



Full wwPDB EM Validation Report ⓘ

Dec 14, 2025 – 10:53 PM JST

PDB ID : 9UOY / pdb_00009uoy
EMDB ID : EMD-64385
Title : Structure of C. elegans piezo channel
Authors : Liu, Y.; Guo, Y.R.
Deposited on : 2025-04-27
Resolution : 3.40 Å(reported)

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<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.dev129
MolProbity : 4-5-2 with Phenix2.0
Percentile statistics : 20231227.v01 (using entries in the PDB archive December 27th 2023)
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) : 2.47

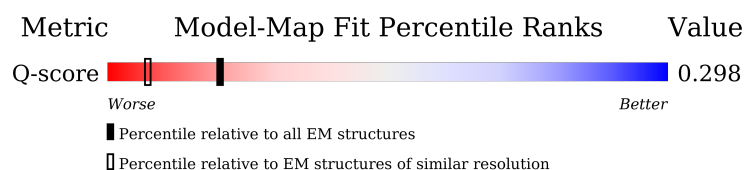
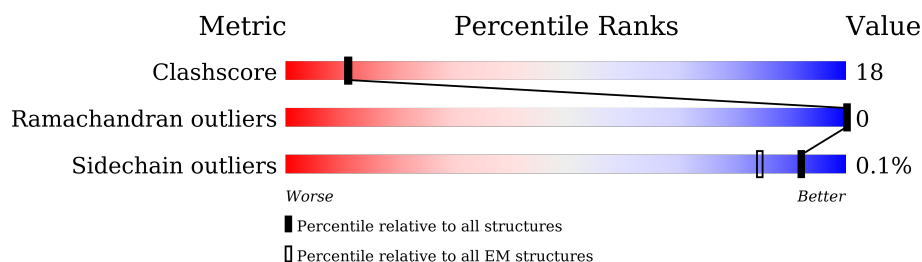
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 3.40 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	210492	15764	-
Ramachandran outliers	207382	16835	-
Sidechain outliers	206894	16415	-
Q-score	-	25397	14717 (2.90 - 3.90)

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	2442	10% 49% 29% 21%
1	B	2442	11% 50% 29% 21%
1	C	2442	10% 50% 29% 21%

2 Entry composition

There is only 1 type of molecule in this entry. The entry contains 46695 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

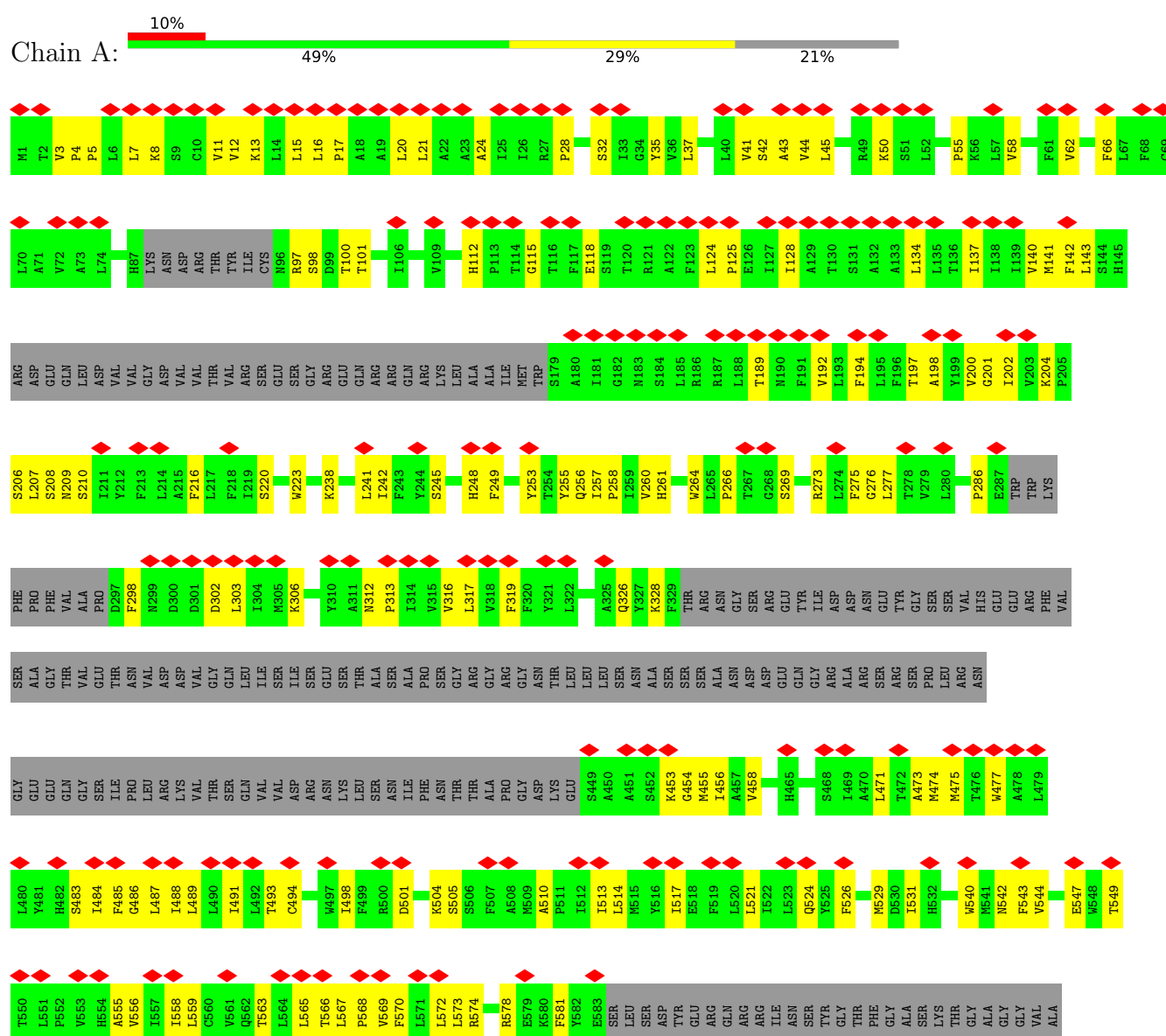
- Molecule 1 is a protein called Piezo-type mechanosensitive ion channel component 1.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	1919	Total	C	N	O	S	0	0
			15565	10325	2510	2643	87		
1	B	1919	Total	C	N	O	S	0	0
			15565	10325	2510	2643	87		
1	C	1919	Total	C	N	O	S	0	0
			15565	10325	2510	2643	87		

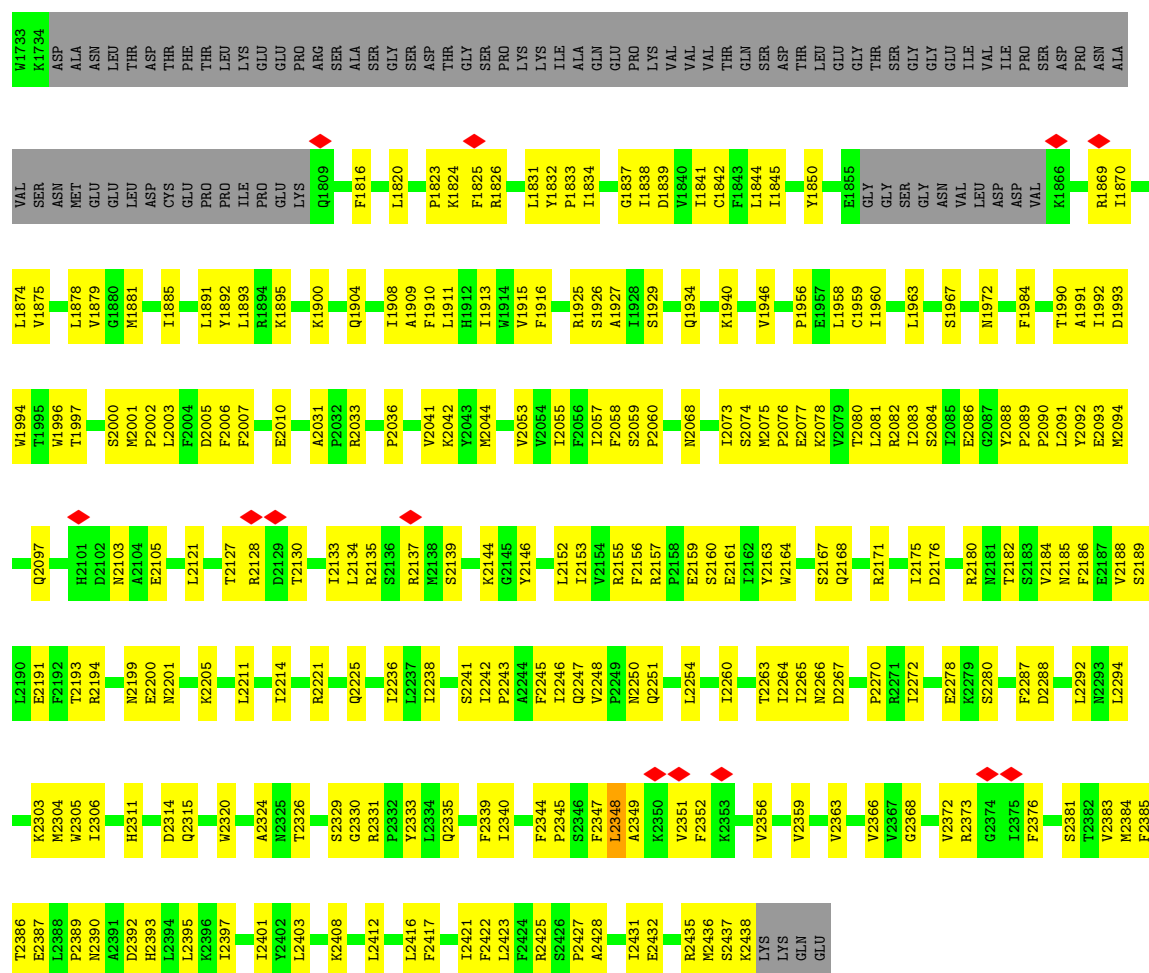
3 Residue-property plots

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

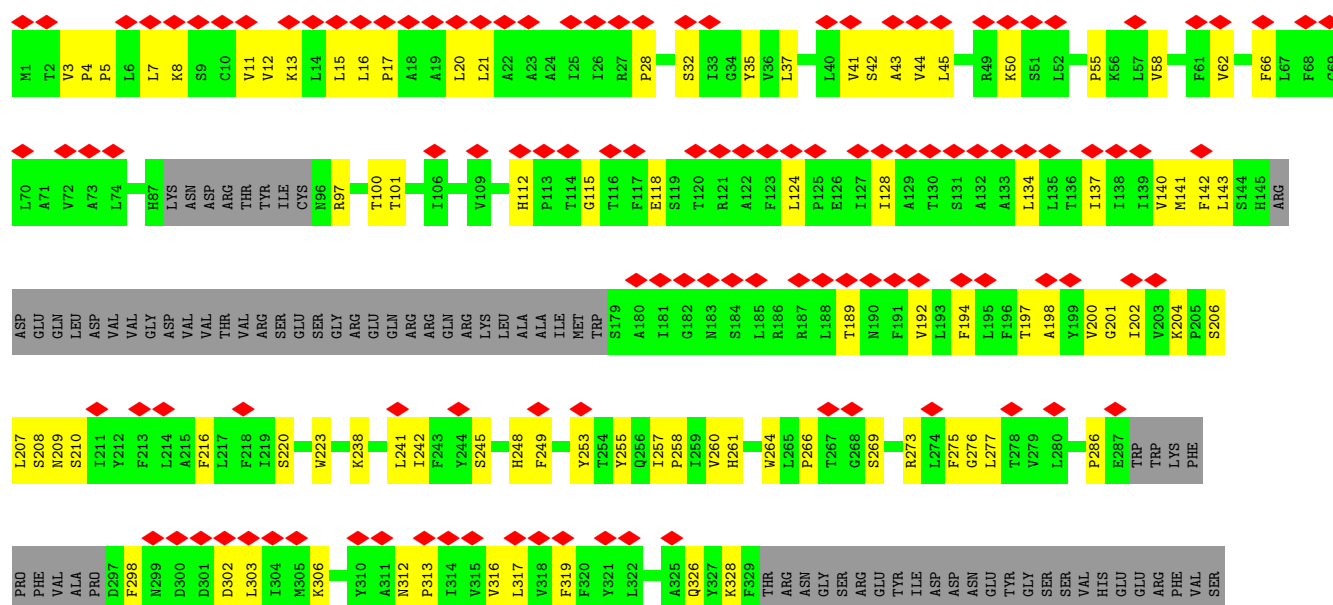
- Molecule 1: Piezo-type mechanosensitive ion channel component 1



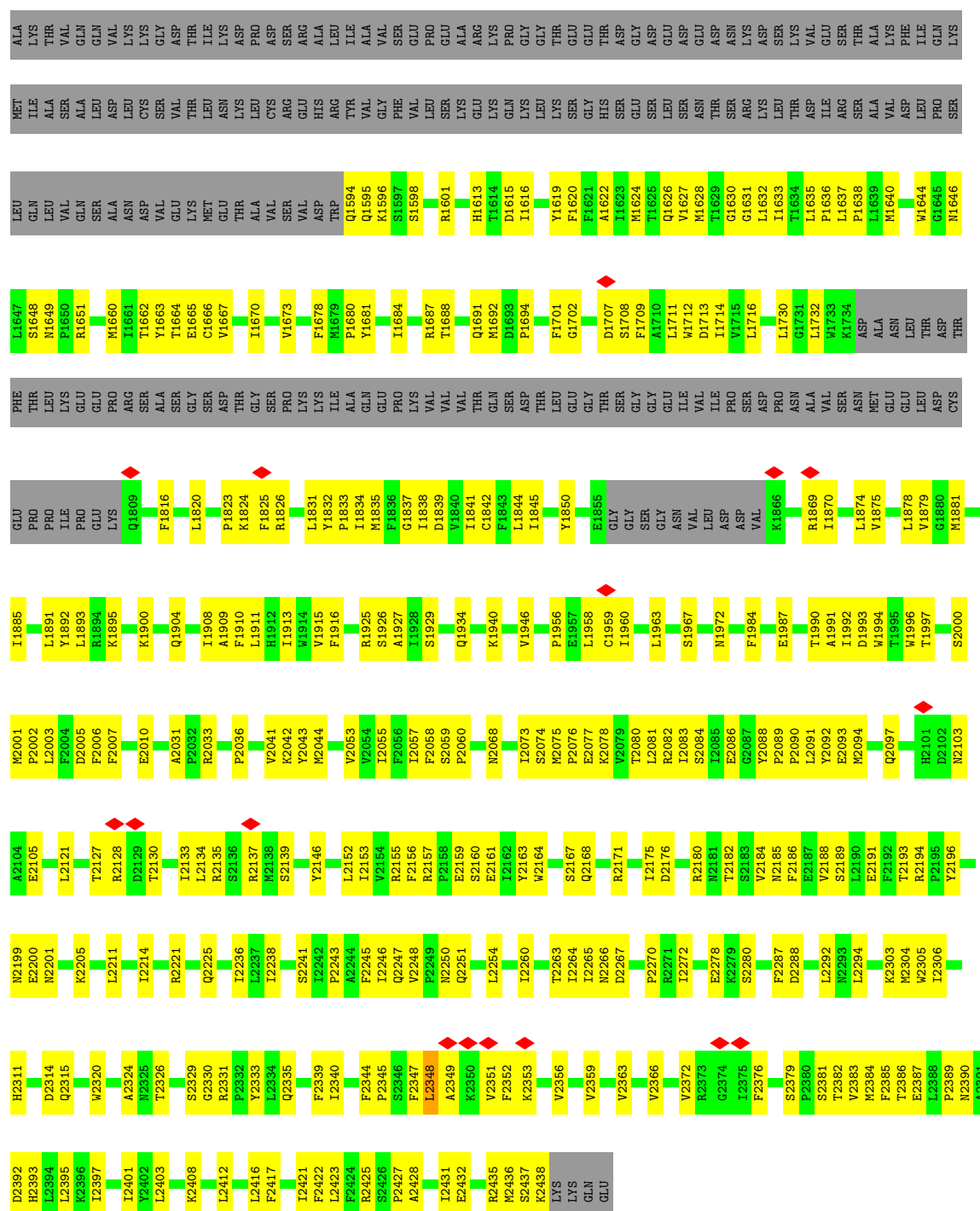




• Molecule 1: Piezo-type mechanosensitive ion channel component 1



G1383	M1299	F1111	L922	Y850	ASP	T695	PHE	V553	S483	GLU	ALA
A1384	I1300	F1112	K923	I851	PRO	S696	GLN	H554	I484	GLU	GLY
E1385	G1301	M1017	G924	P852	PRO	I697	ASP	A555	F485	GLN	THR
E1386	F1302	L1116	E925	L853	THR	V698	PRO	V556	C486	GLY	VAL
R1387	D1303	A1117	V926	V854	SER	I699	LYS	I557	L487	THR	THR
Y1389	V1304	L1121	E927	S858	THR	I700		I558	I488	ASN	ASN
A1396	H1219	A1021	G928	I861	THR	Y705	R621	L559	L489	VAL	VAL
L1397	T1220	A1022	T929	I862	GLU	F706	K622	L560	L490	ASP	ASP
G1401	W1224	C1025	E930	P864	ALA	F707	A624	V561	L491	LYS	VAL
F1404	Y1230	L1028	Y933	S865	VAL	S711	A625	S562	L492	THR	GLY
M1405	L1231	M1029	N934	A866	ALA	N717	V629	L564	T493	GLN	GLN
F1406	L1232	V1029	I935	I870	SER	T718	R633	L565	C494	VAL	ILE
D1409	F1233	F936	G937	F871	THR	S719	V637	L566		VAL	
F1410	F1234	F937	S937	S872	GLY	L720	F638	L567		ASP	ILE
E1411	I1235	Q1147	Y940	M875	THR	E723	P639	L568		ARG	SER
ASN	M1237	Q1148	Y946	Y878	GLN	W724	F640	L569		ASN	GLY
M1326	M1237	R1036	I945	F880	GLY	I728	V642	L570		LYS	THR
V1327	L1241	F1038	A946	L881	ASP	G729	V644	L571		LEU	ALA
E1328	Q1242	I1042	F947	L882	THR	L730	V645	L572		ASN	SER
Y1329	K1155	W1043	I948	L884	ALA	R734	L646	L573		PHE	ALA
R1330	S1157	V1047	S949	M887	HIS	A735	F649	L574		ASN	ALA
S1331	Y1158	Y1053	I950	L888	ALA	L736	V653	L575		PRO	PRO
E1332	V1159	Y1054	Y951	L889	GLY	G737	F654	L576		THR	THR
L1335	D1160	Y1055	I952	L891	ASP	E738	V655	L577		GLY	GLY
ASP	F1161	P1055	Y953	L892	LEU	S739	N656	L578		ALA	ARG
SER	F1162	L1056	R954	L893	THR	L742	F657	L579		GLY	GLY
PHE	V1166	Q1057	Q955	L894	LEU	F743	L660	L580		ASN	ASN
VAL	F1167	F1058	R956	L895	ASP	A744	L661	L581		LYS	THR
GLU	D1252	F1058	Y957	L896	THR	L745	L662	L582		GLU	LEU
PRO	G1253	V1062	R958	L897	LEU	L746	F663	L583		LEU	LEU
ASP	G1259	V1062	R959	L898	THR	L747	F664	L584		LEU	LEU
ASP	L1262	P1065	G963	L899	THR	L748	L665	L585		LEU	LEU
PRO	C1263	P1065	I964	L900	THR	L749	L666	L586		LEU	LEU
LYS	I1264	D1066	E895	L901	THR	L750	L667	L587		LEU	LEU
ALA	V1265	S1068	LEU	L902	THR	L751	L668	L588		LEU	LEU
ALA	R1266	C1069	GLN	L903	THR	L752	L669	L589		LEU	LEU
ALA	Q1267	I1070	ILE	L904	THR	L753	L670	L590		LEU	LEU
ASP	L1268	W1074	ASP	L905	THR	L754	L671	L591		LEU	LEU
ARG	I1271	W1074	ARG	L906	THR	L755	L672	L592		LEU	LEU
LEU	V1274	W1077	VAL	L907	THR	L756	L673	L593		LEU	LEU
ASP	N1276	D1083	ALA	L908	THR	L757	L674	L594		LEU	LEU
PRO	E1277	R1086	ASP	L909	THR	L758	L675	L595		LEU	LEU
GLY	V1280	L1089	ASN	L910	THR	L759	L676	L596		LEU	LEU
GLN	L1281	L1092	CYS	L911	THR	L760	L677	L597		LEU	LEU
ILE	K1282	L1093	SER	L912	THR	L761	L678	L598		LEU	LEU
MET	D1286	L1094	THR	L913	THR	L762	L679	L599		LEU	LEU
THR	F1287	L1095	THR	L914	THR	L763	L680	L600		LEU	LEU
ALA	C1291	Y1106	THR	L915	THR	L764	L681	L601		LEU	LEU
ALA	Q1377	M1206	THR	L916	THR	L765	L682	L602		LEU	LEU
ALA	G1378	L1207	THR	L917	THR	L766	L683	L603		LEU	LEU
HIS	I1380	V1209	THR	L918	THR	L767	L684	L604		LEU	LEU
ASP	E1381	R1382	THR	L919	THR	L768	L685	L605		LEU	LEU
LEU			THR	L920	THR	L769	L686	L606		LEU	LEU
			THR	G921	THR	L770	L687	L607		LEU	LEU
			THR		THR	L771	L688	L608		LEU	LEU
			THR		THR	L772	L689	L609		LEU	LEU
			THR		THR	L773	L690	L610		LEU	LEU
			THR		THR	L774	L691	L611		LEU	LEU
			THR		THR	L775	L692	L612		LEU	LEU
			THR		THR	L776	L693	L613		LEU	LEU
			THR		THR	L777	L694	L614		LEU	LEU
			THR		THR	L778	L695	L615		LEU	LEU
			THR		THR	L779	L696	L616		LEU	LEU
			THR		THR	L780	L697	L617		LEU	LEU
			THR		THR	L781	L698	L618		LEU	LEU
			THR		THR	L782	L699	L619		LEU	LEU
			THR		THR	L783	L700	L620		LEU	LEU
			THR		THR	L784	L701	L621		LEU	LEU
			THR		THR	L785	L702	L622		LEU	LEU
			THR		THR	L786	L703	L623		LEU	LEU
			THR		THR	L787	L704	L624		LEU	LEU
			THR		THR	L788	L705	L625		LEU	LEU
			THR		THR	L789	L706	L626		LEU	LEU
			THR		THR	L790	L707	L627		LEU	LEU
			THR		THR	L791	L708	L628		LEU	LEU
			THR		THR	L792	L709	L629		LEU	LEU
			THR		THR	L793	L710	L630		LEU	LEU
			THR		THR	L794	L711	L631		LEU	LEU
			THR		THR	L795	L712	L632		LEU	LEU
			THR		THR	L796	L713	L633		LEU	LEU
			THR		THR	L797	L714	L634		LEU	LEU
			THR		THR	L798	L715	L635		LEU	LEU
			THR		THR	L799	L716	L636		LEU	LEU
			THR		THR	L800	L717	L637		LEU	LEU
			THR		THR	L801	L718	L638		LEU	LEU
			THR		THR	L802	L719	L639		LEU	LEU
			THR		THR	L803	L720	L640		LEU	LEU
			THR		THR	L804	L721	L641		LEU	LEU
			THR		THR	L805	L722	L642		LEU	LEU
			THR		THR	L806	L723	L643		LEU	LEU
			THR		THR	L807	L724	L644		LEU	LEU
			THR		THR	L808	L725	L645		LEU	LEU
			THR		THR	L809	L726	L646		LEU	LEU
			THR		THR	L810	L727	L647		LEU	LEU
			THR		THR	L811	L728	L648		LEU	LEU
			THR		THR	L812	L729	L649		LEU	LEU
			THR		THR	L813	L730	L650		LEU	LEU
			THR		THR	L814	L731	L651		LEU	LEU
			THR		THR	L815	L732	L652		LEU	LEU
			THR		THR	L816	L733	L653		LEU	LEU
			THR		THR	L817	L734	L654		LEU	LEU
			THR		THR	L818	L735	L655		LEU	LEU
			THR		THR	L819	L736	L656		LEU	LEU
			THR		THR	L820	L737	L657		LEU	LEU
			THR		THR	L821	L738	L658		LEU	LEU
			THR		THR	L822	L739	L659		LEU	LEU
			THR		THR	L823	L740	L660		LEU	LEU
			THR		THR	L824	L741	L661		LEU	LEU
			THR		THR	L825	L742	L662		LEU	LEU
			THR		THR	L826	L743	L663		LEU	LEU
			THR		THR	L827	L744	L664		LEU	LEU
			THR		THR	L828	L745	L665		LEU	LEU
			THR		THR	L829	L746	L666		LEU	LEU
			THR		THR	L830	L747	L667		LEU	LEU
			THR		THR	L831	L748	L668		LEU	LEU
			THR		THR	L832	L749	L669		LEU	LEU
			THR		THR	L833	L750	L670		LEU	LEU
			THR		THR	L834	L751	L671		LEU	LEU
			THR		THR	L835	L752	L672		LEU	LEU
			THR		THR	L836	L753	L673		LEU	LEU
			THR		THR	L837	L754	L674		LEU	LEU
			THR		THR	L838	L755	L675		LEU	LEU
			THR		THR	L839	L756	L676		LEU	LEU
			THR		THR	L840	L757	L677		LEU	LEU
			THR		THR	L841	L758	L678		LEU	LEU
			THR		THR	L842	L759	L679		LEU	LEU
			THR		THR	L843	L760	L680		LEU	LEU
			THR		THR	L844	L761	L681		LEU	LEU
			THR		THR	L845	L762	L682		LEU	LEU
			THR		THR	L846	L763	L683		LEU	LEU
			THR		THR	L847	L764	L684		LEU	LEU
			THR		THR	L848	L765	L685		LEU	LEU
			THR		THR	L849	L766	L686		LEU	LEU
			THR		THR	L850	L767	L687		LEU	LEU
			THR		THR	L851	L768	L688		LEU	LEU
			THR		THR	L852	L769	L689		LEU	LEU
			THR		THR	L853	L770	L690		LEU	LEU
			THR		THR	L854	L771	L691		LEU	LEU
			THR		THR	L855	L772	L692		LEU	LEU
			THR		THR	L856	L773	L693		LEU	LEU
			THR		THR	L857	L774	L694		LEU	LEU
			THR		THR	L858	L775	L695		LEU	LEU
			THR		THR	L859	L776	L696		LEU	LEU
			THR		THR	L860	L777	L697		LEU	LEU
			THR		THR	L861	L778	L698		LEU	LEU
			THR		THR	L862	L779	L699		LEU	LEU
			THR		THR	L863	L780	L700		LEU	LEU
			THR		THR	L864	L781	L701</			



• Molecule 1: Piezo-type mechanosensitive ion channel component 1







P2389	N2390	A2391	D2392	H2393	L2394	L2395	R2396	L2397		I2401	Y2402	L2403		K2408		L2412		L2416	F2417		I2421	F2422	L2423	F2424	R2425	S2426	P2427		I2431	E2432		R2435	N2436	S2437	K2438	LYS	LYS	GLN	GLU
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4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C3	Depositor
Number of particles used	163221	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	JEOL CRYO ARM 300	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	40	Depositor
Minimum defocus (nm)	500	Depositor
Maximum defocus (nm)	2500	Depositor
Magnification	Not provided	
Image detector	GATAN K3 (6k x 4k)	Depositor
Maximum map value	0.401	Depositor
Minimum map value	-0.140	Depositor
Average map value	-0.000	Depositor
Map value standard deviation	0.009	Depositor
Recommended contour level	0.075	Depositor
Map size (Å)	532.0, 532.0, 532.0	wwPDB
Map dimensions	560, 560, 560	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	0.95, 0.95, 0.95	Depositor

5 Model quality [i](#)

5.1 Standard geometry [i](#)

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	0.15	0/16001	0.39	0/21741
1	B	0.15	0/16001	0.39	0/21741
1	C	0.15	0/16001	0.39	0/21741
All	All	0.15	0/48003	0.39	0/65223

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	15565	0	15810	581	0
1	B	15565	0	15810	593	0
1	C	15565	0	15810	582	0
All	All	46695	0	47430	1687	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 18.

All (1687) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:966:GLU:HG2	1:A:969:ARG:NH1	1.54	1.22

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:966:GLU:HG2	1:C:969:ARG:NH1	1.54	1.21
1:B:966:GLU:HG2	1:B:969:ARG:NH1	1.54	1.19
1:B:959:ARG:NH2	1:B:969:ARG:HD3	1.61	1.15
1:A:959:ARG:NH2	1:A:969:ARG:HD3	1.62	1.13
1:B:32:SER:CB	1:B:253:TYR:HE2	1.61	1.13
1:C:32:SER:CB	1:C:253:TYR:HE2	1.61	1.12
1:C:959:ARG:NH2	1:C:969:ARG:HD3	1.62	1.12
1:B:966:GLU:CG	1:B:969:ARG:HH22	1.67	1.07
1:C:32:SER:CB	1:C:253:TYR:CE2	2.38	1.07
1:C:966:GLU:CG	1:C:969:ARG:HH22	1.68	1.07
1:A:966:GLU:CG	1:A:969:ARG:HH22	1.67	1.06
1:B:2372:VAL:O	1:B:2376:PHE:HB3	1.55	1.06
1:B:32:SER:CB	1:B:253:TYR:CE2	2.38	1.06
1:A:2372:VAL:O	1:A:2376:PHE:HB3	1.55	1.05
1:C:2372:VAL:O	1:C:2376:PHE:HB3	1.55	1.05
1:B:964:LEU:CD1	1:B:968:MET:HG3	1.87	1.04
1:C:964:LEU:HD12	1:C:968:MET:HG3	1.04	1.04
1:A:966:GLU:CG	1:A:969:ARG:HH12	1.72	1.03
1:C:964:LEU:CD1	1:C:968:MET:HG3	1.87	1.03
1:C:966:GLU:CG	1:C:969:ARG:HH12	1.72	1.03
1:A:964:LEU:HD12	1:A:968:MET:HG3	1.04	1.02
1:A:964:LEU:CD1	1:A:968:MET:HG3	1.88	1.02
1:C:966:GLU:HG2	1:C:969:ARG:HH12	0.87	1.02
1:B:964:LEU:HD12	1:B:968:MET:HG3	1.04	1.01
1:B:32:SER:HB3	1:B:253:TYR:HE2	1.25	1.01
1:B:966:GLU:HG2	1:B:969:ARG:HH12	0.88	1.01
1:B:966:GLU:CG	1:B:969:ARG:HH12	1.72	1.01
1:A:966:GLU:HB3	1:A:969:ARG:NH2	1.77	0.99
1:C:966:GLU:HB3	1:C:969:ARG:NH2	1.77	0.99
1:A:966:GLU:HG2	1:A:969:ARG:HH12	0.87	0.99
1:C:32:SER:HB2	1:C:253:TYR:CE2	1.98	0.99
1:B:32:SER:HB2	1:B:253:TYR:CE2	1.98	0.99
1:C:32:SER:HB3	1:C:253:TYR:HE2	1.25	0.98
1:B:966:GLU:HB3	1:B:969:ARG:NH2	1.77	0.98
1:A:966:GLU:CD	1:A:969:ARG:HH22	1.73	0.96
1:B:966:GLU:CD	1:B:969:ARG:HH22	1.73	0.96
1:B:32:SER:HB3	1:B:253:TYR:CE2	2.01	0.96
1:C:32:SER:HB3	1:C:253:TYR:CE2	2.01	0.95
1:C:966:GLU:CD	1:C:969:ARG:HH22	1.73	0.95
1:C:32:SER:HB2	1:C:253:TYR:CD2	2.05	0.92
1:B:32:SER:HB2	1:B:253:TYR:CD2	2.05	0.91

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:959:ARG:HH22	1:A:969:ARG:HD3	1.37	0.89
1:C:959:ARG:HH22	1:C:969:ARG:HD3	1.37	0.89
1:B:966:GLU:CG	1:B:969:ARG:NH2	2.36	0.88
1:C:966:GLU:CG	1:C:969:ARG:NH2	2.37	0.88
1:C:959:ARG:CZ	1:C:969:ARG:HD3	2.04	0.88
1:A:966:GLU:CG	1:A:969:ARG:NH2	2.36	0.88
1:B:202:ILE:HG12	1:B:559:LEU:HD22	1.56	0.87
1:A:959:ARG:CZ	1:A:969:ARG:HD3	2.04	0.87
1:A:202:ILE:HG12	1:A:559:LEU:HD22	1.56	0.87
1:B:959:ARG:CZ	1:B:969:ARG:HD3	2.03	0.86
1:C:964:LEU:HD12	1:C:968:MET:CG	2.00	0.86
1:B:959:ARG:HH22	1:B:969:ARG:HD3	1.37	0.85
1:A:966:GLU:CB	1:A:969:ARG:NH2	2.40	0.85
1:C:202:ILE:HG12	1:C:559:LEU:HD22	1.56	0.85
1:B:964:LEU:HD12	1:B:968:MET:CG	2.00	0.84
1:A:964:LEU:HD12	1:A:968:MET:CG	2.00	0.84
1:B:966:GLU:HG2	1:B:969:ARG:CZ	2.08	0.84
1:B:966:GLU:CB	1:B:969:ARG:NH2	2.40	0.84
1:A:966:GLU:HG2	1:A:969:ARG:CZ	2.08	0.83
1:A:968:MET:HE1	1:A:974:PRO:HB2	1.61	0.83
1:C:966:GLU:CB	1:C:969:ARG:NH2	2.40	0.83
1:C:966:GLU:HG2	1:C:969:ARG:CZ	2.08	0.82
1:C:959:ARG:NH2	1:C:969:ARG:HH11	1.78	0.81
1:A:959:ARG:NH2	1:A:969:ARG:HH11	1.79	0.81
1:B:959:ARG:NH2	1:B:969:ARG:HH11	1.78	0.81
1:C:968:MET:HE1	1:C:974:PRO:HB2	1.61	0.81
1:B:968:MET:HE1	1:B:974:PRO:CB	2.11	0.80
1:B:968:MET:HE1	1:B:974:PRO:HB2	1.61	0.80
1:C:968:MET:HE1	1:C:974:PRO:CB	2.11	0.80
1:A:1183:ILE:HG21	1:A:1714:ILE:HD11	1.64	0.80
1:A:968:MET:HE1	1:A:974:PRO:CB	2.11	0.79
1:A:966:GLU:CG	1:A:969:ARG:NH1	2.39	0.79
1:C:1183:ILE:HG21	1:C:1714:ILE:HD11	1.64	0.79
1:B:1183:ILE:HG21	1:B:1714:ILE:HD11	1.64	0.78
1:B:2196:TYR:OH	1:B:2201:ASN:CG	2.27	0.78
1:B:1047:VAL:HG11	1:B:1121:LEU:HD22	1.66	0.78
1:C:966:GLU:CG	1:C:969:ARG:NH1	2.39	0.77
1:C:207:LEU:HB2	1:C:275:PHE:HA	1.65	0.77
1:C:968:MET:CE	1:C:974:PRO:CB	2.63	0.77
1:A:1047:VAL:HG11	1:A:1121:LEU:HD22	1.66	0.77
1:A:207:LEU:HB2	1:A:275:PHE:HA	1.65	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:968:MET:CE	1:A:974:PRO:CB	2.63	0.77
1:A:968:MET:CE	1:A:974:PRO:HB3	2.15	0.77
1:B:207:LEU:HB2	1:B:275:PHE:HA	1.65	0.77
1:B:968:MET:CE	1:B:974:PRO:CB	2.63	0.76
1:B:968:MET:CE	1:B:974:PRO:HB3	2.15	0.76
1:C:959:ARG:NH1	1:C:969:ARG:HG2	2.01	0.75
1:C:968:MET:CE	1:C:974:PRO:HB3	2.15	0.75
1:C:1047:VAL:HG11	1:C:1121:LEU:HD22	1.66	0.75
1:A:1029:VAL:HA	1:A:1232:LEU:HD23	1.69	0.75
1:A:966:GLU:CB	1:A:969:ARG:HH22	1.98	0.75
1:B:959:ARG:NH1	1:B:969:ARG:HG2	2.01	0.75
1:C:1029:VAL:HA	1:C:1232:LEU:HD23	1.69	0.75
1:B:966:GLU:CB	1:B:969:ARG:HH22	1.99	0.74
1:C:966:GLU:CB	1:C:969:ARG:HH22	1.99	0.74
1:A:959:ARG:NH1	1:A:969:ARG:HG2	2.01	0.74
1:B:223:TRP:O	1:B:574:ARG:NH1	2.21	0.73
1:B:1029:VAL:HA	1:B:1232:LEU:HD23	1.69	0.73
1:C:223:TRP:O	1:C:574:ARG:NH1	2.21	0.73
1:C:12:VAL:HG13	1:C:16:LEU:HD12	1.71	0.73
1:A:223:TRP:O	1:A:574:ARG:NH1	2.21	0.72
1:B:966:GLU:CG	1:B:969:ARG:NH1	2.40	0.72
1:A:1850:TYR:HB2	1:A:1874:LEU:HD11	1.72	0.72
1:B:12:VAL:HG13	1:B:16:LEU:HD12	1.71	0.72
1:A:2385:PHE:HE2	1:B:2381:SER:HA	1.55	0.72
1:B:1850:TYR:HB2	1:B:1874:LEU:HD11	1.72	0.72
1:C:2093:GLU:O	1:C:2094:MET:HE2	1.90	0.72
1:A:12:VAL:HG13	1:A:16:LEU:HD12	1.71	0.72
1:A:510:ALA:HB1	1:A:573:LEU:HG	1.72	0.72
1:B:2385:PHE:HE2	1:C:2381:SER:HA	1.55	0.71
1:A:2243:PRO:HG2	1:A:2246:ILE:HD11	1.72	0.71
1:A:2381:SER:HA	1:C:2385:PHE:HE2	1.55	0.71
1:A:1351:MET:SD	1:A:1354:GLN:NE2	2.64	0.71
1:A:1595:GLN:HG3	1:A:1596:LYS:H	1.56	0.71
1:C:1351:MET:SD	1:C:1354:GLN:NE2	2.64	0.71
1:B:1595:GLN:HG3	1:B:1596:LYS:H	1.56	0.71
1:B:2243:PRO:HG2	1:B:2246:ILE:HD11	1.72	0.71
1:C:510:ALA:HB1	1:C:573:LEU:HG	1.72	0.71
1:C:1595:GLN:HG3	1:C:1596:LYS:H	1.56	0.71
1:C:2243:PRO:HG2	1:C:2246:ILE:HD11	1.72	0.71
1:C:968:MET:HE3	1:C:974:PRO:HB3	1.73	0.70
1:A:2093:GLU:O	1:A:2094:MET:HE2	1.90	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:510:ALA:HB1	1:B:573:LEU:HG	1.72	0.70
1:B:1351:MET:SD	1:B:1354:GLN:NE2	2.64	0.70
1:B:847:ASN:HD22	1:B:921:GLY:HA3	1.56	0.70
1:C:1850:TYR:HB2	1:C:1874:LEU:HD11	1.72	0.70
1:B:2093:GLU:O	1:B:2094:MET:HE2	1.90	0.69
1:C:1057:GLN:NE2	1:C:1110:ASP:OD2	2.26	0.69
1:A:847:ASN:HD22	1:A:921:GLY:HA3	1.56	0.69
1:C:847:ASN:HD22	1:C:921:GLY:HA3	1.56	0.69
1:A:968:MET:HE3	1:A:974:PRO:HB3	1.73	0.69
1:B:11:VAL:HG13	1:B:15:LEU:HD12	1.74	0.69
1:B:1057:GLN:NE2	1:B:1110:ASP:OD2	2.26	0.69
1:C:189:THR:HA	1:C:192:VAL:HG22	1.75	0.69
1:B:968:MET:HE3	1:B:974:PRO:HB3	1.73	0.69
1:B:189:THR:HA	1:B:192:VAL:HG22	1.75	0.68
1:B:2383:VAL:HG23	1:B:2387:GLU:HG3	1.75	0.68
1:C:2383:VAL:HG23	1:C:2387:GLU:HG3	1.75	0.68
1:A:11:VAL:HG13	1:A:15:LEU:HD12	1.74	0.68
1:A:1057:GLN:NE2	1:A:1110:ASP:OD2	2.26	0.68
1:C:1651:ARG:NE	1:C:1732:LEU:HD23	2.08	0.68
1:B:1146:ASN:ND2	1:B:1148:GLN:O	2.27	0.68
1:C:11:VAL:HG13	1:C:15:LEU:HD12	1.74	0.68
1:A:1651:ARG:NE	1:A:1732:LEU:HD23	2.08	0.68
1:B:1651:ARG:NE	1:B:1732:LEU:HD23	2.08	0.68
1:A:1649:ASN:HB2	1:A:1820:LEU:HA	1.76	0.68
1:A:2383:VAL:HG23	1:A:2387:GLU:HG3	1.75	0.68
1:B:1198:LEU:O	1:B:1202:TRP:HB2	1.94	0.68
1:A:1083:ASP:OD1	1:A:1086:ARG:NH2	2.27	0.68
1:B:1649:ASN:HB2	1:B:1820:LEU:HA	1.76	0.68
1:C:1146:ASN:ND2	1:C:1148:GLN:O	2.27	0.68
1:C:273:ARG:HG3	1:C:531:ILE:HA	1.77	0.67
1:B:273:ARG:HG3	1:B:531:ILE:HA	1.77	0.67
1:A:1198:LEU:O	1:A:1202:TRP:HB2	1.94	0.67
1:C:2092:TYR:CE1	1:C:2094:MET:HE3	2.30	0.67
1:A:189:THR:HA	1:A:192:VAL:HG22	1.75	0.67
1:A:2236:ILE:HB	1:A:2292:LEU:HB2	1.77	0.67
1:C:688:TRP:HB3	1:C:760:LEU:HD21	1.76	0.67
1:A:1146:ASN:ND2	1:A:1148:GLN:O	2.27	0.67
1:C:1083:ASP:OD1	1:C:1086:ARG:NH2	2.28	0.67
1:B:688:TRP:HB3	1:B:760:LEU:HD21	1.76	0.66
1:C:966:GLU:HG2	1:C:969:ARG:NH2	2.10	0.66
1:A:1294:GLU:OE2	1:A:1294:GLU:N	2.28	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2159:GLU:OE2	1:A:2331:ARG:NH1	2.27	0.66
1:B:1626:GLN:NE2	1:B:1626:GLN:O	2.28	0.66
1:A:688:TRP:HB3	1:A:760:LEU:HD21	1.76	0.66
1:B:2159:GLU:OE2	1:B:2331:ARG:NH1	2.27	0.66
1:C:1649:ASN:HB2	1:C:1820:LEU:HA	1.76	0.66
1:C:2159:GLU:OE2	1:C:2331:ARG:NH1	2.27	0.66
1:A:2092:TYR:CE1	1:A:2094:MET:HE3	2.30	0.66
1:C:839:ALA:HA	1:C:842:ILE:HG22	1.76	0.66
1:B:1083:ASP:OD1	1:B:1086:ARG:NH2	2.28	0.66
1:C:1198:LEU:O	1:C:1202:TRP:HB2	1.94	0.66
1:A:1834:ILE:O	1:A:1838:ILE:HG13	1.96	0.66
1:B:1294:GLU:N	1:B:1294:GLU:OE2	2.28	0.66
1:B:2236:ILE:HB	1:B:2292:LEU:HB2	1.77	0.66
1:C:1626:GLN:NE2	1:C:1626:GLN:O	2.28	0.66
1:C:1834:ILE:O	1:C:1838:ILE:HG13	1.96	0.66
1:C:2372:VAL:O	1:C:2376:PHE:CB	2.40	0.66
1:A:2137:ARG:HE	1:C:1687:ARG:NH1	1.94	0.66
1:B:1834:ILE:O	1:B:1838:ILE:HG13	1.96	0.66
1:B:2092:TYR:CE1	1:B:2094:MET:HE3	2.30	0.66
1:A:1626:GLN:O	1:A:1626:GLN:NE2	2.28	0.66
1:A:1909:ALA:O	1:A:1913:ILE:HG12	1.96	0.66
1:B:1687:ARG:NH1	1:C:2137:ARG:HE	1.94	0.66
1:B:1730:LEU:HB3	1:B:1732:LEU:HD13	1.78	0.66
1:B:1909:ALA:O	1:B:1913:ILE:HG12	1.96	0.66
1:C:2097:GLN:O	1:C:2103:ASN:ND2	2.29	0.66
1:A:696:SER:O	1:A:700:ILE:HG12	1.96	0.66
1:B:696:SER:O	1:B:700:ILE:HG12	1.96	0.66
1:B:2182:THR:O	1:B:2221:ARG:NH2	2.29	0.66
1:C:1730:LEU:HB3	1:C:1732:LEU:HD13	1.78	0.66
1:A:839:ALA:HA	1:A:842:ILE:HG22	1.76	0.65
1:B:839:ALA:HA	1:B:842:ILE:HG22	1.76	0.65
1:A:836:VAL:HA	1:A:1111:PHE:HE2	1.62	0.65
1:A:2182:THR:O	1:A:2221:ARG:NH2	2.29	0.65
1:C:1294:GLU:N	1:C:1294:GLU:OE2	2.28	0.65
1:C:1909:ALA:O	1:C:1913:ILE:HG12	1.96	0.65
1:C:2182:THR:O	1:C:2221:ARG:NH2	2.29	0.65
1:B:646:LEU:HD22	1:B:666:TRP:HB2	1.78	0.65
1:B:2097:GLN:O	1:B:2103:ASN:ND2	2.29	0.65
1:C:2236:ILE:HB	1:C:2292:LEU:HB2	1.77	0.65
1:A:966:GLU:HG2	1:A:969:ARG:NH2	2.09	0.65
1:A:2097:GLN:O	1:A:2103:ASN:ND2	2.29	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:487:LEU:HD11	1:B:700:ILE:HG23	1.78	0.65
1:A:891:LEU:HD23	1:A:893:ILE:H	1.62	0.65
1:A:1730:LEU:HB3	1:A:1732:LEU:HD13	1.78	0.65
1:A:1687:ARG:NH1	1:B:2137:ARG:HE	1.94	0.64
1:C:42:SER:O	1:C:45:LEU:HG	1.98	0.64
1:B:1651:ARG:HE	1:B:1732:LEU:HD23	1.62	0.64
1:C:1651:ARG:HE	1:C:1732:LEU:HD23	1.62	0.64
1:A:42:SER:O	1:A:45:LEU:HG	1.98	0.64
1:B:42:SER:HA	1:B:45:LEU:HD21	1.79	0.64
1:A:723:GLU:HG2	1:A:724:TRP:HD1	1.62	0.64
1:C:836:VAL:HA	1:C:1111:PHE:HE2	1.62	0.64
1:A:273:ARG:HG3	1:A:531:ILE:HA	1.77	0.64
1:A:1002:LEU:O	1:A:1006:MET:HG2	1.97	0.64
1:B:1280:VAL:HG23	1:C:2128:ARG:CZ	2.27	0.64
1:B:42:SER:O	1:B:45:LEU:HG	1.98	0.64
1:C:696:SER:O	1:C:700:ILE:HG12	1.96	0.64
1:A:2128:ARG:CZ	1:C:1280:VAL:HG23	2.28	0.64
1:B:836:VAL:HA	1:B:1111:PHE:HE2	1.62	0.64
1:B:966:GLU:HG2	1:B:969:ARG:NH2	2.09	0.64
1:C:487:LEU:HD11	1:C:700:ILE:HG23	1.78	0.64
1:A:646:LEU:HD22	1:A:666:TRP:HB2	1.79	0.64
1:B:1002:LEU:O	1:B:1006:MET:HG2	1.97	0.64
1:C:646:LEU:HD22	1:C:666:TRP:HB2	1.79	0.64
1:A:487:LEU:HD11	1:A:700:ILE:HG23	1.78	0.64
1:C:891:LEU:HD23	1:C:893:ILE:H	1.62	0.64
1:C:1002:LEU:O	1:C:1006:MET:HG2	1.97	0.64
1:C:1274:VAL:HG11	1:C:1299:ASN:HB3	1.80	0.64
1:A:1280:VAL:HG23	1:B:2128:ARG:CZ	2.27	0.63
1:B:220:SER:HB2	1:B:570:PHE:HE2	1.64	0.63
1:B:891:LEU:HD23	1:B:893:ILE:H	1.62	0.63
1:C:42:SER:HA	1:C:45:LEU:HD21	1.79	0.63
1:A:42:SER:HA	1:A:45:LEU:HD21	1.79	0.63
1:A:966:GLU:CG	1:A:969:ARG:CZ	2.74	0.63
1:B:1274:VAL:HG11	1:B:1299:ASN:HB3	1.80	0.63
1:A:1684:ILE:HD12	1:A:1687:ARG:HH21	1.64	0.63
1:B:477:TRP:HE3	1:B:565:LEU:HD22	1.64	0.63
1:B:723:GLU:HG2	1:B:724:TRP:HD1	1.62	0.63
1:B:2088:TYR:HB3	1:B:2089:PRO:HD2	1.81	0.63
1:A:2193:THR:HG22	1:A:2205:LYS:HG3	1.81	0.63
1:B:2372:VAL:O	1:B:2376:PHE:CB	2.40	0.63
1:C:115:GLY:HA3	1:C:118:GLU:HB2	1.81	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:477:TRP:HE3	1:C:565:LEU:HD22	1.64	0.62
1:C:1244:PHE:HA	1:C:1248:PHE:HB2	1.81	0.62
1:C:2088:TYR:HB3	1:C:2089:PRO:HD2	1.81	0.62
1:B:115:GLY:HA3	1:B:118:GLU:HB2	1.81	0.62
1:B:1992:ILE:HG23	1:B:1996:TRP:HD1	1.65	0.62
1:C:578:ARG:HA	1:C:581:PHE:CE1	2.34	0.62
1:A:2270:PRO:HG2	1:A:2314:ASP:HB2	1.81	0.62
1:C:140:VAL:HG13	1:C:141:MET:HE2	1.81	0.62
1:A:220:SER:HB2	1:A:570:PHE:HE2	1.64	0.62
1:A:578:ARG:HA	1:A:581:PHE:CE1	2.34	0.62
1:B:2270:PRO:HG2	1:B:2314:ASP:HB2	1.81	0.62
1:A:140:VAL:HG13	1:A:141:MET:HE2	1.81	0.62
1:A:1274:VAL:HG11	1:A:1299:ASN:HB3	1.80	0.62
1:B:2193:THR:HG22	1:B:2205:LYS:HG3	1.81	0.62
1:C:220:SER:HB2	1:C:570:PHE:HE2	1.64	0.62
1:C:723:GLU:HG2	1:C:724:TRP:HD1	1.62	0.62
1:A:2088:TYR:HB3	1:A:2089:PRO:HD2	1.81	0.62
1:C:959:ARG:CZ	1:C:969:ARG:CD	2.78	0.62
1:C:2270:PRO:HG2	1:C:2314:ASP:HB2	1.81	0.62
1:A:477:TRP:HE3	1:A:565:LEU:HD22	1.64	0.62
1:C:1684:ILE:HD12	1:C:1687:ARG:HH21	1.64	0.62
1:A:115:GLY:HA3	1:A:118:GLU:HB2	1.81	0.62
1:C:966:GLU:CG	1:C:969:ARG:CZ	2.74	0.61
1:C:1992:ILE:HG23	1:C:1996:TRP:HD1	1.65	0.61
1:A:1651:ARG:HE	1:A:1732:LEU:HD23	1.62	0.61
1:A:4:PRO:HB2	1:A:7:LEU:HB3	1.82	0.61
1:B:835:PHE:HB3	1:B:1111:PHE:HZ	1.65	0.61
1:C:2193:THR:HG22	1:C:2205:LYS:HG3	1.81	0.61
1:A:835:PHE:HB3	1:A:1111:PHE:HZ	1.65	0.61
1:C:842:ILE:HD12	1:C:853:LEU:HD23	1.82	0.61
1:C:1265:VAL:HA	1:C:1268:LEU:HG	1.82	0.61
1:B:966:GLU:CG	1:B:969:ARG:CZ	2.74	0.61
1:A:1190:ALA:O	1:A:1194:ILE:HD12	2.01	0.61
1:B:140:VAL:HG13	1:B:141:MET:HE2	1.81	0.61
1:B:578:ARG:HA	1:B:581:PHE:CE1	2.35	0.61
1:B:842:ILE:HD12	1:B:853:LEU:HD23	1.82	0.61
1:A:1992:ILE:HG23	1:A:1996:TRP:HD1	1.65	0.61
1:A:2372:VAL:O	1:A:2376:PHE:CB	2.40	0.61
1:B:1312:PHE:O	1:B:1316:ILE:HG12	2.00	0.61
1:B:1684:ILE:HD12	1:B:1687:ARG:HH21	1.64	0.61
1:C:639:ILE:H	1:C:639:ILE:HD12	1.66	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1632:LEU:HA	1:C:1635:LEU:HD13	1.82	0.61
1:C:1667:VAL:HA	1:C:1670:ILE:HG22	1.82	0.61
1:A:959:ARG:CZ	1:A:969:ARG:CD	2.78	0.61
1:A:1632:LEU:HA	1:A:1635:LEU:HD13	1.82	0.61
1:B:884:LEU:O	1:B:888:ILE:HG12	2.01	0.61
1:C:28:PRO:HB2	1:C:257:ILE:HG12	1.83	0.61
1:C:824:ARG:HA	1:C:827:GLU:HG2	1.82	0.61
1:A:842:ILE:HD12	1:A:853:LEU:HD23	1.82	0.61
1:B:639:ILE:H	1:B:639:ILE:HD12	1.66	0.61
1:B:830:ILE:HG23	1:B:948:GLN:HG2	1.83	0.61
1:A:639:ILE:H	1:A:639:ILE:HD12	1.66	0.61
1:B:1003:GLU:O	1:B:1007:ILE:HG12	2.01	0.61
1:B:1383:GLY:HA3	1:B:1404:TYR:HB2	1.82	0.61
1:C:884:LEU:O	1:C:888:ILE:HG12	2.01	0.61
1:C:1190:ALA:O	1:C:1194:ILE:HD12	2.01	0.61
1:C:1312:PHE:O	1:C:1316:ILE:HG12	2.00	0.61
1:A:1244:PHE:HA	1:A:1248:PHE:HB2	1.81	0.60
1:A:1312:PHE:O	1:A:1316:ILE:HG12	2.00	0.60
1:A:1383:GLY:HA3	1:A:1404:TYR:HB2	1.82	0.60
1:B:824:ARG:HA	1:B:827:GLU:HG2	1.82	0.60
1:B:1667:VAL:HA	1:B:1670:ILE:HG22	1.82	0.60
1:C:4:PRO:HB2	1:C:7:LEU:HB3	1.82	0.60
1:C:835:PHE:HB3	1:C:1111:PHE:HZ	1.65	0.60
1:C:717:ASN:OD1	1:C:718:THR:N	2.35	0.60
1:C:1003:GLU:O	1:C:1007:ILE:HG12	2.01	0.60
1:B:4:PRO:HB2	1:B:7:LEU:HB3	1.82	0.60
1:B:1244:PHE:HA	1:B:1248:PHE:HB2	1.81	0.60
1:B:2263:THR:O	1:B:2267:ASP:HB2	2.02	0.60
1:A:1667:VAL:HA	1:A:1670:ILE:HG22	1.82	0.60
1:B:1632:LEU:HA	1:B:1635:LEU:HD13	1.82	0.60
1:C:1383:GLY:HA3	1:C:1404:TYR:HB2	1.82	0.60
1:A:884:LEU:O	1:A:888:ILE:HG12	2.01	0.60
1:A:2152:LEU:HD13	1:A:2340:ILE:HD13	1.83	0.60
1:B:655:PRO:HG3	1:B:890:GLN:HG3	1.83	0.60
1:C:2152:LEU:HD13	1:C:2340:ILE:HD13	1.83	0.60
1:A:1003:GLU:O	1:A:1007:ILE:HG12	2.01	0.60
1:B:1265:VAL:HA	1:B:1268:LEU:HG	1.83	0.60
1:A:824:ARG:HA	1:A:827:GLU:HG2	1.82	0.60
1:A:959:ARG:HH21	1:A:969:ARG:HH11	1.49	0.60
1:A:2263:THR:O	1:A:2267:ASP:HB2	2.02	0.60
1:B:28:PRO:HB2	1:B:257:ILE:HG12	1.83	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:959:ARG:CZ	1:B:969:ARG:CD	2.77	0.60
1:B:1190:ALA:O	1:B:1194:ILE:HD12	2.01	0.60
1:B:1649:ASN:HD21	1:B:1823:PRO:HB3	1.67	0.60
1:B:2152:LEU:HD13	1:B:2340:ILE:HD13	1.83	0.60
1:C:655:PRO:HG3	1:C:890:GLN:HG3	1.83	0.60
1:C:830:ILE:HG23	1:C:948:GLN:HG2	1.82	0.60
1:A:1649:ASN:HD21	1:A:1823:PRO:HB3	1.67	0.60
1:A:655:PRO:HG3	1:A:890:GLN:HG3	1.83	0.59
1:A:717:ASN:OD1	1:A:718:THR:N	2.35	0.59
1:B:2000:SER:HA	1:C:2036:PRO:HA	1.84	0.59
1:C:1649:ASN:HD21	1:C:1823:PRO:HB3	1.67	0.59
1:B:28:PRO:HA	1:B:253:TYR:OH	2.02	0.59
1:B:717:ASN:OD1	1:B:718:THR:N	2.34	0.59
1:A:830:ILE:HG23	1:A:948:GLN:HG2	1.82	0.59
1:A:1265:VAL:HA	1:A:1268:LEU:HG	1.82	0.59
1:B:477:TRP:HZ3	1:B:566:THR:HB	1.67	0.59
1:B:1043:TRP:HZ2	1:B:1117:ALA:HA	1.67	0.59
1:B:2351:VAL:O	1:B:2351:VAL:HG12	2.02	0.59
1:A:20:LEU:HG	1:A:35:TYR:CE2	2.37	0.59
1:A:477:TRP:HZ3	1:A:566:THR:HB	1.67	0.59
1:A:28:PRO:HB2	1:A:257:ILE:HG12	1.83	0.59
1:A:2351:VAL:HG12	1:A:2351:VAL:O	2.02	0.59
1:C:966:GLU:CB	1:C:969:ARG:CZ	2.81	0.59
1:C:20:LEU:HG	1:C:35:TYR:CE2	2.37	0.59
1:B:966:GLU:CB	1:B:969:ARG:CZ	2.81	0.59
1:C:1043:TRP:HZ2	1:C:1117:ALA:HA	1.67	0.59
1:C:2263:THR:O	1:C:2267:ASP:HB2	2.02	0.59
1:A:966:GLU:HA	1:A:969:ARG:NH1	2.17	0.59
1:B:966:GLU:HA	1:B:969:ARG:NH1	2.17	0.59
1:A:966:GLU:CB	1:A:969:ARG:CZ	2.81	0.59
1:B:514:LEU:HD22	1:B:573:LEU:HD22	1.85	0.59
1:C:28:PRO:HA	1:C:253:TYR:OH	2.02	0.59
1:A:44:VAL:HG13	1:A:328:LYS:HB2	1.84	0.59
1:A:2036:PRO:HA	1:C:2000:SER:HA	1.84	0.59
1:B:20:LEU:HG	1:B:35:TYR:CE2	2.37	0.59
1:B:44:VAL:HG13	1:B:328:LYS:HB2	1.85	0.59
1:B:959:ARG:HH21	1:B:969:ARG:HH11	1.49	0.58
1:A:1043:TRP:HZ2	1:A:1117:ALA:HA	1.67	0.58
1:A:2000:SER:HA	1:B:2036:PRO:HA	1.84	0.58
1:C:966:GLU:HA	1:C:969:ARG:NH1	2.18	0.58
1:A:514:LEU:HD22	1:A:573:LEU:HD22	1.85	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1694:PRO:HB3	1:C:1926:SER:HA	1.86	0.58
1:C:2246:ILE:O	1:C:2339:PHE:N	2.35	0.58
1:C:477:TRP:HZ3	1:C:566:THR:HB	1.67	0.58
1:C:514:LEU:HD22	1:C:573:LEU:HD22	1.85	0.58
1:A:1637:LEU:HB2	1:A:1638:PRO:HD3	1.86	0.58
1:B:841:PHE:CD1	1:B:937:GLY:HA3	2.39	0.58
1:A:968:MET:CE	1:A:974:PRO:HB2	2.28	0.58
1:C:1881:MET:O	1:C:1885:ILE:HG12	2.04	0.58
1:C:1262:LEU:HA	1:C:1265:VAL:HG12	1.86	0.58
1:B:2246:ILE:O	1:B:2339:PHE:N	2.35	0.58
1:C:1300:ILE:HB	1:C:1303:ASP:HB3	1.86	0.58
1:C:2351:VAL:O	1:C:2351:VAL:HG12	2.02	0.58
1:C:1637:LEU:HB2	1:C:1638:PRO:HD3	1.86	0.58
1:A:2246:ILE:O	1:A:2339:PHE:N	2.35	0.57
1:B:1637:LEU:HB2	1:B:1638:PRO:HD3	1.86	0.57
1:B:1870:ILE:HG13	1:B:1874:LEU:HD13	1.86	0.57
1:B:2390:ASN:HB2	1:B:2436:MET:HG2	1.86	0.57
1:C:44:VAL:HG13	1:C:328:LYS:HB2	1.84	0.57
1:C:1870:ILE:HG13	1:C:1874:LEU:HD13	1.86	0.57
1:A:959:ARG:NH1	1:A:969:ARG:CG	2.68	0.57
1:A:1694:PRO:HB3	1:A:1926:SER:HA	1.86	0.57
1:A:2121:LEU:HD21	1:A:2139:SER:HB3	1.86	0.57
1:A:2128:ARG:NH2	1:C:1280:VAL:HG23	2.20	0.57
1:A:2390:ASN:ND2	1:A:2392:ASP:OD2	2.38	0.57
1:B:1694:PRO:HB3	1:B:1926:SER:HA	1.85	0.57
1:C:959:ARG:HH21	1:C:969:ARG:HH11	1.49	0.57
1:A:2390:ASN:HB2	1:A:2436:MET:HG2	1.87	0.57
1:A:194:PHE:O	1:A:197:THR:OG1	2.21	0.57
1:C:661:LEU:HD23	1:C:694:TYR:CZ	2.39	0.57
1:C:2238:ILE:HG12	1:C:2241:SER:OG	2.04	0.57
1:A:1300:ILE:HB	1:A:1303:ASP:HB3	1.86	0.57
1:C:2390:ASN:ND2	1:C:2392:ASP:OD2	2.38	0.57
1:B:681:ARG:NH1	1:B:771:THR:O	2.38	0.57
1:B:2053:VAL:O	1:B:2057:ILE:HG12	2.05	0.57
1:A:2251:GLN:OE1	1:C:2201:ASN:ND2	2.38	0.57
1:B:2401:ILE:HG12	1:B:2416:LEU:HB3	1.87	0.57
1:C:2401:ILE:HG12	1:C:2416:LEU:HB3	1.87	0.57
1:A:661:LEU:HD23	1:A:694:TYR:CZ	2.40	0.57
1:C:529:MET:HB2	1:C:531:ILE:HG12	1.87	0.57
1:C:1166:VAL:HG13	1:C:1167:PHE:CD1	2.40	0.57
1:C:2053:VAL:O	1:C:2057:ILE:HG12	2.05	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:959:ARG:CZ	1:A:969:ARG:CG	2.83	0.57
1:A:2053:VAL:O	1:A:2057:ILE:HG12	2.04	0.57
1:A:2201:ASN:ND2	1:B:2251:GLN:OE1	2.38	0.57
1:B:2196:TYR:CE1	1:B:2201:ASN:HA	2.40	0.57
1:C:841:PHE:CD1	1:C:937:GLY:HA3	2.39	0.57
1:C:2390:ASN:HB2	1:C:2436:MET:HG2	1.87	0.57
1:A:841:PHE:CD1	1:A:937:GLY:HA3	2.39	0.56
1:A:1262:LEU:HA	1:A:1265:VAL:HG12	1.86	0.56
1:B:194:PHE:O	1:B:197:THR:OG1	2.21	0.56
1:B:2390:ASN:ND2	1:B:2392:ASP:OD2	2.38	0.56
1:C:474:MET:HE3	1:C:489:LEU:HB3	1.87	0.56
1:A:474:MET:HE3	1:A:489:LEU:HB3	1.87	0.56
1:A:681:ARG:NH1	1:A:771:THR:O	2.38	0.56
1:A:1823:PRO:HB2	1:A:1826:ARG:HB3	1.87	0.56
1:B:1280:VAL:HG23	1:C:2128:ARG:NH2	2.19	0.56
1:B:1300:ILE:HB	1:B:1303:ASP:HB3	1.86	0.56
1:B:1881:MET:O	1:B:1885:ILE:HG12	2.04	0.56
1:B:2196:TYR:CZ	1:B:2201:ASN:HA	2.40	0.56
1:B:2238:ILE:HG12	1:B:2241:SER:OG	2.05	0.56
1:A:1280:VAL:HG23	1:B:2128:ARG:NH2	2.20	0.56
1:A:1881:MET:O	1:A:1885:ILE:HG12	2.04	0.56
1:A:2401:ILE:HG12	1:A:2416:LEU:HB3	1.87	0.56
1:B:1018:ASP:H	1:B:1021:ALA:HB3	1.70	0.56
1:B:1166:VAL:HG13	1:B:1167:PHE:CD1	2.40	0.56
1:B:1992:ILE:HG23	1:B:1996:TRP:CD1	2.40	0.56
1:C:486:GLY:HA2	1:C:489:LEU:HG	1.88	0.56
1:C:1302:PHE:HA	1:C:1305:ILE:HG12	1.88	0.56
1:A:1992:ILE:HG23	1:A:1996:TRP:CD1	2.41	0.56
1:B:473:ALA:O	1:B:565:LEU:HD21	2.06	0.56
1:B:661:LEU:HD23	1:B:694:TYR:CZ	2.40	0.56
1:B:959:ARG:CZ	1:B:969:ARG:CG	2.83	0.56
1:C:959:ARG:CZ	1:C:969:ARG:CG	2.83	0.56
1:A:1166:VAL:HG13	1:A:1167:PHE:CD1	2.40	0.56
1:B:1262:LEU:HA	1:B:1265:VAL:HG12	1.86	0.56
1:C:681:ARG:NH1	1:C:771:THR:O	2.38	0.56
1:A:542:ASN:OD1	1:A:543:PHE:N	2.39	0.56
1:A:1018:ASP:H	1:A:1021:ALA:HB3	1.69	0.56
1:B:2121:LEU:HD21	1:B:2139:SER:HB3	1.86	0.56
1:C:1018:ASP:H	1:C:1021:ALA:HB3	1.70	0.56
1:C:2121:LEU:HD21	1:C:2139:SER:HB3	1.86	0.56
1:B:1074:TRP:HA	1:B:1077:TRP:CD1	2.41	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:194:PHE:O	1:C:197:THR:OG1	2.20	0.56
1:C:473:ALA:O	1:C:565:LEU:HD21	2.06	0.56
1:C:2081:LEU:HB3	1:C:2094:MET:HB2	1.88	0.56
1:A:1300:ILE:HG13	1:A:1301:GLY:H	1.71	0.56
1:A:1824:LYS:HG3	1:A:1825:PHE:HD1	1.71	0.56
1:B:959:ARG:NH1	1:B:969:ARG:CG	2.67	0.56
1:B:1684:ILE:O	1:B:1687:ARG:HG3	2.06	0.56
1:A:486:GLY:HA2	1:A:489:LEU:HG	1.88	0.56
1:A:1870:ILE:HG13	1:A:1874:LEU:HD13	1.86	0.56
1:B:968:MET:CE	1:B:974:PRO:HB2	2.28	0.56
1:A:529:MET:HB2	1:A:531:ILE:HG12	1.87	0.55
1:A:966:GLU:HB3	1:A:969:ARG:CZ	2.36	0.55
1:A:2238:ILE:HG12	1:A:2241:SER:OG	2.05	0.55
1:B:529:MET:HB2	1:B:531:ILE:HG12	1.87	0.55
1:C:638:PHE:CZ	1:C:755:VAL:HG13	2.41	0.55
1:C:483:SER:OG	1:C:486:GLY:N	2.37	0.55
1:B:542:ASN:OD1	1:B:543:PHE:N	2.39	0.55
1:B:1824:LYS:HG3	1:B:1825:PHE:HD1	1.71	0.55
1:C:968:MET:CE	1:C:974:PRO:HB2	2.28	0.55
1:C:1685:THR:O	1:C:1689:GLU:HG3	2.07	0.55
1:C:1823:PRO:HB2	1:C:1826:ARG:HB3	1.87	0.55
1:B:1300:ILE:HG13	1:B:1301:GLY:H	1.71	0.55
1:B:1302:PHE:HA	1:B:1305:ILE:HG12	1.87	0.55
1:B:1823:PRO:HB2	1:B:1826:ARG:HB3	1.88	0.55
1:B:1991:ALA:HB2	1:B:2007:PHE:HZ	1.71	0.55
1:C:542:ASN:OD1	1:C:543:PHE:N	2.39	0.55
1:C:966:GLU:HB3	1:C:969:ARG:CZ	2.36	0.55
1:C:2349:ALA:HB3	1:C:2352:PHE:HB2	1.88	0.55
1:A:473:ALA:O	1:A:565:LEU:HD21	2.05	0.55
1:A:1684:ILE:O	1:A:1687:ARG:HG3	2.06	0.55
1:C:484:ILE:HD13	1:C:544:VAL:HA	1.89	0.55
1:C:959:ARG:NH1	1:C:969:ARG:CG	2.68	0.55
1:C:1300:ILE:HG13	1:C:1301:GLY:H	1.71	0.55
1:A:638:PHE:CZ	1:A:755:VAL:HG13	2.41	0.55
1:A:1302:PHE:HA	1:A:1305:ILE:HG12	1.87	0.55
1:A:1991:ALA:HB2	1:A:2007:PHE:HZ	1.71	0.55
1:B:484:ILE:HD13	1:B:544:VAL:HA	1.89	0.55
1:A:1615:ASP:OD1	1:A:1616:ILE:N	2.40	0.55
1:C:62:VAL:HG12	1:C:66:PHE:HE2	1.72	0.55
1:C:513:ILE:HD11	1:C:572:LEU:HD11	1.89	0.55
1:C:875:MET:HE3	1:C:945:LEU:HD21	1.89	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1074:TRP:HA	1:C:1077:TRP:CD1	2.41	0.55
1:C:1157:SER:HA	1:C:1594:GLN:HG2	1.88	0.55
1:C:1615:ASP:OD1	1:C:1616:ILE:N	2.39	0.55
1:C:1824:LYS:HG3	1:C:1825:PHE:HD1	1.71	0.55
1:A:483:SER:OG	1:A:486:GLY:N	2.37	0.55
1:A:1869:ARG:NH2	1:B:2068:ASN:OD1	2.38	0.55
1:B:62:VAL:HG12	1:B:66:PHE:HE2	1.72	0.55
1:B:1925:ARG:NH2	1:B:1929:SER:O	2.40	0.55
1:C:1925:ARG:NH2	1:C:1929:SER:O	2.40	0.55
1:A:847:ASN:ND2	1:A:921:GLY:HA3	2.22	0.55
1:B:1157:SER:HA	1:B:1594:GLN:HG2	1.89	0.55
1:B:1837:GLY:O	1:B:1841:ILE:HG12	2.07	0.55
1:B:2081:LEU:HB3	1:B:2094:MET:HB2	1.88	0.55
1:C:2155:ARG:HH12	1:C:2324:ALA:HB3	1.71	0.55
1:A:875:MET:HE3	1:A:945:LEU:HD21	1.89	0.54
1:A:1074:TRP:HA	1:A:1077:TRP:CD1	2.41	0.54
1:A:1925:ARG:NH2	1:A:1929:SER:O	2.40	0.54
1:B:474:MET:HE3	1:B:489:LEU:HB3	1.87	0.54
1:B:660:ILE:HD12	1:B:887:MET:HB3	1.90	0.54
1:C:1992:ILE:HG23	1:C:1996:TRP:CD1	2.41	0.54
1:C:2160:SER:HB3	1:C:2304:MET:HG3	1.89	0.54
1:A:1915:VAL:HG12	1:A:1916:PHE:CD2	2.42	0.54
1:B:638:PHE:CZ	1:B:755:VAL:HG13	2.41	0.54
1:B:1915:VAL:HG12	1:B:1916:PHE:CD2	2.42	0.54
1:C:1684:ILE:O	1:C:1687:ARG:HG3	2.06	0.54
1:C:1837:GLY:O	1:C:1841:ILE:HG12	2.07	0.54
1:C:1915:VAL:HG12	1:C:1916:PHE:CD2	2.42	0.54
1:A:484:ILE:HD13	1:A:544:VAL:HA	1.89	0.54
1:A:1157:SER:HA	1:A:1594:GLN:HG2	1.88	0.54
1:A:2329:SER:OG	1:A:2331:ARG:NH1	2.41	0.54
1:B:486:GLY:HA2	1:B:489:LEU:HG	1.88	0.54
1:B:513:ILE:HD11	1:B:572:LEU:HD11	1.89	0.54
1:B:2160:SER:HB3	1:B:2304:MET:HG3	1.90	0.54
1:C:1207:LEU:O	1:C:1220:THR:OG1	2.26	0.54
1:C:1991:ALA:HB2	1:C:2007:PHE:HZ	1.71	0.54
1:C:2175:ILE:HG23	1:C:2225:GLN:HG3	1.89	0.54
1:A:1837:GLY:O	1:A:1841:ILE:HG12	2.07	0.54
1:A:2135:ARG:NE	1:A:2266:ASN:OD1	2.41	0.54
1:B:2155:ARG:HH12	1:B:2324:ALA:HB3	1.72	0.54
1:B:2349:ALA:HB3	1:B:2352:PHE:HB2	1.89	0.54
1:A:660:ILE:HD12	1:A:887:MET:HB3	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2349:ALA:HB3	1:A:2352:PHE:HB2	1.89	0.54
1:B:966:GLU:HB3	1:B:969:ARG:CZ	2.37	0.54
1:B:2329:SER:OG	1:B:2331:ARG:NH1	2.41	0.54
1:C:1824:LYS:HG3	1:C:1825:PHE:CD1	2.43	0.54
1:C:2329:SER:OG	1:C:2331:ARG:NH1	2.41	0.54
1:A:1824:LYS:HG3	1:A:1825:PHE:CD1	2.43	0.54
1:B:198:ALA:O	1:B:202:ILE:HG13	2.08	0.54
1:B:968:MET:HE1	1:B:974:PRO:HB3	1.84	0.54
1:C:201:GLY:HA2	1:C:209:ASN:HB3	1.89	0.54
1:A:1895:LYS:NZ	1:A:1956:PRO:O	2.40	0.54
1:A:2081:LEU:HB3	1:A:2094:MET:HB2	1.88	0.54
1:A:2155:ARG:HH12	1:A:2324:ALA:HB3	1.71	0.54
1:A:2160:SER:HB3	1:A:2304:MET:HG3	1.89	0.54
1:B:875:MET:HE3	1:B:945:LEU:HD21	1.89	0.54
1:B:1615:ASP:OD1	1:B:1616:ILE:N	2.39	0.54
1:B:2175:ILE:HG23	1:B:2225:GLN:HG3	1.89	0.54
1:C:660:ILE:HD12	1:C:887:MET:HB3	1.89	0.54
1:B:32:SER:HB2	1:B:253:TYR:HD2	1.65	0.54
1:C:1895:LYS:NZ	1:C:1956:PRO:O	2.40	0.54
1:A:201:GLY:HA2	1:A:209:ASN:HB3	1.89	0.54
1:B:488:ILE:HA	1:B:491:ILE:HG12	1.90	0.54
1:B:966:GLU:HB3	1:B:969:ARG:HH22	1.62	0.54
1:B:2243:PRO:HB3	1:B:2287:PHE:CE1	2.43	0.54
1:C:1967:SER:O	1:C:1972:ASN:ND2	2.41	0.54
1:A:62:VAL:HG12	1:A:66:PHE:HE2	1.72	0.54
1:A:1967:SER:O	1:A:1972:ASN:ND2	2.41	0.54
1:B:1215:ARG:HG2	1:B:1218:GLU:HB3	1.90	0.54
1:B:959:ARG:NH2	1:B:969:ARG:NH1	2.53	0.53
1:B:1065:PRO:HG2	1:B:1068:SER:HB3	1.90	0.53
1:B:1824:LYS:HG3	1:B:1825:PHE:CD1	2.43	0.53
1:B:1895:LYS:NZ	1:B:1956:PRO:O	2.40	0.53
1:C:2243:PRO:HB3	1:C:2287:PHE:CE1	2.43	0.53
1:B:1891:LEU:HD13	1:B:1900:LYS:HA	1.91	0.53
1:B:2084:SER:HB3	1:B:2090:PRO:HA	1.90	0.53
1:C:1068:SER:HB2	1:C:1070:ILE:HD12	1.91	0.53
1:A:513:ILE:HD11	1:A:572:LEU:HD11	1.89	0.53
1:A:1365:ILE:HG23	1:A:2403:LEU:HD21	1.90	0.53
1:A:1823:PRO:HG2	1:A:1826:ARG:HD2	1.91	0.53
1:A:2175:ILE:HG23	1:A:2225:GLN:HG3	1.89	0.53
1:B:13:LYS:NZ	1:B:43:ALA:O	2.34	0.53
1:B:201:GLY:HA2	1:B:209:ASN:HB3	1.89	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:483:SER:OG	1:B:486:GLY:N	2.37	0.53
1:B:1155:LYS:HD2	1:B:1161:TYR:CZ	2.44	0.53
1:B:2155:ARG:HH22	1:B:2324:ALA:H	1.55	0.53
1:C:1891:LEU:HD13	1:C:1900:LYS:HA	1.91	0.53
1:C:2135:ARG:NE	1:C:2266:ASN:OD1	2.41	0.53
1:A:206:SER:O	1:A:210:SER:N	2.41	0.53
1:A:2155:ARG:HH22	1:A:2324:ALA:H	1.55	0.53
1:B:1009:ILE:HG23	1:B:1024:GLN:HG2	1.90	0.53
1:B:2135:ARG:NE	1:B:2266:ASN:OD1	2.41	0.53
1:C:204:LYS:HG3	1:C:312:ASN:ND2	2.24	0.53
1:C:2084:SER:HB3	1:C:2090:PRO:HA	1.90	0.53
1:C:2164:TRP:HB3	1:C:2303:LYS:HB2	1.91	0.53
1:A:198:ALA:O	1:A:202:ILE:HG13	2.08	0.53
1:B:204:LYS:HG3	1:B:312:ASN:ND2	2.24	0.53
1:B:206:SER:O	1:B:210:SER:N	2.41	0.53
1:B:2363:VAL:HA	1:B:2366:VAL:HG12	1.91	0.53
1:C:260:VAL:HA	1:C:264:TRP:HD1	1.74	0.53
1:C:734:ARG:CZ	1:C:734:ARG:HA	2.39	0.53
1:C:1155:LYS:HD2	1:C:1161:TYR:CZ	2.44	0.53
1:A:8:LYS:HZ2	1:A:142:PHE:HB3	1.73	0.53
1:A:2243:PRO:HB3	1:A:2287:PHE:CE1	2.43	0.53
1:B:266:PRO:HG2	1:B:269:SER:HB3	1.91	0.53
1:C:488:ILE:HA	1:C:491:ILE:HG12	1.90	0.53
1:C:2245:PHE:HB3	1:C:2339:PHE:HE2	1.73	0.53
1:A:1068:SER:HB2	1:A:1070:ILE:HD12	1.91	0.53
1:B:685:TYR:O	1:B:689:LEU:HG	2.09	0.53
1:C:198:ALA:O	1:C:202:ILE:HG13	2.08	0.53
1:A:1215:ARG:HG2	1:A:1218:GLU:HB3	1.90	0.53
1:A:1232:LEU:O	1:A:1235:ILE:HG22	2.09	0.53
1:B:521:LEU:HD13	1:B:524:GLN:HE21	1.74	0.53
1:B:1247:VAL:HG23	1:B:1248:PHE:CD2	2.44	0.53
1:B:1967:SER:O	1:B:1972:ASN:ND2	2.41	0.53
1:C:32:SER:HB2	1:C:253:TYR:HD2	1.65	0.53
1:C:1005:THR:O	1:C:1009:ILE:HG12	2.09	0.53
1:C:1373:ARG:O	1:C:1377:GLN:HG2	2.09	0.53
1:C:1823:PRO:HG2	1:C:1826:ARG:HD2	1.91	0.53
1:B:835:PHE:HE1	1:B:875:MET:HE1	1.74	0.52
1:B:1823:PRO:HG2	1:B:1826:ARG:HD2	1.91	0.52
1:C:1365:ILE:HG23	1:C:2403:LEU:HD21	1.90	0.52
1:A:685:TYR:O	1:A:689:LEU:HG	2.09	0.52
1:A:1247:VAL:HG23	1:A:1248:PHE:CD2	2.44	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2245:PHE:HB3	1:A:2339:PHE:HE2	1.73	0.52
1:B:1397:ALA:HB2	1:C:2033:ARG:HD2	1.91	0.52
1:C:206:SER:O	1:C:210:SER:N	2.41	0.52
1:C:1038:PHE:O	1:C:1042:ILE:HG12	2.10	0.52
1:C:1247:VAL:HG23	1:C:1248:PHE:CD2	2.44	0.52
1:B:1232:LEU:O	1:B:1235:ILE:HG22	2.09	0.52
1:B:1869:ARG:NH2	1:C:2068:ASN:OD1	2.38	0.52
1:C:266:PRO:HG2	1:C:269:SER:HB3	1.91	0.52
1:C:1232:LEU:O	1:C:1235:ILE:HG22	2.09	0.52
1:C:2326:THR:HA	1:C:2333:TYR:HE1	1.75	0.52
1:A:488:ILE:HA	1:A:491:ILE:HG12	1.90	0.52
1:A:864:PRO:O	1:A:866:ALA:N	2.41	0.52
1:A:1065:PRO:HG2	1:A:1068:SER:HB3	1.90	0.52
1:A:2084:SER:HB3	1:A:2090:PRO:HA	1.90	0.52
1:A:2425:ARG:NH2	1:B:2389:PRO:HD2	2.25	0.52
1:C:676:SER:HB3	1:C:679:LEU:HD12	1.91	0.52
1:C:2155:ARG:HH22	1:C:2324:ALA:H	1.55	0.52
1:A:1038:PHE:O	1:A:1042:ILE:HG12	2.10	0.52
1:A:1155:LYS:HD2	1:A:1161:TYR:CZ	2.44	0.52
1:C:835:PHE:HE1	1:C:875:MET:HE1	1.74	0.52
1:B:734:ARG:HA	1:B:734:ARG:CZ	2.39	0.52
1:B:2326:THR:HA	1:B:2333:TYR:HE1	1.75	0.52
1:C:968:MET:HE1	1:C:974:PRO:HB3	1.84	0.52
1:C:1009:ILE:HG23	1:C:1024:GLN:HG2	1.91	0.52
1:A:266:PRO:HG2	1:A:269:SER:HB3	1.91	0.52
1:B:872:SER:HA	1:B:875:MET:HE2	1.92	0.52
1:B:2245:PHE:HB3	1:B:2339:PHE:HE2	1.73	0.52
1:B:1068:SER:HB2	1:B:1070:ILE:HD12	1.91	0.52
1:B:1365:ILE:HG23	1:B:2403:LEU:HD21	1.90	0.52
1:B:2265:ILE:HA	1:B:2272:ILE:HD13	1.92	0.52
1:B:2385:PHE:CE2	1:C:2381:SER:HA	2.43	0.52
1:C:2265:ILE:HA	1:C:2272:ILE:HD13	1.92	0.52
1:A:2164:TRP:HB3	1:A:2303:LYS:HB2	1.91	0.52
1:B:20:LEU:HG	1:B:35:TYR:CD2	2.45	0.52
1:B:2164:TRP:HB3	1:B:2303:LYS:HB2	1.91	0.52
1:A:204:LYS:HG3	1:A:312:ASN:ND2	2.24	0.52
1:A:260:VAL:HA	1:A:264:TRP:HD1	1.74	0.52
1:A:835:PHE:HE1	1:A:875:MET:HE1	1.74	0.52
1:A:2326:THR:HA	1:A:2333:TYR:HE1	1.75	0.52
1:B:1005:THR:O	1:B:1009:ILE:HG12	2.10	0.52
1:C:471:LEU:O	1:C:475:MET:HG3	2.10	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:959:ARG:NH2	1:C:969:ARG:NH1	2.53	0.52
1:C:1648:SER:HA	1:C:1816:PHE:HE2	1.75	0.52
1:A:42:SER:HB2	1:A:45:LEU:HD11	1.92	0.51
1:A:1373:ARG:O	1:A:1377:GLN:HG2	2.09	0.51
1:B:1267:GLN:HE21	1:B:1291:CYS:HA	1.75	0.51
1:C:1065:PRO:HG2	1:C:1068:SER:HB3	1.91	0.51
1:A:471:LEU:O	1:A:475:MET:HG3	2.10	0.51
1:A:734:ARG:CZ	1:A:734:ARG:HA	2.39	0.51
1:A:959:ARG:NH2	1:A:969:ARG:NH1	2.53	0.51
1:A:2389:PRO:HD2	1:C:2425:ARG:NH2	2.25	0.51
1:C:2363:VAL:HA	1:C:2366:VAL:HG12	1.91	0.51
1:A:20:LEU:HG	1:A:35:TYR:CD2	2.45	0.51
1:A:526:PHE:HA	1:A:529:MET:HG2	1.92	0.51
1:A:676:SER:HB3	1:A:679:LEU:HD12	1.92	0.51
1:A:1009:ILE:HG23	1:A:1024:GLN:HG2	1.90	0.51
1:C:521:LEU:HD13	1:C:524:GLN:HE21	1.74	0.51
1:A:872:SER:HA	1:A:875:MET:HE2	1.92	0.51
1:A:1891:LEU:HD13	1:A:1900:LYS:HA	1.91	0.51
1:A:2265:ILE:HA	1:A:2272:ILE:HD13	1.92	0.51
1:B:302:ASP:OD1	1:B:303:LEU:N	2.44	0.51
1:B:649:VAL:HG12	1:B:748:ALA:HB1	1.93	0.51
1:B:847:ASN:ND2	1:B:921:GLY:HA3	2.22	0.51
1:B:2425:ARG:NH2	1:C:2389:PRO:HD2	2.25	0.51
1:C:1215:ARG:HG2	1:C:1218:GLU:HB3	1.90	0.51
1:C:2002:PRO:HD2	1:C:2005:ASP:HB2	1.92	0.51
1:A:1648:SER:HA	1:A:1816:PHE:HE2	1.76	0.51
1:A:2031:ALA:O	1:C:1394:TYR:N	2.42	0.51
1:A:2363:VAL:HA	1:A:2366:VAL:HG12	1.91	0.51
1:B:676:SER:HB3	1:B:679:LEU:HD12	1.92	0.51
1:B:1232:LEU:HA	1:B:1235:ILE:HG22	1.92	0.51
1:C:685:TYR:O	1:C:689:LEU:HG	2.09	0.51
1:C:872:SER:HA	1:C:875:MET:HE2	1.92	0.51
1:A:1005:THR:O	1:A:1009:ILE:HG12	2.10	0.51
1:A:1267:GLN:HE21	1:A:1291:CYS:HA	1.75	0.51
1:B:200:VAL:O	1:B:209:ASN:ND2	2.43	0.51
1:B:1038:PHE:O	1:B:1042:ILE:HG12	2.10	0.51
1:C:260:VAL:HA	1:C:264:TRP:CD1	2.46	0.51
1:C:1017:MET:HB3	1:C:1242:GLN:HG2	1.92	0.51
1:A:28:PRO:HG2	1:A:258:PRO:HD3	1.93	0.51
1:A:1025:CYS:SG	1:A:1235:ILE:HG23	2.51	0.51
1:A:2385:PHE:CE2	1:B:2381:SER:HA	2.43	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:864:PRO:O	1:B:866:ALA:N	2.41	0.51
1:C:42:SER:HB2	1:C:45:LEU:HD11	1.93	0.51
1:C:649:VAL:HG12	1:C:748:ALA:HB1	1.93	0.51
1:C:2408:LYS:HA	1:C:2408:LYS:HE2	1.93	0.51
1:A:200:VAL:O	1:A:209:ASN:ND2	2.43	0.51
1:A:477:TRP:CE3	1:A:565:LEU:HD22	2.45	0.51
1:A:521:LEU:HD13	1:A:524:GLN:HE21	1.74	0.51
1:A:2068:ASN:OD1	1:C:1869:ARG:NH2	2.38	0.51
1:B:42:SER:HB2	1:B:45:LEU:HD11	1.93	0.51
1:B:1373:ARG:O	1:B:1377:GLN:HG2	2.09	0.51
1:B:2002:PRO:HD2	1:B:2005:ASP:HB2	1.92	0.51
1:C:28:PRO:HG2	1:C:258:PRO:HD3	1.93	0.51
1:C:1074:TRP:CE2	1:C:1095:LEU:HB3	2.46	0.51
1:C:1267:GLN:HE21	1:C:1291:CYS:HA	1.75	0.51
1:A:649:VAL:HG12	1:A:748:ALA:HB1	1.93	0.51
1:A:2002:PRO:HD2	1:A:2005:ASP:HB2	1.92	0.51
1:A:2408:LYS:HE2	1:A:2408:LYS:HA	1.93	0.51
1:B:28:PRO:HG2	1:B:258:PRO:HD3	1.93	0.51
1:B:959:ARG:NH1	1:B:969:ARG:HD3	2.26	0.51
1:B:1025:CYS:SG	1:B:1235:ILE:HG23	2.51	0.51
1:C:477:TRP:CE3	1:C:565:LEU:HD22	2.45	0.51
1:C:740:GLY:HA2	1:C:743:PHE:HD2	1.76	0.51
1:C:847:ASN:ND2	1:C:921:GLY:HA3	2.22	0.51
1:C:1025:CYS:SG	1:C:1235:ILE:HG23	2.51	0.51
1:A:302:ASP:OD1	1:A:303:LEU:N	2.44	0.51
1:B:260:VAL:HA	1:B:264:TRP:HD1	1.74	0.51
1:B:1074:TRP:CE2	1:B:1095:LEU:HB3	2.46	0.51
1:C:959:ARG:NH1	1:C:969:ARG:HD3	2.26	0.51
1:C:1349:LYS:HA	1:C:1352:LYS:HD2	1.93	0.51
1:C:1833:PRO:HG3	1:C:1963:LEU:HD12	1.93	0.51
1:A:1349:LYS:HA	1:A:1352:LYS:HD2	1.93	0.50
1:A:2168:GLN:OE1	1:A:2171:ARG:NH2	2.39	0.50
1:B:471:LEU:O	1:B:475:MET:HG3	2.10	0.50
1:C:200:VAL:O	1:C:209:ASN:ND2	2.43	0.50
1:C:864:PRO:O	1:C:866:ALA:N	2.41	0.50
1:A:312:ASN:HB3	1:A:313:PRO:HD3	1.94	0.50
1:A:1074:TRP:CE2	1:A:1095:LEU:HB3	2.46	0.50
1:A:1207:LEU:O	1:A:1220:THR:OG1	2.26	0.50
1:A:1232:LEU:HA	1:A:1235:ILE:HG22	1.92	0.50
1:A:2033:ARG:HD2	1:C:1397:ALA:HB2	1.92	0.50
1:B:202:ILE:HG22	1:B:556:VAL:HG23	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:20:LEU:HG	1:C:35:TYR:CD2	2.45	0.50
1:C:202:ILE:HG22	1:C:556:VAL:HG23	1.93	0.50
1:B:112:HIS:HE2	1:B:118:GLU:HB3	1.77	0.50
1:C:2260:ILE:O	1:C:2264:ILE:HG13	2.11	0.50
1:A:1397:ALA:HB2	1:B:2033:ARG:HD2	1.91	0.50
1:A:2392:ASP:OD1	1:A:2393:HIS:N	2.45	0.50
1:B:134:LEU:HA	1:B:137:ILE:HD12	1.94	0.50
1:C:1326:MET:O	1:C:1330:ARG:N	2.34	0.50
1:A:13:LYS:NZ	1:A:43:ALA:O	2.34	0.50
1:A:1029:VAL:HG22	1:A:1232:LEU:HB3	1.93	0.50
1:A:2427:PRO:HG2	1:B:2427:PRO:HG2	1.93	0.50
1:B:526:PHE:HA	1:B:529:MET:HG2	1.92	0.50
1:B:1349:LYS:HA	1:B:1352:LYS:HD2	1.93	0.50
1:B:2168:GLN:OE1	1:B:2171:ARG:NH2	2.39	0.50
1:A:948:GLN:HE22	1:A:952:ILE:HD11	1.77	0.50
1:A:2260:ILE:O	1:A:2264:ILE:HG13	2.11	0.50
1:B:2392:ASP:OD1	1:B:2393:HIS:N	2.45	0.50
1:C:112:HIS:HE2	1:C:118:GLU:HB3	1.76	0.50
1:B:260:VAL:HA	1:B:264:TRP:CD1	2.46	0.50
1:B:477:TRP:CE3	1:B:565:LEU:HD22	2.45	0.50
1:B:1175:LEU:HA	1:B:1178:THR:HG22	1.93	0.50
1:B:1648:SER:HA	1:B:1816:PHE:HE2	1.75	0.50
1:C:526:PHE:HA	1:C:529:MET:HG2	1.92	0.50
1:C:1175:LEU:HA	1:C:1178:THR:HG22	1.94	0.50
1:C:1232:LEU:HA	1:C:1235:ILE:HG22	1.92	0.50
1:A:202:ILE:HG22	1:A:556:VAL:HG23	1.93	0.50
1:A:1017:MET:HB3	1:A:1242:GLN:HG2	1.93	0.50
1:B:947:PHE:HA	1:B:950:ILE:HG12	1.94	0.50
1:B:1157:SER:HB3	1:B:1159:VAL:HG12	1.94	0.50
1:B:2134:LEU:O	1:B:2137:ARG:HB2	2.11	0.50
1:B:2408:LYS:HE2	1:B:2408:LYS:HA	1.93	0.50
1:C:8:LYS:HZ2	1:C:142:PHE:HB3	1.76	0.50
1:A:947:PHE:HA	1:A:950:ILE:HG12	1.94	0.50
1:B:1017:MET:HB3	1:B:1242:GLN:HG2	1.93	0.50
1:C:1162:PHE:O	1:C:1166:VAL:HG12	2.12	0.50
1:C:2134:LEU:O	1:C:2137:ARG:HB2	2.11	0.50
1:A:238:LYS:NZ	1:A:326:GLN:HG3	2.27	0.49
1:A:740:GLY:HA2	1:A:743:PHE:HD2	1.77	0.49
1:A:1157:SER:HB3	1:A:1159:VAL:HG12	1.94	0.49
1:A:1833:PRO:HG3	1:A:1963:LEU:HD12	1.93	0.49
1:A:1993:ASP:O	1:A:1997:THR:HG22	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:563:THR:HA	1:B:566:THR:HG22	1.94	0.49
1:B:2427:PRO:HG2	1:C:2427:PRO:HG2	1.93	0.49
1:A:1353:GLU:O	1:A:1356:GLU:HG3	2.12	0.49
1:A:1664:THR:HA	1:A:1667:VAL:HG12	1.95	0.49
1:A:1915:VAL:HG12	1:A:1916:PHE:HD2	1.76	0.49
1:A:2427:PRO:HG2	1:C:2427:PRO:HG2	1.93	0.49
1:B:312:ASN:HB3	1:B:313:PRO:HD3	1.94	0.49
1:B:1009:ILE:HG21	1:B:1028:LEU:HB2	1.94	0.49
1:C:302:ASP:OD1	1:C:303:LEU:N	2.44	0.49
1:C:563:THR:HA	1:C:566:THR:HG22	1.94	0.49
1:C:1157:SER:HB3	1:C:1159:VAL:HG12	1.94	0.49
1:B:97:ARG:O	1:B:101:THR:HG23	2.12	0.49
1:B:1162:PHE:O	1:B:1166:VAL:HG12	2.12	0.49
1:B:1326:MET:O	1:B:1330:ARG:N	2.34	0.49
1:B:1833:PRO:HG3	1:B:1963:LEU:HD12	1.93	0.49
1:C:312:ASN:HB3	1:C:313:PRO:HD3	1.94	0.49
1:C:817:GLN:O	1:C:821:LEU:HG	2.12	0.49
1:C:1401:GLY:HA3	1:C:2422:PHE:HB2	1.94	0.49
1:C:2392:ASP:OD1	1:C:2393:HIS:N	2.45	0.49
1:A:260:VAL:HA	1:A:264:TRP:CD1	2.46	0.49
1:A:959:ARG:NH1	1:A:969:ARG:HD3	2.26	0.49
1:A:1162:PHE:O	1:A:1166:VAL:HG12	2.12	0.49
1:A:1326:MET:O	1:A:1330:ARG:N	2.34	0.49
1:B:8:LYS:HZ2	1:B:142:PHE:HB3	1.76	0.49
1:B:501:ASP:HB3	1:B:504:LYS:HB3	1.95	0.49
1:B:1380:ILE:HG22	1:B:1404:TYR:HE1	1.78	0.49
1:B:1394:TYR:N	1:C:2031:ALA:O	2.42	0.49
1:B:2326:THR:HG1	1:B:2331:ARG:H	1.59	0.49
1:C:501:ASP:HB3	1:C:504:LYS:HB3	1.94	0.49
1:A:5:PRO:HG3	1:A:50:LYS:HD3	1.95	0.49
1:A:134:LEU:HA	1:A:137:ILE:HD12	1.94	0.49
1:A:1707:ASP:OD1	1:A:1708:SER:N	2.46	0.49
1:A:2134:LEU:O	1:A:2137:ARG:HB2	2.11	0.49
1:C:97:ARG:O	1:C:101:THR:HG23	2.12	0.49
1:A:872:SER:HA	1:A:875:MET:HG2	1.95	0.49
1:A:1636:PRO:O	1:A:1640:MET:HG2	2.13	0.49
1:A:1911:LEU:HD13	1:A:1940:LYS:HG2	1.94	0.49
1:B:238:LYS:NZ	1:B:326:GLN:HG3	2.27	0.49
1:B:1029:VAL:HG22	1:B:1232:LEU:HB3	1.93	0.49
1:B:2425:ARG:HH22	1:C:2389:PRO:HD2	1.78	0.49
1:C:1353:GLU:O	1:C:1356:GLU:HG3	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1364:ASP:OD1	1:C:1367:ARG:NH2	2.38	0.49
1:A:112:HIS:HE2	1:A:118:GLU:HB3	1.76	0.49
1:A:966:GLU:CD	1:A:969:ARG:NH2	2.57	0.49
1:B:817:GLN:O	1:B:821:LEU:HG	2.13	0.49
1:B:1915:VAL:HG12	1:B:1916:PHE:HD2	1.76	0.49
1:B:2260:ILE:O	1:B:2264:ILE:HG13	2.11	0.49
1:C:5:PRO:HG3	1:C:50:LYS:HD3	1.95	0.49
1:C:134:LEU:HA	1:C:137:ILE:HD12	1.94	0.49
1:C:947:PHE:HA	1:C:950:ILE:HG12	1.94	0.49
1:A:1009:ILE:HG21	1:A:1028:LEU:HB2	1.94	0.49
1:B:740:GLY:HA2	1:B:743:PHE:HD2	1.76	0.49
1:B:872:SER:HA	1:B:875:MET:HG2	1.95	0.49
1:B:948:GLN:HE22	1:B:952:ILE:HD11	1.77	0.49
1:C:872:SER:HA	1:C:875:MET:HG2	1.95	0.49
1:C:1029:VAL:HG22	1:C:1232:LEU:HB3	1.93	0.49
1:A:817:GLN:O	1:A:821:LEU:HG	2.13	0.49
1:B:44:VAL:CG1	1:B:328:LYS:HB2	2.43	0.49
1:B:255:TYR:CG	1:B:277:LEU:HD23	2.48	0.49
1:B:748:ALA:HB3	1:B:749:PRO:HD3	1.95	0.49
1:B:1993:ASP:O	1:B:1997:THR:HG22	2.13	0.49
1:C:948:GLN:HE22	1:C:952:ILE:HD11	1.77	0.49
1:C:1663:TYR:HA	1:C:1666:CYS:SG	2.53	0.49
1:A:501:ASP:HB3	1:A:504:LYS:HB3	1.94	0.49
1:B:42:SER:HB2	1:B:45:LEU:CD1	2.43	0.49
1:B:959:ARG:NH1	1:B:969:ARG:CD	2.76	0.49
1:B:1267:GLN:NE2	1:B:1291:CYS:SG	2.86	0.49
1:C:238:LYS:NZ	1:C:326:GLN:HG3	2.27	0.49
1:C:1009:ILE:HG21	1:C:1028:LEU:HB2	1.94	0.49
1:C:1664:THR:HA	1:C:1667:VAL:HG12	1.95	0.49
1:C:2188:VAL:HG21	1:C:2241:SER:HB3	1.94	0.49
1:A:44:VAL:CG1	1:A:328:LYS:HB2	2.43	0.48
1:A:97:ARG:O	1:A:101:THR:HG23	2.12	0.48
1:A:1175:LEU:HA	1:A:1178:THR:HG22	1.93	0.48
1:A:1620:PHE:O	1:A:1624:MET:HG2	2.13	0.48
1:A:2186:PHE:HB3	1:A:2238:ILE:HD11	1.95	0.48
1:C:1636:PRO:O	1:C:1640:MET:HG2	2.13	0.48
1:C:2080:THR:HG22	1:C:2191:GLU:HB2	1.95	0.48
1:C:2176:ASP:O	1:C:2180:ARG:NH1	2.46	0.48
1:A:42:SER:HB2	1:A:45:LEU:CD1	2.43	0.48
1:B:1664:THR:HA	1:B:1667:VAL:HG12	1.95	0.48
1:B:2188:VAL:HG21	1:B:2241:SER:HB3	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:521:LEU:HD13	1:C:524:GLN:NE2	2.28	0.48
1:C:1267:GLN:NE2	1:C:1291:CYS:SG	2.86	0.48
1:C:1911:LEU:HD13	1:C:1940:LYS:HG2	1.95	0.48
1:A:37:LEU:O	1:A:41:VAL:HG23	2.13	0.48
1:A:208:SER:HB2	1:A:248:HIS:CD2	2.48	0.48
1:A:1267:GLN:NE2	1:A:1291:CYS:SG	2.86	0.48
1:A:2001:MET:HE2	1:A:2006:PHE:HA	1.94	0.48
1:B:208:SER:HB2	1:B:248:HIS:CD2	2.48	0.48
1:B:1353:GLU:O	1:B:1356:GLU:HG3	2.12	0.48
1:B:1648:SER:HA	1:B:1816:PHE:CE2	2.48	0.48
1:B:1663:TYR:HA	1:B:1666:CYS:SG	2.53	0.48
1:B:2163:TYR:CE1	1:C:2167:SER:HA	2.48	0.48
1:B:2176:ASP:O	1:B:2180:ARG:NH1	2.46	0.48
1:C:255:TYR:CG	1:C:277:LEU:HD23	2.48	0.48
1:A:521:LEU:HD13	1:A:524:GLN:NE2	2.28	0.48
1:A:959:ARG:NH1	1:A:969:ARG:CD	2.77	0.48
1:A:2077:GLU:O	1:A:2097:GLN:HB2	2.14	0.48
1:B:1401:GLY:HA3	1:B:2422:PHE:HB2	1.94	0.48
1:B:1707:ASP:OD1	1:B:1708:SER:N	2.46	0.48
1:B:2080:THR:HG22	1:B:2191:GLU:HB2	1.95	0.48
1:C:44:VAL:CG1	1:C:328:LYS:HB2	2.43	0.48
1:C:748:ALA:HB3	1:C:749:PRO:HD3	1.95	0.48
1:C:1648:SER:HA	1:C:1816:PHE:CE2	2.48	0.48
1:C:1915:VAL:HG12	1:C:1916:PHE:HD2	1.76	0.48
1:C:2001:MET:HE2	1:C:2006:PHE:HA	1.95	0.48
1:A:948:GLN:NE2	1:A:952:ILE:HD11	2.29	0.48
1:A:1020:LEU:HD13	1:A:1053:LEU:HD21	1.96	0.48
1:A:1341:VAL:O	1:A:1345:GLN:HG2	2.14	0.48
1:A:1648:SER:HA	1:A:1816:PHE:CE2	2.48	0.48
1:A:1875:VAL:O	1:A:1879:VAL:HG23	2.14	0.48
1:C:453:LYS:HA	1:C:456:ILE:HG22	1.96	0.48
1:C:1380:ILE:HG22	1:C:1404:TYR:HE1	1.78	0.48
1:C:1875:VAL:O	1:C:1879:VAL:HG23	2.14	0.48
1:C:1993:ASP:O	1:C:1997:THR:HG22	2.13	0.48
1:A:255:TYR:CG	1:A:277:LEU:HD23	2.48	0.48
1:A:563:THR:HA	1:A:566:THR:HG22	1.94	0.48
1:A:748:ALA:HB3	1:A:749:PRO:HD3	1.95	0.48
1:A:1401:GLY:HA3	1:A:2422:PHE:HB2	1.94	0.48
1:A:1616:ILE:HA	1:A:1619:TYR:CD2	2.49	0.48
1:A:2167:SER:HA	1:C:2163:TYR:CE1	2.49	0.48
1:B:1636:PRO:O	1:B:1640:MET:HG2	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1687:ARG:HD2	1:B:1688:THR:N	2.29	0.48
1:B:1911:LEU:HD13	1:B:1940:LYS:HG2	1.95	0.48
1:B:2186:PHE:HB3	1:B:2238:ILE:HD11	1.96	0.48
1:B:2425:ARG:HG2	1:C:2384:MET:HA	1.95	0.48
1:C:501:ASP:O	1:C:505:SER:N	2.34	0.48
1:C:547:GLU:HG2	1:C:549:THR:H	1.78	0.48
1:C:1341:VAL:O	1:C:1345:GLN:HG2	2.14	0.48
1:B:1355:ASN:O	1:B:1359:LYS:HG2	2.13	0.48
1:B:1875:VAL:O	1:B:1879:VAL:HG23	2.14	0.48
1:B:2001:MET:HE2	1:B:2006:PHE:HA	1.94	0.48
1:C:887:MET:HA	1:C:887:MET:HE2	1.96	0.48
1:C:948:GLN:NE2	1:C:952:ILE:HD11	2.29	0.48
1:C:959:ARG:NH1	1:C:969:ARG:CD	2.77	0.48
1:B:1020:LEU:HD13	1:B:1053:LEU:HD21	1.96	0.48
1:B:1616:ILE:HA	1:B:1619:TYR:CD2	2.49	0.48
1:C:37:LEU:O	1:C:41:VAL:HG23	2.13	0.48
1:C:42:SER:HB2	1:C:45:LEU:CD1	2.43	0.48
1:C:869:GLY:O	1:C:872:SER:OG	2.26	0.48
1:C:1616:ILE:HA	1:C:1619:TYR:CD2	2.49	0.48
1:C:2294:LEU:HD12	1:C:2305:TRP:CZ2	2.48	0.48
1:A:453:LYS:HA	1:A:456:ILE:HG22	1.96	0.48
1:A:2042:LYS:HD3	1:C:1995:THR:HA	1.94	0.48
1:A:2075:MET:HG3	1:A:2152:LEU:HD11	1.96	0.48
1:A:2294:LEU:HD12	1:A:2305:TRP:CZ2	2.49	0.48
1:A:2384:MET:HA	1:C:2425:ARG:HG2	1.95	0.48
1:A:2437:SER:OG	1:A:2438:LYS:N	2.46	0.48
1:B:521:LEU:HD13	1:B:524:GLN:NE2	2.28	0.48
1:B:2315:GLN:OE1	1:B:2315:GLN:N	2.47	0.48
1:C:1687:ARG:HD2	1:C:1688:THR:N	2.29	0.48
1:C:2315:GLN:OE1	1:C:2315:GLN:N	2.47	0.48
1:A:24:ALA:O	1:A:253:TYR:OH	2.32	0.48
1:A:724:TRP:HA	1:A:893:ILE:HD11	1.96	0.48
1:A:2389:PRO:HD2	1:C:2425:ARG:HH22	1.78	0.48
1:B:5:PRO:HG3	1:B:50:LYS:HD3	1.95	0.48
1:B:37:LEU:O	1:B:41:VAL:HG23	2.13	0.48
1:A:1171:HIS:O	1:A:1175:LEU:HG	2.14	0.47
1:A:1663:TYR:HA	1:A:1666:CYS:SG	2.53	0.47
1:A:2163:TYR:CE1	1:B:2167:SER:HA	2.49	0.47
1:A:2176:ASP:O	1:A:2180:ARG:NH1	2.46	0.47
1:A:2425:ARG:HH22	1:B:2389:PRO:HD2	1.78	0.47
1:B:773:PRO:HG2	1:B:957:HIS:NE2	2.29	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:948:GLN:NE2	1:B:952:ILE:HD11	2.29	0.47
1:B:1620:PHE:O	1:B:1624:MET:HG2	2.13	0.47
1:C:724:TRP:HA	1:C:893:ILE:HD11	1.96	0.47
1:A:2137:ARG:HE	1:C:1687:ARG:HH11	1.62	0.47
1:B:547:GLU:HG2	1:B:549:THR:H	1.78	0.47
1:B:646:LEU:HA	1:B:649:VAL:HG22	1.96	0.47
1:B:724:TRP:HA	1:B:893:ILE:HD11	1.96	0.47
1:B:1016:ARG:NH1	1:B:1110:ASP:OD2	2.47	0.47
1:B:1341:VAL:O	1:B:1345:GLN:HG2	2.14	0.47
1:C:1355:ASN:O	1:C:1359:LYS:HG2	2.13	0.47
1:A:851:ILE:HD11	1:A:1062:VAL:HG11	1.96	0.47
1:A:1355:ASN:O	1:A:1359:LYS:HG2	2.13	0.47
1:A:1626:GLN:NE2	1:A:1916:PHE:CE1	2.82	0.47
1:A:2188:VAL:HG21	1:A:2241:SER:HB3	1.95	0.47
1:B:827:GLU:HB3	1:B:955:GLN:HG3	1.96	0.47
1:B:1171:HIS:O	1:B:1175:LEU:HG	2.14	0.47
1:B:1958:LEU:HD23	1:B:1959:CYS:N	2.29	0.47
1:C:854:VAL:HG11	1:C:1058:PHE:CD2	2.49	0.47
1:C:1016:ARG:NH1	1:C:1110:ASP:OD2	2.48	0.47
1:C:1286:ASP:OD1	1:C:1287:PHE:N	2.48	0.47
1:C:1620:PHE:O	1:C:1624:MET:HG2	2.13	0.47
1:A:827:GLU:HB3	1:A:955:GLN:HG3	1.96	0.47
1:A:2080:THR:HG22	1:A:2191:GLU:HB2	1.95	0.47
1:A:2326:THR:HG1	1:A:2331:ARG:H	1.59	0.47
1:B:453:LYS:HA	1:B:456:ILE:HG22	1.96	0.47
1:B:1207:LEU:O	1:B:1220:THR:OG1	2.26	0.47
1:B:2073:ILE:HG22	1:B:2074:SER:O	2.15	0.47
1:B:2077:GLU:O	1:B:2097:GLN:HB2	2.14	0.47
1:C:208:SER:HB2	1:C:248:HIS:CD2	2.48	0.47
1:C:646:LEU:HA	1:C:649:VAL:HG22	1.97	0.47
1:C:1958:LEU:HD23	1:C:1959:CYS:N	2.29	0.47
1:C:2199:ASN:OD1	1:C:2200:GLU:N	2.46	0.47
1:A:62:VAL:HG12	1:A:66:PHE:CE2	2.49	0.47
1:A:1016:ARG:NH1	1:A:1110:ASP:OD2	2.47	0.47
1:B:841:PHE:CE1	1:B:937:GLY:HA3	2.49	0.47
1:B:2294:LEU:HD12	1:B:2305:TRP:CZ2	2.48	0.47
1:C:569:VAL:HA	1:C:572:LEU:HD23	1.97	0.47
1:C:1266:ARG:HA	1:C:1271:ILE:HD12	1.97	0.47
1:C:2077:GLU:O	1:C:2097:GLN:HB2	2.14	0.47
1:C:2186:PHE:HB3	1:C:2238:ILE:HD11	1.96	0.47
1:A:547:GLU:HG2	1:A:549:THR:H	1.78	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1380:ILE:HG22	1:A:1404:TYR:HE1	1.78	0.47
1:A:2073:ILE:HG22	1:A:2074:SER:O	2.15	0.47
1:A:2389:PRO:HB2	1:A:2436:MET:HG3	1.96	0.47
1:B:653:PHE:CZ	1:B:745:GLN:HB2	2.50	0.47
1:B:959:ARG:NH2	1:B:969:ARG:CD	2.55	0.47
1:A:1286:ASP:OD1	1:A:1287:PHE:N	2.48	0.47
1:A:1958:LEU:HD23	1:A:1959:CYS:N	2.29	0.47
1:A:1994:TRP:HB2	1:A:2006:PHE:CD1	2.50	0.47
1:A:2425:ARG:HG2	1:B:2384:MET:HA	1.95	0.47
1:B:569:VAL:HA	1:B:572:LEU:HD23	1.97	0.47
1:B:1137:ASP:OD1	1:B:1138:GLY:N	2.48	0.47
1:C:2073:ILE:HG22	1:C:2074:SER:O	2.15	0.47
1:C:2075:MET:HG3	1:C:2152:LEU:HD11	1.96	0.47
1:C:2139:SER:OG	1:C:2263:THR:OG1	2.31	0.47
1:A:1394:TYR:HB3	1:B:2031:ALA:HB3	1.97	0.47
1:A:1687:ARG:HD2	1:A:1688:THR:N	2.29	0.47
1:A:1687:ARG:HH11	1:B:2137:ARG:HE	1.62	0.47
1:B:1286:ASP:OD1	1:B:1287:PHE:N	2.48	0.47
1:B:2075:MET:HG3	1:B:2152:LEU:HD11	1.97	0.47
1:C:656:ASN:O	1:C:660:ILE:HG12	2.15	0.47
1:C:1171:HIS:O	1:C:1175:LEU:HG	2.14	0.47
1:A:2315:GLN:OE1	1:A:2315:GLN:N	2.47	0.47
1:B:1266:ARG:HA	1:B:1271:ILE:HD12	1.97	0.47
1:B:1626:GLN:NE2	1:B:1916:PHE:CE1	2.82	0.47
1:B:1633:ILE:HG12	1:B:1701:PHE:O	2.15	0.47
1:B:2437:SER:OG	1:B:2438:LYS:N	2.46	0.47
1:C:1626:GLN:NE2	1:C:1916:PHE:CE1	2.82	0.47
1:A:656:ASN:O	1:A:660:ILE:HG12	2.15	0.47
1:A:1310:LEU:O	1:A:1314:ILE:HG12	2.15	0.47
1:B:1687:ARG:HH11	1:C:2137:ARG:HE	1.62	0.47
1:B:1994:TRP:HB2	1:B:2006:PHE:CD1	2.50	0.47
1:C:773:PRO:HG2	1:C:957:HIS:NE2	2.30	0.47
1:C:841:PHE:CE1	1:C:937:GLY:HA3	2.49	0.47
1:C:2389:PRO:HB2	1:C:2436:MET:HG3	1.96	0.47
1:A:569:VAL:HA	1:A:572:LEU:HD23	1.97	0.46
1:A:646:LEU:HA	1:A:649:VAL:HG22	1.96	0.46
1:A:773:PRO:HG2	1:A:957:HIS:NE2	2.29	0.46
1:A:887:MET:HE3	1:A:935:LEU:HD22	1.98	0.46
1:B:276:GLY:C	1:B:277:LEU:HD12	2.40	0.46
1:C:1994:TRP:HB2	1:C:2006:PHE:CD1	2.50	0.46
1:A:653:PHE:CZ	1:A:745:GLN:HB2	2.50	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:695:THR:HA	1:A:698:VAL:HG12	1.97	0.46
1:A:841:PHE:CE1	1:A:937:GLY:HA3	2.49	0.46
1:A:854:VAL:HG11	1:A:1058:PHE:CD2	2.49	0.46
1:A:2031:ALA:HB3	1:C:1394:TYR:HB3	1.97	0.46
1:B:887:MET:HE2	1:B:887:MET:HA	1.96	0.46
1:B:1680:PRO:HD2	1:B:1681:TYR:H	1.80	0.46
1:B:2389:PRO:HB2	1:B:2436:MET:HG3	1.96	0.46
1:C:633:LYS:HD3	1:C:633:LYS:HA	1.75	0.46
1:C:1020:LEU:HD13	1:C:1053:LEU:HD21	1.96	0.46
1:C:1121:LEU:O	1:C:1125:ARG:HG2	2.15	0.46
1:C:2127:THR:OG1	1:C:2128:ARG:N	2.48	0.46
1:A:966:GLU:CB	1:A:969:ARG:NH1	2.79	0.46
1:A:1121:LEU:O	1:A:1125:ARG:HG2	2.15	0.46
1:A:1394:TYR:N	1:B:2031:ALA:O	2.42	0.46
1:A:2250:ASN:OD1	1:A:2251:GLN:N	2.49	0.46
1:B:854:VAL:HG11	1:B:1058:PHE:CD2	2.49	0.46
1:B:1364:ASP:OD1	1:B:1367:ARG:NH2	2.38	0.46
1:B:2127:THR:OG1	1:B:2128:ARG:N	2.48	0.46
1:A:276:GLY:C	1:A:277:LEU:HD12	2.40	0.46
1:A:1633:ILE:HG12	1:A:1701:PHE:O	2.15	0.46
1:B:501:ASP:O	1:B:505:SER:N	2.34	0.46
1:B:1121:LEU:O	1:B:1125:ARG:HG2	2.15	0.46
1:C:723:GLU:HG2	1:C:724:TRP:N	2.30	0.46
1:C:842:ILE:HD11	1:C:850:TYR:HB3	1.97	0.46
1:C:887:MET:HE3	1:C:935:LEU:HD22	1.98	0.46
1:C:1626:GLN:NE2	1:C:1630:GLY:HA2	2.31	0.46
1:C:1691:GLN:HG3	1:C:1692:MET:SD	2.56	0.46
1:C:1707:ASP:OD1	1:C:1708:SER:N	2.46	0.46
1:A:1869:ARG:NH1	1:B:2345:PRO:HA	2.31	0.46
1:A:2246:ILE:HG23	1:A:2254:LEU:HB3	1.97	0.46
1:B:21:LEU:HD13	1:B:317:LEU:HD21	1.98	0.46
1:B:1310:LEU:O	1:B:1314:ILE:HG12	2.15	0.46
1:B:1987:GLU:OE1	1:B:1987:GLU:N	2.35	0.46
1:C:966:GLU:CD	1:C:969:ARG:NH2	2.57	0.46
1:C:1633:ILE:HG12	1:C:1701:PHE:O	2.15	0.46
1:C:2168:GLN:OE1	1:C:2171:ARG:NH2	2.39	0.46
1:C:2250:ASN:OD1	1:C:2251:GLN:N	2.49	0.46
1:C:2347:PHE:O	1:C:2348:LEU:C	2.59	0.46
1:A:2153:ILE:HG23	1:A:2335:GLN:HE21	1.81	0.46
1:B:1691:GLN:HG3	1:B:1692:MET:SD	2.56	0.46
1:C:695:THR:HA	1:C:698:VAL:HG12	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:851:ILE:HD11	1:C:1062:VAL:HG11	1.96	0.46
1:C:1310:LEU:O	1:C:1314:ILE:HG12	2.15	0.46
1:A:685:TYR:CE1	1:A:689:LEU:HD21	2.51	0.46
1:A:1691:GLN:HG3	1:A:1692:MET:SD	2.56	0.46
1:B:249:PHE:CE2	1:B:316:VAL:HG12	2.51	0.46
1:B:723:GLU:HG2	1:B:724:TRP:N	2.30	0.46
1:C:62:VAL:HG12	1:C:66:PHE:CE2	2.49	0.46
1:C:276:GLY:C	1:C:277:LEU:HD12	2.40	0.46
1:C:1680:PRO:HD2	1:C:1681:TYR:H	1.80	0.46
1:A:3:VAL:HG11	1:A:143:LEU:HA	1.98	0.46
1:A:2127:THR:OG1	1:A:2128:ARG:N	2.48	0.46
1:A:2347:PHE:O	1:A:2348:LEU:C	2.59	0.46
1:B:567:LEU:HB3	1:B:568:PRO:HD3	1.98	0.46
1:B:851:ILE:HD11	1:B:1062:VAL:HG11	1.96	0.46
1:B:1394:TYR:HB3	1:C:2031:ALA:HB3	1.97	0.46
1:C:567:LEU:HB3	1:C:568:PRO:HD3	1.98	0.46
1:C:653:PHE:CZ	1:C:745:GLN:HB2	2.50	0.46
1:B:887:MET:HE3	1:B:935:LEU:HD22	1.98	0.46
1:B:2250:ASN:OD1	1:B:2251:GLN:N	2.48	0.46
1:C:827:GLU:HB3	1:C:955:GLN:HG3	1.96	0.46
1:A:968:MET:HE1	1:A:974:PRO:HB3	1.84	0.46
1:A:1640:MET:HE3	1:A:1660:MET:HG2	1.98	0.46
1:A:1680:PRO:HD2	1:A:1681:TYR:H	1.80	0.46
1:A:1984:PHE:CD2	1:B:2057:ILE:HD11	2.51	0.46
1:A:2055:ILE:O	1:A:2059:SER:HB3	2.16	0.46
1:B:62:VAL:HG12	1:B:66:PHE:CE2	2.49	0.46
1:B:695:THR:HA	1:B:698:VAL:HG12	1.97	0.46
1:C:966:GLU:CB	1:C:969:ARG:NH1	2.79	0.46
1:C:977:HIS:HB3	1:C:980:HIS:CD2	2.52	0.46
1:A:810:LYS:HE3	1:A:814:LEU:HD23	1.98	0.45
1:A:887:MET:HE2	1:A:887:MET:HA	1.96	0.45
1:A:925:GLU:HG3	1:A:934:MET:HG3	1.98	0.45
1:A:1626:GLN:NE2	1:A:1630:GLY:HA2	2.31	0.45
1:A:2356:VAL:HA	1:A:2359:VAL:HG12	1.98	0.45
1:B:977:HIS:HB3	1:B:980:HIS:CD2	2.52	0.45
1:C:3:VAL:HG11	1:C:143:LEU:HA	1.98	0.45
1:A:723:GLU:HG2	1:A:724:TRP:N	2.30	0.45
1:A:1266:ARG:HA	1:A:1271:ILE:HD12	1.97	0.45
1:A:2105:GLU:OE2	1:A:2157:ARG:NH1	2.41	0.45
1:B:842:ILE:HD11	1:B:850:TYR:HB3	1.97	0.45
1:B:1106:TYR:OH	1:B:1275:ASN:ND2	2.41	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1869:ARG:NH1	1:C:2345:PRO:HA	2.31	0.45
1:B:2246:ILE:HG23	1:B:2254:LEU:HB3	1.97	0.45
1:C:1624:MET:HE3	1:C:1628:MET:HE1	1.98	0.45
1:A:642:VAL:HA	1:A:645:VAL:HG12	1.98	0.45
1:A:1020:LEU:HA	1:A:1023:ILE:HG12	1.98	0.45
1:A:1711:LEU:HA	1:A:1714:ILE:HD13	1.98	0.45
1:A:2139:SER:OG	1:A:2263:THR:OG1	2.31	0.45
1:A:2199:ASN:OD1	1:A:2200:GLU:N	2.46	0.45
1:A:2345:PRO:HA	1:C:1869:ARG:NH1	2.31	0.45
1:B:2094:MET:HG3	1:B:2156:PHE:HB3	1.98	0.45
1:C:642:VAL:HA	1:C:645:VAL:HG12	1.98	0.45
1:C:810:LYS:HE3	1:C:814:LEU:HD23	1.97	0.45
1:C:1378:LYS:O	1:C:1382:ARG:NE	2.42	0.45
1:C:2094:MET:HG3	1:C:2156:PHE:HB3	1.99	0.45
1:A:198:ALA:HB2	1:A:216:PHE:CE1	2.52	0.45
1:A:249:PHE:CE2	1:A:316:VAL:HG12	2.51	0.45
1:A:842:ILE:HD11	1:A:850:TYR:HB3	1.98	0.45
1:A:1137:ASP:OD1	1:A:1138:GLY:N	2.48	0.45
1:A:2381:SER:HA	1:C:2385:PHE:CE2	2.42	0.45
1:B:3:VAL:HG11	1:B:143:LEU:HA	1.98	0.45
1:B:2417:PHE:O	1:B:2421:ILE:HG12	2.16	0.45
1:C:1137:ASP:OD1	1:C:1138:GLY:N	2.48	0.45
1:C:1711:LEU:HA	1:C:1714:ILE:HD13	1.98	0.45
1:C:1831:LEU:HD23	1:C:1946:VAL:HG23	1.98	0.45
1:C:1987:GLU:OE1	1:C:1987:GLU:N	2.35	0.45
1:C:2246:ILE:HG23	1:C:2254:LEU:HB3	1.97	0.45
1:A:2057:ILE:HD11	1:C:1984:PHE:CD2	2.51	0.45
1:B:656:ASN:O	1:B:660:ILE:HG12	2.15	0.45
1:B:810:LYS:HE3	1:B:814:LEU:HD23	1.98	0.45
1:B:2055:ILE:O	1:B:2059:SER:HB3	2.16	0.45
1:C:249:PHE:CE2	1:C:316:VAL:HG12	2.51	0.45
1:C:1192:GLY:HA2	1:C:1195:ILE:HG12	1.99	0.45
1:A:2184:VAL:HG23	1:A:2214:ILE:HD12	1.98	0.45
1:A:2397:ILE:O	1:A:2401:ILE:HG13	2.17	0.45
1:B:1406:PHE:HE2	1:B:2423:LEU:HD12	1.82	0.45
1:B:1624:MET:HE3	1:B:1628:MET:HE1	1.98	0.45
1:B:1984:PHE:CD2	1:C:2057:ILE:HD11	2.51	0.45
1:B:2397:ILE:O	1:B:2401:ILE:HG13	2.17	0.45
1:C:1020:LEU:HA	1:C:1023:ILE:HG12	1.98	0.45
1:C:1640:MET:HE3	1:C:1660:MET:HG2	1.98	0.45
1:C:2159:GLU:HA	1:C:2306:ILE:HG22	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2184:VAL:HG23	1:C:2214:ILE:HD12	1.98	0.45
1:A:2094:MET:HG3	1:A:2156:PHE:HB3	1.99	0.45
1:A:2417:PHE:O	1:A:2421:ILE:HG12	2.17	0.45
1:A:2427:PRO:O	1:A:2431:ILE:HG12	2.17	0.45
1:B:685:TYR:CE1	1:B:689:LEU:HD21	2.51	0.45
1:B:1626:GLN:NE2	1:B:1630:GLY:HA2	2.31	0.45
1:B:1640:MET:HE3	1:B:1660:MET:HG2	1.98	0.45
1:B:2159:GLU:HA	1:B:2306:ILE:HG22	1.99	0.45
1:C:198:ALA:HB2	1:C:216:PHE:CE1	2.52	0.45
1:C:540:TRP:O	1:C:544:VAL:HB	2.17	0.45
1:C:1301:GLY:O	1:C:1304:VAL:HG12	2.17	0.45
1:A:959:ARG:HH21	1:A:969:ARG:NH1	2.15	0.45
1:A:1249:LEU:HD11	1:A:1287:PHE:HE2	1.82	0.45
1:A:1613:HIS:HB3	1:A:1616:ILE:HG12	1.99	0.45
1:B:198:ALA:HB2	1:B:216:PHE:CE1	2.52	0.45
1:B:966:GLU:CB	1:B:969:ARG:NH1	2.79	0.45
1:C:2288:ASP:OD2	1:C:2311:HIS:ND1	2.49	0.45
1:A:567:LEU:HB3	1:A:568:PRO:HD3	1.98	0.45
1:A:1106:TYR:OH	1:A:1275:ASN:ND2	2.41	0.45
1:B:642:VAL:HA	1:B:645:VAL:HG12	1.99	0.45
1:B:2184:VAL:HG23	1:B:2214:ILE:HD12	1.98	0.45
1:C:21:LEU:HD13	1:C:317:LEU:HD21	1.98	0.45
1:C:1274:VAL:HG21	1:C:1299:ASN:N	2.32	0.45
1:A:1192:GLY:HA2	1:A:1195:ILE:HG12	1.99	0.45
1:A:1301:GLY:O	1:A:1304:VAL:HG12	2.17	0.45
1:B:1274:VAL:HG21	1:B:1299:ASN:N	2.32	0.45
1:B:1613:HIS:HB3	1:B:1616:ILE:HG12	1.99	0.45
1:C:565:LEU:O	1:C:568:PRO:HD2	2.17	0.45
1:C:685:TYR:CE1	1:C:689:LEU:HD21	2.51	0.45
1:C:2086:GLU:HB2	1:C:2185:ASN:O	2.17	0.45
1:A:977:HIS:HB3	1:A:980:HIS:CD2	2.52	0.44
1:A:1406:PHE:HE2	1:A:2423:LEU:HD12	1.82	0.44
1:B:112:HIS:CD2	1:B:286:PRO:HD2	2.52	0.44
1:B:980:HIS:HB3	1:B:983:ARG:NE	2.33	0.44
1:B:1192:GLY:HA2	1:B:1195:ILE:HG12	1.99	0.44
1:B:1301:GLY:O	1:B:1304:VAL:HG12	2.17	0.44
1:B:2153:ILE:HG23	1:B:2335:GLN:HE21	1.81	0.44
1:B:2427:PRO:O	1:B:2431:ILE:HG12	2.17	0.44
1:C:1631:GLY:HA3	1:C:1702:GLY:HA3	1.99	0.44
1:C:2417:PHE:O	1:C:2421:ILE:HG12	2.17	0.44
1:A:2083:ILE:HD12	1:A:2188:VAL:HG22	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:849:LEU:HB2	1:B:920:PHE:O	2.18	0.44
1:B:1387:ARG:NH1	1:B:1404:TYR:OH	2.50	0.44
1:B:1631:GLY:HA3	1:B:1702:GLY:HA3	2.00	0.44
1:B:1831:LEU:HD23	1:B:1946:VAL:HG23	1.98	0.44
1:C:849:LEU:HB2	1:C:920:PHE:O	2.18	0.44
1:C:980:HIS:HB3	1:C:983:ARG:NE	2.33	0.44
1:C:1135:TYR:OH	1:C:1323:GLN:OE1	2.26	0.44
1:C:1406:PHE:HE2	1:C:2423:LEU:HD12	1.82	0.44
1:C:1927:ALA:O	1:C:1934:GLN:NE2	2.51	0.44
1:C:2356:VAL:HA	1:C:2359:VAL:HG12	1.98	0.44
1:A:1387:ARG:NH1	1:A:1404:TYR:OH	2.50	0.44
1:B:925:GLU:HG3	1:B:934:MET:HG3	1.98	0.44
1:B:1711:LEU:HA	1:B:1714:ILE:HD13	1.98	0.44
1:B:2086:GLU:HB2	1:B:2185:ASN:O	2.17	0.44
1:B:2356:VAL:HA	1:B:2359:VAL:HG12	1.98	0.44
1:C:657:PHE:HB2	1:C:728:ILE:HA	2.00	0.44
1:C:851:ILE:HA	1:C:854:VAL:HG22	2.00	0.44
1:A:112:HIS:CD2	1:A:286:PRO:HD2	2.52	0.44
1:A:1927:ALA:O	1:A:1934:GLN:NE2	2.50	0.44
1:B:514:LEU:HD12	1:B:517:ILE:HD11	1.99	0.44
1:B:540:TRP:O	1:B:544:VAL:HB	2.17	0.44
1:B:1020:LEU:HA	1:B:1023:ILE:HG12	1.98	0.44
1:B:2199:ASN:OD1	1:B:2200:GLU:N	2.46	0.44
1:C:112:HIS:CD2	1:C:286:PRO:HD2	2.52	0.44
1:C:2055:ILE:O	1:C:2059:SER:HB3	2.16	0.44
1:A:851:ILE:HA	1:A:854:VAL:HG22	2.00	0.44
1:A:1241:LEU:HD13	1:A:1271:ILE:HG12	2.00	0.44
1:A:1274:VAL:HG21	1:A:1299:ASN:N	2.32	0.44
1:A:1378:LYS:O	1:A:1382:ARG:NE	2.42	0.44
1:A:2003:LEU:CD1	1:A:2007:PHE:HE2	2.31	0.44
1:A:2386:THR:HG23	1:A:2387:GLU:HG2	2.00	0.44
1:B:930:GLU:HB2	1:B:933:TYR:CD2	2.53	0.44
1:C:514:LEU:HD12	1:C:517:ILE:HD11	1.99	0.44
1:C:1626:GLN:NE2	1:C:1916:PHE:HE1	2.16	0.44
1:A:21:LEU:HD13	1:A:317:LEU:HD21	1.98	0.44
1:A:501:ASP:O	1:A:505:SER:N	2.34	0.44
1:A:1713:ASP:OD1	1:A:1714:ILE:HD12	2.18	0.44
1:A:1831:LEU:HD23	1:A:1946:VAL:HG23	1.98	0.44
1:A:1990:THR:HG23	1:A:2010:GLU:HG3	2.00	0.44
1:B:1249:LEU:HD11	1:B:1287:PHE:HE2	1.82	0.44
1:B:1893:LEU:HD13	1:B:1993:ASP:HA	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1990:THR:HG23	1:B:2010:GLU:HG3	2.00	0.44
1:B:2078:LYS:HA	1:B:2097:GLN:HB3	2.00	0.44
1:C:2153:ILE:HG23	1:C:2335:GLN:HE21	1.81	0.44
1:C:2326:THR:N	1:C:2331:ARG:O	2.47	0.44
1:C:2386:THR:HG23	1:C:2387:GLU:HG2	2.00	0.44
1:C:2397:ILE:O	1:C:2401:ILE:HG13	2.17	0.44
1:A:1904:GLN:HE22	1:A:1908:ILE:HD11	1.83	0.44
1:A:2086:GLU:HB2	1:A:2185:ASN:O	2.17	0.44
1:B:565:LEU:O	1:B:568:PRO:HD2	2.17	0.44
1:B:1713:ASP:OD1	1:B:1714:ILE:HD12	2.18	0.44
1:B:2003:LEU:CD1	1:B:2007:PHE:HE2	2.31	0.44
1:B:2083:ILE:HD12	1:B:2188:VAL:HG22	1.99	0.44
1:B:2347:PHE:O	1:B:2348:LEU:C	2.59	0.44
1:C:930:GLU:HB2	1:C:933:TYR:CD2	2.53	0.44
1:C:1036:ARG:HH12	1:C:1131:ASN:HB3	1.83	0.44
1:C:1249:LEU:HD11	1:C:1287:PHE:HE2	1.82	0.44
1:A:540:TRP:O	1:A:544:VAL:HB	2.17	0.44
1:A:1631:GLY:HA3	1:A:1702:GLY:HA3	1.99	0.44
1:A:2059:SER:OG	1:A:2060:PRO:HD3	2.18	0.44
1:B:1844:LEU:HD23	1:B:1844:LEU:HA	1.89	0.44
1:B:2082:ARG:HB3	1:B:2189:SER:HB3	1.99	0.44
1:B:2386:THR:HG23	1:B:2387:GLU:HG2	2.00	0.44
1:C:13:LYS:O	1:C:17:PRO:HG2	2.18	0.44
1:C:925:GLU:HG3	1:C:934:MET:HG3	1.98	0.44
1:C:2078:LYS:HA	1:C:2097:GLN:HB3	2.00	0.44
1:A:1036:ARG:HH12	1:A:1131:ASN:HB3	1.83	0.44
1:A:1192:GLY:HA3	1:A:1230:TYR:OH	2.18	0.44
1:A:2078:LYS:HA	1:A:2097:GLN:HB3	2.00	0.44
1:C:645:VAL:O	1:C:649:VAL:HG13	2.18	0.44
1:C:1241:LEU:HD13	1:C:1271:ILE:HG12	2.00	0.44
1:A:565:LEU:O	1:A:568:PRO:HD2	2.17	0.43
1:A:645:VAL:O	1:A:649:VAL:HG13	2.18	0.43
1:A:849:LEU:HB2	1:A:920:PHE:O	2.18	0.43
1:A:980:HIS:HB3	1:A:983:ARG:NE	2.33	0.43
1:B:851:ILE:HA	1:B:854:VAL:HG22	2.00	0.43
1:B:1241:LEU:HD13	1:B:1271:ILE:HG12	2.00	0.43
1:B:1378:LYS:O	1:B:1382:ARG:NE	2.42	0.43
1:B:2083:ILE:O	1:B:2091:LEU:N	2.51	0.43
1:C:1153:ASP:OD1	1:C:1154:THR:N	2.51	0.43
1:C:1192:GLY:HA3	1:C:1230:TYR:OH	2.18	0.43
1:C:1252:PHE:HB3	1:C:1287:PHE:CZ	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:13:LYS:O	1:A:17:PRO:HG2	2.18	0.43
1:A:917:PRO:HB2	1:A:923:LYS:HA	1.99	0.43
1:A:1153:ASP:OD1	1:A:1154:THR:N	2.51	0.43
1:A:1252:PHE:HB3	1:A:1287:PHE:CZ	2.53	0.43
1:A:1624:MET:HE3	1:A:1628:MET:HE1	1.98	0.43
1:A:1651:ARG:NH1	1:A:1651:ARG:HB2	2.33	0.43
1:B:645:VAL:O	1:B:649:VAL:HG13	2.18	0.43
1:B:879:LEU:HA	1:B:882:VAL:HG12	2.00	0.43
1:B:1192:GLY:HA3	1:B:1230:TYR:OH	2.18	0.43
1:B:1252:PHE:HB3	1:B:1287:PHE:CZ	2.53	0.43
1:B:1927:ALA:O	1:B:1934:GLN:NE2	2.50	0.43
1:C:2083:ILE:O	1:C:2091:LEU:N	2.51	0.43
1:C:2427:PRO:O	1:C:2431:ILE:HG12	2.17	0.43
1:B:471:LEU:HD11	1:B:493:THR:HA	2.00	0.43
1:B:1624:MET:HB3	1:B:1628:MET:HE1	2.00	0.43
1:B:1687:ARG:NH1	1:C:2137:ARG:NE	2.65	0.43
1:B:1904:GLN:HE22	1:B:1908:ILE:HD11	1.82	0.43
1:B:2042:LYS:O	1:B:2043:TYR:C	2.61	0.43
1:B:2326:THR:OG1	1:B:2330:GLY:N	2.50	0.43
1:C:638:PHE:HZ	1:C:755:VAL:HG13	1.83	0.43
1:C:1613:HIS:HB3	1:C:1616:ILE:HG12	1.99	0.43
1:A:471:LEU:HD11	1:A:493:THR:HA	2.01	0.43
1:A:657:PHE:HB2	1:A:728:ILE:HA	2.00	0.43
1:A:2159:GLU:HA	1:A:2306:ILE:HG22	1.99	0.43
1:B:1036:ARG:HH12	1:B:1131:ASN:HB3	1.83	0.43
1:C:455:MET:SD	1:C:455:MET:N	2.91	0.43
1:C:917:PRO:HB2	1:C:923:LYS:HA	2.00	0.43
1:C:2059:SER:OG	1:C:2060:PRO:HD3	2.18	0.43
1:A:930:GLU:HB2	1:A:933:TYR:CD2	2.53	0.43
1:A:1089:LEU:HD12	1:A:1093:LEU:HD23	2.01	0.43
1:A:1626:GLN:NE2	1:A:1916:PHE:HE1	2.16	0.43
1:A:1687:ARG:NH1	1:B:2137:ARG:NE	2.65	0.43
1:B:1368:ARG:HD2	1:B:2403:LEU:HD13	2.00	0.43
1:B:1651:ARG:NH1	1:B:1651:ARG:HB2	2.33	0.43
1:C:879:LEU:HA	1:C:882:VAL:HG12	2.00	0.43
1:C:1387:ARG:NH1	1:C:1404:TYR:OH	2.50	0.43
1:C:1990:THR:HG23	1:C:2010:GLU:HG3	2.00	0.43
1:C:13:LYS:HZ3	1:C:45:LEU:H	1.66	0.43
1:C:1198:LEU:O	1:C:1202:TRP:CB	2.66	0.43
1:C:1644:TRP:O	1:C:1648:SER:OG	2.36	0.43
1:C:1893:LEU:HD13	1:C:1993:ASP:HA	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:869:GLY:O	1:A:872:SER:OG	2.26	0.43
1:A:1879:VAL:HG22	1:B:2058:PHE:HD2	1.84	0.43
1:A:2082:ARG:HB3	1:A:2189:SER:HB3	1.99	0.43
1:B:3:VAL:HG22	1:B:142:PHE:CE2	2.54	0.43
1:B:966:GLU:CD	1:B:969:ARG:NH2	2.57	0.43
1:B:1598:SER:HB2	1:B:1601:ARG:HH11	1.84	0.43
1:C:1368:ARG:HD2	1:C:2403:LEU:HD13	2.00	0.43
1:C:1904:GLN:HE22	1:C:1908:ILE:HD11	1.82	0.43
1:A:514:LEU:HD12	1:A:517:ILE:HD11	1.99	0.43
1:A:1224:TRP:CD2	1:A:1317:PHE:HE2	2.37	0.43
1:A:1364:ASP:OD1	1:A:1367:ARG:NH2	2.38	0.43
1:A:2058:PHE:HD2	1:C:1879:VAL:HG22	1.84	0.43
1:B:657:PHE:HB2	1:B:728:ILE:HA	2.00	0.43
1:B:2059:SER:OG	1:B:2060:PRO:HD3	2.18	0.43
1:C:2083:ILE:HD12	1:C:2188:VAL:HG22	1.99	0.43
1:A:298:PHE:HE2	1:A:306:LYS:HZ3	1.66	0.43
1:A:1373:ARG:HB2	1:A:2412:LEU:HD21	2.01	0.43
1:A:2288:ASP:OD2	1:A:2311:HIS:ND1	2.49	0.43
1:B:1089:LEU:HD12	1:B:1093:LEU:HD23	2.01	0.43
1:C:471:LEU:HD11	1:C:493:THR:HA	2.01	0.43
1:C:1904:GLN:NE2	1:C:1908:ILE:HD11	2.34	0.43
1:A:3:VAL:HG22	1:A:142:PHE:CE2	2.54	0.43
1:A:55:PRO:HB2	1:A:58:VAL:HB	2.01	0.43
1:A:959:ARG:NH2	1:A:969:ARG:CD	2.55	0.43
1:A:2242:ILE:O	1:A:2288:ASP:N	2.48	0.43
1:B:249:PHE:HZ	1:B:317:LEU:HA	1.84	0.43
1:B:1224:TRP:CD2	1:B:1317:PHE:HE2	2.37	0.43
1:B:1409:ASP:OD1	1:B:1409:ASP:N	2.52	0.43
1:B:1904:GLN:NE2	1:B:1908:ILE:HD11	2.34	0.43
1:C:3:VAL:HG22	1:C:142:PHE:CE2	2.54	0.43
1:C:2082:ARG:HB3	1:C:2189:SER:HB3	1.99	0.43
1:C:2082:ARG:N	1:C:2189:SER:O	2.52	0.43
1:C:2326:THR:OG1	1:C:2330:GLY:N	2.50	0.43
1:A:707:PHE:O	1:A:711:SER:OG	2.31	0.42
1:A:2083:ILE:O	1:A:2091:LEU:N	2.51	0.42
1:B:1153:ASP:OD1	1:B:1154:THR:N	2.51	0.42
1:B:1874:LEU:HD23	1:B:1878:LEU:HD23	2.01	0.42
1:C:241:LEU:HD21	1:C:319:PHE:CE2	2.54	0.42
1:C:485:PHE:O	1:C:489:LEU:HG	2.19	0.42
1:C:1089:LEU:HD12	1:C:1093:LEU:HD23	2.01	0.42
1:C:1713:ASP:OD1	1:C:1714:ILE:HD12	2.18	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2076:PRO:HA	1:C:2194:ARG:HA	2.01	0.42
1:A:241:LEU:HD21	1:A:319:PHE:CE2	2.54	0.42
1:A:638:PHE:HZ	1:A:755:VAL:HG13	1.83	0.42
1:A:916:MET:HE2	1:A:916:MET:HA	2.01	0.42
1:A:1893:LEU:HD13	1:A:1993:ASP:HA	1.99	0.42
1:A:2003:LEU:HD12	1:A:2007:PHE:HE2	1.84	0.42
1:B:13:LYS:O	1:B:17:PRO:HG2	2.18	0.42
1:B:55:PRO:HB2	1:B:58:VAL:HB	2.01	0.42
1:B:917:PRO:HB2	1:B:923:LYS:HA	2.00	0.42
1:B:1626:GLN:NE2	1:B:1916:PHE:HE1	2.16	0.42
1:B:1644:TRP:O	1:B:1648:SER:OG	2.36	0.42
1:B:2288:ASP:OD2	1:B:2311:HIS:ND1	2.49	0.42
1:C:1252:PHE:CE2	1:C:1266:ARG:HB2	2.55	0.42
1:C:1624:MET:HB3	1:C:1628:MET:HE1	2.00	0.42
1:C:1651:ARG:NH1	1:C:1651:ARG:HB2	2.33	0.42
1:C:2003:LEU:HD12	1:C:2007:PHE:HE2	1.84	0.42
1:A:1054:TYR:HB3	1:A:1055:PRO:HD3	2.01	0.42
1:A:1598:SER:HB2	1:A:1601:ARG:HH11	1.84	0.42
1:A:1904:GLN:NE2	1:A:1908:ILE:HD11	2.34	0.42
1:A:2373:ARG:HD3	1:A:2373:ARG:HA	1.89	0.42
1:B:673:LEU:HD12	1:B:680:TYR:CZ	2.55	0.42
1:B:692:THR:HA	1:B:695:THR:HG22	2.02	0.42
1:B:959:ARG:HH21	1:B:969:ARG:NH1	2.14	0.42
1:B:2326:THR:N	1:B:2331:ARG:O	2.46	0.42
1:B:2381:SER:OG	1:C:2381:SER:OG	2.35	0.42
1:C:7:LEU:O	1:C:11:VAL:HG23	2.20	0.42
1:C:12:VAL:O	1:C:17:PRO:HD2	2.20	0.42
1:C:692:THR:HA	1:C:695:THR:HG22	2.02	0.42
1:C:1409:ASP:N	1:C:1409:ASP:OD1	2.52	0.42
1:C:2092:TYR:HE1	1:C:2094:MET:HE3	1.82	0.42
1:C:2194:ARG:HH22	1:C:2340:ILE:HG23	1.84	0.42
1:C:2353:LYS:HD2	1:C:2353:LYS:HA	1.84	0.42
1:A:13:LYS:HZ3	1:A:45:LEU:H	1.66	0.42
1:A:485:PHE:O	1:A:489:LEU:HG	2.19	0.42
1:A:1368:ARG:HD2	1:A:2403:LEU:HD13	2.00	0.42
1:A:1624:MET:HB3	1:A:1628:MET:HE1	2.00	0.42
1:A:2144:LYS:HB3	1:A:2144:LYS:HE3	1.94	0.42
1:B:707:PHE:O	1:B:711:SER:OG	2.31	0.42
1:B:1879:VAL:HG22	1:C:2058:PHE:HD2	1.84	0.42
1:B:2082:ARG:N	1:B:2189:SER:O	2.52	0.42
1:B:2155:ARG:HB3	1:B:2333:TYR:CD2	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:977:HIS:NE2	1:C:978:HIS:CE1	2.88	0.42
1:C:1224:TRP:CD2	1:C:1317:PHE:HE2	2.37	0.42
1:C:2155:ARG:HB3	1:C:2333:TYR:CD2	2.54	0.42
1:A:12:VAL:O	1:A:17:PRO:HD2	2.20	0.42
1:A:249:PHE:HZ	1:A:317:LEU:HA	1.84	0.42
1:A:977:HIS:NE2	1:A:978:HIS:CE1	2.88	0.42
1:A:1356:GLU:HA	1:A:1359:LYS:HE2	2.02	0.42
1:A:1844:LEU:HD23	1:A:1844:LEU:HA	1.89	0.42
1:A:2146:TYR:CD2	1:A:2339:PHE:HB3	2.55	0.42
1:A:2381:SER:OG	1:B:2381:SER:OG	2.35	0.42
1:B:977:HIS:NE2	1:B:978:HIS:CE1	2.88	0.42
1:B:2146:TYR:CD2	1:B:2339:PHE:HB3	2.55	0.42
1:C:55:PRO:HB2	1:C:58:VAL:HB	2.01	0.42
1:C:249:PHE:HZ	1:C:317:LEU:HA	1.84	0.42
1:C:746:LEU:O	1:C:750:ILE:HD12	2.20	0.42
1:C:834:VAL:HA	1:C:837:ILE:HG22	2.02	0.42
1:C:1106:TYR:OH	1:C:1275:ASN:ND2	2.41	0.42
1:C:1373:ARG:HB2	1:C:2412:LEU:HD21	2.01	0.42
1:C:1839:ASP:HA	1:C:1842:CYS:SG	2.60	0.42
1:A:37:LEU:HD23	1:A:37:LEU:HA	1.86	0.42
1:A:97:ARG:N	1:A:100:THR:OG1	2.50	0.42
1:A:98:SER:O	1:A:101:THR:OG1	2.27	0.42
1:A:879:LEU:HA	1:A:882:VAL:HG12	2.00	0.42
1:A:1332:GLU:HA	1:A:1335:LEU:HG	2.02	0.42
1:A:1660:MET:HE2	1:A:1660:MET:HB3	1.92	0.42
1:A:1839:ASP:HA	1:A:1842:CYS:SG	2.60	0.42
1:A:2155:ARG:HB3	1:A:2333:TYR:CD2	2.54	0.42
1:B:916:MET:HA	1:B:916:MET:HE2	2.02	0.42
1:B:2194:ARG:HH22	1:B:2340:ILE:HG23	1.84	0.42
1:C:13:LYS:NZ	1:C:43:ALA:O	2.34	0.42
1:C:1598:SER:HB2	1:C:1601:ARG:HH11	1.84	0.42
1:C:2197:ASP:OD1	1:C:2197:ASP:N	2.52	0.42
1:A:1892:TYR:OH	1:A:1960:ILE:HD13	2.20	0.42
1:A:2092:TYR:HE1	1:A:2094:MET:HE3	1.82	0.42
1:B:959:ARG:O	1:B:964:LEU:N	2.37	0.42
1:B:1332:GLU:HA	1:B:1335:LEU:HG	2.02	0.42
1:B:2092:TYR:HE1	1:B:2094:MET:HE3	1.82	0.42
1:C:298:PHE:HE2	1:C:306:LYS:HZ3	1.67	0.42
1:C:673:LEU:HD12	1:C:680:TYR:CZ	2.54	0.42
1:C:916:MET:HE2	1:C:916:MET:HA	2.02	0.42
1:C:1356:GLU:HA	1:C:1359:LYS:HE2	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1660:MET:HE2	1:C:1660:MET:HB3	1.92	0.42
1:C:1709:PHE:CE2	1:C:1711:LEU:HB3	2.55	0.42
1:C:2146:TYR:CD2	1:C:2339:PHE:HB3	2.54	0.42
1:C:2146:TYR:CE2	1:C:2339:PHE:HB3	2.55	0.42
1:A:1662:THR:O	1:A:1665:GLU:HG2	2.20	0.42
1:A:2381:SER:OG	1:C:2381:SER:OG	2.35	0.42
1:B:12:VAL:O	1:B:17:PRO:HD2	2.20	0.42
1:B:245:SER:O	1:B:249:PHE:HD2	2.03	0.42
1:B:834:VAL:HA	1:B:837:ILE:HG22	2.02	0.42
1:B:980:HIS:HB3	1:B:983:ARG:CZ	2.50	0.42
1:B:1373:ARG:HB2	1:B:2412:LEU:HD21	2.01	0.42
1:B:1709:PHE:CE2	1:B:1711:LEU:HB3	2.55	0.42
1:B:1892:TYR:OH	1:B:1960:ILE:HD13	2.20	0.42
1:C:1874:LEU:HD23	1:C:1878:LEU:HD23	2.01	0.42
1:C:2416:LEU:HD23	1:C:2416:LEU:HA	1.91	0.42
1:A:566:THR:HA	1:A:569:VAL:HG12	2.02	0.42
1:A:1644:TRP:O	1:A:1648:SER:OG	2.36	0.42
1:A:1646:ASN:HD22	1:A:1646:ASN:C	2.28	0.42
1:A:2082:ARG:N	1:A:2189:SER:O	2.52	0.42
1:B:826:PHE:O	1:B:830:ILE:HB	2.20	0.42
1:B:1252:PHE:CE2	1:B:1266:ARG:HB2	2.55	0.42
1:B:1307:LEU:HD12	1:B:1310:LEU:HD11	2.02	0.42
1:B:1628:MET:HE3	1:B:1712:TRP:CE2	2.55	0.42
1:C:517:ILE:O	1:C:521:LEU:HD23	2.20	0.42
1:C:1235:ILE:CD1	1:C:1300:ILE:HG21	2.50	0.42
1:C:1343:LYS:HA	1:C:1343:LYS:HD2	1.92	0.42
1:C:1624:MET:HA	1:C:1627:VAL:HG12	2.02	0.42
1:C:1892:TYR:OH	1:C:1960:ILE:HD13	2.20	0.42
1:A:62:VAL:O	1:A:66:PHE:HD2	2.03	0.42
1:A:1628:MET:HE3	1:A:1712:TRP:CE2	2.55	0.42
1:B:858:SER:HA	1:B:861:ILE:HG22	2.01	0.42
1:B:1167:PHE:CD2	1:B:1316:ILE:HG23	2.55	0.42
1:B:1235:ILE:CD1	1:B:1300:ILE:HG21	2.50	0.42
1:B:1646:ASN:C	1:B:1646:ASN:HD22	2.28	0.42
1:B:2185:ASN:HD22	1:B:2211:LEU:HD23	1.84	0.42
1:B:2278:GLU:OE1	1:B:2280:SER:N	2.53	0.42
1:C:917:PRO:O	1:C:921:GLY:N	2.53	0.42
1:C:2003:LEU:CD1	1:C:2007:PHE:HE2	2.31	0.42
1:A:980:HIS:HB3	1:A:983:ARG:CZ	2.50	0.41
1:A:1259:GLY:HA2	1:A:1262:LEU:HG	2.02	0.41
1:A:1670:ILE:HA	1:A:1673:VAL:HG12	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1874:LEU:HD23	1:A:1878:LEU:HD23	2.01	0.41
1:A:2146:TYR:CE2	1:A:2339:PHE:HB3	2.55	0.41
1:A:2278:GLU:OE1	1:A:2280:SER:N	2.53	0.41
1:B:1839:ASP:HA	1:B:1842:CYS:SG	2.60	0.41
1:C:858:SER:HA	1:C:861:ILE:HG22	2.01	0.41
1:C:1054:TYR:HB3	1:C:1055:PRO:HD3	2.01	0.41
1:C:2130:THR:HA	1:C:2133:ILE:HG12	2.02	0.41
1:C:2264:ILE:HD13	1:C:2320:TRP:CH2	2.55	0.41
1:A:245:SER:O	1:A:249:PHE:HD2	2.03	0.41
1:A:670:LEU:HD23	1:A:670:LEU:HA	1.93	0.41
1:A:826:PHE:O	1:A:830:ILE:HB	2.20	0.41
1:A:1709:PHE:CE2	1:A:1711:LEU:HB3	2.55	0.41
1:A:2076:PRO:HA	1:A:2194:ARG:HA	2.01	0.41
1:A:2264:ILE:HD13	1:A:2320:TRP:CH2	2.55	0.41
1:B:633:LYS:HD3	1:B:633:LYS:HA	1.75	0.41
1:B:1356:GLU:HA	1:B:1359:LYS:HE2	2.02	0.41
1:B:1842:CYS:HA	1:B:1845:ILE:HG22	2.02	0.41
1:C:555:ALA:HA	1:C:558:ILE:HG12	2.02	0.41
1:C:1259:GLY:HA2	1:C:1262:LEU:HG	2.02	0.41
1:C:1679:MET:H	1:C:1679:MET:HG2	1.69	0.41
1:C:2185:ASN:HD22	1:C:2211:LEU:HD23	1.84	0.41
1:A:633:LYS:HD3	1:A:633:LYS:HA	1.75	0.41
1:A:953:TYR:HD1	1:A:956:ARG:HH21	1.68	0.41
1:A:1198:LEU:O	1:A:1202:TRP:CB	2.66	0.41
1:A:1235:ILE:CD1	1:A:1300:ILE:HG21	2.50	0.41
1:B:830:ILE:CG2	1:B:948:GLN:HG2	2.49	0.41
1:B:1328:GLU:O	1:B:1332:GLU:HB2	2.21	0.41
1:B:2130:THR:HA	1:B:2133:ILE:HG12	2.02	0.41
1:C:97:ARG:N	1:C:100:THR:OG1	2.50	0.41
1:C:566:THR:HA	1:C:569:VAL:HG12	2.02	0.41
1:C:980:HIS:HB3	1:C:983:ARG:CZ	2.50	0.41
1:C:1206:ASN:O	1:C:1209:VAL:HG22	2.21	0.41
1:C:1910:PHE:O	1:C:1911:LEU:C	2.63	0.41
1:C:2278:GLU:OE1	1:C:2280:SER:N	2.53	0.41
1:A:32:SER:HB2	1:A:253:TYR:CD2	2.55	0.41
1:A:223:TRP:CD1	1:A:574:ARG:HH22	2.39	0.41
1:A:253:TYR:O	1:A:256:GLN:N	2.54	0.41
1:A:258:PRO:HA	1:A:261:HIS:CD2	2.56	0.41
1:A:917:PRO:O	1:A:921:GLY:N	2.53	0.41
1:A:1135:TYR:OH	1:A:1323:GLN:OE1	2.26	0.41
1:A:2194:ARG:HH22	1:A:2340:ILE:HG23	1.84	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:124:LEU:O	1:B:128:ILE:HG12	2.21	0.41
1:B:238:LYS:HZ3	1:B:326:GLN:HG3	1.85	0.41
1:B:455:MET:SD	1:B:455:MET:N	2.91	0.41
1:B:746:LEU:O	1:B:750:ILE:HD12	2.20	0.41
1:B:1206:ASN:O	1:B:1209:VAL:HG22	2.21	0.41
1:B:1259:GLY:HA2	1:B:1262:LEU:HG	2.02	0.41
1:B:1624:MET:HA	1:B:1627:VAL:HG12	2.02	0.41
1:B:2003:LEU:HD12	1:B:2007:PHE:HE2	1.84	0.41
1:B:2076:PRO:HA	1:B:2194:ARG:HA	2.01	0.41
1:B:2146:TYR:CE2	1:B:2339:PHE:HB3	2.55	0.41
1:B:2395:LEU:HD12	1:B:2395:LEU:HA	1.88	0.41
1:C:258:PRO:HA	1:C:261:HIS:CD2	2.56	0.41
1:C:1233:PHE:O	1:C:1237:MET:HG2	2.21	0.41
1:A:7:LEU:O	1:A:11:VAL:HG23	2.20	0.41
1:A:673:LEU:HD12	1:A:680:TYR:CZ	2.55	0.41
1:A:834:VAL:HA	1:A:837:ILE:HG22	2.02	0.41
1:A:858:SER:HA	1:A:861:ILE:HG22	2.01	0.41
1:A:1252:PHE:CE2	1:A:1266:ARG:HB2	2.55	0.41
1:A:2089:PRO:HD3	1:C:2161:GLU:OE2	2.21	0.41
1:A:2185:ASN:HD22	1:A:2211:LEU:HD23	1.84	0.41
1:B:485:PHE:O	1:B:489:LEU:HG	2.20	0.41
1:B:917:PRO:O	1:B:921:GLY:N	2.53	0.41
1:B:936:PHE:O	1:B:940:VAL:HG23	2.21	0.41
1:B:1054:TYR:HB3	1:B:1055:PRO:HD3	2.01	0.41
1:A:1112:PHE:O	1:A:1116:LEU:HD23	2.21	0.41
1:A:1832:TYR:HB2	1:A:1892:TYR:CE1	2.56	0.41
1:A:2395:LEU:HD12	1:A:2395:LEU:HA	1.88	0.41
1:B:62:VAL:O	1:B:66:PHE:HD2	2.03	0.41
1:B:97:ARG:N	1:B:100:THR:OG1	2.49	0.41
1:B:555:ALA:HA	1:B:558:ILE:HG12	2.02	0.41
1:B:566:THR:HA	1:B:569:VAL:HG12	2.02	0.41
1:B:638:PHE:HZ	1:B:755:VAL:HG13	1.83	0.41
1:B:1233:PHE:O	1:B:1237:MET:HG2	2.21	0.41
1:C:1112:PHE:O	1:C:1116:LEU:HD23	2.21	0.41
1:C:1662:THR:O	1:C:1665:GLU:HG2	2.20	0.41
1:C:1842:CYS:HA	1:C:1845:ILE:HG22	2.02	0.41
1:A:455:MET:SD	1:A:455:MET:N	2.91	0.41
1:A:494:CYS:O	1:A:498:ILE:HB	2.21	0.41
1:A:692:THR:HA	1:A:695:THR:HG22	2.02	0.41
1:A:1206:ASN:O	1:A:1209:VAL:HG22	2.20	0.41
1:A:2247:GLN:HA	1:A:2339:PHE:HB2	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:7:LEU:O	1:B:11:VAL:HG23	2.20	0.41
1:B:13:LYS:HZ3	1:B:45:LEU:H	1.67	0.41
1:B:1018:ASP:HB2	1:B:1092:LEU:O	2.21	0.41
1:B:1198:LEU:O	1:B:1202:TRP:CB	2.66	0.41
1:B:1264:ILE:HG23	1:B:1678:PHE:HB3	2.03	0.41
1:B:1910:PHE:O	1:B:1911:LEU:C	2.63	0.41
1:C:124:LEU:O	1:C:128:ILE:HG12	2.21	0.41
1:C:245:SER:O	1:C:249:PHE:HD2	2.03	0.41
1:C:1307:LEU:HD12	1:C:1310:LEU:HD11	2.02	0.41
1:C:2347:PHE:O	1:C:2350:LYS:N	2.49	0.41
1:C:2395:LEU:HD12	1:C:2395:LEU:HA	1.88	0.41
1:A:555:ALA:HA	1:A:558:ILE:HG12	2.02	0.41
1:A:1104:SER:O	1:A:1108:ILE:HG12	2.21	0.41
1:A:1842:CYS:HA	1:A:1845:ILE:HG22	2.02	0.41
1:A:2161:GLU:OE2	1:B:2089:PRO:HD3	2.20	0.41
1:B:484:ILE:CD1	1:B:544:VAL:HA	2.51	0.41
1:B:639:ILE:HA	1:B:642:VAL:HG12	2.03	0.41
1:B:1235:ILE:HD12	1:B:1235:ILE:HA	1.89	0.41
1:B:1662:THR:O	1:B:1665:GLU:HG2	2.20	0.41
1:B:1670:ILE:HA	1:B:1673:VAL:HG12	2.02	0.41
1:B:2161:GLU:OE2	1:C:2089:PRO:HD3	2.21	0.41
1:B:2347:PHE:O	1:B:2348:LEU:HG	2.21	0.41
1:B:2432:GLU:OE2	1:B:2435:ARG:NH2	2.54	0.41
1:C:62:VAL:O	1:C:66:PHE:HD2	2.03	0.41
1:C:1018:ASP:HB2	1:C:1092:LEU:O	2.21	0.41
1:C:1182:GLY:O	1:C:1190:ALA:HB1	2.21	0.41
1:C:1628:MET:HE3	1:C:1712:TRP:CE2	2.55	0.41
1:C:1646:ASN:C	1:C:1646:ASN:HD22	2.28	0.41
1:A:238:LYS:O	1:A:242:ILE:HG12	2.20	0.41
1:A:870:ILE:HG13	1:A:871:PHE:N	2.36	0.41
1:A:1156:LYS:H	1:A:1156:LYS:HG2	1.70	0.41
1:A:1182:GLY:O	1:A:1190:ALA:HB1	2.21	0.41
1:A:1307:LEU:HD12	1:A:1310:LEU:HD11	2.01	0.41
1:A:1409:ASP:OD1	1:A:1409:ASP:N	2.52	0.41
1:A:2326:THR:OG1	1:A:2330:GLY:N	2.50	0.41
1:A:2432:GLU:OE2	1:A:2435:ARG:NH2	2.54	0.41
1:B:223:TRP:CD1	1:B:574:ARG:HH22	2.39	0.41
1:B:241:LEU:HD21	1:B:319:PHE:CE2	2.55	0.41
1:B:494:CYS:O	1:B:498:ILE:HB	2.21	0.41
1:B:517:ILE:O	1:B:521:LEU:HD23	2.20	0.41
1:B:1637:LEU:HA	1:B:1640:MET:HE2	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2041:VAL:HA	1:B:2044:MET:SD	2.61	0.41
1:B:2078:LYS:HA	1:B:2097:GLN:CB	2.51	0.41
1:B:2105:GLU:OE2	1:B:2157:ARG:NH1	2.41	0.41
1:B:2250:ASN:HD22	1:B:2344:PHE:HA	1.86	0.41
1:B:2264:ILE:HD13	1:B:2320:TRP:CH2	2.55	0.41
1:B:2353:LYS:HA	1:B:2353:LYS:HD2	1.84	0.41
1:C:223:TRP:CD1	1:C:574:ARG:HH22	2.39	0.41
1:C:1190:ALA:HA	1:C:1193:TYR:HD1	1.86	0.41
1:C:1670:ILE:HA	1:C:1673:VAL:HG12	2.02	0.41
1:C:2250:ASN:HD22	1:C:2344:PHE:HA	1.86	0.41
1:C:2269:ASN:HB2	1:C:2270:PRO:HD3	2.03	0.41
1:A:28:PRO:HB3	1:A:253:TYR:CE2	2.56	0.41
1:A:1167:PHE:CD2	1:A:1316:ILE:HG23	2.55	0.41
1:A:2078:LYS:HA	1:A:2097:GLN:CB	2.51	0.41
1:A:2347:PHE:O	1:A:2348:LEU:HG	2.21	0.41
1:B:238:LYS:O	1:B:242:ILE:HG12	2.21	0.41
1:B:298:PHE:HE2	1:B:306:LYS:HZ3	1.68	0.41
1:B:870:ILE:HG13	1:B:871:PHE:N	2.36	0.41
1:B:1182:GLY:O	1:B:1190:ALA:HB1	2.21	0.41
1:B:1190:ALA:HA	1:B:1193:TYR:HD1	1.86	0.41
1:B:1622:ALA:HA	1:B:1716:LEU:HD12	2.03	0.41
1:B:2248:VAL:HB	1:B:2340:ILE:HG13	2.02	0.41
1:C:494:CYS:O	1:C:498:ILE:HB	2.21	0.41
1:C:514:LEU:HA	1:C:517:ILE:HG12	2.03	0.41
1:C:826:PHE:O	1:C:830:ILE:HB	2.20	0.41
1:C:1104:SER:O	1:C:1108:ILE:HG12	2.21	0.41
1:A:454:GLY:O	1:A:458:VAL:HG23	2.21	0.40
1:A:830:ILE:CG2	1:A:948:GLN:HG2	2.49	0.40
1:B:258:PRO:HA	1:B:261:HIS:CD2	2.56	0.40
1:B:953:TYR:HD1	1:B:956:ARG:HH21	1.68	0.40
1:B:1684:ILE:HD12	1:B:1687:ARG:NH2	2.34	0.40
1:B:1832:TYR:HB2	1:B:1892:TYR:CE1	2.56	0.40
1:C:238:LYS:O	1:C:242:ILE:HG12	2.20	0.40
1:C:639:ILE:HA	1:C:642:VAL:HG12	2.02	0.40
1:C:1064:LEU:HD23	1:C:1064:LEU:HA	1.96	0.40
1:C:1332:GLU:HA	1:C:1335:LEU:HG	2.02	0.40
1:C:1684:ILE:HD12	1:C:1687:ARG:NH2	2.34	0.40
1:C:1832:TYR:HB2	1:C:1892:TYR:CE1	2.56	0.40
1:C:2057:ILE:HG22	1:C:2058:PHE:CD1	2.56	0.40
1:C:2135:ARG:NH2	1:C:2267:ASP:OD1	2.44	0.40
1:C:2247:GLN:HA	1:C:2339:PHE:HB2	2.03	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:639:ILE:HA	1:A:642:VAL:HG12	2.02	0.40
1:A:2130:THR:HA	1:A:2133:ILE:HG12	2.02	0.40
1:A:2250:ASN:HD22	1:A:2344:PHE:HA	1.86	0.40
1:B:2196:TYR:CD2	1:C:2253:GLU:OE2	2.74	0.40
1:B:2379:SER:O	1:B:2382:THR:OG1	2.38	0.40
1:C:1919:LEU:HD12	1:C:1919:LEU:HA	1.94	0.40
1:C:2078:LYS:HA	1:C:2097:GLN:CB	2.51	0.40
1:C:2105:GLU:OE2	1:C:2157:ARG:NH1	2.41	0.40
1:A:124:LEU:N	1:A:125:PRO:HD2	2.37	0.40
1:A:734:ARG:HA	1:A:734:ARG:NE	2.36	0.40
1:A:936:PHE:O	1:A:940:VAL:HG23	2.21	0.40
1:A:1007:ILE:O	1:A:1011:ILE:HG12	2.22	0.40
1:A:1233:PHE:O	1:A:1237:MET:HG2	2.21	0.40
1:A:1625:THR:HG21	1:A:1716:LEU:HB2	2.04	0.40
1:A:2248:VAL:HB	1:A:2340:ILE:HG13	2.02	0.40
1:B:514:LEU:HA	1:B:517:ILE:HG12	2.03	0.40
1:B:2057:ILE:HG22	1:B:2058:PHE:CD1	2.56	0.40
1:C:734:ARG:HA	1:C:734:ARG:NE	2.36	0.40
1:C:2041:VAL:HA	1:C:2044:MET:SD	2.61	0.40
1:C:2248:VAL:HB	1:C:2340:ILE:HG13	2.02	0.40
1:A:124:LEU:O	1:A:128:ILE:HG12	2.21	0.40
1:A:517:ILE:O	1:A:521:LEU:HD23	2.20	0.40
1:A:1328:GLU:O	1:A:1332:GLU:HB2	2.21	0.40
1:A:1622:ALA:HA	1:A:1716:LEU:HD12	2.04	0.40
1:A:1910:PHE:O	1:A:1911:LEU:C	2.63	0.40
1:A:2368:GLY:O	1:A:2372:VAL:HG22	2.22	0.40
1:A:2428:ALA:O	1:A:2432:GLU:HG2	2.21	0.40
1:B:8:LYS:HB3	1:B:8:LYS:HE2	1.86	0.40
1:B:734:ARG:HA	1:B:734:ARG:NE	2.36	0.40
1:B:2428:ALA:O	1:B:2432:GLU:HG2	2.22	0.40
1:C:1172:TRP:O	1:C:1176:MET:HG3	2.22	0.40
1:A:1172:TRP:O	1:A:1176:MET:HG3	2.22	0.40
1:A:2041:VAL:HA	1:A:2044:MET:SD	2.61	0.40
1:A:2057:ILE:HG22	1:A:2058:PHE:CD1	2.56	0.40
1:B:1112:PHE:O	1:B:1116:LEU:HD23	2.21	0.40
1:B:1172:TRP:O	1:B:1176:MET:HG3	2.22	0.40
1:B:1684:ILE:HD13	1:B:1684:ILE:HA	1.97	0.40
1:B:1832:TYR:HA	1:B:1835:MET:HG2	2.04	0.40
1:B:2247:GLN:HA	1:B:2339:PHE:HB2	2.03	0.40
1:B:2416:LEU:HD23	1:B:2416:LEU:HA	1.90	0.40
1:C:849:LEU:HD13	1:C:920:PHE:CE2	2.57	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1167:PHE:CD2	1:C:1316:ILE:HG23	2.55	0.40
1:C:1264:ILE:HG23	1:C:1678:PHE:HB3	2.03	0.40
1:C:1622:ALA:HA	1:C:1716:LEU:HD12	2.04	0.40
1:C:2347:PHE:O	1:C:2348:LEU:HG	2.21	0.40
1:C:2432:GLU:OE2	1:C:2435:ARG:NH2	2.54	0.40

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	1897/2442 (78%)	1792 (94%)	105 (6%)	0	100	100
1	B	1897/2442 (78%)	1792 (94%)	105 (6%)	0	100	100
1	C	1897/2442 (78%)	1792 (94%)	105 (6%)	0	100	100
All	All	5691/7326 (78%)	5376 (94%)	315 (6%)	0	100	100

There are no Ramachandran outliers to report.

5.3.2 Protein sidechains [i](#)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	1698/2141 (79%)	1697 (100%)	1 (0%)	92	97
1	B	1698/2141 (79%)	1697 (100%)	1 (0%)	92	97

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	C	1698/2141 (79%)	1697 (100%)	1 (0%)	92	97
All	All	5094/6423 (79%)	5091 (100%)	3 (0%)	92	97

All (3) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	2348	LEU
1	B	2348	LEU
1	C	2348	LEU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (37) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	722	GLN
1	A	817	GLN
1	A	948	GLN
1	A	978	HIS
1	A	1267	GLN
1	A	1318	HIS
1	A	1646	ASN
1	A	1682	ASN
1	A	1818	HIS
1	A	1931	HIS
1	A	2201	ASN
1	A	2301	ASN
1	A	2325	ASN
1	B	722	GLN
1	B	817	GLN
1	B	948	GLN
1	B	978	HIS
1	B	980	HIS
1	B	1267	GLN
1	B	1318	HIS
1	B	1646	ASN
1	B	1682	ASN
1	B	1818	HIS
1	B	1931	HIS
1	C	722	GLN
1	C	817	GLN
1	C	948	GLN
1	C	978	HIS

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Mol	Chain	Res	Type
1	C	980	HIS
1	C	1267	GLN
1	C	1318	HIS
1	C	1646	ASN
1	C	1682	ASN
1	C	1818	HIS
1	C	1931	HIS
1	C	2201	ASN
1	C	2301	ASN

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

There are no ligands in this entry.

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.

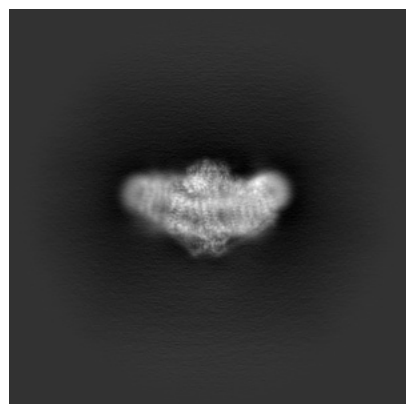
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-64385. These allow visual inspection of the internal detail of the map and identification of artifacts.

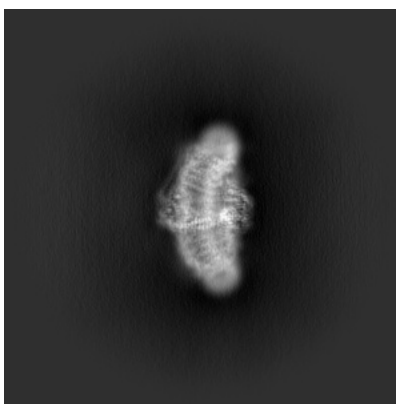
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections [i](#)

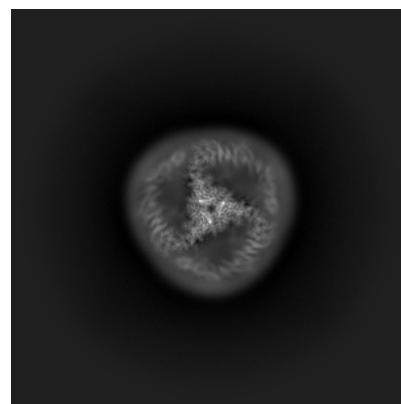
6.1.1 Primary map



X

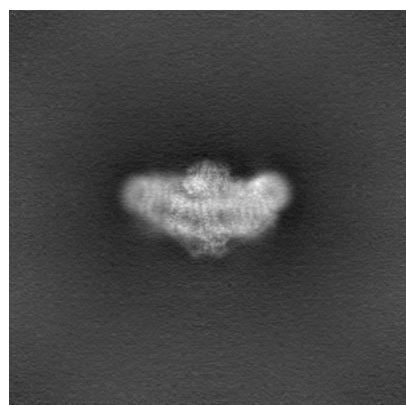


Y

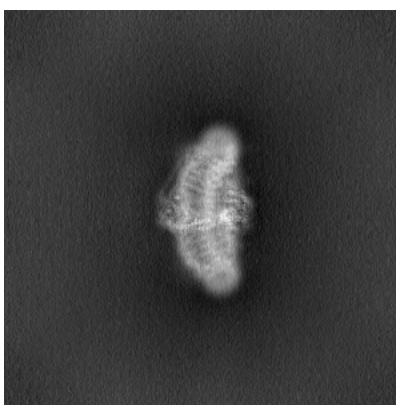


Z

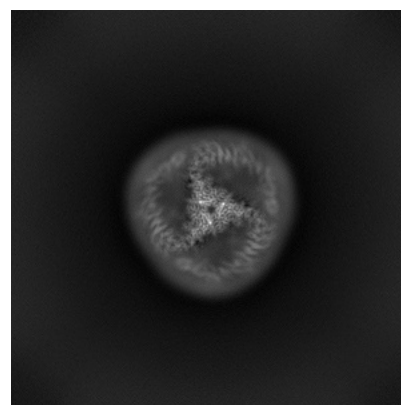
6.1.2 Raw map



X



Y

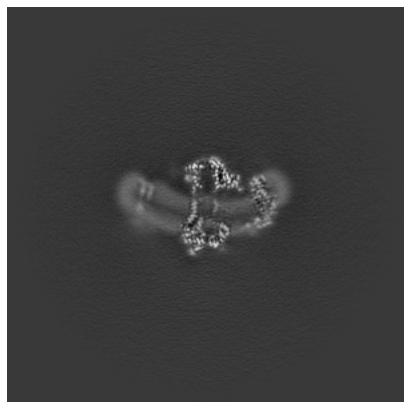


Z

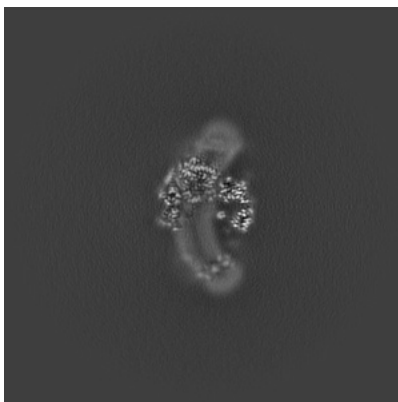
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

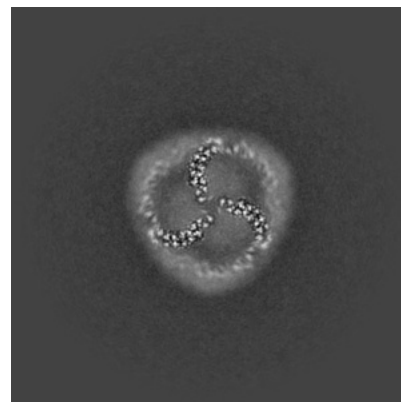
6.2.1 Primary map



X Index: 280



Y Index: 280

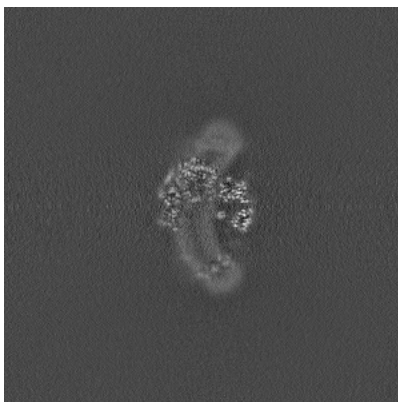


Z Index: 280

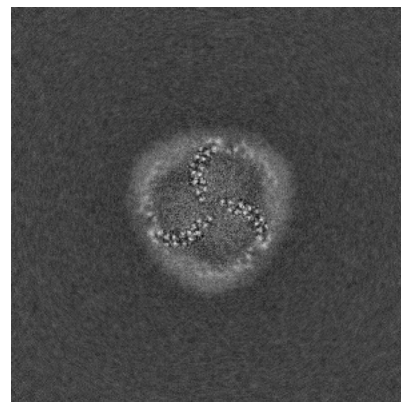
6.2.2 Raw map



X Index: 280



Y Index: 280

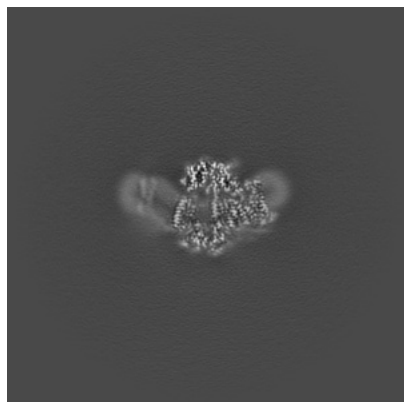


Z Index: 280

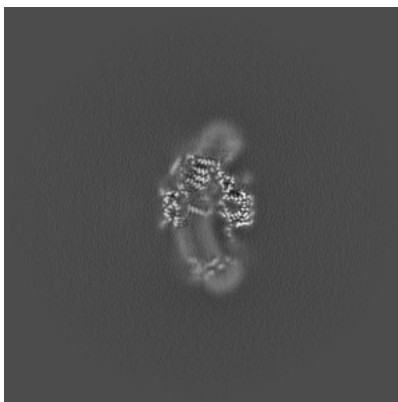
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

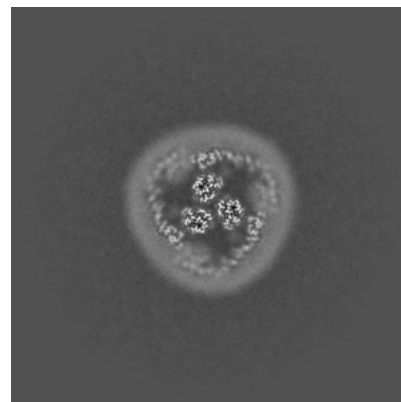
6.3.1 Primary map



X Index: 265

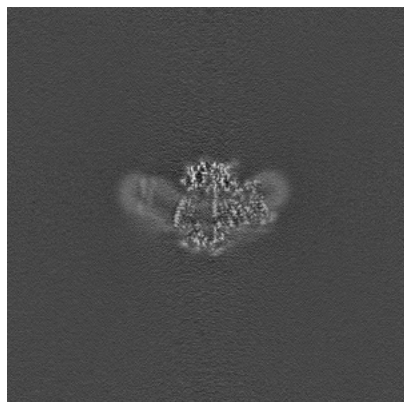


Y Index: 273

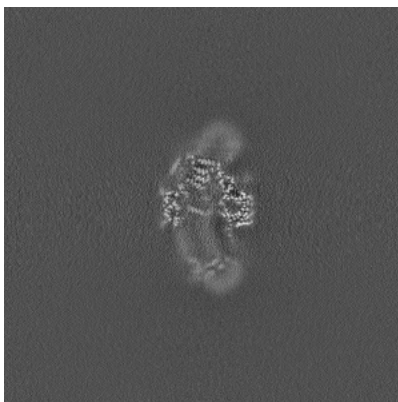


Z Index: 314

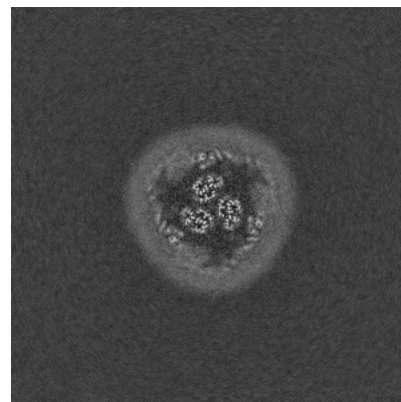
6.3.2 Raw map



X Index: 265



Y Index: 273

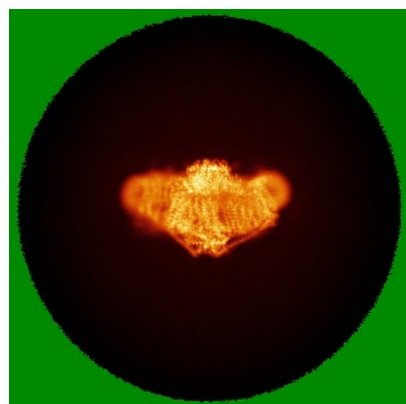


Z Index: 315

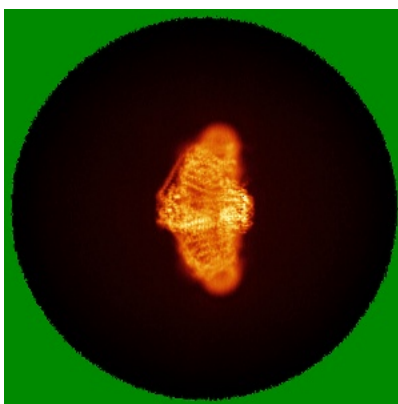
The images above show the largest variance slices of the map in three orthogonal directions.

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

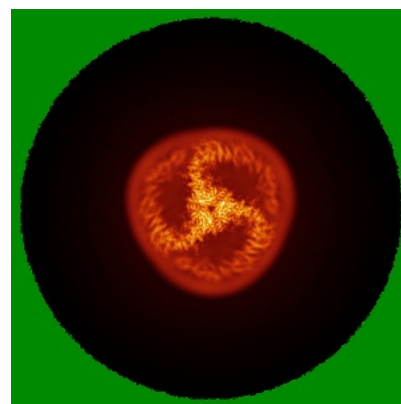
6.4.1 Primary map



X

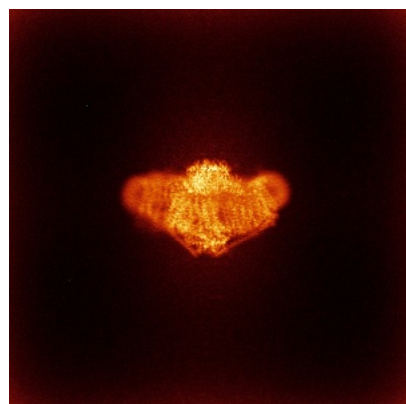


Y

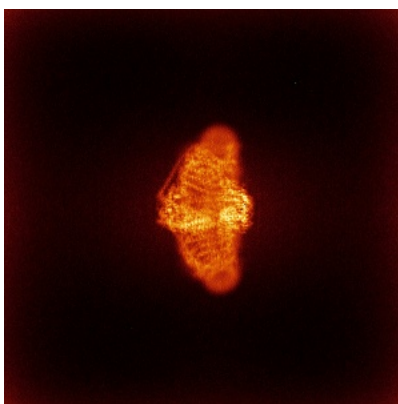


Z

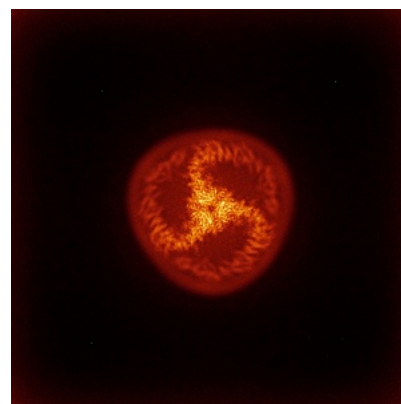
6.4.2 Raw map



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.

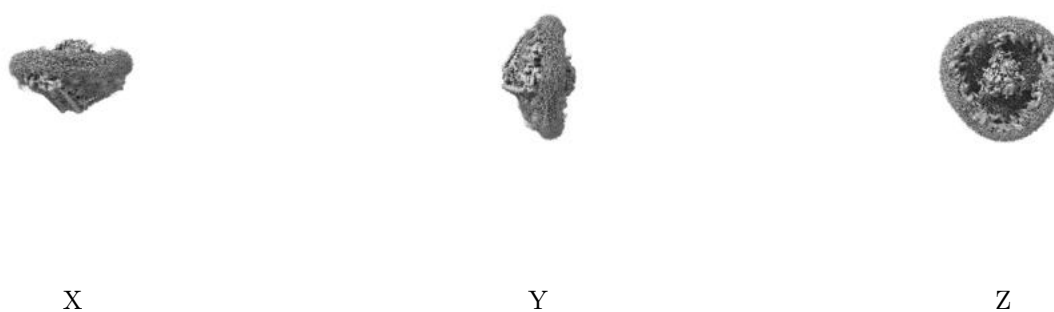
6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.075. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

6.5.2 Raw map



These images show the 3D surface of the raw map. The raw map's contour level was selected so that its surface encloses the same volume as the primary map does at its recommended contour level.

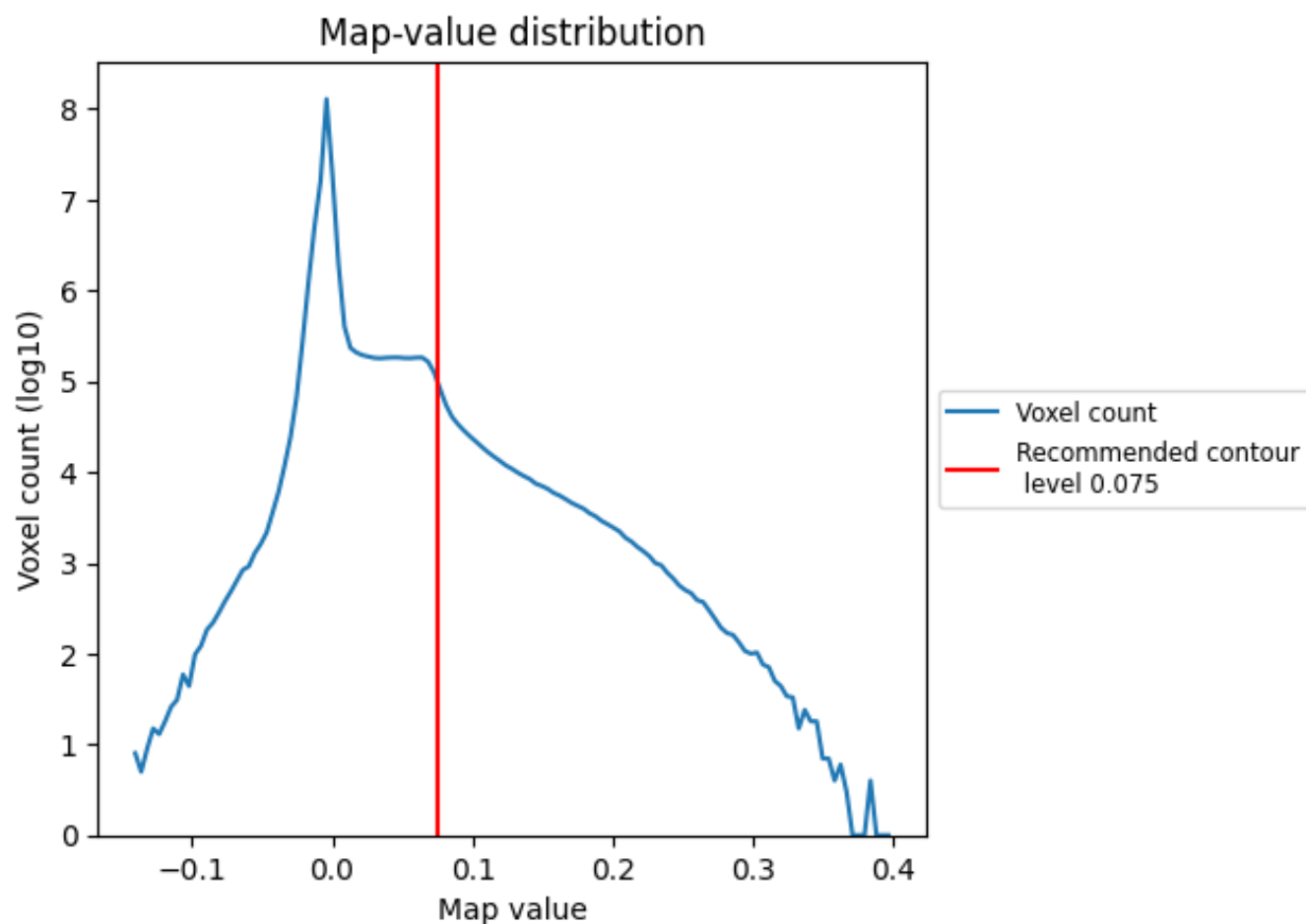
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

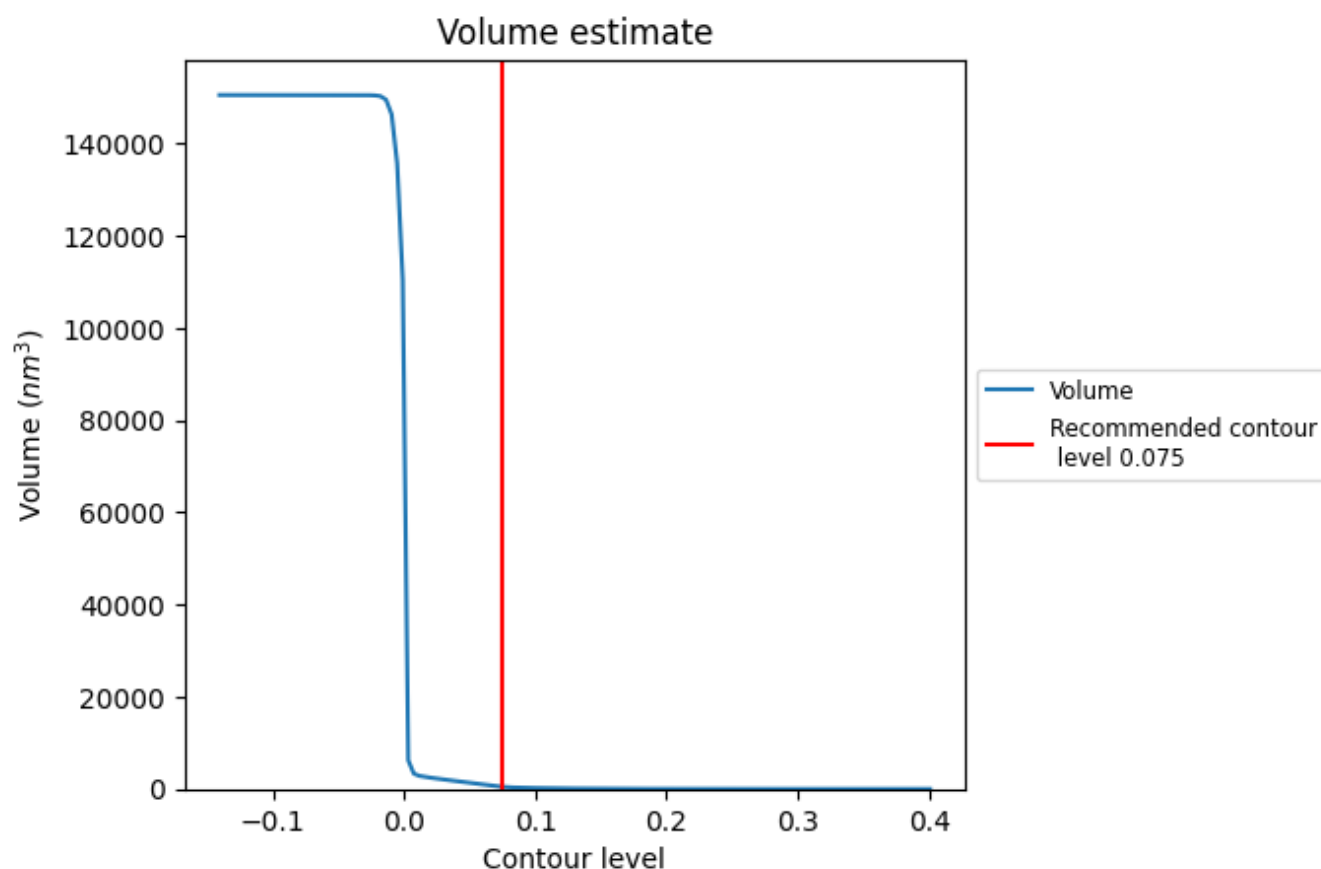
This section contains the results of statistical analysis of the map.

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.

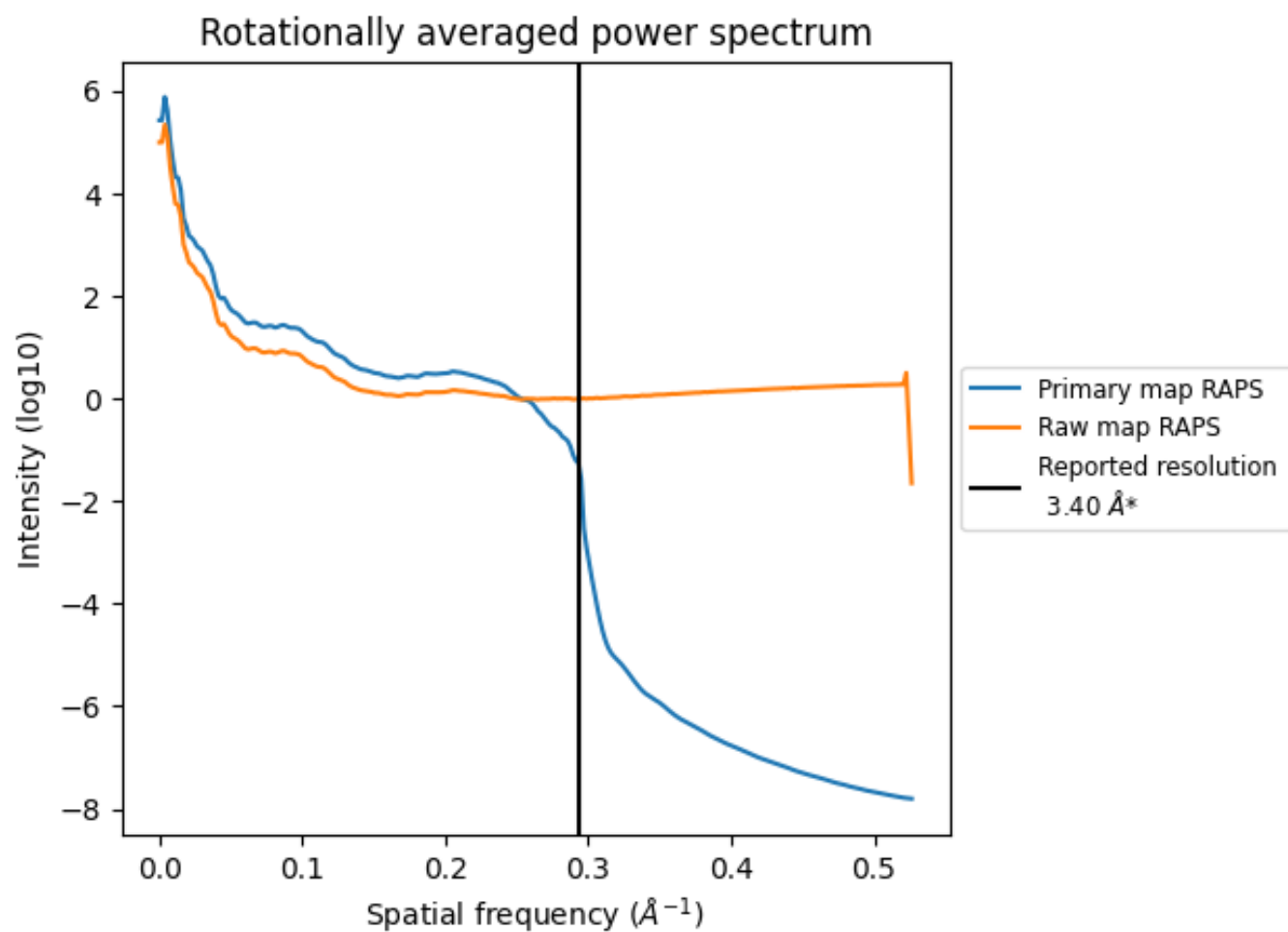
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 458 nm³; this corresponds to an approximate mass of 414 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 ⓘ

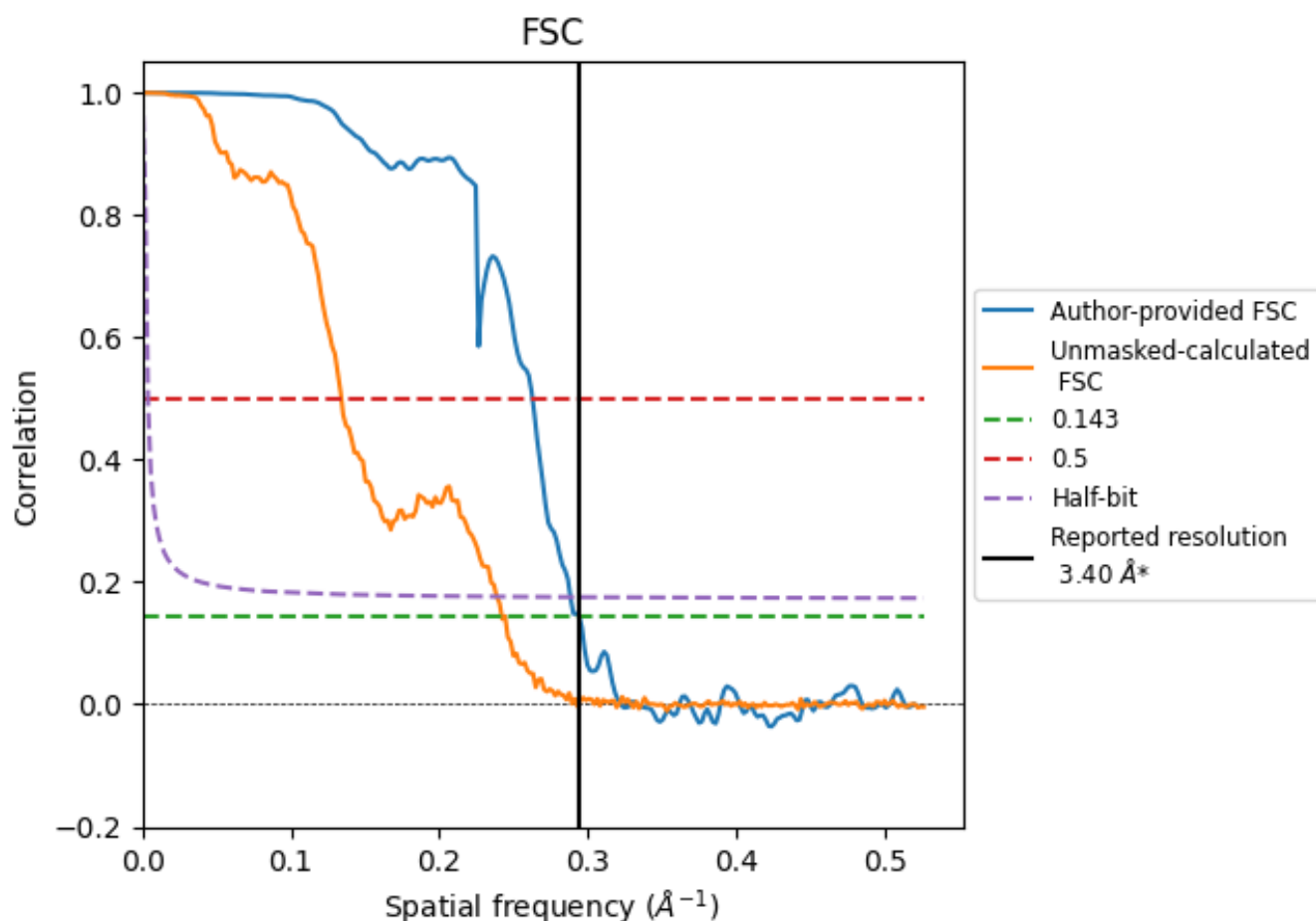


*Reported resolution corresponds to spatial frequency of 0.294 $\text{\AA}^{-1}$

8 Fourier-Shell correlation [i](#)

Fourier-Shell Correlation (FSC) is the most commonly used method to estimate the resolution of single-particle and subtomogram-averaged maps. The shape of the curve depends on the imposed symmetry, mask and whether or not the two 3D reconstructions used were processed from a common reference. The reported resolution is shown as a black line. A curve is displayed for the half-bit criterion in addition to lines showing the 0.143 gold standard cut-off and 0.5 cut-off.

8.1 FSC [i](#)



*Reported resolution corresponds to spatial frequency of 0.294 $\text{\AA}^{-1}$

8.2 Resolution estimates [i](#)

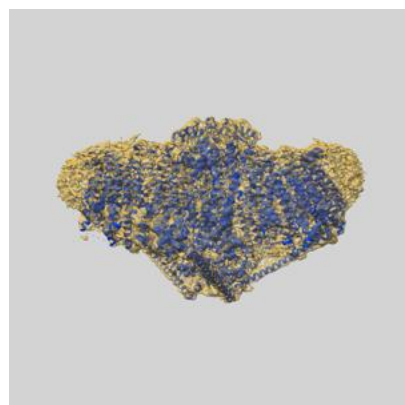
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	3.40	-	-
Author-provided FSC curve	3.40	3.81	3.47
Unmasked-calculated*	4.13	7.46	4.19

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps. The value from deposited half-maps intersecting FSC 0.143 CUT-OFF 4.13 differs from the reported value 3.4 by more than 10 %

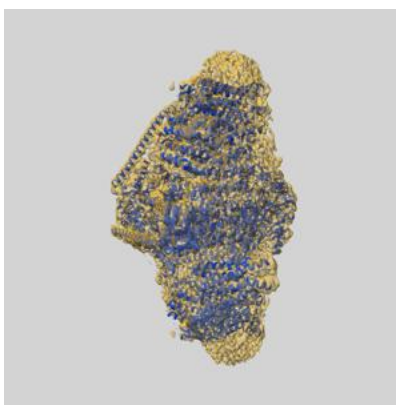
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-64385 and PDB model 9UOY. Per-residue inclusion information can be found in [section 3](#) on [page 4](#).

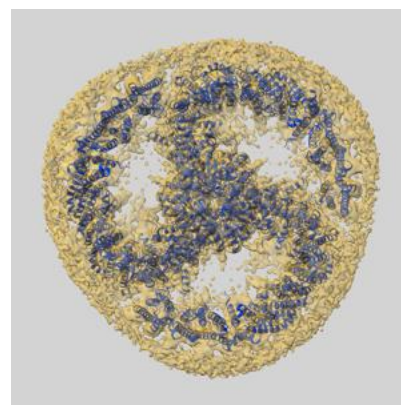
9.1 Map-model overlay [i](#)



X



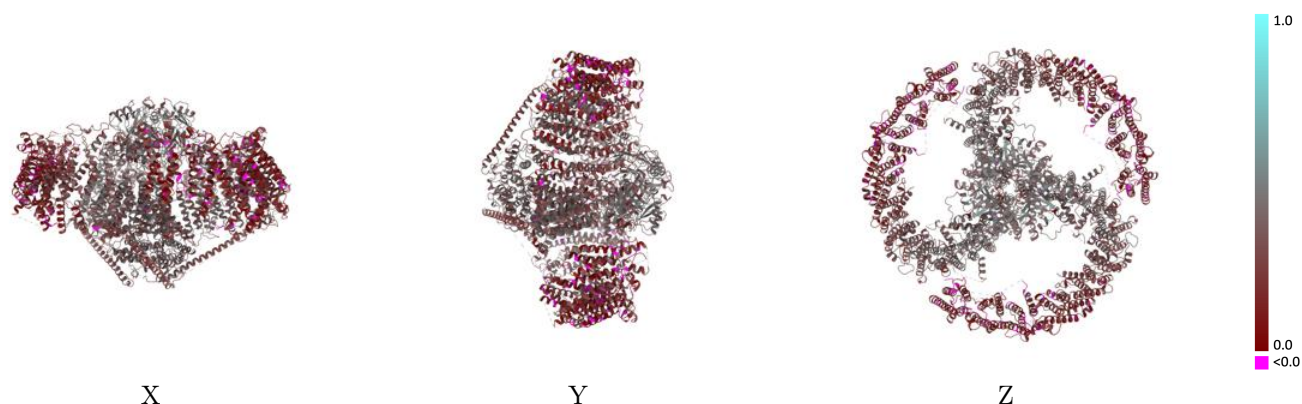
Y



Z

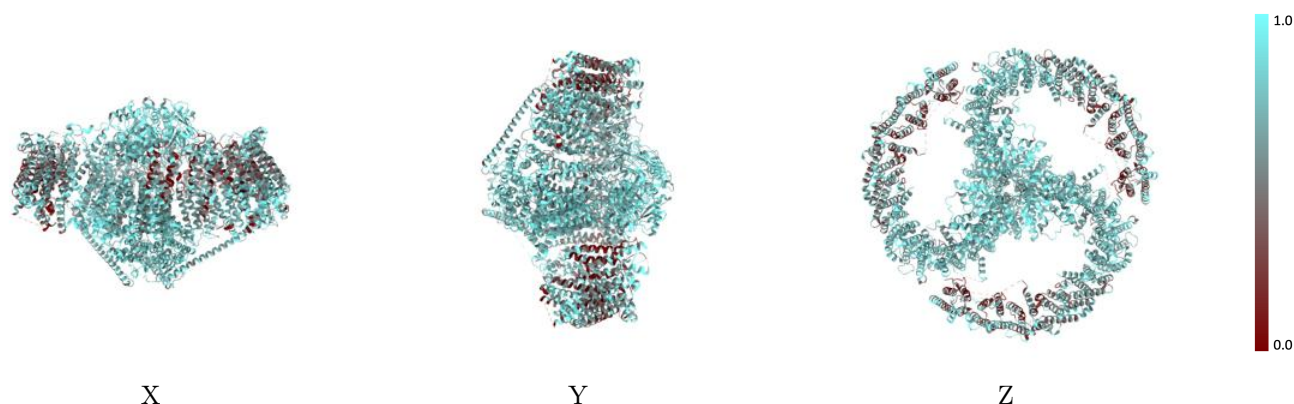
The images above show the 3D surface view of the map at the recommended contour level 0.075 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



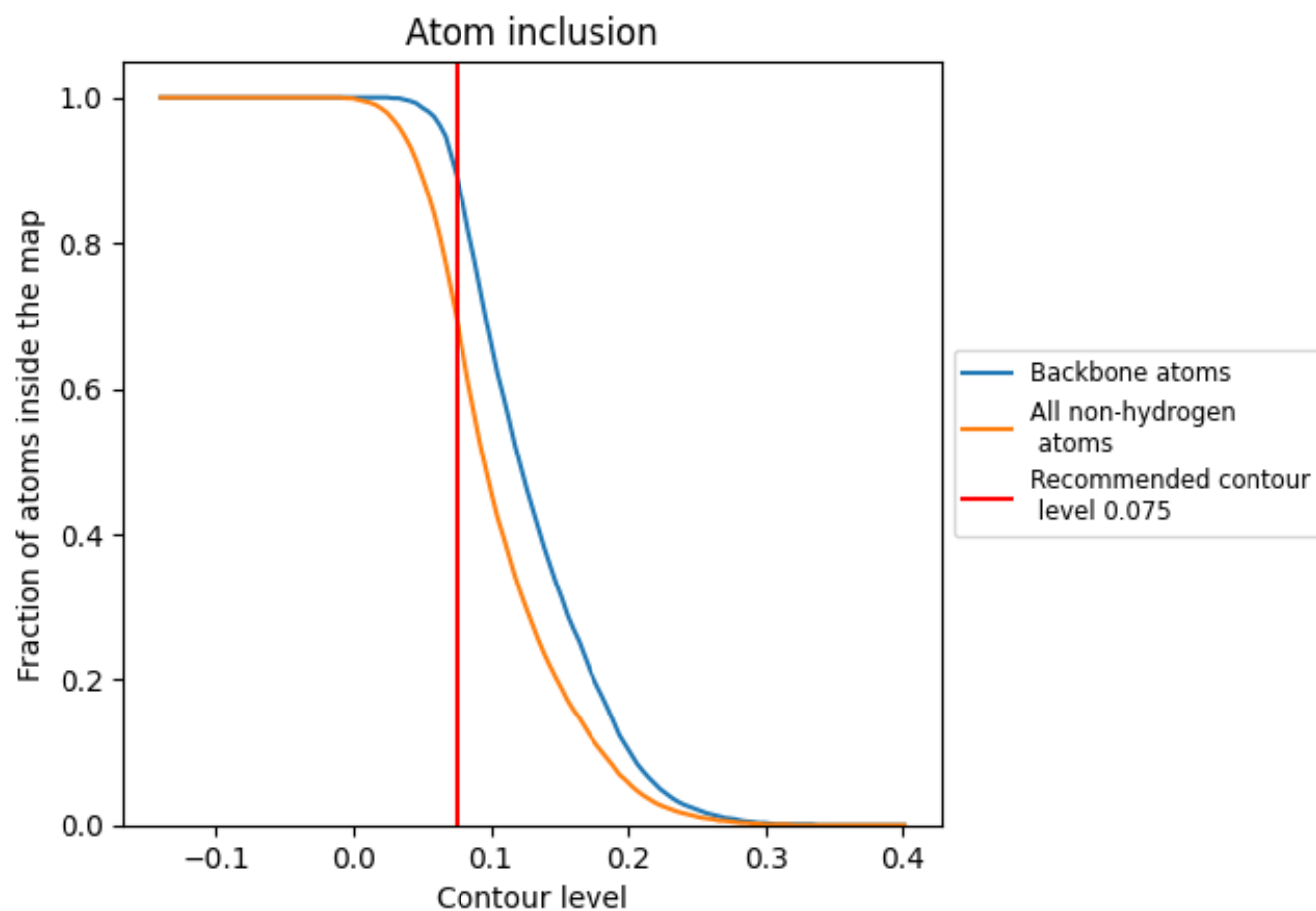
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (0.075).

9.4 Atom inclusion [i](#)



At the recommended contour level, 89% of all backbone atoms, 70% 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 (0.075) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.6960	0.2980
A	0.6960	0.2970
B	0.6960	0.2980
C	0.6970	0.2980

