1.89	0.55
1:C:931:VAL:HG13	1:C:933:VAL:CG2	2.37	0.55
1:E:1253:ARG:HG3	1:E:1253:ARG:NH1	2.18	0.55
1:B:2881:VAL:HG13	1:B:2885:ASP:HB2	1.88	0.55
1:C:2810:GLY:HA2	1:C:2896:THR:HA	1.88	0.55
1:D:1690:GLU:O	1:D:1694:GLY:N	2.40	0.54
1:D:2810:GLY:HA2	1:D:2896:THR:HA	1.89	0.54
1:E:2845:PHE:CD1	1:B:2731:GLY:HA2	2.39	0.54
1:F:540:ASN:HD21	1:F:544:ILE:HG13	1.71	0.54
1:F:1020:THR:O	1:F:1035:VAL:N	2.40	0.54
1:F:1357:ILE:HG13	1:F:1710:THR:HG21	1.89	0.54
1:A:1010:LEU:O	1:A:1017:ILE:N	2.29	0.54
1:A:1618:LEU:HG	1:A:1619:VAL:HG23	1.88	0.54
1:B:737:TYR:HE1	1:B:862:VAL:HA	1.72	0.54
1:B:1690:GLU:O	1:B:1694:GLY:N	2.40	0.54
1:D:668:THR:OG1	1:D:698:ILE:HD11	2.08	0.54
1:D:931:VAL:HG13	1:D:933:VAL:CG1	2.37	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2417:SER:O	1:D:2421:ASP:N	2.40	0.54
1:D:2845:PHE:CD1	1:C:2731:GLY:HA2	2.39	0.54
1:A:2704:ALA:O	1:A:2705:LYS:HD3	2.07	0.54
1:B:2957:PRO:HD3	1:B:2980:PRO:HB3	1.88	0.54
1:D:1618:LEU:HG	1:D:1619:VAL:HG23	1.88	0.54
1:E:1690:GLU:O	1:E:1694:GLY:N	2.40	0.54
1:F:1690:GLU:O	1:F:1694:GLY:N	2.40	0.54
1:F:2303:ASP:OD1	1:F:2303:ASP:N	2.39	0.54
1:F:2458:ALA:HA	1:F:2824:ARG:HD2	1.89	0.54
1:A:551:PRO:HG3	1:A:560:VAL:HG21	1.89	0.54
1:E:580:ARG:HH11	1:E:614:GLY:HA3	1.73	0.54
1:E:668:THR:OG1	1:E:698:ILE:HD11	2.08	0.54
1:E:2012:GLY:C	1:F:2591:ARG:NH1	2.61	0.54
1:F:475:LEU:O	1:F:479:LEU:N	2.37	0.54
1:F:931:VAL:HG13	1:F:933:VAL:CG1	2.37	0.54
1:A:2653:VAL:HA	1:A:3051:MET:HE3	1.88	0.54
1:C:580:ARG:HH11	1:C:614:GLY:HA3	1.73	0.54
1:C:763:SER:O	1:C:766:ASP:N	2.41	0.54
1:C:2458:ALA:HA	1:C:2824:ARG:HD2	1.89	0.54
1:D:763:SER:O	1:D:766:ASP:N	2.41	0.54
1:D:1420:THR:OG1	1:D:1485:HIS:NE2	2.38	0.54
1:F:1618:LEU:HG	1:F:1619:VAL:HG23	1.88	0.54
1:F:1734:SER:HA	1:F:1741:LEU:HD11	1.89	0.54
1:B:551:PRO:HG3	1:B:560:VAL:HG21	1.89	0.54
1:D:2012:GLY:C	1:E:2591:ARG:NH1	2.61	0.54
1:D:2743:ALA:HB3	1:D:2939:ALA:HB3	1.88	0.54
1:E:551:PRO:HG3	1:E:560:VAL:HG21	1.89	0.54
1:E:2417:SER:O	1:E:2421:ASP:N	2.40	0.54
1:B:273:ARG:HD2	1:B:282:VAL:HG12	1.90	0.54
1:B:1226:ARG:HB3	1:B:1282:THR:HG21	1.90	0.54
1:B:2551:PRO:O	1:B:2617:LEU:HB2	2.08	0.54
1:B:3018:LEU:O	1:B:3022:GLU:HB2	2.08	0.54
1:C:716:ALA:HA	1:C:719:VAL:HG23	1.90	0.54
1:C:1151:GLU:HB2	1:C:1179:ALA:HB3	1.90	0.54
1:D:580:ARG:HH11	1:D:614:GLY:HA3	1.72	0.54
1:D:624:TYR:HA	1:D:629:TRP:CD1	2.43	0.54
1:D:2731:GLY:HA2	1:C:2845:PHE:CD1	2.39	0.54
1:E:368:ILE:HG21	1:E:373:ILE:HG13	1.90	0.54
1:F:551:PRO:HG3	1:F:560:VAL:HG21	1.89	0.54
1:F:668:THR:OG1	1:F:698:ILE:HD11	2.08	0.54
1:F:737:TYR:HE1	1:F:862:VAL:HA	1.72	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1037:ASP:HB3	1:F:1042:MET:HG3	1.89	0.54
1:A:737:TYR:HE1	1:A:862:VAL:HA	1.72	0.54
1:A:763:SER:O	1:A:766:ASP:N	2.41	0.54
1:A:2551:PRO:O	1:A:2617:LEU:HB2	2.08	0.54
1:B:931:VAL:HG13	1:B:933:VAL:CG2	2.37	0.54
1:B:2012:GLY:C	1:C:2591:ARG:NH1	2.61	0.54
1:B:2768:ASP:OD2	1:B:2936:GLY:N	2.41	0.54
1:B:2860:ALA:HB1	1:B:3005:LEU:HD13	1.90	0.54
1:C:273:ARG:HD2	1:C:282:VAL:HG12	1.90	0.54
1:C:737:TYR:HE1	1:C:862:VAL:HA	1.72	0.54
1:C:1734:SER:HA	1:C:1741:LEU:HD11	1.89	0.54
1:C:2631:PRO:HG3	1:C:2649:LEU:HD13	1.90	0.54
1:D:716:ALA:HA	1:D:719:VAL:HG23	1.90	0.54
1:D:1734:SER:HA	1:D:1741:LEU:HD11	1.89	0.54
1:D:2551:PRO:O	1:D:2617:LEU:HB2	2.08	0.54
1:E:2551:PRO:O	1:E:2617:LEU:HB2	2.08	0.54
1:F:2731:GLY:HA2	1:A:2845:PHE:CD1	2.38	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	0.54
1:C:1496:SER:HB3	1:C:1578:ASP:HB3	1.89	0.54
1:E:33:ALA:O	1:E:37:ARG:N	2.35	0.54
1:E:33:ALA:O	1:E:37:ARG:HG2	2.08	0.54
1:E:1151:GLU:HB2	1:E:1179:ALA:HB3	1.90	0.54
1:F:526:ILE:HD12	1:F:549:PHE:HB3	1.90	0.54
1:F:580:ARG:HH11	1:F:614:GLY:HA3	1.73	0.54
1:F:792:ALA:HA	1:F:799:PHE:CE2	2.43	0.54
1:F:1010:LEU:O	1:F:1017:ILE:N	2.30	0.54
1:F:1089:ALA:O	1:F:1091:LEU:N	2.42	0.54
1:F:3018:LEU:O	1:F:3022:GLU:HB2	2.08	0.54
1:A:624:TYR:HA	1:A:629:TRP:CD1	2.43	0.54
1:A:2768:ASP:OD2	1:A:2936:GLY:N	2.41	0.54
1:A:2860:ALA:HB1	1:A:3005:LEU:HD13	1.90	0.54
1:B:456:GLU:HG2	1:B:486:GLN:HE21	1.73	0.54
1:B:2810:GLY:HA2	1:B:2896:THR:HA	1.89	0.54
1:C:668:THR:OG1	1:C:698:ILE:HD11	2.08	0.54
1:C:2743:ALA:HB3	1:C:2939:ALA:HB3	1.89	0.54
1:D:1496:SER:HB3	1:D:1578:ASP:HB3	1.89	0.53
1:D:2591:ARG:NH1	1:F:2012:GLY:C	2.61	0.53
1:E:2768:ASP:OD2	1:E:2936:GLY:N	2.41	0.53
1:E:2860:ALA:HB1	1:E:3005:LEU:HD13	1.90	0.53
1:F:763:SER:O	1:F:766:ASP:N	2.41	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:A:1226:ARG:HB3	1:A:1282:THR:HG21	1.90	0.53
1:B:526:ILE:HD12	1:B:549:PHE:HB3	1.90	0.53
1:B:668:THR:OG1	1:B:698:ILE:HD11	2.08	0.53
1:C:2551:PRO:O	1:C:2617:LEU:HB2	2.08	0.53
1:C:2768:ASP:OD2	1:C:2936:GLY:N	2.41	0.53
1:C:2860:ALA:HB1	1:C:3005:LEU:HD13	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:D:2860:ALA:HB1	1:D:3005:LEU:HD13	1.90	0.53
1:E:624:TYR:HA	1:E:629:TRP:CD1	2.43	0.53
1:E:1323:GLU:N	1:E:1343:LEU:O	2.41	0.53
1:E:2246:ALA:C	1:E:2255:ARG:HH12	2.11	0.53
1:F:2810:GLY:HA2	1:F:2896:THR:HA	1.89	0.53
1:A:1174:VAL:HB	1:A:1188:LEU:HB3	1.91	0.53
1:A:2012:GLY:C	1:B:2591:ARG:NH1	2.61	0.53
1:A:2492:VAL:HG21	1:A:2527:VAL:HG22	1.90	0.53
1:C:624:TYR:HA	1:C:629:TRP:CD1	2.43	0.53
1:C:1488:VAL:HG12	1:C:1490:ARG:HH11	1.73	0.53
1:C:2492:VAL:HG21	1:C:2527:VAL:HG22	1.90	0.53
1:F:1385:ARG:HD2	1:F:2407:GLU:OE1	2.08	0.53
1:F:2246:ALA:C	1:F:2255:ARG:HH12	2.12	0.53
1:A:716:ALA:HA	1:A:719:VAL:HG23	1.90	0.53
1:A:2591:ARG:NH1	1:C:2012:GLY:C	2.61	0.53
1:B:580:ARG:HH11	1:B:614:GLY:HA3	1.72	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:B:1618:LEU:HG	1:B:1619:VAL:HG23	1.88	0.53
1:B:2492:VAL:HG21	1:B:2527:VAL:HG22	1.90	0.53
1:C:2653:VAL:HA	1:C:3051:MET:HE3	1.90	0.53
1:D:1425:VAL:HG13	1:D:1474:LEU:HD13	1.91	0.53
1:E:1226:ARG:HB3	1:E:1282:THR:HG21	1.90	0.53
1:E:1420:THR:OG1	1:E:1485:HIS:NE2	2.38	0.53
1:A:745:THR:HG23	1:A:834:GLU:HA	1.90	0.53
1:A:1148:GLU:O	1:A:1150:ALA:N	2.42	0.53
1:B:1734:SER:HA	1:B:1741:LEU:HD11	1.89	0.53
1:B:2103:TRP:CG	1:B:2919:GLY:O	2.62	0.53
1:B:2303:ASP:N	1:B:2303:ASP:OD1	2.39	0.53
1:C:368:ILE:HG21	1:C:373:ILE:HG13	1.90	0.53
1:C:1089:ALA:O	1:C:1091:LEU:N	2.42	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1425:VAL:HG13	1:C:1474:LEU:HD13	1.91	0.53
1:D:745:THR:HG23	1:D:834:GLU:HA	1.90	0.53
1:D:2103:TRP:CG	1:D:2919:GLY:O	2.62	0.53
1:D:3018:LEU:O	1:D:3022:GLU:HB2	2.08	0.53
1:E:526:ILE:HD12	1:E:549:PHE:HB3	1.90	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:E:3018:LEU:O	1:E:3022:GLU:HB2	2.08	0.53
1:F:273:ARG:HD2	1:F:282:VAL:HG12	1.90	0.53
1:F:624:TYR:HA	1:F:629:TRP:CD1	2.43	0.53
1:F:1151:GLU:HB2	1:F:1179:ALA:HB3	1.90	0.53
1:F:2103:TRP:CG	1:F:2919:GLY:O	2.62	0.53
1:A:71:GLU:HG2	1:A:142:ARG:NH2	2.24	0.53
1:B:624:TYR:HA	1:B:629:TRP:CD1	2.43	0.53
1:B:763:SER:O	1:B:766:ASP:N	2.41	0.53
1:B:1357:ILE:HG13	1:B:1710:THR:HG21	1.89	0.53
1:C:1530:LEU:HD21	1:C:1554:LEU:HD22	1.91	0.53
1:D:1357:ILE:HG13	1:D:1710:THR:HG21	1.89	0.53
1:D:2418:GLY:O	1:D:2422:GLU:N	2.40	0.53
1:D:2583:PHE:HD1	1:C:2614:LYS:HZ1	1.51	0.53
1:E:931:VAL:HG13	1:E:933:VAL:CG1	2.37	0.53
1:E:2631:PRO:HG3	1:E:2649:LEU:HD13	1.90	0.53
1:F:1174:VAL:HB	1:F:1188:LEU:HB3	1.91	0.53
1:A:588:GLU:HB3	1:A:593:LEU:HD11	1.91	0.53
1:A:1323:GLU:N	1:A:1343:LEU:O	2.42	0.53
1:A:2246:ALA:C	1:A:2255:ARG:HH12	2.12	0.53
1:B:1010:LEU:O	1:B:1017:ILE:N	2.29	0.53
1:B:2631:PRO:HG3	1:B:2649:LEU:HD13	1.90	0.53
1:C:2087:GLN:HA	1:C:2090:GLU:CG	2.39	0.53
1:D:1530:LEU:HD21	1:D:1554:LEU:HD22	1.91	0.53
1:D:2753:LYS:HZ2	1:C:2748:GLU:HG2	1.73	0.53
1:E:745:THR:HG23	1:E:834:GLU:HA	1.90	0.53
1:E:1174:VAL:HB	1:E:1188:LEU:HB3	1.91	0.53
1:E:1425:VAL:HG13	1:E:1474:LEU:HD13	1.91	0.53
1:F:2087:GLN:HA	1:F:2090:GLU:CG	2.39	0.53
1:A:273:ARG:HD2	1:A:282:VAL:HG12	1.90	0.53
1:A:1089:ALA:O	1:A:1091:LEU:N	2.42	0.53
1:C:71:GLU:HG2	1:C:142:ARG:NH2	2.24	0.53
1:D:2693:GLN:O	1:D:2697:HIS:ND1	2.33	0.53
1:E:273:ARG:HD2	1:E:282:VAL:HG12	1.90	0.53
1:E:588:GLU:HB3	1:E:593:LEU:HD11	1.91	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2103:TRP:CG	1:E:2919:GLY:O	2.62	0.53
1:E:2215:THR:HG22	1:E:2216:GLU:HG3	1.91	0.53
1:F:716:ALA:HA	1:F:719:VAL:HG23	1.90	0.53
1:F:958:TRP:HD1	1:F:958:TRP:H	1.56	0.53
1:F:1020:THR:HB	1:F:1035:VAL:HG22	1.90	0.53
1:F:2492:VAL:HG21	1:F:2527:VAL:HG22	1.90	0.53
1:A:1425:VAL:HG13	1:A:1474:LEU:HD13	1.91	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:2246:ALA:C	1:B:2255:ARG:HH12	2.11	0.53
1:D:526:ILE:HD12	1:D:549:PHE:HB3	1.90	0.53
1:D:2087:GLN:HA	1:D:2090:GLU:CG	2.39	0.53
1:F:745:THR:HG23	1:F:834:GLU:HA	1.90	0.53
1:F:2551:PRO:O	1:F:2617:LEU:HB2	2.08	0.53
1:A:456:GLU:HG2	1:A:486:GLN:HE21	1.73	0.53
1:A:2103:TRP:CG	1:A:2919:GLY:O	2.62	0.53
1:B:368:ILE:HG21	1:B:373:ILE:HG13	1.90	0.53
1:B:1148:GLU:O	1:B:1150:ALA:N	2.42	0.53
1:B:2417:SER:O	1:B:2421:ASP:N	2.40	0.53
1:C:456:GLU:HG2	1:C:486:GLN:HE21	1.73	0.53
1:C:1357:ILE:HG13	1:C:1710:THR:HG21	1.89	0.53
1:D:1226:ARG:HB3	1:D:1282:THR:HG21	1.90	0.53
1:E:1634:ARG:HD2	1:E:1638:PRO:HA	1.91	0.53
1:E:2087:GLN:HA	1:E:2090:GLU:CG	2.39	0.53
1:F:1042:MET:O	1:F:1045:VAL:N	2.34	0.53
1:F:1385:ARG:CD	1:F:2407:GLU:OE2	2.56	0.53
1:F:2631:PRO:HG3	1:F:2649:LEU:HD13	1.90	0.53
1:A:1225:ARG:CG	1:A:1283:ASP:OD1	2.57	0.53
1:C:526:ILE:HD12	1:C:549:PHE:HB3	1.90	0.53
1:C:1010:LEU:O	1:C:1017:ILE:N	2.29	0.53
1:D:456:GLU:HG2	1:D:486:GLN:HE21	1.73	0.52
1:D:1151:GLU:HB2	1:D:1179:ALA:HB3	1.90	0.52
1:D:2492:VAL:HG21	1:D:2527:VAL:HG22	1.90	0.52
1:D:2631:PRO:HG3	1:D:2649:LEU:HD13	1.90	0.52
1:D:2768:ASP:OD2	1:D:2936:GLY:N	2.41	0.52
1:E:411:PRO:HD2	1:E:1025:VAL:HG11	1.91	0.52
1:E:456:GLU:HG2	1:E:486:GLN:HE21	1.73	0.52
1:E:1089:ALA:O	1:E:1091:LEU:N	2.42	0.52
1:F:2417:SER:O	1:F:2421:ASP:N	2.40	0.52
1:A:776:ASP:O	1:A:779:TRP:N	2.31	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1538:ARG:NH1	1:A:1722:PRO:HB3	2.18	0.52
1:B:411:PRO:HD2	1:B:1025:VAL:HG11	1.91	0.52
1:B:716:ALA:HA	1:B:719:VAL:HG23	1.90	0.52
1:B:2653:VAL:HA	1:B:3051:MET:HE3	1.90	0.52
1:C:745:THR:HG23	1:C:834:GLU:HA	1.90	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:1148:GLU:O	1:D:1150:ALA:N	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:716:ALA:HA	1:E:719:VAL:HG23	1.90	0.52
1:F:208:VAL:HG12	1:F:248:ILE:HG12	1.92	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:176:VAL:O	1:A:180:ALA:N	2.36	0.52
1:A:208:VAL:HG12	1:A:248:ILE:HG12	1.91	0.52
1:A:411:PRO:HD2	1:A:1025:VAL:HG11	1.91	0.52
1:A:931:VAL:HG13	1:A:933:VAL:CG1	2.37	0.52
1:C:33:ALA:O	1:C:37:ARG:HG2	2.08	0.52
1:C:1323:GLU:N	1:C:1343:LEU:O	2.41	0.52
1:D:1488:VAL:HG12	1:D:1490:ARG:HH11	1.73	0.52
1:D:2737:VAL:HG21	1:C:2715:PRO:HB2	1.92	0.52
1:D:2740:CYS:HB2	1:D:2998:GLY:HA2	1.92	0.52
1:E:1119:THR:O	1:E:1123:PHE:HB2	2.10	0.52
1:E:2089:PHE:HA	1:E:2188:ARG:HH11	1.74	0.52
1:F:1148:GLU:O	1:F:1150:ALA:N	2.42	0.52
1:A:1110:VAL:HG13	1:A:1172:VAL:HG11	1.92	0.52
1:A:1151:GLU:HB2	1:A:1179:ALA:HB3	1.90	0.52
1:B:1733:ASN:HD22	1:B:1736:ARG:HD2	1.74	0.52
1:B:2808:ARG:HB2	1:B:2895:SER:O	2.10	0.52
1:C:144:GLY:O	1:C:148:THR:N	2.33	0.52
1:C:1225:ARG:CG	1:C:1283:ASP:OD1	2.57	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:D:411:PRO:HD2	1:D:1025:VAL:HG11	1.91	0.52
1:D:792:ALA:HA	1:D:799:PHE:CE2	2.43	0.52
1:D:1225:ARG:CG	1:D:1283:ASP:OD1	2.57	0.52
1:D:1634:ARG:HD2	1:D:1638:PRO:HA	1.91	0.52
1:D:2715:PRO:HB2	1:C:2737:VAL:HG21	1.92	0.52
1:E:1093:PRO:HB3	1:E:1277:HIS:HE1	1.75	0.52
1:E:2962:ASP:OD1	1:E:2962:ASP:N	2.34	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:33:ALA:O	1:F:37:ARG:HG2	2.09	0.52
1:F:71:GLU:HG2	1:F:142:ARG:NH2	2.24	0.52
1:F:958:TRP:NE1	1:F:961:ARG:HB2	2.25	0.52
1:F:1037:ASP:CB	1:F:1042:MET:H	2.23	0.52
1:F:1634:ARG:HD2	1:F:1638:PRO:HA	1.91	0.52
1:F:2418:GLY:O	1:F:2422:GLU:N	2.40	0.52
1:F:2737:VAL:HG21	1:A:2715:PRO:HB2	1.91	0.52
1:A:33:ALA:O	1:A:37:ARG:HG2	2.08	0.52
1:A:2215:THR:HG22	1:A:2216:GLU:HG3	1.91	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:1488:VAL:HG12	1:B:1490:ARG:HH11	1.74	0.52
1:C:1148:GLU:O	1:C:1150:ALA:N	2.42	0.52
1:E:208:VAL:HG12	1:E:248:ILE:HG12	1.92	0.52
1:E:1148:GLU:O	1:E:1150:ALA:N	2.42	0.52
1:F:456:GLU:HG2	1:F:486:GLN:HE21	1.73	0.52
1:F:1021:LEU:CD2	1:F:1034:GLU:CG	2.81	0.52
1:F:1037:ASP:HA	1:F:1038:ALA:C	2.26	0.52
1:F:1420:THR:OG1	1:F:1485:HIS:NE2	2.39	0.52
1:A:526:ILE:HD12	1:A:549:PHE:HB3	1.90	0.52
1:A:542:VAL:HG11	1:A:964:VAL:HB	1.92	0.52
1:A:930:PRO:CG	1:A:930:PRO:O	2.57	0.52
1:A:1733:ASN:HD22	1:A:1736:ARG:HD2	1.74	0.52
1:A:3018:LEU:O	1:A:3022:GLU:HB2	2.08	0.52
1:B:1174:VAL:HB	1:B:1188:LEU:HB3	1.91	0.52
1:B:1323:GLU:N	1:B:1343:LEU:O	2.42	0.52
1:C:400:TRP:CZ3	1:C:636:PRO:HB2	2.45	0.52
1:C:1634:ARG:HD2	1:C:1638:PRO:HA	1.91	0.52
1:C:2089:PHE:HA	1:C:2188:ARG:HH11	1.74	0.52
1:C:2103:TRP:CG	1:C:2919:GLY:O	2.62	0.52
1:E:71:GLU:HG2	1:E:142:ARG:NH2	2.24	0.52
1:E:106:ALA:O	1:E:112:PRO:HD2	2.10	0.52
1:E:208:VAL:HB	1:E:255:LEU:HD13	1.92	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:2418:GLY:O	1:E:2422:GLU:N	2.40	0.52
1:F:931:VAL:HG13	1:F:933:VAL:HG13	1.92	0.52
1:F:960:GLY:CA	1:F:1126:ILE:HD13	2.39	0.52
1:F:1110:VAL:HG13	1:F:1172:VAL:HG11	1.92	0.52
1:F:1385:ARG:CD	1:F:2407:GLU:CD	2.73	0.52
1:F:1733:ASN:HD22	1:F:1736:ARG:HD2	1.74	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2552:ASP:OD1	1:F:2552:ASP:N	2.43	0.52
1:A:208:VAL:HB	1:A:255:LEU:HD13	1.92	0.52
1:A:400:TRP:CZ3	1:A:636:PRO:HB2	2.45	0.52
1:B:1089:ALA:O	1:B:1091:LEU:N	2.41	0.52
1:B:2698:GLY:HA3	1:B:2705:LYS:HG3	1.92	0.52
1:C:1226:ARG:HB3	1:C:1282:THR:HG21	1.90	0.52
1:C:2808:ARG:HB2	1:C:2895:SER:O	2.10	0.52
1:C:2962:ASP:OD1	1:C:2962:ASP:N	2.34	0.52
1:D:588:GLU:HB3	1:D:593:LEU:HD11	1.91	0.52
1:D:1093:PRO:HB3	1:D:1277:HIS:HE1	1.75	0.52
1:D:1622:PRO:HD3	1:D:1685:LEU:HD21	1.92	0.52
1:E:1110:VAL:HG13	1:E:1172:VAL:HG11	1.92	0.52
1:E:1287:VAL:O	1:E:1291:LYS:HG3	2.10	0.52
1:F:2715:PRO:HB2	1:A:2737:VAL:HG21	1.92	0.52
1:A:2740:CYS:HB2	1:A:2998:GLY:HA2	1.92	0.52
1:B:1530:LEU:HD21	1:B:1554:LEU:HD22	1.91	0.52
1:B:1695:LEU:HD23	1:C:257:ARG:NH1	2.23	0.52
1:B:2552:ASP:OD1	1:B:2552:ASP:N	2.43	0.52
1:C:588:GLU:HB3	1:C:593:LEU:HD11	1.91	0.52
1:D:2215:THR:HG22	1:D:2216:GLU:HG3	1.91	0.52
1:E:930:PRO:CG	1:E:930:PRO:O	2.57	0.52
1:E:1225:ARG:CG	1:E:1283:ASP:OD1	2.57	0.52
1:E:1538:ARG:NH1	1:E:1722:PRO:HB3	2.18	0.52
1:F:33:ALA:O	1:F:37:ARG:N	2.35	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:2698:GLY:HA3	1:F:2705:LYS:HG3	1.92	0.52
1:A:577:GLU:OE2	2:A:4000:FMN:O3'	2.28	0.52
1:A:1164:THR:HA	1:A:1204:THR:O	2.10	0.52
1:A:2631:PRO:HG3	1:A:2649:LEU:HD13	1.90	0.52
1:B:206:PRO:HG2	1:B:294:VAL:HA	1.92	0.52
1:B:208:VAL:HG12	1:B:248:ILE:HG12	1.92	0.52
1:B:400:TRP:CZ3	1:B:636:PRO:HB2	2.45	0.52
1:B:588:GLU:HB3	1:B:593:LEU:HD11	1.91	0.52
1:B:961:ARG:NH2	1:B:1196:GLY:O	2.42	0.52
1:B:1119:THR:O	1:B:1123:PHE:HB2	2.10	0.52
1:B:1287:VAL:O	1:B:1291:LYS:HG3	2.10	0.52
1:B:2089:PHE:HA	1:B:2188:ARG:HH11	1.74	0.52
1:C:411:PRO:HD2	1:C:1025:VAL:HG11	1.91	0.52
1:C:1174:VAL:HB	1:C:1188:LEU:HB3	1.91	0.52
1:D:931:VAL:HG13	1:D:933:VAL:HG13	1.92	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1110:VAL:HG13	1:D:1172:VAL:HG11	1.92	0.52
1:E:961:ARG:NH2	1:E:1196:GLY:O	2.42	0.52
1:F:411:PRO:HD2	1:F:1025:VAL:HG11	1.91	0.52
1:F:588:GLU:HB3	1:F:593:LEU:HD11	1.91	0.52
1:F:1394:HIS:CE1	1:C:2324:LYS:CE	2.93	0.52
1:F:2180:LYS:HZ1	1:F:2962:ASP:HB3	1.75	0.52
1:A:1622:PRO:HD3	1:A:1685:LEU:HD21	1.92	0.52
1:B:2215:THR:HG22	1:B:2216:GLU:HG3	1.91	0.52
1:C:1622:PRO:HD3	1:C:1685:LEU:HD21	1.92	0.52
1:D:2089:PHE:HA	1:D:2188:ARG:HH11	1.74	0.52
1:D:3000:GLY:HA3	1:C:2720:ALA:HB1	1.92	0.52
1:E:931:VAL:HG13	1:E:933:VAL:HG13	1.92	0.52
1:E:2715:PRO:HB2	1:B:2737:VAL:HG21	1.92	0.52
1:F:336:TRP:CE2	1:F:360:LEU:HD11	2.46	0.52
1:F:1323:GLU:N	1:F:1343:LEU:O	2.41	0.52
1:F:1622:PRO:HD3	1:F:1685:LEU:HD21	1.92	0.52
1:A:420:LYS:HB3	1:A:641:ASP:OD2	2.10	0.52
1:A:1530:LEU:HD21	1:A:1554:LEU:HD22	1.91	0.52
1:B:405:PRO:HG3	1:B:625:LEU:HG	1.92	0.52
1:B:542:VAL:HG11	1:B:964:VAL:HB	1.92	0.52
1:B:1110:VAL:HG13	1:B:1172:VAL:HG11	1.92	0.52
1:C:106:ALA:O	1:C:112:PRO:HD2	2.10	0.52
1:C:961:ARG:NH2	1:C:1196:GLY:O	2.42	0.52
1:D:1598:GLU:HG2	1:D:1666:ILE:HD13	1.93	0.51
1:D:2720:ALA:HB1	1:C:3000:GLY:HA3	1.92	0.51
1:E:3074:LEU:HB2	1:B:2861:LEU:HD13	1.92	0.51
1:F:1634:ARG:HH11	1:F:1639:ALA:N	2.08	0.51
1:F:2089:PHE:HA	1:F:2188:ARG:HH11	1.74	0.51
1:A:508:GLN:HA	1:A:540:ASN:HB3	1.92	0.51
1:A:1287:VAL:O	1:A:1291:LYS:HG3	2.10	0.51
1:A:2554:ALA:HB1	1:A:2614:LYS:HZ2	1.73	0.51
1:A:2790:MET:HG2	1:A:2809:LEU:HD11	1.93	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:B:2087:GLN:HA	1:B:2090:GLU:CG	2.39	0.51
1:C:1598:GLU:HG2	1:C:1666:ILE:HD13	1.93	0.51
1:D:1174:VAL:HB	1:D:1188:LEU:HB3	1.91	0.51
1:E:70:SER:HG	1:E:142:ARG:HH22	1.54	0.51
1:E:1733:ASN:HD22	1:E:1736:ARG:HD2	1.74	0.51
1:E:2401:ILE:HG23	1:E:2403:ILE:H	1.75	0.51
1:F:1226:ARG:HB3	1:F:1282:THR:HG21	1.90	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2215:THR:HG22	1:F:2216:GLU:HG3	1.91	0.51
1:F:3000:GLY:HA3	1:A:2720:ALA:HB1	1.92	0.51
1:F:3074:LEU:HB2	1:A:2861:LEU:HD13	1.92	0.51
1:A:1695:LEU:HD23	1:B:257:ARG:NH1	2.23	0.51
1:B:1164:THR:HA	1:B:1204:THR:O	2.10	0.51
1:B:2236:LEU:HD23	1:B:2288:HIS:HB2	1.92	0.51
1:C:208:VAL:HB	1:C:255:LEU:HD13	1.92	0.51
1:C:420:LYS:HB3	1:C:641:ASP:OD2	2.10	0.51
1:C:577:GLU:OE2	2:C:4000:FMN:O3'	2.28	0.51
1:D:746:TYR:HA	1:D:749:TRP:HD1	1.76	0.51
1:D:1119:THR:O	1:D:1123:PHE:HB2	2.10	0.51
1:E:1530:LEU:HD21	1:E:1554:LEU:HD22	1.91	0.51
1:E:2236:LEU:HD23	1:E:2288:HIS:HB2	1.92	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:F:420:LYS:HB3	1:F:641:ASP:OD2	2.10	0.51
1:F:577:GLU:OE2	2:F:4000:FMN:O3'	2.28	0.51
1:F:1093:PRO:HB3	1:F:1277:HIS:HE1	1.75	0.51
1:A:206:PRO:HG2	1:A:294:VAL:HA	1.92	0.51
1:A:2401:ILE:HG23	1:A:2403:ILE:H	1.75	0.51
1:B:208:VAL:HB	1:B:255:LEU:HD13	1.92	0.51
1:B:420:LYS:HB3	1:B:641:ASP:OD2	2.10	0.51
1:C:1287:VAL:O	1:C:1291:LYS:HG3	2.10	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:1287:VAL:O	1:D:1291:LYS:HG3	2.10	0.51
1:D:2846:ALA:N	1:C:2731:GLY:O	2.44	0.51
1:E:508:GLN:HA	1:E:540:ASN:HB3	1.92	0.51
1:E:792:ALA:HA	1:E:799:PHE:CE2	2.43	0.51
1:E:2583:PHE:HD1	1:B:2614:LYS:HZ1	1.53	0.51
1:E:2808:ARG:HB2	1:E:2895:SER:O	2.10	0.51
1:F:2740:CYS:HB2	1:F:2998:GLY:HA2	1.92	0.51
1:F:2861:LEU:HD13	1:A:3074:LEU:HB2	1.92	0.51
1:A:931:VAL:HG13	1:A:933:VAL:HG13	1.91	0.51
1:A:961:ARG:NH2	1:A:1196:GLY:O	2.42	0.51
1:A:1317:GLY:H	1:A:1324:VAL:HG12	1.76	0.51
1:A:2690:THR:O	1:A:2693:GLN:HG2	2.11	0.51
1:B:106:ALA:O	1:B:112:PRO:HD2	2.10	0.51
1:B:336:TRP:CE2	1:B:360:LEU:HD11	2.45	0.51
1:C:2552:ASP:N	1:C:2552:ASP:OD1	2.43	0.51
1:E:272:GLU:HB3	1:E:280:GLY:O	2.11	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:420:LYS:HB3	1:E:641:ASP:OD2	2.10	0.51
1:E:746:TYR:HA	1:E:749:TRP:HD1	1.76	0.51
1:E:1164:THR:HA	1:E:1204:THR:O	2.10	0.51
1:E:2731:GLY:O	1:B:2846:ALA:N	2.44	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:F:1119:THR:O	1:F:1123:PHE:HB2	2.10	0.51
1:F:1287:VAL:O	1:F:1291:LYS:HG3	2.10	0.51
1:F:2690:THR:O	1:F:2693:GLN:HG2	2.11	0.51
1:A:106:ALA:O	1:A:112:PRO:HD2	2.10	0.51
1:A:1119:THR:O	1:A:1123:PHE:HB2	2.10	0.51
1:A:1488:VAL:HG12	1:A:1490:ARG:HH11	1.73	0.51
1:B:1093:PRO:HB3	1:B:1277:HIS:HE1	1.74	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:1317:GLY:H	1:D:1324:VAL:HG12	1.76	0.51
1:E:577:GLU:OE2	2:E:4000:FMN:O3'	2.28	0.51
1:E:1488:VAL:HG12	1:E:1490:ARG:HH11	1.73	0.51
1:E:1622:PRO:HD3	1:E:1685:LEU:HD21	1.92	0.51
1:E:2720:ALA:HB1	1:B:3000:GLY:HA3	1.92	0.51
1:F:272:GLU:HB3	1:F:280:GLY:O	2.11	0.51
1:F:3080:ARG:HG3	1:F:3080:ARG:NH1	2.09	0.51
1:A:746:TYR:HA	1:A:749:TRP:HD1	1.76	0.51
1:B:71:GLU:HG2	1:B:142:ARG:NH2	2.24	0.51
1:C:42:GLU:H	1:C:42:GLU:CD	2.14	0.51
1:C:746:TYR:HA	1:C:749:TRP:HD1	1.76	0.51
1:C:1093:PRO:HB3	1:C:1277:HIS:HE1	1.75	0.51
1:C:2698:GLY:HA3	1:C:2705:LYS:HG3	1.92	0.51
1:D:1010:LEU:O	1:D:1017:ILE:N	2.29	0.51
1:E:780:ARG:HD2	1:E:816:LEU:HB3	1.93	0.51
1:F:1530:LEU:HD21	1:F:1554:LEU:HD22	1.91	0.51
1:A:336:TRP:CE2	1:A:360:LEU:HD11	2.46	0.51
1:B:577:GLU:OE2	2:B:4000:FMN:O3'	2.28	0.51
1:B:2740:CYS:HB2	1:B:2998:GLY:HA2	1.91	0.51
1:C:542:VAL:HG11	1:C:964:VAL:HB	1.92	0.51
1:C:780:ARG:HD2	1:C:816:LEU:HB3	1.93	0.51
1:C:1110:VAL:HG13	1:C:1172:VAL:HG11	1.92	0.51
1:C:1164:THR:HA	1:C:1204:THR:O	2.10	0.51
1:C:2690:THR:O	1:C:2693:GLN:HG2	2.11	0.51
1:C:2740:CYS:HB2	1:C:2998:GLY:HA2	1.91	0.51
1:D:508:GLN:HA	1:D:540:ASN:HB3	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2861:LEU:HD13	1:C:3074:LEU:HB2	1.92	0.51
1:F:208:VAL:HB	1:F:255:LEU:HD13	1.92	0.51
1:F:405:PRO:HG3	1:F:625:LEU:HG	1.92	0.51
1:F:542:VAL:HG11	1:F:964:VAL:HB	1.92	0.51
1:F:1425:VAL:HG13	1:F:1474:LEU:HD13	1.91	0.51
1:F:2731:GLY:O	1:A:2846:ALA:N	2.44	0.51
1:F:2808:ARG:HB2	1:F:2895:SER:O	2.10	0.51
1:A:1093:PRO:HB3	1:A:1277:HIS:HE1	1.75	0.51
1:B:931:VAL:HG13	1:B:933:VAL:HG23	1.92	0.51
1:B:1634:ARG:HD2	1:B:1638:PRO:HA	1.91	0.51
1:C:405:PRO:HG3	1:C:625:LEU:HG	1.93	0.51
1:C:792:ALA:HA	1:C:799:PHE:CE2	2.43	0.51
1:C:2401:ILE:HG23	1:C:2403:ILE:H	1.76	0.51
1:D:780:ARG:HD2	1:D:816:LEU:HB3	1.93	0.51
1:D:2401:ILE:HG23	1:D:2403:ILE:H	1.76	0.51
1:D:2698:GLY:HA3	1:D:2705:LYS:HG3	1.92	0.51
1:E:2737:VAL:HG21	1:B:2715:PRO:HB2	1.91	0.51
1:F:1164:THR:HA	1:F:1204:THR:O	2.10	0.51
1:A:2417:SER:O	1:A:2421:ASP:N	2.40	0.51
1:A:2667:THR:HG21	1:A:3058:ARG:HH11	1.76	0.51
1:A:2808:ARG:HB2	1:A:2895:SER:O	2.10	0.51
1:B:42:GLU:CD	1:B:42:GLU:H	2.14	0.51
1:D:2361:VAL:HG11	1:D:2398:LEU:HD23	1.93	0.51
1:D:2808:ARG:HB2	1:D:2895:SER:O	2.10	0.51
1:E:2554:ALA:HB1	1:E:2614:LYS:HZ2	1.75	0.51
1:F:1317:GLY:H	1:F:1324:VAL:HG12	1.76	0.51
1:F:1488:VAL:HG12	1:F:1490:ARG:HH11	1.73	0.51
1:F:3080:ARG:CG	1:F:3080:ARG:NH1	2.72	0.51
1:A:42:GLU:H	1:A:42:GLU:CD	2.14	0.51
1:A:2418:GLY:O	1:A:2422:GLU:N	2.40	0.51
1:B:1598:GLU:HG2	1:B:1666:ILE:HD13	1.93	0.51
1:B:2140:VAL:HG22	1:B:2165:ILE:HD12	1.93	0.51
1:B:2667:THR:HG21	1:B:3058:ARG:HH11	1.76	0.51
1:B:2754:ILE:HA	1:B:2759:ALA:O	2.11	0.51
1:C:1119:THR:O	1:C:1123:PHE:HB2	2.10	0.51
1:D:420:LYS:HB3	1:D:641:ASP:OD2	2.10	0.50
1:E:336:TRP:CE2	1:E:360:LEU:HD11	2.45	0.50
1:E:1317:GLY:H	1:E:1324:VAL:HG12	1.76	0.50
1:E:3000:GLY:HA3	1:B:2720:ALA:HB1	1.92	0.50
1:F:2236:LEU:HD23	1:F:2288:HIS:HB2	1.92	0.50
1:F:2401:ILE:HG23	1:F:2403:ILE:H	1.76	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2846:ALA:N	1:A:2731:GLY:O	2.44	0.50
1:A:1986:LEU:HA	1:A:1989:PHE:HD2	1.77	0.50
1:A:2552:ASP:OD1	1:A:2552:ASP:N	2.43	0.50
1:B:2790:MET:HG2	1:B:2809:LEU:HD11	1.93	0.50
1:B:2829:LEU:HD21	1:B:3014:PHE:HE2	1.76	0.50
1:C:1317:GLY:H	1:C:1324:VAL:HG12	1.76	0.50
1:D:930:PRO:CG	1:D:930:PRO:O	2.57	0.50
1:D:1164:THR:HA	1:D:1204:THR:O	2.10	0.50
1:D:1986:LEU:HA	1:D:1989:PHE:HD2	1.76	0.50
1:D:2245:VAL:HG13	1:D:2255:ARG:CZ	2.41	0.50
1:D:2754:ILE:HA	1:D:2759:ALA:O	2.11	0.50
1:E:2056:PHE:CZ	1:E:2180:LYS:HE2	2.47	0.50
1:E:2662:SER:HB2	1:E:2833:LEU:HD22	1.93	0.50
1:E:2667:THR:HG21	1:E:3058:ARG:HH11	1.76	0.50
1:E:2861:LEU:HD13	1:B:3074:LEU:HB2	1.92	0.50
1:F:42:GLU:H	1:F:42:GLU:CD	2.14	0.50
1:F:106:ALA:O	1:F:112:PRO:HD2	2.10	0.50
1:F:746:TYR:HA	1:F:749:TRP:HD1	1.76	0.50
1:F:1037:ASP:OD1	1:F:1043:ARG:HG3	2.06	0.50
1:F:2753:LYS:HZ2	1:A:2748:GLU:HG2	1.77	0.50
1:A:2140:VAL:HG22	1:A:2165:ILE:HD12	1.93	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:1331:ILE:HG13	1:B:1336:VAL:HG21	1.94	0.50
1:B:1590:VAL:HG11	1:B:1671:TRP:CD2	2.47	0.50
1:B:1634:ARG:HH11	1:B:1639:ALA:N	2.08	0.50
1:C:336:TRP:CE2	1:C:360:LEU:HD11	2.45	0.50
1:C:1986:LEU:HA	1:C:1989:PHE:HD2	1.77	0.50
1:C:2790:MET:HG2	1:C:2809:LEU:HD11	1.93	0.50
1:D:1733:ASN:HD22	1:D:1736:ARG:HD2	1.74	0.50
1:D:2236:LEU:HD23	1:D:2288:HIS:HB2	1.92	0.50
1:E:1986:LEU:HA	1:E:1989:PHE:HD2	1.76	0.50
1:E:2614:LYS:HZ1	1:B:2583:PHE:HD1	1.51	0.50
1:E:2698:GLY:HA3	1:E:2705:LYS:HG3	1.92	0.50
1:F:959:ALA:HB1	1:F:1127:GLU:H	1.72	0.50
1:F:1037:ASP:HA	1:F:1038:ALA:HB3	1.93	0.50
1:F:2245:VAL:HG13	1:F:2255:ARG:CZ	2.42	0.50
1:F:2653:VAL:HA	1:F:3051:MET:HE3	1.91	0.50
1:F:2720:ALA:HB1	1:A:3000:GLY:HA3	1.92	0.50
1:F:2754:ILE:HA	1:F:2759:ALA:O	2.11	0.50
1:A:780:ARG:HD2	1:A:816:LEU:HB3	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1087:PHE:HB3	1:B:117:LYS:HZ3	1.77	0.50
1:A:1598:GLU:HG2	1:A:1666:ILE:HD13	1.93	0.50
1:B:656:THR:HG1	1:B:880:HIS:CE1	2.29	0.50
1:B:1380:ALA:HB1	1:B:1474:LEU:HD12	1.93	0.50
1:B:1622:PRO:HD3	1:B:1685:LEU:HD21	1.92	0.50
1:C:208:VAL:HG12	1:C:248:ILE:HG12	1.91	0.50
1:E:1634:ARG:HH11	1:E:1639:ALA:N	2.08	0.50
1:E:2140:VAL:HG22	1:E:2165:ILE:HD12	1.94	0.50
1:F:508:GLN:HA	1:F:540:ASN:HB3	1.93	0.50
1:F:2662:SER:HB2	1:F:2833:LEU:HD22	1.93	0.50
1:F:2667:THR:HG21	1:F:3058:ARG:HH11	1.76	0.50
1:F:2790:MET:HG2	1:F:2809:LEU:HD11	1.93	0.50
1:B:1012:GLY:C	1:B:1013:THR:HG22	2.32	0.50
1:B:2401:ILE:HG23	1:B:2403:ILE:H	1.76	0.50
1:B:2662:SER:HB2	1:B:2833:LEU:HD22	1.94	0.50
1:C:508:GLN:HA	1:C:540:ASN:HB3	1.92	0.50
1:C:2361:VAL:HG11	1:C:2398:LEU:HD23	1.93	0.50
1:C:2754:ILE:HA	1:C:2759:ALA:O	2.11	0.50
1:D:1695:LEU:HD23	1:E:257:ARG:NH1	2.23	0.50
1:D:2690:THR:O	1:D:2693:GLN:HG2	2.11	0.50
1:D:2829:LEU:HD21	1:D:3014:PHE:HE2	1.77	0.50
1:E:1207:VAL:HG23	1:E:1207:VAL:O	2.12	0.50
1:E:1598:GLU:HG2	1:E:1666:ILE:HD13	1.93	0.50
1:F:2140:VAL:HG22	1:F:2165:ILE:HD12	1.94	0.50
1:F:2748:GLU:HG2	1:A:2753:LYS:HZ2	1.74	0.50
1:A:257:ARG:NH1	1:C:1695:LEU:HD23	2.23	0.50
1:B:2261:LYS:HA	1:B:2265:TRP:HB2	1.93	0.50
1:C:272:GLU:HB3	1:C:280:GLY:O	2.11	0.50
1:C:2180:LYS:HZ1	1:C:2962:ASP:HB3	1.76	0.50
1:D:2552:ASP:OD1	1:D:2552:ASP:N	2.43	0.50
1:D:2731:GLY:O	1:C:2846:ALA:N	2.44	0.50
1:E:1380:ALA:HB1	1:E:1474:LEU:HD12	1.94	0.50
1:F:930:PRO:CG	1:F:930:PRO:O	2.57	0.50
1:F:1598:GLU:HG2	1:F:1666:ILE:HD13	1.93	0.50
1:A:272:GLU:HB3	1:A:280:GLY:O	2.11	0.50
1:A:1380:ALA:HB1	1:A:1474:LEU:HD12	1.94	0.50
1:A:2180:LYS:HZ1	1:A:2962:ASP:HB3	1.76	0.50
1:A:2754:ILE:HA	1:A:2759:ALA:O	2.11	0.50
1:B:2245:VAL:HG13	1:B:2255:ARG:CZ	2.41	0.50
1:B:2690:THR:O	1:B:2693:GLN:HG2	2.11	0.50
1:C:1012:GLY:C	1:C:1013:THR:HG22	2.32	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1010:LEU:CG	1:D:1017:ILE:HB	2.42	0.50
1:D:1590:VAL:HG11	1:D:1671:TRP:CD2	2.47	0.50
1:D:2554:ALA:HB2	1:C:2582:GLN:HB3	1.94	0.50
1:E:176:VAL:O	1:E:180:ALA:N	2.36	0.50
1:E:206:PRO:HG2	1:E:294:VAL:HA	1.93	0.50
1:E:1012:GLY:C	1:E:1013:THR:HG22	2.32	0.50
1:F:207:MET:HA	1:F:249:THR:HG22	1.94	0.50
1:F:780:ARG:HD2	1:F:816:LEU:HB3	1.93	0.50
1:F:1380:ALA:HB1	1:F:1474:LEU:HD12	1.93	0.50
1:A:1331:ILE:HG13	1:A:1336:VAL:HG21	1.94	0.50
1:A:2557:LEU:HD22	1:A:2613:ARG:HB2	1.94	0.50
1:B:780:ARG:HD2	1:B:816:LEU:HB3	1.93	0.50
1:B:930:PRO:CG	1:B:930:PRO:O	2.57	0.50
1:B:940:ARG:CG	1:B:940:ARG:O	2.60	0.50
1:B:1317:GLY:H	1:B:1324:VAL:HG12	1.76	0.50
1:C:1380:ALA:HB1	1:C:1474:LEU:HD12	1.94	0.50
1:C:1590:VAL:HG11	1:C:1671:TRP:CD2	2.47	0.50
1:C:2140:VAL:HG22	1:C:2165:ILE:HD12	1.93	0.50
1:C:2662:SER:HB2	1:C:2833:LEU:HD22	1.93	0.50
1:C:3080:ARG:HG3	1:C:3080:ARG:NH1	2.09	0.50
1:E:2261:LYS:HA	1:E:2265:TRP:HB2	1.94	0.50
1:E:2582:GLN:HB3	1:B:2554:ALA:HB2	1.94	0.50
1:F:133:GLN:HG2	1:F:355:GLY:HA2	1.94	0.50
1:A:2236:LEU:HD23	1:A:2288:HIS:HB2	1.92	0.50
1:A:2361:VAL:HG11	1:A:2398:LEU:HD23	1.93	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:D:1207:VAL:HG13	1:D:1207:VAL:O	2.12	0.50
1:D:1331:ILE:HG13	1:D:1336:VAL:HG21	1.94	0.50
1:D:2582:GLN:HB3	1:C:2554:ALA:HB2	1.94	0.50
1:E:2811:PHE:HB3	1:E:2894:THR:HG22	1.94	0.50
1:F:1119:THR:HA	1:F:1123:PHE:CD1	2.47	0.50
1:F:2554:ALA:HB2	1:A:2582:GLN:HB3	1.94	0.50
1:A:1010:LEU:CG	1:A:1017:ILE:HB	2.42	0.50
1:A:1711:VAL:HA	1:A:1714:LEU:HG	1.94	0.50
1:B:1010:LEU:CG	1:B:1017:ILE:HB	2.42	0.50
1:B:1207:VAL:O	1:B:1207:VAL:HG13	2.12	0.50
1:B:1580:PRO:O	1:B:1583:SER:OG	2.22	0.50
1:B:1711:VAL:HA	1:B:1714:LEU:HG	1.94	0.50
1:B:2334:HIS:HB3	1:B:2391:LYS:HA	1.94	0.50
1:C:207:MET:HA	1:C:249:THR:HG22	1.94	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:931:VAL:HG13	1:C:933:VAL:HG23	1.92	0.50
1:C:2274:LEU:HD23	1:C:2277:ILE:HD12	1.94	0.50
1:D:1133:VAL:O	1:D:1193:ALA:N	2.42	0.49
1:D:1380:ALA:HB1	1:D:1474:LEU:HD12	1.94	0.49
1:D:2667:THR:HG21	1:D:3058:ARG:HH11	1.76	0.49
1:D:3074:LEU:HB2	1:C:2861:LEU:HD13	1.92	0.49
1:E:405:PRO:HG3	1:E:625:LEU:HG	1.92	0.49
1:E:1331:ILE:HG13	1:E:1336:VAL:HG21	1.94	0.49
1:E:1711:VAL:HA	1:E:1714:LEU:HG	1.94	0.49
1:F:1385:ARG:HD2	1:F:2407:GLU:OE2	2.11	0.49
1:F:2334:HIS:HB3	1:F:2391:LYS:HA	1.94	0.49
1:B:133:GLN:HG2	1:B:355:GLY:HA2	1.94	0.49
1:B:2361:VAL:HG11	1:B:2398:LEU:HD23	1.93	0.49
1:C:206:PRO:HG2	1:C:294:VAL:HA	1.92	0.49
1:C:1207:VAL:HG23	1:C:1207:VAL:O	2.12	0.49
1:C:2245:VAL:HG13	1:C:2255:ARG:CZ	2.41	0.49
1:C:2667:THR:HG21	1:C:3058:ARG:HH11	1.76	0.49
1:C:2811:PHE:HB3	1:C:2894:THR:HG22	1.94	0.49
1:D:405:PRO:HG3	1:D:625:LEU:HG	1.92	0.49
1:D:2056:PHE:CZ	1:D:2180:LYS:HE2	2.47	0.49
1:D:2662:SER:HB2	1:D:2833:LEU:HD22	1.93	0.49
1:F:1010:LEU:CG	1:F:1017:ILE:HB	2.42	0.49
1:F:1042:MET:C	1:F:1044:ALA:N	2.62	0.49
1:F:1590:VAL:HG11	1:F:1671:TRP:CD2	2.47	0.49
1:F:2056:PHE:CZ	1:F:2180:LYS:HE2	2.46	0.49
1:F:2361:VAL:HG11	1:F:2398:LEU:HD23	1.93	0.49
1:F:2583:PHE:HD1	1:A:2614:LYS:HZ1	1.51	0.49
1:F:2962:ASP:OD1	1:F:2962:ASP:N	2.34	0.49
1:A:2245:VAL:HG13	1:A:2255:ARG:CZ	2.42	0.49
1:A:2334:HIS:HB3	1:A:2391:LYS:HA	1.94	0.49
1:B:207:MET:HA	1:B:249:THR:HG22	1.94	0.49
1:B:508:GLN:HA	1:B:540:ASN:HB3	1.92	0.49
1:B:746:TYR:HA	1:B:749:TRP:HD1	1.76	0.49
1:C:2137:GLU:O	1:C:2163:THR:N	2.30	0.49
1:D:1178:ASN:HB2	1:D:1185:LEU:HD11	1.94	0.49
1:E:42:GLU:H	1:E:42:GLU:CD	2.14	0.49
1:E:1119:THR:HA	1:E:1123:PHE:CD1	2.47	0.49
1:E:2118:LEU:O	1:E:2122:ILE:CG1	2.60	0.49
1:E:2557:LEU:HD22	1:E:2613:ARG:HB2	1.94	0.49
1:F:1207:VAL:HG13	1:F:1207:VAL:O	2.12	0.49
1:F:2829:LEU:HD21	1:F:3014:PHE:HE2	1.76	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:405:PRO:HG3	1:A:625:LEU:HG	1.93	0.49
1:B:1119:THR:HA	1:B:1123:PHE:CD1	2.47	0.49
1:B:1986:LEU:HA	1:B:1989:PHE:HD2	1.76	0.49
1:C:930:PRO:CG	1:C:930:PRO:O	2.57	0.49
1:C:1331:ILE:HG13	1:C:1336:VAL:HG21	1.94	0.49
1:D:2811:PHE:HB3	1:D:2894:THR:HG22	1.94	0.49
1:E:1580:PRO:O	1:E:1583:SER:OG	2.22	0.49
1:E:1590:VAL:HG11	1:E:1671:TRP:CD2	2.47	0.49
1:E:2846:ALA:N	1:B:2731:GLY:O	2.44	0.49
1:F:1035:VAL:HG12	1:F:1042:MET:HG2	1.94	0.49
1:F:1362:MET:HG3	1:F:1430:VAL:HG21	1.95	0.49
1:F:1986:LEU:HA	1:F:1989:PHE:HD2	1.76	0.49
1:A:1207:VAL:HG23	1:A:1207:VAL:O	2.12	0.49
1:A:1590:VAL:HG11	1:A:1671:TRP:CD2	2.47	0.49
1:B:1291:LYS:HA	1:B:1344:ALA:HB3	1.95	0.49
1:B:2118:LEU:O	1:B:2122:ILE:CG1	2.60	0.49
1:B:2503:LYS:HE3	1:B:2505:GLU:OE2	2.13	0.49
1:C:1010:LEU:CG	1:C:1017:ILE:HB	2.42	0.49
1:C:1119:THR:HA	1:C:1123:PHE:CD1	2.48	0.49
1:D:940:ARG:CG	1:D:940:ARG:O	2.60	0.49
1:D:1119:THR:HA	1:D:1123:PHE:CD1	2.47	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:2274:LEU:HD23	1:D:2277:ILE:HD12	1.94	0.49
1:D:2291:LEU:HD21	1:D:2332:LEU:HD22	1.95	0.49
1:F:961:ARG:NE	1:F:1196:GLY:CA	2.75	0.49
1:F:2261:LYS:HA	1:F:2265:TRP:HB2	1.93	0.49
1:A:133:GLN:HG2	1:A:355:GLY:HA2	1.94	0.49
1:A:2662:SER:HB2	1:A:2833:LEU:HD22	1.94	0.49
1:B:144:GLY:O	1:B:148:THR:N	2.34	0.49
1:B:1178:ASN:HB2	1:B:1185:LEU:HD11	1.94	0.49
1:B:1212:ALA:O	1:B:1342:ARG:NH2	2.45	0.49
1:C:1362:MET:HG3	1:C:1430:VAL:HG21	1.95	0.49
1:C:2291:LEU:HD21	1:C:2332:LEU:HD22	1.95	0.49
1:C:2829:LEU:HD21	1:C:3014:PHE:HE2	1.76	0.49
1:D:2261:LYS:HA	1:D:2265:TRP:HB2	1.94	0.49
1:D:2790:MET:HG2	1:D:2809:LEU:HD11	1.93	0.49
1:E:1010:LEU:CG	1:E:1017:ILE:HB	2.42	0.49
1:E:2334:HIS:HB3	1:E:2391:LYS:HA	1.94	0.49
1:F:2274:LEU:HD23	1:F:2277:ILE:HD12	1.94	0.49
1:F:2503:LYS:HE3	1:F:2505:GLU:OE2	2.13	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1362:MET:HG3	1:A:1430:VAL:HG21	1.95	0.49
1:A:1634:ARG:HH11	1:A:1639:ALA:N	2.08	0.49
1:C:176:VAL:O	1:C:180:ALA:N	2.36	0.49
1:C:1637:VAL:HG21	1:C:1671:TRP:CD2	2.48	0.49
1:C:2056:PHE:CZ	1:C:2180:LYS:HE2	2.47	0.49
1:D:505:ARG:HA	1:D:508:GLN:HB2	1.94	0.49
1:D:1711:VAL:HA	1:D:1714:LEU:HG	1.94	0.49
1:D:3080:ARG:HG3	1:D:3080:ARG:NH1	2.09	0.49
1:E:1212:ALA:O	1:E:1342:ARG:NH2	2.45	0.49
1:E:2503:LYS:HE3	1:E:2505:GLU:OE2	2.13	0.49
1:F:1533:VAL:HG13	1:F:1582:HIS:HB2	1.95	0.49
1:F:2820:ILE:HD12	1:F:2822:LEU:HD21	1.95	0.49
1:A:790:ALA:HB3	1:A:826:LEU:HD21	1.95	0.49
1:A:1119:THR:HA	1:A:1123:PHE:CD1	2.47	0.49
1:C:505:ARG:HA	1:C:508:GLN:HB2	1.94	0.49
1:C:2118:LEU:O	1:C:2122:ILE:CG1	2.61	0.49
1:C:2820:ILE:HD12	1:C:2822:LEU:HD21	1.95	0.49
1:D:745:THR:OG1	1:D:834:GLU:O	2.19	0.49
1:E:133:GLN:HG2	1:E:355:GLY:HA2	1.94	0.49
1:E:184:LEU:HB3	1:E:311:TRP:HE3	1.78	0.49
1:E:2623:ALA:HB2	1:E:2812:LEU:HD21	1.94	0.49
1:F:1637:VAL:HG21	1:F:1671:TRP:CD2	2.48	0.49
1:F:2811:PHE:HB3	1:F:2894:THR:HG22	1.94	0.49
1:A:940:ARG:CG	1:A:940:ARG:O	2.60	0.49
1:A:2261:LYS:HA	1:A:2265:TRP:HB2	1.94	0.49
1:B:2820:ILE:HD12	1:B:2822:LEU:HD21	1.95	0.49
1:C:1533:VAL:HG13	1:C:1582:HIS:HB2	1.95	0.49
1:C:2417:SER:O	1:C:2421:ASP:N	2.40	0.49
1:D:2927:GLN:HE22	1:D:2941:PHE:C	2.17	0.49
1:E:207:MET:HA	1:E:249:THR:HG22	1.94	0.49
1:E:1111:PHE:HE1	1:E:1129:LEU:HD11	1.78	0.49
1:E:2361:VAL:HG11	1:E:2398:LEU:HD23	1.93	0.49
1:F:790:ALA:HB3	1:F:826:LEU:HD21	1.95	0.49
1:F:1331:ILE:HG13	1:F:1336:VAL:HG21	1.94	0.49
1:B:790:ALA:HB3	1:B:826:LEU:HD21	1.95	0.49
1:B:2623:ALA:HB2	1:B:2812:LEU:HD21	1.94	0.49
1:D:2623:ALA:HB2	1:D:2812:LEU:HD21	1.94	0.49
1:E:2245:VAL:HG13	1:E:2255:ARG:CZ	2.42	0.49
1:F:940:ARG:CG	1:F:940:ARG:O	2.60	0.49
1:F:1035:VAL:HG11	1:F:1042:MET:HG2	1.95	0.49
1:F:1212:ALA:O	1:F:1342:ARG:NH2	2.45	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2557:LEU:HD22	1:F:2613:ARG:HB2	1.94	0.49
1:A:1111:PHE:HE1	1:A:1129:LEU:HD11	1.78	0.49
1:A:2058:ASP:OD1	1:A:2058:ASP:N	2.46	0.49
1:B:1435:VAL:HG22	1:B:1703:ILE:HD12	1.95	0.49
1:B:2811:PHE:HB3	1:B:2894:THR:HG22	1.94	0.49
1:C:940:ARG:CG	1:C:940:ARG:O	2.60	0.49
1:C:1435:VAL:HG22	1:C:1703:ILE:HD12	1.95	0.49
1:C:1711:VAL:HA	1:C:1714:LEU:HG	1.94	0.49
1:C:2623:ALA:HB2	1:C:2812:LEU:HD21	1.94	0.49
1:D:2140:VAL:HG22	1:D:2165:ILE:HD12	1.93	0.48
1:D:2503:LYS:HE3	1:D:2505:GLU:OE2	2.13	0.48
1:D:2557:LEU:HD22	1:D:2613:ARG:HB2	1.94	0.48
1:E:144:GLY:O	1:E:148:THR:N	2.34	0.48
1:E:1637:VAL:HG21	1:E:1671:TRP:CD2	2.48	0.48
1:E:2554:ALA:HB1	1:E:2614:LYS:HD2	1.95	0.48
1:F:2926:SER:HB3	1:F:2976:TRP:HH2	1.78	0.48
1:A:207:MET:HA	1:A:249:THR:HG22	1.94	0.48
1:A:2118:LEU:O	1:A:2122:ILE:CG1	2.60	0.48
1:A:2848:GLY:H	1:A:3001:HIS:CD2	2.31	0.48
1:B:1637:VAL:HG21	1:B:1671:TRP:CD2	2.48	0.48
1:C:361:THR:HG21	1:C:377:PRO:HG3	1.95	0.48
1:C:2736:PRO:HG2	1:C:2746:SER:HA	1.96	0.48
1:C:2848:GLY:H	1:C:3001:HIS:CD2	2.31	0.48
1:D:444:ILE:HD12	1:D:655:ALA:HA	1.95	0.48
1:D:1212:ALA:O	1:D:1342:ARG:NH2	2.45	0.48
1:D:1637:VAL:HG21	1:D:1671:TRP:CD2	2.48	0.48
1:D:2820:ILE:HD12	1:D:2822:LEU:HD21	1.95	0.48
1:E:2088:ARG:O	1:E:2188:ARG:NH1	2.47	0.48
1:E:2094:HIS:O	1:E:2098:THR:HG22	2.14	0.48
1:E:2274:LEU:HD23	1:E:2277:ILE:HD12	1.94	0.48
1:F:1036:ASP:C	1:F:1038:ALA:HB3	2.32	0.48
1:F:1651:THR:HB	1:F:1656:LYS:HD2	1.95	0.48
1:F:1711:VAL:HA	1:F:1714:LEU:HG	1.94	0.48
1:F:1996:PRO:O	1:F:2000:LEU:N	2.41	0.48
1:F:2167:THR:HB	1:F:2198:ALA:HB3	1.95	0.48
1:F:2845:PHE:CE1	1:A:2676:SER:HB2	2.49	0.48
1:A:868:ARG:HB3	1:A:872:ARG:NH1	2.28	0.48
1:A:1625:LEU:HD11	1:A:1660:LEU:HB3	1.96	0.48
1:A:2137:GLU:O	1:A:2163:THR:N	2.30	0.48
1:A:2503:LYS:HE3	1:A:2505:GLU:OE2	2.13	0.48
1:B:2274:LEU:HD23	1:B:2277:ILE:HD12	1.94	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2554:ALA:HB1	1:B:2614:LYS:HD2	1.95	0.48
1:B:2848:GLY:H	1:B:3001:HIS:CD2	2.31	0.48
1:C:184:LEU:HB3	1:C:311:TRP:HE3	1.78	0.48
1:C:444:ILE:HD12	1:C:655:ALA:HA	1.95	0.48
1:D:868:ARG:HB3	1:D:872:ARG:NH1	2.28	0.48
1:D:2170:ARG:HB2	1:D:2175:ARG:HG3	1.95	0.48
1:D:2736:PRO:HG2	1:D:2746:SER:HA	1.96	0.48
1:E:790:ALA:HB3	1:E:826:LEU:HD21	1.95	0.48
1:E:1362:MET:HG3	1:E:1430:VAL:HG21	1.95	0.48
1:E:2098:THR:O	1:E:2102:TRP:CG	2.67	0.48
1:E:2666:PRO:CB	1:E:2727:VAL:HA	2.44	0.48
1:E:2676:SER:HB2	1:B:2845:PHE:CE1	2.49	0.48
1:E:2829:LEU:HD21	1:E:3014:PHE:HE2	1.76	0.48
1:F:184:LEU:HB3	1:F:311:TRP:HE3	1.78	0.48
1:F:1111:PHE:HE1	1:F:1129:LEU:HD11	1.78	0.48
1:F:2118:LEU:O	1:F:2122:ILE:CG1	2.60	0.48
1:F:2582:GLN:HB3	1:A:2554:ALA:HB2	1.94	0.48
1:F:2623:ALA:HB2	1:F:2812:LEU:HD21	1.94	0.48
1:A:505:ARG:HA	1:A:508:GLN:HB2	1.94	0.48
1:A:2554:ALA:HB1	1:A:2614:LYS:HD2	1.95	0.48
1:A:2829:LEU:HD21	1:A:3014:PHE:HE2	1.77	0.48
1:B:1533:VAL:HG13	1:B:1582:HIS:HB2	1.95	0.48
1:B:2056:PHE:CZ	1:B:2180:LYS:HE2	2.47	0.48
1:B:2167:THR:HB	1:B:2198:ALA:HB3	1.95	0.48
1:C:1212:ALA:O	1:C:1342:ARG:NH2	2.45	0.48
1:C:1625:LEU:HD11	1:C:1660:LEU:HB3	1.96	0.48
1:C:1651:THR:HB	1:C:1656:LYS:HD2	1.95	0.48
1:C:2261:LYS:HA	1:C:2265:TRP:HB2	1.94	0.48
1:C:3065:PRO:O	1:C:3069:GLN:N	2.42	0.48
1:D:1651:THR:HB	1:D:1656:LYS:HD2	1.95	0.48
1:D:2088:ARG:O	1:D:2188:ARG:NH1	2.47	0.48
1:D:2118:LEU:O	1:D:2122:ILE:CG1	2.60	0.48
1:D:2845:PHE:CE1	1:C:2676:SER:HB2	2.49	0.48
1:E:505:ARG:HA	1:E:508:GLN:HB2	1.94	0.48
1:E:1178:ASN:HB2	1:E:1185:LEU:HD11	1.94	0.48
1:E:1533:VAL:HG13	1:E:1582:HIS:HB2	1.95	0.48
1:E:2592:PRO:HA	1:E:2599:TRP:CD1	2.49	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:444:ILE:HD12	1:F:655:ALA:HA	1.95	0.48
1:F:505:ARG:HA	1:F:508:GLN:HB2	1.94	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1625:LEU:HD11	1:F:1660:LEU:HB3	1.95	0.48
1:F:2170:ARG:HB2	1:F:2175:ARG:HG3	1.95	0.48
1:F:2554:ALA:HB1	1:F:2614:LYS:HD2	1.95	0.48
1:F:2762:VAL:HG22	1:F:2822:LEU:HB2	1.96	0.48
1:B:444:ILE:HD12	1:B:655:ALA:HA	1.95	0.48
1:B:505:ARG:HA	1:B:508:GLN:HB2	1.94	0.48
1:B:868:ARG:HB3	1:B:872:ARG:NH1	2.28	0.48
1:B:2088:ARG:O	1:B:2188:ARG:NH1	2.47	0.48
1:B:2170:ARG:HB2	1:B:2175:ARG:HG3	1.95	0.48
1:C:868:ARG:HB3	1:C:872:ARG:NH1	2.28	0.48
1:C:2503:LYS:HE3	1:C:2505:GLU:OE2	2.13	0.48
1:D:1435:VAL:HG22	1:D:1703:ILE:HD12	1.95	0.48
1:D:1625:LEU:HD11	1:D:1660:LEU:HB3	1.96	0.48
1:E:1103:VAL:HG21	1:E:1269:MET:SD	2.54	0.48
1:E:1625:LEU:HD11	1:E:1660:LEU:HB3	1.96	0.48
1:E:2291:LEU:HD21	1:E:2332:LEU:HD22	1.95	0.48
1:F:1012:GLY:C	1:F:1013:THR:HG22	2.32	0.48
1:F:1435:VAL:HG22	1:F:1703:ILE:HD12	1.95	0.48
1:F:2666:PRO:CB	1:F:2727:VAL:HA	2.44	0.48
1:A:1637:VAL:HG21	1:A:1671:TRP:CD2	2.48	0.48
1:A:2094:HIS:O	1:A:2098:THR:HG22	2.13	0.48
1:D:790:ALA:HB3	1:D:826:LEU:HD21	1.95	0.48
1:D:1012:GLY:C	1:D:1013:THR:HG22	2.32	0.48
1:D:1291:LYS:HA	1:D:1344:ALA:HB3	1.95	0.48
1:D:2645:ASP:OD1	1:D:2647:VAL:HG23	2.14	0.48
1:E:803:GLU:OE1	1:E:2431:THR:CG2	2.62	0.48
1:E:2554:ALA:HB2	1:B:2582:GLN:HB3	1.94	0.48
1:F:868:ARG:HB3	1:F:872:ARG:NH1	2.28	0.48
1:A:184:LEU:HB3	1:A:311:TRP:HE3	1.78	0.48
1:A:1178:ASN:HB2	1:A:1185:LEU:HD11	1.94	0.48
1:A:2648:ALA:HA	1:A:2718:VAL:HG13	1.96	0.48
1:A:2667:THR:HB	1:A:3081:LEU:HD11	1.96	0.48
1:A:2926:SER:HB3	1:A:2976:TRP:HH2	1.79	0.48
1:B:1103:VAL:HG21	1:B:1269:MET:SD	2.54	0.48
1:B:2137:GLU:O	1:B:2163:THR:N	2.30	0.48
1:C:184:LEU:HD13	1:C:311:TRP:HB3	1.96	0.48
1:C:2170:ARG:HB2	1:C:2175:ARG:HG3	1.95	0.48
1:C:2334:HIS:HB3	1:C:2391:LYS:HA	1.94	0.48
1:D:2180:LYS:NZ	1:D:2962:ASP:HB3	2.29	0.48
1:D:2334:HIS:HB3	1:D:2391:LYS:HA	1.94	0.48
1:D:2583:PHE:HB2	1:C:2614:LYS:NZ	2.29	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2676:SER:HB2	1:C:2845:PHE:CE1	2.49	0.48
1:E:868:ARG:HB3	1:E:872:ARG:NH1	2.28	0.48
1:E:1291:LYS:HA	1:E:1344:ALA:HB3	1.95	0.48
1:E:2614:LYS:NZ	1:B:2583:PHE:HB2	2.29	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:F:1178:ASN:HB2	1:F:1185:LEU:HD11	1.94	0.48
1:F:2592:PRO:HA	1:F:2599:TRP:CD1	2.49	0.48
1:F:2848:GLY:H	1:F:3001:HIS:CD2	2.31	0.48
1:B:2666:PRO:CB	1:B:2727:VAL:HA	2.44	0.48
1:D:2167:THR:HB	1:D:2198:ALA:HB3	1.96	0.48
1:D:2666:PRO:CB	1:D:2727:VAL:HA	2.44	0.48
1:D:3065:PRO:O	1:D:3069:GLN:N	2.42	0.48
1:E:2583:PHE:HB2	1:B:2614:LYS:NZ	2.29	0.48
1:E:2762:VAL:HG22	1:E:2822:LEU:HB2	1.96	0.48
1:E:2845:PHE:CE1	1:B:2676:SER:HB2	2.49	0.48
1:E:2927:GLN:HE22	1:E:2941:PHE:C	2.17	0.48
1:F:305:ILE:HD13	1:F:327:GLU:HG2	1.95	0.48
1:F:501:VAL:HA	1:F:504:LYS:HE2	1.96	0.48
1:F:1019:PHE:CE2	1:F:1035:VAL:HG23	2.49	0.48
1:F:1401:THR:CB	1:C:2286:ARG:HH22	2.27	0.48
1:F:2736:PRO:HG2	1:F:2746:SER:HA	1.95	0.48
1:A:301:LEU:HD13	1:A:330:LEU:HD22	1.96	0.48
1:A:792:ALA:HA	1:A:799:PHE:CE2	2.43	0.48
1:B:305:ILE:HD13	1:B:327:GLU:HG2	1.95	0.48
1:B:936:ARG:O	1:B:941:ARG:N	2.44	0.48
1:B:1651:THR:HB	1:B:1656:LYS:HD2	1.95	0.48
1:B:2762:VAL:HG22	1:B:2822:LEU:HB2	1.96	0.48
1:C:301:LEU:HD13	1:C:330:LEU:HD22	1.96	0.48
1:C:1178:ASN:HB2	1:C:1185:LEU:HD11	1.94	0.48
1:C:1634:ARG:HH11	1:C:1639:ALA:N	2.08	0.48
1:C:2088:ARG:O	1:C:2188:ARG:NH1	2.47	0.48
1:C:2094:HIS:O	1:C:2098:THR:HG22	2.13	0.48
1:C:2667:THR:HB	1:C:3081:LEU:HD11	1.95	0.48
1:C:2926:SER:HB3	1:C:2976:TRP:HH2	1.79	0.48
1:C:2927:GLN:HE22	1:C:2941:PHE:C	2.17	0.48
1:D:2848:GLY:H	1:D:3001:HIS:CD2	2.31	0.48
1:E:940:ARG:CG	1:E:940:ARG:O	2.60	0.48
1:E:2060:TRP:HZ2	1:E:2966:ASP:HA	1.79	0.48
1:E:2843:GLN:HG2	1:E:2845:PHE:CZ	2.49	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:808:ALA:HB3	1:F:811:ASP:HB2	1.96	0.48
1:F:961:ARG:CZ	1:F:1196:GLY:HA2	2.44	0.48
1:F:1103:VAL:HG21	1:F:1269:MET:SD	2.54	0.48
1:F:2088:ARG:O	1:F:2188:ARG:NH1	2.47	0.48
1:A:305:ILE:HD13	1:A:327:GLU:HG2	1.95	0.48
1:A:836:VAL:HG12	1:A:837:VAL:N	2.29	0.48
1:A:2088:ARG:O	1:A:2188:ARG:NH1	2.47	0.48
1:A:2274:LEU:HD23	1:A:2277:ILE:HD12	1.94	0.48
1:A:2762:VAL:HG22	1:A:2822:LEU:HB2	1.96	0.48
1:A:2843:GLN:HG2	1:A:2845:PHE:CZ	2.49	0.48
1:B:501:VAL:HA	1:B:504:LYS:HE2	1.96	0.48
1:B:1508:ILE:HB	1:B:1562:ARG:HD3	1.96	0.48
1:B:2094:HIS:O	1:B:2098:THR:HG22	2.13	0.48
1:B:2249:MET:O	1:B:2250:SER:OG	2.28	0.48
1:B:2926:SER:HB3	1:B:2976:TRP:HH2	1.79	0.48
1:C:1103:VAL:HG21	1:C:1269:MET:SD	2.54	0.48
1:C:1133:VAL:O	1:C:1193:ALA:N	2.42	0.48
1:C:1291:LYS:HA	1:C:1344:ALA:HB3	1.95	0.48
1:C:2098:THR:O	1:C:2102:TRP:CG	2.66	0.48
1:C:2557:LEU:HD22	1:C:2613:ARG:HB2	1.94	0.48
1:D:1103:VAL:HG21	1:D:1269:MET:SD	2.54	0.48
1:D:1467:VAL:HA	1:D:1605:LYS:HD2	1.96	0.48
1:E:656:THR:HG1	1:E:880:HIS:CE1	2.31	0.48
1:E:1996:PRO:O	1:E:2000:LEU:N	2.41	0.48
1:F:171:LYS:HE3	1:F:173:ALA:HB3	1.96	0.48
1:F:361:THR:HG21	1:F:377:PRO:HG3	1.95	0.48
1:F:1276:GLN:HE21	1:F:1292:LEU:HD13	1.79	0.48
1:F:2291:LEU:HD21	1:F:2332:LEU:HD22	1.95	0.48
1:A:184:LEU:HD13	1:A:311:TRP:HB3	1.96	0.48
1:A:365:ALA:HB3	1:A:366:PRO:HD3	1.96	0.48
1:A:683:GLY:CA	1:A:700:ASN:HB2	2.44	0.48
1:A:1212:ALA:O	1:A:1342:ARG:NH2	2.45	0.48
1:A:2170:ARG:HB2	1:A:2175:ARG:HG3	1.96	0.48
1:B:176:VAL:O	1:B:180:ALA:N	2.36	0.48
1:B:2098:THR:O	1:B:2102:TRP:CG	2.67	0.48
1:B:2645:ASP:OD1	1:B:2647:VAL:HG23	2.14	0.48
1:C:832:ASP:O	1:C:836:VAL:HG23	2.14	0.48
1:C:2666:PRO:CB	1:C:2727:VAL:HA	2.44	0.48
1:D:1111:PHE:HE1	1:D:1129:LEU:HD11	1.78	0.47
1:D:2098:THR:O	1:D:2102:TRP:CG	2.67	0.47
1:D:2843:GLN:HG2	1:D:2845:PHE:CZ	2.49	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:171:LYS:HE3	1:E:173:ALA:HB3	1.96	0.47
1:E:184:LEU:HD13	1:E:311:TRP:HB3	1.96	0.47
1:E:674:TRP:CD1	1:E:895:THR:HG21	2.49	0.47
1:E:2820:ILE:HD12	1:E:2822:LEU:HD21	1.95	0.47
1:F:745:THR:OG1	1:F:834:GLU:O	2.19	0.47
1:F:832:ASP:O	1:F:836:VAL:HG23	2.14	0.47
1:F:1038:ALA:HA	1:F:1126:ILE:CA	2.44	0.47
1:F:1467:VAL:HA	1:F:1605:LYS:HD2	1.96	0.47
1:F:2060:TRP:HZ2	1:F:2966:ASP:HA	1.79	0.47
1:F:2094:HIS:O	1:F:2098:THR:HG22	2.14	0.47
1:F:2180:LYS:NZ	1:F:2962:ASP:HB3	2.29	0.47
1:B:641:ASP:OD1	1:B:641:ASP:N	2.47	0.47
1:B:1111:PHE:HE1	1:B:1129:LEU:HD11	1.78	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	2.50	0.47
1:B:2418:GLY:O	1:B:2422:GLU:N	2.40	0.47
1:B:2557:LEU:HD22	1:B:2613:ARG:HB2	1.94	0.47
1:B:2592:PRO:HA	1:B:2599:TRP:CD1	2.49	0.47
1:C:1996:PRO:O	1:C:2000:LEU:N	2.41	0.47
1:C:2167:THR:HB	1:C:2198:ALA:HB3	1.96	0.47
1:C:2418:GLY:O	1:C:2422:GLU:N	2.40	0.47
1:C:2645:ASP:OD1	1:C:2647:VAL:HG23	2.14	0.47
1:D:501:VAL:HA	1:D:504:LYS:HE2	1.96	0.47
1:D:997:GLU:HB3	1:D:1009:PRO:CG	2.45	0.47
1:D:1634:ARG:HH11	1:D:1639:ALA:N	2.08	0.47
1:D:2060:TRP:HZ2	1:D:2966:ASP:HA	1.79	0.47
1:D:2094:HIS:O	1:D:2098:THR:HG22	2.13	0.47
1:D:2210:VAL:HB	1:D:2277:ILE:HD11	1.96	0.47
1:D:2461:VAL:HG21	1:D:2751:VAL:HG13	1.96	0.47
1:E:301:LEU:HD13	1:E:330:LEU:HD22	1.96	0.47
1:E:606:ASN:HD22	1:E:606:ASN:H	1.63	0.47
1:E:832:ASP:O	1:E:836:VAL:HG23	2.14	0.47
1:F:1040:THR:O	1:F:1041:ALA:HB2	2.13	0.47
1:F:1590:VAL:HG11	1:F:1671:TRP:CE2	2.50	0.47
1:F:2000:LEU:HD12	1:C:2000:LEU:HD12	1.96	0.47
1:F:2614:LYS:NZ	1:A:2583:PHE:HB2	2.29	0.47
1:F:2676:SER:HB2	1:A:2845:PHE:CE1	2.49	0.47
1:A:171:LYS:HE3	1:A:173:ALA:HB3	1.96	0.47
1:A:444:ILE:HD12	1:A:655:ALA:HA	1.95	0.47
1:A:501:VAL:HA	1:A:504:LYS:HE2	1.96	0.47
1:A:1012:GLY:C	1:A:1013:THR:HG22	2.32	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1291:LYS:HA	1:A:1344:ALA:HB3	1.94	0.47
1:A:1996:PRO:O	1:A:2000:LEU:N	2.41	0.47
1:A:2098:THR:O	1:A:2102:TRP:CG	2.67	0.47
1:A:2167:THR:HB	1:A:2198:ALA:HB3	1.96	0.47
1:A:2666:PRO:CB	1:A:2727:VAL:HA	2.44	0.47
1:A:2820:ILE:HD12	1:A:2822:LEU:HD21	1.95	0.47
1:A:2927:GLN:HE22	1:A:2941:PHE:C	2.17	0.47
1:B:836:VAL:HG12	1:B:837:VAL:N	2.29	0.47
1:B:2884:ASP:HA	1:B:2916:ARG:NH1	2.30	0.47
1:C:133:GLN:HG2	1:C:355:GLY:HA2	1.94	0.47
1:C:171:LYS:HE3	1:C:173:ALA:HB3	1.96	0.47
1:C:501:VAL:HA	1:C:504:LYS:HE2	1.96	0.47
1:C:803:GLU:OE1	1:C:2431:THR:CG2	2.62	0.47
1:C:1467:VAL:HA	1:C:1605:LYS:HD2	1.96	0.47
1:C:2884:ASP:HA	1:C:2916:ARG:NH1	2.29	0.47
1:D:641:ASP:OD1	1:D:641:ASP:N	2.47	0.47
1:D:2252:VAL:HG22	1:D:2255:ARG:NH2	2.30	0.47
1:D:2592:PRO:HA	1:D:2599:TRP:CD1	2.49	0.47
1:E:782:ARG:HD3	1:E:853:LEU:HD22	1.96	0.47
1:E:1276:GLN:HE21	1:E:1292:LEU:HD13	1.79	0.47
1:E:2137:GLU:O	1:E:2163:THR:N	2.30	0.47
1:E:2170:ARG:HB2	1:E:2175:ARG:HG3	1.95	0.47
1:E:2180:LYS:NZ	1:E:2962:ASP:HB3	2.29	0.47
1:F:674:TRP:CD1	1:F:895:THR:HG21	2.50	0.47
1:F:1291:LYS:HA	1:F:1344:ALA:HB3	1.95	0.47
1:F:2583:PHE:HB2	1:A:2614:LYS:NZ	2.29	0.47
1:A:782:ARG:HD3	1:A:853:LEU:HD22	1.97	0.47
1:A:2291:LEU:HD21	1:A:2332:LEU:HD22	1.95	0.47
1:A:2348:GLN:O	1:A:2416:MET:HG3	2.15	0.47
1:B:301:LEU:HD13	1:B:330:LEU:HD22	1.95	0.47
1:B:674:TRP:CD1	1:B:895:THR:HG21	2.49	0.47
1:B:1362:MET:HG3	1:B:1430:VAL:HG21	1.95	0.47
1:B:1996:PRO:O	1:B:2000:LEU:N	2.41	0.47
1:B:2736:PRO:HG2	1:B:2746:SER:HA	1.96	0.47
1:C:305:ILE:HD13	1:C:327:GLU:HG2	1.95	0.47
1:C:2060:TRP:HZ2	1:C:2966:ASP:HA	1.79	0.47
1:C:2210:VAL:HB	1:C:2277:ILE:HD11	1.97	0.47
1:D:2583:PHE:HB2	1:C:2614:LYS:HG3	1.97	0.47
1:D:2614:LYS:HG3	1:C:2583:PHE:HB2	1.97	0.47
1:D:2848:GLY:HA2	1:C:2728:GLY:HA2	1.97	0.47
1:E:444:ILE:HD12	1:E:655:ALA:HA	1.95	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:647:THR:HG22	1:E:901:ILE:HD11	1.96	0.47
1:F:2681:THR:O	1:F:2764:ALA:HA	2.15	0.47
1:A:606:ASN:H	1:A:606:ASN:HD22	1.62	0.47
1:A:1276:GLN:HE21	1:A:1292:LEU:HD13	1.79	0.47
1:A:1435:VAL:HG22	1:A:1703:ILE:HD12	1.95	0.47
1:A:1533:VAL:HG13	1:A:1582:HIS:HB2	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	2.13	0.47
1:B:184:LEU:HB3	1:B:311:TRP:HE3	1.78	0.47
1:B:1467:VAL:HA	1:B:1605:LYS:HD2	1.96	0.47
1:C:670:GLY:HA3	1:C:899:ALA:HB2	1.96	0.47
1:C:836:VAL:HG12	1:C:837:VAL:N	2.29	0.47
1:C:1111:PHE:HE1	1:C:1129:LEU:HD11	1.78	0.47
1:C:2180:LYS:NZ	1:C:2962:ASP:HB3	2.29	0.47
1:C:2843:GLN:HG2	1:C:2845:PHE:CZ	2.49	0.47
1:D:1276:GLN:HE21	1:D:1292:LEU:HD13	1.79	0.47
1:D:2376:LEU:HD22	1:D:2392:VAL:HG21	1.97	0.47
1:E:361:THR:HG21	1:E:377:PRO:HG3	1.95	0.47
1:E:365:ALA:HB3	1:E:366:PRO:HD3	1.97	0.47
1:E:808:ALA:HB3	1:E:811:ASP:HB2	1.96	0.47
1:E:1435:VAL:HG22	1:E:1703:ILE:HD12	1.95	0.47
1:E:2167:THR:HB	1:E:2198:ALA:HB3	1.96	0.47
1:E:2681:THR:O	1:E:2764:ALA:HA	2.15	0.47
1:F:670:GLY:HA3	1:F:899:ALA:HB2	1.96	0.47
1:F:966:PRO:O	1:F:970:ILE:N	2.48	0.47
1:F:976:TRP:CG	1:F:976:TRP:O	2.68	0.47
1:F:997:GLU:HB3	1:F:1009:PRO:CG	2.44	0.47
1:F:1699:ARG:HG3	1:F:1730:GLU:HB3	1.97	0.47
1:A:141:ALA:O	1:A:145:MET:HB2	2.14	0.47
1:A:361:THR:HG21	1:A:377:PRO:HG3	1.95	0.47
1:A:641:ASP:N	1:A:641:ASP:OD1	2.48	0.47
1:A:803:GLU:OE1	1:A:2431:THR:CG2	2.62	0.47
1:A:2056:PHE:CZ	1:A:2180:LYS:HE2	2.47	0.47
1:B:171:LYS:HE3	1:B:173:ALA:HB3	1.96	0.47
1:B:361:THR:HG21	1:B:377:PRO:HG3	1.95	0.47
1:B:803:GLU:OE1	1:B:2431:THR:CG2	2.62	0.47
1:B:2291:LEU:HD21	1:B:2332:LEU:HD22	1.95	0.47
1:B:2352:ILE:HG12	1:B:2412:ALA:HB1	1.96	0.47
1:C:674:TRP:CD1	1:C:895:THR:HG21	2.49	0.47
1:C:1455:VAL:HB	1:C:1480:ARG:HH12	1.80	0.47
1:C:2592:PRO:HA	1:C:2599:TRP:CD1	2.49	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:670:GLY:HA3	1:D:899:ALA:HB2	1.96	0.47
1:D:832:ASP:O	1:D:836:VAL:HG23	2.14	0.47
1:D:2000:LEU:HD12	1:B:2000:LEU:HD12	1.97	0.47
1:D:2348:GLN:O	1:D:2416:MET:HG3	2.15	0.47
1:D:2610:ARG:NH1	1:D:2700:LEU:HD11	2.25	0.47
1:D:2667:THR:HB	1:D:3081:LEU:HD11	1.96	0.47
1:D:2926:SER:HB3	1:D:2976:TRP:HH2	1.79	0.47
1:E:141:ALA:O	1:E:145:MET:HB2	2.14	0.47
1:E:305:ILE:HD13	1:E:327:GLU:HG2	1.95	0.47
1:E:683:GLY:CA	1:E:700:ASN:HB2	2.44	0.47
1:E:997:GLU:HB3	1:E:1009:PRO:CG	2.45	0.47
1:E:2348:GLN:O	1:E:2416:MET:HG3	2.15	0.47
1:E:2848:GLY:HA2	1:B:2728:GLY:HA2	1.97	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:2927:GLN:HE22	1:F:2941:PHE:C	2.17	0.47
1:A:365:ALA:O	1:A:369:ARG:N	2.42	0.47
1:A:647:THR:HG22	1:A:901:ILE:HD11	1.96	0.47
1:A:713:ALA:O	1:A:868:ARG:NH2	2.48	0.47
1:C:790:ALA:HB3	1:C:826:LEU:HD21	1.95	0.47
1:D:713:ALA:O	1:D:868:ARG:NH2	2.48	0.47
1:D:782:ARG:HD3	1:D:853:LEU:HD22	1.97	0.47
1:D:808:ALA:HB3	1:D:811:ASP:HB2	1.96	0.47
1:D:1072:TRP:HE1	1:D:1077:VAL:HG22	1.80	0.47
1:D:2614:LYS:NZ	1:C:2583:PHE:HB2	2.29	0.47
1:E:670:GLY:HA3	1:E:899:ALA:HB2	1.96	0.47
1:E:1651:THR:HB	1:E:1656:LYS:HD2	1.95	0.47
1:E:2252:VAL:HG22	1:E:2255:ARG:NH2	2.30	0.47
1:F:210:VAL:HG22	1:F:287:PHE:CD1	2.50	0.47
1:F:301:LEU:HD13	1:F:330:LEU:HD22	1.96	0.47
1:F:836:VAL:HG12	1:F:837:VAL:N	2.29	0.47
1:F:961:ARG:NE	1:F:1196:GLY:HA2	2.29	0.47
1:F:2348:GLN:O	1:F:2416:MET:HG3	2.15	0.47
1:F:2407:GLU:HG2	1:F:2411:LYS:HE3	1.96	0.47
1:F:2667:THR:HB	1:F:3081:LEU:HD11	1.96	0.47
1:F:2700:LEU:HD22	1:A:2697:HIS:CD2	2.43	0.47
1:F:2800:PHE:CE1	1:F:2812:LEU:HD22	2.50	0.47
1:F:3065:PRO:O	1:F:3069:GLN:N	2.42	0.47
1:A:674:TRP:CD1	1:A:895:THR:HG21	2.50	0.47
1:A:808:ALA:HB3	1:A:811:ASP:HB2	1.96	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:1467:VAL:HA	1:A:1605:LYS:HD2	1.96	0.47
1:A:1651:THR:HB	1:A:1656:LYS:HD2	1.95	0.47
1:A:2180:LYS:NZ	1:A:2962:ASP:HB3	2.29	0.47
1:A:2461:VAL:HG21	1:A:2751:VAL:HG13	1.96	0.47
1:A:2681:THR:O	1:A:2764:ALA:HA	2.15	0.47
1:B:647:THR:HG22	1:B:901:ILE:HD11	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:2180:LYS:NZ	1:B:2962:ASP:HB3	2.29	0.47
1:B:2252:VAL:HG22	1:B:2255:ARG:NH2	2.30	0.47
1:C:141:ALA:O	1:C:145:MET:HB2	2.15	0.47
1:C:641:ASP:N	1:C:641:ASP:OD1	2.47	0.47
1:C:713:ALA:O	1:C:868:ARG:NH2	2.48	0.47
1:C:808:ALA:HB3	1:C:811:ASP:HB2	1.96	0.47
1:C:976:TRP:CG	1:C:976:TRP:O	2.68	0.47
1:C:997:GLU:HB3	1:C:1009:PRO:CG	2.45	0.47
1:C:2376:LEU:HD22	1:C:2392:VAL:HG21	1.97	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:2728:GLY:HA2	1:C:2848:GLY:HA2	1.97	0.47
1:D:2762:VAL:HG22	1:D:2822:LEU:HB2	1.96	0.47
1:D:2773:GLU:HA	1:D:2776:ILE:HG22	1.97	0.47
1:E:1590:VAL:HG11	1:E:1671:TRP:CE2	2.50	0.47
1:E:1699:ARG:HG3	1:E:1730:GLU:HB3	1.97	0.47
1:F:602:ARG:NH2	1:F:641:ASP:OD1	2.27	0.47
1:F:683:GLY:CA	1:F:700:ASN:HB2	2.44	0.47
1:F:1381:ASP:OD1	1:F:1391:SER:OG	2.22	0.47
1:F:2210:VAL:HB	1:F:2277:ILE:HD11	1.97	0.47
1:F:2630:ASP:HB3	1:F:2633:VAL:HG23	1.97	0.47
1:F:2843:GLN:HG2	1:F:2845:PHE:CZ	2.49	0.47
1:A:778:THR:HG21	1:A:854:GLY:HA3	1.97	0.47
1:B:141:ALA:O	1:B:145:MET:HB2	2.15	0.47
1:B:713:ALA:O	1:B:868:ARG:NH2	2.48	0.47
1:B:2667:THR:HB	1:B:3081:LEU:HD11	1.96	0.47
1:C:745:THR:HG22	1:C:747:LEU:H	1.80	0.47
1:C:2461:VAL:HG21	1:C:2751:VAL:HG13	1.96	0.47
1:C:2773:GLU:HA	1:C:2776:ILE:HG22	1.97	0.47
1:D:647:THR:HG22	1:D:901:ILE:HD11	1.96	0.47
1:D:1590:VAL:HG11	1:D:1671:TRP:CE2	2.50	0.47
1:D:1996:PRO:O	1:D:2000:LEU:N	2.41	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:210:VAL:HG22	1:E:287:PHE:CD1	2.50	0.47
1:E:501:VAL:HA	1:E:504:LYS:HE2	1.96	0.47
1:E:836:VAL:HG12	1:E:837:VAL:N	2.29	0.47
1:E:2461:VAL:HG21	1:E:2751:VAL:HG13	1.96	0.47
1:E:2736:PRO:HG2	1:E:2746:SER:HA	1.96	0.47
1:F:141:ALA:O	1:F:145:MET:HB2	2.15	0.47
1:F:518:ASP:HA	1:F:543:GLY:O	2.15	0.47
1:F:647:THR:HG22	1:F:901:ILE:HD11	1.96	0.47
1:F:959:ALA:HA	1:F:1038:ALA:HB2	1.97	0.47
1:F:1037:ASP:HB2	1:F:1042:MET:H	1.80	0.47
1:F:2645:ASP:OD1	1:F:2647:VAL:HG23	2.13	0.47
1:F:2770:LEU:HB3	1:F:2815:GLN:HB3	1.97	0.47
1:F:2785:ALA:HB1	1:F:2809:LEU:HG	1.97	0.47
1:A:832:ASP:O	1:A:836:VAL:HG23	2.14	0.47
1:A:1699:ARG:HG3	1:A:1730:GLU:HB3	1.97	0.47
1:B:997:GLU:HB3	1:B:1009:PRO:CG	2.44	0.47
1:B:1625:LEU:HD11	1:B:1660:LEU:HB3	1.96	0.47
1:B:2376:LEU:HD22	1:B:2392:VAL:HG21	1.97	0.47
1:B:2461:VAL:HG21	1:B:2751:VAL:HG13	1.96	0.47
1:B:2648:ALA:HA	1:B:2718:VAL:HG13	1.96	0.47
1:B:2927:GLN:HE22	1:B:2941:PHE:C	2.17	0.47
1:C:210:VAL:HG22	1:C:287:PHE:CD1	2.50	0.47
1:C:1072:TRP:HE1	1:C:1077:VAL:HG22	1.80	0.47
1:C:1276:GLN:HE21	1:C:1292:LEU:HD13	1.79	0.47
1:C:2348:GLN:O	1:C:2416:MET:HG3	2.15	0.47
1:D:996:LEU:HA	1:D:1010:LEU:HA	1.97	0.47
1:D:1450:ALA:N	1:D:1613:ARG:O	2.48	0.47
1:D:2648:ALA:HA	1:D:2718:VAL:HG13	1.96	0.47
1:E:778:THR:HG21	1:E:854:GLY:HA3	1.97	0.47
1:E:966:PRO:O	1:E:970:ILE:N	2.48	0.47
1:E:1467:VAL:HA	1:E:1605:LYS:HD2	1.96	0.47
1:E:1723:GLU:C	1:E:1725:SER:H	2.18	0.47
1:E:2583:PHE:HB2	1:B:2614:LYS:HG3	1.97	0.47
1:F:184:LEU:HD13	1:F:311:TRP:HB3	1.96	0.47
1:F:713:ALA:O	1:F:868:ARG:NH2	2.48	0.47
1:F:1508:ILE:HB	1:F:1562:ARG:HD3	1.96	0.47
1:F:2884:ASP:HA	1:F:2916:ARG:NH1	2.29	0.47
1:A:198:ILE:HG12	1:C:1087:PHE:CE1	2.50	0.47
1:A:745:THR:HG22	1:A:747:LEU:H	1.80	0.47
1:A:1455:VAL:HB	1:A:1480:ARG:HH12	1.80	0.47
1:A:2630:ASP:HB3	1:A:2633:VAL:HG23	1.97	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2884:ASP:HA	1:A:2916:ARG:NH1	2.29	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:966:PRO:O	1:B:970:ILE:N	2.48	0.47
1:B:1072:TRP:HE1	1:B:1077:VAL:HG22	1.80	0.47
1:B:2348:GLN:O	1:B:2416:MET:HG3	2.15	0.47
1:B:2843:GLN:HG2	1:B:2845:PHE:CZ	2.49	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:D:1087:PHE:CE1	1:E:198:ILE:HG12	2.50	0.46
1:D:1508:ILE:HB	1:D:1562:ARG:HD3	1.97	0.46
1:D:1723:GLU:C	1:D:1725:SER:H	2.18	0.46
1:D:2554:ALA:HB1	1:D:2614:LYS:HD2	1.95	0.46
1:D:2681:THR:O	1:D:2764:ALA:HA	2.15	0.46
1:E:2543:PHE:HA	1:E:2624:GLN:HE22	1.81	0.46
1:E:2961:LEU:HD22	1:E:2976:TRP:CD1	2.51	0.46
1:F:585:HIS:HD2	1:F:586:SER:H	1.62	0.46
1:F:782:ARG:HD3	1:F:853:LEU:HD22	1.97	0.46
1:F:959:ALA:CB	1:F:1126:ILE:HG23	2.34	0.46
1:F:2376:LEU:HD22	1:F:2392:VAL:HG21	1.97	0.46
1:A:670:GLY:HA3	1:A:899:ALA:HB2	1.96	0.46
1:A:997:GLU:HB3	1:A:1009:PRO:CG	2.45	0.46
1:A:2482:GLU:HG2	1:A:2956:PRO:HB3	1.97	0.46
1:A:2736:PRO:HG2	1:A:2746:SER:HA	1.96	0.46
1:B:184:LEU:HD13	1:B:311:TRP:HB3	1.96	0.46
1:B:1455:VAL:HB	1:B:1480:ARG:HH12	1.80	0.46
1:B:2060:TRP:HZ2	1:B:2966:ASP:HA	1.79	0.46
1:B:2252:VAL:HG13	1:B:2255:ARG:HH21	1.81	0.46
1:B:2681:THR:O	1:B:2764:ALA:HA	2.15	0.46
1:B:2785:ALA:HB1	1:B:2809:LEU:HG	1.97	0.46
1:C:365:ALA:HB3	1:C:366:PRO:HD3	1.96	0.46
1:C:575:HIS:CD2	1:C:644:LEU:HD22	2.49	0.46
1:C:996:LEU:HA	1:C:1010:LEU:HA	1.97	0.46
1:C:1508:ILE:HB	1:C:1562:ARG:HD3	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:2554:ALA:HB1	1:C:2614:LYS:HD2	1.95	0.46
1:D:976:TRP:CG	1:D:976:TRP:O	2.68	0.46
1:D:2352:ILE:HG12	1:D:2412:ALA:HB1	1.96	0.46
1:E:684:MET:HG3	1:E:895:THR:HA	1.98	0.46
1:E:713:ALA:O	1:E:868:ARG:NH2	2.48	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:976:TRP:CG	1:E:976:TRP:O	2.68	0.46
1:E:1634:ARG:NH1	1:E:1639:ALA:H	2.11	0.46
1:F:540:ASN:ND2	1:F:544:ILE:HG13	2.30	0.46
1:F:641:ASP:OD1	1:F:641:ASP:N	2.47	0.46
1:F:2407:GLU:HB3	1:F:2411:LYS:CD	2.44	0.46
1:F:2648:ALA:HA	1:F:2718:VAL:HG13	1.96	0.46
1:A:210:VAL:HG22	1:A:287:PHE:CD1	2.50	0.46
1:A:1450:ALA:N	1:A:1613:ARG:O	2.48	0.46
1:A:2060:TRP:HZ2	1:A:2966:ASP:HA	1.79	0.46
1:A:2376:LEU:HD22	1:A:2392:VAL:HG21	1.97	0.46
1:B:84:GLU:HB2	1:B:85:PRO:HD3	1.97	0.46
1:B:1087:PHE:CE1	1:C:198:ILE:HG12	2.50	0.46
1:B:1346:PRO:HG2	1:B:1699:ARG:HD3	1.98	0.46
1:B:1450:ALA:N	1:B:1613:ARG:O	2.48	0.46
1:B:2210:VAL:HB	1:B:2277:ILE:HD11	1.97	0.46
1:B:2482:GLU:HG2	1:B:2956:PRO:HB3	1.97	0.46
1:C:2543:PHE:HA	1:C:2624:GLN:HE22	1.81	0.46
1:C:2630:ASP:HB3	1:C:2633:VAL:HG23	1.97	0.46
1:C:2961:LEU:HD22	1:C:2976:TRP:CD1	2.50	0.46
1:D:534:ASP:O	1:D:538:GLU:HG3	2.16	0.46
1:D:966:PRO:O	1:D:970:ILE:N	2.48	0.46
1:D:1699:ARG:HG3	1:D:1730:GLU:HB3	1.97	0.46
1:E:575:HIS:CD2	1:E:644:LEU:HD22	2.49	0.46
1:E:996:LEU:HA	1:E:1010:LEU:HA	1.98	0.46
1:E:1455:VAL:HB	1:E:1480:ARG:HH12	1.80	0.46
1:E:2096:VAL:HG13	1:E:2097:ALA:H	1.80	0.46
1:E:2252:VAL:HG13	1:E:2255:ARG:HH21	1.81	0.46
1:E:2884:ASP:HA	1:E:2916:ARG:NH1	2.30	0.46
1:F:1037:ASP:CA	1:F:1038:ALA:CB	2.87	0.46
1:F:2482:GLU:HG2	1:F:2956:PRO:HB3	1.97	0.46
1:F:2848:GLY:HA2	1:A:2728:GLY:HA2	1.97	0.46
1:A:518:ASP:HA	1:A:543:GLY:O	2.15	0.46
1:B:2961:LEU:HD22	1:B:2976:TRP:CD1	2.50	0.46
1:C:518:ASP:HA	1:C:543:GLY:O	2.15	0.46
1:C:602:ARG:NH2	1:C:641:ASP:OD1	2.27	0.46
1:C:647:THR:HG22	1:C:901:ILE:HD11	1.96	0.46
1:C:936:ARG:O	1:C:941:ARG:N	2.44	0.46
1:C:2352:ILE:HG12	1:C:2412:ALA:HB1	1.96	0.46
1:D:518:ASP:HA	1:D:543:GLY:O	2.15	0.46
1:D:656:THR:HG1	1:D:880:HIS:CE1	2.29	0.46
1:D:1237:ARG:CZ	1:E:95:PRO:HB2	2.46	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2612:PRO:HD2	1:C:2603:ARG:HH12	1.81	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:2352:ILE:HG12	1:E:2412:ALA:HB1	1.96	0.46
1:F:2543:PHE:HA	1:F:2624:GLN:HE22	1.81	0.46
1:A:976:TRP:CG	1:A:976:TRP:O	2.68	0.46
1:A:1094:THR:O	1:A:1288:PRO:HG2	2.16	0.46
1:A:1237:ARG:CZ	1:B:95:PRO:HB2	2.46	0.46
1:A:1590:VAL:HG11	1:A:1671:TRP:CE2	2.50	0.46
1:A:2352:ILE:HG12	1:A:2412:ALA:HB1	1.96	0.46
1:B:518:ASP:HA	1:B:543:GLY:O	2.15	0.46
1:B:808:ALA:HB3	1:B:811:ASP:HB2	1.96	0.46
1:B:976:TRP:CG	1:B:976:TRP:O	2.68	0.46
1:B:1723:GLU:C	1:B:1725:SER:H	2.18	0.46
1:B:2630:ASP:HB3	1:B:2633:VAL:HG23	1.97	0.46
1:B:2770:LEU:HB3	1:B:2815:GLN:HB3	1.97	0.46
1:C:684:MET:HG3	1:C:895:THR:HA	1.98	0.46
1:C:1590:VAL:HG11	1:C:1671:TRP:CE2	2.50	0.46
1:C:2361:VAL:HG21	1:C:2401:ILE:HD11	1.98	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:D:2361:VAL:HG21	1:D:2401:ILE:HD11	1.98	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
1:E:2630:ASP:HB3	1:E:2633:VAL:HG23	1.97	0.46
1:E:3001:HIS:CE1	1:B:2724:GLN:HG2	2.51	0.46
1:F:167:ALA:HB3	1:F:178:LEU:HD21	1.98	0.46
1:F:406:THR:OG1	1:F:418:GLU:OE1	2.34	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:F:1325:LEU:HD11	1:F:1343:LEU:HD22	1.98	0.46
1:F:2461:VAL:HG21	1:F:2751:VAL:HG13	1.97	0.46
1:F:2961:LEU:HD22	1:F:2976:TRP:CD1	2.51	0.46
1:F:3001:HIS:CE1	1:A:2724:GLN:HG2	2.51	0.46
1:A:602:ARG:NH2	1:A:641:ASP:OD1	2.27	0.46
1:A:768:LYS:HA	1:A:775:LEU:HD11	1.98	0.46
1:B:768:LYS:HA	1:B:775:LEU:HD11	1.98	0.46
1:B:799:PHE:CZ	1:B:2433:ARG:CG	2.99	0.46
1:C:606:ASN:HD22	1:C:606:ASN:H	1.63	0.46
1:C:768:LYS:HA	1:C:775:LEU:HD11	1.97	0.46
1:D:606:ASN:H	1:D:606:ASN:HD22	1.62	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:768:LYS:HA	1:D:775:LEU:HD11	1.98	0.46
1:D:1087:PHE:HB3	1:E:117:LYS:HZ1	1.80	0.46
1:D:2070:LEU:O	1:D:2074:GLU:HG3	2.16	0.46
1:D:2252:VAL:HG13	1:D:2255:ARG:HH21	1.80	0.46
1:D:2603:ARG:HH12	1:C:2612:PRO:HD2	1.81	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:518:ASP:HA	1:E:543:GLY:O	2.15	0.46
1:E:540:ASN:ND2	1:E:544:ILE:HG13	2.30	0.46
1:E:2769:ASP:OD1	1:E:2770:LEU:N	2.49	0.46
1:E:2790:MET:SD	1:E:2800:PHE:HB2	2.56	0.46
1:F:205:PRO:CD	1:F:289:PRO:HB3	2.46	0.46
1:F:516:PRO:HA	1:F:962:MET:SD	2.56	0.46
1:F:1020:THR:CB	1:F:1035:VAL:HG22	2.43	0.46
1:F:2773:GLU:HA	1:F:2776:ILE:HG22	1.97	0.46
1:F:2978:ARG:NH1	1:F:2979:GLU:OE2	2.49	0.46
1:A:966:PRO:O	1:A:970:ILE:N	2.48	0.46
1:B:94:ARG:HG3	1:B:95:PRO:HD3	1.98	0.46
1:B:745:THR:HG22	1:B:747:LEU:H	1.80	0.46
1:B:1072:TRP:CD1	1:B:1097:VAL:HG22	2.51	0.46
1:C:778:THR:HG21	1:C:854:GLY:HA3	1.97	0.46
1:C:1072:TRP:CD1	1:C:1097:VAL:HG22	2.51	0.46
1:C:1346:PRO:HG2	1:C:1699:ARG:HD3	1.97	0.46
1:D:406:THR:OG1	1:D:418:GLU:OE1	2.34	0.46
1:D:511:ARG:CB	1:D:540:ASN:HB2	2.46	0.46
1:D:778:THR:HG21	1:D:854:GLY:HA3	1.97	0.46
1:D:2961:LEU:HD22	1:D:2976:TRP:CD1	2.51	0.46
1:E:641:ASP:OD1	1:E:641:ASP:N	2.47	0.46
1:E:2210:VAL:HB	1:E:2277:ILE:HD11	1.96	0.46
1:E:2361:VAL:HG21	1:E:2401:ILE:HD11	1.98	0.46
1:E:2653:VAL:HA	1:E:3051:MET:HE3	1.97	0.46
1:E:2785:ALA:HB1	1:E:2809:LEU:HG	1.97	0.46
1:E:3065:PRO:O	1:E:3069:GLN:N	2.43	0.46
1:F:745:THR:HG22	1:F:747:LEU:H	1.80	0.46
1:F:961:ARG:NE	1:F:1196:GLY:N	2.61	0.46
1:F:1037:ASP:CB	1:F:1042:MET:N	2.79	0.46
1:A:534:ASP:O	1:A:538:GLU:HG3	2.16	0.46
1:A:1346:PRO:HG2	1:A:1699:ARG:HD3	1.98	0.46
1:A:1619:VAL:HA	1:A:1620:PRO:HD2	1.80	0.46
1:A:2610:ARG:NH1	1:A:2700:LEU:HD21	2.31	0.46
1:B:205:PRO:CD	1:B:289:PRO:HB3	2.46	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:540:ASN:ND2	1:B:544:ILE:HG13	2.30	0.46
1:B:670:GLY:HA3	1:B:899:ALA:HB2	1.96	0.46
1:C:111:GLU:HB2	1:C:112:PRO:HD3	1.98	0.46
1:C:222:LEU:HD21	1:C:236:VAL:HA	1.97	0.46
1:C:782:ARG:HD3	1:C:853:LEU:HD22	1.97	0.46
1:C:2482:GLU:HG2	1:C:2956:PRO:HB3	1.97	0.46
1:C:2610:ARG:NH1	1:C:2700:LEU:HD21	2.31	0.46
1:C:2648:ALA:HA	1:C:2718:VAL:HG13	1.96	0.46
1:C:3080:ARG:CG	1:C:3080:ARG:NH1	2.72	0.46
1:D:540:ASN:ND2	1:D:544:ILE:HG13	2.30	0.46
1:D:1072:TRP:CD1	1:D:1097:VAL:HG22	2.51	0.46
1:D:3001:HIS:CE1	1:C:2724:GLN:HG2	2.51	0.46
1:E:205:PRO:CD	1:E:289:PRO:HB3	2.46	0.46
1:E:1695:LEU:HD23	1:F:257:ARG:NH1	2.23	0.46
1:E:2603:ARG:HH12	1:B:2612:PRO:HD2	1.81	0.46
1:E:2612:PRO:HD2	1:B:2603:ARG:HH12	1.81	0.46
1:F:365:ALA:HB3	1:F:366:PRO:HD3	1.96	0.46
1:F:365:ALA:O	1:F:369:ARG:N	2.42	0.46
1:F:606:ASN:H	1:F:606:ASN:HD22	1.62	0.46
1:F:799:PHE:CZ	1:F:2433:ARG:CG	2.99	0.46
1:F:1346:PRO:HG2	1:F:1699:ARG:HD3	1.98	0.46
1:F:2557:LEU:CG	1:A:2702:GLY:HA3	2.45	0.46
1:F:2790:MET:SD	1:F:2800:PHE:HB2	2.56	0.46
1:A:84:GLU:HB2	1:A:85:PRO:HD3	1.98	0.46
1:A:1325:LEU:HD11	1:A:1343:LEU:HD22	1.98	0.46
1:A:1508:ILE:HB	1:A:1562:ARG:HD3	1.97	0.46
1:A:2212:TRP:HA	1:A:2229:LYS:HB3	1.98	0.46
1:A:2252:VAL:HG13	1:A:2255:ARG:HH21	1.80	0.46
1:A:2610:ARG:NH1	1:A:2700:LEU:HD11	2.25	0.46
1:A:2790:MET:SD	1:A:2800:PHE:HB2	2.56	0.46
1:A:2978:ARG:NH1	1:A:2979:GLU:OE2	2.49	0.46
1:B:207:MET:HG3	1:B:292:VAL:HB	1.98	0.46
1:B:931:VAL:HG13	1:B:934:LEU:N	2.21	0.46
1:B:1319:ASP:HB2	1:B:1342:ARG:NH1	2.31	0.46
1:B:2610:ARG:NH1	1:B:2700:LEU:HD21	2.31	0.46
1:B:2978:ARG:NH1	1:B:2979:GLU:OE2	2.49	0.46
1:C:207:MET:HG3	1:C:292:VAL:HB	1.98	0.46
1:C:277:LEU:HD22	1:C:676:GLY:O	2.16	0.46
1:C:1462:ALA:HB2	1:C:1468:TYR:HE1	1.81	0.46
1:C:1619:VAL:HA	1:C:1620:PRO:HD2	1.80	0.46
1:C:2762:VAL:HG22	1:C:2822:LEU:HB2	1.96	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2800:PHE:CE1	1:C:2812:LEU:HD22	2.50	0.46
1:C:2845:PHE:HD2	1:C:2860:ALA:HA	1.81	0.46
1:C:2946:LEU:HD22	1:C:2994:VAL:HG23	1.98	0.46
1:D:745:THR:HG22	1:D:747:LEU:H	1.80	0.46
1:D:1455:VAL:HB	1:D:1480:ARG:HH12	1.80	0.46
1:D:2630:ASP:HB3	1:D:2633:VAL:HG23	1.97	0.46
1:E:1094:THR:O	1:E:1288:PRO:HG2	2.15	0.46
1:E:1237:ARG:CZ	1:F:95:PRO:HB2	2.46	0.46
1:E:2482:GLU:HG2	1:E:2956:PRO:HB3	1.97	0.46
1:E:2737:VAL:HG12	1:B:2716:ASN:OD1	2.16	0.46
1:E:2773:GLU:HA	1:E:2776:ILE:HG22	1.97	0.46
1:F:2252:VAL:HG13	1:F:2255:ARG:HH21	1.80	0.46
1:F:2614:LYS:HG3	1:A:2583:PHE:HB2	1.97	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:2252:VAL:HG22	1:A:2255:ARG:NH2	2.30	0.46
1:A:2619:ARG:HH12	1:A:2779:GLY:HA2	1.81	0.46
1:A:2891:LYS:HG3	1:A:2924:ILE:HD13	1.98	0.46
1:B:277:LEU:HD22	1:B:676:GLY:O	2.16	0.46
1:B:365:ALA:HB3	1:B:366:PRO:HD3	1.96	0.46
1:B:606:ASN:HD22	1:B:606:ASN:H	1.63	0.46
1:B:868:ARG:HD3	1:B:872:ARG:HH12	1.81	0.46
1:B:1094:THR:O	1:B:1288:PRO:HG2	2.16	0.46
1:C:406:THR:OG1	1:C:418:GLU:OE1	2.34	0.46
1:C:540:ASN:ND2	1:C:544:ILE:HG13	2.30	0.46
1:C:966:PRO:O	1:C:970:ILE:N	2.48	0.46
1:C:1702:GLU:OE1	1:C:1712:ALA:N	2.49	0.46
1:C:2785:ALA:HB1	1:C:2809:LEU:HG	1.97	0.46
1:D:575:HIS:CD2	1:D:644:LEU:HD22	2.49	0.46
1:D:1346:PRO:HG2	1:D:1699:ARG:HD3	1.98	0.46
1:D:2785:ALA:HB1	1:D:2809:LEU:HG	1.97	0.46
1:E:936:ARG:O	1:E:941:ARG:N	2.45	0.46
1:E:1508:ILE:HB	1:E:1562:ARG:HD3	1.96	0.46
1:E:2728:GLY:HA2	1:B:2848:GLY:HA2	1.97	0.46
1:E:2957:PRO:HB3	1:E:2979:GLU:C	2.36	0.46
1:F:2096:VAL:HG13	1:F:2097:ALA:H	1.80	0.46
1:A:205:PRO:CD	1:A:289:PRO:HB3	2.46	0.46
1:A:656:THR:HG1	1:A:880:HIS:CE1	2.31	0.46
1:A:1723:GLU:C	1:A:1725:SER:H	2.18	0.46
1:A:2297:ARG:HH22	1:A:2391:LYS:HZ3	1.64	0.46
1:A:2957:PRO:HB3	1:A:2979:GLU:C	2.36	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2961:LEU:HD22	1:A:2976:TRP:CD1	2.51	0.46
1:B:167:ALA:HB3	1:B:178:LEU:HD21	1.98	0.46
1:B:2672:TRP:CD1	1:B:2831:MET:HG2	2.51	0.46
1:B:2790:MET:SD	1:B:2800:PHE:HB2	2.56	0.46
1:B:2845:PHE:HD2	1:B:2860:ALA:HA	1.81	0.46
1:B:2891:LYS:HG3	1:B:2924:ILE:HD13	1.98	0.46
1:C:784:GLU:OE2	1:C:816:LEU:HD21	2.16	0.46
1:C:2790:MET:SD	1:C:2800:PHE:HB2	2.56	0.46
1:D:544:ILE:O	1:D:546:HIS:N	2.41	0.45
1:D:2543:PHE:HA	1:D:2624:GLN:HE22	1.81	0.45
1:D:2978:ARG:NH1	1:D:2979:GLU:OE2	2.49	0.45
1:D:3080:ARG:CG	1:D:3080:ARG:NH1	2.72	0.45
1:E:84:GLU:HB2	1:E:85:PRO:HD3	1.98	0.45
1:E:868:ARG:HD3	1:E:872:ARG:HH12	1.81	0.45
1:E:2000:LEU:HD12	1:A:2000:LEU:HD12	1.96	0.45
1:E:2376:LEU:HD22	1:E:2392:VAL:HG21	1.97	0.45
1:E:2724:GLN:HG2	1:B:3001:HIS:CE1	2.51	0.45
1:E:2891:LYS:HG3	1:E:2924:ILE:HD13	1.99	0.45
1:E:2978:ARG:NH1	1:E:2979:GLU:OE2	2.49	0.45
1:F:277:LEU:HD22	1:F:676:GLY:O	2.16	0.45
1:F:544:ILE:O	1:F:546:HIS:N	2.40	0.45
1:F:778:THR:HG21	1:F:854:GLY:HA3	1.97	0.45
1:F:1094:THR:O	1:F:1288:PRO:HG2	2.15	0.45
1:F:2086:SER:HA	1:F:2089:PHE:CG	2.51	0.45
1:F:2234:PRO:HB2	1:F:2287:LEU:HD13	1.98	0.45
1:F:2583:PHE:HB2	1:A:2614:LYS:HG3	1.97	0.45
1:F:2612:PRO:HD2	1:A:2603:ARG:HH12	1.81	0.45
1:F:2728:GLY:HA2	1:A:2848:GLY:HA2	1.97	0.45
1:F:2891:LYS:HG3	1:F:2924:ILE:HD13	1.99	0.45
1:F:2946:LEU:HD22	1:F:2994:VAL:HG23	1.98	0.45
1:A:95:PRO:HB2	1:C:1237:ARG:CZ	2.45	0.45
1:A:406:THR:OG1	1:A:418:GLU:OE1	2.34	0.45
1:A:1483:LYS:O	1:A:1487:ILE:HG23	2.17	0.45
1:A:1612:GLY:N	1:A:1623:PHE:O	2.48	0.45
1:A:2361:VAL:HG21	1:A:2401:ILE:HD11	1.98	0.45
1:A:2769:ASP:OD1	1:A:2770:LEU:N	2.49	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:683:GLY:CA	1:B:700:ASN:HB2	2.44	0.45
1:B:1325:LEU:HD11	1:B:1343:LEU:HD22	1.98	0.45
1:B:2946:LEU:HD22	1:B:2994:VAL:HG23	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:167:ALA:HB3	1:C:178:LEU:HD21	1.98	0.45
1:C:1304:LYS:O	1:C:1307:ASP:HB2	2.16	0.45
1:C:2681:THR:O	1:C:2764:ALA:HA	2.15	0.45
1:C:2957:PRO:HB3	1:C:2979:GLU:C	2.36	0.45
1:C:2978:ARG:NH1	1:C:2979:GLU:OE2	2.49	0.45
1:D:2234:PRO:HB2	1:D:2287:LEU:HD13	1.98	0.45
1:D:2246:ALA:N	1:D:2255:ARG:NH1	2.64	0.45
1:D:2619:ARG:NH1	1:D:2779:GLY:HA2	2.31	0.45
1:D:2957:PRO:HB3	1:D:2979:GLU:C	2.36	0.45
1:E:167:ALA:HB3	1:E:178:LEU:HD21	1.98	0.45
1:E:222:LEU:HD21	1:E:236:VAL:HA	1.97	0.45
1:E:534:ASP:O	1:E:538:GLU:HG3	2.16	0.45
1:E:799:PHE:CZ	1:E:2433:ARG:CG	2.99	0.45
1:E:2716:ASN:OD1	1:B:2737:VAL:HG12	2.16	0.45
1:F:94:ARG:HG3	1:F:95:PRO:HD3	1.98	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:A:1702:GLU:OE1	1:A:1712:ALA:N	2.49	0.45
1:A:2086:SER:HA	1:A:2089:PHE:CG	2.51	0.45
1:B:1699:ARG:HG3	1:B:1730:GLU:HB3	1.97	0.45
1:B:2086:SER:HA	1:B:2089:PHE:CG	2.52	0.45
1:B:2889:ILE:HD11	1:B:2922:LEU:HD22	1.98	0.45
1:C:205:PRO:CD	1:C:289:PRO:HB3	2.46	0.45
1:C:683:GLY:CA	1:C:700:ASN:HB2	2.45	0.45
1:C:746:TYR:HB2	1:C:833:ALA:HB1	1.99	0.45
1:C:1171:PRO:HA	1:C:1191:ARG:HG2	1.99	0.45
1:C:2619:ARG:NH1	1:C:2779:GLY:HA2	2.31	0.45
1:D:1634:ARG:NH1	1:D:1639:ALA:H	2.11	0.45
1:D:2096:VAL:HG13	1:D:2097:ALA:H	1.80	0.45
1:E:94:ARG:HG3	1:E:95:PRO:HD3	1.97	0.45
1:E:2845:PHE:HD2	1:E:2860:ALA:HA	1.82	0.45
1:F:868:ARG:HD3	1:F:872:ARG:HH12	1.81	0.45
1:F:1021:LEU:HA	1:F:1034:GLU:HA	1.98	0.45
1:F:1038:ALA:HA	1:F:1126:ILE:HA	1.98	0.45
1:F:1553:ALA:O	1:F:1557:GLU:HG2	2.17	0.45
1:F:2070:LEU:O	1:F:2074:GLU:HG3	2.16	0.45
1:A:277:LEU:HD22	1:A:676:GLY:O	2.16	0.45
1:A:381:ARG:O	1:A:384:GLN:HG2	2.17	0.45
1:A:684:MET:HG3	1:A:895:THR:HA	1.98	0.45
1:A:1319:ASP:HB2	1:A:1342:ARG:NH1	2.31	0.45
1:A:2773:GLU:HA	1:A:2776:ILE:HG22	1.97	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:111:GLU:HB2	1:B:112:PRO:HD3	1.98	0.45
1:B:1304:LYS:O	1:B:1307:ASP:HB2	2.16	0.45
1:B:1519:VAL:HG13	1:B:1530:LEU:HD23	1.99	0.45
1:B:2234:PRO:HB2	1:B:2287:LEU:HD13	1.98	0.45
1:B:2543:PHE:HA	1:B:2624:GLN:HE22	1.81	0.45
1:B:2610:ARG:NH1	1:B:2700:LEU:HD11	2.25	0.45
1:C:84:GLU:HB2	1:C:85:PRO:HD3	1.98	0.45
1:C:534:ASP:O	1:C:538:GLU:HG3	2.16	0.45
1:C:1352:PHE:HA	1:C:1353:PRO:HD3	1.72	0.45
1:C:2234:PRO:HB2	1:C:2287:LEU:HD13	1.98	0.45
1:D:784:GLU:OE2	1:D:816:LEU:HD21	2.16	0.45
1:D:799:PHE:CZ	1:D:2433:ARG:CG	2.99	0.45
1:D:836:VAL:HG12	1:D:837:VAL:N	2.29	0.45
1:D:2769:ASP:OD1	1:D:2770:LEU:N	2.49	0.45
1:E:222:LEU:HD13	1:E:248:ILE:HD12	1.99	0.45
1:E:784:GLU:OE2	1:E:816:LEU:HD21	2.16	0.45
1:E:1087:PHE:CE1	1:F:198:ILE:HG12	2.50	0.45
1:E:1346:PRO:HG2	1:E:1699:ARG:HD3	1.98	0.45
1:E:2800:PHE:CE1	1:E:2812:LEU:HD22	2.50	0.45
1:F:1072:TRP:CD1	1:F:1097:VAL:HG22	2.51	0.45
1:F:1450:ALA:N	1:F:1613:ARG:O	2.47	0.45
1:F:1519:VAL:HG13	1:F:1530:LEU:HD23	1.98	0.45
1:F:1702:GLU:OE1	1:F:1712:ALA:N	2.49	0.45
1:F:1723:GLU:C	1:F:1725:SER:H	2.18	0.45
1:F:2246:ALA:N	1:F:2255:ARG:NH1	2.64	0.45
1:F:2452:ASP:HA	1:F:3017:ALA:HA	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	1.81	0.45
1:F:2889:ILE:HD11	1:F:2922:LEU:HD22	1.98	0.45
1:A:1284:GLY:HA2	1:A:1343:LEU:HD11	1.99	0.45
1:B:47:ALA:O	1:B:353:ASP:HA	2.17	0.45
1:B:222:LEU:HD21	1:B:236:VAL:HA	1.97	0.45
1:B:1553:ALA:O	1:B:1557:GLU:HG2	2.17	0.45
1:B:2361:VAL:HG21	1:B:2401:ILE:HD11	1.98	0.45
1:B:2452:ASP:HA	1:B:3017:ALA:HA	1.99	0.45
1:C:94:ARG:HG3	1:C:95:PRO:HD3	1.98	0.45
1:C:195:ARG:NH1	1:C:198:ILE:HD12	2.31	0.45
1:C:1488:VAL:HB	1:C:1579:VAL:HG22	1.99	0.45
1:C:2246:ALA:N	1:C:2255:ARG:NH1	2.64	0.45
1:D:684:MET:HG3	1:D:895:THR:HA	1.98	0.45
1:D:747:LEU:HD22	1:D:751:ARG:CZ	2.47	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1612:GLY:N	1:D:1623:PHE:O	2.48	0.45
1:D:1702:GLU:OE1	1:D:1712:ALA:N	2.49	0.45
1:D:2472:TYR:CZ	1:D:2930:LEU:HD22	2.52	0.45
1:D:2557:LEU:CG	1:C:2702:GLY:HA3	2.45	0.45
1:D:2716:ASN:OD1	1:C:2737:VAL:HG12	2.16	0.45
1:D:2770:LEU:HB3	1:D:2815:GLN:HB3	1.97	0.45
1:E:277:LEU:HD22	1:E:676:GLY:O	2.16	0.45
1:E:745:THR:HG22	1:E:747:LEU:H	1.80	0.45
1:E:1553:ALA:O	1:E:1557:GLU:HG2	2.17	0.45
1:E:1634:ARG:NH1	1:E:1639:ALA:N	2.65	0.45
1:E:2086:SER:HA	1:E:2089:PHE:CG	2.52	0.45
1:E:2614:LYS:HG3	1:B:2583:PHE:HB2	1.97	0.45
1:E:2770:LEU:HB3	1:E:2815:GLN:HB3	1.97	0.45
1:F:84:GLU:HB2	1:F:85:PRO:HD3	1.98	0.45
1:F:784:GLU:OE2	1:F:816:LEU:HD21	2.16	0.45
1:F:1304:LYS:O	1:F:1307:ASP:HB2	2.16	0.45
1:F:1319:ASP:HB2	1:F:1342:ARG:NH1	2.31	0.45
1:F:2614:LYS:HZ2	1:A:2583:PHE:HB2	1.80	0.45
1:A:94:ARG:HG3	1:A:95:PRO:HD3	1.98	0.45
1:A:996:LEU:HA	1:A:1010:LEU:HA	1.97	0.45
1:A:1304:LYS:O	1:A:1307:ASP:HB2	2.16	0.45
1:A:1553:ALA:O	1:A:1557:GLU:HG2	2.17	0.45
1:A:2946:LEU:HD22	1:A:2994:VAL:HG23	1.98	0.45
1:B:195:ARG:NH1	1:B:198:ILE:HD12	2.31	0.45
1:B:381:ARG:O	1:B:384:GLN:HG2	2.17	0.45
1:B:684:MET:HG3	1:B:895:THR:HA	1.98	0.45
1:B:1285:LYS:HB3	1:B:1286:PRO:HD2	1.98	0.45
1:B:2246:ALA:N	1:B:2255:ARG:NH1	2.64	0.45
1:B:2472:TYR:CZ	1:B:2930:LEU:HD22	2.52	0.45
1:B:2619:ARG:HH12	1:B:2779:GLY:HA2	1.81	0.45
1:C:222:LEU:HD13	1:C:248:ILE:HD12	1.99	0.45
1:C:351:ILE:HB	1:C:375:ILE:HG12	1.99	0.45
1:C:763:SER:HB3	1:C:766:ASP:HB2	1.99	0.45
1:C:1319:ASP:HB2	1:C:1342:ARG:NH1	2.31	0.45
1:C:2058:ASP:OD1	1:C:2058:ASP:N	2.46	0.45
1:C:2096:VAL:HG23	1:C:2097:ALA:H	1.80	0.45
1:C:2619:ARG:HH12	1:C:2779:GLY:HA2	1.81	0.45
1:C:2989:LEU:HD12	1:C:2989:LEU:HA	1.77	0.45
1:D:550:LYS:HD3	1:D:577:GLU:OE2	2.17	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

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1304:LYS:O	1:D:1307:ASP:HB2	2.16	0.45
1:D:1462:ALA:HB2	1:D:1468:TYR:HE1	1.81	0.45
1:D:1553:ALA:O	1:D:1557:GLU:HG2	2.17	0.45
1:D:2137:GLU:O	1:D:2163:THR:N	2.30	0.45
1:D:2800:PHE:CE1	1:D:2812:LEU:HD22	2.50	0.45
1:D:2845:PHE:HD2	1:D:2860:ALA:HA	1.82	0.45
1:E:1284:GLY:HA2	1:E:1343:LEU:HD11	1.99	0.45
1:E:1319:ASP:HB2	1:E:1342:ARG:NH1	2.31	0.45
1:E:2889:ILE:HD11	1:E:2922:LEU:HD22	1.98	0.45
1:E:2946:LEU:HD22	1:E:2994:VAL:HG23	1.98	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:2212:TRP:HA	1:F:2229:LYS:HB3	1.98	0.45
1:F:2716:ASN:OD1	1:A:2737:VAL:HG12	2.16	0.45
1:F:2957:PRO:HB3	1:F:2979:GLU:C	2.36	0.45
1:A:47:ALA:O	1:A:353:ASP:HA	2.17	0.45
1:A:167:ALA:HB3	1:A:178:LEU:HD21	1.98	0.45
1:A:1072:TRP:CD1	1:A:1097:VAL:HG22	2.51	0.45
1:A:2070:LEU:O	1:A:2074:GLU:HG3	2.16	0.45
1:A:2210:VAL:HB	1:A:2277:ILE:HD11	1.96	0.45
1:A:2879:LEU:HD13	1:A:3009:VAL:HG11	1.98	0.45
1:A:3080:ARG:CG	1:A:3080:ARG:NH1	2.72	0.45
1:B:550:LYS:HD3	1:B:577:GLU:OE2	2.17	0.45
1:B:2092:THR:O	1:B:2092:THR:CG2	2.64	0.45
1:B:2773:GLU:HA	1:B:2776:ILE:HG22	1.97	0.45
1:C:393:VAL:HG12	1:C:394:PRO:N	2.32	0.45
1:C:511:ARG:CB	1:C:540:ASN:HB2	2.46	0.45
1:C:585:HIS:CB	1:C:694:ASP:HB2	2.47	0.45
1:C:799:PHE:CZ	1:C:2433:ARG:CG	2.99	0.45
1:C:868:ARG:HD3	1:C:872:ARG:HH12	1.81	0.45
1:D:868:ARG:HD3	1:D:872:ARG:HH12	1.81	0.45
1:D:1226:ARG:CG	1:D:1313:VAL:HG12	2.47	0.45
1:D:1325:LEU:HD11	1:D:1343:LEU:HD22	1.98	0.45
1:E:1171:PRO:HA	1:E:1191:ARG:HG2	1.99	0.45
1:E:2212:TRP:HA	1:E:2229:LYS:HB3	1.98	0.45
1:E:2610:ARG:NH1	1:E:2700:LEU:HD21	2.31	0.45
1:E:2619:ARG:NH1	1:E:2779:GLY:HA2	2.31	0.45
1:E:2702:GLY:HA3	1:B:2557:LEU:CG	2.46	0.45
1:E:3080:ARG:CG	1:E:3080:ARG:NH1	2.72	0.45
1:F:996:LEU:HA	1:F:1010:LEU:HA	1.97	0.45
1:F:2300:PHE:CZ	1:F:2398:LEU:HB3	2.52	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2603:ARG:HH12	1:A:2612:PRO:HD2	1.81	0.45
1:F:2845:PHE:CD2	1:F:2860:ALA:HA	2.52	0.45
1:A:585:HIS:CB	1:A:694:ASP:HB2	2.47	0.45
1:A:799:PHE:CZ	1:A:2433:ARG:CG	2.99	0.45
1:A:2246:ALA:N	1:A:2255:ARG:NH1	2.64	0.45
1:A:2543:PHE:HA	1:A:2624:GLN:HE22	1.81	0.45
1:A:2619:ARG:NH1	1:A:2779:GLY:HA2	2.31	0.45
1:A:2785:ALA:HB1	1:A:2809:LEU:HG	1.97	0.45
1:A:2889:ILE:HD11	1:A:2922:LEU:HD22	1.98	0.45
1:B:1237:ARG:CZ	1:C:95:PRO:HB2	2.46	0.45
1:B:1462:ALA:HB2	1:B:1468:TYR:HE1	1.81	0.45
1:C:1284:GLY:HA2	1:C:1343:LEU:HD11	1.99	0.45
1:C:2070:LEU:O	1:C:2074:GLU:HG3	2.16	0.45
1:C:2672:TRP:CD1	1:C:2831:MET:HG2	2.52	0.45
1:C:2845:PHE:CD2	1:C:2860:ALA:HA	2.52	0.45
1:D:1268:GLY:HA2	1:D:1271:LEU:HD12	1.99	0.45
1:D:2482:GLU:HG2	1:D:2956:PRO:HB3	1.97	0.45
1:D:2610:ARG:NH1	1:D:2700:LEU:HD21	2.31	0.45
1:D:2724:GLN:HG2	1:C:3001:HIS:CE1	2.51	0.45
1:D:2845:PHE:CD2	1:D:2860:ALA:HA	2.52	0.45
1:E:195:ARG:NH1	1:E:198:ILE:HD12	2.31	0.45
1:E:1450:ALA:N	1:E:1613:ARG:O	2.48	0.45
1:E:2297:ARG:HH22	1:E:2391:LYS:HZ3	1.65	0.45
1:E:2619:ARG:HH12	1:E:2779:GLY:HA2	1.81	0.45
1:E:2672:TRP:CD1	1:E:2831:MET:HG2	2.52	0.45
1:E:2989:LEU:HD12	1:E:2989:LEU:HA	1.77	0.45
1:F:195:ARG:NH1	1:F:198:ILE:HD12	2.31	0.45
1:F:222:LEU:HD21	1:F:236:VAL:HA	1.97	0.45
1:F:585:HIS:CB	1:F:694:ASP:HB2	2.47	0.45
1:F:966:PRO:HB3	1:F:1258:LEU:HD13	1.99	0.45
1:F:1634:ARG:NH1	1:F:1639:ALA:N	2.65	0.45
1:F:2619:ARG:NH1	1:F:2779:GLY:HA2	2.31	0.45
1:F:2891:LYS:HZ2	1:F:2903:GLU:HG2	1.82	0.45
1:A:222:LEU:HD21	1:A:236:VAL:HA	1.97	0.45
1:A:1462:ALA:HB2	1:A:1468:TYR:HE1	1.81	0.45
1:A:2296:ASN:HB3	1:A:2299:MET:SD	2.57	0.45
1:A:2845:PHE:HD2	1:A:2860:ALA:HA	1.81	0.45
1:B:784:GLU:OE2	1:B:816:LEU:HD21	2.16	0.45
1:B:1226:ARG:CG	1:B:1313:VAL:HG12	2.47	0.45
1:B:1483:LYS:O	1:B:1487:ILE:HG23	2.17	0.45
1:B:1634:ARG:NH1	1:B:1639:ALA:N	2.65	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1702:GLU:OE1	1:B:1712:ALA:N	2.49	0.45
1:B:2212:TRP:HA	1:B:2229:LYS:HB3	1.98	0.45
1:B:2879:LEU:HD13	1:B:3009:VAL:HG11	1.98	0.45
1:C:381:ARG:O	1:C:384:GLN:HG2	2.17	0.45
1:D:746:TYR:HB2	1:D:833:ALA:HB1	1.99	0.45
1:D:936:ARG:O	1:D:941:ARG:N	2.45	0.45
1:D:2619:ARG:HH12	1:D:2779:GLY:HA2	1.81	0.45
1:D:2737:VAL:HG12	1:C:2716:ASN:OD1	2.16	0.45
1:E:515:ALA:HA	1:E:516:PRO:HD3	1.84	0.45
1:E:664:LEU:HB3	1:E:701:ALA:HB1	1.99	0.45
1:E:1605:LYS:H	1:E:1658:LYS:HE2	1.82	0.45
1:E:2070:LEU:O	1:E:2074:GLU:HG3	2.16	0.45
1:F:47:ALA:O	1:F:353:ASP:HA	2.17	0.45
1:F:111:GLU:HB2	1:F:112:PRO:HD3	1.98	0.45
1:F:550:LYS:HD3	1:F:577:GLU:OE2	2.17	0.45
1:F:747:LEU:HD22	1:F:751:ARG:CZ	2.47	0.45
1:F:1483:LYS:O	1:F:1487:ILE:HG23	2.17	0.45
1:F:1488:VAL:HB	1:F:1579:VAL:HG22	1.99	0.45
1:A:1133:VAL:O	1:A:1193:ALA:N	2.42	0.45
1:A:3065:PRO:O	1:A:3069:GLN:N	2.42	0.45
1:B:393:VAL:HG12	1:B:394:PRO:N	2.32	0.45
1:B:1093:PRO:HB3	1:B:1277:HIS:CE1	2.52	0.45
1:B:2619:ARG:NH1	1:B:2779:GLY:HA2	2.31	0.45
1:B:2769:ASP:OD1	1:B:2770:LEU:N	2.49	0.45
1:C:47:ALA:O	1:C:353:ASP:HA	2.17	0.45
1:C:664:LEU:HB3	1:C:701:ALA:HB1	1.99	0.45
1:C:747:LEU:HD22	1:C:751:ARG:CZ	2.47	0.45
1:C:1094:THR:O	1:C:1288:PRO:HG2	2.15	0.45
1:C:1612:GLY:N	1:C:1623:PHE:O	2.48	0.45
1:C:2300:PHE:CZ	1:C:2398:LEU:HB3	2.52	0.45
1:D:1684:ASP:HA	1:D:1687:PHE:HD2	1.82	0.45
1:D:2672:TRP:CD1	1:D:2831:MET:HG2	2.52	0.45
1:D:2889:ILE:HD11	1:D:2922:LEU:HD22	1.98	0.45
1:E:207:MET:HG3	1:E:292:VAL:HB	1.98	0.45
1:E:336:TRP:CH2	1:E:360:LEU:HD21	2.52	0.45
1:E:585:HIS:CB	1:E:694:ASP:HB2	2.47	0.45
1:E:1226:ARG:CG	1:E:1313:VAL:HG12	2.47	0.45
1:E:1483:LYS:O	1:E:1487:ILE:HG23	2.17	0.45
1:E:1702:GLU:OE1	1:E:1712:ALA:N	2.49	0.45
1:E:2246:ALA:N	1:E:2255:ARG:NH1	2.64	0.45
1:E:2296:ASN:HB3	1:E:2299:MET:SD	2.57	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1133:VAL:O	1:F:1193:ALA:N	2.42	0.45
1:F:2672:TRP:CD1	1:F:2831:MET:HG2	2.52	0.45
1:F:2879:LEU:HD13	1:F:3009:VAL:HG11	1.98	0.45
1:A:207:MET:HG3	1:A:292:VAL:HB	1.98	0.45
1:A:475:LEU:HA	1:A:475:LEU:HD23	1.79	0.45
1:A:1171:PRO:HA	1:A:1191:ARG:HG2	1.99	0.45
1:A:1581:PHE:HB2	1:A:1586:LEU:HD22	1.99	0.45
1:B:746:TYR:HB2	1:B:833:ALA:HB1	1.99	0.45
1:B:1612:GLY:N	1:B:1623:PHE:O	2.48	0.45
1:B:2800:PHE:CE1	1:B:2812:LEU:HD22	2.50	0.45
1:C:745:THR:OG1	1:C:834:GLU:O	2.19	0.45
1:C:1247:ASN:HA	1:C:1248:PRO:HD3	1.83	0.45
1:C:1268:GLY:HA2	1:C:1271:LEU:HD12	1.99	0.45
1:C:1634:ARG:NH1	1:C:1639:ALA:N	2.65	0.45
1:C:2086:SER:HA	1:C:2089:PHE:CG	2.51	0.45
1:C:2769:ASP:OD1	1:C:2770:LEU:N	2.49	0.45
1:D:2092:THR:O	1:D:2092:THR:CG2	2.64	0.44
1:D:2300:PHE:CZ	1:D:2398:LEU:HB3	2.52	0.44
1:E:111:GLU:HB2	1:E:112:PRO:HD3	1.98	0.44
1:E:1581:PHE:HB2	1:E:1586:LEU:HD22	1.99	0.44
1:F:2246:ALA:N	1:F:2255:ARG:HH12	2.16	0.44
1:F:2724:GLN:HG2	1:A:3001:HIS:CE1	2.51	0.44
1:A:336:TRP:CH2	1:A:360:LEU:HD21	2.52	0.44
1:A:2770:LEU:HB3	1:A:2815:GLN:HB3	1.97	0.44
1:B:534:ASP:O	1:B:538:GLU:HG3	2.16	0.44
1:B:2957:PRO:HB3	1:B:2979:GLU:C	2.37	0.44
1:B:2958:ASN:HD22	1:B:2976:TRP:HE1	1.65	0.44
1:C:1226:ARG:CG	1:C:1313:VAL:HG12	2.47	0.44
1:C:1325:LEU:HD11	1:C:1343:LEU:HD22	1.98	0.44
1:C:1553:ALA:O	1:C:1557:GLU:HG2	2.17	0.44
1:C:1684:ASP:HA	1:C:1687:PHE:HD2	1.82	0.44
1:C:2472:TYR:CZ	1:C:2930:LEU:HD22	2.52	0.44
1:C:2555:SER:HA	1:C:2556:PRO:HD2	1.85	0.44
1:D:763:SER:HB3	1:D:766:ASP:HB2	1.99	0.44
1:D:1488:VAL:HB	1:D:1579:VAL:HG22	1.99	0.44
1:D:1519:VAL:HG13	1:D:1530:LEU:HD23	1.98	0.44
1:D:1581:PHE:HB2	1:D:1586:LEU:HD22	1.99	0.44
1:D:2058:ASP:OD1	1:D:2058:ASP:N	2.46	0.44
1:D:2086:SER:HA	1:D:2089:PHE:CG	2.52	0.44
1:D:2879:LEU:HD13	1:D:3009:VAL:HG11	1.98	0.44
1:D:2891:LYS:HZ2	1:D:2903:GLU:HG2	1.83	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:393:VAL:HG12	1:E:394:PRO:N	2.32	0.44
1:E:768:LYS:HA	1:E:775:LEU:HD11	1.98	0.44
1:E:1093:PRO:HB3	1:E:1277:HIS:CE1	2.52	0.44
1:E:1304:LYS:O	1:E:1307:ASP:HB2	2.16	0.44
1:E:2092:THR:O	1:E:2092:THR:CG2	2.64	0.44
1:E:2234:PRO:HB2	1:E:2287:LEU:HD13	1.98	0.44
1:E:2831:MET:HE2	1:E:2831:MET:HB3	1.87	0.44
1:F:746:TYR:HB2	1:F:833:ALA:HB1	1.99	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:1284:GLY:HA2	1:F:1343:LEU:HD11	1.99	0.44
1:F:1581:PHE:HB2	1:F:1586:LEU:HD22	1.99	0.44
1:F:2296:ASN:HB3	1:F:2299:MET:SD	2.57	0.44
1:F:2472:TYR:CZ	1:F:2930:LEU:HD22	2.52	0.44
1:F:2610:ARG:NH1	1:F:2700:LEU:HD21	2.31	0.44
1:F:2737:VAL:HG12	1:A:2716:ASN:OD1	2.16	0.44
1:A:195:ARG:NH1	1:A:198:ILE:HD12	2.31	0.44
1:A:540:ASN:ND2	1:A:544:ILE:HG13	2.30	0.44
1:A:664:LEU:HB3	1:A:701:ALA:HB1	1.99	0.44
1:A:1634:ARG:NH1	1:A:1639:ALA:H	2.11	0.44
1:A:2246:ALA:N	1:A:2255:ARG:HH12	2.15	0.44
1:B:763:SER:HB3	1:B:766:ASP:HB2	1.99	0.44
1:B:1133:VAL:O	1:B:1193:ALA:N	2.42	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:2096:VAL:HG13	1:B:2097:ALA:H	1.80	0.44
1:B:2209:LEU:O	1:B:2213:VAL:HG23	2.18	0.44
1:B:2300:PHE:CZ	1:B:2398:LEU:HB3	2.52	0.44
1:C:2770:LEU:HB3	1:C:2815:GLN:HB3	1.97	0.44
1:D:2212:TRP:HA	1:D:2229:LYS:HB3	1.98	0.44
1:D:2702:GLY:HA3	1:C:2557:LEU:CG	2.46	0.44
1:E:1519:VAL:HG13	1:E:1530:LEU:HD23	1.98	0.44
1:E:2472:TYR:CZ	1:E:2930:LEU:HD22	2.52	0.44
1:F:511:ARG:CB	1:F:540:ASN:HB2	2.46	0.44
1:F:763:SER:HB3	1:F:766:ASP:HB2	1.99	0.44
1:F:1455:VAL:HB	1:F:1480:ARG:HH12	1.80	0.44
1:F:2769:ASP:OD1	1:F:2770:LEU:N	2.49	0.44
1:A:163:LEU:HD13	1:A:181:LEU:HD23	2.00	0.44
1:A:745:THR:OG1	1:A:834:GLU:O	2.19	0.44
1:A:746:TYR:HB2	1:A:833:ALA:HB1	1.99	0.44
1:A:1226:ARG:CG	1:A:1313:VAL:HG12	2.47	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2234:PRO:HB2	1:A:2287:LEU:HD13	1.98	0.44
1:A:2462:VAL:HG13	1:A:2835:VAL:HG13	2.00	0.44
1:A:2903:GLU:OE2	1:A:2995:THR:OG1	2.36	0.44
1:B:996:LEU:HA	1:B:1010:LEU:HA	1.98	0.44
1:B:1488:VAL:HB	1:B:1579:VAL:HG22	1.99	0.44
1:B:1619:VAL:HA	1:B:1620:PRO:HD2	1.80	0.44
1:B:1684:ASP:HA	1:B:1687:PHE:HD2	1.82	0.44
1:C:1483:LYS:O	1:C:1487:ILE:HG23	2.17	0.44
1:C:1519:VAL:HG13	1:C:1530:LEU:HD23	1.99	0.44
1:C:1580:PRO:O	1:C:1583:SER:OG	2.22	0.44
1:C:1605:LYS:H	1:C:1658:LYS:HE2	1.82	0.44
1:C:2212:TRP:HA	1:C:2229:LYS:HB3	1.98	0.44
1:D:1634:ARG:NH1	1:D:1639:ALA:N	2.65	0.44
1:D:2462:VAL:HG13	1:D:2835:VAL:HG13	2.00	0.44
1:D:2891:LYS:HG3	1:D:2924:ILE:HD13	1.98	0.44
1:E:163:LEU:HD13	1:E:181:LEU:HD23	2.00	0.44
1:E:1285:LYS:HB3	1:E:1286:PRO:HD2	1.99	0.44
1:E:1350:TYR:CD1	1:E:1703:ILE:HD11	2.53	0.44
1:E:1352:PHE:HA	1:E:1353:PRO:HD3	1.72	0.44
1:E:2879:LEU:HD13	1:E:3009:VAL:HG11	1.98	0.44
1:F:782:ARG:NH1	1:F:857:VAL:HG22	2.33	0.44
1:F:1037:ASP:HB2	1:F:1041:ALA:CB	2.36	0.44
1:F:1093:PRO:HB3	1:F:1277:HIS:CE1	2.52	0.44
1:F:2958:ASN:HD22	1:F:2976:TRP:HE1	1.65	0.44
1:A:747:LEU:HD22	1:A:751:ARG:CZ	2.47	0.44
1:A:784:GLU:OE2	1:A:816:LEU:HD21	2.16	0.44
1:A:936:ARG:O	1:A:941:ARG:N	2.45	0.44
1:A:1072:TRP:HE1	1:A:1077:VAL:HG22	1.80	0.44
1:A:2092:THR:O	1:A:2092:THR:CG2	2.64	0.44
1:A:2672:TRP:CD1	1:A:2831:MET:HG2	2.52	0.44
1:B:747:LEU:HD22	1:B:751:ARG:CZ	2.47	0.44
1:B:1352:PHE:HA	1:B:1353:PRO:HD3	1.72	0.44
1:B:1581:PHE:HB2	1:B:1586:LEU:HD22	1.99	0.44
1:B:2246:ALA:N	1:B:2255:ARG:HH12	2.16	0.44
1:B:2903:GLU:OE2	1:B:2995:THR:OG1	2.36	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:2462:VAL:HG13	1:C:2835:VAL:HG13	2.00	0.44
1:D:782:ARG:NH1	1:D:857:VAL:HG22	2.33	0.44
1:D:1503:ILE:HB	1:D:1542:TYR:HB2	2.00	0.44
1:D:2014:SER:H	1:E:2591:ARG:HH12	1.66	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2246:ALA:N	1:D:2255:ARG:HH12	2.16	0.44
1:E:381:ARG:O	1:E:384:GLN:HG2	2.17	0.44
1:E:412:ASP:H	1:E:1025:VAL:CG2	2.31	0.44
1:E:782:ARG:NH1	1:E:857:VAL:HG22	2.33	0.44
1:E:1462:ALA:HB2	1:E:1468:TYR:HE1	1.81	0.44
1:F:575:HIS:CD2	1:F:644:LEU:HD22	2.49	0.44
1:F:970:ILE:HG23	1:F:992:THR:HG21	2.00	0.44
1:A:222:LEU:HD13	1:A:248:ILE:HD12	1.99	0.44
1:A:1350:TYR:CD1	1:A:1703:ILE:HD11	2.53	0.44
1:A:1634:ARG:NH1	1:A:1639:ALA:N	2.65	0.44
1:A:2252:VAL:HG22	1:A:2255:ARG:HH21	1.82	0.44
1:A:2452:ASP:HA	1:A:3017:ALA:HA	1.99	0.44
1:A:2471:PRO:HA	1:A:2625:ILE:HA	2.00	0.44
1:A:2753:LYS:HD3	1:A:2753:LYS:HA	1.83	0.44
1:B:438:THR:HA	1:B:880:HIS:CE1	2.51	0.44
1:B:515:ALA:HA	1:B:516:PRO:HD3	1.84	0.44
1:C:88:SER:HB3	1:C:314:THR:OG1	2.18	0.44
1:C:336:TRP:CH2	1:C:360:LEU:HD21	2.52	0.44
1:C:1350:TYR:CD1	1:C:1703:ILE:HD11	2.53	0.44
1:C:1503:ILE:HB	1:C:1542:TYR:HB2	2.00	0.44
1:C:1723:GLU:O	1:C:1725:SER:N	2.51	0.44
1:C:2879:LEU:HD13	1:C:3009:VAL:HG11	1.98	0.44
1:C:2889:ILE:HD11	1:C:2922:LEU:HD22	1.98	0.44
1:D:2471:PRO:HA	1:D:2625:ILE:HA	2.00	0.44
1:D:2580:PHE:HE1	1:D:2603:ARG:HH21	1.66	0.44
1:E:47:ALA:O	1:E:353:ASP:HA	2.17	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:F:222:LEU:HD13	1:F:248:ILE:HD12	1.99	0.44
1:F:671:THR:HB	1:F:682:ASN:CG	2.38	0.44
1:F:1072:TRP:HE1	1:F:1077:VAL:HG22	1.80	0.44
1:F:1723:GLU:O	1:F:1725:SER:N	2.51	0.44
1:A:782:ARG:NH1	1:A:857:VAL:HG22	2.33	0.44
1:A:868:ARG:HD3	1:A:872:ARG:HH12	1.81	0.44
1:A:1268:GLY:HA2	1:A:1271:LEU:HD12	1.99	0.44
1:A:1285:LYS:HB3	1:A:1286:PRO:HD2	1.99	0.44
1:A:1605:LYS:H	1:A:1658:LYS:HE2	1.82	0.44
1:A:2591:ARG:HH12	1:C:2014:SER:H	1.65	0.44
1:B:210:VAL:HG22	1:B:287:PHE:HD1	1.82	0.44
1:B:336:TRP:CH2	1:B:360:LEU:HD21	2.52	0.44
1:B:1171:PRO:HA	1:B:1191:ARG:HG2	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1350:TYR:CD1	1:B:1703:ILE:HD11	2.53	0.44
1:B:1705:VAL:O	1:B:1735:GLU:HB2	2.18	0.44
1:B:2296:ASN:HB3	1:B:2299:MET:SD	2.57	0.44
1:B:2580:PHE:HE1	1:B:2603:ARG:HH21	1.66	0.44
1:C:1581:PHE:HB2	1:C:1586:LEU:HD22	1.99	0.44
1:C:2252:VAL:HG22	1:C:2255:ARG:HH21	1.82	0.44
1:C:2710:LEU:O	1:C:2713:VAL:HG22	2.18	0.44
1:D:664:LEU:HB3	1:D:701:ALA:HB1	1.99	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:1537:LEU:HD13	1:D:1541:GLN:HB2	2.00	0.44
1:D:2591:ARG:NH1	1:F:2014:SER:N	2.66	0.44
1:E:438:THR:HA	1:E:880:HIS:CE1	2.51	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:E:1488:VAL:HB	1:E:1579:VAL:HG22	1.99	0.44
1:E:2471:PRO:HA	1:E:2625:ILE:HA	2.00	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:381:ARG:O	1:F:384:GLN:HG2	2.17	0.44
1:F:412:ASP:H	1:F:1025:VAL:CG2	2.31	0.44
1:F:657:THR:HB	1:F:662:LYS:HE3	2.00	0.44
1:F:2209:LEU:O	1:F:2213:VAL:HG23	2.18	0.44
1:F:2831:MET:HB3	1:F:2831:MET:HE2	1.87	0.44
1:A:210:VAL:HG22	1:A:287:PHE:HD1	1.83	0.44
1:A:816:LEU:HD23	1:A:816:LEU:HA	1.83	0.44
1:A:1488:VAL:HB	1:A:1579:VAL:HG22	1.99	0.44
1:A:1519:VAL:HG13	1:A:1530:LEU:HD23	1.98	0.44
1:A:2014:SER:H	1:B:2591:ARG:HH12	1.66	0.44
1:A:2845:PHE:CD2	1:A:2860:ALA:HA	2.52	0.44
1:B:412:ASP:H	1:B:1025:VAL:CG2	2.31	0.44
1:B:583:GLY:HA2	1:B:892:ILE:HD13	2.00	0.44
1:B:585:HIS:CB	1:B:694:ASP:HB2	2.47	0.44
1:B:602:ARG:NH2	1:B:641:ASP:OD1	2.27	0.44
1:B:782:ARG:NH1	1:B:857:VAL:HG22	2.33	0.44
1:B:1605:LYS:H	1:B:1658:LYS:HE2	1.82	0.44
1:B:1723:GLU:O	1:B:1725:SER:N	2.51	0.44
1:B:2014:SER:N	1:C:2591:ARG:NH1	2.66	0.44
1:B:2297:ARG:HH22	1:B:2391:LYS:HZ3	1.66	0.44
1:C:583:GLY:HA2	1:C:892:ILE:HD13	1.99	0.44
1:C:671:THR:HB	1:C:682:ASN:CG	2.38	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:516:PRO:HA	1:D:962:MET:SD	2.58	0.44
1:D:1605:LYS:H	1:D:1658:LYS:HE2	1.82	0.44
1:D:2014:SER:N	1:E:2591:ARG:NH1	2.66	0.44
1:D:2452:ASP:HA	1:D:3017:ALA:HA	1.99	0.44
1:E:671:THR:HB	1:E:682:ASN:CG	2.38	0.44
1:E:747:LEU:HD22	1:E:751:ARG:CZ	2.47	0.44
1:E:1695:LEU:HD12	1:E:1695:LEU:HA	1.71	0.44
1:F:1350:TYR:CD1	1:F:1703:ILE:HD11	2.53	0.44
1:F:1462:ALA:HB2	1:F:1468:TYR:HE1	1.81	0.44
1:F:1684:ASP:HA	1:F:1687:PHE:HD2	1.82	0.44
1:F:1705:VAL:O	1:F:1735:GLU:HB2	2.18	0.44
1:F:2541:ARG:O	1:F:2621:VAL:HG13	2.18	0.44
1:F:2737:VAL:N	1:A:2735:HIS:O	2.51	0.44
1:A:412:ASP:H	1:A:1025:VAL:CG2	2.31	0.44
1:A:2472:TYR:CZ	1:A:2930:LEU:HD22	2.52	0.44
1:B:2014:SER:H	1:C:2591:ARG:HH12	1.65	0.44
1:B:2845:PHE:CD2	1:B:2860:ALA:HA	2.52	0.44
1:C:344:HIS:CD2	1:C:373:ILE:HG13	2.53	0.44
1:C:970:ILE:HG23	1:C:992:THR:HG21	2.00	0.44
1:D:412:ASP:H	1:D:1025:VAL:CG2	2.31	0.44
1:D:475:LEU:HA	1:D:475:LEU:HD23	1.79	0.44
1:D:671:THR:HB	1:D:682:ASN:CG	2.38	0.44
1:D:931:VAL:HG13	1:D:934:LEU:N	2.21	0.44
1:D:1723:GLU:O	1:D:1725:SER:N	2.51	0.44
1:E:745:THR:OG1	1:E:834:GLU:O	2.19	0.44
1:E:1072:TRP:HE1	1:E:1077:VAL:HG22	1.80	0.44
1:E:1503:ILE:HB	1:E:1542:TYR:HB2	2.00	0.44
1:F:1352:PHE:HA	1:F:1353:PRO:HD3	1.72	0.44
1:F:2252:VAL:HG22	1:F:2255:ARG:HH21	1.82	0.44
1:F:2554:ALA:HB1	1:F:2614:LYS:HZ2	1.81	0.44
1:A:550:LYS:HD3	1:A:577:GLU:OE2	2.17	0.44
1:A:583:GLY:HA2	1:A:892:ILE:HD13	2.00	0.44
1:A:671:THR:HB	1:A:682:ASN:CG	2.38	0.44
1:A:763:SER:HB3	1:A:766:ASP:HB2	1.99	0.44
1:A:857:VAL:HG13	1:A:859:PHE:H	1.83	0.44
1:A:1537:LEU:HD13	1:A:1541:GLN:HB2	2.00	0.44
1:A:1723:GLU:O	1:A:1725:SER:N	2.51	0.44
1:B:88:SER:HB3	1:B:314:THR:OG1	2.18	0.44
1:B:222:LEU:HD13	1:B:248:ILE:HD12	1.99	0.44
1:B:657:THR:HB	1:B:662:LYS:HE3	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:782:ARG:HH11	1:B:857:VAL:HG22	1.83	0.44
1:B:1503:ILE:HB	1:B:1542:TYR:HB2	2.00	0.44
1:C:782:ARG:NH1	1:C:857:VAL:HG22	2.33	0.44
1:C:816:LEU:HD23	1:C:816:LEU:HA	1.83	0.44
1:C:1450:ALA:N	1:C:1613:ARG:O	2.48	0.44
1:C:1537:LEU:HD13	1:C:1541:GLN:HB2	2.00	0.44
1:D:970:ILE:HG23	1:D:992:THR:HG21	2.00	0.43
1:D:1171:PRO:HA	1:D:1191:ARG:HG2	1.99	0.43
1:D:1582:HIS:HA	1:D:1674:ALA:O	2.18	0.43
1:D:2296:ASN:HB3	1:D:2299:MET:SD	2.57	0.43
1:D:3044:ALA:HB1	1:D:3050:PRO:HB3	2.00	0.43
1:E:2180:LYS:HZ1	1:E:2962:ASP:HB3	1.83	0.43
1:E:2710:LEU:O	1:E:2713:VAL:HG22	2.18	0.43
1:F:959:ALA:HB1	1:F:1126:ILE:C	2.35	0.43
1:F:1285:LYS:HB3	1:F:1286:PRO:HD2	1.99	0.43
1:F:2299:MET:H	1:F:2299:MET:HG2	1.68	0.43
1:F:2361:VAL:HG21	1:F:2401:ILE:HD11	1.98	0.43
1:F:2580:PHE:HE1	1:F:2603:ARG:HH21	1.66	0.43
1:F:2710:LEU:O	1:F:2713:VAL:HG22	2.18	0.43
1:F:3044:ALA:HB1	1:F:3050:PRO:HB3	2.00	0.43
1:A:344:HIS:CD2	1:A:373:ILE:HG13	2.53	0.43
1:A:516:PRO:HA	1:A:962:MET:SD	2.58	0.43
1:A:874:ASP:OD2	1:A:877:TRP:CD1	2.71	0.43
1:A:1503:ILE:HB	1:A:1542:TYR:HB2	2.00	0.43
1:A:1551:LEU:HD13	1:A:1551:LEU:HA	1.79	0.43
1:A:1684:ASP:HA	1:A:1687:PHE:HD2	1.82	0.43
1:A:2014:SER:N	1:B:2591:ARG:HH12	2.16	0.43
1:A:2591:ARG:HH12	1:C:2014:SER:N	2.16	0.43
1:B:351:ILE:HB	1:B:375:ILE:HG12	1.99	0.43
1:B:2831:MET:HE2	1:B:2831:MET:HB3	1.87	0.43
1:C:34:LEU:O	1:C:38:LEU:HG	2.18	0.43
1:C:874:ASP:OD2	1:C:877:TRP:CD1	2.72	0.43
1:C:2246:ALA:N	1:C:2255:ARG:HH12	2.15	0.43
1:C:2296:ASN:HB3	1:C:2299:MET:SD	2.57	0.43
1:D:2334:HIS:CD2	1:D:2391:LYS:HG3	2.50	0.43
1:E:695:ILE:HG22	1:E:697:GLU:HG3	2.00	0.43
1:E:1537:LEU:HD13	1:E:1541:GLN:HB2	2.00	0.43
1:E:2115:HIS:HA	1:E:2118:LEU:CG	2.48	0.43
1:F:344:HIS:CD2	1:F:373:ILE:HG13	2.53	0.43
1:F:958:TRP:HZ3	1:F:1130:LEU:HB2	1.83	0.43
1:F:2334:HIS:CD2	1:F:2391:LYS:HG3	2.50	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2735:HIS:O	1:A:2737:VAL:N	2.51	0.43
1:A:398:ARG:HA	1:A:399:PRO:HD2	1.86	0.43
1:A:782:ARG:HH11	1:A:857:VAL:HG22	1.83	0.43
1:A:2300:PHE:CZ	1:A:2398:LEU:HB3	2.52	0.43
1:A:2958:ASN:HD22	1:A:2976:TRP:HE1	1.65	0.43
1:B:516:PRO:HA	1:B:962:MET:SD	2.58	0.43
1:B:1733:ASN:H	1:B:1737:ASP:HB2	1.83	0.43
1:C:516:PRO:HA	1:C:962:MET:SD	2.58	0.43
1:C:695:ILE:HG22	1:C:697:GLU:HG3	2.00	0.43
1:C:2452:ASP:HA	1:C:3017:ALA:HA	1.99	0.43
1:C:2958:ASN:HD22	1:C:2976:TRP:HE1	1.65	0.43
1:C:3044:ALA:HB1	1:C:3050:PRO:HB3	2.00	0.43
1:D:1705:VAL:O	1:D:1735:GLU:HB2	2.18	0.43
1:D:2032:VAL:HG11	1:B:2032:VAL:HG11	2.01	0.43
1:D:2115:HIS:HA	1:D:2118:LEU:CG	2.49	0.43
1:E:88:SER:HB3	1:E:314:THR:OG1	2.18	0.43
1:E:344:HIS:CD2	1:E:373:ILE:HG13	2.53	0.43
1:E:351:ILE:HB	1:E:375:ILE:HG12	1.99	0.43
1:E:1317:GLY:O	1:E:1324:VAL:HG12	2.19	0.43
1:E:1705:VAL:O	1:E:1735:GLU:HB2	2.18	0.43
1:E:1733:ASN:H	1:E:1737:ASP:HB2	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: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:583:GLY:HA2	1:F:892:ILE:HD13	1.99	0.43
1:F:1637:VAL:HA	1:F:1638:PRO:HD2	1.90	0.43
1:F:2462:VAL:HG13	1:F:2835:VAL:HG13	2.00	0.43
1:A:2096:VAL:HG23	1:A:2097:ALA:H	1.80	0.43
1:B:163:LEU:HD13	1:B:181:LEU:HD23	2.00	0.43
1:B:544:ILE:O	1:B:546:HIS:N	2.40	0.43
1:B:671:THR:HB	1:B:682:ASN:CG	2.38	0.43
1:B:1268:GLY:HA2	1:B:1271:LEU:HD12	1.99	0.43
1:B:3044:ALA:HB1	1:B:3050:PRO:HB3	2.00	0.43
1:C:315:VAL:C	1:C:317:LEU:H	2.22	0.43
1:C:2297:ARG:HH22	1:C:2391:LYS:HZ3	1.64	0.43
1:C:2334:HIS:CD2	1:C:2391:LYS:HG3	2.50	0.43
1:C:2891:LYS:HG3	1:C:2924:ILE:HD13	1.98	0.43
1:C:2903:GLU:OE2	1:C:2995:THR:OG1	2.36	0.43
1:D:782:ARG:HH11	1:D:857:VAL:HG22	1.83	0.43
1:D:874:ASP:OD2	1:D:877:TRP:CD1	2.72	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1483:LYS:O	1:D:1487:ILE:HG23	2.17	0.43
1:D:2958:ASN:HD22	1:D:2976:TRP:HE1	1.65	0.43
1:E:34:LEU:O	1:E:38:LEU:HG	2.18	0.43
1:E:1013:THR:CG2	1:E:1014:TRP:H	1.96	0.43
1:E:2209:LEU:O	1:E:2213:VAL:HG23	2.18	0.43
1:E:2252:VAL:HG22	1:E:2255:ARG:HH21	1.82	0.43
1:E:2737:VAL:N	1:B:2735:HIS:O	2.51	0.43
1:F:336:TRP:CH2	1:F:360:LEU:HD21	2.52	0.43
1:F:513:SER:HB3	1:F:961:ARG:NH1	2.33	0.43
1:F:1634:ARG:NH1	1:F:1639:ALA:H	2.11	0.43
1:F:2092:THR:O	1:F:2092:THR:CG2	2.64	0.43
1:F:2903:GLU:OE2	1:F:2995:THR:OG1	2.36	0.43
1:A:34:LEU:O	1:A:38:LEU:HG	2.19	0.43
1:A:351:ILE:HB	1:A:375:ILE:HG12	1.99	0.43
1:A:657:THR:HB	1:A:662:LYS:HE3	2.00	0.43
1:A:658:SER:HB2	1:A:661:VAL:HG23	2.01	0.43
1:A:1582:HIS:HA	1:A:1674:ALA:O	2.18	0.43
1:A:2591:ARG:NH1	1:C:2014:SER:N	2.66	0.43
1:A:2710:LEU:O	1:A:2713:VAL:HG22	2.18	0.43
1:B:315:VAL:C	1:B:317:LEU:H	2.22	0.43
1:B:575:HIS:CD2	1:B:644:LEU:HD22	2.49	0.43
1:B:647:THR:N	2:B:4000:FMN:O3P	2.51	0.43
1:B:658:SER:HB2	1:B:661:VAL:HG23	2.01	0.43
1:B:874:ASP:OD2	1:B:877:TRP:CD1	2.72	0.43
1:B:2296:ASN:ND2	1:B:2395:THR:HG21	2.34	0.43
1:C:369:ARG:HD2	1:C:369:ARG:HA	1.85	0.43
1:C:647:THR:N	2:C:4000:FMN:O3P	2.51	0.43
1:C:857:VAL:HG13	1:C:859:PHE:H	1.83	0.43
1:C:1504:ARG:HA	1:C:1540:SER:O	2.19	0.43
1:C:1660:LEU:HD23	1:C:1660:LEU:HA	1.86	0.43
1:C:2209:LEU:O	1:C:2213:VAL:HG23	2.17	0.43
1:D:583:GLY:HA2	1:D:892:ILE:HD13	2.00	0.43
1:D:658:SER:HB2	1:D:661:VAL:HG23	2.00	0.43
1:D:1317:GLY:O	1:D:1324:VAL:HG12	2.19	0.43
1:D:1733:ASN:H	1:D:1737:ASP:HB2	1.83	0.43
1:E:647:THR:N	2:E:4000:FMN:O3P	2.51	0.43
1:E:657:THR:HB	1:E:662:LYS:HE3	2.00	0.43
1:E:2014:SER:N	1:F:2591:ARG:NH1	2.66	0.43
1:E:2452:ASP:HA	1:E:3017:ALA:HA	1.99	0.43
1:E:2541:ARG:O	1:E:2621:VAL:HG13	2.18	0.43
1:E:2735:HIS:O	1:B:2737:VAL:N	2.51	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:210:VAL:HG22	1:F:287:PHE:HD1	1.82	0.43
1:F:1605:LYS:H	1:F:1658:LYS:HE2	1.82	0.43
1:F:2032:VAL:HG11	1:C:2032:VAL:HG11	2.00	0.43
1:F:2137:GLU:O	1:F:2163:THR:N	2.30	0.43
1:F:2512:TRP:O	1:F:2520:LEU:HD12	2.19	0.43
1:A:393:VAL:HG12	1:A:394:PRO:N	2.32	0.43
1:A:695:ILE:HG22	1:A:697:GLU:HG3	2.01	0.43
1:A:2014:SER:N	1:B:2591:ARG:NH1	2.66	0.43
1:A:2209:LEU:O	1:A:2213:VAL:HG23	2.18	0.43
1:B:341:THR:HG23	1:B:344:HIS:ND1	2.34	0.43
1:B:511:ARG:CB	1:B:540:ASN:HB2	2.46	0.43
1:C:658:SER:HB2	1:C:661:VAL:HG23	2.00	0.43
1:D:580:ARG:HD3	1:D:896:ALA:HB3	2.01	0.43
1:D:683:GLY:CA	1:D:700:ASN:HB2	2.44	0.43
1:D:1163:ASP:HA	1:D:1168:ARG:HA	2.01	0.43
1:D:1504:ARG:HA	1:D:1540:SER:O	2.19	0.43
1:D:2209:LEU:O	1:D:2213:VAL:HG23	2.18	0.43
1:D:2748:GLU:HG2	1:C:2753:LYS:HZ2	1.81	0.43
1:E:516:PRO:HA	1:E:962:MET:SD	2.58	0.43
1:E:580:ARG:HD3	1:E:896:ALA:HB3	2.01	0.43
1:E:746:TYR:HB2	1:E:833:ALA:HB1	1.99	0.43
1:E:856:PRO:HG2	1:E:874:ASP:HB2	2.00	0.43
1:E:1084:THR:CG2	1:E:1274:ALA:HA	2.48	0.43
1:E:1087:PHE:HD2	1:F:117:LYS:HZ1	1.66	0.43
1:E:1582:HIS:HA	1:E:1674:ALA:O	2.18	0.43
1:F:42:GLU:HA	1:F:43:PRO:HD3	1.91	0.43
1:F:351:ILE:HB	1:F:375:ILE:HG12	1.99	0.43
1:F:658:SER:HB2	1:F:661:VAL:HG23	2.00	0.43
1:F:695:ILE:HG22	1:F:697:GLU:HG3	2.00	0.43
1:F:856:PRO:HG2	1:F:874:ASP:HB2	2.00	0.43
1:F:857:VAL:HG13	1:F:859:PHE:H	1.83	0.43
1:F:936:ARG:O	1:F:941:ARG:N	2.45	0.43
1:F:2297:ARG:HH12	1:F:2391:LYS:NZ	2.17	0.43
1:F:2610:ARG:NH1	1:F:2700:LEU:HD11	2.25	0.43
1:A:580:ARG:HD3	1:A:896:ALA:HB3	2.01	0.43
1:A:647:THR:N	2:A:4000:FMN:O3P	2.51	0.43
1:A:1733:ASN:H	1:A:1737:ASP:HB2	1.83	0.43
1:B:34:LEU:O	1:B:38:LEU:HG	2.18	0.43
1:B:695:ILE:HG22	1:B:697:GLU:HG3	2.01	0.43
1:B:1504:ARG:HA	1:B:1540:SER:O	2.19	0.43
1:B:1582:HIS:HA	1:B:1674:ALA:O	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:2710:LEU:O	1:B:2713:VAL:HG22	2.18	0.43
1:B:2891:LYS:HZ1	1:B:2903:GLU:HB3	1.84	0.43
1:C:341:THR:HG23	1:C:344:HIS:ND1	2.34	0.43
1:C:412:ASP:H	1:C:1025:VAL:CG2	2.31	0.43
1:C:782:ARG:HH11	1:C:857:VAL:HG22	1.83	0.43
1:C:1117:ALA:HA	1:C:1120:GLU:HB2	2.01	0.43
1:C:1163:ASP:HA	1:C:1168:ARG:HA	2.01	0.43
1:C:2512:TRP:O	1:C:2520:LEU:HD12	2.19	0.43
1:C:2610:ARG:NH1	1:C:2700:LEU:HD11	2.25	0.43
1:E:583:GLY:HA2	1:E:892:ILE:HD13	2.00	0.43
1:E:857:VAL:HG13	1:E:859:PHE:H	1.83	0.43
1:E:1612:GLY:N	1:E:1623:PHE:O	2.48	0.43
1:E:1672:GLN:HE21	1:E:1672:GLN:HB3	1.58	0.43
1:E:1723:GLU:O	1:E:1725:SER:N	2.51	0.43
1:E:2246:ALA:N	1:E:2255:ARG:HH12	2.15	0.43
1:F:70:SER:HG	1:F:142:ARG:HH22	1.65	0.43
1:F:2810:GLY:HA2	1:F:2896:THR:HG22	2.01	0.43
1:A:575:HIS:CD2	1:A:644:LEU:HD22	2.49	0.43
1:A:2088:ARG:C	1:A:2188:ARG:NH1	2.72	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:276:LYS:HB3	1:B:587:TRP:CH2	2.53	0.43
1:B:307:ILE:HG22	1:B:311:TRP:CE2	2.54	0.43
1:C:340:ILE:HD11	1:C:351:ILE:HD13	2.00	0.43
1:C:1582:HIS:HA	1:C:1674:ALA:O	2.18	0.43
1:C:2088:ARG:C	1:C:2188:ARG:NH1	2.72	0.43
1:C:2541:ARG:O	1:C:2621:VAL:HG13	2.18	0.43
1:C:2665:THR:HA	1:C:2666:PRO:HD3	1.86	0.43
1:D:657:THR:HB	1:D:662:LYS:HE3	2.00	0.43
1:D:856:PRO:HG2	1:D:874:ASP:HB2	2.00	0.43
1:D:857:VAL:HG13	1:D:859:PHE:H	1.83	0.43
1:D:2591:ARG:HH12	1:F:2014:SER:N	2.16	0.43
1:E:276:LYS:HB3	1:E:587:TRP:CH2	2.53	0.43
1:E:550:LYS:HD3	1:E:577:GLU:OE2	2.17	0.43
1:E:585:HIS:HD2	1:E:586:SER:H	1.62	0.43
1:E:1163:ASP:HA	1:E:1168:ARG:HA	2.01	0.43
1:E:2088:ARG:C	1:E:2188:ARG:NH1	2.72	0.43
1:E:2462:VAL:HG13	1:E:2835:VAL:HG13	2.00	0.43
1:F:34:LEU:O	1:F:38:LEU:HG	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:580:ARG:HD3	1:F:896:ALA:HB3	2.01	0.43
1:F:647:THR:N	2:F:4000:FMN:O3P	2.51	0.43
1:F:1084:THR:CG2	1:F:1274:ALA:HA	2.48	0.43
1:F:1163:ASP:HA	1:F:1168:ARG:HA	2.01	0.43
1:F:1317:GLY:O	1:F:1324:VAL:HG12	2.19	0.43
1:F:1695:LEU:HD12	1:F:1695:LEU:HA	1.71	0.43
1:F:2695:MET:HG3	1:F:2696:TYR:N	2.34	0.43
1:F:2697:HIS:CD2	1:A:2700:LEU:HD22	2.43	0.43
1:A:2580:PHE:HE1	1:A:2603:ARG:HH21	1.66	0.43
1:B:857:VAL:HG13	1:B:859:PHE:H	1.83	0.43
1:B:2471:PRO:HA	1:B:2625:ILE:HA	2.00	0.43
1:C:210:VAL:HG22	1:C:287:PHE:HD1	1.83	0.43
1:C:307:ILE:HG22	1:C:311:TRP:CE2	2.54	0.43
1:C:780:ARG:NH1	1:C:817:GLU:OE2	2.52	0.43
1:C:1285:LYS:HB3	1:C:1286:PRO:HD2	1.99	0.43
1:C:2115:HIS:HA	1:C:2118:LEU:CG	2.49	0.43
1:C:2444:PRO:HB2	1:C:2988:PRO:HB3	2.01	0.43
1:C:2580:PHE:HE1	1:C:2603:ARG:HH21	1.66	0.43
1:C:2891:LYS:HZ2	1:C:2903:GLU:HG2	1.83	0.43
1:D:695:ILE:HG22	1:D:697:GLU:HG3	2.01	0.43
1:D:1117:ALA:HA	1:D:1120:GLU:HB2	2.01	0.43
1:D:1133:VAL:N	1:D:1193:ALA:O	2.48	0.43
1:D:2296:ASN:ND2	1:D:2395:THR:HG21	2.34	0.43
1:D:2735:HIS:O	1:C:2737:VAL:N	2.51	0.43
1:D:2786:ASP:OD2	1:D:2789:MET:HG2	2.19	0.43
1:D:2810:GLY:HA2	1:D:2896:THR:HG22	2.01	0.43
1:E:2444:PRO:HB2	1:E:2988:PRO:HB3	2.01	0.43
1:F:307:ILE:HG22	1:F:311:TRP:CE2	2.54	0.43
1:F:475:LEU:HD23	1:F:475:LEU:HA	1.79	0.43
1:F:664:LEU:HB3	1:F:701:ALA:HB1	1.99	0.43
1:F:874:ASP:OD2	1:F:877:TRP:CD1	2.72	0.43
1:F:1030:ALA:N	1:F:1031:PRO:CD	2.81	0.43
1:F:1117:ALA:HA	1:F:1120:GLU:HB2	2.01	0.43
1:F:1413:PRO:O	1:C:2328:GLU:OE1	2.36	0.43
1:F:1457:GLU:OE2	1:F:1614:TYR:OH	2.29	0.43
1:A:856:PRO:HG2	1:A:874:ASP:HB2	2.00	0.43
1:B:344:HIS:CD2	1:B:373:ILE:HG13	2.53	0.43
1:B:664:LEU:HB3	1:B:701:ALA:HB1	1.99	0.43
1:B:1317:GLY:O	1:B:1324:VAL:HG12	2.19	0.43
1:B:2088:ARG:C	1:B:2188:ARG:NH1	2.72	0.43
1:B:2096:VAL:CG1	1:B:2097:ALA:N	2.82	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2541:ARG:O	1:B:2621:VAL:HG13	2.18	0.43
1:C:163:LEU:HD13	1:C:181:LEU:HD23	2.00	0.43
1:D:647:THR:N	2:D:4000:FMN:O3P	2.51	0.43
1:D:885:GLU:HG2	1:D:887:ASP:H	1.84	0.43
1:D:2088:ARG:C	1:D:2188:ARG:NH1	2.72	0.43
1:D:2252:VAL:HG22	1:D:2255:ARG:HH21	1.82	0.43
1:D:2706:PRO:O	1:D:2709:ILE:HG12	2.19	0.43
1:D:2710:LEU:O	1:D:2713:VAL:HG22	2.18	0.43
1:D:2903:GLU:OE2	1:D:2995:THR:OG1	2.36	0.43
1:E:42:GLU:HA	1:E:43:PRO:HD3	1.91	0.43
1:E:307:ILE:HG22	1:E:311:TRP:CE2	2.54	0.43
1:E:340:ILE:HD11	1:E:351:ILE:HD13	2.01	0.43
1:E:487:PHE:O	1:E:521:VAL:N	2.51	0.43
1:E:782:ARG:HH11	1:E:857:VAL:HG22	1.83	0.43
1:E:874:ASP:OD2	1:E:877:TRP:CD1	2.72	0.43
1:E:970:ILE:HG23	1:E:992:THR:HG21	2.00	0.43
1:E:2512:TRP:O	1:E:2520:LEU:HD12	2.19	0.43
1:E:2958:ASN:HD22	1:E:2976:TRP:HE1	1.65	0.43
1:F:2115:HIS:HA	1:F:2118:LEU:CG	2.49	0.43
1:F:2706:PRO:O	1:F:2709:ILE:HG12	2.19	0.43
1:A:340:ILE:HD11	1:A:351:ILE:HD13	2.01	0.43
1:A:438:THR:HA	1:A:880:HIS:CE1	2.51	0.43
1:A:780:ARG:NH1	1:A:817:GLU:OE2	2.52	0.43
1:A:2244:ARG:HG2	1:A:2245:VAL:N	2.34	0.43
1:A:2297:ARG:HH12	1:A:2391:LYS:NZ	2.17	0.43
1:A:3044:ALA:HB1	1:A:3050:PRO:HB3	2.00	0.43
1:B:1537:LEU:HD13	1:B:1541:GLN:HB2	2.00	0.43
1:B:2252:VAL:HG22	1:B:2255:ARG:HH21	1.82	0.43
1:B:2297:ARG:HH12	1:B:2391:LYS:NZ	2.17	0.43
1:B:2695:MET:HG3	1:B:2696:TYR:N	2.34	0.43
1:B:2810:GLY:HA2	1:B:2896:THR:HG22	2.01	0.43
1:B:2846:ALA:O	1:B:2859:GLY:HA3	2.19	0.43
1:C:78:GLU:HB2	1:C:176:VAL:HG21	2.01	0.43
1:C:393:VAL:O	1:C:395:GLU:N	2.52	0.43
1:C:709:LEU:HD21	1:C:872:ARG:NE	2.34	0.43
1:C:2786:ASP:OD2	1:C:2789:MET:HG2	2.19	0.43
1:C:2810:GLY:HA2	1:C:2896:THR:HG22	2.01	0.43
1:D:1695:LEU:HD12	1:D:1695:LEU:HA	1.71	0.42
1:D:2014:SER:N	1:E:2591:ARG:HH12	2.16	0.42
1:D:2297:ARG:HH22	1:D:2391:LYS:HZ3	1.67	0.42
1:D:2299:MET:H	1:D:2299:MET:HG2	1.68	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2444:PRO:HB2	1:D:2988:PRO:HB3	2.01	0.42
1:D:2541:ARG:O	1:D:2621:VAL:HG13	2.18	0.42
1:E:53:SER:HA	1:E:359:ILE:HG13	2.01	0.42
1:E:544:ILE:O	1:E:546:HIS:N	2.40	0.42
1:E:780:ARG:NH1	1:E:817:GLU:OE2	2.52	0.42
1:E:2014:SER:N	1:F:2591:ARG:HH12	2.16	0.42
1:E:2228:LEU:HD23	1:E:2228:LEU:HA	1.86	0.42
1:E:2296:ASN:ND2	1:E:2395:THR:HG21	2.34	0.42
1:E:2557:LEU:HB3	1:E:2613:ARG:HB2	2.01	0.42
1:E:2558:LEU:HD11	1:B:2610:ARG:HD2	2.01	0.42
1:E:2610:ARG:HD2	1:B:2558:LEU:HD11	2.01	0.42
1:E:2891:LYS:HZ2	1:E:2903:GLU:HG2	1.83	0.42
1:E:3044:ALA:HB1	1:E:3050:PRO:HB3	2.00	0.42
1:F:211:THR:HB	1:F:286:VAL:HB	2.01	0.42
1:F:436:THR:OG1	1:F:437:PRO:HD3	2.19	0.42
1:F:1412:HIS:HD2	1:F:1413:PRO:CD	2.31	0.42
1:F:1504:ARG:HA	1:F:1540:SER:O	2.19	0.42
1:F:1582:HIS:HA	1:F:1674:ALA:O	2.18	0.42
1:F:1733:ASN:H	1:F:1737:ASP:HB2	1.83	0.42
1:F:2471:PRO:HA	1:F:2625:ILE:HA	2.00	0.42
1:F:2889:ILE:HB	1:F:2924:ILE:HG12	2.01	0.42
1:A:203:ASP:OD2	1:C:1087:PHE:CZ	2.72	0.42
1:A:276:LYS:HB3	1:A:587:TRP:CH2	2.53	0.42
1:A:544:ILE:C	1:A:546:HIS:H	2.22	0.42
1:A:1087:PHE:CZ	1:B:203:ASP:OD2	2.72	0.42
1:A:2096:VAL:CG2	1:A:2097:ALA:N	2.82	0.42
1:A:2334:HIS:CD2	1:A:2391:LYS:HG3	2.50	0.42
1:A:2452:ASP:CG	1:A:2453:LEU:N	2.73	0.42
1:A:2541:ARG:O	1:A:2621:VAL:HG13	2.18	0.42
1:A:2836:LEU:HD23	1:A:2836:LEU:HA	1.87	0.42
1:A:2911:ALA:O	1:A:2916:ARG:HB2	2.19	0.42
1:B:1662:ARG:HG3	1:B:1663:LYS:N	2.34	0.42
1:B:2462:VAL:HG13	1:B:2835:VAL:HG13	2.00	0.42
1:C:1705:VAL:O	1:C:1735:GLU:HB2	2.18	0.42
1:C:2092:THR:O	1:C:2092:THR:CG2	2.64	0.42
1:C:2889:ILE:HB	1:C:2924:ILE:HG12	2.01	0.42
1:D:780:ARG:NH1	1:D:817:GLU:OE2	2.52	0.42
1:D:1662:ARG:HG3	1:D:1663:LYS:N	2.34	0.42
1:D:2737:VAL:N	1:C:2735:HIS:O	2.51	0.42
1:D:2911:ALA:O	1:D:2916:ARG:HB2	2.19	0.42
1:E:211:THR:HB	1:E:286:VAL:HB	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1662:ARG:HG3	1:E:1663:LYS:N	2.34	0.42
1:E:2530:TYR:O	1:E:2533:ALA:N	2.52	0.42
1:E:2695:MET:HG3	1:E:2696:TYR:N	2.34	0.42
1:E:2706:PRO:O	1:E:2709:ILE:HG12	2.19	0.42
1:F:341:THR:HG23	1:F:344:HIS:ND1	2.34	0.42
1:F:1537:LEU:HD13	1:F:1541:GLN:HB2	2.00	0.42
1:F:2557:LEU:HB3	1:F:2613:ARG:HB2	2.01	0.42
1:A:88:SER:HB3	1:A:314:THR:OG1	2.18	0.42
1:A:211:THR:HB	1:A:286:VAL:HB	2.01	0.42
1:A:544:ILE:O	1:A:546:HIS:N	2.41	0.42
1:A:1163:ASP:HA	1:A:1168:ARG:HA	2.01	0.42
1:A:1705:VAL:O	1:A:1735:GLU:HB2	2.18	0.42
1:A:2444:PRO:HB2	1:A:2988:PRO:HB3	2.01	0.42
1:A:2512:TRP:O	1:A:2520:LEU:HD12	2.19	0.42
1:A:2530:TYR:O	1:A:2533:ALA:N	2.52	0.42
1:A:2808:ARG:HH21	1:A:2901:PRO:HD3	1.85	0.42
1:B:580:ARG:HD3	1:B:896:ALA:HB3	2.01	0.42
1:B:780:ARG:NH1	1:B:817:GLU:OE2	2.52	0.42
1:B:856:PRO:HG2	1:B:874:ASP:HB2	2.00	0.42
1:B:970:ILE:HG23	1:B:992:THR:HG21	2.00	0.42
1:B:1163:ASP:HA	1:B:1168:ARG:HA	2.01	0.42
1:C:45:ALA:O	1:C:351:ILE:HA	2.19	0.42
1:C:211:THR:HB	1:C:286:VAL:HB	2.01	0.42
1:C:954:PRO:O	1:C:965:ASN:N	2.52	0.42
1:C:1672:GLN:HE21	1:C:1672:GLN:HB3	1.58	0.42
1:C:2428:PRO:O	1:C:2428:PRO:CG	2.67	0.42
1:C:2452:ASP:CG	1:C:2453:LEU:N	2.73	0.42
1:D:1093:PRO:HB3	1:D:1277:HIS:CE1	2.52	0.42
1:D:2180:LYS:HZ1	1:D:2962:ASP:HB3	1.83	0.42
1:D:2297:ARG:HH12	1:D:2391:LYS:NZ	2.17	0.42
1:D:2889:ILE:HB	1:D:2924:ILE:HG12	2.01	0.42
1:E:45:ALA:O	1:E:351:ILE:HA	2.20	0.42
1:E:365:ALA:O	1:E:369:ARG:N	2.42	0.42
1:E:511:ARG:CB	1:E:540:ASN:HB2	2.46	0.42
1:E:1275:ALA:O	1:E:1279:VAL:HG23	2.20	0.42
1:E:2452:ASP:CG	1:E:2453:LEU:N	2.73	0.42
1:E:2674:HIS:HA	1:E:2675:PRO:HD2	1.88	0.42
1:F:1030:ALA:N	1:F:1031:PRO:HD3	2.34	0.42
1:F:1503:ILE:HB	1:F:1542:TYR:HB2	2.00	0.42
1:A:1093:PRO:HB3	1:A:1277:HIS:CE1	2.52	0.42
1:B:107:LEU:HD13	1:B:113:VAL:HB	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:613:GLY:HA2	2:B:4000:FMN:O5'	2.19	0.42
1:B:885:GLU:HG2	1:B:887:ASP:H	1.84	0.42
1:B:1021:LEU:HB3	1:B:1034:GLU:HG2	2.01	0.42
1:B:1084:THR:CG2	1:B:1274:ALA:HA	2.48	0.42
1:C:856:PRO:HG2	1:C:874:ASP:HB2	2.00	0.42
1:C:2706:PRO:O	1:C:2709:ILE:HG12	2.19	0.42
1:D:1703:ILE:HG22	1:D:1704:GLY:H	1.85	0.42
1:E:315:VAL:C	1:E:317:LEU:H	2.22	0.42
1:E:488:ASN:OD1	1:E:523:SER:OG	2.34	0.42
1:E:602:ARG:NH2	1:E:641:ASP:OD1	2.28	0.42
1:E:1504:ARG:HA	1:E:1540:SER:O	2.19	0.42
1:E:2297:ARG:HH12	1:E:2391:LYS:NZ	2.17	0.42
1:E:2468:GLU:OE2	1:E:2478:ARG:NH2	2.48	0.42
1:E:2903:GLU:OE2	1:E:2995:THR:OG1	2.36	0.42
1:F:53:SER:HA	1:F:359:ILE:HG13	2.01	0.42
1:F:479:LEU:HD21	1:F:485:ILE:HD11	2.02	0.42
1:F:780:ARG:NH1	1:F:817:GLU:OE2	2.52	0.42
1:F:958:TRP:CZ3	1:F:1130:LEU:HB2	2.54	0.42
1:F:1533:VAL:N	1:F:1543:ALA:O	2.52	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	2.20	0.42
1:A:315:VAL:C	1:A:317:LEU:H	2.22	0.42
1:A:336:TRP:HE3	1:A:339:GLU:OE2	2.03	0.42
1:A:511:ARG:CB	1:A:540:ASN:HB2	2.46	0.42
1:A:1280:THR:O	1:A:1288:PRO:HB3	2.20	0.42
1:A:1672:GLN:HE21	1:A:1672:GLN:HB3	1.58	0.42
1:A:2428:PRO:O	1:A:2428:PRO:CG	2.68	0.42
1:A:2557:LEU:HB3	1:A:2613:ARG:HB2	2.01	0.42
1:A:2810:GLY:HA2	1:A:2896:THR:HG22	2.01	0.42
1:A:2957:PRO:HB3	1:A:2980:PRO:N	2.35	0.42
1:B:53:SER:HA	1:B:359:ILE:HG13	2.01	0.42
1:B:1087:PHE:CZ	1:C:203:ASP:OD2	2.72	0.42
1:B:1634:ARG:NH1	1:B:1639:ALA:H	2.11	0.42
1:B:2468:GLU:OE2	1:B:2478:ARG:NH2	2.48	0.42
1:B:2557:LEU:HB3	1:B:2613:ARG:HB2	2.01	0.42
1:C:70:SER:HG	1:C:142:ARG:NH2	2.16	0.42
1:C:276:LYS:HB3	1:C:587:TRP:CH2	2.53	0.42
1:C:657:THR:HB	1:C:662:LYS:HE3	2.00	0.42
1:C:2141:VAL:HG22	1:C:2238:PHE:HD2	1.85	0.42
1:C:2911:ALA:O	1:C:2916:ARG:HB2	2.19	0.42
1:C:2957:PRO:HB3	1:C:2980:PRO:N	2.34	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:436:THR:OG1	1:D:437:PRO:HD3	2.19	0.42
1:D:613:GLY:HA2	2:D:4000:FMN:O5'	2.19	0.42
1:D:668:THR:HG23	1:D:683:GLY:HA3	2.02	0.42
1:D:1106:CYS:SG	1:D:1174:VAL:HG11	2.60	0.42
1:D:1247:ASN:HA	1:D:1248:PRO:HD3	1.83	0.42
1:D:1280:THR:O	1:D:1288:PRO:HB3	2.20	0.42
1:D:2244:ARG:HG2	1:D:2245:VAL:N	2.34	0.42
1:D:2294:SER:HB3	1:D:2310:LYS:HB2	2.02	0.42
1:D:2892:HIS:HA	1:D:2942:GLN:HE22	1.85	0.42
1:E:1457:GLU:OE2	1:E:1614:TYR:OH	2.30	0.42
1:E:1656:LYS:N	1:E:1657:PRO:HD2	2.35	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:709:LEU:HD21	1:F:872:ARG:NE	2.34	0.42
1:F:2428:PRO:O	1:F:2428:PRO:CG	2.67	0.42
1:F:2558:LEU:HD11	1:A:2610:ARG:HD2	2.01	0.42
1:A:50:GLY:O	1:A:53:SER:OG	2.36	0.42
1:A:488:ASN:OD1	1:A:523:SER:OG	2.34	0.42
1:A:709:LEU:HD21	1:A:872:ARG:NE	2.34	0.42
1:A:970:ILE:HG23	1:A:992:THR:HG21	2.00	0.42
1:A:1504:ARG:HA	1:A:1540:SER:O	2.19	0.42
1:A:2695:MET:HG3	1:A:2696:TYR:N	2.34	0.42
1:A:2831:MET:HE2	1:A:2831:MET:HB3	1.88	0.42
1:B:211:THR:HB	1:B:286:VAL:HB	2.01	0.42
1:B:479:LEU:HD21	1:B:485:ILE:HD11	2.02	0.42
1:B:709:LEU:HD21	1:B:872:ARG:NE	2.34	0.42
1:B:1275:ALA:HB2	1:B:1311:PHE:CE2	2.55	0.42
1:B:2449:GLU:O	1:B:2449:GLU:CG	2.68	0.42
1:B:2706:PRO:O	1:B:2709:ILE:HG12	2.19	0.42
1:B:2786:ASP:OD2	1:B:2789:MET:HG2	2.19	0.42
1:B:2891:LYS:NZ	1:B:2903:GLU:HB3	2.35	0.42
1:C:613:GLY:HA2	2:C:4000:FMN:O5'	2.19	0.42
1:C:1656:LYS:N	1:C:1657:PRO:HD2	2.35	0.42
1:C:1662:ARG:HG3	1:C:1663:LYS:N	2.34	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:2855:ALA:HA	1:C:2856:PRO:HD3	1.93	0.42
1:D:2141:VAL:HG22	1:D:2238:PHE:HD2	1.84	0.42
1:D:2695:MET:HG3	1:D:2696:TYR:N	2.34	0.42
1:D:2753:LYS:HA	1:D:2753:LYS:HD3	1.83	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2891:LYS:NZ	1:D:2903:GLU:HB3	2.35	0.42
1:E:658:SER:HB2	1:E:661:VAL:HG23	2.01	0.42
1:E:1275:ALA:HB2	1:E:1311:PHE:CE2	2.55	0.42
1:E:1684:ASP:HA	1:E:1687:PHE:HD2	1.82	0.42
1:E:2805:ASP:OD2	1:E:2807:ARG:HB2	2.20	0.42
1:E:2889:ILE:HG13	1:E:2922:LEU:HD13	2.02	0.42
1:F:488:ASN:OD1	1:F:523:SER:OG	2.34	0.42
1:F:2244:ARG:HG2	1:F:2245:VAL:N	2.35	0.42
1:F:2452:ASP:CG	1:F:2453:LEU:N	2.73	0.42
1:F:2957:PRO:HB3	1:F:2980:PRO:N	2.34	0.42
1:A:559:SER:O	1:A:563:ILE:HG12	2.20	0.42
1:A:970:ILE:O	1:A:974:THR:HG22	2.20	0.42
1:A:1008:VAL:CG1	1:A:1008:VAL:O	2.68	0.42
1:A:1457:GLU:OE2	1:A:1614:TYR:OH	2.30	0.42
1:A:2055:VAL:HG22	1:A:2194:TRP:CD1	2.55	0.42
1:A:2889:ILE:HG13	1:A:2922:LEU:HD13	2.02	0.42
1:A:2891:LYS:HZ2	1:A:2903:GLU:HG2	1.83	0.42
1:B:45:ALA:O	1:B:351:ILE:HA	2.20	0.42
1:B:336:TRP:HE3	1:B:339:GLU:OE2	2.03	0.42
1:B:1120:GLU:HA	1:B:1125:VAL:CG2	2.50	0.42
1:B:2244:ARG:HG2	1:B:2245:VAL:N	2.34	0.42
1:B:2800:PHE:CZ	1:B:2812:LEU:HD13	2.55	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:1021:LEU:HB3	1:C:1034:GLU:HG2	2.01	0.42
1:C:1280:THR:O	1:C:1288:PRO:HB3	2.20	0.42
1:C:2244:ARG:HG2	1:C:2245:VAL:N	2.34	0.42
1:C:2846:ALA:O	1:C:2859:GLY:HA3	2.19	0.42
1:C:2892:HIS:HA	1:C:2942:GLN:HE22	1.85	0.42
1:D:709:LEU:HD21	1:D:872:ARG:NE	2.34	0.42
1:D:1275:ALA:HB2	1:D:1311:PHE:CE2	2.55	0.42
1:D:1352:PHE:HA	1:D:1353:PRO:HD3	1.72	0.42
1:D:2286:ARG:HD3	1:D:2331:SER:OG	2.20	0.42
1:D:2452:ASP:CG	1:D:2453:LEU:N	2.73	0.42
1:D:2512:TRP:O	1:D:2520:LEU:HD12	2.19	0.42
1:D:2591:ARG:HH12	1:F:2014:SER:H	1.65	0.42
1:D:2957:PRO:HB3	1:D:2980:PRO:N	2.34	0.42
1:E:210:VAL:HG22	1:E:287:PHE:HD1	1.83	0.42
1:E:613:GLY:HA2	2:E:4000:FMN:O5'	2.19	0.42
1:E:885:GLU:HG2	1:E:887:ASP:H	1.84	0.42
1:E:2032:VAL:HG11	1:A:2032:VAL:HG11	2.00	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:2300:PHE:HZ	1:F:2398:LEU:HB3	1.85	0.42
1:F:2610:ARG:HD2	1:A:2558:LEU:HD11	2.02	0.42
1:F:2715:PRO:HD2	1:A:2737:VAL:HG11	2.02	0.42
1:F:2786:ASP:OD2	1:F:2789:MET:HG2	2.19	0.42
1:A:44:TYR:O	1:A:153:VAL:N	2.44	0.42
1:A:53:SER:HA	1:A:359:ILE:HG13	2.01	0.42
1:A:307:ILE:HG22	1:A:311:TRP:CE2	2.54	0.42
1:A:585:HIS:HD2	1:A:586:SER:H	1.62	0.42
1:A:1275:ALA:O	1:A:1279:VAL:HG23	2.20	0.42
1:A:2805:ASP:OD2	1:A:2807:ARG:HB2	2.20	0.42
1:A:2891:LYS:NZ	1:A:2903:GLU:HB3	2.35	0.42
1:B:488:ASN:OD1	1:B:523:SER:OG	2.34	0.42
1:B:1280:THR:O	1:B:1288:PRO:HB3	2.20	0.42
1:B:1656:LYS:N	1:B:1657:PRO:HD2	2.35	0.42
1:B:2428:PRO:O	1:B:2428:PRO:CG	2.67	0.42
1:B:2805:ASP:OD2	1:B:2807:ARG:HB2	2.20	0.42
1:B:2957:PRO:HB3	1:B:2980:PRO:N	2.35	0.42
1:C:436:THR:OG1	1:C:437:PRO:HD3	2.19	0.42
1:C:1317:GLY:O	1:C:1324:VAL:HG12	2.19	0.42
1:C:2055:VAL:HG22	1:C:2194:TRP:CD1	2.55	0.42
1:C:2354:SER:O	1:C:2358:GLU:HG3	2.20	0.42
1:C:2930:LEU:HD23	1:C:2930:LEU:HA	1.93	0.42
1:D:816:LEU:HA	1:D:816:LEU:HD23	1.83	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:1120:GLU:HA	1:D:1125:VAL:CG2	2.50	0.42
1:D:1228:VAL:HB	1:D:1311:PHE:HB2	2.02	0.42
1:D:1656:LYS:N	1:D:1657:PRO:HD2	2.35	0.42
1:D:1660:LEU:HD23	1:D:1660:LEU:HA	1.86	0.42
1:D:2428:PRO:O	1:D:2428:PRO:CG	2.68	0.42
1:D:2468:GLU:OE2	1:D:2478:ARG:NH2	2.48	0.42
1:D:2557:LEU:HB3	1:D:2613:ARG:HB2	2.01	0.42
1:E:957:LEU:O	1:E:1034:GLU:HB2	2.20	0.42
1:E:1280:THR:O	1:E:1288:PRO:HB3	2.20	0.42
1:E:2141:VAL:HG22	1:E:2238:PHE:HD2	1.85	0.42
1:E:2701:LEU:HD23	1:B:2558:LEU:HB2	2.02	0.42
1:E:2786:ASP:OD2	1:E:2789:MET:HG2	2.19	0.42
1:E:2810:GLY:HA2	1:E:2896:THR:HG22	2.01	0.42
1:E:2911:ALA:O	1:E:2916:ARG:HB2	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2957:PRO:HB3	1:E:2980:PRO:N	2.35	0.42
1:F:107:LEU:HD13	1:F:113:VAL:HB	2.02	0.42
1:F:336:TRP:HE3	1:F:339:GLU:OE2	2.03	0.42
1:F:885:GLU:HG2	1:F:887:ASP:H	1.84	0.42
1:F:970:ILE:O	1:F:974:THR:HG22	2.20	0.42
1:F:1275:ALA:HB2	1:F:1311:PHE:CE2	2.55	0.42
1:F:1612:GLY:N	1:F:1623:PHE:O	2.48	0.42
1:F:2088:ARG:C	1:F:2188:ARG:NH1	2.72	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:668:THR:HG23	1:A:683:GLY:HA3	2.02	0.42
1:A:1021:LEU:HB3	1:A:1034:GLU:HG2	2.01	0.42
1:A:2563:LEU:HD21	1:A:2567:PHE:HB2	2.02	0.42
1:B:1275:ALA:O	1:B:1279:VAL:HG23	2.20	0.42
1:B:2014:SER:N	1:C:2591:ARG:HH12	2.16	0.42
1:B:2294:SER:HB3	1:B:2310:LYS:HB2	2.02	0.42
1:B:2452:ASP:CG	1:B:2453:LEU:N	2.73	0.42
1:B:2889:ILE:HG13	1:B:2922:LEU:HD13	2.02	0.42
1:C:365:ALA:O	1:C:369:ARG:N	2.42	0.42
1:C:885:GLU:HG2	1:C:887:ASP:H	1.84	0.42
1:C:931:VAL:HG13	1:C:934:LEU:N	2.21	0.42
1:C:1275:ALA:HB2	1:C:1311:PHE:CE2	2.55	0.42
1:C:1380:ALA:HB1	1:C:1474:LEU:CD1	2.50	0.42
1:C:1504:ARG:HA	1:C:1505:PRO:HD2	1.93	0.42
1:C:1733:ASN:H	1:C:1737:ASP:HB2	1.83	0.42
1:C:2503:LYS:HG3	1:C:2513:TYR:HB2	2.02	0.42
1:C:2557:LEU:HB3	1:C:2613:ARG:HB2	2.01	0.42
1:D:479:LEU:HD21	1:D:485:ILE:HD11	2.02	0.42
1:D:970:ILE:O	1:D:974:THR:HG22	2.20	0.42
1:D:2055:VAL:HG22	1:D:2194:TRP:CD1	2.55	0.42
1:D:2354:SER:O	1:D:2358:GLU:HG3	2.20	0.42
1:D:2805:ASP:OD2	1:D:2807:ARG:HB2	2.20	0.42
1:E:341:THR:HG23	1:E:344:HIS:ND1	2.34	0.42
1:E:559:SER:O	1:E:563:ILE:HG12	2.20	0.42
1:E:928:ALA:HB1	1:E:931:VAL:CB	2.50	0.42
1:E:1087:PHE:CZ	1:F:203:ASP:OD2	2.72	0.42
1:E:1117:ALA:HA	1:E:1120:GLU:HB2	2.01	0.42
1:E:2096:VAL:CG1	1:E:2097:ALA:N	2.82	0.42
1:E:2428:PRO:O	1:E:2428:PRO:CG	2.67	0.42
1:E:2558:LEU:HB2	1:B:2701:LEU:HD23	2.02	0.42
1:F:78:GLU:HB2	1:F:176:VAL:HG21	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:393:VAL:O	1:F:395:GLU:N	2.53	0.42
1:F:1280:THR:O	1:F:1288:PRO:HB3	2.20	0.42
1:F:1380:ALA:HB1	1:F:1474:LEU:CD1	2.50	0.42
1:F:2444:PRO:HB2	1:F:2988:PRO:HB3	2.01	0.42
1:F:2805:ASP:OD2	1:F:2807:ARG:HB2	2.20	0.42
1:F:2891:LYS:NZ	1:F:2903:GLU:HB3	2.35	0.42
1:A:45:ALA:O	1:A:351:ILE:HA	2.20	0.42
1:A:341:THR:HG23	1:A:344:HIS:ND1	2.34	0.42
1:A:436:THR:OG1	1:A:437:PRO:HD3	2.19	0.42
1:A:613:GLY:HA2	2:A:4000:FMN:O5'	2.19	0.42
1:A:1381:ASP:OD1	1:A:1391:SER:OG	2.22	0.42
1:A:2300:PHE:HZ	1:A:2398:LEU:HB3	1.85	0.42
1:A:2620:THR:OG1	1:A:2791:ARG:NH2	2.53	0.42
1:B:340:ILE:HD11	1:B:351:ILE:HD13	2.01	0.42
1:B:2452:ASP:CG	1:B:2453:LEU:H	2.24	0.42
1:B:2584:ASP:O	1:B:2586:GLU:N	2.53	0.42
1:B:2891:LYS:HZ2	1:B:2903:GLU:HG2	1.84	0.42
1:B:2911:ALA:O	1:B:2916:ARG:HB2	2.19	0.42
1:C:53:SER:HA	1:C:359:ILE:HG13	2.01	0.42
1:C:266:ALA:O	1:C:270:GLU:HG3	2.20	0.42
1:C:2294:SER:HB3	1:C:2310:LYS:HB2	2.02	0.42
1:C:2449:GLU:O	1:C:2449:GLU:CG	2.68	0.42
1:D:1380:ALA:HB1	1:D:1474:LEU:CD1	2.50	0.42
1:D:1504:ARG:HA	1:D:1505:PRO:HD2	1.93	0.42
1:D:2503:LYS:HG3	1:D:2513:TYR:HB2	2.02	0.42
1:E:479:LEU:HD21	1:E:485:ILE:HD11	2.02	0.42
1:E:668:THR:HG23	1:E:683:GLY:HA3	2.02	0.42
1:E:1008:VAL:CG1	1:E:1008:VAL:O	2.68	0.42
1:E:1021:LEU:HB3	1:E:1034:GLU:HG2	2.01	0.42
1:E:2244:ARG:HG2	1:E:2245:VAL:N	2.34	0.42
1:F:1228:VAL:HB	1:F:1311:PHE:HB2	2.02	0.42
1:F:1394:HIS:ND1	1:C:2324:LYS:NZ	2.68	0.42
1:F:2055:VAL:HG22	1:F:2194:TRP:CD1	2.55	0.42
1:F:2296:ASN:ND2	1:F:2395:THR:HG21	2.34	0.42
1:F:2558:LEU:HB2	1:A:2701:LEU:HD23	2.02	0.42
1:F:2889:ILE:HG13	1:F:2922:LEU:HD13	2.02	0.42
1:A:1106:CYS:SG	1:A:1174:VAL:HG11	2.60	0.42
1:A:1317:GLY:O	1:A:1324:VAL:HG12	2.19	0.42
1:A:1703:ILE:HG22	1:A:1704:GLY:H	1.85	0.42
1:B:393:VAL:O	1:B:395:GLU:N	2.52	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:1228:VAL:HB	1:B:1311:PHE:HB2	2.02	0.42
1:B:1380:ALA:HB1	1:B:1474:LEU:CD1	2.50	0.42
1:B:1611:ILE:HG23	1:B:1624:THR:HA	2.02	0.42
1:B:2354:SER:O	1:B:2358:GLU:HG3	2.20	0.42
1:C:2800:PHE:CZ	1:C:2812:LEU:HD13	2.55	0.42
1:D:1611:ILE:HG23	1:D:1624:THR:HA	2.02	0.41
1:D:2800:PHE:CZ	1:D:2812:LEU:HD13	2.55	0.41
1:D:2846:ALA:O	1:D:2859:GLY:HA3	2.20	0.41
1:E:1013:THR:CG2	1:E:1014:TRP:N	2.58	0.41
1:E:1120:GLU:HA	1:E:1125:VAL:CG2	2.50	0.41
1:E:1703:ILE:HG22	1:E:1704:GLY:H	1.85	0.41
1:E:2354:SER:O	1:E:2358:GLU:HG3	2.20	0.41
1:E:2452:ASP:CG	1:E:2453:LEU:H	2.24	0.41
1:E:2563:LEU:HD21	1:E:2567:PHE:HB2	2.02	0.41
1:E:2610:ARG:NH1	1:E:2700:LEU:HD11	2.25	0.41
1:E:2620:THR:OG1	1:E:2791:ARG:NH2	2.53	0.41
1:F:266:ALA:O	1:F:270:GLU:HG3	2.20	0.41
1:F:1095:LEU:HD23	1:F:1098:VAL:HA	2.02	0.41
1:F:1500:LEU:HD23	1:F:1574:VAL:HG21	2.02	0.41
1:A:756:LEU:HD13	1:A:859:PHE:CD2	2.55	0.41
1:A:885:GLU:HG2	1:A:887:ASP:H	1.84	0.41
1:A:1117:ALA:HA	1:A:1120:GLU:HB2	2.01	0.41
1:A:1662:ARG:HG3	1:A:1663:LYS:N	2.34	0.41
1:A:1687:PHE:CE1	1:A:1723:GLU:HG2	2.55	0.41
1:A:2846:ALA:O	1:A:2859:GLY:HA3	2.20	0.41
1:B:50:GLY:O	1:B:53:SER:OG	2.36	0.41
1:B:756:LEU:HD13	1:B:859:PHE:CD2	2.55	0.41
1:B:1106:CYS:SG	1:B:1174:VAL:HG11	2.60	0.41
1:B:1687:PHE:CE1	1:B:1723:GLU:HG2	2.55	0.41
1:B:2180:LYS:HZ1	1:B:2962:ASP:HB3	1.83	0.41
1:B:2286:ARG:HD3	1:B:2331:SER:OG	2.20	0.41
1:B:3065:PRO:O	1:B:3069:GLN:N	2.42	0.41
1:C:107:LEU:HD13	1:C:113:VAL:HB	2.01	0.41
1:C:160:GLN:HA	1:C:329:ILE:HD13	2.02	0.41
1:C:668:THR:HG23	1:C:683:GLY:HA3	2.02	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:D:417:LEU:HD21	1:D:625:LEU:HD21	2.02	0.41
1:D:1070:VAL:N	1:D:1152:PHE:O	2.52	0.41
1:D:2449:GLU:O	1:D:2449:GLU:CG	2.68	0.41
1:D:2452:ASP:CG	1:D:2453:LEU:H	2.24	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2700:LEU:HD22	1:C:2697:HIS:CD2	2.43	0.41
1:E:1228:VAL:HB	1:E:1311:PHE:HB2	2.02	0.41
1:E:1460:ALA:O	1:E:1464:VAL:HG22	2.20	0.41
1:E:1687:PHE:CE1	1:E:1723:GLU:HG2	2.55	0.41
1:E:2055:VAL:HG22	1:E:2194:TRP:CD1	2.55	0.41
1:E:2889:ILE:HB	1:E:2924:ILE:HG12	2.01	0.41
1:F:340:ILE:HD11	1:F:351:ILE:HD13	2.01	0.41
1:F:928:ALA:HB1	1:F:931:VAL:CB	2.50	0.41
1:F:2800:PHE:CZ	1:F:2812:LEU:HD13	2.55	0.41
1:F:2989:LEU:HD12	1:F:2989:LEU:HA	1.77	0.41
1:A:393:VAL:O	1:A:395:GLU:N	2.52	0.41
1:A:1084:THR:CG2	1:A:1274:ALA:HA	2.49	0.41
1:A:1611:ILE:HG23	1:A:1624:THR:HA	2.02	0.41
1:A:1656:LYS:N	1:A:1657:PRO:HD2	2.35	0.41
1:A:2800:PHE:CE1	1:A:2812:LEU:HD22	2.50	0.41
1:B:160:GLN:HA	1:B:329:ILE:HD13	2.02	0.41
1:B:795:HIS:NE2	1:B:797:GLN:HB2	2.35	0.41
1:B:1117:ALA:HA	1:B:1120:GLU:HB2	2.01	0.41
1:B:1551:LEU:HD13	1:B:1551:LEU:HA	1.80	0.41
1:B:1703:ILE:HG22	1:B:1704:GLY:H	1.85	0.41
1:B:1706:LYS:HA	1:B:1735:GLU:HG3	2.03	0.41
1:B:2961:LEU:HD22	1:B:2976:TRP:HD1	1.85	0.41
1:C:2300:PHE:HZ	1:C:2398:LEU:HB3	1.85	0.41
1:C:2620:THR:OG1	1:C:2791:ARG:NH2	2.53	0.41
1:D:1087:PHE:CZ	1:E:203:ASP:OD2	2.72	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:1491:ASP:HB2	1:D:1495:ARG:HB2	2.02	0.41
1:D:2889:ILE:HG13	1:D:2922:LEU:HD13	2.02	0.41
1:D:2919:GLY:O	1:D:2921:PRO:HD3	2.21	0.41
1:E:336:TRP:HE3	1:E:339:GLU:OE2	2.03	0.41
1:E:970:ILE:O	1:E:974:THR:HG22	2.20	0.41
1:E:1611:ILE:HG23	1:E:1624:THR:HA	2.02	0.41
1:E:2013:LEU:HD23	1:E:2013:LEU:HA	1.87	0.41
1:E:2294:SER:HB3	1:E:2310:LYS:HB2	2.02	0.41
1:E:2552:ASP:OD1	1:E:2552:ASP:N	2.43	0.41
1:E:2584:ASP:O	1:E:2586:GLU:N	2.53	0.41
1:E:2737:VAL:HG11	1:B:2715:PRO:HD2	2.02	0.41
1:E:2808:ARG:HH21	1:E:2901:PRO:HD3	1.85	0.41
1:F:50:GLY:O	1:F:53:SER:OG	2.36	0.41
1:F:160:GLN:HA	1:F:329:ILE:HD13	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1233:PRO:HB2	1:F:1236:MET:HE2	2.01	0.41
1:F:1656:LYS:N	1:F:1657:PRO:HD2	2.35	0.41
1:F:1672:GLN:HE21	1:F:1672:GLN:HB3	1.58	0.41
1:F:2297:ARG:HH22	1:F:2391:LYS:HZ3	1.67	0.41
1:F:2584:ASP:O	1:F:2586:GLU:N	2.53	0.41
1:F:2620:THR:OG1	1:F:2791:ARG:NH2	2.53	0.41
1:F:2702:GLY:HA3	1:A:2557:LEU:CG	2.45	0.41
1:A:266:ALA:O	1:A:270:GLU:HG3	2.20	0.41
1:A:618:PRO:HB3	1:A:915:PHE:HA	2.03	0.41
1:A:669:LYS:O	1:A:682:ASN:HB3	2.20	0.41
1:A:928:ALA:HB1	1:A:931:VAL:CB	2.50	0.41
1:A:1275:ALA:HB2	1:A:1311:PHE:CE2	2.55	0.41
1:A:2296:ASN:ND2	1:A:2395:THR:HG21	2.34	0.41
1:A:2786:ASP:OD2	1:A:2789:MET:HG2	2.19	0.41
1:A:2961:LEU:HD22	1:A:2976:TRP:HD1	1.85	0.41
1:B:78:GLU:HB2	1:B:176:VAL:HG21	2.01	0.41
1:B:266:ALA:O	1:B:270:GLU:HG3	2.20	0.41
1:B:436:THR:OG1	1:B:437:PRO:HD3	2.19	0.41
1:B:475:LEU:HA	1:B:475:LEU:HD23	1.79	0.41
1:B:1460:ALA:O	1:B:1464:VAL:HG22	2.20	0.41
1:B:1491:ASP:HB2	1:B:1495:ARG:HB2	2.02	0.41
1:B:2141:VAL:HG22	1:B:2238:PHE:HD2	1.85	0.41
1:B:2620:THR:OG1	1:B:2791:ARG:NH2	2.53	0.41
1:B:2892:HIS:HA	1:B:2942:GLN:HE22	1.85	0.41
1:C:544:ILE:O	1:C:546:HIS:N	2.40	0.41
1:C:580:ARG:HD3	1:C:896:ALA:HB3	2.01	0.41
1:C:1008:VAL:CG2	1:C:1008:VAL:O	2.68	0.41
1:C:1070:VAL:N	1:C:1152:PHE:O	2.51	0.41
1:C:1106:CYS:SG	1:C:1174:VAL:HG11	2.60	0.41
1:C:2492:VAL:HG12	1:C:2526:ILE:HG22	2.02	0.41
1:C:2695:MET:HG3	1:C:2696:TYR:N	2.34	0.41
1:C:2805:ASP:OD2	1:C:2807:ARG:HB2	2.20	0.41
1:D:1687:PHE:CE1	1:D:1723:GLU:HG2	2.55	0.41
1:D:2620:THR:OG1	1:D:2791:ARG:NH2	2.53	0.41
1:D:2710:LEU:HD12	1:D:2713:VAL:HG21	2.03	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:202:GLY:O	1:E:289:PRO:HD2	2.21	0.41
1:E:793:ARG:HH12	1:E:2523:GLU:CD	2.24	0.41
1:E:795:HIS:NE2	1:E:797:GLN:HB2	2.35	0.41
1:E:931:VAL:HG13	1:E:934:LEU:N	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1462:ALA:HB2	1:E:1468:TYR:CE1	2.56	0.41
1:E:1533:VAL:N	1:E:1543:ALA:O	2.52	0.41
1:E:2300:PHE:HZ	1:E:2398:LEU:HB3	1.85	0.41
1:E:2557:LEU:CG	1:B:2702:GLY:HA3	2.46	0.41
1:F:756:LEU:HD13	1:F:859:PHE:CD2	2.55	0.41
1:F:1038:ALA:N	1:F:1127:GLU:H	2.19	0.41
1:F:1460:ALA:O	1:F:1464:VAL:HG22	2.20	0.41
1:F:1611:ILE:HG23	1:F:1624:THR:HA	2.02	0.41
1:F:1703:ILE:HG22	1:F:1704:GLY:H	1.85	0.41
1:F:2352:ILE:HG21	1:F:2412:ALA:CB	2.51	0.41
1:A:479:LEU:HD21	1:A:485:ILE:HD11	2.02	0.41
1:A:2449:GLU:O	1:A:2449:GLU:CG	2.68	0.41
1:B:957:LEU:O	1:B:1034:GLU:HB2	2.20	0.41
1:B:970:ILE:O	1:B:974:THR:HG22	2.20	0.41
1:C:587:TRP:CZ2	1:C:694:ASP:OD2	2.74	0.41
1:C:1129:LEU:HD12	1:C:1129:LEU:HA	1.92	0.41
1:D:669:LYS:O	1:D:682:ASN:HB3	2.20	0.41
1:D:928:ALA:HB1	1:D:931:VAL:CB	2.50	0.41
1:D:2096:VAL:CG1	1:D:2097:ALA:N	2.82	0.41
1:D:2141:VAL:HG22	1:D:2238:PHE:CD2	2.56	0.41
1:D:2300:PHE:HZ	1:D:2398:LEU:HB3	1.85	0.41
1:D:2530:TYR:O	1:D:2533:ALA:N	2.52	0.41
1:D:2558:LEU:HB2	1:C:2701:LEU:HD23	2.02	0.41
1:D:2584:ASP:O	1:D:2586:GLU:N	2.53	0.41
1:D:2748:GLU:HG2	1:C:2753:LYS:HZ1	1.85	0.41
1:D:2961:LEU:HD22	1:D:2976:TRP:HD1	1.85	0.41
1:E:107:LEU:HD13	1:E:113:VAL:HB	2.02	0.41
1:E:233:LEU:HB3	1:E:251:THR:OG1	2.21	0.41
1:E:369:ARG:HD2	1:E:369:ARG:HA	1.85	0.41
1:E:436:THR:OG1	1:E:437:PRO:HD3	2.19	0.41
1:E:618:PRO:HB3	1:E:915:PHE:HA	2.02	0.41
1:E:709:LEU:HD21	1:E:872:ARG:NE	2.34	0.41
1:E:1106:CYS:SG	1:E:1174:VAL:HG11	2.60	0.41
1:E:1380:ALA:HB1	1:E:1474:LEU:CD1	2.50	0.41
1:E:1412:HIS:CD2	1:E:1413:PRO:HD2	2.49	0.41
1:E:2014:SER:H	1:F:2591:ARG:NH1	2.19	0.41
1:E:2503:LYS:HG3	1:E:2513:TYR:HB2	2.02	0.41
1:F:45:ALA:O	1:F:351:ILE:HA	2.20	0.41
1:F:233:LEU:HB3	1:F:251:THR:OG1	2.21	0.41
1:F:1035:VAL:HB	1:F:1042:MET:HG2	2.03	0.41
1:F:2354:SER:O	1:F:2358:GLU:HG3	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2449:GLU:O	1:F:2449:GLU:CG	2.68	0.41
1:F:2737:VAL:HG23	1:A:2735:HIS:O	2.21	0.41
1:A:160:GLN:HA	1:A:329:ILE:HD13	2.02	0.41
1:A:1133:VAL:N	1:A:1193:ALA:O	2.48	0.41
1:A:1491:ASP:HB2	1:A:1495:ARG:HB2	2.02	0.41
1:A:2294:SER:HB3	1:A:2310:LYS:HB2	2.02	0.41
1:A:2354:SER:O	1:A:2358:GLU:HG3	2.20	0.41
1:A:2503:LYS:HG3	1:A:2513:TYR:HB2	2.02	0.41
1:B:360:LEU:HA	1:B:363:LEU:HB3	2.03	0.41
1:B:374:GLY:C	1:B:375:ILE:HG13	2.41	0.41
1:B:1660:LEU:HD23	1:B:1660:LEU:HA	1.85	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:3080:ARG:CG	1:B:3080:ARG:NH1	2.72	0.41
1:C:202:GLY:O	1:C:289:PRO:HD2	2.21	0.41
1:C:417:LEU:HD21	1:C:625:LEU:HD21	2.02	0.41
1:C:928:ALA:HB1	1:C:931:VAL:CB	2.50	0.41
1:C:957:LEU:O	1:C:1034:GLU:HB2	2.20	0.41
1:C:1275:ALA:O	1:C:1279:VAL:HG23	2.20	0.41
1:C:1400:PRO:O	1:C:1415:GLY:HA2	2.21	0.41
1:C:1634:ARG:NH1	1:C:1639:ALA:H	2.11	0.41
1:C:1706:LYS:HA	1:C:1735:GLU:HG3	2.03	0.41
1:C:2452:ASP:CG	1:C:2453:LEU:H	2.24	0.41
1:C:2584:ASP:O	1:C:2586:GLU:N	2.53	0.41
1:D:1237:ARG:HG2	1:D:1237:ARG:HH11	1.86	0.41
1:D:1412:HIS:HD2	1:D:1413:PRO:CD	2.31	0.41
1:D:1706:LYS:HA	1:D:1735:GLU:HG3	2.03	0.41
1:D:2492:VAL:HG12	1:D:2526:ILE:HG22	2.02	0.41
1:D:2558:LEU:HD11	1:C:2610:ARG:HD2	2.01	0.41
1:D:2591:ARG:NH1	1:F:2014:SER:H	2.18	0.41
1:D:2701:LEU:HD23	1:C:2558:LEU:HB2	2.02	0.41
1:D:2735:HIS:O	1:C:2737:VAL:HG23	2.21	0.41
1:E:266:ALA:O	1:E:270:GLU:HG3	2.20	0.41
1:E:393:VAL:O	1:E:395:GLU:N	2.52	0.41
1:E:417:LEU:HD21	1:E:625:LEU:HD21	2.02	0.41
1:E:816:LEU:HD23	1:E:816:LEU:HA	1.83	0.41
1:E:1095:LEU:HD23	1:E:1098:VAL:HA	2.02	0.41
1:E:1491:ASP:HB2	1:E:1495:ARG:HB2	2.02	0.41
1:E:2134:TYR:HB3	1:E:2189:PHE:HD2	1.85	0.41
1:E:2334:HIS:CD2	1:E:2391:LYS:HG3	2.50	0.41
1:E:2846:ALA:O	1:E:2859:GLY:HA3	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:587:TRP:CZ2	1:F:694:ASP:OD2	2.74	0.41
1:F:1662:ARG:HG3	1:F:1663:LYS:N	2.34	0.41
1:F:2134:TYR:HB3	1:F:2189:PHE:HD2	1.85	0.41
1:F:2483:VAL:HG13	1:F:2954:VAL:HG11	2.03	0.41
1:F:2919:GLY:O	1:F:2921:PRO:HD3	2.21	0.41
1:A:233:LEU:HB3	1:A:251:THR:OG1	2.21	0.41
1:A:374:GLY:C	1:A:375:ILE:HG13	2.41	0.41
1:A:594:LEU:O	1:A:598:TYR:HB2	2.21	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:2889:ILE:HB	1:A:2924:ILE:HG12	2.01	0.41
1:B:709:LEU:HD11	1:B:872:ARG:CZ	2.51	0.41
1:B:2205:ASP:O	1:B:2209:LEU:HB2	2.21	0.41
1:B:2891:LYS:HB2	1:B:2893:ASP:OD2	2.21	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:618:PRO:HB3	1:C:915:PHE:HA	2.02	0.41
1:C:795:HIS:NE2	1:C:797:GLN:HB2	2.35	0.41
1:C:1095:LEU:HD23	1:C:1098:VAL:HA	2.03	0.41
1:C:2013:LEU:HD23	1:C:2013:LEU:HA	1.87	0.41
1:C:2710:LEU:HD12	1:C:2713:VAL:HG21	2.03	0.41
1:C:2808:ARG:HH21	1:C:2901:PRO:HD3	1.85	0.41
1:D:559:SER:O	1:D:563:ILE:HG12	2.20	0.41
1:D:756:LEU:HD13	1:D:859:PHE:CD2	2.55	0.41
1:D:1400:PRO:O	1:D:1415:GLY:HA2	2.21	0.41
1:D:1460:ALA:O	1:D:1464:VAL:HG22	2.20	0.41
1:D:2483:VAL:HG13	1:D:2954:VAL:HG11	2.03	0.41
1:D:2563:LEU:HD21	1:D:2567:PHE:HB2	2.02	0.41
1:D:2610:ARG:HD2	1:C:2558:LEU:HD11	2.02	0.41
1:E:2449:GLU:O	1:E:2449:GLU:CG	2.68	0.41
1:F:436:THR:HG22	1:F:460:GLY:HA3	2.03	0.41
1:F:1275:ALA:O	1:F:1279:VAL:HG23	2.20	0.41
1:F:2294:SER:HB3	1:F:2310:LYS:HB2	2.02	0.41
1:F:2611:VAL:HA	1:F:2612:PRO:HD3	1.86	0.41
1:F:2701:LEU:HD23	1:A:2558:LEU:HB2	2.02	0.41
1:F:2891:LYS:HB2	1:F:2893:ASP:OD2	2.21	0.41
1:A:107:LEU:HD13	1:A:113:VAL:HB	2.02	0.41
1:A:417:LEU:HD21	1:A:625:LEU:HD21	2.02	0.41
1:A:585:HIS:HB3	1:A:694:ASP:HB2	2.03	0.41
1:A:954:PRO:O	1:A:965:ASN:N	2.52	0.41
1:A:2098:THR:HG23	1:A:2099:GLN:N	2.36	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2141:VAL:HG22	1:A:2238:PHE:HD2	1.85	0.41
1:A:2892:HIS:HA	1:A:2942:GLN:HE22	1.85	0.41
1:B:2134:TYR:HB3	1:B:2189:PHE:HD2	1.85	0.41
1:B:2300:PHE:HZ	1:B:2398:LEU:HB3	1.85	0.41
1:B:2444:PRO:HB2	1:B:2988:PRO:HB3	2.01	0.41
1:B:2770:LEU:CB	1:B:2815:GLN:HB3	2.51	0.41
1:C:42:GLU:HA	1:C:43:PRO:HD3	1.91	0.41
1:C:1084:THR:CG2	1:C:1274:ALA:HA	2.49	0.41
1:C:1120:GLU:HA	1:C:1125:VAL:CG2	2.50	0.41
1:C:2205:ASP:O	1:C:2209:LEU:HB2	2.21	0.41
1:C:2770:LEU:CB	1:C:2815:GLN:HB3	2.51	0.41
1:C:2891:LYS:NZ	1:C:2903:GLU:HB3	2.35	0.41
1:D:594:LEU:O	1:D:598:TYR:HB2	2.21	0.41
1:D:795:HIS:NE2	1:D:797:GLN:HB2	2.35	0.41
1:D:2405:MET:O	1:D:2409:ALA:HB3	2.21	0.41
1:E:78:GLU:HB2	1:E:176:VAL:HG21	2.01	0.41
1:E:160:GLN:HA	1:E:329:ILE:HD13	2.02	0.41
1:E:278:ARG:HD2	1:E:674:TRP:CE3	2.56	0.41
1:E:1099:PRO:HB2	1:E:1295:TRP:HE1	1.86	0.41
1:E:2710:LEU:HD12	1:E:2713:VAL:HG21	2.03	0.41
1:E:2800:PHE:CZ	1:E:2812:LEU:HD13	2.55	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	2.21	0.41
1:F:438:THR:HA	1:F:880:HIS:CE1	2.51	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:709:LEU:HD11	1:F:872:ARG:CZ	2.51	0.41
1:F:795:HIS:NE2	1:F:797:GLN:HB2	2.35	0.41
1:F:1120:GLU:HA	1:F:1125:VAL:CG2	2.50	0.41
1:F:1291:LYS:HZ2	1:F:1346:PRO:N	2.17	0.41
1:F:1491:ASP:HB2	1:F:1495:ARG:HB2	2.02	0.41
1:F:1660:LEU:HD23	1:F:1660:LEU:HA	1.86	0.41
1:A:1120:GLU:HA	1:A:1125:VAL:CG2	2.50	0.41
1:A:1462:ALA:HB2	1:A:1468:TYR:CE1	2.56	0.41
1:B:928:ALA:HB1	1:B:931:VAL:CB	2.50	0.41
1:B:1095:LEU:HD23	1:B:1098:VAL:HA	2.02	0.41
1:C:81:LEU:HD23	1:C:81:LEU:HA	1.88	0.41
1:C:756:LEU:HD13	1:C:859:PHE:CD2	2.55	0.41
1:C:2096:VAL:CG2	1:C:2097:ALA:N	2.82	0.41
1:C:2134:TYR:HB3	1:C:2189:PHE:HD2	1.85	0.41
1:C:2286:ARG:HD3	1:C:2331:SER:OG	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2889:ILE:HG13	1:C:2922:LEU:HD13	2.02	0.41
1:C:2891:LYS:HB2	1:C:2893:ASP:OD2	2.21	0.41
1:D:436:THR:HG22	1:D:460:GLY:HA3	2.03	0.41
1:D:587:TRP:CZ2	1:D:694:ASP:OD2	2.74	0.41
1:D:656:THR:OG1	1:D:880:HIS:ND1	2.35	0.41
1:D:1087:PHE:HD2	1:E:117:LYS:HZ1	1.68	0.41
1:D:1353:PRO:HB2	1:D:1707:SER:HB2	2.03	0.41
1:D:1533:VAL:N	1:D:1543:ALA:O	2.52	0.41
1:D:1619:VAL:HA	1:D:1620:PRO:HD2	1.81	0.41
1:D:2014:SER:H	1:E:2591:ARG:NH1	2.19	0.41
1:D:2098:THR:HG23	1:D:2099:GLN:N	2.36	0.41
1:D:2205:ASP:O	1:D:2209:LEU:HB2	2.21	0.41
1:D:2422:GLU:O	1:D:2422:GLU:CG	2.69	0.41
1:D:2697:HIS:CD2	1:C:2700:LEU:HD22	2.43	0.41
1:D:2737:VAL:HG23	1:C:2735:HIS:O	2.21	0.41
1:D:3062:HIS:H	1:D:3066:GLU:HG3	1.86	0.41
1:E:594:LEU:O	1:E:598:TYR:HB2	2.21	0.41
1:E:669:LYS:O	1:E:682:ASN:HB3	2.20	0.41
1:E:1133:VAL:O	1:E:1193:ALA:N	2.42	0.41
1:E:1706:LYS:HA	1:E:1735:GLU:HG3	2.02	0.41
1:E:2010:GLN:OE1	1:E:2013:LEU:HD11	2.21	0.41
1:E:2286:ARG:HD3	1:E:2331:SER:OG	2.20	0.41
1:E:2483:VAL:HG13	1:E:2954:VAL:HG11	2.03	0.41
1:E:2647:VAL:HA	1:E:2650:TRP:CD1	2.53	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:E:2891:LYS:NZ	1:E:2903:GLU:HB3	2.35	0.41
1:E:2892:HIS:HA	1:E:2942:GLN:HE22	1.85	0.41
1:E:2978:ARG:HG3	1:E:2979:GLU:HG3	2.03	0.41
1:F:180:ALA:O	1:F:184:LEU:HG	2.21	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:2200:MET:HB3	1:F:2200:MET:HE3	1.96	0.41
1:F:2286:ARG:HD3	1:F:2331:SER:OG	2.20	0.41
1:F:2405:MET:O	1:F:2409:ALA:HB3	2.21	0.41
1:F:2563:LEU:HD21	1:F:2567:PHE:HB2	2.02	0.41
1:F:2892:HIS:HA	1:F:2942:GLN:HE22	1.85	0.41
1:F:3057:ASP:OD1	1:F:3057:ASP:N	2.54	0.41
1:A:78:GLU:HB2	1:A:176:VAL:HG21	2.01	0.41
1:A:358:ASP:OD2	1:A:361:THR:HB	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:436:THR:HG22	1:A:460:GLY:HA3	2.03	0.41
1:A:793:ARG:HH12	1:A:2523:GLU:CD	2.24	0.41
1:A:795:HIS:NE2	1:A:797:GLN:HB2	2.35	0.41
1:A:1087:PHE:CD1	1:B:198:ILE:HG23	2.56	0.41
1:A:1099:PRO:HB2	1:A:1295:TRP:HE1	1.86	0.41
1:A:1228:VAL:HB	1:A:1311:PHE:HB2	2.02	0.41
1:A:2134:TYR:HB3	1:A:2189:PHE:HD2	1.85	0.41
1:A:2452:ASP:CG	1:A:2453:LEU:H	2.23	0.41
1:A:2584:ASP:O	1:A:2586:GLU:N	2.53	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:A:2845:PHE:N	1:A:3003:SER:O	2.46	0.41
1:A:2919:GLY:O	1:A:2921:PRO:HD3	2.21	0.41
1:B:358:ASP:OD2	1:B:361:THR:HB	2.21	0.41
1:B:417:LEU:HD21	1:B:625:LEU:HD21	2.02	0.41
1:B:559:SER:O	1:B:563:ILE:HG12	2.20	0.41
1:B:747:LEU:O	1:B:751:ARG:N	2.44	0.41
1:B:954:PRO:O	1:B:965:ASN:N	2.52	0.41
1:B:1087:PHE:CD1	1:C:198:ILE:HG23	2.56	0.41
1:B:1233:PRO:HB2	1:B:1236:MET:HE2	2.03	0.41
1:B:2055:VAL:HG22	1:B:2194:TRP:CD1	2.55	0.41
1:B:2405:MET:O	1:B:2409:ALA:HB3	2.21	0.41
1:B:2889:ILE:HB	1:B:2924:ILE:HG12	2.01	0.41
1:B:3062:HIS:H	1:B:3066:GLU:HG3	1.86	0.41
1:C:336:TRP:HE3	1:C:339:GLU:OE2	2.03	0.41
1:C:488:ASN:OD1	1:C:523:SER:OG	2.34	0.41
1:C:559:SER:O	1:C:563:ILE:HG12	2.20	0.41
1:C:709:LEU:HD11	1:C:872:ARG:CZ	2.51	0.41
1:C:1133:VAL:N	1:C:1193:ALA:O	2.48	0.41
1:C:1460:ALA:O	1:C:1464:VAL:HG22	2.20	0.41
1:C:1637:VAL:HA	1:C:1638:PRO:HD2	1.91	0.41
1:C:1687:PHE:CE1	1:C:1723:GLU:HG2	2.55	0.41
1:C:1719:LEU:O	1:C:1723:GLU:HB3	2.21	0.41
1:C:2098:THR:HG23	1:C:2099:GLN:N	2.36	0.41
1:C:2405:MET:O	1:C:2409:ALA:HB3	2.21	0.41
1:C:2530:TYR:O	1:C:2533:ALA:N	2.52	0.41
1:C:2618:SER:HB3	1:C:2786:ASP:OD1	2.21	0.41
1:C:2647:VAL:HA	1:C:2650:TRP:CD1	2.53	0.41
1:C:2961:LEU:HD22	1:C:2976:TRP:HD1	1.85	0.41
1:D:709:LEU:HD11	1:D:872:ARG:CZ	2.51	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:795:HIS:HE2	1:D:797:GLN:HB2	1.86	0.41
1:D:1087:PHE:CD1	1:E:198:ILE:HG23	2.56	0.41
1:D:2010:GLN:OE1	1:D:2013:LEU:HD11	2.21	0.41
1:D:2715:PRO:HD2	1:C:2737:VAL:HG11	2.02	0.41
1:E:585:HIS:HB3	1:E:694:ASP:HB2	2.03	0.41
1:E:1237:ARG:HH11	1:E:1237:ARG:HG2	1.86	0.41
1:F:417:LEU:HD21	1:F:625:LEU:HD21	2.02	0.41
1:F:618:PRO:HB3	1:F:915:PHE:HA	2.02	0.41
1:F:795:HIS:HE2	1:F:797:GLN:HB2	1.86	0.41
1:F:959:ALA:CB	1:F:1127:GLU:C	2.89	0.41
1:F:1687:PHE:CE1	1:F:1723:GLU:HG2	2.55	0.41
1:F:1702:GLU:OE1	1:F:1711:VAL:HG22	2.21	0.41
1:F:2205:ASP:O	1:F:2209:LEU:HB2	2.21	0.41
1:F:2618:SER:HB3	1:F:2786:ASP:OD1	2.21	0.41
1:F:3062:HIS:H	1:F:3066:GLU:CG	2.34	0.41
1:A:202:GLY:O	1:A:289:PRO:HD2	2.21	0.41
1:A:587:TRP:CZ2	1:A:694:ASP:OD2	2.74	0.41
1:A:957:LEU:O	1:A:1034:GLU:HB2	2.20	0.41
1:A:1986:LEU:HA	1:A:1989:PHE:CD2	2.56	0.41
1:A:2014:SER:H	1:B:2591:ARG:NH1	2.19	0.41
1:A:2212:TRP:O	1:A:2229:LYS:HB3	2.21	0.41
1:A:2286:ARG:HD3	1:A:2331:SER:OG	2.20	0.41
1:A:2422:GLU:O	1:A:2422:GLU:CG	2.69	0.41
1:B:278:ARG:HD2	1:B:674:TRP:CE3	2.56	0.41
1:B:618:PRO:HB3	1:B:915:PHE:HA	2.02	0.41
1:B:795:HIS:HE2	1:B:797:GLN:HB2	1.86	0.41
1:B:1400:PRO:O	1:B:1415:GLY:HA2	2.21	0.41
1:B:1719:LEU:O	1:B:1723:GLU:HB3	2.21	0.41
1:B:2212:TRP:O	1:B:2229:LYS:HB3	2.21	0.41
1:C:1533:VAL:N	1:C:1543:ALA:O	2.52	0.41
1:C:2212:TRP:O	1:C:2229:LYS:HB3	2.21	0.41
1:C:2563:LEU:HD21	1:C:2567:PHE:HB2	2.02	0.41
1:C:2978:ARG:HG3	1:C:2979:GLU:HG3	2.03	0.41
1:C:3062:HIS:H	1:C:3066:GLU:HG3	1.86	0.41
1:D:488:ASN:OD1	1:D:523:SER:OG	2.34	0.40
1:D:585:HIS:HD2	1:D:586:SER:H	1.62	0.40
1:E:336:TRP:HE1	1:E:364:THR:HG22	1.86	0.40
1:E:587:TRP:CZ2	1:E:694:ASP:OD2	2.74	0.40
1:E:709:LEU:HD11	1:E:872:ARG:CZ	2.51	0.40
1:E:756:LEU:HD13	1:E:859:PHE:CD2	2.55	0.40
1:E:1504:ARG:HA	1:E:1505:PRO:HD2	1.94	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2141:VAL:HG22	1:E:2238:PHE:CD2	2.56	0.40
1:E:2715:PRO:HD2	1:B:2737:VAL:HG11	2.02	0.40
1:E:2735:HIS:O	1:B:2737:VAL:HG23	2.21	0.40
1:F:1462:ALA:HB2	1:F:1468:TYR:CE1	2.56	0.40
1:F:2503:LYS:HG3	1:F:2513:TYR:HB2	2.02	0.40
1:F:2735:HIS:O	1:A:2737:VAL:HG23	2.21	0.40
1:A:163:LEU:HD21	1:A:181:LEU:HB3	2.04	0.40
1:A:180:ALA:O	1:A:184:LEU:HG	2.21	0.40
1:A:487:PHE:O	1:A:521:VAL:N	2.51	0.40
1:A:2889:ILE:HD12	1:A:2993:LEU:HD23	2.03	0.40
1:B:793:ARG:HH12	1:B:2523:GLU:CD	2.24	0.40
1:B:1017:ILE:HG12	1:B:1045:VAL:HG11	2.03	0.40
1:B:1099:PRO:HB2	1:B:1295:TRP:HE1	1.86	0.40
1:B:1237:ARG:HG2	1:B:1237:ARG:HH11	1.86	0.40
1:B:1702:GLU:OE1	1:B:1711:VAL:HG22	2.22	0.40
1:B:2808:ARG:HH21	1:B:2901:PRO:HD3	1.85	0.40
1:C:133:GLN:O	1:C:137:VAL:HG23	2.21	0.40
1:C:1353:PRO:HB2	1:C:1707:SER:HB2	2.04	0.40
1:C:1491:ASP:HB2	1:C:1495:ARG:HB2	2.02	0.40
1:C:1606:ASP:HA	1:C:1607:PRO:HD3	1.95	0.40
1:C:2346:MET:O	1:C:2349:ASN:N	2.55	0.40
1:C:2672:TRP:CZ3	1:C:2830:LYS:HG2	2.56	0.40
1:C:2889:ILE:HD12	1:C:2993:LEU:HD23	2.03	0.40
1:D:618:PRO:HB3	1:D:915:PHE:HA	2.02	0.40
1:D:793:ARG:HH12	1:D:2523:GLU:CD	2.24	0.40
1:D:1008:VAL:O	1:D:1008:VAL:CG1	2.67	0.40
1:D:1719:LEU:O	1:D:1723:GLU:HB3	2.21	0.40
1:E:273:ARG:HD2	1:E:282:VAL:CG1	2.51	0.40
1:E:358:ASP:OD2	1:E:361:THR:HB	2.21	0.40
1:E:374:GLY:C	1:E:375:ILE:HG13	2.41	0.40
1:E:1400:PRO:O	1:E:1415:GLY:HA2	2.21	0.40
1:E:2492:VAL:HG12	1:E:2526:ILE:HG22	2.02	0.40
1:E:2737:VAL:HG23	1:B:2735:HIS:O	2.21	0.40
1:E:2865:ARG:HD2	1:B:2674:HIS:NE2	2.37	0.40
1:E:2961:LEU:HD22	1:E:2976:TRP:HD1	1.85	0.40
1:F:1237:ARG:HG2	1:F:1237:ARG:HH11	1.86	0.40
1:F:1271:LEU:HB3	1:F:1337:MET:SD	2.62	0.40
1:F:1719:LEU:O	1:F:1723:GLU:HB3	2.22	0.40
1:F:2141:VAL:HG22	1:F:2238:PHE:CD2	2.56	0.40
1:A:142:ARG:HD3	1:A:142:ARG:HA	1.91	0.40
1:A:1702:GLU:OE1	1:A:1711:VAL:HG22	2.22	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:A:2483:VAL:HG13	1:A:2954:VAL:HG11	2.03	0.40
1:A:2672:TRP:CZ3	1:A:2830:LYS:HG2	2.56	0.40
1:B:273:ARG:HD2	1:B:282:VAL:CG1	2.51	0.40
1:B:1008:VAL:CG2	1:B:1008:VAL:O	2.67	0.40
1:B:1095:LEU:HD13	1:B:1289:PRO:CB	2.52	0.40
1:C:793:ARG:HH12	1:C:2523:GLU:CD	2.24	0.40
1:C:1462:ALA:HB2	1:C:1468:TYR:CE1	2.56	0.40
1:C:2831:MET:HE2	1:C:2831:MET:HB3	1.91	0.40
1:C:2919:GLY:O	1:C:2921:PRO:HD3	2.21	0.40
1:D:408:VAL:HG23	1:D:418:GLU:HB2	2.03	0.40
1:D:1616:PRO:HG2	1:D:1619:VAL:HB	2.04	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
1:D:2978:ARG:HG3	1:D:2979:GLU:HG3	2.03	0.40
1:E:278:ARG:HD2	1:E:674:TRP:HE3	1.87	0.40
1:E:360:LEU:HA	1:E:363:LEU:HB3	2.03	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	2.62	0.40
1:E:2555:SER:HA	1:E:2556:PRO:HD2	1.85	0.40
1:E:2697:HIS:CD2	1:B:2700:LEU:HD22	2.43	0.40
1:F:360:LEU:HA	1:F:363:LEU:HB3	2.03	0.40
1:F:428:SER:HA	1:F:429:PRO:HD3	1.94	0.40
1:F:839:HIS:HA	1:F:840:PRO:HD3	1.99	0.40
1:F:956:VAL:HA	1:F:1034:GLU:OE1	2.20	0.40
1:F:1616:PRO:HG2	1:F:1619:VAL:HB	2.04	0.40
1:F:2737:VAL:HG11	1:A:2715:PRO:HD2	2.02	0.40
1:F:3062:HIS:H	1:F:3066:GLU:HG3	1.86	0.40
1:A:381:ARG:O	1:A:385:ARG:HG3	2.22	0.40
1:A:794:LEU:HD12	1:A:830:TYR:HB3	2.04	0.40
1:A:1400:PRO:O	1:A:1415:GLY:HA2	2.21	0.40
1:A:1706:LYS:HA	1:A:1735:GLU:HG3	2.03	0.40
1:A:2492:VAL:HG12	1:A:2526:ILE:HG22	2.02	0.40
1:A:2503:LYS:HE2	1:A:2514:ASP:O	2.22	0.40
1:A:2557:LEU:HD23	1:A:2558:LEU:N	2.37	0.40
1:B:587:TRP:CZ2	1:B:694:ASP:OD2	2.74	0.40
1:B:594:LEU:O	1:B:598:TYR:HB2	2.21	0.40
1:B:1070:VAL:N	1:B:1152:PHE:O	2.52	0.40
1:B:1399:ASN:HA	1:B:1400:PRO:HD3	1.86	0.40
1:B:1598:GLU:HG2	1:B:1666:ILE:HG21	2.04	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2422:GLU:O	1:B:2422:GLU:CG	2.69	0.40
1:B:2961:LEU:HD13	1:B:2976:TRP:CD1	2.57	0.40
1:C:233:LEU:HB3	1:C:251:THR:OG1	2.21	0.40
1:C:278:ARG:HD2	1:C:674:TRP:HE3	1.87	0.40
1:C:1611:ILE:HG23	1:C:1624:THR:HA	2.02	0.40
1:C:2141:VAL:HG22	1:C:2238:PHE:CD2	2.56	0.40
1:C:3057:ASP:N	1:C:3057:ASP:OD1	2.54	0.40
1:D:544:ILE:C	1:D:546:HIS:H	2.22	0.40
1:D:1462:ALA:HB2	1:D:1468:TYR:CE1	2.56	0.40
1:D:1580:PRO:O	1:D:1583:SER:OG	2.23	0.40
1:D:1656:LYS:HE2	1:D:1660:LEU:HD21	2.03	0.40
1:D:3057:ASP:OD1	1:D:3057:ASP:N	2.54	0.40
1:E:163:LEU:HD21	1:E:181:LEU:HB3	2.04	0.40
1:E:794:LEU:HD12	1:E:830:TYR:HB3	2.04	0.40
1:E:1719:LEU:O	1:E:1723:GLU:HB3	2.21	0.40
1:E:2098:THR:HG23	1:E:2099:GLN:N	2.36	0.40
1:E:2495:LEU:HD23	1:E:2495:LEU:HA	1.89	0.40
1:E:2557:LEU:HD23	1:E:2558:LEU:N	2.37	0.40
1:E:2574:GLU:HG3	1:E:2599:TRP:CE2	2.57	0.40
1:F:336:TRP:HE1	1:F:364:THR:HG22	1.86	0.40
1:F:959:ALA:CB	1:F:1127:GLU:N	2.74	0.40
1:F:1095:LEU:HD13	1:F:1289:PRO:CB	2.52	0.40
1:F:1400:PRO:O	1:F:1415:GLY:HA2	2.21	0.40
1:F:2010:GLN:OE1	1:F:2013:LEU:HD11	2.21	0.40
1:F:2212:TRP:O	1:F:2229:LYS:HB3	2.21	0.40
1:F:2346:MET:O	1:F:2349:ASN:N	2.55	0.40
1:F:2352:ILE:HG21	1:F:2412:ALA:HB2	2.04	0.40
1:F:2422:GLU:O	1:F:2422:GLU:CG	2.69	0.40
1:F:2503:LYS:HE2	1:F:2514:ASP:O	2.22	0.40
1:F:2891:LYS:HZ1	1:F:2904:THR:N	2.19	0.40
1:A:133:GLN:O	1:A:137:VAL:HG23	2.21	0.40
1:A:198:ILE:HG23	1:C:1087:PHE:CD1	2.56	0.40
1:A:260:LEU:HD13	1:C:1725:SER:CB	2.51	0.40
1:A:1237:ARG:HH11	1:A:1237:ARG:HG2	1.86	0.40
1:A:1504:ARG:HA	1:A:1505:PRO:HD2	1.93	0.40
1:A:1535:PHE:O	1:A:1679:TRP:N	2.48	0.40
1:A:2299:MET:H	1:A:2299:MET:HG2	1.68	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:233:LEU:HB3	1:B:251:THR:OG1	2.21	0.40
1:B:1604:ASP:N	1:B:1604:ASP:OD1	2.55	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2346:MET:O	1:B:2349:ASN:N	2.55	0.40
1:B:2618:SER:HB3	1:B:2786:ASP:OD1	2.21	0.40
1:B:2647:VAL:HA	1:B:2650:TRP:CD1	2.53	0.40
1:B:2672:TRP:CZ3	1:B:2830:LYS:HG2	2.56	0.40
1:B:3062:HIS:H	1:B:3066:GLU:CG	2.34	0.40
1:C:273:ARG:HD2	1:C:282:VAL:CG1	2.51	0.40
1:C:669:LYS:O	1:C:682:ASN:HB3	2.20	0.40
1:C:1095:LEU:HD13	1:C:1289:PRO:CB	2.52	0.40
1:C:1360:LYS:HD2	1:C:1398:ASP:HA	2.04	0.40
1:C:1629:PHE:O	1:C:1633:ILE:HG13	2.22	0.40
1:D:745:THR:HG22	1:D:747:LEU:N	2.37	0.40
1:D:1095:LEU:HD13	1:D:1289:PRO:CB	2.52	0.40
1:D:2697:HIS:HE1	1:D:2773:GLU:OE2	2.05	0.40
1:D:2737:VAL:HG11	1:C:2715:PRO:HD2	2.02	0.40
1:D:2843:GLN:HE22	1:C:2758:LYS:HB3	1.87	0.40
1:E:745:THR:HG22	1:E:747:LEU:N	2.37	0.40
1:E:1535:PHE:O	1:E:1679:TRP:N	2.48	0.40
1:E:1606:ASP:HA	1:E:1607:PRO:HD3	1.95	0.40
1:E:1656:LYS:HE2	1:E:1660:LEU:HD21	2.03	0.40
1:E:2674:HIS:NE2	1:B:2865:ARG:HD2	2.37	0.40
1:E:2891:LYS:HZ1	1:E:2904:THR:N	2.20	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:1133:VAL:N	1:F:1193:ALA:O	2.48	0.40
1:F:1353:PRO:HB2	1:F:1707:SER:HB2	2.03	0.40
1:F:1399:ASN:HA	1:F:1400:PRO:HD3	1.86	0.40
1:F:2211:GLU:O	1:F:2215:THR:OG1	2.39	0.40
1:F:2645:ASP:OD2	1:F:2691:SER:HB2	2.22	0.40
1:F:2672:TRP:CZ3	1:F:2830:LYS:HG2	2.56	0.40
1:F:2770:LEU:CB	1:F:2815:GLN:HB3	2.51	0.40
1:F:2865:ARG:HD2	1:A:2674:HIS:NE2	2.37	0.40
1:F:2961:LEU:HD22	1:F:2976:TRP:HD1	1.85	0.40
1:A:90:LEU:HD22	1:A:93:VAL:HB	2.04	0.40
1:A:278:ARG:HD2	1:A:674:TRP:CE3	2.56	0.40
1:A:336:TRP:HE1	1:A:364:THR:HG22	1.86	0.40
1:A:1070:VAL:N	1:A:1152:PHE:O	2.52	0.40
1:A:1291:LYS:HZ2	1:A:1346:PRO:N	2.20	0.40
1:A:1460:ALA:O	1:A:1464:VAL:HG22	2.20	0.40
1:A:1487:ILE:H	1:A:1487:ILE:HG12	1.75	0.40
1:A:1989:PHE:O	1:A:1992:LYS:HG2	2.22	0.40
1:A:2141:VAL:HG22	1:A:2238:PHE:CD2	2.56	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:163:LEU:HD21	1:B:181:LEU:HB3	2.04	0.40
1:B:202:GLY:O	1:B:289:PRO:HD2	2.21	0.40
1:B:668:THR:HG23	1:B:683:GLY:HA3	2.02	0.40
1:B:1500:LEU:HD23	1:B:1574:VAL:HG21	2.03	0.40
1:B:1616:PRO:HG2	1:B:1619:VAL:HB	2.04	0.40
1:B:2098:THR:HG23	1:B:2099:GLN:N	2.36	0.40
1:B:2530:TYR:O	1:B:2533:ALA:N	2.52	0.40
1:B:2611:VAL:HA	1:B:2612:PRO:HD3	1.86	0.40
1:B:2978:ARG:HG3	1:B:2979:GLU:HG3	2.03	0.40
1:C:180:ALA:O	1:C:184:LEU:HG	2.21	0.40
1:C:436:THR:HG22	1:C:460:GLY:HA3	2.03	0.40
1:C:594:LEU:O	1:C:598:TYR:HB2	2.21	0.40
1:C:795:HIS:HE2	1:C:797:GLN:HB2	1.86	0.40
1:C:2010:GLN:OE1	1:C:2013:LEU:HD11	2.21	0.40
1:C:2422:GLU:O	1:C:2422:GLU:CG	2.69	0.40
1:C:2483:VAL:HG13	1:C:2954:VAL:HG11	2.03	0.40
1:C:2574:GLU:HG3	1:C:2599:TRP:CE2	2.57	0.40
1:C:3062:HIS:H	1:C:3066:GLU:CG	2.34	0.40

There are no symmetry-related clashes.

## 5.3 Torsion angles [i](#)

### 5.3.1 Protein backbone [i](#)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	2818/3089 (91%)	2642 (94%)	157 (6%)	19 (1%)	22	63
1	B	2818/3089 (91%)	2642 (94%)	158 (6%)	18 (1%)	25	66
1	C	2818/3089 (91%)	2642 (94%)	157 (6%)	19 (1%)	22	63
1	D	2448/3089 (79%)	2293 (94%)	138 (6%)	17 (1%)	22	63
1	E	2818/3089 (91%)	2641 (94%)	159 (6%)	18 (1%)	25	66
1	F	2818/3089 (91%)	2630 (93%)	163 (6%)	25 (1%)	17	57

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
All	All	16538/18534 (89%)	15490 (94%)	932 (6%)	116 (1%)	26	63

All (116) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	D	930	PRO
1	D	1148	GLU
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	1041	ALA
1	F	1043	ARG
1	F	1148	GLU
1	F	2428	PRO
1	F	2436	PRO
1	F	2446	PRO
1	F	2448	PRO
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

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	C	2448	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	990	PRO
1	A	1009	PRO
1	B	990	PRO
1	B	1009	PRO
1	C	990	PRO
1	C	1009	PRO
1	D	1724	TYR
1	E	1724	TYR
1	F	1724	TYR
1	A	1724	TYR
1	B	1652	TRP
1	B	1724	TYR
1	C	1724	TYR
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	1034	GLU
1	F	1205	ASP
1	F	1652	TRP
1	F	1705	VAL
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	1705	VAL
1	C	149	ALA
1	C	1205	ASP
1	C	1652	TRP

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Mol	Chain	Res	Type
1	C	1705	VAL
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	1038	ALA
1	F	1221	PRO
1	F	2444	PRO
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	F	959	ALA
1	F	1040	THR
1	D	1068	VAL
1	D	1285	LYS
1	E	1068	VAL
1	E	1285	LYS
1	F	1068	VAL
1	F	1285	LYS
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	2585	PRO
1	F	2585	PRO
1	A	2585	PRO
1	C	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	2096/2402 (87%)	1994 (95%)	102 (5%)	25	50
1	B	2096/2402 (87%)	1993 (95%)	103 (5%)	25	50
1	C	2095/2402 (87%)	1993 (95%)	102 (5%)	25	50
1	D	1808/2402 (75%)	1720 (95%)	88 (5%)	25	50
1	E	2097/2402 (87%)	1995 (95%)	102 (5%)	25	50
1	F	2097/2402 (87%)	1992 (95%)	105 (5%)	24	49
All	All	12289/14412 (85%)	11687 (95%)	602 (5%)	29	50

All (602) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
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
1	D	1105	ARG

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
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
1	D	2620	THR

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
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
1	E	580	ARG

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
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
1	E	2129	PRO

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
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
1	F	232	VAL

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
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	958	TRP
1	F	990	PRO
1	F	1009	PRO
1	F	1021	LEU
1	F	1034	GLU
1	F	1040	THR
1	F	1096	THR
1	F	1105	ARG
1	F	1127	GLU
1	F	1162	THR
1	F	1206	PRO

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	F	1221	PRO
1	F	1253	ARG
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

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	F	2800	PHE
1	F	2802	ARG
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
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
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

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
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
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

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
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
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

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
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
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

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
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
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

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
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
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

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
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
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

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
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
1	C	3076	SER
1	C	3077	THR
1	C	3080	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (136) such sidechains are listed below:

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	D	486	GLN
1	D	540	ASN
1	D	575	HIS
1	D	585	HIS
1	D	606	ASN
1	D	1057	ASN
1	D	1134	HIS
1	D	1276	GLN

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
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	585	HIS
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
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

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
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	1394	HIS
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
1	A	386	ASN
1	A	486	GLN
1	A	540	ASN
1	A	575	HIS
1	A	585	HIS
1	A	1057	ASN
1	A	1134	HIS
1	A	1276	GLN
1	A	1277	HIS
1	A	1355	GLN
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
1	A	2973	HIS
1	B	386	ASN

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	B	486	GLN
1	B	540	ASN
1	B	575	HIS
1	B	585	HIS
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	2296	ASN
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	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
1	C	2815	GLN
1	C	2850	HIS
1	C	2927	GLN

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Mol	Chain	Res	Type
1	C	2942	GLN
1	C	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	E	4000	-	33,33,33	1.07	2 (6%)	48,50,50	1.27	7 (14%)
2	FMN	A	4000	-	33,33,33	1.07	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	7 (14%)
2	FMN	D	4000	-	33,33,33	1.07	2 (6%)	48,50,50	1.27	8 (16%)
2	FMN	B	4000	-	33,33,33	1.08	2 (6%)	48,50,50	1.26	8 (16%)
2	FMN	F	4000	-	33,33,33	1.06	2 (6%)	48,50,50	1.25	7 (14%)

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	E	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
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	F	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	4.16	1.38	1.30
2	A	4000	FMN	C4A-N5	4.11	1.38	1.30
2	E	4000	FMN	C4A-N5	4.11	1.38	1.30
2	D	4000	FMN	C4A-N5	4.08	1.38	1.30
2	F	4000	FMN	C4A-N5	4.07	1.38	1.30
2	C	4000	FMN	C4A-N5	4.07	1.38	1.30
2	C	4000	FMN	C10-N1	2.29	1.37	1.33
2	E	4000	FMN	C10-N1	2.25	1.37	1.33
2	B	4000	FMN	C10-N1	2.24	1.37	1.33
2	D	4000	FMN	C10-N1	2.23	1.37	1.33
2	A	4000	FMN	C10-N1	2.21	1.37	1.33
2	F	4000	FMN	C10-N1	2.18	1.37	1.33

All (45) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	C	4000	FMN	C4-N3-C2	-3.02	120.06	125.64
2	E	4000	FMN	C4-N3-C2	-2.99	120.11	125.64
2	F	4000	FMN	C4-N3-C2	-2.98	120.13	125.64
2	E	4000	FMN	C4A-C10-N10	2.98	120.83	116.48
2	D	4000	FMN	C4-N3-C2	-2.96	120.17	125.64
2	B	4000	FMN	C4-N3-C2	-2.96	120.17	125.64
2	C	4000	FMN	C4A-C10-N10	2.96	120.80	116.48
2	A	4000	FMN	C4-N3-C2	-2.96	120.18	125.64
2	B	4000	FMN	C4A-C10-N10	2.95	120.80	116.48
2	D	4000	FMN	C4A-C10-N10	2.93	120.77	116.48
2	A	4000	FMN	C4A-C10-N10	2.91	120.74	116.48
2	F	4000	FMN	C4A-C10-N10	2.88	120.69	116.48
2	C	4000	FMN	C4A-C4-N3	2.64	119.89	113.19
2	B	4000	FMN	C4A-C4-N3	2.61	119.83	113.19

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	E	4000	FMN	C4A-C4-N3	2.61	119.82	113.19
2	E	4000	FMN	C10-C4A-N5	-2.61	119.32	124.86
2	F	4000	FMN	C4A-C4-N3	2.60	119.78	113.19
2	D	4000	FMN	C4A-C4-N3	2.59	119.78	113.19
2	A	4000	FMN	C4A-C4-N3	2.59	119.78	113.19
2	D	4000	FMN	C10-C4A-N5	-2.59	119.37	124.86
2	B	4000	FMN	C10-C4A-N5	-2.57	119.40	124.86
2	C	4000	FMN	C10-C4A-N5	-2.56	119.43	124.86
2	A	4000	FMN	C10-C4A-N5	-2.56	119.43	124.86
2	F	4000	FMN	C10-C4A-N5	-2.52	119.51	124.86
2	E	4000	FMN	O4-C4-C4A	-2.43	120.15	126.60
2	D	4000	FMN	O4-C4-C4A	-2.43	120.16	126.60
2	F	4000	FMN	O4-C4-C4A	-2.43	120.16	126.60
2	C	4000	FMN	O4-C4-C4A	-2.42	120.18	126.60
2	B	4000	FMN	O4-C4-C4A	-2.41	120.19	126.60
2	A	4000	FMN	O4-C4-C4A	-2.40	120.24	126.60
2	E	4000	FMN	C4-C4A-N5	2.29	121.49	118.23
2	D	4000	FMN	C4-C4A-N5	2.28	121.48	118.23
2	B	4000	FMN	C4-C4A-N5	2.27	121.47	118.23
2	C	4000	FMN	C4-C4A-N5	2.25	121.43	118.23
2	A	4000	FMN	C4-C4A-N5	2.23	121.41	118.23
2	D	4000	FMN	C9A-C5A-N5	-2.22	120.01	122.43
2	F	4000	FMN	C4-C4A-N5	2.22	121.39	118.23
2	C	4000	FMN	C9A-C5A-N5	-2.19	120.05	122.43
2	F	4000	FMN	C9A-C5A-N5	-2.19	120.05	122.43
2	E	4000	FMN	C9A-C5A-N5	-2.17	120.07	122.43
2	A	4000	FMN	C9A-C5A-N5	-2.17	120.08	122.43
2	B	4000	FMN	C9A-C5A-N5	-2.13	120.12	122.43
2	D	4000	FMN	O2-C2-N1	-2.05	118.44	121.83
2	B	4000	FMN	O2-C2-N1	-2.04	118.45	121.83
2	A	4000	FMN	O2-C2-N1	-2.02	118.48	121.83

There are no chirality outliers.

All (30) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
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	O3'-C3'-C4'-C5'
2	B	4000	FMN	O3'-C3'-C4'-C5'
2	C	4000	FMN	O3'-C3'-C4'-C5'

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Mol	Chain	Res	Type	Atoms
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'-C5'
2	B	4000	FMN	C2'-C3'-C4'-C5'
2	C	4000	FMN	C2'-C3'-C4'-C5'
2	D	4000	FMN	C2'-C3'-C4'-O4'
2	E	4000	FMN	C2'-C3'-C4'-O4'
2	F	4000	FMN	C2'-C3'-C4'-O4'
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	O3'-C3'-C4'-O4'
2	E	4000	FMN	O3'-C3'-C4'-O4'
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	C4'-C5'-O5'-P
2	B	4000	FMN	C4'-C5'-O5'-P
2	C	4000	FMN	C4'-C5'-O5'-P
2	F	4000	FMN	O3'-C3'-C4'-O4'
2	A	4000	FMN	O3'-C3'-C4'-O4'
2	B	4000	FMN	O3'-C3'-C4'-O4'
2	C	4000	FMN	O3'-C3'-C4'-O4'

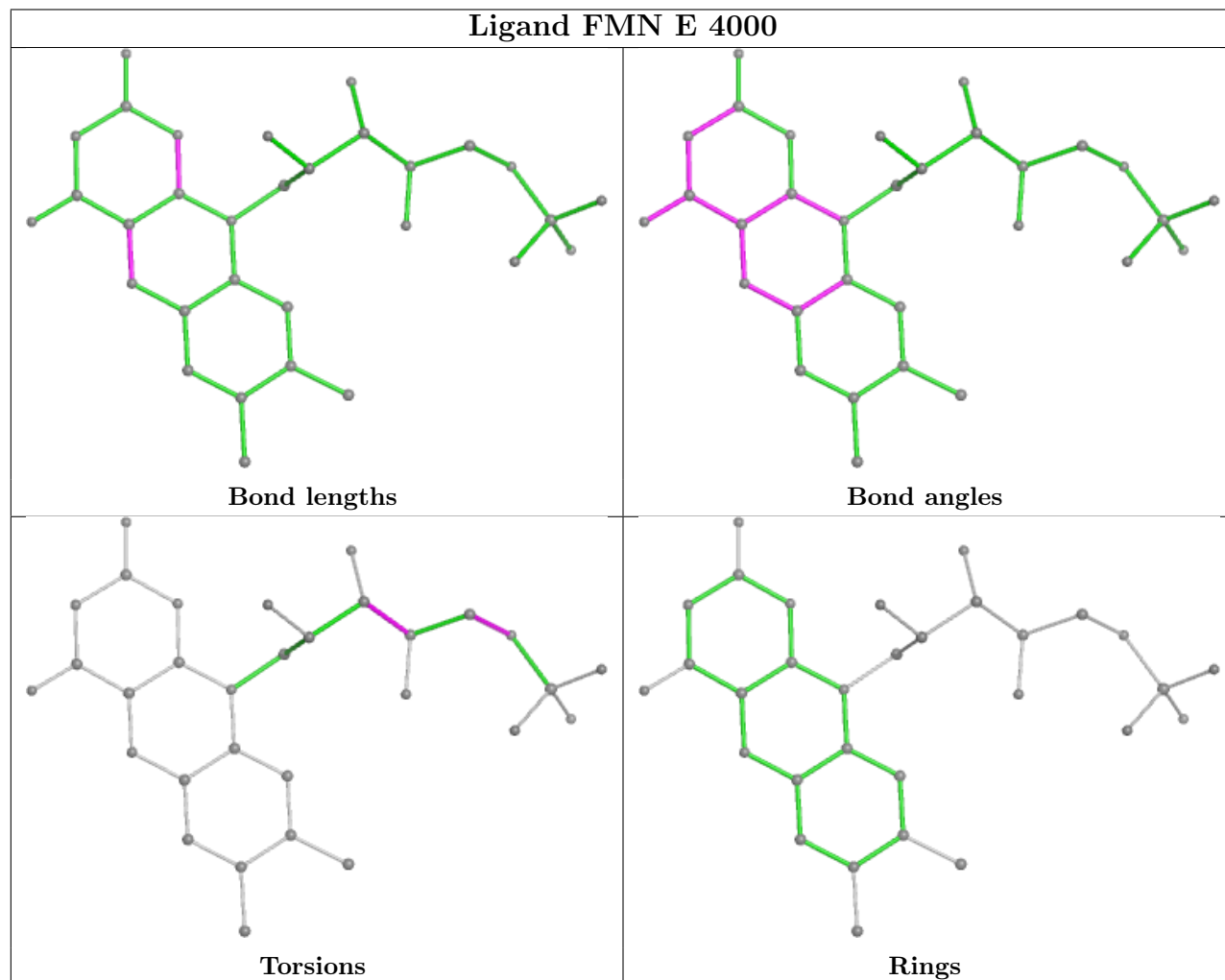
There are no ring outliers.

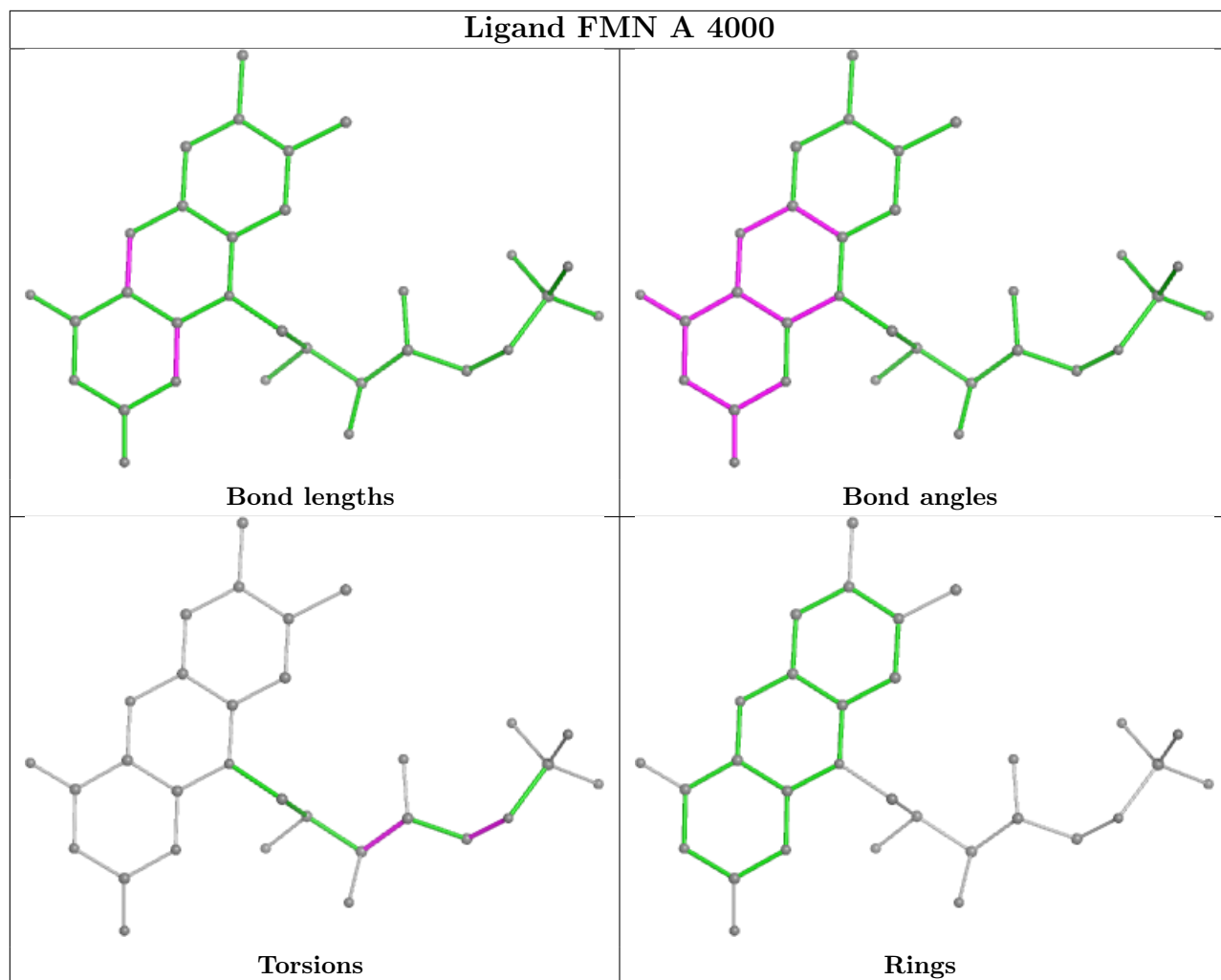
6 monomers are involved in 24 short contacts:

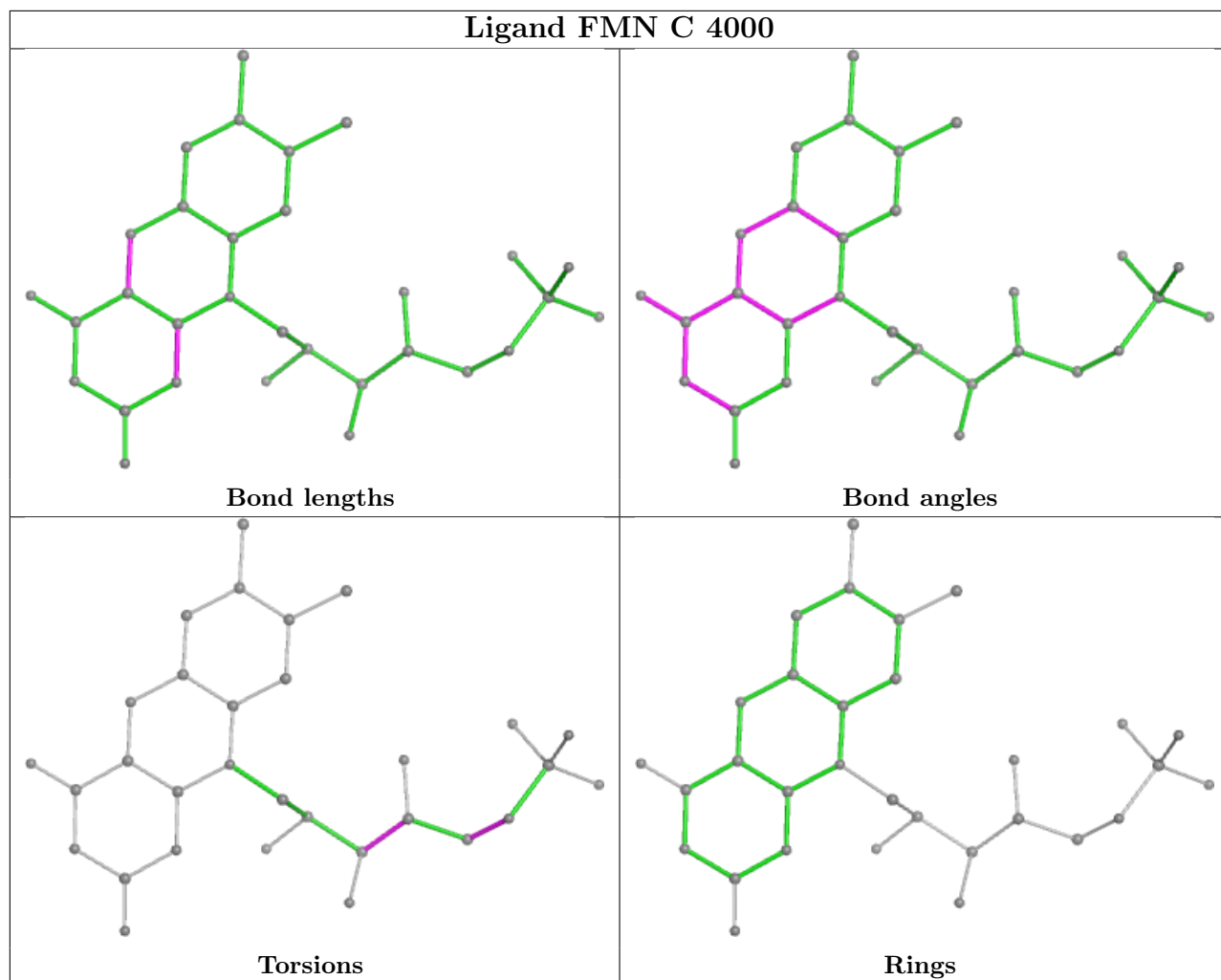
Mol	Chain	Res	Type	Clashes	Symm-Clashes
2	E	4000	FMN	4	0
2	A	4000	FMN	4	0
2	C	4000	FMN	4	0
2	D	4000	FMN	4	0
2	B	4000	FMN	4	0
2	F	4000	FMN	4	0

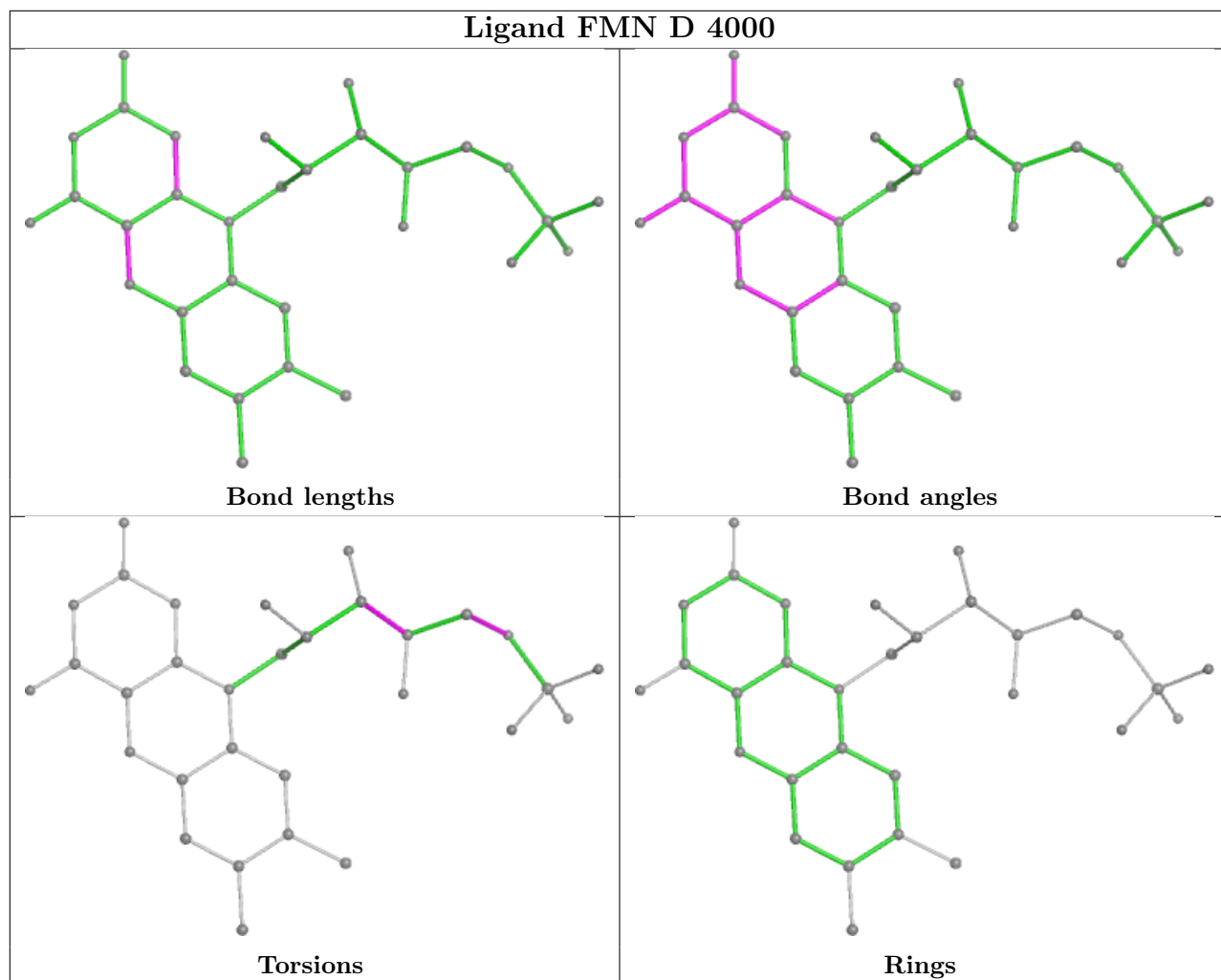
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included.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

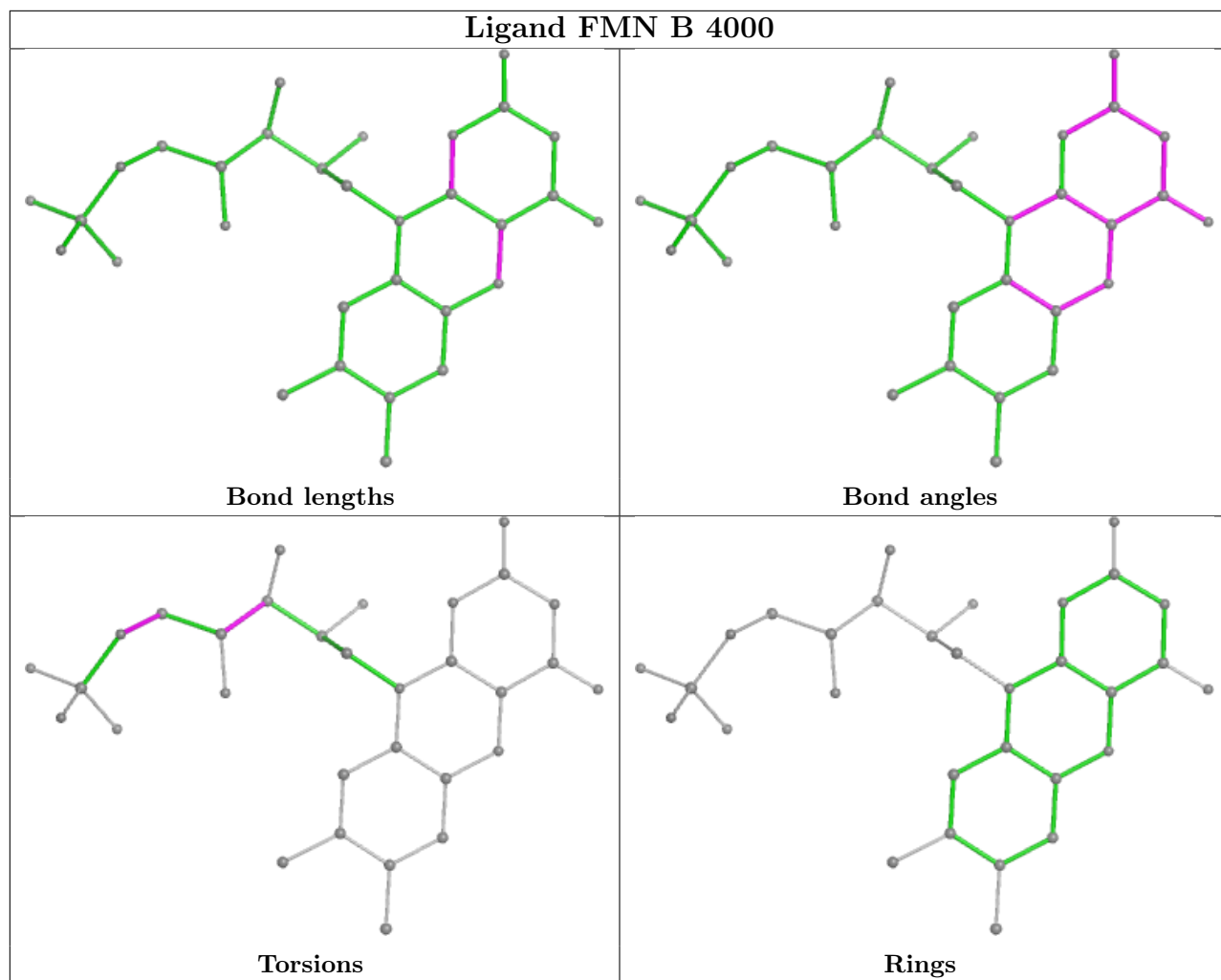
highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified 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.

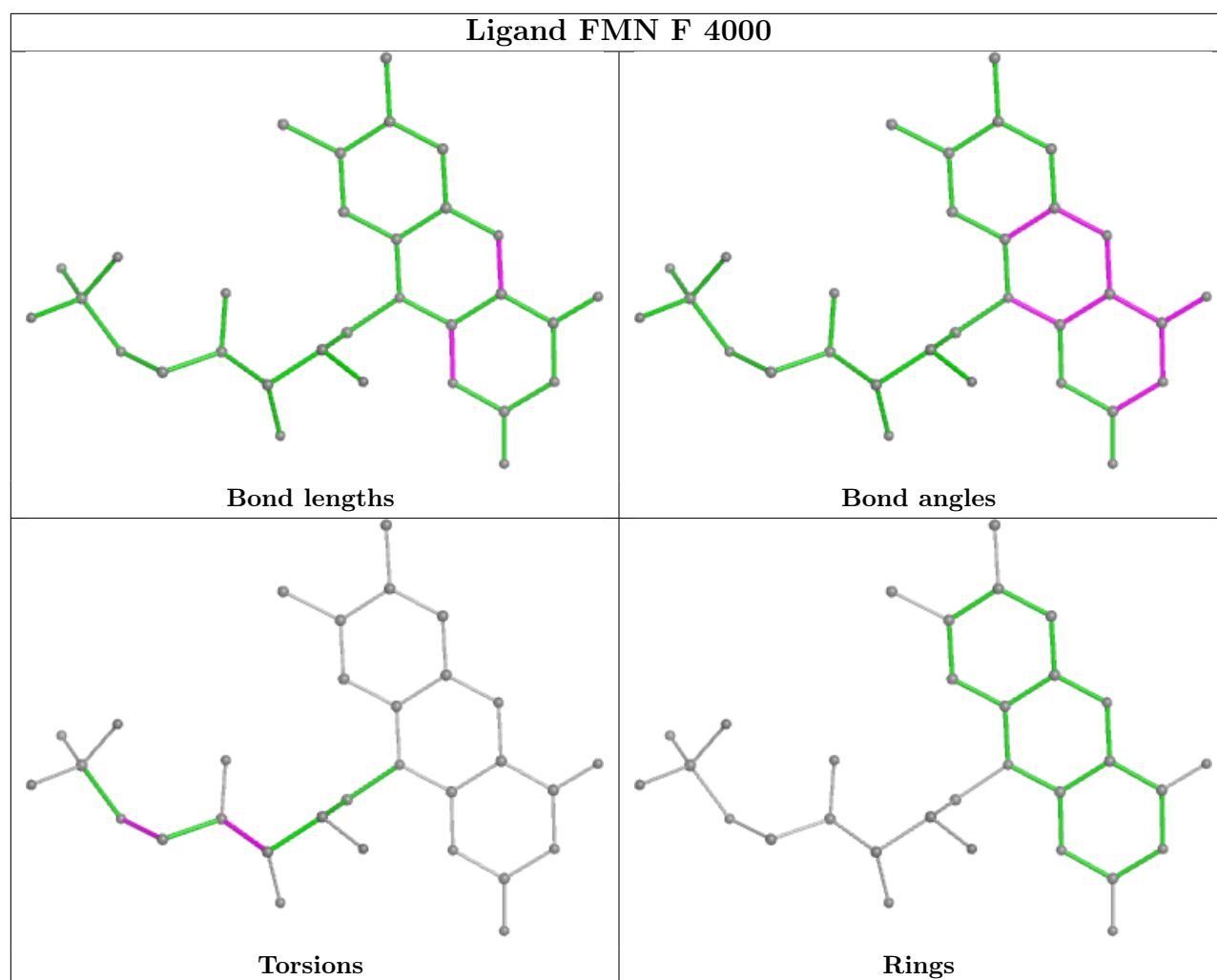












## 5.7 Other polymers [i](#)

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-2357. These allow visual inspection of the internal detail of the map and identification of artifacts.

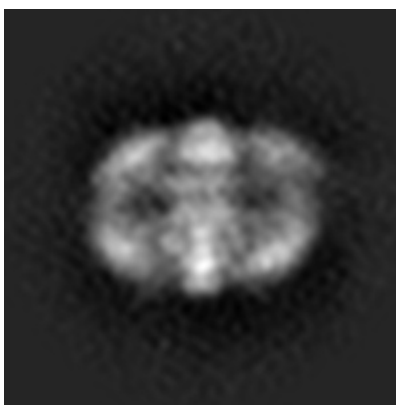
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

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

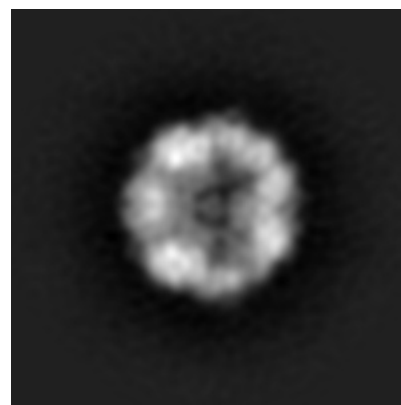
#### 6.1.1 Primary map



X



Y

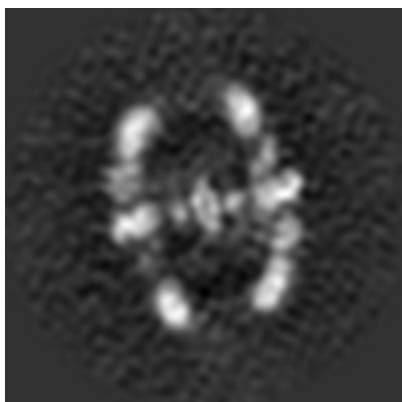


Z

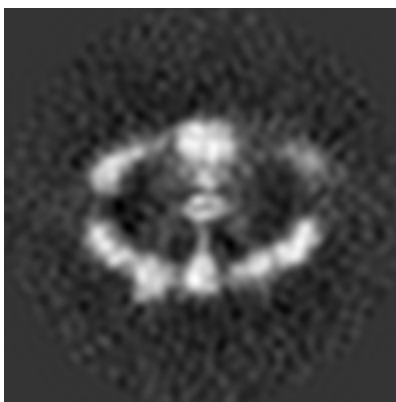
The images above show the map projected in three orthogonal directions.

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

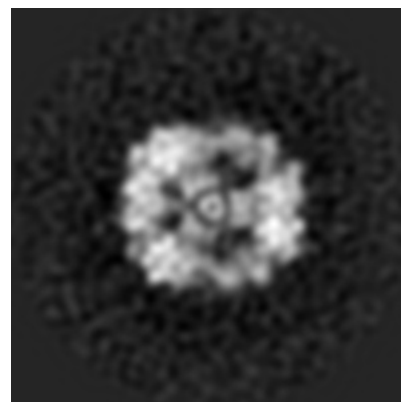
#### 6.2.1 Primary map



X Index: 100



Y Index: 100

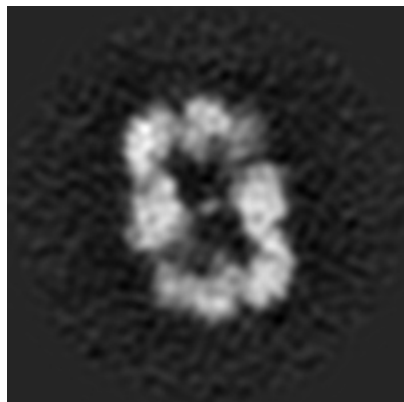


Z Index: 100

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

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

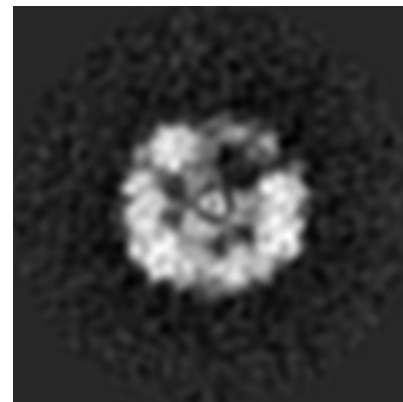
### 6.3.1 Primary map



X Index: 79



Y Index: 130

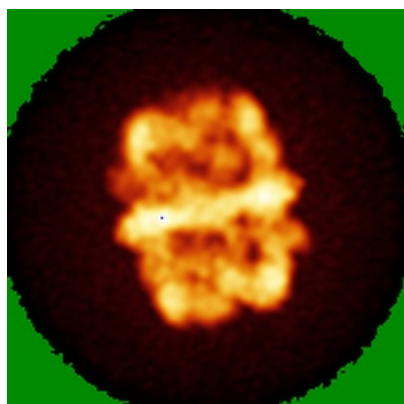


Z Index: 97

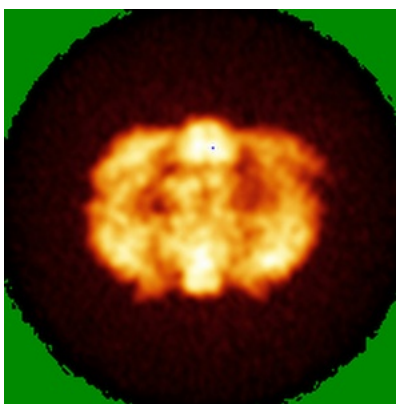
The images above show the largest variance slices of the map in three orthogonal directions.

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

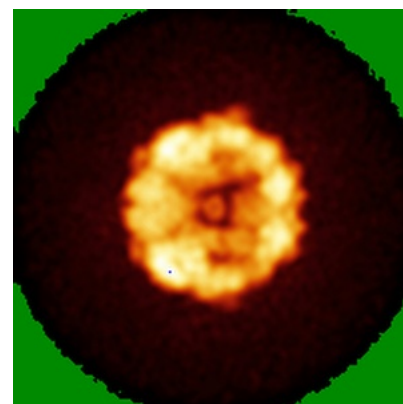
### 6.4.1 Primary map



X



Y

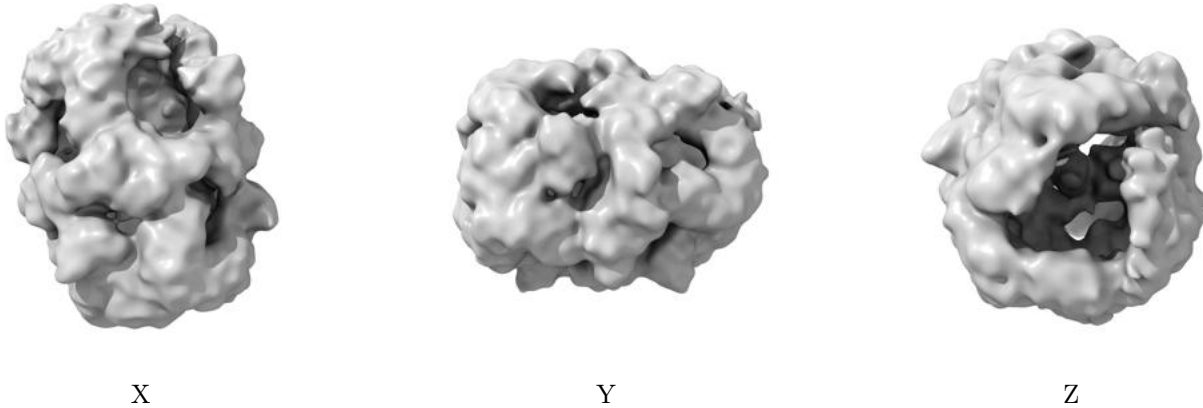


Z

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

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

### 6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 2.0. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

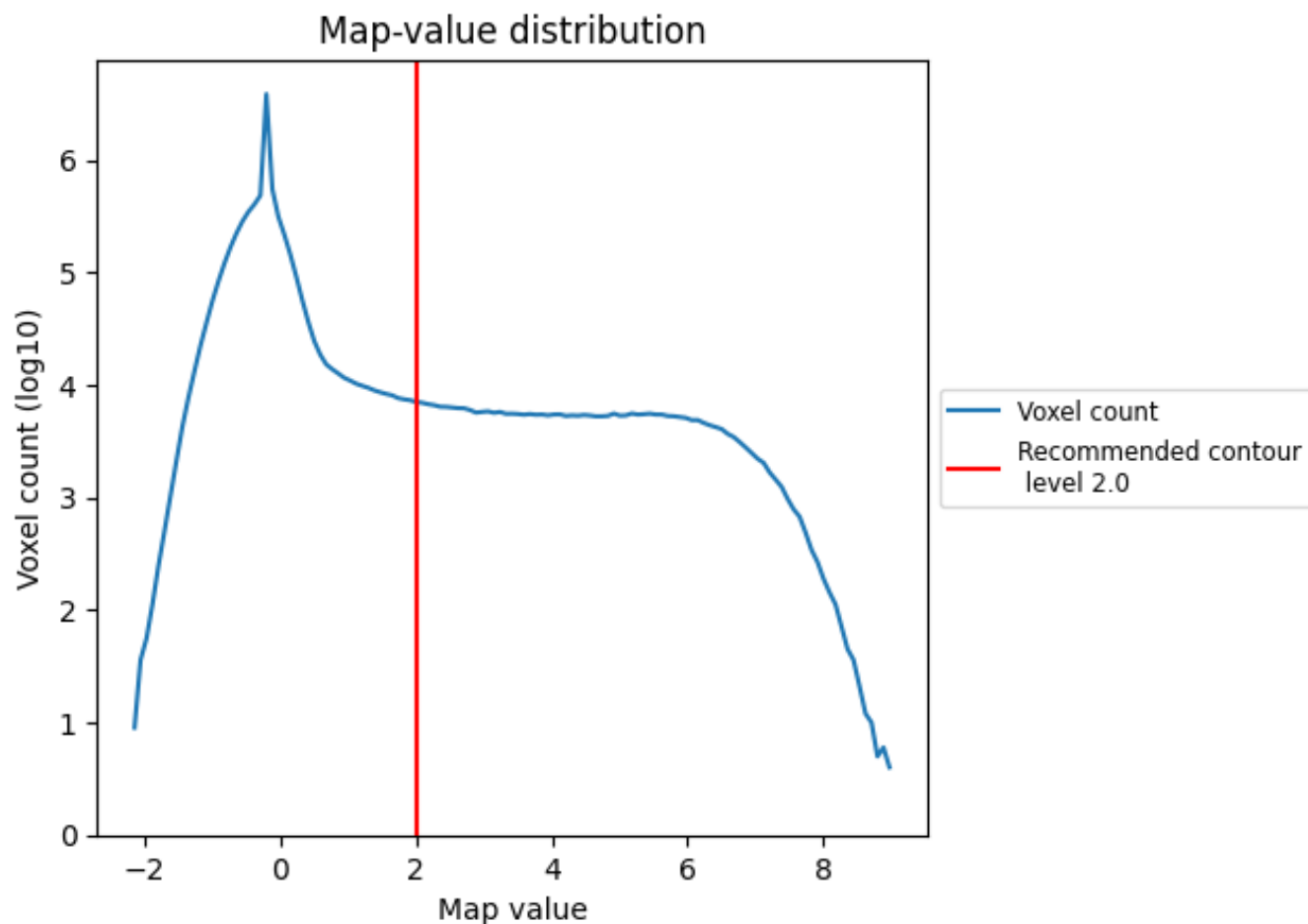
## 6.6 Mask visualisation [i](#)

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

## 7 Map analysis [i](#)

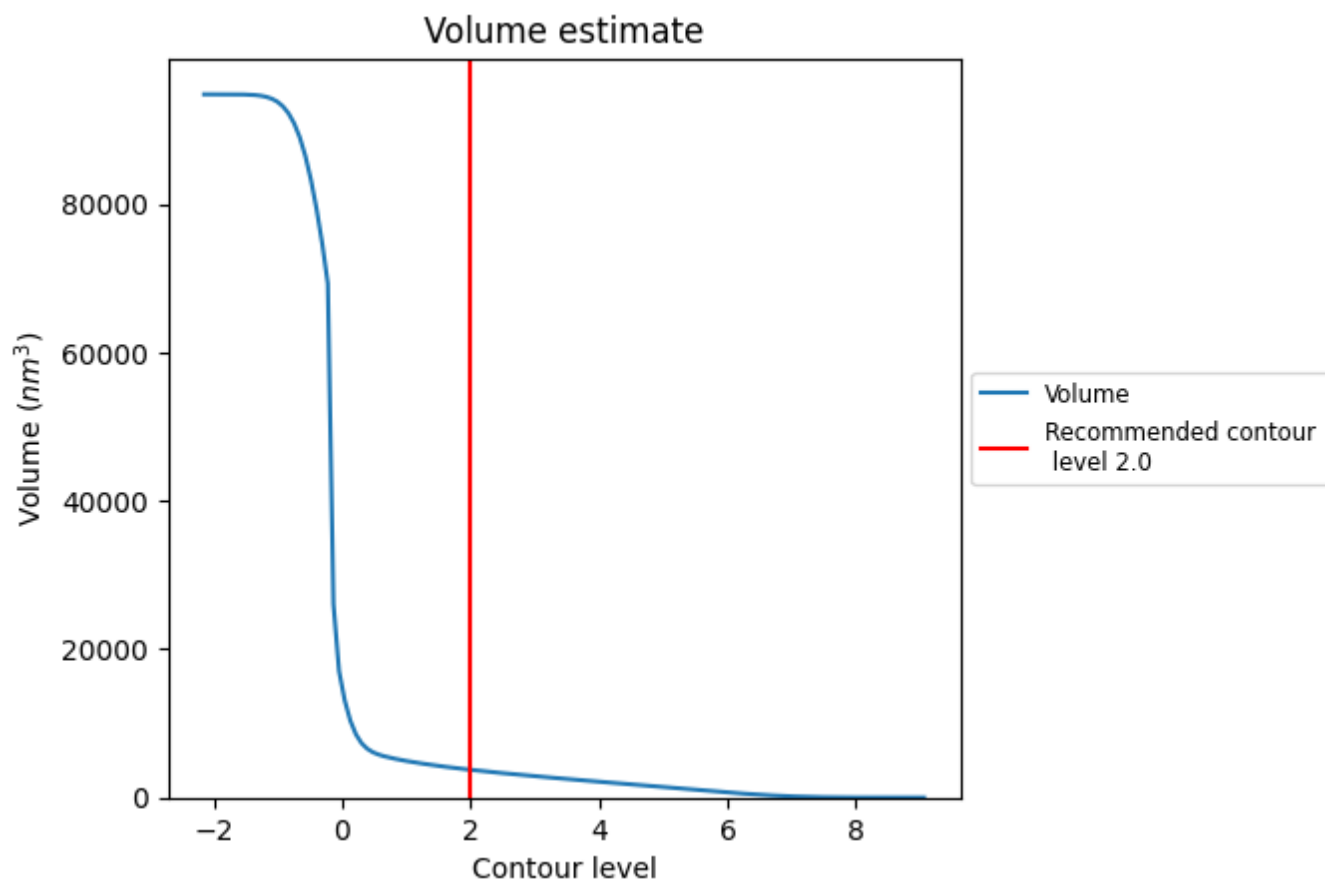
This section contains the results of statistical analysis of the map.

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



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

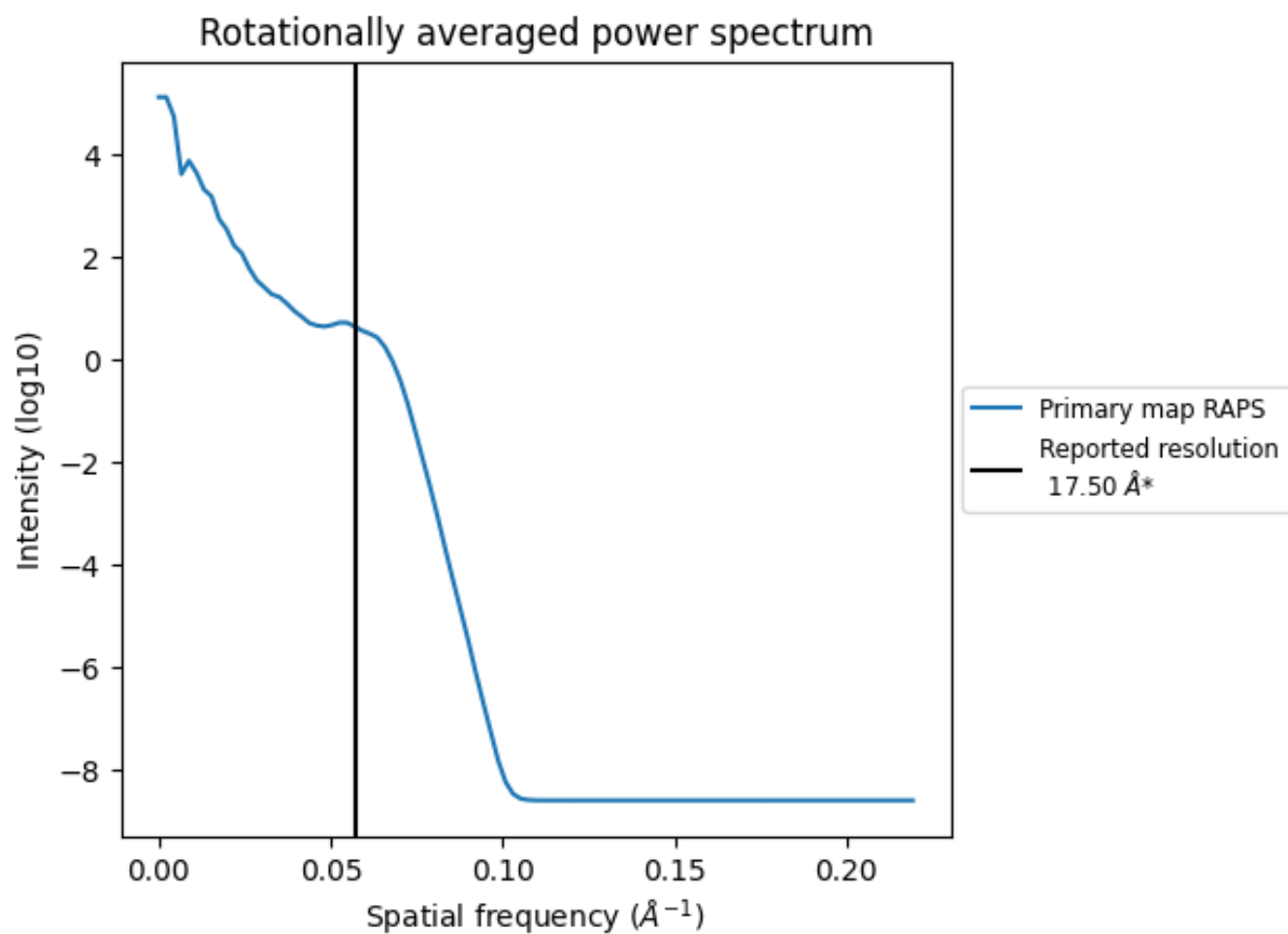
## 7.2 Volume estimate [i](#)



The volume at the recommended contour level is  $3745 \text{ nm}^3$ ; this corresponds to an approximate mass of 3383 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  $0.057 \text{\AA}^{-1}$

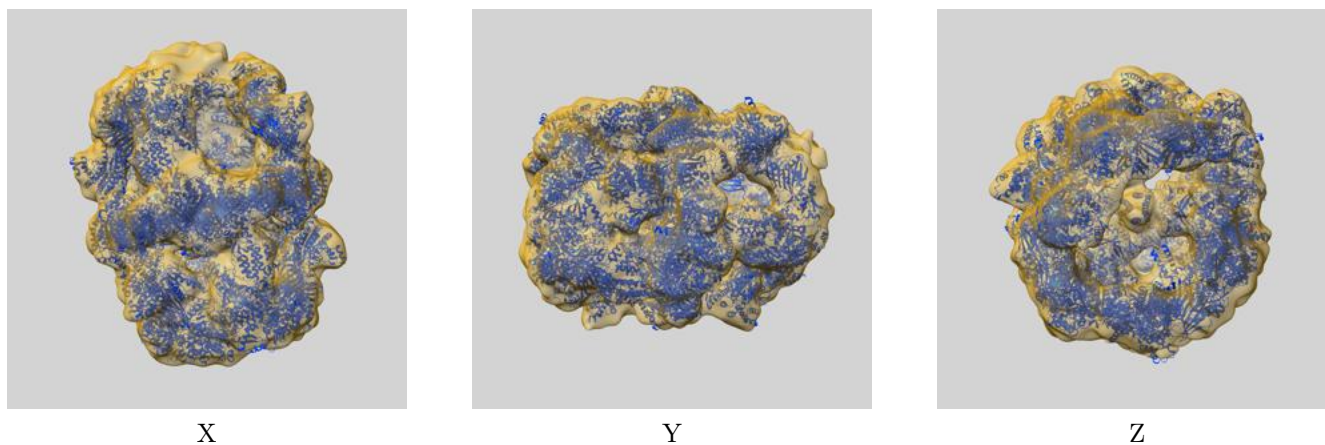
## 8 Fourier-Shell correlation

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

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

This section contains information regarding the fit between EMDB map EMD-2357 and PDB model 4V8W. Per-residue inclusion information can be found in section [3](#) on page [5](#).

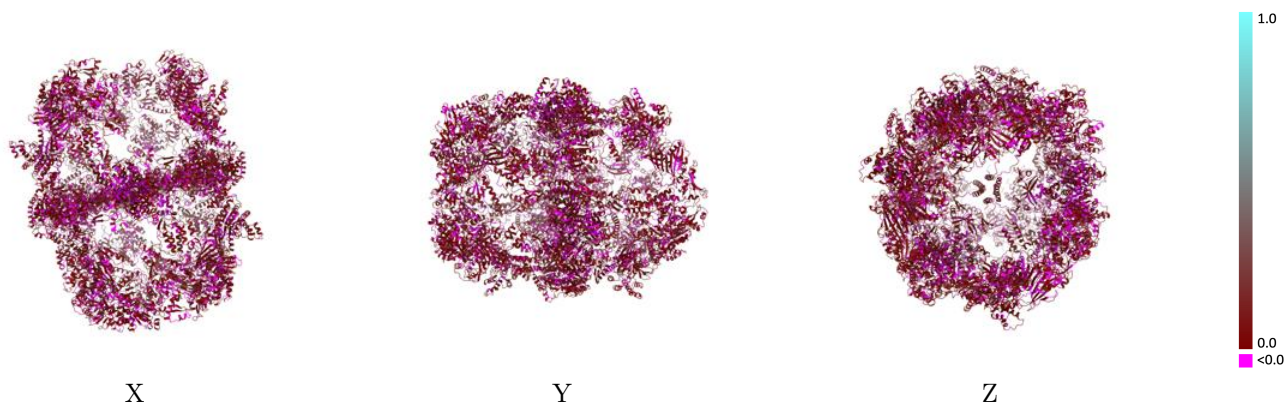
### 9.1 Map-model overlay [i](#)



The images above show the 3D surface view of the map at the recommended contour level 2.0 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.

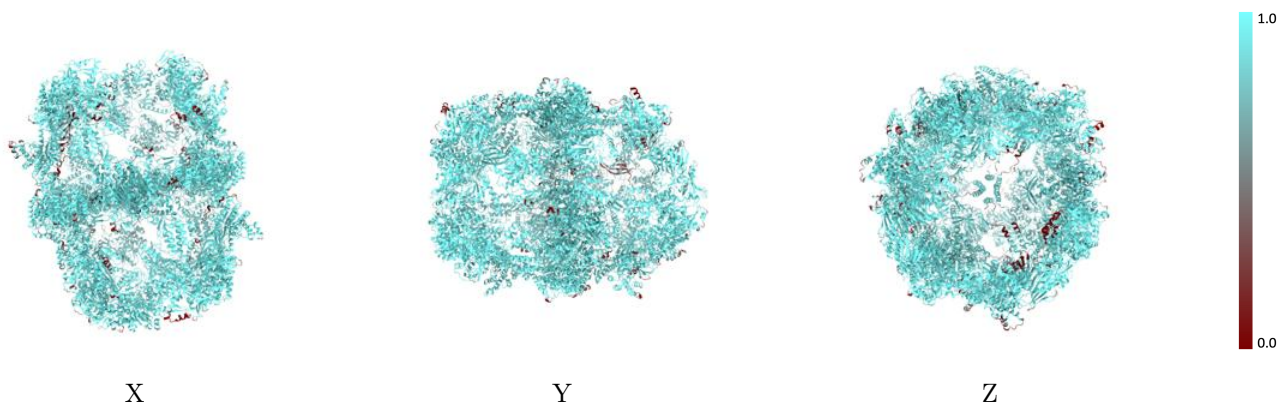


## 9.2 Q-score mapped to coordinate model [i](#)



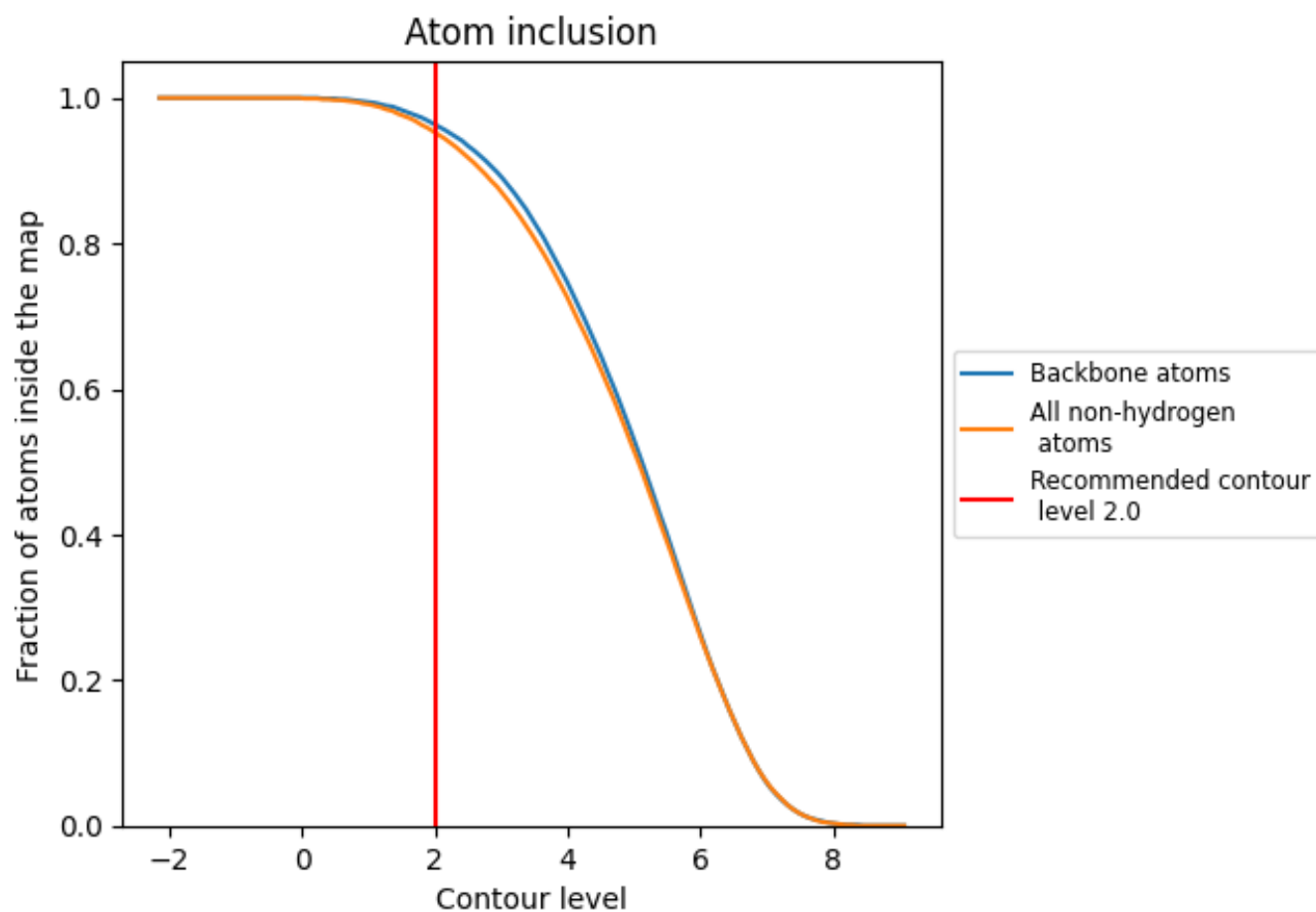
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (2.0).















## 9.4 Atom inclusion [i](#)



At the recommended contour level, 96% of all backbone atoms, 95% 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 (2.0) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.9520	 0.0580
A	 0.9650	 0.0610
B	 0.9640	 0.0600
C	 0.9550	 0.0590
D	 0.9110	 0.0500
E	 0.9660	 0.0610
F	 0.9480	 0.0570

