



## Full wwPDB EM Validation Report ⓘ

May 28, 2026 – 04:17 PM JST

PDB ID : 9VM3 / pdb\_00009vm3  
EMDB ID : EMD-65175  
Title : Structure of DOCK6-Cdc42 complex  
Authors : Kukimoto-Niino, M.; Katsura, K.; Ishizuka-Katsura, Y.; Yonemochi, M.;  
Hanada, K.; Shirouzu, M.  
Deposited on : 2025-06-27  
Resolution : 4.52 Å(reported)

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:

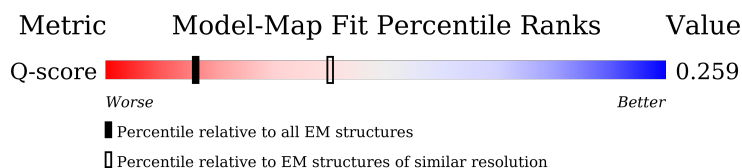
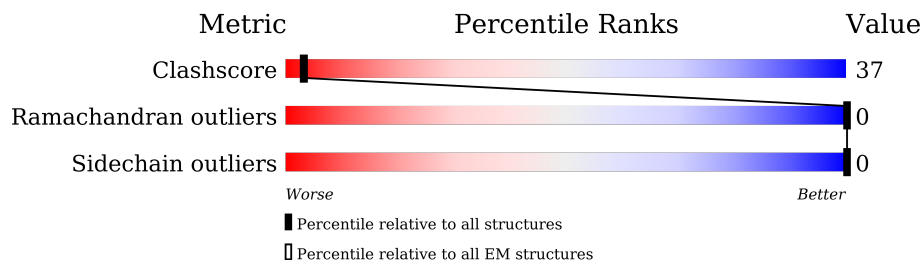
EMDB validation analysis : 0.0.1.dev132  
MolProbity : 4-5-2 with Phenix2.0  
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)  
EM percentile statistics : 202505.v01 (Using data in the EMDB archive up until May 2025)  
MapQ : 1.9.13  
Ideal geometry (proteins)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

# 1 Overall quality at a glance

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

The reported resolution of this entry is 4.52 Å.

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



Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Sidechain outliers	223484	23102	-
Q-score	-	25397	2506 ( 4.02 - 5.02 )

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	2053	
1	C	2053	
2	B	195	
2	D	195	

## 2 Entry composition

There are 2 unique types of molecules in this entry. The entry contains 29720 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 Dedicator of cytokinesis protein 6.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	1688	Total	C	N	O	S	0	0
			13471	8606	2331	2475	59		
1	C	1688	Total	C	N	O	S	0	0
			13471	8606	2331	2475	59		

There are 12 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	-5	GLY	-	expression tag	UNP Q96HP0
A	-4	GLY	-	expression tag	UNP Q96HP0
A	-3	SER	-	expression tag	UNP Q96HP0
A	-2	GLY	-	expression tag	UNP Q96HP0
A	-1	GLY	-	expression tag	UNP Q96HP0
A	0	SER	-	expression tag	UNP Q96HP0
C	-5	GLY	-	expression tag	UNP Q96HP0
C	-4	GLY	-	expression tag	UNP Q96HP0
C	-3	SER	-	expression tag	UNP Q96HP0
C	-2	GLY	-	expression tag	UNP Q96HP0
C	-1	GLY	-	expression tag	UNP Q96HP0
C	0	SER	-	expression tag	UNP Q96HP0

- Molecule 2 is a protein called Cell division control protein 42 homolog.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	B	178	Total	C	N	O	S	0	0
			1389	894	221	267	7		
2	D	178	Total	C	N	O	S	0	0
			1389	894	221	267	7		

There are 18 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
B	-6	GLY	-	expression tag	UNP P60953

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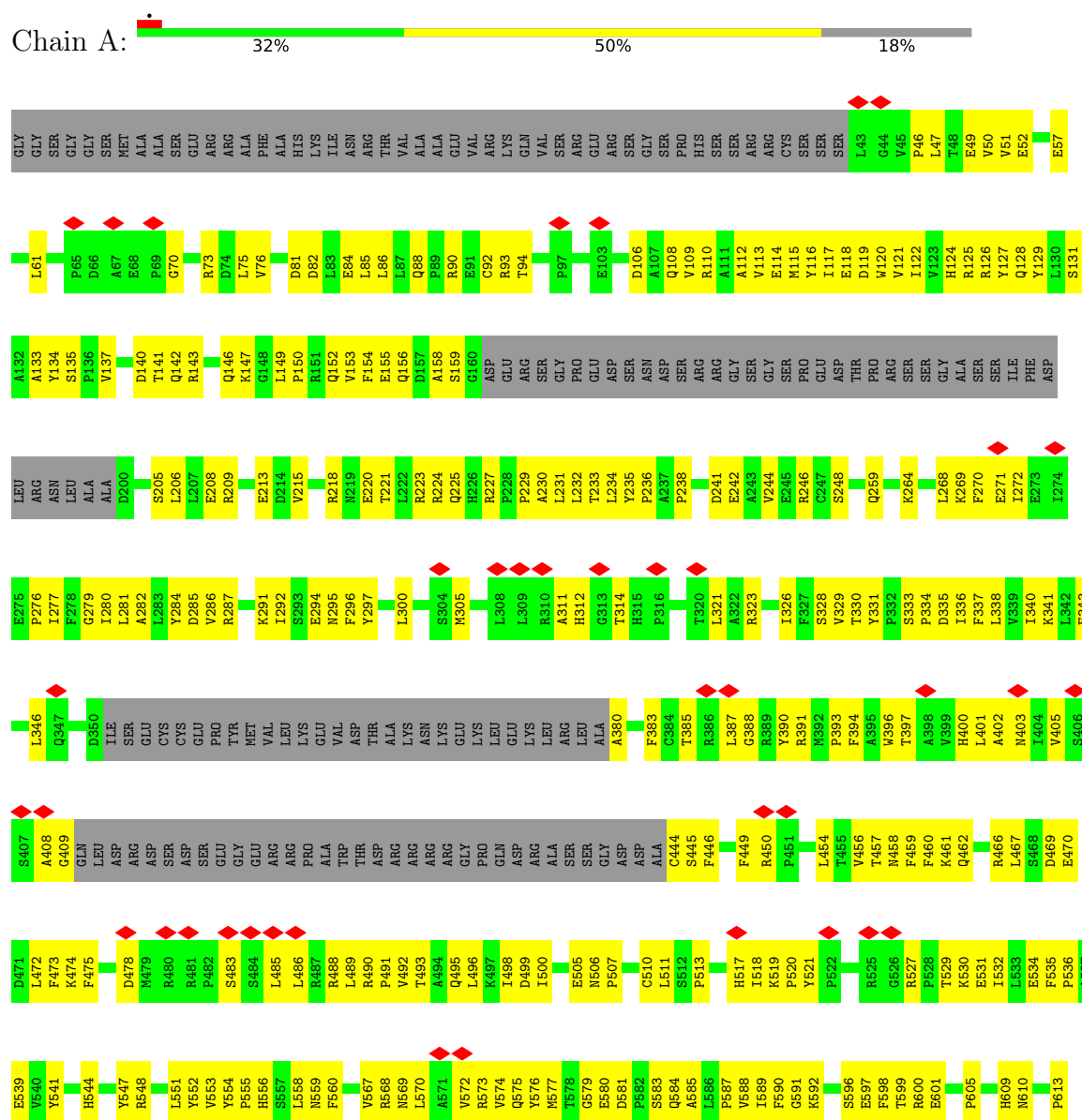
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Chain	Residue	Modelled	Actual	Comment	Reference
B	-5	SER	-	expression tag	UNP P60953
B	-4	SER	-	expression tag	UNP P60953
B	-3	GLY	-	expression tag	UNP P60953
B	-2	SER	-	expression tag	UNP P60953
B	-1	SER	-	expression tag	UNP P60953
B	0	GLY	-	expression tag	UNP P60953
B	15	ALA	GLY	engineered mutation	UNP P60953
B	188	SER	-	expression tag	UNP P60953
D	-6	GLY	-	expression tag	UNP P60953
D	-5	SER	-	expression tag	UNP P60953
D	-4	SER	-	expression tag	UNP P60953
D	-3	GLY	-	expression tag	UNP P60953
D	-2	SER	-	expression tag	UNP P60953
D	-1	SER	-	expression tag	UNP P60953
D	0	GLY	-	expression tag	UNP P60953
D	15	ALA	GLY	engineered mutation	UNP P60953
D	188	SER	-	expression tag	UNP P60953

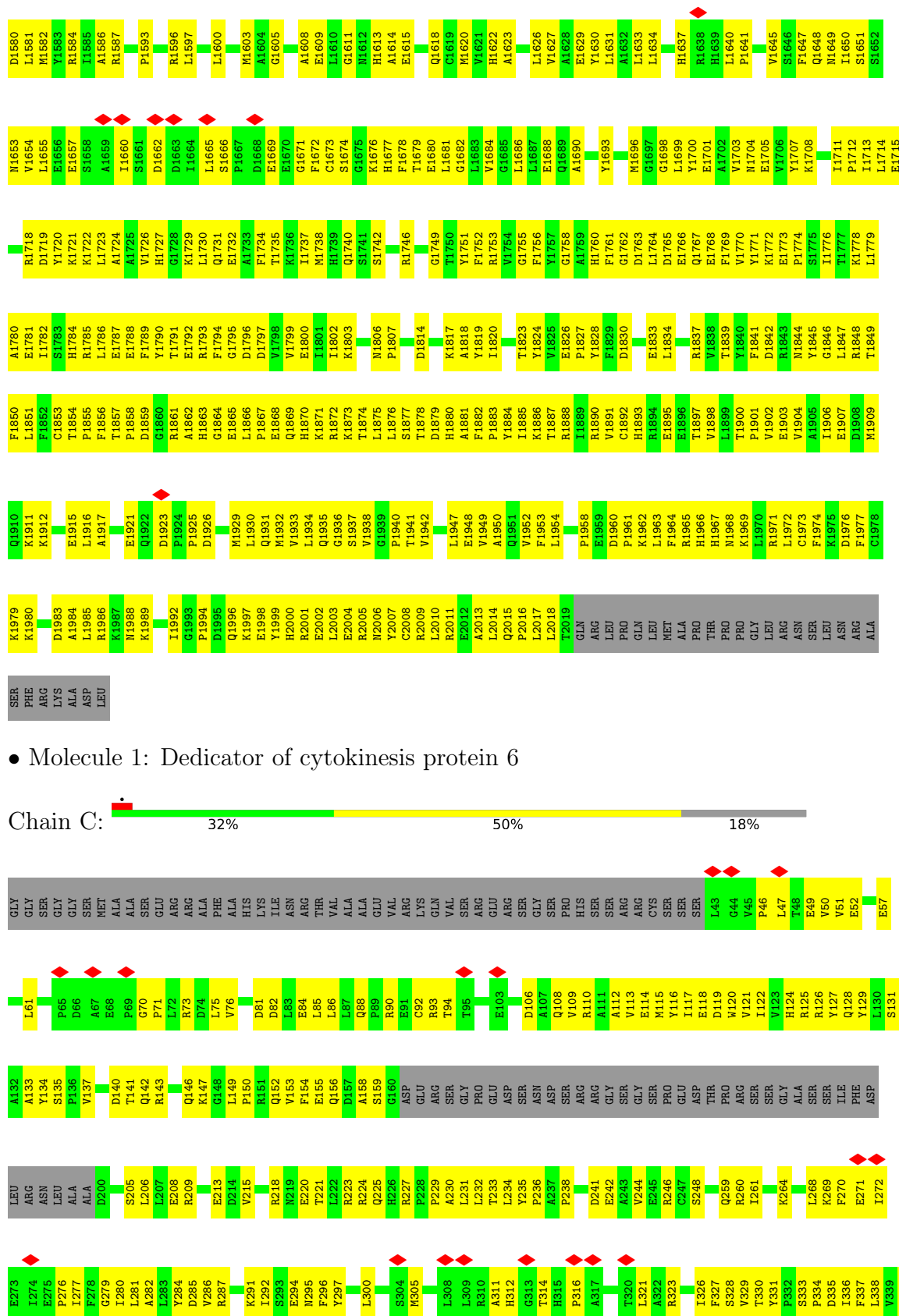
### 3 Residue-property plots

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: Dedicator of cytokinesis protein 6



Q1518	P1448	N1383	LYS	E1248	E1116	H1053	I968	ASP	Y835	L764	L688	E614
R1519	E1449	L1384	ALA	S1249	L1119	Y1054	G976	D897	V836	S768	T889	F615
F1520	L1450	T1385	ARG	R1250	A1120	T1055	L977	I902	H837	S769	T890	F616
S1521	L1451	T1386	LEU	T1251	L1121	T1056	L978	L903	Y838	P769	P899	E617
E1523	F1452	E1387	GLU	T1252	L1122	L1057	E979	L907	A839	E770	L694	E618
E1523	E1453	A1388	ARG	L1253	E1122	N1058	I980	L908	F940	P771	L695	F619
H1524	E1454	S1389	LEU	L1254	P1123	L1059	T981	H909	R841	L772	P696	K620
L1525	D1455	A1265	ALA	A1266	E1124	P1060	T981	E910	L842	V773	G896	L621
R1526	T1456	C1266	SER	V1267	A1125	C1061	K985	H909	P843	W774	M697	H622
E1527		V1267	MET	L1268		C1062		E910	G944	F775		
S1528	L1462	L1268	LEU	A1128	A1128	P1063	N994	L912	F947	H777	H703	
L1529	C1463	V1269	ASP	F1129	F1129	L1064	A995	L912	SER	K704	K704	A625
K1530	L1464	L1260	SER	L1130	L1130	S1065	S996	A913	LEU	W778	G705	C826
T1531	E1465	L1261	ASP	H1131	H1131	PRO	A998	L914	ASP	V779	V706	V627
L1532	L1466	K1262	THR	K1132	K1132	ALA	A998	Q915	PRO	L780	F707	
L1533	L1467	N1263	GLU	H1133	H1133	SER	F999	W916	GLY	D781	S708	M630
T1534	R1468	T1264	GLY	K1134	K1134	ALA	F999	W917	ASP	L782	V709	H631
Y1535	L1469	E1265	GLU	A1135	A1135	PRO	F1000	V917	GLY	L783	V709	H632
A1536		P1266	GLY	A1136	A1136	PRO	L1001	V918	ALA	L784	E710	L633
E1537	S1472	A1267	ASP	A1138	A1138	PRO	S1002	S920	PRO	R785	L711	
E1538	R1473	L1268	ILE	A1139	A1139	SER	D1003		VAL	L786	T712	T636
D1539	T1474	L1405	ALA	H1140	H1140	VAL	L1004	R924	THR	T787	S715	F637
	S1475	S1406	GLY	S1141	S1141	SER	L1005		VAL	I788	S716	Y638
L1542	T1476		THR	L1142	L1142	THR	S1006	I927	GLN	R789	V717	H639
R1543	L1477	R1409	ILE	L1143	L1143	THR	L1007	L928	ALA	P790	V717	V640
D1544	R1478	E1410	ASN	C1144	C1144	SER	V1008		ALA	P791	H718	S641
S1545	T1479	S1411	PRO	G1145	G1145	GLN	D1009		THR	I792	P719	C642
T1546	H1480	D1275	PRO	H1146	H1146	SER	R1010		LEU	D721	Q720	
F1547	A1481	L1276	VAL	D1147	D1147	SER	G1011		ALA			R645
	S1482	P1279	ALA			SER	F1012		ARG	Q796	L724	T648
Q1550	A1483	R1283	ALA	R1151	R1151	THR	F933		GLY	I797	D725	T648
V1551	S1484	L1284	ALA	Y1152	Y1152	PHE	F934		GLY	W798	A649	A649
Q1552	L1485	L1285	ILE	A1153	A1153	SER	F1013		GLY	N799	K726	L650
D1553	K1418	D1286	ALA	E1154	E1154	SER	S1015		ARG	F728	E651	E651
L1554	V1419	L1287	GLY	A1155	A1155	SER	V1017		PRO	T729	F728	T652
M1555	L1420	L1288	PRO	T1156	T1156	LEU	R1018		ALA	G803	L730	G655
F1556	L1421		LEU	V1157	V1157	PRO	K1022		SER	A804	V731	F656
N1557	Y1422	A1293	ALA	R1160	R1160	PRO	A1025		TYR	E806	H732	T657
L1558	S1423	A1294	PRO	V1161	V1161	GLY	L1028		LEU	A807	E735	W658
H1559			GLY	A1162	A1162	SER	Q1029		ALA	M808	E736	I659
M1560	S1426	Y1297	ARG	E1163	E1163	M1096			ARG	H810	F739	P660
I1561	A1427		ALA	L1164	L1164	F1097	P1034		SER	V811	F740	L661
L1562	Q1428	K1300	ALA	Y1165	Y1165	E1098			LYS	V812	P740	L662
T1563	S1429	K1301	SER	L1166	L1166	L1099			ILE	S813	R742	Q663
L1564	A1430		ILE	P1167	P1167				SER	V815	L743	
T1565		E1304	GLN	L1168	L1168	P1102	L1038		SER	H816	T669	R668
V1566	L1433	R1305	GLY	I1171	I1171	F1103	L1039		SER	R817		T669
K1567	Q1434	I1306	PRO	T1175	T1175	R1104	L1040		ASN	Q823	T746	F672
M1568	H1435	N1307	THR	L1178	L1178	Q1105	R1041		PRO	L748	L748	C673
K1569	G1436	SER	GLY	D1181	D1181	H1107	M1042		LEU	S749	L674	L674
E1570	L1437	LEU	PRO	F1182	F1182	L1108	F1044		ASP	E750	S677	V678
M1571	A1438	THR	THR	L1183	L1183	L1109	R1045		VAL	G752	V678	D679
Q1572	Q1440	PHE	ALA	E1184	E1184	G1111	C1049		ALA	N752	D679	Q680
E1573	S1511	LYS	ARG	A1184	A1184	L1112	S1050		GLY	E754	P681	P681
L1574	L1441	LEU	ARG			L1113	H1051		SER	S760		
S1575	A1442	SER	ALA			L1114	E1052		VAL			S684
L1576	L1443	ASP	GLY			T1115						
E1576	F1446	LEU	C1243									
M1577	S1515	ASP	A1247									
L1578	T1516	LEU										
I1579	F1447	MET										



• Molecule 1: Dedicator of cytokinesis protein 6

Chain C:





LYS	M1374	V1514	M1577	S1651	K1778	R1848	D1908	F1977	ARG
SER	E1377	G1515	L1578	S1652	L1779	T1849	M1909	C1978	ALA
LEU	E1374	G1516	L1579	N1653	E1780	F1850	Q1910	K1979	SER
ASP	E1382	T1517	L1580	L1654	E1781	L1851	K1911	K1980	PHE
MET	G1383	F1520	L1581	L1655	F1719	F1852	K1912	K1981	ARG
LYS	L1384	S1521	Y1583	E1656	Y1720	C1853	E1915	D1983	LYS
ALA	A1385	S1522	L1584	E1657	K1721	T1854	E1916	A1984	ALA
ARG	A1386	E1523	L1585	L1658	K1722	L1785	L1917	L1985	ALA
LEU	A1387	H1524	A1586	L1659	L1723	L1786	A1917	L1986	LEU
GLU	A1388	L1525	A1587	D1662	A1725	E1787	E1921	K1987	
ALA	S1389	R1526	P1593	D1663	K1726	P1858	Q1922	M1988	
ILE	L1390	R1527	L1593	I1664	H1727	D1859	D1923	K1989	
LEU	V1391	S1528	L1596	L1665	G1728	A1861	P1924	I1992	
GLY	V1392	K1530	L1597	L1666	K1729	A1862	P1925	P1993	
THR	V1395	K1531	L1599	P1667	L1730	H1863	D1926	P1994	
ILE	L1396	T1532	L1600	P1668	Q1731	G1864	M1929	D1995	
GLY	E1397	I1533	L1603	E1670	A1733	E1865	Q1930	Q1996	
ALA	L1398	L1534	M1603	E1671	F1734	P1867	M1931	L1997	
ARG	I1399	T1535	A1604	G1672	T1735	E1868	Q1932	E1998	
GLN	V1400	A1536	G1605	F1673	K1736	Q1869	M1933	Y1999	
GLU	Q1401	E1537	K1606	C1673	H1737	E1870	L1934	H2000	
MET	Q1402	E1538	H1607	L1674	M1738	K1871	Q1935	R2001	
VAL	V1403	D1539	A1608	P1675	K1739	L1872	G1936	E2002	
ARG	L1404	L1542	E1609	K1676	Q1740	K1873	S1937	L2003	
ARG	L1405	L1543	L1610	K1677	S1741	T1874	G1938	E2004	
SER	S1406	D1544	G1611	F1678	S1742	L1875	V1939	R2005	
GLU	R1409	D1545	H1612	T1679	R1746	L1876	P1940	N2006	
ARG	E1410	S1545	H1613	E1680		S1877	T1941	C2008	
PRO	S1411	T1546	A1614	L1681		T1878	V1942	R2009	
PHE	V1412	H1480	E1615	E1682	G1749	D1879	L1947	L2010	
GLY	L1413	Q1550	Q1618	L1683	T1750	H1880	E1948	R2011	
ASN	L1414	V1551	G1619	V1684	Y1751	A1881	F1949	E2012	
PRO	A1415	Q1552	M1620	G1685	F1752	F1882	A1950	A2013	
GLU	V1416	D1553	V1621	L1686	R1753	P1883	Q1951	L2014	
ASN	L1417	L1554	H1622	L1687	V1754	Y1884	V1952	Q2015	
VAL	K1418	M1555	A1623	E1688	G1755	L1885	F1953	P2016	
ARG	V1419	F1556	L1626	Q1689	F1756	K1886	L1954	L2017	
TRP	L1420	M1557	V1627	A1691	G1757	T1887	P1958	L2018	
ARG	V1421	L1558	A1628	G1692	A1759	E1826	E1959	T2019	
LYS	Y1422	H1559	E1629	Y1693	H1760	P1827	D1960	ARG	
SER	S1423	M1560	Y1630	F1694	F1761	F1829	P1961	LEU	
VAL	S1426	L1561	L1633	T1695	G1762	D1830	K1962	PRO	
THR	A1427	V1562	L1637	G1697	D1763	E1833	L1963	GLN	
HIS	Q1428	T1563	H1637	G1698	D1765	E1834	E1896	LEU	
TRP	L1429	T1564	H1638	L1699	E1766	L1837	T1897	ALA	
LYS	S1429	V1565	H1639	Y1700	Q1767	Y1838	V1898	PRO	
GLN	A1430	K1503	P1641	E1701	E1768	T1839	L1999	THR	
THR	L1433	M1504		A1702	F1769	Y1840	T1900	PRO	
SER	Q1434	V1506		V1703	Y1770	F1841	P1901	PRO	
ASP	H1435	K1569		H1704	K1771	L1842	V1902	GLY	
ARG	G1436	H1571	V1645	S1705	K1772	R1843	V1903	LEU	
	D1368	Q1572	S1646	Y1706	E1773	R1844	V1904	ARG	
	L1437	E1573	F1647	Y1707	P1774	N1844	A1905	ASN	
	A1438	L1510	Q1648		S1775	Y1845	F1974	LEU	
	T1439	S1511	N1649		I1776	G1846	K1975	SER	
	Q1440	E1574			P1712	L1847	D1976	ASN	
	R1441	E1576			I1713				

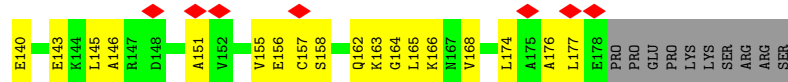
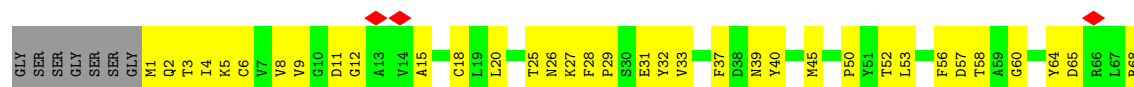
• Molecule 2: Cell division control protein 42 homolog



GLY	SER	SER	GLY	SER	SER	SER	GLY	M1	T2	Q3	T3	T3	T4	K5	C6	V7	V8	V9	G10	D11	G12	A13	V14	A15	K16	T17	C18	L19	L20	T25	N26	K27	F28	P29	S30	E31	Y32	V33	F37	D38	N39	Y40	V44	M45	P50	Y51	T52	L53	F56	D57	T58	A59	G60	Y64	D65	R66																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													



• Molecule 2: Cell division control protein 42 homolog



## 4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C2	Depositor
Number of particles used	370326	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	TFS KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ( $e^-/\text{\AA}^2$ )	48.5	Depositor
Minimum defocus (nm)	800	Depositor
Maximum defocus (nm)	2000	Depositor
Magnification	64000	Depositor
Image detector	GATAN K3 (6k x 4k)	Depositor
Maximum map value	0.077	Depositor
Minimum map value	-0.030	Depositor
Average map value	0.000	Depositor
Map value standard deviation	0.002	Depositor
Recommended contour level	0.01	Depositor
Map size (Å)	452.2, 452.2, 452.2	wwPDB
Map dimensions	340, 340, 340	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.33, 1.33, 1.33	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	0.34	0/13787	0.53	2/18706 (0.0%)
1	C	0.34	0/13787	0.53	2/18706 (0.0%)
2	B	0.22	0/1419	0.43	0/1932
2	D	0.22	0/1419	0.43	0/1932
All	All	0.33	0/30412	0.52	4/41276 (0.0%)

There are no bond length outliers.

All (4) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	1446	LYS	CA-C-N	-5.11	116.59	122.52
1	C	1446	LYS	C-N-CA	-5.11	116.59	122.52
1	A	1446	LYS	CA-C-N	-5.11	116.60	122.52
1	A	1446	LYS	C-N-CA	-5.11	116.60	122.52

There are no chirality outliers.

There are no planarity outliers.

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

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	13471	0	13448	1040	0
1	C	13471	0	13448	1021	0
2	B	1389	0	1407	105	0
2	D	1389	0	1407	90	0
All	All	29720	0	29710	2202	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 37.

All (2202) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:259:GLN:HB2	1:A:329:VAL:HB	1.45	0.99
1:C:259:GLN:HB2	1:C:329:VAL:HB	1.45	0.96
1:A:1849:THR:HA	1:A:1876:LEU:O	1.67	0.93
1:C:1849:THR:HA	1:C:1876:LEU:O	1.67	0.93
1:A:1749:GLY:HA3	1:A:1773:GLU:O	1.69	0.92
1:C:1749:GLY:HA3	1:C:1773:GLU:O	1.69	0.92
1:A:792:ILE:HG12	1:A:797:ILE:HG22	1.52	0.91
1:A:127:TYR:HB2	1:A:1053:HIS:HE2	1.37	0.90
1:C:127:TYR:HB2	1:C:1053:HIS:HE2	1.37	0.90
1:C:1653:ASN:HD21	1:C:1881:ALA:H	1.21	0.89
1:C:792:ILE:HG12	1:C:797:ILE:HG22	1.52	0.89
1:C:1247:ALA:O	1:C:1251:ARG:HB2	1.73	0.88
1:A:1247:ALA:O	1:A:1251:ARG:HB2	1.73	0.88
1:A:1653:ASN:HD21	1:A:1881:ALA:H	1.21	0.87
1:A:660:PRO:O	1:A:668:ARG:NH2	2.08	0.86
1:C:660:PRO:O	1:C:668:ARG:NH2	2.08	0.86
1:C:1999:TYR:O	1:C:2002:GLU:HB2	1.76	0.86
1:A:1999:TYR:O	1:A:2002:GLU:HB2	1.76	0.85
1:C:1259:TRP:O	1:C:1263:ASN:ND2	2.11	0.84
1:C:965:LEU:HA	1:C:968:ILE:HD12	1.60	0.84
1:A:965:LEU:HA	1:A:968:ILE:HD12	1.60	0.83
1:A:1259:TRP:O	1:A:1263:ASN:ND2	2.11	0.83
1:A:280:ILE:HA	1:A:296:PHE:O	1.79	0.83
1:C:1966:HIS:HA	1:C:1969:LYS:HE2	1.61	0.83
1:A:90:ARG:HG3	1:A:119:ASP:HA	1.61	0.82
1:C:280:ILE:HA	1:C:296:PHE:O	1.79	0.82
1:A:1966:HIS:HA	1:A:1969:LYS:HE2	1.61	0.81
1:C:931:ALA:HA	1:C:934:PHE:HD2	1.45	0.81
1:C:1410:GLU:HG2	1:C:1411:SER:H	1.45	0.81
2:D:92:ASN:ND2	2:D:95:GLU:OE2	2.14	0.81
1:C:90:ARG:HG3	1:C:119:ASP:HA	1.61	0.81
1:A:931:ALA:HA	1:A:934:PHE:HD2	1.45	0.81
1:A:1877:SER:HB3	1:A:1893:HIS:HB3	1.62	0.81
2:B:92:ASN:ND2	2:B:95:GLU:OE2	2.13	0.81
1:A:269:LYS:HB2	1:A:495:GLN:HB3	1.62	0.81
1:A:343:GLU:HA	1:A:393:PRO:HA	1.61	0.80
1:A:1501:ARG:O	1:A:1505:GLN:NE2	2.14	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1410:GLU:HG2	1:A:1411:SER:H	1.45	0.80
1:C:1877:SER:HB3	1:C:1893:HIS:HB3	1.61	0.80
2:D:158:SER:HB3	2:D:163:LYS:H	1.46	0.80
1:C:269:LYS:HB2	1:C:495:GLN:HB3	1.62	0.80
1:C:1285:LEU:HD11	1:C:1396:LEU:HD11	1.64	0.80
1:A:1620:MET:HE2	1:A:1690:ALA:HB2	1.64	0.79
1:A:1848:ARG:NH2	1:A:1878:THR:O	2.14	0.79
1:C:343:GLU:HA	1:C:393:PRO:HA	1.62	0.79
1:C:1501:ARG:O	1:C:1505:GLN:NE2	2.14	0.79
1:C:1848:ARG:NH2	1:C:1878:THR:O	2.14	0.79
1:C:1960:ASP:HB3	1:C:1963:LEU:HB2	1.63	0.79
1:A:568:ARG:O	1:A:610:ASN:N	2.14	0.79
1:C:1472:SER:O	1:C:1478:ARG:NH2	2.16	0.79
1:A:1763:ASP:O	1:A:1767:GLN:NE2	2.16	0.79
1:C:472:LEU:HA	1:C:475:PHE:HD2	1.49	0.78
1:C:1620:MET:HE2	1:C:1690:ALA:HB2	1.64	0.78
1:C:1763:ASP:O	1:C:1767:GLN:NE2	2.16	0.78
1:C:206:LEU:HD11	1:C:1441:ARG:HE	1.49	0.78
1:A:1960:ASP:HB3	1:A:1963:LEU:HB2	1.63	0.78
1:C:1749:GLY:CA	1:C:1773:GLU:O	2.31	0.78
1:A:1285:LEU:HD11	1:A:1396:LEU:HD11	1.64	0.78
1:A:1472:SER:O	1:A:1478:ARG:NH2	2.16	0.78
1:A:472:LEU:HA	1:A:475:PHE:HD2	1.49	0.77
1:A:1749:GLY:CA	1:A:1773:GLU:O	2.31	0.77
1:A:1950:ALA:O	1:A:1954:LEU:HB2	1.85	0.77
1:C:960:PHE:HB2	1:C:965:LEU:HD11	1.66	0.77
1:A:466:ARG:NH1	1:A:614:GLU:O	2.18	0.77
1:C:1572:GLN:HA	1:C:1578:LEU:HD21	1.65	0.77
1:C:554:TYR:HB2	1:C:710:GLU:HB3	1.67	0.77
1:C:466:ARG:NH1	1:C:614:GLU:O	2.17	0.77
1:A:960:PHE:HB2	1:A:965:LEU:HD11	1.67	0.77
1:C:142:GLN:NE2	1:C:235:TYR:O	2.18	0.77
1:C:90:ARG:NH2	1:C:115:MET:O	2.18	0.77
1:A:1572:GLN:HA	1:A:1578:LEU:HD21	1.65	0.77
1:A:1426:SER:OG	1:A:1428:GLN:NE2	2.18	0.76
2:B:158:SER:HB3	2:B:163:LYS:H	1.46	0.76
1:C:1950:ALA:O	1:C:1954:LEU:HB2	1.85	0.76
1:A:206:LEU:HD11	1:A:1441:ARG:HE	1.49	0.76
1:C:1059:LEU:HG	1:C:1062:CYS:HB2	1.68	0.76
1:C:380:ALA:HA	1:C:383:PHE:HD2	1.51	0.76
1:C:467:LEU:HD21	1:C:472:LEU:HD13	1.68	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1781:GLU:OE1	2:D:166:LYS:NZ	2.17	0.76
1:A:248:SER:OG	1:A:826:ARG:NH2	2.19	0.76
1:A:1580:ASP:OD2	1:A:1888:ARG:NH2	2.18	0.76
1:C:630:ASN:O	1:C:632:HIS:ND1	2.17	0.76
1:A:1650:ILE:O	1:A:1845:TYR:OH	2.04	0.76
1:A:1855:PRO:HG3	2:B:33:VAL:HA	1.68	0.76
1:A:1871:LYS:O	1:A:1898:VAL:HA	1.86	0.76
1:C:76:VAL:HA	1:C:1056:THR:HG23	1.68	0.76
1:C:1863:HIS:NE2	2:D:32:TYR:O	2.19	0.76
1:A:84:GLU:OE2	1:A:124:HIS:ND1	2.17	0.76
1:A:90:ARG:NH2	1:A:115:MET:O	2.18	0.76
1:C:1426:SER:OG	1:C:1428:GLN:NE2	2.18	0.76
1:A:554:TYR:HB2	1:A:710:GLU:HB3	1.67	0.75
1:A:142:GLN:NE2	1:A:235:TYR:O	2.18	0.75
1:A:380:ALA:HA	1:A:383:PHE:HD2	1.51	0.75
1:A:1566:VAL:HA	1:A:1569:LYS:HD2	1.69	0.75
1:C:568:ARG:O	1:C:610:ASN:N	2.14	0.75
1:A:1878:THR:HG22	1:A:1891:VAL:HA	1.69	0.75
1:C:931:ALA:HA	1:C:934:PHE:CD2	2.22	0.75
1:C:1580:ASP:OD2	1:C:1888:ARG:NH2	2.17	0.75
1:C:1871:LYS:O	1:C:1898:VAL:HA	1.86	0.75
1:A:1058:ASN:HD21	1:A:1109:LEU:HB2	1.51	0.74
1:C:1058:ASN:OD1	1:C:1109:LEU:N	2.19	0.74
1:C:1531:THR:O	1:C:1534:THR:OG1	2.04	0.74
1:A:76:VAL:HA	1:A:1056:THR:HG23	1.68	0.74
1:A:82:ASP:OD2	1:A:1006:SER:OG	2.05	0.74
1:C:1499:PHE:O	1:C:1502:VAL:N	2.17	0.74
1:A:630:ASN:O	1:A:632:HIS:ND1	2.17	0.74
1:C:1878:THR:HG22	1:C:1891:VAL:HA	1.69	0.74
1:C:1058:ASN:HD21	1:C:1109:LEU:HB2	1.51	0.74
1:C:1399:ILE:O	1:C:1402:THR:OG1	2.05	0.74
1:A:467:LEU:HD21	1:A:472:LEU:HD13	1.68	0.74
1:C:231:LEU:HB2	1:C:1262:LYS:HZ3	1.52	0.74
1:C:1650:ILE:O	1:C:1845:TYR:OH	2.04	0.74
1:A:1399:ILE:O	1:A:1402:THR:OG1	2.05	0.74
1:C:248:SER:OG	1:C:826:ARG:NH2	2.19	0.74
2:D:116:GLN:HG3	2:D:119:LEU:HD12	1.69	0.74
1:A:911:GLU:O	1:A:915:GLN:NE2	2.21	0.74
1:A:1059:LEU:HG	1:A:1062:CYS:HB2	1.68	0.74
1:A:1498:ASN:O	1:A:1501:ARG:NH2	2.20	0.74
1:A:1531:THR:O	1:A:1534:THR:OG1	2.04	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1498:ASN:O	1:C:1501:ARG:NH2	2.20	0.74
1:A:1862:ALA:O	1:A:1869:GLN:NE2	2.21	0.73
1:C:82:ASP:OD2	1:C:1006:SER:OG	2.05	0.73
1:A:1533:LEU:HD21	1:A:1555:MET:HG2	1.71	0.73
1:A:1780:ALA:HB3	2:B:166:LYS:HZ2	1.54	0.73
1:C:1566:VAL:HA	1:C:1569:LYS:HD2	1.69	0.73
1:A:931:ALA:HA	1:A:934:PHE:CD2	2.22	0.73
1:A:1587:ARG:HA	1:A:1596:ARG:HH12	1.52	0.73
1:C:1587:ARG:HA	1:C:1596:ARG:HH12	1.51	0.73
1:C:1260:VAL:O	1:C:1264:THR:OG1	2.06	0.73
1:C:911:GLU:O	1:C:915:GLN:NE2	2.21	0.73
1:C:1701:GLU:OE1	1:C:1701:GLU:N	2.21	0.73
1:C:915:GLN:O	1:C:919:SER:N	2.22	0.73
1:C:1756:PHE:O	1:C:1766:GLU:CA	2.37	0.73
1:A:632:HIS:HA	1:A:661:LEU:HG	1.71	0.72
2:B:116:GLN:HG3	2:B:119:LEU:HD12	1.69	0.72
1:A:1701:GLU:OE1	1:A:1701:GLU:N	2.21	0.72
1:C:84:GLU:OE2	1:C:124:HIS:ND1	2.17	0.72
1:C:1533:LEU:HD21	1:C:1555:MET:HG2	1.71	0.72
1:A:466:ARG:HE	1:A:616:TYR:HD1	1.35	0.72
1:C:909:HIS:ND1	1:C:941:SER:OG	2.11	0.72
1:A:1464:LEU:HD21	1:A:1468:ARG:HH21	1.54	0.72
1:C:1464:LEU:HD21	1:C:1468:ARG:HH21	1.54	0.72
1:C:1992:ILE:HG21	1:C:2000:HIS:HB2	1.71	0.72
1:A:1260:VAL:O	1:A:1264:THR:OG1	2.06	0.72
1:A:915:GLN:O	1:A:919:SER:N	2.22	0.71
1:C:466:ARG:HE	1:C:616:TYR:HD1	1.35	0.71
1:A:1756:PHE:O	1:A:1766:GLU:CA	2.37	0.71
1:A:1776:ILE:HD12	2:B:45:MET:HE3	1.72	0.71
1:A:1499:PHE:O	1:A:1502:VAL:N	2.17	0.71
1:A:75:LEU:O	1:A:1056:THR:OG1	2.09	0.71
1:A:1992:ILE:HG21	1:A:2000:HIS:HB2	1.71	0.71
1:A:1533:LEU:HD11	1:A:1555:MET:HE3	1.72	0.71
1:C:133:ALA:HA	1:C:246:ARG:HD2	1.72	0.71
1:A:1058:ASN:OD1	1:A:1109:LEU:N	2.19	0.71
1:C:1756:PHE:O	1:C:1766:GLU:HA	1.91	0.71
1:C:632:HIS:HA	1:C:661:LEU:HG	1.72	0.70
1:C:911:GLU:HB3	1:C:915:GLN:HE22	1.56	0.70
1:A:911:GLU:HB3	1:A:915:GLN:HE22	1.56	0.70
1:A:920:SER:O	1:A:924:ARG:N	2.23	0.70
1:C:93:ARG:NH2	1:C:505:GLU:O	2.25	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:599:THR:HG22	1:A:600:ARG:H	1.57	0.70
1:A:1396:LEU:HA	1:A:1399:ILE:HD12	1.73	0.70
1:C:1396:LEU:HA	1:C:1399:ILE:HD12	1.73	0.70
1:C:1533:LEU:HD11	1:C:1555:MET:HE3	1.72	0.70
1:A:93:ARG:NH2	1:A:505:GLU:O	2.25	0.70
1:C:656:PHE:N	1:C:677:SER:O	2.22	0.70
1:C:1862:ALA:O	1:C:1869:GLN:NE2	2.21	0.70
1:A:539:GLU:HB3	1:A:770:GLU:HG2	1.74	0.70
1:C:539:GLU:HB3	1:C:770:GLU:HG2	1.74	0.70
1:C:599:THR:HG22	1:C:600:ARG:H	1.57	0.70
1:A:57:GLU:OE1	1:A:1010:ARG:N	2.25	0.69
1:A:133:ALA:HA	1:A:246:ARG:HD2	1.72	0.69
1:C:1558:LEU:HA	1:C:1561:ILE:HD12	1.73	0.69
1:A:231:LEU:HB2	1:A:1262:LYS:HZ2	1.56	0.69
2:B:78:PHE:HB2	2:B:110:PHE:HB3	1.74	0.69
1:A:1558:LEU:HA	1:A:1561:ILE:HD12	1.73	0.69
1:A:1756:PHE:O	1:A:1766:GLU:HA	1.92	0.69
1:C:1837:ARG:NH1	1:C:1842:ASP:O	2.26	0.69
1:A:1837:ARG:NH1	1:A:1842:ASP:O	2.26	0.69
1:A:1863:HIS:NE2	2:B:32:TYR:O	2.25	0.69
1:A:1620:MET:HE1	1:A:1686:LEU:O	1.93	0.69
1:A:656:PHE:N	1:A:677:SER:O	2.22	0.69
1:C:1620:MET:HE1	1:C:1686:LEU:O	1.93	0.69
1:A:1455:ASP:OD1	1:A:1456:THR:N	2.25	0.68
1:A:2009:ARG:O	1:A:2013:ALA:N	2.24	0.68
1:C:57:GLU:OE1	1:C:1010:ARG:N	2.25	0.68
1:A:1437:LEU:O	1:A:1440:GLN:NE2	2.25	0.68
1:C:1437:LEU:O	1:C:1440:GLN:NE2	2.26	0.68
1:A:1128:ALA:HA	1:A:1131:LEU:HD13	1.75	0.68
1:C:1128:ALA:HA	1:C:1131:LEU:HD13	1.75	0.68
1:C:553:VAL:HB	1:C:619:PHE:HB2	1.76	0.68
2:D:78:PHE:HB2	2:D:110:PHE:HB3	1.74	0.68
1:C:1770:VAL:O	1:C:1888:ARG:HA	1.94	0.68
1:C:920:SER:O	1:C:924:ARG:N	2.23	0.68
1:A:390:TYR:OH	1:A:651:GLU:OE2	2.12	0.67
1:A:1160:ARG:O	1:A:1163:GLU:HB3	1.94	0.67
1:A:49:GLU:O	1:A:1104:ARG:NH2	2.28	0.67
1:C:1577:MET:SD	1:C:1888:ARG:NH2	2.65	0.67
1:A:1555:MET:HA	1:A:1558:LEU:HD12	1.76	0.67
1:A:1893:HIS:NE2	1:A:1895:GLU:OE1	2.27	0.67
1:C:75:LEU:O	1:C:1056:THR:OG1	2.09	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1772:LYS:N	1:C:1887:THR:O	2.28	0.67
1:A:743:LEU:N	1:A:746:THR:O	2.27	0.67
1:A:1779:LEU:HD13	2:B:26:ASN:CG	2.20	0.67
1:C:92:CYS:O	1:C:519:LYS:NZ	2.23	0.67
1:C:778:HIS:O	1:C:782:LYS:HG2	1.95	0.67
1:C:743:LEU:N	1:C:746:THR:O	2.27	0.67
1:A:1997:LYS:O	1:A:2000:HIS:HB3	1.95	0.67
1:C:1142:LEU:HG	1:C:1146:HIS:NE2	2.10	0.67
1:C:1574:ASP:OD2	1:C:1577:MET:N	2.22	0.67
1:C:1698:GLY:O	1:C:1746:ARG:NH2	2.27	0.67
1:A:1574:ASP:OD2	1:A:1577:MET:N	2.22	0.67
1:A:553:VAL:HB	1:A:619:PHE:HB2	1.76	0.67
1:A:936:GLN:O	1:A:940:LYS:HG2	1.95	0.67
1:C:1455:ASP:OD1	1:C:1456:THR:N	2.25	0.67
1:C:1160:ARG:O	1:C:1163:GLU:HB3	1.94	0.67
1:A:778:HIS:O	1:A:782:LYS:HG2	1.95	0.66
1:A:1698:GLY:O	1:A:1746:ARG:NH2	2.27	0.66
1:C:47:LEU:HG	1:C:1115:THR:HG23	1.76	0.66
1:C:49:GLU:O	1:C:1104:ARG:NH2	2.28	0.66
1:A:792:ILE:HA	1:A:797:ILE:HA	1.77	0.66
2:B:68:ARG:HG3	2:B:69:PRO:HD3	1.78	0.66
1:C:506:ASN:HB3	1:C:520:PRO:HD3	1.77	0.66
1:C:783:LEU:HD22	1:C:808:MET:SD	2.35	0.66
1:C:1797:ASP:O	1:C:1817:LYS:NZ	2.28	0.66
1:A:1046:ARG:O	1:A:1050:SER:N	2.27	0.66
2:B:8:VAL:HA	2:B:79:LEU:O	1.95	0.66
1:C:1062:CYS:O	1:C:1106:GLN:NE2	2.29	0.66
2:D:8:VAL:HA	2:D:79:LEU:O	1.95	0.66
1:C:1997:LYS:O	1:C:2000:HIS:HB3	1.95	0.66
1:A:47:LEU:HG	1:A:1115:THR:HG23	1.76	0.66
1:A:125:ARG:HH22	1:A:1003:ASP:HA	1.61	0.66
1:C:936:GLN:O	1:C:940:LYS:HG2	1.95	0.66
1:A:715:SER:OG	1:A:718:HIS:N	2.28	0.66
1:A:949:GLY:O	1:A:951:ARG:NH1	2.29	0.66
1:C:388:GLY:O	1:C:391:ARG:NH2	2.29	0.66
1:C:1893:HIS:NE2	1:C:1895:GLU:OE1	2.27	0.66
1:A:1004:LEU:HA	1:A:1007:LEU:HD12	1.77	0.66
1:C:456:VAL:HB	1:C:496:LEU:HB3	1.78	0.66
1:C:949:GLY:O	1:C:951:ARG:NH1	2.29	0.66
1:C:1046:ARG:O	1:C:1050:SER:N	2.27	0.66
1:A:388:GLY:O	1:A:391:ARG:NH2	2.29	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:506:ASN:HB3	1:A:520:PRO:HD3	1.77	0.66
1:A:783:LEU:HD22	1:A:808:MET:SD	2.35	0.66
1:A:1770:VAL:O	1:A:1888:ARG:HA	1.94	0.66
1:A:1949:VAL:HA	1:A:1952:VAL:HG22	1.78	0.66
1:C:1935:GLN:OE1	1:C:1999:TYR:OH	2.13	0.66
1:A:679:ASP:H	1:A:697:MET:HE1	1.61	0.66
1:C:908:LEU:O	1:C:911:GLU:N	2.29	0.66
1:C:1139:VAL:O	1:C:1143:LEU:HG	1.96	0.66
1:A:1012:PHE:O	1:A:1015:SER:OG	2.07	0.66
1:C:544:HIS:H	1:C:777:HIS:HE1	1.44	0.66
1:C:1004:LEU:HA	1:C:1007:LEU:HD12	1.77	0.66
1:C:1456:THR:HB	1:C:1676:LYS:HG3	1.77	0.66
1:A:908:LEU:O	1:A:911:GLU:N	2.29	0.65
1:A:1139:VAL:O	1:A:1143:LEU:HG	1.96	0.65
1:A:1142:LEU:HG	1:A:1146:HIS:NE2	2.10	0.65
1:A:1456:THR:HB	1:A:1676:LYS:HG3	1.77	0.65
1:A:1772:LYS:N	1:A:1887:THR:O	2.28	0.65
1:C:715:SER:OG	1:C:718:HIS:N	2.28	0.65
1:C:768:SER:OG	1:C:770:GLU:OE1	2.14	0.65
1:C:994:ASN:HD22	1:C:994:ASN:C	2.03	0.65
1:C:1555:MET:HA	1:C:1558:LEU:HD12	1.76	0.65
1:A:768:SER:OG	1:A:770:GLU:OE1	2.14	0.65
1:C:558:LEU:HD13	1:C:707:PHE:HD1	1.62	0.65
1:A:585:ALA:HB1	1:A:600:ARG:HB3	1.78	0.65
1:C:585:ALA:HB1	1:C:600:ARG:HB3	1.78	0.65
1:C:779:VAL:HG23	1:C:780:LEU:HD23	1.77	0.65
1:C:1637:HIS:HB2	1:C:1640:LEU:HG	1.79	0.65
1:A:779:VAL:HG23	1:A:780:LEU:HD23	1.77	0.65
1:C:125:ARG:HH22	1:C:1003:ASP:HA	1.60	0.65
1:C:143:ARG:HA	1:C:146:GLN:HB2	1.79	0.65
1:C:1846:GLY:H	1:C:1883:PRO:HD2	1.62	0.65
1:A:466:ARG:HB2	1:A:614:GLU:HB3	1.78	0.65
1:A:511:LEU:HB2	1:A:530:LYS:HG2	1.79	0.65
1:A:1577:MET:SD	1:A:1888:ARG:NH2	2.65	0.65
2:D:68:ARG:HG3	2:D:69:PRO:HD3	1.78	0.65
1:A:143:ARG:HA	1:A:146:GLN:HB2	1.79	0.65
1:A:456:VAL:HB	1:A:496:LEU:HB3	1.78	0.65
1:A:1062:CYS:O	1:A:1106:GLN:NE2	2.29	0.65
1:A:2005:ARG:HD2	1:A:2009:ARG:HH22	1.62	0.65
1:C:605:PRO:HD2	1:C:617:GLU:HB2	1.79	0.65
1:C:1182:PHE:HB2	1:C:1293:ALA:HB1	1.78	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:287:ARG:N	1:A:335:ASP:OD1	2.29	0.65
1:A:1846:GLY:H	1:A:1883:PRO:HD2	1.62	0.65
1:C:679:ASP:H	1:C:697:MET:HE1	1.61	0.65
1:C:1780:ALA:HB3	2:D:166:LYS:HZ2	1.62	0.65
1:A:544:HIS:H	1:A:777:HIS:HE1	1.44	0.65
1:A:605:PRO:HD2	1:A:617:GLU:HB2	1.79	0.65
1:C:792:ILE:HA	1:C:797:ILE:HA	1.77	0.65
1:A:994:ASN:C	1:A:994:ASN:HD22	2.03	0.65
1:A:1797:ASP:O	1:A:1817:LYS:NZ	2.28	0.65
1:C:115:MET:SD	1:C:778:HIS:ND1	2.69	0.65
1:C:454:LEU:HD11	1:C:500:ILE:HD11	1.79	0.65
1:A:1782:ILE:HG13	1:A:1786:LEU:HD23	1.80	0.64
1:A:1935:GLN:OE1	1:A:1999:TYR:OH	2.13	0.64
1:C:224:ARG:HH22	1:C:1266:PRO:HG3	1.62	0.64
1:C:466:ARG:HB2	1:C:614:GLU:HB3	1.78	0.64
1:C:1949:VAL:HA	1:C:1952:VAL:HG22	1.78	0.64
1:A:558:LEU:HD13	1:A:707:PHE:HD1	1.62	0.64
1:A:1525:LEU:O	1:A:1528:SER:OG	2.12	0.64
1:A:1637:HIS:HB2	1:A:1640:LEU:HG	1.79	0.64
1:A:1994:PRO:HA	1:A:1997:LYS:HE3	1.79	0.64
1:C:1525:LEU:O	1:C:1528:SER:OG	2.12	0.64
1:C:2005:ARG:HD2	1:C:2009:ARG:HH22	1.62	0.64
1:C:2009:ARG:O	1:C:2013:ALA:N	2.24	0.64
1:A:808:MET:HE3	1:A:808:MET:HA	1.79	0.64
1:A:1512:SER:O	1:A:1516:THR:OG1	2.11	0.64
1:C:1420:VAL:O	1:C:1423:SER:OG	2.15	0.64
1:C:1994:PRO:HA	1:C:1997:LYS:HE3	1.79	0.64
1:A:224:ARG:HH22	1:A:1266:PRO:HG3	1.62	0.64
1:C:934:PHE:HA	1:C:937:LEU:HD12	1.79	0.64
1:C:1711:ILE:HD11	1:C:1726:VAL:HG11	1.79	0.64
1:A:115:MET:SD	1:A:778:HIS:ND1	2.69	0.64
1:C:287:ARG:N	1:C:335:ASP:OD1	2.29	0.64
1:C:1531:THR:HG22	1:C:1535:TYR:CE2	2.32	0.64
1:C:1782:ILE:HG13	1:C:1786:LEU:HD23	1.79	0.64
1:A:1092:LYS:O	1:A:1095:SER:OG	2.11	0.64
1:A:1586:ALA:O	1:A:1596:ARG:NH1	2.31	0.64
1:A:1731:GLN:HB2	1:C:1727:HIS:HB3	1.79	0.64
1:C:1440:GLN:HA	1:C:1443:LEU:HD12	1.79	0.64
1:A:1711:ILE:HD11	1:A:1726:VAL:HG11	1.79	0.64
1:C:963:ARG:NH2	1:C:966:ASP:OD1	2.31	0.64
1:C:1586:ALA:O	1:C:1596:ARG:NH1	2.31	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:131:SER:HB2	1:A:1052:GLU:HG3	1.79	0.64
1:A:454:LEU:HD11	1:A:500:ILE:HD11	1.79	0.64
1:A:934:PHE:HA	1:A:937:LEU:HD12	1.79	0.64
1:A:1781:GLU:OE1	2:B:166:LYS:NZ	2.31	0.64
1:C:511:LEU:HB2	1:C:530:LYS:HG2	1.79	0.64
1:C:1714:LEU:HD22	1:C:1723:LEU:HB2	1.80	0.64
1:A:1182:PHE:HB2	1:A:1293:ALA:HB1	1.78	0.64
1:A:1529:LEU:HA	1:A:1532:ILE:HD12	1.79	0.64
1:A:1859:ASP:OD2	1:A:1861:ARG:NE	2.30	0.64
1:C:131:SER:HB2	1:C:1052:GLU:HG3	1.79	0.64
1:C:146:GLN:NE2	1:C:233:THR:O	2.29	0.64
2:D:119:LEU:HA	2:D:122:ASP:HB2	1.80	0.64
1:A:146:GLN:NE2	1:A:233:THR:O	2.29	0.63
1:A:590:PHE:HD2	1:A:620:LYS:HG3	1.62	0.63
1:A:721:ASP:HB3	1:A:724:LEU:HB2	1.80	0.63
1:A:1139:VAL:HG12	1:A:1143:LEU:HD11	1.80	0.63
2:D:98:VAL:HA	2:D:101:ILE:HG12	1.80	0.63
2:B:98:VAL:HA	2:B:101:ILE:HG12	1.80	0.63
1:C:591:GLY:N	1:C:597:GLU:O	2.30	0.63
1:A:408:ALA:HB1	1:A:450:ARG:HB2	1.80	0.63
1:A:1440:GLN:HA	1:A:1443:LEU:HD12	1.79	0.63
1:A:1530:LYS:HA	1:A:1533:LEU:HD12	1.81	0.63
1:C:955:PRO:HG2	1:C:958:LEU:HD13	1.80	0.63
1:C:964:PHE:CE2	1:C:968:ILE:HD11	2.33	0.63
1:A:955:PRO:HG2	1:A:958:LEU:HD13	1.80	0.63
1:C:590:PHE:HD2	1:C:620:LYS:HG3	1.62	0.63
1:C:1529:LEU:HA	1:C:1532:ILE:HD12	1.79	0.63
1:A:215:VAL:HG22	1:A:218:ARG:HH22	1.63	0.63
1:A:577:MET:HE3	1:A:579:GLY:H	1.63	0.63
1:A:964:PHE:CE2	1:A:968:ILE:HD11	2.33	0.63
1:A:1531:THR:HG22	1:A:1535:TYR:CE2	2.32	0.63
1:A:963:ARG:NH2	1:A:966:ASP:OD1	2.30	0.63
1:C:721:ASP:HB3	1:C:724:LEU:HB2	1.79	0.63
1:C:793:ILE:N	1:C:796:GLN:O	2.32	0.63
1:C:390:TYR:OH	1:C:651:GLU:OE2	2.12	0.63
1:C:783:LEU:HD21	1:C:804:ALA:HB1	1.81	0.63
2:D:4:ILE:HG21	2:D:176:ALA:HB1	1.80	0.63
1:A:793:ILE:N	1:A:796:GLN:O	2.32	0.63
1:A:1420:VAL:O	1:A:1423:SER:OG	2.16	0.63
1:A:1510:LEU:HD11	1:A:1562:LEU:HD21	1.80	0.63
1:C:1756:PHE:O	1:C:1766:GLU:N	2.32	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:205:SER:HA	1:A:208:GLU:HG3	1.81	0.63
2:B:4:ILE:HG21	2:B:176:ALA:HB1	1.80	0.63
1:C:127:TYR:HB2	1:C:1053:HIS:NE2	2.12	0.63
1:C:835:TYR:O	1:C:840:PHE:N	2.21	0.63
1:C:1859:ASP:OD2	1:C:1861:ARG:NE	2.30	0.63
2:D:1:MET:SD	2:D:2:GLN:N	2.72	0.63
1:A:1756:PHE:O	1:A:1766:GLU:N	2.32	0.62
1:C:541:TYR:HB3	1:C:773:VAL:HG21	1.80	0.62
1:C:1755:GLY:O	1:C:1820:ILE:HA	1.99	0.62
1:C:1803:LYS:HE2	2:D:28:PHE:CG	2.34	0.62
1:A:1724:ALA:HB2	1:C:1734:PHE:HD1	1.63	0.62
1:A:1790:TYR:O	1:A:1794:PHE:HB2	1.99	0.62
2:B:1:MET:SD	2:B:2:GLN:N	2.72	0.62
2:D:8:VAL:HG22	2:D:79:LEU:HB2	1.80	0.62
1:A:490:ARG:HH22	1:A:492:VAL:HG22	1.64	0.62
1:A:783:LEU:HD21	1:A:804:ALA:HB1	1.81	0.62
1:A:1002:SER:HA	1:A:1005:LEU:HD12	1.81	0.62
1:C:1510:LEU:HD11	1:C:1562:LEU:HD21	1.80	0.62
1:C:1530:LYS:HA	1:C:1533:LEU:HD12	1.81	0.62
1:A:1753:ARG:NE	1:A:1823:THR:OG1	2.32	0.62
1:A:1755:GLY:O	1:A:1820:ILE:HA	1.99	0.62
1:C:268:LEU:HA	1:C:496:LEU:HA	1.81	0.62
1:C:577:MET:HE3	1:C:579:GLY:H	1.63	0.62
1:C:588:VAL:HG23	1:C:621:LEU:HD22	1.82	0.62
1:A:1392:VAL:O	1:A:1395:THR:OG1	2.14	0.62
1:C:1012:PHE:O	1:C:1015:SER:OG	2.07	0.62
1:C:1428:GLN:HB2	1:C:1433:LEU:HD21	1.82	0.62
1:A:140:ASP:OD1	1:A:141:THR:N	2.33	0.62
1:A:466:ARG:NH1	1:A:605:PRO:O	2.32	0.62
1:A:1850:PHE:O	1:A:1875:LEU:HA	2.00	0.62
1:C:205:SER:HA	1:C:208:GLU:HG3	1.81	0.62
1:A:541:TYR:HB3	1:A:773:VAL:HG21	1.80	0.62
2:B:68:ARG:NH2	2:B:72:TYR:OH	2.33	0.62
1:C:490:ARG:HH22	1:C:492:VAL:HG22	1.64	0.62
1:C:1912:LYS:HE3	1:C:1933:VAL:HG23	1.81	0.62
2:D:68:ARG:NH2	2:D:72:TYR:OH	2.33	0.62
1:A:835:TYR:O	1:A:840:PHE:N	2.21	0.62
1:C:742:ARG:HA	1:C:747:VAL:HA	1.82	0.62
1:C:808:MET:HA	1:C:808:MET:HE3	1.79	0.62
1:A:280:ILE:HG22	1:A:297:TYR:HA	1.81	0.62
1:C:215:VAL:HG22	1:C:218:ARG:HH22	1.64	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:227:ARG:HH12	1:A:1390:LEU:HB3	1.64	0.62
1:A:444:CYS:SG	1:A:445:SER:N	2.73	0.62
1:C:408:ALA:HB1	1:C:450:ARG:HB2	1.80	0.62
1:C:466:ARG:NH1	1:C:605:PRO:O	2.32	0.62
1:C:1790:TYR:O	1:C:1794:PHE:HB2	1.99	0.62
2:D:91:GLU:HA	2:D:94:LYS:HE2	1.82	0.62
1:A:1565:THR:O	1:A:1568:MET:HB3	2.00	0.61
1:A:1714:LEU:HD22	1:A:1723:LEU:HB2	1.80	0.61
1:A:1721:LYS:HA	1:C:1738:MET:HE3	1.81	0.61
1:A:1912:LYS:HE3	1:A:1933:VAL:HG23	1.81	0.61
2:B:119:LEU:HA	2:B:122:ASP:HB2	1.80	0.61
1:A:268:LEU:HA	1:A:496:LEU:HA	1.81	0.61
1:C:577:MET:HE1	1:C:584:GLN:HB2	1.83	0.61
1:C:1139:VAL:HG12	1:C:1143:LEU:HD11	1.81	0.61
1:C:1850:PHE:O	1:C:1875:LEU:HA	1.99	0.61
1:A:485:LEU:HD12	1:A:488:ARG:HD3	1.82	0.61
1:C:227:ARG:HH12	1:C:1390:LEU:HB3	1.64	0.61
1:C:485:LEU:HD12	1:C:488:ARG:HD3	1.82	0.61
2:B:8:VAL:HG22	2:B:79:LEU:HB2	1.80	0.61
1:C:140:ASP:OD1	1:C:141:THR:N	2.33	0.61
1:C:1565:THR:O	1:C:1568:MET:HB3	2.00	0.61
1:A:742:ARG:HA	1:A:747:VAL:HA	1.82	0.61
2:B:94:LYS:HZ2	2:B:145:LEU:HD22	1.65	0.61
1:C:229:PRO:O	1:C:1262:LYS:NZ	2.32	0.61
1:A:1962:LYS:HA	1:A:1965:ARG:HE	1.65	0.61
1:C:1855:PRO:HG3	2:D:33:VAL:HA	1.82	0.61
2:D:94:LYS:HZ2	2:D:145:LEU:HD22	1.65	0.61
1:A:387:LEU:O	1:A:391:ARG:NH1	2.34	0.61
1:A:1650:ILE:HD13	1:A:1705:GLU:HB2	1.82	0.61
1:C:1512:SER:O	1:C:1516:THR:OG1	2.11	0.61
2:D:65:ASP:OD1	2:D:68:ARG:NH1	2.34	0.61
1:A:577:MET:HE1	1:A:584:GLN:HB2	1.83	0.61
1:C:1002:SER:HA	1:C:1005:LEU:HD12	1.81	0.61
1:A:588:VAL:HG23	1:A:621:LEU:HD22	1.82	0.60
1:C:1962:LYS:HA	1:C:1965:ARG:HE	1.65	0.60
1:A:908:LEU:HG	1:A:912:LEU:HG	1.83	0.60
1:A:1428:GLN:HB2	1:A:1433:LEU:HD21	1.82	0.60
1:C:1857:THR:OG1	1:C:1859:ASP:OD1	2.19	0.60
2:B:90:PHE:O	2:B:94:LYS:NZ	2.33	0.60
1:C:444:CYS:SG	1:C:445:SER:N	2.73	0.60
1:C:1161:VAL:HA	1:C:1164:LEU:HD13	1.82	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1410:GLU:HG2	1:C:1411:SER:N	2.15	0.60
1:A:229:PRO:O	1:A:1262:LYS:NZ	2.32	0.60
1:C:1839:THR:OG1	1:C:1842:ASP:N	2.28	0.60
1:A:770:GLU:HA	1:A:773:VAL:HG12	1.84	0.60
1:C:280:ILE:HG22	1:C:297:TYR:HA	1.81	0.60
1:A:743:LEU:HD22	1:A:748:LEU:HD21	1.83	0.60
1:A:1039:THR:O	1:A:1042:MET:N	2.35	0.60
1:A:1596:ARG:O	1:A:1600:LEU:HG	2.02	0.60
1:A:1797:ASP:OD1	1:A:1817:LYS:NZ	2.29	0.60
2:B:65:ASP:OD1	2:B:68:ARG:NH1	2.34	0.60
2:B:91:GLU:HA	2:B:94:LYS:HE2	1.82	0.60
1:C:743:LEU:HD22	1:C:748:LEU:HD21	1.84	0.60
1:A:575:GLN:HE21	1:A:585:ALA:HA	1.67	0.60
1:A:1758:GLY:N	1:A:1765:ASP:OD1	2.28	0.60
1:C:1135:ALA:O	1:C:1139:VAL:HG23	2.02	0.60
1:C:1522:GLU:H	1:C:1522:GLU:CD	2.09	0.60
1:A:1161:VAL:HA	1:A:1164:LEU:HD13	1.82	0.60
1:C:908:LEU:HG	1:C:912:LEU:HG	1.84	0.60
1:C:1650:ILE:HD13	1:C:1705:GLU:HB2	1.82	0.60
1:C:312:HIS:NE2	1:C:385:THR:O	2.35	0.60
1:C:387:LEU:O	1:C:391:ARG:NH1	2.34	0.60
1:C:669:THR:HA	1:C:711:LEU:O	2.02	0.60
1:C:1596:ARG:O	1:C:1600:LEU:HG	2.01	0.60
1:C:1758:GLY:N	1:C:1765:ASP:OD1	2.28	0.60
1:A:230:ALA:O	1:A:233:THR:OG1	2.20	0.60
1:A:912:LEU:HD12	1:A:938:MET:HB3	1.83	0.60
1:A:1522:GLU:H	1:A:1522:GLU:CD	2.09	0.60
1:A:1580:ASP:HB3	1:A:1584:ARG:HH22	1.66	0.60
1:A:1597:LEU:HA	1:A:1600:LEU:HD12	1.84	0.60
1:A:1622:HIS:ND1	1:A:1657:GLU:OE1	2.35	0.60
1:A:1826:GLU:O	1:A:1851:LEU:N	2.26	0.60
1:C:230:ALA:O	1:C:233:THR:OG1	2.20	0.60
1:A:1410:GLU:HG2	1:A:1411:SER:N	2.15	0.59
1:C:394:PHE:CE2	1:C:492:VAL:HG11	2.37	0.59
1:C:1039:THR:O	1:C:1042:MET:N	2.35	0.59
1:C:1580:ASP:HB3	1:C:1584:ARG:HH22	1.66	0.59
1:A:1135:ALA:O	1:A:1139:VAL:HG23	2.02	0.59
1:C:1778:LYS:HG2	2:D:26:ASN:ND2	2.18	0.59
1:A:394:PHE:CE2	1:A:492:VAL:HG11	2.37	0.59
1:C:314:THR:OG1	1:C:596:SER:OG	2.15	0.59
1:C:912:LEU:HD12	1:C:938:MET:HB3	1.83	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1404:MET:O	1:C:1409:ARG:NH2	2.35	0.59
1:C:1753:ARG:NE	1:C:1823:THR:OG1	2.32	0.59
1:C:1791:THR:O	1:C:1795:GLY:N	2.27	0.59
1:A:312:HIS:NE2	1:A:385:THR:O	2.35	0.59
1:A:1740:GLN:HG2	1:A:1746:ARG:HH11	1.67	0.59
1:A:1853:CYS:HB3	1:A:1871:LYS:HD3	1.84	0.59
2:B:5:LYS:HG3	2:B:56:PHE:HE2	1.67	0.59
1:C:513:PRO:HD3	1:C:531:GLU:HB3	1.85	0.59
1:C:1092:LYS:O	1:C:1095:SER:OG	2.11	0.59
1:C:1740:GLN:HG2	1:C:1746:ARG:HH11	1.67	0.59
1:C:924:ARG:O	1:C:928:LEU:HG	2.02	0.59
1:C:1272:TRP:O	1:C:1276:LEU:HG	2.03	0.59
1:C:1597:LEU:HA	1:C:1600:LEU:HD12	1.84	0.59
2:D:5:LYS:HG3	2:D:56:PHE:HE2	1.67	0.59
1:C:454:LEU:HD12	1:C:498:ILE:HD11	1.84	0.59
1:C:1622:HIS:ND1	1:C:1657:GLU:OE1	2.35	0.59
1:C:1737:ILE:O	1:C:1740:GLN:NE2	2.34	0.59
1:A:108:GLN:HG3	1:A:732:HIS:NE2	2.18	0.59
1:A:1404:MET:O	1:A:1409:ARG:NH2	2.35	0.59
1:C:333:SER:OG	1:C:335:ASP:OD2	2.20	0.59
1:C:656:PHE:O	1:C:677:SER:N	2.35	0.59
1:C:1486:TYR:CE2	1:C:1535:TYR:HB3	2.38	0.59
2:D:157:CYS:HB3	2:D:168:VAL:HG21	1.85	0.59
1:A:333:SER:OG	1:A:335:ASP:OD2	2.20	0.59
1:A:513:PRO:HD3	1:A:531:GLU:HB3	1.85	0.59
1:A:560:PHE:HB2	1:A:570:LEU:HD11	1.85	0.59
1:A:1778:LYS:NZ	2:B:44:VAL:HG12	2.17	0.59
1:C:108:GLN:HG3	1:C:732:HIS:NE2	2.18	0.59
1:C:1392:VAL:O	1:C:1395:THR:OG1	2.14	0.59
1:A:475:PHE:CE1	1:A:489:LEU:HD11	2.38	0.59
1:A:910:GLU:OE1	1:A:910:GLU:N	2.29	0.59
1:A:1700:TYR:O	1:A:1703:VAL:HG12	2.03	0.59
1:A:1791:THR:O	1:A:1795:GLY:N	2.27	0.59
2:B:112:LEU:HD12	2:B:146:ALA:HB2	1.85	0.59
2:B:157:CYS:HB3	2:B:168:VAL:HG21	1.85	0.59
1:C:264:LYS:HB2	1:C:499:ASP:HB2	1.85	0.59
1:C:511:LEU:O	1:C:531:GLU:N	2.27	0.59
1:C:1700:TYR:O	1:C:1703:VAL:HG12	2.03	0.59
1:C:1853:CYS:HB3	1:C:1871:LYS:HD3	1.84	0.59
1:A:656:PHE:O	1:A:677:SER:N	2.35	0.59
1:A:741:PHE:O	1:A:748:LEU:N	2.33	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:924:ARG:O	1:A:928:LEU:HG	2.02	0.59
1:A:1272:TRP:O	1:A:1276:LEU:HG	2.03	0.59
1:A:1737:ILE:O	1:A:1740:GLN:NE2	2.34	0.59
1:C:575:GLN:HE21	1:C:585:ALA:HA	1.67	0.59
1:C:741:PHE:O	1:C:748:LEU:N	2.33	0.59
1:C:770:GLU:HA	1:C:773:VAL:HG12	1.84	0.59
1:A:1486:TYR:CE2	1:A:1535:TYR:HB3	2.38	0.58
1:A:1998:GLU:O	1:A:2002:GLU:N	2.28	0.58
1:C:1523:GLU:CD	1:C:1523:GLU:H	2.10	0.58
2:D:65:ASP:HA	2:D:68:ARG:HH11	1.68	0.58
1:A:669:THR:HA	1:A:711:LEU:O	2.02	0.58
1:A:1151:ARG:NH2	1:A:1152:TYR:OH	2.36	0.58
1:A:1954:LEU:HB3	1:A:2017:LEU:HD22	1.85	0.58
1:C:551:LEU:HD12	1:C:712:THR:O	2.04	0.58
1:A:127:TYR:HB2	1:A:1053:HIS:NE2	2.12	0.58
1:C:231:LEU:HD22	1:C:232:LEU:HG	1.85	0.58
1:C:544:HIS:ND1	1:C:716:SER:HA	2.18	0.58
1:A:490:ARG:HH12	1:A:492:VAL:HG22	1.69	0.58
1:A:591:GLY:N	1:A:597:GLU:O	2.31	0.58
1:A:551:LEU:HD12	1:A:712:THR:O	2.04	0.58
1:A:1523:GLU:H	1:A:1523:GLU:CD	2.10	0.58
1:A:1839:THR:OG1	1:A:1842:ASP:N	2.28	0.58
1:C:475:PHE:CE1	1:C:489:LEU:HD11	2.38	0.58
1:A:405:VAL:HG13	1:A:449:PHE:HB3	1.85	0.58
1:A:454:LEU:HD12	1:A:498:ILE:HD11	1.84	0.58
1:A:552:TYR:HA	1:A:619:PHE:O	2.04	0.58
1:A:1855:PRO:HD3	2:B:33:VAL:HG22	1.85	0.58
1:C:1151:ARG:NH2	1:C:1152:TYR:OH	2.36	0.58
1:C:1499:PHE:HE1	1:C:1503:LYS:HE3	1.68	0.58
1:A:231:LEU:HD22	1:A:232:LEU:HG	1.85	0.58
1:A:544:HIS:ND1	1:A:716:SER:HA	2.18	0.58
1:A:573:ARG:HD3	1:A:601:GLU:HB2	1.85	0.58
1:A:1398:ILE:HD12	1:A:1401:GLN:HB2	1.86	0.58
1:A:1399:ILE:O	1:A:1403:VAL:HG23	2.03	0.58
2:B:65:ASP:HA	2:B:68:ARG:HH11	1.68	0.58
1:C:405:VAL:HG13	1:C:449:PHE:HB3	1.85	0.58
1:C:560:PHE:HB2	1:C:570:LEU:HD11	1.85	0.58
1:C:1132:HIS:O	1:C:1136:ILE:HG12	2.04	0.58
1:C:1399:ILE:O	1:C:1403:VAL:HG23	2.03	0.58
1:C:1615:GLU:CD	1:C:1615:GLU:H	2.11	0.58
2:D:112:LEU:HD12	2:D:146:ALA:HB2	1.85	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1437:LEU:HB3	1:A:1441:ARG:HH12	1.69	0.58
1:A:1615:GLU:CD	1:A:1615:GLU:H	2.11	0.58
2:B:101:ILE:HG13	2:B:102:THR:N	2.19	0.58
1:C:1437:LEU:HB3	1:C:1441:ARG:HH12	1.69	0.58
1:C:1526:ARG:O	1:C:1530:LYS:HG2	2.04	0.58
1:A:1168:LEU:HA	1:A:1171:ILE:HD12	1.85	0.58
1:A:1503:LYS:HD2	1:A:1554:LEU:HB2	1.85	0.58
1:A:1531:THR:HG22	1:A:1535:TYR:HE2	1.68	0.58
1:A:1983:ASP:OD1	1:A:1986:ARG:NH1	2.36	0.58
1:C:1531:THR:HG22	1:C:1535:TYR:HE2	1.67	0.58
1:A:1132:HIS:O	1:A:1136:ILE:HG12	2.04	0.58
1:A:1526:ARG:HA	1:A:1529:LEU:HD12	1.86	0.58
1:A:1565:THR:O	1:A:1569:LYS:HG3	2.04	0.58
1:C:143:ARG:HH12	1:C:147:LYS:HB3	1.69	0.58
1:C:1265:GLU:HG2	1:C:1268:LEU:H	1.69	0.58
2:D:90:PHE:O	2:D:94:LYS:NZ	2.33	0.58
1:A:581:ASP:OD1	1:A:581:ASP:N	2.37	0.57
1:A:1433:LEU:O	1:A:1437:LEU:HG	2.04	0.57
1:C:131:SER:HB3	1:C:134:TYR:HB2	1.86	0.57
1:C:573:ARG:HD3	1:C:601:GLU:HB2	1.85	0.57
1:C:1398:ILE:HD12	1:C:1401:GLN:HB2	1.86	0.57
1:C:1433:LEU:O	1:C:1437:LEU:HG	2.04	0.57
1:C:1647:PHE:O	1:C:1650:ILE:HG22	2.04	0.57
1:C:1756:PHE:HB3	1:C:1761:PHE:CD2	2.39	0.57
1:C:1954:LEU:HB3	1:C:2017:LEU:HD22	1.85	0.57
1:A:264:LYS:HB2	1:A:499:ASP:HB2	1.85	0.57
1:A:1482:SER:HA	1:A:1485:LEU:HD12	1.86	0.57
1:A:1526:ARG:O	1:A:1530:LYS:HG2	2.04	0.57
1:C:1503:LYS:HD2	1:C:1554:LEU:HB2	1.85	0.57
1:A:1039:THR:O	1:A:1042:MET:HG3	2.04	0.57
1:A:1514:VAL:HG11	1:A:1565:THR:HG21	1.86	0.57
1:A:1791:THR:HG23	1:A:1796:ASP:HA	1.84	0.57
2:B:118:ASP:OD1	2:B:119:LEU:N	2.38	0.57
1:C:552:TYR:HA	1:C:619:PHE:O	2.04	0.57
1:C:911:GLU:HA	1:C:914:LEU:HD12	1.86	0.57
1:C:1058:ASN:HB3	1:C:1107:HIS:HA	1.85	0.57
1:C:1482:SER:HA	1:C:1485:LEU:HD12	1.86	0.57
1:C:1514:VAL:HG11	1:C:1565:THR:HG21	1.86	0.57
1:C:1526:ARG:HA	1:C:1529:LEU:HD12	1.86	0.57
1:C:1791:THR:HG23	1:C:1796:ASP:HA	1.85	0.57
1:A:638:TYR:HA	1:A:652:THR:O	2.04	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1265:GLU:HG2	1:A:1268:LEU:H	1.69	0.57
2:B:12:GLY:N	2:B:60:GLY:HA3	2.19	0.57
1:C:405:VAL:HG21	1:C:446:PHE:HA	1.86	0.57
1:C:460:PHE:HB3	1:C:489:LEU:HB3	1.87	0.57
1:C:490:ARG:HH12	1:C:492:VAL:HG22	1.68	0.57
1:C:791:PRO:HB2	1:C:793:ILE:HG13	1.87	0.57
1:A:911:GLU:HA	1:A:914:LEU:HD12	1.86	0.57
1:A:935:PHE:HA	1:A:938:MET:SD	2.44	0.57
1:A:1841:PHE:HA	1:A:1844:ASN:HB2	1.87	0.57
1:C:1039:THR:O	1:C:1042:MET:HG3	2.04	0.57
1:C:1181:ASP:OD1	1:C:1182:PHE:N	2.38	0.57
1:C:1841:PHE:HA	1:C:1844:ASN:HB2	1.87	0.57
1:C:1998:GLU:HA	1:C:2001:ARG:HB2	1.86	0.57
1:A:1012:PHE:CZ	1:A:1016:LEU:HD11	2.40	0.57
1:A:1926:ASP:HB3	1:A:1929:MET:HG2	1.87	0.57
1:A:1989:LYS:HB2	1:A:2000:HIS:CE1	2.39	0.57
1:C:1012:PHE:CZ	1:C:1016:LEU:HD11	2.40	0.57
1:C:1714:LEU:HD22	1:C:1723:LEU:HD12	1.87	0.57
2:D:118:ASP:OD1	2:D:119:LEU:N	2.38	0.57
1:A:92:CYS:O	1:A:519:LYS:NZ	2.23	0.57
1:C:935:PHE:HA	1:C:938:MET:SD	2.44	0.57
1:C:1903:GLU:HA	1:C:1906:ILE:HD12	1.85	0.57
2:D:101:ILE:HG13	2:D:102:THR:N	2.19	0.57
1:A:458:ASN:HB3	1:A:460:PHE:CE1	2.40	0.57
1:A:791:PRO:HB2	1:A:793:ILE:HG13	1.87	0.57
1:A:1499:PHE:HE1	1:A:1503:LYS:HE3	1.68	0.57
1:A:1756:PHE:HB3	1:A:1761:PHE:CD2	2.39	0.57
1:A:1948:GLU:O	1:A:1952:VAL:HG13	2.05	0.57
1:C:235:TYR:OH	1:C:1248:GLU:OE2	2.23	0.57
1:C:1453:GLU:N	1:C:1453:GLU:OE2	2.38	0.57
1:C:1941:THR:HG23	1:C:1942:VAL:HG23	1.87	0.57
1:A:131:SER:HB3	1:A:134:TYR:HB2	1.86	0.57
1:A:776:SER:O	1:A:780:LEU:HG	2.05	0.57
1:A:1714:LEU:HD22	1:A:1723:LEU:HD12	1.87	0.57
1:A:1857:THR:OG1	1:A:1859:ASP:OD1	2.19	0.57
1:A:1998:GLU:HA	1:A:2001:ARG:HB2	1.86	0.57
1:C:1761:PHE:CZ	1:C:1818:ALA:HB1	2.40	0.57
1:C:1989:LYS:HB2	1:C:2000:HIS:CE1	2.39	0.57
1:A:1058:ASN:HB3	1:A:1107:HIS:HA	1.85	0.56
1:A:1391:VAL:O	1:A:1395:THR:HG23	2.05	0.56
1:A:1453:GLU:N	1:A:1453:GLU:OE2	2.38	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1647:PHE:O	1:A:1650:ILE:HG22	2.04	0.56
1:C:241:ASP:OD1	1:C:242:GLU:N	2.38	0.56
1:C:478:ASP:OD1	1:C:483:SER:OG	2.22	0.56
1:C:806:GLU:O	1:C:810:HIS:ND1	2.38	0.56
1:C:1168:LEU:HA	1:C:1171:ILE:HD12	1.85	0.56
1:C:1565:THR:O	1:C:1569:LYS:HG3	2.04	0.56
1:C:1926:ASP:HB3	1:C:1929:MET:HG2	1.87	0.56
1:A:405:VAL:HG21	1:A:446:PHE:HA	1.86	0.56
1:A:806:GLU:O	1:A:810:HIS:ND1	2.38	0.56
1:C:638:TYR:HA	1:C:652:THR:O	2.04	0.56
1:C:1752:PHE:CD1	1:C:1824:TYR:HA	2.40	0.56
2:D:12:GLY:N	2:D:60:GLY:HA3	2.19	0.56
2:D:25:THR:HG22	2:D:27:LYS:HE2	1.87	0.56
1:A:241:ASP:OD1	1:A:242:GLU:N	2.38	0.56
1:A:300:LEU:HG	1:A:323:ARG:HD3	1.87	0.56
1:A:330:THR:N	1:A:534:GLU:OE2	2.36	0.56
1:A:623:LEU:HD11	1:A:627:VAL:HG22	1.86	0.56
1:A:1181:ASP:OD1	1:A:1182:PHE:N	2.37	0.56
1:A:1481:ALA:O	1:A:1484:SER:OG	2.23	0.56
1:A:1735:THR:O	1:A:1738:MET:HB2	2.06	0.56
1:A:1761:PHE:CZ	1:A:1818:ALA:HB1	2.40	0.56
1:C:1989:LYS:HB2	1:C:2000:HIS:NE2	2.20	0.56
1:C:2001:ARG:O	1:C:2004:GLU:HB2	2.04	0.56
1:A:269:LYS:N	1:A:495:GLN:O	2.39	0.56
1:A:1102:PRO:HA	1:A:1105:GLN:HE21	1.71	0.56
1:A:1903:GLU:HA	1:A:1906:ILE:HD12	1.85	0.56
2:B:5:LYS:NZ	2:B:73:PRO:O	2.31	0.56
1:C:276:PRO:HA	1:C:305:MET:HE2	1.88	0.56
1:C:907:LEU:HB2	1:C:910:GLU:OE2	2.05	0.56
1:C:1570:GLU:HG3	1:C:1571:HIS:ND1	2.20	0.56
1:A:330:THR:HG21	1:A:536:PRO:HB3	1.87	0.56
1:A:1891:VAL:HG12	1:A:1893:HIS:H	1.71	0.56
1:A:1985:LEU:O	1:A:2000:HIS:HE1	1.88	0.56
1:C:300:LEU:HG	1:C:323:ARG:HD3	1.87	0.56
1:C:1567:LYS:O	1:C:1570:GLU:HG2	2.06	0.56
1:A:143:ARG:HH12	1:A:147:LYS:HB3	1.69	0.56
1:A:276:PRO:HA	1:A:305:MET:HE2	1.88	0.56
1:A:460:PHE:HB3	1:A:489:LEU:HB3	1.87	0.56
1:A:997:LEU:O	1:A:1001:LEU:HG	2.06	0.56
1:A:1567:LYS:O	1:A:1570:GLU:HG2	2.06	0.56
1:C:46:PRO:HD2	1:C:49:GLU:HB3	1.88	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:208:GLU:O	1:C:209:ARG:NH1	2.39	0.56
1:C:985:LYS:H	1:C:985:LYS:HD2	1.70	0.56
1:C:1948:GLU:O	1:C:1952:VAL:HG13	2.05	0.56
1:A:208:GLU:O	1:A:209:ARG:NH1	2.39	0.56
1:A:1430:ALA:HA	1:A:1433:LEU:HB2	1.88	0.56
1:A:1989:LYS:HB2	1:A:2000:HIS:NE2	2.20	0.56
1:A:213:GLU:CD	1:A:213:GLU:H	2.12	0.56
1:A:511:LEU:O	1:A:531:GLU:N	2.27	0.56
1:A:907:LEU:HB2	1:A:910:GLU:OE2	2.05	0.56
1:A:1570:GLU:HG3	1:A:1571:HIS:ND1	2.20	0.56
1:A:1778:LYS:HZ3	2:B:44:VAL:HG12	1.70	0.56
1:A:1911:LYS:O	1:A:1915:GLU:HG2	2.06	0.56
1:C:997:LEU:O	1:C:1001:LEU:HG	2.05	0.56
1:C:1102:PRO:HA	1:C:1105:GLN:HE21	1.71	0.56
1:A:277:ILE:HG13	1:A:343:GLU:O	2.05	0.56
1:A:1700:TYR:O	1:A:1703:VAL:N	2.38	0.56
1:A:1752:PHE:CD1	1:A:1824:TYR:HA	2.40	0.56
1:C:458:ASN:HB3	1:C:460:PHE:CE1	2.40	0.56
1:C:776:SER:O	1:C:780:LEU:HG	2.05	0.56
1:C:1546:THR:OG1	1:C:1550:GLN:NE2	2.39	0.56
1:C:1911:LYS:O	1:C:1915:GLU:HG2	2.06	0.56
1:C:688:LEU:HD21	1:C:694:LEU:HD11	1.88	0.56
1:C:1430:ALA:HA	1:C:1433:LEU:HB2	1.88	0.56
1:C:1735:THR:O	1:C:1738:MET:HB2	2.06	0.56
1:C:2015:GLN:HA	1:C:2018:LEU:HB2	1.88	0.56
1:A:1546:THR:OG1	1:A:1550:GLN:NE2	2.39	0.55
1:A:2001:ARG:O	1:A:2004:GLU:HB2	2.05	0.55
1:C:118:GLU:OE2	1:C:119:ASP:N	2.38	0.55
1:C:330:THR:HG21	1:C:536:PRO:HB3	1.87	0.55
1:C:1700:TYR:O	1:C:1703:VAL:N	2.38	0.55
1:A:323:ARG:HB2	1:A:527:ARG:HD3	1.88	0.55
1:C:213:GLU:H	1:C:213:GLU:CD	2.12	0.55
1:C:269:LYS:N	1:C:495:GLN:O	2.38	0.55
1:C:1391:VAL:O	1:C:1395:THR:HG23	2.05	0.55
1:A:46:PRO:HD2	1:A:49:GLU:HB3	1.88	0.55
1:A:282:ALA:HB2	1:A:295:ASN:HA	1.89	0.55
1:A:1116:GLU:HA	1:A:1119:LEU:HG	1.88	0.55
1:A:1525:LEU:O	1:A:1529:LEU:HG	2.07	0.55
1:A:1711:ILE:O	1:A:1714:LEU:N	2.39	0.55
1:A:1941:THR:HG23	1:A:1942:VAL:HG23	1.86	0.55
2:B:25:THR:HG22	2:B:27:LYS:HE2	1.87	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:277:ILE:HG13	1:C:343:GLU:O	2.05	0.55
1:C:1891:VAL:HG12	1:C:1893:HIS:H	1.71	0.55
1:A:118:GLU:OE2	1:A:119:ASP:N	2.38	0.55
1:A:956:ARG:HA	1:A:959:ARG:HG2	1.87	0.55
1:A:2015:GLN:HA	1:A:2018:LEU:HB2	1.88	0.55
1:C:623:LEU:HD11	1:C:627:VAL:HG22	1.86	0.55
1:C:956:ARG:HA	1:C:959:ARG:HG2	1.87	0.55
1:C:1481:ALA:O	1:C:1484:SER:OG	2.23	0.55
1:C:2008:CYS:HA	1:C:2011:ARG:CZ	2.36	0.55
2:D:78:PHE:O	2:D:110:PHE:HA	2.07	0.55
1:A:466:ARG:CZ	1:A:615:PHE:HA	2.37	0.55
1:A:1157:VAL:O	1:A:1161:VAL:HG23	2.07	0.55
1:A:2008:CYS:HA	1:A:2011:ARG:CZ	2.36	0.55
1:C:581:ASP:OD1	1:C:581:ASP:N	2.37	0.55
1:C:1248:GLU:OE2	1:C:1252:THR:OG1	2.25	0.55
1:A:538:ARG:HG2	1:A:539:GLU:H	1.72	0.55
1:A:688:LEU:HD21	1:A:694:LEU:HD11	1.88	0.55
1:A:1830:ASP:O	1:A:1834:LEU:N	2.35	0.55
1:C:1525:LEU:O	1:C:1529:LEU:HG	2.06	0.55
1:C:1985:LEU:O	1:C:2000:HIS:HE1	1.88	0.55
1:A:314:THR:OG1	1:A:596:SER:OG	2.15	0.55
2:B:91:GLU:O	2:B:95:GLU:HG3	2.07	0.55
1:C:330:THR:N	1:C:534:GLU:OE2	2.36	0.55
1:C:394:PHE:C	1:C:462:GLN:HB2	2.32	0.55
1:C:544:HIS:NE2	1:C:774:ALA:HB1	2.22	0.55
1:A:227:ARG:NH2	1:A:1387:GLU:OE1	2.40	0.55
1:A:1182:PHE:CD1	1:A:1294:ALA:HA	2.42	0.55
1:C:408:ALA:HB1	1:C:450:ARG:H	1.72	0.55
1:C:743:LEU:HB3	1:C:746:THR:H	1.72	0.55
1:C:996:SER:HA	1:C:999:PHE:HD2	1.72	0.55
1:C:1613:HIS:CD2	1:C:1696:MET:HG2	2.42	0.55
1:A:92:CYS:HG	1:A:94:THR:HG1	1.53	0.55
1:A:112:ALA:HA	1:A:115:MET:HG2	1.89	0.55
1:A:224:ARG:NH2	1:A:1266:PRO:HG3	2.22	0.55
1:A:1909:MET:HE1	1:A:1973:CYS:C	2.32	0.55
1:A:1930:LEU:HD11	1:A:1984:ALA:HB1	1.88	0.55
1:C:1909:MET:HE1	1:C:1973:CYS:C	2.32	0.55
1:C:1938:VAL:C	1:C:1940:PRO:HD3	2.31	0.55
1:A:655:GLY:HA2	1:A:678:VAL:HA	1.89	0.55
1:A:739:PHE:CE2	1:A:750:GLU:HB3	2.41	0.55
1:A:985:LYS:H	1:A:985:LYS:HD2	1.70	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1406:SER:OG	1:A:1409:ARG:HG2	2.07	0.55
1:A:1723:LEU:HB3	1:C:1734:PHE:CE1	2.42	0.55
2:B:78:PHE:O	2:B:110:PHE:HA	2.07	0.55
1:C:739:PHE:CE2	1:C:750:GLU:HB3	2.41	0.55
1:A:1248:GLU:OE2	1:A:1252:THR:OG1	2.25	0.54
1:A:1613:HIS:CD2	1:A:1696:MET:HG2	2.42	0.54
2:B:39:ASN:OD1	2:B:57:ASP:N	2.41	0.54
1:C:459:PHE:O	1:C:492:VAL:N	2.36	0.54
1:C:466:ARG:CZ	1:C:615:PHE:HA	2.37	0.54
1:C:1641:PRO:HD3	1:C:1713:ILE:HD11	1.89	0.54
1:A:813:SER:O	1:A:817:ARG:HG3	2.07	0.54
1:C:227:ARG:NH2	1:C:1387:GLU:OE1	2.40	0.54
1:C:568:ARG:HG2	1:C:609:HIS:HA	1.90	0.54
1:C:1711:ILE:O	1:C:1714:LEU:N	2.39	0.54
1:A:568:ARG:HG2	1:A:609:HIS:HA	1.90	0.54
2:B:15:ALA:HB1	2:B:18:CYS:HB3	1.89	0.54
1:C:323:ARG:HB2	1:C:527:ARG:HD3	1.88	0.54
1:C:1917:ALA:HB2	1:C:1980:LYS:HE3	1.89	0.54
1:C:1826:GLU:O	1:C:1851:LEU:N	2.26	0.54
1:A:829:CYS:HB3	1:A:832:LEU:HD13	1.90	0.54
1:A:1002:SER:O	1:A:1005:LEU:HB2	2.08	0.54
1:A:1938:VAL:C	1:A:1940:PRO:HD3	2.31	0.54
1:C:282:ALA:HB2	1:C:295:ASN:HA	1.89	0.54
1:C:829:CYS:HB3	1:C:832:LEU:HD13	1.90	0.54
1:C:1116:GLU:HA	1:C:1119:LEU:HG	1.88	0.54
1:A:1154:GLU:HB3	1:A:1157:VAL:HG22	1.90	0.54
1:A:408:ALA:HB1	1:A:450:ARG:H	1.72	0.54
1:A:1161:VAL:HG12	1:A:1165:TYR:HE1	1.73	0.54
1:A:1573:GLU:H	1:A:1578:LEU:HD11	1.73	0.54
1:C:81:ASP:O	1:C:126:ARG:NE	2.32	0.54
1:C:112:ALA:HA	1:C:115:MET:HG2	1.89	0.54
1:C:224:ARG:NH2	1:C:1266:PRO:HG3	2.22	0.54
1:C:1002:SER:O	1:C:1005:LEU:HB2	2.08	0.54
1:C:1157:VAL:O	1:C:1161:VAL:HG23	2.07	0.54
1:C:1983:ASP:OD1	1:C:1986:ARG:NH1	2.36	0.54
1:A:996:SER:HA	1:A:999:PHE:HD2	1.72	0.54
1:A:1505:GLN:HG3	1:A:1676:LYS:HZ3	1.73	0.54
1:A:1641:PRO:HD3	1:A:1713:ILE:HD11	1.89	0.54
1:C:49:GLU:OE2	1:C:50:VAL:N	2.41	0.54
1:C:1930:LEU:HD11	1:C:1984:ALA:HB1	1.88	0.54
1:C:1958:PRO:HB2	1:C:1964:PHE:CD1	2.43	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:49:GLU:OE2	1:A:1022:LYS:NZ	2.41	0.54
1:A:394:PHE:C	1:A:462:GLN:HB2	2.32	0.54
1:C:538:ARG:HG2	1:C:539:GLU:H	1.72	0.54
1:C:580:GLU:OE1	1:C:684:SER:N	2.41	0.54
1:C:1788:GLU:HG2	1:C:1789:PHE:N	2.23	0.54
2:D:39:ASN:OD1	2:D:57:ASP:N	2.41	0.54
2:D:91:GLU:O	2:D:95:GLU:HG3	2.07	0.54
1:A:81:ASP:O	1:A:126:ARG:NE	2.32	0.54
1:A:544:HIS:NE2	1:A:774:ALA:HB1	2.22	0.54
1:A:1827:PRO:HA	1:A:1850:PHE:HA	1.90	0.54
1:A:1958:PRO:HB2	1:A:1964:PHE:CD1	2.43	0.54
1:C:813:SER:O	1:C:817:ARG:HG3	2.07	0.54
1:C:1182:PHE:CD1	1:C:1294:ALA:HA	2.42	0.54
1:C:1406:SER:OG	1:C:1409:ARG:HG2	2.07	0.54
2:D:5:LYS:NZ	2:D:73:PRO:O	2.31	0.54
2:D:15:ALA:HB1	2:D:18:CYS:HB3	1.89	0.54
2:D:83:SER:OG	2:D:116:GLN:NE2	2.41	0.54
1:A:49:GLU:OE2	1:A:50:VAL:N	2.41	0.53
1:A:459:PHE:O	1:A:492:VAL:N	2.36	0.53
1:A:1885:ILE:HG13	1:A:1886:LYS:HG3	1.89	0.53
1:C:383:PHE:O	1:C:387:LEU:N	2.38	0.53
1:C:1760:HIS:CD2	1:C:1818:ALA:HB2	2.44	0.53
1:C:2006:ASN:O	1:C:2010:LEU:N	2.27	0.53
1:A:231:LEU:HD12	1:A:1262:LYS:HD2	1.90	0.53
1:A:743:LEU:HB3	1:A:746:THR:H	1.72	0.53
1:A:1780:ALA:H	2:B:166:LYS:NZ	2.07	0.53
1:C:1857:THR:N	1:C:1861:ARG:O	2.35	0.53
1:A:575:GLN:NE2	1:A:576:TYR:O	2.42	0.53
1:A:661:LEU:O	1:A:668:ARG:NH1	2.41	0.53
1:C:106:ASP:O	1:C:110:ARG:N	2.24	0.53
1:C:783:LEU:O	1:C:787:VAL:HG23	2.08	0.53
1:C:1557:ASN:O	1:C:1560:MET:HG2	2.08	0.53
1:C:1885:ILE:HG13	1:C:1886:LYS:HG3	1.89	0.53
1:C:1916:LEU:HA	1:C:1933:VAL:HG21	1.90	0.53
1:C:1985:LEU:HD12	1:C:2007:TYR:HD2	1.73	0.53
1:A:383:PHE:O	1:A:387:LEU:N	2.38	0.53
1:A:783:LEU:O	1:A:787:VAL:HG23	2.08	0.53
1:A:1273:ALA:HA	1:A:1276:LEU:HG	1.90	0.53
1:A:1727:HIS:HB3	1:C:1731:GLN:HB2	1.90	0.53
1:C:575:GLN:NE2	1:C:576:TYR:O	2.42	0.53
1:C:655:GLY:HA2	1:C:678:VAL:HA	1.89	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1830:ASP:O	1:C:1834:LEU:N	2.35	0.53
1:C:1858:PRO:HD3	1:C:1870:HIS:CD2	2.43	0.53
1:A:1040:LEU:O	1:A:1044:PHE:HB2	2.08	0.53
1:A:1917:ALA:HB2	1:A:1980:LYS:HE3	1.89	0.53
1:A:1947:LEU:HD13	1:A:2013:ALA:HB1	1.90	0.53
1:C:128:GLN:HG3	1:C:1052:GLU:OE2	2.08	0.53
1:C:1753:ARG:HH21	1:C:1823:THR:HG21	1.74	0.53
1:A:51:VAL:HG21	1:A:1104:ARG:HB2	1.90	0.53
1:A:1666:SER:HB2	1:A:1669:GLU:HB2	1.91	0.53
1:A:1727:HIS:CD2	1:C:1730:LEU:HD22	2.43	0.53
1:A:1788:GLU:HG2	1:A:1789:PHE:N	2.23	0.53
1:A:1806:ASN:OD1	1:A:1872:ARG:NH1	2.41	0.53
1:A:1916:LEU:HA	1:A:1933:VAL:HG21	1.90	0.53
1:C:1154:GLU:HB3	1:C:1157:VAL:HG22	1.90	0.53
1:C:1848:ARG:NH2	1:C:1879:ASP:O	2.42	0.53
1:C:1872:ARG:HA	1:C:1897:THR:O	2.09	0.53
1:A:517:HIS:HB3	1:A:521:TYR:CG	2.44	0.53
1:C:517:HIS:HB3	1:C:521:TYR:CG	2.44	0.53
1:C:1430:ALA:O	1:C:1434:GLN:HB3	2.09	0.53
1:C:1651:SER:HB3	1:C:1654:VAL:HG13	1.91	0.53
1:C:1806:ASN:OD1	1:C:1872:ARG:NH1	2.42	0.53
1:A:120:TRP:HZ3	1:A:839:ALA:HB2	1.74	0.53
1:A:1985:LEU:HD12	1:A:2007:TYR:HD2	1.73	0.53
1:C:49:GLU:OE2	1:C:1022:LYS:NZ	2.41	0.53
1:C:910:GLU:H	1:C:910:GLU:CD	2.16	0.53
1:C:1718:ARG:O	1:C:1720:TYR:N	2.42	0.53
1:A:75:LEU:HB3	1:A:1061:CYS:SG	2.49	0.53
1:A:1557:ASN:O	1:A:1560:MET:HG2	2.08	0.53
1:A:1900:THR:O	1:A:1904:VAL:HG23	2.09	0.53
1:C:75:LEU:HB3	1:C:1061:CYS:SG	2.49	0.53
1:C:1040:LEU:O	1:C:1044:PHE:HB2	2.08	0.53
1:C:1666:SER:HB2	1:C:1669:GLU:HB2	1.91	0.53
2:D:117:ILE:HD11	2:D:156:GLU:HB2	1.90	0.53
1:A:128:GLN:HG3	1:A:1052:GLU:OE2	2.08	0.53
1:A:1751:TYR:HE1	1:A:1772:LYS:NZ	2.07	0.53
1:A:1858:PRO:HD3	1:A:1870:HIS:CD2	2.43	0.53
2:B:9:VAL:HA	2:B:58:THR:OG1	2.09	0.53
2:B:83:SER:OG	2:B:116:GLN:NE2	2.41	0.53
1:C:1508:MET:HE3	1:C:1676:LYS:NZ	2.24	0.53
1:A:1501:ARG:H	1:A:1501:ARG:HD3	1.74	0.52
1:C:281:LEU:HD11	1:C:340:ILE:HG12	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:661:LEU:O	1:C:668:ARG:NH1	2.41	0.52
1:C:1133:LYS:O	1:C:1137:SER:OG	2.16	0.52
1:C:1573:GLU:H	1:C:1578:LEU:HD11	1.73	0.52
1:C:1998:GLU:O	1:C:2002:GLU:N	2.28	0.52
1:A:128:GLN:HG2	1:A:134:TYR:CE2	2.44	0.52
1:A:155:GLU:HA	1:A:158:ALA:HB3	1.91	0.52
1:A:910:GLU:H	1:A:910:GLU:CD	2.16	0.52
1:A:1486:TYR:OH	1:A:1539:ASP:HB2	2.09	0.52
1:A:1557:ASN:HA	1:A:1560:MET:HE3	1.91	0.52
1:A:1872:ARG:HA	1:A:1897:THR:O	2.09	0.52
1:C:128:GLN:HG2	1:C:134:TYR:CE2	2.44	0.52
1:C:137:VAL:HG11	1:C:1144:CYS:SG	2.50	0.52
1:C:1800:GLU:CD	1:C:1817:LYS:HB3	2.34	0.52
1:C:1827:PRO:HA	1:C:1850:PHE:HA	1.90	0.52
2:D:114:GLY:H	2:D:156:GLU:HA	1.73	0.52
1:A:284:TYR:CZ	1:A:291:LYS:HB2	2.45	0.52
1:A:393:PRO:HD3	1:A:605:PRO:HB3	1.92	0.52
1:A:507:PRO:HG2	1:A:518:ILE:HD13	1.91	0.52
1:A:1569:LYS:HA	1:A:1572:GLN:HG3	1.92	0.52
1:A:1785:ARG:HA	1:A:1788:GLU:OE2	2.10	0.52
1:A:1800:GLU:CD	1:A:1817:LYS:HB3	2.34	0.52
1:A:1848:ARG:NH2	1:A:1879:ASP:O	2.42	0.52
2:B:29:PRO:HA	2:B:32:TYR:HD2	1.74	0.52
1:C:51:VAL:HG21	1:C:1104:ARG:HB2	1.90	0.52
1:C:637:PHE:HD2	1:C:655:GLY:C	2.17	0.52
1:C:910:GLU:OE1	1:C:910:GLU:N	2.29	0.52
1:C:1436:GLY:O	1:C:1440:GLN:HG3	2.09	0.52
1:C:1785:ARG:HA	1:C:1788:GLU:OE2	2.10	0.52
1:A:637:PHE:HD2	1:A:655:GLY:C	2.17	0.52
1:A:1430:ALA:O	1:A:1434:GLN:HB3	2.09	0.52
1:A:1505:GLN:HG3	1:A:1676:LYS:NZ	2.24	0.52
1:A:1651:SER:HB3	1:A:1654:VAL:HG13	1.91	0.52
1:A:1753:ARG:HH21	1:A:1823:THR:HG21	1.74	0.52
1:C:120:TRP:HZ3	1:C:839:ALA:HB2	1.74	0.52
1:C:1557:ASN:HA	1:C:1560:MET:HE3	1.91	0.52
1:A:137:VAL:HG11	1:A:1144:CYS:SG	2.50	0.52
1:A:1436:GLY:O	1:A:1440:GLN:HG3	2.09	0.52
1:A:1513:LEU:O	1:A:1517:THR:N	2.37	0.52
1:C:231:LEU:HD12	1:C:1262:LYS:HD2	1.91	0.52
1:C:393:PRO:HD3	1:C:605:PRO:HB3	1.92	0.52
1:C:1947:LEU:HD13	1:C:2013:ALA:HB1	1.90	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:326:ILE:N	1:A:530:LYS:O	2.42	0.52
1:A:1523:GLU:O	1:A:1526:ARG:N	2.43	0.52
1:A:1760:HIS:CD2	1:A:1818:ALA:HB2	2.44	0.52
1:C:106:ASP:N	1:C:109:VAL:HB	2.25	0.52
1:C:754:GLU:HG2	1:C:793:ILE:HD12	1.92	0.52
1:C:1273:ALA:HA	1:C:1276:LEU:HG	1.90	0.52
1:A:544:HIS:N	1:A:777:HIS:HE1	2.07	0.52
1:A:835:TYR:HD1	1:A:839:ALA:HB3	1.75	0.52
1:A:1508:MET:HE3	1:A:1676:LYS:NZ	2.24	0.52
2:B:37:PHE:O	2:B:40:TYR:OH	2.21	0.52
2:B:114:GLY:H	2:B:156:GLU:HA	1.73	0.52
2:B:117:ILE:HD11	2:B:156:GLU:HB2	1.91	0.52
1:C:326:ILE:N	1:C:530:LYS:O	2.42	0.52
1:C:507:PRO:HG2	1:C:518:ILE:HD13	1.91	0.52
1:C:1161:VAL:HG12	1:C:1165:TYR:HE1	1.73	0.52
1:C:2007:TYR:HA	1:C:2010:LEU:HB2	1.90	0.52
1:A:575:GLN:NE2	1:A:584:GLN:O	2.43	0.52
1:C:575:GLN:NE2	1:C:584:GLN:O	2.43	0.52
1:A:570:LEU:HD12	1:A:613:PRO:HD2	1.91	0.52
1:A:1718:ARG:O	1:A:1720:TYR:N	2.42	0.52
1:C:284:TYR:CZ	1:C:291:LYS:HB2	2.45	0.52
2:D:29:PRO:HA	2:D:32:TYR:HD2	1.74	0.52
1:A:703:HIS:O	1:A:704:LYS:HD2	2.10	0.52
1:C:383:PHE:HE1	1:C:642:CYS:O	1.93	0.52
1:C:569:ASN:OD1	1:C:609:HIS:N	2.33	0.52
1:C:703:HIS:O	1:C:704:LYS:HD2	2.10	0.52
1:C:1569:LYS:HA	1:C:1572:GLN:NE2	2.24	0.52
1:A:569:ASN:H	1:A:639:HIS:CD2	2.28	0.51
1:C:1486:TYR:OH	1:C:1539:ASP:HB2	2.09	0.51
1:C:1505:GLN:HG3	1:C:1676:LYS:NZ	2.24	0.51
1:C:1523:GLU:O	1:C:1526:ARG:N	2.43	0.51
1:C:2010:LEU:O	1:C:2014:LEU:N	2.43	0.51
1:A:1503:LYS:HD3	1:A:1554:LEU:HD22	1.92	0.51
1:A:1569:LYS:HA	1:A:1572:GLN:NE2	2.24	0.51
1:A:2007:TYR:HA	1:A:2010:LEU:HB2	1.91	0.51
1:C:835:TYR:HD1	1:C:839:ALA:HB3	1.75	0.51
1:C:1501:ARG:HD3	1:C:1501:ARG:H	1.74	0.51
1:A:152:GLN:HG3	1:A:1386:THR:HG21	1.93	0.51
1:A:511:LEU:N	1:A:529:THR:O	2.43	0.51
1:A:589:ILE:HG12	1:A:621:LEU:HD21	1.92	0.51
1:A:1522:GLU:O	1:A:1525:LEU:HB3	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:155:GLU:HA	1:C:158:ALA:HB3	1.91	0.51
1:C:1528:SER:O	1:C:1532:ILE:HG13	2.11	0.51
1:C:1751:TYR:HE1	1:C:1772:LYS:NZ	2.07	0.51
1:C:1900:THR:O	1:C:1904:VAL:HG23	2.09	0.51
1:C:2002:GLU:HA	1:C:2005:ARG:NH1	2.26	0.51
2:D:69:PRO:HA	2:D:72:TYR:CG	2.46	0.51
1:A:1718:ARG:HD3	1:A:1720:TYR:CZ	2.46	0.51
1:C:114:GLU:O	1:C:118:GLU:N	2.41	0.51
1:C:679:ASP:N	1:C:697:MET:HE1	2.26	0.51
1:C:1505:GLN:HG3	1:C:1676:LYS:HZ3	1.74	0.51
1:A:106:ASP:O	1:A:110:ARG:N	2.24	0.51
1:A:1803:LYS:HE2	2:B:28:PHE:CD1	2.46	0.51
2:B:126:ILE:HG23	2:B:136:PRO:HG3	1.93	0.51
1:C:152:GLN:HG3	1:C:1386:THR:HG21	1.93	0.51
1:C:231:LEU:HD13	1:C:1259:TRP:HA	1.91	0.51
1:C:570:LEU:HD12	1:C:613:PRO:HD2	1.91	0.51
1:A:1474:ILE:HB	1:A:1477:ILE:HD12	1.93	0.51
1:C:544:HIS:N	1:C:777:HIS:HE1	2.07	0.51
2:D:28:PHE:HB2	2:D:31:GLU:CD	2.36	0.51
1:A:281:LEU:HD11	1:A:340:ILE:HG12	1.91	0.51
1:A:672:PHE:HE2	1:A:711:LEU:HB2	1.75	0.51
1:A:1539:ASP:O	1:A:1543:ARG:NE	2.44	0.51
1:C:326:ILE:HD12	1:C:510:CYS:SG	2.51	0.51
1:C:400:HIS:HE1	1:C:402:ALA:HB3	1.76	0.51
1:C:469:ASP:OD1	1:C:469:ASP:N	2.44	0.51
1:C:589:ILE:HG12	1:C:621:LEU:HD21	1.92	0.51
1:C:1503:LYS:HD3	1:C:1554:LEU:HD22	1.92	0.51
1:C:1653:ASN:ND2	1:C:1881:ALA:H	2.01	0.51
2:D:9:VAL:HA	2:D:58:THR:OG1	2.10	0.51
1:A:383:PHE:HE1	1:A:642:CYS:O	1.93	0.51
1:A:567:VAL:HG12	1:A:570:LEU:HD21	1.93	0.51
1:A:1502:VAL:O	1:A:1506:VAL:HG23	2.11	0.51
1:A:1600:LEU:HA	1:A:1603:MET:SD	2.51	0.51
1:A:2006:ASN:O	1:A:2010:LEU:N	2.27	0.51
2:B:28:PHE:HB2	2:B:31:GLU:CD	2.35	0.51
1:C:109:VAL:HG21	1:C:625:ALA:HB1	1.93	0.51
1:C:933:PHE:O	1:C:937:LEU:HG	2.11	0.51
1:C:1502:VAL:O	1:C:1506:VAL:HG23	2.11	0.51
1:C:1522:GLU:O	1:C:1525:LEU:HB3	2.10	0.51
1:C:1556:PHE:O	1:C:1559:HIS:HB2	2.11	0.51
1:C:1712:PRO:HA	1:C:1715:GLU:OE2	2.11	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1718:ARG:HD3	1:C:1720:TYR:CZ	2.46	0.51
1:A:231:LEU:HD13	1:A:1259:TRP:HA	1.91	0.51
1:A:1917:ALA:O	1:A:1921:GLU:N	2.38	0.51
1:A:1923:ASP:HA	1:A:1925:PRO:HD3	1.93	0.51
1:A:1968:ASN:O	1:A:1972:LEU:HG	2.11	0.51
1:A:2002:GLU:HA	1:A:2005:ARG:NH1	2.26	0.51
2:B:69:PRO:HA	2:B:72:TYR:CG	2.46	0.51
1:C:1569:LYS:HA	1:C:1572:GLN:HG3	1.92	0.51
1:A:1528:SER:O	1:A:1532:ILE:HG13	2.11	0.51
1:A:1730:LEU:HD22	1:C:1727:HIS:NE2	2.26	0.51
1:C:511:LEU:N	1:C:529:THR:O	2.43	0.51
1:C:569:ASN:H	1:C:639:HIS:CD2	2.28	0.51
1:C:946:LEU:O	1:C:950:GLN:N	2.44	0.51
1:C:1693:TYR:HA	1:C:1696:MET:SD	2.51	0.51
1:C:1828:TYR:H	1:C:1850:PHE:HA	1.75	0.51
1:A:109:VAL:HG21	1:A:625:ALA:HB1	1.93	0.50
1:A:220:GLU:HA	1:A:223:ARG:NH2	2.26	0.50
1:A:580:GLU:OE1	1:A:684:SER:N	2.41	0.50
1:A:1412:VAL:O	1:A:1416:VAL:HG23	2.11	0.50
1:A:1487:LEU:HD12	1:A:1490:ARG:HD3	1.93	0.50
1:A:1630:TYR:CZ	1:A:1673:CYS:HB2	2.46	0.50
1:A:1693:TYR:HA	1:A:1696:MET:SD	2.51	0.50
1:A:1707:TYR:O	1:A:1711:ILE:HG12	2.12	0.50
1:A:1730:LEU:HD22	1:C:1727:HIS:CE1	2.46	0.50
2:B:113:VAL:HG12	2:B:155:VAL:HG23	1.93	0.50
1:C:1630:TYR:CZ	1:C:1673:CYS:HB2	2.46	0.50
1:C:1923:ASP:HA	1:C:1925:PRO:HD3	1.93	0.50
2:D:81:CYS:HA	2:D:113:VAL:HG23	1.93	0.50
1:A:106:ASP:N	1:A:109:VAL:HB	2.25	0.50
1:A:125:ARG:HB3	1:A:128:GLN:HB2	1.94	0.50
1:A:478:ASP:OD1	1:A:483:SER:OG	2.23	0.50
1:A:932:TRP:HA	1:A:935:PHE:HD2	1.76	0.50
1:A:1556:PHE:O	1:A:1559:HIS:HB2	2.11	0.50
1:A:1614:ALA:O	1:A:1618:GLN:HG2	2.11	0.50
1:A:2010:LEU:O	1:A:2014:LEU:N	2.43	0.50
1:C:108:GLN:HG3	1:C:732:HIS:CD2	2.47	0.50
1:C:394:PHE:HE2	1:C:492:VAL:HG11	1.77	0.50
1:C:548:ARG:HB2	1:C:716:SER:HB3	1.93	0.50
1:C:576:TYR:HA	1:C:633:LEU:HD13	1.93	0.50
1:C:672:PHE:HE2	1:C:711:LEU:HB2	1.75	0.50
1:C:1140:HIS:HA	1:C:1143:LEU:HD12	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1412:VAL:O	1:C:1416:VAL:HG23	2.11	0.50
1:C:1556:PHE:O	1:C:1560:MET:HE3	2.11	0.50
1:C:1614:ALA:O	1:C:1618:GLN:HG2	2.11	0.50
1:C:1936:GLY:HA3	2:D:37:PHE:CE1	2.45	0.50
1:A:754:GLU:HG2	1:A:793:ILE:HD12	1.92	0.50
1:C:220:GLU:HA	1:C:223:ARG:NH2	2.26	0.50
1:C:1765:ASP:O	1:C:1766:GLU:HG2	2.11	0.50
1:A:47:LEU:HD11	1:A:1099:LEU:HD23	1.93	0.50
1:A:108:GLN:HG3	1:A:732:HIS:CD2	2.47	0.50
1:A:121:VAL:HG11	1:A:841:ARG:HG2	1.94	0.50
1:A:326:ILE:HD12	1:A:510:CYS:SG	2.51	0.50
1:A:469:ASP:OD1	1:A:469:ASP:N	2.44	0.50
1:A:576:TYR:HA	1:A:633:LEU:HD13	1.93	0.50
1:A:977:LEU:O	1:A:981:THR:OG1	2.24	0.50
2:B:81:CYS:HA	2:B:113:VAL:HG23	1.93	0.50
1:C:85:LEU:HD23	1:C:85:LEU:H	1.76	0.50
1:C:1051:HIS:CE1	1:C:1053:HIS:H	2.30	0.50
1:C:1513:LEU:O	1:C:1517:THR:N	2.37	0.50
1:C:1530:LYS:O	1:C:1533:LEU:HB2	2.11	0.50
1:C:1600:LEU:HA	1:C:1603:MET:SD	2.51	0.50
1:C:1958:PRO:HB3	1:C:1967:HIS:CE1	2.47	0.50
1:A:235:TYR:OH	1:A:1248:GLU:OE2	2.23	0.50
1:A:679:ASP:N	1:A:697:MET:HE1	2.26	0.50
1:A:933:PHE:O	1:A:937:LEU:HG	2.11	0.50
1:A:1556:PHE:O	1:A:1560:MET:HE3	2.11	0.50
1:A:1828:TYR:H	1:A:1850:PHE:HA	1.76	0.50
1:A:1992:ILE:HD12	1:A:1997:LYS:HA	1.94	0.50
1:C:1707:TYR:O	1:C:1711:ILE:HG12	2.12	0.50
1:C:1968:ASN:O	1:C:1972:LEU:HG	2.10	0.50
2:D:6:CYS:HA	2:D:77:VAL:O	2.12	0.50
2:D:126:ILE:HG23	2:D:136:PRO:HG3	1.93	0.50
1:A:548:ARG:HB2	1:A:716:SER:HB3	1.93	0.50
1:A:780:LEU:HD22	1:A:808:MET:HE1	1.94	0.50
1:A:946:LEU:O	1:A:950:GLN:N	2.44	0.50
1:A:1051:HIS:CE1	1:A:1053:HIS:H	2.29	0.50
2:B:72:TYR:OH	2:B:100:GLU:HG3	2.12	0.50
1:C:244:VAL:HB	1:C:246:ARG:HD3	1.94	0.50
1:C:1474:ILE:HB	1:C:1477:ILE:HD12	1.93	0.50
1:C:1500:ALA:O	1:C:1503:LYS:N	2.45	0.50
1:C:1814:ASP:OD1	1:C:1819:TYR:OH	2.15	0.50
1:C:1992:ILE:HD12	1:C:1997:LYS:HA	1.94	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1500:ALA:O	1:A:1503:LYS:N	2.45	0.50
1:A:1568:MET:HA	1:A:1581:LEU:HD11	1.93	0.50
1:A:1857:THR:N	1:A:1861:ARG:O	2.35	0.50
1:A:1989:LYS:HG3	1:A:1992:ILE:HD11	1.94	0.50
1:C:954:THR:HG23	1:C:959:ARG:HD2	1.94	0.50
1:C:1122:GLU:OE2	1:C:1125:ALA:HB3	2.12	0.50
2:D:80:VAL:HG23	2:D:112:LEU:HD23	1.94	0.50
2:D:113:VAL:HG12	2:D:155:VAL:HG23	1.93	0.50
2:D:164:GLY:O	2:D:168:VAL:HG23	2.12	0.50
1:A:244:VAL:HB	1:A:246:ARG:HD3	1.94	0.50
1:A:1720:TYR:O	1:C:1734:PHE:HE1	1.95	0.50
1:A:1856:PHE:CZ	1:A:1870:HIS:HB2	2.47	0.50
2:B:28:PHE:O	2:B:32:TYR:N	2.45	0.50
2:B:64:TYR:O	2:B:68:ARG:HG2	2.12	0.50
1:C:466:ARG:HD3	1:C:614:GLU:HB3	1.94	0.50
1:C:938:MET:HG2	1:C:942:MET:HE1	1.94	0.50
1:C:1539:ASP:O	1:C:1543:ARG:NE	2.44	0.50
1:A:789:ARG:HD3	1:A:903:LEU:HD22	1.93	0.50
1:A:1712:PRO:HA	1:A:1715:GLU:OE2	2.11	0.50
2:B:6:CYS:HA	2:B:77:VAL:O	2.12	0.50
1:C:120:TRP:HB3	1:C:838:TYR:HB3	1.93	0.50
1:C:789:ARG:HD3	1:C:903:LEU:HD22	1.93	0.50
1:C:945:HIS:O	1:C:949:GLY:N	2.42	0.50
1:C:1856:PHE:HA	1:C:1862:ALA:HA	1.93	0.50
1:A:400:HIS:HE1	1:A:402:ALA:HB3	1.76	0.49
1:A:1958:PRO:HB3	1:A:1967:HIS:CE1	2.47	0.49
1:C:125:ARG:NH2	1:C:1003:ASP:O	2.44	0.49
1:C:1010:ARG:HB3	1:C:1014:PHE:CE2	2.47	0.49
1:C:1845:TYR:H	1:C:1847:LEU:HD21	1.76	0.49
2:D:72:TYR:OH	2:D:100:GLU:HG3	2.12	0.49
1:A:85:LEU:HD23	1:A:85:LEU:H	1.76	0.49
1:A:120:TRP:HB3	1:A:838:TYR:HB3	1.93	0.49
1:A:461:LYS:HZ2	1:A:489:LEU:HA	1.76	0.49
1:A:1167:PRO:O	1:A:1171:ILE:HG13	2.12	0.49
1:A:1530:LYS:O	1:A:1533:LEU:HB2	2.12	0.49
1:A:1724:ALA:HB2	1:C:1734:PHE:CD1	2.47	0.49
2:B:164:GLY:O	2:B:168:VAL:HG23	2.12	0.49
1:C:1988:ASN:O	1:C:1992:ILE:HG23	2.12	0.49
1:A:125:ARG:HH22	1:A:1003:ASP:CA	2.25	0.49
1:A:125:ARG:HH12	1:A:1003:ASP:HA	1.78	0.49
1:A:909:HIS:HB3	1:A:938:MET:HB2	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:956:ARG:HD3	1:A:1007:LEU:C	2.37	0.49
1:A:1256:CYS:O	1:A:1260:VAL:HG23	2.12	0.49
1:A:1845:TYR:H	1:A:1847:LEU:HD21	1.76	0.49
1:C:125:ARG:HH22	1:C:1003:ASP:CA	2.25	0.49
1:C:125:ARG:HB3	1:C:128:GLN:HB2	1.94	0.49
1:C:380:ALA:HA	1:C:383:PHE:CD2	2.40	0.49
1:C:623:LEU:HD12	1:C:624:PRO:HD2	1.94	0.49
1:C:1400:VAL:HG12	1:C:1404:MET:SD	2.53	0.49
2:D:28:PHE:O	2:D:32:TYR:N	2.45	0.49
2:D:45:MET:HA	2:D:50:PRO:HA	1.94	0.49
1:A:57:GLU:O	1:A:61:LEU:HG	2.12	0.49
1:A:405:VAL:HA	1:A:449:PHE:HB2	1.95	0.49
1:A:623:LEU:HD12	1:A:624:PRO:HD2	1.95	0.49
1:A:1653:ASN:ND2	1:A:1881:ALA:H	2.01	0.49
2:B:80:VAL:HG23	2:B:112:LEU:HD23	1.94	0.49
1:C:340:ILE:HB	1:C:397:THR:HG23	1.94	0.49
1:C:567:VAL:HG12	1:C:570:LEU:HD21	1.93	0.49
1:C:956:ARG:HD3	1:C:1007:LEU:C	2.37	0.49
1:A:86:LEU:O	1:A:121:VAL:HA	2.13	0.49
1:A:88:GLN:O	1:A:119:ASP:HB3	2.13	0.49
1:A:1094:THR:O	1:A:1098:GLU:HB3	2.13	0.49
1:A:2002:GLU:HA	1:A:2005:ARG:HH12	1.77	0.49
1:C:460:PHE:HA	1:C:491:PRO:HA	1.94	0.49
1:C:932:TRP:HA	1:C:935:PHE:HD2	1.76	0.49
1:C:1167:PRO:O	1:C:1171:ILE:HG13	2.12	0.49
1:C:1256:CYS:O	1:C:1260:VAL:HG23	2.12	0.49
1:A:114:GLU:O	1:A:118:GLU:N	2.41	0.49
1:A:156:GLN:HE21	1:A:1297:TYR:HE2	1.59	0.49
1:A:466:ARG:HD3	1:A:614:GLU:HB3	1.94	0.49
1:A:1765:ASP:O	1:A:1766:GLU:HG2	2.11	0.49
1:A:1851:LEU:HD11	1:A:1873:LYS:HB2	1.95	0.49
1:C:47:LEU:HD11	1:C:1099:LEU:HD23	1.93	0.49
1:C:156:GLN:HE21	1:C:1297:TYR:HE2	1.59	0.49
1:C:955:PRO:HG2	1:C:958:LEU:HB2	1.94	0.49
1:C:1279:PRO:HB2	1:C:1283:ARG:HH21	1.76	0.49
1:A:924:ARG:HA	1:A:927:ILE:HD12	1.95	0.49
1:A:938:MET:HG2	1:A:942:MET:HE1	1.94	0.49
1:A:1409:ARG:O	1:A:1413:LEU:HG	2.13	0.49
2:B:9:VAL:HG22	2:B:80:VAL:HG12	1.95	0.49
1:C:338:LEU:HB2	1:C:401:LEU:HD21	1.95	0.49
1:C:1917:ALA:O	1:C:1921:GLU:N	2.38	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:64:TYR:O	2:D:68:ARG:HG2	2.12	0.49
1:A:1550:GLN:HA	1:A:1553:ASP:OD2	2.13	0.49
1:A:1961:PRO:HA	1:A:1964:PHE:CD2	2.48	0.49
1:C:57:GLU:O	1:C:61:LEU:HG	2.12	0.49
1:C:1568:MET:HA	1:C:1581:LEU:HD11	1.93	0.49
2:D:68:ARG:NH2	2:D:72:TYR:HH	2.10	0.49
1:A:789:ARG:HD2	1:A:903:LEU:HD13	1.95	0.49
1:A:1530:LYS:O	1:A:1534:THR:HG23	2.13	0.49
1:A:1988:ASN:O	1:A:1992:ILE:HG23	2.12	0.49
2:B:45:MET:HA	2:B:50:PRO:HA	1.94	0.49
1:C:1682:GLY:O	1:C:1686:LEU:HD23	2.12	0.49
1:C:1851:LEU:HD11	1:C:1873:LYS:HB2	1.95	0.49
1:C:1856:PHE:CZ	1:C:1870:HIS:HB2	2.47	0.49
1:A:125:ARG:NH2	1:A:1003:ASP:O	2.44	0.49
1:A:154:PHE:O	1:A:158:ALA:N	2.46	0.49
1:A:284:TYR:CE2	1:A:291:LYS:HB2	2.48	0.49
1:A:460:PHE:HA	1:A:491:PRO:HA	1.94	0.49
1:A:735:GLU:OE2	1:A:736:GLU:HG2	2.13	0.49
1:A:1682:GLY:O	1:A:1686:LEU:HD23	2.12	0.49
1:C:159:SER:HA	1:C:1473:ARG:NH2	2.28	0.49
1:C:544:HIS:CD2	1:C:774:ALA:HB1	2.48	0.49
1:C:910:GLU:O	1:C:914:LEU:HG	2.13	0.49
1:C:1094:THR:O	1:C:1098:GLU:HB3	2.13	0.49
1:A:928:LEU:HD13	1:A:978:GLU:HG2	1.95	0.48
1:A:1122:GLU:OE2	1:A:1125:ALA:HB3	2.12	0.48
1:A:1279:PRO:HB2	1:A:1283:ARG:HH21	1.76	0.48
1:A:1856:PHE:CE1	1:A:1870:HIS:HB2	2.48	0.48
1:C:86:LEU:O	1:C:121:VAL:HA	2.13	0.48
1:C:235:TYR:CG	1:C:236:PRO:HD2	2.48	0.48
1:C:780:LEU:HD22	1:C:808:MET:HE1	1.94	0.48
1:C:784:VAL:O	1:C:788:ILE:HG12	2.13	0.48
1:C:789:ARG:HD2	1:C:903:LEU:HD13	1.95	0.48
1:C:1989:LYS:HG3	1:C:1992:ILE:HD11	1.94	0.48
1:A:338:LEU:HB2	1:A:401:LEU:HD21	1.95	0.48
1:A:544:HIS:CD2	1:A:774:ALA:HB1	2.48	0.48
1:A:784:VAL:O	1:A:788:ILE:HG12	2.13	0.48
1:A:1025:ALA:O	1:A:1029:GLN:HG3	2.13	0.48
1:A:1140:HIS:HA	1:A:1143:LEU:HD12	1.93	0.48
1:A:1401:GLN:HA	1:A:1404:MET:CE	2.44	0.48
1:A:1856:PHE:HA	1:A:1862:ALA:HA	1.93	0.48
1:C:1784:HIS:O	1:C:1787:GLU:N	2.46	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:954:THR:HG23	1:A:959:ARG:HD2	1.94	0.48
1:A:1010:ARG:HB3	1:A:1014:PHE:CE2	2.48	0.48
1:A:1623:ALA:O	1:A:1627:VAL:HG23	2.14	0.48
1:A:1902:VAL:HG11	1:A:1966:HIS:HB3	1.94	0.48
1:C:125:ARG:HH12	1:C:1003:ASP:HA	1.78	0.48
1:C:215:VAL:HG22	1:C:218:ARG:NH2	2.28	0.48
1:C:1275:ASP:OD1	1:C:1275:ASP:N	2.42	0.48
1:C:1482:SER:HB2	1:C:1532:ILE:HG12	1.95	0.48
1:C:1487:LEU:HD12	1:C:1490:ARG:HD3	1.93	0.48
1:C:1534:THR:HA	1:C:1537:GLU:OE1	2.14	0.48
2:D:69:PRO:HA	2:D:72:TYR:CD1	2.48	0.48
1:A:235:TYR:CG	1:A:236:PRO:HD2	2.48	0.48
1:A:548:ARG:O	1:A:716:SER:N	2.47	0.48
1:A:569:ASN:OD1	1:A:609:HIS:N	2.33	0.48
1:A:1780:ALA:CB	2:B:166:LYS:HZ2	2.25	0.48
2:B:69:PRO:HA	2:B:72:TYR:CD1	2.48	0.48
1:C:121:VAL:HG11	1:C:841:ARG:HG2	1.93	0.48
1:C:154:PHE:O	1:C:158:ALA:N	2.46	0.48
1:C:259:GLN:O	1:C:328:SER:HA	2.13	0.48
1:C:284:TYR:CE2	1:C:291:LYS:HB2	2.48	0.48
1:C:1039:THR:O	1:C:1040:LEU:C	2.56	0.48
1:C:1409:ARG:O	1:C:1413:LEU:HG	2.13	0.48
1:C:1530:LYS:O	1:C:1534:THR:HG23	2.13	0.48
1:A:159:SER:HA	1:A:1473:ARG:NH2	2.28	0.48
1:A:340:ILE:HB	1:A:397:THR:HG23	1.94	0.48
1:A:688:LEU:HD22	1:A:694:LEU:HD21	1.94	0.48
1:A:789:ARG:HD3	1:A:903:LEU:HB3	1.95	0.48
1:A:955:PRO:O	1:A:958:LEU:N	2.41	0.48
2:B:57:ASP:OD1	2:B:58:THR:N	2.47	0.48
1:C:405:VAL:HA	1:C:449:PHE:HB2	1.95	0.48
1:C:573:ARG:HB3	1:C:638:TYR:HE2	1.79	0.48
1:C:909:HIS:HB3	1:C:938:MET:HB2	1.95	0.48
1:A:259:GLN:O	1:A:328:SER:HA	2.13	0.48
1:A:955:PRO:HG2	1:A:958:LEU:HB2	1.95	0.48
1:A:1400:VAL:HG12	1:A:1404:MET:SD	2.53	0.48
1:A:1999:TYR:HB2	2:B:70:LEU:O	2.13	0.48
1:C:131:SER:O	1:C:135:SER:N	2.26	0.48
1:C:466:ARG:NH2	1:C:616:TYR:H	2.12	0.48
1:C:841:ARG:O	1:C:843:PRO:HD3	2.14	0.48
1:C:1121:LEU:HB3	1:C:1175:THR:HG21	1.95	0.48
1:C:1649:ASN:ND2	1:C:1705:GLU:OE1	2.47	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1797:ASP:OD1	1:C:1817:LYS:NZ	2.29	0.48
1:C:1937:SER:HB3	1:C:1977:PHE:HZ	1.79	0.48
2:D:57:ASP:OD1	2:D:58:THR:N	2.47	0.48
1:A:84:GLU:HG2	1:A:124:HIS:HB3	1.96	0.48
1:A:295:ASN:ND2	1:A:618:GLU:OE1	2.47	0.48
1:A:910:GLU:O	1:A:914:LEU:HG	2.13	0.48
1:A:1369:LYS:HB3	1:A:1374:MET:SD	2.53	0.48
1:A:1482:SER:HB2	1:A:1532:ILE:HG12	1.95	0.48
1:A:1738:MET:HE1	1:C:1720:TYR:HB3	1.95	0.48
1:A:1814:ASP:OD1	1:A:1819:TYR:OH	2.15	0.48
1:A:1856:PHE:CD1	1:A:1872:ARG:HG3	2.49	0.48
1:C:88:GLN:O	1:C:119:ASP:HB3	2.13	0.48
1:C:231:LEU:HD12	1:C:1262:LYS:CD	2.44	0.48
1:A:394:PHE:HE2	1:A:492:VAL:HG11	1.76	0.48
1:C:735:GLU:OE2	1:C:736:GLU:HG2	2.13	0.48
1:C:836:VAL:HA	1:C:840:PHE:CB	2.44	0.48
1:C:1111:GLY:O	1:C:1115:THR:OG1	2.12	0.48
1:C:1576:GLU:H	1:C:1576:GLU:CD	2.22	0.48
1:C:1781:GLU:CD	2:D:166:LYS:HZ3	2.20	0.48
1:C:1902:VAL:HG11	1:C:1966:HIS:HB3	1.94	0.48
1:C:1961:PRO:HA	1:C:1964:PHE:CD2	2.48	0.48
1:C:1989:LYS:HA	1:C:1992:ILE:HG12	1.95	0.48
1:C:2002:GLU:HA	1:C:2005:ARG:HH12	1.77	0.48
1:A:215:VAL:HG22	1:A:218:ARG:NH2	2.27	0.48
1:A:457:THR:HA	1:A:459:PHE:CE1	2.49	0.48
1:A:559:ASN:HB2	1:A:706:VAL:HB	1.96	0.48
1:A:836:VAL:HA	1:A:840:PHE:CB	2.44	0.48
1:A:1649:ASN:ND2	1:A:1705:GLU:OE1	2.47	0.48
1:A:1912:LYS:HE2	2:B:37:PHE:CD1	2.48	0.48
1:A:1989:LYS:HA	1:A:1992:ILE:HG12	1.95	0.48
1:C:295:ASN:ND2	1:C:618:GLU:OE1	2.47	0.48
1:C:548:ARG:O	1:C:716:SER:N	2.47	0.48
1:C:1012:PHE:O	1:C:1016:LEU:HG	2.14	0.48
1:C:1475:SER:O	1:C:1478:ARG:HG2	2.14	0.48
1:A:346:LEU:O	1:A:387:LEU:HD12	2.14	0.48
1:A:1730:LEU:HD22	1:C:1727:HIS:CD2	2.49	0.48
2:B:87:PRO:HB3	2:B:137:ILE:HD11	1.96	0.48
1:C:688:LEU:HD22	1:C:694:LEU:HD21	1.94	0.48
1:C:1042:MET:SD	1:C:1043:GLU:N	2.87	0.48
1:C:1369:LYS:HB3	1:C:1374:MET:SD	2.53	0.48
1:C:1401:GLN:HA	1:C:1404:MET:CE	2.43	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1437:LEU:HA	1:C:1440:GLN:HE21	1.79	0.48
1:C:1550:GLN:HA	1:C:1553:ASP:OD2	2.13	0.48
1:A:231:LEU:HB3	1:A:1259:TRP:HD1	1.79	0.47
1:A:641:SER:OG	1:A:649:ALA:O	2.31	0.47
1:A:841:ARG:O	1:A:843:PRO:HD3	2.14	0.47
1:C:1025:ALA:O	1:C:1029:GLN:HG3	2.13	0.47
1:A:220:GLU:HA	1:A:223:ARG:CZ	2.44	0.47
1:A:573:ARG:HB3	1:A:638:TYR:HE2	1.79	0.47
1:A:1475:SER:O	1:A:1478:ARG:HG2	2.14	0.47
1:A:1784:HIS:O	1:A:1787:GLU:N	2.46	0.47
1:C:924:ARG:HA	1:C:927:ILE:HD12	1.95	0.47
1:C:998:ALA:HB2	1:C:1044:PHE:CE1	2.49	0.47
1:C:1114:LEU:HD11	1:C:1165:TYR:HA	1.95	0.47
1:C:1623:ALA:O	1:C:1627:VAL:HG23	2.13	0.47
1:C:1856:PHE:CE1	1:C:1870:HIS:HB2	2.48	0.47
1:C:1909:MET:HE1	1:C:1974:PHE:N	2.30	0.47
1:A:1386:THR:O	1:A:1390:LEU:HG	2.14	0.47
1:A:1534:THR:HA	1:A:1537:GLU:OE1	2.14	0.47
1:C:928:LEU:HD13	1:C:978:GLU:HG2	1.95	0.47
1:C:1788:GLU:O	1:C:1791:THR:N	2.47	0.47
1:C:1856:PHE:CD1	1:C:1872:ARG:HG3	2.49	0.47
1:C:1954:LEU:HB2	1:C:2017:LEU:HD13	1.96	0.47
1:A:231:LEU:HD12	1:A:1262:LYS:CD	2.44	0.47
1:A:268:LEU:HD12	1:A:495:GLN:O	2.15	0.47
1:A:1012:PHE:O	1:A:1016:LEU:HG	2.14	0.47
1:A:1520:PHE:CE2	1:A:1522:GLU:HG3	2.49	0.47
1:A:1731:GLN:NE2	1:C:1724:ALA:O	2.46	0.47
1:A:2001:ARG:HA	1:A:2004:GLU:HB2	1.96	0.47
1:C:231:LEU:HB3	1:C:1259:TRP:HD1	1.79	0.47
1:C:388:GLY:HA2	1:C:391:ARG:HH12	1.80	0.47
1:C:1769:PHE:HB2	1:C:1771:TYR:HE1	1.79	0.47
2:D:9:VAL:HG22	2:D:80:VAL:HG12	1.95	0.47
1:A:284:TYR:HD2	1:A:473:PHE:CZ	2.33	0.47
1:A:340:ILE:HD12	1:A:456:VAL:HG11	1.97	0.47
1:A:466:ARG:NH2	1:A:616:TYR:H	2.12	0.47
1:A:935:PHE:HD1	1:A:1000:PHE:CD1	2.33	0.47
1:A:1114:LEU:HD11	1:A:1165:TYR:HA	1.95	0.47
1:A:1738:MET:HE1	1:C:1720:TYR:CB	2.44	0.47
1:A:1937:SER:HB3	1:A:1977:PHE:HZ	1.79	0.47
1:A:1967:HIS:O	1:A:1971:ARG:HG3	2.14	0.47
1:C:152:GLN:HB3	1:C:1429:SER:OG	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:220:GLU:HA	1:C:223:ARG:CZ	2.44	0.47
1:C:726:LYS:O	1:C:730:LEU:HD13	2.14	0.47
1:C:976:GLY:O	1:C:980:ILE:HG13	2.15	0.47
1:C:1878:THR:HA	1:C:1892:CYS:H	1.79	0.47
2:D:165:LEU:O	2:D:168:VAL:HB	2.15	0.47
1:A:998:ALA:HB2	1:A:1044:PHE:CE1	2.50	0.47
1:A:1042:MET:SD	1:A:1043:GLU:N	2.87	0.47
1:A:1288:LEU:HD22	1:A:1392:VAL:HG13	1.95	0.47
1:A:1791:THR:HA	1:A:1799:VAL:HG21	1.97	0.47
1:A:1847:LEU:O	1:A:1848:ARG:HD2	2.15	0.47
1:C:280:ILE:HG12	1:C:341:LYS:HB2	1.97	0.47
1:C:746:THR:OG1	1:C:747:VAL:N	2.47	0.47
1:C:1253:LEU:O	1:C:1257:VAL:HG23	2.15	0.47
1:C:1285:LEU:HA	1:C:1288:LEU:HD12	1.96	0.47
2:D:158:SER:HB3	2:D:163:LYS:N	2.24	0.47
1:A:143:ARG:HH22	1:A:147:LYS:HD3	1.80	0.47
1:A:458:ASN:HB3	1:A:460:PHE:CZ	2.49	0.47
1:A:746:THR:OG1	1:A:747:VAL:N	2.47	0.47
1:A:916:TRP:CH2	1:A:931:ALA:HB1	2.50	0.47
1:A:976:GLY:O	1:A:980:ILE:HG13	2.15	0.47
1:A:1039:THR:O	1:A:1040:LEU:C	2.56	0.47
1:A:1121:LEU:HB3	1:A:1175:THR:HG21	1.95	0.47
1:A:1253:LEU:O	1:A:1257:VAL:HG23	2.15	0.47
1:A:1524:HIS:HA	1:A:1527:ARG:HD3	1.96	0.47
1:C:84:GLU:HG2	1:C:124:HIS:HB3	1.96	0.47
1:C:122:ILE:HD13	1:C:837:HIS:CG	2.50	0.47
1:C:268:LEU:HD12	1:C:495:GLN:O	2.15	0.47
1:C:340:ILE:HD12	1:C:456:VAL:HG11	1.97	0.47
1:C:789:ARG:HD3	1:C:903:LEU:HB3	1.95	0.47
1:C:916:TRP:CH2	1:C:931:ALA:HB1	2.50	0.47
1:C:1109:LEU:O	1:C:1112:LEU:HB2	2.15	0.47
1:C:1288:LEU:HD22	1:C:1392:VAL:HG13	1.95	0.47
1:C:1520:PHE:CE2	1:C:1522:GLU:HG3	2.49	0.47
1:C:1788:GLU:O	1:C:1789:PHE:C	2.57	0.47
1:C:1853:CYS:HA	1:C:1873:LYS:HA	1.96	0.47
1:C:2001:ARG:HA	1:C:2004:GLU:HB2	1.96	0.47
1:C:2011:ARG:O	1:C:2015:GLN:N	2.45	0.47
1:A:789:ARG:CD	1:A:903:LEU:HD13	2.45	0.47
1:A:994:ASN:C	1:A:994:ASN:ND2	2.70	0.47
1:A:1102:PRO:O	1:A:1105:GLN:NE2	2.48	0.47
1:A:1106:GLN:HG2	1:A:1107:HIS:CE1	2.50	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1109:LEU:O	1:A:1112:LEU:HB2	2.14	0.47
1:A:1143:LEU:HA	1:A:1146:HIS:CD2	2.50	0.47
1:C:458:ASN:HB3	1:C:460:PHE:CZ	2.49	0.47
1:C:1106:GLN:HG2	1:C:1107:HIS:CE1	2.50	0.47
1:C:1386:THR:O	1:C:1390:LEU:HG	2.14	0.47
1:C:1524:HIS:HA	1:C:1527:ARG:HD3	1.96	0.47
1:C:1996:GLN:HG3	1:C:1999:TYR:HD2	1.80	0.47
1:A:577:MET:HE1	1:A:581:ASP:O	2.15	0.47
1:A:799:ASN:HD22	1:A:802:ARG:HH22	1.62	0.47
1:A:1437:LEU:HA	1:A:1440:GLN:HE21	1.80	0.47
1:A:1769:PHE:HB2	1:A:1771:TYR:HE1	1.79	0.47
1:A:1909:MET:HE1	1:A:1974:PHE:N	2.30	0.47
1:C:116:TYR:CE1	1:C:778:HIS:HE1	2.33	0.47
1:C:346:LEU:O	1:C:387:LEU:HD12	2.14	0.47
1:C:559:ASN:HB2	1:C:706:VAL:HB	1.96	0.47
1:C:994:ASN:C	1:C:994:ASN:ND2	2.70	0.47
1:C:1143:LEU:HA	1:C:1146:HIS:CD2	2.50	0.47
1:C:1967:HIS:O	1:C:1971:ARG:HG3	2.14	0.47
1:A:221:THR:O	1:A:225:GLN:HG2	2.15	0.47
1:A:229:PRO:C	1:A:1262:LYS:HZ3	2.23	0.47
1:A:285:ASP:HB2	1:A:336:ILE:HD13	1.97	0.47
1:A:1151:ARG:HG3	1:A:1152:TYR:CD1	2.50	0.47
1:C:292:ILE:O	1:C:535:PHE:N	2.48	0.47
1:C:641:SER:OG	1:C:649:ALA:O	2.31	0.47
2:D:87:PRO:HB3	2:D:137:ILE:HD11	1.96	0.47
1:A:1091:PRO:O	1:A:1094:THR:HG22	2.15	0.46
1:A:1285:LEU:HA	1:A:1288:LEU:HD12	1.96	0.46
1:A:1673:CYS:HA	1:A:1678:PHE:CE2	2.50	0.46
2:B:165:LEU:O	2:B:168:VAL:HB	2.15	0.46
1:C:457:THR:HA	1:C:459:PHE:CE1	2.49	0.46
1:C:577:MET:HE1	1:C:581:ASP:O	2.15	0.46
1:C:935:PHE:HD1	1:C:1000:PHE:CD1	2.32	0.46
1:C:1102:PRO:O	1:C:1105:GLN:NE2	2.48	0.46
1:C:1772:LYS:HB2	1:C:1887:THR:OG1	2.15	0.46
1:A:380:ALA:HA	1:A:383:PHE:CD2	2.40	0.46
1:A:388:GLY:HA2	1:A:391:ARG:HH12	1.80	0.46
1:A:909:HIS:ND1	1:A:941:SER:OG	2.11	0.46
1:A:960:PHE:CG	1:A:965:LEU:HD21	2.50	0.46
1:A:1830:ASP:HB2	1:A:1833:GLU:HG3	1.97	0.46
1:A:1932:MET:SD	2:B:56:PHE:CZ	3.08	0.46
1:C:656:PHE:CD2	1:C:681:PRO:HD3	2.51	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1012:PHE:CE1	1:C:1016:LEU:HD21	2.50	0.46
1:C:1630:TYR:O	1:C:1633:LEU:HB2	2.16	0.46
1:C:1791:THR:HA	1:C:1799:VAL:HG21	1.97	0.46
1:A:149:LEU:HD23	1:A:150:PRO:HD2	1.97	0.46
1:A:234:LEU:HB3	1:A:1384:LEU:HB2	1.97	0.46
1:A:280:ILE:HG12	1:A:341:LYS:HB2	1.97	0.46
1:A:726:LYS:O	1:A:730:LEU:HD13	2.14	0.46
1:A:1576:GLU:H	1:A:1576:GLU:CD	2.22	0.46
1:A:1760:HIS:C	1:A:1762:GLY:H	2.23	0.46
1:A:1788:GLU:O	1:A:1791:THR:N	2.48	0.46
1:C:284:TYR:HD2	1:C:473:PHE:CZ	2.33	0.46
1:C:555:PRO:HB3	1:C:707:PHE:CE2	2.51	0.46
1:C:1146:HIS:HA	1:C:1152:TYR:HD2	1.80	0.46
1:C:1807:PRO:HD2	1:C:1872:ARG:NH1	2.30	0.46
1:A:1807:PRO:HD2	1:A:1872:ARG:NH1	2.30	0.46
1:A:1847:LEU:N	1:A:1882:PHE:O	2.44	0.46
2:B:29:PRO:HA	2:B:32:TYR:CD2	2.51	0.46
1:C:115:MET:HE1	1:C:778:HIS:HA	1.98	0.46
1:C:221:THR:O	1:C:225:GLN:HG2	2.16	0.46
1:C:1091:PRO:O	1:C:1094:THR:HG22	2.15	0.46
1:C:1573:GLU:N	1:C:1578:LEU:HD11	2.30	0.46
1:C:1958:PRO:HB3	1:C:1967:HIS:ND1	2.30	0.46
2:D:29:PRO:HA	2:D:32:TYR:CD2	2.51	0.46
1:A:152:GLN:HB3	1:A:1429:SER:OG	2.14	0.46
1:A:292:ILE:O	1:A:535:PHE:N	2.48	0.46
1:A:1573:GLU:N	1:A:1578:LEU:HD11	2.30	0.46
1:A:1872:ARG:HG2	1:A:1898:VAL:HG12	1.98	0.46
1:A:1976:ASP:HA	1:A:1979:LYS:HE2	1.97	0.46
1:C:581:ASP:OD2	1:C:583:SER:OG	2.34	0.46
1:C:960:PHE:CG	1:C:965:LEU:HD21	2.50	0.46
1:C:1566:VAL:CA	1:C:1569:LYS:HZ3	2.28	0.46
1:C:1760:HIS:C	1:C:1762:GLY:H	2.23	0.46
1:C:1789:PHE:O	1:C:1793:ARG:HG3	2.15	0.46
1:A:122:ILE:HD13	1:A:837:HIS:CG	2.50	0.46
1:A:945:HIS:O	1:A:949:GLY:N	2.42	0.46
1:A:1009:ASP:OD1	1:A:1012:PHE:HB3	2.16	0.46
1:A:1133:LYS:O	1:A:1137:SER:OG	2.16	0.46
1:A:1165:TYR:C	1:A:1167:PRO:HD2	2.41	0.46
1:A:1853:CYS:HA	1:A:1873:LYS:HA	1.96	0.46
1:A:1996:GLN:HG3	1:A:1999:TYR:HD2	1.80	0.46
1:C:234:LEU:HB3	1:C:1384:LEU:HB2	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:632:HIS:HB2	1:C:659:ILE:O	2.15	0.46
1:C:1163:GLU:HA	1:C:1166:LEU:HG	1.98	0.46
1:C:1847:LEU:O	1:C:1848:ARG:HD2	2.14	0.46
2:D:86:SER:O	2:D:89:SER:OG	2.26	0.46
1:A:248:SER:H	1:A:826:ARG:CZ	2.28	0.46
1:A:300:LEU:HG	1:A:323:ARG:CD	2.46	0.46
1:A:636:THR:HG23	1:A:656:PHE:CE1	2.51	0.46
1:A:1388:ALA:O	1:A:1392:VAL:HG23	2.16	0.46
1:A:1630:TYR:O	1:A:1633:LEU:HB2	2.16	0.46
1:A:1722:LYS:O	1:A:1726:VAL:HG23	2.16	0.46
1:A:1780:ALA:H	2:B:166:LYS:HZ1	1.64	0.46
1:C:1009:ASP:OD1	1:C:1012:PHE:HB3	2.16	0.46
1:C:1151:ARG:HG3	1:C:1152:TYR:CD1	2.50	0.46
1:C:1267:ALA:O	1:C:1271:ARG:HG3	2.15	0.46
1:C:1401:GLN:HA	1:C:1404:MET:HE1	1.97	0.46
1:C:1976:ASP:HA	1:C:1979:LYS:HE2	1.97	0.46
1:A:1267:ALA:O	1:A:1271:ARG:HG3	2.15	0.46
1:A:1387:GLU:O	1:A:1391:VAL:HG23	2.15	0.46
1:A:1505:GLN:O	1:A:1509:SER:OG	2.24	0.46
1:C:227:ARG:NH1	1:C:1390:LEU:HB3	2.31	0.46
1:C:300:LEU:HG	1:C:323:ARG:CD	2.46	0.46
1:C:460:PHE:CB	1:C:489:LEU:HD13	2.46	0.46
1:C:799:ASN:HD22	1:C:802:ARG:HH22	1.62	0.46
1:C:1058:ASN:O	1:C:1107:HIS:ND1	2.46	0.46
1:C:1387:GLU:O	1:C:1391:VAL:HG23	2.15	0.46
1:C:1415:ALA:O	1:C:1419:VAL:HG22	2.16	0.46
1:C:1673:CYS:HA	1:C:1678:PHE:CE2	2.50	0.46
1:C:1779:LEU:HD13	2:D:26:ASN:CG	2.40	0.46
1:A:694:LEU:HD23	1:A:694:LEU:HA	1.81	0.46
1:A:776:SER:HA	1:A:779:VAL:HG22	1.98	0.46
1:A:1012:PHE:CE1	1:A:1016:LEU:HD21	2.50	0.46
1:A:1401:GLN:HA	1:A:1404:MET:HE1	1.97	0.46
1:A:1563:THR:O	1:A:1566:VAL:HB	2.16	0.46
1:A:1727:HIS:NE2	1:C:1730:LEU:HD22	2.30	0.46
1:A:1954:LEU:HB2	1:A:2017:LEU:HD13	1.96	0.46
2:B:129:LEU:HG	2:B:134:GLN:HB3	1.98	0.46
1:C:248:SER:H	1:C:826:ARG:CZ	2.28	0.46
1:C:812:VAL:HA	1:C:815:VAL:HG12	1.97	0.46
1:C:1985:LEU:HD12	1:C:2007:TYR:CD2	2.51	0.46
2:D:20:LEU:HG	2:D:40:TYR:HD2	1.81	0.46
1:A:116:TYR:CE1	1:A:778:HIS:HE1	2.33	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:460:PHE:CB	1:A:489:LEU:HD13	2.46	0.46
1:A:555:PRO:HB3	1:A:707:PHE:CE2	2.51	0.46
1:A:581:ASP:OD2	1:A:583:SER:OG	2.34	0.46
1:A:598:PHE:O	1:A:600:ARG:NH2	2.48	0.46
1:A:1275:ASP:OD1	1:A:1275:ASP:N	2.42	0.46
1:A:1789:PHE:O	1:A:1793:ARG:HG3	2.15	0.46
1:C:279:GLY:HA2	1:C:341:LYS:O	2.16	0.46
1:C:1064:LEU:HD23	1:C:1106:GLN:OE1	2.16	0.46
1:C:1165:TYR:C	1:C:1167:PRO:HD2	2.41	0.46
1:C:1563:THR:O	1:C:1566:VAL:HB	2.16	0.46
1:C:1872:ARG:HG2	1:C:1898:VAL:HG12	1.98	0.46
1:A:1146:HIS:HA	1:A:1152:TYR:HD2	1.80	0.45
1:A:1415:ALA:O	1:A:1419:VAL:HG22	2.16	0.45
1:A:1653:ASN:ND2	1:A:1880:HIS:HB3	2.31	0.45
1:A:1878:THR:HA	1:A:1892:CYS:H	1.79	0.45
1:C:149:LEU:HD23	1:C:150:PRO:HD2	1.97	0.45
1:C:598:PHE:O	1:C:600:ARG:NH2	2.48	0.45
1:C:789:ARG:CD	1:C:903:LEU:HD13	2.45	0.45
1:C:1010:ARG:HB3	1:C:1014:PHE:CZ	2.51	0.45
1:C:1129:PHE:O	1:C:1133:LYS:HG2	2.16	0.45
1:C:1803:LYS:HE2	2:D:28:PHE:CD1	2.50	0.45
1:A:632:HIS:HB2	1:A:659:ILE:O	2.15	0.45
1:A:1129:PHE:O	1:A:1133:LYS:HG2	2.17	0.45
1:A:1769:PHE:HA	1:A:1890:ARG:HA	1.99	0.45
1:C:271:GLU:CD	1:C:493:THR:HB	2.41	0.45
1:C:1388:ALA:O	1:C:1392:VAL:HG23	2.16	0.45
1:A:292:ILE:HG22	1:A:535:PHE:HD2	1.81	0.45
1:A:1123:PRO:HA	1:A:1178:ARG:CZ	2.47	0.45
1:A:1848:ARG:O	1:A:1877:SER:HA	2.17	0.45
1:C:311:ALA:O	1:C:312:HIS:ND1	2.49	0.45
1:C:1108:PHE:CE1	1:C:1112:LEU:HD21	2.52	0.45
1:C:1469:HIS:O	1:C:1477:ILE:HG22	2.17	0.45
1:C:1475:SER:O	1:C:1479:THR:HG23	2.17	0.45
1:C:1830:ASP:HB2	1:C:1833:GLU:HG3	1.98	0.45
1:A:128:GLN:HA	1:A:1052:GLU:HG2	1.97	0.45
1:A:599:THR:HG22	1:A:600:ARG:N	2.28	0.45
1:C:636:THR:HG23	1:C:656:PHE:CE1	2.51	0.45
1:C:1769:PHE:HA	1:C:1890:ARG:HA	1.98	0.45
1:C:1884:TYR:CZ	1:C:1885:ILE:HG12	2.51	0.45
1:C:1931:GLN:HE21	1:C:1996:GLN:NE2	2.14	0.45
1:A:826:ARG:HB3	1:A:828:HIS:CE1	2.52	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1469:HIS:O	1:A:1477:ILE:HG22	2.17	0.45
2:B:3:THR:HA	2:B:52:THR:O	2.17	0.45
1:C:799:ASN:ND2	1:C:802:ARG:HH12	2.15	0.45
1:C:956:ARG:HA	1:C:959:ARG:CG	2.46	0.45
1:C:1653:ASN:ND2	1:C:1880:HIS:HB3	2.31	0.45
1:C:1848:ARG:O	1:C:1877:SER:HA	2.17	0.45
1:C:1967:HIS:HB3	1:C:1971:ARG:NH1	2.32	0.45
1:A:52:GLU:HA	1:A:1018:ARG:NE	2.32	0.45
1:A:541:TYR:HE1	1:A:770:GLU:HG3	1.82	0.45
1:A:656:PHE:CD2	1:A:681:PRO:HD3	2.51	0.45
1:A:1396:LEU:HD13	1:A:1399:ILE:HD12	1.98	0.45
1:A:1418:LYS:O	1:A:1421:LEU:HG	2.17	0.45
1:A:1701:GLU:HG3	1:A:1841:PHE:CD2	2.52	0.45
1:A:1884:TYR:CZ	1:A:1885:ILE:HG12	2.51	0.45
1:A:1931:GLN:HE21	1:A:1996:GLN:NE2	2.14	0.45
1:A:1936:GLY:HA3	2:B:37:PHE:CE1	2.52	0.45
1:A:1989:LYS:HD2	1:A:2000:HIS:HE2	1.82	0.45
1:C:143:ARG:HH22	1:C:147:LYS:HD3	1.80	0.45
1:C:694:LEU:HA	1:C:694:LEU:HD23	1.81	0.45
1:C:1608:ALA:C	1:C:1611:GLY:H	2.25	0.45
1:C:1999:TYR:HB2	2:D:70:LEU:O	2.17	0.45
1:A:297:TYR:HE2	1:A:592:LYS:HG2	1.81	0.45
1:A:1108:PHE:CE1	1:A:1112:LEU:HD21	2.52	0.45
1:A:1475:SER:O	1:A:1479:THR:HG23	2.17	0.45
1:A:1912:LYS:HE2	2:B:37:PHE:CE1	2.52	0.45
1:C:120:TRP:CZ3	1:C:839:ALA:HB2	2.52	0.45
1:C:128:GLN:HA	1:C:1052:GLU:HG2	1.98	0.45
1:C:261:ILE:N	1:C:327:PHE:O	2.37	0.45
1:C:805:PHE:HE2	1:C:927:ILE:HD11	1.82	0.45
1:C:1049:CYS:C	1:C:1051:HIS:N	2.74	0.45
2:D:3:THR:HA	2:D:52:THR:O	2.17	0.45
1:A:230:ALA:HB1	1:A:233:THR:HG21	1.99	0.45
1:A:271:GLU:CD	1:A:493:THR:HB	2.41	0.45
1:A:311:ALA:O	1:A:312:HIS:ND1	2.49	0.45
1:A:743:LEU:HD12	1:A:743:LEU:HA	1.83	0.45
1:A:805:PHE:CD1	1:A:915:GLN:HB2	2.51	0.45
1:A:812:VAL:HA	1:A:815:VAL:HG12	1.97	0.45
1:A:956:ARG:HA	1:A:959:ARG:CG	2.46	0.45
1:A:1049:CYS:C	1:A:1051:HIS:N	2.74	0.45
1:A:1789:PHE:HA	1:A:1792:GLU:OE2	2.17	0.45
1:A:1958:PRO:HB3	1:A:1967:HIS:ND1	2.31	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:129:LEU:HD23	2:B:136:PRO:HD3	1.98	0.45
1:C:1701:GLU:HG3	1:C:1841:PHE:CD2	2.52	0.45
2:D:4:ILE:HB	2:D:53:LEU:HD23	1.99	0.45
2:D:129:LEU:HG	2:D:134:GLN:HB3	1.98	0.45
1:A:248:SER:H	1:A:826:ARG:NH2	2.15	0.45
1:A:547:TYR:C	1:A:548:ARG:HD3	2.42	0.45
1:A:1637:HIS:CB	1:A:1640:LEU:HG	2.47	0.45
1:A:1734:PHE:CE1	1:C:1723:LEU:HB3	2.51	0.45
2:B:20:LEU:HG	2:B:40:TYR:HD2	1.81	0.45
1:C:280:ILE:HD12	1:C:295:ASN:HB2	1.98	0.45
1:C:292:ILE:HB	1:C:535:PHE:O	2.17	0.45
1:C:510:CYS:HA	1:C:529:THR:HB	1.99	0.45
1:C:1418:LYS:O	1:C:1421:LEU:HG	2.17	0.45
1:C:1867:PRO:HA	1:C:1953:PHE:CZ	2.52	0.45
2:D:122:ASP:O	2:D:126:ILE:HG13	2.17	0.45
1:A:137:VAL:HG13	1:A:238:PRO:HG2	1.99	0.45
1:A:279:GLY:HA2	1:A:341:LYS:O	2.16	0.45
1:A:297:TYR:CE2	1:A:592:LYS:HG2	2.52	0.45
1:A:467:LEU:HD23	1:A:472:LEU:HD22	1.99	0.45
1:C:52:GLU:HA	1:C:1018:ARG:NE	2.32	0.45
1:C:297:TYR:HE2	1:C:592:LYS:HG2	1.81	0.45
1:C:297:TYR:CE2	1:C:592:LYS:HG2	2.52	0.45
1:C:541:TYR:HE1	1:C:770:GLU:HG3	1.82	0.45
1:C:770:GLU:O	1:C:773:VAL:HG12	2.16	0.45
1:C:776:SER:HA	1:C:779:VAL:HG22	1.98	0.45
1:C:835:TYR:HA	1:C:839:ALA:HB3	1.99	0.45
1:C:955:PRO:O	1:C:958:LEU:N	2.41	0.45
1:C:1765:ASP:OD1	1:C:1766:GLU:N	2.49	0.45
2:D:129:LEU:HD23	2:D:136:PRO:HD3	1.98	0.45
1:A:76:VAL:HG22	1:A:1060:PRO:HD2	1.99	0.44
1:A:115:MET:HE1	1:A:778:HIS:HA	1.98	0.44
1:A:142:GLN:HE21	1:A:233:THR:HA	1.82	0.44
1:A:770:GLU:O	1:A:773:VAL:HG12	2.16	0.44
1:A:1010:ARG:HB3	1:A:1014:PHE:CZ	2.51	0.44
1:A:1714:LEU:HD21	1:A:1719:ASP:O	2.17	0.44
1:A:1806:ASN:HA	1:A:1872:ARG:HH12	1.82	0.44
1:A:1985:LEU:HD12	1:A:2007:TYR:CD2	2.51	0.44
2:B:158:SER:HB3	2:B:163:LYS:N	2.23	0.44
1:C:719:PRO:HG3	1:C:725:ASP:HA	2.00	0.44
1:C:771:PRO:O	1:C:775:PHE:HD1	2.00	0.44
1:C:783:LEU:O	1:C:786:LEU:HG	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1005:LEU:HD21	1:C:1013:VAL:HG11	2.00	0.44
1:C:1395:THR:O	1:C:1399:ILE:HG13	2.17	0.44
1:C:1637:HIS:CB	1:C:1640:LEU:HG	2.47	0.44
1:C:1714:LEU:HD21	1:C:1719:ASP:O	2.18	0.44
1:A:113:VAL:O	1:A:117:ILE:HG12	2.17	0.44
1:A:1554:LEU:O	1:A:1558:LEU:HG	2.17	0.44
1:A:1582:MET:HB3	1:A:1603:MET:HE3	2.00	0.44
1:A:1765:ASP:OD1	1:A:1766:GLU:N	2.49	0.44
1:A:1772:LYS:HB2	1:A:1887:THR:OG1	2.15	0.44
1:A:1802:ILE:HG12	1:A:1819:TYR:HB3	1.99	0.44
1:A:1865:GLU:HB2	1:A:1868:GLU:HG2	1.99	0.44
1:A:1867:PRO:HA	1:A:1953:PHE:CZ	2.52	0.44
2:B:11:ASP:OD1	2:B:11:ASP:N	2.48	0.44
1:C:113:VAL:O	1:C:117:ILE:HG12	2.17	0.44
1:C:285:ASP:HB2	1:C:336:ILE:HD13	1.97	0.44
1:C:337:PHE:HE1	1:C:400:HIS:NE2	2.16	0.44
1:C:1051:HIS:HE1	1:C:1053:HIS:HB2	1.82	0.44
1:C:1396:LEU:HD13	1:C:1399:ILE:HD12	1.98	0.44
1:C:1566:VAL:HA	1:C:1569:LYS:HZ3	1.81	0.44
1:C:1582:MET:HB3	1:C:1603:MET:HE3	2.00	0.44
1:C:1722:LYS:O	1:C:1726:VAL:HG23	2.16	0.44
1:C:1855:PRO:HD3	2:D:33:VAL:HG22	2.00	0.44
1:A:719:PRO:HG3	1:A:725:ASP:HA	1.99	0.44
1:A:915:GLN:HA	1:A:918:VAL:HG22	1.99	0.44
1:A:1163:GLU:HA	1:A:1166:LEU:HG	1.98	0.44
1:A:1727:HIS:CE1	1:C:1730:LEU:HD22	2.51	0.44
1:A:2011:ARG:O	1:A:2015:GLN:N	2.45	0.44
1:C:467:LEU:HD23	1:C:472:LEU:HD22	1.99	0.44
1:C:472:LEU:HA	1:C:475:PHE:CD2	2.40	0.44
1:C:577:MET:CE	1:C:584:GLN:HB2	2.46	0.44
1:C:1606:LYS:HA	1:C:1606:LYS:HD2	1.74	0.44
1:C:1934:LEU:HD12	1:C:1934:LEU:HA	1.83	0.44
1:A:280:ILE:HD12	1:A:295:ASN:HB2	1.98	0.44
1:A:835:TYR:HA	1:A:839:ALA:HB3	1.99	0.44
1:A:1051:HIS:HE1	1:A:1053:HIS:HB2	1.82	0.44
1:A:1395:THR:O	1:A:1399:ILE:HG13	2.17	0.44
2:B:92:ASN:HA	2:B:95:GLU:OE2	2.17	0.44
2:B:122:ASP:O	2:B:126:ILE:HG13	2.17	0.44
1:C:547:TYR:C	1:C:548:ARG:HD3	2.42	0.44
1:C:1116:GLU:HA	1:C:1119:LEU:CG	2.48	0.44
1:C:1178:ARG:HH21	1:C:1243:CYS:N	2.16	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:70:GLY:H	1:A:73:ARG:HD3	1.83	0.44
1:A:783:LEU:HD11	1:A:804:ALA:O	2.17	0.44
1:A:1005:LEU:HD21	1:A:1013:VAL:HG11	2.00	0.44
1:A:1064:LEU:HD23	1:A:1106:GLN:OE1	2.16	0.44
1:A:1677:HIS:C	1:A:1679:THR:H	2.24	0.44
1:A:1788:GLU:O	1:A:1789:PHE:C	2.57	0.44
1:A:1803:LYS:NZ	2:B:160:LEU:HD12	2.32	0.44
1:A:1866:LEU:HD23	1:A:1866:LEU:HA	1.83	0.44
1:A:1967:HIS:HB3	1:A:1971:ARG:NH1	2.32	0.44
1:C:142:GLN:O	1:C:146:GLN:N	2.50	0.44
1:C:1848:ARG:HD2	1:C:1848:ARG:HA	1.73	0.44
1:C:1854:THR:OG1	1:C:1872:ARG:HB2	2.18	0.44
2:D:92:ASN:HA	2:D:95:GLU:OE2	2.17	0.44
1:A:292:ILE:HB	1:A:535:PHE:O	2.17	0.44
1:A:1039:THR:HA	1:A:1042:MET:HG3	1.99	0.44
1:A:1142:LEU:HG	1:A:1146:HIS:CE1	2.53	0.44
1:A:1178:ARG:HH21	1:A:1243:CYS:N	2.16	0.44
2:B:4:ILE:HB	2:B:53:LEU:HD23	1.99	0.44
1:C:1558:LEU:O	1:C:1562:LEU:HG	2.18	0.44
1:C:1593:PRO:HB3	1:C:1660:ILE:HD11	1.99	0.44
2:D:11:ASP:N	2:D:11:ASP:OD1	2.48	0.44
1:A:142:GLN:NE2	1:A:233:THR:O	2.51	0.44
1:A:227:ARG:NH1	1:A:1390:LEU:HB3	2.30	0.44
1:A:645:ARG:O	1:A:648:THR:OG1	2.23	0.44
1:A:1740:GLN:HG2	1:A:1746:ARG:HD2	1.99	0.44
1:C:137:VAL:HG13	1:C:238:PRO:HG2	1.99	0.44
1:C:142:GLN:NE2	1:C:233:THR:O	2.51	0.44
1:C:230:ALA:HB1	1:C:233:THR:HG21	1.99	0.44
1:C:292:ILE:HG22	1:C:535:PHE:HD2	1.81	0.44
1:C:400:HIS:C	1:C:401:LEU:HD22	2.43	0.44
1:C:783:LEU:CD2	1:C:804:ALA:HB1	2.47	0.44
1:C:1034:PRO:O	1:C:1038:LEU:HD23	2.18	0.44
1:C:1144:CYS:HA	1:C:1147:ASP:OD2	2.18	0.44
1:C:1989:LYS:HD2	1:C:2000:HIS:HE2	1.82	0.44
1:A:805:PHE:HE2	1:A:927:ILE:HD11	1.82	0.44
1:A:1034:PRO:O	1:A:1038:LEU:HD23	2.17	0.44
1:A:1058:ASN:O	1:A:1107:HIS:ND1	2.46	0.44
1:A:1116:GLU:HA	1:A:1119:LEU:CG	2.48	0.44
1:A:1958:PRO:C	1:A:1964:PHE:HE1	2.26	0.44
2:B:135:LYS:N	2:B:135:LYS:HD2	2.33	0.44
1:C:460:PHE:HB3	1:C:489:LEU:HD13	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:783:LEU:HD11	1:C:804:ALA:O	2.17	0.44
1:C:915:GLN:HA	1:C:918:VAL:HG22	1.99	0.44
1:C:1630:TYR:HA	1:C:1633:LEU:HD12	1.99	0.44
1:C:1806:ASN:HA	1:C:1872:ARG:HH12	1.82	0.44
1:C:1958:PRO:C	1:C:1964:PHE:HE1	2.26	0.44
1:A:92:CYS:SG	1:A:94:THR:OG1	2.68	0.44
1:A:799:ASN:ND2	1:A:802:ARG:HH12	2.15	0.44
1:A:802:ARG:O	1:A:806:GLU:HG3	2.18	0.44
1:A:1574:ASP:OD2	1:A:1577:MET:HG2	2.18	0.44
1:A:1803:LYS:HE2	2:B:28:PHE:CG	2.53	0.44
1:C:76:VAL:HG22	1:C:1060:PRO:HD2	1.99	0.44
1:C:674:LEU:C	1:C:705:GLY:HA2	2.43	0.44
1:C:805:PHE:CD1	1:C:915:GLN:HB2	2.51	0.44
1:C:1677:HIS:C	1:C:1679:THR:H	2.24	0.44
1:C:1707:TYR:CD1	1:C:1730:LEU:HD12	2.52	0.44
1:A:337:PHE:HE1	1:A:400:HIS:NE2	2.16	0.43
1:A:907:LEU:HB3	1:A:909:HIS:CE1	2.53	0.43
1:A:1707:TYR:CD1	1:A:1730:LEU:HD12	2.52	0.43
2:B:82:PHE:CE2	2:B:84:VAL:HG12	2.53	0.43
1:C:142:GLN:HE21	1:C:233:THR:HA	1.82	0.43
1:C:826:ARG:HB3	1:C:828:HIS:CE1	2.52	0.43
1:C:907:LEU:HB3	1:C:909:HIS:CE1	2.53	0.43
1:C:1123:PRO:HA	1:C:1178:ARG:CZ	2.47	0.43
1:C:1496:GLY:C	1:C:1498:ASN:H	2.26	0.43
1:C:1554:LEU:O	1:C:1558:LEU:HG	2.17	0.43
1:C:1740:GLN:O	1:C:1742:SER:N	2.50	0.43
1:C:1753:ARG:HB3	1:C:1823:THR:OG1	2.18	0.43
1:C:1789:PHE:HA	1:C:1792:GLU:OE2	2.17	0.43
1:A:726:LYS:HB3	1:A:726:LYS:HE2	1.79	0.43
1:A:1448:PRO:O	1:A:1451:LEU:HB2	2.19	0.43
1:A:1608:ALA:C	1:A:1611:GLY:H	2.25	0.43
1:A:1740:GLN:O	1:A:1742:SER:N	2.51	0.43
1:A:1753:ARG:HB3	1:A:1823:THR:OG1	2.18	0.43
1:C:752:ASN:O	1:C:754:GLU:N	2.52	0.43
1:A:577:MET:CE	1:A:584:GLN:HB2	2.46	0.43
1:A:927:ILE:O	1:A:931:ALA:N	2.52	0.43
1:A:1055:VAL:HG23	1:A:1056:THR:N	2.33	0.43
1:A:1562:LEU:HD23	1:A:1562:LEU:HA	1.71	0.43
1:A:1579:ILE:HA	1:A:1582:MET:HE2	2.00	0.43
1:C:248:SER:H	1:C:826:ARG:NH2	2.15	0.43
1:C:597:GLU:C	1:C:598:PHE:HD1	2.26	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1109:LEU:HA	1:C:1112:LEU:HD12	1.99	0.43
1:C:1566:VAL:N	1:C:1569:LYS:HZ3	2.16	0.43
1:C:1865:GLU:HB2	1:C:1868:GLU:HG2	1.99	0.43
1:A:405:VAL:HA	1:A:449:PHE:CB	2.48	0.43
1:A:510:CYS:HA	1:A:529:THR:HB	1.99	0.43
1:A:656:PHE:CE2	1:A:680:GLN:HA	2.54	0.43
1:A:1144:CYS:HA	1:A:1147:ASP:OD2	2.18	0.43
1:A:1285:LEU:HA	1:A:1285:LEU:HD13	1.73	0.43
1:A:1806:ASN:CG	1:A:1872:ARG:HH12	2.26	0.43
1:C:334:PRO:HD3	1:C:444:CYS:N	2.34	0.43
1:C:802:ARG:O	1:C:806:GLU:HG3	2.18	0.43
1:C:1448:PRO:O	1:C:1451:LEU:HB2	2.19	0.43
1:C:1574:ASP:OD2	1:C:1577:MET:HG2	2.18	0.43
1:A:460:PHE:HB3	1:A:489:LEU:HD13	1.99	0.43
1:A:597:GLU:C	1:A:598:PHE:HD1	2.26	0.43
1:A:674:LEU:C	1:A:705:GLY:HA2	2.43	0.43
1:A:1593:PRO:HB3	1:A:1660:ILE:HD11	1.99	0.43
1:C:1504:MET:HB2	1:C:1508:MET:HE2	2.00	0.43
1:C:1800:GLU:OE1	1:C:1800:GLU:N	2.51	0.43
1:C:1802:ILE:HG12	1:C:1819:TYR:HB3	1.99	0.43
2:D:135:LYS:HD2	2:D:135:LYS:N	2.33	0.43
1:A:1561:ILE:O	1:A:1565:THR:HG23	2.19	0.43
1:A:1707:TYR:HD1	1:A:1730:LEU:HD12	1.83	0.43
1:A:1752:PHE:CE1	1:A:1824:TYR:HB2	2.54	0.43
1:A:1760:HIS:HB3	1:A:1794:PHE:CE2	2.54	0.43
1:C:656:PHE:CE2	1:C:680:GLN:HA	2.54	0.43
1:C:770:GLU:OE1	1:C:770:GLU:N	2.51	0.43
1:C:1154:GLU:OE2	1:C:1156:THR:HG23	2.19	0.43
1:C:1740:GLN:HG2	1:C:1746:ARG:HD2	1.99	0.43
1:C:1772:LYS:NZ	1:C:1882:PHE:CG	2.86	0.43
2:D:82:PHE:CE2	2:D:84:VAL:HG12	2.53	0.43
1:A:131:SER:O	1:A:135:SER:N	2.26	0.43
1:A:835:TYR:CD1	1:A:839:ALA:HB3	2.54	0.43
1:A:1009:ASP:O	1:A:1013:VAL:HG23	2.18	0.43
1:A:1854:THR:OG1	1:A:1872:ARG:NE	2.39	0.43
1:C:70:GLY:H	1:C:73:ARG:HD3	1.83	0.43
1:C:270:PHE:HB3	1:C:272:ILE:O	2.19	0.43
1:C:554:TYR:CE1	1:C:618:GLU:HB2	2.54	0.43
1:C:656:PHE:CE2	1:C:681:PRO:HD3	2.54	0.43
1:C:1009:ASP:O	1:C:1013:VAL:HG23	2.18	0.43
1:C:1768:GLU:O	1:C:1890:ARG:HA	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1851:LEU:HA	1:C:1874:THR:O	2.19	0.43
1:A:400:HIS:C	1:A:401:LEU:HD22	2.43	0.43
1:A:783:LEU:O	1:A:786:LEU:HG	2.17	0.43
1:A:1779:LEU:H	2:B:26:ASN:HD21	1.67	0.43
1:A:1989:LYS:HD2	1:A:2000:HIS:NE2	2.34	0.43
2:B:16:LYS:NZ	2:B:58:THR:O	2.45	0.43
1:C:242:GLU:HG3	1:C:1134:LYS:HZ2	1.84	0.43
1:C:321:LEU:O	1:C:527:ARG:HG3	2.19	0.43
1:C:1039:THR:HA	1:C:1042:MET:HG3	1.99	0.43
1:A:47:LEU:HD12	1:A:47:LEU:HA	1.85	0.43
1:A:120:TRP:CZ3	1:A:839:ALA:HB2	2.52	0.43
1:A:656:PHE:CE2	1:A:681:PRO:HD3	2.54	0.43
1:A:771:PRO:O	1:A:775:PHE:HD1	2.00	0.43
1:A:1109:LEU:HA	1:A:1112:LEU:HD12	1.99	0.43
1:A:1442:ALA:O	1:A:1446:LYS:HG2	2.19	0.43
1:A:1630:TYR:HA	1:A:1633:LEU:HD12	1.99	0.43
1:A:1854:THR:OG1	1:A:1872:ARG:HB2	2.18	0.43
1:C:577:MET:HE2	1:C:580:GLU:N	2.34	0.43
1:C:656:PHE:HD2	1:C:679:ASP:O	2.02	0.43
1:C:656:PHE:C	1:C:657:THR:HG1	2.25	0.43
1:C:1300:LYS:O	1:C:1304:GLU:HG3	2.18	0.43
1:A:554:TYR:CE1	1:A:618:GLU:HB2	2.54	0.43
1:A:556:HIS:HB2	1:A:708:SER:HB3	2.01	0.43
1:A:1025:ALA:O	1:A:1028:LEU:HB3	2.19	0.43
1:A:1250:SER:O	1:A:1254:LEU:HD23	2.19	0.43
1:A:1300:LYS:O	1:A:1304:GLU:HG3	2.18	0.43
1:A:1496:GLY:C	1:A:1498:ASN:H	2.26	0.43
1:A:1558:LEU:O	1:A:1562:LEU:HG	2.18	0.43
1:A:1648:GLN:HE22	1:A:1655:LEU:HB2	1.84	0.43
1:A:1800:GLU:OE1	1:A:1800:GLU:N	2.52	0.43
1:C:554:TYR:HE1	1:C:618:GLU:HB2	1.83	0.43
1:C:572:VAL:HG22	1:C:637:PHE:CD1	2.54	0.43
1:C:1055:VAL:HG23	1:C:1056:THR:N	2.33	0.43
1:C:1154:GLU:OE2	1:C:1155:ALA:N	2.52	0.43
1:C:1561:ILE:O	1:C:1565:THR:HG23	2.19	0.43
1:C:1866:LEU:HD23	1:C:1866:LEU:HA	1.83	0.43
1:A:231:LEU:HB2	1:A:1262:LYS:NZ	2.30	0.42
1:A:783:LEU:CD2	1:A:804:ALA:HB1	2.47	0.42
1:A:1161:VAL:O	1:A:1164:LEU:HB2	2.19	0.42
1:C:405:VAL:HA	1:C:449:PHE:CB	2.49	0.42
1:C:470:GLU:HB2	1:C:474:LYS:NZ	2.34	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1142:LEU:HG	1:C:1146:HIS:CE1	2.53	0.42
1:C:1161:VAL:O	1:C:1164:LEU:HB2	2.19	0.42
1:C:1442:ALA:O	1:C:1446:LYS:HG2	2.19	0.42
1:C:1707:TYR:HD1	1:C:1730:LEU:HD12	1.83	0.42
2:D:140:GLU:HA	2:D:143:GLU:OE1	2.19	0.42
1:A:656:PHE:HD2	1:A:679:ASP:O	2.02	0.42
1:A:1039:THR:O	1:A:1043:GLU:OE1	2.36	0.42
1:A:1504:MET:HB2	1:A:1508:MET:HE2	2.00	0.42
2:B:140:GLU:HA	2:B:143:GLU:OE1	2.19	0.42
1:C:153:VAL:CG1	1:C:1430:ALA:H	2.32	0.42
1:C:555:PRO:HB3	1:C:707:PHE:CZ	2.55	0.42
1:C:917:VAL:O	1:C:924:ARG:NH2	2.50	0.42
1:C:1025:ALA:O	1:C:1028:LEU:HB3	2.19	0.42
1:C:1057:LEU:HD23	1:C:1057:LEU:HA	1.86	0.42
1:C:1121:LEU:HD23	1:C:1121:LEU:HA	1.84	0.42
1:C:1542:LEU:HB3	1:C:1545:SER:HB2	2.02	0.42
1:C:1752:PHE:CE1	1:C:1824:TYR:HB2	2.54	0.42
1:A:934:PHE:O	1:A:937:LEU:HB2	2.20	0.42
1:A:1045:THR:HG21	1:A:1116:GLU:OE1	2.19	0.42
1:A:1154:GLU:OE2	1:A:1156:THR:HG23	2.19	0.42
1:A:1771:TYR:CZ	1:A:1888:ARG:HD2	2.54	0.42
1:A:1784:HIS:O	1:A:1787:GLU:HB3	2.19	0.42
1:A:1985:LEU:HD11	1:A:2004:GLU:HA	2.01	0.42
2:B:4:ILE:HG23	2:B:76:ASP:HB2	2.01	0.42
2:B:174:LEU:O	2:B:177:LEU:HB3	2.19	0.42
1:C:331:TYR:OH	1:C:538:ARG:HB3	2.19	0.42
1:C:459:PHE:O	1:C:491:PRO:HA	2.19	0.42
1:C:570:LEU:HB2	1:C:613:PRO:CG	2.49	0.42
1:C:1039:THR:O	1:C:1043:GLU:OE1	2.36	0.42
1:C:1436:GLY:HA2	1:C:1439:THR:HG22	2.01	0.42
1:C:1985:LEU:HD11	1:C:2004:GLU:HA	2.01	0.42
1:C:1989:LYS:HD2	1:C:2000:HIS:NE2	2.34	0.42
2:D:5:LYS:HG3	2:D:56:PHE:CE2	2.51	0.42
1:A:86:LEU:HB3	1:A:122:ILE:HG22	2.01	0.42
1:A:153:VAL:O	1:A:1429:SER:OG	2.33	0.42
1:A:331:TYR:OH	1:A:538:ARG:HB3	2.19	0.42
1:A:658:TRP:O	1:A:690:PRO:HG3	2.19	0.42
1:A:752:ASN:O	1:A:754:GLU:N	2.51	0.42
1:A:1154:GLU:OE2	1:A:1155:ALA:N	2.52	0.42
1:A:1287:LEU:HD12	1:A:1287:LEU:HA	1.80	0.42
1:A:1436:GLY:HA2	1:A:1439:THR:HG22	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1720:TYR:O	1:A:1723:LEU:N	2.52	0.42
1:A:1734:PHE:HD1	1:C:1724:ALA:HB2	1.84	0.42
1:C:511:LEU:HD12	1:C:530:LYS:HE2	2.02	0.42
1:C:577:MET:HE2	1:C:580:GLU:C	2.44	0.42
1:C:934:PHE:O	1:C:937:LEU:HB2	2.20	0.42
1:C:1250:SER:O	1:C:1254:LEU:HD23	2.19	0.42
1:C:1626:LEU:O	1:C:1629:GLU:HB3	2.19	0.42
1:C:1749:GLY:HA2	1:C:1774:PRO:C	2.44	0.42
1:C:2015:GLN:N	1:C:2016:PRO:HD2	2.35	0.42
1:A:405:VAL:O	1:A:409:GLY:N	2.47	0.42
1:A:490:ARG:NH1	1:A:491:PRO:O	2.52	0.42
1:A:570:LEU:HB2	1:A:613:PRO:CG	2.49	0.42
1:A:572:VAL:HG22	1:A:637:PHE:CD1	2.54	0.42
1:A:1749:GLY:HA2	1:A:1774:PRO:C	2.44	0.42
1:A:1768:GLU:O	1:A:1890:ARG:HA	2.19	0.42
1:A:1851:LEU:HA	1:A:1874:THR:O	2.19	0.42
2:B:5:LYS:HG3	2:B:56:PHE:CE2	2.51	0.42
1:C:556:HIS:HB2	1:C:708:SER:HB3	2.01	0.42
1:C:1059:LEU:HD12	1:C:1059:LEU:HA	1.72	0.42
1:C:1161:VAL:O	1:C:1164:LEU:N	2.46	0.42
1:C:1421:LEU:HD12	1:C:1422:TYR:N	2.35	0.42
1:C:1448:PRO:O	1:C:1451:LEU:N	2.52	0.42
1:C:1784:HIS:O	1:C:1787:GLU:HB3	2.19	0.42
1:C:1901:PRO:HB2	1:C:1953:PHE:CZ	2.55	0.42
1:A:400:HIS:CE1	1:A:403:ASN:H	2.38	0.42
1:A:459:PHE:O	1:A:491:PRO:HA	2.20	0.42
1:A:470:GLU:HB2	1:A:474:LYS:NZ	2.34	0.42
1:A:577:MET:HE2	1:A:580:GLU:N	2.34	0.42
1:A:1041:ARG:O	1:A:1044:PHE:HB3	2.20	0.42
1:A:1052:GLU:C	1:A:1054:TYR:H	2.28	0.42
1:A:1626:LEU:O	1:A:1629:GLU:HB3	2.19	0.42
1:A:1967:HIS:HB3	1:A:1971:ARG:CZ	2.50	0.42
1:C:408:ALA:HB1	1:C:450:ARG:N	2.35	0.42
1:C:658:TRP:O	1:C:690:PRO:HG3	2.19	0.42
1:C:913:ALA:HB1	1:C:967:ASP:HB3	2.01	0.42
1:C:927:ILE:O	1:C:931:ALA:N	2.52	0.42
1:C:1475:SER:HA	1:C:1478:ARG:NH1	2.34	0.42
1:C:1752:PHE:HD1	1:C:1824:TYR:HA	1.84	0.42
1:C:1760:HIS:HB3	1:C:1794:PHE:CE2	2.54	0.42
1:C:1771:TYR:CZ	1:C:1888:ARG:HD2	2.54	0.42
1:C:1856:PHE:N	1:C:1869:GLN:HE21	2.17	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1962:LYS:H	1:C:1962:LYS:HG3	1.65	0.42
2:D:174:LEU:O	2:D:177:LEU:HB3	2.19	0.42
1:A:555:PRO:HG2	1:A:619:PHE:CE2	2.55	0.42
1:A:577:MET:HE2	1:A:580:GLU:C	2.44	0.42
1:A:625:ALA:O	1:A:627:VAL:HG23	2.19	0.42
1:A:1448:PRO:O	1:A:1451:LEU:N	2.52	0.42
1:A:1856:PHE:N	1:A:1869:GLN:HE21	2.17	0.42
1:A:1901:PRO:HB2	1:A:1953:PHE:CZ	2.55	0.42
1:C:294:GLU:HB2	1:C:532:ILE:HG23	2.02	0.42
1:C:461:LYS:HZ2	1:C:489:LEU:HA	1.83	0.42
1:C:935:PHE:O	1:C:939:VAL:HG13	2.20	0.42
1:C:1041:ARG:O	1:C:1044:PHE:HB3	2.20	0.42
1:C:1827:PRO:HG3	1:C:1850:PHE:CE1	2.55	0.42
2:D:158:SER:O	2:D:162:GLN:HA	2.20	0.42
1:A:153:VAL:CG1	1:A:1430:ALA:H	2.32	0.42
1:A:534:GLU:HG2	1:A:535:PHE:N	2.34	0.42
1:A:935:PHE:O	1:A:939:VAL:HG13	2.20	0.42
1:A:1784:HIS:O	1:A:1785:ARG:C	2.63	0.42
1:C:75:LEU:HD21	1:C:1060:PRO:HB2	2.02	0.42
1:C:1504:MET:O	1:C:1507:THR:OG1	2.35	0.42
1:C:1579:ILE:HA	1:C:1582:MET:HE2	2.00	0.42
1:C:1691:ALA:O	1:C:1695:THR:OG1	2.35	0.42
1:A:126:ARG:HD2	1:A:127:TYR:CZ	2.55	0.42
1:A:294:GLU:HB2	1:A:532:ILE:HG23	2.01	0.42
1:A:321:LEU:O	1:A:527:ARG:HG3	2.19	0.42
1:A:334:PRO:HD3	1:A:444:CYS:N	2.34	0.42
1:A:641:SER:HB2	1:A:650:LEU:HA	2.02	0.42
1:A:826:ARG:HB3	1:A:828:HIS:ND1	2.35	0.42
1:A:1128:ALA:HB1	1:A:1131:LEU:HB2	2.02	0.42
1:A:1382:GLY:O	1:A:1386:THR:HG22	2.20	0.42
1:A:1645:VAL:C	1:A:1647:PHE:H	2.28	0.42
1:A:1907:GLU:O	1:A:1911:LYS:HG3	2.20	0.42
2:B:117:ILE:H	2:B:117:ILE:HD12	1.84	0.42
1:C:555:PRO:HG2	1:C:619:PHE:CE2	2.55	0.42
1:C:599:THR:HG22	1:C:600:ARG:N	2.28	0.42
1:C:625:ALA:O	1:C:627:VAL:HG23	2.19	0.42
1:C:1561:ILE:HA	1:C:1564:ASP:OD2	2.20	0.42
1:C:1653:ASN:HD21	1:C:1881:ALA:N	2.03	0.42
1:C:1854:THR:HG1	1:C:1872:ARG:HB2	1.85	0.42
1:C:1884:TYR:CG	1:C:1885:ILE:N	2.88	0.42
1:A:270:PHE:HB3	1:A:272:ILE:O	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:396:TRP:CH2	1:A:475:PHE:HB3	2.55	0.42
1:A:1437:LEU:HA	1:A:1437:LEU:HD23	1.85	0.42
1:A:1475:SER:HA	1:A:1478:ARG:NH1	2.34	0.42
1:A:1605:GLY:O	1:A:1609:GLU:HG3	2.20	0.42
1:A:1884:TYR:CG	1:A:1885:ILE:N	2.88	0.42
2:B:1:MET:SD	2:B:2:GLN:HB2	2.60	0.42
1:C:70:GLY:HA3	1:C:71:PRO:HD3	1.90	0.42
1:C:156:GLN:OE1	1:C:1301:LYS:HD2	2.20	0.42
1:C:490:ARG:NH1	1:C:491:PRO:O	2.52	0.42
1:C:998:ALA:HB2	1:C:1044:PHE:CD1	2.55	0.42
1:C:1784:HIS:O	1:C:1785:ARG:C	2.63	0.42
2:D:117:ILE:HD12	2:D:117:ILE:H	1.84	0.42
1:A:554:TYR:HE1	1:A:618:GLU:HB2	1.84	0.41
1:A:965:LEU:HD23	1:A:968:ILE:HD12	2.02	0.41
1:A:998:ALA:HB2	1:A:1044:PHE:CD1	2.55	0.41
1:A:1449:GLU:OE1	1:A:1449:GLU:N	2.47	0.41
1:A:1729:LYS:O	1:A:1732:GLU:HG3	2.19	0.41
1:A:1837:ARG:HD3	1:A:1842:ASP:O	2.20	0.41
2:B:158:SER:O	2:B:162:GLN:HA	2.20	0.41
1:C:86:LEU:HB3	1:C:122:ILE:HG22	2.01	0.41
1:C:312:HIS:HD2	1:C:388:GLY:H	1.68	0.41
1:C:1045:THR:HG21	1:C:1116:GLU:OE1	2.19	0.41
1:C:1128:ALA:HB1	1:C:1131:LEU:HB2	2.02	0.41
1:C:1648:GLN:HE22	1:C:1655:LEU:HB2	1.84	0.41
1:A:129:TYR:HA	1:A:134:TYR:HB3	2.02	0.41
1:A:276:PRO:HA	1:A:305:MET:SD	2.60	0.41
1:A:640:VAL:HA	1:A:650:LEU:O	2.20	0.41
2:B:86:SER:O	2:B:89:SER:OG	2.26	0.41
1:C:126:ARG:HD2	1:C:127:TYR:CZ	2.55	0.41
1:C:835:TYR:CD1	1:C:839:ALA:HB3	2.54	0.41
1:C:836:VAL:HA	1:C:840:PHE:HB3	2.02	0.41
1:C:1462:LEU:O	1:C:1466:LEU:HD13	2.21	0.41
1:C:1605:GLY:O	1:C:1609:GLU:HG3	2.20	0.41
1:C:1720:TYR:O	1:C:1723:LEU:N	2.53	0.41
1:C:1729:LYS:O	1:C:1732:GLU:HG3	2.19	0.41
1:A:156:GLN:OE1	1:A:1301:LYS:HD2	2.20	0.41
1:A:511:LEU:HD12	1:A:530:LYS:HE2	2.02	0.41
1:A:555:PRO:HB3	1:A:707:PHE:CZ	2.54	0.41
1:A:913:ALA:HB1	1:A:967:ASP:HB3	2.01	0.41
1:A:1128:ALA:O	1:A:1131:LEU:HB2	2.21	0.41
1:A:1542:LEU:HB3	1:A:1545:SER:HB2	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1566:VAL:CA	1:A:1569:LYS:HZ3	2.34	0.41
1:A:1671:GLY:HA2	1:A:1674:SER:OG	2.20	0.41
1:A:1737:ILE:C	1:A:1740:GLN:HE21	2.28	0.41
1:C:641:SER:HB2	1:C:650:LEU:HA	2.02	0.41
1:C:1615:GLU:CD	1:C:1615:GLU:N	2.78	0.41
1:C:1806:ASN:CG	1:C:1872:ARG:HH12	2.26	0.41
1:C:1907:GLU:O	1:C:1911:LYS:HG3	2.20	0.41
1:A:242:GLU:HG3	1:A:1134:LYS:HZ2	1.85	0.41
1:A:1005:LEU:C	1:A:1007:LEU:H	2.28	0.41
1:A:1022:LYS:HE2	1:A:1022:LYS:HB2	1.94	0.41
1:A:1499:PHE:O	1:A:1501:ARG:N	2.54	0.41
1:A:1772:LYS:NZ	1:A:1882:PHE:CG	2.86	0.41
1:A:1827:PRO:HG3	1:A:1850:PHE:CE1	2.55	0.41
2:B:84:VAL:HG21	2:B:120:ARG:HB2	2.03	0.41
2:B:131:LYS:HA	2:B:131:LYS:HD2	1.83	0.41
1:C:276:PRO:HA	1:C:305:MET:SD	2.60	0.41
1:C:710:GLU:HG3	1:C:712:THR:HG23	2.03	0.41
1:C:1052:GLU:C	1:C:1054:TYR:H	2.28	0.41
1:C:1370:THR:O	1:C:1374:MET:HG2	2.21	0.41
1:C:1837:ARG:HD3	1:C:1842:ASP:O	2.20	0.41
1:C:1912:LYS:HD2	1:C:1912:LYS:HA	1.59	0.41
1:C:1932:MET:HE3	2:D:39:ASN:HB3	2.02	0.41
1:A:281:LEU:CD1	1:A:340:ILE:HG12	2.50	0.41
1:A:836:VAL:HA	1:A:840:PHE:HB2	2.03	0.41
1:A:1049:CYS:C	1:A:1051:HIS:H	2.28	0.41
1:A:1452:PHE:HB2	1:A:1453:GLU:OE2	2.20	0.41
1:A:1857:THR:HG21	1:A:1864:GLY:HA3	2.01	0.41
1:A:1958:PRO:HB2	1:A:1964:PHE:CE1	2.56	0.41
1:A:2015:GLN:N	1:A:2016:PRO:HD2	2.35	0.41
2:B:150:LYS:HD3	2:B:150:LYS:HA	1.91	0.41
1:C:316:PRO:HA	1:C:595:CYS:O	2.21	0.41
1:C:400:HIS:CE1	1:C:403:ASN:H	2.38	0.41
1:C:704:LYS:HE3	1:C:704:LYS:HA	2.03	0.41
1:C:1645:VAL:C	1:C:1647:PHE:H	2.28	0.41
1:C:1671:GLY:HA2	1:C:1674:SER:OG	2.20	0.41
1:A:75:LEU:HD21	1:A:1060:PRO:HB2	2.02	0.41
1:A:268:LEU:HD13	1:A:496:LEU:HD13	2.03	0.41
1:A:1568:MET:O	1:A:1572:GLN:HG3	2.21	0.41
1:A:1669:GLU:HB3	1:A:1672:PHE:CE2	2.56	0.41
1:A:1791:THR:CG2	1:A:1796:ASP:HA	2.49	0.41
1:C:129:TYR:HA	1:C:134:TYR:HB3	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:472:LEU:O	1:C:476:LEU:HG	2.21	0.41
1:C:743:LEU:HA	1:C:743:LEU:HD12	1.83	0.41
1:C:1370:THR:O	1:C:1373:GLU:HB3	2.21	0.41
1:C:1620:MET:CE	1:C:1690:ALA:HB2	2.43	0.41
1:C:1962:LYS:O	1:C:1965:ARG:NH2	2.53	0.41
1:A:81:ASP:OD1	1:A:81:ASP:N	2.43	0.41
1:A:486:LEU:O	1:A:489:LEU:HB2	2.20	0.41
1:A:573:ARG:HD2	1:A:574:VAL:N	2.36	0.41
1:A:710:GLU:HG3	1:A:712:THR:HG23	2.03	0.41
1:A:711:LEU:HD13	1:A:711:LEU:HA	1.97	0.41
1:A:1059:LEU:HA	1:A:1059:LEU:HD12	1.72	0.41
1:A:1396:LEU:HA	1:A:1396:LEU:HD13	1.83	0.41
1:A:1934:LEU:HD12	1:A:1934:LEU:HA	1.82	0.41
1:A:1962:LYS:O	1:A:1965:ARG:NH2	2.53	0.41
1:C:632:HIS:O	1:C:633:LEU:HD22	2.21	0.41
1:C:1285:LEU:HA	1:C:1285:LEU:HD13	1.73	0.41
1:C:1374:MET:HA	1:C:1377:GLU:HB3	2.03	0.41
1:C:1499:PHE:O	1:C:1501:ARG:N	2.54	0.41
1:C:1985:LEU:CD1	1:C:2004:GLU:HA	2.51	0.41
1:A:268:LEU:HB2	1:A:496:LEU:HD13	2.03	0.41
1:A:632:HIS:O	1:A:633:LEU:HD22	2.21	0.41
1:A:1545:SER:C	1:A:1547:PHE:H	2.29	0.41
1:A:1768:GLU:N	1:A:1768:GLU:OE1	2.54	0.41
1:A:1779:LEU:HD13	2:B:26:ASN:ND2	2.35	0.41
1:A:1900:THR:O	1:A:1903:GLU:HG2	2.21	0.41
1:C:573:ARG:HD2	1:C:574:VAL:N	2.36	0.41
1:C:1008:VAL:HG12	1:C:1009:ASP:OD1	2.20	0.41
1:C:1049:CYS:C	1:C:1051:HIS:H	2.28	0.41
1:C:1566:VAL:HA	1:C:1569:LYS:CD	2.46	0.41
1:C:1967:HIS:HB3	1:C:1971:ARG:CZ	2.50	0.41
1:A:312:HIS:HD2	1:A:388:GLY:H	1.68	0.41
1:A:408:ALA:HB1	1:A:450:ARG:N	2.35	0.41
1:A:704:LYS:HA	1:A:704:LYS:HE3	2.03	0.41
1:A:842:LEU:HB2	1:A:944:LEU:HD13	2.03	0.41
1:A:954:THR:HG23	1:A:959:ARG:CD	2.51	0.41
1:A:1008:VAL:HG12	1:A:1009:ASP:OD1	2.20	0.41
1:A:1058:ASN:ND2	1:A:1110:ALA:H	2.19	0.41
1:A:1486:TYR:HB2	1:A:1532:ILE:HG23	2.03	0.41
1:A:1501:ARG:O	1:A:1504:MET:HG2	2.21	0.41
1:A:1620:MET:O	1:A:1623:ALA:HB3	2.21	0.41
1:A:1631:LEU:HA	1:A:1631:LEU:HD12	1.83	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1634:LEU:HD23	1:A:1634:LEU:HA	1.93	0.41
1:A:1680:GLU:HG3	1:A:1681:LEU:HD22	2.02	0.41
1:A:1802:ILE:HD11	1:A:1819:TYR:CD2	2.56	0.41
1:A:1902:VAL:O	1:A:1906:ILE:HG13	2.21	0.41
1:A:1912:LYS:HA	1:A:1912:LYS:HD2	1.59	0.41
1:A:1942:VAL:HG11	2:B:17:THR:OG1	2.21	0.41
1:A:1985:LEU:CD1	1:A:2004:GLU:HA	2.51	0.41
2:B:120:ARG:HD2	2:B:120:ARG:HA	1.82	0.41
1:C:84:GLU:OE1	1:C:126:ARG:HB2	2.21	0.41
1:C:286:VAL:HG12	1:C:473:PHE:HD1	1.86	0.41
1:C:386:ARG:NH1	1:C:644:PRO:HA	2.36	0.41
1:C:728:PHE:O	1:C:732:HIS:CD2	2.74	0.41
1:C:965:LEU:HD23	1:C:968:ILE:HD12	2.02	0.41
1:C:1005:LEU:CD2	1:C:1013:VAL:HG11	2.51	0.41
1:C:1122:GLU:HA	1:C:1123:PRO:HD3	1.91	0.41
1:C:1128:ALA:O	1:C:1131:LEU:HB2	2.21	0.41
1:C:1382:GLY:O	1:C:1386:THR:HG22	2.20	0.41
1:C:1452:PHE:HB2	1:C:1453:GLU:OE2	2.20	0.41
1:C:1486:TYR:HB2	1:C:1532:ILE:HG23	2.03	0.41
1:C:1545:SER:C	1:C:1547:PHE:H	2.29	0.41
1:C:1562:LEU:HA	1:C:1562:LEU:HD23	1.71	0.41
1:C:1615:GLU:HB3	1:C:1885:ILE:O	2.21	0.41
1:C:1828:TYR:HB2	1:C:1851:LEU:HB2	2.03	0.41
1:C:1845:TYR:HA	1:C:1883:PRO:HD3	2.03	0.41
2:D:4:ILE:HG23	2:D:76:ASP:HB2	2.01	0.41
1:A:760:SER:O	1:A:764:LEU:HG	2.21	0.41
1:A:1009:ASP:CG	1:A:1012:PHE:HB3	2.46	0.41
1:A:1462:LEU:O	1:A:1466:LEU:HD13	2.21	0.41
1:A:1561:ILE:HA	1:A:1564:ASP:OD2	2.20	0.41
1:A:1828:TYR:HB2	1:A:1851:LEU:HB2	2.03	0.41
2:B:9:VAL:CG2	2:B:80:VAL:HG12	2.51	0.41
1:C:92:CYS:SG	1:C:94:THR:OG1	2.68	0.41
1:C:534:GLU:HG2	1:C:535:PHE:N	2.34	0.41
1:C:639:HIS:H	1:C:652:THR:H	1.69	0.41
1:C:1005:LEU:C	1:C:1007:LEU:H	2.28	0.41
1:C:1396:LEU:HA	1:C:1396:LEU:HD13	1.82	0.41
1:C:1437:LEU:HA	1:C:1437:LEU:HD23	1.85	0.41
1:C:1669:GLU:HB3	1:C:1672:PHE:CE2	2.56	0.41
1:C:1958:PRO:HB2	1:C:1964:PHE:CE1	2.56	0.41
1:A:548:ARG:N	1:A:716:SER:OG	2.47	0.40
1:A:633:LEU:HD23	1:A:661:LEU:HD21	2.04	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:639:HIS:H	1:A:652:THR:H	1.69	0.40
1:A:1370:THR:O	1:A:1374:MET:HG2	2.21	0.40
1:A:1516:THR:O	1:A:1518:GLN:NE2	2.54	0.40
1:A:1699:LEU:HD13	1:A:1699:LEU:HA	1.90	0.40
1:A:1751:TYR:HE1	1:A:1772:LYS:HZ1	1.65	0.40
1:A:1764:LEU:HA	1:A:1767:GLN:OE1	2.21	0.40
1:C:640:VAL:HA	1:C:650:LEU:O	2.21	0.40
1:C:1410:GLU:H	1:C:1410:GLU:CD	2.28	0.40
1:C:1662:ASP:HA	1:C:1665:LEU:HD12	2.03	0.40
1:C:1900:THR:O	1:C:1903:GLU:HG2	2.21	0.40
2:D:92:ASN:ND2	2:D:96:LYS:HE2	2.37	0.40
2:D:121:ASP:HA	2:D:126:ILE:HD11	2.03	0.40
1:A:286:VAL:HG12	1:A:473:PHE:HD1	1.86	0.40
1:A:728:PHE:O	1:A:732:HIS:CD2	2.74	0.40
1:A:1151:ARG:HG3	1:A:1152:TYR:CE1	2.57	0.40
1:A:1501:ARG:C	1:A:1505:GLN:NE2	2.79	0.40
1:A:1552:GLN:O	1:A:1555:MET:HG3	2.21	0.40
1:A:1684:VAL:O	1:A:1688:GLU:HG3	2.21	0.40
1:C:396:TRP:CH2	1:C:475:PHE:HB3	2.55	0.40
1:C:842:LEU:HB2	1:C:944:LEU:HD13	2.03	0.40
1:C:1064:LEU:HD12	1:C:1096:MET:SD	2.61	0.40
1:C:1501:ARG:O	1:C:1504:MET:HG2	2.21	0.40
1:C:1680:GLU:HG3	1:C:1681:LEU:HD22	2.02	0.40
2:D:1:MET:SD	2:D:2:GLN:HB2	2.60	0.40
1:A:544:HIS:N	1:A:777:HIS:CE1	2.89	0.40
1:A:1374:MET:HA	1:A:1377:GLU:HB3	2.03	0.40
1:A:1529:LEU:HG	1:A:1529:LEU:H	1.77	0.40
1:A:1615:GLU:HB3	1:A:1885:ILE:O	2.21	0.40
1:A:1704:ASN:OD1	1:A:1708:LYS:HE2	2.21	0.40
1:A:1845:TYR:HA	1:A:1883:PRO:HD3	2.03	0.40
1:A:2005:ARG:NE	1:A:2006:ASN:OD1	2.53	0.40
2:B:80:VAL:CG2	2:B:112:LEU:HD23	2.50	0.40
2:B:85:VAL:O	2:B:87:PRO:HD3	2.21	0.40
2:B:94:LYS:HG2	2:B:145:LEU:HD11	2.03	0.40
2:B:144:LYS:HD2	2:B:147:ARG:HH21	1.86	0.40
1:C:230:ALA:HB1	1:C:233:THR:CG2	2.51	0.40
1:C:623:LEU:HD21	1:C:627:VAL:HG21	2.03	0.40
1:C:760:SER:O	1:C:764:LEU:HG	2.21	0.40
1:C:826:ARG:HB3	1:C:828:HIS:ND1	2.35	0.40
1:C:1151:ARG:HG3	1:C:1152:TYR:CE1	2.57	0.40
1:C:1508:MET:HE3	1:C:1676:LYS:HZ3	1.86	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1847:LEU:N	1:C:1882:PHE:O	2.44	0.40
1:C:1857:THR:HG21	1:C:1864:GLY:HA3	2.01	0.40
2:D:94:LYS:HG2	2:D:145:LEU:HD11	2.03	0.40
2:D:110:PHE:O	2:D:151:ALA:HB1	2.21	0.40
1:A:472:LEU:HA	1:A:475:PHE:CD2	2.40	0.40
1:A:587:PRO:HA	1:A:600:ARG:HH21	1.87	0.40
1:A:610:ASN:O	1:A:613:PRO:HD3	2.22	0.40
1:A:663:GLN:NE2	1:A:668:ARG:HD3	2.37	0.40
1:A:1064:LEU:HD12	1:A:1096:MET:SD	2.61	0.40
1:A:1257:VAL:O	1:A:1260:VAL:HB	2.22	0.40
1:A:1370:THR:O	1:A:1373:GLU:HB3	2.21	0.40
1:A:1662:ASP:HA	1:A:1665:LEU:HD12	2.03	0.40
1:C:281:LEU:CD1	1:C:340:ILE:HG12	2.50	0.40
1:C:486:LEU:O	1:C:489:LEU:HB2	2.20	0.40
1:C:726:LYS:HE2	1:C:726:LYS:HB3	1.79	0.40
1:C:824:ASP:OD1	1:C:827:GLY:N	2.55	0.40
1:C:1288:LEU:O	1:C:1291:CYS:HB2	2.22	0.40
1:C:1552:GLN:O	1:C:1555:MET:HG3	2.21	0.40
1:C:1684:VAL:O	1:C:1688:GLU:HG3	2.21	0.40
1:C:2003:LEU:HA	1:C:2006:ASN:HD22	1.86	0.40
1:A:209:ARG:HA	1:A:209:ARG:CZ	2.52	0.40
1:A:230:ALA:HB1	1:A:233:THR:CG2	2.51	0.40
1:A:964:PHE:O	1:A:968:ILE:HG13	2.21	0.40
1:A:1392:VAL:O	1:A:1396:LEU:HD23	2.22	0.40
1:A:1421:LEU:HD12	1:A:1422:TYR:N	2.35	0.40
1:A:1848:ARG:HD2	1:A:1848:ARG:HA	1.73	0.40
1:A:2003:LEU:HA	1:A:2006:ASN:HD22	1.86	0.40
1:C:260:ARG:HA	1:C:327:PHE:O	2.22	0.40
1:C:663:GLN:NE2	1:C:668:ARG:HD3	2.37	0.40
1:C:780:LEU:HD21	1:C:811:VAL:HG11	2.04	0.40
1:C:836:VAL:HA	1:C:840:PHE:HB2	2.03	0.40
1:C:1857:THR:OG1	1:C:1861:ARG:O	2.40	0.40
2:D:84:VAL:HG21	2:D:120:ARG:HB2	2.03	0.40

There are no symmetry-related clashes.

## 5.3 Torsion angles ⓘ

### 5.3.1 Protein backbone ⓘ

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	1672/2053 (81%)	1492 (89%)	180 (11%)	0	100	100
1	C	1672/2053 (81%)	1493 (89%)	179 (11%)	0	100	100
2	B	176/195 (90%)	162 (92%)	14 (8%)	0	100	100
2	D	176/195 (90%)	162 (92%)	14 (8%)	0	100	100
All	All	3696/4496 (82%)	3309 (90%)	387 (10%)	0	100	100

There are no Ramachandran outliers to report.

### 5.3.2 Protein sidechains ⓘ

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	1476/1773 (83%)	1476 (100%)	0	100	100
1	C	1476/1773 (83%)	1476 (100%)	0	100	100
2	B	158/172 (92%)	158 (100%)	0	100	100
2	D	158/172 (92%)	158 (100%)	0	100	100
All	All	3268/3890 (84%)	3268 (100%)	0	100	100

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

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (30) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	575	GLN
1	A	663	GLN
1	A	732	HIS
1	A	799	ASN
1	A	915	GLN
1	A	1029	GLN
1	A	1051	HIS
1	A	1105	GLN
1	A	1440	GLN
1	A	1550	GLN
1	A	1639	HIS
1	A	1653	ASN
1	A	1968	ASN
1	A	1996	GLN
1	C	575	GLN
1	C	663	GLN
1	C	732	HIS
1	C	799	ASN
1	C	915	GLN
1	C	1029	GLN
1	C	1051	HIS
1	C	1105	GLN
1	C	1440	GLN
1	C	1505	GLN
1	C	1550	GLN
1	C	1639	HIS
1	C	1653	ASN
1	C	1968	ASN
1	C	1996	GLN
2	D	26	ASN

### 5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

### 5.4 Non-standard residues in protein, DNA, RNA chains ⓘ

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

### 5.5 Carbohydrates ⓘ

There are no oligosaccharides in this entry.

## 5.6 Ligand geometry [i](#)

There are no ligands in this entry.

## 5.7 Other polymers [i](#)

There are no such residues in this entry.

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

There are no chain breaks in this entry.

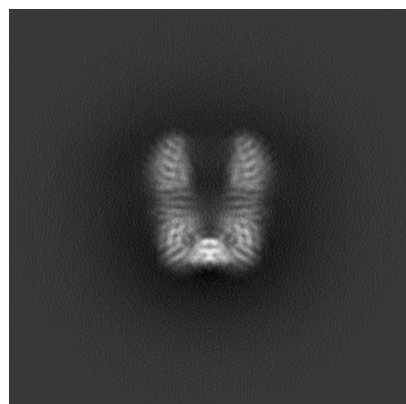
## 6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-65175. These allow visual inspection of the internal detail of the map and identification of artifacts.

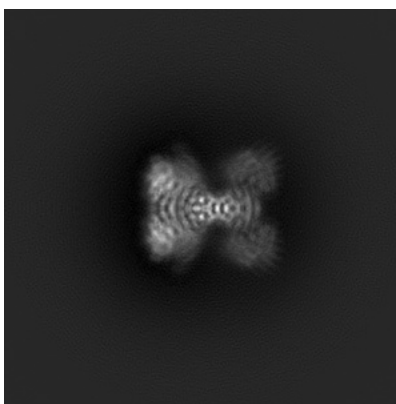
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

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

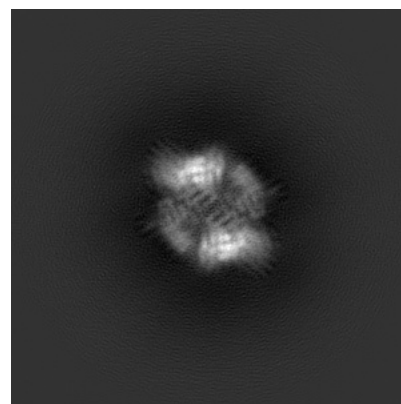
#### 6.1.1 Primary map



X

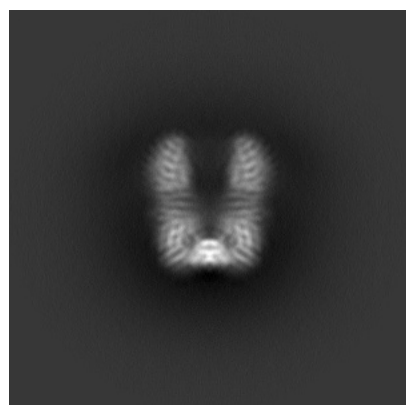


Y

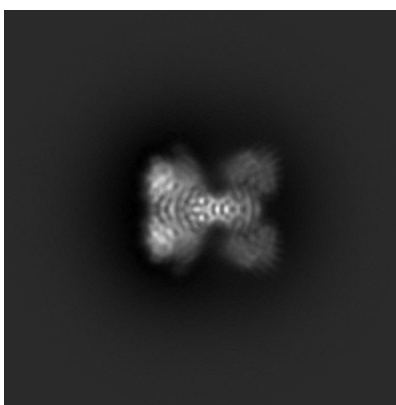


Z

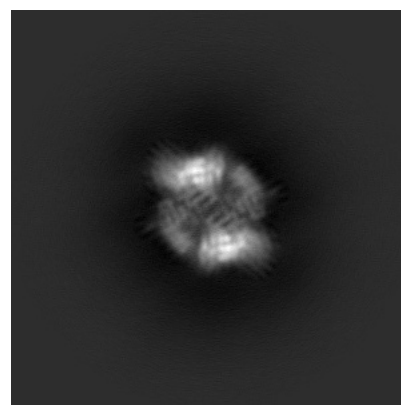
#### 6.1.2 Raw map



X



Y

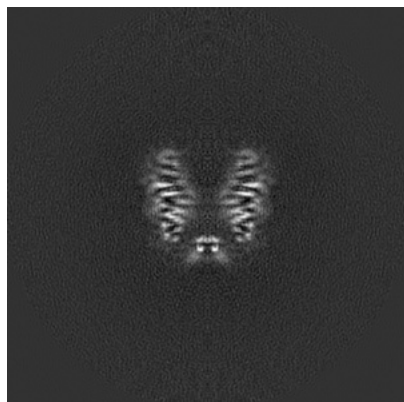


Z

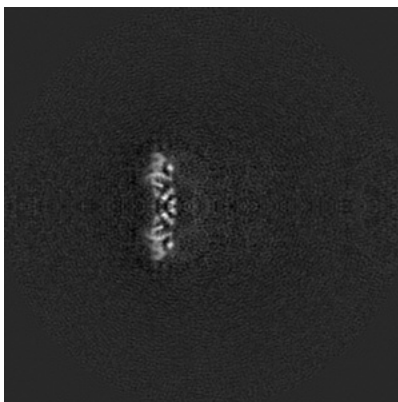
The images above show the map projected in three orthogonal directions.

## 6.2 Central slices [i](#)

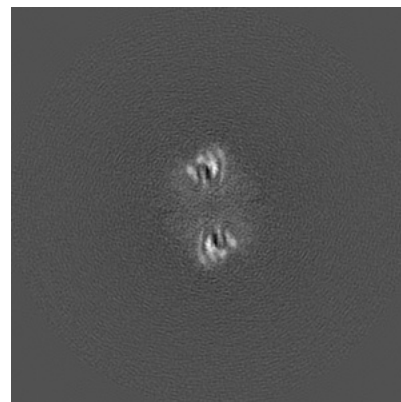
### 6.2.1 Primary map



X Index: 170

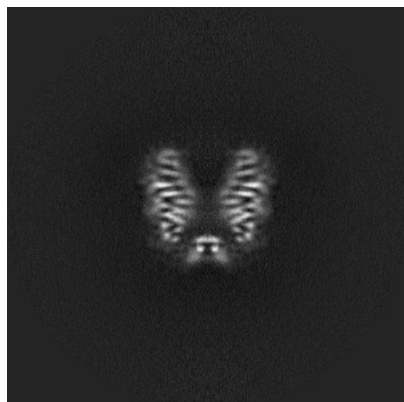


Y Index: 170

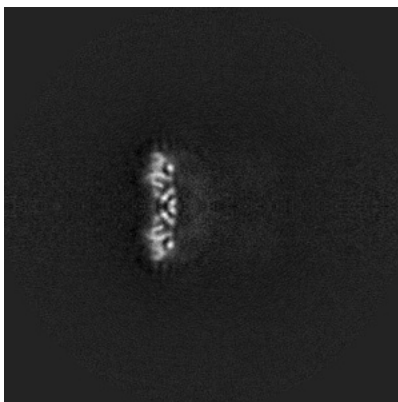


Z Index: 170

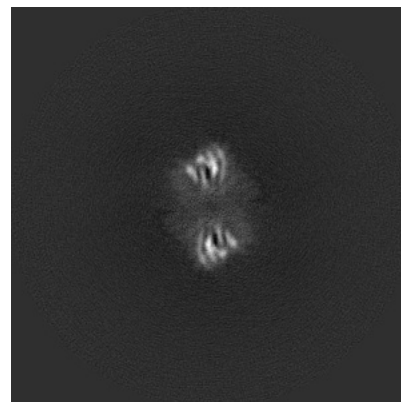
### 6.2.2 Raw map



X Index: 170



Y Index: 170

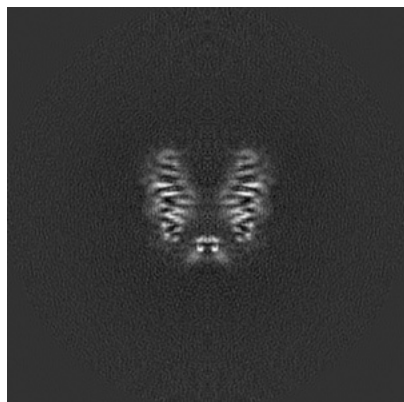


Z Index: 170

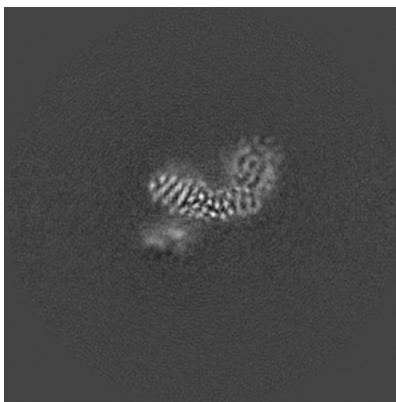
The images above show central slices of the map in three orthogonal directions.

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

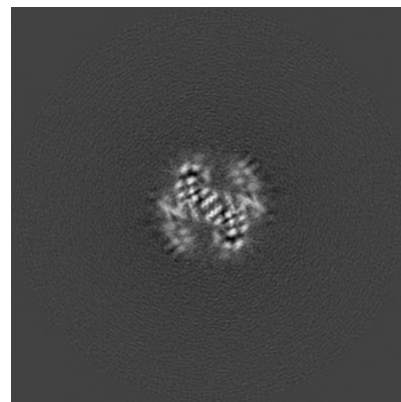
### 6.3.1 Primary map



X Index: 170

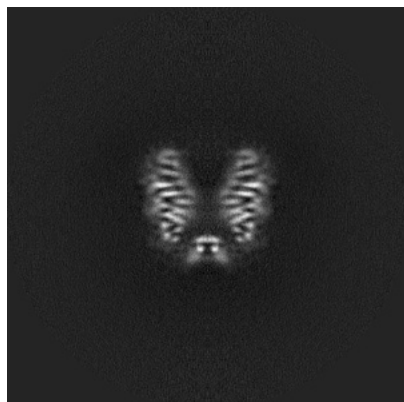


Y Index: 138



Z Index: 134

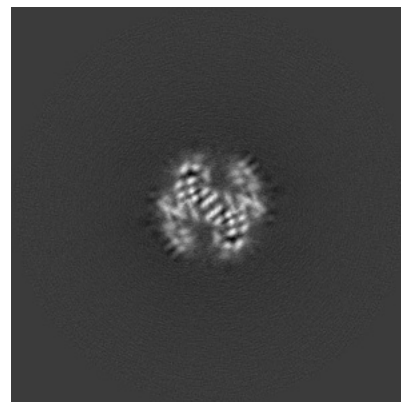
### 6.3.2 Raw map



X Index: 170



Y Index: 202



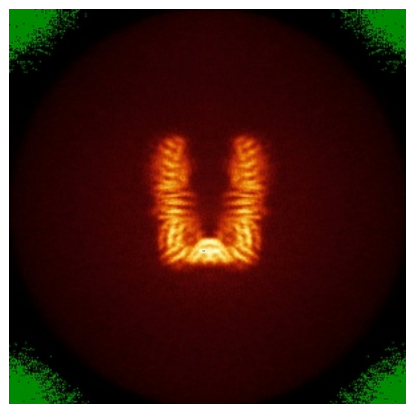
Z Index: 134

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

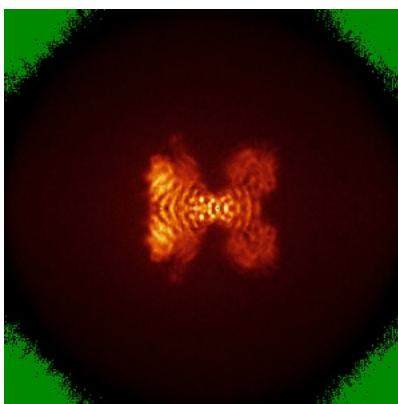


## 6.4 Orthogonal standard-deviation projections (False-color) [i](#)

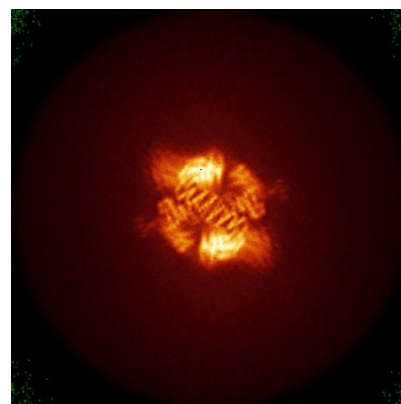
### 6.4.1 Primary map



X



Y

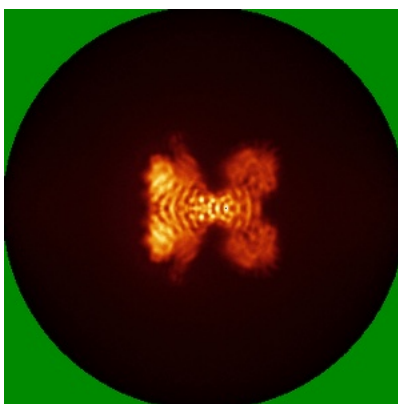


Z

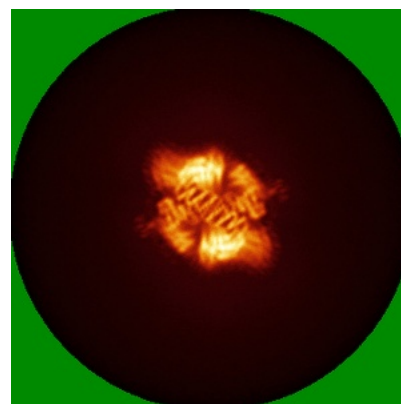
### 6.4.2 Raw map



X



Y

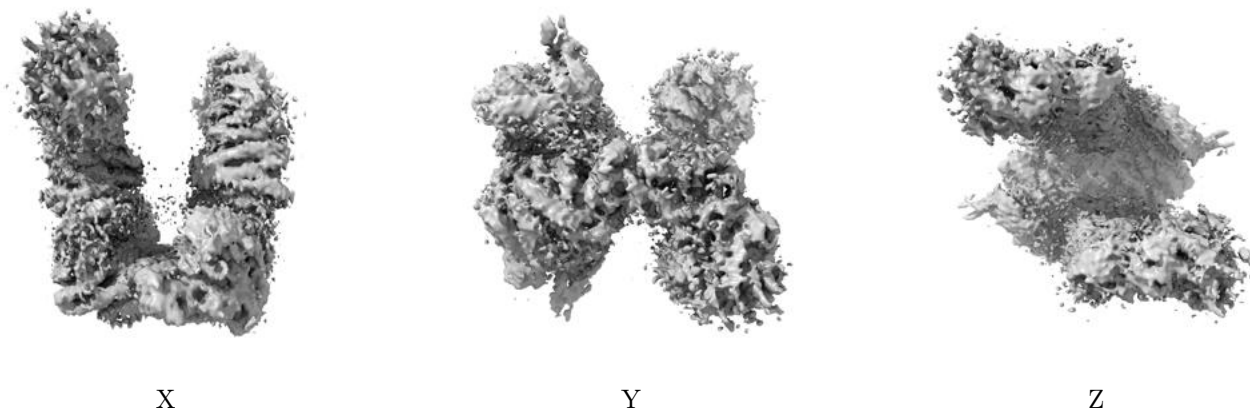


Z

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

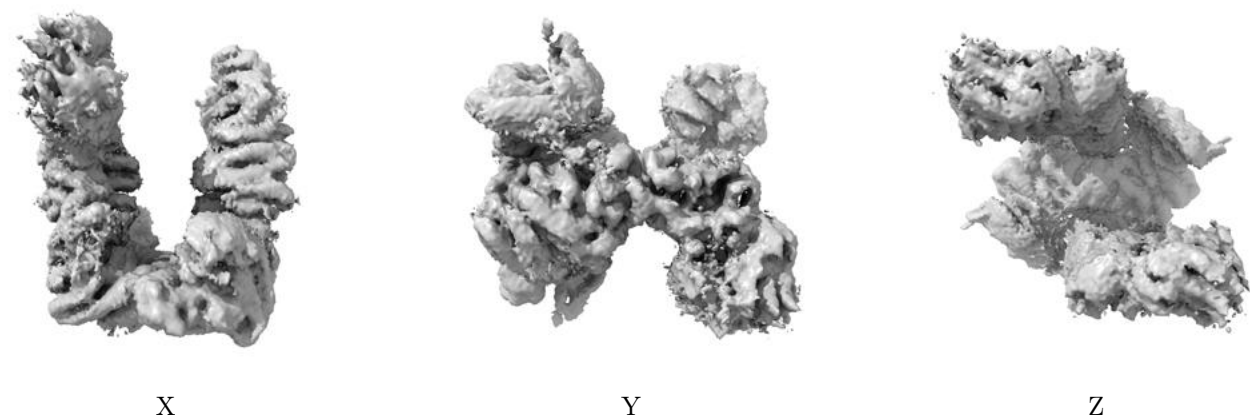
## 6.5 Orthogonal surface views [i](#)

### 6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.01. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

### 6.5.2 Raw map



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

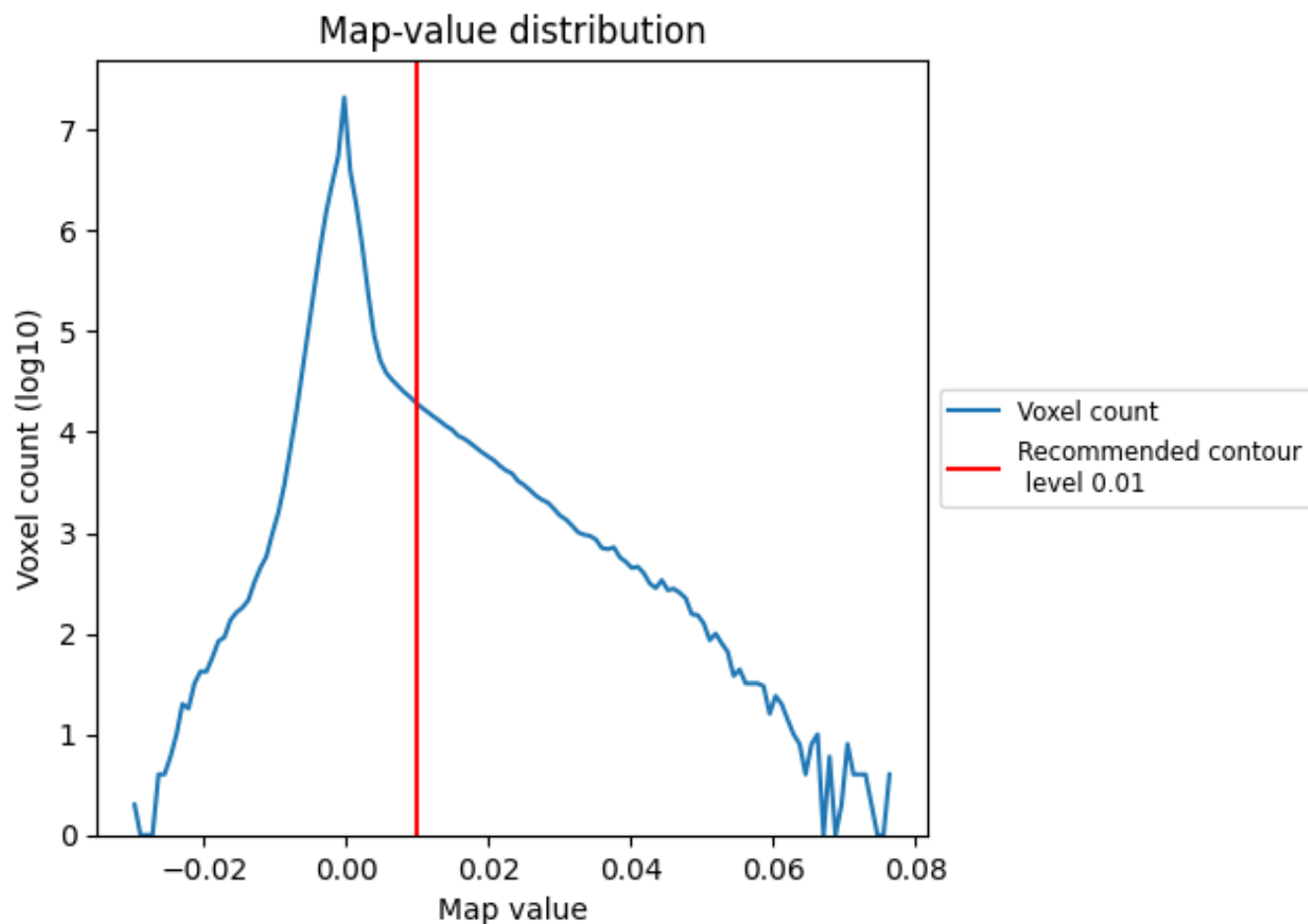
## 6.6 Mask visualisation [i](#)

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

## 7 Map analysis [i](#)

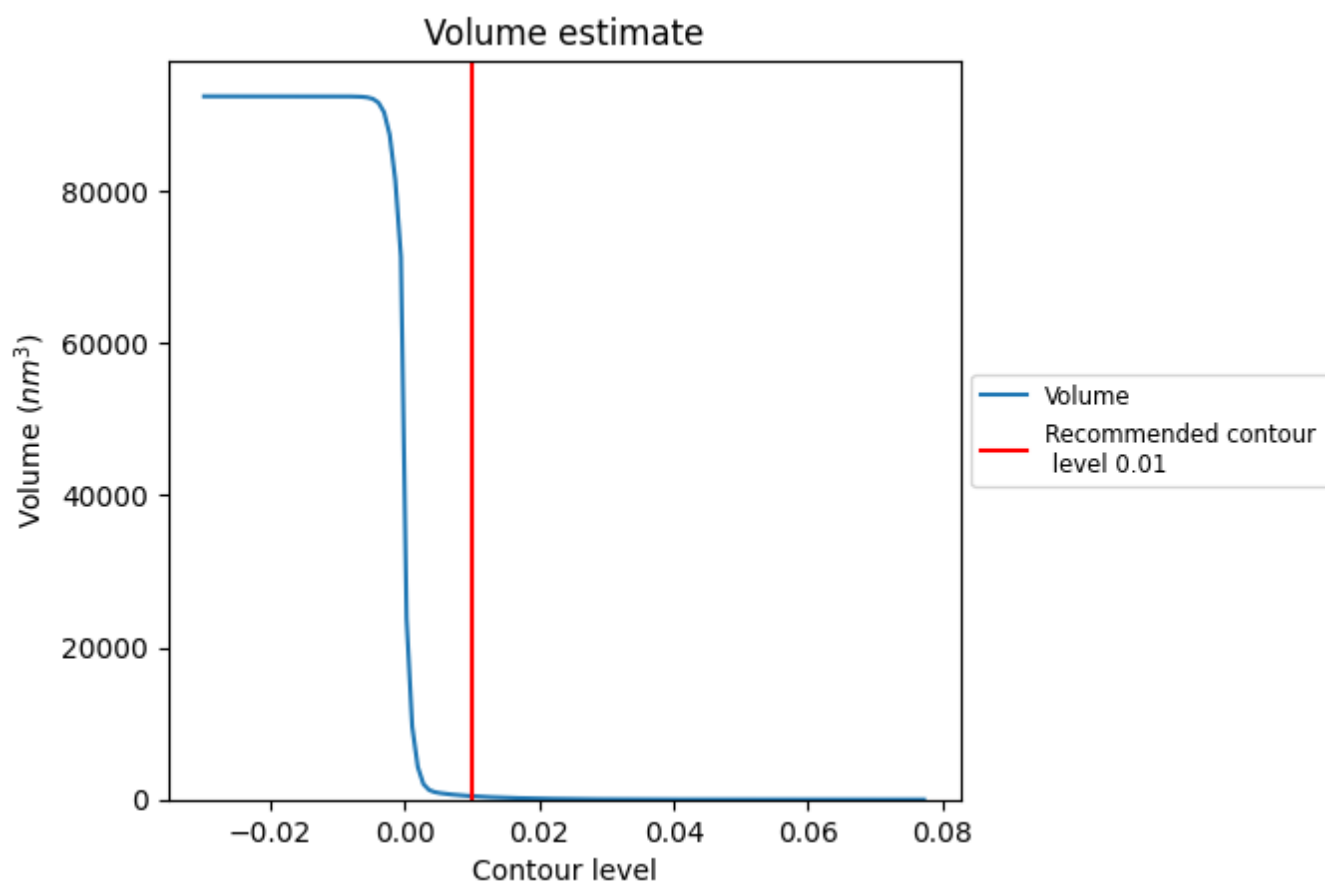
This section contains the results of statistical analysis of the map.

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



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

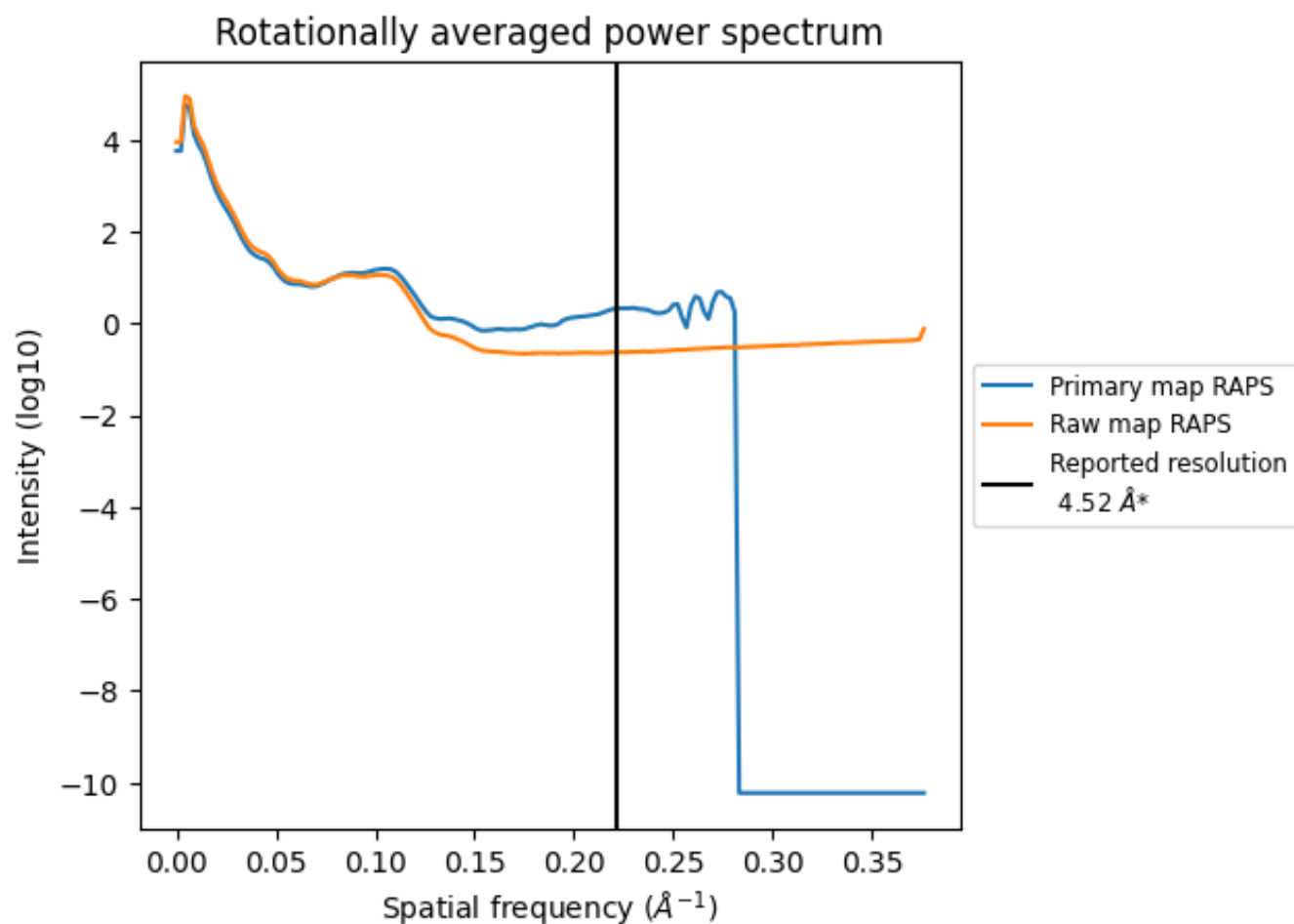
## 7.2 Volume estimate [i](#)



The volume at the recommended contour level is 453  $\text{nm}^3$ ; this corresponds to an approximate mass of 409 kDa.

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

### 7.3 Rotationally averaged power spectrum ⓘ

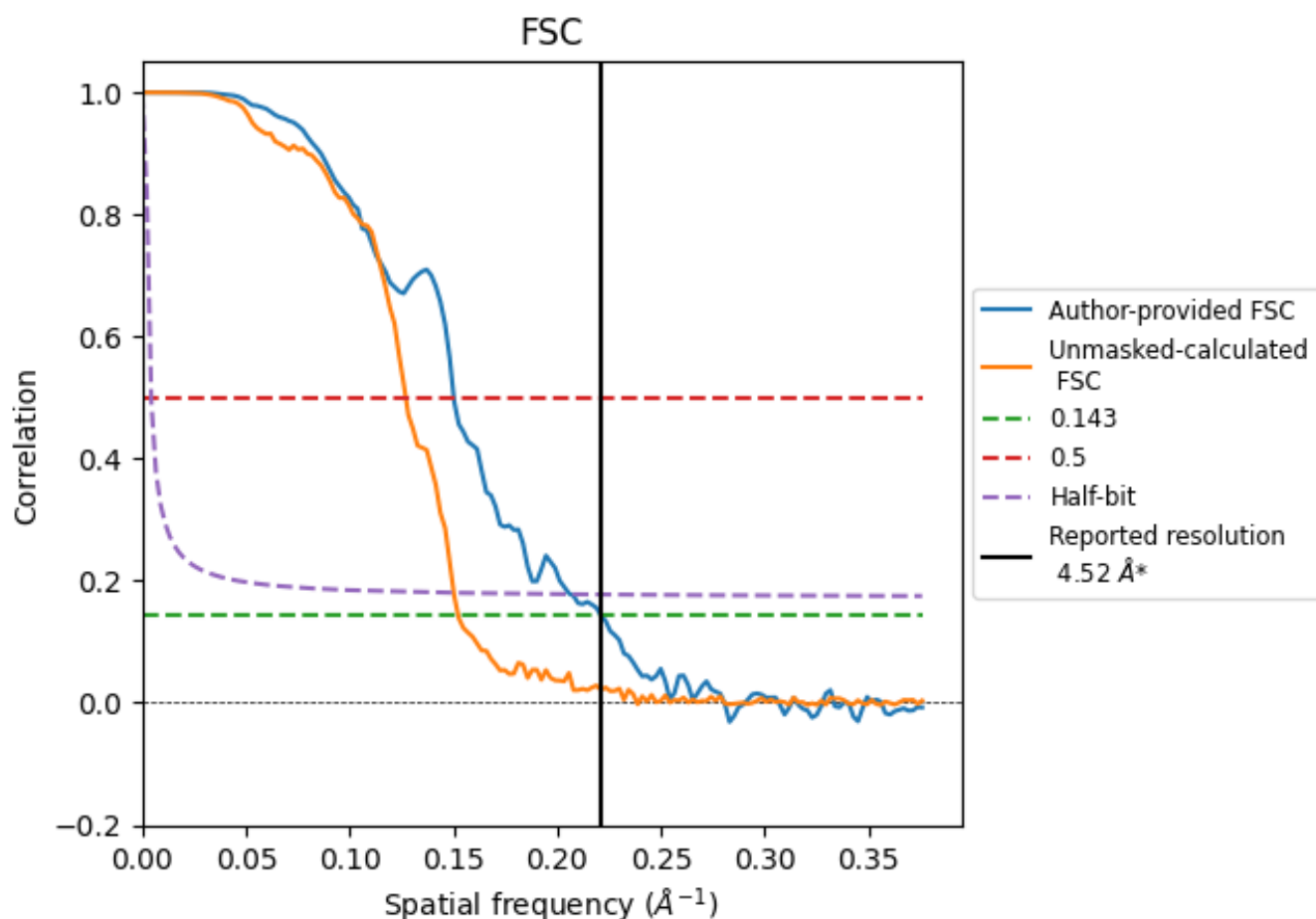


\*Reported resolution corresponds to spatial frequency of 0.221  $\text{\AA}^{-1}$

## 8 Fourier-Shell correlation [i](#)

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

### 8.1 FSC [i](#)



\*Reported resolution corresponds to spatial frequency of 0.221  $\text{\AA}^{-1}$

## 8.2 Resolution estimates [i](#)

Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	4.52	-	-
Author-provided FSC curve	4.52	6.66	4.84
Unmasked-calculated*	6.57	7.87	6.66

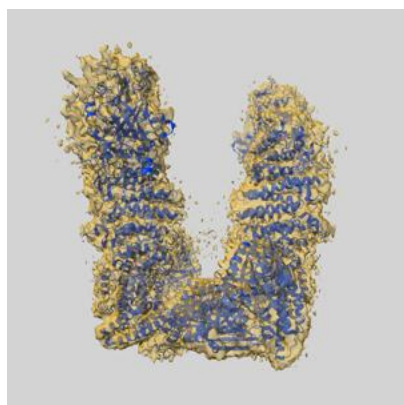
\*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps. The value from deposited half-maps intersecting FSC 0.143 CUT-OFF 6.57 differs from the reported value 4.52 by more than 10 %



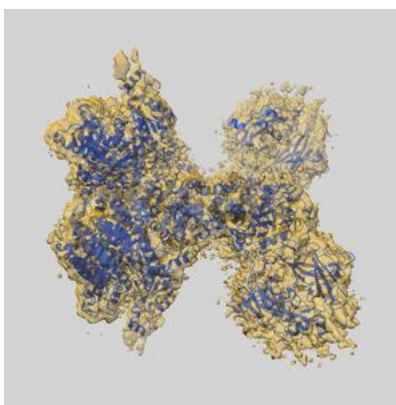
## 9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-65175 and PDB model 9VM3. Per-residue inclusion information can be found in section [3](#) on page [5](#).

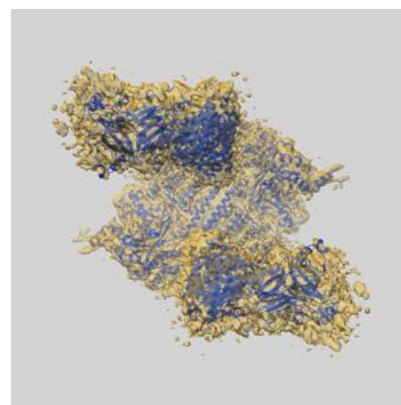
### 9.1 Map-model overlay [i](#)



X



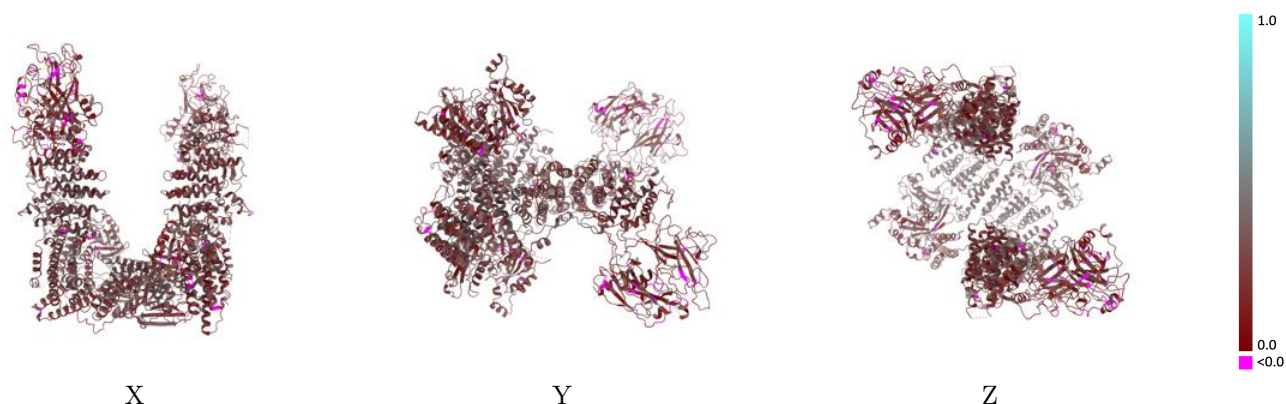
Y



Z

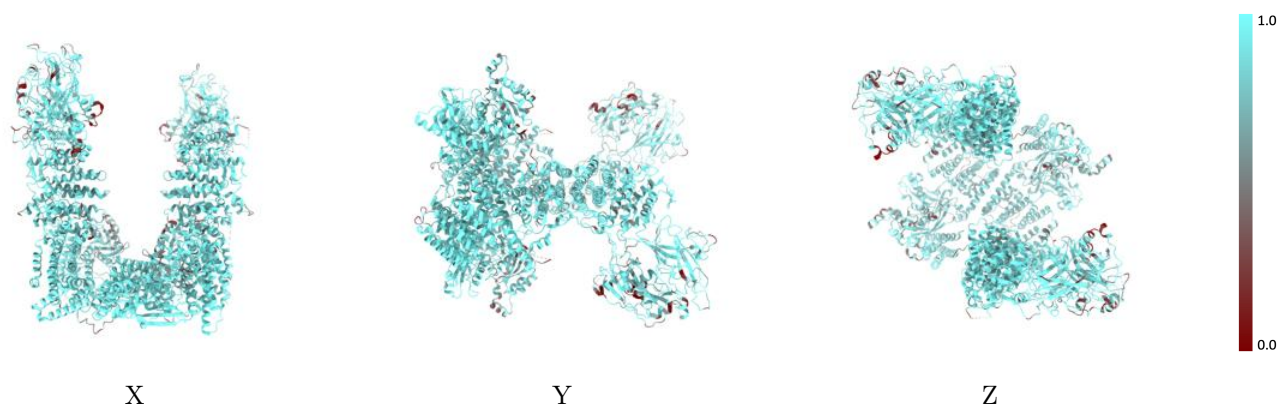
The images above show the 3D surface view of the map at the recommended contour level 0.01 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



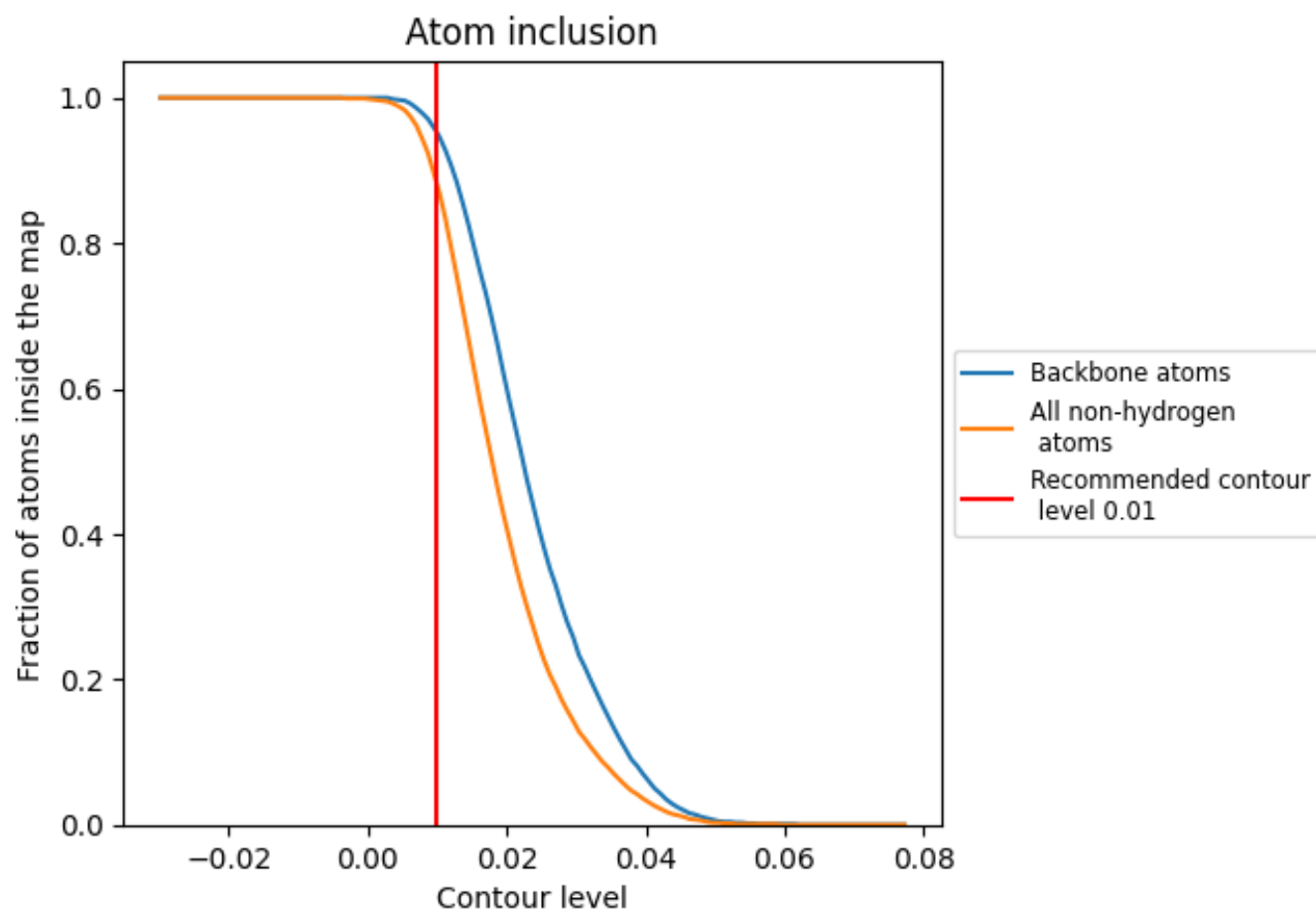
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (0.01).

## 9.4 Atom inclusion [i](#)



At the recommended contour level, 95% of all backbone atoms, 88% 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 (0.01) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	<div></div> 0.8810	<div></div> 0.2590
A	<div></div> 0.8900	<div></div> 0.2630
B	<div></div> 0.7890	<div></div> 0.2200
C	<div></div> 0.8910	<div></div> 0.2630
D	<div></div> 0.7980	<div></div> 0.2270

