



Full wwPDB X-ray Structure Validation Report ⓘ

Jan 19, 2017 – 09:01 AM EST

PDB ID : 5M59
Title : Crystal structure of Chaetomium thermophilum Brr2 helicase core in complex with Prp8 Jab1 domain
Authors : Absmeier, E.; Becke, C.; Wollenhaupt, J.; Santos, K.F.; Wahl, M.C.
Deposited on : 2016-10-20
Resolution : 3.20 Å(reported)

This is a Full wwPDB X-ray Structure Validation Report for a publicly released PDB entry.

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

A user guide is available at

<http://wwpdb.org/validation/2016/XrayValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

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

MolProbity : 4.02b-467
Mogul : 1.7.1 (RC1), CSD as537be (2016)
Xtriage (Phenix) : 1.9-1692
EDS : rb-20028442
Percentile statistics : 20151230.v01 (using entries in the PDB archive December 30th 2015)
Refmac : 5.8.0135
CCP4 : 6.5.0
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : rb-20028442

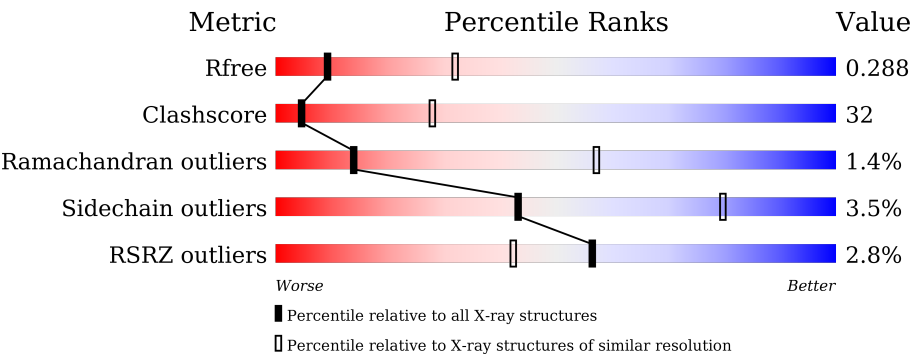
1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 3.20 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)	Similar resolution (#Entries, resolution range(Å))
R_{free}	91344	1124 (3.24-3.16)
Clashscore	102246	1024 (3.22-3.18)
Ramachandran outliers	100387	1004 (3.22-3.18)
Sidechain outliers	100360	1003 (3.22-3.18)
RSRZ outliers	91569	1129 (3.24-3.16)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments on the lower bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria. 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 electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	B	276	<div><div>%</div><div><div></div><div>45%</div><div>48%</div><div>.</div><div>.</div></div></div>
1	D	276	<div><div></div><div>50%</div><div>42%</div><div>.</div><div>5%</div></div>
1	F	276	<div><div>%</div><div><div></div><div>50%</div><div>44%</div><div>.</div><div>.</div></div></div>
1	H	276	<div><div>%</div><div><div></div><div>47%</div><div>47%</div><div>.</div><div>.</div></div></div>
2	A	1772	<div><div>%</div><div><div></div><div>47%</div><div>49%</div><div>.</div><div>.</div></div></div>
2	C	1772	<div><div>3%</div><div><div></div><div>44%</div><div>48%</div><div>.</div><div>.</div></div></div>

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Mol	Chain	Length	Quality of chain
2	E	1772	<div> <div>%</div> <div> <div></div> <div>46%</div> <div>49%</div> <div>..</div> </div> </div>
2	G	1772	<div> <div>6%</div> <div> <div></div> <div>44%</div> <div>50%</div> <div>..</div> </div> </div>

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
3	ACT	C	2201	-	-	-	X
3	ACT	E	2201	-	-	X	-

2 Entry composition

There are 4 unique types of molecules in this entry. The entry contains 63679 atoms, of which 12 are hydrogens and 0 are deuteriums.

In the tables below, the ZeroOcc column contains the number of atoms modelled with zero occupancy, 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 Putative pre-mRNA splicing factor.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	B	266	Total	C	N	O	S	0	0	0
			2116	1352	362	392	10			
1	D	263	Total	C	N	O	S	0	0	0
			2093	1339	359	385	10			
1	F	265	Total	C	N	O	S	0	0	0
			2116	1353	362	391	10			
1	H	267	Total	C	N	O	S	0	0	0
			2125	1358	364	393	10			

There are 12 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
B	2034	GLY	-	expression tag	UNP G0SFL3
B	2035	ALA	-	expression tag	UNP G0SFL3
B	2036	MET	-	expression tag	UNP G0SFL3
D	2034	GLY	-	expression tag	UNP G0SFL3
D	2035	ALA	-	expression tag	UNP G0SFL3
D	2036	MET	-	expression tag	UNP G0SFL3
F	2034	GLY	-	expression tag	UNP G0SFL3
F	2035	ALA	-	expression tag	UNP G0SFL3
F	2036	MET	-	expression tag	UNP G0SFL3
H	2034	GLY	-	expression tag	UNP G0SFL3
H	2035	ALA	-	expression tag	UNP G0SFL3
H	2036	MET	-	expression tag	UNP G0SFL3

- Molecule 2 is a protein called Pre-mRNA splicing helicase-like protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	A	1738	Total	C	N	O	S	0	0	0
			13917	8891	2369	2592	65			
2	C	1702	Total	C	N	O	S	0	0	0
			13628	8709	2319	2536	64			

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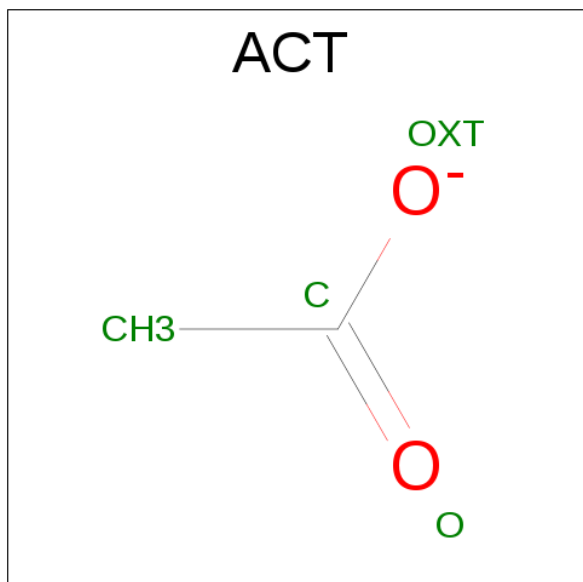
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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	E	1740	Total	C	N	O	S	0	0	0
			13925	8896	2372	2592	65			
2	G	1710	Total	C	N	O	S	0	0	0
			13701	8753	2336	2547	65			

There are 16 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	422	GLY	-	expression tag	UNP G0S0B9
A	423	ALA	-	expression tag	UNP G0S0B9
A	424	GLU	-	expression tag	UNP G0S0B9
A	425	PHE	-	expression tag	UNP G0S0B9
C	422	GLY	-	expression tag	UNP G0S0B9
C	423	ALA	-	expression tag	UNP G0S0B9
C	424	GLU	-	expression tag	UNP G0S0B9
C	425	PHE	-	expression tag	UNP G0S0B9
E	422	GLY	-	expression tag	UNP G0S0B9
E	423	ALA	-	expression tag	UNP G0S0B9
E	424	GLU	-	expression tag	UNP G0S0B9
E	425	PHE	-	expression tag	UNP G0S0B9
G	422	GLY	-	expression tag	UNP G0S0B9
G	423	ALA	-	expression tag	UNP G0S0B9
G	424	GLU	-	expression tag	UNP G0S0B9
G	425	PHE	-	expression tag	UNP G0S0B9

- Molecule 3 is ACETATE ION (three-letter code: ACT) (formula: $C_2H_3O_2$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	A	1	Total C H O 7 2 3 2	0	0
3	C	1	Total C H O 7 2 3 2	0	0
3	E	1	Total C H O 7 2 3 2	0	0
3	G	1	Total C H O 7 2 3 2	0	0

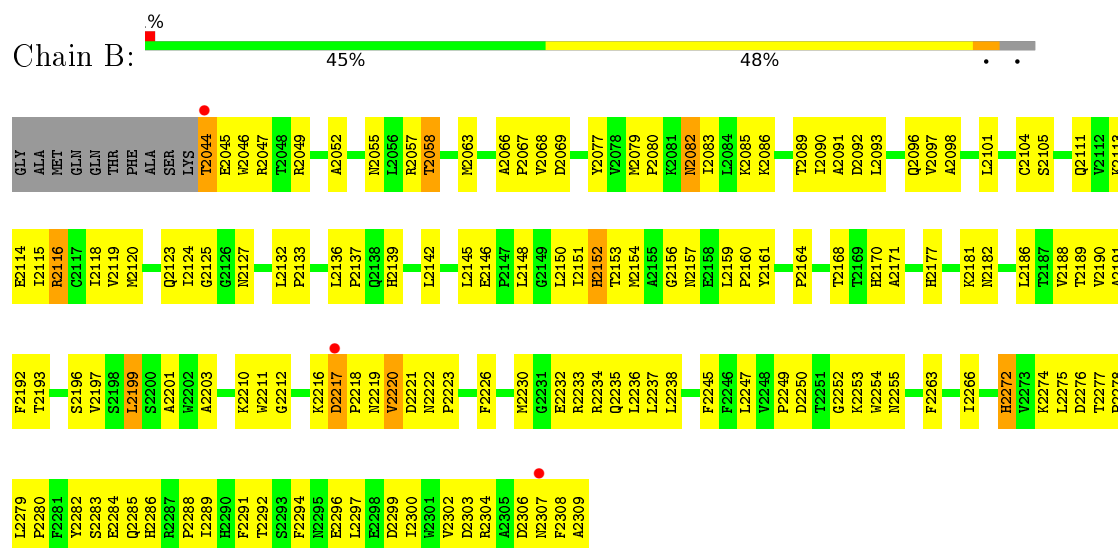
- Molecule 4 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
4	A	12	Total O 12 12	0	0
4	D	2	Total O 2 2	0	0
4	C	5	Total O 5 5	0	0
4	F	1	Total O 1 1	0	0
4	E	7	Total O 7 7	0	0
4	G	3	Total O 3 3	0	0

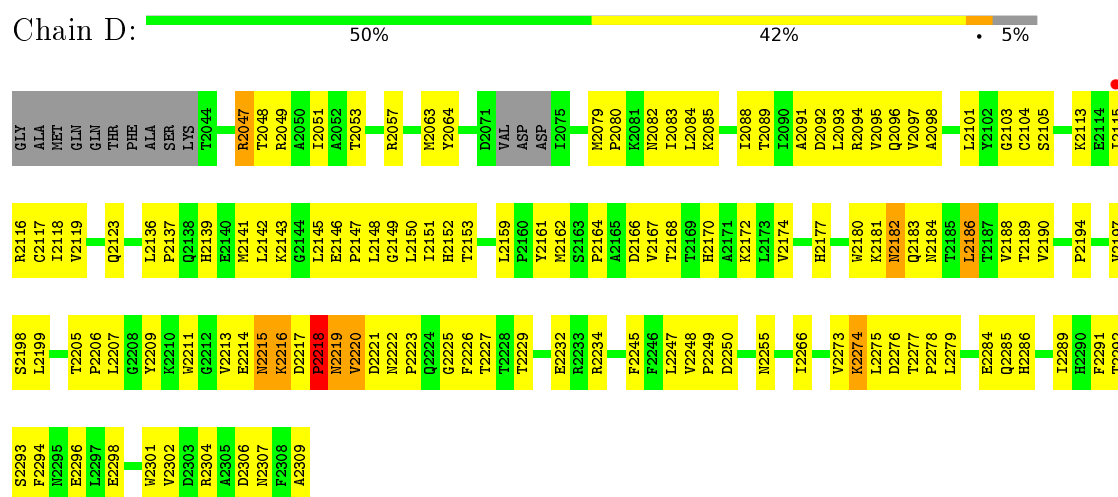
3 Residue-property plots

These plots are drawn for all protein, RNA and DNA chains in the entry. The first graphic for a chain summarises the proportions of errors displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron 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 dot above a residue indicates a poor fit to the electron density ($RSRZ > 2$). 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: Putative pre-mRNA splicing factor

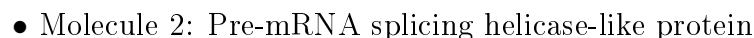
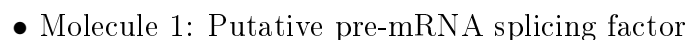


• Molecule 1: Putative pre-mRNA splicing factor



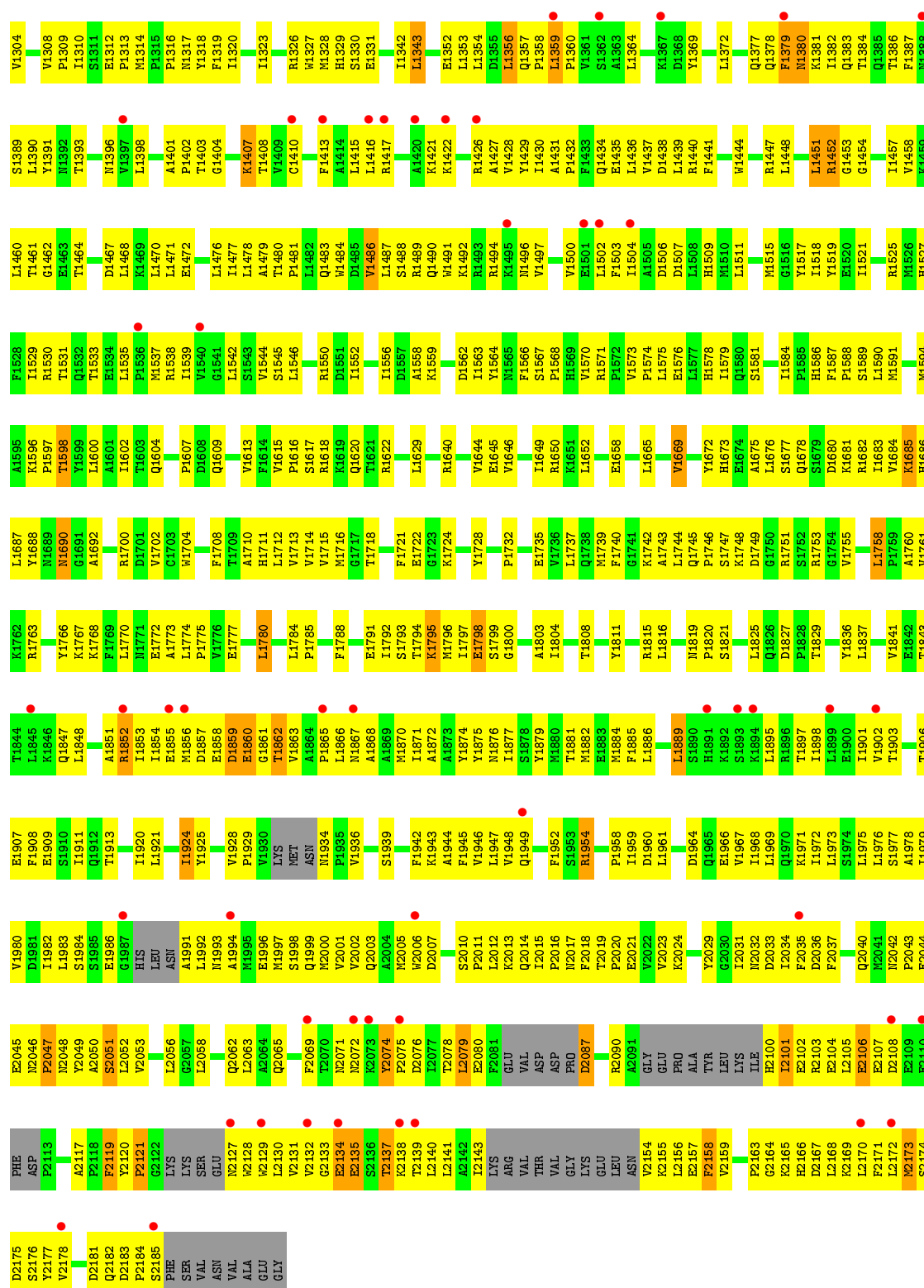
• Molecule 1: Putative pre-mRNA splicing factor





Y1925	D1839	K1748	L1676	S1581	I1504	R1426	T1351	W1271	H1175	E1102	Q1029	I939	A866	V791
D1926	L1840	D1749	S1677	H586	A1505	A1427	E1352	I1272	S1176	E1103	A1030	E940	A792	A792
H1927	T1843	G1750	S1679	F1587	L1508	V1428	L1353	L1273	P1177	P1104	E1032	S941	L871	D796
V1928	T1844	S1752	D1680	P1588	Q1514	A1430	P1358	E1275	Y1181	K1107	R1035	L943	T875	I798
P1929	L1845	R1753	L1681	S1589	M1515	A1431	P1359	D1276	P1182	I1108	I1036	V944	W876	W799
V1930	K1846	G1754	R1682	L1590	M1516	F1432	P1360	C1277	T1183	M1109	A1037	S945	L877	Q800
K1931	Q1847	V1755	L1683	M1591	Y1517	Q1434	V1361	D1278	P1185	L1111	S1038	L947	L878	L801
P1934	L1853	L1756	V1684	M1594	I1518	E1435	S1362	G1279	P1188	Q1113	H1039	L952	L802	L802
P1935	T1854	W1757	K1685	A1595	Y1519	L1436	L1364	I1282	I1188	Q1113	Y1040	N952	K803	K803
V1936	E1855	P1759	Y1688	A1596	E1520	L1437	K1365	L1283	K1191	L1119	Y1041	A953	H804	H804
M1856	M1856	A1760	M1689	P1597	I1521	V1437	K1366	H1285	M1195	K1120	E1044	V956	D805	D805
S1939	G1861	Y1766	L1696	Y1599	V1523	F1441	Y1369	D1287	P1199	L1112	H1045	L957	A806	A806
F1942	V1862	Y1770	S1594	L1600	R1525	F1448	L1448	F1288	W1199	G1123	S1046	R986	G807	G807
K1944	V1863	L1770	R1700	A1601	T1529	E1456	Y1373	F1289	F1203	L1126	H1055	V967	T808	T808
F1945	P1865	A1701	D1701	Q1609	R1530	L1457	P1374	D1290	D1204	L1127	A1057	G971	R837	R837
V1946	L1866	L1774	V1702	P1610	T1533	L1458	M1375	A1291	D1206	Y1132	P1056	L970	V819	V819
V1948	A1868	L1780	L1706	V1613	L1535	E1534	Q1377	D1293	P1207	V1133	H1063	G972	T822	T822
Q1949	A1869	L1784	F1708	V1614	P1536	L1460	Q1378	L1294	F1379	L1134	A1057	L971	D825	D825
A1950	M1870	P1785	A1710	V1615	M1537	T1461	M1380	L1294	P1208	Q1135	H1058	G972	R826	R826
H1951	L1871	L1788	L1711	R1618	R1538	T1464	K1381	E1301	R1209	Q1136	H1063	G972	L828	L828
L1957	M1876	F1788	L1712	K1619	L1539	T1466	Q1382	H1302	D1204	L1134	A1057	L971	P829	P829
P1958	L1877	L1792	V1713	Q1620	V1540	L1467	Q1384	V1307	G1215	L1140	F1064	R978	Y830	Y830
D1960	S1878	L1792	V1714	G1621	G1541	L1468	Q1385	T1307	M1216	L1141	F1064	R978	F831	F831
L1961	L1879	V1715	V1715	R1622	L1542	K1469	Q1386	F1309	L1470	L1141	F1064	R978	G833	G833
A1962	M1880	M1796	M1716	R1622	S1543	L1470	T1390	P1309	L1471	L1141	F1064	R978	L834	L834
L1967	Q1965	L1797	L1717	A1625	V1544	L1471	L1390	P1309	L1471	L1141	F1064	R978	H835	H835
V1967	E1966	E1798	T1718	R1626	L1545	Q1473	Y1391	P1315	L1226	L1147	F1066	L980	H836	H836
L1968	L1968	G1800	F1720	T1630	L1546	G1474	T1392	P1316	L1226	L1147	F1066	L980	A837	A837
Q1970	L1886	E1801	F1721	L1630	L1562	L1475	T1393	P1316	L1226	L1147	F1066	L980	G839	G839
K1971	L1887	L1804	E1722	E1638	I1562	L1476	D1394	F1319	F1230	G1143	E1072	Y992	L934	L934
K1972	L1894	Y1811	G1723	D1639	W1555	L1477	V1397	I1320	P1231	L1149	E1072	Y992	H836	H836
L1975	L1895	F1812	E1725	L1642	W1556	L1478	L1398	I1323	V1233	K1150	F1073	G917	V835	V835
L1976	L1896	L1815	H1726	L1642	K1569	A1479	V1399	I1323	E1234	K1151	K1074	D995	I918	I918
V1979	L1897	R1815	R1727	V1646	K1569	T1480	A1400	I1235	G1152	G1152	Y1075	V996	I919	I919
D1981	L1898	L1816	L1727	Q1648	H1561	D1481	A1401	E1236	Q1236	W1153	I1076	P1077	I920	I920
L1982	L1899	L1817	Y1731	Q1648	D1562	V1486	P1402	W1327	P1241	A1154	P1077	T921	T921	T921
L1983	V1902	A1818	P1732	R1650	I1563	L1487	K1407	M1328	M1242	L1084	Q1000	T922	T922	T922
L1984	T1903	L1819	E1735	L1653	M1564	S1488	T1408	H1329	T1243	E1085	K1001	Q923	Q923	Q923
S1984	F1908	S1821	E1735	L1653	F1566	R1489	C1410	E1331	R1244	L1159	R1002	I926	I926	I926
S1985	T1911	L1825	Q1738	E1658	H1569	K1495	E1412	M1334	L1247	L1161	L1090	Y928	Y928	Y928
Q1986	Q1912	L1826	M1739	E1663	V1570	N1496	L1415	P1335	I1249	M1162	V1093	Y929	Y929	Y929
G1987	T1913	D1827	G1740	V1497	R1571	V1497	L1416	V1336	E1250	G1164	P1094	L930	L930	L930
H1988	R1914	T1828	K1742	S1666	R1572	Q1498	R1417	S1337	L1251	K1165	I1095	L932	L932	L932
A1991	E1917	H1830	L1744	G1670	V1573	T1499	H1418	F1338	T1252	Y1021	P1096	N934	N934	N934
L1992	L1992	L1837	Q1745	V1671	V1500	V1500	W1419	F1347	T1254	E1168	K1098	Q935	Q935	Q935
A1994	L1921	S1837	P1746	V1672	L1502	E1501	L1501	P1348	P1255	M1171	E1099	Q936	Q936	Q936
		S1838	S1747	F1503	F1503	F1503	D1423	H1350	L1256	T1174	S1100	K1027	T864	T864
														L865

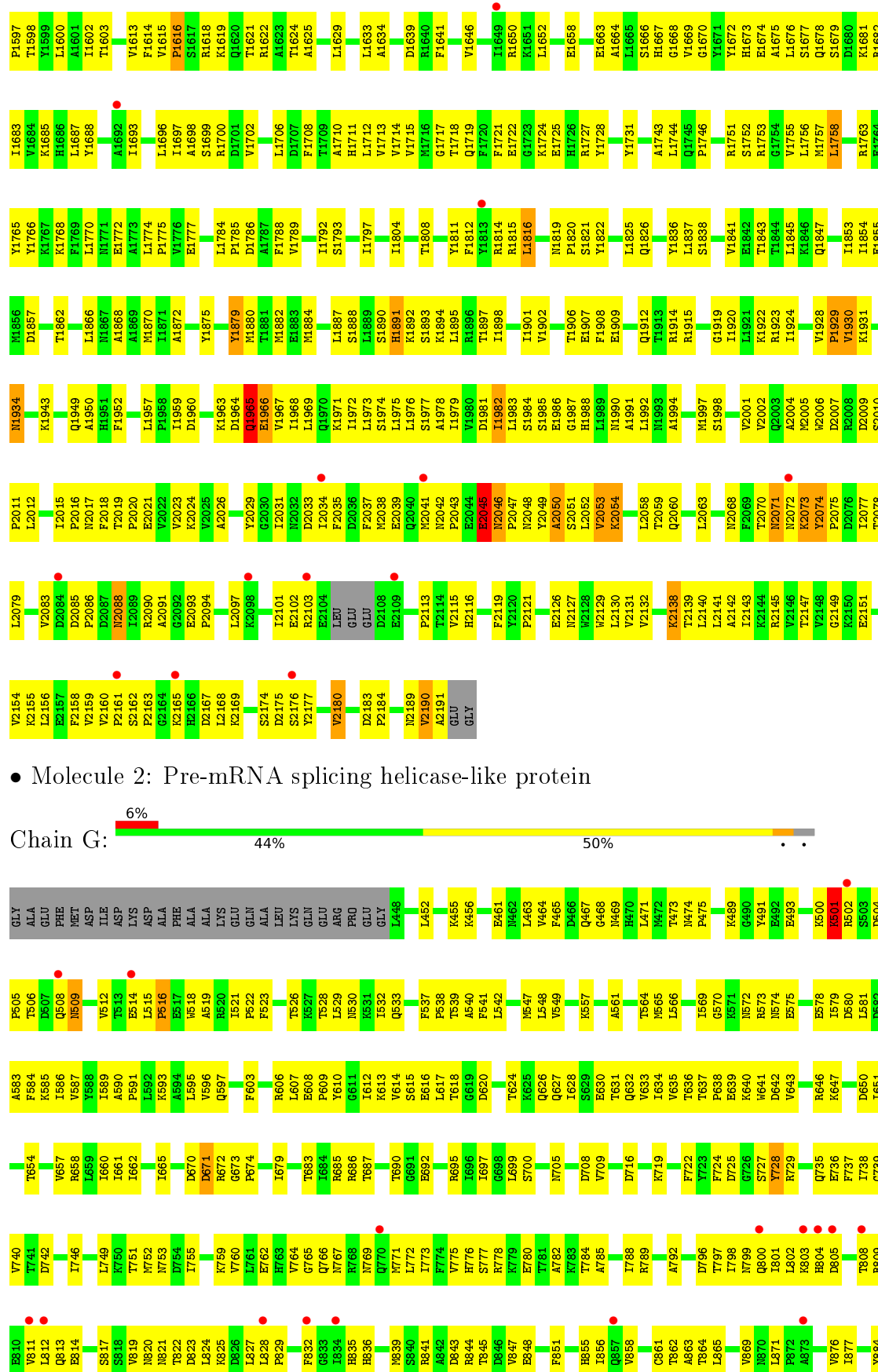




• Molecule 2: Pre-mRNA splicing helicase-like protein



M1526	Q1442	L1273	L1178	L1101	E1023	A953	H874	E794	Y728	H639	E568	P499	GLY
H1527	D1443	V1274	R1179	E1102	G1026	E954	T875	H795	R729	H640	E569	K500	ALA
F1528	V1444	E1275	C1184	E1103	K1027	V956	H876	D796	P730	H641	R573	R501	GLU
I1529	Q1445	D1276	P1185	P1104	K1028	V957	L877	T797	C731	D642	H574	R502	PHE
R1530	K1446	G1279	T1188	T1105	M1028	L957	L878	I798	I798	V643	E575	S503	MET
T1531	L1372	G1279	T1188	A1106	T1031	V960	K879	N799	L733	H646	G577	D504	ASP
Q1532	Y1373	H1285	T1189	L1108	E1032	R961	H880	Q800	R734	H647	P505	P505	ILE
P1536	W1376	D1286	K1190	M1109	I1036	R962	T881	L801	Q735	D650	D607	T506	ASP
M1537	L1451	V1287	L1199	M1109	I1037	R963	H882	L802	E736	H651	Q508	Q508	LYS
R1538	Q1385	E1193	L1110	L1111	L1036	R983	H883	K803	F737	H652	L581	Q509	ASP
I1539	T1386	R1194	E1193	L1111	A1037	D964	Y884	H804	I738	H654	D882	N509	ALA
V1540	L1396	L1291	L1194	L1112	S1038	V967	G889	D805	G739	H657	A583	I510	PHE
K1541	L1390	L1294	F1203	A1114	H1039	V967	G889	A806	V740	H658	F584	P511	ALA
L1542	E1305	E1305	P1207	R1118	Y1040	Y970	L894	G807	K744	H659	K585	V512	ALA
S1543	F1306	F1306	P1207	L1118	Y1041	Y971	T808	R809	R744	L659	I586	L515	LYS
V1544	T1307	T1307	P1208	L1119	Y972	Y972	D898	R809	K747	H660	V587	L515	GLU
G1462	M1395	L1307	P1208	L1119	Y973	Y973	D898	R809	Q748	H661	P516	P516	GLN
L1546	M1396	V1308	M1210	L1124	M1047	Y974	H899	V811	K748	H662	I589	E517	ALA
A1547	T1466	G1211	G1211	L1124	L1053	L975	L900	L812	T751	H664	A590	R520	LEU
D1467	L1398	E1212	E1212	D1129	I1054	F976	R902	Q813	H752	H665	P591	R520	LYS
L1468	V1399	S1311	P1217	M1130	H1055	R977	R905	D823	N753	H666	L592	I521	GLN
K1469	A1400	E1312	P1217	V1131	P1056	R978	R906	K825	D754	L667	K593	P522	GLU
L1470	A1401	P1313	Y1132	V1132	A1057	H979	G907	D826	I755	D671	L595	T526	ARG
P1402	P1402	M1314	Y1133	V1133	M1058	H979	R908	L827	T756	H674	V596	K527	PRO
G1406	G1406	P1315	T1222	V1133	H1059	S982	R908	L827	Y757	H674	V596	T528	GLU
K1407	K1407	P1316	V1223	A1137	M1060	P983	R909	L828	Q758	H680	Q599	L529	GLY
L1476	L1476	M1317	L1226	A1137	V1061	G984	Y911	P829	K759	V680	N802	N530	LEU
I1477	T1408	F1318	K1229	L1140	E1062	L985	Y911	F832	V760	H683	L532	K531	L452
K1478	V1409	F1319	L1230	L1141	L1063	Y986	G915	G833	L761	H684	R506	Q533	L452
A1479	G1410	I1320	P1231	R1142	F1064	S987	E916	H834	E762	H685	L607	Q533	L452
T1480	A1411	I1323	R1232	A1143	L1065	S988	E916	H835	H763	H686	L607	F537	K485
P1481	A1412	S1324	L1232	L1144	V1066	G989	G917	H836	V764	H687	L607	P538	K485
D1485	F1413	E1234	F1145	F1145	A1068	A990	E917	H836	Q765	H688	P509	P538	L457
V1486	L1415	E1234	E1234	A1146	A1068	E991	E917	H836	Q766	H688	P509	T539	V458
L1487	L1416	M1327	I1235	I1147	Q1069	Y992	E920	G838	N767	H689	I612	A540	K459
S1488	R1417	M1328	Q1236	C1148	S1070	E993	T921	G838	R768	H690	K613	F541	K459
V1570	H1418	E1331	Q1240	L1149	F1073	L998	T922	D846	N769	H695	V814	L542	L460
R1571	K1421	T1332	P1241	K1150	K1074	E999	Q923	H847	Q770	H696	S615	D543	D466
P1572	K1422	M1333	T1242	W1153	Y1075	E999	E848	D849	L772	L696	S616	D544	D467
V1573	D1423	M1334	R1244	V1156	R1079	K1001	P927	L850	L773	H697	L617	G545	K468
P1574	D1423	V1335	S1245	V1156	Q1080	R1002	Y928	F851	F774	H699	T818	N546	L471
L1502	R1426	V1336	M1246	L1161	Q1080	V1003	Y928	H855	V775	L700	G619	M547	L471
F1503	A1427	F1338	L1247	M1162	K1083	H1007	L930	H855	H776	A101	H621	L548	M472
L1504	Y1429	F1338	R1248	M1163	L1084	S1008	S931	I856	S777	T702	Q622	V549	T473
A1505	I1430	I1342	I1249	C1164	E1085	A1009	L932	Q857	R778	T702	L623	G550	
D1506	I1430	F1347	I1253	K1165	L1089	M1011	Q935	T862	K779	D708	T824	A551	R478
H1509	P1432	E1167	I1260	M1166	L1090	M1012	Q936	H863	E760	V709	Q625	G554	K479
Y1517	F1433	E1167	D1260	A1167	V1093	L1013	L937	T864	L781	H709	Q626	S555	P480
I1518	Q1434	L1353	L1263	E1168	P1094	L1012	L937	L865	A782	V715	I628	G556	K481
E1435	E1435	L1354	L1263	M1171	S1016	S1016	P938	T864	K719	T558	T831	S557	G482
Y1519	L1436	D1355	L1263	W1172	I1095	L1017	L939	L865	F722	T558	Q632	G557	T483
E1520	V1437	D1356	V1266	P1173	P1096	L1018	S941	A866	V723	V560	V633	N559	E492
I1521	D1438	L1356	T1267	T1174	V1097	L1019	Q942	H867	H767	V560	V633	A561	E493
V1522	L1439	E1268	E1268	M1175	K1098	I1020	L943	H869	F724	V562	V633	M562	K485
M1594	R1440	L1364	I1272	S1176	K1098	Y1021	R946	N870	K791	D725	T636	L566	V496
A1595	F1441	L1364	I1272	P1177	S1100	D1022	R946	N870	A792	H726	T637	P497	P498



G1987	H1988	E1917	Q1847	L1774	M1689	S1524	I1457	L1390	F1306	L1213	Y1132	P1056	E968	E887
H1989	L1848	E1918	L1848	P1775	M1690	R1525	V1488	T1391	T1307	L1213	V1133	A1057	H969	
L1989	S1849	G1919	H1850		I1693	H1526	K1459	M1392	V1308		G1138	H1058	L970	
A1991	A1851		G1694	S1778	I1693	F1528	T1460	T1393	T1309	M1216	G1138	H1059		H892
L1992	L1854	E1923	H1779	H1780	V1695	L1529	T1461	D1394	I1310	T1217	I1139	V1061	T973	E893
M1993	L1855	E1923	L1696	H1781	L1696	R1530	E1463	D1395	S1311	K1218	I1140	V1060	T974	L894
A1994	H1856	E1924	P1697		L1697	T1531	T1464	M1396	E1312	A1219	L1141	E1062	L975	S895
M1995	L1857	Y1925	D1608	L1784	M1697	Q1532	T1465	V1397	P1313	V1223	R1142	F1063	F976	
E1996	D1857	P1785	Q1609	P1785	Q1609	T1533	T1466	L1398	M1314	C1224	R1143	F1064	Y977	D898
M1997	E1858		E1705				D1467	A1400	Y1318	V1227	T1144	R1065	H978	
S1998	L1859	V1788	E1705				L1468	A1401	F1319	V1227	E1146	V1066	H979	H902
V1999	E1860	V1789	L1707				K1469	P1402	I1320		E1147	A1067	L980	L903
Q1999	G1861	T1790	F1708				L1470	T1403	S1321	P1231	C1148	A1068	L981	G904
M2000	L1862	E1791	T1709				G1472	G1404	I1322	R1232	L1149	Q1069		H905
V2001	H1863	L1792	A1710				L1473	S1405	I1323					
Q2003	L1864	S1793	H1711				Q1474	G1406		I1236	M1153	E1072		
A2004	L1865	T1794	L1712				G1475			Q1236	M1153	F1073	Y992	
M2005	L1866	K1795	V1713				D1476			I1236	M1155	Y1075	E993	D912
	L1867	V1714					L1476			Q1240	V1156	I1076	E994	H914
	A1868						L1477			P1241		I1077		
D2007	L1869	T1718					V1478	A1411		M1242	L1159	Y1078	E999	
R2008	A1870	Q1719					L1478	E1412		M1243	A1160	R1079	Q1000	G917
S2010	L1871	T1630					A1479	F1413		T1243	L1161	Q1081	R1001	L918
P2011	G1800	F1720	A1631				T1480	A1414		R1244	L1161	Q1080	K1002	L919
L2012	E1801	F1721	C1632				L1481	L1415		M1245	M1162	E1082	L1002	
Q2013	D1802	E1722					L1482	L1416		M1246	M1163	E1082	V1003	L920
H2014	A1803	G1723	D1639				Q1483	H1417		R1247	C1164	K1083		L921
L2015	L1877	F1641	F1641				D1485	W1484		L1248	L1165	L1084		
P2016	S1878	R1727	Q1648				V1486	W1419		R1248	L1165	E1085		
M2017	L1879	Y1728	Q1648				L1487	A1420		E1250	M1011		H1007	
F2018	M1880	I1729	L1649				S1488	K1421		L1251	K1169	L1089		L926
P2019							R1489	D1423		L1363	R1170	L1090		P927
P2020	E1883	P1732	L1652				W1490	G1425		D1256	M1171	L1090	S1016	Y928
	L1884		L1653				W1491	G1425			M1172	V1093	L1017	Y929
V2023	F1885	E1735	D1654				K1492	R1426		E1262	P1174		L1018	L930
L2024	L1886	H1655	H1655				R1493	A1427		V1266	M1175	K1098	Y1021	L932
V2025	L1887	V1656	V1656				H1494	V1428		T1267	S1176	E1099	K1027	L933
A2026	S1888	Q1657	Q1657				K1495	Y1429			P1177	S1100	Q1028	H934
M2027	L1889	P1746	E1658				M1496	I1430		W1271		E1101	M1028	Q936
K2028	S1890	S1747	G1670				V1497	A1431		L1272	Q1180	E1102	Q1029	L937
	H1891						Q1498	P1432		L1273	P1182	P1104		P938
L2031	L1892	D1748	Y1671				T1499	Q1434		V1274	T1183	T1105	L1033	L943
M2032	S1893	K1749	Y1672				V1500	E1435			C1184	A1106		
D2033	K1894	G1750	H1673				E1501	K1367		L1283	C1184	K1107	T1036	L951
L2034	L1895	A1675	A1675				L1502	D1368		F1284	P1185	L1111	A1037	H952
F2035	L1896	S1752	A1675				F1503	Y1369		H1285	A1186	L1111	S1038	A953
D2036	T1897	L1676	H1586				V1503	V1437		D1286	E1187	L1112	H1039	E954
P2037	L1898	S1677	H1587				I1504	D1438		V1287	I1188	Q1113	Y1040	L955
M2038	S1834	V1755	Q1835							F1288	K1191	Y1115	Y1041	V956
E2039	Q1835						H1509			T1289		Y1116	I1042	L957
Q2040	L1837	L1758	S1679				Q1514	Q1442		L1290		I1116	I1042	
M2041	S1838	Y1766	D1680				M1515	Q1445		R1291	M1195	S1117	M1047	G958
L2042	D1839	K1767	L1591				G1516			K1292	D1196	R1118	D1048	H959
P2043	L1840	F1683	L1592				I1517	R1451		D1293	V1197	L1118	Y960	L961
D2044	V1841	L1684	A1593				L1518	R1452		L1294		L1126	T1049	
E2045	L1842	K1685	A1595				Y1519	G1453			D1206	M1127	K1052	H962
M2046	H1866	H1686	K1596					G1454		T1303	P1207	A1128	L1053	H963
P2047	L1872	L1687	P1597				V1522	K1455		V1304	P1208		L1054	G966
M2048	L1914	A1773	T1598				V1523	E1456		E1305	R1209	V1131	H1055	Y967

L2172	L2173	S2174	D2175	S2176	S2177	D2181	Q2182	D2183	P2184	S2185	PHE	SER	VAL	ASN	VAL	ALA	GLU	GLY	GLU	PHE	ASP	P2113	T2114	V2115	H2116	A2117	F2118	Y2119	Y2120	P2121	S2125	E2126	N2127	V2128	TRP	LEU	VAL	VAL	GLY	GLU	E2135	S2136	T2137	K2138	T2139	L2140	L2141	A2142	T2143	K2144	R2145	V2146	THR	VAL	GLY	LYS	E2151	L2152	N2153	V2154	K2155	L2156	E2157	F2158	V2159	VAL	PRO	SER	PRO	GLY	LYS	HIS	D2167	L2168	K2169	L2170	F2171	GLU	F2081	E2082	V2083	D2084	D2085	P2086	E2087	N2088	T2089	R2090	A2091	G2092	E2093	F2094	A2095	Y2096	L2097	K2098	L2099	H2100	T2101	E2102	R2103	E2104	L2105	E2106	E2107	ASP	GLU	S2051	L2052	V2053	K2054	D2055	L2056	G2057	T2058	T2059	Q2060	A2061	Q2062	L2063	A2064	Q2065	A2066	A2067	N2068	F2069	T2070	N2071	N2072	K2073	Y2074	PRO	ASP	ILE	THR	LEU	GLU	F2081	E2082	V2083	D2084	D2085	P2086	E2087	N2088	T2089	R2090	A2091	G2092	E2093	F2094	A2095	Y2096	L2097	K2098	L2099	H2100	T2101	E2102	R2103	E2104	L2105	E2106	E2107	ASP	GLU
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4 Data and refinement statistics

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α , β , γ	92.54Å 269.59Å 231.69Å 90.00° 90.10° 90.00°	Depositor
Resolution (Å)	49.13 – 3.20 49.52 – 3.20	Depositor EDS
% Data completeness (in resolution range)	99.0 (49.13-3.20) 99.0 (49.52-3.20)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.15 (at 3.19Å)	Xtriage
Refinement program	PHENIX (phenix.refine: 1.9_1692)	Depositor
R, R_{free}	0.244 , 0.287 0.246 , 0.288	Depositor DCC
R_{free} test set	9214 reflections (5.00%)	DCC
Wilson B-factor (Å ²)	93.4	Xtriage
Anisotropy	0.312	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.29 , 60.4	EDS
L-test for twinning ²	$\langle L \rangle = 0.45$, $\langle L^2 \rangle = 0.28$	Xtriage
Estimated twinning fraction	0.044 for h,-k,-l	Xtriage
F_o, F_c correlation	0.91	EDS
Total number of atoms	63679	wwPDB-VP
Average B, all atoms (Å ²)	88.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.98% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

²Theoretical values of $\langle |L| \rangle$, $\langle L^2 \rangle$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: ACT

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	B	0.20	0/2175	0.38	0/2962
1	D	0.22	0/2151	0.39	0/2927
1	F	0.21	0/2174	0.39	0/2958
1	H	0.21	0/2184	0.37	0/2973
2	A	0.21	0/14227	0.37	0/19296
2	C	0.21	0/13925	0.38	0/18882
2	E	0.21	0/14234	0.38	0/19306
2	G	0.22	0/13998	0.39	0/18976
All	All	0.21	0/65068	0.38	0/88280

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	D	0	1
2	E	0	1
All	All	0	2

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

All (2) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	D	2217	ASP	Peptide
2	E	1965	GLN	Peptide

5.2 Too-close contacts ⓘ

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	B	2116	0	2075	139	0
1	D	2093	0	2057	120	0
1	F	2116	0	2079	124	0
1	H	2125	0	2088	127	0
2	A	13917	0	13956	862	0
2	C	13628	0	13674	959	0
2	E	13925	0	13970	867	0
2	G	13701	0	13768	973	0
3	A	4	3	3	1	0
3	C	4	3	3	1	0
3	E	4	3	3	4	0
3	G	4	3	3	0	0
4	A	12	0	0	0	0
4	C	5	0	0	0	0
4	D	2	0	0	0	0
4	E	7	0	0	0	0
4	F	1	0	0	0	0
4	G	3	0	0	1	0
All	All	63667	12	63679	4086	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 32.

All (4086) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:521:ILE:HD12	2:E:522:PRO:HD3	1.22	1.21
2:C:874:HIS:HA	2:C:907:GLY:HA2	1.28	1.13
2:G:515:LEU:HB3	2:G:516:PRO:HD2	1.18	1.10
2:A:835:HIS:HA	2:A:839:MET:HE1	1.31	1.10
2:C:2040:GLN:HA	2:C:2046:ASN:HB3	1.29	1.10
2:G:1574:PRO:HB2	2:G:1751:ARG:HG2	1.31	1.09
2:C:2000:MET:HE2	2:C:2007:ASP:HA	1.23	1.09
1:B:2253:LYS:HE3	1:B:2279:LEU:HG	1.36	1.07
2:C:813:GLN:HB3	2:C:829:PRO:HA	1.39	1.04

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:797:THR:HB	2:A:801:ILE:HD13	1.38	1.02
2:G:1418:HIS:NE2	2:G:1501:GLU:HB2	1.75	1.02
2:G:2171:PHE:HB3	2:G:2183:ASP:HA	1.42	1.02
2:E:661:ILE:HG12	2:E:697:ILE:HD11	1.42	1.01
2:A:1928:VAL:HG21	2:A:1949:GLN:HB3	1.42	1.00
2:G:1792:ILE:HG21	2:G:1854:ILE:HD11	1.41	0.98
2:E:2050:ALA:HB3	2:E:2054:LYS:HE2	1.42	0.98
2:A:1247:LEU:HD13	2:A:1310:ILE:HG13	1.46	0.97
2:E:674:PRO:HB2	2:E:946:LYS:HD3	1.46	0.97
2:G:1862:THR:HG22	2:G:1863:VAL:HG13	1.45	0.96
2:C:620:ASP:HA	2:C:623:LEU:HB2	1.44	0.96
2:G:2002:VAL:HG21	2:G:2176:SER:HA	1.46	0.95
2:E:1982:ILE:HB	2:E:1991:ALA:HB2	1.48	0.95
2:A:2059:THR:HG23	2:A:2062:GLN:HB2	1.45	0.95
2:A:1792:ILE:HG22	2:A:1865:PRO:HB3	1.47	0.95
2:G:1457:ILE:HG22	2:G:1476:LEU:HD23	1.48	0.95
2:G:841:ARG:HG2	2:G:845:THR:HG23	1.48	0.95
2:G:1632:CYS:HB3	2:G:1639:ASP:HA	1.48	0.94
2:A:1975:LEU:HD11	2:A:1997:MET:HG2	1.50	0.94
2:A:2012:LEU:HD13	2:A:2034:ILE:HD13	1.47	0.94
2:E:877:ILE:HG12	2:E:918:ILE:HD11	1.48	0.94
2:C:1467:ASP:HA	2:C:1470:LEU:HG	1.47	0.94
2:C:1921:LEU:HD21	2:C:1946:VAL:HG21	1.48	0.94
2:G:515:LEU:HB3	2:G:516:PRO:CD	1.98	0.94
2:G:506:THR:HG22	2:G:508:GLN:HG2	1.48	0.94
2:C:561:ALA:HB1	2:C:661:ILE:HD13	1.49	0.93
2:G:2052:LEU:HD12	2:G:2055:ASP:HA	1.50	0.93
2:G:1392:ASN:HA	2:G:1417:ARG:HB3	1.46	0.93
2:C:1903:THR:HG21	2:C:1945:PHE:HA	1.49	0.92
2:A:614:VAL:HG22	2:A:633:VAL:HB	1.52	0.92
2:G:665:ILE:HG22	2:G:700:SER:HB2	1.49	0.92
2:G:1495:LYS:HA	2:G:1498:GLN:HG2	1.51	0.92
2:C:2047:PRO:HB2	2:C:2050:ALA:HA	1.50	0.91
2:C:622:GLN:HG2	2:C:627:GLN:HB2	1.49	0.91
1:D:2218:PRO:HG2	1:D:2223:PRO:HB3	1.51	0.91
2:G:2005:MET:HB2	2:G:2013:LYS:HD3	1.53	0.91
2:C:1791:GLU:HB3	2:C:1797:ILE:HG13	1.52	0.91
2:E:1364:LEU:HD13	2:E:1369:TYR:HB3	1.50	0.91
1:B:2057:ARG:HD2	2:A:1057:ALA:HB1	1.53	0.91
2:E:1353:LEU:HD22	2:E:1570:VAL:HG13	1.50	0.90
1:B:2154:MET:HB3	1:B:2191:ALA:HA	1.52	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1857:ASP:HA	2:C:1861:GLY:HA2	1.53	0.90
2:E:625:LYS:HB2	2:E:628:ILE:HG22	1.54	0.90
2:G:926:ILE:HG13	2:G:927:PRO:HD3	1.51	0.90
2:C:1854:ILE:H	2:C:1854:ILE:HD12	1.36	0.90
2:E:1774:LEU:HD12	2:E:1775:PRO:HD2	1.54	0.89
2:C:1732:PRO:HG2	2:C:1735:GLU:HG3	1.55	0.89
2:C:1958:PRO:HD2	2:C:1961:LEU:HD12	1.55	0.89
2:G:1546:LEU:HD22	2:G:1552:ILE:HD13	1.54	0.89
2:E:561:ALA:HB1	2:E:661:ILE:HD13	1.55	0.88
1:F:2151:ILE:HG12	1:F:2188:VAL:HB	1.56	0.88
2:C:1571:ARG:HH21	2:C:1744:LEU:HD23	1.36	0.88
2:C:931:SER:HA	2:C:936:GLN:HB2	1.53	0.88
2:G:801:ILE:HD13	2:G:803:LYS:HE3	1.55	0.88
2:G:811:VAL:HG13	2:G:812:LEU:HD12	1.56	0.87
2:A:1530:ARG:HD2	2:A:1537:MET:HB3	1.54	0.87
2:E:517:GLU:HG2	2:E:520:ARG:HH12	1.39	0.87
2:C:2046:ASN:OD1	2:C:2049:TYR:N	2.07	0.87
2:E:782:ALA:HB1	2:E:824:LEU:HD21	1.56	0.87
2:E:1359:LEU:HD13	2:E:1384:THR:HB	1.57	0.86
2:G:1452:ARG:HD2	2:G:1452:ARG:H	1.41	0.86
2:C:1898:ILE:HA	2:C:1901:ILE:HD12	1.58	0.86
2:C:1924:ILE:HD11	2:C:1946:VAL:HB	1.57	0.86
2:A:1714:VAL:HG12	2:A:1755:VAL:HB	1.56	0.86
2:A:2131:VAL:HG22	2:A:2143:ILE:HG13	1.57	0.86
2:E:1393:THR:HG22	2:E:1395:ASN:H	1.41	0.86
2:A:2077:ILE:HG22	2:A:2103:ARG:HA	1.56	0.85
2:G:1249:ILE:HD11	2:G:1320:ILE:HD11	1.58	0.85
2:A:590:ALA:HB3	2:A:596:VAL:HG12	1.57	0.85
2:A:625:LYS:HD3	2:A:644:ILE:HD11	1.58	0.85
2:E:1675:ALA:HA	2:E:1963:LYS:HD3	1.59	0.85
1:B:2288:PRO:HB3	2:A:1174:THR:HG21	1.58	0.85
2:G:1390:LEU:HD23	2:G:1397:VAL:HG21	1.59	0.85
2:G:841:ARG:HA	2:G:844:ARG:HB3	1.58	0.85
2:A:1207:PRO:HG2	2:A:1208:PRO:HD3	1.57	0.85
2:C:773:ILE:HD11	2:C:860:VAL:HG13	1.57	0.85
2:A:620:ASP:HB3	2:A:624:THR:HG22	1.59	0.84
2:A:1574:PRO:HB2	2:A:1751:ARG:HG2	1.59	0.84
2:A:1983:LEU:HD13	2:A:2143:ILE:HG21	1.58	0.84
2:C:1911:ILE:HD11	2:C:1966:GLU:HG2	1.59	0.84
2:C:1558:ALA:HB3	2:C:1563:ILE:HD11	1.60	0.84
2:C:1644:VAL:HG13	2:C:1649:ILE:HD11	1.57	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:1714:VAL:HG12	2:E:1755:VAL:HB	1.59	0.84
2:C:1207:PRO:HG2	2:C:1208:PRO:HD3	1.59	0.83
2:C:617:LEU:HD21	2:C:644:ILE:HG13	1.58	0.83
2:G:1392:ASN:HA	2:G:1417:ARG:HD2	1.58	0.83
2:G:1774:LEU:HD12	2:G:1775:PRO:HD2	1.58	0.83
2:A:1958:PRO:HG2	2:A:1961:LEU:HB2	1.58	0.83
2:E:1987:GLY:HA2	2:E:2140:LEU:N	1.94	0.83
2:E:1111:LEU:HD22	2:E:1130:MET:HB2	1.60	0.83
2:C:1415:LEU:HD12	2:C:1502:LEU:HD21	1.61	0.82
2:E:591:PRO:HD2	2:E:595:LEU:HD23	1.59	0.82
2:G:658:ARG:HH12	2:G:692:GLU:HG3	1.44	0.82
2:E:1396:ASN:HB2	2:E:1558:ALA:HB2	1.62	0.82
2:G:1426:ARG:HB2	2:G:1499:THR:HG23	1.62	0.82
2:A:955:ILE:HG22	2:A:1030:ALA:HB2	1.62	0.82
2:C:2040:GLN:CA	2:C:2046:ASN:HB3	2.08	0.82
1:H:2106:PRO:HD2	1:H:2112:VAL:HG13	1.60	0.82
2:A:1394:ASP:HB3	2:A:1417:ARG:HE	1.43	0.81
2:A:872:PRO:HB2	2:A:908:ARG:HG2	1.62	0.81
2:E:2162:SER:HB2	2:E:2163:PRO:HD2	1.63	0.81
2:G:1101:ILE:HG23	2:G:1102:GLU:H	1.44	0.81
2:A:575:GLU:HG3	2:A:576:LYS:HG3	1.62	0.81
2:G:2003:GLN:HE22	2:G:2177:TYR:HA	1.43	0.80
2:G:1457:ILE:HD13	2:G:1457:ILE:H	1.44	0.80
2:E:798:ILE:HA	2:E:801:ILE:HD13	1.62	0.80
2:A:1560:LYS:HA	2:A:1563:ILE:HG12	1.63	0.80
2:C:1364:LEU:HD11	2:C:1416:LEU:HD21	1.62	0.80
1:D:2083:ILE:HD12	1:D:2118:ILE:HG13	1.61	0.80
1:F:2183:GLN:HB3	2:G:1206:ASP:HB3	1.63	0.80
2:G:501:LYS:HB3	2:G:727:SER:HB2	1.64	0.80
2:G:586:ILE:HB	2:G:633:VAL:HA	1.64	0.80
2:A:1460:LEU:HD23	2:A:1479:ALA:HB2	1.62	0.80
2:A:453:GLN:HG3	2:A:454:PRO:HD2	1.64	0.80
2:G:851:PHE:HA	2:G:856:ILE:HG22	1.64	0.80
2:G:519:ALA:HB1	2:G:566:LEU:HD23	1.62	0.79
2:A:877:ILE:HG12	2:A:918:ILE:HB	1.63	0.79
2:G:2144:LYS:HD3	2:G:2156:LEU:HD13	1.64	0.79
2:C:877:ILE:HG12	2:C:918:ILE:HB	1.62	0.79
2:C:665:ILE:HG22	2:C:700:SER:HB2	1.64	0.79
2:E:617:LEU:HD23	2:E:622:GLN:HG3	1.62	0.79
2:G:1959:ILE:HD12	2:G:1959:ILE:H	1.47	0.79
2:A:1856:MET:HA	2:A:1863:VAL:HA	1.63	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1382:ILE:HD12	2:C:1382:ILE:H	1.48	0.79
2:A:1944:ALA:HB1	2:A:1971:LYS:HZ3	1.48	0.79
2:E:932:LEU:HD13	2:E:937:LEU:HD23	1.65	0.79
2:G:493:GLU:HG2	2:G:738:ILE:HG12	1.65	0.79
2:C:586:ILE:HB	2:C:633:VAL:HA	1.65	0.78
2:G:1855:GLU:HB2	2:G:1866:LEU:HD11	1.65	0.78
2:C:1792:ILE:HD13	2:C:1797:ILE:HB	1.65	0.78
2:E:1560:LYS:HA	2:E:1563:ILE:HG12	1.65	0.78
2:E:1968:ILE:HA	2:E:1971:LYS:HB3	1.64	0.78
1:F:2227:THR:HB	1:F:2230:MET:HG3	1.63	0.78
1:B:2119:VAL:HG11	1:B:2137:PRO:HG3	1.65	0.78
2:C:2002:VAL:HG11	2:C:2176:SER:HB2	1.65	0.78
1:F:2068:VAL:HG22	1:F:2069:ASP:H	1.49	0.78
1:F:2300:ILE:O	1:F:2302:VAL:N	2.15	0.78
2:G:690:THR:HG23	2:G:692:GLU:H	1.48	0.78
2:C:1022:ASP:HB3	2:C:1025:THR:HG22	1.66	0.78
2:C:1357:GLN:HG2	2:C:1359:LEU:H	1.49	0.78
2:A:2019:THR:HB	2:A:2020:PRO:HD2	1.66	0.78
2:C:1080:GLN:HA	2:C:1083:LYS:HG3	1.65	0.78
2:E:2077:ILE:HG22	2:E:2103:ARG:HA	1.66	0.78
2:G:2115:VAL:HB	2:G:2125:SER:HB3	1.64	0.78
2:C:2172:LEU:HD11	2:C:2182:GLN:HB2	1.64	0.78
2:A:1064:PHE:HB3	2:A:1109:ASN:HD21	1.47	0.77
2:C:587:VAL:HB	2:C:660:ILE:HG22	1.65	0.77
2:G:1714:VAL:HG12	2:G:1755:VAL:HB	1.65	0.77
2:A:1440:ARG:HE	2:A:1440:ARG:HA	1.49	0.77
2:G:1419:TRP:HH2	2:G:1476:LEU:HB2	1.50	0.77
1:B:2220:VAL:HG22	1:B:2221:ASP:H	1.49	0.77
2:E:800:GLN:HG2	2:E:805:ASP:HB2	1.65	0.77
2:E:1616:PRO:HG3	2:E:1717:GLY:HA3	1.66	0.77
2:A:1571:ARG:HG3	2:A:1572:PRO:HD2	1.66	0.76
2:C:1921:LEU:CD2	2:C:1946:VAL:HG21	2.15	0.76
2:G:1393:THR:O	2:G:1395:ASN:ND2	2.18	0.76
2:A:612:ILE:HG23	2:A:632:GLN:HB2	1.66	0.76
1:B:2068:VAL:HG11	1:B:2235:GLN:HB2	1.66	0.76
2:G:2026:ALA:HB1	2:G:2031:ILE:HD11	1.66	0.76
2:G:737:PHE:HE2	2:G:933:LEU:HD12	1.49	0.76
2:C:1428:VAL:HG13	2:C:1503:PHE:HD1	1.49	0.76
2:E:521:ILE:HD12	2:E:522:PRO:CD	2.12	0.76
2:G:1426:ARG:HG3	2:G:1499:THR:CG2	2.15	0.76
2:E:646:ARG:HA	2:E:957:LEU:HD11	1.67	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1021:TYR:HD1	2:C:1028:MET:HG2	1.51	0.76
2:E:1372:LEU:HD21	2:E:1451:LEU:HD21	1.67	0.76
2:E:2068:ASN:O	2:E:2071:ASN:ND2	2.19	0.76
2:A:2165:LYS:HE3	2:C:1934:ASN:HD22	1.49	0.75
2:C:768:ARG:NH2	2:C:802:LEU:HB3	1.99	0.75
2:E:782:ALA:CB	2:E:824:LEU:HD21	2.15	0.75
2:G:2157:GLU:HG2	2:G:2158:PHE:H	1.51	0.75
1:F:2080:PRO:HD2	1:F:2083:ILE:HD11	1.68	0.75
1:B:2253:LYS:HE3	1:B:2279:LEU:CG	2.16	0.75
1:D:2218:PRO:CG	1:D:2223:PRO:HB3	2.15	0.75
2:E:537:PHE:HB3	2:E:538:PRO:HD3	1.68	0.75
2:C:1426:ARG:HE	2:C:1496:ASN:HB3	1.51	0.75
2:C:1467:ASP:HA	2:C:1470:LEU:CG	2.15	0.75
2:C:1854:ILE:HG13	2:C:1866:LEU:HD13	1.68	0.75
1:D:2250:ASP:HA	1:D:2274:LYS:HD2	1.69	0.75
2:G:1792:ILE:HG22	2:G:1865:PRO:HB3	1.65	0.75
2:G:1894:LYS:H	2:G:1988:HIS:HE1	1.32	0.75
2:E:1987:GLY:HA2	2:E:2140:LEU:H	1.51	0.75
2:G:1042:ILE:HD12	2:G:1140:ILE:HD13	1.68	0.75
2:C:770:GLN:HE21	2:C:854:GLY:HA2	1.51	0.75
2:E:452:LEU:O	2:E:963:ARG:NH1	2.20	0.75
1:F:2101:LEU:HD21	1:F:2151:ILE:HG13	1.67	0.75
2:G:1854:ILE:HD12	2:G:1865:PRO:HA	1.67	0.75
2:G:2053:VAL:HG13	2:G:2056:LEU:HB2	1.69	0.75
2:C:617:LEU:HA	2:C:622:GLN:NE2	2.01	0.75
2:C:1979:ILE:HA	2:C:1982:ILE:HG22	1.66	0.74
2:G:1236:GLN:HA	2:G:1334:MET:HE1	1.68	0.74
2:A:1065:ARG:HH21	2:A:1099:GLU:HB3	1.52	0.74
2:A:1353:LEU:HD22	2:A:1570:VAL:CG1	2.16	0.74
2:A:1596:LYS:HB3	2:A:1597:PRO:HD3	1.68	0.74
2:C:1229:LYS:HD3	2:C:1260:ASP:HB2	1.69	0.74
2:C:1596:LYS:HB3	2:C:1597:PRO:HD3	1.67	0.74
2:G:746:ILE:HD12	2:G:746:ILE:H	1.53	0.74
2:E:881:THR:HG21	2:E:919:ILE:HD11	1.69	0.74
2:G:2102:GLU:HG3	2:G:2103:ARG:H	1.51	0.74
2:A:828:LEU:HB3	2:A:829:PRO:HD3	1.67	0.74
2:E:1400:ALA:HB3	2:E:1565:ASN:HA	1.69	0.74
2:C:797:THR:O	2:C:801:ILE:N	2.19	0.74
2:E:2051:SER:HB2	2:E:2054:LYS:HA	1.69	0.74
2:G:1587:PHE:HB3	2:G:1588:PRO:HD3	1.68	0.74
2:C:660:ILE:HD11	2:C:696:ILE:HG13	1.69	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:1980:VAL:HA	2:G:1983:LEU:HD23	1.69	0.74
2:G:613:LYS:HD2	2:G:631:THR:HG22	1.70	0.74
2:A:1908:PHE:CZ	2:A:1971:LYS:HG2	2.22	0.74
1:B:2079:MET:HG3	1:B:2080:PRO:HD2	1.68	0.74
2:G:665:ILE:CG2	2:G:700:SER:HB2	2.18	0.74
2:C:2101:ILE:HG13	2:C:2102:GLU:H	1.52	0.74
2:E:1952:PHE:HB3	2:E:2006:TRP:HE3	1.53	0.74
1:B:2297:LEU:HD23	2:A:1120:LYS:HA	1.70	0.73
2:A:1530:ARG:HB2	2:A:1537:MET:HE1	1.70	0.73
2:C:1854:ILE:HD11	2:C:1866:LEU:HB2	1.69	0.73
2:G:1461:THR:HG23	2:G:1462:GLY:H	1.53	0.73
2:A:746:ILE:HD12	2:A:746:ILE:H	1.53	0.73
1:H:2070:ASN:HD21	1:H:2076:THR:HG22	1.52	0.73
2:A:1323:ILE:HG12	2:A:1331:GLU:HG3	1.69	0.73
2:A:798:ILE:HG13	2:A:799:ASN:H	1.53	0.73
2:E:617:LEU:CD2	2:E:622:GLN:HG3	2.17	0.73
2:G:2005:MET:CB	2:G:2013:LYS:HD3	2.17	0.73
2:C:1460:LEU:HD23	2:C:1479:ALA:HB1	1.71	0.73
2:C:2100:HIS:HB2	2:C:2154:VAL:HA	1.69	0.73
1:D:2174:VAL:HG13	1:D:2181:LYS:HB3	1.70	0.73
2:E:729:ARG:HG3	2:E:730:PRO:HD2	1.68	0.73
2:G:1899:LEU:HA	2:G:1902:VAL:HG12	1.70	0.73
2:A:665:ILE:HG22	2:A:700:SER:HB2	1.69	0.73
2:G:1602:ILE:HD13	2:G:1695:VAL:HG21	1.68	0.73
2:G:452:LEU:HD12	2:G:999:GLU:HG2	1.71	0.73
2:C:1966:GLU:HA	2:C:1969:LEU:HD12	1.71	0.73
2:C:753:ASN:HB3	2:C:787:TYR:CE1	2.24	0.73
2:E:1441:PHE:HB2	2:E:1478:LEU:HD12	1.69	0.73
2:G:1392:ASN:ND2	2:G:1417:ARG:O	2.21	0.73
2:C:1571:ARG:NH2	2:C:1743:ALA:O	2.22	0.72
2:E:2049:TYR:HB3	2:E:2053:VAL:HG22	1.71	0.72
2:E:1986:GLU:OE2	2:E:1986:GLU:N	2.22	0.72
2:C:1615:VAL:HG11	2:C:1620:GLN:HB3	1.69	0.72
2:C:607:LEU:HD12	2:C:612:ILE:HD11	1.70	0.72
2:G:2097:LEU:N	2:G:2157:GLU:HB2	2.04	0.72
2:G:1352:GLU:HG2	2:G:1353:LEU:H	1.54	0.72
2:A:1725:GLU:HB3	2:A:1727:ARG:HD3	1.70	0.72
2:A:1055:HIS:HB2	2:A:1056:PRO:HD2	1.70	0.72
2:A:803:LYS:HE2	2:A:803:LYS:HA	1.72	0.72
2:C:2046:ASN:O	2:C:2050:ALA:N	2.23	0.72
2:G:1419:TRP:CH2	2:G:1476:LEU:HB2	2.24	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:2079:MET:HE1	1:H:2151:ILE:HD11	1.70	0.72
2:A:1546:LEU:HD22	2:A:1552:ILE:HD13	1.70	0.72
2:E:1930:VAL:HG13	2:E:1949:GLN:NE2	2.05	0.72
2:C:1959:ILE:H	2:C:1959:ILE:HD12	1.54	0.72
1:D:2057:ARG:NH2	2:C:1062:GLU:OE2	2.23	0.71
2:E:1353:LEU:HD22	2:E:1570:VAL:CG1	2.20	0.71
2:G:1980:VAL:HG13	2:G:1983:LEU:HD21	1.71	0.71
2:C:2005:MET:SD	2:C:2013:LYS:HB3	2.29	0.71
2:E:625:LYS:HB2	2:E:628:ILE:CG2	2.19	0.71
2:E:1452:ARG:HB2	2:E:1455:LYS:HE2	1.71	0.71
2:E:1987:GLY:HA3	2:E:2139:THR:HA	1.72	0.71
1:D:2207:LEU:H	1:D:2207:LEU:HD23	1.54	0.71
2:E:1902:VAL:HG11	2:E:1971:LYS:HE3	1.72	0.71
2:G:1063:LEU:HD23	2:G:1163:MET:HE3	1.72	0.71
2:C:903:LEU:CD1	2:C:933:LEU:HD21	2.20	0.71
1:D:2153:THR:HG22	1:D:2190:VAL:HB	1.72	0.71
2:E:1566:PHE:HB3	2:E:1570:VAL:HG21	1.72	0.71
1:F:2159:LEU:HB2	1:F:2202:TRP:HH2	1.54	0.71
2:G:1037:ALA:HB2	2:G:1047:MET:HG3	1.72	0.71
2:A:801:ILE:HG22	2:A:802:LEU:HD12	1.72	0.71
2:G:1490:GLN:HB3	2:G:1493:ARG:HG2	1.72	0.71
2:A:537:PHE:HB3	2:A:538:PRO:HD3	1.72	0.71
1:D:2220:VAL:HG22	1:D:2221:ASP:H	1.55	0.71
2:G:2046:ASN:O	2:G:2048:ASN:N	2.23	0.71
2:G:2052:LEU:CD1	2:G:2055:ASP:HA	2.20	0.71
2:C:812:LEU:HD12	2:C:855:HIS:CD2	2.26	0.71
2:C:772:LEU:HB2	2:C:873:ALA:HB3	1.71	0.71
2:G:1798:GLU:C	2:G:1863:VAL:HG21	2.11	0.71
2:C:1622:ARG:NH2	2:C:1658:GLU:OE2	2.24	0.71
2:C:775:VAL:HG21	2:C:780:GLU:HG2	1.73	0.71
2:G:1101:ILE:HG12	2:G:1102:GLU:HG2	1.72	0.71
2:C:931:SER:CA	2:C:936:GLN:HB2	2.20	0.70
2:E:2115:VAL:HG11	2:E:2176:SER:HB3	1.73	0.70
2:E:2097:LEU:HB2	2:E:2158:PHE:HE2	1.54	0.70
1:H:2083:ILE:HD11	1:H:2244:GLY:HA3	1.73	0.70
2:A:561:ALA:HB1	2:A:661:ILE:HD13	1.72	0.70
2:C:1791:GLU:HB3	2:C:1797:ILE:CG1	2.20	0.70
2:C:801:ILE:O	2:C:804:HIS:ND1	2.23	0.70
2:C:775:VAL:HG21	2:C:780:GLU:CG	2.21	0.70
1:D:2205:THR:HB	1:D:2206:PRO:HD2	1.71	0.70
2:E:617:LEU:HD22	2:E:640:LYS:HG3	1.73	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:1989:LEU:HD23	2:G:1989:LEU:H	1.57	0.70
2:A:2074:TYR:HD1	2:A:2075:PRO:HD2	1.57	0.70
2:A:749:LEU:O	2:A:753:ASN:ND2	2.24	0.70
2:C:1393:THR:O	2:C:1538:ARG:NH2	2.24	0.70
1:B:2057:ARG:HD2	2:A:1057:ALA:CB	2.22	0.70
2:A:2059:THR:CG2	2:A:2062:GLN:HB2	2.19	0.70
2:C:1793:SER:HA	2:C:1865:PRO:HG3	1.74	0.70
2:C:2076:ASP:CB	2:C:2105:LEU:HD22	2.22	0.70
2:C:614:VAL:HG22	2:C:633:VAL:HG21	1.74	0.70
2:E:1722:GLU:HG3	2:E:1724:LYS:HG2	1.71	0.70
2:G:782:ALA:HB2	2:G:824:LEU:HD13	1.73	0.70
1:H:2068:VAL:HG11	1:H:2235:GLN:HA	1.74	0.70
2:C:2183:ASP:N	2:C:2184:PRO:HD3	2.06	0.70
2:E:498:PRO:HD3	2:E:734:ARG:HG3	1.73	0.70
2:E:736:GLU:HB2	2:E:918:ILE:HG21	1.74	0.70
2:C:537:PHE:HB3	2:C:538:PRO:HD3	1.74	0.70
2:G:1392:ASN:CA	2:G:1417:ARG:HD2	2.22	0.70
2:G:825:LYS:HZ1	2:G:847:VAL:HG21	1.57	0.70
2:C:665:ILE:CG2	2:C:700:SER:HB2	2.22	0.70
2:G:1548:ASN:HB3	2:G:1815:ARG:HH12	1.57	0.70
2:E:1460:LEU:HD22	2:E:1479:ALA:HB2	1.74	0.69
2:G:775:VAL:HG22	2:G:776:HIS:H	1.57	0.69
1:H:2159:LEU:HD21	1:H:2191:ALA:HB2	1.74	0.69
2:A:621:ARG:HG2	2:A:622:GLN:H	1.58	0.69
2:C:2132:VAL:HG12	2:C:2133:GLY:H	1.56	0.69
2:C:1711:HIS:CE1	2:C:1747:SER:HB2	2.27	0.69
2:A:1571:ARG:NH2	2:A:1743:ALA:O	2.25	0.69
2:C:1360:PRO:HB3	2:C:1377:GLN:HG2	1.73	0.69
2:G:607:LEU:HB2	2:G:612:ILE:HD11	1.74	0.69
2:A:1457:ILE:HG23	2:A:1476:LEU:HB3	1.73	0.69
2:A:1103:GLU:HB3	2:A:1104:PRO:HD2	1.74	0.69
2:C:1749:ASP:HB3	2:C:1751:ARG:HG2	1.74	0.69
2:C:2031:ILE:HD11	2:C:2040:GLN:HG2	1.75	0.69
2:E:870:ASN:HA	2:E:905:ARG:NH1	2.06	0.69
2:C:1408:THR:HG21	2:C:1440:ARG:HE	1.57	0.69
2:C:525:THR:HG23	2:C:526:THR:HG23	1.75	0.69
2:A:2135:GLU:N	2:A:2135:GLU:OE1	2.26	0.69
2:C:2155:LYS:HG2	2:C:2156:LEU:H	1.56	0.69
2:E:1571:ARG:HG2	2:E:1572:PRO:HD2	1.73	0.69
2:A:660:ILE:HD11	2:A:696:ILE:HG12	1.74	0.69
2:C:690:THR:HG23	2:C:692:GLU:H	1.57	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:828:LEU:HB2	2:E:829:PRO:HD3	1.73	0.69
2:G:2042:ASN:HB2	2:G:2043:PRO:HD2	1.75	0.69
2:G:820:ASN:HD22	2:G:825:LYS:HB3	1.57	0.69
2:A:797:THR:O	2:A:801:ILE:N	2.22	0.69
2:C:1785:PRO:HB2	2:C:1879:TYR:CE1	2.28	0.68
2:C:2134:GLU:HG2	2:C:2168:LEU:HB2	1.75	0.68
2:E:599:GLN:HA	2:E:602:ASN:HB3	1.75	0.68
2:E:478:ARG:HB2	2:E:936:GLN:HE22	1.58	0.68
1:F:2068:VAL:HG11	1:F:2235:GLN:CB	2.24	0.68
2:G:2011:PRO:HG2	2:G:2012:LEU:HD22	1.76	0.68
2:C:595:LEU:HD11	2:C:867:TRP:HE3	1.58	0.68
2:E:731:CYS:SG	2:E:909:PRO:HA	2.33	0.68
2:A:1997:MET:HA	2:A:2000:MET:HE2	1.74	0.68
1:B:2049:ARG:NH1	1:B:2092:ASP:OD2	2.27	0.68
2:C:1574:PRO:HG2	2:C:1751:ARG:HB3	1.76	0.68
1:F:2098:ALA:O	1:F:2123:GLN:NE2	2.26	0.68
2:C:1037:ALA:HB2	2:C:1047:MET:HG3	1.75	0.68
2:E:1968:ILE:HA	2:E:1971:LYS:CB	2.24	0.68
2:G:2034:ILE:HD12	2:G:2074:TYR:CE2	2.28	0.68
2:G:2144:LYS:HD3	2:G:2156:LEU:CD1	2.22	0.68
1:H:2077:TYR:CD1	1:H:2186:LEU:HD11	2.29	0.68
2:A:590:ALA:HB3	2:A:596:VAL:CG1	2.24	0.68
2:A:992:TYR:CE2	2:A:1001:LYS:HD3	2.29	0.68
2:E:2050:ALA:O	2:E:2054:LYS:HG3	1.94	0.68
2:E:1460:LEU:HD22	2:E:1479:ALA:CB	2.24	0.68
2:G:1363:ALA:HB1	2:G:1387:PHE:CE1	2.29	0.68
2:A:2103:ARG:NH1	2:A:2112:ASP:OD2	2.27	0.68
2:A:2147:THR:O	2:A:2152:LEU:HD11	1.92	0.68
1:B:2101:LEU:HD22	1:B:2115:ILE:HD13	1.76	0.68
2:C:1615:VAL:CG1	2:C:1620:GLN:HB3	2.23	0.68
2:C:2137:THR:HG23	2:C:2138:LYS:H	1.58	0.68
2:C:452:LEU:O	2:C:963:ARG:NH1	2.27	0.68
2:G:1820:PRO:HB2	2:G:1825:LEU:HD11	1.74	0.68
2:G:2115:VAL:HB	2:G:2126:GLU:H	1.59	0.68
2:A:2000:MET:SD	2:A:2007:ASP:HA	2.34	0.68
2:A:2074:TYR:CD1	2:A:2075:PRO:HD2	2.29	0.68
2:A:587:VAL:HB	2:A:660:ILE:HG22	1.75	0.68
1:B:2139:HIS:HB3	1:B:2142:LEU:HD12	1.76	0.68
2:E:581:LEU:H	2:E:581:LEU:HD23	1.59	0.68
1:H:2065:VAL:HG21	1:H:2238:LEU:HD13	1.75	0.68
2:C:2031:ILE:HG23	2:C:2037:PHE:HB2	1.76	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:903:LEU:HD13	2:C:933:LEU:HD21	1.74	0.67
2:A:1925:TYR:O	2:A:1931:LYS:NZ	2.27	0.67
2:C:1872:ALA:HA	2:C:1877:ILE:HG22	1.76	0.67
2:C:2182:GLN:HB3	2:C:2184:PRO:HD3	1.76	0.67
1:D:2119:VAL:HG11	1:D:2137:PRO:HG3	1.74	0.67
2:E:2103:ARG:NH1	2:E:2149:GLY:O	2.28	0.67
2:G:1618:ARG:HD3	2:G:1674:GLU:HG3	1.76	0.67
2:G:1784:LEU:CD1	2:G:1840:LEU:HD21	2.24	0.67
2:A:2130:LEU:HD21	2:A:2172:LEU:HD13	1.75	0.67
2:A:574:ASN:ND2	2:A:577:GLY:O	2.27	0.67
2:C:1471:LEU:HD12	2:C:1472:GLU:N	2.10	0.67
1:D:2101:LEU:HD21	1:D:2151:ILE:CD1	2.24	0.67
2:G:1232:ARG:NH1	2:G:1256:ASN:O	2.28	0.67
2:C:1022:ASP:HB3	2:C:1025:THR:CG2	2.24	0.67
2:C:734:ARG:N	2:C:915:GLY:O	2.23	0.67
2:E:1908:PHE:CD1	2:E:1967:VAL:HG13	2.29	0.67
1:H:2162:MET:HE3	1:H:2202:TRP:HB3	1.77	0.67
2:A:1898:ILE:HD11	2:A:1997:MET:SD	2.35	0.67
2:A:585:LYS:NZ	2:A:629:SER:O	2.28	0.67
1:D:2084:LEU:HD21	1:D:2199:LEU:HD11	1.77	0.67
2:E:2002:VAL:HG11	2:E:2176:SER:HA	1.76	0.67
2:E:665:ILE:CG2	2:E:700:SER:HB2	2.25	0.67
2:C:2019:THR:HB	2:C:2020:PRO:HD2	1.77	0.67
2:C:2076:ASP:HB3	2:C:2105:LEU:HD22	1.76	0.67
2:E:1890:SER:HA	2:E:1988:HIS:ND1	2.09	0.67
2:A:1419:TRP:CH2	2:A:1476:LEU:HB2	2.29	0.67
2:C:1429:TYR:HB3	2:C:1478:LEU:CD2	2.25	0.67
2:E:2079:LEU:HD11	2:E:2184:PRO:HG2	1.76	0.67
2:E:825:LYS:HE3	2:E:834:ILE:HG22	1.77	0.67
1:F:2227:THR:N	1:F:2230:MET:SD	2.68	0.67
2:G:1380:ASN:HD21	2:G:1572:PRO:HB3	1.59	0.67
2:A:1232:ARG:NH1	2:A:1256:ASN:O	2.28	0.67
2:G:789:ARG:HD3	2:G:827:LEU:CD1	2.24	0.67
1:B:2057:ARG:NH1	2:A:1062:GLU:OE2	2.28	0.67
2:E:507:ASP:HB3	2:E:531:LYS:HE2	1.77	0.67
2:G:1393:THR:HG22	2:G:1394:ASP:H	1.60	0.67
2:G:1396:ASN:ND2	2:G:1558:ALA:HB2	2.09	0.67
2:A:1207:PRO:CG	2:A:1208:PRO:HD3	2.24	0.66
2:A:835:HIS:HB3	2:A:861:CYS:HB3	1.76	0.66
2:E:1249:ILE:HD11	2:E:1320:ILE:HD11	1.76	0.66
2:E:507:ASP:OD1	2:E:507:ASP:N	2.28	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:1067:PHE:CE2	2:G:1112:LEU:HD22	2.30	0.66
1:B:2080:PRO:HG2	1:B:2083:ILE:HG12	1.77	0.66
1:B:2220:VAL:HG13	1:B:2222:ASN:H	1.60	0.66
2:C:2005:MET:HG3	2:C:2178:VAL:HG22	1.76	0.66
2:C:521:ILE:HD12	2:C:521:ILE:H	1.60	0.66
1:F:2124:ILE:HG23	1:F:2131:GLN:HB2	1.77	0.66
2:G:537:PHE:HB3	2:G:538:PRO:HD3	1.77	0.66
2:A:2097:LEU:HB2	2:A:2158:PHE:HE2	1.60	0.66
2:A:532:ILE:HD12	2:A:724:PHE:CD2	2.30	0.66
2:A:753:ASN:HB3	2:A:787:TYR:CE1	2.31	0.66
2:C:1644:VAL:CG1	2:C:1649:ILE:HD11	2.25	0.66
2:E:1103:GLU:HB3	2:E:1104:PRO:HD2	1.77	0.66
2:E:1429:TYR:HB3	2:E:1478:LEU:CD2	2.25	0.66
1:F:2211:TRP:CD2	1:F:2230:MET:HE1	2.31	0.66
1:H:2227:THR:CG2	1:H:2229:THR:HG22	2.25	0.66
2:A:1243:THR:HG23	2:A:1347:PHE:CE1	2.29	0.66
2:C:772:LEU:HD21	2:C:859:LEU:HD23	1.78	0.66
2:A:1124:LEU:H	2:A:1124:LEU:HD12	1.60	0.66
2:A:646:ARG:HA	2:A:957:LEU:HD11	1.77	0.66
2:C:1063:LEU:HD23	2:C:1163:MET:HE3	1.78	0.66
2:C:1576:GLU:OE1	2:C:1753:ARG:NH1	2.29	0.66
2:C:2029:TYR:CE2	2:C:2053:VAL:HG22	2.31	0.66
1:F:2251:THR:HG23	1:F:2253:LYS:H	1.61	0.66
2:G:1249:ILE:CD1	2:G:1320:ILE:HD11	2.26	0.66
2:G:1357:GLN:HG3	2:G:1358:PRO:HD2	1.78	0.66
2:G:590:ALA:HB3	2:G:596:VAL:HG12	1.77	0.66
2:A:1185:PRO:HD2	2:A:1188:ILE:HD11	1.78	0.66
1:B:2111:GLN:OE1	1:B:2111:GLN:N	2.28	0.66
1:B:2101:LEU:HD21	1:B:2151:ILE:HD11	1.76	0.66
2:E:2165:LYS:HG2	2:E:2189:ASN:HA	1.76	0.66
2:G:1422:LYS:HE3	2:G:1424:ALA:H	1.61	0.66
2:G:1587:PHE:HZ	2:G:1616:PRO:HG2	1.60	0.66
2:A:1622:ARG:NH1	2:A:1960:ASP:OD1	2.29	0.66
2:A:608:GLU:N	2:A:609:PRO:HD2	2.11	0.66
2:C:2005:MET:HG3	2:C:2178:VAL:CG2	2.25	0.66
1:F:2180:TRP:O	1:F:2182:ASN:ND2	2.28	0.66
2:G:1894:LYS:H	2:G:1988:HIS:CE1	2.13	0.66
2:A:1460:LEU:HB2	2:A:1479:ALA:HB2	1.77	0.66
2:A:1992:LEU:CD2	2:A:2173:MET:HG3	2.26	0.66
2:C:736:GLU:HB2	2:C:918:ILE:HD12	1.77	0.66
1:F:2086:LYS:HE3	1:F:2278:PRO:HG2	1.76	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:1426:ARG:HD3	2:G:1475:ASP:HA	1.76	0.66
2:G:593:LYS:HA	2:G:596:VAL:HG22	1.78	0.66
2:G:760:VAL:O	2:G:764:VAL:HG22	1.96	0.66
2:C:1035:ARG:NH1	2:C:1146:GLU:OE2	2.29	0.66
2:C:1991:ALA:CB	2:C:2141:LEU:HD11	2.26	0.66
2:C:632:GLN:O	2:C:633:VAL:HG22	1.95	0.66
2:E:1853:ILE:HG22	2:E:1854:ILE:HG23	1.77	0.66
2:E:2019:THR:HB	2:E:2020:PRO:HD2	1.78	0.66
2:E:2085:ASP:HB3	2:E:2088:ASN:HB3	1.78	0.66
2:A:1195:MET:SD	2:A:1214:LEU:HA	2.35	0.66
2:C:811:VAL:HG12	2:C:812:LEU:HD23	1.77	0.66
2:G:1353:LEU:O	2:G:1354:LEU:HD22	1.95	0.66
2:A:1724:LYS:HG3	2:A:1725:GLU:HG2	1.77	0.65
2:C:1718:THR:HG21	2:C:1758:LEU:HB3	1.77	0.65
2:E:1920:ILE:HD12	2:E:1920:ILE:H	1.61	0.65
2:G:782:ALA:CB	2:G:824:LEU:HD13	2.26	0.65
2:G:841:ARG:HG2	2:G:845:THR:CG2	2.26	0.65
2:C:482:GLY:HA3	2:C:497:PRO:HG3	1.78	0.65
2:E:1591:MET:CE	2:E:1616:PRO:HG2	2.26	0.65
2:G:1411:ALA:HB2	2:G:1542:LEU:HD11	1.76	0.65
2:G:792:ALA:HB1	2:G:797:THR:HB	1.77	0.65
2:A:1364:LEU:HD23	2:A:1369:TYR:HB3	1.77	0.65
2:E:1323:ILE:HG12	2:E:1331:GLU:HG3	1.77	0.65
2:E:1576:GLU:OE2	2:E:1753:ARG:NH1	2.29	0.65
2:E:626:GLN:HG2	2:E:1266:VAL:HG21	1.77	0.65
2:E:708:ASP:OD2	2:E:978:ARG:NH1	2.29	0.65
2:G:961:ARG:HH22	2:G:1029:GLN:HG3	1.62	0.65
2:G:1224:CYS:HA	2:G:1227:VAL:HG12	1.78	0.65
2:G:1784:LEU:HD11	2:G:1840:LEU:HD21	1.78	0.65
2:C:771:MET:CE	2:C:877:ILE:HD12	2.27	0.65
2:E:2018:PHE:HD2	2:E:2023:VAL:HG12	1.60	0.65
2:G:1428:VAL:HG21	2:G:1484:TRP:HZ2	1.61	0.65
2:A:1504:ILE:HD13	2:A:1540:VAL:HG13	1.78	0.65
2:C:1903:THR:HG21	2:C:1945:PHE:CA	2.23	0.65
2:C:2172:LEU:CD1	2:C:2182:GLN:HB2	2.26	0.65
2:C:581:LEU:CD2	2:C:612:ILE:HG22	2.26	0.65
2:C:607:LEU:CD1	2:C:612:ILE:HD11	2.25	0.65
2:G:1413:PHE:O	2:G:1417:ARG:HG2	1.97	0.65
2:G:1778:SER:O	2:G:1781:HIS:NE2	2.28	0.65
2:G:587:VAL:HB	2:G:660:ILE:HG22	1.78	0.65
2:A:1672:TYR:CD1	2:A:1702:VAL:HG11	2.32	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1404:GLY:H	2:C:1407:LYS:HE2	1.62	0.65
2:C:614:VAL:HG22	2:C:633:VAL:CG2	2.26	0.65
2:E:482:GLY:HA3	2:E:497:PRO:HG3	1.79	0.65
1:H:2303:ASP:OD1	2:G:778:ARG:NH2	2.28	0.65
2:G:2014:GLN:HB3	2:G:2069:PHE:CZ	2.32	0.65
2:G:593:LYS:NZ	2:G:597:GLN:OE1	2.29	0.65
2:G:785:ALA:HB1	2:G:827:LEU:HD21	1.79	0.65
1:D:2248:VAL:HB	1:D:2249:PRO:HD2	1.79	0.65
2:E:1530:ARG:HD3	2:E:1537:MET:HE2	1.77	0.65
2:E:770:GLN:OE1	2:E:770:GLN:N	2.29	0.65
2:G:2095:ALA:O	2:G:2157:GLU:HB3	1.96	0.65
2:G:932:LEU:HD13	2:G:937:LEU:HD23	1.79	0.65
2:A:1983:LEU:HB2	2:A:2140:LEU:HD21	1.77	0.65
2:A:665:ILE:CG2	2:A:700:SER:HB2	2.26	0.65
2:C:973:THR:HG23	2:C:976:PHE:H	1.62	0.65
2:E:2042:ASN:N	2:E:2045:GLU:OE1	2.30	0.65
2:E:2127:ASN:HD22	2:E:2145:ARG:HE	1.44	0.65
2:E:761:LEU:HA	2:E:764:VAL:HG12	1.79	0.65
2:G:1951:HIS:O	2:G:2004:ALA:HB1	1.96	0.65
2:C:1207:PRO:CG	2:C:1208:PRO:HD3	2.26	0.65
2:C:1403:THR:HA	2:C:1407:LYS:CE	2.27	0.65
2:E:460:LEU:HD12	2:E:460:LEU:H	1.61	0.65
1:F:2053:THR:HG22	1:F:2056:LEU:HD13	1.78	0.65
2:G:1084:LEU:HD23	2:G:1084:LEU:H	1.62	0.65
2:G:1392:ASN:HA	2:G:1417:ARG:CB	2.24	0.65
2:G:1894:LYS:HG2	2:G:1990:ASN:HD22	1.62	0.65
2:A:1037:ALA:HB2	2:A:1047:MET:HG3	1.78	0.64
2:A:1390:LEU:HA	2:A:1538:ARG:HH22	1.62	0.64
2:A:621:ARG:HD3	2:A:622:GLN:HE21	1.62	0.64
2:C:1481:PRO:HB2	2:C:1518:ILE:HG23	1.79	0.64
2:E:1312:GLU:HB3	2:E:1313:PRO:HD3	1.80	0.64
2:G:1065:ARG:CZ	2:G:1099:GLU:HG2	2.27	0.64
2:G:1799:SER:N	2:G:1863:VAL:HG11	2.11	0.64
1:B:2304:ARG:NH2	2:A:1135:GLN:OE1	2.29	0.64
2:A:1979:ILE:HG12	2:A:1994:ALA:CB	2.27	0.64
2:A:2111:PHE:HD1	2:A:2113:PRO:HD3	1.62	0.64
2:A:760:VAL:O	2:A:764:VAL:HG22	1.97	0.64
2:C:1353:LEU:HD21	2:C:1381:LYS:HE3	1.78	0.64
1:F:2053:THR:HA	1:F:2056:LEU:HD12	1.78	0.64
2:A:2015:ILE:HD13	2:A:2069:PHE:CE2	2.32	0.64
2:A:613:LYS:H	2:A:632:GLN:HG2	1.62	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1793:SER:HA	2:C:1865:PRO:CB	2.26	0.64
2:C:806:ALA:HB3	2:C:808:THR:HG22	1.79	0.64
2:G:1428:VAL:HG11	2:G:1484:TRP:CZ2	2.32	0.64
1:H:2106:PRO:CD	1:H:2112:VAL:HG13	2.27	0.64
1:H:2101:LEU:HD21	1:H:2151:ILE:HD11	1.78	0.64
2:A:1491:TRP:CE3	2:A:1529:ILE:HG12	2.32	0.64
2:A:1685:LYS:O	2:A:1689:ASN:ND2	2.25	0.64
2:G:1426:ARG:HG3	2:G:1499:THR:HG21	1.78	0.64
2:G:1908:PHE:CE1	2:G:1967:VAL:HG13	2.32	0.64
1:H:2119:VAL:HG11	1:H:2137:PRO:HG3	1.79	0.64
2:C:1387:PHE:HB2	2:C:1391:TYR:CZ	2.33	0.64
2:C:1571:ARG:NH2	2:C:1744:LEU:HD23	2.10	0.64
2:C:1972:ILE:HG13	2:C:1973:LEU:N	2.11	0.64
2:C:2042:ASN:OD1	2:C:2045:GLU:HB2	1.98	0.64
2:C:1999:GLN:NE2	2:C:2177:TYR:O	2.28	0.64
1:D:2289:ILE:HD12	1:D:2289:ILE:H	1.62	0.64
1:F:2298:GLU:N	1:F:2298:GLU:OE1	2.29	0.64
2:G:1895:LEU:HD23	2:G:1896:ARG:H	1.62	0.64
2:G:822:THR:CG2	2:G:825:LYS:HD3	2.28	0.64
2:C:1924:ILE:HD11	2:C:1946:VAL:CB	2.28	0.64
2:C:532:ILE:HG23	2:C:533:GLN:HG3	1.80	0.64
2:C:670:ASP:OD1	2:C:671:ASP:N	2.30	0.64
2:C:729:ARG:CG	2:C:730:PRO:HD2	2.28	0.64
2:E:1460:LEU:HD13	2:E:1477:ILE:HG23	1.79	0.64
1:F:2296:GLU:N	1:F:2296:GLU:OE1	2.31	0.64
2:A:1064:PHE:HB3	2:A:1109:ASN:ND2	2.13	0.64
2:C:996:VAL:HG13	2:C:997:ALA:H	1.63	0.64
2:E:540:ALA:HA	2:E:547:MET:HE3	1.78	0.64
2:A:1577:LEU:HD11	2:A:1770:LEU:HD23	1.78	0.64
1:B:2308:PHE:O	2:A:640:LYS:NZ	2.31	0.64
2:E:539:THR:HG23	2:E:719:LYS:HD2	1.79	0.64
2:G:1426:ARG:NH1	2:G:1471:LEU:O	2.31	0.64
2:G:1613:VAL:HG22	2:G:1714:VAL:CG2	2.27	0.64
2:G:1574:PRO:CB	2:G:1751:ARG:HG2	2.20	0.64
2:A:786:LYS:HE3	2:A:824:LEU:CD2	2.28	0.64
2:A:781:THR:HG23	2:A:834:ILE:HD11	1.79	0.64
1:B:2300:ILE:HG13	2:A:1127:MET:HE3	1.78	0.64
1:D:2104:CYS:SG	1:D:2116:ARG:NH2	2.71	0.64
2:G:1458:VAL:CG2	2:G:1477:ILE:HG22	2.28	0.64
2:G:1894:LYS:HE3	2:G:1898:ILE:HG12	1.79	0.64
2:G:2138:LYS:HA	2:G:2138:LYS:HZ3	1.63	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:515:LEU:CB	2:G:516:PRO:HD2	2.12	0.64
2:A:2009:ASP:OD1	2:A:2009:ASP:N	2.24	0.64
2:G:614:VAL:HG22	2:G:633:VAL:CG1	2.28	0.64
1:H:2162:MET:SD	1:H:2167:VAL:HG22	2.38	0.64
2:A:737:PHE:HE2	2:A:933:LEU:HD12	1.63	0.63
2:E:767:ASN:O	2:E:769:ASN:N	2.27	0.63
2:G:1914:ARG:NH1	2:G:1917:GLU:OE1	2.32	0.63
2:C:778:ARG:O	2:C:781:THR:HG22	1.96	0.63
2:E:2047:PRO:HG2	2:E:2049:TYR:CE2	2.33	0.63
2:E:753:ASN:HB3	2:E:787:TYR:CE2	2.33	0.63
1:H:2136:LEU:HD21	1:H:2180:TRP:HE1	1.64	0.63
2:C:1467:ASP:HA	2:C:1470:LEU:CD2	2.29	0.63
2:C:1457:ILE:HG22	2:C:1476:LEU:HB3	1.80	0.63
2:E:2034:ILE:HG12	2:E:2074:TYR:CD2	2.33	0.63
2:G:1875:TYR:CE1	2:G:1976:LEU:HD11	2.33	0.63
2:A:1009:ALA:O	2:A:1012:VAL:HG22	1.99	0.63
2:A:1359:LEU:HG	2:A:1384:THR:HG22	1.80	0.63
2:A:589:ILE:HD12	2:A:662:ILE:CD1	2.29	0.63
2:C:1195:MET:HB3	2:C:1197:VAL:HG22	1.79	0.63
2:C:2002:VAL:HG21	2:C:2176:SER:CB	2.29	0.63
2:G:1241:PRO:HG3	2:G:1821:SER:HB2	1.79	0.63
1:H:2079:MET:HE2	1:H:2115:ILE:HD12	1.79	0.63
2:A:625:LYS:CD	2:A:644:ILE:HD11	2.27	0.63
2:C:1718:THR:CG2	2:C:1758:LEU:HB3	2.28	0.63
2:G:1525:ARG:NH2	2:G:1791:GLU:OE1	2.31	0.63
1:B:2299:ASP:OD1	1:B:2300:ILE:N	2.32	0.63
2:C:1678:GLN:O	2:C:1682:ARG:HG3	1.97	0.63
2:C:2135:GLU:CG	2:C:2139:THR:HG22	2.29	0.63
2:C:2090:ARG:NH2	2:C:2164:GLY:O	2.32	0.63
2:C:480:PRO:HG2	2:C:496:VAL:CG1	2.29	0.63
2:C:562:MET:HE3	2:C:607:LEU:HD21	1.79	0.63
2:A:1911:ILE:HD13	2:A:1912:GLN:H	1.63	0.63
2:C:605:LYS:HA	2:C:605:LYS:HE2	1.81	0.63
2:E:1171:MET:HE3	2:E:1328:MET:HG2	1.80	0.63
2:E:1502:LEU:HD21	2:E:1504:ILE:HG13	1.78	0.63
2:G:471:LEU:HD21	2:G:473:THR:HG23	1.81	0.63
2:G:500:LYS:NZ	2:G:502:ARG:HB2	2.14	0.63
2:G:589:ILE:HD12	2:G:662:ILE:CD1	2.29	0.63
2:G:801:ILE:HD13	2:G:803:LYS:CE	2.29	0.63
2:A:1247:LEU:HD13	2:A:1310:ILE:CG1	2.23	0.63
2:A:454:PRO:HD3	2:A:963:ARG:NH1	2.14	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:620:ASP:CA	2:C:623:LEU:HB2	2.25	0.63
2:A:1428:VAL:HG22	2:A:1477:ILE:HD11	1.81	0.63
2:A:1944:ALA:HB1	2:A:1971:LYS:NZ	2.14	0.63
2:C:1426:ARG:NE	2:C:1496:ASN:HB3	2.14	0.63
2:C:2117:ALA:HA	2:C:2119:PHE:CE1	2.34	0.63
2:C:532:ILE:HG13	2:C:724:PHE:CD2	2.34	0.63
2:E:625:LYS:HD3	2:E:650:ASP:CG	2.19	0.63
2:G:1849:SER:HA	2:G:1854:ILE:HG22	1.80	0.63
2:G:1968:ILE:HA	2:G:1971:LYS:HB2	1.79	0.63
2:A:1774:LEU:HD12	2:A:1775:PRO:HD2	1.80	0.62
2:C:1503:PHE:HD2	2:C:1539:ILE:HG23	1.64	0.62
2:C:581:LEU:HD23	2:C:612:ILE:HG22	1.79	0.62
2:G:1248:ARG:NH2	2:G:1305:GLU:OE1	2.27	0.62
2:G:452:LEU:O	2:G:963:ARG:NH1	2.30	0.62
2:A:725:ASP:OD1	2:A:726:GLY:N	2.32	0.62
1:B:2253:LYS:HZ2	1:B:2278:PRO:HA	1.63	0.62
2:C:2029:TYR:CZ	2:C:2056:LEU:HD22	2.34	0.62
2:C:874:HIS:CA	2:C:907:GLY:HA2	2.19	0.62
1:D:2136:LEU:HD21	1:D:2177:HIS:CG	2.34	0.62
2:E:1743:ALA:HB1	2:E:1752:SER:OG	2.00	0.62
2:E:1983:LEU:CD2	2:E:2143:ILE:HD13	2.28	0.62
2:E:1893:SER:HB2	2:E:1990:ASN:ND2	2.14	0.62
2:G:1555:TRP:HA	2:G:1814:ARG:HH21	1.64	0.62
2:G:532:ILE:HD11	2:G:724:PHE:CG	2.34	0.62
2:A:1235:ILE:HD11	2:A:1334:MET:HB3	1.82	0.62
1:B:2253:LYS:NZ	1:B:2278:PRO:HA	2.14	0.62
2:C:1429:TYR:CD2	2:C:1478:LEU:HD22	2.34	0.62
2:C:2135:GLU:HG2	2:C:2139:THR:HG22	1.81	0.62
2:C:590:ALA:HB3	2:C:596:VAL:HG12	1.81	0.62
2:C:980:LEU:HD23	2:C:998:LEU:HD12	1.80	0.62
1:D:2142:LEU:HA	1:D:2145:LEU:HD12	1.81	0.62
2:E:2138:LYS:O	2:E:2138:LYS:HD2	1.99	0.62
2:E:732:PRO:O	2:E:915:GLY:N	2.31	0.62
2:G:1303:THR:OG1	2:G:1727:ARG:NH2	2.33	0.62
2:G:2045:GLU:O	2:G:2046:ASN:HB2	1.99	0.62
2:G:608:GLU:HB3	2:G:609:PRO:HD3	1.82	0.62
2:A:1458:VAL:CG2	2:A:1477:ILE:HG22	2.29	0.62
2:A:2042:ASN:CG	2:A:2043:PRO:HD2	2.20	0.62
2:C:1357:GLN:HG3	2:C:1358:PRO:HD2	1.82	0.62
2:C:1389:SER:HG	2:C:1564:TYR:HH	1.42	0.62
2:E:2042:ASN:HB2	2:E:2043:PRO:HD2	1.81	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2216:LYS:C	1:F:2218:PRO:HD3	2.20	0.62
2:A:2165:LYS:HE3	2:C:1934:ASN:ND2	2.14	0.62
2:A:453:GLN:CG	2:A:454:PRO:HD2	2.29	0.62
1:B:2253:LYS:HG3	1:B:2279:LEU:HB2	1.81	0.62
2:C:541:PHE:O	2:C:567:ARG:NH2	2.32	0.62
2:A:574:ASN:HD21	2:A:578:GLU:HG2	1.64	0.62
2:C:1358:PRO:HB2	2:C:1378:GLN:CB	2.28	0.62
2:C:803:LYS:HB2	2:C:803:LYS:NZ	2.14	0.62
2:E:1432:PRO:HD2	2:E:1436:LEU:HD13	1.80	0.62
2:E:1888:SER:HB2	2:E:1901:ILE:HD13	1.82	0.62
2:E:501:LYS:HG2	2:E:727:SER:HB2	1.80	0.62
2:G:1428:VAL:HG22	2:G:1477:ILE:HD11	1.81	0.62
2:G:1954:ARG:NH2	2:G:2013:LYS:HB2	2.15	0.62
2:G:561:ALA:HB1	2:G:661:ILE:HD13	1.82	0.62
2:G:887:GLU:HG3	2:G:1132:TYR:CE1	2.34	0.62
2:A:625:LYS:HE2	2:A:640:LYS:HE3	1.81	0.62
2:C:1911:ILE:CD1	2:C:1966:GLU:HG2	2.29	0.62
2:E:1056:PRO:HG3	2:E:1153:TRP:CE2	2.34	0.62
2:E:1591:MET:HE1	2:E:1616:PRO:HG2	1.82	0.62
2:E:1718:THR:HA	2:E:1731:TYR:CD2	2.34	0.62
1:H:2300:ILE:HG22	1:H:2302:VAL:H	1.63	0.62
2:A:2093:GLU:HB3	2:A:2094:PRO:HD2	1.82	0.62
1:B:2090:ILE:HD11	1:B:2278:PRO:HG2	1.81	0.62
1:B:2083:ILE:HD12	1:B:2118:ILE:HG13	1.80	0.62
2:C:1210:MET:HE1	2:C:1224:CYS:N	2.15	0.62
2:E:1407:LYS:NZ	2:E:1543:SER:O	2.32	0.62
2:E:532:ILE:HD11	2:E:724:PHE:CD2	2.35	0.62
2:G:1980:VAL:HA	2:G:1983:LEU:CD2	2.29	0.62
2:G:2085:ASP:OD2	2:G:2088:ASN:HB3	1.99	0.62
2:G:2115:VAL:H	2:G:2125:SER:HB3	1.63	0.62
1:H:2059:ARG:NH1	1:H:2193:THR:O	2.33	0.62
2:A:1530:ARG:CD	2:A:1537:MET:HB3	2.26	0.62
2:A:2020:PRO:HA	2:A:2023:VAL:HG22	1.82	0.62
2:C:1386:THR:HG22	2:C:1564:TYR:CD1	2.34	0.62
2:C:1571:ARG:NH1	2:C:1573:VAL:O	2.32	0.62
2:C:649:THR:O	2:C:1586:HIS:ND1	2.32	0.62
2:C:923:GLN:HA	2:C:926:ILE:HD13	1.82	0.62
2:E:936:GLN:O	2:E:938:PRO:HD3	2.00	0.62
2:A:2054:LYS:NZ	2:A:2054:LYS:HB2	2.13	0.62
2:A:772:LEU:HD11	2:A:876:VAL:HG22	1.82	0.62
2:C:1924:ILE:CD1	2:C:1946:VAL:HB	2.29	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:2046:ASN:CG	2:E:2047:PRO:HD2	2.21	0.62
2:G:1103:GLU:HB2	2:G:1104:PRO:HD2	1.80	0.62
2:A:1685:LYS:HG3	2:A:1708:PHE:HE1	1.63	0.61
2:C:1067:PHE:CE2	2:C:1112:LEU:HD22	2.34	0.61
2:E:1982:ILE:HD13	2:E:1991:ALA:HB1	1.81	0.61
1:F:2064:TYR:N	1:F:2197:VAL:O	2.33	0.61
2:G:1894:LYS:NZ	2:G:1901:ILE:HD12	2.15	0.61
2:A:500:LYS:HE3	2:A:502:ARG:HB3	1.82	0.61
2:C:1264:HIS:O	2:C:1326:ARG:NH1	2.30	0.61
2:C:1774:LEU:HD12	2:C:1775:PRO:HD2	1.82	0.61
2:C:686:ARG:O	2:C:690:THR:HG22	2.00	0.61
2:G:1792:ILE:HG21	2:G:1854:ILE:CD1	2.25	0.61
2:G:1930:VAL:HG22	2:G:1949:GLN:OE1	2.00	0.61
2:C:1025:THR:HG23	2:C:1027:LYS:HG2	1.82	0.61
2:C:1458:VAL:CG2	2:C:1477:ILE:HG22	2.30	0.61
2:C:1852:ARG:O	2:C:1853:ILE:HG13	1.99	0.61
2:C:663:ASP:HA	2:C:699:LEU:HB2	1.80	0.61
2:C:729:ARG:HH21	2:C:904:GLY:HA2	1.65	0.61
2:E:1203:PHE:HB3	2:E:1232:ARG:NH2	2.15	0.61
2:E:926:ILE:N	2:E:927:PRO:HD2	2.15	0.61
2:G:1433:PHE:HB2	2:G:1436:LEU:HD23	1.80	0.61
2:G:1629:LEU:HD12	2:G:1630:THR:N	2.15	0.61
2:G:822:THR:HG23	2:G:825:LYS:HB2	1.80	0.61
2:C:1358:PRO:HB2	2:C:1378:GLN:HG3	1.83	0.61
2:E:2021:GLU:O	2:E:2024:LYS:HG2	2.00	0.61
2:E:2169:LYS:HD2	2:E:2183:ASP:HB2	1.82	0.61
2:E:541:PHE:HB3	2:E:542:LEU:HD22	1.82	0.61
1:F:2053:THR:HA	1:F:2056:LEU:CD1	2.31	0.61
1:F:2149:GLY:HA2	1:F:2180:TRP:CZ3	2.35	0.61
2:G:1145:PHE:CE1	2:G:1161:LEU:HB2	2.35	0.61
2:G:1794:THR:HG22	2:G:1796:MET:HG2	1.83	0.61
2:G:1836:TYR:CD2	2:G:1837:LEU:HD12	2.34	0.61
2:A:1486:VAL:HA	2:A:1489:ARG:HD3	1.81	0.61
2:A:574:ASN:ND2	2:A:578:GLU:HG2	2.16	0.61
2:C:1491:TRP:CH2	2:C:1796:MET:HG3	2.35	0.61
2:C:1854:ILE:CG2	2:C:1863:VAL:HG22	2.30	0.61
2:E:1421:LYS:O	2:E:1423:ASP:N	2.33	0.61
2:E:654:THR:O	2:E:657:VAL:HG22	2.00	0.61
2:G:1788:PHE:O	2:G:1792:ILE:HG12	2.01	0.61
1:H:2083:ILE:HG23	1:H:2246:PHE:CE1	2.35	0.61
2:A:1998:SER:O	2:A:2002:VAL:HG23	2.01	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1889:LEU:CD1	2:C:1901:ILE:HD13	2.31	0.61
2:C:2045:GLU:O	2:C:2048:ASN:N	2.33	0.61
1:F:2092:ASP:OD1	1:F:2093:LEU:N	2.33	0.61
1:F:2068:VAL:HG11	1:F:2235:GLN:HB2	1.82	0.61
2:G:2025:VAL:CG2	2:G:2056:LEU:HD22	2.31	0.61
1:B:2255:ASN:HB3	1:B:2286:HIS:CD2	2.35	0.61
2:C:1921:LEU:HD22	2:C:1942:PHE:CE2	2.34	0.61
2:C:768:ARG:HH22	2:C:802:LEU:HB3	1.63	0.61
2:G:963:ARG:HD2	2:G:1003:VAL:HG13	1.82	0.61
2:G:1685:LYS:HG3	2:G:1708:PHE:HE1	1.66	0.61
2:G:2083:VAL:HA	2:G:2097:LEU:CD1	2.30	0.61
2:G:512:VAL:HG11	2:G:526:THR:O	2.00	0.61
1:H:2101:LEU:HD11	1:H:2151:ILE:HG13	1.82	0.61
2:A:1613:VAL:HG22	2:A:1714:VAL:CG2	2.30	0.61
2:A:1856:MET:HB3	2:A:1863:VAL:HG12	1.83	0.61
2:C:1600:LEU:O	2:C:1604:GLN:HG2	2.00	0.61
2:C:2017:ASN:OD1	2:C:2065:GLN:NE2	2.33	0.61
1:D:2220:VAL:HG13	1:D:2222:ASN:H	1.65	0.61
2:E:544:ASP:OD1	2:E:567:ARG:NH2	2.26	0.61
2:G:1243:THR:HG22	2:G:1244:ARG:H	1.66	0.61
1:H:2074:ASP:O	1:H:2111:GLN:HB3	2.01	0.61
2:A:1560:LYS:HA	2:A:1563:ILE:CG1	2.30	0.61
2:C:1165:LYS:HD3	2:C:1328:MET:HA	1.83	0.61
2:C:670:ASP:OD2	2:C:897:GLN:NE2	2.33	0.61
2:G:1236:GLN:HA	2:G:1334:MET:CE	2.30	0.61
2:G:1858:GLU:O	2:G:1859:ASP:HB3	2.01	0.61
2:G:828:LEU:N	2:G:829:PRO:HD2	2.16	0.61
2:A:1035:ARG:NH1	2:A:1146:GLU:OE2	2.31	0.61
2:A:2085:ASP:HB3	2:A:2088:ASN:HB3	1.82	0.61
2:E:1978:ALA:C	2:E:1982:ILE:HD11	2.21	0.61
2:G:1426:ARG:CG	2:G:1499:THR:CG2	2.79	0.61
2:A:1747:SER:O	2:A:1749:ASP:N	2.31	0.60
2:C:1429:TYR:HB3	2:C:1478:LEU:HD22	1.83	0.60
2:C:1590:LEU:HD11	2:C:1594:MET:HE2	1.82	0.60
2:E:1398:LEU:HD21	2:E:1552:ILE:HG13	1.82	0.60
2:E:1979:ILE:HG12	2:E:1994:ALA:HB3	1.83	0.60
2:E:760:VAL:HG13	2:E:761:LEU:H	1.66	0.60
2:E:1431:ALA:HB3	2:E:1437:VAL:HG12	1.84	0.60
2:E:1398:LEU:CD2	2:E:1552:ILE:HG13	2.31	0.60
1:H:2090:ILE:HG23	1:H:2280:PRO:HA	1.82	0.60
2:A:1385:GLN:HG2	2:A:1566:PHE:HZ	1.66	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:1712:LEU:HA	2:A:1753:ARG:O	2.01	0.60
2:A:1903:THR:HG21	2:A:1945:PHE:HA	1.82	0.60
2:A:837:ALA:HA	2:A:844:ARG:NH1	2.17	0.60
2:C:1082:GLU:OE1	2:C:1126:LEU:HG	2.00	0.60
2:C:457:LEU:HD23	2:C:458:VAL:N	2.16	0.60
2:E:1248:ARG:NH1	2:E:1305:GLU:OE2	2.33	0.60
2:E:2050:ALA:HB3	2:E:2054:LYS:CE	2.25	0.60
2:G:2183:ASP:OD1	2:G:2184:PRO:HD3	2.01	0.60
2:G:533:GLN:OE1	2:G:533:GLN:N	2.33	0.60
2:A:1090:LEU:HD23	2:A:1090:LEU:O	2.00	0.60
1:B:2047:ARG:NH2	2:A:1093:VAL:O	2.34	0.60
2:C:1489:ARG:O	2:C:1794:THR:HG21	2.01	0.60
2:C:1509:HIS:HD2	2:C:1544:VAL:H	1.48	0.60
2:C:1672:TYR:CE1	2:C:1702:VAL:HG11	2.36	0.60
2:C:1854:ILE:HB	2:C:1863:VAL:CG1	2.31	0.60
2:C:773:ILE:CD1	2:C:860:VAL:HG13	2.31	0.60
2:E:585:LYS:HZ3	2:E:632:GLN:HA	1.66	0.60
2:G:1353:LEU:HD12	2:G:1355:ASP:HB2	1.81	0.60
2:G:1426:ARG:CB	2:G:1499:THR:HG23	2.31	0.60
2:G:2171:PHE:HB3	2:G:2183:ASP:CA	2.24	0.60
1:H:2205:THR:HB	1:H:2206:PRO:HD2	1.83	0.60
2:A:1883:GLU:O	2:A:1887:LEU:HG	2.01	0.60
2:E:2097:LEU:HB2	2:E:2158:PHE:CE2	2.34	0.60
1:F:2220:VAL:HG22	1:F:2221:ASP:H	1.66	0.60
2:G:1555:TRP:HA	2:G:1814:ARG:NH2	2.17	0.60
2:A:2005:MET:SD	2:A:2014:GLN:HG3	2.42	0.60
2:C:1145:PHE:CE1	2:C:1161:LEU:HB2	2.37	0.60
2:C:2042:ASN:HB2	2:C:2043:PRO:HD2	1.84	0.60
2:C:646:ARG:HA	2:C:957:LEU:HD11	1.83	0.60
2:C:798:ILE:HA	2:C:801:ILE:HG22	1.82	0.60
2:E:1247:LEU:HD13	2:E:1310:ILE:HG13	1.83	0.60
2:E:1445:GLN:OE1	2:E:1449:SER:OG	2.20	0.60
2:E:1460:LEU:HG	2:E:1467:ASP:OD1	2.01	0.60
2:G:1021:TYR:HD1	2:G:1028:MET:HG2	1.67	0.60
2:G:1401:ALA:O	2:G:1544:VAL:HA	2.02	0.60
2:G:2100:HIS:NE2	2:G:2102:GLU:OE1	2.34	0.60
2:A:1696:LEU:HD22	2:A:1708:PHE:HD2	1.67	0.60
2:A:1879:TYR:CE1	2:A:1880:MET:HG3	2.36	0.60
2:C:1025:THR:HG21	2:C:1027:LYS:NZ	2.17	0.60
2:E:517:GLU:HG2	2:E:520:ARG:NH1	2.12	0.60
2:E:614:VAL:HG12	2:E:633:VAL:HB	1.83	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:1653:LEU:HD12	2:G:1654:ASP:N	2.17	0.60
2:G:504:ASP:O	2:G:506:THR:N	2.34	0.60
2:G:518:TRP:CZ3	2:G:519:ALA:HB2	2.37	0.60
2:E:1596:LYS:HB2	2:E:1597:PRO:HD3	1.81	0.60
2:E:736:GLU:H	2:E:918:ILE:HG22	1.64	0.60
2:E:870:ASN:HA	2:E:905:ARG:HH12	1.67	0.60
2:G:1452:ARG:N	2:G:1452:ARG:HD2	2.14	0.60
2:G:1980:VAL:O	2:G:1983:LEU:HG	2.02	0.60
2:A:1214:LEU:CD1	2:A:1216:MET:HB2	2.31	0.60
2:A:1912:GLN:O	2:A:1943:LYS:NZ	2.32	0.60
2:A:1982:ILE:HG23	2:A:1991:ALA:HB2	1.83	0.60
2:C:1025:THR:CG2	2:C:1027:LYS:HG2	2.30	0.60
2:C:978:ARG:HA	2:C:978:ARG:HH11	1.66	0.60
2:E:1209:ARG:HA	2:E:1212:GLU:HG2	1.83	0.60
2:G:1185:PRO:HG2	2:G:1188:ILE:HG12	1.82	0.60
2:G:1314:MET:HE2	2:G:1343:LEU:HD11	1.84	0.60
2:G:1849:SER:CA	2:G:1854:ILE:HG22	2.32	0.60
1:B:2276:ASP:OD1	1:B:2277:THR:N	2.33	0.60
2:C:1458:VAL:HG23	2:C:1477:ILE:HG22	1.83	0.60
2:C:1574:PRO:HG2	2:C:1751:ARG:CB	2.32	0.60
2:C:941:SER:HB3	2:C:974:TYR:HD2	1.67	0.60
2:E:1408:THR:HG21	2:E:1440:ARG:NH1	2.16	0.60
2:E:1386:THR:HG22	2:E:1564:TYR:CD2	2.36	0.60
2:E:1979:ILE:HG22	2:E:1983:LEU:HD22	1.84	0.60
2:E:585:LYS:NZ	2:E:631:THR:O	2.35	0.60
2:E:827:LEU:O	2:E:832:PHE:N	2.27	0.60
2:E:978:ARG:HB3	2:E:986:TYR:CE1	2.37	0.60
1:F:2269:LYS:HG3	1:F:2270:PRO:HD2	1.83	0.60
2:G:1606:SER:HB3	2:G:1609:GLN:HB2	1.84	0.60
2:G:1954:ARG:NE	2:G:2004:ALA:O	2.30	0.60
2:A:1586:HIS:HB3	2:A:1589:SER:HB2	1.83	0.59
2:A:466:ASP:OD1	2:A:467:GLN:NE2	2.34	0.59
2:A:777:SER:HB3	2:A:780:GLU:CB	2.31	0.59
2:C:1975:LEU:HD12	2:C:1978:ALA:HB3	1.82	0.59
2:E:1743:ALA:C	2:E:1744:LEU:HD12	2.23	0.59
2:E:808:THR:O	2:E:809:ARG:HG2	2.02	0.59
2:G:1418:HIS:NE2	2:G:1501:GLU:OE1	2.35	0.59
2:G:501:LYS:HE3	2:G:501:LYS:N	2.18	0.59
2:A:1390:LEU:HA	2:A:1538:ARG:NH2	2.16	0.59
2:E:1286:ASP:OD1	2:E:1287:VAL:N	2.36	0.59
2:E:1485:ASP:O	2:E:1489:ARG:HG2	2.02	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:1982:ILE:HB	2:E:1991:ALA:CB	2.29	0.59
2:G:1517:TYR:HB2	2:G:1780:LEU:HD23	1.84	0.59
2:G:1862:THR:HG22	2:G:1863:VAL:N	2.17	0.59
2:G:578:GLU:HG3	2:G:579:ILE:H	1.66	0.59
2:G:978:ARG:HA	2:G:978:ARG:HH11	1.67	0.59
2:A:557:LYS:N	3:A:2201:ACT:OXT	2.35	0.59
2:A:895:SER:HB3	2:A:897:GLN:NE2	2.16	0.59
2:C:1794:THR:O	2:C:1796:MET:HG2	2.02	0.59
2:C:1793:SER:HA	2:C:1865:PRO:CG	2.32	0.59
2:E:2005:MET:HG2	2:E:2006:TRP:H	1.67	0.59
2:E:2189:ASN:OD1	2:E:2190:VAL:N	2.35	0.59
2:E:775:VAL:HG22	2:E:776:HIS:H	1.67	0.59
2:G:1495:LYS:CA	2:G:1498:GLN:HG2	2.29	0.59
2:A:1914:ARG:HB2	2:A:1917:GLU:HG3	1.84	0.59
2:A:887:GLU:HG2	2:A:1132:TYR:CE1	2.38	0.59
2:E:1964:ASP:O	2:E:1965:GLN:HB3	2.01	0.59
2:E:736:GLU:HB2	2:E:918:ILE:CG2	2.32	0.59
2:E:825:LYS:HD2	2:E:828:LEU:HG	1.84	0.59
2:A:1784:LEU:CD1	2:A:1840:LEU:HD11	2.32	0.59
2:A:763:HIS:HA	2:A:767:ASN:HB2	1.85	0.59
2:C:1629:LEU:HD21	2:C:1669:VAL:HG23	1.83	0.59
2:G:1618:ARG:HD3	2:G:1674:GLU:CG	2.32	0.59
2:G:862:THR:HG23	2:G:864:THR:H	1.67	0.59
2:A:1738:GLN:OE1	2:A:1742:LYS:NZ	2.35	0.59
2:A:1899:LEU:HG	2:A:1997:MET:HE1	1.83	0.59
2:C:1380:ASN:ND2	2:C:1383:GLN:HG2	2.18	0.59
2:C:1673:HIS:CE1	2:C:1675:ALA:HB3	2.37	0.59
2:G:1968:ILE:HA	2:G:1971:LYS:CB	2.33	0.59
2:G:716:ASP:HB3	2:G:719:LYS:HB2	1.84	0.59
2:A:1784:LEU:HD12	2:A:1840:LEU:HD11	1.85	0.59
2:A:775:VAL:HG21	2:A:780:GLU:HG3	1.84	0.59
2:C:1285:HIS:O	2:C:1761:VAL:HG11	2.03	0.59
2:C:1907:GLU:OE1	2:C:1907:GLU:N	2.36	0.59
2:C:2013:LYS:O	2:C:2013:LYS:HD3	2.03	0.59
2:C:2100:HIS:O	2:C:2101:ILE:HG22	2.02	0.59
2:C:626:GLN:HG2	2:C:1266:VAL:HG21	1.85	0.59
2:E:1571:ARG:NH2	2:E:1743:ALA:O	2.36	0.59
2:A:813:GLN:HB3	2:A:829:PRO:HA	1.85	0.59
2:C:522:PRO:HB2	2:C:562:MET:HE1	1.84	0.59
2:E:1434:GLN:NE2	2:E:1438:ASP:OD1	2.36	0.59
2:G:1426:ARG:CG	2:G:1499:THR:HG21	2.33	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:2083:ILE:HG22	1:H:2118:ILE:HD12	1.85	0.59
2:A:1415:LEU:HD11	2:A:1476:LEU:HD22	1.83	0.59
1:B:2220:VAL:HG13	1:B:2222:ASN:N	2.18	0.59
2:C:2134:GLU:CD	2:C:2168:LEU:HD13	2.24	0.59
2:C:454:PRO:HD3	2:C:963:ARG:NH1	2.18	0.59
2:C:617:LEU:HB3	2:C:636:THR:HB	1.84	0.59
2:E:1618:ARG:NH1	2:E:1963:LYS:HB3	2.18	0.59
2:E:760:VAL:O	2:E:764:VAL:HG12	2.02	0.59
2:E:772:LEU:O	2:E:772:LEU:HD12	2.02	0.59
1:F:2071:ASP:OD1	1:F:2072:VAL:N	2.35	0.59
1:H:2120:MET:O	1:H:2249:PRO:HD3	2.03	0.59
2:A:1021:TYR:HD1	2:A:1028:MET:HG2	1.68	0.58
2:A:521:ILE:HG23	2:A:522:PRO:HD3	1.85	0.58
2:C:521:ILE:HB	2:C:522:PRO:HD3	1.83	0.58
2:E:1431:ALA:HB3	2:E:1437:VAL:CG1	2.33	0.58
2:G:2183:ASP:CG	2:G:2184:PRO:HD3	2.23	0.58
2:G:630:GLU:HG3	2:G:631:THR:HG23	1.85	0.58
2:A:862:THR:HG23	2:A:864:THR:H	1.69	0.58
2:C:887:GLU:HG2	2:C:1132:TYR:CE1	2.38	0.58
2:C:1391:TYR:HD1	2:C:1413:PHE:HB3	1.68	0.58
2:C:1562:ASP:N	2:C:1562:ASP:OD1	2.33	0.58
2:C:813:GLN:CB	2:C:829:PRO:HA	2.25	0.58
2:C:861:CYS:SG	2:C:865:LEU:HD23	2.43	0.58
2:C:941:SER:HB3	2:C:974:TYR:CD2	2.38	0.58
2:G:1431:ALA:O	2:G:1481:PRO:HD3	2.02	0.58
2:G:1496:ASN:O	2:G:1499:THR:HG22	2.03	0.58
2:A:2134:GLU:HB3	2:A:2168:LEU:HB3	1.84	0.58
1:B:2114:GLU:OE2	1:B:2116:ARG:NH1	2.36	0.58
2:C:1434:GLN:HA	2:C:1437:VAL:HG22	1.84	0.58
2:C:2020:PRO:O	2:C:2023:VAL:HG22	2.04	0.58
2:C:834:ILE:HG23	2:C:839:MET:HE1	1.83	0.58
2:E:1023:GLU:N	2:E:1023:GLU:OE1	2.36	0.58
2:E:1902:VAL:CG1	2:E:1971:LYS:HE3	2.32	0.58
2:E:1983:LEU:HD21	2:E:2143:ILE:HD13	1.85	0.58
2:E:2102:GLU:CB	2:E:2151:GLU:HG2	2.34	0.58
2:E:551:ALA:HB2	2:E:724:PHE:HD2	1.68	0.58
2:G:1529:ILE:O	2:G:1533:THR:HG22	2.03	0.58
1:H:2251:THR:HG23	1:H:2253:LYS:H	1.69	0.58
2:C:1451:LEU:O	2:C:1453:GLY:N	2.36	0.58
2:C:1673:HIS:HA	2:C:1702:VAL:HG21	1.85	0.58
2:C:1902:VAL:HG11	2:C:1971:LYS:HD2	1.84	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:828:LEU:N	2:C:829:PRO:HD2	2.18	0.58
1:F:2296:GLU:HB2	2:E:1118:ARG:O	2.03	0.58
2:E:580:ASP:OD2	2:E:583:ALA:HB2	2.04	0.58
2:E:761:LEU:HD12	2:E:762:GLU:N	2.18	0.58
1:F:2181:LYS:O	1:F:2183:GLN:N	2.35	0.58
2:G:1422:LYS:HD2	2:G:1423:ASP:H	1.68	0.58
2:G:1400:ALA:HB1	2:G:1544:VAL:O	2.03	0.58
2:G:1792:ILE:HG22	2:G:1865:PRO:CB	2.33	0.58
2:A:992:TYR:CD2	2:A:1001:LYS:HD3	2.37	0.58
2:A:926:ILE:N	2:A:927:PRO:HD2	2.19	0.58
2:C:1525:ARG:NH1	2:C:1791:GLU:OE2	2.36	0.58
2:C:617:LEU:HA	2:C:622:GLN:HE22	1.66	0.58
2:C:686:ARG:NH1	2:C:689:GLN:OE1	2.35	0.58
2:C:926:ILE:N	2:C:927:PRO:HD2	2.19	0.58
1:F:2045:GLU:OE2	1:F:2094:ARG:NH1	2.36	0.58
1:F:2279:LEU:CD2	1:F:2285:GLN:HG3	2.32	0.58
2:G:822:THR:HG21	2:G:825:LYS:HD3	1.85	0.58
2:A:449:VAL:N	2:A:999:GLU:OE2	2.36	0.58
2:C:1649:ILE:HG21	2:C:1687:LEU:HD21	1.85	0.58
2:C:1598:THR:HG21	2:C:1716:MET:CE	2.33	0.58
2:C:2015:ILE:HG23	2:C:2016:PRO:HD2	1.84	0.58
2:C:608:GLU:HB3	2:C:609:PRO:HD3	1.85	0.58
1:D:2047:ARG:NH2	2:C:1093:VAL:O	2.36	0.58
2:E:825:LYS:HE3	2:E:834:ILE:CG2	2.34	0.58
2:A:1065:ARG:NH2	2:A:1099:GLU:HB3	2.15	0.58
1:B:2049:ARG:NH1	1:B:2282:TYR:OH	2.36	0.58
2:C:1401:ALA:O	2:C:1544:VAL:HA	2.03	0.58
2:C:1613:VAL:HG22	2:C:1714:VAL:CG2	2.33	0.58
2:C:2155:LYS:HE3	2:C:2156:LEU:O	2.03	0.58
2:C:2169:LYS:HA	2:C:2185:SER:HA	1.85	0.58
2:C:736:GLU:HB2	2:C:918:ILE:CD1	2.33	0.58
2:E:1124:LEU:H	2:E:1124:LEU:HD12	1.68	0.58
2:G:1722:GLU:OE2	2:G:1724:LYS:HB3	2.04	0.58
2:G:1979:ILE:HD11	2:G:1991:ALA:HB1	1.86	0.58
2:G:1995:MET:HE1	2:G:2173:MET:H	1.67	0.58
2:A:1928:VAL:HG21	2:A:1949:GLN:CB	2.24	0.58
2:C:1427:ALA:HB3	2:C:1476:LEU:HD12	1.84	0.58
2:E:992:TYR:CD2	2:E:1001:LYS:HB2	2.39	0.58
2:G:808:THR:O	2:G:811:VAL:HG12	2.03	0.58
1:H:2109:ASN:HB3	1:H:2112:VAL:HG12	1.84	0.58
2:A:1353:LEU:HD21	2:A:1381:LYS:HE3	1.85	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:612:ILE:HG23	2:A:632:GLN:CB	2.33	0.58
2:C:1567:SER:O	2:C:1570:VAL:HG22	2.04	0.58
2:C:1958:PRO:CD	2:C:1961:LEU:HD12	2.30	0.58
1:D:2117:CYS:HB2	1:D:2245:PHE:CZ	2.39	0.58
1:F:2082:ASN:ND2	1:F:2083:ILE:HG23	2.19	0.58
2:G:2044:GLU:O	2:G:2045:GLU:HG2	2.04	0.58
2:G:973:THR:HG23	2:G:976:PHE:H	1.69	0.58
2:A:1275:GLU:HB3	2:A:1279:GLY:HA2	1.85	0.58
2:A:1921:LEU:HD12	2:A:1921:LEU:H	1.69	0.58
2:A:737:PHE:CE2	2:A:933:LEU:HD12	2.39	0.58
2:C:1530:ARG:NH1	2:C:1537:MET:O	2.35	0.58
2:C:1546:LEU:HD13	2:C:1552:ILE:HD12	1.84	0.58
2:C:1672:TYR:CD1	2:C:1702:VAL:HG11	2.39	0.58
2:C:1827:ASP:OD2	2:C:1829:THR:OG1	2.22	0.58
2:E:1502:LEU:CD2	2:E:1504:ILE:HG13	2.34	0.58
2:E:615:SER:OG	2:E:631:THR:HG21	2.02	0.58
2:E:970:LEU:O	2:E:973:THR:HG22	2.03	0.58
1:F:2109:ASN:ND2	1:F:2112:VAL:HG23	2.19	0.58
1:F:2277:THR:HG23	1:F:2278:PRO:HD2	1.86	0.58
2:G:1207:PRO:HB2	2:G:1208:PRO:HD3	1.86	0.58
2:G:1677:SER:O	2:G:1681:LYS:HG3	2.04	0.58
2:G:471:LEU:CD2	2:G:473:THR:HG23	2.34	0.58
1:H:2086:LYS:O	1:H:2090:ILE:HG12	2.04	0.58
1:H:2077:TYR:CE1	1:H:2186:LEU:HD11	2.39	0.58
1:H:2216:LYS:O	1:H:2216:LYS:HD3	2.03	0.58
2:A:2034:ILE:HG21	2:A:2074:TYR:CE2	2.38	0.57
1:B:2309:ALA:OXT	2:A:619:GLY:N	2.37	0.57
2:A:967:VAL:HG21	2:A:1003:VAL:HG22	1.85	0.57
2:C:1142:ARG:HG2	2:C:1164:CYS:SG	2.44	0.57
2:C:1233:VAL:CG1	2:C:1253:ILE:HG23	2.34	0.57
1:D:2215:ASN:OD1	1:D:2218:PRO:HD3	2.04	0.57
1:F:2302:VAL:CG2	2:E:1131:VAL:HG21	2.34	0.57
2:E:1487:LEU:HD23	2:E:1488:SER:N	2.19	0.57
2:G:1436:LEU:HD21	2:G:1704:TRP:HB3	1.85	0.57
2:G:1951:HIS:CE1	2:G:2004:ALA:HB2	2.38	0.57
2:A:1766:TYR:O	2:A:1770:LEU:HB2	2.04	0.57
1:B:2045:GLU:HG2	1:B:2046:TRP:N	2.19	0.57
2:C:1089:LEU:CD1	2:C:1119:LEU:HD13	2.35	0.57
2:C:1509:HIS:CD2	2:C:1544:VAL:H	2.22	0.57
1:D:2151:ILE:HG12	1:D:2188:VAL:HB	1.85	0.57
2:E:1573:VAL:HG13	2:E:1746:PRO:HG3	1.84	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:1966:GLU:H	2:E:1968:ILE:HG12	1.70	0.57
2:E:478:ARG:HB2	2:E:936:GLN:NE2	2.19	0.57
2:G:1552:ILE:O	2:G:1556:ILE:HG12	2.03	0.57
2:G:862:THR:OG1	2:G:863:ALA:N	2.35	0.57
2:G:954:GLU:O	2:G:959:ASN:ND2	2.36	0.57
2:G:646:ARG:HA	2:G:957:LEU:HD11	1.86	0.57
2:A:903:LEU:HD12	2:A:933:LEU:HD21	1.85	0.57
1:B:2047:ARG:HD3	2:A:1098:LYS:HE3	1.87	0.57
2:C:1618:ARG:NH1	2:C:1960:ASP:OD1	2.37	0.57
2:C:1871:ILE:HD12	2:C:1872:ALA:N	2.19	0.57
2:C:1979:ILE:HD12	2:C:1980:VAL:N	2.18	0.57
2:C:729:ARG:CZ	2:C:733:LEU:HD12	2.34	0.57
2:C:797:THR:OG1	2:C:801:ILE:HB	2.05	0.57
2:C:862:THR:HG23	2:C:864:THR:H	1.69	0.57
1:D:2232:GLU:OE2	1:D:2234:ARG:NH1	2.37	0.57
2:E:1114:ALA:HA	2:E:1119:LEU:HD12	1.85	0.57
2:E:1530:ARG:HB3	2:E:1537:MET:HE1	1.86	0.57
2:G:1185:PRO:HD2	2:G:1188:ILE:HD11	1.86	0.57
2:G:1688:TYR:HB2	2:G:1693:ILE:HD11	1.85	0.57
2:A:1504:ILE:CD1	2:A:1540:VAL:HG13	2.34	0.57
2:A:786:LYS:HE3	2:A:824:LEU:HD21	1.84	0.57
2:E:1184:CYS:SG	2:E:1188:ILE:HD11	2.44	0.57
2:E:1411:ALA:HB1	2:E:1504:ILE:HD13	1.85	0.57
2:G:1286:ASP:OD1	2:G:1287:VAL:N	2.37	0.57
2:G:1380:ASN:HB3	2:G:1383:GLN:OE1	2.05	0.57
2:G:1354:LEU:CD2	2:G:1385:GLN:HB2	2.34	0.57
2:G:1426:ARG:O	2:G:1500:VAL:HA	2.04	0.57
2:G:1648:GLN:C	2:G:1649:ILE:HD12	2.24	0.57
2:G:572:ASN:ND2	2:G:584:PHE:HB3	2.19	0.57
2:C:1054:ILE:CD1	2:C:1144:ILE:HG23	2.35	0.57
2:C:1431:ALA:HB1	2:C:1432:PRO:HD2	1.86	0.57
2:C:633:VAL:O	2:C:633:VAL:HG23	2.04	0.57
2:G:1058:MET:HE3	2:G:1063:LEU:HD13	1.87	0.57
1:B:2132:LEU:HB3	1:B:2133:PRO:HD2	1.87	0.57
2:C:1060:ASP:OD1	2:C:1061:VAL:N	2.36	0.57
2:C:2003:GLN:HG3	2:C:2178:VAL:HG23	1.87	0.57
2:E:2079:LEU:HA	2:E:2101:ILE:HG22	1.85	0.57
2:E:590:ALA:O	2:E:638:PRO:HD3	2.05	0.57
1:F:2068:VAL:HG11	1:F:2235:GLN:CG	2.33	0.57
2:G:1406:GLY:O	2:G:1409:VAL:HG22	2.05	0.57
2:G:1744:LEU:O	2:G:1746:PRO:HD3	2.03	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:1774:LEU:HD12	2:G:1775:PRO:CD	2.31	0.57
2:G:530:ASN:HB3	2:G:533:GLN:OE1	2.05	0.57
2:A:1979:ILE:HG12	2:A:1994:ALA:HB1	1.86	0.57
2:A:2012:LEU:HD13	2:A:2034:ILE:CD1	2.28	0.57
2:C:1380:ASN:O	2:C:1384:THR:HG23	2.04	0.57
2:C:480:PRO:HG2	2:C:496:VAL:HG13	1.87	0.57
2:E:1207:PRO:HB2	2:E:1208:PRO:HD3	1.86	0.57
2:E:500:LYS:HZ2	2:E:502:ARG:HG2	1.68	0.57
2:G:1434:GLN:O	2:G:1437:VAL:HG22	2.04	0.57
2:G:1836:TYR:HD2	2:G:1837:LEU:HD12	1.70	0.57
1:H:2084:LEU:CD2	1:H:2199:LEU:HD11	2.34	0.57
2:A:1067:PHE:CE2	2:A:1112:LEU:HD22	2.39	0.57
2:A:1303:THR:OG1	2:A:1727:ARG:NH2	2.37	0.57
2:A:518:TRP:O	2:A:610:TYR:OH	2.19	0.57
2:A:757:TYR:OH	2:A:796:ASP:OD2	2.18	0.57
1:B:2063:MET:HB3	1:B:2197:VAL:CG2	2.35	0.57
2:C:685:ARG:NH1	2:C:969:TRP:HB2	2.20	0.57
2:E:1274:VAL:HG11	2:E:1308:VAL:HG11	1.87	0.57
2:E:804:HIS:O	2:E:807:GLY:N	2.35	0.57
2:G:1431:ALA:HB3	2:G:1437:VAL:HG12	1.86	0.57
2:G:1860:GLU:OE2	2:G:1861:GLY:N	2.33	0.57
2:G:2066:ALA:O	2:G:2070:THR:N	2.29	0.57
2:C:1065:ARG:NH1	2:C:1099:GLU:HG2	2.19	0.57
2:C:1579:ILE:HD11	2:C:1763:ARG:HH11	1.68	0.57
2:E:562:MET:CE	2:E:606:ARG:HD2	2.34	0.57
1:F:2211:TRP:O	1:F:2215:ASN:HB2	2.04	0.57
1:H:2154:MET:O	1:H:2156:GLY:N	2.37	0.57
2:A:1044:HIS:CE1	2:A:1045:GLU:HG3	2.40	0.57
2:A:1676:LEU:O	2:A:1681:LYS:HE3	2.05	0.57
2:A:1678:GLN:N	2:A:1678:GLN:OE1	2.35	0.57
2:A:1598:THR:HG21	2:A:1716:MET:CE	2.34	0.57
2:A:1972:ILE:O	2:A:1976:LEU:HD13	2.04	0.57
2:A:580:ASP:OD2	2:A:583:ALA:HB2	2.05	0.57
2:A:801:ILE:HG13	2:A:804:HIS:CE1	2.40	0.57
2:A:771:MET:HB3	2:A:875:THR:HB	1.87	0.57
2:C:1854:ILE:CD1	2:C:1866:LEU:HB2	2.35	0.57
2:E:1037:ALA:HB2	2:E:1047:MET:HG3	1.87	0.57
2:G:2033:ASP:HB2	2:G:2036:ASP:HB3	1.86	0.57
2:G:590:ALA:HB3	2:G:596:VAL:CG1	2.35	0.57
1:H:2162:MET:CE	1:H:2202:TRP:HB3	2.34	0.57
1:H:2227:THR:HG22	1:H:2229:THR:HG22	1.87	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:1419:TRP:HH2	2:A:1476:LEU:HB2	1.68	0.56
2:A:1962:ALA:O	2:A:1965:GLN:HB3	2.04	0.56
2:C:1715:VAL:HG22	2:C:1739:MET:HE3	1.86	0.56
2:E:963:ARG:NH2	2:E:1023:GLU:O	2.38	0.56
2:E:1396:ASN:ND2	2:E:1556:ILE:O	2.38	0.56
2:E:557:LYS:HE2	3:E:2201:ACT:H2	1.86	0.56
2:E:778:ARG:HG2	2:E:836:HIS:HB2	1.87	0.56
2:G:1552:ILE:HA	2:G:1555:TRP:HB3	1.86	0.56
2:G:1598:THR:HG23	2:G:1714:VAL:HG21	1.86	0.56
2:G:884:TYR:OH	2:G:1079:ARG:NH1	2.33	0.56
2:G:943:LEU:HD22	2:G:973:THR:OG1	2.05	0.56
2:A:1155:SER:O	2:A:1159:LEU:HD13	2.05	0.56
2:A:1272:ILE:O	2:A:1285:HIS:HA	2.04	0.56
2:A:2046:ASN:N	2:A:2047:PRO:HD2	2.21	0.56
2:A:801:ILE:O	2:A:804:HIS:ND1	2.38	0.56
1:B:2101:LEU:CD2	1:B:2151:ILE:HD11	2.34	0.56
1:D:2296:GLU:HG2	2:C:1120:LYS:N	2.20	0.56
1:D:2276:ASP:OD1	1:D:2277:THR:N	2.33	0.56
2:E:1866:LEU:O	2:E:1868:ALA:N	2.37	0.56
2:E:608:GLU:HB3	2:E:609:PRO:HD3	1.86	0.56
2:E:921:THR:OG1	2:E:922:THR:N	2.38	0.56
2:G:2031:ILE:HG21	2:G:2037:PHE:HD1	1.69	0.56
2:A:473:THR:HG21	2:A:985:LEU:HD22	1.87	0.56
2:C:1721:PHE:HB2	2:C:1728:TYR:CE1	2.41	0.56
2:C:690:THR:HG23	2:C:692:GLU:HG3	1.88	0.56
2:G:2100:HIS:ND1	2:G:2153:ASN:OD1	2.34	0.56
2:G:529:LEU:HD21	2:G:533:GLN:HB2	1.87	0.56
2:C:1025:THR:HG21	2:C:1027:LYS:HZ3	1.68	0.56
2:C:1065:ARG:O	2:C:1069:GLN:HG3	2.05	0.56
2:C:1713:VAL:CG2	2:C:1743:ALA:HB2	2.36	0.56
2:C:2131:VAL:HG11	2:C:2170:LEU:HG	1.88	0.56
2:E:1616:PRO:CG	2:E:1717:GLY:HA3	2.33	0.56
2:E:2049:TYR:HB3	2:E:2053:VAL:CG2	2.36	0.56
2:G:1441:PHE:HB2	2:G:1478:LEU:HD22	1.86	0.56
2:G:1995:MET:CE	2:G:2173:MET:HB2	2.35	0.56
2:A:1143:ALA:O	2:A:1147:ILE:HG13	2.06	0.56
2:A:1465:THR:HG23	2:A:1466:THR:H	1.70	0.56
2:C:1171:MET:HE1	2:C:1180:GLN:HE21	1.70	0.56
2:G:1311:SER:OG	2:G:1313:PRO:HD2	2.06	0.56
2:G:835:HIS:HB3	2:G:861:CYS:HB3	1.87	0.56
2:A:1397:VAL:HG23	2:A:1562:ASP:O	2.05	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:789:ARG:HA	2:A:792:ALA:HB2	1.87	0.56
1:B:2253:LYS:HB3	1:B:2286:HIS:NE2	2.21	0.56
2:C:1360:PRO:HA	2:C:1378:GLN:HA	1.87	0.56
2:C:515:LEU:O	2:C:520:ARG:HD2	2.06	0.56
2:E:1100:SER:HB2	2:E:1106:ALA:HB2	1.88	0.56
2:E:1104:PRO:O	2:E:1108:ILE:HG12	2.05	0.56
2:E:1063:LEU:HD23	2:E:1163:MET:HE3	1.87	0.56
2:G:1685:LYS:HG3	2:G:1708:PHE:CE1	2.40	0.56
2:G:1996:GLU:O	2:G:2000:MET:HG3	2.05	0.56
2:G:515:LEU:HD22	2:G:537:PHE:HZ	1.71	0.56
2:G:686:ARG:O	2:G:690:THR:HG22	2.06	0.56
1:H:2101:LEU:HD21	1:H:2151:ILE:CD1	2.36	0.56
2:A:1251:LEU:HB3	2:A:1304:VAL:HG12	1.88	0.56
2:A:1489:ARG:HA	2:A:1525:ARG:NH1	2.20	0.56
2:A:1530:ARG:HD3	2:A:1537:MET:HE2	1.87	0.56
2:A:2148:VAL:HA	2:A:2152:LEU:HD12	1.88	0.56
2:A:473:THR:HG21	2:A:985:LEU:CD2	2.35	0.56
2:C:493:GLU:HG2	2:C:738:ILE:HG12	1.86	0.56
1:D:2220:VAL:HG22	1:D:2221:ASP:N	2.21	0.56
2:E:1554:GLU:OE2	2:E:1814:ARG:NH2	2.37	0.56
2:E:798:ILE:HD12	2:E:801:ILE:HD13	1.87	0.56
1:F:2101:LEU:HD21	1:F:2151:ILE:CG1	2.35	0.56
2:G:2115:VAL:HB	2:G:2126:GLU:N	2.19	0.56
2:E:1194:ARG:NH1	2:G:2137:THR:OG1	2.39	0.56
1:H:2101:LEU:HD22	1:H:2115:ILE:HD13	1.87	0.56
2:A:1399:VAL:HG13	2:A:1407:LYS:HE3	1.86	0.56
2:A:2169:LYS:HD3	2:A:2185:SER:HA	1.88	0.56
2:A:961:ARG:HE	2:A:1600:LEU:CD1	2.17	0.56
2:C:562:MET:SD	2:C:606:ARG:NH1	2.70	0.56
2:C:835:HIS:ND1	2:C:865:LEU:HB2	2.21	0.56
2:E:1429:TYR:HB3	2:E:1478:LEU:HD22	1.86	0.56
2:E:1975:LEU:O	2:E:1979:ILE:HG13	2.06	0.56
2:G:1312:GLU:HB2	2:G:1313:PRO:HD3	1.88	0.56
2:G:642:ASP:O	2:G:646:ARG:HG3	2.05	0.56
1:H:2139:HIS:CE1	1:H:2141:MET:HG2	2.41	0.56
1:B:2294:PHE:CD1	2:A:1119:LEU:HD21	2.41	0.56
2:A:1839:ASP:O	2:A:1843:THR:OG1	2.23	0.56
2:A:1914:ARG:HB2	2:A:1917:GLU:CG	2.36	0.56
2:C:1272:ILE:O	2:C:1285:HIS:HA	2.04	0.56
2:C:2012:LEU:HD21	2:C:2032:ASN:O	2.06	0.56
2:C:771:MET:HE3	2:C:877:ILE:HD12	1.88	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:963:ARG:N	2:E:1026:GLY:O	2.37	0.56
2:E:1065:ARG:NH2	2:E:1099:GLU:HG3	2.20	0.56
2:E:1768:LYS:O	2:E:1772:GLU:HG2	2.06	0.56
2:E:2005:MET:HG2	2:E:2006:TRP:N	2.21	0.56
2:E:587:VAL:HG21	2:E:641:TRP:CH2	2.40	0.56
2:E:660:ILE:HD11	2:E:696:ILE:HG12	1.87	0.56
2:G:1456:GLU:N	2:G:1456:GLU:OE1	2.39	0.56
2:A:1688:TYR:OH	2:A:1710:ALA:HB2	2.06	0.56
2:A:2051:SER:O	2:A:2054:LYS:HG3	2.05	0.56
2:A:2090:ARG:HG3	2:A:2164:GLY:H	1.71	0.56
2:A:624:THR:O	2:A:628:ILE:HG13	2.06	0.56
2:C:1732:PRO:HG2	2:C:1735:GLU:CG	2.33	0.56
2:C:770:GLN:NE2	2:C:851:PHE:O	2.39	0.56
1:D:2098:ALA:O	1:D:2123:GLN:NE2	2.36	0.56
1:D:2190:VAL:HG22	1:D:2199:LEU:CD2	2.36	0.56
2:E:1552:ILE:O	2:E:1556:ILE:HG12	2.06	0.56
2:E:851:PHE:CD2	2:E:856:ILE:HG21	2.41	0.56
2:A:1390:LEU:HD23	2:A:1410:CYS:O	2.05	0.56
2:A:1969:LEU:HD21	2:A:2121:PRO:HB2	1.88	0.56
2:A:465:PHE:CD2	2:A:471:LEU:HD22	2.41	0.56
2:A:910:GLN:OE1	2:A:910:GLN:N	2.38	0.56
2:C:1700:ARG:NH2	2:C:1735:GLU:OE1	2.38	0.56
2:C:1911:ILE:HD11	2:C:1966:GLU:CG	2.35	0.56
2:C:2002:VAL:HG21	2:C:2176:SER:HB2	1.88	0.56
2:C:622:GLN:CG	2:C:627:GLN:HB2	2.29	0.56
2:C:725:ASP:OD1	2:C:725:ASP:N	2.36	0.56
2:C:798:ILE:O	2:C:800:GLN:N	2.37	0.56
2:E:2093:GLU:N	2:E:2160:VAL:HG21	2.21	0.56
2:E:876:VAL:H	2:E:917:GLY:HA2	1.70	0.56
2:G:1426:ARG:HG3	2:G:1499:THR:HG23	1.84	0.56
2:G:1679:SER:O	2:G:1683:ILE:HG13	2.06	0.56
2:G:654:THR:O	2:G:657:VAL:HG22	2.06	0.56
2:G:936:GLN:O	2:G:938:PRO:HD3	2.05	0.56
2:A:1065:ARG:O	2:A:1069:GLN:HG3	2.06	0.55
2:A:1713:VAL:HG11	2:A:1739:MET:O	2.06	0.55
2:A:926:ILE:O	2:A:930:LEU:HG	2.06	0.55
2:C:454:PRO:HB3	2:C:1003:VAL:HG12	1.89	0.55
2:C:1391:TYR:CB	2:C:1417:ARG:HB2	2.36	0.55
2:E:1972:ILE:O	2:E:1976:LEU:HD13	2.06	0.55
2:G:1457:ILE:CG2	2:G:1476:LEU:HD23	2.29	0.55
2:G:1504:ILE:CD1	2:G:1540:VAL:HG13	2.36	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:1930:VAL:C	2:G:1931:LYS:HD2	2.27	0.55
2:G:1924:ILE:HG22	2:G:1946:VAL:CG2	2.36	0.55
2:G:2020:PRO:O	2:G:2023:VAL:HG22	2.05	0.55
2:G:639:GLU:OE1	2:G:639:GLU:N	2.38	0.55
2:A:2148:VAL:HG13	2:A:2149:GLY:H	1.71	0.55
1:B:2079:MET:HG3	1:B:2080:PRO:CD	2.37	0.55
2:C:1460:LEU:HD23	2:C:1479:ALA:CB	2.35	0.55
2:C:1566:PHE:HB3	2:C:1570:VAL:HG21	1.87	0.55
2:C:1852:ARG:HB3	2:C:1886:LEU:HD13	1.89	0.55
2:C:565:MET:O	2:C:569:ILE:HG12	2.06	0.55
1:D:2105:SER:OG	1:D:2113:LYS:HG2	2.05	0.55
2:E:1073:PHE:HE1	2:E:1133:VAL:HA	1.68	0.55
2:E:813:GLN:NE2	2:E:855:HIS:O	2.39	0.55
2:G:2135:GLU:O	2:G:2137:THR:N	2.40	0.55
2:A:1609:GLN:HG3	2:A:1711:HIS:ND1	2.21	0.55
2:C:532:ILE:HD11	2:C:551:ALA:CB	2.37	0.55
2:C:936:GLN:O	2:C:938:PRO:HD3	2.07	0.55
2:C:970:LEU:O	2:C:973:THR:HG22	2.06	0.55
2:E:1919:GLY:O	2:E:1923:ARG:N	2.38	0.55
2:E:702:THR:CG2	2:E:935:GLN:HG2	2.37	0.55
2:G:1894:LYS:CE	2:G:1898:ILE:HG12	2.35	0.55
2:G:2042:ASN:HB2	2:G:2043:PRO:CD	2.35	0.55
2:C:626:GLN:HG2	2:C:1266:VAL:CG2	2.36	0.55
2:C:799:ASN:OD1	2:C:800:GLN:N	2.39	0.55
2:E:1724:LYS:HG3	2:E:1725:GLU:HG3	1.87	0.55
2:E:2034:ILE:HG12	2:E:2074:TYR:CE2	2.42	0.55
2:E:556:GLY:N	3:E:2201:ACT:OXT	2.39	0.55
2:E:549:VAL:HG12	2:E:722:PHE:HD2	1.72	0.55
2:A:1992:LEU:HD22	2:A:2173:MET:HG3	1.88	0.55
2:C:1788:PHE:O	2:C:1792:ILE:HG12	2.06	0.55
2:E:1241:PRO:HG3	2:E:1821:SER:HB2	1.89	0.55
2:E:736:GLU:OE1	2:E:759:LYS:NZ	2.34	0.55
1:F:2220:VAL:HG22	1:F:2221:ASP:N	2.21	0.55
2:G:1048:ASP:OD1	2:G:1052:LYS:HE3	2.06	0.55
2:G:1063:LEU:HD23	2:G:1163:MET:CE	2.37	0.55
2:G:1861:GLY:O	2:G:1862:THR:OG1	2.21	0.55
2:A:2015:ILE:HD13	2:A:2069:PHE:CD2	2.41	0.55
2:A:2091:ALA:HB2	2:A:2162:SER:O	2.06	0.55
1:B:2216:LYS:C	1:B:2218:PRO:HD3	2.27	0.55
2:C:620:ASP:OD2	2:C:1326:ARG:HD3	2.06	0.55
1:D:2309:ALA:HB1	2:C:618:THR:HA	1.88	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:1090:LEU:HD21	2:E:1098:LYS:HD3	1.89	0.55
2:E:1445:GLN:NE2	2:E:1457:ILE:O	2.39	0.55
1:F:2227:THR:HB	1:F:2230:MET:CG	2.34	0.55
2:G:740:VAL:HG12	2:G:742:ASP:H	1.72	0.55
2:G:970:LEU:O	2:G:973:THR:HG22	2.06	0.55
2:A:789:ARG:HA	2:A:792:ALA:CB	2.36	0.55
2:A:826:ASP:O	2:A:829:PRO:HD2	2.06	0.55
2:C:1364:LEU:O	2:C:1364:LEU:HD13	2.06	0.55
2:C:1793:SER:HA	2:C:1865:PRO:HB3	1.88	0.55
2:E:1064:PHE:HB3	2:E:1109:ASN:HD21	1.72	0.55
2:E:1445:GLN:HE22	2:E:1457:ILE:H	1.54	0.55
2:E:532:ILE:HD11	2:E:724:PHE:CG	2.41	0.55
1:F:2068:VAL:HG11	1:F:2235:GLN:HG3	1.88	0.55
2:G:1425:GLY:HA2	2:G:1501:GLU:CD	2.27	0.55
2:G:1468:LEU:HD12	2:G:1469:LYS:N	2.22	0.55
2:G:1924:ILE:HG22	2:G:1946:VAL:HG22	1.88	0.55
2:G:500:LYS:HZ3	2:G:502:ARG:HB2	1.72	0.55
2:G:573:ARG:HG2	2:G:579:ILE:HA	1.88	0.55
2:G:967:VAL:HG13	2:G:1002:ARG:CB	2.36	0.55
2:A:1185:PRO:HD2	2:A:1188:ILE:CD1	2.36	0.55
2:A:1696:LEU:HD22	2:A:1708:PHE:CD2	2.41	0.55
2:C:1104:PRO:O	2:C:1108:ILE:HG12	2.06	0.55
2:C:1615:VAL:HG13	2:C:1616:PRO:HD2	1.89	0.55
2:C:607:LEU:HB3	2:C:612:ILE:HD11	1.89	0.55
2:C:654:THR:O	2:C:657:VAL:HG22	2.05	0.55
2:E:1658:GLU:OE1	2:E:1959:ILE:HG21	2.06	0.55
2:E:2102:GLU:HB2	2:E:2151:GLU:HG2	1.88	0.55
1:F:2136:LEU:HD21	1:F:2180:TRP:HE1	1.71	0.55
2:G:1495:LYS:HA	2:G:1498:GLN:CG	2.32	0.55
1:H:2101:LEU:HD11	1:H:2151:ILE:CG1	2.36	0.55
2:A:521:ILE:N	2:A:522:PRO:HD2	2.22	0.55
1:B:2136:LEU:HD11	1:B:2177:HIS:HB3	1.89	0.55
2:C:1233:VAL:HG13	2:C:1253:ILE:HG23	1.89	0.55
2:C:1992:LEU:HD13	2:C:2132:VAL:HG21	1.87	0.55
2:E:2090:ARG:HH22	2:E:2191:ALA:HB3	1.72	0.55
2:E:953:ALA:O	2:E:957:LEU:HD13	2.06	0.55
1:F:2047:ARG:NH2	2:E:1093:VAL:O	2.38	0.55
1:F:2146:GLU:O	1:F:2148:LEU:HD13	2.06	0.55
2:G:2090:ARG:HG2	2:G:2091:ALA:H	1.72	0.55
2:G:2135:GLU:OE1	2:G:2168:LEU:HB3	2.07	0.55
2:G:501:LYS:HG2	2:G:727:SER:O	2.06	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:760:VAL:HA	2:G:771:MET:SD	2.46	0.55
1:H:2253:LYS:NZ	1:H:2285:GLN:HG3	2.22	0.55
2:A:1390:LEU:HD12	2:A:1397:VAL:HG11	1.88	0.55
2:A:788:ILE:O	2:A:792:ALA:HB2	2.07	0.55
2:C:1177:PRO:HG2	2:C:1199:TRP:CD2	2.42	0.55
2:C:1848:LEU:O	2:C:1853:ILE:HB	2.07	0.55
2:E:1243:THR:HG22	2:E:1245:SER:H	1.72	0.55
2:E:1249:ILE:CD1	2:E:1320:ILE:HD11	2.37	0.55
2:E:1272:ILE:O	2:E:1285:HIS:HA	2.06	0.55
2:E:1546:LEU:HD22	2:E:1552:ILE:HD13	1.89	0.55
2:G:1213:LEU:HD23	2:G:1213:LEU:O	2.07	0.55
2:A:840:SER:OG	2:A:843:ASP:OD1	2.25	0.54
2:C:1121:LEU:HB2	2:C:1127:MET:HE1	1.89	0.54
2:C:1460:LEU:HD12	2:C:1461:THR:N	2.21	0.54
2:E:1247:LEU:HD13	2:E:1310:ILE:CG1	2.37	0.54
2:E:2141:LEU:HD23	2:E:2159:VAL:O	2.07	0.54
2:E:522:PRO:HB3	2:E:606:ARG:HD3	1.89	0.54
1:F:2309:ALA:HB1	2:E:618:THR:HA	1.89	0.54
2:G:1972:ILE:HG23	2:G:1973:LEU:HD12	1.90	0.54
2:G:778:ARG:HG3	2:G:836:HIS:CG	2.42	0.54
2:A:1383:GLN:HG2	2:A:1409:VAL:CG2	2.38	0.54
2:A:1702:VAL:HG12	2:A:1706:LEU:HB2	1.89	0.54
2:A:2075:PRO:HA	2:A:2103:ARG:HH21	1.73	0.54
2:C:1107:LYS:O	2:C:1111:LEU:HG	2.06	0.54
2:C:1517:TYR:O	2:C:1521:ILE:HG13	2.07	0.54
2:C:1609:GLN:HG3	2:C:1711:HIS:ND1	2.23	0.54
2:E:851:PHE:HA	2:E:856:ILE:CG2	2.36	0.54
2:G:1074:LYS:HD2	2:G:1075:TYR:CE1	2.41	0.54
2:G:1323:ILE:HG12	2:G:1331:GLU:HG3	1.89	0.54
2:A:1243:THR:HG23	2:A:1347:PHE:CZ	2.43	0.54
2:A:1975:LEU:O	2:A:1979:ILE:HG13	2.08	0.54
2:A:650:ASP:O	2:A:654:THR:HG23	2.08	0.54
2:A:881:THR:CG2	2:A:893:GLU:HG3	2.37	0.54
2:C:2002:VAL:HG21	2:C:2176:SER:HB3	1.89	0.54
2:E:1615:VAL:HG13	2:E:1616:PRO:HD2	1.88	0.54
2:E:1774:LEU:HD12	2:E:1775:PRO:CD	2.31	0.54
2:E:478:ARG:H	2:E:936:GLN:HE22	1.54	0.54
2:E:792:ALA:HA	2:E:798:ILE:HG22	1.89	0.54
2:G:1353:LEU:C	2:G:1354:LEU:HD13	2.28	0.54
2:G:1523:VAL:HG11	2:G:1555:TRP:HE1	1.72	0.54
2:G:1899:LEU:HA	2:G:1902:VAL:CG1	2.36	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:1785:PRO:HG3	2:A:1844:THR:HG22	1.90	0.54
2:A:2183:ASP:N	2:A:2184:PRO:HD3	2.21	0.54
2:A:532:ILE:HG23	2:A:724:PHE:CE2	2.42	0.54
2:A:789:ARG:HB3	2:A:832:PHE:CE2	2.42	0.54
2:C:1429:TYR:HD2	2:C:1478:LEU:HD22	1.73	0.54
2:C:1525:ARG:O	2:C:1529:ILE:HG12	2.08	0.54
2:C:1680:ASP:O	2:C:1684:VAL:HG23	2.07	0.54
2:C:2079:LEU:HD22	2:C:2080:GLU:N	2.23	0.54
2:C:953:ALA:O	2:C:957:LEU:HD13	2.08	0.54
2:E:1639:ASP:OD1	2:E:1667:HIS:ND1	2.36	0.54
1:F:2149:GLY:HA2	1:F:2180:TRP:CH2	2.43	0.54
2:G:1032:GLU:O	2:G:1036:ILE:HG13	2.07	0.54
2:G:1632:CYS:CB	2:G:1639:ASP:HA	2.30	0.54
1:H:2170:HIS:ND1	1:H:2187:THR:OG1	2.39	0.54
2:A:1732:PRO:HG2	2:A:1735:GLU:HG3	1.90	0.54
2:C:1070:SER:HB2	2:C:1073:PHE:CE2	2.43	0.54
2:C:1686:HIS:O	2:C:1690:ASN:HB2	2.06	0.54
2:E:1590:LEU:HD21	2:E:1594:MET:CE	2.37	0.54
2:E:683:THR:O	2:E:686:ARG:HG2	2.08	0.54
2:E:851:PHE:HA	2:E:856:ILE:HG22	1.89	0.54
2:G:1747:SER:OG	2:G:1749:ASP:OD1	2.26	0.54
2:G:2171:PHE:CB	2:G:2183:ASP:HA	2.29	0.54
2:A:1254:THR:HG22	2:A:1301:GLU:HA	1.89	0.54
2:A:804:HIS:HA	2:A:809:ARG:HD2	1.90	0.54
2:C:1357:GLN:O	2:C:1359:LEU:HD22	2.08	0.54
2:C:1492:LYS:HE3	2:C:1796:MET:CE	2.38	0.54
2:C:2076:ASP:HB2	2:C:2105:LEU:HD22	1.89	0.54
2:C:532:ILE:HD11	2:C:551:ALA:HB1	1.90	0.54
2:C:614:VAL:HG13	2:C:633:VAL:HG23	1.88	0.54
2:G:1191:LYS:HE2	2:G:1216:MET:HE3	1.88	0.54
2:G:1972:ILE:CG2	2:G:1973:LEU:HD12	2.38	0.54
2:A:2007:ASP:OD1	2:A:2008:ARG:HG2	2.07	0.54
2:A:543:ASP:OD1	2:A:544:ASP:N	2.39	0.54
2:C:1372:LEU:O	2:C:1447:ARG:NH2	2.34	0.54
2:C:1444:TRP:O	2:C:1448:LEU:HB3	2.08	0.54
2:C:1947:LEU:HD21	2:C:1961:LEU:HD22	1.89	0.54
2:C:729:ARG:HG2	2:C:730:PRO:HD2	1.89	0.54
2:C:792:ALA:O	2:C:796:ASP:HB3	2.08	0.54
2:E:1721:PHE:HB2	2:E:1728:TYR:CE1	2.42	0.54
2:E:786:LYS:HG2	2:E:827:LEU:HD11	1.87	0.54
2:G:978:ARG:HB3	2:G:986:TYR:CE1	2.43	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:1063:LEU:HD23	2:A:1163:MET:HE1	1.88	0.54
2:A:2048:ASN:O	2:A:2052:LEU:HB2	2.07	0.54
2:C:1219:ALA:HB1	2:C:1223:VAL:HG23	1.90	0.54
2:C:1860:GLU:C	2:C:1862:THR:H	2.12	0.54
2:C:1867:ASN:OD1	2:C:1868:ALA:N	2.41	0.54
1:D:2101:LEU:HD11	1:D:2151:ILE:CG1	2.38	0.54
2:E:1021:TYR:HD1	2:E:1028:MET:HG2	1.73	0.54
2:E:1401:ALA:O	2:E:1544:VAL:HA	2.08	0.54
2:E:877:ILE:HG12	2:E:918:ILE:CD1	2.29	0.54
2:G:1820:PRO:HB2	2:G:1825:LEU:CD1	2.38	0.54
2:G:580:ASP:OD2	2:G:583:ALA:HB2	2.08	0.54
2:A:1430:ILE:HD12	2:A:1503:PHE:CZ	2.43	0.54
2:A:1591:MET:HG2	2:A:1620:GLN:CD	2.28	0.54
2:C:1854:ILE:H	2:C:1854:ILE:CD1	2.10	0.54
2:C:1979:ILE:HG22	2:C:1994:ALA:HB3	1.90	0.54
2:C:777:SER:HB3	2:C:780:GLU:HB3	1.90	0.54
2:E:1090:LEU:O	2:E:1098:LYS:NZ	2.40	0.54
2:E:1246:MET:HG3	2:E:1247:LEU:N	2.22	0.54
2:E:1373:TYR:HB3	2:E:1376:TRP:HB2	1.90	0.54
2:E:1973:LEU:HD12	2:E:1974:SER:N	2.23	0.54
1:F:2068:VAL:HG22	1:F:2069:ASP:N	2.20	0.54
2:G:1798:GLU:CA	2:G:1863:VAL:HG21	2.37	0.54
2:G:2167:ASP:C	2:G:2168:LEU:HD23	2.28	0.54
2:A:1249:ILE:CD1	2:A:1320:ILE:HD11	2.37	0.54
1:B:2193:THR:OG1	1:B:2196:SER:O	2.19	0.54
1:B:2300:ILE:HG13	2:A:1127:MET:CE	2.38	0.54
2:C:1249:ILE:HD13	2:C:1320:ILE:HD11	1.89	0.54
2:C:1403:THR:HA	2:C:1407:LYS:HE2	1.90	0.54
2:C:510:ILE:HG23	2:C:511:PRO:HD2	1.90	0.54
2:E:1143:ALA:O	2:E:1147:ILE:HG13	2.08	0.54
2:E:1460:LEU:HD13	2:E:1477:ILE:CG2	2.37	0.54
2:E:508:GLN:O	2:E:510:ILE:N	2.41	0.54
2:E:862:THR:HG23	2:E:864:THR:H	1.73	0.54
2:G:1380:ASN:OD1	2:G:1381:LYS:N	2.36	0.54
2:G:1428:VAL:HG11	2:G:1484:TRP:CE2	2.43	0.54
2:A:837:ALA:HA	2:A:844:ARG:HH12	1.73	0.53
2:C:1646:VAL:O	2:C:1650:ARG:N	2.40	0.53
2:C:1652:LEU:CD2	2:C:1683:ILE:HG23	2.38	0.53
2:C:2157:GLU:O	2:C:2159:VAL:N	2.42	0.53
2:C:542:LEU:HA	2:C:567:ARG:NH2	2.23	0.53
2:G:1274:VAL:HG11	2:G:1308:VAL:HG11	1.89	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:1291:ARG:HH11	2:G:1294:LEU:HD11	1.73	0.53
2:G:1352:GLU:HG2	2:G:1353:LEU:N	2.23	0.53
2:G:1785:PRO:HB2	2:G:1879:TYR:CE1	2.42	0.53
1:H:2079:MET:CE	1:H:2151:ILE:HD11	2.38	0.53
2:A:1358:PRO:HB2	2:A:1378:GLN:HG3	1.91	0.53
2:A:1722:GLU:HG2	2:A:1724:LYS:HG2	1.90	0.53
2:C:955:ILE:HG22	2:C:1030:ALA:HB2	1.90	0.53
2:C:1431:ALA:HB3	2:C:1437:VAL:HG12	1.90	0.53
2:C:1983:LEU:HD12	2:C:1984:SER:N	2.23	0.53
2:C:636:THR:OG1	2:C:637:THR:N	2.41	0.53
2:C:999:GLU:O	2:C:1003:VAL:HG23	2.08	0.53
2:E:1670:GLY:O	2:E:1696:LEU:HA	2.08	0.53
2:E:2132:VAL:HG23	2:E:2156:LEU:HD11	1.90	0.53
1:F:2159:LEU:HB2	1:F:2202:TRP:CH2	2.40	0.53
1:H:2092:ASP:HB3	1:H:2095:VAL:HG22	1.89	0.53
2:A:1460:LEU:HD12	2:A:1467:ASP:OD2	2.08	0.53
2:A:1503:PHE:HD2	2:A:1539:ILE:HG23	1.73	0.53
2:E:1613:VAL:HG22	2:E:1714:VAL:CG2	2.38	0.53
2:E:2041:MET:N	2:E:2045:GLU:OE1	2.41	0.53
2:E:2131:VAL:HG22	2:E:2143:ILE:CG1	2.37	0.53
2:G:1161:LEU:HG	2:G:1165:LYS:HE3	1.90	0.53
2:G:1195:MET:O	2:G:1197:VAL:N	2.42	0.53
2:G:1354:LEU:HD21	2:G:1385:GLN:HB2	1.90	0.53
2:G:1357:GLN:CG	2:G:1358:PRO:HD2	2.37	0.53
2:G:1732:PRO:HG2	2:G:1735:GLU:CB	2.38	0.53
2:G:1907:GLU:OE1	2:G:1907:GLU:N	2.37	0.53
2:G:541:PHE:C	2:G:542:LEU:HD12	2.28	0.53
2:G:616:GLU:O	2:G:627:GLN:NE2	2.41	0.53
2:A:1060:ASP:OD1	2:A:1061:VAL:N	2.41	0.53
2:A:2017:ASN:CG	2:A:2058:LEU:HD13	2.29	0.53
2:C:1121:LEU:HB2	2:C:1127:MET:CE	2.38	0.53
2:C:1517:TYR:HB2	2:C:1780:LEU:HD22	1.90	0.53
2:E:988:VAL:HG13	2:E:1001:LYS:HD2	1.89	0.53
2:E:1354:LEU:HB3	2:E:1356:LEU:HG	1.90	0.53
2:E:1455:LYS:HD2	2:E:1475:ASP:OD2	2.09	0.53
2:E:2131:VAL:HG22	2:E:2143:ILE:HD12	1.91	0.53
2:E:530:ASN:OD1	2:E:532:ILE:HG22	2.09	0.53
1:F:2064:TYR:O	1:F:2199:LEU:N	2.38	0.53
2:G:1894:LYS:HZ3	2:G:1901:ILE:HD12	1.71	0.53
2:G:2071:ASN:O	2:G:2072:ASN:HB3	2.08	0.53
2:G:463:LEU:HD23	2:G:463:LEU:O	2.08	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:796:ASP:HB3	2:G:798:ILE:HG12	1.91	0.53
2:A:1386:THR:O	2:A:1390:LEU:HD13	2.08	0.53
2:A:1722:GLU:OE1	2:A:1722:GLU:N	2.40	0.53
2:A:1721:PHE:HB2	2:A:1728:TYR:CE1	2.44	0.53
2:A:777:SER:HB3	2:A:780:GLU:HB3	1.91	0.53
2:C:1352:GLU:OE1	2:C:1352:GLU:N	2.39	0.53
2:C:2132:VAL:HG12	2:C:2133:GLY:N	2.23	0.53
2:C:2139:THR:C	2:C:2140:LEU:HD12	2.29	0.53
2:C:805:ASP:N	2:C:805:ASP:OD1	2.42	0.53
2:E:1466:THR:O	2:E:1470:LEU:HD13	2.08	0.53
2:E:900:LEU:HD11	2:E:932:LEU:HD11	1.89	0.53
1:F:2080:PRO:HG3	1:F:2242:PHE:CE2	2.44	0.53
2:G:828:LEU:HA	2:G:832:PHE:O	2.07	0.53
2:A:1394:ASP:HA	2:A:1538:ARG:CZ	2.38	0.53
2:C:1552:ILE:HG12	2:C:1811:TYR:CE1	2.44	0.53
2:C:1964:ASP:O	2:C:1968:ILE:HG12	2.09	0.53
2:E:1311:SER:OG	2:E:1313:PRO:HD2	2.09	0.53
2:E:2011:PRO:HB2	2:E:2034:ILE:HG23	1.89	0.53
2:G:1653:LEU:HD12	2:G:1654:ASP:HB2	1.90	0.53
2:G:1732:PRO:HG2	2:G:1735:GLU:HB2	1.91	0.53
2:G:1799:SER:OG	2:G:1802:ASP:HB2	2.08	0.53
1:H:2220:VAL:HG22	1:H:2221:ASP:N	2.23	0.53
2:A:620:ASP:OD2	2:A:623:LEU:HB2	2.09	0.53
2:C:1387:PHE:HB2	2:C:1391:TYR:CE1	2.44	0.53
2:C:2182:GLN:C	2:C:2184:PRO:HD3	2.29	0.53
2:E:1142:ARG:HD2	2:E:1168:GLU:OE2	2.08	0.53
2:E:941:SER:HB2	2:E:974:TYR:HD2	1.72	0.53
1:F:2164:PRO:HG3	1:F:2226:PHE:CE1	2.42	0.53
1:F:2164:PRO:HG3	1:F:2226:PHE:CZ	2.44	0.53
2:G:1860:GLU:CD	2:G:1861:GLY:H	2.10	0.53
2:G:2033:ASP:HB2	2:G:2036:ASP:CB	2.38	0.53
2:G:2066:ALA:O	2:G:2070:THR:OG1	2.25	0.53
2:G:926:ILE:CG1	2:G:927:PRO:HD3	2.31	0.53
1:H:2300:ILE:HD12	2:G:1127:MET:SD	2.49	0.53
2:A:1715:VAL:HG22	2:A:1739:MET:HE1	1.91	0.53
2:A:1936:VAL:HG13	2:A:1939:SER:OG	2.09	0.53
2:A:878:ILE:HB	2:A:919:ILE:HD12	1.91	0.53
2:C:1464:THR:HA	2:C:1467:ASP:OD1	2.09	0.53
2:C:737:PHE:CZ	2:C:930:LEU:HD23	2.44	0.53
2:C:775:VAL:HG22	2:C:776:HIS:H	1.73	0.53
2:E:686:ARG:O	2:E:690:THR:HB	2.07	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:773:ILE:HG13	2:E:877:ILE:HB	1.90	0.53
2:G:1165:LYS:HB2	2:G:1328:MET:HE1	1.91	0.53
2:G:1768:LYS:O	2:G:1772:GLU:HG2	2.08	0.53
2:G:1892:LYS:HA	2:G:1988:HIS:CE1	2.44	0.53
2:G:529:LEU:HD23	2:G:530:ASN:O	2.09	0.53
2:G:825:LYS:HE3	2:G:828:LEU:HD12	1.91	0.53
2:G:993:GLU:O	2:G:994:ASP:HB3	2.09	0.53
2:A:654:THR:O	2:A:657:VAL:HG22	2.09	0.53
2:A:663:ASP:HA	2:A:699:LEU:HB2	1.89	0.53
1:B:2124:ILE:HG22	1:B:2263:PHE:CE2	2.44	0.53
2:C:775:VAL:CG2	2:C:780:GLU:HG2	2.39	0.53
2:C:775:VAL:HG21	2:C:780:GLU:HG3	1.89	0.53
1:D:2101:LEU:HD22	1:D:2115:ILE:HG21	1.91	0.53
2:E:1722:GLU:OE2	2:E:1724:LYS:HE3	2.08	0.53
2:E:2046:ASN:C	2:E:2048:ASN:H	2.12	0.53
2:E:533:GLN:NE2	2:E:559:ASN:HB2	2.23	0.53
1:F:2211:TRP:CG	1:F:2230:MET:HE1	2.44	0.53
2:G:1073:PHE:CE1	2:G:1133:VAL:HA	2.44	0.53
2:G:1990:ASN:HA	2:G:1993:ASN:ND2	2.24	0.53
2:G:2005:MET:HB2	2:G:2013:LYS:CD	2.31	0.53
2:A:521:ILE:CG2	2:A:522:PRO:HD3	2.38	0.53
2:A:617:LEU:HD23	2:A:644:ILE:HG13	1.91	0.53
2:A:978:ARG:HB3	2:A:986:TYR:CE1	2.43	0.53
1:B:2069:ASP:OD1	1:B:2069:ASP:N	2.42	0.53
2:C:2172:LEU:N	2:C:2172:LEU:HD12	2.24	0.53
2:E:1073:PHE:CE1	2:E:1133:VAL:HG22	2.44	0.53
2:E:1674:GLU:N	2:E:1674:GLU:OE2	2.33	0.53
2:E:593:LYS:HA	2:E:596:VAL:HG22	1.89	0.53
2:G:1243:THR:HG22	2:G:1244:ARG:N	2.24	0.53
2:G:1353:LEU:HD13	2:G:1353:LEU:O	2.09	0.53
2:G:1411:ALA:O	2:G:1415:LEU:HD23	2.09	0.53
2:G:2101:ILE:O	2:G:2151:GLU:HA	2.09	0.53
2:A:1235:ILE:HG13	2:A:1334:MET:HE3	1.91	0.52
2:A:1996:GLU:O	2:A:2000:MET:HG3	2.09	0.52
2:A:2131:VAL:HG22	2:A:2143:ILE:CG1	2.35	0.52
2:C:1054:ILE:HA	2:C:1058:MET:SD	2.48	0.52
2:C:1676:LEU:O	2:C:1681:LYS:HE3	2.08	0.52
2:C:1994:ALA:HA	2:C:1997:MET:CG	2.39	0.52
2:C:2062:GLN:O	2:C:2065:GLN:HG2	2.09	0.52
2:E:1089:LEU:HD11	2:E:1119:LEU:HB3	1.91	0.52
2:E:1887:LEU:HD23	2:E:1888:SER:N	2.24	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:1619:LYS:HD2	2:E:1914:ARG:HD2	1.90	0.52
2:E:1978:ALA:O	2:E:1982:ILE:HD11	2.10	0.52
2:E:2048:ASN:C	2:E:2050:ALA:H	2.12	0.52
1:F:2120:MET:O	1:F:2249:PRO:HD3	2.09	0.52
2:G:1393:THR:HG22	2:G:1394:ASP:N	2.23	0.52
2:G:1889:LEU:O	2:G:1988:HIS:NE2	2.43	0.52
2:G:540:ALA:HA	2:G:547:MET:HE3	1.91	0.52
1:B:2288:PRO:CB	2:A:1174:THR:HG21	2.35	0.52
2:A:1713:VAL:HG23	2:A:1743:ALA:HB2	1.91	0.52
2:A:2006:TRP:HB2	2:A:2009:ASP:OD2	2.09	0.52
2:C:1881:THR:HG1	2:C:1906:THR:HG1	1.58	0.52
2:C:2036:ASP:O	2:C:2040:GLN:HB2	2.09	0.52
2:C:2087:ASP:OD1	2:C:2087:ASP:N	2.42	0.52
1:D:2092:ASP:HB3	1:D:2095:VAL:HG12	1.91	0.52
2:E:1068:ALA:HB3	2:E:1105:THR:HG23	1.91	0.52
2:E:1243:THR:HG22	2:E:1244:ARG:N	2.24	0.52
2:E:1487:LEU:HD23	2:E:1488:SER:HB3	1.91	0.52
2:E:498:PRO:HD3	2:E:734:ARG:CG	2.39	0.52
1:F:2101:LEU:HD21	1:F:2151:ILE:CD1	2.39	0.52
2:G:2025:VAL:HG22	2:G:2056:LEU:HD22	1.91	0.52
1:H:2132:LEU:HB3	1:H:2133:PRO:HD2	1.92	0.52
2:A:1853:ILE:HG22	2:A:1869:ALA:HB2	1.92	0.52
2:A:2170:LEU:O	2:A:2184:PRO:HD2	2.09	0.52
2:C:1509:HIS:CD2	2:C:1544:VAL:HG22	2.44	0.52
2:C:2002:VAL:CG1	2:C:2176:SER:HB2	2.36	0.52
2:C:931:SER:O	2:C:937:LEU:N	2.42	0.52
2:E:1893:SER:HB2	2:E:1990:ASN:CG	2.29	0.52
2:E:804:HIS:HD1	2:E:807:GLY:HA2	1.73	0.52
1:F:2065:VAL:HG21	1:F:2236:LEU:O	2.08	0.52
2:G:1090:LEU:HD23	2:G:1090:LEU:O	2.09	0.52
2:G:596:VAL:HB	2:G:635:VAL:HG12	1.90	0.52
2:G:724:PHE:HB3	2:G:728:TYR:CD1	2.44	0.52
1:H:2247:LEU:HB3	1:H:2273:VAL:HG11	1.91	0.52
2:A:1235:ILE:HD11	2:A:1334:MET:CB	2.39	0.52
2:A:1685:LYS:HG3	2:A:1708:PHE:CE1	2.42	0.52
1:D:2302:VAL:HG11	2:C:1128:ALA:HA	1.91	0.52
2:C:1925:TYR:HA	2:C:1928:VAL:HG22	1.91	0.52
2:E:1235:ILE:O	2:E:1236:GLN:HG3	2.10	0.52
2:E:1434:GLN:O	2:E:1437:VAL:HG22	2.10	0.52
2:E:1679:SER:O	2:E:1683:ILE:HG13	2.09	0.52
2:G:1143:ALA:O	2:G:1147:ILE:HG13	2.10	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:1490:GLN:OE1	2:G:1492:LYS:N	2.42	0.52
2:G:2046:ASN:CB	2:G:2047:PRO:HD2	2.39	0.52
2:G:844:ARG:O	2:G:848:GLU:HG3	2.09	0.52
1:H:2157:ASN:OD1	1:H:2158:GLU:N	2.31	0.52
2:A:744:LYS:O	2:A:748:GLN:HG3	2.09	0.52
2:C:1054:ILE:HD13	2:C:1144:ILE:HG23	1.92	0.52
2:C:1468:LEU:HD11	2:C:1494:ARG:NH2	2.25	0.52
2:C:1992:LEU:HD13	2:C:2132:VAL:CG2	2.38	0.52
2:C:871:LEU:N	2:C:872:PRO:CD	2.73	0.52
2:G:1142:ARG:HD2	2:G:1168:GLU:OE2	2.09	0.52
2:G:1490:GLN:OE1	2:G:1492:LYS:HG2	2.09	0.52
2:G:581:LEU:HD22	2:G:612:ILE:HG22	1.90	0.52
2:G:636:THR:OG1	2:G:640:LYS:HB3	2.09	0.52
2:A:1205:LEU:HD23	2:A:1210:MET:HB2	1.92	0.52
2:A:1586:HIS:CE1	2:A:1588:PRO:HG2	2.45	0.52
2:A:1908:PHE:CE2	2:A:1971:LYS:HE2	2.44	0.52
2:A:2083:VAL:HG22	2:A:2097:LEU:HD13	1.92	0.52
2:A:2169:LYS:CE	2:A:2185:SER:HB3	2.38	0.52
2:A:775:VAL:HG11	2:A:781:THR:CA	2.39	0.52
2:A:809:ARG:O	2:A:813:GLN:HB2	2.09	0.52
2:A:844:ARG:O	2:A:848:GLU:HG3	2.10	0.52
1:B:2288:PRO:HB3	2:A:1174:THR:CG2	2.35	0.52
2:C:1025:THR:HG23	2:C:1027:LYS:H	1.75	0.52
2:C:1254:THR:HG22	2:C:1301:GLU:HG3	1.92	0.52
2:C:1490:GLN:O	2:C:1490:GLN:HG2	2.10	0.52
2:C:921:THR:OG1	2:C:922:THR:N	2.42	0.52
2:E:1445:GLN:HA	2:E:1457:ILE:HD12	1.92	0.52
1:F:2193:THR:HB	1:F:2194:PRO:HD2	1.90	0.52
1:F:2247:LEU:HB3	1:F:2273:VAL:CG1	2.40	0.52
2:G:2115:VAL:CB	2:G:2126:GLU:H	2.22	0.52
1:H:2309:ALA:HB1	2:G:618:THR:OG1	2.10	0.52
2:G:647:LYS:HA	2:G:1039:HIS:CD2	2.45	0.52
2:G:736:GLU:CG	2:G:918:ILE:HG13	2.39	0.52
1:H:2202:TRP:CZ3	1:H:2233:ARG:HG3	2.44	0.52
1:H:2217:ASP:CB	1:H:2218:PRO:CD	2.88	0.52
2:A:1032:GLU:OE1	2:A:1035:ARG:NH2	2.43	0.52
2:A:1496:ASN:O	2:A:1499:THR:OG1	2.24	0.52
2:A:1679:SER:O	2:A:1683:ILE:HG13	2.10	0.52
2:A:1928:VAL:CG2	2:A:1949:GLN:HB3	2.28	0.52
2:A:805:ASP:OD1	2:A:806:ALA:N	2.43	0.52
2:C:1142:ARG:HD2	2:C:1168:GLU:OE2	2.10	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1184:CYS:SG	2:C:1188:ILE:HD11	2.49	0.52
2:C:1214:LEU:CD1	2:C:1216:MET:HB2	2.40	0.52
2:E:1067:PHE:CE2	2:E:1112:LEU:HD22	2.44	0.52
2:E:1412:GLU:O	2:E:1416:LEU:HD13	2.08	0.52
2:E:1431:ALA:O	2:E:1481:PRO:HD3	2.09	0.52
2:E:2091:ALA:HB2	2:E:2191:ALA:N	2.24	0.52
2:G:1820:PRO:O	2:G:1825:LEU:HG	2.10	0.52
2:G:1936:VAL:HG13	2:G:1939:SER:CB	2.39	0.52
2:G:2115:VAL:HB	2:G:2125:SER:CB	2.37	0.52
2:G:736:GLU:HG3	2:G:918:ILE:HG13	1.92	0.52
2:A:1460:LEU:CD1	2:A:1467:ASP:HB3	2.40	0.52
2:A:772:LEU:O	2:A:772:LEU:HD12	2.10	0.52
1:B:2297:LEU:HD12	1:B:2297:LEU:O	2.10	0.52
2:C:1357:GLN:CG	2:C:1358:PRO:HD2	2.39	0.52
2:C:1913:THR:HG22	2:C:1943:LYS:NZ	2.25	0.52
2:C:2048:ASN:O	2:C:2049:TYR:HB2	2.10	0.52
2:C:834:ILE:HG23	2:C:839:MET:CE	2.40	0.52
2:C:975:LEU:O	2:C:979:MET:HG3	2.10	0.52
2:C:980:LEU:HD23	2:C:998:LEU:CD1	2.39	0.52
2:E:1368:ASP:OD1	2:E:1369:TYR:N	2.43	0.52
2:E:2091:ALA:HB2	2:E:2191:ALA:H	1.75	0.52
1:F:2063:MET:HA	1:F:2197:VAL:HG13	1.91	0.52
1:F:2211:TRP:CE3	1:F:2230:MET:HE1	2.45	0.52
2:G:1428:VAL:HG21	2:G:1484:TRP:CZ2	2.45	0.52
2:G:1592:LEU:HD23	2:G:1592:LEU:O	2.10	0.52
2:G:2098:LYS:HA	2:G:2155:LYS:HA	1.92	0.52
2:A:1235:ILE:HG13	2:A:1334:MET:CE	2.40	0.52
2:A:621:ARG:CD	2:A:622:GLN:HE21	2.21	0.52
1:B:2091:ALA:CB	1:B:2153:THR:HG21	2.40	0.52
2:C:715:VAL:CG1	2:C:720:GLY:HA3	2.40	0.52
2:C:985:LEU:HD23	2:C:985:LEU:O	2.09	0.52
2:E:1243:THR:HG23	2:E:1347:PHE:CZ	2.45	0.52
2:E:1468:LEU:HD12	2:E:1469:LYS:N	2.24	0.52
2:E:650:ASP:O	2:E:654:THR:HG23	2.10	0.52
2:E:898:ASP:O	2:E:902:MET:HG3	2.09	0.52
2:G:1089:LEU:O	2:G:1093:VAL:HG13	2.10	0.52
2:G:1504:ILE:HD13	2:G:1540:VAL:HG13	1.92	0.52
2:G:1504:ILE:HD12	2:G:1540:VAL:O	2.10	0.52
2:G:1613:VAL:HG13	2:G:1714:VAL:HG23	1.91	0.52
2:G:1718:THR:CG2	2:G:1758:LEU:HB3	2.39	0.52
2:G:2115:VAL:N	2:G:2125:SER:HB3	2.25	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:872:PRO:HB2	2:A:908:ARG:CG	2.38	0.52
2:C:1396:ASN:OD1	2:C:1530:ARG:NH1	2.41	0.52
2:C:835:HIS:HB3	2:C:861:CYS:HB3	1.90	0.52
2:E:562:MET:HG2	2:E:606:ARG:NH2	2.25	0.52
2:G:1247:LEU:HD13	2:G:1310:ILE:CG1	2.40	0.52
2:G:1855:GLU:HB2	2:G:1866:LEU:CD1	2.36	0.52
2:G:615:SER:OG	2:G:631:THR:HG21	2.10	0.52
2:A:686:ARG:HA	2:A:689:GLN:HG2	1.91	0.51
2:C:1503:PHE:CD2	2:C:1539:ILE:HG23	2.45	0.51
2:C:2031:ILE:HD12	2:C:2031:ILE:N	2.25	0.51
2:E:1898:ILE:O	2:E:1902:VAL:HG12	2.10	0.51
2:E:1934:ASN:ND2	2:E:1934:ASN:O	2.43	0.51
2:E:832:PHE:HA	2:E:858:VAL:HG13	1.91	0.51
1:F:2227:THR:CG2	1:F:2229:THR:HG22	2.40	0.51
2:G:1359:LEU:HD21	2:G:1363:ALA:HB2	1.92	0.51
2:G:1928:VAL:HB	2:G:1949:GLN:OE1	2.11	0.51
2:G:1982:ILE:HD13	2:G:1986:GLU:HG3	1.92	0.51
2:G:509:ASN:O	2:G:528:THR:OG1	2.28	0.51
2:G:647:LYS:HG2	2:G:1039:HIS:CD2	2.45	0.51
2:A:1587:PHE:HB3	2:A:1588:PRO:HD3	1.92	0.51
2:A:456:LYS:HD3	2:A:992:TYR:OH	2.10	0.51
2:A:496:VAL:HB	2:A:735:GLN:HG3	1.92	0.51
2:A:572:ASN:O	2:A:579:ILE:HD12	2.10	0.51
2:C:1007:HIS:HE1	2:C:1023:GLU:HG3	1.74	0.51
1:D:2101:LEU:HD11	1:D:2151:ILE:HG13	1.92	0.51
2:E:1401:ALA:HB1	2:E:1402:PRO:HD2	1.90	0.51
2:E:1396:ASN:ND2	2:E:1557:ASP:O	2.37	0.51
2:E:585:LYS:NZ	2:E:632:GLN:HA	2.26	0.51
2:E:665:ILE:HG22	2:E:700:SER:HB2	1.91	0.51
1:F:2082:ASN:HD21	1:F:2244:GLY:H	1.58	0.51
2:G:1180:GLN:O	2:G:1182:PRO:HD3	2.10	0.51
2:G:1184:CYS:SG	2:G:1188:ILE:HD11	2.50	0.51
2:G:1242:MET:HG3	2:G:1248:ARG:HB3	1.92	0.51
2:G:1426:ARG:CG	2:G:1499:THR:HG23	2.40	0.51
2:G:2141:LEU:HD22	2:G:2141:LEU:O	2.10	0.51
2:G:657:VAL:O	2:G:658:ARG:HD2	2.10	0.51
2:A:1108:ILE:HG23	2:A:1133:VAL:HG21	1.93	0.51
2:A:1152:GLY:HA2	2:A:1282:ILE:HB	1.93	0.51
2:A:515:LEU:O	2:A:520:ARG:NH1	2.43	0.51
2:A:799:ASN:O	2:A:803:LYS:HD2	2.10	0.51
2:C:1358:PRO:HB2	2:C:1378:GLN:CG	2.40	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:2155:LYS:HG2	2:C:2156:LEU:N	2.25	0.51
1:D:2309:ALA:CB	2:C:618:THR:HA	2.41	0.51
2:E:1509:HIS:HB3	2:E:1543:SER:OG	2.11	0.51
2:E:1908:PHE:CE1	2:E:1967:VAL:HG13	2.45	0.51
2:E:1982:ILE:HD12	2:E:1982:ILE:H	1.73	0.51
2:E:622:GLN:O	2:E:625:LYS:HB3	2.11	0.51
2:E:757:TYR:O	2:E:761:LEU:HG	2.11	0.51
2:G:1591:MET:HA	2:G:1591:MET:CE	2.39	0.51
2:A:2105:LEU:O	2:A:2105:LEU:HD12	2.10	0.51
1:B:2300:ILE:HG22	1:B:2302:VAL:H	1.74	0.51
2:C:1056:PRO:HG3	2:C:1153:TRP:CE2	2.46	0.51
2:C:1386:THR:HG22	2:C:1564:TYR:CE1	2.45	0.51
2:C:1391:TYR:HB2	2:C:1417:ARG:HB2	1.93	0.51
2:C:1451:LEU:HA	2:C:1454:GLY:O	2.11	0.51
2:C:777:SER:HB3	2:C:780:GLU:CB	2.41	0.51
2:C:976:PHE:CE2	2:C:980:LEU:HD11	2.45	0.51
1:D:2147:PRO:O	1:D:2148:LEU:HD12	2.11	0.51
2:E:1652:LEU:HD12	2:E:1652:LEU:N	2.25	0.51
2:E:1677:SER:O	2:E:1681:LYS:HG3	2.11	0.51
2:G:1676:LEU:O	2:G:1681:LYS:HE3	2.10	0.51
2:G:1713:VAL:HG23	2:G:1743:ALA:HB2	1.91	0.51
2:G:2034:ILE:HD12	2:G:2074:TYR:HE2	1.72	0.51
2:G:2113:PRO:HA	2:G:2126:GLU:OE2	2.11	0.51
2:G:506:THR:HG22	2:G:508:GLN:CG	2.32	0.51
2:G:591:PRO:HD2	2:G:595:LEU:HD23	1.90	0.51
1:H:2160:PRO:HB2	1:H:2161:TYR:CD2	2.45	0.51
1:B:2296:GLU:HB3	2:A:1120:LYS:HG3	1.92	0.51
2:A:1138:GLY:O	2:A:1142:ARG:HG3	2.10	0.51
2:A:1827:ASP:OD1	2:A:1829:THR:OG1	2.19	0.51
1:B:2153:THR:HA	1:B:2190:VAL:HB	1.91	0.51
1:D:2301:TRP:HZ3	2:C:1124:LEU:HD23	1.75	0.51
2:C:1230:PHE:CZ	2:C:1330:SER:HB2	2.45	0.51
2:C:1587:PHE:N	2:C:1588:PRO:HD2	2.25	0.51
2:C:1993:ASN:O	2:C:1997:MET:HG2	2.10	0.51
1:D:2289:ILE:HD12	1:D:2289:ILE:N	2.25	0.51
2:E:1109:ASN:OD1	2:E:1113:GLN:NE2	2.36	0.51
2:E:1629:LEU:HD11	2:E:1664:ALA:HA	1.92	0.51
2:E:1711:HIS:CD2	2:E:1752:SER:HA	2.45	0.51
2:G:1072:GLU:OE1	2:G:1072:GLU:N	2.43	0.51
2:G:1622:ARG:NH2	2:G:1658:GLU:OE2	2.41	0.51
2:G:1883:GLU:O	2:G:1886:LEU:HD23	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:1073:PHE:CD2	2:A:1108:ILE:HG21	2.46	0.51
2:A:1811:TYR:CZ	2:A:1815:ARG:HD3	2.45	0.51
2:A:1799:SER:OG	2:A:1861:GLY:O	2.24	0.51
2:A:2135:GLU:OE2	2:A:2169:LYS:HG3	2.10	0.51
2:A:472:MET:CE	2:A:928:TYR:HA	2.41	0.51
2:A:620:ASP:HB3	2:A:624:THR:CG2	2.34	0.51
2:C:1428:VAL:HG13	2:C:1503:PHE:CD1	2.36	0.51
2:C:1492:LYS:HE3	2:C:1796:MET:HE1	1.92	0.51
2:C:1791:GLU:CB	2:C:1797:ILE:HG13	2.33	0.51
2:C:2107:GLU:HG2	2:C:2108:ASP:N	2.25	0.51
1:D:2214:GLU:O	1:D:2216:LYS:N	2.43	0.51
2:E:685:ARG:O	2:E:689:GLN:HG2	2.11	0.51
2:G:1359:LEU:HD23	2:G:1360:PRO:O	2.10	0.51
2:G:1796:MET:HA	2:G:1796:MET:CE	2.40	0.51
2:G:1976:LEU:O	2:G:1980:VAL:HG23	2.11	0.51
2:G:2096:TYR:HA	2:G:2157:GLU:CB	2.41	0.51
2:G:2171:PHE:CD2	2:G:2183:ASP:HA	2.45	0.51
2:G:709:VAL:HG22	2:G:974:TYR:CE1	2.46	0.51
2:G:992:TYR:CG	2:G:1001:LYS:HD3	2.45	0.51
1:H:2186:LEU:HD13	1:H:2201:ALA:HB1	1.92	0.51
1:B:2250:ASP:CB	1:B:2272:HIS:HB3	2.41	0.51
2:C:1711:HIS:HA	2:C:1745:GLN:O	2.10	0.51
2:C:1906:THR:HA	2:C:1909:GLU:HG3	1.91	0.51
2:C:1994:ALA:HA	2:C:1997:MET:HG2	1.92	0.51
2:C:2031:ILE:HG21	2:C:2037:PHE:HD1	1.76	0.51
1:F:2170:HIS:ND1	1:F:2187:THR:OG1	2.42	0.51
2:G:1401:ALA:HB1	2:G:1402:PRO:HD2	1.93	0.51
2:G:1574:PRO:HD2	2:G:1750:GLY:O	2.10	0.51
2:G:751:THR:O	2:G:755:ILE:HG13	2.10	0.51
2:A:1243:THR:HG22	2:A:1244:ARG:N	2.25	0.51
2:A:1792:ILE:HG22	2:A:1865:PRO:CB	2.30	0.51
2:A:578:GLU:HG3	2:A:579:ILE:N	2.25	0.51
2:A:746:ILE:N	2:A:746:ILE:HD12	2.25	0.51
2:C:1244:ARG:NH1	2:C:1343:LEU:HB2	2.26	0.51
2:C:1387:PHE:HA	2:C:1390:LEU:HB2	1.91	0.51
2:C:976:PHE:CD1	2:C:1002:ARG:HD3	2.46	0.51
2:E:1586:HIS:HB3	2:E:1589:SER:HB2	1.92	0.51
2:E:2085:ASP:N	2:E:2086:PRO:HD3	2.25	0.51
2:G:1820:PRO:CB	2:G:1825:LEU:HD11	2.40	0.51
2:G:1674:GLU:HB2	2:G:1963:LYS:NZ	2.25	0.51
2:A:2025:VAL:HG11	2:A:2055:ASP:HB3	1.93	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:469:ASN:ND2	2:A:670:ASP:OD2	2.44	0.51
2:C:1086:LEU:O	2:C:1090:LEU:N	2.43	0.51
2:C:1895:LEU:O	2:C:1898:ILE:HG22	2.11	0.51
2:C:846:ASP:O	2:C:850:LEU:HG	2.10	0.51
2:E:2079:LEU:H	2:E:2079:LEU:HD23	1.76	0.51
2:E:798:ILE:HD12	2:E:801:ILE:CD1	2.41	0.51
1:F:2054:SER:O	1:F:2057:ARG:HG2	2.10	0.51
2:G:975:LEU:O	2:G:979:MET:HG3	2.10	0.51
1:H:2084:LEU:HD21	1:H:2199:LEU:HD11	1.92	0.51
2:A:1042:ILE:HD11	2:A:1140:ILE:HA	1.92	0.51
2:A:1360:PRO:HA	2:A:1378:GLN:HA	1.91	0.51
2:A:1642:LEU:HD21	2:A:1646:VAL:HG12	1.93	0.51
2:A:482:GLY:HA3	2:A:497:PRO:HG3	1.93	0.51
2:A:530:ASN:OD1	2:A:532:ILE:HG12	2.11	0.51
2:A:751:THR:O	2:A:755:ILE:HG13	2.11	0.51
1:B:2255:ASN:HB3	1:B:2286:HIS:CG	2.46	0.51
2:C:1101:ILE:HD12	2:C:1101:ILE:O	2.11	0.51
2:C:601:GLY:O	2:C:605:LYS:HG2	2.11	0.51
2:C:760:VAL:HG12	2:C:761:LEU:HD12	1.93	0.51
2:E:2131:VAL:HG22	2:E:2143:ILE:HG13	1.92	0.51
2:E:472:MET:HG3	2:E:928:TYR:HD1	1.76	0.51
2:G:1892:LYS:HA	2:G:1988:HIS:NE2	2.25	0.51
2:G:2007:ASP:OD1	2:G:2008:ARG:N	2.39	0.51
2:G:516:PRO:HB3	2:G:518:TRP:NE1	2.25	0.51
1:H:2227:THR:HG21	1:H:2229:THR:HG22	1.93	0.51
1:H:2065:VAL:HG11	1:H:2236:LEU:O	2.11	0.51
1:H:2297:LEU:O	1:H:2297:LEU:HD12	2.10	0.51
2:A:1231:PRO:HG3	2:A:1327:TRP:CD1	2.46	0.50
2:A:1573:VAL:HG11	2:A:1746:PRO:HB3	1.93	0.50
2:A:1774:LEU:HD12	2:A:1775:PRO:CD	2.41	0.50
2:A:970:LEU:O	2:A:973:THR:HG22	2.11	0.50
1:B:2104:CYS:HB3	1:B:2145:LEU:HD23	1.92	0.50
2:C:1665:LEU:HD22	2:C:1687:LEU:HD23	1.93	0.50
2:C:1952:PHE:HB3	2:C:2006:TRP:HE3	1.75	0.50
2:C:2034:ILE:HA	2:C:2037:PHE:HB3	1.93	0.50
2:C:629:SER:HB2	2:C:653:TYR:CZ	2.46	0.50
2:C:822:THR:HG22	2:C:823:ASP:O	2.11	0.50
2:C:820:ASN:HB2	2:C:843:ASP:OD2	2.11	0.50
2:E:1064:PHE:HB3	2:E:1109:ASN:ND2	2.25	0.50
2:E:1310:ILE:HD13	2:E:1318:TYR:OH	2.11	0.50
2:E:504:ASP:N	2:E:505:PRO:HD3	2.25	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:1101:ILE:HG23	2:G:1102:GLU:N	2.21	0.50
2:G:1625:ALA:HA	2:G:1697:ILE:HD12	1.92	0.50
2:G:2026:ALA:CB	2:G:2031:ILE:HD11	2.36	0.50
2:G:657:VAL:C	2:G:658:ARG:HD2	2.31	0.50
1:H:2045:GLU:O	1:H:2049:ARG:HG3	2.11	0.50
2:A:1539:ILE:HD12	2:A:1539:ILE:N	2.26	0.50
2:A:1559:LYS:O	2:A:1563:ILE:HG23	2.11	0.50
2:A:1598:THR:HG21	2:A:1716:MET:HE2	1.93	0.50
2:C:1952:PHE:HB3	2:C:2006:TRP:CE3	2.46	0.50
2:C:585:LYS:O	2:C:657:VAL:HA	2.11	0.50
1:D:2092:ASP:CB	1:D:2095:VAL:HG12	2.40	0.50
2:E:1093:VAL:HG11	2:E:1110:VAL:HG13	1.92	0.50
2:E:1352:GLU:O	2:E:1354:LEU:HD12	2.11	0.50
2:E:775:VAL:HG11	2:E:781:THR:HB	1.92	0.50
2:G:1007:HIS:O	2:G:1011:MET:HG2	2.12	0.50
1:H:2300:ILE:HG23	2:G:1127:MET:SD	2.50	0.50
2:G:1247:LEU:HD13	2:G:1310:ILE:HG13	1.92	0.50
2:G:1396:ASN:HD21	2:G:1558:ALA:HB2	1.73	0.50
2:G:1652:LEU:N	2:G:1652:LEU:HD12	2.27	0.50
2:G:1706:LEU:HD11	2:G:1708:PHE:CD2	2.46	0.50
2:G:1867:ASN:O	2:G:1871:ILE:HG13	2.12	0.50
2:G:2015:ILE:H	2:G:2015:ILE:HD12	1.77	0.50
2:G:959:ASN:HD22	2:G:959:ASN:H	1.58	0.50
1:D:2284:GLU:HG2	2:C:1174:THR:HG21	1.93	0.50
2:C:1857:ASP:HA	2:C:1861:GLY:CA	2.34	0.50
2:C:1972:ILE:O	2:C:1976:LEU:HG	2.10	0.50
2:C:1993:ASN:O	2:C:1997:MET:HE3	2.11	0.50
2:C:2029:TYR:CD2	2:C:2053:VAL:HG22	2.46	0.50
2:C:454:PRO:HD3	2:C:963:ARG:HH12	1.76	0.50
2:E:1497:VAL:O	2:E:1500:VAL:HG22	2.10	0.50
2:E:1633:LEU:HD12	2:E:1634:ALA:N	2.26	0.50
2:E:2071:ASN:HD21	2:E:2073:LYS:HB2	1.75	0.50
2:G:1155:SER:O	2:G:1159:LEU:HD13	2.11	0.50
2:G:1902:VAL:CG2	2:G:1971:LYS:HE3	2.42	0.50
2:A:1104:PRO:O	2:A:1108:ILE:HG12	2.12	0.50
2:A:1876:ASN:O	2:A:1876:ASN:ND2	2.44	0.50
2:A:2045:GLU:C	2:A:2047:PRO:HD2	2.31	0.50
1:B:2216:LYS:O	1:B:2217:ASP:HB2	2.11	0.50
2:C:1276:ASP:HB3	2:C:1283:LEU:HD11	1.94	0.50
2:C:1438:ASP:HA	2:C:1441:PHE:HB3	1.93	0.50
2:C:1685:LYS:HD2	2:C:1686:HIS:N	2.26	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1897:THR:O	2:C:1901:ILE:HG13	2.11	0.50
2:C:1996:GLU:O	2:C:2000:MET:HG3	2.11	0.50
2:C:504:ASP:N	2:C:504:ASP:OD1	2.42	0.50
2:C:607:LEU:HD12	2:C:612:ILE:CD1	2.37	0.50
2:C:872:PRO:HD3	2:C:905:ARG:HG3	1.93	0.50
2:E:2169:LYS:HG3	2:E:2184:PRO:O	2.11	0.50
2:G:1525:ARG:O	2:G:1529:ILE:HG23	2.11	0.50
2:G:2169:LYS:HA	2:G:2185:SER:HB3	1.94	0.50
2:G:501:LYS:HD2	2:G:501:LYS:O	2.10	0.50
2:G:687:THR:HG23	2:G:692:GLU:O	2.10	0.50
2:G:809:ARG:O	2:G:813:GLN:HG2	2.10	0.50
2:A:1353:LEU:HD22	2:A:1570:VAL:HG11	1.92	0.50
2:A:1428:VAL:HG13	2:A:1477:ILE:CD1	2.41	0.50
2:A:1504:ILE:HD12	2:A:1540:VAL:O	2.11	0.50
1:B:2247:LEU:HD23	1:B:2275:LEU:HA	1.92	0.50
2:C:1434:GLN:O	2:C:1437:VAL:HG22	2.12	0.50
1:D:2284:GLU:HG2	2:C:1174:THR:CG2	2.42	0.50
2:E:1539:ILE:HB	2:E:1556:ILE:CG2	2.42	0.50
2:E:1668:GLY:HA2	2:E:1693:ILE:HG22	1.92	0.50
2:E:2142:ALA:CB	2:E:2158:PHE:HA	2.42	0.50
2:E:501:LYS:CG	2:E:727:SER:HB2	2.42	0.50
2:E:503:SER:C	2:E:505:PRO:HD3	2.32	0.50
2:E:555:SER:N	3:E:2201:ACT:OXT	2.45	0.50
2:E:617:LEU:CD2	2:E:640:LYS:HG3	2.40	0.50
2:E:803:LYS:O	2:E:803:LYS:HG2	2.11	0.50
2:E:826:ASP:OD1	2:E:826:ASP:N	2.45	0.50
1:H:2047:ARG:HD3	2:G:1098:LYS:HE3	1.93	0.50
2:G:1530:ARG:HH21	2:G:1539:ILE:HG13	1.77	0.50
2:G:1785:PRO:HB2	2:G:1879:TYR:CZ	2.47	0.50
2:G:1895:LEU:CD2	2:G:1896:ARG:H	2.25	0.50
2:A:777:SER:HB3	2:A:780:GLU:HB2	1.92	0.50
2:A:464:VAL:HG21	2:A:945:SER:HB3	1.92	0.50
1:B:2296:GLU:HG3	2:A:1119:LEU:HA	1.93	0.50
2:C:1383:GLN:O	2:C:1387:PHE:HB3	2.10	0.50
2:C:1468:LEU:HD23	2:C:1468:LEU:O	2.12	0.50
2:C:1713:VAL:HG23	2:C:1743:ALA:HB2	1.93	0.50
1:D:2301:TRP:HA	2:C:778:ARG:HD2	1.93	0.50
2:C:803:LYS:C	2:C:803:LYS:HD3	2.32	0.50
2:E:1530:ARG:HB3	2:E:1537:MET:CE	2.41	0.50
2:E:2139:THR:HG22	2:E:2140:LEU:N	2.26	0.50
2:E:623:LEU:HD12	2:E:623:LEU:O	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:1720:PHE:CE1	2:G:1729:ILE:HD11	2.47	0.50
2:G:1863:VAL:O	2:G:1863:VAL:HG23	2.11	0.50
2:G:2034:ILE:HD12	2:G:2074:TYR:CD2	2.46	0.50
2:G:514:GLU:C	2:G:515:LEU:HD12	2.32	0.50
2:G:722:PHE:HB3	2:G:724:PHE:CE2	2.46	0.50
2:G:772:LEU:O	2:G:772:LEU:HD12	2.11	0.50
2:G:452:LEU:CD1	2:G:999:GLU:HG2	2.41	0.50
2:A:1359:LEU:HD12	2:A:1359:LEU:O	2.11	0.50
2:A:1487:LEU:HD23	2:A:1488:SER:N	2.27	0.50
2:A:1969:LEU:CD2	2:A:2121:PRO:HG2	2.41	0.50
2:C:1504:ILE:HD12	2:C:1504:ILE:N	2.27	0.50
1:D:2218:PRO:HD2	1:D:2219:ASN:N	2.27	0.50
2:E:1675:ALA:HA	2:E:1963:LYS:CD	2.37	0.50
2:E:1793:SER:HB2	2:E:1870:MET:SD	2.52	0.50
2:E:1983:LEU:HD21	2:E:2143:ILE:CD1	2.42	0.50
2:E:784:THR:OG1	2:E:879:LYS:HE2	2.12	0.50
2:G:1461:THR:HG23	2:G:1462:GLY:N	2.25	0.50
2:G:1657:GLN:NE2	2:G:1677:SER:HB3	2.27	0.50
2:G:1827:ASP:OD1	2:G:1829:THR:OG1	2.24	0.50
2:G:607:LEU:CB	2:G:612:ILE:HD11	2.40	0.50
2:G:843:ASP:O	2:G:847:VAL:HG23	2.12	0.50
1:H:2083:ILE:CG2	1:H:2118:ILE:HD12	2.42	0.50
2:A:1203:PHE:HB3	2:A:1232:ARG:HH21	1.77	0.50
2:A:1247:LEU:CD1	2:A:1310:ILE:HG13	2.31	0.50
2:A:1428:VAL:HG13	2:A:1477:ILE:HD11	1.94	0.50
2:A:1487:LEU:HD23	2:A:1488:SER:HB3	1.93	0.50
2:A:2128:TRP:CD1	2:A:2148:VAL:HG12	2.47	0.50
2:A:494:ILE:HD12	2:A:494:ILE:N	2.26	0.50
2:A:618:THR:HA	2:A:640:LYS:HE2	1.94	0.50
2:A:710:ALA:HB3	2:A:717:PHE:HE1	1.77	0.50
2:A:781:THR:HG23	2:A:834:ILE:CD1	2.42	0.50
2:C:1070:SER:HB2	2:C:1073:PHE:CD2	2.47	0.50
2:C:1378:GLN:N	2:C:1378:GLN:OE1	2.43	0.50
2:C:1525:ARG:HD3	2:C:1791:GLU:OE2	2.12	0.50
2:C:772:LEU:O	2:C:876:VAL:HA	2.12	0.50
2:E:1788:PHE:O	2:E:1792:ILE:HG12	2.11	0.50
2:E:2051:SER:HB2	2:E:2054:LYS:CA	2.41	0.50
2:E:955:ILE:HG12	2:E:960:VAL:HG13	1.94	0.50
2:G:1073:PHE:HE1	2:G:1133:VAL:HA	1.76	0.50
2:G:1460:LEU:HD22	2:G:1483:GLN:CD	2.33	0.50
2:G:2171:PHE:HD2	2:G:2183:ASP:HA	1.76	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:2172:LEU:H	2:G:2172:LEU:HD23	1.76	0.50
2:G:785:ALA:CB	2:G:827:LEU:HD21	2.41	0.50
2:G:926:ILE:N	2:G:927:PRO:CD	2.75	0.50
2:G:952:ASN:O	2:G:956:VAL:HG23	2.12	0.50
2:A:1276:ASP:HB3	2:A:1283:LEU:HD11	1.94	0.50
2:A:1251:LEU:HB3	2:A:1304:VAL:CG1	2.41	0.50
2:A:1372:LEU:C	2:A:1374:PRO:HD3	2.32	0.50
2:A:1375:ASN:OD1	2:A:1376:TRP:N	2.43	0.50
2:A:2000:MET:HB3	2:A:2005:MET:O	2.12	0.50
2:C:1460:LEU:HD12	2:C:1461:THR:H	1.77	0.50
2:C:2050:ALA:HB3	2:C:2053:VAL:HG23	1.93	0.50
1:D:2309:ALA:HB1	2:C:618:THR:OG1	2.12	0.50
2:E:2015:ILE:HD11	2:E:2034:ILE:HG22	1.92	0.50
2:E:680:VAL:O	2:E:684:ILE:HG12	2.11	0.50
2:E:661:ILE:CG1	2:E:697:ILE:HD11	2.29	0.50
2:E:760:VAL:HG13	2:E:761:LEU:N	2.25	0.50
2:E:772:LEU:CD1	2:E:876:VAL:HG13	2.42	0.50
1:F:2236:LEU:HD23	1:F:2237:LEU:N	2.27	0.50
2:G:1413:PHE:O	2:G:1416:LEU:HD12	2.11	0.50
2:G:1578:HIS:C	2:G:1579:ILE:HD12	2.32	0.50
2:G:1886:LEU:CD1	2:G:1887:LEU:HD22	2.41	0.50
2:G:2072:ASN:ND2	2:G:2072:ASN:O	2.45	0.50
2:G:841:ARG:CG	2:G:845:THR:HG23	2.32	0.50
2:G:953:ALA:O	2:G:957:LEU:HD13	2.11	0.50
1:H:2149:GLY:HA2	1:H:2180:TRP:CZ3	2.47	0.50
2:A:1184:CYS:SG	2:A:1188:ILE:HD11	2.51	0.49
2:A:1412:GLU:O	2:A:1416:LEU:HD13	2.12	0.49
2:A:1434:GLN:O	2:A:1437:VAL:HG22	2.12	0.49
2:A:1700:ARG:NH2	2:A:1735:GLU:OE2	2.45	0.49
2:A:918:ILE:HD12	2:A:918:ILE:N	2.27	0.49
2:C:1243:THR:HG22	2:C:1244:ARG:N	2.27	0.49
2:C:1747:SER:OG	2:C:1748:LYS:N	2.45	0.49
2:C:2078:THR:CB	2:C:2103:ARG:HA	2.42	0.49
2:C:871:LEU:N	2:C:872:PRO:HD2	2.26	0.49
2:E:1890:SER:HA	2:E:1988:HIS:CE1	2.47	0.49
2:E:2130:LEU:HB3	2:E:2156:LEU:HD22	1.94	0.49
2:E:562:MET:HE1	2:E:606:ARG:HD2	1.93	0.49
1:H:2097:VAL:HG22	1:H:2153:THR:OG1	2.11	0.49
2:A:466:ASP:N	2:A:466:ASP:OD1	2.44	0.49
2:A:471:LEU:HD23	2:A:940:GLU:HG3	1.93	0.49
2:C:1021:TYR:CD1	2:C:1028:MET:HG2	2.39	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1487:LEU:HD23	2:C:1488:SER:N	2.27	0.49
2:C:1853:ILE:HG23	2:C:1854:ILE:HD12	1.94	0.49
2:C:1855:GLU:HG3	2:C:1856:MET:N	2.27	0.49
2:C:1928:VAL:HG11	2:C:1949:GLN:HB3	1.94	0.49
2:C:1996:GLU:O	2:C:1999:GLN:HB3	2.12	0.49
2:C:532:ILE:HG13	2:C:724:PHE:CE2	2.47	0.49
2:C:590:ALA:HB3	2:C:596:VAL:CG1	2.42	0.49
2:C:616:GLU:HA	2:C:635:VAL:O	2.11	0.49
2:C:642:ASP:O	2:C:646:ARG:HG3	2.11	0.49
1:D:2214:GLU:HG2	1:D:2216:LYS:HZ1	1.76	0.49
2:E:1070:SER:HB2	2:E:1073:PHE:CD2	2.47	0.49
2:E:660:ILE:HG13	2:E:696:ILE:HG23	1.94	0.49
2:E:764:VAL:CG1	2:E:802:LEU:HB2	2.42	0.49
2:G:1433:PHE:HB2	2:G:1436:LEU:CD2	2.42	0.49
2:G:2085:ASP:N	2:G:2086:PRO:HD3	2.26	0.49
2:G:2081:PHE:HB2	2:G:2099:ILE:CG1	2.42	0.49
2:G:532:ILE:HG22	2:G:533:GLN:OE1	2.12	0.49
2:G:802:LEU:HD12	2:G:805:ASP:HB3	1.92	0.49
2:A:1392:ASN:O	2:A:1393:THR:OG1	2.22	0.49
2:A:2017:ASN:O	2:A:2017:ASN:ND2	2.45	0.49
2:C:2173:MET:HG3	2:C:2174:SER:N	2.27	0.49
2:E:1291:ARG:HB2	2:E:1294:LEU:HB2	1.94	0.49
2:E:1816:LEU:HD11	2:E:1836:TYR:HE2	1.77	0.49
2:E:2141:LEU:N	2:E:2141:LEU:HD12	2.27	0.49
2:E:770:GLN:HE22	2:E:908:ARG:NH1	2.10	0.49
1:F:2171:ALA:HB1	1:F:2213:VAL:HG23	1.94	0.49
2:G:1016:SER:O	2:G:1018:LEU:N	2.46	0.49
2:G:1914:ARG:HE	2:G:1960:ASP:HB3	1.75	0.49
2:G:547:MET:HG2	2:G:697:ILE:CD1	2.42	0.49
2:G:762:GLU:O	2:G:766:GLN:HB3	2.11	0.49
1:H:2092:ASP:OD2	1:H:2095:VAL:HG22	2.12	0.49
2:A:1236:GLN:O	2:A:1252:THR:N	2.38	0.49
2:A:1286:ASP:OD1	2:A:1287:VAL:N	2.45	0.49
2:A:1979:ILE:HG12	2:A:1994:ALA:HB3	1.93	0.49
2:A:533:GLN:NE2	2:A:559:ASN:HB2	2.27	0.49
2:C:1517:TYR:HB2	2:C:1780:LEU:CD2	2.43	0.49
2:C:1859:ASP:O	2:C:1860:GLU:HB3	2.13	0.49
2:C:2044:GLU:OE1	2:C:2044:GLU:N	2.45	0.49
2:C:461:GLU:O	2:C:464:VAL:HG12	2.11	0.49
2:C:650:ASP:O	2:C:654:THR:HG23	2.13	0.49
2:E:1506:ASP:HA	2:E:1542:LEU:HB2	1.93	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:1587:PHE:HB3	2:E:1588:PRO:HD3	1.95	0.49
2:E:2035:PHE:HA	2:E:2038:MET:HG2	1.95	0.49
2:E:2115:VAL:HG13	2:E:2177:TYR:CZ	2.47	0.49
2:E:2132:VAL:CG2	2:E:2156:LEU:HD11	2.41	0.49
2:E:468:GLY:HA2	2:E:942:GLN:NE2	2.27	0.49
2:E:467:GLN:O	2:E:471:LEU:HB2	2.12	0.49
2:E:724:PHE:HB3	2:E:728:TYR:CD2	2.48	0.49
1:F:2103:GLY:O	1:F:2146:GLU:N	2.36	0.49
1:F:2289:ILE:HG23	1:F:2290:HIS:CD2	2.46	0.49
2:G:1884:MET:HG3	2:G:1885:PHE:H	1.78	0.49
2:G:1886:LEU:HD12	2:G:1887:LEU:HD13	1.94	0.49
2:G:1962:ALA:O	2:G:1965:GLN:HB3	2.12	0.49
2:G:2046:ASN:HB3	2:G:2047:PRO:HD2	1.94	0.49
2:G:2102:GLU:HG3	2:G:2103:ARG:N	2.25	0.49
2:G:2116:HIS:CD2	2:G:2118:PRO:HD3	2.47	0.49
2:G:617:LEU:HD11	2:G:634:ILE:HD13	1.93	0.49
2:A:1458:VAL:HG21	2:A:1470:LEU:HD22	1.94	0.49
2:C:1075:TYR:O	2:C:1077:PRO:HD3	2.11	0.49
2:C:1178:LEU:HA	2:C:1181:TYR:HD2	1.77	0.49
2:C:1326:ARG:HG3	2:C:1327:TRP:CD1	2.47	0.49
2:C:1889:LEU:HD12	2:C:1901:ILE:HD13	1.94	0.49
2:C:589:ILE:HD12	2:C:662:ILE:CD1	2.42	0.49
2:E:1354:LEU:HD13	2:E:1385:GLN:NE2	2.27	0.49
2:E:2039:GLU:O	2:E:2045:GLU:HG2	2.12	0.49
2:E:481:GLU:OE1	2:E:481:GLU:N	2.45	0.49
2:G:1356:LEU:HD12	2:G:1384:THR:HG22	1.93	0.49
2:G:2115:VAL:CG2	2:G:2126:GLU:H	2.26	0.49
2:G:746:ILE:N	2:G:746:ILE:HD12	2.25	0.49
2:G:908:ARG:O	2:G:912:ASP:N	2.33	0.49
2:G:917:GLY:C	2:G:918:ILE:HD12	2.32	0.49
1:H:2193:THR:HB	1:H:2194:PRO:HD2	1.95	0.49
2:A:1394:ASP:CB	2:A:1417:ARG:HE	2.19	0.49
2:A:1432:PRO:HB2	2:A:1433:PHE:CD1	2.47	0.49
2:A:1464:THR:O	2:A:1468:LEU:HD23	2.11	0.49
2:A:1587:PHE:HB3	2:A:1588:PRO:CD	2.42	0.49
2:A:1801:GLU:OE1	2:A:1801:GLU:N	2.45	0.49
2:A:1792:ILE:CG2	2:A:1865:PRO:HB3	2.33	0.49
2:A:776:HIS:ND1	2:A:883:VAL:HG22	2.27	0.49
2:A:930:LEU:O	2:A:934:ASN:HB2	2.13	0.49
1:B:2253:LYS:CG	1:B:2279:LEU:HD12	2.43	0.49
2:C:1476:LEU:HD23	2:C:1477:ILE:N	2.28	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:2134:GLU:OE1	2:C:2135:GLU:N	2.34	0.49
2:C:593:LYS:O	2:C:596:VAL:HG22	2.13	0.49
2:E:1673:HIS:CE1	2:E:1676:LEU:HB2	2.48	0.49
2:E:1678:GLN:O	2:E:1682:ARG:HG3	2.13	0.49
2:E:1894:LYS:HB2	2:E:1897:THR:HG23	1.95	0.49
2:E:2071:ASN:HD22	2:E:2071:ASN:H	1.60	0.49
1:F:2267:GLU:HG2	1:F:2268:LYS:N	2.28	0.49
2:G:1415:LEU:HD13	2:G:1502:LEU:HD13	1.95	0.49
2:G:1430:ILE:HD12	2:G:1503:PHE:CE1	2.47	0.49
2:G:2127:ASN:OD1	2:G:2145:ARG:NH2	2.44	0.49
1:H:2056:LEU:HA	1:H:2059:ARG:HG3	1.95	0.49
2:A:1161:LEU:HG	2:A:1165:LYS:HE3	1.93	0.49
2:A:1285:HIS:O	2:A:1761:VAL:HG11	2.12	0.49
2:A:1461:THR:HB	2:A:1467:ASP:OD1	2.13	0.49
2:A:899:VAL:HG21	2:A:929:TYR:HE2	1.78	0.49
1:B:2159:LEU:HD21	1:B:2161:TYR:CZ	2.47	0.49
2:C:1089:LEU:HD12	2:C:1119:LEU:HD13	1.95	0.49
2:E:1390:LEU:HD21	2:E:1397:VAL:HG11	1.94	0.49
2:E:1710:ALA:O	2:E:1743:ALA:HA	2.13	0.49
2:G:1456:GLU:OE2	2:G:1474:GLY:HA2	2.13	0.49
2:G:1437:VAL:HG11	2:G:1480:THR:HG22	1.93	0.49
2:G:1816:LEU:HD11	2:G:1825:LEU:HD23	1.94	0.49
2:G:1998:SER:O	2:G:2001:VAL:HG12	2.13	0.49
2:G:2015:ILE:HD12	2:G:2015:ILE:N	2.28	0.49
2:A:476:ARG:HH22	2:A:478:ARG:NH1	2.11	0.49
2:A:550:CYS:HB2	2:A:723:TYR:HA	1.95	0.49
2:A:642:ASP:O	2:A:646:ARG:HG3	2.12	0.49
2:A:775:VAL:HG11	2:A:781:THR:HA	1.95	0.49
1:B:2105:SER:HB3	1:B:2113:LYS:HD2	1.95	0.49
1:D:2275:LEU:HD21	2:C:1317:ASN:CG	2.33	0.49
2:E:1616:PRO:O	2:E:1700:ARG:HG2	2.12	0.49
2:E:773:ILE:N	2:E:773:ILE:HD12	2.28	0.49
2:G:1289:ILE:HD12	2:G:1289:ILE:N	2.27	0.49
2:G:1855:GLU:O	2:G:1864:ALA:HB3	2.12	0.49
2:G:1924:ILE:O	2:G:1928:VAL:HG13	2.12	0.49
2:G:2051:SER:O	2:G:2052:LEU:HG	2.13	0.49
2:G:798:ILE:HG23	2:G:804:HIS:CD2	2.47	0.49
2:G:739:GLY:HA2	2:G:921:THR:O	2.13	0.49
2:G:903:LEU:HD22	2:G:933:LEU:HD13	1.94	0.49
2:A:1431:ALA:HB3	2:A:1437:VAL:HG12	1.95	0.49
2:A:1465:THR:HG23	2:A:1466:THR:N	2.28	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:1517:TYR:O	2:A:1521:ILE:HG13	2.12	0.49
2:A:1843:THR:O	2:A:1846:LYS:HG2	2.12	0.49
2:A:1967:VAL:O	2:A:1971:LYS:HG3	2.11	0.49
2:C:1127:MET:O	2:C:1131:VAL:HG23	2.13	0.49
2:C:1314:MET:HE3	2:C:1343:LEU:HD21	1.94	0.49
2:C:1428:VAL:HG12	2:C:1500:VAL:HG21	1.95	0.49
1:D:2296:GLU:HG2	2:C:1120:LYS:HB3	1.94	0.49
2:E:1245:SER:O	2:E:1310:ILE:N	2.43	0.49
2:E:1570:VAL:HG12	2:E:1570:VAL:O	2.13	0.49
2:E:1920:ILE:HD12	2:E:1920:ILE:N	2.28	0.49
2:E:532:ILE:HD13	2:E:728:TYR:CD1	2.47	0.49
2:E:702:THR:HB	2:E:935:GLN:HG3	1.94	0.49
2:E:739:GLY:HA2	2:E:921:THR:O	2.13	0.49
2:G:1142:ARG:HG2	2:G:1164:CYS:SG	2.53	0.49
2:G:1792:ILE:CG2	2:G:1865:PRO:HB3	2.38	0.49
2:G:2040:GLN:HG3	2:G:2045:GLU:OE1	2.13	0.49
2:G:729:ARG:HH12	2:G:904:GLY:HA2	1.77	0.49
2:A:1457:ILE:HG23	2:A:1476:LEU:CB	2.40	0.49
2:A:510:ILE:HD13	2:A:534:SER:HB3	1.94	0.49
2:A:543:ASP:OD2	2:A:719:LYS:HD2	2.12	0.49
1:B:2164:PRO:HG2	1:B:2221:ASP:O	2.12	0.49
2:C:1574:PRO:HG2	2:C:1751:ARG:HA	1.94	0.49
2:C:1712:LEU:HA	2:C:1753:ARG:O	2.13	0.49
2:C:2078:THR:OG1	2:C:2104:GLU:O	2.31	0.49
2:C:660:ILE:CD1	2:C:696:ILE:HG13	2.41	0.49
2:C:943:LEU:HD22	2:C:973:THR:OG1	2.13	0.49
1:D:2174:VAL:CG1	1:D:2181:LYS:HB3	2.40	0.49
1:D:2255:ASN:HB3	1:D:2286:HIS:CG	2.48	0.49
2:E:1274:VAL:HG21	2:E:1306:PHE:CE2	2.48	0.49
2:E:1577:LEU:O	2:E:1577:LEU:HD12	2.12	0.49
2:E:1581:SER:OG	2:E:1763:ARG:HD2	2.13	0.49
2:E:1591:MET:HE3	2:E:1616:PRO:HG2	1.94	0.49
2:E:1793:SER:HA	2:E:1870:MET:HE1	1.95	0.49
2:E:2046:ASN:CB	2:E:2047:PRO:HD2	2.43	0.49
2:E:526:THR:C	2:E:528:THR:H	2.17	0.49
2:G:1426:ARG:CD	2:G:1499:THR:HG21	2.43	0.49
2:G:2064:ALA:O	2:G:2067:ALA:HB3	2.13	0.49
2:G:636:THR:OG1	2:G:637:THR:N	2.46	0.49
1:H:2091:ALA:CB	1:H:2153:THR:HG21	2.43	0.49
1:H:2248:VAL:O	1:H:2273:VAL:HG13	2.12	0.49
2:A:1075:TYR:O	2:A:1077:PRO:HD3	2.12	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:2043:PRO:O	2:A:2046:ASN:HB3	2.13	0.48
2:A:2128:TRP:CZ3	2:A:2174:SER:HB3	2.48	0.48
2:A:775:VAL:HG22	2:A:776:HIS:H	1.77	0.48
1:D:2301:TRP:CZ3	2:C:1124:LEU:HD23	2.48	0.48
2:C:1206:ASP:HB2	2:C:1208:PRO:HD2	1.95	0.48
2:C:1471:LEU:HD13	2:C:1496:ASN:HB2	1.93	0.48
2:C:1579:ILE:CD1	2:C:1763:ARG:HH11	2.25	0.48
2:C:1766:TYR:O	2:C:1770:LEU:HD13	2.13	0.48
2:C:1860:GLU:OE2	2:C:1862:THR:OG1	2.29	0.48
2:C:1486:VAL:HG13	2:C:1876:ASN:OD1	2.13	0.48
2:E:1148:CYS:SG	2:E:1156:VAL:HG12	2.53	0.48
2:E:883:VAL:HG12	2:E:884:TYR:N	2.29	0.48
1:F:2247:LEU:HB3	1:F:2273:VAL:HG11	1.95	0.48
2:G:523:PHE:O	2:G:526:THR:OG1	2.31	0.48
2:G:777:SER:HB3	2:G:780:GLU:HB2	1.95	0.48
2:G:708:ASP:OD1	2:G:981:ARG:HG3	2.11	0.48
2:A:1365:LYS:HG3	2:A:1366:ALA:N	2.27	0.48
2:A:1383:GLN:CD	2:A:1409:VAL:HG21	2.33	0.48
2:A:1495:LYS:O	2:A:1499:THR:HG23	2.14	0.48
2:A:1626:ARG:O	2:A:1630:THR:HG23	2.13	0.48
2:A:822:THR:HG22	2:A:823:ASP:O	2.13	0.48
2:A:881:THR:HG22	2:A:893:GLU:HG3	1.93	0.48
2:C:1854:ILE:HB	2:C:1863:VAL:HG13	1.95	0.48
2:C:1854:ILE:CG1	2:C:1866:LEU:HD13	2.41	0.48
2:C:2131:VAL:O	2:C:2143:ILE:HA	2.13	0.48
2:E:1058:MET:HG3	2:E:1062:GLU:HB2	1.94	0.48
2:E:1305:GLU:OE1	2:E:1727:ARG:NH1	2.42	0.48
2:E:684:ILE:HG13	2:E:972:TYR:HD2	1.77	0.48
1:F:2227:THR:HG22	1:F:2229:THR:HG22	1.95	0.48
2:G:1127:MET:O	2:G:1131:VAL:HG23	2.13	0.48
2:G:1522:VAL:O	2:G:1526:MET:HG2	2.13	0.48
2:G:1657:GLN:HG2	2:G:1680:ASP:OD2	2.13	0.48
2:G:1875:TYR:CZ	2:G:1976:LEU:HD21	2.48	0.48
2:G:2048:ASN:ND2	2:G:2051:SER:HA	2.28	0.48
2:G:521:ILE:HB	2:G:522:PRO:HD3	1.93	0.48
2:G:620:ASP:O	2:G:624:THR:HG23	2.13	0.48
2:G:725:ASP:OD1	2:G:727:SER:OG	2.18	0.48
1:H:2217:ASP:HB3	1:H:2218:PRO:CD	2.43	0.48
1:H:2284:GLU:HG2	2:G:1174:THR:CG2	2.43	0.48
2:A:1843:THR:O	2:A:1847:GLN:HG3	2.13	0.48
2:A:2046:ASN:N	2:A:2047:PRO:CD	2.77	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:786:LYS:HE3	2:A:824:LEU:HD23	1.95	0.48
1:B:2171:ALA:CB	1:B:2212:GLY:HA3	2.43	0.48
2:C:1598:THR:O	2:C:1602:ILE:HG13	2.13	0.48
2:C:1649:ILE:N	2:C:1649:ILE:HD12	2.28	0.48
2:C:1854:ILE:HG22	2:C:1863:VAL:HG22	1.94	0.48
2:C:1991:ALA:HB1	2:C:2141:LEU:HD11	1.94	0.48
2:E:889:GLY:HA3	2:E:1075:TYR:O	2.12	0.48
2:E:508:GLN:O	2:E:510:ILE:HG13	2.13	0.48
2:E:664:GLU:HG3	2:E:666:HIS:CE1	2.48	0.48
2:E:826:ASP:C	2:E:829:PRO:HD2	2.34	0.48
2:G:1354:LEU:O	2:G:1356:LEU:HG	2.13	0.48
2:G:1429:TYR:HA	2:G:1504:ILE:HG23	1.95	0.48
2:G:1566:PHE:HB3	2:G:1570:VAL:HG21	1.95	0.48
2:G:1673:HIS:CE1	2:G:1676:LEU:HD13	2.49	0.48
2:G:1670:GLY:O	2:G:1696:LEU:HD12	2.13	0.48
2:G:1936:VAL:HG13	2:G:1939:SER:HB3	1.94	0.48
2:G:2005:MET:HE1	2:G:2009:ASP:HB3	1.95	0.48
2:G:1999:GLN:HE22	2:G:2173:MET:HB3	1.78	0.48
2:G:848:GLU:OE2	2:G:869:VAL:HG11	2.14	0.48
2:G:737:PHE:CE2	2:G:933:LEU:HD12	2.38	0.48
1:H:2184:ASN:O	1:H:2184:ASN:ND2	2.47	0.48
1:H:2170:HIS:HE2	1:H:2185:THR:HG23	1.78	0.48
2:A:1573:VAL:CG1	2:A:1746:PRO:HB3	2.43	0.48
2:A:2148:VAL:O	2:A:2152:LEU:HG	2.13	0.48
2:A:613:LYS:O	2:A:631:THR:HB	2.14	0.48
2:A:802:LEU:O	2:A:803:LYS:HE2	2.13	0.48
2:C:1048:ASP:O	2:C:1052:LYS:HG3	2.14	0.48
2:C:1527:HIS:O	2:C:1531:THR:HG23	2.12	0.48
2:C:1820:PRO:HB3	2:C:1825:LEU:HD23	1.94	0.48
2:C:2029:TYR:CE2	2:C:2056:LEU:HD22	2.48	0.48
2:C:2042:ASN:HD21	2:C:2045:GLU:HG3	1.77	0.48
1:D:2146:GLU:HG3	1:D:2148:LEU:CD1	2.44	0.48
2:E:1359:LEU:H	2:E:1384:THR:HG21	1.79	0.48
2:E:1997:MET:O	2:E:2001:VAL:HG23	2.13	0.48
2:E:659:LEU:HA	2:E:695:ARG:O	2.13	0.48
2:E:804:HIS:ND1	2:E:807:GLY:HA2	2.28	0.48
2:E:733:LEU:HD23	2:E:915:GLY:O	2.13	0.48
2:G:1656:VAL:HA	2:G:1680:ASP:OD1	2.12	0.48
2:G:775:VAL:HG21	2:G:780:GLU:HB3	1.96	0.48
2:G:836:HIS:CE1	2:G:839:MET:HG2	2.49	0.48
2:G:851:PHE:HA	2:G:856:ILE:CG2	2.37	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:469:ASN:HD21	2:G:895:SER:CB	2.25	0.48
2:A:1120:LYS:O	2:A:1121:LEU:HD23	2.13	0.48
2:A:1423:ASP:OD1	2:A:1423:ASP:N	2.46	0.48
2:A:1577:LEU:HA	2:A:1754:GLY:O	2.14	0.48
2:A:1986:GLU:O	2:A:1988:HIS:N	2.44	0.48
1:B:2120:MET:O	1:B:2249:PRO:HD3	2.13	0.48
2:C:1460:LEU:HD23	2:C:1483:GLN:HG3	1.96	0.48
2:C:1431:ALA:O	2:C:1481:PRO:HD3	2.13	0.48
2:C:1874:TYR:HD2	2:C:1875:TYR:CE1	2.31	0.48
2:C:1921:LEU:HD21	2:C:1946:VAL:CG2	2.33	0.48
2:C:2071:ASN:OD1	2:C:2072:ASN:N	2.46	0.48
2:C:2168:LEU:HA	2:C:2185:SER:OG	2.14	0.48
2:C:737:PHE:CZ	2:C:933:LEU:HD22	2.48	0.48
1:D:2149:GLY:HA3	1:D:2186:LEU:O	2.14	0.48
2:E:1042:ILE:HD12	2:E:1140:ILE:HD13	1.95	0.48
2:E:926:ILE:N	2:E:927:PRO:CD	2.76	0.48
2:G:1930:VAL:HG22	2:G:1949:GLN:CD	2.34	0.48
2:G:1995:MET:HE2	2:G:2173:MET:HB2	1.94	0.48
2:G:814:GLU:HA	2:G:817:SER:OG	2.13	0.48
2:G:789:ARG:HD3	2:G:827:LEU:HD12	1.94	0.48
2:A:1293:ASP:OD1	2:A:1293:ASP:N	2.43	0.48
2:A:1530:ARG:HB2	2:A:1537:MET:CE	2.39	0.48
2:A:1856:MET:CB	2:A:1863:VAL:HG12	2.43	0.48
2:A:516:PRO:HD2	2:A:519:ALA:HB3	1.96	0.48
2:A:789:ARG:NH1	2:A:790:ASP:OD1	2.46	0.48
1:D:2085:LYS:O	1:D:2089:THR:HG23	2.14	0.48
1:D:2162:MET:HG2	1:D:2167:VAL:HG23	1.94	0.48
1:D:2164:PRO:HG3	1:D:2226:PHE:CD1	2.49	0.48
2:E:620:ASP:O	2:E:623:LEU:HG	2.14	0.48
2:G:1885:PHE:HD1	2:G:1901:ILE:HG22	1.78	0.48
2:G:2169:LYS:C	2:G:2185:SER:HB3	2.34	0.48
2:G:976:PHE:CE1	2:G:1002:ARG:HD3	2.48	0.48
1:H:2181:LYS:O	1:H:2183:GLN:N	2.44	0.48
2:A:1233:VAL:CG1	2:A:1253:ILE:HG23	2.43	0.48
2:A:1399:VAL:CG1	2:A:1542:LEU:HD22	2.44	0.48
2:A:1780:LEU:O	2:A:1784:LEU:HG	2.14	0.48
2:A:1882:MET:O	2:A:1886:LEU:HG	2.14	0.48
2:A:521:ILE:N	2:A:522:PRO:CD	2.77	0.48
2:A:585:LYS:O	2:A:657:VAL:HA	2.14	0.48
2:A:952:ASN:O	2:A:956:VAL:HG23	2.13	0.48
2:C:1067:PHE:CZ	2:C:1112:LEU:HD22	2.49	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1246:MET:HB2	2:C:1768:LYS:HZ2	1.79	0.48
2:C:1816:LEU:HD21	2:C:1836:TYR:CD2	2.49	0.48
2:C:2127:ASN:N	2:C:2175:ASP:OD2	2.46	0.48
2:C:2155:LYS:C	2:C:2156:LEU:HD12	2.34	0.48
2:C:952:ASN:O	2:C:956:VAL:HG23	2.13	0.48
2:E:666:HIS:HA	2:E:939:ILE:HD13	1.95	0.48
2:G:1517:TYR:HB3	2:G:1779:HIS:HB2	1.96	0.48
2:A:1059:ASN:ND2	2:A:1061:VAL:HG12	2.29	0.48
2:A:1415:LEU:O	2:A:1415:LEU:HD23	2.14	0.48
2:A:1491:TRP:HB3	2:A:1529:ILE:HD13	1.95	0.48
2:A:1609:GLN:HB2	2:A:1711:HIS:HB3	1.95	0.48
1:B:2068:VAL:CG1	1:B:2235:GLN:HB2	2.41	0.48
2:C:1185:PRO:HG2	2:C:1188:ILE:HG12	1.96	0.48
2:C:1210:MET:O	2:C:1214:LEU:HG	2.14	0.48
2:C:1994:ALA:HA	2:C:1997:MET:HB2	1.96	0.48
2:C:469:ASN:HD21	2:C:895:SER:HA	1.78	0.48
2:C:798:ILE:HG22	2:C:799:ASN:N	2.29	0.48
1:D:2103:GLY:O	1:D:2146:GLU:HG2	2.14	0.48
1:D:2119:VAL:HG22	1:D:2247:LEU:HB2	1.96	0.48
2:E:1342:ILE:HD12	2:E:1342:ILE:N	2.28	0.48
2:E:1445:GLN:NE2	2:E:1457:ILE:HB	2.28	0.48
2:E:1872:ALA:HB2	2:E:1882:MET:HG3	1.96	0.48
2:E:2059:THR:HG22	2:E:2060:GLN:N	2.29	0.48
2:E:501:LYS:HG3	2:E:501:LYS:O	2.13	0.48
2:E:588:TYR:HD2	2:E:661:ILE:HD12	1.78	0.48
1:F:2276:ASP:OD1	1:F:2277:THR:N	2.45	0.48
2:G:2061:ALA:O	2:G:2065:GLN:HG3	2.14	0.48
2:G:2081:PHE:HD2	2:G:2097:LEU:HD11	1.79	0.48
2:G:547:MET:HG2	2:G:697:ILE:HD12	1.96	0.48
2:G:705:ASN:O	2:G:709:VAL:HG23	2.14	0.48
2:A:826:ASP:C	2:A:829:PRO:HD2	2.34	0.48
1:D:2293:SER:HB2	2:C:1175:MET:HE2	1.95	0.48
2:C:1379:PHE:CE1	2:C:1384:THR:HG22	2.48	0.48
2:C:1976:LEU:O	2:C:1980:VAL:HG23	2.13	0.48
2:C:541:PHE:C	2:C:542:LEU:HD22	2.34	0.48
2:C:751:THR:O	2:C:755:ILE:HG13	2.12	0.48
1:D:2152:HIS:NE2	1:D:2166:ASP:OD1	2.47	0.48
1:D:2245:PHE:HB3	2:C:1316:PRO:HG2	1.96	0.48
2:E:918:ILE:HD12	2:E:918:ILE:O	2.14	0.48
2:G:1058:MET:CE	2:G:1063:LEU:HD13	2.44	0.48
2:G:2014:GLN:OE1	2:G:2014:GLN:N	2.46	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:2018:PHE:CE2	2:G:2023:VAL:HG12	2.49	0.48
2:G:775:VAL:HG22	2:G:776:HIS:N	2.24	0.48
1:H:2070:ASN:HD22	1:H:2235:GLN:CD	2.17	0.48
2:A:1788:PHE:O	2:A:1792:ILE:HG12	2.14	0.48
2:A:507:ASP:OD1	2:A:508:GLN:N	2.47	0.48
1:B:2164:PRO:HG3	1:B:2226:PHE:CZ	2.49	0.48
2:C:1143:ALA:O	2:C:1147:ILE:HG13	2.14	0.48
2:C:1678:GLN:N	2:C:1678:GLN:OE1	2.38	0.48
2:C:1854:ILE:HD13	2:C:1863:VAL:CG1	2.44	0.48
2:C:835:HIS:CE1	2:C:865:LEU:HD13	2.48	0.48
2:E:455:LYS:HG2	2:E:1000:GLN:NE2	2.28	0.48
2:E:1324:SER:OG	2:E:1327:TRP:HB2	2.13	0.48
2:E:1685:LYS:HG3	2:E:1708:PHE:HE1	1.79	0.48
2:E:1594:MET:HE2	2:E:1757:MET:HB3	1.96	0.48
2:E:1892:LYS:HD3	2:E:1892:LYS:HA	1.72	0.48
2:E:791:LYS:HA	2:E:794:GLU:HB3	1.95	0.48
2:E:873:ALA:O	2:E:907:GLY:N	2.26	0.48
1:F:2084:LEU:O	1:F:2088:ILE:HG13	2.13	0.48
1:F:2120:MET:HB2	1:F:2248:VAL:HG12	1.96	0.48
2:G:1293:ASP:OD1	2:G:1293:ASP:N	2.45	0.48
2:G:1551:ASP:O	2:G:1555:TRP:HB2	2.14	0.48
2:A:541:PHE:O	2:A:542:LEU:HD23	2.14	0.47
1:B:2044:THR:OG1	1:B:2045:GLU:N	2.45	0.47
2:C:1291:ARG:NH1	2:C:1293:ASP:OD2	2.47	0.47
2:C:2173:MET:CG	2:C:2174:SER:H	2.26	0.47
2:C:721:LEU:HD12	2:C:722:PHE:N	2.28	0.47
2:E:1185:PRO:HG2	2:E:1188:ILE:HD13	1.95	0.47
2:E:1266:VAL:HG12	2:E:1267:THR:HG23	1.96	0.47
2:E:1414:ALA:HB1	2:E:1502:LEU:HD11	1.96	0.47
2:E:754:ASP:O	2:E:758:GLN:HG2	2.14	0.47
2:E:846:ASP:O	2:E:850:LEU:HG	2.13	0.47
2:E:941:SER:HB2	2:E:974:TYR:CD2	2.49	0.47
2:E:990:ALA:O	2:E:993:GLU:HG2	2.14	0.47
2:G:1060:ASP:OD1	2:G:1061:VAL:N	2.47	0.47
2:G:1068:ALA:HB3	2:G:1105:THR:HG23	1.96	0.47
2:G:2096:TYR:HA	2:G:2157:GLU:HB2	1.96	0.47
1:H:2069:ASP:OD1	1:H:2069:ASP:N	2.45	0.47
2:A:1591:MET:HG2	2:A:1620:GLN:NE2	2.30	0.47
2:A:2063:LEU:HD23	2:A:2063:LEU:O	2.13	0.47
2:C:1598:THR:HG21	2:C:1716:MET:HE2	1.96	0.47
2:C:1959:ILE:N	2:C:1959:ILE:HD12	2.25	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:481:GLU:HG2	2:C:482:GLY:N	2.30	0.47
2:E:1145:PHE:CE1	2:E:1161:LEU:HB2	2.49	0.47
2:E:1663:GLU:O	2:E:1666:SER:OG	2.25	0.47
2:E:744:LYS:O	2:E:748:GLN:HB2	2.14	0.47
1:F:2086:LYS:O	1:F:2090:ILE:HD13	2.14	0.47
2:G:1266:VAL:HG23	2:G:1267:THR:HG23	1.95	0.47
2:G:1578:HIS:HB2	2:G:1755:VAL:HG22	1.95	0.47
2:G:1880:MET:O	2:G:1883:GLU:HB3	2.14	0.47
2:G:572:ASN:HD22	2:G:584:PHE:HB3	1.79	0.47
1:H:2079:MET:HG3	1:H:2080:PRO:HD2	1.95	0.47
1:H:2277:THR:HG23	1:H:2278:PRO:HD2	1.96	0.47
2:A:2165:LYS:HD2	2:A:2166:HIS:N	2.29	0.47
2:C:1137:ALA:O	2:C:1141:LEU:HD23	2.13	0.47
1:D:2298:GLU:HG3	2:C:1170:ARG:HH22	1.80	0.47
2:C:1185:PRO:HD2	2:C:1188:ILE:HD11	1.95	0.47
2:C:1204:ASP:OD2	2:C:1232:ARG:NH1	2.26	0.47
2:C:521:ILE:HB	2:C:522:PRO:CD	2.44	0.47
1:F:2284:GLU:HG2	2:E:1174:THR:CG2	2.44	0.47
2:E:1573:VAL:CG1	2:E:1746:PRO:HG3	2.45	0.47
2:E:640:LYS:O	2:E:643:VAL:HG12	2.13	0.47
1:F:2159:LEU:N	1:F:2159:LEU:HD13	2.29	0.47
1:F:2284:GLU:HG2	2:E:1174:THR:HG23	1.95	0.47
2:G:1272:ILE:O	2:G:1285:HIS:HA	2.14	0.47
2:G:1464:THR:HG21	2:G:1486:VAL:HG22	1.96	0.47
2:G:1895:LEU:CG	2:G:1896:ARG:H	2.26	0.47
2:G:2115:VAL:CB	2:G:2125:SER:HB3	2.38	0.47
2:A:1275:GLU:HB2	2:A:1319:PHE:HB2	1.96	0.47
2:A:2034:ILE:O	2:A:2037:PHE:HB3	2.14	0.47
2:A:500:LYS:HD2	2:A:501:LYS:H	1.78	0.47
2:A:941:SER:HB3	2:A:974:TYR:HD2	1.78	0.47
1:B:2217:ASP:N	1:B:2218:PRO:CD	2.78	0.47
2:C:1276:ASP:OD1	2:C:1279:GLY:N	2.45	0.47
2:C:1895:LEU:HD11	2:C:1997:MET:CE	2.45	0.47
2:C:660:ILE:HD11	2:C:696:ILE:CG1	2.43	0.47
2:C:696:ILE:HD12	2:C:696:ILE:N	2.29	0.47
2:C:895:SER:HB2	2:C:897:GLN:NE2	2.29	0.47
2:G:1482:LEU:HD11	2:G:1876:ASN:OD1	2.14	0.47
2:G:1799:SER:H	2:G:1863:VAL:HG11	1.78	0.47
2:G:2034:ILE:O	2:G:2038:MET:N	2.47	0.47
2:G:581:LEU:HB3	2:G:632:GLN:NE2	2.29	0.47
2:G:903:LEU:HD22	2:G:933:LEU:CD1	2.44	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:1093:VAL:HB	2:A:1113:GLN:OE1	2.15	0.47
2:A:1501:GLU:O	2:A:1538:ARG:N	2.35	0.47
2:A:1508:LEU:HD11	2:A:1555:TRP:HZ3	1.79	0.47
1:B:2082:ASN:ND2	1:B:2083:ILE:HG23	2.29	0.47
1:B:2220:VAL:HG22	1:B:2221:ASP:N	2.24	0.47
2:C:1314:MET:HE1	2:C:1343:LEU:HG	1.96	0.47
2:C:1470:LEU:HD12	2:C:1470:LEU:C	2.35	0.47
2:C:1491:TRP:CZ3	2:C:1525:ARG:HD2	2.50	0.47
2:C:1792:ILE:HD13	2:C:1797:ILE:CB	2.41	0.47
2:C:2134:GLU:OE1	2:C:2168:LEU:HD22	2.14	0.47
2:C:516:PRO:O	2:C:520:ARG:HG3	2.14	0.47
2:C:715:VAL:HG13	2:C:720:GLY:HA3	1.96	0.47
1:D:2209:TYR:O	1:D:2213:VAL:HG23	2.14	0.47
2:E:1538:ARG:C	2:E:1539:ILE:HD12	2.34	0.47
2:E:581:LEU:N	2:E:581:LEU:HD23	2.27	0.47
2:E:590:ALA:HB1	2:E:595:LEU:HD23	1.96	0.47
2:E:671:ASP:O	2:E:674:PRO:HD2	2.14	0.47
2:G:1552:ILE:O	2:G:1555:TRP:HB3	2.15	0.47
2:G:1966:GLU:O	2:G:1969:LEU:HB2	2.15	0.47
2:G:586:ILE:HB	2:G:633:VAL:CA	2.40	0.47
2:G:976:PHE:HA	2:G:979:MET:HE2	1.95	0.47
2:A:1481:PRO:O	2:A:1522:VAL:HG11	2.15	0.47
2:A:1594:MET:O	2:A:1598:THR:HG23	2.14	0.47
2:A:565:MET:O	2:A:569:ILE:HG13	2.15	0.47
2:A:623:LEU:CD1	2:A:1326:ARG:HD2	2.45	0.47
2:A:923:GLN:O	2:A:926:ILE:HG12	2.15	0.47
1:B:2285:GLN:O	1:B:2288:PRO:HD3	2.13	0.47
2:C:1613:VAL:HG22	2:C:1714:VAL:HG22	1.96	0.47
2:C:1768:LYS:O	2:C:1772:GLU:HG2	2.15	0.47
2:C:1777:GLU:OE2	2:C:1815:ARG:NH2	2.48	0.47
2:E:2012:LEU:HD21	2:E:2031:ILE:HG21	1.97	0.47
2:E:725:ASP:OD1	2:E:727:SER:OG	2.21	0.47
2:G:1456:GLU:HG2	2:G:1456:GLU:O	2.14	0.47
2:G:1502:LEU:HD23	2:G:1502:LEU:C	2.35	0.47
2:G:1586:HIS:HB3	2:G:1589:SER:HB2	1.96	0.47
2:G:1676:LEU:HG	2:G:1680:ASP:HB2	1.95	0.47
2:G:1854:ILE:CD1	2:G:1865:PRO:HA	2.42	0.47
2:G:1897:THR:O	2:G:1900:GLU:HG2	2.14	0.47
1:H:2077:TYR:OH	1:H:2184:ASN:HB2	2.13	0.47
2:A:1042:ILE:HD12	2:A:1143:ALA:CB	2.45	0.47
2:A:1520:GLU:HG3	2:A:1555:TRP:CZ2	2.49	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1429:TYR:HE1	2:C:1506:ASP:HB2	1.79	0.47
2:C:2031:ILE:CD1	2:C:2040:GLN:HG2	2.42	0.47
2:C:797:THR:HG23	2:C:801:ILE:HG21	1.96	0.47
2:E:1031:THR:HG22	2:E:1032:GLU:N	2.30	0.47
2:E:1331:GLU:HG2	2:E:1332:THR:N	2.29	0.47
2:E:2029:TYR:OH	2:E:2053:VAL:HG21	2.15	0.47
2:E:576:LYS:HG2	2:E:577:GLY:H	1.79	0.47
2:E:472:MET:SD	2:E:928:TYR:HA	2.54	0.47
2:G:1165:LYS:HB2	2:G:1328:MET:CE	2.45	0.47
2:G:1314:MET:HE2	2:G:1343:LEU:CD1	2.44	0.47
2:G:1430:ILE:HD12	2:G:1503:PHE:HE1	1.80	0.47
2:G:1943:LYS:O	2:G:1947:LEU:HG	2.15	0.47
2:G:2026:ALA:HB1	2:G:2031:ILE:CD1	2.41	0.47
2:G:2083:VAL:HG12	2:G:2084:ASP:N	2.29	0.47
2:G:570:GLY:HA2	2:G:573:ARG:HH22	1.80	0.47
2:G:614:VAL:HG22	2:G:633:VAL:HG13	1.96	0.47
2:G:999:GLU:O	2:G:1003:VAL:HG23	2.15	0.47
2:A:1379:PHE:HB3	2:A:1383:GLN:HB2	1.97	0.47
2:A:1715:VAL:HG23	2:A:1740:PHE:CE1	2.49	0.47
2:A:532:ILE:HG23	2:A:724:PHE:CD2	2.50	0.47
2:A:806:ALA:HB3	2:A:808:THR:HG22	1.95	0.47
2:A:926:ILE:N	2:A:927:PRO:CD	2.77	0.47
2:A:936:GLN:O	2:A:938:PRO:HD3	2.14	0.47
2:C:1222:THR:O	2:C:1226:LEU:HD13	2.15	0.47
2:C:1491:TRP:HZ3	2:C:1525:ARG:HD2	1.79	0.47
2:C:539:THR:HG21	2:C:719:LYS:O	2.15	0.47
2:C:797:THR:O	2:C:801:ILE:HG22	2.15	0.47
1:D:2276:ASP:HA	2:C:1319:PHE:CE1	2.50	0.47
2:E:1539:ILE:N	2:E:1539:ILE:HD12	2.29	0.47
2:E:1574:PRO:HB2	2:E:1751:ARG:HG2	1.97	0.47
2:E:1621:THR:HG21	2:E:1699:SER:HB3	1.96	0.47
2:E:775:VAL:HG22	2:E:776:HIS:N	2.29	0.47
2:G:1085:GLU:O	2:G:1089:LEU:HD13	2.15	0.47
2:G:1468:LEU:HD12	2:G:1469:LYS:HG3	1.96	0.47
2:G:1686:HIS:O	2:G:1690:ASN:HB2	2.15	0.47
2:G:1885:PHE:CD1	2:G:1901:ILE:HG22	2.50	0.47
2:A:1289:ILE:HD12	2:A:1289:ILE:O	2.15	0.47
2:A:1460:LEU:HD11	2:A:1467:ASP:HB3	1.95	0.47
2:A:1535:LEU:HB2	2:A:1536:PRO:HD2	1.97	0.47
1:B:2159:LEU:HA	1:B:2160:PRO:HD3	1.79	0.47
2:C:1082:GLU:OE2	2:C:1107:LYS:NZ	2.33	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:2021:GLU:N	2:C:2021:GLU:OE1	2.44	0.47
2:C:2106:GLU:O	2:C:2107:GLU:HB2	2.15	0.47
2:C:2183:ASP:N	2:C:2184:PRO:CD	2.76	0.47
1:F:2298:GLU:HB3	2:E:1118:ARG:HD2	1.97	0.47
2:E:1619:LYS:HG2	2:E:1960:ASP:OD2	2.14	0.47
2:E:2131:VAL:HG22	2:E:2143:ILE:CD1	2.44	0.47
2:G:455:LYS:HG2	2:G:1000:GLN:NE2	2.30	0.47
2:G:1463:GLU:HG3	2:G:1466:THR:OG1	2.15	0.47
2:G:1798:GLU:HB3	2:G:1863:VAL:HG21	1.97	0.47
2:G:650:ASP:O	2:G:654:THR:HG23	2.15	0.47
2:G:832:PHE:O	2:G:856:ILE:HD11	2.14	0.47
2:A:1242:MET:HE1	2:A:1307:THR:CG2	2.44	0.47
2:A:1392:ASN:OD1	2:A:1393:THR:HG23	2.15	0.47
2:A:1792:ILE:O	2:A:1865:PRO:HG3	2.14	0.47
2:A:1928:VAL:HG23	2:A:1929:PRO:HD2	1.97	0.47
2:A:2072:ASN:HB3	2:A:2111:PHE:HZ	1.80	0.47
2:C:1983:LEU:HD12	2:C:1983:LEU:C	2.35	0.47
2:C:1971:LYS:NZ	2:C:2001:VAL:HG11	2.29	0.47
2:C:2131:VAL:CG1	2:C:2171:PHE:H	2.28	0.47
2:E:2012:LEU:HD21	2:E:2031:ILE:CG2	2.45	0.47
2:E:2189:ASN:O	2:E:2190:VAL:HG13	2.15	0.47
2:E:521:ILE:N	2:E:522:PRO:CD	2.78	0.47
2:E:585:LYS:O	2:E:657:VAL:HA	2.15	0.47
2:E:796:ASP:O	2:E:797:THR:OG1	2.31	0.47
1:F:2289:ILE:HG23	1:F:2290:HIS:HD2	1.80	0.47
2:G:1392:ASN:CA	2:G:1417:ARG:HB3	2.32	0.47
2:G:1914:ARG:O	2:G:1917:GLU:HG2	2.14	0.47
2:G:2025:VAL:HA	2:G:2028:LYS:CB	2.45	0.47
2:G:539:THR:HG22	2:G:547:MET:HE1	1.97	0.47
2:A:1291:ARG:HG3	2:A:1294:LEU:HB2	1.97	0.47
2:A:892:VAL:HG22	2:A:893:GLU:N	2.30	0.47
2:A:878:ILE:HB	2:A:919:ILE:CD1	2.45	0.47
2:C:521:ILE:N	2:C:521:ILE:HD12	2.27	0.47
1:D:2083:ILE:HD12	1:D:2118:ILE:CG1	2.39	0.47
1:D:2309:ALA:HB1	2:C:618:THR:CA	2.44	0.47
2:E:1887:LEU:HD23	2:E:1888:SER:H	1.79	0.47
2:E:1897:THR:O	2:E:1901:ILE:HG13	2.14	0.47
2:E:1907:GLU:N	2:E:1907:GLU:OE1	2.48	0.47
2:E:562:MET:O	2:E:566:LEU:HG	2.15	0.47
1:F:2309:ALA:HB1	2:E:618:THR:OG1	2.15	0.47
2:G:1027:LYS:HB2	2:G:1027:LYS:NZ	2.29	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:1056:PRO:HG3	2:G:1153:TRP:CE2	2.49	0.47
2:G:471:LEU:HD21	2:G:473:THR:CG2	2.45	0.47
2:G:521:ILE:N	2:G:522:PRO:HD2	2.29	0.47
2:A:1025:THR:OG1	2:A:1027:LYS:HD3	2.15	0.46
2:A:1390:LEU:CD2	2:A:1410:CYS:HB3	2.45	0.46
2:A:2148:VAL:HA	2:A:2152:LEU:CD1	2.44	0.46
2:A:474:ASN:ND2	2:A:931:SER:OG	2.38	0.46
2:C:1171:MET:HG3	2:C:1328:MET:HE3	1.96	0.46
2:C:1688:TYR:OH	2:C:1710:ALA:HB2	2.15	0.46
2:C:738:ILE:HD11	2:C:759:LYS:HE3	1.95	0.46
1:D:2096:GLN:HG2	1:D:2153:THR:O	2.15	0.46
2:E:1477:ILE:HD12	2:E:1477:ILE:N	2.30	0.46
2:E:1641:PHE:HD2	2:E:1669:VAL:HG22	1.80	0.46
2:E:967:VAL:HG12	2:E:1002:ARG:HH21	1.79	0.46
2:E:983:PRO:O	2:E:988:VAL:HB	2.15	0.46
2:G:865:LEU:HD23	2:G:865:LEU:O	2.15	0.46
2:G:954:GLU:HB3	2:G:960:VAL:HG11	1.97	0.46
2:A:1390:LEU:CD1	2:A:1397:VAL:HG11	2.45	0.46
2:A:1586:HIS:HB3	2:A:1589:SER:CB	2.45	0.46
2:A:510:ILE:HD12	2:A:510:ILE:N	2.30	0.46
2:A:532:ILE:HG13	2:A:555:SER:OG	2.15	0.46
2:A:953:ALA:O	2:A:957:LEU:HD13	2.15	0.46
2:A:999:GLU:O	2:A:1003:VAL:HG23	2.15	0.46
1:B:2164:PRO:HG3	1:B:2226:PHE:CE1	2.51	0.46
2:C:1063:LEU:HD23	2:C:1163:MET:CE	2.43	0.46
2:C:1312:GLU:N	2:C:1313:PRO:HD2	2.31	0.46
2:C:1615:VAL:CG1	2:C:1616:PRO:HD2	2.45	0.46
2:C:1975:LEU:HD12	2:C:1978:ALA:CB	2.44	0.46
2:C:2129:TRP:HE3	2:C:2130:LEU:HD23	1.79	0.46
2:C:651:ILE:HD12	2:C:654:THR:OG1	2.14	0.46
1:D:2080:PRO:HB2	1:D:2082:ASN:OD1	2.15	0.46
2:E:1744:LEU:O	2:E:1746:PRO:HD3	2.16	0.46
2:E:1979:ILE:O	2:E:1983:LEU:HB2	2.15	0.46
2:E:1983:LEU:HD23	2:E:2143:ILE:HD13	1.96	0.46
2:E:801:ILE:HD12	2:E:801:ILE:N	2.30	0.46
2:G:1639:ASP:O	2:G:1641:PHE:N	2.48	0.46
2:G:1959:ILE:HD12	2:G:1959:ILE:N	2.24	0.46
2:G:2025:VAL:HG11	2:G:2056:LEU:HD13	1.98	0.46
1:H:2083:ILE:HD11	1:H:2244:GLY:CA	2.42	0.46
2:A:1969:LEU:HD23	2:A:2121:PRO:HG2	1.97	0.46
2:A:527:LYS:HG3	2:A:528:THR:H	1.80	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:639:GLU:O	2:A:643:VAL:HG23	2.15	0.46
2:A:804:HIS:CA	2:A:809:ARG:HD2	2.46	0.46
1:B:2090:ILE:CG2	1:B:2254:TRP:HZ2	2.27	0.46
1:B:2186:LEU:HD22	1:B:2201:ALA:HB1	1.96	0.46
2:C:1613:VAL:HG13	2:C:1714:VAL:HG23	1.97	0.46
2:C:1998:SER:O	2:C:2002:VAL:HG23	2.15	0.46
2:C:951:LEU:O	2:C:955:ILE:HG13	2.16	0.46
2:E:1838:SER:HA	2:E:1841:VAL:HG12	1.98	0.46
2:E:478:ARG:CB	2:E:936:GLN:HE22	2.27	0.46
2:E:976:PHE:CE1	2:E:1002:ARG:HD3	2.50	0.46
2:G:1711:HIS:CE1	2:G:1747:SER:HB3	2.50	0.46
2:G:1894:LYS:HE3	2:G:1898:ILE:CG1	2.43	0.46
2:G:539:THR:HG22	2:G:547:MET:CE	2.45	0.46
2:G:809:ARG:HH11	2:G:855:HIS:CD2	2.33	0.46
1:H:2136:LEU:HD11	1:H:2177:HIS:HB3	1.98	0.46
2:A:1048:ASP:OD1	2:A:1052:LYS:HE3	2.15	0.46
2:A:1331:GLU:HG2	2:A:1332:THR:N	2.30	0.46
2:A:1358:PRO:HA	2:A:1384:THR:HG21	1.98	0.46
2:A:1428:VAL:CG2	2:A:1477:ILE:HD11	2.46	0.46
2:A:2155:LYS:HG3	2:A:2155:LYS:O	2.15	0.46
2:A:2169:LYS:HD3	2:A:2185:SER:HB3	1.98	0.46
2:A:596:VAL:HB	2:A:635:VAL:HG12	1.97	0.46
2:A:548:LEU:HD22	2:A:709:VAL:HG12	1.98	0.46
2:A:729:ARG:HG3	2:A:730:PRO:HD2	1.96	0.46
2:A:943:LEU:HD23	2:A:975:LEU:HD23	1.98	0.46
2:C:1358:PRO:CB	2:C:1378:GLN:HG3	2.44	0.46
2:C:1464:THR:HG21	2:C:1874:TYR:HE1	1.79	0.46
2:C:1713:VAL:HG11	2:C:1739:MET:O	2.14	0.46
2:C:2079:LEU:HD23	2:C:2100:HIS:O	2.16	0.46
1:D:2049:ARG:O	1:D:2053:THR:HG23	2.15	0.46
1:D:2296:GLU:OE1	1:D:2296:GLU:N	2.49	0.46
2:E:1390:LEU:HD23	2:E:1397:VAL:HG21	1.97	0.46
2:E:1982:ILE:CD1	2:E:1982:ILE:H	2.26	0.46
2:E:2140:LEU:HD23	2:E:2140:LEU:C	2.36	0.46
2:E:554:GLY:H	3:E:2201:ACT:CH3	2.29	0.46
2:E:575:GLU:O	2:E:576:LYS:HG2	2.16	0.46
2:E:642:ASP:O	2:E:646:ARG:HG3	2.15	0.46
2:E:751:THR:O	2:E:755:ILE:HG13	2.15	0.46
2:E:766:GLN:OE1	2:E:766:GLN:N	2.49	0.46
1:F:2227:THR:HG22	1:F:2229:THR:H	1.81	0.46
2:G:1392:ASN:HA	2:G:1417:ARG:CD	2.37	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:1555:TRP:HE3	2:G:1814:ARG:HD2	1.80	0.46
2:G:2141:LEU:HD13	2:G:2141:LEU:N	2.30	0.46
1:H:2164:PRO:O	1:H:2168:THR:HG23	2.16	0.46
2:A:1672:TYR:OH	2:A:1681:LYS:HD3	2.15	0.46
2:A:1713:VAL:CG2	2:A:1743:ALA:HB2	2.45	0.46
2:A:2011:PRO:O	2:A:2034:ILE:HD11	2.16	0.46
2:A:625:LYS:HE2	2:A:640:LYS:CE	2.44	0.46
2:C:1494:ARG:HB2	2:C:1497:VAL:HG21	1.98	0.46
2:C:2173:MET:HG3	2:C:2174:SER:H	1.79	0.46
2:C:564:THR:HG21	2:C:697:ILE:CD1	2.45	0.46
2:C:976:PHE:HA	2:C:979:MET:HE2	1.98	0.46
1:D:2146:GLU:O	1:D:2148:LEU:HD13	2.15	0.46
2:E:1142:ARG:HG2	2:E:1164:CYS:SG	2.56	0.46
2:E:1972:ILE:HG23	2:E:1973:LEU:N	2.30	0.46
2:E:2183:ASP:N	2:E:2183:ASP:OD1	2.48	0.46
2:E:862:THR:OG1	2:E:863:ALA:N	2.49	0.46
2:G:967:VAL:HG13	2:G:1002:ARG:HB3	1.98	0.46
2:G:1062:GLU:O	2:G:1066:VAL:HG23	2.14	0.46
2:G:1353:LEU:CD1	2:G:1355:ASP:HB2	2.44	0.46
2:G:1571:ARG:CG	2:G:1572:PRO:HD2	2.45	0.46
2:G:2081:PHE:HB2	2:G:2099:ILE:HG13	1.98	0.46
2:G:2167:ASP:O	2:G:2168:LEU:HD23	2.16	0.46
1:H:2136:LEU:CD1	1:H:2179:SER:HB2	2.45	0.46
2:A:1063:LEU:HD23	2:A:1163:MET:CE	2.46	0.46
2:A:1107:LYS:O	2:A:1111:LEU:HG	2.16	0.46
2:A:1804:ILE:HG23	2:A:1837:LEU:HD22	1.98	0.46
2:A:1920:ILE:N	2:A:1920:ILE:HD12	2.30	0.46
2:A:2127:ASN:HB2	2:A:2175:ASP:OD2	2.15	0.46
2:A:539:THR:O	2:A:695:ARG:NH2	2.48	0.46
2:A:767:ASN:O	2:A:769:ASN:N	2.49	0.46
2:C:1487:LEU:HD23	2:C:1488:SER:CB	2.44	0.46
2:C:564:THR:HG21	2:C:697:ILE:HG13	1.97	0.46
2:C:784:THR:O	2:C:788:ILE:HG13	2.16	0.46
1:D:2279:LEU:HD12	1:D:2279:LEU:N	2.31	0.46
2:E:1418:HIS:O	2:E:1422:LYS:HB2	2.15	0.46
2:E:2037:PHE:O	2:E:2041:MET:HB2	2.15	0.46
2:E:548:LEU:HD22	2:E:709:VAL:HG12	1.98	0.46
2:G:1383:GLN:HA	2:G:1386:THR:OG1	2.16	0.46
2:G:1503:PHE:HD2	2:G:1539:ILE:HG23	1.81	0.46
2:G:1976:LEU:O	2:G:1979:ILE:HG22	2.15	0.46
2:G:865:LEU:HD11	2:G:871:LEU:HD12	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:2090:ILE:O	1:H:2281:PHE:HB2	2.15	0.46
2:A:1577:LEU:HD23	2:A:1577:LEU:H	1.81	0.46
2:A:2020:PRO:HA	2:A:2023:VAL:CG2	2.46	0.46
2:A:789:ARG:HB3	2:A:832:PHE:HE2	1.81	0.46
2:A:865:LEU:HD21	2:A:871:LEU:HD12	1.97	0.46
1:B:2211:TRP:HZ2	1:B:2223:PRO:HB2	1.81	0.46
1:B:2253:LYS:HD2	1:B:2279:LEU:H	1.81	0.46
2:C:1254:THR:CG2	2:C:1301:GLU:HG3	2.46	0.46
2:C:1391:TYR:CD1	2:C:1413:PHE:HB3	2.49	0.46
2:C:1246:MET:HB2	2:C:1768:LYS:NZ	2.30	0.46
2:C:1929:PRO:HG3	2:C:2006:TRP:CZ2	2.51	0.46
2:C:2049:TYR:O	2:C:2053:VAL:HG23	2.16	0.46
2:C:996:VAL:HG13	2:C:997:ALA:N	2.30	0.46
1:D:2119:VAL:HG11	1:D:2137:PRO:CG	2.44	0.46
2:E:1400:ALA:HA	2:E:1543:SER:O	2.15	0.46
2:E:1786:ASP:O	2:E:1789:VAL:HG12	2.16	0.46
2:E:1884:MET:O	2:E:1887:LEU:HD22	2.16	0.46
2:E:2093:GLU:HB3	2:E:2094:PRO:HD2	1.96	0.46
2:E:2102:GLU:HB3	2:E:2151:GLU:HG2	1.97	0.46
2:E:2162:SER:O	2:E:2190:VAL:HG21	2.16	0.46
2:E:466:ASP:N	2:E:466:ASP:OD1	2.45	0.46
2:E:761:LEU:HA	2:E:764:VAL:CG1	2.45	0.46
2:E:877:ILE:HA	2:E:918:ILE:HD12	1.98	0.46
2:G:1420:ALA:C	2:G:1421:LYS:HG3	2.35	0.46
2:G:1428:VAL:HG22	2:G:1477:ILE:CD1	2.45	0.46
2:G:1710:ALA:O	2:G:1743:ALA:HA	2.16	0.46
2:G:1819:ASN:ND2	2:G:1822:TYR:HB2	2.29	0.46
2:G:1989:LEU:H	2:G:1989:LEU:CD2	2.25	0.46
2:G:2097:LEU:H	2:G:2157:GLU:HB2	1.80	0.46
2:G:514:GLU:HG2	2:G:515:LEU:HD13	1.97	0.46
2:G:764:VAL:HG12	2:G:769:ASN:O	2.15	0.46
2:A:1181:TYR:CD1	2:A:1226:LEU:HD11	2.51	0.46
2:A:1670:GLY:O	2:A:1696:LEU:HA	2.15	0.46
2:A:1879:TYR:CZ	2:A:1880:MET:HG3	2.51	0.46
2:A:533:GLN:HE21	2:A:559:ASN:HB2	1.81	0.46
2:A:621:ARG:HG2	2:A:622:GLN:HE21	1.81	0.46
2:A:866:ALA:O	2:A:905:ARG:NH2	2.48	0.46
2:A:975:LEU:HG	2:A:979:MET:CE	2.46	0.46
1:B:2096:GLN:O	1:B:2125:GLY:HA3	2.16	0.46
2:C:1180:GLN:HE22	2:C:1328:MET:H	1.63	0.46
2:C:1944:ALA:O	2:C:1948:VAL:HG23	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:605:LYS:CA	2:C:605:LYS:HE2	2.44	0.46
2:C:622:GLN:HG2	2:C:627:GLN:CB	2.35	0.46
2:E:1307:THR:HG21	2:E:1765:TYR:CE1	2.50	0.46
2:E:1587:PHE:N	2:E:1588:PRO:HD2	2.30	0.46
2:E:1646:VAL:O	2:E:1650:ARG:HG2	2.16	0.46
2:E:1986:GLU:HG2	2:E:1986:GLU:O	2.15	0.46
2:E:2115:VAL:HG22	2:E:2126:GLU:HG2	1.98	0.46
2:E:2142:ALA:HB3	2:E:2158:PHE:HA	1.98	0.46
2:E:568:GLU:HG3	2:E:584:PHE:HD2	1.80	0.46
2:E:549:VAL:CG2	2:E:699:LEU:HD22	2.46	0.46
2:E:804:HIS:ND1	2:E:804:HIS:O	2.45	0.46
2:E:848:GLU:OE2	2:E:869:VAL:HG21	2.16	0.46
2:E:875:THR:HA	2:E:916:GLU:HB2	1.98	0.46
2:G:1579:ILE:N	2:G:1579:ILE:HD12	2.31	0.46
2:G:1603:THR:HB	2:G:1640:ARG:NH1	2.30	0.46
2:G:2060:GLN:O	2:G:2063:LEU:HG	2.15	0.46
2:G:930:LEU:O	2:G:934:ASN:HB2	2.15	0.46
1:H:2079:MET:HE2	1:H:2115:ILE:CD1	2.45	0.46
2:A:1336:VAL:HG12	2:A:1338:PHE:CE1	2.51	0.46
2:A:1401:ALA:HB1	2:A:1402:PRO:HD2	1.98	0.46
2:A:1840:LEU:O	2:A:1844:THR:OG1	2.34	0.46
2:A:797:THR:CB	2:A:801:ILE:HD13	2.26	0.46
2:A:862:THR:OG1	2:A:863:ALA:N	2.49	0.46
2:A:871:LEU:H	2:A:905:ARG:HD3	1.80	0.46
2:C:1354:LEU:HB2	2:C:1356:LEU:HD21	1.96	0.46
2:C:1629:LEU:HD21	2:C:1669:VAL:CG2	2.46	0.46
2:C:1784:LEU:HD22	2:C:1788:PHE:CZ	2.51	0.46
2:C:2182:GLN:HB3	2:C:2184:PRO:CD	2.44	0.46
2:C:581:LEU:HD21	2:C:612:ILE:HG22	1.97	0.46
2:C:744:LYS:O	2:C:748:GLN:HG3	2.16	0.46
2:C:768:ARG:HH21	2:C:802:LEU:HD22	1.81	0.46
2:C:881:THR:HB	2:C:929:TYR:OH	2.16	0.46
2:C:980:LEU:CD2	2:C:998:LEU:HD12	2.46	0.46
1:D:2048:THR:O	1:D:2051:ILE:HG13	2.16	0.46
1:D:2218:PRO:HG2	1:D:2223:PRO:CB	2.33	0.46
2:E:1525:ARG:O	2:E:1529:ILE:HG13	2.16	0.46
2:E:612:ILE:HG21	2:E:633:VAL:HG21	1.97	0.46
2:E:810:GLU:HA	2:E:812:LEU:HD22	1.98	0.46
1:F:2085:LYS:O	1:F:2089:THR:HG23	2.16	0.46
1:F:2209:TYR:O	1:F:2213:VAL:HG23	2.16	0.46
2:G:1017:ASN:O	2:G:1033:LEU:HD23	2.14	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:1310:ILE:HD13	2:G:1318:TYR:OH	2.16	0.46
2:G:1404:GLY:HA3	2:G:1744:LEU:HD21	1.98	0.46
2:G:1442:GLN:O	2:G:1445:GLN:HG2	2.16	0.46
2:G:1491:TRP:HA	2:G:1497:VAL:HG11	1.98	0.46
2:G:1590:LEU:HD11	2:G:1594:MET:HE2	1.98	0.46
2:G:2082:GLU:HB3	2:G:2098:LYS:NZ	2.31	0.46
2:G:467:GLN:O	2:G:471:LEU:HB2	2.16	0.46
2:G:613:LYS:CD	2:G:631:THR:HG22	2.42	0.46
2:G:821:ASN:N	2:G:843:ASP:OD2	2.40	0.46
2:G:892:VAL:HG22	2:G:893:GLU:N	2.31	0.46
2:G:951:LEU:O	2:G:955:ILE:HG13	2.16	0.46
2:G:976:PHE:HA	2:G:979:MET:CE	2.46	0.46
2:A:1365:LYS:HB2	2:A:1365:LYS:HE3	1.81	0.46
2:A:592:LEU:O	2:A:596:VAL:HG13	2.16	0.46
2:C:1432:PRO:HG2	2:C:1436:LEU:HD12	1.97	0.46
2:C:1895:LEU:HD11	2:C:1997:MET:SD	2.56	0.46
2:C:2029:TYR:OH	2:C:2056:LEU:HD22	2.16	0.46
2:C:2130:LEU:HD22	2:C:2143:ILE:CG2	2.46	0.46
2:C:522:PRO:HB2	2:C:562:MET:CE	2.47	0.46
1:D:2092:ASP:OD2	1:D:2094:ARG:N	2.35	0.46
1:D:2277:THR:HG23	1:D:2278:PRO:HD2	1.97	0.46
2:E:1009:ALA:O	2:E:1012:VAL:HG22	2.16	0.46
2:E:2129:TRP:CD1	2:E:2143:ILE:HD11	2.51	0.46
2:E:2127:ASN:OD1	2:E:2147:THR:HG22	2.16	0.46
2:E:776:HIS:CE1	2:E:894:LEU:HD11	2.51	0.46
2:E:737:PHE:CZ	2:E:930:LEU:HD23	2.51	0.46
2:G:1402:PRO:HG2	2:G:1405:SER:OG	2.16	0.46
2:G:1922:LYS:HD3	2:G:1937:TRP:CH2	2.51	0.46
2:G:2067:ALA:HA	2:G:2070:THR:OG1	2.15	0.46
2:A:1465:THR:HA	2:A:1468:LEU:HD23	1.98	0.45
2:A:1715:VAL:HG13	2:A:1739:MET:CE	2.45	0.45
2:A:975:LEU:O	2:A:979:MET:HE2	2.16	0.45
1:B:2232:GLU:O	1:B:2232:GLU:HG3	2.16	0.45
2:C:1356:LEU:HD22	2:C:1356:LEU:N	2.31	0.45
2:C:1487:LEU:HD23	2:C:1488:SER:HB2	1.97	0.45
2:E:1386:THR:HG22	2:E:1564:TYR:CE2	2.51	0.45
2:E:1673:HIS:CD2	2:E:1675:ALA:HB3	2.51	0.45
2:E:1928:VAL:HB	2:E:1929:PRO:HD2	1.98	0.45
2:E:764:VAL:HG11	2:E:802:LEU:HB2	1.96	0.45
2:G:1080:GLN:OE1	2:G:1083:LYS:HD2	2.16	0.45
2:G:1426:ARG:HB2	2:G:1499:THR:CG2	2.40	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:1483:GLN:O	2:G:1487:LEU:HB3	2.16	0.45
2:G:1816:LEU:HD21	2:G:1836:TYR:CE2	2.51	0.45
2:G:529:LEU:CD2	2:G:533:GLN:HB2	2.45	0.45
2:A:1460:LEU:HD23	2:A:1479:ALA:CB	2.40	0.45
2:A:636:THR:OG1	2:A:640:LYS:HB3	2.17	0.45
2:A:976:PHE:CE2	2:A:980:LEU:HD11	2.51	0.45
2:C:1251:LEU:HB3	2:C:1304:VAL:HG13	1.97	0.45
2:C:1711:HIS:NE2	2:C:1747:SER:HB2	2.31	0.45
2:C:898:ASP:O	2:C:902:MET:HG3	2.16	0.45
2:E:1429:TYR:CE1	2:E:1506:ASP:HB2	2.51	0.45
2:E:1567:SER:O	2:E:1570:VAL:HG23	2.16	0.45
2:E:1613:VAL:HG22	2:E:1714:VAL:HG22	1.98	0.45
2:E:546:ASN:O	2:E:715:VAL:HG13	2.17	0.45
2:E:754:ASP:OD1	2:E:787:TYR:OH	2.33	0.45
2:E:774:PHE:CE1	2:E:866:ALA:HB2	2.51	0.45
2:E:775:VAL:CG2	2:E:780:GLU:HG2	2.46	0.45
2:E:807:GLY:O	2:E:810:GLU:HB2	2.16	0.45
2:G:1544:VAL:O	2:G:1546:LEU:HD12	2.17	0.45
2:G:1683:ILE:O	2:G:1687:LEU:HD13	2.16	0.45
2:G:1912:GLN:O	2:G:1943:LYS:NZ	2.50	0.45
2:G:2135:GLU:OE1	2:G:2169:LYS:N	2.46	0.45
2:G:749:LEU:O	2:G:753:ASN:ND2	2.32	0.45
1:B:2275:LEU:HD21	2:A:1335:PRO:CB	2.46	0.45
2:A:1480:THR:HB	2:A:1481:PRO:HD2	1.98	0.45
2:A:1571:ARG:CG	2:A:1572:PRO:HD2	2.41	0.45
2:A:1618:ARG:O	2:A:1621:THR:OG1	2.27	0.45
2:A:1650:ARG:HD3	2:A:1653:LEU:HB2	1.98	0.45
2:A:675:VAL:O	2:A:679:ILE:HG13	2.16	0.45
1:B:2098:ALA:HA	1:B:2151:ILE:O	2.16	0.45
1:B:2203:ALA:HB2	1:B:2234:ARG:CD	2.46	0.45
2:C:1800:GLY:O	2:C:1803:ALA:HB3	2.17	0.45
1:D:2064:TYR:O	1:D:2198:SER:HA	2.17	0.45
2:E:1146:GLU:O	2:E:1150:LYS:HG2	2.16	0.45
2:E:1598:THR:O	2:E:1602:ILE:HG13	2.17	0.45
2:E:1718:THR:HG21	2:E:1758:LEU:HB3	1.98	0.45
2:E:2167:ASP:C	2:E:2168:LEU:HD12	2.36	0.45
2:E:2174:SER:OG	2:E:2177:TYR:O	2.34	0.45
2:E:501:LYS:O	2:E:502:ARG:HD2	2.17	0.45
2:G:1075:TYR:O	2:G:1077:PRO:HD3	2.15	0.45
2:G:1425:GLY:O	2:G:1426:ARG:HG2	2.17	0.45
2:G:1919:GLY:O	2:G:1922:LYS:HB3	2.15	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:518:TRP:CE3	2:G:519:ALA:HB2	2.51	0.45
2:G:626:GLN:O	2:G:630:GLU:HG2	2.15	0.45
2:A:1525:ARG:O	2:A:1529:ILE:HG13	2.17	0.45
2:A:1397:VAL:O	2:A:1540:VAL:HG23	2.17	0.45
2:A:544:ASP:OD1	2:A:571:LYS:HE3	2.16	0.45
2:A:775:VAL:HG22	2:A:776:HIS:N	2.31	0.45
2:A:804:HIS:HA	2:A:809:ARG:CD	2.46	0.45
2:C:500:LYS:HE2	2:C:502:ARG:HG2	1.98	0.45
2:C:682:ARG:O	2:C:685:ARG:HB3	2.15	0.45
1:D:2218:PRO:CD	1:D:2219:ASN:N	2.78	0.45
1:D:2227:THR:HG22	1:D:2229:THR:H	1.81	0.45
2:E:1520:GLU:OE2	2:E:1811:TYR:N	2.50	0.45
2:E:1906:THR:HA	2:E:1909:GLU:HG3	1.97	0.45
2:E:1920:ILE:O	2:E:1924:ILE:HG13	2.16	0.45
2:E:457:LEU:HD23	2:E:458:VAL:N	2.31	0.45
2:E:613:LYS:O	2:E:631:THR:HB	2.17	0.45
2:E:729:ARG:NH1	2:E:733:LEU:HD12	2.32	0.45
2:G:1247:LEU:CD1	2:G:1310:ILE:HG13	2.47	0.45
2:G:1583:THR:O	2:G:1584:ILE:HD13	2.17	0.45
2:G:1785:PRO:HB3	2:G:1848:LEU:HD13	1.99	0.45
2:G:1983:LEU:C	2:G:1983:LEU:HD12	2.37	0.45
2:G:1988:HIS:HB3	2:G:1990:ASN:CG	2.36	0.45
2:G:557:LYS:NZ	4:G:2301:HOH:O	2.49	0.45
2:G:918:ILE:HD12	2:G:918:ILE:N	2.31	0.45
1:H:2070:ASN:HD21	1:H:2076:THR:CG2	2.27	0.45
2:A:1191:LYS:HE2	2:A:1195:MET:HE3	1.98	0.45
2:A:2009:ASP:HB2	2:A:2013:LYS:HD3	1.98	0.45
2:A:1983:LEU:CD1	2:A:2143:ILE:HG21	2.39	0.45
2:A:591:PRO:O	2:A:592:LEU:HD12	2.16	0.45
2:A:772:LEU:CD1	2:A:876:VAL:HG22	2.45	0.45
2:A:835:HIS:HB3	2:A:861:CYS:CB	2.46	0.45
2:C:1342:ILE:HG22	2:C:1821:SER:OG	2.17	0.45
2:C:1735:GLU:O	2:C:1739:MET:HG3	2.16	0.45
2:C:803:LYS:HZ2	2:C:803:LYS:HB2	1.80	0.45
2:C:895:SER:OG	2:C:898:ASP:OD2	2.34	0.45
1:D:2139:HIS:CE1	1:D:2141:MET:HB2	2.52	0.45
1:D:2294:PHE:CE2	2:C:1119:LEU:HD21	2.51	0.45
2:E:1268:GLU:OE2	2:E:1327:TRP:NE1	2.49	0.45
2:E:625:LYS:HD3	2:E:650:ASP:OD2	2.16	0.45
2:E:883:VAL:HG12	2:E:884:TYR:H	1.81	0.45
2:G:1274:VAL:HA	2:G:1319:PHE:O	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:1718:THR:HG23	2:G:1758:LEU:HB3	1.97	0.45
2:G:1816:LEU:HD21	2:G:1836:TYR:HE2	1.81	0.45
2:G:1862:THR:CG2	2:G:1863:VAL:HG13	2.33	0.45
2:G:2083:VAL:HA	2:G:2097:LEU:HD13	1.98	0.45
2:G:603:PHE:HA	2:G:606:ARG:HB2	1.99	0.45
1:H:2084:LEU:HD22	1:H:2199:LEU:HD11	1.97	0.45
2:A:2077:ILE:HG23	2:A:2103:ARG:HG3	1.99	0.45
2:A:908:ARG:HD2	2:A:911:TYR:HD2	1.81	0.45
2:C:1369:TYR:HB3	2:C:1416:LEU:HD11	1.98	0.45
2:C:1382:ILE:H	2:C:1382:ILE:CD1	2.23	0.45
2:C:1799:SER:HA	2:C:1862:THR:OG1	2.17	0.45
2:C:1881:THR:OG1	2:C:1906:THR:OG1	2.32	0.45
2:C:684:ILE:HA	2:C:687:THR:HB	1.98	0.45
1:D:2097:VAL:O	1:D:2152:HIS:HA	2.16	0.45
2:E:1013:LEU:HB3	2:E:1019:ILE:HG12	1.97	0.45
2:E:1065:ARG:O	2:E:1069:GLN:HG3	2.16	0.45
2:E:1233:VAL:CG1	2:E:1253:ILE:HG23	2.47	0.45
2:E:1629:LEU:HD21	2:E:1669:VAL:HB	1.98	0.45
2:E:1804:ILE:O	2:E:1808:THR:HG23	2.17	0.45
2:E:1826:GLN:OE1	2:E:1826:GLN:N	2.33	0.45
2:E:2015:ILE:HA	2:E:2016:PRO:HD3	1.87	0.45
2:E:2048:ASN:O	2:E:2049:TYR:HB2	2.16	0.45
2:E:481:GLU:OE1	2:E:482:GLY:N	2.48	0.45
2:E:576:LYS:CG	2:E:577:GLY:H	2.28	0.45
2:G:1115:TYR:CZ	2:G:1170:ARG:HD2	2.51	0.45
2:G:1235:ILE:HG21	2:G:1322:VAL:HG21	1.97	0.45
2:G:2018:PHE:HE2	2:G:2023:VAL:HG12	1.82	0.45
2:G:2141:LEU:HD13	2:G:2141:LEU:H	1.81	0.45
2:A:1394:ASP:HA	2:A:1538:ARG:NH1	2.31	0.45
2:A:1625:ALA:HA	2:A:1697:ILE:CD1	2.47	0.45
2:C:1022:ASP:CB	2:C:1025:THR:HG22	2.40	0.45
2:C:886:PRO:HB2	2:C:1132:TYR:HB2	1.99	0.45
2:C:1578:HIS:HB2	2:C:1755:VAL:HG22	1.99	0.45
2:C:1866:LEU:O	2:C:1870:MET:HG2	2.17	0.45
2:C:771:MET:HE1	2:C:877:ILE:HD12	1.99	0.45
1:D:2101:LEU:HD21	1:D:2151:ILE:HD12	1.98	0.45
2:E:1875:TYR:CE1	2:E:1976:LEU:HB3	2.52	0.45
2:E:2090:ARG:NH2	2:E:2191:ALA:HB3	2.31	0.45
2:E:504:ASP:HA	2:E:507:ASP:OD2	2.17	0.45
2:E:665:ILE:HG23	2:E:700:SER:HB2	1.99	0.45
1:F:2191:ALA:O	1:F:2197:VAL:HG23	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:1138:GLY:O	2:G:1142:ARG:HG3	2.16	0.45
2:G:1363:ALA:HB1	2:G:1387:PHE:HE1	1.76	0.45
2:G:1785:PRO:O	2:G:1789:VAL:HG23	2.17	0.45
2:G:1796:MET:HA	2:G:1796:MET:HE2	1.97	0.45
2:G:1992:LEU:O	2:G:1996:GLU:HG3	2.16	0.45
2:G:2051:SER:C	2:G:2052:LEU:HG	2.37	0.45
2:G:2083:VAL:HG12	2:G:2084:ASP:H	1.82	0.45
2:G:2169:LYS:O	2:G:2170:LEU:HB2	2.16	0.45
1:H:2168:THR:O	1:H:2172:LYS:HG3	2.17	0.45
2:A:1984:SER:C	2:A:1986:GLU:H	2.20	0.45
2:A:973:THR:HG23	2:A:976:PHE:H	1.82	0.45
1:B:2157:ASN:O	1:B:2157:ASN:ND2	2.50	0.45
1:B:2226:PHE:HA	1:B:2230:MET:HE1	1.99	0.45
2:C:1185:PRO:HG2	2:C:1188:ILE:CD1	2.47	0.45
2:C:1591:MET:HE3	2:C:1616:PRO:HG2	1.99	0.45
2:C:2002:VAL:CB	2:C:2176:SER:HB2	2.47	0.45
2:C:591:PRO:CG	2:C:664:GLU:HB2	2.47	0.45
1:D:2207:LEU:H	1:D:2207:LEU:CD2	2.26	0.45
2:E:1236:GLN:HA	2:E:1334:MET:CE	2.47	0.45
2:E:1528:PHE:O	2:E:1532:GLN:HG2	2.17	0.45
2:E:2052:LEU:N	2:E:2052:LEU:HD12	2.31	0.45
2:E:581:LEU:HG	2:E:582:ASP:OD1	2.16	0.45
2:E:985:LEU:HD23	2:E:985:LEU:O	2.17	0.45
2:G:1246:MET:C	2:G:1247:LEU:HD12	2.37	0.45
2:G:1354:LEU:HD21	2:G:1385:GLN:CB	2.45	0.45
2:G:1979:ILE:O	2:G:1983:LEU:N	2.42	0.45
2:G:573:ARG:HG2	2:G:579:ILE:CA	2.46	0.45
2:G:641:TRP:HD1	2:G:679:ILE:HD13	1.81	0.45
1:H:2170:HIS:O	1:H:2174:VAL:HG23	2.16	0.45
2:A:1241:PRO:HG3	2:A:1821:SER:HB2	1.99	0.45
2:A:1460:LEU:HA	2:A:1460:LEU:HD13	1.71	0.45
2:A:1911:ILE:HD13	2:A:1912:GLN:N	2.31	0.45
1:B:2280:PRO:HD2	1:B:2283:SER:HB2	1.99	0.45
2:C:1435:GLU:O	2:C:1439:LEU:HB2	2.17	0.45
2:C:1744:LEU:O	2:C:1746:PRO:HD3	2.17	0.45
2:C:2050:ALA:O	2:C:2051:SER:HB2	2.17	0.45
2:C:588:TYR:CE2	2:C:599:GLN:HG2	2.51	0.45
2:E:1613:VAL:HG13	2:E:1714:VAL:HG23	1.98	0.45
2:G:1049:THR:O	2:G:1053:LEU:HD13	2.17	0.45
2:G:1240:GLN:HB2	2:G:1248:ARG:HG2	1.98	0.45
2:G:1283:LEU:HD12	2:G:1283:LEU:N	2.32	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:1584:ILE:HG22	2:G:1586:HIS:H	1.81	0.45
2:G:1303:THR:O	2:G:1727:ARG:HD2	2.17	0.45
2:G:1952:PHE:O	2:G:2005:MET:HA	2.17	0.45
2:G:565:MET:O	2:G:569:ILE:HG13	2.17	0.45
2:G:876:VAL:CG2	2:G:906:ALA:HB2	2.47	0.45
2:A:1149:LEU:HD21	2:A:1271:TRP:CZ3	2.51	0.45
2:A:1426:ARG:NH2	2:A:1472:GLU:HA	2.32	0.45
2:A:1543:SER:OG	2:A:1546:LEU:HD11	2.16	0.45
2:A:1570:VAL:O	2:A:1570:VAL:HG12	2.16	0.45
1:B:2080:PRO:HG2	1:B:2083:ILE:CG1	2.46	0.45
1:B:2289:ILE:O	1:B:2292:THR:HG22	2.17	0.45
2:C:1289:ILE:HD12	2:C:1289:ILE:O	2.17	0.45
2:C:2181:ASP:OD1	2:C:2181:ASP:N	2.50	0.45
2:C:513:THR:HG22	2:C:520:ARG:HH21	1.82	0.45
2:C:883:VAL:HG12	2:C:884:TYR:N	2.32	0.45
2:E:1222:THR:O	2:E:1226:LEU:HB2	2.17	0.45
2:E:1394:ASP:OD1	2:E:1417:ARG:HD3	2.17	0.45
2:E:1624:THR:HG22	2:E:1697:ILE:HD13	2.00	0.45
2:E:2129:TRP:CZ3	2:E:2175:ASP:HB3	2.52	0.45
1:F:2309:ALA:CB	2:E:618:THR:HA	2.47	0.45
2:E:650:ASP:N	2:E:650:ASP:OD1	2.49	0.45
2:E:923:GLN:O	2:E:926:ILE:HG12	2.16	0.45
1:F:2247:LEU:HD23	1:F:2275:LEU:HA	1.99	0.45
1:H:2190:VAL:HG22	1:H:2199:LEU:HD21	1.98	0.45
2:A:1481:PRO:HB2	2:A:1518:ILE:HG23	1.99	0.44
2:A:1774:LEU:HA	2:A:1775:PRO:HD3	1.83	0.44
2:A:713:LEU:HB2	2:A:715:VAL:HG23	1.98	0.44
1:B:2237:LEU:HD12	1:B:2238:LEU:H	1.82	0.44
1:D:2220:VAL:HG13	1:D:2222:ASN:N	2.31	0.44
2:E:1080:GLN:OE1	2:E:1083:LYS:HD3	2.17	0.44
2:E:1163:MET:O	2:E:1166:MET:HB3	2.16	0.44
2:E:1184:CYS:HB2	2:E:1226:LEU:HD21	1.99	0.44
2:E:1246:MET:O	2:E:1247:LEU:HD12	2.17	0.44
2:E:1418:HIS:HB2	2:E:1502:LEU:HD12	1.98	0.44
2:E:1587:PHE:HB3	2:E:1588:PRO:CD	2.46	0.44
2:E:1676:LEU:O	2:E:1681:LYS:HE3	2.16	0.44
2:E:1855:GLU:HB3	2:E:1866:LEU:HD12	1.99	0.44
1:F:2158:GLU:C	1:F:2159:LEU:HD13	2.37	0.44
2:G:967:VAL:HG13	2:G:1002:ARG:HB2	1.98	0.44
2:G:1397:VAL:HG12	2:G:1398:LEU:N	2.31	0.44
2:G:1641:PHE:HE2	2:G:1695:VAL:CG2	2.30	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:2307:ASN:OD1	2:G:672:ARG:NH1	2.50	0.44
1:H:2075:ILE:HA	1:H:2111:GLN:O	2.17	0.44
1:H:2302:VAL:HG11	2:G:1128:ALA:HA	1.98	0.44
2:A:1206:ASP:OD2	2:A:1209:ARG:HB2	2.17	0.44
2:A:2085:ASP:N	2:A:2086:PRO:HD3	2.31	0.44
2:A:621:ARG:CG	2:A:622:GLN:H	2.25	0.44
2:A:797:THR:O	2:A:801:ILE:HB	2.17	0.44
2:A:936:GLN:HE21	2:A:936:GLN:HB3	1.56	0.44
2:C:1148:CYS:SG	2:C:1156:VAL:HG12	2.57	0.44
2:C:1149:LEU:HD21	2:C:1271:TRP:CZ3	2.52	0.44
2:C:1386:THR:O	2:C:1390:LEU:HG	2.17	0.44
2:C:1486:VAL:HG23	2:C:1487:LEU:H	1.82	0.44
2:C:1426:ARG:O	2:C:1500:VAL:HA	2.16	0.44
2:C:1652:LEU:N	2:C:1652:LEU:HD12	2.31	0.44
2:C:1913:THR:HG22	2:C:1943:LYS:HZ1	1.83	0.44
2:C:482:GLY:CA	2:C:497:PRO:HG3	2.47	0.44
2:E:1095:ILE:N	2:E:1095:ILE:HD12	2.33	0.44
2:E:1919:GLY:HA2	2:E:1922:LYS:HB2	1.98	0.44
2:E:2019:THR:O	2:E:2023:VAL:HG13	2.16	0.44
2:E:832:PHE:CD2	2:E:858:VAL:HG11	2.53	0.44
2:G:1082:GLU:CD	2:G:1126:LEU:HG	2.38	0.44
2:G:1894:LYS:CG	2:G:1990:ASN:HD22	2.28	0.44
1:H:2150:LEU:C	1:H:2150:LEU:HD12	2.37	0.44
2:A:1008:SER:O	2:A:1012:VAL:HG13	2.17	0.44
2:A:955:ILE:CG2	2:A:1030:ALA:HB2	2.42	0.44
2:A:1514:GLN:HG3	2:A:1515:MET:H	1.83	0.44
2:A:1539:ILE:HB	2:A:1556:ILE:CG2	2.47	0.44
2:A:2115:VAL:HG12	2:A:2126:GLU:CG	2.48	0.44
2:C:1138:GLY:O	2:C:1142:ARG:HG3	2.17	0.44
2:C:1268:GLU:CD	2:C:1326:ARG:HH11	2.21	0.44
2:C:1946:VAL:O	2:C:1949:GLN:HB2	2.17	0.44
2:C:2031:ILE:CG2	2:C:2037:PHE:HB2	2.46	0.44
2:C:2003:GLN:CG	2:C:2178:VAL:HG23	2.47	0.44
2:C:562:MET:CE	2:C:607:LEU:HD21	2.48	0.44
2:C:781:THR:HG23	2:C:834:ILE:CD1	2.47	0.44
2:C:881:THR:CG2	2:C:921:THR:HB	2.47	0.44
2:E:1124:LEU:N	2:E:1124:LEU:HD12	2.31	0.44
2:E:1987:GLY:CA	2:E:2139:THR:HA	2.45	0.44
2:E:580:ASP:HB3	2:E:583:ALA:CB	2.48	0.44
2:G:1445:GLN:HA	2:G:1457:ILE:HD11	1.98	0.44
2:G:1438:ASP:HB3	2:G:1459:LYS:CE	2.48	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:1982:ILE:HG21	2:G:1990:ASN:OD1	2.17	0.44
2:G:898:ASP:O	2:G:902:MET:HG3	2.17	0.44
2:A:1391:TYR:O	2:A:1417:ARG:HD2	2.17	0.44
2:A:1537:MET:HE2	2:A:1539:ILE:HD11	1.99	0.44
2:A:1942:PHE:O	2:A:1946:VAL:HG12	2.18	0.44
1:B:2189:THR:O	1:B:2199:LEU:HA	2.18	0.44
2:C:1089:LEU:HD11	2:C:1119:LEU:HD13	1.98	0.44
2:C:1205:LEU:HD13	2:C:1210:MET:HB2	1.99	0.44
2:C:1851:ALA:O	2:C:1853:ILE:N	2.50	0.44
2:C:1954:ARG:O	2:C:1954:ARG:HD3	2.17	0.44
2:C:757:TYR:HE1	2:C:792:ALA:HA	1.83	0.44
1:D:2168:THR:O	1:D:2172:LYS:HG3	2.17	0.44
1:D:2207:LEU:N	1:D:2207:LEU:HD23	2.28	0.44
1:D:2285:GLN:OE1	1:D:2285:GLN:N	2.47	0.44
2:E:1920:ILE:HA	2:E:1923:ARG:HG2	1.99	0.44
2:E:2141:LEU:HD22	2:E:2168:LEU:HD21	1.99	0.44
2:E:617:LEU:HB3	2:E:636:THR:HB	1.99	0.44
2:E:772:LEU:HD12	2:E:876:VAL:HG13	2.00	0.44
2:E:775:VAL:HG21	2:E:780:GLU:CG	2.47	0.44
2:E:884:TYR:OH	2:E:1079:ARG:NH1	2.49	0.44
2:E:961:ARG:HB3	2:E:961:ARG:NH1	2.32	0.44
2:G:1148:CYS:SG	2:G:1156:VAL:HG12	2.58	0.44
2:G:1365:LYS:O	2:G:1367:LYS:HG2	2.17	0.44
2:G:1639:ASP:OD1	2:G:1639:ASP:N	2.51	0.44
2:G:1862:THR:CG2	2:G:1863:VAL:N	2.80	0.44
1:H:2119:VAL:HG22	1:H:2247:LEU:HB2	1.99	0.44
2:A:1419:TRP:CZ3	2:A:1476:LEU:HB2	2.52	0.44
2:A:593:LYS:HA	2:A:596:VAL:HG22	1.98	0.44
1:B:2079:MET:CE	1:B:2115:ILE:HG21	2.48	0.44
2:C:1396:ASN:HB3	2:C:1556:ILE:HG22	1.99	0.44
2:C:1477:ILE:HD11	2:C:1484:TRP:HZ3	1.83	0.44
2:C:1533:THR:OG1	2:C:1535:LEU:HG	2.16	0.44
2:C:1594:MET:C	2:C:1597:PRO:HD2	2.38	0.44
2:C:1708:PHE:O	2:C:1742:LYS:HG3	2.17	0.44
2:C:2031:ILE:HG23	2:C:2037:PHE:CB	2.44	0.44
2:C:607:LEU:N	2:C:607:LEU:HD23	2.32	0.44
1:D:2053:THR:HA	1:D:2093:LEU:HD21	1.99	0.44
2:E:1161:LEU:HG	2:E:1165:LYS:HE3	1.99	0.44
2:E:1429:TYR:CD2	2:E:1478:LEU:HD22	2.53	0.44
2:E:1443:ASP:O	2:E:1446:LYS:HB3	2.17	0.44
2:E:2049:TYR:CB	2:E:2053:VAL:HG22	2.45	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:537:PHE:CE1	2:E:541:PHE:HD2	2.35	0.44
2:E:826:ASP:O	2:E:829:PRO:HD2	2.17	0.44
1:F:2240:ASP:N	1:F:2240:ASP:OD1	2.47	0.44
2:G:1849:SER:HB2	2:G:1854:ILE:CG2	2.47	0.44
2:G:683:THR:O	2:G:687:THR:OG1	2.27	0.44
2:A:1274:VAL:HG11	2:A:1308:VAL:HG11	1.99	0.44
2:A:1720:PHE:O	2:A:1728:TYR:HA	2.17	0.44
2:A:1840:LEU:C	2:A:1840:LEU:HD13	2.38	0.44
2:A:1898:ILE:O	2:A:1902:VAL:HG12	2.18	0.44
2:A:733:LEU:HD11	2:A:917:GLY:N	2.33	0.44
2:A:816:ALA:O	2:A:819:VAL:HG12	2.18	0.44
1:B:2127:ASN:N	1:B:2127:ASN:OD1	2.49	0.44
1:B:2284:GLU:HG3	1:B:2291:PHE:CZ	2.52	0.44
2:C:1089:LEU:O	2:C:1093:VAL:HG13	2.18	0.44
2:C:1136:SER:O	2:C:1140:ILE:HG12	2.16	0.44
2:C:1480:THR:H	2:C:1483:GLN:HE21	1.65	0.44
2:C:1798:GLU:N	2:C:1798:GLU:OE2	2.51	0.44
2:C:1979:ILE:CG2	2:C:1994:ALA:HB3	2.48	0.44
2:C:2015:ILE:HG12	2:C:2069:PHE:CD2	2.53	0.44
2:C:892:VAL:HG22	2:C:893:GLU:N	2.32	0.44
2:C:877:ILE:HA	2:C:918:ILE:O	2.18	0.44
2:E:1100:SER:CB	2:E:1106:ALA:HB2	2.46	0.44
2:E:1426:ARG:HG2	2:E:1500:VAL:HG12	1.99	0.44
2:E:1683:ILE:O	2:E:1687:LEU:HD13	2.18	0.44
2:E:1784:LEU:N	2:E:1785:PRO:CD	2.81	0.44
2:E:798:ILE:HG13	2:E:801:ILE:HB	2.00	0.44
2:E:943:LEU:HD22	2:E:973:THR:OG1	2.17	0.44
1:F:2148:LEU:O	1:F:2186:LEU:N	2.49	0.44
2:G:1988:HIS:HB3	2:G:1990:ASN:OD1	2.17	0.44
2:G:825:LYS:HD2	2:G:825:LYS:HA	1.82	0.44
1:H:2298:GLU:OE2	2:G:1118:ARG:NE	2.49	0.44
2:A:1750:GLY:C	2:A:1751:ARG:HG3	2.38	0.44
2:A:454:PRO:HD3	2:A:963:ARG:CZ	2.48	0.44
2:A:509:ASN:O	2:A:511:PRO:HD3	2.18	0.44
2:A:729:ARG:CG	2:A:730:PRO:HD2	2.48	0.44
2:A:836:HIS:H	2:A:839:MET:HE2	1.83	0.44
2:C:1090:LEU:O	2:C:1090:LEU:HD23	2.18	0.44
2:C:1598:THR:HG21	2:C:1716:MET:HE3	1.99	0.44
2:C:1618:ARG:HG3	2:C:1673:HIS:ND1	2.33	0.44
2:C:1913:THR:HA	2:C:1943:LYS:HZ1	1.83	0.44
2:C:736:GLU:OE1	2:C:759:LYS:NZ	2.40	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:1000:GLN:O	2:E:1003:VAL:HB	2.18	0.44
2:E:1137:ALA:O	2:E:1141:LEU:HG	2.17	0.44
2:E:1819:ASN:ND2	2:E:1822:TYR:HB2	2.33	0.44
2:E:593:LYS:HE3	2:E:616:GLU:OE2	2.17	0.44
2:E:802:LEU:HD12	2:E:803:LYS:N	2.33	0.44
1:F:2109:ASN:HD22	1:F:2112:VAL:HG23	1.81	0.44
1:F:2162:MET:SD	1:F:2167:VAL:HG22	2.58	0.44
2:G:1065:ARG:O	2:G:1069:GLN:HG3	2.17	0.44
2:G:1451:LEU:HD22	2:G:1452:ARG:HH21	1.83	0.44
2:G:1799:SER:OG	2:G:1802:ASP:N	2.50	0.44
2:G:2103:ARG:O	2:G:2105:LEU:HD12	2.18	0.44
2:A:1171:MET:HE1	2:A:1328:MET:HB3	2.00	0.44
2:A:2031:ILE:HG22	2:A:2036:ASP:O	2.17	0.44
2:A:2111:PHE:CD1	2:A:2113:PRO:HD3	2.49	0.44
2:A:596:VAL:O	2:A:600:VAL:HG23	2.18	0.44
2:A:668:LEU:HD23	2:A:676:LEU:HB2	2.00	0.44
2:C:1715:VAL:HG23	2:C:1740:PHE:CE1	2.52	0.44
2:C:811:VAL:O	2:C:815:ALA:N	2.42	0.44
2:E:1063:LEU:HD23	2:E:1163:MET:CE	2.47	0.44
2:E:1185:PRO:HG2	2:E:1188:ILE:CD1	2.48	0.44
2:E:1457:ILE:HD13	2:E:1476:LEU:HD23	1.99	0.44
2:E:512:VAL:HG22	2:E:520:ARG:HG3	2.00	0.44
2:E:799:ASN:O	2:E:803:LYS:N	2.22	0.44
1:F:2193:THR:HB	1:F:2194:PRO:CD	2.48	0.44
2:G:1491:TRP:CZ2	2:G:1532:GLN:HG3	2.53	0.44
2:G:1889:LEU:HD12	2:G:1889:LEU:N	2.32	0.44
2:G:519:ALA:HA	2:G:610:TYR:OH	2.18	0.44
1:H:2091:ALA:HB2	1:H:2153:THR:HG21	1.99	0.44
2:A:1085:GLU:OE2	2:A:1122:GLU:N	2.41	0.44
2:A:1242:MET:HE1	2:A:1307:THR:HG22	2.00	0.44
2:A:1428:VAL:HG22	2:A:1477:ILE:CG1	2.47	0.44
2:A:1581:SER:HB2	2:A:1760:ALA:HA	1.99	0.44
2:A:1979:ILE:O	2:A:1982:ILE:HG22	2.18	0.44
2:A:687:THR:HG23	2:A:692:GLU:O	2.17	0.44
2:A:738:ILE:HD13	2:A:755:ILE:HG21	2.00	0.44
2:A:472:MET:HE2	2:A:928:TYR:HA	2.00	0.44
2:C:1617:SER:HB3	2:C:1620:GLN:HB2	2.00	0.44
2:C:1881:THR:OG1	2:C:1907:GLU:OE1	2.36	0.44
2:C:1911:ILE:O	2:C:1913:THR:HG23	2.17	0.44
2:C:1979:ILE:HD13	2:C:2130:LEU:CD1	2.48	0.44
2:C:593:LYS:HE2	2:C:597:GLN:OE1	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2079:MET:CE	1:D:2115:ILE:HG21	2.48	0.44
2:E:1073:PHE:CD1	2:E:1133:VAL:HG22	2.53	0.44
1:F:2284:GLU:OE2	2:E:1174:THR:HG23	2.17	0.44
2:E:1276:ASP:OD1	2:E:1279:GLY:N	2.49	0.44
2:E:1560:LYS:HA	2:E:1563:ILE:CG1	2.43	0.44
2:E:526:THR:O	2:E:527:LYS:HB2	2.18	0.44
2:E:590:ALA:O	2:E:637:THR:HA	2.17	0.44
2:E:835:HIS:CE1	2:E:865:LEU:HB2	2.52	0.44
2:E:989:GLY:C	2:E:991:GLU:H	2.21	0.44
2:E:998:LEU:O	2:E:1002:ARG:HG3	2.18	0.44
2:G:1241:PRO:CG	2:G:1821:SER:HB2	2.48	0.44
2:G:1861:GLY:O	2:G:1862:THR:CB	2.64	0.44
2:G:2083:VAL:CG1	2:G:2086:PRO:HG3	2.48	0.44
2:G:2093:GLU:HA	2:G:2094:PRO:HD3	1.81	0.44
2:G:541:PHE:HB3	2:G:542:LEU:HD12	2.00	0.44
2:G:727:SER:C	2:G:729:ARG:H	2.21	0.44
2:A:1397:VAL:HB	2:A:1562:ASP:HB3	2.00	0.43
2:A:1497:VAL:O	2:A:1500:VAL:HG12	2.17	0.43
2:A:1622:ARG:NH2	2:A:1658:GLU:OE1	2.51	0.43
2:A:1903:THR:HG22	2:A:1971:LYS:NZ	2.33	0.43
2:A:1982:ILE:HG23	2:A:1991:ALA:CB	2.48	0.43
2:A:2129:TRP:CZ3	2:A:2175:ASP:HB3	2.53	0.43
2:A:562:MET:O	2:A:566:LEU:HG	2.18	0.43
2:C:1403:THR:HA	2:C:1407:LYS:HE3	1.98	0.43
2:C:1858:GLU:O	2:C:1860:GLU:N	2.51	0.43
2:C:1881:THR:HG23	2:C:1884:MET:CE	2.48	0.43
2:C:1913:THR:HA	2:C:1943:LYS:NZ	2.33	0.43
2:C:588:TYR:HB3	2:C:635:VAL:HG22	2.00	0.43
2:C:729:ARG:HG3	2:C:730:PRO:HD2	2.00	0.43
2:C:844:ARG:O	2:C:848:GLU:HG3	2.17	0.43
2:E:1398:LEU:HD21	2:E:1552:ILE:CG1	2.47	0.43
2:E:1622:ARG:HH22	2:E:1658:GLU:CD	2.21	0.43
2:E:1784:LEU:O	2:E:1788:PHE:N	2.44	0.43
2:E:1843:THR:O	2:E:1847:GLN:HG3	2.18	0.43
2:E:1952:PHE:HB3	2:E:2006:TRP:CE3	2.43	0.43
1:F:2056:LEU:HD11	1:F:2093:LEU:CD2	2.48	0.43
1:F:2164:PRO:O	1:F:2168:THR:HG23	2.17	0.43
2:G:1515:MET:O	2:G:1518:ILE:HG12	2.18	0.43
2:G:1743:ALA:C	2:G:1744:LEU:HD12	2.38	0.43
2:G:2096:TYR:HD1	2:G:2156:LEU:HA	1.82	0.43
1:H:2308:PHE:CE1	2:G:639:GLU:HB3	2.52	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:2104:CYS:SG	1:H:2116:ARG:NH2	2.91	0.43
1:H:2216:LYS:C	1:H:2216:LYS:HD3	2.39	0.43
2:A:1061:VAL:HG13	2:A:1062:GLU:N	2.33	0.43
2:A:1191:LYS:NZ	2:A:1214:LEU:O	2.38	0.43
2:A:1429:TYR:HA	2:A:1504:ILE:HG23	2.00	0.43
2:A:1541:GLY:O	2:A:1542:LEU:HD23	2.18	0.43
2:A:1784:LEU:O	2:A:1788:PHE:N	2.46	0.43
2:A:1934:ASN:O	2:A:1934:ASN:ND2	2.51	0.43
2:A:2054:LYS:HD3	2:A:2054:LYS:C	2.39	0.43
2:A:2132:VAL:HG12	2:A:2170:LEU:HD23	2.01	0.43
2:A:621:ARG:CG	2:A:622:GLN:HE21	2.32	0.43
2:A:746:ILE:H	2:A:746:ILE:CD1	2.28	0.43
1:B:2303:ASP:OD1	2:A:778:ARG:NH2	2.39	0.43
2:C:1085:GLU:HA	2:C:1088:LYS:HE2	2.00	0.43
2:C:1249:ILE:CD1	2:C:1320:ILE:HD11	2.47	0.43
2:C:2167:ASP:O	2:C:2168:LEU:HD12	2.17	0.43
2:E:2020:PRO:HA	2:E:2023:VAL:HG22	2.00	0.43
2:E:2075:PRO:O	2:E:2180:VAL:HG11	2.18	0.43
2:G:1556:ILE:HG22	2:G:1556:ILE:O	2.17	0.43
2:G:1862:THR:O	2:G:1863:VAL:HG22	2.17	0.43
2:G:593:LYS:HE2	2:G:616:GLU:OE2	2.18	0.43
2:A:1085:GLU:O	2:A:1089:LEU:HB2	2.17	0.43
2:A:1154:ALA:O	2:A:1158:LYS:HG3	2.18	0.43
2:A:1837:LEU:O	2:A:1837:LEU:HD23	2.17	0.43
1:B:2151:ILE:HG23	1:B:2188:VAL:HB	2.00	0.43
2:C:1037:ALA:CB	2:C:1047:MET:HG3	2.47	0.43
2:C:1843:THR:O	2:C:1847:GLN:HG3	2.18	0.43
2:C:862:THR:OG1	2:C:863:ALA:N	2.48	0.43
1:D:2284:GLU:HG3	1:D:2291:PHE:CD1	2.54	0.43
2:E:1398:LEU:HD21	2:E:1552:ILE:CD1	2.48	0.43
2:E:1992:LEU:C	2:E:1992:LEU:HD23	2.39	0.43
2:E:2141:LEU:HB3	2:E:2159:VAL:HG22	2.00	0.43
2:E:2127:ASN:ND2	2:E:2145:ARG:HE	2.15	0.43
1:F:2119:VAL:HG11	1:F:2137:PRO:HG3	2.00	0.43
1:F:2086:LYS:CE	1:F:2278:PRO:HG2	2.44	0.43
2:G:1033:LEU:CD1	2:G:1047:MET:HE3	2.48	0.43
2:G:1249:ILE:HD11	2:G:1320:ILE:CD1	2.39	0.43
2:G:1251:LEU:HB3	2:G:1304:VAL:HG13	2.00	0.43
2:G:1784:LEU:HB2	2:G:1785:PRO:HD3	2.01	0.43
2:G:1792:ILE:O	2:G:1865:PRO:HG3	2.17	0.43
2:G:540:ALA:HA	2:G:695:ARG:HH22	1.83	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:971:GLY:HA3	2:A:1002:ARG:NH1	2.33	0.43
2:A:1084:LEU:C	2:A:1084:LEU:HD12	2.38	0.43
2:A:1401:ALA:O	2:A:1544:VAL:HA	2.18	0.43
2:A:1465:THR:HG23	2:A:1466:THR:HG23	1.99	0.43
2:A:2075:PRO:HG2	2:A:2180:VAL:HG21	2.01	0.43
2:A:577:GLY:O	2:A:578:GLU:HG2	2.18	0.43
1:B:2101:LEU:HD21	1:B:2151:ILE:CD1	2.45	0.43
1:B:2250:ASP:HB3	1:B:2272:HIS:HB3	1.99	0.43
2:C:1468:LEU:HD21	2:C:1494:ARG:NH1	2.34	0.43
2:C:1860:GLU:HG2	2:C:1862:THR:HB	2.00	0.43
2:C:2032:ASN:N	2:C:2036:ASP:OD1	2.50	0.43
2:C:2156:LEU:N	2:C:2156:LEU:HD12	2.33	0.43
2:C:729:ARG:HH12	2:C:906:ALA:HB3	1.82	0.43
2:E:1007:HIS:O	2:E:1011:MET:HG2	2.18	0.43
2:E:1129:ASP:O	2:E:1133:VAL:HG23	2.17	0.43
2:G:1273:LEU:HD23	2:G:1285:HIS:CB	2.48	0.43
2:G:1382:ILE:O	2:G:1386:THR:HG23	2.18	0.43
2:G:1425:GLY:HA2	2:G:1501:GLU:OE1	2.18	0.43
2:G:1766:TYR:O	2:G:1770:LEU:HD13	2.18	0.43
2:G:1914:ARG:NE	2:G:1960:ASP:HB3	2.33	0.43
2:A:1441:PHE:CD1	2:A:1459:LYS:HB2	2.53	0.43
2:A:1718:THR:O	2:A:1731:TYR:N	2.49	0.43
2:A:1815:ARG:NH1	2:A:1818:ALA:HB3	2.33	0.43
2:A:803:LYS:CA	2:A:803:LYS:HE2	2.45	0.43
2:C:1188:ILE:HG21	2:C:1219:ALA:HB2	1.99	0.43
2:C:1274:VAL:HA	2:C:1319:PHE:O	2.18	0.43
2:C:1387:PHE:HB2	2:C:1391:TYR:OH	2.18	0.43
2:C:1441:PHE:HB2	2:C:1478:LEU:HD12	1.99	0.43
2:C:541:PHE:O	2:C:567:ARG:HD2	2.18	0.43
1:D:2053:THR:HG22	1:D:2093:LEU:CD2	2.49	0.43
1:D:2177:HIS:HB2	1:D:2180:TRP:HB2	2.00	0.43
2:E:1090:LEU:CD2	2:E:1098:LYS:HD3	2.48	0.43
2:E:1891:HIS:O	2:E:1892:LYS:HB2	2.18	0.43
1:F:2308:PHE:O	2:E:640:LYS:HD3	2.18	0.43
2:E:777:SER:HB3	2:E:780:GLU:HB3	2.00	0.43
1:F:2208:GLY:HA2	1:F:2230:MET:HE3	2.00	0.43
1:H:2284:GLU:HG2	2:G:1174:THR:HG23	2.01	0.43
2:G:1925:TYR:O	2:G:1928:VAL:HG22	2.19	0.43
2:G:590:ALA:O	2:G:638:PRO:HD3	2.19	0.43
2:G:752:MET:HG3	2:G:920:ILE:HG21	2.00	0.43
2:A:1241:PRO:CG	2:A:1821:SER:HB2	2.49	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:1533:THR:CG2	2:A:1535:LEU:HG	2.48	0.43
2:A:1610:PRO:O	2:A:1710:ALA:HB1	2.19	0.43
2:A:1872:ALA:HB2	2:A:1882:MET:HG3	2.01	0.43
2:A:593:LYS:O	2:A:596:VAL:HG22	2.18	0.43
2:A:660:ILE:CD1	2:A:696:ILE:HG12	2.46	0.43
2:C:1430:ILE:HD12	2:C:1503:PHE:CZ	2.53	0.43
2:C:1559:LYS:O	2:C:1563:ILE:HG12	2.18	0.43
2:C:1596:LYS:HB3	2:C:1597:PRO:CD	2.45	0.43
2:C:2011:PRO:O	2:C:2014:GLN:HG2	2.18	0.43
2:C:2130:LEU:HD22	2:C:2143:ILE:HG21	2.01	0.43
2:C:2131:VAL:HG12	2:C:2132:VAL:N	2.33	0.43
2:C:541:PHE:HB3	2:C:542:LEU:HD22	2.00	0.43
2:C:684:ILE:HD12	2:C:684:ILE:N	2.34	0.43
2:C:851:PHE:CD1	2:C:871:LEU:HD12	2.52	0.43
1:D:2092:ASP:CG	1:D:2095:VAL:HG12	2.39	0.43
1:D:2182:ASN:OD1	1:D:2183:GLN:N	2.48	0.43
1:D:2306:ASP:O	1:D:2307:ASN:HB2	2.18	0.43
2:E:1890:SER:O	2:E:1893:SER:OG	2.24	0.43
2:E:1985:SER:HB3	2:E:1988:HIS:CD2	2.53	0.43
2:E:2015:ILE:O	2:E:2018:PHE:HB2	2.18	0.43
2:E:2026:ALA:O	2:E:2031:ILE:HB	2.19	0.43
1:F:2077:TYR:HA	1:F:2113:LYS:O	2.19	0.43
1:F:2124:ILE:CG2	1:F:2131:GLN:HB2	2.48	0.43
2:G:1084:LEU:H	2:G:1084:LEU:CD2	2.31	0.43
2:G:1354:LEU:HD23	2:G:1385:GLN:HB2	2.01	0.43
1:H:2084:LEU:O	1:H:2088:ILE:HG13	2.18	0.43
1:H:2065:VAL:CG2	1:H:2238:LEU:HD13	2.47	0.43
2:A:1428:VAL:HG22	2:A:1477:ILE:CD1	2.47	0.43
2:A:2062:GLN:O	2:A:2066:ALA:N	2.51	0.43
1:B:2253:LYS:HA	1:B:2253:LYS:HD3	1.74	0.43
2:C:1837:LEU:O	2:C:1841:VAL:HG12	2.18	0.43
2:C:2045:GLU:HB3	2:C:2046:ASN:H	1.55	0.43
2:C:530:ASN:ND2	2:C:532:ILE:HG22	2.34	0.43
2:C:729:ARG:HH22	2:C:906:ALA:CB	2.32	0.43
2:C:866:ALA:O	2:C:905:ARG:NH1	2.49	0.43
2:C:948:VAL:HG12	2:C:1013:LEU:HD21	2.01	0.43
1:D:2170:HIS:O	1:D:2174:VAL:HG23	2.19	0.43
2:E:1746:PRO:HB3	2:E:1751:ARG:O	2.19	0.43
2:E:1912:GLN:O	2:E:1943:LYS:NZ	2.50	0.43
2:E:2115:VAL:HG13	2:E:2177:TYR:CE2	2.53	0.43
2:G:1438:ASP:HB3	2:G:1459:LYS:HE3	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:1670:GLY:O	2:G:1696:LEU:HA	2.18	0.43
2:G:1889:LEU:HD12	2:G:1889:LEU:H	1.84	0.43
2:G:2012:LEU:HD22	2:G:2012:LEU:N	2.33	0.43
2:G:1989:LEU:HB3	2:G:2139:THR:HG21	2.01	0.43
2:G:578:GLU:HG3	2:G:579:ILE:N	2.32	0.43
1:H:2163:SER:O	1:H:2167:VAL:HG23	2.19	0.43
1:B:2044:THR:N	2:A:1098:LYS:HZ1	2.17	0.43
2:A:1533:THR:HG22	2:A:1535:LEU:HG	2.01	0.43
2:A:1715:VAL:HG22	2:A:1739:MET:CE	2.48	0.43
2:A:1758:LEU:O	2:A:1758:LEU:HD12	2.19	0.43
2:A:1967:VAL:CG1	2:A:1971:LYS:HE3	2.49	0.43
2:A:2010:SER:OG	2:A:2012:LEU:HD23	2.18	0.43
2:A:2016:PRO:HG3	2:A:2116:HIS:CE1	2.54	0.43
2:A:685:ARG:O	2:A:689:GLN:HG2	2.19	0.43
2:A:995:ASP:OD2	2:A:1000:GLN:N	2.51	0.43
1:B:2091:ALA:HB2	1:B:2153:THR:HG21	2.00	0.43
1:B:2164:PRO:O	1:B:2168:THR:HG23	2.19	0.43
1:B:2306:ASP:O	1:B:2307:ASN:HB2	2.19	0.43
2:C:1106:ALA:O	2:C:1110:VAL:HG23	2.18	0.43
2:C:1774:LEU:HD12	2:C:1775:PRO:CD	2.49	0.43
2:C:1854:ILE:HB	2:C:1863:VAL:HG11	2.01	0.43
2:C:2031:ILE:HA	2:C:2036:ASP:OD1	2.19	0.43
2:C:686:ARG:HH21	2:C:959:ASN:HA	1.84	0.43
1:F:2302:VAL:HG22	2:E:1131:VAL:HG21	2.00	0.43
2:E:2156:LEU:HD12	2:E:2156:LEU:O	2.19	0.43
2:E:623:LEU:O	2:E:624:THR:OG1	2.21	0.43
2:E:975:LEU:O	2:E:979:MET:HG3	2.19	0.43
1:F:2150:LEU:O	1:F:2150:LEU:HD12	2.19	0.43
1:F:2276:ASP:OD1	2:E:1333:ARG:NH1	2.51	0.43
2:G:1187:GLU:HG2	2:G:1188:ILE:N	2.34	0.43
2:G:1982:ILE:CG2	2:G:1991:ALA:HB2	2.49	0.43
2:G:565:MET:CE	2:G:633:VAL:HG21	2.47	0.43
2:G:628:ILE:HD12	2:G:628:ILE:C	2.39	0.43
2:G:735:GLN:OE1	2:G:933:LEU:HB3	2.19	0.43
1:H:2081:LYS:HE2	1:H:2240:ASP:OD1	2.19	0.43
2:A:2042:ASN:OD1	2:A:2043:PRO:HD2	2.19	0.43
2:A:2029:TYR:HH	2:A:2051:SER:HG	1.58	0.43
2:A:2084:ASP:N	2:A:2084:ASP:OD1	2.52	0.43
2:A:2130:LEU:O	2:A:2143:ILE:HA	2.17	0.43
2:A:2162:SER:HA	2:A:2163:PRO:HD3	1.82	0.43
2:A:2169:LYS:NZ	2:A:2185:SER:HB3	2.33	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:898:ASP:O	2:A:902:MET:HG3	2.18	0.43
1:B:2266:ILE:O	1:B:2266:ILE:HG12	2.19	0.43
2:C:1481:PRO:HB2	2:C:1518:ILE:CG2	2.45	0.43
2:C:556:GLY:HA2	3:C:2201:ACT:OXT	2.18	0.43
2:C:657:VAL:O	2:C:657:VAL:HG23	2.19	0.43
2:E:1418:HIS:HA	2:E:1422:LYS:HG3	1.99	0.43
2:E:1600:LEU:HA	2:E:1603:THR:OG1	2.19	0.43
2:E:1998:SER:O	2:E:2002:VAL:HG12	2.19	0.43
2:E:778:ARG:NH1	2:E:838:GLY:HA2	2.33	0.43
2:E:856:ILE:O	2:E:858:VAL:N	2.51	0.43
2:E:961:ARG:HB3	2:E:961:ARG:CZ	2.49	0.43
1:F:2163:SER:O	1:F:2167:VAL:HG23	2.18	0.43
2:G:1497:VAL:HG13	2:G:1498:GLN:OE1	2.19	0.43
2:G:1886:LEU:HG	2:G:1887:LEU:HD22	2.00	0.43
2:G:2058:LEU:HD23	2:G:2062:GLN:HE22	1.84	0.43
2:G:2120:TYR:HA	2:G:2121:PRO:HD3	1.89	0.43
2:G:823:ASP:OD1	2:G:824:LEU:HG	2.19	0.43
2:A:1101:ILE:O	2:A:1101:ILE:HD12	2.19	0.43
2:A:1181:TYR:HA	2:A:1182:PRO:HD3	1.88	0.43
2:A:1647:ASP:OD1	2:A:1648:GLN:HG2	2.19	0.43
2:A:1792:ILE:HD13	2:A:1797:ILE:HB	2.01	0.43
2:A:1975:LEU:CD1	2:A:1997:MET:HG2	2.34	0.43
2:A:2185:SER:O	2:A:2186:PHE:HB2	2.19	0.43
2:A:885:SER:O	2:A:889:GLY:N	2.51	0.43
2:A:776:HIS:NE2	2:A:894:LEU:HD11	2.33	0.43
1:B:2210:LYS:HB3	1:B:2210:LYS:NZ	2.34	0.43
1:B:2160:PRO:O	1:B:2233:ARG:NH2	2.52	0.43
2:C:1545:SER:OG	2:C:1568:PRO:HB3	2.18	0.43
2:C:2090:ARG:HH22	2:C:2165:LYS:HA	1.84	0.43
2:C:851:PHE:HZ	2:C:873:ALA:HB1	1.82	0.43
2:E:1102:GLU:N	2:E:1102:GLU:OE1	2.51	0.43
2:E:1094:PRO:HG2	2:E:1172:TRP:CZ2	2.54	0.43
2:E:1179:ARG:NE	2:E:1193:GLU:OE1	2.45	0.43
2:E:1315:PRO:HA	2:E:1316:PRO:HD3	1.89	0.43
1:F:2275:LEU:HD21	2:E:1317:ASN:ND2	2.34	0.43
2:E:1715:VAL:HB	2:E:1756:LEU:HD12	2.01	0.43
2:E:1804:ILE:HG23	2:E:1837:LEU:CD1	2.49	0.43
2:E:2083:VAL:O	2:E:2086:PRO:HG3	2.18	0.43
2:E:833:GLY:CA	2:E:856:ILE:HD11	2.49	0.43
2:E:737:PHE:CE2	2:E:930:LEU:HD23	2.54	0.43
2:G:1107:LYS:O	2:G:1111:LEU:HB2	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:1149:LEU:HD21	2:G:1271:TRP:CZ3	2.54	0.43
2:G:1283:LEU:HD12	2:G:1283:LEU:H	1.83	0.43
2:G:1464:THR:HA	2:G:1467:ASP:HB2	2.00	0.43
2:G:1509:HIS:HB3	2:G:1543:SER:OG	2.19	0.43
2:G:1678:GLN:OE1	2:G:1678:GLN:N	2.48	0.43
2:G:1682:ARG:HA	2:G:1685:LYS:HB3	2.00	0.43
2:G:1618:ARG:NH2	2:G:1914:ARG:HH21	2.16	0.43
2:G:2054:LYS:HG3	2:G:2054:LYS:O	2.18	0.43
2:G:877:ILE:HA	2:G:918:ILE:O	2.19	0.43
2:G:993:GLU:O	2:G:994:ASP:CB	2.67	0.43
2:A:2056:LEU:HD22	2:A:2056:LEU:N	2.34	0.42
2:A:2133:GLY:O	2:A:2168:LEU:HB2	2.19	0.42
1:B:2302:VAL:HG21	2:A:1127:MET:HB3	2.01	0.42
2:E:541:PHE:O	2:E:567:ARG:HD2	2.19	0.42
1:F:2051:ILE:HG21	2:E:1099:GLU:HG2	2.01	0.42
1:F:2309:ALA:HB1	2:E:618:THR:CA	2.49	0.42
2:G:1171:MET:CE	2:G:1328:MET:HB3	2.49	0.42
2:G:1792:ILE:HG22	2:G:1865:PRO:CG	2.49	0.42
2:G:2025:VAL:HA	2:G:2028:LYS:HB2	2.00	0.42
2:G:564:THR:HG21	2:G:697:ILE:HG13	2.01	0.42
2:G:877:ILE:HG12	2:G:918:ILE:HB	2.01	0.42
2:G:926:ILE:HD12	2:G:927:PRO:N	2.34	0.42
1:H:2211:TRP:CZ2	1:H:2226:PHE:HB2	2.54	0.42
1:H:2253:LYS:HZ2	1:H:2285:GLN:HG3	1.83	0.42
2:A:1249:ILE:HD11	2:A:1320:ILE:HD11	2.01	0.42
2:A:1460:LEU:HB2	2:A:1479:ALA:CB	2.44	0.42
2:A:1351:THR:CG2	2:A:1565:ASN:H	2.32	0.42
2:A:1615:VAL:CG2	2:A:1621:THR:HG22	2.49	0.42
2:A:1914:ARG:HA	2:A:1914:ARG:NE	2.34	0.42
2:A:2076:ASP:O	2:A:2077:ILE:HG23	2.19	0.42
2:A:1983:LEU:CB	2:A:2140:LEU:HD21	2.46	0.42
2:A:2143:ILE:HG12	2:A:2144:LYS:N	2.34	0.42
2:A:760:VAL:HG21	2:A:858:VAL:HG21	2.01	0.42
2:C:1507:ASP:N	2:C:1542:LEU:O	2.52	0.42
2:C:1581:SER:HB2	2:C:1760:ALA:HA	2.00	0.42
2:C:1586:HIS:CE1	2:C:1588:PRO:HG2	2.54	0.42
1:D:2101:LEU:HD22	1:D:2115:ILE:CG2	2.49	0.42
1:D:2289:ILE:HA	1:D:2292:THR:HG23	2.00	0.42
2:E:1016:SER:CB	2:E:1018:LEU:HD13	2.49	0.42
2:E:1054:ILE:HG23	2:E:1058:MET:HE2	1.99	0.42
2:E:1590:LEU:HD21	2:E:1594:MET:HE1	2.00	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:1812:PHE:O	2:E:1816:LEU:HB2	2.17	0.42
2:E:1981:ASP:O	2:E:1984:SER:OG	2.27	0.42
2:E:2141:LEU:CD2	2:E:2168:LEU:HD21	2.49	0.42
2:E:479:MET:HE2	2:E:483:THR:HG21	2.00	0.42
2:E:585:LYS:HG2	2:E:632:GLN:HA	2.01	0.42
2:E:688:GLU:OE1	2:E:972:TYR:OH	2.32	0.42
1:F:2149:GLY:HA3	1:F:2186:LEU:O	2.19	0.42
2:G:1404:GLY:CA	2:G:1744:LEU:HD21	2.50	0.42
2:G:585:LYS:O	2:G:657:VAL:HA	2.20	0.42
2:G:913:THR:HG1	2:G:914:TYR:HD1	1.67	0.42
2:A:1107:LYS:HE3	2:A:1126:LEU:CD1	2.49	0.42
2:A:1067:PHE:CD1	2:A:1140:ILE:HG21	2.55	0.42
2:A:1820:PRO:HB3	2:A:1825:LEU:HD23	2.01	0.42
2:A:2002:VAL:HG21	2:A:2176:SER:HA	2.00	0.42
1:B:2170:HIS:HE1	1:B:2186:LEU:HA	1.83	0.42
2:C:1103:GLU:HB3	2:C:1104:PRO:HD2	2.00	0.42
2:C:1213:LEU:HD23	2:C:1213:LEU:C	2.39	0.42
2:C:1223:VAL:O	2:C:1227:VAL:HG12	2.19	0.42
2:C:1254:THR:HG22	2:C:1301:GLU:HA	2.02	0.42
2:C:1677:SER:O	2:C:1681:LYS:HG3	2.19	0.42
2:C:1948:VAL:HG12	2:C:1952:PHE:CZ	2.54	0.42
2:C:677:GLU:OE2	2:C:941:SER:HB2	2.19	0.42
2:C:983:PRO:HA	2:C:988:VAL:HG23	2.01	0.42
2:E:1712:LEU:HD13	2:E:1753:ARG:HB2	2.01	0.42
2:E:1714:VAL:HA	2:E:1755:VAL:O	2.19	0.42
2:E:2115:VAL:HG12	2:E:2116:HIS:N	2.33	0.42
2:E:2154:VAL:HG12	2:E:2155:LYS:N	2.33	0.42
2:E:2127:ASN:HB2	2:E:2175:ASP:OD2	2.19	0.42
2:E:521:ILE:H	2:E:521:ILE:HG13	1.49	0.42
2:E:593:LYS:O	2:E:596:VAL:HG22	2.19	0.42
2:E:657:VAL:O	2:E:658:ARG:HG3	2.20	0.42
2:E:674:PRO:HB2	2:E:946:LYS:CD	2.33	0.42
2:E:778:ARG:HH21	2:E:837:ALA:HB3	1.85	0.42
2:G:1103:GLU:CB	2:G:1104:PRO:HD2	2.46	0.42
2:G:1185:PRO:HG2	2:G:1188:ILE:CG1	2.48	0.42
2:G:1219:ALA:O	2:G:1223:VAL:HG23	2.19	0.42
2:G:1361:VAL:HG23	2:G:1377:GLN:O	2.19	0.42
2:G:1851:ALA:HB1	2:G:1883:GLU:OE1	2.19	0.42
2:G:903:LEU:CD2	2:G:933:LEU:HD13	2.49	0.42
1:H:2190:VAL:HG13	1:H:2197:VAL:HG11	2.01	0.42
2:A:1136:SER:O	2:A:1140:ILE:HG12	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:1407:LYS:HZ3	2:A:1407:LYS:CA	2.32	0.42
2:A:1514:GLN:HG3	2:A:1515:MET:N	2.34	0.42
2:A:1519:TYR:O	2:A:1523:VAL:HG23	2.19	0.42
2:A:1895:LEU:HD23	2:A:1895:LEU:C	2.39	0.42
2:A:1948:VAL:O	2:A:1951:HIS:HB3	2.20	0.42
2:A:535:LYS:HB3	2:A:724:PHE:HZ	1.84	0.42
2:A:608:GLU:N	2:A:609:PRO:CD	2.79	0.42
2:A:943:LEU:O	2:A:947:LEU:N	2.52	0.42
1:B:2085:LYS:O	1:B:2089:THR:HG23	2.19	0.42
1:B:2146:GLU:O	1:B:2148:LEU:HD13	2.19	0.42
1:D:2304:ARG:NH2	2:C:1135:GLN:OE1	2.50	0.42
2:C:1458:VAL:O	2:C:1477:ILE:HA	2.19	0.42
1:D:2137:PRO:CB	1:D:2273:VAL:HG21	2.49	0.42
2:E:1062:GLU:O	2:E:1066:VAL:HG23	2.20	0.42
2:E:1441:PHE:CB	2:E:1478:LEU:HD12	2.43	0.42
2:E:587:VAL:HB	2:E:660:ILE:HG22	2.00	0.42
1:F:2217:ASP:N	1:F:2218:PRO:HD3	2.34	0.42
2:G:1054:ILE:HG23	2:G:1058:MET:HE2	2.01	0.42
2:G:1720:PHE:CZ	2:G:1729:ILE:HD11	2.54	0.42
2:G:2025:VAL:HG21	2:G:2056:LEU:HD22	2.01	0.42
2:G:670:ASP:OD1	2:G:671:ASP:N	2.52	0.42
2:C:1354:LEU:CB	2:C:1356:LEU:HD21	2.49	0.42
2:C:1763:ARG:HH22	2:C:1767:LYS:NZ	2.18	0.42
2:C:1920:ILE:O	2:C:1924:ILE:HG23	2.19	0.42
2:E:1471:LEU:O	2:E:1471:LEU:HD23	2.19	0.42
2:E:1614:PHE:HA	2:E:1698:ALA:O	2.19	0.42
2:E:1965:GLN:O	2:E:1966:GLU:HB2	2.20	0.42
2:E:562:MET:HE3	2:E:606:ARG:HD2	2.01	0.42
2:E:684:ILE:HG13	2:E:972:TYR:CD2	2.54	0.42
2:G:1274:VAL:HG21	2:G:1306:PHE:CE2	2.54	0.42
2:G:1959:ILE:CD1	2:G:1959:ILE:H	2.22	0.42
2:G:633:VAL:O	2:G:633:VAL:HG13	2.20	0.42
1:H:2156:GLY:H	1:H:2192:PHE:HB2	1.84	0.42
2:A:1185:PRO:O	2:A:1188:ILE:HG12	2.19	0.42
2:A:1360:PRO:HG2	2:A:1362:SER:OG	2.19	0.42
2:A:1505:ALA:HB1	2:A:1519:TYR:OH	2.19	0.42
2:A:1894:LYS:HB3	2:A:1896:ARG:HH11	1.84	0.42
2:A:2090:ARG:HG3	2:A:2164:GLY:N	2.34	0.42
2:A:589:ILE:HD12	2:A:662:ILE:HD12	2.00	0.42
2:A:646:ARG:HD3	2:A:1038:SER:O	2.19	0.42
1:B:2079:MET:HE2	1:B:2115:ILE:HG21	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1045:GLU:HG2	2:C:1046:SER:N	2.34	0.42
2:C:1163:MET:O	2:C:1166:MET:HB3	2.19	0.42
2:C:1206:ASP:CG	2:C:1209:ARG:HG2	2.40	0.42
2:C:1229:LYS:NZ	2:C:1260:ASP:OD2	2.34	0.42
2:C:1323:ILE:HG12	2:C:1331:GLU:HG3	2.02	0.42
2:C:1429:TYR:CE1	2:C:1506:ASP:HB2	2.54	0.42
2:C:1737:LEU:CD1	2:C:1774:LEU:HD22	2.49	0.42
2:C:2006:TRP:CG	2:C:2007:ASP:N	2.86	0.42
2:C:517:GLU:HA	2:C:520:ARG:HD3	2.02	0.42
2:C:546:ASN:C	2:C:715:VAL:HG22	2.40	0.42
2:C:926:ILE:HG22	2:C:927:PRO:N	2.35	0.42
2:E:1406:GLY:O	2:E:1409:VAL:HG22	2.18	0.42
2:E:1895:LEU:HD12	2:E:1895:LEU:N	2.34	0.42
2:E:1928:VAL:O	2:E:1931:LYS:NZ	2.52	0.42
2:E:2058:LEU:HB2	2:E:2063:LEU:CD2	2.50	0.42
1:F:2206:PRO:O	1:F:2209:TYR:HB3	2.19	0.42
1:F:2294:PHE:HE2	2:E:1119:LEU:HD21	1.85	0.42
2:G:1791:GLU:HB3	2:G:1797:ILE:HB	2.00	0.42
2:G:2015:ILE:HG23	2:G:2016:PRO:HD2	2.02	0.42
2:G:2170:LEU:HD23	2:G:2170:LEU:C	2.39	0.42
2:G:464:VAL:HG22	2:G:465:PHE:N	2.34	0.42
2:G:614:VAL:HG22	2:G:633:VAL:HG11	1.98	0.42
2:G:617:LEU:CD1	2:G:634:ILE:HD13	2.50	0.42
2:G:812:LEU:HD22	2:G:855:HIS:CE1	2.55	0.42
1:H:2183:GLN:NE2	1:H:2183:GLN:O	2.53	0.42
2:A:1146:GLU:O	2:A:1150:LYS:HG2	2.20	0.42
2:A:1230:PHE:CD1	2:A:1231:PRO:HD2	2.55	0.42
2:A:1440:ARG:CA	2:A:1440:ARG:HE	2.27	0.42
2:A:1638:GLU:HG2	2:A:1639:ASP:OD1	2.19	0.42
2:A:1980:VAL:O	2:A:1984:SER:HB2	2.19	0.42
2:A:2054:LYS:HZ2	2:A:2054:LYS:HB2	1.81	0.42
2:A:2115:VAL:HG12	2:A:2126:GLU:HG2	2.01	0.42
1:B:2086:LYS:O	1:B:2090:ILE:HG13	2.19	0.42
1:B:2219:ASN:O	1:B:2220:VAL:HB	2.20	0.42
2:C:1308:VAL:HA	2:C:1309:PRO:HD3	1.92	0.42
2:C:1437:VAL:O	2:C:1441:PHE:HB2	2.20	0.42
2:C:1854:ILE:CB	2:C:1863:VAL:HG13	2.49	0.42
2:C:1971:LYS:O	2:C:1975:LEU:N	2.47	0.42
2:C:2078:THR:CB	2:C:2104:GLU:H	2.32	0.42
2:E:1185:PRO:O	2:E:1188:ILE:HG12	2.20	0.42
2:E:1441:PHE:O	2:E:1445:GLN:HB3	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:1548:ASN:O	2:E:1548:ASN:ND2	2.53	0.42
2:E:800:GLN:NE2	2:E:800:GLN:O	2.53	0.42
2:G:1422:LYS:HD2	2:G:1423:ASP:N	2.34	0.42
2:G:1427:ALA:N	2:G:1475:ASP:O	2.45	0.42
2:G:1880:MET:HA	2:G:1883:GLU:HB3	2.01	0.42
2:G:522:PRO:HG3	2:G:566:LEU:HD21	2.02	0.42
2:G:976:PHE:O	2:G:980:LEU:HG	2.20	0.42
2:A:1348:PRO:HA	2:A:1349:PRO:HD3	1.89	0.42
2:A:2044:GLU:H	2:A:2044:GLU:HG2	1.64	0.42
2:A:2077:ILE:HG22	2:A:2103:ARG:CA	2.37	0.42
2:A:479:MET:HE3	2:A:479:MET:HA	2.00	0.42
2:A:881:THR:OG1	2:A:921:THR:HB	2.20	0.42
1:B:2066:ALA:HA	1:B:2067:PRO:HD3	1.79	0.42
1:B:2284:GLU:HG3	1:B:2291:PHE:CE1	2.54	0.42
2:C:1491:TRP:CG	2:C:1529:ILE:HD12	2.55	0.42
2:C:1535:LEU:O	2:C:1535:LEU:HD12	2.20	0.42
1:D:2091:ALA:HB2	1:D:2097:VAL:HG21	2.01	0.42
2:E:1032:GLU:O	2:E:1036:ILE:HG13	2.19	0.42
2:E:1487:LEU:HD23	2:E:1487:LEU:C	2.40	0.42
2:E:1504:ILE:HG12	2:E:1540:VAL:HB	2.00	0.42
2:E:542:LEU:HD22	2:E:542:LEU:N	2.34	0.42
2:E:590:ALA:HB3	2:E:596:VAL:HG12	2.01	0.42
2:E:665:ILE:C	2:E:667:LEU:H	2.24	0.42
2:E:823:ASP:O	2:E:824:LEU:HB3	2.19	0.42
2:G:1784:LEU:HD23	2:G:1784:LEU:HA	1.91	0.42
2:G:1675:ALA:HA	2:G:1963:LYS:HD3	2.01	0.42
2:G:1983:LEU:HD12	2:G:1984:SER:N	2.35	0.42
2:G:1954:ARG:HH22	2:G:2013:LYS:HB2	1.84	0.42
2:G:2138:LYS:HA	2:G:2138:LYS:NZ	2.31	0.42
2:G:2140:LEU:O	2:G:2140:LEU:HD22	2.20	0.42
2:G:634:ILE:HD12	2:G:634:ILE:O	2.20	0.42
2:A:1408:THR:HB	2:A:1440:ARG:NH2	2.34	0.42
2:A:1567:SER:O	2:A:1570:VAL:HG23	2.19	0.42
2:A:1638:GLU:HG2	2:A:1639:ASP:N	2.35	0.42
2:A:2052:LEU:HD23	2:A:2052:LEU:C	2.40	0.42
2:A:687:THR:HG23	2:A:693:PRO:HA	2.02	0.42
1:B:2181:LYS:O	1:B:2182:ASN:HB2	2.20	0.42
1:B:2300:ILE:CG2	1:B:2302:VAL:H	2.32	0.42
2:C:976:PHE:CE1	2:C:1002:ARG:HD3	2.54	0.42
2:C:1206:ASP:OD2	2:C:1209:ARG:NE	2.52	0.42
2:C:1310:ILE:HD13	2:C:1318:TYR:OH	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1971:LYS:HZ3	2:C:2001:VAL:HG11	1.83	0.42
2:C:2137:THR:HG23	2:C:2138:LYS:N	2.32	0.42
2:C:484:THR:CG2	2:C:495:HIS:HB2	2.50	0.42
2:C:651:ILE:HA	2:C:654:THR:OG1	2.20	0.42
1:D:2098:ALA:HA	1:D:2151:ILE:O	2.19	0.42
2:E:1085:GLU:O	2:E:1089:LEU:HB2	2.20	0.42
2:E:1815:ARG:HD2	2:E:1815:ARG:HA	1.83	0.42
2:E:2071:ASN:O	2:E:2072:ASN:HB2	2.20	0.42
2:E:549:VAL:HG12	2:E:722:PHE:CD2	2.53	0.42
2:E:967:VAL:HG13	2:E:1002:ARG:HB2	2.02	0.42
2:G:1825:LEU:HD12	2:G:1825:LEU:C	2.40	0.42
2:G:1884:MET:HG3	2:G:1885:PHE:N	2.34	0.42
2:G:1974:SER:O	2:G:1978:ALA:HB2	2.20	0.42
2:G:521:ILE:HB	2:G:522:PRO:CD	2.50	0.42
2:G:765:GLY:HA2	2:G:799:ASN:O	2.20	0.42
2:G:827:LEU:HG	2:G:832:PHE:HB2	2.02	0.42
1:H:2072:VAL:O	1:H:2072:VAL:HG13	2.19	0.42
2:A:1383:GLN:NE2	2:A:1409:VAL:HG21	2.35	0.42
2:A:1398:LEU:HD23	2:A:1398:LEU:C	2.40	0.42
2:A:1586:HIS:ND1	2:A:1589:SER:OG	2.44	0.42
2:A:1598:THR:HG21	2:A:1716:MET:HE3	2.01	0.42
2:A:1642:LEU:CD2	2:A:1646:VAL:HG12	2.49	0.42
2:A:1716:MET:HB2	2:A:1716:MET:HE3	1.94	0.42
2:A:2077:ILE:CG2	2:A:2103:ARG:HG3	2.50	0.42
2:A:2130:LEU:CD2	2:A:2172:LEU:HD13	2.45	0.42
2:A:736:GLU:CG	2:A:918:ILE:HG13	2.50	0.42
2:C:1129:ASP:O	2:C:1133:VAL:HG23	2.20	0.42
2:C:1180:GLN:NE2	2:C:1328:MET:HB3	2.35	0.42
2:C:1240:GLN:HA	2:C:1241:PRO:HD2	1.93	0.42
2:C:1398:LEU:HD23	2:C:1398:LEU:C	2.38	0.42
2:C:1574:PRO:HG2	2:C:1751:ARG:CA	2.49	0.42
2:C:1584:ILE:HG22	2:C:1586:HIS:H	1.84	0.42
2:C:1722:GLU:OE2	2:C:1724:LYS:HB2	2.20	0.42
2:C:1794:THR:C	2:C:1795:LYS:HD2	2.39	0.42
2:C:825:LYS:HE3	2:C:834:ILE:CG2	2.50	0.42
1:D:2152:HIS:CE1	1:D:2189:THR:HG22	2.55	0.42
2:E:1060:ASP:OD1	2:E:1060:ASP:N	2.52	0.42
2:E:1314:MET:HA	2:E:1315:PRO:HD2	1.95	0.42
2:E:1336:VAL:HG12	2:E:1338:PHE:CE1	2.55	0.42
2:E:1555:TRP:HA	2:E:1814:ARG:NH2	2.35	0.42
2:E:1615:VAL:CG1	2:E:1616:PRO:HD2	2.50	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:1792:ILE:HD13	2:E:1797:ILE:O	2.20	0.42
2:E:2058:LEU:HB2	2:E:2063:LEU:HD21	2.01	0.42
2:E:802:LEU:HD12	2:E:802:LEU:C	2.40	0.42
2:G:1033:LEU:HD11	2:G:1047:MET:HE3	2.02	0.42
2:G:1504:ILE:HA	2:G:1540:VAL:HG13	2.02	0.42
2:G:1571:ARG:NH2	2:G:1752:SER:OG	2.53	0.42
2:G:2011:PRO:CG	2:G:2012:LEU:HD22	2.46	0.42
2:G:2023:VAL:O	2:G:2026:ALA:HB3	2.19	0.42
2:G:685:ARG:HD2	2:G:969:TRP:HA	2.02	0.42
2:G:746:ILE:H	2:G:746:ILE:CD1	2.27	0.42
1:H:2300:ILE:HG21	2:G:1131:VAL:CG2	2.50	0.42
2:A:1095:ILE:HA	2:A:1096:PRO:HD3	1.93	0.41
2:A:1171:MET:CE	2:A:1328:MET:HB3	2.50	0.41
2:A:1213:LEU:HD23	2:A:1213:LEU:C	2.40	0.41
2:A:1364:LEU:N	2:A:1364:LEU:HD12	2.34	0.41
2:A:1519:TYR:O	2:A:1522:VAL:HG22	2.20	0.41
2:A:2094:PRO:HA	2:A:2159:VAL:HG22	2.02	0.41
2:A:549:VAL:HG12	2:A:722:PHE:HB2	2.02	0.41
1:B:2101:LEU:CD2	1:B:2115:ILE:HD13	2.48	0.41
2:C:1687:LEU:HA	2:C:1687:LEU:HD12	1.88	0.41
2:C:1852:ARG:HB3	2:C:1886:LEU:CD1	2.49	0.41
2:C:2021:GLU:O	2:C:2024:LYS:HB3	2.20	0.41
2:C:2120:TYR:HA	2:C:2121:PRO:HD3	1.94	0.41
2:C:757:TYR:CE1	2:C:792:ALA:HA	2.55	0.41
1:D:2057:ARG:NH1	2:C:1057:ALA:O	2.53	0.41
2:E:988:VAL:HA	2:E:1001:LYS:HE2	2.02	0.41
2:E:1190:LYS:O	2:E:1194:ARG:HD3	2.20	0.41
2:E:1210:MET:HE1	2:E:1223:VAL:HG12	2.02	0.41
2:E:1622:ARG:O	2:E:1625:ALA:HB3	2.19	0.41
2:E:1979:ILE:O	2:E:1983:LEU:HD13	2.20	0.41
2:E:674:PRO:HB3	2:E:943:LEU:HD12	2.02	0.41
2:E:492:GLU:O	2:E:738:ILE:HA	2.19	0.41
1:F:2053:THR:HA	1:F:2093:LEU:HD21	2.01	0.41
2:G:1093:VAL:HB	2:G:1113:GLN:OE1	2.19	0.41
2:G:1596:LYS:N	2:G:1597:PRO:CD	2.82	0.41
1:H:2088:ILE:HD13	1:H:2197:VAL:HG21	2.01	0.41
2:A:756:THR:O	2:A:760:VAL:HG12	2.20	0.41
2:A:472:MET:HE1	2:A:928:TYR:HA	2.01	0.41
1:B:2236:LEU:HD23	1:B:2237:LEU:N	2.35	0.41
2:C:1353:LEU:HD23	2:C:1353:LEU:C	2.41	0.41
2:C:1908:PHE:CZ	2:C:1967:VAL:HG13	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:596:VAL:HB	2:C:635:VAL:HG12	2.01	0.41
2:C:675:VAL:O	2:C:679:ILE:HG13	2.20	0.41
2:C:768:ARG:HH21	2:C:802:LEU:HB3	1.83	0.41
2:C:808:THR:HG23	2:C:809:ARG:N	2.35	0.41
2:C:702:THR:O	2:C:935:GLN:HG3	2.20	0.41
2:E:1820:PRO:HB2	2:E:1825:LEU:O	2.19	0.41
2:E:1857:ASP:HB3	2:E:1862:THR:CG2	2.50	0.41
2:E:1968:ILE:CA	2:E:1971:LYS:HB3	2.41	0.41
2:E:457:LEU:C	2:E:457:LEU:HD23	2.41	0.41
2:E:665:ILE:HG12	2:E:665:ILE:O	2.20	0.41
2:E:926:ILE:O	2:E:930:LEU:HG	2.19	0.41
1:F:2276:ASP:HA	2:E:1319:PHE:CE1	2.55	0.41
2:G:1672:TYR:CE2	2:G:1681:LYS:HG2	2.56	0.41
2:G:1812:PHE:O	2:G:1816:LEU:HB2	2.20	0.41
2:G:963:ARG:O	2:G:967:VAL:HG23	2.19	0.41
1:H:2093:LEU:N	1:H:2093:LEU:HD22	2.35	0.41
1:H:2146:GLU:O	1:H:2148:LEU:HD13	2.18	0.41
1:B:2245:PHE:CD2	2:A:1316:PRO:HB3	2.55	0.41
2:A:1979:ILE:HG22	2:A:1983:LEU:HD21	2.01	0.41
2:A:2017:ASN:ND2	2:A:2058:LEU:HD22	2.35	0.41
2:A:2137:THR:HG22	2:A:2139:THR:HG23	2.01	0.41
2:A:2145:ARG:NH2	2:A:2175:ASP:OD2	2.52	0.41
2:A:599:GLN:HA	2:A:602:ASN:HB3	2.02	0.41
2:A:926:ILE:CG1	2:A:927:PRO:HD3	2.49	0.41
2:C:1487:LEU:C	2:C:1487:LEU:HD23	2.41	0.41
2:C:1682:ARG:HA	2:C:1685:LYS:HE3	2.02	0.41
2:C:1936:VAL:O	2:C:1939:SER:OG	2.30	0.41
2:C:2015:ILE:HG12	2:C:2069:PHE:HD2	1.85	0.41
2:E:1097:VAL:HG22	2:E:1097:VAL:O	2.19	0.41
2:E:1054:ILE:HG22	2:E:1153:TRP:HZ3	1.84	0.41
2:E:1559:LYS:O	2:E:1561:HIS:N	2.51	0.41
2:E:1977:SER:C	2:E:1979:ILE:H	2.22	0.41
2:E:1985:SER:HB3	2:E:1988:HIS:HD2	1.86	0.41
2:E:812:LEU:HD23	2:E:812:LEU:H	1.85	0.41
1:F:2217:ASP:N	1:F:2218:PRO:CD	2.82	0.41
1:F:2248:VAL:HB	1:F:2249:PRO:HD2	2.02	0.41
2:G:1354:LEU:N	2:G:1354:LEU:HD13	2.35	0.41
2:G:1922:LYS:HD3	2:G:1937:TRP:CZ3	2.56	0.41
2:G:1968:ILE:HD12	2:G:1969:LEU:N	2.35	0.41
2:G:1976:LEU:HD12	2:G:1976:LEU:C	2.40	0.41
2:G:2098:LYS:N	2:G:2155:LYS:HG3	2.35	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:489:LYS:O	2:G:489:LYS:HG3	2.20	0.41
1:H:2220:VAL:O	1:H:2223:PRO:HD3	2.21	0.41
1:H:2301:TRP:HA	2:G:778:ARG:NH1	2.35	0.41
2:A:1195:MET:HE3	2:A:1214:LEU:O	2.20	0.41
2:C:1093:VAL:HB	2:C:1113:GLN:OE1	2.21	0.41
2:C:1219:ALA:HB1	2:C:1223:VAL:CG2	2.50	0.41
2:C:1573:VAL:HG13	2:C:1746:PRO:HB3	2.02	0.41
2:C:1852:ARG:NH1	2:C:1866:LEU:HD21	2.35	0.41
2:C:2034:ILE:HD12	2:C:2034:ILE:H	1.85	0.41
2:C:894:LEU:HD23	2:C:895:SER:H	1.85	0.41
2:C:983:PRO:O	2:C:988:VAL:HG23	2.21	0.41
1:D:2159:LEU:C	1:D:2161:TYR:H	2.24	0.41
1:D:2182:ASN:CG	1:D:2183:GLN:H	2.24	0.41
2:E:1207:PRO:CB	2:E:1208:PRO:HD3	2.49	0.41
2:E:1501:GLU:O	2:E:1537:MET:HA	2.19	0.41
2:E:1411:ALA:CB	2:E:1504:ILE:HD13	2.50	0.41
2:E:1522:VAL:O	2:E:1526:MET:HG2	2.20	0.41
2:E:1777:GLU:OE1	2:E:1815:ARG:NE	2.53	0.41
2:E:1983:LEU:HD12	2:E:1991:ALA:HB3	2.02	0.41
2:E:1969:LEU:HD21	2:E:2121:PRO:HG2	2.02	0.41
2:E:460:LEU:HD12	2:E:460:LEU:N	2.31	0.41
2:E:500:LYS:NZ	2:E:502:ARG:HG2	2.35	0.41
2:G:1191:LYS:O	2:G:1195:MET:HG2	2.20	0.41
2:G:1457:ILE:HG12	2:G:1457:ILE:O	2.20	0.41
2:G:1758:LEU:O	2:G:1758:LEU:HD12	2.20	0.41
2:G:1840:LEU:HD23	2:G:1841:VAL:N	2.35	0.41
2:G:1924:ILE:HD12	2:G:1924:ILE:N	2.36	0.41
2:G:633:VAL:O	2:G:633:VAL:HG22	2.21	0.41
1:H:2096:GLN:HG2	1:H:2153:THR:O	2.21	0.41
1:H:2220:VAL:HG13	1:H:2223:PRO:N	2.36	0.41
2:A:1862:THR:O	2:A:1862:THR:HG23	2.20	0.41
2:A:2114:THR:HA	2:A:2125:SER:HA	2.03	0.41
2:A:599:GLN:HG2	2:A:603:PHE:CE2	2.55	0.41
2:A:621:ARG:HB3	2:A:623:LEU:HG	2.02	0.41
2:C:1687:LEU:HG	2:C:1692:ALA:HB3	2.01	0.41
2:C:1860:GLU:HG2	2:C:1862:THR:H	1.86	0.41
2:C:1968:ILE:HG22	2:C:2120:TYR:CE2	2.55	0.41
2:C:834:ILE:HA	2:C:860:VAL:O	2.20	0.41
2:C:974:TYR:CZ	2:C:978:ARG:HD3	2.55	0.41
1:D:2146:GLU:HA	1:D:2147:PRO:HD3	1.93	0.41
2:E:1678:GLN:CD	2:E:1678:GLN:H	2.22	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:1804:ILE:HG23	2:E:1837:LEU:HD11	2.03	0.41
2:E:2053:VAL:O	2:E:2053:VAL:HG12	2.20	0.41
2:E:2017:ASN:O	2:E:2058:LEU:HD11	2.21	0.41
2:E:526:THR:OG1	2:E:528:THR:O	2.38	0.41
2:E:988:VAL:O	2:E:990:ALA:N	2.53	0.41
1:F:2263:PHE:HA	1:F:2266:ILE:HG22	2.01	0.41
2:G:1460:LEU:HD13	2:G:1479:ALA:CB	2.50	0.41
2:G:1914:ARG:NH2	2:G:1960:ASP:O	2.53	0.41
2:G:2152:LEU:HD22	2:G:2152:LEU:N	2.35	0.41
2:G:673:GLY:N	2:G:674:PRO:CD	2.83	0.41
2:G:825:LYS:NZ	2:G:847:VAL:HG21	2.29	0.41
2:G:985:LEU:O	2:G:985:LEU:HD23	2.20	0.41
2:A:1277:CYS:HB3	2:A:1315:PRO:HB2	2.03	0.41
2:A:1408:THR:HB	2:A:1440:ARG:HH22	1.86	0.41
2:A:1663:GLU:O	2:A:1666:SER:HB3	2.20	0.41
2:A:1702:VAL:HG12	2:A:1702:VAL:O	2.20	0.41
2:A:1877:ILE:HG22	2:A:1878:SER:N	2.36	0.41
2:A:1930:VAL:HB	2:A:1949:GLN:NE2	2.34	0.41
2:A:828:LEU:C	2:A:830:TYR:H	2.24	0.41
1:B:2063:MET:HB3	1:B:2197:VAL:HG23	2.01	0.41
1:B:2077:TYR:HA	1:B:2113:LYS:O	2.19	0.41
2:C:1205:LEU:O	2:C:1205:LEU:HD12	2.21	0.41
2:C:1434:GLN:HG2	2:C:1480:THR:HG21	2.02	0.41
2:C:1408:THR:CG2	2:C:1440:ARG:HE	2.28	0.41
2:C:2012:LEU:N	2:C:2012:LEU:HD22	2.36	0.41
2:C:2033:ASP:OD1	2:C:2035:PHE:HB2	2.21	0.41
2:C:671:ASP:O	2:C:674:PRO:HD2	2.21	0.41
1:D:2063:MET:HG2	1:D:2197:VAL:HB	2.01	0.41
2:E:1517:TYR:O	2:E:1521:ILE:HG13	2.20	0.41
2:E:1688:TYR:OH	2:E:1710:ALA:HB2	2.21	0.41
2:E:1950:ALA:HB1	2:E:1957:LEU:HD11	2.02	0.41
2:E:756:THR:O	2:E:760:VAL:HG12	2.20	0.41
2:G:1598:THR:O	2:G:1602:ILE:HG13	2.20	0.41
2:G:1629:LEU:HD12	2:G:1630:THR:HG23	2.03	0.41
2:G:1899:LEU:HB3	2:G:1997:MET:HE1	2.02	0.41
1:H:2072:VAL:HG22	1:H:2072:VAL:O	2.21	0.41
1:H:2253:LYS:NZ	1:H:2285:GLN:O	2.53	0.41
2:A:1101:ILE:H	2:A:1101:ILE:HG13	1.78	0.41
2:A:1207:PRO:HG3	2:A:1221:LYS:HD3	2.03	0.41
2:A:1426:ARG:NH2	2:A:1472:GLU:O	2.54	0.41
2:A:1440:ARG:HA	2:A:1440:ARG:NE	2.26	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:1709:THR:OG1	2:A:1744:LEU:HB2	2.20	0.41
2:A:978:ARG:HH11	2:A:978:ARG:HA	1.85	0.41
2:C:1230:PHE:CD1	2:C:1231:PRO:HD2	2.56	0.41
1:D:2150:LEU:HD12	1:D:2150:LEU:C	2.41	0.41
2:E:1229:LYS:HD3	2:E:1263:LEU:HD12	2.03	0.41
2:E:1430:ILE:HD12	2:E:1503:PHE:CZ	2.55	0.41
2:E:1586:HIS:CE1	2:E:1588:PRO:HG2	2.56	0.41
2:E:1712:LEU:HD12	2:E:1713:VAL:H	1.84	0.41
2:E:1855:GLU:N	2:E:1866:LEU:HD12	2.36	0.41
2:E:1879:TYR:CE1	2:E:1880:MET:HG3	2.55	0.41
2:E:496:VAL:N	2:E:735:GLN:O	2.37	0.41
2:E:881:THR:CG2	2:E:919:ILE:HD11	2.42	0.41
2:E:978:ARG:NH2	2:E:982:SER:OG	2.54	0.41
2:E:985:LEU:C	2:E:985:LEU:HD23	2.41	0.41
2:G:1478:LEU:N	2:G:1478:LEU:HD12	2.35	0.41
2:G:2171:PHE:HB3	2:G:2182:GLN:C	2.41	0.41
2:G:461:GLU:O	2:G:464:VAL:HG12	2.21	0.41
2:G:764:VAL:HA	2:G:767:ASN:O	2.21	0.41
2:G:797:THR:OG1	2:G:800:GLN:HB2	2.20	0.41
2:A:1176:SER:HA	2:A:1177:PRO:HD3	1.88	0.41
2:A:1468:LEU:HG	2:A:1469:LYS:N	2.36	0.41
2:A:1712:LEU:HD12	2:A:1754:GLY:HA2	2.03	0.41
2:A:510:ILE:CD1	2:A:534:SER:HB3	2.50	0.41
2:A:808:THR:HG23	2:A:809:ARG:N	2.35	0.41
1:B:2247:LEU:HD23	1:B:2275:LEU:CA	2.50	0.41
1:B:2274:LYS:HE3	1:B:2274:LYS:HB2	1.83	0.41
2:C:1116:ILE:HG22	2:C:1172:TRP:CD1	2.55	0.41
2:C:1235:ILE:HG22	2:C:1253:ILE:HG12	2.03	0.41
2:C:1607:PRO:HA	2:C:1640:ARG:NH1	2.36	0.41
2:C:1652:LEU:HD23	2:C:1683:ILE:HG23	2.01	0.41
2:C:1796:MET:O	2:C:1797:ILE:HD13	2.21	0.41
2:C:677:GLU:OE1	2:C:943:LEU:HB2	2.21	0.41
2:E:1439:LEU:O	2:E:1442:GLN:HB3	2.19	0.41
2:E:1718:THR:O	2:E:1719:GLN:HG3	2.21	0.41
2:E:1841:VAL:O	2:E:1845:LEU:HG	2.21	0.41
2:E:2004:ALA:CB	2:E:2119:PHE:HB2	2.51	0.41
2:E:2049:TYR:CD1	2:E:2053:VAL:HG22	2.55	0.41
2:E:517:GLU:HA	2:E:520:ARG:NH1	2.35	0.41
2:E:549:VAL:HG22	2:E:699:LEU:HD22	2.02	0.41
2:E:781:THR:HG23	2:E:834:ILE:HD11	2.01	0.41
2:G:1142:ARG:NH2	2:G:1168:GLU:OE2	2.49	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:1489:ARG:HG3	2:G:1490:GLN:N	2.36	0.41
2:G:1514:GLN:HB3	2:G:1515:MET:H	1.66	0.41
2:G:1732:PRO:HG2	2:G:1735:GLU:HB3	2.03	0.41
2:G:1713:VAL:CG2	2:G:1743:ALA:HB2	2.50	0.41
2:G:1862:THR:C	2:G:1863:VAL:HG22	2.41	0.41
2:G:500:LYS:O	2:G:502:ARG:N	2.54	0.41
2:G:639:GLU:O	2:G:643:VAL:HG12	2.20	0.41
2:G:771:MET:HE2	2:G:773:ILE:HD11	2.03	0.41
2:A:1817:LEU:N	2:A:1817:LEU:HD12	2.35	0.41
2:A:1976:LEU:HA	2:A:1979:ILE:HD12	2.03	0.41
2:A:789:ARG:O	2:A:792:ALA:HB3	2.21	0.41
2:A:798:ILE:HG13	2:A:799:ASN:N	2.29	0.41
2:C:1415:LEU:CD1	2:C:1502:LEU:HD21	2.43	0.41
2:C:1804:ILE:O	2:C:1808:THR:HG23	2.21	0.41
2:C:1979:ILE:C	2:C:1979:ILE:HD12	2.41	0.41
2:C:2005:MET:HG3	2:C:2178:VAL:HG21	2.00	0.41
2:C:521:ILE:N	2:C:522:PRO:HD2	2.36	0.41
2:C:546:ASN:O	2:C:715:VAL:HG13	2.21	0.41
2:E:1229:LYS:HD3	2:E:1260:ASP:HB2	2.01	0.41
2:E:2097:LEU:HD23	2:E:2097:LEU:C	2.40	0.41
2:E:592:LEU:HD12	2:E:867:TRP:CD2	2.56	0.41
1:F:2079:MET:HA	1:F:2080:PRO:HD3	1.85	0.41
2:G:456:LYS:HB3	2:G:992:TYR:OH	2.21	0.41
2:G:548:LEU:HD22	2:G:709:VAL:HG12	2.03	0.41
2:G:784:THR:O	2:G:788:ILE:HG13	2.21	0.41
2:A:1460:LEU:CD2	2:A:1479:ALA:HB2	2.40	0.41
2:A:1796:MET:CE	2:A:1796:MET:HA	2.51	0.41
2:A:1914:ARG:HB2	2:A:1917:GLU:CD	2.41	0.41
2:A:1957:LEU:HB3	2:A:1958:PRO:HD2	2.02	0.41
2:A:498:PRO:HB3	2:A:733:LEU:C	2.41	0.41
2:A:621:ARG:HG2	2:A:622:GLN:N	2.31	0.41
1:B:2096:GLN:HG2	1:B:2153:THR:O	2.20	0.41
2:C:1382:ILE:N	2:C:1382:ILE:HD12	2.25	0.41
2:C:1460:LEU:CD2	2:C:1483:GLN:HG3	2.50	0.41
2:C:1509:HIS:NE2	2:C:1544:VAL:HG13	2.36	0.41
2:C:1511:LEU:HD12	2:C:1511:LEU:C	2.41	0.41
2:C:1672:TYR:OH	2:C:1681:LYS:HD3	2.20	0.41
2:C:2182:GLN:CB	2:C:2184:PRO:HD3	2.49	0.41
2:C:616:GLU:HG3	2:C:616:GLU:O	2.20	0.41
2:C:621:ARG:O	2:C:624:THR:OG1	2.28	0.41
2:C:775:VAL:HG22	2:C:776:HIS:N	2.34	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2164:PRO:HG3	1:D:2226:PHE:CE1	2.56	0.41
1:D:2309:ALA:HB1	2:C:619:GLY:H	1.86	0.41
2:E:482:GLY:CA	2:E:497:PRO:HG3	2.50	0.41
2:E:498:PRO:HB3	2:E:733:LEU:C	2.41	0.41
2:E:515:LEU:HD12	2:E:515:LEU:O	2.21	0.41
2:E:617:LEU:HA	2:E:622:GLN:NE2	2.35	0.41
2:E:747:LYS:HE2	2:E:751:THR:OG1	2.21	0.41
2:G:1336:VAL:HG12	2:G:1338:PHE:CE1	2.56	0.41
2:G:1527:HIS:HB3	2:G:1809:PHE:CE2	2.56	0.41
2:G:2058:LEU:HD23	2:G:2062:GLN:NE2	2.36	0.41
2:G:549:VAL:HG22	2:G:699:LEU:CD2	2.51	0.41
2:G:574:ASN:HB3	2:G:575:GLU:H	1.57	0.41
2:G:960:VAL:HG21	2:G:966:GLY:HA2	2.02	0.41
1:H:2071:ASP:C	1:H:2073:ASP:H	2.25	0.41
2:A:1458:VAL:HG22	2:A:1477:ILE:HG22	2.00	0.41
2:A:1546:LEU:HD22	2:A:1552:ILE:CD1	2.46	0.41
2:A:1715:VAL:HB	2:A:1756:LEU:HD12	2.03	0.41
2:A:679:ILE:O	2:A:683:THR:HG23	2.20	0.41
2:A:806:ALA:CB	2:A:808:THR:HG22	2.50	0.41
1:B:2080:PRO:HG2	1:B:2083:ILE:CD1	2.51	0.41
1:B:2284:GLU:OE2	2:A:1174:THR:OG1	2.39	0.41
2:C:1007:HIS:O	2:C:1011:MET:HG2	2.20	0.41
2:C:1109:ASN:O	2:C:1113:GLN:HG3	2.21	0.41
2:C:1115:TYR:OH	2:C:1170:ARG:HD2	2.21	0.41
2:C:1390:LEU:O	2:C:1538:ARG:NH1	2.39	0.41
2:C:1401:ALA:HB1	2:C:1402:PRO:HD2	2.03	0.41
2:C:1398:LEU:CD1	2:C:1552:ILE:HG22	2.50	0.41
2:C:1868:ALA:HB1	2:C:1882:MET:SD	2.60	0.41
1:D:2211:TRP:HE1	1:D:2225:GLY:HA3	1.86	0.41
2:E:1501:GLU:HG3	2:E:1536:PRO:O	2.21	0.41
2:E:1672:TYR:HD2	2:E:1702:VAL:HG21	1.85	0.41
2:E:539:THR:HG23	2:E:719:LYS:CD	2.49	0.41
2:E:590:ALA:HB1	2:E:591:PRO:HD2	2.03	0.41
2:G:1054:ILE:HG22	2:G:1153:TRP:HZ3	1.86	0.41
2:G:1209:ARG:O	2:G:1213:LEU:HB2	2.21	0.41
2:G:1396:ASN:O	2:G:1396:ASN:ND2	2.54	0.41
2:G:2000:MET:CE	2:G:2007:ASP:HB3	2.50	0.41
2:G:474:ASN:HA	2:G:475:PRO:HD3	1.92	0.41
2:G:565:MET:HE2	2:G:607:LEU:HD11	2.03	0.41
2:G:651:ILE:HA	2:G:654:THR:OG1	2.21	0.41
2:G:771:MET:O	2:G:858:VAL:HA	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:776:HIS:CE1	2:G:894:LEU:HD11	2.56	0.41
1:H:2087:PHE:CE2	1:H:2153:THR:HG23	2.56	0.41
1:H:2218:PRO:O	1:H:2220:VAL:N	2.51	0.41
2:A:1598:THR:O	2:A:1602:ILE:HG13	2.21	0.40
2:A:1712:LEU:HD12	2:A:1753:ARG:O	2.21	0.40
2:A:2046:ASN:HA	2:A:2049:TYR:HB2	2.02	0.40
2:A:2112:ASP:N	2:A:2113:PRO:CD	2.84	0.40
2:A:677:GLU:OE1	2:A:973:THR:OG1	2.38	0.40
2:A:759:LYS:HD3	2:A:759:LYS:HA	1.93	0.40
2:A:843:ASP:O	2:A:847:VAL:HG23	2.21	0.40
2:A:910:GLN:H	2:A:910:GLN:CD	2.23	0.40
2:A:975:LEU:HG	2:A:979:MET:HE2	2.03	0.40
2:C:1379:PHE:HE1	2:C:1384:THR:HG22	1.85	0.40
2:C:1421:LYS:HG2	2:C:1422:LYS:N	2.36	0.40
2:C:716:ASP:O	2:C:720:GLY:N	2.43	0.40
2:C:788:ILE:O	2:C:792:ALA:HB2	2.21	0.40
1:D:2276:ASP:HA	2:C:1319:PHE:CZ	2.57	0.40
2:E:1053:LEU:HD22	2:E:1069:GLN:OE1	2.21	0.40
2:E:1235:ILE:O	2:E:1334:MET:HE3	2.21	0.40
2:E:1766:TYR:O	2:E:1770:LEU:HB2	2.21	0.40
2:E:581:LEU:CD2	2:E:581:LEU:H	2.28	0.40
2:E:722:PHE:HB3	2:E:724:PHE:CZ	2.57	0.40
2:E:811:VAL:HG12	2:E:811:VAL:O	2.22	0.40
2:E:823:ASP:OD1	2:E:824:LEU:N	2.54	0.40
2:G:1596:LYS:HB3	2:G:1597:PRO:HD3	2.02	0.40
2:G:2183:ASP:N	2:G:2183:ASP:OD1	2.43	0.40
2:G:514:GLU:O	2:G:515:LEU:HD12	2.20	0.40
2:A:1072:GLU:OE1	2:A:1072:GLU:N	2.53	0.40
1:B:2047:ARG:CD	2:A:1098:LYS:HE3	2.50	0.40
2:A:1177:PRO:HG2	2:A:1199:TRP:CD2	2.56	0.40
2:A:1430:ILE:HD12	2:A:1503:PHE:HZ	1.86	0.40
2:A:1535:LEU:O	2:A:1535:LEU:HD12	2.21	0.40
2:A:1972:ILE:HG12	2:A:2124:LYS:HE2	2.03	0.40
2:A:1871:ILE:HD11	2:A:1984:SER:HB2	2.03	0.40
2:A:562:MET:CE	2:A:607:LEU:HD21	2.51	0.40
2:A:709:VAL:HG22	2:A:974:TYR:CE1	2.57	0.40
1:B:2077:TYR:HE2	1:B:2234:ARG:HD3	1.86	0.40
1:B:2097:VAL:O	1:B:2152:HIS:HA	2.21	0.40
1:B:2192:PHE:HD1	1:B:2197:VAL:HG12	1.85	0.40
1:B:2253:LYS:HG3	1:B:2279:LEU:HD12	2.03	0.40
2:C:1461:THR:HG23	2:C:1462:GLY:N	2.36	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1586:HIS:HB3	2:C:1589:SER:HB2	2.03	0.40
2:C:1644:VAL:HG13	2:C:1649:ILE:CD1	2.38	0.40
2:C:1858:GLU:OE1	2:C:1859:ASP:N	2.54	0.40
2:C:2074:TYR:HD1	2:C:2075:PRO:HD2	1.85	0.40
2:C:2079:LEU:HA	2:C:2101:ILE:CG2	2.51	0.40
2:C:2129:TRP:CE3	2:C:2130:LEU:HD23	2.55	0.40
2:C:771:MET:N	2:C:857:GLN:O	2.54	0.40
2:C:937:LEU:HA	2:C:938:PRO:HD3	1.92	0.40
2:E:1176:SER:HA	2:E:1177:PRO:HD3	1.87	0.40
2:E:1556:ILE:O	2:E:1556:ILE:HG22	2.20	0.40
2:E:479:MET:CE	2:E:483:THR:HG21	2.51	0.40
2:G:1273:LEU:HD23	2:G:1285:HIS:HB2	2.02	0.40
2:G:1591:MET:HA	2:G:1591:MET:HE2	2.02	0.40
2:G:1714:VAL:HA	2:G:1755:VAL:O	2.20	0.40
2:G:1875:TYR:O	2:G:1877:ILE:N	2.54	0.40
2:G:1886:LEU:C	2:G:1886:LEU:HD12	2.42	0.40
2:G:685:ARG:NH1	2:G:959:ASN:O	2.53	0.40
1:H:2227:THR:O	1:H:2230:MET:HG2	2.21	0.40
1:B:2297:LEU:CD2	2:A:1120:LYS:HA	2.44	0.40
2:A:1040:TYR:O	2:A:1139:ARG:HD2	2.21	0.40
2:A:1142:ARG:HD2	2:A:1168:GLU:OE2	2.21	0.40
2:A:1380:ASN:O	2:A:1384:THR:HG23	2.21	0.40
2:A:1386:THR:HG22	2:A:1564:TYR:CE2	2.56	0.40
2:A:1784:LEU:N	2:A:1785:PRO:CD	2.84	0.40
2:A:1867:ASN:O	2:A:1871:ILE:HG13	2.21	0.40
2:A:1908:PHE:O	2:A:1911:ILE:HB	2.22	0.40
2:A:1914:ARG:HA	2:A:1914:ARG:HE	1.87	0.40
2:A:2148:VAL:HG13	2:A:2149:GLY:N	2.33	0.40
2:A:955:ILE:HG22	2:A:1030:ALA:CB	2.42	0.40
1:B:2052:ALA:CB	1:B:2093:LEU:HG	2.51	0.40
1:B:2101:LEU:HG	1:B:2151:ILE:HG13	2.02	0.40
1:B:2300:ILE:N	1:B:2300:ILE:HD12	2.37	0.40
2:C:1476:LEU:HD23	2:C:1476:LEU:C	2.42	0.40
2:C:1546:LEU:C	2:C:1773:ALA:HB1	2.42	0.40
2:C:1895:LEU:HD11	2:C:1997:MET:HE1	2.04	0.40
2:C:561:ALA:O	2:C:565:MET:HG3	2.21	0.40
2:E:1481:PRO:HB3	2:E:1519:TYR:HA	2.03	0.40
2:E:1928:VAL:HG21	2:E:1949:GLN:OE1	2.20	0.40
2:E:494:ILE:HB	2:E:737:PHE:HB2	2.04	0.40
2:E:740:VAL:HG21	2:E:748:GLN:HG3	2.03	0.40
2:E:792:ALA:CA	2:E:798:ILE:HG22	2.51	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2117:CYS:HB2	1:F:2245:PHE:CE2	2.56	0.40
2:G:1207:PRO:CB	2:G:1208:PRO:HD3	2.51	0.40
2:G:1216:MET:HA	2:G:1217:PRO:HD3	1.90	0.40
2:G:1426:ARG:HD2	2:G:1499:THR:HG21	2.02	0.40
2:G:1601:ALA:O	2:G:1605:LEU:HB2	2.22	0.40
2:G:1801:GLU:O	2:G:1804:ILE:HB	2.21	0.40
2:G:1995:MET:O	2:G:1999:GLN:HG3	2.21	0.40
2:G:2097:LEU:O	2:G:2156:LEU:N	2.54	0.40
2:G:2169:LYS:CA	2:G:2185:SER:HB3	2.51	0.40
2:G:624:THR:HA	2:G:627:GLN:OE1	2.22	0.40
2:G:738:ILE:HD11	2:G:759:LYS:HE3	2.03	0.40
1:H:2047:ARG:O	1:H:2051:ILE:HG13	2.21	0.40
1:H:2274:LYS:HE2	1:H:2276:ASP:HB2	2.02	0.40
2:A:1587:PHE:N	2:A:1588:PRO:HD2	2.36	0.40
2:A:472:MET:HG3	2:A:474:ASN:OD1	2.21	0.40
2:A:540:ALA:HA	2:A:695:ARG:HH22	1.86	0.40
2:A:978:ARG:NH1	2:A:978:ARG:HA	2.36	0.40
1:B:2055:ASN:HA	1:B:2058:THR:HG23	2.03	0.40
2:C:1328:MET:HG3	2:C:1329:HIS:N	2.36	0.40
2:C:1460:LEU:HD13	2:C:1467:ASP:CB	2.51	0.40
2:C:1571:ARG:NH1	2:C:1575:LEU:HB2	2.37	0.40
2:C:1780:LEU:HD13	2:C:1780:LEU:O	2.21	0.40
2:C:1815:ARG:NH2	2:C:1819:ASN:HB2	2.36	0.40
2:C:1871:ILE:O	2:C:1875:TYR:HD1	2.05	0.40
2:C:2010:SER:HA	2:C:2011:PRO:HD3	1.84	0.40
2:C:825:LYS:HG3	2:C:828:LEU:HB2	2.03	0.40
1:D:2084:LEU:O	1:D:2088:ILE:HG13	2.21	0.40
2:E:1016:SER:HB2	2:E:1018:LEU:HD13	2.02	0.40
2:E:1094:PRO:HG2	2:E:1172:TRP:CE2	2.57	0.40
2:E:2006:TRP:CG	2:E:2007:ASP:N	2.89	0.40
2:E:825:LYS:CE	2:E:834:ILE:HG22	2.49	0.40
1:F:2177:HIS:HB2	1:F:2180:TRP:CD1	2.57	0.40
2:G:1116:ILE:HG22	2:G:1172:TRP:CD1	2.56	0.40
2:G:1455:LYS:HD2	2:G:1475:ASP:CG	2.42	0.40
2:G:1501:GLU:H	2:G:1501:GLU:HG3	1.58	0.40
2:G:1570:VAL:HG12	2:G:1570:VAL:O	2.21	0.40
2:G:1649:ILE:HD12	2:G:1649:ILE:N	2.36	0.40
2:G:1800:GLY:O	2:G:1804:ILE:HG12	2.22	0.40
2:G:1801:GLU:HA	2:G:1804:ILE:HG12	2.03	0.40
2:G:1843:THR:O	2:G:1846:LYS:HG2	2.21	0.40
1:F:2261:SER:O	2:G:1891:HIS:HB3	2.22	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:2237:LEU:C	1:H:2238:LEU:HD12	2.41	0.40
2:A:1567:SER:OG	2:A:1568:PRO:HD2	2.22	0.40
2:A:2089:ILE:HD12	2:A:2089:ILE:C	2.41	0.40
2:A:2169:LYS:HD3	2:A:2185:SER:CB	2.51	0.40
2:A:605:LYS:HB3	2:A:605:LYS:HE2	1.93	0.40
2:C:1025:THR:HG21	2:C:1027:LYS:HG2	2.02	0.40
2:C:1435:GLU:OE1	2:C:1704:TRP:HB2	2.22	0.40
2:C:716:ASP:OD1	2:C:719:LYS:HG2	2.22	0.40
1:D:2051:ILE:C	1:D:2051:ILE:HD12	2.42	0.40
1:D:2146:GLU:HG3	1:D:2148:LEU:HD11	2.03	0.40
2:E:1230:PHE:HA	2:E:1231:PRO:HD3	1.90	0.40
2:E:1706:LEU:HD11	2:E:1708:PHE:CD2	2.57	0.40
2:G:1176:SER:HA	2:G:1177:PRO:HD3	1.91	0.40
2:G:1425:GLY:C	2:G:1426:ARG:HG2	2.41	0.40
2:G:1587:PHE:HB3	2:G:1588:PRO:CD	2.46	0.40
2:G:566:LEU:HA	2:G:569:ILE:HB	2.04	0.40
2:G:491:TYR:CD1	2:G:755:ILE:HD11	2.56	0.40
2:G:893:GLU:HG3	2:G:929:TYR:OH	2.21	0.40

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

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	B	264/276 (96%)	241 (91%)	19 (7%)	4 (2%)	13	55
1	D	259/276 (94%)	239 (92%)	13 (5%)	7 (3%)	6	39
1	F	261/276 (95%)	237 (91%)	22 (8%)	2 (1%)	24	69
1	H	265/276 (96%)	243 (92%)	13 (5%)	9 (3%)	5	31
2	A	1736/1772 (98%)	1619 (93%)	105 (6%)	12 (1%)	26	72
2	C	1686/1772 (95%)	1537 (91%)	130 (8%)	19 (1%)	17	62

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	E	1736/1772 (98%)	1580 (91%)	127 (7%)	29 (2%)	11	52
2	G	1698/1772 (96%)	1537 (90%)	131 (8%)	30 (2%)	11	51
All	All	7905/8192 (96%)	7233 (92%)	560 (7%)	112 (1%)	14	57

All (112) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	B	2217	ASP
1	B	2220	VAL
2	A	575	GLU
2	A	1748	LYS
1	D	2218	PRO
2	C	872	PRO
2	C	1452	ARG
2	C	1852	ARG
2	C	2047	PRO
2	C	2101	ILE
2	C	2158	PHE
1	F	2301	TRP
2	E	509	ASN
2	E	1422	LYS
2	E	2010	SER
2	E	2046	ASN
2	E	2113	PRO
1	H	2074	ASP
1	H	2155	ALA
1	H	2217	ASP
1	H	2218	PRO
2	G	501	LYS
2	G	505	PRO
2	G	1452	ARG
2	G	1859	ASP
2	G	1862	THR
2	G	2072	ASN
2	G	2136	SER
2	A	621	ARG
2	A	768	ARG
2	A	798	ILE
2	A	1861	GLY
1	D	2182	ASN
1	D	2215	ASN

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Mol	Chain	Res	Type
2	C	799	ASN
2	C	2121	PRO
2	C	2173	MET
2	E	768	ARG
2	E	917	GLY
2	E	1915	ARG
2	E	1929	PRO
2	E	2045	GLU
2	E	2053	VAL
2	E	2161	PRO
2	G	994	ASP
2	G	1017	ASN
2	G	1365	LYS
2	G	1640	ARG
2	G	1799	SER
2	G	1985	SER
2	G	2002	VAL
2	G	2053	VAL
2	G	2170	LEU
1	B	2156	GLY
2	A	2107	GLU
1	D	2219	ASN
2	C	2137	THR
2	E	1966	GLU
1	H	2182	ASN
2	G	516	PRO
2	G	1196	ASP
2	G	1421	LYS
2	G	1860	GLU
2	G	1876	ASN
2	G	2121	PRO
2	C	1860	GLU
2	C	2051	SER
2	E	468	GLY
2	E	505	PRO
2	E	767	ASN
2	E	989	GLY
2	E	1094	PRO
2	E	1462	GLY
2	E	2050	ALA
1	H	2072	VAL
1	H	2219	ASN

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Mol	Chain	Res	Type
2	G	728	TYR
2	G	960	VAL
2	G	1231	PRO
2	G	1364	LEU
2	A	1987	GLY
1	D	2194	PRO
1	D	2220	VAL
2	C	874	HIS
2	C	2163	PRO
2	E	576	LYS
2	E	1313	PRO
2	E	1965	GLN
2	G	1616	PRO
2	G	2047	PRO
1	B	2252	GLY
2	A	1876	ASN
2	E	868	GLY
1	H	2160	PRO
1	H	2181	LYS
2	A	996	VAL
2	C	1241	PRO
2	E	1208	PRO
2	E	2180	VAL
2	G	468	GLY
2	A	1231	PRO
2	E	1217	PRO
2	A	2046	ASN
1	F	2300	ILE
2	E	1231	PRO
2	C	811	VAL
2	E	1616	PRO
2	G	819	VAL
1	D	2266	ILE
2	C	868	GLY
2	C	871	LEU
2	C	1669	VAL

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 X-ray entries followed by that with respect to entries of similar resolution.

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	B	234/241 (97%)	225 (96%)	9 (4%)	40	78
1	D	231/241 (96%)	224 (97%)	7 (3%)	48	82
1	F	235/241 (98%)	227 (97%)	8 (3%)	44	80
1	H	235/241 (98%)	231 (98%)	4 (2%)	68	90
2	A	1534/1562 (98%)	1475 (96%)	59 (4%)	40	78
2	C	1503/1562 (96%)	1439 (96%)	64 (4%)	35	75
2	E	1537/1562 (98%)	1486 (97%)	51 (3%)	45	81
2	G	1511/1562 (97%)	1469 (97%)	42 (3%)	51	84
All	All	7020/7212 (97%)	6776 (96%)	244 (4%)	43	80

All (244) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	B	2044	THR
1	B	2058	THR
1	B	2082	ASN
1	B	2116	ARG
1	B	2123	GLN
1	B	2150	LEU
1	B	2152	HIS
1	B	2199	LEU
1	B	2272	HIS
2	A	452	LEU
2	A	462	ASN
2	A	467	GLN
2	A	479	MET
2	A	489	LYS
2	A	592	LEU
2	A	599	GLN
2	A	622	GLN
2	A	686	ARG
2	A	692	GLU
2	A	749	LEU
2	A	766	GLN
2	A	800	GLN
2	A	801	ILE
2	A	803	LYS

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Mol	Chain	Res	Type
2	A	824	LEU
2	A	935	GLN
2	A	936	GLN
2	A	1041	TYR
2	A	1044	HIS
2	A	1174	THR
2	A	1209	ARG
2	A	1294	LEU
2	A	1329	HIS
2	A	1407	LYS
2	A	1423	ASP
2	A	1436	LEU
2	A	1456	GLU
2	A	1460	LEU
2	A	1468	LEU
2	A	1470	LEU
2	A	1473	GLN
2	A	1475	ASP
2	A	1519	TYR
2	A	1525	ARG
2	A	1609	GLN
2	A	1812	PHE
2	A	1830	HIS
2	A	1843	THR
2	A	1844	THR
2	A	1876	ASN
2	A	1897	THR
2	A	1899	LEU
2	A	1911	ILE
2	A	1927	HIS
2	A	1965	GLN
2	A	1986	GLU
2	A	2009	ASP
2	A	2017	ASN
2	A	2018	PHE
2	A	2042	ASN
2	A	2048	ASN
2	A	2054	LYS
2	A	2055	ASP
2	A	2076	ASP
2	A	2111	PHE
2	A	2165	LYS

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Mol	Chain	Res	Type
2	A	2168	LEU
2	A	2185	SER
1	D	2047	ARG
1	D	2143	LYS
1	D	2184	ASN
1	D	2186	LEU
1	D	2216	LYS
1	D	2218	PRO
1	D	2274	LYS
2	C	465	PHE
2	C	599	GLN
2	C	607	LEU
2	C	623	LEU
2	C	625	LYS
2	C	721	LEU
2	C	725	ASP
2	C	760	VAL
2	C	773	ILE
2	C	802	LEU
2	C	803	LYS
2	C	804	HIS
2	C	809	ARG
2	C	810	GLU
2	C	825	LYS
2	C	871	LEU
2	C	894	LEU
2	C	914	TYR
2	C	1041	TYR
2	C	1195	MET
2	C	1299	GLU
2	C	1343	LEU
2	C	1356	LEU
2	C	1359	LEU
2	C	1379	PHE
2	C	1380	ASN
2	C	1407	LYS
2	C	1410	CYS
2	C	1451	LEU
2	C	1452	ARG
2	C	1486	VAL
2	C	1515	MET
2	C	1519	TYR

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Mol	Chain	Res	Type
2	C	1550	ARG
2	C	1598	THR
2	C	1645	GLU
2	C	1685	LYS
2	C	1690	ASN
2	C	1758	LEU
2	C	1780	LEU
2	C	1795	LYS
2	C	1798	GLU
2	C	1859	ASP
2	C	1862	THR
2	C	1885	PHE
2	C	1889	LEU
2	C	1924	ILE
2	C	1954	ARG
2	C	1977	SER
2	C	1986	GLU
2	C	2018	PHE
2	C	2052	LEU
2	C	2058	LEU
2	C	2063	LEU
2	C	2074	TYR
2	C	2079	LEU
2	C	2087	ASP
2	C	2106	GLU
2	C	2119	PHE
2	C	2128	TRP
2	C	2134	GLU
2	C	2135	GLU
2	C	2158	PHE
2	C	2166	HIS
1	F	2053	THR
1	F	2070	ASN
1	F	2117	CYS
1	F	2159	LEU
1	F	2172	LYS
1	F	2184	ASN
1	F	2224	GLN
1	F	2301	TRP
2	E	473	THR
2	E	481	GLU
2	E	507	ASP

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Mol	Chain	Res	Type
2	E	508	GLN
2	E	521	ILE
2	E	541	PHE
2	E	542	LEU
2	E	573	ARG
2	E	576	LYS
2	E	582	ASP
2	E	584	PHE
2	E	606	ARG
2	E	632	GLN
2	E	633	VAL
2	E	650	ASP
2	E	702	THR
2	E	719	LYS
2	E	733	LEU
2	E	769	ASN
2	E	799	ASN
2	E	808	THR
2	E	826	ASP
2	E	827	LEU
2	E	964	ASP
2	E	991	GLU
2	E	1039	HIS
2	E	1041	TYR
2	E	1101	ILE
2	E	1240	GLN
2	E	1246	MET
2	E	1423	ASP
2	E	1519	TYR
2	E	1758	LEU
2	E	1816	LEU
2	E	1879	TYR
2	E	1891	HIS
2	E	1930	VAL
2	E	1934	ASN
2	E	1982	ILE
2	E	2009	ASP
2	E	2033	ASP
2	E	2045	GLU
2	E	2054	LYS
2	E	2070	THR
2	E	2071	ASN

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Mol	Chain	Res	Type
2	E	2073	LYS
2	E	2074	TYR
2	E	2078	THR
2	E	2088	ASN
2	E	2138	LYS
2	E	2190	VAL
1	H	2069	ASP
1	H	2110	ASP
1	H	2135	HIS
1	H	2301	TRP
2	G	501	LYS
2	G	509	ASN
2	G	671	ASP
2	G	912	ASP
2	G	959	ASN
2	G	994	ASP
2	G	1041	TYR
2	G	1126	LEU
2	G	1195	MET
2	G	1262	GLU
2	G	1354	LEU
2	G	1369	TYR
2	G	1392	ASN
2	G	1396	ASN
2	G	1416	LEU
2	G	1421	LYS
2	G	1457	ILE
2	G	1498	GLN
2	G	1499	THR
2	G	1501	GLU
2	G	1502	LEU
2	G	1519	TYR
2	G	1608	ASP
2	G	1639	ASP
2	G	1640	ARG
2	G	1722	GLU
2	G	1860	GLU
2	G	1874	TYR
2	G	1895	LEU
2	G	1969	LEU
2	G	1979	ILE
2	G	2025	VAL

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Mol	Chain	Res	Type
2	G	2044	GLU
2	G	2052	LEU
2	G	2070	THR
2	G	2115	VAL
2	G	2127	ASN
2	G	2135	GLU
2	G	2140	LEU
2	G	2141	LEU
2	G	2153	ASN
2	G	2181	ASP

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (26) such sidechains are listed below:

Mol	Chain	Res	Type
1	B	2082	ASN
2	A	800	GLN
2	A	813	GLN
2	C	622	GLN
2	C	770	GLN
2	C	855	HIS
2	C	1180	GLN
2	C	1483	GLN
2	C	1509	HIS
2	C	1934	ASN
1	F	2182	ASN
1	F	2184	ASN
1	F	2290	HIS
2	E	769	ASN
2	E	800	GLN
2	E	936	GLN
2	E	1673	HIS
2	E	2071	ASN
2	E	2127	ASN
1	H	2070	ASN
1	H	2183	GLN
2	G	959	ASN
2	G	1396	ASN
2	G	1673	HIS
2	G	1988	HIS
2	G	2003	GLN

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 carbohydrates in this entry.

5.6 Ligand geometry ⓘ

4 ligands are modelled in this entry.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
3	ACT	A	2201	-	0,3,3	0.00	-	0,3,3	0.00	-
3	ACT	C	2201	-	0,3,3	0.00	-	0,3,3	0.00	-
3	ACT	E	2201	-	0,3,3	0.00	-	0,3,3	0.00	-
3	ACT	G	2201	-	0,3,3	0.00	-	0,3,3	0.00	-

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
3	ACT	A	2201	-	-	0/0/0/0	0/0/0/0
3	ACT	C	2201	-	-	0/0/0/0	0/0/0/0
3	ACT	E	2201	-	-	0/0/0/0	0/0/0/0
3	ACT	G	2201	-	-	0/0/0/0	0/0/0/0

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

3 monomers are involved in 6 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
3	A	2201	ACT	1	0
3	C	2201	ACT	1	0
3	E	2201	ACT	4	0

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 Fit of model and data ⓘ

6.1 Protein, DNA and RNA chains ⓘ

In the following table, the column labelled ‘#RSRZ> 2’ contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95th percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled ‘Q< 0.9’ lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	B	266/276 (96%)	-0.05	3 (1%) 82 72	54, 76, 110, 128	0
1	D	263/276 (95%)	-0.06	1 (0%) 93 90	56, 73, 101, 130	0
1	F	265/276 (96%)	-0.02	4 (1%) 76 63	53, 83, 117, 143	0
1	H	267/276 (96%)	-0.01	2 (0%) 89 83	54, 77, 111, 132	0
2	A	1738/1772 (98%)	0.01	26 (1%) 76 63	39, 73, 123, 171	0
2	C	1702/1772 (96%)	0.12	60 (3%) 48 32	49, 86, 159, 209	0
2	E	1740/1772 (98%)	0.06	23 (1%) 79 67	48, 80, 132, 205	0
2	G	1710/1772 (96%)	0.27	106 (6%) 24 13	48, 92, 171, 209	0
All	All	7951/8192 (97%)	0.09	225 (2%) 56 42	39, 81, 154, 209	0

All (225) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
2	G	2171	PHE	4.8
2	G	2142	ALA	4.7
2	C	2170	LEU	4.6
2	G	2088	ASN	4.5
2	A	1985	SER	4.5
2	G	1475	ASP	4.4
2	G	2038	MET	4.4
2	G	1838	SER	4.4
1	B	2217	ASP	4.4
2	C	1416	LEU	4.2
2	G	800	GLN	4.1
2	G	2096	TYR	4.1
2	G	2155	LYS	4.1
2	G	2101	ILE	4.0
2	G	2039	GLU	4.0
2	G	1361	VAL	4.0

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Mol	Chain	Res	Type	RSRZ
2	G	2003	GLN	3.9
2	A	800	GLN	3.9
2	C	1504	ILE	3.9
2	E	796	ASP	3.9
2	G	2172	LEU	3.9
2	C	2127	ASN	3.9
2	C	2185	SER	3.8
2	G	1541	GLY	3.8
2	E	508	GLN	3.8
2	G	2094	PRO	3.8
2	G	1428	VAL	3.8
2	G	1427	ALA	3.7
2	A	2075	PRO	3.7
2	G	2042	ASN	3.7
2	G	2153	ASN	3.7
2	C	1987	GLY	3.6
2	A	809	ARG	3.6
2	E	2084	ASP	3.5
2	C	1856	MET	3.5
2	G	1384	THR	3.5
2	C	2035	PHE	3.5
2	G	2100	HIS	3.5
2	G	2041	MET	3.4
2	G	1495	LYS	3.4
2	G	803	LYS	3.4
2	A	832	PHE	3.4
2	C	1502	LEU	3.4
2	G	1501	GLU	3.4
2	C	2072	ASN	3.4
2	G	2170	LEU	3.3
2	C	1362	SER	3.3
2	G	2089	ILE	3.3
2	E	2161	PRO	3.2
2	C	1867	ASN	3.2
2	C	1495	LYS	3.2
2	C	2110	GLU	3.2
2	G	2151	GLU	3.2
2	G	1476	LEU	3.2
2	G	2173	MET	3.1
2	G	2181	ASP	3.1
2	G	2034	ILE	3.1
2	G	1365	LYS	3.1

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Mol	Chain	Res	Type	RSRZ
2	G	857	GLN	3.1
2	C	800	GLN	3.1
2	G	502	ARG	3.0
2	C	1865	PRO	3.0
2	C	813	GLN	3.0
2	G	1499	THR	3.0
2	G	1502	LEU	3.0
2	C	1098	LYS	3.0
2	A	810	GLU	3.0
2	E	506	THR	3.0
2	A	804	HIS	3.0
2	C	1413	PHE	2.9
2	G	1809	PHE	2.9
2	A	829	PRO	2.9
2	C	1420	ALA	2.9
2	C	1902	VAL	2.9
2	C	2108	ASP	2.9
2	G	1834	SER	2.9
2	G	2084	ASP	2.8
2	G	2141	LEU	2.8
2	C	1891	HIS	2.8
2	A	2039	GLU	2.8
2	G	1417	ARG	2.8
2	C	1852	ARG	2.8
2	C	1379	PHE	2.8
2	G	1397	VAL	2.8
2	G	2159	VAL	2.8
2	G	812	LEU	2.7
2	G	2014	GLN	2.7
2	G	805	ASP	2.7
2	G	2152	LEU	2.7
2	G	1362	SER	2.7
2	E	2034	ILE	2.7
1	F	2134	GLN	2.7
2	G	2158	PHE	2.7
2	G	1360	PRO	2.7
2	A	1364	LEU	2.6
2	G	1415	LEU	2.6
2	G	1410	CYS	2.6
2	A	858	VAL	2.6
1	F	2236	LEU	2.6
2	A	1854	ILE	2.6

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Mol	Chain	Res	Type	RSRZ
2	G	1421	LYS	2.6
2	G	1561	HIS	2.6
2	G	1473	GLN	2.6
2	G	2093	GLU	2.6
1	H	2074	ASP	2.6
2	E	2103	ARG	2.6
2	G	2156	LEU	2.6
2	G	2047	PRO	2.6
2	G	1098	LYS	2.5
2	G	2060	GLN	2.5
2	E	2098	LYS	2.5
2	G	2081	PHE	2.5
2	G	1841	VAL	2.5
2	C	1422	LYS	2.5
2	A	833	GLY	2.5
2	G	1540	VAL	2.5
2	G	1695	VAL	2.5
2	G	1484	TRP	2.5
2	C	811	VAL	2.5
2	C	1219	ALA	2.5
2	E	911	TYR	2.5
2	A	1971	LYS	2.5
2	C	1367	LYS	2.5
2	C	2178	VAL	2.4
2	C	2073	LYS	2.4
2	G	828	LEU	2.4
2	G	1837	LEU	2.4
2	G	832	PHE	2.4
2	G	1388	ASN	2.4
2	G	2065	GLN	2.4
2	G	2035	PHE	2.4
2	A	801	ILE	2.4
2	G	1539	ILE	2.4
2	G	1385	GLN	2.4
2	C	1536	PRO	2.4
2	G	1857	ASP	2.4
2	G	1861	GLY	2.4
2	C	1501	GLU	2.4
2	C	1994	ALA	2.4
2	E	1649	ILE	2.4
2	G	1398	LEU	2.3
1	H	2156	GLY	2.3

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Mol	Chain	Res	Type	RSRZ
2	G	1399	VAL	2.3
2	C	802	LEU	2.3
2	C	1540	VAL	2.3
2	A	828	LEU	2.3
2	C	526	THR	2.3
2	C	2075	PRO	2.3
2	G	1451	LEU	2.3
2	E	2041	MET	2.3
2	G	2097	LEU	2.3
2	C	1410	CYS	2.3
2	G	2176	SER	2.3
2	C	1949	GLN	2.3
2	E	2176	SER	2.3
2	C	2129	TRP	2.3
1	B	2044	THR	2.3
2	G	514	GLU	2.2
2	G	2128	TRP	2.2
2	C	1417	ARG	2.2
2	A	813	GLN	2.2
2	A	2139	THR	2.2
2	G	1453	GLY	2.2
2	G	1869	ALA	2.2
2	A	1448	LEU	2.2
2	G	834	ILE	2.2
2	C	1388	ASN	2.2
2	G	1392	ASN	2.2
2	G	2175	ASP	2.2
2	E	1427	ALA	2.2
2	G	873	ALA	2.2
2	E	1692	ALA	2.2
2	C	1426	ARG	2.2
2	C	2138	LYS	2.2
2	G	1504	ILE	2.2
2	C	2006	TRP	2.2
2	C	502	ARG	2.2
2	G	1503	PHE	2.2
2	G	2154	VAL	2.2
2	C	1359	LEU	2.1
2	C	1845	LEU	2.1
2	G	2006	TRP	2.1
2	E	671	ASP	2.1
2	C	1894	LYS	2.1

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Mol	Chain	Res	Type	RSRZ
2	E	2109	GLU	2.1
1	D	2115	ILE	2.1
2	G	1858	GLU	2.1
2	E	832	PHE	2.1
2	G	804	HIS	2.1
2	E	574	ASN	2.1
2	C	1899	LEU	2.1
2	C	1855	GLU	2.1
2	G	2009	ASP	2.1
2	A	857	GLN	2.1
2	A	803	LYS	2.1
2	A	856	ILE	2.1
2	G	811	VAL	2.1
2	G	508	GLN	2.1
2	G	1629	LEU	2.1
2	E	2072	ASN	2.1
2	E	1813	TYR	2.1
2	A	805	ASP	2.1
2	A	826	ASP	2.1
2	E	504	ASP	2.1
2	E	624	THR	2.1
2	G	1416	LEU	2.1
2	G	808	THR	2.1
2	A	2162	SER	2.1
2	C	2069	PHE	2.0
2	G	1560	LYS	2.0
1	B	2307	ASN	2.0
2	C	1893	SER	2.0
2	E	2165	LYS	2.0
2	C	2172	LEU	2.0
1	F	2202	TRP	2.0
2	C	799	ASN	2.0
2	C	2139	THR	2.0
2	C	1397	VAL	2.0
2	C	2134	GLU	2.0
2	G	770	GLN	2.0
2	G	1798	GLU	2.0
1	F	2217	ASP	2.0
2	A	1391	TYR	2.0
2	C	2132	VAL	2.0
2	G	2145	ARG	2.0

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

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

6.3 Carbohydrates [i](#)

There are no carbohydrates in this entry.

6.4 Ligands [i](#)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. LLDF column lists the quality of electron density of the group with respect to its neighbouring residues in protein, DNA or RNA chains. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
3	ACT	C	2201	4/4	0.63	0.35	3.22	80,91,97,98	0
3	ACT	E	2201	4/4	0.85	0.27	0.84	87,92,111,111	0
3	ACT	G	2201	4/4	0.85	0.25	0.84	84,89,104,104	0
3	ACT	A	2201	4/4	0.88	0.20	-0.33	63,68,81,81	0

6.5 Other polymers [i](#)

There are no such residues in this entry.