



Full wwPDB EM Validation Report ⓘ

Mar 20, 2026 – 02:36 AM UTC

PDB ID : 9C1F / pdb_00009c1f
EMDB ID : EMD-45117
Title : Mink RyR3 in open conformation bound to Ca²⁺/ATP/caffeine
Authors : Chen, Y.S.; Van Petegem, F.
Deposited on : 2024-05-29
Resolution : 3.22 Å(reported)
Based on initial model : 9C1E

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

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

A user guide is available at

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

The types of validation reports are described at

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

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

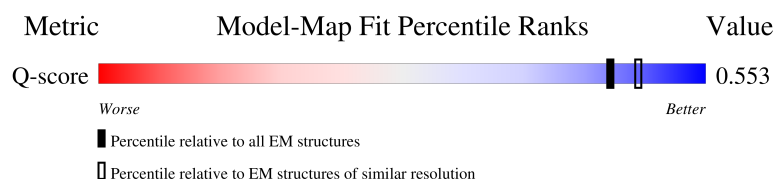
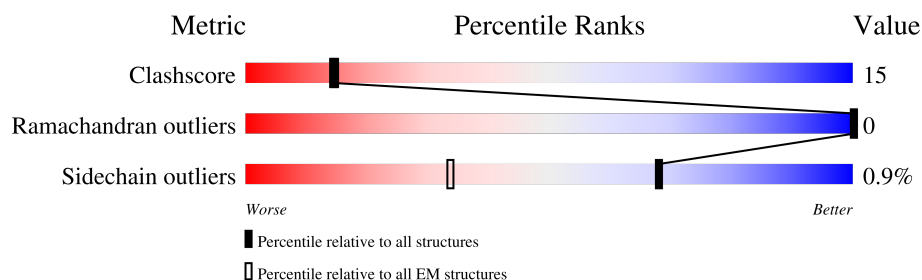
EMDB validation analysis : 0.0.1.dev132
Mogul : 2022.3.0, CSD as543be (2022)
MolProbity : 4-5-2 with Phenix2.0
Buster-report : wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics : 202505.v01 (Using data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

1 Overall quality at a glance

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

The reported resolution of this entry is 3.22 Å.

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



Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Sidechain outliers	223484	23102	-
Q-score	-	25397	14612 (2.72 - 3.72)

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

Mol	Chain	Length	Quality of chain
1	A	110	8% 72% 25% ..
1	C	110	8% 72% 25% ..
1	E	110	8% 73% 25% ..
1	G	110	8% 70% 27% ..

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Mol	Chain	Length	Quality of chain
2	B	4859	
2	D	4859	
2	F	4859	
2	H	4859	

2 Entry composition

There are 7 unique types of molecules in this entry. The entry contains 130508 atoms, of which 136 are hydrogens and 0 are deuteriums.

In the tables below, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a protein called Peptidyl-prolyl cis-trans isomerase FKBP1B.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	108	Total	C	N	O	S	0	0
			815	515	145	151	4		
1	C	108	Total	C	N	O	S	0	0
			815	515	145	151	4		
1	E	108	Total	C	N	O	S	0	0
			815	515	145	151	4		
1	G	108	Total	C	N	O	S	0	0
			815	515	145	151	4		

There are 12 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	-1	SER	-	expression tag	UNP P68106
A	0	ASN	-	expression tag	UNP P68106
A	1	ALA	-	expression tag	UNP P68106
C	-1	SER	-	expression tag	UNP P68106
C	0	ASN	-	expression tag	UNP P68106
C	1	ALA	-	expression tag	UNP P68106
E	-1	SER	-	expression tag	UNP P68106
E	0	ASN	-	expression tag	UNP P68106
E	1	ALA	-	expression tag	UNP P68106
G	-1	SER	-	expression tag	UNP P68106
G	0	ASN	-	expression tag	UNP P68106
G	1	ALA	-	expression tag	UNP P68106

- Molecule 2 is a protein called Ryanodine receptor 3.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	B	4076	Total	C	N	O	S	0	0
			31699	20288	5416	5789	206		
2	D	4076	Total	C	N	O	S	0	0
			31699	20288	5416	5789	206		
2	F	4076	Total	C	N	O	S	0	0
			31699	20288	5416	5789	206		

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Mol	Chain	Residues	Atoms					AltConf	Trace
2	H	4076	Total	C	N	O	S	0	0
			31699	20288	5416	5789	206		

There are 12 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
B	733	LEU	GLN	conflict	UNP A0A8C7B9Y8
B	1078	TRP	ARG	conflict	UNP A0A8C7B9Y8
B	2075	ASP	ASN	conflict	UNP A0A8C7B9Y8
D	733	LEU	GLN	conflict	UNP A0A8C7B9Y8
D	1078	TRP	ARG	conflict	UNP A0A8C7B9Y8
D	2075	ASP	ASN	conflict	UNP A0A8C7B9Y8
F	733	LEU	GLN	conflict	UNP A0A8C7B9Y8
F	1078	TRP	ARG	conflict	UNP A0A8C7B9Y8
F	2075	ASP	ASN	conflict	UNP A0A8C7B9Y8
H	733	LEU	GLN	conflict	UNP A0A8C7B9Y8
H	1078	TRP	ARG	conflict	UNP A0A8C7B9Y8
H	2075	ASP	ASN	conflict	UNP A0A8C7B9Y8

- Molecule 3 is ZINC ION (CCD ID: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		AltConf
3	B	1	Total	Zn	0
			1	1	
3	D	1	Total	Zn	0
			1	1	
3	F	1	Total	Zn	0
			1	1	
3	H	1	Total	Zn	0
			1	1	

- Molecule 4 is CALCIUM ION (CCD ID: CA) (formula: Ca) (labeled as "Ligand of Interest" by depositor).

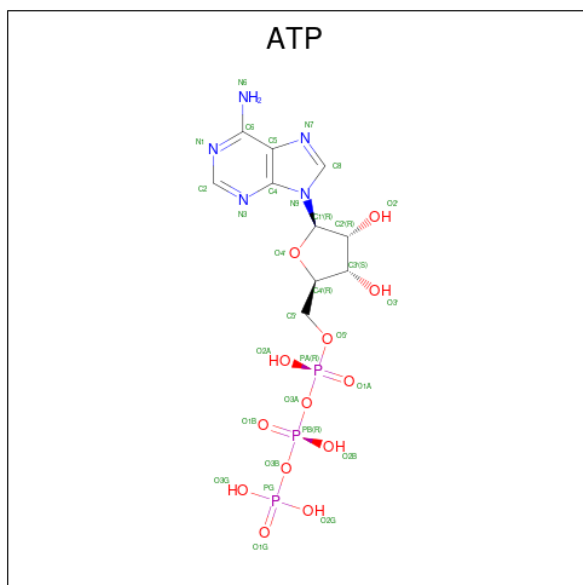
Mol	Chain	Residues	Atoms		AltConf
4	B	1	Total	Ca	0
			1	1	
4	D	1	Total	Ca	0
			1	1	
4	F	1	Total	Ca	0
			1	1	

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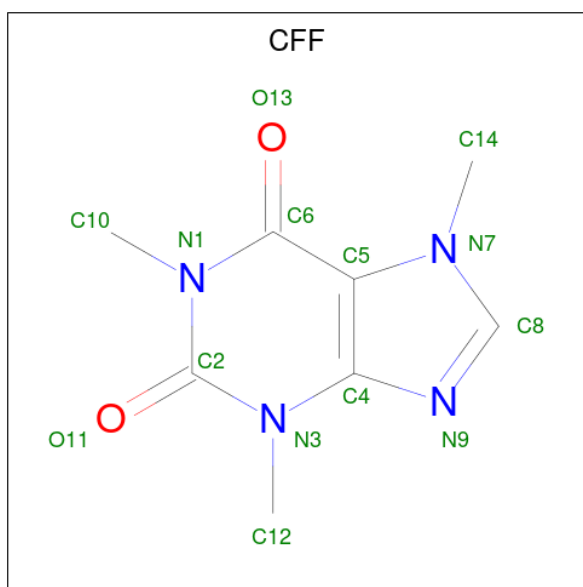
Mol	Chain	Residues	Atoms		AltConf
4	H	1	Total	Ca	0
			1	1	

- Molecule 5 is ADENOSINE-5'-TRIPHOSPHATE (CCD ID: ATP) (formula: $C_{10}H_{16}N_5O_{13}P_3$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms						AltConf
5	B	1	Total	C	H	N	O	P	0
			43	10	12	5	13	3	
5	B	1	Total	C	H	N	O	P	0
			43	10	12	5	13	3	
5	D	1	Total	C	H	N	O	P	0
			43	10	12	5	13	3	
5	D	1	Total	C	H	N	O	P	0
			43	10	12	5	13	3	
5	F	1	Total	C	H	N	O	P	0
			43	10	12	5	13	3	
5	F	1	Total	C	H	N	O	P	0
			43	10	12	5	13	3	
5	H	1	Total	C	H	N	O	P	0
			43	10	12	5	13	3	
5	H	1	Total	C	H	N	O	P	0
			43	10	12	5	13	3	

- Molecule 6 is CAFFEINE (CCD ID: CFF) (formula: $C_8H_{10}N_4O_2$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms					AltConf
6	B	1	Total	C	H	N	O	0
			24	8	10	4	2	
6	D	1	Total	C	H	N	O	0
			24	8	10	4	2	
6	F	1	Total	C	H	N	O	0
			24	8	10	4	2	
6	H	1	Total	C	H	N	O	0
			24	8	10	4	2	

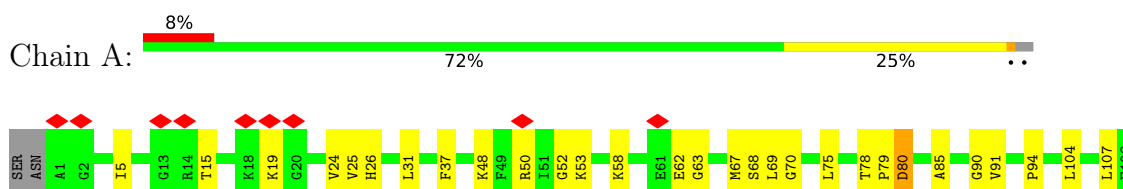
- Molecule 7 is CHLORIDE ION (CCD ID: CL) (formula: Cl) (labeled as "Ligand of Interest" by depositor).

Mol	Chain	Residues	Atoms		AltConf
7	B	1	Total	Cl	0
			1	1	
7	D	1	Total	Cl	0
			1	1	
7	F	1	Total	Cl	0
			1	1	
7	H	1	Total	Cl	0
			1	1	

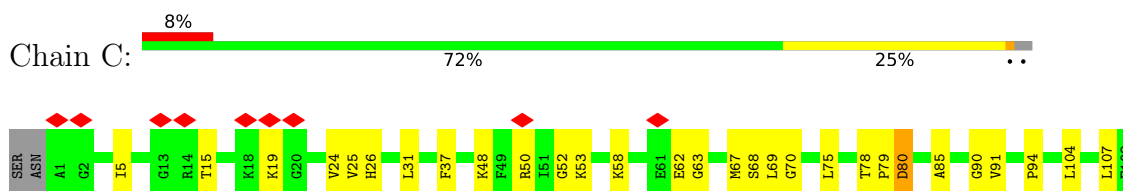
3 Residue-property plots [i](#)

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

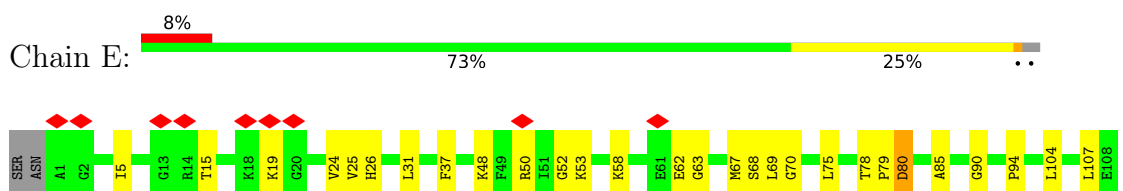
- Molecule 1: Peptidyl-prolyl cis-trans isomerase FKBP1B



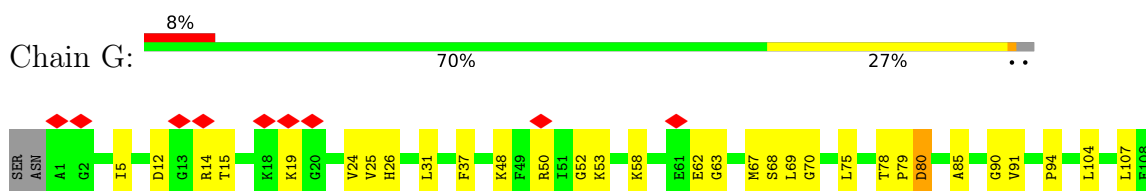
- Molecule 1: Peptidyl-prolyl cis-trans isomerase FKBP1B



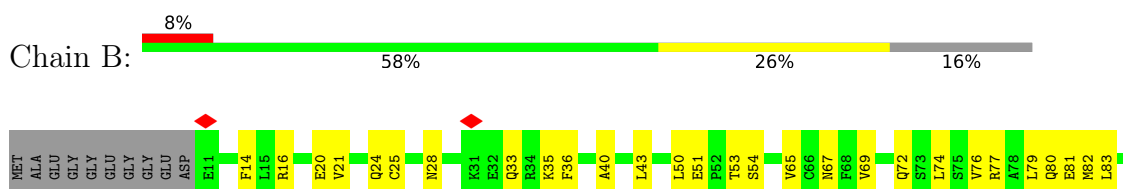
- Molecule 1: Peptidyl-prolyl cis-trans isomerase FKBP1B



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



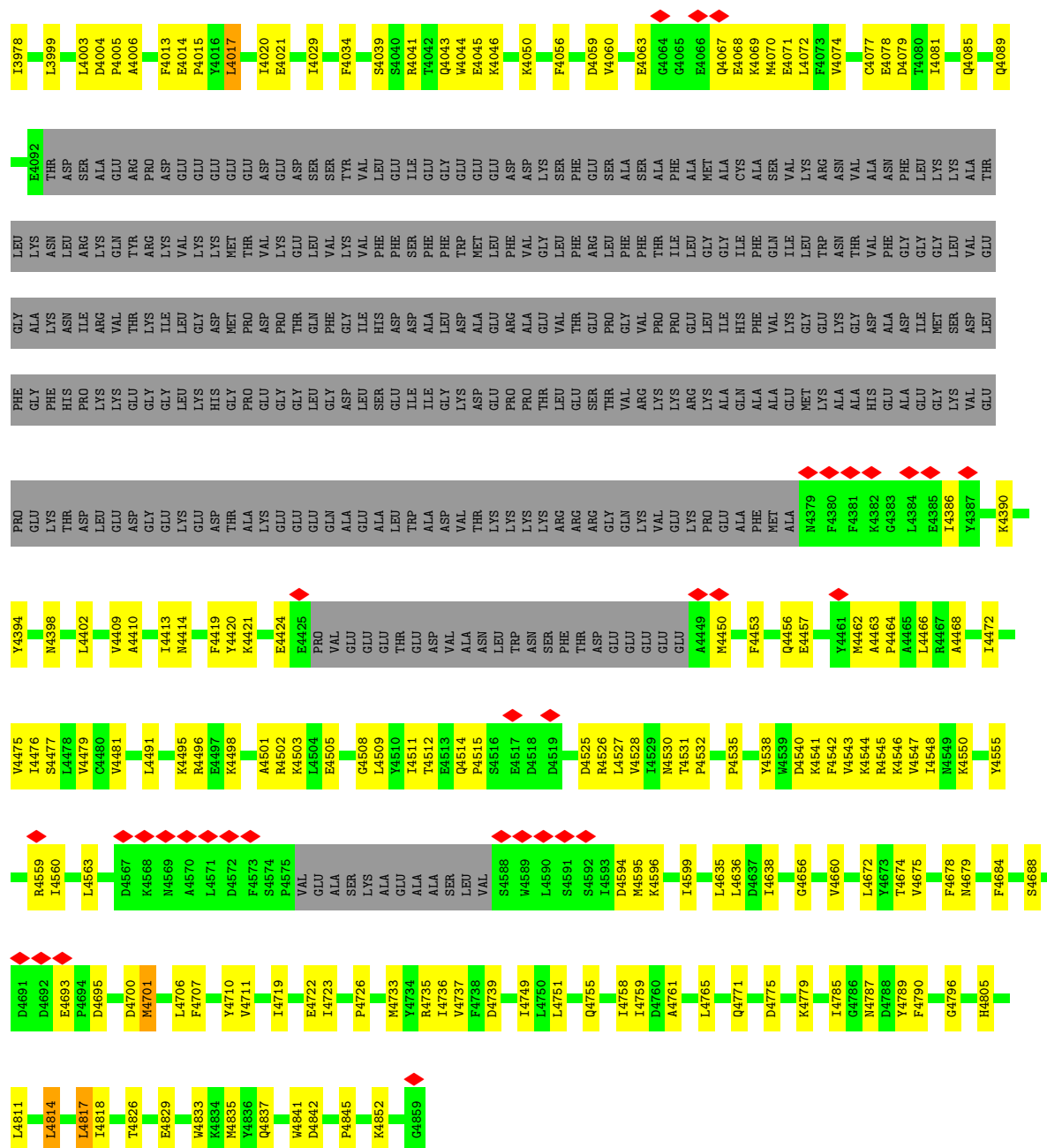
- Molecule 2: Ryanodine receptor 3



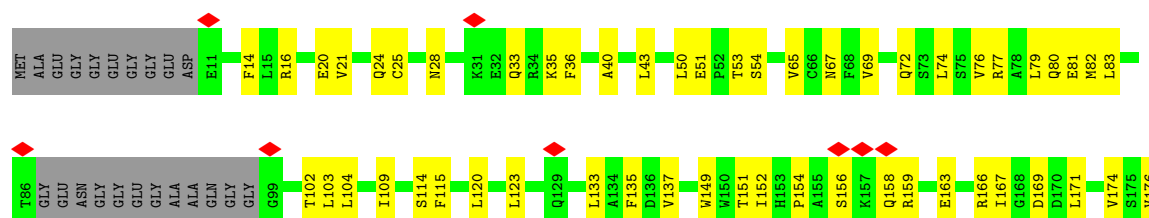


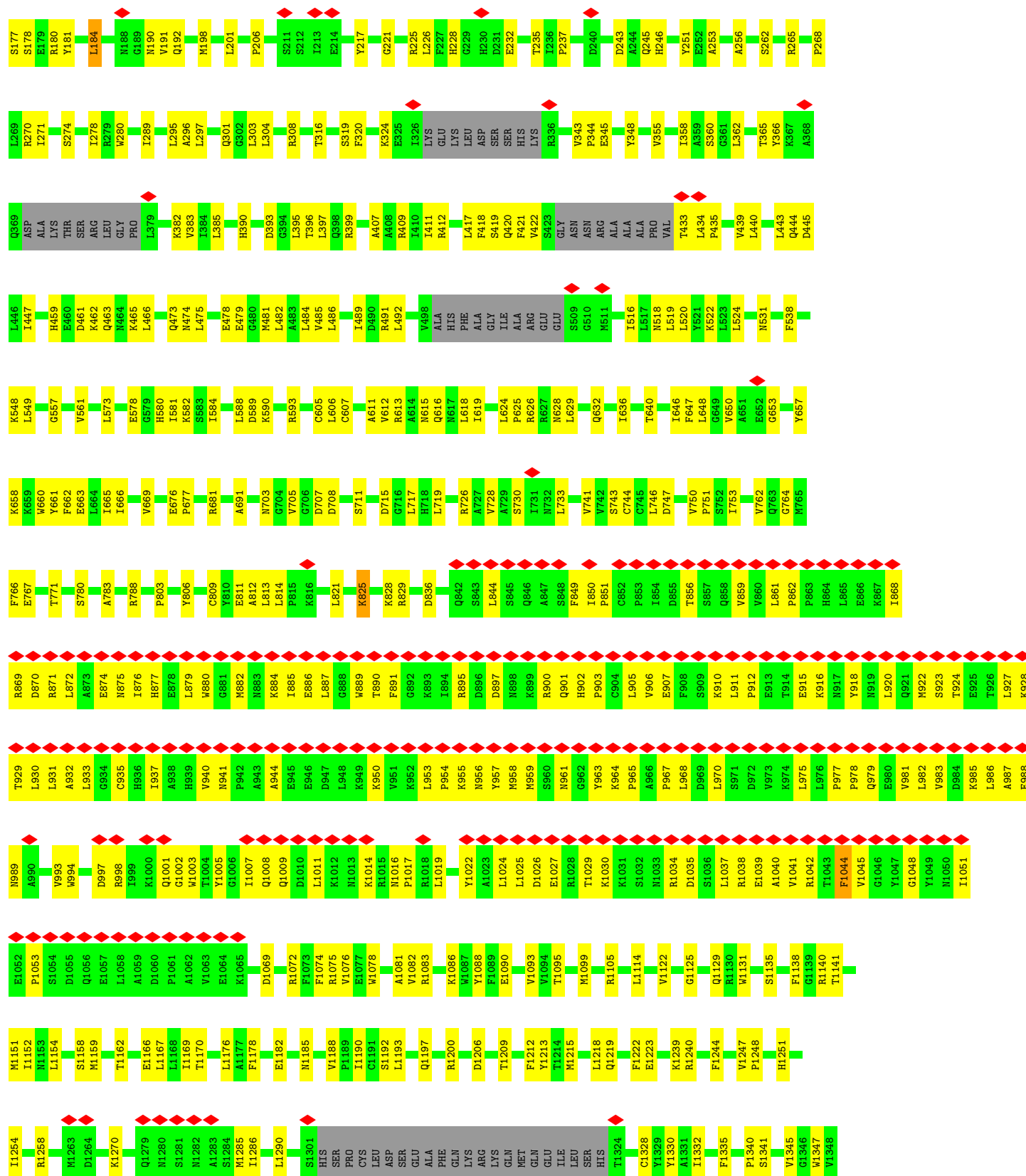


Q3882	L3742	M3635	GLU	L3371	R3275	T3193	S3087	L2996	V2909	ALA	LYS
S3636	Q3745	S3636	VAL	L3372	L3289	A3197	T3088	P2997	R2912	S2808	LYS
S3637	T3751	P3637	TRP	D3379	F3290	A3197	L3089	L2998	L2913	S2809	LYS
E3641	T3754	E3641	HIS	L3382	R3291	L3201	G3090	T3000	M2923	L2819	LEU
N3651	V3755	N3651	LYS	L3383	M3292	A3204	T3094	I3002	K2820	K2821	LEU
V3657	V3761	Q3658	LEU	S3384	V3293	R3205	V3095	F3063	L2822	L2823	GLU
Q3658	L3762	L3658	SER	L3385	A3294	E3206	E3096	E3004	SER	L2823	GLU
Q3659	L3763	L3659	LYS	L3386	E3295	E3206	E3097	H3005	L2823	L2823	LYS
L3660	L3763	L3660	GLN	K3387	E3296	D3207	P3100	V3006	L2833	L2833	GLY
M3661	F3772	M3661	ARG	V3390	F3297	L3208	D3100	L3209	A2834	A2834	GLY
L3662	F3776	L3662	LYS	V3399	L3299	L3209	D3101	L3209	H2835	H2835	SER
L3663	Y3776	L3663	ALA	W3300	W3300	K3210	Q3104	D3014	L2836	L2836	HIS
Y3664	D3783	Y3664	VAL	L3403	N3305	F3213	L3105	L3016	E2837	E2837	PRO
K3668	Q3787	K3668	ALA	R3404	R3308	I3214	M3109	G3018	A2838	A2838	LEU
K3669	Q3787	K3669	CYS	R3403	R3308	K3219	L3115	D3019	L2839	L2839	VAL
K3670	F3790	K3670	LYS	D3415	R3308	L3220	L3115	V3020	V2840	V2840	PRO
A3671	S3791	A3671	ALA	F3416	E3309	K3221	Q3104	Q3021	S2841	S2841	TYR
G3672	S3791	G3672	VAL	A3417	E3310	M3125	L3105	I3022	S2842	S2842	ASP
F3673	K3792	F3673	VAL	V3418	N3321	V3225	L3128	S3023	G2843	G2843	THR
F3674	K3793	F3674	ALA	L3424	T3326	E3232	I3129	C3024	K2844	K2844	LEU
Q3675	L3794	Q3675	CYS	Y3425	T3327	A3236	E3130	I3027	T2845	T2845	THR
S3676	K3798	S3676	LYS	K3430	G3327	A3237	L3133	L3028	E2846	E2846	ALA
L3677	G3799	L3677	GLU	S3431	D3328	T3237	L3133	L3034	E2847	E2847	LYS
L3680	F3799	L3680	ASP	S3432	SER	T3238	L3136	Y3041	K2847	K2847	PHE
M3681	S3799	M3681	GLU	E3432	SER	K3239	Y3139	E2963	S2848	S2848	ARG
S3685	L3808	S3685	GLU	E3433	MET	G3240	L3140	T2965	P2849	P2849	ASP
Q3689	Q3809	Q3689	GLU	P3434	SER	D3241	L3150	S2966	H2850	H2850	ARG
N3690	P3810	N3690	GLU	F3435	LYS	T3242	H3150	E2967	E2853	E2853	GLU
P3811	P3811	P3811	GLU	N3436	SER	Q3243	L3151	H2968	L2861	L2861	LYS
L3819	L3819	L3819	ASP	A3437	G3337	A3244	P3152	L2969	L2862	L2862	GLN
E3706	R3823	E3706	LYS	K3438	G3338	E3246	P3153	K2970	P2863	P2863	ASP
E3707	L3824	E3707	ASP	T3440	Q3339	E3247	S3154	L2971	L2864	L2864	LEU
G3708	V3825	G3708	GLU	E3441	D3340	L3247	T3155	G2972	V2865	V2865	PHE
T3709	D3826	T3709	GLU	F3442	Q3341	L3248	G3156	K2973	D2866	D2866	LYS
R3710	V3829	R3710	GLU	R3443	E3342	T3249	P3157	PHE	F2869	F2869	LEU
E3711	L3850	E3711	GLU	Q3445	E3343	L3250	E3165	THR	S2876	S2876	VAL
K3712	L3850	K3712	ASP	R3446	K3344	D3251	V3169	SER	K2882	K2882	ASN
V3713	L3850	V3713	LYS	K3447	K3345	F3253	I3170	ARG	L2883	L2883	GLY
L3714	Q3848	L3714	GLU	V3451	T3346	V3255	L3175	THR	L2884	L2884	ILE
Q3715	I3849	Q3715	GLU	F3452	R3347	R3258	N3179	GLY	S2886	S2886	VAL
N3716	E3850	N3716	VAL	R3453	R3348	D3259	K3180	V2984	E2894	E2894	GLY
D3717	E3850	D3717	GLU	L3454	R3349	L3260	L3181	S2985	K2895	K2895	VAL
E3718	K3853	E3718	GLU	E3455	R3350	Y3261	L3182	Q2986	E2896	E2896	ASP
F3719	E3854	F3719	GLU	Q3456	Q3351	A3262	G3183	T2987	M2897	M2897	MET
L3727	L3861	L3727	LYS	F3457	D3356	F3263	I3184	T2988	A2898	A2898	GLU
N3735	D3861	N3735	VAL	E3458	Q3356	Q3264	A3187	V2989	S2900	S2900	LEU
S3736	V3864	S3736	GLU	Q3459	T3357	P3265	Q3188	E2994	L2901	L2901	ASP
D3737	T3878	D3737	GLU	L3461	S3358	M3266	W3189	L2995	L2905	L2905	GLY
F3738	T3878	F3738	GLU	K3462	L3364	Y3270	M3190	L2995	L2908	L2908	GLY
			GLU	K3463	K3366	G3272					
			GLU	LYS	I3370						



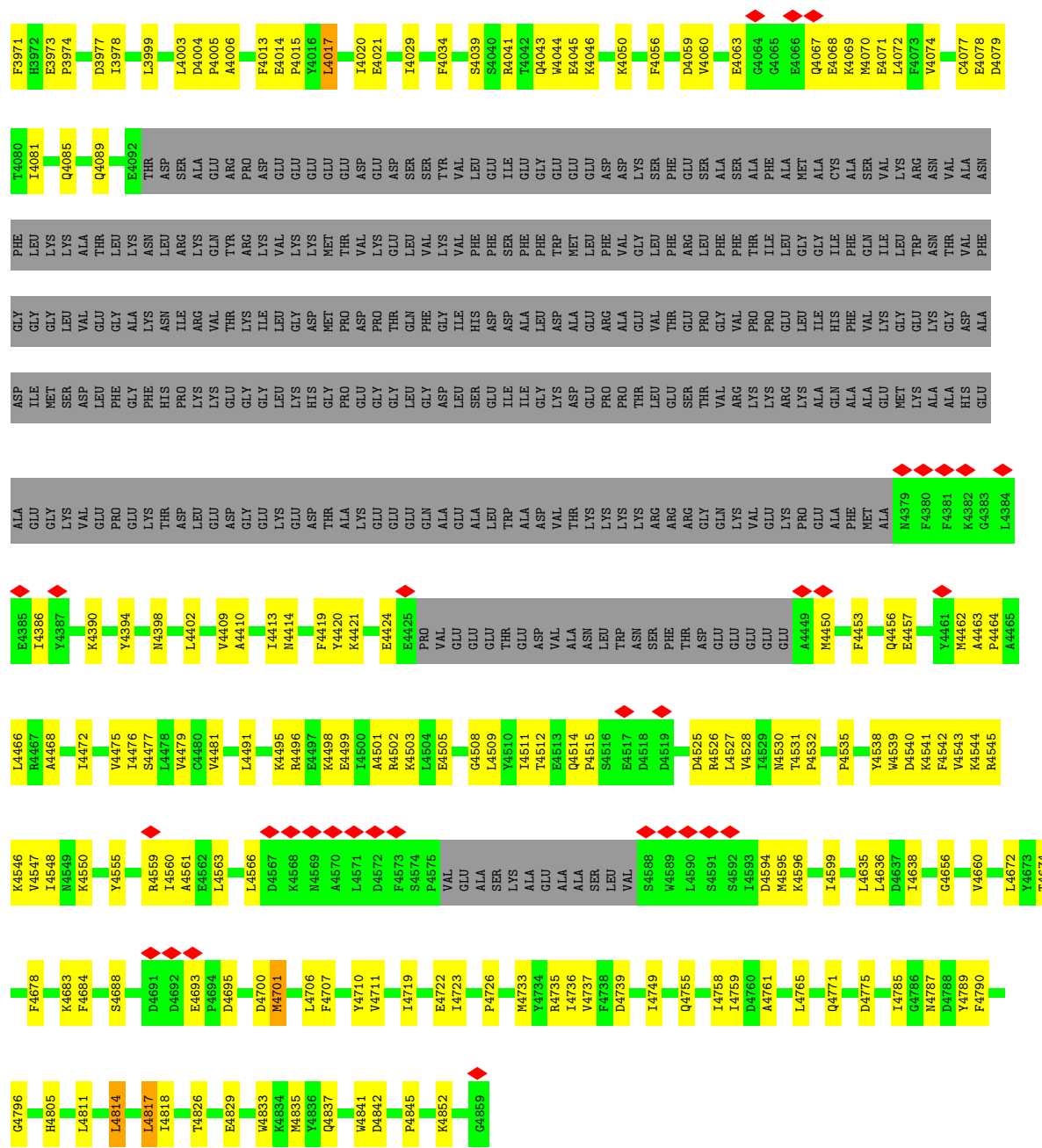
● Molecule 2: Ryanodine receptor 3



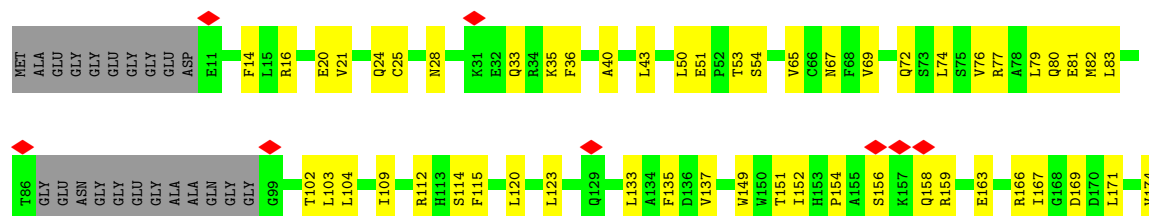








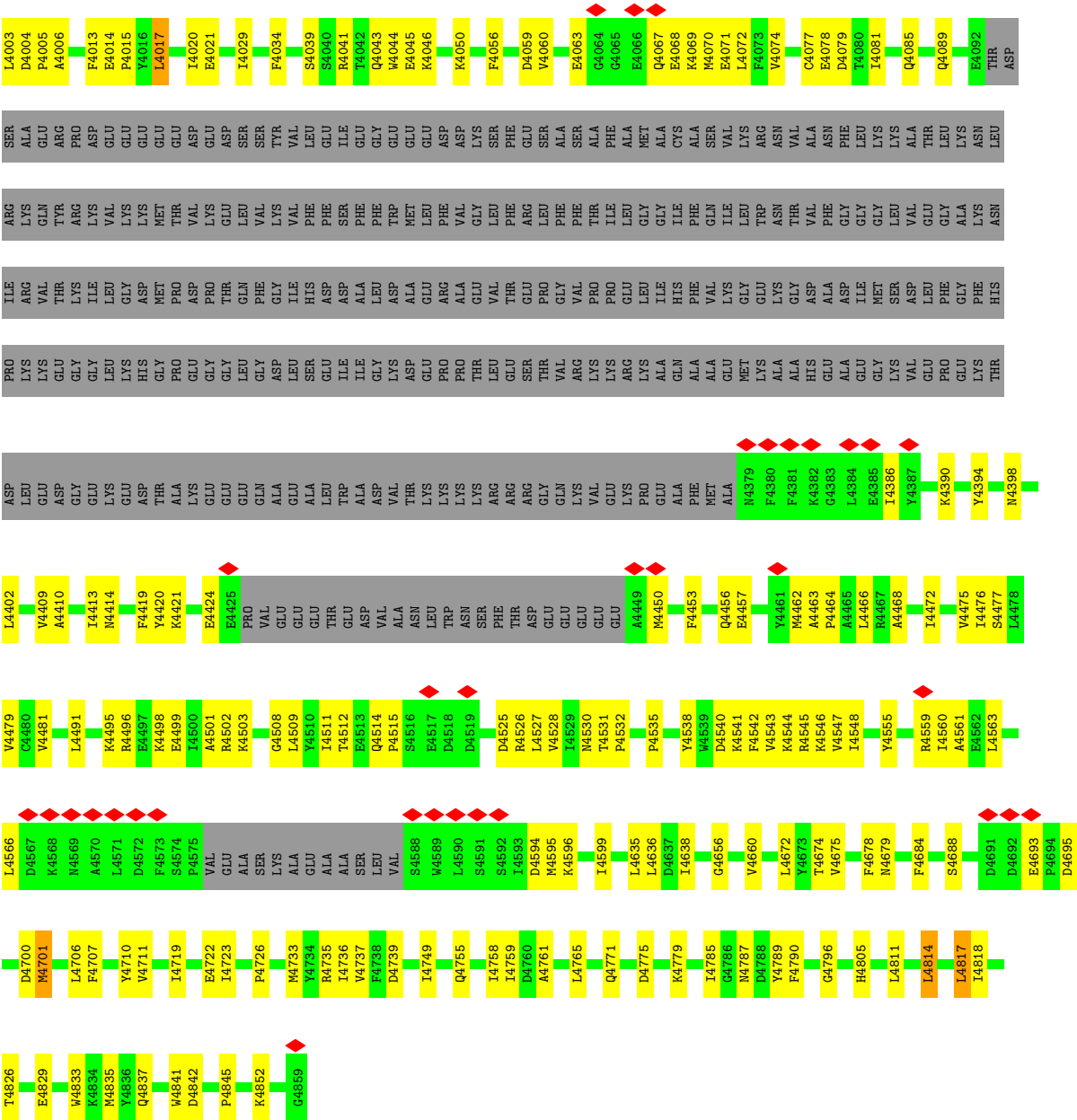
• Molecule 2: Ryanodine receptor 3



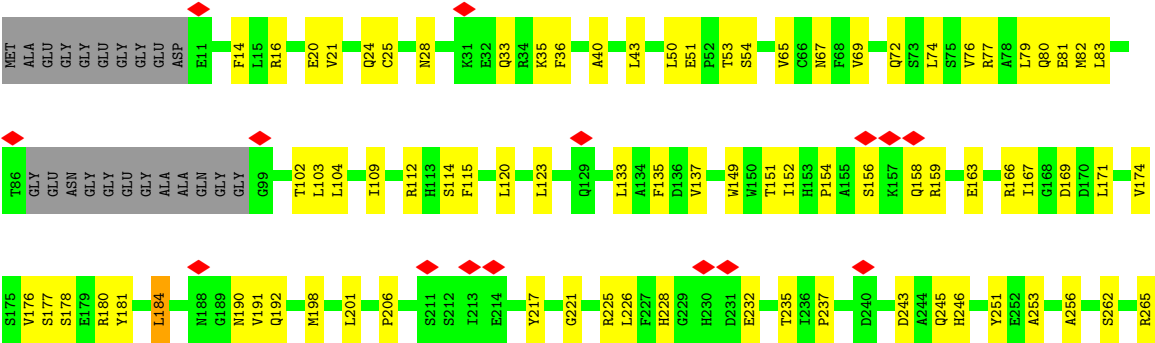
V1247	V1248	H1251	I1254	R1258	M1263	D1264	K1270	Q1279	M1280	S1281	M1282	A1283	S1284	M1285	I1286	L1290	S1301	HIS	SER	PRO	CYS	LEU	ASP	SER	GLU	PHE	GLN	LYS	ARG	LYS	GLN	MET	F1212	Y1213	T1214	M1215	L1218	Q1219	F1222	E1223	K1239	R1240	F1244															
S1135	F1138	G1139	R1140	T1141	M1151	M1153	L1154	M1158	M1159	T1162	E1166	L1167	L1168	T1169	T1170	L1176	E1182	M1185	V1188	F1189	I1190	C1191	S1192	L1193	Q1197	R1200	D1206	T1209	F1212	Y1213	T1214	M1215	L1218	Q1219	F1222	E1223	K1239	R1240	F1244																			
F1044	V1045	G1046	Y1047	G1048	Y1049	M1050	I1051	E1052	P1053	S1054	D1055	Q1056	E1057	L1058	A1059	P1061	V1062	E1064	K1065	D1069	R1072	F1073	F1074	R1075	V1076	E1077	A1078	A1081	V1082	R1083	K1086	V1087	Y1088	F1089	E1090	V1093	V1094	T1095	M1099	R1105	L1114	V1122	G1125	Q1129	R1130	W1131												
V981	L982	V983	D984	K985	L986	A987	E988	N989	A990	V993	W994	D997	R998	I999	K1000	Q1001	G1002	T1004	Y1005	G1006	I1007	Q1008	Q1009	D1010	L1011	K1012	N1013	K1014	R1015	N1016	P1017	R1018	L1019	Y1022	A1023	L1024	L1025	D1026	E1027	R1028	T1029	K1030	K1031	S1032	N1033	R1034	D1035	S1036	L1037	R1038	E1039	A1040	V1041	R1042	T1043			
L861	P862	P863	H864	L865	E866	R867	T868	R869	D870	R871	L872	A873	E874	R875	T876	H877	L879	W880	G881	L882	R883	K884	I885	E886	L887	G888	W889	T890	F891	G892	K893	L894	R895	D896	D897	N898	R899	R900	Q901	H902	P903	C904	L905	V906	E907	F908	S909	K910	L911	P912	E913	T914	E915	K916	R917	Y918	R919	L920
V750	P751	S752	I753	G764	W765	F766	E767	T771	S780	F781	S782	A783	R788	P803	Y806	C809	Y810	E811	A812	L813	L814	P815	K816	L821	K825	K828	R829	D836	Q842	S843	L844	S845	Q846	A847	S848	F849	T850	P851	C852	P853	C744	C745	L746	D855	T856	S857	W859	V860										
G653	Y657	K658	K659	W660	Y661	F662	E663	L664	I665	I666	V669	E676	P677	T678	H679	L680	R681	A691	N703	G704	V705	D706	D707	D708	S711	D715	G716	L717	H718	L719	R723	R726	A727	W728	A729	S730	I731	W732	L733	L736	V741	W742	S743	C744	C745	L746	D747											
Q444	D445	L446	L447	H459	E460	D461	K462	Q463	N464	K465	L466	Q473	H580	I581	K582	S583	I584	L588	D589	M481	L482	A483	L484	V485	L486	L489	D490	R491	L492	V498	ALA	HIS	PHE	ALA	ILE	ARG	GLU	S509	G510	M511	K514	E515	I516	L517	N518	L519	L520	Y521	K522	L523	L524							
N531	F538	K548	G557	V561	L573	E578	G579	H580	I581	K582	S583	I584	L588	D589	K590	R593	C605	L606	C607	A611	V612	R613	A614	N615	Q616	N617	L618	I619	L624	P625	R626	R627	N628	L629	Q632	I636	T640	I646	F647	L648	G649	V650	A651	E652														
K367	A368	Q369	ASP	ALA	LVS	THR	SER	ARG	LEU	GLY	PRO	L379	K382	V383	I384	L385	H390	D393	G394	L395	T396	L397	G398	R399	A407	A408	R409	I410	I411	R412	L417	F418	S419	Q420	F421	V422	S423	GLY	ASN	ASN	ARG	ALA	ALA	PRO	VAL	T433	L434	P435	K522	L523	L524	L443						
P268	L269	R270	I271	S274	L278	R279	W280	L289	L295	A296	L297	Q301	G302	L303	L304	R308	T316	S319	F320	K324	E325	I326	LVS	GLU	LVS	LEU	ASP	SER	SER	HIS	LVS	R336	V343	P344	E345	Y348	V355	I358	A359	S360	G361	L362	T365	Y366														
S175	V176	S177	S178	E179	R180	Y181	L184	M188	G189	N190	V191	Q192	M198	L201	P206	S211	S212	I213	E214	Y217	G221	R225	L226	F227	H228	G229	H230	D231	E232	T235	L236	P237	D240	D243	Q245	H246	Y251	E252	A253	A256	S262	R265																

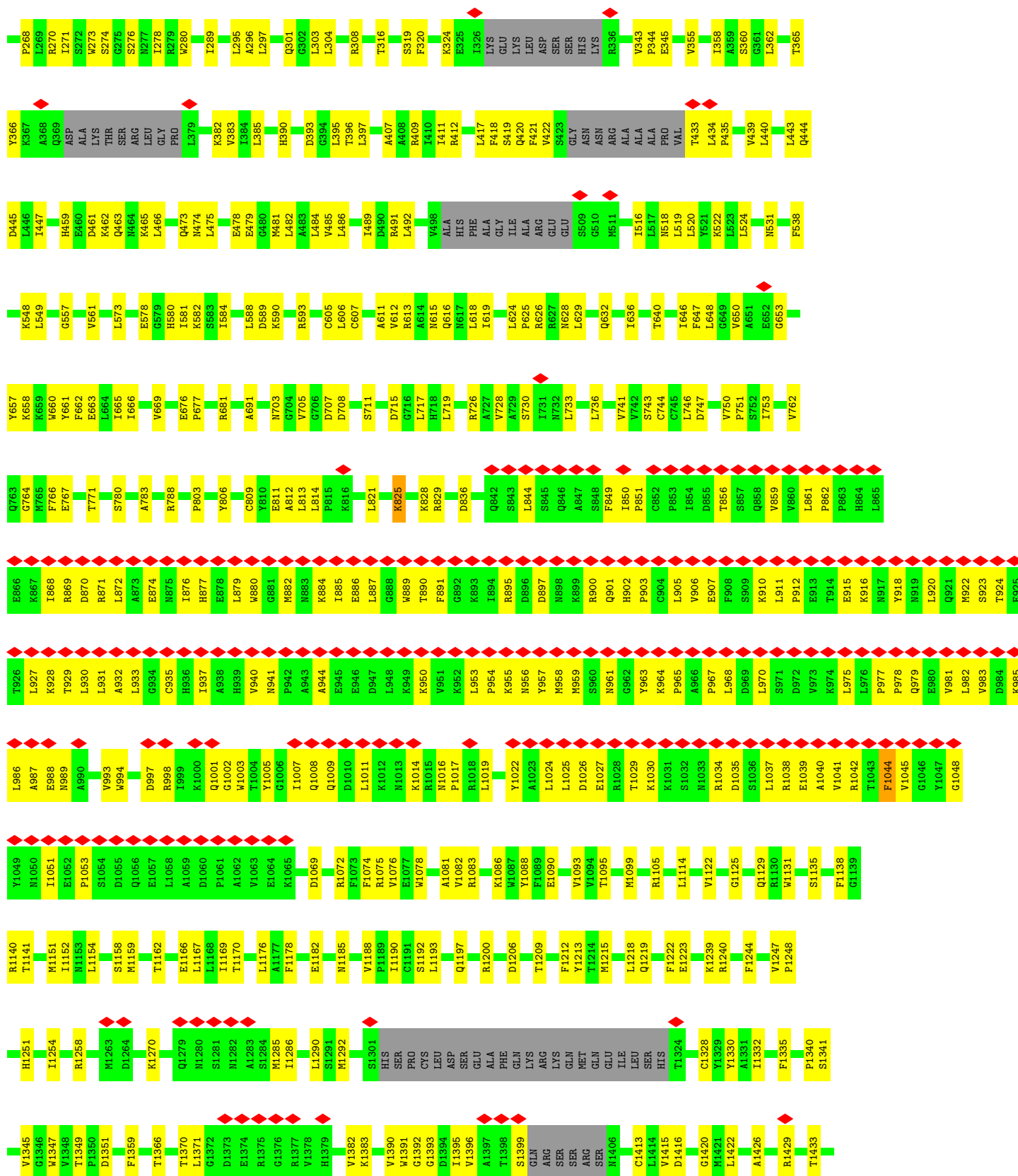


F3901	L3762	R3658	I3550	LYS	Y3390	V3296	R3207	E3097	E3004	H2928	L2823	SER
D3902	L3763	Q3659	I3551	ARG	Y3399	F3297	L3208	E3097	H3005	I2929	T2833	LYS
K3903	F3772	K3660	A3558	ALA	V3399	L3298	L3209	P3100	V3006	L2930	A2834	GLY
L3905	Y3776	L3662	T3572	VAL	L3403	L3299	K3210	D3101	V3013	T2933	H2835	GLY
K3906	D3783	L3663	S3573	ALA	R3404	V3300	I3214	Q3104	D3014	L2834	L2836	SER
L3907	K3668	Y3664	K3574	CYS	F3484	N3305	F3213	L3105	L3015	E2837	E2837	HIS
L3910	K3669	K3668	S3575		R3415	R3308	K3219	M3109	L3016	A2838	A2838	PRO
T3911	K3670	K3669	P3416	R3485	F3416	E3309	L3220	M3109	L3017	I2839	I2839	LEU
F3914	K3671	K3670	M3577	R3486	A3417	E3310	K3221	L3115	G3018	V2939	V2939	LEU
F3914	A3671	A3672	M3578	A3487	V3418	N3321	V3225	M3125	D3019	M2940	M2940	VAL
K3921	K3792	F3673	K3580	F3488	L3424	T3327	E3232	F3151	V3020	S2841	S2841	PRO
D3922	A3793	Q3674	S3581	L3489	Y3425	G3326	E3232	V3128	Q3021	G2943	G2943	TYR
G3925	L3794	Q3675	C3582	N3491	K3430	D3328	A3236	V3128	I3022	S2944	S2944	ASP
K3929	K3798	S3676	G3585	H3495	S3431	SER	D3237	V3128	S3023	E2945	E2945	THR
K3929	Q3799	L3677	K3496	I3497	F3432	LYS	T3238	L3136	I3222	L2946	L2946	THR
F3932	I3800	M3681	SER		E3433	LYS	K3239	Y3139	G3024	V2947	V2947	THR
A3935	I3808	S3685	GLU	F3501	P3434	MET	G3240	L3140	I3027	K2844	K2844	ALA
K3936	Q3809	N3690	GLU	L3502	F3435	LYS	D3241	L3140	L3028	T2845	T2845	LYS
L3939	K3810	K3690	GLU	S3503	N3436	LYS	T3242	H3150	L3027	E2846	E2846	GLU
K3940	L3811	R3694	ASP	F3505	A3437	SER	T3242	L3151	L3028	K2847	K2847	LYS
K3940	L3819	E3706	LYS	Q3506	K3439		A3245	P3152	Y3041	S2849	S2849	PHE
Q3941	R3823	E3707	E3595	L3510	T3440	G3337	E3245	P3153	R3044	H2850	H2850	ASP
Y3942	L3824	Q3708	E3599	K3516	I3441	G3338	E3246	S3154	G3050	E2853	E2853	GLU
T3943	K3825	E3709	E3600	D3520	E3442	Q3339	L3247	T3155	L2861	L2861	L2861	LYS
E3946	D3826	R3710	K3901	R3521	Q3445	Q3340	L3248	T3155	L2862	L2862	L2862	ALA
L3947	V3929	E3711	K3805	L3522	I3447	D3341	L3249	P3157	L2863	P2863	P2863	GLN
L3950	L3942	K3712	T3608	L3523	F3451	E3342	R3250	E3165	L2864	L2864	L2864	LEU
E3955	Q3848	L3714	Q3612	P3524	H3452	R3343	F3251	V3169	L2865	D2865	D2865	PHE
A3956	I3849	Q3715	A3613	P3524	L3453	K3344	F3252	I3170	L2866	D2866	D2866	LYS
D3957	E3850	N3716	R3614	L3526	L3454	T3346	F3253	I3170	THR	F2869	F2869	LEU
L3958	L3851	E3718	L3615	M3527	E3455	K3347	A3254	I3175	VAL	S2878	S2878	GLN
K3959	L3852	F3719	E3617	K3528	Q3456	R3348	R3258	L3175	ASN	K2882	K2882	ASN
D3960	E3854	L3727	G3619	S3529	V3457	R3349	I3259	R3071	GLY	P2882	P2882	GLY
K3961	Q3860	R3735	A3620	P3530	E3458	G3350	L3260	N3179	ILE	K2883	K2883	ILE
F3962	D3861	S3736	VAL	L3530	Q3459	G3350	Y3261	N3180	VAL	L2884	L2884	VAL
N3963	V3864	D3737	GLU	K3536	P3460	D3351	A3262	L3182	VAL	S2885	S2885	VAL
D3965	T3878	F3738	GLU	K3536	L3461	Q3356	F3264	G3183	LYS	S2886	S2886	SER
R3970	Q3878	L3742	GLU	LYS	S3463	I3357	K3266	I3184	ARG	E2894	E2894	ARG
F3971	Q3882	Q3745	GLU	ALA	LYS	T3358	P3265	A3187	GLY	K2895	K2895	GLY
E3973	S3890	T3751	GLU	VAL	LYS	K3365	K3266	K3081	VAL	E2896	E2896	VAL
P3974	V3894	V3754	GLU	TRP	ALA	K3366	Y3270	T3082	ASP	M2897	M2897	ASP
D3977	L3898	I3755	GLU	HIS	VAL	I3370	V3271	T3082	NET	V2898	V2898	NET
L3999		Y3761	GLU	LYS	LEU	G3371	D3272	M3190	GLU	A2899	A2899	GLU
				LEU	LEU	K3372	R3275	E3085	LEU	S2900	S2900	LEU
				SER	SER	I3370	R3275	R3086	ASP	L2901	L2901	ASP
				LYS	LYS	G3371	R3275	S3087	ALA	L2905	L2905	ALA
				GLN	GLN	L3372	L3289	L3088	GLY	L2908	L2908	GLY
				ARG	ARG	D3379	F3290	L3089	ASP	V2909	V2909	ASP
						I3383	K3291	G3090	LYS	L2819	L2819	LYS
						S3384	K3292	T3090	THR	K2820	K2820	THR
						L3385	V3293	S3001	GLU	L2821	L2821	GLU
						K3386	A3294	F3003	LEU	12822	12822	LEU
						K3387	E3295		ALA			ALA



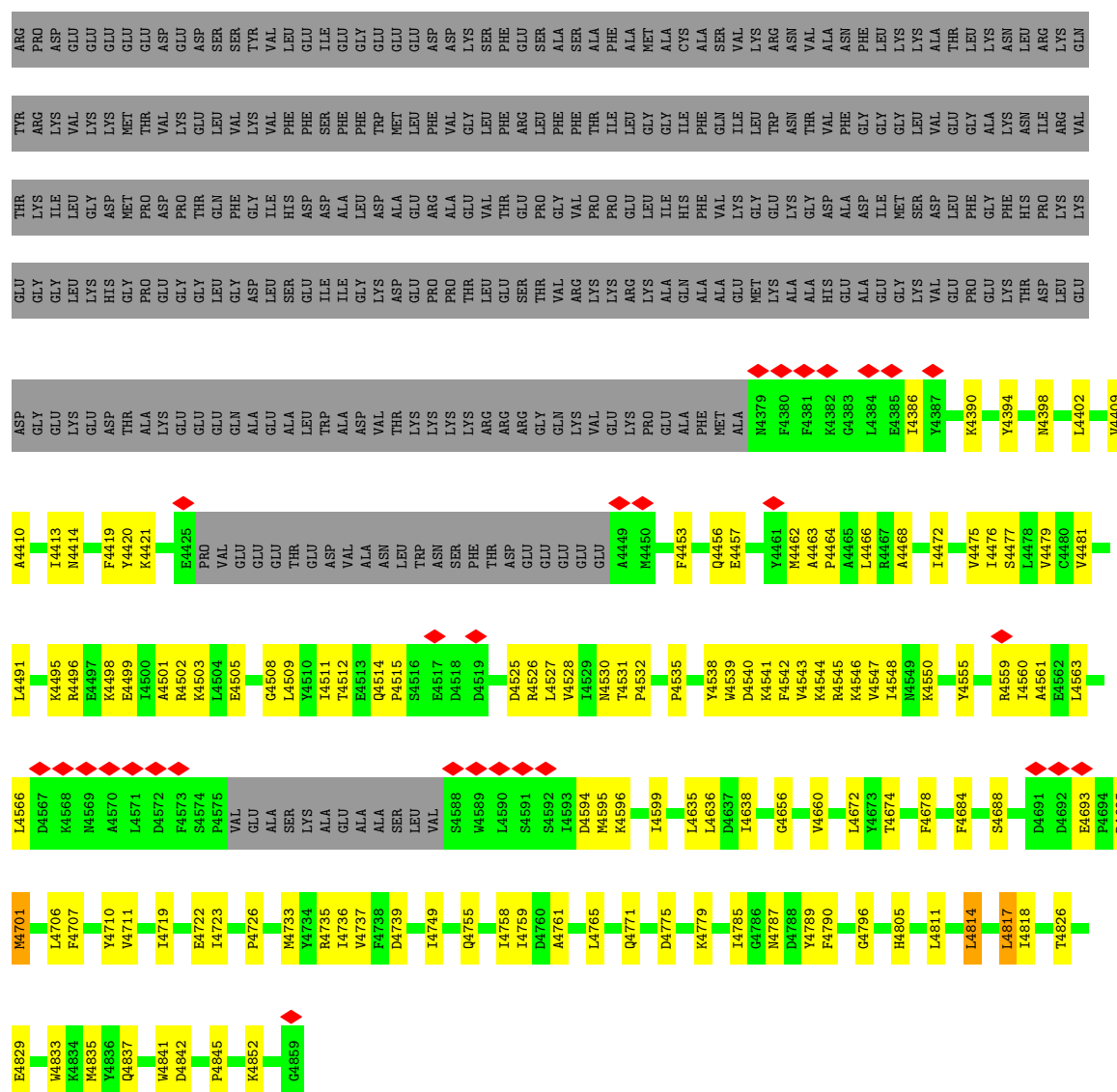
● Molecule 2: Ryanodine receptor 3







L4003	K3999	Q3549	K3387	E3295	L3208	P3100	H3005	H9998	L2823
D4004	F3900	I3550	Y3390	V3296	L3209	D3101	V3006	I2929	I2833
A4006	D3901	I3551	Y3399	F3297	K3210	Q3104	V3013	T2933	A2834
F4013	M3903	A3558	V3399	L3298	F3213	L3105	L3015	D2935	H2835
E4014	F3904	L3662	L3403	K3309	I3214	M3109	L3016	T2936	L2836
F4015	L3905	D3663	R3404	W3305	K3219	L3115	L3017	V2939	E2837
F4016	K3906	Y3664	F3404	R3305	L3220	L3125	G3018	M2940	A2838
L4017	L3907	T3572	D3415	R3308	K3221	V3128	V3020	V2941	V2840
E4021	T3911	S3573	P3416	E3309	K3222	E3130	S3021	S2944	S2941
T4029	D3914	S3574	A3417	E3310	K3223	V3129	I3022	E2945	S2842
S4039	F3921	A3575	V3418	N3321	V3225	E3136	C3024	S2946	G2843
S4040	D3922	S3576	L3424	T3326	E3232	L3136	I3027	V2947	K2844
R4041	K3925	S3577	Y3425	G3327	A3236	L3139	L3028	K2948	T2845
T4042	G3929	S3578	K3430	S3328	D3237	Y3139	L3034	E2960	E2846
Q4043	K3932	S3579	S3431	L3328	L3238	L3140	Y3041	E2963	K2847
Q4044	K3933	S3580	E3432	L3338	K3239	H3150	R3044	T2964	S2848
E4045	K3934	S3581	E3433	L3339	L3240	L3151	G3050	K2966	P2849
K4046	K3935	S3582	F3434	L3340	D3241	P3152	L3063	S2966	H2850
K4050	K3936	G3585	N3436	Q3337	T3242	P3153	L3065	E2967	E2853
F4056	K3939	S3586	A3437	Q3338	Q3243	S3154	L3069	N2968	L2861
D4059	K3940	S3587	K3439	L3341	Q3244	T3155	L2971	L2969	L2862
V4060	K3941	S3588	T3440	Q3343	A3245	G3156	G2970	K2970	P2863
E4063	K3942	S3589	Q3445	L3344	E3246	P3157	G2972	L2971	L2864
G4064	Y3942	E3590	R3446	D3344	L3247	V3169	P3061	G2972	V2865
G4065	T3943	E3591	L3447	K3345	L3248	L3175	F3064	PHE	D2866
E4066	K3946	E3592	Q3447	K3346	I3249	N3179	T3068	THR	F2869
Q4067	K3947	E3593	V3451	K3347	L3250	N3181	L3069	HIS	S2878
Q4068	L3950	E3594	F3452	K3348	D3251	L3182	ARG	ARG	S2878
K4069	L3951	E3595	H3453	K3349	E3252	G3183	R3071	THR	K2882
K4070	E3955	E3596	L3454	R3348	F3253	I3184	GLN	GLN	P2883
E4071	A3956	E3597	E3455	R3349	V3255	A3187	LYS	LYS	L2884
L4072	D3957	E3598	Q3456	G3350	R3258	N3190	GLY	GLY	S2885
F4073	K3958	E3599	Q3457	E3351	D3259	L3191	V2984	V2984	S2886
V4074	E3959	E3600	E3458	D3356	L3260	N3181	S2985	S2985	E2894
C4077	K3959	E3601	Q3459	Q3357	Y3261	L3182	Q2986	Q2986	V2895
E4078	D3960	E3602	P3460	S3358	A3262	G3183	N2987	N2987	E2896
D4079	K3961	V3624	L3461	L3364	F3263	I3184	I2988	I2988	K2897
T4080	F3962	V3627	R3462	L3365	K3266	A3187	S2989	S2989	V2898
L4081	N3963	M3627	LYS	L3366	M3266	N3190	F2990	F2990	A2899
Q4085	R3970	M3628	LYS	K3367	Y3270	T3193	R3086	S2900	S2900
Q4089	F3971	M3635	ALA	K3368	D3271	T3193	S3087	L2901	L2901
E4092	E3973	S3636	TRP	K3369	D3272	A3197	I3088	L2995	L2995
THR	P3974	M3637	GLU	L3370	R3275	I3201	L3089	L2996	L2996
ASP	D3977	E3641	GLU	L3371	L3289	A3204	G3090	P2997	P2997
ALA	I3978	N3651	LEU	L3372	F3290	R2205	T3094	I2998	I2998
GLU	L3999	N3652	SER	D3372	K3291	P3206	S3095	L2999	L2999
			LYS	D3373	M3292	E3096	E3095	T3000	T3000
			GLN	S3384	V3293	E3097	E3097	S3001	S3001
				L3385	A3294			F3002	F3002
				L3386				F3003	F3003
								E3004	E3004
									L2927



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C4	Depositor
Number of particles used	84690	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	50	Depositor
Minimum defocus (nm)	500	Depositor
Maximum defocus (nm)	2000	Depositor
Magnification	Not provided	
Image detector	FEI FALCON IV (4k x 4k)	Depositor
Maximum map value	0.693	Depositor
Minimum map value	0.000	Depositor
Average map value	0.002	Depositor
Map value standard deviation	0.015	Depositor
Recommended contour level	0.068	Depositor
Map size (Å)	478.72, 478.72, 478.72	wwPDB
Map dimensions	512, 512, 512	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	0.935, 0.935, 0.935	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: CL, CA, ATP, CFF, ZN

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	0.16	0/831	0.24	0/1120
1	C	0.16	0/831	0.24	0/1120
1	E	0.16	0/831	0.24	0/1120
1	G	0.16	0/831	0.24	0/1120
2	B	0.23	0/32381	0.27	0/43893
2	D	0.23	0/32381	0.27	0/43893
2	F	0.23	0/32381	0.27	0/43893
2	H	0.23	0/32381	0.27	0/43893
All	All	0.23	0/132848	0.27	0/180052

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts [i](#)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	815	0	821	22	0
1	C	815	0	821	22	0
1	E	815	0	821	21	0
1	G	815	0	821	23	0
2	B	31699	0	31082	973	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
2	D	31699	0	31082	978	0
2	F	31699	0	31082	964	0
2	H	31699	0	31082	968	0
3	B	1	0	0	0	0
3	D	1	0	0	0	0
3	F	1	0	0	0	0
3	H	1	0	0	0	0
4	B	1	0	0	0	0
4	D	1	0	0	0	0
4	F	1	0	0	0	0
4	H	1	0	0	0	0
5	B	62	24	24	2	0
5	D	62	24	24	2	0
5	F	62	24	24	2	0
5	H	62	24	24	2	0
6	B	14	10	10	0	0
6	D	14	10	10	0	0
6	F	14	10	10	0	0
6	H	14	10	10	0	0
7	B	1	0	0	1	0
7	D	1	0	0	1	0
7	F	1	0	0	1	0
7	H	1	0	0	1	0
All	All	130372	136	127748	3915	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 15.

All (3915) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:983:VAL:HG22	2:B:1041:VAL:HG21	1.45	0.98
2:H:885:ILE:HG21	2:H:957:TYR:HA	1.45	0.98
2:H:983:VAL:HG22	2:H:1041:VAL:HG21	1.45	0.98
2:B:885:ILE:HG21	2:B:957:TYR:HA	1.45	0.98
2:F:983:VAL:HG22	2:F:1041:VAL:HG21	1.45	0.98
2:D:983:VAL:HG22	2:D:1041:VAL:HG21	1.45	0.97
2:F:889:TRP:HA	2:F:900:ARG:HB3	1.46	0.97
2:F:885:ILE:HG21	2:F:957:TYR:HA	1.45	0.97
2:B:889:TRP:HA	2:B:900:ARG:HB3	1.46	0.95
2:D:885:ILE:HG21	2:D:957:TYR:HA	1.45	0.95

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:889:TRP:HA	2:D:900:ARG:HB3	1.46	0.95
2:H:889:TRP:HA	2:H:900:ARG:HB3	1.46	0.93
2:D:3929:LYS:HE3	2:D:3956:ALA:HB2	1.52	0.92
2:D:1964:MET:HE3	2:D:1985:LEU:HD23	1.52	0.91
2:F:1670:PRO:HG3	2:F:1684:PRO:HB3	1.53	0.91
2:F:1964:MET:HE3	2:F:1985:LEU:HD23	1.52	0.91
2:H:1964:MET:HE3	2:H:1985:LEU:HD23	1.52	0.91
2:H:232:GLU:HG2	2:H:253:ALA:HB2	1.52	0.91
2:H:1670:PRO:HG3	2:H:1684:PRO:HB3	1.53	0.91
2:H:3929:LYS:HE3	2:H:3956:ALA:HB2	1.52	0.91
2:B:1670:PRO:HG3	2:B:1684:PRO:HB3	1.53	0.91
2:B:3929:LYS:HE3	2:B:3956:ALA:HB2	1.52	0.90
2:F:3929:LYS:HE3	2:F:3956:ALA:HB2	1.52	0.90
2:F:885:ILE:HG12	2:F:959:MET:HE2	1.54	0.90
2:B:1964:MET:HE3	2:B:1985:LEU:HD23	1.52	0.90
2:H:885:ILE:HG12	2:H:959:MET:HE2	1.54	0.90
2:F:232:GLU:HG2	2:F:253:ALA:HB2	1.52	0.90
2:B:3681:MET:HE1	2:B:3754:VAL:HG13	1.55	0.89
2:D:1670:PRO:HG3	2:D:1684:PRO:HB3	1.53	0.89
2:B:232:GLU:HG2	2:B:253:ALA:HB2	1.52	0.89
2:D:232:GLU:HG2	2:D:253:ALA:HB2	1.52	0.89
2:D:3681:MET:HE1	2:D:3754:VAL:HG13	1.55	0.89
2:D:235:THR:HG22	2:D:262:SER:HB3	1.54	0.89
2:B:691:ALA:HB1	2:B:825:LYS:HD2	1.55	0.88
2:F:3681:MET:HE1	2:F:3754:VAL:HG13	1.55	0.88
2:B:885:ILE:HG12	2:B:959:MET:HE2	1.54	0.88
2:D:691:ALA:HB1	2:D:825:LYS:HD2	1.55	0.88
2:F:235:THR:HG22	2:F:262:SER:HB3	1.54	0.88
2:H:3681:MET:HE1	2:H:3754:VAL:HG13	1.55	0.88
2:D:885:ILE:HG12	2:D:959:MET:HE2	1.54	0.87
2:B:235:THR:HG22	2:B:262:SER:HB3	1.54	0.87
2:B:2822:ILE:HD13	2:B:2865:VAL:HG22	1.58	0.86
2:D:611:ALA:HB2	2:D:1571:LEU:HD12	1.57	0.86
2:H:235:THR:HG22	2:H:262:SER:HB3	1.54	0.86
2:D:2822:ILE:HD13	2:D:2865:VAL:HG22	1.58	0.85
2:B:2905:LEU:HD22	2:B:2923:MET:HE1	1.58	0.85
2:F:650:VAL:HG23	2:F:658:LYS:HE2	1.57	0.85
2:B:3763:LEU:HD11	2:B:3823:ARG:HB2	1.59	0.85
2:F:2905:LEU:HD22	2:F:2923:MET:HE1	1.58	0.85
2:F:691:ALA:HB1	2:F:825:LYS:HD2	1.55	0.85
2:H:611:ALA:HB2	2:H:1571:LEU:HD12	1.57	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:2822:ILE:HD13	2:H:2865:VAL:HG22	1.58	0.85
2:H:2905:LEU:HD22	2:H:2923:MET:HE1	1.58	0.85
2:B:573:LEU:HD22	2:B:607:CYS:HB2	1.59	0.85
2:H:691:ALA:HB1	2:H:825:LYS:HD2	1.55	0.85
2:F:2346:ILE:HD11	2:F:2401:SER:HB2	1.59	0.85
2:F:3681:MET:HE2	2:F:3727:LEU:HD11	1.59	0.84
2:H:650:VAL:HG23	2:H:658:LYS:HE2	1.57	0.84
2:D:3763:LEU:HD11	2:D:3823:ARG:HB2	1.59	0.84
2:D:2346:ILE:HD11	2:D:2401:SER:HB2	1.59	0.84
2:D:2905:LEU:HD22	2:D:2923:MET:HE1	1.58	0.84
2:F:611:ALA:HB2	2:F:1571:LEU:HD12	1.57	0.84
2:F:2822:ILE:HD13	2:F:2865:VAL:HG22	1.58	0.84
2:F:3527:MET:HG3	2:F:3618:ARG:HH12	1.43	0.84
2:D:3220:LEU:HD13	2:D:3260:LEU:HD23	1.60	0.83
2:B:650:VAL:HG23	2:B:658:LYS:HE2	1.57	0.83
2:H:2346:ILE:HD11	2:H:2401:SER:HB2	1.59	0.83
2:B:3681:MET:HE2	2:B:3727:LEU:HD11	1.59	0.83
2:D:650:VAL:HG23	2:D:658:LYS:HE2	1.57	0.83
2:H:3763:LEU:HD11	2:H:3823:ARG:HB2	1.59	0.83
2:B:1162:THR:HG22	2:B:1167:LEU:HD23	1.61	0.83
2:H:3681:MET:HE2	2:H:3727:LEU:HD11	1.59	0.83
2:B:611:ALA:HB2	2:B:1571:LEU:HD12	1.57	0.83
2:F:3763:LEU:HD11	2:F:3823:ARG:HB2	1.59	0.83
2:H:573:LEU:HD22	2:H:607:CYS:HB2	1.59	0.83
2:D:1162:THR:HG22	2:D:1167:LEU:HD23	1.61	0.83
2:D:3681:MET:HE2	2:D:3727:LEU:HD11	1.59	0.83
2:F:573:LEU:HD22	2:F:607:CYS:HB2	1.59	0.83
2:H:3527:MET:HG3	2:H:3618:ARG:HH12	1.43	0.82
2:H:3220:LEU:HD13	2:H:3260:LEU:HD23	1.60	0.82
2:B:2346:ILE:HD11	2:B:2401:SER:HB2	1.59	0.82
2:D:573:LEU:HD22	2:D:607:CYS:HB2	1.59	0.82
2:F:3220:LEU:HD13	2:F:3260:LEU:HD23	1.60	0.82
2:D:3527:MET:HG3	2:D:3618:ARG:HH12	1.43	0.82
2:H:1162:THR:HG22	2:H:1167:LEU:HD23	1.61	0.81
2:F:1162:THR:HG22	2:F:1167:LEU:HD23	1.61	0.81
2:B:3220:LEU:HD13	2:B:3260:LEU:HD23	1.60	0.81
2:B:3077:VAL:HA	2:B:3080:THR:HG22	1.63	0.81
2:D:3077:VAL:HA	2:D:3080:THR:HG22	1.63	0.81
2:F:3077:VAL:HA	2:F:3080:THR:HG22	1.63	0.81
2:F:3425:TYR:OH	2:H:1219:GLN:NE2	2.15	0.81
2:B:3527:MET:HG3	2:B:3618:ARG:HH12	1.43	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:3077:VAL:HA	2:H:3080:THR:HG22	1.63	0.80
2:B:3425:TYR:OH	2:D:1219:GLN:NE2	2.15	0.80
2:D:50:LEU:HD12	2:D:191:VAL:HG12	1.65	0.79
2:D:4555:TYR:HB3	2:D:4559:ARG:HH21	1.48	0.79
2:D:3425:TYR:OH	2:F:1219:GLN:NE2	2.15	0.79
2:B:4555:TYR:HB3	2:B:4559:ARG:HH21	1.48	0.79
2:F:50:LEU:HD12	2:F:191:VAL:HG12	1.65	0.79
2:F:911:LEU:HD12	2:F:912:PRO:HD2	1.65	0.79
2:B:1219:GLN:NE2	2:H:3425:TYR:OH	2.15	0.78
2:F:4555:TYR:HB3	2:F:4559:ARG:HH21	1.48	0.78
2:B:50:LEU:HD12	2:B:191:VAL:HG12	1.65	0.78
2:F:811:GLU:HA	2:F:1007:ILE:HD12	1.66	0.78
2:H:50:LEU:HD12	2:H:191:VAL:HG12	1.65	0.78
2:D:1009:GLN:HE21	2:D:1011:LEU:HB2	1.49	0.78
2:F:1009:GLN:HE21	2:F:1011:LEU:HB2	1.49	0.78
2:H:911:LEU:HD12	2:H:912:PRO:HD2	1.65	0.78
2:H:937:ILE:HG12	2:H:1051:ILE:HD12	1.66	0.78
2:D:3898:LEU:HD13	2:D:4006:ALA:HB2	1.66	0.77
2:F:3898:LEU:HD13	2:F:4006:ALA:HB2	1.66	0.77
2:B:1009:GLN:HE21	2:B:1011:LEU:HB2	1.49	0.77
2:D:811:GLU:HA	2:D:1007:ILE:HD12	1.66	0.77
2:H:4555:TYR:HB3	2:H:4559:ARG:HH21	1.48	0.77
2:B:937:ILE:HG12	2:B:1051:ILE:HD12	1.66	0.77
2:D:911:LEU:HD12	2:D:912:PRO:HD2	1.65	0.77
2:D:937:ILE:HG12	2:D:1051:ILE:HD12	1.66	0.77
2:F:937:ILE:HG12	2:F:1051:ILE:HD12	1.66	0.77
2:H:3898:LEU:HD13	2:H:4006:ALA:HB2	1.66	0.77
2:H:1009:GLN:HE21	2:H:1011:LEU:HB2	1.49	0.77
2:D:422:VAL:HG23	2:D:491:ARG:HG3	1.67	0.77
2:B:3898:LEU:HD13	2:B:4006:ALA:HB2	1.66	0.77
2:F:422:VAL:HG23	2:F:491:ARG:HG3	1.67	0.77
2:F:1129:GLN:OE1	2:F:1135:SER:OG	2.03	0.77
2:B:1114:LEU:HD11	2:B:1190:ILE:HD13	1.67	0.77
2:B:1129:GLN:OE1	2:B:1135:SER:OG	2.03	0.77
2:D:1129:GLN:OE1	2:D:1135:SER:OG	2.03	0.77
2:H:869:ARG:HB2	2:H:927:LEU:HD11	1.67	0.77
2:H:811:GLU:HA	2:H:1007:ILE:HD12	1.66	0.76
2:B:911:LEU:HD12	2:B:912:PRO:HD2	1.65	0.76
2:B:869:ARG:HB2	2:B:927:LEU:HD11	1.67	0.76
2:D:4496:ARG:NH1	2:D:4525:ASP:OD1	2.19	0.76
2:F:869:ARG:HB2	2:F:927:LEU:HD11	1.67	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:1114:LEU:HD11	2:H:1190:ILE:HD13	1.67	0.76
2:H:4496:ARG:NH1	2:H:4525:ASP:OD1	2.19	0.76
2:D:1114:LEU:HD11	2:D:1190:ILE:HD13	1.67	0.76
2:F:109:ILE:HG21	2:F:152:ILE:HD11	1.68	0.76
2:H:109:ILE:HG21	2:H:152:ILE:HD11	1.68	0.76
2:H:1129:GLN:OE1	2:H:1135:SER:OG	2.03	0.75
2:D:869:ARG:HB2	2:D:927:LEU:HD11	1.67	0.75
2:B:811:GLU:HA	2:B:1007:ILE:HD12	1.66	0.75
2:B:3385:LEU:HD22	2:B:3403:LEU:HD23	1.68	0.75
2:B:422:VAL:HG23	2:B:491:ARG:HG3	1.67	0.75
2:H:422:VAL:HG23	2:H:491:ARG:HG3	1.67	0.75
2:H:924:THR:HG22	2:H:928:LYS:HE3	1.69	0.75
2:B:4496:ARG:NH1	2:B:4525:ASP:OD1	2.19	0.75
2:F:924:THR:HG22	2:F:928:LYS:HE3	1.69	0.75
2:F:1114:LEU:HD11	2:F:1190:ILE:HD13	1.67	0.75
2:D:109:ILE:HG21	2:D:152:ILE:HD11	1.68	0.74
2:F:3385:LEU:HD22	2:F:3403:LEU:HD23	1.68	0.74
2:F:411:ILE:HD13	2:F:479:GLU:HG3	1.69	0.74
2:H:3019:ASP:OD1	2:H:3019:ASP:N	2.20	0.74
2:D:411:ILE:HD13	2:D:479:GLU:HG3	1.69	0.74
2:B:109:ILE:HG21	2:B:152:ILE:HD11	1.68	0.74
2:B:296:ALA:HB2	2:B:316:THR:HG22	1.70	0.74
2:D:296:ALA:HB2	2:D:316:THR:HG22	1.70	0.74
2:D:1022:TYR:O	2:D:1030:LYS:NZ	2.20	0.74
2:F:4496:ARG:NH1	2:F:4525:ASP:OD1	2.19	0.73
2:D:3300:TRP:NE1	2:D:3310:GLU:OE1	2.20	0.73
2:F:178:SER:HB2	2:F:180:ARG:HH11	1.53	0.73
2:H:3385:LEU:HD22	2:H:3403:LEU:HD23	1.68	0.73
2:B:411:ILE:HD13	2:B:479:GLU:HG3	1.69	0.73
2:F:3300:TRP:NE1	2:F:3310:GLU:OE1	2.20	0.73
2:B:1624:MET:HE2	2:B:1624:MET:HA	1.70	0.73
2:D:924:THR:HG22	2:D:928:LYS:HE3	1.69	0.73
2:B:924:THR:HG22	2:B:928:LYS:HE3	1.69	0.73
2:B:3300:TRP:NE1	2:B:3310:GLU:OE1	2.20	0.73
2:H:411:ILE:HD13	2:H:479:GLU:HG3	1.69	0.73
2:H:3204:ALA:HB1	2:H:3208:LEU:HD12	1.71	0.73
2:B:1022:TYR:O	2:B:1030:LYS:NZ	2.20	0.73
2:D:1624:MET:HA	2:D:1624:MET:HE2	1.70	0.73
2:H:1022:TYR:O	2:H:1030:LYS:NZ	2.20	0.73
2:D:1105:ARG:NH2	2:D:1182:GLU:O	2.22	0.73
2:H:178:SER:HB2	2:H:180:ARG:HH11	1.53	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:4457:GLU:HG2	2:H:4462:MET:HG3	1.70	0.73
2:D:3523:ILE:HG22	2:D:3524:PRO:HD3	1.71	0.73
2:D:4457:GLU:HG2	2:D:4462:MET:HG3	1.70	0.73
2:D:3385:LEU:HD22	2:D:3403:LEU:HD23	1.68	0.72
2:F:296:ALA:HB2	2:F:316:THR:HG22	1.70	0.72
2:H:3300:TRP:NE1	2:H:3310:GLU:OE1	2.20	0.72
2:B:1105:ARG:NH2	2:B:1182:GLU:O	2.22	0.72
2:B:4739:ASP:OD2	2:H:4710:TYR:OH	2.07	0.72
2:H:1816:ASP:OD1	2:H:1988:ARG:NH2	2.20	0.72
2:B:3204:ALA:HB1	2:B:3208:LEU:HD12	1.71	0.72
2:H:296:ALA:HB2	2:H:316:THR:HG22	1.70	0.72
2:B:297:LEU:HD12	2:B:385:LEU:HD13	1.72	0.72
2:F:289:ILE:O	2:F:412:ARG:NH1	2.23	0.72
2:F:1624:MET:HE2	2:F:1624:MET:HA	1.70	0.72
2:F:3019:ASP:N	2:F:3019:ASP:OD1	2.20	0.72
2:F:4457:GLU:HG2	2:F:4462:MET:HG3	1.70	0.72
2:B:3523:ILE:HG22	2:B:3524:PRO:HD3	1.71	0.72
2:B:4710:TYR:OH	2:D:4739:ASP:OD2	2.07	0.72
2:D:178:SER:HB2	2:D:180:ARG:HH11	1.53	0.72
2:F:1105:ARG:NH2	2:F:1182:GLU:O	2.22	0.72
2:D:297:LEU:HD12	2:D:385:LEU:HD13	1.72	0.72
2:H:4530:ASN:ND2	2:H:4563:LEU:O	2.23	0.72
2:B:4457:GLU:HG2	2:B:4462:MET:HG3	1.70	0.72
2:F:3523:ILE:HG22	2:F:3524:PRO:HD3	1.71	0.72
2:H:133:LEU:O	2:H:180:ARG:NE	2.23	0.72
2:B:133:LEU:O	2:B:180:ARG:NE	2.23	0.71
2:F:1022:TYR:O	2:F:1030:LYS:NZ	2.20	0.71
2:F:3204:ALA:HB1	2:F:3208:LEU:HD12	1.71	0.71
2:D:3109:MET:HE3	2:D:3170:ILE:HD11	1.72	0.71
2:H:1624:MET:HE2	2:H:1624:MET:HA	1.70	0.71
2:D:4530:ASN:ND2	2:D:4563:LEU:O	2.23	0.71
2:F:297:LEU:HD12	2:F:385:LEU:HD13	1.72	0.71
2:H:3109:MET:HE3	2:H:3170:ILE:HD11	1.72	0.71
2:B:178:SER:HB2	2:B:180:ARG:HH11	1.53	0.71
2:H:1105:ARG:NH2	2:H:1182:GLU:O	2.22	0.71
2:B:681:ARG:NH1	2:B:707:ASP:OD1	2.23	0.71
2:D:3204:ALA:HB1	2:D:3208:LEU:HD12	1.71	0.71
2:F:646:ILE:HD13	2:F:809:CYS:HB3	1.73	0.71
2:D:4710:TYR:OH	2:F:4739:ASP:OD2	2.07	0.71
1:A:50:ARG:HD3	1:A:53:LYS:HE3	1.73	0.71
2:H:646:ILE:HD13	2:H:809:CYS:HB3	1.73	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2047:ILE:HD13	2:B:2065:MET:HE1	1.73	0.71
2:F:4530:ASN:ND2	2:F:4563:LEU:O	2.23	0.71
2:H:3523:ILE:HG22	2:H:3524:PRO:HD3	1.71	0.71
2:B:289:ILE:O	2:B:412:ARG:NH1	2.23	0.70
2:F:3109:MET:HE3	2:F:3170:ILE:HD11	1.72	0.70
2:F:4710:TYR:OH	2:H:4739:ASP:OD2	2.07	0.70
2:H:650:VAL:HG11	2:H:771:THR:HB	1.73	0.70
2:D:646:ILE:HD13	2:D:809:CYS:HB3	1.73	0.70
2:B:3109:MET:HE3	2:B:3170:ILE:HD11	1.72	0.70
2:F:681:ARG:NH1	2:F:707:ASP:OD1	2.23	0.70
2:F:2047:ILE:HD13	2:F:2065:MET:HE1	1.73	0.70
2:B:4394:TYR:O	2:B:4398:ASN:ND2	2.24	0.70
2:H:859:VAL:HG21	2:H:932:ALA:HB2	1.73	0.70
2:H:4394:TYR:O	2:H:4398:ASN:ND2	2.24	0.70
2:B:4530:ASN:ND2	2:B:4563:LEU:O	2.23	0.70
2:H:297:LEU:HD12	2:H:385:LEU:HD13	1.72	0.70
2:F:930:LEU:HD21	2:F:986:LEU:HD11	1.73	0.70
2:H:2350:ASP:O	2:H:2354:ASN:ND2	2.24	0.70
2:B:859:VAL:HG21	2:B:932:ALA:HB2	1.73	0.70
2:D:3019:ASP:N	2:D:3019:ASP:OD1	2.20	0.70
2:F:2350:ASP:O	2:F:2354:ASN:ND2	2.24	0.70
2:H:3125:MET:HE3	2:H:3129:ILE:HD11	1.74	0.70
2:B:1798:ARG:NH2	2:B:1971:ASP:OD2	2.24	0.70
2:B:3125:MET:HE3	2:B:3129:ILE:HD11	1.74	0.70
2:F:133:LEU:O	2:F:180:ARG:NE	2.23	0.70
2:D:4394:TYR:O	2:D:4398:ASN:ND2	2.24	0.70
1:E:50:ARG:HD3	1:E:53:LYS:HE3	1.73	0.70
2:F:4394:TYR:O	2:F:4398:ASN:ND2	2.24	0.70
2:B:3019:ASP:OD1	2:B:3019:ASP:N	2.20	0.69
2:D:133:LEU:O	2:D:180:ARG:NE	2.23	0.69
2:F:636:ILE:HD11	2:F:1531:MET:HE2	1.74	0.69
2:H:636:ILE:HD11	2:H:1531:MET:HE2	1.74	0.69
2:B:646:ILE:HD13	2:B:809:CYS:HB3	1.73	0.69
2:B:650:VAL:HG11	2:B:771:THR:HB	1.73	0.69
2:D:1816:ASP:OD1	2:D:1988:ARG:NH2	2.20	0.69
2:D:3125:MET:HE3	2:D:3129:ILE:HD11	1.74	0.69
2:F:859:VAL:HG21	2:F:932:ALA:HB2	1.73	0.69
2:F:2530:GLU:OE1	2:F:2579:ARG:NH2	2.25	0.69
2:F:3125:MET:HE3	2:F:3129:ILE:HD11	1.74	0.69
2:H:2047:ILE:HD13	2:H:2065:MET:HE1	1.73	0.69
1:G:50:ARG:HD3	1:G:53:LYS:HE3	1.73	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:2350:ASP:O	2:D:2354:ASN:ND2	2.24	0.69
2:D:3094:THR:HG22	2:D:3096:GLU:H	1.57	0.69
2:F:650:VAL:HG11	2:F:771:THR:HB	1.73	0.69
2:F:3094:THR:HG22	2:F:3096:GLU:H	1.57	0.69
2:B:3253:PHE:HB3	2:B:3309:GLU:HG3	1.74	0.69
1:C:50:ARG:HD3	1:C:53:LYS:HE3	1.73	0.69
2:D:650:VAL:HG11	2:D:771:THR:HB	1.73	0.69
2:D:2530:GLU:OE1	2:D:2579:ARG:NH2	2.25	0.69
2:D:3253:PHE:HB3	2:D:3309:GLU:HG3	1.74	0.69
2:F:1816:ASP:OD1	2:F:1988:ARG:NH2	2.20	0.69
2:B:1816:ASP:OD1	2:B:1988:ARG:NH2	2.20	0.69
2:D:636:ILE:HD11	2:D:1531:MET:HE2	1.74	0.69
2:H:2530:GLU:OE1	2:H:2579:ARG:NH2	2.25	0.69
2:H:681:ARG:NH1	2:H:707:ASP:OD1	2.23	0.69
2:H:930:LEU:HD21	2:H:986:LEU:HD11	1.73	0.69
2:B:767:GLU:OE2	2:B:1370:THR:OG1	2.10	0.69
2:B:2530:GLU:OE1	2:B:2579:ARG:NH2	2.25	0.69
2:H:289:ILE:O	2:H:412:ARG:NH1	2.23	0.69
2:H:3253:PHE:HB3	2:H:3309:GLU:HG3	1.74	0.69
2:B:636:ILE:HD11	2:B:1531:MET:HE2	1.74	0.69
2:B:2350:ASP:O	2:B:2354:ASN:ND2	2.24	0.69
2:D:930:LEU:HD21	2:D:986:LEU:HD11	1.73	0.69
2:F:613:ARG:NH2	2:F:1571:LEU:O	2.26	0.69
2:B:20:GLU:OE2	2:B:114:SER:OG	2.08	0.68
2:D:859:VAL:HG21	2:D:932:ALA:HB2	1.73	0.68
2:D:289:ILE:O	2:D:412:ARG:NH1	2.23	0.68
2:F:3253:PHE:HB3	2:F:3309:GLU:HG3	1.74	0.68
2:H:958:MET:HB3	2:H:964:LYS:HB2	1.76	0.68
2:F:2465:GLU:HB3	2:F:2500:MET:HG3	1.75	0.68
2:D:2047:ILE:HD13	2:D:2065:MET:HE1	1.73	0.68
2:F:958:MET:HB3	2:F:964:LYS:HB2	1.76	0.68
2:F:4835:MET:HE1	2:F:4842:ASP:HB2	1.75	0.68
2:H:3094:THR:HG22	2:H:3096:GLU:H	1.57	0.68
2:D:958:MET:HB3	2:D:964:LYS:HB2	1.76	0.68
2:H:856:THR:HB	2:H:928:LYS:HB3	1.76	0.68
2:B:3094:THR:HG22	2:B:3096:GLU:H	1.57	0.68
2:B:4790:PHE:O	2:B:4796:GLY:HA3	1.94	0.68
2:D:681:ARG:NH1	2:D:707:ASP:OD1	2.23	0.68
2:B:856:THR:HB	2:B:928:LYS:HB3	1.76	0.68
2:B:930:LEU:HD21	2:B:986:LEU:HD11	1.73	0.68
2:B:958:MET:HB3	2:B:964:LYS:HB2	1.76	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:2465:GLU:HB3	2:D:2500:MET:HG3	1.75	0.68
2:F:265:ARG:HB2	2:F:289:ILE:HD11	1.75	0.68
2:F:3572:THR:HG23	2:F:3641:GLU:HG3	1.75	0.68
2:H:4835:MET:HE1	2:H:4842:ASP:HB2	1.75	0.68
2:B:2476:ARG:HG2	2:B:2479:MET:HE2	1.76	0.67
2:D:20:GLU:OE2	2:D:114:SER:OG	2.08	0.67
2:H:2465:GLU:HB3	2:H:2500:MET:HG3	1.75	0.67
2:H:2476:ARG:HG2	2:H:2479:MET:HE2	1.76	0.67
2:D:3523:ILE:HG13	2:D:3527:MET:HE1	1.77	0.67
2:D:3547:LEU:HD23	2:D:3618:ARG:HH11	1.60	0.67
2:B:21:VAL:HG12	2:B:206:PRO:HA	1.77	0.67
2:D:4835:MET:HE1	2:D:4842:ASP:HB2	1.75	0.67
2:B:2482:GLN:OE1	2:B:2485:ARG:NH1	2.28	0.67
2:D:2482:GLN:OE1	2:D:2485:ARG:NH1	2.28	0.67
2:F:626:ARG:HH11	2:F:629:LEU:HD11	1.60	0.67
2:F:2540:PHE:HB2	2:F:2567:ILE:HG21	1.77	0.67
2:F:4402:LEU:HD13	2:F:4479:VAL:HG23	1.77	0.67
2:H:21:VAL:HG12	2:H:206:PRO:HA	1.77	0.67
2:H:265:ARG:HB2	2:H:289:ILE:HD11	1.75	0.67
2:H:4790:PHE:O	2:H:4796:GLY:HA3	1.94	0.67
2:B:626:ARG:HH11	2:B:629:LEU:HD11	1.60	0.67
2:D:814:LEU:HD13	2:D:1024:LEU:HD21	1.76	0.67
2:D:856:THR:HB	2:D:928:LYS:HB3	1.76	0.67
2:D:1399:SER:HB2	2:D:1429:ARG:HH21	1.60	0.67
2:F:4790:PHE:O	2:F:4796:GLY:HA3	1.94	0.67
2:H:3572:THR:HG23	2:H:3641:GLU:HG3	1.75	0.67
2:H:418:PHE:HB2	2:H:484:LEU:HD21	1.77	0.67
2:H:2540:PHE:HB2	2:H:2567:ILE:HG21	1.77	0.67
2:B:1399:SER:HB2	2:B:1429:ARG:HH21	1.60	0.67
2:D:4402:LEU:HD13	2:D:4479:VAL:HG23	1.77	0.67
2:F:814:LEU:HD13	2:F:1024:LEU:HD21	1.76	0.67
2:B:3523:ILE:HG13	2:B:3527:MET:HE1	1.77	0.67
2:B:4402:LEU:HD13	2:B:4479:VAL:HG23	1.77	0.67
2:D:3572:THR:HG23	2:D:3641:GLU:HG3	1.75	0.67
1:G:58:LYS:O	1:G:62:GLU:HG2	1.95	0.67
2:B:418:PHE:HB2	2:B:484:LEU:HD21	1.77	0.67
2:D:4790:PHE:O	2:D:4796:GLY:HA3	1.94	0.67
2:F:1798:ARG:NH2	2:F:1971:ASP:OD2	2.24	0.67
2:F:2476:ARG:HG2	2:F:2479:MET:HE2	1.76	0.67
2:B:152:ILE:HG23	2:B:171:LEU:HD23	1.77	0.67
2:B:613:ARG:NH2	2:B:1571:LEU:O	2.26	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2465:GLU:HB3	2:B:2500:MET:HG3	1.75	0.67
2:B:3547:LEU:HD23	2:B:3618:ARG:HH11	1.60	0.67
2:B:3572:THR:HG23	2:B:3641:GLU:HG3	1.75	0.67
2:B:4835:MET:HE1	2:B:4842:ASP:HB2	1.75	0.67
2:D:626:ARG:HH11	2:D:629:LEU:HD11	1.60	0.67
2:F:856:THR:HB	2:F:928:LYS:HB3	1.76	0.67
2:F:3547:LEU:HD23	2:F:3618:ARG:HH11	1.60	0.67
2:H:876:ILE:HD13	2:H:879:LEU:HD12	1.77	0.67
1:A:58:LYS:O	1:A:62:GLU:HG2	1.95	0.66
2:D:665:ILE:HD12	2:D:741:VAL:HG22	1.77	0.66
2:F:21:VAL:HG12	2:F:206:PRO:HA	1.77	0.66
2:H:20:GLU:OE2	2:H:114:SER:OG	2.08	0.66
2:D:21:VAL:HG12	2:D:206:PRO:HA	1.77	0.66
2:D:2540:PHE:HB2	2:D:2567:ILE:HG21	1.77	0.66
2:F:876:ILE:HD13	2:F:879:LEU:HD12	1.77	0.66
2:F:1399:SER:HB2	2:F:1429:ARG:HH21	1.60	0.66
2:H:767:GLU:OE2	2:H:1370:THR:OG1	2.10	0.66
2:H:2482:GLN:OE1	2:H:2485:ARG:NH1	2.28	0.66
2:B:814:LEU:HD13	2:B:1024:LEU:HD21	1.76	0.66
1:C:58:LYS:O	1:C:62:GLU:HG2	1.95	0.66
2:F:2482:GLN:OE1	2:F:2485:ARG:NH1	2.28	0.66
2:H:626:ARG:HH11	2:H:629:LEU:HD11	1.60	0.66
2:H:1399:SER:HB2	2:H:1429:ARG:HH21	1.60	0.66
2:H:1798:ARG:NH2	2:H:1971:ASP:OD2	2.24	0.66
2:B:876:ILE:HD13	2:B:879:LEU:HD12	1.77	0.66
2:D:265:ARG:HB2	2:D:289:ILE:HD11	1.75	0.66
2:D:1798:ARG:NH2	2:D:1971:ASP:OD2	2.24	0.66
2:F:3523:ILE:HG13	2:F:3527:MET:HE1	1.77	0.66
2:H:152:ILE:HG23	2:H:171:LEU:HD23	1.77	0.66
2:B:665:ILE:HD12	2:B:741:VAL:HG22	1.77	0.66
2:D:2476:ARG:HG2	2:D:2479:MET:HE2	1.76	0.66
2:F:767:GLU:OE2	2:F:1370:THR:OG1	2.10	0.66
2:H:665:ILE:HD12	2:H:741:VAL:HG22	1.77	0.66
2:F:1285:MET:HE2	2:F:1359:PHE:HB2	1.77	0.66
2:H:613:ARG:NH2	2:H:1571:LEU:O	2.26	0.66
2:H:814:LEU:HD13	2:H:1024:LEU:HD21	1.76	0.66
2:H:3547:LEU:HD23	2:H:3618:ARG:HH11	1.60	0.66
2:B:265:ARG:HB2	2:B:289:ILE:HD11	1.75	0.66
2:D:876:ILE:HD13	2:D:879:LEU:HD12	1.77	0.66
2:H:1285:MET:HE2	2:H:1359:PHE:HB2	1.77	0.66
2:B:997:ASP:OD2	2:B:998:ARG:NH2	2.29	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:665:ILE:HD12	2:F:741:VAL:HG22	1.77	0.66
2:H:4402:LEU:HD13	2:H:4479:VAL:HG23	1.77	0.66
2:H:3523:ILE:HG13	2:H:3527:MET:HE1	1.77	0.66
2:D:418:PHE:HB2	2:D:484:LEU:HD21	1.77	0.65
2:F:418:PHE:HB2	2:F:484:LEU:HD21	1.77	0.65
2:F:1114:LEU:HG	2:F:1122:VAL:HG11	1.78	0.65
2:F:2215:SER:O	2:F:2219:LYS:HG2	1.97	0.65
2:B:2540:PHE:HB2	2:B:2567:ILE:HG21	1.77	0.65
2:D:767:GLU:OE2	2:D:1370:THR:OG1	2.10	0.65
1:E:58:LYS:O	1:E:62:GLU:HG2	1.95	0.65
2:F:2899:ALA:HA	2:F:2934:LEU:HD21	1.78	0.65
2:D:1114:LEU:HG	2:D:1122:VAL:HG11	1.78	0.65
2:H:2190:ILE:HD11	2:H:2277:VAL:HG11	1.79	0.65
2:B:221:GLY:O	2:B:265:ARG:NH1	2.30	0.65
2:H:2899:ALA:HA	2:H:2934:LEU:HD21	1.78	0.65
2:D:2899:ALA:HA	2:D:2934:LEU:HD21	1.78	0.65
2:F:2190:ILE:HD11	2:F:2277:VAL:HG11	1.79	0.65
2:H:1114:LEU:HG	2:H:1122:VAL:HG11	1.78	0.65
2:D:421:PHE:HZ	2:D:492:LEU:HD21	1.62	0.65
2:F:152:ILE:HG23	2:F:171:LEU:HD23	1.77	0.65
2:F:997:ASP:OD2	2:F:998:ARG:NH2	2.29	0.65
2:H:2215:SER:O	2:H:2219:LYS:HG2	1.97	0.65
2:B:421:PHE:HZ	2:B:492:LEU:HD21	1.62	0.65
2:B:1285:MET:HE2	2:B:1359:PHE:HB2	1.77	0.65
2:D:152:ILE:HG23	2:D:171:LEU:HD23	1.77	0.65
2:D:1285:MET:HE2	2:D:1359:PHE:HB2	1.77	0.65
2:D:4684:PHE:HB2	2:D:4735:ARG:HH21	1.62	0.65
2:H:221:GLY:O	2:H:265:ARG:NH1	2.30	0.65
2:F:324:LYS:NZ	2:F:390:HIS:O	2.30	0.65
2:B:2899:ALA:HA	2:B:2934:LEU:HD21	1.78	0.64
2:D:2215:SER:O	2:D:2219:LYS:HG2	1.97	0.64
2:B:268:PRO:HG3	2:B:278:ILE:HD11	1.80	0.64
2:B:2215:SER:O	2:B:2219:LYS:HG2	1.97	0.64
2:F:20:GLU:OE2	2:F:114:SER:OG	2.08	0.64
2:B:1114:LEU:HG	2:B:1122:VAL:HG11	1.78	0.64
2:B:2028:LEU:HD21	2:B:2072:VAL:HG22	1.80	0.64
2:F:4410:ALA:O	2:F:4414:ASN:ND2	2.30	0.64
2:H:324:LYS:NZ	2:H:390:HIS:O	2.30	0.64
2:H:2028:LEU:HD21	2:H:2072:VAL:HG22	1.80	0.64
2:B:2190:ILE:HD11	2:B:2277:VAL:HG11	1.79	0.64
2:D:705:VAL:HG23	2:D:780:SER:HB3	1.79	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:4021:GLU:OE1	2:D:4805:HIS:NE2	2.30	0.64
2:F:221:GLY:O	2:F:265:ARG:NH1	2.30	0.64
2:F:3390:TYR:OH	2:F:3445:GLN:NE2	2.26	0.64
2:H:1531:MET:HE3	2:H:1533:ALA:HB2	1.80	0.64
2:B:2853:GLU:OE1	2:B:2853:GLU:N	2.30	0.64
2:D:1069:ASP:HB3	2:D:1240:ARG:HG3	1.80	0.64
2:H:268:PRO:HG3	2:H:278:ILE:HD11	1.80	0.64
2:D:221:GLY:O	2:D:265:ARG:NH1	2.30	0.64
2:D:997:ASP:OD2	2:D:998:ARG:NH2	2.29	0.64
2:D:2190:ILE:HD11	2:D:2277:VAL:HG11	1.79	0.64
2:H:1069:ASP:HB3	2:H:1240:ARG:HG3	1.80	0.64
2:H:1088:TYR:OH	2:H:1090:GLU:OE2	2.16	0.64
2:H:2853:GLU:OE1	2:H:2853:GLU:N	2.30	0.64
2:D:16:ARG:NH1	2:D:102:THR:OG1	2.31	0.64
2:D:2853:GLU:N	2:D:2853:GLU:OE1	2.30	0.64
2:D:3390:TYR:OH	2:D:3445:GLN:NE2	2.26	0.64
2:F:4684:PHE:HB2	2:F:4735:ARG:HH21	1.62	0.64
2:F:4723:ILE:HD12	2:F:4735:ARG:NH2	2.13	0.64
2:H:421:PHE:HZ	2:H:492:LEU:HD21	1.62	0.64
2:H:705:VAL:HG23	2:H:780:SER:HB3	1.79	0.64
2:H:955:LYS:O	2:H:958:MET:HG2	1.98	0.64
2:B:4410:ALA:O	2:B:4414:ASN:ND2	2.30	0.64
2:D:1589:LEU:O	2:D:1593:ILE:HG23	1.98	0.64
2:F:1069:ASP:HB3	2:F:1240:ARG:HG3	1.80	0.64
2:D:324:LYS:NZ	2:D:390:HIS:O	2.30	0.63
2:D:2028:LEU:HD21	2:D:2072:VAL:HG22	1.80	0.63
2:D:4723:ILE:HD12	2:D:4735:ARG:NH2	2.13	0.63
2:F:1625:MET:HE1	2:F:2021:LEU:HG	1.80	0.63
2:F:4021:GLU:OE1	2:F:4805:HIS:NE2	2.30	0.63
2:H:1589:LEU:O	2:H:1593:ILE:HG23	1.98	0.63
2:H:4410:ALA:O	2:H:4414:ASN:ND2	2.30	0.63
2:B:650:VAL:CG1	2:B:771:THR:HB	2.28	0.63
2:B:4723:ILE:HD12	2:B:4735:ARG:NH2	2.13	0.63
2:D:268:PRO:HG3	2:D:278:ILE:HD11	1.80	0.63
2:D:3763:LEU:HD11	2:D:3823:ARG:CB	2.29	0.63
2:F:861:LEU:HD12	2:F:862:PRO:HD2	1.80	0.63
2:B:1069:ASP:HB3	2:B:1240:ARG:HG3	1.80	0.63
2:D:1088:TYR:OH	2:D:1090:GLU:OE2	2.16	0.63
2:F:421:PHE:HZ	2:F:492:LEU:HD21	1.62	0.63
2:F:2028:LEU:HD21	2:F:2072:VAL:HG22	1.80	0.63
2:F:2853:GLU:OE1	2:F:2853:GLU:N	2.30	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:2896:GLU:CG	2:F:2947:VAL:HG21	2.29	0.63
2:H:4723:ILE:HD12	2:H:4735:ARG:NH2	2.13	0.63
2:B:4684:PHE:HB2	2:B:4735:ARG:HH21	1.62	0.63
2:D:650:VAL:CG1	2:D:771:THR:HB	2.28	0.63
2:D:4039:SER:O	2:D:4043:GLN:HG2	1.99	0.63
2:F:955:LYS:O	2:F:958:MET:HG2	1.98	0.63
2:H:16:ARG:NH1	2:H:102:THR:OG1	2.31	0.63
2:H:4021:GLU:OE1	2:H:4805:HIS:NE2	2.30	0.63
2:H:4039:SER:O	2:H:4043:GLN:HG2	1.99	0.63
2:D:955:LYS:O	2:D:958:MET:HG2	1.98	0.63
2:D:1625:MET:HE1	2:D:2021:LEU:HG	1.80	0.63
2:F:1088:TYR:OH	2:F:1090:GLU:OE2	2.16	0.63
2:D:4410:ALA:O	2:D:4414:ASN:ND2	2.30	0.63
2:F:268:PRO:HG3	2:F:278:ILE:HD11	1.80	0.63
2:F:1589:LEU:O	2:F:1593:ILE:HG23	1.98	0.63
2:H:861:LEU:HD12	2:H:862:PRO:HD2	1.80	0.63
2:H:997:ASP:OD2	2:H:998:ARG:NH2	2.29	0.63
2:B:324:LYS:NZ	2:B:390:HIS:O	2.30	0.63
2:B:2025:ARG:NH2	2:B:2063:LEU:O	2.32	0.63
2:D:1531:MET:HE3	2:D:1533:ALA:HB2	1.80	0.63
2:F:650:VAL:CG1	2:F:771:THR:HB	2.28	0.63
2:B:891:PHE:CE2	2:B:961:ASN:HB2	2.34	0.63
2:B:1589:LEU:O	2:B:1593:ILE:HG23	1.98	0.63
2:B:1625:MET:HE1	2:B:2021:LEU:HG	1.80	0.63
1:C:50:ARG:HB2	1:C:53:LYS:HD2	1.81	0.63
2:F:705:VAL:HG23	2:F:780:SER:HB3	1.79	0.63
2:F:891:PHE:CE2	2:F:961:ASN:HB2	2.34	0.63
2:H:640:THR:OG1	2:H:1508:LEU:HD12	1.99	0.63
2:H:2896:GLU:CG	2:H:2947:VAL:HG21	2.29	0.63
2:B:640:THR:OG1	2:B:1508:LEU:HD12	1.99	0.63
2:B:955:LYS:O	2:B:958:MET:HG2	1.98	0.63
2:H:650:VAL:CG1	2:H:771:THR:HB	2.28	0.63
2:H:891:PHE:CE2	2:H:961:ASN:HB2	2.34	0.63
1:A:24:VAL:HG22	1:A:48:LYS:HG2	1.81	0.62
2:B:653:GLY:O	2:B:850:ILE:HA	1.99	0.62
2:B:1088:TYR:OH	2:B:1090:GLU:OE2	2.16	0.62
2:B:4711:VAL:HG12	2:B:4722:GLU:HG3	1.81	0.62
1:E:50:ARG:HB2	1:E:53:LYS:HD2	1.81	0.62
2:H:3783:ASP:N	2:H:3783:ASP:OD1	2.32	0.62
2:D:911:LEU:CD1	2:D:912:PRO:HD2	2.29	0.62
1:E:24:VAL:HG22	1:E:48:LYS:HG2	1.81	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:16:ARG:NH1	2:F:102:THR:OG1	2.31	0.62
1:A:50:ARG:HB2	1:A:53:LYS:HD2	1.81	0.62
2:B:1531:MET:HE3	2:B:1533:ALA:HB2	1.80	0.62
2:B:4039:SER:O	2:B:4043:GLN:HG2	1.99	0.62
2:D:640:THR:OG1	2:D:1508:LEU:HD12	1.99	0.62
2:D:891:PHE:CE2	2:D:961:ASN:HB2	2.34	0.62
2:F:1349:THR:OG1	2:F:1351:ASP:OD1	2.17	0.62
2:B:861:LEU:HD12	2:B:862:PRO:HD2	1.80	0.62
2:B:911:LEU:CD1	2:B:912:PRO:HD2	2.29	0.62
1:C:24:VAL:HG22	1:C:48:LYS:HG2	1.81	0.62
2:D:590:LYS:HE3	2:D:1477:SER:HB2	1.82	0.62
2:D:2896:GLU:CG	2:D:2947:VAL:HG21	2.29	0.62
2:D:3790:PHE:O	2:D:3794:LEU:HG	1.99	0.62
2:F:4039:SER:O	2:F:4043:GLN:HG2	1.99	0.62
2:F:4711:VAL:HG12	2:F:4722:GLU:HG3	1.81	0.62
2:H:653:GLY:O	2:H:850:ILE:HA	1.99	0.62
2:B:705:VAL:HG23	2:B:780:SER:HB3	1.79	0.62
2:B:1578:TYR:OH	2:B:1668:SER:HB3	1.99	0.62
2:D:4711:VAL:HG12	2:D:4722:GLU:HG3	1.81	0.62
2:D:4817:LEU:HD11	2:D:4829:GLU:HB3	1.81	0.62
2:F:640:THR:OG1	2:F:1508:LEU:HD12	1.99	0.62
2:F:1025:LEU:HD11	2:F:1029:THR:HG21	1.81	0.62
2:F:1531:MET:HE3	2:F:1533:ALA:HB2	1.80	0.62
2:H:590:LYS:HE3	2:H:1477:SER:HB2	1.82	0.62
2:H:1578:TYR:OH	2:H:1668:SER:HB3	1.99	0.62
2:H:3790:PHE:O	2:H:3794:LEU:HG	1.99	0.62
2:B:50:LEU:CD1	2:B:184:LEU:HD12	2.30	0.62
2:B:4021:GLU:OE1	2:B:4805:HIS:NE2	2.30	0.62
2:D:861:LEU:HD12	2:D:862:PRO:HD2	1.80	0.62
2:F:4817:LEU:HD11	2:F:4829:GLU:HB3	1.81	0.62
2:H:4684:PHE:HB2	2:H:4735:ARG:HH21	1.62	0.62
2:B:3790:PHE:O	2:B:3794:LEU:HG	1.99	0.62
2:D:50:LEU:CD1	2:D:184:LEU:HD12	2.30	0.62
2:D:1578:TYR:OH	2:D:1668:SER:HB3	1.99	0.62
2:F:2025:ARG:NH2	2:F:2063:LEU:O	2.32	0.62
2:F:3790:PHE:O	2:F:3794:LEU:HG	1.99	0.62
1:G:24:VAL:HG22	1:G:48:LYS:HG2	1.81	0.62
1:G:50:ARG:HB2	1:G:53:LYS:HD2	1.81	0.62
2:B:2896:GLU:CG	2:B:2947:VAL:HG21	2.29	0.62
2:D:613:ARG:NH2	2:D:1571:LEU:O	2.26	0.62
2:F:2819:LEU:HD21	2:F:2869:PHE:HZ	1.64	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:3523:ILE:HG13	2:F:3527:MET:SD	2.40	0.62
2:F:3763:LEU:HD11	2:F:3823:ARG:CB	2.29	0.62
2:H:1025:LEU:HD11	2:H:1029:THR:HG21	1.81	0.62
2:B:16:ARG:NH1	2:B:102:THR:OG1	2.31	0.62
2:D:2025:ARG:NH2	2:D:2063:LEU:O	2.32	0.62
2:D:2556:LEU:HA	2:D:2559:MET:HE2	1.82	0.62
2:F:1075:ARG:HD2	2:F:1078:TRP:CH2	2.35	0.62
2:H:2025:ARG:NH2	2:H:2063:LEU:O	2.32	0.62
2:H:1625:MET:HE1	2:H:2021:LEU:HG	1.80	0.62
2:H:2556:LEU:HA	2:H:2559:MET:HE2	1.82	0.62
2:H:3523:ILE:HG13	2:H:3527:MET:SD	2.40	0.62
2:B:590:LYS:HE3	2:B:1477:SER:HB2	1.82	0.61
2:D:653:GLY:O	2:D:850:ILE:HA	1.99	0.61
2:D:891:PHE:HB3	2:D:959:MET:HB3	1.82	0.61
2:F:489:ILE:HG22	2:F:548:LYS:HZ3	1.65	0.61
2:D:2819:LEU:HD21	2:D:2869:PHE:HZ	1.64	0.61
2:D:3310:GLU:OE2	2:D:3358:SER:OG	2.13	0.61
2:F:590:LYS:HE3	2:F:1477:SER:HB2	1.82	0.61
2:F:891:PHE:HB3	2:F:959:MET:HB3	1.82	0.61
2:H:1340:PRO:HB2	2:H:1396:VAL:HG11	1.82	0.61
2:B:489:ILE:HG22	2:B:548:LYS:HZ3	1.65	0.61
2:D:3523:ILE:HG13	2:D:3527:MET:SD	2.40	0.61
2:F:653:GLY:O	2:F:850:ILE:HA	1.99	0.61
2:H:4711:VAL:HG12	2:H:4722:GLU:HG3	1.81	0.61
2:B:1025:LEU:HD11	2:B:1029:THR:HG21	1.81	0.61
2:B:2556:LEU:HA	2:B:2559:MET:HE2	1.82	0.61
2:B:2819:LEU:HD21	2:B:2869:PHE:HZ	1.64	0.61
2:D:1247:VAL:HG21	2:D:1254:ILE:HD11	1.83	0.61
2:F:1340:PRO:HB2	2:F:1396:VAL:HG11	1.82	0.61
2:H:50:LEU:CD1	2:H:184:LEU:HD12	2.30	0.61
2:H:4817:LEU:HD11	2:H:4829:GLU:HB3	1.81	0.61
2:D:1025:LEU:HD11	2:D:1029:THR:HG21	1.81	0.61
2:F:911:LEU:CD1	2:F:912:PRO:HD2	2.29	0.61
2:H:1075:ARG:HD2	2:H:1078:TRP:CH2	2.35	0.61
2:D:2896:GLU:OE2	2:D:2944:SER:OG	2.18	0.61
2:F:1247:VAL:HG21	2:F:1254:ILE:HD11	1.83	0.61
2:F:1578:TYR:OH	2:F:1668:SER:HB3	1.99	0.61
2:F:2934:LEU:O	2:F:3005:HIS:NE2	2.26	0.61
2:B:3910:LEU:HD21	2:B:3941:GLN:OE1	2.01	0.61
2:B:4758:ILE:HD12	2:D:4749:ILE:HD11	1.83	0.61
2:B:4817:LEU:HD11	2:B:4829:GLU:HB3	1.81	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:890:THR:O	2:D:901:GLN:HA	2.01	0.61
2:F:2556:LEU:HA	2:F:2559:MET:HE2	1.82	0.61
2:H:1247:VAL:HG21	2:H:1254:ILE:HD11	1.83	0.61
2:D:1075:ARG:HD2	2:D:1078:TRP:CH2	2.35	0.61
2:D:3973:GLU:HB2	2:D:3974:PRO:HD3	1.83	0.61
2:F:50:LEU:CD1	2:F:184:LEU:HD12	2.30	0.61
2:H:3910:LEU:HD21	2:H:3941:GLN:OE1	2.01	0.61
2:B:647:PHE:CE1	2:B:844:LEU:HD13	2.36	0.61
2:B:1075:ARG:HD2	2:B:1078:TRP:CH2	2.35	0.61
2:B:1247:VAL:HG21	2:B:1254:ILE:HD11	1.83	0.60
2:B:4749:ILE:HD11	2:H:4758:ILE:HD12	1.83	0.60
2:F:890:THR:O	2:F:901:GLN:HA	2.01	0.60
2:B:890:THR:O	2:B:901:GLN:HA	2.01	0.60
2:B:3523:ILE:HG13	2:B:3527:MET:SD	2.40	0.60
2:D:954:PRO:HG2	2:D:956:ASN:OD1	2.01	0.60
2:H:489:ILE:HG22	2:H:548:LYS:HZ3	1.65	0.60
2:H:911:LEU:CD1	2:H:912:PRO:HD2	2.29	0.60
2:H:2835:HIS:O	2:H:2839:ILE:HG23	2.01	0.60
2:H:3763:LEU:HD11	2:H:3823:ARG:CB	2.29	0.60
2:B:3356:GLN:NE2	2:B:3461:LEU:HD23	2.17	0.60
2:D:647:PHE:CE1	2:D:844:LEU:HD13	2.36	0.60
2:D:836:ASP:OD1	2:D:1200:ARG:NE	2.31	0.60
2:H:3613:ALA:HA	2:H:3616:HIS:CD2	2.37	0.60
2:B:1340:PRO:HB2	2:B:1396:VAL:HG11	1.82	0.60
2:D:235:THR:HG22	2:D:262:SER:CB	2.31	0.60
2:D:2835:HIS:O	2:D:2839:ILE:HG23	2.01	0.60
2:F:3902:ASP:OD1	2:F:3906:LYS:HE3	2.02	0.60
2:H:890:THR:O	2:H:901:GLN:HA	2.01	0.60
2:H:2819:LEU:HD21	2:H:2869:PHE:HZ	1.64	0.60
2:H:3356:GLN:NE2	2:H:3461:LEU:HD23	2.17	0.60
2:B:1349:THR:OG1	2:B:1351:ASP:OD1	2.17	0.60
2:B:1534:LEU:HD22	2:B:1548:LEU:HD11	1.83	0.60
2:B:3902:ASP:OD1	2:B:3906:LYS:HE3	2.02	0.60
2:D:319:SER:HB3	2:D:358:ILE:HD11	1.84	0.60
2:D:1349:THR:OG1	2:D:1351:ASP:OD1	2.17	0.60
2:D:3613:ALA:HA	2:D:3616:HIS:CD2	2.37	0.60
2:D:3910:LEU:HD21	2:D:3941:GLN:OE1	2.01	0.60
2:F:3613:ALA:HA	2:F:3616:HIS:CD2	2.37	0.60
2:B:319:SER:HB3	2:B:358:ILE:HD11	1.84	0.60
2:B:1003:TRP:CE3	2:B:1016:ASN:HB2	2.37	0.60
2:B:2162:VAL:HG21	2:B:2198:PHE:CE2	2.37	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3973:GLU:HB2	2:B:3974:PRO:HD3	1.83	0.60
2:D:489:ILE:HG22	2:D:548:LYS:HZ3	1.65	0.60
2:D:2381:HIS:O	2:D:2385:VAL:HG22	2.01	0.60
2:D:3356:GLN:NE2	2:D:3461:LEU:HD23	2.17	0.60
2:D:3902:ASP:OD1	2:D:3906:LYS:HE3	2.02	0.60
2:F:647:PHE:CE1	2:F:844:LEU:HD13	2.36	0.60
2:F:954:PRO:HG2	2:F:956:ASN:OD1	2.01	0.60
2:F:3910:LEU:HD21	2:F:3941:GLN:OE1	2.01	0.60
2:B:2381:HIS:O	2:B:2385:VAL:HG22	2.01	0.60
2:D:1340:PRO:HB2	2:D:1396:VAL:HG11	1.82	0.60
2:H:1534:LEU:HD22	2:H:1548:LEU:HD11	1.83	0.60
2:H:3545:ASP:O	2:H:3549:GLN:HG3	2.02	0.60
2:H:4514:GLN:OE1	2:H:4526:ARG:NH2	2.35	0.60
2:B:954:PRO:HG2	2:B:956:ASN:OD1	2.01	0.60
2:B:2823:LEU:HD21	2:B:2901:LEU:HB2	1.84	0.60
2:B:3613:ALA:HA	2:B:3616:HIS:CD2	2.37	0.60
2:D:1003:TRP:CE3	2:D:1016:ASN:HB2	2.37	0.60
2:D:2004:TYR:CD2	2:D:2059:LEU:HD13	2.37	0.60
2:F:1213:TYR:OH	2:F:1222:PHE:O	2.12	0.60
2:F:2162:VAL:HG21	2:F:2198:PHE:CE2	2.37	0.60
2:F:2896:GLU:HG3	2:F:2947:VAL:HG21	1.84	0.60
2:H:821:LEU:HD11	2:H:1521:TRP:HB3	1.84	0.60
2:B:280:TRP:N	2:B:345:GLU:OE1	2.26	0.60
2:B:2896:GLU:HG3	2:B:2947:VAL:HG21	1.84	0.60
2:D:3808:ILE:HG21	2:D:3819:LEU:HD12	1.84	0.60
2:F:4758:ILE:HD12	2:H:4749:ILE:HD11	1.83	0.60
2:H:1415:VAL:HG22	2:H:1422:LEU:HG	1.83	0.60
2:B:891:PHE:HB3	2:B:959:MET:HB3	1.82	0.59
2:D:1534:LEU:HD22	2:D:1548:LEU:HD11	1.83	0.59
2:F:1415:VAL:HG22	2:F:1422:LEU:HG	1.83	0.59
2:F:1534:LEU:HD22	2:F:1548:LEU:HD11	1.83	0.59
2:F:2835:HIS:O	2:F:2839:ILE:HG23	2.01	0.59
2:F:3356:GLN:NE2	2:F:3461:LEU:HD23	2.17	0.59
2:B:3545:ASP:O	2:B:3549:GLN:HG3	2.02	0.59
2:B:3808:ILE:HG21	2:B:3819:LEU:HD12	1.84	0.59
2:D:3576:SER:O	2:D:3580:LYS:HG2	2.03	0.59
2:F:3576:SER:O	2:F:3580:LYS:HG2	2.03	0.59
2:H:891:PHE:HB3	2:H:959:MET:HB3	1.82	0.59
2:D:895:ARG:HB3	2:D:903:PRO:HD3	1.85	0.59
2:D:4077:CYS:O	2:D:4081:ILE:HG13	2.02	0.59
2:D:4514:GLN:OE1	2:D:4526:ARG:NH2	2.35	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:2381:HIS:O	2:F:2385:VAL:HG22	2.01	0.59
2:F:3973:GLU:HB2	2:F:3974:PRO:HD3	1.83	0.59
2:F:4514:GLN:OE1	2:F:4526:ARG:NH2	2.35	0.59
2:H:2896:GLU:HG3	2:H:2947:VAL:HG21	1.84	0.59
2:H:3808:ILE:HG21	2:H:3819:LEU:HD12	1.84	0.59
2:H:3973:GLU:HB2	2:H:3974:PRO:HD3	1.83	0.59
2:B:2248:ILE:HG12	2:B:2284:MET:HE2	1.84	0.59
2:B:3763:LEU:HD11	2:B:3823:ARG:CB	2.29	0.59
2:B:4514:GLN:OE1	2:B:4526:ARG:NH2	2.35	0.59
2:D:2162:VAL:HG21	2:D:2198:PHE:CE2	2.37	0.59
2:D:2896:GLU:HG3	2:D:2947:VAL:HG21	1.84	0.59
2:H:647:PHE:CE1	2:H:844:LEU:HD13	2.36	0.59
2:H:2162:VAL:HG21	2:H:2198:PHE:CE2	2.37	0.59
2:H:2381:HIS:O	2:H:2385:VAL:HG22	2.01	0.59
2:B:981:VAL:O	2:B:985:LYS:HG2	2.02	0.59
2:F:869:ARG:NH1	2:F:870:ASP:OD1	2.36	0.59
2:F:1846:ASN:HA	2:F:1849:MET:HE2	1.84	0.59
2:F:3808:ILE:HG21	2:F:3819:LEU:HD12	1.84	0.59
2:H:1003:TRP:CE3	2:H:1016:ASN:HB2	2.37	0.59
2:H:2248:ILE:HG12	2:H:2284:MET:HE2	1.84	0.59
2:H:3576:SER:O	2:H:3580:LYS:HG2	2.03	0.59
2:B:869:ARG:NH1	2:B:870:ASP:OD1	2.36	0.59
2:B:1213:TYR:OH	2:B:1222:PHE:O	2.12	0.59
2:B:2934:LEU:O	2:B:3005:HIS:NE2	2.26	0.59
2:F:821:LEU:HD11	2:F:1521:TRP:HB3	1.84	0.59
2:H:954:PRO:HG2	2:H:956:ASN:OD1	2.01	0.59
2:H:981:VAL:O	2:H:985:LYS:HG2	2.02	0.59
2:B:895:ARG:HB3	2:B:903:PRO:HD3	1.85	0.59
2:B:3383:ILE:O	2:B:3387:LYS:HG3	2.03	0.59
2:D:1415:VAL:HG22	2:D:1422:LEU:HG	1.83	0.59
2:D:2823:LEU:HD21	2:D:2901:LEU:HB2	1.84	0.59
2:D:4511:ILE:HD13	2:D:4560:ILE:HD12	1.85	0.59
2:F:319:SER:HB3	2:F:358:ILE:HD11	1.84	0.59
2:F:2004:TYR:CD2	2:F:2059:LEU:HD13	2.37	0.59
2:B:2004:TYR:CD2	2:B:2059:LEU:HD13	2.37	0.59
2:B:2835:HIS:O	2:B:2839:ILE:HG23	2.01	0.59
2:D:1846:ASN:HA	2:D:1849:MET:HE2	1.84	0.59
2:D:4758:ILE:HD12	2:F:4749:ILE:HD11	1.83	0.59
2:F:895:ARG:HB3	2:F:903:PRO:HD3	1.85	0.59
2:F:4077:CYS:O	2:F:4081:ILE:HG13	2.02	0.59
2:H:1694:LYS:O	2:H:1698:MET:HG3	2.03	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:2823:LEU:HD21	2:H:2901:LEU:HB2	1.84	0.59
2:H:3383:ILE:O	2:H:3387:LYS:HG3	2.03	0.59
2:B:1415:VAL:HG22	2:B:1422:LEU:HG	1.83	0.59
2:B:4077:CYS:O	2:B:4081:ILE:HG13	2.02	0.59
2:F:1003:TRP:CE3	2:F:1016:ASN:HB2	2.37	0.59
2:H:319:SER:HB3	2:H:358:ILE:HD11	1.84	0.59
2:H:2004:TYR:CD2	2:H:2059:LEU:HD13	2.37	0.59
2:H:4077:CYS:O	2:H:4081:ILE:HG13	2.02	0.59
2:B:167:ILE:HD13	2:B:206:PRO:HG3	1.85	0.59
2:B:821:LEU:HD11	2:B:1521:TRP:HB3	1.84	0.59
2:B:1694:LYS:O	2:B:1698:MET:HG3	2.03	0.59
2:B:3390:TYR:OH	2:B:3445:GLN:NE2	2.26	0.59
2:D:1213:TYR:OH	2:D:1222:PHE:O	2.12	0.59
2:H:869:ARG:NH1	2:H:870:ASP:OD1	2.36	0.59
2:H:1803:VAL:O	2:H:1807:MET:HG2	2.03	0.59
2:H:3225:VAL:HG12	2:H:3299:LEU:HD11	1.85	0.59
2:H:3902:ASP:OD1	2:H:3906:LYS:HE3	2.02	0.59
2:H:4041:ARG:O	2:H:4045:GLU:HG2	2.03	0.59
2:B:1846:ASN:HA	2:B:1849:MET:HE2	1.84	0.58
2:B:3275:ARG:HG3	2:B:3370:ILE:HD11	1.85	0.58
2:D:981:VAL:O	2:D:985:LYS:HG2	2.02	0.58
2:D:2068:THR:O	2:D:2072:VAL:HG23	2.03	0.58
2:F:2488:VAL:HG21	2:F:2535:LEU:HD11	1.84	0.58
2:F:3023:SER:O	2:F:3027:ILE:HG13	2.03	0.58
2:H:895:ARG:HB3	2:H:903:PRO:HD3	1.85	0.58
2:H:4511:ILE:HD13	2:H:4560:ILE:HD12	1.85	0.58
2:B:1341:SER:O	2:B:1391:TRP:NE1	2.35	0.58
2:D:1694:LYS:O	2:D:1698:MET:HG3	2.03	0.58
2:D:3221:LYS:HD2	2:D:3295:GLU:OE1	2.03	0.58
2:D:3637:PRO:O	2:D:3641:GLU:HG2	2.03	0.58
2:D:4041:ARG:O	2:D:4045:GLU:HG2	2.03	0.58
2:H:1846:ASN:HA	2:H:1849:MET:HE2	1.84	0.58
2:B:3018:GLY:O	2:B:3022:ILE:HG13	2.03	0.58
2:B:4041:ARG:O	2:B:4045:GLU:HG2	2.03	0.58
2:D:869:ARG:NH1	2:D:870:ASP:OD1	2.36	0.58
2:D:3253:PHE:CB	2:D:3309:GLU:HG3	2.34	0.58
2:D:3383:ILE:O	2:D:3387:LYS:HG3	2.03	0.58
2:F:3545:ASP:O	2:F:3549:GLN:HG3	2.02	0.58
2:F:3637:PRO:O	2:F:3641:GLU:HG2	2.03	0.58
2:H:2068:THR:O	2:H:2072:VAL:HG23	2.03	0.58
2:H:3677:LEU:O	2:H:3681:MET:HG3	2.03	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:646:ILE:HG23	2:D:812:ALA:HB3	1.84	0.58
2:D:2488:VAL:HG21	2:D:2535:LEU:HD11	1.84	0.58
2:D:3225:VAL:HG12	2:D:3299:LEU:HD11	1.85	0.58
2:D:3545:ASP:O	2:D:3549:GLN:HG3	2.02	0.58
2:F:3221:LYS:HD2	2:F:3295:GLU:OE1	2.03	0.58
2:F:3225:VAL:HG12	2:F:3299:LEU:HD11	1.85	0.58
2:H:3390:TYR:OH	2:H:3445:GLN:NE2	2.26	0.58
2:D:1803:VAL:O	2:D:1807:MET:HG2	2.03	0.58
2:F:167:ILE:HD13	2:F:206:PRO:HG3	1.85	0.58
2:F:280:TRP:N	2:F:345:GLU:OE1	2.26	0.58
2:F:981:VAL:O	2:F:985:LYS:HG2	2.02	0.58
2:F:1694:LYS:O	2:F:1698:MET:HG3	2.03	0.58
2:F:2068:THR:O	2:F:2072:VAL:HG23	2.03	0.58
2:F:3662:LEU:HD21	2:F:3737:ASP:HB3	1.86	0.58
2:H:3023:SER:O	2:H:3027:ILE:HG13	2.03	0.58
2:B:2068:THR:O	2:B:2072:VAL:HG23	2.03	0.58
2:B:2488:VAL:HG21	2:B:2535:LEU:HD11	1.84	0.58
2:B:3016:LEU:O	2:B:3017:LEU:HD23	2.04	0.58
2:B:3023:SER:O	2:B:3027:ILE:HG13	2.03	0.58
2:B:3576:SER:O	2:B:3580:LYS:HG2	2.03	0.58
2:D:859:VAL:CG1	2:D:931:LEU:HB2	2.33	0.58
2:D:2398:ASP:O	2:D:2454:ARG:NH1	2.37	0.58
2:D:3023:SER:O	2:D:3027:ILE:HG13	2.03	0.58
2:F:3016:LEU:O	2:F:3017:LEU:HD23	2.04	0.58
2:F:3253:PHE:CB	2:F:3309:GLU:HG3	2.34	0.58
2:H:646:ILE:HG23	2:H:812:ALA:HB3	1.84	0.58
2:H:3297:PHE:CD2	2:H:3364:LEU:HD22	2.39	0.58
2:B:1803:VAL:O	2:B:1807:MET:HG2	2.03	0.58
2:B:2398:ASP:O	2:B:2454:ARG:NH1	2.37	0.58
2:D:1975:ASP:O	2:D:1979:VAL:HG23	2.04	0.58
2:D:2248:ILE:HG12	2:D:2284:MET:HE2	1.84	0.58
2:F:836:ASP:OD1	2:F:1200:ARG:NE	2.31	0.58
2:F:859:VAL:CG1	2:F:931:LEU:HB2	2.33	0.58
2:H:836:ASP:OD1	2:H:1200:ARG:NE	2.31	0.58
2:B:3225:VAL:HG12	2:B:3299:LEU:HD11	1.85	0.58
2:B:3637:PRO:O	2:B:3641:GLU:HG2	2.03	0.58
2:B:3677:LEU:O	2:B:3681:MET:HG3	2.03	0.58
2:B:4511:ILE:HD13	2:B:4560:ILE:HD12	1.85	0.58
2:F:235:THR:HG22	2:F:262:SER:CB	2.31	0.58
2:F:646:ILE:HG23	2:F:812:ALA:HB3	1.84	0.58
2:F:2823:LEU:HD21	2:F:2901:LEU:HB2	1.84	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:3677:LEU:O	2:F:3681:MET:HG3	2.03	0.58
2:F:4041:ARG:O	2:F:4045:GLU:HG2	2.03	0.58
2:H:2934:LEU:O	2:H:3005:HIS:NE2	2.26	0.58
2:H:3016:LEU:O	2:H:3017:LEU:HD23	2.04	0.58
2:H:3662:LEU:HD21	2:H:3737:ASP:HB3	1.86	0.58
2:B:3221:LYS:HD2	2:B:3295:GLU:OE1	2.03	0.58
2:D:821:LEU:HD11	2:D:1521:TRP:HB3	1.84	0.58
2:D:885:ILE:HD13	2:D:957:TYR:HB3	1.86	0.58
2:D:4532:PRO:HD2	2:D:4594:ASP:OD2	2.04	0.58
2:F:885:ILE:HD13	2:F:957:TYR:HB3	1.86	0.58
2:F:1803:VAL:O	2:F:1807:MET:HG2	2.03	0.58
2:F:2248:ILE:HG12	2:F:2284:MET:HE2	1.84	0.58
2:F:3197:ALA:O	2:F:3201:ILE:HG13	2.04	0.58
2:F:4532:PRO:HD2	2:F:4594:ASP:OD2	2.04	0.58
2:H:3637:PRO:O	2:H:3641:GLU:HG2	2.03	0.58
2:B:3272:ASP:OD1	2:B:3366:LYS:HD3	2.04	0.58
2:D:3016:LEU:O	2:D:3017:LEU:HD23	2.04	0.58
2:D:3929:LYS:HE3	2:D:3956:ALA:CB	2.31	0.58
2:F:243:ASP:O	2:F:246:HIS:ND1	2.37	0.58
2:F:1975:ASP:O	2:F:1979:VAL:HG23	2.04	0.58
2:F:2896:GLU:OE2	2:F:2944:SER:OG	2.18	0.58
2:F:3002:ILE:O	2:F:3006:VAL:HG13	2.04	0.58
2:F:3018:GLY:O	2:F:3022:ILE:HG13	2.03	0.58
2:F:3383:ILE:O	2:F:3387:LYS:HG3	2.03	0.58
2:H:167:ILE:HD13	2:H:206:PRO:HG3	1.85	0.58
2:H:243:ASP:O	2:H:246:HIS:ND1	2.37	0.58
2:H:859:VAL:CG1	2:H:931:LEU:HB2	2.33	0.58
2:H:1254:ILE:HG21	2:H:1286:ILE:HD13	1.86	0.58
2:H:2398:ASP:O	2:H:2454:ARG:NH1	2.37	0.58
2:H:2561:LEU:HB3	2:H:2562:PRO:HD3	1.86	0.58
2:H:3002:ILE:O	2:H:3006:VAL:HG13	2.04	0.58
2:H:3182:LEU:HD11	2:H:3220:LEU:HD21	1.86	0.58
2:H:3221:LYS:HD2	2:H:3295:GLU:OE1	2.03	0.58
2:H:3708:GLY:O	2:H:3712:LYS:HG2	2.04	0.58
2:B:859:VAL:CG1	2:B:931:LEU:HB2	2.33	0.57
2:B:3297:PHE:CD2	2:B:3364:LEU:HD22	2.39	0.57
2:D:3018:GLY:O	2:D:3022:ILE:HG13	2.03	0.57
2:D:3297:PHE:CD2	2:D:3364:LEU:HD22	2.39	0.57
2:D:3708:GLY:O	2:D:3712:LYS:HG2	2.04	0.57
2:F:1270:LYS:HE3	2:F:1335:PHE:HE2	1.69	0.57
2:F:1341:SER:O	2:F:1391:TRP:NE1	2.35	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:3297:PHE:CD2	2:F:3364:LEU:HD22	2.39	0.57
2:H:243:ASP:OD1	2:H:243:ASP:N	2.37	0.57
2:H:2488:VAL:HG21	2:H:2535:LEU:HD11	1.84	0.57
2:B:243:ASP:N	2:B:243:ASP:OD1	2.37	0.57
2:B:662:PHE:HB3	2:B:809:CYS:SG	2.44	0.57
2:B:3253:PHE:CB	2:B:3309:GLU:HG3	2.34	0.57
2:B:3708:GLY:O	2:B:3712:LYS:HG2	2.04	0.57
2:B:3929:LYS:HE3	2:B:3956:ALA:CB	2.31	0.57
2:D:3190:MET:HB3	2:D:3262:ALA:CB	2.34	0.57
2:F:235:THR:HG21	2:F:256:ALA:HB1	1.87	0.57
2:F:889:TRP:HA	2:F:900:ARG:CB	2.30	0.57
2:F:1586:LEU:HD21	2:F:1686:ILE:HG13	1.86	0.57
2:F:3182:LEU:HD11	2:F:3220:LEU:HD21	1.86	0.57
2:F:4511:ILE:HD13	2:F:4560:ILE:HD12	1.85	0.57
2:F:4755:GLN:O	2:F:4759:ILE:HG12	2.05	0.57
2:H:3018:GLY:O	2:H:3022:ILE:HG13	2.03	0.57
2:B:4532:PRO:HD2	2:B:4594:ASP:OD2	2.04	0.57
2:D:662:PHE:HB3	2:D:809:CYS:SG	2.44	0.57
2:D:1270:LYS:HE3	2:D:1335:PHE:HE2	1.69	0.57
2:D:3197:ALA:O	2:D:3201:ILE:HG13	2.04	0.57
2:F:2337:LEU:HB3	2:F:2397:LEU:HD11	1.86	0.57
2:F:2561:LEU:HB3	2:F:2562:PRO:HD3	1.86	0.57
2:F:3502:LEU:O	2:F:3506:GLN:HG3	2.05	0.57
2:B:1026:ASP:O	2:B:1030:LYS:HG3	2.05	0.57
2:B:3190:MET:HB3	2:B:3262:ALA:CB	2.34	0.57
2:B:3197:ALA:O	2:B:3201:ILE:HG13	2.04	0.57
2:B:3662:LEU:HD21	2:B:3737:ASP:HB3	1.86	0.57
2:D:167:ILE:HD13	2:D:206:PRO:HG3	1.85	0.57
2:D:243:ASP:O	2:D:246:HIS:ND1	2.37	0.57
2:D:1555:MET:CE	2:D:1601:LEU:HD12	2.35	0.57
2:D:2561:LEU:HB3	2:D:2562:PRO:HD3	1.86	0.57
2:D:3275:ARG:HG3	2:D:3370:ILE:HD11	1.85	0.57
2:F:243:ASP:OD1	2:F:243:ASP:N	2.37	0.57
2:F:1416:ASP:O	2:F:1420:GLY:N	2.38	0.57
2:H:662:PHE:HB3	2:H:809:CYS:SG	2.44	0.57
2:D:1026:ASP:O	2:D:1030:LYS:HG3	2.05	0.57
2:D:3002:ILE:O	2:D:3006:VAL:HG13	2.04	0.57
2:D:3677:LEU:O	2:D:3681:MET:HG3	2.03	0.57
2:D:4525:ASP:O	2:D:4528:VAL:HG12	2.05	0.57
2:D:4755:GLN:O	2:D:4759:ILE:HG12	2.05	0.57
2:F:3190:MET:HB3	2:F:3262:ALA:CB	2.34	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:235:THR:HG21	2:H:256:ALA:HB1	1.87	0.57
2:H:280:TRP:N	2:H:345:GLU:OE1	2.26	0.57
2:H:1026:ASP:O	2:H:1030:LYS:HG3	2.05	0.57
2:H:1349:THR:OG1	2:H:1351:ASP:OD1	2.17	0.57
2:H:3253:PHE:CB	2:H:3309:GLU:HG3	2.34	0.57
2:B:235:THR:HG22	2:B:262:SER:CB	2.31	0.57
2:B:243:ASP:O	2:B:246:HIS:ND1	2.37	0.57
2:B:646:ILE:HG23	2:B:812:ALA:HB3	1.84	0.57
2:B:1270:LYS:HE3	2:B:1335:PHE:HE2	1.69	0.57
2:B:2337:LEU:HB3	2:B:2397:LEU:HD11	1.86	0.57
2:B:4505:GLU:O	2:B:4550:LYS:NZ	2.34	0.57
2:D:79:LEU:O	2:D:83:LEU:HG	2.05	0.57
2:D:1416:ASP:O	2:D:1420:GLY:N	2.38	0.57
2:D:3662:LEU:HD21	2:D:3737:ASP:HB3	1.86	0.57
2:D:3783:ASP:OD1	2:D:3783:ASP:N	2.32	0.57
2:F:2398:ASP:O	2:F:2454:ARG:NH1	2.37	0.57
2:H:930:LEU:HD23	2:H:986:LEU:HD21	1.87	0.57
2:H:1270:LYS:HE3	2:H:1335:PHE:HE2	1.69	0.57
2:H:1975:ASP:O	2:H:1979:VAL:HG23	2.04	0.57
2:H:2337:LEU:HB3	2:H:2397:LEU:HD11	1.86	0.57
2:H:3275:ARG:HG3	2:H:3370:ILE:HD11	1.85	0.57
2:H:4532:PRO:HD2	2:H:4594:ASP:OD2	2.04	0.57
2:B:590:LYS:NZ	2:B:1478:GLU:OE2	2.38	0.57
2:B:1254:ILE:HG21	2:B:1286:ILE:HD13	1.86	0.57
2:B:1975:ASP:O	2:B:1979:VAL:HG23	2.04	0.57
2:B:3002:ILE:O	2:B:3006:VAL:HG13	2.04	0.57
2:D:1341:SER:O	2:D:1391:TRP:NE1	2.35	0.57
2:D:2965:THR:OG1	2:D:2987:ASN:ND2	2.38	0.57
2:D:3182:LEU:HD11	2:D:3220:LEU:HD21	1.86	0.57
2:F:1254:ILE:HG21	2:F:1286:ILE:HD13	1.86	0.57
2:F:1555:MET:CE	2:F:1601:LEU:HD12	2.35	0.57
2:F:3708:GLY:O	2:F:3712:LYS:HG2	2.04	0.57
2:H:747:ASP:O	2:H:751:PRO:HA	2.05	0.57
2:H:2965:THR:OG1	2:H:2987:ASN:ND2	2.38	0.57
2:H:3502:LEU:O	2:H:3506:GLN:HG3	2.05	0.57
2:B:1038:ARG:O	2:B:1042:ARG:HG3	2.05	0.57
2:B:2965:THR:OG1	2:B:2987:ASN:ND2	2.38	0.57
2:B:3182:LEU:HD11	2:B:3220:LEU:HD21	1.86	0.57
2:D:747:ASP:O	2:D:751:PRO:HA	2.05	0.57
2:D:930:LEU:HD23	2:D:986:LEU:HD21	1.87	0.57
2:D:3109:MET:HE3	2:D:3170:ILE:CD1	2.35	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:1026:ASP:O	2:F:1030:LYS:HG3	2.05	0.57
2:F:3109:MET:HE3	2:F:3170:ILE:CD1	2.35	0.57
2:H:1038:ARG:O	2:H:1042:ARG:HG3	2.05	0.57
2:H:3190:MET:HB3	2:H:3262:ALA:CB	2.34	0.57
2:H:3272:ASP:OD1	2:H:3366:LYS:HD3	2.04	0.57
2:H:4755:GLN:O	2:H:4759:ILE:HG12	2.05	0.57
2:B:747:ASP:O	2:B:751:PRO:HA	2.05	0.57
2:D:1038:ARG:O	2:D:1042:ARG:HG3	2.05	0.57
2:F:662:PHE:HB3	2:F:809:CYS:SG	2.44	0.57
2:F:930:LEU:HD23	2:F:986:LEU:HD21	1.87	0.57
2:H:79:LEU:O	2:H:83:LEU:HG	2.05	0.57
2:H:1213:TYR:OH	2:H:1222:PHE:O	2.12	0.57
2:H:3016:LEU:HD22	2:H:3024:CYS:SG	2.45	0.57
2:H:3197:ALA:O	2:H:3201:ILE:HG13	2.04	0.57
2:B:612:VAL:O	2:B:616:GLN:HG3	2.05	0.57
2:B:1416:ASP:O	2:B:1420:GLY:N	2.38	0.57
2:B:1625:MET:SD	2:B:2025:ARG:NH1	2.78	0.57
2:B:3399:VAL:O	2:B:3403:LEU:HG	2.05	0.57
2:B:4525:ASP:O	2:B:4528:VAL:HG12	2.05	0.57
2:D:1586:LEU:HD21	2:D:1686:ILE:HG13	1.86	0.57
2:D:2337:LEU:HB3	2:D:2397:LEU:HD11	1.86	0.57
2:F:612:VAL:O	2:F:616:GLN:HG3	2.05	0.57
2:F:1666:ARG:H	2:F:1682:GLN:HE22	1.52	0.57
2:F:3275:ARG:HG3	2:F:3370:ILE:HD11	1.85	0.57
2:H:4525:ASP:O	2:H:4528:VAL:HG12	2.05	0.57
2:B:885:ILE:HD13	2:B:957:TYR:HB3	1.86	0.56
2:B:930:LEU:HD23	2:B:986:LEU:HD21	1.87	0.56
2:B:3289:LEU:O	2:B:3293:VAL:HG23	2.05	0.56
2:D:1625:MET:SD	2:D:2025:ARG:NH1	2.78	0.56
2:H:1666:ARG:H	2:H:1682:GLN:HE22	1.52	0.56
2:B:3016:LEU:HD22	2:B:3024:CYS:SG	2.45	0.56
2:D:1829:PHE:O	2:D:1832:ILE:HG13	2.06	0.56
2:D:3289:LEU:O	2:D:3293:VAL:HG23	2.05	0.56
2:D:4453:PHE:HE2	2:F:4678:PHE:CE2	2.23	0.56
2:F:79:LEU:O	2:F:83:LEU:HG	2.05	0.56
2:F:1152:ILE:HG13	2:F:1159:MET:HG2	1.87	0.56
2:F:4525:ASP:O	2:F:4528:VAL:HG12	2.05	0.56
2:H:1416:ASP:O	2:H:1420:GLY:N	2.38	0.56
2:B:235:THR:HG21	2:B:256:ALA:HB1	1.87	0.56
2:B:1829:PHE:O	2:B:1832:ILE:HG13	2.06	0.56
2:B:2313:ARG:O	2:B:2317:ILE:HG13	2.05	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:4453:PHE:HE2	2:D:4678:PHE:CE2	2.23	0.56
1:C:78:THR:HB	1:C:79:PRO:HD2	1.88	0.56
2:D:24:GLN:NE2	2:D:35:LYS:HD3	2.20	0.56
2:D:235:THR:HG21	2:D:256:ALA:HB1	1.87	0.56
2:D:590:LYS:NZ	2:D:1478:GLU:OE2	2.38	0.56
2:D:3272:ASP:OD1	2:D:3366:LYS:HD3	2.04	0.56
2:D:3399:VAL:O	2:D:3403:LEU:HG	2.05	0.56
2:F:24:GLN:NE2	2:F:35:LYS:HD3	2.20	0.56
2:F:1038:ARG:O	2:F:1042:ARG:HG3	2.05	0.56
2:F:1290:LEU:HD12	2:F:1445:PRO:HG2	1.87	0.56
2:F:1625:MET:SD	2:F:2025:ARG:NH1	2.78	0.56
2:F:1829:PHE:O	2:F:1832:ILE:HG13	2.06	0.56
2:F:2965:THR:OG1	2:F:2987:ASN:ND2	2.38	0.56
2:F:3016:LEU:HD22	2:F:3024:CYS:SG	2.45	0.56
2:H:24:GLN:NE2	2:H:35:LYS:HD3	2.20	0.56
2:H:612:VAL:O	2:H:616:GLN:HG3	2.05	0.56
2:H:885:ILE:HD13	2:H:957:TYR:HB3	1.86	0.56
2:H:1290:LEU:HD12	2:H:1445:PRO:HG2	1.87	0.56
2:H:1829:PHE:O	2:H:1832:ILE:HG13	2.06	0.56
2:H:2908:LEU:O	2:H:2912:ARG:HD2	2.06	0.56
2:B:482:LEU:O	2:B:486:LEU:HG	2.05	0.56
2:B:1988:ARG:HG3	2:B:1995:GLU:OE2	2.06	0.56
2:B:2561:LEU:HB3	2:B:2562:PRO:HD3	1.86	0.56
2:D:612:VAL:O	2:D:616:GLN:HG3	2.05	0.56
2:D:1152:ILE:HG13	2:D:1159:MET:HG2	1.87	0.56
2:D:1988:ARG:HG3	2:D:1995:GLU:OE2	2.06	0.56
2:F:482:LEU:O	2:F:486:LEU:HG	2.05	0.56
2:F:3783:ASP:OD1	2:F:3783:ASP:N	2.32	0.56
2:F:4386:ILE:O	2:F:4390:LYS:HG3	2.06	0.56
1:G:68:SER:O	1:G:104:LEU:HD23	2.06	0.56
2:H:482:LEU:O	2:H:486:LEU:HG	2.05	0.56
2:H:1586:LEU:HD21	2:H:1686:ILE:HG13	1.86	0.56
2:H:1988:ARG:HG3	2:H:1995:GLU:OE2	2.06	0.56
1:A:78:THR:HB	1:A:79:PRO:HD2	1.88	0.56
2:B:24:GLN:NE2	2:B:35:LYS:HD3	2.20	0.56
2:D:580:HIS:O	2:D:584:ILE:HG13	2.06	0.56
2:D:989:ASN:O	2:D:993:VAL:HG23	2.05	0.56
2:D:3016:LEU:HD22	2:D:3024:CYS:SG	2.45	0.56
2:H:3399:VAL:O	2:H:3403:LEU:HG	2.05	0.56
2:B:1555:MET:HE1	2:B:1601:LEU:HD12	1.87	0.56
2:B:2315:ARG:O	2:B:2319:ARG:HG3	2.05	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3502:LEU:O	2:B:3506:GLN:HG3	2.05	0.56
2:D:3060:ILE:HG12	2:D:3062:VAL:HG22	1.88	0.56
2:F:3289:LEU:O	2:F:3293:VAL:HG23	2.05	0.56
1:G:78:THR:HB	1:G:79:PRO:HD2	1.88	0.56
2:H:1555:MET:HE1	2:H:1601:LEU:HD12	1.87	0.56
2:H:1555:MET:CE	2:H:1601:LEU:HD12	2.35	0.56
2:B:79:LEU:O	2:B:83:LEU:HG	2.05	0.56
2:B:4755:GLN:O	2:B:4759:ILE:HG12	2.05	0.56
2:D:1254:ILE:HG21	2:D:1286:ILE:HD13	1.86	0.56
1:E:78:THR:HB	1:E:79:PRO:HD2	1.88	0.56
2:F:2313:ARG:O	2:F:2317:ILE:HG13	2.05	0.56
2:F:4453:PHE:HE2	2:H:4678:PHE:CE2	2.23	0.56
2:H:989:ASN:O	2:H:993:VAL:HG23	2.05	0.56
2:H:1341:SER:O	2:H:1391:TRP:NE1	2.35	0.56
2:H:3289:LEU:O	2:H:3293:VAL:HG23	2.05	0.56
2:B:1555:MET:CE	2:B:1601:LEU:HD12	2.35	0.56
2:D:482:LEU:O	2:D:486:LEU:HG	2.05	0.56
2:D:3502:LEU:O	2:D:3506:GLN:HG3	2.05	0.56
1:E:68:SER:O	1:E:104:LEU:HD23	2.06	0.56
2:F:2908:LEU:O	2:F:2912:ARG:HD2	2.06	0.56
2:F:3060:ILE:HG12	2:F:3062:VAL:HG22	1.88	0.56
2:F:3399:VAL:O	2:F:3403:LEU:HG	2.05	0.56
2:H:1625:MET:SD	2:H:2025:ARG:NH1	2.78	0.56
2:H:2313:ARG:O	2:H:2317:ILE:HG13	2.05	0.56
2:H:4386:ILE:O	2:H:4390:LYS:HG3	2.06	0.56
2:B:849:PHE:CE2	2:B:851:PRO:HB3	2.41	0.56
2:B:3310:GLU:OE2	2:B:3358:SER:OG	2.13	0.56
2:B:3523:ILE:HG13	2:B:3527:MET:CE	2.36	0.56
2:D:979:GLN:O	2:D:983:VAL:HG23	2.06	0.56
2:D:2315:ARG:O	2:D:2319:ARG:HG3	2.05	0.56
2:D:4069:LYS:HE3	2:D:4070:MET:HE3	1.88	0.56
2:F:2047:ILE:HG21	2:F:2065:MET:CE	2.36	0.56
2:H:1152:ILE:HG13	2:H:1159:MET:HG2	1.87	0.56
2:B:2047:ILE:HG21	2:B:2065:MET:CE	2.36	0.56
2:B:3109:MET:HE3	2:B:3170:ILE:CD1	2.35	0.56
2:D:3243:GLN:O	2:D:3247:LEU:HG	2.06	0.56
2:F:580:HIS:O	2:F:584:ILE:HG13	2.06	0.56
2:F:590:LYS:NZ	2:F:1478:GLU:OE2	2.38	0.56
2:F:747:ASP:O	2:F:751:PRO:HA	2.05	0.56
2:F:4071:GLU:OE1	2:F:4841:TRP:NE1	2.39	0.56
2:H:889:TRP:HA	2:H:900:ARG:CB	2.30	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:979:GLN:O	2:H:983:VAL:HG23	2.06	0.56
2:H:2896:GLU:OE2	2:H:2944:SER:OG	2.18	0.56
2:B:989:ASN:O	2:B:993:VAL:HG23	2.05	0.55
2:B:2174:CYS:HB2	2:B:2188:ASN:OD1	2.06	0.55
2:D:648:LEU:HD13	2:D:660:TRP:CD1	2.41	0.55
2:D:1666:ARG:H	2:D:1682:GLN:HE22	1.52	0.55
2:F:2231:ALA:HB2	2:F:2243:ALA:HB2	1.89	0.55
2:F:2240:LEU:HD21	2:F:2291:ILE:HG13	1.88	0.55
2:F:3272:ASP:OD1	2:F:3366:LYS:HD3	2.04	0.55
2:H:580:HIS:O	2:H:584:ILE:HG13	2.06	0.55
2:H:2913:ILE:HD12	2:H:2990:TYR:HA	1.88	0.55
2:H:3060:ILE:HG12	2:H:3062:VAL:HG22	1.88	0.55
2:H:3109:MET:HE3	2:H:3170:ILE:CD1	2.35	0.55
2:H:3243:GLN:O	2:H:3247:LEU:HG	2.06	0.55
2:H:4069:LYS:HE3	2:H:4070:MET:HE3	1.88	0.55
2:B:1666:ARG:H	2:B:1682:GLN:HE22	1.52	0.55
2:B:2908:LEU:O	2:B:2912:ARG:HD2	2.06	0.55
2:B:2913:ILE:HD12	2:B:2990:TYR:HA	1.88	0.55
2:B:3527:MET:HG3	2:B:3618:ARG:NH1	2.19	0.55
2:D:280:TRP:N	2:D:345:GLU:OE1	2.26	0.55
2:D:2174:CYS:HB2	2:D:2188:ASN:OD1	2.06	0.55
2:D:2190:ILE:CD1	2:D:2277:VAL:HG11	2.36	0.55
2:D:2908:LEU:O	2:D:2912:ARG:HD2	2.06	0.55
2:F:524:LEU:HD11	2:F:538:PHE:CE2	2.41	0.55
2:H:2315:ARG:O	2:H:2319:ARG:HG3	2.05	0.55
2:B:580:HIS:O	2:B:584:ILE:HG13	2.06	0.55
2:B:4678:PHE:CE2	2:H:4453:PHE:HE2	2.23	0.55
2:D:849:PHE:CE2	2:D:851:PRO:HB3	2.41	0.55
2:D:2047:ILE:HG21	2:D:2065:MET:CE	2.36	0.55
2:D:4771:GLN:NE2	2:D:4775:ASP:OD1	2.40	0.55
2:F:3261:TYR:HE2	2:F:3321:ASN:HD21	1.54	0.55
2:H:726:ARG:HG3	2:H:1371:LEU:HD11	1.89	0.55
2:B:1152:ILE:HG13	2:B:1159:MET:HG2	1.87	0.55
2:B:1586:LEU:HD21	2:B:1686:ILE:HG13	1.86	0.55
2:B:1692:LYS:HB2	2:B:1738:PHE:CE1	2.42	0.55
2:B:3060:ILE:HG12	2:B:3062:VAL:HG22	1.88	0.55
2:B:4069:LYS:HE3	2:B:4070:MET:HE3	1.88	0.55
2:D:924:THR:CG2	2:D:928:LYS:HE3	2.36	0.55
2:D:3291:ARG:O	2:D:3295:GLU:HG3	2.07	0.55
2:F:989:ASN:O	2:F:993:VAL:HG23	2.05	0.55
2:F:2315:ARG:O	2:F:2319:ARG:HG3	2.05	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:856:THR:HB	2:H:928:LYS:CB	2.37	0.55
2:H:3527:MET:HE3	2:H:3614:ARG:NE	2.22	0.55
2:B:979:GLN:O	2:B:983:VAL:HG23	2.06	0.55
2:D:524:LEU:HD11	2:D:538:PHE:CE2	2.41	0.55
2:D:929:THR:O	2:D:933:LEU:HG	2.07	0.55
2:D:2913:ILE:HD12	2:D:2990:TYR:HA	1.88	0.55
2:D:4386:ILE:O	2:D:4390:LYS:HG3	2.06	0.55
2:F:2174:CYS:HB2	2:F:2188:ASN:OD1	2.06	0.55
2:F:4069:LYS:HE3	2:F:4070:MET:HE3	1.88	0.55
2:H:235:THR:HG22	2:H:262:SER:CB	2.31	0.55
1:A:68:SER:O	1:A:104:LEU:HD23	2.06	0.55
2:B:1025:LEU:HD11	2:B:1029:THR:CG2	2.37	0.55
2:B:1805:LEU:O	2:B:1809:GLU:HG3	2.07	0.55
2:D:1290:LEU:HD12	2:D:1445:PRO:HG2	1.87	0.55
2:D:3150:HIS:O	2:D:3151:LEU:HD23	2.07	0.55
2:D:4067:GLN:O	2:D:4068:GLU:HG2	2.07	0.55
2:F:726:ARG:HG3	2:F:1371:LEU:HD11	1.89	0.55
2:F:1988:ARG:HG3	2:F:1995:GLU:OE2	2.06	0.55
2:F:2302:HIS:O	2:F:2306:THR:HG23	2.07	0.55
1:G:5:ILE:HG12	1:G:75:LEU:CD2	2.37	0.55
2:H:2047:ILE:HG21	2:H:2065:MET:CE	2.36	0.55
2:H:2231:ALA:HB2	2:H:2243:ALA:HB2	1.89	0.55
2:B:2190:ILE:CD1	2:B:2277:VAL:HG11	2.36	0.55
2:B:3243:GLN:O	2:B:3247:LEU:HG	2.06	0.55
2:B:4067:GLN:O	2:B:4068:GLU:HG2	2.07	0.55
2:B:4771:GLN:NE2	2:B:4775:ASP:OD1	2.40	0.55
1:C:68:SER:O	1:C:104:LEU:HD23	2.06	0.55
2:D:1025:LEU:HD11	2:D:1029:THR:CG2	2.37	0.55
2:D:2231:ALA:HB2	2:D:2243:ALA:HB2	1.89	0.55
2:D:3261:TYR:HE2	2:D:3321:ASN:HD21	1.54	0.55
2:D:3527:MET:HE3	2:D:3614:ARG:NE	2.22	0.55
2:F:605:CYS:SG	2:F:619:ILE:HD12	2.47	0.55
2:F:3150:HIS:O	2:F:3151:LEU:HD23	2.07	0.55
2:F:3291:ARG:O	2:F:3295:GLU:HG3	2.07	0.55
2:H:849:PHE:CE2	2:H:851:PRO:HB3	2.41	0.55
2:H:929:THR:O	2:H:933:LEU:HG	2.07	0.55
2:H:1630:ILE:HD12	2:H:2059:LEU:HD11	1.88	0.55
2:H:4733:MET:O	2:H:4737:VAL:HG23	2.06	0.55
2:H:4771:GLN:NE2	2:H:4775:ASP:OD1	2.40	0.55
2:B:524:LEU:HD11	2:B:538:PHE:CE2	2.41	0.55
2:B:605:CYS:SG	2:B:619:ILE:HD12	2.47	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:648:LEU:HD13	2:B:660:TRP:CD1	2.41	0.55
2:B:813:LEU:O	2:B:1007:ILE:HD11	2.07	0.55
2:B:924:THR:CG2	2:B:928:LYS:HE3	2.36	0.55
2:B:3929:LYS:HB2	2:B:3960:ASP:OD2	2.07	0.55
2:B:4386:ILE:O	2:B:4390:LYS:HG3	2.06	0.55
1:C:5:ILE:HG12	1:C:75:LEU:CD2	2.37	0.55
2:D:1555:MET:HE1	2:D:1601:LEU:HD12	1.87	0.55
2:D:2313:ARG:O	2:D:2317:ILE:HG13	2.05	0.55
1:E:5:ILE:HG12	1:E:75:LEU:CD2	2.37	0.55
2:F:1692:LYS:HB2	2:F:1738:PHE:CE1	2.42	0.55
2:F:1805:LEU:O	2:F:1809:GLU:HG3	2.07	0.55
2:F:3527:MET:HE3	2:F:3614:ARG:NE	2.22	0.55
2:F:4771:GLN:NE2	2:F:4775:ASP:OD1	2.40	0.55
2:H:648:LEU:HD13	2:H:660:TRP:CD1	2.41	0.55
2:H:1035:ASP:O	2:H:1039:GLU:HG2	2.07	0.55
2:H:1805:LEU:O	2:H:1809:GLU:HG3	2.07	0.55
2:B:2230:PRO:O	2:B:2233:ARG:HG2	2.07	0.55
2:B:3291:ARG:O	2:B:3295:GLU:HG3	2.07	0.55
2:B:3527:MET:HE3	2:B:3614:ARG:NE	2.22	0.55
2:D:1692:LYS:HB2	2:D:1738:PHE:CE1	2.42	0.55
2:D:2230:PRO:O	2:D:2233:ARG:HG2	2.07	0.55
2:D:4531:THR:HB	2:D:4594:ASP:OD2	2.07	0.55
2:F:979:GLN:O	2:F:983:VAL:HG23	2.06	0.55
2:F:1555:MET:HE1	2:F:1601:LEU:HD12	1.87	0.55
2:F:2913:ILE:HD12	2:F:2990:TYR:HA	1.88	0.55
2:F:3929:LYS:HE3	2:F:3956:ALA:CB	2.31	0.55
2:H:2302:HIS:O	2:H:2306:THR:HG23	2.07	0.55
2:H:3249:ILE:HD12	2:H:3250:LEU:HD23	1.89	0.55
2:H:3523:ILE:HG13	2:H:3527:MET:CE	2.36	0.55
2:H:3929:LYS:HB2	2:H:3960:ASP:OD2	2.07	0.55
1:A:5:ILE:HG12	1:A:75:LEU:CD2	2.37	0.55
2:B:929:THR:O	2:B:933:LEU:HG	2.07	0.55
2:B:1290:LEU:HD12	2:B:1445:PRO:HG2	1.87	0.55
2:D:1805:LEU:O	2:D:1809:GLU:HG3	2.07	0.55
2:D:2059:LEU:HB3	2:D:2060:MET:HE2	1.89	0.55
2:D:3453:HIS:O	2:D:3457:VAL:HG13	2.07	0.55
2:H:524:LEU:HD11	2:H:538:PHE:CE2	2.41	0.55
2:H:1270:LYS:HE3	2:H:1335:PHE:CE2	2.42	0.55
2:H:2182:TYR:CE1	2:H:2259:PRO:HD3	2.42	0.55
2:B:856:THR:HB	2:B:928:LYS:CB	2.37	0.54
2:B:2240:LEU:HD21	2:B:2291:ILE:HG13	1.88	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2833:ILE:HD12	2:B:2908:LEU:HD22	1.89	0.54
2:B:4531:THR:HB	2:B:4594:ASP:OD2	2.07	0.54
2:F:929:THR:O	2:F:933:LEU:HG	2.07	0.54
2:F:1025:LEU:HD11	2:F:1029:THR:CG2	2.37	0.54
2:F:1382:VAL:HG11	2:F:1438:GLU:OE2	2.07	0.54
2:F:2182:TYR:CE1	2:F:2259:PRO:HD3	2.42	0.54
2:H:605:CYS:SG	2:H:619:ILE:HD12	2.47	0.54
2:H:924:THR:CG2	2:H:928:LYS:HE3	2.36	0.54
2:H:4067:GLN:O	2:H:4068:GLU:HG2	2.07	0.54
2:B:994:TRP:O	2:B:998:ARG:HG2	2.07	0.54
2:B:1630:ILE:HD12	2:B:2059:LEU:HD11	1.88	0.54
2:B:2896:GLU:OE2	2:B:2944:SER:OG	2.18	0.54
2:B:3680:LEU:HD22	2:B:3719:PHE:HZ	1.72	0.54
2:D:3929:LYS:HB2	2:D:3960:ASP:OD2	2.07	0.54
2:F:994:TRP:O	2:F:998:ARG:HG2	2.07	0.54
2:F:1035:ASP:O	2:F:1039:GLU:HG2	2.07	0.54
2:F:3929:LYS:HB2	2:F:3960:ASP:OD2	2.07	0.54
2:H:1692:LYS:HB2	2:H:1738:PHE:CE1	2.42	0.54
2:H:2174:CYS:HB2	2:H:2188:ASN:OD1	2.06	0.54
2:H:2190:ILE:CD1	2:H:2277:VAL:HG11	2.36	0.54
2:H:3929:LYS:HE3	2:H:3956:ALA:CB	2.31	0.54
2:B:726:ARG:HG3	2:B:1371:LEU:HD11	1.89	0.54
2:B:3150:HIS:O	2:B:3151:LEU:HD23	2.07	0.54
2:B:4071:GLU:OE1	2:B:4841:TRP:NE1	2.39	0.54
2:D:605:CYS:SG	2:D:619:ILE:HD12	2.47	0.54
2:D:3680:LEU:HD22	2:D:3719:PHE:HZ	1.72	0.54
2:F:422:VAL:CG2	2:F:491:ARG:HG3	2.38	0.54
2:F:2059:LEU:HB3	2:F:2060:MET:HE2	1.89	0.54
2:F:2449:ARG:O	2:F:2449:ARG:NH1	2.32	0.54
2:F:3243:GLN:O	2:F:3247:LEU:HG	2.06	0.54
2:F:3901:PHE:O	2:F:3905:LEU:HG	2.08	0.54
2:H:303:LEU:HD23	2:H:383:VAL:HG12	1.90	0.54
2:H:320:PHE:CE1	2:H:355:VAL:HG22	2.42	0.54
2:H:676:GLU:HG3	2:H:677:PRO:HD2	1.90	0.54
2:H:2240:LEU:HD21	2:H:2291:ILE:HG13	1.88	0.54
2:H:2822:ILE:HD13	2:H:2865:VAL:CG2	2.33	0.54
2:B:750:VAL:HB	2:B:751:PRO:C	2.33	0.54
2:B:859:VAL:HG11	2:B:931:LEU:HB2	1.89	0.54
2:B:2182:TYR:CE1	2:B:2259:PRO:HD3	2.42	0.54
2:D:1382:VAL:HG11	2:D:1438:GLU:OE2	2.07	0.54
2:D:2240:LEU:HD21	2:D:2291:ILE:HG13	1.88	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:2302:HIS:O	2:D:2306:THR:HG23	2.07	0.54
2:D:3901:PHE:O	2:D:3905:LEU:HG	2.08	0.54
2:F:648:LEU:HD13	2:F:660:TRP:CD1	2.41	0.54
2:F:1270:LYS:HE3	2:F:1335:PHE:CE2	2.42	0.54
2:F:4067:GLN:O	2:F:4068:GLU:HG2	2.07	0.54
2:H:1390:VAL:HG12	2:H:1433:THR:HG21	1.90	0.54
2:D:417:LEU:O	2:D:420:GLN:HG2	2.08	0.54
2:D:880:TRP:CZ3	2:D:905:LEU:HD23	2.42	0.54
2:D:1630:ILE:HD12	2:D:2059:LEU:HD11	1.88	0.54
2:D:3249:ILE:HD12	2:D:3250:LEU:HD23	1.89	0.54
2:F:320:PHE:CE1	2:F:355:VAL:HG22	2.42	0.54
2:F:676:GLU:HG3	2:F:677:PRO:HD2	1.90	0.54
2:F:856:THR:HB	2:F:928:LYS:CB	2.37	0.54
2:F:4535:PRO:O	2:F:4541:LYS:HE2	2.08	0.54
2:F:4733:MET:O	2:F:4737:VAL:HG23	2.06	0.54
2:H:2833:ILE:HD12	2:H:2908:LEU:HD22	1.89	0.54
2:H:3021:GLN:OE1	2:H:3062:VAL:HG11	2.08	0.54
2:H:3291:ARG:O	2:H:3295:GLU:HG3	2.07	0.54
2:H:4531:THR:HB	2:H:4594:ASP:OD2	2.07	0.54
2:H:4726:PRO:HB3	2:H:4735:ARG:HG2	1.89	0.54
2:B:303:LEU:HD23	2:B:383:VAL:HG12	1.90	0.54
2:B:1035:ASP:O	2:B:1039:GLU:HG2	2.07	0.54
2:B:2152:LEU:O	2:B:3694:ARG:NH1	2.40	0.54
2:B:3021:GLN:OE1	2:B:3062:VAL:HG11	2.08	0.54
2:B:4733:MET:O	2:B:4737:VAL:HG23	2.06	0.54
2:D:320:PHE:CE1	2:D:355:VAL:HG22	2.42	0.54
2:D:1122:VAL:CG2	2:D:1131:TRP:HB2	2.37	0.54
2:D:4733:MET:O	2:D:4737:VAL:HG23	2.06	0.54
2:F:750:VAL:HB	2:F:751:PRO:C	2.33	0.54
2:F:1390:VAL:HG12	2:F:1433:THR:HG21	1.90	0.54
2:H:750:VAL:HB	2:H:751:PRO:C	2.33	0.54
2:H:3310:GLU:OE2	2:H:3358:SER:OG	2.13	0.54
2:B:2302:HIS:O	2:B:2306:THR:HG23	2.07	0.54
2:B:3244:GLU:O	2:B:3248:LEU:HD13	2.08	0.54
2:B:3910:LEU:HD12	2:B:3942:TYR:CE2	2.43	0.54
2:D:303:LEU:HD23	2:D:383:VAL:HG12	1.90	0.54
2:D:2934:LEU:O	2:D:3005:HIS:NE2	2.26	0.54
2:D:4726:PRO:HB3	2:D:4735:ARG:HG2	1.89	0.54
2:F:880:TRP:CZ3	2:F:905:LEU:HD23	2.42	0.54
2:F:2200:ARG:NH1	2:F:2292:ASP:OD2	2.39	0.54
2:F:2230:PRO:O	2:F:2233:ARG:HG2	2.07	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:417:LEU:O	2:H:420:GLN:HG2	2.08	0.54
2:H:813:LEU:O	2:H:1007:ILE:HD11	2.07	0.54
2:H:1025:LEU:HD11	2:H:1029:THR:CG2	2.37	0.54
2:H:2230:PRO:O	2:H:2233:ARG:HG2	2.07	0.54
2:H:3527:MET:HG3	2:H:3618:ARG:NH1	2.19	0.54
2:B:1332:ILE:HD12	2:B:1459:PHE:HA	1.90	0.54
2:B:1539:GLU:OE1	2:B:1541:ARG:NE	2.41	0.54
2:B:2231:ALA:HB2	2:B:2243:ALA:HB2	1.89	0.54
2:B:3249:ILE:HD12	2:B:3250:LEU:HD23	1.89	0.54
2:B:3761:TYR:CE2	2:B:3800:ILE:HD11	2.43	0.54
2:B:4074:VAL:O	2:B:4078:GLU:HG3	2.08	0.54
2:D:492:LEU:HD11	2:D:516:ILE:HG22	1.90	0.54
2:D:813:LEU:O	2:D:1007:ILE:HD11	2.07	0.54
2:D:1889:PRO:O	2:D:1893:ARG:HG3	2.08	0.54
2:D:3787:GLN:NE2	2:D:3848:GLN:HG2	2.23	0.54
2:F:492:LEU:HD11	2:F:516:ILE:HG22	1.90	0.54
2:F:1122:VAL:CG2	2:F:1131:TRP:HB2	2.37	0.54
2:F:1539:GLU:OE1	2:F:1541:ARG:NE	2.41	0.54
2:F:3523:ILE:HG13	2:F:3527:MET:CE	2.36	0.54
2:H:859:VAL:HG11	2:H:931:LEU:HB2	1.89	0.54
2:H:1539:GLU:OE1	2:H:1541:ARG:NE	2.41	0.54
2:H:3787:GLN:NE2	2:H:3848:GLN:HG2	2.23	0.54
2:H:4505:GLU:O	2:H:4550:LYS:NZ	2.34	0.54
2:B:982:LEU:O	2:B:986:LEU:HG	2.08	0.54
2:B:3453:HIS:O	2:B:3457:VAL:HG13	2.07	0.54
2:B:3787:GLN:NE2	2:B:3848:GLN:HG2	2.23	0.54
2:D:676:GLU:HG3	2:D:677:PRO:HD2	1.90	0.54
2:D:982:LEU:O	2:D:986:LEU:HG	2.08	0.54
2:F:417:LEU:O	2:F:420:GLN:HG2	2.08	0.54
2:F:849:PHE:CE2	2:F:851:PRO:HB3	2.41	0.54
2:F:2152:LEU:O	2:F:3694:ARG:NH1	2.40	0.54
2:F:3453:HIS:O	2:F:3457:VAL:HG13	2.07	0.54
2:F:4726:PRO:HB3	2:F:4735:ARG:HG2	1.89	0.54
2:H:1382:VAL:HG11	2:H:1438:GLU:OE2	2.07	0.54
2:H:1807:MET:O	2:H:1811:LEU:HG	2.08	0.54
2:H:2152:LEU:O	2:H:3694:ARG:NH1	2.40	0.54
2:H:3150:HIS:O	2:H:3151:LEU:HD23	2.07	0.54
2:B:407:ALA:O	2:B:411:ILE:HG13	2.08	0.54
2:B:417:LEU:O	2:B:420:GLN:HG2	2.08	0.54
2:B:422:VAL:CG2	2:B:491:ARG:HG3	2.38	0.54
2:B:880:TRP:CZ3	2:B:905:LEU:HD23	2.42	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1382:VAL:HG11	2:B:1438:GLU:OE2	2.07	0.54
2:B:1840:ASN:OD1	2:B:1892:ILE:HD11	2.08	0.54
2:B:3261:TYR:HE2	2:B:3321:ASN:HD21	1.54	0.54
2:D:407:ALA:O	2:D:411:ILE:HG13	2.08	0.54
2:D:726:ARG:HG3	2:D:1371:LEU:HD11	1.89	0.54
2:D:856:THR:HB	2:D:928:LYS:CB	2.37	0.54
2:D:994:TRP:O	2:D:998:ARG:HG2	2.07	0.54
2:D:3244:GLU:O	2:D:3248:LEU:HD13	2.08	0.54
2:D:3523:ILE:HG13	2:D:3527:MET:CE	2.36	0.54
2:D:3910:LEU:HD12	2:D:3942:TYR:CE2	2.43	0.54
2:D:3936:MET:HA	2:D:3936:MET:HE2	1.90	0.54
2:F:1138:PHE:HD1	2:F:1170:THR:HG22	1.73	0.54
2:F:1807:MET:O	2:F:1811:LEU:HG	2.08	0.54
2:H:557:GLY:O	2:H:561:VAL:HG23	2.08	0.54
2:H:1625:MET:HE1	2:H:2021:LEU:CG	2.38	0.54
2:H:1742:ASP:O	2:H:1746:ILE:HG13	2.08	0.54
2:H:3558:ALA:HB2	2:H:3627:MET:SD	2.48	0.54
2:H:3910:LEU:HD12	2:H:3942:TYR:CE2	2.43	0.54
2:B:2047:ILE:HG21	2:B:2065:MET:HE1	1.90	0.53
2:B:2200:ARG:NH1	2:B:2292:ASP:OD2	2.39	0.53
2:B:3558:ALA:HB2	2:B:3627:MET:SD	2.48	0.53
2:D:419:SER:HA	2:D:422:VAL:HG12	1.91	0.53
2:D:1027:GLU:HA	2:D:1030:LYS:HD2	1.89	0.53
2:D:1035:ASP:O	2:D:1039:GLU:HG2	2.07	0.53
2:D:1270:LYS:HE3	2:D:1335:PHE:CE2	2.42	0.53
2:D:3761:TYR:CE2	2:D:3800:ILE:HD11	2.43	0.53
2:D:4074:VAL:O	2:D:4078:GLU:HG3	2.08	0.53
2:F:1332:ILE:HD12	2:F:1459:PHE:HA	1.90	0.53
2:H:492:LEU:HD11	2:H:516:ILE:HG22	1.90	0.53
2:H:632:GLN:O	2:H:1534:LEU:HD12	2.08	0.53
2:H:880:TRP:CZ3	2:H:905:LEU:HD23	2.42	0.53
2:H:1122:VAL:CG2	2:H:1131:TRP:HB2	2.37	0.53
2:H:1138:PHE:HD1	2:H:1170:THR:HG22	1.73	0.53
2:H:1332:ILE:HD12	2:H:1459:PHE:HA	1.90	0.53
2:H:1889:PRO:O	2:H:1893:ARG:HG3	2.08	0.53
2:H:2200:ARG:NH1	2:H:2292:ASP:OD2	2.39	0.53
2:H:3901:PHE:O	2:H:3905:LEU:HG	2.08	0.53
2:B:492:LEU:HD11	2:B:516:ILE:HG22	1.90	0.53
2:B:884:LYS:CB	2:B:905:LEU:HD21	2.38	0.53
2:B:1027:GLU:HA	2:B:1030:LYS:HD2	1.89	0.53
2:B:3901:PHE:O	2:B:3905:LEU:HG	2.08	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:4535:PRO:O	2:B:4541:LYS:HE2	2.08	0.53
2:B:4736:ILE:CD1	2:H:4706:LEU:HD21	2.39	0.53
2:D:422:VAL:CG2	2:D:491:ARG:HG3	2.38	0.53
2:D:814:LEU:HD13	2:D:1024:LEU:CD2	2.38	0.53
2:D:2182:TYR:CE1	2:D:2259:PRO:HD3	2.42	0.53
2:F:813:LEU:O	2:F:1007:ILE:HD11	2.07	0.53
2:F:924:THR:CG2	2:F:928:LYS:HE3	2.36	0.53
2:F:1742:ASP:O	2:F:1746:ILE:HG13	2.08	0.53
2:F:1889:PRO:O	2:F:1893:ARG:HG3	2.08	0.53
2:F:2820:LYS:HD3	2:F:2897:MET:CE	2.38	0.53
2:F:3105:LEU:O	2:F:3109:MET:HG3	2.08	0.53
2:F:3459:GLN:HB2	2:F:3460:PRO:HD3	1.91	0.53
2:F:3936:MET:HE2	2:F:3936:MET:HA	1.90	0.53
2:H:407:ALA:O	2:H:411:ILE:HG13	2.08	0.53
2:H:891:PHE:HA	2:H:905:LEU:HD12	1.91	0.53
2:H:1027:GLU:HA	2:H:1030:LYS:HD2	1.89	0.53
2:H:1798:ARG:NH1	2:H:1970:GLU:OE1	2.41	0.53
2:H:2820:LYS:HD3	2:H:2897:MET:CE	2.38	0.53
2:B:676:GLU:HG3	2:B:677:PRO:HD2	1.90	0.53
2:B:803:PRO:HB2	2:B:806:TYR:CD1	2.43	0.53
2:B:1122:VAL:CG2	2:B:1131:TRP:HB2	2.37	0.53
2:B:1270:LYS:HE3	2:B:1335:PHE:CE2	2.42	0.53
2:B:4706:LEU:HD21	2:D:4736:ILE:CD1	2.39	0.53
2:D:750:VAL:HB	2:D:751:PRO:C	2.33	0.53
2:D:2152:LEU:O	2:D:3694:ARG:NH1	2.40	0.53
2:F:303:LEU:HD23	2:F:383:VAL:HG12	1.90	0.53
2:F:1027:GLU:HA	2:F:1030:LYS:HD2	1.89	0.53
2:F:2047:ILE:HG21	2:F:2065:MET:HE1	1.90	0.53
2:F:2822:ILE:HD13	2:F:2865:VAL:CG2	2.33	0.53
2:F:3787:GLN:NE2	2:F:3848:GLN:HG2	2.23	0.53
2:F:3910:LEU:HD12	2:F:3942:TYR:CE2	2.43	0.53
2:F:4635:LEU:O	2:F:4638:ILE:HG23	2.09	0.53
2:H:3261:TYR:HE2	2:H:3321:ASN:HD21	1.54	0.53
2:H:4074:VAL:O	2:H:4078:GLU:HG3	2.08	0.53
2:B:217:TYR:CD2	2:B:344:PRO:HB2	2.44	0.53
2:B:237:PRO:HG2	2:B:245:GLN:O	2.09	0.53
2:B:2059:LEU:HB3	2:B:2060:MET:HE2	1.89	0.53
2:B:3459:GLN:HB2	2:B:3460:PRO:HD3	1.91	0.53
2:D:557:GLY:O	2:D:561:VAL:HG23	2.08	0.53
2:D:889:TRP:HA	2:D:900:ARG:CB	2.30	0.53
2:D:1390:VAL:HG12	2:D:1433:THR:HG21	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:2200:ARG:NH1	2:D:2292:ASP:OD2	2.39	0.53
2:D:2822:ILE:HD13	2:D:2865:VAL:CG2	2.33	0.53
2:D:4635:LEU:O	2:D:4638:ILE:HG23	2.09	0.53
2:F:237:PRO:HG2	2:F:245:GLN:O	2.09	0.53
2:F:703:ASN:HA	2:F:707:ASP:OD2	2.09	0.53
2:F:891:PHE:HA	2:F:905:LEU:HD12	1.91	0.53
2:F:4531:THR:HB	2:F:4594:ASP:OD2	2.07	0.53
2:H:43:LEU:HG	2:H:445:ASP:HB3	1.90	0.53
2:H:1840:ASN:OD1	2:H:1892:ILE:HD11	2.08	0.53
2:H:3438:GLU:O	2:H:3442:GLU:HG3	2.08	0.53
2:H:3680:LEU:HD22	2:H:3719:PHE:HZ	1.72	0.53
2:B:419:SER:HA	2:B:422:VAL:HG12	1.91	0.53
2:B:632:GLN:O	2:B:1534:LEU:HD12	2.08	0.53
2:B:703:ASN:HA	2:B:707:ASP:OD2	2.09	0.53
2:B:2820:LYS:HD3	2:B:2897:MET:CE	2.38	0.53
2:B:4726:PRO:HB3	2:B:4735:ARG:HG2	1.89	0.53
2:D:1840:ASN:OD1	2:D:1892:ILE:HD11	2.08	0.53
2:D:3021:GLN:OE1	2:D:3062:VAL:HG11	2.08	0.53
2:F:557:GLY:O	2:F:561:VAL:HG23	2.08	0.53
2:F:803:PRO:HB2	2:F:806:TYR:CD1	2.43	0.53
2:F:1025:LEU:O	2:F:1030:LYS:HE2	2.08	0.53
2:F:1630:ILE:HD12	2:F:2059:LEU:HD11	1.88	0.53
2:F:3021:GLN:OE1	2:F:3062:VAL:HG11	2.08	0.53
2:F:3310:GLU:OE2	2:F:3358:SER:OG	2.13	0.53
2:H:982:LEU:O	2:H:986:LEU:HG	2.08	0.53
2:H:2059:LEU:HB3	2:H:2060:MET:HE2	1.89	0.53
2:H:3453:HIS:O	2:H:3457:VAL:HG13	2.07	0.53
2:H:3459:GLN:HB2	2:H:3460:PRO:HD3	1.91	0.53
2:H:4535:PRO:O	2:H:4541:LYS:HE2	2.08	0.53
2:B:814:LEU:HD13	2:B:1024:LEU:CD2	2.38	0.53
2:B:1138:PHE:HD1	2:B:1170:THR:HG22	1.73	0.53
2:B:1798:ARG:NH1	2:B:1970:GLU:OE1	2.41	0.53
2:B:1889:PRO:O	2:B:1893:ARG:HG3	2.08	0.53
2:D:884:LYS:CB	2:D:905:LEU:HD21	2.38	0.53
2:D:1138:PHE:HD1	2:D:1170:THR:HG22	1.73	0.53
2:D:1742:ASP:O	2:D:1746:ILE:HG13	2.08	0.53
2:D:1830:GLY:O	2:D:1834:VAL:HG13	2.09	0.53
2:D:3558:ALA:HB2	2:D:3627:MET:SD	2.48	0.53
2:D:4706:LEU:HD21	2:F:4736:ILE:CD1	2.39	0.53
2:F:632:GLN:O	2:F:1534:LEU:HD12	2.08	0.53
2:F:3244:GLU:O	2:F:3248:LEU:HD13	2.08	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:4706:LEU:HD21	2:H:4736:ILE:CD1	2.39	0.53
2:H:217:TYR:CD2	2:H:344:PRO:HB2	2.44	0.53
2:H:524:LEU:HD21	2:H:538:PHE:CZ	2.44	0.53
2:H:3105:LEU:O	2:H:3109:MET:HG3	2.08	0.53
2:B:3936:MET:HE2	2:B:3936:MET:HA	1.90	0.53
2:D:524:LEU:HD21	2:D:538:PHE:CZ	2.44	0.53
2:D:703:ASN:HA	2:D:707:ASP:OD2	2.09	0.53
2:D:2434:GLU:O	2:D:2437:THR:HG23	2.09	0.53
2:D:4071:GLU:OE1	2:D:4841:TRP:NE1	2.39	0.53
2:F:2190:ILE:CD1	2:F:2277:VAL:HG11	2.36	0.53
2:F:4074:VAL:O	2:F:4078:GLU:HG3	2.08	0.53
2:H:237:PRO:HG2	2:H:245:GLN:O	2.09	0.53
2:H:803:PRO:HB2	2:H:806:TYR:CD1	2.43	0.53
2:H:994:TRP:O	2:H:998:ARG:HG2	2.07	0.53
2:H:3244:GLU:O	2:H:3248:LEU:HD13	2.08	0.53
2:H:3404:ARG:HG3	2:H:3441:ILE:HD13	1.90	0.53
2:H:3582:CYS:SG	2:H:3615:LEU:HD12	2.49	0.53
2:H:4070:MET:HA	2:H:4070:MET:HE2	1.91	0.53
2:B:320:PHE:CE1	2:B:355:VAL:HG22	2.42	0.53
2:B:474:ASN:O	2:B:478:GLU:HG3	2.09	0.53
2:B:1807:MET:O	2:B:1811:LEU:HG	2.08	0.53
2:B:3404:ARG:HG3	2:B:3441:ILE:HD13	1.90	0.53
2:B:3582:CYS:SG	2:B:3615:LEU:HD12	2.49	0.53
2:D:1332:ILE:HD12	2:D:1459:PHE:HA	1.90	0.53
2:D:2833:ILE:HD12	2:D:2908:LEU:HD22	1.89	0.53
2:D:2935:ASP:O	2:D:2939:VAL:HG23	2.09	0.53
2:D:3860:GLN:O	2:D:3864:VAL:HG23	2.09	0.53
2:F:524:LEU:HD21	2:F:538:PHE:CZ	2.44	0.53
2:F:1625:MET:HE1	2:F:2021:LEU:CG	2.38	0.53
2:F:2833:ILE:HD12	2:F:2908:LEU:HD22	1.89	0.53
2:F:3558:ALA:HB2	2:F:3627:MET:SD	2.48	0.53
2:F:3582:CYS:SG	2:F:3615:LEU:HD12	2.49	0.53
2:F:3680:LEU:HD22	2:F:3719:PHE:HZ	1.72	0.53
2:F:3761:TYR:CE2	2:F:3800:ILE:HD11	2.43	0.53
2:F:4419:PHE:O	2:F:4456:GLN:HG2	2.09	0.53
2:H:2935:ASP:O	2:H:2939:VAL:HG23	2.09	0.53
2:B:1390:VAL:HG12	2:B:1433:THR:HG21	1.90	0.53
2:B:2324:THR:HG22	2:B:2371:TYR:CD2	2.44	0.53
2:B:2434:GLU:O	2:B:2437:THR:HG23	2.09	0.53
2:B:3105:LEU:O	2:B:3109:MET:HG3	2.08	0.53
2:D:803:PRO:HB2	2:D:806:TYR:CD1	2.43	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:1625:MET:HE1	2:D:2021:LEU:CG	2.38	0.53
2:D:3438:GLU:O	2:D:3442:GLU:HG3	2.08	0.53
2:D:4535:PRO:O	2:D:4541:LYS:HE2	2.08	0.53
2:F:814:LEU:HD13	2:F:1024:LEU:CD2	2.38	0.53
2:F:884:LYS:CB	2:F:905:LEU:HD21	2.38	0.53
2:F:2027:LEU:CB	2:F:2040:MET:HE3	2.39	0.53
2:F:2324:THR:HG22	2:F:2371:TYR:CD2	2.44	0.53
2:H:1830:GLY:O	2:H:1834:VAL:HG13	2.09	0.53
2:H:3761:TYR:CE2	2:H:3800:ILE:HD11	2.43	0.53
2:B:3438:GLU:O	2:B:3442:GLU:HG3	2.08	0.53
2:B:4070:MET:HE2	2:B:4070:MET:HA	1.91	0.53
2:B:4419:PHE:O	2:B:4456:GLN:HG2	2.09	0.53
2:B:4463:ALA:HB3	2:B:4464:PRO:HD3	1.91	0.53
2:D:43:LEU:HG	2:D:445:ASP:HB3	1.90	0.53
2:D:217:TYR:CD2	2:D:344:PRO:HB2	2.44	0.53
2:D:632:GLN:O	2:D:1534:LEU:HD12	2.08	0.53
2:D:1807:MET:O	2:D:1811:LEU:HG	2.08	0.53
2:D:2074:VAL:HG22	2:D:2117:TYR:CZ	2.44	0.53
2:D:3152:PRO:HD2	2:D:3153:PRO:HD2	1.91	0.53
2:F:419:SER:HA	2:F:422:VAL:HG12	1.91	0.53
2:F:1830:GLY:O	2:F:1834:VAL:HG13	2.09	0.53
2:H:4635:LEU:O	2:H:4638:ILE:HG23	2.09	0.53
2:B:1625:MET:HE1	2:B:2021:LEU:CG	2.38	0.52
2:B:1830:GLY:O	2:B:1834:VAL:HG13	2.09	0.52
2:B:4635:LEU:O	2:B:4638:ILE:HG23	2.09	0.52
2:D:891:PHE:HA	2:D:905:LEU:HD12	1.91	0.52
2:D:1025:LEU:O	2:D:1030:LYS:HE2	2.08	0.52
2:D:1798:ARG:NH1	2:D:1970:GLU:OE1	2.41	0.52
2:D:2192:GLY:O	2:D:2196:LEU:HG	2.09	0.52
2:F:396:THR:O	2:F:397:LEU:HD23	2.10	0.52
2:F:1009:GLN:O	2:F:1017:PRO:HD3	2.10	0.52
2:F:1798:ARG:NH1	2:F:1970:GLU:OE1	2.41	0.52
2:F:2192:GLY:O	2:F:2196:LEU:HG	2.09	0.52
1:G:25:VAL:HG12	1:G:104:LEU:HD12	1.92	0.52
2:B:1742:ASP:O	2:B:1746:ILE:HG13	2.08	0.52
2:B:3860:GLN:O	2:B:3864:VAL:HG23	2.09	0.52
2:D:1009:GLN:O	2:D:1017:PRO:HD3	2.10	0.52
2:D:2027:LEU:CB	2:D:2040:MET:HE3	2.39	0.52
2:D:2047:ILE:HG21	2:D:2065:MET:HE1	1.90	0.52
1:E:25:VAL:HG12	1:E:104:LEU:HD12	1.92	0.52
2:F:648:LEU:HD13	2:F:660:TRP:CG	2.44	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:859:VAL:HG11	2:F:931:LEU:HB2	1.89	0.52
2:F:3152:PRO:HD2	2:F:3153:PRO:HD2	1.91	0.52
2:F:4070:MET:HE2	2:F:4070:MET:HA	1.91	0.52
2:H:396:THR:O	2:H:397:LEU:HD23	2.10	0.52
2:H:474:ASN:O	2:H:478:GLU:HG3	2.09	0.52
2:H:648:LEU:HD13	2:H:660:TRP:CG	2.44	0.52
2:H:1025:LEU:O	2:H:1030:LYS:HE2	2.08	0.52
2:H:2027:LEU:CB	2:H:2040:MET:HE3	2.39	0.52
2:H:2115:LEU:HD21	2:H:2154:LEU:HD21	1.91	0.52
2:H:2192:GLY:O	2:H:2196:LEU:HG	2.09	0.52
2:B:557:GLY:O	2:B:561:VAL:HG23	2.08	0.52
2:B:648:LEU:HD13	2:B:660:TRP:CG	2.44	0.52
2:B:1475:PHE:CE2	2:B:1487:PRO:HG2	2.45	0.52
2:B:2027:LEU:CB	2:B:2040:MET:HE3	2.39	0.52
2:B:2115:LEU:HD21	2:B:2154:LEU:HD21	1.91	0.52
2:B:4477:SER:O	2:B:4481:VAL:HG23	2.09	0.52
2:D:396:THR:O	2:D:397:LEU:HD23	2.10	0.52
2:D:2820:LYS:HD3	2:D:2897:MET:CE	2.38	0.52
2:F:407:ALA:O	2:F:411:ILE:HG13	2.08	0.52
2:F:3438:GLU:O	2:F:3442:GLU:HG3	2.08	0.52
2:F:3860:GLN:O	2:F:3864:VAL:HG23	2.09	0.52
2:F:4463:ALA:HB3	2:F:4464:PRO:HD3	1.91	0.52
2:H:1585:ASP:OD1	2:H:1585:ASP:N	2.42	0.52
2:H:2074:VAL:HG22	2:H:2117:TYR:CZ	2.44	0.52
2:H:4419:PHE:O	2:H:4456:GLN:HG2	2.09	0.52
2:H:4477:SER:O	2:H:4481:VAL:HG23	2.09	0.52
2:B:2192:GLY:O	2:B:2196:LEU:HG	2.09	0.52
2:D:648:LEU:HD13	2:D:660:TRP:CG	2.44	0.52
2:D:3459:GLN:HB2	2:D:3460:PRO:HD3	1.91	0.52
2:D:4419:PHE:O	2:D:4456:GLN:HG2	2.09	0.52
2:F:1809:GLU:HG2	2:F:1981:MET:HE1	1.92	0.52
2:F:3249:ILE:HD12	2:F:3250:LEU:HD23	1.89	0.52
2:F:3850:GLU:O	2:F:3854:GLU:HG3	2.10	0.52
2:F:4475:VAL:O	2:F:4479:VAL:HG13	2.10	0.52
2:H:2820:LYS:HD3	2:H:2897:MET:HE1	1.91	0.52
2:B:225:ARG:HG2	2:B:262:SER:O	2.10	0.52
2:B:889:TRP:HA	2:B:900:ARG:CB	2.30	0.52
2:B:2074:VAL:HG22	2:B:2117:TYR:CZ	2.44	0.52
1:C:25:VAL:HG12	1:C:104:LEU:HD12	1.92	0.52
2:D:474:ASN:O	2:D:478:GLU:HG3	2.09	0.52
2:D:859:VAL:HG11	2:D:931:LEU:HB2	1.89	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:2449:ARG:O	2:D:2449:ARG:NH1	2.32	0.52
2:D:3252:GLU:O	2:D:3255:VAL:HG22	2.10	0.52
2:D:4475:VAL:O	2:D:4479:VAL:HG13	2.10	0.52
2:F:43:LEU:HG	2:F:445:ASP:HB3	1.90	0.52
2:F:2935:ASP:O	2:F:2939:VAL:HG23	2.09	0.52
2:F:3404:ARG:HG3	2:F:3441:ILE:HD13	1.90	0.52
2:F:4684:PHE:HB2	2:F:4735:ARG:NH2	2.24	0.52
2:H:814:LEU:HD13	2:H:1024:LEU:CD2	2.38	0.52
2:H:884:LYS:CB	2:H:905:LEU:HD21	2.38	0.52
2:H:1158:SER:OG	2:H:1176:LEU:HG	2.10	0.52
2:H:3936:MET:HE2	2:H:3936:MET:HA	1.90	0.52
2:B:1025:LEU:O	2:B:1030:LYS:HE2	2.08	0.52
2:B:4475:VAL:O	2:B:4479:VAL:HG13	2.10	0.52
2:D:1475:PHE:CE2	2:D:1487:PRO:HG2	2.45	0.52
2:D:1539:GLU:OE1	2:D:1541:ARG:NE	2.41	0.52
2:D:3105:LEU:O	2:D:3109:MET:HG3	2.08	0.52
2:D:3455:GLU:O	2:D:3459:GLN:HG3	2.10	0.52
2:D:3850:GLU:O	2:D:3854:GLU:HG3	2.10	0.52
2:F:872:LEU:HD11	2:F:1040:ALA:HA	1.91	0.52
2:F:982:LEU:O	2:F:986:LEU:HG	2.08	0.52
2:F:1840:ASN:OD1	2:F:1892:ILE:HD11	2.08	0.52
2:F:2074:VAL:HG22	2:F:2117:TYR:CZ	2.44	0.52
2:F:2434:GLU:O	2:F:2437:THR:HG23	2.09	0.52
2:F:3690:ASN:HD21	2:F:3694:ARG:HE	1.58	0.52
2:H:590:LYS:NZ	2:H:1478:GLU:OE2	2.38	0.52
2:H:1809:GLU:HG2	2:H:1981:MET:HE1	1.92	0.52
2:H:2047:ILE:HG21	2:H:2065:MET:HE1	1.90	0.52
2:H:4463:ALA:HB3	2:H:4464:PRO:HD3	1.91	0.52
2:B:524:LEU:HD21	2:B:538:PHE:CZ	2.44	0.52
2:B:4684:PHE:HB2	2:B:4735:ARG:NH2	2.24	0.52
2:D:2027:LEU:HB3	2:D:2040:MET:HE3	1.92	0.52
2:F:3252:GLU:O	2:F:3255:VAL:HG22	2.10	0.52
2:H:419:SER:HA	2:H:422:VAL:HG12	1.91	0.52
2:H:997:ASP:O	2:H:1001:GLN:HG2	2.10	0.52
2:H:3690:ASN:HD21	2:H:3694:ARG:HE	1.58	0.52
2:B:43:LEU:HG	2:B:445:ASP:HB3	1.90	0.52
2:B:1158:SER:OG	2:B:1176:LEU:HG	2.10	0.52
2:B:2468:LEU:HD23	2:B:2500:MET:SD	2.50	0.52
2:D:237:PRO:HG2	2:D:245:GLN:O	2.09	0.52
2:D:2037:GLU:HG3	2:D:2089:MET:HE2	1.91	0.52
2:D:2820:LYS:HD3	2:D:2897:MET:HE1	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:3582:CYS:SG	2:D:3615:LEU:HD12	2.49	0.52
2:D:4477:SER:O	2:D:4481:VAL:HG23	2.09	0.52
2:F:217:TYR:CD2	2:F:344:PRO:HB2	2.44	0.52
2:F:3455:GLU:O	2:F:3459:GLN:HG3	2.10	0.52
2:F:4402:LEU:HD13	2:F:4479:VAL:CG2	2.40	0.52
2:H:1009:GLN:O	2:H:1017:PRO:HD3	2.10	0.52
2:H:2324:THR:HG22	2:H:2371:TYR:CD2	2.44	0.52
2:H:3455:GLU:O	2:H:3459:GLN:HG3	2.10	0.52
2:H:3860:GLN:O	2:H:3864:VAL:HG23	2.09	0.52
2:H:4684:PHE:HB2	2:H:4735:ARG:NH2	2.24	0.52
1:A:25:VAL:HG12	1:A:104:LEU:HD12	1.92	0.52
2:B:891:PHE:HA	2:B:905:LEU:HD12	1.91	0.52
2:B:1114:LEU:HD22	2:B:1192:SER:HB2	1.91	0.52
2:B:2935:ASP:O	2:B:2939:VAL:HG23	2.09	0.52
2:B:4402:LEU:HD13	2:B:4479:VAL:CG2	2.40	0.52
2:D:1809:GLU:HG2	2:D:1981:MET:HE1	1.92	0.52
2:D:3690:ASN:HD21	2:D:3694:ARG:HE	1.58	0.52
2:D:3776:TYR:OH	2:D:3783:ASP:OD1	2.19	0.52
2:F:225:ARG:HG2	2:F:262:SER:O	2.10	0.52
2:F:3776:TYR:OH	2:F:3783:ASP:OD1	2.19	0.52
2:H:703:ASN:HA	2:H:707:ASP:OD2	2.09	0.52
2:B:593:ARG:NH2	2:B:1537:PRO:HD2	2.25	0.52
2:B:1809:GLU:HG2	2:B:1981:MET:HE1	1.92	0.52
2:B:1997:LEU:O	2:B:2001:ARG:HG3	2.10	0.52
2:B:2822:ILE:HD13	2:B:2865:VAL:CG2	2.33	0.52
2:D:518:ASN:O	2:D:522:LYS:HG3	2.10	0.52
2:D:2324:THR:HG22	2:D:2371:TYR:CD2	2.44	0.52
2:D:3404:ARG:HG3	2:D:3441:ILE:HD13	1.90	0.52
2:D:4453:PHE:CE2	2:F:4678:PHE:CE2	2.98	0.52
2:D:4463:ALA:HB3	2:D:4464:PRO:HD3	1.91	0.52
2:F:869:ARG:HG2	2:F:923:SER:OG	2.10	0.52
2:F:2862:LEU:HB2	2:F:2863:PRO:HD3	1.92	0.52
2:F:4398:ASN:O	2:F:4402:LEU:HG	2.10	0.52
2:F:4477:SER:O	2:F:4481:VAL:HG23	2.09	0.52
2:H:3252:GLU:O	2:H:3255:VAL:HG22	2.10	0.52
2:H:4398:ASN:O	2:H:4402:LEU:HG	2.10	0.52
2:B:518:ASN:O	2:B:522:LYS:HG3	2.10	0.51
2:B:869:ARG:HG2	2:B:923:SER:OG	2.10	0.51
2:B:997:ASP:O	2:B:1001:GLN:HG2	2.10	0.51
2:B:3455:GLU:O	2:B:3459:GLN:HG3	2.10	0.51
2:D:593:ARG:NH2	2:D:1537:PRO:HD2	2.25	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:1158:SER:OG	2:D:1176:LEU:HG	2.10	0.51
2:D:1997:LEU:O	2:D:2001:ARG:HG3	2.10	0.51
2:D:2985:SER:HA	2:D:2988:ILE:HG12	1.92	0.51
2:D:4505:GLU:O	2:D:4550:LYS:NZ	2.34	0.51
2:F:997:ASP:O	2:F:1001:GLN:HG2	2.10	0.51
2:H:225:ARG:HG2	2:H:262:SER:O	2.10	0.51
2:B:396:THR:O	2:B:397:LEU:HD23	2.10	0.51
2:B:462:LYS:O	2:B:466:LEU:HG	2.11	0.51
2:B:3084:ARG:O	2:B:3088:ILE:HG13	2.10	0.51
2:B:3252:GLU:O	2:B:3255:VAL:HG22	2.10	0.51
2:B:3305:ASN:O	2:B:3309:GLU:HG2	2.11	0.51
2:B:4678:PHE:CE2	2:H:4453:PHE:CE2	2.98	0.51
2:D:225:ARG:HG2	2:D:262:SER:O	2.10	0.51
2:D:872:LEU:HD11	2:D:1040:ALA:HA	1.91	0.51
2:D:1114:LEU:HD22	2:D:1192:SER:HB2	1.91	0.51
2:D:2468:LEU:HD23	2:D:2500:MET:SD	2.50	0.51
2:F:2027:LEU:HB3	2:F:2040:MET:HE3	1.92	0.51
2:F:2115:LEU:HD21	2:F:2154:LEU:HD21	1.91	0.51
2:H:1475:PHE:CE2	2:H:1487:PRO:HG2	2.45	0.51
2:H:2468:LEU:HD23	2:H:2500:MET:SD	2.50	0.51
2:H:3084:ARG:O	2:H:3088:ILE:HG13	2.10	0.51
2:B:2449:ARG:O	2:B:2449:ARG:NH1	2.32	0.51
2:B:3339:GLN:HA	2:B:3342:GLU:OE2	2.11	0.51
2:D:243:ASP:OD1	2:D:243:ASP:N	2.37	0.51
2:D:462:LYS:O	2:D:466:LEU:HG	2.11	0.51
2:D:2862:LEU:HB2	2:D:2863:PRO:HD3	1.92	0.51
2:D:3305:ASN:O	2:D:3309:GLU:HG2	2.11	0.51
2:D:4070:MET:HE2	2:D:4070:MET:HA	1.91	0.51
2:F:593:ARG:NH2	2:F:1537:PRO:HD2	2.25	0.51
2:F:1158:SER:OG	2:F:1176:LEU:HG	2.10	0.51
2:F:1491:ASP:OD1	2:F:1492:VAL:N	2.44	0.51
2:F:4046:LYS:O	2:F:4050:LYS:HG3	2.11	0.51
2:H:120:LEU:HD11	2:H:137:VAL:HG12	1.93	0.51
2:H:1997:LEU:O	2:H:2001:ARG:HG3	2.10	0.51
2:H:2315:ARG:HD2	2:H:2319:ARG:HH21	1.76	0.51
2:B:3690:ASN:HD21	2:B:3694:ARG:HE	1.58	0.51
2:B:4046:LYS:O	2:B:4050:LYS:HG3	2.11	0.51
2:D:35:LYS:H	2:D:54:SER:HB3	1.76	0.51
2:D:420:GLN:HG3	2:D:434:LEU:HD12	1.93	0.51
2:D:997:ASP:O	2:D:1001:GLN:HG2	2.10	0.51
2:D:1347:TRP:CD1	2:D:1422:LEU:HD23	2.46	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:459:HIS:O	2:F:463:GLN:HG2	2.10	0.51
2:F:1475:PHE:CE2	2:F:1487:PRO:HG2	2.45	0.51
2:F:4531:THR:O	2:F:4544:LYS:NZ	2.41	0.51
2:H:462:LYS:O	2:H:466:LEU:HG	2.11	0.51
2:H:869:ARG:HG2	2:H:923:SER:OG	2.10	0.51
2:H:887:LEU:O	2:H:900:ARG:NH1	2.44	0.51
2:H:2337:LEU:HD13	2:H:2397:LEU:HD11	1.92	0.51
2:H:3152:PRO:HD2	2:H:3153:PRO:HD2	1.91	0.51
2:H:4071:GLU:OE1	2:H:4841:TRP:NE1	2.39	0.51
2:B:320:PHE:HE1	2:B:355:VAL:HG22	1.76	0.51
2:B:887:LEU:O	2:B:900:ARG:NH1	2.44	0.51
2:B:4453:PHE:CE2	2:D:4678:PHE:CE2	2.98	0.51
2:D:977:PRO:HD2	2:D:978:PRO:HD2	1.92	0.51
2:D:3071:ARG:HA	2:D:3079:ASN:HD21	1.76	0.51
2:D:3084:ARG:O	2:D:3088:ILE:HG13	2.10	0.51
2:D:3527:MET:HG3	2:D:3618:ARG:NH1	2.19	0.51
2:D:4527:LEU:O	2:D:4596:LYS:HE2	2.11	0.51
2:F:474:ASN:O	2:F:478:GLU:HG3	2.09	0.51
2:F:1114:LEU:HD22	2:F:1192:SER:HB2	1.91	0.51
2:F:2037:GLU:HG3	2:F:2089:MET:HE2	1.91	0.51
2:F:2468:LEU:HD23	2:F:2500:MET:SD	2.50	0.51
2:F:3339:GLN:HA	2:F:3342:GLU:OE2	2.11	0.51
2:H:636:ILE:HD11	2:H:1531:MET:CE	2.41	0.51
2:H:1820:GLN:O	2:H:1824:GLU:HG3	2.11	0.51
2:H:1958:GLU:O	2:H:1962:GLN:HG3	2.11	0.51
2:H:2027:LEU:HB3	2:H:2040:MET:HE3	1.92	0.51
2:H:2862:LEU:HB2	2:H:2863:PRO:HD3	1.92	0.51
2:H:3850:GLU:O	2:H:3854:GLU:HG3	2.10	0.51
2:B:930:LEU:CD2	2:B:986:LEU:HD21	2.40	0.51
2:B:2820:LYS:HD3	2:B:2897:MET:HE1	1.91	0.51
2:B:3152:PRO:HD2	2:B:3153:PRO:HD2	1.91	0.51
2:D:1958:GLU:O	2:D:1962:GLN:HG3	2.11	0.51
2:F:2820:LYS:HD3	2:F:2897:MET:HE1	1.91	0.51
2:F:3077:VAL:HA	2:F:3080:THR:CG2	2.40	0.51
2:H:872:LEU:HD11	2:H:1040:ALA:HA	1.91	0.51
2:B:120:LEU:HD11	2:B:137:VAL:HG12	1.93	0.51
2:B:1958:GLU:O	2:B:1962:GLN:HG3	2.11	0.51
2:B:3077:VAL:HA	2:B:3080:THR:CG2	2.40	0.51
2:D:1491:ASP:OD1	2:D:1492:VAL:N	2.44	0.51
2:F:35:LYS:H	2:F:54:SER:HB3	1.76	0.51
2:F:120:LEU:HD11	2:F:137:VAL:HG12	1.93	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:1820:GLN:O	2:F:1824:GLU:HG3	2.11	0.51
2:H:950:LYS:HG2	2:H:968:LEU:HD23	1.93	0.51
2:H:2437:THR:HG22	2:H:2479:MET:HG2	1.93	0.51
2:H:4046:LYS:O	2:H:4050:LYS:HG3	2.11	0.51
2:B:271:ILE:HD12	5:B:5305:ATP:PG	2.50	0.51
2:B:1138:PHE:CD1	2:B:1170:THR:HG22	2.46	0.51
2:B:1491:ASP:OD1	2:B:1492:VAL:N	2.44	0.51
2:B:2376:GLN:OE1	2:B:2433:THR:HG22	2.11	0.51
2:D:869:ARG:HG2	2:D:923:SER:OG	2.10	0.51
2:D:1206:ASP:O	2:D:1209:THR:OG1	2.29	0.51
2:D:2115:LEU:HD21	2:D:2154:LEU:HD21	1.91	0.51
2:D:2488:VAL:HG21	2:D:2535:LEU:CD1	2.41	0.51
2:D:4535:PRO:HB2	2:D:4538:TYR:HB3	1.93	0.51
2:F:420:GLN:HG3	2:F:434:LEU:HD12	1.93	0.51
2:F:869:ARG:CB	2:F:927:LEU:HD11	2.40	0.51
2:F:937:ILE:HG12	2:F:1051:ILE:CD1	2.40	0.51
2:F:1072:ARG:HD2	2:F:1074:PHE:CZ	2.46	0.51
2:F:1347:TRP:CD1	2:F:1422:LEU:HD23	2.46	0.51
2:H:977:PRO:HD2	2:H:978:PRO:HD2	1.92	0.51
2:H:3305:ASN:O	2:H:3309:GLU:HG2	2.11	0.51
2:H:4475:VAL:O	2:H:4479:VAL:HG13	2.10	0.51
2:D:615:ASN:O	2:D:619:ILE:HG13	2.11	0.51
2:D:1072:ARG:HD2	2:D:1074:PHE:CZ	2.46	0.51
2:D:1834:VAL:O	2:D:1838:GLN:HG3	2.11	0.51
2:D:4398:ASN:O	2:D:4402:LEU:HG	2.10	0.51
2:F:615:ASN:O	2:F:619:ILE:HG13	2.11	0.51
2:F:2376:GLN:OE1	2:F:2433:THR:HG22	2.11	0.51
2:H:593:ARG:NH2	2:H:1537:PRO:HD2	2.25	0.51
2:H:882:MET:SD	2:H:967:PRO:HG3	2.51	0.51
2:H:1347:TRP:CD1	2:H:1422:LEU:HD23	2.46	0.51
2:B:51:GLU:OE2	2:B:308:ARG:NH2	2.43	0.51
2:B:420:GLN:HG3	2:B:434:LEU:HD12	1.93	0.51
2:B:475:LEU:O	2:B:479:GLU:HG2	2.11	0.51
2:B:1037:LEU:O	2:B:1041:VAL:HG23	2.11	0.51
2:B:1072:ARG:HD2	2:B:1074:PHE:CZ	2.46	0.51
2:B:1347:TRP:CD1	2:B:1422:LEU:HD23	2.46	0.51
2:B:1834:VAL:O	2:B:1838:GLN:HG3	2.11	0.51
2:B:2027:LEU:HB3	2:B:2040:MET:HE3	1.92	0.51
2:B:4398:ASN:O	2:B:4402:LEU:HG	2.10	0.51
2:D:51:GLU:OE2	2:D:308:ARG:NH2	2.43	0.51
2:D:2337:LEU:HD13	2:D:2397:LEU:HD11	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:3339:GLN:HA	2:D:3342:GLU:OE2	2.11	0.51
2:D:4684:PHE:HB2	2:D:4735:ARG:NH2	2.24	0.51
2:F:1037:LEU:O	2:F:1041:VAL:HG23	2.11	0.51
2:F:2338:PRO:HB3	2:F:2348:GLU:HA	1.93	0.51
2:F:2437:THR:HG22	2:F:2479:MET:HG2	1.93	0.51
2:F:3084:ARG:O	2:F:3088:ILE:HG13	2.10	0.51
2:H:320:PHE:HE1	2:H:355:VAL:HG22	1.76	0.51
2:H:461:ASP:O	2:H:465:LYS:HG2	2.11	0.51
2:H:930:LEU:CD2	2:H:986:LEU:HD21	2.40	0.51
2:H:1072:ARG:HD2	2:H:1074:PHE:CZ	2.46	0.51
2:H:3339:GLN:HA	2:H:3342:GLU:OE2	2.11	0.51
2:B:636:ILE:HD11	2:B:1531:MET:CE	2.41	0.50
2:B:2037:GLU:HG3	2:B:2089:MET:HE2	1.91	0.50
2:B:3214:ILE:HG23	2:B:3292:MET:HE1	1.94	0.50
2:B:4029:ILE:CD1	2:B:4845:PRO:HB3	2.42	0.50
2:D:120:LEU:HD11	2:D:137:VAL:HG12	1.93	0.50
2:D:459:HIS:O	2:D:463:GLN:HG2	2.10	0.50
2:D:1820:GLN:O	2:D:1824:GLU:HG3	2.11	0.50
2:D:4402:LEU:HD13	2:D:4479:VAL:CG2	2.40	0.50
2:F:51:GLU:OE2	2:F:308:ARG:NH2	2.43	0.50
2:F:950:LYS:HG2	2:F:968:LEU:HD23	1.93	0.50
2:F:977:PRO:HD2	2:F:978:PRO:HD2	1.92	0.50
2:F:1997:LEU:O	2:F:2001:ARG:HG3	2.10	0.50
2:F:4453:PHE:CE2	2:H:4678:PHE:CE2	2.98	0.50
2:F:4527:LEU:O	2:F:4596:LYS:HE2	2.11	0.50
2:H:35:LYS:H	2:H:54:SER:HB3	1.76	0.50
2:H:459:HIS:O	2:H:463:GLN:HG2	2.10	0.50
2:H:1114:LEU:HD22	2:H:1192:SER:HB2	1.91	0.50
2:B:872:LEU:HD11	2:B:1040:ALA:HA	1.91	0.50
2:B:977:PRO:HD2	2:B:978:PRO:HD2	1.92	0.50
2:B:2315:ARG:HD2	2:B:2319:ARG:HH21	1.76	0.50
2:B:3850:GLU:O	2:B:3854:GLU:HG3	2.10	0.50
2:B:4527:LEU:O	2:B:4596:LYS:HE2	2.11	0.50
2:D:271:ILE:HD12	5:D:5305:ATP:PG	2.50	0.50
2:D:320:PHE:HE1	2:D:355:VAL:HG22	1.76	0.50
2:D:475:LEU:O	2:D:479:GLU:HG2	2.11	0.50
2:D:1585:ASP:OD1	2:D:1585:ASP:N	2.42	0.50
2:D:3755:ILE:HG22	2:D:3819:LEU:HD21	1.93	0.50
2:F:461:ASP:O	2:F:465:LYS:HG2	2.11	0.50
2:F:2985:SER:HA	2:F:2988:ILE:HG12	1.92	0.50
2:F:3379:ASP:O	2:F:3383:ILE:HG13	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:271:ILE:HD12	5:H:5305:ATP:PG	2.50	0.50
2:H:708:ASP:OD1	2:H:711:SER:OG	2.29	0.50
2:H:1491:ASP:OD1	2:H:1492:VAL:N	2.44	0.50
2:H:2985:SER:HA	2:H:2988:ILE:HG12	1.92	0.50
2:H:3214:ILE:HG23	2:H:3292:MET:HE1	1.94	0.50
2:B:35:LYS:H	2:B:54:SER:HB3	1.76	0.50
2:B:615:ASN:O	2:B:619:ILE:HG13	2.11	0.50
2:B:1820:GLN:O	2:B:1824:GLU:HG3	2.11	0.50
2:D:882:MET:SD	2:D:967:PRO:HG3	2.51	0.50
2:D:1037:LEU:O	2:D:1041:VAL:HG23	2.11	0.50
2:D:1138:PHE:CD1	2:D:1170:THR:HG22	2.46	0.50
2:D:2204:PHE:CZ	2:D:2207:SER:HA	2.47	0.50
2:D:2376:GLN:OE1	2:D:2433:THR:HG22	2.11	0.50
2:D:2836:LEU:O	2:D:2839:ILE:HG12	2.12	0.50
2:D:3379:ASP:O	2:D:3383:ILE:HG13	2.12	0.50
2:F:271:ILE:HD12	5:F:5305:ATP:PG	2.50	0.50
2:F:1973:ILE:H	2:F:1973:ILE:HD12	1.77	0.50
2:F:2204:PHE:CZ	2:F:2207:SER:HA	2.47	0.50
2:F:2337:LEU:HD13	2:F:2397:LEU:HD11	1.92	0.50
2:F:3527:MET:HG3	2:F:3618:ARG:NH1	2.19	0.50
2:H:475:LEU:O	2:H:479:GLU:HG2	2.11	0.50
2:H:1666:ARG:H	2:H:1682:GLN:NE2	2.10	0.50
2:H:1834:VAL:O	2:H:1838:GLN:HG3	2.11	0.50
2:H:2037:GLU:HG3	2:H:2089:MET:HE2	1.91	0.50
2:H:2376:GLN:OE1	2:H:2433:THR:HG22	2.11	0.50
2:B:459:HIS:O	2:B:463:GLN:HG2	2.10	0.50
2:B:836:ASP:OD1	2:B:1200:ARG:NE	2.31	0.50
2:B:882:MET:SD	2:B:967:PRO:HG3	2.51	0.50
2:B:2204:PHE:CZ	2:B:2207:SER:HA	2.47	0.50
2:B:2985:SER:HA	2:B:2988:ILE:HG12	1.92	0.50
2:B:4056:PHE:O	2:B:4060:VAL:HG12	2.12	0.50
2:D:887:LEU:O	2:D:900:ARG:NH1	2.44	0.50
2:D:3214:ILE:HG23	2:D:3292:MET:HE1	1.94	0.50
2:F:462:LYS:O	2:F:466:LEU:HG	2.11	0.50
2:F:708:ASP:OD1	2:F:711:SER:OG	2.29	0.50
2:F:1138:PHE:CD1	2:F:1170:THR:HG22	2.46	0.50
2:F:3071:ARG:HA	2:F:3079:ASN:HD21	1.76	0.50
2:H:2434:GLU:O	2:H:2437:THR:HG23	2.09	0.50
2:H:2836:LEU:O	2:H:2839:ILE:HG12	2.12	0.50
2:H:3071:ARG:HA	2:H:3079:ASN:HD21	1.76	0.50
2:H:3379:ASP:O	2:H:3383:ILE:HG13	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:4531:THR:O	2:H:4544:LYS:NZ	2.41	0.50
2:B:28:ASN:OD1	2:B:33:GLN:HG2	2.11	0.50
2:B:2862:LEU:HB2	2:B:2863:PRO:HD3	1.92	0.50
1:C:15:THR:HG22	1:C:107:LEU:HD12	1.93	0.50
2:D:461:ASP:O	2:D:465:LYS:HG2	2.11	0.50
2:F:475:LEU:O	2:F:479:GLU:HG2	2.11	0.50
2:F:887:LEU:O	2:F:900:ARG:NH1	2.44	0.50
2:F:1666:ARG:H	2:F:1682:GLN:NE2	2.10	0.50
2:F:2967:GLU:O	2:F:2971:LEU:HD13	2.12	0.50
2:F:3755:ILE:HG22	2:F:3819:LEU:HD21	1.93	0.50
2:F:4029:ILE:CD1	2:F:4845:PRO:HB3	2.42	0.50
2:H:518:ASN:O	2:H:522:LYS:HG3	2.10	0.50
2:H:1438:GLU:O	2:H:1441:THR:OG1	2.24	0.50
2:H:4402:LEU:HD13	2:H:4479:VAL:CG2	2.40	0.50
2:B:950:LYS:HG2	2:B:968:LEU:HD23	1.93	0.50
2:B:955:LYS:HG3	2:B:958:MET:SD	2.52	0.50
2:B:1009:GLN:O	2:B:1017:PRO:HD3	2.10	0.50
2:B:1212:PHE:HD1	2:B:1215:MET:HE2	1.77	0.50
2:B:3071:ARG:HA	2:B:3079:ASN:HD21	1.76	0.50
2:D:955:LYS:HG3	2:D:958:MET:SD	2.52	0.50
2:D:2315:ARG:HD2	2:D:2319:ARG:HH21	1.76	0.50
2:D:4056:PHE:O	2:D:4060:VAL:HG12	2.12	0.50
2:D:4503:LYS:HD3	2:D:4509:LEU:HD22	1.94	0.50
2:D:4543:VAL:O	2:D:4547:VAL:HG23	2.12	0.50
2:F:320:PHE:HE1	2:F:355:VAL:HG22	1.76	0.50
2:F:882:MET:SD	2:F:967:PRO:HG3	2.51	0.50
2:F:930:LEU:CD2	2:F:986:LEU:HD21	2.40	0.50
2:F:1034:ARG:HG2	2:F:1038:ARG:HH12	1.77	0.50
2:F:2836:LEU:O	2:F:2839:ILE:HG12	2.12	0.50
2:F:3305:ASN:O	2:F:3309:GLU:HG2	2.11	0.50
2:H:420:GLN:HG3	2:H:434:LEU:HD12	1.93	0.50
2:H:2204:PHE:CZ	2:H:2207:SER:HA	2.47	0.50
2:H:2967:GLU:O	2:H:2971:LEU:HD13	2.12	0.50
2:B:3190:MET:HB3	2:B:3262:ALA:HB2	1.94	0.50
2:B:3925:GLY:O	2:B:3963:ASN:ND2	2.45	0.50
2:B:4059:ASP:O	2:B:4063:GLU:HG2	2.12	0.50
2:B:4535:PRO:HB2	2:B:4538:TYR:HB3	1.93	0.50
2:D:1034:ARG:HG2	2:D:1038:ARG:HH12	1.77	0.50
2:D:3925:GLY:O	2:D:3963:ASN:ND2	2.45	0.50
2:D:4046:LYS:O	2:D:4050:LYS:HG3	2.11	0.50
2:F:518:ASN:O	2:F:522:LYS:HG3	2.10	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:1041:VAL:O	2:F:1045:VAL:HG23	2.12	0.50
2:F:1834:VAL:O	2:F:1838:GLN:HG3	2.11	0.50
2:F:3925:GLY:O	2:F:3963:ASN:ND2	2.45	0.50
2:F:4056:PHE:O	2:F:4060:VAL:HG12	2.12	0.50
2:F:4059:ASP:O	2:F:4063:GLU:HG2	2.12	0.50
2:F:4543:VAL:O	2:F:4547:VAL:HG23	2.12	0.50
2:H:14:PHE:CE1	2:H:166:ARG:HG2	2.47	0.50
2:H:28:ASN:OD1	2:H:33:GLN:HG2	2.11	0.50
2:H:1973:ILE:HD12	2:H:1973:ILE:H	1.77	0.50
2:B:1973:ILE:H	2:B:1973:ILE:HD12	1.77	0.50
2:B:2437:THR:HG22	2:B:2479:MET:HG2	1.93	0.50
2:B:3253:PHE:CE2	2:B:3305:ASN:HB2	2.47	0.50
2:B:3783:ASP:OD1	2:B:3783:ASP:N	2.32	0.50
2:B:3935:ALA:O	2:B:3939:GLN:HG2	2.12	0.50
2:D:717:LEU:O	2:D:728:VAL:HG12	2.12	0.50
2:D:1438:GLU:O	2:D:1441:THR:OG1	2.24	0.50
2:D:3190:MET:HB3	2:D:3262:ALA:HB2	1.94	0.50
2:F:1082:VAL:HG23	2:F:1154:LEU:HD11	1.94	0.50
2:F:2315:ARG:HD2	2:F:2319:ARG:HH21	1.76	0.50
2:F:3214:ILE:HG23	2:F:3292:MET:HE1	1.94	0.50
2:F:3253:PHE:CE2	2:F:3305:ASN:HB2	2.47	0.50
2:F:3956:ALA:HA	2:F:3962:PHE:HB3	1.94	0.50
2:F:4688:SER:OG	2:F:4693:GLU:O	2.30	0.50
2:H:3253:PHE:CE2	2:H:3305:ASN:HB2	2.47	0.50
2:H:3925:GLY:O	2:H:3963:ASN:ND2	2.45	0.50
2:H:3935:ALA:O	2:H:3939:GLN:HG2	2.12	0.50
2:B:1034:ARG:HG2	2:B:1038:ARG:HH12	1.77	0.50
2:B:1666:ARG:H	2:B:1682:GLN:NE2	2.10	0.50
2:B:2337:LEU:HD13	2:B:2397:LEU:HD11	1.92	0.50
2:B:2488:VAL:HG21	2:B:2535:LEU:CD1	2.41	0.50
2:B:3379:ASP:O	2:B:3383:ILE:HG13	2.12	0.50
2:B:3755:ILE:HG22	2:B:3819:LEU:HD21	1.93	0.50
2:D:1328:CYS:SG	2:D:1470:LEU:HD12	2.52	0.50
2:D:2437:THR:HG22	2:D:2479:MET:HG2	1.93	0.50
2:D:2967:GLU:O	2:D:2971:LEU:HD13	2.12	0.50
2:D:3077:VAL:HA	2:D:3080:THR:CG2	2.40	0.50
2:D:3201:ILE:HD13	2:D:3266:MET:HA	1.93	0.50
2:F:14:PHE:CE1	2:F:166:ARG:HG2	2.47	0.50
2:F:1838:GLN:NE2	2:F:3497:ILE:HG13	2.27	0.50
2:F:2488:VAL:HG21	2:F:2535:LEU:CD1	2.41	0.50
2:F:4535:PRO:HB2	2:F:4538:TYR:HB3	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:1212:PHE:HD1	2:H:1215:MET:HE2	1.77	0.50
2:H:1838:GLN:NE2	2:H:3497:ILE:HG13	2.27	0.50
2:H:4535:PRO:HB2	2:H:4538:TYR:HB3	1.93	0.50
2:B:859:VAL:HB	2:B:928:LYS:HB3	1.94	0.49
2:B:1395:ILE:HD13	2:B:1426:ALA:HB2	1.94	0.49
2:B:2498:CYS:O	2:B:2502:LEU:HG	2.12	0.49
2:B:2836:LEU:O	2:B:2839:ILE:HG12	2.12	0.49
2:D:950:LYS:HG2	2:D:968:LEU:HD23	1.93	0.49
2:D:1041:VAL:O	2:D:1045:VAL:HG23	2.12	0.49
2:D:1244:PHE:CE2	2:D:1495:ILE:HG13	2.47	0.49
2:D:1838:GLN:NE2	2:D:3497:ILE:HG13	2.27	0.49
2:F:481:MET:O	2:F:485:VAL:HG23	2.12	0.49
2:F:955:LYS:HG3	2:F:958:MET:SD	2.52	0.49
1:G:15:THR:HG22	1:G:107:LEU:HD12	1.93	0.49
2:H:1082:VAL:HG23	2:H:1154:LEU:HD11	1.94	0.49
2:H:1244:PHE:CE2	2:H:1495:ILE:HG13	2.47	0.49
2:H:2488:VAL:HG21	2:H:2535:LEU:CD1	2.41	0.49
2:H:2498:CYS:O	2:H:2502:LEU:HG	2.12	0.49
2:H:3798:LYS:HG3	2:H:3861:ASP:OD2	2.12	0.49
2:H:4029:ILE:CD1	2:H:4845:PRO:HB3	2.42	0.49
2:H:4543:VAL:O	2:H:4547:VAL:HG23	2.12	0.49
1:A:15:THR:HG22	1:A:107:LEU:HD12	1.93	0.49
2:B:1206:ASP:O	2:B:1209:THR:OG1	2.29	0.49
2:B:1838:GLN:NE2	2:B:3497:ILE:HG13	2.27	0.49
2:B:3187:ALA:HB1	2:B:3189:TRP:NE1	2.27	0.49
2:D:28:ASN:OD1	2:D:33:GLN:HG2	2.11	0.49
2:D:930:LEU:CD2	2:D:986:LEU:HD21	2.40	0.49
2:D:1212:PHE:HD1	2:D:1215:MET:HE2	1.77	0.49
2:D:2231:ALA:CB	2:D:2243:ALA:HB2	2.41	0.49
2:D:3745:GLN:H	2:D:3751:THR:HG23	1.78	0.49
2:F:927:LEU:O	2:F:931:LEU:HG	2.13	0.49
2:F:2338:PRO:HA	2:F:2349:PRO:HD3	1.94	0.49
2:H:435:PRO:O	2:H:439:VAL:HG23	2.12	0.49
2:H:3246:GLU:O	2:H:3250:LEU:HG	2.12	0.49
2:H:4527:LEU:O	2:H:4596:LYS:HE2	2.11	0.49
2:B:481:MET:O	2:B:485:VAL:HG23	2.12	0.49
2:B:726:ARG:CG	2:B:1371:LEU:HD11	2.43	0.49
2:B:1041:VAL:O	2:B:1045:VAL:HG23	2.12	0.49
2:B:3181:ASN:HB3	2:B:3184:ILE:HD12	1.95	0.49
2:D:1888:CYS:HB3	2:D:1893:ARG:HE	1.78	0.49
2:D:3181:ASN:HB3	2:D:3184:ILE:HD12	1.95	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:3181:ASN:HB3	2:F:3184:ILE:HD12	1.95	0.49
2:H:1037:LEU:O	2:H:1041:VAL:HG23	2.11	0.49
2:H:2214:ALA:O	2:H:2218:VAL:HG23	2.13	0.49
2:H:3755:ILE:HG22	2:H:3819:LEU:HD21	1.93	0.49
2:B:461:ASP:O	2:B:465:LYS:HG2	2.11	0.49
2:B:1888:CYS:HB3	2:B:1893:ARG:HE	1.78	0.49
2:B:2338:PRO:HB3	2:B:2348:GLU:HA	1.93	0.49
2:B:2967:GLU:O	2:B:2971:LEU:HD13	2.12	0.49
1:C:90:GLY:HA2	2:D:625:PRO:HG3	1.94	0.49
2:D:433:THR:OG1	2:D:434:LEU:HD22	2.13	0.49
2:D:1965:ILE:HD13	2:D:3525:ILE:HG22	1.95	0.49
2:D:2338:PRO:HB3	2:D:2348:GLU:HA	1.93	0.49
2:D:2461:ARG:O	2:D:2465:GLU:HG3	2.12	0.49
2:F:717:LEU:O	2:F:728:VAL:HG12	2.12	0.49
2:F:726:ARG:CG	2:F:1371:LEU:HD11	2.43	0.49
2:F:1395:ILE:HD13	2:F:1426:ALA:HB2	1.94	0.49
2:F:1888:CYS:HB3	2:F:1893:ARG:HE	1.78	0.49
2:F:1965:ILE:HD13	2:F:3525:ILE:HG22	1.95	0.49
2:F:2214:ALA:O	2:F:2218:VAL:HG23	2.13	0.49
2:F:2231:ALA:CB	2:F:2243:ALA:HB2	2.41	0.49
2:F:2461:ARG:O	2:F:2465:GLU:HG3	2.12	0.49
2:F:4785:ILE:HD13	2:F:4852:LYS:HD2	1.94	0.49
2:H:615:ASN:O	2:H:619:ILE:HG13	2.11	0.49
2:H:1138:PHE:CD1	2:H:1170:THR:HG22	2.46	0.49
2:H:1328:CYS:SG	2:H:1470:LEU:HD12	2.52	0.49
2:H:1395:ILE:HD13	2:H:1426:ALA:HB2	1.94	0.49
2:H:3187:ALA:HB1	2:H:3189:TRP:NE1	2.27	0.49
2:H:4059:ASP:O	2:H:4063:GLU:HG2	2.12	0.49
2:B:717:LEU:O	2:B:728:VAL:HG12	2.12	0.49
2:B:2214:ALA:O	2:B:2218:VAL:HG23	2.13	0.49
2:B:4531:THR:O	2:B:4544:LYS:NZ	2.41	0.49
2:D:859:VAL:HB	2:D:928:LYS:HB3	1.94	0.49
2:D:1082:VAL:HG23	2:D:1154:LEU:HD11	1.94	0.49
2:D:1239:LYS:HD3	2:D:1499:LEU:HD11	1.95	0.49
2:D:2214:ALA:O	2:D:2218:VAL:HG23	2.13	0.49
2:D:2338:PRO:HA	2:D:2349:PRO:HD3	1.94	0.49
2:D:4498:LYS:HG3	2:D:4538:TYR:CE1	2.47	0.49
2:F:433:THR:OG1	2:F:434:LEU:HD22	2.13	0.49
2:F:1212:PHE:CD1	2:F:1215:MET:HE2	2.48	0.49
2:F:1958:GLU:O	2:F:1962:GLN:HG3	2.11	0.49
2:F:2498:CYS:O	2:F:2502:LEU:HG	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:3187:ALA:HB1	2:F:3189:TRP:NE1	2.27	0.49
2:H:51:GLU:OE2	2:H:308:ARG:NH2	2.43	0.49
2:H:481:MET:O	2:H:485:VAL:HG23	2.12	0.49
2:H:717:LEU:O	2:H:728:VAL:HG12	2.12	0.49
2:H:2231:ALA:CB	2:H:2243:ALA:HB2	2.41	0.49
2:H:4056:PHE:O	2:H:4060:VAL:HG12	2.12	0.49
2:H:4814:LEU:HD22	2:H:4818:ILE:HD11	1.95	0.49
2:B:14:PHE:CE1	2:B:166:ARG:HG2	2.47	0.49
2:B:1239:LYS:HD3	2:B:1499:LEU:HD11	1.95	0.49
2:B:2231:ALA:CB	2:B:2243:ALA:HB2	2.41	0.49
2:B:3251:ASP:O	2:B:3255:VAL:HG13	2.13	0.49
2:B:3798:LYS:HG3	2:B:3861:ASP:OD2	2.12	0.49
2:B:3925:GLY:O	2:B:3963:ASN:HA	2.12	0.49
2:B:4511:ILE:HG12	2:B:4563:LEU:CD2	2.43	0.49
2:D:435:PRO:O	2:D:439:VAL:HG23	2.12	0.49
2:D:708:ASP:OD1	2:D:711:SER:OG	2.29	0.49
2:D:2498:CYS:O	2:D:2502:LEU:HG	2.12	0.49
2:D:3251:ASP:O	2:D:3255:VAL:HG13	2.13	0.49
2:D:3620:ALA:O	2:D:3624:VAL:HG23	2.13	0.49
2:D:3935:ALA:O	2:D:3939:GLN:HG2	2.12	0.49
2:D:4029:ILE:CD1	2:D:4845:PRO:HB3	2.42	0.49
2:D:4511:ILE:HG12	2:D:4563:LEU:CD2	2.43	0.49
1:E:15:THR:HG22	1:E:107:LEU:HD12	1.93	0.49
2:F:28:ASN:OD1	2:F:33:GLN:HG2	2.11	0.49
2:F:77:ARG:O	2:F:81:GLU:HG2	2.13	0.49
2:F:1239:LYS:HD3	2:F:1499:LEU:HD11	1.95	0.49
2:F:1328:CYS:SG	2:F:1470:LEU:HD12	2.52	0.49
2:F:2484:LEU:O	2:F:2488:VAL:HG23	2.13	0.49
2:F:3201:ILE:HD13	2:F:3266:MET:HA	1.93	0.49
2:F:4498:LYS:HG3	2:F:4538:TYR:CE1	2.47	0.49
2:F:4503:LYS:HD3	2:F:4509:LEU:HD22	1.94	0.49
2:H:955:LYS:HG3	2:H:958:MET:SD	2.52	0.49
2:H:2338:PRO:HB3	2:H:2348:GLU:HA	1.93	0.49
2:H:2927:LEU:HD13	2:H:2998:ILE:HD13	1.94	0.49
2:H:3925:GLY:O	2:H:3963:ASN:HA	2.12	0.49
2:H:3956:ALA:HA	2:H:3962:PHE:HB3	1.94	0.49
2:B:821:LEU:HD13	2:B:1523:VAL:CG2	2.43	0.49
2:B:3745:GLN:H	2:B:3751:THR:HG23	1.78	0.49
2:D:726:ARG:CG	2:D:1371:LEU:HD11	2.43	0.49
2:D:1395:ILE:HD13	2:D:1426:ALA:HB2	1.94	0.49
2:D:2218:VAL:O	2:D:2222:ILE:HG12	2.13	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:3925:GLY:O	2:D:3963:ASN:HA	2.12	0.49
2:D:4059:ASP:O	2:D:4063:GLU:HG2	2.12	0.49
2:F:3246:GLU:O	2:F:3250:LEU:HG	2.12	0.49
2:F:3745:GLN:H	2:F:3751:THR:HG23	1.78	0.49
2:F:4814:LEU:HD22	2:F:4818:ILE:HD11	1.95	0.49
2:H:1034:ARG:HG2	2:H:1038:ARG:HH12	1.77	0.49
2:H:1041:VAL:O	2:H:1045:VAL:HG23	2.12	0.49
2:H:2219:LYS:O	2:H:2223:ARG:HG2	2.12	0.49
1:A:90:GLY:HA2	2:B:625:PRO:HG3	1.94	0.49
2:B:82:MET:HE1	2:B:149:TRP:CZ2	2.48	0.49
2:B:2861:LEU:O	2:B:2865:VAL:HG23	2.13	0.49
2:B:4543:VAL:O	2:B:4547:VAL:HG23	2.12	0.49
2:D:40:ALA:O	2:D:65:VAL:HB	2.13	0.49
2:D:481:MET:O	2:D:485:VAL:HG23	2.12	0.49
2:D:1973:ILE:H	2:D:1973:ILE:HD12	1.77	0.49
2:D:3956:ALA:HA	2:D:3962:PHE:HB3	1.94	0.49
2:F:681:ARG:HG2	2:F:715:ASP:HB3	1.95	0.49
2:F:2219:LYS:O	2:F:2223:ARG:HG2	2.12	0.49
2:F:3798:LYS:HG3	2:F:3861:ASP:OD2	2.12	0.49
2:H:821:LEU:HD13	2:H:1523:VAL:CG2	2.43	0.49
2:H:1739:ASP:O	2:H:1743:ILE:HG13	2.13	0.49
2:H:3181:ASN:HB3	2:H:3184:ILE:HD12	1.95	0.49
2:H:3745:GLN:H	2:H:3751:THR:HG23	1.78	0.49
2:H:3878:THR:O	2:H:3882:GLN:HG3	2.13	0.49
2:B:40:ALA:O	2:B:65:VAL:HB	2.13	0.49
2:B:79:LEU:HD12	2:B:82:MET:HE2	1.95	0.49
2:B:435:PRO:O	2:B:439:VAL:HG23	2.12	0.49
2:B:1723:VAL:O	2:B:1727:LYS:HG3	2.13	0.49
2:B:4503:LYS:HD3	2:B:4509:LEU:HD22	1.94	0.49
2:D:14:PHE:HE1	2:D:166:ARG:HG2	1.77	0.49
2:D:681:ARG:HG2	2:D:715:ASP:HB3	1.95	0.49
2:D:821:LEU:HD13	2:D:1523:VAL:CG2	2.43	0.49
2:F:82:MET:HE1	2:F:149:TRP:CZ2	2.48	0.49
2:F:435:PRO:O	2:F:439:VAL:HG23	2.12	0.49
2:F:1244:PHE:CE2	2:F:1495:ILE:HG13	2.47	0.49
2:F:3013:VAL:HG23	2:F:3014:ASP:OD1	2.13	0.49
2:F:3925:GLY:O	2:F:3963:ASN:HA	2.12	0.49
2:H:1239:LYS:HD3	2:H:1499:LEU:HD11	1.95	0.49
2:H:2040:MET:HB2	2:H:2089:MET:HE1	1.95	0.49
2:H:2494:LEU:HD22	2:H:2556:LEU:HD11	1.95	0.49
2:H:2878:SER:OG	2:H:2884:LEU:HB2	2.13	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:3201:ILE:HD13	2:H:3266:MET:HA	1.93	0.49
1:A:69:LEU:HD13	1:A:70:GLY:N	2.28	0.49
2:B:77:ARG:O	2:B:81:GLU:HG2	2.13	0.49
2:B:1082:VAL:HG23	2:B:1154:LEU:HD11	1.94	0.49
2:B:1244:PHE:CE2	2:B:1495:ILE:HG13	2.47	0.49
2:B:1328:CYS:SG	2:B:1470:LEU:HD12	2.52	0.49
2:B:1426:ALA:O	2:B:1429:ARG:HG2	2.13	0.49
2:B:1739:ASP:O	2:B:1743:ILE:HG13	2.13	0.49
2:B:2218:VAL:O	2:B:2222:ILE:HG12	2.13	0.49
2:B:3013:VAL:HG23	2:B:3014:ASP:OD1	2.13	0.49
2:B:3201:ILE:HD13	2:B:3266:MET:HA	1.93	0.49
2:D:82:MET:HE1	2:D:149:TRP:CZ2	2.48	0.49
2:D:636:ILE:HD11	2:D:1531:MET:CE	2.41	0.49
2:D:3187:ALA:HB1	2:D:3189:TRP:NE1	2.27	0.49
2:D:3253:PHE:CE2	2:D:3305:ASN:HB2	2.47	0.49
2:D:3798:LYS:HG3	2:D:3861:ASP:OD2	2.12	0.49
1:E:80:ASP:OD1	1:E:80:ASP:N	2.46	0.49
2:F:1739:ASP:O	2:F:1743:ILE:HG13	2.13	0.49
2:F:3935:ALA:O	2:F:3939:GLN:HG2	2.12	0.49
1:G:90:GLY:CA	2:H:625:PRO:HG3	2.43	0.49
2:H:14:PHE:HE1	2:H:166:ARG:HG2	1.77	0.49
2:H:77:ARG:O	2:H:81:GLU:HG2	2.13	0.49
2:H:422:VAL:CG2	2:H:491:ARG:HG3	2.38	0.49
2:H:681:ARG:HG2	2:H:715:ASP:HB3	1.95	0.49
2:H:2338:PRO:HA	2:H:2349:PRO:HD3	1.94	0.49
2:H:3190:MET:HB3	2:H:3262:ALA:HB2	1.94	0.49
2:H:3251:ASP:O	2:H:3255:VAL:HG13	2.13	0.49
1:A:90:GLY:CA	2:B:625:PRO:HG3	2.43	0.48
2:B:14:PHE:HE1	2:B:166:ARG:HG2	1.77	0.48
2:B:433:THR:OG1	2:B:434:LEU:HD22	2.13	0.48
2:B:1212:PHE:CD1	2:B:1215:MET:HE2	2.48	0.48
2:B:3246:GLU:O	2:B:3250:LEU:HG	2.12	0.48
2:B:4498:LYS:HG3	2:B:4538:TYR:CE1	2.47	0.48
2:D:77:ARG:O	2:D:81:GLU:HG2	2.13	0.48
2:D:1212:PHE:CD1	2:D:1215:MET:HE2	2.48	0.48
2:D:2219:LYS:O	2:D:2223:ARG:HG2	2.12	0.48
2:D:3104:GLN:OE1	2:D:3104:GLN:N	2.47	0.48
2:F:1212:PHE:HD1	2:F:1215:MET:HE2	1.77	0.48
2:F:4014:GLU:HB3	2:F:4015:PRO:HD3	1.95	0.48
1:G:69:LEU:HD13	1:G:70:GLY:N	2.28	0.48
2:H:726:ARG:CG	2:H:1371:LEU:HD11	2.43	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:1888:CYS:HB3	2:H:1893:ARG:HE	1.78	0.48
2:H:3013:VAL:HG23	2:H:3014:ASP:OD1	2.13	0.48
2:H:4503:LYS:HD3	2:H:4509:LEU:HD22	1.94	0.48
2:H:4511:ILE:HG12	2:H:4563:LEU:CD2	2.43	0.48
2:B:109:ILE:CG2	2:B:152:ILE:HD11	2.42	0.48
2:B:751:PRO:HG3	2:B:771:THR:HG23	1.96	0.48
2:B:2040:MET:HB2	2:B:2089:MET:HE1	1.95	0.48
2:B:2219:LYS:O	2:B:2223:ARG:HG2	2.12	0.48
2:B:2878:SER:OG	2:B:2884:LEU:HB2	2.13	0.48
2:B:4545:ARG:HA	2:B:4548:ILE:HG22	1.95	0.48
2:D:14:PHE:CE1	2:D:166:ARG:HG2	2.47	0.48
2:D:24:GLN:HE22	2:D:35:LYS:HD3	1.78	0.48
2:D:251:TYR:CD2	2:D:383:VAL:HG22	2.48	0.48
2:D:1723:VAL:O	2:D:1727:LYS:HG3	2.13	0.48
2:D:3246:GLU:O	2:D:3250:LEU:HG	2.12	0.48
2:F:3620:ALA:O	2:F:3624:VAL:HG23	2.13	0.48
2:F:3878:THR:O	2:F:3882:GLN:HG3	2.13	0.48
2:H:927:LEU:O	2:H:931:LEU:HG	2.13	0.48
2:H:2540:PHE:HB2	2:H:2567:ILE:CG2	2.43	0.48
2:H:3104:GLN:OE1	2:H:3104:GLN:N	2.47	0.48
2:H:3904:PHE:CD1	2:H:3971:PHE:HB3	2.49	0.48
2:H:4498:LYS:HG3	2:H:4538:TYR:CE1	2.47	0.48
2:B:226:LEU:HG	2:B:397:LEU:HD22	1.95	0.48
2:B:681:ARG:HG2	2:B:715:ASP:HB3	1.95	0.48
2:B:2337:LEU:HD13	2:B:2397:LEU:CD1	2.44	0.48
2:B:2927:LEU:HD13	2:B:2998:ILE:HD13	1.94	0.48
1:C:69:LEU:HD13	1:C:70:GLY:N	2.28	0.48
2:D:869:ARG:CB	2:D:927:LEU:HD11	2.40	0.48
2:D:927:LEU:O	2:D:931:LEU:HG	2.13	0.48
2:D:4688:SER:OG	2:D:4693:GLU:O	2.30	0.48
2:F:14:PHE:HE1	2:F:166:ARG:HG2	1.77	0.48
2:F:251:TYR:CD2	2:F:383:VAL:HG22	2.48	0.48
2:F:3179:ASN:OD1	2:F:3219:LYS:HD3	2.13	0.48
2:F:3671:ALA:O	2:F:3675:GLN:HG2	2.13	0.48
2:H:79:LEU:HD12	2:H:82:MET:HE2	1.95	0.48
2:H:433:THR:OG1	2:H:434:LEU:HD22	2.13	0.48
2:H:751:PRO:HG3	2:H:771:THR:HG23	1.96	0.48
2:H:977:PRO:CD	2:H:978:PRO:HD2	2.44	0.48
2:B:181:TYR:HB2	2:B:198:MET:O	2.14	0.48
2:B:916:LYS:O	2:B:920:LEU:HG	2.14	0.48
2:B:927:LEU:O	2:B:931:LEU:HG	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1965:ILE:HD13	2:B:3525:ILE:HG22	1.95	0.48
1:C:90:GLY:CA	2:D:625:PRO:HG3	2.43	0.48
2:D:1666:ARG:H	2:D:1682:GLN:NE2	2.10	0.48
2:D:3761:TYR:HE2	2:D:3800:ILE:HD11	1.79	0.48
2:D:3878:THR:O	2:D:3882:GLN:HG3	2.13	0.48
2:D:3904:PHE:CD1	2:D:3971:PHE:HB3	2.49	0.48
1:E:90:GLY:HA2	2:F:625:PRO:HG3	1.94	0.48
2:F:36:PHE:HB3	2:F:50:LEU:HB3	1.96	0.48
2:F:2540:PHE:HB2	2:F:2567:ILE:CG2	2.43	0.48
2:F:3415:ASP:HB3	2:F:3418:VAL:HG22	1.95	0.48
1:G:80:ASP:N	1:G:80:ASP:OD1	2.46	0.48
2:H:859:VAL:HB	2:H:928:LYS:HB3	1.94	0.48
2:H:1723:VAL:O	2:H:1727:LYS:HG3	2.13	0.48
2:H:1965:ILE:HD13	2:H:3525:ILE:HG22	1.95	0.48
2:H:2337:LEU:HD13	2:H:2397:LEU:CD1	2.44	0.48
2:H:2461:ARG:O	2:H:2465:GLU:HG3	2.12	0.48
2:H:2861:LEU:O	2:H:2865:VAL:HG23	2.13	0.48
2:H:4785:ILE:HD13	2:H:4852:LYS:HD2	1.94	0.48
2:B:3179:ASN:OD1	2:B:3219:LYS:HD3	2.13	0.48
2:B:3620:ALA:O	2:B:3624:VAL:HG23	2.13	0.48
2:D:751:PRO:HG3	2:D:771:THR:HG23	1.96	0.48
2:D:1739:ASP:O	2:D:1743:ILE:HG13	2.13	0.48
2:D:3522:LEU:HD23	2:D:3577:MET:CE	2.43	0.48
1:E:90:GLY:CA	2:F:625:PRO:HG3	2.43	0.48
2:F:977:PRO:CD	2:F:978:PRO:HD2	2.44	0.48
2:F:2337:LEU:HD13	2:F:2397:LEU:CD1	2.44	0.48
2:F:3904:PHE:CD1	2:F:3971:PHE:HB3	2.49	0.48
2:F:4511:ILE:HG12	2:F:4563:LEU:CD2	2.43	0.48
2:H:1212:PHE:CD1	2:H:1215:MET:HE2	2.48	0.48
2:H:2836:LEU:O	2:H:2840:VAL:HG23	2.14	0.48
2:B:36:PHE:HB3	2:B:50:LEU:HB3	1.96	0.48
2:B:708:ASP:OD1	2:B:711:SER:OG	2.29	0.48
2:B:918:TYR:O	2:B:922:MET:HG2	2.14	0.48
2:B:2484:LEU:O	2:B:2488:VAL:HG23	2.13	0.48
2:B:2494:LEU:HD22	2:B:2556:LEU:HD11	1.95	0.48
2:B:3904:PHE:CD1	2:B:3971:PHE:HB3	2.49	0.48
2:B:4814:LEU:HD22	2:B:4818:ILE:HD11	1.95	0.48
2:D:3013:VAL:HG23	2:D:3014:ASP:OD1	2.13	0.48
2:D:3179:ASN:OD1	2:D:3219:LYS:HD3	2.13	0.48
2:D:3415:ASP:HB3	2:D:3418:VAL:HG22	1.95	0.48
2:D:4785:ILE:HD13	2:D:4852:LYS:HD2	1.94	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:25:CYS:SG	2:F:184:LEU:HD13	2.54	0.48
2:F:1723:VAL:O	2:F:1727:LYS:HG3	2.13	0.48
2:F:2218:VAL:O	2:F:2222:ILE:HG12	2.13	0.48
2:F:2878:SER:OG	2:F:2884:LEU:HB2	2.13	0.48
2:F:3190:MET:HB3	2:F:3262:ALA:HB2	1.94	0.48
2:F:3659:GLN:NE2	2:F:3663:ASP:OD1	2.47	0.48
2:H:24:GLN:HE22	2:H:35:LYS:HD3	1.78	0.48
2:H:36:PHE:HB3	2:H:50:LEU:HB3	1.96	0.48
2:H:1075:ARG:HG2	2:H:1076:VAL:O	2.14	0.48
2:H:3659:GLN:NE2	2:H:3663:ASP:OD1	2.47	0.48
2:H:4545:ARG:HA	2:H:4548:ILE:HG22	1.95	0.48
2:B:1723:VAL:HG12	2:B:1727:LYS:HE3	1.96	0.48
2:B:2338:PRO:HA	2:B:2349:PRO:HD3	1.94	0.48
2:B:2461:ARG:O	2:B:2465:GLU:HG3	2.12	0.48
2:B:3878:THR:O	2:B:3882:GLN:HG3	2.13	0.48
2:D:1426:ALA:O	2:D:1429:ARG:HG2	2.13	0.48
2:D:2060:MET:HE2	2:D:2060:MET:N	2.29	0.48
2:D:2337:LEU:HD13	2:D:2397:LEU:CD1	2.44	0.48
2:D:2836:LEU:O	2:D:2840:VAL:HG23	2.14	0.48
2:D:2861:LEU:O	2:D:2865:VAL:HG23	2.13	0.48
2:D:2927:LEU:HD13	2:D:2998:ILE:HD13	1.94	0.48
2:D:3000:THR:O	2:D:3004:GLU:HG3	2.14	0.48
2:D:3671:ALA:O	2:D:3675:GLN:HG2	2.13	0.48
2:F:232:GLU:CG	2:F:253:ALA:HB2	2.36	0.48
2:F:821:LEU:HD13	2:F:1523:VAL:CG2	2.43	0.48
2:F:1426:ALA:O	2:F:1429:ARG:HG2	2.13	0.48
2:F:3522:LEU:HD23	2:F:3577:MET:CE	2.43	0.48
2:H:40:ALA:O	2:H:65:VAL:HB	2.13	0.48
2:H:1723:VAL:HG12	2:H:1727:LYS:HE3	1.96	0.48
2:H:3671:ALA:O	2:H:3675:GLN:HG2	2.13	0.48
2:B:1016:ASN:OD1	2:B:1017:PRO:HD2	2.14	0.48
2:B:3956:ALA:HA	2:B:3962:PHE:HB3	1.94	0.48
2:D:25:CYS:SG	2:D:184:LEU:HD13	2.54	0.48
2:D:79:LEU:HD12	2:D:82:MET:HE2	1.95	0.48
2:D:4531:THR:O	2:D:4544:LYS:NZ	2.41	0.48
2:F:918:TYR:O	2:F:922:MET:HG2	2.14	0.48
2:H:82:MET:HE1	2:H:149:TRP:CZ2	2.48	0.48
2:H:156:SER:OG	2:H:158:GLN:HG2	2.13	0.48
2:H:1978:LEU:O	2:H:1982:MET:HG3	2.14	0.48
2:H:2484:LEU:O	2:H:2488:VAL:HG23	2.13	0.48
2:H:3000:THR:O	2:H:3004:GLU:HG3	2.14	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:3179:ASN:OD1	2:H:3219:LYS:HD3	2.13	0.48
2:H:3415:ASP:HB3	2:H:3418:VAL:HG22	1.95	0.48
2:B:1075:ARG:HG2	2:B:1076:VAL:O	2.14	0.48
2:B:1335:PHE:HD2	2:B:1455:ALA:HB1	1.79	0.48
2:B:3104:GLN:OE1	2:B:3104:GLN:N	2.47	0.48
2:D:109:ILE:CG2	2:D:152:ILE:HD11	2.42	0.48
2:D:166:ARG:HB2	2:D:169:ASP:OD2	2.14	0.48
2:D:443:LEU:O	2:D:447:ILE:HG13	2.14	0.48
2:D:2484:LEU:O	2:D:2488:VAL:HG23	2.13	0.48
2:D:4814:LEU:HD22	2:D:4818:ILE:HD11	1.95	0.48
2:F:751:PRO:HG3	2:F:771:THR:HG23	1.96	0.48
2:F:859:VAL:HB	2:F:928:LYS:HB3	1.94	0.48
2:F:2861:LEU:O	2:F:2865:VAL:HG23	2.13	0.48
2:F:3104:GLN:N	2:F:3104:GLN:OE1	2.47	0.48
1:G:50:ARG:HD3	1:G:53:LYS:CE	2.42	0.48
1:G:90:GLY:HA2	2:H:625:PRO:HG3	1.94	0.48
2:H:25:CYS:SG	2:H:184:LEU:HD13	2.54	0.48
2:H:916:LYS:O	2:H:920:LEU:HG	2.14	0.48
2:H:1335:PHE:HD2	2:H:1455:ALA:HB1	1.79	0.48
2:B:24:GLN:HE22	2:B:35:LYS:HD3	1.78	0.48
2:B:1438:GLU:O	2:B:1441:THR:OG1	2.24	0.48
2:B:3671:ALA:O	2:B:3675:GLN:HG2	2.13	0.48
2:B:3761:TYR:HE2	2:B:3800:ILE:HD11	1.79	0.48
2:D:916:LYS:O	2:D:920:LEU:HG	2.14	0.48
2:F:181:TYR:HB2	2:F:198:MET:O	2.14	0.48
2:F:1016:ASN:OD1	2:F:1017:PRO:HD2	2.14	0.48
2:F:1332:ILE:HD11	2:F:1457:PHE:CD2	2.49	0.48
2:F:2494:LEU:HD22	2:F:2556:LEU:HD11	1.95	0.48
2:H:181:TYR:HB2	2:H:198:MET:O	2.14	0.48
2:H:2218:VAL:O	2:H:2222:ILE:HG12	2.13	0.48
2:H:3522:LEU:HD23	2:H:3577:MET:CE	2.43	0.48
2:H:3761:TYR:HE2	2:H:3800:ILE:HD11	1.79	0.48
2:B:443:LEU:O	2:B:447:ILE:HG13	2.14	0.47
2:B:1086:LYS:HB3	2:B:1222:PHE:CD1	2.49	0.47
2:B:1880:PHE:CZ	2:B:1893:ARG:HG2	2.50	0.47
2:B:2060:MET:HE2	2:B:2060:MET:N	2.29	0.47
2:D:1538:GLU:HG2	2:D:1539:GLU:N	2.29	0.47
2:F:24:GLN:HE22	2:F:35:LYS:HD3	1.78	0.47
2:F:40:ALA:O	2:F:65:VAL:HB	2.13	0.47
2:F:1335:PHE:HD2	2:F:1455:ALA:HB1	1.79	0.47
2:F:3251:ASP:O	2:F:3255:VAL:HG13	2.13	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:3717:ASP:OD1	2:F:3717:ASP:N	2.46	0.47
2:H:2319:ARG:O	2:H:2371:TYR:OH	2.33	0.47
2:B:156:SER:OG	2:B:158:GLN:HG2	2.13	0.47
2:B:705:VAL:HG23	2:B:780:SER:CB	2.45	0.47
2:B:3659:GLN:NE2	2:B:3663:ASP:OD1	2.47	0.47
2:B:4014:GLU:HB3	2:B:4015:PRO:HD3	1.95	0.47
2:D:36:PHE:HB3	2:D:50:LEU:HB3	1.96	0.47
2:D:918:TYR:O	2:D:922:MET:HG2	2.14	0.47
2:D:1332:ILE:HD11	2:D:1457:PHE:CD2	2.49	0.47
2:D:2040:MET:HB2	2:D:2089:MET:HE1	1.95	0.47
2:D:2319:ARG:O	2:D:2371:TYR:OH	2.33	0.47
2:D:2878:SER:OG	2:D:2884:LEU:HB2	2.13	0.47
2:D:3717:ASP:OD1	2:D:3717:ASP:N	2.46	0.47
2:F:2836:LEU:O	2:F:2840:VAL:HG23	2.14	0.47
2:H:1016:ASN:OD1	2:H:1017:PRO:HD2	2.14	0.47
1:A:50:ARG:HD3	1:A:53:LYS:CE	2.42	0.47
2:B:2540:PHE:HB2	2:B:2567:ILE:CG2	2.43	0.47
2:B:3000:THR:O	2:B:3004:GLU:HG3	2.14	0.47
2:B:3385:LEU:HD22	2:B:3403:LEU:CD2	2.41	0.47
2:B:4542:PHE:O	2:B:4546:LYS:HG3	2.14	0.47
2:D:2494:LEU:HD22	2:D:2556:LEU:HD11	1.95	0.47
2:D:2540:PHE:HB2	2:D:2567:ILE:CG2	2.43	0.47
2:F:166:ARG:HB2	2:F:169:ASP:OD2	2.14	0.47
2:F:226:LEU:HG	2:F:397:LEU:HD22	1.95	0.47
2:F:297:LEU:HD12	2:F:385:LEU:CD1	2.44	0.47
2:F:636:ILE:HD11	2:F:1531:MET:CE	2.41	0.47
2:F:1978:LEU:O	2:F:1982:MET:HG3	2.14	0.47
2:F:2927:LEU:HD13	2:F:2998:ILE:HD13	1.94	0.47
2:H:1151:MET:HE3	2:H:1162:THR:HG23	1.96	0.47
2:H:1332:ILE:HD11	2:H:1457:PHE:CD2	2.49	0.47
2:H:1426:ALA:O	2:H:1429:ARG:HG2	2.13	0.47
2:H:1621:ARG:HH12	2:H:2023:GLN:HG2	1.80	0.47
2:H:4542:PHE:O	2:H:4546:LYS:HG3	2.14	0.47
2:B:25:CYS:SG	2:B:184:LEU:HD13	2.54	0.47
2:B:273:TRP:O	2:B:276:SER:OG	2.32	0.47
2:B:2836:LEU:O	2:B:2840:VAL:HG23	2.14	0.47
2:B:3447:ILE:O	2:B:3451:VAL:HG23	2.14	0.47
2:B:3522:LEU:HD23	2:B:3577:MET:CE	2.43	0.47
2:B:3547:LEU:HD23	2:B:3618:ARG:NH1	2.29	0.47
2:B:3717:ASP:N	2:B:3717:ASP:OD1	2.46	0.47
2:D:2376:GLN:CD	2:D:2433:THR:HG22	2.40	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:3599:GLU:HG3	2:D:4542:PHE:CZ	2.49	0.47
2:D:3659:GLN:NE2	2:D:3663:ASP:OD1	2.47	0.47
2:F:79:LEU:HD12	2:F:82:MET:HE2	1.95	0.47
2:F:156:SER:OG	2:F:158:GLN:HG2	2.13	0.47
2:F:988:GLU:HA	2:F:1022:TYR:CE2	2.50	0.47
2:F:1075:ARG:HG2	2:F:1076:VAL:O	2.14	0.47
2:F:2060:MET:HE2	2:F:2060:MET:N	2.29	0.47
2:F:3599:GLU:HG3	2:F:4542:PHE:CZ	2.49	0.47
2:F:3761:TYR:HE2	2:F:3800:ILE:HD11	1.79	0.47
2:F:4545:ARG:HA	2:F:4548:ILE:HG22	1.95	0.47
2:H:988:GLU:HA	2:H:1022:TYR:CE2	2.50	0.47
2:H:1880:PHE:CZ	2:H:1893:ARG:HG2	2.50	0.47
2:H:2060:MET:HE2	2:H:2060:MET:N	2.29	0.47
2:H:2376:GLN:CD	2:H:2433:THR:HG22	2.40	0.47
2:H:3620:ALA:O	2:H:3624:VAL:HG23	2.13	0.47
2:B:251:TYR:CD2	2:B:383:VAL:HG22	2.48	0.47
2:B:3415:ASP:HB3	2:B:3418:VAL:HG22	1.95	0.47
2:B:4785:ILE:HD13	2:B:4852:LYS:HD2	1.94	0.47
1:C:80:ASP:OD1	1:C:80:ASP:N	2.46	0.47
2:D:156:SER:OG	2:D:158:GLN:HG2	2.13	0.47
2:D:1075:ARG:HG2	2:D:1076:VAL:O	2.14	0.47
2:D:1086:LYS:HB3	2:D:1222:PHE:CD1	2.49	0.47
2:D:1686:ILE:HD13	2:D:1691:LEU:HD22	1.96	0.47
2:D:1978:LEU:O	2:D:1982:MET:HG3	2.14	0.47
2:D:2037:GLU:HA	2:D:2089:MET:HE3	1.96	0.47
2:D:3447:ILE:O	2:D:3451:VAL:HG23	2.14	0.47
2:F:859:VAL:HG11	2:F:928:LYS:HA	1.97	0.47
2:F:869:ARG:HG3	2:F:927:LEU:HD11	1.96	0.47
2:F:1723:VAL:HG12	2:F:1727:LYS:HE3	1.96	0.47
2:F:2040:MET:HB2	2:F:2089:MET:HE1	1.95	0.47
2:F:3424:LEU:HD13	2:H:1218:LEU:HD22	1.96	0.47
2:F:4514:GLN:OE1	2:F:4515:PRO:HD2	2.14	0.47
2:H:251:TYR:CD2	2:H:383:VAL:HG22	2.48	0.47
2:H:443:LEU:O	2:H:447:ILE:HG13	2.14	0.47
2:H:492:LEU:HD12	2:H:520:LEU:HD12	1.96	0.47
2:H:937:ILE:HG12	2:H:1051:ILE:CD1	2.40	0.47
2:H:3717:ASP:OD2	2:H:3792:LYS:HD2	2.15	0.47
2:H:4014:GLU:HB3	2:H:4015:PRO:HD3	1.95	0.47
1:A:80:ASP:N	1:A:80:ASP:OD1	2.46	0.47
2:B:977:PRO:CD	2:B:978:PRO:HD2	2.44	0.47
2:B:1151:MET:HE3	2:B:1162:THR:HG23	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2808:SER:OG	2:B:2809:SER:N	2.47	0.47
2:B:3717:ASP:OD2	2:B:3792:LYS:HD2	2.15	0.47
2:D:181:TYR:HB2	2:D:198:MET:O	2.14	0.47
2:D:1335:PHE:HD2	2:D:1455:ALA:HB1	1.79	0.47
2:D:3574:TYR:O	2:D:3578:MET:HG3	2.15	0.47
2:F:2070:MET:O	2:F:2074:VAL:HG23	2.15	0.47
2:F:2376:GLN:CD	2:F:2433:THR:HG22	2.40	0.47
2:H:1086:LYS:HB3	2:H:1222:PHE:CD1	2.49	0.47
2:H:1206:ASP:O	2:H:1209:THR:OG1	2.29	0.47
2:B:657:TYR:O	2:B:660:TRP:NE1	2.47	0.47
2:B:665:ILE:CD1	2:B:741:VAL:HG13	2.45	0.47
2:B:859:VAL:HG11	2:B:928:LYS:HA	1.97	0.47
2:B:1399:SER:HB2	2:B:1429:ARG:NH2	2.29	0.47
2:B:1621:ARG:HH12	2:B:2023:GLN:HG2	1.80	0.47
2:B:2376:GLN:CD	2:B:2433:THR:HG22	2.40	0.47
2:B:2819:LEU:O	2:B:2823:LEU:HG	2.15	0.47
2:B:4688:SER:OG	2:B:4693:GLU:O	2.30	0.47
2:D:746:LEU:CD1	2:D:753:ILE:HG12	2.45	0.47
2:D:977:PRO:CD	2:D:978:PRO:HD2	2.44	0.47
2:D:1880:PHE:CZ	2:D:1893:ARG:HG2	2.50	0.47
2:D:3424:LEU:HD13	2:F:1218:LEU:HD22	1.96	0.47
2:D:4542:PHE:O	2:D:4546:LYS:HG3	2.14	0.47
2:D:4545:ARG:HA	2:D:4548:ILE:HG22	1.95	0.47
1:E:69:LEU:HD13	1:E:70:GLY:N	2.28	0.47
2:F:657:TYR:O	2:F:660:TRP:NE1	2.47	0.47
2:F:705:VAL:HG23	2:F:780:SER:CB	2.45	0.47
2:F:1086:LYS:HB3	2:F:1222:PHE:CD1	2.49	0.47
2:F:2420:LEU:CD1	2:F:2464:ILE:HG12	2.45	0.47
2:F:3000:THR:O	2:F:3004:GLU:HG3	2.14	0.47
2:H:226:LEU:HG	2:H:397:LEU:HD22	1.95	0.47
2:H:911:LEU:HG	2:H:915:GLU:HB2	1.97	0.47
2:H:918:TYR:O	2:H:922:MET:HG2	2.14	0.47
2:H:1122:VAL:HG23	2:H:1131:TRP:HB2	1.97	0.47
2:H:2037:GLU:HA	2:H:2089:MET:HE3	1.96	0.47
2:H:2819:LEU:O	2:H:2823:LEU:HG	2.15	0.47
2:H:3447:ILE:O	2:H:3451:VAL:HG23	2.14	0.47
2:B:661:TYR:OH	2:B:663:GLU:OE2	2.24	0.47
2:B:1332:ILE:HD11	2:B:1457:PHE:CD2	2.49	0.47
2:B:1687:PRO:O	2:B:1688:LEU:HB2	2.15	0.47
2:B:1978:LEU:O	2:B:1982:MET:HG3	2.14	0.47
2:B:3574:TYR:O	2:B:3578:MET:HG3	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3907:LEU:O	2:B:3911:THR:HG23	2.15	0.47
2:B:3999:LEU:O	2:B:4003:LEU:HG	2.15	0.47
2:B:4079:ASP:OD1	2:B:4498:LYS:NZ	2.46	0.47
2:B:4514:GLN:OE1	2:B:4515:PRO:HD2	2.14	0.47
2:D:226:LEU:HG	2:D:397:LEU:HD22	1.95	0.47
2:D:988:GLU:HA	2:D:1022:TYR:CE2	2.50	0.47
2:D:1122:VAL:HG23	2:D:1131:TRP:HB2	1.97	0.47
2:D:3943:THR:O	2:D:3947:ILE:HG13	2.15	0.47
2:D:4014:GLU:HB3	2:D:4015:PRO:HD3	1.95	0.47
2:D:4514:GLN:OE1	2:D:4515:PRO:HD2	2.14	0.47
2:F:746:LEU:CD1	2:F:753:ILE:HG12	2.45	0.47
2:F:3523:ILE:CG2	2:F:3524:PRO:HD3	2.44	0.47
2:F:3943:THR:O	2:F:3947:ILE:HG13	2.15	0.47
2:F:3999:LEU:O	2:F:4003:LEU:HG	2.15	0.47
2:H:859:VAL:HG11	2:H:928:LYS:HA	1.97	0.47
2:H:2420:LEU:CD1	2:H:2464:ILE:HG12	2.45	0.47
2:B:365:THR:HB	2:B:393:ASP:OD2	2.15	0.47
2:B:885:ILE:CG2	2:B:957:TYR:HA	2.32	0.47
2:B:911:LEU:HG	2:B:915:GLU:HB2	1.97	0.47
2:B:3943:THR:O	2:B:3947:ILE:HG13	2.15	0.47
2:D:657:TYR:O	2:D:660:TRP:NE1	2.47	0.47
2:D:950:LYS:HA	2:D:968:LEU:HA	1.97	0.47
2:D:3685:SER:HB2	2:D:3715:GLN:O	2.14	0.47
2:F:443:LEU:O	2:F:447:ILE:HG13	2.14	0.47
2:F:968:LEU:O	2:F:970:LEU:HG	2.15	0.47
2:F:1538:GLU:HG2	2:F:1539:GLU:N	2.29	0.47
2:F:3574:TYR:O	2:F:3578:MET:HG3	2.15	0.47
2:H:968:LEU:O	2:H:970:LEU:HG	2.15	0.47
2:H:2067:GLU:O	2:H:2071:GLU:HG3	2.15	0.47
2:H:2070:MET:O	2:H:2074:VAL:HG23	2.15	0.47
2:H:3574:TYR:O	2:H:3578:MET:HG3	2.15	0.47
2:H:3842:LEU:HA	2:H:3848:GLN:NE2	2.30	0.47
2:H:3943:THR:O	2:H:3947:ILE:HG13	2.15	0.47
2:B:869:ARG:HG3	2:B:927:LEU:HD11	1.96	0.47
2:B:2043:GLY:O	2:B:2047:ILE:HG13	2.15	0.47
2:B:2960:GLU:O	2:B:2963:GLU:HG2	2.15	0.47
2:B:3685:SER:HB2	2:B:3715:GLN:O	2.14	0.47
2:D:968:LEU:O	2:D:970:LEU:HG	2.15	0.47
2:D:975:LEU:HA	2:D:979:GLN:OE1	2.15	0.47
2:D:1016:ASN:OD1	2:D:1017:PRO:HD2	2.14	0.47
2:D:1392:GLY:O	2:D:1396:VAL:HG13	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:2515:TYR:OH	2:D:2532:GLU:OE1	2.29	0.47
2:D:3523:ILE:CG2	2:D:3524:PRO:HD3	2.44	0.47
2:F:882:MET:O	2:F:886:GLU:HG3	2.15	0.47
2:F:1438:GLU:O	2:F:1441:THR:OG1	2.24	0.47
2:F:1621:ARG:HH12	2:F:2023:GLN:HG2	1.80	0.47
2:F:2808:SER:OG	2:F:2809:SER:N	2.47	0.47
2:F:3209:LEU:HD11	2:F:3289:LEU:HD22	1.97	0.47
2:F:3685:SER:HB2	2:F:3715:GLN:O	2.14	0.47
2:H:975:LEU:HA	2:H:979:GLN:OE1	2.15	0.47
2:H:1538:GLU:HG2	2:H:1539:GLU:N	2.29	0.47
2:H:3999:LEU:O	2:H:4003:LEU:HG	2.15	0.47
2:H:4514:GLN:OE1	2:H:4515:PRO:HD2	2.14	0.47
2:B:492:LEU:HD12	2:B:520:LEU:HD12	1.96	0.46
2:B:730:SER:HB3	2:B:733:LEU:CD2	2.45	0.46
2:B:1538:GLU:HG2	2:B:1539:GLU:N	2.29	0.46
2:D:730:SER:HB3	2:D:733:LEU:CD2	2.45	0.46
2:D:890:THR:N	2:D:900:ARG:O	2.41	0.46
2:D:911:LEU:HG	2:D:915:GLU:HB2	1.97	0.46
2:D:1723:VAL:HG12	2:D:1727:LYS:HE3	1.96	0.46
2:D:2067:GLU:O	2:D:2071:GLU:HG3	2.15	0.46
2:F:578:GLU:OE2	2:F:582:LYS:HE3	2.15	0.46
2:F:950:LYS:HA	2:F:968:LEU:HA	1.97	0.46
2:F:1122:VAL:HG23	2:F:1131:TRP:HB2	1.97	0.46
2:F:1392:GLY:O	2:F:1396:VAL:HG13	2.15	0.46
2:F:1611:ILE:O	2:F:1616:ALA:N	2.48	0.46
2:F:2067:GLU:O	2:F:2071:GLU:HG3	2.15	0.46
2:H:360:SER:OG	2:H:362:LEU:HG	2.15	0.46
2:H:624:LEU:HB2	2:H:625:PRO:HD3	1.97	0.46
2:H:869:ARG:HG3	2:H:927:LEU:HD11	1.96	0.46
2:H:1008:GLN:OE1	2:H:1008:GLN:N	2.49	0.46
2:H:1392:GLY:O	2:H:1396:VAL:HG13	2.15	0.46
2:H:3599:GLU:HG3	2:H:4542:PHE:CZ	2.49	0.46
2:B:166:ARG:HB2	2:B:169:ASP:OD2	2.14	0.46
2:B:869:ARG:CB	2:B:927:LEU:HD11	2.40	0.46
2:B:950:LYS:HA	2:B:968:LEU:HA	1.97	0.46
2:B:975:LEU:HA	2:B:979:GLN:OE1	2.15	0.46
2:B:988:GLU:HA	2:B:1022:TYR:CE2	2.50	0.46
2:D:159:ARG:HA	2:D:163:GLU:OE1	2.16	0.46
2:D:492:LEU:HD12	2:D:520:LEU:HD12	1.96	0.46
2:D:665:ILE:CD1	2:D:741:VAL:HG13	2.45	0.46
2:D:869:ARG:HG3	2:D:927:LEU:HD11	1.96	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:906:VAL:HG22	2:D:907:GLU:H	1.80	0.46
2:D:1399:SER:HB2	2:D:1429:ARG:NH2	2.29	0.46
2:D:1687:PRO:O	2:D:1688:LEU:HB2	2.15	0.46
2:D:2228:PHE:HB3	2:D:2232:LEU:HB2	1.97	0.46
2:D:2536:THR:CG2	2:D:2567:ILE:HG23	2.45	0.46
2:D:3717:ASP:OD2	2:D:3792:LYS:HD2	2.15	0.46
2:D:3999:LEU:O	2:D:4003:LEU:HG	2.15	0.46
2:F:365:THR:HB	2:F:393:ASP:OD2	2.15	0.46
2:F:911:LEU:HG	2:F:915:GLU:HB2	1.97	0.46
2:F:3447:ILE:O	2:F:3451:VAL:HG23	2.14	0.46
2:H:103:LEU:C	2:H:104:LEU:HD12	2.41	0.46
2:H:657:TYR:O	2:H:660:TRP:NE1	2.47	0.46
2:H:2536:THR:CG2	2:H:2567:ILE:HG23	2.45	0.46
2:H:4674:THR:HG22	2:H:4701:MET:HE3	1.97	0.46
2:B:486:LEU:HD21	2:B:538:PHE:HE2	1.80	0.46
2:B:578:GLU:OE2	2:B:582:LYS:HE3	2.15	0.46
2:B:941:ASN:HB3	2:B:944:ALA:HB2	1.97	0.46
2:B:2122:SER:HB2	2:B:2137:LEU:HD13	1.97	0.46
2:B:3133:LEU:HD12	2:B:3133:LEU:HA	1.79	0.46
2:B:3424:LEU:HD13	2:D:1218:LEU:HD22	1.96	0.46
2:D:859:VAL:HG11	2:D:928:LYS:HA	1.97	0.46
2:D:2960:GLU:O	2:D:2963:GLU:HG2	2.15	0.46
2:D:3209:LEU:HD11	2:D:3289:LEU:HD22	1.97	0.46
2:D:3385:LEU:HD22	2:D:3403:LEU:CD2	2.41	0.46
2:D:4684:PHE:CB	2:D:4735:ARG:HH21	2.29	0.46
2:F:486:LEU:HD21	2:F:538:PHE:HE2	1.80	0.46
2:F:624:LEU:HB2	2:F:625:PRO:HD3	1.97	0.46
2:F:916:LYS:O	2:F:920:LEU:HG	2.14	0.46
2:F:935:CYS:SG	2:F:1053:PRO:HB3	2.55	0.46
2:F:954:PRO:O	2:F:964:LYS:HD2	2.16	0.46
2:F:3109:MET:HE3	2:F:3170:ILE:CG1	2.45	0.46
2:F:3717:ASP:OD2	2:F:3792:LYS:HD2	2.15	0.46
2:F:3842:LEU:HA	2:F:3848:GLN:NE2	2.30	0.46
2:F:3902:ASP:CG	2:F:3906:LYS:HE3	2.41	0.46
2:H:788:ARG:HD2	2:H:1519:HIS:O	2.15	0.46
2:H:3685:SER:HB2	2:H:3715:GLN:O	2.14	0.46
2:H:3907:LEU:O	2:H:3911:THR:HG23	2.15	0.46
2:B:1218:LEU:HD22	2:H:3424:LEU:HD13	1.96	0.46
2:B:1723:VAL:CG1	2:B:1727:LYS:HE3	2.46	0.46
2:B:2327:LEU:HD11	2:B:2366:PHE:HD2	1.80	0.46
2:B:2420:LEU:CD1	2:B:2464:ILE:HG12	2.45	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3599:GLU:HG3	2:B:4542:PHE:CZ	2.49	0.46
2:D:115:PHE:CZ	2:D:409:ARG:HD3	2.51	0.46
2:D:228:HIS:O	2:D:232:GLU:HB2	2.16	0.46
2:D:360:SER:OG	2:D:362:LEU:HG	2.15	0.46
2:D:868:ILE:HG13	2:D:1044:PHE:HE1	1.81	0.46
2:D:1151:MET:HE3	2:D:1162:THR:HG23	1.96	0.46
2:D:1611:ILE:O	2:D:1616:ALA:N	2.48	0.46
2:D:1621:ARG:HH12	2:D:2023:GLN:HG2	1.80	0.46
2:D:2028:LEU:CD2	2:D:2072:VAL:HG22	2.46	0.46
2:D:2070:MET:O	2:D:2074:VAL:HG23	2.15	0.46
2:D:2437:THR:HG22	2:D:2479:MET:CG	2.46	0.46
2:D:2819:LEU:O	2:D:2823:LEU:HG	2.15	0.46
2:D:3415:ASP:CG	2:D:3416:PRO:HD2	2.41	0.46
2:D:3547:LEU:HD23	2:D:3618:ARG:NH1	2.29	0.46
2:D:3907:LEU:O	2:D:3911:THR:HG23	2.15	0.46
2:F:154:PRO:HB3	2:F:159:ARG:HB2	1.98	0.46
2:F:360:SER:OG	2:F:362:LEU:HG	2.15	0.46
2:F:1008:GLN:N	2:F:1008:GLN:OE1	2.49	0.46
2:F:1621:ARG:HD2	2:F:1665:PHE:CE1	2.50	0.46
2:F:1686:ILE:HD13	2:F:1691:LEU:HD22	1.96	0.46
2:F:2314:ILE:O	2:F:2318:LEU:HG	2.16	0.46
2:F:2536:THR:CG2	2:F:2567:ILE:HG23	2.45	0.46
2:F:4542:PHE:O	2:F:4546:LYS:HG3	2.14	0.46
2:H:665:ILE:CD1	2:H:741:VAL:HG13	2.45	0.46
2:H:935:CYS:SG	2:H:1053:PRO:HB3	2.55	0.46
2:H:2043:GLY:O	2:H:2047:ILE:HG13	2.15	0.46
2:B:937:ILE:HG12	2:B:1051:ILE:CD1	2.40	0.46
2:B:1122:VAL:HG23	2:B:1131:TRP:HB2	1.97	0.46
2:B:3209:LEU:HD11	2:B:3289:LEU:HD22	1.97	0.46
2:B:3608:THR:O	2:B:3612:GLN:HG3	2.16	0.46
2:B:3842:LEU:HA	2:B:3848:GLN:NE2	2.30	0.46
2:B:3902:ASP:CG	2:B:3906:LYS:HE3	2.41	0.46
1:C:68:SER:C	1:C:104:LEU:HD23	2.41	0.46
2:D:935:CYS:SG	2:D:1053:PRO:HB3	2.55	0.46
2:D:937:ILE:HG12	2:D:1051:ILE:CD1	2.40	0.46
2:D:3977:ASP:HB3	2:D:3978:ILE:HD12	1.97	0.46
2:F:319:SER:CB	2:F:358:ILE:HD11	2.46	0.46
2:F:730:SER:HB3	2:F:733:LEU:CD2	2.45	0.46
2:F:788:ARG:HD2	2:F:1519:HIS:O	2.15	0.46
2:F:868:ILE:HG13	2:F:1044:PHE:HE1	1.81	0.46
2:F:906:VAL:HG22	2:F:907:GLU:H	1.80	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:975:LEU:HA	2:F:979:GLN:OE1	2.15	0.46
2:F:2028:LEU:CD2	2:F:2072:VAL:HG22	2.46	0.46
2:H:746:LEU:CD1	2:H:753:ILE:HG12	2.45	0.46
2:H:1686:ILE:HD13	2:H:1691:LEU:HD22	1.96	0.46
2:H:2327:LEU:HD11	2:H:2366:PHE:HD2	1.80	0.46
2:H:2808:SER:OG	2:H:2809:SER:N	2.47	0.46
2:H:2960:GLU:O	2:H:2963:GLU:HG2	2.15	0.46
2:B:20:GLU:HG2	2:B:69:VAL:HG22	1.98	0.46
2:B:115:PHE:CZ	2:B:409:ARG:HD3	2.51	0.46
2:B:788:ARG:HD2	2:B:1519:HIS:O	2.15	0.46
2:B:1578:TYR:CE1	2:B:1680:GLN:HG3	2.51	0.46
2:B:3415:ASP:CG	2:B:3416:PRO:HD2	2.41	0.46
2:B:3946:GLU:O	2:B:3950:LEU:HG	2.16	0.46
2:B:4707:PHE:CE2	2:B:4719:ILE:HD11	2.51	0.46
2:B:4833:TRP:O	2:B:4837:GLN:HG2	2.16	0.46
2:D:486:LEU:HD21	2:D:538:PHE:HE2	1.80	0.46
2:D:1008:GLN:OE1	2:D:1008:GLN:N	2.49	0.46
2:D:3109:MET:HE3	2:D:3170:ILE:CG1	2.45	0.46
2:F:115:PHE:CZ	2:F:409:ARG:HD3	2.51	0.46
2:F:2960:GLU:O	2:F:2963:GLU:HG2	2.15	0.46
2:H:166:ARG:HB2	2:H:169:ASP:OD2	2.14	0.46
2:H:365:THR:HB	2:H:393:ASP:OD2	2.15	0.46
2:H:730:SER:HB3	2:H:733:LEU:CD2	2.45	0.46
2:H:895:ARG:NH2	2:H:897:ASP:OD1	2.49	0.46
2:H:906:VAL:HG22	2:H:907:GLU:H	1.80	0.46
2:H:940:VAL:HG23	2:H:941:ASN:ND2	2.31	0.46
2:H:1723:VAL:CG1	2:H:1727:LYS:HE3	2.46	0.46
2:H:3109:MET:HE3	2:H:3170:ILE:CG1	2.45	0.46
2:H:3209:LEU:HD11	2:H:3289:LEU:HD22	1.97	0.46
2:H:3902:ASP:CG	2:H:3906:LYS:HE3	2.41	0.46
2:B:473:GLN:OE1	2:B:531:ASN:HB2	2.16	0.46
2:B:746:LEU:CD1	2:B:753:ILE:HG12	2.45	0.46
2:B:895:ARG:NH2	2:B:897:ASP:OD1	2.49	0.46
2:B:2037:GLU:HA	2:B:2089:MET:HE3	1.96	0.46
2:B:2067:GLU:O	2:B:2071:GLU:HG3	2.15	0.46
2:B:2187:TRP:O	2:B:2189:PRO:HD3	2.16	0.46
2:D:578:GLU:OE2	2:D:582:LYS:HE3	2.15	0.46
2:D:895:ARG:NH2	2:D:897:ASP:OD1	2.49	0.46
2:D:1578:TYR:HE1	2:D:1682:GLN:O	1.99	0.46
2:D:2420:LEU:CD1	2:D:2464:ILE:HG12	2.45	0.46
2:D:4674:THR:HG22	2:D:4701:MET:HE3	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:4833:TRP:O	2:D:4837:GLN:HG2	2.16	0.46
2:F:109:ILE:CG2	2:F:152:ILE:HD11	2.42	0.46
2:F:1151:MET:HE3	2:F:1162:THR:HG23	1.96	0.46
2:F:2228:PHE:HB3	2:F:2232:LEU:HB2	1.97	0.46
2:F:2819:LEU:O	2:F:2823:LEU:HG	2.15	0.46
2:H:154:PRO:HB3	2:H:159:ARG:HB2	1.98	0.46
2:H:954:PRO:O	2:H:964:LYS:HD2	2.16	0.46
2:H:1621:ARG:HD2	2:H:1665:PHE:CE1	2.50	0.46
2:H:2314:ILE:O	2:H:2318:LEU:HG	2.16	0.46
2:H:3608:THR:O	2:H:3612:GLN:HG3	2.16	0.46
2:H:3826:ASP:OD1	2:H:3826:ASP:N	2.49	0.46
2:H:4688:SER:OG	2:H:4693:GLU:O	2.30	0.46
1:A:31:LEU:HD12	1:A:37:PHE:CD1	2.51	0.46
2:B:103:LEU:C	2:B:104:LEU:HD12	2.41	0.46
2:B:154:PRO:HB3	2:B:159:ARG:HB2	1.98	0.46
2:B:159:ARG:HA	2:B:163:GLU:OE1	2.16	0.46
2:B:624:LEU:HB2	2:B:625:PRO:HD3	1.97	0.46
2:B:968:LEU:O	2:B:970:LEU:HG	2.15	0.46
2:B:2437:THR:HG22	2:B:2479:MET:CG	2.46	0.46
2:B:3523:ILE:CG2	2:B:3524:PRO:HD3	2.44	0.46
2:B:3738:PHE:O	2:B:3742:LEU:HG	2.16	0.46
2:B:3977:ASP:HB3	2:B:3978:ILE:HD12	1.97	0.46
2:D:828:LYS:HG2	2:D:829:ARG:N	2.31	0.46
2:D:895:ARG:HB3	2:D:902:HIS:HA	1.98	0.46
2:D:941:ASN:HB3	2:D:944:ALA:HB2	1.97	0.46
2:D:954:PRO:O	2:D:964:LYS:HD2	2.16	0.46
2:D:2314:ILE:O	2:D:2318:LEU:HG	2.16	0.46
2:D:3946:GLU:O	2:D:3950:LEU:HG	2.16	0.46
2:D:4545:ARG:O	2:D:4548:ILE:HG22	2.16	0.46
2:F:20:GLU:HG2	2:F:69:VAL:HG22	1.98	0.46
2:F:1880:PHE:CZ	2:F:1893:ARG:HG2	2.50	0.46
2:F:2037:GLU:HA	2:F:2089:MET:HE3	1.96	0.46
2:F:2437:THR:HG22	2:F:2479:MET:CG	2.46	0.46
2:F:3152:PRO:CD	2:F:3153:PRO:HD2	2.46	0.46
2:F:3907:LEU:O	2:F:3911:THR:HG23	2.15	0.46
2:H:251:TYR:CE2	2:H:383:VAL:HG22	2.51	0.46
2:H:3547:LEU:HD23	2:H:3618:ARG:NH1	2.29	0.46
2:H:3946:GLU:O	2:H:3950:LEU:HG	2.16	0.46
2:H:4390:LYS:NZ	2:H:4390:LYS:HB3	2.31	0.46
2:H:4538:TYR:CE2	2:H:4540:ASP:HB3	2.51	0.46
2:H:4833:TRP:O	2:H:4837:GLN:HG2	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:935:CYS:SG	2:B:1053:PRO:HB3	2.55	0.46
2:B:954:PRO:O	2:B:964:LYS:HD2	2.16	0.46
2:B:1008:GLN:OE1	2:B:1008:GLN:N	2.49	0.46
2:B:3109:MET:HE3	2:B:3170:ILE:CG1	2.45	0.46
2:D:251:TYR:CE2	2:D:383:VAL:HG22	2.51	0.46
2:D:319:SER:CB	2:D:358:ILE:HD11	2.46	0.46
2:D:3902:ASP:CG	2:D:3906:LYS:HE3	2.41	0.46
2:F:103:LEU:C	2:F:104:LEU:HD12	2.41	0.46
2:F:665:ILE:CD1	2:F:741:VAL:HG13	2.45	0.46
2:F:940:VAL:HG23	2:F:941:ASN:ND2	2.31	0.46
2:F:1081:ALA:HA	2:F:1188:VAL:HG12	1.98	0.46
2:F:2043:GLY:O	2:F:2047:ILE:HG13	2.15	0.46
2:F:4390:LYS:NZ	2:F:4390:LYS:HB3	2.31	0.46
2:F:4538:TYR:CE2	2:F:4540:ASP:HB3	2.51	0.46
1:G:31:LEU:HD12	1:G:37:PHE:CD1	2.51	0.46
2:H:228:HIS:O	2:H:232:GLU:HB2	2.16	0.46
2:H:868:ILE:HG13	2:H:1044:PHE:HE1	1.81	0.46
2:H:2057:PRO:HB3	2:H:2103:ILE:HG21	1.98	0.46
2:H:2122:SER:HB2	2:H:2137:LEU:HD13	1.97	0.46
2:H:2187:TRP:O	2:H:2189:PRO:HD3	2.16	0.46
2:H:3977:ASP:HB3	2:H:3978:ILE:HD12	1.97	0.46
1:A:5:ILE:HG12	1:A:75:LEU:HD22	1.98	0.46
2:B:486:LEU:HD21	2:B:538:PHE:CE2	2.51	0.46
2:B:868:ILE:HG13	2:B:1044:PHE:HE1	1.81	0.46
2:B:1621:ARG:HD2	2:B:1665:PHE:CE1	2.50	0.46
2:B:1686:ILE:HD13	2:B:1691:LEU:HD22	1.96	0.46
2:B:2070:MET:O	2:B:2074:VAL:HG23	2.15	0.46
2:B:2319:ARG:O	2:B:2371:TYR:OH	2.33	0.46
2:B:2536:THR:CG2	2:B:2567:ILE:HG23	2.45	0.46
2:B:3152:PRO:CD	2:B:3153:PRO:HD2	2.46	0.46
2:B:3190:MET:HB3	2:B:3262:ALA:HB1	1.98	0.46
2:B:4674:THR:HG22	2:B:4701:MET:HE3	1.97	0.46
2:D:365:THR:HB	2:D:393:ASP:OD2	2.15	0.46
2:D:473:GLN:OE1	2:D:531:ASN:HB2	2.16	0.46
2:D:705:VAL:HG23	2:D:780:SER:CB	2.45	0.46
2:D:1621:ARG:HD2	2:D:1665:PHE:CE1	2.50	0.46
2:D:2313:ARG:HD3	2:F:177:SER:O	2.16	0.46
2:D:2327:LEU:HD11	2:D:2366:PHE:HD2	1.80	0.46
2:D:3842:LEU:HA	2:D:3848:GLN:NE2	2.30	0.46
2:D:4707:PHE:CE2	2:D:4719:ILE:HD11	2.51	0.46
2:F:301:GLN:HB2	2:F:304:LEU:HD22	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:492:LEU:HD12	2:F:520:LEU:HD12	1.96	0.46
2:F:1723:VAL:CG1	2:F:1727:LYS:HE3	2.46	0.46
2:F:2319:ARG:O	2:F:2371:TYR:OH	2.33	0.46
2:F:3903:MET:HG2	2:F:3950:LEU:HD21	1.98	0.46
2:H:473:GLN:OE1	2:H:531:ASN:HB2	2.16	0.46
2:H:486:LEU:HD21	2:H:538:PHE:HE2	1.80	0.46
2:H:882:MET:O	2:H:886:GLU:HG3	2.15	0.46
2:H:1578:TYR:CE1	2:H:1680:GLN:HG3	2.51	0.46
2:H:3523:ILE:CG2	2:H:3524:PRO:HD3	2.44	0.46
2:B:301:GLN:HB2	2:B:304:LEU:HD22	1.98	0.45
2:B:884:LYS:O	2:B:889:TRP:HB2	2.17	0.45
2:B:4390:LYS:NZ	2:B:4390:LYS:HB3	2.31	0.45
2:B:4545:ARG:O	2:B:4548:ILE:HG22	2.16	0.45
2:D:232:GLU:CG	2:D:253:ALA:HB2	2.36	0.45
2:D:788:ARG:HD2	2:D:1519:HIS:O	2.15	0.45
2:D:882:MET:O	2:D:886:GLU:HG3	2.15	0.45
2:D:988:GLU:HA	2:D:1022:TYR:CD2	2.51	0.45
2:D:2043:GLY:O	2:D:2047:ILE:HG13	2.15	0.45
2:D:2808:SER:OG	2:D:2809:SER:N	2.47	0.45
2:D:4390:LYS:HB3	2:D:4390:LYS:NZ	2.31	0.45
1:E:50:ARG:HD3	1:E:53:LYS:CE	2.42	0.45
2:F:486:LEU:HD21	2:F:538:PHE:CE2	2.51	0.45
2:F:590:LYS:CE	2:F:1477:SER:HB2	2.46	0.45
2:F:884:LYS:O	2:F:889:TRP:HB2	2.17	0.45
2:F:895:ARG:HB3	2:F:902:HIS:HA	1.98	0.45
2:F:1687:PRO:O	2:F:1688:LEU:HB2	2.15	0.45
2:F:2122:SER:HB2	2:F:2137:LEU:HD13	1.97	0.45
2:F:3977:ASP:HB3	2:F:3978:ILE:HD12	1.97	0.45
2:H:115:PHE:CZ	2:H:409:ARG:HD3	2.51	0.45
2:H:301:GLN:HB2	2:H:304:LEU:HD22	1.98	0.45
2:H:319:SER:CB	2:H:358:ILE:HD11	2.46	0.45
2:H:950:LYS:HA	2:H:968:LEU:HA	1.97	0.45
2:B:177:SER:O	2:H:2313:ARG:HD3	2.16	0.45
2:B:885:ILE:HG12	2:B:959:MET:CE	2.38	0.45
2:B:1081:ALA:HA	2:B:1188:VAL:HG12	1.98	0.45
2:B:1616:ALA:O	2:B:1620:GLU:HG3	2.16	0.45
2:B:4013:PHE:O	2:B:4017:LEU:HB2	2.16	0.45
2:B:4498:LYS:O	2:B:4502:ARG:HG2	2.16	0.45
1:C:31:LEU:HD12	1:C:37:PHE:CD1	2.51	0.45
2:D:184:LEU:O	2:D:184:LEU:HD23	2.16	0.45
2:D:624:LEU:HB2	2:D:625:PRO:HD3	1.97	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:884:LYS:O	2:D:889:TRP:HB2	2.17	0.45
2:D:3080:THR:HG23	2:D:3081:LYS:HG3	1.99	0.45
2:D:4013:PHE:O	2:D:4017:LEU:HB2	2.16	0.45
2:D:4538:TYR:CE2	2:D:4540:ASP:HB3	2.51	0.45
2:F:159:ARG:HA	2:F:163:GLU:OE1	2.16	0.45
2:F:988:GLU:HA	2:F:1022:TYR:CD2	2.51	0.45
2:F:2313:ARG:HD3	2:H:177:SER:O	2.16	0.45
2:F:3415:ASP:CG	2:F:3416:PRO:HD2	2.41	0.45
2:F:4674:THR:HG22	2:F:4701:MET:HE3	1.97	0.45
2:F:4833:TRP:O	2:F:4837:GLN:HG2	2.16	0.45
2:H:578:GLU:OE2	2:H:582:LYS:HE3	2.15	0.45
2:H:1687:PRO:O	2:H:1688:LEU:HB2	2.15	0.45
2:H:2228:PHE:HB3	2:H:2232:LEU:HB2	1.97	0.45
2:H:2437:THR:HG22	2:H:2479:MET:CG	2.46	0.45
2:B:3080:THR:HG23	2:B:3081:LYS:HG3	1.99	0.45
1:C:5:ILE:HG12	1:C:75:LEU:HD22	1.98	0.45
2:D:301:GLN:HB2	2:D:304:LEU:HD22	1.98	0.45
2:D:2388:LEU:HB3	2:D:2389:PRO:HD3	1.99	0.45
2:D:3190:MET:HB3	2:D:3262:ALA:HB1	1.98	0.45
2:D:3738:PHE:O	2:D:3742:LEU:HG	2.16	0.45
1:E:19:LYS:HE3	1:E:52:GLY:HA3	1.99	0.45
1:E:31:LEU:HD12	1:E:37:PHE:CD1	2.51	0.45
2:F:895:ARG:NH2	2:F:897:ASP:OD1	2.49	0.45
2:F:3946:GLU:O	2:F:3950:LEU:HG	2.16	0.45
1:G:5:ILE:HG12	1:G:75:LEU:HD22	1.98	0.45
2:H:895:ARG:HB3	2:H:902:HIS:HA	1.98	0.45
2:H:941:ASN:HB3	2:H:944:ALA:HB2	1.97	0.45
2:H:1081:ALA:HA	2:H:1188:VAL:HG12	1.98	0.45
1:A:68:SER:C	1:A:104:LEU:HD23	2.41	0.45
2:B:251:TYR:CE2	2:B:383:VAL:HG22	2.51	0.45
2:B:882:MET:O	2:B:886:GLU:HG3	2.15	0.45
2:B:2248:ILE:CG1	2:B:2284:MET:HE2	2.46	0.45
2:B:2388:LEU:HB3	2:B:2389:PRO:HD3	1.99	0.45
2:B:2969:LEU:HD11	2:B:3041:TYR:CD2	2.52	0.45
2:D:103:LEU:C	2:D:104:LEU:HD12	2.41	0.45
2:D:486:LEU:HD21	2:D:538:PHE:CE2	2.51	0.45
2:D:2122:SER:HB2	2:D:2137:LEU:HD13	1.97	0.45
2:D:3152:PRO:CD	2:D:3153:PRO:HD2	2.46	0.45
2:D:3379:ASP:N	2:D:3379:ASP:OD1	2.50	0.45
2:F:1578:TYR:CE1	2:F:1680:GLN:HG3	2.51	0.45
2:F:2327:LEU:HD11	2:F:2366:PHE:HD2	1.80	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:2943:GLY:O	2:F:2948:LYS:HE3	2.17	0.45
2:F:3080:THR:HG23	2:F:3081:LYS:HG3	1.99	0.45
2:F:4013:PHE:O	2:F:4017:LEU:HB2	2.16	0.45
1:G:19:LYS:HE3	1:G:52:GLY:HA3	1.99	0.45
2:H:297:LEU:HD12	2:H:385:LEU:CD1	2.44	0.45
2:H:590:LYS:CE	2:H:1477:SER:HB2	2.46	0.45
2:H:884:LYS:O	2:H:889:TRP:HB2	2.17	0.45
2:H:1393:GLY:O	2:H:1396:VAL:HG22	2.17	0.45
2:H:1840:ASN:O	2:H:1844:ARG:HG3	2.17	0.45
2:H:2388:LEU:HB3	2:H:2389:PRO:HD3	1.99	0.45
2:H:3738:PHE:O	2:H:3742:LEU:HG	2.16	0.45
2:H:4545:ARG:O	2:H:4548:ILE:HG22	2.16	0.45
1:A:19:LYS:HE3	1:A:52:GLY:HA3	1.99	0.45
2:B:319:SER:CB	2:B:358:ILE:HD11	2.46	0.45
2:B:440:LEU:O	2:B:444:GLN:HG3	2.17	0.45
2:B:940:VAL:HG23	2:B:941:ASN:ND2	2.31	0.45
2:B:1392:GLY:O	2:B:1396:VAL:HG13	2.15	0.45
2:B:2314:ILE:O	2:B:2318:LEU:HG	2.16	0.45
1:C:50:ARG:HD3	1:C:53:LYS:CE	2.42	0.45
2:D:440:LEU:O	2:D:444:GLN:HG3	2.17	0.45
2:D:1081:ALA:HA	2:D:1188:VAL:HG12	1.98	0.45
2:D:1578:TYR:CE1	2:D:1680:GLN:HG3	2.51	0.45
2:D:2187:TRP:O	2:D:2189:PRO:HD3	2.16	0.45
2:D:3072:TYR:CE1	2:D:3157:PRO:HB2	2.52	0.45
2:D:3714:LEU:HD23	2:D:3792:LYS:CB	2.47	0.45
2:F:228:HIS:O	2:F:232:GLU:HB2	2.16	0.45
2:F:4498:LYS:O	2:F:4502:ARG:HG2	2.16	0.45
2:F:4707:PHE:CE2	2:F:4719:ILE:HD11	2.51	0.45
2:H:159:ARG:HA	2:H:163:GLU:OE1	2.16	0.45
2:H:184:LEU:HD23	2:H:184:LEU:O	2.16	0.45
2:H:2969:LEU:HD11	2:H:3041:TYR:CD2	2.52	0.45
2:H:3072:TYR:CE1	2:H:3157:PRO:HB2	2.52	0.45
2:H:3080:THR:HG23	2:H:3081:LYS:HG3	1.99	0.45
2:H:3527:MET:CG	2:H:3618:ARG:HH12	2.24	0.45
2:B:228:HIS:O	2:B:232:GLU:HB2	2.16	0.45
2:B:1330:TYR:CE1	2:B:1413:CYS:HB2	2.52	0.45
2:B:2028:LEU:CD2	2:B:2072:VAL:HG22	2.46	0.45
2:B:2057:PRO:HB3	2:B:2103:ILE:HG21	1.98	0.45
2:B:2313:ARG:HD3	2:D:177:SER:O	2.16	0.45
2:B:3072:TYR:CE1	2:B:3157:PRO:HB2	2.52	0.45
2:D:1696:LEU:HD11	2:D:1742:ASP:HB3	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:3903:MET:HG2	2:D:3950:LEU:HD21	1.98	0.45
2:F:1878:LEU:HD11	2:F:3501:PHE:CD1	2.52	0.45
2:F:1960:ILE:O	2:F:1964:MET:HG2	2.17	0.45
2:F:3608:THR:O	2:F:3612:GLN:HG3	2.16	0.45
2:F:3714:LEU:HD23	2:F:3792:LYS:CB	2.47	0.45
2:F:3738:PHE:O	2:F:3742:LEU:HG	2.16	0.45
2:F:4545:ARG:O	2:F:4548:ILE:HG22	2.16	0.45
2:H:1878:LEU:HD11	2:H:3501:PHE:CD1	2.52	0.45
2:H:3152:PRO:CD	2:H:3153:PRO:HD2	2.46	0.45
2:H:3385:LEU:HD22	2:H:3403:LEU:CD2	2.41	0.45
2:H:3714:LEU:HD23	2:H:3792:LYS:CB	2.47	0.45
2:H:4707:PHE:CE2	2:H:4719:ILE:HD11	2.51	0.45
2:B:184:LEU:O	2:B:184:LEU:HD23	2.16	0.45
2:B:360:SER:OG	2:B:362:LEU:HG	2.15	0.45
2:B:1248:PRO:HD2	2:B:1251:HIS:HB2	1.99	0.45
2:B:1878:LEU:HD11	2:B:3501:PHE:CD1	2.52	0.45
2:B:3454:LEU:O	2:B:3457:VAL:HG22	2.17	0.45
2:B:4538:TYR:CE2	2:B:4540:ASP:HB3	2.51	0.45
1:C:19:LYS:HE3	1:C:52:GLY:HA3	1.99	0.45
2:D:20:GLU:HG2	2:D:69:VAL:HG22	1.98	0.45
2:D:154:PRO:HB3	2:D:159:ARG:HB2	1.98	0.45
2:D:4498:LYS:O	2:D:4502:ARG:HG2	2.16	0.45
2:F:123:LEU:O	2:F:135:PHE:HB3	2.17	0.45
2:F:251:TYR:CE2	2:F:383:VAL:HG22	2.51	0.45
2:F:1009:GLN:HG3	2:F:1011:LEU:H	1.82	0.45
2:F:2388:LEU:HB3	2:F:2389:PRO:HD3	1.99	0.45
2:F:2545:ASP:O	2:F:2548:SER:OG	2.35	0.45
2:F:3072:TYR:CE1	2:F:3157:PRO:HB2	2.52	0.45
2:F:3115:LEU:HD12	2:F:3128:VAL:HG11	1.99	0.45
2:H:447:ILE:HD12	2:H:519:LEU:HD22	1.99	0.45
2:H:486:LEU:HD21	2:H:538:PHE:CE2	2.51	0.45
2:B:232:GLU:CG	2:B:253:ALA:HB2	2.36	0.45
2:B:447:ILE:HD12	2:B:519:LEU:HD22	1.99	0.45
2:B:906:VAL:HG22	2:B:907:GLU:H	1.80	0.45
2:B:1578:TYR:HE1	2:B:1682:GLN:O	1.99	0.45
2:B:2228:PHE:HB3	2:B:2232:LEU:HB2	1.97	0.45
2:B:4456:GLN:HG3	2:B:4456:GLN:O	2.17	0.45
2:D:1330:TYR:CE1	2:D:1413:CYS:HB2	2.52	0.45
2:D:1840:ASN:O	2:D:1844:ARG:HG3	2.17	0.45
2:F:3379:ASP:OD1	2:F:3379:ASP:N	2.50	0.45
2:H:705:VAL:HG23	2:H:780:SER:CB	2.45	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:869:ARG:CB	2:H:927:LEU:HD11	2.40	0.45
2:H:1095:THR:HG22	2:H:1197:GLN:OE1	2.17	0.45
2:H:1611:ILE:O	2:H:1616:ALA:N	2.48	0.45
2:H:1960:ILE:O	2:H:1964:MET:HG2	2.17	0.45
2:H:2449:ARG:O	2:H:2449:ARG:NH1	2.32	0.45
2:H:2943:GLY:O	2:H:2948:LYS:HE3	2.17	0.45
2:H:3903:MET:HG2	2:H:3950:LEU:HD21	1.98	0.45
2:B:297:LEU:HD12	2:B:385:LEU:CD1	2.44	0.45
2:B:3115:LEU:HD12	2:B:3128:VAL:HG11	1.99	0.45
2:B:3165:GLU:O	2:B:3169:VAL:HG12	2.17	0.45
2:D:343:VAL:HG13	2:D:344:PRO:HD2	1.99	0.45
2:D:1095:THR:HG22	2:D:1197:GLN:OE1	2.17	0.45
2:D:1151:MET:HE3	2:D:1162:THR:CG2	2.47	0.45
2:D:2319:ARG:HD3	2:D:2371:TYR:CE1	2.52	0.45
2:D:3825:TRP:O	2:D:3829:VAL:HG23	2.17	0.45
2:F:440:LEU:O	2:F:444:GLN:HG3	2.17	0.45
2:F:941:ASN:HB3	2:F:944:ALA:HB2	1.97	0.45
2:F:1578:TYR:HE1	2:F:1682:GLN:O	1.99	0.45
2:F:2248:ILE:CG1	2:F:2284:MET:HE2	2.46	0.45
2:F:3454:LEU:O	2:F:3457:VAL:HG22	2.17	0.45
2:F:3547:LEU:HD23	2:F:3618:ARG:NH1	2.29	0.45
2:H:440:LEU:O	2:H:444:GLN:HG3	2.17	0.45
2:H:3246:GLU:O	2:H:3249:ILE:HG13	2.17	0.45
2:B:828:LYS:HG2	2:B:829:ARG:N	2.31	0.45
2:B:890:THR:N	2:B:900:ARG:O	2.41	0.45
2:B:1002:GLY:O	2:B:1014:LYS:HB3	2.17	0.45
2:B:1840:ASN:O	2:B:1844:ARG:HG3	2.17	0.45
2:B:2319:ARG:HD3	2:B:2371:TYR:CE1	2.52	0.45
2:B:3903:MET:HG2	2:B:3950:LEU:HD21	1.98	0.45
1:C:5:ILE:HD11	1:C:63:GLY:HA2	1.99	0.45
2:D:270:ARG:O	2:D:274:SER:HB3	2.17	0.45
2:D:447:ILE:HD12	2:D:519:LEU:HD22	1.99	0.45
2:D:940:VAL:HG23	2:D:941:ASN:ND2	2.31	0.45
2:D:1002:GLY:O	2:D:1014:LYS:HB3	2.17	0.45
2:D:1878:LEU:HD11	2:D:3501:PHE:CD1	2.52	0.45
2:D:2057:PRO:HB3	2:D:2103:ILE:HG21	1.98	0.45
2:D:2367:LEU:HD11	2:D:2378:PHE:HZ	1.82	0.45
2:D:3436:ASN:OD1	2:D:3439:LYS:HG3	2.17	0.45
1:E:68:SER:C	1:E:104:LEU:HD23	2.41	0.45
2:F:1095:THR:HG22	2:F:1197:GLN:OE1	2.17	0.45
2:F:1393:GLY:O	2:F:1396:VAL:HG22	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:1399:SER:HB2	2:F:1429:ARG:NH2	2.29	0.45
2:F:1616:ALA:O	2:F:1620:GLU:HG3	2.16	0.45
2:F:1696:LEU:HD11	2:F:1742:ASP:HB3	1.99	0.45
2:H:72:GLN:HE21	2:H:74:LEU:HD13	1.82	0.45
2:H:1616:ALA:O	2:H:1620:GLU:HG3	2.16	0.45
2:H:1696:LEU:HD11	2:H:1742:ASP:HB3	1.99	0.45
2:H:2028:LEU:CD2	2:H:2072:VAL:HG22	2.46	0.45
2:H:4013:PHE:O	2:H:4017:LEU:HB2	2.16	0.45
2:B:261:ARG:O	2:B:288:HIS:NE2	2.34	0.44
2:B:422:VAL:HG23	2:B:491:ARG:CG	2.44	0.44
2:B:861:LEU:HD12	2:B:862:PRO:CD	2.46	0.44
2:B:882:MET:HE2	2:B:886:GLU:OE2	2.17	0.44
2:B:895:ARG:HB3	2:B:902:HIS:HA	1.98	0.44
2:B:2327:LEU:HD11	2:B:2366:PHE:CD2	2.53	0.44
2:B:3436:ASN:OD1	2:B:3439:LYS:HG3	2.17	0.44
2:B:4409:VAL:O	2:B:4413:ILE:HG13	2.17	0.44
2:D:123:LEU:O	2:D:135:PHE:HB3	2.17	0.44
2:D:941:ASN:HB2	2:D:1048:GLY:HA3	2.00	0.44
2:D:1248:PRO:HD2	2:D:1251:HIS:HB2	1.99	0.44
2:D:1616:ALA:O	2:D:1620:GLU:HG3	2.16	0.44
2:D:1966:ARG:O	2:D:1970:GLU:HG3	2.18	0.44
2:D:2248:ILE:CG1	2:D:2284:MET:HE2	2.46	0.44
2:D:2943:GLY:O	2:D:2948:LYS:HE3	2.17	0.44
2:D:3454:LEU:O	2:D:3457:VAL:HG22	2.17	0.44
2:D:4409:VAL:O	2:D:4413:ILE:HG13	2.17	0.44
2:D:4476:ILE:O	2:D:4479:VAL:HG22	2.18	0.44
2:F:473:GLN:OE1	2:F:531:ASN:HB2	2.16	0.44
2:F:1966:ARG:O	2:F:1970:GLU:HG3	2.18	0.44
2:H:1399:SER:HB2	2:H:1429:ARG:NH2	2.29	0.44
2:H:3115:LEU:HD12	2:H:3128:VAL:HG11	1.99	0.44
2:H:3415:ASP:CG	2:H:3416:PRO:HD2	2.41	0.44
2:H:4476:ILE:O	2:H:4479:VAL:HG22	2.18	0.44
2:B:788:ARG:HA	2:B:1521:TRP:O	2.17	0.44
2:B:1009:GLN:HG3	2:B:1011:LEU:H	1.82	0.44
2:B:1838:GLN:HE21	2:B:3497:ILE:HG13	1.82	0.44
2:B:1960:ILE:O	2:B:1964:MET:HG2	2.17	0.44
2:B:3706:GLU:O	2:B:3710:ARG:HG3	2.17	0.44
2:B:3826:ASP:OD1	2:B:3826:ASP:N	2.49	0.44
2:B:4476:ILE:O	2:B:4479:VAL:HG22	2.18	0.44
2:B:4491:LEU:HG	2:B:4495:LYS:HE2	1.99	0.44
2:D:1723:VAL:CG1	2:D:1727:LYS:HE3	2.46	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:3115:LEU:HD12	2:D:3128:VAL:HG11	1.99	0.44
2:F:72:GLN:HE21	2:F:74:LEU:HD13	1.82	0.44
2:F:270:ARG:O	2:F:274:SER:HB3	2.17	0.44
2:F:447:ILE:HD12	2:F:519:LEU:HD22	1.99	0.44
2:F:2969:LEU:HD11	2:F:3041:TYR:CD2	2.52	0.44
2:F:4409:VAL:O	2:F:4413:ILE:HG13	2.17	0.44
2:F:4476:ILE:O	2:F:4479:VAL:HG22	2.18	0.44
2:F:4779:LYS:HE2	2:F:4779:LYS:HB3	1.76	0.44
2:H:123:LEU:O	2:H:135:PHE:HB3	2.17	0.44
2:H:3776:TYR:OH	2:H:3783:ASP:OD1	2.19	0.44
2:H:4548:ILE:HA	2:H:4560:ILE:HG21	1.99	0.44
2:B:270:ARG:O	2:B:274:SER:HB3	2.17	0.44
2:B:988:GLU:HA	2:B:1022:TYR:CD2	2.51	0.44
2:B:1696:LEU:HD11	2:B:1742:ASP:HB3	1.99	0.44
2:B:2500:MET:HB3	2:B:2501:PRO:HD3	1.99	0.44
2:D:1838:GLN:HE21	2:D:3497:ILE:HG13	1.82	0.44
2:D:1960:ILE:O	2:D:1964:MET:HG2	2.17	0.44
2:D:3165:GLU:O	2:D:3169:VAL:HG12	2.17	0.44
2:D:3246:GLU:O	2:D:3249:ILE:HG13	2.17	0.44
2:D:3657:VAL:O	2:D:3661:MET:HG3	2.18	0.44
1:E:5:ILE:HG12	1:E:75:LEU:HD22	1.98	0.44
2:F:1840:ASN:O	2:F:1844:ARG:HG3	2.17	0.44
2:F:2057:PRO:HB3	2:F:2103:ILE:HG21	1.98	0.44
2:F:2187:TRP:O	2:F:2189:PRO:HD3	2.16	0.44
2:F:3706:GLU:O	2:F:3710:ARG:HG3	2.17	0.44
1:G:68:SER:C	1:G:104:LEU:HD23	2.41	0.44
2:H:1248:PRO:HD2	2:H:1251:HIS:HB2	1.99	0.44
2:H:3190:MET:HB3	2:H:3262:ALA:HB1	1.98	0.44
2:H:4456:GLN:HG3	2:H:4456:GLN:O	2.17	0.44
2:H:4779:LYS:HE2	2:H:4779:LYS:HB3	1.76	0.44
2:B:343:VAL:HG13	2:B:344:PRO:HD2	1.99	0.44
2:B:661:TYR:CE1	2:B:743:SER:HB3	2.53	0.44
2:B:977:PRO:N	2:B:978:PRO:HD2	2.33	0.44
2:B:1611:ILE:O	2:B:1616:ALA:N	2.48	0.44
2:B:3246:GLU:O	2:B:3249:ILE:HG13	2.17	0.44
2:B:3735:ASN:ND2	2:B:3738:PHE:HB2	2.33	0.44
2:B:4491:LEU:O	2:B:4495:LYS:HG3	2.18	0.44
2:D:72:GLN:HE21	2:D:74:LEU:HD13	1.82	0.44
2:D:626:ARG:HD3	2:D:628:ASN:OD1	2.18	0.44
2:F:1151:MET:HE3	2:F:1162:THR:CG2	2.47	0.44
2:F:4004:ASP:HB2	2:F:4005:PRO:HD3	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:4491:LEU:HG	2:F:4495:LYS:HE2	1.99	0.44
2:H:270:ARG:O	2:H:274:SER:HB3	2.17	0.44
2:H:882:MET:HE2	2:H:886:GLU:OE2	2.17	0.44
2:H:3706:GLU:O	2:H:3710:ARG:HG3	2.17	0.44
2:H:4004:ASP:HB2	2:H:4005:PRO:HD3	2.00	0.44
1:A:5:ILE:HD11	1:A:63:GLY:HA2	1.99	0.44
2:B:1393:GLY:O	2:B:1396:VAL:HG22	2.17	0.44
2:B:1965:ILE:O	2:B:1969:GLN:HG3	2.18	0.44
2:B:2913:ILE:HD11	2:B:2994:ALA:HB2	1.99	0.44
2:D:590:LYS:CE	2:D:1477:SER:HB2	2.46	0.44
2:D:1393:GLY:O	2:D:1396:VAL:HG22	2.17	0.44
2:D:1845:TYR:HB2	2:D:1866:PHE:CE2	2.53	0.44
2:F:184:LEU:O	2:F:184:LEU:HD23	2.16	0.44
2:F:828:LYS:HG2	2:F:829:ARG:N	2.31	0.44
2:F:1845:TYR:HB2	2:F:1866:PHE:CE2	2.53	0.44
2:F:2367:LEU:HD11	2:F:2378:PHE:HZ	1.82	0.44
2:H:20:GLU:HG2	2:H:69:VAL:HG22	1.98	0.44
2:H:988:GLU:HA	2:H:1022:TYR:CD2	2.51	0.44
2:H:3128:VAL:O	2:H:3128:VAL:HG12	2.18	0.44
2:H:3184:ILE:O	2:H:3258:ARG:NH2	2.51	0.44
2:H:3223:LYS:NZ	2:H:3252:GLU:OE1	2.29	0.44
2:B:1966:ARG:O	2:B:1970:GLU:HG3	2.18	0.44
2:B:1997:LEU:HD21	2:B:3510:LEU:CB	2.48	0.44
2:B:2367:LEU:HD11	2:B:2378:PHE:HZ	1.82	0.44
2:B:2819:LEU:HD21	2:B:2869:PHE:CZ	2.50	0.44
2:B:3184:ILE:O	2:B:3258:ARG:NH2	2.51	0.44
2:B:3488:PRO:HB2	2:B:3490:TYR:CE2	2.53	0.44
2:B:4004:ASP:HB2	2:B:4005:PRO:HD3	2.00	0.44
2:D:661:TYR:CE1	2:D:743:SER:HB3	2.53	0.44
2:D:882:MET:HE2	2:D:886:GLU:OE2	2.17	0.44
2:D:1965:ILE:O	2:D:1969:GLN:HG3	2.18	0.44
2:D:2536:THR:HG23	2:D:2567:ILE:HG23	1.99	0.44
2:D:3184:ILE:O	2:D:3258:ARG:NH2	2.51	0.44
2:D:3372:LEU:HD23	2:D:3447:ILE:HG21	2.00	0.44
2:D:3735:ASN:ND2	2:D:3738:PHE:HB2	2.33	0.44
2:D:4491:LEU:O	2:D:4495:LYS:HG3	2.18	0.44
1:E:5:ILE:HD11	1:E:63:GLY:HA2	1.99	0.44
2:F:661:TYR:OH	2:F:663:GLU:OE2	2.24	0.44
2:F:788:ARG:HA	2:F:1521:TRP:O	2.17	0.44
2:F:977:PRO:N	2:F:978:PRO:HD2	2.33	0.44
2:F:2936:THR:O	2:F:2940:MET:HG2	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:3184:ILE:O	2:F:3258:ARG:NH2	2.51	0.44
2:F:3372:LEU:HD23	2:F:3447:ILE:HG21	2.00	0.44
2:H:661:TYR:CE1	2:H:743:SER:HB3	2.53	0.44
2:H:890:THR:N	2:H:900:ARG:O	2.41	0.44
2:H:895:ARG:N	2:H:903:PRO:HD3	2.33	0.44
2:H:1997:LEU:HD21	2:H:3510:LEU:CB	2.48	0.44
2:H:2865:VAL:HG13	2:H:2869:PHE:HE2	1.83	0.44
2:H:3326:THR:O	2:H:3326:THR:OG1	2.35	0.44
2:H:3547:LEU:O	2:H:3550:ILE:HG22	2.18	0.44
2:H:3657:VAL:O	2:H:3661:MET:HG3	2.18	0.44
2:B:626:ARG:HD3	2:B:628:ASN:OD1	2.18	0.44
2:B:1095:THR:HG22	2:B:1197:GLN:OE1	2.17	0.44
2:B:1140:ARG:NH2	2:B:1166:GLU:OE1	2.51	0.44
2:B:3128:VAL:O	2:B:3128:VAL:HG12	2.18	0.44
2:B:3379:ASP:N	2:B:3379:ASP:OD1	2.50	0.44
2:D:1009:GLN:HG3	2:D:1011:LEU:H	1.82	0.44
2:D:1140:ARG:NH2	2:D:1166:GLU:OE1	2.51	0.44
2:D:1997:LEU:HD21	2:D:3510:LEU:CB	2.48	0.44
2:D:2969:LEU:HD11	2:D:3041:TYR:CD2	2.52	0.44
2:D:3608:THR:O	2:D:3612:GLN:HG3	2.16	0.44
2:D:4004:ASP:HB2	2:D:4005:PRO:HD3	2.00	0.44
2:F:882:MET:HE2	2:F:886:GLU:OE2	2.17	0.44
2:F:895:ARG:N	2:F:903:PRO:HD3	2.33	0.44
2:F:941:ASN:HB2	2:F:1048:GLY:HA3	2.00	0.44
2:F:1330:TYR:CE1	2:F:1413:CYS:HB2	2.52	0.44
2:F:2327:LEU:HD11	2:F:2366:PHE:CD2	2.53	0.44
2:H:418:PHE:O	2:H:422:VAL:HG12	2.18	0.44
2:H:1330:TYR:CE1	2:H:1413:CYS:HB2	2.52	0.44
2:H:1578:TYR:HE1	2:H:1682:GLN:O	1.99	0.44
2:H:2936:THR:O	2:H:2940:MET:HG2	2.18	0.44
2:H:3454:LEU:O	2:H:3457:VAL:HG22	2.17	0.44
2:H:4079:ASP:OD1	2:H:4498:LYS:NZ	2.46	0.44
2:H:4491:LEU:O	2:H:4495:LYS:HG3	2.18	0.44
2:B:626:ARG:HD2	2:B:629:LEU:HD12	2.00	0.44
2:B:895:ARG:N	2:B:903:PRO:HD3	2.33	0.44
2:B:1093:VAL:HB	2:B:1099:MET:HE1	2.00	0.44
2:B:2865:VAL:HG13	2:B:2869:PHE:HE2	1.83	0.44
2:B:2943:GLY:O	2:B:2948:LYS:HE3	2.17	0.44
2:B:3403:LEU:HB2	2:B:3441:ILE:HG23	2.00	0.44
2:B:3714:LEU:HD23	2:B:3792:LYS:CB	2.47	0.44
2:D:297:LEU:HD12	2:D:385:LEU:CD1	2.44	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:788:ARG:HA	2:D:1521:TRP:O	2.17	0.44
2:D:859:VAL:HG11	2:D:928:LYS:O	2.18	0.44
2:D:3826:ASP:OD1	2:D:3826:ASP:N	2.49	0.44
2:F:661:TYR:CE1	2:F:743:SER:HB3	2.53	0.44
2:F:1002:GLY:O	2:F:1014:LYS:HB3	2.17	0.44
2:F:3165:GLU:O	2:F:3169:VAL:HG12	2.17	0.44
2:F:3190:MET:HB3	2:F:3262:ALA:HB1	1.98	0.44
2:F:3246:GLU:O	2:F:3249:ILE:HG13	2.17	0.44
2:F:3249:ILE:HD12	2:F:3250:LEU:N	2.33	0.44
2:F:3657:VAL:O	2:F:3661:MET:HG3	2.18	0.44
2:F:3735:ASN:ND2	2:F:3738:PHE:HB2	2.33	0.44
2:H:273:TRP:O	2:H:276:SER:OG	2.32	0.44
2:H:1002:GLY:O	2:H:1014:LYS:HB3	2.17	0.44
2:H:1838:GLN:HE21	2:H:3497:ILE:HG13	1.82	0.44
2:H:1997:LEU:HD21	2:H:3510:LEU:HB2	2.00	0.44
2:H:2913:ILE:HD11	2:H:2994:ALA:HB2	1.99	0.44
2:H:4498:LYS:O	2:H:4502:ARG:HG2	2.16	0.44
2:B:418:PHE:O	2:B:422:VAL:HG12	2.18	0.44
2:B:590:LYS:CE	2:B:1477:SER:HB2	2.46	0.44
2:B:1845:TYR:HB2	2:B:1866:PHE:CE2	2.53	0.44
2:B:2894:GLU:O	2:B:2898:VAL:HG23	2.18	0.44
2:B:3657:VAL:O	2:B:3661:MET:HG3	2.18	0.44
2:D:977:PRO:N	2:D:978:PRO:HD2	2.33	0.44
2:D:987:ALA:HA	2:D:1037:LEU:HD12	2.00	0.44
2:D:3706:GLU:O	2:D:3710:ARG:HG3	2.17	0.44
2:D:4413:ILE:HG23	2:D:4466:LEU:CD1	2.48	0.44
2:F:885:ILE:HG21	2:F:957:TYR:CA	2.32	0.44
2:F:987:ALA:HA	2:F:1037:LEU:HD12	2.00	0.44
2:F:1997:LEU:HD21	2:F:3510:LEU:HB2	2.00	0.44
2:F:2865:VAL:HG13	2:F:2869:PHE:HE2	1.83	0.44
2:F:3436:ASN:OD1	2:F:3439:LYS:HG3	2.17	0.44
2:F:4636:LEU:HD21	2:H:4672:LEU:HD11	2.00	0.44
2:H:788:ARG:HA	2:H:1521:TRP:O	2.17	0.44
2:H:977:PRO:N	2:H:978:PRO:HD2	2.33	0.44
2:H:1009:GLN:HG3	2:H:1011:LEU:H	1.82	0.44
2:H:1965:ILE:O	2:H:1969:GLN:HG3	2.18	0.44
2:H:1966:ARG:O	2:H:1970:GLU:HG3	2.18	0.44
2:H:2327:LEU:HD11	2:H:2366:PHE:CD2	2.53	0.44
2:H:3165:GLU:O	2:H:3169:VAL:HG12	2.17	0.44
2:H:3436:ASN:OD1	2:H:3439:LYS:HG3	2.17	0.44
2:H:3488:PRO:HB2	2:H:3490:TYR:CE2	2.53	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:123:LEU:O	2:B:135:PHE:HB3	2.17	0.43
2:B:228:HIS:HB2	2:B:251:TYR:CE1	2.53	0.43
2:B:1151:MET:HE3	2:B:1162:THR:CG2	2.47	0.43
2:B:3547:LEU:O	2:B:3550:ILE:HG22	2.18	0.43
2:D:907:GLU:HG2	2:D:963:TYR:CD1	2.53	0.43
2:D:1997:LEU:HD21	2:D:3510:LEU:HB2	2.00	0.43
2:D:2327:LEU:HD11	2:D:2366:PHE:CD2	2.53	0.43
2:D:3249:ILE:HD12	2:D:3250:LEU:N	2.33	0.43
2:D:3547:LEU:O	2:D:3550:ILE:HG22	2.18	0.43
2:F:343:VAL:HG13	2:F:344:PRO:HD2	1.99	0.43
2:F:859:VAL:HG11	2:F:928:LYS:O	2.18	0.43
2:F:3825:TRP:O	2:F:3829:VAL:HG23	2.17	0.43
2:F:4684:PHE:CB	2:F:4735:ARG:HH21	2.29	0.43
2:H:422:VAL:HG23	2:H:491:ARG:CG	2.44	0.43
2:H:626:ARG:HD3	2:H:628:ASN:OD1	2.18	0.43
2:H:859:VAL:HG11	2:H:928:LYS:O	2.18	0.43
2:H:2292:ASP:O	2:H:2296:ARG:HG3	2.18	0.43
2:H:3735:ASN:ND2	2:H:3738:PHE:HB2	2.33	0.43
2:H:4413:ILE:HG23	2:H:4466:LEU:CD1	2.48	0.43
2:B:906:VAL:HG22	2:B:910:LYS:HB2	2.00	0.43
2:B:987:ALA:HA	2:B:1037:LEU:HD12	2.00	0.43
2:B:1093:VAL:HG23	2:B:1093:VAL:O	2.18	0.43
2:B:4817:LEU:HD12	2:B:4817:LEU:HA	1.76	0.43
2:D:626:ARG:HD2	2:D:629:LEU:HD12	2.00	0.43
2:D:2936:THR:O	2:D:2940:MET:HG2	2.18	0.43
2:D:3942:TYR:CE1	2:D:3950:LEU:HD11	2.53	0.43
1:E:85:ALA:O	1:E:94:PRO:HB3	2.19	0.43
2:F:1248:PRO:HD2	2:F:1251:HIS:HB2	1.99	0.43
2:F:3385:LEU:HD22	2:F:3403:LEU:CD2	2.41	0.43
2:F:3488:PRO:HB2	2:F:3490:TYR:CE2	2.53	0.43
2:F:4413:ILE:HG23	2:F:4466:LEU:CD1	2.48	0.43
2:H:941:ASN:HB2	2:H:1048:GLY:HA3	2.00	0.43
2:H:2248:ILE:CG1	2:H:2284:MET:HE2	2.46	0.43
2:H:2894:GLU:O	2:H:2898:VAL:HG23	2.18	0.43
2:H:3403:LEU:HB2	2:H:3441:ILE:HG23	2.00	0.43
2:B:72:GLN:HE21	2:B:74:LEU:HD13	1.82	0.43
2:B:895:ARG:HA	2:B:901:GLN:C	2.44	0.43
2:B:3260:LEU:O	2:B:3264:TYR:HB2	2.18	0.43
2:B:3372:LEU:HD23	2:B:3447:ILE:HG21	2.00	0.43
2:B:3810:GLY:N	2:B:3811:PRO:HA	2.34	0.43
2:D:418:PHE:O	2:D:422:VAL:HG12	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:1083:ARG:HG2	2:D:1185:ASN:O	2.18	0.43
2:D:4491:LEU:HG	2:D:4495:LYS:HE2	1.99	0.43
2:F:626:ARG:HD3	2:F:628:ASN:OD1	2.18	0.43
2:F:895:ARG:HA	2:F:901:GLN:C	2.44	0.43
2:F:2500:MET:HB3	2:F:2501:PRO:HD3	1.99	0.43
2:F:2822:ILE:CD1	2:F:2865:VAL:HG22	2.40	0.43
2:F:2913:ILE:HD11	2:F:2994:ALA:HB2	1.99	0.43
2:F:4456:GLN:HG3	2:F:4456:GLN:O	2.17	0.43
2:F:4656:GLY:O	2:F:4660:VAL:HG23	2.18	0.43
2:H:895:ARG:HA	2:H:901:GLN:C	2.44	0.43
2:H:987:ALA:HA	2:H:1037:LEU:HD12	2.00	0.43
2:H:2367:LEU:HD11	2:H:2378:PHE:HZ	1.82	0.43
2:H:3094:THR:HG22	2:H:3096:GLU:HG2	2.00	0.43
2:H:3372:LEU:HD23	2:H:3447:ILE:HG21	2.00	0.43
2:H:3899:LYS:HB2	2:H:3899:LYS:HE3	1.78	0.43
2:H:4085:GLN:O	2:H:4089:GLN:HG3	2.19	0.43
2:H:4656:GLY:O	2:H:4660:VAL:HG23	2.18	0.43
2:H:4684:PHE:CB	2:H:4735:ARG:HH21	2.29	0.43
2:B:859:VAL:HG11	2:B:928:LYS:O	2.18	0.43
2:B:3082:THR:O	2:B:3086:ARG:HG3	2.19	0.43
2:B:3339:GLN:HA	2:B:3342:GLU:HG2	2.00	0.43
2:B:3390:TYR:HH	2:B:3445:GLN:HE21	1.60	0.43
2:B:4413:ILE:HG23	2:B:4466:LEU:CD1	2.48	0.43
2:B:4548:ILE:HA	2:B:4560:ILE:HG21	1.99	0.43
2:B:4672:LEU:HD11	2:H:4636:LEU:HD21	2.00	0.43
2:B:4751:LEU:HD23	2:B:4751:LEU:HA	1.85	0.43
1:C:85:ALA:O	1:C:94:PRO:HB3	2.19	0.43
2:D:228:HIS:HB2	2:D:251:TYR:CE1	2.53	0.43
2:D:895:ARG:N	2:D:903:PRO:HD3	2.33	0.43
2:D:2065:MET:O	2:D:2069:VAL:HG23	2.18	0.43
2:D:3260:LEU:O	2:D:3264:TYR:HB2	2.18	0.43
2:D:3488:PRO:HB2	2:D:3490:TYR:CE2	2.53	0.43
2:D:4817:LEU:HD12	2:D:4817:LEU:HA	1.76	0.43
2:F:1838:GLN:HE21	2:F:3497:ILE:HG13	1.82	0.43
2:F:3547:LEU:O	2:F:3550:ILE:HG22	2.18	0.43
2:F:3810:GLY:N	2:F:3811:PRO:HA	2.34	0.43
2:H:228:HIS:HB2	2:H:251:TYR:CE1	2.53	0.43
2:H:1140:ARG:NH2	2:H:1166:GLU:OE1	2.51	0.43
2:H:1366:THR:HG21	2:H:1383:LYS:HE3	2.00	0.43
2:H:2065:MET:O	2:H:2069:VAL:HG23	2.18	0.43
2:H:2536:THR:HG23	2:H:2567:ILE:HG23	1.99	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:3825:TRP:O	2:H:3829:VAL:HG23	2.17	0.43
2:H:4068:GLU:O	2:H:4072:LEU:HG	2.19	0.43
2:B:411:ILE:HD13	2:B:479:GLU:CG	2.45	0.43
2:B:2536:THR:HG23	2:B:2567:ILE:HG23	1.99	0.43
2:B:2936:THR:O	2:B:2940:MET:HG2	2.18	0.43
2:B:3825:TRP:O	2:B:3829:VAL:HG23	2.17	0.43
2:D:666:ILE:CG2	2:D:669:VAL:HG23	2.49	0.43
2:D:1981:MET:HE2	2:D:1981:MET:HB3	1.95	0.43
2:D:2500:MET:HB3	2:D:2501:PRO:HD3	1.99	0.43
2:D:3082:THR:O	2:D:3086:ARG:HG3	2.19	0.43
2:D:3810:GLY:N	2:D:3811:PRO:HA	2.34	0.43
2:D:4656:GLY:O	2:D:4660:VAL:HG23	2.18	0.43
2:F:906:VAL:HG22	2:F:910:LYS:HB2	2.00	0.43
2:F:1140:ARG:NH2	2:F:1166:GLU:OE1	2.51	0.43
2:F:4068:GLU:O	2:F:4072:LEU:HG	2.19	0.43
2:F:4085:GLN:O	2:F:4089:GLN:HG3	2.19	0.43
2:F:4548:ILE:HA	2:F:4560:ILE:HG21	1.99	0.43
2:H:907:GLU:HG2	2:H:963:TYR:CD1	2.53	0.43
2:H:1845:TYR:HB2	2:H:1866:PHE:CE2	2.53	0.43
2:H:2500:MET:HB3	2:H:2501:PRO:HD3	1.99	0.43
2:H:4409:VAL:O	2:H:4413:ILE:HG13	2.17	0.43
2:B:907:GLU:HG2	2:B:963:TYR:CD1	2.53	0.43
2:B:2292:ASP:O	2:B:2296:ARG:HG3	2.18	0.43
2:B:3551:ILE:HG12	2:B:3578:MET:HE1	2.01	0.43
2:B:3714:LEU:HD23	2:B:3792:LYS:HB2	2.01	0.43
2:D:190:ASN:HD21	2:D:192:GLN:HG3	1.84	0.43
2:D:861:LEU:HD12	2:D:862:PRO:CD	2.46	0.43
2:D:895:ARG:HA	2:D:901:GLN:C	2.44	0.43
2:D:906:VAL:HG22	2:D:910:LYS:HB2	2.00	0.43
2:D:2865:VAL:HG13	2:D:2869:PHE:HE2	1.83	0.43
2:D:2894:GLU:O	2:D:2898:VAL:HG23	2.18	0.43
2:D:2913:ILE:HD11	2:D:2994:ALA:HB2	1.99	0.43
2:F:666:ILE:CG2	2:F:669:VAL:HG23	2.49	0.43
2:F:1001:GLN:O	2:F:1014:LYS:NZ	2.45	0.43
2:F:1669:THR:HA	2:F:1670:PRO:HD3	1.85	0.43
2:F:1997:LEU:HD21	2:F:3510:LEU:CB	2.48	0.43
2:F:2894:GLU:O	2:F:2898:VAL:HG23	2.18	0.43
2:F:2933:THR:O	2:F:2933:THR:HG22	2.19	0.43
1:G:5:ILE:HD11	1:G:63:GLY:HA2	1.99	0.43
2:H:343:VAL:HG13	2:H:344:PRO:HD2	1.99	0.43
2:H:662:PHE:CE1	2:H:744:CYS:HB2	2.54	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:2279:MET:O	2:H:2283:ILE:HG13	2.19	0.43
2:H:2933:THR:O	2:H:2933:THR:HG22	2.19	0.43
2:H:3339:GLN:HA	2:H:3342:GLU:HG2	2.00	0.43
2:H:3714:LEU:HD23	2:H:3792:LYS:HB2	2.01	0.43
2:H:4491:LEU:HG	2:H:4495:LYS:HE2	1.99	0.43
2:B:434:LEU:HD22	2:B:434:LEU:H	1.84	0.43
2:B:4068:GLU:O	2:B:4072:LEU:HG	2.19	0.43
2:D:935:CYS:HB3	2:D:1051:ILE:HG22	2.01	0.43
2:D:2321:LEU:HD23	2:D:2321:LEU:HA	1.91	0.43
2:D:3128:VAL:O	2:D:3128:VAL:HG12	2.18	0.43
2:D:3403:LEU:HB2	2:D:3441:ILE:HG23	2.00	0.43
2:D:3527:MET:HE3	2:D:3614:ARG:HE	1.84	0.43
2:D:4456:GLN:HG3	2:D:4456:GLN:O	2.17	0.43
2:F:418:PHE:O	2:F:422:VAL:HG12	2.18	0.43
2:F:1093:VAL:HB	2:F:1099:MET:HE1	2.00	0.43
2:F:1585:ASP:OD1	2:F:1588:GLN:NE2	2.52	0.43
2:F:2065:MET:O	2:F:2069:VAL:HG23	2.18	0.43
2:F:2279:MET:O	2:F:2283:ILE:HG13	2.19	0.43
2:F:2292:ASP:O	2:F:2296:ARG:HG3	2.18	0.43
2:F:3068:THR:OG1	2:F:3069:LEU:HD12	2.19	0.43
2:F:3210:LYS:O	2:F:3210:LYS:HD3	2.19	0.43
2:H:53:THR:HB	2:H:271:ILE:CD1	2.49	0.43
2:H:626:ARG:HD2	2:H:629:LEU:HD12	2.00	0.43
2:H:906:VAL:HG22	2:H:910:LYS:HB2	2.00	0.43
2:H:1151:MET:HE3	2:H:1162:THR:CG2	2.47	0.43
2:H:2319:ARG:HD3	2:H:2371:TYR:CE1	2.52	0.43
2:H:3068:THR:OG1	2:H:3069:LEU:HD12	2.19	0.43
2:H:3175:LEU:HD11	2:H:3213:PHE:CE2	2.54	0.43
2:B:877:HIS:CE1	2:B:911:LEU:HD13	2.54	0.43
2:B:924:THR:O	2:B:928:LYS:HG3	2.19	0.43
2:D:877:HIS:CE1	2:D:911:LEU:HD13	2.54	0.43
2:D:1332:ILE:HG21	2:D:1345:VAL:HG21	2.01	0.43
2:D:3028:LEU:HD12	2:D:3053:LEU:CD1	2.49	0.43
2:D:3635:MET:HE1	2:D:3716:ASN:ND2	2.34	0.43
2:D:4700:ASP:OD1	2:D:4701:MET:N	2.52	0.43
2:F:662:PHE:CE1	2:F:744:CYS:HB2	2.54	0.43
2:F:907:GLU:HG2	2:F:963:TYR:CD1	2.53	0.43
2:F:2319:ARG:HD3	2:F:2371:TYR:CE1	2.52	0.43
2:F:2536:THR:HG23	2:F:2567:ILE:HG23	1.99	0.43
2:F:3175:LEU:HD11	2:F:3213:PHE:CE2	2.54	0.43
2:H:661:TYR:OH	2:H:663:GLU:OE2	2.24	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:666:ILE:CG2	2:H:669:VAL:HG23	2.49	0.43
2:H:828:LYS:HG2	2:H:829:ARG:N	2.31	0.43
2:H:3028:LEU:HD12	2:H:3053:LEU:CD1	2.49	0.43
2:H:3097:GLU:O	2:H:3100:PRO:HD3	2.19	0.43
2:H:3810:GLY:N	2:H:3811:PRO:HA	2.34	0.43
2:H:3898:LEU:CD1	2:H:4006:ALA:HB2	2.45	0.43
2:B:666:ILE:CG2	2:B:669:VAL:HG23	2.49	0.43
2:B:1001:GLN:O	2:B:1014:LYS:NZ	2.45	0.43
2:B:1470:LEU:O	2:B:1474:ILE:HG13	2.19	0.43
2:B:1692:LYS:HD3	2:B:1737:VAL:HG12	2.01	0.43
2:B:2933:THR:O	2:B:2933:THR:HG22	2.19	0.43
2:B:3942:TYR:CE1	2:B:3950:LEU:HD11	2.53	0.43
2:D:872:LEU:HD22	2:D:1044:PHE:CZ	2.54	0.43
2:D:1125:GLY:O	2:D:1141:THR:HA	2.19	0.43
2:D:2933:THR:HG22	2:D:2933:THR:O	2.19	0.43
2:D:3140:LEU:HD11	2:D:3170:ILE:HG13	2.01	0.43
2:D:4508:GLY:HA3	2:D:4512:THR:HB	2.01	0.43
2:F:924:THR:O	2:F:928:LYS:HG3	2.19	0.43
2:F:1692:LYS:HD3	2:F:1737:VAL:HG12	2.01	0.43
2:F:3260:LEU:O	2:F:3264:TYR:HB2	2.18	0.43
2:F:4508:GLY:HA3	2:F:4512:THR:HB	2.01	0.43
2:H:434:LEU:HD22	2:H:434:LEU:H	1.84	0.43
2:H:3077:VAL:HA	2:H:3080:THR:CG2	2.40	0.43
2:H:3210:LYS:O	2:H:3210:LYS:HD3	2.19	0.43
2:H:3379:ASP:OD1	2:H:3379:ASP:N	2.50	0.43
2:H:3551:ILE:HG12	2:H:3578:MET:HE1	2.01	0.43
2:H:3601:LYS:O	2:H:3605:LYS:HG3	2.19	0.43
2:H:4817:LEU:HA	2:H:4817:LEU:HD12	1.76	0.43
2:B:872:LEU:HD22	2:B:1044:PHE:CZ	2.54	0.43
2:B:3097:GLU:O	2:B:3100:PRO:HD3	2.19	0.43
2:D:662:PHE:CE1	2:D:744:CYS:HB2	2.54	0.43
2:D:1093:VAL:HB	2:D:1099:MET:HE1	2.00	0.43
2:D:1585:ASP:OD1	2:D:1588:GLN:NE2	2.52	0.43
2:D:2292:ASP:O	2:D:2296:ARG:HG3	2.18	0.43
2:D:3068:THR:OG1	2:D:3069:LEU:HD12	2.19	0.43
2:D:3210:LYS:O	2:D:3210:LYS:HD3	2.19	0.43
2:D:4636:LEU:HD21	2:F:4672:LEU:HD11	2.00	0.43
2:F:53:THR:HB	2:F:271:ILE:CD1	2.49	0.43
2:F:1125:GLY:O	2:F:1141:THR:HA	2.19	0.43
2:F:1366:THR:HG21	2:F:1383:LYS:HE3	2.00	0.43
2:F:1470:LEU:O	2:F:1474:ILE:HG13	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:3082:THR:O	2:F:3086:ARG:HG3	2.19	0.43
1:G:85:ALA:O	1:G:94:PRO:HB3	2.19	0.43
2:H:877:HIS:CE1	2:H:911:LEU:HD13	2.54	0.43
2:H:1470:LEU:O	2:H:1474:ILE:HG13	2.19	0.43
2:B:190:ASN:HD21	2:B:192:GLN:HG3	1.84	0.42
2:B:1292:MET:HE3	2:B:1292:MET:HB3	1.95	0.42
2:B:1997:LEU:HD21	2:B:3510:LEU:HB2	2.00	0.42
2:B:2865:VAL:HG13	2:B:2869:PHE:CE2	2.54	0.42
2:B:3140:LEU:HD11	2:B:3170:ILE:HG13	2.01	0.42
2:B:3249:ILE:HD12	2:B:3250:LEU:N	2.33	0.42
2:D:53:THR:HB	2:D:271:ILE:CD1	2.49	0.42
2:D:1988:ARG:HG3	2:D:1995:GLU:CD	2.44	0.42
2:D:3094:THR:HG22	2:D:3096:GLU:HG2	2.00	0.42
2:F:3028:LEU:HD12	2:F:3053:LEU:CD1	2.49	0.42
2:F:3128:VAL:O	2:F:3128:VAL:HG12	2.18	0.42
2:F:3403:LEU:HB2	2:F:3441:ILE:HG23	2.00	0.42
2:F:3527:MET:HE3	2:F:3614:ARG:HE	1.84	0.42
2:F:3601:LYS:O	2:F:3605:LYS:HG3	2.19	0.42
2:F:4079:ASP:OD1	2:F:4498:LYS:NZ	2.46	0.42
2:F:4491:LEU:O	2:F:4495:LYS:HG3	2.18	0.42
2:H:1074:PHE:CE1	2:H:1193:LEU:HD12	2.54	0.42
2:H:3249:ILE:HD12	2:H:3250:LEU:N	2.33	0.42
2:H:3942:TYR:CE1	2:H:3950:LEU:HD11	2.53	0.42
2:B:251:TYR:OH	2:B:395:LEU:HD21	2.20	0.42
2:B:271:ILE:HD12	5:B:5305:ATP:O3G	2.19	0.42
2:B:3068:THR:OG1	2:B:3069:LEU:HD12	2.19	0.42
2:B:3175:LEU:HD11	2:B:3213:PHE:CE2	2.54	0.42
2:B:3601:LYS:O	2:B:3605:LYS:HG3	2.19	0.42
2:D:434:LEU:HD22	2:D:434:LEU:H	1.84	0.42
2:D:719:LEU:HB3	2:D:766:PHE:CZ	2.54	0.42
2:D:2279:MET:O	2:D:2283:ILE:HG13	2.19	0.42
2:D:2866:ASP:OD1	2:D:2929:ILE:HG12	2.19	0.42
2:D:3424:LEU:CD1	2:F:1218:LEU:HD22	2.50	0.42
2:D:4068:GLU:O	2:D:4072:LEU:HG	2.19	0.42
2:F:228:HIS:HB2	2:F:251:TYR:CE1	2.53	0.42
2:F:626:ARG:HD2	2:F:629:LEU:HD12	2.00	0.42
2:F:728:VAL:O	2:F:733:LEU:HD11	2.19	0.42
2:F:1083:ARG:HG2	2:F:1185:ASN:O	2.18	0.42
2:F:1988:ARG:HG3	2:F:1995:GLU:CD	2.44	0.42
2:F:3635:MET:HE1	2:F:3716:ASN:ND2	2.34	0.42
2:F:3849:ILE:HD11	2:F:3970:ARG:HH11	1.84	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:3942:TYR:CE1	2:F:3950:LEU:HD11	2.53	0.42
2:H:885:ILE:HG12	2:H:959:MET:CE	2.38	0.42
2:H:1125:GLY:O	2:H:1141:THR:HA	2.19	0.42
2:H:1692:LYS:HD3	2:H:1737:VAL:HG12	2.01	0.42
2:H:2450:LEU:HB3	2:H:2464:ILE:HD13	2.01	0.42
2:H:3260:LEU:O	2:H:3264:TYR:HB2	2.18	0.42
2:B:935:CYS:HB3	2:B:1051:ILE:HG22	2.01	0.42
2:B:1366:THR:HG21	2:B:1383:LYS:HE3	2.00	0.42
2:B:1585:ASP:OD1	2:B:1585:ASP:N	2.42	0.42
2:B:2021:LEU:HD13	2:B:2065:MET:SD	2.60	0.42
2:B:2065:MET:O	2:B:2069:VAL:HG23	2.18	0.42
2:B:3210:LYS:O	2:B:3210:LYS:HD3	2.19	0.42
2:B:3326:THR:O	2:B:3326:THR:OG1	2.35	0.42
2:B:3849:ILE:HD11	2:B:3970:ARG:HH11	1.84	0.42
2:B:4044:TRP:CZ3	2:B:4811:LEU:HD13	2.55	0.42
2:D:924:THR:O	2:D:928:LYS:HG3	2.19	0.42
2:D:1340:PRO:HB2	2:D:1396:VAL:CG1	2.49	0.42
2:D:2545:ASP:O	2:D:2548:SER:OG	2.35	0.42
2:D:3551:ILE:HG12	2:D:3578:MET:HE1	2.01	0.42
2:D:3601:LYS:O	2:D:3605:LYS:HG3	2.19	0.42
2:D:3714:LEU:HD23	2:D:3792:LYS:HB2	2.01	0.42
2:F:434:LEU:HD22	2:F:434:LEU:H	1.84	0.42
2:F:764:GLY:HA2	2:F:1370:THR:O	2.20	0.42
2:F:861:LEU:HD12	2:F:862:PRO:CD	2.46	0.42
2:F:1340:PRO:HB2	2:F:1396:VAL:CG1	2.49	0.42
2:F:1347:TRP:HB3	2:F:1443:VAL:HB	2.01	0.42
2:F:3094:THR:HG22	2:F:3096:GLU:HG2	2.00	0.42
2:F:3826:ASP:OD1	2:F:3826:ASP:N	2.49	0.42
2:H:1083:ARG:HG2	2:H:1185:ASN:O	2.18	0.42
2:H:1093:VAL:HB	2:H:1099:MET:HE1	2.00	0.42
2:H:3849:ILE:HD11	2:H:3970:ARG:HH11	1.84	0.42
2:B:764:GLY:HA2	2:B:1370:THR:O	2.20	0.42
2:B:3028:LEU:HD12	2:B:3053:LEU:CD1	2.49	0.42
2:B:4656:GLY:O	2:B:4660:VAL:HG23	2.18	0.42
2:D:728:VAL:O	2:D:733:LEU:HD11	2.19	0.42
2:D:1093:VAL:O	2:D:1093:VAL:HG23	2.18	0.42
2:D:1258:ARG:NH1	2:D:1486:CYS:SG	2.93	0.42
2:D:1347:TRP:HB3	2:D:1443:VAL:HB	2.01	0.42
2:D:2037:GLU:HA	2:D:2089:MET:CE	2.50	0.42
2:D:2865:VAL:HG13	2:D:2869:PHE:CE2	2.54	0.42
2:D:3175:LEU:HD11	2:D:3213:PHE:CE2	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:3235:LYS:HD3	2:D:3235:LYS:HA	1.90	0.42
2:D:3339:GLN:HA	2:D:3342:GLU:HG2	2.00	0.42
2:F:271:ILE:HD12	5:F:5305:ATP:O3G	2.19	0.42
2:F:1585:ASP:OD1	2:F:1585:ASP:N	2.42	0.42
2:F:1965:ILE:O	2:F:1969:GLN:HG3	2.18	0.42
2:F:3028:LEU:HD21	2:F:3064:PHE:CD2	2.55	0.42
2:H:251:TYR:OH	2:H:395:LEU:HD21	2.20	0.42
2:H:271:ILE:HD12	5:H:5305:ATP:O3G	2.19	0.42
2:H:2865:VAL:HG13	2:H:2869:PHE:CE2	2.54	0.42
2:H:3050:GLY:HA3	2:H:3130:GLU:O	2.20	0.42
2:H:3082:THR:O	2:H:3086:ARG:HG3	2.19	0.42
2:H:3140:LEU:HD11	2:H:3170:ILE:HG13	2.01	0.42
2:B:941:ASN:HB2	2:B:1048:GLY:HA3	2.00	0.42
2:B:1083:ARG:HG2	2:B:1185:ASN:O	2.18	0.42
2:B:1258:ARG:NH1	2:B:1486:CYS:SG	2.93	0.42
2:B:2909:VAL:O	2:B:2909:VAL:HG22	2.19	0.42
2:B:2996:LEU:HB2	2:B:2997:PRO:HD3	2.02	0.42
2:B:3063:ALA:HB1	2:B:3139:TYR:OH	2.19	0.42
2:B:3190:MET:O	2:B:3193:ILE:HG22	2.20	0.42
2:B:3635:MET:HE1	2:B:3716:ASN:ND2	2.34	0.42
2:D:885:ILE:CG2	2:D:957:TYR:HA	2.32	0.42
2:D:1074:PHE:CE1	2:D:1193:LEU:HD12	2.54	0.42
2:D:1692:LYS:HD3	2:D:1737:VAL:HG12	2.01	0.42
2:D:2437:THR:HG22	2:D:2479:MET:SD	2.60	0.42
2:D:3063:ALA:HB1	2:D:3139:TYR:OH	2.19	0.42
2:D:4548:ILE:HA	2:D:4560:ILE:HG21	1.99	0.42
2:F:935:CYS:HB3	2:F:1051:ILE:HG22	2.01	0.42
2:F:1093:VAL:HG23	2:F:1093:VAL:O	2.18	0.42
2:F:1206:ASP:O	2:F:1209:THR:OG1	2.29	0.42
2:F:3190:MET:O	2:F:3193:ILE:HG22	2.20	0.42
2:F:3910:LEU:HD12	2:F:3942:TYR:HE2	1.84	0.42
2:F:4044:TRP:CZ3	2:F:4811:LEU:HD13	2.55	0.42
2:H:190:ASN:HD21	2:H:192:GLN:HG3	1.84	0.42
2:H:998:ARG:HB2	2:H:1019:LEU:HD21	2.02	0.42
2:H:1044:PHE:HD1	2:H:1044:PHE:HA	1.78	0.42
2:H:1258:ARG:NH1	2:H:1486:CYS:SG	2.93	0.42
2:H:2021:LEU:HD13	2:H:2065:MET:SD	2.60	0.42
2:H:2065:MET:HE3	2:H:2065:MET:HB3	1.81	0.42
2:H:2346:ILE:HG22	2:H:2348:GLU:HG3	2.02	0.42
2:H:2498:CYS:C	2:H:2501:PRO:HD2	2.45	0.42
2:H:2909:VAL:HG22	2:H:2909:VAL:O	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:4044:TRP:CZ3	2:H:4811:LEU:HD13	2.55	0.42
2:B:1332:ILE:HG21	2:B:1345:VAL:HG21	2.01	0.42
2:B:1692:LYS:HB2	2:B:1738:PHE:HE1	1.84	0.42
2:B:1981:MET:HE2	2:B:1981:MET:HB3	1.95	0.42
2:B:2487:LEU:O	2:B:2491:VAL:HG23	2.20	0.42
2:B:3424:LEU:CD1	2:D:1218:LEU:HD22	2.50	0.42
2:B:4468:ALA:O	2:B:4472:ILE:HG13	2.20	0.42
2:B:4789:TYR:CZ	2:B:4852:LYS:HG2	2.55	0.42
2:D:1470:LEU:O	2:D:1474:ILE:HG13	2.19	0.42
2:F:719:LEU:HB3	2:F:766:PHE:CZ	2.54	0.42
2:F:872:LEU:HD22	2:F:1044:PHE:CZ	2.54	0.42
2:F:877:HIS:CE1	2:F:911:LEU:HD13	2.54	0.42
2:F:1258:ARG:NH1	2:F:1486:CYS:SG	2.93	0.42
2:F:3140:LEU:HD11	2:F:3170:ILE:HG13	2.01	0.42
2:F:3339:GLN:HA	2:F:3342:GLU:HG2	2.00	0.42
2:F:3437:ALA:O	2:F:3441:ILE:HG13	2.20	0.42
2:H:589:ASP:HB2	2:H:629:LEU:HD21	2.01	0.42
2:H:3028:LEU:HD21	2:H:3064:PHE:CD2	2.55	0.42
2:B:2279:MET:O	2:B:2283:ILE:HG13	2.19	0.42
2:B:3050:GLY:HA3	2:B:3130:GLU:O	2.20	0.42
2:B:3206:PRO:HA	2:B:3270:TYR:OH	2.20	0.42
2:B:3527:MET:HE3	2:B:3614:ARG:HE	1.84	0.42
2:B:3776:TYR:OH	2:B:3783:ASP:OD1	2.19	0.42
2:B:4636:LEU:HD21	2:D:4672:LEU:HD11	2.00	0.42
2:D:589:ASP:HB2	2:D:629:LEU:HD21	2.01	0.42
2:F:1631:ILE:HD12	2:F:1827:VAL:HG21	2.02	0.42
2:F:3424:LEU:CD1	2:H:1218:LEU:HD22	2.50	0.42
2:F:3527:MET:CG	2:F:3618:ARG:HH12	2.24	0.42
2:F:3551:ILE:HG12	2:F:3578:MET:HE1	2.01	0.42
2:F:3714:LEU:HD23	2:F:3792:LYS:HB2	2.01	0.42
2:F:4700:ASP:OD1	2:F:4701:MET:N	2.52	0.42
2:H:151:THR:OG1	2:H:174:VAL:HB	2.20	0.42
2:H:728:VAL:O	2:H:733:LEU:HD11	2.19	0.42
2:H:1093:VAL:HG23	2:H:1093:VAL:O	2.18	0.42
2:H:3717:ASP:OD1	2:H:3717:ASP:N	2.46	0.42
2:H:3910:LEU:HD12	2:H:3942:TYR:HE2	1.84	0.42
1:A:85:ALA:O	1:A:94:PRO:HB3	2.19	0.42
2:B:53:THR:HB	2:B:271:ILE:CD1	2.49	0.42
2:B:662:PHE:CE1	2:B:744:CYS:HB2	2.54	0.42
2:B:665:ILE:HD13	2:B:741:VAL:HG13	2.02	0.42
2:B:1074:PHE:CE1	2:B:1193:LEU:HD12	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1125:GLY:O	2:B:1141:THR:HA	2.19	0.42
2:B:3437:ALA:O	2:B:3441:ILE:HG13	2.20	0.42
2:B:3910:LEU:HD12	2:B:3942:TYR:HE2	1.84	0.42
2:B:4413:ILE:HG23	2:B:4466:LEU:HD11	2.02	0.42
2:D:661:TYR:OH	2:D:663:GLU:OE2	2.24	0.42
2:D:869:ARG:HG3	2:D:927:LEU:CD1	2.50	0.42
2:D:998:ARG:HB2	2:D:1019:LEU:HD21	2.02	0.42
2:D:3849:ILE:HD11	2:D:3970:ARG:HH11	1.84	0.42
2:D:4688:SER:HB2	2:D:4695:ASP:H	1.85	0.42
2:D:4789:TYR:CZ	2:D:4852:LYS:HG2	2.55	0.42
2:F:251:TYR:OH	2:F:395:LEU:HD21	2.20	0.42
2:F:1003:TRP:HA	2:F:1014:LYS:HB3	2.02	0.42
2:F:1692:LYS:HB2	2:F:1738:PHE:HE1	1.84	0.42
2:F:3063:ALA:HB1	2:F:3139:TYR:OH	2.19	0.42
2:F:3097:GLU:O	2:F:3100:PRO:HD3	2.19	0.42
2:H:289:ILE:HD12	7:H:5306:CL:CL	2.57	0.42
2:H:861:LEU:HD12	2:H:862:PRO:CD	2.46	0.42
2:H:4508:GLY:HA3	2:H:4512:THR:HB	2.01	0.42
2:B:1003:TRP:HA	2:B:1014:LYS:HB3	2.02	0.42
2:B:2346:ILE:HG22	2:B:2348:GLU:HG3	2.02	0.42
2:B:3028:LEU:HD21	2:B:3064:PHE:CD2	2.55	0.42
2:B:4700:ASP:OD1	2:B:4701:MET:N	2.52	0.42
2:D:271:ILE:HD12	5:D:5305:ATP:O3G	2.19	0.42
2:D:422:VAL:HG23	2:D:491:ARG:CG	2.44	0.42
2:D:665:ILE:HD13	2:D:741:VAL:HG13	2.02	0.42
2:D:2021:LEU:HD13	2:D:2065:MET:SD	2.60	0.42
2:D:2450:LEU:HB3	2:D:2464:ILE:HD13	2.01	0.42
2:D:3028:LEU:HD21	2:D:3064:PHE:CD2	2.55	0.42
2:D:3136:LEU:O	2:D:3140:LEU:HG	2.20	0.42
2:D:3190:MET:O	2:D:3193:ILE:HG22	2.20	0.42
2:D:4468:ALA:O	2:D:4472:ILE:HG13	2.20	0.42
2:D:4826:THR:OG1	2:D:4829:GLU:HG3	2.20	0.42
2:F:1332:ILE:HG21	2:F:1345:VAL:HG21	2.01	0.42
2:F:2257:ASP:OD1	2:F:2257:ASP:N	2.53	0.42
2:F:4595:MET:O	2:F:4599:ILE:HG13	2.20	0.42
2:F:4688:SER:HB2	2:F:4695:ASP:H	1.85	0.42
2:H:719:LEU:HB3	2:H:766:PHE:CZ	2.54	0.42
2:H:764:GLY:HA2	2:H:1370:THR:O	2.20	0.42
2:H:3136:LEU:O	2:H:3140:LEU:HG	2.20	0.42
2:B:589:ASP:HB2	2:B:629:LEU:HD21	2.01	0.42
2:B:719:LEU:HB3	2:B:766:PHE:CZ	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:869:ARG:HG3	2:B:927:LEU:CD1	2.50	0.42
2:B:1218:LEU:HD22	2:H:3424:LEU:CD1	2.50	0.42
2:B:1631:ILE:HD12	2:B:1827:VAL:HG21	2.02	0.42
2:B:2007:SER:HB3	2:B:3495:HIS:CD2	2.55	0.42
2:D:581:ILE:HD12	2:D:618:LEU:CD1	2.50	0.42
2:D:1285:MET:HE3	2:D:1285:MET:HB3	1.89	0.42
2:D:1366:THR:HG21	2:D:1383:LYS:HE3	2.00	0.42
2:D:2017:LEU:HD21	2:D:2060:MET:HE1	2.02	0.42
2:D:2498:CYS:C	2:D:2501:PRO:HD2	2.45	0.42
2:D:2909:VAL:O	2:D:2909:VAL:HG22	2.19	0.42
2:D:3097:GLU:O	2:D:3100:PRO:HD3	2.19	0.42
2:D:4079:ASP:OD1	2:D:4498:LYS:NZ	2.46	0.42
2:F:151:THR:OG1	2:F:174:VAL:HB	2.20	0.42
2:F:589:ASP:HB2	2:F:629:LEU:HD21	2.01	0.42
2:F:1074:PHE:CE1	2:F:1193:LEU:HD12	2.54	0.42
2:F:4468:ALA:O	2:F:4472:ILE:HG13	2.20	0.42
2:H:872:LEU:HD22	2:H:1044:PHE:CZ	2.54	0.42
2:H:924:THR:O	2:H:928:LYS:HG3	2.19	0.42
2:H:1285:MET:HE2	2:H:1359:PHE:CB	2.47	0.42
2:H:1585:ASP:OD1	2:H:1588:GLN:NE2	2.52	0.42
2:H:2437:THR:HG22	2:H:2479:MET:SD	2.60	0.42
2:H:3437:ALA:O	2:H:3441:ILE:HG13	2.20	0.42
2:B:1585:ASP:OD1	2:B:1588:GLN:NE2	2.52	0.41
2:B:2257:ASP:OD1	2:B:2257:ASP:N	2.53	0.41
2:B:2437:THR:HG22	2:B:2479:MET:SD	2.60	0.41
2:B:3326:THR:HB	2:D:1169:ILE:HD11	2.02	0.41
2:B:4684:PHE:CB	2:B:4735:ARG:HH21	2.29	0.41
2:D:492:LEU:HD11	2:D:516:ILE:CG2	2.50	0.41
2:D:2007:SER:HB3	2:D:3495:HIS:CD2	2.55	0.41
2:D:2346:ILE:HG22	2:D:2348:GLU:HG3	2.02	0.41
2:D:3050:GLY:HA3	2:D:3130:GLU:O	2.20	0.41
2:D:4085:GLN:O	2:D:4089:GLN:HG3	2.19	0.41
2:D:4758:ILE:HD12	2:F:4749:ILE:CD1	2.50	0.41
2:F:665:ILE:HD13	2:F:741:VAL:HG13	2.02	0.41
2:F:2037:GLU:HA	2:F:2089:MET:CE	2.50	0.41
2:F:2346:ILE:HG22	2:F:2348:GLU:HG3	2.02	0.41
2:F:2450:LEU:HB3	2:F:2464:ILE:HD13	2.01	0.41
2:F:2969:LEU:HD12	2:F:3034:LEU:HD22	2.02	0.41
2:F:3326:THR:HB	2:H:1169:ILE:HD11	2.02	0.41
2:H:665:ILE:HD13	2:H:741:VAL:HG13	2.02	0.41
2:H:2487:LEU:O	2:H:2491:VAL:HG23	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:2969:LEU:HD12	2:H:3034:LEU:HD22	2.02	0.41
2:H:3063:ALA:HB1	2:H:3139:TYR:OH	2.19	0.41
2:H:3635:MET:HE1	2:H:3716:ASN:ND2	2.34	0.41
2:H:4789:TYR:CZ	2:H:4852:LYS:HG2	2.55	0.41
2:B:783:ALA:CB	2:B:1528:PRO:HA	2.50	0.41
2:B:2188:ASN:HD21	2:B:2191:GLU:HG3	1.86	0.41
2:B:2498:CYS:C	2:B:2501:PRO:HD2	2.45	0.41
2:B:2969:LEU:HD12	2:B:3034:LEU:HD22	2.02	0.41
2:B:4508:GLY:HA3	2:B:4512:THR:HB	2.01	0.41
2:D:733:LEU:HD23	2:D:733:LEU:HA	1.92	0.41
2:D:1159:MET:HB2	2:D:1178:PHE:HB2	2.02	0.41
2:F:289:ILE:HD12	7:F:5306:CL:CL	2.57	0.41
2:F:366:TYR:HA	2:F:382:LYS:O	2.21	0.41
2:F:869:ARG:HG3	2:F:927:LEU:CD1	2.50	0.41
2:F:885:ILE:HG12	2:F:959:MET:CE	2.38	0.41
2:F:2204:PHE:CE2	2:F:2207:SER:HA	2.55	0.41
2:F:2321:LEU:HD23	2:F:2321:LEU:HA	1.91	0.41
2:F:2865:VAL:HG13	2:F:2869:PHE:CE2	2.54	0.41
2:F:2909:VAL:HG22	2:F:2909:VAL:O	2.19	0.41
2:F:3136:LEU:O	2:F:3140:LEU:HG	2.20	0.41
2:F:3849:ILE:HG22	2:F:3853:LYS:HE3	2.03	0.41
2:F:4675:VAL:O	2:F:4679:ASN:ND2	2.44	0.41
2:F:4826:THR:OG1	2:F:4829:GLU:HG3	2.20	0.41
2:H:109:ILE:CG2	2:H:152:ILE:HD11	2.42	0.41
2:H:1332:ILE:HG21	2:H:1345:VAL:HG21	2.01	0.41
2:H:3527:MET:HE3	2:H:3614:ARG:HE	1.84	0.41
2:H:4501:ALA:HB1	2:H:4543:VAL:HG21	2.03	0.41
2:B:421:PHE:HA	2:B:434:LEU:HG	2.02	0.41
2:B:1988:ARG:HG3	2:B:1995:GLU:CD	2.44	0.41
2:B:2450:LEU:HB3	2:B:2464:ILE:HD13	2.01	0.41
2:B:2882:LYS:O	2:B:2882:LYS:HG3	2.20	0.41
2:B:3094:THR:HG22	2:B:3096:GLU:HG2	2.00	0.41
2:B:4085:GLN:O	2:B:4089:GLN:HG3	2.19	0.41
2:B:4688:SER:HB2	2:B:4695:ASP:H	1.85	0.41
2:D:396:THR:C	2:D:397:LEU:HD23	2.46	0.41
2:D:421:PHE:CZ	2:D:492:LEU:HD21	2.50	0.41
2:D:764:GLY:HA2	2:D:1370:THR:O	2.20	0.41
2:D:3370:ILE:O	2:D:3370:ILE:HG22	2.21	0.41
2:F:783:ALA:CB	2:F:1528:PRO:HA	2.50	0.41
2:F:889:TRP:O	2:F:959:MET:HE1	2.21	0.41
2:F:2007:SER:HB3	2:F:3495:HIS:CD2	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:2188:ASN:HD21	2:F:2191:GLU:HG3	1.86	0.41
2:F:2487:LEU:O	2:F:2491:VAL:HG23	2.20	0.41
2:F:2996:LEU:HB2	2:F:2997:PRO:HD3	2.02	0.41
2:F:4789:TYR:CZ	2:F:4852:LYS:HG2	2.55	0.41
2:H:869:ARG:HG3	2:H:927:LEU:CD1	2.50	0.41
2:H:1290:LEU:HD23	2:H:1290:LEU:HA	1.89	0.41
2:H:3206:PRO:HA	2:H:3270:TYR:OH	2.20	0.41
2:H:4595:MET:O	2:H:4599:ILE:HG13	2.20	0.41
2:H:4700:ASP:OD1	2:H:4701:MET:N	2.52	0.41
2:B:728:VAL:O	2:B:733:LEU:HD11	2.19	0.41
2:B:2204:PHE:CE2	2:B:2207:SER:HA	2.55	0.41
2:B:2212:GLU:O	2:B:2216:VAL:HG23	2.21	0.41
2:B:2545:ASP:O	2:B:2548:SER:OG	2.35	0.41
2:B:3136:LEU:O	2:B:3140:LEU:HG	2.20	0.41
2:B:4501:ALA:HB1	2:B:4543:VAL:HG21	2.03	0.41
2:D:1332:ILE:HD12	2:D:1332:ILE:HA	1.97	0.41
2:D:1688:LEU:HD23	2:D:1688:LEU:HA	1.91	0.41
2:D:3849:ILE:HG22	2:D:3853:LYS:HE3	2.03	0.41
2:F:2021:LEU:HD13	2:F:2065:MET:SD	2.60	0.41
2:F:2515:TYR:OH	2:F:2532:GLU:OE1	2.29	0.41
2:F:2866:ASP:OD1	2:F:2929:ILE:HG12	2.19	0.41
2:F:2869:PHE:HB2	2:F:2929:ILE:CG2	2.51	0.41
2:H:1088:TYR:HD2	2:H:1151:MET:HG2	1.85	0.41
2:H:1159:MET:HB2	2:H:1178:PHE:HB2	2.02	0.41
2:H:1347:TRP:HB3	2:H:1443:VAL:HB	2.01	0.41
2:H:2204:PHE:CE2	2:H:2207:SER:HA	2.55	0.41
2:H:2866:ASP:OD1	2:H:2929:ILE:HG12	2.19	0.41
2:H:3670:ASP:OD2	2:H:3673:PHE:HB2	2.21	0.41
1:A:91:VAL:HG21	2:B:1672:PHE:CE1	2.56	0.41
2:B:151:THR:OG1	2:B:174:VAL:HB	2.20	0.41
2:B:289:ILE:HD12	7:B:5306:CL:CL	2.57	0.41
2:B:998:ARG:HB2	2:B:1019:LEU:HD21	2.02	0.41
2:B:1005:TYR:HA	2:B:1016:ASN:O	2.21	0.41
2:B:1347:TRP:HB3	2:B:1443:VAL:HB	2.01	0.41
2:B:2037:GLU:HA	2:B:2089:MET:CE	2.50	0.41
2:B:3670:ASP:OD2	2:B:3673:PHE:HB2	2.21	0.41
2:D:889:TRP:O	2:D:959:MET:HE1	2.21	0.41
2:D:1823:VAL:O	2:D:1827:VAL:HG23	2.21	0.41
2:D:2035:GLU:O	2:D:2039:LEU:HG	2.21	0.41
2:D:3326:THR:HB	2:F:1169:ILE:HD11	2.02	0.41
2:F:581:ILE:HD12	2:F:618:LEU:CD1	2.50	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:1005:TYR:HA	2:F:1016:ASN:O	2.21	0.41
2:F:1285:MET:HE2	2:F:1359:PHE:CB	2.47	0.41
2:F:1878:LEU:HB2	2:F:3504:THR:HG21	2.03	0.41
2:F:2437:THR:HG22	2:F:2479:MET:SD	2.60	0.41
2:F:3932:PHE:O	2:F:3936:MET:HG2	2.21	0.41
2:H:421:PHE:HA	2:H:434:LEU:HG	2.02	0.41
2:H:935:CYS:HB3	2:H:1051:ILE:HG22	2.01	0.41
2:H:1688:LEU:HD23	2:H:1688:LEU:HA	1.91	0.41
2:H:2037:GLU:HA	2:H:2089:MET:CE	2.50	0.41
2:H:3190:MET:O	2:H:3193:ILE:HG22	2.20	0.41
2:H:3370:ILE:HG22	2:H:3370:ILE:O	2.21	0.41
2:B:76:VAL:O	2:B:80:GLN:HG3	2.20	0.41
2:B:396:THR:C	2:B:397:LEU:HD23	2.46	0.41
2:B:1169:ILE:HD11	2:H:3326:THR:HB	2.02	0.41
1:C:67:MET:HE2	1:C:104:LEU:HB2	2.03	0.41
2:D:870:ASP:O	2:D:874:GLU:HG3	2.21	0.41
2:D:891:PHE:HD1	2:D:905:LEU:HB2	1.86	0.41
2:D:1831:ASP:O	2:D:1834:VAL:HG22	2.20	0.41
2:D:2052:VAL:HG13	2:D:2056:HIS:CD2	2.56	0.41
2:D:2427:ALA:HB3	2:D:2428:PRO:HD3	2.03	0.41
2:D:2927:LEU:HD13	2:D:2998:ILE:CD1	2.51	0.41
2:D:3206:PRO:HA	2:D:3270:TYR:OH	2.20	0.41
2:D:4413:ILE:HG23	2:D:4466:LEU:HD11	2.02	0.41
2:F:396:THR:C	2:F:397:LEU:HD23	2.46	0.41
2:F:492:LEU:HD11	2:F:516:ILE:CG2	2.50	0.41
2:F:665:ILE:CD1	2:F:741:VAL:HG22	2.49	0.41
2:F:2498:CYS:C	2:F:2501:PRO:HD2	2.45	0.41
2:F:3050:GLY:HA3	2:F:3130:GLU:O	2.20	0.41
2:F:3370:ILE:HG22	2:F:3370:ILE:O	2.21	0.41
2:F:4501:ALA:HB1	2:F:4543:VAL:HG21	2.03	0.41
2:H:783:ALA:CB	2:H:1528:PRO:HA	2.50	0.41
2:H:1642:LEU:HD21	2:H:1903:LEU:HA	2.03	0.41
2:H:1988:ARG:HG3	2:H:1995:GLU:CD	2.44	0.41
2:H:2882:LYS:HG3	2:H:2882:LYS:O	2.20	0.41
2:H:4539:TRP:CD1	2:H:4539:TRP:H	2.38	0.41
2:H:4688:SER:HB2	2:H:4695:ASP:H	1.85	0.41
2:B:935:CYS:HA	2:B:1053:PRO:HA	2.03	0.41
2:B:1340:PRO:HB2	2:B:1396:VAL:CG1	2.49	0.41
2:B:3018:GLY:HA2	2:B:3077:VAL:HG12	2.03	0.41
2:B:3664:TYR:CE1	2:B:3668:LYS:HE3	2.56	0.41
2:B:4595:MET:O	2:B:4599:ILE:HG13	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:76:VAL:O	2:D:80:GLN:HG3	2.20	0.41
2:D:151:THR:OG1	2:D:174:VAL:HB	2.20	0.41
2:D:289:ILE:HD12	7:D:5306:CL:CL	2.57	0.41
2:D:2212:GLU:O	2:D:2216:VAL:HG23	2.21	0.41
2:D:2487:LEU:O	2:D:2491:VAL:HG23	2.20	0.41
2:D:2822:ILE:CD1	2:D:2865:VAL:HG22	2.40	0.41
2:D:3133:LEU:HD12	2:D:3133:LEU:HA	1.79	0.41
2:D:3437:ALA:O	2:D:3441:ILE:HG13	2.20	0.41
2:D:3664:TYR:CE1	2:D:3668:LYS:HE3	2.56	0.41
2:D:3890:SER:O	2:D:3894:VAL:HG23	2.21	0.41
2:F:2361:ALA:HB3	2:F:2362:PRO:HD3	2.03	0.41
2:F:3787:GLN:HG2	2:F:3851:LEU:HD22	2.03	0.41
2:F:3890:SER:O	2:F:3894:VAL:HG23	2.21	0.41
2:F:4420:TYR:CD1	2:F:4453:PHE:HB3	2.56	0.41
1:G:67:MET:HE2	1:G:104:LEU:HB2	2.03	0.41
2:H:492:LEU:HD11	2:H:516:ILE:CG2	2.50	0.41
2:H:1003:TRP:HA	2:H:1014:LYS:HB3	2.02	0.41
2:H:1340:PRO:HB2	2:H:1396:VAL:CG1	2.49	0.41
2:H:3018:GLY:HA2	2:H:3077:VAL:HG12	2.03	0.41
2:H:4468:ALA:O	2:H:4472:ILE:HG13	2.20	0.41
1:A:67:MET:HE2	1:A:104:LEU:HB2	2.03	0.41
2:B:1823:VAL:O	2:B:1827:VAL:HG23	2.21	0.41
2:B:2427:ALA:HB3	2:B:2428:PRO:HD3	2.03	0.41
2:B:2866:ASP:OD1	2:B:2929:ILE:HG12	2.19	0.41
2:B:3890:SER:O	2:B:3894:VAL:HG23	2.21	0.41
2:B:4020:ILE:HG23	2:B:4034:PHE:HE1	1.86	0.41
2:B:4826:THR:OG1	2:B:4829:GLU:HG3	2.20	0.41
1:C:91:VAL:HG21	2:D:1672:PHE:CE1	2.56	0.41
2:D:251:TYR:OH	2:D:395:LEU:HD21	2.20	0.41
2:D:366:TYR:HA	2:D:382:LYS:O	2.21	0.41
2:D:2188:ASN:HD21	2:D:2191:GLU:HG3	1.86	0.41
2:D:2361:ALA:HB3	2:D:2362:PRO:HD3	2.03	0.41
2:D:3932:PHE:O	2:D:3936:MET:HG2	2.21	0.41
2:D:4020:ILE:HG23	2:D:4034:PHE:HE1	1.86	0.41
2:D:4420:TYR:CD1	2:D:4453:PHE:HB3	2.56	0.41
2:D:4761:ALA:O	2:D:4765:LEU:HG	2.21	0.41
1:E:67:MET:HE2	1:E:104:LEU:HB2	2.03	0.41
2:F:422:VAL:O	2:F:422:VAL:HG22	2.21	0.41
2:F:1841:GLN:HG3	2:F:1844:ARG:NH2	2.36	0.41
2:F:2882:LYS:HG3	2:F:2882:LYS:O	2.20	0.41
2:F:3206:PRO:HA	2:F:3270:TYR:OH	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:4413:ILE:HG23	2:F:4466:LEU:HD11	2.02	0.41
2:H:666:ILE:CD1	2:H:736:LEU:HB3	2.51	0.41
2:H:2007:SER:HB3	2:H:3495:HIS:CD2	2.55	0.41
2:H:2019:ALA:O	2:H:2023:GLN:HG3	2.21	0.41
2:H:2212:GLU:O	2:H:2216:VAL:HG23	2.21	0.41
2:H:2257:ASP:OD1	2:H:2257:ASP:N	2.53	0.41
2:H:2869:PHE:HB2	2:H:2929:ILE:CG2	2.51	0.41
2:H:2996:LEU:HB2	2:H:2997:PRO:HD3	2.02	0.41
2:H:3664:TYR:CE1	2:H:3668:LYS:HE3	2.56	0.41
2:H:3787:GLN:HG2	2:H:3851:LEU:HD22	2.03	0.41
2:B:295:LEU:HG	2:B:303:LEU:HD11	2.03	0.41
2:B:366:TYR:HA	2:B:382:LYS:O	2.21	0.41
2:B:492:LEU:HD11	2:B:516:ILE:CG2	2.50	0.41
2:B:581:ILE:HD12	2:B:618:LEU:CD1	2.50	0.41
2:B:859:VAL:CG2	2:B:932:ALA:HB2	2.47	0.41
2:B:870:ASP:O	2:B:874:GLU:HG3	2.21	0.41
2:B:2065:MET:HB3	2:B:2065:MET:HE3	1.81	0.41
2:B:2927:LEU:HD13	2:B:2998:ILE:CD1	2.51	0.41
2:B:4761:ALA:O	2:B:4765:LEU:HG	2.21	0.41
2:D:422:VAL:HG22	2:D:422:VAL:O	2.21	0.41
2:D:935:CYS:HA	2:D:1053:PRO:HA	2.03	0.41
2:D:1003:TRP:HA	2:D:1014:LYS:HB3	2.02	0.41
2:D:1025:LEU:HD12	2:D:1026:ASP:H	1.86	0.41
2:D:1088:TYR:HD2	2:D:1151:MET:HG2	1.85	0.41
2:D:1631:ILE:HD12	2:D:1827:VAL:HG21	2.02	0.41
2:D:1878:LEU:HB2	2:D:3504:THR:HG21	2.03	0.41
2:D:2204:PHE:CE2	2:D:2207:SER:HA	2.55	0.41
2:D:2348:GLU:OE2	2:D:2405:THR:HG22	2.21	0.41
2:D:2882:LYS:HG3	2:D:2882:LYS:O	2.20	0.41
2:D:3382:LEU:HB3	2:D:3444:VAL:HG11	2.03	0.41
2:D:3898:LEU:CD1	2:D:4006:ALA:HB2	2.45	0.41
2:D:4595:MET:O	2:D:4599:ILE:HG13	2.20	0.41
2:F:76:VAL:O	2:F:80:GLN:HG3	2.20	0.41
2:F:190:ASN:HD21	2:F:192:GLN:HG3	1.84	0.41
2:F:998:ARG:HB2	2:F:1019:LEU:HD21	2.02	0.41
2:F:1823:VAL:O	2:F:1827:VAL:HG23	2.21	0.41
2:F:2348:GLU:OE2	2:F:2405:THR:HG22	2.21	0.41
2:F:2555:ASP:O	2:F:2559:MET:HG3	2.21	0.41
2:F:3018:GLY:HA2	2:F:3077:VAL:HG12	2.03	0.41
2:F:3605:LYS:NZ	2:F:3605:LYS:HB3	2.36	0.41
2:F:3670:ASP:OD2	2:F:3673:PHE:HB2	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:232:GLU:CG	2:H:253:ALA:HB2	2.36	0.41
2:H:295:LEU:HG	2:H:303:LEU:HD11	2.03	0.41
2:H:422:VAL:O	2:H:422:VAL:HG22	2.21	0.41
2:H:581:ILE:HD12	2:H:618:LEU:CD1	2.50	0.41
2:H:1005:TYR:HA	2:H:1016:ASN:O	2.21	0.41
2:H:1658:ARG:HA	2:H:1658:ARG:HD3	1.96	0.41
2:H:1841:GLN:HG3	2:H:1844:ARG:NH2	2.36	0.41
2:H:2348:GLU:OE2	2:H:2405:THR:HG22	2.21	0.41
2:H:2361:ALA:HB3	2:H:2362:PRO:HD3	2.03	0.41
2:H:2427:ALA:HB3	2:H:2428:PRO:HD3	2.03	0.41
2:H:3890:SER:O	2:H:3894:VAL:HG23	2.21	0.41
2:H:3932:PHE:O	2:H:3936:MET:HG2	2.21	0.41
2:H:4761:ALA:O	2:H:4765:LEU:HG	2.21	0.41
2:H:4826:THR:OG1	2:H:4829:GLU:HG3	2.20	0.41
2:B:422:VAL:HG22	2:B:422:VAL:O	2.21	0.41
2:B:895:ARG:HB3	2:B:903:PRO:CD	2.51	0.41
2:B:1159:MET:HB2	2:B:1178:PHE:HB2	2.02	0.41
2:B:2908:LEU:HD23	2:B:2908:LEU:HA	1.93	0.41
2:B:3370:ILE:O	2:B:3370:ILE:HG22	2.21	0.41
2:B:3605:LYS:HB3	2:B:3605:LYS:NZ	2.36	0.41
2:B:4420:TYR:CD1	2:B:4453:PHE:HB3	2.56	0.41
2:B:4779:LYS:HE2	2:B:4779:LYS:HB3	1.76	0.41
2:D:2245:GLN:O	2:D:2249:LYS:HG3	2.21	0.41
2:D:2257:ASP:OD1	2:D:2257:ASP:N	2.53	0.41
2:D:4044:TRP:CZ3	2:D:4811:LEU:HD13	2.55	0.41
2:F:69:VAL:HG11	2:F:112:ARG:HH21	1.86	0.41
2:F:514:LYS:HE3	2:F:514:LYS:HB2	1.92	0.41
2:F:870:ASP:O	2:F:874:GLU:HG3	2.21	0.41
2:F:1088:TYR:HD2	2:F:1151:MET:HG2	1.85	0.41
2:F:1642:LEU:HD21	2:F:1903:LEU:HA	2.03	0.41
2:F:2427:ALA:HB3	2:F:2428:PRO:HD3	2.03	0.41
2:F:3680:LEU:HD22	2:F:3719:PHE:CZ	2.55	0.41
2:F:3951:LEU:HD23	2:F:3951:LEU:HA	1.93	0.41
2:F:4496:ARG:O	2:F:4499:GLU:HG2	2.21	0.41
2:H:366:TYR:HA	2:H:382:LYS:O	2.21	0.41
2:H:396:THR:C	2:H:397:LEU:HD23	2.46	0.41
2:H:733:LEU:HD23	2:H:733:LEU:HA	1.92	0.41
2:H:871:ARG:NH2	2:H:874:GLU:OE2	2.54	0.41
2:H:953:LEU:HD12	2:H:965:PRO:O	2.21	0.41
2:H:1025:LEU:HD12	2:H:1026:ASP:H	1.86	0.41
2:H:1831:ASP:O	2:H:1834:VAL:HG22	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:2017:LEU:HD21	2:H:2060:MET:HE1	2.02	0.41
2:B:53:THR:HB	2:B:271:ILE:HD13	2.04	0.40
2:B:348:TYR:CE2	2:B:399:ARG:HB2	2.57	0.40
2:B:443:LEU:HD23	2:B:443:LEU:HA	1.95	0.40
2:B:666:ILE:CD1	2:B:736:LEU:HB3	2.51	0.40
2:B:891:PHE:HD1	2:B:905:LEU:HB2	1.86	0.40
2:B:1088:TYR:HD2	2:B:1151:MET:HG2	1.85	0.40
2:B:2555:ASP:O	2:B:2559:MET:HG3	2.21	0.40
2:B:4675:VAL:O	2:B:4679:ASN:ND2	2.44	0.40
2:D:348:TYR:CE2	2:D:399:ARG:HB2	2.57	0.40
2:D:891:PHE:HB3	2:D:959:MET:CB	2.51	0.40
2:D:1005:TYR:HA	2:D:1016:ASN:O	2.21	0.40
2:D:1658:ARG:HA	2:D:1658:ARG:HD3	1.96	0.40
2:D:1841:GLN:HG3	2:D:1844:ARG:NH2	2.36	0.40
2:D:2019:ALA:O	2:D:2023:GLN:HG3	2.21	0.40
2:D:2555:ASP:O	2:D:2559:MET:HG3	2.21	0.40
2:D:2905:LEU:HB3	2:D:2923:MET:HE3	2.03	0.40
2:D:2969:LEU:HD12	2:D:3034:LEU:HD22	2.02	0.40
2:D:2996:LEU:HB2	2:D:2997:PRO:HD3	2.02	0.40
2:D:3605:LYS:HB3	2:D:3605:LYS:NZ	2.36	0.40
2:D:4424:GLU:HA	2:D:4450:MET:O	2.22	0.40
2:D:4501:ALA:HB1	2:D:4543:VAL:HG21	2.03	0.40
2:F:295:LEU:HG	2:F:303:LEU:HD11	2.03	0.40
2:F:1831:ASP:O	2:F:1834:VAL:HG22	2.20	0.40
2:F:1878:LEU:HD12	2:F:3504:THR:CG2	2.51	0.40
2:F:2019:ALA:O	2:F:2023:GLN:HG3	2.21	0.40
2:F:4421:LYS:HD3	2:F:4456:GLN:HB3	2.03	0.40
2:F:4424:GLU:HA	2:F:4450:MET:O	2.22	0.40
2:H:870:ASP:O	2:H:874:GLU:HG3	2.21	0.40
2:H:1631:ILE:HD12	2:H:1827:VAL:HG21	2.02	0.40
2:H:1878:LEU:HB2	2:H:3504:THR:HG21	2.03	0.40
2:H:1878:LEU:HD12	2:H:3504:THR:CG2	2.51	0.40
2:H:3605:LYS:NZ	2:H:3605:LYS:HB3	2.36	0.40
2:H:3849:ILE:HG22	2:H:3853:LYS:HE3	2.03	0.40
2:H:4421:LYS:HD3	2:H:4456:GLN:HB3	2.03	0.40
2:H:4496:ARG:O	2:H:4499:GLU:HG2	2.21	0.40
2:B:871:ARG:NH2	2:B:874:GLU:OE2	2.54	0.40
2:B:1831:ASP:O	2:B:1834:VAL:HG22	2.20	0.40
2:B:2869:PHE:HB2	2:B:2929:ILE:CG2	2.51	0.40
2:B:2905:LEU:HB3	2:B:2923:MET:HE3	2.03	0.40
2:B:2905:LEU:HD12	2:B:2930:LEU:CD1	2.51	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3523:ILE:CG1	2:B:3527:MET:HE1	2.50	0.40
2:B:4424:GLU:HA	2:B:4450:MET:O	2.22	0.40
2:D:53:THR:HB	2:D:271:ILE:HD13	2.04	0.40
2:D:549:LEU:HD23	2:D:549:LEU:HA	1.91	0.40
2:D:728:VAL:HG21	2:D:762:VAL:HG12	2.03	0.40
2:D:783:ALA:CB	2:D:1528:PRO:HA	2.50	0.40
2:D:871:ARG:NH2	2:D:874:GLU:OE2	2.54	0.40
2:D:953:LEU:HD12	2:D:965:PRO:O	2.21	0.40
2:D:2905:LEU:HD12	2:D:2930:LEU:CD1	2.51	0.40
2:D:4496:ARG:O	2:D:4499:GLU:HG2	2.21	0.40
2:D:4539:TRP:CD1	2:D:4539:TRP:H	2.38	0.40
2:F:422:VAL:HG23	2:F:491:ARG:CG	2.44	0.40
2:F:666:ILE:CD1	2:F:736:LEU:HB3	2.51	0.40
2:F:707:ASP:OD2	2:F:723:ARG:NH1	2.55	0.40
2:F:733:LEU:HD23	2:F:733:LEU:HA	1.92	0.40
2:F:891:PHE:HD1	2:F:905:LEU:HB2	1.86	0.40
2:F:2905:LEU:HD12	2:F:2930:LEU:CD1	2.51	0.40
1:G:91:VAL:HG21	2:H:1672:PHE:CE1	2.56	0.40
2:H:728:VAL:HG21	2:H:762:VAL:HG12	2.03	0.40
2:H:1292:MET:HE3	2:H:1292:MET:HB3	1.95	0.40
2:H:2035:GLU:O	2:H:2039:LEU:HG	2.21	0.40
2:H:2188:ASN:HD21	2:H:2191:GLU:HG3	1.86	0.40
2:H:4413:ILE:HG23	2:H:4466:LEU:HD11	2.02	0.40
2:B:2299:PRO:HG2	2:B:2311:ALA:O	2.21	0.40
2:B:2515:TYR:OH	2:B:2532:GLU:OE1	2.29	0.40
2:B:3382:LEU:HB3	2:B:3444:VAL:HG11	2.03	0.40
2:D:295:LEU:HG	2:D:303:LEU:HD11	2.03	0.40
2:D:2812:LYS:O	2:D:2817:LYS:HE3	2.22	0.40
2:D:2869:PHE:HB2	2:D:2929:ILE:CG2	2.51	0.40
2:D:3018:GLY:HA2	2:D:3077:VAL:HG12	2.03	0.40
2:D:3221:LYS:HE2	2:D:3221:LYS:HB3	1.94	0.40
2:D:3670:ASP:OD2	2:D:3673:PHE:HB2	2.21	0.40
2:D:3787:GLN:HG2	2:D:3851:LEU:HD22	2.03	0.40
2:D:4421:LYS:HD3	2:D:4456:GLN:HB3	2.03	0.40
2:F:871:ARG:NH2	2:F:874:GLU:OE2	2.54	0.40
2:F:890:THR:N	2:F:900:ARG:O	2.41	0.40
2:F:2052:VAL:HG13	2:F:2056:HIS:CD2	2.56	0.40
2:F:2245:GLN:O	2:F:2249:LYS:HG3	2.21	0.40
2:F:2291:ILE:HG21	2:F:2363:MET:SD	2.62	0.40
2:F:3253:PHE:HD1	2:F:3253:PHE:HA	1.81	0.40
2:H:859:VAL:CG2	2:H:932:ALA:HB2	2.47	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:872:LEU:O	2:H:876:ILE:HG12	2.22	0.40
2:H:889:TRP:O	2:H:959:MET:HE1	2.21	0.40
2:H:1823:VAL:O	2:H:1827:VAL:HG23	2.21	0.40
2:H:3934:LYS:HE2	2:H:3934:LYS:HB3	1.90	0.40
2:H:4420:TYR:CD1	2:H:4453:PHE:HB3	2.56	0.40
2:B:531:ASN:HD22	2:B:534:ASN:H	1.69	0.40
2:B:907:GLU:HG2	2:B:963:TYR:HD1	1.87	0.40
2:B:1025:LEU:HD12	2:B:1026:ASP:H	1.86	0.40
2:B:1642:LEU:HD21	2:B:1903:LEU:HA	2.03	0.40
2:B:2019:ALA:O	2:B:2023:GLN:HG3	2.21	0.40
2:D:251:TYR:CD2	2:D:366:TYR:HB3	2.57	0.40
2:D:1001:GLN:O	2:D:1014:LYS:NZ	2.45	0.40
2:D:2291:ILE:HG21	2:D:2363:MET:SD	2.62	0.40
2:D:3204:ALA:HB1	2:D:3208:LEU:CD1	2.46	0.40
2:D:3326:THR:O	2:D:3326:THR:OG1	2.35	0.40
2:D:4561:ALA:HB1	2:D:4566:LEU:O	2.22	0.40
2:F:251:TYR:CD2	2:F:366:TYR:HB3	2.57	0.40
1:G:12:ASP:OD1	1:G:14:ARG:N	2.48	0.40
2:H:76:VAL:O	2:H:80:GLN:HG3	2.20	0.40
2:H:421:PHE:CZ	2:H:492:LEU:HD21	2.50	0.40
2:H:1285:MET:HB3	2:H:1285:MET:HE3	1.89	0.40
2:H:4561:ALA:HB1	2:H:4566:LEU:O	2.22	0.40
2:B:874:GLU:HG2	2:B:908:PHE:CE2	2.57	0.40
2:B:875:ASN:O	2:B:879:LEU:HG	2.22	0.40
2:B:953:LEU:HD12	2:B:965:PRO:O	2.21	0.40
2:B:2017:LEU:HD21	2:B:2060:MET:HE1	2.02	0.40
2:B:2035:GLU:O	2:B:2039:LEU:HG	2.21	0.40
2:B:2052:VAL:HG13	2:B:2056:HIS:CD2	2.56	0.40
2:B:2348:GLU:OE2	2:B:2405:THR:HG22	2.21	0.40
2:B:2361:ALA:HB3	2:B:2362:PRO:HD3	2.03	0.40
2:B:2822:ILE:CD1	2:B:2865:VAL:HG22	2.40	0.40
2:B:3849:ILE:HG22	2:B:3853:LYS:HE3	2.03	0.40
2:B:4421:LYS:HD3	2:B:4456:GLN:HB3	2.03	0.40
2:D:875:ASN:O	2:D:879:LEU:HG	2.22	0.40
2:D:1285:MET:HE2	2:D:1359:PHE:CB	2.47	0.40
2:D:1878:LEU:HD12	2:D:3504:THR:CG2	2.51	0.40
2:D:4683:LYS:H	2:D:4683:LYS:HG2	1.70	0.40
2:F:348:TYR:CE2	2:F:399:ARG:HB2	2.57	0.40
2:F:679:HIS:O	2:F:781:PHE:HA	2.22	0.40
2:F:907:GLU:HG2	2:F:963:TYR:HD1	1.87	0.40
2:F:953:LEU:HD12	2:F:965:PRO:O	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:3664:TYR:CE1	2:F:3668:LYS:HE3	2.56	0.40
2:F:4020:ILE:HG23	2:F:4034:PHE:HE1	1.86	0.40
2:F:4561:ALA:HB1	2:F:4566:LEU:O	2.22	0.40
2:F:4761:ALA:O	2:F:4765:LEU:HG	2.21	0.40
2:H:69:VAL:HG11	2:H:112:ARG:HH21	1.86	0.40
2:H:549:LEU:HD23	2:H:549:LEU:HA	1.91	0.40
2:H:2052:VAL:HG13	2:H:2056:HIS:CD2	2.56	0.40
2:H:2245:GLN:O	2:H:2249:LYS:HG3	2.21	0.40
2:H:2291:ILE:HG21	2:H:2363:MET:SD	2.62	0.40
2:H:2555:ASP:O	2:H:2559:MET:HG3	2.21	0.40

There are no symmetry-related clashes.

5.3 Torsion angles ⓘ

5.3.1 Protein backbone ⓘ

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	106/110 (96%)	100 (94%)	6 (6%)	0	100	100
1	C	106/110 (96%)	100 (94%)	6 (6%)	0	100	100
1	E	106/110 (96%)	100 (94%)	6 (6%)	0	100	100
1	G	106/110 (96%)	100 (94%)	6 (6%)	0	100	100
2	B	4034/4859 (83%)	3934 (98%)	100 (2%)	0	100	100
2	D	4034/4859 (83%)	3934 (98%)	100 (2%)	0	100	100
2	F	4034/4859 (83%)	3934 (98%)	100 (2%)	0	100	100
2	H	4034/4859 (83%)	3934 (98%)	100 (2%)	0	100	100
All	All	16560/19876 (83%)	16136 (97%)	424 (3%)	0	100	100

There are no Ramachandran outliers to report.

5.3.2 Protein sidechains ⓘ

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	86/90 (96%)	84 (98%)	2 (2%)	44	68
1	C	86/90 (96%)	84 (98%)	2 (2%)	44	68
1	E	86/90 (96%)	84 (98%)	2 (2%)	44	68
1	G	86/90 (96%)	84 (98%)	2 (2%)	44	68
2	B	3370/4253 (79%)	3341 (99%)	29 (1%)	70	79
2	D	3370/4253 (79%)	3341 (99%)	29 (1%)	70	79
2	F	3370/4253 (79%)	3341 (99%)	29 (1%)	70	79
2	H	3370/4253 (79%)	3341 (99%)	29 (1%)	70	79
All	All	13824/17372 (80%)	13700 (99%)	124 (1%)	68	79

All (124) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	26	HIS
1	A	80	ASP
2	B	67	ASN
2	B	176	VAL
2	B	184	LEU
2	B	201	LEU
2	B	588	LEU
2	B	606	LEU
2	B	825	LYS
2	B	1044	PHE
2	B	1223	GLU
2	B	1495	ILE
2	B	1531	MET
2	B	1610	LEU
2	B	1802	SER
2	B	2062	VAL
2	B	2301	MET
2	B	2861	LEU
2	B	3019	ASP

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Mol	Chain	Res	Type
2	B	3545	ASP
2	B	3581	SER
2	B	3651	ASN
2	B	3738	PHE
2	B	3772	PHE
2	B	3783	ASP
2	B	3826	ASP
2	B	4017	LEU
2	B	4701	MET
2	B	4787	ASN
2	B	4814	LEU
2	B	4817	LEU
1	C	26	HIS
1	C	80	ASP
2	D	67	ASN
2	D	176	VAL
2	D	184	LEU
2	D	201	LEU
2	D	588	LEU
2	D	606	LEU
2	D	825	LYS
2	D	1044	PHE
2	D	1223	GLU
2	D	1495	ILE
2	D	1531	MET
2	D	1610	LEU
2	D	1802	SER
2	D	2062	VAL
2	D	2301	MET
2	D	2861	LEU
2	D	3019	ASP
2	D	3545	ASP
2	D	3581	SER
2	D	3651	ASN
2	D	3738	PHE
2	D	3772	PHE
2	D	3783	ASP
2	D	3826	ASP
2	D	4017	LEU
2	D	4701	MET
2	D	4787	ASN
2	D	4814	LEU

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Mol	Chain	Res	Type
2	D	4817	LEU
1	E	26	HIS
1	E	80	ASP
2	F	67	ASN
2	F	176	VAL
2	F	184	LEU
2	F	201	LEU
2	F	588	LEU
2	F	606	LEU
2	F	825	LYS
2	F	1044	PHE
2	F	1223	GLU
2	F	1495	ILE
2	F	1531	MET
2	F	1610	LEU
2	F	1802	SER
2	F	2062	VAL
2	F	2301	MET
2	F	2861	LEU
2	F	3019	ASP
2	F	3545	ASP
2	F	3581	SER
2	F	3651	ASN
2	F	3738	PHE
2	F	3772	PHE
2	F	3783	ASP
2	F	3826	ASP
2	F	4017	LEU
2	F	4701	MET
2	F	4787	ASN
2	F	4814	LEU
2	F	4817	LEU
1	G	26	HIS
1	G	80	ASP
2	H	67	ASN
2	H	176	VAL
2	H	184	LEU
2	H	201	LEU
2	H	588	LEU
2	H	606	LEU
2	H	825	LYS
2	H	1044	PHE

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Mol	Chain	Res	Type
2	H	1223	GLU
2	H	1495	ILE
2	H	1531	MET
2	H	1610	LEU
2	H	1802	SER
2	H	2062	VAL
2	H	2301	MET
2	H	2861	LEU
2	H	3019	ASP
2	H	3545	ASP
2	H	3581	SER
2	H	3651	ASN
2	H	3738	PHE
2	H	3772	PHE
2	H	3783	ASP
2	H	3826	ASP
2	H	4017	LEU
2	H	4701	MET
2	H	4787	ASN
2	H	4814	LEU
2	H	4817	LEU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (279) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	26	HIS
1	A	54	GLN
1	A	66	GLN
2	B	45	ASN
2	B	72	GLN
2	B	107	HIS
2	B	153	HIS
2	B	183	HIS
2	B	190	ASN
2	B	192	GLN
2	B	199	GLN
2	B	306	GLN
2	B	387	GLN
2	B	398	GLN
2	B	401	GLN
2	B	413	ASN
2	B	474	ASN

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Mol	Chain	Res	Type
2	B	493	ASN
2	B	531	ASN
2	B	537	GLN
2	B	718	HIS
2	B	760	GLN
2	B	858	GLN
2	B	875	ASN
2	B	877	HIS
2	B	883	ASN
2	B	941	ASN
2	B	961	ASN
2	B	1009	GLN
2	B	1219	GLN
2	B	1230	ASN
2	B	1246	ASN
2	B	1273	HIS
2	B	1436	GLN
2	B	1485	GLN
2	B	1530	GLN
2	B	1535	HIS
2	B	1560	HIS
2	B	1680	GLN
2	B	1682	GLN
2	B	1721	GLN
2	B	1838	GLN
2	B	1850	GLN
2	B	2147	ASN
2	B	2148	ASN
2	B	2172	GLN
2	B	2445	GLN
2	B	2481	GLN
2	B	2911	HIS
2	B	2987	ASN
2	B	3039	ASN
2	B	3243	GLN
2	B	3321	ASN
2	B	3356	GLN
2	B	3410	GLN
2	B	3421	GLN
2	B	3453	HIS
2	B	3506	GLN
2	B	3690	ASN

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Mol	Chain	Res	Type
2	B	3716	ASN
2	B	3734	HIS
2	B	3766	GLN
2	B	3787	GLN
2	B	3848	GLN
2	B	4530	ASN
2	B	4686	ASN
2	B	4787	ASN
2	B	4825	HIS
2	B	4853	GLN
1	C	26	HIS
1	C	54	GLN
1	C	66	GLN
2	D	45	ASN
2	D	72	GLN
2	D	107	HIS
2	D	153	HIS
2	D	183	HIS
2	D	190	ASN
2	D	192	GLN
2	D	199	GLN
2	D	306	GLN
2	D	387	GLN
2	D	398	GLN
2	D	401	GLN
2	D	413	ASN
2	D	474	ASN
2	D	493	ASN
2	D	531	ASN
2	D	537	GLN
2	D	718	HIS
2	D	760	GLN
2	D	858	GLN
2	D	875	ASN
2	D	877	HIS
2	D	883	ASN
2	D	941	ASN
2	D	961	ASN
2	D	1009	GLN
2	D	1219	GLN
2	D	1230	ASN
2	D	1273	HIS

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Mol	Chain	Res	Type
2	D	1436	GLN
2	D	1485	GLN
2	D	1535	HIS
2	D	1560	HIS
2	D	1588	GLN
2	D	1680	GLN
2	D	1682	GLN
2	D	1721	GLN
2	D	1838	GLN
2	D	1850	GLN
2	D	2147	ASN
2	D	2148	ASN
2	D	2172	GLN
2	D	2445	GLN
2	D	2481	GLN
2	D	2911	HIS
2	D	2987	ASN
2	D	3039	ASN
2	D	3243	GLN
2	D	3321	ASN
2	D	3356	GLN
2	D	3410	GLN
2	D	3421	GLN
2	D	3453	HIS
2	D	3506	GLN
2	D	3659	GLN
2	D	3690	ASN
2	D	3734	HIS
2	D	3766	GLN
2	D	3787	GLN
2	D	3788	HIS
2	D	3848	GLN
2	D	3873	ASN
2	D	4530	ASN
2	D	4686	ASN
2	D	4787	ASN
2	D	4825	HIS
2	D	4853	GLN
1	E	26	HIS
1	E	54	GLN
1	E	66	GLN
2	F	45	ASN

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Mol	Chain	Res	Type
2	F	72	GLN
2	F	107	HIS
2	F	153	HIS
2	F	183	HIS
2	F	190	ASN
2	F	192	GLN
2	F	199	GLN
2	F	306	GLN
2	F	387	GLN
2	F	398	GLN
2	F	401	GLN
2	F	413	ASN
2	F	474	ASN
2	F	493	ASN
2	F	531	ASN
2	F	537	GLN
2	F	718	HIS
2	F	760	GLN
2	F	858	GLN
2	F	875	ASN
2	F	877	HIS
2	F	883	ASN
2	F	961	ASN
2	F	1009	GLN
2	F	1219	GLN
2	F	1230	ASN
2	F	1273	HIS
2	F	1436	GLN
2	F	1485	GLN
2	F	1535	HIS
2	F	1560	HIS
2	F	1588	GLN
2	F	1595	ASN
2	F	1680	GLN
2	F	1682	GLN
2	F	1721	GLN
2	F	1838	GLN
2	F	1850	GLN
2	F	2147	ASN
2	F	2148	ASN
2	F	2172	GLN
2	F	2445	GLN

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Mol	Chain	Res	Type
2	F	2460	GLN
2	F	2481	GLN
2	F	2911	HIS
2	F	2987	ASN
2	F	3039	ASN
2	F	3243	GLN
2	F	3321	ASN
2	F	3356	GLN
2	F	3410	GLN
2	F	3421	GLN
2	F	3453	HIS
2	F	3659	GLN
2	F	3690	ASN
2	F	3716	ASN
2	F	3734	HIS
2	F	3766	GLN
2	F	3848	GLN
2	F	3873	ASN
2	F	4530	ASN
2	F	4686	ASN
2	F	4787	ASN
2	F	4825	HIS
2	F	4853	GLN
1	G	26	HIS
1	G	54	GLN
1	G	66	GLN
2	H	24	GLN
2	H	45	ASN
2	H	72	GLN
2	H	107	HIS
2	H	153	HIS
2	H	183	HIS
2	H	190	ASN
2	H	192	GLN
2	H	199	GLN
2	H	306	GLN
2	H	387	GLN
2	H	398	GLN
2	H	401	GLN
2	H	413	ASN
2	H	474	ASN
2	H	493	ASN

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Mol	Chain	Res	Type
2	H	531	ASN
2	H	537	GLN
2	H	718	HIS
2	H	760	GLN
2	H	858	GLN
2	H	875	ASN
2	H	877	HIS
2	H	883	ASN
2	H	961	ASN
2	H	1009	GLN
2	H	1219	GLN
2	H	1230	ASN
2	H	1273	HIS
2	H	1436	GLN
2	H	1485	GLN
2	H	1530	GLN
2	H	1535	HIS
2	H	1560	HIS
2	H	1588	GLN
2	H	1680	GLN
2	H	1682	GLN
2	H	1721	GLN
2	H	1850	GLN
2	H	2147	ASN
2	H	2148	ASN
2	H	2172	GLN
2	H	2445	GLN
2	H	2481	GLN
2	H	2911	HIS
2	H	2987	ASN
2	H	3039	ASN
2	H	3243	GLN
2	H	3288	GLN
2	H	3321	ASN
2	H	3356	GLN
2	H	3410	GLN
2	H	3421	GLN
2	H	3453	HIS
2	H	3506	GLN
2	H	3659	GLN
2	H	3690	ASN
2	H	3716	ASN

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Mol	Chain	Res	Type
2	H	3734	HIS
2	H	3766	GLN
2	H	3788	HIS
2	H	3848	GLN
2	H	3873	ASN
2	H	4530	ASN
2	H	4686	ASN
2	H	4787	ASN
2	H	4825	HIS
2	H	4853	GLN

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 24 ligands modelled in this entry, 12 are monoatomic - leaving 12 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
6	CFF	B	5304	-	15,15,15	0.68	0	23,23,23	0.56	0
5	ATP	F	5305	-	32,33,33	0.31	0	48,52,52	0.68	1 (2%)
5	ATP	D	5303	-	32,33,33	0.37	0	48,52,52	0.72	0
6	CFF	D	5304	-	15,15,15	0.68	0	23,23,23	0.56	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
6	CFF	H	5304	-	15,15,15	0.68	0	23,23,23	0.56	0
5	ATP	H	5303	-	32,33,33	0.37	0	48,52,52	0.72	0
6	CFF	F	5304	-	15,15,15	0.68	0	23,23,23	0.56	0
5	ATP	D	5305	-	32,33,33	0.31	0	48,52,52	0.68	1 (2%)
5	ATP	B	5305	-	32,33,33	0.31	0	48,52,52	0.68	1 (2%)
5	ATP	F	5303	-	32,33,33	0.37	0	48,52,52	0.72	0
5	ATP	H	5305	-	32,33,33	0.31	0	48,52,52	0.68	1 (2%)
5	ATP	B	5303	-	32,33,33	0.37	0	48,52,52	0.72	0

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
6	CFF	B	5304	-	-	-	0/2/2/2
5	ATP	F	5305	-	-	6/22/38/38	0/3/3/3
5	ATP	D	5303	-	-	6/22/38/38	0/3/3/3
6	CFF	D	5304	-	-	-	0/2/2/2
6	CFF	H	5304	-	-	-	0/2/2/2
5	ATP	H	5303	-	-	6/22/38/38	0/3/3/3
6	CFF	F	5304	-	-	-	0/2/2/2
5	ATP	D	5305	-	-	6/22/38/38	0/3/3/3
5	ATP	B	5305	-	-	6/22/38/38	0/3/3/3
5	ATP	F	5303	-	-	6/22/38/38	0/3/3/3
5	ATP	H	5305	-	-	6/22/38/38	0/3/3/3
5	ATP	B	5303	-	-	6/22/38/38	0/3/3/3

There are no bond length outliers.

All (4) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	B	5305	ATP	O2'-C2'-C3'	-2.10	105.08	111.82
5	D	5305	ATP	O2'-C2'-C3'	-2.10	105.08	111.82
5	F	5305	ATP	O2'-C2'-C3'	-2.10	105.08	111.82
5	H	5305	ATP	O2'-C2'-C3'	-2.10	105.08	111.82

There are no chirality outliers.

All (48) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
5	B	5305	ATP	C5'-O5'-PA-O1A
5	B	5305	ATP	C5'-O5'-PA-O3A
5	D	5305	ATP	C5'-O5'-PA-O1A
5	D	5305	ATP	C5'-O5'-PA-O3A
5	F	5305	ATP	C5'-O5'-PA-O1A
5	F	5305	ATP	C5'-O5'-PA-O3A
5	H	5305	ATP	C5'-O5'-PA-O1A
5	H	5305	ATP	C5'-O5'-PA-O3A
5	B	5305	ATP	C3'-C4'-C5'-O5'
5	D	5305	ATP	C3'-C4'-C5'-O5'
5	F	5305	ATP	C3'-C4'-C5'-O5'
5	H	5305	ATP	C3'-C4'-C5'-O5'
5	B	5305	ATP	C4'-C5'-O5'-PA
5	D	5305	ATP	C4'-C5'-O5'-PA
5	F	5305	ATP	C4'-C5'-O5'-PA
5	H	5305	ATP	C4'-C5'-O5'-PA
5	B	5303	ATP	PB-O3A-PA-O5'
5	D	5303	ATP	PB-O3A-PA-O5'
5	F	5303	ATP	PB-O3A-PA-O5'
5	H	5303	ATP	PB-O3A-PA-O5'
5	B	5305	ATP	C5'-O5'-PA-O2A
5	D	5305	ATP	C5'-O5'-PA-O2A
5	F	5305	ATP	C5'-O5'-PA-O2A
5	H	5305	ATP	C5'-O5'-PA-O2A
5	B	5303	ATP	PB-O3A-PA-O1A
5	D	5303	ATP	PB-O3A-PA-O1A
5	F	5303	ATP	PB-O3A-PA-O1A
5	H	5303	ATP	PB-O3A-PA-O1A
5	B	5305	ATP	O4'-C4'-C5'-O5'
5	D	5305	ATP	O4'-C4'-C5'-O5'
5	F	5305	ATP	O4'-C4'-C5'-O5'
5	H	5305	ATP	O4'-C4'-C5'-O5'
5	B	5303	ATP	PG-O3B-PB-O2B
5	B	5303	ATP	PA-O3A-PB-O2B
5	D	5303	ATP	PG-O3B-PB-O2B
5	D	5303	ATP	PA-O3A-PB-O2B
5	F	5303	ATP	PG-O3B-PB-O2B
5	F	5303	ATP	PA-O3A-PB-O2B
5	H	5303	ATP	PG-O3B-PB-O2B
5	H	5303	ATP	PA-O3A-PB-O2B
5	B	5303	ATP	PA-O3A-PB-O1B
5	D	5303	ATP	PA-O3A-PB-O1B
5	F	5303	ATP	PA-O3A-PB-O1B

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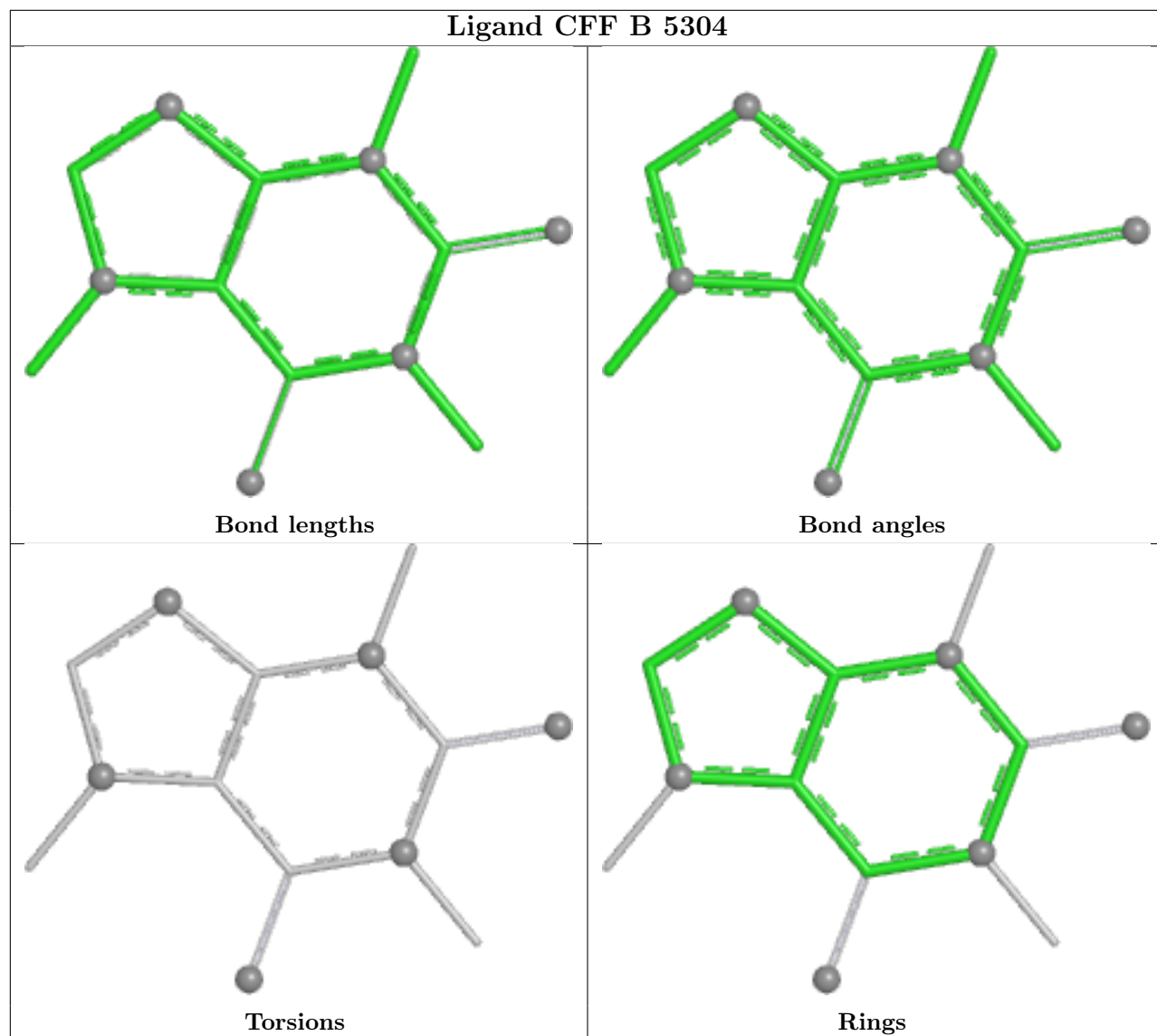
Mol	Chain	Res	Type	Atoms
5	H	5303	ATP	PA-O3A-PB-O1B
5	B	5303	ATP	C3'-C4'-C5'-O5'
5	D	5303	ATP	C3'-C4'-C5'-O5'
5	F	5303	ATP	C3'-C4'-C5'-O5'
5	H	5303	ATP	C3'-C4'-C5'-O5'

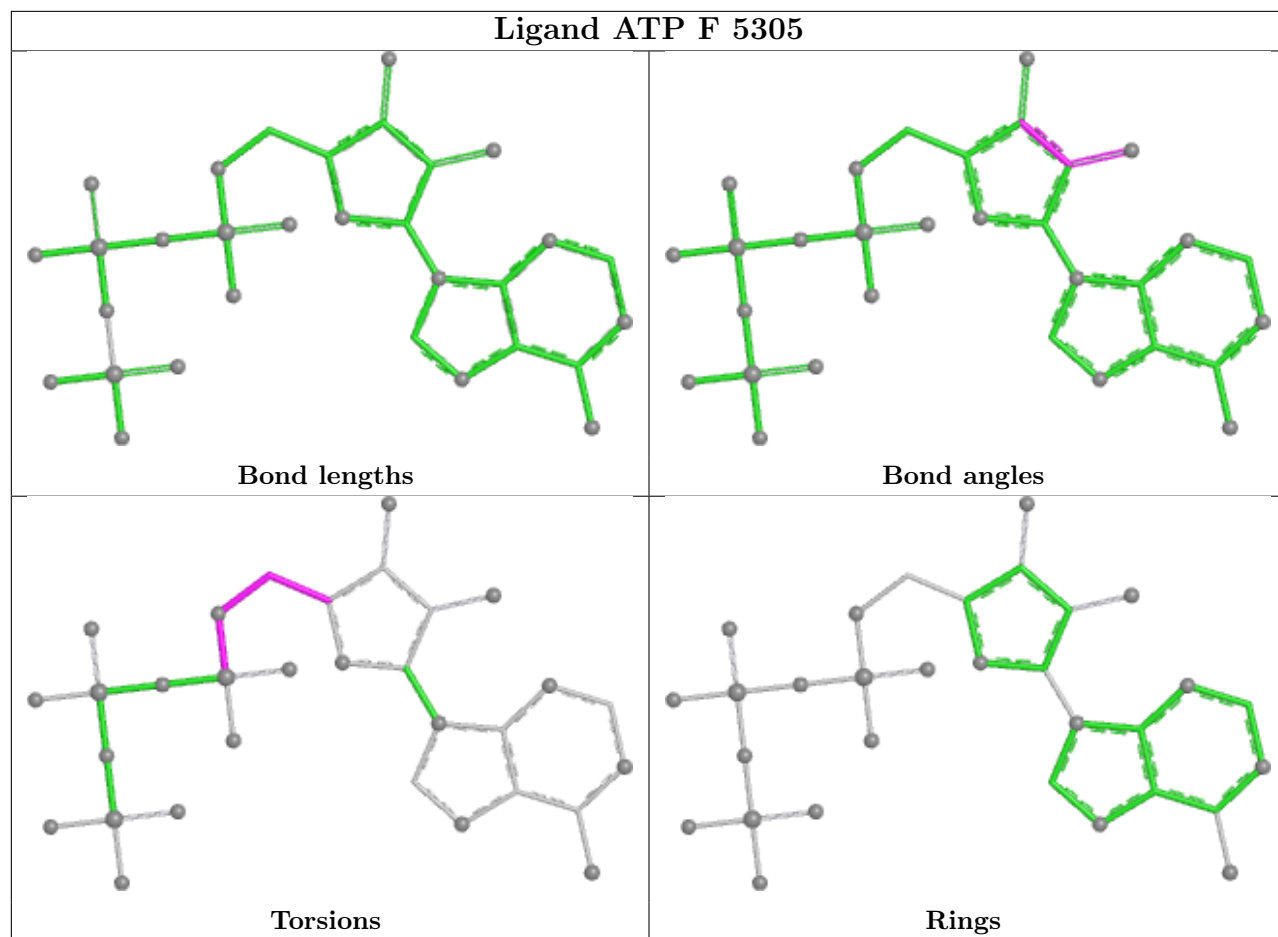
There are no ring outliers.

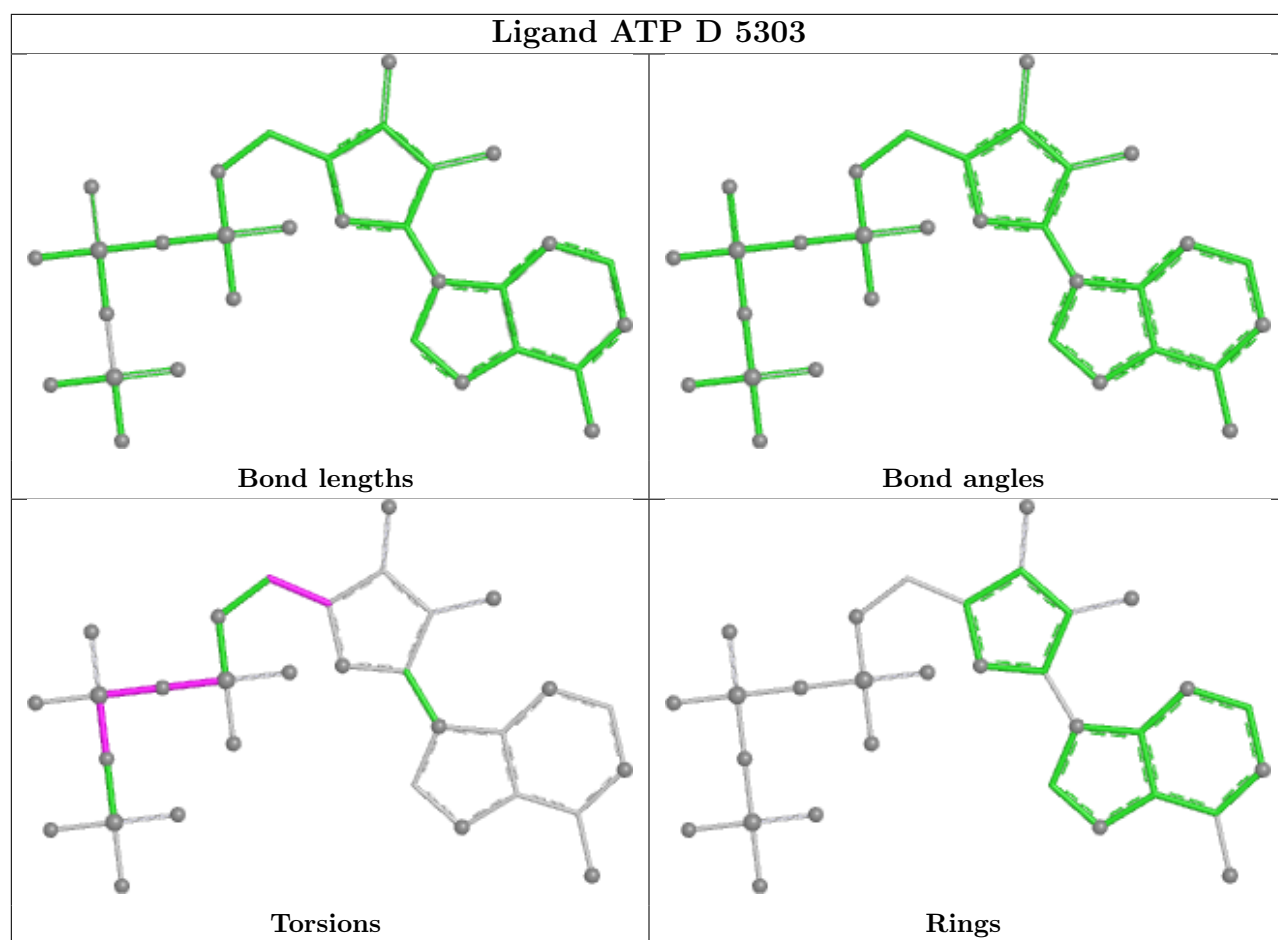
4 monomers are involved in 8 short contacts:

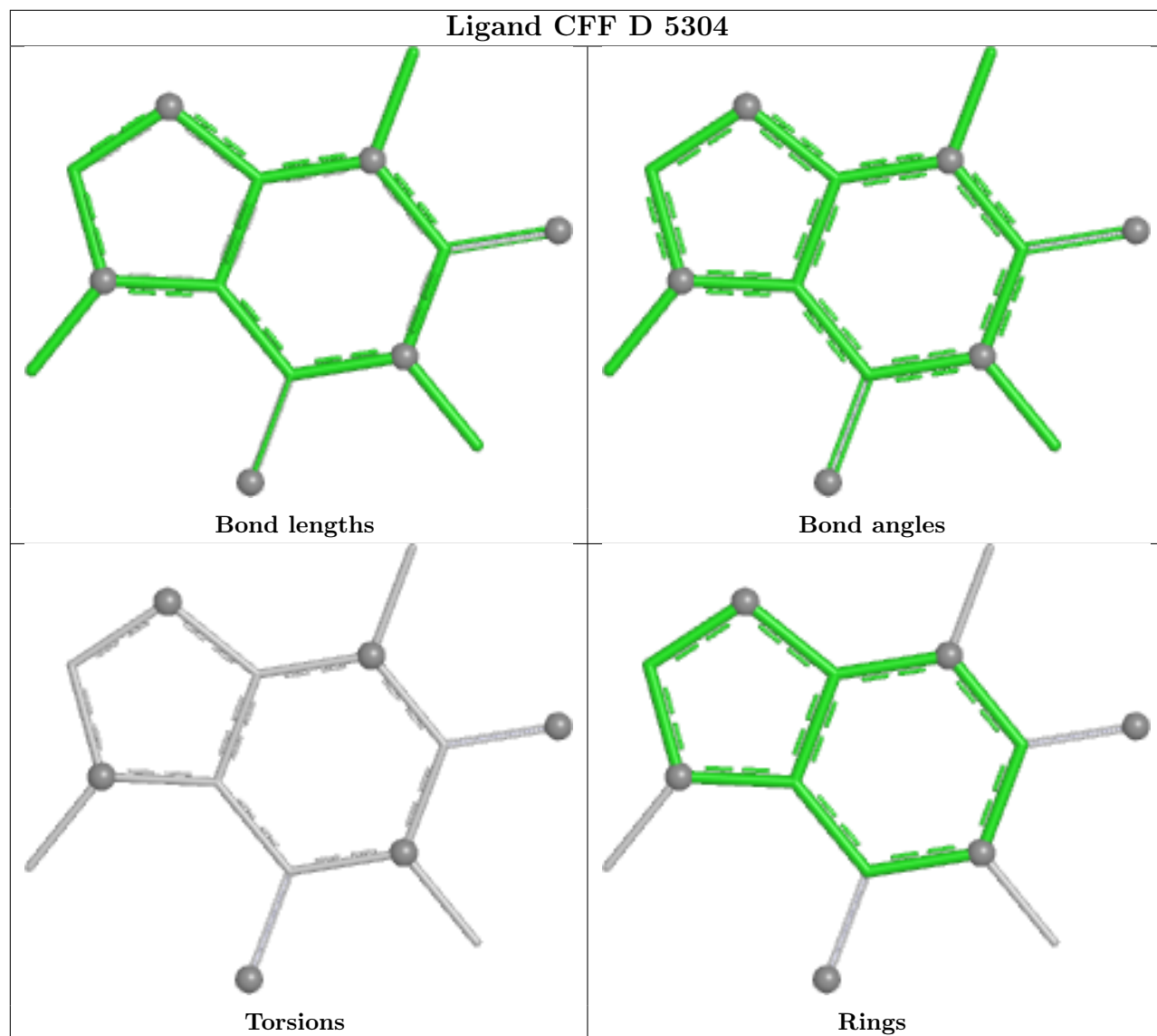
Mol	Chain	Res	Type	Clashes	Symm-Clashes
5	F	5305	ATP	2	0
5	D	5305	ATP	2	0
5	B	5305	ATP	2	0
5	H	5305	ATP	2	0

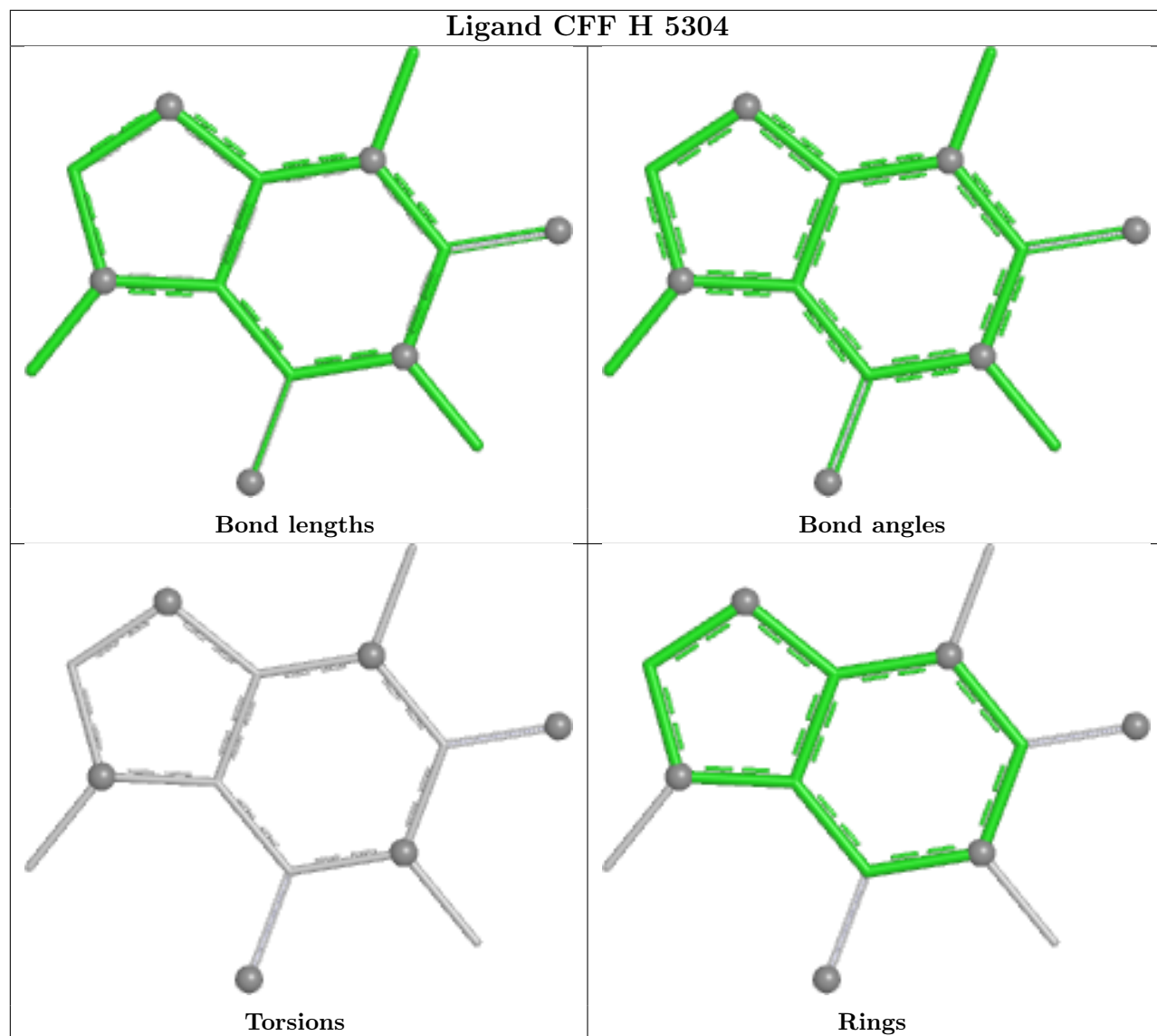
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included.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

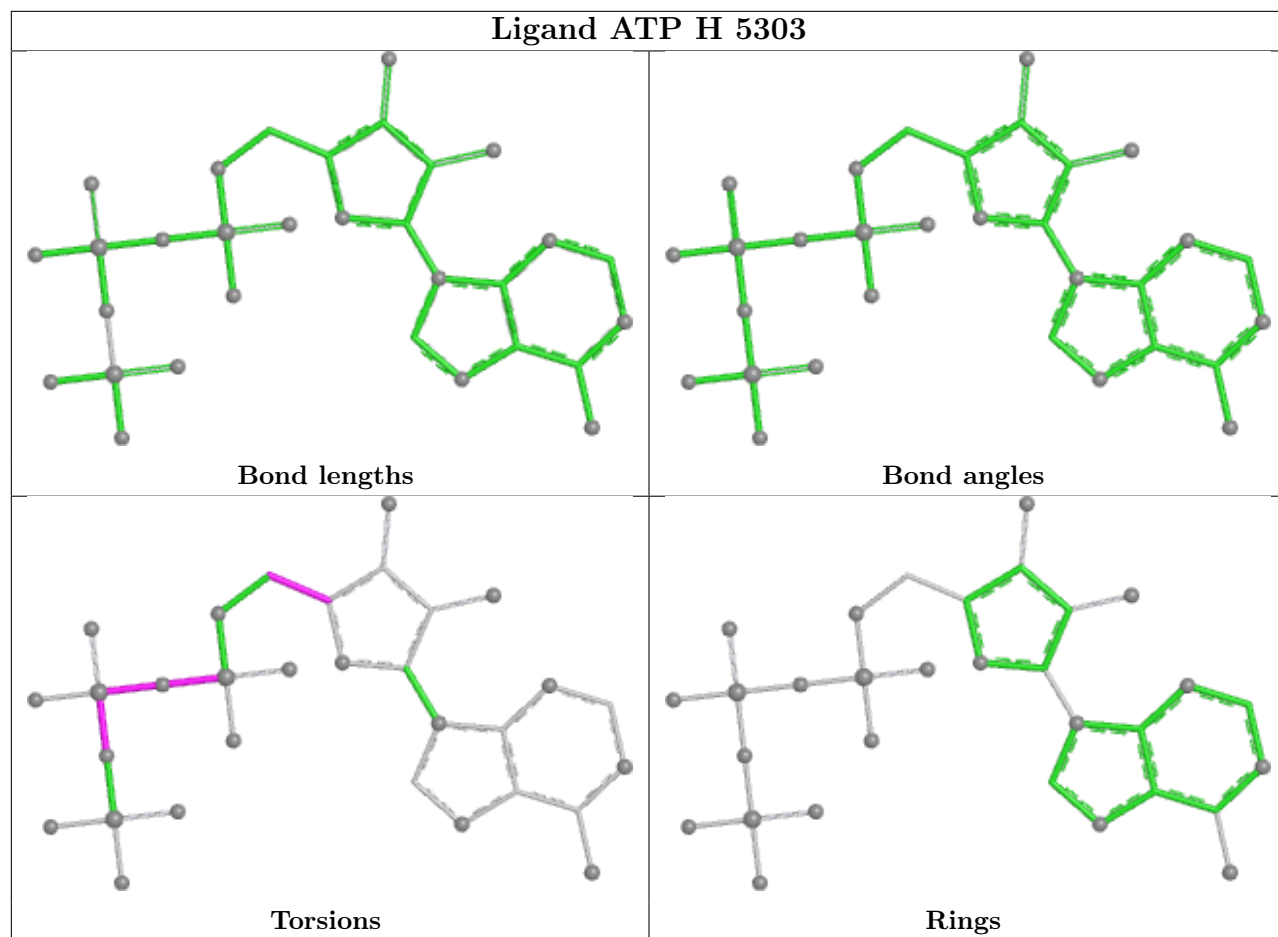


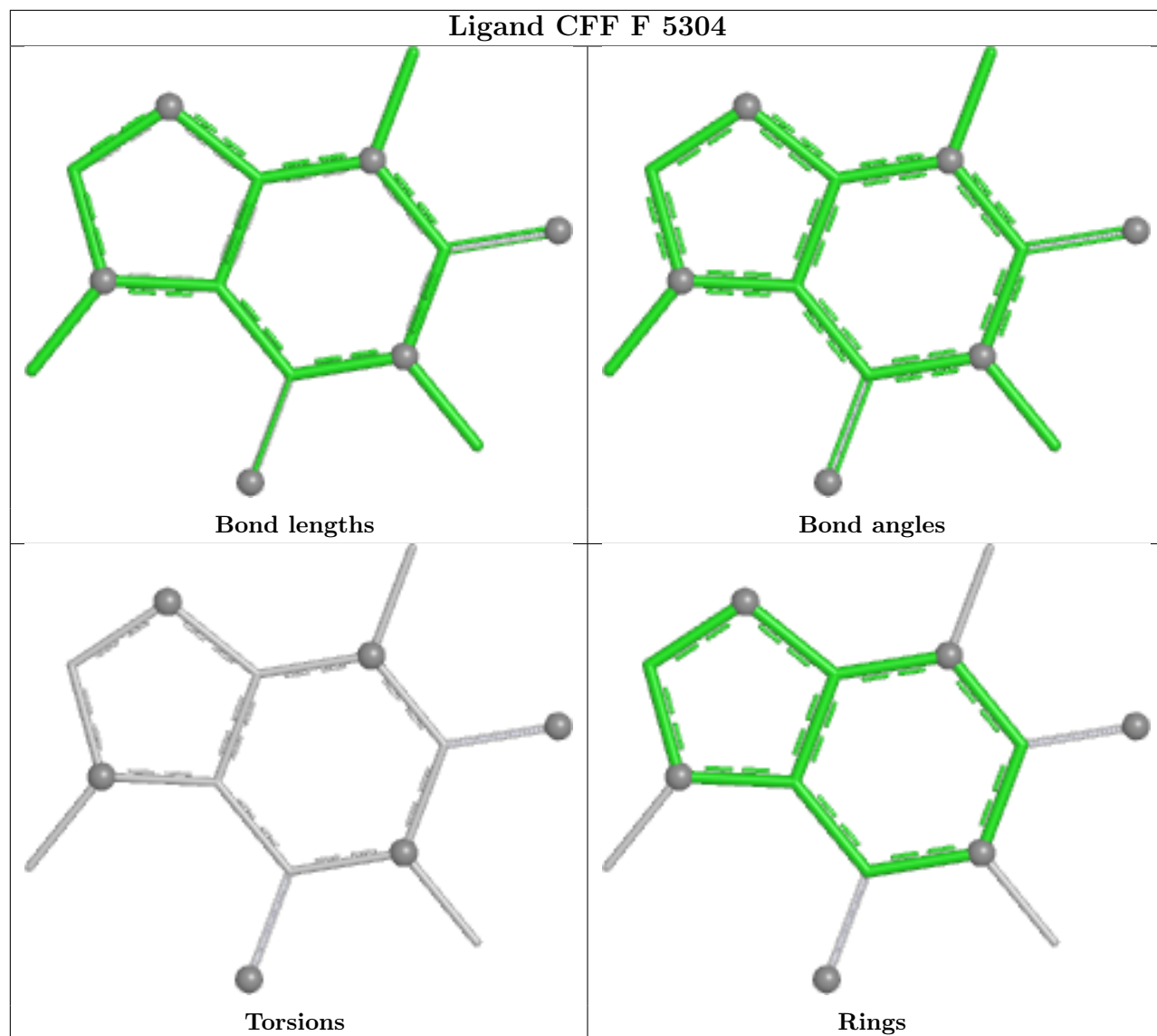


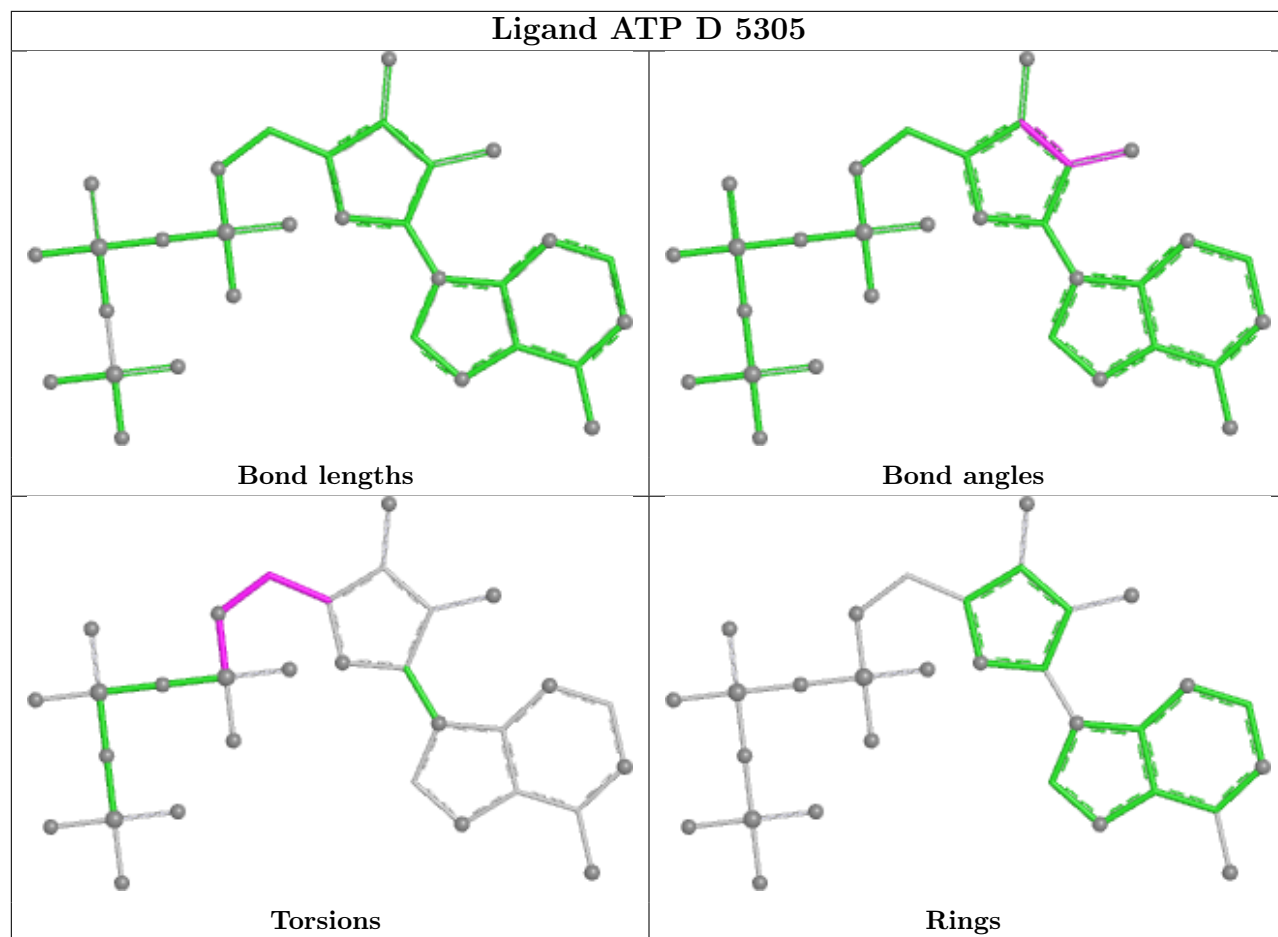


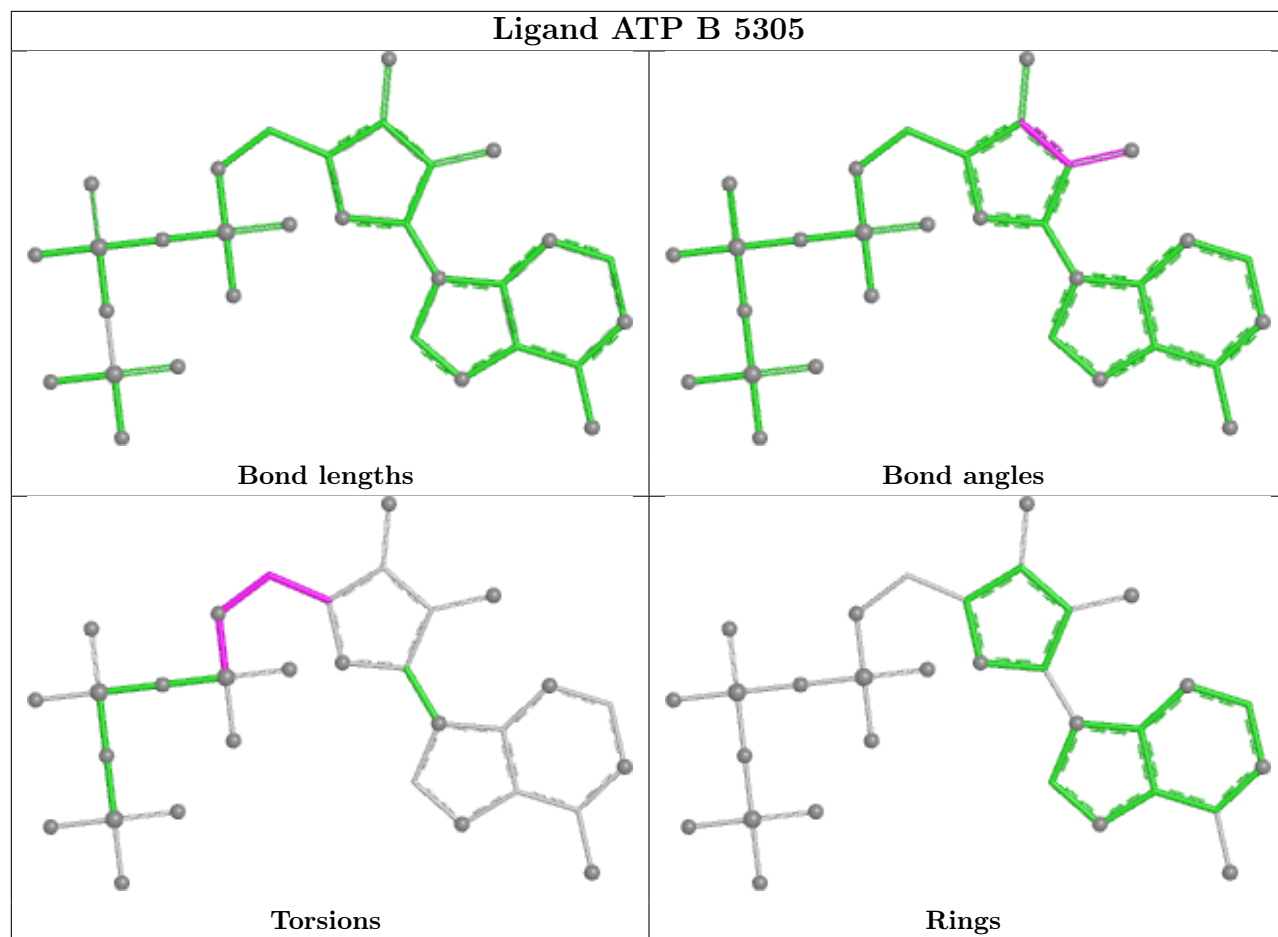


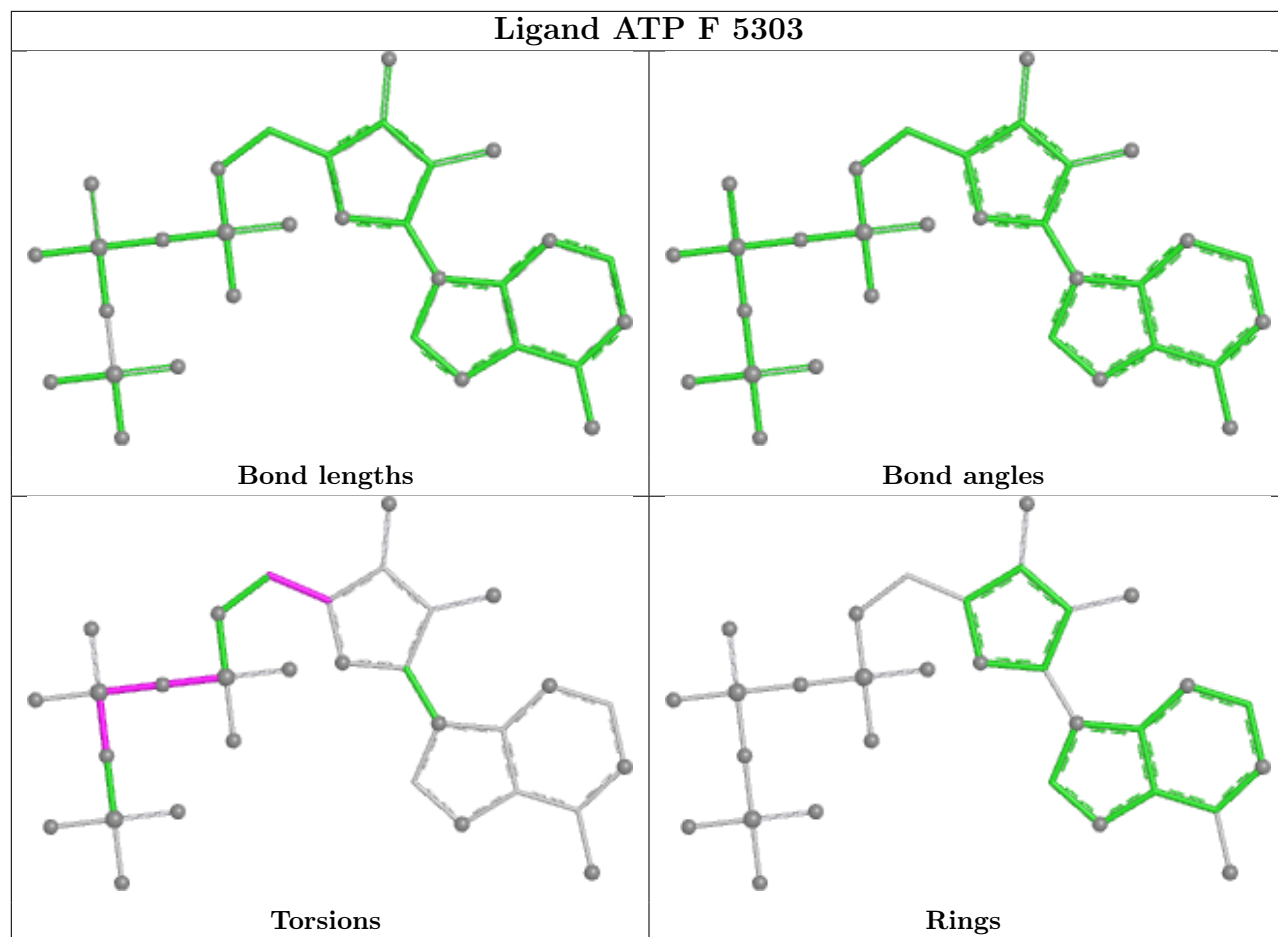


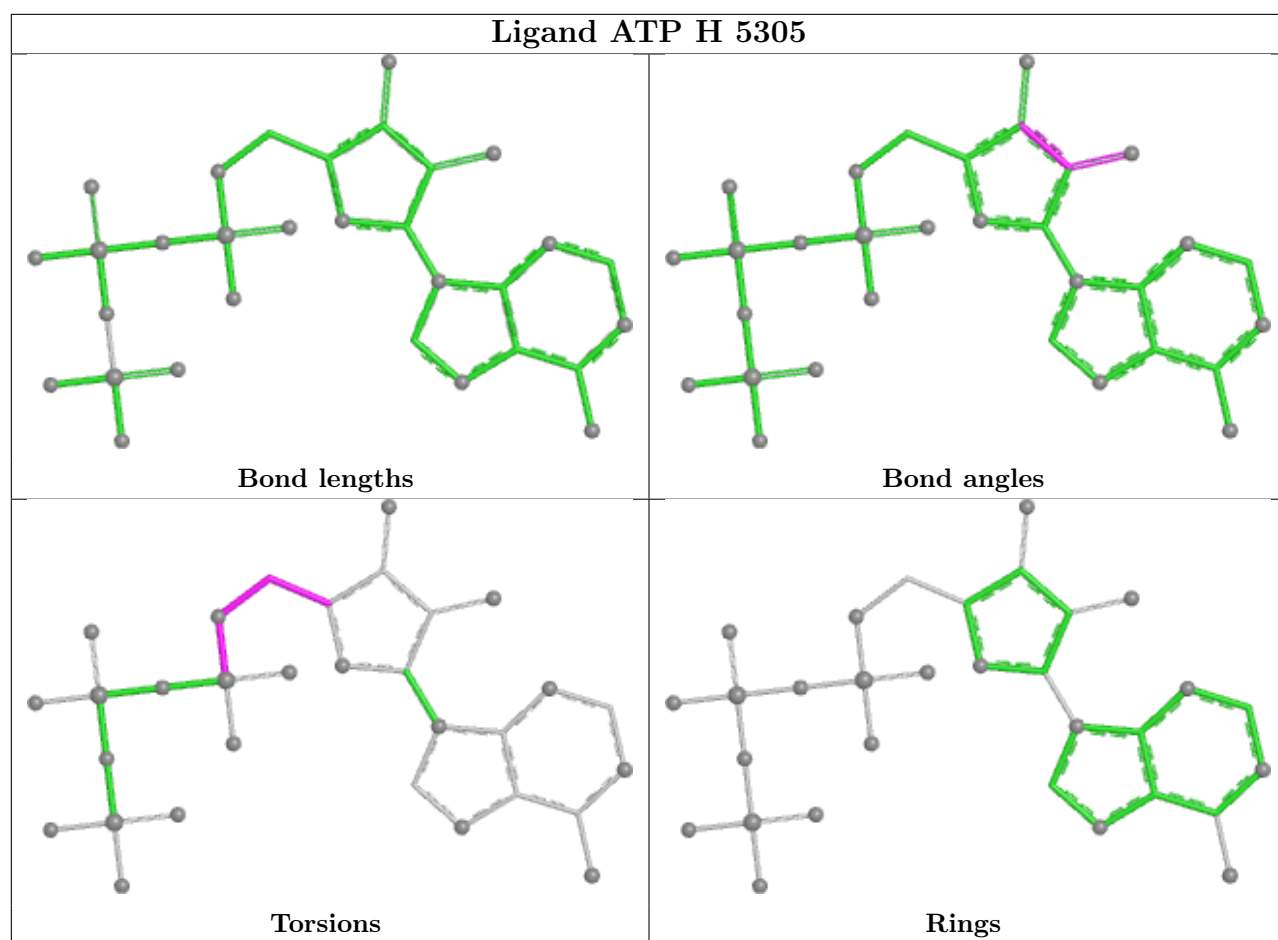


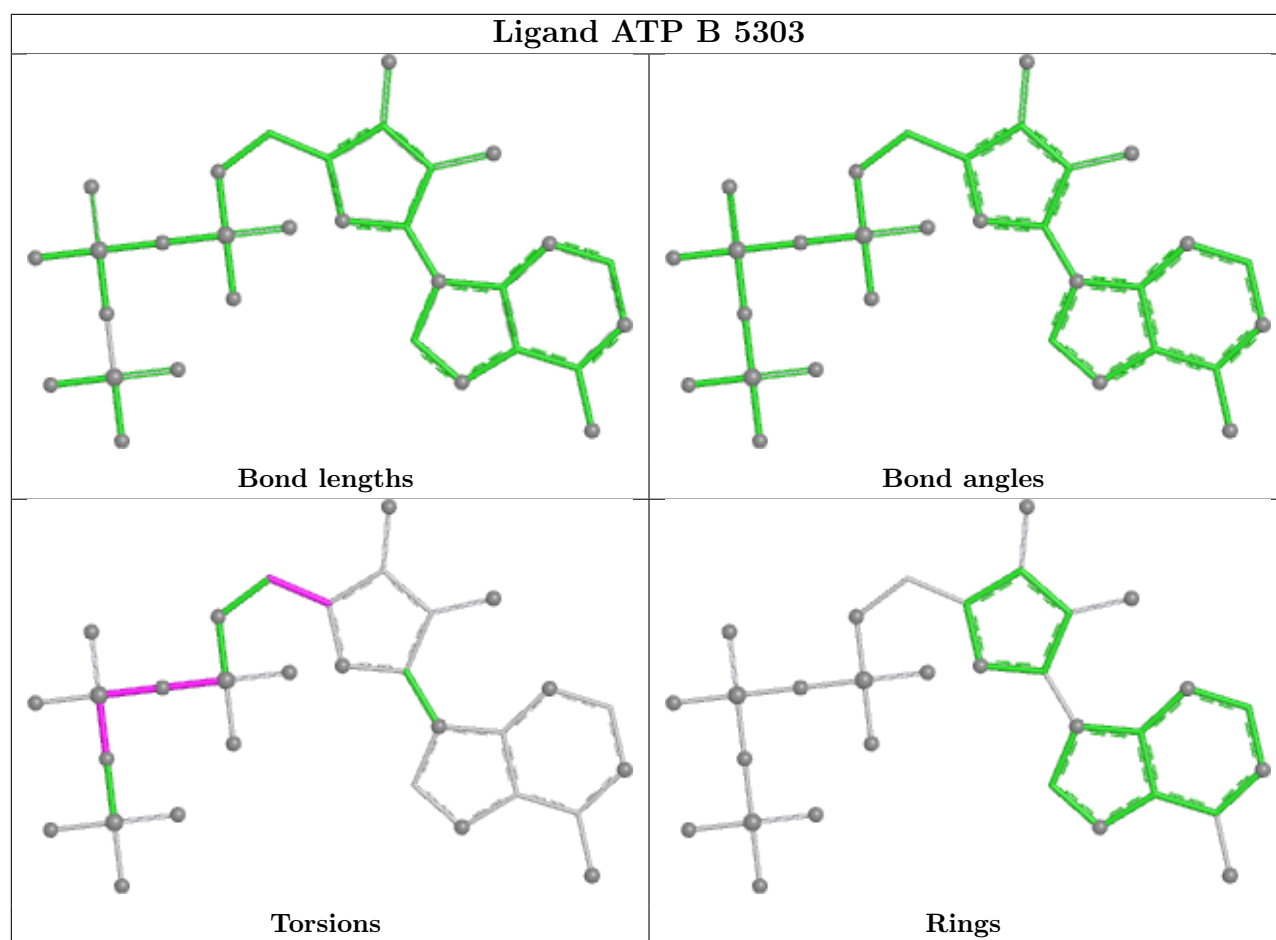












5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

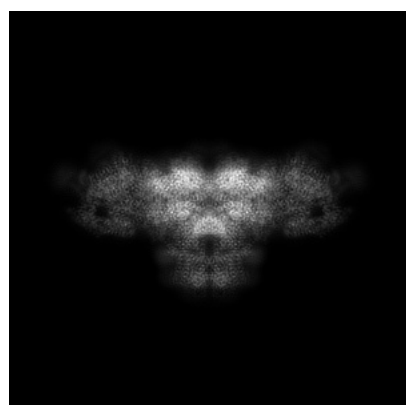
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-45117. These allow visual inspection of the internal detail of the map and identification of artifacts.

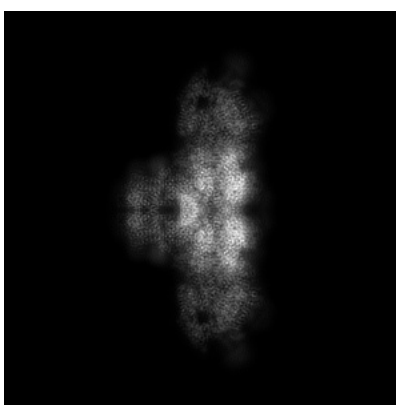
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

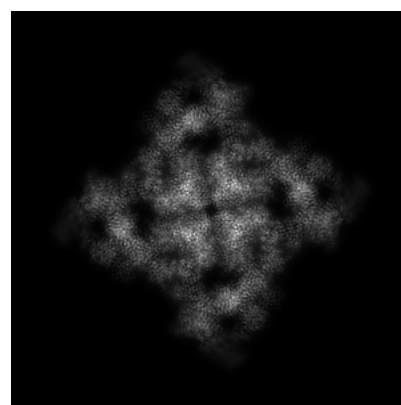
6.1.1 Primary map



X



Y

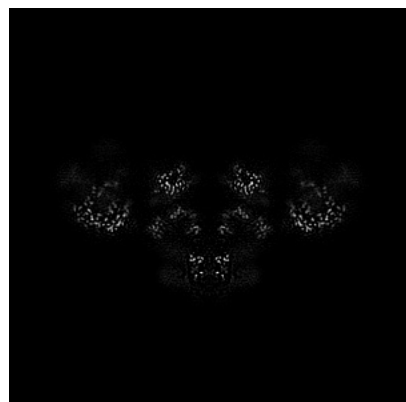


Z

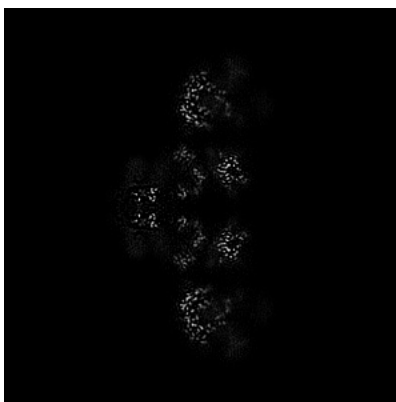
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

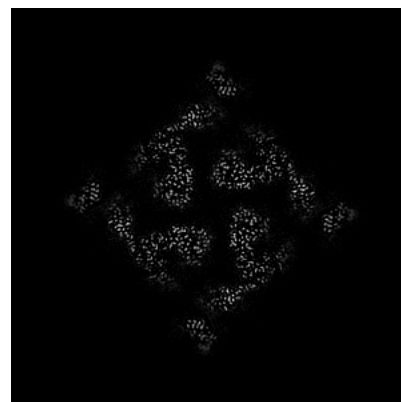
6.2.1 Primary map



X Index: 256



Y Index: 256

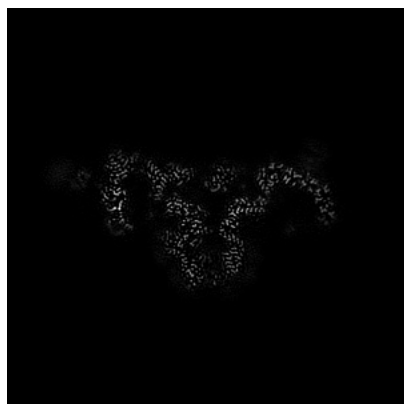


Z Index: 256

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

6.3 Largest variance slices [i](#)

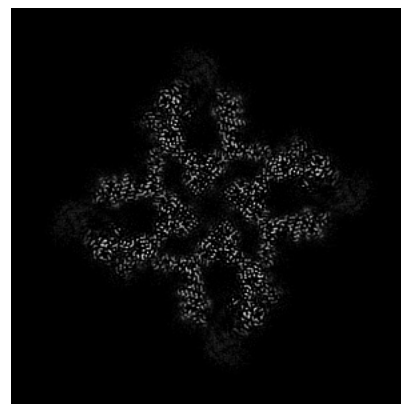
6.3.1 Primary map



X Index: 284



Y Index: 228

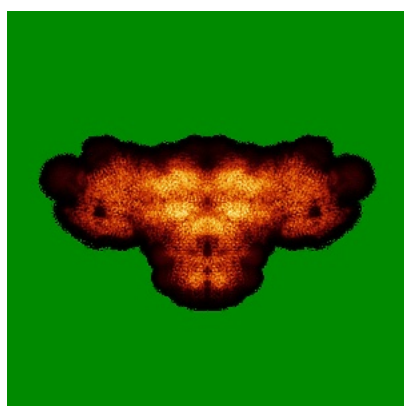


Z Index: 289

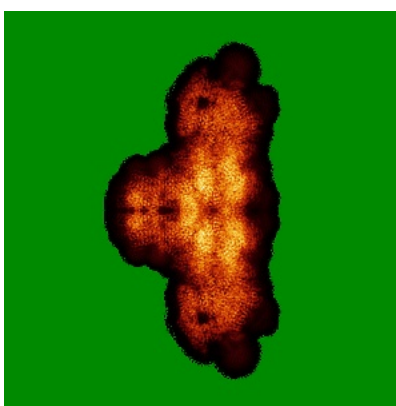
The images above show the largest variance slices of the map in three orthogonal directions.

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

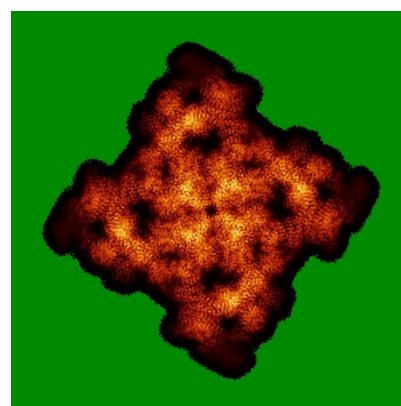
6.4.1 Primary map



X



Y

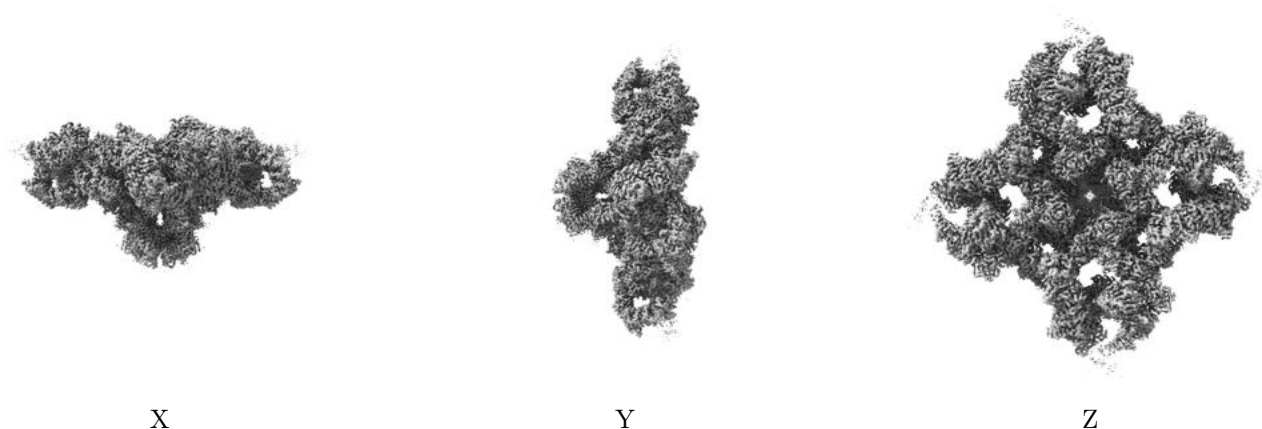


Z

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

6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.068. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

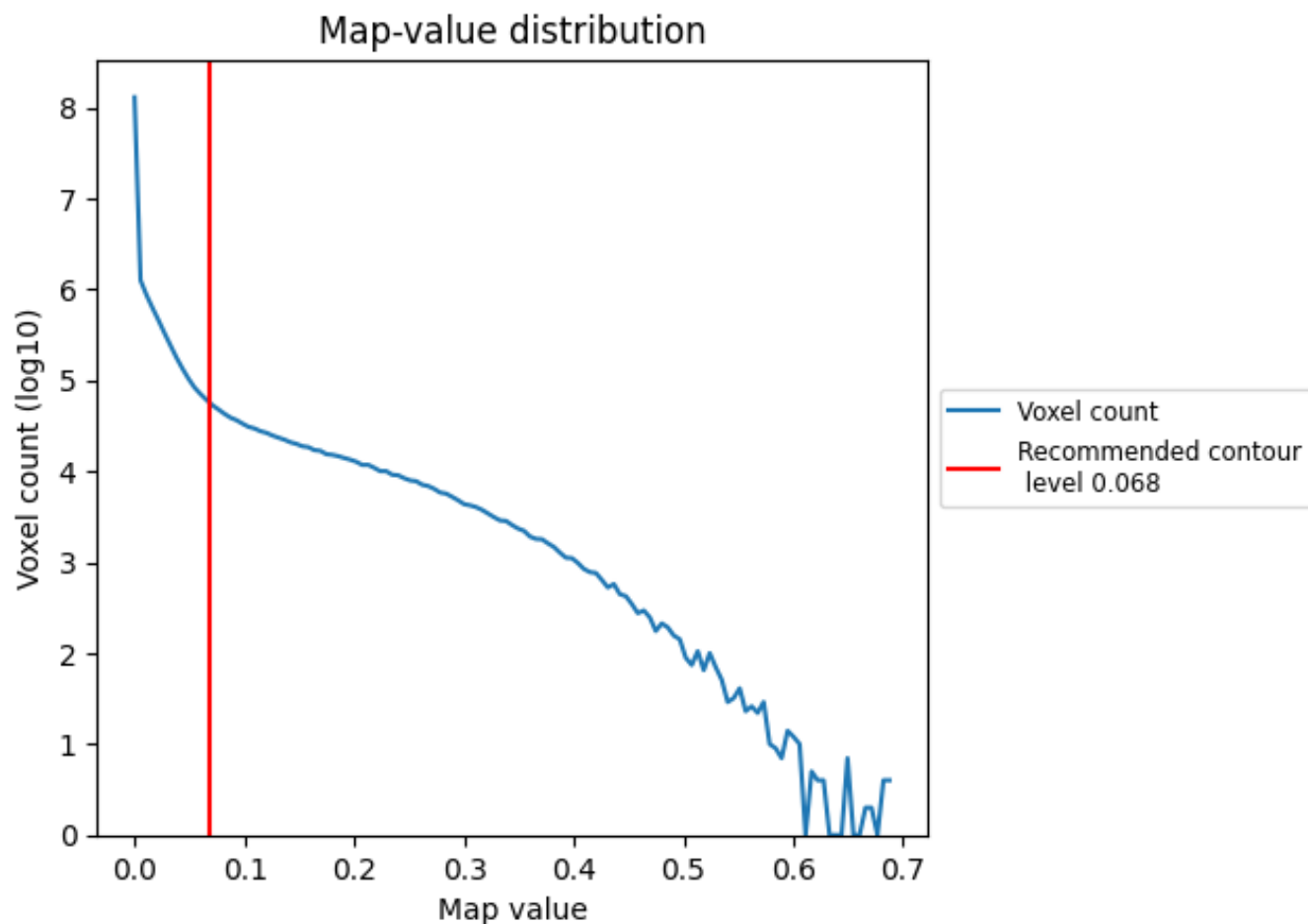
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

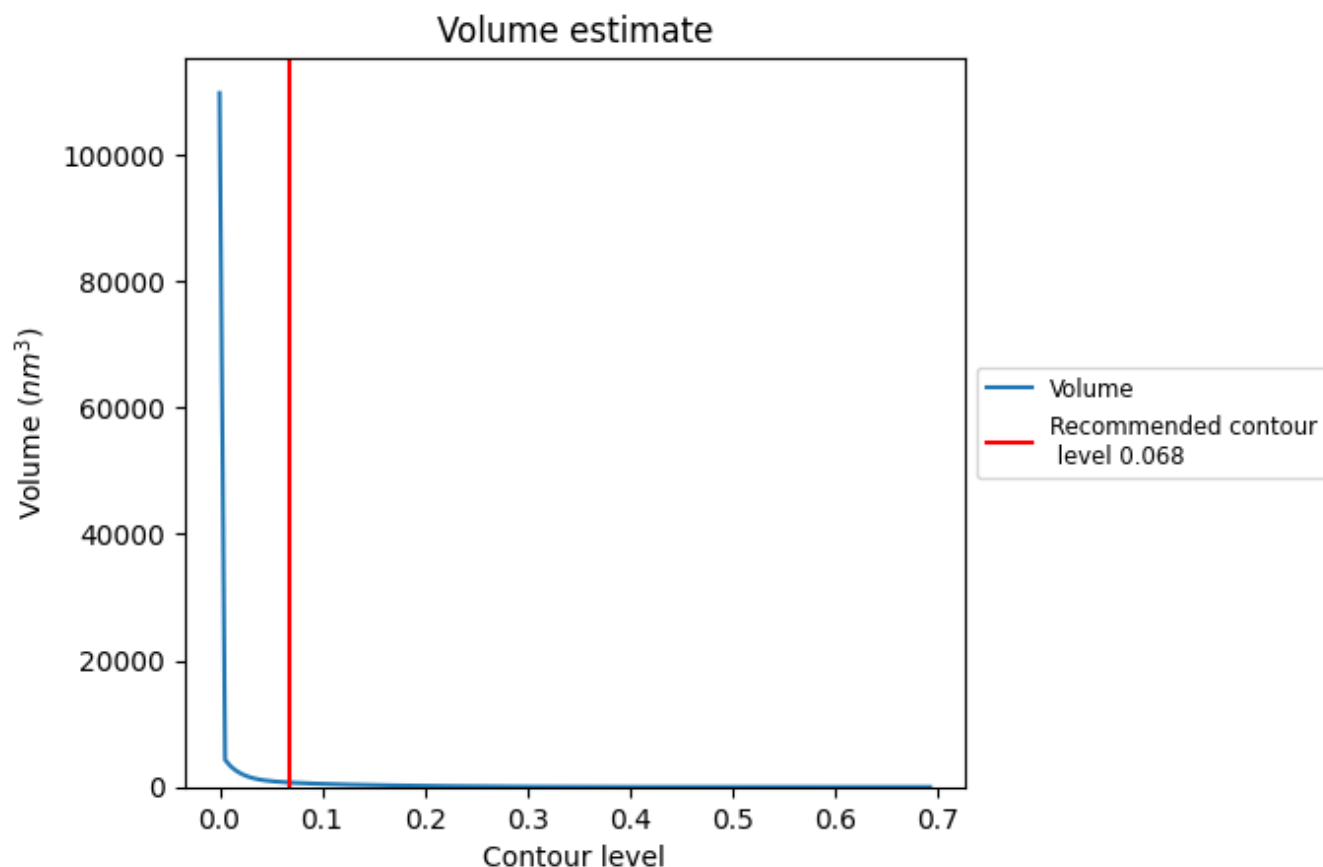
This section contains the results of statistical analysis of the map.

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.

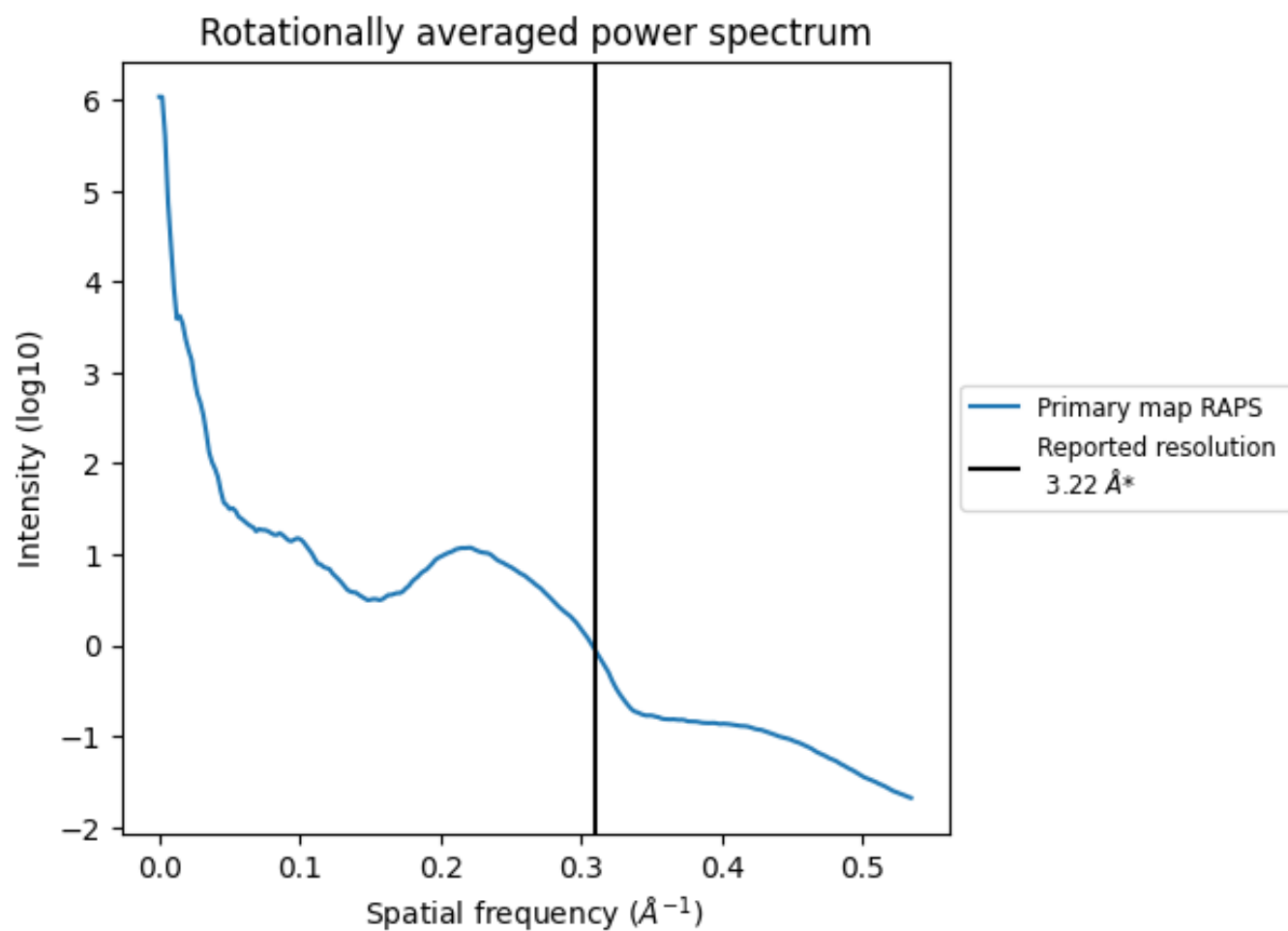
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 704 nm^3 ; this corresponds to an approximate mass of 636 kDa.

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

7.3 Rotationally averaged power spectrum ⓘ



*Reported resolution corresponds to spatial frequency of 0.311 Å⁻¹

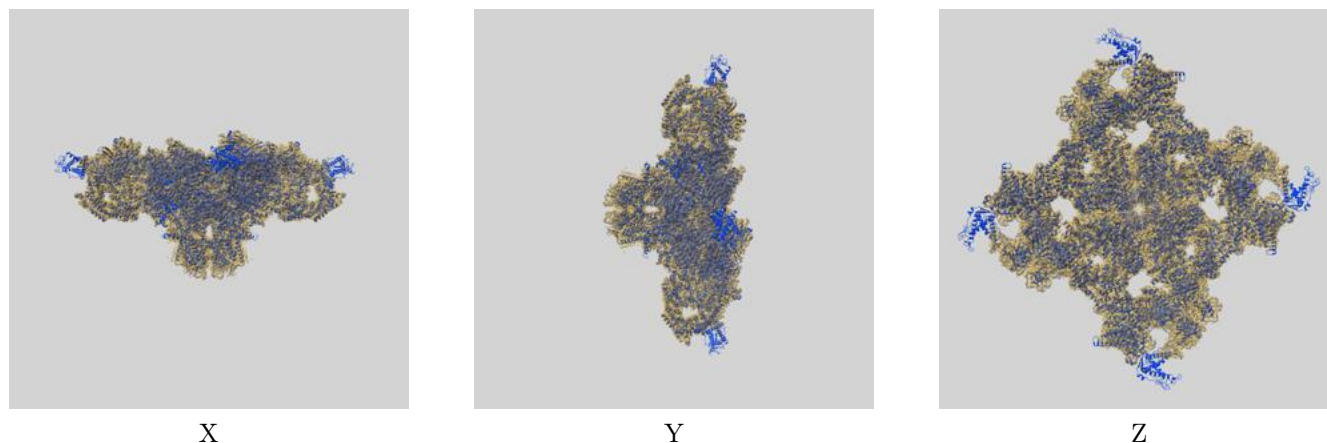
8 Fourier-Shell correlation

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

9 Map-model fit [i](#)

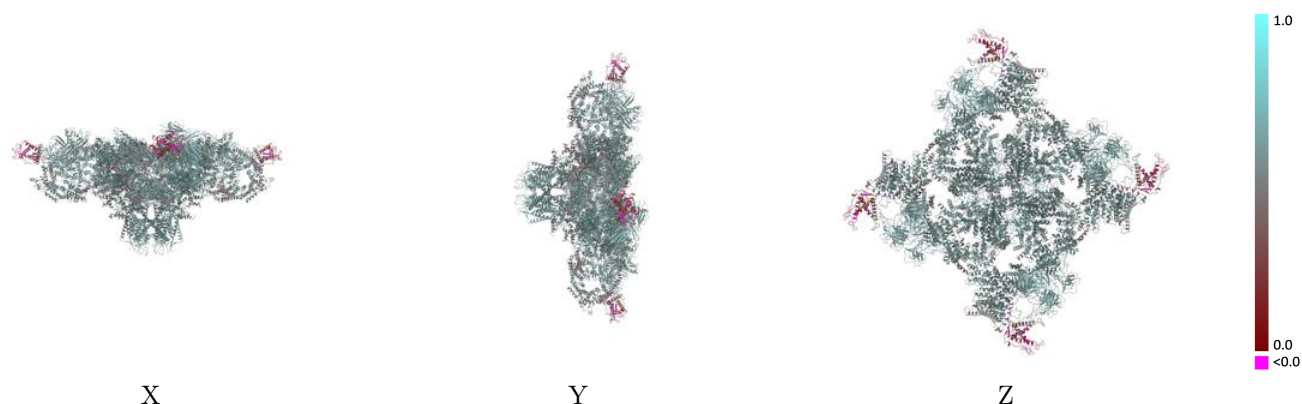
This section contains information regarding the fit between EMDB map EMD-45117 and PDB model 9C1F. Per-residue inclusion information can be found in section [3](#) on page [8](#).

9.1 Map-model overlay [i](#)



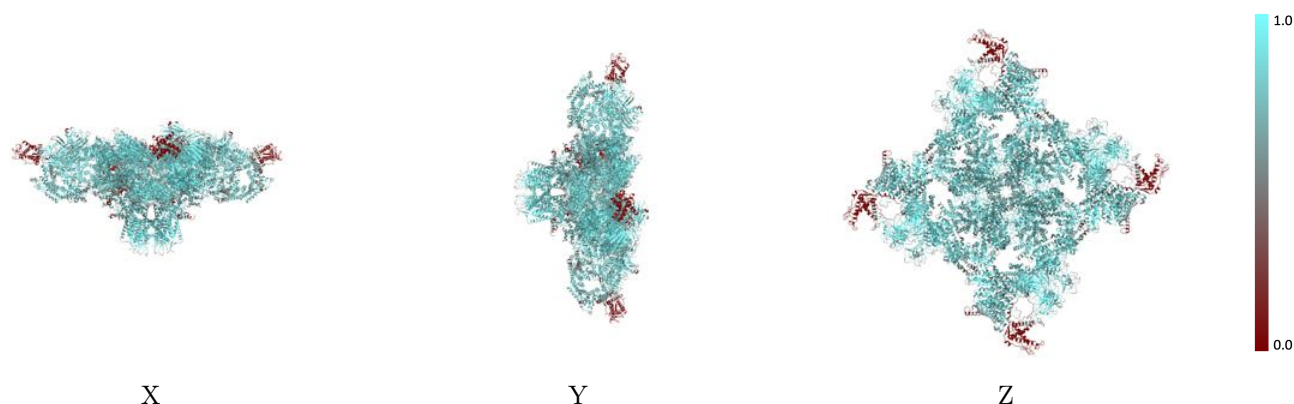
The images above show the 3D surface view of the map at the recommended contour level 0.068 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



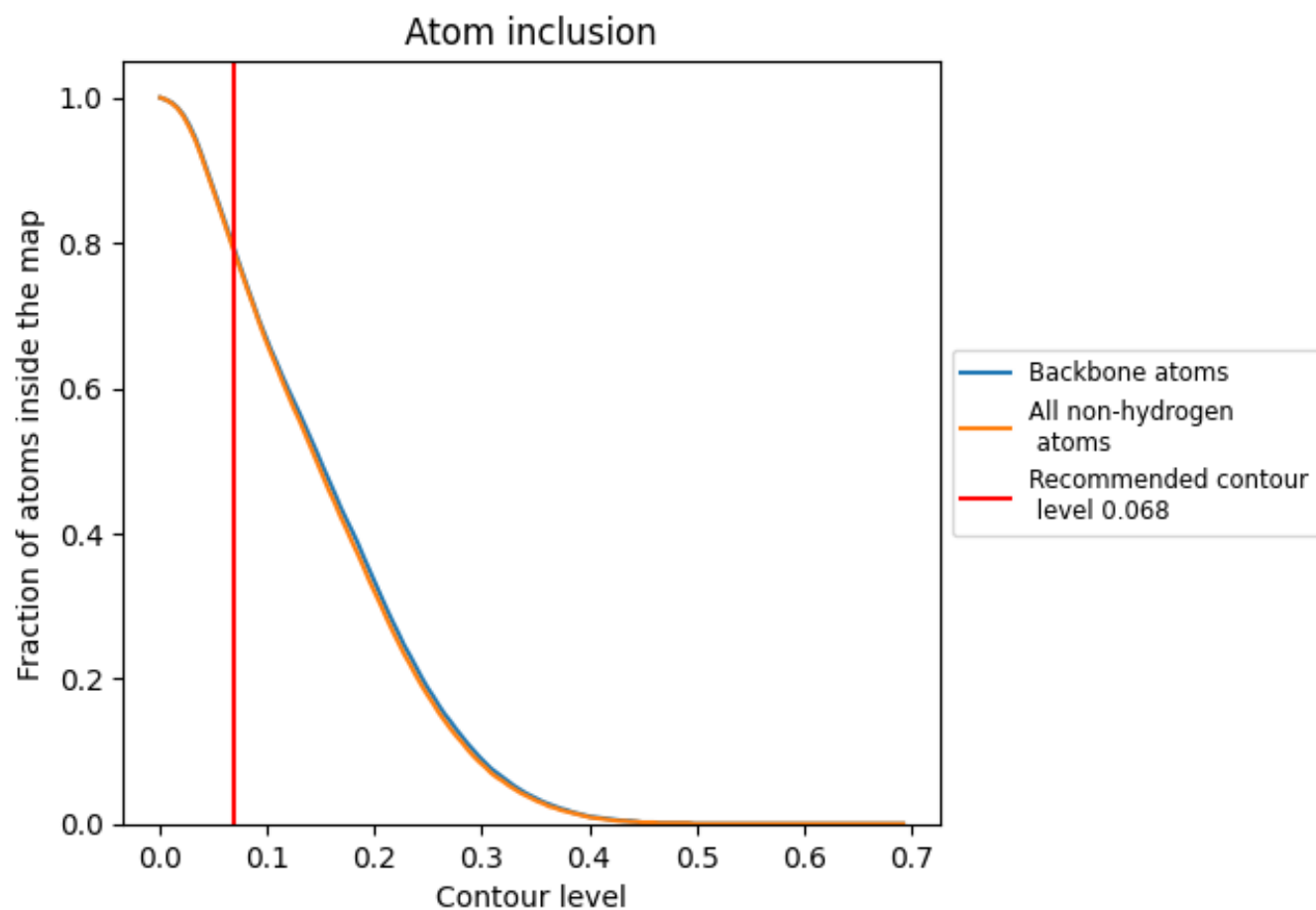
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

9.3 Atom inclusion mapped to coordinate model [i](#)



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.068).

9.4 Atom inclusion [i](#)



At the recommended contour level, 80% of all backbone atoms, 79% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary ⓘ

The table lists the average atom inclusion at the recommended contour level (0.068) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.7910	0.5530
A	0.7220	0.5760
B	0.7960	0.5520
C	0.7200	0.5720
D	0.7960	0.5520
E	0.7210	0.5720
F	0.7960	0.5520
G	0.7220	0.5740
H	0.7960	0.5520

1.0

0.0

<0.0