



# Full wwPDB X-ray Structure Validation Report ⓘ

Mar 8, 2018 – 11:15 pm GMT

PDB ID : 5EXR  
Title : Crystal structure of human primosome  
Authors : Tahirov, T.H.; Baranovskiy, A.G.; Babayeva, N.D.  
Deposited on : 2015-11-24  
Resolution : 3.60 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](mailto:validation@mail.wwpdb.org)

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

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

MolProbity : 4.02b-467  
Mogul : 1.7.3 (157068), CSD as539be (2018)  
Xtriage (Phenix) : 1.13  
EDS : trunk30967  
Percentile statistics : 20171227.v01 (using entries in the PDB archive December 27th 2017)  
Refmac : 5.8.0158  
CCP4 : 7.0 (Gargrove)  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)  
Validation Pipeline (wwPDB-VP) : trunk30967

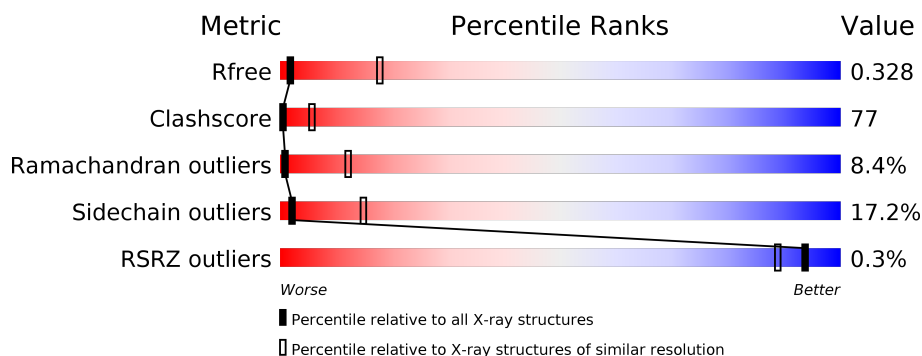
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

*X-RAY DIFFRACTION*

The reported resolution of this entry is 3.60 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))
$R_{free}$	111664	1053 (3.70-3.50)
Clashscore	122126	1141 (3.70-3.50)
Ramachandran outliers	120053	1102 (3.70-3.50)
Sidechain outliers	120020	1102 (3.70-3.50)
RSRZ outliers	108989	1009 (3.72-3.48)

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  $\geq 3$ , 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	A	420	<div> <div>3%</div> <div>21% 63% 9% 7%</div> </div>
1	E	420	<div> <div>23% 62% 8% 7%</div> </div>
2	B	509	<div> <div>20% 48% 16% 15%</div> </div>
2	F	509	<div> <div>17% 50% 17% 15%</div> </div>
3	C	1128	<div> <div>21% 54% 18% 6%</div> </div>
3	G	1128	<div> <div>21% 53% 18% 6%</div> </div>

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Mol	Chain	Length	Quality of chain
4	D	597	
4	H	597	

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
6	SF4	B	601	-	-	X	-

## 2 Entry composition

There are 6 unique types of molecules in this entry. The entry contains 37658 atoms, of which 0 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 DNA primase small subunit.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	389	Total	C	N	O	S	0	0	0
			3261	2099	564	583	15			
1	E	389	Total	C	N	O	S	0	0	0
			3261	2099	564	583	15			

- Molecule 2 is a protein called DNA primase large subunit.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	B	434	Total	C	N	O	S	0	0	0
			3562	2280	616	653	13			
2	F	434	Total	C	N	O	S	0	0	0
			3562	2280	616	653	13			

- Molecule 3 is a protein called DNA polymerase alpha catalytic subunit.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	C	1057	Total	C	N	O	S	0	0	0
			8544	5477	1433	1578	56			
3	G	1057	Total	C	N	O	S	0	0	0
			8544	5477	1433	1578	56			

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
C	516	ALA	VAL	engineered mutation	UNP P09884
G	516	ALA	VAL	engineered mutation	UNP P09884

- Molecule 4 is a protein called DNA polymerase alpha subunit B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	D	444	Total	C	N	O	S	0	0	0
			3451	2194	576	666	15			

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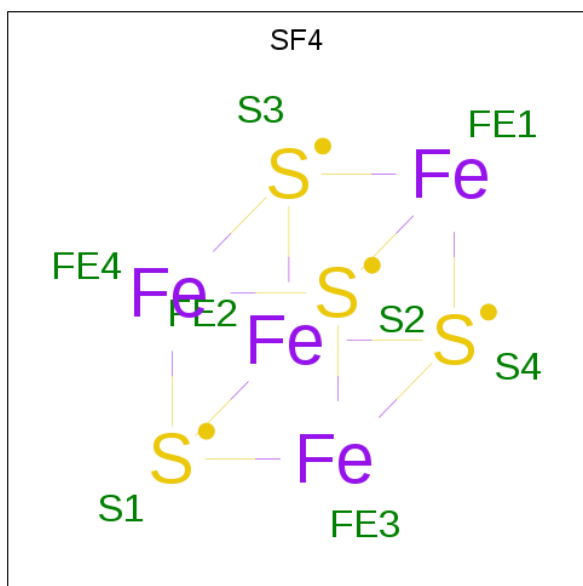
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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	H	444	Total	C	N	O	S	0	0	0
			3451	2194	576	666	15			

- Molecule 5 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
5	G	2	Total	Zn	0	0
			2	2		
5	A	1	Total	Zn	0	0
			1	1		
5	C	2	Total	Zn	0	0
			2	2		
5	E	1	Total	Zn	0	0
			1	1		

- Molecule 6 is IRON/SULFUR CLUSTER (three-letter code: SF4) (formula: Fe<sub>4</sub>S<sub>4</sub>).

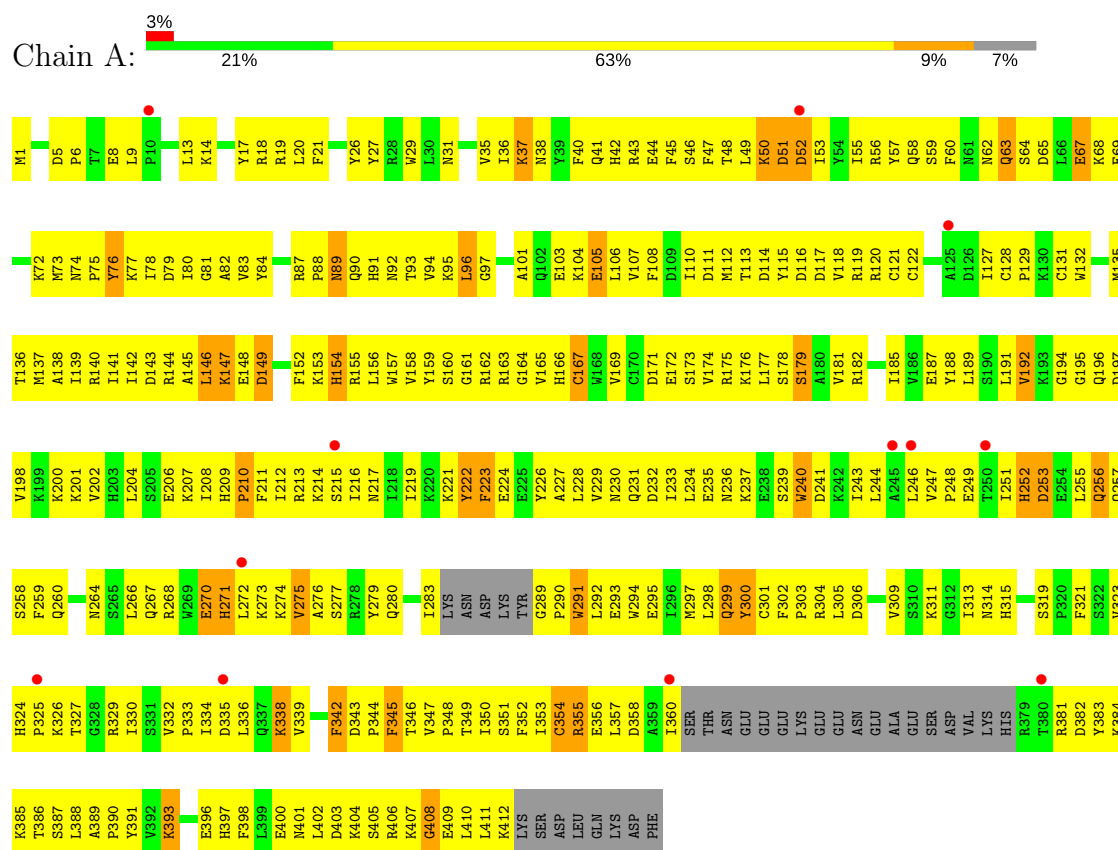


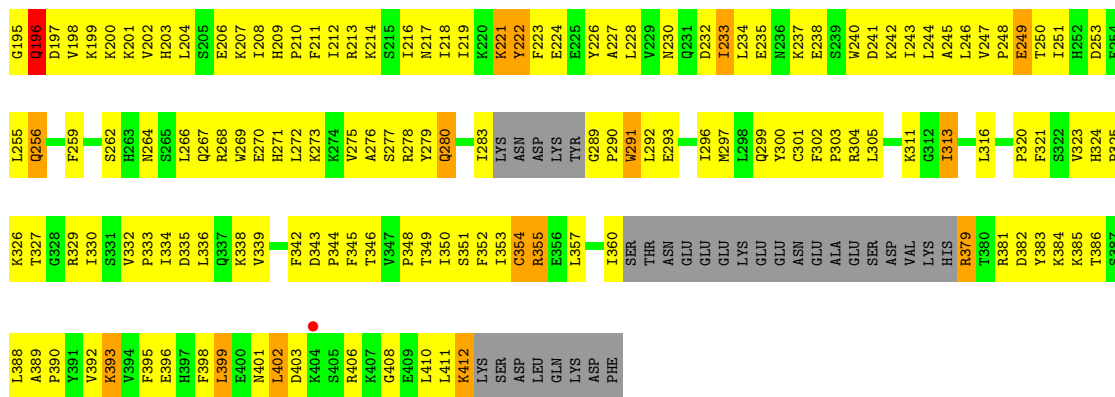
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
6	B	1	Total	Fe	S	0	0
			8	4	4		
6	F	1	Total	Fe	S	0	0
			8	4	4		

### 3 Residue-property plots

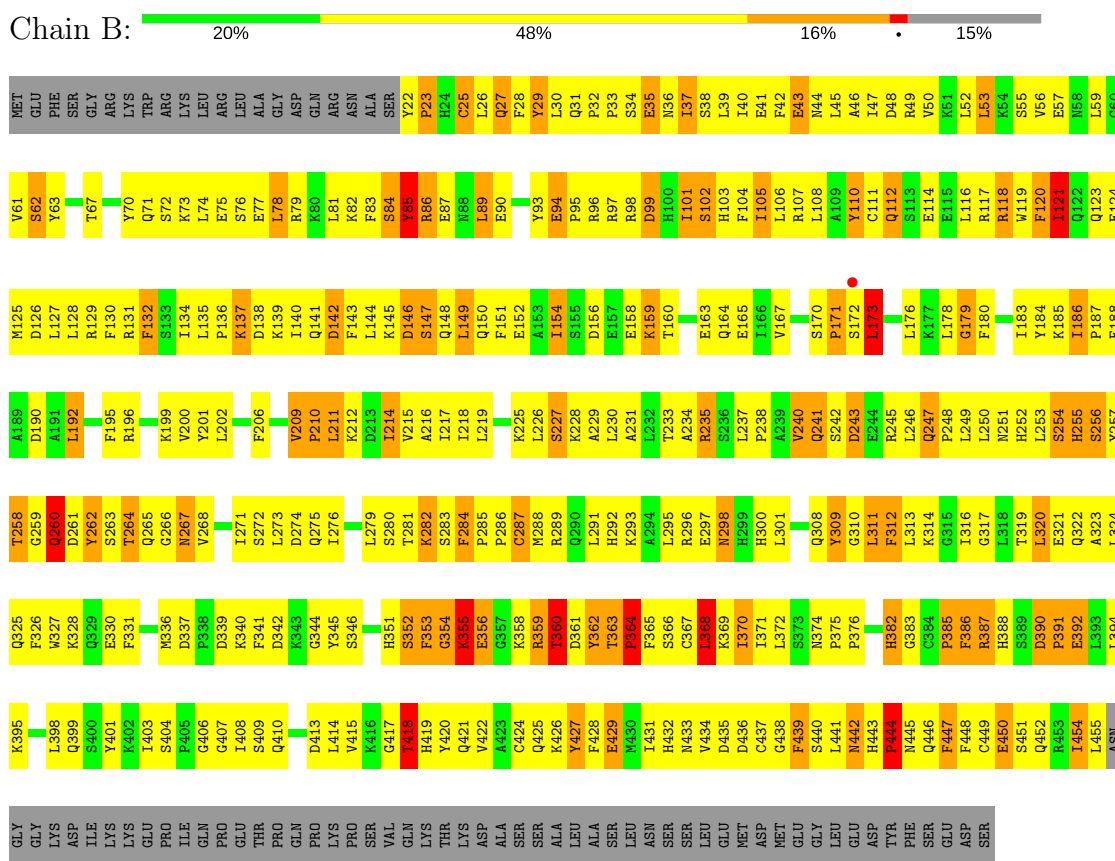
These plots are drawn for all protein, RNA and DNA chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. Residues are 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: DNA primase small subunit

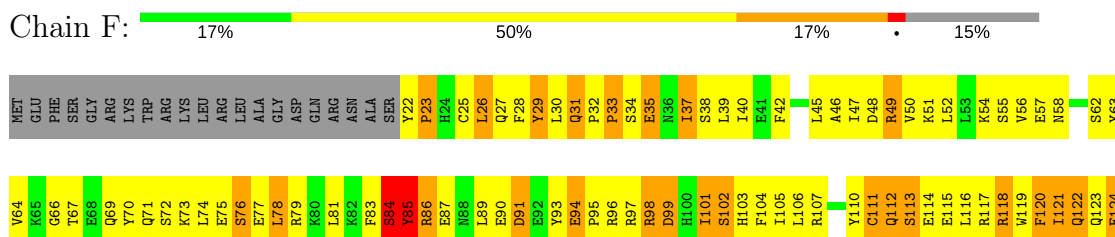


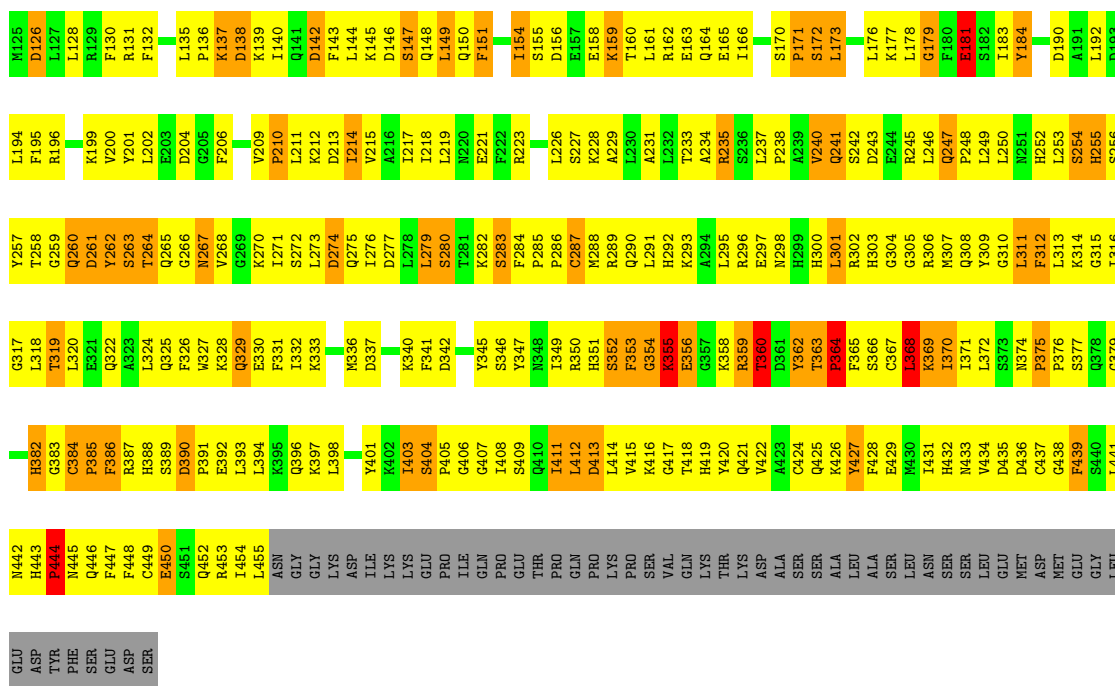


- Molecule 2: DNA primase large subunit

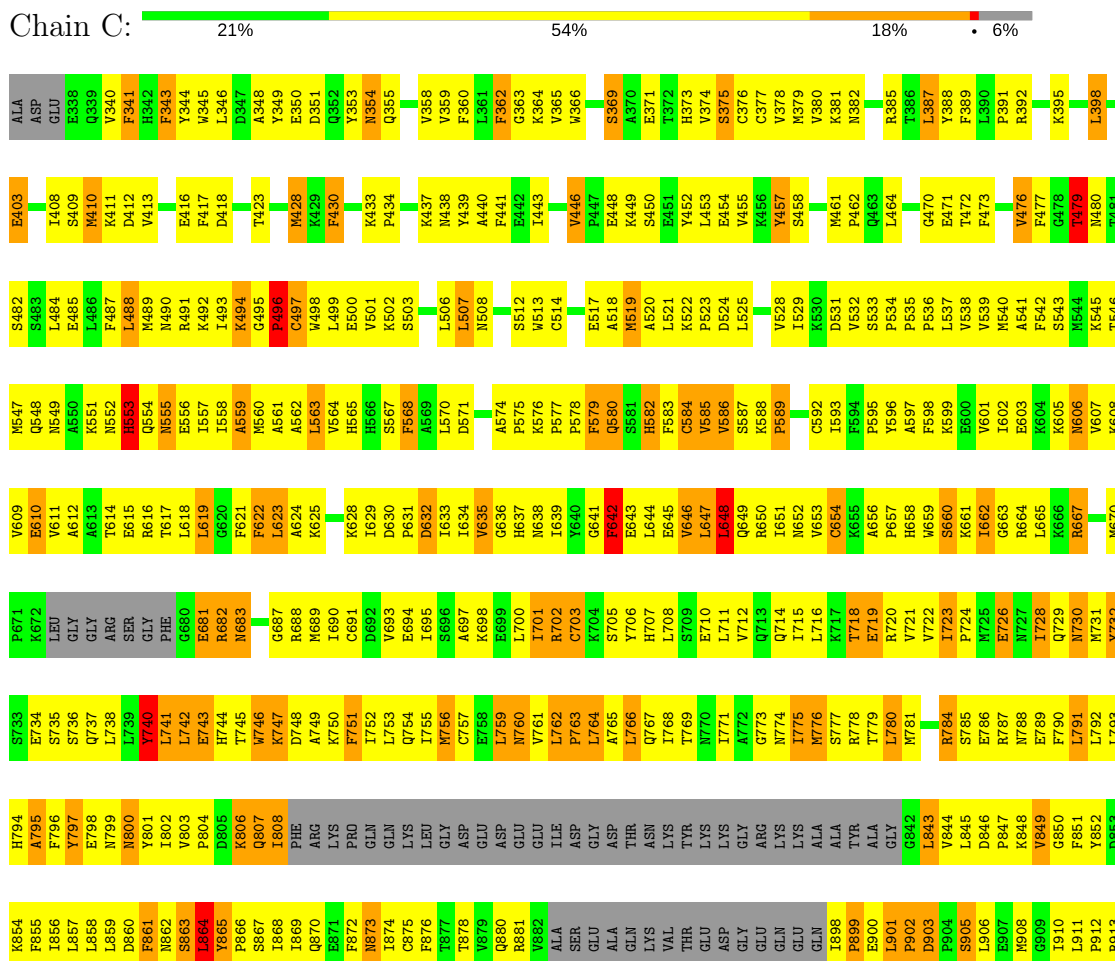


- Molecule 2: DNA primase large subunit

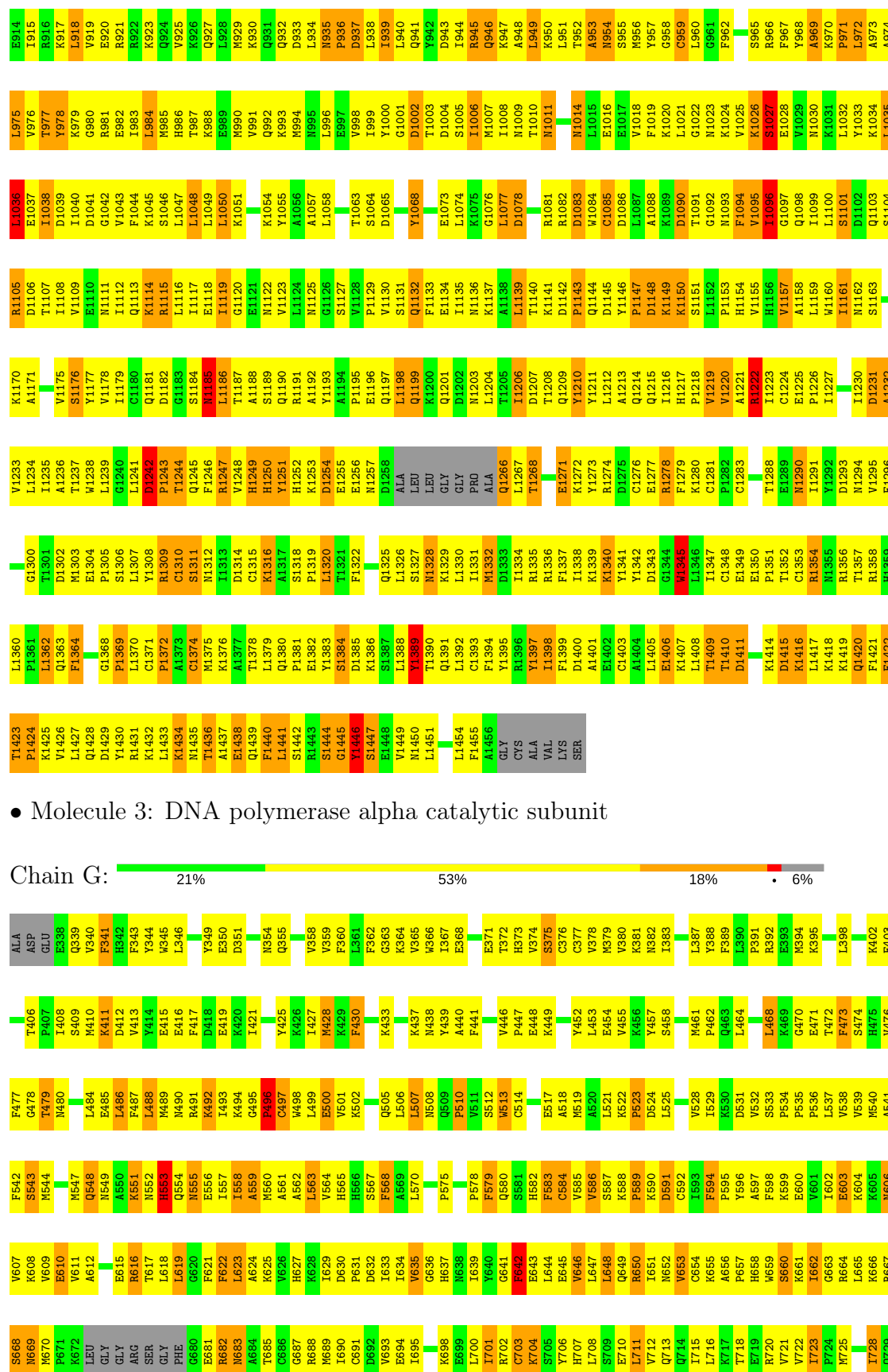




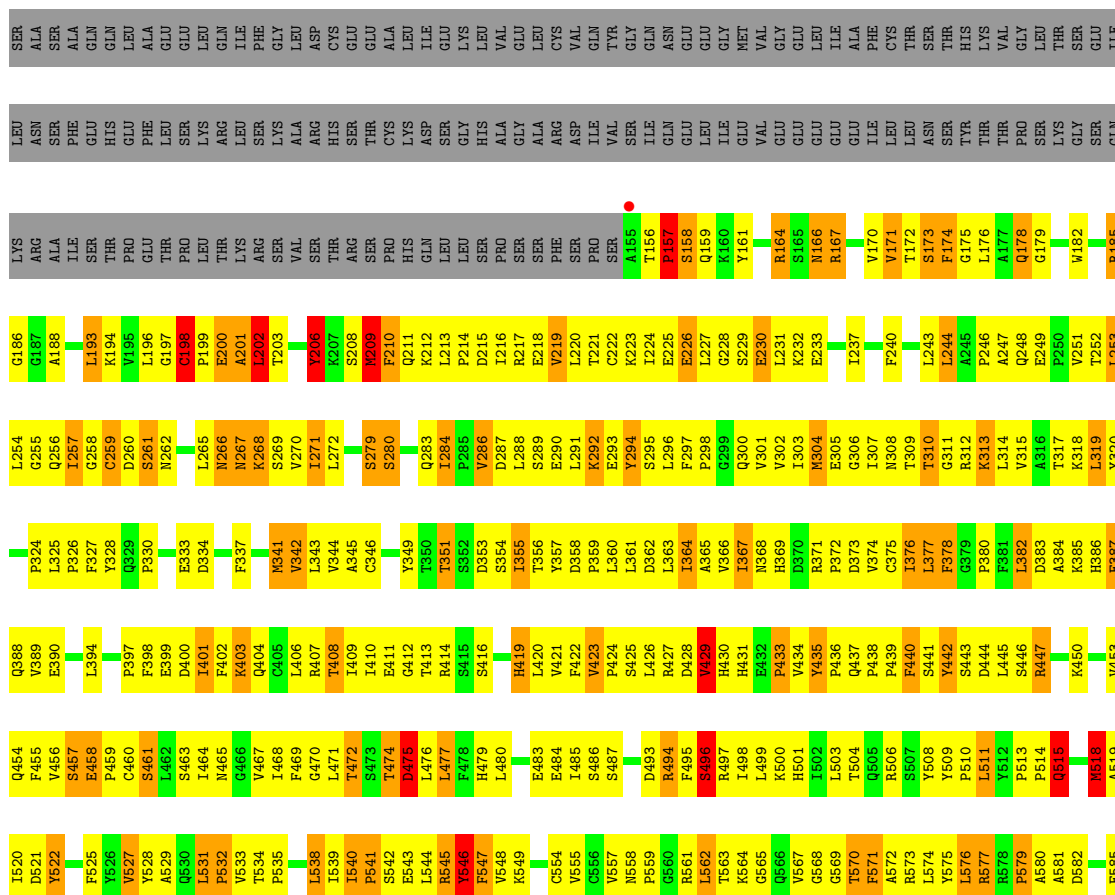
### • Molecule 3: DNA polymerase alpha catalytic subunit







W730	W731	Y732	Q737	L738	L739	W799	W799	W800	Y801	L802	W803	L742	L743	W744	W745	W746	W747	PHE	D748	ARG	A749	K750	K751	L752	L753	Q754	L755	W756	C757	W758	L759	W760	L761	L762	P763	L764	A765	L766	Q767	L768	T769	L770	L771	A772	G773	W774	L775	W776	S777	T778	T779	L780	W781	W784	S785	E786	R787	W788	W789	F790	L791	L792	D853																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
H794	A795	F796	Y797	E798	W800	Y801	L802	W803	P804	D805	K806	Q807	L808	PHE	ARG	LYS	PRO	GLN	GLN	L753	Q754	L755	W756	C757	W758	L759	W760	L761	L762	P763	L764	A765	L766	Q767	L768	T769	L770	L771	A772	G773	W774	L775	W776	S777	T778	T779	L780	W781	W784	S785	E786	R787	W788	W789	F790	L791	L792	D853																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
K854	F855	L856	L857	L858	L859	D860	F861	R862	S863	L864	Y865	P866	S867	L868	Q869	E870	E871	F872	R873	R874	C875	F876	G877	T878	W879	Q880	R881	ALA	ALA	GLU	GLU	ASP	ASP	GLY	ASP	ASP	THR	LYS	ASN	Q767	L768	T769	L770	L771	A772	G773	W774	L775	W776	S777	T778	T779	L780	W781	W784	S785	E786	R787	W788	W789	F790	L791	L792	D853																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
E914	I915	K916	L917	L918	L919	E920	R921	R922	Y923	K924	Y925	K926	Q927	D928	L929	P930	P931	P932	P933	P934	P935	P936	P937	P938	P939	P940	P941	P942	P943	P944	P945	P946	P947	P948	P949	P950	P951	P952	P953	P954	P955	P956	P957	P958	P959	P960	P961	P962	P963	P964	P965	P966	P967	P968	P969	P970	P971	P972	P973	P974	P975	P976	P977	P978	P979	P980	P981	P982	P983	P984	P985	P986	P987	P988	P989	P990	P991	P992	P993	P994	P995	P996	P997	P998	P999	P1000	P1001	P1002	P1003	P1004	P1005	P1006	P1007	P1008	P1009	P1010	P1011	P1012	P1013	P1014	P1015	P1016	P1017	P1018	P1019	P1020	P1021	P1022	P1023	P1024	P1025	P1026	P1027	P1028	P1029	P1030	P1031	P1032	P1033	P1034	P1035	P1036	P1037	P1038	P1039	P1040	P1041	P1042	P1043	P1044	P1045	P1046	P1047	P1048	P1049	P1050	P1051	P1052	P1053	P1054	P1055	P1056	P1057	P1058	P1059	P1060	P1061	P1062	P1063	P1064	P1065	P1066	P1067	P1068	P1069	P1070	P1071	P1072	P1073	P1074	P1075	P1076	P1077	P1078	P1079	P1080	P1081	P1082	P1083	P1084	P1085	P1086	P1087	P1088	P1089	P1090	P1091	P1092	P1093	P1094	P1095	P1096	P1097	P1098	P1099	P1100	P1101	P1102	P1103	P1104	P1105	P1106	P1107	P1108	P1109	P1110	P1111	P1112	P1113	P1114	P1115	P1116	P1117	P1118	P1119	P1120	P1121	P1122	P1123	P1124	P1125	P1126	P1127	P1128	P1129	P1130	P1131	P1132	P1133	P1134	P1135	P1136	P1137	P1138	P1139	P1140	P1141	P1142	P1143	P1144	P1145	P1146	P1147	P1148	P1149	P1150	P1151	P1152	P1153	P1154	P1155	P1156	P1157	P1158	P1159	P1160	P1161	P1162	P1163	P1164	P1165	P1166	P1167	P1168	P1169	P1170	P1171	P1172	P1173	P1174	P1175	P1176	P1177	P1178	P1179	P1180	P1181	P1182	P1183	P1184	P1185	P1186	P1187	P1188	P1189	P1190	P1191	P1192	P1193	P1194	P1195	P1196	P1197	P1198	P1199	P1200	P1201	P1202	P1203	P1204	P1205	P1206	P1207	P1208	P1209	P1210	P1211	P1212	P1213	P1214	P1215	P1216	P1217	P1218	P1219	P1220	P1221	P1222	P1223	P1224	P1225	P1226	P1227	P1228	P1229	P1230	P1231	P1232	P1233	P1234	P1235	P1236	P1237	P1238	P1239	P1240	P1241	P1242	P1243	P1244	P1245	P1246	P1247	P1248	P1249	P1250	P1251	P1252	P1253	P1254	P1255	P1256	P1257	P1258	P1259	P1260	P1261	P1262	P1263	P1264	P1265	P1266	P1267	P1268	P1269	P1270	P1271	P1272	P1273	P1274	P1275	P1276	P1277	P1278	P1279	P1280	P1281	P1282	P1283	P1284	P1285	P1286	P1287	P1288	P1289	P1290	P1291	P1292	P1293	P1294	P1295	P1296	P1297	P1298	P1299	P1300	P1301	P1302	P1303	P1304	P1305	P1306	P1307	P1308	P1309	P1310	P1311	P1312	P1313	P1314	P1315	P1316	P1317	P1318	P1319	P1320	P1321	P1322	P1323	P1324	P1325	P1326	P1327	P1328	P1329	P1330	P1331	P1332	P1333	P1334	P1335	P1336	P1337	P1338	P1339	P1340	P1341	P1342	P1343	P1344	P1345	P1346	P1347	P1348	P1349	P1350	P1351	P1352	P1353	P1354	P1355	P1356	P1357	P1358	P1359	P1360	P1361	P1362	P1363	P1364	P1365	P1366	P1367	P1368	P1369	P1370	P1371	P1372	P1373	P1374	P1375	P1376	P1377	P1378	P1379	P1380	P1381	P1382	P1383	P1384	P1385	P1386	P1387	P1388	P1389	P1390	P1391	P1392	P1393	P1394	P1395	P1396	P1397	P1398	P1399	P1400	P1401	P1402	P1403	P1404	P1405	P1406	P1407	P1408	P1409	P1410	P1411	P1412	P1413	P1414	P1415	P1416	P1417	P1418	P1419	P1420	P1421	P1422	P1423	P1424	P1425	P1426	P1427	P1428	P1429	P1430	P1431	P1432	P1433	P1434	P1435	P1436	P1437	P1438	P1439	P1440	P1441	P1442	P1443	P1444	P1445	P1446	P1447	P1448	P1449	P1450	P1451	P1452	P1453	P1454	P1455	P1456	P1457	P1458	P1459	P1460	P1461	P1462	P1463	P1464	P1465	P1466	P1467	P1468	P1469	P1470	P1471	P1472	P1473	P1474	P1475	P1476	P1477	P1478	P1479	P1480	P1481	P1482	P1483	P1484	P1485	P1486	P1487	P1488	P1489	P1490	P1491	P1492	P1493	P1494	P1495	P1496	P1497	P1498	P1499	P1500	P1501	P1502	P1503	P1504	P1505	P1506	P1507	P1508	P1509	P1510	P1511	P1512	P1513	P1514	P1515	P1516	P1517	P1518	P1519	P1520	P1521	P1522	P1523	P1524	P1525	P1526	P1527	P1528	P1529	P1530	P1531	P1532	P1533	P1534	P1535	P1536	P1537	P1538	P1539	P1540	P1541	P1542	P1543	P1544	P1545	P1546	P1547	P1548	P1549	P1550	P1551	P1552	P1553	P1554	P1555	P1556	P1557	P1558	P1559	P1560	P1561	P1562	P1563	P1564	P1565	P1566	P1567	P1568	P1569	P1570	P1571	P1572	P1573	P1574	P1575	P1576	P1577	P1578	P1579	P1580	P1581	P1582	P1583	P1584	P1585	P1586	P1587	P1588	P1589	P1590	P1591	P1592	P1593	P1594	P1595	P1596	P1597	P1598	P1599	P1600	P1601	P1602	P1603	P1604	P1605	P1606	P1607	P1608	P1609	P1610	P1611	P1612	P1613	P1614	P1615	P1616	P1617	P1618	P1619	P1620	P1621	P1622	P1623	P1624	P1625	P1626	P1627	P1628	P1629	P1630	P1631	P1632	P1633	P1634	P1635	P1636	P1637	P1638	P1639	P1640	P1641	P1642	P1643	P1644	P1645	P1646	P1647	P1648	P1649	P1650	P1651	P1652	P1653	P1654	P1655	P1656	P1657	P1658	P1659	P1660	P1661	P1662	P1663	P1664	P1665	P1666	P1667	P1668	P1669	P1670	P1671	P1672	P1673	P1674	P1675	P1676	P1677	P1678	P1679	P1680	P1681	P1682	P1683	P1684	P1685	P1686	P1687	P1688	P1689	P1690	P1691	P1692	P1693	P1694	P1695	P1696	P1697	P1698	P1699	P1700	P1701	P1702	P1703	P1704	P1705	P1706	P1707	P1708	P1709	P1710	P1711	P1712	P1713	P1714	P1715	P1716	P1717	P1718	P1719	P1720	P1721	P1722	P1723	P1724	P1725	P1726	P1727	P1728	P1729	P1730	P1731	P1732	P1733	P1734	P1735	P1736	P1737	P1738	P1739	P1740	P1741	P1742	P1743	P1744	P1745	P1746	P1747	P1748	P1749	P1750	P1751	P1752	P1753	P1754	P1755	P1756	P1757	P1758	P1759	P1760	P1761	P1762	P1763	P1764	P1765	P1766	P1767	P1768	P1769	P1770	P1771	P1772	P1773	P1774	P1775	P1776	P1777	P1778	P1779	P1780	P1781	P1782	P1783	P1784	P1785	P1786	P1787	P1788	P1789	P1790	P1791	P1792	P1793	P1794	P1795	P1796	P1797	P1798	P1799	P1800	P1801	P1802	P1803	P1804	P1805	P1806	P1807	P1808	P1809	P1810	P1811	P1812	P1813	P1814	P1815	P1816	P1817	P1818	P1819	P1820	P1821	P1822	P1823	P1824	P1825	P1826	P1827	P1828	P1829	P1830	P1831	P1832	P1833	P1834	P1835	P1836	P1837	P1838	P1839	P1840	P1841	P1842	P1843	P1844	P1845	P1846	P1847	P1848	P1849	P1850	P1851	P1852	P1853	P1854	P1855	P1856	P1857	P1858	P1859	P1860	P1861	P1862	P1863	P1864	P1865	P1866	P1867	P1868	P1869	P1870	P1871	P1872	P1873	P1874	P1875	P1876	P1877	P1878	P1879	P1880	P1881	P1882	P1883	P1884	P1885	P1886	P1887	P1888	P1889	P1890	P1891	P1892	P1893	P1894	P1895	P1896	P1897	P1898	P1899	P1900	P1901	P1902	P1903	P1904	P1905	P1906	P1907	P1908	P1909	P1910	P1911	P1912	P1913	P1914	P1915	P1916	P1917	P1918	P1919	P1920	P1921	P1922	P1923	P1924	P1925	P1926	P1927	P1928	P1929	P1930	P1931	P1932	P1933	P1934	P1935	P1936	P1937	P1938	P1939	P1940	P1941	P1942	P1943	P1944	P1945	P1946	P1947	P1948	P1949	P1950	P1951	P1952	P1953	P1954	P1955	P1956	P1957	P1958	P1959	P1960	P1961	P1962	P1963	P1964	P1965	P1966	P1967	P1968	P1969	P1970	P1971	P1972	P1973	P1974	P1975	P1976	P1977	P1978	P1979	P1980	P1981	P1982	P1983	P1984	P1985	P1986	P1987	P1988	P1989	P1990	P1991	P1992	P1993	P1994	P1995	P1996	P1997	P1998	P1999	P2000	P2001	P2002	P2003	P2004	P2005	P2006	P2007	P2008	P2009	P2010	P2011	P2012	P2013	P2014	P2015	P2016	P2017	P2018	P2019	P2020	P2021	P2022	P2023	P2024	P2025	P2026	P2027	P2028	P2029	P2030	P2031	P2032	P2033	P2034	P2035	P2036	P2037	P2038	P2039	P2040	P2041	P2042	P2043	P2044	P2045	P2046	P2047	P2048	P2049	P2050	P2051	P2052	P2053	P2054	P2055	P2056	P2057	P2058	P2059	P2060	P2061	P2062	P2063	P2064	P2065	P2066	P2067	P2068	P2069	P2070	P2071	P2072	P2073	P2074	P2075	P2076	P2077	P2078	P2079	P2080	P2081	P2082	P2083	P2084	P2085	P2086	P2087	P2088	P2089	P2090	P2091	P2092	P2093	P2094	P2095	P2096	P2097	P2098	P2099	P2100	P2101	P2102	P2103	P2104	P2105	P2106	P2107	P2108	P2109	P2110	P2111	P2112	P211



R586
Q587
SS88
P589
C590
T591
A592
V593
Q594
V595
V596
R597
T598

## 4 Data and refinement statistics

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	113.10Å 210.16Å 172.56Å 90.00° 93.56° 90.00°	Depositor
Resolution (Å)	39.94 – 3.60 49.73 – 3.30	Depositor EDS
% Data completeness (in resolution range)	68.9 (39.94-3.60) 73.5 (49.73-3.30)	Depositor EDS
$R_{merge}$	0.06	Depositor
$R_{sym}$	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	1.36 (at 3.33Å)	Xtrriage
Refinement program	CNS 1.1	Depositor
R, $R_{free}$	0.268 , 0.326 0.275 , 0.328	Depositor DCC
$R_{free}$ test set	4621 reflections (5.01%)	wwPDB-VP
Wilson B-factor (Å <sup>2</sup> )	78.1	Xtrriage
Anisotropy	0.047	Xtrriage
Bulk solvent $k_{sol}$ (e/Å <sup>3</sup> ), $B_{sol}$ (Å <sup>2</sup> )	0.29 , 69.5	EDS
L-test for twinning <sup>2</sup>	$\langle  L  \rangle = 0.42$ , $\langle L^2 \rangle = 0.24$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
$F_o, F_c$ correlation	0.86	EDS
Total number of atoms	37658	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	61.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The analyses of the Patterson function reveals a significant off-origin peak that is 44.59 % of the origin peak, indicating pseudo-translational symmetry. The chance of finding a peak of this or larger height randomly in a structure without pseudo-translational symmetry is equal to 1.4935e-04. The detected translational NCS is most likely also responsible for the elevated intensity ratio.*

<sup>1</sup>Intensities estimated from amplitudes.

<sup>2</sup>Theoretical 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: ZN, SF4

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with  $|Z| > 5$  is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
1	A	0.51	0/3343	0.72	0/4508
1	E	0.48	0/3343	0.67	0/4508
2	B	0.57	0/3646	0.82	5/4908 (0.1%)
2	F	0.57	0/3646	0.80	3/4908 (0.1%)
3	C	0.58	0/8724	0.83	3/11788 (0.0%)
3	G	0.58	1/8724 (0.0%)	0.83	5/11788 (0.0%)
4	D	0.61	0/3529	0.86	2/4795 (0.0%)
4	H	0.60	0/3529	0.86	3/4795 (0.1%)
All	All	0.57	1/38484 (0.0%)	0.81	21/51998 (0.0%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
2	B	0	2
2	F	0	1
3	C	0	1
3	G	0	1
4	D	0	1
4	H	0	1
All	All	0	7

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	G	1371	CYS	CB-SG	-5.25	1.73	1.81

All (21) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	F	368	LEU	CA-CB-CG	-7.73	97.53	115.30
2	B	368	LEU	CA-CB-CG	-7.12	98.92	115.30
4	D	202	LEU	CA-CB-CG	6.87	131.10	115.30
4	H	202	LEU	CA-CB-CG	6.48	130.21	115.30
3	C	742	LEU	CA-CB-CG	-6.32	100.76	115.30
3	G	553	HIS	N-CA-C	6.23	127.82	111.00
3	C	553	HIS	N-CA-C	6.13	127.56	111.00
3	G	1405	LEU	CA-CB-CG	-6.13	101.19	115.30
3	C	1447	SER	N-CA-C	-6.01	94.76	111.00
3	G	1447	SER	N-CA-C	-5.97	94.88	111.00
3	G	738	LEU	CA-CB-CG	-5.93	101.65	115.30
2	F	355	LYS	N-CA-C	5.86	126.82	111.00
4	H	377	LEU	CA-CB-CG	-5.67	102.27	115.30
2	B	355	LYS	N-CA-C	5.62	126.19	111.00
2	B	89	LEU	CA-CB-CG	5.30	127.49	115.30
2	F	354	GLY	N-CA-C	5.12	125.89	113.10
4	H	284	ILE	CG1-CB-CG2	-5.10	100.18	111.40
2	B	53	LEU	CA-CB-CG	-5.10	103.57	115.30
2	B	354	GLY	N-CA-C	5.10	125.84	113.10
4	D	377	LEU	CA-CB-CG	-5.03	103.74	115.30
3	G	1252	HIS	N-CA-C	-5.00	97.49	111.00

There are no chirality outliers.

All (7) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
2	B	110	TYR	Sidechain
2	B	309	TYR	Sidechain
3	C	740	TYR	Sidechain
4	D	349	TYR	Sidechain
2	F	110	TYR	Sidechain
3	G	452	TYR	Sidechain
4	H	442	TYR	Sidechain

## 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	A	3261	0	3247	444	0
1	E	3261	0	3247	419	0
2	B	3562	0	3542	548	0
2	F	3562	0	3542	557	0
3	C	8544	0	8632	1431	0
3	G	8544	0	8634	1426	0
4	D	3451	0	3425	535	0
4	H	3451	0	3425	532	0
5	A	1	0	0	0	0
5	C	2	0	0	0	0
5	E	1	0	0	0	0
5	G	2	0	0	0	0
6	B	8	0	0	3	0
6	F	8	0	0	0	0
All	All	37658	0	37694	5765	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 77.

All (5765) 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)
3:G:858:LEU:HD13	3:G:1007:MET:HG3	1.23	1.21
2:B:209:VAL:HG12	2:B:210:PRO:HD2	1.25	1.19
3:C:730:ASN:ND2	3:C:730:ASN:H	1.28	1.19
4:D:476:LEU:HD11	4:D:502:ILE:HD11	1.22	1.14
1:E:20:LEU:HD21	1:E:357:LEU:HD22	1.16	1.13
3:C:1279:PHE:HB2	3:C:1395:TYR:HE1	1.15	1.12
3:G:1188:ALA:HA	3:G:1191:ARG:HE	1.08	1.11
2:B:439:PHE:CE2	2:B:450:GLU:HG2	1.84	1.11
1:A:224:GLU:HG2	1:A:228:LEU:HD12	1.17	1.11
4:H:308:ASN:HD21	4:H:311:GLY:HA2	1.07	1.10
3:C:730:ASN:HD22	3:C:730:ASN:N	1.35	1.10
4:H:306:GLY:HA2	4:H:317:THR:HG23	1.33	1.09
3:G:1427:LEU:HD22	3:G:1431:ARG:HH12	1.03	1.09
4:D:308:ASN:HD21	4:D:311:GLY:HA2	1.13	1.09
3:G:650:ARG:HH11	3:G:650:ARG:HA	0.98	1.09
3:C:935:ASN:HD21	3:C:937:ASP:HB2	1.16	1.08
4:D:227:LEU:HD11	4:D:231:LEU:HG	1.36	1.08
4:H:308:ASN:ND2	4:H:311:GLY:HA2	1.66	1.08
4:H:360:LEU:HD11	4:H:409:ILE:HD11	1.25	1.08
4:D:360:LEU:HD11	4:D:409:ILE:HD11	1.28	1.08

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:864:LEU:HD23	3:G:1004:ASP:HB3	1.35	1.08
3:C:563:LEU:HD21	3:C:746:TRP:NE1	1.65	1.08
4:D:170:VAL:HG11	4:D:594:GLN:HE21	1.11	1.08
4:H:342:VAL:HG22	4:H:374:VAL:HB	1.32	1.08
2:B:93:TYR:HD2	2:B:96:ARG:HB2	1.07	1.07
3:G:364:LYS:HZ2	3:G:537:LEU:HD23	1.17	1.07
3:G:539:VAL:HG21	3:G:568:PHE:HD2	1.13	1.07
3:G:848:LYS:NZ	3:G:997:GLU:HG3	1.68	1.07
3:G:1139:LEU:H	3:G:1139:LEU:HD12	1.18	1.07
3:G:689:MET:SD	3:G:776:MET:HG2	1.95	1.07
4:D:202:LEU:HD21	4:D:438:PRO:HA	1.37	1.06
1:A:43:ARG:HH11	1:A:80:ILE:HG22	1.19	1.06
4:D:166:ASN:HD22	4:D:166:ASN:N	1.52	1.06
1:E:224:GLU:HG2	1:E:228:LEU:HD12	1.33	1.06
4:H:194:LYS:HG3	4:H:463:SER:HB3	1.36	1.06
1:A:55:ILE:HG13	1:A:58:GLN:HE22	1.20	1.06
3:C:1250:HIS:CG	3:C:1251:TYR:H	1.69	1.06
3:G:411:LYS:HD2	3:G:411:LYS:H	1.15	1.06
2:F:49:ARG:NH1	2:F:103:HIS:HB2	1.70	1.05
4:D:306:GLY:HA2	4:D:317:THR:HG23	1.35	1.05
1:E:50:LYS:H	1:E:50:LYS:HD2	1.14	1.05
1:A:355:ARG:NH1	1:A:355:ARG:HB2	1.71	1.04
3:G:1250:HIS:CG	3:G:1251:TYR:H	1.68	1.04
4:D:397:PRO:HB2	4:D:400:ASP:OD1	1.55	1.04
4:H:202:LEU:HD21	4:H:438:PRO:HA	1.39	1.04
3:C:876:PHE:HA	3:C:881:ARG:HH12	1.14	1.04
3:C:789:GLU:O	3:C:793:LEU:HG	1.58	1.03
1:A:403:ASP:HA	1:A:406:ARG:NH1	1.72	1.03
2:B:443:HIS:CE1	2:B:445:ASN:H	1.77	1.03
4:H:202:LEU:HD22	4:H:457:SER:HB3	1.40	1.03
3:C:498:TRP:CZ2	3:C:535:PRO:HD3	1.93	1.02
3:G:1308:TYR:HD2	3:G:1309:ARG:HG2	1.23	1.02
3:G:468:LEU:HD23	3:G:476:VAL:HG11	1.41	1.02
1:A:355:ARG:HH11	1:A:355:ARG:HB2	0.87	1.02
2:F:33:PRO:HD3	2:F:104:PHE:HD2	1.22	1.02
4:D:202:LEU:HD22	4:D:457:SER:HB3	1.42	1.02
3:C:1141:LYS:NZ	3:C:1147:PRO:HD3	1.74	1.01
3:C:875:CYS:HB3	3:C:878:THR:HG23	1.39	1.01
3:G:1337:PHE:CD2	3:G:1391:GLN:HG2	1.95	1.01
3:G:630:ASP:HA	3:G:688:ARG:HH22	1.25	1.01
3:G:739:LEU:HD13	3:G:742:LEU:HD12	1.42	1.01

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:362:TYR:O	2:B:364:PRO:HD3	1.59	1.01
2:B:286:PRO:HG2	2:B:386:PHE:CE2	1.95	1.01
3:C:543:SER:H	3:C:749:ALA:HB2	1.24	1.01
3:C:935:ASN:ND2	3:C:937:ASP:H	1.55	1.01
4:H:362:ASP:O	4:H:366:VAL:HG23	1.58	1.01
3:C:724:PRO:HB2	3:C:726:GLU:HG3	1.41	1.01
4:D:308:ASN:ND2	4:D:311:GLY:HA2	1.75	1.01
3:G:953:ALA:O	3:G:956:MET:HB2	1.60	1.01
3:G:1300:GLY:H	3:G:1303:MET:HE3	1.24	1.00
3:G:935:ASN:HD21	3:G:937:ASP:HB2	1.22	1.00
3:G:1216:ILE:O	3:G:1219:VAL:HG23	1.62	1.00
3:G:568:PHE:CE1	3:G:575:PRO:HD2	1.97	1.00
3:G:1296:PHE:HZ	3:G:1405:LEU:HD21	1.24	1.00
3:C:664:ARG:HG3	3:C:688:ARG:HE	1.26	1.00
3:C:563:LEU:HD21	3:C:746:TRP:HE1	1.15	1.00
3:G:543:SER:H	3:G:749:ALA:HB2	1.23	1.00
4:H:366:VAL:HG21	4:H:598:ILE:HD11	1.43	1.00
2:F:293:LYS:HE2	2:F:297:GLU:HG3	1.40	0.99
3:G:845:LEU:HD12	3:G:1001:GLY:HA3	1.42	0.99
1:E:145:ALA:HB2	1:E:211:PHE:HE2	1.27	0.99
2:B:93:TYR:CD2	2:B:96:ARG:HB2	1.96	0.99
3:G:650:ARG:NH1	3:G:650:ARG:HA	1.77	0.99
2:F:358:LYS:HD3	3:G:1274:ARG:HH22	1.25	0.99
3:C:1048:LEU:HD23	3:C:1050:LEU:HD21	1.45	0.98
4:D:194:LYS:HG3	4:D:463:SER:HB3	1.42	0.98
2:F:358:LYS:HG2	2:F:359:ARG:N	1.77	0.98
1:A:64:SER:O	1:A:67:GLU:HG3	1.63	0.98
3:G:1276:CYS:SG	3:G:1390:THR:HG22	2.03	0.98
3:C:498:TRP:HZ2	3:C:535:PRO:HD3	1.23	0.98
3:C:1047:LEU:HG	3:C:1049:LEU:CD2	1.92	0.98
2:F:426:LYS:HA	2:F:429:GLU:OE1	1.62	0.98
3:C:1036:LEU:HD12	3:C:1037:GLU:H	1.29	0.97
2:B:47:ILE:HD11	3:C:1266:GLN:HB3	1.44	0.97
1:A:144:ARG:HH11	1:A:211:PHE:HD2	1.03	0.97
3:G:848:LYS:HZ3	3:G:997:GLU:HG3	1.17	0.97
1:A:255:LEU:HD11	1:A:272:LEU:HD13	1.47	0.97
3:G:1441:LEU:H	3:G:1441:LEU:HD23	1.30	0.97
1:A:237:LYS:O	1:A:241:ASP:HB2	1.64	0.97
4:H:246:PRO:HB3	4:H:309:THR:O	1.65	0.97
4:H:503:LEU:HD22	4:H:534:THR:HG23	1.47	0.96
3:C:1307:LEU:HD13	3:C:1430:TYR:OH	1.66	0.96

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:553:HIS:HB2	4:D:307:ILE:HD12	1.43	0.96
2:F:209:VAL:HG12	2:F:210:PRO:HD2	1.44	0.96
1:A:323:VAL:HG21	1:A:350:ILE:HD12	1.43	0.96
3:G:623:LEU:HD11	3:G:651:ILE:HD11	1.45	0.96
3:G:875:CYS:SG	3:G:876:PHE:N	2.38	0.96
2:B:49:ARG:HB2	2:B:102:SER:HB2	1.48	0.96
4:D:476:LEU:HD11	4:D:502:ILE:CD1	1.96	0.96
1:A:294:TRP:O	1:A:298:LEU:HG	1.66	0.95
4:D:358:ASP:HB2	4:D:359:PRO:HD3	1.44	0.95
2:B:336:MET:HG2	2:B:337:ASP:H	1.29	0.95
3:C:1279:PHE:HB2	3:C:1395:TYR:CE1	1.99	0.95
2:F:362:TYR:O	2:F:364:PRO:HD3	1.66	0.95
3:C:1348:CYS:SG	3:C:1353:CYS:HB3	2.06	0.95
3:C:1395:TYR:HD1	3:C:1398:ILE:HD11	1.31	0.95
4:D:257:ILE:HG22	4:D:258:GLY:H	1.30	0.95
2:F:49:ARG:HB2	2:F:102:SER:HB2	1.45	0.95
1:A:140:ARG:O	1:A:144:ARG:HB2	1.65	0.95
3:C:364:LYS:HZ2	3:C:537:LEU:HD23	1.30	0.95
2:B:358:LYS:CE	3:C:1274:ARG:HH22	1.80	0.94
3:C:935:ASN:HD22	3:C:935:ASN:C	1.70	0.94
4:H:382:LEU:HD11	4:H:389:VAL:HG21	1.49	0.94
3:C:864:LEU:HD23	3:C:1004:ASP:HB3	1.49	0.94
3:G:1364:PHE:HB2	4:H:217:ARG:HE	1.32	0.94
3:G:555:ASN:HD22	3:G:555:ASN:H	1.03	0.94
3:C:500:GLU:OE2	3:C:502:LYS:HE3	1.65	0.94
3:G:1146:TYR:CD2	3:G:1155:VAL:HG21	2.02	0.94
4:D:166:ASN:ND2	4:D:166:ASN:H	1.59	0.94
3:C:360:PHE:HD1	3:C:665:LEU:HD11	1.30	0.94
3:C:607:VAL:HG23	3:C:609:VAL:HG12	1.49	0.94
4:D:343:LEU:HD11	4:D:571:PHE:HD1	1.33	0.94
3:G:1046:SER:HB2	3:G:1058:LEU:HG	1.48	0.94
3:C:635:VAL:HG23	3:C:752:ILE:HG22	1.50	0.94
4:H:343:LEU:HD12	4:H:344:VAL:H	1.33	0.94
3:G:1019:PHE:CE1	3:G:1040:ILE:HG21	2.03	0.94
3:G:732:TYR:HA	3:G:738:LEU:HD13	1.50	0.94
3:C:1307:LEU:HD22	3:C:1430:TYR:CE2	2.02	0.94
2:F:170:SER:HB3	2:F:171:PRO:HD2	1.50	0.94
1:A:355:ARG:CB	1:A:355:ARG:HH11	1.79	0.93
3:G:695:ILE:HD13	3:G:781:MET:O	1.67	0.93
2:F:439:PHE:CE2	2:F:450:GLU:HG2	2.03	0.93
3:G:1139:LEU:CD1	3:G:1139:LEU:H	1.81	0.93

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:843:LEU:N	3:C:981:ARG:HG2	1.83	0.93
3:G:935:ASN:ND2	3:G:937:ASP:H	1.65	0.93
3:G:498:TRP:HZ2	3:G:535:PRO:HD3	1.34	0.93
3:G:585:VAL:HG22	3:G:618:LEU:HD12	1.49	0.93
3:C:1409:THR:HG23	3:C:1410:THR:H	1.32	0.93
3:C:1095:VAL:CG1	3:C:1112:ILE:HD13	1.99	0.92
3:C:1312:ASN:HD22	3:C:1315:CYS:HB2	1.34	0.92
3:C:919:VAL:O	3:C:923:LYS:HG3	1.69	0.92
1:A:37:LYS:HG3	1:A:38:ASN:H	1.32	0.92
4:D:366:VAL:HG21	4:D:598:ILE:HD11	1.52	0.92
4:H:389:VAL:HG13	4:H:398:PHE:HE1	1.32	0.92
2:B:443:HIS:CE1	2:B:445:ASN:HB2	2.05	0.92
3:C:1047:LEU:HG	3:C:1049:LEU:HD22	1.50	0.92
3:G:1095:VAL:HG13	3:G:1112:ILE:CD1	1.99	0.92
2:B:280:SER:HA	2:B:284:PHE:CD1	2.05	0.92
1:A:68:LYS:HE3	1:A:72:LYS:HZ2	1.34	0.92
4:D:194:LYS:HE3	4:D:463:SER:OG	1.69	0.92
3:G:806:LYS:HE2	3:G:807:GLN:N	1.84	0.91
3:C:555:ASN:H	3:C:555:ASN:HD22	1.19	0.91
3:C:595:PRO:HG3	3:C:732:TYR:O	1.71	0.91
3:C:723:ILE:H	3:C:723:ILE:HD12	1.31	0.91
4:D:257:ILE:HG22	4:D:258:GLY:N	1.83	0.91
3:G:539:VAL:HG21	3:G:568:PHE:CD2	2.05	0.91
4:H:446:SER:O	4:H:450:LYS:HG3	1.70	0.91
3:C:720:ARG:HH11	3:C:722:VAL:HG22	1.35	0.91
3:C:365:VAL:HG22	3:C:376:CYS:HB2	1.52	0.91
1:E:349:THR:HG22	1:E:351:SER:H	1.36	0.91
3:G:1427:LEU:HD22	3:G:1431:ARG:NH1	1.86	0.91
3:C:1154:HIS:CE1	3:C:1155:VAL:HG23	2.06	0.90
4:D:538:LEU:HD12	4:D:539:ILE:N	1.85	0.90
2:F:336:MET:HG2	2:F:337:ASP:H	1.33	0.90
3:G:555:ASN:ND2	3:G:555:ASN:H	1.65	0.90
3:G:1036:LEU:HD12	3:G:1037:GLU:N	1.87	0.90
2:B:78:LEU:HD21	2:B:131:ARG:HH22	1.34	0.90
3:G:956:MET:O	3:G:959:CYS:HB3	1.72	0.90
2:B:258:THR:OG1	2:B:261:ASP:N	2.04	0.90
3:C:935:ASN:HD22	3:C:937:ASP:H	1.15	0.90
2:F:42:PHE:CD1	2:F:105:ILE:HD11	2.06	0.90
3:C:1095:VAL:HG12	3:C:1112:ILE:HD13	1.51	0.90
3:C:1206:ILE:HD13	3:C:1207:ASP:N	1.87	0.90
3:G:1241:LEU:C	3:G:1243:PRO:HD2	1.91	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:881:ARG:HD3	3:C:972:LEU:HD21	1.54	0.90
4:D:362:ASP:O	4:D:366:VAL:HG23	1.71	0.90
2:B:336:MET:HG2	2:B:337:ASP:N	1.87	0.89
3:C:1241:LEU:C	3:C:1243:PRO:HD2	1.92	0.89
3:G:595:PRO:HG3	3:G:732:TYR:O	1.72	0.89
2:F:39:LEU:HD11	2:F:245:ARG:HD2	1.51	0.89
4:D:342:VAL:HG13	4:D:374:VAL:HB	1.54	0.89
2:F:78:LEU:HD21	2:F:131:ARG:HH22	1.38	0.89
2:B:394:LEU:HD11	2:B:398:LEU:HD21	1.53	0.89
4:H:567:VAL:HG12	4:H:568:GLY:H	1.37	0.89
1:A:229:VAL:HG23	1:A:266:LEU:HD21	1.51	0.89
3:C:1230:ILE:HA	3:C:1234:LEU:HD23	1.55	0.89
4:D:447:ARG:CZ	4:D:447:ARG:HA	2.02	0.89
3:C:628:LYS:HG2	3:G:933:ASP:HB3	1.54	0.89
3:G:843:LEU:HD11	3:G:845:LEU:CD2	2.03	0.89
2:B:367:CYS:SG	2:B:444:PRO:HD3	2.12	0.89
3:C:410:MET:SD	3:C:434:PRO:HB3	2.13	0.89
2:F:75:GLU:HB3	2:F:130:PHE:HZ	1.38	0.89
1:A:330:ILE:HG12	1:A:348:PRO:O	1.71	0.89
2:B:439:PHE:HE1	2:B:441:LEU:HD13	1.37	0.89
4:D:246:PRO:HB3	4:D:309:THR:O	1.73	0.89
1:E:48:THR:HG21	1:E:77:LYS:HD2	1.55	0.89
2:F:33:PRO:HD3	2:F:104:PHE:CD2	2.07	0.88
3:G:1230:ILE:HD12	3:G:1238:TRP:HH2	1.34	0.88
1:E:241:ASP:HA	1:E:244:LEU:HD12	1.56	0.88
2:F:50:VAL:HG23	2:F:106:LEU:HD11	1.55	0.88
4:H:522:TYR:H	4:H:522:TYR:HD2	1.21	0.88
2:B:52:LEU:HD21	2:B:127:LEU:HD21	1.56	0.88
4:D:156:THR:N	4:D:157:PRO:HD2	1.87	0.88
3:C:1104:SER:O	3:C:1108:ILE:HG13	1.73	0.88
1:E:237:LYS:O	1:E:241:ASP:HB2	1.72	0.88
1:A:55:ILE:HG13	1:A:58:GLN:NE2	1.88	0.88
2:B:443:HIS:CE1	2:B:445:ASN:N	2.41	0.88
3:C:869:ILE:HG21	3:C:911:LEU:HD21	1.54	0.88
1:E:262:SER:HB2	1:E:268:ARG:HE	1.39	0.88
3:G:848:LYS:HD2	3:G:999:ILE:HA	1.56	0.88
4:D:355:ILE:HD11	4:D:388:GLN:HE22	1.38	0.88
1:E:69:GLU:O	1:E:73:MET:HG2	1.74	0.88
2:F:280:SER:HA	2:F:284:PHE:CD1	2.09	0.88
4:H:221:THR:O	4:H:225:GLU:HG3	1.73	0.88
3:C:484:LEU:O	3:C:488:LEU:HD23	1.73	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:857:LEU:CD2	3:C:859:LEU:HG	2.03	0.88
4:D:193:LEU:HD11	4:D:462:LEU:HD21	1.54	0.88
2:F:262:TYR:HD1	2:F:263:SER:N	1.72	0.88
3:G:413:VAL:HA	3:G:472:THR:OG1	1.74	0.88
3:G:843:LEU:N	3:G:981:ARG:HG2	1.88	0.88
2:B:167:VAL:HG13	2:B:173:LEU:HD21	1.56	0.87
1:A:137:MET:SD	1:A:301:CYS:HB3	2.14	0.87
3:C:1250:HIS:CG	3:C:1251:TYR:N	2.42	0.87
4:D:401:ILE:O	4:D:404:GLN:HB3	1.72	0.87
1:E:221:LYS:NZ	1:E:221:LYS:HB2	1.88	0.87
3:G:1139:LEU:HD12	3:G:1139:LEU:N	1.87	0.87
4:H:387:GLU:HG3	4:H:388:GLN:H	1.40	0.87
3:C:1322:PHE:HB3	3:C:1325:GLN:OE1	1.75	0.87
3:G:1081:ARG:HG2	3:G:1081:ARG:HH11	1.38	0.87
3:G:622:PHE:HE2	3:G:647:LEU:HD21	1.39	0.87
2:B:47:ILE:CD1	3:C:1266:GLN:HB3	2.03	0.87
4:H:156:THR:N	4:H:157:PRO:HD2	1.87	0.87
2:F:356:GLU:HB2	3:G:1247:ARG:HD3	1.56	0.87
3:C:1093:ASN:O	3:C:1096:ILE:HG22	1.75	0.87
2:B:170:SER:HB3	2:B:171:PRO:HD2	1.57	0.87
1:A:82:ALA:HB2	1:A:104:LYS:HB2	1.57	0.86
3:C:1400:ASP:HB2	3:C:1434:LYS:HD3	1.57	0.86
3:C:731:MET:HE1	3:C:741:LEU:HD13	1.57	0.86
3:G:1085:CYS:SG	3:G:1132:GLN:O	2.32	0.86
4:H:503:LEU:CD2	4:H:534:THR:HG23	2.04	0.86
4:D:360:LEU:CD1	4:D:409:ILE:HD11	2.05	0.86
1:A:234:LEU:HD21	1:A:243:ILE:HD12	1.53	0.86
3:C:664:ARG:HG3	3:C:688:ARG:NE	1.89	0.86
1:E:181:VAL:HG22	2:F:192:LEU:HD22	1.57	0.86
2:F:23:PRO:C	2:F:25:CYS:H	1.76	0.86
1:A:207:LYS:NZ	2:B:172:SER:HA	1.90	0.86
3:C:851:PHE:CD1	3:C:1048:LEU:HD12	2.09	0.86
3:C:990:MET:HG2	3:C:994:MET:CE	2.05	0.86
3:G:1340:LYS:NZ	3:G:1340:LYS:HB2	1.91	0.86
3:G:568:PHE:HE1	3:G:575:PRO:HD2	1.39	0.86
3:G:623:LEU:HD22	3:G:661:LYS:HB2	1.55	0.86
3:G:652:ASN:HB2	3:G:670:MET:HE3	1.57	0.86
2:B:265:GLN:HB2	2:B:362:TYR:CE2	2.10	0.86
2:F:164:GLN:HE22	2:F:176:LEU:HD11	1.39	0.86
3:G:1095:VAL:HG13	3:G:1112:ILE:HD13	1.55	0.86
3:G:1230:ILE:HA	3:G:1234:LEU:HD23	1.56	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:1308:TYR:CD2	3:G:1309:ARG:HG2	2.11	0.86
1:E:38:ASN:HA	1:E:41:GLN:OE1	1.76	0.86
4:H:354:SER:OG	4:H:356:THR:HG23	1.75	0.86
4:D:567:VAL:HG12	4:D:568:GLY:H	1.40	0.86
1:E:37:LYS:HG3	1:E:38:ASN:H	1.40	0.86
3:G:1360:LEU:HD22	4:H:216:ILE:HG22	1.57	0.86
2:B:358:LYS:HG2	2:B:359:ARG:N	1.91	0.86
3:G:1340:LYS:HZ3	3:G:1340:LYS:HB2	1.41	0.86
3:G:1358:ARG:HH21	4:H:513:PRO:HB2	1.40	0.86
3:G:636:GLY:HA3	3:G:639:ILE:HD11	1.57	0.86
1:E:145:ALA:HB2	1:E:211:PHE:CE2	2.10	0.86
3:G:565:HIS:HA	3:G:580:GLN:OE1	1.74	0.86
4:H:310:THR:HB	4:H:312:ARG:HG2	1.57	0.86
3:C:1036:LEU:HD12	3:C:1037:GLU:N	1.90	0.85
3:C:691:CYS:HA	3:C:780:LEU:HD22	1.56	0.85
3:G:602:ILE:HD13	3:G:609:VAL:HG13	1.56	0.85
3:C:1392:LEU:HB3	3:C:1441:LEU:HD21	1.55	0.85
3:G:876:PHE:CZ	3:G:960:LEU:HD21	2.10	0.85
2:B:23:PRO:C	2:B:25:CYS:H	1.78	0.85
3:C:857:LEU:HD21	3:C:859:LEU:HG	1.58	0.85
2:F:258:THR:OG1	2:F:261:ASP:HB2	1.75	0.85
4:H:318:LYS:HE3	4:H:320:TYR:CE2	2.11	0.85
4:H:389:VAL:HG22	4:H:394:LEU:HD11	1.58	0.85
1:E:277:SER:HA	1:E:280:GLN:HG3	1.58	0.85
3:G:1371:CYS:HA	3:G:1379:LEU:HD21	1.58	0.85
3:C:701:ILE:HD11	3:C:714:GLN:HE21	1.39	0.85
3:C:935:ASN:HD21	3:C:937:ASP:CB	1.89	0.85
4:H:341:MET:HE2	4:H:573:ARG:HD2	1.57	0.85
3:C:1371:CYS:HA	3:C:1379:LEU:HD21	1.58	0.85
4:D:387:GLU:HG3	4:D:388:GLN:H	1.42	0.85
2:B:358:LYS:HG2	2:B:359:ARG:H	1.42	0.85
3:C:364:LYS:NZ	3:C:537:LEU:HD23	1.91	0.85
3:C:876:PHE:HA	3:C:881:ARG:NH1	1.91	0.85
1:A:131:CYS:HA	1:A:226:TYR:CE1	2.10	0.85
3:C:553:HIS:CB	4:D:307:ILE:HD12	2.06	0.85
4:D:343:LEU:HG	4:D:344:VAL:N	1.90	0.85
4:D:389:VAL:HG13	4:D:398:PHE:HE1	1.38	0.85
2:B:286:PRO:HG2	2:B:386:PHE:HE2	1.39	0.85
3:G:843:LEU:HD12	3:G:844:VAL:N	1.92	0.85
2:B:159:LYS:HE3	2:B:178:LEU:HD23	1.58	0.84
3:G:1250:HIS:CG	3:G:1251:TYR:N	2.43	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:570:LEU:HD13	3:G:766:LEU:HD22	1.59	0.84
3:G:1395:TYR:HA	3:G:1398:ILE:HD11	1.57	0.84
3:G:563:LEU:HD21	3:G:746:TRP:NE1	1.92	0.84
1:A:68:LYS:HE3	1:A:72:LYS:NZ	1.92	0.84
3:C:851:PHE:HD1	3:C:1048:LEU:HD12	1.42	0.84
4:D:360:LEU:HD11	4:D:409:ILE:CD1	2.07	0.84
1:E:353:ILE:HB	1:E:386:THR:HG21	1.56	0.84
3:G:1188:ALA:HA	3:G:1191:ARG:NE	1.90	0.84
3:G:498:TRP:CZ2	3:G:535:PRO:HD3	2.12	0.84
1:A:144:ARG:NH1	1:A:211:PHE:HD2	1.74	0.84
3:C:650:ARG:HA	3:C:650:ARG:NH1	1.92	0.84
4:D:399:GLU:HG3	4:D:403:LYS:HE2	1.58	0.84
2:F:385:PRO:HG2	2:F:386:PHE:H	1.42	0.84
3:G:1158:ALA:HA	3:G:1161:ILE:HD12	1.60	0.84
1:A:106:LEU:HB3	1:A:169:VAL:HB	1.58	0.84
3:C:344:TYR:HA	3:C:497:CYS:O	1.77	0.84
2:F:265:GLN:HG2	2:F:266:GLY:H	1.43	0.84
2:F:319:THR:HG23	2:F:322:GLN:OE1	1.78	0.84
4:H:474:THR:HG21	4:H:518:MET:CE	2.07	0.84
4:H:255:GLY:C	4:H:272:LEU:HD11	1.97	0.84
1:A:135:MET:SD	1:A:164:GLY:HA2	2.18	0.84
2:F:300:HIS:HA	2:F:331:PHE:HE1	1.42	0.84
4:H:358:ASP:HB2	4:H:359:PRO:HD3	1.60	0.84
4:H:360:LEU:HD11	4:H:409:ILE:CD1	2.07	0.84
4:D:257:ILE:CG2	4:D:258:GLY:H	1.89	0.84
4:D:540:ILE:H	4:D:540:ILE:HD12	1.40	0.84
3:G:1230:ILE:HD12	3:G:1238:TRP:CH2	2.12	0.84
2:F:121:ILE:HG12	2:F:226:LEU:HD23	1.60	0.84
4:H:243:LEU:HB3	4:H:284:ILE:HD13	1.59	0.84
3:C:555:ASN:HD21	4:D:248:GLN:NE2	1.76	0.84
2:F:104:PHE:HE1	2:F:107:ARG:CZ	1.90	0.84
2:F:358:LYS:HG2	2:F:359:ARG:H	1.43	0.84
2:F:441:LEU:HD12	2:F:446:GLN:CD	1.99	0.83
3:G:1222:ARG:HG2	3:G:1223:ILE:HD12	1.59	0.83
3:C:1251:TYR:HD1	3:C:1254:ASP:H	1.27	0.83
4:D:170:VAL:HG11	4:D:594:GLN:NE2	1.93	0.83
4:D:445:LEU:HD13	4:D:450:LYS:HZ3	1.43	0.83
3:G:1074:LEU:HB3	3:G:1077:LEU:HD12	1.56	0.83
3:G:1133:PHE:HB3	3:G:1211:TYR:OH	1.78	0.83
1:A:43:ARG:NH1	1:A:80:ILE:HG22	1.92	0.83
4:H:357:TYR:O	4:H:360:LEU:HB3	1.79	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:589:PRO:HG3	3:C:592:CYS:SG	2.19	0.83
3:C:360:PHE:CD1	3:C:665:LEU:HD11	2.11	0.83
4:H:401:ILE:O	4:H:404:GLN:HB3	1.77	0.83
4:H:540:ILE:N	4:H:540:ILE:HD12	1.94	0.83
2:B:443:HIS:HE1	2:B:445:ASN:HB2	1.42	0.83
3:G:589:PRO:HG3	3:G:592:CYS:SG	2.18	0.83
3:G:732:TYR:HA	3:G:738:LEU:CD1	2.07	0.83
4:H:296:LEU:HA	4:H:300:GLN:OE1	1.78	0.83
3:C:1347:ILE:HD11	3:C:1354:ARG:HG3	1.59	0.83
3:C:641:GLY:O	3:C:642:PHE:HB2	1.78	0.83
3:G:1154:HIS:CE1	3:G:1155:VAL:HG23	2.14	0.83
4:H:420:LEU:HB2	4:H:453:VAL:HG22	1.59	0.83
2:B:265:GLN:HG2	2:B:266:GLY:H	1.43	0.83
3:C:731:MET:HG2	3:C:737:GLN:HB3	1.60	0.83
3:C:497:CYS:SG	3:C:499:LEU:HD21	2.19	0.83
1:E:68:LYS:HE3	1:E:72:LYS:HZ3	1.40	0.83
2:F:270:LYS:HE3	2:F:270:LYS:HA	1.61	0.83
3:G:389:PHE:HB2	3:G:453:LEU:HB3	1.58	0.83
1:E:227:ALA:HB1	1:E:233:ILE:HD13	1.60	0.83
2:F:32:PRO:HA	2:F:104:PHE:CE2	2.14	0.83
1:A:131:CYS:HA	1:A:226:TYR:HE1	1.41	0.82
3:C:689:MET:SD	3:C:776:MET:HG2	2.17	0.82
3:G:858:LEU:HD13	3:G:1007:MET:CG	2.05	0.82
3:C:364:LYS:HZ3	3:C:538:VAL:HG23	1.44	0.82
4:D:460:CYS:SG	4:D:461:SER:N	2.52	0.82
3:G:650:ARG:CA	3:G:650:ARG:HH11	1.88	0.82
4:H:460:CYS:SG	4:H:461:SER:N	2.52	0.82
3:C:1098:GLN:O	3:C:1101:SER:HB3	1.79	0.82
3:C:1400:ASP:CB	3:C:1434:LYS:HD3	2.09	0.82
3:C:695:ILE:HG21	3:C:781:MET:O	1.79	0.82
3:C:865:TYR:HD2	3:C:865:TYR:H	1.24	0.82
4:D:378:PHE:CD2	4:D:541:PRO:HG2	2.13	0.82
3:G:1076:GLY:C	3:G:1077:LEU:HD23	2.00	0.82
3:G:932:GLN:NE2	3:G:933:ASP:H	1.76	0.82
1:A:49:LEU:HB3	1:A:50:LYS:HZ1	1.44	0.82
3:C:612:ALA:HB1	3:C:617:THR:HB	1.60	0.82
4:D:227:LEU:HD23	4:D:301:VAL:HB	1.61	0.82
4:H:470:GLY:O	4:H:471:LEU:HD23	1.79	0.82
3:C:413:VAL:HA	3:C:472:THR:OG1	1.78	0.82
3:G:1116:LEU:HA	3:G:1119:ILE:HG13	1.60	0.82
4:H:257:ILE:HG22	4:H:258:GLY:H	1.45	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:H:361:LEU:HA	4:H:364:ILE:HD12	1.60	0.82
3:C:543:SER:N	3:C:749:ALA:HB2	1.95	0.82
2:F:427:TYR:O	2:F:431:ILE:HG22	1.78	0.82
4:H:258:GLY:O	4:H:271:ILE:HG23	1.79	0.82
2:B:387:ARG:HA	2:B:420:TYR:CE1	2.14	0.82
3:G:1441:LEU:HD23	3:G:1441:LEU:N	1.91	0.82
4:H:385:LYS:HA	4:H:390:GLU:OE1	1.79	0.82
3:G:507:LEU:H	3:G:507:LEU:HD12	1.45	0.82
3:G:543:SER:N	3:G:749:ALA:HB2	1.94	0.82
3:G:935:ASN:HD22	3:G:935:ASN:C	1.82	0.82
3:C:843:LEU:HD11	3:C:845:LEU:CD2	2.10	0.82
3:C:563:LEU:HD13	3:C:579:PHE:CD2	2.14	0.81
4:D:346:CYS:HB2	4:D:378:PHE:HB2	1.60	0.81
1:E:140:ARG:O	1:E:144:ARG:HB2	1.79	0.81
2:F:209:VAL:CG1	2:F:210:PRO:HD2	2.09	0.81
3:G:1334:ILE:HG21	3:G:1440:PHE:CE1	2.15	0.81
4:D:343:LEU:HG	4:D:344:VAL:H	1.45	0.81
3:G:1074:LEU:HB3	3:G:1077:LEU:CD1	2.11	0.81
3:C:968:TYR:OH	3:C:970:LYS:HD3	1.79	0.81
4:D:227:LEU:HD23	4:D:301:VAL:CG1	2.10	0.81
3:G:522:LYS:O	3:G:525:LEU:HG	1.79	0.81
3:C:1149:LYS:HG2	3:C:1150:LYS:N	1.94	0.81
3:C:650:ARG:HH11	3:C:650:ARG:HA	1.46	0.81
2:F:23:PRO:HD2	2:F:25:CYS:SG	2.21	0.81
3:G:629:ILE:HG22	3:G:631:PRO:HD3	1.59	0.81
3:G:543:SER:HB2	3:G:749:ALA:HB2	1.60	0.81
4:D:193:LEU:HD13	4:D:462:LEU:HD11	1.63	0.81
1:E:26:TYR:OH	1:E:80:ILE:HD11	1.80	0.81
3:C:691:CYS:HA	3:C:780:LEU:CD2	2.11	0.81
3:C:563:LEU:CD2	3:C:746:TRP:HE1	1.94	0.81
2:F:320:LEU:HA	2:F:353:PHE:CE1	2.16	0.81
4:H:257:ILE:HD11	4:H:302:VAL:HG11	1.62	0.81
4:H:182:TRP:CE3	4:H:573:ARG:HD2	2.16	0.81
1:A:247:VAL:HG13	1:A:248:PRO:HD2	1.63	0.81
3:C:1401:ALA:HB2	3:C:1430:TYR:HD1	1.46	0.81
4:D:227:LEU:CD1	4:D:231:LEU:HG	2.11	0.81
4:D:495:PHE:HA	4:D:498:ILE:HG13	1.63	0.81
1:E:234:LEU:HD21	1:E:243:ILE:HD12	1.62	0.81
3:C:1185:ASN:C	3:C:1185:ASN:HD22	1.85	0.80
3:C:1304:GLU:OE1	3:C:1309:ARG:HD2	1.81	0.80
3:G:364:LYS:HE3	3:G:632:ASP:OD2	1.80	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:H:271:ILE:HD12	4:H:272:LEU:N	1.95	0.80
2:B:94:GLU:HG3	2:B:95:PRO:HD3	1.61	0.80
4:H:337:PHE:HB3	4:H:465:ASN:ND2	1.96	0.80
3:C:1417:LEU:HG	3:C:1421:PHE:HD2	1.46	0.80
3:C:636:GLY:HA3	3:C:639:ILE:HD11	1.61	0.80
4:D:346:CYS:CB	4:D:378:PHE:HB2	2.10	0.80
1:E:247:VAL:HG22	1:E:292:LEU:HD13	1.63	0.80
1:E:393:LYS:HA	1:E:393:LYS:HE3	1.61	0.80
3:G:1098:GLN:O	3:G:1101:SER:HB3	1.81	0.80
3:G:363:GLY:O	3:G:364:LYS:HG3	1.81	0.80
4:D:571:PHE:CZ	4:D:598:ILE:HD13	2.17	0.80
3:G:1116:LEU:HA	3:G:1119:ILE:CG1	2.11	0.80
3:G:630:ASP:HA	3:G:688:ARG:NH2	1.97	0.80
4:H:337:PHE:HB3	4:H:465:ASN:HD21	1.42	0.80
2:B:173:LEU:O	2:B:173:LEU:HD23	1.82	0.80
3:C:977:THR:HB	3:C:981:ARG:HH12	1.44	0.80
4:D:343:LEU:HD11	4:D:571:PHE:CD1	2.16	0.80
4:H:567:VAL:HG12	4:H:568:GLY:N	1.97	0.80
2:B:41:GLU:O	2:B:45:LEU:HG	1.81	0.80
2:B:47:ILE:HD13	2:B:260:GLN:HE22	1.46	0.80
2:F:286:PRO:HG2	2:F:386:PHE:CE2	2.16	0.80
3:C:1276:CYS:SG	3:C:1390:THR:HG22	2.22	0.80
3:C:935:ASN:ND2	3:C:937:ASP:N	2.29	0.80
4:D:292:LYS:HG2	4:D:293:GLU:H	1.46	0.80
4:D:464:ILE:O	4:D:467:VAL:HB	1.82	0.80
3:G:875:CYS:HB3	3:G:878:THR:HG23	1.60	0.80
2:F:255:HIS:CG	2:F:256:SER:H	2.00	0.80
3:G:1307:LEU:HD22	3:G:1430:TYR:CE2	2.16	0.80
3:G:682:ARG:HD3	3:G:683:ASN:HD22	1.45	0.80
3:G:704:LYS:HE2	3:G:704:LYS:N	1.95	0.80
4:H:246:PRO:HG3	4:H:311:GLY:HA3	1.63	0.80
3:C:1245:GLN:O	3:C:1248:VAL:HB	1.81	0.80
3:G:1087:LEU:O	3:G:1087:LEU:HD12	1.81	0.80
4:H:365:ALA:HA	4:H:368:ASN:HD22	1.46	0.80
3:C:1216:ILE:HD12	3:C:1216:ILE:H	1.47	0.80
3:C:767:GLN:O	3:C:771:ILE:HG13	1.82	0.80
4:H:445:LEU:HB2	4:H:450:LYS:HZ3	1.45	0.80
2:B:367:CYS:SG	2:B:443:HIS:HA	2.21	0.79
3:C:599:LYS:O	3:C:603:GLU:HG2	1.82	0.79
3:C:715:ILE:HD13	3:C:759:LEU:HD21	1.64	0.79
1:E:67:GLU:O	1:E:71:GLN:HG3	1.82	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:39:LEU:HD11	2:F:245:ARG:CD	2.11	0.79
1:A:113:THR:HG23	1:A:163:ARG:NE	1.97	0.79
1:A:69:GLU:O	1:A:73:MET:HG2	1.82	0.79
4:D:227:LEU:HD12	4:D:227:LEU:O	1.82	0.79
2:F:118:ARG:HB3	2:F:118:ARG:CZ	2.12	0.79
3:G:387:LEU:HD21	3:G:479:THR:HA	1.63	0.79
4:H:156:THR:H	4:H:157:PRO:HD2	1.46	0.79
3:C:539:VAL:O	3:C:564:VAL:HG13	1.82	0.79
4:D:156:THR:H	4:D:157:PRO:HD2	1.47	0.79
3:G:725:MET:HA	3:G:728:ILE:HD11	1.62	0.79
3:C:1244:THR:HG22	3:C:1247:ARG:NH2	1.97	0.79
3:C:542:PHE:O	3:C:542:PHE:CD2	2.36	0.79
3:C:734:GLU:OE1	3:C:736:SER:HB2	1.81	0.79
2:F:355:LYS:HG2	3:G:1247:ARG:NH2	1.98	0.79
4:D:382:LEU:HD11	4:D:389:VAL:HG21	1.63	0.79
3:G:1348:CYS:SG	3:G:1353:CYS:HB3	2.23	0.79
3:G:784:ARG:HD2	3:G:784:ARG:H	1.46	0.79
4:D:411:GLU:O	4:D:413:THR:N	2.16	0.79
4:D:570:THR:HG22	4:D:597:ARG:HA	1.62	0.79
2:F:313:LEU:HB3	2:F:318:LEU:HD12	1.65	0.79
2:F:358:LYS:HE2	3:G:1274:ARG:HH12	1.46	0.79
3:G:935:ASN:ND2	3:G:937:ASP:HB2	1.98	0.79
4:D:574:LEU:HD12	4:D:574:LEU:N	1.98	0.79
4:H:387:GLU:HG3	4:H:388:GLN:N	1.94	0.79
1:A:97:GLY:HA3	3:C:880:GLN:NE2	1.97	0.79
4:D:157:PRO:HB3	4:D:354:SER:HB3	1.65	0.79
1:E:139:ILE:HD11	1:E:334:ILE:HD12	1.65	0.79
4:H:176:LEU:O	4:H:178:GLN:NE2	2.16	0.79
3:G:1093:ASN:O	3:G:1096:ILE:HG22	1.82	0.79
3:G:641:GLY:O	3:G:642:PHE:HB2	1.81	0.79
4:D:426:LEU:HD11	4:D:518:MET:HE3	1.65	0.78
2:F:406:GLY:O	2:F:409:SER:HB3	1.83	0.78
3:G:562:ALA:O	3:G:563:LEU:HD23	1.82	0.78
2:B:445:ASN:O	2:B:448:PHE:HB3	1.82	0.78
4:D:243:LEU:O	4:D:284:ILE:HD13	1.83	0.78
3:G:631:PRO:N	3:G:688:ARG:HH12	1.80	0.78
3:C:843:LEU:HD12	3:C:844:VAL:N	1.98	0.78
1:E:87:ARG:HB3	1:E:89:ASN:HD21	1.48	0.78
3:G:631:PRO:O	3:G:688:ARG:NH1	2.16	0.78
3:G:701:ILE:HG13	3:G:703:CYS:SG	2.23	0.78
4:H:294:TYR:HD1	4:H:294:TYR:O	1.64	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:H:253:LEU:HG	4:H:314:LEU:HD22	1.66	0.78
4:H:360:LEU:O	4:H:363:LEU:HB3	1.84	0.78
2:B:358:LYS:HE2	3:C:1274:ARG:HH22	1.46	0.78
3:C:1439:GLN:O	3:C:1442:SER:HB2	1.83	0.78
4:H:164:ARG:HG2	4:H:164:ARG:HH11	1.49	0.78
4:H:538:LEU:CG	4:H:540:ILE:HD11	2.14	0.78
4:D:476:LEU:HD12	4:D:476:LEU:C	2.03	0.78
2:F:47:ILE:HG22	2:F:51:LYS:HE3	1.65	0.78
3:G:901:LEU:O	3:G:901:LEU:HD12	1.84	0.78
1:A:146:LEU:HB2	1:A:155:ARG:HD3	1.66	0.78
3:C:644:LEU:O	3:C:644:LEU:HD12	1.84	0.78
4:D:567:VAL:HG12	4:D:568:GLY:N	1.98	0.78
4:D:573:ARG:O	4:D:593:VAL:HG13	1.83	0.78
1:E:209:HIS:CE1	1:E:211:PHE:H	2.02	0.78
2:F:422:VAL:O	2:F:425:GLN:HB2	1.84	0.78
3:C:858:LEU:HD13	3:C:1007:MET:HG3	1.65	0.78
3:G:630:ASP:CA	3:G:688:ARG:HH22	1.96	0.78
3:G:704:LYS:HE2	3:G:704:LYS:H	1.49	0.78
4:H:538:LEU:HG	4:H:540:ILE:HD11	1.66	0.78
4:H:548:VAL:HG22	4:H:557:VAL:HG22	1.63	0.78
1:E:240:TRP:O	1:E:244:LEU:HG	1.82	0.78
2:F:262:TYR:CD1	2:F:263:SER:N	2.52	0.78
2:B:319:THR:HG23	2:B:322:GLN:OE1	1.84	0.78
3:C:1146:TYR:CD2	3:C:1155:VAL:HG21	2.19	0.78
3:C:682:ARG:HD3	3:C:683:ASN:HD22	1.49	0.78
3:C:701:ILE:HG12	3:C:703:CYS:SG	2.24	0.78
3:G:852:TYR:HD1	3:G:1009:ASN:HD22	1.32	0.78
3:G:612:ALA:HB1	3:G:617:THR:HB	1.65	0.78
4:H:243:LEU:HB3	4:H:284:ILE:CD1	2.14	0.78
4:H:376:ILE:O	4:H:377:LEU:HD23	1.84	0.78
4:H:522:TYR:CD2	4:H:522:TYR:N	2.50	0.78
1:A:112:MET:HB3	1:A:163:ARG:HD2	1.65	0.77
1:A:5:ASP:HB3	1:A:8:GLU:OE2	1.84	0.77
3:C:856:ILE:CG2	3:C:1007:MET:HG2	2.14	0.77
3:C:562:ALA:O	3:C:563:LEU:HD23	1.84	0.77
3:G:635:VAL:HG22	3:G:752:ILE:HG22	1.63	0.77
3:G:943:ASP:O	3:G:946:GLN:HB3	1.85	0.77
1:A:237:LYS:HA	1:A:240:TRP:CE2	2.20	0.77
2:B:118:ARG:HG3	2:B:118:ARG:HH11	1.47	0.77
3:C:1038:ILE:HG13	3:C:1039:ASP:N	1.99	0.77
3:C:389:PHE:HB2	3:C:453:LEU:HB3	1.67	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:220:LEU:O	4:D:224:ILE:HG13	1.85	0.77
4:D:361:LEU:HA	4:D:364:ILE:CD1	2.13	0.77
3:G:1129:PRO:HB2	3:G:1132:GLN:HG2	1.66	0.77
3:C:659:TRP:CG	3:C:660:SER:N	2.51	0.77
3:C:875:CYS:SG	3:C:876:PHE:N	2.56	0.77
4:D:499:LEU:O	4:D:503:LEU:HD12	1.83	0.77
1:E:25:GLN:HE21	1:E:396:GLU:HG3	1.48	0.77
4:H:399:GLU:O	4:H:403:LYS:HG2	1.85	0.77
1:A:393:LYS:HE2	1:A:397:HIS:CE1	2.19	0.77
3:C:1129:PRO:HB2	3:C:1132:GLN:HG2	1.65	0.77
3:C:872:PHE:CE2	3:C:979:LYS:HE2	2.18	0.77
4:D:166:ASN:H	4:D:166:ASN:HD22	0.81	0.77
4:D:254:LEU:HD12	4:D:255:GLY:N	2.00	0.77
2:F:445:ASN:O	2:F:448:PHE:HB3	1.85	0.77
3:G:1395:TYR:HD1	3:G:1398:ILE:HD11	1.50	0.77
3:G:411:LYS:HD2	3:G:411:LYS:N	1.97	0.77
3:G:803:VAL:HB	3:G:804:PRO:CD	2.14	0.77
2:B:276:ILE:HA	2:B:279:LEU:HD12	1.67	0.77
3:C:1395:TYR:O	3:C:1398:ILE:HG13	1.83	0.77
3:C:522:LYS:O	3:C:525:LEU:HG	1.84	0.77
2:F:111:CYS:HB2	2:F:233:THR:OG1	1.84	0.77
2:B:23:PRO:HD2	2:B:25:CYS:HB2	1.65	0.77
3:C:555:ASN:H	3:C:555:ASN:ND2	1.82	0.77
3:C:345:TRP:HH2	3:C:775:ILE:HG13	1.48	0.77
3:C:932:GLN:NE2	3:C:933:ASP:H	1.82	0.77
3:G:564:VAL:HG12	3:G:565:HIS:N	1.99	0.77
4:H:292:LYS:HG2	4:H:293:GLU:N	2.00	0.77
3:G:1335:ARG:HH21	4:H:433:PRO:HD3	1.48	0.77
3:C:1267:LEU:HD22	3:C:1271:GLU:HG3	1.65	0.77
3:C:789:GLU:HG2	3:C:793:LEU:HD11	1.66	0.77
1:E:46:SER:OG	1:E:79:ASP:HB2	1.84	0.77
3:C:1010:THR:O	3:C:1011:ASN:HB2	1.85	0.77
4:D:227:LEU:HD23	4:D:301:VAL:CB	2.14	0.77
1:E:264:ASN:O	1:E:268:ARG:HD3	1.84	0.77
1:E:93:THR:HG23	3:G:447:PRO:HB3	1.66	0.77
3:C:683:ASN:HD22	3:C:683:ASN:N	1.81	0.77
2:F:64:VAL:HG23	2:F:66:GLY:H	1.49	0.77
3:G:1046:SER:HB2	3:G:1058:LEU:CG	2.13	0.77
1:A:233:ILE:HG13	1:A:234:LEU:HG	1.66	0.77
3:C:864:LEU:HD23	3:C:1004:ASP:CB	2.15	0.77
3:C:954:ASN:H	3:C:954:ASN:HD22	1.29	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:1141:LYS:NZ	3:G:1147:PRO:HD3	2.00	0.77
3:G:806:LYS:HE2	3:G:807:GLN:H	1.45	0.77
3:G:806:LYS:HG2	3:G:966:ARG:HD2	1.66	0.77
4:D:300:GLN:O	4:D:302:VAL:HG12	1.84	0.76
2:F:42:PHE:CE1	2:F:105:ILE:HD11	2.19	0.76
2:F:387:ARG:NH1	3:G:995:ASN:HB3	2.00	0.76
3:G:1206:ILE:HD13	3:G:1207:ASP:N	2.00	0.76
4:H:346:CYS:CB	4:H:378:PHE:HB2	2.15	0.76
3:C:1244:THR:O	3:C:1247:ARG:HG3	1.84	0.76
3:C:943:ASP:O	3:C:946:GLN:HB3	1.85	0.76
3:G:437:LYS:HD3	3:G:800:ASN:ND2	1.99	0.76
2:F:443:HIS:CE1	2:F:445:ASN:H	2.04	0.76
4:H:157:PRO:HB3	4:H:354:SER:HB2	1.67	0.76
1:E:162:ARG:HG3	1:E:327:THR:HG21	1.67	0.76
3:G:1427:LEU:CD2	3:G:1431:ARG:HH12	1.91	0.76
3:G:547:MET:HG3	3:G:728:ILE:HD12	1.67	0.76
3:C:1235:ILE:H	3:C:1235:ILE:HD12	1.49	0.76
3:C:1395:TYR:CD1	3:C:1398:ILE:HD11	2.19	0.76
3:C:602:ILE:HD13	3:C:609:VAL:HG13	1.68	0.76
2:F:255:HIS:CD2	2:F:256:SER:H	2.03	0.76
3:G:610:GLU:HG2	3:G:621:PHE:CZ	2.20	0.76
4:H:411:GLU:O	4:H:413:THR:N	2.18	0.76
1:A:174:VAL:O	1:A:177:LEU:HG	1.85	0.76
1:E:192:VAL:HG21	1:E:304:ARG:HG2	1.68	0.76
1:E:50:LYS:N	1:E:50:LYS:HD2	1.96	0.76
3:C:1294:ASN:HD22	3:C:1296:PHE:H	1.34	0.76
4:D:357:TYR:O	4:D:360:LEU:HB3	1.85	0.76
1:E:234:LEU:CD2	1:E:243:ILE:HD12	2.15	0.76
3:G:362:PHE:HZ	3:G:665:LEU:HG	1.51	0.76
1:A:82:ALA:CB	1:A:104:LYS:HB2	2.15	0.76
3:C:1427:LEU:HB3	3:C:1431:ARG:HH22	1.50	0.76
3:C:857:LEU:HD21	3:C:859:LEU:CG	2.15	0.76
1:E:208:ILE:HD12	1:E:212:ILE:HG21	1.68	0.76
3:G:623:LEU:HD11	3:G:659:TRP:HA	1.68	0.76
4:H:215:ASP:O	4:H:219:VAL:HG23	1.86	0.76
4:H:231:LEU:CB	4:H:303:ILE:HD11	2.16	0.76
1:A:198:VAL:O	1:A:201:LYS:HE3	1.86	0.76
2:B:247:GLN:HB2	2:B:248:PRO:HD3	1.68	0.76
2:B:271:ILE:HG22	2:B:272:SER:O	1.85	0.76
3:C:1201:GLN:NE2	3:C:1204:LEU:HG	2.01	0.76
4:D:361:LEU:HA	4:D:364:ILE:HD12	1.66	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:1219:VAL:O	3:G:1223:ILE:HD12	1.86	0.76
3:G:793:LEU:O	3:G:797:TYR:HD1	1.69	0.76
2:B:314:LYS:HD2	2:B:353:PHE:CD2	2.21	0.75
3:C:869:ILE:CG2	3:C:911:LEU:HD21	2.15	0.75
3:G:711:LEU:HB3	3:G:755:ILE:CD1	2.16	0.75
4:H:292:LYS:HG2	4:H:293:GLU:H	1.51	0.75
2:B:255:HIS:CG	2:B:256:SER:H	2.05	0.75
3:C:1444:SER:O	3:C:1446:TYR:N	2.19	0.75
4:D:355:ILE:HD11	4:D:388:GLN:NE2	1.99	0.75
4:H:292:LYS:CG	4:H:293:GLU:H	1.99	0.75
3:C:760:ASN:O	3:C:763:PRO:HD2	1.87	0.75
4:D:194:LYS:HG3	4:D:463:SER:CB	2.17	0.75
1:E:200:LYS:HE2	1:E:246:LEU:HB3	1.68	0.75
3:G:1320:LEU:O	3:G:1320:LEU:HD13	1.86	0.75
3:G:1444:SER:O	3:G:1446:TYR:N	2.19	0.75
3:G:635:VAL:CG2	3:G:752:ILE:HG22	2.16	0.75
4:H:318:LYS:HE3	4:H:320:TYR:CD2	2.21	0.75
1:A:398:PHE:O	1:A:402:LEU:HD13	1.86	0.75
2:F:303:HIS:HB2	3:G:1106:ASP:OD1	1.86	0.75
3:G:903:ASP:CG	3:G:905:SER:H	1.88	0.75
4:H:493:ASP:OD2	4:H:496:SER:HB2	1.87	0.75
1:A:38:ASN:HB3	1:A:41:GLN:HB2	1.69	0.75
1:A:403:ASP:HA	1:A:406:ARG:HH12	1.51	0.75
2:F:387:ARG:HA	2:F:420:TYR:CE1	2.21	0.75
4:D:306:GLY:HA2	4:D:317:THR:CG2	2.15	0.75
4:D:387:GLU:HG3	4:D:388:GLN:N	2.00	0.75
1:E:247:VAL:HG13	1:E:248:PRO:HD2	1.66	0.75
1:E:403:ASP:HA	1:E:406:ARG:HH11	1.50	0.75
4:H:342:VAL:CG2	4:H:374:VAL:HB	2.12	0.75
3:C:861:PHE:CD1	3:C:1036:LEU:HD11	2.22	0.75
4:D:292:LYS:CG	4:D:293:GLU:H	2.00	0.75
2:F:22:TYR:N	2:F:84:SER:HG	1.84	0.75
2:B:441:LEU:HD21	2:B:447:PHE:HB2	1.66	0.75
3:C:564:VAL:HG12	3:C:565:HIS:N	2.02	0.75
1:E:55:ILE:HD12	1:E:56:ARG:H	1.51	0.75
3:G:341:PHE:HE2	3:G:365:VAL:HG11	1.51	0.75
2:F:103:HIS:CE1	2:F:107:ARG:HE	2.05	0.75
3:G:428:MET:N	3:G:428:MET:SD	2.60	0.75
4:H:447:ARG:HH11	4:H:447:ARG:HG2	1.52	0.75
2:B:362:TYR:HD2	2:B:362:TYR:O	1.70	0.74
2:B:76:SER:O	2:B:79:ARG:HB2	1.87	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:1036:LEU:O	3:C:1037:GLU:HG3	1.86	0.74
3:C:1400:ASP:CA	3:C:1434:LYS:HD3	2.17	0.74
1:E:118:VAL:HG13	1:E:300:TYR:CD2	2.20	0.74
1:E:37:LYS:C	1:E:38:ASN:HD22	1.91	0.74
1:E:50:LYS:CD	1:E:50:LYS:H	1.96	0.74
3:G:549:ASN:HD21	3:G:552:ASN:H	1.31	0.74
4:H:210:PHE:CD1	4:H:210:PHE:O	2.40	0.74
3:C:774:ASN:ND2	3:C:779:THR:OG1	2.19	0.74
2:F:165:GLU:HB3	2:F:201:TYR:CE2	2.21	0.74
2:F:137:LYS:HZ3	2:F:181:GLU:CA	2.01	0.74
2:F:403:ILE:HG22	2:F:408:ILE:HG12	1.69	0.74
3:G:1023:ASN:HA	3:G:1026:LYS:HB3	1.68	0.74
3:G:762:LEU:HD23	3:G:762:LEU:H	1.52	0.74
2:B:209:VAL:CG1	2:B:210:PRO:HD2	2.12	0.74
2:F:164:GLN:HE22	2:F:176:LEU:CD1	1.99	0.74
2:F:411:ILE:HG22	2:F:412:LEU:HD23	1.70	0.74
4:H:398:PHE:CD1	4:H:429:VAL:HG21	2.22	0.74
4:D:215:ASP:O	4:D:219:VAL:HG23	1.87	0.74
1:E:275:VAL:O	1:E:278:ARG:HB3	1.88	0.74
3:G:623:LEU:CD1	3:G:651:ILE:HD11	2.17	0.74
1:A:228:LEU:HD23	1:A:233:ILE:HG12	1.70	0.74
2:B:93:TYR:HD2	2:B:96:ARG:CB	1.93	0.74
3:G:935:ASN:ND2	3:G:937:ASP:N	2.36	0.74
4:H:546:TYR:O	4:H:547:PHE:HB3	1.85	0.74
1:A:251:ILE:HD12	1:A:275:VAL:HG12	1.68	0.74
2:F:367:CYS:SG	2:F:444:PRO:HD3	2.28	0.74
3:G:1154:HIS:NE2	3:G:1155:VAL:HG23	2.03	0.74
3:G:876:PHE:HA	3:G:881:ARG:HH12	1.52	0.74
4:H:194:LYS:CG	4:H:463:SER:HB3	2.17	0.74
1:A:48:THR:HB	1:A:77:LYS:HB2	1.67	0.74
3:C:1119:ILE:O	3:C:1123:VAL:HG23	1.87	0.74
3:C:723:ILE:N	3:C:723:ILE:HD12	2.03	0.74
1:E:158:VAL:HG22	1:E:333:PRO:HA	1.67	0.74
3:G:1369:PRO:O	3:G:1378:THR:HG23	1.88	0.74
4:H:532:PRO:HG2	4:H:533:VAL:H	1.53	0.74
3:C:1105:ARG:HA	3:C:1108:ILE:HD12	1.69	0.74
3:C:1314:ASP:O	3:C:1316:LYS:HD2	1.87	0.74
3:C:1395:TYR:HA	3:C:1398:ILE:HD11	1.69	0.74
1:E:398:PHE:O	1:E:402:LEU:HD13	1.86	0.74
3:G:857:LEU:HD23	3:G:859:LEU:HG	1.69	0.74
3:C:1216:ILE:HD12	3:C:1216:ILE:N	2.03	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:956:MET:O	3:C:959:CYS:HB3	1.88	0.74
4:H:574:LEU:N	4:H:574:LEU:HD12	2.03	0.74
1:A:200:LYS:HD2	1:A:246:LEU:HD22	1.68	0.74
1:E:313:ILE:HG12	1:E:313:ILE:O	1.88	0.74
1:E:20:LEU:CD2	1:E:357:LEU:HD22	2.07	0.74
2:F:280:SER:HA	2:F:284:PHE:HD1	1.52	0.74
3:G:1345:TRP:CZ3	3:G:1358:ARG:HG3	2.23	0.74
3:C:1335:ARG:NH2	4:D:433:PRO:HD3	2.03	0.73
1:E:379:ARG:HH11	1:E:379:ARG:HG3	1.53	0.73
2:F:200:VAL:HG11	2:F:209:VAL:HG22	1.70	0.73
2:F:428:PHE:CZ	2:F:450:GLU:HB3	2.23	0.73
3:G:437:LYS:NZ	3:G:800:ASN:HD22	1.86	0.73
3:G:344:TYR:HA	3:G:497:CYS:O	1.87	0.73
3:C:1369:PRO:O	3:C:1378:THR:HG23	1.88	0.73
3:C:1394:PHE:O	3:C:1398:ILE:HG12	1.87	0.73
4:D:292:LYS:HG2	4:D:293:GLU:N	2.03	0.73
2:F:32:PRO:HA	2:F:104:PHE:HE2	1.52	0.73
2:F:47:ILE:CD1	3:G:1266:GLN:HB3	2.18	0.73
1:A:56:ARG:C	1:A:58:GLN:HE21	1.92	0.73
2:B:94:GLU:CG	2:B:95:PRO:HD3	2.17	0.73
3:G:695:ILE:HG21	3:G:781:MET:O	1.87	0.73
4:H:202:LEU:CD2	4:H:457:SER:HB3	2.18	0.73
3:G:1337:PHE:CE2	3:G:1391:GLN:HG2	2.22	0.73
3:G:563:LEU:HD21	3:G:746:TRP:CD1	2.22	0.73
4:H:224:ILE:HD11	4:H:256:GLN:OE1	1.89	0.73
1:A:137:MET:O	1:A:141:ILE:HG13	1.87	0.73
2:F:104:PHE:O	2:F:107:ARG:HB2	1.89	0.73
2:F:417:GLY:O	2:F:418:THR:HG22	1.88	0.73
3:G:1143:PRO:HB2	3:G:1159:LEU:HD21	1.70	0.73
3:G:1235:ILE:O	3:G:1238:TRP:HB2	1.89	0.73
3:G:659:TRP:CG	3:G:660:SER:N	2.56	0.73
1:A:49:LEU:HB3	1:A:50:LYS:NZ	2.02	0.73
3:C:507:LEU:H	3:C:507:LEU:HD12	1.52	0.73
4:D:342:VAL:CG1	4:D:374:VAL:HB	2.17	0.73
1:E:13:LEU:HD22	1:E:17:TYR:CE2	2.24	0.73
1:E:49:LEU:HB3	1:E:50:LYS:NZ	2.03	0.73
3:G:865:TYR:H	3:G:865:TYR:HD2	1.32	0.73
2:B:47:ILE:HD13	2:B:260:GLN:NE2	2.02	0.73
3:C:701:ILE:HD11	3:C:714:GLN:NE2	2.04	0.73
3:C:944:ILE:HA	3:C:947:LYS:NZ	2.03	0.73
4:D:296:LEU:HA	4:D:300:GLN:OE1	1.89	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:H:343:LEU:O	4:H:344:VAL:HG23	1.89	0.73
3:C:537:LEU:HD12	3:C:570:LEU:HD21	1.70	0.73
3:C:938:LEU:HA	3:C:941:GLN:HB2	1.70	0.73
4:D:546:TYR:O	4:D:547:PHE:HB3	1.87	0.73
4:D:171:VAL:HG23	4:D:595:VAL:HG12	1.69	0.73
1:E:293:GLU:O	1:E:297:MET:HG3	1.89	0.73
2:F:316:ILE:HB	2:F:448:PHE:HE2	1.54	0.73
3:G:365:VAL:HG22	3:G:376:CYS:HB2	1.69	0.73
3:G:500:GLU:CD	3:G:502:LYS:HE3	2.08	0.73
4:H:243:LEU:O	4:H:284:ILE:HG21	1.87	0.73
1:A:111:ASP:OD1	1:A:163:ARG:HG3	1.89	0.73
1:A:43:ARG:HH11	1:A:80:ILE:CG2	2.01	0.73
2:B:433:ASN:O	2:B:434:VAL:HG12	1.89	0.73
3:C:774:ASN:O	3:C:775:ILE:HD12	1.89	0.73
4:D:446:SER:O	4:D:450:LYS:HG2	1.88	0.73
3:G:599:LYS:O	3:G:603:GLU:HG2	1.89	0.73
3:G:938:LEU:HA	3:G:941:GLN:HB2	1.70	0.73
2:B:164:GLN:HE22	2:B:176:LEU:CD1	2.01	0.73
4:D:166:ASN:ND2	4:D:166:ASN:N	2.27	0.73
1:E:206:GLU:HA	1:E:206:GLU:OE1	1.89	0.73
3:G:1149:LYS:HD3	3:G:1150:LYS:N	2.04	0.73
3:G:773:GLY:O	3:G:794:HIS:NE2	2.21	0.73
1:A:145:ALA:HB2	1:A:211:PHE:CE2	2.24	0.72
3:C:803:VAL:HB	3:C:804:PRO:CD	2.19	0.72
4:D:346:CYS:HB2	4:D:378:PHE:CB	2.18	0.72
4:D:479:HIS:ND1	4:D:509:TYR:OH	2.20	0.72
2:F:22:TYR:HB3	2:F:23:PRO:HD3	1.71	0.72
2:F:94:GLU:HB3	2:F:95:PRO:HD3	1.71	0.72
3:G:341:PHE:CE2	3:G:365:VAL:HG11	2.24	0.72
4:H:306:GLY:HA2	4:H:317:THR:CG2	2.16	0.72
1:A:393:LYS:HZ1	1:A:396:GLU:HB3	1.53	0.72
2:B:319:THR:OG1	2:B:322:GLN:HG3	1.89	0.72
3:C:1307:LEU:H	3:C:1307:LEU:HD12	1.54	0.72
3:C:610:GLU:HG2	3:C:621:PHE:CZ	2.24	0.72
3:C:682:ARG:C	3:C:682:ARG:HD3	2.10	0.72
4:D:539:ILE:HG22	4:D:541:PRO:HD3	1.71	0.72
3:G:1296:PHE:CZ	3:G:1405:LEU:HD21	2.17	0.72
3:G:346:LEU:HD22	3:G:689:MET:HE1	1.69	0.72
3:G:925:VAL:HG21	3:G:945:ARG:HD3	1.71	0.72
1:A:393:LYS:HE3	1:A:396:GLU:HB2	1.69	0.72
3:C:1122:ASN:HA	3:C:1125:ASN:ND2	2.04	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:843:LEU:H	3:C:981:ARG:HG2	1.54	0.72
4:H:494:ARG:HG3	4:H:494:ARG:HH11	1.54	0.72
1:A:51:ASP:HB2	1:A:53:ILE:HD13	1.70	0.72
2:B:434:VAL:HG23	2:B:435:ASP:N	2.02	0.72
3:C:346:LEU:HD12	3:C:363:GLY:HA2	1.71	0.72
2:F:387:ARG:HG3	2:F:388:HIS:CD2	2.24	0.72
3:G:360:PHE:CD1	3:G:665:LEU:HD11	2.24	0.72
3:C:437:LYS:HD3	3:C:800:ASN:ND2	2.04	0.72
3:G:510:PRO:HA	3:G:517:GLU:OE1	1.89	0.72
3:G:869:ILE:O	3:G:869:ILE:HG22	1.89	0.72
1:A:353:ILE:HB	1:A:386:THR:HG21	1.70	0.72
4:D:307:ILE:O	4:D:315:VAL:HG23	1.89	0.72
4:D:376:ILE:O	4:D:377:LEU:HD23	1.89	0.72
2:F:29:TYR:HB3	2:F:103:HIS:CD2	2.24	0.72
2:F:51:LYS:HE2	2:F:260:GLN:HB2	1.72	0.72
3:G:1140:THR:O	3:G:1140:THR:HG22	1.89	0.72
3:G:539:VAL:O	3:G:564:VAL:HG13	1.88	0.72
4:H:166:ASN:HD22	4:H:166:ASN:N	1.84	0.72
1:A:82:ALA:HB2	1:A:104:LYS:HD3	1.70	0.72
2:F:286:PRO:HB2	2:F:385:PRO:HG3	1.70	0.72
2:F:313:LEU:O	2:F:316:ILE:HG12	1.90	0.72
3:G:598:PHE:CE1	3:G:738:LEU:HB3	2.25	0.72
3:G:945:ARG:O	3:G:949:LEU:HG	1.89	0.72
4:H:522:TYR:HA	4:H:525:PHE:HB3	1.72	0.72
1:A:178:SER:O	1:A:182:ARG:HG3	1.90	0.72
1:A:207:LYS:HZ1	2:B:172:SER:HA	1.54	0.72
2:B:443:HIS:HE1	2:B:445:ASN:CB	2.03	0.72
4:D:522:TYR:HA	4:D:525:PHE:HB3	1.70	0.72
1:E:192:VAL:HG23	1:E:302:PHE:CD1	2.24	0.72
2:F:282:LYS:HA	2:F:431:ILE:HD11	1.71	0.72
2:F:403:ILE:HG22	2:F:408:ILE:CG1	2.20	0.72
3:G:1374:CYS:O	3:G:1374:CYS:SG	2.47	0.72
4:H:227:LEU:HD23	4:H:301:VAL:HB	1.72	0.72
4:H:400:ASP:O	4:H:403:LYS:N	2.22	0.72
2:B:342:ASP:HA	2:B:346:SER:HB2	1.70	0.72
1:E:269:TRP:NE1	1:E:273:LYS:HD3	2.05	0.72
3:C:1399:PHE:O	3:C:1434:LYS:HG3	1.89	0.72
3:C:876:PHE:HZ	3:C:960:LEU:HD21	1.55	0.72
1:E:143:ASP:HA	1:E:146:LEU:HD12	1.70	0.72
2:F:104:PHE:CE1	2:F:107:ARG:CZ	2.72	0.72
2:F:258:THR:OG1	2:F:261:ASP:N	2.22	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:265:GLN:CG	2:F:266:GLY:H	2.03	0.72
2:F:316:ILE:HB	2:F:448:PHE:CE2	2.24	0.72
3:G:533:SER:OG	3:G:534:PRO:HD2	1.90	0.72
1:A:237:LYS:HA	1:A:240:TRP:CD2	2.25	0.71
3:C:428:MET:SD	3:C:428:MET:N	2.62	0.71
2:F:300:HIS:ND1	2:F:301:LEU:N	2.38	0.71
4:H:294:TYR:HE1	4:H:486:SER:C	1.93	0.71
3:C:1185:ASN:O	3:C:1185:ASN:ND2	2.16	0.71
3:C:498:TRP:O	3:C:528:VAL:HG13	1.89	0.71
3:C:552:ASN:O	3:C:553:HIS:ND1	2.15	0.71
3:C:953:ALA:HA	3:C:956:MET:HG2	1.71	0.71
3:G:563:LEU:HD13	3:G:579:PHE:CD2	2.25	0.71
4:H:308:ASN:HD21	4:H:311:GLY:CA	1.97	0.71
2:B:104:PHE:O	2:B:107:ARG:HB2	1.89	0.71
2:B:359:ARG:O	2:B:360:THR:HG22	1.90	0.71
3:C:1141:LYS:NZ	3:C:1147:PRO:CD	2.53	0.71
3:C:1334:ILE:HG21	3:C:1440:PHE:CD1	2.25	0.71
3:C:991:VAL:HG12	3:C:996:LEU:O	1.90	0.71
2:F:262:TYR:O	2:F:264:THR:HG22	1.89	0.71
3:C:477:PHE:CD1	3:C:802:ILE:HG21	2.25	0.71
4:D:227:LEU:C	4:D:227:LEU:HD12	2.11	0.71
1:E:107:VAL:HG12	1:E:168:TRP:HA	1.71	0.71
1:E:323:VAL:HG21	1:E:350:ILE:HD12	1.72	0.71
1:E:30:LEU:HD11	1:E:80:ILE:HD13	1.73	0.71
3:G:588:LYS:HD3	3:G:594:PHE:CE1	2.25	0.71
3:G:875:CYS:HB3	3:G:878:THR:CG2	2.20	0.71
4:H:573:ARG:C	4:H:574:LEU:HD12	2.11	0.71
1:A:209:HIS:CE1	1:A:211:PHE:H	2.08	0.71
1:A:382:ASP:OD1	1:A:385:LYS:HB2	1.90	0.71
2:B:265:GLN:CG	2:B:266:GLY:H	2.03	0.71
3:C:1358:ARG:NH2	4:D:514:PRO:O	2.24	0.71
3:C:558:ILE:O	3:C:558:ILE:HG13	1.89	0.71
3:C:720:ARG:NH1	3:C:722:VAL:HG22	2.06	0.71
3:C:865:TYR:N	3:C:866:PRO:CD	2.54	0.71
3:G:1290:ASN:HD22	3:G:1292:TYR:HE1	1.37	0.71
3:G:497:CYS:SG	3:G:499:LEU:HD21	2.31	0.71
3:G:669:ASN:HD22	3:G:669:ASN:N	1.87	0.71
4:H:231:LEU:HB2	4:H:303:ILE:HD11	1.72	0.71
1:A:227:ALA:O	1:A:233:ILE:HG23	1.91	0.71
2:B:45:LEU:HD13	2:B:101:ILE:HG21	1.72	0.71
2:B:288:MET:HG3	2:B:312:PHE:CE2	2.25	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:62:SER:O	2:B:63:TYR:HD2	1.72	0.71
3:C:803:VAL:HB	3:C:804:PRO:HD2	1.73	0.71
1:E:60:PHE:HB3	1:E:65:ASP:HB2	1.72	0.71
3:G:1026:LYS:HG3	3:G:1030:ASN:ND2	2.04	0.71
1:A:259:PHE:HE2	1:A:271:HIS:HB3	1.55	0.71
2:B:28:PHE:O	2:B:30:LEU:N	2.23	0.71
3:C:1334:ILE:HG21	3:C:1440:PHE:CE1	2.24	0.71
4:D:227:LEU:HD11	4:D:231:LEU:CG	2.18	0.71
2:F:264:THR:OG1	2:F:265:GLN:N	2.23	0.71
3:G:430:PHE:N	3:G:430:PHE:CD2	2.58	0.71
3:G:668:SER:C	3:G:669:ASN:HD22	1.94	0.71
3:G:922:ARG:HH12	3:G:950:LYS:CD	2.04	0.71
4:H:243:LEU:O	4:H:284:ILE:HD13	1.89	0.71
2:B:114:GLU:N	2:B:117:ARG:HH21	1.89	0.71
2:B:163:GLU:HG3	2:B:178:LEU:HD22	1.73	0.71
3:C:1328:ASN:HB3	4:D:392:CYS:SG	2.31	0.71
3:C:939:ILE:HG22	3:C:940:LEU:N	2.05	0.71
1:E:221:LYS:HZ2	1:E:221:LYS:HB2	1.50	0.71
3:G:774:ASN:ND2	3:G:779:THR:OG1	2.20	0.71
2:F:49:ARG:NH1	2:F:124:GLU:OE2	2.23	0.71
3:G:558:ILE:O	3:G:559:ALA:HB2	1.90	0.71
3:G:788:ASN:HD22	3:G:956:MET:HA	1.56	0.71
4:H:227:LEU:HD23	4:H:301:VAL:CB	2.21	0.71
4:H:407:ARG:HH11	4:H:407:ARG:HG3	1.54	0.71
3:C:1241:LEU:O	3:C:1243:PRO:HD2	1.91	0.71
3:C:578:PRO:HB2	3:C:753:LEU:HD23	1.73	0.71
3:C:716:LEU:HG	3:C:755:ILE:HG13	1.72	0.71
3:C:855:PHE:CE1	3:C:1045:LYS:HG3	2.26	0.71
4:D:411:GLU:HG3	4:D:414:ARG:NH1	2.06	0.71
4:D:525:PHE:CD1	4:D:529:ALA:HB3	2.25	0.71
3:G:843:LEU:HD11	3:G:845:LEU:HD21	1.72	0.71
4:D:358:ASP:HB2	4:D:359:PRO:CD	2.21	0.70
1:E:144:ARG:HD3	1:E:218:ILE:HD11	1.73	0.70
3:G:1300:GLY:N	3:G:1303:MET:HE3	2.02	0.70
3:G:804:PRO:HG2	3:G:967:PHE:CE2	2.25	0.70
1:A:157:TRP:HB3	1:A:334:ILE:HD12	1.74	0.70
3:C:1345:TRP:HZ3	3:C:1358:ARG:HB2	1.56	0.70
3:C:716:LEU:HD11	3:C:754:GLN:HB2	1.72	0.70
1:E:408:GLY:O	1:E:412:LYS:HB3	1.90	0.70
2:F:255:HIS:CG	2:F:256:SER:N	2.59	0.70
2:F:392:GLU:O	2:F:396:GLN:HG3	1.92	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:1405:LEU:C	3:G:1407:LYS:H	1.92	0.70
1:A:244:LEU:CD1	1:A:256:GLN:HE22	2.03	0.70
1:A:349:THR:HG22	1:A:351:SER:H	1.56	0.70
2:F:441:LEU:HD12	2:F:446:GLN:OE1	1.90	0.70
3:G:975:LEU:C	3:G:975:LEU:HD12	2.12	0.70
4:H:243:LEU:HD22	4:H:253:LEU:HD12	1.71	0.70
3:C:1115:ARG:HG3	3:C:1115:ARG:HH11	1.57	0.70
3:G:1192:ALA:C	3:G:1193:TYR:HD1	1.93	0.70
3:G:430:PHE:N	3:G:430:PHE:HD2	1.87	0.70
1:A:152:PHE:O	1:A:155:ARG:NH1	2.24	0.70
3:C:1350:GLU:OE2	3:C:1351:PRO:HD2	1.92	0.70
3:C:875:CYS:HB3	3:C:878:THR:CG2	2.16	0.70
3:C:873:ASN:OD1	3:C:878:THR:HG21	1.92	0.70
3:C:921:ARG:HH22	3:C:945:ARG:NH2	1.88	0.70
3:C:935:ASN:C	3:C:935:ASN:ND2	2.44	0.70
4:D:354:SER:HB2	4:D:356:THR:HG23	1.72	0.70
1:E:82:ALA:HB2	1:E:104:LYS:HD3	1.72	0.70
3:C:920:GLU:HG2	3:C:923:LYS:NZ	2.07	0.70
2:F:336:MET:HG2	2:F:337:ASP:N	2.06	0.70
3:G:1143:PRO:HB2	3:G:1159:LEU:CD2	2.22	0.70
3:G:594:PHE:HD1	3:G:594:PHE:H	1.39	0.70
4:H:389:VAL:HG13	4:H:398:PHE:CE1	2.22	0.70
4:H:476:LEU:HD13	4:H:509:TYR:HD2	1.56	0.70
2:B:176:LEU:O	2:B:176:LEU:HD23	1.92	0.70
3:C:788:ASN:HD22	3:C:956:MET:HA	1.57	0.70
3:C:944:ILE:HA	3:C:947:LYS:HZ3	1.55	0.70
3:C:1185:ASN:ND2	3:C:1185:ASN:C	2.43	0.70
3:C:1345:TRP:HE3	3:C:1345:TRP:HA	1.57	0.70
4:D:185:ARG:HB2	4:D:188:ALA:HB3	1.73	0.70
2:F:247:GLN:HB2	2:F:248:PRO:HD3	1.74	0.70
4:H:227:LEU:HD23	4:H:301:VAL:CG1	2.21	0.70
4:H:307:ILE:O	4:H:315:VAL:HG22	1.91	0.70
3:C:1023:ASN:HA	3:C:1026:LYS:HB2	1.74	0.70
2:F:300:HIS:HA	2:F:331:PHE:CE1	2.27	0.70
3:G:1215:GLN:O	3:G:1218:PRO:HD2	1.92	0.70
3:C:1141:LYS:HZ2	3:C:1147:PRO:HD3	1.53	0.70
3:C:531:ASP:O	3:C:532:VAL:HG23	1.92	0.70
3:C:558:ILE:O	3:C:559:ALA:HB2	1.90	0.70
3:C:978:TYR:HA	3:C:981:ARG:NH2	2.07	0.70
4:D:539:ILE:HD13	4:D:557:VAL:HB	1.73	0.70
2:F:387:ARG:HH12	3:G:995:ASN:HB3	1.57	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:1267:LEU:H	3:G:1267:LEU:HD12	1.56	0.70
3:G:513:TRP:HB3	3:G:627:HIS:CD2	2.27	0.70
3:G:700:LEU:O	3:G:701:ILE:HG22	1.91	0.70
4:H:343:LEU:CD1	4:H:344:VAL:H	2.03	0.70
1:A:209:HIS:CG	1:A:210:PRO:HD2	2.27	0.69
3:C:364:LYS:NZ	3:C:538:VAL:HG23	2.07	0.69
3:C:635:VAL:HG23	3:C:752:ILE:CG2	2.22	0.69
3:C:786:GLU:O	3:C:789:GLU:HB3	1.92	0.69
3:G:946:GLN:HE22	3:G:947:LYS:HG3	1.57	0.69
1:A:18:ARG:HG3	1:A:19:ARG:HG3	1.75	0.69
1:A:247:VAL:CG1	1:A:248:PRO:HD2	2.21	0.69
3:C:453:LEU:HG	3:C:455:VAL:HG23	1.74	0.69
4:D:310:THR:HG21	4:D:312:ARG:HD2	1.72	0.69
2:F:76:SER:O	2:F:79:ARG:HB3	1.91	0.69
3:G:1122:ASN:HA	3:G:1125:ASN:ND2	2.07	0.69
3:G:903:ASP:OD2	3:G:906:LEU:HD12	1.92	0.69
4:H:361:LEU:HA	4:H:364:ILE:CD1	2.21	0.69
3:C:1158:ALA:HA	3:C:1161:ILE:HD12	1.73	0.69
4:D:476:LEU:HD12	4:D:476:LEU:O	1.92	0.69
2:F:252:HIS:HD2	2:F:255:HIS:CD2	2.10	0.69
3:G:760:ASN:HB3	3:G:944:ILE:HD11	1.73	0.69
2:B:241:GLN:O	2:B:241:GLN:OE1	2.10	0.69
2:B:441:LEU:HD12	2:B:446:GLN:CD	2.12	0.69
3:C:1140:THR:O	3:C:1140:THR:HG22	1.90	0.69
3:C:1431:ARG:O	3:C:1435:ASN:ND2	2.25	0.69
3:C:543:SER:H	3:C:749:ALA:CB	2.03	0.69
4:D:399:GLU:O	4:D:403:LYS:HG2	1.93	0.69
3:G:1219:VAL:O	3:G:1222:ARG:HG2	1.92	0.69
3:G:756:MET:SD	3:G:762:LEU:HD21	2.32	0.69
1:A:135:MET:O	1:A:139:ILE:HG13	1.91	0.69
3:C:1225:GLU:HB3	3:C:1226:PRO:HD3	1.73	0.69
3:C:1244:THR:HG22	3:C:1247:ARG:HH22	1.57	0.69
3:C:1334:ILE:CG2	3:C:1440:PHE:CE1	2.75	0.69
3:C:1363:GLN:O	3:C:1370:LEU:HB3	1.93	0.69
3:C:1405:LEU:C	3:C:1407:LYS:H	1.93	0.69
2:B:139:LYS:HA	2:B:142:ASP:OD1	1.93	0.69
3:C:1028:GLU:O	3:C:1032:LEU:HG	1.92	0.69
3:C:1250:HIS:HE1	3:C:1254:ASP:CB	2.06	0.69
1:E:156:LEU:HD22	1:E:395:PHE:HE1	1.57	0.69
3:G:1216:ILE:H	3:G:1216:ILE:HD12	1.56	0.69
3:G:1349:GLU:HG2	3:G:1378:THR:O	1.92	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:585:VAL:HG22	3:G:618:LEU:CD1	2.20	0.69
3:G:939:ILE:HG22	3:G:940:LEU:N	2.08	0.69
1:A:5:ASP:OD1	1:A:8:GLU:HG3	1.92	0.69
2:B:434:VAL:HG23	2:B:436:ASP:N	2.06	0.69
3:C:1307:LEU:N	3:C:1307:LEU:HD12	2.07	0.69
4:D:255:GLY:C	4:D:272:LEU:HD11	2.13	0.69
4:D:389:VAL:HG13	4:D:398:PHE:CE1	2.25	0.69
2:F:28:PHE:O	2:F:30:LEU:N	2.26	0.69
2:F:367:CYS:HB3	2:F:421:GLN:NE2	2.07	0.69
2:F:441:LEU:HD11	2:F:447:PHE:HB2	1.75	0.69
3:G:873:ASN:ND2	3:G:878:THR:HG21	2.08	0.69
2:B:414:LEU:O	2:B:417:GLY:N	2.24	0.69
2:B:87:GLU:HG3	2:B:93:TYR:HE1	1.56	0.69
1:E:349:THR:HG22	1:E:351:SER:N	2.05	0.69
2:F:137:LYS:HZ3	2:F:181:GLU:HA	1.55	0.69
2:F:50:VAL:HG23	2:F:106:LEU:CD1	2.21	0.69
3:G:1010:THR:O	3:G:1011:ASN:HB2	1.93	0.69
3:G:1196:GLU:HG3	3:G:1197:GLN:H	1.56	0.69
3:G:1211:TYR:HA	3:G:1215:GLN:HB2	1.74	0.69
3:G:946:GLN:NE2	3:G:947:LYS:HG3	2.08	0.69
1:A:136:THR:HG23	1:A:339:VAL:HG12	1.74	0.69
1:A:255:LEU:CD1	1:A:272:LEU:HD13	2.23	0.69
2:B:23:PRO:CD	2:B:25:CYS:HB2	2.22	0.69
3:C:636:GLY:HA2	3:C:752:ILE:HD13	1.74	0.69
2:F:362:TYR:CD2	2:F:362:TYR:C	2.64	0.69
3:G:807:GLN:O	3:G:808:ILE:HG13	1.93	0.69
3:G:874:ILE:HD13	3:G:976:VAL:HG22	1.73	0.69
1:A:177:LEU:N	1:A:182:ARG:HH21	1.89	0.69
1:E:49:LEU:HB3	1:E:50:LYS:HZ2	1.57	0.69
3:C:1212:LEU:HD22	3:C:1239:LEU:HB3	1.74	0.69
3:C:732:TYR:CD2	3:C:738:LEU:HD13	2.28	0.69
4:D:164:ARG:HH12	4:D:167:ARG:NH2	1.90	0.69
1:E:141:ILE:HG22	1:E:142:ILE:HD13	1.75	0.69
3:G:1119:ILE:O	3:G:1123:VAL:HG23	1.93	0.69
3:G:1273:TYR:HD2	3:G:1394:PHE:HD1	1.40	0.69
3:G:387:LEU:HD12	3:G:457:TYR:HE1	1.57	0.69
2:B:121:ILE:HG12	2:B:226:LEU:HD23	1.74	0.68
2:F:414:LEU:O	2:F:417:GLY:N	2.25	0.68
2:F:358:LYS:CD	3:G:1274:ARG:HH22	2.04	0.68
1:A:276:ALA:O	1:A:279:TYR:HB3	1.93	0.68
3:C:1141:LYS:HZ1	3:C:1147:PRO:CD	2.07	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:364:LYS:NZ	3:C:537:LEU:HA	2.07	0.68
4:D:265:LEU:HD13	4:D:298:PRO:HG3	1.76	0.68
1:A:27:TYR:HB2	1:A:63:GLN:HG3	1.75	0.68
3:C:1345:TRP:CE3	3:C:1345:TRP:HA	2.28	0.68
3:C:499:LEU:CD2	3:C:528:VAL:HG22	2.24	0.68
3:C:954:ASN:HD22	3:C:954:ASN:N	1.87	0.68
4:H:175:GLY:O	4:H:176:LEU:HD23	1.94	0.68
4:H:186:GLY:HA3	4:H:371:ARG:NH2	2.08	0.68
1:A:244:LEU:HD13	1:A:256:GLN:HE22	1.58	0.68
3:C:543:SER:HB2	3:C:749:ALA:N	2.08	0.68
4:D:243:LEU:HD22	4:D:253:LEU:HD13	1.74	0.68
3:G:1023:ASN:O	3:G:1026:LYS:HB3	1.94	0.68
3:G:1186:LEU:HD13	3:G:1190:GLN:HB3	1.74	0.68
3:G:1245:GLN:O	3:G:1248:VAL:HB	1.93	0.68
3:G:366:TRP:HB2	3:G:373:HIS:CD2	2.28	0.68
3:G:549:ASN:HD21	3:G:552:ASN:N	1.92	0.68
3:G:873:ASN:ND2	3:G:878:THR:CG2	2.57	0.68
2:B:75:GLU:HB3	2:B:130:PHE:HZ	1.59	0.68
2:B:258:THR:HG21	2:B:261:ASP:OD1	1.94	0.68
3:C:512:SER:HB2	3:C:664:ARG:O	1.93	0.68
2:F:178:LEU:O	2:F:179:GLY:O	2.12	0.68
3:G:1009:ASN:OD1	3:G:1011:ASN:ND2	2.27	0.68
3:G:1340:LYS:HD3	3:G:1383:TYR:CD1	2.28	0.68
3:G:350:GLU:HB3	3:G:359:VAL:HG22	1.74	0.68
2:B:434:VAL:HG23	2:B:436:ASP:H	1.58	0.68
3:C:1007:MET:SD	3:C:1047:LEU:HD21	2.33	0.68
4:D:327:PHE:HZ	4:D:552:LEU:O	1.77	0.68
1:E:106:LEU:HD21	1:E:185:ILE:HD13	1.75	0.68
1:E:120:ARG:HB3	1:E:120:ARG:NH1	2.09	0.68
1:E:89:ASN:N	1:E:89:ASN:HD22	1.91	0.68
1:A:87:ARG:HD3	1:A:90:GLN:NE2	2.08	0.68
3:C:354:ASN:N	3:C:354:ASN:HD22	1.90	0.68
3:C:496:PRO:O	3:C:497:CYS:HB3	1.93	0.68
2:F:287:CYS:SG	2:F:288:MET:HE3	2.33	0.68
3:G:395:LYS:HB2	3:G:408:ILE:HD11	1.74	0.68
1:A:87:ARG:HD3	1:A:90:GLN:HE21	1.59	0.68
2:B:178:LEU:O	2:B:179:GLY:O	2.11	0.68
2:B:376:PRO:HD2	2:B:388:HIS:CD2	2.29	0.68
3:C:865:TYR:O	3:C:869:ILE:HG13	1.94	0.68
2:F:103:HIS:NE2	2:F:107:ARG:NE	2.40	0.68
3:G:1230:ILE:CD1	3:G:1238:TRP:HH2	2.06	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:H:474:THR:HG21	4:H:518:MET:HE2	1.75	0.68
1:E:192:VAL:HG23	1:E:302:PHE:CE1	2.28	0.68
3:G:651:ILE:CG2	3:G:652:ASN:N	2.57	0.68
4:H:573:ARG:O	4:H:593:VAL:HG13	1.94	0.68
2:B:443:HIS:HE1	2:B:445:ASN:H	1.38	0.68
4:D:400:ASP:O	4:D:403:LYS:N	2.26	0.68
2:F:259:GLY:O	2:F:260:GLN:HB2	1.94	0.68
3:G:1182:ASP:N	3:G:1182:ASP:OD2	2.25	0.68
3:G:1050:LEU:HD11	3:G:1222:ARG:O	1.93	0.68
3:G:416:GLU:OE1	3:G:471:GLU:N	2.27	0.68
3:G:364:LYS:NZ	3:G:537:LEU:HD23	2.01	0.68
3:G:957:TYR:O	3:G:959:CYS:N	2.27	0.68
4:H:343:LEU:HD11	4:H:571:PHE:HD1	1.59	0.68
1:A:202:VAL:HG11	1:A:298:LEU:HD12	1.77	0.67
2:B:369:LYS:O	2:B:371:ILE:N	2.27	0.67
3:C:1116:LEU:HA	3:C:1119:ILE:CG1	2.24	0.67
3:C:549:ASN:HD21	3:C:552:ASN:N	1.92	0.67
2:F:23:PRO:C	2:F:25:CYS:N	2.47	0.67
3:G:1035:LEU:O	3:G:1037:GLU:HG3	1.93	0.67
4:H:334:ASP:HA	4:H:337:PHE:CD2	2.28	0.67
2:B:410:GLN:NE2	2:B:426:LYS:HE3	2.09	0.67
3:C:1105:ARG:HA	3:C:1108:ILE:CD1	2.24	0.67
3:C:549:ASN:HD21	3:C:552:ASN:H	1.41	0.67
4:D:467:VAL:HG11	4:D:576:LEU:HD13	1.76	0.67
1:E:162:ARG:HG3	1:E:327:THR:CG2	2.22	0.67
2:F:295:LEU:O	2:F:295:LEU:HD12	1.93	0.67
3:G:990:MET:O	3:G:994:MET:HG3	1.93	0.67
4:H:209:MET:SD	4:H:209:MET:O	2.52	0.67
2:B:39:LEU:HD11	2:B:245:ARG:HD2	1.76	0.67
3:C:1035:LEU:O	3:C:1037:GLU:HG3	1.95	0.67
3:C:1235:ILE:N	3:C:1235:ILE:HD12	2.09	0.67
3:C:1441:LEU:HD23	3:C:1441:LEU:N	2.10	0.67
3:C:395:LYS:HB2	3:C:408:ILE:HD11	1.76	0.67
2:F:389:SER:OG	2:F:397:LYS:NZ	2.26	0.67
3:C:651:ILE:HG23	3:C:652:ASN:N	2.09	0.67
1:E:232:ASP:OD2	1:E:235:GLU:HB3	1.95	0.67
1:E:24:SER:HA	1:E:63:GLN:OE1	1.95	0.67
3:G:784:ARG:CD	3:G:784:ARG:H	2.08	0.67
3:C:340:VAL:HG23	3:C:501:VAL:O	1.95	0.67
3:C:628:LYS:HG2	3:G:933:ASP:CB	2.23	0.67
4:D:571:PHE:CD2	4:D:571:PHE:N	2.63	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:352:PHE:O	1:E:355:ARG:HB3	1.94	0.67
2:F:313:LEU:CB	2:F:318:LEU:HD12	2.24	0.67
3:G:543:SER:H	3:G:749:ALA:CB	2.03	0.67
3:G:362:PHE:CZ	3:G:665:LEU:HG	2.28	0.67
3:G:1360:LEU:HD22	4:H:216:ILE:CG2	2.23	0.67
4:H:267:ASN:O	4:H:288:LEU:HD12	1.95	0.67
2:B:53:LEU:HD21	2:B:124:GLU:OE1	1.94	0.67
2:B:255:HIS:CG	2:B:256:SER:N	2.62	0.67
2:B:32:PRO:HA	2:B:104:PHE:CE2	2.29	0.67
3:C:1047:LEU:HD13	3:C:1057:ALA:HB2	1.77	0.67
3:C:1076:GLY:C	3:C:1077:LEU:HD23	2.15	0.67
3:C:549:ASN:ND2	3:C:552:ASN:H	1.92	0.67
3:C:695:ILE:HD12	3:C:781:MET:O	1.95	0.67
2:F:163:GLU:HG3	2:F:178:LEU:HD22	1.75	0.67
3:G:1146:TYR:CE2	3:G:1155:VAL:HG21	2.29	0.67
4:H:240:PHE:CD1	4:H:254:LEU:HB2	2.29	0.67
1:A:95:LYS:NZ	3:C:881:ARG:H	1.92	0.67
3:C:1139:LEU:CD1	3:C:1139:LEU:H	2.08	0.67
3:C:583:PHE:CE2	3:C:625:LYS:HE2	2.29	0.67
3:C:693:VAL:HG11	3:C:755:ILE:HG22	1.75	0.67
3:C:788:ASN:O	3:C:789:GLU:C	2.33	0.67
1:E:135:MET:SD	1:E:164:GLY:HA2	2.35	0.67
2:F:170:SER:CB	2:F:171:PRO:HD2	2.24	0.67
3:G:1095:VAL:O	3:G:1097:GLY:N	2.28	0.67
3:G:1251:TYR:HD1	3:G:1254:ASP:H	1.42	0.67
2:B:427:TYR:O	2:B:431:ILE:HG22	1.94	0.67
3:C:1141:LYS:HZ1	3:C:1147:PRO:HD3	1.58	0.67
3:C:843:LEU:HB3	3:C:981:ARG:HG2	1.76	0.67
4:D:243:LEU:HB3	4:D:284:ILE:CD1	2.25	0.67
3:G:865:TYR:HD2	3:G:865:TYR:N	1.92	0.67
3:G:843:LEU:H	3:G:981:ARG:HG2	1.59	0.67
4:H:227:LEU:HD23	4:H:301:VAL:HG11	1.77	0.67
3:C:597:ALA:O	3:C:601:VAL:HG23	1.95	0.67
3:C:957:TYR:O	3:C:959:CYS:N	2.28	0.67
3:G:1141:LYS:HZ2	3:G:1147:PRO:HD3	1.58	0.67
3:G:351:ASP:OD2	3:G:354:ASN:HB2	1.95	0.67
3:G:762:LEU:HD23	3:G:762:LEU:N	2.08	0.67
4:H:367:ILE:O	4:H:372:PRO:HD2	1.95	0.67
3:C:874:ILE:HD13	3:C:976:VAL:CG2	2.24	0.67
4:H:360:LEU:CD1	4:H:409:ILE:HD11	2.16	0.67
1:A:234:LEU:CD2	1:A:243:ILE:HD12	2.26	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:443:ILE:O	3:C:446:VAL:HG23	1.94	0.66
3:C:876:PHE:CZ	3:C:960:LEU:HD21	2.29	0.66
3:C:953:ALA:O	3:C:956:MET:N	2.26	0.66
4:D:538:LEU:HG	4:D:540:ILE:HG13	1.77	0.66
4:D:571:PHE:HD2	4:D:571:PHE:N	1.93	0.66
1:E:382:ASP:OD1	1:E:385:LYS:HD2	1.95	0.66
1:A:213:ARG:HG2	1:A:213:ARG:HH11	1.59	0.66
2:B:45:LEU:CD1	2:B:101:ILE:HG21	2.25	0.66
3:C:362:PHE:CD2	3:C:687:GLY:HA3	2.30	0.66
3:C:903:ASP:OD2	3:C:906:LEU:HD12	1.95	0.66
3:C:589:PRO:CG	3:C:592:CYS:HB2	2.24	0.66
2:F:308:GLN:CD	2:F:370:ILE:HD13	2.16	0.66
3:G:542:PHE:CD2	3:G:542:PHE:O	2.49	0.66
3:G:622:PHE:CE2	3:G:647:LEU:HD21	2.27	0.66
4:H:257:ILE:HD11	4:H:302:VAL:CG1	2.25	0.66
4:H:426:LEU:HD12	4:H:518:MET:HE2	1.77	0.66
4:H:341:MET:HE2	4:H:573:ARG:CD	2.25	0.66
3:C:1111:ASN:O	3:C:1114:LYS:HB3	1.95	0.66
4:D:171:VAL:CG2	4:D:595:VAL:HG12	2.25	0.66
1:E:262:SER:HB2	1:E:268:ARG:NE	2.08	0.66
3:G:991:VAL:HG12	3:G:996:LEU:O	1.95	0.66
4:H:286:VAL:HG11	4:H:304:MET:HE1	1.76	0.66
3:C:1009:ASN:HD21	3:C:1011:ASN:HD21	1.41	0.66
3:C:1095:VAL:O	3:C:1097:GLY:N	2.28	0.66
3:C:1437:ALA:O	3:C:1440:PHE:N	2.29	0.66
3:C:492:LYS:O	3:C:494:LYS:HD2	1.96	0.66
3:C:747:LYS:O	3:C:751:PHE:CD1	2.49	0.66
1:E:159:TYR:HE2	1:E:329:ARG:HB2	1.60	0.66
1:E:162:ARG:CZ	1:E:326:LYS:HD3	2.25	0.66
2:F:313:LEU:HB3	2:F:318:LEU:CD1	2.24	0.66
3:G:935:ASN:ND2	3:G:935:ASN:C	2.49	0.66
4:H:342:VAL:HG21	4:H:464:ILE:HD13	1.78	0.66
1:A:50:LYS:NZ	1:A:73:MET:O	2.25	0.66
2:B:336:MET:HE2	2:B:340:LYS:HD3	1.76	0.66
3:C:364:LYS:HZ2	3:C:537:LEU:HA	1.60	0.66
3:C:759:LEU:N	3:C:759:LEU:HD23	2.09	0.66
3:C:778:ARG:HA	3:C:781:MET:SD	2.35	0.66
4:D:240:PHE:CD1	4:D:254:LEU:HB2	2.30	0.66
1:E:221:LYS:HB3	1:E:222:TYR:CD1	2.30	0.66
1:E:68:LYS:CE	1:E:72:LYS:HD3	2.25	0.66
2:F:312:PHE:O	2:F:316:ILE:HG23	1.94	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:108:PHE:HD1	1:A:167:CYS:SG	2.19	0.66
3:C:1236:ALA:HB1	3:C:1246:PHE:CD2	2.30	0.66
2:B:358:LYS:NZ	3:C:1274:ARG:NH2	2.43	0.66
3:C:350:GLU:OE2	3:C:484:LEU:HB2	1.94	0.66
3:C:364:LYS:HE3	3:C:632:ASP:OD1	1.95	0.66
3:C:944:ILE:CG1	3:C:947:LYS:HZ1	2.08	0.66
2:F:184:TYR:HE1	2:F:210:PRO:C	1.99	0.66
2:F:243:ASP:OD1	2:F:245:ARG:N	2.28	0.66
3:G:1036:LEU:HD12	3:G:1037:GLU:H	1.60	0.66
3:G:1186:LEU:CD2	3:G:1187:THR:H	2.08	0.66
3:G:865:TYR:N	3:G:866:PRO:CD	2.59	0.66
3:G:932:GLN:HE21	3:G:933:ASP:H	1.43	0.66
3:C:1116:LEU:HA	3:C:1119:ILE:HG12	1.78	0.66
1:E:8:GLU:O	1:E:12:LEU:HG	1.96	0.66
1:E:146:LEU:O	1:E:152:PHE:HB2	1.95	0.66
1:E:384:LYS:HA	1:E:389:ALA:HB2	1.78	0.66
3:G:1185:ASN:HD22	3:G:1185:ASN:C	1.98	0.66
3:G:1235:ILE:HA	3:G:1238:TRP:CE3	2.30	0.66
3:G:375:SER:HB2	3:G:514:CYS:SG	2.36	0.66
3:G:564:VAL:HG12	3:G:565:HIS:H	1.61	0.66
3:G:788:ASN:HD22	3:G:956:MET:HE3	1.60	0.66
1:A:154:HIS:N	1:A:154:HIS:CD2	2.60	0.66
2:B:156:ASP:HA	2:B:159:LYS:HB3	1.76	0.66
2:B:282:LYS:HA	2:B:431:ILE:HD11	1.78	0.66
1:E:142:ILE:O	1:E:146:LEU:HG	1.95	0.66
1:E:150:PHE:HB3	1:E:152:PHE:CD1	2.30	0.66
1:E:156:LEU:HD11	1:E:333:PRO:HB3	1.77	0.66
3:G:1206:ILE:HD13	3:G:1207:ASP:H	1.60	0.66
3:G:1250:HIS:ND1	3:G:1251:TYR:N	2.42	0.66
3:G:745:THR:HG22	3:G:746:TRP:N	2.09	0.66
3:G:769:THR:HG23	3:G:774:ASN:OD1	1.95	0.66
3:G:903:ASP:OD1	3:G:905:SER:N	2.28	0.66
3:G:947:LYS:O	3:G:950:LYS:HB3	1.96	0.66
4:H:259:CYS:HB2	4:H:265:LEU:HD12	1.78	0.66
4:H:296:LEU:HD23	4:H:300:GLN:NE2	2.11	0.66
2:B:167:VAL:HG13	2:B:173:LEU:CD2	2.25	0.66
3:C:1122:ASN:HA	3:C:1125:ASN:HD21	1.58	0.66
3:C:1085:CYS:SG	3:C:1132:GLN:O	2.48	0.66
3:C:341:PHE:HE2	3:C:365:VAL:HG11	1.61	0.66
3:C:618:LEU:HD23	3:C:618:LEU:C	2.16	0.66
3:C:586:VAL:HG11	3:C:742:LEU:CD1	2.26	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:157:TRP:HA	1:E:166:HIS:O	1.95	0.66
1:E:335:ASP:OD1	1:E:338:LYS:HD2	1.96	0.66
2:F:276:ILE:HG23	2:F:284:PHE:HZ	1.60	0.66
3:G:555:ASN:HD22	3:G:555:ASN:N	1.75	0.66
4:H:447:ARG:NH1	4:H:447:ARG:HG2	2.10	0.66
2:B:246:LEU:O	2:B:250:LEU:HD12	1.96	0.65
3:C:1045:LYS:O	3:C:1045:LYS:HG2	1.96	0.65
3:C:1112:ILE:O	3:C:1116:LEU:HD13	1.95	0.65
4:D:548:VAL:HG13	4:D:557:VAL:HG22	1.79	0.65
2:F:158:GLU:HG2	2:F:162:ARG:NH2	2.10	0.65
2:F:369:LYS:O	2:F:371:ILE:N	2.29	0.65
3:G:1395:TYR:O	3:G:1398:ILE:HG13	1.96	0.65
3:G:1395:TYR:HA	3:G:1398:ILE:CD1	2.25	0.65
3:G:876:PHE:HA	3:G:881:ARG:NH1	2.11	0.65
1:A:235:GLU:C	1:A:236:ASN:HD22	1.98	0.65
2:B:421:GLN:HG2	6:B:601:SF4:S4	2.36	0.65
3:C:1047:LEU:HG	3:C:1049:LEU:HD21	1.77	0.65
4:D:445:LEU:CD1	4:D:450:LYS:HZ3	2.09	0.65
4:D:170:VAL:CG1	4:D:594:GLN:HE21	2.00	0.65
1:E:48:THR:OG1	1:E:77:LYS:HB2	1.96	0.65
3:G:1335:ARG:NH2	4:H:433:PRO:HD3	2.11	0.65
3:G:861:PHE:HD1	3:G:864:LEU:HD22	1.61	0.65
3:G:767:GLN:OE1	3:G:945:ARG:HB2	1.96	0.65
3:C:1250:HIS:CE1	3:C:1251:TYR:HB2	2.31	0.65
3:C:653:VAL:HG12	3:C:654:CYS:N	2.11	0.65
4:D:212:LYS:HZ2	4:D:215:ASP:CG	1.99	0.65
2:F:22:TYR:CB	2:F:84:SER:OG	2.44	0.65
3:G:1058:LEU:CD2	3:G:1100:LEU:HD22	2.26	0.65
3:G:1149:LYS:HD3	3:G:1150:LYS:H	1.60	0.65
3:G:513:TRP:HB3	3:G:627:HIS:NE2	2.11	0.65
3:G:440:ALA:O	3:G:881:ARG:NH2	2.29	0.65
4:H:567:VAL:CG1	4:H:568:GLY:H	2.09	0.65
2:B:104:PHE:HE1	2:B:107:ARG:NH2	1.93	0.65
2:B:23:PRO:C	2:B:25:CYS:N	2.49	0.65
3:C:1044:PHE:HA	3:C:1058:LEU:O	1.96	0.65
3:C:491:ARG:CZ	3:C:524:ASP:HA	2.26	0.65
3:C:499:LEU:HD22	3:C:528:VAL:HG22	1.78	0.65
2:F:114:GLU:CD	2:F:117:ARG:HH12	2.00	0.65
3:G:1044:PHE:HA	3:G:1058:LEU:O	1.96	0.65
3:G:1157:VAL:O	3:G:1161:ILE:HG13	1.96	0.65
3:G:1187:THR:O	3:G:1191:ARG:HG3	1.96	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:468:LEU:CD2	3:G:476:VAL:HG11	2.22	0.65
3:G:953:ALA:O	3:G:956:MET:N	2.28	0.65
4:H:464:ILE:HD12	4:H:469:PHE:CE1	2.31	0.65
4:H:531:LEU:N	4:H:531:LEU:HD23	2.11	0.65
3:C:1201:GLN:HE21	3:C:1204:LEU:HG	1.61	0.65
3:C:375:SER:HB2	3:C:514:CYS:SG	2.36	0.65
3:G:484:LEU:O	3:G:488:LEU:HD23	1.96	0.65
3:G:1364:PHE:CB	4:H:217:ARG:HE	2.07	0.65
4:H:494:ARG:NH1	4:H:494:ARG:HG3	2.09	0.65
1:A:212:ILE:O	1:A:216:ILE:HG13	1.95	0.65
4:D:593:VAL:HG12	4:D:594:GLN:N	2.10	0.65
2:F:342:ASP:HA	2:F:346:SER:HB3	1.78	0.65
3:G:1201:GLN:NE2	3:G:1204:LEU:HG	2.11	0.65
3:G:558:ILE:O	3:G:558:ILE:HD12	1.97	0.65
4:H:156:THR:N	4:H:157:PRO:CD	2.59	0.65
4:H:198:CYS:HB2	4:H:199:PRO:CD	2.26	0.65
3:C:1242:ASP:O	3:C:1246:PHE:HB2	1.96	0.65
3:C:974:ALA:HA	3:C:977:THR:OG1	1.97	0.65
4:D:224:ILE:HD13	4:D:256:GLN:HB3	1.79	0.65
2:F:192:LEU:HA	2:F:195:PHE:CE2	2.31	0.65
3:G:1025:VAL:O	3:G:1029:VAL:HG23	1.96	0.65
3:G:1047:LEU:HD13	3:G:1057:ALA:HB2	1.79	0.65
3:G:499:LEU:CD2	3:G:528:VAL:HG22	2.27	0.65
1:A:110:ILE:HG12	1:A:305:LEU:HD21	1.79	0.65
2:B:362:TYR:C	2:B:362:TYR:HD2	2.00	0.65
3:C:775:ILE:O	3:C:775:ILE:HG22	1.95	0.65
1:E:68:LYS:HE3	1:E:72:LYS:NZ	2.10	0.65
4:H:445:LEU:HB2	4:H:450:LYS:NZ	2.12	0.65
4:H:458:GLU:OE1	4:H:472:THR:HA	1.97	0.65
4:H:574:LEU:HG	4:H:593:VAL:HG22	1.79	0.65
3:C:858:LEU:HD13	3:C:1007:MET:CG	2.26	0.65
3:C:1157:VAL:HG21	3:C:1177:TYR:CB	2.27	0.65
3:C:1233:VAL:O	3:C:1237:THR:HG23	1.97	0.65
3:C:522:LYS:HG3	3:C:525:LEU:HG	1.79	0.65
3:C:556:GLU:HA	3:C:650:ARG:HE	1.61	0.65
3:C:799:ASN:O	3:C:801:TYR:HD1	1.80	0.65
4:D:257:ILE:CG2	4:D:258:GLY:N	2.49	0.65
4:D:394:LEU:HD13	4:D:401:ILE:CD1	2.26	0.65
4:D:445:LEU:HD13	4:D:450:LYS:NZ	2.12	0.65
3:G:1135:ILE:HD12	3:G:1177:TYR:CE1	2.31	0.65
3:G:464:LEU:HD13	3:G:468:LEU:CD2	2.26	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:669:ASN:N	3:G:669:ASN:ND2	2.44	0.65
2:B:285:PRO:HG2	2:B:287:CYS:SG	2.37	0.65
3:C:1219:VAL:O	3:C:1222:ARG:HG2	1.97	0.65
3:C:488:LEU:HD11	3:C:775:ILE:HD11	1.78	0.65
3:C:607:VAL:O	3:C:609:VAL:N	2.28	0.65
3:C:540:MET:HE3	3:C:631:PRO:HG3	1.79	0.65
3:C:865:TYR:N	3:C:865:TYR:CD2	2.65	0.65
2:F:309:TYR:O	2:F:313:LEU:HG	1.97	0.65
3:G:1322:PHE:HD1	3:G:1325:GLN:HE22	1.43	0.65
3:G:555:ASN:ND2	3:G:555:ASN:N	2.31	0.65
4:H:465:ASN:O	4:H:467:VAL:HG23	1.96	0.65
1:A:202:VAL:HG11	1:A:298:LEU:CD1	2.27	0.64
3:C:1108:ILE:O	3:C:1112:ILE:HG13	1.97	0.64
4:D:356:THR:OG1	4:D:358:ASP:OD2	2.15	0.64
2:F:437:CYS:SG	2:F:438:GLY:N	2.70	0.64
3:G:1118:GLU:O	3:G:1119:ILE:C	2.36	0.64
1:A:96:LEU:O	3:C:880:GLN:NE2	2.31	0.64
3:C:1400:ASP:HA	3:C:1434:LYS:HD3	1.80	0.64
3:C:857:LEU:HD21	3:C:859:LEU:CD2	2.27	0.64
4:D:532:PRO:HG2	4:D:533:VAL:H	1.62	0.64
1:E:68:LYS:HE3	1:E:72:LYS:HD3	1.78	0.64
2:F:75:GLU:HB3	2:F:130:PHE:CZ	2.27	0.64
3:G:645:GLU:O	3:G:646:VAL:C	2.35	0.64
3:G:794:HIS:O	3:G:797:TYR:HB2	1.97	0.64
3:G:855:PHE:HE2	3:G:1045:LYS:HG3	1.62	0.64
3:G:875:CYS:SG	3:G:877:THR:N	2.69	0.64
2:B:94:GLU:HG3	2:B:95:PRO:CD	2.27	0.64
3:C:1038:ILE:HG13	3:C:1039:ASP:H	1.60	0.64
3:C:1279:PHE:CE1	3:C:1280:LYS:O	2.50	0.64
3:C:344:TYR:HB2	3:C:498:TRP:CE2	2.32	0.64
3:C:599:LYS:HE2	3:C:611:VAL:HG13	1.78	0.64
4:D:383:ASP:OD1	4:D:385:LYS:N	2.31	0.64
3:G:1058:LEU:HD21	3:G:1100:LEU:HD22	1.80	0.64
2:B:62:SER:C	2:B:63:TYR:HD2	2.01	0.64
3:C:555:ASN:HD22	3:C:555:ASN:N	1.86	0.64
2:F:355:LYS:HG2	3:G:1247:ARG:CZ	2.27	0.64
3:G:589:PRO:CG	3:G:592:CYS:HB2	2.26	0.64
3:G:349:TYR:HD1	3:G:665:LEU:HD12	1.62	0.64
3:G:760:ASN:O	3:G:763:PRO:HD2	1.96	0.64
3:G:866:PRO:HG3	3:G:954:ASN:HA	1.79	0.64
2:B:49:ARG:NH1	2:B:124:GLU:OE2	2.31	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:228:LYS:O	2:B:231:ALA:HB3	1.98	0.64
2:B:422:VAL:HA	2:B:425:GLN:HG3	1.80	0.64
2:B:94:GLU:CB	2:B:95:PRO:HD3	2.27	0.64
3:C:1235:ILE:O	3:C:1238:TRP:HB2	1.96	0.64
3:C:903:ASP:CG	3:C:905:SER:H	2.01	0.64
3:G:1221:ALA:O	3:G:1223:ILE:N	2.30	0.64
3:G:1437:ALA:O	3:G:1440:PHE:N	2.29	0.64
3:G:522:LYS:HG3	3:G:525:LEU:HD11	1.79	0.64
3:G:873:ASN:HD21	3:G:878:THR:CG2	2.10	0.64
4:H:477:LEU:HD11	4:H:499:LEU:HG	1.79	0.64
3:C:1157:VAL:HG21	3:C:1177:TYR:HB3	1.78	0.64
3:C:529:ILE:HG23	3:C:529:ILE:O	1.96	0.64
3:C:720:ARG:HD3	3:C:721:VAL:O	1.97	0.64
4:D:164:ARG:HH12	4:D:167:ARG:HH21	1.44	0.64
1:E:9:LEU:HD23	1:E:9:LEU:O	1.97	0.64
2:F:199:LYS:O	2:F:200:VAL:HG13	1.97	0.64
3:G:1185:ASN:C	3:G:1185:ASN:ND2	2.50	0.64
3:G:853:ASP:HB3	3:G:854:LYS:HD3	1.77	0.64
4:H:286:VAL:HG11	4:H:304:MET:CE	2.28	0.64
3:C:1050:LEU:HD22	3:C:1226:PRO:HG2	1.78	0.64
3:C:346:LEU:HB3	3:C:689:MET:HE2	1.79	0.64
3:C:650:ARG:O	3:C:654:CYS:SG	2.54	0.64
3:C:631:PRO:O	3:C:688:ARG:NH1	2.31	0.64
4:D:291:LEU:HD11	4:D:317:THR:C	2.18	0.64
1:E:335:ASP:HB3	1:E:338:LYS:HG2	1.79	0.64
2:F:45:LEU:HD12	2:F:101:ILE:HG21	1.80	0.64
2:F:171:PRO:C	2:F:173:LEU:H	2.00	0.64
3:G:1128:VAL:HG11	3:G:1133:PHE:HE2	1.62	0.64
3:G:549:ASN:ND2	3:G:552:ASN:H	1.95	0.64
3:G:618:LEU:HD23	3:G:619:LEU:CD2	2.28	0.64
2:B:23:PRO:HG3	2:B:93:TYR:OH	1.97	0.64
2:B:300:HIS:ND1	2:B:301:LEU:N	2.45	0.64
2:B:368:LEU:HD21	2:B:372:LEU:HD12	1.78	0.64
3:C:856:ILE:HG21	3:C:1007:MET:HG2	1.79	0.64
3:C:1143:PRO:HB2	3:C:1159:LEU:CD2	2.28	0.64
3:C:411:LYS:HD2	3:C:411:LYS:H	1.62	0.64
3:C:721:VAL:HG12	3:C:722:VAL:N	2.13	0.64
3:C:943:ASP:OD2	3:C:947:LYS:NZ	2.31	0.64
4:D:156:THR:N	4:D:157:PRO:CD	2.59	0.64
4:D:257:ILE:HD12	4:D:270:VAL:CG1	2.28	0.64
4:D:270:VAL:HG12	4:D:271:ILE:N	2.12	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:1362:LEU:HD22	4:D:273:GLU:HG2	1.79	0.64
1:E:139:ILE:HD11	1:E:334:ILE:CD1	2.28	0.64
1:E:204:LEU:HD22	1:E:208:ILE:HD11	1.80	0.64
2:F:158:GLU:HG2	2:F:162:ARG:HH21	1.61	0.64
2:F:316:ILE:N	2:F:445:ASN:HD21	1.95	0.64
3:G:1046:SER:HB2	3:G:1058:LEU:CD1	2.28	0.64
3:G:344:TYR:HB2	3:G:498:TRP:CE2	2.33	0.64
4:H:426:LEU:CD1	4:H:518:MET:HE2	2.28	0.64
3:C:796:PHE:CZ	3:C:910:ILE:HG21	2.33	0.64
3:G:1422:PHE:CD2	3:G:1422:PHE:N	2.65	0.64
4:H:224:ILE:CD1	4:H:256:GLN:HB3	2.28	0.64
1:A:108:PHE:HZ	1:A:185:ILE:HG21	1.62	0.64
2:B:74:LEU:HD23	2:B:130:PHE:CG	2.33	0.64
3:C:1372:PRO:HA	3:C:1375:MET:CE	2.27	0.64
3:C:549:ASN:ND2	3:C:552:ASN:N	2.46	0.64
1:E:89:ASN:ND2	1:E:89:ASN:H	1.95	0.64
3:G:599:LYS:HE2	3:G:611:VAL:HG13	1.78	0.64
3:G:788:ASN:O	3:G:789:GLU:C	2.35	0.64
4:H:423:VAL:O	4:H:423:VAL:HG12	1.97	0.64
4:H:532:PRO:HG2	4:H:533:VAL:N	2.13	0.64
1:A:160:SER:HB3	1:A:166:HIS:NE2	2.13	0.63
2:B:47:ILE:HD11	3:C:1266:GLN:CB	2.23	0.63
3:C:946:GLN:NE2	3:C:947:LYS:HG3	2.14	0.63
4:D:193:LEU:CD1	4:D:462:LEU:HD21	2.25	0.63
2:F:156:ASP:HA	2:F:159:LYS:HB3	1.80	0.63
3:G:1198:LEU:HG	3:G:1199:GLN:N	2.13	0.63
3:G:512:SER:HB2	3:G:664:ARG:O	1.98	0.63
3:G:867:SER:O	3:G:870:GLN:HB2	1.98	0.63
3:G:792:LEU:HD12	3:G:967:PHE:CD1	2.33	0.63
3:G:975:LEU:O	3:G:975:LEU:HD12	1.98	0.63
4:H:202:LEU:HD22	4:H:457:SER:CB	2.24	0.63
4:H:260:ASP:OD2	4:H:269:SER:HB3	1.98	0.63
4:H:495:PHE:HA	4:H:498:ILE:HD12	1.80	0.63
2:B:105:ILE:HG22	2:B:106:LEU:N	2.14	0.63
2:B:120:PHE:CD2	2:B:230:LEU:HD11	2.33	0.63
2:B:293:LYS:HE2	2:B:297:GLU:CG	2.27	0.63
3:C:1115:ARG:HG3	3:C:1115:ARG:NH1	2.11	0.63
3:C:1139:LEU:HD13	3:C:1139:LEU:H	1.64	0.63
3:C:1160:TRP:HE3	3:C:1161:ILE:HG13	1.62	0.63
3:C:360:PHE:HE2	3:C:379:MET:HG3	1.62	0.63
4:D:227:LEU:HD23	4:D:301:VAL:HG11	1.79	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:1267:LEU:N	3:G:1267:LEU:HD12	2.12	0.63
3:G:1273:TYR:CD2	3:G:1394:PHE:HD1	2.16	0.63
3:G:507:LEU:N	3:G:507:LEU:HD12	2.13	0.63
3:G:604:LYS:HD3	3:G:604:LYS:C	2.18	0.63
2:B:118:ARG:HH11	2:B:118:ARG:CG	2.11	0.63
2:B:421:GLN:NE2	2:B:442:ASN:HA	2.12	0.63
3:C:1211:TYR:HA	3:C:1215:GLN:HB2	1.80	0.63
3:C:1244:THR:HA	3:C:1247:ARG:CZ	2.29	0.63
3:C:353:TYR:HD2	3:C:354:ASN:HD21	1.46	0.63
3:C:972:LEU:H	3:C:972:LEU:CD2	2.10	0.63
4:D:302:VAL:CG2	4:D:304:MET:HG3	2.27	0.63
2:F:22:TYR:HB3	2:F:23:PRO:CD	2.28	0.63
3:G:1098:GLN:OE1	3:G:1098:GLN:HA	1.98	0.63
3:G:843:LEU:HD23	3:G:984:LEU:HB3	1.80	0.63
4:H:385:LYS:HD3	4:H:427:ARG:NH2	2.13	0.63
2:B:163:GLU:HG3	2:B:178:LEU:CD2	2.28	0.63
1:E:110:ILE:HD11	1:E:157:TRP:HZ3	1.63	0.63
2:F:228:LYS:O	2:F:231:ALA:HB3	1.98	0.63
2:F:309:TYR:CE1	2:F:313:LEU:HD21	2.34	0.63
2:F:235:ARG:HD3	3:G:898:ILE:HB	1.79	0.63
3:C:1362:LEU:N	3:C:1362:LEU:HD13	2.14	0.63
3:C:364:LYS:HE3	3:C:632:ASP:CG	2.19	0.63
3:C:990:MET:HG2	3:C:994:MET:HE2	1.80	0.63
3:G:1135:ILE:HD12	3:G:1177:TYR:HE1	1.63	0.63
3:G:1247:ARG:O	3:G:1250:HIS:HB3	1.98	0.63
2:B:171:PRO:C	2:B:173:LEU:H	2.00	0.63
2:B:199:LYS:O	2:B:200:VAL:HG13	1.99	0.63
2:B:78:LEU:HD21	2:B:131:ARG:NH2	2.11	0.63
3:C:1068:TYR:CD2	3:C:1068:TYR:C	2.72	0.63
3:C:1250:HIS:HE1	3:C:1254:ASP:HB3	1.64	0.63
3:C:540:MET:CE	3:C:631:PRO:HG3	2.29	0.63
3:C:648:LEU:C	3:C:651:ILE:HG22	2.18	0.63
3:C:650:ARG:HH12	3:C:653:VAL:HG11	1.63	0.63
3:C:863:SER:OG	3:C:866:PRO:HG2	1.99	0.63
3:G:1135:ILE:HG21	3:G:1177:TYR:OH	1.99	0.63
3:G:1148:ASP:OD1	3:G:1151:SER:HB2	1.98	0.63
3:G:659:TRP:CD1	3:G:659:TRP:N	2.67	0.63
3:G:922:ARG:HH12	3:G:950:LYS:HD2	1.64	0.63
4:H:346:CYS:HB2	4:H:378:PHE:HB2	1.81	0.63
1:A:37:LYS:HG3	1:A:38:ASN:N	2.09	0.63
3:C:479:THR:OG1	3:C:480:ASN:N	2.30	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:852:TYR:HB3	3:C:856:ILE:HD11	1.79	0.63
1:A:95:LYS:HZ2	3:C:881:ARG:H	1.47	0.63
4:D:447:ARG:HA	4:D:447:ARG:NH1	2.13	0.63
2:F:104:PHE:HE1	2:F:107:ARG:NH2	1.97	0.63
2:F:209:VAL:HG12	2:F:210:PRO:CD	2.23	0.63
2:F:94:GLU:CB	2:F:95:PRO:HD3	2.28	0.63
3:G:1250:HIS:HE1	3:G:1254:ASP:HB3	1.62	0.63
3:G:364:LYS:NZ	3:G:538:VAL:HG23	2.13	0.63
4:H:540:ILE:HD12	4:H:540:ILE:H	1.63	0.63
1:A:141:ILE:HD12	1:A:303:PRO:HD3	1.80	0.63
1:A:9:LEU:HD11	1:A:325:PRO:HA	1.80	0.63
2:B:358:LYS:NZ	3:C:1274:ARG:HH22	1.96	0.63
4:D:447:ARG:HH11	4:D:447:ARG:HG2	1.63	0.63
1:E:144:ARG:HD3	1:E:218:ILE:CD1	2.29	0.63
1:E:383:TYR:CE1	1:E:392:VAL:HG11	2.33	0.63
2:F:258:THR:CG2	2:F:366:SER:HB2	2.28	0.63
4:H:199:PRO:O	4:H:200:GLU:C	2.37	0.63
3:C:1118:GLU:O	3:C:1119:ILE:C	2.36	0.63
3:C:1216:ILE:CD1	3:C:1216:ILE:H	2.12	0.63
4:D:469:PHE:HZ	4:D:574:LEU:HD22	1.64	0.63
1:E:137:MET:O	1:E:141:ILE:HG13	1.98	0.63
1:E:212:ILE:O	1:E:216:ILE:HG13	1.99	0.63
1:E:38:ASN:HD22	1:E:38:ASN:N	1.95	0.63
2:F:49:ARG:HG3	2:F:106:LEU:HD12	1.81	0.63
2:F:51:LYS:HE2	2:F:260:GLN:CB	2.29	0.63
3:G:1266:GLN:HG3	3:G:1267:LEU:N	2.13	0.63
3:G:763:PRO:O	3:G:766:LEU:N	2.31	0.63
4:H:198:CYS:SG	4:H:527:VAL:O	2.56	0.63
2:B:112:GLN:O	2:B:117:ARG:NH2	2.31	0.62
3:C:1337:PHE:CD2	3:C:1391:GLN:HG2	2.33	0.62
3:C:760:ASN:C	3:C:763:PRO:HD2	2.20	0.62
4:D:394:LEU:HD13	4:D:401:ILE:HD12	1.80	0.62
4:D:567:VAL:CG1	4:D:568:GLY:H	2.09	0.62
2:F:403:ILE:CG2	2:F:408:ILE:HG12	2.28	0.62
3:G:1426:VAL:HA	3:G:1429:ASP:OD2	1.98	0.62
3:G:591:ASP:O	3:G:591:ASP:OD1	2.17	0.62
3:G:652:ASN:HD22	3:G:670:MET:HE2	1.63	0.62
3:G:795:ALA:O	3:G:798:GLU:N	2.30	0.62
3:C:1084:TRP:HZ2	3:C:1352:THR:HA	1.63	0.62
3:C:587:SER:O	3:C:732:TYR:OH	2.12	0.62
4:D:202:LEU:CD2	4:D:457:SER:HB3	2.24	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:875:CYS:HB2	3:G:912:PRO:HD3	1.81	0.62
3:C:881:ARG:HH11	3:C:972:LEU:HD21	1.64	0.62
1:E:130:LYS:O	1:E:226:TYR:HE1	1.82	0.62
1:E:47:PHE:HE1	1:E:78:ILE:HG23	1.64	0.62
2:F:166:ILE:HD13	2:F:183:ILE:HD13	1.81	0.62
3:G:1095:VAL:CG1	3:G:1112:ILE:HD13	2.28	0.62
3:G:1225:GLU:HB3	3:G:1226:PRO:HD3	1.79	0.62
3:G:1236:ALA:HB1	3:G:1246:PHE:CD2	2.35	0.62
3:G:392:ARG:CZ	3:G:474:SER:HA	2.29	0.62
3:G:500:GLU:OE2	3:G:502:LYS:HE3	1.99	0.62
4:H:384:ALA:O	4:H:390:GLU:HG2	1.98	0.62
1:A:142:ILE:CD1	1:A:189:LEU:HB3	2.28	0.62
2:B:186:ILE:HG22	2:B:187:PRO:HD2	1.81	0.62
3:C:549:ASN:HB3	3:C:554:GLN:HG3	1.82	0.62
3:C:972:LEU:H	3:C:972:LEU:HD23	1.63	0.62
1:E:46:SER:HB3	1:E:316:LEU:HD13	1.82	0.62
3:G:1277:GLU:OE1	3:G:1337:PHE:HZ	1.82	0.62
3:G:799:ASN:O	3:G:801:TYR:HD1	1.83	0.62
4:H:509:TYR:HD1	4:H:520:ILE:HD11	1.63	0.62
1:A:145:ALA:HB2	1:A:211:PHE:HE2	1.65	0.62
2:B:136:PRO:O	2:B:138:ASP:N	2.33	0.62
2:B:49:ARG:HB3	2:B:106:LEU:HD12	1.80	0.62
3:C:345:TRP:CH2	3:C:775:ILE:HG13	2.31	0.62
4:D:445:LEU:CB	4:D:450:LYS:HZ3	2.11	0.62
2:F:311:LEU:O	2:F:313:LEU:N	2.32	0.62
3:G:1186:LEU:HD23	3:G:1187:THR:H	1.64	0.62
3:G:803:VAL:HB	3:G:804:PRO:HD2	1.81	0.62
1:A:167:CYS:SG	1:A:167:CYS:O	2.57	0.62
2:B:56:VAL:HG21	2:B:127:LEU:HD13	1.81	0.62
2:B:441:LEU:HD21	2:B:447:PHE:HD1	1.64	0.62
3:C:1235:ILE:H	3:C:1235:ILE:CD1	2.13	0.62
3:C:863:SER:C	3:C:866:PRO:HD2	2.18	0.62
3:C:876:PHE:HZ	3:C:960:LEU:CD2	2.12	0.62
2:F:393:LEU:O	2:F:397:LYS:HG3	1.98	0.62
3:G:1038:ILE:HG13	3:G:1039:ASP:N	2.14	0.62
3:G:1216:ILE:HD12	3:G:1216:ILE:N	2.14	0.62
3:G:1273:TYR:CE2	3:G:1394:PHE:HA	2.35	0.62
3:G:562:ALA:O	3:G:563:LEU:CD2	2.48	0.62
3:G:903:ASP:OD2	3:G:905:SER:HB3	2.00	0.62
3:G:940:LEU:HD23	3:G:940:LEU:O	1.98	0.62
1:A:234:LEU:HD21	1:A:243:ILE:CD1	2.27	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:276:ILE:HG23	2:B:284:PHE:HZ	1.63	0.62
3:C:439:TYR:CD2	3:C:440:ALA:N	2.68	0.62
3:C:631:PRO:N	3:C:688:ARG:HH12	1.97	0.62
3:C:932:GLN:CD	3:C:933:ASP:H	2.03	0.62
3:C:957:TYR:C	3:C:959:CYS:N	2.53	0.62
3:G:610:GLU:HG2	3:G:621:PHE:CE2	2.35	0.62
2:B:311:LEU:O	2:B:313:LEU:N	2.32	0.62
3:C:344:TYR:HB2	3:C:498:TRP:CD2	2.35	0.62
3:C:795:ALA:O	3:C:798:GLU:N	2.33	0.62
3:G:1111:ASN:O	3:G:1114:LYS:HB3	1.99	0.62
3:G:1314:ASP:O	3:G:1316:LYS:HD2	1.99	0.62
3:G:1405:LEU:C	3:G:1407:LYS:N	2.53	0.62
2:F:37:ILE:O	3:G:1449:VAL:HG23	2.00	0.62
3:G:498:TRP:O	3:G:528:VAL:HG13	1.99	0.62
2:B:368:LEU:CD2	2:B:372:LEU:HD12	2.29	0.62
3:C:1068:TYR:HD2	3:C:1068:TYR:C	2.02	0.62
3:C:1148:ASP:OD1	3:C:1151:SER:HB2	1.99	0.62
3:C:1206:ILE:HD13	3:C:1207:ASP:H	1.65	0.62
3:C:346:LEU:HB3	3:C:689:MET:CE	2.29	0.62
4:D:480:LEU:HD13	4:D:511:LEU:HB2	1.82	0.62
4:H:474:THR:HG21	4:H:518:MET:HE3	1.80	0.62
1:A:210:PRO:HG2	2:B:201:TYR:CE2	2.35	0.62
2:B:258:THR:HG1	2:B:261:ASP:H	1.48	0.62
3:C:1135:ILE:HG21	3:C:1177:TYR:OH	2.00	0.62
3:C:1277:GLU:OE1	3:C:1337:PHE:HZ	1.82	0.62
3:C:659:TRP:CH2	3:C:667:ARG:HD3	2.35	0.62
3:C:763:PRO:O	3:C:766:LEU:N	2.32	0.62
1:E:37:LYS:CG	1:E:38:ASN:H	2.09	0.62
2:F:202:LEU:HA	2:F:206:PHE:O	2.00	0.62
2:F:371:ILE:HD13	2:F:384:CYS:HB3	1.81	0.62
2:F:453:ARG:O	2:F:455:LEU:HD12	2.00	0.62
3:G:1186:LEU:HD13	3:G:1190:GLN:CB	2.29	0.62
3:G:723:ILE:HD12	3:G:741:LEU:HD12	1.81	0.62
4:H:253:LEU:CD2	4:H:253:LEU:N	2.63	0.62
1:A:51:ASP:O	1:A:52:ASP:HB3	2.00	0.61
2:B:243:ASP:OD1	2:B:246:LEU:HG	2.00	0.61
3:C:645:GLU:O	3:C:646:VAL:C	2.37	0.61
1:E:119:ARG:HH11	1:E:119:ARG:HG3	1.65	0.61
2:F:176:LEU:O	2:F:176:LEU:HD23	2.00	0.61
3:G:557:ILE:CG1	3:G:650:ARG:HG3	2.30	0.61
4:H:400:ASP:O	4:H:401:ILE:C	2.38	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:237:LYS:HE3	1:A:256:GLN:OE1	1.99	0.61
2:B:104:PHE:CE1	2:B:107:ARG:CZ	2.82	0.61
3:C:683:ASN:ND2	3:C:683:ASN:N	2.46	0.61
3:C:746:TRP:O	3:C:748:ASP:N	2.33	0.61
2:F:47:ILE:O	2:F:51:LYS:HG3	2.00	0.61
3:G:496:PRO:O	3:G:497:CYS:HB3	1.99	0.61
4:H:315:VAL:O	4:H:315:VAL:HG23	1.99	0.61
1:A:223:PHE:CE1	1:A:297:MET:HG2	2.35	0.61
2:B:285:PRO:HA	2:B:447:PHE:CZ	2.36	0.61
2:B:29:TYR:CD1	2:B:103:HIS:CG	2.88	0.61
2:B:76:SER:HA	2:B:79:ARG:HE	1.65	0.61
3:C:1251:TYR:CD1	3:C:1253:LYS:HB3	2.36	0.61
3:C:634:ILE:HD12	3:C:690:ILE:HD12	1.82	0.61
4:D:200:GLU:O	4:D:202:LEU:N	2.33	0.61
4:D:407:ARG:O	4:D:408:THR:C	2.39	0.61
4:D:407:ARG:O	4:D:409:ILE:N	2.33	0.61
4:D:540:ILE:HD12	4:D:557:VAL:O	2.00	0.61
2:F:137:LYS:CD	2:F:181:GLU:HA	2.30	0.61
2:F:237:LEU:N	2:F:238:PRO:CD	2.64	0.61
2:F:362:TYR:O	2:F:364:PRO:CD	2.44	0.61
3:G:1154:HIS:CG	3:G:1155:VAL:N	2.68	0.61
3:G:1157:VAL:HG12	3:G:1161:ILE:HD11	1.81	0.61
3:G:1441:LEU:CD2	3:G:1441:LEU:N	2.61	0.61
1:A:219:ILE:HD13	1:A:301:CYS:HB2	1.81	0.61
3:C:1141:LYS:NZ	3:C:1146:TYR:HA	2.15	0.61
3:C:477:PHE:HD1	3:C:802:ILE:HG21	1.64	0.61
4:D:355:ILE:O	4:D:357:TYR:CD1	2.54	0.61
1:E:121:CYS:SG	1:E:131:CYS:HB3	2.41	0.61
1:E:227:ALA:O	1:E:233:ILE:HG12	2.00	0.61
3:G:621:PHE:O	3:G:625:LYS:HG2	2.01	0.61
4:H:400:ASP:HA	4:H:403:LYS:HG3	1.82	0.61
1:A:223:PHE:CZ	1:A:297:MET:HG2	2.34	0.61
1:A:259:PHE:CD2	1:A:259:PHE:N	2.67	0.61
1:A:390:PRO:HG2	1:A:391:TYR:CD1	2.36	0.61
2:B:428:PHE:CD2	2:B:437:CYS:HB2	2.35	0.61
3:C:1151:SER:HA	3:C:1189:SER:CB	2.29	0.61
2:F:137:LYS:HD3	2:F:181:GLU:HA	1.82	0.61
3:G:1114:LYS:O	3:G:1117:ILE:HB	1.99	0.61
3:G:351:ASP:CG	3:G:354:ASN:HB2	2.20	0.61
3:G:636:GLY:HA2	3:G:752:ILE:HD13	1.82	0.61
3:G:360:PHE:HD1	3:G:665:LEU:HD11	1.66	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:362:TYR:O	2:B:364:PRO:CD	2.43	0.61
2:B:418:THR:O	2:B:420:TYR:CD2	2.53	0.61
3:C:579:PHE:CD1	3:C:579:PHE:N	2.68	0.61
3:C:1342:TYR:HB3	4:D:519:ALA:HB1	1.80	0.61
4:D:171:VAL:HB	4:D:546:TYR:CE2	2.35	0.61
1:E:174:VAL:HA	1:E:177:LEU:HG	1.83	0.61
2:F:387:ARG:HH12	3:G:995:ASN:CB	2.12	0.61
3:G:1350:GLU:OE2	3:G:1351:PRO:HD2	1.99	0.61
4:H:200:GLU:O	4:H:202:LEU:N	2.34	0.61
2:B:367:CYS:SG	2:B:443:HIS:CA	2.88	0.61
2:B:439:PHE:CE1	2:B:441:LEU:HD13	2.26	0.61
3:C:1009:ASN:HD21	3:C:1011:ASN:ND2	1.99	0.61
3:C:1370:LEU:HD21	3:C:1375:MET:SD	2.40	0.61
3:C:1401:ALA:HB2	3:C:1430:TYR:CD1	2.32	0.61
3:C:413:VAL:HG13	3:C:472:THR:OG1	2.01	0.61
3:C:762:LEU:O	3:C:765:ALA:HB3	2.00	0.61
4:D:256:GLN:C	4:D:272:LEU:HD12	2.20	0.61
1:E:68:LYS:NZ	1:E:72:LYS:HD3	2.15	0.61
2:F:363:THR:O	2:F:364:PRO:C	2.39	0.61
3:G:1147:PRO:O	3:G:1149:LYS:N	2.34	0.61
3:G:438:ASN:OD1	3:G:449:LYS:HE2	2.00	0.61
3:G:346:LEU:HB3	3:G:689:MET:CE	2.31	0.61
3:G:865:TYR:CD2	3:G:865:TYR:N	2.64	0.61
3:G:1148:ASP:OD2	4:H:262:ASN:HB2	2.00	0.61
3:G:1342:TYR:HB3	4:H:519:ALA:HB1	1.82	0.61
1:A:350:ILE:HA	1:A:353:ILE:HG12	1.82	0.61
2:B:209:VAL:HG12	2:B:210:PRO:CD	2.17	0.61
2:B:418:THR:HG1	2:B:420:TYR:HE2	1.49	0.61
3:C:1135:ILE:HB	3:C:1177:TYR:CZ	2.35	0.61
3:C:1334:ILE:O	3:C:1338:ILE:HG13	2.01	0.61
3:C:497:CYS:SG	3:C:499:LEU:CD2	2.89	0.61
3:C:631:PRO:CD	3:C:688:ARG:HH12	2.13	0.61
4:D:227:LEU:CD2	4:D:301:VAL:HB	2.30	0.61
4:D:256:GLN:O	4:D:256:GLN:HG3	1.99	0.61
4:D:430:HIS:NE2	4:D:440:PHE:CE1	2.68	0.61
4:D:525:PHE:HD1	4:D:529:ALA:HB3	1.64	0.61
1:E:56:ARG:HG2	1:E:57:TYR:CD2	2.36	0.61
3:G:1338:ILE:HG23	4:H:209:MET:HE2	1.81	0.61
3:G:957:TYR:C	3:G:959:CYS:H	2.03	0.61
1:A:94:VAL:HG12	1:A:95:LYS:H	1.65	0.61
3:C:498:TRP:O	3:C:499:LEU:HD23	2.01	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:147:LYS:HG3	1:E:148:GLU:N	2.16	0.61
2:F:286:PRO:CB	2:F:385:PRO:HG3	2.29	0.61
3:G:1050:LEU:HD22	3:G:1226:PRO:HG2	1.83	0.61
3:G:387:LEU:HD21	3:G:479:THR:CA	2.31	0.61
3:G:381:LYS:HD3	3:G:519:MET:CE	2.31	0.61
3:G:852:TYR:CE1	3:G:999:ILE:HG21	2.36	0.61
2:B:94:GLU:HB3	2:B:95:PRO:HD3	1.82	0.61
3:C:1147:PRO:O	3:C:1149:LYS:N	2.34	0.61
3:C:1250:HIS:CE1	3:C:1254:ASP:HB3	2.35	0.61
3:C:1334:ILE:HG23	3:C:1392:LEU:HD21	1.83	0.61
3:C:635:VAL:HG21	3:C:756:MET:HE2	1.83	0.61
3:C:774:ASN:ND2	3:C:775:ILE:H	1.98	0.61
4:D:328:TYR:O	4:D:330:PRO:HD3	2.00	0.61
2:F:136:PRO:O	2:F:138:ASP:N	2.34	0.61
3:G:602:ILE:HD13	3:G:609:VAL:CG1	2.28	0.61
3:G:922:ARG:HH12	3:G:950:LYS:CE	2.13	0.61
1:A:384:LYS:HA	1:A:389:ALA:HB2	1.82	0.60
3:C:365:VAL:HG22	3:C:376:CYS:CB	2.28	0.60
4:D:170:VAL:HG21	4:D:594:GLN:NE2	2.16	0.60
4:D:232:LYS:HD2	4:D:240:PHE:CE2	2.36	0.60
4:D:332:GLU:HA	4:D:332:GLU:OE2	2.00	0.60
2:F:139:LYS:HA	2:F:142:ASP:OD2	2.01	0.60
3:G:1384:SER:HB3	3:G:1387:SER:OG	2.01	0.60
3:G:1395:TYR:O	3:G:1398:ILE:CG1	2.49	0.60
3:G:395:LYS:CA	3:G:408:ILE:HD11	2.31	0.60
3:G:721:VAL:CG1	3:G:722:VAL:N	2.64	0.60
3:G:762:LEU:O	3:G:765:ALA:HB3	2.02	0.60
3:G:856:ILE:N	3:G:856:ILE:HD12	2.16	0.60
4:H:254:LEU:HD12	4:H:255:GLY:N	2.16	0.60
4:H:354:SER:O	4:H:386:HIS:HE1	1.84	0.60
1:A:121:CYS:SG	1:A:131:CYS:HB3	2.40	0.60
1:A:233:ILE:O	1:A:234:LEU:HD23	2.01	0.60
3:C:1014:ASN:HD21	3:C:1016:GLU:HB2	1.66	0.60
3:C:1335:ARG:HH21	4:D:433:PRO:HD3	1.65	0.60
3:C:642:PHE:O	3:C:646:VAL:HG23	2.01	0.60
4:D:174:PHE:CD1	4:D:175:GLY:N	2.68	0.60
1:E:338:LYS:HG3	1:E:338:LYS:O	2.02	0.60
3:G:1185:ASN:O	3:G:1185:ASN:ND2	2.26	0.60
3:G:389:PHE:CD2	3:G:476:VAL:HB	2.36	0.60
3:G:720:ARG:NH2	3:G:748:ASP:OD2	2.28	0.60
3:G:956:MET:HA	3:G:956:MET:HE3	1.82	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:241:ASP:HA	1:A:244:LEU:HD12	1.83	0.60
2:B:160:THR:HA	2:B:163:GLU:HB2	1.82	0.60
2:B:186:ILE:HG22	2:B:187:PRO:CD	2.31	0.60
3:C:1416:LYS:O	3:C:1420:GLN:HB2	2.01	0.60
3:C:1427:LEU:CB	3:C:1431:ARG:HH22	2.12	0.60
3:C:565:HIS:HA	3:C:580:GLN:OE1	2.00	0.60
1:E:37:LYS:HG3	1:E:38:ASN:N	2.15	0.60
2:F:118:ARG:CB	2:F:118:ARG:CZ	2.79	0.60
2:F:311:LEU:O	2:F:314:LYS:N	2.33	0.60
3:G:1135:ILE:HG22	3:G:1136:ASN:N	2.17	0.60
4:H:182:TRP:HB3	4:H:341:MET:CE	2.31	0.60
4:H:535:PRO:HG3	4:H:538:LEU:HD22	1.81	0.60
1:A:104:LYS:HE2	1:A:315:HIS:N	2.16	0.60
2:B:259:GLY:O	2:B:260:GLN:HB2	2.02	0.60
2:B:26:LEU:HD22	2:B:128:LEU:HD12	1.82	0.60
2:B:311:LEU:O	2:B:314:LYS:N	2.33	0.60
2:B:422:VAL:CA	2:B:425:GLN:HG3	2.31	0.60
3:C:533:SER:HB2	3:C:534:PRO:HD2	1.82	0.60
3:C:586:VAL:HG11	3:C:742:LEU:HD13	1.83	0.60
4:D:406:LEU:O	4:D:410:ILE:HG13	2.01	0.60
4:D:479:HIS:CE1	4:D:509:TYR:HH	2.17	0.60
1:E:237:LYS:HA	1:E:240:TRP:CE2	2.35	0.60
2:F:49:ARG:CB	2:F:102:SER:HB2	2.28	0.60
2:F:105:ILE:CG2	2:F:106:LEU:N	2.64	0.60
3:G:1222:ARG:HH11	3:G:1222:ARG:HG3	1.67	0.60
3:G:522:LYS:H	3:G:525:LEU:HD12	1.66	0.60
4:H:231:LEU:HB3	4:H:303:ILE:HD11	1.83	0.60
4:H:211:GLN:OE1	4:H:521:ASP:HA	2.01	0.60
1:A:247:VAL:HG11	1:A:251:ILE:HG21	1.83	0.60
3:C:1222:ARG:HH11	3:C:1222:ARG:HB2	1.67	0.60
3:C:507:LEU:HD21	3:C:517:GLU:HB3	1.84	0.60
3:C:623:LEU:HD11	3:C:651:ILE:HD11	1.82	0.60
3:C:659:TRP:CZ2	3:C:667:ARG:HB2	2.37	0.60
3:C:1364:PHE:HB2	4:D:217:ARG:CZ	2.31	0.60
4:D:360:LEU:O	4:D:364:ILE:HG13	2.02	0.60
2:F:433:ASN:O	2:F:434:VAL:HG12	2.01	0.60
3:G:1235:ILE:HA	3:G:1238:TRP:HE3	1.65	0.60
3:G:1322:PHE:HB3	3:G:1325:GLN:NE2	2.16	0.60
3:G:634:ILE:HD12	3:G:690:ILE:CD1	2.31	0.60
2:B:120:PHE:HD2	2:B:230:LEU:HD11	1.65	0.60
2:B:358:LYS:CE	3:C:1274:ARG:NH2	2.61	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:362:TYR:C	2:B:362:TYR:CD2	2.73	0.60
2:B:417:GLY:O	2:B:418:THR:HG22	2.01	0.60
3:C:1050:LEU:O	3:C:1051:LYS:HG2	2.02	0.60
3:C:1434:LYS:O	3:C:1438:GLU:HG3	2.00	0.60
1:E:379:ARG:NH1	1:E:379:ARG:HG3	2.16	0.60
2:F:341:PHE:CD1	2:F:345:TYR:HB2	2.36	0.60
3:G:1147:PRO:C	3:G:1149:LYS:H	2.05	0.60
3:G:861:PHE:HD2	3:G:1038:ILE:HA	1.67	0.60
1:A:113:THR:HG23	1:A:163:ARG:HE	1.67	0.60
2:B:371:ILE:HG22	2:B:372:LEU:CD2	2.32	0.60
3:C:555:ASN:ND2	4:D:248:GLN:NE2	2.49	0.60
3:C:610:GLU:HG2	3:C:621:PHE:CE2	2.37	0.60
3:C:869:ILE:HG22	3:C:869:ILE:O	2.01	0.60
2:F:154:ILE:HD11	2:F:183:ILE:HG22	1.82	0.60
3:G:1081:ARG:HG2	3:G:1081:ARG:NH1	2.09	0.60
3:G:806:LYS:CE	3:G:807:GLN:H	2.15	0.60
4:H:394:LEU:HD22	4:H:401:ILE:CD1	2.32	0.60
1:A:209:HIS:ND1	1:A:210:PRO:N	2.50	0.60
1:A:405:SER:HB3	1:A:409:GLU:OE1	2.00	0.60
2:B:108:LEU:O	2:B:111:CYS:SG	2.52	0.60
2:B:159:LYS:HE3	2:B:178:LEU:CD2	2.31	0.60
3:C:698:LYS:NZ	3:C:706:TYR:HB2	2.16	0.60
3:C:759:LEU:HB2	3:C:761:VAL:HG22	1.83	0.60
1:E:209:HIS:CG	1:E:210:PRO:HD2	2.37	0.60
2:F:346:SER:OG	2:F:350:ARG:NH1	2.34	0.60
2:F:428:PHE:CE1	2:F:432:HIS:CE1	2.90	0.60
2:F:73:LYS:HA	2:F:76:SER:HB2	1.83	0.60
3:G:1131:SER:C	3:G:1133:PHE:H	2.04	0.60
3:G:848:LYS:CD	3:G:999:ILE:HA	2.29	0.60
4:H:174:PHE:CD1	4:H:174:PHE:C	2.74	0.60
4:H:358:ASP:CB	4:H:359:PRO:HD3	2.30	0.60
3:C:1143:PRO:HB2	3:C:1159:LEU:HD23	1.83	0.60
3:C:345:TRP:O	3:C:346:LEU:HG	2.00	0.60
3:C:491:ARG:NH1	3:C:524:ASP:HA	2.17	0.60
3:C:557:ILE:HG13	3:C:650:ARG:HG3	1.84	0.60
3:C:977:THR:HB	3:C:981:ARG:NH1	2.16	0.60
3:G:1133:PHE:HB3	3:G:1211:TYR:CZ	2.37	0.60
3:G:1279:PHE:CE1	3:G:1329:LYS:HG3	2.37	0.60
3:G:531:ASP:O	3:G:532:VAL:HG23	2.02	0.60
3:G:940:LEU:C	3:G:940:LEU:HD23	2.22	0.60
4:H:532:PRO:CG	4:H:533:VAL:H	2.15	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:H:343:LEU:HD12	4:H:572:ALA:O	2.02	0.60
1:A:294:TRP:HA	1:A:297:MET:SD	2.42	0.60
1:A:396:GLU:O	1:A:400:GLU:HG3	2.02	0.60
1:A:94:VAL:HG12	1:A:95:LYS:N	2.17	0.60
3:C:1141:LYS:HZ2	3:C:1146:TYR:HA	1.67	0.60
3:C:360:PHE:CE2	3:C:379:MET:HG3	2.36	0.60
3:C:957:TYR:C	3:C:959:CYS:H	2.04	0.60
4:D:199:PRO:O	4:D:200:GLU:C	2.39	0.60
4:D:367:ILE:O	4:D:372:PRO:HD2	2.01	0.60
2:F:358:LYS:HE3	2:F:359:ARG:NE	2.16	0.60
3:G:746:TRP:O	3:G:748:ASP:N	2.35	0.60
1:A:153:LYS:HA	1:A:153:LYS:HE2	1.84	0.59
2:B:237:LEU:N	2:B:238:PRO:CD	2.65	0.59
2:B:280:SER:HA	2:B:284:PHE:CE1	2.36	0.59
2:B:342:ASP:HA	2:B:346:SER:CB	2.31	0.59
3:C:354:ASN:N	3:C:354:ASN:ND2	2.50	0.59
3:C:720:ARG:NH1	3:C:722:VAL:HG13	2.17	0.59
3:C:865:TYR:HD2	3:C:865:TYR:N	1.97	0.59
2:F:138:ASP:N	2:F:138:ASP:OD2	2.34	0.59
2:F:253:LEU:O	2:F:254:SER:CB	2.50	0.59
2:F:426:LYS:HD2	2:F:429:GLU:OE1	2.02	0.59
3:G:1307:LEU:HD13	3:G:1430:TYR:OH	2.02	0.59
3:G:437:LYS:NZ	3:G:800:ASN:ND2	2.50	0.59
4:H:294:TYR:O	4:H:294:TYR:CD1	2.53	0.59
1:A:108:PHE:CD1	1:A:167:CYS:SG	2.95	0.59
1:A:38:ASN:HA	1:A:41:GLN:OE1	2.02	0.59
2:B:121:ILE:CG1	2:B:226:LEU:HD23	2.31	0.59
2:B:437:CYS:SG	2:B:438:GLY:N	2.75	0.59
3:C:1154:HIS:CG	3:C:1155:VAL:N	2.70	0.59
3:C:1405:LEU:C	3:C:1407:LYS:N	2.54	0.59
3:C:632:ASP:CG	3:C:664:ARG:HH22	2.05	0.59
3:C:788:ASN:O	3:C:791:LEU:HB3	2.02	0.59
3:C:861:PHE:CE1	3:C:1036:LEU:HD21	2.36	0.59
4:D:198:CYS:HB3	4:D:199:PRO:CD	2.32	0.59
2:F:170:SER:HB3	2:F:171:PRO:CD	2.30	0.59
3:G:1284:PRO:HG2	3:G:1325:GLN:NE2	2.17	0.59
3:G:539:VAL:CG2	3:G:568:PHE:HD2	2.01	0.59
4:H:166:ASN:ND2	4:H:166:ASN:N	2.50	0.59
3:C:1030:ASN:OD1	3:C:1037:GLU:HA	2.01	0.59
4:D:355:ILE:O	4:D:357:TYR:HD1	1.85	0.59
4:D:400:ASP:OD1	4:D:400:ASP:N	2.33	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:400:ASP:O	4:D:401:ILE:C	2.40	0.59
2:F:358:LYS:CG	2:F:359:ARG:H	2.15	0.59
3:G:544:MET:HE1	3:G:647:LEU:HD13	1.84	0.59
1:A:200:LYS:HA	1:A:246:LEU:HD22	1.84	0.59
2:B:359:ARG:HH11	2:B:359:ARG:HG3	1.66	0.59
3:C:1149:LYS:CG	3:C:1150:LYS:H	2.13	0.59
3:C:1330:LEU:HD11	3:C:1399:PHE:HE2	1.67	0.59
3:C:1441:LEU:H	3:C:1441:LEU:HD23	1.66	0.59
3:C:564:VAL:HG12	3:C:565:HIS:H	1.67	0.59
3:C:598:PHE:HD1	3:C:735:SER:HG	1.50	0.59
3:C:862:ASN:ND2	3:C:1039:ASP:HB2	2.18	0.59
3:C:953:ALA:O	3:C:956:MET:HG2	2.02	0.59
3:C:978:TYR:O	3:C:979:LYS:C	2.41	0.59
4:D:246:PRO:HG3	4:D:311:GLY:HA3	1.84	0.59
1:E:355:ARG:HH11	1:E:355:ARG:HB2	1.67	0.59
2:F:135:LEU:HB2	2:F:140:ILE:HG13	1.83	0.59
2:F:287:CYS:HB2	2:F:288:MET:HE2	1.84	0.59
2:F:309:TYR:CE2	2:F:313:LEU:HD11	2.37	0.59
3:G:398:LEU:HD23	3:G:398:LEU:O	2.01	0.59
3:G:960:LEU:HD23	3:G:967:PHE:O	2.03	0.59
1:A:156:LEU:HB2	1:A:398:PHE:CZ	2.38	0.59
2:B:103:HIS:CD2	2:B:104:PHE:HD1	2.19	0.59
3:C:364:LYS:NZ	3:C:537:LEU:CD2	2.64	0.59
3:C:720:ARG:HH12	3:C:722:VAL:HG13	1.67	0.59
3:C:756:MET:O	3:C:761:VAL:HG23	2.03	0.59
4:D:446:SER:O	4:D:450:LYS:CG	2.50	0.59
2:F:45:LEU:HD12	2:F:101:ILE:CG2	2.32	0.59
3:G:562:ALA:C	3:G:563:LEU:HD23	2.23	0.59
3:G:579:PHE:CD1	3:G:579:PHE:N	2.68	0.59
3:G:722:VAL:HG12	3:G:723:ILE:N	2.17	0.59
4:H:198:CYS:HB2	4:H:199:PRO:HD2	1.85	0.59
4:H:210:PHE:O	4:H:210:PHE:HD1	1.85	0.59
4:H:270:VAL:HG12	4:H:271:ILE:N	2.18	0.59
2:B:49:ARG:HD2	2:B:49:ARG:O	2.02	0.59
3:C:1131:SER:C	3:C:1133:PHE:H	2.05	0.59
3:C:1181:GLN:O	3:C:1204:LEU:HD22	2.03	0.59
3:C:599:LYS:O	3:C:602:ILE:HB	2.02	0.59
3:C:935:ASN:HD22	3:C:937:ASP:N	1.94	0.59
2:F:438:GLY:O	2:F:439:PHE:HB3	2.02	0.59
3:G:1388:LEU:O	3:G:1391:GLN:N	2.35	0.59
3:G:1394:PHE:O	3:G:1398:ILE:HG12	2.02	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:756:MET:O	3:G:761:VAL:HG23	2.02	0.59
4:H:342:VAL:HG13	4:H:343:LEU:O	2.02	0.59
1:A:44:GLU:HB2	1:A:84:TYR:HE2	1.67	0.59
2:B:258:THR:CG2	2:B:261:ASP:HB2	2.31	0.59
2:B:295:LEU:HG	2:B:330:GLU:HG2	1.84	0.59
2:B:355:LYS:HG2	3:C:1247:ARG:CZ	2.33	0.59
3:C:1221:ALA:O	3:C:1223:ILE:N	2.35	0.59
3:C:439:TYR:CD2	3:C:439:TYR:C	2.75	0.59
3:C:582:HIS:C	3:C:582:HIS:ND1	2.56	0.59
1:E:221:LYS:HB3	1:E:222:TYR:CE1	2.38	0.59
2:F:421:GLN:O	2:F:424:CYS:HB3	2.03	0.59
3:G:604:LYS:HD3	3:G:604:LYS:O	2.03	0.59
3:G:911:LEU:O	3:G:911:LEU:HD12	2.02	0.59
3:G:978:TYR:O	3:G:979:LYS:C	2.40	0.59
1:A:235:GLU:HG3	1:A:236:ASN:ND2	2.18	0.59
1:A:306:ASP:OD2	1:A:309:VAL:HG23	2.03	0.59
2:B:45:LEU:HD13	2:B:101:ILE:CG2	2.33	0.59
3:C:1139:LEU:CD1	3:C:1154:HIS:HD2	2.16	0.59
3:C:689:MET:C	3:C:690:ILE:HD13	2.23	0.59
3:C:751:PHE:HD1	3:C:751:PHE:N	2.00	0.59
3:C:864:LEU:C	3:C:866:PRO:HD2	2.22	0.59
3:C:981:ARG:HH11	3:C:981:ARG:HG3	1.68	0.59
4:D:202:LEU:CD2	4:D:439:PRO:HD3	2.32	0.59
1:E:47:PHE:HB3	1:E:49:LEU:HD21	1.84	0.59
2:F:173:LEU:HD23	2:F:173:LEU:O	2.03	0.59
3:G:1050:LEU:HD13	3:G:1226:PRO:HG2	1.85	0.59
3:G:1334:ILE:HG21	3:G:1440:PHE:CD1	2.37	0.59
3:G:1345:TRP:CE3	3:G:1358:ARG:HG3	2.38	0.59
3:G:682:ARG:HD3	3:G:682:ARG:C	2.23	0.59
3:G:598:PHE:CZ	3:G:738:LEU:HB3	2.38	0.59
4:H:334:ASP:HA	4:H:337:PHE:CE2	2.37	0.59
4:H:356:THR:OG1	4:H:358:ASP:OD2	2.20	0.59
4:H:382:LEU:HD11	4:H:389:VAL:CG2	2.28	0.59
2:B:363:THR:O	2:B:364:PRO:C	2.40	0.59
3:C:1116:LEU:HD21	3:C:1220:VAL:HG11	1.84	0.59
3:C:340:VAL:HG21	3:C:500:GLU:HG3	1.85	0.59
3:C:623:LEU:HD11	3:C:651:ILE:CD1	2.33	0.59
3:C:858:LEU:HD22	3:C:1007:MET:HE2	1.84	0.59
4:D:407:ARG:HG3	4:D:407:ARG:HH11	1.67	0.59
1:E:144:ARG:NH1	1:E:211:PHE:CD2	2.71	0.59
2:F:49:ARG:NH1	2:F:103:HIS:CB	2.57	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:1082:ARG:HG2	3:G:1082:ARG:O	2.02	0.59
3:G:1151:SER:HA	3:G:1189:SER:CB	2.33	0.59
3:G:957:TYR:O	3:G:960:LEU:N	2.31	0.59
3:G:957:TYR:C	3:G:959:CYS:N	2.53	0.59
4:H:171:VAL:O	4:H:172:THR:OG1	2.21	0.59
1:A:161:GLY:HA3	1:A:324:HIS:HD2	1.68	0.59
1:A:208:ILE:HD12	1:A:212:ILE:HG21	1.84	0.59
2:B:87:GLU:HG3	2:B:93:TYR:CE1	2.36	0.59
3:C:1139:LEU:CD1	3:C:1139:LEU:N	2.65	0.59
3:C:541:ALA:HB2	3:C:753:LEU:HD13	1.84	0.59
2:F:26:LEU:HB3	2:F:143:PHE:CE2	2.38	0.59
3:G:1284:PRO:HG2	3:G:1325:GLN:HE21	1.68	0.59
3:G:788:ASN:O	3:G:791:LEU:HB3	2.02	0.59
3:G:864:LEU:HD23	3:G:1004:ASP:CB	2.23	0.59
3:G:946:GLN:HE21	3:G:947:LYS:H	1.50	0.59
3:G:876:PHE:HZ	3:G:960:LEU:HD21	1.66	0.59
3:G:984:LEU:HD12	3:G:984:LEU:O	2.01	0.59
4:H:407:ARG:O	4:H:408:THR:C	2.40	0.59
4:H:435:TYR:HD2	4:H:518:MET:HE3	1.67	0.59
1:A:37:LYS:CG	1:A:38:ASN:H	2.08	0.58
1:A:154:HIS:HB3	1:A:402:LEU:HD11	1.85	0.58
2:B:325:GLN:OE1	2:B:325:GLN:HA	2.02	0.58
2:B:289:ARG:HD3	2:B:401:TYR:CE2	2.38	0.58
2:B:316:ILE:N	2:B:445:ASN:HD21	2.00	0.58
3:C:1019:PHE:C	3:C:1021:LEU:N	2.55	0.58
3:C:439:TYR:CE2	3:C:441:PHE:N	2.64	0.58
4:D:540:ILE:O	4:D:558:ASN:OD1	2.21	0.58
2:F:135:LEU:HB2	2:F:140:ILE:CG1	2.33	0.58
2:F:359:ARG:HH11	2:F:359:ARG:HG3	1.67	0.58
3:G:703:CYS:HA	3:G:704:LYS:HE2	1.85	0.58
3:G:868:ILE:HD13	3:G:872:PHE:HE2	1.67	0.58
4:H:164:ARG:HG2	4:H:164:ARG:NH1	2.14	0.58
4:H:476:LEU:CD1	4:H:509:TYR:HD2	2.16	0.58
1:A:43:ARG:NH1	1:A:81:GLY:O	2.36	0.58
2:B:368:LEU:HD21	2:B:372:LEU:CD1	2.34	0.58
3:C:1294:ASN:N	3:C:1398:ILE:HG22	2.18	0.58
3:C:545:LYS:HE3	3:C:723:ILE:HD13	1.83	0.58
3:C:388:TYR:CD1	3:C:802:ILE:HD12	2.37	0.58
4:D:383:ASP:OD1	4:D:385:LYS:HB2	2.03	0.58
4:D:467:VAL:O	4:D:467:VAL:HG12	2.02	0.58
1:E:403:ASP:HA	1:E:406:ARG:NH1	2.17	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:276:ILE:HA	2:F:279:LEU:CD1	2.33	0.58
2:F:376:PRO:HB3	2:F:382:HIS:CD2	2.37	0.58
2:F:55:SER:HA	2:F:58:ASN:HD22	1.68	0.58
3:G:558:ILE:O	3:G:559:ALA:CB	2.51	0.58
2:B:308:GLN:HA	2:B:365:PHE:CD2	2.38	0.58
3:C:1170:LYS:HG3	3:C:1171:ALA:N	2.17	0.58
3:C:1177:TYR:C	3:C:1177:TYR:CD1	2.77	0.58
3:C:751:PHE:CD1	3:C:751:PHE:N	2.70	0.58
4:D:509:TYR:HE1	4:D:514:PRO:HB3	1.69	0.58
1:E:68:LYS:O	1:E:72:LYS:HB2	2.02	0.58
2:F:246:LEU:O	2:F:250:LEU:HG	2.03	0.58
2:F:342:ASP:HA	2:F:346:SER:CB	2.33	0.58
3:G:857:LEU:HD21	3:G:859:LEU:HD21	1.85	0.58
3:G:869:ILE:HG21	3:G:911:LEU:HD21	1.84	0.58
4:H:382:LEU:CD1	4:H:389:VAL:HG21	2.29	0.58
1:A:87:ARG:HB3	1:A:89:ASN:HD21	1.68	0.58
3:C:653:VAL:HG12	3:C:654:CYS:SG	2.43	0.58
3:C:753:LEU:HD12	3:C:756:MET:CE	2.33	0.58
3:C:843:LEU:HD11	3:C:845:LEU:HD21	1.83	0.58
3:C:1342:TYR:HB3	4:D:519:ALA:CB	2.34	0.58
1:E:213:ARG:HH11	1:E:213:ARG:HG2	1.68	0.58
1:E:40:PHE:HB3	1:E:41:GLN:NE2	2.18	0.58
2:F:249:LEU:N	2:F:249:LEU:HD23	2.17	0.58
2:F:52:LEU:HB2	2:F:81:LEU:HD12	1.85	0.58
3:G:1015:LEU:O	3:G:1015:LEU:HD12	2.04	0.58
3:G:1281:CYS:O	3:G:1290:ASN:HB2	2.04	0.58
3:G:563:LEU:HD21	3:G:746:TRP:HE1	1.69	0.58
3:G:874:ILE:CD1	3:G:976:VAL:HG22	2.33	0.58
4:H:593:VAL:HG12	4:H:594:GLN:N	2.18	0.58
1:A:234:LEU:CD2	1:A:240:TRP:HA	2.34	0.58
1:A:161:GLY:HA3	1:A:324:HIS:CD2	2.38	0.58
3:C:543:SER:CB	3:C:749:ALA:HB2	2.34	0.58
3:C:876:PHE:CZ	3:C:960:LEU:CD2	2.87	0.58
1:E:195:GLY:O	1:E:197:ASP:N	2.36	0.58
1:E:237:LYS:HE3	1:E:241:ASP:OD1	2.03	0.58
1:E:402:LEU:N	1:E:402:LEU:CD1	2.66	0.58
1:E:9:LEU:CD2	1:E:13:LEU:HG	2.32	0.58
2:F:93:TYR:HD2	2:F:96:ARG:HB2	1.68	0.58
3:G:395:LYS:CB	3:G:408:ILE:HD11	2.34	0.58
3:G:652:ASN:HD22	3:G:670:MET:CE	2.15	0.58
3:G:786:GLU:O	3:G:789:GLU:HB3	2.04	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:112:MET:HG3	1:A:119:ARG:NH2	2.18	0.58
2:B:271:ILE:CD1	2:B:316:ILE:HD12	2.34	0.58
2:B:439:PHE:CZ	2:B:450:GLU:HG2	2.37	0.58
3:C:1147:PRO:C	3:C:1149:LYS:H	2.06	0.58
3:C:1281:CYS:O	3:C:1290:ASN:HB2	2.04	0.58
3:C:1364:PHE:CE2	3:C:1368:GLY:HA2	2.39	0.58
3:C:579:PHE:HD1	3:C:579:PHE:N	2.01	0.58
3:C:903:ASP:OD1	3:C:905:SER:HB3	2.04	0.58
4:D:232:LYS:HD2	4:D:240:PHE:HE2	1.68	0.58
4:D:538:LEU:HD12	4:D:539:ILE:H	1.66	0.58
1:E:18:ARG:HH11	1:E:18:ARG:HG3	1.69	0.58
1:E:343:ASP:OD1	1:E:345:PHE:N	2.37	0.58
1:E:353:ILE:HB	1:E:386:THR:CG2	2.29	0.58
2:F:137:LYS:CE	2:F:181:GLU:HA	2.34	0.58
3:G:1026:LYS:HG3	3:G:1030:ASN:HD21	1.67	0.58
3:G:1148:ASP:O	3:G:1149:LYS:C	2.42	0.58
3:G:1241:LEU:O	3:G:1241:LEU:HD12	2.03	0.58
3:G:760:ASN:C	3:G:763:PRO:HD2	2.24	0.58
3:G:857:LEU:CD2	3:G:859:LEU:HG	2.33	0.58
3:G:981:ARG:HG3	3:G:981:ARG:HH11	1.67	0.58
4:H:343:LEU:HD12	4:H:344:VAL:N	2.11	0.58
1:A:357:LEU:HD13	1:A:382:ASP:CG	2.24	0.58
1:A:381:ARG:O	1:A:384:LYS:HB2	2.04	0.58
2:B:255:HIS:CD2	2:B:256:SER:H	2.20	0.58
4:D:547:PHE:C	4:D:547:PHE:CD1	2.77	0.58
2:F:314:LYS:HG3	2:F:353:PHE:CE2	2.39	0.58
2:F:49:ARG:HB2	2:F:102:SER:CB	2.29	0.58
3:G:549:ASN:ND2	3:G:552:ASN:N	2.52	0.58
3:G:565:HIS:CE1	3:G:567:SER:O	2.57	0.58
4:H:435:TYR:CD2	4:H:518:MET:HE3	2.38	0.58
1:A:192:VAL:CG2	1:A:302:PHE:HD1	2.17	0.58
1:A:14:LYS:HD2	1:A:74:ASN:HD21	1.69	0.58
2:B:336:MET:HE3	2:B:345:TYR:HE2	1.69	0.58
3:C:1116:LEU:HD12	3:C:1116:LEU:H	1.69	0.58
3:C:872:PHE:CZ	3:C:979:LYS:HE2	2.39	0.58
4:D:292:LYS:CG	4:D:293:GLU:N	2.61	0.58
4:D:327:PHE:CZ	4:D:552:LEU:O	2.56	0.58
1:E:171:ASP:HB2	1:E:174:VAL:HG23	1.84	0.58
2:F:118:ARG:CB	2:F:118:ARG:NH1	2.67	0.58
2:F:387:ARG:HH12	3:G:995:ASN:CA	2.17	0.58
3:G:564:VAL:CG1	3:G:565:HIS:N	2.66	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:H:170:VAL:HG11	4:H:594:GLN:HE21	1.67	0.58
4:H:279:SER:O	4:H:280:SER:C	2.41	0.58
2:B:159:LYS:HD3	2:B:159:LYS:C	2.23	0.58
3:C:1196:GLU:HG3	3:C:1197:GLN:H	1.68	0.58
3:C:1245:GLN:OE1	3:C:1248:VAL:HB	2.04	0.58
3:C:1250:HIS:CD2	3:C:1251:TYR:H	2.19	0.58
3:C:944:ILE:HG12	3:C:947:LYS:HZ1	1.69	0.58
3:C:954:ASN:H	3:C:954:ASN:ND2	2.01	0.58
4:D:279:SER:O	4:D:280:SER:C	2.42	0.58
1:E:227:ALA:HB1	1:E:233:ILE:CD1	2.32	0.58
2:F:105:ILE:HG22	2:F:106:LEU:N	2.19	0.58
2:F:443:HIS:ND1	2:F:443:HIS:C	2.56	0.58
3:G:1141:LYS:NZ	3:G:1147:PRO:CD	2.67	0.58
3:G:935:ASN:HD22	3:G:936:PRO:N	2.01	0.58
3:G:788:ASN:ND2	3:G:956:MET:HA	2.19	0.58
4:H:420:LEU:HB3	4:H:422:PHE:HE2	1.68	0.58
3:C:789:GLU:C	3:C:793:LEU:HG	2.23	0.58
1:E:388:LEU:O	1:E:392:VAL:HG23	2.04	0.58
2:F:195:PHE:C	2:F:195:PHE:CD1	2.77	0.58
2:F:271:ILE:HG22	2:F:272:SER:O	2.04	0.58
3:G:564:VAL:O	3:G:579:PHE:HB2	2.04	0.58
3:G:700:LEU:C	3:G:701:ILE:CG2	2.72	0.58
4:H:435:TYR:CZ	4:H:459:PRO:HD3	2.39	0.58
1:A:46:SER:O	1:A:47:PHE:HD1	1.86	0.57
2:B:426:LYS:HA	2:B:429:GLU:CD	2.24	0.57
2:B:81:LEU:C	2:B:82:LYS:HG2	2.25	0.57
3:C:1092:GLY:O	3:C:1095:VAL:HG23	2.04	0.57
3:C:563:LEU:HD22	3:C:582:HIS:HB2	1.84	0.57
3:C:658:HIS:HB2	3:C:661:LYS:HE3	1.86	0.57
1:E:237:LYS:HZ2	1:E:256:GLN:NE2	2.01	0.57
3:G:1272:LYS:HD3	3:G:1273:TYR:CE1	2.39	0.57
3:G:921:ARG:HH22	3:G:945:ARG:CZ	2.17	0.57
4:H:253:LEU:HG	4:H:314:LEU:CD2	2.31	0.57
1:A:147:LYS:HB2	1:A:155:ARG:NH2	2.19	0.57
1:A:192:VAL:HG11	1:A:304:ARG:HE	1.69	0.57
2:B:202:LEU:HA	2:B:206:PHE:O	2.03	0.57
3:C:437:LYS:HD2	3:C:802:ILE:HD13	1.86	0.57
3:G:1296:PHE:HZ	3:G:1405:LEU:CD2	2.10	0.57
3:G:1363:GLN:O	3:G:1370:LEU:HB3	2.05	0.57
3:G:1422:PHE:N	3:G:1422:PHE:HD2	2.01	0.57
3:G:552:ASN:O	3:G:553:HIS:ND1	2.37	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:701:ILE:O	3:G:706:TYR:OH	2.21	0.57
3:G:702:ARG:C	3:G:703:CYS:SG	2.82	0.57
3:G:721:VAL:HG12	3:G:722:VAL:N	2.18	0.57
3:G:543:SER:OG	3:G:748:ASP:HB3	2.04	0.57
3:G:864:LEU:HD12	3:G:864:LEU:C	2.25	0.57
3:C:1345:TRP:HZ3	3:C:1358:ARG:CB	2.16	0.57
3:C:555:ASN:ND2	3:C:555:ASN:N	2.48	0.57
3:C:585:VAL:HG22	3:C:618:LEU:HG	1.87	0.57
3:C:700:LEU:C	3:C:701:ILE:HG22	2.23	0.57
3:C:843:LEU:CB	3:C:981:ARG:HG2	2.35	0.57
3:C:857:LEU:HD23	3:C:859:LEU:HG	1.83	0.57
1:E:223:PHE:HE2	1:E:269:TRP:CE2	2.22	0.57
1:E:396:GLU:HA	1:E:399:LEU:HG	1.86	0.57
2:F:286:PRO:HG2	2:F:386:PHE:HE2	1.63	0.57
3:G:1157:VAL:HG21	3:G:1177:TYR:CB	2.34	0.57
3:G:1241:LEU:O	3:G:1243:PRO:HD2	2.03	0.57
3:G:498:TRP:O	3:G:499:LEU:HD23	2.04	0.57
3:G:600:GLU:HA	3:G:603:GLU:HG2	1.86	0.57
4:H:292:LYS:CD	4:H:293:GLU:H	2.17	0.57
1:A:108:PHE:HD2	1:A:305:LEU:HD13	1.69	0.57
2:B:26:LEU:CD2	2:B:128:LEU:HD12	2.35	0.57
3:C:1133:PHE:HB3	3:C:1211:TYR:OH	2.05	0.57
3:C:558:ILE:O	3:C:559:ALA:CB	2.51	0.57
3:C:565:HIS:CE1	3:C:567:SER:O	2.56	0.57
4:D:171:VAL:O	4:D:172:THR:OG1	2.18	0.57
4:D:493:ASP:HB3	4:D:496:SER:HB2	1.85	0.57
2:F:121:ILE:HD11	2:F:227:SER:HA	1.84	0.57
3:G:1033:TYR:C	3:G:1034:LYS:HD2	2.25	0.57
3:G:1230:ILE:HA	3:G:1234:LEU:CD2	2.30	0.57
3:G:861:PHE:HD1	3:G:864:LEU:CD2	2.17	0.57
4:H:365:ALA:HA	4:H:368:ASN:ND2	2.16	0.57
2:B:253:LEU:O	2:B:254:SER:CB	2.51	0.57
2:B:50:VAL:HG23	2:B:106:LEU:HD13	1.87	0.57
3:C:1105:ARG:O	3:C:1109:VAL:HG23	2.05	0.57
3:C:1133:PHE:HB3	3:C:1211:TYR:CZ	2.38	0.57
3:C:1369:PRO:HG2	3:C:1379:LEU:H	1.70	0.57
3:C:730:ASN:ND2	3:C:730:ASN:N	2.10	0.57
4:D:243:LEU:HD13	4:D:284:ILE:HG12	1.85	0.57
4:D:253:LEU:CD1	4:D:314:LEU:HD22	2.35	0.57
1:E:13:LEU:HD22	1:E:17:TYR:CZ	2.39	0.57
2:F:46:ALA:HB1	2:F:106:LEU:HD21	1.87	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:H:425:SER:C	4:H:437:GLN:HE22	2.08	0.57
1:A:343:ASP:HB3	1:A:346:THR:OG1	2.05	0.57
3:C:1409:THR:HG23	3:C:1410:THR:N	2.13	0.57
3:C:618:LEU:HD23	3:C:619:LEU:N	2.20	0.57
3:C:697:ALA:O	3:C:701:ILE:HG23	2.04	0.57
4:D:241:THR:HG21	4:D:251:VAL:HG11	1.85	0.57
4:D:243:LEU:HB3	4:D:284:ILE:HD13	1.86	0.57
4:D:307:ILE:HG13	4:D:315:VAL:HG23	1.86	0.57
1:E:350:ILE:O	1:E:354:CYS:HB2	2.04	0.57
1:E:187:GLU:HB3	2:F:196:ARG:O	2.04	0.57
3:G:1022:GLY:O	3:G:1025:VAL:HB	2.05	0.57
3:G:360:PHE:HE2	3:G:379:MET:HG3	1.70	0.57
3:G:716:LEU:HD21	3:G:755:ILE:HA	1.86	0.57
4:H:351:THR:OG1	4:H:353:ASP:OD2	2.19	0.57
4:H:569:GLY:C	4:H:570:THR:HG22	2.24	0.57
1:A:43:ARG:NH1	1:A:80:ILE:CG2	2.65	0.57
2:B:110:TYR:HD2	2:B:116:LEU:HB3	1.70	0.57
2:B:422:VAL:O	2:B:425:GLN:HB2	2.05	0.57
2:B:73:LYS:O	2:B:76:SER:HB3	2.04	0.57
3:C:621:PHE:O	3:C:624:ALA:HB3	2.03	0.57
3:C:968:TYR:HH	3:C:970:LYS:HD3	1.69	0.57
4:D:381:PHE:HE2	4:D:440:PHE:HE2	1.53	0.57
4:D:476:LEU:CD1	4:D:502:ILE:HD11	2.15	0.57
1:E:9:LEU:HD23	1:E:13:LEU:HG	1.85	0.57
1:E:156:LEU:HD22	1:E:395:PHE:CE1	2.39	0.57
1:E:398:PHE:O	1:E:402:LEU:HD22	2.05	0.57
2:F:274:ASP:N	2:F:274:ASP:OD2	2.33	0.57
3:G:1131:SER:O	3:G:1133:PHE:N	2.38	0.57
3:G:1294:ASN:HD22	3:G:1296:PHE:H	1.52	0.57
3:G:985:MET:O	3:G:988:LYS:N	2.38	0.57
4:H:224:ILE:HD13	4:H:256:GLN:HB3	1.87	0.57
1:A:90:GLN:O	1:A:93:THR:HB	2.04	0.57
2:B:441:LEU:CD1	2:B:446:GLN:HG2	2.34	0.57
3:C:1328:ASN:O	3:C:1331:ILE:HB	2.04	0.57
3:C:609:VAL:HG22	3:C:609:VAL:O	2.05	0.57
4:D:243:LEU:O	4:D:284:ILE:HG21	2.04	0.57
4:D:406:LEU:HG	4:D:410:ILE:HD11	1.87	0.57
1:E:237:LYS:HZ2	1:E:256:GLN:CD	2.08	0.57
3:G:1095:VAL:HG13	3:G:1112:ILE:HD11	1.82	0.57
3:G:383:ILE:HG12	3:G:523:PRO:HG2	1.85	0.57
3:G:946:GLN:NE2	3:G:947:LYS:H	2.03	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:H:411:GLU:HA	4:H:414:ARG:HG3	1.87	0.57
2:B:258:THR:HG22	2:B:366:SER:HB2	1.87	0.57
2:B:363:THR:O	2:B:363:THR:HG22	2.04	0.57
2:B:62:SER:C	2:B:63:TYR:CD2	2.79	0.57
3:C:1146:TYR:CE2	3:C:1155:VAL:HG21	2.39	0.57
4:D:343:LEU:C	4:D:344:VAL:HG22	2.24	0.57
2:F:47:ILE:HD13	2:F:260:GLN:HE22	1.70	0.57
2:F:77:GLU:O	2:F:78:LEU:C	2.43	0.57
3:G:858:LEU:CD1	3:G:1007:MET:HG3	2.15	0.57
3:G:364:LYS:NZ	3:G:632:ASP:OD1	2.32	0.57
3:G:653:VAL:HG12	3:G:654:CYS:N	2.20	0.57
3:G:746:TRP:O	3:G:747:LYS:C	2.42	0.57
3:G:489:MET:HG3	3:G:797:TYR:CE2	2.40	0.57
4:H:255:GLY:HA3	4:H:272:LEU:HD21	1.87	0.57
4:H:358:ASP:HB2	4:H:359:PRO:CD	2.26	0.57
4:H:571:PHE:N	4:H:571:PHE:CD2	2.72	0.57
3:C:1002:ASP:O	3:C:1004:ASP:N	2.34	0.57
3:C:539:VAL:CG1	3:C:540:MET:N	2.68	0.57
3:C:740:TYR:HD1	3:C:740:TYR:O	1.85	0.57
4:D:389:VAL:HG22	4:D:394:LEU:HD11	1.86	0.57
4:D:411:GLU:C	4:D:413:THR:H	2.08	0.57
4:D:571:PHE:CE2	4:D:598:ILE:HD13	2.40	0.57
2:F:252:HIS:CD2	2:F:255:HIS:CD2	2.93	0.57
2:F:275:GLN:O	2:F:279:LEU:HG	2.04	0.57
2:F:360:THR:OG1	2:F:360:THR:O	2.23	0.57
3:G:549:ASN:HB3	3:G:554:GLN:HG3	1.87	0.57
3:G:784:ARG:HD2	3:G:784:ARG:N	2.19	0.57
3:G:902:PRO:HB2	3:G:906:LEU:HD13	1.86	0.57
4:H:229:SER:O	4:H:233:GLU:HG2	2.04	0.57
4:H:227:LEU:CD1	4:H:231:LEU:HD21	2.35	0.57
4:H:356:THR:HB	4:H:358:ASP:OD1	2.05	0.57
4:H:385:LYS:HD3	4:H:427:ARG:HH21	1.68	0.57
2:B:53:LEU:HD11	2:B:124:GLU:OE1	2.04	0.56
3:C:796:PHE:CE2	3:C:910:ILE:HG21	2.41	0.56
3:C:920:GLU:HG2	3:C:923:LYS:HZ1	1.70	0.56
4:D:312:ARG:NH1	4:D:312:ARG:HB2	2.20	0.56
1:E:154:HIS:N	1:E:154:HIS:CD2	2.73	0.56
2:F:419:HIS:HB3	2:F:422:VAL:HG21	1.86	0.56
2:F:71:GLN:O	2:F:75:GLU:HG2	2.04	0.56
3:G:1328:ASN:O	3:G:1331:ILE:HB	2.05	0.56
3:G:389:PHE:HD2	3:G:476:VAL:HB	1.70	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:497:CYS:SG	3:G:499:LEU:CD2	2.93	0.56
3:G:522:LYS:H	3:G:525:LEU:CD1	2.18	0.56
3:G:607:VAL:O	3:G:609:VAL:N	2.30	0.56
4:H:300:GLN:O	4:H:302:VAL:HG13	2.05	0.56
1:A:270:GLU:O	1:A:273:LYS:HB2	2.05	0.56
2:B:441:LEU:HD21	2:B:447:PHE:CD1	2.40	0.56
3:C:1195:PRO:O	3:C:1198:LEU:HB3	2.06	0.56
3:C:1222:ARG:HH11	3:C:1222:ARG:CG	2.18	0.56
3:C:546:THR:HG22	3:C:556:GLU:O	2.05	0.56
3:C:596:TYR:O	3:C:597:ALA:HB3	2.05	0.56
3:C:689:MET:O	3:C:690:ILE:HD13	2.05	0.56
3:C:908:MET:HB2	3:C:913:ARG:HD3	1.85	0.56
3:C:947:LYS:O	3:C:950:LYS:HB3	2.04	0.56
4:D:174:PHE:CD1	4:D:174:PHE:C	2.79	0.56
4:D:265:LEU:HD22	4:D:298:PRO:HD3	1.86	0.56
4:D:484:GLU:OE1	4:D:497:ARG:NH1	2.39	0.56
4:D:509:TYR:CE1	4:D:514:PRO:HB3	2.40	0.56
1:E:395:PHE:O	1:E:399:LEU:HG	2.05	0.56
3:G:1325:GLN:O	3:G:1328:ASN:HB2	2.04	0.56
4:H:182:TRP:HB3	4:H:341:MET:HE3	1.87	0.56
2:B:29:TYR:HB3	2:B:103:HIS:CD2	2.40	0.56
2:B:362:TYR:CD2	2:B:362:TYR:O	2.54	0.56
3:C:1217:HIS:O	3:C:1218:PRO:C	2.43	0.56
3:C:636:GLY:HA2	3:C:752:ILE:HG21	1.87	0.56
3:C:769:THR:HG23	3:C:774:ASN:OD1	2.04	0.56
3:C:957:TYR:O	3:C:960:LEU:N	2.33	0.56
3:C:981:ARG:HG3	3:C:981:ARG:NH1	2.20	0.56
1:E:162:ARG:NH2	1:E:326:LYS:HD3	2.19	0.56
2:F:218:ILE:HG22	2:F:219:LEU:N	2.20	0.56
2:F:229:ALA:O	2:F:233:THR:HG23	2.04	0.56
3:G:1116:LEU:HA	3:G:1119:ILE:HG12	1.85	0.56
3:G:1357:THR:HG23	3:G:1359:HIS:H	1.68	0.56
3:G:594:PHE:CD1	3:G:594:PHE:N	2.72	0.56
1:E:95:LYS:NZ	3:G:881:ARG:H	2.03	0.56
3:G:977:THR:C	3:G:981:ARG:HH12	2.08	0.56
3:G:985:MET:O	3:G:986:HIS:C	2.44	0.56
4:H:476:LEU:HD13	4:H:509:TYR:CD2	2.39	0.56
1:A:157:TRP:HB2	1:A:334:ILE:HB	1.86	0.56
1:A:156:LEU:HD22	1:A:398:PHE:CD2	2.40	0.56
1:A:48:THR:CB	1:A:77:LYS:HB2	2.34	0.56
2:B:103:HIS:HD2	2:B:104:PHE:CD1	2.24	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:366:TRP:CH2	3:C:371:GLU:HA	2.40	0.56
3:C:365:VAL:HG13	3:C:376:CYS:SG	2.45	0.56
3:C:652:ASN:HD22	3:C:670:MET:CG	2.18	0.56
3:C:746:TRP:O	3:C:749:ALA:N	2.38	0.56
3:C:946:GLN:NE2	3:C:947:LYS:CG	2.69	0.56
4:D:156:THR:H	4:D:157:PRO:CD	2.15	0.56
1:E:113:THR:HG22	1:E:124:SER:O	2.04	0.56
1:E:41:GLN:N	1:E:41:GLN:NE2	2.54	0.56
2:F:309:TYR:CD1	2:F:313:LEU:HD21	2.40	0.56
2:F:87:GLU:HA	2:F:93:TYR:CE1	2.41	0.56
3:G:1224:CYS:HA	3:G:1227:ILE:HD13	1.87	0.56
3:G:1334:ILE:O	3:G:1338:ILE:HG13	2.05	0.56
3:G:1416:LYS:HG3	3:G:1417:LEU:HD12	1.87	0.56
3:G:579:PHE:HD1	3:G:579:PHE:N	2.02	0.56
3:G:752:ILE:O	3:G:752:ILE:HG22	2.05	0.56
4:H:464:ILE:O	4:H:467:VAL:HB	2.05	0.56
2:B:438:GLY:O	2:B:439:PHE:HB3	2.04	0.56
3:C:549:ASN:ND2	3:C:552:ASN:O	2.38	0.56
3:C:790:PHE:O	3:C:791:LEU:C	2.42	0.56
4:D:196:LEU:HD12	4:D:197:GLY:H	1.70	0.56
2:F:159:LYS:HE3	2:F:178:LEU:CD2	2.36	0.56
2:F:22:TYR:HB2	2:F:84:SER:OG	2.05	0.56
3:G:570:LEU:HD13	3:G:766:LEU:CD2	2.33	0.56
3:G:621:PHE:O	3:G:624:ALA:HB3	2.06	0.56
4:H:407:ARG:O	4:H:409:ILE:N	2.39	0.56
2:B:170:SER:CB	2:B:171:PRO:HD2	2.34	0.56
3:C:382:ASN:ND2	3:C:521:LEU:HD22	2.20	0.56
3:G:1155:VAL:O	3:G:1159:LEU:HD12	2.05	0.56
3:G:1320:LEU:C	3:G:1320:LEU:HD13	2.25	0.56
3:G:1334:ILE:CG2	3:G:1440:PHE:CE1	2.88	0.56
3:G:596:TYR:O	3:G:597:ALA:HB3	2.05	0.56
3:G:650:ARG:CA	3:G:650:ARG:NH1	2.60	0.56
3:G:708:LEU:O	3:G:712:VAL:HG23	2.06	0.56
3:G:863:SER:C	3:G:866:PRO:HD2	2.26	0.56
3:G:946:GLN:NE2	3:G:947:LYS:CG	2.69	0.56
3:G:792:LEU:HD21	3:G:956:MET:HE2	1.86	0.56
3:G:982:GLU:HA	3:G:985:MET:CE	2.35	0.56
3:C:1131:SER:O	3:C:1133:PHE:N	2.37	0.56
3:C:1341:TYR:C	3:C:1341:TYR:CD2	2.79	0.56
4:D:357:TYR:CD1	4:D:357:TYR:N	2.74	0.56
4:D:382:LEU:HD11	4:D:389:VAL:CG2	2.34	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:596:VAL:HG12	4:D:597:ARG:O	2.05	0.56
1:E:171:ASP:HB2	1:E:174:VAL:CG2	2.35	0.56
1:E:248:PRO:HD2	1:E:292:LEU:HD11	1.87	0.56
3:G:1198:LEU:HD12	3:G:1198:LEU:C	2.26	0.56
3:G:491:ARG:O	3:G:492:LYS:HD2	2.05	0.56
3:G:375:SER:OG	3:G:630:ASP:OD2	2.18	0.56
3:G:767:GLN:O	3:G:771:ILE:HG13	2.05	0.56
4:H:212:LYS:C	4:H:214:PRO:HD2	2.26	0.56
4:H:446:SER:O	4:H:450:LYS:CG	2.51	0.56
2:B:313:LEU:O	2:B:316:ILE:HG12	2.06	0.56
3:C:564:VAL:CG1	3:C:565:HIS:N	2.67	0.56
3:C:762:LEU:HD23	3:C:762:LEU:H	1.70	0.56
3:C:953:ALA:O	3:C:956:MET:CB	2.53	0.56
2:F:158:GLU:CG	2:F:162:ARG:HH21	2.17	0.56
2:F:328:LYS:O	2:F:332:ILE:HG13	2.05	0.56
2:F:362:TYR:HD2	2:F:362:TYR:C	2.06	0.56
2:F:94:GLU:HG3	2:F:95:PRO:HD3	1.87	0.56
3:G:437:LYS:HG3	3:G:802:ILE:HD11	1.88	0.56
3:G:861:PHE:CD1	3:G:864:LEU:HD22	2.39	0.56
4:H:349:TYR:OH	4:H:377:LEU:HB3	2.06	0.56
1:A:234:LEU:HD22	1:A:240:TRP:HA	1.88	0.56
2:B:394:LEU:O	2:B:398:LEU:HG	2.06	0.56
3:C:746:TRP:O	3:C:747:LYS:C	2.43	0.56
3:C:872:PHE:O	3:C:873:ASN:C	2.43	0.56
1:E:241:ASP:HA	1:E:244:LEU:CD1	2.34	0.56
2:F:359:ARG:C	2:F:360:THR:HG22	2.25	0.56
3:G:635:VAL:O	3:G:635:VAL:HG22	2.05	0.56
3:G:843:LEU:HB3	3:G:981:ARG:HG2	1.87	0.56
4:H:363:LEU:HG	4:H:367:ILE:HD11	1.88	0.56
1:A:290:PRO:O	1:A:291:TRP:HB2	2.04	0.56
2:B:265:GLN:CG	2:B:266:GLY:N	2.69	0.56
2:B:425:GLN:O	2:B:429:GLU:HG3	2.06	0.56
3:C:1230:ILE:HG22	3:C:1235:ILE:HD11	1.88	0.56
3:C:1388:LEU:O	3:C:1391:GLN:N	2.36	0.56
3:C:598:PHE:O	3:C:599:LYS:C	2.44	0.56
3:C:707:HIS:O	3:C:708:LEU:C	2.42	0.56
3:C:728:ILE:HG22	3:C:729:GLN:N	2.20	0.56
4:D:346:CYS:CA	4:D:378:PHE:HB2	2.36	0.56
4:D:431:HIS:NE2	4:D:438:PRO:HD2	2.21	0.56
3:G:387:LEU:CD1	3:G:457:TYR:HE1	2.19	0.56
3:G:661:LYS:C	3:G:663:GLY:N	2.57	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:633:ILE:HG12	3:G:689:MET:HB2	1.88	0.56
3:G:790:PHE:O	3:G:793:LEU:HB2	2.05	0.56
2:B:292:HIS:CE1	2:B:296:ARG:HE	2.24	0.56
2:B:392:GLU:O	2:B:395:LYS:HB3	2.06	0.56
3:C:1290:ASN:ND2	3:C:1311:SER:OG	2.39	0.56
3:C:1372:PRO:HA	3:C:1375:MET:HE1	1.88	0.56
3:C:1379:LEU:O	3:C:1380:GLN:NE2	2.38	0.56
3:C:636:GLY:CA	3:C:752:ILE:HD13	2.35	0.56
3:C:998:VAL:O	3:C:998:VAL:HG12	2.05	0.56
4:D:213:LEU:HB2	4:D:214:PRO:HD3	1.87	0.56
4:D:157:PRO:HB3	4:D:354:SER:CB	2.35	0.56
1:E:110:ILE:HG13	1:E:165:VAL:O	2.06	0.56
1:E:194:GLY:HA2	1:E:201:LYS:HD3	1.88	0.56
1:E:48:THR:CB	1:E:77:LYS:HB2	2.36	0.56
1:E:82:ALA:CB	1:E:104:LYS:HB2	2.36	0.56
2:F:184:TYR:HD1	2:F:209:VAL:O	1.89	0.56
2:F:328:LYS:HZ2	2:F:341:PHE:HD2	1.50	0.56
3:G:1149:LYS:CD	3:G:1150:LYS:H	2.19	0.56
3:G:1376:LYS:HA	3:G:1376:LYS:HE2	1.87	0.56
3:G:598:PHE:O	3:G:599:LYS:C	2.42	0.56
3:G:725:MET:HA	3:G:728:ILE:CD1	2.33	0.56
3:G:790:PHE:O	3:G:791:LEU:C	2.43	0.56
4:H:435:TYR:HD1	4:H:436:PRO:N	2.03	0.56
1:A:169:VAL:CG1	1:A:174:VAL:HG11	2.36	0.55
1:A:208:ILE:HG23	1:A:212:ILE:HB	1.88	0.55
3:C:1019:PHE:O	3:C:1022:GLY:N	2.39	0.55
3:C:362:PHE:N	3:C:362:PHE:CD1	2.73	0.55
3:G:1246:PHE:O	3:G:1249:HIS:HB2	2.07	0.55
3:G:522:LYS:O	3:G:525:LEU:CG	2.52	0.55
3:G:636:GLY:CA	3:G:639:ILE:HD11	2.30	0.55
3:G:720:ARG:O	3:G:720:ARG:HD3	2.06	0.55
3:G:695:ILE:CD1	3:G:781:MET:O	2.50	0.55
3:G:935:ASN:HD22	3:G:937:ASP:H	1.49	0.55
4:H:253:LEU:N	4:H:253:LEU:HD22	2.21	0.55
1:A:128:CYS:HB2	1:A:129:PRO:CD	2.37	0.55
1:A:177:LEU:HB2	1:A:182:ARG:HE	1.69	0.55
1:A:209:HIS:CD2	1:A:210:PRO:HD2	2.41	0.55
1:A:214:LYS:O	1:A:217:ASN:HB2	2.06	0.55
2:B:37:ILE:CG2	2:B:41:GLU:HB3	2.36	0.55
2:B:74:LEU:HD23	2:B:130:PHE:CD1	2.42	0.55
3:C:1184:SER:C	3:C:1186:LEU:H	2.09	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:1411:ASP:O	3:C:1415:ASP:CG	2.44	0.55
3:C:602:ILE:HG22	3:C:603:GLU:N	2.21	0.55
3:C:978:TYR:O	3:C:980:GLY:N	2.39	0.55
4:D:344:VAL:HG21	4:D:574:LEU:HD11	1.88	0.55
1:E:330:ILE:HG12	1:E:348:PRO:O	2.06	0.55
2:F:295:LEU:HG	2:F:330:GLU:HG2	1.88	0.55
3:G:1451:LEU:HD23	3:G:1454:LEU:HD23	1.87	0.55
3:G:803:VAL:CB	3:G:804:PRO:CD	2.79	0.55
4:H:156:THR:H	4:H:157:PRO:CD	2.15	0.55
4:H:182:TRP:CD2	4:H:573:ARG:HD2	2.41	0.55
4:H:328:TYR:O	4:H:330:PRO:HD3	2.05	0.55
4:H:435:TYR:CD1	4:H:436:PRO:CA	2.90	0.55
2:B:22:TYR:N	2:B:25:CYS:HB3	2.20	0.55
3:C:1332:MET:HE1	4:D:390:GLU:HA	1.88	0.55
3:C:762:LEU:N	3:C:763:PRO:CD	2.70	0.55
3:C:774:ASN:HD21	3:C:779:THR:HG1	1.52	0.55
3:C:874:ILE:HD13	3:C:976:VAL:HG23	1.88	0.55
4:D:567:VAL:CG1	4:D:568:GLY:N	2.67	0.55
1:E:106:LEU:CD2	1:E:185:ILE:HD13	2.36	0.55
1:E:49:LEU:HD13	1:E:50:LYS:NZ	2.22	0.55
1:E:69:GLU:O	1:E:73:MET:CG	2.49	0.55
2:F:401:TYR:HD2	2:F:427:TYR:HE2	1.54	0.55
3:G:764:LEU:O	3:G:768:ILE:HG13	2.06	0.55
3:G:978:TYR:O	3:G:980:GLY:N	2.39	0.55
4:H:357:TYR:O	4:H:360:LEU:CB	2.53	0.55
2:B:32:PRO:HA	2:B:104:PHE:HE2	1.68	0.55
3:C:1219:VAL:O	3:C:1220:VAL:C	2.45	0.55
3:C:1433:LEU:O	3:C:1436:THR:HB	2.06	0.55
3:C:682:ARG:HD3	3:C:683:ASN:ND2	2.20	0.55
4:D:236:LYS:HD2	4:D:236:LYS:O	2.06	0.55
1:E:144:ARG:HG2	1:E:144:ARG:HH21	1.71	0.55
1:E:255:LEU:HD21	1:E:272:LEU:HA	1.88	0.55
2:F:433:ASN:O	2:F:434:VAL:CG1	2.54	0.55
3:G:1251:TYR:CD1	3:G:1253:LYS:HB3	2.41	0.55
3:G:499:LEU:HD22	3:G:528:VAL:HG22	1.87	0.55
1:A:140:ARG:O	1:A:144:ARG:CB	2.46	0.55
1:A:162:ARG:NH2	1:A:326:LYS:HG2	2.21	0.55
1:A:192:VAL:HG22	1:A:302:PHE:HD1	1.70	0.55
2:B:23:PRO:HD2	2:B:25:CYS:CB	2.36	0.55
2:B:426:LYS:HA	2:B:429:GLU:OE1	2.05	0.55
3:C:416:GLU:OE1	3:C:471:GLU:N	2.39	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:156:LEU:HB2	1:E:398:PHE:CZ	2.42	0.55
1:E:66:LEU:HD11	1:E:70:MET:HE3	1.89	0.55
2:F:159:LYS:HD3	2:F:159:LYS:C	2.27	0.55
2:F:243:ASP:C	2:F:243:ASP:OD1	2.45	0.55
3:G:1329:LYS:HE3	3:G:1333:ASP:OD2	2.06	0.55
3:G:529:ILE:O	3:G:529:ILE:HG23	2.05	0.55
3:G:538:VAL:HB	3:G:632:ASP:OD1	2.06	0.55
4:H:355:ILE:O	4:H:357:TYR:CD1	2.60	0.55
1:A:273:LYS:O	1:A:277:SER:OG	2.23	0.55
1:A:139:ILE:HG21	1:A:339:VAL:HG13	1.88	0.55
2:B:298:ASN:N	2:B:298:ASN:HD22	2.04	0.55
2:B:38:SER:C	2:B:40:ILE:H	2.10	0.55
2:B:445:ASN:O	2:B:448:PHE:N	2.40	0.55
3:C:1348:CYS:SG	3:C:1353:CYS:CB	2.78	0.55
3:C:1389:TYR:CD2	3:C:1389:TYR:O	2.60	0.55
4:D:479:HIS:CD2	4:D:515:GLN:NE2	2.74	0.55
1:E:267:GLN:HG2	1:E:271:HIS:NE2	2.22	0.55
1:E:65:ASP:OD2	1:E:65:ASP:N	2.39	0.55
2:F:369:LYS:HG2	2:F:370:ILE:N	2.21	0.55
3:G:1186:LEU:HD21	3:G:1190:GLN:OE1	2.06	0.55
3:G:1215:GLN:C	3:G:1218:PRO:HD2	2.27	0.55
3:G:1399:PHE:CD2	3:G:1433:LEU:HB3	2.42	0.55
3:G:698:LYS:HG2	3:G:706:TYR:CD1	2.42	0.55
3:G:854:LYS:N	3:G:854:LYS:HD3	2.22	0.55
3:G:864:LEU:HD12	3:G:868:ILE:HG13	1.87	0.55
3:G:867:SER:HA	3:G:870:GLN:HE21	1.72	0.55
4:H:571:PHE:CZ	4:H:598:ILE:HD13	2.42	0.55
1:A:105:GLU:OE1	1:A:175:ARG:HG2	2.06	0.55
1:A:139:ILE:HG21	1:A:339:VAL:CG1	2.37	0.55
1:A:147:LYS:HB2	1:A:155:ARG:CZ	2.37	0.55
1:A:270:GLU:O	1:A:274:LYS:HG3	2.06	0.55
1:A:386:THR:HG22	1:A:387:SER:N	2.22	0.55
3:C:1222:ARG:HG3	3:C:1223:ILE:HG13	1.89	0.55
3:C:1345:TRP:CE3	3:C:1358:ARG:HG3	2.42	0.55
3:C:953:ALA:O	3:C:956:MET:HB2	2.07	0.55
1:E:107:VAL:HA	1:E:167:CYS:O	2.07	0.55
2:F:265:GLN:HG2	2:F:266:GLY:N	2.18	0.55
3:G:1216:ILE:C	3:G:1218:PRO:HD2	2.27	0.55
3:G:362:PHE:CD2	3:G:687:GLY:HA3	2.40	0.55
3:G:792:LEU:HD12	3:G:967:PHE:HD1	1.71	0.55
3:G:848:LYS:HZ3	3:G:997:GLU:CG	2.07	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:1154:HIS:CE1	3:C:1155:VAL:CG2	2.86	0.55
3:C:1273:TYR:CD2	3:C:1394:PHE:HD1	2.25	0.55
3:C:344:TYR:N	3:C:498:TRP:CE3	2.74	0.55
4:D:212:LYS:C	4:D:214:PRO:HD2	2.27	0.55
4:D:158:SER:OG	4:D:356:THR:HG21	2.06	0.55
4:D:376:ILE:HG12	4:D:421:VAL:CG1	2.37	0.55
2:F:121:ILE:HG12	2:F:226:LEU:CD2	2.35	0.55
2:F:77:GLU:OE1	2:F:77:GLU:HA	2.07	0.55
3:G:1272:LYS:HD3	3:G:1273:TYR:HE1	1.71	0.55
3:G:701:ILE:CG1	3:G:703:CYS:SG	2.95	0.55
3:G:953:ALA:O	3:G:956:MET:CB	2.47	0.55
4:H:256:GLN:N	4:H:272:LEU:HD11	2.22	0.55
1:A:157:TRP:HA	1:A:166:HIS:O	2.07	0.55
2:B:55:SER:O	2:B:59:LEU:HG	2.07	0.55
2:B:421:GLN:CG	6:B:601:SF4:S4	2.95	0.55
3:C:595:PRO:CG	3:C:732:TYR:O	2.50	0.55
3:C:763:PRO:O	3:C:764:LEU:C	2.45	0.55
3:C:857:LEU:HD23	3:C:857:LEU:O	2.07	0.55
3:C:857:LEU:HD21	3:C:859:LEU:HD21	1.88	0.55
1:E:134:LEU:HD21	1:E:226:TYR:HE2	1.72	0.55
3:G:1371:CYS:CA	3:G:1379:LEU:HD21	2.35	0.55
3:G:1397:TYR:CD1	3:G:1397:TYR:C	2.79	0.55
3:G:365:VAL:HG13	3:G:376:CYS:SG	2.47	0.55
4:H:185:ARG:HB2	4:H:188:ALA:HB3	1.88	0.55
4:H:213:LEU:HB2	4:H:214:PRO:HD3	1.87	0.55
4:H:371:ARG:NH1	4:H:416:SER:O	2.40	0.55
1:A:344:PRO:HD2	1:A:345:PHE:CE1	2.42	0.55
2:B:215:VAL:O	2:B:218:ILE:HB	2.07	0.55
3:C:1131:SER:HA	3:C:1134:GLU:HG3	1.88	0.55
3:C:1219:VAL:HA	3:C:1222:ARG:HD3	1.89	0.55
3:C:1113:GLN:HG3	3:C:1238:TRP:CE2	2.41	0.55
3:C:1340:LYS:O	3:C:1341:TYR:C	2.44	0.55
3:C:1369:PRO:O	3:C:1369:PRO:HG2	2.06	0.55
3:C:1437:ALA:O	3:C:1438:GLU:C	2.45	0.55
3:C:977:THR:CB	3:C:981:ARG:HH12	2.16	0.55
4:D:561:ARG:HB2	4:D:563:THR:O	2.06	0.55
2:F:137:LYS:HE2	2:F:181:GLU:HB3	1.88	0.55
2:F:371:ILE:HG22	2:F:372:LEU:CD2	2.37	0.55
2:F:393:LEU:HG	2:F:397:LYS:HE3	1.88	0.55
3:G:651:ILE:HG23	3:G:652:ASN:N	2.21	0.55
3:G:796:PHE:CZ	3:G:910:ILE:HG21	2.42	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:H:540:ILE:N	4:H:540:ILE:CD1	2.66	0.55
2:B:298:ASN:N	2:B:298:ASN:ND2	2.55	0.54
3:C:1034:LYS:HB2	3:C:1035:LEU:HD23	1.89	0.54
3:C:579:PHE:HD1	3:C:579:PHE:H	1.55	0.54
3:C:661:LYS:C	3:C:663:GLY:N	2.60	0.54
3:C:866:PRO:HG3	3:C:954:ASN:HA	1.89	0.54
4:D:443:SER:O	4:D:445:LEU:N	2.40	0.54
1:E:199:LYS:HZ1	1:E:242:LYS:HG3	1.72	0.54
1:E:219:ILE:O	1:E:223:PHE:HB2	2.07	0.54
2:F:385:PRO:HG2	2:F:386:PHE:N	2.19	0.54
3:G:1222:ARG:HG2	3:G:1223:ILE:CD1	2.33	0.54
3:G:1299:SER:HA	3:G:1303:MET:CE	2.36	0.54
3:G:598:PHE:CZ	3:G:738:LEU:HD23	2.42	0.54
4:H:176:LEU:HD11	4:H:591:ILE:HG22	1.89	0.54
4:H:435:TYR:CD1	4:H:436:PRO:N	2.75	0.54
4:H:574:LEU:HG	4:H:593:VAL:CG2	2.37	0.54
1:A:146:LEU:CB	1:A:155:ARG:HD3	2.36	0.54
2:B:103:HIS:CD2	2:B:104:PHE:CD1	2.95	0.54
2:B:164:GLN:HE22	2:B:176:LEU:HD11	1.72	0.54
3:C:1231:ASP:O	3:C:1232:ALA:C	2.44	0.54
3:C:619:LEU:HD12	3:C:651:ILE:HA	1.88	0.54
3:C:925:VAL:HG21	3:C:945:ARG:HD3	1.88	0.54
1:E:106:LEU:HD13	1:E:182:ARG:HD3	1.89	0.54
2:F:78:LEU:HD12	2:F:130:PHE:HE2	1.72	0.54
3:G:1400:ASP:OD1	3:G:1403:CYS:HB2	2.07	0.54
3:G:588:LYS:HD3	3:G:594:PHE:HE1	1.70	0.54
3:G:855:PHE:CE2	3:G:1045:LYS:HG3	2.42	0.54
4:H:430:HIS:NE2	4:H:440:PHE:CE1	2.75	0.54
4:H:294:TYR:CE1	4:H:486:SER:C	2.77	0.54
1:A:251:ILE:HD12	1:A:275:VAL:CG1	2.37	0.54
2:B:38:SER:C	2:B:40:ILE:N	2.60	0.54
2:B:406:GLY:O	2:B:409:SER:OG	2.22	0.54
2:B:49:ARG:NH1	2:B:103:HIS:HB2	2.22	0.54
3:C:1000:TYR:CG	3:C:1001:GLY:N	2.75	0.54
3:C:585:VAL:HG11	3:C:621:PHE:HD2	1.71	0.54
4:D:156:THR:HG22	4:D:159:GLN:HB2	1.89	0.54
4:D:495:PHE:HA	4:D:498:ILE:CG1	2.36	0.54
4:D:526:TYR:C	4:D:526:TYR:CD2	2.81	0.54
4:D:593:VAL:CG1	4:D:594:GLN:N	2.71	0.54
1:E:273:LYS:HD2	1:E:293:GLU:CD	2.27	0.54
1:E:21:PHE:HE2	1:E:321:PHE:O	1.91	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:38:ASN:HB3	1:E:41:GLN:HB2	1.89	0.54
3:G:1328:ASN:O	3:G:1331:ILE:N	2.41	0.54
3:G:413:VAL:HA	3:G:472:THR:CB	2.38	0.54
3:G:378:VAL:HA	3:G:518:ALA:O	2.08	0.54
3:G:707:HIS:O	3:G:708:LEU:C	2.44	0.54
3:G:855:PHE:HE2	3:G:1045:LYS:CG	2.20	0.54
4:H:593:VAL:CG1	4:H:594:GLN:N	2.71	0.54
1:A:142:ILE:O	1:A:146:LEU:HG	2.07	0.54
2:B:50:VAL:HG23	2:B:106:LEU:CD1	2.37	0.54
2:B:23:PRO:O	2:B:25:CYS:N	2.38	0.54
2:B:431:ILE:HG23	2:B:432:HIS:ND1	2.22	0.54
2:B:78:LEU:HD12	2:B:130:PHE:HE2	1.72	0.54
3:C:545:LYS:CE	3:C:723:ILE:HD13	2.38	0.54
3:C:553:HIS:ND1	3:C:554:GLN:N	2.56	0.54
3:C:869:ILE:HA	3:C:874:ILE:HD12	1.90	0.54
3:C:934:LEU:HD12	3:C:935:ASN:H	1.72	0.54
4:D:243:LEU:CD2	4:D:253:LEU:HD13	2.36	0.54
1:E:95:LYS:NZ	3:G:881:ARG:O	2.41	0.54
2:F:136:PRO:C	2:F:138:ASP:H	2.11	0.54
2:F:358:LYS:HD3	3:G:1274:ARG:NH2	2.09	0.54
2:F:38:SER:C	2:F:40:ILE:N	2.60	0.54
3:G:1184:SER:C	3:G:1186:LEU:H	2.10	0.54
3:G:1299:SER:HA	3:G:1303:MET:HE2	1.87	0.54
3:G:599:LYS:O	3:G:603:GLU:CG	2.54	0.54
3:G:746:TRP:O	3:G:749:ALA:N	2.40	0.54
3:G:774:ASN:O	3:G:775:ILE:HG13	2.08	0.54
3:G:774:ASN:ND2	3:G:775:ILE:H	2.04	0.54
4:H:431:HIS:O	4:H:433:PRO:HD3	2.07	0.54
4:H:493:ASP:O	4:H:494:ARG:C	2.45	0.54
4:H:532:PRO:CG	4:H:533:VAL:N	2.71	0.54
1:A:35:VAL:O	1:A:36:ILE:HD13	2.07	0.54
2:B:121:ILE:HD11	2:B:227:SER:N	2.23	0.54
3:C:1095:VAL:O	3:C:1096:ILE:C	2.46	0.54
4:D:414:ARG:HH11	4:D:414:ARG:HG3	1.72	0.54
4:D:493:ASP:O	4:D:494:ARG:C	2.44	0.54
1:E:174:VAL:O	1:E:177:LEU:HG	2.06	0.54
1:E:247:VAL:CG1	1:E:248:PRO:HD2	2.38	0.54
2:F:137:LYS:NZ	2:F:181:GLU:HA	2.20	0.54
2:F:30:LEU:HG	2:F:31:GLN:HG3	1.90	0.54
3:G:1010:THR:O	3:G:1011:ASN:CB	2.55	0.54
3:G:1035:LEU:O	3:G:1036:LEU:C	2.46	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:851:PHE:CD1	3:G:1048:LEU:HD12	2.43	0.54
3:G:1253:LYS:O	3:G:1255:GLU:N	2.41	0.54
3:G:411:LYS:H	3:G:411:LYS:CD	1.96	0.54
3:G:578:PRO:HB2	3:G:753:LEU:HD23	1.89	0.54
4:H:251:VAL:O	4:H:305:GLU:HA	2.06	0.54
1:A:210:PRO:HG2	2:B:201:TYR:CD2	2.42	0.54
1:A:45:PHE:O	1:A:58:GLN:HG2	2.07	0.54
3:C:1253:LYS:O	3:C:1255:GLU:N	2.41	0.54
3:C:365:VAL:CG2	3:C:376:CYS:HB2	2.33	0.54
3:C:409:SER:O	3:C:412:ASP:HB2	2.08	0.54
3:C:563:LEU:HD21	3:C:746:TRP:CD1	2.40	0.54
3:C:610:GLU:OE1	3:C:611:VAL:N	2.40	0.54
3:C:985:MET:O	3:C:988:LYS:N	2.41	0.54
3:C:1332:MET:CE	4:D:390:GLU:HA	2.37	0.54
1:E:112:MET:CB	1:E:163:ARG:HB2	2.37	0.54
1:E:213:ARG:HA	1:E:216:ILE:HD12	1.88	0.54
2:F:49:ARG:HH11	2:F:103:HIS:HB2	1.69	0.54
2:F:290:GLN:OE1	2:F:397:LYS:NZ	2.35	0.54
2:F:428:PHE:HZ	2:F:450:GLU:HB3	1.70	0.54
3:G:1135:ILE:HB	3:G:1177:TYR:CE1	2.43	0.54
3:G:1242:ASP:N	3:G:1243:PRO:HD2	2.19	0.54
3:G:1392:LEU:HB3	3:G:1441:LEU:HD21	1.90	0.54
3:G:587:SER:OG	3:G:588:LYS:N	2.36	0.54
3:G:598:PHE:CE1	3:G:739:LEU:HD22	2.43	0.54
3:G:911:LEU:HD11	3:G:915:ILE:HD11	1.90	0.54
4:H:382:LEU:HD12	4:H:382:LEU:C	2.27	0.54
2:B:355:LYS:HG2	3:C:1247:ARG:NH2	2.23	0.54
2:B:57:GLU:O	2:B:61:VAL:HG23	2.07	0.54
3:C:1014:ASN:ND2	3:C:1016:GLU:HB2	2.23	0.54
3:C:1148:ASP:O	3:C:1149:LYS:C	2.45	0.54
3:C:790:PHE:O	3:C:793:LEU:N	2.40	0.54
3:C:920:GLU:HA	3:C:923:LYS:CE	2.38	0.54
4:D:561:ARG:CG	4:D:564:LYS:HE2	2.37	0.54
1:E:182:ARG:O	1:E:186:VAL:HG23	2.08	0.54
2:F:237:LEU:O	2:F:240:VAL:HG12	2.07	0.54
2:F:443:HIS:HE1	2:F:445:ASN:H	1.55	0.54
3:G:1342:TYR:HB3	4:H:519:ALA:CB	2.36	0.54
3:G:1416:LYS:O	3:G:1420:GLN:HB2	2.08	0.54
3:G:543:SER:CB	3:G:749:ALA:HB2	2.35	0.54
3:G:636:GLY:HA2	3:G:752:ILE:HG21	1.89	0.54
4:H:227:LEU:O	4:H:231:LEU:HG	2.07	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:H:547:PHE:CD1	4:H:547:PHE:C	2.80	0.54
2:B:150:GLN:C	2:B:151:PHE:CD1	2.81	0.54
2:B:264:THR:OG1	2:B:265:GLN:N	2.38	0.54
2:B:280:SER:N	2:B:284:PHE:HE1	2.06	0.54
2:B:355:LYS:NZ	3:C:1247:ARG:NH2	2.56	0.54
3:C:990:MET:O	3:C:993:LYS:HB3	2.08	0.54
4:D:306:GLY:CA	4:D:317:THR:HG23	2.25	0.54
3:C:1328:ASN:ND2	4:D:398:PHE:CZ	2.75	0.54
4:D:445:LEU:HB3	4:D:450:LYS:NZ	2.23	0.54
4:D:540:ILE:O	4:D:541:PRO:O	2.26	0.54
1:E:159:TYR:HD2	1:E:330:ILE:O	1.90	0.54
2:F:308:GLN:HE22	2:F:383:GLY:H	1.56	0.54
3:G:1221:ALA:O	3:G:1224:CYS:N	2.37	0.54
3:G:743:GLU:HG2	3:G:744:HIS:N	2.23	0.54
3:G:921:ARG:HH22	3:G:945:ARG:NE	2.05	0.54
1:A:136:THR:HA	1:A:139:ILE:HD12	1.88	0.54
1:A:108:PHE:HZ	1:A:185:ILE:CG2	2.21	0.54
1:A:202:VAL:CG1	1:A:298:LEU:HD12	2.38	0.54
1:A:157:TRP:HB3	1:A:334:ILE:CD1	2.37	0.54
1:A:393:LYS:NZ	1:A:396:GLU:HB3	2.23	0.54
2:B:135:LEU:O	2:B:140:ILE:HD11	2.08	0.54
2:B:449:CYS:O	2:B:452:GLN:N	2.35	0.54
3:C:1201:GLN:NE2	3:C:1203:ASN:OD1	2.38	0.54
3:C:1224:CYS:HA	3:C:1227:ILE:HD12	1.89	0.54
3:C:1389:TYR:CD2	3:C:1389:TYR:C	2.81	0.54
3:C:790:PHE:HA	3:C:793:LEU:HD12	1.90	0.54
3:C:903:ASP:OD1	3:C:905:SER:N	2.38	0.54
4:D:198:CYS:HB3	4:D:199:PRO:HD2	1.90	0.54
4:D:511:LEU:HD12	4:D:512:TYR:N	2.23	0.54
3:G:1431:ARG:O	3:G:1435:ASN:ND2	2.41	0.54
3:G:557:ILE:HG13	3:G:650:ARG:HG3	1.89	0.54
3:G:793:LEU:O	3:G:797:TYR:CD1	2.57	0.54
2:B:164:GLN:HE22	2:B:176:LEU:HD12	1.71	0.54
3:C:1019:PHE:O	3:C:1021:LEU:N	2.40	0.54
3:C:1095:VAL:HG13	3:C:1112:ILE:HG23	1.89	0.54
3:C:1135:ILE:HG22	3:C:1136:ASN:N	2.23	0.54
3:C:1332:MET:HA	3:C:1335:ARG:HG3	1.89	0.54
3:C:364:LYS:HZ1	3:C:538:VAL:H	1.56	0.54
3:C:750:LYS:O	3:C:753:LEU:N	2.39	0.54
3:C:764:LEU:O	3:C:768:ILE:HG13	2.08	0.54
4:D:411:GLU:C	4:D:413:THR:N	2.61	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:424:PRO:HG2	4:D:458:GLU:CB	2.38	0.54
4:D:571:PHE:HD2	4:D:571:PHE:H	1.56	0.54
1:E:213:ARG:O	1:E:217:ASN:ND2	2.41	0.54
1:E:51:ASP:O	1:E:52:ASP:CB	2.56	0.54
1:E:47:PHE:CE1	1:E:78:ILE:HG23	2.43	0.54
2:F:320:LEU:HA	2:F:353:PHE:CD1	2.43	0.54
2:F:324:LEU:O	2:F:328:LYS:HB2	2.08	0.54
3:G:1018:VAL:O	3:G:1021:LEU:HB3	2.08	0.54
3:G:1186:LEU:CD2	3:G:1190:GLN:OE1	2.56	0.54
3:G:344:TYR:CE2	3:G:497:CYS:HA	2.42	0.54
3:G:925:VAL:CG2	3:G:945:ARG:HD3	2.37	0.54
3:G:978:TYR:HA	3:G:981:ARG:NH2	2.23	0.54
3:G:982:GLU:HG2	3:G:983:ILE:N	2.22	0.54
4:H:257:ILE:HG22	4:H:258:GLY:N	2.20	0.54
1:A:259:PHE:CE2	1:A:271:HIS:HB3	2.41	0.53
1:A:82:ALA:HB1	1:A:103:GLU:O	2.07	0.53
2:B:114:GLU:HG3	2:B:114:GLU:O	2.07	0.53
3:C:388:TYR:O	3:C:476:VAL:HA	2.07	0.53
3:C:607:VAL:HG23	3:C:607:VAL:O	2.07	0.53
3:C:578:PRO:HB2	3:C:753:LEU:CD2	2.38	0.53
4:D:257:ILE:HG12	4:D:302:VAL:HG11	1.90	0.53
2:F:101:ILE:O	2:F:102:SER:C	2.47	0.53
2:F:215:VAL:O	2:F:219:LEU:HG	2.08	0.53
2:F:341:PHE:CE1	2:F:345:TYR:HB2	2.43	0.53
2:F:445:ASN:O	2:F:448:PHE:N	2.41	0.53
2:F:47:ILE:HD11	3:G:1266:GLN:HB3	1.88	0.53
4:H:443:SER:O	4:H:445:LEU:N	2.41	0.53
4:H:170:VAL:HG13	4:H:594:GLN:HG3	1.90	0.53
1:A:228:LEU:HB3	1:A:266:LEU:HD23	1.89	0.53
1:A:207:LYS:HZ2	2:B:172:SER:HA	1.69	0.53
2:B:293:LYS:HE2	2:B:297:GLU:HG3	1.90	0.53
3:C:345:TRP:C	3:C:346:LEU:HG	2.28	0.53
3:C:378:VAL:HA	3:C:518:ALA:O	2.08	0.53
3:C:413:VAL:HA	3:C:472:THR:CB	2.38	0.53
4:D:303:ILE:HG22	4:D:320:TYR:HD1	1.73	0.53
4:D:346:CYS:HA	4:D:378:PHE:HB2	1.89	0.53
4:D:469:PHE:CE2	4:D:537:VAL:HG11	2.42	0.53
2:F:370:ILE:HG22	2:F:370:ILE:O	2.07	0.53
3:G:1000:TYR:CG	3:G:1001:GLY:N	2.76	0.53
3:G:1094:PHE:CZ	3:G:1115:ARG:HG2	2.44	0.53
3:G:1128:VAL:HG11	3:G:1133:PHE:CE2	2.43	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:1149:LYS:O	3:G:1151:SER:N	2.41	0.53
3:G:1198:LEU:CG	3:G:1199:GLN:N	2.71	0.53
3:G:1231:ASP:O	3:G:1232:ALA:C	2.46	0.53
3:G:857:LEU:HD12	3:G:1018:VAL:CG1	2.38	0.53
4:H:576:LEU:O	4:H:577:ARG:HB2	2.08	0.53
1:A:208:ILE:HG23	1:A:212:ILE:CG2	2.37	0.53
2:B:97:ARG:O	2:B:98:ARG:C	2.45	0.53
3:C:1277:GLU:OE1	3:C:1336:ARG:NH2	2.41	0.53
3:C:858:LEU:HD12	3:C:1007:MET:N	2.23	0.53
3:G:380:VAL:HG12	3:G:523:PRO:HG3	1.91	0.53
3:G:862:ASN:ND2	3:G:1039:ASP:HB2	2.22	0.53
4:H:422:PHE:CD2	4:H:422:PHE:N	2.77	0.53
1:A:255:LEU:HD21	1:A:272:LEU:HA	1.90	0.53
1:A:336:LEU:HD23	1:A:339:VAL:HG22	1.89	0.53
2:B:309:TYR:CE2	2:B:313:LEU:HD11	2.43	0.53
3:C:1078:ASP:N	3:C:1078:ASP:OD2	2.41	0.53
3:C:851:PHE:HD2	3:C:1105:ARG:HG3	1.72	0.53
3:C:1294:ASN:ND2	3:C:1296:PHE:H	2.03	0.53
3:C:1395:TYR:HA	3:C:1398:ILE:CD1	2.35	0.53
3:C:549:ASN:OD1	3:C:552:ASN:C	2.47	0.53
3:C:625:LYS:HB3	3:C:629:ILE:HD11	1.90	0.53
3:C:637:HIS:CE1	3:C:708:LEU:H	2.26	0.53
3:C:977:THR:O	3:C:981:ARG:NH1	2.42	0.53
4:D:256:GLN:N	4:D:272:LEU:HD11	2.23	0.53
4:D:367:ILE:HG23	4:D:375:CYS:SG	2.48	0.53
2:F:265:GLN:CG	2:F:266:GLY:N	2.69	0.53
2:F:441:LEU:HD21	2:F:447:PHE:HD1	1.74	0.53
3:G:1219:VAL:O	3:G:1220:VAL:C	2.47	0.53
3:G:360:PHE:CE2	3:G:379:MET:HG3	2.42	0.53
3:G:409:SER:O	3:G:412:ASP:HB2	2.09	0.53
3:G:780:LEU:O	3:G:780:LEU:HD23	2.08	0.53
4:H:495:PHE:N	4:H:495:PHE:CD1	2.74	0.53
1:A:204:LEU:HB3	1:A:208:ILE:HD11	1.90	0.53
1:A:62:ASN:OD1	1:A:64:SER:HB3	2.09	0.53
2:B:265:GLN:HG2	2:B:266:GLY:N	2.17	0.53
2:B:337:ASP:OD1	2:B:339:ASP:N	2.40	0.53
2:B:428:PHE:HD2	2:B:437:CYS:HB2	1.73	0.53
2:F:300:HIS:CG	2:F:301:LEU:N	2.76	0.53
3:G:1019:PHE:C	3:G:1021:LEU:N	2.60	0.53
3:G:1376:LYS:O	3:G:1376:LYS:HD3	2.07	0.53
3:G:1389:TYR:OH	3:G:1447:SER:HB2	2.09	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:479:THR:OG1	3:G:480:ASN:N	2.42	0.53
3:G:589:PRO:HG3	3:G:592:CYS:CB	2.39	0.53
3:G:664:ARG:HG3	3:G:688:ARG:HE	1.73	0.53
3:G:543:SER:OG	3:G:748:ASP:CB	2.57	0.53
3:G:489:MET:HG3	3:G:797:TYR:CZ	2.44	0.53
4:H:430:HIS:CD2	4:H:440:PHE:HE1	2.26	0.53
4:H:403:LYS:NZ	4:H:442:TYR:HD1	2.07	0.53
4:H:170:VAL:HG13	4:H:594:GLN:CG	2.38	0.53
1:A:393:LYS:HG3	1:A:397:HIS:NE2	2.23	0.53
3:C:1116:LEU:HA	3:C:1119:ILE:HG13	1.90	0.53
4:D:251:VAL:O	4:D:305:GLU:HA	2.09	0.53
1:E:140:ARG:O	1:E:144:ARG:CB	2.54	0.53
3:G:1113:GLN:HG3	3:G:1238:TRP:CE2	2.43	0.53
3:G:598:PHE:CE1	3:G:739:LEU:CD2	2.92	0.53
3:G:880:GLN:O	3:G:899:PRO:HB3	2.08	0.53
4:H:196:LEU:HG	4:H:197:GLY:N	2.24	0.53
4:H:346:CYS:HA	4:H:378:PHE:HB2	1.91	0.53
4:H:548:VAL:CG2	4:H:557:VAL:HG22	2.34	0.53
1:A:294:TRP:HD1	1:A:297:MET:SD	2.32	0.53
1:A:43:ARG:HD3	1:A:44:GLU:N	2.24	0.53
3:C:1025:VAL:O	3:C:1026:LYS:C	2.47	0.53
3:C:1147:PRO:C	3:C:1149:LYS:N	2.62	0.53
3:C:1231:ASP:OD1	3:C:1233:VAL:N	2.42	0.53
3:C:1307:LEU:HB3	3:C:1320:LEU:CD2	2.37	0.53
3:C:695:ILE:CD1	3:C:781:MET:O	2.55	0.53
3:C:867:SER:O	3:C:870:GLN:HB2	2.09	0.53
1:E:111:ASP:OD1	1:E:163:ARG:HG3	2.09	0.53
2:F:248:PRO:C	2:F:249:LEU:HD23	2.29	0.53
2:F:78:LEU:HD12	2:F:130:PHE:CE2	2.44	0.53
3:G:668:SER:HB2	3:G:669:ASN:ND2	2.23	0.53
3:G:588:LYS:HA	3:G:732:TYR:OH	2.09	0.53
3:G:935:ASN:HD21	3:G:937:ASP:CB	2.08	0.53
4:H:253:LEU:CD2	4:H:253:LEU:H	2.21	0.53
4:H:411:GLU:C	4:H:413:THR:H	2.12	0.53
4:H:510:PRO:O	4:H:511:LEU:C	2.47	0.53
4:H:569:GLY:C	4:H:570:THR:CG2	2.77	0.53
2:B:67:THR:O	2:B:71:GLN:HG2	2.09	0.53
3:C:1307:LEU:HD22	3:C:1430:TYR:HE2	1.67	0.53
3:C:363:GLY:O	3:C:364:LYS:CG	2.56	0.53
3:C:539:VAL:HG21	3:C:568:PHE:CD2	2.44	0.53
3:C:693:VAL:HG11	3:C:755:ILE:CG2	2.39	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:751:PHE:HD1	3:C:751:PHE:H	1.54	0.53
2:F:23:PRO:O	2:F:25:CYS:N	2.36	0.53
2:F:387:ARG:HH12	3:G:995:ASN:HA	1.74	0.53
2:F:22:TYR:N	2:F:84:SER:OG	2.41	0.53
3:G:513:TRP:CZ3	3:G:661:LYS:HG2	2.43	0.53
3:G:631:PRO:CA	3:G:688:ARG:HH12	2.21	0.53
3:G:856:ILE:HG21	3:G:999:ILE:HD11	1.91	0.53
4:H:503:LEU:HD21	4:H:534:THR:HG23	1.90	0.53
1:A:106:LEU:HB3	1:A:169:VAL:CB	2.36	0.53
1:A:137:MET:O	1:A:141:ILE:CG1	2.57	0.53
1:A:192:VAL:CG2	1:A:302:PHE:CD1	2.92	0.53
1:A:313:ILE:O	1:A:313:ILE:HG12	2.09	0.53
2:B:132:PHE:HE1	2:B:140:ILE:HG23	1.74	0.53
2:B:427:TYR:CD1	2:B:427:TYR:C	2.82	0.53
3:C:1362:LEU:N	3:C:1362:LEU:CD1	2.71	0.53
3:C:616:ARG:O	3:C:616:ARG:HG2	2.09	0.53
4:D:218:GLU:HA	4:D:218:GLU:OE1	2.09	0.53
4:D:307:ILE:O	4:D:315:VAL:CG2	2.57	0.53
4:D:357:TYR:O	4:D:360:LEU:CB	2.57	0.53
1:E:60:PHE:HB3	1:E:65:ASP:CB	2.38	0.53
2:F:178:LEU:HD11	2:F:183:ILE:HD11	1.90	0.53
3:G:539:VAL:CG1	3:G:540:MET:N	2.71	0.53
4:H:357:TYR:CD1	4:H:357:TYR:N	2.76	0.53
1:A:349:THR:HG22	1:A:351:SER:N	2.23	0.53
2:B:77:GLU:O	2:B:78:LEU:C	2.47	0.53
3:C:858:LEU:HD12	3:C:1007:MET:CA	2.38	0.53
3:C:1120:GLY:O	3:C:1123:VAL:HB	2.09	0.53
3:C:849:VAL:HG13	3:C:1226:PRO:HB3	1.91	0.53
3:C:1370:LEU:O	3:C:1371:CYS:C	2.47	0.53
3:C:1397:TYR:C	3:C:1397:TYR:CD1	2.81	0.53
3:C:1430:TYR:O	3:C:1432:LYS:N	2.42	0.53
3:C:539:VAL:HG21	3:C:568:PHE:HD2	1.72	0.53
3:C:724:PRO:HB2	3:C:726:GLU:CG	2.27	0.53
3:C:747:LYS:O	3:C:750:LYS:HB3	2.08	0.53
4:D:376:ILE:HG12	4:D:421:VAL:HG11	1.91	0.53
1:E:112:MET:SD	1:E:119:ARG:CZ	2.97	0.53
1:E:204:LEU:HD22	1:E:208:ILE:CD1	2.39	0.53
1:E:41:GLN:H	1:E:41:GLN:NE2	2.06	0.53
1:E:55:ILE:CD1	1:E:56:ARG:H	2.21	0.53
1:E:26:TYR:CZ	1:E:80:ILE:HD11	2.44	0.53
2:F:158:GLU:CD	2:F:162:ARG:HH21	2.12	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:1355:ASN:OD1	3:G:1355:ASN:C	2.46	0.53
3:G:618:LEU:HD23	3:G:619:LEU:HD23	1.90	0.53
3:G:745:THR:CG2	3:G:746:TRP:N	2.70	0.53
3:G:872:PHE:O	3:G:873:ASN:C	2.46	0.53
4:H:174:PHE:CD1	4:H:175:GLY:N	2.77	0.53
4:H:539:ILE:O	4:H:541:PRO:HD3	2.08	0.53
1:A:114:ASP:O	1:A:304:ARG:NH1	2.42	0.52
1:A:135:MET:CE	1:A:164:GLY:HA2	2.38	0.52
2:B:154:ILE:HG22	2:B:158:GLU:OE1	2.09	0.52
3:C:1151:SER:HA	3:C:1189:SER:HB3	1.90	0.52
3:C:1372:PRO:HA	3:C:1375:MET:HE2	1.90	0.52
1:E:158:VAL:HG12	1:E:159:TYR:N	2.25	0.52
2:F:240:VAL:C	2:F:242:SER:N	2.61	0.52
2:F:371:ILE:HD11	2:F:384:CYS:SG	2.49	0.52
2:F:83:PHE:HE2	2:F:99:ASP:HA	1.74	0.52
3:G:1221:ALA:C	3:G:1223:ILE:N	2.61	0.52
3:G:1364:PHE:HB2	4:H:217:ARG:NE	2.15	0.52
3:G:637:HIS:CE1	3:G:708:LEU:H	2.26	0.52
3:G:868:ILE:HG23	3:G:872:PHE:CD2	2.44	0.52
1:A:174:VAL:HA	1:A:177:LEU:HG	1.90	0.52
1:A:222:TYR:N	1:A:222:TYR:CD1	2.77	0.52
2:B:132:PHE:CE1	2:B:140:ILE:HG23	2.43	0.52
2:B:433:ASN:C	2:B:434:VAL:CG1	2.78	0.52
2:B:355:LYS:NZ	3:C:1247:ARG:HH22	2.07	0.52
3:C:1400:ASP:HA	3:C:1434:LYS:CD	2.38	0.52
3:C:437:LYS:HD3	3:C:800:ASN:HD22	1.74	0.52
4:D:430:HIS:NE2	4:D:440:PHE:HE1	2.07	0.52
4:D:427:ARG:HH12	4:D:561:ARG:HH12	1.57	0.52
4:D:561:ARG:H	4:D:564:LYS:HE2	1.74	0.52
3:G:1006:ILE:HG22	3:G:1006:ILE:O	2.09	0.52
2:B:136:PRO:C	2:B:138:ASP:H	2.11	0.52
2:B:47:ILE:HG21	2:B:260:GLN:NE2	2.24	0.52
2:B:26:LEU:HB3	2:B:143:PHE:CE2	2.45	0.52
2:B:27:GLN:NE2	2:B:29:TYR:CD2	2.78	0.52
3:C:1081:ARG:HB3	3:C:1083:ASP:OD1	2.09	0.52
3:C:1216:ILE:N	3:C:1216:ILE:CD1	2.72	0.52
3:C:395:LYS:CA	3:C:408:ILE:HD11	2.39	0.52
3:C:612:ALA:HB1	3:C:617:THR:CB	2.38	0.52
1:E:334:ILE:HG12	1:E:342:PHE:CE2	2.44	0.52
1:E:401:ASN:HD22	1:E:401:ASN:N	2.06	0.52
1:E:49:LEU:HB3	1:E:50:LYS:CE	2.39	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:307:MET:O	2:F:311:LEU:HG	2.09	0.52
3:G:1025:VAL:O	3:G:1026:LYS:C	2.47	0.52
3:G:1141:LYS:HB2	3:G:1146:TYR:CD1	2.44	0.52
3:G:1142:ASP:O	3:G:1145:ASP:N	2.42	0.52
3:G:1211:TYR:CA	3:G:1215:GLN:HB2	2.37	0.52
3:G:437:LYS:CG	3:G:802:ILE:HD11	2.40	0.52
4:H:577:ARG:O	4:H:591:ILE:HD11	2.10	0.52
1:A:112:MET:CB	1:A:163:ARG:HB2	2.39	0.52
1:A:334:ILE:HG12	1:A:342:PHE:CE1	2.43	0.52
3:C:1221:ALA:C	3:C:1223:ILE:N	2.63	0.52
3:C:1334:ILE:HD13	3:C:1392:LEU:HD22	1.91	0.52
3:C:651:ILE:HD11	3:C:659:TRP:HA	1.90	0.52
3:C:659:TRP:N	3:C:659:TRP:CD1	2.77	0.52
3:C:716:LEU:HG	3:C:755:ILE:CG1	2.40	0.52
3:G:1141:LYS:HB2	3:G:1146:TYR:CE1	2.44	0.52
3:G:1158:ALA:CA	3:G:1161:ILE:HD12	2.37	0.52
3:G:635:VAL:HG11	3:G:756:MET:CE	2.39	0.52
4:H:271:ILE:HD12	4:H:272:LEU:C	2.29	0.52
1:A:13:LEU:HD22	1:A:17:TYR:CE2	2.43	0.52
2:B:285:PRO:HB2	2:B:286:PRO:CD	2.40	0.52
2:B:410:GLN:O	2:B:414:LEU:HG	2.08	0.52
2:B:387:ARG:HA	2:B:420:TYR:CD1	2.43	0.52
3:C:1097:GLY:O	3:C:1100:LEU:N	2.42	0.52
3:C:1074:LEU:HD21	3:C:1100:LEU:HD11	1.91	0.52
3:C:1431:ARG:O	3:C:1435:ASN:CG	2.48	0.52
3:C:382:ASN:HD21	3:C:521:LEU:HD22	1.75	0.52
4:D:202:LEU:C	4:D:202:LEU:HD23	2.30	0.52
1:E:349:THR:CG2	1:E:351:SER:HB3	2.40	0.52
1:E:156:LEU:CD2	1:E:395:PHE:HE1	2.22	0.52
1:E:56:ARG:HD3	1:E:57:TYR:HE2	1.73	0.52
2:F:265:GLN:HB2	2:F:362:TYR:CZ	2.44	0.52
2:F:87:GLU:HB3	2:F:93:TYR:HE1	1.75	0.52
3:G:1083:ASP:OD1	3:G:1083:ASP:N	2.43	0.52
3:G:1216:ILE:H	3:G:1216:ILE:CD1	2.23	0.52
3:G:1304:GLU:OE2	3:G:1309:ARG:HD2	2.10	0.52
3:G:1363:GLN:CD	3:G:1370:LEU:HD23	2.30	0.52
3:G:543:SER:HB2	3:G:749:ALA:CB	2.37	0.52
3:G:549:ASN:OD1	3:G:552:ASN:C	2.48	0.52
3:G:792:LEU:HD21	3:G:956:MET:CE	2.39	0.52
4:H:157:PRO:HB3	4:H:354:SER:CB	2.36	0.52
1:A:106:LEU:O	1:A:169:VAL:HG23	2.09	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:174:VAL:HG13	1:A:177:LEU:HD11	1.91	0.52
1:A:228:LEU:HD21	1:A:233:ILE:HD11	1.92	0.52
1:A:233:ILE:HD12	1:A:243:ILE:CD1	2.39	0.52
1:A:27:TYR:CB	1:A:63:GLN:HG3	2.39	0.52
2:B:358:LYS:O	2:B:359:ARG:CB	2.58	0.52
2:B:385:PRO:O	2:B:387:ARG:N	2.43	0.52
3:C:1035:LEU:O	3:C:1036:LEU:C	2.47	0.52
3:C:859:LEU:HB3	3:C:1038:ILE:HD11	1.92	0.52
3:C:1116:LEU:HD12	3:C:1116:LEU:N	2.23	0.52
3:C:1340:LYS:HA	3:C:1343:ASP:OD2	2.09	0.52
3:C:864:LEU:C	3:C:866:PRO:CD	2.78	0.52
4:D:270:VAL:CG1	4:D:271:ILE:N	2.73	0.52
4:D:414:ARG:NH1	4:D:414:ARG:HG3	2.24	0.52
4:D:574:LEU:CD1	4:D:574:LEU:N	2.70	0.52
4:D:578:ARG:NH2	4:D:589:PRO:HG3	2.25	0.52
3:G:790:PHE:O	3:G:793:LEU:N	2.43	0.52
4:H:575:TYR:C	4:H:576:LEU:HD23	2.29	0.52
1:A:330:ILE:O	1:A:332:VAL:HG13	2.10	0.52
2:B:136:PRO:HG2	2:B:139:LYS:HG2	1.92	0.52
2:B:295:LEU:HD11	2:B:330:GLU:HG3	1.91	0.52
2:B:355:LYS:HZ2	3:C:1247:ARG:HH22	1.58	0.52
3:C:1345:TRP:CZ3	3:C:1358:ARG:HG3	2.45	0.52
3:C:389:PHE:CD2	3:C:476:VAL:HB	2.44	0.52
3:C:712:VAL:HG12	3:C:718:THR:O	2.09	0.52
4:D:431:HIS:CE1	4:D:438:PRO:HG2	2.45	0.52
1:E:196:GLN:H	1:E:196:GLN:CD	2.13	0.52
3:G:1366:ARG:HH11	3:G:1366:ARG:HG3	1.75	0.52
3:G:433:LYS:O	3:G:454:GLU:HB3	2.09	0.52
3:G:468:LEU:HG	3:G:473:PHE:CZ	2.45	0.52
3:G:586:VAL:HB	3:G:742:LEU:HD21	1.92	0.52
3:G:796:PHE:CE1	3:G:910:ILE:HG12	2.45	0.52
1:A:177:LEU:H	1:A:182:ARG:HH21	1.55	0.52
1:A:21:PHE:HE2	1:A:321:PHE:O	1.93	0.52
1:A:393:LYS:HE3	1:A:396:GLU:CB	2.35	0.52
2:B:358:LYS:O	2:B:359:ARG:HB2	2.10	0.52
2:B:368:LEU:O	2:B:368:LEU:HD23	2.10	0.52
3:C:1247:ARG:O	3:C:1250:HIS:HB3	2.10	0.52
3:C:876:PHE:HB3	3:C:881:ARG:HH22	1.75	0.52
4:D:213:LEU:N	4:D:214:PRO:CD	2.72	0.52
4:D:224:ILE:HG23	4:D:301:VAL:HG13	1.90	0.52
1:E:290:PRO:O	1:E:291:TRP:HB2	2.10	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:38:SER:C	2:F:40:ILE:H	2.12	0.52
3:G:1132:GLN:C	3:G:1133:PHE:HD2	2.13	0.52
3:G:1385:ASP:N	3:G:1385:ASP:OD1	2.41	0.52
3:G:1388:LEU:HD21	4:H:209:MET:CE	2.40	0.52
3:G:468:LEU:HG	3:G:473:PHE:CE2	2.45	0.52
4:H:297:PHE:HD1	4:H:298:PRO:O	1.92	0.52
2:B:105:ILE:CG2	2:B:106:LEU:N	2.72	0.52
2:B:37:ILE:O	3:C:1449:VAL:HG23	2.10	0.52
2:B:410:GLN:O	2:B:413:ASP:HB2	2.08	0.52
3:C:1139:LEU:HD11	3:C:1154:HIS:HD2	1.75	0.52
3:C:1395:TYR:HA	3:C:1398:ILE:CG1	2.39	0.52
3:C:363:GLY:O	3:C:364:LYS:HG3	2.10	0.52
3:C:631:PRO:CD	3:C:688:ARG:NH1	2.73	0.52
3:C:858:LEU:HD13	3:C:1007:MET:HE3	1.92	0.52
1:A:95:LYS:HE3	3:C:880:GLN:HA	1.91	0.52
3:C:911:LEU:O	3:C:911:LEU:HD12	2.10	0.52
3:C:935:ASN:ND2	3:C:937:ASP:HB2	2.02	0.52
4:D:469:PHE:CZ	4:D:574:LEU:HD22	2.43	0.52
1:E:222:TYR:CD1	1:E:222:TYR:N	2.77	0.52
1:E:13:LEU:HD13	1:E:75:PRO:O	2.10	0.52
2:F:77:GLU:C	2:F:79:ARG:N	2.61	0.52
3:G:1370:LEU:O	3:G:1371:CYS:C	2.48	0.52
3:G:381:LYS:O	3:G:523:PRO:HD3	2.10	0.52
3:G:464:LEU:HD13	3:G:468:LEU:HD22	1.92	0.52
3:G:875:CYS:N	3:G:878:THR:OG1	2.43	0.52
3:G:788:ASN:HB3	3:G:956:MET:CE	2.40	0.52
1:A:135:MET:SD	1:A:165:VAL:HG22	2.50	0.52
1:A:264:ASN:O	1:A:268:ARG:HG3	2.10	0.52
2:B:137:LYS:O	2:B:141:GLN:HG3	2.09	0.52
3:C:1047:LEU:CG	3:C:1049:LEU:HD22	2.33	0.52
3:C:1094:PHE:CD1	3:C:1094:PHE:C	2.83	0.52
3:C:1151:SER:C	3:C:1189:SER:HB3	2.30	0.52
3:C:1221:ALA:O	3:C:1224:CYS:N	2.42	0.52
3:C:1230:ILE:HD12	3:C:1238:TRP:CH2	2.45	0.52
3:C:1268:THR:OG1	3:C:1271:GLU:HG2	2.10	0.52
3:C:1422:PHE:CD2	3:C:1422:PHE:N	2.78	0.52
3:C:1427:LEU:HB3	3:C:1431:ARG:NH2	2.23	0.52
3:C:458:SER:OG	3:C:461:MET:HG3	2.10	0.52
3:C:364:LYS:CE	3:C:632:ASP:OD1	2.57	0.52
3:C:864:LEU:O	3:C:868:ILE:HG13	2.10	0.52
4:D:510:PRO:HG2	4:D:511:LEU:N	2.25	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:208:ILE:HG22	1:E:213:ARG:HB2	1.91	0.52
1:E:49:LEU:HD13	1:E:50:LYS:HZ2	1.75	0.52
2:F:310:GLY:HA2	2:F:327:TRP:HZ2	1.75	0.52
2:F:358:LYS:O	2:F:359:ARG:HB2	2.10	0.52
3:G:1217:HIS:O	3:G:1218:PRO:C	2.47	0.52
3:G:723:ILE:HD12	3:G:741:LEU:CD1	2.40	0.52
3:G:932:GLN:HE21	3:G:933:ASP:N	2.07	0.52
4:H:257:ILE:HG13	4:H:296:LEU:HD22	1.92	0.52
1:A:293:GLU:O	1:A:297:MET:HG3	2.10	0.51
1:A:95:LYS:NZ	3:C:881:ARG:N	2.57	0.51
3:C:1236:ALA:HB2	3:C:1246:PHE:CZ	2.45	0.51
3:C:1250:HIS:ND1	3:C:1251:TYR:N	2.58	0.51
3:C:1345:TRP:CZ3	3:C:1358:ARG:HB2	2.41	0.51
3:C:1279:PHE:CB	3:C:1395:TYR:HE1	2.03	0.51
3:C:413:VAL:HG22	3:C:472:THR:HB	1.92	0.51
3:C:585:VAL:CG2	3:C:618:LEU:HG	2.40	0.51
3:C:740:TYR:O	3:C:743:GLU:HB3	2.10	0.51
3:C:920:GLU:HA	3:C:923:LYS:CD	2.40	0.51
4:D:426:LEU:N	4:D:437:GLN:HE22	2.07	0.51
2:F:358:LYS:O	2:F:359:ARG:CB	2.58	0.51
2:F:390:ASP:OD1	2:F:390:ASP:C	2.49	0.51
3:G:1340:LYS:O	3:G:1341:TYR:C	2.49	0.51
3:G:1405:LEU:HD23	3:G:1408:LEU:HD23	1.91	0.51
3:G:1445:GLY:O	3:G:1446:TYR:C	2.47	0.51
3:G:398:LEU:HD12	3:G:470:GLY:HA2	1.91	0.51
3:G:568:PHE:HE1	3:G:575:PRO:CD	2.17	0.51
3:G:946:GLN:HE22	3:G:947:LYS:CG	2.21	0.51
4:H:232:LYS:HD2	4:H:240:PHE:CE2	2.45	0.51
1:A:354:CYS:O	1:A:358:ASP:OD2	2.28	0.51
2:B:308:GLN:OE1	2:B:370:ILE:HD13	2.09	0.51
3:C:1133:PHE:O	3:C:1211:TYR:OH	2.22	0.51
3:C:438:ASN:OD1	3:C:449:LYS:HE3	2.09	0.51
3:C:865:TYR:N	3:C:866:PRO:HD3	2.25	0.51
4:D:357:TYR:CD2	4:D:405:CYS:SG	3.03	0.51
1:E:143:ASP:HB2	1:E:157:TRP:CZ2	2.45	0.51
1:E:55:ILE:HG13	1:E:56:ARG:N	2.25	0.51
2:F:296:ARG:NH2	2:F:333:LYS:NZ	2.58	0.51
3:G:1034:LYS:HD2	3:G:1034:LYS:N	2.25	0.51
3:G:1095:VAL:O	3:G:1096:ILE:C	2.48	0.51
3:G:1147:PRO:C	3:G:1149:LYS:N	2.63	0.51
3:G:1177:TYR:CD1	3:G:1177:TYR:C	2.84	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:417:PHE:CD1	3:G:421:ILE:HB	2.45	0.51
3:G:560:MET:CE	3:G:647:LEU:HD11	2.40	0.51
3:G:762:LEU:CD2	3:G:762:LEU:N	2.74	0.51
3:G:771:ILE:HD13	3:G:949:LEU:HD23	1.92	0.51
3:G:978:TYR:C	3:G:980:GLY:N	2.61	0.51
4:H:157:PRO:O	4:H:158:SER:OG	2.25	0.51
2:B:101:ILE:HG22	2:B:102:SER:N	2.24	0.51
2:B:159:LYS:HD3	2:B:160:THR:N	2.25	0.51
2:B:240:VAL:C	2:B:242:SER:N	2.61	0.51
3:C:1019:PHE:CE1	3:C:1040:ILE:HG21	2.46	0.51
3:C:631:PRO:HD2	3:C:688:ARG:NH1	2.25	0.51
3:C:984:LEU:O	3:C:984:LEU:HD12	2.09	0.51
1:E:131:CYS:HA	1:E:226:TYR:CE1	2.45	0.51
1:E:158:VAL:CG1	1:E:159:TYR:N	2.73	0.51
1:E:152:PHE:CD2	1:E:169:VAL:HG11	2.45	0.51
1:E:150:PHE:CE2	1:E:185:ILE:HG12	2.44	0.51
1:E:338:LYS:O	1:E:338:LYS:CG	2.59	0.51
1:E:66:LEU:HD11	1:E:70:MET:CE	2.41	0.51
2:F:358:LYS:HE2	3:G:1274:ARG:NH1	2.20	0.51
3:G:851:PHE:CE2	3:G:1108:ILE:HD12	2.45	0.51
3:G:589:PRO:HG2	3:G:592:CYS:H	1.76	0.51
3:G:903:ASP:CG	3:G:905:SER:HB3	2.30	0.51
1:A:259:PHE:N	1:A:259:PHE:HD2	2.07	0.51
2:B:121:ILE:HG12	2:B:226:LEU:CD2	2.39	0.51
3:C:854:LYS:CB	3:C:1011:ASN:HA	2.41	0.51
3:C:1022:GLY:O	3:C:1025:VAL:HB	2.11	0.51
3:C:350:GLU:OE2	3:C:484:LEU:CB	2.59	0.51
3:C:557:ILE:O	3:C:557:ILE:HG22	2.10	0.51
3:C:598:PHE:CE1	3:C:738:LEU:HB3	2.46	0.51
3:C:659:TRP:HZ2	3:C:667:ARG:HB2	1.74	0.51
3:C:752:ILE:O	3:C:752:ILE:HG22	2.10	0.51
3:C:716:LEU:HD11	3:C:754:GLN:CB	2.38	0.51
3:C:849:VAL:CG1	3:C:1226:PRO:HA	2.40	0.51
3:C:864:LEU:HD12	3:C:868:ILE:HD11	1.92	0.51
4:D:511:LEU:HD12	4:D:511:LEU:C	2.30	0.51
1:E:37:LYS:HZ1	1:E:42:HIS:CE1	2.29	0.51
2:F:74:LEU:HD23	2:F:130:PHE:CD1	2.45	0.51
3:G:1150:LYS:O	3:G:1190:GLN:HG3	2.11	0.51
3:G:874:ILE:HD13	3:G:976:VAL:CG2	2.39	0.51
4:H:346:CYS:CA	4:H:378:PHE:HB2	2.39	0.51
1:A:128:CYS:HB2	1:A:129:PRO:HD2	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:144:ARG:NH1	1:A:211:PHE:CD2	2.62	0.51
1:A:172:GLU:HG2	1:A:175:ARG:HH21	1.74	0.51
1:A:323:VAL:CG2	1:A:350:ILE:HD12	2.29	0.51
2:B:118:ARG:NH1	2:B:118:ARG:CG	2.70	0.51
3:C:1082:ARG:HG2	3:C:1082:ARG:O	2.10	0.51
3:C:1149:LYS:O	3:C:1151:SER:N	2.44	0.51
3:C:344:TYR:N	3:C:498:TRP:CZ3	2.77	0.51
3:C:647:LEU:CD2	3:C:662:ILE:CD1	2.89	0.51
3:C:978:TYR:C	3:C:980:GLY:N	2.62	0.51
4:D:287:ASP:OD2	4:D:313:LYS:HE2	2.11	0.51
4:D:363:LEU:O	4:D:364:ILE:C	2.49	0.51
2:F:42:PHE:CG	2:F:105:ILE:HD11	2.46	0.51
2:F:171:PRO:HG2	2:F:173:LEU:HB2	1.93	0.51
2:F:258:THR:OG1	2:F:261:ASP:CB	2.52	0.51
2:F:47:ILE:HD13	2:F:260:GLN:NE2	2.26	0.51
3:G:1074:LEU:HB3	3:G:1077:LEU:HD11	1.92	0.51
3:G:599:LYS:O	3:G:603:GLU:CD	2.49	0.51
3:G:635:VAL:HG22	3:G:752:ILE:CG2	2.36	0.51
3:G:751:PHE:HA	3:G:754:GLN:HG3	1.93	0.51
3:G:869:ILE:CG2	3:G:869:ILE:O	2.57	0.51
3:G:788:ASN:HD22	3:G:956:MET:CE	2.21	0.51
4:H:295:SER:OG	4:H:501:HIS:NE2	2.38	0.51
2:B:104:PHE:CE1	2:B:107:ARG:NH2	2.76	0.51
3:C:1222:ARG:HH11	3:C:1222:ARG:CB	2.24	0.51
3:C:587:SER:OG	3:C:588:LYS:N	2.43	0.51
3:C:984:LEU:O	3:C:987:THR:HB	2.11	0.51
4:D:381:PHE:CZ	4:D:422:PHE:HD1	2.29	0.51
4:D:202:LEU:HD23	4:D:439:PRO:HD3	1.92	0.51
4:D:450:LYS:NZ	4:D:450:LYS:HA	2.26	0.51
4:D:477:LEU:CD1	4:D:540:ILE:HB	2.41	0.51
2:F:163:GLU:HG3	2:F:178:LEU:CD2	2.41	0.51
3:G:1095:VAL:C	3:G:1097:GLY:N	2.64	0.51
3:G:1160:TRP:HE3	3:G:1161:ILE:HG13	1.76	0.51
3:G:1250:HIS:HE1	3:G:1254:ASP:CB	2.24	0.51
3:G:873:ASN:OD1	3:G:908:MET:HA	2.11	0.51
3:G:955:SER:O	3:G:956:MET:C	2.48	0.51
4:H:288:LEU:O	4:H:289:SER:C	2.48	0.51
1:A:107:VAL:HA	1:A:167:CYS:O	2.10	0.51
1:A:209:HIS:CG	1:A:210:PRO:CD	2.94	0.51
1:A:295:GLU:HA	1:A:298:LEU:HD12	1.93	0.51
1:A:43:ARG:HB2	1:A:83:VAL:HG22	1.91	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:49:ARG:CG	2:B:106:LEU:HD12	2.41	0.51
2:B:110:TYR:CZ	2:B:119:TRP:HZ3	2.29	0.51
2:B:148:GLN:O	2:B:149:LEU:HB2	2.10	0.51
2:B:258:THR:CG2	2:B:366:SER:HB2	2.40	0.51
3:C:1135:ILE:HD12	3:C:1177:TYR:CE1	2.46	0.51
3:C:1266:GLN:HG3	3:C:1267:LEU:N	2.26	0.51
3:C:1445:GLY:O	3:C:1446:TYR:C	2.49	0.51
3:C:489:MET:HG3	3:C:797:TYR:CE1	2.45	0.51
3:C:843:LEU:HD11	3:C:845:LEU:HD23	1.87	0.51
3:C:978:TYR:CA	3:C:981:ARG:NH2	2.74	0.51
4:D:227:LEU:C	4:D:227:LEU:CD1	2.76	0.51
4:D:303:ILE:CG2	4:D:320:TYR:HD1	2.23	0.51
4:D:480:LEU:HD13	4:D:511:LEU:HD22	1.91	0.51
1:E:1:MET:HG2	1:E:329:ARG:NH2	2.25	0.51
1:E:84:TYR:CD1	1:E:101:ALA:HA	2.45	0.51
3:G:1141:LYS:HE3	3:G:1146:TYR:CD1	2.46	0.51
3:G:1250:HIS:CE1	3:G:1251:TYR:HB2	2.46	0.51
3:G:1272:LYS:C	3:G:1273:TYR:HD1	2.14	0.51
3:G:1409:THR:HG23	3:G:1410:THR:H	1.75	0.51
3:G:1437:ALA:O	3:G:1438:GLU:C	2.49	0.51
3:C:532:VAL:N	3:G:366:TRP:NE1	2.59	0.51
3:G:437:LYS:HZ3	3:G:800:ASN:HD22	1.57	0.51
3:G:437:LYS:HZ3	3:G:800:ASN:ND2	2.09	0.51
4:H:253:LEU:HD23	4:H:253:LEU:H	1.76	0.51
4:H:406:LEU:O	4:H:410:ILE:HG13	2.11	0.51
1:A:43:ARG:HD3	1:A:44:GLU:H	1.75	0.51
2:B:358:LYS:CG	2:B:359:ARG:H	2.19	0.51
2:B:94:GLU:CB	2:B:95:PRO:CD	2.89	0.51
3:C:1222:ARG:CG	3:C:1223:ILE:HG13	2.40	0.51
3:C:1395:TYR:O	3:C:1398:ILE:CG1	2.56	0.51
3:C:410:MET:HE1	3:C:453:LEU:CA	2.40	0.51
3:C:522:LYS:HE3	3:C:525:LEU:HD21	1.92	0.51
3:C:767:GLN:OE1	3:C:945:ARG:HG3	2.11	0.51
4:D:310:THR:CG2	4:D:312:ARG:HG2	2.41	0.51
4:D:497:ARG:O	4:D:500:LYS:N	2.44	0.51
1:E:104:LYS:O	1:E:175:ARG:HA	2.10	0.51
2:F:417:GLY:O	2:F:418:THR:CG2	2.59	0.51
3:G:1276:CYS:SG	3:G:1390:THR:CG2	2.90	0.51
3:G:564:VAL:CG1	3:G:565:HIS:H	2.23	0.51
3:G:939:ILE:CG2	3:G:940:LEU:N	2.74	0.51
3:G:792:LEU:HB2	3:G:967:PHE:CE1	2.46	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:H:308:ASN:OD1	4:H:313:LYS:O	2.28	0.51
4:H:364:ILE:HA	4:H:367:ILE:HG13	1.92	0.51
2:B:403:ILE:O	2:B:408:ILE:HG13	2.10	0.51
2:B:428:PHE:CZ	2:B:450:GLU:HB3	2.46	0.51
3:C:1018:VAL:O	3:C:1022:GLY:N	2.38	0.51
3:C:920:GLU:HA	3:C:923:LYS:HE3	1.93	0.51
3:C:939:ILE:CG2	3:C:940:LEU:N	2.73	0.51
3:C:985:MET:O	3:C:986:HIS:C	2.48	0.51
4:D:435:TYR:CB	4:D:518:MET:HE1	2.41	0.51
4:D:525:PHE:O	4:D:530:GLN:NE2	2.44	0.51
2:F:324:LEU:HD23	2:F:349:ILE:HG21	1.93	0.51
3:G:1111:ASN:HD22	3:G:1111:ASN:N	2.09	0.51
3:G:1157:VAL:HG21	3:G:1177:TYR:HB2	1.92	0.51
3:G:796:PHE:CE1	3:G:910:ILE:HG21	2.46	0.51
4:H:555:VAL:HG21	4:H:590:CYS:HB3	1.93	0.51
4:H:571:PHE:CE2	4:H:598:ILE:HD13	2.45	0.51
1:A:291:TRP:CE3	1:A:291:TRP:HA	2.46	0.51
2:B:170:SER:HB3	2:B:171:PRO:CD	2.37	0.51
3:C:1115:ARG:O	3:C:1116:LEU:C	2.50	0.51
3:C:1334:ILE:HD13	3:C:1392:LEU:CD2	2.41	0.51
3:C:351:ASP:OD2	3:C:354:ASN:HB2	2.10	0.51
4:D:354:SER:CB	4:D:356:THR:HG23	2.39	0.51
4:D:411:GLU:HG3	4:D:414:ARG:HH12	1.76	0.51
4:D:476:LEU:C	4:D:476:LEU:CD1	2.75	0.51
1:E:336:LEU:HA	1:E:339:VAL:HG22	1.93	0.51
3:G:1115:ARG:HG3	3:G:1119:ILE:HD11	1.93	0.51
3:G:345:TRP:CD1	3:G:499:LEU:HD11	2.46	0.51
3:G:491:ARG:CZ	3:G:524:ASP:HA	2.41	0.51
3:G:754:GLN:O	3:G:757:CYS:N	2.43	0.51
3:G:489:MET:CE	3:G:793:LEU:HB3	2.41	0.51
3:G:978:TYR:HD1	3:G:981:ARG:NH2	2.09	0.51
4:H:296:LEU:O	4:H:484:GLU:HG2	2.10	0.51
3:C:1046:SER:HB2	3:C:1058:LEU:HD12	1.92	0.50
3:C:1047:LEU:HD12	3:C:1048:LEU:N	2.26	0.50
3:C:1345:TRP:CZ3	3:C:1358:ARG:CB	2.94	0.50
2:B:36:ASN:HA	3:C:1451:LEU:HG	1.92	0.50
3:C:631:PRO:O	3:C:664:ARG:NH2	2.44	0.50
3:C:698:LYS:HZ1	3:C:706:TYR:HB2	1.75	0.50
3:C:734:GLU:OE1	3:C:736:SER:CB	2.56	0.50
4:D:334:ASP:HA	4:D:337:PHE:CD2	2.46	0.50
1:E:147:LYS:CG	1:E:148:GLU:N	2.74	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:1294:ASN:N	3:G:1398:ILE:HG22	2.25	0.50
3:G:656:ALA:HB1	3:G:657:PRO:HD2	1.92	0.50
3:G:903:ASP:OD1	3:G:905:SER:HB3	2.11	0.50
4:H:259:CYS:SG	4:H:260:ASP:N	2.84	0.50
1:A:259:PHE:HB3	1:A:268:ARG:HD3	1.93	0.50
1:A:143:ASP:OD2	1:A:336:LEU:HD13	2.11	0.50
2:B:441:LEU:HD12	2:B:446:GLN:OE1	2.11	0.50
2:B:285:PRO:CA	2:B:447:PHE:CE2	2.94	0.50
3:C:437:LYS:HB3	3:C:802:ILE:HD11	1.93	0.50
3:C:564:VAL:CG1	3:C:565:HIS:H	2.24	0.50
1:E:25:GLN:HE21	1:E:396:GLU:CG	2.21	0.50
2:F:135:LEU:CB	2:F:140:ILE:HG13	2.41	0.50
2:F:143:PHE:O	2:F:147:SER:OG	2.26	0.50
2:F:295:LEU:CG	2:F:330:GLU:HG2	2.42	0.50
2:F:443:HIS:CE1	2:F:445:ASN:N	2.77	0.50
3:G:715:ILE:HG22	3:G:716:LEU:HD23	1.93	0.50
3:G:950:LYS:O	3:G:954:ASN:ND2	2.44	0.50
3:G:1148:ASP:HB2	4:H:261:SER:OG	2.11	0.50
2:B:359:ARG:C	2:B:360:THR:CG2	2.80	0.50
3:C:851:PHE:CE1	3:C:1048:LEU:HD12	2.44	0.50
3:C:1187:THR:O	3:C:1191:ARG:HG3	2.12	0.50
3:C:1328:ASN:O	3:C:1331:ILE:N	2.43	0.50
3:C:973:ALA:O	3:C:974:ALA:C	2.50	0.50
4:D:571:PHE:HE2	4:D:597:ARG:O	1.94	0.50
1:E:179:SER:HA	1:E:182:ARG:HG3	1.92	0.50
2:F:262:TYR:C	2:F:262:TYR:CD1	2.84	0.50
2:F:296:ARG:HH21	2:F:333:LYS:NZ	2.09	0.50
2:F:403:ILE:HG22	2:F:408:ILE:HG13	1.92	0.50
3:G:1063:THR:OG1	3:G:1064:SER:N	2.43	0.50
3:G:1120:GLY:O	3:G:1123:VAL:HB	2.12	0.50
3:G:1337:PHE:HD2	3:G:1391:GLN:HG2	1.70	0.50
3:G:704:LYS:N	3:G:704:LYS:CE	2.70	0.50
3:G:763:PRO:O	3:G:764:LEU:C	2.49	0.50
3:G:973:ALA:O	3:G:977:THR:HG23	2.11	0.50
4:H:243:LEU:CB	4:H:284:ILE:HD13	2.37	0.50
4:H:378:PHE:CD1	4:H:378:PHE:N	2.80	0.50
1:A:258:SER:HB3	1:A:271:HIS:CG	2.45	0.50
1:A:350:ILE:HA	1:A:353:ILE:CD1	2.41	0.50
1:A:387:SER:O	1:A:390:PRO:HD2	2.11	0.50
2:B:394:LEU:CD1	2:B:398:LEU:HD21	2.35	0.50
3:C:362:PHE:N	3:C:362:PHE:HD1	2.09	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:398:LEU:O	3:C:398:LEU:HD23	2.11	0.50
3:C:874:ILE:HD13	3:C:976:VAL:HG22	1.93	0.50
3:C:990:MET:HG2	3:C:994:MET:HE3	1.91	0.50
4:D:459:PRO:HB2	4:D:471:LEU:O	2.12	0.50
4:D:538:LEU:C	4:D:538:LEU:HD12	2.26	0.50
4:D:575:TYR:O	4:D:576:LEU:HD23	2.11	0.50
1:E:66:LEU:O	1:E:70:MET:HB2	2.12	0.50
2:F:171:PRO:C	2:F:173:LEU:N	2.65	0.50
1:E:207:LYS:NZ	2:F:172:SER:HA	2.26	0.50
2:F:359:ARG:O	2:F:360:THR:HG22	2.12	0.50
3:G:1131:SER:C	3:G:1133:PHE:N	2.65	0.50
3:G:1141:LYS:HZ1	3:G:1147:PRO:CD	2.24	0.50
3:G:1305:PRO:O	3:G:1307:LEU:N	2.45	0.50
3:G:587:SER:O	3:G:732:TYR:OH	2.27	0.50
4:H:213:LEU:N	4:H:214:PRO:CD	2.74	0.50
4:H:407:ARG:NH1	4:H:407:ARG:HG3	2.23	0.50
1:A:120:ARG:CZ	1:A:239:SER:OG	2.60	0.50
2:B:102:SER:OG	2:B:103:HIS:N	2.43	0.50
2:B:186:ILE:HD13	2:B:214:ILE:HD11	1.94	0.50
2:B:367:CYS:O	2:B:368:LEU:C	2.49	0.50
2:B:367:CYS:SG	2:B:443:HIS:N	2.85	0.50
3:C:1137:LYS:HD2	3:C:1154:HIS:HB3	1.94	0.50
3:C:1215:GLN:C	3:C:1218:PRO:HD2	2.32	0.50
3:C:1231:ASP:O	3:C:1235:ILE:CD1	2.60	0.50
3:C:1330:LEU:O	3:C:1331:ILE:C	2.50	0.50
3:C:377:CYS:SG	3:C:378:VAL:N	2.84	0.50
3:C:691:CYS:HA	3:C:780:LEU:HD21	1.93	0.50
4:D:503:LEU:HD23	4:D:534:THR:HG23	1.92	0.50
4:D:342:VAL:O	4:D:574:LEU:HD12	2.11	0.50
1:E:129:PRO:HD3	1:E:345:PHE:CZ	2.47	0.50
1:E:68:LYS:HE3	1:E:72:LYS:CD	2.41	0.50
2:F:194:LEU:HD11	2:F:213:ASP:HB3	1.92	0.50
3:G:1198:LEU:HG	3:G:1199:GLN:H	1.75	0.50
3:G:1207:ASP:OD2	3:G:1207:ASP:C	2.49	0.50
3:G:1349:GLU:OE2	3:G:1378:THR:HB	2.11	0.50
3:G:542:PHE:CG	3:G:542:PHE:O	2.65	0.50
3:G:622:PHE:O	3:G:624:ALA:N	2.45	0.50
4:H:222:CYS:O	4:H:223:LYS:C	2.49	0.50
4:H:538:LEU:HD12	4:H:540:ILE:CD1	2.42	0.50
2:B:146:ASP:OD2	2:B:146:ASP:N	2.44	0.50
2:B:266:GLY:O	2:B:267:ASN:O	2.30	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:26:LEU:HD22	2:B:128:LEU:CD1	2.41	0.50
2:B:283:SER:O	2:B:447:PHE:HE2	1.95	0.50
3:C:1411:ASP:O	3:C:1415:ASP:OD2	2.29	0.50
3:C:1417:LEU:HG	3:C:1421:PHE:CD2	2.36	0.50
3:C:622:PHE:CE2	3:C:647:LEU:HD11	2.47	0.50
3:C:648:LEU:HD23	3:C:670:MET:SD	2.52	0.50
3:C:570:LEU:HD13	3:C:766:LEU:HD22	1.93	0.50
3:C:851:PHE:HD1	3:C:1048:LEU:CD1	2.19	0.50
4:D:403:LYS:HB3	4:D:442:TYR:HE1	1.77	0.50
4:D:510:PRO:O	4:D:511:LEU:C	2.50	0.50
1:E:269:TRP:CE2	1:E:273:LYS:HD3	2.46	0.50
2:F:103:HIS:CD2	2:F:104:PHE:CD1	2.99	0.50
2:F:328:LYS:NZ	2:F:341:PHE:HD2	2.09	0.50
2:F:404:SER:O	2:F:407:GLY:N	2.45	0.50
2:F:93:TYR:HB3	2:F:96:ARG:HB3	1.94	0.50
3:G:1236:ALA:HB2	3:G:1246:PHE:CZ	2.47	0.50
3:G:354:ASN:N	3:G:354:ASN:HD22	2.09	0.50
3:G:622:PHE:HE2	3:G:647:LEU:CD2	2.18	0.50
3:G:740:TYR:O	3:G:743:GLU:HB3	2.10	0.50
3:G:760:ASN:O	3:G:764:LEU:HB2	2.12	0.50
3:G:774:ASN:CG	3:G:775:ILE:H	2.15	0.50
4:H:186:GLY:HA3	4:H:371:ARG:HH21	1.74	0.50
1:A:69:GLU:O	1:A:73:MET:CG	2.57	0.50
2:B:401:TYR:HD2	2:B:427:TYR:HE2	1.59	0.50
3:C:1349:GLU:HG2	3:C:1378:THR:O	2.11	0.50
3:C:353:TYR:HD2	3:C:354:ASN:ND2	2.09	0.50
3:C:385:ARG:HB2	3:C:457:TYR:CE1	2.47	0.50
3:C:843:LEU:N	3:C:981:ARG:CG	2.68	0.50
4:D:191:ILE:HG21	4:D:419:HIS:CE1	2.46	0.50
4:D:421:VAL:O	4:D:421:VAL:HG12	2.12	0.50
2:F:253:LEU:O	2:F:254:SER:OG	2.28	0.50
2:F:291:LEU:HD13	2:F:309:TYR:HB2	1.94	0.50
2:F:403:ILE:O	2:F:408:ILE:HG13	2.12	0.50
2:F:77:GLU:O	2:F:79:ARG:N	2.44	0.50
3:G:1002:ASP:O	3:G:1004:ASP:N	2.41	0.50
3:G:1083:ASP:O	3:G:1084:TRP:HE3	1.94	0.50
3:G:388:TYR:O	3:G:476:VAL:HA	2.11	0.50
3:G:618:LEU:HD23	3:G:619:LEU:HD22	1.92	0.50
3:G:903:ASP:H	3:G:906:LEU:CD1	2.25	0.50
3:G:788:ASN:HB3	3:G:956:MET:HE3	1.93	0.50
3:G:984:LEU:C	3:G:984:LEU:HD12	2.32	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:H:172:THR:HG22	4:H:173:SER:N	2.25	0.50
3:G:1360:LEU:CD2	4:H:216:ILE:HG22	2.36	0.50
4:H:363:LEU:O	4:H:364:ILE:C	2.50	0.50
4:H:543:GLU:CG	4:H:543:GLU:O	2.59	0.50
1:A:127:ILE:HD12	1:A:127:ILE:O	2.12	0.50
3:C:1095:VAL:HG13	3:C:1112:ILE:HD13	1.88	0.50
3:C:622:PHE:O	3:C:624:ALA:N	2.45	0.50
3:C:804:PRO:HG2	3:C:967:PHE:CE2	2.47	0.50
3:C:788:ASN:ND2	3:C:956:MET:SD	2.85	0.50
4:D:295:SER:OG	4:D:497:ARG:HD3	2.11	0.50
4:D:381:PHE:HE2	4:D:440:PHE:CE2	2.30	0.50
1:E:25:GLN:NE2	1:E:396:GLU:HG3	2.21	0.50
2:F:394:LEU:HA	2:F:397:LYS:HD2	1.94	0.50
3:G:857:LEU:HD12	3:G:1018:VAL:HG12	1.94	0.50
3:G:1034:LYS:O	3:G:1035:LEU:HD23	2.12	0.50
3:G:1405:LEU:HA	3:G:1408:LEU:HD23	1.94	0.50
3:G:859:LEU:CD2	3:G:1040:ILE:HA	2.42	0.50
3:G:981:ARG:HG3	3:G:981:ARG:NH1	2.27	0.50
4:H:397:PRO:O	4:H:401:ILE:HG13	2.11	0.50
4:H:538:LEU:CB	4:H:540:ILE:HD11	2.42	0.50
4:H:577:ARG:O	4:H:579:PRO:HD3	2.11	0.50
1:A:158:VAL:HG12	1:A:159:TYR:N	2.27	0.50
1:A:135:MET:SD	1:A:164:GLY:CA	2.95	0.50
3:C:1116:LEU:CA	3:C:1119:ILE:HG12	2.41	0.50
3:C:1175:VAL:HG12	3:C:1176:SER:N	2.27	0.50
3:C:1242:ASP:N	3:C:1243:PRO:HD2	2.27	0.50
3:C:658:HIS:O	3:C:661:LYS:HG3	2.12	0.50
4:D:344:VAL:CG2	4:D:574:LEU:HD11	2.42	0.50
1:E:334:ILE:HA	1:E:342:PHE:CE2	2.47	0.50
1:E:25:GLN:HE22	1:E:392:VAL:HG12	1.75	0.50
2:F:159:LYS:HE3	2:F:178:LEU:HD23	1.94	0.50
2:F:184:TYR:CD1	2:F:184:TYR:N	2.80	0.50
2:F:23:PRO:HD2	2:F:25:CYS:HB2	1.93	0.50
2:F:398:LEU:HD11	2:F:411:ILE:HG21	1.94	0.50
2:F:94:GLU:OE2	2:F:94:GLU:HA	2.12	0.50
4:H:376:ILE:HG23	4:H:421:VAL:CG1	2.42	0.50
4:H:406:LEU:HD21	4:H:455:PHE:HZ	1.76	0.50
4:H:571:PHE:N	4:H:571:PHE:HD2	2.09	0.50
1:A:144:ARG:NH1	1:A:149:ASP:OD2	2.44	0.49
1:A:258:SER:HB3	1:A:271:HIS:ND1	2.27	0.49
2:B:214:ILE:HG22	2:B:215:VAL:N	2.27	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:1142:ASP:O	3:C:1145:ASP:N	2.43	0.49
3:C:1230:ILE:CG2	3:C:1235:ILE:HD11	2.42	0.49
3:C:389:PHE:CZ	3:C:476:VAL:HG21	2.47	0.49
3:C:395:LYS:CB	3:C:408:ILE:HD11	2.41	0.49
4:D:220:LEU:O	4:D:223:LYS:HB3	2.12	0.49
1:E:214:LYS:HA	1:E:217:ASN:HD22	1.77	0.49
2:F:279:LEU:N	2:F:279:LEU:HD23	2.26	0.49
2:F:367:CYS:HB3	2:F:421:GLN:HE21	1.74	0.49
2:F:374:ASN:O	2:F:375:PRO:O	2.30	0.49
2:F:94:GLU:CG	2:F:95:PRO:HD3	2.42	0.49
3:G:1005:SER:O	3:G:1006:ILE:HG12	2.12	0.49
3:G:630:ASP:C	3:G:688:ARG:HH22	2.15	0.49
4:H:476:LEU:HD12	4:H:480:LEU:HD23	1.93	0.49
1:A:141:ILE:CD1	1:A:303:PRO:HD3	2.42	0.49
2:B:22:TYR:HB3	2:B:84:SER:HB3	1.93	0.49
2:B:229:ALA:C	2:B:231:ALA:N	2.65	0.49
2:B:39:LEU:CD1	2:B:245:ARG:HD2	2.41	0.49
3:C:1277:GLU:OE1	3:C:1337:PHE:CZ	2.64	0.49
3:C:1349:GLU:OE2	3:C:1378:THR:HB	2.11	0.49
3:C:484:LEU:HD12	3:C:488:LEU:HD23	1.94	0.49
3:C:488:LEU:CD2	3:C:488:LEU:H	2.24	0.49
3:C:759:LEU:O	3:C:760:ASN:C	2.51	0.49
4:D:275:ASP:OD1	4:D:278:HIS:HB2	2.12	0.49
4:D:343:LEU:HD22	4:D:367:ILE:HD13	1.93	0.49
4:D:531:LEU:N	4:D:531:LEU:HD23	2.28	0.49
4:D:539:ILE:HG22	4:D:539:ILE:O	2.10	0.49
4:D:561:ARG:HG3	4:D:564:LYS:HZ3	1.77	0.49
1:E:108:PHE:N	1:E:108:PHE:CD1	2.80	0.49
1:E:259:PHE:CD2	1:E:268:ARG:HG3	2.47	0.49
1:E:276:ALA:O	1:E:280:GLN:HG2	2.12	0.49
2:F:139:LYS:O	2:F:142:ASP:OD2	2.29	0.49
3:G:1055:TYR:C	3:G:1055:TYR:CD1	2.85	0.49
3:G:495:GLY:O	3:G:496:PRO:C	2.50	0.49
3:G:758:GLU:OE1	3:G:758:GLU:HA	2.12	0.49
3:G:911:LEU:HB3	3:G:912:PRO:HD3	1.94	0.49
4:H:431:HIS:CE1	4:H:439:PRO:O	2.65	0.49
1:A:202:VAL:HG11	1:A:298:LEU:HB2	1.94	0.49
1:A:229:VAL:CG2	1:A:266:LEU:HD21	2.34	0.49
1:A:401:ASN:HD22	1:A:401:ASN:N	2.10	0.49
1:A:43:ARG:HE	1:A:83:VAL:CG2	2.25	0.49
2:B:101:ILE:O	2:B:102:SER:C	2.50	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:128:LEU:HD11	2:B:132:PHE:HE2	1.76	0.49
2:B:186:ILE:CD1	2:B:214:ILE:HD11	2.42	0.49
3:C:1095:VAL:C	3:C:1097:GLY:N	2.63	0.49
3:C:377:CYS:O	3:C:517:GLU:HA	2.12	0.49
3:C:636:GLY:O	3:C:693:VAL:HG23	2.13	0.49
3:C:705:SER:C	3:C:706:TYR:CD2	2.86	0.49
3:C:920:GLU:HG2	3:C:923:LYS:HZ2	1.78	0.49
4:D:296:LEU:HB2	4:D:485:ILE:HG13	1.94	0.49
4:D:247:ALA:O	4:D:309:THR:HA	2.12	0.49
1:E:35:VAL:O	1:E:36:ILE:HD13	2.13	0.49
2:F:160:THR:HA	2:F:163:GLU:HB2	1.94	0.49
1:E:207:LYS:HE3	2:F:172:SER:HA	1.94	0.49
2:F:303:HIS:HA	2:F:306:ARG:NH2	2.27	0.49
3:G:1036:LEU:O	3:G:1037:GLU:HG3	2.12	0.49
3:G:1151:SER:HA	3:G:1189:SER:HB2	1.92	0.49
3:G:568:PHE:CE1	3:G:575:PRO:CD	2.82	0.49
3:G:599:LYS:HE2	3:G:611:VAL:CG1	2.40	0.49
3:G:437:LYS:CD	3:G:800:ASN:ND2	2.72	0.49
3:G:872:PHE:CZ	3:G:979:LYS:HE2	2.47	0.49
3:G:998:VAL:O	3:G:998:VAL:HG12	2.12	0.49
4:H:246:PRO:HG3	4:H:311:GLY:CA	2.40	0.49
4:H:574:LEU:N	4:H:574:LEU:CD1	2.73	0.49
1:A:158:VAL:HA	1:A:333:PRO:HA	1.93	0.49
2:B:404:SER:O	2:B:407:GLY:N	2.45	0.49
3:C:1131:SER:C	3:C:1133:PHE:N	2.66	0.49
3:C:1224:CYS:O	3:C:1225:GLU:C	2.51	0.49
3:C:1312:ASN:HD22	3:C:1315:CYS:CB	2.17	0.49
3:C:561:ALA:HA	3:C:584:CYS:HA	1.94	0.49
3:C:651:ILE:HG13	3:C:656:ALA:HB3	1.95	0.49
3:C:437:LYS:HD2	3:C:802:ILE:CD1	2.42	0.49
3:C:988:LYS:O	3:C:992:GLN:HG3	2.12	0.49
4:D:164:ARG:NH1	4:D:167:ARG:NH2	2.58	0.49
4:D:494:ARG:O	4:D:498:ILE:HG12	2.13	0.49
2:F:148:GLN:HA	2:F:148:GLN:OE1	2.13	0.49
2:F:184:TYR:CE1	2:F:210:PRO:O	2.65	0.49
2:F:441:LEU:HD21	2:F:447:PHE:CD1	2.47	0.49
3:G:1376:LYS:HE2	3:G:1376:LYS:CA	2.42	0.49
3:G:636:GLY:HA3	3:G:639:ILE:CD1	2.38	0.49
3:G:651:ILE:HG22	3:G:652:ASN:H	1.77	0.49
3:G:658:HIS:O	3:G:659:TRP:C	2.51	0.49
3:G:762:LEU:N	3:G:763:PRO:CD	2.75	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:H:385:LYS:CA	4:H:390:GLU:OE1	2.56	0.49
1:A:103:GLU:OE1	1:A:176:LYS:HB3	2.12	0.49
1:A:244:LEU:HD11	1:A:256:GLN:HE22	1.76	0.49
1:A:60:PHE:HB3	1:A:65:ASP:HB2	1.94	0.49
3:C:1246:PHE:O	3:C:1249:HIS:HB2	2.13	0.49
3:C:1392:LEU:HD13	3:C:1441:LEU:CD2	2.42	0.49
3:C:362:PHE:CE2	3:C:664:ARG:HB3	2.47	0.49
3:C:979:LYS:O	3:C:982:GLU:HB3	2.12	0.49
4:D:292:LYS:CD	4:D:293:GLU:H	2.24	0.49
1:E:132:TRP:CD2	1:E:344:PRO:HG2	2.48	0.49
1:E:208:ILE:HD12	1:E:212:ILE:CG2	2.41	0.49
2:F:148:GLN:O	2:F:149:LEU:HB2	2.12	0.49
3:G:1007:MET:C	3:G:1008:ILE:HG13	2.33	0.49
3:G:1019:PHE:O	3:G:1021:LEU:N	2.46	0.49
3:G:1431:ARG:O	3:G:1435:ASN:CG	2.51	0.49
3:G:643:GLU:HA	3:G:646:VAL:HG23	1.93	0.49
3:G:848:LYS:O	3:G:849:VAL:C	2.51	0.49
4:H:435:TYR:HB2	4:H:518:MET:HE1	1.95	0.49
1:A:113:THR:HG23	1:A:163:ARG:CZ	2.43	0.49
1:A:291:TRP:HA	1:A:291:TRP:HE3	1.78	0.49
3:C:1010:THR:O	3:C:1011:ASN:CB	2.57	0.49
3:C:1340:LYS:O	3:C:1343:ASP:N	2.45	0.49
3:C:648:LEU:CD2	3:C:670:MET:SD	3.00	0.49
3:C:848:LYS:O	3:C:849:VAL:C	2.48	0.49
4:D:372:PRO:O	4:D:418:SER:HB3	2.13	0.49
4:D:522:TYR:N	4:D:522:TYR:CD2	2.80	0.49
4:D:576:LEU:O	4:D:577:ARG:HB2	2.12	0.49
2:F:411:ILE:O	2:F:414:LEU:HB2	2.11	0.49
3:G:1038:ILE:HG13	3:G:1039:ASP:H	1.76	0.49
3:G:1340:LYS:O	3:G:1343:ASP:N	2.44	0.49
3:G:1348:CYS:SG	3:G:1353:CYS:CB	2.90	0.49
3:G:1401:ALA:HB2	3:G:1430:TYR:CD1	2.47	0.49
3:G:1402:GLU:O	3:G:1406:GLU:HG3	2.13	0.49
3:G:561:ALA:HA	3:G:584:CYS:HA	1.94	0.49
3:G:602:ILE:HG22	3:G:603:GLU:N	2.27	0.49
3:G:616:ARG:NH2	3:G:657:PRO:HD3	2.28	0.49
1:A:139:ILE:HD13	1:A:339:VAL:HG13	1.94	0.49
1:A:46:SER:C	1:A:47:PHE:CD1	2.86	0.49
2:B:22:TYR:HB3	2:B:23:PRO:HD3	1.94	0.49
2:B:27:GLN:NE2	2:B:29:TYR:HD2	2.10	0.49
2:B:336:MET:CG	2:B:337:ASP:H	2.14	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:376:PRO:HB3	2:B:382:HIS:CD2	2.48	0.49
2:B:42:PHE:CD1	2:B:105:ILE:HD11	2.48	0.49
3:C:1300:GLY:N	3:C:1303:MET:HG3	2.28	0.49
3:C:1307:LEU:HD13	3:C:1430:TYR:CZ	2.47	0.49
3:C:556:GLU:HG2	3:C:650:ARG:HH21	1.78	0.49
3:C:929:MET:O	3:C:929:MET:HG2	2.13	0.49
4:D:193:LEU:CD1	4:D:462:LEU:HD11	2.38	0.49
4:D:512:TYR:CD1	4:D:513:PRO:HA	2.48	0.49
1:E:206:GLU:OE2	1:E:289:GLY:HA2	2.11	0.49
1:E:16:TYR:CD1	1:E:20:LEU:HB2	2.48	0.49
1:E:168:TRP:CZ2	1:E:320:PRO:HD3	2.48	0.49
1:E:402:LEU:N	1:E:402:LEU:HD13	2.28	0.49
1:E:74:ASN:N	1:E:75:PRO:HD3	2.27	0.49
2:F:215:VAL:O	2:F:218:ILE:HB	2.13	0.49
2:F:97:ARG:O	2:F:98:ARG:C	2.50	0.49
3:G:761:VAL:HB	3:G:762:LEU:HD23	1.94	0.49
4:H:287:ASP:HB3	4:H:315:VAL:HA	1.94	0.49
4:H:495:PHE:O	4:H:497:ARG:N	2.45	0.49
1:A:50:LYS:HD2	1:A:50:LYS:H	1.78	0.49
1:A:42:HIS:O	1:A:83:VAL:HA	2.13	0.49
2:B:285:PRO:HB2	2:B:286:PRO:HD2	1.94	0.49
2:B:300:HIS:HA	2:B:331:PHE:HE1	1.78	0.49
2:B:443:HIS:ND1	2:B:445:ASN:N	2.60	0.49
3:C:1018:VAL:O	3:C:1021:LEU:HB3	2.13	0.49
3:C:1369:PRO:HG3	3:C:1379:LEU:HB2	1.95	0.49
3:C:1430:TYR:O	3:C:1431:ARG:C	2.49	0.49
3:C:350:GLU:HB3	3:C:359:VAL:HG22	1.95	0.49
3:C:387:LEU:HD23	3:C:476:VAL:CG2	2.42	0.49
3:C:559:ALA:HA	3:C:585:VAL:O	2.12	0.49
3:C:651:ILE:CG2	3:C:652:ASN:N	2.74	0.49
3:C:759:LEU:HB2	3:C:761:VAL:CG2	2.42	0.49
4:D:364:ILE:O	4:D:367:ILE:N	2.46	0.49
4:D:497:ARG:O	4:D:498:ILE:C	2.50	0.49
4:D:535:PRO:HG2	4:D:554:CYS:SG	2.53	0.49
1:E:59:SER:HB3	1:E:89:ASN:CG	2.33	0.49
2:F:311:LEU:HB3	2:F:364:PRO:HG3	1.94	0.49
2:F:311:LEU:O	2:F:312:PHE:C	2.51	0.49
2:F:398:LEU:HD12	2:F:408:ILE:HG23	1.95	0.49
2:F:449:CYS:O	2:F:452:GLN:N	2.40	0.49
3:G:1267:LEU:HD23	3:G:1271:GLU:OE2	2.12	0.49
3:G:1290:ASN:ND2	3:G:1292:TYR:HE1	2.08	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:1395:TYR:CD1	3:G:1398:ILE:HD11	2.40	0.49
4:H:198:CYS:O	4:H:199:PRO:C	2.50	0.49
4:H:355:ILE:O	4:H:357:TYR:HD1	1.95	0.49
1:A:144:ARG:NH1	1:A:145:ALA:HA	2.28	0.49
2:B:308:GLN:HA	2:B:365:PHE:CE2	2.48	0.49
2:B:369:LYS:C	2:B:371:ILE:N	2.66	0.49
3:C:1054:LYS:HD3	3:C:1076:GLY:O	2.13	0.49
3:C:1094:PHE:CZ	3:C:1115:ARG:HG2	2.48	0.49
3:C:1415:ASP:HA	3:C:1418:LYS:HB3	1.94	0.49
3:C:495:GLY:O	3:C:496:PRO:C	2.50	0.49
3:C:658:HIS:O	3:C:659:TRP:C	2.51	0.49
3:C:636:GLY:C	3:C:752:ILE:HD13	2.33	0.49
4:D:563:THR:O	4:D:564:LYS:HG3	2.12	0.49
2:F:276:ILE:HA	2:F:279:LEU:HG	1.95	0.49
2:F:285:PRO:HG2	2:F:287:CYS:SG	2.53	0.49
3:G:1217:HIS:N	3:G:1218:PRO:CD	2.76	0.49
3:G:1224:CYS:HA	3:G:1227:ILE:CD1	2.43	0.49
3:G:1244:THR:O	3:G:1248:VAL:HG23	2.13	0.49
3:G:1279:PHE:HB2	3:G:1395:TYR:CE1	2.48	0.49
3:G:1294:ASN:OD1	3:G:1397:TYR:CZ	2.66	0.49
3:G:1305:PRO:O	3:G:1308:TYR:N	2.44	0.49
3:G:485:GLU:CD	3:G:966:ARG:HH12	2.16	0.49
3:G:629:ILE:CG2	3:G:631:PRO:HD3	2.35	0.49
3:G:659:TRP:HZ2	3:G:667:ARG:O	1.96	0.49
3:G:982:GLU:HA	3:G:985:MET:HE2	1.94	0.49
4:H:182:TRP:HE3	4:H:341:MET:CE	2.26	0.49
4:H:196:LEU:HD12	4:H:197:GLY:H	1.77	0.49
1:A:350:ILE:HA	1:A:353:ILE:CG1	2.43	0.49
1:A:56:ARG:O	1:A:58:GLN:HG2	2.13	0.49
2:B:114:GLU:O	2:B:118:ARG:HG3	2.13	0.49
2:B:75:GLU:HB3	2:B:130:PHE:CZ	2.43	0.49
2:B:143:PHE:O	2:B:147:SER:OG	2.18	0.49
3:C:703:CYS:SG	3:C:706:TYR:OH	2.68	0.49
3:C:598:PHE:CZ	3:C:738:LEU:HB3	2.48	0.49
3:C:759:LEU:O	3:C:761:VAL:N	2.46	0.49
3:C:774:ASN:CG	3:C:775:ILE:N	2.66	0.49
3:C:850:GLY:HA2	3:C:1226:PRO:O	2.13	0.49
4:D:421:VAL:O	4:D:421:VAL:CG1	2.60	0.49
4:D:512:TYR:HA	4:D:514:PRO:HD3	1.94	0.49
4:D:561:ARG:HG3	4:D:564:LYS:CE	2.43	0.49
1:E:355:ARG:CB	1:E:355:ARG:HH11	2.25	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:358:LYS:CG	2:F:359:ARG:N	2.58	0.49
3:G:1116:LEU:CA	3:G:1119:ILE:HG12	2.43	0.49
3:G:1175:VAL:HG12	3:G:1176:SER:N	2.27	0.49
3:G:642:PHE:O	3:G:646:VAL:HG23	2.13	0.49
3:G:558:ILE:HD11	3:G:741:LEU:HD21	1.94	0.49
3:G:774:ASN:CG	3:G:775:ILE:N	2.66	0.49
3:G:795:ALA:HB2	3:G:914:GLU:HG3	1.95	0.49
4:H:543:GLU:HG3	4:H:543:GLU:O	2.12	0.49
1:A:157:TRP:CB	1:A:334:ILE:HD12	2.42	0.48
2:B:280:SER:N	2:B:284:PHE:CE1	2.81	0.48
2:B:265:GLN:CB	2:B:362:TYR:CE2	2.92	0.48
3:C:1036:LEU:C	3:C:1037:GLU:HG3	2.33	0.48
3:C:1188:ALA:HA	3:C:1191:ARG:HE	1.76	0.48
3:C:507:LEU:O	3:C:508:ASN:C	2.51	0.48
3:C:598:PHE:CE1	3:C:735:SER:HA	2.49	0.48
3:C:719:GLU:OE1	3:C:720:ARG:N	2.46	0.48
3:C:721:VAL:HG12	3:C:722:VAL:H	1.77	0.48
3:C:878:THR:HB	3:C:902:PRO:HG3	1.94	0.48
3:C:918:LEU:HD12	3:C:953:ALA:HB2	1.94	0.48
3:C:975:LEU:HD12	3:C:975:LEU:C	2.33	0.48
4:D:212:LYS:O	4:D:213:LEU:C	2.50	0.48
4:D:254:LEU:C	4:D:254:LEU:HD12	2.32	0.48
4:D:541:PRO:C	4:D:558:ASN:OD1	2.52	0.48
1:E:103:GLU:CD	1:E:176:LYS:HB3	2.33	0.48
1:E:118:VAL:HG11	1:E:300:TYR:O	2.13	0.48
2:F:137:LYS:NZ	2:F:181:GLU:CA	2.74	0.48
3:G:1083:ASP:C	3:G:1084:TRP:HE3	2.15	0.48
3:G:1113:GLN:O	3:G:1117:ILE:HG13	2.13	0.48
3:G:1307:LEU:N	3:G:1307:LEU:HD12	2.27	0.48
3:G:437:LYS:CE	3:G:800:ASN:ND2	2.76	0.48
3:G:982:GLU:O	3:G:984:LEU:N	2.46	0.48
4:H:257:ILE:CG2	4:H:270:VAL:HG13	2.43	0.48
4:H:267:ASN:OD1	4:H:267:ASN:N	2.46	0.48
4:H:435:TYR:C	4:H:435:TYR:CD1	2.86	0.48
1:A:106:LEU:HD21	1:A:185:ILE:HD12	1.94	0.48
1:A:345:PHE:CD1	1:A:345:PHE:N	2.82	0.48
1:A:410:LEU:C	1:A:412:LYS:H	2.16	0.48
2:B:171:PRO:C	2:B:173:LEU:N	2.65	0.48
2:B:39:LEU:HD11	2:B:245:ARG:CD	2.43	0.48
4:D:297:PHE:N	4:D:300:GLN:OE1	2.46	0.48
4:D:445:LEU:HB3	4:D:450:LYS:HZ3	1.77	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:30:LEU:HD11	1:E:80:ILE:CD1	2.41	0.48
3:G:1345:TRP:CH2	3:G:1358:ARG:HD3	2.48	0.48
3:G:484:LEU:HD12	3:G:488:LEU:HD23	1.95	0.48
3:G:522:LYS:HG3	3:G:525:LEU:CD1	2.42	0.48
3:G:583:PHE:C	3:G:583:PHE:CD1	2.87	0.48
3:G:599:LYS:O	3:G:602:ILE:HB	2.12	0.48
3:G:664:ARG:HG3	3:G:688:ARG:NE	2.28	0.48
3:G:864:LEU:C	3:G:866:PRO:HD2	2.34	0.48
4:H:248:GLN:HA	4:H:309:THR:HG22	1.95	0.48
4:H:508:TYR:CE2	4:H:531:LEU:HD22	2.48	0.48
1:A:169:VAL:HG12	1:A:174:VAL:HG11	1.95	0.48
1:A:410:LEU:O	1:A:412:LYS:N	2.46	0.48
1:A:46:SER:HB3	1:A:79:ASP:HB2	1.95	0.48
2:B:258:THR:C	2:B:260:GLN:N	2.65	0.48
2:B:313:LEU:O	2:B:316:ILE:CG1	2.61	0.48
2:B:32:PRO:CA	2:B:104:PHE:HE2	2.25	0.48
2:B:320:LEU:HA	2:B:353:PHE:CE1	2.48	0.48
3:C:1158:ALA:CA	3:C:1161:ILE:HD12	2.42	0.48
3:C:1215:GLN:O	3:C:1218:PRO:HD2	2.12	0.48
3:C:362:PHE:HE2	3:C:664:ARG:HB3	1.79	0.48
3:C:858:LEU:HD13	3:C:1007:MET:CE	2.42	0.48
4:D:240:PHE:HA	4:D:252:THR:O	2.12	0.48
1:E:129:PRO:HG3	1:E:345:PHE:CE2	2.48	0.48
1:E:135:MET:SD	1:E:165:VAL:HG22	2.54	0.48
1:E:264:ASN:OD1	1:E:266:LEU:HB2	2.13	0.48
1:E:55:ILE:CG1	1:E:56:ARG:N	2.76	0.48
3:G:1019:PHE:O	3:G:1022:GLY:N	2.46	0.48
3:G:1045:LYS:N	3:G:1058:LEU:O	2.44	0.48
3:G:1122:ASN:HA	3:G:1125:ASN:HD21	1.78	0.48
3:G:854:LYS:CB	3:G:1011:ASN:HA	2.43	0.48
3:G:876:PHE:CE2	3:G:960:LEU:HD11	2.49	0.48
4:H:364:ILE:O	4:H:367:ILE:N	2.46	0.48
4:H:383:ASP:OD1	4:H:385:LYS:HB2	2.13	0.48
1:A:84:TYR:CD1	1:A:101:ALA:HA	2.48	0.48
1:A:343:ASP:OD1	1:A:346:THR:HG23	2.13	0.48
1:A:89:ASN:ND2	1:A:90:GLN:HG3	2.29	0.48
4:D:424:PRO:HG2	4:D:458:GLU:HB3	1.95	0.48
1:E:56:ARG:HG2	1:E:57:TYR:HD2	1.77	0.48
2:F:144:LEU:O	2:F:145:LYS:C	2.52	0.48
2:F:284:PHE:HB3	2:F:288:MET:HB2	1.94	0.48
3:G:1439:GLN:O	3:G:1442:SER:HB3	2.12	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:487:PHE:O	3:G:488:LEU:C	2.50	0.48
3:G:648:LEU:O	3:G:651:ILE:HG22	2.14	0.48
3:G:698:LYS:HA	3:G:706:TYR:CE1	2.48	0.48
3:G:691:CYS:HA	3:G:780:LEU:HD22	1.94	0.48
3:G:973:ALA:O	3:G:974:ALA:C	2.52	0.48
3:G:979:LYS:O	3:G:982:GLU:HB3	2.14	0.48
4:H:360:LEU:O	4:H:364:ILE:HG13	2.14	0.48
1:A:112:MET:HB3	1:A:163:ARG:HB2	1.94	0.48
1:A:29:TRP:CD1	1:A:29:TRP:C	2.87	0.48
2:B:42:PHE:CD1	3:C:1449:VAL:HG11	2.48	0.48
3:C:410:MET:HE1	3:C:453:LEU:HB2	1.94	0.48
3:C:635:VAL:CG2	3:C:635:VAL:O	2.60	0.48
4:D:288:LEU:O	4:D:291:LEU:N	2.41	0.48
4:D:307:ILE:HG13	4:D:315:VAL:CG2	2.43	0.48
4:D:161:TYR:CZ	4:D:359:PRO:HG3	2.48	0.48
4:D:202:LEU:HD21	4:D:439:PRO:HD3	1.94	0.48
4:D:447:ARG:NH2	4:D:450:LYS:HB2	2.28	0.48
1:E:141:ILE:HD12	1:E:303:PRO:HD3	1.95	0.48
1:E:156:LEU:HB2	1:E:398:PHE:CE1	2.48	0.48
1:E:246:LEU:CD1	1:E:296:ILE:HG12	2.44	0.48
1:E:37:LYS:CG	1:E:38:ASN:N	2.76	0.48
1:E:14:LYS:HA	1:E:74:ASN:OD1	2.13	0.48
2:F:23:PRO:HD2	2:F:25:CYS:HG	1.76	0.48
3:G:1277:GLU:OE1	3:G:1337:PHE:CZ	2.66	0.48
3:G:533:SER:OG	3:G:534:PRO:CD	2.60	0.48
3:G:731:MET:HG2	3:G:737:GLN:HB3	1.95	0.48
3:G:843:LEU:HD11	3:G:845:LEU:HD23	1.92	0.48
3:G:922:ARG:NH1	3:G:950:LYS:HD2	2.26	0.48
4:H:540:ILE:O	4:H:541:PRO:O	2.31	0.48
1:A:147:LYS:CB	1:A:155:ARG:CZ	2.92	0.48
1:A:157:TRP:CE3	1:A:166:HIS:O	2.67	0.48
1:A:142:ILE:HD11	1:A:189:LEU:HB3	1.93	0.48
2:B:421:GLN:O	2:B:425:GLN:HG3	2.14	0.48
3:C:1192:ALA:C	3:C:1193:TYR:HD1	2.17	0.48
3:C:349:TYR:O	3:C:359:VAL:HG13	2.13	0.48
3:C:484:LEU:HD12	3:C:488:LEU:CD2	2.44	0.48
3:C:507:LEU:N	3:C:507:LEU:HD12	2.24	0.48
3:C:760:ASN:HB3	3:C:944:ILE:HD11	1.96	0.48
2:B:235:ARG:HD3	3:C:898:ILE:HB	1.95	0.48
4:D:332:GLU:CA	4:D:332:GLU:OE2	2.62	0.48
4:D:400:ASP:O	4:D:402:PHE:N	2.46	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:26:TYR:HD2	1:E:66:LEU:HD21	1.78	0.48
2:F:308:GLN:HE22	2:F:383:GLY:N	2.10	0.48
3:G:1097:GLY:O	3:G:1100:LEU:N	2.41	0.48
3:G:1425:LYS:O	3:G:1428:GLN:N	2.47	0.48
3:G:585:VAL:HB	3:G:621:PHE:CD2	2.49	0.48
3:G:693:VAL:HG23	3:G:694:GLU:N	2.28	0.48
4:H:244:LEU:O	4:H:246:PRO:HD3	2.13	0.48
4:H:256:GLN:C	4:H:272:LEU:HD12	2.34	0.48
4:H:525:PHE:CD1	4:H:529:ALA:HB3	2.49	0.48
4:H:170:VAL:CG1	4:H:594:GLN:HG3	2.43	0.48
1:A:110:ILE:HG12	1:A:305:LEU:CD2	2.42	0.48
1:A:160:SER:HB3	1:A:166:HIS:CD2	2.49	0.48
1:A:279:TYR:CE1	1:A:283:ILE:HG13	2.49	0.48
2:B:146:ASP:O	2:B:147:SER:O	2.32	0.48
2:B:370:ILE:O	2:B:370:ILE:HG22	2.13	0.48
2:B:425:GLN:O	2:B:428:PHE:N	2.47	0.48
3:C:1019:PHE:O	3:C:1020:LYS:C	2.49	0.48
3:C:1118:GLU:O	3:C:1122:ASN:ND2	2.47	0.48
3:C:1211:TYR:CA	3:C:1215:GLN:HB2	2.42	0.48
3:C:1305:PRO:O	3:C:1307:LEU:N	2.46	0.48
3:C:1426:VAL:O	3:C:1429:ASP:HB2	2.13	0.48
3:C:433:LYS:O	3:C:454:GLU:HB3	2.13	0.48
3:C:846:ASP:HA	3:C:847:PRO:HD2	1.73	0.48
3:C:854:LYS:O	3:C:856:ILE:HD12	2.14	0.48
3:C:843:LEU:HD23	3:C:981:ARG:O	2.13	0.48
4:D:288:LEU:O	4:D:289:SER:C	2.51	0.48
4:D:376:ILE:HD11	4:D:464:ILE:HD11	1.95	0.48
2:F:192:LEU:HA	2:F:195:PHE:CD2	2.48	0.48
2:F:371:ILE:CD1	2:F:384:CYS:HB3	2.42	0.48
3:G:1077:LEU:N	3:G:1077:LEU:HD23	2.28	0.48
3:G:1217:HIS:CD2	3:G:1246:PHE:HZ	2.32	0.48
3:G:602:ILE:HG22	3:G:603:GLU:OE1	2.13	0.48
4:H:403:LYS:HZ3	4:H:442:TYR:HD1	1.61	0.48
1:A:188:TYR:CZ	2:B:202:LEU:HD12	2.48	0.48
1:A:89:ASN:HD22	1:A:89:ASN:N	2.10	0.48
2:B:447:PHE:O	2:B:447:PHE:CD2	2.66	0.48
3:C:1088:ALA:O	3:C:1092:GLY:N	2.41	0.48
3:C:953:ALA:CA	3:C:956:MET:HG2	2.43	0.48
4:D:382:LEU:HD22	4:D:401:ILE:HG21	1.95	0.48
1:E:168:TRP:CH2	1:E:320:PRO:HD3	2.49	0.48
2:F:164:GLN:NE2	2:F:176:LEU:CD1	2.73	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:260:GLN:HA	2:F:260:GLN:NE2	2.29	0.48
2:F:258:THR:C	2:F:260:GLN:N	2.67	0.48
2:F:306:ARG:NE	2:F:345:TYR:HE1	2.12	0.48
2:F:413:ASP:HA	2:F:416:LYS:HD3	1.96	0.48
3:G:364:LYS:HZ3	3:G:538:VAL:HG23	1.77	0.48
3:G:700:LEU:C	3:G:701:ILE:HG22	2.32	0.48
3:G:725:MET:CA	3:G:728:ILE:HD11	2.38	0.48
3:G:725:MET:O	3:G:728:ILE:HG13	2.14	0.48
3:G:796:PHE:CD1	3:G:910:ILE:HG12	2.48	0.48
3:G:966:ARG:O	3:G:967:PHE:HD2	1.96	0.48
4:H:252:THR:HG22	4:H:305:GLU:HB2	1.95	0.48
4:H:435:TYR:HD2	4:H:518:MET:CE	2.26	0.48
1:A:5:ASP:HA	1:A:6:PRO:HD2	1.73	0.48
2:B:365:PHE:CD1	2:B:369:LYS:HD3	2.49	0.48
2:B:443:HIS:C	2:B:443:HIS:ND1	2.66	0.48
2:B:49:ARG:HB2	2:B:102:SER:CB	2.33	0.48
3:C:1019:PHE:HE1	3:C:1040:ILE:HG21	1.77	0.48
3:C:1142:ASP:O	3:C:1144:GLN:N	2.46	0.48
3:C:1149:LYS:HD3	3:C:1150:LYS:HG3	1.95	0.48
3:C:1283:CYS:HB2	3:C:1310:CYS:SG	2.54	0.48
3:C:1363:GLN:OE1	3:C:1370:LEU:HD23	2.13	0.48
3:C:1425:LYS:O	3:C:1428:GLN:N	2.47	0.48
3:C:1432:LYS:HA	3:C:1435:ASN:HD22	1.79	0.48
3:C:975:LEU:O	3:C:978:TYR:HB3	2.13	0.48
4:D:164:ARG:HH11	4:D:164:ARG:CG	2.27	0.48
1:E:114:ASP:O	1:E:304:ARG:NH1	2.46	0.48
1:E:161:GLY:HA3	1:E:324:HIS:HD2	1.78	0.48
3:G:861:PHE:CD2	3:G:1038:ILE:HA	2.48	0.48
3:G:439:TYR:CD2	3:G:440:ALA:N	2.82	0.48
3:G:588:LYS:HB2	3:G:589:PRO:HD2	1.95	0.48
3:G:586:VAL:CB	3:G:742:LEU:HD21	2.43	0.48
4:H:296:LEU:HD23	4:H:300:GLN:HE22	1.77	0.48
4:H:394:LEU:HD22	4:H:401:ILE:HD13	1.95	0.48
4:H:400:ASP:O	4:H:402:PHE:N	2.46	0.48
4:H:520:ILE:CG2	4:H:521:ASP:N	2.74	0.48
1:A:352:PHE:O	1:A:356:GLU:HG3	2.14	0.48
2:B:78:LEU:HD12	2:B:130:PHE:CE2	2.49	0.48
3:C:1083:ASP:O	3:C:1135:ILE:HG23	2.13	0.48
3:C:437:LYS:CB	3:C:802:ILE:HD11	2.43	0.48
3:C:693:VAL:CG1	3:C:755:ILE:HG22	2.44	0.48
3:C:852:TYR:CE1	3:C:999:ILE:HG21	2.49	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:864:LEU:N	3:C:866:PRO:HD2	2.29	0.48
3:C:935:ASN:HD22	3:C:936:PRO:N	2.11	0.48
1:E:151:GLY:O	1:E:153:LYS:HG2	2.13	0.48
1:E:262:SER:O	1:E:268:ARG:NH2	2.46	0.48
2:F:51:LYS:NZ	2:F:260:GLN:HG2	2.28	0.48
2:F:362:TYR:CD2	2:F:362:TYR:O	2.67	0.48
2:F:385:PRO:CG	2:F:386:PHE:H	2.21	0.48
2:F:389:SER:CB	2:F:397:LYS:HZ1	2.24	0.48
2:F:441:LEU:CD2	2:F:447:PHE:HD1	2.26	0.48
3:G:1334:ILE:CG2	3:G:1334:ILE:O	2.61	0.48
2:F:38:SER:HA	3:G:1447:SER:O	2.13	0.48
3:G:683:ASN:ND2	3:G:683:ASN:N	2.62	0.48
3:G:563:LEU:CD2	3:G:746:TRP:HE1	2.26	0.48
3:G:803:VAL:HB	3:G:804:PRO:HD3	1.92	0.48
3:G:988:LYS:HE2	3:G:988:LYS:HB3	1.63	0.48
4:H:297:PHE:CZ	4:H:300:GLN:HA	2.49	0.48
3:G:1335:ARG:NH2	4:H:431:HIS:O	2.45	0.48
4:H:344:VAL:HG11	4:H:539:ILE:HG21	1.96	0.48
4:H:571:PHE:HE2	4:H:597:ARG:O	1.97	0.48
1:A:146:LEU:HB2	1:A:155:ARG:CD	2.41	0.47
1:A:26:TYR:OH	1:A:80:ILE:HG12	2.14	0.47
3:C:1044:PHE:CD1	3:C:1057:ALA:HB1	2.49	0.47
4:D:196:LEU:HG	4:D:197:GLY:N	2.29	0.47
4:D:458:GLU:OE1	4:D:472:THR:HA	2.12	0.47
4:D:494:ARG:O	4:D:497:ARG:HB3	2.14	0.47
4:D:548:VAL:HG22	4:D:557:VAL:HG13	1.96	0.47
4:D:561:ARG:HG3	4:D:564:LYS:NZ	2.29	0.47
1:E:150:PHE:HB3	1:E:152:PHE:CE1	2.48	0.47
1:E:137:MET:HE3	1:E:301:CYS:HB3	1.96	0.47
1:E:389:ALA:N	1:E:390:PRO:HD2	2.29	0.47
2:F:26:LEU:HG	2:F:131:ARG:HB3	1.95	0.47
2:F:425:GLN:O	2:F:428:PHE:N	2.47	0.47
2:F:94:GLU:HG3	2:F:95:PRO:CD	2.43	0.47
3:G:1047:LEU:HD12	3:G:1056:ALA:O	2.14	0.47
3:G:1345:TRP:HA	3:G:1345:TRP:CE3	2.47	0.47
3:G:589:PRO:HG3	3:G:592:CYS:HB2	1.95	0.47
3:G:618:LEU:O	3:G:621:PHE:HB3	2.13	0.47
3:G:944:ILE:O	3:G:946:GLN:N	2.46	0.47
4:H:227:LEU:HD11	4:H:231:LEU:HD21	1.94	0.47
1:A:202:VAL:HG11	1:A:298:LEU:CB	2.43	0.47
2:B:433:ASN:C	2:B:434:VAL:HG12	2.34	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:343:LEU:O	4:D:344:VAL:HG13	2.14	0.47
4:D:195:VAL:HA	4:D:462:LEU:HD12	1.96	0.47
4:D:477:LEU:HD11	4:D:540:ILE:HB	1.95	0.47
4:D:561:ARG:HG3	4:D:564:LYS:HE2	1.96	0.47
2:F:146:ASP:O	2:F:147:SER:O	2.32	0.47
2:F:266:GLY:O	2:F:267:ASN:O	2.32	0.47
3:G:1094:PHE:C	3:G:1094:PHE:CD1	2.88	0.47
3:G:1279:PHE:HB2	3:G:1395:TYR:HE1	1.79	0.47
3:G:362:PHE:CD1	3:G:362:PHE:N	2.82	0.47
3:G:983:ILE:O	3:G:983:ILE:CG2	2.62	0.47
4:H:157:PRO:C	4:H:158:SER:OG	2.53	0.47
4:H:194:LYS:HG3	4:H:463:SER:CB	2.26	0.47
4:H:407:ARG:O	4:H:410:ILE:N	2.48	0.47
4:H:171:VAL:HG23	4:H:595:VAL:HG12	1.96	0.47
1:A:147:LYS:CB	1:A:155:ARG:NH2	2.77	0.47
1:A:226:TYR:HA	1:A:230:ASN:HB2	1.96	0.47
1:A:276:ALA:HA	1:A:279:TYR:HB3	1.97	0.47
2:B:135:LEU:HB2	2:B:140:ILE:CG1	2.44	0.47
3:C:1007:MET:C	3:C:1008:ILE:HG13	2.35	0.47
3:C:1425:LYS:HG2	3:C:1429:ASP:OD2	2.14	0.47
3:C:543:SER:HB2	3:C:749:ALA:H	1.76	0.47
3:C:664:ARG:HE	3:C:688:ARG:NH2	2.11	0.47
3:C:978:TYR:N	3:C:981:ARG:HH22	2.11	0.47
1:E:112:MET:HB2	1:E:163:ARG:HB2	1.97	0.47
1:E:208:ILE:O	1:E:208:ILE:HG22	2.14	0.47
2:F:23:PRO:HD2	2:F:25:CYS:CB	2.43	0.47
2:F:309:TYR:O	2:F:310:GLY:C	2.51	0.47
2:F:374:ASN:O	2:F:375:PRO:C	2.51	0.47
3:G:1178:VAL:O	3:G:1179:ILE:HD13	2.14	0.47
3:G:1050:LEU:HD13	3:G:1226:PRO:CG	2.43	0.47
3:G:371:GLU:O	3:G:371:GLU:HG2	2.14	0.47
3:G:532:VAL:HG12	3:G:533:SER:N	2.28	0.47
4:H:247:ALA:O	4:H:309:THR:HA	2.14	0.47
4:H:297:PHE:CE2	4:H:300:GLN:HG3	2.48	0.47
4:H:364:ILE:CA	4:H:367:ILE:HG13	2.45	0.47
4:H:497:ARG:O	4:H:498:ILE:C	2.51	0.47
1:A:114:ASP:O	1:A:304:ARG:HD2	2.14	0.47
1:A:389:ALA:N	1:A:390:PRO:HD2	2.30	0.47
2:B:128:LEU:HD11	2:B:132:PHE:CE2	2.49	0.47
2:B:135:LEU:HB2	2:B:140:ILE:HG12	1.96	0.47
2:B:309:TYR:O	2:B:310:GLY:C	2.51	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:77:GLU:C	2:B:79:ARG:N	2.66	0.47
3:C:1384:SER:OG	3:C:1386:LYS:N	2.47	0.47
3:C:682:ARG:CD	3:C:682:ARG:C	2.79	0.47
3:C:796:PHE:CE1	3:C:910:ILE:HG21	2.49	0.47
3:C:855:PHE:C	3:C:856:ILE:HD12	2.34	0.47
3:C:944:ILE:O	3:C:946:GLN:N	2.47	0.47
4:D:198:CYS:O	4:D:199:PRO:C	2.51	0.47
4:D:382:LEU:CD1	4:D:389:VAL:HG21	2.41	0.47
1:E:131:CYS:HA	1:E:226:TYR:HE1	1.79	0.47
1:E:37:LYS:NZ	1:E:42:HIS:CE1	2.82	0.47
2:F:26:LEU:HB3	2:F:143:PHE:CZ	2.49	0.47
2:F:302:ARG:HH12	2:F:379:GLY:HA3	1.79	0.47
3:G:1157:VAL:HG21	3:G:1177:TYR:HB3	1.95	0.47
3:G:392:ARG:NH2	3:G:474:SER:HA	2.29	0.47
3:G:559:ALA:HA	3:G:585:VAL:O	2.13	0.47
3:G:711:LEU:HB3	3:G:755:ILE:HD11	1.96	0.47
3:G:548:GLN:H	3:G:725:MET:HE3	1.79	0.47
3:G:790:PHE:HA	3:G:793:LEU:HD12	1.96	0.47
3:G:919:VAL:O	3:G:919:VAL:HG12	2.14	0.47
3:G:994:MET:O	3:G:996:LEU:HG	2.13	0.47
4:H:212:LYS:O	4:H:213:LEU:C	2.53	0.47
4:H:378:PHE:CD2	4:H:541:PRO:HG2	2.49	0.47
4:H:574:LEU:HA	4:H:593:VAL:HG22	1.96	0.47
1:A:145:ALA:O	1:A:147:LYS:N	2.47	0.47
1:A:219:ILE:O	1:A:219:ILE:HG22	2.14	0.47
2:B:117:ARG:HG2	2:B:230:LEU:HB3	1.95	0.47
2:B:258:THR:O	2:B:260:GLN:N	2.46	0.47
2:B:369:LYS:C	2:B:371:ILE:H	2.17	0.47
3:C:1091:THR:O	3:C:1095:VAL:HG23	2.15	0.47
3:C:1294:ASN:ND2	3:C:1295:VAL:N	2.62	0.47
3:C:553:HIS:CG	3:C:554:GLN:N	2.82	0.47
3:C:583:PHE:CZ	3:C:625:LYS:HG3	2.49	0.47
3:C:599:LYS:HE2	3:C:611:VAL:CG1	2.42	0.47
3:C:721:VAL:CG1	3:C:722:VAL:N	2.78	0.47
3:C:762:LEU:N	3:C:762:LEU:HD23	2.29	0.47
3:C:760:ASN:O	3:C:764:LEU:HB2	2.14	0.47
3:C:955:SER:O	3:C:956:MET:C	2.51	0.47
4:D:222:CYS:O	4:D:223:LYS:C	2.53	0.47
4:D:334:ASP:HA	4:D:337:PHE:CE2	2.50	0.47
4:D:398:PHE:CD1	4:D:429:VAL:HG11	2.50	0.47
4:D:378:PHE:CE2	4:D:541:PRO:HG2	2.50	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:276:ALA:O	1:E:279:TYR:HB3	2.15	0.47
1:E:349:THR:HG22	1:E:351:SER:HB3	1.97	0.47
2:F:308:GLN:HA	2:F:365:PHE:CD2	2.49	0.47
2:F:428:PHE:CD1	2:F:432:HIS:CE1	3.03	0.47
2:F:447:PHE:O	2:F:447:PHE:CD2	2.68	0.47
2:F:447:PHE:CD2	2:F:447:PHE:C	2.87	0.47
3:G:1035:LEU:O	3:G:1036:LEU:O	2.32	0.47
3:G:1142:ASP:O	3:G:1144:GLN:N	2.47	0.47
3:G:1224:CYS:O	3:G:1225:GLU:C	2.51	0.47
3:G:1357:THR:HG23	3:G:1359:HIS:N	2.29	0.47
3:G:607:VAL:O	3:G:609:VAL:HG12	2.14	0.47
4:H:596:VAL:HG12	4:H:597:ARG:O	2.15	0.47
1:A:129:PRO:HA	1:A:345:PHE:CZ	2.50	0.47
1:A:174:VAL:HA	1:A:177:LEU:CG	2.44	0.47
2:B:152:GLU:OE2	2:B:185:LYS:HE2	2.14	0.47
2:B:311:LEU:O	2:B:312:PHE:C	2.52	0.47
2:B:337:ASP:HB3	2:B:340:LYS:HB2	1.97	0.47
3:C:1222:ARG:NH1	3:C:1222:ARG:HG3	2.30	0.47
3:C:1245:GLN:HG3	3:C:1249:HIS:CE1	2.49	0.47
3:C:1279:PHE:CE1	3:C:1330:LEU:HD23	2.48	0.47
2:B:38:SER:HA	3:C:1447:SER:O	2.15	0.47
3:C:353:TYR:CD2	3:C:354:ASN:ND2	2.83	0.47
3:C:549:ASN:HD21	3:C:552:ASN:CA	2.27	0.47
3:C:919:VAL:HG12	3:C:919:VAL:O	2.14	0.47
3:C:932:GLN:O	3:C:933:ASP:HB2	2.14	0.47
3:C:972:LEU:N	3:C:972:LEU:CD2	2.72	0.47
1:E:106:LEU:HG	1:E:108:PHE:CE1	2.50	0.47
1:E:68:LYS:O	1:E:68:LYS:HD2	2.15	0.47
2:F:137:LYS:HZ1	2:F:181:GLU:CG	2.28	0.47
3:G:1405:LEU:HD23	3:G:1405:LEU:HA	1.58	0.47
3:G:1431:ARG:HG3	3:G:1431:ARG:HH11	1.79	0.47
3:G:579:PHE:HD1	3:G:579:PHE:H	1.61	0.47
3:G:722:VAL:HG12	3:G:723:ILE:H	1.79	0.47
3:G:756:MET:SD	3:G:762:LEU:CD2	3.01	0.47
4:H:210:PHE:CD1	4:H:210:PHE:C	2.88	0.47
4:H:292:LYS:CG	4:H:293:GLU:N	2.58	0.47
1:A:202:VAL:HG21	1:A:299:GLN:N	2.30	0.47
2:B:33:PRO:HD3	2:B:104:PHE:CD2	2.50	0.47
2:B:428:PHE:CE1	2:B:432:HIS:CE1	3.02	0.47
3:C:1098:GLN:NE2	3:C:1111:ASN:OD1	2.48	0.47
3:C:586:VAL:HG11	3:C:742:LEU:HD11	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:700:LEU:HD21	3:C:764:LEU:HD11	1.96	0.47
3:C:859:LEU:O	3:C:860:ASP:OD1	2.33	0.47
4:D:252:THR:HG23	4:D:305:GLU:HG3	1.95	0.47
4:D:363:LEU:HD13	4:D:562:LEU:HD11	1.97	0.47
4:D:526:TYR:O	4:D:526:TYR:CD2	2.68	0.47
1:E:170:CYS:O	1:E:175:ARG:NH1	2.47	0.47
1:E:48:THR:HB	1:E:77:LYS:HB2	1.96	0.47
2:F:385:PRO:O	2:F:387:ARG:N	2.48	0.47
3:G:1180:CYS:SG	3:G:1193:TYR:CG	3.08	0.47
3:G:849:VAL:CG1	3:G:1226:PRO:HA	2.45	0.47
3:G:1290:ASN:ND2	3:G:1292:TYR:CE1	2.78	0.47
3:G:588:LYS:HD2	3:G:592:CYS:O	2.14	0.47
3:G:661:LYS:O	3:G:663:GLY:N	2.47	0.47
3:G:843:LEU:HD11	3:G:845:LEU:CG	2.44	0.47
3:G:948:ALA:C	3:G:950:LYS:N	2.67	0.47
3:G:990:MET:O	3:G:993:LYS:HB3	2.15	0.47
4:H:435:TYR:CD1	4:H:436:PRO:HA	2.49	0.47
4:H:435:TYR:CD2	4:H:518:MET:CE	2.97	0.47
1:A:390:PRO:HG2	1:A:391:TYR:CE1	2.50	0.47
2:B:419:HIS:O	2:B:422:VAL:HB	2.13	0.47
3:C:1001:GLY:O	3:C:1002:ASP:HB2	2.14	0.47
3:C:1047:LEU:CG	3:C:1049:LEU:CD2	2.81	0.47
3:C:398:LEU:HD12	3:C:470:GLY:HA2	1.96	0.47
3:C:631:PRO:HD2	3:C:688:ARG:HH12	1.80	0.47
3:C:702:ARG:C	3:C:703:CYS:SG	2.93	0.47
1:E:109:ASP:O	1:E:305:LEU:HD22	2.15	0.47
1:E:141:ILE:HD12	1:E:303:PRO:CD	2.45	0.47
1:E:209:HIS:ND1	1:E:210:PRO:N	2.63	0.47
1:E:202:VAL:HG23	1:E:299:GLN:HG3	1.97	0.47
1:E:357:LEU:HA	1:E:360:ILE:HD12	1.95	0.47
2:F:83:PHE:CE2	2:F:99:ASP:HA	2.49	0.47
3:G:1105:ARG:HH11	3:G:1105:ARG:HB2	1.79	0.47
3:G:531:ASP:O	3:G:532:VAL:CG2	2.62	0.47
3:G:558:ILE:O	3:G:558:ILE:CG1	2.62	0.47
3:G:876:PHE:CA	3:G:881:ARG:HH12	2.25	0.47
1:E:96:LEU:HG	3:G:906:LEU:HD23	1.97	0.47
3:G:932:GLN:O	3:G:933:ASP:HB2	2.14	0.47
4:H:196:LEU:CG	4:H:197:GLY:N	2.78	0.47
1:A:204:LEU:HD11	1:A:298:LEU:HD11	1.97	0.47
1:A:40:PHE:CE2	1:A:45:PHE:CZ	3.03	0.47
2:B:46:ALA:O	2:B:106:LEU:HD11	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:187:GLU:OE1	2:B:196:ARG:HG3	2.15	0.47
2:B:225:LYS:O	2:B:228:LYS:HB3	2.14	0.47
2:B:274:ASP:N	2:B:274:ASP:OD2	2.48	0.47
2:B:403:ILE:O	2:B:404:SER:C	2.53	0.47
3:C:1281:CYS:SG	3:C:1326:LEU:HD23	2.55	0.47
3:C:1081:ARG:HD2	3:C:1352:THR:O	2.15	0.47
3:C:528:VAL:HG12	3:C:529:ILE:N	2.30	0.47
3:C:875:CYS:HB2	3:C:912:PRO:HD3	1.96	0.47
3:C:948:ALA:C	3:C:950:LYS:N	2.68	0.47
4:D:510:PRO:HG2	4:D:511:LEU:H	1.78	0.47
1:E:112:MET:HE3	1:E:127:ILE:HG22	1.96	0.47
2:F:369:LYS:C	2:F:371:ILE:N	2.68	0.47
2:F:403:ILE:O	2:F:404:SER:C	2.51	0.47
3:G:1104:SER:O	3:G:1105:ARG:C	2.53	0.47
3:G:413:VAL:HG22	3:G:472:THR:HB	1.96	0.47
3:G:387:LEU:CD2	3:G:479:THR:N	2.78	0.47
3:G:637:HIS:N	3:G:639:ILE:HD11	2.29	0.47
4:H:230:GLU:OE1	4:H:506:ARG:NH2	2.47	0.47
4:H:357:TYR:HB3	4:H:360:LEU:HD23	1.96	0.47
4:H:411:GLU:C	4:H:413:THR:N	2.64	0.47
1:A:357:LEU:HA	1:A:360:ILE:HD12	1.97	0.47
1:A:353:ILE:CB	1:A:386:THR:HG21	2.44	0.47
2:B:323:ALA:O	2:B:327:TRP:HD1	1.98	0.47
3:C:1357:THR:HG23	3:C:1357:THR:O	2.15	0.47
3:C:1384:SER:OG	3:C:1385:ASP:N	2.48	0.47
3:C:703:CYS:SG	3:C:706:TYR:CZ	3.08	0.47
3:C:547:MET:SD	3:C:728:ILE:HG21	2.55	0.47
4:D:185:ARG:H	4:D:185:ARG:CD	2.27	0.47
4:D:426:LEU:HG	4:D:437:GLN:HE21	1.80	0.47
4:D:495:PHE:O	4:D:497:ARG:N	2.47	0.47
3:G:1074:LEU:HD21	3:G:1100:LEU:HD11	1.97	0.47
3:G:1330:LEU:O	3:G:1331:ILE:C	2.52	0.47
3:G:596:TYR:CG	3:G:597:ALA:N	2.83	0.47
4:H:343:LEU:CG	4:H:344:VAL:N	2.78	0.47
4:H:497:ARG:O	4:H:500:LYS:N	2.48	0.47
1:A:187:GLU:OE2	2:B:196:ARG:HD2	2.15	0.47
1:A:292:LEU:HD23	1:A:295:GLU:OE1	2.15	0.47
2:B:154:ILE:HD11	2:B:183:ILE:HG22	1.96	0.47
3:C:1097:GLY:C	3:C:1099:ILE:N	2.68	0.47
3:C:1114:LYS:O	3:C:1117:ILE:HB	2.15	0.47
3:C:1154:HIS:CG	3:C:1155:VAL:H	2.32	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:1178:VAL:O	3:C:1179:ILE:HD13	2.14	0.47
3:C:1251:TYR:HD1	3:C:1254:ASP:N	2.06	0.47
3:C:487:PHE:O	3:C:488:LEU:C	2.53	0.47
3:C:492:LYS:O	3:C:494:LYS:CD	2.63	0.47
3:C:711:LEU:HB3	3:C:755:ILE:HD13	1.96	0.47
3:C:863:SER:OG	3:C:954:ASN:ND2	2.48	0.47
4:D:357:TYR:CE2	4:D:405:CYS:SG	3.08	0.47
1:E:103:GLU:OE1	1:E:176:LYS:HB3	2.13	0.47
1:E:335:ASP:HB3	1:E:338:LYS:CG	2.44	0.47
2:F:122:GLN:HG2	2:F:123:GLN:NE2	2.29	0.47
2:F:229:ALA:C	2:F:231:ALA:N	2.66	0.47
3:G:1278:ARG:HD3	3:G:1293:ASP:HB3	1.96	0.47
3:G:1348:CYS:O	3:G:1354:ARG:NH1	2.42	0.47
3:G:377:CYS:O	3:G:517:GLU:HA	2.15	0.47
3:G:507:LEU:O	3:G:508:ASN:C	2.53	0.47
3:G:853:ASP:HB3	3:G:854:LYS:CD	2.44	0.47
4:H:224:ILE:HD11	4:H:256:GLN:HB3	1.96	0.47
4:H:266:ASN:OD1	4:H:268:LYS:HB2	2.15	0.47
4:H:345:ALA:HB1	4:H:562:LEU:CD1	2.45	0.47
1:A:397:HIS:O	1:A:401:ASN:ND2	2.49	0.46
1:A:40:PHE:CE2	1:A:45:PHE:HZ	2.33	0.46
2:B:136:PRO:C	2:B:138:ASP:N	2.67	0.46
2:B:22:TYR:HB3	2:B:23:PRO:CD	2.45	0.46
2:B:280:SER:CA	2:B:284:PHE:CE1	2.97	0.46
2:B:445:ASN:O	2:B:448:PHE:CB	2.59	0.46
3:C:519:MET:SD	3:C:520:ALA:N	2.88	0.46
3:C:589:PRO:CG	3:C:592:CYS:CB	2.93	0.46
3:C:689:MET:SD	3:C:776:MET:CG	2.98	0.46
3:C:920:GLU:HA	3:C:923:LYS:HD2	1.95	0.46
3:C:938:LEU:HD12	3:C:941:GLN:HG3	1.97	0.46
3:C:976:VAL:O	3:C:977:THR:C	2.52	0.46
4:D:407:ARG:O	4:D:410:ILE:N	2.48	0.46
1:E:134:LEU:CD2	1:E:226:TYR:HE2	2.28	0.46
1:E:158:VAL:HG13	1:E:332:VAL:C	2.35	0.46
1:E:187:GLU:CD	2:F:196:ARG:HB2	2.35	0.46
1:E:313:ILE:O	1:E:313:ILE:CG1	2.62	0.46
1:E:89:ASN:HD22	1:E:89:ASN:H	1.55	0.46
3:G:1430:TYR:O	3:G:1432:LYS:N	2.49	0.46
3:G:365:VAL:O	3:G:373:HIS:HB3	2.15	0.46
3:G:792:LEU:O	3:G:793:LEU:C	2.53	0.46
3:G:796:PHE:CE2	3:G:910:ILE:HG21	2.50	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:868:ILE:HG23	3:G:872:PHE:HD2	1.80	0.46
3:G:988:LYS:HG3	3:G:998:VAL:HG11	1.97	0.46
4:H:193:LEU:HD23	4:H:193:LEU:HA	1.69	0.46
4:H:334:ASP:HA	4:H:337:PHE:HD2	1.80	0.46
1:A:141:ILE:HD13	1:A:303:PRO:HD2	1.97	0.46
1:A:158:VAL:HG13	1:A:332:VAL:C	2.35	0.46
1:A:191:LEU:HB2	1:A:302:PHE:CE1	2.51	0.46
1:A:21:PHE:CE2	1:A:321:PHE:O	2.68	0.46
2:B:234:ALA:O	2:B:237:LEU:N	2.36	0.46
3:C:1222:ARG:NH1	3:C:1222:ARG:CG	2.77	0.46
3:C:618:LEU:HD22	3:C:619:LEU:CD2	2.45	0.46
3:C:651:ILE:HG23	3:C:652:ASN:H	1.78	0.46
3:C:722:VAL:HG12	3:C:723:ILE:H	1.81	0.46
3:C:935:ASN:C	3:C:937:ASP:H	2.19	0.46
1:E:112:MET:CE	1:E:127:ILE:HG22	2.45	0.46
1:E:49:LEU:CB	1:E:50:LYS:HZ2	2.27	0.46
3:G:1015:LEU:HD11	3:G:1019:PHE:CD2	2.50	0.46
3:G:1115:ARG:O	3:G:1116:LEU:C	2.52	0.46
3:G:1221:ALA:C	3:G:1223:ILE:H	2.18	0.46
3:G:710:GLU:O	3:G:712:VAL:N	2.48	0.46
3:G:926:LYS:HD2	3:G:926:LYS:HA	1.74	0.46
4:H:228:GLY:O	4:H:229:SER:C	2.52	0.46
1:A:234:LEU:HD21	1:A:243:ILE:CG1	2.45	0.46
2:B:195:PHE:CD1	2:B:195:PHE:C	2.89	0.46
2:B:310:GLY:HA2	2:B:327:TRP:HZ2	1.80	0.46
2:B:443:HIS:O	2:B:446:GLN:HB3	2.15	0.46
3:C:858:LEU:HD13	3:C:1007:MET:CB	2.46	0.46
3:C:1392:LEU:HD23	3:C:1392:LEU:HA	1.71	0.46
3:C:346:LEU:HD13	3:C:632:ASP:OD2	2.16	0.46
3:C:410:MET:SD	3:C:434:PRO:CB	2.96	0.46
3:C:615:GLU:O	3:C:619:LEU:HD23	2.15	0.46
3:C:639:ILE:HG21	3:C:690:ILE:CG2	2.46	0.46
3:C:742:LEU:O	3:C:743:GLU:C	2.54	0.46
4:D:253:LEU:HD11	4:D:314:LEU:HD22	1.96	0.46
2:F:22:TYR:HB3	2:F:84:SER:OG	2.15	0.46
2:F:403:ILE:HA	2:F:403:ILE:HD13	1.70	0.46
2:F:94:GLU:CB	2:F:95:PRO:CD	2.93	0.46
3:G:860:ASP:O	3:G:1038:ILE:HD12	2.16	0.46
3:G:1050:LEU:O	3:G:1051:LYS:HG2	2.14	0.46
3:G:1097:GLY:C	3:G:1099:ILE:N	2.66	0.46
3:G:1223:ILE:O	3:G:1223:ILE:HG22	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:1430:TYR:O	3:G:1431:ARG:C	2.53	0.46
3:G:610:GLU:HG3	3:G:610:GLU:O	2.15	0.46
3:G:659:TRP:CD2	3:G:660:SER:N	2.82	0.46
3:G:977:THR:O	3:G:981:ARG:NH1	2.47	0.46
3:G:982:GLU:C	3:G:984:LEU:N	2.68	0.46
3:G:984:LEU:O	3:G:987:THR:HB	2.15	0.46
3:G:997:GLU:O	3:G:997:GLU:HG2	2.14	0.46
4:H:407:ARG:NH1	4:H:411:GLU:OE2	2.49	0.46
4:H:546:TYR:O	4:H:547:PHE:CB	2.60	0.46
1:A:113:THR:O	1:A:116:ASP:OD2	2.34	0.46
1:A:209:HIS:CE1	1:A:210:PRO:HB2	2.50	0.46
2:B:235:ARG:NH1	3:C:978:TYR:CE2	2.84	0.46
2:B:251:ASN:C	2:B:252:HIS:HD2	2.18	0.46
2:B:351:HIS:O	2:B:352:SER:C	2.54	0.46
2:B:355:LYS:HZ3	3:C:1247:ARG:NH2	2.13	0.46
2:B:428:PHE:CD1	2:B:432:HIS:CE1	3.03	0.46
2:B:454:ILE:HD12	2:B:454:ILE:HA	1.74	0.46
2:B:81:LEU:HD23	2:B:81:LEU:HA	1.61	0.46
2:B:35:GLU:OE2	2:B:97:ARG:NH2	2.49	0.46
3:C:1055:TYR:C	3:C:1055:TYR:CD1	2.89	0.46
3:C:788:ASN:O	3:C:791:LEU:N	2.49	0.46
3:C:944:ILE:HG13	3:C:947:LYS:HZ1	1.80	0.46
3:C:953:ALA:O	3:C:956:MET:CG	2.64	0.46
4:D:253:LEU:N	4:D:253:LEU:HD23	2.31	0.46
4:D:295:SER:HG	4:D:501:HIS:CE1	2.27	0.46
4:D:553:GLY:O	4:D:586:ARG:NH2	2.48	0.46
1:E:381:ARG:O	1:E:384:LYS:HB2	2.15	0.46
1:E:43:ARG:CZ	1:E:83:VAL:HG22	2.44	0.46
2:F:105:ILE:C	2:F:107:ARG:H	2.18	0.46
2:F:114:GLU:HA	2:F:117:ARG:NH2	2.30	0.46
2:F:280:SER:O	2:F:289:ARG:HD2	2.16	0.46
3:G:804:PRO:HD2	3:G:967:PHE:HE2	1.81	0.46
3:G:864:LEU:C	3:G:864:LEU:CD1	2.84	0.46
3:G:873:ASN:HD21	3:G:878:THR:HG22	1.77	0.46
4:H:475:ASP:OD1	4:H:542:SER:HA	2.14	0.46
1:A:172:GLU:HA	1:A:175:ARG:HH21	1.81	0.46
2:B:286:PRO:HG2	2:B:386:PHE:CZ	2.46	0.46
2:B:447:PHE:C	2:B:447:PHE:CD2	2.89	0.46
3:C:589:PRO:HD3	3:C:732:TYR:HE1	1.81	0.46
3:C:635:VAL:CG2	3:C:752:ILE:HG22	2.34	0.46
3:C:927:GLN:HE22	3:C:930:LYS:HE3	1.79	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:202:LEU:HD11	4:D:437:GLN:O	2.14	0.46
4:D:257:ILE:HG23	4:D:270:VAL:HG13	1.96	0.46
2:F:184:TYR:HE1	2:F:210:PRO:O	1.98	0.46
2:F:128:LEU:HD23	2:F:219:LEU:CD2	2.45	0.46
3:G:1236:ALA:O	3:G:1242:ASP:OD2	2.34	0.46
3:G:364:LYS:HE3	3:G:632:ASP:CG	2.33	0.46
3:G:477:PHE:CD1	3:G:802:ILE:HG21	2.50	0.46
3:G:487:PHE:CE2	3:G:493:ILE:HD11	2.50	0.46
3:G:649:GLN:HB3	4:H:248:GLN:NE2	2.31	0.46
3:G:1388:LEU:HD21	4:H:209:MET:HE2	1.97	0.46
4:H:458:GLU:OE1	4:H:459:PRO:HA	2.16	0.46
1:A:142:ILE:HD12	1:A:189:LEU:HD13	1.98	0.46
2:B:144:LEU:O	2:B:145:LYS:C	2.53	0.46
2:B:283:SER:O	2:B:447:PHE:CE2	2.68	0.46
2:B:417:GLY:O	2:B:418:THR:CB	2.64	0.46
2:B:443:HIS:CE1	2:B:445:ASN:CB	2.82	0.46
2:B:94:GLU:HB3	2:B:95:PRO:CD	2.45	0.46
3:C:1141:LYS:HZ1	3:C:1147:PRO:HD2	1.79	0.46
3:C:365:VAL:O	3:C:373:HIS:HB3	2.15	0.46
3:C:784:ARG:HG2	3:C:784:ARG:NH1	2.30	0.46
4:D:287:ASP:HB2	4:D:313:LYS:HE2	1.97	0.46
4:D:363:LEU:O	4:D:367:ILE:HG12	2.16	0.46
1:E:128:CYS:HA	1:E:345:PHE:CZ	2.51	0.46
1:E:209:HIS:CD2	1:E:210:PRO:HD2	2.51	0.46
1:E:237:LYS:HD2	1:E:256:GLN:OE1	2.15	0.46
2:F:234:ALA:O	2:F:237:LEU:N	2.41	0.46
3:G:1184:SER:O	3:G:1186:LEU:N	2.48	0.46
3:G:1201:GLN:HG2	3:G:1202:ASP:N	2.30	0.46
3:G:1279:PHE:HE1	3:G:1329:LYS:HG3	1.79	0.46
3:G:651:ILE:HG22	3:G:652:ASN:N	2.31	0.46
3:G:799:ASN:O	3:G:801:TYR:CD1	2.67	0.46
3:G:861:PHE:CD1	3:G:1036:LEU:HD11	2.51	0.46
3:G:910:ILE:N	3:G:910:ILE:HD12	2.29	0.46
4:H:196:LEU:CD1	4:H:197:GLY:H	2.29	0.46
4:H:288:LEU:O	4:H:291:LEU:N	2.42	0.46
4:H:423:VAL:CG1	4:H:423:VAL:O	2.64	0.46
4:H:509:TYR:CE1	4:H:514:PRO:HB3	2.51	0.46
2:B:26:LEU:HD21	2:B:131:ARG:HB2	1.98	0.46
2:B:136:PRO:CG	2:B:139:LYS:HG2	2.46	0.46
2:B:185:LYS:HG3	2:B:185:LYS:O	2.15	0.46
2:B:311:LEU:HB3	2:B:364:PRO:HG3	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:1184:SER:O	3:C:1186:LEU:N	2.48	0.46
3:C:711:LEU:HB3	3:C:755:ILE:CD1	2.45	0.46
3:C:910:ILE:N	3:C:910:ILE:HD12	2.30	0.46
3:C:974:ALA:O	3:C:975:LEU:C	2.54	0.46
3:C:1342:TYR:CB	4:D:519:ALA:HB1	2.46	0.46
1:E:76:TYR:N	1:E:76:TYR:CD1	2.84	0.46
2:F:121:ILE:HG21	2:F:223:ARG:HG3	1.96	0.46
2:F:341:PHE:CE1	2:F:345:TYR:CB	2.99	0.46
3:G:1088:ALA:O	3:G:1092:GLY:N	2.42	0.46
3:G:586:VAL:HG11	3:G:742:LEU:HD21	1.98	0.46
3:G:759:LEU:O	3:G:761:VAL:N	2.49	0.46
3:G:954:ASN:ND2	3:G:954:ASN:H	2.13	0.46
3:G:976:VAL:O	3:G:977:THR:C	2.53	0.46
2:B:200:VAL:CG1	2:B:209:VAL:HG13	2.45	0.46
3:C:1160:TRP:CE3	3:C:1161:ILE:HG13	2.47	0.46
3:C:346:LEU:HD22	3:C:689:MET:HE1	1.96	0.46
3:C:387:LEU:HD23	3:C:476:VAL:HG22	1.98	0.46
3:C:529:ILE:O	3:C:529:ILE:CG2	2.63	0.46
3:C:754:GLN:O	3:C:757:CYS:N	2.46	0.46
4:D:243:LEU:CD2	4:D:253:LEU:HB3	2.45	0.46
1:E:237:LYS:HE3	1:E:241:ASP:CG	2.36	0.46
1:E:51:ASP:O	1:E:52:ASP:HB3	2.15	0.46
1:E:57:TYR:CD2	1:E:57:TYR:N	2.83	0.46
2:F:298:ASN:N	2:F:298:ASN:HD22	2.13	0.46
3:G:1130:VAL:HG12	3:G:1198:LEU:HD21	1.98	0.46
3:G:1395:TYR:HA	3:G:1398:ILE:CG1	2.46	0.46
3:G:345:TRP:C	3:G:346:LEU:HG	2.36	0.46
3:G:416:GLU:OE2	3:G:472:THR:OG1	2.28	0.46
3:G:589:PRO:CD	3:G:592:CYS:HB2	2.44	0.46
3:G:609:VAL:HG22	3:G:609:VAL:O	2.15	0.46
3:G:922:ARG:HH12	3:G:950:LYS:HE3	1.79	0.46
4:H:420:LEU:HB3	4:H:422:PHE:CE2	2.51	0.46
1:A:401:ASN:O	1:A:404:LYS:HB2	2.16	0.46
1:A:51:ASP:O	1:A:52:ASP:CB	2.63	0.46
2:B:441:LEU:CD2	2:B:447:PHE:HD1	2.28	0.46
3:C:1006:ILE:O	3:C:1006:ILE:HG22	2.15	0.46
3:C:1045:LYS:N	3:C:1058:LEU:O	2.47	0.46
3:C:1157:VAL:O	3:C:1161:ILE:HG13	2.16	0.46
4:D:191:ILE:HD11	4:D:373:ASP:OD2	2.16	0.46
4:D:306:GLY:C	4:D:314:LEU:HD11	2.37	0.46
4:D:424:PRO:HG2	4:D:458:GLU:HB2	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:196:LEU:HD23	4:D:468:ILE:HD12	1.98	0.46
1:E:144:ARG:NH1	1:E:211:PHE:CE2	2.84	0.46
1:E:248:PRO:O	1:E:250:THR:N	2.49	0.46
2:F:29:TYR:CB	2:F:103:HIS:CD2	2.97	0.46
2:F:137:LYS:NZ	2:F:181:GLU:HG2	2.31	0.46
2:F:270:LYS:HA	2:F:270:LYS:CE	2.39	0.46
2:F:285:PRO:HB3	2:F:447:PHE:CD2	2.50	0.46
2:F:78:LEU:HD23	2:F:83:PHE:HB2	1.98	0.46
3:G:1130:VAL:CG1	3:G:1198:LEU:HD21	2.46	0.46
3:G:1201:GLN:HG2	3:G:1202:ASP:H	1.81	0.46
1:A:234:LEU:HD21	1:A:243:ILE:HB	1.98	0.46
1:A:382:ASP:CG	1:A:385:LYS:HD2	2.37	0.46
3:C:1083:ASP:HB2	3:C:1135:ILE:CG2	2.44	0.46
3:C:1389:TYR:HD2	3:C:1389:TYR:C	2.19	0.46
3:C:639:ILE:O	3:C:644:LEU:HB3	2.16	0.46
3:C:743:GLU:HG2	3:C:744:HIS:N	2.31	0.46
4:D:360:LEU:O	4:D:363:LEU:HB3	2.16	0.46
1:E:154:HIS:HB3	1:E:402:LEU:HD11	1.96	0.46
1:E:221:LYS:HZ3	1:E:221:LYS:HB2	1.74	0.46
1:E:226:TYR:HA	1:E:230:ASN:HB2	1.98	0.46
1:E:62:ASN:O	1:E:65:ASP:OD2	2.33	0.46
2:F:184:TYR:OH	2:F:211:LEU:HD12	2.16	0.46
2:F:351:HIS:O	2:F:352:SER:C	2.54	0.46
2:F:73:LYS:CA	2:F:76:SER:HB2	2.45	0.46
3:G:1075:LYS:HD2	3:G:1075:LYS:HA	1.76	0.46
3:G:1094:PHE:CE1	3:G:1115:ARG:HG2	2.50	0.46
3:G:498:TRP:HB2	3:G:529:ILE:O	2.16	0.46
3:G:507:LEU:HD21	3:G:517:GLU:HB2	1.98	0.46
3:G:609:VAL:HG21	3:G:742:LEU:HD13	1.97	0.46
3:G:943:ASP:OD1	3:G:943:ASP:C	2.54	0.46
4:H:217:ARG:O	4:H:218:GLU:C	2.53	0.46
4:H:429:VAL:HG22	4:H:430:HIS:N	2.30	0.46
1:A:110:ILE:HD13	1:A:138:ALA:HB1	1.98	0.45
1:A:122:CYS:SG	1:A:127:ILE:HA	2.55	0.45
1:A:50:LYS:HE3	1:A:76:TYR:HE1	1.81	0.45
1:A:95:LYS:HZ1	3:C:881:ARG:N	2.14	0.45
2:B:365:PHE:CG	2:B:369:LYS:HD3	2.50	0.45
2:B:42:PHE:CE1	2:B:105:ILE:HD11	2.51	0.45
3:C:1139:LEU:HD12	3:C:1154:HIS:CD2	2.51	0.45
2:B:351:HIS:NE2	3:C:1231:ASP:OD2	2.49	0.45
3:C:1268:THR:O	3:C:1272:LYS:HB2	2.15	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:1278:ARG:HD3	3:C:1293:ASP:HB3	1.97	0.45
3:C:1334:ILE:O	3:C:1334:ILE:HG22	2.15	0.45
3:C:944:ILE:C	3:C:946:GLN:N	2.69	0.45
4:D:198:CYS:CB	4:D:199:PRO:CD	2.94	0.45
4:D:376:ILE:HG23	4:D:421:VAL:HG12	1.99	0.45
4:D:427:ARG:HH12	4:D:561:ARG:NH1	2.13	0.45
1:E:106:LEU:O	1:E:108:PHE:CE1	2.69	0.45
1:E:157:TRP:HB2	1:E:334:ILE:HB	1.96	0.45
2:F:359:ARG:C	2:F:360:THR:CG2	2.85	0.45
2:F:366:SER:O	2:F:369:LYS:HB3	2.16	0.45
3:G:1257:ASN:C	3:G:1257:ASN:ND2	2.70	0.45
3:G:1334:ILE:HD13	3:G:1392:LEU:HD22	1.98	0.45
3:G:346:LEU:HB3	3:G:689:MET:HE1	1.98	0.45
3:G:615:GLU:OE2	3:G:650:ARG:HB3	2.16	0.45
3:G:661:LYS:O	3:G:662:ILE:C	2.54	0.45
4:H:196:LEU:CG	4:H:197:GLY:H	2.29	0.45
4:H:228:GLY:O	4:H:231:LEU:N	2.50	0.45
4:H:470:GLY:C	4:H:471:LEU:HD23	2.34	0.45
1:A:174:VAL:HG13	1:A:177:LEU:CD1	2.45	0.45
1:A:27:TYR:O	1:A:31:ASN:HB3	2.15	0.45
2:B:295:LEU:HB2	2:B:301:LEU:CD1	2.46	0.45
3:C:1236:ALA:HB2	3:C:1246:PHE:CE1	2.51	0.45
3:C:1340:LYS:HD3	3:C:1383:TYR:CD1	2.51	0.45
3:C:1423:THR:HG23	3:C:1426:VAL:CG2	2.46	0.45
3:C:343:PHE:HB2	3:C:365:VAL:CG1	2.46	0.45
3:C:487:PHE:CE2	3:C:493:ILE:HD11	2.51	0.45
3:C:519:MET:SD	3:C:519:MET:C	2.94	0.45
3:C:585:VAL:CG1	3:C:621:PHE:HD2	2.29	0.45
4:D:360:LEU:HD11	4:D:409:ILE:CG1	2.46	0.45
4:D:514:PRO:O	4:D:515:GLN:C	2.54	0.45
1:E:183:SER:OG	1:E:311:LYS:HG3	2.16	0.45
1:E:198:VAL:O	1:E:201:LYS:HE2	2.17	0.45
1:E:199:LYS:NZ	1:E:242:LYS:HG3	2.31	0.45
1:E:57:TYR:N	1:E:57:TYR:HD2	2.14	0.45
2:F:136:PRO:C	2:F:138:ASP:N	2.68	0.45
2:F:387:ARG:HG3	2:F:388:HIS:N	2.31	0.45
3:G:1019:PHE:O	3:G:1020:LYS:C	2.53	0.45
3:G:345:TRP:HA	3:G:363:GLY:HA3	1.98	0.45
3:G:387:LEU:HD21	3:G:479:THR:N	2.32	0.45
3:G:788:ASN:O	3:G:791:LEU:N	2.49	0.45
3:G:917:LYS:HA	3:G:920:GLU:HB2	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:H:312:ARG:O	4:H:313:LYS:HB2	2.15	0.45
4:H:319:LEU:O	4:H:320:TYR:C	2.53	0.45
4:H:375:CYS:HB2	4:H:420:LEU:HD22	1.98	0.45
4:H:428:ASP:O	4:H:430:HIS:N	2.48	0.45
4:H:460:CYS:N	4:H:471:LEU:O	2.44	0.45
4:H:476:LEU:HD22	4:H:508:TYR:O	2.16	0.45
1:A:255:LEU:HD11	1:A:272:LEU:CD1	2.33	0.45
1:A:43:ARG:HG3	1:A:45:PHE:CZ	2.50	0.45
2:B:47:ILE:CD1	2:B:260:GLN:HE22	2.25	0.45
2:B:421:GLN:O	2:B:424:CYS:N	2.49	0.45
3:C:1454:LEU:HG	3:C:1455:PHE:CD1	2.51	0.45
3:C:417:PHE:HE1	3:C:464:LEU:HD11	1.80	0.45
3:C:470:GLY:HA3	3:C:473:PHE:CE1	2.52	0.45
3:C:637:HIS:NE2	3:C:708:LEU:N	2.64	0.45
3:C:697:ALA:HB1	3:C:711:LEU:HD21	1.97	0.45
1:E:159:TYR:HB3	1:E:332:VAL:H	1.81	0.45
1:E:343:ASP:HB3	1:E:346:THR:OG1	2.17	0.45
2:F:105:ILE:HG22	2:F:106:LEU:H	1.80	0.45
2:F:210:PRO:O	2:F:214:ILE:HB	2.16	0.45
2:F:262:TYR:HD1	2:F:263:SER:CA	2.28	0.45
2:F:280:SER:HA	2:F:284:PHE:CE1	2.49	0.45
3:G:1015:LEU:HD11	3:G:1019:PHE:HD2	1.80	0.45
3:G:1043:VAL:O	3:G:1060:VAL:HG23	2.16	0.45
3:G:1389:TYR:CD2	3:G:1389:TYR:O	2.69	0.45
3:G:430:PHE:H	3:G:430:PHE:HD2	1.58	0.45
3:G:560:MET:HE3	3:G:647:LEU:HD11	1.97	0.45
4:H:199:PRO:O	4:H:201:ALA:N	2.48	0.45
4:H:202:LEU:HB2	4:H:528:TYR:CE2	2.50	0.45
4:H:202:LEU:HD23	4:H:202:LEU:C	2.37	0.45
4:H:292:LYS:HD2	4:H:293:GLU:H	1.81	0.45
4:H:313:LYS:HE2	4:H:313:LYS:HB3	1.74	0.45
4:H:327:PHE:N	4:H:327:PHE:CD1	2.84	0.45
4:H:424:PRO:HG2	4:H:458:GLU:CB	2.47	0.45
4:H:298:PRO:HD3	4:H:483:GLU:O	2.17	0.45
2:B:124:GLU:HA	2:B:124:GLU:OE1	2.17	0.45
2:B:280:SER:HA	2:B:284:PHE:HD1	1.74	0.45
2:B:300:HIS:CG	2:B:301:LEU:N	2.85	0.45
3:C:1441:LEU:CD2	3:C:1441:LEU:N	2.79	0.45
3:C:341:PHE:CD1	3:C:341:PHE:O	2.70	0.45
3:C:720:ARG:O	3:C:720:ARG:CD	2.65	0.45
3:C:752:ILE:O	3:C:752:ILE:CG2	2.65	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:873:ASN:CG	3:C:873:ASN:O	2.53	0.45
3:C:917:LYS:HA	3:C:920:GLU:HB2	1.99	0.45
4:D:324:PRO:HD3	4:D:504:THR:HG22	1.98	0.45
4:D:480:LEU:HA	4:D:480:LEU:HD13	1.67	0.45
4:D:499:LEU:HD22	4:D:556:CYS:SG	2.56	0.45
2:F:367:CYS:SG	2:F:443:HIS:HA	2.56	0.45
2:F:445:ASN:O	2:F:448:PHE:CB	2.61	0.45
3:G:1081:ARG:NH1	3:G:1081:ARG:CG	2.76	0.45
3:G:1359:HIS:HD2	3:G:1360:LEU:N	2.14	0.45
3:G:486:LEU:CD2	3:G:490:ASN:ND2	2.79	0.45
3:G:655:LYS:HD3	3:G:655:LYS:O	2.16	0.45
3:G:853:ASP:HB3	3:G:854:LYS:CE	2.47	0.45
3:G:878:THR:O	3:G:902:PRO:HB3	2.16	0.45
3:G:935:ASN:C	3:G:937:ASP:H	2.20	0.45
3:G:956:MET:HA	3:G:956:MET:CE	2.46	0.45
4:H:346:CYS:SG	4:H:378:PHE:HB2	2.55	0.45
1:A:228:LEU:CD2	1:A:233:ILE:HG12	2.42	0.45
2:B:243:ASP:CG	2:B:246:LEU:HG	2.37	0.45
2:B:246:LEU:HD23	2:B:246:LEU:N	2.30	0.45
3:C:1253:LYS:O	3:C:1254:ASP:C	2.55	0.45
3:C:588:LYS:HB2	3:C:589:PRO:HD2	1.99	0.45
3:C:792:LEU:O	3:C:793:LEU:C	2.54	0.45
4:D:364:ILE:HA	4:D:367:ILE:HG13	1.98	0.45
4:D:532:PRO:HG2	4:D:533:VAL:N	2.27	0.45
4:D:535:PRO:O	4:D:554:CYS:SG	2.71	0.45
2:F:114:GLU:HA	2:F:117:ARG:CZ	2.46	0.45
2:F:138:ASP:O	2:F:142:ASP:OD1	2.33	0.45
2:F:23:PRO:CD	2:F:25:CYS:HB2	2.47	0.45
2:F:258:THR:O	2:F:260:GLN:N	2.49	0.45
3:G:1047:LEU:CD1	3:G:1057:ALA:HB2	2.45	0.45
3:G:1135:ILE:HB	3:G:1177:TYR:CZ	2.51	0.45
3:G:1253:LYS:O	3:G:1254:ASP:C	2.55	0.45
3:G:1307:LEU:HD13	3:G:1430:TYR:CZ	2.52	0.45
3:G:643:GLU:O	3:G:644:LEU:C	2.53	0.45
3:G:944:ILE:O	3:G:945:ARG:C	2.55	0.45
3:G:982:GLU:HA	3:G:985:MET:HE3	1.98	0.45
1:A:147:LYS:HG2	1:A:148:GLU:HG3	1.99	0.45
1:A:200:LYS:CD	1:A:246:LEU:HB3	2.47	0.45
2:B:188:PHE:C	2:B:188:PHE:CD1	2.90	0.45
2:B:210:PRO:O	2:B:214:ILE:HB	2.16	0.45
2:B:48:ASP:O	2:B:50:VAL:N	2.50	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:531:ASP:C	3:G:366:TRP:CD1	2.90	0.45
3:C:539:VAL:HG13	3:C:540:MET:N	2.32	0.45
3:C:622:PHE:HE2	3:C:647:LEU:HD11	1.81	0.45
3:C:966:ARG:O	3:C:967:PHE:HD2	1.99	0.45
3:C:1362:LEU:CD2	4:D:273:GLU:HG2	2.46	0.45
3:C:1335:ARG:NH2	4:D:433:PRO:HB3	2.31	0.45
1:E:144:ARG:CD	1:E:218:ILE:HD11	2.46	0.45
1:E:223:PHE:CE2	1:E:269:TRP:CZ2	3.05	0.45
2:F:276:ILE:CA	2:F:279:LEU:HG	2.46	0.45
2:F:367:CYS:CB	2:F:421:GLN:NE2	2.77	0.45
2:F:283:SER:O	2:F:447:PHE:HE2	1.99	0.45
2:F:446:GLN:HG2	2:F:447:PHE:N	2.30	0.45
3:G:1034:LYS:C	3:G:1035:LEU:HD23	2.37	0.45
3:G:851:PHE:CE2	3:G:1108:ILE:CD1	2.99	0.45
3:G:563:LEU:HD22	3:G:582:HIS:HB2	1.99	0.45
3:G:944:ILE:C	3:G:946:GLN:N	2.69	0.45
4:H:240:PHE:HA	4:H:252:THR:O	2.16	0.45
4:H:453:VAL:CG1	4:H:454:GLN:N	2.79	0.45
4:H:343:LEU:CD1	4:H:571:PHE:HD1	2.27	0.45
1:A:110:ILE:HD11	1:A:157:TRP:HH2	1.80	0.45
1:A:195:GLY:O	1:A:197:ASP:N	2.49	0.45
1:A:210:PRO:HG2	2:B:201:TYR:HE2	1.81	0.45
2:B:33:PRO:CD	2:B:104:PHE:HD2	2.30	0.45
3:C:1081:ARG:HH11	3:C:1081:ARG:HG2	1.82	0.45
3:C:1139:LEU:CD1	3:C:1154:HIS:CD2	2.99	0.45
3:C:351:ASP:O	3:C:355:GLN:C	2.55	0.45
3:C:585:VAL:O	3:C:585:VAL:HG22	2.17	0.45
3:C:618:LEU:O	3:C:621:PHE:HB3	2.16	0.45
3:C:742:LEU:O	3:C:745:THR:HB	2.17	0.45
4:D:297:PHE:HD1	4:D:298:PRO:O	2.00	0.45
4:D:429:VAL:HG13	4:D:430:HIS:N	2.30	0.45
4:D:484:GLU:OE2	4:D:485:ILE:O	2.34	0.45
4:D:512:TYR:CD2	4:D:512:TYR:C	2.86	0.45
1:E:41:GLN:H	1:E:41:GLN:CD	2.20	0.45
1:E:26:TYR:CD2	1:E:66:LEU:HD21	2.52	0.45
2:F:146:ASP:N	2:F:146:ASP:OD2	2.50	0.45
2:F:150:GLN:C	2:F:151:PHE:CG	2.90	0.45
1:E:187:GLU:OE2	2:F:196:ARG:HB2	2.17	0.45
2:F:253:LEU:HA	2:F:253:LEU:HD23	1.77	0.45
3:G:1151:SER:C	3:G:1189:SER:HB3	2.37	0.45
3:G:1155:VAL:HG12	3:G:1159:LEU:HD12	1.97	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:1386:LYS:C	3:G:1386:LYS:HD3	2.36	0.45
3:G:512:SER:O	3:G:517:GLU:OE2	2.35	0.45
4:H:271:ILE:HD12	4:H:272:LEU:O	2.16	0.45
1:A:111:ASP:CG	1:A:112:MET:H	2.20	0.45
1:A:20:LEU:CD2	1:A:383:TYR:HA	2.47	0.45
1:A:267:GLN:O	1:A:267:GLN:HG2	2.17	0.45
1:A:234:LEU:O	1:A:268:ARG:HD2	2.17	0.45
2:B:29:TYR:CB	2:B:103:HIS:CD2	3.00	0.45
2:B:382:HIS:CD2	2:B:382:HIS:C	2.90	0.45
3:C:1047:LEU:HD12	3:C:1048:LEU:H	1.81	0.45
3:C:1210:TYR:O	3:C:1214:GLN:N	2.42	0.45
3:C:583:PHE:CD2	3:C:625:LYS:HE2	2.52	0.45
3:C:731:MET:CG	3:C:737:GLN:HB3	2.41	0.45
3:C:962:PHE:HD2	3:C:965:SER:HB2	1.82	0.45
4:D:193:LEU:HD12	4:D:454:GLN:OE1	2.16	0.45
4:D:256:GLN:O	4:D:272:LEU:HD12	2.17	0.45
4:D:297:PHE:CZ	4:D:300:GLN:HA	2.52	0.45
1:E:49:LEU:HD23	1:E:75:PRO:HA	1.99	0.45
2:F:301:LEU:HD22	2:F:305:GLY:HA3	1.99	0.45
2:F:312:PHE:HD2	2:F:313:LEU:HD23	1.80	0.45
3:G:1047:LEU:HG	3:G:1049:LEU:HD22	1.98	0.45
3:G:1140:THR:O	3:G:1140:THR:CG2	2.60	0.45
3:G:1242:ASP:O	3:G:1246:PHE:HB2	2.17	0.45
3:G:1384:SER:OG	3:G:1385:ASP:N	2.49	0.45
3:G:541:ALA:HA	3:G:635:VAL:HG13	1.99	0.45
4:H:479:HIS:CD2	4:H:515:GLN:HB2	2.52	0.45
3:C:1139:LEU:HD12	3:C:1139:LEU:N	2.30	0.45
3:C:1207:ASP:O	3:C:1208:THR:C	2.55	0.45
3:C:1307:LEU:CD1	3:C:1307:LEU:H	2.26	0.45
3:C:360:PHE:HD1	3:C:665:LEU:CD1	2.14	0.45
3:C:344:TYR:HB2	3:C:498:TRP:CZ2	2.52	0.45
3:C:803:VAL:CB	3:C:804:PRO:CD	2.88	0.45
4:D:196:LEU:CD1	4:D:197:GLY:H	2.29	0.45
4:D:312:ARG:O	4:D:313:LYS:HB2	2.16	0.45
4:D:357:TYR:HB3	4:D:360:LEU:HD23	1.99	0.45
4:D:447:ARG:HG2	4:D:447:ARG:NH1	2.32	0.45
4:D:532:PRO:CG	4:D:533:VAL:H	2.29	0.45
4:D:573:ARG:NH2	4:D:596:VAL:HG21	2.32	0.45
1:E:133:THR:HG21	1:E:226:TYR:HB2	1.98	0.45
2:F:139:LYS:HD2	2:F:139:LYS:HA	1.73	0.45
2:F:369:LYS:C	2:F:371:ILE:H	2.19	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:439:PHE:CD2	2:F:450:GLU:HG2	2.51	0.45
3:G:491:ARG:N	3:G:491:ARG:HD2	2.32	0.45
3:G:582:HIS:O	3:G:583:PHE:HB3	2.17	0.45
3:G:653:VAL:HG12	3:G:654:CYS:SG	2.57	0.45
3:G:908:MET:HG3	3:G:916:ARG:HE	1.82	0.45
3:G:926:LYS:NZ	3:G:926:LYS:O	2.49	0.45
4:H:186:GLY:HA3	4:H:371:ARG:CZ	2.47	0.45
4:H:257:ILE:CD1	4:H:302:VAL:HG21	2.47	0.45
4:H:324:PRO:N	4:H:504:THR:HG22	2.31	0.45
1:A:302:PHE:CE1	1:A:303:PRO:O	2.70	0.45
1:A:179:SER:OG	1:A:311:LYS:O	2.33	0.45
1:A:393:LYS:HZ2	1:A:396:GLU:CD	2.20	0.45
2:B:121:ILE:CD1	2:B:226:LEU:HD23	2.47	0.45
3:C:1213:ALA:O	3:C:1218:PRO:HD3	2.17	0.45
3:C:1345:TRP:CZ3	3:C:1358:ARG:CG	3.00	0.45
3:C:391:PRO:HA	3:C:472:THR:O	2.16	0.45
3:C:589:PRO:HG3	3:C:592:CYS:CB	2.47	0.45
3:C:659:TRP:NE1	3:C:660:SER:HB2	2.32	0.45
3:C:689:MET:SD	3:C:776:MET:HB3	2.56	0.45
4:D:411:GLU:CG	4:D:414:ARG:HH12	2.29	0.45
4:D:447:ARG:HH22	4:D:450:LYS:CG	2.30	0.45
1:E:159:TYR:CE2	1:E:161:GLY:HA2	2.52	0.45
2:F:39:LEU:HD11	2:F:245:ARG:CG	2.47	0.45
2:F:428:PHE:CD2	2:F:437:CYS:HB2	2.53	0.45
2:F:443:HIS:O	2:F:446:GLN:HB3	2.17	0.45
3:G:1193:TYR:N	3:G:1193:TYR:CD1	2.85	0.45
3:G:1227:ILE:CG2	3:G:1230:ILE:HG12	2.47	0.45
3:G:1320:LEU:HD11	3:G:1425:LYS:HE3	1.99	0.45
3:G:710:GLU:O	3:G:711:LEU:C	2.55	0.45
3:G:586:VAL:CG1	3:G:742:LEU:HD21	2.47	0.45
3:G:795:ALA:O	3:G:796:PHE:C	2.55	0.45
3:G:806:LYS:NZ	3:G:807:GLN:O	2.32	0.45
1:A:147:LYS:HB2	1:A:155:ARG:NH1	2.32	0.44
1:A:104:LYS:HE2	1:A:314:ASN:C	2.38	0.44
1:A:68:LYS:HE3	1:A:72:LYS:CE	2.46	0.44
2:B:22:TYR:CB	2:B:84:SER:HB3	2.47	0.44
2:B:429:GLU:O	2:B:433:ASN:N	2.50	0.44
3:C:1376:LYS:O	3:C:1376:LYS:HG3	2.17	0.44
3:C:625:LYS:HB3	3:C:629:ILE:CD1	2.46	0.44
3:C:349:TYR:HD1	3:C:665:LEU:CD1	2.30	0.44
3:C:723:ILE:HA	3:C:724:PRO:HD3	1.66	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:774:ASN:CG	3:C:775:ILE:H	2.17	0.44
3:C:875:CYS:N	3:C:878:THR:OG1	2.51	0.44
3:C:969:ALA:C	3:C:971:PRO:HD2	2.38	0.44
4:D:459:PRO:CB	4:D:471:LEU:O	2.65	0.44
1:E:84:TYR:HD1	1:E:100:GLN:C	2.20	0.44
1:E:402:LEU:C	1:E:406:ARG:NH1	2.70	0.44
2:F:241:GLN:HB3	2:F:241:GLN:HE21	1.62	0.44
3:G:1076:GLY:O	3:G:1077:LEU:HD23	2.18	0.44
3:G:849:VAL:HG12	3:G:1226:PRO:HA	1.99	0.44
3:G:1332:MET:HE1	3:G:1335:ARG:HD2	1.98	0.44
3:G:537:LEU:HD12	3:G:570:LEU:HD21	1.99	0.44
3:G:647:LEU:O	3:G:649:GLN:N	2.50	0.44
4:H:343:LEU:O	4:H:344:VAL:CG2	2.63	0.44
4:H:398:PHE:O	4:H:399:GLU:C	2.56	0.44
4:H:589:PRO:O	4:H:591:ILE:CD1	2.65	0.44
2:B:111:CYS:HB2	2:B:233:THR:OG1	2.17	0.44
2:B:344:GLY:HA2	3:C:1113:GLN:NE2	2.32	0.44
3:C:1021:LEU:O	3:C:1022:GLY:C	2.52	0.44
3:C:1095:VAL:HG12	3:C:1112:ILE:CD1	2.36	0.44
3:C:1096:ILE:HD13	3:C:1096:ILE:O	2.17	0.44
3:C:786:GLU:O	3:C:787:ARG:C	2.55	0.44
3:C:971:PRO:O	3:C:972:LEU:C	2.55	0.44
4:D:287:ASP:HB2	4:D:313:LYS:CE	2.47	0.44
4:D:399:GLU:CG	4:D:403:LYS:HE2	2.40	0.44
4:D:447:ARG:NH2	4:D:450:LYS:HG3	2.32	0.44
4:D:480:LEU:HA	4:D:511:LEU:HD22	1.99	0.44
1:E:146:LEU:O	1:E:150:PHE:HB2	2.18	0.44
1:E:153:LYS:N	1:E:171:ASP:OD2	2.50	0.44
1:E:62:ASN:H	1:E:65:ASP:CG	2.19	0.44
2:F:214:ILE:HG22	2:F:215:VAL:N	2.31	0.44
2:F:371:ILE:HG22	2:F:372:LEU:HD23	1.99	0.44
3:G:1036:LEU:CD1	3:G:1037:GLU:H	2.28	0.44
3:G:1105:ARG:O	3:G:1109:VAL:HG23	2.17	0.44
3:G:1117:ILE:O	3:G:1121:GLU:HG3	2.17	0.44
3:G:1154:HIS:CG	3:G:1155:VAL:H	2.34	0.44
3:G:1146:TYR:CG	3:G:1155:VAL:HG21	2.48	0.44
3:G:1356:ARG:HH11	3:G:1356:ARG:HG2	1.82	0.44
3:G:1433:LEU:O	3:G:1436:THR:HB	2.17	0.44
3:G:351:ASP:O	3:G:355:GLN:C	2.55	0.44
3:G:427:ILE:C	3:G:428:MET:HE3	2.37	0.44
3:G:439:TYR:O	3:G:448:GLU:HA	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:560:MET:CE	3:G:647:LEU:CD1	2.95	0.44
3:G:725:MET:HA	3:G:728:ILE:CG1	2.48	0.44
3:G:747:LYS:O	3:G:750:LYS:HB3	2.16	0.44
3:G:777:SER:O	3:G:778:ARG:C	2.56	0.44
1:A:176:LYS:HG3	1:A:176:LYS:O	2.17	0.44
1:A:177:LEU:HB2	1:A:182:ARG:NE	2.32	0.44
2:B:105:ILE:C	2:B:107:ARG:H	2.21	0.44
3:C:1294:ASN:OD1	3:C:1397:TYR:CZ	2.71	0.44
3:C:1339:LYS:O	3:C:1342:TYR:N	2.50	0.44
3:C:1350:GLU:HA	3:C:1351:PRO:HD3	1.80	0.44
3:C:522:LYS:CE	3:C:525:LEU:HD21	2.47	0.44
3:C:596:TYR:CD1	3:C:597:ALA:N	2.85	0.44
3:C:630:ASP:HA	3:C:688:ARG:HH22	1.82	0.44
3:C:643:GLU:O	3:C:644:LEU:C	2.56	0.44
3:C:732:TYR:CD2	3:C:738:LEU:CD1	2.99	0.44
3:C:740:TYR:C	3:C:740:TYR:CD1	2.90	0.44
3:C:859:LEU:CD2	3:C:1040:ILE:HD13	2.46	0.44
3:C:941:GLN:NE2	3:G:371:GLU:OE1	2.50	0.44
4:D:275:ASP:OD2	4:D:277:GLU:HB3	2.18	0.44
4:D:291:LEU:HD12	4:D:291:LEU:HA	1.72	0.44
4:D:447:ARG:NH2	4:D:450:LYS:CB	2.80	0.44
4:D:475:ASP:OD1	4:D:478:PHE:CB	2.65	0.44
4:D:555:VAL:HG12	4:D:557:VAL:HG23	1.99	0.44
2:F:69:GLN:O	2:F:73:LYS:HG3	2.17	0.44
3:G:861:PHE:HB2	3:G:1004:ASP:HB2	1.99	0.44
3:G:1097:GLY:O	3:G:1098:GLN:C	2.55	0.44
3:G:1337:PHE:N	3:G:1337:PHE:HD1	2.15	0.44
3:G:1337:PHE:N	3:G:1337:PHE:CD1	2.84	0.44
3:G:366:TRP:O	3:G:367:ILE:HD13	2.17	0.44
3:G:358:VAL:HA	3:G:380:VAL:O	2.17	0.44
3:G:487:PHE:O	3:G:489:MET:N	2.50	0.44
3:G:556:GLU:HG2	3:G:650:ARG:HH21	1.82	0.44
3:G:918:LEU:HD12	3:G:953:ALA:HB2	2.00	0.44
4:H:479:HIS:CE1	4:H:509:TYR:HH	2.30	0.44
1:A:209:HIS:ND1	1:A:211:PHE:N	2.65	0.44
2:B:49:ARG:CB	2:B:106:LEU:HD12	2.45	0.44
2:B:376:PRO:HD2	2:B:388:HIS:HD2	1.77	0.44
2:B:39:LEU:O	2:B:43:GLU:HB2	2.17	0.44
2:B:70:TYR:O	2:B:74:LEU:HB2	2.18	0.44
3:C:1097:GLY:O	3:C:1098:GLN:C	2.55	0.44
3:C:1133:PHE:N	3:C:1133:PHE:CD2	2.85	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:1214:GLN:O	3:C:1218:PRO:HG2	2.17	0.44
3:C:1388:LEU:O	3:C:1390:THR:N	2.50	0.44
3:C:345:TRP:HA	3:C:363:GLY:HA3	2.00	0.44
3:C:388:TYR:HB2	3:C:477:PHE:HB2	1.99	0.44
3:C:418:ASP:OD2	3:C:418:ASP:C	2.56	0.44
3:C:542:PHE:O	3:C:542:PHE:CG	2.69	0.44
3:C:576:LYS:HB2	3:C:576:LYS:HE3	1.82	0.44
3:C:607:VAL:HG23	3:C:609:VAL:CG1	2.34	0.44
3:C:731:MET:CE	3:C:741:LEU:HD22	2.48	0.44
4:D:226:GLU:O	4:D:227:LEU:C	2.53	0.44
1:E:112:MET:HB3	1:E:163:ARG:HB2	1.97	0.44
2:F:411:ILE:HG22	2:F:412:LEU:N	2.32	0.44
2:F:443:HIS:ND1	2:F:445:ASN:N	2.66	0.44
2:F:443:HIS:CE1	2:F:445:ASN:HB2	2.53	0.44
2:F:312:PHE:CD1	2:F:445:ASN:OD1	2.71	0.44
2:F:94:GLU:HB3	2:F:95:PRO:CD	2.45	0.44
3:G:637:HIS:CD2	3:G:708:LEU:HD13	2.52	0.44
3:G:689:MET:SD	3:G:776:MET:CG	2.87	0.44
3:G:948:ALA:O	3:G:950:LYS:N	2.51	0.44
4:H:383:ASP:C	4:H:385:LYS:N	2.70	0.44
4:H:495:PHE:C	4:H:497:ARG:N	2.70	0.44
1:A:112:MET:N	1:A:163:ARG:O	2.51	0.44
1:A:13:LEU:HD13	1:A:74:ASN:O	2.17	0.44
2:B:258:THR:HG21	2:B:261:ASP:HB2	2.00	0.44
2:B:29:TYR:CD1	2:B:103:HIS:CD2	3.06	0.44
2:B:367:CYS:O	2:B:369:LYS:N	2.51	0.44
2:B:367:CYS:C	2:B:369:LYS:N	2.67	0.44
3:C:1035:LEU:O	3:C:1036:LEU:O	2.36	0.44
3:C:1054:LYS:HG3	3:C:1076:GLY:HA3	2.00	0.44
3:C:1185:ASN:O	3:C:1186:LEU:O	2.35	0.44
3:C:1423:THR:O	3:C:1424:PRO:C	2.55	0.44
3:C:381:LYS:O	3:C:521:LEU:O	2.36	0.44
3:C:610:GLU:HG3	3:C:610:GLU:O	2.17	0.44
3:C:777:SER:O	3:C:778:ARG:C	2.56	0.44
3:C:880:GLN:O	3:C:899:PRO:HB3	2.18	0.44
3:C:935:ASN:O	3:C:938:LEU:N	2.50	0.44
4:D:199:PRO:O	4:D:201:ALA:N	2.50	0.44
4:D:259:CYS:SG	4:D:260:ASP:N	2.90	0.44
4:D:319:LEU:O	4:D:319:LEU:HG	2.18	0.44
4:D:194:LYS:CE	4:D:463:SER:OG	2.54	0.44
1:E:37:LYS:C	1:E:38:ASN:ND2	2.65	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:403:ASP:CA	1:E:406:ARG:NH1	2.81	0.44
1:E:403:ASP:N	1:E:406:ARG:NH1	2.66	0.44
3:G:1026:LYS:O	3:G:1027:SER:C	2.56	0.44
3:G:1363:GLN:OE1	3:G:1370:LEU:HD23	2.17	0.44
3:G:1398:ILE:O	3:G:1399:PHE:CD1	2.70	0.44
3:G:1415:ASP:HA	3:G:1418:LYS:HB3	1.99	0.44
3:G:392:ARG:O	3:G:408:ILE:HB	2.17	0.44
3:G:439:TYR:C	3:G:439:TYR:CD2	2.91	0.44
3:G:637:HIS:O	3:G:643:GLU:OE2	2.36	0.44
3:G:739:LEU:HD13	3:G:742:LEU:CD1	2.30	0.44
3:G:873:ASN:HD21	3:G:878:THR:HG21	1.78	0.44
3:G:974:ALA:O	3:G:975:LEU:C	2.55	0.44
4:H:257:ILE:HD11	4:H:302:VAL:HG21	1.98	0.44
4:H:531:LEU:N	4:H:531:LEU:CD2	2.79	0.44
1:A:159:TYR:N	1:A:332:VAL:O	2.49	0.44
1:A:194:GLY:HA2	1:A:201:LYS:HD3	2.00	0.44
1:A:1:MET:HE3	1:A:329:ARG:HH21	1.81	0.44
2:B:165:GLU:HB3	2:B:201:TYR:CE2	2.53	0.44
3:C:1231:ASP:OD1	3:C:1231:ASP:C	2.55	0.44
3:C:1416:LYS:NZ	3:C:1420:GLN:OE1	2.45	0.44
3:C:498:TRP:HB2	3:C:529:ILE:O	2.17	0.44
3:C:948:ALA:O	3:C:950:LYS:N	2.51	0.44
3:C:875:CYS:O	3:C:972:LEU:HD11	2.18	0.44
4:D:351:THR:HG23	4:D:354:SER:OG	2.17	0.44
1:E:386:THR:C	1:E:388:LEU:H	2.20	0.44
2:F:150:GLN:C	2:F:151:PHE:CD1	2.90	0.44
2:F:285:PRO:CA	2:F:447:PHE:CE2	3.00	0.44
3:G:1160:TRP:HE3	3:G:1161:ILE:CG1	2.30	0.44
3:G:1175:VAL:CG1	3:G:1176:SER:N	2.81	0.44
3:G:1050:LEU:CD2	3:G:1226:PRO:HG2	2.48	0.44
3:G:1389:TYR:HE1	3:G:1447:SER:HA	1.82	0.44
3:G:583:PHE:C	3:G:583:PHE:HD1	2.21	0.44
3:G:753:LEU:O	3:G:756:MET:HB3	2.18	0.44
3:G:843:LEU:C	3:G:843:LEU:HD12	2.36	0.44
3:G:852:TYR:HD1	3:G:1009:ASN:ND2	2.05	0.44
3:G:915:ILE:HG22	3:G:915:ILE:O	2.17	0.44
3:G:969:ALA:C	3:G:971:PRO:HD2	2.37	0.44
4:H:206:TYR:HE1	4:H:434:VAL:HG11	1.83	0.44
4:H:226:GLU:O	4:H:227:LEU:C	2.56	0.44
4:H:564:LYS:O	4:H:565:GLY:C	2.55	0.44
1:A:192:VAL:HG23	1:A:302:PHE:CE1	2.52	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:43:ARG:HE	1:A:83:VAL:HG23	1.82	0.44
2:B:120:PHE:O	2:B:121:ILE:C	2.55	0.44
3:C:1101:SER:OG	3:C:1103:GLN:HG3	2.17	0.44
3:C:1137:LYS:NZ	3:C:1153:PRO:HG2	2.32	0.44
3:C:1221:ALA:C	3:C:1223:ILE:H	2.20	0.44
3:C:360:PHE:CE1	3:C:665:LEU:HD21	2.53	0.44
3:C:745:THR:HG22	3:C:746:TRP:N	2.32	0.44
3:C:868:ILE:C	3:C:870:GLN:H	2.21	0.44
3:C:801:TYR:CE1	3:C:910:ILE:HD11	2.53	0.44
4:D:156:THR:HG22	4:D:159:GLN:CB	2.47	0.44
4:D:228:GLY:O	4:D:231:LEU:N	2.51	0.44
4:D:237:ILE:HD11	4:D:320:TYR:CE1	2.52	0.44
4:D:351:THR:OG1	4:D:353:ASP:OD1	2.30	0.44
4:D:361:LEU:HA	4:D:364:ILE:CG1	2.47	0.44
2:F:45:LEU:CD1	2:F:101:ILE:CG2	2.95	0.44
2:F:382:HIS:C	2:F:382:HIS:CD2	2.91	0.44
2:F:67:THR:O	2:F:70:TYR:HB3	2.18	0.44
3:G:1004:ASP:N	3:G:1004:ASP:OD2	2.51	0.44
3:G:1151:SER:O	3:G:1189:SER:HB3	2.18	0.44
3:G:379:MET:SD	3:G:519:MET:HG3	2.57	0.44
3:G:505:GLN:C	3:G:506:LEU:HD23	2.38	0.44
3:G:524:ASP:OD1	3:G:525:LEU:HD23	2.18	0.44
3:G:612:ALA:HB1	3:G:617:THR:CB	2.43	0.44
3:G:544:MET:CE	3:G:647:LEU:HD13	2.46	0.44
3:G:682:ARG:HD3	3:G:683:ASN:N	2.33	0.44
4:H:161:TYR:O	4:H:164:ARG:HB3	2.18	0.44
4:H:360:LEU:HD11	4:H:409:ILE:CG1	2.46	0.44
4:H:459:PRO:HB2	4:H:471:LEU:O	2.17	0.44
1:A:298:LEU:C	1:A:300:TYR:H	2.21	0.44
2:B:215:VAL:HG12	2:B:216:ALA:N	2.33	0.44
2:B:370:ILE:HG23	2:B:383:GLY:HA2	1.99	0.44
2:B:29:TYR:OH	2:B:99:ASP:OD2	2.13	0.44
3:C:1198:LEU:HG	3:C:1199:GLN:N	2.33	0.44
3:C:1430:TYR:C	3:C:1432:LYS:N	2.71	0.44
3:C:564:VAL:O	3:C:579:PHE:HB2	2.17	0.44
3:C:605:LYS:O	3:C:607:VAL:HG13	2.18	0.44
3:C:753:LEU:O	3:C:756:MET:HB3	2.17	0.44
3:C:806:LYS:HE2	3:C:807:GLN:N	2.33	0.44
3:C:910:ILE:N	3:C:910:ILE:CD1	2.80	0.44
3:C:982:GLU:C	3:C:984:LEU:N	2.71	0.44
4:D:217:ARG:O	4:D:218:GLU:C	2.56	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:255:GLY:HA3	4:D:272:LEU:HD21	2.00	0.44
4:D:458:GLU:CD	4:D:473:SER:H	2.21	0.44
1:E:82:ALA:HB2	1:E:104:LYS:HB2	1.99	0.44
1:E:120:ARG:CB	1:E:120:ARG:HH11	2.31	0.44
2:F:140:ILE:O	2:F:144:LEU:HG	2.18	0.44
2:F:85:TYR:HB3	2:F:86:ARG:H	1.30	0.44
2:F:93:TYR:HB3	2:F:96:ARG:CB	2.48	0.44
3:G:1023:ASN:CA	3:G:1026:LYS:HB3	2.43	0.44
3:G:1244:THR:HG22	3:G:1247:ARG:HH12	1.83	0.44
3:G:1332:MET:CE	3:G:1335:ARG:HD2	2.48	0.44
3:G:341:PHE:CE2	3:G:365:VAL:CG1	2.99	0.44
3:G:528:VAL:HG12	3:G:529:ILE:N	2.31	0.44
3:G:539:VAL:HG12	3:G:540:MET:N	2.33	0.44
3:G:742:LEU:O	3:G:743:GLU:C	2.56	0.44
3:G:900:GLU:O	3:G:901:LEU:C	2.56	0.44
4:H:256:GLN:HG3	4:H:257:ILE:O	2.16	0.44
4:H:294:TYR:CE1	4:H:487:SER:N	2.86	0.44
4:H:514:PRO:O	4:H:515:GLN:C	2.54	0.44
4:H:435:TYR:CB	4:H:518:MET:HE1	2.47	0.44
1:A:181:VAL:HA	2:B:192:LEU:HD22	2.00	0.44
3:C:1182:ASP:HA	3:C:1204:LEU:HD22	1.99	0.44
3:C:1241:LEU:HG	3:C:1241:LEU:O	2.18	0.44
3:C:1316:LYS:N	3:C:1316:LYS:CD	2.80	0.44
3:C:522:LYS:O	3:C:525:LEU:CG	2.61	0.44
4:D:218:GLU:O	4:D:222:CYS:SG	2.64	0.44
4:D:294:TYR:HA	4:D:319:LEU:HD22	2.00	0.44
4:D:396:SER:HA	4:D:397:PRO:HD3	1.83	0.44
1:E:87:ARG:HB3	1:E:89:ASN:ND2	2.23	0.44
2:F:137:LYS:NZ	2:F:181:GLU:CG	2.81	0.44
2:F:247:GLN:N	2:F:248:PRO:CD	2.81	0.44
2:F:329:GLN:HE21	2:F:329:GLN:HB3	1.57	0.44
2:F:295:LEU:HD11	2:F:330:GLU:HG3	2.00	0.44
2:F:355:LYS:HB3	2:F:356:GLU:H	1.55	0.44
3:G:1018:VAL:O	3:G:1022:GLY:N	2.41	0.44
3:G:507:LEU:HD22	3:G:510:PRO:HA	2.00	0.44
3:G:437:LYS:HZ2	3:G:800:ASN:HD22	1.65	0.44
3:G:878:THR:HB	3:G:902:PRO:HG3	2.00	0.44
4:H:196:LEU:HG	4:H:197:GLY:H	1.83	0.44
4:H:257:ILE:HG12	4:H:300:GLN:HB3	2.00	0.44
1:A:206:GLU:OE1	1:A:289:GLY:O	2.36	0.43
1:A:87:ARG:HB3	1:A:89:ASN:ND2	2.33	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:240:VAL:C	2:B:242:SER:H	2.21	0.43
2:B:37:ILE:HG22	2:B:41:GLU:HB3	2.00	0.43
3:C:1351:PRO:HA	3:C:1354:ARG:HD3	1.99	0.43
3:C:346:LEU:CD1	3:C:632:ASP:OD2	2.66	0.43
3:C:648:LEU:O	3:C:651:ILE:HG22	2.18	0.43
3:C:700:LEU:HD21	3:C:764:LEU:CD1	2.48	0.43
1:E:120:ARG:NH1	1:E:120:ARG:CB	2.80	0.43
1:E:169:VAL:HG12	1:E:174:VAL:HG21	1.99	0.43
1:E:251:ILE:CG2	1:E:251:ILE:O	2.66	0.43
3:G:1283:CYS:O	3:G:1285:THR:N	2.51	0.43
3:G:1339:LYS:O	3:G:1342:TYR:N	2.50	0.43
3:G:631:PRO:HG2	3:G:688:ARG:NH1	2.33	0.43
3:G:982:GLU:C	3:G:984:LEU:H	2.21	0.43
4:H:356:THR:HG1	4:H:358:ASP:CG	2.21	0.43
4:H:484:GLU:OE2	4:H:497:ARG:NH1	2.51	0.43
4:H:480:LEU:HA	4:H:511:LEU:HD22	1.99	0.43
1:A:136:THR:O	1:A:139:ILE:HB	2.18	0.43
1:A:192:VAL:HG22	1:A:302:PHE:CD1	2.51	0.43
1:A:382:ASP:OD2	1:A:385:LYS:HD2	2.18	0.43
2:B:33:PRO:HD2	2:B:104:PHE:HD2	1.82	0.43
2:B:444:PRO:HG3	6:B:601:SF4:S3	2.58	0.43
3:C:1135:ILE:HB	3:C:1177:TYR:CE1	2.53	0.43
3:C:589:PRO:HD3	3:C:732:TYR:CE1	2.53	0.43
3:C:543:SER:HB2	3:C:749:ALA:CA	2.48	0.43
3:C:766:LEU:HA	3:C:766:LEU:HD12	1.73	0.43
3:C:975:LEU:HD12	3:C:975:LEU:O	2.18	0.43
4:D:196:LEU:CG	4:D:197:GLY:N	2.81	0.43
4:D:237:ILE:HG22	4:D:238:GLU:N	2.31	0.43
4:D:349:TYR:HE1	4:D:381:PHE:CE1	2.37	0.43
4:D:563:THR:HG22	4:D:564:LYS:N	2.33	0.43
1:E:208:ILE:HG23	1:E:212:ILE:CG2	2.48	0.43
1:E:207:LYS:CE	2:F:172:SER:HA	2.49	0.43
2:F:412:LEU:O	2:F:416:LYS:HG3	2.18	0.43
2:F:434:VAL:HG23	2:F:436:ASP:N	2.33	0.43
3:G:1160:TRP:CE3	3:G:1161:ILE:N	2.86	0.43
3:G:1220:VAL:O	3:G:1223:ILE:HB	2.18	0.43
2:F:358:LYS:HZ3	3:G:1274:ARG:NH2	2.16	0.43
3:G:523:PRO:C	3:G:525:LEU:H	2.21	0.43
3:G:786:GLU:O	3:G:787:ARG:C	2.57	0.43
4:H:219:VAL:O	4:H:222:CYS:N	2.51	0.43
4:H:464:ILE:HD12	4:H:469:PHE:CD1	2.52	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:350:ILE:HA	1:A:353:ILE:HD11	2.00	0.43
1:A:74:ASN:N	1:A:75:PRO:HD3	2.33	0.43
2:B:180:PHE:N	2:B:180:PHE:CD1	2.86	0.43
3:C:1409:THR:CG2	3:C:1410:THR:H	2.14	0.43
3:C:362:PHE:CD2	3:C:687:GLY:CA	2.99	0.43
3:C:358:VAL:HA	3:C:380:VAL:O	2.17	0.43
3:C:582:HIS:O	3:C:583:PHE:HB3	2.18	0.43
3:C:657:PRO:O	3:C:658:HIS:HB2	2.18	0.43
3:C:794:HIS:O	3:C:797:TYR:HB2	2.18	0.43
3:C:944:ILE:O	3:C:945:ARG:C	2.56	0.43
4:D:256:GLN:HE21	4:D:256:GLN:HB2	1.62	0.43
4:D:319:LEU:O	4:D:320:TYR:C	2.56	0.43
1:E:130:LYS:O	1:E:226:TYR:CE1	2.69	0.43
1:E:209:HIS:CG	1:E:210:PRO:CD	3.01	0.43
1:E:210:PRO:O	1:E:211:PHE:C	2.55	0.43
1:E:214:LYS:O	1:E:218:ILE:HG13	2.17	0.43
1:E:269:TRP:O	1:E:273:LYS:HG3	2.17	0.43
1:E:5:ASP:HA	1:E:6:PRO:HD2	1.85	0.43
2:F:124:GLU:HG3	2:F:124:GLU:O	2.19	0.43
2:F:37:ILE:HD11	3:G:1451:LEU:HD11	1.99	0.43
2:F:93:TYR:O	2:F:94:GLU:C	2.57	0.43
3:G:1196:GLU:HG3	3:G:1197:GLN:N	2.28	0.43
3:G:1328:ASN:CG	4:H:398:PHE:CE2	2.92	0.43
3:G:1401:ALA:HB2	3:G:1430:TYR:HD1	1.83	0.43
3:G:365:VAL:CG1	3:G:376:CYS:SG	3.07	0.43
3:G:635:VAL:CG2	3:G:752:ILE:CG2	2.92	0.43
3:G:665:LEU:HA	3:G:665:LEU:HD23	1.83	0.43
3:G:801:TYR:CE1	3:G:910:ILE:HD11	2.53	0.43
4:H:166:ASN:ND2	4:H:166:ASN:H	2.14	0.43
4:H:423:VAL:HA	4:H:424:PRO:HD2	1.80	0.43
4:H:435:TYR:C	4:H:435:TYR:HD1	2.21	0.43
4:H:538:LEU:CD1	4:H:540:ILE:HD11	2.48	0.43
1:A:113:THR:HG21	1:A:163:ARG:NH1	2.33	0.43
1:A:407:LYS:HG2	1:A:408:GLY:N	2.33	0.43
1:A:27:TYR:HB3	1:A:63:GLN:OE1	2.18	0.43
2:B:281:THR:O	2:B:431:ILE:HD11	2.19	0.43
2:B:295:LEU:CD1	2:B:330:GLU:HG3	2.47	0.43
2:B:341:PHE:HD2	2:B:342:ASP:OD2	2.01	0.43
3:C:1116:LEU:CD1	3:C:1116:LEU:H	2.32	0.43
3:C:1360:LEU:O	3:C:1360:LEU:HG	2.12	0.43
3:C:665:LEU:O	3:C:667:ARG:HG2	2.17	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:777:SER:O	3:C:780:LEU:N	2.41	0.43
4:D:356:THR:OG1	4:D:358:ASP:CG	2.56	0.43
4:D:476:LEU:HD13	4:D:480:LEU:HD23	1.99	0.43
4:D:493:ASP:OD1	4:D:493:ASP:C	2.57	0.43
4:D:171:VAL:HB	4:D:546:TYR:HE2	1.79	0.43
2:F:287:CYS:HB2	2:F:288:MET:CE	2.49	0.43
2:F:417:GLY:O	2:F:418:THR:CB	2.67	0.43
2:F:441:LEU:HD21	2:F:447:PHE:HB2	2.00	0.43
3:G:1364:PHE:CE1	3:G:1369:PRO:HA	2.54	0.43
3:G:731:MET:HG2	3:G:737:GLN:OE1	2.18	0.43
4:H:563:THR:HG22	4:H:564:LYS:N	2.34	0.43
1:A:196:GLN:O	1:A:196:GLN:HG2	2.18	0.43
1:A:68:LYS:O	1:A:72:LYS:HB2	2.19	0.43
2:B:139:LYS:CA	2:B:142:ASP:OD1	2.65	0.43
2:B:288:MET:HG3	2:B:312:PHE:CZ	2.54	0.43
2:B:336:MET:CE	2:B:345:TYR:HE2	2.30	0.43
3:C:851:PHE:CD2	3:C:1105:ARG:HG3	2.53	0.43
2:B:356:GLU:HB2	3:C:1247:ARG:HD3	2.01	0.43
3:C:661:LYS:O	3:C:663:GLY:N	2.51	0.43
3:C:349:TYR:OH	3:C:667:ARG:NH2	2.51	0.43
3:C:795:ALA:O	3:C:796:PHE:C	2.57	0.43
1:E:162:ARG:NH2	1:E:326:LYS:CD	2.82	0.43
1:E:237:LYS:HZ2	1:E:256:GLN:HE22	1.66	0.43
2:F:107:ARG:O	2:F:111:CYS:HB3	2.19	0.43
2:F:421:GLN:O	2:F:424:CYS:N	2.52	0.43
3:G:1135:ILE:CG2	3:G:1136:ASN:N	2.79	0.43
3:G:389:PHE:CE2	3:G:476:VAL:HG21	2.53	0.43
3:G:391:PRO:HA	3:G:472:THR:O	2.19	0.43
3:G:551:LYS:HB3	3:G:552:ASN:H	1.65	0.43
3:G:631:PRO:CD	3:G:688:ARG:HH12	2.32	0.43
4:H:198:CYS:CB	4:H:199:PRO:CD	2.96	0.43
4:H:380:PRO:HB3	4:H:427:ARG:HB2	2.01	0.43
4:H:399:GLU:HA	4:H:399:GLU:OE2	2.18	0.43
1:A:172:GLU:HA	1:A:175:ARG:NH2	2.33	0.43
1:A:48:THR:HB	1:A:77:LYS:CB	2.44	0.43
2:B:49:ARG:CB	2:B:102:SER:HB2	2.35	0.43
2:B:211:LEU:O	2:B:212:LYS:C	2.56	0.43
2:B:253:LEU:HD23	2:B:253:LEU:HA	1.70	0.43
3:C:1251:TYR:HE1	3:C:1253:LYS:HD3	1.83	0.43
3:C:549:ASN:HD21	3:C:552:ASN:C	2.21	0.43
3:C:659:TRP:CD2	3:C:660:SER:N	2.86	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:378:PHE:HE2	4:D:472:THR:O	2.02	0.43
4:D:522:TYR:H	4:D:522:TYR:HD2	1.65	0.43
2:F:285:PRO:HB2	2:F:286:PRO:HD2	1.99	0.43
2:F:285:PRO:HB2	2:F:286:PRO:CD	2.48	0.43
2:F:265:GLN:CB	2:F:362:TYR:CZ	3.01	0.43
3:G:1186:LEU:HD22	3:G:1187:THR:H	1.81	0.43
3:G:1193:TYR:CE2	3:G:1204:LEU:HD13	2.54	0.43
3:G:395:LYS:N	3:G:408:ILE:HD11	2.33	0.43
3:G:486:LEU:CD2	3:G:490:ASN:HD21	2.31	0.43
3:G:507:LEU:HD21	3:G:517:GLU:CB	2.48	0.43
3:G:562:ALA:HB3	3:G:583:PHE:CE1	2.53	0.43
3:G:790:PHE:HA	3:G:793:LEU:HB2	2.01	0.43
4:H:255:GLY:CA	4:H:272:LEU:HD11	2.47	0.43
4:H:484:GLU:HG2	4:H:485:ILE:N	2.33	0.43
1:A:237:LYS:HG3	1:A:240:TRP:NE1	2.34	0.43
1:A:360:ILE:HD11	1:A:385:LYS:HB3	2.01	0.43
2:B:139:LYS:O	2:B:142:ASP:OD2	2.37	0.43
2:B:185:LYS:CG	2:B:185:LYS:O	2.65	0.43
2:B:262:TYR:CD1	2:B:262:TYR:C	2.92	0.43
3:C:1048:LEU:HD23	3:C:1050:LEU:CD2	2.32	0.43
3:C:1098:GLN:O	3:C:1108:ILE:HG23	2.19	0.43
3:C:1230:ILE:HD12	3:C:1238:TRP:CZ3	2.54	0.43
3:C:1340:LYS:O	3:C:1342:TYR:N	2.51	0.43
3:C:1421:PHE:O	3:C:1426:VAL:HG21	2.18	0.43
3:C:343:PHE:HB2	3:C:365:VAL:HG13	2.01	0.43
3:C:392:ARG:O	3:C:408:ILE:HB	2.19	0.43
3:C:585:VAL:HG22	3:C:618:LEU:CG	2.49	0.43
3:C:659:TRP:CE2	3:C:660:SER:HB2	2.53	0.43
3:C:664:ARG:HD2	3:C:688:ARG:HG3	1.99	0.43
3:C:682:ARG:HD3	3:C:683:ASN:N	2.34	0.43
3:C:740:TYR:HD1	3:C:740:TYR:C	2.21	0.43
4:D:458:GLU:OE1	4:D:473:SER:N	2.49	0.43
1:E:120:ARG:HB3	1:E:120:ARG:CZ	2.49	0.43
1:E:349:THR:CG2	1:E:351:SER:H	2.19	0.43
2:F:277:ASP:O	2:F:280:SER:OG	2.37	0.43
3:G:1085:CYS:SG	3:G:1086:ASP:N	2.92	0.43
3:G:1207:ASP:O	3:G:1208:THR:C	2.56	0.43
3:G:1242:ASP:N	3:G:1243:PRO:CD	2.81	0.43
3:G:548:GLN:HA	3:G:554:GLN:O	2.19	0.43
3:G:558:ILE:O	3:G:558:ILE:CD1	2.65	0.43
3:G:944:ILE:HG22	3:G:945:ARG:N	2.34	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:H:337:PHE:CB	4:H:465:ASN:ND2	2.76	0.43
2:B:374:ASN:O	2:B:375:PRO:O	2.37	0.43
2:B:422:VAL:HA	2:B:425:GLN:CG	2.45	0.43
2:B:429:GLU:HG3	2:B:429:GLU:H	1.47	0.43
2:B:365:PHE:O	2:B:443:HIS:CD2	2.72	0.43
3:C:857:LEU:HD12	3:C:1018:VAL:CG1	2.48	0.43
3:C:1035:LEU:HD23	3:C:1035:LEU:N	2.34	0.43
3:C:1104:SER:O	3:C:1105:ARG:C	2.57	0.43
3:C:1414:LYS:HD3	3:C:1415:ASP:OD1	2.18	0.43
3:C:344:TYR:HB2	3:C:498:TRP:CE3	2.54	0.43
3:C:609:VAL:HG13	3:C:609:VAL:O	2.19	0.43
3:C:900:GLU:O	3:C:901:LEU:C	2.57	0.43
4:D:254:LEU:HD12	4:D:255:GLY:H	1.78	0.43
4:D:308:ASN:CG	4:D:311:GLY:HA2	2.36	0.43
2:F:149:LEU:H	2:F:151:PHE:HE1	1.66	0.43
2:F:240:VAL:C	2:F:242:SER:H	2.21	0.43
2:F:337:ASP:HB3	2:F:340:LYS:CB	2.49	0.43
2:F:342:ASP:O	2:F:346:SER:HB3	2.19	0.43
3:G:1021:LEU:O	3:G:1022:GLY:C	2.55	0.43
3:G:1193:TYR:N	3:G:1193:TYR:HD1	2.16	0.43
3:G:387:LEU:HD23	3:G:478:GLY:C	2.39	0.43
3:G:522:LYS:HG3	3:G:525:LEU:CG	2.49	0.43
3:G:607:VAL:C	3:G:609:VAL:H	2.20	0.43
3:G:362:PHE:CE2	3:G:687:GLY:HA3	2.53	0.43
3:G:730:ASN:ND2	3:G:730:ASN:N	2.65	0.43
3:G:770:ASN:HA	3:G:770:ASN:HD22	1.51	0.43
3:G:774:ASN:C	3:G:775:ILE:HG13	2.39	0.43
1:E:95:LYS:HZ3	3:G:881:ARG:H	1.63	0.43
1:A:111:ASP:CG	1:A:112:MET:N	2.72	0.43
1:A:335:ASP:CG	1:A:338:LYS:HG2	2.38	0.43
2:B:279:LEU:C	2:B:284:PHE:CE1	2.92	0.43
3:C:1237:THR:OG1	3:C:1238:TRP:N	2.51	0.43
3:C:792:LEU:HD21	3:C:956:MET:HE1	2.01	0.43
3:C:976:VAL:HG12	3:C:977:THR:N	2.34	0.43
4:D:543:GLU:O	4:D:543:GLU:HG3	2.19	0.43
1:E:107:VAL:HG11	1:E:168:TRP:CE3	2.54	0.43
1:E:237:LYS:CD	1:E:256:GLN:OE1	2.67	0.43
2:F:414:LEU:O	2:F:415:VAL:C	2.55	0.43
2:F:452:GLN:O	2:F:455:LEU:HG	2.19	0.43
3:G:861:PHE:CE1	3:G:1036:LEU:HD11	2.53	0.43
3:G:1104:SER:O	3:G:1108:ILE:HG13	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:1181:GLN:HE21	3:G:1181:GLN:HA	1.83	0.43
3:G:1301:THR:HG22	3:G:1302:ASP:N	2.34	0.43
3:G:1366:ARG:NH1	3:G:1366:ARG:HG3	2.33	0.43
3:G:853:ASP:HB3	3:G:854:LYS:NZ	2.34	0.43
3:G:943:ASP:O	3:G:946:GLN:NE2	2.45	0.43
4:H:208:SER:HB2	4:H:209:MET:H	1.58	0.43
1:A:356:GLU:OE1	1:A:386:THR:HG23	2.19	0.43
1:A:55:ILE:CG1	1:A:58:GLN:HE22	2.10	0.43
2:B:291:LEU:HD11	2:B:308:GLN:HE21	1.83	0.43
2:B:314:LYS:O	2:B:317:GLY:N	2.49	0.43
2:B:314:LYS:HG3	2:B:353:PHE:CE2	2.54	0.43
2:B:358:LYS:O	2:B:359:ARG:HG2	2.19	0.43
2:B:398:LEU:O	2:B:403:ILE:HG12	2.19	0.43
2:B:428:PHE:CE2	2:B:437:CYS:HB2	2.54	0.43
3:C:563:LEU:HD22	3:C:563:LEU:HA	1.75	0.43
3:C:577:PRO:HB2	3:C:578:PRO:CD	2.49	0.43
3:C:665:LEU:O	3:C:667:ARG:CG	2.66	0.43
3:C:753:LEU:HD12	3:C:756:MET:HE1	2.00	0.43
3:C:760:ASN:N	3:C:760:ASN:ND2	2.66	0.43
3:C:864:LEU:CD1	3:C:868:ILE:HD11	2.49	0.43
1:A:95:LYS:NZ	3:C:881:ARG:O	2.52	0.43
4:D:310:THR:HB	4:D:312:ARG:HG2	2.00	0.43
4:D:495:PHE:C	4:D:497:ARG:N	2.73	0.43
1:E:111:ASP:OD1	1:E:112:MET:N	2.51	0.43
1:E:348:PRO:HB2	1:E:353:ILE:CG2	2.49	0.43
1:E:38:ASN:ND2	1:E:38:ASN:N	2.64	0.43
2:F:22:TYR:N	2:F:25:CYS:CB	2.82	0.43
2:F:34:SER:O	2:F:35:GLU:O	2.37	0.43
2:F:62:SER:O	2:F:63:TYR:HD2	2.02	0.43
3:G:1225:GLU:N	3:G:1226:PRO:CD	2.82	0.43
3:G:659:TRP:CZ2	3:G:667:ARG:O	2.72	0.43
3:G:694:GLU:OE2	3:G:706:TYR:O	2.37	0.43
3:G:732:TYR:CD2	3:G:738:LEU:HD11	2.53	0.43
3:G:715:ILE:HD12	3:G:755:ILE:HD11	2.01	0.43
4:H:269:SER:O	4:H:271:ILE:HG22	2.19	0.43
4:H:354:SER:O	4:H:386:HIS:CE1	2.70	0.43
4:H:161:TYR:CE2	4:H:359:PRO:HG3	2.54	0.43
4:H:460:CYS:O	4:H:471:LEU:N	2.51	0.43
1:A:112:MET:HG3	1:A:119:ARG:CZ	2.49	0.42
1:A:244:LEU:HD11	1:A:256:GLN:NE2	2.33	0.42
2:B:26:LEU:O	2:B:143:PHE:CZ	2.72	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:341:PHE:CD1	2:B:345:TYR:HB2	2.54	0.42
2:B:390:ASP:OD1	2:B:390:ASP:C	2.57	0.42
2:B:418:THR:OG1	2:B:420:TYR:HE2	2.01	0.42
2:B:441:LEU:HD12	2:B:446:GLN:CG	2.48	0.42
3:C:1063:THR:OG1	3:C:1064:SER:N	2.52	0.42
3:C:1077:LEU:N	3:C:1077:LEU:HD23	2.34	0.42
3:C:1335:ARG:NH2	4:D:433:PRO:CD	2.79	0.42
3:C:1414:LYS:HG2	3:C:1415:ASP:N	2.34	0.42
3:C:439:TYR:O	3:C:448:GLU:HA	2.18	0.42
3:C:340:VAL:CG2	3:C:500:GLU:HG3	2.49	0.42
3:C:910:ILE:H	3:C:910:ILE:CD1	2.31	0.42
3:C:918:LEU:HD22	3:C:918:LEU:HA	1.90	0.42
4:D:292:LYS:H	4:D:292:LYS:CE	2.32	0.42
4:D:306:GLY:HA3	4:D:315:VAL:O	2.19	0.42
4:D:398:PHE:O	4:D:399:GLU:C	2.57	0.42
4:D:534:THR:HA	4:D:535:PRO:HD2	1.76	0.42
4:D:542:SER:OG	4:D:544:LEU:N	2.41	0.42
1:E:132:TRP:CE3	1:E:135:MET:HG3	2.53	0.42
1:E:143:ASP:OD1	1:E:155:ARG:NE	2.43	0.42
2:F:119:TRP:CE3	2:F:119:TRP:C	2.92	0.42
2:F:170:SER:CB	2:F:171:PRO:CD	2.95	0.42
2:F:279:LEU:HD23	2:F:279:LEU:H	1.84	0.42
2:F:33:PRO:HG2	2:F:33:PRO:O	2.20	0.42
3:G:861:PHE:CG	3:G:1036:LEU:HD11	2.54	0.42
3:G:1081:ARG:CZ	3:G:1083:ASP:OD2	2.67	0.42
3:G:864:LEU:C	3:G:866:PRO:CD	2.88	0.42
4:H:325:LEU:HD22	4:H:326:PRO:HD2	2.01	0.42
1:A:153:LYS:CB	1:A:154:HIS:CD2	3.03	0.42
1:A:236:ASN:N	1:A:236:ASN:HD22	2.10	0.42
1:A:156:LEU:HD11	1:A:333:PRO:HB3	2.01	0.42
1:A:59:SER:HB2	1:A:88:PRO:HB2	2.01	0.42
2:B:74:LEU:CD2	2:B:130:PHE:CG	3.02	0.42
2:B:53:LEU:HD11	2:B:124:GLU:CD	2.39	0.42
2:B:77:GLU:O	2:B:79:ARG:N	2.52	0.42
3:C:1149:LYS:HG2	3:C:1150:LYS:H	1.70	0.42
3:C:571:ASP:N	3:C:571:ASP:OD2	2.50	0.42
3:C:621:PHE:O	3:C:625:LYS:HG2	2.19	0.42
3:C:647:LEU:O	3:C:649:GLN:N	2.52	0.42
3:C:946:GLN:HE21	3:C:946:GLN:HB3	1.68	0.42
4:D:212:LYS:C	4:D:214:PRO:CD	2.86	0.42
4:D:304:MET:HE1	4:D:316:ALA:HB2	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:431:HIS:O	4:D:433:PRO:HD3	2.19	0.42
4:D:564:LYS:O	4:D:565:GLY:C	2.55	0.42
4:D:344:VAL:HG23	4:D:572:ALA:O	2.18	0.42
1:E:21:PHE:HA	1:E:22:PRO:HD3	1.67	0.42
1:E:56:ARG:O	1:E:58:GLN:N	2.51	0.42
1:E:151:GLY:HA2	2:F:204:ASP:OD2	2.19	0.42
2:F:211:LEU:O	2:F:212:LYS:C	2.56	0.42
2:F:22:TYR:O	2:F:135:LEU:HD21	2.18	0.42
2:F:324:LEU:HD23	2:F:349:ILE:CG2	2.50	0.42
2:F:434:VAL:HG23	2:F:435:ASP:N	2.34	0.42
3:G:1036:LEU:CD1	3:G:1037:GLU:N	2.70	0.42
3:G:1055:TYR:O	3:G:1055:TYR:CD1	2.73	0.42
3:G:1227:ILE:HG21	3:G:1230:ILE:HG12	2.01	0.42
3:G:1439:GLN:O	3:G:1442:SER:CB	2.67	0.42
3:G:382:ASN:HB2	3:G:521:LEU:O	2.19	0.42
3:G:563:LEU:HD13	3:G:579:PHE:CE2	2.53	0.42
3:G:932:GLN:NE2	3:G:933:ASP:N	2.57	0.42
3:G:991:VAL:HA	3:G:994:MET:HE2	2.00	0.42
4:H:343:LEU:CD1	4:H:344:VAL:N	2.78	0.42
4:H:403:LYS:H	4:H:403:LYS:HG2	1.66	0.42
4:H:434:VAL:O	4:H:436:PRO:O	2.37	0.42
4:H:535:PRO:HG3	4:H:538:LEU:CD2	2.49	0.42
1:A:40:PHE:HB3	1:A:41:GLN:NE2	2.34	0.42
2:B:421:GLN:O	2:B:424:CYS:HB3	2.18	0.42
3:C:861:PHE:CD2	3:C:1038:ILE:HA	2.54	0.42
3:C:1081:ARG:NE	3:C:1083:ASP:OD2	2.52	0.42
3:C:1098:GLN:HE21	3:C:1111:ASN:CB	2.32	0.42
3:C:1243:PRO:O	3:C:1244:THR:C	2.58	0.42
3:C:437:LYS:HD3	3:C:800:ASN:O	2.19	0.42
3:C:541:ALA:HA	3:C:635:VAL:O	2.19	0.42
3:C:710:GLU:O	3:C:711:LEU:C	2.57	0.42
3:C:735:SER:O	3:C:736:SER:C	2.58	0.42
4:D:334:ASP:OD1	4:D:337:PHE:HE2	2.01	0.42
4:D:349:TYR:OH	4:D:377:LEU:HB3	2.19	0.42
1:E:187:GLU:OE1	2:F:196:ARG:HG3	2.19	0.42
1:E:223:PHE:HE2	1:E:269:TRP:CZ2	2.37	0.42
2:F:103:HIS:NE2	2:F:107:ARG:NH2	2.67	0.42
3:G:1446:TYR:HD2	3:G:1446:TYR:HA	1.68	0.42
3:G:846:ASP:HA	3:G:847:PRO:HD2	1.79	0.42
3:G:804:PRO:CG	3:G:967:PHE:CE2	3.00	0.42
3:G:977:THR:C	3:G:981:ARG:NH1	2.72	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:H:212:LYS:C	4:H:214:PRO:CD	2.87	0.42
4:H:346:CYS:SG	4:H:378:PHE:CB	3.07	0.42
4:H:574:LEU:CG	4:H:593:VAL:HG22	2.48	0.42
2:B:300:HIS:HA	2:B:331:PHE:CE1	2.55	0.42
2:B:401:TYR:N	2:B:401:TYR:HD1	2.17	0.42
3:C:1093:ASN:O	3:C:1095:VAL:N	2.52	0.42
3:C:1316:LYS:N	3:C:1316:LYS:HD3	2.34	0.42
3:C:1345:TRP:HD1	3:C:1382:GLU:OE1	2.02	0.42
3:C:348:ALA:O	3:C:349:TYR:HB2	2.19	0.42
3:C:773:GLY:O	3:C:794:HIS:NE2	2.48	0.42
4:D:310:THR:HG22	4:D:312:ARG:HG2	2.01	0.42
2:F:246:LEU:N	2:F:246:LEU:HD23	2.35	0.42
2:F:367:CYS:O	2:F:368:LEU:C	2.54	0.42
3:G:458:SER:OG	3:G:461:MET:HG3	2.19	0.42
3:G:489:MET:O	3:G:490:ASN:C	2.58	0.42
3:G:552:ASN:ND2	3:G:553:HIS:ND1	2.68	0.42
3:G:591:ASP:OD1	3:G:591:ASP:C	2.57	0.42
3:G:541:ALA:HA	3:G:635:VAL:O	2.19	0.42
3:G:703:CYS:CA	3:G:704:LYS:HE2	2.47	0.42
3:G:440:ALA:CB	3:G:877:THR:HG22	2.50	0.42
4:H:270:VAL:HB	4:H:286:VAL:HG23	2.02	0.42
4:H:319:LEU:O	4:H:319:LEU:CG	2.67	0.42
4:H:237:ILE:HD11	4:H:320:TYR:CE1	2.54	0.42
4:H:357:TYR:HD1	4:H:357:TYR:N	2.15	0.42
2:B:279:LEU:O	2:B:283:SER:N	2.47	0.42
2:B:283:SER:HA	2:B:451:SER:OG	2.19	0.42
2:B:366:SER:O	2:B:369:LYS:HB3	2.18	0.42
2:B:95:PRO:O	2:B:96:ARG:C	2.58	0.42
3:C:1222:ARG:HG2	3:C:1223:ILE:N	2.35	0.42
3:C:403:GLU:HG3	3:C:403:GLU:H	1.59	0.42
3:C:542:PHE:C	3:C:542:PHE:CD2	2.93	0.42
3:C:630:ASP:OD1	3:C:688:ARG:NH2	2.53	0.42
3:C:633:ILE:HG12	3:C:689:MET:HB2	2.00	0.42
3:C:711:LEU:O	3:C:755:ILE:HD11	2.19	0.42
4:D:228:GLY:O	4:D:229:SER:C	2.58	0.42
4:D:376:ILE:HA	4:D:421:VAL:HG12	2.00	0.42
4:D:355:ILE:CD1	4:D:388:GLN:HE22	2.20	0.42
4:D:363:LEU:HD22	4:D:562:LEU:HD22	2.01	0.42
4:D:592:ALA:O	4:D:593:VAL:CG2	2.68	0.42
1:E:246:LEU:HD12	1:E:296:ILE:HG12	2.01	0.42
2:F:292:HIS:O	2:F:293:LYS:C	2.56	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:49:ARG:HG3	2:F:106:LEU:CD1	2.46	0.42
3:G:1329:LYS:HE3	3:G:1333:ASP:CG	2.40	0.42
3:G:1395:TYR:O	3:G:1398:ILE:HG12	2.18	0.42
3:G:1423:THR:O	3:G:1424:PRO:C	2.56	0.42
3:G:340:VAL:CG2	3:G:341:PHE:N	2.82	0.42
3:G:344:TYR:HB2	3:G:498:TRP:CD2	2.53	0.42
1:E:95:LYS:HA	3:G:448:GLU:CD	2.39	0.42
3:G:548:GLN:HB2	3:G:548:GLN:HE21	1.63	0.42
4:H:296:LEU:HD23	4:H:300:GLN:CD	2.39	0.42
4:H:421:VAL:HG12	4:H:421:VAL:O	2.20	0.42
4:H:459:PRO:CB	4:H:471:LEU:O	2.67	0.42
4:H:494:ARG:CG	4:H:494:ARG:HH11	2.24	0.42
1:A:132:TRP:CD2	1:A:344:PRO:HG2	2.54	0.42
1:A:141:ILE:CD1	1:A:303:PRO:CD	2.98	0.42
1:A:78:ILE:HG22	1:A:319:SER:OG	2.18	0.42
2:B:75:GLU:HA	2:B:78:LEU:HB2	2.00	0.42
3:C:1050:LEU:N	3:C:1050:LEU:HD23	2.34	0.42
3:C:1193:TYR:N	3:C:1193:TYR:CD1	2.88	0.42
3:C:1294:ASN:CG	3:C:1295:VAL:N	2.72	0.42
3:C:345:TRP:HZ2	3:C:495:GLY:HA2	1.84	0.42
3:C:450:SER:O	3:C:452:TYR:HD1	2.03	0.42
3:C:519:MET:SD	3:C:520:ALA:C	2.98	0.42
3:C:531:ASP:O	3:C:532:VAL:CG2	2.66	0.42
3:C:663:GLY:O	3:C:688:ARG:NE	2.52	0.42
3:C:693:VAL:O	3:C:694:GLU:C	2.56	0.42
3:C:977:THR:C	3:C:981:ARG:HH12	2.23	0.42
4:D:349:TYR:HE1	4:D:381:PHE:CD1	2.37	0.42
4:D:512:TYR:HA	4:D:514:PRO:CD	2.50	0.42
1:E:125:ALA:O	1:E:163:ARG:HD3	2.20	0.42
1:E:178:SER:O	1:E:182:ARG:HG3	2.20	0.42
1:E:55:ILE:HD12	1:E:56:ARG:N	2.28	0.42
2:F:303:HIS:O	2:F:304:GLY:C	2.58	0.42
2:F:320:LEU:CA	2:F:353:PHE:CE1	2.96	0.42
3:G:1002:ASP:C	3:G:1002:ASP:OD1	2.55	0.42
3:G:1105:ARG:HH11	3:G:1105:ARG:CB	2.32	0.42
3:G:1222:ARG:CG	3:G:1223:ILE:CD1	2.98	0.42
3:G:1235:ILE:H	3:G:1235:ILE:HG13	1.58	0.42
3:G:415:GLU:HB3	3:G:419:GLU:OE2	2.20	0.42
3:G:759:LEU:O	3:G:760:ASN:C	2.57	0.42
4:H:546:TYR:N	4:H:546:TYR:CD1	2.62	0.42
1:A:355:ARG:CB	1:A:355:ARG:NH1	2.58	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:56:ARG:O	1:A:58:GLN:N	2.51	0.42
1:A:89:ASN:HD22	1:A:90:GLN:N	2.18	0.42
2:B:284:PHE:HB3	2:B:288:MET:HB2	2.02	0.42
2:B:401:TYR:N	2:B:401:TYR:CD1	2.87	0.42
2:B:81:LEU:O	2:B:83:PHE:CD1	2.73	0.42
3:C:1122:ASN:HB3	3:C:1127:SER:HB3	2.01	0.42
3:C:1182:ASP:HA	3:C:1204:LEU:CD2	2.50	0.42
3:C:574:ALA:HA	3:C:575:PRO:HD3	1.77	0.42
3:C:610:GLU:OE1	3:C:610:GLU:C	2.57	0.42
3:C:755:ILE:O	3:C:759:LEU:HG	2.20	0.42
4:D:201:ALA:O	4:D:202:LEU:HB3	2.18	0.42
4:D:383:ASP:C	4:D:385:LYS:N	2.73	0.42
1:E:191:LEU:HD23	1:E:191:LEU:O	2.20	0.42
1:E:360:ILE:O	1:E:360:ILE:HG22	2.20	0.42
1:E:73:MET:O	1:E:74:ASN:C	2.56	0.42
2:F:54:LYS:O	2:F:58:ASN:ND2	2.53	0.42
3:G:1026:LYS:HG2	3:G:1027:SER:N	2.35	0.42
3:G:1085:CYS:SG	3:G:1087:LEU:N	2.93	0.42
3:G:1186:LEU:O	3:G:1191:ARG:HD3	2.20	0.42
3:G:1329:LYS:O	3:G:1330:LEU:C	2.58	0.42
3:G:1388:LEU:O	3:G:1390:THR:N	2.53	0.42
3:G:1408:LEU:HD13	3:G:1408:LEU:HA	1.78	0.42
3:G:512:SER:C	3:G:514:CYS:H	2.22	0.42
3:G:682:ARG:CD	3:G:682:ARG:C	2.85	0.42
3:G:764:LEU:CD1	3:G:768:ILE:HD11	2.50	0.42
3:G:874:ILE:HG23	3:G:879:VAL:HG21	2.01	0.42
4:H:292:LYS:NZ	4:H:317:THR:O	2.53	0.42
4:H:592:ALA:O	4:H:593:VAL:HG23	2.18	0.42
1:A:343:ASP:O	1:A:347:VAL:HG23	2.18	0.42
2:B:230:LEU:HD23	2:B:230:LEU:HA	1.66	0.42
3:C:1116:LEU:O	3:C:1117:ILE:C	2.58	0.42
3:C:1182:ASP:OD1	3:C:1193:TYR:OH	2.36	0.42
3:C:1236:ALA:HB1	3:C:1246:PHE:CE2	2.55	0.42
3:C:1245:GLN:HG3	3:C:1249:HIS:HE1	1.83	0.42
3:C:1349:GLU:OE2	3:C:1378:THR:N	2.48	0.42
3:C:441:PHE:HZ	3:C:796:PHE:CZ	2.38	0.42
3:C:555:ASN:O	3:C:650:ARG:HD3	2.19	0.42
3:C:756:MET:SD	3:C:762:LEU:HD21	2.60	0.42
3:C:774:ASN:C	3:C:775:ILE:HD12	2.39	0.42
3:C:571:ASP:HB2	3:C:941:GLN:NE2	2.35	0.42
3:C:951:LEU:O	3:C:952:THR:C	2.57	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:382:LEU:HD22	4:D:401:ILE:CG2	2.50	0.42
4:D:411:GLU:CG	4:D:414:ARG:NH1	2.80	0.42
4:D:592:ALA:C	4:D:593:VAL:HG23	2.40	0.42
1:E:171:ASP:O	1:E:174:VAL:HB	2.19	0.42
1:E:237:LYS:NZ	1:E:256:GLN:NE2	2.67	0.42
1:E:43:ARG:CZ	1:E:83:VAL:CG2	2.98	0.42
1:E:50:LYS:CD	1:E:50:LYS:N	2.67	0.42
2:F:177:LYS:HD3	2:F:177:LYS:HA	1.89	0.42
2:F:241:GLN:O	2:F:241:GLN:HG2	2.20	0.42
2:F:316:ILE:HG22	2:F:448:PHE:CD2	2.54	0.42
2:F:429:GLU:O	2:F:433:ASN:N	2.53	0.42
2:F:94:GLU:OE2	2:F:94:GLU:CA	2.68	0.42
3:G:1027:SER:O	3:G:1028:GLU:C	2.57	0.42
3:G:1160:TRP:CE3	3:G:1161:ILE:HA	2.55	0.42
3:G:1184:SER:C	3:G:1186:LEU:N	2.72	0.42
3:G:1195:PRO:HA	3:G:1198:LEU:HD23	2.01	0.42
3:G:359:VAL:HG12	3:G:360:PHE:N	2.35	0.42
3:G:589:PRO:HG2	3:G:590:LYS:N	2.34	0.42
3:G:789:GLU:CD	3:G:966:ARG:HD3	2.40	0.42
3:G:865:TYR:N	3:G:866:PRO:HD3	2.35	0.42
3:G:898:ILE:O	3:G:899:PRO:O	2.37	0.42
3:G:946:GLN:NE2	3:G:947:LYS:N	2.67	0.42
3:G:971:PRO:O	3:G:972:LEU:C	2.58	0.42
4:H:406:LEU:HD23	4:H:442:TYR:CD2	2.55	0.42
4:H:546:TYR:CB	4:H:595:VAL:HG11	2.50	0.42
4:H:575:TYR:O	4:H:576:LEU:HD23	2.20	0.42
4:H:580:ALA:O	4:H:587:GLN:OE1	2.37	0.42
1:A:237:LYS:HA	1:A:240:TRP:CG	2.54	0.42
1:A:255:LEU:HD23	1:A:275:VAL:HG21	2.02	0.42
1:A:323:VAL:HG11	1:A:350:ILE:HG21	2.02	0.42
1:A:88:PRO:C	1:A:90:GLN:H	2.23	0.42
2:B:139:LYS:O	2:B:142:ASP:CG	2.58	0.42
2:B:374:ASN:O	2:B:375:PRO:C	2.54	0.42
2:B:414:LEU:O	2:B:415:VAL:C	2.58	0.42
2:B:42:PHE:C	2:B:42:PHE:CD2	2.93	0.42
2:B:93:TYR:O	2:B:94:GLU:C	2.58	0.42
2:B:94:GLU:HA	2:B:94:GLU:OE2	2.20	0.42
3:C:864:LEU:CD2	3:C:1004:ASP:CB	2.92	0.42
3:C:1023:ASN:O	3:C:1024:LYS:C	2.59	0.42
3:C:1294:ASN:CG	3:C:1295:VAL:H	2.22	0.42
3:C:1411:ASP:O	3:C:1415:ASP:OD1	2.37	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:485:GLU:OE1	3:C:966:ARG:NH1	2.49	0.42
3:C:568:PHE:CE1	3:C:575:PRO:HD2	2.54	0.42
3:C:698:LYS:HG2	3:C:706:TYR:CD1	2.55	0.42
3:C:851:PHE:CD1	3:C:1048:LEU:CD1	2.92	0.42
3:C:911:LEU:HB3	3:C:912:PRO:HD3	2.01	0.42
4:D:291:LEU:HD12	4:D:292:LYS:HZ1	1.85	0.42
4:D:403:LYS:H	4:D:403:LYS:HG2	1.62	0.42
4:D:435:TYR:HB3	4:D:518:MET:HE1	2.02	0.42
1:E:142:ILE:HD11	1:E:303:PRO:CG	2.50	0.42
1:E:232:ASP:O	1:E:234:LEU:N	2.52	0.42
1:E:28:ARG:HD3	1:E:399:LEU:HD13	2.01	0.42
1:E:56:ARG:HD3	1:E:57:TYR:CE2	2.54	0.42
2:F:358:LYS:HB3	2:F:358:LYS:HE2	1.78	0.42
2:F:49:ARG:NH1	2:F:124:GLU:CD	2.73	0.42
3:G:860:ASP:C	3:G:1038:ILE:HD12	2.40	0.42
3:G:1095:VAL:O	3:G:1098:GLN:N	2.52	0.42
3:G:1221:ALA:O	3:G:1222:ARG:C	2.58	0.42
3:G:1295:VAL:HG21	3:G:1404:ALA:HB2	2.02	0.42
3:G:438:ASN:HA	3:G:448:GLU:O	2.20	0.42
3:G:523:PRO:C	3:G:525:LEU:N	2.73	0.42
3:G:849:VAL:HG13	3:G:1226:PRO:HB3	2.01	0.42
3:G:857:LEU:CD2	3:G:859:LEU:CG	2.97	0.42
4:H:376:ILE:HG13	4:H:376:ILE:H	1.55	0.42
1:A:145:ALA:O	1:A:146:LEU:C	2.58	0.42
1:A:332:VAL:HA	1:A:333:PRO:HD3	1.97	0.42
2:B:253:LEU:O	2:B:254:SER:HB3	2.20	0.42
2:B:295:LEU:O	2:B:330:GLU:OE2	2.38	0.42
3:C:340:VAL:HG22	3:C:341:PHE:N	2.34	0.42
3:C:366:TRP:HB2	3:C:373:HIS:CD2	2.55	0.42
3:C:374:VAL:C	3:C:375:SER:O	2.57	0.42
3:C:457:TYR:CD1	3:C:457:TYR:N	2.87	0.42
3:C:548:GLN:HA	3:C:554:GLN:O	2.20	0.42
3:C:659:TRP:HH2	3:C:667:ARG:HD3	1.85	0.42
3:C:586:VAL:HB	3:C:742:LEU:HD21	2.01	0.42
3:C:988:LYS:HE2	3:C:988:LYS:HB3	1.94	0.42
4:D:170:VAL:HG13	4:D:594:GLN:CG	2.49	0.42
4:D:298:PRO:HD3	4:D:483:GLU:O	2.19	0.42
1:E:158:VAL:HG22	1:E:333:PRO:CA	2.45	0.42
1:E:251:ILE:HG23	1:E:275:VAL:HG11	2.00	0.42
2:F:240:VAL:O	2:F:242:SER:N	2.53	0.42
2:F:314:LYS:O	2:F:317:GLY:N	2.50	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:48:ASP:O	2:F:50:VAL:N	2.52	0.42
2:F:89:LEU:O	2:F:91:ASP:N	2.53	0.42
3:G:1322:PHE:HB3	3:G:1325:GLN:CD	2.40	0.42
3:G:1420:GLN:NE2	3:G:1421:PHE:CE2	2.87	0.42
3:G:343:PHE:CB	3:G:365:VAL:HG12	2.50	0.42
4:H:212:LYS:O	4:H:215:ASP:N	2.42	0.42
4:H:558:ASN:HA	4:H:559:PRO:HD2	1.88	0.42
4:H:591:ILE:H	4:H:591:ILE:HG12	1.68	0.42
1:A:244:LEU:HB3	1:A:252:HIS:NE2	2.35	0.41
2:B:192:LEU:HA	2:B:195:PHE:CE2	2.55	0.41
2:B:22:TYR:N	2:B:25:CYS:CB	2.82	0.41
2:B:293:LYS:HE2	2:B:297:GLU:CD	2.40	0.41
2:B:394:LEU:HG	2:B:398:LEU:HD11	2.02	0.41
3:C:1100:LEU:HA	3:C:1100:LEU:HD23	1.74	0.41
3:C:1103:GLN:HB3	3:C:1107:THR:HG21	2.02	0.41
3:C:1192:ALA:C	3:C:1193:TYR:CD1	2.94	0.41
3:C:1293:ASP:OD1	3:C:1293:ASP:N	2.48	0.41
3:C:1328:ASN:O	3:C:1329:LYS:C	2.59	0.41
3:C:1406:GLU:HG2	3:C:1406:GLU:H	1.69	0.41
3:C:410:MET:HE1	3:C:453:LEU:HA	2.02	0.41
3:C:350:GLU:OE2	3:C:482:SER:HB2	2.19	0.41
3:C:636:GLY:HA3	3:C:639:ILE:CD1	2.42	0.41
3:C:787:ARG:O	3:C:790:PHE:HB2	2.19	0.41
4:D:407:ARG:NH1	4:D:407:ARG:HG3	2.33	0.41
4:D:480:LEU:CD1	4:D:511:LEU:HB2	2.47	0.41
1:E:211:PHE:CD1	1:E:211:PHE:C	2.94	0.41
2:F:115:GLU:CB	3:G:989:GLU:OE2	2.68	0.41
2:F:119:TRP:HE3	2:F:120:PHE:N	2.18	0.41
2:F:195:PHE:HB2	2:F:202:LEU:HD11	2.03	0.41
3:G:1006:ILE:CG2	3:G:1008:ILE:HD11	2.49	0.41
3:G:1023:ASN:O	3:G:1024:LYS:C	2.58	0.41
3:G:1182:ASP:HB2	3:G:1184:SER:HB3	2.01	0.41
3:G:439:TYR:OH	3:G:441:PHE:HB2	2.19	0.41
3:G:589:PRO:CG	3:G:592:CYS:CB	2.94	0.41
3:G:643:GLU:HA	3:G:646:VAL:CG2	2.50	0.41
4:H:240:PHE:CE1	4:H:254:LEU:HB2	2.55	0.41
2:B:127:LEU:HA	2:B:127:LEU:HD12	1.71	0.41
2:B:279:LEU:C	2:B:284:PHE:HE1	2.23	0.41
3:C:1026:LYS:O	3:C:1027:SER:C	2.58	0.41
3:C:1074:LEU:HB3	3:C:1077:LEU:CD1	2.49	0.41
3:C:1081:ARG:CD	3:C:1352:THR:O	2.68	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:523:PRO:C	3:C:525:LEU:N	2.73	0.41
3:C:560:MET:SD	3:C:622:PHE:CG	3.13	0.41
3:C:623:LEU:HD22	3:C:661:LYS:HB2	2.01	0.41
3:C:784:ARG:HG2	3:C:784:ARG:HH11	1.85	0.41
4:D:287:ASP:HB3	4:D:315:VAL:HA	2.01	0.41
4:D:367:ILE:CG2	4:D:375:CYS:SG	3.08	0.41
1:E:163:ARG:HH21	1:E:163:ARG:HG2	1.84	0.41
1:E:67:GLU:C	1:E:71:GLN:HG3	2.39	0.41
2:F:282:LYS:HE2	2:F:282:LYS:HB3	1.94	0.41
2:F:315:GLY:C	2:F:445:ASN:ND2	2.73	0.41
2:F:370:ILE:O	2:F:370:ILE:CG2	2.68	0.41
3:G:1276:CYS:HB3	3:G:1391:GLN:OE1	2.20	0.41
3:G:1345:TRP:CH2	3:G:1358:ARG:HG3	2.55	0.41
3:G:1428:GLN:HA	3:G:1431:ARG:NH2	2.34	0.41
3:G:383:ILE:HG12	3:G:523:PRO:CG	2.50	0.41
3:G:760:ASN:CB	3:G:944:ILE:HD11	2.45	0.41
3:G:881:ARG:HH11	3:G:972:LEU:HD21	1.85	0.41
4:H:174:PHE:CG	4:H:175:GLY:N	2.88	0.41
3:G:1342:TYR:CB	4:H:519:ALA:HB1	2.48	0.41
4:H:567:VAL:CG1	4:H:568:GLY:N	2.67	0.41
1:A:118:VAL:O	1:A:118:VAL:HG12	2.19	0.41
1:A:166:HIS:CD2	1:A:166:HIS:N	2.88	0.41
2:B:358:LYS:HG3	2:B:362:TYR:HB3	2.02	0.41
2:B:67:THR:O	2:B:70:TYR:HB3	2.20	0.41
3:C:1150:LYS:O	3:C:1190:GLN:HG3	2.19	0.41
3:C:1209:GLN:O	3:C:1210:TYR:C	2.58	0.41
3:C:1251:TYR:CE1	3:C:1253:LYS:HB3	2.55	0.41
3:C:488:LEU:HD23	3:C:488:LEU:H	1.83	0.41
3:C:577:PRO:CB	3:C:578:PRO:CD	2.97	0.41
3:C:765:ALA:O	3:C:766:LEU:C	2.57	0.41
3:C:858:LEU:HD12	3:C:1007:MET:HA	2.02	0.41
4:D:333:GLU:N	4:D:333:GLU:OE1	2.54	0.41
4:D:460:CYS:O	4:D:471:LEU:N	2.53	0.41
2:F:273:LEU:C	2:F:275:GLN:H	2.24	0.41
3:G:1015:LEU:HD12	3:G:1018:VAL:HB	2.01	0.41
3:G:1186:LEU:CD2	3:G:1187:THR:N	2.81	0.41
3:G:1217:HIS:CD2	3:G:1246:PHE:CZ	3.08	0.41
3:G:446:VAL:HA	3:G:447:PRO:HD2	1.78	0.41
3:G:513:TRP:NE1	3:G:666:LYS:HG2	2.35	0.41
3:G:522:LYS:CG	3:G:525:LEU:HD11	2.48	0.41
3:G:589:PRO:HG2	3:G:590:LYS:H	1.85	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:861:PHE:HA	3:G:861:PHE:HD2	1.69	0.41
3:G:926:LYS:HA	3:G:926:LYS:HZ3	1.85	0.41
3:G:951:LEU:O	3:G:952:THR:C	2.57	0.41
4:H:343:LEU:HG	4:H:344:VAL:N	2.35	0.41
1:A:139:ILE:O	1:A:143:ASP:HB2	2.21	0.41
1:A:108:PHE:N	1:A:167:CYS:SG	2.93	0.41
1:A:208:ILE:HG23	1:A:212:ILE:CB	2.49	0.41
1:A:298:LEU:O	1:A:300:TYR:N	2.53	0.41
2:B:56:VAL:CG2	2:B:127:LEU:HD13	2.48	0.41
2:B:138:ASP:HA	2:B:141:GLN:CD	2.40	0.41
2:B:259:GLY:O	2:B:260:GLN:CB	2.68	0.41
2:B:371:ILE:HG22	2:B:372:LEU:HD23	2.01	0.41
3:C:1036:LEU:O	3:C:1037:GLU:CG	2.61	0.41
3:C:1140:THR:O	3:C:1140:THR:CG2	2.61	0.41
3:C:1374:CYS:SG	3:C:1376:LYS:N	2.84	0.41
3:C:1415:ASP:O	3:C:1416:LYS:C	2.59	0.41
3:C:1334:ILE:HG22	3:C:1440:PHE:CE1	2.54	0.41
3:C:360:PHE:HB3	3:C:362:PHE:HE1	1.86	0.41
3:C:438:ASN:HA	3:C:448:GLU:O	2.20	0.41
3:C:771:ILE:HG13	3:C:771:ILE:H	1.64	0.41
3:C:775:ILE:HG22	3:C:778:ARG:HG2	2.01	0.41
4:D:479:HIS:ND1	4:D:509:TYR:CZ	2.88	0.41
4:D:540:ILE:C	4:D:541:PRO:O	2.59	0.41
2:F:120:PHE:O	2:F:121:ILE:C	2.59	0.41
2:F:38:SER:O	2:F:40:ILE:N	2.54	0.41
3:G:1294:ASN:ND2	3:G:1295:VAL:N	2.68	0.41
3:G:366:TRP:CH2	3:G:371:GLU:HA	2.55	0.41
4:H:219:VAL:O	4:H:221:THR:N	2.53	0.41
4:H:476:LEU:O	4:H:480:LEU:HD23	2.21	0.41
4:H:541:PRO:O	4:H:542:SER:HB3	2.19	0.41
1:A:13:LEU:CD2	1:A:17:TYR:CE2	3.04	0.41
1:A:234:LEU:CG	1:A:243:ILE:HD12	2.51	0.41
1:A:162:ARG:HG3	1:A:327:THR:HG21	2.02	0.41
1:A:76:TYR:N	1:A:76:TYR:CD1	2.88	0.41
2:B:120:PHE:O	2:B:123:GLN:N	2.53	0.41
2:B:431:ILE:HG23	2:B:432:HIS:HD1	1.84	0.41
2:B:285:PRO:HA	2:B:447:PHE:CE2	2.55	0.41
3:C:1137:LYS:HZ2	3:C:1153:PRO:HG2	1.84	0.41
3:C:1157:VAL:HG21	3:C:1177:TYR:HB2	1.98	0.41
3:C:1211:TYR:HA	3:C:1215:GLN:CB	2.49	0.41
3:C:1328:ASN:CG	4:D:398:PHE:CE2	2.94	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:359:VAL:HG11	3:C:484:LEU:HD13	2.02	0.41
3:C:638:ASN:ND2	3:C:642:PHE:HD1	2.19	0.41
3:C:901:LEU:C	3:C:902:PRO:O	2.59	0.41
3:C:843:LEU:CA	3:C:981:ARG:HG2	2.48	0.41
4:D:182:TRP:CZ3	4:D:575:TYR:CD2	3.08	0.41
4:D:243:LEU:HD22	4:D:253:LEU:CD1	2.45	0.41
4:D:182:TRP:HB3	4:D:341:MET:HE3	2.03	0.41
4:D:445:LEU:CG	4:D:450:LYS:HZ3	2.34	0.41
1:E:82:ALA:CB	1:E:104:LYS:HD3	2.47	0.41
2:F:311:LEU:C	2:F:313:LEU:N	2.74	0.41
2:F:73:LYS:O	2:F:76:SER:HB2	2.20	0.41
3:G:1055:TYR:C	3:G:1055:TYR:HD1	2.24	0.41
3:G:1240:GLY:HA3	3:G:1242:ASP:OD1	2.20	0.41
3:G:1245:GLN:HA	3:G:1248:VAL:CG2	2.50	0.41
3:G:1359:HIS:CD2	3:G:1359:HIS:C	2.94	0.41
3:G:1408:LEU:HD12	3:G:1413:GLU:OE1	2.19	0.41
3:G:1427:LEU:HB3	3:G:1431:ARG:HH22	1.85	0.41
3:G:532:VAL:CG1	3:G:533:SER:N	2.84	0.41
3:G:661:LYS:C	3:G:663:GLY:H	2.23	0.41
3:G:349:TYR:CD1	3:G:665:LEU:HD12	2.48	0.41
3:G:362:PHE:CG	3:G:687:GLY:HA2	2.55	0.41
3:G:693:VAL:O	3:G:694:GLU:C	2.58	0.41
3:G:778:ARG:O	3:G:780:LEU:N	2.54	0.41
3:G:903:ASP:OD1	3:G:905:SER:CB	2.68	0.41
3:G:975:LEU:CD1	3:G:975:LEU:C	2.82	0.41
4:H:422:PHE:N	4:H:422:PHE:HD2	2.19	0.41
4:H:469:PHE:CD2	4:H:539:ILE:HD11	2.55	0.41
1:A:106:LEU:HA	1:A:106:LEU:HD12	1.75	0.41
2:B:218:ILE:HG22	2:B:219:LEU:N	2.34	0.41
2:B:34:SER:O	2:B:35:GLU:O	2.38	0.41
2:B:385:PRO:C	2:B:387:ARG:N	2.74	0.41
2:B:87:GLU:HA	2:B:93:TYR:CE1	2.55	0.41
3:C:1042:GLY:O	3:C:1043:VAL:HG23	2.21	0.41
3:C:1193:TYR:CE2	3:C:1204:LEU:CD1	3.04	0.41
3:C:1217:HIS:N	3:C:1218:PRO:CD	2.84	0.41
3:C:1242:ASP:N	3:C:1243:PRO:CD	2.84	0.41
3:C:1305:PRO:O	3:C:1308:TYR:N	2.47	0.41
3:C:438:ASN:O	3:C:802:ILE:HG12	2.20	0.41
3:C:583:PHE:CD1	3:C:583:PHE:C	2.93	0.41
3:C:711:LEU:C	3:C:755:ILE:HD11	2.41	0.41
3:C:729:GLN:O	3:C:732:TYR:HB2	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:932:GLN:CG	3:C:933:ASP:N	2.84	0.41
4:D:548:VAL:CG1	4:D:557:VAL:HG22	2.49	0.41
1:E:209:HIS:ND1	1:E:211:PHE:N	2.67	0.41
2:F:407:GLY:O	2:F:408:ILE:C	2.58	0.41
3:G:857:LEU:CD1	3:G:1018:VAL:CG1	2.99	0.41
3:G:1337:PHE:CE2	3:G:1391:GLN:CG	2.98	0.41
3:G:381:LYS:HD3	3:G:519:MET:HE2	2.03	0.41
3:G:664:ARG:HD2	3:G:688:ARG:HG3	2.03	0.41
3:G:794:HIS:O	3:G:795:ALA:C	2.59	0.41
3:G:868:ILE:C	3:G:870:GLN:H	2.24	0.41
4:H:213:LEU:H	4:H:213:LEU:HG	1.69	0.41
4:H:419:HIS:O	4:H:420:LEU:HD23	2.20	0.41
4:H:544:LEU:O	4:H:545:ARG:C	2.59	0.41
4:H:503:LEU:HD11	4:H:554:CYS:HB3	2.01	0.41
1:A:139:ILE:HG22	1:A:140:ARG:N	2.35	0.41
1:A:237:LYS:O	1:A:241:ASP:N	2.49	0.41
1:A:344:PRO:HD2	1:A:345:PHE:CZ	2.56	0.41
1:A:350:ILE:CA	1:A:353:ILE:HG12	2.47	0.41
2:B:46:ALA:HA	2:B:106:LEU:HD11	2.03	0.41
2:B:178:LEU:HD11	2:B:183:ILE:HD11	2.02	0.41
2:B:245:ARG:C	2:B:246:LEU:HD23	2.41	0.41
2:B:44:ASN:O	2:B:48:ASP:OD2	2.39	0.41
3:C:1054:LYS:HB2	3:C:1054:LYS:HE2	1.97	0.41
3:C:1211:TYR:O	3:C:1215:GLN:HB2	2.20	0.41
3:C:1234:LEU:HG	3:C:1238:TRP:CZ3	2.56	0.41
3:C:430:PHE:CD2	3:C:430:PHE:N	2.88	0.41
3:C:589:PRO:HG2	3:C:592:CYS:HB2	2.02	0.41
3:C:701:ILE:HG13	3:C:702:ARG:N	2.35	0.41
3:C:935:ASN:ND2	3:C:937:ASP:CB	2.69	0.41
4:D:279:SER:O	4:D:281:GLY:N	2.53	0.41
1:E:237:LYS:HA	1:E:240:TRP:NE1	2.35	0.41
1:E:398:PHE:CE2	1:E:402:LEU:HD21	2.55	0.41
1:E:406:ARG:O	1:E:410:LEU:HB2	2.21	0.41
2:F:161:LEU:CD2	2:F:162:ARG:NH1	2.84	0.41
2:F:298:ASN:N	2:F:298:ASN:ND2	2.68	0.41
3:G:1273:TYR:N	3:G:1273:TYR:CD1	2.89	0.41
3:G:395:LYS:HB2	3:G:408:ILE:CD1	2.47	0.41
3:G:855:PHE:CD2	3:G:1045:LYS:HA	2.56	0.41
3:G:901:LEU:HD12	3:G:902:PRO:O	2.20	0.41
4:H:403:LYS:HE2	4:H:442:TYR:CE1	2.55	0.41
1:A:118:VAL:HG13	1:A:300:TYR:CG	2.56	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:174:VAL:HA	1:A:177:LEU:HD21	2.03	0.41
1:A:274:LYS:O	1:A:275:VAL:C	2.59	0.41
2:B:275:GLN:O	2:B:279:LEU:HG	2.21	0.41
2:B:311:LEU:C	2:B:313:LEU:N	2.73	0.41
3:C:1319:PRO:O	3:C:1320:LEU:C	2.58	0.41
3:C:1345:TRP:HE1	3:C:1356:ARG:HH12	1.62	0.41
3:C:365:VAL:CG1	3:C:376:CYS:SG	3.09	0.41
3:C:560:MET:HE3	3:C:622:PHE:CD2	2.55	0.41
3:C:577:PRO:HB2	3:C:578:PRO:HD2	2.02	0.41
3:C:602:ILE:HD13	3:C:609:VAL:CG1	2.43	0.41
3:C:651:ILE:CD1	3:C:659:TRP:HA	2.50	0.41
3:C:694:GLU:HG3	3:C:698:LYS:HE2	2.03	0.41
3:C:723:ILE:N	3:C:723:ILE:CD1	2.68	0.41
3:C:759:LEU:N	3:C:759:LEU:CD2	2.79	0.41
3:C:807:GLN:O	3:C:808:ILE:HG13	2.20	0.41
4:D:212:LYS:O	4:D:214:PRO:N	2.53	0.41
4:D:292:LYS:H	4:D:292:LYS:CD	2.34	0.41
4:D:349:TYR:CE1	4:D:381:PHE:CD1	3.09	0.41
4:D:428:ASP:O	4:D:430:HIS:N	2.53	0.41
1:E:142:ILE:HG23	1:E:189:LEU:HD13	2.03	0.41
1:E:329:ARG:H	1:E:329:ARG:HG2	1.72	0.41
1:E:349:THR:O	1:E:353:ILE:HG23	2.20	0.41
1:E:68:LYS:HE3	1:E:72:LYS:CE	2.51	0.41
2:F:276:ILE:HA	2:F:279:LEU:HD12	2.01	0.41
2:F:283:SER:O	2:F:447:PHE:CE2	2.74	0.41
2:F:445:ASN:C	2:F:448:PHE:H	2.24	0.41
3:G:1192:ALA:C	3:G:1193:TYR:CD1	2.84	0.41
3:G:1050:LEU:CD1	3:G:1226:PRO:HG2	2.49	0.41
3:G:1294:ASN:ND2	3:G:1295:VAL:H	2.19	0.41
3:G:540:MET:SD	3:G:562:ALA:HB1	2.61	0.41
3:G:563:LEU:HD22	3:G:563:LEU:HA	1.84	0.41
3:G:649:GLN:C	3:G:651:ILE:N	2.74	0.41
3:G:710:GLU:O	3:G:713:GLN:N	2.54	0.41
3:G:784:ARG:HG2	3:G:784:ARG:HH11	1.86	0.41
3:G:787:ARG:O	3:G:790:PHE:HB2	2.20	0.41
3:G:804:PRO:HG2	3:G:967:PHE:CD2	2.54	0.41
4:H:294:TYR:CD1	4:H:294:TYR:C	2.93	0.41
4:H:297:PHE:CD1	4:H:298:PRO:O	2.72	0.41
4:H:376:ILE:C	4:H:377:LEU:HD23	2.41	0.41
4:H:426:LEU:HD23	4:H:437:GLN:NE2	2.36	0.41
4:H:569:GLY:O	4:H:570:THR:HG22	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:147:LYS:HG2	1:A:148:GLU:N	2.36	0.41
1:A:330:ILE:HG21	1:A:388:LEU:HD11	2.02	0.41
2:B:200:VAL:HG11	2:B:209:VAL:HG13	2.03	0.41
3:C:1160:TRP:HE3	3:C:1161:ILE:CG1	2.31	0.41
3:C:1230:ILE:CD1	3:C:1238:TRP:HH2	2.34	0.41
3:C:1235:ILE:O	3:C:1238:TRP:N	2.54	0.41
3:C:1417:LEU:HD11	3:C:1421:PHE:HE2	1.85	0.41
3:C:523:PRO:C	3:C:525:LEU:H	2.22	0.41
3:C:585:VAL:HB	3:C:621:PHE:CD2	2.56	0.41
3:C:681:GLU:N	3:C:681:GLU:OE1	2.54	0.41
3:C:929:MET:O	3:C:929:MET:CG	2.69	0.41
3:C:982:GLU:C	3:C:984:LEU:H	2.25	0.41
1:E:174:VAL:CA	1:E:177:LEU:HG	2.49	0.41
1:E:213:ARG:CG	1:E:213:ARG:HH11	2.33	0.41
2:F:427:TYR:CD1	2:F:427:TYR:C	2.93	0.41
2:F:49:ARG:HD3	2:F:102:SER:OG	2.21	0.41
2:F:75:GLU:HA	2:F:78:LEU:HB2	2.01	0.41
3:G:505:GLN:O	3:G:506:LEU:HD23	2.20	0.41
3:G:765:ALA:O	3:G:766:LEU:C	2.59	0.41
4:H:363:LEU:HD21	4:H:377:LEU:HD11	2.03	0.41
4:H:383:ASP:OD1	4:H:385:LYS:N	2.45	0.41
4:H:447:ARG:NH2	4:H:450:LYS:HB2	2.36	0.41
2:B:327:TRP:O	2:B:328:LYS:C	2.59	0.41
2:B:441:LEU:HD11	2:B:446:GLN:HG2	2.02	0.41
3:C:1099:ILE:O	3:C:1100:LEU:HD23	2.21	0.41
3:C:1244:THR:CG2	3:C:1247:ARG:NH2	2.77	0.41
3:C:1416:LYS:HE2	3:C:1420:GLN:HB2	2.02	0.41
3:C:457:TYR:N	3:C:457:TYR:HD1	2.19	0.41
3:C:532:VAL:HA	3:G:366:TRP:CD1	2.56	0.41
3:C:800:ASN:ND2	3:C:800:ASN:O	2.54	0.41
1:E:208:ILE:HG23	1:E:212:ILE:HB	2.02	0.41
2:F:285:PRO:HB3	2:F:447:PHE:CE2	2.55	0.41
3:G:1203:ASN:N	3:G:1203:ASN:OD1	2.50	0.41
3:G:1305:PRO:O	3:G:1306:SER:C	2.59	0.41
3:G:1340:LYS:HD3	3:G:1383:TYR:CG	2.56	0.41
3:G:1356:ARG:NH1	3:G:1356:ARG:HG2	2.36	0.41
3:G:1388:LEU:C	3:G:1390:THR:N	2.72	0.41
3:G:394:MET:SD	3:G:406:THR:C	2.99	0.41
3:G:394:MET:SD	3:G:406:THR:O	2.79	0.41
3:G:340:VAL:HG23	3:G:501:VAL:O	2.21	0.41
3:G:843:LEU:HD11	3:G:845:LEU:HG	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:H:424:PRO:HG2	4:H:458:GLU:HB2	2.03	0.41
4:H:544:LEU:HD23	4:H:544:LEU:HA	1.81	0.41
1:A:144:ARG:NH2	1:A:144:ARG:HG2	2.35	0.41
1:A:324:HIS:HA	1:A:325:PRO:HD3	1.96	0.41
2:B:118:ARG:CB	2:B:118:ARG:CZ	2.98	0.41
2:B:125:MET:O	2:B:129:ARG:HG3	2.21	0.41
2:B:199:LYS:O	2:B:200:VAL:CG1	2.69	0.41
2:B:444:PRO:O	2:B:445:ASN:C	2.59	0.41
2:B:85:TYR:HB3	2:B:86:ARG:H	1.53	0.41
3:C:1094:PHE:CE1	3:C:1115:ARG:HG2	2.55	0.41
3:C:1227:ILE:CG2	3:C:1230:ILE:HG12	2.50	0.41
3:C:1388:LEU:C	3:C:1390:THR:N	2.73	0.41
3:C:747:LYS:O	3:C:751:PHE:HD1	1.99	0.41
3:C:908:MET:HB2	3:C:913:ARG:CD	2.51	0.41
3:C:982:GLU:O	3:C:984:LEU:N	2.54	0.41
4:D:381:PHE:CE2	4:D:440:PHE:CE2	3.07	0.41
4:D:383:ASP:HB3	4:D:386:HIS:HB2	2.02	0.41
4:D:517:ASP:N	4:D:517:ASP:OD1	2.54	0.41
4:D:546:TYR:H	4:D:546:TYR:HD1	1.59	0.41
1:E:202:VAL:CG2	1:E:299:GLN:HB2	2.50	0.41
1:E:251:ILE:HG22	1:E:251:ILE:O	2.20	0.41
1:E:324:HIS:HA	1:E:325:PRO:HD3	1.86	0.41
2:F:178:LEU:HD11	2:F:183:ILE:CD1	2.50	0.41
2:F:83:PHE:HD2	2:F:99:ASP:HB2	1.85	0.41
2:F:347:TYR:CD2	3:G:1238:TRP:HD1	2.39	0.41
3:G:1369:PRO:HG2	3:G:1379:LEU:HG	2.03	0.41
3:G:1415:ASP:O	3:G:1416:LYS:C	2.59	0.41
3:G:421:ILE:HG23	3:G:425:TYR:CE2	2.55	0.41
3:G:715:ILE:HD12	3:G:755:ILE:CD1	2.51	0.41
3:G:922:ARG:HH22	3:G:950:LYS:NZ	2.18	0.41
3:G:958:GLY:O	3:G:962:PHE:HB2	2.21	0.41
4:H:201:ALA:O	4:H:202:LEU:HB3	2.21	0.41
4:H:231:LEU:HB3	4:H:303:ILE:CD1	2.51	0.41
4:H:389:VAL:HA	4:H:394:LEU:CD1	2.51	0.41
4:H:513:PRO:HA	4:H:514:PRO:HD2	1.44	0.41
1:A:256:GLN:HE21	1:A:256:GLN:HB2	1.65	0.40
1:A:388:LEU:C	1:A:390:PRO:HD2	2.41	0.40
1:A:406:ARG:O	1:A:410:LEU:HB2	2.20	0.40
2:B:38:SER:O	2:B:41:GLU:N	2.53	0.40
2:B:87:GLU:HA	2:B:93:TYR:CD1	2.56	0.40
3:C:1182:ASP:CG	3:C:1193:TYR:OH	2.60	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:1293:ASP:O	3:C:1294:ASN:HB2	2.21	0.40
3:C:1389:TYR:HD2	3:C:1389:TYR:O	2.02	0.40
3:C:489:MET:O	3:C:490:ASN:C	2.60	0.40
3:C:720:ARG:HH12	3:C:722:VAL:CG1	2.34	0.40
3:C:553:HIS:HB3	4:D:307:ILE:HD12	1.94	0.40
4:D:355:ILE:O	4:D:355:ILE:HG22	2.21	0.40
4:D:426:LEU:HG	4:D:437:GLN:NE2	2.36	0.40
1:E:82:ALA:HB1	1:E:103:GLU:O	2.21	0.40
2:F:137:LYS:HZ1	2:F:181:GLU:HG2	1.87	0.40
2:F:258:THR:OG1	2:F:261:ASP:CA	2.68	0.40
2:F:295:LEU:CD1	2:F:295:LEU:O	2.66	0.40
2:F:295:LEU:HD11	2:F:330:GLU:CG	2.51	0.40
2:F:419:HIS:HB3	2:F:422:VAL:CG2	2.48	0.40
3:G:559:ALA:O	3:G:560:MET:HG2	2.22	0.40
3:G:659:TRP:O	3:G:661:LYS:N	2.55	0.40
3:G:907:GLU:HA	3:G:907:GLU:OE1	2.21	0.40
1:A:192:VAL:HG21	1:A:304:ARG:HG2	2.03	0.40
1:A:357:LEU:HD13	1:A:382:ASP:OD1	2.21	0.40
2:B:112:GLN:O	2:B:117:ARG:CZ	2.69	0.40
2:B:22:TYR:CB	2:B:23:PRO:CD	2.99	0.40
2:B:401:TYR:HD2	2:B:427:TYR:CE2	2.39	0.40
3:C:1184:SER:C	3:C:1186:LEU:N	2.72	0.40
3:C:948:ALA:O	3:C:949:LEU:C	2.59	0.40
4:D:302:VAL:HG21	4:D:304:MET:HG3	2.02	0.40
4:D:341:MET:HB2	4:D:575:TYR:CE1	2.56	0.40
4:D:357:TYR:O	4:D:358:ASP:C	2.58	0.40
4:D:381:PHE:CE2	4:D:440:PHE:HE2	2.36	0.40
1:E:196:GLN:N	1:E:196:GLN:OE1	2.52	0.40
1:E:57:TYR:HB3	1:E:88:PRO:O	2.21	0.40
2:F:184:TYR:OH	2:F:211:LEU:CD1	2.70	0.40
2:F:303:HIS:HA	2:F:306:ARG:CZ	2.50	0.40
3:G:859:LEU:HD22	3:G:1040:ILE:HA	2.02	0.40
3:G:1236:ALA:CB	3:G:1246:PHE:CE2	3.05	0.40
3:G:1340:LYS:O	3:G:1342:TYR:N	2.54	0.40
3:G:1376:LYS:HE2	3:G:1376:LYS:C	2.41	0.40
3:G:637:HIS:O	3:G:639:ILE:HD13	2.21	0.40
3:G:752:ILE:CG2	3:G:752:ILE:O	2.65	0.40
3:G:864:LEU:N	3:G:866:PRO:HD2	2.36	0.40
4:H:306:GLY:CA	4:H:317:THR:HG23	2.24	0.40
4:H:382:LEU:O	4:H:429:VAL:HG12	2.21	0.40
1:A:209:HIS:CG	1:A:210:PRO:N	2.89	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:227:ALA:HA	1:A:231:GLN:HB2	2.04	0.40
1:A:275:VAL:O	1:A:279:TYR:N	2.54	0.40
1:A:46:SER:C	1:A:47:PHE:HD1	2.25	0.40
2:B:167:VAL:HG23	2:B:178:LEU:HD13	2.03	0.40
3:C:1376:LYS:O	3:C:1376:LYS:CG	2.70	0.40
3:C:549:ASN:N	3:C:554:GLN:O	2.54	0.40
3:C:614:THR:O	3:C:617:THR:N	2.50	0.40
3:C:710:GLU:O	3:C:712:VAL:N	2.54	0.40
4:D:287:ASP:HB3	4:D:315:VAL:CG1	2.52	0.40
4:D:406:LEU:HD12	4:D:406:LEU:HA	1.90	0.40
2:F:314:LYS:HG3	2:F:353:PHE:HE2	1.85	0.40
2:F:327:TRP:O	2:F:328:LYS:C	2.59	0.40
2:F:367:CYS:C	2:F:369:LYS:N	2.70	0.40
3:G:1000:TYR:HB3	3:G:1007:MET:HB2	2.03	0.40
3:G:1116:LEU:O	3:G:1117:ILE:C	2.60	0.40
3:G:1154:HIS:NE2	3:G:1155:VAL:CG2	2.81	0.40
3:G:960:LEU:HA	3:G:960:LEU:HD23	1.80	0.40
4:H:156:THR:CG2	4:H:159:GLN:HB2	2.51	0.40
4:H:164:ARG:O	4:H:164:ARG:HG2	2.21	0.40
4:H:243:LEU:HD22	4:H:253:LEU:HB3	2.04	0.40
4:H:333:GLU:O	4:H:337:PHE:CE2	2.74	0.40
4:H:403:LYS:HE2	4:H:442:TYR:CD1	2.56	0.40
1:A:347:VAL:HA	1:A:348:PRO:HD2	1.90	0.40
1:A:393:LYS:HE3	1:A:393:LYS:O	2.21	0.40
2:B:229:ALA:O	2:B:233:THR:HG23	2.22	0.40
2:B:273:LEU:C	2:B:275:GLN:H	2.24	0.40
2:B:359:ARG:NH1	2:B:359:ARG:HG3	2.33	0.40
2:B:40:ILE:H	2:B:40:ILE:HG13	1.65	0.40
3:C:1136:ASN:HA	3:C:1175:VAL:O	2.22	0.40
3:C:1220:VAL:O	3:C:1223:ILE:HB	2.22	0.40
3:C:637:HIS:N	3:C:752:ILE:HD13	2.36	0.40
3:C:762:LEU:CD2	3:C:762:LEU:N	2.85	0.40
3:C:974:ALA:O	3:C:977:THR:OG1	2.33	0.40
4:D:227:LEU:HD11	4:D:231:LEU:CD1	2.50	0.40
4:D:430:HIS:CD2	4:D:440:PHE:HE1	2.40	0.40
4:D:450:LYS:HA	4:D:450:LYS:HZ2	1.85	0.40
1:E:184:GLY:O	1:E:187:GLU:HB2	2.21	0.40
1:E:242:LYS:HE3	1:E:242:LYS:HB2	1.88	0.40
1:E:302:PHE:CZ	1:E:303:PRO:O	2.75	0.40
1:E:343:ASP:OD1	1:E:346:THR:N	2.51	0.40
1:E:57:TYR:HD2	1:E:57:TYR:H	1.68	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:66:LEU:O	1:E:70:MET:CB	2.69	0.40
2:F:112:GLN:HB2	2:F:113:SER:H	1.74	0.40
2:F:116:LEU:HD23	2:F:116:LEU:HA	1.79	0.40
3:G:1284:PRO:CG	3:G:1325:GLN:HE21	2.33	0.40
3:G:346:LEU:HB3	3:G:689:MET:HE2	2.03	0.40
3:G:389:PHE:HE1	3:G:455:VAL:HG21	1.87	0.40
3:G:489:MET:HE3	3:G:793:LEU:HB3	2.03	0.40
3:G:991:VAL:HA	3:G:994:MET:CE	2.52	0.40
4:H:514:PRO:O	4:H:515:GLN:O	2.38	0.40
1:A:335:ASP:OD1	1:A:338:LYS:CG	2.69	0.40
1:A:26:TYR:HE1	1:A:80:ILE:HD11	1.87	0.40
2:B:240:VAL:O	2:B:242:SER:N	2.54	0.40
2:B:320:LEU:HD12	2:B:321:GLU:N	2.37	0.40
2:B:365:PHE:CD1	2:B:369:LYS:HE3	2.56	0.40
2:B:417:GLY:O	2:B:418:THR:CG2	2.66	0.40
2:B:421:GLN:HE22	2:B:442:ASN:HA	1.83	0.40
3:C:983:ILE:HG23	3:C:1033:TYR:OH	2.21	0.40
3:C:1208:THR:OG1	3:C:1209:GLN:N	2.54	0.40
3:C:1445:GLY:O	3:C:1447:SER:N	2.55	0.40
3:C:549:ASN:CB	3:C:554:GLN:HG3	2.51	0.40
3:C:664:ARG:HG3	3:C:688:ARG:CZ	2.49	0.40
3:C:724:PRO:CB	3:C:726:GLU:HG3	2.28	0.40
3:C:441:PHE:CZ	3:C:796:PHE:CZ	3.10	0.40
3:C:954:ASN:ND2	3:C:954:ASN:N	2.59	0.40
4:D:241:THR:OG1	4:D:251:VAL:HG12	2.22	0.40
4:D:375:CYS:HB2	4:D:420:LEU:HD22	2.03	0.40
4:D:423:VAL:HA	4:D:424:PRO:HD2	1.88	0.40
4:D:514:PRO:O	4:D:515:GLN:O	2.39	0.40
1:E:398:PHE:O	1:E:402:LEU:CD1	2.65	0.40
1:E:61:ASN:HB2	1:E:65:ASP:OD1	2.22	0.40
2:F:337:ASP:HB3	2:F:340:LYS:HB2	2.02	0.40
2:F:56:VAL:CG1	2:F:126:ASP:HB3	2.51	0.40
2:F:95:PRO:O	2:F:96:ARG:C	2.59	0.40
3:G:1024:LYS:HD3	3:G:1024:LYS:HA	1.77	0.40
3:G:1139:LEU:HD11	3:G:1175:VAL:HG23	2.04	0.40
3:G:1243:PRO:O	3:G:1244:THR:C	2.59	0.40
3:G:1350:GLU:HA	3:G:1351:PRO:HD3	1.85	0.40
3:G:795:ALA:O	3:G:797:TYR:N	2.54	0.40
2:F:377:SER:OG	3:G:854:LYS:HE3	2.22	0.40
4:H:166:ASN:O	4:H:167:ARG:C	2.60	0.40
4:H:226:GLU:O	4:H:229:SER:HB3	2.22	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:H:318:LYS:CE	4:H:320:TYR:CE2	2.94	0.40
4:H:363:LEU:HD21	4:H:377:LEU:CD1	2.51	0.40
4:H:328:TYR:HB2	4:H:468:ILE:HG13	2.03	0.40
4:H:538:LEU:CD1	4:H:540:ILE:HG13	2.52	0.40
4:H:542:SER:HA	4:H:561:ARG:NH2	2.36	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	A	383/420 (91%)	326 (85%)	45 (12%)	12 (3%)	4	37
1	E	383/420 (91%)	336 (88%)	36 (9%)	11 (3%)	5	38
2	B	432/509 (85%)	291 (67%)	93 (22%)	48 (11%)	0	7
2	F	432/509 (85%)	295 (68%)	84 (19%)	53 (12%)	0	6
3	C	1047/1128 (93%)	731 (70%)	226 (22%)	90 (9%)	1	11
3	G	1047/1128 (93%)	743 (71%)	209 (20%)	95 (9%)	1	11
4	D	442/597 (74%)	325 (74%)	79 (18%)	38 (9%)	1	11
4	H	442/597 (74%)	330 (75%)	73 (16%)	39 (9%)	1	11
All	All	4608/5308 (87%)	3377 (73%)	845 (18%)	386 (8%)	1	12

All (386) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	37	LYS
2	B	29	TYR
2	B	35	GLU
2	B	90	GLU
2	B	94	GLU

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Mol	Chain	Res	Type
2	B	112	GLN
2	B	147	SER
2	B	179	GLY
2	B	254	SER
2	B	260	GLN
2	B	267	ASN
2	B	312	PHE
2	B	354	GLY
2	B	363	THR
2	B	370	ILE
3	C	551	LYS
3	C	589	PRO
3	C	608	LYS
3	C	642	PHE
3	C	646	VAL
3	C	747	LYS
3	C	899	PRO
3	C	1143	PRO
3	C	1149	LYS
3	C	1150	LYS
3	C	1186	LEU
3	C	1243	PRO
3	C	1244	THR
3	C	1250	HIS
3	C	1254	ASP
3	C	1445	GLY
3	C	1446	TYR
4	D	157	PRO
4	D	198	CYS
4	D	201	ALA
4	D	209	MET
4	D	412	GLY
4	D	444	ASP
4	D	457	SER
4	D	577	ARG
1	E	37	LYS
2	F	35	GLU
2	F	90	GLU
2	F	94	GLU
2	F	112	GLN
2	F	147	SER
2	F	179	GLY

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Mol	Chain	Res	Type
2	F	254	SER
2	F	260	GLN
2	F	267	ASN
2	F	312	PHE
2	F	354	GLY
2	F	363	THR
3	G	551	LYS
3	G	589	PRO
3	G	608	LYS
3	G	642	PHE
3	G	646	VAL
3	G	747	LYS
3	G	760	ASN
3	G	776	MET
3	G	899	PRO
3	G	1143	PRO
3	G	1149	LYS
3	G	1150	LYS
3	G	1222	ARG
3	G	1243	PRO
3	G	1244	THR
3	G	1250	HIS
3	G	1254	ASP
3	G	1445	GLY
3	G	1446	TYR
4	H	157	PRO
4	H	198	CYS
4	H	201	ALA
4	H	209	MET
4	H	412	GLY
4	H	444	ASP
4	H	457	SER
1	A	223	PHE
1	A	411	LEU
2	B	23	PRO
2	B	84	SER
2	B	85	TYR
2	B	137	LYS
2	B	149	LEU
2	B	171	PRO
2	B	352	SER
2	B	355	LYS

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Mol	Chain	Res	Type
2	B	356	GLU
2	B	359	ARG
2	B	386	PHE
3	C	559	ALA
3	C	606	ASN
3	C	660	SER
3	C	746	TRP
3	C	760	ASN
3	C	776	MET
3	C	795	ALA
3	C	958	GLY
3	C	969	ALA
3	C	1003	THR
3	C	1011	ASN
3	C	1094	PHE
3	C	1096	ILE
3	C	1119	ILE
3	C	1132	GLN
3	C	1148	ASP
3	C	1161	ILE
3	C	1210	TYR
3	C	1219	VAL
3	C	1222	ARG
3	C	1306	SER
3	C	1345	TRP
3	C	1409	THR
4	D	167	ARG
4	D	200	GLU
4	D	280	SER
4	D	364	ILE
4	D	401	ILE
4	D	408	THR
4	D	429	VAL
4	D	475	ASP
4	D	515	GLN
4	D	541	PRO
4	D	545	ARG
4	D	547	PHE
4	D	586	ARG
1	E	52	ASP
1	E	57	TYR
1	E	196	GLN

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Mol	Chain	Res	Type
1	E	233	ILE
1	E	249	GLU
2	F	23	PRO
2	F	29	TYR
2	F	84	SER
2	F	85	TYR
2	F	137	LYS
2	F	149	LEU
2	F	171	PRO
2	F	352	SER
2	F	355	LYS
2	F	356	GLU
2	F	359	ARG
2	F	370	ILE
2	F	386	PHE
3	G	403	GLU
3	G	488	LEU
3	G	559	ALA
3	G	606	ASN
3	G	660	SER
3	G	746	TRP
3	G	766	LEU
3	G	795	ALA
3	G	864	LEU
3	G	958	GLY
3	G	969	ALA
3	G	1003	THR
3	G	1011	ASN
3	G	1026	LYS
3	G	1094	PHE
3	G	1096	ILE
3	G	1119	ILE
3	G	1132	GLN
3	G	1148	ASP
3	G	1161	ILE
3	G	1186	LEU
3	G	1210	TYR
3	G	1306	SER
3	G	1345	TRP
3	G	1409	THR
4	H	167	ARG
4	H	200	GLU

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Mol	Chain	Res	Type
4	H	257	ILE
4	H	364	ILE
4	H	401	ILE
4	H	408	THR
4	H	429	VAL
4	H	475	ASP
4	H	545	ARG
4	H	547	PHE
4	H	577	ARG
4	H	586	ARG
1	A	52	ASP
1	A	146	LEU
1	A	249	GLU
1	A	299	GLN
2	B	72	SER
2	B	173	LEU
2	B	255	HIS
2	B	263	SER
2	B	311	LEU
2	B	360	THR
2	B	442	ASN
3	C	403	GLU
3	C	479	THR
3	C	488	LEU
3	C	496	PRO
3	C	497	CYS
3	C	553	HIS
3	C	623	LEU
3	C	766	LEU
3	C	864	LEU
3	C	1002	ASP
3	C	1026	LYS
3	C	1027	SER
3	C	1036	LEU
3	C	1090	ASP
3	C	1114	LYS
3	C	1162	ASN
3	C	1185	ASN
3	C	1232	ALA
3	C	1444	SER
4	D	257	ILE
4	D	494	ARG

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Mol	Chain	Res	Type
4	D	496	SER
4	D	546	TYR
4	D	585	GLU
2	F	72	SER
2	F	173	LEU
2	F	255	HIS
2	F	263	SER
2	F	311	LEU
2	F	360	THR
2	F	442	ASN
3	G	479	THR
3	G	496	PRO
3	G	497	CYS
3	G	553	HIS
3	G	623	LEU
3	G	648	LEU
3	G	873	ASN
3	G	1027	SER
3	G	1036	LEU
3	G	1114	LYS
3	G	1162	ASN
3	G	1185	ASN
3	G	1219	VAL
3	G	1232	ALA
3	G	1444	SER
4	H	280	SER
4	H	494	ARG
4	H	515	GLN
4	H	541	PRO
4	H	546	TYR
4	H	581	ALA
4	H	585	GLU
1	A	57	TYR
1	A	252	HIS
2	B	31	GLN
2	B	102	SER
2	B	120	PHE
2	B	287	CYS
2	B	353	PHE
2	B	418	THR
2	B	439	PHE
3	C	462	PRO

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Mol	Chain	Res	Type
3	C	513	TRP
3	C	648	LEU
3	C	791	LEU
3	C	873	ASN
3	C	945	ARG
3	C	953	ALA
3	C	978	TYR
3	C	1256	GLU
3	C	1438	GLU
4	D	202	LEU
4	D	313	LYS
4	D	581	ALA
1	E	245	ALA
1	E	411	LEU
2	F	31	GLN
2	F	102	SER
2	F	287	CYS
2	F	326	PHE
2	F	439	PHE
3	G	462	PRO
3	G	728	ILE
3	G	791	LEU
3	G	945	ARG
3	G	953	ALA
3	G	1002	ASP
3	G	1090	ASP
3	G	1220	VAL
3	G	1256	GLU
3	G	1438	GLU
4	H	202	LEU
4	H	220	LEU
4	H	313	LYS
4	H	496	SER
4	H	518	MET
4	H	579	PRO
2	B	121	ILE
2	B	210	PRO
2	B	326	PHE
2	B	391	PRO
3	C	369	SER
3	C	622	PHE
3	C	743	GLU

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Mol	Chain	Res	Type
3	C	949	LEU
3	C	1115	ARG
3	C	1147	PRO
3	C	1163	SER
3	C	1220	VAL
3	C	1242	ASP
3	C	1340	LYS
3	C	1389	TYR
3	C	1450	ASN
4	D	206	TYR
4	D	219	VAL
4	D	220	LEU
4	D	226	GLU
4	D	579	PRO
1	E	67	GLU
2	F	120	PHE
2	F	181	GLU
2	F	210	PRO
2	F	261	ASP
2	F	391	PRO
3	G	513	TRP
3	G	536	PRO
3	G	622	PHE
3	G	711	LEU
3	G	743	GLU
3	G	978	TYR
3	G	1103	GLN
3	G	1115	ARG
3	G	1163	SER
3	G	1221	ALA
3	G	1242	ASP
3	G	1328	ASN
3	G	1340	LYS
3	G	1436	THR
4	H	206	TYR
4	H	226	GLU
1	A	253	ASP
1	A	275	VAL
2	B	101	ILE
3	C	728	ILE
3	C	763	PRO
3	C	902	PRO

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Mol	Chain	Res	Type
3	C	1436	THR
4	D	433	PRO
4	D	518	MET
1	E	34	GLY
2	F	49	ARG
2	F	353	PHE
2	F	369	LYS
3	G	763	PRO
3	G	949	LEU
3	G	983	ILE
3	G	1147	PRO
3	G	1389	TYR
3	G	1450	ASN
4	H	219	VAL
4	H	267	ASN
4	H	433	PRO
1	A	408	GLY
3	C	936	PRO
4	D	532	PRO
2	F	385	PRO
3	G	936	PRO
3	G	1006	ILE
3	G	1284	PRO
4	H	532	PRO
2	B	240	VAL
2	B	385	PRO
3	C	536	PRO
4	D	179	GLY
1	E	194	GLY
2	F	101	ILE
2	F	411	ILE
3	G	902	PRO
2	B	364	PRO
2	B	444	PRO
3	C	849	VAL
3	C	971	PRO
3	C	1006	ILE
2	F	121	ILE
2	F	240	VAL
2	F	364	PRO
2	F	444	PRO
3	G	971	PRO

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Mol	Chain	Res	Type
4	H	179	GLY
2	F	375	PRO
3	G	849	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	A	363/393 (92%)	322 (89%)	41 (11%)	6	33
1	E	363/393 (92%)	324 (89%)	39 (11%)	7	36
2	B	394/459 (86%)	326 (83%)	68 (17%)	2	14
2	F	394/459 (86%)	329 (84%)	65 (16%)	2	17
3	C	962/1013 (95%)	785 (82%)	177 (18%)	2	11
3	G	962/1013 (95%)	780 (81%)	182 (19%)	1	11
4	D	390/526 (74%)	314 (80%)	76 (20%)	1	10
4	H	390/526 (74%)	312 (80%)	78 (20%)	1	9
All	All	4218/4782 (88%)	3492 (83%)	726 (17%)	2	15

All (726) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	50	LYS
1	A	51	ASP
1	A	63	GLN
1	A	67	GLU
1	A	76	TYR
1	A	89	ASN
1	A	91	HIS
1	A	92	ASN
1	A	96	LEU
1	A	105	GLU
1	A	115	TYR
1	A	117	ASP

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Mol	Chain	Res	Type
1	A	147	LYS
1	A	149	ASP
1	A	154	HIS
1	A	167	CYS
1	A	171	ASP
1	A	173	SER
1	A	179	SER
1	A	192	VAL
1	A	210	PRO
1	A	215	SER
1	A	221	LYS
1	A	222	TYR
1	A	232	ASP
1	A	240	TRP
1	A	253	ASP
1	A	256	GLN
1	A	257	GLN
1	A	260	GLN
1	A	270	GLU
1	A	271	HIS
1	A	280	GLN
1	A	291	TRP
1	A	300	TYR
1	A	338	LYS
1	A	342	PHE
1	A	345	PHE
1	A	354	CYS
1	A	355	ARG
1	A	393	LYS
2	B	25	CYS
2	B	27	GLN
2	B	37	ILE
2	B	43	GLU
2	B	62	SER
2	B	78	LEU
2	B	85	TYR
2	B	86	ARG
2	B	89	LEU
2	B	99	ASP
2	B	105	ILE
2	B	118	ARG
2	B	121	ILE

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Mol	Chain	Res	Type
2	B	126	ASP
2	B	132	PHE
2	B	134	ILE
2	B	142	ASP
2	B	146	ASP
2	B	154	ILE
2	B	159	LYS
2	B	173	LEU
2	B	184	TYR
2	B	186	ILE
2	B	190	ASP
2	B	192	LEU
2	B	209	VAL
2	B	211	LEU
2	B	214	ILE
2	B	217	ILE
2	B	227	SER
2	B	235	ARG
2	B	241	GLN
2	B	243	ASP
2	B	247	GLN
2	B	249	LEU
2	B	256	SER
2	B	257	TYR
2	B	258	THR
2	B	260	GLN
2	B	262	TYR
2	B	264	THR
2	B	268	VAL
2	B	282	LYS
2	B	284	PHE
2	B	298	ASN
2	B	320	LEU
2	B	324	LEU
2	B	355	LYS
2	B	360	THR
2	B	361	ASP
2	B	362	TYR
2	B	364	PRO
2	B	368	LEU
2	B	382	HIS
2	B	387	ARG

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Mol	Chain	Res	Type
2	B	390	ASP
2	B	391	PRO
2	B	392	GLU
2	B	399	GLN
2	B	418	THR
2	B	427	TYR
2	B	429	GLU
2	B	440	SER
2	B	444	PRO
2	B	447	PHE
2	B	450	GLU
2	B	454	ILE
2	B	455	LEU
3	C	341	PHE
3	C	343	PHE
3	C	354	ASN
3	C	362	PHE
3	C	369	SER
3	C	375	SER
3	C	387	LEU
3	C	398	LEU
3	C	410	MET
3	C	423	THR
3	C	428	MET
3	C	430	PHE
3	C	446	VAL
3	C	457	TYR
3	C	476	VAL
3	C	479	THR
3	C	494	LYS
3	C	496	PRO
3	C	503	SER
3	C	506	LEU
3	C	507	LEU
3	C	519	MET
3	C	553	HIS
3	C	555	ASN
3	C	563	LEU
3	C	568	PHE
3	C	579	PHE
3	C	580	GLN
3	C	582	HIS

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Mol	Chain	Res	Type
3	C	584	CYS
3	C	585	VAL
3	C	586	VAL
3	C	593	ILE
3	C	606	ASN
3	C	610	GLU
3	C	619	LEU
3	C	632	ASP
3	C	635	VAL
3	C	642	PHE
3	C	647	LEU
3	C	648	LEU
3	C	654	CYS
3	C	662	ILE
3	C	667	ARG
3	C	681	GLU
3	C	682	ARG
3	C	683	ASN
3	C	701	ILE
3	C	702	ARG
3	C	703	CYS
3	C	718	THR
3	C	719	GLU
3	C	723	ILE
3	C	726	GLU
3	C	730	ASN
3	C	732	TYR
3	C	740	TYR
3	C	741	LEU
3	C	751	PHE
3	C	756	MET
3	C	759	LEU
3	C	762	LEU
3	C	764	LEU
3	C	775	ILE
3	C	780	LEU
3	C	784	ARG
3	C	785	SER
3	C	797	TYR
3	C	800	ASN
3	C	806	LYS
3	C	807	GLN

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Mol	Chain	Res	Type
3	C	808	ILE
3	C	843	LEU
3	C	861	PHE
3	C	863	SER
3	C	864	LEU
3	C	865	TYR
3	C	901	LEU
3	C	903	ASP
3	C	905	SER
3	C	915	ILE
3	C	918	LEU
3	C	935	ASN
3	C	937	ASP
3	C	939	ILE
3	C	946	GLN
3	C	954	ASN
3	C	959	CYS
3	C	972	LEU
3	C	975	LEU
3	C	977	THR
3	C	984	LEU
3	C	1005	SER
3	C	1014	ASN
3	C	1027	SER
3	C	1035	LEU
3	C	1036	LEU
3	C	1038	ILE
3	C	1041	ASP
3	C	1048	LEU
3	C	1050	LEU
3	C	1065	ASP
3	C	1068	TYR
3	C	1073	GLU
3	C	1077	LEU
3	C	1078	ASP
3	C	1083	ASP
3	C	1085	CYS
3	C	1086	ASP
3	C	1090	ASP
3	C	1095	VAL
3	C	1096	ILE
3	C	1101	SER

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Mol	Chain	Res	Type
3	C	1105	ARG
3	C	1106	ASP
3	C	1130	VAL
3	C	1139	LEU
3	C	1157	VAL
3	C	1176	SER
3	C	1185	ASN
3	C	1198	LEU
3	C	1199	GLN
3	C	1206	ILE
3	C	1222	ARG
3	C	1231	ASP
3	C	1242	ASP
3	C	1247	ARG
3	C	1249	HIS
3	C	1251	TYR
3	C	1252	HIS
3	C	1257	ASN
3	C	1266	GLN
3	C	1268	THR
3	C	1271	GLU
3	C	1278	ARG
3	C	1288	THR
3	C	1290	ASN
3	C	1291	ILE
3	C	1302	ASP
3	C	1309	ARG
3	C	1310	CYS
3	C	1311	SER
3	C	1316	LYS
3	C	1318	SER
3	C	1320	LEU
3	C	1327	SER
3	C	1328	ASN
3	C	1332	MET
3	C	1345	TRP
3	C	1354	ARG
3	C	1362	LEU
3	C	1364	PHE
3	C	1369	PRO
3	C	1372	PRO
3	C	1374	CYS

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Mol	Chain	Res	Type
3	C	1381	PRO
3	C	1384	SER
3	C	1389	TYR
3	C	1393	CYS
3	C	1397	TYR
3	C	1398	ILE
3	C	1403	CYS
3	C	1406	GLU
3	C	1408	LEU
3	C	1410	THR
3	C	1411	ASP
3	C	1415	ASP
3	C	1416	LYS
3	C	1419	LYS
3	C	1420	GLN
3	C	1422	PHE
3	C	1423	THR
3	C	1424	PRO
3	C	1434	LYS
3	C	1440	PHE
3	C	1441	LEU
3	C	1446	TYR
4	D	157	PRO
4	D	158	SER
4	D	164	ARG
4	D	166	ASN
4	D	178	GLN
4	D	185	ARG
4	D	193	LEU
4	D	198	CYS
4	D	202	LEU
4	D	206	TYR
4	D	210	PHE
4	D	212	LYS
4	D	224	ILE
4	D	227	LEU
4	D	236	LYS
4	D	251	VAL
4	D	254	LEU
4	D	256	GLN
4	D	261	SER
4	D	266	ASN

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Mol	Chain	Res	Type
4	D	271	ILE
4	D	279	SER
4	D	290	GLU
4	D	292	LYS
4	D	302	VAL
4	D	305	GLU
4	D	307	ILE
4	D	312	ARG
4	D	315	VAL
4	D	319	LEU
4	D	329	GLN
4	D	333	GLU
4	D	341	MET
4	D	342	VAL
4	D	344	VAL
4	D	346	CYS
4	D	348	PRO
4	D	351	THR
4	D	373	ASP
4	D	390	GLU
4	D	400	ASP
4	D	411	GLU
4	D	414	ARG
4	D	421	VAL
4	D	435	TYR
4	D	440	PHE
4	D	444	ASP
4	D	447	ARG
4	D	450	LYS
4	D	454	GLN
4	D	456	VAL
4	D	476	LEU
4	D	477	LEU
4	D	480	LEU
4	D	491	THR
4	D	492	SER
4	D	496	SER
4	D	498	ILE
4	D	510	PRO
4	D	511	LEU
4	D	513	PRO
4	D	518	MET

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Mol	Chain	Res	Type
4	D	526	TYR
4	D	527	VAL
4	D	538	LEU
4	D	540	ILE
4	D	541	PRO
4	D	542	SER
4	D	546	TYR
4	D	552	LEU
4	D	561	ARG
4	D	571	PHE
4	D	574	LEU
4	D	575	TYR
4	D	582	ASP
4	D	586	ARG
1	E	2	GLU
1	E	5	ASP
1	E	38	ASN
1	E	39	TYR
1	E	41	GLN
1	E	50	LYS
1	E	51	ASP
1	E	55	ILE
1	E	57	TYR
1	E	65	ASP
1	E	89	ASN
1	E	94	VAL
1	E	105	GLU
1	E	108	PHE
1	E	110	ILE
1	E	122	CYS
1	E	167	CYS
1	E	186	VAL
1	E	191	LEU
1	E	196	GLN
1	E	203	HIS
1	E	221	LYS
1	E	222	TYR
1	E	238	GLU
1	E	249	GLU
1	E	253	ASP
1	E	256	GLN
1	E	270	GLU

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Mol	Chain	Res	Type
1	E	280	GLN
1	E	283	ILE
1	E	291	TRP
1	E	313	ILE
1	E	354	CYS
1	E	355	ARG
1	E	379	ARG
1	E	393	LYS
1	E	399	LEU
1	E	402	LEU
1	E	412	LYS
2	F	26	LEU
2	F	27	GLN
2	F	33	PRO
2	F	37	ILE
2	F	57	GLU
2	F	76	SER
2	F	78	LEU
2	F	84	SER
2	F	85	TYR
2	F	86	ARG
2	F	91	ASP
2	F	98	ARG
2	F	99	ASP
2	F	111	CYS
2	F	113	SER
2	F	118	ARG
2	F	122	GLN
2	F	124	GLU
2	F	126	ASP
2	F	132	PHE
2	F	138	ASP
2	F	142	ASP
2	F	151	PHE
2	F	154	ILE
2	F	155	SER
2	F	159	LYS
2	F	172	SER
2	F	181	GLU
2	F	184	TYR
2	F	190	ASP
2	F	214	ILE

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Mol	Chain	Res	Type
2	F	217	ILE
2	F	221	GLU
2	F	235	ARG
2	F	241	GLN
2	F	247	GLN
2	F	257	TYR
2	F	262	TYR
2	F	264	THR
2	F	268	VAL
2	F	274	ASP
2	F	279	LEU
2	F	280	SER
2	F	283	SER
2	F	301	LEU
2	F	319	THR
2	F	325	GLN
2	F	329	GLN
2	F	355	LYS
2	F	360	THR
2	F	362	TYR
2	F	364	PRO
2	F	368	LEU
2	F	382	HIS
2	F	384	CYS
2	F	390	ASP
2	F	403	ILE
2	F	404	SER
2	F	405	PRO
2	F	412	LEU
2	F	413	ASP
2	F	427	TYR
2	F	444	PRO
2	F	450	GLU
2	F	454	ILE
3	G	339	GLN
3	G	341	PHE
3	G	368	GLU
3	G	372	THR
3	G	374	VAL
3	G	375	SER
3	G	402	LYS
3	G	410	MET

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Mol	Chain	Res	Type
3	G	411	LYS
3	G	428	MET
3	G	430	PHE
3	G	468	LEU
3	G	473	PHE
3	G	486	LEU
3	G	492	LYS
3	G	494	LYS
3	G	496	PRO
3	G	500	GLU
3	G	507	LEU
3	G	510	PRO
3	G	523	PRO
3	G	543	SER
3	G	548	GLN
3	G	555	ASN
3	G	558	ILE
3	G	563	LEU
3	G	568	PHE
3	G	579	PHE
3	G	583	PHE
3	G	584	CYS
3	G	586	VAL
3	G	591	ASP
3	G	594	PHE
3	G	603	GLU
3	G	606	ASN
3	G	610	GLU
3	G	616	ARG
3	G	619	LEU
3	G	635	VAL
3	G	642	PHE
3	G	650	ARG
3	G	653	VAL
3	G	662	ILE
3	G	668	SER
3	G	669	ASN
3	G	681	GLU
3	G	682	ARG
3	G	683	ASN
3	G	685	THR
3	G	701	ILE

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Mol	Chain	Res	Type
3	G	703	CYS
3	G	704	LYS
3	G	718	THR
3	G	723	ILE
3	G	732	TYR
3	G	738	LEU
3	G	745	THR
3	G	754	GLN
3	G	760	ASN
3	G	762	LEU
3	G	764	LEU
3	G	770	ASN
3	G	776	MET
3	G	779	THR
3	G	780	LEU
3	G	784	ARG
3	G	786	GLU
3	G	791	LEU
3	G	800	ASN
3	G	806	LYS
3	G	843	LEU
3	G	853	ASP
3	G	857	LEU
3	G	861	PHE
3	G	864	LEU
3	G	865	TYR
3	G	868	ILE
3	G	875	CYS
3	G	903	ASP
3	G	918	LEU
3	G	932	GLN
3	G	935	ASN
3	G	937	ASP
3	G	938	LEU
3	G	939	ILE
3	G	941	GLN
3	G	943	ASP
3	G	946	GLN
3	G	951	LEU
3	G	952	THR
3	G	956	MET
3	G	959	CYS

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Mol	Chain	Res	Type
3	G	975	LEU
3	G	984	LEU
3	G	1010	THR
3	G	1014	ASN
3	G	1024	LYS
3	G	1036	LEU
3	G	1039	ASP
3	G	1041	ASP
3	G	1049	LEU
3	G	1050	LEU
3	G	1055	TYR
3	G	1060	VAL
3	G	1068	TYR
3	G	1077	LEU
3	G	1078	ASP
3	G	1083	ASP
3	G	1084	TRP
3	G	1085	CYS
3	G	1087	LEU
3	G	1093	ASN
3	G	1096	ILE
3	G	1099	ILE
3	G	1102	ASP
3	G	1105	ARG
3	G	1106	ASP
3	G	1118	GLU
3	G	1130	VAL
3	G	1139	LEU
3	G	1144	GLN
3	G	1181	GLN
3	G	1182	ASP
3	G	1185	ASN
3	G	1186	LEU
3	G	1187	THR
3	G	1189	SER
3	G	1198	LEU
3	G	1199	GLN
3	G	1202	ASP
3	G	1203	ASN
3	G	1206	ILE
3	G	1214	GLN
3	G	1219	VAL

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Mol	Chain	Res	Type
3	G	1228	ASP
3	G	1242	ASP
3	G	1244	THR
3	G	1251	TYR
3	G	1257	ASN
3	G	1258	ASP
3	G	1266	GLN
3	G	1268	THR
3	G	1282	PRO
3	G	1286	CYS
3	G	1290	ASN
3	G	1297	ASP
3	G	1309	ARG
3	G	1313	ILE
3	G	1316	LYS
3	G	1318	SER
3	G	1326	LEU
3	G	1327	SER
3	G	1330	LEU
3	G	1331	ILE
3	G	1332	MET
3	G	1340	LYS
3	G	1347	ILE
3	G	1354	ARG
3	G	1355	ASN
3	G	1357	THR
3	G	1358	ARG
3	G	1360	LEU
3	G	1364	PHE
3	G	1366	ARG
3	G	1367	THR
3	G	1372	PRO
3	G	1374	CYS
3	G	1376	LYS
3	G	1379	LEU
3	G	1386	LYS
3	G	1397	TYR
3	G	1398	ILE
3	G	1409	THR
3	G	1410	THR
3	G	1411	ASP
3	G	1419	LYS

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Mol	Chain	Res	Type
3	G	1422	PHE
3	G	1427	LEU
3	G	1431	ARG
3	G	1441	LEU
3	G	1443	ARG
3	G	1446	TYR
4	H	157	PRO
4	H	158	SER
4	H	164	ARG
4	H	166	ASN
4	H	171	VAL
4	H	173	SER
4	H	174	PHE
4	H	178	GLN
4	H	185	ARG
4	H	193	LEU
4	H	198	CYS
4	H	202	LEU
4	H	203	THR
4	H	206	TYR
4	H	209	MET
4	H	210	PHE
4	H	230	GLU
4	H	244	LEU
4	H	249	GLU
4	H	253	LEU
4	H	259	CYS
4	H	261	SER
4	H	266	ASN
4	H	268	LYS
4	H	271	ILE
4	H	279	SER
4	H	283	GLN
4	H	286	VAL
4	H	290	GLU
4	H	292	LYS
4	H	294	TYR
4	H	304	MET
4	H	310	THR
4	H	319	LEU
4	H	341	MET
4	H	342	VAL

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Mol	Chain	Res	Type
4	H	351	THR
4	H	355	ILE
4	H	367	ILE
4	H	369	HIS
4	H	373	ASP
4	H	376	ILE
4	H	378	PHE
4	H	382	LEU
4	H	387	GLU
4	H	403	LYS
4	H	419	HIS
4	H	423	VAL
4	H	429	VAL
4	H	435	TYR
4	H	440	PHE
4	H	441	SER
4	H	447	ARG
4	H	456	VAL
4	H	458	GLU
4	H	461	SER
4	H	472	THR
4	H	474	THR
4	H	475	ASP
4	H	477	LEU
4	H	496	SER
4	H	511	LEU
4	H	515	GLN
4	H	518	MET
4	H	522	TYR
4	H	527	VAL
4	H	531	LEU
4	H	538	LEU
4	H	540	ILE
4	H	546	TYR
4	H	549	LYS
4	H	562	LEU
4	H	570	THR
4	H	571	PHE
4	H	576	LEU
4	H	582	ASP
4	H	586	ARG
4	H	591	ILE



Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (180) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	58	GLN
1	A	74	ASN
1	A	89	ASN
1	A	90	GLN
1	A	154	HIS
1	A	236	ASN
1	A	257	GLN
1	A	260	GLN
1	A	267	GLN
1	A	324	HIS
1	A	337	GLN
1	A	401	ASN
2	B	24	HIS
2	B	27	GLN
2	B	31	GLN
2	B	71	GLN
2	B	112	GLN
2	B	122	GLN
2	B	141	GLN
2	B	150	GLN
2	B	164	GLN
2	B	252	HIS
2	B	255	HIS
2	B	260	GLN
2	B	290	GLN
2	B	298	ASN
2	B	329	GLN
2	B	374	ASN
2	B	378	GLN
2	B	399	GLN
2	B	425	GLN
2	B	443	HIS
2	B	445	ASN
2	B	452	GLN
3	C	354	ASN
3	C	382	ASN
3	C	475	HIS
3	C	555	ASN
3	C	566	HIS
3	C	606	ASN
3	C	627	HIS

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Mol	Chain	Res	Type
3	C	649	GLN
3	C	652	ASN
3	C	669	ASN
3	C	683	ASN
3	C	714	GLN
3	C	729	GLN
3	C	730	ASN
3	C	744	HIS
3	C	760	ASN
3	C	770	ASN
3	C	800	ASN
3	C	862	ASN
3	C	870	GLN
3	C	927	GLN
3	C	931	GLN
3	C	932	GLN
3	C	935	ASN
3	C	941	GLN
3	C	946	GLN
3	C	954	ASN
3	C	1011	ASN
3	C	1014	ASN
3	C	1023	ASN
3	C	1098	GLN
3	C	1111	ASN
3	C	1122	ASN
3	C	1154	HIS
3	C	1181	GLN
3	C	1190	GLN
3	C	1197	GLN
3	C	1201	GLN
3	C	1214	GLN
3	C	1250	HIS
3	C	1257	ASN
3	C	1266	GLN
3	C	1290	ASN
3	C	1294	ASN
3	C	1312	ASN
3	C	1328	ASN
3	C	1359	HIS
3	C	1380	GLN
3	C	1435	ASN

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Mol	Chain	Res	Type
4	D	166	ASN
4	D	178	GLN
4	D	248	GLN
4	D	256	GLN
4	D	283	GLN
4	D	339	GLN
4	D	386	HIS
4	D	388	GLN
4	D	419	HIS
4	D	437	GLN
4	D	452	GLN
4	D	515	GLN
4	D	587	GLN
4	D	594	GLN
1	E	25	GLN
1	E	38	ASN
1	E	41	GLN
1	E	42	HIS
1	E	58	GLN
1	E	86	HIS
1	E	89	ASN
1	E	217	ASN
1	E	236	ASN
1	E	260	GLN
1	E	267	GLN
1	E	280	GLN
1	E	337	GLN
1	E	341	GLN
1	E	401	ASN
2	F	27	GLN
2	F	31	GLN
2	F	58	ASN
2	F	71	GLN
2	F	112	GLN
2	F	123	GLN
2	F	150	GLN
2	F	164	GLN
2	F	241	GLN
2	F	247	GLN
2	F	252	HIS
2	F	255	HIS
2	F	260	GLN

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Mol	Chain	Res	Type
2	F	267	ASN
2	F	275	GLN
2	F	298	ASN
2	F	329	GLN
2	F	374	ASN
2	F	399	GLN
2	F	421	GLN
2	F	443	HIS
2	F	445	ASN
3	G	354	ASN
3	G	373	HIS
3	G	490	ASN
3	G	548	GLN
3	G	552	ASN
3	G	554	GLN
3	G	555	ASN
3	G	566	HIS
3	G	637	HIS
3	G	652	ASN
3	G	669	ASN
3	G	683	ASN
3	G	730	ASN
3	G	770	ASN
3	G	788	ASN
3	G	800	ASN
3	G	862	ASN
3	G	870	GLN
3	G	873	ASN
3	G	931	GLN
3	G	932	GLN
3	G	935	ASN
3	G	946	GLN
3	G	1011	ASN
3	G	1014	ASN
3	G	1181	GLN
3	G	1199	GLN
3	G	1214	GLN
3	G	1250	HIS
3	G	1257	ASN
3	G	1266	GLN
3	G	1359	HIS
3	G	1420	GLN

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Mol	Chain	Res	Type
3	G	1435	ASN
4	H	166	ASN
4	H	178	GLN
4	H	248	GLN
4	H	283	GLN
4	H	339	GLN
4	H	368	ASN
4	H	386	HIS
4	H	437	GLN
4	H	465	ASN
4	H	515	GLN
4	H	530	GLN
4	H	587	GLN

### 5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

## 5.5 Carbohydrates [i](#)

There are no carbohydrates in this entry.

## 5.6 Ligand geometry [i](#)

Of 8 ligands modelled in this entry, 6 are monoatomic - leaving 2 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z  > 2$	Counts	RMSZ	$\# Z  > 2$
6	SF4	B	601	2	0,12,12	0.00	-	0,24,24	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
6	SF4	F	601	2	0,12,12	0.00	-	0,24,24	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
6	SF4	B	601	2	-	0/0/48/48	0/6/5/5
6	SF4	F	601	2	-	0/0/48/48	0/6/5/5

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.

1 monomer is involved in 3 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
6	B	601	SF4	3	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, 95<sup>th</sup> 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 <sup>2</sup> )	Q<0.9
1	A	389/420 (92%)	-0.09	12 (3%) 49 34	39, 101, 121, 137	0
1	E	389/420 (92%)	-0.40	1 (0%) 93 89	45, 98, 115, 136	0
2	B	434/509 (85%)	-0.72	1 (0%) 94 91	5, 61, 112, 135	0
2	F	434/509 (85%)	-0.66	0 100 100	4, 64, 115, 135	0
3	C	1057/1128 (93%)	-0.75	0 100 100	1, 51, 93, 123	0
3	G	1057/1128 (93%)	-0.73	0 100 100	2, 54, 96, 116	0
4	D	444/597 (74%)	-0.70	0 100 100	1, 44, 94, 111	0
4	H	444/597 (74%)	-0.68	1 (0%) 94 91	2, 47, 94, 121	0
All	All	4648/5308 (87%)	-0.64	15 (0%) 93 89	1, 60, 109, 137	0

All (15) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	A	125	ALA	3.6
1	A	360	ILE	2.9
1	A	272	LEU	2.9
1	A	215	SER	2.7
1	A	245	ALA	2.7
1	A	335	ASP	2.7
1	A	246	LEU	2.6
1	A	10	PRO	2.5
1	A	325	PRO	2.5
1	A	380	THR	2.4
1	E	404	LYS	2.4
4	H	155	ALA	2.4
1	A	250	THR	2.3
2	B	172	SER	2.1
1	A	52	ASP	2.1



## 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. The B-factors column lists the minimum, median, 95<sup>th</sup> 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	B-factors( $\text{\AA}^2$ )	Q<0.9
5	ZN	A	501	1/1	0.91	0.04	123,123,123,123	0
5	ZN	E	501	1/1	0.94	0.10	91,91,91,91	0
5	ZN	G	1501	1/1	0.95	0.16	78,78,78,78	0
6	SF4	F	601	8/8	0.97	0.18	1,1,8,18	0
5	ZN	C	1502	1/1	0.97	0.15	26,26,26,26	0
6	SF4	B	601	8/8	0.98	0.18	1,1,2,9	0
5	ZN	G	1502	1/1	0.99	0.12	1,1,1,1	0
5	ZN	C	1501	1/1	0.99	0.14	46,46,46,46	0

## 6.5 Other polymers [i](#)

There are no such residues in this entry.