



## Full wwPDB EM Validation Report ⓘ

Nov 19, 2022 – 03:47 pm GMT

PDB ID : 5NP0  
EMDB ID : EMD-3669  
Title : Closed dimer of human ATM (Ataxia telangiectasia mutated)  
Authors : Baretic, D.; Pollard, H.K.; Fisher, D.I.; Johnson, C.M.; Santhanam, B.; Truman, C.M.; Kouba, T.; Fersht, A.R.; Phillips, C.; Williams, R.L.  
Deposited on : 2017-04-13  
Resolution : 5.70 Å (reported)  
Based on initial model : 4JSP

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

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

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

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

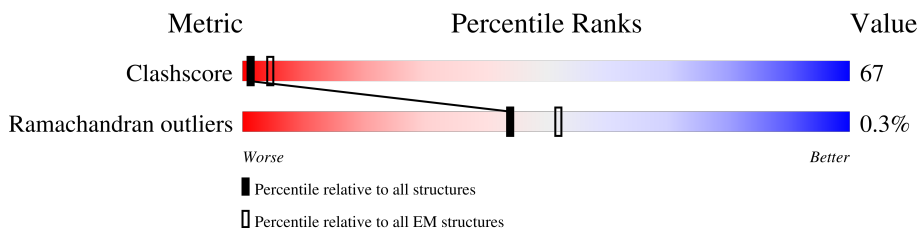
EMDB validation analysis : 0.0.1.dev43  
MolProbity : 4.02b-467  
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)  
MapQ : 1.9.9  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)  
Validation Pipeline (wwPDB-VP)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

# 1 Overall quality at a glance

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

The reported resolution of this entry is 5.70 Å.

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



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

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

Mol	Chain	Length	Quality of chain
1	A	3066	
1	B	3066	

## 2 Entry composition [i](#)

There is only 1 type of molecule in this entry. The entry contains 25074 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 Serine-protein kinase ATM.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
1	A	2528	12537	7481	2528	2528	0	0
1	B	2528	12537	7481	2528	2528	0	0

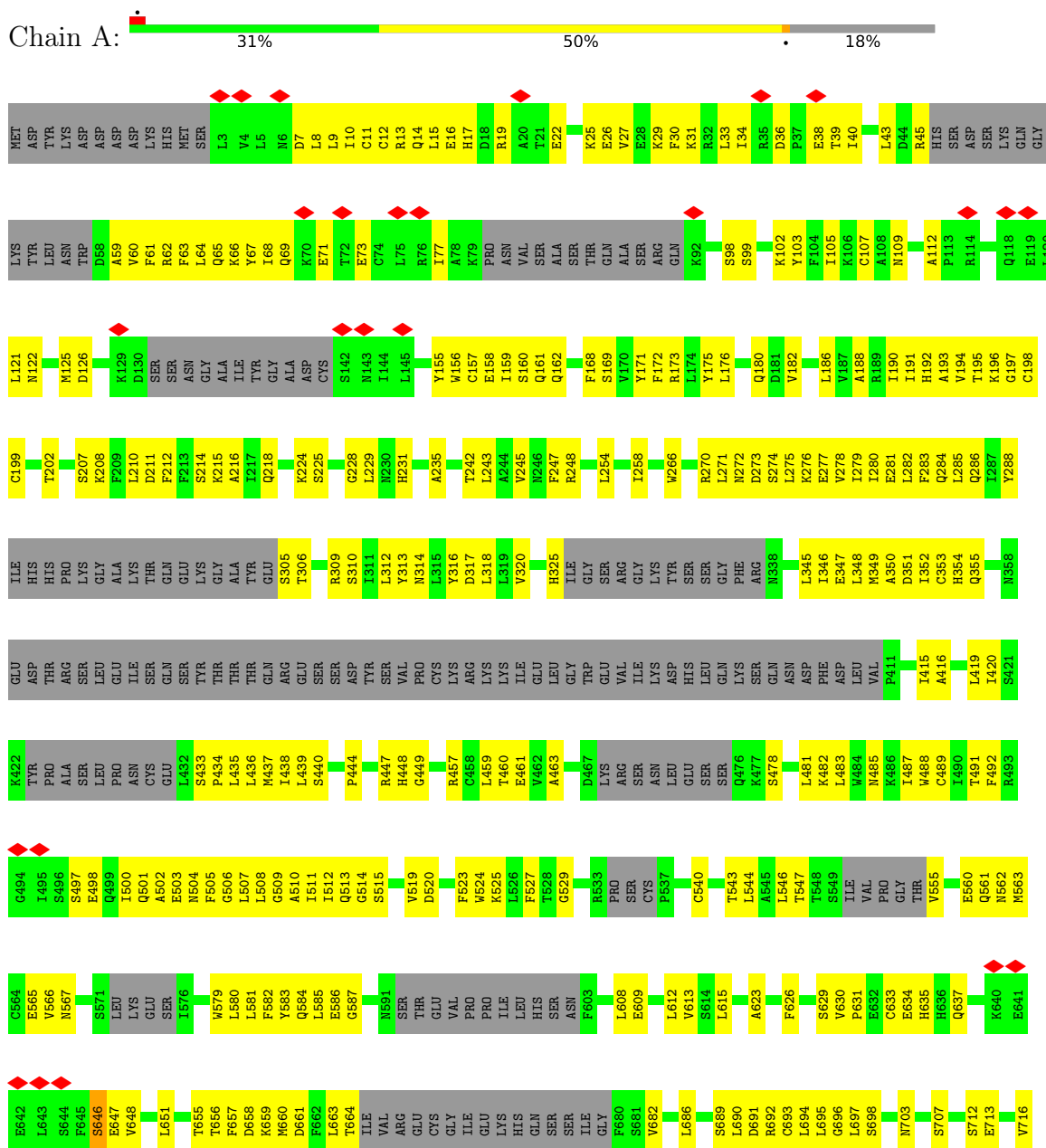
There are 20 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	-9	MET	-	initiating methionine	UNP Q13315
A	-8	ASP	-	expression tag	UNP Q13315
A	-7	TYR	-	expression tag	UNP Q13315
A	-6	LYS	-	expression tag	UNP Q13315
A	-5	ASP	-	expression tag	UNP Q13315
A	-4	ASP	-	expression tag	UNP Q13315
A	-3	ASP	-	expression tag	UNP Q13315
A	-2	ASP	-	expression tag	UNP Q13315
A	-1	LYS	-	expression tag	UNP Q13315
A	0	HIS	-	expression tag	UNP Q13315
B	-9	MET	-	initiating methionine	UNP Q13315
B	-8	ASP	-	expression tag	UNP Q13315
B	-7	TYR	-	expression tag	UNP Q13315
B	-6	LYS	-	expression tag	UNP Q13315
B	-5	ASP	-	expression tag	UNP Q13315
B	-4	ASP	-	expression tag	UNP Q13315
B	-3	ASP	-	expression tag	UNP Q13315
B	-2	ASP	-	expression tag	UNP Q13315
B	-1	LYS	-	expression tag	UNP Q13315
B	0	HIS	-	expression tag	UNP Q13315

### 3 Residue-property plots

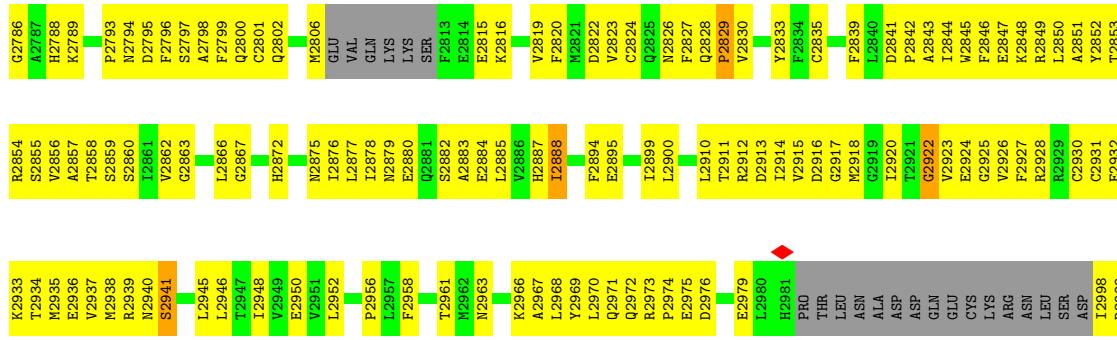
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion 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: Serine-protein kinase ATM

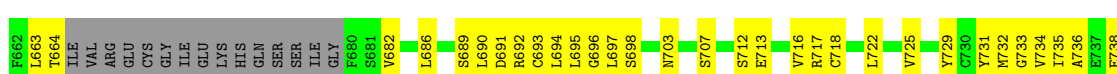
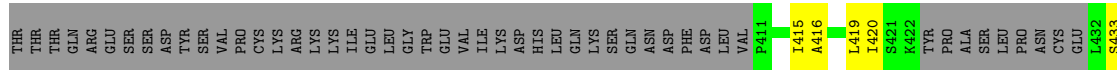
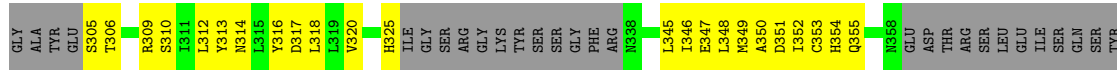
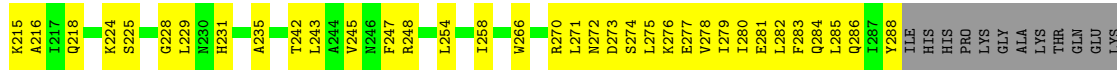
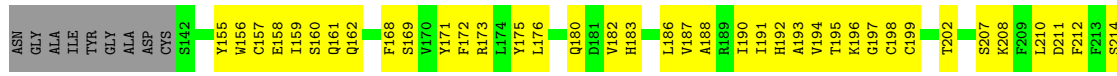
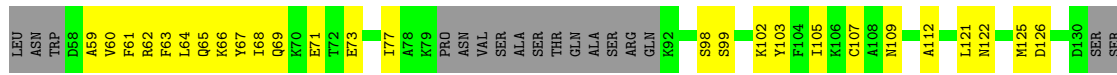








• Molecule 1: Serine-protein kinase ATM



T1735	M1657	K1582	P1374	L1312	L1173	LYS	L1312	L1173	LEU	SER	PRO	E739
C1736	I1658	Y1583	A1375	E1913	F1174	GLY	E1913	F1174	LEU	LEU	GLY	A740
K1737	I1659	S1584	P1376	T1314	A1175	ASP	T1314	A1175	THR	THR	GLU	Q747
M1738	I1660	H1443	ASN	T1315	L1176	S1104	T1315	L1176	SER	SER	SER	K748
N1739	I1661	H1444	P1377	T1316	C1177	S1105	T1316	C1177	LYS	LYS	LYS	A749
I1740	H1662	F1445	P1378	K1317	G1178	R1106	K1317	G1178	LEU	LEU	MET	K750
L1741	T1663	V1446	H1380	VAL	SER	L1107	N1243	N1244	ASN	ASN	ASN	S751
A1742	G1663	S1447	F1381	TYR	TYR	L1108	I1244	I1244	ASP	ASP	ASP	L752
E1743	E1664	A1512	P1382	ASP	ASP	L1109	I1244	I1244	LEU	LEU	LEU	Q755
K1744	K1665	L1513	S1383	MET	LEU	A1110	F1247	F1247	LEU	LEU	SER	S759
L1745	E1666	D1452	H1384	LEU	HIS	A1111	Y1247	Y1247	GLN	GLN	LYS	I760
G1746	L1667	G1453	L1385	LEU	HIS	L1112	V1248	V1248	LEU	LEU	SER	I761
F1749	V1668	L1454	V1386	GLY	GLY	P1113	L1249	L1249	LEU	LEU	ASP	P829
M1750	E1669	S1455	K1387	GLU	GLU	K1114	S1250	S1250	LEU	LEU	ASP	F830
I1751	G1676	G1456	A1388	ASN	PRO	L1115	K1253	K1253	LEU	LEU	LYS	D831
L1752	E1677	L1457	V1254	LEU	HIS	Q1116	V1254	V1254	LEU	LEU	LEU	R832
Y1753	V1678	G1458	T1389	LEU	HIS	Q1117	L1255	L1255	LEU	LEU	LEU	G833
K1754	L1679	G1459	PHE	GLY	GLY	T1118	P1257	P1257	LEU	LEU	LEU	E834
M1755	G1679	A1460	A1391	LYS	V1190	A1119	H1258	H1258	LEU	LEU	LEU	M835
M1756	F1680	W1461	Y1382	GLN	K1192	F1120	L1258	L1258	LEU	LEU	LEU	S837
T1757	I1681	A1462	Y1383	ILE	V1193	E1121	L1259	L1259	LEU	LEU	LEU	M838
D1758	F1682	F1463	S1394	HIS	L1194	M1122	L1259	L1259	LEU	LEU	LEU	M843
L1764	I1686	V1464	M1395	ASP	E1195	A1123	L1260	L1260	LEU	LEU	LEU	G844
Q1765	F1683	L1465	M1396	LEU	K1196	Y1124	S1262	S1262	LEU	LEU	LEU	M845
R1768	I1687	R1466	H1397	PHE	V1197	L1125	S1263	S1263	LEU	LEU	LEU	M847
L1769	I1688	D1467	H1398	ILE	S1198	K1126	H1264	H1264	LEU	LEU	LEU	E848
S1770	Y1696	V1468	T1399	SER	F1201	A1127	F1265	F1265	LEU	LEU	LEU	V849
L1702	F1703	V1469	K1400	ASN	F1202	R982	D1266	D1266	LEU	LEU	LEU	E860
F1703	E1704	Y1470	LEU	LEU	TYR	E1133	E1267	E1267	LEU	LEU	LEU	D861
D1705	K1706	L1471	LYS	ARG	ARG	H1136	V1268	V1268	LEU	LEU	LEU	Q852
E1707	L1708	L1472	ILE	LEU	ARG	S1137	E1268	E1268	LEU	LEU	LEU	S853
L1708	F1712	L1473	SER	LEU	ARG	A1138	K1269	K1269	LEU	LEU	LEU	S854
M1719	M1714	M1477	S1411	L1351	ARG	H1137	S1270	S1270	LEU	LEU	LEU	S855
N1720	L1715	K1478	P1412	E1352	LEU	A1138	Y1271	Y1271	LEU	LEU	LEU	S854
L1721	T1716	D1479	D1413	P1354	GLU	M1140	ALA	ALA	LEU	LEU	LEU	S854
L1722	Y1717	R1485	S1414	A1355	ASP	P1141	L1281	L1281	LEU	LEU	LEU	S854
E1724	L1718	V1486	Y1415	M1356	PHE	E1142	L1282	L1282	LEU	LEU	LEU	S854
C1726	M1719	L1488	Q1416	S1357	ILE	T1143	L1283	L1283	LEU	LEU	LEU	S854
L1727	M1720	R1489	K1417	S1358	M1210	T1143	T1284	T1284	LEU	LEU	LEU	S854
K1728	L1721	S1490	I1418	A1359	A1211	D1145	I1289	I1289	LEU	LEU	LEU	S854
S1731	L1722	F1491	L1419	L1359	L1212	D1145	C1286	C1286	LEU	LEU	LEU	S854
A1732	L1723	S1492	A1421	SER	ASN	L1154	M1293	M1293	LEU	LEU	LEU	S854
I1733	E1724	L1493	A1421	GLN	LEU	L1155	L1284	L1284	LEU	LEU	LEU	S854
L1734	D1725	C1494	E1424	L1365	LEU	T1156	L1285	L1285	LEU	LEU	LEU	S854
F1737	C1726	D1496	Q1425	C1366	ASN	L1157	F1296	F1296	LEU	LEU	LEU	S854
K1728	L1574	L1497	M1430	D1367	TYR	L1157	Y1297	Y1297	LEU	LEU	LEU	S854
S1731	L1645	L1498	M1430	F1368	ASN	L1157	F1298	F1298	LEU	LEU	LEU	S854
A1732	K1646	S1499	K1434	F1369	SER	L1158	K1434	K1434	LEU	LEU	LEU	S854
I1733	L1647	Q1500	K1435	G1370	SER	A1159	K1435	K1435	LEU	LEU	LEU	S854
F1737	V1648	V1501	L1436	D1371	SER	V1160	L1436	L1436	LEU	LEU	LEU	S854
A1812	V1649	CYS	H1437	L1372	PHE	V1161	H1437	H1437	LEU	LEU	LEU	S854
F1813	V1734	GLN	I1438	D1373	PRO	V1161	I1438	I1438	LEU	LEU	LEU	S854





S3027	V3028	G3029	G3030	Q3031	V3032	N3033	L3034	L3035	I3036	Q3037	Q3038	A3039	I3040	D3041	P3042	K3043	N3044	L3045	S3046	R3047	L3048	F3049	P3050	G3051	W3052	K3053	A3054	W3055	V3056																															
K2966	A2967	L2968	Y2969	L2970	Q2971	Q2972	R2973	P2974	E2975	D2976	E2979	L2980	H2981	PRO	THR	LEU	ASN	ALA	ASP	ASP	GLN	GLU	CYS	LYS	ARG	ASN	LEU	SER	ASP	I2998	D2999	Q3000	S3001	F3002	N3003	K3004	V3005	A3006	E3007	R3008	V3009	L3010	N3011	R3012	L3013	Q3014	E3015	K3016	L3017	K3018	G3019	V3020	G3023	T3024	V3025	L3026				
L2816	L2885	V2886	H2887	I2888	F2894	E2895	I2899	L2900	L2910	T2911	R2912	D2913	I2914	V2915	D2916	G2917	M2918	G2919	I2920	T2921	G2922	V2923	E2924	G2925	V2926	F2927	R2928	R2929	C2930	I2931	E2932	K2933	T2934	S2855	M2935	E2936	V2937	M2938	R2939	N2940	S2941	G2863	L2945	L2946	T2947	I2948	V2949	E2950	V2951	L2952	L2875	L2876	L2877	L2878	N2879	E2880	K2881	S2882	A2883	E2884

## 4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	25315	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING ONLY	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ( $e^-/\text{\AA}^2$ )	2.1	Depositor
Minimum defocus (nm)	2500	Depositor
Maximum defocus (nm)	4000	Depositor
Magnification	35714	Depositor
Image detector	GATAN K2 SUMMIT (4k x 4k)	Depositor
Maximum map value	0.099	Depositor
Minimum map value	-0.029	Depositor
Average map value	-0.000	Depositor
Map value standard deviation	0.004	Depositor
Recommended contour level	0.03	Depositor
Map size ( $\text{\AA}$ )	428.99997, 428.99997, 428.99997	wwPDB
Map dimensions	300, 300, 300	wwPDB
Map angles ( $^\circ$ )	90.0, 90.0, 90.0	wwPDB
Pixel spacing ( $\text{\AA}$ )	1.43, 1.43, 1.43	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	0.48	0/12490	0.62	6/17349 (0.0%)
1	B	0.48	0/12490	0.62	6/17349 (0.0%)
All	All	0.48	0/24980	0.62	12/34698 (0.0%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand. A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	0	53
1	B	0	53
All	All	0	106

There are no bond length outliers.

All (12) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed( $^{\circ}$ )	Ideal( $^{\circ}$ )
1	A	2765	GLY	N-CA-C	9.33	136.44	113.10
1	B	2765	GLY	N-CA-C	9.31	136.38	113.10
1	A	1925	GLY	N-CA-C	-7.59	94.13	113.10
1	B	1925	GLY	N-CA-C	-7.58	94.15	113.10
1	B	2307	LEU	N-CA-C	-6.09	94.56	111.00
1	A	2307	LEU	N-CA-C	-6.08	94.59	111.00
1	A	1053	ASP	C-N-CA	-5.76	97.81	122.00
1	B	1053	ASP	C-N-CA	-5.76	97.82	122.00
1	A	1924	SER	C-N-CA	-5.53	110.68	122.30
1	B	1924	SER	C-N-CA	-5.53	110.70	122.30
1	B	1353	GLU	C-N-CA	5.39	144.63	122.00
1	A	1353	GLU	C-N-CA	5.38	144.61	122.00

There are no chirality outliers.

All (106) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	1001	LEU	Peptide
1	A	1053	ASP	Peptide
1	A	1054	PRO	Peptide
1	A	1254	VAL	Peptide
1	A	1303	THR	Peptide
1	A	1315	ALA	Peptide
1	A	1354	PRO	Peptide
1	A	1447	SER	Peptide
1	A	1454	LYS	Peptide
1	A	1456	GLY	Peptide
1	A	1482	CYS	Peptide
1	A	1512	ALA	Peptide
1	A	1591	LEU	Peptide
1	A	1624	HIS	Peptide
1	A	1629	VAL	Peptide
1	A	1687	ALA	Peptide
1	A	1727	VAL	Peptide
1	A	1728	LYS	Peptide
1	A	1758	ASP	Peptide
1	A	1839	GLN	Peptide
1	A	1900	CYS	Peptide
1	A	1901	LEU	Peptide
1	A	1934	LEU	Peptide
1	A	1935	ASP	Peptide
1	A	1936	LEU	Peptide
1	A	1997	THR	Peptide
1	A	2028	GLN	Peptide
1	A	2085	ASP	Peptide
1	A	2168	SER	Peptide
1	A	2268	THR	Peptide
1	A	2283	SER	Peptide
1	A	2301	ALA	Peptide
1	A	2357	MET	Peptide
1	A	2569	ASP	Peptide
1	A	2665	PRO	Peptide
1	A	2669	ILE	Peptide
1	A	2683	ILE	Peptide
1	A	2696	VAL	Peptide
1	A	2699	PRO	Peptide
1	A	2764	SER	Peptide
1	A	2774	VAL	Peptide
1	A	2888	ILE	Peptide

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>Group</b>
1	A	2900	LEU	Peptide
1	A	2922	GLY	Peptide
1	A	2941	SER	Peptide
1	A	2963	ASN	Peptide
1	A	3024	THR	Peptide
1	A	3026	LEU	Peptide
1	A	3027	SER	Peptide
1	A	3040	ILE	Peptide
1	A	39	THR	Peptide
1	A	497	SER	Peptide
1	A	646	SER	Peptide
1	B	1001	LEU	Peptide
1	B	1053	ASP	Peptide
1	B	1054	PRO	Peptide
1	B	1254	VAL	Peptide
1	B	1303	THR	Peptide
1	B	1315	ALA	Peptide
1	B	1354	PRO	Peptide
1	B	1447	SER	Peptide
1	B	1454	LYS	Peptide
1	B	1456	GLY	Peptide
1	B	1482	CYS	Peptide
1	B	1512	ALA	Peptide
1	B	1591	LEU	Peptide
1	B	1624	HIS	Peptide
1	B	1629	VAL	Peptide
1	B	1687	ALA	Peptide
1	B	1727	VAL	Peptide
1	B	1728	LYS	Peptide
1	B	1758	ASP	Peptide
1	B	1839	GLN	Peptide
1	B	1900	CYS	Peptide
1	B	1901	LEU	Peptide
1	B	1934	LEU	Peptide
1	B	1935	ASP	Peptide
1	B	1936	LEU	Peptide
1	B	1997	THR	Peptide
1	B	2028	GLN	Peptide
1	B	2085	ASP	Peptide
1	B	2168	SER	Peptide
1	B	2268	THR	Peptide
1	B	2283	SER	Peptide

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Mol	Chain	Res	Type	Group
1	B	2301	ALA	Peptide
1	B	2357	MET	Peptide
1	B	2569	ASP	Peptide
1	B	2665	PRO	Peptide
1	B	2669	ILE	Peptide
1	B	2683	ILE	Peptide
1	B	2696	VAL	Peptide
1	B	2699	PRO	Peptide
1	B	2764	SER	Peptide
1	B	2774	VAL	Peptide
1	B	2888	ILE	Peptide
1	B	2900	LEU	Peptide
1	B	2922	GLY	Peptide
1	B	2941	SER	Peptide
1	B	2963	ASN	Peptide
1	B	3024	THR	Peptide
1	B	3026	LEU	Peptide
1	B	3027	SER	Peptide
1	B	3040	ILE	Peptide
1	B	39	THR	Peptide
1	B	497	SER	Peptide
1	B	646	SER	Peptide

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

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	12537	0	5446	1207	0
1	B	12537	0	5446	1207	0
All	All	25074	0	10892	2413	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 67.

All (2413) 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:B:2095:LEU:O	1:B:2099:HIS:N	1.93	1.02
1:B:3013:LEU:O	1:B:3017:LEU:N	1.92	1.02
1:A:2068:LEU:O	1:A:2072:GLY:N	1.93	1.01
1:A:3013:LEU:O	1:A:3017:LEU:N	1.92	1.01
1:A:1955:LEU:O	1:A:1959:GLU:N	1.94	1.01
1:A:2095:LEU:O	1:A:2099:HIS:N	1.93	1.00
1:B:1856:GLU:O	1:B:1860:ASN:N	1.93	1.00
1:A:1856:GLU:O	1:A:1860:ASN:N	1.93	1.00
1:A:2398:TYR:O	1:A:2402:GLU:N	1.95	0.99
1:B:2068:LEU:O	1:B:2072:GLY:N	1.93	0.99
1:B:1955:LEU:O	1:B:1959:GLU:N	1.94	0.98
1:B:2200:GLU:O	1:B:2204:LYS:N	1.95	0.98
1:B:2401:ILE:O	1:B:2405:MET:N	1.97	0.98
1:B:2398:TYR:O	1:B:2402:GLU:N	1.95	0.98
1:B:1596:HIS:O	1:B:1600:VAL:N	1.97	0.98
1:B:2337:CYS:O	1:B:2341:CYS:N	1.97	0.98
1:A:2401:ILE:O	1:A:2405:MET:N	1.97	0.97
1:A:2200:GLU:O	1:A:2204:LYS:N	1.95	0.97
1:A:1596:HIS:O	1:A:1600:VAL:N	1.97	0.97
1:A:3009:VAL:O	1:A:3013:LEU:N	1.97	0.97
1:B:1927:ILE:O	1:B:1931:ALA:N	1.97	0.97
1:A:1823:ILE:O	1:A:1827:LEU:N	1.96	0.97
1:A:1633:ARG:O	1:A:1637:ASP:N	1.96	0.97
1:B:2317:LYS:O	1:B:2321:ALA:N	1.98	0.97
1:A:2337:CYS:O	1:A:2341:CYS:N	1.97	0.97
1:A:2312:LEU:O	1:A:2316:ILE:N	1.97	0.96
1:B:1823:ILE:O	1:B:1827:LEU:N	1.96	0.96
1:B:3009:VAL:O	1:B:3013:LEU:N	1.97	0.96
1:B:1633:ARG:O	1:B:1637:ASP:N	1.96	0.96
1:B:1812:ALA:O	1:B:1816:SER:N	1.98	0.96
1:A:2045:ALA:O	1:A:2049:TYR:N	1.98	0.96
1:A:2170:TYR:O	1:A:2174:SER:N	1.98	0.96
1:A:3028:VAL:O	1:A:3032:VAL:N	1.99	0.96
1:B:1611:LEU:O	1:B:1615:LYS:N	1.99	0.96
1:B:2006:LEU:O	1:B:2010:ARG:N	1.98	0.96
1:A:1611:LEU:O	1:A:1615:LYS:N	1.99	0.95
1:A:2317:LYS:O	1:A:2321:ALA:N	1.98	0.95
1:B:1600:VAL:O	1:B:1604:ASP:N	1.97	0.95
1:B:2170:TYR:O	1:B:2174:SER:N	1.99	0.95
1:B:2312:LEU:O	1:B:2316:ILE:N	1.97	0.95
1:A:1343:ILE:O	1:A:1347:LEU:N	1.99	0.95
1:A:1600:VAL:O	1:A:1604:ASP:N	1.97	0.95

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1615:LYS:O	1:B:1619:ARG:N	2.00	0.95
1:B:3032:VAL:O	1:B:3036:ILE:N	1.99	0.95
1:A:2008:ILE:O	1:A:2012:ILE:N	1.99	0.95
1:A:1927:ILE:O	1:A:1931:ALA:N	1.97	0.95
1:A:2006:LEU:O	1:A:2010:ARG:N	1.98	0.95
1:B:2005:LEU:O	1:B:2009:TYR:N	1.98	0.95
1:B:2967:ALA:O	1:B:2971:GLN:N	1.99	0.95
1:A:1812:ALA:O	1:A:1816:SER:N	1.98	0.95
1:A:2005:LEU:O	1:A:2009:TYR:N	1.98	0.95
1:A:2033:LEU:O	1:A:2037:GLU:N	1.99	0.95
1:A:3032:VAL:O	1:A:3036:ILE:N	1.99	0.95
1:A:2967:ALA:O	1:A:2971:GLN:N	1.99	0.94
1:A:2276:PHE:O	1:A:2280:GLN:N	2.00	0.94
1:A:1958:ALA:O	1:A:1962:ALA:N	2.00	0.94
1:A:2298:VAL:HA	1:A:2301:ALA:HB3	1.49	0.94
1:A:2306:SER:H	1:A:2309:LEU:H	1.16	0.94
1:A:2627:TYR:O	1:A:2631:ALA:N	2.00	0.94
1:A:1368:PHE:O	1:A:1372:LEU:N	2.01	0.94
1:A:1712:PHE:O	1:A:1715:LEU:N	2.00	0.94
1:B:1712:PHE:O	1:B:1715:LEU:N	2.00	0.94
1:B:1343:ILE:O	1:B:1347:LEU:N	1.99	0.94
1:B:2033:LEU:O	1:B:2037:GLU:N	1.99	0.94
1:B:1863:SER:O	1:B:1867:GLN:N	2.01	0.94
1:B:2045:ALA:O	1:B:2049:TYR:N	1.98	0.94
1:B:2202:TYR:O	1:B:2206:GLN:N	2.01	0.94
1:B:2306:SER:H	1:B:2309:LEU:H	1.16	0.94
1:B:2310:SER:O	1:B:2314:GLN:N	2.00	0.94
1:B:3028:VAL:O	1:B:3032:VAL:N	1.99	0.94
1:A:1863:SER:O	1:A:1867:GLN:N	2.01	0.93
1:B:2627:TYR:O	1:B:2631:ALA:N	2.00	0.93
1:A:2077:LEU:O	1:A:2081:LEU:N	2.00	0.93
1:B:1722:LEU:O	1:B:1726:CYS:N	2.01	0.93
1:B:2008:ILE:O	1:B:2012:ILE:N	1.99	0.93
1:A:2310:SER:O	1:A:2314:GLN:N	2.00	0.93
1:A:2042:TRP:O	1:A:2046:LEU:N	2.01	0.93
1:A:2743:THR:O	1:A:2747:LYS:N	2.02	0.93
1:B:1822:GLU:O	1:B:1825:GLN:N	2.01	0.93
1:B:1866:VAL:O	1:B:1870:PHE:N	2.02	0.93
1:B:2077:LEU:O	1:B:2081:LEU:N	2.00	0.93
1:B:1368:PHE:O	1:B:1372:LEU:N	2.01	0.93
1:B:1749:PHE:O	1:B:1753:TYR:N	2.01	0.93

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2298:VAL:HA	1:B:2301:ALA:HB3	1.49	0.93
1:B:2851:ALA:O	1:B:2855:SER:N	2.02	0.93
1:B:2001:LEU:O	1:B:2005:LEU:N	2.01	0.93
1:A:274:SER:O	1:A:279:ILE:N	2.03	0.92
1:A:1615:LYS:O	1:A:1619:ARG:N	2.00	0.92
1:A:1866:VAL:O	1:A:1870:PHE:N	2.02	0.92
1:A:2318:LYS:O	1:A:2322:SER:N	2.01	0.92
1:B:1867:GLN:O	1:B:1871:THR:N	2.02	0.92
1:A:2355:VAL:O	1:A:2359:THR:N	2.02	0.92
1:B:2276:PHE:O	1:B:2280:GLN:N	2.00	0.92
1:B:2998:ILE:O	1:B:3002:PHE:N	2.02	0.92
1:A:2001:LEU:O	1:A:2005:LEU:N	2.01	0.92
1:B:2743:THR:O	1:B:2747:LYS:N	2.02	0.92
1:A:2354:ALA:O	1:A:2358:GLN:N	2.02	0.92
1:B:2355:VAL:O	1:B:2359:THR:N	2.02	0.92
1:A:1822:GLU:O	1:A:1825:GLN:N	2.01	0.92
1:B:1958:ALA:O	1:B:1962:ALA:N	2.00	0.92
1:B:2042:TRP:O	1:B:2046:LEU:N	2.01	0.92
1:A:1717:TYR:O	1:A:1721:THR:N	2.01	0.92
1:A:2202:TYR:O	1:A:2206:GLN:N	2.01	0.92
1:B:2358:GLN:O	1:B:2362:GLU:N	2.01	0.92
1:B:3031:GLN:O	1:B:3035:LEU:N	2.03	0.92
1:A:1960:ILE:O	1:A:1964:LYS:N	2.02	0.92
1:A:2998:ILE:O	1:A:3002:PHE:N	2.03	0.92
1:A:1749:PHE:O	1:A:1753:TYR:N	2.01	0.92
1:A:1867:GLN:O	1:A:1871:THR:N	2.02	0.92
1:B:2252:THR:O	1:B:2256:VAL:N	2.03	0.92
1:B:2354:ALA:O	1:B:2358:GLN:N	2.02	0.92
1:B:2924:GLU:HA	1:B:2928:ARG:H	1.34	0.92
1:B:274:SER:O	1:B:279:ILE:N	2.03	0.91
1:B:2309:LEU:O	1:B:2313:LYS:N	2.03	0.91
1:B:2318:LYS:O	1:B:2322:SER:N	2.01	0.91
1:B:2395:ASP:O	1:B:2399:GLN:N	2.02	0.91
1:A:1412:PRO:O	1:A:1416:GLN:N	2.03	0.91
1:A:1722:LEU:O	1:A:1726:CYS:N	2.01	0.91
1:A:2927:PHE:O	1:A:2931:CYS:N	2.03	0.91
1:B:1491:PHE:O	1:B:1495:CYS:N	2.03	0.91
1:A:2924:GLU:HA	1:A:2928:ARG:H	1.34	0.91
1:B:1717:TYR:O	1:B:1721:THR:N	2.01	0.91
1:B:1960:ILE:O	1:B:1964:LYS:N	2.03	0.91
1:A:1910:LEU:O	1:A:1914:ASP:N	2.02	0.91

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2358:GLN:O	1:A:2362:GLU:N	2.01	0.91
1:A:2395:ASP:O	1:A:2399:GLN:N	2.02	0.91
1:A:2912:ARG:O	1:A:2916:ASP:N	2.03	0.91
1:A:2309:LEU:O	1:A:2313:LYS:N	2.03	0.91
1:B:2843:ALA:O	1:B:2847:GLU:N	2.04	0.91
1:B:2927:PHE:O	1:B:2931:CYS:N	2.03	0.91
1:B:3034:LEU:O	1:B:3038:GLN:N	2.03	0.91
1:A:1491:PHE:O	1:A:1495:CYS:N	2.03	0.91
1:A:2843:ALA:O	1:A:2847:GLU:N	2.04	0.91
1:A:3031:GLN:O	1:A:3035:LEU:N	2.03	0.91
1:A:2004:LEU:O	1:A:2008:ILE:N	2.04	0.91
1:A:2458:ASP:O	1:A:2462:PHE:N	2.04	0.91
1:A:2851:ALA:O	1:A:2855:SER:N	2.02	0.91
1:B:2004:LEU:O	1:B:2008:ILE:N	2.04	0.91
1:B:2816:LYS:O	1:B:2820:PHE:N	2.04	0.91
1:A:2500:VAL:O	1:A:2504:MET:N	2.04	0.91
1:A:3011:MET:O	1:A:3015:GLU:N	2.03	0.91
1:B:3012:ARG:O	1:B:3016:LYS:N	2.04	0.91
1:B:2203:ILE:O	1:B:2207:LYS:N	2.03	0.91
1:B:2969:TYR:O	1:B:2973:ARG:N	2.04	0.91
1:A:2097:GLU:O	1:A:2101:GLN:N	2.04	0.91
1:A:2252:THR:O	1:A:2256:VAL:N	2.03	0.91
1:B:2500:VAL:O	1:B:2504:MET:N	2.04	0.91
1:B:3011:MET:O	1:B:3015:GLU:N	2.03	0.91
1:A:2314:GLN:O	1:A:2318:LYS:N	2.04	0.90
1:B:1412:PRO:O	1:B:1416:GLN:N	2.03	0.90
1:B:1661:HIS:O	1:B:1665:LYS:N	2.04	0.90
1:B:2412:ASN:O	1:B:2416:LEU:N	2.04	0.90
1:B:2912:ARG:O	1:B:2916:ASP:N	2.03	0.90
1:A:1458:GLY:O	1:A:1462:ALA:N	2.05	0.90
1:A:1864:THR:O	1:A:1868:GLY:N	2.04	0.90
1:A:1612:GLU:O	1:A:1616:ASP:N	2.04	0.90
1:A:2816:LYS:O	1:A:2820:PHE:N	2.04	0.90
1:A:2203:ILE:O	1:A:2207:LYS:N	2.03	0.90
1:B:1465:LEU:O	1:B:1469:ILE:N	2.05	0.90
1:B:1910:LEU:O	1:B:1914:ASP:N	2.02	0.90
1:B:2714:GLN:HA	1:B:2768:GLU:HA	1.54	0.90
1:A:2714:GLN:HA	1:A:2768:GLU:HA	1.54	0.90
1:A:3034:LEU:O	1:A:3038:GLN:N	2.03	0.90
1:A:1465:LEU:O	1:A:1469:ILE:N	2.05	0.90
1:B:1609:THR:O	1:B:1613:GLY:N	2.03	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:278:VAL:O	1:A:282:LEU:N	2.04	0.90
1:A:1609:THR:O	1:A:1613:GLY:N	2.03	0.90
1:A:3012:ARG:O	1:A:3016:LYS:N	2.04	0.90
1:B:1864:THR:O	1:B:1868:GLY:N	2.04	0.90
1:B:2484:VAL:O	1:B:2488:CYS:N	2.04	0.90
1:B:2852:TYR:O	1:B:2856:VAL:N	2.04	0.90
1:A:1371:ASP:O	1:A:1375:ALA:N	2.05	0.90
1:A:1467:ASP:O	1:A:1471:THR:N	2.05	0.90
1:B:2201:VAL:O	1:B:2205:TRP:N	2.04	0.90
1:B:2458:ASP:O	1:B:2462:PHE:N	2.04	0.90
1:A:1661:HIS:O	1:A:1665:LYS:N	2.04	0.90
1:A:2852:TYR:O	1:A:2856:VAL:N	2.04	0.90
1:B:278:VAL:O	1:B:282:LEU:N	2.04	0.90
1:B:1458:GLY:O	1:B:1462:ALA:N	2.05	0.90
1:B:2968:LEU:O	1:B:2972:GLN:N	2.05	0.90
1:A:2412:ASN:O	1:A:2416:LEU:N	2.04	0.90
1:B:1612:GLU:O	1:B:1616:ASP:N	2.04	0.90
1:B:2966:LYS:O	1:B:2970:LEU:N	2.05	0.90
1:A:2101:GLN:O	1:A:2105:ARG:N	2.05	0.89
1:A:2923:VAL:O	1:A:2927:PHE:N	2.05	0.89
1:B:2249:ASP:O	1:B:2253:LYS:N	2.05	0.89
1:B:2314:GLN:O	1:B:2318:LYS:N	2.04	0.89
1:B:2466:ALA:O	1:B:2470:TYR:N	2.05	0.89
1:B:2923:VAL:O	1:B:2927:PHE:N	2.05	0.89
1:A:2030:ILE:O	1:A:2034:ARG:N	2.05	0.89
1:A:2201:VAL:O	1:A:2205:TRP:N	2.04	0.89
1:A:2628:ILE:O	1:A:2632:ASN:N	2.05	0.89
1:B:2340:VAL:O	1:B:2344:TRP:N	2.05	0.89
1:A:2313:LYS:O	1:A:2317:LYS:N	2.05	0.89
1:A:2969:TYR:O	1:A:2973:ARG:N	2.04	0.89
1:A:2098:LEU:O	1:A:2102:ALA:N	2.06	0.89
1:A:2100:TYR:O	1:A:2104:TRP:N	2.06	0.89
1:B:2031:THR:O	1:B:2035:THR:N	2.04	0.89
1:A:1133:GLU:O	1:A:1137:SER:N	2.05	0.89
1:B:2313:LYS:O	1:B:2317:LYS:N	2.05	0.89
1:B:2457:GLU:O	1:B:2461:ARG:N	2.06	0.89
1:B:2775:PRO:O	1:B:2779:PHE:N	2.04	0.89
1:A:1262:ARG:O	1:A:1266:ASP:N	2.06	0.89
1:A:2031:THR:O	1:A:2035:THR:N	2.05	0.89
1:A:2966:LYS:O	1:A:2970:LEU:N	2.05	0.89
1:B:1262:ARG:O	1:B:1266:ASP:N	2.06	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1467:ASP:O	1:B:1471:THR:N	2.05	0.89
1:B:2030:ILE:O	1:B:2034:ARG:N	2.05	0.89
1:A:2457:GLU:O	1:A:2461:ARG:N	2.06	0.89
1:A:2466:ALA:O	1:A:2470:TYR:N	2.05	0.89
1:A:2775:PRO:O	1:A:2779:PHE:N	2.04	0.89
1:B:2014:GLU:O	1:B:2018:LEU:N	2.06	0.89
1:B:2101:GLN:O	1:B:2105:ARG:N	2.05	0.89
1:B:2625:ASP:O	1:B:2629:ILE:N	2.06	0.89
1:B:2913:ASP:O	1:B:2917:GLY:N	2.05	0.89
1:A:1495:CYS:O	1:A:1499:SER:N	2.05	0.89
1:A:2913:ASP:O	1:A:2917:GLY:N	2.05	0.89
1:B:2624:CYS:O	1:B:2628:ILE:N	2.05	0.89
1:A:2484:VAL:O	1:A:2488:CYS:N	2.04	0.88
1:A:2777:GLY:O	1:A:2781:VAL:N	2.06	0.88
1:B:2628:ILE:O	1:B:2632:ASN:N	2.05	0.88
1:A:2173:LEU:O	1:A:2177:GLN:N	2.07	0.88
1:B:1133:GLU:O	1:B:1137:SER:N	2.05	0.88
1:A:2340:VAL:O	1:A:2344:TRP:N	2.05	0.88
1:A:2408:SER:O	1:A:2412:ASN:N	2.07	0.88
1:A:1630:ASP:O	1:A:1634:ALA:N	2.07	0.88
1:A:2014:GLU:O	1:A:2018:LEU:N	2.06	0.88
1:B:188:ALA:O	1:B:192:HIS:N	2.07	0.88
1:B:1371:ASP:O	1:B:1375:ALA:N	2.05	0.88
1:B:2097:GLU:O	1:B:2101:GLN:N	2.04	0.88
1:A:2624:CYS:O	1:A:2628:ILE:N	2.05	0.88
1:A:1911:ALA:O	1:A:1915:TYR:N	2.07	0.88
1:A:2003:ASP:O	1:A:2007:GLU:N	2.07	0.88
1:A:2625:ASP:O	1:A:2629:ILE:N	2.06	0.88
1:B:1495:CYS:O	1:B:1499:SER:N	2.05	0.88
1:B:2737:THR:O	1:B:2741:ARG:N	2.07	0.88
1:A:2968:LEU:O	1:A:2972:GLN:N	2.05	0.88
1:A:2975:GLU:O	1:A:2979:GLU:N	2.07	0.88
1:B:2003:ASP:O	1:B:2007:GLU:N	2.06	0.88
1:B:2341:CYS:O	1:B:2345:LEU:N	2.06	0.88
1:B:2076:ILE:O	1:B:2080:TYR:N	2.07	0.88
1:A:1999:ILE:O	1:A:2003:ASP:N	2.06	0.88
1:A:2076:ILE:O	1:A:2080:TYR:N	2.07	0.88
1:B:2100:TYR:O	1:B:2104:TRP:N	2.06	0.88
1:B:2204:LYS:O	1:B:2208:HIS:N	2.07	0.88
1:B:2379:LEU:O	1:B:2383:LYS:N	2.07	0.88
1:B:2382:GLY:O	1:B:2386:ALA:N	2.06	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2848:LYS:O	1:B:2852:TYR:N	2.07	0.88
1:A:1494:CYS:O	1:A:1498:LEU:N	2.07	0.87
1:A:1746:GLY:O	1:A:1750:TRP:N	2.07	0.87
1:A:2498:SER:O	1:A:2501:ASN:N	2.07	0.87
1:A:2545:ILE:O	1:A:2549:SER:N	2.07	0.87
1:A:247:PHE:HA	1:A:278:VAL:HA	1.56	0.87
1:A:2204:LYS:O	1:A:2208:HIS:N	2.07	0.87
1:A:2341:CYS:O	1:A:2345:LEU:N	2.06	0.87
1:A:2397:GLN:O	1:A:2401:ILE:N	2.07	0.87
1:B:2397:GLN:O	1:B:2401:ILE:N	2.07	0.87
1:B:2777:GLY:O	1:B:2781:VAL:N	2.06	0.87
1:A:1490:SER:O	1:A:1494:CYS:N	2.07	0.87
1:A:2848:LYS:O	1:A:2852:TYR:N	2.07	0.87
1:B:1911:ALA:O	1:B:1915:TYR:N	2.07	0.87
1:B:1999:ILE:O	1:B:2003:ASP:N	2.06	0.87
1:B:2074:CYS:O	1:B:2078:SER:N	2.07	0.87
1:B:2096:GLU:O	1:B:2100:TYR:N	2.08	0.87
1:B:2408:SER:O	1:B:2412:ASN:N	2.07	0.87
1:B:2780:LEU:O	1:B:2784:GLU:N	2.07	0.87
1:A:2780:LEU:O	1:A:2784:GLU:N	2.08	0.87
1:B:1366:CYS:O	1:B:1370:GLY:N	2.07	0.87
1:B:1462:ALA:O	1:B:1466:ARG:N	2.07	0.87
1:B:2468:GLU:O	1:B:2472:ASN:N	2.07	0.87
1:A:1462:ALA:O	1:A:1466:ARG:N	2.07	0.87
1:A:3006:ALA:O	1:A:3010:LEU:N	2.07	0.87
1:B:3006:ALA:O	1:B:3010:LEU:N	2.07	0.87
1:A:2382:GLY:O	1:A:2386:ALA:N	2.06	0.87
1:B:2079:VAL:O	1:B:2083:GLY:N	2.08	0.87
1:B:2333:THR:O	1:B:2337:CYS:N	2.08	0.87
1:B:2558:PHE:O	1:B:2562:ALA:N	2.08	0.87
1:B:1824:LEU:O	1:B:1828:LYS:N	2.07	0.87
1:B:2098:LEU:O	1:B:2102:ALA:N	2.06	0.87
1:B:2216:ASP:O	1:B:2220:GLN:N	2.07	0.87
1:B:2545:ILE:O	1:B:2549:SER:N	2.07	0.87
1:A:2125:HIS:O	1:A:2129:TYR:N	2.08	0.87
1:A:2333:THR:O	1:A:2337:CYS:N	2.08	0.87
1:A:2379:LEU:O	1:A:2383:LYS:N	2.07	0.87
1:B:247:PHE:HA	1:B:278:VAL:HA	1.56	0.87
1:B:2353:PRO:O	1:B:2357:MET:N	2.07	0.87
1:B:2498:SER:O	1:B:2501:ASN:N	2.07	0.87
1:A:2353:PRO:O	1:A:2357:MET:N	2.07	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2034:ARG:O	1:B:2038:HIS:N	2.08	0.86
1:B:2344:TRP:O	1:B:2348:THR:N	2.07	0.86
1:B:2394:SER:O	1:B:2398:TYR:N	2.08	0.86
1:A:2080:TYR:O	1:A:2084:LEU:N	2.08	0.86
1:A:2216:ASP:O	1:A:2220:GLN:N	2.07	0.86
1:A:2468:GLU:O	1:A:2472:ASN:N	2.06	0.86
1:A:1824:LEU:O	1:A:1828:LYS:N	2.07	0.86
1:A:2065:ILE:O	1:A:2069:GLN:N	2.08	0.86
1:A:2249:ASP:O	1:A:2253:LYS:N	2.05	0.86
1:A:2737:THR:O	1:A:2741:ARG:N	2.07	0.86
1:B:1494:CYS:O	1:B:1498:LEU:N	2.07	0.86
1:B:2975:GLU:O	1:B:2979:GLU:N	2.07	0.86
1:A:188:ALA:O	1:A:192:HIS:N	2.07	0.86
1:A:849:VAL:O	1:A:853:SER:N	2.08	0.86
1:A:2058:SER:O	1:A:2062:ALA:N	2.08	0.86
1:A:2091:TRP:O	1:A:2095:LEU:N	2.08	0.86
1:B:3007:GLU:O	1:B:3011:MET:N	2.07	0.86
1:A:1366:CYS:O	1:A:1370:GLY:N	2.07	0.86
1:A:1595:ASN:O	1:A:1599:SER:N	2.08	0.86
1:A:2451:ALA:O	1:A:2455:LEU:N	2.09	0.86
1:B:2080:TYR:O	1:B:2084:LEU:N	2.08	0.86
1:B:2125:HIS:O	1:B:2129:TYR:N	2.08	0.86
1:A:1492:SER:O	1:A:1496:ASP:N	2.08	0.86
1:A:2274:ALA:O	1:A:2278:ILE:N	2.09	0.86
1:B:1738:LYS:O	1:B:1742:ALA:N	2.09	0.86
1:A:2394:SER:O	1:A:2398:TYR:N	2.08	0.86
1:B:1887:ALA:O	1:B:1891:SER:N	2.08	0.86
1:B:2058:SER:O	1:B:2062:ALA:N	2.08	0.86
1:B:2065:ILE:O	1:B:2069:GLN:N	2.08	0.86
1:B:2102:ALA:O	1:B:2106:ASN:N	2.08	0.86
1:B:2173:LEU:O	1:B:2177:GLN:N	2.07	0.86
1:A:2344:TRP:O	1:A:2348:THR:N	2.07	0.86
1:A:2034:ARG:O	1:A:2038:HIS:N	2.08	0.86
1:A:2400:ARG:O	1:A:2404:TYR:N	2.08	0.86
1:A:2795:ASP:O	1:A:2799:PHE:N	2.09	0.86
1:A:211:ASP:O	1:A:215:LYS:N	2.09	0.86
1:A:3002:PHE:O	1:A:3006:ALA:N	2.08	0.86
1:A:3005:VAL:O	1:A:3009:VAL:N	2.08	0.86
1:B:1461:TRP:O	1:B:1465:LEU:N	2.07	0.86
1:B:1490:SER:O	1:B:1494:CYS:N	2.07	0.86
1:B:1630:ASP:O	1:B:1634:ALA:N	2.07	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2537:PHE:O	1:B:2541:LEU:N	2.08	0.86
1:A:2602:ALA:O	1:A:2606:ILE:N	2.09	0.85
1:A:3000:GLN:O	1:A:3004:LYS:N	2.08	0.85
1:B:2094:GLU:O	1:B:2098:LEU:N	2.09	0.85
1:B:2451:ALA:O	1:B:2455:LEU:N	2.09	0.85
1:B:2729:GLN:O	1:B:2733:GLN:N	2.09	0.85
1:A:1715:LEU:O	1:A:1719:ASN:N	2.10	0.85
1:A:1902:ASP:O	1:A:1906:GLN:N	2.09	0.85
1:A:2537:PHE:O	1:A:2541:LEU:N	2.08	0.85
1:B:2131:ALA:O	1:B:2135:LEU:N	2.09	0.85
1:B:3005:VAL:O	1:B:3009:VAL:N	2.08	0.85
1:A:1461:TRP:O	1:A:1465:LEU:N	2.07	0.85
1:A:1703:PHE:O	1:A:1707:GLU:N	2.09	0.85
1:A:1887:ALA:O	1:A:1891:SER:N	2.08	0.85
1:A:2007:GLU:O	1:A:2011:SER:N	2.08	0.85
1:A:2388:LEU:O	1:A:2392:ARG:N	2.09	0.85
1:B:1746:GLY:O	1:B:1750:TRP:N	2.07	0.85
1:A:2096:GLU:O	1:A:2100:TYR:N	2.08	0.85
1:B:849:VAL:O	1:B:853:SER:N	2.08	0.85
1:B:2128:LEU:O	1:B:2132:LEU:N	2.08	0.85
1:A:2128:LEU:O	1:A:2132:LEU:N	2.08	0.85
1:B:1492:SER:O	1:B:1496:ASP:N	2.08	0.85
1:A:2794:ASN:O	1:A:2798:ALA:N	2.09	0.85
1:B:1702:LEU:O	1:B:1706:LYS:N	2.10	0.85
1:B:2388:LEU:O	1:B:2392:ARG:N	2.09	0.85
1:B:3000:GLN:O	1:B:3004:LYS:N	2.08	0.85
1:B:3002:PHE:O	1:B:3006:ALA:N	2.08	0.85
1:A:2319:LEU:O	1:A:2323:CYS:N	2.09	0.85
1:A:3007:GLU:O	1:A:3011:MET:N	2.07	0.85
1:B:1658:ALA:O	1:B:1662:THR:N	2.09	0.85
1:B:2794:ASN:O	1:B:2798:ALA:N	2.09	0.85
1:A:2607:CYS:O	1:A:2611:SER:N	2.10	0.85
1:B:1157:LEU:O	1:B:1161:VAL:N	2.09	0.85
1:B:1902:ASP:O	1:B:1906:GLN:N	2.09	0.85
1:B:1963:ASP:O	1:B:1967:MET:N	2.08	0.85
1:B:2091:TRP:O	1:B:2095:LEU:N	2.08	0.85
1:A:647:GLU:O	1:A:651:LEU:N	2.10	0.85
1:B:2454:ALA:O	1:B:2458:ASP:N	2.10	0.85
1:B:2607:CYS:O	1:B:2611:SER:N	2.10	0.85
1:B:2405:MET:O	1:B:2409:GLU:N	2.11	0.84
1:A:1956:LEU:O	1:A:1960:ILE:N	2.10	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2102:ALA:O	1:A:2106:ASN:N	2.08	0.84
1:B:2007:GLU:O	1:B:2011:SER:N	2.08	0.84
1:A:2454:ALA:O	1:A:2458:ASP:N	2.10	0.84
1:B:1595:ASN:O	1:B:1599:SER:N	2.08	0.84
1:A:1658:ALA:O	1:A:1662:THR:N	2.09	0.84
1:A:2131:ALA:O	1:A:2135:LEU:N	2.10	0.84
1:A:2079:VAL:O	1:A:2083:GLY:N	2.08	0.84
1:A:2729:GLN:O	1:A:2733:GLN:N	2.09	0.84
1:B:211:ASP:O	1:B:215:LYS:N	2.09	0.84
1:B:647:GLU:O	1:B:651:LEU:N	2.10	0.84
1:B:1534:VAL:O	1:B:1538:VAL:N	2.10	0.84
1:B:2365:VAL:O	1:B:2369:GLY:N	2.10	0.84
1:B:2400:ARG:O	1:B:2404:TYR:N	2.08	0.84
1:A:2094:GLU:O	1:A:2098:LEU:N	2.09	0.84
1:A:2074:CYS:O	1:A:2078:SER:N	2.07	0.84
1:B:192:HIS:O	1:B:196:LYS:N	2.08	0.84
1:B:2360:TYR:O	1:B:2364:ALA:N	2.11	0.84
1:A:1720:ASN:O	1:A:1724:GLU:N	2.10	0.84
1:B:1715:LEU:O	1:B:1719:ASN:N	2.10	0.84
1:A:2225:ALA:O	1:A:2229:VAL:N	2.10	0.84
1:A:2835:CYS:O	1:A:2839:PHE:N	2.11	0.84
1:A:3043:LYS:O	1:A:3047:ARG:N	2.10	0.84
1:B:1663:GLY:O	1:B:1667:VAL:N	2.11	0.84
1:B:2319:LEU:O	1:B:2323:CYS:N	2.09	0.84
1:B:2602:ALA:O	1:B:2606:ILE:N	2.09	0.84
1:B:2795:ASP:O	1:B:2799:PHE:N	2.09	0.84
1:A:1157:LEU:O	1:A:1161:VAL:N	2.09	0.83
1:A:1963:ASP:O	1:A:1967:MET:N	2.08	0.83
1:A:2289:SER:O	1:A:2293:LEU:N	2.10	0.83
1:B:2206:GLN:O	1:B:2210:GLN:N	2.10	0.83
1:A:1665:LYS:O	1:A:1669:GLU:N	2.11	0.83
1:B:2274:ALA:O	1:B:2278:ILE:N	2.09	0.83
1:B:2782:ASN:O	1:B:2786:GLY:N	2.11	0.83
1:A:192:HIS:O	1:A:196:LYS:N	2.09	0.83
1:A:1369:SER:O	1:A:1373:ASP:N	2.12	0.83
1:A:1942:ALA:O	1:A:1946:GLN:N	2.10	0.83
1:A:2782:ASN:O	1:A:2786:GLY:N	2.12	0.83
1:B:436:LEU:O	1:B:440:SER:N	2.11	0.83
1:B:2745:THR:O	1:B:2749:LYS:N	2.11	0.83
1:A:2558:PHE:O	1:A:2562:ALA:N	2.08	0.83
1:B:2391:ALA:O	1:B:2395:ASP:N	2.08	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1965:LYS:O	1:A:1969:ASP:N	2.10	0.83
1:A:2776:ILE:O	1:A:2780:LEU:N	2.11	0.83
1:B:2447:LEU:O	1:B:2451:ALA:N	2.10	0.83
1:B:1739:ASN:O	1:B:1743:THR:N	2.10	0.83
1:B:2935:MET:O	1:B:2939:ARG:N	2.11	0.83
1:A:2143:PHE:O	1:A:2147:LEU:N	2.10	0.83
1:A:2275:ILE:O	1:A:2279:LYS:N	2.11	0.83
1:A:2935:MET:O	1:A:2939:ARG:N	2.11	0.83
1:B:196:LYS:O	1:B:202:THR:N	2.11	0.83
1:A:843:ASN:O	1:A:847:MET:N	2.11	0.83
1:B:1665:LYS:O	1:B:1669:GLU:N	2.11	0.83
1:B:2002:GLN:O	1:B:2006:LEU:N	2.09	0.83
1:A:1739:ASN:O	1:A:1743:THR:N	2.10	0.83
1:A:2447:LEU:O	1:A:2451:ALA:N	2.10	0.83
1:A:2745:THR:O	1:A:2749:LYS:N	2.11	0.83
1:B:947:TYR:O	1:B:951:LEU:N	2.11	0.83
1:B:2835:CYS:O	1:B:2839:PHE:N	2.11	0.83
1:A:2360:TYR:O	1:A:2364:ALA:N	2.11	0.83
1:A:2365:VAL:O	1:A:2369:GLY:N	2.10	0.83
1:A:2846:PHE:O	1:A:2850:LEU:N	2.11	0.83
1:B:1380:HIS:O	1:B:1384:HIS:N	2.12	0.83
1:A:2779:PHE:O	1:A:2783:ASN:N	2.11	0.82
1:B:1870:PHE:O	1:B:1874:LEU:N	2.11	0.82
1:B:1962:ALA:O	1:B:1966:SER:N	2.11	0.82
1:B:2502:GLY:O	1:B:2506:ARG:N	2.12	0.82
1:A:1870:PHE:O	1:A:1874:LEU:N	2.11	0.82
1:A:2405:MET:O	1:A:2409:GLU:N	2.11	0.82
1:A:1702:LEU:O	1:A:1706:LYS:N	2.10	0.82
1:A:2409:GLU:O	1:A:2413:LYS:N	2.12	0.82
1:B:105:ILE:O	1:B:109:ASN:N	2.12	0.82
1:B:3043:LYS:O	1:B:3047:ARG:N	2.10	0.82
1:B:2275:ILE:O	1:B:2279:LYS:N	2.11	0.82
1:A:436:LEU:O	1:A:440:SER:N	2.11	0.82
1:A:1738:LYS:O	1:A:1742:ALA:N	2.09	0.82
1:A:2224:MET:O	1:A:2228:THR:N	2.11	0.82
1:A:2566:ALA:O	1:A:2762:GLN:N	2.12	0.82
1:B:2207:LYS:O	1:B:2211:LEU:N	2.12	0.82
1:A:1464:VAL:O	1:A:1468:VAL:N	2.10	0.82
1:A:1751:GLU:O	1:A:1755:MET:N	2.11	0.82
1:A:1752:ILE:O	1:A:1756:THR:N	2.13	0.82
1:A:2157:GLU:O	1:A:2161:ARG:N	2.12	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1714:MET:O	1:B:1718:LEU:N	2.12	0.82
1:A:1599:SER:O	1:A:1603:TYR:N	2.11	0.82
1:B:1106:ARG:O	1:B:1110:ALA:N	2.13	0.82
1:A:105:ILE:O	1:A:109:ASN:N	2.12	0.82
1:A:196:LYS:O	1:A:202:THR:N	2.12	0.82
1:A:581:LEU:O	1:A:585:LEU:N	2.12	0.82
1:A:2486:ARG:O	1:A:2490:LEU:N	2.12	0.82
1:A:2502:GLY:O	1:A:2506:ARG:N	2.12	0.82
1:B:1703:PHE:O	1:B:1707:GLU:N	2.09	0.82
1:B:2143:PHE:O	1:B:2147:LEU:N	2.10	0.82
1:B:2486:ARG:O	1:B:2490:LEU:N	2.12	0.82
1:B:2910:LEU:O	1:B:2914:ILE:N	2.12	0.82
1:B:1369:SER:O	1:B:1373:ASP:N	2.12	0.82
1:B:1752:ILE:O	1:B:1756:THR:N	2.13	0.82
1:B:2936:GLU:O	1:B:2940:ASN:N	2.10	0.82
1:A:1380:HIS:O	1:A:1384:HIS:N	2.11	0.82
1:A:1663:GLY:O	1:A:1667:VAL:N	2.11	0.82
1:A:2206:GLN:O	1:A:2210:GLN:N	2.10	0.82
1:B:1971:GLU:O	1:B:1975:LEU:N	2.12	0.82
1:B:1716:THR:O	1:B:1720:ASN:N	2.12	0.81
1:B:1720:ASN:O	1:B:1724:GLU:N	2.10	0.81
1:B:2157:GLU:O	1:B:2161:ARG:N	2.12	0.81
1:B:2850:LEU:O	1:B:2854:ARG:N	2.12	0.81
1:A:2152:VAL:O	1:A:2156:GLU:N	2.12	0.81
1:A:2491:TRP:O	1:A:2495:SER:N	2.14	0.81
1:A:2910:LEU:O	1:A:2914:ILE:N	2.12	0.81
1:B:172:PHE:O	1:B:176:LEU:N	2.13	0.81
1:B:279:ILE:O	1:B:283:PHE:N	2.12	0.81
1:B:843:ASN:O	1:B:847:MET:N	2.11	0.81
1:B:3042:PRO:O	1:B:3046:SER:N	2.11	0.81
1:A:2850:LEU:O	1:A:2854:ARG:N	2.12	0.81
1:B:1109:LYS:O	1:B:1113:LEU:N	2.11	0.81
1:B:1645:VAL:O	1:B:1649:VAL:N	2.12	0.81
1:B:2736:ASN:O	1:B:2740:GLN:N	2.12	0.81
1:A:498:GLU:O	1:A:502:ALA:N	2.13	0.81
1:A:1570:VAL:O	1:A:1574:LEU:N	2.13	0.81
1:A:1645:VAL:O	1:A:1649:VAL:N	2.12	0.81
1:A:2736:ASN:O	1:A:2740:GLN:N	2.12	0.81
1:A:3010:LEU:O	1:A:3014:GLN:N	2.12	0.81
1:B:1265:PHE:O	1:B:1269:LYS:N	2.13	0.81
1:B:2152:VAL:O	1:B:2156:GLU:N	2.12	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2169:LEU:O	1:B:2173:LEU:N	2.12	0.81
1:B:2222:PRO:HA	1:B:2225:ALA:HB3	1.63	0.81
1:B:2491:TRP:O	1:B:2495:SER:N	2.14	0.81
1:A:502:ALA:O	1:A:506:GLY:N	2.12	0.81
1:A:1106:ARG:O	1:A:1110:ALA:N	2.13	0.81
1:B:2048:THR:O	1:B:2052:GLU:N	2.14	0.81
1:A:947:TYR:O	1:A:951:LEU:N	2.11	0.81
1:B:498:GLU:O	1:B:502:ALA:N	2.13	0.81
1:B:1954:ALA:O	1:B:1958:ALA:N	2.12	0.81
1:B:2289:SER:O	1:B:2293:LEU:N	2.10	0.81
1:A:1150:ARG:O	1:A:1154:LEU:N	2.13	0.81
1:A:2720:ASP:N	1:A:2763:ARG:O	2.14	0.81
1:B:878:THR:O	1:B:882:ILE:N	2.14	0.81
1:B:2231:LEU:O	1:B:2235:MET:N	2.13	0.81
1:B:2409:GLU:O	1:B:2413:LYS:N	2.12	0.81
1:A:279:ILE:O	1:A:283:PHE:N	2.12	0.81
1:A:852:GLN:O	1:A:856:ASN:N	2.14	0.81
1:A:2169:LEU:O	1:A:2173:LEU:N	2.12	0.81
1:A:2207:LYS:O	1:A:2211:LEU:N	2.12	0.81
1:A:2336:GLU:O	1:A:2340:VAL:N	2.12	0.81
1:A:2936:GLU:O	1:A:2940:ASN:N	2.10	0.81
1:B:581:LEU:O	1:B:585:LEU:N	2.12	0.81
1:A:1951:HIS:O	1:A:1955:LEU:N	2.14	0.81
1:A:2231:LEU:O	1:A:2235:MET:N	2.13	0.81
1:B:1464:VAL:O	1:B:1468:VAL:N	2.10	0.81
1:A:1397:HIS:O	1:A:1512:ALA:N	2.14	0.80
1:A:2277:GLN:O	1:A:2281:TYR:N	2.13	0.80
1:A:2872:HIS:O	1:A:2876:ILE:N	2.14	0.80
1:B:1397:HIS:O	1:B:1512:ALA:N	2.15	0.80
1:B:1442:TYR:O	1:B:1446:VAL:N	2.13	0.80
1:B:1751:GLU:O	1:B:1755:MET:N	2.12	0.80
1:B:2248:LYS:O	1:B:2252:THR:N	2.12	0.80
1:B:3008:ARG:O	1:B:3012:ARG:N	2.13	0.80
1:B:1926:THR:O	1:B:1930:ASP:N	2.12	0.80
1:B:1956:LEU:O	1:B:1960:ILE:N	2.10	0.80
1:A:830:PHE:O	1:A:834:GLU:N	2.15	0.80
1:A:1265:PHE:O	1:A:1269:LYS:N	2.14	0.80
1:A:2222:PRO:HA	1:A:2225:ALA:HB3	1.63	0.80
1:A:2391:ALA:O	1:A:2395:ASP:N	2.08	0.80
1:B:502:ALA:O	1:B:506:GLY:N	2.12	0.80
1:B:1888:ASN:O	1:B:1892:GLU:N	2.15	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1943:LYS:O	1:B:1947:SER:N	2.14	0.80
1:B:2174:SER:O	1:B:2178:ALA:N	2.11	0.80
1:B:2339:ARG:O	1:B:2343:ASN:N	2.12	0.80
1:B:2383:LYS:O	1:B:2387:PHE:N	2.14	0.80
1:B:2735:CYS:O	1:B:2739:LEU:N	2.12	0.80
1:B:2123:SER:O	1:B:2127:SER:N	2.12	0.80
1:B:2127:SER:O	1:B:2131:ALA:N	2.13	0.80
1:B:2330:LEU:O	1:B:2334:TYR:N	2.14	0.80
1:A:878:THR:O	1:A:882:ILE:N	2.14	0.80
1:A:1962:ALA:O	1:A:1966:SER:N	2.11	0.80
1:A:2626:ALA:O	1:A:2630:LEU:N	2.11	0.80
1:B:1599:SER:O	1:B:1603:TYR:N	2.11	0.80
1:B:1828:LYS:O	1:B:1832:GLU:N	2.14	0.80
1:B:2277:GLN:O	1:B:2281:TYR:N	2.13	0.80
1:A:509:GLY:O	1:A:513:GLN:N	2.14	0.80
1:B:2411:GLU:O	1:B:2415:ALA:N	2.14	0.80
1:B:2622:ALA:O	1:B:2626:ALA:N	2.12	0.80
1:A:2062:ALA:O	1:A:2066:GLN:N	2.13	0.80
1:A:2377:ASP:O	1:A:2381:ASN:N	2.11	0.80
1:A:2999:ASP:O	1:A:3003:ASN:N	2.12	0.80
1:B:282:LEU:O	1:B:286:GLN:N	2.14	0.80
1:B:1537:GLN:O	1:B:1541:LEU:N	2.15	0.80
1:A:2000:SER:O	1:A:2004:LEU:N	2.13	0.80
1:A:2295:GLU:O	1:A:2298:VAL:N	2.14	0.80
1:B:62:ARG:O	1:B:66:LYS:N	2.15	0.80
1:B:1593:GLU:O	1:B:1597:PHE:N	2.15	0.80
1:B:1662:THR:O	1:B:1666:GLU:N	2.13	0.80
1:A:1484:MET:O	1:A:1488:LEU:N	2.12	0.80
1:A:1559:ILE:O	1:A:1563:ASP:N	2.13	0.80
1:B:2295:GLU:O	1:B:2298:VAL:N	2.14	0.80
1:B:2377:ASP:O	1:B:2381:ASN:N	2.11	0.80
1:A:1457:LEU:O	1:A:1461:TRP:N	2.12	0.80
1:A:1469:ILE:O	1:A:1473:ILE:N	2.14	0.80
1:A:1534:VAL:O	1:A:1538:VAL:N	2.10	0.80
1:A:1593:GLU:O	1:A:1597:PHE:N	2.15	0.80
1:A:2557:LEU:O	1:A:2561:LEU:N	2.15	0.80
1:B:509:GLY:O	1:B:513:GLN:N	2.14	0.80
1:B:630:VAL:O	1:B:634:GLU:N	2.16	0.80
1:B:852:GLN:O	1:B:856:ASN:N	2.14	0.80
1:B:1264:HIS:O	1:B:1268:VAL:N	2.15	0.80
1:B:2172:THR:O	1:B:2176:LEU:N	2.14	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2872:HIS:O	1:B:2876:ILE:N	2.14	0.80
1:A:282:LEU:O	1:A:286:GLN:N	2.14	0.79
1:A:1938:TYR:O	1:A:1942:ALA:N	2.15	0.79
1:A:2339:ARG:O	1:A:2343:ASN:N	2.12	0.79
1:B:1496:ASP:O	1:B:1500:GLN:N	2.16	0.79
1:B:1559:ILE:O	1:B:1563:ASP:N	2.13	0.79
1:B:2362:GLU:O	1:B:2366:GLU:N	2.14	0.79
1:B:2566:ALA:O	1:B:2762:GLN:N	2.12	0.79
1:A:172:PHE:O	1:A:176:LEU:N	2.13	0.79
1:A:444:PRO:O	1:A:448:HIS:N	2.14	0.79
1:A:1264:HIS:O	1:A:1268:VAL:N	2.15	0.79
1:A:2002:GLN:O	1:A:2006:LEU:N	2.09	0.79
1:A:2048:THR:O	1:A:2052:GLU:N	2.14	0.79
1:B:1938:TYR:O	1:B:1942:ALA:N	2.15	0.79
1:B:2224:MET:O	1:B:2228:THR:N	2.11	0.79
1:B:2776:ILE:O	1:B:2780:LEU:N	2.11	0.79
1:A:2107:MET:O	1:A:2111:HIS:N	2.16	0.79
1:A:2273:ARG:O	1:A:2277:GLN:N	2.14	0.79
1:A:2386:ALA:O	1:A:2390:LEU:N	2.15	0.79
1:A:2503:MET:O	1:A:2507:ASP:N	2.14	0.79
1:B:1965:LYS:O	1:B:1969:ASP:N	2.10	0.79
1:A:1660:ASN:O	1:A:1664:GLU:N	2.15	0.79
1:B:1570:VAL:O	1:B:1574:LEU:N	2.13	0.79
1:A:62:ARG:O	1:A:66:LYS:N	2.15	0.79
1:A:630:VAL:O	1:A:634:GLU:N	2.15	0.79
1:A:1862:LEU:O	1:A:1866:VAL:N	2.15	0.79
1:A:2735:CYS:O	1:A:2739:LEU:N	2.12	0.79
1:B:830:PHE:O	1:B:834:GLU:N	2.15	0.79
1:B:1110:ALA:O	1:B:1114:LYS:N	2.16	0.79
1:B:2225:ALA:O	1:B:2229:VAL:N	2.10	0.79
1:B:2720:ASP:N	1:B:2763:ARG:O	2.14	0.79
1:A:845:ASN:O	1:A:849:VAL:N	2.16	0.79
1:A:1954:ALA:O	1:A:1958:ALA:N	2.12	0.79
1:A:1971:GLU:O	1:A:1975:LEU:N	2.12	0.79
1:B:845:ASN:O	1:B:849:VAL:N	2.16	0.79
1:B:1469:ILE:O	1:B:1473:ILE:N	2.14	0.79
1:B:1550:LYS:O	1:B:1554:ASN:N	2.12	0.79
1:B:2798:ALA:O	1:B:2802:GLN:N	2.15	0.79
1:B:2999:ASP:O	1:B:3003:ASN:N	2.12	0.79
1:A:1613:GLY:O	1:A:1617:LEU:N	2.14	0.79
1:A:1888:ASN:O	1:A:1892:GLU:N	2.15	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1998:GLY:O	1:A:2002:GLN:N	2.15	0.79
1:A:2123:SER:O	1:A:2127:SER:N	2.12	0.79
1:B:1150:ARG:O	1:B:1154:LEU:N	2.13	0.79
1:B:1517:LEU:O	1:B:1521:VAL:N	2.14	0.79
1:A:1258:HIS:O	1:A:1262:ARG:N	2.15	0.79
1:B:2948:ILE:O	1:B:2952:LEU:N	2.15	0.79
1:A:834:GLU:O	1:A:838:MET:N	2.16	0.78
1:A:1496:ASP:O	1:A:1500:GLN:N	2.15	0.78
1:A:1550:LYS:O	1:A:1554:ASN:N	2.12	0.78
1:A:3003:ASN:O	1:A:3007:GLU:N	2.10	0.78
1:B:1942:ALA:O	1:B:1946:GLN:N	2.10	0.78
1:B:2254:HIS:O	1:B:2258:LEU:N	2.14	0.78
1:A:1110:ALA:O	1:A:1114:LYS:N	2.16	0.78
1:A:2362:GLU:O	1:A:2366:GLU:N	2.14	0.78
1:A:2946:LEU:O	1:A:2950:GLU:N	2.16	0.78
1:B:1951:HIS:O	1:B:1955:LEU:N	2.14	0.78
1:B:2779:PHE:O	1:B:2783:ASN:N	2.11	0.78
1:A:2411:GLU:O	1:A:2415:ALA:N	2.15	0.78
1:A:1517:LEU:O	1:A:1521:VAL:N	2.14	0.78
1:B:1944:VAL:O	1:B:1948:CYS:N	2.15	0.78
1:B:1945:ALA:O	1:B:1949:ALA:N	2.16	0.78
1:A:1259:LEU:O	1:A:1263:SER:N	2.11	0.78
1:A:2383:LYS:O	1:A:2387:PHE:N	2.14	0.78
1:B:444:PRO:O	1:B:448:HIS:N	2.14	0.78
1:B:1660:ASN:O	1:B:1664:GLU:N	2.15	0.78
1:A:348:LEU:O	1:A:352:ILE:N	2.12	0.78
1:A:1828:LYS:O	1:A:1832:GLU:N	2.14	0.78
1:A:2692:LEU:HA	1:A:2700:LYS:HA	1.66	0.78
1:A:3008:ARG:O	1:A:3012:ARG:N	2.12	0.78
1:B:1484:MET:O	1:B:1488:LEU:N	2.12	0.78
1:B:2015:PRO:O	1:B:2019:TYR:N	2.17	0.78
1:B:2046:LEU:O	1:B:2050:ASP:N	2.14	0.78
1:A:1109:LYS:O	1:A:1113:LEU:N	2.12	0.78
1:A:2702:ILE:O	1:A:2714:GLN:N	2.16	0.78
1:A:2798:ALA:O	1:A:2802:GLN:N	2.15	0.78
1:B:1259:LEU:O	1:B:1263:SER:N	2.11	0.78
1:B:2000:SER:O	1:B:2004:LEU:N	2.13	0.78
1:B:3029:GLY:O	1:B:3033:ASN:N	2.13	0.78
1:A:2948:ILE:O	1:A:2952:LEU:N	2.15	0.78
1:B:348:LEU:O	1:B:352:ILE:N	2.12	0.78
1:B:2824:CYS:O	1:B:2827:PHE:O	2.02	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1436:HIS:O	1:A:1440:LYS:N	2.13	0.78
1:A:2824:CYS:O	1:A:2827:PHE:O	2.01	0.78
1:B:853:SER:O	1:B:857:LEU:N	2.14	0.78
1:B:1353:GLU:O	1:B:1356:ASN:N	2.13	0.78
1:B:2503:MET:O	1:B:2507:ASP:N	2.14	0.78
1:B:2692:LEU:HA	1:B:2700:LYS:HA	1.66	0.78
1:A:1139:GLU:O	1:A:1143:THR:N	2.13	0.78
1:A:1944:VAL:O	1:A:1948:CYS:N	2.15	0.78
1:B:1826:LEU:O	1:B:1830:MET:N	2.17	0.78
1:B:1966:SER:O	1:B:1970:GLN:N	2.13	0.78
1:A:1353:GLU:O	1:A:1356:ASN:N	2.13	0.77
1:A:3035:LEU:O	1:A:3039:ALA:N	2.14	0.77
1:B:1436:HIS:O	1:B:1440:LYS:N	2.13	0.77
1:B:2557:LEU:O	1:B:2561:LEU:N	2.15	0.77
1:B:2702:ILE:O	1:B:2714:GLN:N	2.16	0.77
1:A:2015:PRO:O	1:A:2019:TYR:N	2.17	0.77
1:B:658:ASP:O	1:B:663:LEU:N	2.16	0.77
1:B:2336:GLU:O	1:B:2340:VAL:N	2.12	0.77
1:B:2485:PHE:O	1:B:2489:SER:N	2.15	0.77
1:A:1716:THR:O	1:A:1720:ASN:N	2.12	0.77
1:A:1826:LEU:O	1:A:1830:MET:N	2.17	0.77
1:A:1945:ALA:O	1:A:1949:ALA:N	2.16	0.77
1:A:2046:LEU:O	1:A:2050:ASP:N	2.14	0.77
1:A:2485:PHE:O	1:A:2489:SER:N	2.15	0.77
1:A:2847:GLU:O	1:A:2851:ALA:N	2.12	0.77
1:B:2361:LEU:O	1:B:2365:VAL:N	2.17	0.77
1:A:478:SER:O	1:A:482:LYS:N	2.16	0.77
1:A:853:SER:O	1:A:857:LEU:N	2.14	0.77
1:B:2315:MET:O	1:B:2319:LEU:N	2.18	0.77
1:A:224:LYS:O	1:A:228:GLY:N	2.17	0.77
1:A:1293:ASN:O	1:A:1297:TYR:N	2.17	0.77
1:A:1869:PHE:O	1:A:1873:CYS:N	2.16	0.77
1:B:1614:LEU:O	1:B:1618:ARG:N	2.16	0.77
1:A:346:ILE:O	1:A:350:ALA:N	2.13	0.77
1:A:501:GLN:O	1:A:505:PHE:N	2.17	0.77
1:B:2142:THR:O	1:B:2146:SER:N	2.14	0.77
1:B:2623:LEU:O	1:B:2627:TYR:N	2.14	0.77
1:A:1878:SER:O	1:A:1882:ARG:N	2.17	0.77
1:A:2174:SER:O	1:A:2178:ALA:N	2.11	0.77
1:B:191:ILE:O	1:B:195:THR:N	2.15	0.77
1:B:501:GLN:O	1:B:505:PHE:N	2.17	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1646:LYS:O	1:B:1650:ASN:N	2.18	0.77
1:B:3004:LYS:O	1:B:3008:ARG:N	2.14	0.77
1:A:1140:ASN:O	1:A:1145:ASP:N	2.17	0.77
1:A:1535:GLN:O	1:A:1539:LEU:N	2.16	0.77
1:A:2315:MET:O	1:A:2319:LEU:N	2.18	0.77
1:B:2386:ALA:O	1:B:2390:LEU:N	2.15	0.77
1:B:2626:ALA:O	1:B:2630:LEU:N	2.11	0.77
1:A:1714:MET:O	1:A:1718:LEU:N	2.12	0.77
1:A:2330:LEU:O	1:A:2334:TYR:N	2.14	0.77
1:A:2361:LEU:O	1:A:2365:VAL:N	2.17	0.77
1:A:3042:PRO:O	1:A:3046:SER:N	2.11	0.77
1:B:1941:VAL:O	1:B:1945:ALA:N	2.14	0.77
1:B:2453:ARG:O	1:B:2457:GLU:N	2.13	0.77
1:A:519:VAL:O	1:A:523:PHE:N	2.15	0.76
1:A:1076:GLN:O	1:A:1080:ASP:N	2.17	0.76
1:A:3028:VAL:O	1:A:3031:GLN:N	2.18	0.76
1:B:1140:ASN:O	1:B:1145:ASP:N	2.17	0.76
1:B:2066:GLN:O	1:B:2070:ASN:N	2.14	0.76
1:B:2867:GLY:HA3	1:B:2894:PHE:HA	1.65	0.76
1:B:1139:GLU:O	1:B:1143:THR:N	2.13	0.76
1:A:2723:ARG:HA	1:A:2726:ALA:HB3	1.66	0.76
1:A:2867:GLY:HA3	1:A:2894:PHE:HA	1.65	0.76
1:B:3028:VAL:O	1:B:3031:GLN:N	2.18	0.76
1:A:1646:LYS:O	1:A:1650:ASN:N	2.18	0.76
1:B:1076:GLN:O	1:B:1080:ASP:N	2.17	0.76
1:B:1394:SER:O	1:B:1396:CYS:N	2.18	0.76
1:B:2863:GLY:O	1:B:2867:GLY:N	2.19	0.76
1:A:1394:SER:O	1:A:1396:CYS:N	2.18	0.76
1:A:2862:VAL:O	1:A:2866:LEU:N	2.14	0.76
1:B:834:GLU:O	1:B:838:MET:N	2.16	0.76
1:B:1713:ILE:O	1:B:1717:TYR:N	2.16	0.76
1:B:1869:PHE:O	1:B:1873:CYS:N	2.16	0.76
1:B:2208:HIS:O	1:B:2212:LEU:N	2.19	0.76
1:A:10:ILE:O	1:A:14:GLN:N	2.19	0.76
1:B:3003:ASN:O	1:B:3007:GLU:N	2.11	0.76
1:A:561:GLN:O	1:A:565:GLU:N	2.19	0.76
1:A:2194:THR:O	1:A:2198:LEU:N	2.16	0.76
1:A:2308:ALA:O	1:A:2312:LEU:N	2.17	0.76
1:A:2863:GLY:O	1:A:2867:GLY:N	2.19	0.76
1:B:851:ASP:O	1:B:855:MET:N	2.17	0.76
1:B:1293:ASN:O	1:B:1297:TYR:N	2.17	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1634:ALA:O	1:A:1638:ASN:N	2.14	0.76
1:B:1457:LEU:O	1:B:1461:TRP:N	2.12	0.76
1:A:1926:THR:O	1:A:1930:ASP:N	2.12	0.76
1:A:2622:ALA:O	1:A:2626:ALA:N	2.12	0.76
1:B:10:ILE:O	1:B:14:GLN:N	2.19	0.76
1:B:1862:LEU:O	1:B:1866:VAL:N	2.15	0.76
1:A:155:TYR:O	1:A:159:ILE:N	2.17	0.76
1:A:3029:GLY:O	1:A:3033:ASN:N	2.14	0.76
1:A:1212:SER:O	1:A:1216:TYR:N	2.18	0.75
1:B:2846:PHE:O	1:B:2850:LEU:N	2.11	0.75
1:A:658:ASP:O	1:A:663:LEU:N	2.16	0.75
1:A:1943:LYS:O	1:A:1947:SER:N	2.14	0.75
1:A:2501:ASN:O	1:A:2505:LYS:N	2.17	0.75
1:B:224:LYS:O	1:B:228:GLY:N	2.17	0.75
1:B:2501:ASN:O	1:B:2505:LYS:N	2.17	0.75
1:B:2946:LEU:O	1:B:2950:GLU:N	2.16	0.75
1:B:3010:LEU:O	1:B:3014:GLN:N	2.12	0.75
1:A:1516:HIS:O	1:A:1520:ILE:N	2.15	0.75
1:A:1558:THR:O	1:A:1562:LEU:N	2.17	0.75
1:A:2069:GLN:O	1:A:2073:LEU:N	2.18	0.75
1:A:2606:ILE:O	1:A:2610:ARG:N	2.18	0.75
1:A:3049:PHE:O	1:A:3053:LYS:N	2.19	0.75
1:B:64:LEU:O	1:B:68:ILE:N	2.19	0.75
1:B:1878:SER:O	1:B:1882:ARG:N	2.17	0.75
1:B:2156:GLU:O	1:B:2160:LYS:N	2.15	0.75
1:A:2248:LYS:O	1:A:2252:THR:N	2.12	0.75
1:A:2254:HIS:O	1:A:2258:LEU:N	2.14	0.75
1:B:1258:HIS:O	1:B:1262:ARG:N	2.15	0.75
1:B:2797:SER:O	1:B:2801:CYS:N	2.16	0.75
1:B:2924:GLU:CA	1:B:2928:ARG:H	2.00	0.75
1:A:1003:GLN:O	1:A:1007:ASP:N	2.20	0.75
1:A:2331:LYS:O	1:A:2335:THR:N	2.12	0.75
1:B:1613:GLY:O	1:B:1617:LEU:N	2.14	0.75
1:B:2194:THR:O	1:B:2198:LEU:N	2.16	0.75
1:B:2847:GLU:O	1:B:2851:ALA:N	2.12	0.75
1:A:1644:MET:O	1:A:1648:VAL:N	2.15	0.75
1:A:2412:ASN:HA	1:A:2415:ALA:HB3	1.69	0.75
1:A:2453:ARG:O	1:A:2457:GLU:N	2.13	0.75
1:B:736:ALA:O	1:B:740:ALA:N	2.19	0.75
1:B:1260:VAL:O	1:B:1264:HIS:N	2.16	0.75
1:B:2062:ALA:O	1:B:2066:GLN:N	2.13	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2107:MET:O	1:B:2111:HIS:N	2.16	0.75
1:B:2519:LEU:O	1:B:2523:LEU:N	2.20	0.75
1:B:2720:ASP:H	1:B:2763:ARG:C	1.90	0.75
1:B:2734:MET:O	1:B:2738:LEU:N	2.15	0.75
1:B:478:SER:O	1:B:482:LYS:N	2.16	0.75
1:B:1704:GLU:O	1:B:1708:LEU:N	2.20	0.75
1:B:2686:PHE:HA	1:B:2704:CYS:HA	1.69	0.75
1:B:2723:ARG:HA	1:B:2726:ALA:HB3	1.66	0.75
1:A:280:ILE:O	1:A:284:GLN:N	2.19	0.75
1:A:736:ALA:O	1:A:740:ALA:N	2.19	0.75
1:A:1941:VAL:O	1:A:1945:ALA:N	2.14	0.75
1:A:2066:GLN:O	1:A:2070:ASN:N	2.14	0.75
1:A:2691:ARG:O	1:A:2701:ILE:N	2.19	0.75
1:B:155:TYR:O	1:B:159:ILE:N	2.17	0.75
1:A:485:ASN:O	1:A:489:CYS:N	2.20	0.74
1:A:2172:THR:O	1:A:2176:LEU:N	2.14	0.74
1:B:629:SER:O	1:B:633:CYS:N	2.18	0.74
1:B:1598:LEU:O	1:B:1602:VAL:N	2.19	0.74
1:B:1721:THR:O	1:B:1725:ASP:N	2.17	0.74
1:B:2384:MET:O	1:B:2388:LEU:N	2.15	0.74
1:B:3035:LEU:O	1:B:3039:ALA:N	2.14	0.74
1:A:207:SER:O	1:A:211:ASP:N	2.19	0.74
1:A:1442:TYR:O	1:A:1446:VAL:N	2.13	0.74
1:A:2519:LEU:O	1:A:2523:LEU:N	2.20	0.74
1:B:1003:GLN:O	1:B:1007:ASP:N	2.20	0.74
1:B:1558:THR:O	1:B:1562:LEU:N	2.17	0.74
1:B:2862:VAL:O	1:B:2866:LEU:N	2.14	0.74
1:A:2208:HIS:O	1:A:2212:LEU:N	2.19	0.74
1:B:2273:ARG:O	1:B:2277:GLN:N	2.14	0.74
1:B:2621:GLU:O	1:B:2625:ASP:N	2.19	0.74
1:A:846:LEU:O	1:A:850:GLU:N	2.19	0.74
1:B:2487:LEU:O	1:B:2491:TRP:N	2.15	0.74
1:B:2412:ASN:HA	1:B:2415:ALA:HB3	1.69	0.74
1:B:3049:PHE:O	1:B:3053:LYS:N	2.19	0.74
1:A:2384:MET:O	1:A:2388:LEU:N	2.15	0.74
1:A:2541:LEU:O	1:A:2545:ILE:N	2.15	0.74
1:A:2720:ASP:H	1:A:2763:ARG:C	1.90	0.74
1:B:346:ILE:O	1:B:350:ALA:N	2.13	0.74
1:B:2222:PRO:O	1:B:2226:LEU:N	2.21	0.74
1:A:1904:LYS:O	1:A:1908:THR:N	2.20	0.74
1:A:2686:PHE:HA	1:A:2704:CYS:HA	1.70	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2402:GLU:O	1:B:2406:LYS:N	2.16	0.74
1:B:2598:ARG:O	1:B:2602:ALA:N	2.15	0.74
1:A:64:LEU:O	1:A:68:ILE:N	2.19	0.74
1:A:1111:LEU:O	1:A:1116:GLN:N	2.19	0.74
1:A:2597:ASP:O	1:A:2601:ALA:N	2.19	0.74
1:A:2815:GLU:O	1:A:2819:VAL:N	2.16	0.74
1:B:1111:LEU:O	1:B:1116:GLN:N	2.19	0.74
1:B:1904:LYS:O	1:B:1908:THR:N	2.20	0.74
1:B:2933:LYS:O	1:B:2937:VAL:N	2.18	0.74
1:A:1342:GLU:O	1:A:1346:GLU:N	2.20	0.74
1:A:1704:GLU:O	1:A:1708:LEU:N	2.20	0.74
1:A:1831:CYS:O	1:A:1835:THR:N	2.17	0.74
1:A:1857:SER:O	1:A:1861:LEU:N	2.18	0.74
1:A:2156:GLU:O	1:A:2160:LYS:N	2.15	0.74
1:B:485:ASN:O	1:B:489:CYS:N	2.20	0.74
1:B:2147:LEU:O	1:B:2151:ARG:N	2.21	0.74
1:A:1107:LEU:O	1:A:1111:LEU:N	2.16	0.74
1:A:1614:LEU:O	1:A:1618:ARG:N	2.16	0.74
1:A:2402:GLU:O	1:A:2406:LYS:N	2.16	0.74
1:A:2598:ARG:O	1:A:2602:ALA:N	2.15	0.74
1:A:3004:LYS:O	1:A:3008:ARG:N	2.14	0.74
1:B:2363:LYS:O	1:B:2367:VAL:N	2.21	0.74
1:A:2009:TYR:O	1:A:2013:GLY:N	2.21	0.73
1:B:280:ILE:O	1:B:284:GLN:N	2.19	0.73
1:B:1342:GLU:O	1:B:1346:GLU:N	2.20	0.73
1:B:2043:GLY:O	1:B:2047:VAL:N	2.17	0.73
1:A:1537:GLN:O	1:A:1541:LEU:N	2.15	0.73
1:B:1535:GLN:O	1:B:1539:LEU:N	2.16	0.73
1:B:2308:ALA:O	1:B:2312:LEU:N	2.17	0.73
1:B:1456:GLY:O	1:B:1460:ALA:N	2.19	0.73
1:B:1998:GLY:O	1:B:2002:GLN:N	2.15	0.73
1:A:1966:SER:O	1:A:1970:GLN:N	2.13	0.73
1:A:2924:GLU:CA	1:A:2928:ARG:H	2.00	0.73
1:A:2933:LYS:O	1:A:2937:VAL:N	2.18	0.73
1:B:272:ASN:O	1:B:276:LYS:N	2.21	0.73
1:B:2815:GLU:O	1:B:2819:VAL:N	2.16	0.73
1:A:272:ASN:O	1:A:276:LYS:N	2.21	0.73
1:A:2147:LEU:O	1:A:2151:ARG:N	2.21	0.73
1:A:2623:LEU:O	1:A:2627:TYR:N	2.14	0.73
1:A:2844:ILE:HA	1:A:2848:LYS:H	1.53	0.73
1:A:1945:ALA:HB1	1:A:1954:ALA:HA	1.70	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:692:ARG:O	1:B:696:GLY:N	2.21	0.73
1:B:943:HIS:O	1:B:947:TYR:N	2.17	0.73
1:B:1516:HIS:O	1:B:1520:ILE:N	2.15	0.73
1:A:1117:GLN:O	1:A:1121:GLU:N	2.18	0.73
1:A:2142:THR:O	1:A:2146:SER:N	2.14	0.73
1:B:2075:HIS:O	1:B:2079:VAL:N	2.17	0.73
1:B:2534:GLY:O	1:B:2538:HIS:N	2.21	0.73
1:A:1957:TYR:O	1:A:1961:TYR:N	2.17	0.73
1:A:2256:VAL:O	1:A:2260:ILE:N	2.20	0.73
1:A:2335:THR:O	1:A:2339:ARG:N	2.18	0.73
1:B:1679:GLY:O	1:B:1683:PHE:N	2.22	0.73
1:B:2844:ILE:HA	1:B:2848:LYS:H	1.53	0.73
1:A:629:SER:O	1:A:633:CYS:N	2.19	0.73
1:A:633:CYS:O	1:A:637:GLN:N	2.22	0.73
1:A:1260:VAL:O	1:A:1264:HIS:N	2.16	0.73
1:A:2539:GLU:O	1:A:2543:ASN:N	2.19	0.73
1:A:2733:GLN:O	1:A:2737:THR:N	2.17	0.73
1:A:2757:VAL:HA	1:A:2767:LEU:HA	1.70	0.73
1:B:171:TYR:O	1:B:175:TYR:N	2.22	0.73
1:B:633:CYS:O	1:B:637:GLN:N	2.22	0.73
1:B:2334:TYR:O	1:B:2338:LEU:N	2.16	0.73
1:B:2796:PHE:O	1:B:2800:GLN:N	2.19	0.73
1:A:1765:GLN:O	1:A:1769:THR:N	2.22	0.72
1:A:2654:THR:O	1:A:2658:ASN:N	2.22	0.72
1:B:1945:ALA:HB1	1:B:1954:ALA:HA	1.70	0.72
1:B:1964:LYS:O	1:B:1968:ASP:N	2.13	0.72
1:B:2597:ASP:O	1:B:2601:ALA:N	2.19	0.72
1:A:191:ILE:O	1:A:195:THR:N	2.15	0.72
1:A:1395:ASN:O	1:A:1399:THR:N	2.19	0.72
1:A:1398:LYS:HA	1:A:1513:LEU:H	1.54	0.72
1:A:1678:VAL:O	1:A:1682:ASP:N	2.17	0.72
1:B:1831:CYS:O	1:B:1835:THR:N	2.17	0.72
1:B:2332:LEU:O	1:B:2336:GLU:N	2.16	0.72
1:A:563:MET:O	1:A:567:ASN:N	2.22	0.72
1:A:2621:GLU:O	1:A:2625:ASP:N	2.19	0.72
1:B:158:GLU:O	1:B:162:GLN:N	2.22	0.72
1:A:828:LYS:O	1:A:832:ARG:N	2.20	0.72
1:A:1001:LEU:O	1:A:1005:ASN:N	2.21	0.72
1:A:1679:GLY:O	1:A:1683:PHE:N	2.22	0.72
1:A:2534:GLY:O	1:A:2538:HIS:N	2.21	0.72
1:A:2619:SER:O	1:A:2623:LEU:N	2.16	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1001:LEU:O	1:B:1005:ASN:N	2.21	0.72
1:B:1354:PRO:O	1:B:1358:SER:N	2.23	0.72
1:B:1678:VAL:O	1:B:1682:ASP:N	2.17	0.72
1:B:1765:GLN:O	1:B:1769:THR:N	2.22	0.72
1:B:2331:LYS:O	1:B:2335:THR:N	2.12	0.72
1:B:2342:GLY:O	1:B:2346:ALA:N	2.18	0.72
1:A:156:TRP:O	1:A:160:SER:N	2.22	0.72
1:A:2544:LEU:O	1:A:2548:ILE:N	2.16	0.72
1:B:190:ILE:O	1:B:194:VAL:N	2.22	0.72
1:B:276:LYS:O	1:B:281:GLU:N	2.23	0.72
1:B:1398:LYS:HA	1:B:1513:LEU:H	1.54	0.72
1:B:1857:SER:O	1:B:1861:LEU:N	2.18	0.72
1:B:2691:ARG:O	1:B:2701:ILE:N	2.19	0.72
1:A:2342:GLY:O	1:A:2346:ALA:N	2.18	0.72
1:A:2559:ILE:O	1:A:2563:LEU:N	2.22	0.72
1:B:582:PHE:O	1:B:586:GLU:N	2.20	0.72
1:B:846:LEU:O	1:B:850:GLU:N	2.19	0.72
1:B:1957:TYR:O	1:B:1961:TYR:N	2.17	0.72
1:B:2539:GLU:O	1:B:2543:ASN:N	2.19	0.72
1:B:2733:GLN:O	1:B:2737:THR:N	2.17	0.72
1:A:171:TYR:O	1:A:175:TYR:N	2.22	0.72
1:B:345:LEU:O	1:B:349:MET:N	2.16	0.72
1:B:2654:THR:O	1:B:2658:ASN:N	2.22	0.72
1:A:1662:THR:O	1:A:1666:GLU:N	2.13	0.72
1:A:2035:THR:O	1:A:2039:GLU:N	2.18	0.72
1:A:2487:LEU:O	1:A:2491:TRP:N	2.15	0.72
1:A:2734:MET:O	1:A:2738:LEU:N	2.15	0.72
1:A:2911:THR:O	1:A:2915:VAL:N	2.17	0.72
1:B:1597:PHE:O	1:B:1601:SER:N	2.18	0.72
1:B:1644:MET:O	1:B:1648:VAL:N	2.15	0.72
1:B:2559:ILE:O	1:B:2563:LEU:N	2.22	0.72
1:A:2043:GLY:O	1:A:2047:VAL:N	2.17	0.72
1:B:9:LEU:O	1:B:13:ARG:N	2.18	0.72
1:B:3030:GLY:O	1:B:3034:LEU:N	2.16	0.72
1:A:481:LEU:O	1:A:485:ASN:N	2.17	0.72
1:A:2797:SER:O	1:A:2801:CYS:N	2.16	0.72
1:B:60:VAL:O	1:B:64:LEU:N	2.17	0.72
1:B:2009:TYR:O	1:B:2013:GLY:N	2.21	0.72
1:A:158:GLU:O	1:A:162:GLN:N	2.22	0.71
1:B:2256:VAL:O	1:B:2260:ILE:N	2.20	0.71
1:B:2619:SER:O	1:B:2623:LEU:N	2.16	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2222:PRO:O	1:A:2226:LEU:N	2.21	0.71
1:B:182:VAL:O	1:B:186:LEU:N	2.22	0.71
1:B:563:MET:O	1:B:567:ASN:N	2.22	0.71
1:B:1213:HIS:O	1:B:1217:LEU:N	2.23	0.71
1:B:2335:THR:O	1:B:2339:ARG:N	2.18	0.71
1:B:2606:ILE:O	1:B:2610:ARG:N	2.18	0.71
1:A:190:ILE:O	1:A:194:VAL:N	2.22	0.71
1:A:2064:ILE:O	1:A:2068:LEU:N	2.17	0.71
1:A:1912:VAL:O	1:A:1916:MET:N	2.24	0.71
1:A:2603:ASN:O	1:A:2607:CYS:N	2.23	0.71
1:A:2878:ILE:HA	1:A:2885:LEU:HA	1.73	0.71
1:B:519:VAL:O	1:B:523:PHE:N	2.15	0.71
1:A:1213:HIS:O	1:A:1217:LEU:N	2.23	0.71
1:A:2127:SER:O	1:A:2131:ALA:N	2.12	0.71
1:A:2399:GLN:O	1:A:2403:ASN:N	2.18	0.71
1:B:207:SER:O	1:B:211:ASP:N	2.19	0.71
1:A:851:ASP:O	1:A:855:MET:N	2.18	0.71
1:A:1354:PRO:O	1:A:1358:SER:N	2.23	0.71
1:B:1395:ASN:O	1:B:1399:THR:N	2.19	0.71
1:B:1912:VAL:O	1:B:1916:MET:N	2.24	0.71
1:B:2617:VAL:O	1:B:2620:VAL:N	2.18	0.71
1:A:1676:GLY:O	1:A:1679:GLY:N	2.23	0.71
1:B:61:PHE:O	1:B:65:GLN:N	2.19	0.71
1:B:1117:GLN:O	1:B:1121:GLU:N	2.18	0.71
1:B:2449:GLU:O	1:B:2453:ARG:N	2.17	0.71
1:A:243:LEU:O	1:A:247:PHE:N	2.24	0.71
1:B:2757:VAL:HA	1:B:2767:LEU:HA	1.70	0.71
1:A:579:TRP:O	1:A:583:TYR:N	2.19	0.71
1:A:582:PHE:O	1:A:586:GLU:N	2.20	0.71
1:A:978:SER:O	1:A:982:ARG:N	2.20	0.71
1:A:1263:SER:O	1:A:1267:GLU:N	2.17	0.71
1:A:1964:LYS:O	1:A:1968:ASP:N	2.13	0.71
1:A:2297:GLN:O	1:A:2301:ALA:N	2.22	0.71
1:B:156:TRP:O	1:B:160:SER:N	2.22	0.71
1:B:243:LEU:O	1:B:247:PHE:N	2.24	0.71
1:B:2292:GLN:O	1:B:2295:GLU:N	2.24	0.71
1:B:2364:ALA:O	1:B:2368:ALA:N	2.20	0.71
1:A:2194:THR:N	1:A:2197:GLN:H	1.89	0.70
1:A:2819:VAL:O	1:A:2823:VAL:N	2.19	0.70
1:B:313:TYR:O	1:B:317:ASP:N	2.20	0.70
1:B:579:TRP:O	1:B:583:TYR:N	2.19	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:656:THR:O	1:B:660:MET:N	2.20	0.70
1:B:1736:CYS:O	1:B:1740:ILE:N	2.19	0.70
1:B:1847:HIS:O	1:B:1851:LEU:N	2.16	0.70
1:A:2334:TYR:O	1:A:2338:LEU:N	2.16	0.70
1:A:2841:ASP:O	1:A:2844:ILE:N	2.23	0.70
1:A:2928:ARG:O	1:A:2932:GLU:N	2.21	0.70
1:B:275:LEU:O	1:B:280:ILE:N	2.24	0.70
1:B:583:TYR:O	1:B:587:GLY:N	2.24	0.70
1:B:2541:LEU:O	1:B:2545:ILE:N	2.15	0.70
1:A:2359:THR:O	1:A:2363:LYS:N	2.20	0.70
1:B:1531:GLN:O	1:B:1534:VAL:N	2.19	0.70
1:B:2297:GLN:O	1:B:2301:ALA:N	2.22	0.70
1:B:2878:ILE:HA	1:B:2885:LEU:HA	1.73	0.70
1:A:1736:CYS:O	1:A:1740:ILE:N	2.19	0.70
1:A:2363:LYS:O	1:A:2367:VAL:N	2.21	0.70
1:B:1198:SER:O	1:B:1202:GLY:N	2.20	0.70
1:A:508:LEU:O	1:A:512:ILE:N	2.19	0.70
1:A:943:HIS:O	1:A:947:TYR:N	2.17	0.70
1:A:1557:ILE:O	1:A:1561:LEU:N	2.23	0.70
1:B:1136:HIS:O	1:B:1140:ASN:N	2.16	0.70
1:B:1634:ALA:O	1:B:1638:ASN:N	2.14	0.70
1:B:2261:LEU:O	1:B:2265:PHE:N	2.20	0.70
1:B:2841:ASP:O	1:B:2844:ILE:N	2.23	0.70
1:A:61:PHE:O	1:A:65:GLN:N	2.19	0.70
1:A:2772:GLY:O	1:A:2879:ASN:HA	1.92	0.70
1:B:2194:THR:N	1:B:2197:GLN:H	1.89	0.70
1:B:2306:SER:H	1:B:2309:LEU:N	1.89	0.70
1:B:2445:LEU:O	1:B:2449:GLU:N	2.18	0.70
1:A:2449:GLU:O	1:A:2453:ARG:N	2.17	0.70
1:A:2685:SER:N	1:A:2705:VAL:O	2.19	0.70
1:A:2926:VAL:O	1:A:2930:CYS:N	2.21	0.70
1:B:2343:ASN:O	1:B:2347:GLU:N	2.17	0.70
1:B:2413:LYS:O	1:B:2417:LEU:N	2.21	0.70
1:A:345:LEU:O	1:A:349:MET:N	2.16	0.70
1:A:1881:SER:O	1:A:1885:THR:N	2.18	0.70
1:B:2150:ALA:O	1:B:2154:GLU:N	2.21	0.70
1:B:2359:THR:O	1:B:2363:LYS:N	2.20	0.70
1:B:2603:ASN:O	1:B:2607:CYS:N	2.23	0.70
1:B:2926:VAL:O	1:B:2930:CYS:N	2.21	0.70
1:A:275:LEU:O	1:A:280:ILE:N	2.24	0.70
1:A:276:LYS:O	1:A:281:GLU:N	2.23	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:692:ARG:O	1:A:696:GLY:N	2.21	0.70
1:A:1713:ILE:O	1:A:1717:TYR:N	2.16	0.70
1:A:2251:LEU:O	1:A:2255:LEU:N	2.20	0.70
1:A:2292:GLN:O	1:A:2295:GLU:N	2.24	0.70
1:B:2512:PRO:O	1:B:2516:PHE:N	2.22	0.70
1:A:67:TYR:O	1:A:71:GLU:N	2.24	0.70
1:A:182:VAL:O	1:A:186:LEU:N	2.22	0.70
1:A:284:GLN:O	1:A:288:TYR:N	2.23	0.70
1:A:1552:ASN:O	1:A:1556:TYR:N	2.21	0.70
1:A:1724:GLU:O	1:A:1727:VAL:N	2.24	0.70
1:A:2617:VAL:O	1:A:2620:VAL:N	2.18	0.70
1:B:194:VAL:O	1:B:198:CYS:N	2.25	0.70
1:B:561:GLN:O	1:B:565:GLU:N	2.19	0.70
1:B:989:THR:O	1:B:993:HIS:N	2.19	0.70
1:B:1107:LEU:O	1:B:1111:LEU:N	2.16	0.70
1:B:1586:GLY:O	1:B:1591:LEU:N	2.25	0.70
1:B:1676:GLY:O	1:B:1679:GLY:N	2.23	0.70
1:B:1155:LEU:O	1:B:1159:ALA:N	2.23	0.69
1:B:2472:ASN:O	1:B:2476:SER:N	2.25	0.69
1:B:2544:LEU:O	1:B:2548:ILE:N	2.16	0.69
1:B:2731:VAL:O	1:B:2735:CYS:N	2.19	0.69
1:B:3036:ILE:O	1:B:3040:ILE:N	2.25	0.69
1:A:1170:LYS:O	1:A:1174:PHE:N	2.18	0.69
1:A:1456:GLY:O	1:A:1460:ALA:N	2.19	0.69
1:A:2075:HIS:O	1:A:2079:VAL:N	2.17	0.69
1:A:2257:GLU:O	1:A:2261:LEU:N	2.21	0.69
1:A:194:VAL:O	1:A:198:CYS:N	2.25	0.69
1:A:712:SER:O	1:A:716:VAL:N	2.20	0.69
1:A:2973:ARG:O	1:A:2975:GLU:N	2.25	0.69
1:B:993:HIS:O	1:B:997:VAL:N	2.24	0.69
1:B:2199:SER:O	1:B:2203:ILE:N	2.18	0.69
1:A:656:THR:O	1:A:660:MET:N	2.20	0.69
1:B:506:GLY:O	1:B:510:ALA:N	2.24	0.69
1:B:1912:VAL:O	1:B:1917:ARG:N	2.26	0.69
1:A:8:LEU:O	1:A:12:CYS:N	2.25	0.69
1:A:2258:LEU:O	1:A:2262:ALA:N	2.25	0.69
1:B:2258:LEU:O	1:B:2262:ALA:N	2.24	0.69
1:B:2973:ARG:O	1:B:2975:GLU:N	2.25	0.69
1:A:1439:LEU:O	1:A:1443:HIS:N	2.21	0.69
1:A:1586:GLY:O	1:A:1591:LEU:N	2.25	0.69
1:A:1271:ILE:O	1:A:1276:GLN:N	2.26	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1531:GLN:O	1:A:1534:VAL:N	2.19	0.69
1:B:281:GLU:O	1:B:285:LEU:N	2.26	0.69
1:B:1557:ILE:O	1:B:1561:LEU:N	2.23	0.69
1:B:2911:THR:O	1:B:2915:VAL:N	2.17	0.69
1:A:457:ARG:O	1:A:461:GLU:N	2.23	0.69
1:A:2914:ILE:O	1:A:2918:MET:N	2.25	0.69
1:B:8:LEU:O	1:B:12:CYS:N	2.25	0.69
1:B:1485:ASP:O	1:B:1489:ARG:N	2.25	0.69
1:B:1724:GLU:O	1:B:1727:VAL:N	2.24	0.69
1:B:2270:LEU:O	1:B:2274:ALA:N	2.19	0.69
1:B:2682:THR:O	1:B:2707:SER:N	2.21	0.69
1:A:2294:GLU:O	1:A:2297:GLN:N	2.20	0.69
1:A:2306:SER:H	1:A:2309:LEU:N	1.89	0.69
1:B:1212:SER:O	1:B:1216:TYR:N	2.18	0.69
1:A:11:CYS:O	1:A:15:LEU:N	2.21	0.69
1:A:540:CYS:O	1:A:544:LEU:N	2.21	0.69
1:A:1151:LYS:O	1:A:1155:LEU:N	2.27	0.69
1:B:540:CYS:O	1:B:544:LEU:N	2.21	0.69
1:B:1271:ILE:O	1:B:1276:GLN:N	2.26	0.69
1:B:2728:MET:O	1:B:2732:PHE:N	2.18	0.69
1:A:506:GLY:O	1:A:510:ALA:N	2.24	0.68
1:A:3030:GLY:O	1:A:3034:LEU:N	2.16	0.68
1:B:748:LYS:O	1:B:752:LEU:N	2.23	0.68
1:A:3036:ILE:O	1:A:3040:ILE:N	2.24	0.68
1:B:435:LEU:O	1:B:439:LEU:N	2.26	0.68
1:B:2035:THR:O	1:B:2039:GLU:N	2.18	0.68
1:A:583:TYR:O	1:A:587:GLY:N	2.24	0.68
1:A:2793:PRO:O	1:A:2797:SER:N	2.23	0.68
1:B:2772:GLY:O	1:B:2879:ASN:HA	1.92	0.68
1:A:1136:HIS:O	1:A:1140:ASN:N	2.16	0.68
1:A:2311:ILE:O	1:A:2315:MET:N	2.22	0.68
1:A:2472:ASN:O	1:A:2476:SER:N	2.25	0.68
1:A:2859:SER:O	1:A:2862:VAL:N	2.27	0.68
1:B:7:ASP:O	1:B:11:CYS:N	2.24	0.68
1:B:312:LEU:O	1:B:316:TYR:N	2.26	0.68
1:B:828:LYS:O	1:B:832:ARG:N	2.20	0.68
1:B:2064:ILE:O	1:B:2068:LEU:N	2.17	0.68
1:A:921:ALA:O	1:A:925:ARG:N	2.23	0.68
1:A:949:MET:O	1:A:953:GLU:N	2.22	0.68
1:B:1664:GLU:O	1:B:1668:LEU:N	2.22	0.68
1:B:2047:VAL:O	1:B:2051:LEU:N	2.22	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:281:GLU:O	1:A:285:LEU:N	2.26	0.68
1:A:2261:LEU:O	1:A:2265:PHE:N	2.20	0.68
1:A:2513:THR:O	1:A:2517:LEU:N	2.27	0.68
1:B:2842:PRO:O	1:B:2846:PHE:N	2.27	0.68
1:A:312:LEU:O	1:A:316:TYR:N	2.26	0.68
1:A:993:HIS:O	1:A:997:VAL:N	2.24	0.68
1:A:1598:LEU:O	1:A:1602:VAL:N	2.19	0.68
1:A:2205:TRP:O	1:A:2209:SER:N	2.26	0.68
1:A:2450:LEU:O	1:A:2454:ALA:N	2.16	0.68
1:A:2620:VAL:O	1:A:2624:CYS:N	2.23	0.68
1:B:1170:LYS:O	1:B:1174:PHE:N	2.18	0.68
1:B:1881:SER:O	1:B:1885:THR:N	2.19	0.68
1:B:2243:GLN:O	1:B:2247:ILE:N	2.22	0.68
1:A:1173:LEU:O	1:A:1177:CYS:N	2.20	0.68
1:A:2150:ALA:O	1:A:2154:GLU:N	2.21	0.68
1:B:2311:ILE:O	1:B:2315:MET:N	2.22	0.68
1:B:2859:SER:O	1:B:2862:VAL:N	2.27	0.68
1:A:2396:THR:O	1:A:2400:ARG:N	2.20	0.68
1:B:1263:SER:O	1:B:1267:GLU:N	2.17	0.68
1:B:2069:GLN:O	1:B:2073:LEU:N	2.18	0.67
1:A:9:LEU:O	1:A:13:ARG:N	2.18	0.67
1:A:313:TYR:O	1:A:317:ASP:N	2.20	0.67
1:A:523:PHE:O	1:A:527:PHE:N	2.25	0.67
1:A:1309:ALA:HB1	1:A:1314:THR:HA	1.76	0.67
1:A:1764:LEU:O	1:A:1768:ARG:N	2.25	0.67
1:A:1912:VAL:O	1:A:1917:ARG:N	2.25	0.67
1:A:2199:SER:O	1:A:2203:ILE:N	2.18	0.67
1:A:2243:GLN:O	1:A:2247:ILE:N	2.22	0.67
1:B:508:LEU:O	1:B:512:ILE:N	2.19	0.67
1:B:2399:GLN:O	1:B:2403:ASN:N	2.18	0.67
1:A:1847:HIS:O	1:A:1851:LEU:N	2.16	0.67
1:A:2842:PRO:O	1:A:2846:PHE:N	2.27	0.67
1:B:284:GLN:O	1:B:288:TYR:N	2.23	0.67
1:B:885:LEU:O	1:B:889:TYR:N	2.25	0.67
1:B:1554:ASN:O	1:B:1558:THR:N	2.24	0.67
1:B:2854:ARG:O	1:B:2858:THR:N	2.28	0.67
1:A:43:LEU:HA	1:A:59:ALA:HB3	1.77	0.67
1:A:1721:THR:O	1:A:1725:ASP:N	2.17	0.67
1:A:2854:ARG:O	1:A:2858:THR:N	2.28	0.67
1:B:978:SER:O	1:B:982:ARG:N	2.20	0.67
1:B:1115:LEU:O	1:B:1119:ALA:N	2.22	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1439:LEU:O	1:B:1443:HIS:N	2.21	0.67
1:B:2179:ILE:O	1:B:2183:GLU:N	2.22	0.67
1:B:3050:PRO:O	1:B:3054:ALA:N	2.27	0.67
1:B:1072:GLU:O	1:B:1076:GLN:N	2.20	0.67
1:A:944:LEU:O	1:A:948:LEU:N	2.23	0.67
1:A:992:ASN:O	1:A:996:HIS:N	2.22	0.67
1:A:1437:ARG:O	1:A:1441:ILE:N	2.18	0.67
1:A:2356:ILE:O	1:A:2361:LEU:N	2.24	0.67
1:B:659:LYS:O	1:B:664:THR:N	2.28	0.67
1:B:2513:THR:O	1:B:2517:LEU:N	2.27	0.67
1:B:2685:SER:N	1:B:2705:VAL:O	2.19	0.67
1:B:2895:GLU:O	1:B:2899:ILE:N	2.27	0.67
1:A:212:PHE:O	1:A:216:ALA:N	2.25	0.67
1:A:435:LEU:O	1:A:439:LEU:N	2.26	0.67
1:A:1155:LEU:O	1:A:1159:ALA:N	2.23	0.67
1:A:2332:LEU:O	1:A:2336:GLU:N	2.17	0.67
1:A:2512:PRO:O	1:A:2516:PHE:N	2.22	0.67
1:A:2599:THR:O	1:A:2603:ASN:N	2.26	0.67
1:B:43:LEU:HA	1:B:59:ALA:HB3	1.77	0.67
1:B:1173:LEU:O	1:B:1177:CYS:N	2.20	0.67
1:A:231:HIS:O	1:A:235:ALA:N	2.26	0.67
1:A:1664:GLU:O	1:A:1668:LEU:N	2.22	0.67
1:A:2488:CYS:O	1:A:2492:LEU:N	2.27	0.67
1:B:231:HIS:O	1:B:235:ALA:N	2.26	0.67
1:A:1739:ASN:HA	1:A:1742:ALA:HB3	1.76	0.67
1:A:2364:ALA:O	1:A:2368:ALA:N	2.20	0.67
1:B:30:PHE:O	1:B:34:ILE:N	2.28	0.67
1:B:1579:GLN:O	1:B:1583:TYR:N	2.19	0.67
1:B:2356:ILE:O	1:B:2361:LEU:N	2.24	0.67
1:B:457:ARG:O	1:B:461:GLU:N	2.23	0.66
1:B:954:LEU:O	1:B:958:GLU:N	2.24	0.66
1:B:1151:LYS:O	1:B:1155:LEU:N	2.27	0.66
1:B:2205:TRP:O	1:B:2209:SER:N	2.26	0.66
1:A:30:PHE:O	1:A:34:ILE:N	2.28	0.66
1:A:2895:GLU:O	1:A:2899:ILE:N	2.27	0.66
1:B:992:ASN:O	1:B:996:HIS:N	2.22	0.66
1:A:1518:HIS:O	1:A:1522:GLY:N	2.29	0.66
1:A:1868:GLY:O	1:A:1872:SER:N	2.18	0.66
1:A:2067:ALA:O	1:A:2071:LEU:N	2.18	0.66
1:B:2488:CYS:O	1:B:2492:LEU:N	2.27	0.66
1:A:885:LEU:O	1:A:889:TYR:N	2.25	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:974:SER:O	1:B:978:SER:N	2.21	0.66
1:B:1569:VAL:O	1:B:1573:ASP:N	2.18	0.66
1:B:1739:ASN:HA	1:B:1742:ALA:HB3	1.76	0.66
1:B:2251:LEU:O	1:B:2255:LEU:N	2.20	0.66
1:A:659:LYS:O	1:A:664:THR:N	2.28	0.66
1:A:1493:LEU:O	1:A:1497:LEU:N	2.19	0.66
1:A:2308:ALA:O	1:A:2311:ILE:N	2.29	0.66
1:A:2343:ASN:O	1:A:2347:GLU:N	2.17	0.66
1:A:2445:LEU:O	1:A:2449:GLU:N	2.18	0.66
1:B:67:TYR:O	1:B:71:GLU:N	2.24	0.66
1:B:991:LEU:O	1:B:995:LEU:N	2.23	0.66
1:B:1552:ASN:O	1:B:1556:TYR:N	2.21	0.66
1:B:212:PHE:O	1:B:216:ALA:N	2.25	0.66
1:B:350:ALA:O	1:B:354:HIS:N	2.29	0.66
1:B:655:THR:O	1:B:659:LYS:N	2.23	0.66
1:B:2376:SER:O	1:B:2380:ARG:N	2.21	0.66
1:A:2376:SER:O	1:A:2380:ARG:N	2.22	0.66
1:A:2413:LYS:O	1:A:2417:LEU:N	2.21	0.66
1:A:3050:PRO:O	1:A:3054:ALA:N	2.27	0.66
1:A:1054:PRO:O	1:A:1057:LYS:N	2.29	0.66
1:A:1930:ASP:O	1:A:1934:LEU:N	2.29	0.66
1:B:1518:HIS:O	1:B:1522:GLY:N	2.29	0.66
1:B:1657:MET:O	1:B:1660:ASN:N	2.29	0.66
1:A:45:ARG:O	1:A:60:VAL:N	2.28	0.66
1:B:1309:ALA:HB1	1:B:1314:THR:HA	1.76	0.66
1:B:1764:LEU:O	1:B:1768:ARG:N	2.25	0.66
1:B:2180:GLY:O	1:B:2184:SER:N	2.25	0.66
1:A:7:ASP:O	1:A:11:CYS:N	2.24	0.66
1:A:827:LYS:O	1:A:831:ASP:N	2.22	0.66
1:A:1632:MET:O	1:A:1636:GLN:N	2.19	0.66
1:B:523:PHE:O	1:B:527:PHE:N	2.25	0.66
1:B:1842:LEU:O	1:B:1846:ILE:N	2.29	0.66
1:B:3041:ASP:O	1:B:3045:LEU:N	2.24	0.66
1:A:1597:PHE:O	1:A:1601:SER:N	2.18	0.65
1:A:2731:VAL:O	1:A:2735:CYS:N	2.19	0.65
1:B:1054:PRO:O	1:B:1057:LYS:N	2.29	0.65
1:B:1969:ASP:O	1:B:1973:ARG:N	2.24	0.65
1:B:2744:GLU:O	1:B:2748:ARG:N	2.20	0.65
1:A:350:ALA:O	1:A:354:HIS:N	2.29	0.65
1:A:655:THR:O	1:A:659:LYS:N	2.23	0.65
1:A:2338:LEU:O	1:A:2342:GLY:N	2.21	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2061:GLN:O	1:B:2065:ILE:N	2.22	0.65
1:B:2308:ALA:O	1:B:2311:ILE:N	2.29	0.65
1:A:2682:THR:O	1:A:2707:SER:N	2.21	0.65
1:B:1382:PRO:O	1:B:1386:ILE:N	2.23	0.65
1:A:169:SER:O	1:A:173:ARG:N	2.23	0.65
1:B:1354:PRO:HA	1:B:1357:SER:H	1.61	0.65
1:B:1632:MET:O	1:B:1636:GLN:N	2.19	0.65
1:A:2092:CYS:O	1:A:2096:GLU:N	2.30	0.65
1:A:160:SER:O	1:A:199:CYS:N	2.28	0.65
1:A:1211:ALA:O	1:A:1215:ASP:N	2.26	0.65
1:B:11:CYS:O	1:B:15:LEU:N	2.21	0.65
1:A:1354:PRO:HA	1:A:1357:SER:H	1.61	0.65
1:A:1382:PRO:O	1:A:1386:ILE:N	2.23	0.65
1:A:3033:ASN:O	1:A:3037:GLN:N	2.18	0.65
1:B:2444:GLU:O	1:B:2448:ASP:N	2.25	0.65
1:B:2450:LEU:O	1:B:2454:ALA:N	2.16	0.65
1:A:1579:GLN:O	1:A:1583:TYR:N	2.19	0.65
1:B:2793:PRO:O	1:B:2797:SER:N	2.22	0.65
1:A:60:VAL:O	1:A:64:LEU:N	2.17	0.65
1:A:2047:VAL:O	1:A:2051:LEU:N	2.22	0.65
1:A:2099:HIS:O	1:A:2103:ALA:N	2.24	0.65
1:B:2092:CYS:O	1:B:2096:GLU:N	2.30	0.65
1:A:2253:LYS:O	1:A:2257:GLU:N	2.18	0.65
1:B:944:LEU:O	1:B:948:LEU:N	2.23	0.65
1:A:1554:ASN:O	1:A:1558:THR:N	2.24	0.64
1:A:2187:GLU:O	1:A:2191:ARG:N	2.26	0.64
1:A:1082:HIS:O	1:A:1086:ARG:N	2.24	0.64
1:A:1913:VAL:O	1:A:1918:ARG:N	2.31	0.64
1:A:2060:ARG:O	1:A:2064:ILE:N	2.21	0.64
1:B:160:SER:O	1:B:199:CYS:N	2.28	0.64
1:B:511:ILE:O	1:B:515:SER:N	2.29	0.64
1:B:1166:PRO:O	1:B:1170:LYS:N	2.25	0.64
1:B:1397:HIS:C	1:B:1400:LYS:H	2.01	0.64
1:A:609:GLU:O	1:A:613:VAL:N	2.31	0.64
1:A:2796:PHE:O	1:A:2800:GLN:N	2.19	0.64
1:B:481:LEU:O	1:B:485:ASN:N	2.17	0.64
1:B:1900:CYS:O	1:B:1902:ASP:N	2.29	0.64
1:B:1913:VAL:O	1:B:1918:ARG:N	2.31	0.64
1:B:2819:VAL:O	1:B:2823:VAL:N	2.19	0.64
1:A:1072:GLU:O	1:A:1076:GLN:N	2.20	0.64
1:A:1900:CYS:O	1:A:1902:ASP:N	2.29	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1930:ASP:O	1:B:1934:LEU:N	2.29	0.64
1:B:2250:ILE:O	1:B:2254:HIS:N	2.20	0.64
1:B:2538:HIS:O	1:B:2542:ASN:N	2.17	0.64
1:B:2727:VAL:O	1:B:2731:VAL:N	2.20	0.64
1:B:2914:ILE:O	1:B:2918:MET:N	2.25	0.64
1:A:271:LEU:O	1:A:275:LEU:N	2.25	0.64
1:A:2378:GLU:O	1:A:2382:GLY:N	2.23	0.64
1:A:2650:ASP:H	1:A:2689:GLU:HA	1.62	0.64
1:B:2778:GLU:O	1:B:2782:ASN:N	2.25	0.64
1:B:1951:HIS:HA	1:B:1954:ALA:HB3	1.80	0.64
1:B:2133:GLN:O	1:B:2136:ARG:N	2.31	0.64
1:A:1198:SER:O	1:A:1202:GLY:N	2.21	0.64
1:B:2879:ASN:N	1:B:2884:GLU:O	2.31	0.64
1:B:755:CYS:O	1:B:759:SER:N	2.30	0.64
1:B:2937:VAL:O	1:B:2941:SER:N	2.29	0.64
1:A:316:TYR:O	1:A:320:VAL:N	2.30	0.64
1:A:1115:LEU:O	1:A:1119:ALA:N	2.22	0.64
1:A:2728:MET:O	1:A:2732:PHE:N	2.18	0.64
1:B:2403:ASN:O	1:B:2407:SER:N	2.31	0.64
1:B:2528:GLY:O	1:B:2533:GLY:N	2.30	0.64
1:A:511:ILE:O	1:A:515:SER:N	2.29	0.64
1:A:1397:HIS:C	1:A:1400:LYS:H	2.01	0.64
1:A:2392:ARG:O	1:A:2396:THR:N	2.23	0.64
1:A:2528:GLY:O	1:A:2533:GLY:N	2.31	0.64
1:B:609:GLU:O	1:B:613:VAL:N	2.31	0.64
1:B:686:LEU:O	1:B:690:LEU:N	2.31	0.64
1:B:2294:GLU:O	1:B:2297:GLN:N	2.20	0.64
1:B:2620:VAL:O	1:B:2624:CYS:N	2.23	0.64
1:B:2650:ASP:H	1:B:2689:GLU:HA	1.63	0.64
1:B:2941:SER:O	1:B:2945:LEU:N	2.18	0.64
1:A:1745:THR:O	1:A:1749:PHE:N	2.27	0.63
1:A:1842:LEU:O	1:A:1846:ILE:N	2.29	0.63
1:A:2716:VAL:HA	1:A:2765:GLY:O	1.97	0.63
1:B:1437:ARG:O	1:B:1441:ILE:N	2.18	0.63
1:B:2298:VAL:CA	1:B:2301:ALA:HB3	2.27	0.63
1:B:921:ALA:O	1:B:925:ARG:N	2.23	0.63
1:B:1256:ILE:O	1:B:1260:VAL:N	2.26	0.63
1:B:2356:ILE:HA	1:B:2360:TYR:H	1.63	0.63
1:A:1532:VAL:O	1:A:1536:LYS:N	2.26	0.63
1:A:2403:ASN:O	1:A:2407:SER:N	2.31	0.63
1:B:1281:SER:O	1:B:1285:ASP:N	2.32	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1813:PHE:O	1:B:1817:GLY:N	2.31	0.63
1:B:2396:THR:O	1:B:2400:ARG:N	2.20	0.63
1:B:2693:ALA:N	1:B:2699:PRO:O	2.32	0.63
1:B:2716:VAL:HA	1:B:2765:GLY:O	1.97	0.63
1:A:2693:ALA:N	1:A:2699:PRO:O	2.32	0.63
1:A:2879:ASN:N	1:A:2884:GLU:O	2.31	0.63
1:B:1877:PHE:O	1:B:1881:SER:N	2.25	0.63
1:B:2504:MET:O	1:B:2508:GLY:N	2.32	0.63
1:A:13:ARG:O	1:A:17:HIS:N	2.32	0.63
1:A:488:TRP:O	1:A:492:PHE:N	2.24	0.63
1:A:1398:LYS:HA	1:A:1513:LEU:N	2.13	0.63
1:A:1485:ASP:O	1:A:1489:ARG:N	2.25	0.63
1:B:1868:GLY:O	1:B:1872:SER:N	2.18	0.63
1:B:2155:VAL:O	1:B:2159:CYS:N	2.24	0.63
1:B:2226:LEU:O	1:B:2230:ILE:N	2.25	0.63
1:A:1463:PHE:O	1:A:1467:ASP:N	2.23	0.63
1:B:13:ARG:O	1:B:17:HIS:N	2.32	0.63
1:B:1398:LYS:HA	1:B:1513:LEU:N	2.13	0.63
1:B:1591:LEU:O	1:B:1594:ILE:N	2.30	0.63
1:A:1813:PHE:O	1:A:1817:GLY:N	2.31	0.63
1:A:1951:HIS:HA	1:A:1954:ALA:HB3	1.80	0.63
1:B:1341:PRO:O	1:B:1345:VAL:N	2.31	0.63
1:B:1493:LEU:O	1:B:1497:LEU:N	2.19	0.63
1:B:2599:THR:O	1:B:2603:ASN:N	2.26	0.63
1:B:2880:GLU:C	1:B:2883:ALA:H	2.02	0.63
1:A:755:CYS:O	1:A:759:SER:N	2.30	0.63
1:A:1279:TRP:O	1:A:1283:LEU:N	2.18	0.63
1:A:2744:GLU:O	1:A:2748:ARG:N	2.20	0.63
1:A:2880:GLU:C	1:A:2883:ALA:H	2.02	0.63
1:B:45:ARG:O	1:B:60:VAL:N	2.28	0.63
1:B:1532:VAL:O	1:B:1536:LYS:N	2.26	0.63
1:B:2822:ASP:O	1:B:2826:ASN:N	2.18	0.63
1:A:686:LEU:O	1:A:690:LEU:N	2.31	0.63
1:A:691:ASP:O	1:A:695:LEU:N	2.25	0.63
1:A:989:THR:O	1:A:993:HIS:N	2.19	0.63
1:B:488:TRP:O	1:B:492:PHE:N	2.24	0.63
1:A:1812:ALA:O	1:A:1815:ASP:N	2.32	0.62
1:A:2504:MET:O	1:A:2508:GLY:N	2.32	0.62
1:B:2830:VAL:O	1:B:2833:TYR:N	2.31	0.62
1:A:2155:VAL:O	1:A:2159:CYS:N	2.23	0.62
1:A:1341:PRO:O	1:A:1345:VAL:N	2.31	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1750:TRP:O	1:A:1754:LYS:N	2.26	0.62
1:B:712:SER:O	1:B:716:VAL:N	2.20	0.62
1:A:1731:SER:C	1:A:1733:ALA:H	2.03	0.62
1:B:949:MET:O	1:B:953:GLU:N	2.22	0.62
1:B:2057:SER:O	1:B:2061:GLN:N	2.29	0.62
1:B:2480:HIS:O	1:B:2483:TRP:N	2.33	0.62
1:A:2298:VAL:CA	1:A:2301:ALA:HB3	2.27	0.62
1:A:2830:VAL:O	1:A:2833:TYR:N	2.31	0.62
1:A:2941:SER:O	1:A:2945:LEU:N	2.18	0.62
1:B:1082:HIS:O	1:B:1086:ARG:N	2.24	0.62
1:A:1955:LEU:HA	1:A:1958:ALA:HB3	1.81	0.62
1:A:2356:ILE:HA	1:A:2360:TYR:H	1.63	0.62
1:B:1812:ALA:O	1:B:1815:ASP:N	2.32	0.62
1:A:848:GLU:O	1:A:852:GLN:N	2.25	0.62
1:A:2061:GLN:O	1:A:2065:ILE:N	2.22	0.62
1:B:2067:ALA:O	1:B:2071:LEU:N	2.18	0.62
1:B:2257:GLU:O	1:B:2261:LEU:N	2.21	0.62
1:A:273:ASP:O	1:A:277:GLU:N	2.33	0.62
1:A:954:LEU:O	1:A:958:GLU:N	2.24	0.62
1:A:2538:HIS:O	1:A:2542:ASN:N	2.17	0.62
1:A:2958:PHE:O	1:A:2961:THR:N	2.32	0.62
1:B:1279:TRP:O	1:B:1283:LEU:N	2.18	0.62
1:B:2148:LYS:O	1:B:2151:ARG:N	2.33	0.62
1:A:2250:ILE:O	1:A:2254:HIS:N	2.20	0.62
1:A:2480:HIS:O	1:A:2483:TRP:N	2.33	0.62
1:B:827:LYS:O	1:B:831:ASP:N	2.22	0.62
1:B:1967:MET:O	1:B:1971:GLU:N	2.18	0.62
1:B:2660:GLU:O	1:B:2686:PHE:N	2.33	0.62
1:B:2958:PHE:O	1:B:2961:THR:N	2.32	0.62
1:A:1281:SER:O	1:A:1285:ASP:N	2.32	0.61
1:B:1487:SER:O	1:B:1490:SER:N	2.32	0.61
1:A:1569:VAL:O	1:A:1573:ASP:N	2.18	0.61
1:A:2133:GLN:O	1:A:2136:ARG:N	2.31	0.61
1:B:169:SER:O	1:B:173:ARG:N	2.23	0.61
1:B:1086:ARG:O	1:B:1090:ALA:N	2.31	0.61
1:B:2078:SER:O	1:B:2082:LYS:N	2.27	0.61
1:B:3041:ASP:CB	1:B:3044:ASN:H	2.14	0.61
1:A:459:LEU:O	1:A:463:ALA:N	2.25	0.61
1:A:2822:ASP:O	1:A:2826:ASN:N	2.18	0.61
1:A:751:SER:O	1:A:755:CYS:N	2.33	0.61
1:A:948:LEU:O	1:A:952:LYS:N	2.27	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1237:ILE:O	1:A:1241:TYR:N	2.28	0.61
1:A:2148:LYS:O	1:A:2151:ARG:N	2.33	0.61
1:A:3041:ASP:CB	1:A:3044:ASN:H	2.14	0.61
1:B:1237:ILE:O	1:B:1241:TYR:N	2.28	0.61
1:A:27:VAL:O	1:A:31:LYS:N	2.33	0.61
1:A:500:ILE:O	1:A:504:ASN:N	2.23	0.61
1:A:1657:MET:O	1:A:1660:ASN:N	2.29	0.61
1:A:2180:GLY:O	1:A:2184:SER:N	2.25	0.61
1:A:2727:VAL:O	1:A:2731:VAL:N	2.20	0.61
1:A:2937:VAL:O	1:A:2941:SER:N	2.29	0.61
1:B:1243:ASN:O	1:B:1247:PHE:N	2.34	0.61
1:B:2253:LYS:O	1:B:2257:GLU:N	2.18	0.61
1:B:2378:GLU:O	1:B:2382:GLY:N	2.23	0.61
1:A:1107:LEU:HA	1:A:1110:ALA:HB3	1.83	0.61
1:A:1456:GLY:O	1:A:1459:GLY:N	2.34	0.61
1:B:459:LEU:O	1:B:463:ALA:N	2.25	0.61
1:B:487:ILE:O	1:B:491:THR:N	2.26	0.61
1:B:999:LYS:O	1:B:1002:GLY:N	2.26	0.61
1:B:2924:GLU:HA	1:B:2928:ARG:N	2.13	0.61
1:A:2167:TYR:C	1:A:2169:LEU:H	2.04	0.61
1:A:1591:LEU:O	1:A:1594:ILE:N	2.30	0.61
1:A:2786:GLY:O	1:A:2789:LYS:N	2.31	0.61
1:B:1731:SER:C	1:B:1733:ALA:H	2.03	0.61
1:A:991:LEU:O	1:A:995:LEU:N	2.23	0.61
1:A:1877:PHE:O	1:A:1881:SER:N	2.25	0.61
1:A:1959:GLU:O	1:A:1963:ASP:N	2.19	0.61
1:B:271:LEU:O	1:B:275:LEU:N	2.25	0.61
1:B:525:LYS:O	1:B:529:GLY:N	2.33	0.61
1:B:751:SER:O	1:B:755:CYS:N	2.33	0.61
1:B:1420:LEU:O	1:B:1425:GLN:N	2.30	0.61
1:A:999:LYS:O	1:A:1002:GLY:N	2.26	0.61
1:A:1256:ILE:O	1:A:1260:VAL:N	2.26	0.61
1:B:27:VAL:O	1:B:31:LYS:N	2.33	0.61
1:B:1827:LEU:O	1:B:1831:CYS:N	2.24	0.61
1:B:1961:TYR:O	1:B:1965:LYS:N	2.19	0.61
1:B:2099:HIS:O	1:B:2103:ALA:N	2.24	0.61
1:A:98:SER:O	1:A:102:LYS:N	2.32	0.60
1:A:1243:ASN:O	1:A:1247:PHE:N	2.34	0.60
1:A:2924:GLU:HA	1:A:2928:ARG:N	2.12	0.60
1:B:273:ASP:O	1:B:277:GLU:N	2.33	0.60
1:B:948:LEU:O	1:B:952:LYS:N	2.27	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1107:LEU:HA	1:B:1110:ALA:HB3	1.83	0.60
1:B:1456:GLY:O	1:B:1459:GLY:N	2.34	0.60
1:B:1955:LEU:HA	1:B:1958:ALA:HB3	1.81	0.60
1:B:1959:GLU:O	1:B:1963:ASP:N	2.19	0.60
1:B:2167:TYR:C	1:B:2169:LEU:H	2.04	0.60
1:B:2732:PHE:O	1:B:2736:ASN:N	2.22	0.60
1:A:1166:PRO:O	1:A:1170:LYS:N	2.25	0.60
1:A:2444:GLU:O	1:A:2448:ASP:N	2.25	0.60
1:B:316:TYR:O	1:B:320:VAL:N	2.31	0.60
1:B:855:MET:O	1:B:859:ASN:N	2.34	0.60
1:B:2928:ARG:O	1:B:2932:GLU:N	2.21	0.60
1:A:1827:LEU:HA	1:A:1830:MET:CB	2.31	0.60
1:A:2179:ILE:O	1:A:2183:GLU:N	2.21	0.60
1:B:718:CYS:O	1:B:722:LEU:N	2.35	0.60
1:B:1827:LEU:HA	1:B:1830:MET:CB	2.31	0.60
1:B:2973:ARG:O	1:B:2976:ASP:N	2.33	0.60
1:A:2078:SER:O	1:A:2082:LYS:N	2.27	0.60
1:A:2660:GLU:O	1:A:2686:PHE:N	2.33	0.60
1:A:718:CYS:O	1:A:722:LEU:N	2.35	0.60
1:A:2684:GLN:H	1:A:2707:SER:N	2.00	0.60
1:B:193:ALA:O	1:B:197:GLY:N	2.35	0.60
1:B:1381:PHE:O	1:B:1385:VAL:N	2.22	0.60
1:B:2356:ILE:O	1:B:2360:TYR:N	2.34	0.60
1:A:210:LEU:O	1:A:214:SER:N	2.34	0.60
1:B:2719:ARG:N	1:B:2763:ARG:O	2.35	0.60
1:A:525:LYS:O	1:A:529:GLY:N	2.33	0.60
1:A:855:MET:O	1:A:859:ASN:N	2.34	0.60
1:A:1016:GLY:O	1:A:1020:THR:N	2.29	0.60
1:A:214:SER:O	1:A:218:GLN:N	2.35	0.60
1:A:314:ASN:O	1:A:318:LEU:N	2.27	0.60
1:B:2242:SER:O	1:B:2246:CYS:N	2.24	0.60
1:B:3001:SER:O	1:B:3005:VAL:N	2.22	0.60
1:A:1086:ARG:O	1:A:1090:ALA:N	2.31	0.59
1:A:2553:PRO:O	1:A:2557:LEU:N	2.35	0.59
1:A:193:ALA:O	1:A:197:GLY:N	2.35	0.59
1:A:1309:ALA:HA	1:A:1312:ARG:O	2.01	0.59
1:A:2057:SER:O	1:A:2061:GLN:N	2.29	0.59
1:A:2226:LEU:O	1:A:2230:ILE:N	2.25	0.59
1:B:1309:ALA:HA	1:B:1312:ARG:O	2.01	0.59
1:B:2553:PRO:O	1:B:2557:LEU:N	2.35	0.59
1:A:1487:SER:O	1:A:1490:SER:N	2.33	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2778:GLU:O	1:A:2782:ASN:N	2.25	0.59
1:A:2719:ARG:N	1:A:2763:ARG:O	2.35	0.59
1:B:2175:ARG:O	1:B:2178:ALA:HB3	2.02	0.59
1:B:2684:GLN:H	1:B:2707:SER:N	2.00	0.59
1:A:2356:ILE:O	1:A:2360:TYR:N	2.34	0.59
1:A:2934:THR:O	1:A:2938:MET:N	2.19	0.59
1:B:2682:THR:C	1:B:2707:SER:H	2.05	0.59
1:B:3033:ASN:O	1:B:3037:GLN:N	2.18	0.59
1:B:214:SER:O	1:B:218:GLN:N	2.35	0.59
1:B:1616:ASP:O	1:B:1620:GLN:N	2.36	0.59
1:A:748:LYS:O	1:A:752:LEU:N	2.23	0.59
1:B:2392:ARG:O	1:B:2396:THR:N	2.23	0.59
1:A:1686:ILE:O	1:A:2177:GLN:HA	2.03	0.59
1:A:974:SER:O	1:A:978:SER:N	2.21	0.58
1:A:1967:MET:O	1:A:1971:GLU:N	2.18	0.58
1:A:2459:ARG:O	1:A:2464:CYS:N	2.32	0.58
1:A:2682:THR:C	1:A:2707:SER:H	2.05	0.58
1:B:623:ALA:O	1:B:626:PHE:N	2.36	0.58
1:B:1745:THR:O	1:B:1749:PHE:N	2.27	0.58
1:A:1616:ASP:O	1:A:1620:GLN:N	2.36	0.58
1:B:1556:TYR:O	1:B:1560:LYS:N	2.27	0.58
1:B:2786:GLY:O	1:B:2789:LYS:N	2.31	0.58
1:A:208:LYS:O	1:A:212:PHE:N	2.32	0.58
1:A:1815:ASP:O	1:A:1818:GLY:N	2.33	0.58
1:A:1928:PHE:O	1:A:1932:PHE:N	2.30	0.58
1:B:2060:ARG:O	1:B:2064:ILE:N	2.21	0.58
1:A:19:ARG:O	1:A:77:ILE:N	2.37	0.58
1:A:157:CYS:O	1:A:161:GLN:N	2.34	0.58
1:A:3020:VAL:CB	1:A:3024:THR:H	2.17	0.58
1:B:646:SER:O	1:B:648:VAL:N	2.37	0.58
1:B:1282:LEU:O	1:B:1286:CYS:N	2.33	0.58
1:B:2171:PRO:O	1:B:2175:ARG:N	2.22	0.58
1:B:2338:LEU:O	1:B:2342:GLY:N	2.21	0.58
1:A:487:ILE:O	1:A:491:THR:N	2.26	0.58
1:A:646:SER:O	1:A:648:VAL:N	2.37	0.58
1:A:1084:GLN:O	1:A:1088:LEU:N	2.25	0.58
1:B:848:GLU:O	1:B:852:GLN:N	2.25	0.58
1:B:1016:GLY:O	1:B:1020:THR:N	2.29	0.58
1:B:1211:ALA:O	1:B:1215:ASP:N	2.26	0.58
1:B:1583:TYR:O	1:B:1592:GLU:HA	2.03	0.58
1:B:1750:TRP:O	1:B:1754:LYS:N	2.26	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1190:VAL:O	1:A:1194:LEU:N	2.21	0.58
1:A:1549:ASN:O	1:A:1553:GLU:N	2.24	0.58
1:B:1073:VAL:O	1:B:1077:PHE:N	2.22	0.58
1:B:2389:SER:O	1:B:2393:PHE:N	2.26	0.58
1:A:1420:LEU:O	1:A:1425:GLN:N	2.30	0.58
1:A:1583:TYR:O	1:A:1592:GLU:HA	2.03	0.58
1:B:2934:THR:O	1:B:2938:MET:N	2.19	0.58
1:A:623:ALA:O	1:A:626:PHE:N	2.36	0.58
1:A:1832:GLU:O	1:A:1836:ASP:N	2.32	0.58
1:B:157:CYS:O	1:B:161:GLN:N	2.34	0.58
1:A:2389:SER:O	1:A:2393:PHE:N	2.26	0.58
1:B:1832:GLU:O	1:B:1836:ASP:N	2.32	0.58
1:B:3020:VAL:CB	1:B:3024:THR:H	2.17	0.58
1:A:2270:LEU:O	1:A:2274:ALA:N	2.19	0.58
1:A:3001:SER:O	1:A:3005:VAL:N	2.22	0.58
1:B:2470:TYR:O	1:B:2474:LEU:N	2.21	0.58
1:B:2649:ALA:N	1:B:2689:GLU:HA	2.19	0.58
1:A:270:ARG:O	1:A:274:SER:N	2.27	0.57
1:A:682:VAL:HA	1:A:738:GLU:HA	1.86	0.57
1:A:1398:LYS:N	1:A:1512:ALA:HB3	2.19	0.57
1:B:433:SER:HA	1:B:437:MET:H	1.69	0.57
1:B:2298:VAL:HA	1:B:2302:LYS:H	1.69	0.57
1:A:433:SER:HA	1:A:437:MET:H	1.69	0.57
1:A:1823:ILE:HA	1:A:1826:LEU:H	1.70	0.57
1:A:2175:ARG:O	1:A:2178:ALA:HB3	2.02	0.57
1:A:2242:SER:O	1:A:2246:CYS:N	2.24	0.57
1:B:210:LEU:O	1:B:214:SER:N	2.34	0.57
1:B:276:LYS:HA	1:B:280:ILE:CB	2.35	0.57
1:B:1398:LYS:N	1:B:1512:ALA:HB3	2.19	0.57
1:B:2829:PRO:CB	1:B:2912:ARG:N	2.67	0.57
1:A:555:VAL:O	1:A:560:GLU:N	2.37	0.57
1:A:2246:CYS:O	1:A:2249:ASP:N	2.30	0.57
1:A:2649:ALA:N	1:A:2689:GLU:HA	2.19	0.57
1:B:19:ARG:O	1:B:77:ILE:N	2.36	0.57
1:B:98:SER:O	1:B:102:LYS:N	2.33	0.57
1:B:1686:ILE:O	1:B:2177:GLN:HA	2.03	0.57
1:A:3003:ASN:HA	1:A:3006:ALA:HB3	1.85	0.57
1:B:691:ASP:O	1:B:695:LEU:N	2.25	0.57
1:B:12:CYS:O	1:B:16:GLU:N	2.35	0.57
1:B:309:ARG:O	1:B:313:TYR:N	2.25	0.57
1:A:1969:ASP:O	1:A:1973:ARG:N	2.24	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:971:LYS:O	1:B:975:ASN:N	2.33	0.57
1:A:103:TYR:O	1:A:107:CYS:N	2.32	0.57
1:A:416:ALA:O	1:A:420:ILE:N	2.24	0.57
1:A:878:THR:HA	1:A:881:ALA:HB3	1.87	0.57
1:A:1631:ILE:O	1:A:1635:SER:N	2.29	0.57
1:A:2154:GLU:O	1:A:2157:GLU:N	2.38	0.57
1:A:121:LEU:O	1:A:125:MET:N	2.31	0.57
1:A:1580:LYS:HA	1:A:1596:HIS:HA	1.86	0.57
1:A:2780:LEU:O	1:A:2783:ASN:N	2.37	0.57
1:B:1551:ASP:O	1:B:1555:LEU:N	2.24	0.57
1:B:2780:LEU:O	1:B:2783:ASN:N	2.37	0.57
1:A:2128:LEU:HA	1:A:2131:ALA:HB3	1.86	0.57
1:A:2300:TRP:O	1:A:2303:LYS:HA	2.05	0.57
1:B:729:TYR:O	1:B:732:MET:N	2.38	0.57
1:B:1815:ASP:O	1:B:1818:GLY:N	2.33	0.57
1:B:2187:GLU:O	1:B:2191:ARG:N	2.25	0.57
1:B:2300:TRP:O	1:B:2303:LYS:HA	2.05	0.57
1:A:2365:VAL:HA	1:A:2368:ALA:HB3	1.87	0.57
1:B:270:ARG:O	1:B:274:SER:N	2.27	0.57
1:B:1190:VAL:O	1:B:1194:LEU:N	2.21	0.57
1:B:2246:CYS:O	1:B:2249:ASP:N	2.30	0.57
1:B:3003:ASN:HA	1:B:3006:ALA:HB3	1.86	0.57
1:A:1381:PHE:O	1:A:1385:VAL:N	2.22	0.56
1:A:2598:ARG:HA	1:A:2601:ALA:HB3	1.86	0.56
1:A:2829:PRO:CB	1:A:2912:ARG:N	2.68	0.56
1:A:2647:ILE:H	1:A:2691:ARG:HA	1.70	0.56
1:A:2848:LYS:HA	1:A:2851:ALA:HB3	1.87	0.56
1:B:682:VAL:HA	1:B:738:GLU:HA	1.86	0.56
1:B:2481:ASP:O	1:B:2485:PHE:N	2.34	0.56
1:B:2647:ILE:H	1:B:2691:ARG:HA	1.70	0.56
1:A:122:ASN:O	1:A:126:ASP:N	2.38	0.56
1:A:276:LYS:HA	1:A:280:ILE:CB	2.35	0.56
1:A:729:TYR:O	1:A:732:MET:N	2.38	0.56
1:A:1282:LEU:O	1:A:1286:CYS:N	2.33	0.56
1:A:1551:ASP:O	1:A:1555:LEU:N	2.24	0.56
1:B:555:VAL:O	1:B:560:GLU:N	2.37	0.56
1:B:844:GLY:O	1:B:848:GLU:N	2.28	0.56
1:B:1171:GLN:O	1:B:1175:ALA:N	2.17	0.56
1:B:2128:LEU:HA	1:B:2131:ALA:HB3	1.86	0.56
1:B:2598:ARG:HA	1:B:2601:ALA:HB3	1.86	0.56
1:A:2732:PHE:O	1:A:2736:ASN:N	2.22	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:254:LEU:O	1:B:258:ILE:N	2.38	0.56
1:A:309:ARG:O	1:A:313:TYR:N	2.25	0.56
1:A:854:SER:O	1:A:858:PHE:N	2.36	0.56
1:B:122:ASN:O	1:B:126:ASP:N	2.39	0.56
1:B:1928:PHE:O	1:B:1932:PHE:N	2.30	0.56
1:B:2848:LYS:HA	1:B:2851:ALA:HB3	1.88	0.56
1:A:254:LEU:O	1:A:258:ILE:N	2.38	0.56
1:A:1544:TYR:O	1:A:1548:ASP:N	2.39	0.56
1:A:3027:SER:O	1:A:3029:GLY:N	2.39	0.56
1:B:1544:TYR:O	1:B:1548:ASP:N	2.39	0.56
1:B:2262:ALA:O	1:B:2266:LYS:N	2.39	0.56
1:B:2365:VAL:HA	1:B:2368:ALA:HB3	1.87	0.56
1:A:3041:ASP:O	1:A:3045:LEU:N	2.24	0.56
1:B:314:ASN:O	1:B:318:LEU:N	2.27	0.56
1:B:1823:ILE:HA	1:B:1826:LEU:H	1.69	0.56
1:B:3015:GLU:O	1:B:3019:GLY:N	2.39	0.56
1:A:1827:LEU:O	1:A:1831:CYS:N	2.24	0.56
1:A:2152:VAL:O	1:A:2155:VAL:N	2.39	0.56
1:B:2306:SER:N	1:B:2309:LEU:H	1.97	0.56
1:A:2298:VAL:HA	1:A:2302:LYS:H	1.69	0.56
1:A:3015:GLU:O	1:A:3019:GLY:N	2.39	0.56
1:B:103:TYR:O	1:B:107:CYS:N	2.32	0.56
1:B:878:THR:HA	1:B:881:ALA:HB3	1.87	0.56
1:A:520:ASP:HA	1:A:524:TRP:H	1.70	0.55
1:A:1073:VAL:O	1:A:1077:PHE:N	2.22	0.55
1:A:2017:SER:HA	1:A:2021:CYS:CB	2.36	0.55
1:A:2176:LEU:O	1:A:2179:ILE:N	2.40	0.55
1:B:2255:LEU:O	1:B:2259:SER:N	2.30	0.55
1:A:1556:TYR:O	1:A:1560:LYS:N	2.27	0.55
1:A:3020:VAL:H	1:A:3023:GLY:HA2	1.72	0.55
1:B:1463:PHE:O	1:B:1467:ASP:N	2.23	0.55
1:B:1580:LYS:HA	1:B:1596:HIS:HA	1.86	0.55
1:A:99:SER:O	1:A:103:TYR:N	2.26	0.55
1:A:1171:GLN:O	1:A:1175:ALA:N	2.17	0.55
1:A:2262:ALA:O	1:A:2266:LYS:N	2.39	0.55
1:B:520:ASP:HA	1:B:524:TRP:H	1.70	0.55
1:B:854:SER:O	1:B:858:PHE:N	2.36	0.55
1:B:2154:GLU:O	1:B:2157:GLU:N	2.38	0.55
1:B:2685:SER:O	1:B:2705:VAL:N	2.40	0.55
1:B:3027:SER:O	1:B:3029:GLY:N	2.39	0.55
1:B:121:LEU:O	1:B:125:MET:N	2.31	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1084:GLN:O	1:B:1088:LEU:N	2.25	0.55
1:B:1549:ASN:O	1:B:1553:GLU:N	2.24	0.55
1:B:500:ILE:O	1:B:504:ASN:N	2.23	0.55
1:B:1343:ILE:O	1:B:1346:GLU:N	2.39	0.55
1:A:703:ASN:O	1:A:707:SER:N	2.35	0.55
1:A:1343:ILE:O	1:A:1346:GLU:N	2.39	0.55
1:A:2973:ARG:O	1:A:2976:ASP:N	2.33	0.55
1:B:2017:SER:HA	1:B:2021:CYS:CB	2.36	0.55
1:B:2152:VAL:O	1:B:2155:VAL:N	2.39	0.55
1:A:2228:THR:O	1:A:2231:LEU:N	2.37	0.55
1:A:2922:GLY:O	1:A:2924:GLU:N	2.40	0.55
1:B:657:PHE:O	1:B:661:ASP:N	2.34	0.55
1:A:2685:SER:O	1:A:2705:VAL:N	2.40	0.55
1:B:33:LEU:HA	1:B:36:ASP:HA	1.89	0.55
1:B:1138:ALA:O	1:B:1142:GLU:N	2.28	0.55
1:B:2168:SER:HA	1:B:2171:PRO:N	2.22	0.55
1:A:14:GLN:HA	1:A:17:HIS:CB	2.38	0.54
1:A:1112:PRO:O	1:A:1117:GLN:N	2.37	0.54
1:A:2168:SER:HA	1:A:2171:PRO:N	2.22	0.54
1:A:2608:THR:O	1:A:2612:ARG:N	2.29	0.54
1:B:1643:ILE:O	1:B:1647:LEU:N	2.32	0.54
1:B:2018:LEU:O	1:B:2022:GLY:HA3	2.07	0.54
1:B:2608:THR:O	1:B:2612:ARG:N	2.29	0.54
1:A:689:SER:O	1:A:693:CYS:N	2.23	0.54
1:A:1237:ILE:HA	1:A:1240:ASN:CB	2.38	0.54
1:B:2922:GLY:O	1:B:2924:GLU:N	2.40	0.54
1:B:3020:VAL:H	1:B:3023:GLY:HA2	1.72	0.54
1:A:12:CYS:O	1:A:16:GLU:N	2.35	0.54
1:A:33:LEU:HA	1:A:36:ASP:HA	1.89	0.54
1:A:1901:LEU:HA	1:A:1904:LYS:CB	2.37	0.54
1:A:2018:LEU:O	1:A:2022:GLY:HA3	2.07	0.54
1:B:1901:LEU:HA	1:B:1904:LYS:CB	2.37	0.54
1:B:2176:LEU:O	1:B:2179:ILE:N	2.40	0.54
1:B:2542:ASN:O	1:B:2546:SER:N	2.24	0.54
1:B:2877:LEU:H	1:B:2887:HIS:HA	1.72	0.54
1:A:2470:TYR:O	1:A:2474:LEU:N	2.21	0.54
1:B:2376:SER:N	1:B:2379:LEU:H	2.06	0.54
1:A:2063:GLY:O	1:A:2067:ALA:N	2.29	0.54
1:A:2315:MET:HA	1:A:2319:LEU:H	1.72	0.54
1:B:1038:VAL:HA	1:B:1042:LEU:H	1.73	0.54
1:B:1237:ILE:HA	1:B:1240:ASN:CB	2.38	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2722:LEU:O	1:A:2726:ALA:N	2.39	0.54
1:B:415:ILE:O	1:B:419:LEU:N	2.37	0.54
1:A:834:GLU:O	1:A:837:SER:N	2.41	0.54
1:A:2415:ALA:O	1:A:2419:ARG:N	2.41	0.54
1:A:2967:ALA:HB3	1:A:2970:LEU:HA	1.89	0.54
1:B:208:LYS:O	1:B:212:PHE:N	2.32	0.54
1:B:416:ALA:O	1:B:420:ILE:N	2.24	0.54
1:B:460:THR:HA	1:B:463:ALA:HB3	1.89	0.54
1:A:2167:TYR:C	1:A:2169:LEU:N	2.61	0.54
1:A:2699:PRO:HA	1:A:2716:VAL:O	2.07	0.54
1:B:2415:ALA:O	1:B:2419:ARG:N	2.41	0.54
1:A:1842:LEU:O	1:A:1845:LEU:N	2.41	0.54
1:B:1123:ALA:O	1:B:1127:ALA:N	2.41	0.54
1:A:1123:ALA:O	1:A:1127:ALA:N	2.41	0.54
1:A:1677:GLU:O	1:A:1681:ILE:N	2.27	0.54
1:A:1961:TYR:O	1:A:1965:LYS:N	2.19	0.54
1:A:2384:MET:HA	1:A:2473:CYS:HA	1.90	0.54
1:B:834:GLU:O	1:B:837:SER:N	2.41	0.54
1:B:2469:ASN:O	1:B:2473:CYS:N	2.26	0.54
1:B:2629:ILE:O	1:B:2633:LEU:N	2.41	0.54
1:B:14:GLN:HA	1:B:17:HIS:CB	2.37	0.53
1:B:40:ILE:C	1:B:112:ALA:HB3	2.28	0.53
1:B:1842:LEU:O	1:B:1845:LEU:N	2.41	0.53
1:A:40:ILE:C	1:A:112:ALA:HB3	2.28	0.53
1:A:460:THR:HA	1:A:463:ALA:HB3	1.89	0.53
1:A:1583:TYR:CB	1:A:1596:HIS:H	2.21	0.53
1:A:2877:LEU:H	1:A:2887:HIS:HA	1.72	0.53
1:B:703:ASN:O	1:B:707:SER:N	2.35	0.53
1:A:1138:ALA:O	1:A:1142:GLU:N	2.28	0.53
1:A:2629:ILE:O	1:A:2633:LEU:N	2.41	0.53
1:B:503:GLU:O	1:B:507:LEU:N	2.41	0.53
1:B:2010:ARG:O	1:B:2013:GLY:N	2.41	0.53
1:B:2315:MET:HA	1:B:2319:LEU:H	1.72	0.53
1:B:2520:MET:O	1:B:2523:LEU:N	2.42	0.53
1:A:1478:GLN:O	1:A:1482:CYS:N	2.42	0.53
1:B:1583:TYR:CB	1:B:1596:HIS:H	2.21	0.53
1:A:25:LYS:O	1:A:29:LYS:N	2.23	0.53
1:A:415:ILE:O	1:A:419:LEU:N	2.37	0.53
1:A:503:GLU:O	1:A:507:LEU:N	2.40	0.53
1:A:844:GLY:O	1:A:848:GLU:N	2.28	0.53
1:A:1643:ILE:O	1:A:1647:LEU:N	2.32	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2520:MET:O	1:A:2523:LEU:N	2.42	0.53
1:A:2922:GLY:O	1:A:2925:GLY:N	2.26	0.53
1:B:1112:PRO:O	1:B:1117:GLN:N	2.37	0.53
1:B:2384:MET:HA	1:B:2473:CYS:HA	1.90	0.53
1:B:2726:ALA:O	1:B:2729:GLN:N	2.42	0.53
1:A:69:GLN:O	1:A:73:GLU:N	2.42	0.53
1:A:1997:THR:O	1:A:1999:ILE:N	2.42	0.53
1:A:3020:VAL:C	1:A:3023:GLY:H	2.12	0.53
1:A:2376:SER:N	1:A:2379:LEU:H	2.06	0.53
1:B:2381:ASN:O	1:B:2385:LYS:N	2.26	0.53
1:B:2967:ALA:HB3	1:B:2970:LEU:HA	1.89	0.53
1:A:1907:ARG:O	1:A:1910:LEU:N	2.35	0.53
1:A:2171:PRO:O	1:A:2175:ARG:N	2.22	0.53
1:A:2469:ASN:O	1:A:2473:CYS:N	2.26	0.53
1:A:2683:ILE:O	1:A:2685:SER:N	2.42	0.53
1:B:729:TYR:H	1:B:733:GLY:H	1.57	0.53
1:B:1631:ILE:O	1:B:1635:SER:N	2.29	0.53
1:B:2683:ILE:O	1:B:2685:SER:N	2.42	0.53
1:B:3020:VAL:C	1:B:3023:GLY:H	2.12	0.53
1:A:1063:VAL:O	1:A:1067:ASP:N	2.42	0.53
1:A:2682:THR:H	1:A:2707:SER:CB	2.21	0.53
1:B:1070:VAL:H	1:B:1073:VAL:CB	2.22	0.53
1:A:631:PRO:O	1:A:635:HIS:N	2.29	0.53
1:A:2010:ARG:O	1:A:2013:GLY:N	2.41	0.53
1:A:2306:SER:N	1:A:2309:LEU:H	1.97	0.53
1:A:2704:CYS:O	1:A:2711:GLU:HA	2.09	0.53
1:B:693:CYS:O	1:B:697:LEU:N	2.41	0.53
1:B:2228:THR:O	1:B:2231:LEU:N	2.37	0.53
1:B:2704:CYS:O	1:B:2711:GLU:HA	2.09	0.53
1:A:1038:VAL:HA	1:A:1042:LEU:H	1.73	0.52
1:B:1063:VAL:O	1:B:1067:ASP:N	2.42	0.52
1:B:1478:GLN:O	1:B:1482:CYS:N	2.42	0.52
1:B:2167:TYR:C	1:B:2169:LEU:N	2.61	0.52
1:B:2471:ILE:O	1:B:2475:LEU:N	2.32	0.52
1:B:2806:MET:O	1:B:2816:LYS:N	2.43	0.52
1:A:2706:GLY:C	1:A:2709:GLY:H	2.12	0.52
1:B:69:GLN:O	1:B:73:GLU:N	2.42	0.52
1:B:433:SER:O	1:B:437:MET:N	2.42	0.52
1:B:2217:PHE:O	1:B:2221:GLU:N	2.43	0.52
1:B:2699:PRO:HA	1:B:2716:VAL:O	2.08	0.52
1:A:693:CYS:O	1:A:697:LEU:N	2.41	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2844:ILE:O	1:A:2848:LYS:N	2.43	0.52
1:B:1732:ALA:N	1:B:1734:VAL:H	2.07	0.52
1:B:1907:ARG:O	1:B:1910:LEU:N	2.35	0.52
1:B:2722:LEU:O	1:B:2726:ALA:N	2.39	0.52
1:A:729:TYR:H	1:A:733:GLY:H	1.57	0.52
1:A:2103:ALA:HA	1:A:2106:ASN:O	2.10	0.52
1:A:2217:PHE:O	1:A:2221:GLU:N	2.43	0.52
1:A:2255:LEU:O	1:A:2259:SER:N	2.30	0.52
1:A:2726:ALA:O	1:A:2729:GLN:N	2.42	0.52
1:A:2880:GLU:HA	1:A:2883:ALA:HA	1.92	0.52
1:A:433:SER:O	1:A:437:MET:N	2.42	0.52
1:A:2481:ASP:O	1:A:2485:PHE:N	2.34	0.52
1:B:2103:ALA:HA	1:B:2106:ASN:O	2.09	0.52
1:B:2703:ASP:HA	1:B:2712:ARG:O	2.10	0.52
1:B:2880:GLU:HA	1:B:2883:ALA:HA	1.92	0.52
1:B:2682:THR:H	1:B:2707:SER:CB	2.21	0.52
1:A:505:PHE:O	1:A:509:GLY:HA3	2.10	0.52
1:A:657:PHE:O	1:A:661:ASP:N	2.34	0.52
1:A:1732:ALA:N	1:A:1734:VAL:H	2.08	0.52
1:A:2247:ILE:O	1:A:2250:ILE:N	2.43	0.52
1:A:2648:PRO:HA	1:A:2689:GLU:O	2.10	0.52
1:B:2074:CYS:O	1:B:2077:LEU:N	2.43	0.52
1:B:2829:PRO:CB	1:B:2912:ARG:CA	2.88	0.52
1:B:2844:ILE:O	1:B:2848:LYS:N	2.43	0.52
1:A:977:CYS:O	1:A:981:ARG:N	2.39	0.52
1:A:1968:ASP:O	1:A:1972:LYS:N	2.23	0.52
1:A:2793:PRO:CB	1:A:2796:PHE:H	2.23	0.52
1:B:168:PHE:O	1:B:172:PHE:N	2.27	0.52
1:B:505:PHE:O	1:B:509:GLY:HA3	2.10	0.52
1:A:2074:CYS:O	1:A:2077:LEU:N	2.43	0.52
1:A:2604:ARG:O	1:A:2608:THR:N	2.42	0.52
1:B:2247:ILE:O	1:B:2250:ILE:N	2.43	0.52
1:A:1070:VAL:H	1:A:1073:VAL:CB	2.22	0.51
1:B:1637:ASP:O	1:B:1640:GLN:N	2.42	0.51
1:A:580:LEU:O	1:A:584:GLN:N	2.29	0.51
1:A:1825:GLN:O	1:A:1829:PRO:N	2.44	0.51
1:B:2298:VAL:HA	1:B:2301:ALA:CB	2.33	0.51
1:B:2628:ILE:HA	1:B:2631:ALA:HB3	1.92	0.51
1:A:971:LYS:O	1:A:975:ASN:N	2.34	0.51
1:A:483:LEU:HA	1:A:524:TRP:HA	1.92	0.51
1:A:2829:PRO:CB	1:A:2912:ARG:CA	2.88	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1968:ASP:O	1:B:1972:LYS:N	2.23	0.51
1:B:2793:PRO:CB	1:B:2796:PHE:H	2.23	0.51
1:A:168:PHE:O	1:A:172:PHE:N	2.27	0.51
1:A:2290:GLU:HA	1:A:2293:LEU:CB	2.41	0.51
1:B:2459:ARG:O	1:B:2464:CYS:N	2.32	0.51
1:A:2924:GLU:O	1:A:2928:ARG:N	2.44	0.51
1:B:282:LEU:HA	1:B:285:LEU:CB	2.40	0.51
1:B:1997:THR:O	1:B:1999:ILE:N	2.42	0.51
1:A:749:ALA:O	1:A:753:MET:N	2.25	0.51
1:A:1637:ASP:O	1:A:1640:GLN:N	2.42	0.51
1:A:1908:THR:O	1:A:1911:ALA:N	2.43	0.51
1:A:282:LEU:HA	1:A:285:LEU:CB	2.40	0.51
1:A:608:LEU:O	1:A:612:LEU:N	2.33	0.51
1:A:1951:HIS:O	1:A:1954:ALA:N	2.44	0.51
1:A:2703:ASP:HA	1:A:2712:ARG:O	2.10	0.51
1:B:2693:ALA:H	1:B:2700:LYS:HA	1.76	0.51
1:A:1156:THR:O	1:A:1160:VAL:N	2.36	0.51
1:B:25:LYS:O	1:B:29:LYS:N	2.23	0.51
1:B:310:SER:O	1:B:314:ASN:N	2.30	0.51
1:B:1908:THR:O	1:B:1911:ALA:N	2.43	0.51
1:B:2648:PRO:HA	1:B:2689:GLU:O	2.10	0.51
1:A:1383:SER:O	1:A:1387:LYS:N	2.42	0.51
1:A:2628:ILE:HA	1:A:2631:ALA:HB3	1.92	0.51
1:A:2786:GLY:O	1:A:2788:HIS:N	2.44	0.51
1:A:2872:HIS:CB	1:A:2875:ASN:H	2.24	0.51
1:B:1383:SER:O	1:B:1387:LYS:N	2.42	0.51
1:A:1116:GLN:HA	1:A:1119:ALA:HB3	1.93	0.50
1:A:2879:ASN:CB	1:A:2882:SER:H	2.24	0.50
1:A:159:ILE:O	1:A:195:THR:HA	2.11	0.50
1:B:1951:HIS:O	1:B:1954:ALA:N	2.44	0.50
1:B:2706:GLY:C	1:B:2709:GLY:H	2.12	0.50
1:A:1198:SER:HA	1:A:1201:PHE:CB	2.41	0.50
1:A:2841:ASP:O	1:A:2843:ALA:N	2.45	0.50
1:B:689:SER:O	1:B:693:CYS:N	2.23	0.50
1:B:1825:GLN:O	1:B:1829:PRO:N	2.44	0.50
1:B:2924:GLU:O	1:B:2928:ARG:N	2.44	0.50
1:A:2092:CYS:HA	1:A:2095:LEU:CB	2.41	0.50
1:B:242:THR:H	1:B:1105:SER:CB	2.25	0.50
1:B:1677:GLU:O	1:B:1681:ILE:N	2.27	0.50
1:B:2290:GLU:HA	1:B:2293:LEU:CB	2.41	0.50
1:A:2016:ASP:O	1:A:2021:CYS:N	2.44	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2783:ASN:C	1:A:2786:GLY:H	2.15	0.50
1:A:3028:VAL:C	1:A:3032:VAL:H	2.06	0.50
1:B:2092:CYS:HA	1:B:2095:LEU:CB	2.41	0.50
1:B:2604:ARG:O	1:B:2608:THR:N	2.42	0.50
1:B:2786:GLY:O	1:B:2788:HIS:N	2.44	0.50
1:B:1489:ARG:O	1:B:1493:LEU:N	2.33	0.50
1:B:1905:SER:O	1:B:1908:THR:N	2.45	0.50
1:A:1953:THR:O	1:A:1957:TYR:N	2.37	0.50
1:B:159:ILE:O	1:B:195:THR:HA	2.11	0.50
1:B:483:LEU:HA	1:B:524:TRP:HA	1.93	0.50
1:B:2783:ASN:C	1:B:2786:GLY:H	2.15	0.50
1:A:325:HIS:O	1:A:438:ILE:N	2.44	0.50
1:A:2387:PHE:O	1:A:2391:ALA:N	2.24	0.50
1:B:2306:SER:HA	1:B:2310:SER:H	1.77	0.50
1:B:1198:SER:HA	1:B:1201:PHE:CB	2.41	0.50
1:B:2394:SER:CB	1:B:2466:ALA:HB2	2.42	0.50
1:B:2841:ASP:O	1:B:2843:ALA:N	2.45	0.50
1:A:2082:LYS:CB	1:B:2083:GLY:HA2	2.42	0.49
1:B:608:LEU:O	1:B:612:LEU:N	2.33	0.49
1:B:2879:ASN:CB	1:B:2882:SER:H	2.24	0.49
1:A:1087:MET:O	1:A:1090:ALA:HB3	2.12	0.49
1:A:2305:GLN:C	1:A:2307:LEU:H	2.15	0.49
1:A:2391:ALA:HA	1:A:2466:ALA:HA	1.94	0.49
1:A:2394:SER:CB	1:A:2466:ALA:HB2	2.42	0.49
1:B:325:HIS:O	1:B:438:ILE:N	2.44	0.49
1:A:1453:ILE:HA	1:A:1456:GLY:C	2.32	0.49
1:A:1905:SER:O	1:A:1908:THR:N	2.45	0.49
1:A:2233:ILE:O	1:A:2236:GLU:N	2.45	0.49
1:A:2774:VAL:N	1:A:2878:ILE:H	2.09	0.49
1:B:977:CYS:O	1:B:981:ARG:N	2.40	0.49
1:B:1250:SER:O	1:B:1253:LYS:N	2.46	0.49
1:A:1250:SER:O	1:A:1253:LYS:N	2.46	0.49
1:A:1489:ARG:O	1:A:1493:LEU:N	2.33	0.49
1:A:2823:VAL:O	1:A:2827:PHE:N	2.45	0.49
1:B:1116:GLN:HA	1:B:1119:ALA:HB3	1.93	0.49
1:A:1452:ASP:O	1:A:1456:GLY:HA3	2.12	0.49
1:A:2318:LYS:HA	1:A:2321:ALA:HB3	1.95	0.49
1:A:347:GLU:O	1:A:351:ASP:N	2.35	0.49
1:A:2459:ARG:O	1:A:2463:LEU:N	2.46	0.49
1:B:1452:ASP:O	1:B:1456:GLY:HA3	2.12	0.49
1:B:2391:ALA:HA	1:B:2466:ALA:HA	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2459:ARG:O	1:B:2463:LEU:N	2.46	0.49
1:B:2774:VAL:N	1:B:2878:ILE:H	2.09	0.49
1:A:2306:SER:HA	1:A:2310:SER:H	1.77	0.49
1:B:1112:PRO:HA	1:B:1116:GLN:CB	2.42	0.49
1:B:1586:GLY:O	1:B:1592:GLU:N	2.45	0.49
1:B:2318:LYS:HA	1:B:2321:ALA:HB3	1.94	0.49
1:A:510:ALA:O	1:A:514:GLY:N	2.37	0.49
1:A:2693:ALA:H	1:A:2700:LYS:HA	1.76	0.49
1:B:225:SER:O	1:B:229:LEU:N	2.46	0.49
1:B:1859:ARG:O	1:B:1862:LEU:N	2.46	0.49
1:A:1112:PRO:HA	1:A:1116:GLN:CB	2.42	0.49
1:A:2085:ASP:O	1:A:2087:GLU:N	2.43	0.49
1:A:2692:LEU:CA	1:A:2700:LYS:HA	2.40	0.49
1:B:1453:ILE:HA	1:B:1456:GLY:C	2.32	0.49
1:A:847:MET:O	1:A:851:ASP:N	2.32	0.49
1:A:242:THR:H	1:A:1105:SER:CB	2.25	0.48
1:A:2298:VAL:CA	1:A:2302:LYS:H	2.26	0.48
1:A:2607:CYS:HA	1:A:2610:ARG:CB	2.43	0.48
1:A:2867:GLY:HA3	1:A:2894:PHE:CA	2.41	0.48
1:B:1945:ALA:HB1	1:B:1954:ALA:CA	2.40	0.48
1:B:2233:ILE:O	1:B:2236:GLU:N	2.45	0.48
1:B:3020:VAL:H	1:B:3023:GLY:CA	2.26	0.48
1:A:228:GLY:HA3	1:A:266:TRP:CB	2.43	0.48
1:A:2806:MET:O	1:A:2816:LYS:N	2.43	0.48
1:B:228:GLY:HA3	1:B:266:TRP:CB	2.43	0.48
1:B:1156:THR:O	1:B:1160:VAL:N	2.36	0.48
1:B:2823:VAL:O	1:B:2827:PHE:N	2.45	0.48
1:B:2872:HIS:CB	1:B:2875:ASN:H	2.24	0.48
1:A:225:SER:O	1:A:229:LEU:N	2.46	0.48
1:A:351:ASP:O	1:A:355:GLN:N	2.47	0.48
1:A:2174:SER:O	1:A:2177:GLN:N	2.46	0.48
1:A:3020:VAL:H	1:A:3023:GLY:CA	2.26	0.48
1:B:1087:MET:O	1:B:1090:ALA:HB3	2.12	0.48
1:A:1586:GLY:O	1:A:1592:GLU:N	2.45	0.48
1:A:1192:LYS:O	1:A:1196:LYS:N	2.46	0.48
1:A:1859:ARG:O	1:A:1862:LEU:N	2.46	0.48
1:A:1942:ALA:HA	1:A:1945:ALA:HB3	1.95	0.48
1:B:1192:LYS:O	1:B:1196:LYS:N	2.46	0.48
1:A:254:LEU:HA	1:A:258:ILE:H	1.79	0.48
1:B:59:ALA:O	1:B:63:PHE:N	2.38	0.48
1:B:254:LEU:HA	1:B:258:ILE:H	1.79	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1942:ALA:HA	1:B:1945:ALA:HB3	1.95	0.48
1:B:2174:SER:O	1:B:2177:GLN:N	2.46	0.48
1:B:2607:CYS:HA	1:B:2610:ARG:CB	2.43	0.48
1:B:2674:THR:H	1:B:2677:TYR:CB	2.27	0.48
1:B:2702:ILE:C	1:B:2714:GLN:H	2.16	0.48
1:A:2381:ASN:O	1:A:2385:LYS:N	2.26	0.48
1:A:2702:ILE:C	1:A:2714:GLN:H	2.16	0.48
1:B:159:ILE:HA	1:B:195:THR:CB	2.44	0.48
1:B:2305:GLN:C	1:B:2307:LEU:H	2.15	0.48
1:B:1156:THR:O	1:B:1159:ALA:HB3	2.14	0.48
1:B:1731:SER:C	1:B:1733:ALA:N	2.67	0.48
1:A:1156:THR:O	1:A:1159:ALA:HB3	2.14	0.48
1:A:2877:LEU:H	1:A:2888:ILE:H	1.62	0.48
1:B:351:ASP:O	1:B:355:GLN:N	2.47	0.48
1:B:543:THR:HA	1:B:546:LEU:CB	2.44	0.48
1:B:631:PRO:O	1:B:635:HIS:N	2.29	0.48
1:B:2044:LYS:O	1:B:2048:THR:N	2.26	0.48
1:B:2650:ASP:H	1:B:2689:GLU:CA	2.27	0.48
1:B:2780:LEU:C	1:B:2784:GLU:H	2.17	0.48
1:B:2877:LEU:H	1:B:2888:ILE:H	1.62	0.48
1:A:3024:THR:O	1:A:3026:LEU:N	2.47	0.48
1:B:1191:LYS:O	1:B:1195:GLU:N	2.46	0.48
1:B:2172:THR:O	1:B:2175:ARG:N	2.47	0.48
1:B:2298:VAL:CA	1:B:2302:LYS:H	2.26	0.48
1:A:713:GLU:O	1:A:717:ARG:N	2.47	0.47
1:A:1191:LYS:O	1:A:1195:GLU:N	2.46	0.47
1:A:1310:GLN:HA	1:A:1314:THR:CB	2.44	0.47
1:A:1945:ALA:HB1	1:A:1954:ALA:CA	2.40	0.47
1:B:2016:ASP:O	1:B:2021:CYS:N	2.44	0.47
1:B:3024:THR:O	1:B:3026:LEU:N	2.47	0.47
1:A:159:ILE:HA	1:A:195:THR:CB	2.44	0.47
1:A:310:SER:O	1:A:314:ASN:N	2.30	0.47
1:A:543:THR:HA	1:A:546:LEU:CB	2.44	0.47
1:A:2172:THR:O	1:A:2175:ARG:N	2.47	0.47
1:A:2928:ARG:O	1:A:2931:CYS:N	2.47	0.47
1:B:99:SER:O	1:B:103:TYR:N	2.27	0.47
1:B:1829:PRO:O	1:B:1833:VAL:N	2.47	0.47
1:B:2795:ASP:HA	1:B:2798:ALA:HB3	1.96	0.47
1:A:1719:ASN:O	1:A:1722:LEU:N	2.47	0.47
1:A:2320:ASP:O	1:A:2324:ALA:N	2.44	0.47
1:B:2692:LEU:CA	1:B:2700:LYS:HA	2.40	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2857:ALA:O	1:B:2860:SER:N	2.47	0.47
1:A:1731:SER:C	1:A:1733:ALA:N	2.67	0.47
1:A:2298:VAL:HA	1:A:2301:ALA:CB	2.32	0.47
1:B:1122:ASN:O	1:B:1126:LYS:N	2.34	0.47
1:B:1553:GLU:O	1:B:1557:ILE:N	2.30	0.47
1:B:1719:ASN:O	1:B:1722:LEU:N	2.47	0.47
1:B:2761:SER:C	1:B:2764:SER:H	2.18	0.47
1:B:2829:PRO:CB	1:B:2912:ARG:CB	2.92	0.47
1:B:2855:SER:O	1:B:2858:THR:N	2.44	0.47
1:A:2674:THR:H	1:A:2677:TYR:CB	2.27	0.47
1:A:2739:LEU:O	1:A:2742:ASN:N	2.46	0.47
1:A:2761:SER:C	1:A:2764:SER:H	2.18	0.47
1:B:2739:LEU:O	1:B:2742:ASN:N	2.46	0.47
1:B:2928:ARG:O	1:B:2931:CYS:N	2.47	0.47
1:B:3028:VAL:O	1:B:3029:GLY:C	2.50	0.47
1:A:1420:LEU:C	1:A:1425:GLN:H	2.17	0.47
1:A:2650:ASP:H	1:A:2689:GLU:CA	2.27	0.47
1:A:2879:ASN:O	1:A:2884:GLU:N	2.28	0.47
1:A:3028:VAL:O	1:A:3029:GLY:C	2.50	0.47
1:A:3052:TRP:O	1:A:3055:TRP:N	2.48	0.47
1:B:17:HIS:HA	1:B:22:GLU:HA	1.97	0.47
1:B:176:LEU:HA	1:B:180:GLN:O	2.15	0.47
1:B:510:ALA:O	1:B:514:GLY:N	2.37	0.47
1:B:1214:LEU:O	1:B:1218:VAL:N	2.48	0.47
1:B:1421:ALA:C	1:B:1424:GLU:H	2.18	0.47
1:B:1958:ALA:O	1:B:1961:TYR:N	2.47	0.47
1:B:2524:ALA:O	1:B:2527:MET:N	2.36	0.47
1:B:3052:TRP:O	1:B:3055:TRP:N	2.47	0.47
1:A:45:ARG:O	1:A:59:ALA:N	2.48	0.47
1:A:1553:GLU:O	1:A:1557:ILE:N	2.30	0.47
1:A:1958:ALA:O	1:A:1961:TYR:N	2.47	0.47
1:A:2758:VAL:N	1:A:2766:VAL:O	2.27	0.47
1:B:713:GLU:O	1:B:717:ARG:N	2.47	0.47
1:B:1444:LEU:O	1:B:1447:SER:N	2.48	0.47
1:B:2879:ASN:O	1:B:2884:GLU:N	2.28	0.47
1:A:1421:ALA:C	1:A:1424:GLU:H	2.18	0.47
1:B:2626:ALA:HB1	1:B:2654:THR:HA	1.97	0.47
1:B:2867:GLY:HA3	1:B:2894:PHE:CA	2.41	0.47
1:A:1444:LEU:O	1:A:1447:SER:N	2.48	0.47
1:A:2091:TRP:O	1:A:2094:GLU:N	2.47	0.47
1:B:580:LEU:O	1:B:584:GLN:N	2.29	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2091:TRP:O	1:B:2094:GLU:N	2.47	0.47
1:B:2320:ASP:O	1:B:2324:ALA:N	2.44	0.47
1:B:2380:ARG:O	1:B:2384:MET:N	2.31	0.47
1:A:2795:ASP:HA	1:A:2798:ALA:HB3	1.96	0.46
1:A:2829:PRO:CB	1:A:2912:ARG:CB	2.93	0.46
1:B:847:MET:O	1:B:851:ASP:N	2.32	0.46
1:B:2849:ARG:O	1:B:2853:THR:N	2.23	0.46
1:A:1609:THR:O	1:A:1612:GLU:N	2.48	0.46
1:A:2650:ASP:N	1:A:2689:GLU:HA	2.30	0.46
1:B:45:ARG:O	1:B:59:ALA:N	2.48	0.46
1:B:1609:THR:O	1:B:1612:GLU:N	2.48	0.46
1:B:1849:ILE:O	1:B:1852:GLN:N	2.48	0.46
1:A:1862:LEU:O	1:A:1865:HIS:N	2.49	0.46
1:A:2471:ILE:O	1:A:2475:LEU:N	2.32	0.46
1:A:2647:ILE:N	1:A:2691:ARG:HA	2.29	0.46
1:A:2857:ALA:O	1:A:2860:SER:N	2.47	0.46
1:A:59:ALA:O	1:A:63:PHE:N	2.38	0.46
1:A:1214:LEU:O	1:A:1218:VAL:N	2.48	0.46
1:B:1923:SER:H	1:B:1929:ASN:CB	2.29	0.46
1:A:1829:PRO:O	1:A:1833:VAL:N	2.47	0.46
1:B:1310:GLN:HA	1:B:1314:THR:CB	2.44	0.46
1:B:2647:ILE:H	1:B:2692:LEU:H	1.64	0.46
1:B:2914:ILE:O	1:B:2917:GLY:N	2.48	0.46
1:B:194:VAL:O	1:B:197:GLY:N	2.49	0.46
1:A:17:HIS:HA	1:A:22:GLU:HA	1.97	0.46
1:B:1583:TYR:O	1:B:1586:GLY:N	2.49	0.46
1:B:2085:ASP:O	1:B:2087:GLU:N	2.43	0.46
1:B:2126:GLU:O	1:B:2130:ASN:N	2.26	0.46
1:A:40:ILE:CB	1:A:112:ALA:H	2.29	0.46
1:A:176:LEU:HA	1:A:180:GLN:O	2.15	0.46
1:A:1583:TYR:O	1:A:1586:GLY:N	2.49	0.46
1:A:2855:SER:O	1:A:2858:THR:N	2.43	0.46
1:B:306:THR:N	1:B:310:SER:H	2.14	0.46
1:B:975:ASN:O	1:B:979:LEU:N	2.26	0.46
1:B:1124:TYR:C	1:B:1127:ALA:H	2.19	0.46
1:B:2535:LEU:HA	1:B:2539:GLU:CB	2.45	0.46
1:A:1124:TYR:C	1:A:1127:ALA:H	2.19	0.46
1:A:1849:ILE:O	1:A:1852:GLN:N	2.48	0.46
1:A:1999:ILE:HA	1:A:2002:GLN:CB	2.46	0.46
1:A:2626:ALA:HB1	1:A:2654:THR:HA	1.97	0.46
1:A:2647:ILE:H	1:A:2692:LEU:H	1.64	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1862:LEU:O	1:B:1865:HIS:N	2.49	0.46
1:B:1999:ILE:HA	1:B:2002:GLN:CB	2.46	0.46
1:B:2008:ILE:HA	1:B:2011:SER:CB	2.46	0.46
1:B:2647:ILE:N	1:B:2691:ARG:HA	2.29	0.46
1:B:2922:GLY:O	1:B:2925:GLY:N	2.26	0.46
1:A:2914:ILE:O	1:A:2917:GLY:N	2.48	0.46
1:A:1480:PRO:HA	1:A:1484:MET:N	2.31	0.45
1:A:1923:SER:H	1:A:1929:ASN:CB	2.29	0.45
1:A:2224:MET:O	1:A:2227:ARG:N	2.49	0.45
1:B:694:LEU:O	1:B:698:SER:N	2.49	0.45
1:B:1044:ASN:O	1:B:1048:THR:N	2.28	0.45
1:B:1970:GLN:O	1:B:1974:SER:N	2.22	0.45
1:B:2758:VAL:N	1:B:2766:VAL:O	2.27	0.45
1:A:194:VAL:O	1:A:197:GLY:N	2.49	0.45
1:A:306:THR:N	1:A:310:SER:H	2.14	0.45
1:A:2017:SER:O	1:A:2022:GLY:N	2.49	0.45
1:A:2126:GLU:O	1:A:2130:ASN:N	2.26	0.45
1:A:2226:LEU:O	1:A:2229:VAL:N	2.50	0.45
1:A:2270:LEU:O	1:A:2273:ARG:N	2.50	0.45
1:B:2224:MET:O	1:B:2227:ARG:N	2.49	0.45
1:B:2226:LEU:O	1:B:2229:VAL:N	2.50	0.45
1:B:2270:LEU:O	1:B:2273:ARG:N	2.50	0.45
1:A:2505:LYS:O	1:A:2508:GLY:N	2.49	0.45
1:A:2535:LEU:HA	1:A:2539:GLU:CB	2.45	0.45
1:B:279:ILE:HA	1:B:282:LEU:CB	2.47	0.45
1:B:1643:ILE:O	1:B:1646:LYS:N	2.49	0.45
1:B:1696:TYR:HA	1:B:2164:GLU:O	2.16	0.45
1:B:2387:PHE:O	1:B:2391:ALA:N	2.24	0.45
1:B:2783:ASN:HA	1:B:2786:GLY:HA3	1.99	0.45
1:B:306:THR:O	1:B:310:SER:N	2.50	0.45
1:B:2305:GLN:O	1:B:2307:LEU:N	2.47	0.45
1:A:2524:ALA:O	1:A:2527:MET:N	2.36	0.45
1:A:3051:GLY:O	1:A:3054:ALA:HB3	2.17	0.45
1:B:659:LYS:HA	1:B:663:LEU:CB	2.47	0.45
1:B:2017:SER:O	1:B:2022:GLY:N	2.49	0.45
1:A:1533:GLU:O	1:A:1537:GLN:N	2.22	0.45
1:A:1643:ILE:O	1:A:1646:LYS:N	2.49	0.45
1:A:1696:TYR:HA	1:A:2164:GLU:O	2.16	0.45
1:A:2499:GLU:O	1:A:2502:GLY:N	2.50	0.45
1:A:2780:LEU:C	1:A:2784:GLU:H	2.17	0.45
1:A:2783:ASN:HA	1:A:2786:GLY:HA3	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:183:HIS:O	1:B:187:VAL:N	2.26	0.45
1:B:615:LEU:HA	1:B:1342:GLU:O	2.17	0.45
1:A:1044:ASN:O	1:A:1048:THR:N	2.28	0.45
1:A:1309:ALA:O	1:A:1312:ARG:N	2.50	0.45
1:A:2222:PRO:O	1:A:2225:ALA:N	2.49	0.45
1:B:40:ILE:CB	1:B:112:ALA:H	2.29	0.45
1:B:747:GLN:O	1:B:751:SER:N	2.35	0.45
1:B:2063:GLY:O	1:B:2067:ALA:N	2.29	0.45
1:B:2222:PRO:O	1:B:2225:ALA:N	2.50	0.45
1:A:2029:PRO:C	1:A:2031:THR:N	2.70	0.45
1:A:2294:GLU:O	1:A:2296:ALA:N	2.50	0.45
1:B:3051:GLY:O	1:B:3054:ALA:HB3	2.17	0.45
1:A:26:GLU:O	1:A:30:PHE:N	2.38	0.45
1:A:694:LEU:O	1:A:698:SER:N	2.49	0.45
1:A:1717:TYR:O	1:A:1720:ASN:N	2.50	0.45
1:A:2008:ILE:HA	1:A:2011:SER:CB	2.46	0.45
1:B:1309:ALA:O	1:B:1312:ARG:N	2.50	0.45
1:B:1468:VAL:O	1:B:1472:LEU:N	2.22	0.45
1:A:279:ILE:HA	1:A:282:LEU:CB	2.47	0.44
1:A:615:LEU:HA	1:A:1342:GLU:O	2.17	0.44
1:A:2057:SER:O	1:A:2060:ARG:N	2.50	0.44
1:A:562:ASN:O	1:A:566:VAL:N	2.32	0.44
1:A:2016:ASP:O	1:A:2019:TYR:N	2.50	0.44
1:A:2456:LYS:O	1:A:2460:LYS:N	2.29	0.44
1:B:1070:VAL:O	1:B:1074:PHE:N	2.23	0.44
1:B:1076:GLN:HA	1:B:1079:ALA:HB3	2.00	0.44
1:B:1124:TYR:O	1:B:1127:ALA:N	2.50	0.44
1:B:2057:SER:O	1:B:2060:ARG:N	2.50	0.44
1:B:2973:ARG:C	1:B:2976:ASP:H	2.19	0.44
1:B:1480:PRO:HA	1:B:1484:MET:N	2.32	0.44
1:B:1717:TYR:O	1:B:1720:ASN:N	2.50	0.44
1:B:3050:PRO:HA	1:B:3053:LYS:CB	2.47	0.44
1:A:1076:GLN:HA	1:A:1079:ALA:HB3	2.00	0.44
1:A:2044:LYS:O	1:A:2048:THR:N	2.26	0.44
1:B:2016:ASP:O	1:B:2019:TYR:N	2.50	0.44
1:B:2092:CYS:CA	1:B:2096:GLU:H	2.30	0.44
1:B:2499:GLU:O	1:B:2502:GLY:N	2.50	0.44
1:A:1578:GLN:O	1:A:1582:LYS:N	2.32	0.44
1:B:353:CYS:CB	1:B:449:GLY:HA3	2.48	0.44
1:B:1192:LYS:HA	1:B:1195:GLU:CB	2.48	0.44
1:B:1451:LYS:C	1:B:1453:ILE:H	2.21	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2525:ALA:HB1	1:B:2956:PRO:CB	2.48	0.44
1:A:306:THR:O	1:A:310:SER:N	2.50	0.44
1:A:1124:TYR:O	1:A:1127:ALA:N	2.50	0.44
1:A:1192:LYS:HA	1:A:1195:GLU:CB	2.48	0.44
1:A:1453:ILE:C	1:A:1456:GLY:H	2.21	0.44
1:A:2305:GLN:O	1:A:2307:LEU:N	2.47	0.44
1:A:2784:GLU:HA	1:A:2788:HIS:CB	2.48	0.44
1:A:2973:ARG:C	1:A:2976:ASP:H	2.19	0.44
1:B:2131:ALA:HA	1:B:2134:SER:CB	2.48	0.44
1:B:2216:ASP:O	1:B:2219:PHE:N	2.51	0.44
1:B:729:TYR:C	1:B:732:MET:H	2.20	0.44
1:B:2209:SER:O	1:B:2213:LYS:N	2.51	0.44
1:B:2294:GLU:O	1:B:2296:ALA:N	2.50	0.44
1:B:2859:SER:O	1:B:2860:SER:C	2.57	0.44
1:A:1580:LYS:HA	1:A:1596:HIS:CA	2.47	0.44
1:A:2092:CYS:CA	1:A:2096:GLU:H	2.30	0.44
1:A:2131:ALA:HA	1:A:2134:SER:CB	2.48	0.44
1:A:2209:SER:O	1:A:2213:LYS:N	2.51	0.44
1:A:2216:ASP:O	1:A:2219:PHE:N	2.51	0.44
1:A:3050:PRO:HA	1:A:3053:LYS:CB	2.47	0.44
1:B:1467:ASP:O	1:B:1470:TYR:N	2.51	0.44
1:B:1580:LYS:HA	1:B:1596:HIS:CA	2.47	0.44
1:A:659:LYS:HA	1:A:663:LEU:CB	2.47	0.43
1:A:729:TYR:C	1:A:732:MET:H	2.20	0.43
1:A:1851:LEU:O	1:A:1854:THR:N	2.47	0.43
1:B:1453:ILE:C	1:B:1456:GLY:H	2.21	0.43
1:B:1580:LYS:O	1:B:1584:SER:N	2.20	0.43
1:B:2391:ALA:HB2	1:B:2470:TYR:N	2.33	0.43
1:A:734:VAL:O	1:A:738:GLU:N	2.32	0.43
1:A:1467:ASP:O	1:A:1470:TYR:N	2.51	0.43
1:A:2101:GLN:HA	1:A:2104:TRP:CB	2.48	0.43
1:A:2185:ILE:O	1:A:2188:LEU:N	2.39	0.43
1:A:2459:ARG:HA	1:A:2463:LEU:H	1.83	0.43
1:B:543:THR:O	1:B:547:THR:N	2.51	0.43
1:B:2459:ARG:HA	1:B:2463:LEU:H	1.83	0.43
1:B:2722:LEU:O	1:B:2725:ASP:N	2.51	0.43
1:A:1970:GLN:O	1:A:1974:SER:N	2.22	0.43
1:A:2513:THR:HA	1:A:2516:PHE:CB	2.48	0.43
1:A:2525:ALA:HB1	1:A:2956:PRO:CB	2.48	0.43
1:B:734:VAL:O	1:B:738:GLU:N	2.32	0.43
1:B:749:ALA:O	1:B:753:MET:N	2.25	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2224:MET:O	1:B:2225:ALA:C	2.56	0.43
1:A:543:THR:O	1:A:547:THR:N	2.51	0.43
1:A:1955:LEU:O	1:A:1958:ALA:HB3	2.18	0.43
1:A:2722:LEU:O	1:A:2725:ASP:N	2.51	0.43
1:B:38:GLU:HA	1:B:43:LEU:N	2.33	0.43
1:B:1165:SER:O	1:B:1169:GLU:N	2.33	0.43
1:B:1953:THR:O	1:B:1957:TYR:N	2.37	0.43
1:B:2513:THR:HA	1:B:2516:PHE:CB	2.48	0.43
1:A:2099:HIS:O	1:A:2102:ALA:HB3	2.19	0.43
1:A:2391:ALA:HB2	1:A:2470:TYR:N	2.33	0.43
1:B:1477:ASN:O	1:B:1481:SER:N	2.43	0.43
1:A:353:CYS:CB	1:A:449:GLY:HA3	2.48	0.43
1:A:1370:GLY:HA2	1:A:1373:ASP:CB	2.49	0.43
1:A:2410:PHE:O	1:A:2414:GLN:N	2.35	0.43
1:B:1712:PHE:C	1:B:1714:MET:N	2.71	0.43
1:B:2092:CYS:HA	1:B:2096:GLU:H	1.84	0.43
1:B:2842:PRO:HA	1:B:2845:TRP:CB	2.48	0.43
1:B:280:ILE:HA	1:B:283:PHE:CB	2.49	0.43
1:B:1736:CYS:O	1:B:1739:ASN:N	2.52	0.43
1:B:2496:GLY:H	1:B:2537:PHE:CB	2.31	0.43
1:A:38:GLU:HA	1:A:43:LEU:N	2.33	0.43
1:A:280:ILE:HA	1:A:283:PHE:CB	2.49	0.43
1:A:1451:LYS:C	1:A:1453:ILE:H	2.21	0.43
1:A:1938:TYR:HA	1:A:1941:VAL:CB	2.49	0.43
1:A:2224:MET:O	1:A:2225:ALA:C	2.56	0.43
1:A:2496:GLY:H	1:A:2537:PHE:CB	2.31	0.43
1:B:347:GLU:O	1:B:351:ASP:N	2.35	0.43
1:B:1938:TYR:HA	1:B:1941:VAL:CB	2.49	0.43
1:B:2505:LYS:O	1:B:2508:GLY:N	2.49	0.43
1:B:3014:GLN:O	1:B:3017:LEU:O	2.37	0.43
1:A:1736:CYS:O	1:A:1739:ASN:N	2.52	0.43
1:A:2473:CYS:O	1:A:2476:SER:N	2.52	0.43
1:A:2842:PRO:HA	1:A:2845:TRP:CB	2.48	0.43
1:B:2029:PRO:C	1:B:2031:THR:N	2.71	0.43
1:B:2361:LEU:HA	1:B:2364:ALA:HB3	2.00	0.43
1:B:2784:GLU:HA	1:B:2788:HIS:CB	2.48	0.43
1:A:1414:SER:O	1:A:1418:ILE:N	2.52	0.43
1:A:2091:TRP:C	1:A:2093:PRO:N	2.71	0.43
1:A:2272:GLU:O	1:A:2275:ILE:N	2.51	0.43
1:A:2361:LEU:HA	1:A:2364:ALA:HB3	2.00	0.43
1:A:2844:ILE:O	1:A:2849:ARG:N	2.42	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1370:GLY:HA2	1:B:1373:ASP:CB	2.49	0.43
1:B:1532:VAL:HA	1:B:1535:GLN:H	1.84	0.43
1:B:2298:VAL:O	1:B:2302:LYS:N	2.52	0.43
1:B:1043:VAL:O	1:B:1047:LYS:N	2.34	0.42
1:B:2099:HIS:O	1:B:2102:ALA:HB3	2.19	0.42
1:A:975:ASN:O	1:A:979:LEU:N	2.26	0.42
1:A:1244:ILE:HA	1:A:1248:TYR:N	2.34	0.42
1:A:2859:SER:O	1:A:2860:SER:C	2.57	0.42
1:B:1003:GLN:HA	1:B:1006:MET:CB	2.50	0.42
1:B:2101:GLN:HA	1:B:2104:TRP:CB	2.48	0.42
1:A:2867:GLY:CA	1:A:2894:PHE:HA	2.43	0.42
1:A:2970:LEU:O	1:A:2974:PRO:N	2.52	0.42
1:A:3014:GLN:O	1:A:3017:LEU:O	2.37	0.42
1:B:26:GLU:O	1:B:30:PHE:N	2.38	0.42
1:B:1414:SER:O	1:B:1418:ILE:N	2.52	0.42
1:B:2354:ALA:HA	1:B:2357:MET:CB	2.48	0.42
1:B:2410:PHE:O	1:B:2414:GLN:N	2.35	0.42
1:A:663:LEU:O	1:A:1341:PRO:HA	2.19	0.42
1:A:1050:LEU:O	1:A:1056:SER:HA	2.19	0.42
1:A:2298:VAL:O	1:A:2302:LYS:N	2.52	0.42
1:B:1054:PRO:O	1:B:1055:TYR:C	2.57	0.42
1:B:1244:ILE:HA	1:B:1248:TYR:N	2.34	0.42
1:B:1955:LEU:O	1:B:1958:ALA:HB3	2.18	0.42
1:B:2294:GLU:C	1:B:2296:ALA:N	2.73	0.42
1:B:2309:LEU:HA	1:B:2312:LEU:CB	2.50	0.42
1:B:3028:VAL:C	1:B:3032:VAL:H	2.06	0.42
1:A:731:TYR:O	1:A:735:ILE:N	2.53	0.42
1:A:923:ILE:O	1:A:927:LEU:N	2.29	0.42
1:A:1712:PHE:C	1:A:1714:MET:N	2.71	0.42
1:A:2150:ALA:O	1:A:2153:LYS:N	2.53	0.42
1:A:2309:LEU:HA	1:A:2312:LEU:CB	2.50	0.42
1:B:1050:LEU:O	1:B:1056:SER:HA	2.19	0.42
1:B:1295:LEU:O	1:B:1298:PHE:N	2.50	0.42
1:B:2297:GLN:O	1:B:2299:PHE:N	2.53	0.42
1:A:1070:VAL:O	1:A:1074:PHE:N	2.24	0.42
1:A:1532:VAL:HA	1:A:1535:GLN:H	1.84	0.42
1:A:2174:SER:O	1:A:2175:ARG:C	2.58	0.42
1:A:2294:GLU:C	1:A:2296:ALA:N	2.73	0.42
1:A:2386:ALA:O	1:A:2389:SER:N	2.53	0.42
1:B:325:HIS:CB	1:B:434:PRO:HA	2.50	0.42
1:B:1453:ILE:HA	1:B:1458:GLY:N	2.35	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1465:LEU:O	1:B:1468:VAL:N	2.53	0.42
1:A:2092:CYS:HA	1:A:2096:GLU:H	1.84	0.42
1:B:923:ILE:O	1:B:927:LEU:N	2.29	0.42
1:B:1958:ALA:O	1:B:1959:GLU:C	2.58	0.42
1:A:1165:SER:O	1:A:1169:GLU:N	2.33	0.42
1:A:1453:ILE:HA	1:A:1458:GLY:N	2.35	0.42
1:A:1465:LEU:O	1:A:1468:VAL:N	2.53	0.42
1:A:1556:TYR:O	1:A:1559:ILE:N	2.53	0.42
1:A:1715:LEU:O	1:A:1718:LEU:N	2.53	0.42
1:A:2505:LYS:C	1:A:2508:GLY:H	2.23	0.42
1:B:731:TYR:O	1:B:735:ILE:N	2.53	0.42
1:B:1533:GLU:O	1:B:1537:GLN:N	2.23	0.42
1:B:1556:TYR:O	1:B:1559:ILE:N	2.53	0.42
1:B:2259:SER:O	1:B:2262:ALA:HB3	2.19	0.42
1:B:2272:GLU:O	1:B:2275:ILE:N	2.51	0.42
1:B:2970:LEU:O	1:B:2974:PRO:N	2.52	0.42
1:A:325:HIS:CB	1:A:434:PRO:HA	2.50	0.42
1:A:1054:PRO:O	1:A:1055:TYR:C	2.57	0.42
1:A:1088:LEU:HA	1:A:1114:LYS:HA	2.01	0.42
1:A:1765:GLN:O	1:A:1768:ARG:N	2.53	0.42
1:A:1913:VAL:HA	1:A:1917:ARG:CB	2.50	0.42
1:A:2297:GLN:O	1:A:2299:PHE:N	2.53	0.42
1:A:2354:ALA:HA	1:A:2357:MET:CB	2.48	0.42
1:A:2552:HIS:O	1:A:2556:THR:N	2.43	0.42
1:B:1578:GLN:O	1:B:1582:LYS:N	2.32	0.42
1:B:1420:LEU:C	1:B:1425:GLN:H	2.17	0.42
1:B:2473:CYS:O	1:B:2476:SER:N	2.52	0.42
1:B:3029:GLY:HA2	1:B:3032:VAL:CB	2.50	0.42
1:A:1003:GLN:HA	1:A:1006:MET:CB	2.50	0.41
1:A:1749:PHE:HA	1:A:1752:ILE:CB	2.50	0.41
1:A:1850:LEU:O	1:A:1854:THR:N	2.53	0.41
1:A:2209:SER:O	1:A:2212:LEU:N	2.53	0.41
1:B:1715:LEU:O	1:B:1718:LEU:N	2.53	0.41
1:B:2209:SER:O	1:B:2212:LEU:N	2.53	0.41
1:B:2386:ALA:O	1:B:2389:SER:N	2.53	0.41
1:B:2403:ASN:O	1:B:2408:SER:N	2.46	0.41
1:A:1091:GLU:O	1:A:1110:ALA:HB1	2.20	0.41
1:A:325:HIS:HA	1:A:434:PRO:HA	2.03	0.41
1:A:2259:SER:O	1:A:2262:ALA:HB3	2.19	0.41
1:A:2457:GLU:HA	1:A:2460:LYS:CB	2.50	0.41
1:B:1850:LEU:O	1:B:1854:THR:N	2.53	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1913:VAL:HA	1:B:1917:ARG:CB	2.50	0.41
1:B:2647:ILE:O	1:B:2691:ARG:HA	2.21	0.41
1:B:2650:ASP:N	1:B:2689:GLU:HA	2.30	0.41
1:A:1939:LEU:O	1:A:1942:ALA:HB3	2.20	0.41
1:B:725:VAL:HA	1:B:733:GLY:HA2	2.01	0.41
1:B:1088:LEU:HA	1:B:1114:LYS:HA	2.01	0.41
1:B:1091:GLU:O	1:B:1110:ALA:HB1	2.20	0.41
1:B:1376:PRO:C	1:B:1379:PRO:N	2.74	0.41
1:B:2344:TRP:HA	1:B:2347:GLU:CB	2.50	0.41
1:B:2742:ASN:CB	1:B:2745:THR:H	2.34	0.41
1:A:725:VAL:HA	1:A:733:GLY:HA2	2.01	0.41
1:A:747:GLN:O	1:A:751:SER:N	2.35	0.41
1:A:1925:GLY:O	1:A:1928:PHE:N	2.53	0.41
1:A:1931:ALA:O	1:A:1934:LEU:N	2.54	0.41
1:A:2298:VAL:HA	1:A:2302:LYS:N	2.35	0.41
1:B:476:GLN:O	1:B:480:LEU:N	2.36	0.41
1:A:1453:ILE:HA	1:A:1458:GLY:H	1.86	0.41
1:A:1609:THR:O	1:A:1610:ARG:C	2.59	0.41
1:A:1730:ARG:O	1:A:1733:ALA:HB3	2.21	0.41
1:A:1951:HIS:O	1:A:1952:PHE:C	2.59	0.41
1:A:3029:GLY:HA2	1:A:3032:VAL:CB	2.50	0.41
1:B:161:GLN:HA	1:B:199:CYS:CB	2.50	0.41
1:B:325:HIS:HA	1:B:434:PRO:HA	2.02	0.41
1:B:1765:GLN:O	1:B:1768:ARG:N	2.53	0.41
1:B:1822:GLU:O	1:B:1824:LEU:N	2.54	0.41
1:B:1939:LEU:O	1:B:1942:ALA:HB3	2.20	0.41
1:B:2715:LEU:N	1:B:2767:LEU:O	2.54	0.41
1:A:242:THR:CB	1:A:245:VAL:H	2.33	0.41
1:A:1430:ASN:O	1:A:1434:LYS:N	2.54	0.41
1:A:1824:LEU:HA	1:A:1827:LEU:CB	2.51	0.41
1:A:2305:GLN:C	1:A:2307:LEU:N	2.74	0.41
1:A:2647:ILE:O	1:A:2691:ARG:HA	2.21	0.41
1:B:1925:GLY:O	1:B:1928:PHE:N	2.53	0.41
1:B:2505:LYS:C	1:B:2508:GLY:H	2.23	0.41
1:B:2878:ILE:CA	1:B:2885:LEU:HA	2.48	0.41
1:B:3042:PRO:HA	1:B:3045:LEU:CB	2.51	0.41
1:A:43:LEU:HA	1:A:59:ALA:CB	2.48	0.41
1:A:2738:LEU:O	1:A:2742:ASN:N	2.53	0.41
1:A:2742:ASN:CB	1:A:2745:THR:H	2.34	0.41
1:A:3042:PRO:HA	1:A:3045:LEU:CB	2.51	0.41
1:B:242:THR:CB	1:B:245:VAL:H	2.33	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1456:GLY:O	1:B:1457:LEU:C	2.59	0.41
1:B:1458:GLY:O	1:B:1461:TRP:N	2.54	0.41
1:B:2305:GLN:C	1:B:2307:LEU:N	2.74	0.41
1:A:248:ARG:HA	1:A:305:SER:HA	2.03	0.41
1:A:444:PRO:HA	1:A:447:ARG:CB	2.51	0.41
1:A:1043:VAL:O	1:A:1047:LYS:N	2.34	0.41
1:A:1878:SER:O	1:A:1881:SER:N	2.54	0.41
1:A:1912:VAL:HA	1:A:1916:MET:H	1.86	0.41
1:A:2226:LEU:O	1:A:2227:ARG:C	2.58	0.41
1:A:2542:ASN:O	1:A:2546:SER:N	2.24	0.41
1:A:2746:ARG:C	1:A:2749:LYS:H	2.24	0.41
1:A:2878:ILE:CA	1:A:2885:LEU:HA	2.48	0.41
1:B:663:LEU:O	1:B:1341:PRO:HA	2.20	0.41
1:B:1309:ALA:C	1:B:1314:THR:HA	2.42	0.41
1:B:1878:SER:O	1:B:1881:SER:N	2.54	0.41
1:B:1912:VAL:HA	1:B:1916:MET:H	1.86	0.41
1:B:2150:ALA:O	1:B:2153:LYS:N	2.53	0.41
1:B:2657:LYS:O	1:B:2660:GLU:N	2.54	0.41
1:B:2867:GLY:CA	1:B:2894:PHE:HA	2.43	0.41
1:A:1376:PRO:C	1:A:1379:PRO:N	2.74	0.41
1:A:1458:GLY:O	1:A:1461:TRP:N	2.54	0.41
1:A:2380:ARG:O	1:A:2384:MET:N	2.31	0.41
1:A:2498:SER:O	1:A:2500:VAL:N	2.54	0.41
1:B:1421:ALA:HA	1:B:1424:GLU:HA	2.03	0.41
1:B:2188:LEU:O	1:B:2191:ARG:N	2.54	0.41
1:B:2482:MET:O	1:B:2485:PHE:N	2.54	0.41
1:A:1452:ASP:O	1:A:1454:LYS:N	2.54	0.40
1:A:1456:GLY:O	1:A:1457:LEU:C	2.59	0.40
1:A:1901:LEU:CA	1:A:1904:LYS:H	2.34	0.40
1:A:2344:TRP:HA	1:A:2347:GLU:CB	2.50	0.40
1:A:2849:ARG:O	1:A:2853:THR:N	2.23	0.40
1:B:562:ASN:O	1:B:566:VAL:N	2.32	0.40
1:B:1452:ASP:O	1:B:1454:LYS:N	2.54	0.40
1:B:2457:GLU:HA	1:B:2460:LYS:CB	2.50	0.40
1:B:2923:VAL:O	1:B:2926:VAL:N	2.54	0.40
1:A:1309:ALA:C	1:A:1314:THR:HA	2.42	0.40
1:B:248:ARG:HA	1:B:305:SER:HA	2.03	0.40
1:B:1430:ASN:O	1:B:1434:LYS:N	2.54	0.40
1:B:2226:LEU:O	1:B:2227:ARG:C	2.58	0.40
1:B:2647:ILE:H	1:B:2691:ARG:CA	2.33	0.40
1:B:2738:LEU:O	1:B:2742:ASN:N	2.53	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:208:LYS:HA	1:A:211:ASP:CB	2.51	0.40
1:A:1041:ALA:O	1:A:1043:VAL:N	2.54	0.40
1:A:1236:PHE:O	1:A:1239:LEU:N	2.55	0.40
1:A:1396:CYS:O	1:A:1400:LYS:N	2.55	0.40
1:A:1421:ALA:HA	1:A:1424:GLU:HA	2.03	0.40
1:A:1707:GLU:O	1:A:1710:TRP:N	2.51	0.40
1:A:2292:GLN:C	1:A:2295:GLU:H	2.24	0.40
1:A:2657:LYS:O	1:A:2660:GLU:N	2.54	0.40
1:A:2828:GLN:O	1:A:2830:VAL:N	2.55	0.40
1:B:1395:ASN:HA	1:B:1398:LYS:CB	2.52	0.40
1:B:1453:ILE:HA	1:B:1458:GLY:H	1.86	0.40
1:B:1749:PHE:HA	1:B:1752:ILE:CB	2.50	0.40
1:B:2150:ALA:O	1:B:2151:ARG:C	2.60	0.40
1:B:2216:ASP:O	1:B:2217:PHE:C	2.58	0.40
1:B:2877:LEU:N	1:B:2888:ILE:H	2.19	0.40
1:A:1017:GLN:O	1:A:1021:VAL:N	2.54	0.40
1:A:1822:GLU:O	1:A:1824:LEU:N	2.54	0.40
1:A:2036:TYR:O	1:A:2039:GLU:O	2.40	0.40
1:B:444:PRO:HA	1:B:447:ARG:CB	2.51	0.40
1:B:1862:LEU:O	1:B:1863:SER:C	2.60	0.40
1:B:1925:GLY:C	1:B:1927:ILE:N	2.75	0.40
1:B:2036:TYR:O	1:B:2039:GLU:O	2.40	0.40
1:B:2552:HIS:O	1:B:2555:HIS:N	2.54	0.40
1:A:161:GLN:HA	1:A:199:CYS:CB	2.51	0.40
1:A:1695:SER:O	1:A:2166:VAL:HA	2.22	0.40
1:A:1862:LEU:O	1:A:1863:SER:C	2.60	0.40
1:A:2923:VAL:O	1:A:2926:VAL:N	2.54	0.40
1:B:208:LYS:HA	1:B:211:ASP:CB	2.51	0.40
1:B:1041:ALA:O	1:B:1043:VAL:N	2.54	0.40
1:B:1396:CYS:O	1:B:1400:LYS:N	2.54	0.40
1:B:1746:GLY:HA2	1:B:1749:PHE:CB	2.52	0.40
1:B:1931:ALA:O	1:B:1934:LEU:N	2.54	0.40
1:B:2289:SER:O	1:B:2292:GLN:N	2.55	0.40
1:B:2456:LYS:O	1:B:2460:LYS:N	2.29	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	2435/3066 (79%)	2231 (92%)	197 (8%)	7 (0%)	41	76
1	B	2435/3066 (79%)	2232 (92%)	196 (8%)	7 (0%)	41	76
All	All	4870/6132 (79%)	4463 (92%)	393 (8%)	14 (0%)	44	76

All (14) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	1367	ASP
1	A	1376	PRO
1	A	1378	PRO
1	B	1367	ASP
1	B	1376	PRO
1	B	1378	PRO
1	A	2645	ILE
1	A	2829	PRO
1	B	2645	ILE
1	B	2829	PRO
1	A	1688	ILE
1	B	1688	ILE
1	A	2920	ILE
1	B	2920	ILE

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

There are no protein residues with a non-rotameric sidechain to report in this entry.

### 5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

## 5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

## 5.6 Ligand geometry [i](#)

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](#)

The following chains have linkage breaks:

Mol	Chain	Number of breaks
1	A	3
1	B	3

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	A	305:SER	C	306:THR	N	6.20
1	B	305:SER	C	306:THR	N	6.20
1	A	163:GLN	C	164:TRP	N	3.12
1	B	163:GLN	C	164:TRP	N	3.12
1	A	1394:SER	C	1395:ASN	N	2.99
1	B	1394:SER	C	1395:ASN	N	2.99

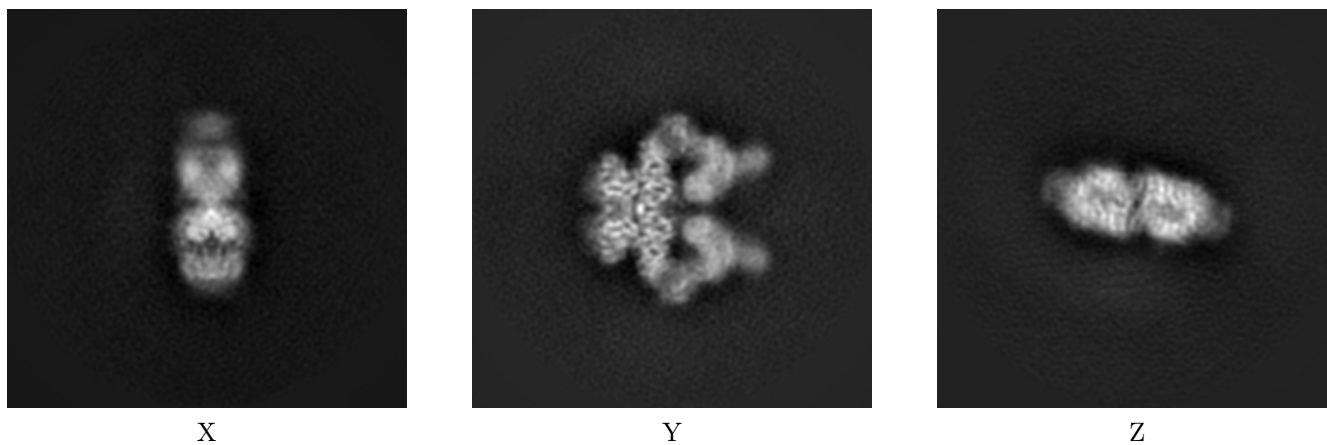
## 6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-3669. These allow visual inspection of the internal detail of the map and identification of artifacts.

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

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

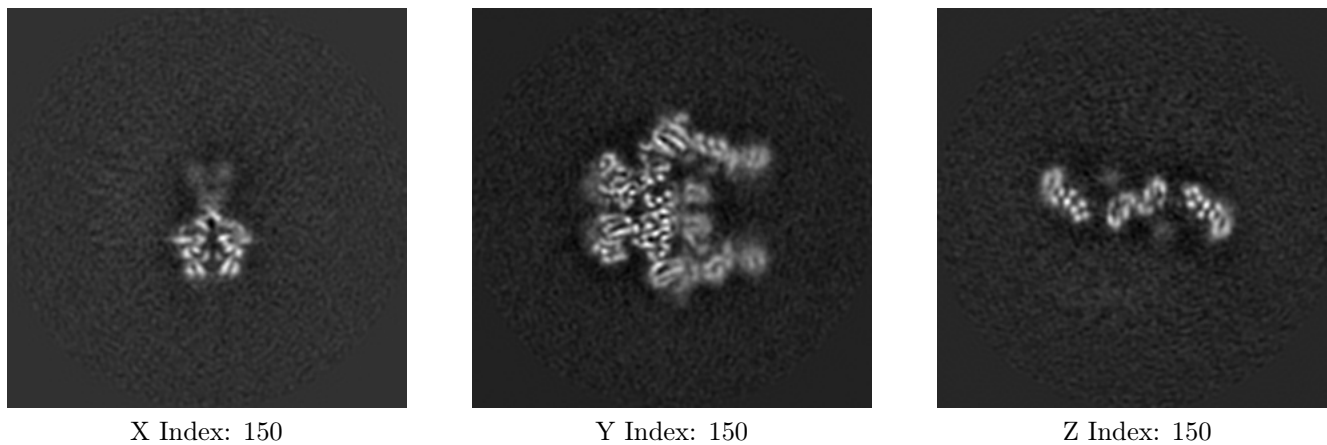
#### 6.1.1 Primary map



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

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

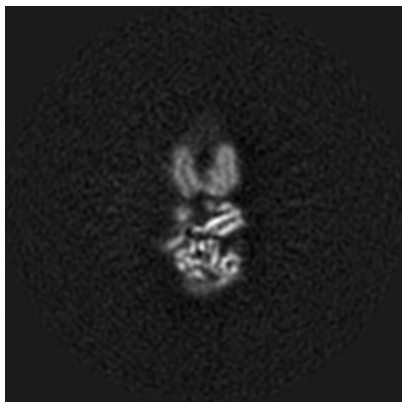
#### 6.2.1 Primary map



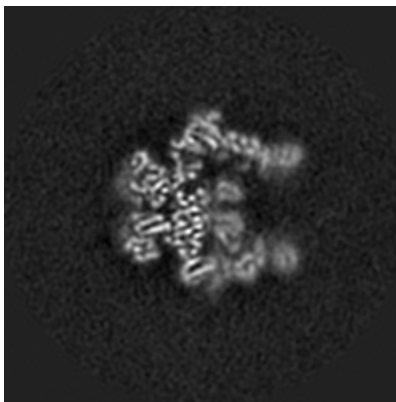
The images above show central slices of the map in three orthogonal directions.

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

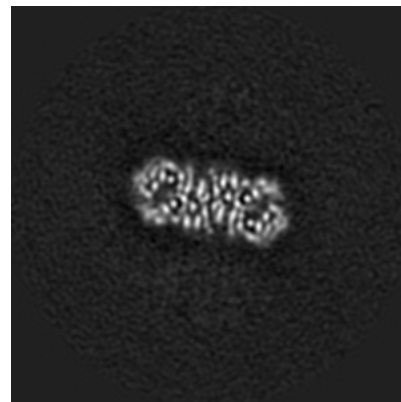
### 6.3.1 Primary map



X Index: 168



Y Index: 149



Z Index: 133

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

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

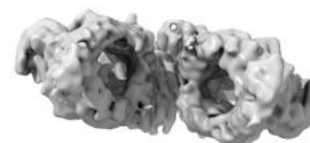
### 6.4.1 Primary map



X



Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.03. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

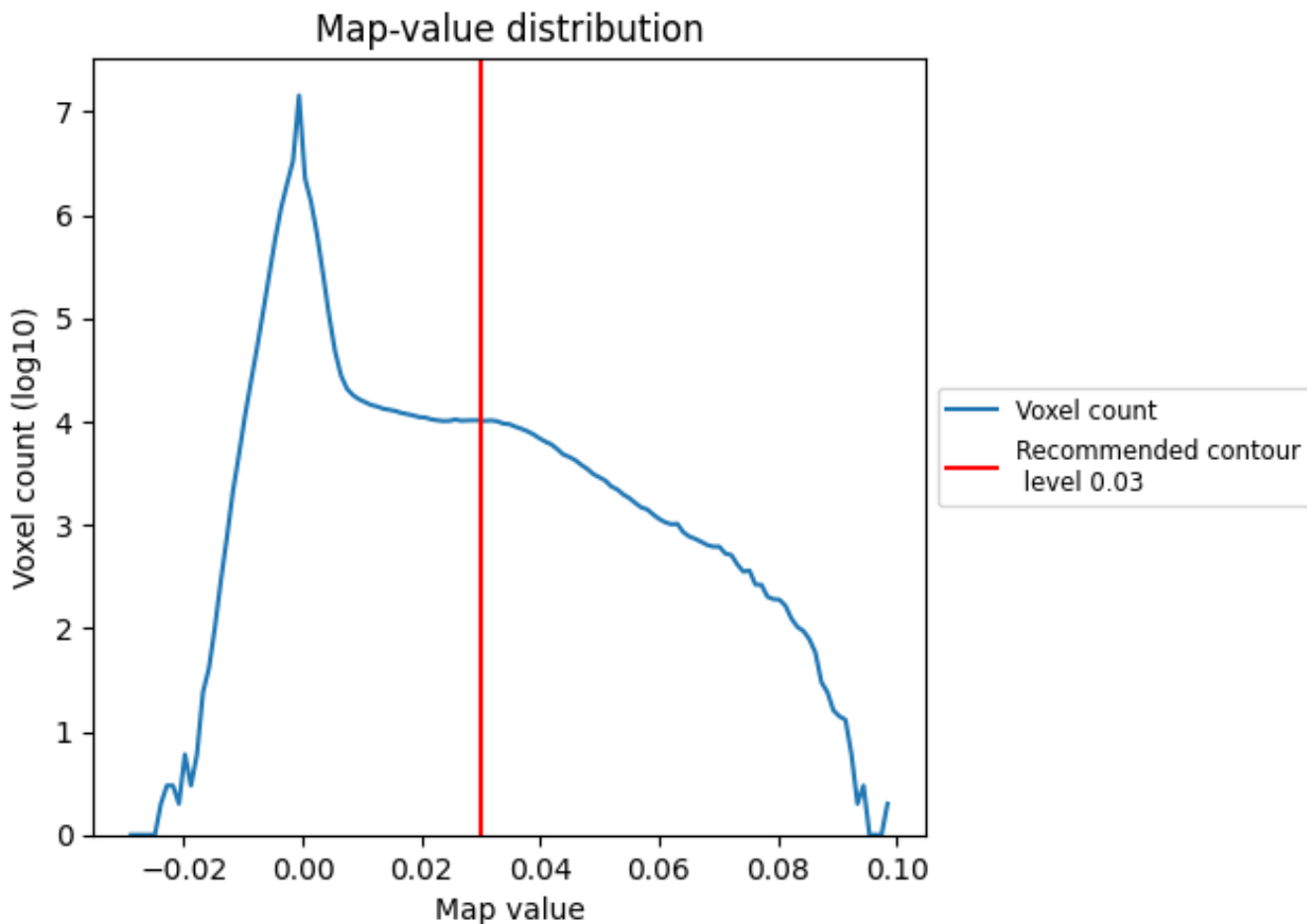
## 6.5 Mask visualisation

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

## 7 Map analysis [i](#)

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

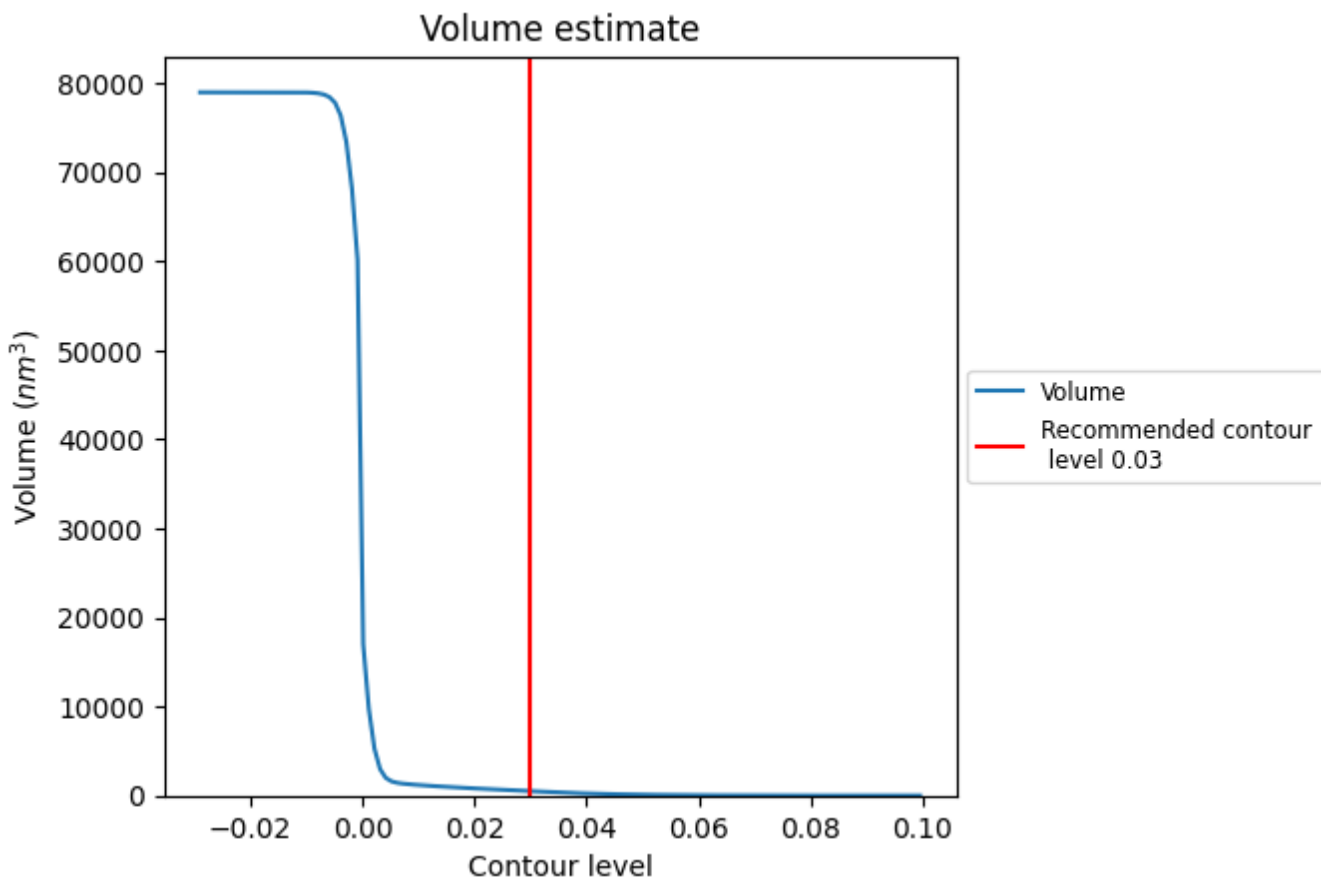
### 7.1 Map-value distribution [i](#)



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



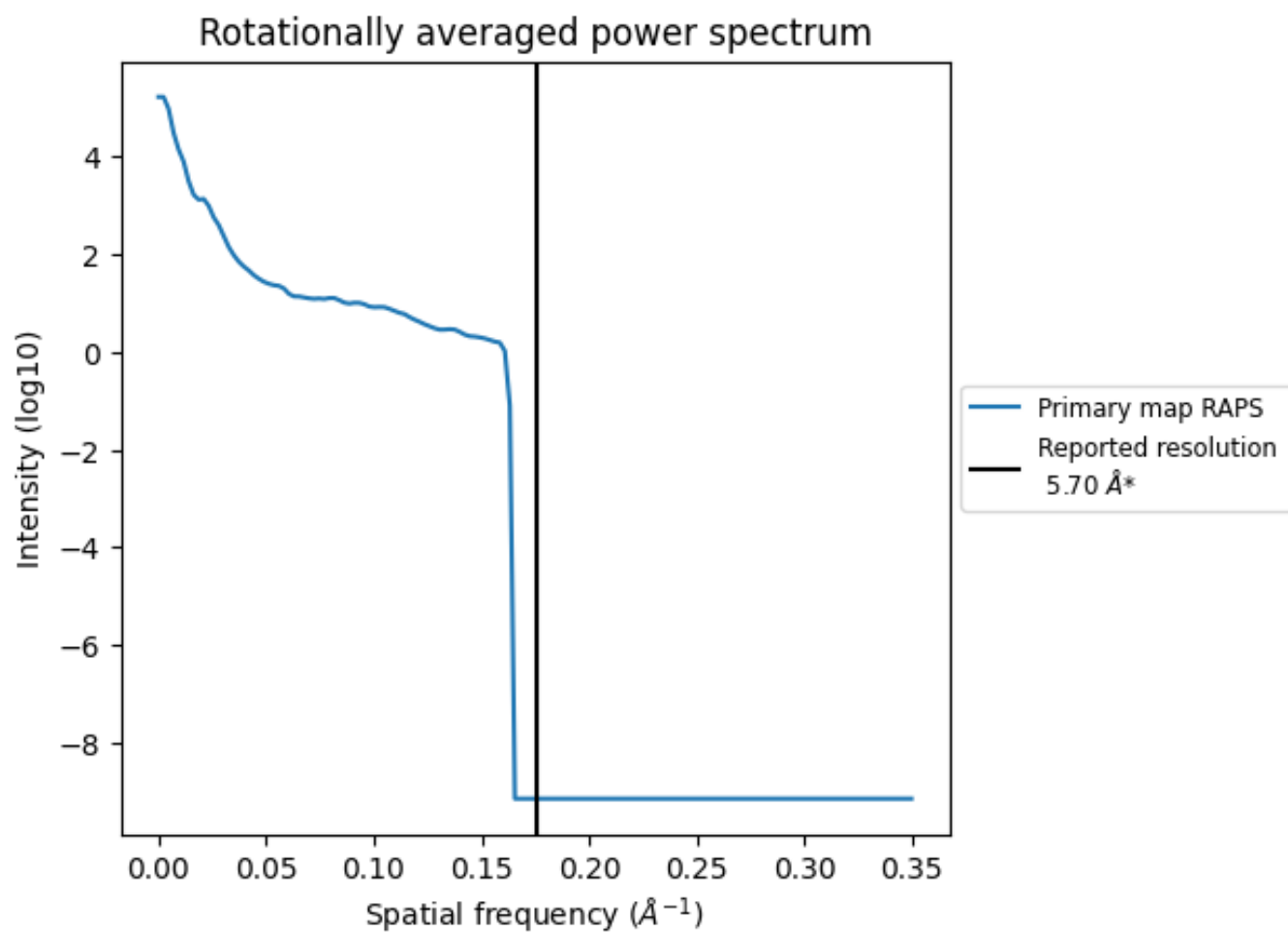
## 7.2 Volume estimate [i](#)



The volume at the recommended contour level is 502 nm<sup>3</sup>; this corresponds to an approximate mass of 454 kDa.

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

### 7.3 Rotationally averaged power spectrum i

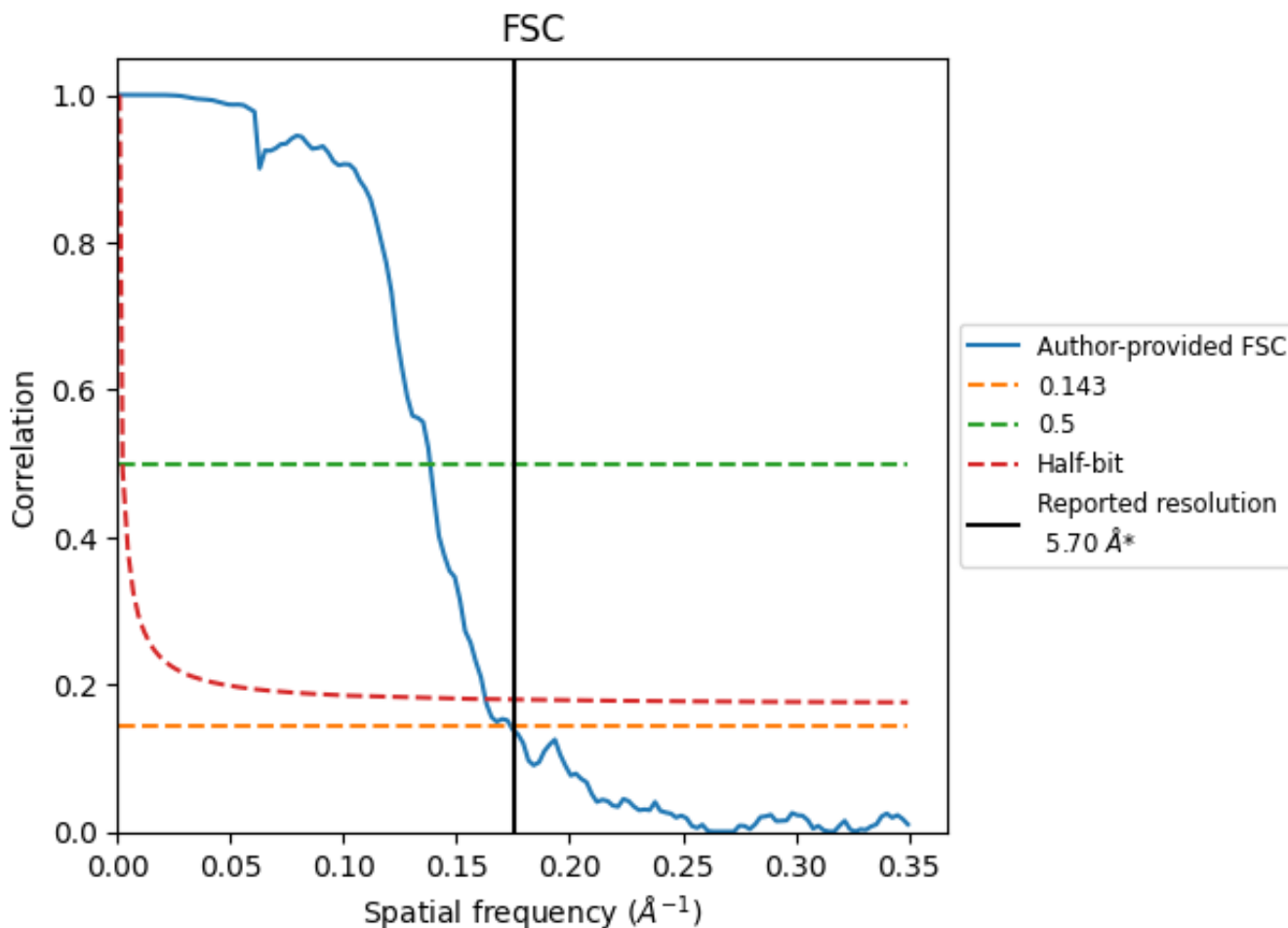


\*Reported resolution corresponds to spatial frequency of 0.175 Å<sup>-1</sup>

## 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 0.175 Å<sup>-1</sup>

## 8.2 Resolution estimates [i](#)

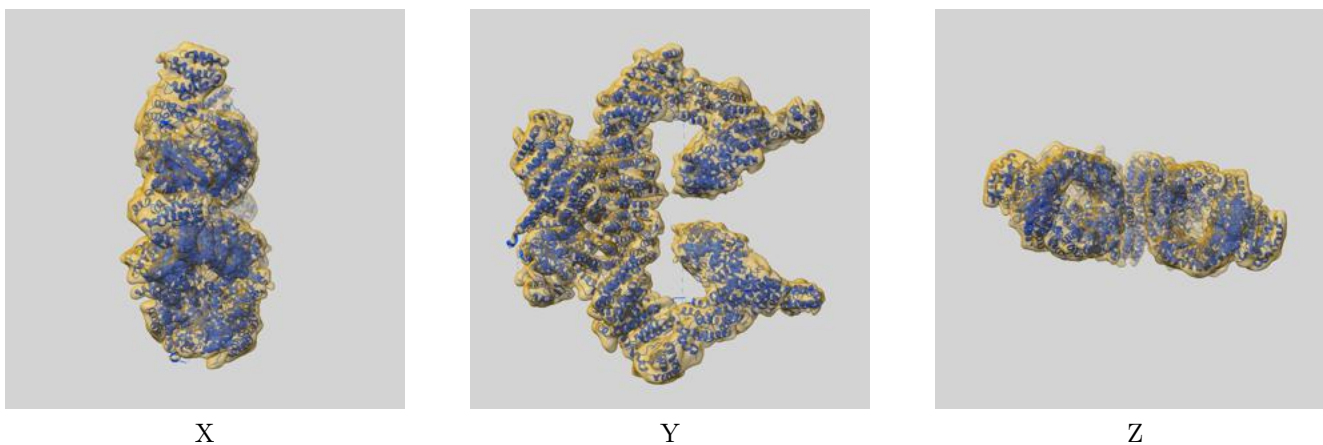
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	5.70	-	-
Author-provided FSC curve	5.75	7.23	6.14
Unmasked-calculated*	-	-	-

\*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps.

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

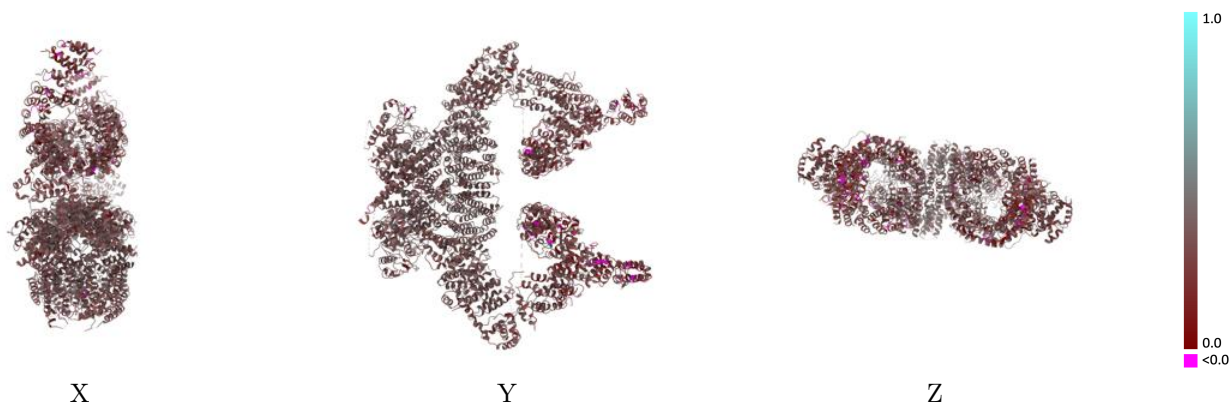
This section contains information regarding the fit between EMDB map EMD-3669 and PDB model 5NP0. Per-residue inclusion information can be found in section 3 on page 4.

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



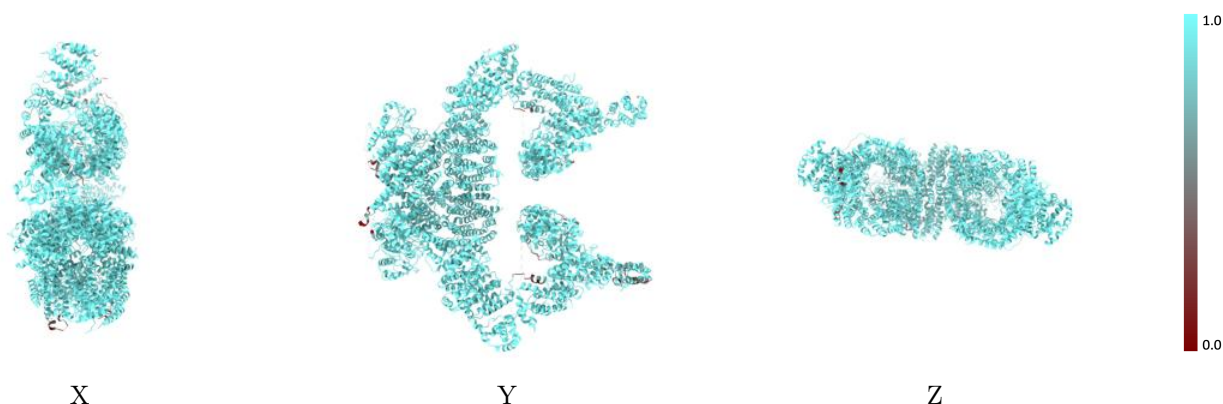
The images above show the 3D surface view of the map at the recommended contour level 0.03 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



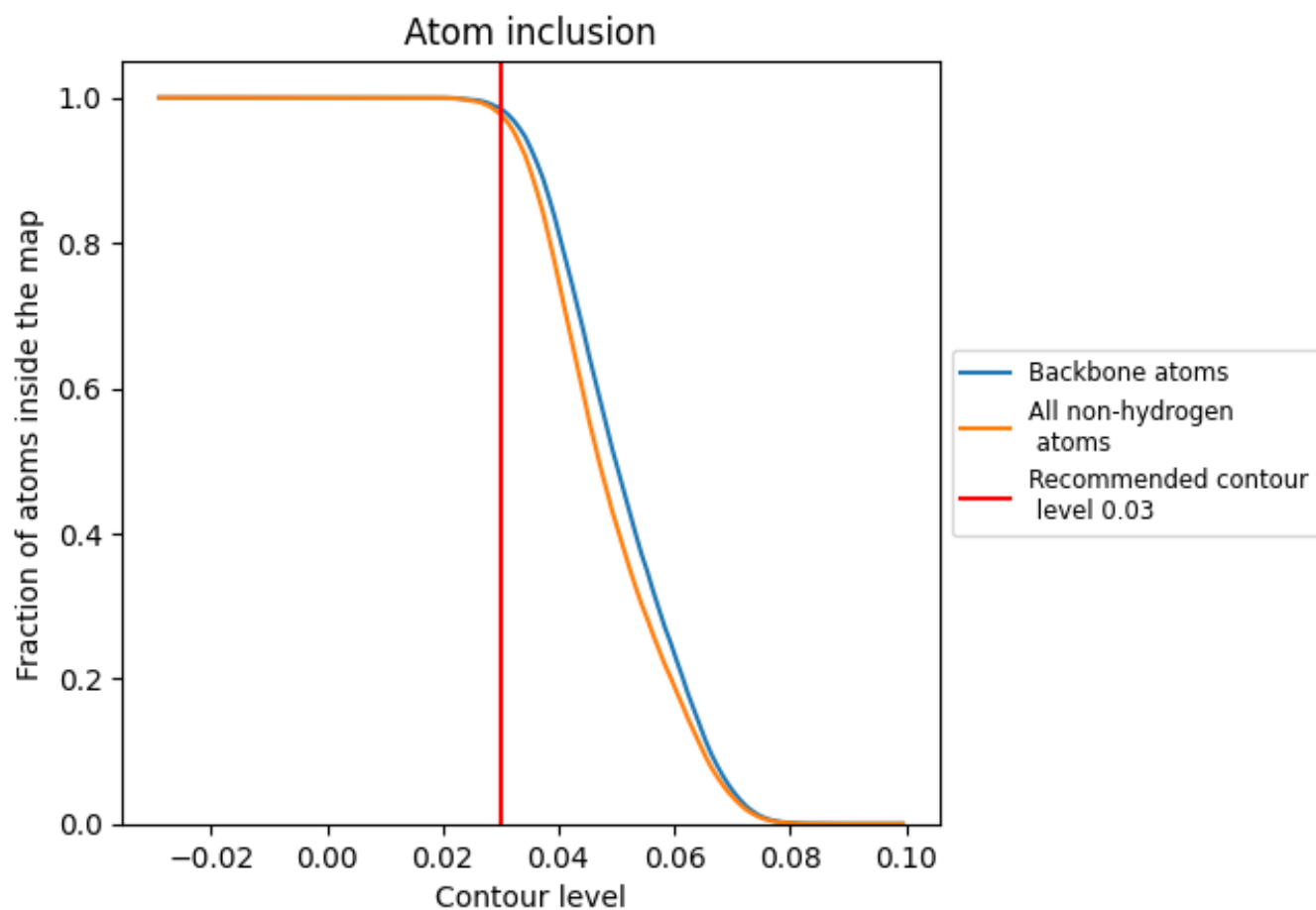
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (0.03).

## 9.4 Atom inclusion [i](#)









At the recommended contour level, 98% of all backbone atoms, 98% 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 (0.03) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.9772	 0.3140
A	 0.9691	 0.3110
B	 0.9854	 0.3160

