



wwPDB EM Map/Model Validation Report ⓘ

Sep 14, 2016 – 11:13 AM EDT

PDB ID : 5GL1
EMDB ID: : EMD-9521
Title : Structure of RyR1 in an open state
Authors : Bai, X.C.; Yan, Z.; Wu, J.P.; Yan, N.
Deposited on : 2016-07-07
Resolution : 5.70 Å(reported)

This is a wwPDB EM Map/Model Validation Report for a publicly released PDB/EMDB entry.
For rigid body fitted models, validation errors reported here could stem from errors in the original structure(s) used in the fitting.
We welcome your comments at validation@mail.wwpdb.org
A user guide is available at
<http://wwpdb.org/validation/2016/EMValidationReportHelp>

MolProbity : 4.02b-467
Mogul : unknown
Percentile statistics : 20151230.v01 (using entries in the PDB archive December 30th 2015)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et. al. (1996)
Validation Pipeline (wwPDB-VP) : rb-20027939

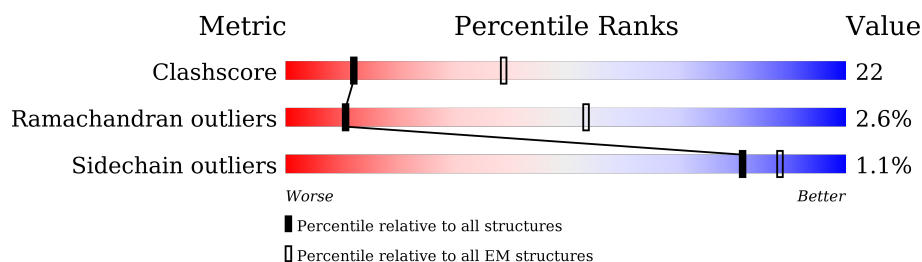
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 5.70 Å.

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



Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	114402	924
Ramachandran outliers	111179	726
Sidechain outliers	111093	686

The table below summarises the geometric issues observed across the polymeric chains. The red, orange, yellow and green segments on the bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$.

Mol	Chain	Length	Quality of chain
1	A	5037	
1	C	5037	
1	E	5037	
1	G	5037	
2	B	108	
2	D	108	
2	F	108	
2	H	108	

2 Entry composition [i](#)

There are 3 unique types of molecules in this entry. The entry contains 110704 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a protein called Ryanodine receptor 1.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	3645	Total	C	N	O	S	0	0
			26843	17063	4667	4956	157		
1	C	3645	Total	C	N	O	S	0	0
			26843	17063	4667	4956	157		
1	E	3645	Total	C	N	O	S	0	0
			26843	17063	4667	4956	157		
1	G	3645	Total	C	N	O	S	0	0
			26843	17063	4667	4956	157		

- Molecule 2 is a protein called Peptidyl-prolyl cis-trans isomerase FKBP1A.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	B	107	Total	C	N	O	S	0	0
			832	527	146	155	4		
2	D	107	Total	C	N	O	S	0	0
			832	527	146	155	4		
2	F	107	Total	C	N	O	S	0	0
			832	527	146	155	4		
2	H	107	Total	C	N	O	S	0	0
			832	527	146	155	4		

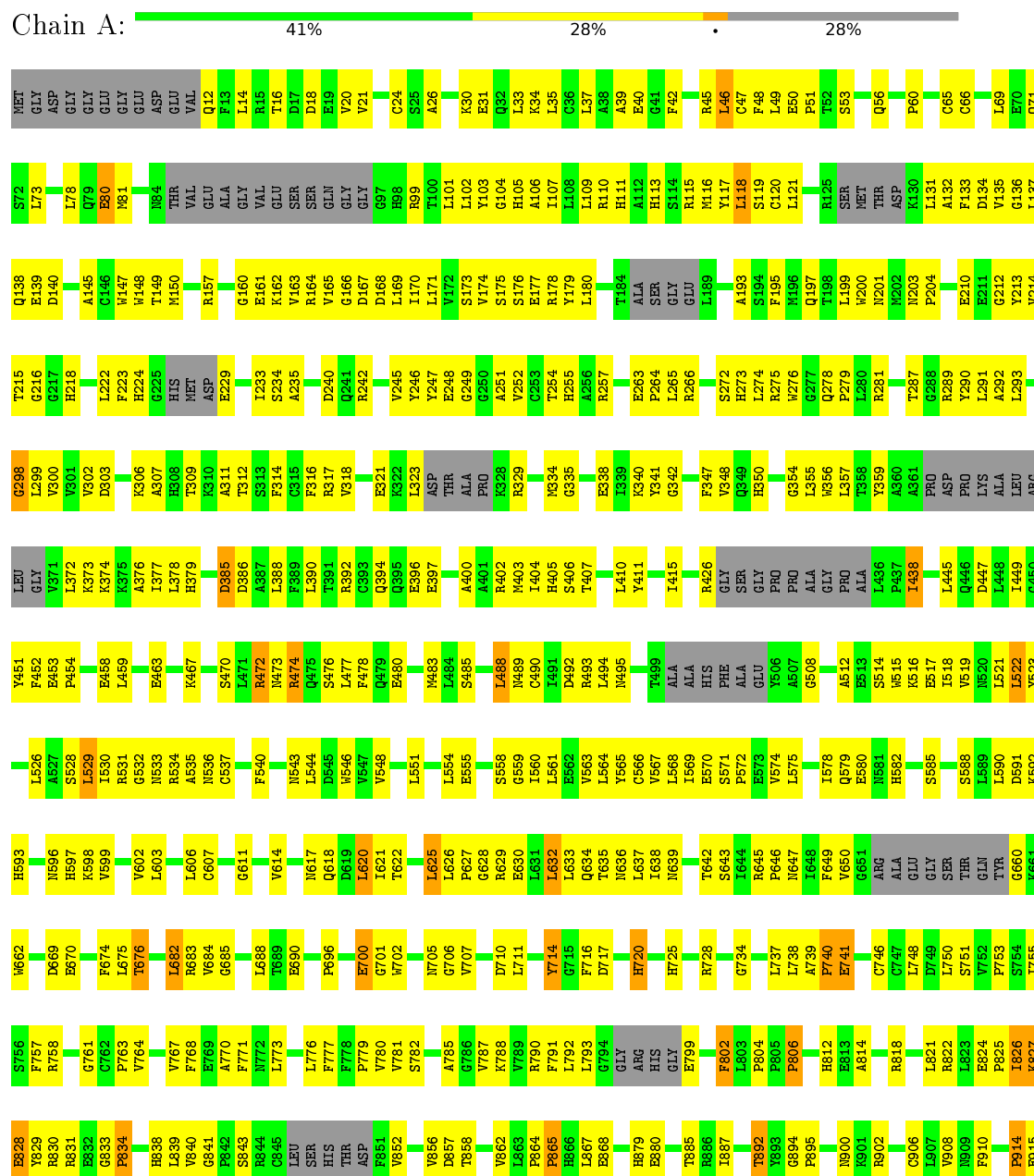
- Molecule 3 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		AltConf
3	G	1	Total	Zn	0
			1	1	
3	A	1	Total	Zn	0
			1	1	
3	C	1	Total	Zn	0
			1	1	
3	E	1	Total	Zn	0
			1	1	

3 Residue-property plots

These plots are drawn for all protein, RNA and DNA chains in the entry. The first graphic for a chain summarises the proportions of errors displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry. 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. 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.

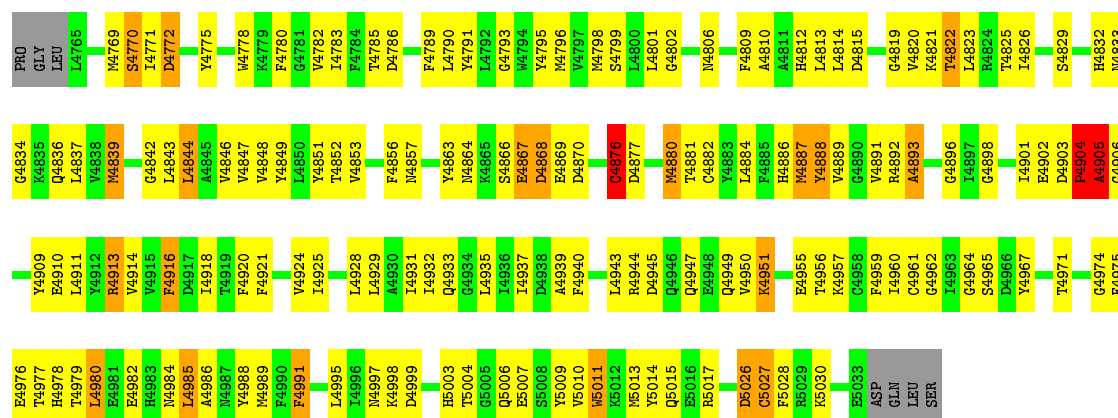
• Molecule 1: Ryanodine receptor 1



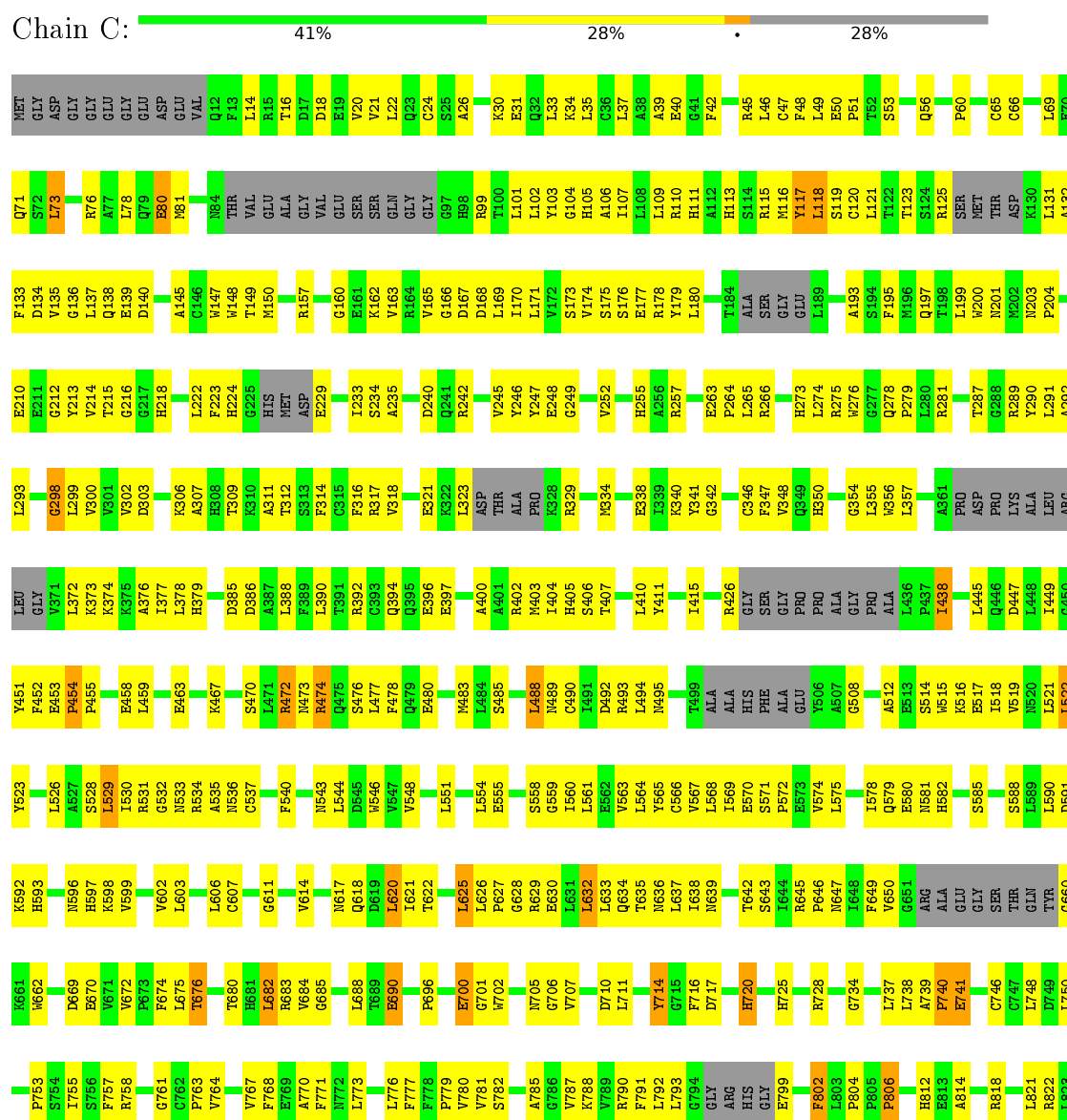



S8504	VAL	A3399	CYS	GLY	HIS	K2928	LYS	GLU	M2608	V2503	A2437	PRO	Q2293	THR	A2137	V2070
T3513	ALA	P3351	ARG	VAL	GLN	F2929	LYS	LYS	A2609	R2508	PRO	LEU	D2294	LYS	L2138	R2071
P3519	ALA	P3360	ASP	THR	THR	L2930	THR	LYS	L2609	R2509	ALA	ARG	L2295	ILE	P2139	L2072
C3525	ARG	G3363	ASP	THR	THR	N2933	THR	THR	CYS	Y2510	GLY	GLY	E2296	PHE	A2141	LYS
A3526	GLU	A3526	ASP	THR	THR	V2937	THR	ASP	THR	GLY	HIS	GLY	K2297	THR	Y2142	LYS
P3527	LEU	P3527	ASP	THR	THR	T2938	THR	ALA	ILE	ILE	ILE	GLY	V2299	PHE	P2146	GLU
ASP	ALA	ASP	ASP	THR	THR	G2940	THR	GLY	R2615	N2514	GLN	SER	C2305	V2229	P2146	GLU
GLN	GLU	GLN	ASP	THR	THR	L2939	THR	GLY	P2616	Q2515	ALA	GLY	G2306	C2232	D2151	PRO
ASP	ALA	ASP	ASP	THR	THR	P2933	THR	F2735	P2631	F2517	LYS	L2377	GLN	C2233	L2155	GLU
ASP	ALA	ASP	ASP	THR	THR	N2937	THR	V2745	N2634	R2518	GLY	A2383	SER	R2234	L2156	GLU
ASP	ALA	ASP	ASP	THR	THR	T2938	THR	P2746	GLU	V2521	R2452	I2386	CYS	F2235	L2166	GLU
ASP	ALA	ASP	ASP	THR	THR	G2940	THR	P2748	ALA	R2453	ARG	I2386	PRO	C2236	C2158	LEU
ASP	ALA	ASP	ASP	THR	THR	L2939	THR	L2751	ALA	R2454	ASP	I2386	LEU	L2237	L2159	PRO
ASP	ALA	ASP	ASP	THR	THR	P2933	THR	D2762	M2639	R2455	ASP	I2386	LEU	F2238	ALA	ALA
ASP	ALA	ASP	ASP	THR	THR	N2937	THR	S2753	P2640	L2466	VAL	I2386	LEU	F2239	L2162	GLU
ASP	ALA	ASP	ASP	THR	THR	F2754	THR	F2757	P2658	L2467	PRO	I2386	LEU	R2244	R2163	GLU
ASP	ALA	ASP	ASP	THR	THR	D2762	THR	D2768	T2658	L2468	ARG	I2386	LEU	Q2245	V2168	LYS
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ASP	ALA	ASP	ASP	THR	THR	N2762	THR	N2763	P2660	L2468	ARG	I2386	LEU	S2252	GLY	V2098
ASP	ALA	ASP	ASP	THR	THR	F2763	THR	F2764	P2660	L2468	ARG	I2386	LEU	S2253	GLY	S2099
ASP	ALA	ASP	ASP	THR	THR	N2764	THR	N2765	P2660	L2468	ARG	I2386	LEU	S2254	GLY	H2100
ASP	ALA	ASP	ASP	THR	THR	F2765	THR	F2766	P2660	L2468	ARG	I2386	LEU	S2255	GLY	M2101
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ASP	ALA	ASP	ASP	THR	THR	N2768	THR	N2769	P2660	L2468	ARG	I2386	LEU	S2258	GLY	R2104
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ASP	ALA	ASP	ASP	THR	THR	F2771	THR	F2772	P2660	L2468	ARG	I2386	LEU	S2261	GLY	Y2110
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ASP	ALA	ASP	ASP	THR	THR	F2773	THR	F2774	P2660	L2468	ARG	I2386	LEU	S2263	GLY	
ASP	ALA	ASP	ASP	THR	THR	N2774	THR	N2775	P2660	L2468	ARG	I2386	LEU	S2264	GLY	P2114
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ASP	ALA	ASP	ASP	THR	THR	N283										



• Molecule 1: Ryanodine receptor 1



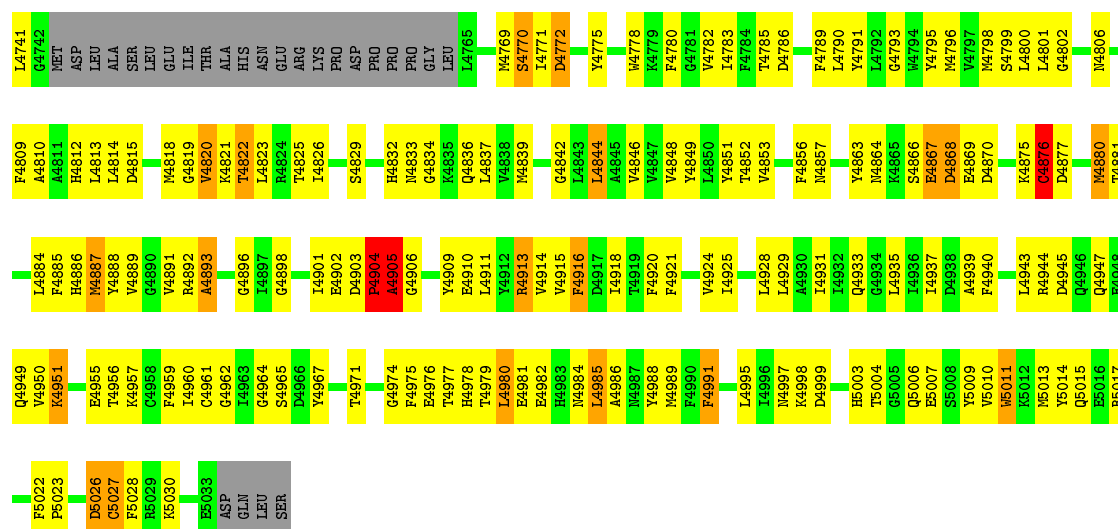




WORLDWIDE PDB
 PROTEIN DATA BANK

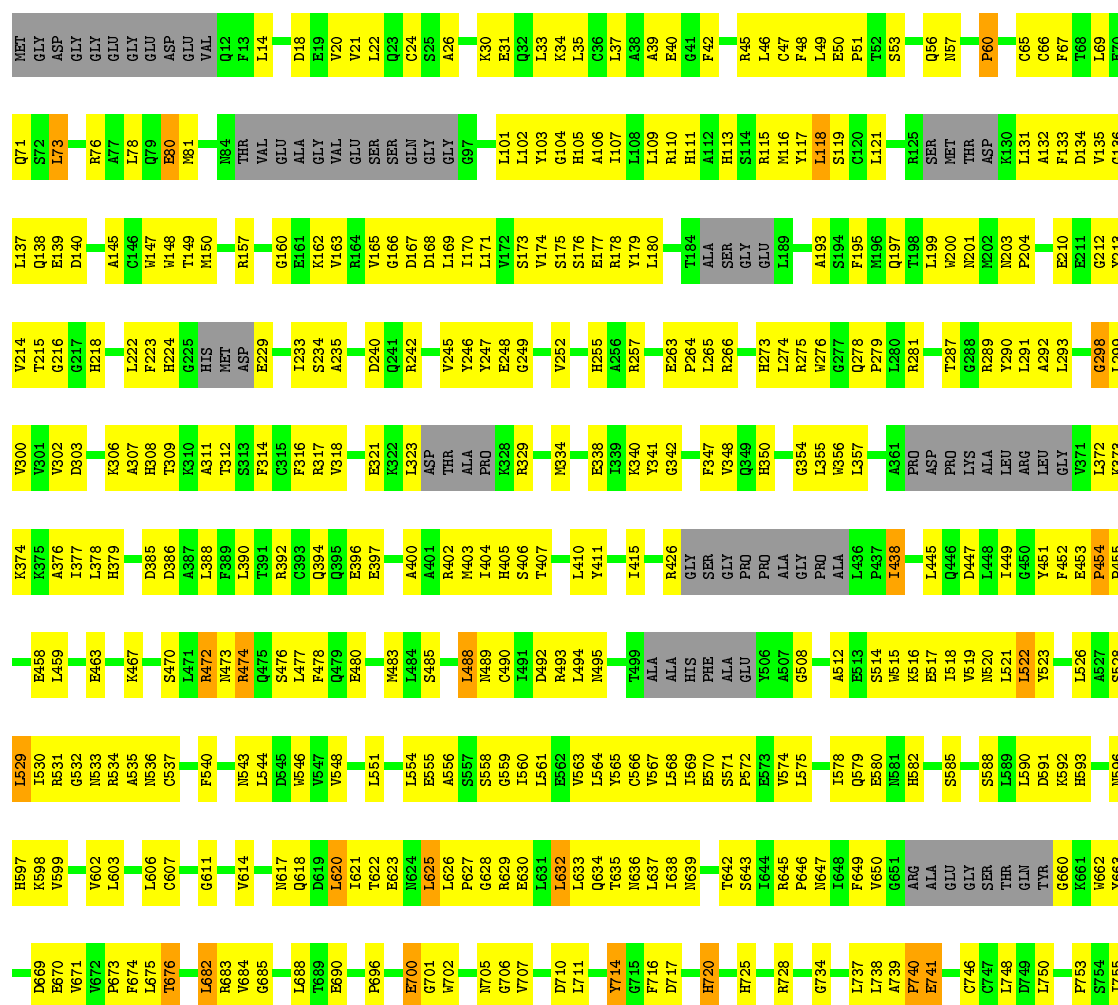
EMDataBank
 Unified Data Resource for 3DEM



• Molecule 1: Ryanodine receptor 1

Chain E: 41% 28% 28%



GLU	R1808	L1667	E1596	PRO	ASP	PRO	GLY	ARG	W1237	E1157	R1087	Y1016	Y1018	Y1019	Y1020	Y1021	Y1022	Y1023	Y1024	Y1025	Y1026	Y1027	Y1028	Y1029	Y1030	Y1031	Y1032	Y1033	Y1034	Y1035	Y1036	Y1037	Y1038	Y1039	Y1040	Y1041	Y1042	Y1043	Y1044	Y1045	Y1046	Y1047	Y1048	Y1049	Y1050	Y1051	Y1052	Y1053	Y1054	Y1055	Y1056	Y1057	Y1058	Y1059	Y1060	Y1061	Y1062	Y1063	Y1064	Y1065	Y1066	Y1067	Y1068	Y1069	Y1070	Y1071	Y1072	Y1073	Y1074	Y1075	Y1076	Y1077	Y1078	Y1079	Y1080	Y1081	Y1082	Y1083	Y1084	Y1085	Y1086	Y1087	Y1088	Y1089	Y1090	Y1091	Y1092	Y1093	Y1094	Y1095	Y1096	Y1097	Y1098	Y1099	Y1100	Y1101	Y1102	Y1103	Y1104	Y1105	Y1106	Y1107	Y1108	Y1109	Y1110	Y1111	Y1112	Y1113	Y1114	Y1115	Y1116	Y1117	Y1118	Y1119	Y1120	Y1121	Y1122	Y1123	Y1124	Y1125	Y1126	Y1127	Y1128	Y1129	Y1130	Y1131	Y1132	Y1133	Y1134	Y1135	Y1136	Y1137	Y1138	Y1139	Y1140	Y1141	Y1142	Y1143	Y1144	Y1145	Y1146	Y1147	Y1148	Y1149	Y1150	Y1151	Y1152	Y1153	Y1154	Y1155	Y1156	Y1157	Y1158	Y1159	Y1160	Y1161	Y1162	Y1163	Y1164	Y1165	Y1166	Y1167	Y1168	Y1169	Y1170	Y1171	Y1172	Y1173	Y1174	Y1175	Y1176	Y1177	Y1178	Y1179	Y1180	Y1181	Y1182	Y1183	Y1184	Y1185	Y1186	Y1187	Y1188	Y1189	Y1190	Y1191	Y1192	Y1193	Y1194	Y1195	Y1196	Y1197	Y1198	Y1199	Y1200	Y1201	Y1202	Y1203	Y1204	Y1205	Y1206	Y1207	Y1208	Y1209	Y1210	Y1211	Y1212	Y1213	Y1214	Y1215	Y1216	Y1217	Y1218	Y1219	Y1220	Y1221	Y1222	Y1223	Y1224	Y1225	Y1226	Y1227	Y1228	Y1229	Y1230	Y1231	Y1232	Y1233	Y1234	Y1235	Y1236	Y1237	Y1238	Y1239	Y1240	Y1241	Y1242	Y1243	Y1244	Y1245	Y1246	Y1247	Y1248	Y1249	Y1250	Y1251	Y1252	Y1253	Y1254	Y1255	Y1256	Y1257	Y1258	Y1259	Y1260	Y1261	Y1262	Y1263	Y1264	Y1265	Y1266	Y1267	Y1268	Y1269	Y1270	Y1271	Y1272	Y1273	Y1274	Y1275	Y1276	Y1277	Y1278	Y1279	Y1280	Y1281	Y1282	Y1283	Y1284	Y1285	Y1286	Y1287	Y1288	Y1289	Y1290	Y1291	Y1292	Y1293	Y1294	Y1295	Y1296	Y1297	Y1298	Y1299	Y1300	Y1301	Y1302	Y1303	Y1304	Y1305	Y1306	Y1307	Y1308	Y1309	Y1310	Y1311	Y1312	Y1313	Y1314	Y1315	Y1316	Y1317	Y1318	Y1319	Y1320	Y1321	Y1322	Y1323	Y1324	Y1325	Y1326	Y1327	Y1328	Y1329	Y1330	Y1331	Y1332	Y1333	Y1334	Y1335	Y1336	Y1337	Y1338	Y1339	Y1340	Y1341	Y1342	Y1343	Y1344	Y1345	Y1346	Y1347	Y1348	Y1349	Y1350	Y1351	Y1352	Y1353	Y1354	Y1355	Y1356	Y1357	Y1358	Y1359	Y1360	Y1361	Y1362	Y1363	Y1364	Y1365	Y1366	Y1367	Y1368	Y1369	Y1370	Y1371	Y1372	Y1373	Y1374	Y1375	Y1376	Y1377	Y1378	Y1379	Y1380	Y1381	Y1382	Y1383	Y1384	Y1385	Y1386	Y1387	Y1388	Y1389	Y1390	Y1391	Y1392	Y1393	Y1394	Y1395	Y1396	Y1397	Y1398	Y1399	Y1400	Y1401	Y1402	Y1403	Y1404	Y1405	Y1406	Y1407	Y1408	Y1409	Y1410	Y1411	Y1412	Y1413	Y1414	Y1415	Y1416	Y1417	Y1418	Y1419	Y1420	Y1421	Y1422	Y1423	Y1424	Y1425	Y1426	Y1427	Y1428	Y1429	Y1430	Y1431	Y1432	Y1433	Y1434	Y1435	Y1436	Y1437	Y1438	Y1439	Y1440	Y1441	Y1442	Y1443	Y1444	Y1445	Y1446	Y1447	Y1448	Y1449	Y1450	Y1451	Y1452	Y1453	Y1454	Y1455	Y1456	Y1457	Y1458	Y1459	Y1460	Y1461	Y1462	Y1463	Y1464	Y1465	Y1466	Y1467	Y1468	Y1469	Y1470	Y1471	Y1472	Y1473	Y1474	Y1475	Y1476	Y1477	Y1478	Y1479	Y1480	Y1481	Y1482	Y1483	Y1484	Y1485	Y1486	Y1487	Y1488	Y1489	Y1490	Y1491	Y1492	Y1493	Y1494	Y1495	Y1496	Y1497	Y1498	Y1499	Y1500	Y1501	Y1502	Y1503	Y1504	Y1505	Y1506	Y1507	Y1508	Y1509	Y1510	Y1511	Y1512	Y1513	Y1514	Y1515	Y1516	Y1517	Y1518	Y1519	Y1520	Y1521	Y1522	Y1523	Y1524	Y1525	Y1526	Y1527	Y1528	Y1529	Y1530	Y1531	Y1532	Y1533	Y1534	Y1535	Y1536	Y1537	Y1538	Y1539	Y1540	Y1541	Y1542	Y1543	Y1544	Y1545	Y1546	Y1547	Y1548	Y1549	Y1550	Y1551	Y1552	Y1553	Y1554	Y1555	Y1556	Y1557	Y1558	Y1559	Y1560	Y1561	Y1562	Y1563	Y1564	Y1565	Y1566	Y1567	Y1568	Y1569	Y1570	Y1571	Y1572	Y1573	Y1574	Y1575	Y1576	Y1577	Y1578	Y1579	Y1580	Y1581	Y1582	Y1583	Y1584	Y1585	Y1586	Y1587	Y1588	Y1589	Y1590	Y1591	Y1592	Y1593	Y1594	Y1595	Y1596	Y1597	Y1598	Y1599	Y1600	Y1601	Y1602	Y1603	Y1604	Y1605	Y1606	Y1607	Y1608	Y1609	Y1610	Y1611	Y1612	Y1613	Y1614	Y1615	Y1616	Y1617	Y1618	Y1619	Y1620	Y1621	Y1622	Y1623	Y1624	Y1625	Y1626	Y1627	Y1628	Y1629	Y1630	Y1631	Y1632	Y1633	Y1634	Y1635	Y1636	Y1637	Y1638	Y1639	Y1640	Y1641	Y1642	Y1643	Y1644	Y1645	Y1646	Y1647	Y1648	Y1649	Y1650	Y1651	Y1652	Y1653	Y1654	Y1655	Y1656	Y1657	Y1658	Y1659	Y1660	Y1661	Y1662	Y1663	Y1664	Y1665	Y1666	Y1667	Y1668	Y1669	Y1670	Y1671	Y1672	Y1673	Y1674	Y1675	Y1676	Y1677	Y1678	Y1679	Y1680	Y1681	Y1682	Y1683	Y1684	Y1685	Y1686	Y1687	Y1688	Y1689	Y1690	Y1691	Y1692	Y1693	Y1694	Y1695	Y1696	Y1697	Y1698	Y1699	Y1700	Y1701	Y1702	Y1703	Y1704	Y1705	Y1706	Y1707	Y1708	Y1709	Y1710	Y1711	Y1712	Y1713	Y1714	Y1715	Y1716	Y1717	Y1718	Y1719	Y1720	Y1721	Y1722	Y1723	Y1724	Y1725	Y1726	Y1727	Y1728	Y1729	Y1730	Y1731	Y1732	Y1733	Y1734	Y1735	Y1736	Y1737	Y1738	Y1739	Y1740	Y1741	Y1742	Y1743	Y1744	Y1745	Y1746	Y1747	Y1748	Y1749	Y1750	Y1751	Y1752	Y1753	Y1754	Y1755	Y1756	Y1757	Y1758	Y1759	Y1760	Y1761	Y1762	Y1763	Y1764	Y1765	Y1766	Y1767	Y1768	Y1769	Y1770	Y1771	Y1772	Y1773	Y1774	Y1775	Y1776	Y1777	Y1778	Y1779	Y1780	Y1781	Y1782	Y1783	Y1784	Y1785	Y1786	Y1787	Y1788	Y1789	Y1790	Y1791	Y1792	Y1793	Y1794	Y1795	Y1796	Y1797	Y1798	Y1799	Y1800	Y1801	Y1802	Y1803	Y1804	Y1805	Y1806	Y1807	Y1808	Y1809	Y1810	Y1811	Y1812	Y1813	Y1814	Y1815	Y1816	Y1817	Y1818	Y1819	Y1820	Y1821	Y1822	Y1823	Y1824	Y1825	Y1826	Y1827	Y1828	Y1829	Y1830	Y1831	Y1832	Y1833	Y1834	Y1835	Y1836	Y1837	Y1838	Y1839	Y1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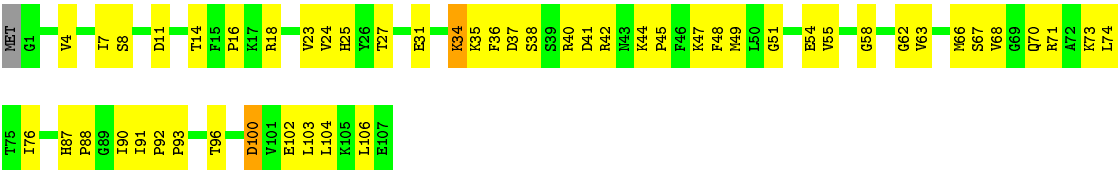



VAL	A2913	K2814	P2711	ALA	MET	HIS	V2352	T2206	H2125	T2057	GLU	GLU	PRO
VAL	K2914	A2818	P2712	P2567	SER	LEU	V2353	V2207	R2126	S2058	PHE	ALA	ALA
SER	R2819	A2819	ASP	I2577	ALA	H2420	R2354	M2208	Q2127	L2059	SER	ARG	ARG
GLY	E2820	E2820	VAL	V2586	F2494	M2423	L2356	V2210	D2129	R2062	PRO	L1798	L1798
VAL	K2825	E2821	ASP	T2586	P2495	S2424	L2357	M2211	G2130	L2063	PRO	P1868	P1868
GLU	K2825	K2825	SER	T2586	P2496	S2424	L2358	V2212	G2130	L2063	GLN	L1801	L1801
LYS	E2830	E2830	TYR	T2586	D2497	A2427	L2359	M2213	L2134	S2065	GLU	L1802	L1802
SER	L2926	L2926	TYR	ARG	H2498	A2428	L2360	L2214	L2135	S2066	GLN	VAL	VAL
SER	L2927	L2927	SER	LEU	K2499	A2428	P2361	L2215	L2136	T2069	ILE	GLU	GLU
HIS	K2928	K2928	SER	LEU	A2500	L2429	E2362	L2216	A2137	G2207	ASP	GLU	GLU
GLU	F2929	F2929	LYS	S2501	S2501	I2430	CYS	GLY	D2138	L2071	MET	GLU	GLU
GLN	L2930	L2930	ALA	M2502	M2502	D2431	PHE	GLU	P2139	L2072	LEU	GLU	GLU
ILE	Y2935	Y2935	LYS	V2503	V2503	A2437	GLY	THR	R2140	VAL	HIS	GLU	GLU
ILE	A2936	A2936	LYS	R2508	R2508	PRO	ALA	THR	R2141	L1942	PHE	GLU	GLU
LYS	V2937	V2937	ALA	V2509	V2509	GLU	LEU	LYS	A2141	L1943	GLU	GLU	GLU
PHE	T2938	T2938	THR	CYS	Y2510	MET	ARG	GLU	Y2142	L1943	ASP	GLU	GLU
PHE	T2938	T2938	VAL	ARG	GLY	HIS	GLY	ILE	L1944	L1944	LYS	GLU	GLU
ALA	R2939	R2939	ASP	TYR	ILE	LEU	GLU	ARG	Y1945	Y1945	GLU	GLU	GLU
LYS	G2940	G2940	ALA	ILE	GLU	ILE	GLY	PHE	F1946	F1946	ALA	GLU	GLU
ILE	L2940	L2940	GLY	P2616	R2615	GLN	GLY	P2226	L2151	L2151	ASP	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2155	L2155	PRO	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2156	L2156	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2157	L2157	ASP	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	C2158	C2158	PRO	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2159	L2159	LEU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2160	L2160	PRO	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2161	L2161	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2162	L2162	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2163	L2163	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2164	L2164	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2165	L2165	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2166	L2166	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2167	L2167	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2168	L2168	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2169	L2169	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2170	L2170	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2171	L2171	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2172	L2172	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2173	L2173	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2174	L2174	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2175	L2175	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2176	L2176	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2177	L2177	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2178	L2178	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2179	L2179	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2180	L2180	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2181	L2181	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2182	L2182	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2183	L2183	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2184	L2184	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2185	L2185	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2186	L2186	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2187	L2187	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2188	L2188	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2189	L2189	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2190	L2190	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2191	L2191	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2192	L2192	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2193	L2193	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2194	L2194	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2195	L2195	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2196	L2196	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2197	L2197	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2198	L2198	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2199	L2199	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2200	L2200	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2201	L2201	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2202	L2202	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2203	L2203	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2204	L2204	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2205	L2205	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2206	L2206	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2207	L2207	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2208	L2208	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2209	L2209	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2210	L2210	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2211	L2211	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2212	L2212	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2213	L2213	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2214	L2214	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2215	L2215	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2216	L2216	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2217	L2217	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2218	L2218	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2219	L2219	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2220	L2220	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2221	L2221	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2222	L2222	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2223	L2223	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2224	L2224	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2225	L2225	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2226	L2226	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2227	L2227	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2228	L2228	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2229	L2229	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2230	L2230	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2231	L2231	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2232	L2232	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2233	L2233	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2234	L2234	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2235	L2235	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2236	L2236	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2237	L2237	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2616	Q2515	ALA	SER	Y2229	L2238	L2238	GLU	GLU	GLU
LEU	L2940	L2940	GLY	P2									






● Molecule 2: Peptidyl-prolyl cis-trans isomerase FKBP1A



4 Experimental information

Property	Value	Source
Reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	Depositor
Number of particles used	30000	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	Not provided	Depositor
Microscope	FEI POLARA 300	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	Not provided	Depositor
Minimum defocus (nm)	Not provided	Depositor
Maximum defocus (nm)	Not provided	Depositor
Magnification	Not provided	Depositor
Image detector	Not provided	Depositor

5 Model quality ⓘ

5.1 Standard geometry ⓘ

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

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	$\# Z > 2$	RMSZ	$\# Z > 2$
1	A	1.21	41/27312 (0.2%)	1.12	151/37004 (0.4%)
1	C	1.20	39/27312 (0.1%)	1.12	154/37004 (0.4%)
1	E	1.21	35/27312 (0.1%)	1.12	158/37004 (0.4%)
1	G	1.21	38/27312 (0.1%)	1.11	145/37004 (0.4%)
2	B	0.91	1/851 (0.1%)	0.93	2/1146 (0.2%)
2	D	0.91	1/851 (0.1%)	0.92	2/1146 (0.2%)
2	F	0.91	1/851 (0.1%)	0.92	2/1146 (0.2%)
2	H	0.93	1/851 (0.1%)	0.90	0/1146
All	All	1.20	157/112652 (0.1%)	1.11	614/152600 (0.4%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	0	36
1	C	0	35
1	E	0	36
1	G	0	34
All	All	0	141

All (157) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	G	80	GLU	CG-CD	11.12	1.68	1.51
1	G	3661	TRP	CB-CG	10.06	1.68	1.50
1	A	3661	TRP	CB-CG	9.81	1.68	1.50
1	G	1976	ARG	NE-CZ	9.78	1.45	1.33
1	A	741	GLU	CG-CD	9.74	1.66	1.51
1	E	5011	TRP	CB-CG	-9.37	1.33	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	5011	TRP	CB-CG	-9.29	1.33	1.50
1	C	5011	TRP	CB-CG	-9.22	1.33	1.50
1	E	3661	TRP	CB-CG	9.18	1.66	1.50
1	C	3661	TRP	CB-CG	9.15	1.66	1.50
1	G	1976	ARG	CD-NE	9.10	1.61	1.46
1	A	2926	LEU	CA-C	-8.45	1.30	1.52
1	G	80	GLU	CD-OE1	8.35	1.34	1.25
1	E	80	GLU	CG-CD	8.15	1.64	1.51
1	E	1976	ARG	NE-CZ	7.84	1.43	1.33
1	A	1976	ARG	CD-NE	7.76	1.59	1.46
1	G	4050	GLU	CD-OE2	7.70	1.34	1.25
1	C	1976	ARG	CD-NE	7.52	1.59	1.46
1	C	80	GLU	CG-CD	7.51	1.63	1.51
1	E	3670	GLU	CD-OE1	-7.43	1.17	1.25
1	C	3670	GLU	CD-OE1	-7.37	1.17	1.25
1	A	3670	GLU	CD-OE1	-7.35	1.17	1.25
1	G	5011	TRP	CB-CG	-7.22	1.37	1.50
1	C	1976	ARG	NE-CZ	7.17	1.42	1.33
1	G	741	GLU	CG-CD	7.17	1.62	1.51
1	G	3670	GLU	CD-OE1	-6.91	1.18	1.25
1	C	741	GLU	CG-CD	6.89	1.62	1.51
1	G	4215	ARG	CD-NE	6.87	1.58	1.46
1	C	1784	ALA	N-CA	6.79	1.59	1.46
1	E	4644	TRP	CB-CG	6.71	1.62	1.50
1	A	4644	TRP	CB-CG	6.66	1.62	1.50
1	C	4644	TRP	CB-CG	6.66	1.62	1.50
1	A	1784	ALA	N-CA	6.59	1.59	1.46
1	A	1867	GLU	CD-OE1	-6.54	1.18	1.25
1	E	80	GLU	CD-OE1	6.54	1.32	1.25
1	A	1976	ARG	NE-CZ	6.53	1.41	1.33
1	E	741	GLU	CG-CD	6.52	1.61	1.51
1	A	80	GLU	CG-CD	6.46	1.61	1.51
1	E	1867	GLU	CD-OE1	-6.44	1.18	1.25
1	C	1867	GLU	CD-OE1	-6.38	1.18	1.25
1	G	1867	GLU	CD-OE1	-6.29	1.18	1.25
1	G	3299	GLY	N-CA	6.27	1.55	1.46
1	G	4909	TYR	CB-CG	6.26	1.61	1.51
1	A	1973	GLN	CG-CD	6.22	1.65	1.51
1	G	1973	GLN	CG-CD	6.20	1.65	1.51
1	G	4644	TRP	CB-CG	6.18	1.61	1.50
1	A	700	GLU	CD-OE1	6.13	1.32	1.25
1	A	4822	THR	CB-CG2	-6.11	1.32	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	4822	THR	CB-CG2	-6.11	1.32	1.52
1	E	4909	TYR	CB-CG	6.08	1.60	1.51
1	E	4967	TYR	CB-CG	-6.07	1.42	1.51
1	A	4967	TYR	CB-CG	-6.03	1.42	1.51
1	G	4967	TYR	CB-CG	-6.03	1.42	1.51
1	C	4967	TYR	CB-CG	-6.00	1.42	1.51
1	A	4191	GLU	CG-CD	5.99	1.60	1.51
1	E	4191	GLU	CG-CD	5.96	1.60	1.51
1	C	700	GLU	CD-OE1	5.96	1.32	1.25
1	C	1973	GLN	CG-CD	5.95	1.64	1.51
1	C	4909	TYR	CB-CG	5.94	1.60	1.51
1	G	700	GLU	CD-OE1	5.92	1.32	1.25
1	E	1973	GLN	CG-CD	5.89	1.64	1.51
1	A	1933	GLU	CG-CD	5.88	1.60	1.51
2	H	100	ASP	CB-CG	5.87	1.64	1.51
1	G	623	GLU	CG-CD	5.86	1.60	1.51
1	E	700	GLU	CD-OE1	5.84	1.32	1.25
1	E	1784	ALA	N-CA	5.83	1.58	1.46
1	G	4699	GLY	N-CA	-5.83	1.37	1.46
1	E	4699	GLY	N-CA	-5.81	1.37	1.46
2	F	100	ASP	CB-CG	5.79	1.64	1.51
2	D	100	ASP	CB-CG	5.78	1.63	1.51
2	B	100	ASP	CB-CG	5.77	1.63	1.51
1	G	3665	GLU	CG-CD	5.76	1.60	1.51
1	C	1933	GLU	CG-CD	5.75	1.60	1.51
1	C	4191	GLU	CG-CD	5.73	1.60	1.51
1	G	4932	ILE	N-CA	-5.72	1.34	1.46
1	A	3299	GLY	N-CA	5.70	1.54	1.46
1	C	3299	GLY	N-CA	5.68	1.54	1.46
1	G	3916	ILE	N-CA	-5.68	1.34	1.46
1	A	4699	GLY	N-CA	-5.68	1.37	1.46
1	A	4909	TYR	CB-CG	5.67	1.60	1.51
1	C	4699	GLY	N-CA	-5.66	1.37	1.46
1	E	3916	ILE	N-CA	-5.63	1.35	1.46
1	E	1933	GLU	CG-CD	5.62	1.60	1.51
1	C	3916	ILE	N-CA	-5.61	1.35	1.46
1	E	3299	GLY	N-CA	5.61	1.54	1.46
1	E	1976	ARG	CD-NE	5.59	1.55	1.46
1	A	3665	GLU	CG-CD	5.59	1.60	1.51
1	A	3916	ILE	N-CA	-5.58	1.35	1.46
1	E	4876	CYS	CB-SG	-5.57	1.72	1.81
1	G	4191	GLU	CG-CD	5.56	1.60	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	G	1933	GLU	CG-CD	5.52	1.60	1.51
1	A	4545	GLU	CG-CD	5.50	1.60	1.51
1	C	3665	GLU	CG-CD	5.50	1.60	1.51
1	G	2577	ILE	N-CA	5.50	1.57	1.46
1	A	2577	ILE	N-CA	5.50	1.57	1.46
1	C	2577	ILE	N-CA	5.49	1.57	1.46
1	A	741	GLU	CD-OE1	5.47	1.31	1.25
1	G	1670	TYR	CG-CD1	-5.47	1.32	1.39
1	E	3665	GLU	CG-CD	5.46	1.60	1.51
1	A	4876	CYS	CB-SG	-5.43	1.73	1.81
1	A	4962	GLY	N-CA	-5.42	1.38	1.46
1	E	2577	ILE	N-CA	5.42	1.57	1.46
1	C	4876	CYS	CB-SG	-5.41	1.73	1.81
1	C	4962	GLY	N-CA	-5.39	1.38	1.46
1	E	4962	GLY	N-CA	-5.39	1.38	1.46
1	C	1670	TYR	CG-CD1	-5.38	1.32	1.39
1	C	2205	GLU	CG-CD	5.38	1.60	1.51
1	G	714	TYR	CG-CD2	5.28	1.46	1.39
1	C	714	TYR	CG-CD2	5.27	1.46	1.39
1	E	4215	ARG	CD-NE	5.26	1.55	1.46
1	A	714	TYR	CG-CD2	5.24	1.46	1.39
1	E	1670	TYR	CG-CD1	-5.23	1.32	1.39
1	E	2855	TYR	CG-CD1	5.21	1.46	1.39
1	G	3164	SER	N-CA	5.20	1.56	1.46
1	A	1670	TYR	CG-CD1	-5.19	1.32	1.39
1	E	1728	ARG	CZ-NH1	5.19	1.39	1.33
1	A	1836	PHE	CB-CG	-5.19	1.42	1.51
1	E	714	TYR	CG-CD2	5.18	1.45	1.39
1	G	1836	PHE	CB-CG	-5.18	1.42	1.51
1	A	2855	TYR	CG-CD1	5.18	1.45	1.39
1	A	529	LEU	CA-CB	-5.18	1.41	1.53
1	C	1836	PHE	CB-CG	-5.18	1.42	1.51
1	E	1836	PHE	CB-CG	-5.17	1.42	1.51
1	G	3525	CYS	CA-CB	-5.17	1.42	1.53
1	E	529	LEU	CA-CB	-5.16	1.41	1.53
1	G	4554	TYR	CB-CG	5.15	1.59	1.51
1	C	117	TYR	CE1-CZ	-5.14	1.31	1.38
1	A	1728	ARG	CZ-NH1	5.14	1.39	1.33
1	A	4888	TYR	CE2-CZ	-5.14	1.31	1.38
1	G	2855	TYR	CG-CD1	5.14	1.45	1.39
1	C	529	LEU	CA-CB	-5.14	1.42	1.53
1	G	4863	TYR	CG-CD2	-5.11	1.32	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	G	4050	GLU	CD-OE1	5.11	1.31	1.25
1	C	5011	TRP	CG-CD1	-5.11	1.29	1.36
1	A	3525	CYS	CA-CB	-5.11	1.42	1.53
1	C	4976	GLU	N-CA	5.10	1.56	1.46
1	G	529	LEU	CA-CB	-5.10	1.42	1.53
1	A	2094	LEU	N-CA	5.09	1.56	1.46
1	A	4554	TYR	CB-CG	5.09	1.59	1.51
1	C	2855	TYR	CG-CD1	5.09	1.45	1.39
1	A	5011	TRP	CG-CD1	-5.08	1.29	1.36
1	A	4976	GLU	N-CA	5.07	1.56	1.46
1	E	3525	CYS	CA-CB	-5.07	1.42	1.53
1	E	2094	LEU	N-CA	5.07	1.56	1.46
1	G	80	GLU	CB-CG	5.07	1.61	1.52
1	E	4554	TYR	CB-CG	5.06	1.59	1.51
1	G	4876	CYS	CB-SG	-5.05	1.73	1.81
1	C	1728	ARG	CZ-NH1	5.04	1.39	1.33
1	A	4575	PHE	CB-CG	5.04	1.59	1.51
1	C	4554	TYR	CB-CG	5.04	1.59	1.51
1	C	4215	ARG	CD-NE	5.04	1.55	1.46
1	C	4575	PHE	CB-CG	5.04	1.59	1.51
1	E	2381	GLU	CD-OE2	-5.02	1.20	1.25
1	C	3525	CYS	CA-CB	-5.01	1.43	1.53
1	G	4962	GLY	N-CA	-5.01	1.38	1.46
1	C	1976	ARG	CZ-NH1	5.00	1.39	1.33
1	A	4932	ILE	N-CA	-5.00	1.36	1.46

All (614) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	G	80	GLU	OE1-CD-OE2	-10.92	110.20	123.30
1	A	1212	ARG	NE-CZ-NH1	10.39	125.49	120.30
1	G	4796	MET	CG-SD-CE	10.33	116.73	100.20
1	G	1976	ARG	CD-NE-CZ	10.23	137.93	123.60
1	C	1212	ARG	NE-CZ-NH1	10.17	125.39	120.30
1	G	1212	ARG	NE-CZ-NH1	10.00	125.30	120.30
1	E	1212	ARG	NE-CZ-NH1	9.74	125.17	120.30
1	A	4159	ARG	NE-CZ-NH2	-9.68	115.46	120.30
1	C	4980	LEU	CB-CG-CD2	-9.59	94.70	111.00
1	A	4980	LEU	CB-CG-CD2	-9.55	94.76	111.00
1	E	4980	LEU	CB-CG-CD2	-9.53	94.80	111.00
1	C	3303	PRO	N-CA-CB	9.52	114.72	103.30
1	E	3303	PRO	N-CA-CB	9.46	114.65	103.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	1976	ARG	CD-NE-CZ	9.46	136.84	123.60
1	A	3303	PRO	N-CA-CB	9.35	114.52	103.30
1	C	4159	ARG	NE-CZ-NH2	-9.31	115.64	120.30
1	A	2640	PRO	N-CA-CB	9.29	114.45	103.30
1	C	2640	PRO	N-CA-CB	9.29	114.45	103.30
1	E	2640	PRO	N-CA-CB	9.28	114.44	103.30
1	G	2640	PRO	N-CA-CB	9.27	114.42	103.30
1	A	4909	TYR	CB-CG-CD1	9.25	126.55	121.00
1	G	4112	LEU	CB-CG-CD2	-9.20	95.35	111.00
1	G	4159	ARG	NE-CZ-NH2	-9.20	115.70	120.30
1	E	2497	ASP	CB-CG-OD1	9.13	126.52	118.30
1	G	1076	ARG	NE-CZ-NH1	9.04	124.82	120.30
1	E	4159	ARG	NE-CZ-NH2	-8.99	115.81	120.30
1	A	2567	PRO	N-CA-CB	8.98	114.08	103.30
1	G	4909	TYR	CB-CG-CD1	8.98	126.39	121.00
1	C	4909	TYR	CB-CG-CD1	8.96	126.38	121.00
1	E	2567	PRO	N-CA-CB	8.92	114.00	103.30
1	A	1976	ARG	NE-CZ-NH2	8.92	124.76	120.30
1	E	4909	TYR	CB-CG-CD1	8.85	126.31	121.00
1	G	2497	ASP	CB-CG-OD1	8.85	126.27	118.30
1	C	2497	ASP	CB-CG-OD1	8.81	126.23	118.30
1	E	1076	ARG	NE-CZ-NH1	8.79	124.69	120.30
1	A	1076	ARG	NE-CZ-NH1	8.76	124.68	120.30
1	G	2567	PRO	N-CA-CB	8.75	113.80	103.30
1	C	1076	ARG	NE-CZ-NH1	8.74	124.67	120.30
1	C	3297	PRO	N-CA-CB	8.72	113.76	103.30
1	A	2497	ASP	CB-CG-OD1	8.68	126.11	118.30
1	E	3297	PRO	N-CA-CB	8.65	113.68	103.30
1	C	2567	PRO	N-CA-CB	8.62	113.65	103.30
1	A	3297	PRO	N-CA-CB	8.60	113.61	103.30
1	C	2234	ARG	NE-CZ-NH2	8.52	124.56	120.30
1	E	2234	ARG	NE-CZ-NH2	8.41	124.50	120.30
1	E	4880	MET	CG-SD-CE	8.36	113.58	100.20
1	A	2234	ARG	NE-CZ-NH2	8.34	124.47	120.30
1	G	3303	PRO	N-CA-CB	8.34	113.31	103.30
1	E	3980	LEU	CB-CG-CD1	-8.31	96.88	111.00
1	G	3297	PRO	N-CA-CB	8.24	113.19	103.30
1	G	2234	ARG	NE-CZ-NH2	8.24	124.42	120.30
1	A	3843	ASP	CB-CG-OD1	8.10	125.59	118.30
1	G	66	CYS	CA-CB-SG	8.08	128.55	114.00
1	C	3980	LEU	CB-CG-CD1	-8.07	97.29	111.00
1	A	3980	LEU	CB-CG-CD1	-8.06	97.29	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	1976	ARG	CD-NE-CZ	8.06	134.89	123.60
1	C	66	CYS	CA-CB-SG	8.03	128.45	114.00
1	E	3843	ASP	CB-CG-OD1	8.01	125.51	118.30
1	E	386	ASP	CB-CG-OD2	7.99	125.49	118.30
1	A	66	CYS	CA-CB-SG	7.99	128.38	114.00
1	E	4564	PHE	CB-CG-CD2	7.96	126.37	120.80
1	A	4913	ARG	NE-CZ-NH2	-7.95	116.32	120.30
1	C	386	ASP	CB-CG-OD2	7.93	125.44	118.30
1	G	3208	PRO	N-CA-CB	7.91	112.79	103.30
1	E	66	CYS	CA-CB-SG	7.90	128.22	114.00
1	A	386	ASP	CB-CG-OD2	7.84	125.36	118.30
1	G	386	ASP	CB-CG-OD2	7.83	125.35	118.30
1	C	4880	MET	CG-SD-CE	7.82	112.70	100.20
1	C	3843	ASP	CB-CG-OD1	7.76	125.28	118.30
1	G	4913	ARG	NE-CZ-NH2	-7.74	116.43	120.30
1	A	1929	MET	CB-CG-SD	7.69	135.46	112.40
1	C	1929	MET	CB-CG-SD	7.68	135.45	112.40
1	C	1976	ARG	NE-CZ-NH2	7.67	124.14	120.30
1	G	115	ARG	NE-CZ-NH2	-7.66	116.47	120.30
1	G	3843	ASP	CB-CG-OD1	7.64	125.18	118.30
1	A	3208	PRO	N-CA-CB	7.62	112.44	103.30
1	E	3208	PRO	N-CA-CB	7.59	112.41	103.30
1	C	2131	LEU	CB-CG-CD1	7.58	123.88	111.00
1	A	3021	PRO	N-CA-CB	7.56	112.37	103.30
1	C	3208	PRO	N-CA-CB	7.53	112.33	103.30
1	E	3021	PRO	N-CA-CB	7.53	112.33	103.30
1	G	1929	MET	CB-CG-SD	7.52	134.95	112.40
1	G	4643	LEU	CB-CG-CD1	-7.50	98.25	111.00
1	E	1929	MET	CB-CG-SD	7.50	134.89	112.40
1	C	3021	PRO	N-CA-CB	7.48	112.28	103.30
1	G	3021	PRO	N-CA-CB	7.47	112.27	103.30
1	G	4039	MET	CB-CG-SD	7.46	134.79	112.40
1	E	4913	ARG	NE-CZ-NH2	-7.46	116.57	120.30
1	C	1728	ARG	NE-CZ-NH2	-7.45	116.58	120.30
1	A	4202	ARG	NE-CZ-NH2	7.42	124.01	120.30
1	A	4790	LEU	CB-CG-CD2	7.38	123.55	111.00
1	A	2131	LEU	CB-CG-CD1	7.33	123.47	111.00
1	G	2458	ARG	NE-CZ-NH2	-7.33	116.64	120.30
1	A	115	ARG	NE-CZ-NH2	-7.29	116.66	120.30
1	C	4564	PHE	CB-CG-CD2	7.28	125.90	120.80
1	G	3729	MET	CG-SD-CE	7.27	111.83	100.20
1	E	2131	LEU	CB-CG-CD1	7.27	123.36	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	4564	PHE	CB-CG-CD2	7.26	125.89	120.80
1	G	3301	PRO	N-CA-CB	7.26	112.02	103.30
1	A	2458	ARG	NE-CZ-NH2	-7.24	116.68	120.30
1	C	4790	LEU	CB-CG-CD2	7.23	123.30	111.00
1	A	2926	LEU	CA-C-N	-7.23	101.30	117.20
1	E	115	ARG	NE-CZ-NH2	-7.22	116.69	120.30
1	E	1855	GLY	N-CA-C	-7.21	95.08	113.10
1	C	1855	GLY	N-CA-C	-7.19	95.13	113.10
1	G	2131	LEU	CB-CG-CD1	7.19	123.22	111.00
1	C	1698	LEU	CB-CG-CD2	-7.18	98.79	111.00
1	A	5017	ARG	NE-CZ-NH2	-7.18	116.71	120.30
1	C	3729	MET	CG-SD-CE	7.18	111.68	100.20
1	G	1855	GLY	N-CA-C	-7.17	95.17	113.10
1	C	3085	PRO	N-CA-CB	7.17	111.90	103.30
1	G	2914	LYS	CD-CE-NZ	7.16	128.17	111.70
1	C	4913	ARG	NE-CZ-NH2	-7.16	116.72	120.30
1	E	2458	ARG	NE-CZ-NH2	-7.16	116.72	120.30
1	E	3729	MET	CG-SD-CE	7.15	111.64	100.20
1	E	5017	ARG	NE-CZ-NH2	-7.14	116.73	120.30
1	E	1698	LEU	CB-CG-CD2	-7.12	98.90	111.00
1	A	1855	GLY	N-CA-C	-7.11	95.33	113.10
1	G	1698	LEU	CB-CG-CD2	-7.08	98.96	111.00
1	A	1698	LEU	CB-CG-CD2	-7.07	98.98	111.00
1	A	3085	PRO	N-CA-CB	7.07	111.78	103.30
1	E	1728	ARG	NE-CZ-NH2	-7.06	116.77	120.30
1	C	4202	ARG	NE-CZ-NH2	7.05	123.83	120.30
1	E	4790	LEU	CB-CG-CD2	7.05	122.99	111.00
1	A	1728	ARG	NE-CZ-NH2	-7.03	116.78	120.30
1	G	2769	ASP	CB-CG-OD2	7.03	124.63	118.30
1	E	3085	PRO	N-CA-CB	7.03	111.73	103.30
1	G	3289	PRO	N-CA-CB	7.03	111.73	103.30
1	E	4202	ARG	NE-CZ-NH2	7.03	123.81	120.30
1	G	2711	PRO	N-CA-CB	7.00	111.69	103.30
1	C	2458	ARG	NE-CZ-NH2	-6.99	116.80	120.30
1	G	3085	PRO	N-CA-CB	6.95	111.64	103.30
1	A	1976	ARG	CD-NE-CZ	6.95	133.32	123.60
1	A	4880	MET	CG-SD-CE	6.93	111.28	100.20
1	A	2711	PRO	N-CA-CB	6.92	111.61	103.30
1	A	3729	MET	CG-SD-CE	6.91	111.26	100.20
1	A	5017	ARG	NE-CZ-NH1	6.91	123.75	120.30
1	E	2711	PRO	N-CA-CB	6.89	111.57	103.30
1	A	1867	GLU	OE1-CD-OE2	-6.89	115.03	123.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	5017	ARG	NE-CZ-NH2	-6.88	116.86	120.30
1	C	2711	PRO	N-CA-CB	6.86	111.53	103.30
1	E	80	GLU	OE1-CD-OE2	-6.85	115.08	123.30
1	E	4911	LEU	CB-CG-CD2	6.84	122.63	111.00
1	C	180	LEU	CB-CG-CD1	6.84	122.62	111.00
1	G	3427	PRO	N-CA-CB	6.82	111.49	103.30
1	G	2429	LEU	CB-CG-CD1	6.82	122.60	111.00
1	C	1867	GLU	OE1-CD-OE2	-6.82	115.11	123.30
1	G	1728	ARG	NE-CZ-NH2	-6.82	116.89	120.30
1	C	5017	ARG	NE-CZ-NH1	6.81	123.71	120.30
1	C	115	ARG	NE-CZ-NH2	-6.79	116.90	120.30
1	E	5017	ARG	NE-CZ-NH1	6.79	123.70	120.30
1	G	1974	ARG	NE-CZ-NH2	6.79	123.70	120.30
1	G	5026	ASP	CB-CG-OD1	6.79	124.41	118.30
1	E	1867	GLU	OE1-CD-OE2	-6.76	115.19	123.30
1	G	3188	PRO	N-CA-CB	6.75	111.40	103.30
1	E	4207	MET	CB-CG-SD	6.75	132.63	112.40
1	A	1942	LEU	CB-CG-CD2	-6.74	99.54	111.00
1	G	180	LEU	CB-CG-CD1	6.74	122.45	111.00
1	A	4839	MET	CG-SD-CE	6.72	110.95	100.20
1	C	3289	PRO	N-CA-CB	6.72	111.36	103.30
1	G	3980	LEU	CB-CG-CD1	-6.71	99.59	111.00
1	E	3289	PRO	N-CA-CB	6.71	111.35	103.30
1	A	180	LEU	CB-CG-CD1	6.70	122.39	111.00
1	E	180	LEU	CB-CG-CD1	6.69	122.38	111.00
1	A	3289	PRO	N-CA-CB	6.67	111.31	103.30
1	G	1283	LEU	CB-CG-CD2	6.67	122.33	111.00
1	G	2701	PRO	N-CA-CB	6.67	111.30	103.30
1	C	1283	LEU	CB-CG-CD2	6.66	122.32	111.00
1	C	2701	PRO	N-CA-CB	6.66	111.29	103.30
1	C	3301	PRO	N-CA-CB	6.65	111.28	103.30
1	A	3275	PRO	N-CA-CB	6.64	111.26	103.30
1	C	240	ASP	CB-CG-OD2	6.64	124.27	118.30
1	G	620	LEU	CB-CG-CD1	-6.64	99.72	111.00
1	G	3410	PRO	N-CA-CB	6.63	111.26	103.30
1	A	2701	PRO	N-CA-CB	6.63	111.25	103.30
1	E	3301	PRO	N-CA-CB	6.62	111.25	103.30
1	A	1283	LEU	CB-CG-CD2	6.62	122.25	111.00
1	E	2701	PRO	N-CA-CB	6.62	111.24	103.30
1	C	2769	ASP	CB-CG-OD2	6.61	124.25	118.30
1	E	3275	PRO	N-CA-CB	6.60	111.22	103.30
1	A	3301	PRO	N-CA-CB	6.60	111.22	103.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	G	1465	ASP	N-CA-CB	-6.60	98.72	110.60
1	E	1283	LEU	CB-CG-CD2	6.59	122.21	111.00
1	A	1465	ASP	N-CA-CB	-6.59	98.75	110.60
1	G	2234	ARG	NE-CZ-NH1	-6.59	117.01	120.30
1	A	2518	LEU	CA-CB-CG	6.58	130.43	115.30
1	C	2518	LEU	CA-CB-CG	6.58	130.43	115.30
1	C	3275	PRO	N-CA-CB	6.57	111.19	103.30
1	E	1942	LEU	CB-CG-CD2	-6.57	99.84	111.00
1	E	2518	LEU	CA-CB-CG	6.57	130.41	115.30
1	C	3410	PRO	N-CA-CB	6.57	111.18	103.30
1	C	1942	LEU	CB-CG-CD2	-6.55	99.86	111.00
1	C	1465	ASP	N-CA-CB	-6.55	98.82	110.60
1	G	1976	ARG	NE-CZ-NH1	6.54	123.57	120.30
1	E	1465	ASP	N-CA-CB	-6.54	98.83	110.60
1	G	240	ASP	CB-CG-OD2	6.54	124.18	118.30
1	A	3188	PRO	N-CA-CB	6.53	111.14	103.30
1	A	3410	PRO	N-CA-CB	6.52	111.12	103.30
1	E	3410	PRO	N-CA-CB	6.52	111.12	103.30
1	E	2769	ASP	CB-CG-OD2	6.51	124.16	118.30
1	A	240	ASP	CB-CG-OD2	6.51	124.16	118.30
1	E	1211	LEU	CA-CB-CG	6.49	130.23	115.30
1	G	3527	PRO	N-CA-CB	6.49	111.08	103.30
1	E	3188	PRO	N-CA-CB	6.48	111.08	103.30
1	A	488	LEU	CB-CG-CD2	6.47	122.01	111.00
1	A	2454	ARG	NE-CZ-NH2	-6.47	117.06	120.30
1	E	240	ASP	CB-CG-OD2	6.47	124.13	118.30
1	G	2518	LEU	CA-CB-CG	6.47	130.19	115.30
1	G	4911	LEU	CB-CG-CD2	6.46	121.99	111.00
1	G	4207	MET	CB-CG-SD	6.46	131.78	112.40
1	G	3886	ARG	NE-CZ-NH1	6.45	123.53	120.30
1	A	4207	MET	CB-CG-SD	6.44	131.73	112.40
1	C	3188	PRO	N-CA-CB	6.43	111.01	103.30
1	E	3567	PRO	N-CA-CB	6.41	110.99	103.30
1	C	3567	PRO	N-CA-CB	6.41	110.99	103.30
1	A	3567	PRO	N-CA-CB	6.40	110.98	103.30
1	C	1211	LEU	CA-CB-CG	6.40	130.02	115.30
1	E	4202	ARG	NE-CZ-NH1	-6.40	117.10	120.30
1	A	3427	PRO	N-CA-CB	6.40	110.97	103.30
1	E	2234	ARG	NE-CZ-NH1	-6.39	117.11	120.30
1	C	2234	ARG	NE-CZ-NH1	-6.39	117.11	120.30
1	G	1942	LEU	CB-CG-CD2	-6.38	100.16	111.00
1	E	620	LEU	CB-CG-CD1	-6.38	100.16	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	2769	ASP	CB-CG-OD2	6.37	124.03	118.30
1	G	1211	LEU	CA-CB-CG	6.37	129.96	115.30
1	G	474	ARG	NE-CZ-NH1	6.37	123.48	120.30
1	C	80	GLU	OE1-CD-OE2	-6.37	115.66	123.30
1	E	488	LEU	CB-CG-CD2	6.36	121.82	111.00
1	G	4843	LEU	CB-CG-CD2	-6.36	100.19	111.00
1	E	3427	PRO	N-CA-CB	6.35	110.92	103.30
1	C	620	LEU	CB-CG-CD1	-6.35	100.20	111.00
1	A	2234	ARG	NE-CZ-NH1	-6.34	117.13	120.30
1	G	1867	GLU	OE1-CD-OE2	-6.34	115.69	123.30
1	A	4951	LYS	CD-CE-NZ	6.34	126.28	111.70
1	E	1976	ARG	NE-CZ-NH1	6.33	123.46	120.30
1	A	4159	ARG	NE-CZ-NH1	6.32	123.46	120.30
1	G	3360	PRO	N-CA-CB	6.32	110.88	103.30
1	A	4112	LEU	CB-CG-CD2	-6.32	100.26	111.00
1	C	3427	PRO	N-CA-CB	6.32	110.88	103.30
1	A	2429	LEU	CB-CG-CD1	6.31	121.72	111.00
1	A	474	ARG	NE-CZ-NH1	6.31	123.45	120.30
1	C	4207	MET	CB-CG-SD	6.30	131.31	112.40
1	E	4112	LEU	CB-CG-CD2	-6.30	100.28	111.00
1	G	5017	ARG	NE-CZ-NH1	6.30	123.45	120.30
1	C	488	LEU	CB-CG-CD2	6.29	121.69	111.00
1	E	3844	LEU	CB-CG-CD1	-6.29	100.31	111.00
1	G	3275	PRO	N-CA-CB	6.29	110.84	103.30
1	G	488	LEU	CB-CG-CD2	6.28	121.68	111.00
1	C	4911	LEU	CB-CG-CD2	6.28	121.68	111.00
1	E	971	ASP	CB-CG-OD2	6.28	123.95	118.30
1	C	4159	ARG	NE-CZ-NH1	6.27	123.43	120.30
1	C	4112	LEU	CB-CG-CD2	-6.26	100.35	111.00
1	E	4639	MET	CG-SD-CE	6.25	110.20	100.20
1	G	4639	MET	CG-SD-CE	6.25	110.20	100.20
1	G	3567	PRO	N-CA-CB	6.24	110.78	103.30
1	G	2454	ARG	NE-CZ-NH2	-6.23	117.19	120.30
1	A	1211	LEU	CA-CB-CG	6.21	129.58	115.30
1	A	620	LEU	CB-CG-CD1	-6.20	100.45	111.00
1	G	4887	MET	CG-SD-CE	6.20	110.12	100.20
1	C	4639	MET	CG-SD-CE	6.16	110.06	100.20
1	G	3886	ARG	NE-CZ-NH2	-6.15	117.22	120.30
1	G	4911	LEU	CA-CB-CG	6.15	129.44	115.30
1	A	4887	MET	CA-CB-CG	6.14	123.75	113.30
1	C	3844	LEU	CB-CG-CD1	-6.14	100.55	111.00
1	E	971	ASP	N-CA-C	6.14	127.58	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	474	ARG	NE-CZ-NH1	6.13	123.37	120.30
1	E	5026	ASP	CB-CG-OD1	6.13	123.82	118.30
1	E	4159	ARG	NE-CZ-NH1	6.13	123.36	120.30
1	C	4191	GLU	OE1-CD-OE2	-6.12	115.95	123.30
1	C	474	ARG	NE-CZ-NH1	6.12	123.36	120.30
1	A	291	LEU	CB-CG-CD1	-6.11	100.61	111.00
1	C	3282	PRO	N-CA-CB	6.11	110.63	103.30
1	A	4639	MET	CG-SD-CE	6.11	109.97	100.20
1	C	4887	MET	CA-CB-CG	6.10	123.68	113.30
1	A	1974	ARG	NE-CZ-NH2	6.09	123.35	120.30
1	G	3282	PRO	N-CA-CB	6.08	110.60	103.30
1	C	2518	LEU	CB-CG-CD2	6.08	121.33	111.00
1	G	291	LEU	CB-CG-CD1	-6.07	100.68	111.00
1	C	472	ARG	NE-CZ-NH2	-6.06	117.27	120.30
1	C	1974	ARG	NE-CZ-NH2	6.06	123.33	120.30
1	A	3844	LEU	CB-CG-CD1	-6.05	100.71	111.00
1	E	3282	PRO	N-CA-CB	6.05	110.56	103.30
1	E	1974	ARG	NE-CZ-NH2	6.05	123.33	120.30
1	A	2518	LEU	CB-CG-CD2	6.05	121.28	111.00
1	G	3985	LEU	CB-CG-CD1	-6.05	100.72	111.00
1	C	4202	ARG	NE-CZ-NH1	-6.03	117.28	120.30
1	G	4112	LEU	CB-CG-CD1	6.03	121.24	111.00
1	C	73	LEU	CB-CG-CD2	-6.02	100.76	111.00
1	E	1659	LEU	CB-CG-CD1	6.02	121.24	111.00
1	E	2518	LEU	CB-CG-CD2	6.02	121.24	111.00
1	A	3282	PRO	N-CA-CB	6.02	110.52	103.30
1	E	472	ARG	NE-CZ-NH2	-6.02	117.29	120.30
1	A	4191	GLU	OE1-CD-OE2	-6.01	116.09	123.30
1	C	1659	LEU	CB-CG-CD1	6.00	121.21	111.00
1	E	4191	GLU	OE1-CD-OE2	-6.00	116.10	123.30
1	G	3062	PRO	N-CA-CB	6.00	110.50	103.30
1	G	4844	LEU	CA-CB-CG	6.00	129.09	115.30
1	E	4951	LYS	CD-CE-NZ	5.99	125.48	111.70
1	C	4951	LYS	CD-CE-NZ	5.99	125.47	111.70
1	A	5026	ASP	CB-CG-OD1	5.98	123.68	118.30
1	E	291	LEU	CB-CG-CD1	-5.98	100.84	111.00
1	C	291	LEU	CB-CG-CD1	-5.97	100.85	111.00
1	A	472	ARG	NE-CZ-NH2	-5.97	117.31	120.30
1	A	1659	LEU	CB-CG-CD1	5.97	121.14	111.00
1	A	625	LEU	CB-CG-CD1	-5.96	100.87	111.00
1	G	1659	LEU	CB-CG-CD1	5.96	121.13	111.00
1	G	2518	LEU	CB-CG-CD2	5.96	121.13	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	G	971	ASP	N-CA-C	5.96	127.08	111.00
1	E	4215	ARG	NE-CZ-NH1	5.95	123.28	120.30
1	C	4911	LEU	CA-CB-CG	5.95	128.99	115.30
1	E	2546	MET	CB-CG-SD	5.93	130.19	112.40
1	G	522	LEU	CA-CB-CG	5.93	128.93	115.30
1	A	4887	MET	CG-SD-CE	5.92	109.68	100.20
1	A	522	LEU	CA-CB-CG	5.92	128.92	115.30
1	G	3844	LEU	CB-CG-CD1	-5.91	100.95	111.00
1	C	522	LEU	CA-CB-CG	5.91	128.89	115.30
1	C	4039	MET	CG-SD-CE	5.90	109.64	100.20
1	G	625	LEU	CB-CG-CD1	-5.90	100.97	111.00
1	G	73	LEU	CB-CG-CD2	-5.90	100.97	111.00
1	A	4916	PHE	CB-CG-CD1	-5.89	116.67	120.80
1	E	522	LEU	CA-CB-CG	5.89	128.85	115.30
1	C	2454	ARG	NE-CZ-NH1	5.89	123.25	120.30
1	C	971	ASP	N-CA-C	5.89	126.89	111.00
1	E	1976	ARG	CG-CD-NE	5.89	124.16	111.80
1	C	5026	ASP	CB-CG-OD1	5.88	123.59	118.30
1	G	3351	PRO	N-CA-CB	5.88	110.36	103.30
1	G	474	ARG	NE-CZ-NH2	-5.87	117.36	120.30
1	A	4844	LEU	CA-CB-CG	5.87	128.80	115.30
1	A	971	ASP	N-CA-C	5.87	126.85	111.00
1	E	73	LEU	CB-CG-CD2	-5.87	101.03	111.00
1	E	3138	PRO	N-CA-CB	5.85	110.32	103.30
1	E	2429	LEU	CB-CG-CD1	5.85	120.95	111.00
1	A	3773	ARG	NE-CZ-NH2	5.85	123.22	120.30
1	C	3138	PRO	N-CA-CB	5.84	110.31	103.30
1	E	2163	ARG	NE-CZ-NH2	-5.84	117.38	120.30
1	E	3758	MET	CG-SD-CE	5.83	109.53	100.20
1	C	4887	MET	CG-SD-CE	5.82	109.52	100.20
1	C	4844	LEU	CA-CB-CG	5.82	128.68	115.30
1	C	3360	PRO	N-CA-CB	5.81	110.28	103.30
1	G	1076	ARG	NE-CZ-NH2	-5.81	117.39	120.30
1	G	2546	MET	CB-CG-SD	5.81	129.84	112.40
1	C	2429	LEU	CB-CG-CD1	5.81	120.88	111.00
1	A	2631	PRO	N-CA-CB	5.80	110.26	103.30
1	C	2631	PRO	N-CA-CB	5.79	110.25	103.30
1	G	1112	ASP	CB-CG-OD1	5.79	123.52	118.30
1	E	4039	MET	CB-CG-SD	5.79	129.76	112.40
1	G	4980	LEU	CB-CG-CD2	-5.79	101.16	111.00
1	A	1212	ARG	NE-CZ-NH2	-5.78	117.41	120.30
1	C	2546	MET	CB-CG-SD	5.77	129.72	112.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	1112	ASP	CB-CG-OD1	5.77	123.49	118.30
1	E	2454	ARG	NE-CZ-NH1	5.77	123.18	120.30
1	A	3360	PRO	N-CA-CB	5.76	110.21	103.30
1	A	4039	MET	CG-SD-CE	5.76	109.42	100.20
1	E	3360	PRO	N-CA-CB	5.76	110.21	103.30
1	E	4916	PHE	CB-CG-CD1	-5.76	116.77	120.80
1	A	46	LEU	CB-CG-CD1	5.76	120.79	111.00
1	C	3062	PRO	N-CA-CB	5.75	110.20	103.30
1	C	4916	PHE	CB-CG-CD1	-5.75	116.78	120.80
1	G	1212	ARG	NE-CZ-NH2	-5.74	117.43	120.30
1	E	4887	MET	CA-CB-CG	5.73	123.04	113.30
1	A	2546	MET	CB-CG-SD	5.72	129.57	112.40
1	E	3062	PRO	N-CA-CB	5.72	110.17	103.30
1	A	971	ASP	CB-CG-OD2	5.72	123.45	118.30
1	A	4911	LEU	CA-CB-CG	5.72	128.46	115.30
1	E	625	LEU	CB-CG-CD1	-5.72	101.27	111.00
1	A	3138	PRO	N-CA-CB	5.72	110.16	103.30
1	E	2631	PRO	N-CA-CB	5.72	110.16	103.30
1	A	4991	PHE	CB-CG-CD1	-5.71	116.80	120.80
1	G	472	ARG	NE-CZ-NH2	-5.71	117.44	120.30
1	G	3302	PRO	N-CA-CB	5.70	110.14	103.30
1	G	2631	PRO	N-CA-CB	5.70	110.14	103.30
1	A	3758	MET	CG-SD-CE	5.70	109.32	100.20
1	E	2094	LEU	CB-CG-CD2	5.70	120.69	111.00
1	E	3294	PRO	N-CA-CB	5.70	110.14	103.30
1	A	3294	PRO	N-CA-CB	5.70	110.14	103.30
1	A	4039	MET	CB-CG-SD	5.68	129.43	112.40
1	C	4567	LEU	CB-CG-CD2	5.67	120.63	111.00
1	A	3062	PRO	N-CA-CB	5.66	110.09	103.30
1	C	3294	PRO	N-CA-CB	5.66	110.09	103.30
1	A	4567	LEU	CB-CG-CD2	5.65	120.61	111.00
1	E	4976	GLU	OE1-CD-OE2	5.65	130.08	123.30
1	E	2518	LEU	CB-CG-CD1	-5.65	101.40	111.00
1	C	2094	LEU	CB-CG-CD1	-5.64	101.40	111.00
1	E	2094	LEU	CB-CG-CD1	-5.64	101.40	111.00
1	A	3351	PRO	N-CA-CB	5.64	110.07	103.30
1	C	3758	MET	CG-SD-CE	5.63	109.21	100.20
1	G	971	ASP	CB-CG-OD2	5.63	123.37	118.30
1	A	1112	ASP	CB-CG-OD1	5.62	123.36	118.30
1	C	1076	ARG	NE-CZ-NH2	-5.61	117.49	120.30
1	C	4044	MET	CB-CG-SD	-5.61	95.56	112.40
1	E	4911	LEU	CA-CB-CG	5.61	128.21	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	4044	MET	CB-CG-SD	-5.61	95.57	112.40
1	C	2094	LEU	CB-CG-CD2	5.61	120.54	111.00
1	C	2116	LEU	CB-CG-CD2	-5.61	101.47	111.00
1	E	4880	MET	CB-CG-SD	5.61	129.22	112.40
1	E	4112	LEU	CB-CG-CD1	5.60	120.53	111.00
1	C	4581	LYS	CD-CE-NZ	5.60	124.58	111.70
1	C	1212	ARG	NE-CZ-NH2	-5.60	117.50	120.30
1	E	4039	MET	CG-SD-CE	5.60	109.16	100.20
1	G	3769	ARG	NE-CZ-NH2	-5.60	117.50	120.30
1	G	4048	LEU	CB-CG-CD2	5.60	120.52	111.00
1	G	2116	LEU	CB-CG-CD2	-5.59	101.49	111.00
1	G	2094	LEU	CB-CG-CD2	5.59	120.51	111.00
1	C	474	ARG	NE-CZ-NH2	-5.59	117.50	120.30
1	C	1112	ASP	CB-CG-OD1	5.59	123.33	118.30
1	A	2094	LEU	CB-CG-CD1	-5.59	101.50	111.00
1	C	625	LEU	CB-CG-CD1	-5.58	101.51	111.00
1	C	2518	LEU	CB-CG-CD1	-5.57	101.53	111.00
1	G	4202	ARG	NE-CZ-NH2	5.57	123.09	120.30
1	G	4916	PHE	CB-CG-CD1	-5.57	116.90	120.80
1	G	2518	LEU	CB-CG-CD1	-5.57	101.54	111.00
1	A	2518	LEU	CB-CG-CD1	-5.56	101.54	111.00
1	E	46	LEU	CB-CG-CD1	5.56	120.45	111.00
1	E	118	LEU	CB-CG-CD2	-5.56	101.55	111.00
1	C	46	LEU	CB-CG-CD1	5.56	120.45	111.00
1	G	180	LEU	CB-CG-CD2	-5.56	101.55	111.00
1	E	4044	MET	CB-CG-SD	-5.55	95.74	112.40
1	C	2454	ARG	NE-CZ-NH2	-5.55	117.53	120.30
1	A	1076	ARG	NE-CZ-NH2	-5.55	117.53	120.30
1	E	474	ARG	NE-CZ-NH2	-5.54	117.53	120.30
1	C	4679	ARG	NE-CZ-NH1	5.54	123.07	120.30
1	G	2123	LEU	CA-CB-CG	-5.54	102.57	115.30
1	A	2658	PRO	N-CA-CB	5.53	109.94	103.30
1	A	2116	LEU	CB-CG-CD2	-5.53	101.60	111.00
1	A	4909	TYR	CE1-CZ-OH	5.53	135.02	120.10
1	C	4976	GLU	OE1-CD-OE2	5.53	129.93	123.30
1	G	46	LEU	CB-CG-CD1	5.53	120.39	111.00
1	A	2094	LEU	CB-CG-CD2	5.52	120.39	111.00
1	C	3351	PRO	N-CA-CB	5.51	109.92	103.30
1	C	4039	MET	CB-CG-SD	5.51	128.94	112.40
1	A	4581	LYS	CD-CE-NZ	5.51	124.37	111.70
1	C	180	LEU	CB-CG-CD2	-5.51	101.63	111.00
1	E	2454	ARG	NE-CZ-NH2	-5.51	117.55	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	4976	GLU	OE1-CD-OE2	5.50	129.90	123.30
1	A	180	LEU	CB-CG-CD2	-5.50	101.66	111.00
1	G	118	LEU	CB-CG-CD2	-5.49	101.66	111.00
1	G	2658	PRO	N-CA-CB	5.49	109.89	103.30
1	A	4202	ARG	NE-CZ-NH1	-5.49	117.56	120.30
1	E	1076	ARG	NE-CZ-NH2	-5.49	117.56	120.30
1	A	474	ARG	NE-CZ-NH2	-5.48	117.56	120.30
1	G	3294	PRO	N-CA-CB	5.48	109.87	103.30
1	C	971	ASP	CB-CG-OD2	5.48	123.23	118.30
1	E	4567	LEU	CB-CG-CD2	5.47	120.30	111.00
1	G	1976	ARG	CG-CD-NE	5.46	123.27	111.80
1	C	1128	ARG	NE-CZ-NH1	5.46	123.03	120.30
1	E	180	LEU	CB-CG-CD2	-5.46	101.72	111.00
1	C	4649	LEU	CB-CG-CD2	-5.45	101.73	111.00
1	E	632	LEU	CB-CG-CD1	5.44	120.25	111.00
1	E	3351	PRO	N-CA-CB	5.44	109.83	103.30
1	E	22	LEU	CB-CG-CD1	-5.44	101.75	111.00
1	C	4991	PHE	CB-CG-CD1	-5.44	116.99	120.80
1	C	2658	PRO	N-CA-CB	5.44	109.82	103.30
1	E	2658	PRO	N-CA-CB	5.44	109.82	103.30
1	C	632	LEU	CB-CG-CD1	5.43	120.23	111.00
1	A	802	PHE	CB-CG-CD1	-5.42	117.00	120.80
1	E	4887	MET	CG-SD-CE	5.42	108.88	100.20
1	E	3773	ARG	NE-CZ-NH2	5.42	123.01	120.30
1	A	4679	ARG	NE-CZ-NH1	5.42	123.01	120.30
1	C	4112	LEU	CB-CG-CD1	5.42	120.21	111.00
1	A	4215	ARG	NE-CZ-NH1	5.42	123.01	120.30
1	G	773	LEU	CA-CB-CG	5.42	127.76	115.30
1	G	4880	MET	CG-SD-CE	5.42	108.87	100.20
1	A	4112	LEU	CB-CG-CD1	5.41	120.20	111.00
1	G	1548	LEU	CB-CG-CD2	5.41	120.19	111.00
1	E	2116	LEU	CB-CG-CD2	-5.41	101.81	111.00
1	C	3773	ARG	NE-CZ-NH2	5.40	123.00	120.30
1	A	1648	MET	CG-SD-CE	-5.40	91.56	100.20
1	G	1128	ARG	NE-CZ-NH1	5.40	123.00	120.30
1	G	4563	ARG	NE-CZ-NH2	5.40	123.00	120.30
1	C	118	LEU	CB-CG-CD2	-5.39	101.83	111.00
1	A	2115	GLU	N-CA-CB	-5.39	100.90	110.60
1	G	2063	LEU	CB-CG-CD1	-5.39	101.84	111.00
1	E	4632	LEU	CA-CB-CG	5.38	127.67	115.30
1	A	1128	ARG	NE-CZ-NH1	5.38	122.99	120.30
1	C	4215	ARG	NE-CZ-NH1	5.38	122.99	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	4980	LEU	CD1-CG-CD2	5.38	126.64	110.50
1	E	802	PHE	CB-CG-CD1	-5.38	117.04	120.80
1	E	4679	ARG	NE-CZ-NH1	5.38	122.99	120.30
1	E	4822	THR	CA-CB-CG2	-5.37	104.88	112.40
1	G	4703	ARG	NE-CZ-NH1	5.37	122.99	120.30
1	C	1836	PHE	CB-CG-CD1	-5.37	117.04	120.80
1	C	2163	ARG	NE-CZ-NH2	-5.36	117.62	120.30
1	G	632	LEU	CB-CG-CD1	5.36	120.11	111.00
1	A	4649	LEU	CB-CG-CD2	-5.36	101.90	111.00
1	E	1842	LEU	CB-CG-CD1	5.35	120.10	111.00
1	A	632	LEU	CB-CG-CD1	5.35	120.10	111.00
1	E	4649	LEU	CB-CG-CD2	-5.35	101.91	111.00
1	A	118	LEU	CB-CG-CD2	-5.35	101.91	111.00
1	G	22	LEU	CB-CG-CD1	-5.34	101.92	111.00
1	A	4980	LEU	CD1-CG-CD2	5.34	126.52	110.50
1	A	1836	PHE	CB-CG-CD1	-5.34	117.06	120.80
1	A	2454	ARG	NE-CZ-NH1	5.34	122.97	120.30
1	C	1842	LEU	CB-CG-CD1	5.34	120.07	111.00
1	E	2115	GLU	N-CA-CB	-5.33	101.00	110.60
1	E	4980	LEU	CD1-CG-CD2	5.33	126.49	110.50
1	G	4951	LYS	CD-CE-NZ	5.32	123.94	111.70
1	C	2115	GLU	N-CA-CB	-5.32	101.03	110.60
2	F	32	ASP	CB-CG-OD1	5.32	123.08	118.30
1	E	2497	ASP	CB-CG-OD2	-5.31	113.52	118.30
2	B	32	ASP	CB-CG-OD1	5.30	123.07	118.30
1	G	2115	GLU	N-CA-CB	-5.30	101.05	110.60
1	A	2163	ARG	NE-CZ-NH2	-5.30	117.65	120.30
1	C	2616	PRO	N-CA-CB	5.30	109.66	103.30
1	E	1548	LEU	CB-CG-CD2	5.30	120.01	111.00
1	E	4814	LEU	CB-CG-CD1	5.30	120.01	111.00
1	E	1212	ARG	NE-CZ-NH2	-5.30	117.65	120.30
1	A	1259	ARG	NE-CZ-NH2	-5.29	117.65	120.30
1	E	4844	LEU	CA-CB-CG	5.29	127.47	115.30
1	A	1842	LEU	CB-CG-CD1	5.29	119.99	111.00
1	C	4885	PHE	CB-CG-CD1	-5.29	117.10	120.80
1	G	4909	TYR	CE1-CZ-OH	5.29	134.38	120.10
1	A	2616	PRO	N-CA-CB	5.29	109.64	103.30
1	C	1548	LEU	CB-CG-CD2	5.28	119.97	111.00
1	A	1548	LEU	CB-CG-CD2	5.27	119.96	111.00
1	E	2063	LEU	CB-CG-CD1	-5.27	102.04	111.00
1	G	802	PHE	CB-CG-CD1	-5.27	117.11	120.80
1	G	2616	PRO	N-CA-CB	5.26	109.62	103.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	746	CYS	CA-CB-SG	-5.26	104.53	114.00
1	E	4991	PHE	CB-CG-CD1	-5.26	117.12	120.80
1	E	1128	ARG	NE-CZ-NH1	5.26	122.93	120.30
1	A	2926	LEU	O-C-N	5.24	131.08	122.70
1	C	1648	MET	CG-SD-CE	-5.24	91.82	100.20
1	G	1648	MET	CG-SD-CE	-5.24	91.82	100.20
1	C	802	PHE	CB-CG-CD1	-5.23	117.14	120.80
1	G	2094	LEU	CB-CG-CD1	-5.23	102.11	111.00
1	G	1842	LEU	CB-CG-CD1	5.23	119.89	111.00
1	G	4159	ARG	NE-CZ-NH1	5.23	122.92	120.30
1	C	3841	VAL	CG1-CB-CG2	5.23	119.27	110.90
1	C	1259	ARG	NE-CZ-NH2	-5.22	117.69	120.30
1	E	4048	LEU	CB-CG-CD1	-5.21	102.15	111.00
1	C	22	LEU	CB-CG-CD1	-5.21	102.15	111.00
1	G	2163	ARG	NE-CZ-NH2	-5.21	117.70	120.30
1	G	4581	LYS	CD-CE-NZ	5.20	123.67	111.70
1	E	2616	PRO	N-CA-CB	5.20	109.54	103.30
1	C	4800	LEU	CB-CG-CD1	5.20	119.83	111.00
1	E	4796	MET	CG-SD-CE	5.19	108.51	100.20
1	E	3751	VAL	CB-CA-C	-5.19	101.54	111.40
1	E	1259	ARG	NE-CZ-NH2	-5.19	117.71	120.30
1	G	746	CYS	CA-CB-SG	-5.18	104.67	114.00
1	E	1648	MET	CG-SD-CE	-5.17	91.92	100.20
1	A	3780	LEU	CB-CG-CD1	5.17	119.79	111.00
1	G	2712	PRO	N-CA-CB	5.17	109.50	103.30
1	C	4048	LEU	CB-CG-CD1	-5.16	102.22	111.00
1	C	746	CYS	CA-CB-SG	-5.16	104.71	114.00
2	D	32	ASP	CB-CG-OD2	-5.16	113.66	118.30
1	E	3841	VAL	CG1-CB-CG2	5.16	119.16	110.90
1	G	1259	ARG	NE-CZ-NH2	-5.16	117.72	120.30
1	E	4800	LEU	CB-CG-CD1	5.16	119.76	111.00
1	E	773	LEU	CA-CB-CG	5.15	127.16	115.30
1	G	1865	MET	CG-SD-CE	-5.15	91.96	100.20
1	G	4215	ARG	CD-NE-CZ	5.15	130.81	123.60
1	A	3932	ASP	CB-CG-OD2	5.15	122.93	118.30
1	A	3841	VAL	CG1-CB-CG2	5.15	119.13	110.90
1	C	3787	LYS	CD-CE-NZ	5.14	123.53	111.70
1	A	746	CYS	CA-CB-SG	-5.14	104.75	114.00
1	A	2497	ASP	CB-CG-OD2	-5.13	113.68	118.30
1	C	3751	VAL	CB-CA-C	-5.13	101.64	111.40
1	C	773	LEU	CA-CB-CG	5.13	127.10	115.30
1	A	3751	VAL	CB-CA-C	-5.13	101.66	111.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	G	1836	PHE	CB-CG-CD1	-5.13	117.21	120.80
1	C	3729	MET	CB-CG-SD	-5.12	97.02	112.40
1	E	3780	LEU	CB-CG-CD1	5.12	119.71	111.00
1	E	3926	LEU	CB-CG-CD1	5.12	119.71	111.00
1	G	3519	PRO	N-CA-CB	5.12	109.44	103.30
1	C	3780	LEU	CB-CG-CD1	5.11	119.69	111.00
1	A	2244	ARG	NE-CZ-NH1	-5.11	117.75	120.30
1	A	3729	MET	CB-CG-SD	-5.10	97.09	112.40
2	D	32	ASP	CB-CG-OD1	5.10	122.89	118.30
1	E	4769	MET	CG-SD-CE	5.10	108.36	100.20
1	A	4048	LEU	CB-CG-CD1	-5.10	102.33	111.00
1	G	4643	LEU	CA-CB-CG	5.09	127.02	115.30
1	A	4769	MET	CG-SD-CE	5.09	108.35	100.20
1	A	2920	ARG	NE-CZ-NH1	5.09	122.85	120.30
1	A	2063	LEU	CB-CG-CD1	-5.09	102.35	111.00
1	C	1589	PRO	N-CA-C	5.09	125.32	112.10
1	E	4668	LEU	CB-CG-CD1	-5.08	102.36	111.00
1	A	1589	PRO	N-CA-C	5.08	125.31	112.10
1	A	2336	ARG	NE-CZ-NH2	5.08	122.84	120.30
1	E	1600	LEU	CB-CG-CD1	5.08	119.63	111.00
1	E	4215	ARG	CD-NE-CZ	5.08	130.71	123.60
1	A	4632	LEU	CA-CB-CG	5.08	126.97	115.30
1	E	1589	PRO	N-CA-C	5.07	125.29	112.10
1	C	3926	LEU	CB-CG-CD1	5.07	119.62	111.00
1	C	1106	ARG	NE-CZ-NH2	-5.07	117.77	120.30
1	G	4905	ALA	N-CA-CB	5.07	117.19	110.10
1	C	1976	ARG	CG-CD-NE	5.07	122.44	111.80
1	C	2063	LEU	CB-CG-CD1	-5.06	102.39	111.00
1	C	842	PRO	N-CA-C	5.06	125.26	112.10
1	G	1589	PRO	N-CA-C	5.06	125.27	112.10
1	G	2454	ARG	NE-CZ-NH1	5.06	122.83	120.30
1	C	2920	ARG	NE-CZ-NH1	5.06	122.83	120.30
1	G	1931	LEU	CB-CG-CD1	5.06	119.60	111.00
2	B	32	ASP	CB-CG-OD2	-5.05	113.75	118.30
1	E	1836	PHE	CB-CG-CD1	-5.05	117.26	120.80
2	F	32	ASP	CB-CG-OD2	-5.05	113.75	118.30
1	G	842	PRO	N-CA-C	5.05	125.23	112.10
1	C	773	LEU	CB-CG-CD2	5.05	119.58	111.00
1	A	3926	LEU	CB-CG-CD1	5.04	119.57	111.00
1	G	3787	LYS	CD-CE-NZ	5.03	123.28	111.70
1	G	3751	VAL	CB-CA-C	-5.03	101.84	111.40
1	E	2456	ILE	CG1-CB-CG2	-5.03	100.33	111.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	3519	PRO	N-CA-CB	5.03	109.33	103.30
1	E	842	PRO	N-CA-C	5.03	125.17	112.10
1	E	2555	CYS	CA-CB-SG	5.03	123.05	114.00
1	E	3729	MET	CB-CG-SD	-5.03	97.33	112.40
1	G	2497	ASP	CB-CG-OD2	-5.03	113.78	118.30
1	E	4231	MET	CB-CG-SD	5.02	127.47	112.40
1	A	4668	LEU	CB-CG-CD1	-5.01	102.48	111.00
1	C	3519	PRO	N-CA-CB	5.01	109.31	103.30
1	C	4769	MET	CG-SD-CE	5.01	108.22	100.20
1	C	4215	ARG	CD-NE-CZ	5.01	130.61	123.60
1	E	4909	TYR	CE1-CZ-OH	5.01	133.63	120.10
1	A	773	LEU	CB-CG-CD2	5.00	119.51	111.00
1	C	4668	LEU	CB-CG-CD1	-5.00	102.49	111.00

There are no chirality outliers.

All (141) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	1100	MET	Peptide
1	A	1251	GLU	Peptide
1	A	1253	PRO	Peptide
1	A	1464	PHE	Peptide
1	A	1588	ALA	Mainchain,Peptide
1	A	1748	PHE	Peptide
1	A	1828	ASP	Mainchain,Peptide
1	A	1854	PHE	Mainchain,Peptide
1	A	1855	GLY	Peptide
1	A	1856	ASP	Mainchain,Peptide
1	A	1867	GLU	Mainchain,Peptide
1	A	1932	PRO	Peptide
1	A	2567	PRO	Peptide
1	A	31	GLU	Mainchain,Peptide
1	A	329	ARG	Mainchain,Peptide
1	A	4819	GLY	Mainchain,Peptide
1	A	4903	ASP	Mainchain,Peptide
1	A	4904	PRO	Mainchain,Peptide
1	A	4905	ALA	Mainchain,Peptide
1	A	734	GLY	Peptide
1	A	841	GLY	Mainchain,Peptide
1	A	894	GLY	Mainchain,Peptide
1	A	970	LEU	Peptide
1	C	1100	MET	Peptide

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Mol	Chain	Res	Type	Group
1	C	1251	GLU	Peptide
1	C	1253	PRO	Peptide
1	C	1464	PHE	Peptide
1	C	1588	ALA	Mainchain,Peptide
1	C	1748	PHE	Peptide
1	C	1828	ASP	Mainchain,Peptide
1	C	1854	PHE	Mainchain,Peptide
1	C	1855	GLY	Peptide
1	C	1856	ASP	Mainchain,Peptide
1	C	1867	GLU	Mainchain,Peptide
1	C	1932	PRO	Peptide
1	C	2567	PRO	Peptide
1	C	31	GLU	Mainchain,Peptide
1	C	329	ARG	Peptide
1	C	4819	GLY	Mainchain,Peptide
1	C	4903	ASP	Mainchain,Peptide
1	C	4904	PRO	Mainchain,Peptide
1	C	4905	ALA	Mainchain,Peptide
1	C	734	GLY	Peptide
1	C	841	GLY	Mainchain,Peptide
1	C	894	GLY	Mainchain,Peptide
1	C	970	LEU	Peptide
1	E	1100	MET	Peptide
1	E	1251	GLU	Peptide
1	E	1253	PRO	Peptide
1	E	1464	PHE	Peptide
1	E	1588	ALA	Mainchain,Peptide
1	E	1748	PHE	Peptide
1	E	1828	ASP	Mainchain,Peptide
1	E	1854	PHE	Mainchain,Peptide
1	E	1855	GLY	Peptide
1	E	1856	ASP	Mainchain,Peptide
1	E	1867	GLU	Mainchain,Peptide
1	E	1932	PRO	Peptide
1	E	2567	PRO	Peptide
1	E	31	GLU	Mainchain,Peptide
1	E	329	ARG	Mainchain,Peptide
1	E	4819	GLY	Mainchain,Peptide
1	E	4903	ASP	Mainchain,Peptide
1	E	4904	PRO	Mainchain,Peptide
1	E	4905	ALA	Mainchain,Peptide
1	E	734	GLY	Peptide

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Mol	Chain	Res	Type	Group
1	E	841	GLY	Mainchain,Peptide
1	E	894	GLY	Mainchain,Peptide
1	E	970	LEU	Peptide
1	G	1100	MET	Peptide
1	G	1253	PRO	Peptide
1	G	1464	PHE	Peptide
1	G	1588	ALA	Mainchain,Peptide
1	G	1748	PHE	Peptide
1	G	1828	ASP	Mainchain,Peptide
1	G	1854	PHE	Mainchain,Peptide
1	G	1855	GLY	Peptide
1	G	1856	ASP	Mainchain,Peptide
1	G	1867	GLU	Mainchain,Peptide
1	G	1932	PRO	Peptide
1	G	31	GLU	Mainchain,Peptide
1	G	329	ARG	Mainchain,Peptide
1	G	4819	GLY	Mainchain,Peptide
1	G	4903	ASP	Mainchain,Peptide
1	G	4904	PRO	Mainchain,Peptide
1	G	4905	ALA	Mainchain,Peptide
1	G	734	GLY	Peptide
1	G	841	GLY	Mainchain,Peptide
1	G	894	GLY	Mainchain,Peptide
1	G	970	LEU	Peptide

5.2 Too-close contacts

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	26843	0	24428	1190	0
1	C	26843	0	24428	1200	0
1	E	26843	0	24428	1194	0
1	G	26843	0	24427	1209	0
2	B	832	0	831	58	0
2	D	832	0	831	54	0
2	F	832	0	831	58	0
2	H	832	0	831	58	0
3	A	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
3	C	1	0	0	0	0
3	E	1	0	0	0	0
3	G	1	0	0	0	0
All	All	110704	0	101035	4733	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 22.

All (4733) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:4880:MET:HA	1:G:4578:LEU:HD11	1.26	1.17
1:A:4578:LEU:HD11	1:C:4880:MET:HA	1.18	1.17
1:E:4578:LEU:HD11	1:G:4880:MET:HA	1.25	1.16
1:C:4578:LEU:HD11	1:E:4880:MET:HA	1.17	1.10
1:A:4822:THR:HG22	1:C:4839:MET:SD	1.93	1.08
1:C:4822:THR:HG22	1:E:4839:MET:SD	1.95	1.05
1:A:4931:ILE:HD11	1:G:4940:PHE:CE1	1.96	1.00
1:A:4892:ARG:CZ	1:C:4896:GLY:HA3	1.95	0.97
1:E:1835:GLU:HG3	1:E:1932:PRO:HG2	1.46	0.97
1:C:1835:GLU:HG3	1:C:1932:PRO:HG2	1.45	0.96
1:A:1783:VAL:HG12	2:B:55:VAL:HA	1.47	0.95
1:A:1808:ARG:NH1	1:A:1858:ASP:OD2	2.00	0.95
1:E:626:LEU:O	1:E:629:ARG:NH1	1.99	0.95
1:C:626:LEU:O	1:C:629:ARG:NH1	1.99	0.95
1:E:1808:ARG:NH1	1:E:1858:ASP:OD2	2.00	0.95
1:A:4839:MET:HE3	1:G:4822:THR:O	1.65	0.95
1:G:1808:ARG:NH1	1:G:1858:ASP:OD2	2.00	0.95
1:A:1835:GLU:HG3	1:A:1932:PRO:HG2	1.46	0.94
1:G:1783:VAL:HG12	2:H:55:VAL:HA	1.47	0.94
1:C:4822:THR:CG2	1:E:4839:MET:SD	2.55	0.94
1:G:4192:ARG:HH11	1:G:5028:PHE:HB3	1.33	0.94
1:A:3970:GLN:NE2	1:A:5003:HIS:O	2.01	0.93
1:G:1835:GLU:HG3	1:G:1932:PRO:HG2	1.45	0.93
1:A:4921:PHE:CZ	1:G:4892:ARG:HA	2.03	0.93
1:A:626:LEU:O	1:A:629:ARG:NH1	1.99	0.93
1:C:1294:PRO:HD2	1:C:1584:ARG:HH11	1.34	0.93
1:C:1808:ARG:NH1	1:C:1858:ASP:OD2	2.00	0.93
1:A:1294:PRO:HD2	1:A:1584:ARG:HH11	1.34	0.93
1:C:3970:GLN:NE2	1:C:5003:HIS:O	2.01	0.93
1:G:1294:PRO:HD2	1:G:1584:ARG:HH11	1.34	0.93

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:4822:THR:CG2	1:C:4839:MET:SD	2.56	0.93
1:C:1783:VAL:HG12	2:D:55:VAL:HA	1.52	0.92
1:E:3970:GLN:NE2	1:E:5003:HIS:O	2.02	0.92
1:E:1294:PRO:HD2	1:E:1584:ARG:HH11	1.34	0.92
1:G:626:LEU:O	1:G:629:ARG:NH1	2.01	0.91
1:C:4892:ARG:CZ	1:E:4896:GLY:HA3	2.01	0.90
1:E:1783:VAL:HG12	2:F:55:VAL:HA	1.54	0.90
1:C:4192:ARG:HH11	1:C:5028:PHE:HB3	1.37	0.89
1:A:4192:ARG:HH11	1:A:5028:PHE:HB3	1.36	0.89
1:C:4892:ARG:HA	1:E:4921:PHE:CZ	2.06	0.89
1:A:4896:GLY:HA3	1:G:4892:ARG:CZ	2.03	0.89
1:A:4839:MET:SD	1:G:4822:THR:HG22	2.12	0.89
1:E:4192:ARG:HH11	1:E:5028:PHE:HB3	1.37	0.88
1:A:2456:ILE:HD11	1:C:178:ARG:HH12	1.38	0.88
1:A:2059:LEU:HD22	1:A:2062:ARG:HH12	1.38	0.88
2:D:23:VAL:HG22	2:D:47:LYS:HG2	1.56	0.88
2:F:23:VAL:HG22	2:F:47:LYS:HG2	1.56	0.88
1:A:1436:SER:HA	1:A:1515:VAL:O	1.75	0.87
1:E:4826:ILE:HD11	1:G:4839:MET:SD	2.15	0.87
1:C:2059:LEU:HD22	1:C:2062:ARG:HH12	1.38	0.87
1:A:1439:VAL:N	1:A:1513:ASP:O	2.07	0.87
1:E:2173:GLN:HG2	1:E:2174:GLU:H	1.40	0.87
1:G:2173:GLN:HG2	1:G:2174:GLU:H	1.40	0.87
1:A:4839:MET:CE	1:G:4822:THR:O	2.23	0.87
2:B:23:VAL:HG22	2:B:47:LYS:HG2	1.56	0.87
1:C:4578:LEU:HD11	1:E:4880:MET:CA	2.05	0.86
1:C:2173:GLN:HG2	1:C:2174:GLU:H	1.40	0.86
1:A:2173:GLN:HG2	1:A:2174:GLU:H	1.40	0.86
1:E:2456:ILE:HD11	1:G:178:ARG:HH12	1.39	0.86
1:A:178:ARG:HH12	1:G:2456:ILE:HD11	1.40	0.86
1:C:2456:ILE:HD11	1:E:178:ARG:HH12	1.41	0.86
1:E:674:PHE:HZ	2:F:71:ARG:CZ	1.88	0.86
1:A:1555:LEU:HD12	1:A:1556:PRO:HD2	1.58	0.85
1:A:289:ARG:NH1	1:A:303:ASP:OD1	2.09	0.85
1:C:2922:LYS:HA	1:C:2925:GLU:CG	2.05	0.85
1:A:2459:SER:O	1:C:131:LEU:HD23	1.77	0.85
1:A:2922:LYS:HA	1:A:2925:GLU:CG	2.06	0.85
1:E:2059:LEU:HD22	1:E:2062:ARG:HH12	1.38	0.85
1:G:2059:LEU:HD22	1:G:2062:ARG:HH12	1.38	0.85
1:G:4708:THR:HG22	1:G:4710:SER:H	1.41	0.85
1:C:3772:THR:OG1	1:C:3773:ARG:NH1	2.10	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:674:PHE:HZ	2:D:71:ARG:CZ	1.90	0.85
1:C:1555:LEU:HD12	1:C:1556:PRO:HD2	1.59	0.85
1:C:289:ARG:NH1	1:C:303:ASP:OD1	2.10	0.85
1:A:3772:THR:OG1	1:A:3773:ARG:NH1	2.10	0.84
1:A:4892:ARG:HA	1:C:4921:PHE:CZ	2.11	0.84
1:A:4839:MET:SD	1:G:4822:THR:CG2	2.65	0.84
1:A:4839:MET:HE3	1:G:4826:ILE:HG13	1.59	0.84
1:A:131:LEU:HD23	1:G:2459:SER:O	1.77	0.84
1:C:2922:LYS:O	1:C:2925:GLU:HB2	1.77	0.84
1:E:289:ARG:NH1	1:E:303:ASP:OD1	2.10	0.84
1:E:674:PHE:CZ	2:F:71:ARG:CZ	2.60	0.84
1:G:1555:LEU:HD12	1:G:1556:PRO:HD2	1.59	0.84
1:G:289:ARG:NH1	1:G:303:ASP:OD1	2.10	0.84
1:G:4780:PHE:HA	1:G:4783:ILE:HD12	1.59	0.84
1:C:4708:THR:HG22	1:C:4710:SER:H	1.41	0.84
1:E:3772:THR:OG1	1:E:3773:ARG:NH1	2.10	0.84
1:C:4172:GLU:HG2	1:C:4175:ARG:HH12	1.43	0.83
1:C:2234:ARG:HH12	1:C:2271:THR:N	1.76	0.83
1:E:4708:THR:HG22	1:E:4710:SER:H	1.41	0.83
1:A:4708:THR:HG22	1:A:4710:SER:H	1.41	0.83
1:E:1555:LEU:HD12	1:E:1556:PRO:HD2	1.59	0.83
1:E:2234:ARG:HH12	1:E:2271:THR:N	1.76	0.83
1:E:2459:SER:O	1:G:131:LEU:HD23	1.79	0.82
1:A:2234:ARG:HH12	1:A:2271:THR:N	1.76	0.82
1:A:674:PHE:HZ	2:B:71:ARG:CZ	1.91	0.82
1:C:2921:GLU:O	1:C:2925:GLU:HG2	1.79	0.82
1:C:674:PHE:CZ	2:D:71:ARG:CZ	2.62	0.82
1:C:4578:LEU:CD1	1:E:4880:MET:HA	2.06	0.82
1:A:2922:LYS:O	1:A:2925:GLU:HB2	1.80	0.82
1:G:2234:ARG:HH12	1:G:2271:THR:N	1.76	0.82
1:G:4708:THR:HG21	1:G:4775:TYR:HB2	1.61	0.82
1:G:4033:GLY:O	1:G:4189:ARG:NH2	2.12	0.82
1:E:495:ASN:ND2	1:E:555:GLU:OE2	2.13	0.81
1:C:4940:PHE:CE1	1:E:4931:ILE:HD11	2.16	0.81
1:G:495:ASN:ND2	1:G:555:GLU:OE2	2.13	0.81
1:C:2459:SER:O	1:E:131:LEU:HD23	1.81	0.81
1:A:4578:LEU:CD1	1:C:4880:MET:HA	2.05	0.81
1:E:3750:GLU:HA	1:E:3753:PHE:HB3	1.62	0.80
1:E:702:TRP:HD1	2:F:34:LYS:HZ1	1.27	0.80
1:C:3750:GLU:HA	1:C:3753:PHE:HB3	1.62	0.80
1:A:674:PHE:CZ	2:B:71:ARG:CZ	2.64	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:4033:GLY:O	1:A:4189:ARG:NH2	2.15	0.80
1:A:4578:LEU:HD11	1:C:4880:MET:CA	2.08	0.80
1:G:4957:LYS:HA	1:G:4964:GLY:HA2	1.62	0.80
1:C:102:LEU:HB2	1:C:105:HIS:CD2	2.17	0.80
1:E:102:LEU:HB2	1:E:105:HIS:CD2	2.17	0.79
1:E:4033:GLY:O	1:E:4189:ARG:NH2	2.15	0.79
1:C:495:ASN:ND2	1:C:555:GLU:OE2	2.14	0.79
1:A:3750:GLU:HA	1:A:3753:PHE:HB3	1.63	0.79
1:G:1032:LYS:HB3	1:G:1036:ARG:HH12	1.48	0.79
1:A:2921:GLU:O	1:A:2925:GLU:HG2	1.82	0.79
1:A:495:ASN:ND2	1:A:555:GLU:OE2	2.14	0.79
1:A:4172:GLU:HG2	1:A:4175:ARG:HH12	1.46	0.79
1:E:4172:GLU:HG2	1:E:4175:ARG:HH12	1.47	0.79
1:G:4033:GLY:HA2	1:G:4189:ARG:HH12	1.46	0.79
1:G:1457:TYR:OH	1:G:1459:GLN:NE2	2.15	0.79
1:E:4578:LEU:CD1	1:G:4880:MET:HA	2.08	0.79
1:A:1032:LYS:HB3	1:A:1036:ARG:HH12	1.47	0.78
1:A:174:VAL:O	1:G:2452:ARG:NH2	2.16	0.78
1:C:4033:GLY:O	1:C:4189:ARG:NH2	2.15	0.78
1:A:102:LEU:HB2	1:A:105:HIS:CD2	2.18	0.78
1:E:3677:LEU:HB2	1:E:3698:LEU:HD12	1.65	0.78
1:G:102:LEU:HB2	1:G:105:HIS:CD2	2.17	0.78
1:G:3772:THR:OG1	1:G:3773:ARG:NH1	2.16	0.78
1:E:675:LEU:HD23	1:E:676:THR:HG23	1.66	0.78
1:A:2463:LEU:N	1:A:2510:TYR:HH	1.81	0.78
1:E:4578:LEU:HD11	1:G:4880:MET:CA	2.10	0.78
1:G:4971:THR:HG23	1:G:4974:GLY:HA3	1.66	0.78
1:G:830:ARG:HD3	1:G:1616:GLU:OE2	1.83	0.78
1:A:4880:MET:CA	1:G:4578:LEU:HD11	2.12	0.78
1:E:830:ARG:HD3	1:E:1616:GLU:OE2	1.84	0.78
1:E:2463:LEU:N	1:E:2510:TYR:HH	1.81	0.78
1:C:2463:LEU:N	1:C:2510:TYR:HH	1.82	0.78
1:E:1032:LYS:HB3	1:E:1036:ARG:HH12	1.48	0.78
1:A:830:ARG:HD3	1:A:1616:GLU:OE2	1.83	0.77
1:C:675:LEU:HD23	1:C:676:THR:HG23	1.66	0.77
1:C:1294:PRO:HD2	1:C:1584:ARG:NH1	1.99	0.77
1:C:3677:LEU:HB2	1:C:3698:LEU:HD12	1.66	0.77
1:E:4780:PHE:HA	1:E:4783:ILE:HD12	1.66	0.77
1:G:1294:PRO:HD2	1:G:1584:ARG:NH1	1.99	0.77
1:G:675:LEU:HD23	1:G:676:THR:HG23	1.66	0.77
1:A:4957:LYS:HA	1:A:4964:GLY:HA2	1.67	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1294:PRO:HD2	1:E:1584:ARG:NH1	2.00	0.77
1:C:4780:PHE:HA	1:C:4783:ILE:HD12	1.67	0.77
1:G:3970:GLN:NE2	1:G:5003:HIS:O	2.17	0.77
1:A:830:ARG:NH1	1:A:1613:LEU:O	2.18	0.76
1:C:830:ARG:NH1	1:C:1613:LEU:O	2.18	0.76
1:A:1294:PRO:HD2	1:A:1584:ARG:NH1	1.99	0.76
1:C:4957:LYS:HA	1:C:4964:GLY:HA2	1.66	0.76
1:E:4889:VAL:O	1:E:4893:ALA:N	2.18	0.76
1:G:830:ARG:NH1	1:G:1613:LEU:O	2.18	0.76
1:C:1032:LYS:HB3	1:C:1036:ARG:HH12	1.48	0.76
1:C:830:ARG:HD3	1:C:1616:GLU:OE2	1.84	0.76
1:G:1078:GLU:HA	1:G:1237:TRP:HZ3	1.50	0.76
1:G:2463:LEU:N	1:G:2510:TYR:HH	1.83	0.76
1:A:1078:GLU:HA	1:A:1237:TRP:HZ3	1.50	0.76
1:A:355:LEU:HD22	1:A:379:HIS:HA	1.65	0.76
1:A:675:LEU:HD23	1:A:676:THR:HG23	1.66	0.76
1:G:1933:GLU:OE2	1:G:2111:VAL:HG12	1.84	0.76
1:E:1078:GLU:HA	1:E:1237:TRP:HZ3	1.50	0.76
1:E:4957:LYS:HA	1:E:4964:GLY:HA2	1.67	0.76
1:A:3677:LEU:HB2	1:A:3698:LEU:HD12	1.66	0.76
1:G:674:PHE:CZ	2:H:71:ARG:CZ	2.69	0.76
1:A:4780:PHE:HA	1:A:4783:ILE:HD12	1.68	0.76
1:A:4880:MET:HA	1:G:4578:LEU:CD1	2.13	0.76
1:G:2924:GLN:HB3	1:G:2928:LYS:HE2	1.68	0.76
1:A:717:ASP:HB2	2:B:7:ILE:HG23	1.69	0.75
1:E:830:ARG:NH1	1:E:1613:LEU:O	2.19	0.75
1:C:1933:GLU:OE2	1:C:2111:VAL:HG12	1.86	0.75
1:C:717:ASP:HB2	2:D:7:ILE:HG23	1.68	0.75
1:A:1933:GLU:OE2	1:A:2111:VAL:HG12	1.86	0.75
1:C:1078:GLU:HA	1:C:1237:TRP:HZ3	1.50	0.75
1:E:1933:GLU:OE2	1:E:2111:VAL:HG12	1.86	0.75
1:G:355:LEU:HD22	1:G:379:HIS:HA	1.66	0.75
1:C:702:TRP:HD1	2:D:34:LYS:HZ1	1.31	0.75
1:C:1931:LEU:O	1:C:1936:LYS:NZ	2.20	0.75
1:C:355:LEU:HD22	1:C:379:HIS:HA	1.68	0.75
2:F:24:VAL:HG12	2:F:103:LEU:HA	1.69	0.75
1:E:1457:TYR:OH	1:E:1459:GLN:NE2	2.19	0.75
1:E:717:ASP:HB2	2:F:7:ILE:HG23	1.69	0.75
1:E:4892:ARG:CZ	1:G:4896:GLY:HA3	2.17	0.74
1:A:1457:TYR:OH	1:A:1459:GLN:NE2	2.19	0.74
1:A:2456:ILE:HD11	1:C:178:ARG:NH1	2.02	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:3882:GLN:HB2	1:C:3957:VAL:HG22	1.70	0.74
1:A:1205:GLY:HA3	1:A:1227:ALA:HB3	1.69	0.74
2:H:23:VAL:HG22	2:H:47:LYS:HG2	1.69	0.74
1:A:4729:GLY:HA2	1:A:4737:ILE:HG13	1.69	0.74
1:E:42:PHE:HB3	1:E:447:ASP:OD2	1.87	0.74
1:E:355:LEU:HD22	1:E:379:HIS:HA	1.68	0.74
1:G:20:VAL:HG12	1:G:204:PRO:HA	1.70	0.74
1:A:20:VAL:HG12	1:A:204:PRO:HA	1.70	0.74
1:A:3882:GLN:HB2	1:A:3957:VAL:HG22	1.70	0.74
1:E:20:VAL:HG12	1:E:204:PRO:HA	1.69	0.74
1:E:3882:GLN:HB2	1:E:3957:VAL:HG22	1.70	0.74
1:C:20:VAL:HG12	1:C:204:PRO:HA	1.70	0.74
1:E:2456:ILE:HD11	1:G:178:ARG:NH1	2.03	0.73
1:E:3756:LYS:NZ	1:E:4999:ASP:OD1	2.20	0.73
1:G:4138:ASP:O	1:G:4142:ASN:ND2	2.21	0.73
1:G:674:PHE:HZ	2:H:71:ARG:CZ	2.02	0.73
1:A:1141:ARG:HH12	1:A:1169:LEU:HD11	1.54	0.73
1:A:1708:ARG:NH2	1:A:1837:GLN:HA	2.04	0.73
1:A:42:PHE:HB3	1:A:447:ASP:OD2	1.87	0.73
2:D:24:VAL:HG12	2:D:103:LEU:HA	1.69	0.73
1:A:4207:MET:HG2	1:A:4208:PRO:HD3	1.71	0.73
1:E:1931:LEU:O	1:E:1936:LYS:NZ	2.19	0.73
1:A:4940:PHE:CE1	1:C:4931:ILE:HD11	2.23	0.73
2:B:24:VAL:HG12	2:B:103:LEU:HA	1.69	0.73
1:C:2456:ILE:HD11	1:E:178:ARG:NH1	2.04	0.73
1:E:1669:LEU:O	1:E:1673:VAL:HG23	1.88	0.73
1:A:2452:ARG:NH2	1:C:174:VAL:O	2.20	0.73
1:E:1205:GLY:HA3	1:E:1227:ALA:HB3	1.71	0.73
1:C:2452:ARG:NH2	1:E:174:VAL:O	2.21	0.73
1:E:4207:MET:HG2	1:E:4208:PRO:HD3	1.71	0.73
1:G:42:PHE:HB3	1:G:447:ASP:OD2	1.88	0.73
1:A:1439:VAL:HB	1:A:1513:ASP:HB2	1.69	0.73
1:C:42:PHE:HB3	1:C:447:ASP:OD2	1.87	0.73
1:E:1075:PHE:HB2	1:E:1192:CYS:HB2	1.71	0.73
1:G:1075:PHE:HB2	1:G:1192:CYS:HB2	1.71	0.73
1:A:4876:CYS:O	1:A:4881:THR:OG1	2.07	0.73
1:C:1669:LEU:O	1:C:1673:VAL:HG23	1.89	0.73
1:C:281:ARG:HG2	1:C:312:THR:HG21	1.71	0.73
1:A:1075:PHE:HB2	1:A:1192:CYS:HB2	1.71	0.72
1:A:818:ARG:HG2	1:A:1028:ASP:HA	1.71	0.72
1:E:4727:LYS:HZ1	1:E:4728:HIS:CE1	2.06	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:4036:VAL:O	1:G:4038:GLY:N	2.22	0.72
1:G:4960:ILE:HD11	1:G:4985:LEU:HB2	1.71	0.72
1:A:683:ARG:HH12	1:A:725:HIS:CD2	2.07	0.72
1:C:818:ARG:HG2	1:C:1028:ASP:HA	1.71	0.72
1:C:4876:CYS:O	1:C:4881:THR:OG1	2.06	0.72
1:G:1669:LEU:O	1:G:1673:VAL:HG23	1.89	0.72
1:G:4961:CYS:SG	1:G:4978:HIS:NE2	2.63	0.72
1:A:674:PHE:HB3	2:B:40:ARG:NH1	2.04	0.72
1:C:1087:ARG:HB3	1:C:1223:PHE:CD1	2.25	0.72
1:E:1087:ARG:HB3	1:E:1223:PHE:CD1	2.24	0.72
1:C:1708:ARG:NH2	1:C:1837:GLN:HA	2.04	0.72
1:E:1708:ARG:NH2	1:E:1837:GLN:HA	2.04	0.72
1:E:2452:ARG:NH2	1:G:174:VAL:O	2.23	0.72
1:E:4729:GLY:HA2	1:E:4737:ILE:HG13	1.69	0.72
1:E:818:ARG:HG2	1:E:1028:ASP:HA	1.72	0.72
1:G:1205:GLY:HA3	1:G:1227:ALA:HB3	1.72	0.72
1:A:1669:LEU:O	1:A:1673:VAL:HG23	1.89	0.72
1:A:178:ARG:NH1	1:G:2456:ILE:HD11	2.03	0.72
1:C:1205:GLY:HA3	1:C:1227:ALA:HB3	1.70	0.72
1:E:4876:CYS:O	1:E:4881:THR:OG1	2.05	0.72
1:E:674:PHE:HB3	2:F:40:ARG:NH1	2.03	0.72
1:G:683:ARG:HH12	1:G:725:HIS:CD2	2.08	0.72
1:A:1087:ARG:HB3	1:A:1223:PHE:CD1	2.25	0.72
1:G:818:ARG:HG2	1:G:1028:ASP:HA	1.72	0.72
1:G:1708:ARG:NH2	1:G:1837:GLN:HA	2.03	0.72
1:A:1931:LEU:O	1:A:1936:LYS:NZ	2.20	0.72
1:A:1941:ASN:O	1:A:1944:GLU:HG2	1.90	0.72
1:C:1075:PHE:HB2	1:C:1192:CYS:HB2	1.71	0.72
1:C:1783:VAL:CG1	2:D:55:VAL:HA	2.19	0.72
1:C:4729:GLY:HA2	1:C:4737:ILE:HG13	1.70	0.72
1:E:1291:LEU:HD23	1:E:1293:LEU:H	1.55	0.72
1:G:1087:ARG:HB3	1:G:1223:PHE:CD1	2.24	0.72
1:A:281:ARG:HG2	1:A:312:THR:HG21	1.71	0.72
1:A:544:LEU:HD12	1:A:574:VAL:HG13	1.72	0.72
1:G:674:PHE:HB3	2:H:40:ARG:NH1	2.04	0.72
1:G:717:ASP:HB2	2:H:7:ILE:HG23	1.72	0.72
1:A:293:LEU:H	1:A:311:ALA:HB1	1.54	0.71
1:C:2922:LYS:HA	1:C:2925:GLU:HG3	1.70	0.71
1:C:4207:MET:HG2	1:C:4208:PRO:HD3	1.71	0.71
1:C:674:PHE:HB3	2:D:40:ARG:NH1	2.05	0.71
1:E:2921:GLU:O	1:E:2925:GLU:HG2	1.89	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:4892:ARG:NH1	1:C:4896:GLY:HA3	2.04	0.71
1:A:4033:GLY:HA2	1:A:4189:ARG:HH12	1.55	0.71
1:C:1032:LYS:HB3	1:C:1036:ARG:NH1	2.05	0.71
1:E:1941:ASN:O	1:E:1944:GLU:HG2	1.90	0.71
1:G:1141:ARG:HH12	1:G:1169:LEU:HD11	1.55	0.71
1:G:298:GLY:HA3	1:G:377:ILE:HB	1.72	0.71
1:A:1032:LYS:HB3	1:A:1036:ARG:NH1	2.05	0.71
1:C:2178:MET:O	1:C:2182:ILE:HG12	1.90	0.71
1:C:683:ARG:HH12	1:C:725:HIS:CD2	2.07	0.71
1:C:1439:VAL:HB	1:C:1513:ASP:HB2	1.71	0.71
1:E:683:ARG:HH12	1:E:725:HIS:CD2	2.07	0.71
1:A:702:TRP:HD1	2:B:34:LYS:HZ1	1.30	0.71
1:C:4643:LEU:HA	1:C:4646:LEU:HB2	1.72	0.71
1:G:3750:GLU:HA	1:G:3753:PHE:HB3	1.72	0.71
1:A:4708:THR:HG21	1:A:4775:TYR:HB2	1.72	0.71
1:C:1941:ASN:O	1:C:1944:GLU:HG2	1.91	0.71
1:E:1032:LYS:HB3	1:E:1036:ARG:NH1	2.05	0.71
1:E:544:LEU:HD12	1:E:574:VAL:HG13	1.72	0.71
1:G:293:LEU:H	1:G:311:ALA:HB1	1.54	0.71
1:G:1783:VAL:CG1	2:H:55:VAL:HA	2.20	0.71
1:A:2178:MET:O	1:A:2182:ILE:HG12	1.91	0.71
1:C:4708:THR:HG21	1:C:4775:TYR:HB2	1.72	0.71
1:C:3756:LYS:NZ	1:C:4999:ASP:OD1	2.20	0.71
1:G:1941:ASN:O	1:G:1944:GLU:HG2	1.91	0.71
1:G:4729:GLY:HA2	1:G:4737:ILE:HG13	1.73	0.71
1:G:4913:ARG:HA	1:G:4916:PHE:HB3	1.71	0.71
1:A:2341:VAL:HG22	1:A:2342:ASN:H	1.56	0.71
1:E:2341:VAL:HG22	1:E:2342:ASN:H	1.56	0.71
1:E:298:GLY:HA3	1:E:377:ILE:HB	1.72	0.71
1:E:1783:VAL:CG1	2:F:55:VAL:HA	2.19	0.71
1:G:1078:GLU:HG2	1:G:1080:SER:H	1.55	0.71
1:G:674:PHE:CD1	2:H:40:ARG:NH1	2.58	0.71
1:C:544:LEU:HD12	1:C:574:VAL:HG13	1.72	0.71
1:E:1078:GLU:HG2	1:E:1080:SER:H	1.55	0.71
1:G:670:GLU:HA	1:G:740:PRO:HB3	1.71	0.71
1:E:293:LEU:H	1:E:311:ALA:HB1	1.54	0.70
1:G:281:ARG:HG2	1:G:312:THR:HG21	1.71	0.70
1:A:1078:GLU:HG2	1:A:1080:SER:H	1.55	0.70
1:A:670:GLU:HA	1:A:740:PRO:HB3	1.72	0.70
1:C:293:LEU:H	1:C:311:ALA:HB1	1.54	0.70
1:C:4138:ASP:O	1:C:4142:ASN:ND2	2.25	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4643:LEU:HA	1:E:4646:LEU:HB2	1.72	0.70
1:E:4708:THR:HG21	1:E:4775:TYR:HB2	1.72	0.70
1:E:4961:CYS:SG	1:E:4978:HIS:NE2	2.61	0.70
1:G:4983:HIS:O	1:G:4985:LEU:N	2.23	0.70
1:A:4643:LEU:HA	1:A:4646:LEU:HB2	1.73	0.70
1:A:298:GLY:HA3	1:A:377:ILE:HB	1.72	0.70
1:A:4138:ASP:O	1:A:4142:ASN:ND2	2.25	0.70
1:E:281:ARG:HG2	1:E:312:THR:HG21	1.72	0.70
1:A:2293:GLN:HA	1:A:2296:GLU:HG2	1.73	0.70
1:C:1663:HIS:O	1:C:1666:THR:OG1	2.08	0.70
1:C:2341:VAL:HG22	1:C:2342:ASN:H	1.57	0.70
1:C:298:GLY:HA3	1:C:377:ILE:HB	1.72	0.70
1:A:3966:THR:O	1:A:3970:GLN:HB2	1.92	0.70
1:C:1291:LEU:HD23	1:C:1293:LEU:H	1.55	0.70
1:E:2178:MET:O	1:E:2182:ILE:HG12	1.90	0.70
1:E:702:TRP:CD1	2:F:34:LYS:NZ	2.56	0.70
1:E:737:LEU:HD11	2:F:7:ILE:HG22	1.73	0.70
1:A:3970:GLN:HE21	1:A:5004:THR:HA	1.56	0.70
1:C:670:GLU:HA	1:C:740:PRO:HB3	1.72	0.70
1:E:3966:THR:O	1:E:3970:GLN:HB2	1.92	0.70
1:G:1032:LYS:HB3	1:G:1036:ARG:NH1	2.05	0.70
1:G:544:LEU:HD12	1:G:574:VAL:HG13	1.72	0.70
1:C:4033:GLY:HA2	1:C:4189:ARG:HH12	1.57	0.70
1:E:670:GLU:HA	1:E:740:PRO:HB3	1.72	0.70
1:A:2922:LYS:HA	1:A:2925:GLU:HG3	1.74	0.70
1:A:737:LEU:HD11	2:B:7:ILE:HG22	1.72	0.70
1:E:4138:ASP:O	1:E:4142:ASN:ND2	2.24	0.70
1:G:1291:LEU:HD23	1:G:1293:LEU:H	1.55	0.70
1:G:2341:VAL:HG22	1:G:2342:ASN:H	1.57	0.70
1:C:2095:GLN:NE2	1:C:2127:GLN:O	2.25	0.70
1:A:2326:CYS:HA	1:A:2329:GLU:HG2	1.74	0.69
1:G:548:VAL:HG21	1:G:582:HIS:HB3	1.73	0.69
1:C:2326:CYS:HA	1:C:2329:GLU:HG2	1.74	0.69
1:A:1102:VAL:HG22	1:A:1192:CYS:HA	1.75	0.69
1:E:2095:GLN:NE2	1:E:2127:GLN:O	2.25	0.69
1:C:1141:ARG:HH12	1:C:1169:LEU:HD11	1.57	0.69
1:E:4033:GLY:HA2	1:E:4189:ARG:HH12	1.56	0.69
1:A:548:VAL:HG21	1:A:582:HIS:HB3	1.73	0.69
1:C:1078:GLU:HG2	1:C:1080:SER:H	1.55	0.69
1:A:1783:VAL:CG1	2:B:55:VAL:HA	2.21	0.69
1:C:3966:THR:O	1:C:3970:GLN:HB2	1.91	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:4154:VAL:HG22	1:C:4157:ASP:OD2	1.92	0.69
1:E:4786:ASP:OD2	1:E:4789:PHE:N	2.26	0.69
1:A:1291:LEU:HD23	1:A:1293:LEU:H	1.55	0.69
1:A:2095:GLN:NE2	1:A:2127:GLN:O	2.25	0.69
1:C:1102:VAL:HG22	1:C:1192:CYS:HA	1.75	0.69
1:E:2326:CYS:HA	1:E:2329:GLU:HG2	1.74	0.69
1:G:3677:LEU:HB2	1:G:3698:LEU:HD12	1.75	0.69
1:A:4003:LEU:HB2	1:A:4013:LEU:HD12	1.75	0.69
1:A:3756:LYS:NZ	1:A:4999:ASP:OD1	2.20	0.69
1:C:548:VAL:HG21	1:C:582:HIS:HB3	1.73	0.69
1:E:1102:VAL:HG22	1:E:1192:CYS:HA	1.75	0.69
1:E:2922:LYS:O	1:E:2925:GLU:HB2	1.93	0.69
1:C:4961:CYS:SG	1:C:4978:HIS:NE2	2.61	0.69
1:G:1102:VAL:HG22	1:G:1192:CYS:HA	1.75	0.69
1:A:4961:CYS:SG	1:A:4978:HIS:NE2	2.61	0.69
1:E:445:LEU:HD21	1:E:522:LEU:HD12	1.75	0.69
1:E:548:VAL:HG21	1:E:582:HIS:HB3	1.74	0.68
1:G:4923:PHE:O	1:G:4928:LEU:HG	1.94	0.68
1:A:1663:HIS:O	1:A:1666:THR:OG1	2.08	0.68
1:G:4563:ARG:NH1	1:G:4815:ASP:OD1	2.27	0.68
2:B:74:LEU:HB2	2:B:99:PHE:HB2	1.74	0.68
1:C:2293:GLN:HA	1:C:2296:GLU:HG2	1.74	0.68
1:C:3970:GLN:HE21	1:C:5004:THR:HA	1.58	0.68
1:C:4892:ARG:HG3	1:E:4921:PHE:CE1	2.28	0.68
1:C:4971:THR:HG23	1:C:4974:GLY:HA3	1.75	0.68
1:E:2460:LEU:HD12	1:G:178:ARG:NH1	2.08	0.68
1:G:2178:MET:O	1:G:2182:ILE:HG12	1.91	0.68
1:G:2326:CYS:HA	1:G:2329:GLU:HG2	1.74	0.68
1:G:289:ARG:HD2	1:G:303:ASP:HA	1.75	0.68
1:G:674:PHE:HB3	2:H:40:ARG:HH12	1.58	0.68
1:C:4148:THR:O	1:C:4151:SER:OG	2.11	0.68
1:C:674:PHE:HZ	2:D:71:ARG:NE	1.92	0.68
1:E:3970:GLN:HE21	1:E:5004:THR:HA	1.57	0.68
1:G:265:LEU:HD12	1:G:279:PRO:HB2	1.75	0.68
1:G:4867:GLU:O	1:G:4869:GLU:N	2.27	0.68
1:G:4986:ALA:O	1:G:4989:MET:HG2	1.93	0.68
1:G:4207:MET:HG2	1:G:4208:PRO:HD3	1.76	0.68
1:A:4154:VAL:HG22	1:A:4157:ASP:OD2	1.92	0.68
1:E:2293:GLN:HA	1:E:2296:GLU:HG2	1.75	0.68
1:E:289:ARG:HD2	1:E:303:ASP:HA	1.76	0.68
1:E:674:PHE:HZ	2:F:71:ARG:NE	1.90	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4154:VAL:HG22	1:E:4157:ASP:OD2	1.92	0.68
1:A:4148:THR:O	1:A:4151:SER:OG	2.12	0.68
1:A:4727:LYS:HZ1	1:A:4728:HIS:CE1	2.11	0.68
1:C:4003:LEU:HB2	1:C:4013:LEU:HD12	1.76	0.68
1:C:4786:ASP:OD2	1:C:4789:PHE:N	2.26	0.68
1:C:4230:LYS:NZ	1:C:4960:ILE:O	2.27	0.68
2:F:74:LEU:HB2	2:F:99:PHE:HB2	1.75	0.68
1:A:4786:ASP:OD2	1:A:4789:PHE:N	2.26	0.68
1:A:674:PHE:HZ	2:B:71:ARG:NE	1.91	0.68
1:C:4655:PHE:O	1:C:4658:ILE:HG13	1.94	0.68
2:D:74:LEU:HB2	2:D:99:PHE:HB2	1.75	0.68
1:A:2059:LEU:HB3	1:A:2062:ARG:NH1	2.09	0.68
1:A:4921:PHE:CE1	1:G:4892:ARG:HG3	2.29	0.68
1:C:702:TRP:CD1	2:D:34:LYS:NZ	2.58	0.68
1:G:1931:LEU:O	1:G:1936:LYS:NZ	2.21	0.68
1:A:168:ASP:OD1	1:A:201:ASN:ND2	2.27	0.67
1:A:2151:ASP:OD1	1:A:2188:ASN:ND2	2.27	0.67
1:A:4867:GLU:O	1:A:4869:GLU:N	2.27	0.67
1:C:289:ARG:HD2	1:C:303:ASP:HA	1.75	0.67
1:E:1708:ARG:HD2	1:E:1837:GLN:HE22	1.59	0.67
1:G:4876:CYS:O	1:G:4881:THR:OG1	2.09	0.67
1:C:4036:VAL:O	1:C:4038:GLY:N	2.27	0.67
1:E:2059:LEU:HB3	1:E:2062:ARG:NH1	2.09	0.67
1:G:2151:ASP:OD1	1:G:2188:ASN:ND2	2.27	0.67
1:A:4230:LYS:NZ	1:A:4960:ILE:O	2.27	0.67
1:E:106:ALA:HB1	1:E:147:TRP:HB3	1.77	0.67
1:E:2151:ASP:OD1	1:E:2188:ASN:ND2	2.27	0.67
1:E:4148:THR:O	1:E:4151:SER:OG	2.11	0.67
1:A:4655:PHE:O	1:A:4658:ILE:HG13	1.95	0.67
1:C:1708:ARG:HD2	1:C:1837:GLN:HE22	1.59	0.67
1:C:737:LEU:HD11	2:D:7:ILE:HG22	1.74	0.67
1:E:4036:VAL:O	1:E:4038:GLY:N	2.27	0.67
1:E:4230:LYS:NZ	1:E:4960:ILE:O	2.27	0.67
1:E:4581:LYS:HD2	1:G:4856:PHE:HZ	1.59	0.67
1:E:4655:PHE:O	1:E:4658:ILE:HG13	1.94	0.67
1:G:3780:LEU:HD11	1:G:3820:LEU:HD21	1.76	0.67
1:C:106:ALA:HB1	1:C:147:TRP:HB3	1.77	0.67
1:C:2151:ASP:OD1	1:C:2188:ASN:ND2	2.27	0.67
1:E:975:VAL:HG21	1:E:1044:ARG:HB3	1.75	0.67
1:E:265:LEU:HD12	1:E:279:PRO:HB2	1.77	0.67
1:A:975:VAL:HG21	1:A:1044:ARG:HB3	1.75	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:4036:VAL:O	1:A:4038:GLY:N	2.27	0.67
1:C:2460:LEU:HD12	1:E:178:ARG:NH1	2.10	0.67
1:E:544:LEU:HD21	1:E:578:ILE:HG13	1.76	0.67
1:E:579:GLN:HB2	1:E:582:HIS:ND1	2.10	0.67
1:G:2059:LEU:HB3	1:G:2062:ARG:NH1	2.09	0.67
1:G:579:GLN:HB2	1:G:582:HIS:ND1	2.10	0.67
1:A:4884:LEU:HA	1:A:4887:MET:HB3	1.77	0.67
1:A:445:LEU:HD21	1:A:522:LEU:HD12	1.76	0.67
1:A:579:GLN:HB2	1:A:582:HIS:ND1	2.10	0.67
1:C:4884:LEU:HA	1:C:4887:MET:HB3	1.77	0.67
1:C:4892:ARG:NH1	1:E:4896:GLY:HA3	2.09	0.67
1:G:717:ASP:OD2	2:H:7:ILE:HA	1.95	0.67
1:A:1100:MET:HB2	1:A:1126:GLY:HA3	1.76	0.67
1:A:289:ARG:HD2	1:A:303:ASP:HA	1.75	0.67
1:C:1457:TYR:OH	1:C:1459:GLN:NE2	2.27	0.67
1:G:1663:HIS:O	1:G:1666:THR:OG1	2.08	0.67
1:G:975:VAL:HG21	1:G:1044:ARG:HB3	1.76	0.67
1:A:544:LEU:HD21	1:A:578:ILE:HG13	1.76	0.67
1:C:975:VAL:HG21	1:C:1044:ARG:HB3	1.76	0.67
2:D:48:PHE:HZ	2:D:63:VAL:HG11	1.59	0.67
1:E:4003:LEU:HB2	1:E:4013:LEU:HD12	1.76	0.67
1:E:865:PRO:HA	1:E:868:GLU:HB2	1.76	0.67
1:G:1703:LEU:HD12	1:G:1704:PRO:HD2	1.77	0.67
1:A:265:LEU:HD12	1:A:279:PRO:HB2	1.76	0.67
1:C:265:LEU:HD12	1:C:279:PRO:HB2	1.75	0.67
1:C:4867:GLU:O	1:C:4869:GLU:N	2.27	0.67
1:C:544:LEU:HD21	1:C:578:ILE:HG13	1.76	0.67
1:E:4867:GLU:O	1:E:4869:GLU:N	2.27	0.67
1:G:1544:PRO:HG2	1:G:1546:THR:HG23	1.77	0.67
1:G:2095:GLN:NE2	1:G:2127:GLN:O	2.28	0.67
1:A:263:GLU:O	1:A:281:ARG:N	2.28	0.66
1:C:2059:LEU:HB3	1:C:2062:ARG:NH1	2.09	0.66
1:C:445:LEU:HD21	1:C:522:LEU:HD12	1.75	0.66
1:E:645:ARG:O	1:E:824:GLU:N	2.28	0.66
1:G:106:ALA:HB1	1:G:147:TRP:HB3	1.77	0.66
1:G:4003:LEU:HB2	1:G:4013:LEU:HD12	1.77	0.66
1:G:865:PRO:HA	1:G:868:GLU:HB2	1.77	0.66
1:A:4971:THR:HG23	1:A:4974:GLY:HA3	1.77	0.66
1:A:758:ARG:NH1	1:A:763:PRO:HD3	2.10	0.66
1:E:1856:ASP:H	1:E:1857:GLU:HB3	1.60	0.66
1:E:2430:ILE:HD13	1:E:2502:MET:HG2	1.78	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:263:GLU:O	1:G:281:ARG:N	2.28	0.66
1:G:445:LEU:HD21	1:G:522:LEU:HD12	1.75	0.66
1:A:2460:LEU:HD12	1:C:178:ARG:NH1	2.10	0.66
1:A:2770:LYS:HG3	1:A:2791:LEU:HD21	1.77	0.66
1:A:4210:VAL:O	1:A:4214:LYS:N	2.28	0.66
1:C:1856:ASP:H	1:C:1857:GLU:HB3	1.61	0.66
1:E:2770:LYS:HG3	1:E:2791:LEU:HD21	1.77	0.66
1:E:4210:VAL:O	1:E:4214:LYS:N	2.28	0.66
1:E:4892:ARG:HA	1:G:4921:PHE:CZ	2.29	0.66
1:A:1513:ASP:C	1:A:1514:LEU:HD12	2.16	0.66
1:C:1100:MET:HB2	1:C:1126:GLY:HA3	1.76	0.66
1:C:540:PHE:HA	1:C:543:ASN:HD22	1.61	0.66
1:C:579:GLN:HB2	1:C:582:HIS:ND1	2.10	0.66
1:A:1703:LEU:HD12	1:A:1704:PRO:HD2	1.78	0.66
1:A:540:PHE:HA	1:A:543:ASN:HD22	1.61	0.66
1:C:1078:GLU:HA	1:C:1237:TRP:CZ3	2.31	0.66
1:C:2770:LYS:HG3	1:C:2791:LEU:HD21	1.77	0.66
1:E:1100:MET:HB2	1:E:1126:GLY:HA3	1.76	0.66
1:E:252:VAL:HG23	1:E:257:ARG:HE	1.61	0.66
1:E:4971:THR:HG23	1:E:4974:GLY:HA3	1.77	0.66
2:F:48:PHE:HZ	2:F:63:VAL:HG11	1.59	0.66
1:G:4884:LEU:HA	1:G:4887:MET:HB3	1.78	0.66
1:C:591:ASP:OD2	1:C:1585:LYS:HG3	1.95	0.66
1:E:674:PHE:HB3	2:F:40:ARG:HH12	1.60	0.66
1:A:591:ASP:OD2	1:A:1585:LYS:HG3	1.95	0.66
1:C:1703:LEU:HD12	1:C:1704:PRO:HD2	1.77	0.66
1:C:2430:ILE:HD13	1:C:2502:MET:HG2	1.78	0.66
1:E:3934:TYR:HB2	1:E:3995:VAL:HG13	1.78	0.66
1:E:168:ASP:OD1	1:E:201:ASN:ND2	2.27	0.66
1:G:591:ASP:OD2	1:G:1585:LYS:HG3	1.95	0.66
1:G:168:ASP:OD1	1:G:201:ASN:ND2	2.28	0.66
1:G:1708:ARG:HD2	1:G:1837:GLN:HE22	1.60	0.66
1:A:865:PRO:HA	1:A:868:GLU:HB2	1.78	0.66
1:C:252:VAL:HG23	1:C:257:ARG:HE	1.61	0.66
1:C:263:GLU:O	1:C:281:ARG:N	2.28	0.66
1:E:4933:GLN:HG2	1:G:4926:VAL:HG13	1.76	0.66
1:G:1100:MET:HB2	1:G:1126:GLY:HA3	1.76	0.66
1:A:1544:PRO:HG2	1:A:1546:THR:HG23	1.78	0.65
1:A:1856:ASP:H	1:A:1857:GLU:HB3	1.61	0.65
1:C:1544:PRO:HG2	1:C:1546:THR:HG23	1.78	0.65
1:C:2862:LEU:HD21	1:C:2929:PHE:HB2	1.78	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:628:GLY:O	1:C:630:GLU:N	2.27	0.65
1:C:758:ARG:NH1	1:C:763:PRO:HD3	2.11	0.65
1:E:1703:LEU:HD12	1:E:1704:PRO:HD2	1.77	0.65
1:G:4154:VAL:HG13	1:G:4154:VAL:O	1.96	0.65
1:A:3934:TYR:HB2	1:A:3995:VAL:HG13	1.78	0.65
1:A:4839:MET:SD	1:G:4822:THR:HG23	2.35	0.65
1:C:2922:LYS:HA	1:C:2925:GLU:HG2	1.78	0.65
1:C:4727:LYS:HZ1	1:C:4728:HIS:CE1	2.13	0.65
1:G:1856:ASP:H	1:G:1857:GLU:HB3	1.61	0.65
1:G:252:VAL:HG23	1:G:257:ARG:HE	1.61	0.65
1:G:544:LEU:HD21	1:G:578:ILE:HG13	1.77	0.65
1:G:593:HIS:HB3	1:G:596:ASN:ND2	2.12	0.65
1:G:645:ARG:O	1:G:824:GLU:N	2.28	0.65
1:A:2430:ILE:HD13	1:A:2502:MET:HG2	1.78	0.65
1:A:645:ARG:O	1:A:824:GLU:N	2.28	0.65
1:E:1663:HIS:O	1:E:1666:THR:OG1	2.07	0.65
1:E:758:ARG:NH1	1:E:763:PRO:HD3	2.11	0.65
1:G:2770:LYS:HG3	1:G:2791:LEU:HD21	1.77	0.65
1:G:628:GLY:O	1:G:630:GLU:N	2.27	0.65
1:A:1708:ARG:HD2	1:A:1837:GLN:HE22	1.60	0.65
1:A:2646:ASN:HA	1:A:2699:ALA:HB1	1.79	0.65
1:C:593:HIS:HB3	1:C:596:ASN:ND2	2.12	0.65
1:A:2862:LEU:HD21	1:A:2929:PHE:HB2	1.78	0.65
1:A:4839:MET:SD	1:G:4822:THR:O	2.54	0.65
1:A:593:HIS:HB3	1:A:596:ASN:ND2	2.12	0.65
1:C:3934:TYR:HB2	1:C:3995:VAL:HG13	1.78	0.65
1:E:1078:GLU:HA	1:E:1237:TRP:CZ3	2.31	0.65
1:E:591:ASP:OD2	1:E:1585:LYS:HG3	1.95	0.65
1:G:2293:GLN:HA	1:G:2296:GLU:HG2	1.77	0.65
1:A:178:ARG:NH1	1:G:2460:LEU:HD12	2.12	0.65
1:A:3969:ILE:HG12	1:A:3980:LEU:HD11	1.79	0.65
1:A:628:GLY:O	1:A:630:GLU:N	2.27	0.65
2:B:48:PHE:HZ	2:B:63:VAL:HG11	1.59	0.65
1:E:18:ASP:HB3	1:E:69:LEU:HD12	1.78	0.65
1:G:3966:THR:O	1:G:3970:GLN:N	2.29	0.65
1:A:1078:GLU:HA	1:A:1237:TRP:CZ3	2.32	0.65
1:A:451:TYR:O	1:A:474:ARG:NH1	2.30	0.65
1:E:540:PHE:HA	1:E:543:ASN:HD22	1.61	0.65
1:G:2430:ILE:HD13	1:G:2502:MET:HG2	1.79	0.65
1:G:669:ASP:OD2	1:G:790:ARG:HB2	1.96	0.65
1:C:3969:ILE:HG12	1:C:3980:LEU:HD11	1.79	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1141:ARG:HH12	1:E:1169:LEU:HD11	1.59	0.65
1:E:2862:LEU:HD21	1:E:2929:PHE:HB2	1.79	0.65
1:G:4786:ASP:OD2	1:G:4789:PHE:N	2.29	0.65
1:A:4839:MET:CE	1:G:4826:ILE:HG13	2.27	0.65
1:E:467:LYS:O	1:E:470:SER:OG	2.12	0.65
1:G:4107:GLU:HA	1:G:4110:PHE:HB3	1.78	0.65
1:G:540:PHE:HA	1:G:543:ASN:HD22	1.61	0.65
1:E:669:ASP:OD2	1:E:790:ARG:HB2	1.97	0.65
1:A:4688:ILE:HD12	1:A:4737:ILE:HD12	1.79	0.64
1:A:669:ASP:OD2	1:A:790:ARG:HB2	1.97	0.64
1:C:865:PRO:HA	1:C:868:GLU:HB2	1.77	0.64
1:E:1544:PRO:HG2	1:E:1546:THR:HG23	1.78	0.64
1:E:4884:LEU:HA	1:E:4887:MET:HB3	1.80	0.64
1:G:451:TYR:O	1:G:474:ARG:NH1	2.30	0.64
1:E:263:GLU:O	1:E:281:ARG:N	2.28	0.64
1:E:593:HIS:HB3	1:E:596:ASN:ND2	2.12	0.64
1:A:106:ALA:HB1	1:A:147:TRP:HB3	1.79	0.64
1:A:3914:ASN:HB3	1:A:3917:ILE:HD12	1.79	0.64
1:C:4688:ILE:HD12	1:C:4737:ILE:HD12	1.79	0.64
1:E:451:TYR:O	1:E:474:ARG:NH1	2.31	0.64
1:E:628:GLY:O	1:E:630:GLU:N	2.27	0.64
1:G:4643:LEU:HA	1:G:4646:LEU:HB2	1.80	0.64
1:A:1115:LEU:HD21	1:A:1123:VAL:HG21	1.80	0.64
1:A:2922:LYS:HA	1:A:2925:GLU:HG2	1.77	0.64
1:C:2646:ASN:HA	1:C:2699:ALA:HB1	1.78	0.64
1:E:3969:ILE:HG12	1:E:3980:LEU:HD11	1.80	0.64
1:G:1436:SER:HA	1:G:1515:VAL:O	1.98	0.64
1:G:18:ASP:HB3	1:G:69:LEU:HD12	1.79	0.64
1:A:131:LEU:HB3	1:G:2460:LEU:HD21	1.80	0.64
1:A:4027:LEU:O	1:A:4031:LEU:HD13	1.98	0.64
1:A:674:PHE:HB3	2:B:40:ARG:HH12	1.62	0.64
1:C:1293:LEU:HD23	1:C:1584:ARG:HG2	1.80	0.64
1:C:168:ASP:OD1	1:C:201:ASN:ND2	2.28	0.64
1:C:669:ASP:OD2	1:C:790:ARG:HB2	1.97	0.64
1:E:4688:ILE:HD12	1:E:4737:ILE:HD12	1.79	0.64
1:E:638:ILE:HG22	1:E:639:ASN:H	1.62	0.64
1:G:3914:ASN:HB3	1:G:3917:ILE:HD12	1.78	0.64
1:A:116:MET:HG2	1:A:139:GLU:HG3	1.80	0.64
1:C:3914:ASN:HB3	1:C:3917:ILE:HD12	1.79	0.64
1:G:1561:VAL:HG13	1:G:1562:ILE:HG22	1.80	0.64
1:G:467:LYS:O	1:G:470:SER:OG	2.12	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:638:ILE:HG22	1:G:639:ASN:H	1.62	0.64
1:A:252:VAL:HG23	1:A:257:ARG:HE	1.61	0.64
1:C:2453:ILE:O	1:C:2456:ILE:HG22	1.98	0.64
1:E:4823:LEU:HA	1:E:4826:ILE:HD12	1.79	0.64
1:G:1078:GLU:HB3	1:G:1081:TYR:CD2	2.33	0.64
1:C:1115:LEU:HD21	1:C:1123:VAL:HG21	1.80	0.64
1:A:4892:ARG:HG3	1:C:4921:PHE:CE1	2.33	0.64
1:E:1078:GLU:HB3	1:E:1081:TYR:CD2	2.33	0.64
1:E:2453:ILE:O	1:E:2456:ILE:HG22	1.98	0.64
1:G:116:MET:HG2	1:G:139:GLU:HG3	1.80	0.64
1:G:4933:GLN:O	1:G:4937:ILE:HG12	1.98	0.64
1:G:758:ARG:NH1	1:G:763:PRO:HD3	2.13	0.64
1:A:674:PHE:CD1	2:B:40:ARG:NH1	2.64	0.64
1:C:1143:TRP:HB3	1:C:1164:LEU:HD11	1.80	0.64
1:C:451:TYR:O	1:C:474:ARG:NH1	2.31	0.64
1:A:2922:LYS:C	1:A:2925:GLU:HB2	2.18	0.64
1:A:4035:VAL:HG23	1:A:4036:VAL:H	1.63	0.64
1:C:116:MET:HG2	1:C:139:GLU:HG3	1.80	0.64
1:A:1078:GLU:HB3	1:A:1081:TYR:CD2	2.33	0.63
1:C:4210:VAL:O	1:C:4214:LYS:N	2.28	0.63
2:D:27:THR:HG22	2:D:100:ASP:HB3	1.80	0.63
1:E:1115:LEU:HD21	1:E:1123:VAL:HG21	1.80	0.63
1:E:1293:LEU:HD23	1:E:1584:ARG:HG2	1.80	0.63
1:E:2460:LEU:HD21	1:G:131:LEU:HB3	1.80	0.63
1:E:3702:VAL:HG21	1:E:3773:ARG:HB3	1.80	0.63
1:G:2453:ILE:O	1:G:2456:ILE:HG22	1.98	0.63
1:G:2646:ASN:HA	1:G:2699:ALA:HB1	1.81	0.63
1:G:737:LEU:HD13	2:H:8:SER:HB3	1.80	0.63
1:E:3889:GLN:NE2	1:E:3963:ASN:OD1	2.32	0.63
1:G:3783:ILE:O	1:G:3831:SER:OG	2.11	0.63
1:G:3813:GLN:OE1	1:G:3896:ASN:ND2	2.31	0.63
1:A:2453:ILE:O	1:A:2456:ILE:HG22	1.98	0.63
1:A:3878:ASP:O	1:A:3881:THR:OG1	2.14	0.63
1:A:4986:ALA:O	1:A:4989:MET:HG2	1.99	0.63
1:C:18:ASP:HB3	1:C:69:LEU:HD12	1.79	0.63
1:C:212:GLY:HA2	1:C:341:TYR:H	1.63	0.63
1:C:4035:VAL:HG23	1:C:4036:VAL:H	1.63	0.63
1:C:638:ILE:HG22	1:C:639:ASN:H	1.62	0.63
1:E:1143:TRP:HB3	1:E:1164:LEU:HD11	1.80	0.63
1:E:3892:CYS:HB3	1:E:3900:GLN:HE21	1.63	0.63
1:E:4124:ASN:OD1	1:E:4125:PHE:N	2.31	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4986:ALA:O	1:E:4989:MET:HG2	1.99	0.63
1:G:1143:TRP:HB3	1:G:1164:LEU:HD11	1.79	0.63
1:G:1104:TRP:HB3	1:G:1188:PHE:HB3	1.81	0.63
1:C:2770:LYS:HB3	1:C:2775:TRP:HB2	1.81	0.63
1:C:263:GLU:HB2	1:C:281:ARG:HB2	1.81	0.63
1:C:646:PRO:HD2	1:C:779:PRO:HG2	1.79	0.63
1:C:4027:LEU:O	1:C:4031:LEU:HD13	1.97	0.63
1:C:674:PHE:CD1	2:D:40:ARG:NH1	2.62	0.63
1:E:1104:TRP:HB3	1:E:1188:PHE:HB3	1.81	0.63
1:G:4715:TYR:CE2	1:G:4717:ASP:HB2	2.34	0.63
1:G:4983:HIS:C	1:G:4985:LEU:H	2.01	0.63
1:A:646:PRO:HD2	1:A:779:PRO:HG2	1.80	0.63
1:C:1561:VAL:HG13	1:C:1562:ILE:HG22	1.80	0.63
1:C:3963:ASN:O	1:C:3966:THR:OG1	2.14	0.63
1:C:4889:VAL:O	1:C:4893:ALA:N	2.22	0.63
1:C:603:LEU:HD23	1:C:606:LEU:HD12	1.80	0.63
1:E:2646:ASN:HA	1:E:2699:ALA:HB1	1.80	0.63
1:E:4656:LEU:O	1:E:4659:ILE:HG22	1.97	0.63
1:E:603:LEU:HD23	1:E:606:LEU:HD12	1.81	0.63
1:G:2862:LEU:HD21	1:G:2929:PHE:HB2	1.80	0.63
1:E:3914:ASN:HB3	1:E:3917:ILE:HD12	1.79	0.63
2:F:27:THR:HG22	2:F:100:ASP:HB3	1.80	0.63
1:G:1115:LEU:HD21	1:G:1123:VAL:HG21	1.80	0.63
1:G:4881:THR:HA	1:G:4884:LEU:HG	1.81	0.63
1:A:1561:VAL:HG13	1:A:1562:ILE:HG22	1.80	0.63
1:C:224:HIS:HB2	1:C:247:TYR:CD1	2.34	0.63
1:E:4035:VAL:HG23	1:E:4036:VAL:H	1.63	0.63
1:A:170:ILE:HG12	1:A:197:GLN:HB3	1.79	0.63
1:A:1729:SER:HB2	1:A:2163:ARG:NH1	2.14	0.63
1:A:4656:LEU:O	1:A:4659:ILE:HG22	1.98	0.63
1:C:4656:LEU:O	1:C:4659:ILE:HG22	1.98	0.63
1:E:212:GLY:HA2	1:E:341:TYR:H	1.64	0.63
1:E:263:GLU:HB2	1:E:281:ARG:HB2	1.81	0.63
1:G:170:ILE:HG12	1:G:197:GLN:HB3	1.81	0.63
1:G:1729:SER:HB2	1:G:2163:ARG:NH1	2.14	0.63
1:G:603:LEU:HD23	1:G:606:LEU:HD12	1.81	0.63
1:G:674:PHE:CB	2:H:40:ARG:HH12	2.12	0.63
1:A:3889:GLN:NE2	1:A:3963:ASN:OD1	2.32	0.62
1:A:4868:ASP:OD1	1:A:4869:GLU:N	2.32	0.62
1:A:4889:VAL:O	1:A:4893:ALA:N	2.22	0.62
1:C:1078:GLU:HB3	1:C:1081:TYR:CD2	2.33	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:4124:ASN:OD1	1:C:4125:PHE:N	2.32	0.62
1:G:4124:ASN:OD1	1:G:4125:PHE:N	2.31	0.62
1:A:4931:ILE:HD11	1:G:4940:PHE:CD1	2.33	0.62
1:A:1835:GLU:CG	1:A:1932:PRO:HG2	2.27	0.62
1:A:224:HIS:HB2	1:A:247:TYR:CD1	2.34	0.62
1:C:1104:TRP:HB3	1:C:1188:PHE:HB3	1.81	0.62
1:E:2770:LYS:HB3	1:E:2775:TRP:HB2	1.81	0.62
1:E:3962:PHE:O	1:E:3966:THR:HG23	1.99	0.62
1:G:2071:ARG:NH2	1:G:3666:ASP:OD2	2.32	0.62
1:G:3926:LEU:O	1:G:3930:ILE:HG12	1.99	0.62
1:G:4956:THR:O	1:G:4965:SER:N	2.32	0.62
1:A:1143:TRP:HB3	1:A:1164:LEU:HD11	1.79	0.62
1:A:2770:LYS:HB3	1:A:2775:TRP:HB2	1.81	0.62
1:A:603:LEU:HD23	1:A:606:LEU:HD12	1.81	0.62
1:C:2460:LEU:HD21	1:E:131:LEU:HB3	1.80	0.62
1:E:1436:SER:HA	1:E:1515:VAL:O	1.99	0.62
1:E:1561:VAL:HG13	1:E:1562:ILE:HG22	1.80	0.62
1:E:4027:LEU:O	1:E:4031:LEU:HD13	1.98	0.62
1:E:4868:ASP:OD1	1:E:4869:GLU:N	2.32	0.62
1:G:1078:GLU:HA	1:G:1237:TRP:CZ3	2.32	0.62
1:A:1104:TRP:HB3	1:A:1188:PHE:HB3	1.81	0.62
1:A:669:ASP:HB3	1:A:788:LYS:HZ1	1.64	0.62
1:C:3702:VAL:HG21	1:C:3773:ARG:HB3	1.81	0.62
1:C:3962:PHE:O	1:C:3966:THR:HG23	1.99	0.62
1:C:4986:ALA:O	1:C:4989:MET:HG2	1.99	0.62
1:E:116:MET:HG2	1:E:139:GLU:HG3	1.80	0.62
1:G:224:HIS:HB2	1:G:247:TYR:CD1	2.34	0.62
1:G:3884:LEU:O	1:G:3887:PHE:HB3	1.98	0.62
1:G:3900:GLN:NE2	1:G:3967:GLU:O	2.31	0.62
1:G:4160:LEU:O	1:G:4164:LEU:N	2.32	0.62
1:G:4853:VAL:O	1:G:4857:ASN:ND2	2.31	0.62
1:A:263:GLU:HB2	1:A:281:ARG:HB2	1.82	0.62
1:G:1853:ILE:O	1:G:1854:PHE:HB2	1.99	0.62
1:G:2770:LYS:HB3	1:G:2775:TRP:HB2	1.82	0.62
1:C:2452:ARG:NH2	1:E:177:GLU:OE2	2.33	0.62
1:E:1729:SER:HB2	1:E:2163:ARG:NH1	2.14	0.62
2:B:27:THR:HG22	2:B:100:ASP:HB3	1.81	0.62
1:E:1087:ARG:HB3	1:E:1223:PHE:HD1	1.64	0.62
1:E:2071:ARG:NH2	1:E:3666:ASP:OD2	2.33	0.62
1:G:1087:ARG:HB3	1:G:1223:PHE:HD1	1.65	0.62
1:G:212:GLY:HA2	1:G:341:TYR:H	1.64	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:4901:ILE:HD13	1:G:4913:ARG:HH21	1.65	0.62
1:A:2071:ARG:NH2	1:A:3666:ASP:OD2	2.33	0.62
1:E:170:ILE:HG12	1:E:197:GLN:HB3	1.81	0.62
1:E:224:HIS:HB2	1:E:247:TYR:CD1	2.34	0.62
1:E:646:PRO:HD2	1:E:779:PRO:HG2	1.80	0.62
1:G:3892:CYS:HB3	1:G:3900:GLN:HE21	1.65	0.62
1:G:646:PRO:HD2	1:G:779:PRO:HG2	1.80	0.62
1:A:1293:LEU:HD23	1:A:1584:ARG:HG2	1.81	0.62
1:A:554:LEU:HD13	1:A:1596:GLU:HB3	1.82	0.62
1:A:3962:PHE:O	1:A:3966:THR:HG23	1.99	0.62
1:C:554:LEU:HD13	1:C:1596:GLU:HB3	1.82	0.62
1:C:645:ARG:O	1:C:824:GLU:N	2.28	0.62
1:E:1827:ARG:O	1:E:1827:ARG:HG3	2.00	0.62
1:E:1853:ILE:O	1:E:1854:PHE:HB2	1.99	0.62
1:E:554:LEU:HD13	1:E:1596:GLU:HB3	1.82	0.62
1:G:1293:LEU:HD23	1:G:1584:ARG:HG2	1.81	0.62
1:G:263:GLU:HB2	1:G:281:ARG:HB2	1.81	0.62
1:C:1158:ASN:HB3	1:C:1182:ILE:H	1.65	0.62
1:C:1853:ILE:O	1:C:1854:PHE:HB2	1.99	0.62
1:C:2460:LEU:CD1	1:E:178:ARG:NH1	2.62	0.62
1:A:212:GLY:HA2	1:A:341:TYR:H	1.63	0.61
1:A:702:TRP:CD1	2:B:34:LYS:NZ	2.58	0.61
1:A:892:THR:H	1:A:902:ARG:HA	1.65	0.61
1:G:4688:ILE:HD12	1:G:4737:ILE:HD12	1.82	0.61
1:G:478:PHE:CZ	1:G:483:MET:HB2	2.35	0.61
2:H:27:THR:HA	2:H:38:SER:HA	1.82	0.61
1:A:168:ASP:HB3	1:A:199:LEU:HD22	1.82	0.61
1:A:2930:LEU:HB3	1:A:2937:VAL:HG21	1.82	0.61
1:A:4581:LYS:HD2	1:C:4856:PHE:HZ	1.65	0.61
1:E:3965:LEU:HD23	1:E:3968:TYR:HD2	1.65	0.61
1:G:554:LEU:HD13	1:G:1596:GLU:HB3	1.82	0.61
1:G:264:PRO:HG3	1:G:274:LEU:HD11	1.82	0.61
1:A:3702:VAL:HG21	1:A:3773:ARG:HB3	1.81	0.61
1:C:1827:ARG:O	1:C:1827:ARG:HG3	2.01	0.61
1:C:4023:MET:O	1:C:4026:MET:HG2	2.00	0.61
1:C:674:PHE:HB3	2:D:40:ARG:HH12	1.64	0.61
1:E:748:LEU:HD11	1:E:753:PRO:HA	1.82	0.61
1:E:2460:LEU:CD1	1:G:178:ARG:NH1	2.63	0.61
1:A:264:PRO:HG3	1:A:274:LEU:HD11	1.82	0.61
1:C:1729:SER:HB2	1:C:2163:ARG:NH1	2.15	0.61
1:E:2930:LEU:HB3	1:E:2937:VAL:HG21	1.80	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:478:PHE:CZ	1:E:483:MET:HB2	2.36	0.61
1:A:4124:ASN:OD1	1:A:4125:PHE:N	2.32	0.61
1:C:2237:CYS:HB2	1:C:2275:VAL:HG22	1.83	0.61
1:C:3892:CYS:HB3	1:C:3900:GLN:HE21	1.64	0.61
1:E:2237:CYS:HB2	1:E:2275:VAL:HG22	1.82	0.61
1:E:264:PRO:HG3	1:E:274:LEU:HD11	1.83	0.61
1:G:1158:ASN:HB3	1:G:1182:ILE:H	1.65	0.61
1:A:4856:PHE:HZ	1:G:4581:LYS:HD2	1.64	0.61
1:A:3892:CYS:HB3	1:A:3900:GLN:HE21	1.64	0.61
1:C:1835:GLU:CG	1:C:1932:PRO:HG2	2.26	0.61
1:C:2071:ARG:NH2	1:C:3666:ASP:OD2	2.33	0.61
1:C:467:LYS:O	1:C:470:SER:OG	2.13	0.61
1:G:1827:ARG:HG3	1:G:1827:ARG:O	2.01	0.61
1:G:4555:LEU:HD22	1:G:4660:GLY:HA3	1.82	0.61
1:G:4847:VAL:HG21	1:G:4928:LEU:HD11	1.83	0.61
1:G:4868:ASP:OD1	1:G:4869:GLU:N	2.32	0.61
1:A:1815:LEU:HD11	1:A:1845:VAL:HG21	1.83	0.61
1:A:3965:LEU:HD23	1:A:3968:TYR:HD2	1.65	0.61
1:A:4023:MET:O	1:A:4026:MET:HG2	2.00	0.61
1:C:478:PHE:CZ	1:C:483:MET:HB2	2.35	0.61
1:C:892:THR:H	1:C:902:ARG:HA	1.65	0.61
1:E:1835:GLU:CG	1:E:1932:PRO:HG2	2.26	0.61
1:E:4063:ASP:HA	1:E:4170:ILE:HG12	1.83	0.61
1:G:214:VAL:HA	1:G:341:TYR:CE1	2.36	0.61
1:G:4190:ILE:HD11	1:G:5026:ASP:HB2	1.81	0.61
1:A:1827:ARG:HG3	1:A:1827:ARG:O	2.01	0.61
1:A:18:ASP:HB3	1:A:69:LEU:HD12	1.81	0.61
1:C:264:PRO:HG3	1:C:274:LEU:HD11	1.83	0.61
1:C:3889:GLN:NE2	1:C:3963:ASN:OD1	2.32	0.61
1:C:3965:LEU:HD23	1:C:3968:TYR:HD2	1.65	0.61
1:C:4172:GLU:HG2	1:C:4175:ARG:NH1	2.15	0.61
1:E:1825:HIS:ND1	1:E:1825:HIS:O	2.34	0.61
1:E:892:THR:H	1:E:902:ARG:HA	1.65	0.61
1:A:178:ARG:NH1	1:G:2460:LEU:CD1	2.64	0.61
1:G:748:LEU:HD11	1:G:753:PRO:HA	1.83	0.61
1:G:892:THR:H	1:G:902:ARG:HA	1.65	0.61
1:A:214:VAL:HA	1:A:341:TYR:CE1	2.36	0.61
1:A:4031:LEU:HD11	1:A:4044:MET:SD	2.41	0.61
1:G:1835:GLU:CG	1:G:1932:PRO:HG2	2.26	0.61
1:G:4642:ALA:O	1:G:4646:LEU:N	2.32	0.61
2:H:48:PHE:HZ	2:H:63:VAL:HG11	1.64	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1856:ASP:H	1:A:1858:ASP:H	1.49	0.61
1:A:4063:ASP:HA	1:A:4170:ILE:HG12	1.83	0.61
1:A:478:PHE:CZ	1:A:483:MET:HB2	2.36	0.61
1:C:840:VAL:HG12	1:C:1199:VAL:HG13	1.83	0.61
1:A:2460:LEU:HD21	1:C:131:LEU:HB3	1.82	0.61
1:C:1815:LEU:HD11	1:C:1845:VAL:HG21	1.83	0.61
1:E:3893:GLU:HA	1:E:3967:GLU:OE2	2.01	0.61
1:G:1815:LEU:HD11	1:G:1845:VAL:HG21	1.82	0.61
1:C:1825:HIS:ND1	1:C:1825:HIS:O	2.33	0.60
1:C:1856:ASP:H	1:C:1858:ASP:H	1.49	0.60
1:C:4063:ASP:HA	1:C:4170:ILE:HG12	1.83	0.60
1:E:1158:ASN:HB3	1:E:1182:ILE:H	1.65	0.60
1:E:4023:MET:O	1:E:4026:MET:HG2	2.00	0.60
1:G:887:ILE:HG21	1:G:962:SER:HB2	1.83	0.60
1:C:170:ILE:HG12	1:C:197:GLN:HB3	1.81	0.60
1:C:2930:LEU:HB3	1:C:2937:VAL:HG21	1.81	0.60
1:E:2452:ARG:NH2	1:G:177:GLU:OE2	2.34	0.60
1:E:533:ASN:OD1	1:E:534:ARG:N	2.34	0.60
1:G:3968:TYR:HB2	1:G:3969:ILE:HD12	1.83	0.60
1:G:533:ASN:OD1	1:G:534:ARG:N	2.34	0.60
1:A:1853:ILE:O	1:A:1854:PHE:HB2	1.99	0.60
1:C:4031:LEU:HD11	1:C:4044:MET:SD	2.41	0.60
1:G:1825:HIS:ND1	1:G:1825:HIS:O	2.34	0.60
1:G:1856:ASP:H	1:G:1858:ASP:H	1.49	0.60
1:A:1854:PHE:HB3	1:A:1855:GLY:HA2	1.84	0.60
1:A:2237:CYS:HB2	1:A:2275:VAL:HG22	1.82	0.60
1:C:748:LEU:HD11	1:C:753:PRO:HA	1.82	0.60
1:E:214:VAL:HA	1:E:341:TYR:CE1	2.36	0.60
1:E:3771:HIS:HD2	1:E:3812:VAL:HG22	1.65	0.60
1:E:299:LEU:HB2	1:E:378:LEU:HG	1.84	0.60
1:G:2204:HIS:HB3	1:G:2239:PHE:CE2	2.37	0.60
1:G:4030:LEU:HD23	1:G:4044:MET:HE3	1.83	0.60
1:A:1205:GLY:HA2	1:A:1225:PRO:HB2	1.83	0.60
1:A:3771:HIS:HD2	1:A:3812:VAL:HG22	1.64	0.60
1:A:4715:TYR:CE2	1:A:4717:ASP:HB2	2.36	0.60
1:C:1854:PHE:HB3	1:C:1855:GLY:HA2	1.83	0.60
1:E:37:LEU:HD11	1:E:47:CYS:SG	2.42	0.60
1:E:5006:GLN:HA	1:E:5009:TYR:CE2	2.37	0.60
1:G:1854:PHE:HB3	1:G:1855:GLY:HA2	1.84	0.60
1:G:4836:GLN:O	1:G:4839:MET:HG2	2.01	0.60
1:A:1825:HIS:ND1	1:A:1825:HIS:O	2.34	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2204:HIS:HB3	1:A:2239:PHE:CE2	2.37	0.60
1:A:748:LEU:HD11	1:A:753:PRO:HA	1.82	0.60
1:A:748:LEU:HD13	1:A:755:ILE:HG13	1.84	0.60
1:C:168:ASP:HB3	1:C:199:LEU:HD22	1.83	0.60
1:C:299:LEU:HB2	1:C:378:LEU:HG	1.83	0.60
1:E:840:VAL:HG12	1:E:1199:VAL:HG13	1.83	0.60
1:E:168:ASP:HB3	1:E:199:LEU:HD22	1.83	0.60
1:E:2204:HIS:HB3	1:E:2239:PHE:CE2	2.37	0.60
1:E:4031:LEU:HD11	1:E:4044:MET:SD	2.41	0.60
1:E:674:PHE:CD1	2:F:40:ARG:NH1	2.65	0.60
1:E:2460:LEU:HD21	1:G:131:LEU:CB	2.31	0.60
1:G:4898:GLY:HA2	1:G:4901:ILE:HG22	1.84	0.60
1:A:299:LEU:HB2	1:A:378:LEU:HG	1.83	0.60
1:C:4715:TYR:CE2	1:C:4717:ASP:HB2	2.36	0.60
1:C:4868:ASP:OD1	1:C:4869:GLU:N	2.32	0.60
1:C:533:ASN:OD1	1:C:534:ARG:N	2.34	0.60
1:E:2924:GLN:O	1:E:2928:LYS:HB2	2.02	0.60
1:E:4715:TYR:CE2	1:E:4717:ASP:HB2	2.36	0.60
1:E:812:HIS:HA	1:E:821:LEU:HD13	1.84	0.60
1:C:2204:HIS:HB3	1:C:2239:PHE:CE2	2.37	0.60
1:C:748:LEU:HD13	1:C:755:ILE:HG13	1.84	0.60
1:G:669:ASP:HB3	1:G:788:LYS:NZ	2.16	0.60
1:A:1130:GLN:HE21	1:A:1132:TRP:HE1	1.50	0.60
1:A:2924:GLN:HB3	1:A:2928:LYS:HE2	1.83	0.60
1:A:3938:SER:HB2	1:A:4002:LYS:NZ	2.17	0.60
1:A:467:LYS:O	1:A:470:SER:OG	2.13	0.60
1:A:533:ASN:OD1	1:A:534:ARG:N	2.34	0.60
1:C:214:VAL:HA	1:C:341:TYR:CE1	2.36	0.60
1:C:5006:GLN:HA	1:C:5009:TYR:CE2	2.37	0.60
1:E:1815:LEU:HD11	1:E:1845:VAL:HG21	1.83	0.60
1:E:1856:ASP:H	1:E:1858:ASP:H	1.50	0.60
1:E:215:THR:HG22	1:E:273:HIS:HA	1.84	0.60
1:E:4689:THR:OG1	1:E:4690:GLU:OE1	2.20	0.60
1:G:37:LEU:HD11	1:G:47:CYS:SG	2.42	0.60
1:G:4948:GLU:O	1:G:4952:GLU:N	2.33	0.60
1:A:1158:ASN:HB3	1:A:1182:ILE:H	1.65	0.59
1:A:669:ASP:HB3	1:A:788:LYS:NZ	2.17	0.59
1:A:887:ILE:HG21	1:A:962:SER:HB2	1.84	0.59
1:C:37:LEU:HD11	1:C:47:CYS:SG	2.42	0.59
1:C:4689:THR:OG1	1:C:4690:GLU:OE1	2.20	0.59
1:C:4806:ASN:O	1:C:4809:PHE:HB3	2.02	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:669:ASP:HB3	1:E:788:LYS:NZ	2.17	0.59
1:A:1514:LEU:N	1:A:1514:LEU:HD12	2.17	0.59
1:C:3771:HIS:HD2	1:C:3812:VAL:HG22	1.65	0.59
1:E:1854:PHE:HB3	1:E:1855:GLY:HA2	1.84	0.59
1:E:3959:LYS:HE3	1:E:4018:ASP:HB3	1.84	0.59
1:E:4192:ARG:NH1	1:E:5028:PHE:HB3	2.14	0.59
1:E:700:GLU:HG3	1:E:707:VAL:HB	1.84	0.59
1:G:2237:CYS:HB2	1:G:2275:VAL:HG22	1.83	0.59
1:A:1729:SER:O	1:A:1732:SER:OG	2.19	0.59
1:A:3959:LYS:HE3	1:A:4018:ASP:HB3	1.85	0.59
1:A:5009:TYR:O	1:A:5013:MET:HG2	2.03	0.59
1:A:840:VAL:HG12	1:A:1199:VAL:HG13	1.83	0.59
1:C:1087:ARG:HB3	1:C:1223:PHE:HD1	1.65	0.59
1:E:276:TRP:HA	1:E:316:PHE:HB2	1.85	0.59
1:E:396:GLU:OE2	1:E:474:ARG:HG2	2.03	0.59
1:G:168:ASP:HB3	1:G:199:LEU:HD22	1.83	0.59
1:A:4896:GLY:HA3	1:G:4892:ARG:NH1	2.17	0.59
1:G:674:PHE:HD1	2:H:40:ARG:HH12	1.47	0.59
1:A:210:GLU:HB2	1:A:213:TYR:HD2	1.67	0.59
1:A:2460:LEU:CD1	1:C:178:ARG:NH1	2.65	0.59
1:A:3986:TRP:HZ2	1:A:4040:ILE:HG13	1.66	0.59
1:A:37:LEU:HD11	1:A:47:CYS:SG	2.41	0.59
1:A:5006:GLN:HA	1:A:5009:TYR:CE2	2.37	0.59
1:A:638:ILE:HG22	1:A:639:ASN:H	1.67	0.59
1:A:80:GLU:OE2	1:G:3935:TRP:O	2.20	0.59
1:C:812:HIS:HA	1:C:821:LEU:HD13	1.84	0.59
1:E:3938:SER:HB2	1:E:4002:LYS:NZ	2.17	0.59
1:E:4141:PHE:HE1	1:E:4178:LEU:HA	1.67	0.59
1:G:215:THR:HG22	1:G:273:HIS:HA	1.84	0.59
1:G:3893:GLU:HA	1:G:3967:GLU:OE2	2.03	0.59
1:G:700:GLU:HG3	1:G:707:VAL:HB	1.85	0.59
1:G:669:ASP:HB3	1:G:788:LYS:HZ1	1.68	0.59
2:H:24:VAL:HG12	2:H:103:LEU:HA	1.85	0.59
1:C:210:GLU:HB2	1:C:213:TYR:HD2	1.67	0.59
1:C:669:ASP:HB3	1:C:788:LYS:NZ	2.17	0.59
1:E:4940:PHE:CE1	1:G:4931:ILE:HD11	2.38	0.59
1:E:717:ASP:OD2	2:F:7:ILE:HA	2.02	0.59
1:G:840:VAL:HG12	1:G:1199:VAL:HG13	1.83	0.59
1:G:1806:ALA:O	1:G:1810:LYS:HG2	2.02	0.59
1:G:4573:ILE:O	1:G:4577:LEU:N	2.36	0.59
1:G:4979:THR:O	1:G:4984:ASN:N	2.30	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:35:LEU:HD11	1:G:49:LEU:HD13	1.84	0.59
1:C:3670:GLU:O	1:C:3674:ILE:HG12	2.03	0.59
1:C:396:GLU:OE2	1:C:474:ARG:HG2	2.03	0.59
1:E:2768:PHE:HA	1:E:2771:ILE:HD12	1.84	0.59
1:G:1738:LEU:HB2	1:G:2146:PRO:HD3	1.85	0.59
1:G:5009:TYR:O	1:G:5013:MET:HG2	2.01	0.59
1:A:3893:GLU:HA	1:A:3967:GLU:OE2	2.01	0.59
1:G:4919:THR:O	1:G:4923:PHE:HB2	2.01	0.59
1:A:3670:GLU:O	1:A:3674:ILE:HG12	2.03	0.59
1:A:3965:LEU:HA	1:A:3968:TYR:CD2	2.38	0.59
1:A:4141:PHE:HE1	1:A:4178:LEU:HA	1.67	0.59
1:A:4806:ASN:O	1:A:4809:PHE:HB3	2.03	0.59
1:A:4901:ILE:HD13	1:A:4913:ARG:HH21	1.68	0.59
1:C:1130:GLN:HE21	1:C:1132:TRP:HE1	1.51	0.59
1:C:1738:LEU:HB2	1:C:2146:PRO:HD3	1.85	0.59
1:C:3938:SER:HB2	1:C:4002:LYS:NZ	2.17	0.59
1:C:3893:GLU:HA	1:C:3967:GLU:OE2	2.01	0.59
1:C:3986:TRP:HZ2	1:C:4040:ILE:HG13	1.67	0.59
1:E:35:LEU:HD11	1:E:49:LEU:HD13	1.85	0.59
1:C:1105:ALA:HB1	1:C:1109:LEU:HD21	1.85	0.59
1:C:3839:CYS:HB2	1:C:3881:THR:HG22	1.85	0.59
1:C:3965:LEU:HA	1:C:3968:TYR:CD2	2.38	0.59
1:C:700:GLU:HG3	1:C:707:VAL:HB	1.85	0.59
1:E:3965:LEU:HA	1:E:3968:TYR:CD2	2.38	0.59
1:E:3986:TRP:HZ2	1:E:4040:ILE:HG13	1.67	0.59
1:G:2924:GLN:O	1:G:2928:LYS:HB2	2.03	0.59
1:G:299:LEU:HB2	1:G:378:LEU:HG	1.83	0.59
1:G:4035:VAL:HG23	1:G:4036:VAL:H	1.67	0.59
1:G:4689:THR:OG1	1:G:4690:GLU:OE1	2.20	0.59
1:A:1662:PHE:O	1:A:1666:THR:HG23	2.03	0.59
1:A:195:PHE:HE2	1:G:2358:ILE:HG21	1.67	0.59
1:A:2768:PHE:HA	1:A:2771:ILE:HD12	1.85	0.59
1:A:696:PRO:HD2	1:A:829:TYR:HE2	1.67	0.59
1:C:4933:GLN:O	1:C:4937:ILE:HG12	2.03	0.59
1:G:2288:LEU:O	1:G:3849:ARG:HD3	2.02	0.59
1:A:3781:GLN:O	1:A:3784:SER:OG	2.19	0.58
1:A:2288:LEU:O	1:A:3849:ARG:HD3	2.03	0.58
1:A:544:LEU:HD11	1:A:578:ILE:HB	1.85	0.58
1:C:2460:LEU:HD21	1:E:131:LEU:CB	2.33	0.58
1:C:215:THR:HG22	1:C:273:HIS:HA	1.85	0.58
1:C:4141:PHE:HE1	1:C:4178:LEU:HA	1.67	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:696:PRO:HD2	1:C:829:TYR:HE2	1.67	0.58
1:E:1662:PHE:O	1:E:1666:THR:HG23	2.03	0.58
1:E:248:GLU:HG3	1:E:372:LEU:HD11	1.85	0.58
1:E:3839:CYS:HB2	1:E:3881:THR:HG22	1.85	0.58
1:G:1662:PHE:O	1:G:1666:THR:HG23	2.03	0.58
1:G:248:GLU:HG3	1:G:372:LEU:HD11	1.85	0.58
1:G:396:GLU:OE2	1:G:474:ARG:HG2	2.03	0.58
1:G:4039:MET:HA	1:G:4042:ARG:HE	1.67	0.58
1:A:131:LEU:CB	1:G:2460:LEU:HD21	2.32	0.58
1:A:396:GLU:OE2	1:A:474:ARG:HG2	2.03	0.58
1:A:4689:THR:OG1	1:A:4690:GLU:OE1	2.20	0.58
1:A:4190:ILE:HD11	1:A:5026:ASP:HB2	1.85	0.58
1:A:633:LEU:HD21	1:A:1639:LEU:HD13	1.83	0.58
1:A:812:HIS:HA	1:A:821:LEU:HD13	1.84	0.58
1:C:1205:GLY:HA2	1:C:1225:PRO:HB2	1.85	0.58
1:C:633:LEU:HD21	1:C:1639:LEU:HD13	1.84	0.58
1:C:3959:LYS:HE3	1:C:4018:ASP:HB3	1.85	0.58
1:E:618:GLN:OE1	1:E:1675:ALA:HB2	2.03	0.58
1:G:2294:ASP:O	1:G:2298:VAL:HG23	2.03	0.58
1:G:4007:SER:O	1:G:4010:ILE:HG12	2.02	0.58
1:G:702:TRP:HE1	2:H:34:LYS:HZ1	1.50	0.58
1:G:812:HIS:HA	1:G:821:LEU:HD13	1.84	0.58
1:A:4192:ARG:NH1	1:A:5028:PHE:HB3	2.14	0.58
1:C:3781:GLN:O	1:C:3784:SER:OG	2.19	0.58
1:C:2288:LEU:O	1:C:3849:ARG:HD3	2.02	0.58
1:C:887:ILE:HG21	1:C:962:SER:HB2	1.84	0.58
1:E:3963:ASN:O	1:E:3966:THR:OG1	2.14	0.58
1:G:633:LEU:HD21	1:G:1639:LEU:HD13	1.84	0.58
1:G:1846:SER:O	1:G:1850:VAL:HG23	2.03	0.58
1:A:1806:ALA:O	1:A:1810:LYS:HG2	2.03	0.58
1:C:1662:PHE:O	1:C:1666:THR:HG23	2.03	0.58
1:A:2452:ARG:NH2	1:C:177:GLU:OE2	2.36	0.58
1:C:3926:LEU:O	1:C:3930:ILE:HG12	2.04	0.58
1:C:5009:TYR:O	1:C:5013:MET:HG2	2.03	0.58
1:E:1105:ALA:HB1	1:E:1109:LEU:HD21	1.86	0.58
1:E:1130:GLN:HE21	1:E:1132:TRP:HE1	1.51	0.58
1:C:4581:LYS:HD2	1:E:4856:PHE:HZ	1.66	0.58
1:E:633:LEU:HD21	1:E:1639:LEU:HD13	1.84	0.58
1:G:3889:GLN:NE2	1:G:3963:ASN:OD1	2.31	0.58
1:G:4889:VAL:O	1:G:4893:ALA:N	2.30	0.58
1:A:618:GLN:OE1	1:A:1675:ALA:HB2	2.03	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2294:ASP:O	1:A:2298:VAL:HG23	2.04	0.58
1:A:2460:LEU:HD21	1:C:131:LEU:CB	2.33	0.58
1:A:215:THR:HG22	1:A:273:HIS:HA	1.85	0.58
1:E:1738:LEU:HB2	1:E:2146:PRO:HD3	1.84	0.58
1:E:2288:LEU:O	1:E:3849:ARG:HD3	2.02	0.58
1:E:748:LEU:HD13	1:E:755:ILE:HG13	1.84	0.58
1:G:544:LEU:HD11	1:G:578:ILE:HB	1.85	0.58
1:G:737:LEU:HD11	2:H:7:ILE:HG22	1.85	0.58
1:A:1735:ILE:HD12	1:A:1771:LEU:HD12	1.86	0.58
1:A:1738:LEU:HB2	1:A:2146:PRO:HD3	1.85	0.58
1:A:248:GLU:HG3	1:A:372:LEU:HD11	1.86	0.58
1:A:276:TRP:HA	1:A:316:PHE:HB2	1.85	0.58
1:A:3839:CYS:HB2	1:A:3881:THR:HG22	1.85	0.58
1:A:4770:SER:O	1:A:4772:ASP:N	2.33	0.58
1:C:618:GLN:OE1	1:C:1675:ALA:HB2	2.03	0.58
1:C:544:LEU:HD11	1:C:578:ILE:HB	1.85	0.58
1:E:1806:ALA:O	1:E:1810:LYS:HG2	2.03	0.58
1:E:3670:GLU:O	1:E:3674:ILE:HG12	2.03	0.58
1:G:1735:ILE:HD12	1:G:1771:LEU:HD12	1.85	0.58
1:G:2344:GLU:OE2	1:G:2508:ARG:NH2	2.36	0.58
1:G:276:TRP:HA	1:G:316:PHE:HB2	1.84	0.58
1:G:4910:GLU:HA	1:G:4913:ARG:HG2	1.86	0.58
1:G:696:PRO:HD2	1:G:829:TYR:HE2	1.67	0.58
1:A:674:PHE:CB	2:B:40:ARG:HH12	2.17	0.58
1:C:276:TRP:HA	1:C:316:PHE:HB2	1.85	0.58
1:C:3984:ARG:NH1	1:E:160:GLY:O	2.36	0.58
1:E:4190:ILE:HD11	1:E:5026:ASP:HB2	1.85	0.58
1:A:1943:LEU:HA	1:A:1946:PHE:HD2	1.69	0.58
1:A:700:GLU:HG3	1:A:707:VAL:HB	1.85	0.58
1:C:1439:VAL:HG22	1:C:1562:ILE:HG13	1.86	0.58
1:C:1806:ALA:O	1:C:1810:LYS:HG2	2.02	0.58
1:E:1846:SER:O	1:E:1850:VAL:HG23	2.03	0.58
1:E:561:LEU:HD21	1:E:598:LYS:HB3	1.86	0.58
1:E:674:PHE:CB	2:F:40:ARG:HH12	2.16	0.58
1:G:1130:GLN:HE21	1:G:1132:TRP:HE1	1.51	0.58
1:G:618:GLN:OE1	1:G:1675:ALA:HB2	2.03	0.58
1:G:2125:HIS:NE2	1:G:2129:ASP:OD2	2.37	0.58
1:G:2768:PHE:HA	1:G:2771:ILE:HD12	1.84	0.58
1:G:402:ARG:NH1	1:G:405:HIS:HD2	2.02	0.58
1:G:1783:VAL:CG1	2:H:55:VAL:HG12	2.34	0.58
1:G:623:GLU:OE1	2:H:88:PRO:HA	2.03	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1256:GLU:HG2	1:A:1278:GLY:O	2.04	0.58
1:A:302:VAL:HG21	1:A:306:LYS:HD3	1.86	0.58
1:A:35:LEU:HD11	1:A:49:LEU:HD13	1.84	0.58
1:C:103:TYR:O	1:C:160:GLY:N	2.33	0.58
1:C:4901:ILE:HD13	1:C:4913:ARG:HH21	1.69	0.58
1:C:35:LEU:HD11	1:C:49:LEU:HD13	1.85	0.58
1:E:402:ARG:NH1	1:E:405:HIS:HD2	2.02	0.58
1:G:3931:SER:O	1:G:3934:TYR:HB3	2.04	0.58
1:A:1087:ARG:HB3	1:A:1223:PHE:HD1	1.64	0.58
1:G:4839:MET:O	1:G:4843:LEU:N	2.29	0.58
1:C:2294:ASP:O	1:C:2298:VAL:HG23	2.04	0.57
1:E:4901:ILE:HD13	1:E:4913:ARG:HH21	1.69	0.57
1:E:5009:TYR:O	1:E:5013:MET:HG2	2.03	0.57
1:G:2336:ARG:NH1	1:G:2428:ALA:HA	2.19	0.57
1:A:1439:VAL:HG22	1:A:1562:ILE:HG13	1.86	0.57
1:A:3963:ASN:O	1:A:3966:THR:OG1	2.14	0.57
1:A:607:CYS:O	1:A:618:GLN:NE2	2.37	0.57
1:C:1256:GLU:HG2	1:C:1278:GLY:O	2.04	0.57
1:C:1846:SER:O	1:C:1850:VAL:HG23	2.03	0.57
1:E:2294:ASP:O	1:E:2298:VAL:HG23	2.04	0.57
1:E:3781:GLN:O	1:E:3784:SER:OG	2.19	0.57
1:E:696:PRO:HD2	1:E:829:TYR:HE2	1.68	0.57
1:A:103:TYR:O	1:A:160:GLY:N	2.32	0.57
1:A:1846:SER:O	1:A:1850:VAL:HG23	2.03	0.57
1:A:2344:GLU:OE2	1:A:2508:ARG:NH2	2.37	0.57
1:A:3926:LEU:O	1:A:3930:ILE:HG12	2.04	0.57
1:A:4904:PRO:HA	1:A:4905:ALA:C	2.24	0.57
1:C:248:GLU:HG3	1:C:372:LEU:HD11	1.85	0.57
1:C:2344:GLU:OE2	1:C:2508:ARG:NH2	2.38	0.57
1:E:544:LEU:HD11	1:E:578:ILE:HB	1.85	0.57
1:E:607:CYS:HB3	1:E:618:GLN:HE21	1.69	0.57
1:G:1131:ARG:NH1	1:G:1137:GLU:OE1	2.38	0.57
1:G:3897:ASN:HA	1:G:3900:GLN:HB2	1.86	0.57
1:A:4898:GLY:H	1:G:4892:ARG:HH12	1.52	0.57
1:A:4933:GLN:O	1:A:4937:ILE:HG12	2.05	0.57
1:A:4974:GLY:O	1:A:4977:THR:OG1	2.15	0.57
1:C:1735:ILE:HD12	1:C:1771:LEU:HD12	1.86	0.57
1:C:4836:GLN:O	1:C:4839:MET:HG2	2.04	0.57
1:C:4190:ILE:HD11	1:C:5026:ASP:HB2	1.85	0.57
1:E:4555:LEU:HD11	1:E:4656:LEU:HG	1.87	0.57
1:E:4821:LYS:HD3	1:E:4947:GLN:NE2	2.20	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:1205:GLY:HA2	1:G:1225:PRO:HB2	1.87	0.57
1:G:2870:GLU:OE2	1:G:2939:ARG:NH2	2.38	0.57
1:A:1783:VAL:CG1	2:B:55:VAL:HG12	2.34	0.57
1:C:4555:LEU:HD11	1:C:4656:LEU:HG	1.86	0.57
1:G:4893:ALA:HB1	1:G:4896:GLY:HA2	1.86	0.57
1:G:748:LEU:HD13	1:G:755:ILE:HG13	1.85	0.57
1:C:402:ARG:NH1	1:C:405:HIS:HD2	2.02	0.57
1:C:4822:THR:O	1:C:4825:THR:HB	2.04	0.57
1:G:1105:ALA:HB1	1:G:1109:LEU:HD21	1.85	0.57
1:G:302:VAL:HG21	1:G:306:LYS:HD3	1.86	0.57
1:G:4010:ILE:HA	1:G:4013:LEU:HB3	1.85	0.57
1:G:565:TYR:O	1:G:569:ILE:HG12	2.05	0.57
1:A:1457:TYR:CG	1:A:1458:HIS:N	2.73	0.57
1:A:4893:ALA:HB1	1:A:4896:GLY:HA2	1.87	0.57
1:A:607:CYS:HB3	1:A:618:GLN:HE21	1.69	0.57
1:A:717:ASP:OD2	2:B:7:ILE:HA	2.04	0.57
1:A:880:GLU:HB3	1:A:967:PRO:HG2	1.86	0.57
1:C:3878:ASP:O	1:C:3881:THR:OG1	2.14	0.57
1:C:4904:PRO:HA	1:C:4905:ALA:C	2.24	0.57
1:C:561:LEU:HD21	1:C:598:LYS:HB3	1.86	0.57
1:E:3878:ASP:O	1:E:3881:THR:OG1	2.14	0.57
1:E:3926:LEU:O	1:E:3930:ILE:HG12	2.03	0.57
1:E:4888:TYR:OH	1:G:4898:GLY:CA	2.53	0.57
1:G:3761:GLN:HA	1:G:3764:LEU:HD12	1.87	0.57
1:A:402:ARG:NH1	1:A:405:HIS:HD2	2.02	0.57
1:C:1457:TYR:CG	1:C:1458:HIS:N	2.73	0.57
1:C:2768:PHE:HA	1:C:2771:ILE:HD12	1.84	0.57
1:C:4793:GLY:HA2	1:C:4796:MET:HG2	1.86	0.57
1:C:4910:GLU:OE2	1:C:4914:VAL:HG21	2.04	0.57
1:E:1131:ARG:NH1	1:E:1137:GLU:OE1	2.38	0.57
1:G:1617:THR:O	1:G:1618:ARG:NH2	2.38	0.57
1:G:561:LEU:HD21	1:G:598:LYS:HB3	1.87	0.57
1:A:229:GLU:HA	1:A:249:GLY:HA2	1.87	0.57
1:A:4793:GLY:HA2	1:A:4796:MET:HG2	1.87	0.57
1:E:1439:VAL:HG22	1:E:1562:ILE:HG13	1.86	0.57
1:E:103:TYR:OH	1:E:167:ASP:OD2	2.23	0.57
1:E:4770:SER:O	1:E:4772:ASP:N	2.33	0.57
1:E:4910:GLU:OE2	1:E:4914:VAL:HG21	2.04	0.57
1:E:4933:GLN:O	1:E:4937:ILE:HG12	2.03	0.57
1:G:1439:VAL:HG22	1:G:1562:ILE:HG13	1.86	0.57
1:G:210:GLU:HB2	1:G:213:TYR:HD2	1.68	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:4154:VAL:HG22	1:G:4157:ASP:OD2	2.04	0.57
1:A:1695:LEU:HA	1:A:1698:LEU:HD13	1.87	0.57
1:C:4974:GLY:O	1:C:4977:THR:OG1	2.16	0.57
1:C:921:ASN:O	1:C:925:SER:N	2.26	0.57
1:E:4836:GLN:O	1:E:4839:MET:HG2	2.05	0.57
1:E:643:SER:HA	1:E:782:SER:HA	1.87	0.57
1:G:1256:GLU:HG2	1:G:1278:GLY:O	2.04	0.57
1:G:4924:VAL:HG13	1:G:4928:LEU:HD12	1.87	0.57
1:G:4192:ARG:NH1	1:G:5028:PHE:HB3	2.13	0.57
1:A:1131:ARG:NH1	1:A:1137:GLU:OE1	2.38	0.56
1:A:1731:LEU:HA	1:A:1772:ARG:HD3	1.87	0.56
1:A:2098:VAL:O	1:A:2102:VAL:HG23	2.05	0.56
1:A:4822:THR:O	1:A:4825:THR:HB	2.05	0.56
1:C:103:TYR:OH	1:C:167:ASP:OD2	2.23	0.56
1:C:476:SER:O	1:C:480:GLU:HG3	2.05	0.56
1:E:2344:GLU:OE2	1:E:2508:ARG:NH2	2.38	0.56
1:E:533:ASN:HB3	1:E:536:ASN:HD22	1.70	0.56
1:G:1719:HIS:CD2	1:G:1802:ILE:HG23	2.40	0.56
1:A:1439:VAL:O	1:A:1513:ASP:N	2.31	0.56
1:A:216:GLY:HA3	1:A:264:PRO:HD3	1.86	0.56
1:C:302:VAL:HG21	1:C:306:LYS:HD3	1.87	0.56
1:C:4021:LYS:O	1:C:4025:VAL:HG23	2.06	0.56
1:E:210:GLU:HB2	1:E:213:TYR:HD2	1.67	0.56
1:E:216:GLY:HA3	1:E:264:PRO:HD3	1.87	0.56
1:E:607:CYS:O	1:E:618:GLN:NE2	2.37	0.56
1:C:3935:TRP:HB2	1:E:76:ARG:HG3	1.87	0.56
1:G:1491:ASN:O	1:G:1493:TYR:N	2.38	0.56
1:G:1731:LEU:HA	1:G:1772:ARG:HD3	1.87	0.56
1:G:229:GLU:HA	1:G:249:GLY:HA2	1.87	0.56
1:G:4974:GLY:O	1:G:4977:THR:OG1	2.17	0.56
1:A:2059:LEU:HB3	1:A:2062:ARG:HH12	1.68	0.56
1:A:2123:LEU:O	1:A:2127:GLN:HG2	2.05	0.56
1:A:4154:VAL:HG13	1:A:4160:LEU:HD22	1.87	0.56
1:A:4567:LEU:HD12	1:A:4815:ASP:OD2	2.05	0.56
1:A:4853:VAL:O	1:A:4857:ASN:ND2	2.38	0.56
1:A:565:TYR:O	1:A:569:ILE:HG12	2.05	0.56
1:C:4832:HIS:NE2	1:C:4939:ALA:HB1	2.21	0.56
1:C:674:PHE:CB	2:D:40:ARG:HH12	2.18	0.56
1:E:1256:GLU:HG2	1:E:1278:GLY:O	2.04	0.56
1:E:2059:LEU:HB3	1:E:2062:ARG:HH12	1.68	0.56
1:E:476:SER:O	1:E:480:GLU:HG3	2.05	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4904:PRO:HA	1:E:4905:ALA:C	2.24	0.56
1:G:643:SER:HA	1:G:782:SER:HA	1.87	0.56
1:A:1105:ALA:HB1	1:A:1109:LEU:HD21	1.86	0.56
1:A:476:SER:O	1:A:480:GLU:HG3	2.05	0.56
1:C:1943:LEU:HA	1:C:1946:PHE:HD2	1.70	0.56
1:C:4567:LEU:HD12	1:C:4815:ASP:OD2	2.05	0.56
1:C:607:CYS:O	1:C:618:GLN:NE2	2.37	0.56
1:E:1617:THR:O	1:E:1618:ARG:NH2	2.38	0.56
1:E:1862:ILE:O	1:E:1865:MET:HB3	2.06	0.56
1:E:4181:ILE:HG12	1:E:4195:PHE:HE1	1.70	0.56
1:E:4853:VAL:O	1:E:4857:ASN:ND2	2.38	0.56
1:E:565:TYR:O	1:E:569:ILE:HG12	2.05	0.56
1:G:1457:TYR:CG	1:G:1458:HIS:N	2.73	0.56
1:G:476:SER:O	1:G:480:GLU:HG3	2.05	0.56
1:G:4806:ASN:O	1:G:4809:PHE:HB3	2.05	0.56
1:G:4904:PRO:HA	1:G:4905:ALA:C	2.25	0.56
1:A:561:LEU:HD21	1:A:598:LYS:HB3	1.86	0.56
1:C:1083:VAL:HG11	1:C:1088:TRP:CZ2	2.41	0.56
1:C:1719:HIS:CD2	1:C:1802:ILE:HG23	2.40	0.56
1:C:4192:ARG:NH1	1:C:5028:PHE:HB3	2.15	0.56
1:E:1457:TYR:CG	1:E:1458:HIS:N	2.73	0.56
1:E:3935:TRP:HB2	1:G:76:ARG:HG3	1.87	0.56
1:E:3984:ARG:NH1	1:G:160:GLY:O	2.35	0.56
1:G:3794:VAL:O	1:G:3797:THR:OG1	2.20	0.56
1:A:103:TYR:OH	1:A:167:ASP:OD2	2.24	0.56
1:A:1719:HIS:CD2	1:A:1802:ILE:HG23	2.40	0.56
1:A:4021:LYS:O	1:A:4025:VAL:HG23	2.06	0.56
1:C:1714:LEU:HA	1:C:1717:SER:HB3	1.88	0.56
1:C:4181:ILE:HG12	1:C:4195:PHE:HE1	1.71	0.56
1:C:607:CYS:HB3	1:C:618:GLN:HE21	1.70	0.56
1:E:224:HIS:HB3	1:E:229:GLU:HG2	1.88	0.56
1:E:4021:LYS:O	1:E:4025:VAL:HG23	2.06	0.56
1:G:1695:LEU:HA	1:G:1698:LEU:HD13	1.87	0.56
1:G:4107:GLU:O	1:G:4111:LEU:N	2.38	0.56
1:A:1294:PRO:HB3	1:A:1547:LYS:HB3	1.88	0.56
1:C:1491:ASN:O	1:C:1493:TYR:N	2.38	0.56
1:C:533:ASN:HB3	1:C:536:ASN:HD22	1.70	0.56
1:C:643:SER:HA	1:C:782:SER:HA	1.87	0.56
1:E:1083:VAL:HG11	1:E:1088:TRP:CZ2	2.40	0.56
1:E:1735:ILE:HD12	1:E:1771:LEU:HD12	1.86	0.56
1:E:302:VAL:HG21	1:E:306:LYS:HD3	1.86	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4974:GLY:O	1:E:4977:THR:OG1	2.15	0.56
1:G:103:TYR:OH	1:G:167:ASP:OD2	2.23	0.56
1:G:1943:LEU:HA	1:G:1946:PHE:HD2	1.71	0.56
1:G:4145:VAL:HG13	1:G:4194:TYR:HB2	1.87	0.56
1:G:4181:ILE:HG12	1:G:4195:PHE:HE1	1.69	0.56
1:G:4864:ASN:HB2	1:G:4902:GLU:HG3	1.88	0.56
1:G:607:CYS:O	1:G:618:GLN:NE2	2.38	0.56
1:A:4910:GLU:OE2	1:A:4914:VAL:HG21	2.06	0.56
1:A:643:SER:HA	1:A:782:SER:HA	1.88	0.56
1:C:2125:HIS:NE2	1:C:2129:ASP:OD2	2.39	0.56
1:C:717:ASP:OD2	2:D:7:ILE:HA	2.05	0.56
1:E:2123:LEU:O	1:E:2127:GLN:HG2	2.06	0.56
1:E:4898:GLY:HA2	1:E:4901:ILE:HG22	1.87	0.56
1:G:150:MET:SD	1:G:169:LEU:HD22	2.45	0.56
1:G:216:GLY:HA3	1:G:264:PRO:HD3	1.86	0.56
1:G:4574:ASN:ND2	1:G:4813:LEU:HD23	2.21	0.56
1:A:1714:LEU:HA	1:A:1717:SER:HB3	1.88	0.56
1:A:4172:GLU:HG2	1:A:4175:ARG:NH1	2.20	0.56
1:A:4555:LEU:HD11	1:A:4656:LEU:HG	1.86	0.56
1:C:2098:VAL:O	1:C:2102:VAL:HG23	2.06	0.56
1:C:2212:VAL:HG22	1:C:2260:ASN:HD21	1.71	0.56
1:C:224:HIS:HB3	1:C:229:GLU:HG2	1.88	0.56
1:C:3980:LEU:HD22	1:C:3985:LEU:HD22	1.87	0.56
1:E:1205:GLY:HA2	1:E:1225:PRO:HB2	1.88	0.56
1:E:1731:LEU:HA	1:E:1772:ARG:HD3	1.87	0.56
1:E:2125:HIS:NE2	1:E:2129:ASP:OD2	2.39	0.56
1:E:3793:MET:O	1:E:3797:THR:HG23	2.06	0.56
1:E:3965:LEU:O	1:E:3969:ILE:HD12	2.06	0.56
1:G:224:HIS:HB3	1:G:229:GLU:HG2	1.88	0.56
1:G:3814:GLN:HG3	1:G:3815:LYS:N	2.19	0.56
1:A:1491:ASN:O	1:A:1493:TYR:N	2.38	0.56
1:A:670:GLU:HB3	1:A:788:LYS:H	1.71	0.56
1:A:921:ASN:O	1:A:925:SER:N	2.26	0.56
1:C:1617:THR:O	1:C:1618:ARG:NH2	2.39	0.56
1:C:565:TYR:O	1:C:569:ILE:HG12	2.05	0.56
1:E:150:MET:SD	1:E:169:LEU:HD22	2.45	0.56
1:E:2098:VAL:O	1:E:2102:VAL:HG23	2.06	0.56
1:E:2212:VAL:HG22	1:E:2260:ASN:HD21	1.71	0.56
1:E:229:GLU:HA	1:E:249:GLY:HA2	1.87	0.56
1:E:4007:SER:O	1:E:4010:ILE:HG12	2.05	0.56
1:G:1856:ASP:N	1:G:1857:GLU:HB3	2.21	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:1862:ILE:O	1:G:1865:MET:HB3	2.06	0.56
1:G:3902:TYR:HE1	1:G:3908:GLY:H	1.54	0.56
1:A:1617:THR:O	1:A:1618:ARG:NH2	2.38	0.56
1:A:4007:SER:O	1:A:4010:ILE:HG12	2.06	0.56
1:C:1585:LYS:HB3	1:C:1587:PRO:HD2	1.88	0.56
1:C:1695:LEU:HA	1:C:1698:LEU:HD13	1.87	0.56
1:C:1856:ASP:N	1:C:1857:GLU:HB3	2.21	0.56
1:C:2137:ALA:HA	1:C:2140:ARG:NH1	2.22	0.56
1:E:1491:ASN:O	1:E:1493:TYR:N	2.38	0.56
1:G:2123:LEU:O	1:G:2127:GLN:HG2	2.06	0.56
1:G:4720:VAL:HA	1:G:4723:LYS:HE2	1.88	0.56
1:G:490:CYS:O	1:G:494:LEU:HG	2.06	0.56
1:A:224:HIS:HB3	1:A:229:GLU:HG2	1.88	0.55
1:A:526:LEU:O	1:A:530:ILE:HG13	2.07	0.55
1:C:1131:ARG:NH1	1:C:1137:GLU:OE1	2.38	0.55
1:C:3793:MET:O	1:C:3797:THR:HG23	2.06	0.55
1:C:3965:LEU:O	1:C:3969:ILE:HD12	2.05	0.55
1:C:4007:SER:O	1:C:4010:ILE:HG12	2.06	0.55
1:C:880:GLU:HB3	1:C:967:PRO:HG2	1.87	0.55
1:C:2358:ILE:HG21	1:E:195:PHE:HE2	1.71	0.55
1:E:4806:ASN:O	1:E:4809:PHE:HB3	2.05	0.55
1:G:2771:ILE:HG23	1:G:2852:ARG:HB2	1.88	0.55
1:A:1708:ARG:HH11	1:A:1712:TYR:HE2	1.54	0.55
1:A:2276:ALA:O	1:A:2280:VAL:HG23	2.06	0.55
2:B:37:ASP:OD1	2:B:38:SER:N	2.39	0.55
1:C:1839:VAL:HB	1:C:1840:PRO:HD3	1.89	0.55
1:C:2059:LEU:HB3	1:C:2062:ARG:HH12	1.69	0.55
1:C:2191:PHE:HE1	1:C:2239:PHE:HD1	1.54	0.55
1:C:2336:ARG:NH1	1:C:2428:ALA:HA	2.21	0.55
1:C:3786:CYS:SG	1:C:3794:VAL:HG22	2.46	0.55
1:C:3806:ASN:OD1	1:C:3807:GLY:N	2.40	0.55
1:C:4230:LYS:HD2	1:C:4959:PHE:O	2.07	0.55
1:E:2137:ALA:HA	1:E:2140:ARG:NH1	2.21	0.55
1:E:2276:ALA:O	1:E:2280:VAL:HG23	2.06	0.55
1:E:4832:HIS:NE2	1:E:4939:ALA:HB1	2.22	0.55
2:H:49:MET:N	2:H:54:GLU:OE2	2.40	0.55
1:A:1245:PHE:HA	1:A:1604:SER:HA	1.88	0.55
1:A:2212:VAL:HG22	1:A:2260:ASN:HD21	1.71	0.55
1:A:4898:GLY:HA2	1:A:4901:ILE:HG22	1.88	0.55
1:A:533:ASN:HB3	1:A:536:ASN:HD22	1.71	0.55
1:C:229:GLU:HA	1:C:249:GLY:HA2	1.87	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:4893:ALA:HB1	1:C:4896:GLY:HA2	1.89	0.55
1:C:826:ILE:HG22	1:C:827:LYS:HG2	1.89	0.55
1:E:2771:ILE:HG23	1:E:2852:ARG:HB2	1.87	0.55
2:F:87:HIS:CE1	2:F:90:ILE:HD13	2.42	0.55
1:G:1125:ASN:ND2	1:G:1130:GLN:O	2.27	0.55
1:G:526:LEU:O	1:G:530:ILE:HG13	2.06	0.55
1:G:607:CYS:HB3	1:G:618:GLN:HE21	1.70	0.55
1:A:2137:ALA:HA	1:A:2140:ARG:NH1	2.21	0.55
1:C:150:MET:SD	1:C:169:LEU:HD22	2.46	0.55
1:E:1719:HIS:CD2	1:E:1802:ILE:HG23	2.40	0.55
1:E:1856:ASP:N	1:E:1857:GLU:HB3	2.21	0.55
1:E:4241:THR:O	1:E:4244:GLU:HB3	2.06	0.55
1:E:4888:TYR:OH	1:G:4898:GLY:O	2.23	0.55
1:E:490:CYS:O	1:E:494:LEU:HG	2.07	0.55
1:E:4230:LYS:HD2	1:E:4959:PHE:O	2.06	0.55
1:G:2098:VAL:O	1:G:2102:VAL:HG23	2.06	0.55
1:A:2336:ARG:NH1	1:A:2428:ALA:HA	2.21	0.55
1:A:3760:LYS:O	1:A:3764:LEU:HG	2.07	0.55
1:A:3793:MET:O	1:A:3797:THR:HG23	2.06	0.55
1:A:4181:ILE:HG12	1:A:4195:PHE:HE1	1.71	0.55
1:A:490:CYS:O	1:A:494:LEU:HG	2.07	0.55
1:C:1930:LYS:O	1:C:1931:LEU:HD12	2.07	0.55
1:C:2758:PHE:HD2	1:C:2809:ILE:HD13	1.72	0.55
1:C:4853:VAL:O	1:C:4857:ASN:ND2	2.38	0.55
1:C:526:LEU:O	1:C:530:ILE:HG13	2.07	0.55
2:D:87:HIS:CE1	2:D:90:ILE:HD13	2.42	0.55
1:E:2191:PHE:HE1	1:E:2239:PHE:HD1	1.54	0.55
1:E:2336:ARG:NH1	1:E:2428:ALA:HA	2.22	0.55
1:E:2556:LEU:HD23	1:E:2559:LEU:HD12	1.88	0.55
1:E:4154:VAL:HG13	1:E:4160:LEU:HD22	1.88	0.55
1:G:1649:ASP:OD1	1:G:1652:GLU:HB2	2.06	0.55
1:G:166:GLY:O	1:G:201:ASN:ND2	2.40	0.55
1:G:1937:LEU:HD12	1:G:2116:LEU:HD12	1.88	0.55
1:G:3805:LEU:HB3	1:G:3890:LEU:HB3	1.89	0.55
1:G:4782:VAL:O	1:G:4785:THR:OG1	2.17	0.55
1:G:533:ASN:HB3	1:G:536:ASN:HD22	1.71	0.55
1:A:1141:ARG:HH12	1:A:1169:LEU:CD1	2.19	0.55
1:A:1667:LEU:HD23	1:A:1710:GLY:HA3	1.89	0.55
1:A:2125:HIS:NE2	1:A:2129:ASP:OD2	2.39	0.55
1:A:3786:CYS:SG	1:A:3794:VAL:HG22	2.46	0.55
1:A:3984:ARG:NH1	1:C:160:GLY:O	2.38	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1731:LEU:HA	1:C:1772:ARG:HD3	1.87	0.55
1:C:1862:ILE:O	1:C:1865:MET:HB3	2.06	0.55
1:C:2556:LEU:HD23	1:C:2559:LEU:HD12	1.88	0.55
1:C:490:CYS:O	1:C:494:LEU:HG	2.06	0.55
1:E:3786:CYS:SG	1:E:3794:VAL:HG22	2.46	0.55
1:E:4567:LEU:HD12	1:E:4815:ASP:OD2	2.06	0.55
1:E:826:ILE:HG22	1:E:827:LYS:HG2	1.89	0.55
1:G:1083:VAL:HG11	1:G:1088:TRP:CZ2	2.41	0.55
1:G:212:GLY:O	1:G:340:LYS:HA	2.07	0.55
1:A:4839:MET:CE	1:G:4826:ILE:CG1	2.84	0.55
1:A:1862:ILE:O	1:A:1865:MET:HB3	2.06	0.55
1:A:2556:LEU:HD23	1:A:2559:LEU:HD12	1.88	0.55
1:C:2123:LEU:O	1:C:2127:GLN:HG2	2.05	0.55
1:C:4849:TYR:O	1:C:4853:VAL:HG23	2.06	0.55
1:G:1585:LYS:HB3	1:G:1587:PRO:HD2	1.88	0.55
1:G:1714:LEU:HA	1:G:1717:SER:HB3	1.88	0.55
1:A:3806:ASN:OD1	1:A:3807:GLY:N	2.40	0.55
1:A:4077:PHE:CZ	1:A:4125:PHE:HA	2.42	0.55
1:C:2276:ALA:O	1:C:2280:VAL:HG23	2.06	0.55
1:C:4154:VAL:HG13	1:C:4160:LEU:HD22	1.88	0.55
1:C:4241:THR:O	1:C:4244:GLU:HB3	2.07	0.55
1:C:4898:GLY:HA2	1:C:4901:ILE:HG22	1.87	0.55
1:E:1783:VAL:CG1	2:F:55:VAL:HG12	2.37	0.55
1:E:1930:LYS:O	1:E:1931:LEU:HD12	2.07	0.55
1:E:887:ILE:HG21	1:E:962:SER:HB2	1.89	0.55
1:G:1143:TRP:HB3	1:G:1164:LEU:CD1	2.37	0.55
2:H:25:HIS:O	2:H:102:GLU:N	2.35	0.55
1:A:1083:VAL:HG11	1:A:1088:TRP:CZ2	2.42	0.55
1:A:1856:ASP:N	1:A:1857:GLU:HB3	2.21	0.55
1:A:212:GLY:O	1:A:340:LYS:HA	2.07	0.55
1:A:3965:LEU:O	1:A:3969:ILE:HD12	2.07	0.55
1:C:216:GLY:HA3	1:C:264:PRO:HD3	1.87	0.55
1:C:4864:ASN:HB2	1:C:4902:GLU:HG3	1.89	0.55
1:C:915:GLU:HB3	1:C:923:GLN:HB2	1.89	0.55
1:E:1143:TRP:HB3	1:E:1164:LEU:CD1	2.37	0.55
1:E:2924:GLN:HB3	1:E:2928:LYS:HE2	1.89	0.55
1:E:669:ASP:HB3	1:E:788:LYS:HZ1	1.72	0.55
1:E:702:TRP:HD1	2:F:34:LYS:NZ	2.01	0.55
1:E:915:GLU:HB3	1:E:923:GLN:HB2	1.88	0.55
1:G:1245:PHE:HA	1:G:1604:SER:HA	1.89	0.55
1:G:1712:TYR:HD2	1:G:1840:PRO:HB2	1.72	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:1930:LYS:O	1:G:1931:LEU:HD12	2.07	0.55
1:G:2212:VAL:HG22	1:G:2260:ASN:HD21	1.72	0.55
2:H:27:THR:HG22	2:H:100:ASP:HB3	1.88	0.55
1:A:512:ALA:O	1:A:515:TRP:HB3	2.07	0.55
1:A:915:GLU:HB3	1:A:923:GLN:HB2	1.89	0.55
1:C:5027:CYS:HB3	1:C:5030:LYS:HB3	1.89	0.55
1:C:790:ARG:HA	1:C:1627:ALA:HA	1.89	0.55
1:E:1695:LEU:HA	1:E:1698:LEU:HD13	1.87	0.55
1:E:1714:LEU:HA	1:E:1717:SER:HB3	1.88	0.55
1:E:1810:LYS:HD3	1:E:1813:ARG:HH12	1.72	0.55
1:E:3760:LYS:O	1:E:3764:LEU:HG	2.07	0.55
1:E:5027:CYS:HB3	1:E:5030:LYS:HB3	1.89	0.55
2:F:37:ASP:OD1	2:F:38:SER:N	2.39	0.55
1:G:1839:VAL:HB	1:G:1840:PRO:HD3	1.89	0.55
1:A:1930:LYS:O	1:A:1931:LEU:HD12	2.07	0.54
1:C:1245:PHE:HA	1:C:1604:SER:HA	1.88	0.54
1:E:1585:LYS:HB3	1:E:1587:PRO:HD2	1.88	0.54
1:E:1714:LEU:O	1:E:1718:ILE:HG12	2.07	0.54
1:E:512:ALA:O	1:E:515:TRP:HB3	2.06	0.54
2:F:38:SER:HB3	2:F:41:ASP:OD2	2.07	0.54
1:E:674:PHE:HD1	2:F:40:ARG:HH12	1.52	0.54
1:G:1708:ARG:HH11	1:G:1712:TYR:HE2	1.55	0.54
1:G:2191:PHE:HE1	1:G:2239:PHE:HD1	1.53	0.54
1:G:2276:ALA:O	1:G:2280:VAL:HG23	2.06	0.54
1:G:915:GLU:HB3	1:G:923:GLN:HB2	1.89	0.54
1:G:880:GLU:HB3	1:G:967:PRO:HG2	1.87	0.54
2:H:37:ASP:OD1	2:H:38:SER:N	2.41	0.54
2:H:67:SER:N	2:H:70:GLN:OE1	2.33	0.54
1:A:1243:PRO:HB3	1:A:1606:SER:HA	1.90	0.54
1:A:2771:ILE:HG23	1:A:2852:ARG:HB2	1.89	0.54
1:A:4832:HIS:NE2	1:A:4939:ALA:HB1	2.22	0.54
2:B:38:SER:HB3	2:B:41:ASP:OD2	2.07	0.54
1:C:1143:TRP:HB3	1:C:1164:LEU:CD1	2.37	0.54
1:C:670:GLU:HB3	1:C:788:LYS:H	1.71	0.54
1:E:1245:PHE:HA	1:E:1604:SER:HA	1.89	0.54
1:E:3806:ASN:OD1	1:E:3807:GLY:N	2.40	0.54
1:E:4849:TYR:O	1:E:4853:VAL:HG23	2.06	0.54
1:E:645:ARG:HD3	1:E:826:ILE:HG13	1.90	0.54
1:G:1739:THR:O	1:G:1742:THR:OG1	2.20	0.54
1:G:2059:LEU:HB3	1:G:2062:ARG:HH12	1.69	0.54
1:G:2137:ALA:HA	1:G:2140:ARG:NH1	2.22	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:3774:GLY:HA2	1:G:3815:LYS:NZ	2.22	0.54
1:G:826:ILE:HG22	1:G:827:LYS:HG2	1.89	0.54
1:A:4241:THR:O	1:A:4244:GLU:HB3	2.06	0.54
1:A:4666:VAL:HB	1:A:4667:PRO:HD3	1.89	0.54
1:C:1111:PRO:HG3	1:C:1609:PRO:HG3	1.89	0.54
1:C:1714:LEU:O	1:C:1718:ILE:HG12	2.08	0.54
1:C:37:LEU:HB2	1:C:200:TRP:CZ3	2.43	0.54
1:C:834:PRO:HD2	1:C:838:HIS:HE2	1.73	0.54
2:D:37:ASP:OD1	2:D:38:SER:N	2.40	0.54
1:E:4077:PHE:CZ	1:E:4125:PHE:HA	2.42	0.54
1:E:4928:LEU:O	1:E:4931:ILE:HG22	2.08	0.54
1:E:622:THR:HB	1:E:626:LEU:HD12	1.89	0.54
1:G:1111:PRO:HG3	1:G:1609:PRO:HG3	1.89	0.54
1:G:739:ALA:O	1:G:741:GLU:N	2.40	0.54
1:G:834:PRO:HD2	1:G:838:HIS:HE2	1.72	0.54
1:A:4849:TYR:O	1:A:4853:VAL:HG23	2.06	0.54
1:C:1294:PRO:HB3	1:C:1547:LYS:HB3	1.89	0.54
1:C:2496:PRO:HB3	1:C:2552:ARG:HD2	1.90	0.54
1:C:645:ARG:HD3	1:C:826:ILE:HG13	1.89	0.54
2:D:38:SER:HB3	2:D:41:ASP:OD2	2.07	0.54
1:E:1943:LEU:HA	1:E:1946:PHE:HD2	1.71	0.54
1:E:4864:ASN:HB2	1:E:4902:GLU:HG3	1.90	0.54
1:E:526:LEU:O	1:E:530:ILE:HG13	2.07	0.54
1:G:4580:TYR:HB2	1:G:4631:PHE:HD1	1.73	0.54
1:G:4222:VAL:HG11	1:G:4950:VAL:HA	1.89	0.54
1:G:512:ALA:O	1:G:515:TRP:HB3	2.07	0.54
1:A:1438:ARG:HA	1:A:1514:LEU:HA	1.90	0.54
1:A:1585:LYS:HB3	1:A:1587:PRO:HD2	1.88	0.54
1:A:1810:LYS:HD3	1:A:1813:ARG:HH12	1.71	0.54
1:A:37:LEU:HB2	1:A:200:TRP:CZ3	2.42	0.54
1:A:2191:PHE:HE1	1:A:2239:PHE:HD1	1.54	0.54
1:C:1810:LYS:HD3	1:C:1813:ARG:HH12	1.72	0.54
1:C:166:GLY:O	1:C:201:ASN:ND2	2.40	0.54
1:C:4077:PHE:CZ	1:C:4125:PHE:HA	2.42	0.54
1:E:1667:LEU:HD23	1:E:1710:GLY:HA3	1.89	0.54
1:G:1714:LEU:O	1:G:1718:ILE:HG12	2.07	0.54
1:G:4664:LEU:O	1:G:4667:PRO:HD2	2.08	0.54
1:G:4844:LEU:HD11	1:G:4891:VAL:HG13	1.88	0.54
1:G:670:GLU:HB3	1:G:788:LYS:H	1.71	0.54
1:A:1240:LYS:HZ3	1:A:1242:LEU:HB2	1.73	0.54
1:A:1714:LEU:O	1:A:1718:ILE:HG12	2.07	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2515:GLN:NE2	1:A:2608:MET:O	2.40	0.54
1:A:650:VAL:O	1:A:777:PHE:N	2.41	0.54
1:A:645:ARG:HD3	1:A:826:ILE:HG13	1.90	0.54
1:C:512:ALA:O	1:C:515:TRP:HB3	2.07	0.54
1:E:103:TYR:O	1:E:160:GLY:N	2.33	0.54
1:E:790:ARG:HA	1:E:1627:ALA:HA	1.89	0.54
1:E:1649:ASP:OD1	1:E:1652:GLU:HB2	2.07	0.54
1:E:670:GLU:HB3	1:E:788:LYS:H	1.71	0.54
1:E:834:PRO:HD2	1:E:838:HIS:HE2	1.73	0.54
1:G:1294:PRO:HB3	1:G:1547:LYS:HB3	1.90	0.54
1:G:2134:LEU:O	1:G:2138:LEU:HG	2.07	0.54
1:G:37:LEU:HB2	1:G:200:TRP:CZ3	2.42	0.54
1:G:4770:SER:O	1:G:4772:ASP:N	2.33	0.54
1:G:4965:SER:HA	1:G:4975:PHE:CD1	2.43	0.54
1:G:5009:TYR:O	1:G:5013:MET:N	2.39	0.54
1:G:645:ARG:HD3	1:G:826:ILE:HG13	1.90	0.54
2:H:58:GLY:HA3	2:H:76:ILE:HG23	1.90	0.54
1:A:3980:LEU:HD22	1:A:3985:LEU:HD22	1.88	0.54
1:A:4720:VAL:HA	1:A:4723:LYS:NZ	2.23	0.54
1:C:116:MET:HA	1:C:139:GLU:HA	1.90	0.54
1:C:1808:ARG:HB2	1:C:1854:PHE:CE1	2.43	0.54
1:C:3930:ILE:HG22	1:C:3995:VAL:HG11	1.89	0.54
1:C:563:VAL:O	1:C:567:VAL:HG23	2.08	0.54
1:C:622:THR:HB	1:C:626:LEU:HD12	1.90	0.54
1:E:212:GLY:O	1:E:340:LYS:HA	2.08	0.54
1:G:103:TYR:O	1:G:160:GLY:N	2.33	0.54
1:G:1808:ARG:HB2	1:G:1854:PHE:CE1	2.43	0.54
1:G:4024:VAL:HA	1:G:4027:LEU:HD12	1.89	0.54
1:G:622:THR:HB	1:G:626:LEU:HD12	1.90	0.54
1:G:688:LEU:HG	1:G:710:ASP:HB3	1.90	0.54
2:H:87:HIS:CE1	2:H:90:ILE:HD13	2.43	0.54
1:A:1046:LEU:O	1:A:1050:GLY:N	2.41	0.54
1:A:1143:TRP:HB3	1:A:1164:LEU:CD1	2.37	0.54
1:A:4782:VAL:O	1:A:4785:THR:OG1	2.20	0.54
1:A:4921:PHE:CE2	1:G:4892:ARG:HA	2.43	0.54
1:A:559:GLY:O	1:A:563:VAL:HG23	2.08	0.54
2:B:87:HIS:CE1	2:B:90:ILE:HD13	2.42	0.54
1:C:1205:GLY:HA3	1:C:1227:ALA:H	1.73	0.54
1:C:212:GLY:O	1:C:340:LYS:HA	2.07	0.54
2:D:38:SER:HB3	2:D:41:ASP:CG	2.28	0.54
1:E:1292:SER:HB2	1:E:1602:PRO:HG3	1.90	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1243:PRO:HB3	1:E:1606:SER:HA	1.90	0.54
1:E:166:GLY:O	1:E:201:ASN:ND2	2.41	0.54
1:E:3930:ILE:HG22	1:E:3995:VAL:HG11	1.89	0.54
1:E:4793:GLY:HA2	1:E:4796:MET:HG2	1.90	0.54
2:F:38:SER:HB3	2:F:41:ASP:CG	2.28	0.54
1:G:1729:SER:O	1:G:1732:SER:OG	2.19	0.54
1:A:116:MET:HA	1:A:139:GLU:HA	1.90	0.54
1:A:1649:ASP:OD1	1:A:1652:GLU:HB2	2.07	0.54
1:A:166:GLY:O	1:A:201:ASN:ND2	2.40	0.54
1:A:150:MET:SD	1:A:169:LEU:HD22	2.47	0.54
1:A:1937:LEU:HD12	1:A:2116:LEU:HD12	1.90	0.54
1:A:826:ILE:HG22	1:A:827:LYS:HG2	1.90	0.54
1:C:1125:ASN:ND2	1:C:1130:GLN:O	2.26	0.54
1:C:1805:GLU:OE1	1:C:1808:ARG:NE	2.35	0.54
1:C:2771:ILE:HG23	1:C:2852:ARG:HB2	1.89	0.54
1:C:559:GLY:O	1:C:563:VAL:HG23	2.08	0.54
1:C:705:ASN:OD1	1:C:706:GLY:N	2.41	0.54
1:E:4044:MET:HA	1:E:4047:MET:HG2	1.90	0.54
1:E:4666:VAL:HB	1:E:4667:PRO:HD3	1.90	0.54
1:E:688:LEU:HG	1:E:710:ASP:HB3	1.90	0.54
1:G:1141:ARG:HH12	1:G:1169:LEU:CD1	2.20	0.54
1:G:1243:PRO:HB3	1:G:1606:SER:HA	1.90	0.54
1:G:1810:LYS:HD3	1:G:1813:ARG:HH12	1.72	0.54
1:A:4044:MET:HA	1:A:4047:MET:HG2	1.90	0.54
1:A:4161:ARG:HA	1:A:4164:LEU:HB3	1.90	0.54
1:A:5027:CYS:HB3	1:A:5030:LYS:HB3	1.89	0.54
1:A:790:ARG:HA	1:A:1627:ALA:HA	1.89	0.54
1:C:2134:LEU:O	1:C:2138:LEU:HG	2.08	0.54
1:C:3767:GLN:OE1	1:C:3809:ASN:ND2	2.34	0.54
1:E:1457:TYR:CZ	1:E:1459:GLN:NE2	2.76	0.54
1:E:1712:TYR:HD2	1:E:1840:PRO:HB2	1.73	0.54
1:E:2758:PHE:HD2	1:E:2809:ILE:HD13	1.72	0.54
1:E:3935:TRP:O	1:G:80:GLU:OE2	2.26	0.54
1:E:705:ASN:OD1	1:E:706:GLY:N	2.41	0.54
1:G:2158:CYS:SG	1:G:2184:ASN:ND2	2.81	0.54
1:G:2927:LEU:HD22	1:G:2937:VAL:HG11	1.90	0.54
1:G:705:ASN:OD1	1:G:706:GLY:N	2.41	0.54
1:C:4044:MET:HA	1:C:4047:MET:HG2	1.90	0.53
1:C:4699:GLY:HA2	1:C:4702:ASP:HB2	1.90	0.53
1:C:4798:MET:SD	1:C:4801:LEU:HD12	2.48	0.53
1:C:4823:LEU:HA	1:C:4826:ILE:HD12	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:18:ARG:NH1	2:D:51:GLY:HA3	2.24	0.53
2:D:25:HIS:CG	2:D:40:ARG:HE	2.27	0.53
1:C:1783:VAL:CG1	2:D:55:VAL:HG12	2.38	0.53
1:E:1839:VAL:HB	1:E:1840:PRO:HD3	1.90	0.53
1:E:1937:LEU:HD12	1:E:2116:LEU:HD12	1.91	0.53
1:E:650:VAL:O	1:E:777:PHE:N	2.40	0.53
1:E:4581:LYS:HZ3	1:G:4877:ASP:HA	1.73	0.53
1:A:45:ARG:NH2	1:A:139:GLU:OE2	2.42	0.53
1:A:1808:ARG:HB2	1:A:1854:PHE:CE1	2.43	0.53
1:A:2758:PHE:HD2	1:A:2809:ILE:HD13	1.72	0.53
1:A:4823:LEU:HA	1:A:4826:ILE:HD12	1.90	0.53
1:A:4230:LYS:HD2	1:A:4959:PHE:O	2.08	0.53
1:C:1562:ILE:HG12	1:C:1563:GLN:O	2.09	0.53
1:C:1292:SER:HB2	1:C:1602:PRO:HG3	1.91	0.53
1:C:1243:PRO:HB3	1:C:1606:SER:HA	1.90	0.53
1:C:45:ARG:NH2	1:C:139:GLU:OE2	2.42	0.53
1:E:1808:ARG:HB2	1:E:1854:PHE:CE1	2.43	0.53
1:E:3767:GLN:OE1	1:E:3809:ASN:ND2	2.34	0.53
1:E:739:ALA:O	1:E:741:GLU:N	2.42	0.53
1:G:2099:SER:O	1:G:2103:VAL:HG23	2.08	0.53
1:G:2095:GLN:HG3	1:G:2127:GLN:OE1	2.08	0.53
1:G:3768:SER:HA	1:G:3771:HIS:HB3	1.89	0.53
1:A:1292:SER:HB2	1:A:1602:PRO:HG3	1.90	0.53
1:A:1712:TYR:HD2	1:A:1840:PRO:HB2	1.73	0.53
1:A:1839:VAL:HB	1:A:1840:PRO:HD3	1.90	0.53
1:C:1436:SER:HA	1:C:1515:VAL:O	2.08	0.53
1:C:1649:ASP:OD1	1:C:1652:GLU:HB2	2.07	0.53
1:C:1833:SER:O	1:C:1835:GLU:N	2.41	0.53
1:C:1830:VAL:HG12	1:C:1834:VAL:HA	1.90	0.53
1:C:3760:LYS:O	1:C:3764:LEU:HG	2.07	0.53
1:C:3841:VAL:HG12	1:C:3843:ASP:H	1.73	0.53
1:C:400:ALA:O	1:C:404:ILE:HG13	2.09	0.53
1:C:4720:VAL:HA	1:C:4723:LYS:NZ	2.23	0.53
1:C:650:VAL:O	1:C:777:PHE:N	2.41	0.53
1:E:110:ARG:HG2	1:E:117:TYR:CD1	2.44	0.53
1:E:3841:VAL:HG12	1:E:3843:ASP:H	1.73	0.53
1:E:3980:LEU:HD22	1:E:3985:LEU:HD22	1.89	0.53
1:G:102:LEU:HB2	1:G:105:HIS:HD2	1.72	0.53
1:G:110:ARG:HG2	1:G:117:TYR:CD1	2.43	0.53
1:G:1562:ILE:HG12	1:G:1563:GLN:O	2.09	0.53
1:G:1667:LEU:HD23	1:G:1710:GLY:HA3	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:1830:VAL:HG12	1:G:1834:VAL:HA	1.90	0.53
1:G:2214:VAL:HG11	1:G:2229:VAL:HG21	1.90	0.53
1:G:3984:ARG:O	1:G:3986:TRP:N	2.41	0.53
1:G:790:ARG:HA	1:G:1627:ALA:HA	1.89	0.53
1:A:3930:ILE:HG22	1:A:3995:VAL:HG11	1.89	0.53
2:B:38:SER:HB3	2:B:41:ASP:CG	2.28	0.53
1:C:1141:ARG:HH12	1:C:1169:LEU:CD1	2.21	0.53
1:C:138:GLN:HG2	1:C:140:ASP:H	1.73	0.53
1:C:739:ALA:O	1:C:741:GLU:N	2.41	0.53
1:E:1125:ASN:ND2	1:E:1130:GLN:O	2.27	0.53
1:E:1294:PRO:HB3	1:E:1547:LYS:HB3	1.91	0.53
1:E:1477:GLY:HA2	1:E:1483:VAL:HA	1.90	0.53
1:E:1439:VAL:O	1:E:1512:THR:HB	2.08	0.53
1:E:1729:SER:O	1:E:1732:SER:OG	2.19	0.53
1:E:37:LEU:HB2	1:E:200:TRP:CZ3	2.43	0.53
1:E:4956:THR:O	1:E:4965:SER:N	2.42	0.53
1:G:116:MET:HA	1:G:139:GLU:HA	1.90	0.53
1:G:314:PHE:HE1	1:G:378:LEU:HD21	1.73	0.53
1:G:3905:THR:HG23	1:G:3907:THR:HG23	1.90	0.53
1:G:4242:ILE:O	1:G:4246:GLN:HG2	2.09	0.53
1:A:1679:ASN:O	1:A:1683:HIS:ND1	2.41	0.53
1:A:4798:MET:SD	1:A:4801:LEU:HD12	2.49	0.53
1:A:563:VAL:O	1:A:567:VAL:HG23	2.08	0.53
1:A:705:ASN:OD1	1:A:706:GLY:N	2.41	0.53
1:E:2099:SER:O	1:E:2103:VAL:HG23	2.09	0.53
1:E:4849:TYR:HA	1:E:4852:THR:HG22	1.90	0.53
1:E:638:ILE:HG22	1:E:639:ASN:N	2.24	0.53
1:G:1046:LEU:O	1:G:1050:GLY:N	2.41	0.53
1:G:1240:LYS:O	1:G:1607:ARG:HA	2.09	0.53
1:G:4251:ILE:HG22	1:G:4557:ARG:HH11	1.74	0.53
1:G:45:ARG:NH2	1:G:139:GLU:OE2	2.42	0.53
1:A:2099:SER:O	1:A:2103:VAL:HG23	2.08	0.53
1:A:24:CYS:SG	1:A:26:ALA:HB2	2.49	0.53
1:A:2496:PRO:HB3	1:A:2552:ARG:HD2	1.90	0.53
1:A:622:THR:HB	1:A:626:LEU:HD12	1.90	0.53
2:B:16:PRO:HD3	2:B:66:MET:O	2.09	0.53
1:C:1641:ILE:HG23	1:C:1643:GLU:O	2.09	0.53
1:C:1667:LEU:HD23	1:C:1710:GLY:HA3	1.90	0.53
1:C:1712:TYR:HD2	1:C:1840:PRO:HB2	1.73	0.53
1:C:2099:SER:O	1:C:2103:VAL:HG23	2.09	0.53
1:C:4161:ARG:HA	1:C:4164:LEU:HB3	1.91	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:138:GLN:HG2	1:E:140:ASP:H	1.73	0.53
1:E:2496:PRO:HB3	1:E:2552:ARG:HD2	1.91	0.53
1:E:4161:ARG:HA	1:E:4164:LEU:HB3	1.90	0.53
1:E:4699:GLY:HA2	1:E:4702:ASP:HB2	1.91	0.53
1:E:563:VAL:O	1:E:567:VAL:HG23	2.08	0.53
1:G:33:LEU:HD21	1:G:51:PRO:HB3	1.91	0.53
1:G:674:PHE:HZ	2:H:71:ARG:NE	2.05	0.53
1:A:3841:VAL:HG12	1:A:3843:ASP:H	1.73	0.53
1:A:400:ALA:O	1:A:404:ILE:HG13	2.09	0.53
1:A:4928:LEU:O	1:A:4931:ILE:HG22	2.08	0.53
1:C:4928:LEU:O	1:C:4931:ILE:HG22	2.08	0.53
1:E:1079:LYS:NZ	1:E:1107:PRO:HB2	2.23	0.53
1:E:1830:VAL:HG12	1:E:1834:VAL:HA	1.91	0.53
1:E:2095:GLN:HG3	1:E:2127:GLN:OE1	2.08	0.53
1:E:2515:GLN:NE2	1:E:2608:MET:O	2.40	0.53
1:E:314:PHE:HE1	1:E:378:LEU:HD21	1.74	0.53
1:G:1205:GLY:HA3	1:G:1227:ALA:H	1.74	0.53
1:G:4666:VAL:HB	1:G:4667:PRO:HD3	1.91	0.53
1:G:563:VAL:O	1:G:567:VAL:HG23	2.07	0.53
1:G:636:ASN:OD1	1:G:637:LEU:N	2.42	0.53
1:A:1111:PRO:HG3	1:A:1609:PRO:HG3	1.89	0.53
1:A:1562:ILE:HG12	1:A:1563:GLN:O	2.09	0.53
1:A:2134:LEU:O	1:A:2138:LEU:HG	2.09	0.53
1:A:314:PHE:HE1	1:A:378:LEU:HD21	1.73	0.53
1:A:4864:ASN:HB2	1:A:4902:GLU:HG3	1.89	0.53
1:C:1079:LYS:NZ	1:C:1107:PRO:HB2	2.24	0.53
1:C:1477:GLY:HA2	1:C:1483:VAL:HA	1.90	0.53
1:C:2924:GLN:HB3	1:C:2928:LYS:HE2	1.91	0.53
1:C:638:ILE:HG22	1:C:639:ASN:N	2.24	0.53
1:C:688:LEU:HG	1:C:710:ASP:HB3	1.90	0.53
1:E:1111:PRO:HG3	1:E:1609:PRO:HG3	1.90	0.53
1:E:45:ARG:NH2	1:E:139:GLU:OE2	2.42	0.53
1:E:1259:ARG:NH2	1:E:1599:MET:O	2.42	0.53
1:E:1805:GLU:OE1	1:E:1808:ARG:NE	2.35	0.53
1:E:2745:VAL:HG21	1:E:2818:ALA:HB2	1.91	0.53
1:E:4154:VAL:HG13	1:E:4154:VAL:O	2.08	0.53
1:E:559:GLY:O	1:E:563:VAL:HG23	2.08	0.53
1:G:1641:ILE:HG23	1:G:1643:GLU:O	2.09	0.53
1:G:400:ALA:O	1:G:404:ILE:HG13	2.09	0.53
1:G:4702:ASP:O	1:G:4705:VAL:HG12	2.07	0.53
1:G:717:ASP:CG	2:H:7:ILE:HA	2.29	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:18:ARG:NH1	2:H:51:GLY:HA3	2.23	0.53
1:A:4699:GLY:HA2	1:A:4702:ASP:HB2	1.89	0.53
1:A:4821:LYS:HD3	1:A:4947:GLN:NE2	2.24	0.53
1:A:597:HIS:NE2	1:A:598:LYS:NZ	2.57	0.53
2:B:25:HIS:CG	2:B:40:ARG:HE	2.27	0.53
1:C:1072:VAL:HB	1:C:1607:ARG:HH12	1.74	0.53
2:D:16:PRO:HD3	2:D:66:MET:O	2.09	0.53
1:G:2205:GLU:O	1:G:2209:GLU:HG2	2.09	0.53
1:G:2515:GLN:NE2	1:G:2608:MET:O	2.40	0.53
1:G:4004:ALA:HB3	1:G:4110:PHE:HZ	1.73	0.53
1:G:4217:PHE:HZ	1:G:4234:PHE:HA	1.74	0.53
1:G:597:HIS:NE2	1:G:598:LYS:NZ	2.57	0.53
1:G:650:VAL:O	1:G:777:PHE:N	2.41	0.53
1:A:1125:ASN:ND2	1:A:1130:GLN:O	2.27	0.53
1:A:1805:GLU:OE1	1:A:1808:ARG:NE	2.35	0.53
1:A:2158:CYS:SG	1:A:2184:ASN:ND2	2.82	0.53
1:A:2214:VAL:HG11	1:A:2229:VAL:HG21	1.91	0.53
1:A:636:ASN:ND2	2:B:35:LYS:HD3	2.24	0.53
1:A:674:PHE:HD1	2:B:40:ARG:HH12	1.52	0.53
1:C:110:ARG:HG2	1:C:117:TYR:CD1	2.44	0.53
1:C:2515:GLN:NE2	1:C:2608:MET:O	2.40	0.53
1:C:4965:SER:HA	1:C:4975:PHE:CD1	2.44	0.53
1:E:4004:ALA:HB3	1:E:4110:PHE:HZ	1.74	0.53
2:F:18:ARG:NH1	2:F:51:GLY:HA3	2.24	0.53
1:G:24:CYS:SG	1:G:26:ALA:HB2	2.49	0.53
1:G:2553:TYR:HD1	1:G:2556:LEU:HD12	1.74	0.53
1:G:3771:HIS:HD2	1:G:3812:VAL:HG22	1.72	0.53
1:G:3827:GLY:O	1:G:3831:SER:N	2.41	0.53
1:A:110:ARG:HG2	1:A:117:TYR:CD1	2.43	0.52
1:A:138:GLN:HG2	1:A:140:ASP:H	1.73	0.52
1:A:1294:PRO:HG3	1:A:1549:PHE:HE1	1.75	0.52
1:A:3916:ILE:HA	1:A:3919:THR:HG22	1.91	0.52
1:A:3935:TRP:HB2	1:C:76:ARG:HG3	1.89	0.52
1:A:4154:VAL:O	1:A:4154:VAL:HG13	2.09	0.52
1:A:33:LEU:HD21	1:A:51:PRO:HB3	1.91	0.52
1:C:1516:ILE:O	1:C:1530:THR:OG1	2.26	0.52
1:C:1705:GLY:O	1:C:1708:ARG:HB3	2.09	0.52
1:C:1729:SER:O	1:C:1732:SER:OG	2.19	0.52
1:C:4666:VAL:HB	1:C:4667:PRO:HD3	1.90	0.52
1:C:669:ASP:HB3	1:C:788:LYS:HZ1	1.72	0.52
1:E:116:MET:HA	1:E:139:GLU:HA	1.90	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4720:VAL:HA	1:E:4723:LYS:NZ	2.23	0.52
2:F:25:HIS:CG	2:F:40:ARG:HE	2.27	0.52
1:G:1079:LYS:NZ	1:G:1107:PRO:HB2	2.24	0.52
1:G:1259:ARG:NH2	1:G:1599:MET:O	2.42	0.52
1:G:1072:VAL:HB	1:G:1607:ARG:HH12	1.74	0.52
1:G:3882:GLN:HB2	1:G:3957:VAL:HG22	1.91	0.52
1:G:3903:LEU:HD22	1:G:3915:ILE:HD12	1.91	0.52
1:G:4648:LEU:HA	1:G:4651:THR:HB	1.91	0.52
1:A:1641:ILE:HG23	1:A:1643:GLU:O	2.09	0.52
1:A:688:LEU:HG	1:A:710:ASP:HB3	1.90	0.52
2:B:18:ARG:NH1	2:B:51:GLY:HA3	2.24	0.52
1:C:24:CYS:SG	1:C:26:ALA:HB2	2.49	0.52
1:C:4821:LYS:HD3	1:C:4947:GLN:NE2	2.23	0.52
1:E:1046:LEU:O	1:E:1050:GLY:N	2.42	0.52
1:E:2158:CYS:SG	1:E:2184:ASN:ND2	2.82	0.52
1:E:4893:ALA:HB1	1:E:4896:GLY:HA2	1.91	0.52
1:G:37:LEU:HB2	1:G:200:TRP:HZ3	1.75	0.52
1:G:2377:LEU:HD12	1:G:2468:GLY:HA2	1.92	0.52
1:G:3962:PHE:O	1:G:3966:THR:HG23	2.09	0.52
1:G:614:VAL:O	1:G:614:VAL:HG13	2.09	0.52
2:H:25:HIS:CG	2:H:40:ARG:HE	2.26	0.52
1:A:1259:ARG:NH2	1:A:1599:MET:O	2.42	0.52
1:A:37:LEU:HB2	1:A:200:TRP:HZ3	1.74	0.52
1:A:739:ALA:O	1:A:741:GLU:N	2.42	0.52
1:C:1046:LEU:O	1:C:1050:GLY:N	2.41	0.52
1:C:4154:VAL:HG13	1:C:4154:VAL:O	2.09	0.52
1:C:4640:GLU:HB3	1:C:4641:PRO:HD3	1.92	0.52
1:E:638:ILE:HB	1:E:1636:MET:HB2	1.91	0.52
1:E:4965:SER:HA	1:E:4975:PHE:CD1	2.44	0.52
1:E:857:ASP:O	1:E:991:ASN:ND2	2.42	0.52
1:G:1252:HIS:ND1	1:G:1253:PRO:HD2	2.24	0.52
1:G:1856:ASP:H	1:G:1858:ASP:N	2.07	0.52
1:A:1202:LEU:HD21	1:A:1204:LEU:HG	1.90	0.52
1:A:1240:LYS:O	1:A:1607:ARG:HA	2.09	0.52
1:A:4640:GLU:HB3	1:A:4641:PRO:HD3	1.92	0.52
1:A:4956:THR:O	1:A:4965:SER:N	2.43	0.52
1:C:1294:PRO:HG3	1:C:1549:PHE:HE1	1.74	0.52
1:C:2205:GLU:O	1:C:2209:GLU:HG2	2.09	0.52
1:C:2922:LYS:C	1:C:2925:GLU:HB2	2.30	0.52
1:C:33:LEU:HD21	1:C:51:PRO:HB3	1.91	0.52
1:C:3768:SER:HA	1:C:3771:HIS:HB3	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:404:ILE:HG12	1:C:478:PHE:HD2	1.74	0.52
1:C:4810:ALA:O	1:C:4813:LEU:HG	2.10	0.52
1:C:590:LEU:HB2	1:C:599:VAL:HG11	1.92	0.52
1:C:617:ASN:O	1:C:621:ILE:HG12	2.10	0.52
1:E:1205:GLY:HA3	1:E:1227:ALA:H	1.75	0.52
1:E:3916:ILE:HA	1:E:3919:THR:HG22	1.92	0.52
1:E:617:ASN:O	1:E:621:ILE:HG12	2.10	0.52
1:G:138:GLN:HG2	1:G:140:ASP:H	1.74	0.52
1:G:2758:PHE:HD2	1:G:2809:ILE:HD13	1.73	0.52
1:G:3793:MET:O	1:G:3797:THR:HG23	2.09	0.52
1:G:617:ASN:O	1:G:621:ILE:HG12	2.10	0.52
1:A:1247:PRO:HA	1:A:1602:PRO:HA	1.92	0.52
1:A:1830:VAL:HG12	1:A:1834:VAL:HA	1.91	0.52
1:A:4221:VAL:O	1:A:4225:GLY:N	2.43	0.52
1:C:1259:ARG:NH2	1:C:1599:MET:O	2.42	0.52
1:C:1688:HIS:O	1:C:1688:HIS:ND1	2.43	0.52
1:C:622:THR:O	1:C:626:LEU:N	2.42	0.52
1:C:857:ASP:O	1:C:991:ASN:ND2	2.43	0.52
1:E:1141:ARG:HH12	1:E:1169:LEU:CD1	2.22	0.52
1:E:1562:ILE:HG12	1:E:1563:GLN:O	2.09	0.52
1:E:2755:ILE:HD13	1:E:2810:LYS:HG2	1.91	0.52
1:E:33:LEU:HD21	1:E:51:PRO:HB3	1.92	0.52
2:F:25:HIS:O	2:F:102:GLU:N	2.39	0.52
1:G:1477:GLY:HA2	1:G:1483:VAL:HA	1.91	0.52
1:G:2059:LEU:HD22	1:G:2062:ARG:NH1	2.19	0.52
1:G:3841:VAL:HG12	1:G:3843:ASP:H	1.74	0.52
1:G:638:ILE:HG22	1:G:639:ASN:N	2.24	0.52
1:A:1692:ALA:HA	1:A:1695:LEU:HD12	1.92	0.52
1:A:3877:ASP:O	1:A:3880:PHE:HB3	2.10	0.52
1:A:614:VAL:O	1:A:614:VAL:HG13	2.10	0.52
1:A:636:ASN:OD1	1:A:637:LEU:N	2.42	0.52
1:A:834:PRO:HD2	1:A:838:HIS:HE2	1.73	0.52
1:C:1240:LYS:O	1:C:1607:ARG:HA	2.09	0.52
1:C:1856:ASP:H	1:C:1858:ASP:N	2.08	0.52
1:C:3877:ASP:O	1:C:3880:PHE:HB3	2.10	0.52
1:C:716:PHE:H	1:C:738:LEU:HD13	1.75	0.52
1:E:1240:LYS:O	1:E:1607:ARG:HA	2.09	0.52
1:E:4146:LEU:O	1:E:4150:LEU:HG	2.09	0.52
1:C:4892:ARG:HH12	1:E:4898:GLY:H	1.57	0.52
1:G:1103:GLY:HA3	1:G:1123:VAL:HA	1.92	0.52
1:A:1252:HIS:ND1	1:A:1253:PRO:HD2	2.24	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1477:GLY:HA2	1:A:1483:VAL:HA	1.90	0.52
1:A:4965:SER:HA	1:A:4975:PHE:CD1	2.45	0.52
1:A:716:PHE:H	1:A:738:LEU:HD13	1.75	0.52
1:E:1210:SER:HA	1:E:1214:PHE:HB3	1.92	0.52
1:E:1294:PRO:HG3	1:E:1549:PHE:HE1	1.75	0.52
1:E:2205:GLU:O	1:E:2209:GLU:HG2	2.09	0.52
1:E:2902:HIS:CG	1:E:2903:PRO:HD2	2.45	0.52
1:E:299:LEU:HD23	1:E:357:LEU:HD13	1.92	0.52
1:E:4172:GLU:HG2	1:E:4175:ARG:NH1	2.20	0.52
1:G:1292:SER:HB2	1:G:1602:PRO:HG3	1.91	0.52
1:G:1692:ALA:HA	1:G:1695:LEU:HD12	1.92	0.52
1:G:1931:LEU:CD2	1:G:1935:VAL:HG11	2.39	0.52
1:G:857:ASP:O	1:G:991:ASN:ND2	2.43	0.52
1:A:1103:GLY:HA3	1:A:1123:VAL:HA	1.92	0.52
1:A:1079:LYS:NZ	1:A:1107:PRO:HB2	2.25	0.52
1:A:1931:LEU:CD2	1:A:1935:VAL:HG11	2.40	0.52
1:A:2205:GLU:O	1:A:2209:GLU:HG2	2.09	0.52
1:A:2377:LEU:HD12	1:A:2468:GLY:HA2	1.92	0.52
1:A:2902:HIS:CG	1:A:2903:PRO:HD2	2.45	0.52
1:A:617:ASN:O	1:A:621:ILE:HG12	2.10	0.52
1:C:1937:LEU:HD12	1:C:2116:LEU:HD12	1.91	0.52
1:C:4583:SER:N	1:C:4628:VAL:O	2.41	0.52
1:E:1072:VAL:HB	1:E:1607:ARG:HH12	1.74	0.52
1:E:1688:HIS:O	1:E:1688:HIS:ND1	2.43	0.52
1:E:1705:GLY:O	1:E:1708:ARG:HB3	2.09	0.52
1:E:2924:GLN:O	1:E:2928:LYS:CB	2.58	0.52
1:G:1805:GLU:OE1	1:G:1808:ARG:NE	2.35	0.52
1:G:3813:GLN:NE2	1:G:3890:LEU:O	2.40	0.52
1:G:404:ILE:HG12	1:G:478:PHE:HD2	1.74	0.52
1:G:4210:VAL:O	1:G:4214:LYS:N	2.39	0.52
1:A:1240:LYS:NZ	1:A:1242:LEU:O	2.43	0.52
1:A:1072:VAL:HB	1:A:1607:ARG:HH12	1.75	0.52
1:A:638:ILE:HB	1:A:1636:MET:HB2	1.91	0.52
1:A:2755:ILE:HD13	1:A:2810:LYS:HG2	1.92	0.52
1:A:4839:MET:HE3	1:G:4826:ILE:CG1	2.35	0.52
1:C:1240:LYS:NZ	1:C:1242:LEU:O	2.43	0.52
1:C:1247:PRO:HA	1:C:1602:PRO:HA	1.91	0.52
1:C:1658:ASP:OD1	1:C:1661:ARG:NH2	2.43	0.52
1:C:2158:CYS:SG	1:C:2184:ASN:ND2	2.82	0.52
1:C:2377:LEU:HD12	1:C:2468:GLY:HA2	1.92	0.52
1:C:614:VAL:O	1:C:614:VAL:HG13	2.09	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1252:HIS:ND1	1:E:1253:PRO:HD2	2.25	0.52
1:E:1641:ILE:HG23	1:E:1643:GLU:O	2.09	0.52
1:E:1931:LEU:CD2	1:E:1935:VAL:HG11	2.40	0.52
1:E:2214:VAL:HG11	1:E:2229:VAL:HG21	1.92	0.52
1:E:2377:LEU:HD12	1:E:2468:GLY:HA2	1.92	0.52
1:E:24:CYS:SG	1:E:26:ALA:HB2	2.49	0.52
1:E:252:VAL:HA	1:E:255:HIS:ND1	2.25	0.52
1:E:4640:GLU:HB3	1:E:4641:PRO:HD3	1.92	0.52
1:E:4795:TYR:O	1:E:4812:HIS:HE1	1.92	0.52
1:G:233:ILE:HD12	1:G:242:ARG:HB3	1.92	0.52
1:G:299:LEU:HD23	1:G:357:LEU:HD13	1.92	0.52
1:G:4039:MET:HG3	1:G:4040:ILE:N	2.25	0.52
1:G:4150:LEU:O	1:G:4154:VAL:HG12	2.09	0.52
1:G:4583:SER:N	1:G:4628:VAL:O	2.41	0.52
1:G:921:ASN:O	1:G:925:SER:N	2.26	0.52
1:A:3985:LEU:O	1:A:3988:ALA:HB3	2.10	0.52
1:C:4844:LEU:O	1:C:4848:VAL:HG23	2.10	0.52
1:E:3877:ASP:O	1:E:3880:PHE:HB3	2.09	0.52
1:E:4651:THR:HG23	1:E:4799:SER:HB3	1.90	0.52
1:G:1294:PRO:HG3	1:G:1549:PHE:HE1	1.75	0.52
1:G:1833:SER:O	1:G:1835:GLU:N	2.42	0.52
1:G:252:VAL:HA	1:G:255:HIS:ND1	2.25	0.52
1:G:2902:HIS:CG	1:G:2903:PRO:HD2	2.45	0.52
1:G:265:LEU:HD22	1:G:309:THR:HG23	1.92	0.52
1:G:4077:PHE:CZ	1:G:4125:PHE:HA	2.44	0.52
1:A:4651:THR:HG23	1:A:4799:SER:HB3	1.92	0.51
1:A:4795:TYR:O	1:A:4812:HIS:HE1	1.93	0.51
1:A:828:GLU:O	1:A:840:VAL:HG23	2.11	0.51
1:C:2902:HIS:CG	1:C:2903:PRO:HD2	2.45	0.51
1:C:314:PHE:HE1	1:C:378:LEU:HD21	1.74	0.51
1:C:4770:SER:O	1:C:4772:ASP:N	2.34	0.51
1:C:4956:THR:O	1:C:4965:SER:N	2.43	0.51
1:C:523:TYR:CE1	1:C:560:ILE:HG12	2.45	0.51
1:C:597:HIS:NE2	1:C:598:LYS:NZ	2.57	0.51
1:C:793:LEU:HB3	1:C:812:HIS:HB2	1.91	0.51
1:E:233:ILE:HD12	1:E:242:ARG:HB3	1.92	0.51
1:E:3768:SER:HA	1:E:3771:HIS:HB3	1.91	0.51
1:E:404:ILE:HG12	1:E:478:PHE:HD2	1.75	0.51
1:G:1734:TYR:OH	1:G:1948:ASP:OD1	2.18	0.51
1:G:2922:LYS:O	1:G:2925:GLU:HB2	2.10	0.51
1:G:590:LEU:HB2	1:G:599:VAL:HG11	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:793:LEU:HB3	1:G:812:HIS:HB2	1.91	0.51
1:A:1205:GLY:HA3	1:A:1227:ALA:H	1.75	0.51
1:A:2059:LEU:HD22	1:A:2062:ARG:NH1	2.18	0.51
1:A:3767:GLN:OE1	1:A:3809:ASN:ND2	2.34	0.51
1:A:590:LEU:HB2	1:A:599:VAL:HG11	1.92	0.51
1:A:622:THR:HG21	1:A:1681:VAL:HG13	1.93	0.51
1:A:622:THR:O	1:A:626:LEU:N	2.42	0.51
1:C:2755:ILE:HD13	1:C:2810:LYS:HG2	1.93	0.51
1:C:2745:VAL:HG21	1:C:2818:ALA:HB2	1.91	0.51
1:E:2134:LEU:O	1:E:2138:LEU:HG	2.08	0.51
1:E:400:ALA:O	1:E:404:ILE:HG13	2.09	0.51
1:E:597:HIS:NE2	1:E:598:LYS:NZ	2.57	0.51
1:E:614:VAL:HG13	1:E:614:VAL:O	2.10	0.51
1:G:1240:LYS:NZ	1:G:1242:LEU:HB2	2.25	0.51
1:G:2556:LEU:HD23	1:G:2559:LEU:HD12	1.91	0.51
1:G:3750:GLU:O	1:G:3754:GLU:N	2.43	0.51
1:G:4031:LEU:HD23	1:G:4153:HIS:CD2	2.45	0.51
1:A:255:HIS:HB3	1:A:257:ARG:HG2	1.93	0.51
1:A:407:THR:HA	1:A:410:LEU:HG	1.92	0.51
1:A:4146:LEU:O	1:A:4150:LEU:HG	2.09	0.51
1:C:638:ILE:HB	1:C:1636:MET:HB2	1.90	0.51
1:C:252:VAL:HG23	1:C:257:ARG:NE	2.26	0.51
1:C:4004:ALA:HB3	1:C:4110:PHE:HZ	1.75	0.51
1:C:4146:LEU:O	1:C:4150:LEU:HG	2.10	0.51
1:E:1103:GLY:HA3	1:E:1123:VAL:HA	1.92	0.51
1:E:2358:ILE:HG21	1:G:195:PHE:HE2	1.75	0.51
1:E:3698:LEU:O	1:E:3702:VAL:HG23	2.10	0.51
1:E:3729:MET:HE2	1:E:3770:LEU:HD13	1.91	0.51
1:E:675:LEU:O	1:E:676:THR:OG1	2.27	0.51
1:G:1240:LYS:NZ	1:G:1242:LEU:O	2.43	0.51
1:G:4150:LEU:HB3	1:G:4160:LEU:HD21	1.92	0.51
2:H:16:PRO:HD3	2:H:66:MET:O	2.10	0.51
1:A:2121:PHE:CD1	1:A:3701:LEU:HD12	2.46	0.51
1:A:4844:LEU:O	1:A:4848:VAL:HG23	2.10	0.51
1:C:3750:GLU:O	1:C:3754:GLU:N	2.43	0.51
1:C:3905:THR:HG23	1:C:3907:THR:HG23	1.91	0.51
1:C:407:THR:HA	1:C:410:LEU:HG	1.93	0.51
1:C:4177:TYR:HA	1:C:4199:GLU:OE2	2.10	0.51
1:C:4795:TYR:O	1:C:4812:HIS:HE1	1.93	0.51
1:C:4826:ILE:HG12	1:E:4839:MET:HE3	1.93	0.51
1:E:37:LEU:HB2	1:E:200:TRP:HZ3	1.75	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4782:VAL:O	1:E:4785:THR:OG1	2.21	0.51
1:E:4798:MET:SD	1:E:4801:LEU:HD12	2.50	0.51
1:G:1202:LEU:HD21	1:G:1204:LEU:HG	1.92	0.51
1:G:3670:GLU:O	1:G:3674:ILE:HG12	2.11	0.51
1:G:4645:CYS:O	1:G:4649:LEU:N	2.39	0.51
1:A:1856:ASP:H	1:A:1858:ASP:N	2.07	0.51
1:A:2358:ILE:HG21	1:C:195:PHE:HE2	1.76	0.51
1:A:233:ILE:HD12	1:A:242:ARG:HB3	1.92	0.51
1:A:3727:ASP:O	1:A:3730:ALA:HB3	2.11	0.51
2:B:25:HIS:O	2:B:102:GLU:N	2.38	0.51
2:B:27:THR:HA	2:B:38:SER:HA	1.92	0.51
2:B:58:GLY:HA3	2:B:76:ILE:HG23	1.92	0.51
1:C:1205:GLY:HA3	1:C:1227:ALA:CB	2.40	0.51
1:C:1931:LEU:CD2	1:C:1935:VAL:HG11	2.40	0.51
1:C:3698:LEU:O	1:C:3702:VAL:HG23	2.10	0.51
1:C:4849:TYR:HA	1:C:4852:THR:HG22	1.92	0.51
1:E:1240:LYS:NZ	1:E:1242:LEU:HB2	2.25	0.51
1:E:1658:ASP:OD1	1:E:1661:ARG:NH2	2.43	0.51
1:E:1692:ALA:HA	1:E:1695:LEU:HD12	1.92	0.51
1:E:1708:ARG:HH11	1:E:1712:TYR:HE2	1.57	0.51
1:E:1833:SER:O	1:E:1835:GLU:N	2.42	0.51
1:E:2495:VAL:HA	1:E:2498:HIS:HD2	1.76	0.51
1:E:2121:PHE:CD1	1:E:3701:LEU:HD12	2.46	0.51
1:E:4177:TYR:HA	1:E:4199:GLU:OE2	2.10	0.51
1:E:523:TYR:CE1	1:E:560:ILE:HG12	2.46	0.51
1:G:1688:HIS:ND1	1:G:1688:HIS:O	2.44	0.51
1:G:559:GLY:O	1:G:563:VAL:HG23	2.10	0.51
1:A:2305:CYS:HB2	1:A:2325:PRO:HG2	1.93	0.51
1:A:3729:MET:HE2	1:A:3770:LEU:HD13	1.92	0.51
1:A:793:LEU:HB3	1:A:812:HIS:HB2	1.91	0.51
1:C:1202:LEU:HD21	1:C:1204:LEU:HG	1.92	0.51
1:C:1210:SER:HA	1:C:1214:PHE:HB3	1.93	0.51
1:C:1708:ARG:HH11	1:C:1712:TYR:HE2	1.58	0.51
1:C:2553:TYR:HD1	1:C:2556:LEU:HD12	1.76	0.51
1:E:102:LEU:HB2	1:E:105:HIS:HD2	1.72	0.51
1:E:1247:PRO:HA	1:E:1602:PRO:HA	1.91	0.51
1:E:2244:ARG:HH11	1:E:2248:ARG:HH21	1.58	0.51
1:E:4107:GLU:HA	1:E:4110:PHE:HB3	1.93	0.51
1:E:4844:LEU:O	1:E:4848:VAL:HG23	2.11	0.51
1:E:636:ASN:OD1	1:E:637:LEU:N	2.43	0.51
1:G:1210:SER:HA	1:G:1214:PHE:HB3	1.93	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:4146:LEU:O	1:G:4150:LEU:HG	2.09	0.51
1:G:638:ILE:HB	1:G:1636:MET:HB2	1.92	0.51
1:A:132:ALA:HB1	1:A:193:ALA:O	2.11	0.51
1:A:113:HIS:CE1	1:A:402:ARG:HB3	2.46	0.51
1:A:4580:TYR:HB2	1:A:4631:PHE:HD1	1.76	0.51
1:C:1115:LEU:HD21	1:C:1123:VAL:HG11	1.93	0.51
1:C:173:SER:O	1:C:177:GLU:HA	2.11	0.51
1:C:1962:ALA:O	1:C:1966:VAL:HG23	2.11	0.51
1:C:3729:MET:HE2	1:C:3770:LEU:HD13	1.92	0.51
1:C:113:HIS:CE1	1:C:402:ARG:HB3	2.46	0.51
2:D:58:GLY:HA3	2:D:76:ILE:HG23	1.92	0.51
1:E:1240:LYS:NZ	1:E:1242:LEU:O	2.43	0.51
2:F:16:PRO:HD3	2:F:66:MET:O	2.09	0.51
1:G:255:HIS:HB3	1:G:257:ARG:HG2	1.93	0.51
1:A:1163:THR:HG22	1:A:1168:VAL:HA	1.93	0.51
1:A:1240:LYS:NZ	1:A:1242:LEU:HB2	2.25	0.51
1:A:1658:ASP:OD1	1:A:1661:ARG:NH2	2.43	0.51
1:A:299:LEU:HD23	1:A:357:LEU:HD13	1.92	0.51
1:A:265:LEU:HD22	1:A:309:THR:HG23	1.93	0.51
1:A:3750:GLU:O	1:A:3754:GLU:N	2.43	0.51
1:A:523:TYR:CE1	1:A:560:ILE:HG12	2.45	0.51
1:C:3727:ASP:O	1:C:3730:ALA:HB3	2.11	0.51
1:C:3839:CYS:SG	1:C:3840:SER:N	2.84	0.51
1:C:4107:GLU:HA	1:C:4110:PHE:HB3	1.93	0.51
1:C:4651:THR:HG23	1:C:4799:SER:HB3	1.92	0.51
1:C:1780:PRO:HB2	2:D:42:ARG:NH2	2.25	0.51
1:C:4892:ARG:HH22	1:E:4920:PHE:HD2	1.57	0.51
1:E:590:LEU:HB2	1:E:599:VAL:HG11	1.93	0.51
1:C:3935:TRP:O	1:E:80:GLU:OE2	2.28	0.51
1:G:2755:ILE:HD13	1:G:2810:LYS:HG2	1.92	0.51
1:G:4241:THR:O	1:G:4244:GLU:HB3	2.10	0.51
1:G:4665:LYS:O	1:G:4669:VAL:N	2.40	0.51
1:G:625:LEU:HB3	1:G:632:LEU:HD23	1.93	0.51
1:A:252:VAL:HA	1:A:255:HIS:ND1	2.25	0.51
1:A:252:VAL:HG23	1:A:257:ARG:NE	2.25	0.51
1:A:4004:ALA:HB3	1:A:4110:PHE:HZ	1.74	0.51
1:A:404:ILE:HG12	1:A:478:PHE:HD2	1.75	0.51
1:A:4905:ALA:N	1:A:4906:GLY:HA3	2.26	0.51
1:C:1079:LYS:HZ2	1:C:1107:PRO:HB2	1.76	0.51
1:C:1103:GLY:HA3	1:C:1123:VAL:HA	1.92	0.51
1:C:1240:LYS:HZ3	1:C:1242:LEU:HB2	1.76	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:37:LEU:HB2	1:C:200:TRP:HZ3	1.75	0.51
1:C:265:LEU:HD22	1:C:309:THR:HG23	1.93	0.51
1:E:1115:LEU:HD21	1:E:1123:VAL:HG11	1.93	0.51
1:E:1202:LEU:HD21	1:E:1204:LEU:HG	1.92	0.51
1:E:132:ALA:HB1	1:E:193:ALA:O	2.11	0.51
1:E:1962:ALA:O	1:E:1966:VAL:HG23	2.11	0.51
1:E:793:LEU:HB3	1:E:812:HIS:HB2	1.91	0.51
1:E:921:ASN:O	1:E:925:SER:N	2.26	0.51
1:G:1658:ASP:OD1	1:G:1661:ARG:NH2	2.43	0.51
1:G:264:PRO:O	1:G:266:ARG:N	2.44	0.51
1:G:3847:PHE:HE1	1:G:3946:GLN:HG2	1.75	0.51
1:G:4905:ALA:N	1:G:4906:GLY:HA3	2.26	0.51
1:G:523:TYR:CE1	1:G:560:ILE:HG12	2.46	0.51
1:A:1833:SER:O	1:A:1835:GLU:N	2.41	0.51
1:A:638:ILE:HG22	1:A:639:ASN:N	2.25	0.51
1:C:1252:HIS:ND1	1:C:1253:PRO:HD2	2.25	0.51
1:C:2059:LEU:HD22	1:C:2062:ARG:NH1	2.18	0.51
1:C:255:HIS:HB3	1:C:257:ARG:HG2	1.93	0.51
1:C:276:TRP:CD1	1:C:318:VAL:HG23	2.46	0.51
1:E:1856:ASP:H	1:E:1858:ASP:N	2.08	0.51
1:E:2254:LEU:O	1:E:2258:LEU:HG	2.11	0.51
1:E:2819:TRP:CH2	1:E:2881:ASN:HB2	2.46	0.51
1:E:3750:GLU:O	1:E:3754:GLU:N	2.43	0.51
1:E:4822:THR:O	1:E:4825:THR:HB	2.11	0.51
1:G:173:SER:O	1:G:177:GLU:HA	2.11	0.51
1:G:716:PHE:H	1:G:738:LEU:HD13	1.74	0.51
2:H:14:THR:HG22	2:H:106:LEU:HD12	1.93	0.51
1:A:1077:ALA:HB2	1:A:1190:PRO:HG2	1.94	0.50
1:A:2553:TYR:HD1	1:A:2556:LEU:HD12	1.76	0.50
1:A:2745:VAL:HG21	1:A:2818:ALA:HB2	1.91	0.50
1:A:4151:SER:HA	1:A:4160:LEU:HD21	1.94	0.50
1:C:1240:LYS:NZ	1:C:1242:LEU:HB2	2.26	0.50
1:C:1679:ASN:O	1:C:1683:HIS:ND1	2.41	0.50
1:C:252:VAL:HA	1:C:255:HIS:ND1	2.25	0.50
1:C:299:LEU:HD23	1:C:357:LEU:HD13	1.92	0.50
1:C:4580:TYR:HB2	1:C:4631:PHE:HD1	1.76	0.50
1:C:4721:LYS:HD3	1:C:4741:LEU:HB3	1.93	0.50
1:C:4905:ALA:N	1:C:4906:GLY:HA3	2.25	0.50
1:C:828:GLU:O	1:C:840:VAL:HG23	2.10	0.50
1:E:622:THR:HG21	1:E:1681:VAL:HG13	1.94	0.50
1:E:1810:LYS:HD2	1:E:1813:ARG:HH22	1.76	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2553:TYR:HD1	1:E:2556:LEU:HD12	1.76	0.50
1:E:3839:CYS:SG	1:E:3840:SER:N	2.84	0.50
2:F:27:THR:HA	2:F:38:SER:HA	1.93	0.50
1:G:1115:LEU:HD21	1:G:1123:VAL:HG11	1.93	0.50
1:G:1247:PRO:HA	1:G:1602:PRO:HA	1.91	0.50
1:G:1810:LYS:HD2	1:G:1813:ARG:HH22	1.76	0.50
1:G:2116:LEU:O	1:G:2120:MET:HG3	2.10	0.50
1:G:252:VAL:HG23	1:G:257:ARG:NE	2.25	0.50
1:G:2819:TRP:CH2	1:G:2881:ASN:HB2	2.47	0.50
1:G:2890:LYS:HE3	1:G:2894:LEU:HD11	1.93	0.50
1:G:626:LEU:HB2	1:G:627:PRO:HD3	1.93	0.50
1:A:2774:ASN:OD1	1:A:2852:ARG:NE	2.44	0.50
1:A:2819:TRP:CH2	1:A:2881:ASN:HB2	2.46	0.50
1:A:3753:PHE:O	1:A:3757:GLU:N	2.44	0.50
1:A:4177:TYR:HA	1:A:4199:GLU:OE2	2.10	0.50
1:A:4676:GLU:O	1:A:4680:LYS:HG3	2.11	0.50
1:C:1768:THR:O	1:C:1769:THR:OG1	2.22	0.50
1:C:2062:ARG:O	1:C:2065:SER:OG	2.22	0.50
1:C:2254:LEU:O	1:C:2258:LEU:HG	2.11	0.50
1:E:1735:ILE:CD1	1:E:1771:LEU:HD12	2.42	0.50
1:E:3935:TRP:CB	1:G:76:ARG:HG3	2.41	0.50
2:F:58:GLY:HA3	2:F:76:ILE:HG23	1.92	0.50
1:G:3835:LEU:O	1:G:3839:CYS:N	2.43	0.50
1:G:394:GLN:HB3	1:G:397:GLU:HG2	1.93	0.50
1:G:4221:VAL:O	1:G:4225:GLY:N	2.44	0.50
1:G:4876:CYS:HA	1:G:4882:CYS:HB3	1.93	0.50
1:G:588:SER:O	1:G:592:LYS:HG3	2.12	0.50
1:A:173:SER:O	1:A:177:GLU:HA	2.11	0.50
1:A:3768:SER:HA	1:A:3771:HIS:HB3	1.91	0.50
1:C:1692:ALA:HA	1:C:1695:LEU:HD12	1.92	0.50
1:C:2214:VAL:HG11	1:C:2229:VAL:HG21	1.92	0.50
1:C:2495:VAL:HA	1:C:2498:HIS:HD2	1.76	0.50
1:C:2774:ASN:OD1	1:C:2852:ARG:NE	2.44	0.50
1:C:3835:LEU:HD22	1:C:3884:LEU:CD1	2.41	0.50
1:C:3916:ILE:HA	1:C:3919:THR:HG22	1.93	0.50
1:E:173:SER:O	1:E:177:GLU:HA	2.11	0.50
1:E:252:VAL:HG23	1:E:257:ARG:NE	2.26	0.50
1:G:1029:GLU:HA	1:G:1032:LYS:HB2	1.93	0.50
1:G:1253:PRO:O	1:G:1254:HIS:HB2	2.11	0.50
1:G:4578:LEU:HG	1:G:4578:LEU:O	2.12	0.50
1:A:1166:GLY:HA3	1:A:1216:ILE:HD12	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1962:ALA:O	1:A:1966:VAL:HG23	2.11	0.50
1:A:394:GLN:HB3	1:A:397:GLU:HG2	1.93	0.50
1:A:4573:ILE:O	1:A:4577:LEU:HB2	2.11	0.50
1:A:588:SER:O	1:A:592:LYS:HG3	2.11	0.50
1:C:622:THR:HG21	1:C:1681:VAL:HG13	1.93	0.50
1:C:716:PHE:N	1:C:738:LEU:HD13	2.27	0.50
1:E:1163:THR:HG22	1:E:1168:VAL:HA	1.93	0.50
1:E:2774:ASN:OD1	1:E:2852:ARG:NE	2.45	0.50
1:E:3774:GLY:HA2	1:E:3815:LYS:NZ	2.26	0.50
1:E:218:HIS:HE1	1:E:392:ARG:HB2	1.76	0.50
1:G:1163:THR:HG22	1:G:1168:VAL:HA	1.93	0.50
1:G:132:ALA:HB1	1:G:193:ALA:O	2.11	0.50
1:G:113:HIS:CE1	1:G:402:ARG:HB3	2.46	0.50
1:G:5013:MET:O	1:G:5017:ARG:N	2.40	0.50
1:G:622:THR:HG21	1:G:1681:VAL:HG13	1.93	0.50
1:G:828:GLU:O	1:G:840:VAL:HG23	2.11	0.50
1:A:1253:PRO:O	1:A:1254:HIS:HB2	2.12	0.50
1:A:1705:GLY:O	1:A:1708:ARG:HB3	2.11	0.50
1:A:276:TRP:CD1	1:A:318:VAL:HG23	2.47	0.50
1:A:3698:LEU:O	1:A:3702:VAL:HG23	2.10	0.50
1:A:4583:SER:N	1:A:4628:VAL:O	2.41	0.50
1:C:102:LEU:HB2	1:C:105:HIS:HD2	1.72	0.50
1:C:1514:LEU:HD12	1:C:1514:LEU:N	2.26	0.50
1:C:2121:PHE:CD1	1:C:3701:LEU:HD12	2.46	0.50
1:C:2819:TRP:CH2	1:C:2881:ASN:HB2	2.47	0.50
1:C:218:HIS:HE1	1:C:392:ARG:HB2	1.76	0.50
1:C:492:ASP:OD1	1:C:546:TRP:NE1	2.43	0.50
1:C:588:SER:O	1:C:592:LYS:HG3	2.11	0.50
1:E:3727:ASP:O	1:E:3730:ALA:HB3	2.11	0.50
1:E:3891:LEU:HB3	1:E:3899:PHE:HE2	1.77	0.50
1:E:113:HIS:CE1	1:E:402:ARG:HB3	2.46	0.50
1:E:4905:ALA:N	1:E:4906:GLY:HA3	2.26	0.50
1:E:716:PHE:H	1:E:738:LEU:HD13	1.75	0.50
1:G:110:ARG:HG2	1:G:117:TYR:CE1	2.47	0.50
1:A:1115:LEU:HD21	1:A:1123:VAL:HG11	1.94	0.50
1:A:1210:SER:HA	1:A:1214:PHE:HB3	1.94	0.50
1:A:1688:HIS:ND1	1:A:1688:HIS:O	2.44	0.50
1:A:3835:LEU:HD22	1:A:3884:LEU:CD1	2.42	0.50
1:A:3935:TRP:O	1:C:80:GLU:OE2	2.29	0.50
1:A:716:PHE:N	1:A:738:LEU:HD13	2.27	0.50
1:C:1163:THR:HG22	1:C:1168:VAL:HA	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:3774:GLY:HA2	1:C:3815:LYS:NZ	2.26	0.50
1:C:3879:GLU:OE2	1:C:3883:ASP:OD2	2.30	0.50
1:C:3935:TRP:CB	1:E:76:ARG:HG3	2.42	0.50
1:C:4221:VAL:O	1:C:4225:GLY:N	2.44	0.50
1:C:675:LEU:O	1:C:676:THR:OG1	2.27	0.50
1:E:276:TRP:CD1	1:E:318:VAL:HG23	2.46	0.50
1:E:265:LEU:HD22	1:E:309:THR:HG23	1.94	0.50
1:E:42:PHE:HB2	1:E:403:MET:SD	2.52	0.50
1:E:4906:GLY:H	1:E:4910:GLU:HG3	1.76	0.50
1:E:622:THR:O	1:E:626:LEU:N	2.42	0.50
1:E:828:GLU:O	1:E:840:VAL:HG23	2.10	0.50
1:G:118:LEU:HA	1:G:137:LEU:HD23	1.94	0.50
1:G:1679:ASN:O	1:G:1683:HIS:ND1	2.40	0.50
1:G:1962:ALA:O	1:G:1966:VAL:HG23	2.11	0.50
1:G:2254:LEU:O	1:G:2258:LEU:HG	2.11	0.50
1:G:4172:GLU:HG2	1:G:4175:ARG:HH12	1.76	0.50
1:G:4182:GLU:HB2	1:G:4983:HIS:CE1	2.47	0.50
1:G:4984:ASN:O	1:G:4985:LEU:HB3	2.11	0.50
1:G:622:THR:O	1:G:626:LEU:N	2.42	0.50
1:A:118:LEU:HA	1:A:137:LEU:HD23	1.94	0.50
1:A:1828:ASP:HB3	1:A:1829:PRO:C	2.32	0.50
1:A:218:HIS:HE1	1:A:392:ARG:HB2	1.76	0.50
1:A:4836:GLN:O	1:A:4839:MET:HG2	2.11	0.50
1:A:702:TRP:HD1	2:B:34:LYS:NZ	2.04	0.50
1:C:3753:PHE:O	1:C:3757:GLU:N	2.44	0.50
1:C:4906:GLY:H	1:C:4910:GLU:HG3	1.77	0.50
1:E:1166:GLY:HA3	1:E:1216:ILE:HD12	1.94	0.50
1:E:1783:VAL:HG12	2:F:54:GLU:O	2.12	0.50
1:E:4221:VAL:O	1:E:4225:GLY:N	2.44	0.50
1:E:4676:GLU:O	1:E:4680:LYS:HG3	2.12	0.50
1:E:625:LEU:HB3	1:E:632:LEU:HD23	1.94	0.50
1:E:716:PHE:N	1:E:738:LEU:HD13	2.27	0.50
1:G:150:MET:HG2	1:G:171:LEU:HD23	1.94	0.50
1:G:2495:VAL:HA	1:G:2498:HIS:HD2	1.77	0.50
1:G:702:TRP:CD1	2:H:34:LYS:NZ	2.79	0.50
1:A:1780:PRO:HB2	2:B:42:ARG:NH2	2.27	0.50
1:A:2095:GLN:HG3	1:A:2127:GLN:OE1	2.11	0.50
1:A:2254:LEU:O	1:A:2258:LEU:HG	2.12	0.50
1:A:4145:VAL:HG13	1:A:4194:TYR:HD2	1.77	0.50
1:A:4810:ALA:O	1:A:4813:LEU:HG	2.11	0.50
1:A:472:ARG:NE	1:A:532:GLY:O	2.45	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:764:VAL:O	1:A:764:VAL:HG12	2.12	0.50
1:C:233:ILE:HD12	1:C:242:ARG:HB3	1.92	0.50
1:C:4676:GLU:O	1:C:4680:LYS:HG3	2.12	0.50
1:C:4905:ALA:H	1:C:4906:GLY:HA3	1.77	0.50
1:E:1029:GLU:HA	1:E:1032:LYS:HB2	1.94	0.50
1:E:1685:LEU:O	1:E:1689:VAL:HG12	2.12	0.50
1:E:2059:LEU:HD22	1:E:2062:ARG:NH1	2.18	0.50
1:E:2735:PHE:HD2	1:E:2891:LYS:HD2	1.77	0.50
1:E:407:THR:HA	1:E:410:LEU:HG	1.93	0.50
1:E:588:SER:O	1:E:592:LYS:HG3	2.11	0.50
1:G:1166:GLY:HA3	1:G:1216:ILE:HD12	1.94	0.50
1:G:3727:ASP:O	1:G:3730:ALA:HB3	2.11	0.50
1:G:3698:LEU:HB3	1:G:3773:ARG:HE	1.77	0.50
1:A:1685:LEU:O	1:A:1689:VAL:HG12	2.12	0.50
1:A:173:SER:HG	1:A:175:SER:HG	1.57	0.50
1:A:2517:PHE:O	1:A:2521:VAL:HG23	2.12	0.50
1:C:132:ALA:HB1	1:C:193:ALA:O	2.11	0.50
1:C:3985:LEU:O	1:C:3988:ALA:HB3	2.11	0.50
1:C:4979:THR:O	1:C:4984:ASN:N	2.30	0.50
1:E:118:LEU:HA	1:E:137:LEU:HD23	1.94	0.50
1:E:255:HIS:HB3	1:E:257:ARG:HG2	1.93	0.50
1:E:3879:GLU:OE2	1:E:3883:ASP:OD2	2.30	0.50
1:G:1663:HIS:CE1	1:G:1667:LEU:HD11	2.47	0.50
1:G:1705:GLY:O	1:G:1708:ARG:HB3	2.11	0.50
1:G:2496:PRO:HB3	1:G:2552:ARG:HD2	1.92	0.50
1:G:4834:GLY:O	1:G:4837:LEU:HB3	2.12	0.50
1:A:1024:TYR:HB3	1:A:1032:LYS:HD3	1.94	0.49
1:A:1767:VAL:C	1:A:1768:THR:HG1	2.15	0.49
1:A:3774:GLY:HA2	1:A:3815:LYS:NZ	2.27	0.49
1:A:3879:GLU:OE2	1:A:3883:ASP:OD2	2.30	0.49
1:A:3891:LEU:HB3	1:A:3899:PHE:HE2	1.77	0.49
1:A:4107:GLU:HA	1:A:4110:PHE:HB3	1.93	0.49
1:A:626:LEU:HB2	1:A:627:PRO:HD3	1.93	0.49
1:C:1457:TYR:C	1:C:1458:HIS:CG	2.86	0.49
1:C:1810:LYS:HD2	1:C:1813:ARG:HH22	1.76	0.49
1:C:1933:GLU:O	1:C:1936:LYS:HB2	2.12	0.49
1:C:3921:ASP:O	1:C:3924:LEU:HB2	2.12	0.49
1:C:472:ARG:NE	1:C:532:GLY:O	2.45	0.49
1:E:2173:GLN:HG2	1:E:2174:GLU:N	2.19	0.49
1:E:3753:PHE:O	1:E:3757:GLU:N	2.44	0.49
1:E:4892:ARG:HH22	1:G:4920:PHE:HD2	1.60	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:626:LEU:HB2	1:E:627:PRO:HD3	1.93	0.49
2:F:14:THR:HG22	2:F:106:LEU:HD12	1.94	0.49
1:G:2066:LEU:O	1:G:2069:THR:OG1	2.30	0.49
1:G:2774:ASN:OD1	1:G:2852:ARG:NE	2.45	0.49
1:G:2121:PHE:CD1	1:G:3701:LEU:HD12	2.46	0.49
1:G:4137:ARG:HD2	1:G:4177:TYR:CZ	2.45	0.49
1:G:4946:GLN:HA	1:G:4949:GLN:HB3	1.94	0.49
1:A:1810:LYS:HD2	1:A:1813:ARG:HH22	1.76	0.49
1:A:2214:VAL:HG11	1:A:2229:VAL:CG2	2.42	0.49
2:B:74:LEU:HD23	2:B:76:ILE:HD11	1.94	0.49
1:C:1077:ALA:HB2	1:C:1190:PRO:HG2	1.94	0.49
1:C:1663:HIS:CE1	1:C:1667:LEU:HD11	2.47	0.49
1:C:34:LYS:HB2	1:C:53:SER:HB2	1.94	0.49
1:C:702:TRP:HD1	2:D:34:LYS:NZ	2.04	0.49
1:E:1679:ASN:O	1:E:1683:HIS:ND1	2.41	0.49
1:E:1933:GLU:O	1:E:1936:LYS:HB2	2.13	0.49
1:E:2671:GLU:CB	1:E:2913:ALA:H	2.26	0.49
1:E:3835:LEU:HD22	1:E:3884:LEU:CD1	2.42	0.49
1:E:764:VAL:O	1:E:764:VAL:HG12	2.12	0.49
2:F:54:GLU:HG3	2:F:55:VAL:HG13	1.94	0.49
1:G:1448:VAL:HG13	1:G:1554:VAL:HA	1.94	0.49
1:G:407:THR:HA	1:G:410:LEU:HG	1.93	0.49
1:A:2890:LYS:HE3	1:A:2894:LEU:HD11	1.94	0.49
1:A:3905:THR:HG23	1:A:3907:THR:HG23	1.92	0.49
1:A:4849:TYR:HA	1:A:4852:THR:HG22	1.92	0.49
1:A:5006:GLN:O	1:A:5010:VAL:HG23	2.12	0.49
1:C:119:SER:O	1:C:136:GLY:N	2.31	0.49
1:C:1253:PRO:O	1:C:1254:HIS:HB2	2.12	0.49
1:C:118:LEU:HA	1:C:137:LEU:HD23	1.94	0.49
1:C:597:HIS:HB2	1:C:1665:HIS:CD2	2.48	0.49
1:C:42:PHE:HB2	1:C:403:MET:SD	2.52	0.49
2:D:27:THR:HA	2:D:38:SER:HA	1.93	0.49
1:E:150:MET:HG2	1:E:171:LEU:HD23	1.95	0.49
1:E:1663:HIS:CE1	1:E:1667:LEU:HD11	2.48	0.49
1:E:1767:VAL:C	1:E:1768:THR:HG1	2.15	0.49
1:E:2517:PHE:O	1:E:2521:VAL:HG23	2.13	0.49
1:E:2890:LYS:HE3	1:E:2894:LEU:HD11	1.94	0.49
1:E:492:ASP:OD1	1:E:546:TRP:NE1	2.43	0.49
1:E:636:ASN:ND2	2:F:35:LYS:HD3	2.27	0.49
1:G:2517:PHE:O	1:G:2521:VAL:HG23	2.13	0.49
1:G:3716:LEU:N	1:G:3789:GLU:OE2	2.45	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:4842:GLY:O	1:G:4846:VAL:HG23	2.13	0.49
1:A:2173:GLN:N	1:A:2173:GLN:OE1	2.46	0.49
1:A:245:VAL:HG12	1:A:376:ALA:HB3	1.95	0.49
1:A:42:PHE:HB2	1:A:403:MET:SD	2.53	0.49
1:C:1029:GLU:HA	1:C:1032:LYS:HB2	1.93	0.49
1:C:1245:PHE:HD2	1:C:1290:ARG:HH11	1.61	0.49
1:C:2890:LYS:HE3	1:C:2894:LEU:HD11	1.94	0.49
1:C:394:GLN:HB3	1:C:397:GLU:HG2	1.93	0.49
1:C:4573:ILE:O	1:C:4577:LEU:HB2	2.11	0.49
1:E:1077:ALA:HB2	1:E:1190:PRO:HG2	1.95	0.49
1:E:1253:PRO:O	1:E:1254:HIS:HB2	2.12	0.49
1:G:2173:GLN:OE1	1:G:2173:GLN:N	2.45	0.49
1:G:516:LYS:HG3	1:G:517:GLU:N	2.27	0.49
1:A:1029:GLU:HA	1:A:1032:LYS:HB2	1.93	0.49
1:A:1457:TYR:C	1:A:1458:HIS:CG	2.86	0.49
1:A:2854:GLY:O	1:A:2856:ASN:ND2	2.46	0.49
1:A:4677:LEU:HA	1:A:4680:LYS:HD2	1.95	0.49
1:C:110:ARG:HG2	1:C:117:TYR:CE1	2.48	0.49
1:C:1685:LEU:O	1:C:1689:VAL:HG12	2.13	0.49
1:C:1767:VAL:C	1:C:1768:THR:HG1	2.16	0.49
1:C:342:GLY:N	1:C:390:LEU:O	2.46	0.49
1:C:4151:SER:HA	1:C:4160:LEU:HD21	1.94	0.49
1:C:4730:ASP:OD1	1:C:4731:ILE:N	2.46	0.49
1:E:1245:PHE:HD2	1:E:1290:ARG:HH11	1.61	0.49
1:E:2173:GLN:N	1:E:2173:GLN:OE1	2.45	0.49
1:E:3905:THR:HG23	1:E:3907:THR:HG23	1.93	0.49
1:E:5006:GLN:O	1:E:5010:VAL:HG23	2.12	0.49
1:E:597:HIS:HB2	1:E:1665:HIS:CD2	2.47	0.49
1:G:1762:LEU:HD12	1:G:1763:PRO:HD2	1.94	0.49
1:G:2125:HIS:CE1	1:G:3724:ALA:HB1	2.48	0.49
1:G:42:PHE:HB2	1:G:403:MET:SD	2.52	0.49
1:G:4905:ALA:H	1:G:4906:GLY:HA3	1.78	0.49
1:A:1933:GLU:O	1:A:1936:LYS:HB2	2.12	0.49
1:A:2420:HIS:ND1	1:A:2423:MET:SD	2.75	0.49
1:A:3662:ILE:O	1:A:3662:ILE:HG22	2.13	0.49
1:A:597:HIS:HB2	1:A:1665:HIS:CD2	2.48	0.49
1:A:639:ASN:ND2	1:A:676:THR:OG1	2.45	0.49
1:C:1024:TYR:HB3	1:C:1032:LYS:HD3	1.95	0.49
1:C:1556:PRO:HA	1:C:1561:VAL:HG23	1.93	0.49
1:C:1783:VAL:HG12	2:D:54:GLU:O	2.12	0.49
1:C:264:PRO:O	1:C:266:ARG:N	2.44	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:4642:ALA:O	1:C:4646:LEU:N	2.44	0.49
1:C:4677:LEU:HD23	1:C:4711:PHE:CE1	2.48	0.49
1:C:4688:ILE:HG21	1:C:4728:HIS:HB3	1.95	0.49
1:E:1074:ILE:HA	1:E:1193:SER:HA	1.95	0.49
1:E:472:ARG:NE	1:E:532:GLY:O	2.46	0.49
1:G:1141:ARG:NH1	1:G:1169:LEU:HD11	2.26	0.49
1:G:1685:LEU:O	1:G:1689:VAL:HG12	2.12	0.49
1:G:1933:GLU:O	1:G:1936:LYS:HB2	2.12	0.49
1:G:2244:ARG:HH11	1:G:2248:ARG:HH21	1.60	0.49
1:G:245:VAL:HG12	1:G:376:ALA:HB3	1.95	0.49
1:G:2883:HIS:HE1	1:G:2904:LEU:O	1.95	0.49
1:G:4567:LEU:HD12	1:G:4815:ASP:OD2	2.12	0.49
1:G:472:ARG:NE	1:G:532:GLY:O	2.46	0.49
1:G:34:LYS:HB2	1:G:53:SER:HB2	1.94	0.49
1:A:110:ARG:HG2	1:A:117:TYR:CE1	2.48	0.49
1:A:1245:PHE:HD2	1:A:1290:ARG:HH11	1.61	0.49
1:A:1734:TYR:OH	1:A:1948:ASP:OD1	2.19	0.49
1:A:2735:PHE:HD2	1:A:2891:LYS:HD2	1.78	0.49
1:A:3921:ASP:O	1:A:3924:LEU:HB2	2.12	0.49
1:A:452:PHE:O	1:A:528:SER:OG	2.31	0.49
1:A:4730:ASP:OD1	1:A:4731:ILE:N	2.45	0.49
2:B:49:MET:N	2:B:54:GLU:OE2	2.46	0.49
1:C:1828:ASP:HB3	1:C:1829:PRO:C	2.32	0.49
1:C:2095:GLN:HG3	1:C:2127:GLN:OE1	2.11	0.49
1:C:2735:PHE:HD2	1:C:2891:LYS:HD2	1.77	0.49
2:D:74:LEU:HD23	2:D:76:ILE:HD11	1.94	0.49
1:E:1277:TRP:HB2	1:E:1562:ILE:O	2.13	0.49
1:E:1712:TYR:CD2	1:E:1840:PRO:HB2	2.48	0.49
1:E:4573:ILE:O	1:E:4577:LEU:HB2	2.13	0.49
1:E:4574:ASN:ND2	1:E:4813:LEU:HD23	2.27	0.49
1:G:1457:TYR:C	1:G:1458:HIS:CG	2.86	0.49
1:G:1556:PRO:HA	1:G:1561:VAL:HG23	1.93	0.49
1:G:2173:GLN:HG2	1:G:2174:GLU:N	2.20	0.49
1:G:218:HIS:HE1	1:G:392:ARG:HB2	1.76	0.49
1:G:4031:LEU:HD11	1:G:4044:MET:SD	2.53	0.49
1:G:4843:LEU:O	1:G:4847:VAL:HG23	2.13	0.49
1:A:4920:PHE:HD2	1:G:4892:ARG:HH22	1.61	0.49
1:A:1735:ILE:CD1	1:A:1771:LEU:HD12	2.42	0.49
1:A:3839:CYS:SG	1:A:3840:SER:N	2.84	0.49
1:A:4906:GLY:H	1:A:4910:GLU:HG3	1.77	0.49
1:C:1130:GLN:NE2	1:C:1132:TRP:HE1	2.11	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:150:MET:HG2	1:C:171:LEU:HD23	1.95	0.49
1:C:245:VAL:HG12	1:C:376:ALA:HB3	1.95	0.49
1:C:3891:LEU:HB3	1:C:3899:PHE:HE2	1.77	0.49
1:C:636:ASN:OD1	1:C:637:LEU:N	2.43	0.49
1:E:1457:TYR:C	1:E:1458:HIS:CG	2.86	0.49
1:E:1739:THR:O	1:E:1742:THR:OG1	2.21	0.49
1:E:4055:VAL:HA	1:E:4058:ILE:HG12	1.95	0.49
1:E:4677:LEU:HA	1:E:4680:LYS:HD2	1.94	0.49
1:E:4721:LYS:HD3	1:E:4741:LEU:HB3	1.94	0.49
1:E:4905:ALA:H	1:E:4906:GLY:HA3	1.78	0.49
1:E:516:LYS:HG3	1:E:517:GLU:N	2.27	0.49
1:G:1077:ALA:HB2	1:G:1190:PRO:HG2	1.94	0.49
1:G:276:TRP:CD1	1:G:318:VAL:HG23	2.47	0.49
1:G:4027:LEU:O	1:G:4031:LEU:HD13	2.13	0.49
1:G:451:TYR:HD2	1:G:452:PHE:CE2	2.31	0.49
1:G:458:GLU:HG2	1:G:458:GLU:O	2.13	0.49
1:G:4666:VAL:O	1:G:4670:ILE:HG12	2.13	0.49
1:G:4688:ILE:HG21	1:G:4728:HIS:HB3	1.94	0.49
2:H:23:VAL:HG12	2:H:104:LEU:HD12	1.95	0.49
1:A:1457:TYR:CZ	1:A:1459:GLN:NE2	2.81	0.49
1:A:2244:ARG:HH11	1:A:2248:ARG:HH21	1.59	0.49
1:A:2495:VAL:HA	1:A:2498:HIS:HD2	1.77	0.49
1:A:2671:GLU:CB	1:A:2913:ALA:H	2.26	0.49
1:A:34:LYS:HB2	1:A:53:SER:HB2	1.93	0.49
1:A:625:LEU:HB3	1:A:632:LEU:HD23	1.94	0.49
1:A:636:ASN:HD21	2:B:35:LYS:HD3	1.78	0.49
1:C:1166:GLY:HA3	1:C:1216:ILE:HD12	1.95	0.49
1:C:1448:VAL:HG13	1:C:1554:VAL:HA	1.94	0.49
1:C:2671:GLU:CB	1:C:2913:ALA:H	2.26	0.49
1:C:626:LEU:HB2	1:C:627:PRO:HD3	1.93	0.49
1:E:3985:LEU:O	1:E:3988:ALA:HB3	2.11	0.49
1:E:4242:ILE:O	1:E:4246:GLN:HG2	2.13	0.49
1:E:4888:TYR:OH	1:G:4898:GLY:HA3	2.13	0.49
1:G:1240:LYS:HZ3	1:G:1242:LEU:HB2	1.78	0.49
1:G:3835:LEU:HD21	1:G:3880:PHE:HE2	1.77	0.49
1:G:3927:GLN:NE2	1:G:3988:ALA:O	2.36	0.49
1:A:4877:ASP:O	1:G:4581:LYS:CE	2.61	0.49
1:A:1074:ILE:HA	1:A:1193:SER:HA	1.95	0.49
1:A:1448:VAL:HG13	1:A:1554:VAL:HA	1.93	0.49
1:A:635:THR:OG1	1:A:1638:ALA:O	2.26	0.49
1:A:162:LYS:HB2	1:A:164:ARG:HH12	1.77	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:3996:PHE:CE2	1:A:4019:LEU:HD22	2.48	0.49
1:A:4886:HIS:O	1:A:4891:VAL:N	2.42	0.49
1:A:4905:ALA:H	1:A:4906:GLY:HA3	1.78	0.49
1:C:1084:GLN:NE2	1:C:1185:GLY:O	2.46	0.49
1:C:1712:TYR:CD2	1:C:1840:PRO:HB2	2.48	0.49
1:C:4581:LYS:CE	1:E:4877:ASP:O	2.61	0.49
1:E:1780:PRO:HB2	2:F:42:ARG:NH2	2.28	0.49
1:E:312:THR:O	1:E:314:PHE:N	2.41	0.49
1:E:3921:ASP:O	1:E:3924:LEU:HB2	2.12	0.49
1:E:394:GLN:HB3	1:E:397:GLU:HG2	1.94	0.49
1:E:4727:LYS:NZ	1:E:4728:HIS:CE1	2.80	0.49
1:G:1073:ARG:C	1:G:1074:ILE:HG13	2.33	0.49
1:G:1093:GLU:HA	1:G:1148:VAL:HG13	1.95	0.49
1:G:312:THR:O	1:G:314:PHE:N	2.41	0.49
1:G:3713:LYS:O	1:G:3715:LYS:N	2.46	0.49
1:G:4230:LYS:NZ	1:G:4960:ILE:O	2.45	0.49
1:G:4217:PHE:CZ	1:G:4234:PHE:HA	2.48	0.49
1:A:516:LYS:HG3	1:A:517:GLU:N	2.28	0.48
1:C:1074:ILE:HA	1:C:1193:SER:HA	1.95	0.48
1:C:1735:ILE:CD1	1:C:1771:LEU:HD12	2.42	0.48
1:C:2854:GLY:O	1:C:2856:ASN:ND2	2.46	0.48
1:C:3713:LYS:O	1:C:3715:LYS:N	2.46	0.48
1:C:4145:VAL:HG13	1:C:4194:TYR:HD2	1.77	0.48
1:C:4141:PHE:CE1	1:C:4178:LEU:HA	2.48	0.48
1:C:674:PHE:HD1	2:D:40:ARG:HH12	1.50	0.48
1:E:4181:ILE:HG12	1:E:4195:PHE:CE1	2.48	0.48
1:E:459:LEU:HD11	1:E:463:GLU:OE1	2.12	0.48
1:E:4887:MET:HA	1:E:4891:VAL:HG23	1.95	0.48
1:G:1245:PHE:HD2	1:G:1290:ARG:HH11	1.61	0.48
1:G:4034:ASN:HD21	1:G:4040:ILE:CG2	2.26	0.48
1:G:1780:PRO:HB2	2:H:42:ARG:NH2	2.28	0.48
1:A:1663:HIS:CE1	1:A:1667:LEU:HD11	2.47	0.48
1:A:3713:LYS:O	1:A:3715:LYS:N	2.46	0.48
1:A:4721:LYS:HD3	1:A:4741:LEU:HB3	1.95	0.48
1:A:473:ASN:O	1:A:477:LEU:HG	2.13	0.48
1:C:1277:TRP:HB2	1:C:1562:ILE:O	2.13	0.48
1:C:458:GLU:O	1:C:458:GLU:HG2	2.13	0.48
1:C:473:ASN:O	1:C:477:LEU:HG	2.13	0.48
1:C:764:VAL:O	1:C:764:VAL:HG12	2.12	0.48
1:E:1556:PRO:HA	1:E:1561:VAL:HG23	1.94	0.48
1:E:3713:LYS:O	1:E:3715:LYS:N	2.46	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:1767:VAL:C	1:G:1768:THR:HG1	2.16	0.48
1:G:1828:ASP:HB3	1:G:1829:PRO:C	2.33	0.48
1:G:1712:TYR:CD2	1:G:1840:PRO:HB2	2.48	0.48
2:H:38:SER:HB3	2:H:41:ASP:CG	2.33	0.48
1:A:1641:ILE:HD12	1:A:1642:PRO:HD2	1.96	0.48
1:A:1712:TYR:CD2	1:A:1840:PRO:HB2	2.48	0.48
1:A:264:PRO:O	1:A:266:ARG:N	2.43	0.48
1:A:3935:TRP:CB	1:C:76:ARG:HG3	2.44	0.48
1:A:4688:ILE:HG21	1:A:4728:HIS:HB3	1.95	0.48
1:A:4826:ILE:O	1:A:4829:SER:HB2	2.13	0.48
2:B:54:GLU:HG3	2:B:55:VAL:HG13	1.94	0.48
1:C:5006:GLN:O	1:C:5010:VAL:HG23	2.13	0.48
1:C:452:PHE:O	1:C:528:SER:OG	2.31	0.48
2:D:54:GLU:HG3	2:D:55:VAL:HG13	1.94	0.48
1:E:1295:VAL:O	1:E:1547:LYS:HA	2.13	0.48
1:E:1448:VAL:HG13	1:E:1554:VAL:HA	1.93	0.48
1:E:2214:VAL:HG11	1:E:2229:VAL:CG2	2.44	0.48
1:E:473:ASN:O	1:E:477:LEU:HG	2.13	0.48
1:E:34:LYS:HB2	1:E:53:SER:HB2	1.94	0.48
2:F:49:MET:N	2:F:54:GLU:OE2	2.46	0.48
1:G:1074:ILE:HA	1:G:1193:SER:HA	1.95	0.48
1:G:2214:VAL:HG11	1:G:2229:VAL:CG2	2.44	0.48
1:A:1079:LYS:HZ2	1:A:1107:PRO:HB2	1.78	0.48
1:A:4642:ALA:O	1:A:4646:LEU:N	2.44	0.48
1:A:4677:LEU:HD23	1:A:4711:PHE:CE1	2.49	0.48
1:A:4234:PHE:CZ	1:A:4988:TYR:HB2	2.49	0.48
1:C:1830:VAL:HG13	1:C:1837:GLN:HB3	1.95	0.48
1:C:2214:VAL:HG11	1:C:2229:VAL:CG2	2.43	0.48
1:C:2517:PHE:O	1:C:2521:VAL:HG23	2.13	0.48
1:C:4677:LEU:HA	1:C:4680:LYS:HD2	1.94	0.48
1:E:235:ALA:HB2	1:E:257:ARG:HD3	1.95	0.48
1:E:245:VAL:HG12	1:E:376:ALA:HB3	1.95	0.48
1:E:4141:PHE:CE1	1:E:4178:LEU:HA	2.48	0.48
1:E:452:PHE:O	1:E:528:SER:OG	2.31	0.48
1:E:4730:ASP:OD1	1:E:4731:ILE:N	2.46	0.48
1:G:1024:TYR:HB3	1:G:1032:LYS:HD3	1.94	0.48
1:A:195:PHE:HE2	1:G:2358:ILE:CG2	2.27	0.48
1:G:2754:PHE:CZ	1:G:2930:LEU:HD23	2.48	0.48
1:G:597:HIS:HB2	1:G:1665:HIS:CD2	2.48	0.48
1:A:1093:GLU:HA	1:A:1148:VAL:HG13	1.95	0.48
1:A:4039:MET:HA	1:A:4042:ARG:HH11	1.78	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:458:GLU:HG2	1:A:458:GLU:O	2.13	0.48
1:A:4839:MET:HB3	1:G:4823:LEU:CD1	2.44	0.48
2:B:14:THR:HG22	2:B:106:LEU:HD12	1.95	0.48
1:C:1293:LEU:HD23	1:C:1584:ARG:CG	2.44	0.48
1:C:4702:ASP:OD1	1:C:4778:TRP:NE1	2.31	0.48
2:D:14:THR:HG22	2:D:106:LEU:HD12	1.95	0.48
2:D:25:HIS:O	2:D:102:GLU:N	2.39	0.48
1:E:1073:ARG:C	1:E:1074:ILE:HG13	2.34	0.48
1:E:1112:ASP:OD1	1:E:1606:SER:HB3	2.14	0.48
1:E:2854:GLY:O	1:E:2856:ASN:ND2	2.46	0.48
1:E:4979:THR:O	1:E:4984:ASN:N	2.30	0.48
1:G:1277:TRP:HB2	1:G:1562:ILE:O	2.13	0.48
1:G:2305:CYS:HB2	1:G:2325:PRO:HG2	1.96	0.48
1:G:2854:GLY:O	1:G:2856:ASN:ND2	2.46	0.48
1:G:3729:MET:HE2	1:G:3770:LEU:HD22	1.96	0.48
1:G:4921:PHE:CD1	1:G:4925:ILE:HG13	2.49	0.48
1:G:4951:LYS:O	1:G:4955:GLU:HG2	2.13	0.48
1:G:5027:CYS:HB3	1:G:5030:LYS:HB3	1.95	0.48
1:G:764:VAL:HG12	1:G:764:VAL:O	2.13	0.48
1:G:636:ASN:HD21	2:H:35:LYS:HD3	1.79	0.48
1:A:1739:THR:O	1:A:1742:THR:OG1	2.21	0.48
1:C:791:PHE:HB2	1:C:1626:TRP:HB2	1.95	0.48
1:C:2173:GLN:OE1	1:C:2173:GLN:N	2.46	0.48
1:C:2358:ILE:CG2	1:E:195:PHE:HE2	2.27	0.48
1:C:4782:VAL:O	1:C:4785:THR:OG1	2.21	0.48
1:C:625:LEU:HB3	1:C:632:LEU:HD23	1.95	0.48
1:E:3811:GLU:HA	1:E:3814:GLN:HG2	1.95	0.48
1:E:4039:MET:HA	1:E:4042:ARG:HH11	1.78	0.48
1:E:519:VAL:HG22	1:E:523:TYR:CE2	2.48	0.48
1:G:1098:GLY:HA3	1:G:1198:GLN:HE21	1.78	0.48
1:G:1112:ASP:OD1	1:G:1606:SER:HB3	2.14	0.48
1:G:1641:ILE:HD12	1:G:1642:PRO:HD2	1.96	0.48
1:G:2142:TYR:HE1	1:G:2196:ASN:HD22	1.62	0.48
1:G:3729:MET:CE	1:G:3770:LEU:HD22	2.44	0.48
1:G:4141:PHE:HE1	1:G:4178:LEU:HA	1.78	0.48
1:G:4640:GLU:HB3	1:G:4641:PRO:HD3	1.95	0.48
1:G:519:VAL:HG22	1:G:523:TYR:CE2	2.49	0.48
1:G:452:PHE:O	1:G:528:SER:OG	2.32	0.48
1:A:1073:ARG:C	1:A:1074:ILE:HG13	2.34	0.48
1:A:160:GLY:O	1:G:3984:ARG:NH1	2.43	0.48
1:A:1830:VAL:HG13	1:A:1837:GLN:HB3	1.96	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:519:VAL:HG22	1:A:523:TYR:CE2	2.48	0.48
1:C:1098:GLY:HA3	1:C:1198:GLN:HE21	1.78	0.48
1:C:355:LEU:HB2	1:C:378:LEU:HB3	1.96	0.48
1:C:3835:LEU:O	1:C:3839:CYS:N	2.46	0.48
1:E:107:ILE:H	1:E:148:TRP:H	1.62	0.48
1:E:1828:ASP:HB3	1:E:1829:PRO:C	2.33	0.48
1:E:720:HIS:HB2	1:E:728:ARG:O	2.14	0.48
1:G:1735:ILE:CD1	1:G:1771:LEU:HD12	2.43	0.48
1:G:2383:ALA:HB1	1:G:2423:MET:SD	2.54	0.48
1:G:3768:SER:O	1:G:3772:THR:HG23	2.13	0.48
1:G:3810:ALA:HA	1:G:3813:GLN:HB2	1.94	0.48
1:G:4730:ASP:OD1	1:G:4731:ILE:N	2.46	0.48
1:A:3882:GLN:HE22	1:A:3956:SER:HB3	1.78	0.48
1:A:492:ASP:OD1	1:A:546:TRP:NE1	2.42	0.48
1:C:1295:VAL:O	1:C:1547:LYS:HA	2.14	0.48
1:C:235:ALA:HB2	1:C:257:ARG:HD3	1.95	0.48
1:C:2870:GLU:OE2	1:C:2939:ARG:NH2	2.47	0.48
1:C:2927:LEU:HD23	1:C:2930:LEU:HD12	1.96	0.48
1:C:3662:ILE:O	1:C:3662:ILE:HG22	2.14	0.48
1:C:4055:VAL:HA	1:C:4058:ILE:HG12	1.95	0.48
1:C:4242:ILE:O	1:C:4246:GLN:HG2	2.13	0.48
1:C:4727:LYS:NZ	1:C:4728:HIS:CE1	2.80	0.48
1:E:1084:GLN:NE2	1:E:1185:GLY:O	2.46	0.48
1:E:1762:LEU:HD12	1:E:1763:PRO:HD2	1.96	0.48
1:E:3662:ILE:O	1:E:3662:ILE:HG22	2.14	0.48
1:E:4580:TYR:HB2	1:E:4631:PHE:HD1	1.78	0.48
1:E:4778:TRP:O	1:E:4782:VAL:HG23	2.14	0.48
1:G:1295:VAL:O	1:G:1547:LYS:HA	2.14	0.48
1:G:2771:ILE:HD11	1:G:2857:PRO:HD2	1.96	0.48
1:G:3780:LEU:HG	1:G:3828:PHE:CE1	2.48	0.48
1:G:3835:LEU:HD22	1:G:3884:LEU:HD13	1.95	0.48
1:A:2927:LEU:HD23	1:A:2930:LEU:HD12	1.95	0.48
1:A:342:GLY:N	1:A:390:LEU:O	2.46	0.48
1:A:451:TYR:HD2	1:A:452:PHE:CE2	2.32	0.48
1:A:4578:LEU:O	1:A:4578:LEU:HG	2.14	0.48
1:A:4727:LYS:NZ	1:A:4728:HIS:CE1	2.80	0.48
1:A:4821:LYS:HD3	1:A:4947:GLN:HE22	1.79	0.48
1:A:4839:MET:HB3	1:G:4823:LEU:HD12	1.96	0.48
1:A:593:HIS:HB3	1:A:596:ASN:HD22	1.79	0.48
1:C:1073:ARG:C	1:C:1074:ILE:HG13	2.33	0.48
1:C:1093:GLU:HA	1:C:1148:VAL:HG13	1.96	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:215:THR:O	1:C:218:HIS:HB3	2.14	0.48
1:C:4234:PHE:CZ	1:C:4988:TYR:HB2	2.49	0.48
1:C:593:HIS:HB3	1:C:596:ASN:HD22	1.79	0.48
1:E:110:ARG:HG2	1:E:117:TYR:CE1	2.48	0.48
1:E:1641:ILE:HD12	1:E:1642:PRO:HD2	1.96	0.48
1:E:355:LEU:HB2	1:E:378:LEU:HB3	1.96	0.48
1:E:4039:MET:HA	1:E:4042:ARG:HE	1.79	0.48
1:E:4945:ASP:O	1:E:4949:GLN:HB2	2.14	0.48
2:F:74:LEU:HD23	2:F:76:ILE:HD11	1.95	0.48
1:G:178:ARG:HD3	1:G:195:PHE:CE1	2.49	0.48
1:G:2735:PHE:HD2	1:G:2891:LYS:HD2	1.78	0.48
1:G:2883:HIS:NE2	1:G:2906:VAL:O	2.36	0.48
1:G:2671:GLU:CB	1:G:2913:ALA:H	2.27	0.48
1:G:3980:LEU:HA	1:G:3983:SER:HB2	1.96	0.48
1:G:4779:LYS:O	1:G:4783:ILE:HG13	2.13	0.48
1:G:4844:LEU:O	1:G:4848:VAL:HG23	2.14	0.48
1:G:785:ALA:HA	1:G:1633:PRO:HD3	1.96	0.48
1:G:791:PHE:HB2	1:G:1626:TRP:HB2	1.95	0.48
1:A:1556:PRO:HA	1:A:1561:VAL:HG23	1.94	0.48
1:A:3953:LYS:O	1:A:3957:VAL:HG23	2.14	0.48
1:A:4242:ILE:O	1:A:4246:GLN:HG2	2.13	0.48
1:A:4672:LYS:O	1:A:4676:GLU:HG3	2.14	0.48
1:C:1511:HIS:CE1	1:C:1532:ASN:HD21	2.31	0.48
1:C:1641:ILE:HD12	1:C:1642:PRO:HD2	1.96	0.48
1:C:2121:PHE:CE1	1:C:3701:LEU:HD12	2.49	0.48
1:C:4039:MET:HA	1:C:4042:ARG:HH11	1.78	0.48
1:A:4826:ILE:HG12	1:C:4839:MET:HE3	1.96	0.48
2:D:49:MET:N	2:D:54:GLU:OE2	2.46	0.48
1:E:342:GLY:N	1:E:390:LEU:O	2.46	0.48
1:E:4677:LEU:HD23	1:E:4711:PHE:CE1	2.49	0.48
1:G:3980:LEU:HB3	1:G:3985:LEU:HD22	1.96	0.48
1:A:119:SER:O	1:A:136:GLY:N	2.31	0.47
1:A:1931:LEU:HD22	1:A:1935:VAL:HG11	1.96	0.47
1:A:2159:LEU:O	1:A:2162:ILE:HG22	2.14	0.47
1:A:215:THR:O	1:A:218:HIS:HB3	2.14	0.47
1:A:3835:LEU:O	1:A:3839:CYS:N	2.46	0.47
1:A:3923:LEU:HD12	1:A:3961:VAL:HG12	1.96	0.47
1:A:4055:VAL:HA	1:A:4058:ILE:HG12	1.95	0.47
1:A:4141:PHE:CE1	1:A:4178:LEU:HA	2.48	0.47
1:A:4702:ASP:O	1:A:4705:VAL:HG12	2.14	0.47
1:A:4702:ASP:OD1	1:A:4778:TRP:NE1	2.32	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:3811:GLU:HA	1:C:3814:GLN:HG2	1.96	0.47
1:C:3780:LEU:HD11	1:C:3820:LEU:HD21	1.96	0.47
1:C:3996:PHE:CE2	1:C:4019:LEU:HD22	2.49	0.47
1:E:1130:GLN:NE2	1:E:1132:TRP:HE1	2.11	0.47
1:E:451:TYR:HD2	1:E:452:PHE:CE2	2.31	0.47
1:E:4833:ASN:OD1	1:E:4836:GLN:HG2	2.14	0.47
1:E:4234:PHE:CZ	1:E:4988:TYR:HB2	2.49	0.47
1:E:639:ASN:ND2	1:E:676:THR:OG1	2.45	0.47
1:G:107:ILE:H	1:G:148:TRP:H	1.62	0.47
1:G:2295:LEU:HD22	1:G:2335:LEU:CD2	2.44	0.47
1:G:3996:PHE:CE2	1:G:4019:LEU:HD22	2.49	0.47
1:G:636:ASN:ND2	2:H:35:LYS:HD3	2.28	0.47
1:A:1112:ASP:OD1	1:A:1606:SER:HB3	2.14	0.47
1:A:1762:LEU:HD12	1:A:1763:PRO:HD2	1.95	0.47
1:A:2121:PHE:CE1	1:A:3701:LEU:HD12	2.49	0.47
1:A:2353:VAL:HG12	1:A:2357:LEU:HD11	1.97	0.47
1:A:2351:ASN:O	1:A:2355:ARG:HG2	2.14	0.47
1:A:4898:GLY:HA3	1:G:4888:TYR:OH	2.14	0.47
1:A:489:ASN:HB3	1:A:493:ARG:HH22	1.78	0.47
1:C:107:ILE:H	1:C:148:TRP:H	1.62	0.47
1:C:178:ARG:HD3	1:C:195:PHE:CE1	2.49	0.47
1:C:4181:ILE:HG12	1:C:4195:PHE:CE1	2.48	0.47
1:C:4826:ILE:CG1	1:E:4839:MET:CE	2.92	0.47
1:C:16:THR:OG1	1:C:99:ARG:O	2.21	0.47
1:E:1024:TYR:HB3	1:E:1032:LYS:HD3	1.95	0.47
1:E:1098:GLY:HA3	1:E:1198:GLN:HE21	1.79	0.47
1:E:1293:LEU:HD23	1:E:1584:ARG:CG	2.44	0.47
1:E:4024:VAL:HA	1:E:4027:LEU:HD12	1.97	0.47
1:E:489:ASN:HB3	1:E:493:ARG:HH22	1.78	0.47
1:E:682:LEU:O	1:E:682:LEU:HG	2.14	0.47
1:G:1084:GLN:NE2	1:G:1185:GLY:O	2.47	0.47
1:G:1252:HIS:CG	1:G:1253:PRO:HD2	2.49	0.47
1:G:2745:VAL:HG21	1:G:2818:ALA:HB2	1.95	0.47
1:G:3775:ALA:O	1:G:3779:VAL:HG23	2.14	0.47
1:G:489:ASN:HB3	1:G:493:ARG:HH22	1.79	0.47
1:G:931:THR:HA	1:G:934:ALA:HB3	1.96	0.47
1:A:229:GLU:HG3	1:A:248:GLU:C	2.34	0.47
1:A:2295:LEU:HD22	1:A:2335:LEU:CD2	2.44	0.47
1:A:4039:MET:HA	1:A:4042:ARG:HE	1.79	0.47
1:A:4137:ARG:HD2	1:A:4177:TYR:CZ	2.50	0.47
1:C:1739:THR:O	1:C:1742:THR:OG1	2.21	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:4003:LEU:CB	1:C:4013:LEU:HD12	2.44	0.47
1:C:4645:CYS:O	1:C:4649:LEU:N	2.45	0.47
1:C:4563:ARG:NH1	1:C:4815:ASP:OD1	2.47	0.47
1:C:531:ARG:HG2	1:C:566:CYS:SG	2.55	0.47
1:C:720:HIS:HB2	1:C:728:ARG:O	2.14	0.47
1:E:1088:TRP:CZ3	1:E:1226:PHE:HD1	2.33	0.47
1:E:2870:GLU:OE2	1:E:2939:ARG:NH2	2.47	0.47
1:E:3835:LEU:O	1:E:3839:CYS:N	2.47	0.47
1:E:4145:VAL:HG13	1:E:4194:TYR:HD2	1.78	0.47
1:E:531:ARG:HG2	1:E:566:CYS:SG	2.55	0.47
1:G:3970:GLN:HE21	1:G:5004:THR:HA	1.77	0.47
1:G:4234:PHE:HZ	1:G:4988:TYR:HB2	1.77	0.47
1:G:531:ARG:HG2	1:G:566:CYS:SG	2.54	0.47
1:A:1205:GLY:HA3	1:A:1227:ALA:CB	2.40	0.47
1:A:150:MET:HG2	1:A:171:LEU:HD23	1.95	0.47
1:A:1729:SER:O	1:A:1733:GLU:HG2	2.14	0.47
1:A:178:ARG:HD3	1:A:195:PHE:CE1	2.49	0.47
1:A:1961:PHE:CZ	1:A:2063:LEU:HD22	2.49	0.47
1:A:2870:GLU:OE2	1:A:2939:ARG:NH2	2.47	0.47
1:A:355:LEU:HB2	1:A:378:LEU:HB3	1.96	0.47
1:A:857:ASP:O	1:A:991:ASN:ND2	2.47	0.47
1:C:1762:LEU:HD12	1:C:1763:PRO:HD2	1.96	0.47
1:C:4039:MET:HA	1:C:4042:ARG:HE	1.79	0.47
1:C:451:TYR:HD2	1:C:452:PHE:CE2	2.31	0.47
1:C:489:ASN:HB3	1:C:493:ARG:HH22	1.78	0.47
1:C:519:VAL:HG22	1:C:523:TYR:CE2	2.48	0.47
1:E:2121:PHE:CE1	1:E:3701:LEU:HD12	2.49	0.47
1:E:4642:ALA:O	1:E:4646:LEU:N	2.44	0.47
1:C:4826:ILE:CG1	1:E:4839:MET:HE3	2.44	0.47
1:C:4888:TYR:OH	1:E:4898:GLY:HA3	2.15	0.47
1:E:862:VAL:HA	1:E:930:LYS:NZ	2.30	0.47
1:E:3501:ASP:HA	1:G:1224:GLU:OE2	2.13	0.47
1:G:1457:TYR:CZ	1:G:1459:GLN:NE2	2.82	0.47
1:G:2351:ASN:O	1:G:2355:ARG:HG2	2.14	0.47
1:G:355:LEU:HB2	1:G:378:LEU:HB3	1.97	0.47
1:G:3677:LEU:O	1:G:3698:LEU:N	2.47	0.47
1:G:3959:LYS:HE3	1:G:4018:ASP:HB3	1.96	0.47
1:G:4230:LYS:HD2	1:G:4959:PHE:O	2.14	0.47
1:G:473:ASN:O	1:G:477:LEU:HG	2.13	0.47
1:G:5011:TRP:O	1:G:5015:GLN:HG2	2.14	0.47
1:G:4192:ARG:NH1	1:G:5028:PHE:HD2	2.12	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1514:LEU:CD1	1:A:1514:LEU:N	2.77	0.47
1:A:177:GLU:OE2	1:G:2452:ARG:NH2	2.46	0.47
1:A:758:ARG:NE	1:A:804:PRO:HG3	2.29	0.47
1:C:1432:THR:N	1:C:1519:LEU:O	2.48	0.47
1:C:2295:LEU:HD22	1:C:2335:LEU:CD2	2.44	0.47
1:C:2351:ASN:O	1:C:2355:ARG:HG2	2.14	0.47
1:C:3902:TYR:HE1	1:C:3908:GLY:H	1.62	0.47
1:C:4578:LEU:O	1:C:4578:LEU:HG	2.15	0.47
1:C:459:LEU:HD11	1:C:463:GLU:OE1	2.13	0.47
1:C:636:ASN:ND2	2:D:35:LYS:HD3	2.28	0.47
1:C:639:ASN:ND2	1:C:676:THR:OG1	2.45	0.47
2:D:87:HIS:HB3	2:D:91:ILE:H	1.80	0.47
1:E:1729:SER:O	1:E:1733:GLU:HG2	2.14	0.47
1:E:3780:LEU:HD11	1:E:3820:LEU:HD21	1.96	0.47
1:E:3882:GLN:HE22	1:E:3956:SER:HB3	1.78	0.47
1:E:4672:LYS:O	1:E:4676:GLU:HG3	2.14	0.47
1:E:4886:HIS:O	1:E:4890:GLY:N	2.48	0.47
1:G:2353:VAL:HG12	1:G:2357:LEU:HD11	1.96	0.47
1:G:3190:LEU:O	1:G:3194:LEU:N	2.46	0.47
1:G:3835:LEU:HD22	1:G:3884:LEU:CD1	2.44	0.47
1:G:3891:LEU:HB3	1:G:3899:PHE:HE2	1.80	0.47
1:G:4580:TYR:HB2	1:G:4631:PHE:CD1	2.49	0.47
1:A:1084:GLN:NE2	1:A:1185:GLY:O	2.48	0.47
1:A:134:ASP:OD1	1:A:135:VAL:N	2.48	0.47
1:A:1295:VAL:O	1:A:1547:LYS:HA	2.14	0.47
1:A:3811:GLU:HA	1:A:3814:GLN:HG2	1.96	0.47
1:A:39:ALA:HA	1:A:48:PHE:CE2	2.50	0.47
1:A:4181:ILE:HG12	1:A:4195:PHE:CE1	2.48	0.47
1:A:4207:MET:HG2	1:A:4208:PRO:CD	2.42	0.47
1:A:4642:ALA:O	1:A:4646:LEU:HG	2.15	0.47
1:A:682:LEU:O	1:A:682:LEU:HG	2.14	0.47
1:A:720:HIS:HB2	1:A:728:ARG:O	2.14	0.47
1:C:1457:TYR:CZ	1:C:1459:GLN:NE2	2.83	0.47
1:C:1112:ASP:OD1	1:C:1606:SER:HB3	2.14	0.47
1:C:2244:ARG:HH11	1:C:2248:ARG:HH21	1.60	0.47
1:C:4672:LYS:O	1:C:4676:GLU:HG3	2.14	0.47
1:C:4945:ASP:O	1:C:4949:GLN:HB2	2.14	0.47
1:C:516:LYS:HG3	1:C:517:GLU:N	2.28	0.47
1:C:931:THR:HA	1:C:934:ALA:HB3	1.97	0.47
1:E:1093:GLU:HA	1:E:1148:VAL:HG13	1.96	0.47
1:E:2351:ASN:O	1:E:2355:ARG:HG2	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2383:ALA:HB1	1:E:2423:MET:SD	2.55	0.47
1:E:229:GLU:HG3	1:E:248:GLU:C	2.34	0.47
1:E:4688:ILE:HG21	1:E:4728:HIS:HB3	1.95	0.47
1:E:892:THR:N	1:E:902:ARG:HA	2.29	0.47
1:G:1072:VAL:HB	1:G:1607:ARG:NH1	2.30	0.47
1:G:4666:VAL:HA	1:G:4669:VAL:HG12	1.95	0.47
1:E:4822:THR:HG22	1:G:4839:MET:SD	2.55	0.47
1:A:1277:TRP:HB2	1:A:1562:ILE:O	2.13	0.47
1:A:1432:THR:N	1:A:1519:LEU:O	2.48	0.47
1:A:1294:PRO:CB	1:A:1547:LYS:HB3	2.45	0.47
1:A:2173:GLN:HG2	1:A:2174:GLU:N	2.20	0.47
1:A:2437:ALA:HB1	1:A:2454:ARG:CZ	2.45	0.47
1:A:249:GLY:O	1:A:252:VAL:HG12	2.15	0.47
1:C:102:LEU:HB2	1:C:105:HIS:NE2	2.29	0.47
1:C:1072:VAL:HB	1:C:1607:ARG:NH1	2.30	0.47
1:C:1961:PHE:CZ	1:C:2063:LEU:HD22	2.50	0.47
1:C:862:VAL:HA	1:C:930:LYS:NZ	2.30	0.47
1:E:1830:VAL:HG13	1:E:1837:GLN:HB3	1.95	0.47
1:E:3996:PHE:CE2	1:E:4019:LEU:HD22	2.48	0.47
1:G:1830:VAL:HG13	1:G:1837:GLN:HB3	1.96	0.47
1:G:215:THR:O	1:G:218:HIS:HB3	2.14	0.47
1:G:3938:SER:HB2	1:G:4002:LYS:NZ	2.30	0.47
1:A:4877:ASP:O	1:G:4581:LYS:HE2	2.15	0.47
1:G:4699:GLY:HA2	1:G:4702:ASP:HB2	1.96	0.47
1:A:102:LEU:HB2	1:A:105:HIS:HD2	1.72	0.47
1:A:4877:ASP:HA	1:G:4581:LYS:HZ3	1.80	0.47
1:C:943:ASP:HB3	1:C:1050:GLY:HA3	1.96	0.47
1:C:1106:ARG:HE	1:C:1188:PHE:HE1	1.62	0.47
1:C:1516:ILE:C	1:C:1530:THR:OG1	2.52	0.47
1:C:3938:SER:HB2	1:C:4002:LYS:HZ2	1.79	0.47
1:C:682:LEU:O	1:C:682:LEU:HG	2.14	0.47
1:C:758:ARG:NE	1:C:804:PRO:HG3	2.30	0.47
1:E:1775:HIS:ND1	1:E:1775:HIS:O	2.48	0.47
1:E:2159:LEU:O	1:E:2162:ILE:HG22	2.15	0.47
1:E:2927:LEU:HD23	1:E:2930:LEU:HD12	1.95	0.47
1:E:4137:ARG:HD2	1:E:4177:TYR:CZ	2.49	0.47
1:G:1130:GLN:NE2	1:G:1132:TRP:HE1	2.11	0.47
1:G:1293:LEU:HD23	1:G:1584:ARG:CG	2.45	0.47
1:G:2117:VAL:O	1:G:2120:MET:HB2	2.15	0.47
1:G:2159:LEU:O	1:G:2162:ILE:HG22	2.14	0.47
1:G:235:ALA:HB2	1:G:257:ARG:HD3	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:342:GLY:N	1:G:390:LEU:O	2.47	0.47
1:G:4579:PHE:HB3	1:G:4632:LEU:O	2.14	0.47
1:G:4810:ALA:O	1:G:4813:LEU:HG	2.15	0.47
1:G:4826:ILE:O	1:G:4830:VAL:HG23	2.15	0.47
1:A:1101:ARG:HG3	1:A:1193:SER:OG	2.15	0.47
1:A:2383:ALA:HB1	1:A:2423:MET:SD	2.55	0.47
1:A:2427:ALA:O	1:A:2430:ILE:HG22	2.14	0.47
1:A:4945:ASP:O	1:A:4949:GLN:HB2	2.14	0.47
1:C:1101:ARG:HG3	1:C:1193:SER:OG	2.15	0.47
1:C:3882:GLN:HE22	1:C:3956:SER:HB3	1.78	0.47
1:C:3953:LYS:O	1:C:3957:VAL:HG23	2.14	0.47
1:C:449:ILE:O	1:C:453:GLU:HG2	2.15	0.47
1:C:4702:ASP:O	1:C:4705:VAL:HG12	2.15	0.47
1:C:4833:ASN:OD1	1:C:4836:GLN:HG2	2.14	0.47
1:E:1432:THR:N	1:E:1519:LEU:O	2.48	0.47
1:E:2353:VAL:HG12	1:E:2357:LEU:HD11	1.97	0.47
1:E:2437:ALA:HB1	1:E:2454:ARG:CZ	2.44	0.47
1:G:943:ASP:HB3	1:G:1050:GLY:HA3	1.96	0.47
1:G:1088:TRP:CZ3	1:G:1226:PHE:HD1	2.33	0.47
1:G:134:ASP:OD1	1:G:135:VAL:N	2.48	0.47
1:G:1931:LEU:HD22	1:G:1935:VAL:HG11	1.97	0.47
1:G:2198:MET:HE3	1:G:2203:MET:SD	2.55	0.47
1:G:4672:LYS:O	1:G:4676:GLU:HG3	2.15	0.47
1:G:4906:GLY:H	1:G:4910:GLU:HG3	1.80	0.47
1:G:675:LEU:O	1:G:676:THR:OG1	2.27	0.47
2:H:87:HIS:HB3	2:H:91:ILE:H	1.79	0.47
1:A:1072:VAL:HB	1:A:1607:ARG:NH1	2.30	0.47
1:A:1768:THR:C	1:A:1769:THR:HG1	2.15	0.47
1:A:1775:HIS:O	1:A:1775:HIS:ND1	2.48	0.47
1:A:4778:TRP:O	1:A:4782:VAL:HG23	2.14	0.47
1:C:1088:TRP:CZ3	1:C:1226:PHE:HD1	2.33	0.47
1:C:134:ASP:OD1	1:C:135:VAL:N	2.48	0.47
1:C:1775:HIS:ND1	1:C:1775:HIS:O	2.48	0.47
1:C:2159:LEU:O	1:C:2162:ILE:HG22	2.15	0.47
1:C:2353:VAL:HG12	1:C:2357:LEU:HD11	1.97	0.47
1:C:2437:ALA:HB1	1:C:2454:ARG:CZ	2.45	0.47
1:C:3923:LEU:HD12	1:C:3961:VAL:HG12	1.97	0.47
1:C:39:ALA:HA	1:C:48:PHE:CE2	2.49	0.47
1:C:4913:ARG:O	1:C:4916:PHE:HB3	2.15	0.47
1:C:737:LEU:HD11	2:D:7:ILE:CG2	2.44	0.47
1:E:1931:LEU:HD22	1:E:1935:VAL:HG11	1.97	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:178:ARG:HD3	1:E:195:PHE:CE1	2.50	0.47
1:E:2066:LEU:O	1:E:2069:THR:OG1	2.31	0.47
1:E:2295:LEU:HD22	1:E:2335:LEU:CD2	2.44	0.47
1:E:3992:PHE:HB2	1:E:4023:MET:CE	2.45	0.47
1:E:4207:MET:HG2	1:E:4208:PRO:CD	2.42	0.47
1:E:458:GLU:O	1:E:458:GLU:HG2	2.13	0.47
1:E:758:ARG:NE	1:E:804:PRO:HG3	2.30	0.47
1:G:2427:ALA:O	1:G:2430:ILE:HG22	2.15	0.47
1:G:449:ILE:O	1:G:453:GLU:HG2	2.15	0.47
1:G:758:ARG:NE	1:G:804:PRO:HG3	2.30	0.47
1:A:2211:MET:O	1:A:2215:LEU:HG	2.15	0.47
1:A:449:ILE:O	1:A:453:GLU:HG2	2.15	0.47
1:A:4913:ARG:O	1:A:4916:PHE:HB3	2.15	0.47
1:C:149:THR:HG23	1:C:174:VAL:HG22	1.97	0.47
1:C:1734:TYR:OH	1:C:1948:ASP:OD1	2.19	0.47
1:C:229:GLU:HG3	1:C:248:GLU:C	2.34	0.47
1:C:2499:LYS:O	1:C:2503:VAL:HG23	2.15	0.47
1:C:3655:GLU:O	1:C:3658:LYS:HB3	2.16	0.47
1:C:4137:ARG:HD2	1:C:4177:TYR:CZ	2.49	0.47
1:C:4778:TRP:O	1:C:4782:VAL:HG23	2.15	0.47
1:E:1154:ASP:HB3	1:E:1157:GLU:HB3	1.97	0.47
1:E:1961:PHE:CZ	1:E:2063:LEU:HD22	2.49	0.47
1:E:215:THR:O	1:E:218:HIS:HB3	2.14	0.47
1:E:2211:MET:O	1:E:2215:LEU:HG	2.15	0.47
1:E:4003:LEU:CB	1:E:4013:LEU:HD12	2.45	0.47
1:G:4642:ALA:O	1:G:4646:LEU:HG	2.15	0.47
1:A:1252:HIS:CG	1:A:1253:PRO:HD2	2.50	0.46
1:A:2771:ILE:HD11	1:A:2857:PRO:HD2	1.97	0.46
1:A:4581:LYS:CE	1:C:4877:ASP:O	2.63	0.46
1:A:737:LEU:HD11	2:B:7:ILE:CG2	2.43	0.46
1:C:1154:ASP:HB3	1:C:1157:GLU:HB3	1.97	0.46
1:C:1931:LEU:HD22	1:C:1935:VAL:HG11	1.97	0.46
1:E:102:LEU:HB2	1:E:105:HIS:NE2	2.29	0.46
1:E:1106:ARG:HE	1:E:1188:PHE:HE1	1.63	0.46
1:E:264:PRO:O	1:E:266:ARG:N	2.43	0.46
1:E:3780:LEU:HG	1:E:3828:PHE:CE1	2.51	0.46
1:E:3989:VAL:HG13	1:E:4023:MET:HE2	1.98	0.46
1:E:4702:ASP:O	1:E:4705:VAL:HG12	2.15	0.46
1:E:737:LEU:HB3	1:E:738:LEU:H	1.56	0.46
1:E:791:PHE:HB2	1:E:1626:TRP:HB2	1.95	0.46
1:G:149:THR:HG23	1:G:174:VAL:HG22	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:229:GLU:HG3	1:G:248:GLU:C	2.35	0.46
1:G:3804:ILE:O	1:G:3809:ASN:ND2	2.48	0.46
1:G:3906:GLN:HB3	1:G:3912:THR:HA	1.96	0.46
1:G:3916:ILE:O	1:G:3919:THR:HG22	2.15	0.46
1:G:39:ALA:HA	1:G:48:PHE:CE2	2.50	0.46
1:G:4024:VAL:O	1:G:4027:LEU:HB2	2.15	0.46
1:G:4920:PHE:O	1:G:4924:VAL:HB	2.15	0.46
2:H:38:SER:HB3	2:H:41:ASP:OD2	2.14	0.46
1:A:943:ASP:HB3	1:A:1050:GLY:HA3	1.96	0.46
1:A:1093:GLU:HA	1:A:1148:VAL:HG22	1.97	0.46
1:A:634:GLN:HG3	1:A:1640:HIS:CE1	2.50	0.46
1:A:3780:LEU:HG	1:A:3828:PHE:CE1	2.50	0.46
1:C:1729:SER:O	1:C:1733:GLU:HG2	2.15	0.46
1:C:2383:ALA:HB1	1:C:2423:MET:SD	2.55	0.46
2:D:88:PRO:O	2:D:90:ILE:HD12	2.16	0.46
1:E:1072:VAL:HB	1:E:1607:ARG:NH1	2.30	0.46
1:C:3501:ASP:HA	1:E:1224:GLU:OE2	2.15	0.46
1:E:4664:LEU:O	1:E:4667:PRO:HD2	2.16	0.46
1:E:4822:THR:O	1:E:4826:ILE:HG13	2.15	0.46
1:E:593:HIS:HB3	1:E:596:ASN:HD22	1.79	0.46
1:G:1294:PRO:CB	1:G:1547:LYS:HB3	2.46	0.46
1:G:634:GLN:HG3	1:G:1640:HIS:CE1	2.50	0.46
1:A:195:PHE:CE2	1:G:2358:ILE:HG21	2.50	0.46
1:G:2553:TYR:CD1	1:G:2556:LEU:HD12	2.50	0.46
1:G:4023:MET:O	1:G:4026:MET:HG2	2.15	0.46
1:G:4720:VAL:O	1:G:4724:VAL:HG23	2.14	0.46
1:G:4991:PHE:O	1:G:4995:LEU:HG	2.16	0.46
1:A:1943:LEU:HD11	1:A:2098:VAL:HG22	1.97	0.46
1:A:2748:PRO:HD2	1:A:2751:LEU:HD12	1.97	0.46
1:A:350:HIS:O	1:A:354:GLY:HA2	2.15	0.46
1:A:3655:GLU:O	1:A:3658:LYS:HB3	2.16	0.46
1:A:4039:MET:CA	1:A:4042:ARG:HH11	2.29	0.46
1:A:791:PHE:HB2	1:A:1626:TRP:HB2	1.95	0.46
1:C:3780:LEU:HG	1:C:3828:PHE:CE1	2.50	0.46
1:C:4574:ASN:ND2	1:C:4813:LEU:HD23	2.31	0.46
1:C:824:GLU:CD	1:C:825:PRO:HD2	2.36	0.46
1:E:1439:VAL:O	1:E:1513:ASP:N	2.44	0.46
1:E:2059:LEU:CD2	1:E:2062:ARG:HH12	2.20	0.46
1:E:2305:CYS:HB2	1:E:2325:PRO:HG2	1.97	0.46
1:E:3655:GLU:O	1:E:3658:LYS:HB3	2.15	0.46
1:E:3923:LEU:HD12	1:E:3961:VAL:HG12	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:3953:LYS:O	1:E:3957:VAL:HG23	2.14	0.46
1:E:4039:MET:CA	1:E:4042:ARG:HH11	2.29	0.46
1:E:3986:TRP:HD1	1:E:4047:MET:SD	2.39	0.46
1:E:489:ASN:HB3	1:E:493:ARG:NH2	2.30	0.46
1:E:634:GLN:HG3	1:E:1640:HIS:CE1	2.50	0.46
1:E:931:THR:HA	1:E:934:ALA:HB3	1.97	0.46
2:F:87:HIS:HB3	2:F:91:ILE:H	1.80	0.46
1:G:1951:LEU:O	1:G:1955:VAL:HG23	2.16	0.46
1:G:2437:ALA:HB1	1:G:2454:ARG:CZ	2.44	0.46
1:G:249:GLY:O	1:G:252:VAL:HG12	2.15	0.46
1:G:4239:GLU:OE2	1:G:5014:TYR:HE1	1.98	0.46
1:G:4778:TRP:O	1:G:4782:VAL:HG23	2.16	0.46
1:G:4976:GLU:O	1:G:4980:LEU:N	2.48	0.46
2:H:54:GLU:HG3	2:H:55:VAL:HG13	1.97	0.46
1:A:3780:LEU:HD11	1:A:3820:LEU:HD21	1.96	0.46
1:A:4674:GLU:OE2	1:A:4712:PRO:HA	2.15	0.46
1:A:531:ARG:HG2	1:A:566:CYS:SG	2.55	0.46
1:A:824:GLU:CD	1:A:825:PRO:HD2	2.36	0.46
1:C:2427:ALA:O	1:C:2430:ILE:HG22	2.14	0.46
1:E:1141:ARG:NH1	1:E:1169:LEU:HD11	2.28	0.46
1:E:1294:PRO:CB	1:E:1547:LYS:HB3	2.46	0.46
1:E:2290:LEU:HD11	1:E:2349:ASN:OD1	2.16	0.46
1:E:2427:ALA:O	1:E:2430:ILE:HG22	2.15	0.46
1:E:4151:SER:HA	1:E:4160:LEU:HD21	1.96	0.46
1:G:1775:HIS:O	1:G:1775:HIS:ND1	2.48	0.46
1:G:2173:GLN:CG	1:G:2174:GLU:H	2.21	0.46
1:A:107:ILE:H	1:A:148:TRP:H	1.63	0.46
1:A:1130:GLN:NE2	1:A:1132:TRP:HE1	2.11	0.46
1:A:149:THR:HG23	1:A:174:VAL:HG22	1.97	0.46
1:A:3992:PHE:HB2	1:A:4023:MET:CE	2.45	0.46
1:C:2211:MET:O	1:C:2215:LEU:HG	2.15	0.46
1:C:2305:CYS:HB2	1:C:2325:PRO:HG2	1.97	0.46
1:C:4886:HIS:O	1:C:4891:VAL:N	2.42	0.46
1:C:792:LEU:HB3	1:C:799:GLU:O	2.16	0.46
1:E:1252:HIS:CG	1:E:1253:PRO:HD2	2.50	0.46
1:E:134:ASP:OD1	1:E:135:VAL:N	2.48	0.46
1:E:785:ALA:HA	1:E:1633:PRO:HD3	1.98	0.46
1:E:3902:TYR:HE1	1:E:3908:GLY:H	1.62	0.46
1:E:39:ALA:HA	1:E:48:PHE:CE2	2.50	0.46
1:E:449:ILE:O	1:E:453:GLU:HG2	2.16	0.46
1:E:4642:ALA:O	1:E:4646:LEU:HG	2.14	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:1106:ARG:HE	1:G:1188:PHE:HE1	1.63	0.46
1:G:1961:PHE:CZ	1:G:2063:LEU:HD22	2.51	0.46
1:G:2062:ARG:O	1:G:2065:SER:OG	2.21	0.46
1:G:2290:LEU:HD11	1:G:2349:ASN:OD1	2.16	0.46
1:G:4059:LEU:HA	1:G:4062:PHE:HD2	1.79	0.46
1:G:4725:LEU:O	1:G:4734:ARG:NH2	2.49	0.46
1:G:682:LEU:O	1:G:682:LEU:HG	2.16	0.46
1:A:2553:TYR:CD1	1:A:2556:LEU:HD12	2.51	0.46
1:A:3775:ALA:O	1:A:3779:VAL:HG23	2.15	0.46
1:A:3989:VAL:HG13	1:A:4023:MET:HE2	1.98	0.46
1:A:489:ASN:HB3	1:A:493:ARG:NH2	2.30	0.46
1:A:4979:THR:O	1:A:4984:ASN:N	2.30	0.46
1:A:785:ALA:HA	1:A:1633:PRO:HD3	1.97	0.46
1:C:1128:ARG:N	1:C:1142:PRO:HB3	2.31	0.46
1:C:1252:HIS:CG	1:C:1253:PRO:HD2	2.50	0.46
1:C:249:GLY:O	1:C:252:VAL:HG12	2.15	0.46
1:C:3775:ALA:O	1:C:3779:VAL:HG23	2.16	0.46
1:C:3986:TRP:HD1	1:C:4047:MET:SD	2.39	0.46
1:C:3992:PHE:HB2	1:C:4023:MET:CE	2.45	0.46
1:C:4039:MET:CA	1:C:4042:ARG:HH11	2.29	0.46
1:C:892:THR:N	1:C:902:ARG:HA	2.30	0.46
1:E:1951:LEU:O	1:E:1955:VAL:HG23	2.16	0.46
1:E:21:VAL:CG2	1:E:203:ASN:HB3	2.46	0.46
1:E:4583:SER:N	1:E:4628:VAL:O	2.42	0.46
1:E:4674:GLU:OE2	1:E:4712:PRO:HA	2.16	0.46
1:E:4913:ARG:O	1:E:4916:PHE:HB3	2.15	0.46
1:G:102:LEU:HB2	1:G:105:HIS:NE2	2.29	0.46
1:G:1729:SER:O	1:G:1733:GLU:HG2	2.15	0.46
1:G:1783:VAL:HG12	2:H:54:GLU:O	2.16	0.46
1:E:2358:ILE:CG2	1:G:195:PHE:HE2	2.29	0.46
1:G:2748:PRO:HD2	1:G:2751:LEU:HD12	1.96	0.46
1:G:3934:TYR:HD1	1:G:3999:MET:HG2	1.80	0.46
1:G:4207:MET:HG2	1:G:4208:PRO:CD	2.44	0.46
1:G:5004:THR:O	1:G:5007:GLU:HG2	2.16	0.46
2:H:76:ILE:O	2:H:96:THR:HG23	2.16	0.46
1:A:1098:GLY:HA3	1:A:1198:GLN:HE21	1.79	0.46
1:A:1779:PRO:HA	1:A:1780:PRO:HD3	1.78	0.46
1:A:1840:PRO:O	1:A:1843:LYS:HB3	2.16	0.46
1:A:2499:LYS:O	1:A:2503:VAL:HG23	2.15	0.46
1:A:312:THR:O	1:A:314:PHE:N	2.41	0.46
1:A:675:LEU:O	1:A:676:THR:OG1	2.27	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:4207:MET:HG2	1:C:4208:PRO:CD	2.42	0.46
1:C:4642:ALA:O	1:C:4646:LEU:HG	2.15	0.46
1:C:4888:TYR:OH	1:E:4898:GLY:CA	2.64	0.46
1:C:4980:LEU:HA	1:C:4984:ASN:HA	1.98	0.46
1:E:1101:ARG:HG3	1:E:1193:SER:OG	2.15	0.46
1:E:2173:GLN:CG	1:E:2174:GLU:H	2.22	0.46
1:E:2499:LYS:O	1:E:2503:VAL:HG23	2.15	0.46
1:E:792:LEU:HB3	1:E:799:GLU:O	2.16	0.46
1:G:2431:ASP:HB2	1:G:2501:SER:CB	2.46	0.46
1:G:4712:PRO:O	1:G:4718:LYS:HD2	2.16	0.46
1:G:4887:MET:HA	1:G:4891:VAL:HG23	1.97	0.46
1:G:4914:VAL:O	1:G:4918:ILE:HG13	2.15	0.46
1:G:489:ASN:HB3	1:G:493:ARG:NH2	2.31	0.46
1:G:862:VAL:HA	1:G:930:LYS:NZ	2.31	0.46
1:A:107:ILE:HD12	1:A:109:LEU:HD21	1.98	0.46
1:A:2198:MET:HE3	1:A:2203:MET:SD	2.56	0.46
1:A:3777:GLU:O	1:A:3781:GLN:HG3	2.16	0.46
1:A:3902:TYR:HE1	1:A:3908:GLY:H	1.62	0.46
1:A:4666:VAL:O	1:A:4670:ILE:HG12	2.15	0.46
2:B:87:HIS:HB3	2:B:91:ILE:H	1.80	0.46
1:C:1141:ARG:NH1	1:C:1169:LEU:HD11	2.27	0.46
1:C:21:VAL:CG2	1:C:203:ASN:HB3	2.46	0.46
1:C:223:PHE:O	1:C:388:LEU:HD23	2.16	0.46
1:E:14:LEU:HD12	1:E:163:VAL:HG12	1.97	0.46
1:E:1768:THR:O	1:E:1769:THR:OG1	2.23	0.46
1:E:2771:ILE:HD11	1:E:2857:PRO:HD2	1.96	0.46
1:G:2788:HIS:CG	1:G:2789:PRO:HD2	2.51	0.46
1:G:3891:LEU:HB3	1:G:3899:PHE:CE2	2.50	0.46
1:G:3906:GLN:HG2	1:G:3909:ASN:HB2	1.98	0.46
1:G:3996:PHE:HE2	1:G:4019:LEU:HD22	1.80	0.46
1:G:492:ASP:OD1	1:G:546:TRP:NE1	2.42	0.46
1:A:1082:THR:HG22	1:A:1189:LEU:HG	1.98	0.46
1:A:21:VAL:CG2	1:A:203:ASN:HB3	2.46	0.46
1:A:2350:ALA:O	1:A:2354:VAL:HG23	2.16	0.46
1:A:276:TRP:CD1	1:A:276:TRP:O	2.69	0.46
1:A:4929:LEU:O	1:A:4933:GLN:HG3	2.15	0.46
2:B:88:PRO:O	2:B:90:ILE:HD12	2.16	0.46
1:C:2059:LEU:CD2	1:C:2062:ARG:HH12	2.20	0.46
1:C:2350:ALA:O	1:C:2354:VAL:HG23	2.16	0.46
1:C:2553:TYR:CD1	1:C:2556:LEU:HD12	2.51	0.46
1:C:564:LEU:O	1:C:568:LEU:HG	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:3938:SER:OG	1:E:80:GLU:OE1	2.30	0.46
2:F:88:PRO:O	2:F:90:ILE:HD12	2.16	0.46
1:G:1101:ARG:HG3	1:G:1193:SER:OG	2.15	0.46
1:G:1432:THR:N	1:G:1519:LEU:O	2.49	0.46
1:G:1638:ALA:HA	1:G:1649:ASP:HA	1.98	0.46
1:G:223:PHE:O	1:G:388:LEU:HD23	2.16	0.46
1:G:3937:TYR:O	1:G:3941:ASP:N	2.47	0.46
1:G:792:LEU:HB3	1:G:799:GLU:O	2.16	0.46
1:A:1128:ARG:N	1:A:1142:PRO:HB3	2.31	0.46
1:A:1293:LEU:HD23	1:A:1584:ARG:CG	2.45	0.46
1:A:4003:LEU:CB	1:A:4013:LEU:HD12	2.44	0.46
1:A:451:TYR:CZ	1:A:474:ARG:HD2	2.51	0.46
1:A:4717:ASP:O	1:A:4720:VAL:HG23	2.16	0.46
1:A:4888:TYR:OH	1:C:4898:GLY:HA3	2.16	0.46
1:A:649:PHE:HB3	1:A:776:LEU:HB3	1.98	0.46
1:C:2460:LEU:HD12	1:E:178:ARG:CZ	2.45	0.46
1:C:4717:ASP:O	1:C:4720:VAL:HG23	2.16	0.46
1:C:4951:LYS:O	1:C:4955:GLU:HG2	2.16	0.46
1:C:690:GLU:CG	1:C:1459:GLN:OE1	2.64	0.46
1:E:1093:GLU:HA	1:E:1148:VAL:HG22	1.97	0.46
1:E:2250:MET:HA	1:E:2253:HIS:HD2	1.81	0.46
1:E:2929:PHE:O	1:E:2933:ASN:ND2	2.47	0.46
1:E:292:ALA:HB3	1:E:302:VAL:HG11	1.98	0.46
1:E:350:HIS:O	1:E:354:GLY:HA2	2.16	0.46
1:E:3916:ILE:O	1:E:3920:VAL:HG23	2.16	0.46
1:E:4951:LYS:O	1:E:4955:GLU:HG2	2.16	0.46
1:G:2211:MET:O	1:G:2215:LEU:HG	2.16	0.46
1:G:445:LEU:CD2	1:G:522:LEU:HD12	2.44	0.46
1:E:3938:SER:OG	1:G:80:GLU:OE1	2.27	0.46
1:A:1638:ALA:HA	1:A:1649:ASP:HA	1.97	0.45
1:A:3724:ALA:O	1:A:3727:ASP:HB2	2.16	0.45
1:A:3977:GLN:HE22	1:A:4033:GLY:H	1.63	0.45
1:A:3986:TRP:HD1	1:A:4047:MET:SD	2.39	0.45
1:A:459:LEU:HD11	1:A:463:GLU:OE1	2.15	0.45
1:A:4712:PRO:O	1:A:4718:LYS:HD2	2.16	0.45
2:B:44:LYS:HA	2:B:45:PRO:HD3	1.86	0.45
1:C:1294:PRO:CB	1:C:1547:LYS:HB3	2.45	0.45
1:C:1713:ASP:OD1	1:C:1714:LEU:N	2.49	0.45
1:C:2748:PRO:HD2	1:C:2751:LEU:HD12	1.98	0.45
1:C:276:TRP:CD1	1:C:276:TRP:O	2.69	0.45
1:C:2883:HIS:HE1	1:C:2904:LEU:O	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:3989:VAL:HG13	1:C:4023:MET:HE2	1.98	0.45
1:C:4712:PRO:O	1:C:4718:LYS:HD2	2.15	0.45
1:C:489:ASN:HB3	1:C:493:ARG:NH2	2.30	0.45
1:E:249:GLY:O	1:E:252:VAL:HG12	2.15	0.45
1:E:2553:TYR:CD1	1:E:2556:LEU:HD12	2.51	0.45
1:E:2819:TRP:HH2	1:E:2881:ASN:HB2	1.81	0.45
1:E:4578:LEU:CD1	1:G:4880:MET:CA	2.85	0.45
1:E:4648:LEU:O	1:E:4652:LEU:N	2.47	0.45
1:E:4810:ALA:O	1:E:4813:LEU:HG	2.16	0.45
1:E:4222:VAL:HG11	1:E:4950:VAL:HA	1.99	0.45
1:E:824:GLU:CD	1:E:825:PRO:HD2	2.36	0.45
1:G:14:LEU:HD12	1:G:163:VAL:HG12	1.98	0.45
1:G:1598:GLN:O	1:G:1600:LEU:N	2.49	0.45
1:G:2499:LYS:O	1:G:2503:VAL:HG23	2.15	0.45
1:G:4821:LYS:HD3	1:G:4947:GLN:NE2	2.31	0.45
1:G:4832:HIS:NE2	1:G:4939:ALA:HB1	2.31	0.45
2:H:88:PRO:O	2:H:90:ILE:HD12	2.16	0.45
1:A:2431:ASP:HB2	1:A:2501:SER:CB	2.46	0.45
1:A:2883:HIS:HE1	1:A:2904:LEU:O	1.99	0.45
1:C:2290:LEU:HD11	1:C:2349:ASN:OD1	2.16	0.45
1:C:2771:ILE:HD11	1:C:2857:PRO:HD2	1.97	0.45
1:C:4581:LYS:HD2	1:E:4856:PHE:CZ	2.50	0.45
1:C:649:PHE:HB3	1:C:776:LEU:HB3	1.98	0.45
1:E:1224:GLU:HA	1:E:1225:PRO:HD3	1.64	0.45
1:E:2431:ASP:HB2	1:E:2501:SER:CB	2.46	0.45
1:G:1660:GLN:NE2	1:G:1704:PRO:HB2	2.31	0.45
1:G:21:VAL:CG2	1:G:203:ASN:HB3	2.46	0.45
1:G:2350:ALA:O	1:G:2354:VAL:HG23	2.16	0.45
1:G:3371:LYS:O	1:G:3375:GLU:N	2.44	0.45
1:G:3936:TYR:HD2	1:G:3937:TYR:CE2	2.34	0.45
1:G:4209:GLN:HG3	1:G:4213:SER:HB2	1.99	0.45
1:G:4727:LYS:NZ	1:G:4728:HIS:CE1	2.84	0.45
1:G:833:GLY:HA3	1:G:838:HIS:CD2	2.52	0.45
1:G:16:THR:OG1	1:G:99:ARG:O	2.20	0.45
1:A:1713:ASP:OD1	1:A:1714:LEU:N	2.49	0.45
1:A:2290:LEU:HD11	1:A:2349:ASN:OD1	2.16	0.45
1:A:3698:LEU:O	1:A:3701:LEU:HB3	2.17	0.45
1:A:3916:ILE:O	1:A:3920:VAL:HG23	2.17	0.45
1:A:4234:PHE:HZ	1:A:4988:TYR:HB2	1.81	0.45
1:A:750:LEU:O	1:A:751:SER:OG	2.33	0.45
1:A:792:LEU:HB3	1:A:799:GLU:O	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1090:PHE:CE1	1:C:1151:CYS:HB3	2.51	0.45
1:C:1438:ARG:HA	1:C:1514:LEU:HA	1.98	0.45
1:C:2117:VAL:O	1:C:2120:MET:HB2	2.16	0.45
1:C:2198:MET:HE3	1:C:2203:MET:SD	2.56	0.45
1:C:3724:ALA:O	1:C:3727:ASP:HB2	2.17	0.45
1:C:4024:VAL:HA	1:C:4027:LEU:HD12	1.98	0.45
1:C:4674:GLU:OE2	1:C:4712:PRO:HA	2.16	0.45
1:E:1840:PRO:O	1:E:1843:LYS:HB3	2.16	0.45
1:E:2883:HIS:HE1	1:E:2904:LEU:O	1.99	0.45
1:E:3775:ALA:O	1:E:3779:VAL:HG23	2.15	0.45
1:E:3977:GLN:HE22	1:E:4033:GLY:H	1.64	0.45
1:E:451:TYR:CZ	1:E:474:ARG:HD2	2.51	0.45
1:C:4578:LEU:CD1	1:E:4880:MET:CA	2.83	0.45
1:G:1093:GLU:HA	1:G:1148:VAL:HG22	1.98	0.45
1:G:2420:HIS:ND1	1:G:2423:MET:SD	2.76	0.45
1:G:3434:LEU:O	1:G:3437:MET:N	2.49	0.45
1:G:3655:GLU:O	1:G:3658:LYS:HB3	2.15	0.45
1:G:451:TYR:CZ	1:G:474:ARG:HD2	2.52	0.45
1:G:459:LEU:HD11	1:G:463:GLU:OE1	2.15	0.45
1:A:1106:ARG:HE	1:A:1188:PHE:HE1	1.63	0.45
1:A:119:SER:OG	1:A:136:GLY:O	2.25	0.45
1:A:2248:ARG:HA	1:A:2286:LEU:HD22	1.99	0.45
1:A:223:PHE:O	1:A:388:LEU:HD23	2.16	0.45
1:C:2066:LEU:O	1:C:2069:THR:OG1	2.31	0.45
1:C:2745:VAL:HB	1:C:2814:LYS:HB3	1.98	0.45
1:C:478:PHE:CD1	1:C:529:LEU:HD21	2.51	0.45
1:C:785:ALA:HA	1:C:1633:PRO:HD3	1.97	0.45
1:E:2062:ARG:O	1:E:2065:SER:OG	2.21	0.45
1:E:2745:VAL:HB	1:E:2814:LYS:HB3	1.98	0.45
1:E:3698:LEU:O	1:E:3701:LEU:HB3	2.17	0.45
1:E:478:PHE:CD1	1:E:529:LEU:HD21	2.52	0.45
1:E:4563:ARG:NH1	1:E:4815:ASP:OD1	2.47	0.45
1:E:558:SER:O	1:E:561:LEU:HB3	2.16	0.45
2:F:58:GLY:HA3	2:F:76:ILE:CG2	2.46	0.45
1:G:1154:ASP:HB3	1:G:1157:GLU:HB3	1.97	0.45
1:G:1729:SER:HB2	1:G:2163:ARG:HH11	1.81	0.45
1:G:4213:SER:O	1:G:4217:PHE:N	2.42	0.45
1:G:4886:HIS:O	1:G:4891:VAL:N	2.45	0.45
1:G:720:HIS:HB2	1:G:728:ARG:O	2.16	0.45
1:A:2822:THR:HG1	1:A:2938:THR:HG1	1.63	0.45
1:A:4664:LEU:O	1:A:4667:PRO:HD2	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:4980:LEU:HA	1:A:4984:ASN:HA	1.98	0.45
1:A:833:GLY:HA3	1:A:838:HIS:CD2	2.52	0.45
1:C:1834:VAL:HG13	1:C:1835:GLU:N	2.32	0.45
1:C:451:TYR:CZ	1:C:474:ARG:HD2	2.52	0.45
1:C:634:GLN:HG3	1:C:1640:HIS:CE1	2.50	0.45
1:C:737:LEU:HB3	1:C:738:LEU:H	1.56	0.45
1:E:943:ASP:HB3	1:E:1050:GLY:HA3	1.97	0.45
1:E:1240:LYS:HZ3	1:E:1242:LEU:HB2	1.80	0.45
1:E:1648:MET:SD	1:E:1656:ARG:NH2	2.89	0.45
1:E:2117:VAL:O	1:E:2120:MET:HB2	2.17	0.45
1:E:3724:ALA:O	1:E:3727:ASP:HB2	2.16	0.45
1:E:4823:LEU:HA	1:E:4826:ILE:CD1	2.44	0.45
1:E:4929:LEU:O	1:E:4933:GLN:HG3	2.17	0.45
1:G:1079:LYS:HZ2	1:G:1107:PRO:HB2	1.81	0.45
1:G:1840:PRO:O	1:G:1843:LYS:HB3	2.16	0.45
1:G:2059:LEU:CD2	1:G:2062:ARG:HH12	2.20	0.45
1:G:2250:MET:HA	1:G:2253:HIS:HD2	1.81	0.45
1:G:478:PHE:CD1	1:G:529:LEU:HD21	2.52	0.45
1:G:593:HIS:HB3	1:G:596:ASN:HD22	1.79	0.45
1:A:1660:GLN:NE2	1:A:1704:PRO:HB2	2.31	0.45
1:A:2142:TYR:HE1	1:A:2196:ASN:HD22	1.64	0.45
1:A:372:LEU:O	1:A:374:LYS:N	2.50	0.45
1:A:4024:VAL:HA	1:A:4027:LEU:HD12	1.97	0.45
1:A:4579:PHE:HB3	1:A:4632:LEU:O	2.17	0.45
1:A:564:LEU:O	1:A:568:LEU:HG	2.16	0.45
1:C:1093:GLU:HA	1:C:1148:VAL:HG22	1.98	0.45
1:C:1082:THR:HG22	1:C:1189:LEU:HG	1.98	0.45
1:C:1598:GLN:O	1:C:1600:LEU:N	2.49	0.45
1:C:2271:THR:HA	1:C:2272:PRO:HD2	1.85	0.45
1:C:274:LEU:HA	1:C:278:GLN:NE2	2.32	0.45
1:C:3969:ILE:CG1	1:C:3980:LEU:HD11	2.46	0.45
1:C:445:LEU:CD2	1:C:522:LEU:HD12	2.44	0.45
1:C:4579:PHE:HB3	1:C:4632:LEU:O	2.17	0.45
1:C:4826:ILE:O	1:C:4829:SER:HB2	2.16	0.45
1:A:4578:LEU:HG	1:C:4880:MET:HB2	1.99	0.45
1:C:4915:VAL:HA	1:C:4918:ILE:HD12	1.97	0.45
1:C:839:LEU:HD22	1:C:1075:PHE:CE1	2.52	0.45
2:D:67:SER:N	2:D:70:GLN:OE1	2.37	0.45
1:E:839:LEU:HD22	1:E:1075:PHE:CE1	2.52	0.45
1:E:149:THR:HG23	1:E:174:VAL:HG22	1.98	0.45
1:E:2460:LEU:HD12	1:G:178:ARG:CZ	2.46	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:24:CYS:HB3	1:E:200:TRP:CE3	2.52	0.45
1:E:274:LEU:HA	1:E:278:GLN:NE2	2.32	0.45
1:E:3777:GLU:O	1:E:3781:GLN:HG3	2.16	0.45
1:E:4702:ASP:OD1	1:E:4778:TRP:NE1	2.31	0.45
1:E:4712:PRO:O	1:E:4718:LYS:HD2	2.16	0.45
1:E:649:PHE:HB3	1:E:776:LEU:HB3	1.98	0.45
1:E:833:GLY:HA3	1:E:838:HIS:CD2	2.52	0.45
1:G:1713:ASP:OD1	1:G:1714:LEU:N	2.49	0.45
1:G:4000:MET:O	1:G:4004:ALA:N	2.49	0.45
1:G:4735:GLU:O	1:G:4739:GLU:N	2.48	0.45
1:A:1090:PHE:CE1	1:A:1151:CYS:HB3	2.52	0.45
1:A:1292:SER:O	1:A:1294:PRO:HD3	2.17	0.45
1:A:1294:PRO:CD	1:A:1584:ARG:HH11	2.19	0.45
1:A:24:CYS:HB3	1:A:200:TRP:CE3	2.52	0.45
1:A:2272:PRO:O	1:A:2275:VAL:HB	2.17	0.45
1:A:4214:LYS:HE2	1:A:4985:LEU:HD23	1.98	0.45
1:A:758:ARG:HA	1:A:763:PRO:HA	1.97	0.45
1:C:1805:GLU:O	1:C:1808:ARG:HG2	2.17	0.45
1:C:1840:PRO:O	1:C:1843:LYS:HB3	2.16	0.45
1:C:2114:PRO:O	1:C:3704:HIS:NE2	2.40	0.45
1:C:2431:ASP:HB2	1:C:2501:SER:CB	2.46	0.45
1:C:2556:LEU:HD23	1:C:2559:LEU:CD1	2.47	0.45
1:C:312:THR:O	1:C:314:PHE:N	2.41	0.45
1:C:3698:LEU:O	1:C:3701:LEU:HB3	2.17	0.45
1:C:3777:GLU:O	1:C:3781:GLN:HG3	2.16	0.45
1:C:3916:ILE:O	1:C:3920:VAL:HG23	2.17	0.45
1:C:3996:PHE:O	1:C:4000:MET:HG2	2.17	0.45
1:C:4222:VAL:HG11	1:C:4950:VAL:HA	1.99	0.45
1:C:4234:PHE:HZ	1:C:4988:TYR:HB2	1.82	0.45
1:C:533:ASN:OD1	1:C:535:ALA:N	2.41	0.45
1:C:599:VAL:O	1:C:602:VAL:HB	2.17	0.45
1:E:1079:LYS:HZ2	1:E:1107:PRO:HB2	1.80	0.45
1:E:111:HIS:NE2	1:E:113:HIS:HB3	2.32	0.45
1:E:1805:GLU:O	1:E:1808:ARG:HG2	2.17	0.45
1:E:4924:VAL:HA	1:E:4928:LEU:HD12	1.99	0.45
1:G:2756:ASN:OD1	1:G:2806:ARG:NH2	2.49	0.45
1:G:350:HIS:O	1:G:354:GLY:HA2	2.17	0.45
1:G:4039:MET:HG3	1:G:4040:ILE:H	1.81	0.45
1:G:4108:ILE:O	1:G:4111:LEU:HB3	2.16	0.45
1:G:4733:GLY:O	1:G:4737:ILE:HG12	2.17	0.45
1:G:533:ASN:OD1	1:G:535:ALA:N	2.41	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:558:SER:O	1:G:561:LEU:HB3	2.17	0.45
1:A:111:HIS:NE2	1:A:113:HIS:HB3	2.32	0.45
1:A:2244:ARG:NH1	1:A:2285:GLU:OE1	2.50	0.45
1:A:4574:ASN:ND2	1:A:4813:LEU:HD23	2.31	0.45
1:A:4222:VAL:HG11	1:A:4950:VAL:HA	1.99	0.45
1:C:111:HIS:NE2	1:C:113:HIS:HB3	2.32	0.45
1:C:24:CYS:HB3	1:C:200:TRP:CE3	2.52	0.45
1:C:2819:TRP:HH2	1:C:2881:ASN:HB2	1.81	0.45
1:C:4143:VAL:O	1:C:4147:LEU:HG	2.17	0.45
1:C:438:ILE:HG23	1:C:518:ILE:HD11	1.98	0.45
1:C:4648:LEU:O	1:C:4652:LEU:N	2.47	0.45
1:C:558:SER:O	1:C:561:LEU:HB3	2.16	0.45
1:C:768:PHE:HB3	1:C:771:PHE:HE2	1.82	0.45
1:C:941:MET:HA	1:C:1051:TYR:HD1	1.82	0.45
1:E:1128:ARG:N	1:E:1142:PRO:HB3	2.31	0.45
1:E:1713:ASP:OD1	1:E:1714:LEU:N	2.50	0.45
1:E:4666:VAL:O	1:E:4670:ILE:HG12	2.16	0.45
1:E:4915:VAL:HA	1:E:4918:ILE:HD12	1.98	0.45
1:E:564:LEU:O	1:E:568:LEU:HG	2.16	0.45
1:E:662:TRP:CZ3	1:E:814:ALA:HB2	2.52	0.45
1:G:1848:LEU:O	1:G:1851:MET:HG2	2.17	0.45
1:G:2232:CYS:O	1:G:2235:PHE:HB3	2.17	0.45
1:G:4786:ASP:OD2	1:G:4788:SER:HB3	2.16	0.45
1:G:4946:GLN:O	1:G:4950:VAL:HG23	2.17	0.45
1:A:102:LEU:HB2	1:A:105:HIS:NE2	2.31	0.45
1:A:1130:GLN:HB2	1:A:1138:PRO:HA	1.99	0.45
1:A:1951:LEU:O	1:A:1955:VAL:HG23	2.16	0.45
1:A:2232:CYS:O	1:A:2235:PHE:HB3	2.17	0.45
1:A:4648:LEU:O	1:A:4652:LEU:N	2.47	0.45
1:A:4802:GLY:HA2	1:A:4809:PHE:HB2	1.99	0.45
1:C:2173:GLN:HG2	1:C:2174:GLU:N	2.19	0.45
1:C:4666:VAL:O	1:C:4670:ILE:HG12	2.16	0.45
1:C:4664:LEU:O	1:C:4667:PRO:HD2	2.16	0.45
1:C:887:ILE:CG2	1:C:962:SER:HB2	2.47	0.45
2:D:58:GLY:HA3	2:D:76:ILE:CG2	2.47	0.45
1:E:2296:GLU:HA	1:E:2299:VAL:HG22	1.99	0.45
1:E:2350:ALA:O	1:E:2354:VAL:HG23	2.17	0.45
1:E:234:SER:O	1:E:242:ARG:HG2	2.17	0.45
1:E:223:PHE:O	1:E:388:LEU:HD23	2.16	0.45
1:E:4579:PHE:HB3	1:E:4632:LEU:O	2.16	0.45
1:E:445:LEU:CD2	1:E:522:LEU:HD12	2.44	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:107:ILE:HD12	1:G:109:LEU:HD21	1.99	0.45
1:G:111:HIS:NE2	1:G:113:HIS:HB3	2.32	0.45
1:G:1205:GLY:HA3	1:G:1227:ALA:CB	2.43	0.45
1:G:1234:VAL:HG12	1:G:1235:THR:O	2.17	0.45
1:G:1805:GLU:O	1:G:1808:ARG:HG2	2.17	0.45
1:G:2752:ASP:HA	1:G:2755:ILE:HD12	1.99	0.45
1:G:290:TYR:HB2	1:G:307:ALA:CB	2.47	0.45
1:G:3997:ALA:HB1	1:G:4057:MET:HB2	1.99	0.45
1:G:438:ILE:HG23	1:G:518:ILE:HD11	1.98	0.45
1:G:716:PHE:N	1:G:738:LEU:HD13	2.31	0.45
1:G:824:GLU:CD	1:G:825:PRO:HD2	2.36	0.45
1:A:1234:VAL:HG12	1:A:1235:THR:O	2.17	0.45
1:A:1735:ILE:HD11	1:A:2156:LEU:HD11	1.99	0.45
1:A:3936:TYR:HD2	1:A:3937:TYR:CD2	2.35	0.45
1:A:4181:ILE:HD11	1:A:4193:ILE:HD11	1.99	0.45
1:A:16:THR:OG1	1:A:99:ARG:O	2.18	0.45
2:B:58:GLY:HA3	2:B:76:ILE:CG2	2.47	0.45
1:C:788:LYS:HD3	1:C:1629:GLN:OE1	2.17	0.45
1:C:1660:GLN:NE2	1:C:1704:PRO:HB2	2.32	0.45
1:C:234:SER:O	1:C:242:ARG:HG2	2.17	0.45
1:C:275:ARG:HA	1:C:338:GLU:OE1	2.17	0.45
1:C:290:TYR:HB2	1:C:307:ALA:CB	2.47	0.45
1:C:3977:GLN:HE22	1:C:4033:GLY:H	1.63	0.45
1:C:4921:PHE:HA	1:C:4925:ILE:CG1	2.47	0.45
1:E:1074:ILE:HB	1:E:1239:SER:OG	2.17	0.45
1:E:1158:ASN:ND2	1:E:1182:ILE:O	2.50	0.45
1:E:1638:ALA:HA	1:E:1649:ASP:HA	1.98	0.45
1:E:1735:ILE:HD11	1:E:2156:LEU:HD11	1.98	0.45
1:E:2748:PRO:HD2	1:E:2751:LEU:HD12	1.98	0.45
1:E:276:TRP:O	1:E:276:TRP:CD1	2.69	0.45
1:E:275:ARG:HA	1:E:338:GLU:OE1	2.17	0.45
1:E:3936:TYR:HD2	1:E:3937:TYR:CD2	2.35	0.45
1:E:4717:ASP:O	1:E:4720:VAL:HG23	2.17	0.45
1:E:4980:LEU:HA	1:E:4984:ASN:HA	1.98	0.45
1:E:768:PHE:HB3	1:E:771:PHE:HE2	1.82	0.45
1:E:856:VAL:O	1:E:991:ASN:ND2	2.48	0.45
1:G:119:SER:O	1:G:136:GLY:N	2.31	0.45
1:G:1943:LEU:HD11	1:G:2098:VAL:HG22	1.99	0.45
1:G:24:CYS:HB3	1:G:200:TRP:CE3	2.52	0.45
1:G:4648:LEU:O	1:G:4652:LEU:N	2.46	0.45
1:G:4851:TYR:HB3	1:G:4916:PHE:CZ	2.52	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:941:MET:HA	1:G:1051:TYR:HD1	1.82	0.45
1:A:839:LEU:HD22	1:A:1075:PHE:CE1	2.52	0.44
1:A:1598:GLN:O	1:A:1600:LEU:N	2.49	0.44
1:A:1805:GLU:O	1:A:1808:ARG:HG2	2.17	0.44
1:A:2117:VAL:O	1:A:2120:MET:HB2	2.17	0.44
1:A:2250:MET:HA	1:A:2253:HIS:HD2	1.81	0.44
1:A:2756:ASN:OD1	1:A:2806:ARG:NH2	2.51	0.44
1:A:4143:VAL:O	1:A:4147:LEU:HG	2.17	0.44
1:A:478:PHE:CD1	1:A:529:LEU:HD21	2.52	0.44
1:A:4881:THR:HA	1:A:4884:LEU:HG	1.99	0.44
1:A:4991:PHE:O	1:A:4995:LEU:HG	2.17	0.44
1:A:714:TYR:HB2	1:A:757:PHE:CD2	2.52	0.44
1:A:788:LYS:HD3	1:A:1629:GLN:OE1	2.17	0.44
1:C:1087:ARG:HH11	1:C:1223:PHE:HE1	1.65	0.44
1:C:1074:ILE:HB	1:C:1239:SER:OG	2.18	0.44
1:C:2248:ARG:HA	1:C:2286:LEU:HD22	1.98	0.44
1:C:2788:HIS:CG	1:C:2789:PRO:HD2	2.52	0.44
1:C:350:HIS:O	1:C:354:GLY:HA2	2.17	0.44
1:A:4892:ARG:HH22	1:C:4920:PHE:HD2	1.63	0.44
1:C:4821:LYS:HD3	1:C:4947:GLN:HE22	1.80	0.44
1:C:4997:ASN:OD1	1:C:4998:LYS:N	2.50	0.44
1:C:530:ILE:HG12	1:C:540:PHE:HE2	1.82	0.44
1:C:662:TRP:CZ3	1:C:814:ALA:HB2	2.52	0.44
1:C:73:LEU:O	1:C:105:HIS:HB3	2.17	0.44
1:C:748:LEU:HD21	1:C:777:PHE:HD2	1.82	0.44
2:D:11:ASP:OD1	2:D:67:SER:HB2	2.18	0.44
2:D:22:CYS:O	2:D:47:LYS:HA	2.17	0.44
1:E:107:ILE:HD12	1:E:109:LEU:HD21	1.99	0.44
1:E:1090:PHE:CE1	1:E:1151:CYS:HB3	2.51	0.44
1:E:4039:MET:HG3	1:E:4040:ILE:N	2.32	0.44
1:C:4581:LYS:HE2	1:E:4877:ASP:O	2.17	0.44
1:E:748:LEU:HD13	1:E:755:ILE:CG1	2.47	0.44
2:F:74:LEU:O	2:F:98:VAL:HA	2.17	0.44
1:G:1128:ARG:N	1:G:1142:PRO:HB3	2.31	0.44
1:G:1143:TRP:HE3	1:G:1144:GLN:O	2.01	0.44
1:G:839:LEU:HD22	1:G:1075:PHE:CE1	2.52	0.44
2:H:11:ASP:OD1	2:H:67:SER:HB2	2.17	0.44
2:H:74:LEU:HD23	2:H:76:ILE:HD11	1.99	0.44
1:A:103:TYR:CE2	1:A:157:ARG:HB3	2.52	0.44
1:A:1141:ARG:NH1	1:A:1169:LEU:HD11	2.26	0.44
1:A:2059:LEU:CD2	1:A:2062:ARG:HH12	2.20	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2788:HIS:CG	1:A:2789:PRO:HD2	2.52	0.44
1:A:3906:GLN:HG2	1:A:3909:ASN:HB2	2.00	0.44
1:A:599:VAL:O	1:A:602:VAL:HB	2.17	0.44
1:A:941:MET:HA	1:A:1051:TYR:HD1	1.83	0.44
1:C:2116:LEU:O	1:C:2120:MET:HG3	2.17	0.44
1:C:2250:MET:HA	1:C:2253:HIS:HD2	1.81	0.44
1:C:292:ALA:HB3	1:C:302:VAL:HG11	1.99	0.44
1:C:3835:LEU:HD22	1:C:3884:LEU:HD11	2.00	0.44
1:A:4892:ARG:HH12	1:C:4898:GLY:H	1.64	0.44
1:C:4991:PHE:O	1:C:4995:LEU:HG	2.17	0.44
1:E:2244:ARG:NH1	1:E:2285:GLU:OE1	2.50	0.44
1:E:2248:ARG:HA	1:E:2286:LEU:HD22	1.98	0.44
1:E:233:ILE:O	1:E:257:ARG:HD2	2.17	0.44
1:E:3811:GLU:O	1:E:3814:GLN:HG3	2.18	0.44
1:E:4056:GLU:O	1:E:4060:LYS:HG2	2.18	0.44
2:F:22:CYS:O	2:F:47:LYS:HA	2.18	0.44
1:G:1158:ASN:ND2	1:G:1182:ILE:O	2.50	0.44
1:G:276:TRP:O	1:G:276:TRP:CD1	2.70	0.44
1:G:4686:LEU:HD13	1:G:4692:PRO:HD3	2.00	0.44
1:G:639:ASN:ND2	1:G:676:THR:OG1	2.46	0.44
1:A:1729:SER:HB2	1:A:2163:ARG:HH11	1.81	0.44
1:A:274:LEU:HA	1:A:278:GLN:NE2	2.32	0.44
1:A:35:LEU:O	1:A:35:LEU:HD12	2.17	0.44
1:A:3996:PHE:O	1:A:4000:MET:HG2	2.17	0.44
1:A:4645:CYS:O	1:A:4649:LEU:N	2.45	0.44
1:A:4887:MET:HA	1:A:4891:VAL:HG23	1.99	0.44
1:A:4924:VAL:HA	1:A:4928:LEU:HD12	1.99	0.44
1:A:561:LEU:CD2	1:A:598:LYS:HB3	2.48	0.44
1:A:887:ILE:CG2	1:A:962:SER:HB2	2.47	0.44
1:C:107:ILE:HD12	1:C:109:LEU:HD21	1.99	0.44
1:C:1951:LEU:O	1:C:1955:VAL:HG23	2.16	0.44
1:C:1943:LEU:HD11	1:C:2098:VAL:HG22	1.99	0.44
1:C:2244:ARG:NH1	1:C:2285:GLU:OE1	2.50	0.44
1:C:35:LEU:O	1:C:35:LEU:HD12	2.18	0.44
1:C:3811:GLU:O	1:C:3814:GLN:HG3	2.18	0.44
1:C:561:LEU:CD2	1:C:598:LYS:HB3	2.48	0.44
1:E:2271:THR:HA	1:E:2272:PRO:HD2	1.85	0.44
1:E:2272:PRO:O	1:E:2275:VAL:HB	2.17	0.44
1:E:2420:HIS:ND1	1:E:2423:MET:SD	2.76	0.44
1:E:2556:LEU:HD23	1:E:2559:LEU:CD1	2.48	0.44
1:E:2756:ASN:OD1	1:E:2806:ARG:NH2	2.51	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:290:TYR:HB2	1:E:307:ALA:CB	2.48	0.44
1:E:3996:PHE:O	1:E:4000:MET:HG2	2.17	0.44
1:G:1090:PHE:CE1	1:G:1151:CYS:HB3	2.51	0.44
1:G:121:LEU:O	1:G:133:PHE:HB3	2.18	0.44
1:G:1294:PRO:CD	1:G:1584:ARG:HH11	2.19	0.44
1:G:203:ASN:OD1	1:G:204:PRO:HD2	2.18	0.44
1:G:2558:VAL:O	1:G:2561:LEU:HG	2.16	0.44
1:G:2825:LYS:HA	1:G:2935:TYR:CD1	2.52	0.44
1:A:161:GLU:OE1	1:G:3984:ARG:NH1	2.51	0.44
1:G:4041:ALA:O	1:G:4044:MET:HB3	2.18	0.44
1:G:4251:ILE:HG22	1:G:4557:ARG:NH1	2.32	0.44
1:G:674:PHE:HD1	2:H:40:ARG:NH1	2.09	0.44
1:A:1848:LEU:O	1:A:1851:MET:HG2	2.18	0.44
1:A:4856:PHE:CZ	1:G:4581:LYS:HD2	2.47	0.44
1:A:558:SER:O	1:A:561:LEU:HB3	2.17	0.44
1:A:593:HIS:HA	1:A:1597:VAL:HB	1.99	0.44
1:C:1439:VAL:O	1:C:1513:ASP:N	2.49	0.44
1:C:233:ILE:O	1:C:257:ARG:HD2	2.17	0.44
1:C:4842:GLY:O	1:C:4846:VAL:HG23	2.18	0.44
1:C:4881:THR:HA	1:C:4884:LEU:HG	2.00	0.44
1:E:1848:LEU:O	1:E:1851:MET:HG2	2.18	0.44
1:E:3980:LEU:HA	1:E:3983:SER:OG	2.17	0.44
1:E:4881:THR:HA	1:E:4884:LEU:HG	1.98	0.44
1:E:533:ASN:OD1	1:E:535:ALA:N	2.42	0.44
1:E:567:VAL:O	1:E:571:SER:OG	2.27	0.44
1:E:599:VAL:O	1:E:602:VAL:HB	2.17	0.44
1:E:685:GLY:O	1:E:780:VAL:HB	2.17	0.44
1:G:1834:VAL:HG13	1:G:1835:GLU:N	2.32	0.44
1:G:2500:ALA:HA	1:G:2556:LEU:HD21	1.99	0.44
1:G:274:LEU:HA	1:G:278:GLN:NE2	2.32	0.44
1:G:292:ALA:HB3	1:G:302:VAL:HG11	1.99	0.44
1:G:564:LEU:O	1:G:568:LEU:HG	2.16	0.44
1:G:599:VAL:O	1:G:602:VAL:HB	2.17	0.44
1:A:4888:TYR:OH	1:C:4898:GLY:CA	2.65	0.44
1:A:530:ILE:HG12	1:A:540:PHE:HE2	1.83	0.44
1:A:931:THR:O	1:A:935:LEU:N	2.44	0.44
2:B:11:ASP:OD1	2:B:67:SER:HB2	2.18	0.44
1:C:173:SER:HG	1:C:175:SER:HG	1.63	0.44
1:C:1930:LYS:HG2	1:C:1931:LEU:N	2.33	0.44
1:C:2272:PRO:O	1:C:2275:VAL:HB	2.18	0.44
1:C:3839:CYS:SG	1:C:3922:TYR:CE1	3.11	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:3936:TYR:HD2	1:C:3937:TYR:CD2	2.35	0.44
1:C:4851:TYR:HB3	1:C:4916:PHE:CZ	2.53	0.44
1:C:714:TYR:HB2	1:C:757:PHE:CD2	2.53	0.44
1:E:4844:LEU:HD11	1:E:4891:VAL:HG13	1.99	0.44
1:E:4931:ILE:O	1:E:4935:LEU:HB2	2.18	0.44
1:E:73:LEU:O	1:E:105:HIS:HB3	2.17	0.44
1:E:788:LYS:HD3	1:E:1629:GLN:OE1	2.17	0.44
2:F:7:ILE:HD12	2:F:71:ARG:HG2	2.00	0.44
1:G:35:LEU:O	1:G:35:LEU:HD12	2.18	0.44
1:G:4218:ILE:HG22	1:G:4950:VAL:HG13	2.00	0.44
1:G:685:GLY:O	1:G:780:VAL:HB	2.18	0.44
1:A:1158:ASN:ND2	1:A:1182:ILE:O	2.50	0.44
1:A:275:ARG:HA	1:A:338:GLU:OE1	2.17	0.44
1:A:3811:GLU:O	1:A:3814:GLN:HG3	2.18	0.44
1:A:3969:ILE:CG1	1:A:3980:LEU:HD11	2.46	0.44
1:A:685:GLY:O	1:A:780:VAL:HB	2.17	0.44
1:A:662:TRP:CZ3	1:A:814:ALA:HB2	2.52	0.44
1:A:892:THR:N	1:A:902:ARG:HA	2.30	0.44
1:C:2929:PHE:O	1:C:2933:ASN:ND2	2.47	0.44
1:C:4056:GLU:O	1:C:4060:LYS:HG2	2.17	0.44
1:C:4181:ILE:HD11	1:C:4193:ILE:HD11	2.00	0.44
2:D:7:ILE:HD12	2:D:71:ARG:HG2	2.00	0.44
1:E:1598:GLN:O	1:E:1600:LEU:N	2.49	0.44
1:C:4826:ILE:HG13	1:E:4839:MET:HE1	1.99	0.44
1:G:1292:SER:O	1:G:1294:PRO:HD3	2.18	0.44
1:G:234:SER:O	1:G:242:ARG:HG2	2.16	0.44
1:G:372:LEU:O	1:G:374:LYS:N	2.51	0.44
1:G:4816:ILE:HG13	1:G:4823:LEU:HD22	2.00	0.44
1:G:4921:PHE:HA	1:G:4925:ILE:HG12	2.00	0.44
1:G:892:THR:N	1:G:902:ARG:HA	2.30	0.44
1:A:2296:GLU:HA	1:A:2299:VAL:HG22	1.99	0.44
1:A:235:ALA:HB2	1:A:257:ARG:HD3	1.99	0.44
1:A:2819:TRP:HH2	1:A:2881:ASN:HB2	1.82	0.44
1:A:314:PHE:HB3	1:A:348:VAL:CG1	2.48	0.44
1:A:4056:GLU:O	1:A:4060:LYS:HG2	2.17	0.44
1:A:4582:VAL:HB	1:A:4628:VAL:HG12	2.00	0.44
1:C:1158:ASN:ND2	1:C:1182:ILE:O	2.50	0.44
1:C:1201:HIS:CD2	1:C:1202:LEU:H	2.35	0.44
1:C:1638:ALA:HA	1:C:1649:ASP:HA	1.99	0.44
1:C:1848:LEU:O	1:C:1851:MET:HG2	2.18	0.44
1:C:2142:TYR:HE1	1:C:2196:ASN:HD22	1.65	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2431:ASP:HB2	1:C:2501:SER:HA	2.00	0.44
1:C:758:ARG:HA	1:C:763:PRO:HA	1.99	0.44
1:E:1292:SER:O	1:E:1294:PRO:HD3	2.18	0.44
1:E:1660:GLN:NE2	1:E:1704:PRO:HB2	2.32	0.44
1:E:2232:CYS:O	1:E:2235:PHE:HB3	2.17	0.44
1:E:2788:HIS:CG	1:E:2789:PRO:HD2	2.53	0.44
1:E:35:LEU:O	1:E:35:LEU:HD12	2.18	0.44
1:E:438:ILE:HG23	1:E:518:ILE:HD11	1.98	0.44
1:E:4910:GLU:HA	1:E:4913:ARG:HG2	1.99	0.44
1:E:4234:PHE:HZ	1:E:4988:TYR:HB2	1.82	0.44
1:E:50:GLU:CD	1:E:51:PRO:HD2	2.38	0.44
1:E:941:MET:HA	1:E:1051:TYR:HD1	1.83	0.44
1:G:593:HIS:HA	1:G:1597:VAL:HB	1.99	0.44
1:G:2248:ARG:HA	1:G:2286:LEU:HD22	1.99	0.44
1:G:275:ARG:HA	1:G:338:GLU:OE1	2.18	0.44
1:G:2902:HIS:H	1:G:2905:LEU:HD12	1.83	0.44
1:G:50:GLU:CD	1:G:51:PRO:HD2	2.38	0.44
1:G:887:ILE:CG2	1:G:962:SER:HB2	2.47	0.44
1:A:1143:TRP:HE3	1:A:1144:GLN:O	2.01	0.44
1:A:1154:ASP:HB3	1:A:1157:GLU:HB3	1.98	0.44
1:A:119:SER:HB2	1:A:145:ALA:HB1	2.00	0.44
1:A:121:LEU:O	1:A:133:PHE:HB3	2.18	0.44
1:A:104:GLY:HA2	1:A:150:MET:O	2.18	0.44
1:A:1834:VAL:HG13	1:A:1835:GLU:N	2.32	0.44
1:A:2066:LEU:O	1:A:2069:THR:OG1	2.31	0.44
1:A:233:ILE:O	1:A:257:ARG:HD2	2.17	0.44
1:A:4581:LYS:HZ3	1:C:4877:ASP:HA	1.83	0.44
1:A:4715:TYR:CG	1:A:4715:TYR:O	2.71	0.44
1:A:4791:TYR:OH	1:A:4815:ASP:HA	2.18	0.44
1:A:4563:ARG:NH1	1:A:4815:ASP:OD1	2.47	0.44
1:A:1687:SER:OG	2:B:36:PHE:HB2	2.18	0.44
1:C:1234:VAL:HG12	1:C:1235:THR:O	2.18	0.44
1:C:14:LEU:HD12	1:C:163:VAL:HG12	1.99	0.44
1:A:2358:ILE:CG2	1:C:195:PHE:HE2	2.30	0.44
1:C:2232:CYS:O	1:C:2235:PHE:HB3	2.17	0.44
1:C:4931:ILE:O	1:C:4935:LEU:HB2	2.18	0.44
1:C:4984:ASN:O	1:C:4985:LEU:HB2	2.18	0.44
1:C:672:VAL:O	1:C:680:THR:OG1	2.30	0.44
1:C:833:GLY:HA3	1:C:838:HIS:CD2	2.52	0.44
2:D:74:LEU:O	2:D:98:VAL:HA	2.18	0.44
1:E:1234:VAL:HG12	1:E:1235:THR:O	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1858:ASP:O	1:E:1862:ILE:HG12	2.18	0.44
1:E:4791:TYR:OH	1:E:4815:ASP:HA	2.18	0.44
1:E:663:TYR:OH	1:E:802:PHE:O	2.30	0.44
2:F:67:SER:N	2:F:70:GLN:OE1	2.37	0.44
1:G:1082:THR:HG22	1:G:1189:LEU:HG	1.98	0.44
1:G:1687:SER:HG	2:H:36:PHE:HB2	1.83	0.44
1:G:2114:PRO:O	1:G:3704:HIS:NE2	2.39	0.44
1:A:1074:ILE:HB	1:A:1239:SER:OG	2.18	0.44
1:A:3496:LYS:O	1:A:3513:THR:N	2.51	0.44
1:A:3838:THR:O	1:A:3839:CYS:SG	2.76	0.44
1:A:4910:GLU:HA	1:A:4913:ARG:HG2	2.00	0.44
1:A:4997:ASN:OD1	1:A:4998:LYS:N	2.50	0.44
1:A:445:LEU:HD23	1:A:521:LEU:HG	2.00	0.44
1:A:862:VAL:HA	1:A:930:LYS:NZ	2.33	0.44
2:B:22:CYS:O	2:B:47:LYS:HA	2.17	0.44
2:B:67:SER:N	2:B:70:GLN:OE1	2.37	0.44
1:C:635:THR:OG1	1:C:1638:ALA:O	2.31	0.44
1:C:1655:GLU:N	1:C:1655:GLU:OE1	2.50	0.44
1:C:1735:ILE:HD11	1:C:2156:LEU:HD11	1.99	0.44
1:C:2197:LEU:O	1:C:2201:LEU:HG	2.18	0.44
1:C:2756:ASN:OD1	1:C:2806:ARG:NH2	2.51	0.44
1:C:411:TYR:O	1:C:415:ILE:HG13	2.18	0.44
1:C:4582:VAL:HB	1:C:4628:VAL:HG12	2.00	0.44
1:C:4929:LEU:O	1:C:4933:GLN:HG3	2.17	0.44
1:E:1205:GLY:HA3	1:E:1227:ALA:CB	2.43	0.44
1:E:2752:ASP:HA	1:E:2755:ILE:HD12	2.00	0.44
1:E:4251:ILE:HG12	1:E:4553:ASN:HB3	2.00	0.44
1:E:569:ILE:HG22	1:E:570:GLU:OE2	2.18	0.44
2:F:11:ASP:OD1	2:F:67:SER:HB2	2.17	0.44
1:G:71:GLN:O	1:G:107:ILE:HA	2.18	0.44
1:G:1074:ILE:HB	1:G:1239:SER:OG	2.17	0.44
1:G:788:LYS:HD3	1:G:1629:GLN:OE1	2.17	0.44
1:G:2244:ARG:NH1	1:G:2285:GLU:OE1	2.50	0.44
1:G:4676:GLU:O	1:G:4680:LYS:HG3	2.17	0.44
1:G:73:LEU:O	1:G:105:HIS:HB3	2.17	0.44
1:G:662:TRP:CZ3	1:G:814:ALA:HB2	2.52	0.44
1:A:1655:GLU:OE1	1:A:1655:GLU:N	2.51	0.43
1:A:2460:LEU:HD12	1:C:178:ARG:CZ	2.48	0.43
1:A:292:ALA:HB3	1:A:302:VAL:HG11	1.99	0.43
1:A:35:LEU:HD13	1:A:49:LEU:HB3	2.00	0.43
1:A:4251:ILE:HG12	1:A:4553:ASN:HB3	1.99	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1783:VAL:HG11	2:B:55:VAL:HG12	1.99	0.43
1:C:2296:GLU:HA	1:C:2299:VAL:HG22	1.99	0.43
1:C:2924:GLN:O	1:C:2928:LYS:HB2	2.18	0.43
1:C:3916:ILE:O	1:C:3919:THR:HG22	2.18	0.43
1:C:4251:ILE:HG12	1:C:4553:ASN:HB3	2.00	0.43
1:C:4924:VAL:HA	1:C:4928:LEU:HD12	2.00	0.43
1:E:1201:HIS:CD2	1:E:1202:LEU:H	2.35	0.43
1:E:1586:ASN:O	1:E:1588:ALA:N	2.49	0.43
1:E:1655:GLU:OE1	1:E:1655:GLU:N	2.51	0.43
1:E:1666:THR:O	1:E:1669:LEU:HB3	2.18	0.43
1:E:1834:VAL:HG13	1:E:1835:GLU:N	2.31	0.43
1:E:21:VAL:HG12	1:E:65:CYS:O	2.18	0.43
1:E:3838:THR:O	1:E:3839:CYS:SG	2.76	0.43
1:E:4842:GLY:O	1:E:4846:VAL:HG23	2.18	0.43
1:G:1655:GLU:OE1	1:G:1655:GLU:N	2.51	0.43
1:G:1808:ARG:HB2	1:G:1854:PHE:HE1	1.83	0.43
1:G:21:VAL:HG23	1:G:203:ASN:HB3	1.99	0.43
1:G:2137:ALA:HA	1:G:2140:ARG:HH11	1.82	0.43
1:G:4715:TYR:CG	1:G:4715:TYR:O	2.70	0.43
1:G:748:LEU:HD13	1:G:755:ILE:CG1	2.47	0.43
1:A:1858:ASP:O	1:A:1862:ILE:HG12	2.17	0.43
1:A:222:LEU:HB3	1:A:388:LEU:HD22	2.00	0.43
1:A:3839:CYS:SG	1:A:3922:TYR:CE1	3.11	0.43
1:A:4251:ILE:HG22	1:A:4557:ARG:NH1	2.33	0.43
1:A:438:ILE:HG23	1:A:518:ILE:HD11	1.99	0.43
1:A:768:PHE:HB3	1:A:771:PHE:HE2	1.82	0.43
1:A:3501:ASP:HA	1:C:1224:GLU:OE2	2.18	0.43
1:C:1224:GLU:HA	1:C:1225:PRO:HD3	1.63	0.43
1:C:104:GLY:HA2	1:C:150:MET:O	2.19	0.43
1:C:2137:ALA:HA	1:C:2140:ARG:HH11	1.83	0.43
1:C:3970:GLN:HE21	1:C:5004:THR:CA	2.30	0.43
1:C:4214:LYS:HE2	1:C:4985:LEU:HD23	1.99	0.43
1:C:4888:TYR:OH	1:E:4898:GLY:O	2.36	0.43
1:E:1082:THR:HG22	1:E:1189:LEU:HG	1.98	0.43
1:E:2142:TYR:HE1	1:E:2196:ASN:HD22	1.65	0.43
1:E:21:VAL:HG23	1:E:203:ASN:HB3	1.99	0.43
1:E:2338:ALA:O	1:E:2349:ASN:ND2	2.51	0.43
1:E:4735:GLU:O	1:E:4739:GLU:N	2.50	0.43
1:E:706:GLY:H	1:E:711:LEU:HD22	1.83	0.43
1:E:748:LEU:HD21	1:E:777:PHE:HD2	1.82	0.43
1:E:714:TYR:HB2	1:E:757:PHE:CD2	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:984:LEU:O	1:E:988:LEU:HG	2.18	0.43
1:G:1858:ASP:O	1:G:1862:ILE:HG12	2.17	0.43
1:G:314:PHE:HB3	1:G:348:VAL:CG1	2.49	0.43
1:G:3786:CYS:SG	1:G:3794:VAL:HG22	2.58	0.43
1:G:3840:SER:OG	1:G:3878:ASP:OD1	2.26	0.43
1:G:454:PRO:HA	1:G:455:PRO:HD3	1.87	0.43
1:G:530:ILE:HG12	1:G:540:PHE:HE2	1.83	0.43
1:G:649:PHE:HB3	1:G:776:LEU:HB3	1.98	0.43
1:A:1201:HIS:CD2	1:A:1202:LEU:H	2.35	0.43
1:A:21:VAL:HG23	1:A:203:ASN:HB3	1.99	0.43
1:A:2197:LEU:O	1:A:2201:LEU:HG	2.19	0.43
1:A:2556:LEU:HD23	1:A:2559:LEU:CD1	2.47	0.43
1:A:290:TYR:HB2	1:A:307:ALA:CB	2.47	0.43
1:A:3835:LEU:HD22	1:A:3884:LEU:HD11	2.01	0.43
1:C:1292:SER:O	1:C:1294:PRO:HD3	2.17	0.43
1:C:203:ASN:OD1	1:C:204:PRO:HD2	2.18	0.43
1:C:276:TRP:CZ3	1:C:338:GLU:HB3	2.54	0.43
1:C:3496:LYS:O	1:C:3513:THR:N	2.51	0.43
1:C:3716:LEU:N	1:C:3789:GLU:OE2	2.51	0.43
1:C:3980:LEU:HA	1:C:3983:SER:OG	2.18	0.43
1:C:4578:LEU:HG	1:E:4880:MET:HB2	1.99	0.43
1:C:4834:GLY:O	1:C:4837:LEU:HB3	2.18	0.43
1:C:748:LEU:HD13	1:C:755:ILE:CG1	2.47	0.43
2:D:38:SER:O	2:D:41:ASP:HB2	2.18	0.43
2:D:73:LYS:HA	2:D:99:PHE:O	2.19	0.43
1:E:121:LEU:O	1:E:133:PHE:HB3	2.18	0.43
1:E:2116:LEU:O	1:E:2120:MET:HG3	2.17	0.43
1:E:2198:MET:HE3	1:E:2203:MET:SD	2.58	0.43
1:E:3496:LYS:O	1:E:3513:THR:N	2.52	0.43
1:C:4826:ILE:HG12	1:E:4839:MET:CE	2.47	0.43
1:E:530:ILE:HG12	1:E:540:PHE:HE2	1.83	0.43
1:E:758:ARG:HA	1:E:763:PRO:HA	2.00	0.43
1:A:1224:GLU:OE2	1:G:3501:ASP:CB	2.67	0.43
1:G:3914:ASN:OD1	1:G:3916:ILE:HB	2.18	0.43
1:G:4801:LEU:O	1:G:4805:ASN:N	2.45	0.43
1:G:4913:ARG:O	1:G:4917:ASP:N	2.46	0.43
1:G:69:LEU:HD13	1:G:101:LEU:HD11	2.00	0.43
1:A:1087:ARG:HH11	1:A:1223:PHE:HE1	1.65	0.43
1:A:2116:LEU:O	1:A:2120:MET:HG3	2.17	0.43
1:A:234:SER:O	1:A:242:ARG:HG2	2.19	0.43
1:A:3980:LEU:HA	1:A:3983:SER:OG	2.17	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:4951:LYS:O	1:A:4955:GLU:HG2	2.18	0.43
1:A:4984:ASN:O	1:A:4985:LEU:HB2	2.18	0.43
2:B:7:ILE:HD12	2:B:71:ARG:HG2	2.00	0.43
1:C:2173:GLN:CG	1:C:2174:GLU:H	2.21	0.43
1:C:2793:PRO:O	1:C:2796:THR:OG1	2.29	0.43
1:C:3906:GLN:HG2	1:C:3909:ASN:HB2	2.00	0.43
1:C:758:ARG:HH12	1:C:763:PRO:HD3	1.82	0.43
1:E:1143:TRP:HE3	1:E:1144:GLN:O	2.01	0.43
1:E:788:LYS:HB2	1:E:1629:GLN:HG3	2.00	0.43
1:E:2142:TYR:CE2	1:E:2197:LEU:HB2	2.54	0.43
1:E:314:PHE:HB3	1:E:348:VAL:CG1	2.48	0.43
1:E:3839:CYS:SG	1:E:3922:TYR:CE1	3.11	0.43
1:E:3969:ILE:CG1	1:E:3980:LEU:HD11	2.46	0.43
1:E:4984:ASN:O	1:E:4985:LEU:HB2	2.18	0.43
1:E:4991:PHE:O	1:E:4995:LEU:HG	2.18	0.43
2:F:73:LYS:HA	2:F:99:PHE:O	2.19	0.43
1:G:1666:THR:O	1:G:1669:LEU:HB3	2.19	0.43
1:G:1768:THR:O	1:G:1769:THR:OG1	2.23	0.43
1:G:3969:ILE:CD1	1:G:3980:LEU:HD11	2.48	0.43
1:G:411:TYR:O	1:G:415:ILE:HG13	2.18	0.43
1:G:4661:TYR:HA	1:G:4664:LEU:HB3	2.00	0.43
1:G:4887:MET:HA	1:G:4891:VAL:CG2	2.48	0.43
1:A:1074:ILE:HG22	1:A:1075:PHE:N	2.34	0.43
1:A:2745:VAL:HB	1:A:2814:LYS:HB3	1.99	0.43
1:A:2902:HIS:H	1:A:2905:LEU:HD12	1.83	0.43
1:A:411:TYR:O	1:A:415:ILE:HG13	2.18	0.43
1:A:569:ILE:HG22	1:A:570:GLU:OE2	2.18	0.43
1:A:660:GLY:HA2	1:A:750:LEU:HD22	2.00	0.43
1:A:748:LEU:HD13	1:A:755:ILE:CG1	2.47	0.43
1:A:858:THR:HG21	1:A:992:GLY:HA2	2.01	0.43
1:C:121:LEU:O	1:C:133:PHE:HB3	2.18	0.43
1:C:1152:MET:SD	1:C:1223:PHE:HD2	2.42	0.43
1:C:1078:GLU:HB2	1:C:1235:THR:OG1	2.19	0.43
1:C:4202:ARG:O	1:C:4206:GLU:HG2	2.19	0.43
1:C:4580:TYR:HB2	1:C:4631:PHE:CD1	2.53	0.43
1:C:4715:TYR:CG	1:C:4715:TYR:O	2.71	0.43
1:C:50:GLU:CD	1:C:51:PRO:HD2	2.38	0.43
1:C:706:GLY:H	1:C:711:LEU:HD22	1.83	0.43
1:E:1040:CYS:O	1:E:1044:ARG:N	2.52	0.43
1:E:71:GLN:O	1:E:107:ILE:HA	2.18	0.43
1:E:411:TYR:O	1:E:415:ILE:HG13	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:758:ARG:HH12	1:E:763:PRO:HD3	1.82	0.43
1:G:103:TYR:CE2	1:G:157:ARG:HB3	2.54	0.43
1:G:1091:GLU:HB2	1:G:1203:ASN:O	2.18	0.43
1:G:1201:HIS:CD2	1:G:1202:LEU:H	2.35	0.43
1:G:1685:LEU:HA	1:G:1685:LEU:HD23	1.75	0.43
1:G:178:ARG:HB2	1:G:193:ALA:HB1	2.01	0.43
1:G:2155:LEU:HD13	1:G:2188:ASN:OD1	2.19	0.43
1:G:2272:PRO:O	1:G:2275:VAL:HB	2.18	0.43
1:G:2296:GLU:HA	1:G:2299:VAL:HG22	1.99	0.43
1:G:317:ARG:HG3	1:G:356:TRP:CH2	2.53	0.43
1:G:35:LEU:HD13	1:G:49:LEU:HB3	2.00	0.43
1:G:3962:PHE:HZ	1:G:3992:PHE:CE2	2.36	0.43
1:G:4552:LEU:O	1:G:4555:LEU:HB3	2.18	0.43
1:G:21:VAL:HG12	1:G:65:CYS:O	2.18	0.43
1:G:768:PHE:HB3	1:G:771:PHE:HE2	1.82	0.43
1:G:864:PRO:HG2	1:G:867:LEU:HD12	2.01	0.43
1:A:1040:CYS:O	1:A:1044:ARG:N	2.52	0.43
1:A:1704:PRO:HG2	1:A:1707:LEU:HD12	2.01	0.43
1:A:2142:TYR:CE2	1:A:2197:LEU:HB2	2.54	0.43
1:A:2752:ASP:HA	1:A:2755:ILE:HD12	2.00	0.43
1:A:2929:PHE:O	1:A:2933:ASN:ND2	2.47	0.43
1:A:3716:LEU:N	1:A:3789:GLU:OE2	2.51	0.43
1:A:4010:ILE:HA	1:A:4013:LEU:HB3	2.01	0.43
1:A:4581:LYS:HD2	1:C:4856:PHE:CZ	2.50	0.43
1:A:4813:LEU:HD12	1:A:4814:LEU:N	2.34	0.43
1:A:706:GLY:H	1:A:711:LEU:HD22	1.83	0.43
1:C:1143:TRP:HE3	1:C:1144:GLN:O	2.01	0.43
1:C:119:SER:HB2	1:C:145:ALA:HB1	2.01	0.43
1:C:1666:THR:O	1:C:1669:LEU:HB3	2.19	0.43
1:C:569:ILE:HG22	1:C:570:GLU:OE2	2.18	0.43
1:E:1130:GLN:HB2	1:E:1138:PRO:HA	2.00	0.43
1:E:1105:ALA:HB3	1:E:1191:VAL:HG21	2.00	0.43
1:E:2155:LEU:HD13	1:E:2188:ASN:OD1	2.18	0.43
1:E:2902:HIS:H	1:E:2905:LEU:HD12	1.83	0.43
1:E:276:TRP:CZ3	1:E:338:GLU:HB3	2.54	0.43
1:E:372:LEU:O	1:E:374:LYS:N	2.50	0.43
1:E:3835:LEU:HD22	1:E:3884:LEU:HD11	2.00	0.43
1:E:4143:VAL:O	1:E:4147:LEU:HG	2.17	0.43
1:E:4251:ILE:HG22	1:E:4557:ARG:NH1	2.33	0.43
1:E:4997:ASN:OD1	1:E:4998:LYS:N	2.51	0.43
1:E:572:PRO:O	1:E:575:LEU:HB2	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:623:GLU:OE1	2:F:88:PRO:HA	2.18	0.43
1:G:1297:PHE:HB2	1:G:1545:ASN:HA	2.01	0.43
1:G:1930:LYS:HG2	1:G:1931:LEU:N	2.33	0.43
1:G:4013:LEU:O	1:G:4017:LEU:HG	2.18	0.43
1:G:4036:VAL:HG12	1:G:4037:ASN:N	2.34	0.43
1:A:2123:LEU:HD23	1:A:2123:LEU:HA	1.77	0.43
1:A:2137:ALA:HA	1:A:2140:ARG:HH11	1.83	0.43
1:A:2338:ALA:O	1:A:2349:ASN:ND2	2.51	0.43
1:A:287:THR:O	1:A:405:HIS:CE1	2.72	0.43
1:A:548:VAL:O	1:A:551:LEU:HG	2.18	0.43
1:A:748:LEU:HD21	1:A:777:PHE:HD2	1.83	0.43
1:C:633:LEU:HD22	1:C:1663:HIS:HD2	1.84	0.43
1:C:2142:TYR:CE2	1:C:2197:LEU:HB2	2.53	0.43
1:C:3758:MET:HG3	1:C:3759:GLU:N	2.34	0.43
1:C:3756:LYS:O	1:C:3760:LYS:HB2	2.18	0.43
1:E:104:GLY:HA2	1:E:150:MET:O	2.18	0.43
1:E:1074:ILE:HG22	1:E:1075:PHE:N	2.34	0.43
1:E:1091:GLU:HB2	1:E:1203:ASN:O	2.18	0.43
1:E:1514:LEU:HD12	1:E:1514:LEU:N	2.34	0.43
1:E:1930:LYS:HG2	1:E:1931:LEU:N	2.34	0.43
1:E:3716:LEU:N	1:E:3789:GLU:OE2	2.51	0.43
1:E:3906:GLN:HG2	1:E:3909:ASN:HB2	2.01	0.43
1:E:4202:ARG:O	1:E:4206:GLU:HG2	2.19	0.43
1:E:4715:TYR:CG	1:E:4715:TYR:O	2.71	0.43
2:F:38:SER:O	2:F:41:ASP:HB2	2.18	0.43
1:G:1040:CYS:O	1:G:1044:ARG:N	2.51	0.43
1:G:2142:TYR:HE1	1:G:2196:ASN:ND2	2.17	0.43
1:G:2855:TYR:CD2	1:G:2857:PRO:HD3	2.54	0.43
1:G:4988:TYR:O	1:G:4991:PHE:HB3	2.17	0.43
1:G:569:ILE:HG22	1:G:570:GLU:OE2	2.19	0.43
1:G:561:LEU:CD2	1:G:598:LYS:HB3	2.48	0.43
1:G:714:TYR:HB2	1:G:757:PHE:CD2	2.53	0.43
1:G:748:LEU:HD21	1:G:777:PHE:HD2	1.82	0.43
1:A:1088:TRP:CZ3	1:A:1226:PHE:HD1	2.36	0.43
1:A:1691:GLN:O	1:A:1695:LEU:HG	2.19	0.43
1:A:4833:ASN:OD1	1:A:4836:GLN:HG2	2.19	0.43
1:A:80:GLU:OE1	1:G:3938:SER:OG	2.35	0.43
1:C:593:HIS:HA	1:C:1597:VAL:HB	1.99	0.43
1:C:1808:ARG:HB2	1:C:1854:PHE:HE1	1.82	0.43
1:C:21:VAL:HG12	1:C:65:CYS:O	2.18	0.43
1:C:222:LEU:HB3	1:C:388:LEU:HD22	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:4251:ILE:HG22	1:C:4557:ARG:NH1	2.33	0.43
1:C:4910:GLU:HA	1:C:4913:ARG:HG2	2.00	0.43
1:C:71:GLN:O	1:C:107:ILE:HA	2.18	0.43
1:C:984:LEU:O	1:C:988:LEU:HG	2.19	0.43
1:C:1687:SER:OG	2:D:36:PHE:HB2	2.19	0.43
1:E:1835:GLU:OE2	1:E:1935:VAL:HG23	2.18	0.43
1:E:245:VAL:HG21	1:E:300:VAL:HA	2.01	0.43
1:E:287:THR:O	1:E:405:HIS:CE1	2.72	0.43
1:E:317:ARG:HG3	1:E:356:TRP:CH2	2.54	0.43
1:E:3756:LYS:O	1:E:3760:LYS:HB2	2.19	0.43
1:E:3891:LEU:HB3	1:E:3899:PHE:CE2	2.53	0.43
1:E:4041:ALA:O	1:E:4044:MET:HB3	2.19	0.43
1:E:4645:CYS:O	1:E:4649:LEU:N	2.45	0.43
1:E:660:GLY:HA2	1:E:750:LEU:HD22	2.00	0.43
1:G:1459:GLN:HE21	1:G:1459:GLN:HB2	1.60	0.43
1:G:1676:LEU:HG	1:G:1721:GLU:OE2	2.18	0.43
1:G:1835:GLU:OE2	1:G:1935:VAL:HG23	2.18	0.43
1:G:2360:LYS:HD2	1:G:2360:LYS:HA	1.89	0.43
1:G:3935:TRP:HZ2	1:G:3994:HIS:HE1	1.66	0.43
1:G:4976:GLU:HB2	1:G:4980:LEU:HD12	1.99	0.43
1:G:4983:HIS:C	1:G:4985:LEU:N	2.67	0.43
1:A:788:LYS:HB2	1:A:1629:GLN:HG3	2.00	0.43
1:A:717:ASP:CG	2:B:7:ILE:HA	2.39	0.43
1:C:1723:ALA:O	1:C:1727:ARG:HB2	2.19	0.43
1:C:2155:LEU:HD13	1:C:2188:ASN:OD1	2.19	0.43
1:C:2902:HIS:H	1:C:2905:LEU:HD12	1.83	0.43
1:C:2907:PRO:O	1:C:2910:THR:OG1	2.24	0.43
1:C:372:LEU:O	1:C:374:LYS:N	2.51	0.43
1:C:4039:MET:HG3	1:C:4040:ILE:N	2.34	0.43
1:C:4802:GLY:HA2	1:C:4809:PHE:HB2	2.00	0.43
1:C:685:GLY:O	1:C:780:VAL:HB	2.18	0.43
1:E:1087:ARG:HH11	1:E:1223:PHE:HE1	1.65	0.43
1:E:1848:LEU:HD12	1:E:1851:MET:SD	2.59	0.43
1:E:203:ASN:OD1	1:E:204:PRO:HD2	2.18	0.43
1:E:4826:ILE:O	1:E:4829:SER:HB2	2.18	0.43
1:E:4851:TYR:HB3	1:E:4916:PHE:CZ	2.53	0.43
1:E:60:PRO:O	1:E:290:TYR:OH	2.33	0.43
1:E:702:TRP:HZ2	1:E:1640:HIS:HD1	1.67	0.43
1:G:1110:ARG:HB2	1:G:1113:VAL:HG23	2.01	0.43
1:G:1152:MET:SD	1:G:1223:PHE:HD2	2.42	0.43
1:G:1078:GLU:HB2	1:G:1235:THR:OG1	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:104:GLY:HA2	1:G:150:MET:O	2.19	0.43
1:G:2424:SER:HA	1:G:2427:ALA:HB3	2.00	0.43
1:G:3877:ASP:O	1:G:3880:PHE:HB3	2.19	0.43
1:G:4555:LEU:HD11	1:G:4656:LEU:HG	1.99	0.43
1:G:4737:ILE:O	1:G:4740:LEU:HB3	2.19	0.43
1:G:572:PRO:O	1:G:575:LEU:HB2	2.19	0.43
1:G:758:ARG:HH12	1:G:763:PRO:HD3	1.83	0.43
1:A:116:MET:HE2	1:A:139:GLU:OE2	2.19	0.43
1:A:1930:LYS:HG2	1:A:1931:LEU:N	2.33	0.43
1:A:21:VAL:HG12	1:A:65:CYS:O	2.18	0.43
1:A:317:ARG:HG3	1:A:356:TRP:CH2	2.53	0.43
1:A:4039:MET:HG3	1:A:4040:ILE:N	2.34	0.43
1:A:4843:LEU:O	1:A:4847:VAL:HG23	2.18	0.43
1:A:864:PRO:HG2	1:A:867:LEU:HD12	2.01	0.43
2:B:73:LYS:HA	2:B:99:PHE:O	2.19	0.43
1:C:1287:LEU:HD13	1:C:1556:PRO:HD3	2.01	0.43
1:C:287:THR:O	1:C:405:HIS:CE1	2.72	0.43
1:C:4836:GLN:HB3	1:C:4935:LEU:HD11	2.00	0.43
1:C:4887:MET:HA	1:C:4891:VAL:HG23	1.99	0.43
1:E:103:TYR:CE2	1:E:157:ARG:HB3	2.54	0.43
1:E:1152:MET:SD	1:E:1223:PHE:HD2	2.42	0.43
1:E:1440:PHE:CB	1:E:1512:THR:HG22	2.49	0.43
1:E:1294:PRO:O	1:E:1584:ARG:NE	2.52	0.43
1:E:1691:GLN:O	1:E:1695:LEU:HG	2.19	0.43
1:E:178:ARG:HB2	1:E:193:ALA:HB1	2.01	0.43
1:E:3758:MET:HG3	1:E:3759:GLU:N	2.34	0.43
1:E:222:LEU:HB3	1:E:388:LEU:HD22	2.00	0.43
1:E:4181:ILE:HD11	1:E:4193:ILE:HD11	2.01	0.43
1:E:445:LEU:HD23	1:E:521:LEU:HG	2.01	0.43
1:E:4826:ILE:HD11	1:G:4839:MET:CE	2.48	0.43
1:E:4892:ARG:HG3	1:G:4921:PHE:CE1	2.54	0.43
1:E:4920:PHE:O	1:E:4924:VAL:HB	2.19	0.43
1:E:4836:GLN:HB3	1:E:4935:LEU:HD11	2.01	0.43
1:E:647:ASN:N	1:E:822:ARG:O	2.52	0.43
1:E:717:ASP:CG	2:F:7:ILE:HA	2.39	0.43
1:E:737:LEU:HD11	2:F:7:ILE:CG2	2.44	0.43
1:G:1735:ILE:HD11	1:G:2156:LEU:HD11	2.01	0.43
1:G:145:ALA:HA	1:G:175:SER:HB3	2.01	0.43
1:G:1762:LEU:HD21	1:G:1860:LYS:NZ	2.34	0.43
1:G:2123:LEU:HD23	1:G:2123:LEU:HA	1.72	0.43
1:G:2197:LEU:O	1:G:2201:LEU:HG	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:179:TYR:OH	1:G:2359:ARG:CZ	2.66	0.43
1:G:317:ARG:N	1:G:347:PHE:O	2.52	0.43
1:G:3817:LEU:HD11	1:G:3821:LYS:HE2	2.00	0.43
1:G:4183:ILE:HD13	1:G:4193:ILE:HD13	2.01	0.43
1:G:758:ARG:HA	1:G:763:PRO:HA	2.01	0.43
1:A:1078:GLU:HB2	1:A:1235:THR:OG1	2.18	0.42
1:A:2500:ALA:HA	1:A:2556:LEU:HD21	2.01	0.42
1:A:2876:GLU:OE2	1:A:2916:LYS:HD3	2.19	0.42
1:A:3758:MET:HG3	1:A:3759:GLU:N	2.34	0.42
1:A:4059:LEU:HA	1:A:4062:PHE:HD2	1.84	0.42
1:A:4238:CYS:O	1:A:4242:ILE:HG13	2.19	0.42
1:A:4218:ILE:HG22	1:A:4950:VAL:HG13	2.01	0.42
1:A:50:GLU:CD	1:A:51:PRO:HD2	2.38	0.42
2:B:38:SER:O	2:B:41:ASP:HB2	2.18	0.42
1:C:1074:ILE:HG22	1:C:1075:PHE:N	2.34	0.42
1:C:1294:PRO:O	1:C:1584:ARG:NE	2.52	0.42
1:C:1845:VAL:HG13	1:C:1854:PHE:HE2	1.84	0.42
1:C:1855:GLY:O	1:C:1858:ASP:HB2	2.19	0.42
1:C:21:VAL:HG23	1:C:203:ASN:HB3	1.99	0.42
1:C:2458:ARG:O	1:C:2464:ASP:N	2.52	0.42
1:C:4059:LEU:HA	1:C:4062:PHE:HD2	1.84	0.42
1:C:4208:PRO:HG2	1:C:4210:VAL:HG23	2.01	0.42
1:C:445:LEU:HD23	1:C:521:LEU:HG	2.01	0.42
1:C:4791:TYR:OH	1:C:4815:ASP:HA	2.19	0.42
1:C:717:ASP:CG	2:D:7:ILE:HA	2.39	0.42
1:C:788:LYS:HB2	1:C:1629:GLN:HG3	2.00	0.42
1:E:1723:ALA:O	1:E:1727:ARG:HB2	2.19	0.42
1:E:317:ARG:N	1:E:347:PHE:O	2.52	0.42
1:E:4010:ILE:HA	1:E:4013:LEU:HB3	2.01	0.42
1:E:561:LEU:CD2	1:E:598:LYS:HB3	2.48	0.42
1:G:1130:GLN:HB2	1:G:1138:PRO:HA	2.00	0.42
1:G:1087:ARG:HH11	1:G:1223:PHE:HE1	1.65	0.42
1:G:1294:PRO:O	1:G:1584:ARG:NE	2.52	0.42
1:G:642:THR:OG1	1:G:1617:THR:HG21	2.19	0.42
1:G:2094:LEU:O	1:G:2098:VAL:HG23	2.19	0.42
1:G:233:ILE:O	1:G:257:ARG:HD2	2.18	0.42
1:G:2556:LEU:HD23	1:G:2559:LEU:CD1	2.49	0.42
1:G:3724:ALA:O	1:G:3727:ASP:HB2	2.19	0.42
1:G:3933:PHE:O	1:G:3937:TYR:HD2	2.01	0.42
1:G:4033:GLY:HA2	1:G:4189:ARG:NH1	2.25	0.42
1:G:4582:VAL:HB	1:G:4628:VAL:HG12	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:984:LEU:O	1:G:988:LEU:HG	2.18	0.42
1:A:1152:MET:SD	1:A:1223:PHE:HD2	2.42	0.42
1:A:2155:LEU:HD13	1:A:2188:ASN:OD1	2.19	0.42
1:A:4851:TYR:HB3	1:A:4916:PHE:CZ	2.54	0.42
1:A:4920:PHE:O	1:A:4924:VAL:HB	2.20	0.42
1:A:984:LEU:O	1:A:988:LEU:HG	2.19	0.42
1:C:771:PHE:HE1	1:C:1472:VAL:HG13	1.84	0.42
1:C:1586:ASN:O	1:C:1588:ALA:N	2.49	0.42
1:C:1768:THR:C	1:C:1769:THR:HG1	2.20	0.42
1:C:1858:ASP:O	1:C:1862:ILE:HG12	2.18	0.42
1:C:2424:SER:HA	1:C:2427:ALA:HB3	2.01	0.42
1:C:2500:ALA:HA	1:C:2556:LEU:HD21	2.00	0.42
1:C:548:VAL:O	1:C:551:LEU:HG	2.18	0.42
1:E:1087:ARG:HD2	1:E:1223:PHE:CE1	2.54	0.42
1:E:1689:VAL:HG22	1:E:1694:LEU:HD11	2.01	0.42
1:E:2137:ALA:HA	1:E:2140:ARG:HH11	1.83	0.42
1:E:2197:LEU:O	1:E:2201:LEU:HG	2.18	0.42
1:E:4055:VAL:O	1:E:4059:LEU:HG	2.19	0.42
1:E:514:SER:O	1:E:518:ILE:HG13	2.19	0.42
1:E:548:VAL:O	1:E:551:LEU:HG	2.18	0.42
1:E:607:CYS:HB2	1:E:1672:ALA:HB1	2.01	0.42
1:E:771:PHE:HE1	1:E:1472:VAL:HG13	1.84	0.42
1:G:340:LYS:HG3	1:G:342:GLY:N	2.35	0.42
1:G:4141:PHE:CE1	1:G:4178:LEU:HA	2.54	0.42
1:A:4898:GLY:CA	1:G:4888:TYR:OH	2.67	0.42
1:G:660:GLY:HA2	1:G:750:LEU:HD22	2.01	0.42
1:G:828:GLU:HG3	1:G:840:VAL:HG21	2.01	0.42
1:G:1687:SER:OG	2:H:36:PHE:HB2	2.20	0.42
1:A:178:ARG:CZ	1:G:2460:LEU:HD12	2.49	0.42
1:A:1835:GLU:OE2	1:A:1935:VAL:HG23	2.18	0.42
1:A:203:ASN:OD1	1:A:204:PRO:HD2	2.18	0.42
1:A:3916:ILE:O	1:A:3919:THR:HG22	2.19	0.42
1:A:4013:LEU:O	1:A:4017:LEU:HG	2.19	0.42
1:A:4582:VAL:HG12	1:A:4629:TYR:HD1	1.85	0.42
1:A:4717:ASP:O	1:A:4719:PHE:N	2.48	0.42
1:A:533:ASN:OD1	1:A:535:ALA:N	2.42	0.42
1:C:1091:GLU:HB2	1:C:1203:ASN:O	2.18	0.42
1:C:1105:ALA:HB3	1:C:1191:VAL:HG21	2.00	0.42
1:C:314:PHE:HB3	1:C:348:VAL:CG1	2.49	0.42
1:C:5022:PHE:HA	1:C:5023:PRO:HD3	1.93	0.42
1:E:1227:ALA:HA	1:E:1230:MET:HG2	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1459:GLN:HB2	1:E:1459:GLN:HE21	1.54	0.42
1:E:1943:LEU:HD11	1:E:2098:VAL:HG22	2.00	0.42
1:E:2431:ASP:HB2	1:E:2501:SER:HA	2.01	0.42
1:E:3916:ILE:O	1:E:3919:THR:HG22	2.19	0.42
1:E:4034:ASN:HD21	1:E:4040:ILE:CG2	2.33	0.42
1:E:4041:ALA:O	1:E:4045:VAL:HG23	2.20	0.42
1:E:4073:GLY:H	1:E:4128:PHE:HE2	1.68	0.42
1:E:4214:LYS:HE2	1:E:4985:LEU:HD23	1.99	0.42
1:E:4710:SER:OG	1:E:4772:ASP:OD2	2.35	0.42
1:E:520:ASN:HB2	1:E:556:ALA:HB1	2.01	0.42
1:E:593:HIS:HA	1:E:1597:VAL:HB	2.00	0.42
1:E:633:LEU:HD22	1:E:1663:HIS:HD2	1.85	0.42
1:E:887:ILE:CG2	1:E:962:SER:HB2	2.48	0.42
1:G:1074:ILE:HG22	1:G:1075:PHE:N	2.34	0.42
1:G:788:LYS:HB2	1:G:1629:GLN:HG3	2.00	0.42
1:G:245:VAL:HG21	1:G:300:VAL:HA	2.01	0.42
1:G:4013:LEU:O	1:G:4017:LEU:N	2.52	0.42
1:G:4118:ASP:O	1:G:4120:ASN:N	2.52	0.42
1:G:4832:HIS:CE1	1:G:4833:ASN:HB2	2.54	0.42
1:G:670:GLU:O	1:G:787:VAL:HG13	2.19	0.42
1:G:927:GLU:O	1:G:930:LYS:HB2	2.19	0.42
2:H:11:ASP:OD2	2:H:68:VAL:HB	2.20	0.42
2:H:7:ILE:HG13	2:H:73:LYS:N	2.35	0.42
1:A:71:GLN:O	1:A:107:ILE:HA	2.18	0.42
1:A:14:LEU:HD12	1:A:163:VAL:HG12	2.00	0.42
1:A:1676:LEU:HG	1:A:1721:GLU:OE2	2.19	0.42
1:A:359:TYR:OH	1:A:385:ASP:OD2	2.28	0.42
1:A:737:LEU:HB3	1:A:738:LEU:H	1.56	0.42
2:B:92:PRO:HA	2:B:93:PRO:HD3	1.91	0.42
1:C:103:TYR:CE2	1:C:157:ARG:HB3	2.54	0.42
1:C:1040:CYS:O	1:C:1044:ARG:N	2.52	0.42
1:C:1130:GLN:HB2	1:C:1138:PRO:HA	2.00	0.42
1:C:1864:LYS:NZ	1:C:1869:GLU:C	2.73	0.42
1:C:2338:ALA:O	1:C:2349:ASN:ND2	2.52	0.42
1:C:245:VAL:HG21	1:C:300:VAL:HA	2.01	0.42
1:C:35:LEU:HD13	1:C:49:LEU:HB3	2.00	0.42
1:C:4013:LEU:O	1:C:4017:LEU:HG	2.19	0.42
1:C:4653:VAL:O	1:C:4657:CYS:N	2.45	0.42
1:C:4920:PHE:O	1:C:4924:VAL:HB	2.19	0.42
1:E:1133:HIS:CE1	1:E:1134:LEU:HG	2.55	0.42
1:E:1687:SER:OG	2:F:36:PHE:HB2	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:1227:ALA:HA	1:G:1230:MET:HG2	2.01	0.42
1:E:2359:ARG:CZ	1:G:179:TYR:OH	2.67	0.42
1:G:1855:GLY:O	1:G:1858:ASP:HB2	2.19	0.42
1:G:2142:TYR:CE2	1:G:2197:LEU:HB2	2.54	0.42
1:G:2806:ARG:HB3	1:G:2810:LYS:HE3	2.01	0.42
1:G:4137:ARG:HD2	1:G:4177:TYR:CE2	2.55	0.42
1:G:4997:ASN:OD1	1:G:4998:LYS:N	2.52	0.42
1:A:1119:GLU:C	1:A:1133:HIS:HE2	2.22	0.42
1:A:771:PHE:HE1	1:A:1472:VAL:HG13	1.84	0.42
1:A:1452:TRP:HB3	1:A:1550:PRO:HA	2.02	0.42
1:A:2258:LEU:HA	1:A:2261:SER:OG	2.20	0.42
1:A:2431:ASP:HB2	1:A:2501:SER:HA	2.01	0.42
1:A:3718:GLU:HG3	1:A:3719:ASP:N	2.35	0.42
1:A:4073:GLY:H	1:A:4128:PHE:HE2	1.67	0.42
1:A:5004:THR:O	1:A:5007:GLU:HG2	2.20	0.42
2:B:42:ARG:C	2:B:44:LYS:H	2.23	0.42
2:B:74:LEU:O	2:B:98:VAL:HA	2.18	0.42
1:C:1835:GLU:OE2	1:C:1935:VAL:HG23	2.18	0.42
1:C:1857:GLU:O	1:C:1860:LYS:HB2	2.20	0.42
1:C:3811:GLU:HG2	1:C:3812:VAL:N	2.35	0.42
1:A:4826:ILE:CG1	1:C:4839:MET:CE	2.98	0.42
1:C:702:TRP:HZ2	1:C:1640:HIS:HD1	1.68	0.42
2:D:16:PRO:HG3	2:D:106:LEU:HD21	2.02	0.42
1:E:1808:ARG:HB2	1:E:1854:PHE:HE1	1.84	0.42
1:E:35:LEU:HD13	1:E:49:LEU:HB3	2.00	0.42
1:G:1799:SER:HA	1:G:1800:PRO:HD2	1.92	0.42
1:G:2819:TRP:HH2	1:G:2881:ASN:HB2	1.84	0.42
1:G:2879:ALA:HB2	1:G:2920:ARG:HA	2.00	0.42
1:G:3968:TYR:O	1:G:3976:ASN:ND2	2.52	0.42
1:G:287:THR:O	1:G:405:HIS:CE1	2.72	0.42
1:G:4219:PHE:O	1:G:4223:ASN:HB2	2.19	0.42
1:G:4789:PHE:O	1:G:4793:GLY:N	2.46	0.42
1:G:514:SER:O	1:G:518:ILE:HG13	2.19	0.42
1:G:548:VAL:O	1:G:551:LEU:HG	2.19	0.42
1:G:580:GLU:HB3	1:G:620:LEU:HD11	2.02	0.42
1:A:178:ARG:HB2	1:A:193:ALA:HB1	2.01	0.42
1:A:1834:VAL:HG13	1:A:1835:GLU:H	1.85	0.42
1:A:216:GLY:HA3	1:A:264:PRO:CD	2.50	0.42
1:A:245:VAL:HG21	1:A:300:VAL:HA	2.00	0.42
1:A:2745:VAL:CG2	1:A:2818:ALA:HB2	2.50	0.42
1:A:2855:TYR:CD2	1:A:2857:PRO:HD3	2.55	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:276:TRP:CZ3	1:A:338:GLU:HB3	2.54	0.42
1:A:3756:LYS:O	1:A:3760:LYS:HB2	2.19	0.42
1:A:3970:GLN:HE21	1:A:5004:THR:CA	2.29	0.42
1:C:1110:ARG:HB2	1:C:1113:VAL:HG23	2.00	0.42
1:C:1459:GLN:HE21	1:C:1459:GLN:HB2	1.56	0.42
1:C:1676:LEU:HG	1:C:1721:GLU:OE2	2.19	0.42
1:C:1819:VAL:HG22	1:C:1926:LEU:HD13	2.01	0.42
1:C:2855:TYR:CD2	1:C:2857:PRO:HD3	2.54	0.42
1:C:3732:SER:HB2	1:C:3766:GLN:HB3	2.02	0.42
1:C:402:ARG:NH1	1:C:405:HIS:CD2	2.86	0.42
1:C:4876:CYS:HB2	1:C:4877:ASP:H	1.54	0.42
1:A:4888:TYR:OH	1:C:4898:GLY:O	2.38	0.42
1:C:4944:ARG:O	1:C:4947:GLN:HB2	2.20	0.42
1:C:4978:HIS:ND1	1:C:4982:GLU:OE1	2.53	0.42
1:E:1297:PHE:HB2	1:E:1545:ASN:HA	2.01	0.42
1:E:2460:LEU:HD21	1:G:131:LEU:HB2	2.01	0.42
1:E:2855:TYR:CD2	1:E:2857:PRO:HD3	2.55	0.42
1:E:4013:LEU:O	1:E:4017:LEU:HG	2.20	0.42
1:E:4826:ILE:HG12	1:G:4839:MET:HE1	2.00	0.42
1:E:4941:GLY:O	1:E:4945:ASP:HB2	2.19	0.42
1:E:864:PRO:HG2	1:E:867:LEU:HD12	2.01	0.42
1:G:1087:ARG:HD2	1:G:1223:PHE:CE1	2.55	0.42
1:G:1723:ALA:O	1:G:1727:ARG:HB2	2.19	0.42
1:G:2338:ALA:O	1:G:2349:ASN:ND2	2.52	0.42
1:G:2458:ARG:O	1:G:2464:ASP:N	2.53	0.42
1:G:276:TRP:CZ3	1:G:338:GLU:HB3	2.54	0.42
1:G:3806:ASN:OD1	1:G:3807:GLY:N	2.52	0.42
1:G:4048:LEU:HA	1:G:4051:SER:OG	2.20	0.42
1:G:4055:VAL:O	1:G:4059:LEU:HG	2.19	0.42
1:G:4582:VAL:HG12	1:G:4629:TYR:HD1	1.84	0.42
1:G:4639:MET:HG3	1:G:4640:GLU:N	2.34	0.42
1:G:4792:LEU:O	1:G:4795:TYR:HB3	2.19	0.42
1:G:706:GLY:H	1:G:711:LEU:HD22	1.84	0.42
1:A:1091:GLU:HB2	1:A:1203:ASN:O	2.19	0.42
1:A:1762:LEU:HD21	1:A:1860:LYS:NZ	2.34	0.42
1:A:2430:ILE:HG23	1:A:2501:SER:HB2	2.01	0.42
1:A:317:ARG:N	1:A:347:PHE:O	2.52	0.42
1:A:4710:SER:OG	1:A:4772:ASP:OD2	2.36	0.42
1:A:4914:VAL:O	1:A:4918:ILE:HG13	2.20	0.42
1:A:4921:PHE:HA	1:A:4925:ILE:CG1	2.49	0.42
1:A:828:GLU:HG3	1:A:840:VAL:HG21	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:910:PHE:CG	1:A:918:ARG:HB3	2.55	0.42
1:C:1087:ARG:HD2	1:C:1223:PHE:CE1	2.54	0.42
1:C:1648:MET:SD	1:C:1656:ARG:NH2	2.92	0.42
1:C:178:ARG:HB2	1:C:193:ALA:HB1	2.01	0.42
1:C:2123:LEU:HA	1:C:2123:LEU:HD23	1.77	0.42
1:C:3651:ASN:HA	1:C:3654:LEU:HD12	2.02	0.42
1:C:4073:GLY:H	1:C:4128:PHE:HE2	1.68	0.42
1:C:4717:ASP:O	1:C:4719:PHE:N	2.48	0.42
1:C:660:GLY:HA2	1:C:750:LEU:HD22	2.01	0.42
1:C:758:ARG:HD3	1:C:761:GLY:HA2	2.02	0.42
1:C:647:ASN:N	1:C:822:ARG:O	2.52	0.42
1:E:1099:GLU:H	1:E:1198:GLN:NE2	2.18	0.42
1:E:1110:ARG:HB2	1:E:1113:VAL:HG23	2.01	0.42
1:E:145:ALA:HA	1:E:175:SER:HB3	2.02	0.42
1:E:175:SER:OG	1:E:176:SER:N	2.53	0.42
1:E:1768:THR:C	1:E:1769:THR:HG1	2.18	0.42
1:E:4208:PRO:HG2	1:E:4210:VAL:HG23	2.02	0.42
1:G:771:PHE:HE1	1:G:1472:VAL:HG13	1.84	0.42
1:G:102:LEU:HD23	1:G:162:LYS:HA	2.01	0.42
1:G:1848:LEU:HD12	1:G:1851:MET:SD	2.59	0.42
1:G:2431:ASP:HB2	1:G:2501:SER:HA	2.00	0.42
1:G:2821:TRP:CD1	1:G:2939:ARG:HA	2.55	0.42
1:G:222:LEU:HB3	1:G:388:LEU:HD22	2.00	0.42
1:G:4090:LYS:CB	1:G:4112:LEU:HD21	2.50	0.42
1:G:4949:GLN:NE2	1:G:4953:ASP:OD1	2.52	0.42
2:H:92:PRO:HA	2:H:93:PRO:HD3	1.89	0.42
1:A:1689:VAL:HG22	1:A:1694:LEU:HD11	2.01	0.42
1:A:175:SER:OG	1:A:176:SER:N	2.53	0.42
1:A:3651:ASN:HA	1:A:3654:LEU:HD12	2.02	0.42
1:A:4202:ARG:O	1:A:4206:GLU:HG2	2.19	0.42
1:A:4208:PRO:HG2	1:A:4210:VAL:HG23	2.01	0.42
1:A:4834:GLY:O	1:A:4837:LEU:HB3	2.20	0.42
1:A:5011:TRP:O	1:A:5015:GLN:HG2	2.20	0.42
1:A:514:SER:O	1:A:518:ILE:HG13	2.19	0.42
1:A:537:CYS:HB3	1:A:571:SER:HB3	2.02	0.42
1:A:647:ASN:N	1:A:822:ARG:O	2.53	0.42
1:C:116:MET:HE2	1:C:139:GLU:OE2	2.20	0.42
1:C:1237:TRP:CD1	1:C:1611:HIS:HA	2.55	0.42
1:C:1654:SER:HB2	1:C:1704:PRO:HB3	2.02	0.42
1:C:1762:LEU:HD21	1:C:1860:LYS:NZ	2.35	0.42
1:C:2094:LEU:O	1:C:2098:VAL:HG23	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2258:LEU:HA	1:C:2261:SER:OG	2.20	0.42
1:C:2822:THR:HG1	1:C:2938:THR:HG1	1.68	0.42
1:C:3838:THR:C	1:C:3839:CYS:SG	2.98	0.42
1:C:4238:CYS:O	1:C:4242:ILE:HG13	2.19	0.42
1:E:1654:SER:HB2	1:E:1704:PRO:HB3	2.02	0.42
1:E:1779:PRO:HA	1:E:1780:PRO:HD3	1.78	0.42
1:E:1819:VAL:HG22	1:E:1926:LEU:HD13	2.02	0.42
1:E:1834:VAL:HG13	1:E:1835:GLU:H	1.84	0.42
1:E:2437:ALA:HB1	1:E:2454:ARG:NE	2.35	0.42
1:E:4717:ASP:O	1:E:4719:PHE:N	2.48	0.42
1:E:4887:MET:HA	1:E:4891:VAL:CG2	2.49	0.42
1:E:670:GLU:O	1:E:787:VAL:HG13	2.19	0.42
1:G:1133:HIS:CE1	1:G:1134:LEU:HG	2.55	0.42
1:G:119:SER:HB2	1:G:145:ALA:HB1	2.01	0.42
1:G:1648:MET:SD	1:G:1656:ARG:NH2	2.93	0.42
1:G:633:LEU:HD22	1:G:1663:HIS:HD2	1.84	0.42
1:G:1748:PHE:HA	1:G:1749:PRO:HD2	1.75	0.42
1:G:2110:TYR:O	1:G:2110:TYR:CD2	2.73	0.42
1:G:2199:ARG:NE	1:G:2249:SER:OG	2.51	0.42
1:G:2258:LEU:HA	1:G:2261:SER:OG	2.20	0.42
1:G:4088:ILE:O	1:G:4123:ILE:N	2.45	0.42
1:G:4990:PHE:O	1:G:4993:MET:HG2	2.19	0.42
1:G:78:LEU:HA	1:G:81:MET:HG2	2.02	0.42
1:G:1783:VAL:HG11	2:H:55:VAL:HG12	2.02	0.42
1:A:1245:PHE:CE2	1:A:1646:ARG:NH1	2.88	0.42
1:A:1287:LEU:HD13	1:A:1556:PRO:HD3	2.02	0.42
1:A:145:ALA:HA	1:A:175:SER:HB3	2.02	0.42
1:A:1666:THR:O	1:A:1669:LEU:HB3	2.19	0.42
1:A:1654:SER:HB2	1:A:1704:PRO:HB3	2.02	0.42
1:A:1855:GLY:O	1:A:1858:ASP:HB2	2.19	0.42
1:A:2094:LEU:O	1:A:2098:VAL:HG23	2.19	0.42
1:A:4887:MET:HA	1:A:4891:VAL:CG2	2.50	0.42
1:A:69:LEU:HD13	1:A:101:LEU:HD11	2.00	0.42
1:C:1099:GLU:H	1:C:1198:GLN:NE2	2.18	0.42
1:C:102:LEU:HD23	1:C:162:LYS:HA	2.02	0.42
1:C:1729:SER:HB2	1:C:2163:ARG:HH11	1.82	0.42
1:C:317:ARG:HG3	1:C:356:TRP:CH2	2.54	0.42
1:C:4036:VAL:HG12	1:C:4037:ASN:N	2.35	0.42
1:C:4943:LEU:O	1:C:4947:GLN:HG2	2.20	0.42
1:C:572:PRO:O	1:C:575:LEU:HB2	2.19	0.42
1:E:1078:GLU:HB2	1:E:1235:THR:OG1	2.18	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1855:GLY:O	1:E:1858:ASP:HB2	2.19	0.42
1:E:1856:ASP:H	1:E:1857:GLU:CB	2.30	0.42
1:E:2258:LEU:HA	1:E:2261:SER:OG	2.20	0.42
1:E:2358:ILE:HG21	1:G:195:PHE:CE2	2.55	0.42
1:E:3811:GLU:HG2	1:E:3812:VAL:N	2.35	0.42
1:E:3838:THR:C	1:E:3839:CYS:SG	2.98	0.42
1:E:3933:PHE:O	1:E:3937:TYR:HD2	2.03	0.42
1:E:454:PRO:HA	1:E:455:PRO:HD3	1.86	0.42
1:E:4636:THR:O	1:E:4639:MET:HE2	2.20	0.42
1:E:4943:LEU:O	1:E:4947:GLN:HG2	2.20	0.42
1:G:1616:GLU:HG3	1:G:1617:THR:HG23	2.02	0.42
1:G:1864:LYS:NZ	1:G:1869:GLU:C	2.73	0.42
1:G:2745:VAL:HB	1:G:2814:LYS:HB3	2.00	0.42
1:G:3703:LEU:HD23	1:G:3703:LEU:O	2.19	0.42
1:A:4839:MET:HE2	1:G:4826:ILE:CG1	2.50	0.42
1:G:828:GLU:OE2	1:G:831:ARG:HA	2.20	0.42
1:G:975:VAL:HG21	1:G:1044:ARG:CB	2.47	0.42
1:A:1133:HIS:CE1	1:A:1134:LEU:HG	2.55	0.42
1:A:1105:ALA:HB3	1:A:1191:VAL:HG21	2.00	0.42
1:A:1648:MET:SD	1:A:1656:ARG:NH2	2.93	0.42
1:A:1808:ARG:HB2	1:A:1854:PHE:HE1	1.83	0.42
1:A:1945:TYR:O	1:A:1949:GLN:HG2	2.20	0.42
1:A:2424:SER:HA	1:A:2427:ALA:HB3	2.01	0.42
1:A:246:TYR:CE2	1:A:373:LYS:HD3	2.54	0.42
1:A:3881:THR:O	1:A:3885:PHE:HD2	2.03	0.42
1:A:3891:LEU:HB3	1:A:3899:PHE:CE2	2.53	0.42
1:A:4041:ALA:O	1:A:4044:MET:HB3	2.19	0.42
1:A:4823:LEU:HG	1:A:4826:ILE:HD12	2.01	0.42
1:A:4842:GLY:O	1:A:4846:VAL:HG23	2.20	0.42
1:C:1288:PHE:O	1:C:1603:VAL:HG13	2.20	0.42
1:C:2752:ASP:HA	1:C:2755:ILE:HD12	2.01	0.42
1:C:2876:GLU:OE2	1:C:2916:LYS:HD3	2.20	0.42
1:C:3891:LEU:HB3	1:C:3899:PHE:CE2	2.54	0.42
1:C:4041:ALA:O	1:C:4045:VAL:HG23	2.20	0.42
1:C:828:GLU:HG3	1:C:840:VAL:HG21	2.01	0.42
1:C:927:GLU:O	1:C:930:LYS:HB2	2.20	0.42
1:E:119:SER:HB2	1:E:145:ALA:HB1	2.01	0.42
1:E:2463:LEU:N	1:E:2510:TYR:OH	2.50	0.42
1:E:2806:ARG:HB3	1:E:2810:LYS:HE3	2.02	0.42
1:E:4154:VAL:HA	1:E:4155:PRO:HD2	1.88	0.42
1:E:1783:VAL:HG11	2:F:55:VAL:HG12	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:1452:TRP:HB3	1:G:1550:PRO:HA	2.02	0.42
1:G:1748:PHE:HE1	1:G:2072:LEU:C	2.23	0.42
1:G:1857:GLU:O	1:G:1860:LYS:HB2	2.20	0.42
1:G:612:VAL:HA	1:G:2167:ILE:HG23	2.02	0.42
1:G:3774:GLY:HA2	1:G:3815:LYS:HZ1	1.85	0.42
1:G:3980:LEU:HA	1:G:3983:SER:CB	2.50	0.42
1:G:4675:LYS:O	1:G:4679:ARG:HG2	2.20	0.42
1:G:5006:GLN:O	1:G:5010:VAL:HG23	2.19	0.42
1:G:537:CYS:HB3	1:G:571:SER:HB3	2.02	0.42
1:A:2359:ARG:CZ	1:C:179:TYR:OH	2.68	0.41
1:A:2449:GLU:O	1:A:2452:ARG:HB2	2.20	0.41
1:A:4041:ALA:O	1:A:4045:VAL:HG23	2.20	0.41
1:C:1245:PHE:CE2	1:C:1646:ARG:NH1	2.88	0.41
1:C:1297:PHE:HB2	1:C:1545:ASN:HA	2.02	0.41
1:C:1457:TYR:O	1:C:1458:HIS:CG	2.73	0.41
1:C:1294:PRO:CD	1:C:1584:ARG:HH11	2.19	0.41
1:C:2142:TYR:CD2	1:C:2197:LEU:HD12	2.55	0.41
1:C:2558:VAL:O	1:C:2561:LEU:HG	2.20	0.41
1:C:2887:GLY:O	1:C:2891:LYS:HG3	2.20	0.41
1:C:246:TYR:CE2	1:C:373:LYS:HD3	2.55	0.41
1:C:3881:THR:O	1:C:3885:PHE:HD2	2.03	0.41
1:C:346:CYS:O	1:C:388:LEU:HB2	2.19	0.41
1:C:40:GLU:OE2	1:C:406:SER:HB2	2.20	0.41
1:C:4710:SER:OG	1:C:4772:ASP:OD2	2.36	0.41
1:C:4892:ARG:CZ	1:E:4896:GLY:CA	2.87	0.41
1:C:582:HIS:O	1:C:585:SER:HB2	2.20	0.41
1:E:1119:GLU:C	1:E:1133:HIS:HE2	2.22	0.41
1:E:1452:TRP:HB3	1:E:1550:PRO:HA	2.02	0.41
1:E:2458:ARG:O	1:E:2464:ASP:N	2.53	0.41
1:E:4208:PRO:HB2	1:E:4209:GLN:H	1.61	0.41
1:E:5011:TRP:O	1:E:5015:GLN:HG2	2.20	0.41
1:E:78:LEU:HA	1:E:81:MET:HG2	2.02	0.41
1:G:1457:TYR:O	1:G:1458:HIS:CG	2.73	0.41
1:G:1834:VAL:HG13	1:G:1835:GLU:H	1.85	0.41
1:G:2123:LEU:HD23	1:G:2126:ARG:HD2	2.02	0.41
1:G:2336:ARG:HH11	1:G:2431:ASP:HB3	1.84	0.41
1:G:3838:THR:OG1	1:G:3839:CYS:N	2.53	0.41
1:G:4164:LEU:O	1:G:4168:GLU:N	2.53	0.41
1:G:445:LEU:HD23	1:G:521:LEU:HG	2.01	0.41
1:G:582:HIS:O	1:G:585:SER:HB2	2.20	0.41
1:G:758:ARG:HD3	1:G:761:GLY:HA2	2.01	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:910:PHE:CG	1:G:918:ARG:HB3	2.55	0.41
2:H:38:SER:O	2:H:41:ASP:HB2	2.19	0.41
1:A:1294:PRO:O	1:A:1584:ARG:NE	2.52	0.41
1:A:1845:VAL:HG13	1:A:1854:PHE:HE2	1.84	0.41
1:A:2142:TYR:CD2	1:A:2197:LEU:HD12	2.55	0.41
1:A:2458:ARG:O	1:A:2464:ASP:N	2.52	0.41
1:A:3732:SER:HB2	1:A:3766:GLN:HB3	2.01	0.41
1:A:4036:VAL:HG12	1:A:4037:ASN:N	2.36	0.41
1:A:4034:ASN:HD21	1:A:4040:ILE:CG2	2.33	0.41
1:A:4055:VAL:O	1:A:4059:LEU:HG	2.20	0.41
1:A:4058:ILE:HG13	1:A:4059:LEU:N	2.35	0.41
1:A:73:LEU:O	1:A:105:HIS:HB3	2.19	0.41
1:C:1119:GLU:C	1:C:1133:HIS:HE2	2.21	0.41
1:C:1514:LEU:CD1	1:C:1514:LEU:N	2.84	0.41
1:C:165:VAL:HG13	1:C:204:PRO:HD3	2.01	0.41
1:C:317:ARG:N	1:C:347:PHE:O	2.52	0.41
1:C:4010:ILE:HA	1:C:4013:LEU:HB3	2.01	0.41
1:C:4047:MET:HG3	1:C:4048:LEU:N	2.36	0.41
1:C:4055:VAL:O	1:C:4059:LEU:HG	2.20	0.41
1:C:4636:THR:O	1:C:4639:MET:HE2	2.20	0.41
1:C:4866:SER:O	1:C:4868:ASP:N	2.53	0.41
1:C:5011:TRP:O	1:C:5015:GLN:HG2	2.20	0.41
1:C:537:CYS:HB3	1:C:571:SER:HB3	2.02	0.41
1:C:768:PHE:HB3	1:C:771:PHE:CE2	2.56	0.41
1:C:670:GLU:O	1:C:787:VAL:HG13	2.19	0.41
1:C:864:PRO:HG2	1:C:867:LEU:HD12	2.02	0.41
1:E:1245:PHE:CE2	1:E:1646:ARG:NH1	2.88	0.41
1:E:2868:SER:O	1:E:2872:GLN:N	2.48	0.41
1:E:3651:ASN:HA	1:E:3654:LEU:HD12	2.02	0.41
1:E:3718:GLU:HG3	1:E:3719:ASP:N	2.35	0.41
1:E:4059:LEU:HA	1:E:4062:PHE:HD2	1.84	0.41
1:E:4062:PHE:O	1:E:4170:ILE:HG21	2.20	0.41
1:E:4183:ILE:HD13	1:E:4193:ILE:HD13	2.03	0.41
1:E:4691:GLN:HA	1:E:4692:PRO:HD2	1.86	0.41
1:E:927:GLU:O	1:E:930:LYS:HB2	2.19	0.41
1:G:1105:ALA:HB3	1:G:1191:VAL:HG21	2.00	0.41
1:G:1603:VAL:HG12	1:G:1604:SER:O	2.20	0.41
1:G:2142:TYR:CD2	1:G:2197:LEU:HD12	2.55	0.41
1:G:2430:ILE:HG23	1:G:2501:SER:HB2	2.01	0.41
1:G:2887:GLY:O	1:G:2891:LYS:HG3	2.20	0.41
1:G:246:TYR:CE2	1:G:373:LYS:HD3	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:3839:CYS:HB2	1:G:3881:THR:HG22	2.02	0.41
1:G:3969:ILE:HG12	1:G:3980:LEU:HD11	2.03	0.41
1:G:4720:VAL:HG12	1:G:4724:VAL:HG23	2.00	0.41
1:A:1856:ASP:N	1:A:1858:ASP:H	2.18	0.41
1:A:1864:LYS:NZ	1:A:1869:GLU:C	2.73	0.41
1:A:2299:VAL:O	1:A:2360:LYS:HE2	2.21	0.41
1:A:2868:SER:O	1:A:2872:GLN:N	2.48	0.41
1:A:3811:GLU:HG2	1:A:3812:VAL:N	2.34	0.41
1:A:3838:THR:C	1:A:3839:CYS:SG	2.99	0.41
1:A:4047:MET:HG3	1:A:4048:LEU:N	2.35	0.41
1:A:4943:LEU:O	1:A:4947:GLN:HG2	2.20	0.41
1:A:4978:HIS:ND1	1:A:4982:GLU:OE1	2.53	0.41
1:A:758:ARG:HH12	1:A:763:PRO:HD3	1.83	0.41
1:A:828:GLU:OE2	1:A:831:ARG:HA	2.20	0.41
1:C:1246:GLU:HA	1:C:1247:PRO:HD3	1.90	0.41
1:C:1647:CYS:O	1:C:1648:MET:HG3	2.20	0.41
1:C:1691:GLN:O	1:C:1695:LEU:HG	2.19	0.41
1:C:4566:ALA:HA	1:C:4569:LEU:HD12	2.03	0.41
1:C:607:CYS:HB2	1:C:1672:ALA:HB1	2.02	0.41
1:C:828:GLU:OE2	1:C:831:ARG:HA	2.20	0.41
1:E:1667:LEU:HD23	1:E:1710:GLY:C	2.41	0.41
1:E:1676:LEU:HG	1:E:1721:GLU:OE2	2.20	0.41
1:E:2500:ALA:HA	1:E:2556:LEU:HD21	2.01	0.41
1:E:2515:GLN:O	1:E:2518:LEU:HB3	2.20	0.41
1:E:2745:VAL:CG2	1:E:2818:ALA:HB2	2.50	0.41
1:E:4834:GLY:O	1:E:4837:LEU:HB3	2.20	0.41
1:E:4863:TYR:HD2	1:E:4876:CYS:SG	2.44	0.41
1:E:4866:SER:O	1:E:4868:ASP:N	2.54	0.41
1:E:5011:TRP:O	1:E:5014:TYR:HB3	2.20	0.41
1:E:582:HIS:O	1:E:585:SER:HB2	2.20	0.41
1:G:702:TRP:HZ2	1:G:1640:HIS:HD1	1.67	0.41
1:G:1704:PRO:HG2	1:G:1707:LEU:HD12	2.02	0.41
1:G:165:VAL:HG13	1:G:204:PRO:HD3	2.02	0.41
1:G:3556:ASN:O	1:G:3560:GLN:N	2.54	0.41
1:G:4161:ARG:HA	1:G:4164:LEU:HB3	2.03	0.41
1:G:4710:SER:OG	1:G:4772:ASP:OD2	2.33	0.41
1:G:696:PRO:HD2	1:G:829:TYR:CE2	2.52	0.41
1:A:2558:VAL:O	1:A:2561:LEU:HG	2.20	0.41
1:A:4880:MET:CA	1:G:4578:LEU:CD1	2.89	0.41
1:A:445:LEU:CD2	1:A:522:LEU:HD12	2.44	0.41
1:A:684:VAL:HG22	1:A:781:VAL:HG13	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:4058:ILE:HG13	1:C:4059:LEU:N	2.35	0.41
1:C:4218:ILE:HG22	1:C:4950:VAL:HG13	2.02	0.41
1:C:4823:LEU:HG	1:C:4826:ILE:HD12	2.02	0.41
1:C:669:ASP:CB	1:C:788:LYS:NZ	2.83	0.41
1:E:1585:LYS:HD3	1:E:1596:GLU:OE2	2.21	0.41
1:E:1748:PHE:HE1	1:E:2072:LEU:C	2.23	0.41
1:E:3881:THR:O	1:E:3885:PHE:HD2	2.03	0.41
1:E:4036:VAL:HG12	1:E:4037:ASN:N	2.36	0.41
1:E:4174:PHE:HA	1:E:4177:TYR:CD2	2.56	0.41
1:E:4218:ILE:HG22	1:E:4950:VAL:HG13	2.01	0.41
1:E:4217:PHE:CZ	1:E:4234:PHE:HA	2.56	0.41
1:E:4251:ILE:HG22	1:E:4557:ARG:HH11	1.85	0.41
1:E:4944:ARG:O	1:E:4947:GLN:HB2	2.20	0.41
1:E:858:THR:HG21	1:E:992:GLY:HA2	2.02	0.41
1:E:870:ILE:HA	1:E:873:LYS:HB3	2.02	0.41
1:G:1585:LYS:HD3	1:G:1596:GLU:OE2	2.20	0.41
1:G:1845:VAL:HG13	1:G:1854:PHE:HE2	1.85	0.41
1:G:216:GLY:HA3	1:G:264:PRO:CD	2.49	0.41
1:G:2862:LEU:HD11	1:G:2929:PHE:HD1	1.85	0.41
1:G:4006:ASP:HB2	1:G:4009:GLN:HG2	2.02	0.41
1:G:4866:SER:O	1:G:4868:ASP:N	2.53	0.41
1:G:768:PHE:HB3	1:G:771:PHE:CE2	2.56	0.41
1:G:78:LEU:O	1:G:81:MET:HG2	2.21	0.41
1:G:647:ASN:N	1:G:822:ARG:O	2.52	0.41
1:G:856:VAL:O	1:G:991:ASN:ND2	2.50	0.41
1:G:879:HIS:NE2	1:G:906:CYS:O	2.53	0.41
1:A:102:LEU:HD23	1:A:162:LYS:HA	2.03	0.41
1:A:12:GLN:O	1:A:165:VAL:HG23	2.21	0.41
1:A:1719:HIS:CG	1:A:1802:ILE:HG23	2.56	0.41
1:A:1819:VAL:HG22	1:A:1926:LEU:HD13	2.02	0.41
1:A:1848:LEU:HD12	1:A:1851:MET:SD	2.60	0.41
1:A:340:LYS:HG3	1:A:342:GLY:N	2.35	0.41
1:A:515:TRP:HA	1:A:518:ILE:HD12	2.02	0.41
1:A:633:LEU:HD22	1:A:1663:HIS:HD2	1.84	0.41
1:A:975:VAL:HG21	1:A:1044:ARG:CB	2.47	0.41
2:B:16:PRO:HG3	2:B:106:LEU:HD21	2.03	0.41
1:C:1834:VAL:HG13	1:C:1835:GLU:H	1.84	0.41
1:C:2349:ASN:O	1:C:2353:VAL:HG23	2.20	0.41
1:C:4041:ALA:O	1:C:4044:MET:HB3	2.19	0.41
1:C:4217:PHE:CZ	1:C:4234:PHE:HA	2.56	0.41
1:C:4863:TYR:HD2	1:C:4876:CYS:SG	2.44	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:642:THR:OG1	1:C:1617:THR:HG21	2.20	0.41
1:C:78:LEU:HA	1:C:81:MET:HG2	2.02	0.41
1:C:879:HIS:NE2	1:C:906:CYS:O	2.53	0.41
1:E:945:LYS:HA	1:E:1049:TYR:HA	2.03	0.41
1:E:1287:LEU:HD13	1:E:1556:PRO:HD3	2.01	0.41
1:E:1237:TRP:CD1	1:E:1611:HIS:HA	2.56	0.41
1:E:1729:SER:HB2	1:E:2163:ARG:HH11	1.82	0.41
1:E:1762:LEU:HD21	1:E:1860:LYS:NZ	2.34	0.41
1:E:2094:LEU:O	1:E:2098:VAL:HG23	2.21	0.41
1:E:2430:ILE:HG23	1:E:2501:SER:HB2	2.01	0.41
1:E:2887:GLY:O	1:E:2891:LYS:HG3	2.20	0.41
1:E:5004:THR:O	1:E:5007:GLU:HG2	2.21	0.41
1:E:768:PHE:HB3	1:E:771:PHE:CE2	2.56	0.41
1:E:669:ASP:CB	1:E:788:LYS:NZ	2.83	0.41
1:G:1072:VAL:HG22	1:G:1196:PRO:HD3	2.03	0.41
1:G:1099:GLU:H	1:G:1198:GLN:NE2	2.18	0.41
1:G:1245:PHE:CE2	1:G:1646:ARG:NH1	2.88	0.41
1:G:1691:GLN:O	1:G:1695:LEU:HG	2.19	0.41
1:G:2299:VAL:O	1:G:2360:LYS:HE2	2.20	0.41
1:G:3977:GLN:NE2	1:G:4030:LEU:O	2.54	0.41
1:G:40:GLU:OE2	1:G:406:SER:HB2	2.20	0.41
2:H:4:VAL:HG21	2:H:62:GLY:HA3	2.01	0.41
1:A:607:CYS:HB2	1:A:1672:ALA:HB1	2.01	0.41
1:A:1723:ALA:O	1:A:1727:ARG:HB2	2.20	0.41
1:A:3922:TYR:HA	1:A:3925:ARG:HG2	2.02	0.41
1:A:3933:PHE:O	1:A:3937:TYR:HD2	2.03	0.41
1:A:4653:VAL:O	1:A:4657:CYS:N	2.46	0.41
1:A:4866:SER:O	1:A:4868:ASP:N	2.54	0.41
1:A:768:PHE:HB3	1:A:771:PHE:CE2	2.56	0.41
1:C:69:LEU:HD13	1:C:101:LEU:HD11	2.01	0.41
1:C:1616:GLU:HG3	1:C:1617:THR:HG23	2.02	0.41
1:C:1689:VAL:HG22	1:C:1694:LEU:HD11	2.01	0.41
1:C:340:LYS:HG3	1:C:342:GLY:N	2.36	0.41
1:C:3886:ARG:O	1:C:3890:LEU:HD13	2.21	0.41
1:C:3927:GLN:HE21	1:C:3991:GLY:HA3	1.86	0.41
1:C:4137:ARG:HD2	1:C:4177:TYR:CE2	2.56	0.41
1:C:4582:VAL:HG12	1:C:4629:TYR:HD1	1.85	0.41
1:C:4735:GLU:O	1:C:4739:GLU:N	2.50	0.41
1:C:514:SER:O	1:C:518:ILE:HG13	2.20	0.41
1:C:515:TRP:HA	1:C:518:ILE:HD12	2.02	0.41
1:C:580:GLU:HB3	1:C:620:LEU:HD11	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:111:HIS:CD2	1:E:113:HIS:HB3	2.56	0.41
1:E:1457:TYR:O	1:E:1458:HIS:CG	2.73	0.41
1:E:1857:GLU:O	1:E:1860:LYS:HB2	2.20	0.41
1:E:1945:TYR:O	1:E:1949:GLN:HG2	2.21	0.41
1:E:2349:ASN:O	1:E:2353:VAL:HG23	2.21	0.41
1:E:2876:GLU:OE2	1:E:2916:LYS:HD3	2.20	0.41
1:E:40:GLU:OE2	1:E:406:SER:HB2	2.20	0.41
1:E:4578:LEU:HG	1:E:4578:LEU:O	2.20	0.41
1:E:4580:TYR:HB2	1:E:4631:PHE:CD1	2.56	0.41
1:E:642:THR:OG1	1:E:1617:THR:HG21	2.20	0.41
1:E:758:ARG:HD3	1:E:761:GLY:HA2	2.03	0.41
1:E:826:ILE:O	1:E:828:GLU:N	2.54	0.41
1:E:828:GLU:HG3	1:E:840:VAL:HG21	2.02	0.41
1:G:1237:TRP:CD1	1:G:1611:HIS:HA	2.56	0.41
1:G:1856:ASP:H	1:G:1857:GLU:CB	2.31	0.41
1:G:1959:ALA:O	1:G:1962:ALA:HB3	2.20	0.41
1:G:4157:ASP:O	1:G:4161:ARG:NE	2.53	0.41
1:G:4820:VAL:HG12	1:G:4821:LYS:H	1.85	0.41
1:G:485:SER:O	1:G:488:LEU:HB3	2.21	0.41
1:A:1288:PHE:O	1:A:1603:VAL:HG13	2.21	0.41
1:A:120:CYS:HA	1:A:135:VAL:HA	2.03	0.41
1:A:1297:PHE:HB2	1:A:1545:ASN:HA	2.03	0.41
1:A:1293:LEU:HB3	1:A:1584:ARG:HE	1.86	0.41
1:A:1857:GLU:O	1:A:1860:LYS:HB2	2.20	0.41
1:A:2349:ASN:O	1:A:2353:VAL:HG23	2.21	0.41
1:A:40:GLU:OE2	1:A:406:SER:HB2	2.20	0.41
1:A:4137:ARG:HD2	1:A:4177:TYR:CE2	2.56	0.41
1:A:4183:ILE:HD13	1:A:4193:ILE:HD13	2.03	0.41
1:A:4931:ILE:O	1:A:4935:LEU:HB2	2.19	0.41
1:A:879:HIS:NE2	1:A:906:CYS:O	2.53	0.41
1:C:1293:LEU:HB3	1:C:1584:ARG:HE	1.86	0.41
1:C:1676:LEU:O	1:C:1676:LEU:HD23	2.21	0.41
1:C:1848:LEU:HD12	1:C:1851:MET:SD	2.60	0.41
1:C:1748:PHE:HE1	1:C:2072:LEU:C	2.24	0.41
1:C:2284:ASN:HA	1:C:2287:ALA:HB3	2.02	0.41
1:C:2806:ARG:HB3	1:C:2810:LYS:HE3	2.02	0.41
1:C:4034:ASN:HD21	1:C:4040:ILE:CG2	2.32	0.41
1:C:4174:PHE:HA	1:C:4177:TYR:CD2	2.56	0.41
1:C:4813:LEU:HD12	1:C:4814:LEU:N	2.35	0.41
1:C:4875:LYS:O	1:C:4877:ASP:N	2.54	0.41
1:A:4581:LYS:HE2	1:C:4877:ASP:O	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:485:SER:O	1:C:488:LEU:HB3	2.21	0.41
1:C:5011:TRP:O	1:C:5014:TYR:HB3	2.20	0.41
2:D:92:PRO:HA	2:D:93:PRO:HD3	1.91	0.41
1:E:1616:GLU:HG3	1:E:1617:THR:HG23	2.02	0.41
1:E:1864:LYS:NZ	1:E:1869:GLU:C	2.73	0.41
1:E:1944:GLU:HA	1:E:1947:CYS:SG	2.61	0.41
1:E:165:VAL:HG13	1:E:204:PRO:HD3	2.02	0.41
1:E:2114:PRO:O	1:E:3704:HIS:NE2	2.40	0.41
1:E:2142:TYR:CD2	1:E:2197:LEU:HD12	2.55	0.41
1:E:2284:ASN:HA	1:E:2287:ALA:HB3	2.02	0.41
1:E:3732:SER:HB2	1:E:3766:GLN:HB3	2.03	0.41
1:E:4666:VAL:HA	1:E:4669:VAL:HG12	2.03	0.41
1:E:537:CYS:HB3	1:E:571:SER:HB3	2.03	0.41
1:E:580:GLU:HB3	1:E:620:LEU:HD11	2.03	0.41
1:E:590:LEU:HD13	1:E:599:VAL:HB	2.03	0.41
1:E:910:PHE:CG	1:E:918:ARG:HB3	2.55	0.41
2:F:16:PRO:HG3	2:F:106:LEU:HD21	2.02	0.41
1:G:1077:ALA:HB3	1:G:1189:LEU:HB3	2.03	0.41
1:G:843:SER:HA	1:G:1197:GLY:HA2	2.03	0.41
1:G:39:ALA:HB3	1:G:137:LEU:HD11	2.03	0.41
1:G:1819:VAL:HG22	1:G:1926:LEU:HD13	2.02	0.41
1:G:1937:LEU:HD11	1:G:2115:GLU:OE1	2.21	0.41
1:G:2293:GLN:O	1:G:2296:GLU:HG2	2.21	0.41
1:G:3659:ALA:O	1:G:3663:LEU:HG	2.20	0.41
1:G:3718:GLU:HG3	1:G:3719:ASP:N	2.36	0.41
1:G:3722:TYR:HE2	1:G:3797:THR:HG22	1.86	0.41
1:G:3838:THR:C	1:G:3839:CYS:SG	2.99	0.41
1:G:4234:PHE:CZ	1:G:4988:TYR:HB2	2.55	0.41
1:G:515:TRP:HA	1:G:518:ILE:HD12	2.02	0.41
1:A:1094:ALA:HB1	1:A:1143:TRP:CZ3	2.56	0.41
1:A:1275:ARG:HG2	1:A:1564:PHE:CD2	2.56	0.41
1:A:1585:LYS:HD3	1:A:1596:GLU:OE2	2.20	0.41
1:A:1230:MET:HB2	1:A:1828:ASP:OD1	2.20	0.41
1:A:2284:ASN:HA	1:A:2287:ALA:HB3	2.02	0.41
1:A:2335:LEU:HB2	1:A:2432:LEU:HD11	2.03	0.41
1:A:356:TRP:O	1:A:378:LEU:HA	2.21	0.41
1:A:3984:ARG:HG2	1:A:3984:ARG:O	2.21	0.41
1:A:4062:PHE:O	1:A:4170:ILE:HG21	2.20	0.41
1:A:4118:ASP:O	1:A:4120:ASN:N	2.53	0.41
1:A:758:ARG:HD3	1:A:761:GLY:HA2	2.02	0.41
1:A:856:VAL:O	1:A:991:ASN:ND2	2.48	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1077:ALA:HB3	1:C:1189:LEU:HB3	2.03	0.41
1:C:145:ALA:HA	1:C:175:SER:HB3	2.01	0.41
1:C:2299:VAL:O	1:C:2360:LYS:HE2	2.20	0.41
1:C:2745:VAL:CG2	1:C:2818:ALA:HB2	2.50	0.41
1:C:2754:PHE:CZ	1:C:2930:LEU:HD23	2.56	0.41
1:C:3888:LEU:HD23	1:C:3888:LEU:HA	1.84	0.41
1:C:4666:VAL:HA	1:C:4669:VAL:HG12	2.03	0.41
1:E:69:LEU:HD13	1:E:101:LEU:HD11	2.01	0.41
1:E:2773:ASN:HB3	1:E:2775:TRP:CD1	2.56	0.41
1:E:2822:THR:HG1	1:E:2938:THR:HG1	1.62	0.41
1:E:246:TYR:CE2	1:E:373:LYS:HD3	2.55	0.41
1:E:4238:CYS:O	1:E:4242:ILE:HG13	2.20	0.41
1:E:4914:VAL:O	1:E:4918:ILE:HG13	2.21	0.41
1:E:67:PHE:HA	1:E:110:ARG:O	2.21	0.41
1:E:684:VAL:HG22	1:E:781:VAL:HG13	2.02	0.41
1:G:116:MET:HE2	1:G:139:GLU:OE2	2.21	0.41
1:G:1287:LEU:HD13	1:G:1556:PRO:HD3	2.02	0.41
1:G:1654:SER:HB2	1:G:1704:PRO:HB3	2.02	0.41
1:G:1965:TYR:CE1	1:G:2063:LEU:HD11	2.56	0.41
1:G:2349:ASN:O	1:G:2353:VAL:HG23	2.20	0.41
1:G:2761:TYR:CZ	1:G:2862:LEU:HD13	2.55	0.41
1:G:3976:ASN:O	1:G:3979:SER:HB3	2.20	0.41
1:G:4796:MET:HG3	1:G:4797:VAL:N	2.35	0.41
1:A:1110:ARG:HB2	1:A:1113:VAL:HG23	2.02	0.41
1:A:1077:ALA:HB3	1:A:1189:LEU:HB3	2.03	0.41
1:A:121:LEU:HD12	1:A:136:GLY:HA3	2.03	0.41
1:A:1457:TYR:O	1:A:1458:HIS:CG	2.74	0.41
1:A:1586:ASN:O	1:A:1588:ALA:N	2.49	0.41
1:A:1237:TRP:CD1	1:A:1611:HIS:HA	2.56	0.41
1:A:1679:ASN:HB3	1:A:1799:SER:H	1.86	0.41
1:A:2456:ILE:HD11	1:C:178:ARG:CZ	2.51	0.41
1:A:2887:GLY:O	1:A:2891:LYS:HG3	2.20	0.41
1:A:485:SER:O	1:A:488:LEU:HB3	2.21	0.41
1:A:4944:ARG:O	1:A:4947:GLN:HB2	2.20	0.41
1:A:582:HIS:O	1:A:585:SER:HB2	2.20	0.41
1:A:670:GLU:O	1:A:787:VAL:HG13	2.20	0.41
1:C:1024:TYR:CD1	1:C:1032:LYS:HG2	2.56	0.41
1:C:1072:VAL:HG22	1:C:1196:PRO:HD3	2.03	0.41
1:C:1667:LEU:HD23	1:C:1710:GLY:C	2.41	0.41
1:C:1945:TYR:O	1:C:1949:GLN:HG2	2.21	0.41
1:C:2430:ILE:HG23	1:C:2501:SER:HB2	2.01	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:454:PRO:HA	1:C:455:PRO:HD3	1.86	0.41
1:C:5004:THR:O	1:C:5007:GLU:HG2	2.20	0.41
1:C:684:VAL:HG22	1:C:781:VAL:HG13	2.03	0.41
1:C:856:VAL:O	1:C:991:ASN:ND2	2.50	0.41
1:E:1288:PHE:O	1:E:1603:VAL:HG13	2.21	0.41
1:E:635:THR:OG1	1:E:1638:ALA:O	2.31	0.41
1:C:2359:ARG:CZ	1:E:179:TYR:OH	2.68	0.41
1:E:2754:PHE:CZ	1:E:2930:LEU:HD23	2.56	0.41
1:E:3981:ALA:HA	1:E:3986:TRP:HH2	1.86	0.41
1:E:4047:MET:HG3	1:E:4048:LEU:N	2.35	0.41
1:E:4566:ALA:HA	1:E:4569:LEU:HD12	2.03	0.41
1:E:4875:LYS:O	1:E:4877:ASP:N	2.54	0.41
1:E:4977:THR:HA	1:E:4981:GLU:OE1	2.21	0.41
1:E:5022:PHE:HA	1:E:5022:PHE:HD1	1.75	0.41
1:E:671:VAL:HG12	1:E:673:PRO:HG3	2.03	0.41
1:G:1094:ALA:HB1	1:G:1143:TRP:CZ3	2.56	0.41
1:G:2101:MET:SD	1:G:2104:ARG:HD2	2.61	0.41
1:G:2515:GLN:O	1:G:2518:LEU:HB3	2.20	0.41
1:G:2745:VAL:CG2	1:G:2818:ALA:HB2	2.51	0.41
1:G:3957:VAL:O	1:G:3961:VAL:HG23	2.20	0.41
1:G:4722:ARG:O	1:G:4725:LEU:HG	2.21	0.41
1:G:607:CYS:HB2	1:G:1672:ALA:HB1	2.02	0.41
1:G:750:LEU:O	1:G:751:SER:OG	2.33	0.41
2:H:44:LYS:HA	2:H:45:PRO:HD3	1.90	0.41
1:A:642:THR:OG1	1:A:1617:THR:HG21	2.20	0.41
1:A:1667:LEU:HD23	1:A:1710:GLY:C	2.42	0.41
1:A:2114:PRO:O	1:A:3704:HIS:NE2	2.40	0.41
1:A:2204:HIS:ND1	1:A:2250:MET:SD	2.94	0.41
1:A:2554:LEU:HD11	1:A:2595:LEU:HA	2.03	0.41
1:A:4580:TYR:HB2	1:A:4631:PHE:CD1	2.53	0.41
1:A:4863:TYR:HD2	1:A:4876:CYS:SG	2.44	0.41
1:A:4876:CYS:HA	1:A:4882:CYS:HB3	2.03	0.41
1:A:572:PRO:O	1:A:575:LEU:HB2	2.19	0.41
1:A:78:LEU:HD12	1:A:81:MET:SD	2.61	0.41
1:A:78:LEU:O	1:A:81:MET:HG2	2.21	0.41
1:C:1275:ARG:HG2	1:C:1564:PHE:CD2	2.56	0.41
1:C:1230:MET:HB2	1:C:1828:ASP:OD1	2.21	0.41
1:C:2420:HIS:ND1	1:C:2423:MET:SD	2.76	0.41
1:C:3984:ARG:HG2	1:C:3984:ARG:O	2.21	0.41
1:C:4062:PHE:O	1:C:4170:ILE:HG21	2.20	0.41
1:C:4887:MET:HA	1:C:4891:VAL:CG2	2.51	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:4914:VAL:O	1:C:4918:ILE:HG13	2.21	0.41
1:C:4991:PHE:CE2	1:C:4995:LEU:HD11	2.56	0.41
1:E:1077:ALA:HB3	1:E:1189:LEU:HB3	2.03	0.41
1:E:121:LEU:HD12	1:E:136:GLY:HA3	2.02	0.41
1:E:1275:ARG:HG2	1:E:1564:PHE:CD2	2.56	0.41
1:E:1676:LEU:O	1:E:1676:LEU:HD23	2.21	0.41
1:E:1719:HIS:CG	1:E:1802:ILE:HG23	2.55	0.41
1:E:1829:PRO:HB3	1:E:1834:VAL:H	1.86	0.41
1:E:3888:LEU:HD23	1:E:3888:LEU:HA	1.84	0.41
1:E:4570:ALA:HB2	1:E:4650:HIS:CE1	2.56	0.41
2:F:42:ARG:C	2:F:44:LYS:H	2.24	0.41
1:G:635:THR:OG1	1:G:1638:ALA:O	2.32	0.41
1:A:178:ARG:CZ	1:G:2456:ILE:HD11	2.51	0.41
1:G:4063:ASP:HA	1:G:4170:ILE:HG12	2.03	0.41
1:G:4727:LYS:HZ1	1:G:4728:HIS:CE1	2.38	0.41
1:G:4968:PHE:HB2	1:G:4975:PHE:HD1	1.86	0.41
1:G:826:ILE:O	1:G:828:GLU:N	2.54	0.41
1:A:1087:ARG:HD2	1:A:1223:PHE:CE1	2.55	0.41
1:A:1099:GLU:H	1:A:1198:GLN:NE2	2.19	0.41
1:A:580:GLU:HB3	1:A:620:LEU:HD11	2.03	0.41
1:C:1094:ALA:HB1	1:C:1143:TRP:CZ3	2.56	0.41
1:C:1452:TRP:HB3	1:C:1550:PRO:HA	2.03	0.41
1:C:1937:LEU:O	1:C:1940:CYS:SG	2.69	0.41
1:C:1944:GLU:HA	1:C:1947:CYS:SG	2.61	0.41
1:C:2204:HIS:ND1	1:C:2250:MET:SD	2.94	0.41
1:C:3901:ASN:O	1:C:3905:THR:HG22	2.21	0.41
1:C:4108:ILE:O	1:C:4111:LEU:HB3	2.21	0.41
1:C:4118:ASP:O	1:C:4120:ASN:N	2.54	0.41
1:C:426:ARG:NH2	1:C:508:GLY:O	2.54	0.41
1:C:870:ILE:HA	1:C:873:LYS:HB3	2.03	0.41
1:E:1094:ALA:HB1	1:E:1143:TRP:CZ3	2.56	0.41
1:E:1293:LEU:HB3	1:E:1584:ARG:HE	1.87	0.41
1:C:2456:ILE:HD11	1:E:178:ARG:HH22	1.87	0.41
1:E:1959:ALA:O	1:E:1962:ALA:HB3	2.22	0.41
1:E:1966:VAL:HG12	1:E:1966:VAL:O	2.21	0.41
1:E:3712:GLU:O	1:E:3713:LYS:HD2	2.21	0.41
1:E:4137:ARG:HD2	1:E:4177:TYR:CE2	2.56	0.41
1:E:4802:GLY:HA2	1:E:4809:PHE:HB2	2.02	0.41
1:E:485:SER:O	1:E:488:LEU:HB3	2.21	0.41
1:E:4978:HIS:ND1	1:E:4982:GLU:OE1	2.53	0.41
1:E:636:ASN:HD21	2:F:35:LYS:HD3	1.85	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:1275:ARG:HG2	1:G:1564:PHE:CD2	2.56	0.41
1:G:175:SER:OG	1:G:176:SER:N	2.53	0.41
1:G:1779:PRO:HA	1:G:1780:PRO:HD3	1.79	0.41
1:G:2251:PHE:HA	1:G:2254:LEU:HG	2.03	0.41
1:G:2550:LEU:O	1:G:2554:LEU:N	2.54	0.41
1:G:2773:ASN:HB3	1:G:2775:TRP:CD1	2.56	0.41
1:G:3662:ILE:O	1:G:3662:ILE:HG22	2.21	0.41
1:G:3838:THR:O	1:G:3839:CYS:SG	2.76	0.41
1:G:4569:LEU:O	1:G:4573:ILE:HG13	2.20	0.41
1:G:4662:ASN:O	1:G:4667:PRO:HD3	2.20	0.41
1:E:4892:ARG:NH1	1:G:4896:GLY:HA3	2.35	0.41
2:H:31:GLU:HG2	2:H:96:THR:HB	2.02	0.41
1:A:1748:PHE:HE1	1:A:2072:LEU:C	2.24	0.40
1:A:2550:LEU:O	1:A:2554:LEU:N	2.54	0.40
1:A:2754:PHE:CZ	1:A:2930:LEU:HD23	2.56	0.40
1:A:272:SER:HB2	1:A:335:GLY:HA3	2.03	0.40
1:A:4174:PHE:HA	1:A:4177:TYR:CD2	2.56	0.40
1:C:111:HIS:CD2	1:C:113:HIS:HB3	2.56	0.40
1:C:1679:ASN:HB3	1:C:1799:SER:H	1.86	0.40
1:C:2550:LEU:O	1:C:2554:LEU:N	2.54	0.40
1:C:3933:PHE:O	1:C:3937:TYR:HD2	2.03	0.40
1:E:1603:VAL:HG12	1:E:1604:SER:O	2.20	0.40
1:E:2204:HIS:ND1	1:E:2250:MET:SD	2.94	0.40
1:E:2251:PHE:HA	1:E:2254:LEU:HG	2.03	0.40
1:E:4118:ASP:O	1:E:4120:ASN:N	2.54	0.40
1:E:4823:LEU:HG	1:E:4826:ILE:HD12	2.02	0.40
1:E:4932:ILE:O	1:E:4935:LEU:HB3	2.20	0.40
2:F:28:GLY:HA2	2:F:99:PHE:CD1	2.57	0.40
1:G:67:PHE:HA	1:G:110:ARG:O	2.21	0.40
1:G:111:HIS:CD2	1:G:113:HIS:HB3	2.56	0.40
1:G:2281:ILE:HD11	1:G:2337:PHE:HB3	2.02	0.40
1:G:3839:CYS:SG	1:G:3840:SER:N	2.94	0.40
1:G:3981:ALA:HA	1:G:3986:TRP:HH2	1.86	0.40
1:G:4691:GLN:HA	1:G:4692:PRO:HD2	1.88	0.40
1:G:4847:VAL:HG11	1:G:4924:VAL:HG22	2.02	0.40
1:G:4978:HIS:ND1	1:G:4982:GLU:OE1	2.54	0.40
1:G:78:LEU:HD12	1:G:81:MET:SD	2.61	0.40
1:A:1046:LEU:HA	1:A:1049:TYR:HB2	2.04	0.40
1:A:1603:VAL:HG12	1:A:1604:SER:O	2.22	0.40
1:A:1676:LEU:O	1:A:1676:LEU:HD23	2.21	0.40
1:A:1685:LEU:HA	1:A:1685:LEU:HD23	1.76	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1829:PRO:HB3	1:A:1834:VAL:H	1.86	0.40
1:A:1944:GLU:HA	1:A:1947:CYS:SG	2.61	0.40
1:A:165:VAL:HG13	1:A:204:PRO:HD3	2.03	0.40
1:A:2199:ARG:NE	1:A:2249:SER:OG	2.52	0.40
1:A:2251:PHE:HA	1:A:2254:LEU:HG	2.03	0.40
1:A:3712:GLU:O	1:A:3713:LYS:HD2	2.21	0.40
1:A:3805:LEU:HB3	1:A:3890:LEU:HB3	2.03	0.40
1:A:4666:VAL:HA	1:A:4669:VAL:HG12	2.02	0.40
1:A:826:ILE:O	1:A:828:GLU:N	2.54	0.40
1:A:843:SER:HA	1:A:1197:GLY:HA2	2.03	0.40
1:C:1100:MET:HE1	1:C:1199:VAL:O	2.22	0.40
1:C:123:THR:HB	1:C:125:ARG:HH21	1.86	0.40
1:C:1457:TYR:O	1:C:1458:HIS:ND1	2.54	0.40
1:C:2449:GLU:O	1:C:2452:ARG:HB2	2.20	0.40
1:C:3985:LEU:O	1:C:3989:VAL:HG23	2.21	0.40
1:C:905:PRO:HB2	1:C:917:GLU:HB3	2.04	0.40
1:E:1679:ASN:HB3	1:E:1799:SER:H	1.86	0.40
1:E:1748:PHE:HA	1:E:1749:PRO:HD2	1.76	0.40
1:E:2198:MET:HB3	1:E:2239:PHE:HE1	1.86	0.40
1:E:2199:ARG:NE	1:E:2249:SER:OG	2.52	0.40
1:E:224:HIS:N	1:E:229:GLU:O	2.42	0.40
1:E:2335:LEU:HB2	1:E:2432:LEU:HD11	2.02	0.40
1:E:2449:GLU:O	1:E:2452:ARG:HB2	2.20	0.40
1:E:321:GLU:HG2	1:E:323:LEU:HG	2.03	0.40
1:E:3985:LEU:O	1:E:3989:VAL:HG23	2.21	0.40
1:E:4175:ARG:O	1:E:4178:LEU:HB3	2.21	0.40
1:E:4582:VAL:HB	1:E:4628:VAL:HG12	2.03	0.40
1:E:4669:VAL:O	1:E:4672:LYS:HB3	2.22	0.40
1:E:78:LEU:O	1:E:81:MET:HG2	2.22	0.40
1:E:828:GLU:OE2	1:E:831:ARG:HA	2.20	0.40
1:G:1293:LEU:HB3	1:G:1584:ARG:HE	1.86	0.40
1:G:1945:TYR:O	1:G:1949:GLN:HG2	2.21	0.40
1:G:2210:VAL:O	1:G:2214:VAL:HG23	2.22	0.40
1:G:321:GLU:HG2	1:G:323:LEU:HG	2.03	0.40
1:G:356:TRP:O	1:G:378:LEU:HA	2.21	0.40
1:G:4770:SER:OG	1:G:4771:ILE:N	2.53	0.40
1:A:4839:MET:CB	1:G:4823:LEU:CD1	2.99	0.40
1:G:426:ARG:NH2	1:G:508:GLY:O	2.54	0.40
1:G:497:TYR:HB2	1:G:515:TRP:CH2	2.57	0.40
1:A:1841:VAL:O	1:A:1845:VAL:HG23	2.21	0.40
1:A:2293:GLN:CA	1:A:2296:GLU:HG2	2.47	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:321:GLU:HG2	1:A:323:LEU:HG	2.03	0.40
1:A:3775:ALA:HA	1:A:3778:MET:HG2	2.03	0.40
1:A:3886:ARG:O	1:A:3890:LEU:HD13	2.21	0.40
1:A:3927:GLN:HE21	1:A:3991:GLY:HA3	1.87	0.40
1:A:4175:ARG:O	1:A:4178:LEU:HB3	2.21	0.40
1:A:4578:LEU:CD1	1:C:4880:MET:CA	2.83	0.40
1:A:4636:THR:O	1:A:4639:MET:HE2	2.21	0.40
1:A:4675:LYS:O	1:A:4679:ARG:HG2	2.21	0.40
1:A:598:LYS:HA	1:A:598:LYS:HD3	1.87	0.40
2:B:31:GLU:HG2	2:B:96:THR:HB	2.02	0.40
1:C:1133:HIS:CE1	1:C:1134:LEU:HG	2.55	0.40
1:C:39:ALA:HB3	1:C:137:LEU:HD11	2.03	0.40
1:C:1585:LYS:HD3	1:C:1596:GLU:OE2	2.21	0.40
1:C:175:SER:OG	1:C:176:SER:N	2.53	0.40
1:C:216:GLY:HA3	1:C:264:PRO:CD	2.50	0.40
1:C:3805:LEU:HB3	1:C:3890:LEU:HB3	2.03	0.40
1:C:4183:ILE:HD13	1:C:4193:ILE:HD13	2.03	0.40
1:C:4570:ALA:HB2	1:C:4650:HIS:CE1	2.57	0.40
1:C:4669:VAL:O	1:C:4672:LYS:HB3	2.21	0.40
1:C:831:ARG:O	1:C:837:PRO:HA	2.22	0.40
1:E:102:LEU:HD23	1:E:162:LYS:HA	2.02	0.40
1:E:1864:LYS:HZ2	1:E:1869:GLU:C	2.25	0.40
1:E:2281:ILE:HD11	1:E:2337:PHE:CG	2.56	0.40
1:E:2424:SER:HA	1:E:2427:ALA:HB3	2.02	0.40
1:E:2550:LEU:O	1:E:2554:LEU:N	2.54	0.40
1:E:2558:VAL:O	1:E:2561:LEU:HG	2.21	0.40
1:E:2858:GLN:HA	1:E:2859:PRO:HD2	1.93	0.40
1:E:3805:LEU:HB3	1:E:3890:LEU:HB3	2.03	0.40
1:E:3945:GLU:O	1:E:3948:LYS:HB2	2.22	0.40
1:E:4108:ILE:O	1:E:4111:LEU:HB3	2.21	0.40
1:E:4991:PHE:CE2	1:E:4995:LEU:HD11	2.56	0.40
1:E:57:ASN:OD1	1:E:308:HIS:ND1	2.54	0.40
1:G:1288:PHE:O	1:G:1603:VAL:HG13	2.21	0.40
1:G:1681:VAL:O	1:G:1684:ALA:HB3	2.21	0.40
1:G:2207:VAL:O	1:G:2211:MET:HG2	2.22	0.40
1:G:2251:PHE:CD1	1:G:2254:LEU:HD12	2.57	0.40
1:A:131:LEU:HB2	1:G:2460:LEU:HD21	2.02	0.40
1:G:2554:LEU:HD11	1:G:2595:LEU:HA	2.04	0.40
1:G:4820:VAL:HG12	1:G:4821:LYS:N	2.36	0.40
1:G:590:LEU:HD13	1:G:599:VAL:HB	2.04	0.40
1:G:725:HIS:O	1:G:725:HIS:ND1	2.54	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:870:ILE:HA	1:G:873:LYS:HB3	2.03	0.40
1:G:905:PRO:HB2	1:G:917:GLU:HB3	2.03	0.40
1:A:1647:CYS:O	1:A:1648:MET:HG3	2.20	0.40
1:A:1681:VAL:O	1:A:1684:ALA:HB3	2.22	0.40
1:A:1958:LEU:HD11	1:A:3657:TYR:CE2	2.57	0.40
1:A:2101:MET:SD	1:A:2104:ARG:HD2	2.61	0.40
1:A:2251:PHE:CD1	1:A:2254:LEU:HD12	2.57	0.40
1:A:2515:GLN:O	1:A:2518:LEU:HB3	2.20	0.40
1:A:251:ALA:O	1:A:254:THR:OG1	2.33	0.40
1:A:4991:PHE:CE2	1:A:4995:LEU:HD11	2.56	0.40
1:A:426:ARG:NH2	1:A:508:GLY:O	2.54	0.40
1:C:120:CYS:HA	1:C:135:VAL:HA	2.04	0.40
1:C:1216:ILE:HG22	1:C:1217:CYS:N	2.37	0.40
1:C:1862:ILE:HG23	1:C:1865:MET:HE2	2.03	0.40
1:C:2131:LEU:O	1:C:2134:LEU:HB3	2.22	0.40
1:C:2554:LEU:HD11	1:C:2595:LEU:HA	2.03	0.40
1:C:2773:ASN:HB3	1:C:2775:TRP:CD1	2.56	0.40
1:C:3838:THR:O	1:C:3839:CYS:SG	2.76	0.40
1:C:3922:TYR:HA	1:C:3925:ARG:HG2	2.03	0.40
1:C:3989:VAL:O	1:C:3993:LEU:HG	2.22	0.40
1:C:4818:MET:O	1:C:4820:VAL:HA	2.22	0.40
1:A:4826:ILE:CG1	1:C:4839:MET:HE3	2.52	0.40
1:E:1024:TYR:CD1	1:E:1032:LYS:HG2	2.56	0.40
1:E:1457:TYR:O	1:E:1458:HIS:ND1	2.55	0.40
1:E:1719:HIS:CD2	1:E:1800:PRO:HG2	2.57	0.40
1:E:1845:VAL:HG13	1:E:1854:PHE:HE2	1.85	0.40
1:E:2251:PHE:CD1	1:E:2254:LEU:HD12	2.57	0.40
1:E:2299:VAL:O	1:E:2360:LYS:HE2	2.20	0.40
1:E:4733:GLY:O	1:E:4737:ILE:HG12	2.21	0.40
1:E:4995:LEU:HD21	1:E:5007:GLU:HB2	2.02	0.40
1:G:1719:HIS:CD2	1:G:1800:PRO:HG2	2.56	0.40
1:G:1944:GLU:HA	1:G:1947:CYS:SG	2.61	0.40
1:G:1966:VAL:O	1:G:1966:VAL:HG12	2.21	0.40
1:G:2204:HIS:ND1	1:G:2250:MET:SD	2.94	0.40
1:G:3801:GLY:HA3	1:G:3887:PHE:HE1	1.86	0.40
1:G:4989:MET:HG3	1:G:4990:PHE:N	2.37	0.40
1:G:669:ASP:CB	1:G:788:LYS:NZ	2.83	0.40
1:A:1719:HIS:CD2	1:A:1800:PRO:HG2	2.56	0.40
1:A:33:LEU:HD23	1:A:35:LEU:HD23	2.03	0.40
1:A:3901:ASN:O	1:A:3905:THR:HG22	2.21	0.40
1:A:4995:LEU:HD21	1:A:5007:GLU:HB2	2.04	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:5011:TRP:O	1:A:5014:TYR:HB3	2.20	0.40
1:C:1073:ARG:O	1:C:1074:ILE:HG13	2.22	0.40
1:C:1275:ARG:HG2	1:C:1564:PHE:HB3	2.03	0.40
1:C:1681:VAL:O	1:C:1684:ALA:HB3	2.22	0.40
1:C:1694:LEU:HB3	1:C:1715:LEU:HD12	2.04	0.40
1:C:248:GLU:HG2	1:C:252:VAL:HG11	2.03	0.40
1:C:2515:GLN:O	1:C:2518:LEU:HB3	2.20	0.40
1:C:321:GLU:HG2	1:C:323:LEU:HG	2.03	0.40
1:C:3712:GLU:O	1:C:3713:LYS:HD2	2.21	0.40
1:C:3718:GLU:HG3	1:C:3719:ASP:N	2.35	0.40
1:C:4175:ARG:O	1:C:4178:LEU:HB3	2.21	0.40
1:C:4977:THR:HA	1:C:4981:GLU:OE1	2.21	0.40
1:C:590:LEU:HD13	1:C:599:VAL:HB	2.04	0.40
1:C:78:LEU:O	1:C:81:MET:HG2	2.22	0.40
1:E:1046:LEU:HA	1:E:1049:TYR:HB2	2.04	0.40
1:E:1230:MET:HB2	1:E:1828:ASP:OD1	2.22	0.40
1:E:216:GLY:HA3	1:E:264:PRO:CD	2.50	0.40
1:E:2456:ILE:HD11	1:G:178:ARG:CZ	2.52	0.40
1:E:3817:LEU:HD11	1:E:3821:LYS:HE2	2.02	0.40
1:E:4058:ILE:HG13	1:E:4059:LEU:N	2.35	0.40
1:E:426:ARG:NH2	1:E:508:GLY:O	2.54	0.40
1:E:598:LYS:HD3	1:E:598:LYS:HA	1.87	0.40
1:E:975:VAL:HG21	1:E:1044:ARG:CB	2.47	0.40
1:G:1201:HIS:CD2	1:G:1202:LEU:N	2.89	0.40
1:G:123:THR:HB	1:G:125:ARG:HH21	1.86	0.40
1:G:1667:LEU:HD23	1:G:1710:GLY:C	2.41	0.40
1:G:1719:HIS:CG	1:G:1802:ILE:HG23	2.56	0.40
1:G:737:LEU:HB3	1:G:738:LEU:H	1.50	0.40
1:G:831:ARG:O	1:G:837:PRO:HA	2.22	0.40

There are no symmetry-related clashes.

5.3 Torsion angles ⓘ

5.3.1 Protein backbone ⓘ

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	3483/5037 (69%)	3132 (90%)	258 (7%)	93 (3%)	6	44
1	C	3483/5037 (69%)	3133 (90%)	254 (7%)	96 (3%)	6	44
1	E	3483/5037 (69%)	3134 (90%)	255 (7%)	94 (3%)	6	44
1	G	3483/5037 (69%)	3137 (90%)	252 (7%)	94 (3%)	6	44
2	B	105/108 (97%)	95 (90%)	9 (9%)	1 (1%)	19	65
2	D	105/108 (97%)	95 (90%)	9 (9%)	1 (1%)	19	65
2	F	105/108 (97%)	96 (91%)	8 (8%)	1 (1%)	19	65
2	H	105/108 (97%)	97 (92%)	8 (8%)	0	100	100
All	All	14352/20580 (70%)	12919 (90%)	1053 (7%)	380 (3%)	11	45

All (380) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	806	PRO
1	A	900	ASN
1	A	914	PRO
1	A	916	PRO
1	A	971	ASP
1	A	1211	LEU
1	A	1216	ILE
1	A	1459	GLN
1	A	1763	PRO
1	A	1767	VAL
1	A	2341	VAL
1	A	3714	SER
1	A	4012	LEU
1	A	4037	ASN
1	A	4083	ASP
1	A	4084	PRO
1	A	4820	VAL
1	A	4868	ASP
1	A	4904	PRO
1	C	806	PRO
1	C	914	PRO
1	C	916	PRO
1	C	971	ASP
1	C	1211	LEU
1	C	1216	ILE
1	C	1459	GLN
1	C	1763	PRO

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Mol	Chain	Res	Type
1	C	1767	VAL
1	C	2341	VAL
1	C	3714	SER
1	C	4012	LEU
1	C	4037	ASN
1	C	4083	ASP
1	C	4084	PRO
1	C	4820	VAL
1	C	4868	ASP
1	C	4904	PRO
1	E	806	PRO
1	E	914	PRO
1	E	916	PRO
1	E	971	ASP
1	E	1211	LEU
1	E	1216	ILE
1	E	1459	GLN
1	E	1763	PRO
1	E	1767	VAL
1	E	2341	VAL
1	E	4012	LEU
1	E	4037	ASN
1	E	4083	ASP
1	E	4084	PRO
1	E	4820	VAL
1	E	4868	ASP
1	E	4904	PRO
1	G	806	PRO
1	G	914	PRO
1	G	916	PRO
1	G	971	ASP
1	G	1211	LEU
1	G	1216	ILE
1	G	1459	GLN
1	G	1763	PRO
1	G	1767	VAL
1	G	2341	VAL
1	G	3714	SER
1	G	3985	LEU
1	G	4012	LEU
1	G	4037	ASN
1	G	4083	ASP

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Mol	Chain	Res	Type
1	G	4084	PRO
1	G	4771	ILE
1	G	4820	VAL
1	G	4868	ASP
1	G	4904	PRO
1	A	334	MET
1	A	385	ASP
1	A	767	VAL
1	A	770	ALA
1	A	826	ILE
1	A	895	PRO
1	A	1483	VAL
1	A	1488	LYS
1	A	1582	SER
1	A	3844	LEU
1	A	3941	ASP
1	A	3944	GLU
1	A	4119	GLU
1	A	4770	SER
1	A	4771	ILE
1	A	4772	ASP
1	A	4870	ASP
1	A	4985	LEU
1	A	5027	CYS
1	C	334	MET
1	C	385	ASP
1	C	767	VAL
1	C	770	ALA
1	C	826	ILE
1	C	895	PRO
1	C	900	ASN
1	C	1483	VAL
1	C	1488	LYS
1	C	1582	SER
1	C	3844	LEU
1	C	3941	ASP
1	C	3944	GLU
1	C	4119	GLU
1	C	4770	SER
1	C	4771	ILE
1	C	4772	ASP
1	C	4870	ASP

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Mol	Chain	Res	Type
1	C	4985	LEU
1	C	5027	CYS
1	E	334	MET
1	E	385	ASP
1	E	767	VAL
1	E	770	ALA
1	E	826	ILE
1	E	895	PRO
1	E	900	ASN
1	E	1483	VAL
1	E	1488	LYS
1	E	1582	SER
1	E	3714	SER
1	E	3844	LEU
1	E	3944	GLU
1	E	4119	GLU
1	E	4770	SER
1	E	4771	ILE
1	E	4772	ASP
1	E	4870	ASP
1	E	4985	LEU
1	E	5027	CYS
1	G	334	MET
1	G	385	ASP
1	G	767	VAL
1	G	770	ALA
1	G	826	ILE
1	G	895	PRO
1	G	900	ASN
1	G	1483	VAL
1	G	1488	LYS
1	G	1582	SER
1	G	4119	GLU
1	G	4870	ASP
1	G	4984	ASN
1	G	5027	CYS
1	A	30	LYS
1	A	611	GLY
1	A	682	LEU
1	A	690	GLU
1	A	834	PRO
1	A	1206	GLN

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Mol	Chain	Res	Type
1	A	1254	HIS
1	A	1280	GLN
1	A	1606	SER
1	A	1772	ARG
1	A	1834	VAL
1	A	1857	GLU
1	A	2246	ASN
1	A	2466	LEU
1	A	3719	ASP
1	A	4158	PRO
1	A	4208	PRO
1	A	4867	GLU
1	A	4876	CYS
1	A	4893	ALA
1	C	30	LYS
1	C	611	GLY
1	C	682	LEU
1	C	690	GLU
1	C	834	PRO
1	C	1206	GLN
1	C	1254	HIS
1	C	1280	GLN
1	C	1512	THR
1	C	1606	SER
1	C	1772	ARG
1	C	1834	VAL
1	C	1857	GLU
1	C	2246	ASN
1	C	2466	LEU
1	C	3719	ASP
1	C	4158	PRO
1	C	4208	PRO
1	C	4867	GLU
1	C	4876	CYS
1	C	4893	ALA
1	E	30	LYS
1	E	611	GLY
1	E	682	LEU
1	E	690	GLU
1	E	834	PRO
1	E	1206	GLN
1	E	1254	HIS

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Mol	Chain	Res	Type
1	E	1280	GLN
1	E	1462	MET
1	E	1606	SER
1	E	1772	ARG
1	E	1834	VAL
1	E	1857	GLU
1	E	2246	ASN
1	E	2466	LEU
1	E	3719	ASP
1	E	3941	ASP
1	E	4158	PRO
1	E	4208	PRO
1	E	4867	GLU
1	E	4876	CYS
1	G	30	LYS
1	G	611	GLY
1	G	682	LEU
1	G	690	GLU
1	G	834	PRO
1	G	1206	GLN
1	G	1254	HIS
1	G	1280	GLN
1	G	1606	SER
1	G	1747	LEU
1	G	1772	ARG
1	G	1834	VAL
1	G	1857	GLU
1	G	2246	ASN
1	G	2466	LEU
1	G	3659	ALA
1	G	3719	ASP
1	G	3844	LEU
1	G	3944	GLU
1	G	4158	PRO
1	G	4208	PRO
1	G	4772	ASP
1	G	4867	GLU
1	G	4876	CYS
1	G	4893	ALA
1	A	56	GLN
1	A	701	GLY
1	A	827	LYS

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Mol	Chain	Res	Type
1	A	852	VAL
1	A	885	THR
1	A	1095	VAL
1	A	1284	VAL
1	A	1286	MET
1	A	1462	MET
1	A	1747	LEU
1	A	2546	MET
1	A	2826	ALA
1	A	3659	ALA
1	A	4905	ALA
1	C	56	GLN
1	C	701	GLY
1	C	827	LYS
1	C	828	GLU
1	C	852	VAL
1	C	885	THR
1	C	1095	VAL
1	C	1284	VAL
1	C	1286	MET
1	C	1462	MET
1	C	1747	LEU
1	C	2306	GLY
1	C	2546	MET
1	C	2826	ALA
1	C	3659	ALA
1	E	56	GLN
1	E	701	GLY
1	E	827	LYS
1	E	828	GLU
1	E	852	VAL
1	E	885	THR
1	E	1095	VAL
1	E	1284	VAL
1	E	1286	MET
1	E	1747	LEU
1	E	2306	GLY
1	E	2546	MET
1	E	2826	ALA
1	E	3659	ALA
1	E	4905	ALA
1	G	56	GLN

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Mol	Chain	Res	Type
1	G	701	GLY
1	G	720	HIS
1	G	827	LYS
1	G	828	GLU
1	G	852	VAL
1	G	885	THR
1	G	1095	VAL
1	G	1284	VAL
1	G	1286	MET
1	G	1462	MET
1	G	2306	GLY
1	G	2546	MET
1	G	3941	ASP
1	G	4207	MET
1	G	4905	ALA
1	A	298	GLY
1	A	676	THR
1	A	720	HIS
1	A	802	PHE
1	A	828	GLU
1	A	1139	PHE
1	A	1182	ILE
1	A	1550	PRO
1	A	2109	ASP
1	A	4207	MET
1	C	298	GLY
1	C	676	THR
1	C	720	HIS
1	C	802	PHE
1	C	1139	PHE
1	C	1182	ILE
1	C	1550	PRO
1	C	2109	ASP
1	C	4207	MET
1	C	4905	ALA
1	E	298	GLY
1	E	676	THR
1	E	720	HIS
1	E	802	PHE
1	E	908	VAL
1	E	1139	PHE
1	E	1182	ILE

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Mol	Chain	Res	Type
1	E	1550	PRO
1	E	2109	ASP
1	E	4207	MET
1	E	4893	ALA
1	G	298	GLY
1	G	676	THR
1	G	736	HIS
1	G	802	PHE
1	G	1139	PHE
1	G	1182	ILE
1	G	1515	VAL
1	G	1550	PRO
1	G	2109	ASP
1	A	1613	LEU
1	A	2306	GLY
1	C	581	ASN
1	C	1515	VAL
1	C	1613	LEU
1	C	1768	THR
1	E	1515	VAL
1	E	1613	LEU
1	E	1768	THR
1	G	1613	LEU
1	A	908	VAL
1	A	1602	PRO
1	C	908	VAL
1	C	1602	PRO
1	E	1589	PRO
1	E	1602	PRO
1	G	908	VAL
1	G	1589	PRO
1	G	1602	PRO
1	G	3808	GLY
1	A	1589	PRO
1	C	60	PRO
1	C	1589	PRO
1	E	60	PRO
1	A	60	PRO
1	A	438	ILE
1	A	1142	PRO
1	A	1437	VAL
1	C	438	ILE

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Mol	Chain	Res	Type
1	C	1142	PRO
1	C	1437	VAL
1	E	438	ILE
1	E	1142	PRO
1	E	1437	VAL
1	G	60	PRO
1	G	438	ILE
1	G	740	PRO
1	G	1142	PRO
1	G	1437	VAL
1	A	740	PRO
1	C	740	PRO
1	E	740	PRO
1	A	4035	VAL
2	B	7	ILE
2	D	7	ILE
2	F	7	ILE

5.3.2 Protein sidechains ⓘ

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	2502/4276 (58%)	2472 (99%)	30 (1%)	78	90
1	C	2504/4276 (59%)	2476 (99%)	28 (1%)	80	91
1	E	2501/4276 (58%)	2472 (99%)	29 (1%)	78	90
1	G	2501/4276 (58%)	2474 (99%)	27 (1%)	80	91
2	B	89/90 (99%)	88 (99%)	1 (1%)	80	91
2	D	89/90 (99%)	88 (99%)	1 (1%)	80	91
2	F	89/90 (99%)	88 (99%)	1 (1%)	80	91
2	H	89/90 (99%)	88 (99%)	1 (1%)	80	91
All	All	10364/17464 (59%)	10246 (99%)	118 (1%)	81	91

All (118) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	46	LEU
1	A	454	PRO
1	A	806	PRO
1	A	865	PRO
1	A	892	THR
1	A	914	PRO
1	A	916	PRO
1	A	928	THR
1	A	939	VAL
1	A	978	THR
1	A	979	PRO
1	A	1055	PRO
1	A	1211	LEU
1	A	1458	HIS
1	A	1459	GLN
1	A	1929	MET
1	A	2135	LEU
1	A	2518	LEU
1	A	2555	CYS
1	A	2914	LYS
1	A	2925	GLU
1	A	3814	GLN
1	A	3824	LYS
1	A	3835	LEU
1	A	3987	ASP
1	A	4039	MET
1	A	4082	THR
1	A	4106	PRO
1	A	4207	MET
1	A	4215	ARG
2	B	34	LYS
1	C	454	PRO
1	C	806	PRO
1	C	859	VAL
1	C	865	PRO
1	C	892	THR
1	C	914	PRO
1	C	916	PRO
1	C	928	THR
1	C	939	VAL
1	C	978	THR
1	C	979	PRO
1	C	1055	PRO

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Mol	Chain	Res	Type
1	C	1211	LEU
1	C	1458	HIS
1	C	1459	GLN
1	C	1929	MET
1	C	2135	LEU
1	C	2518	LEU
1	C	2555	CYS
1	C	2914	LYS
1	C	3814	GLN
1	C	3835	LEU
1	C	3987	ASP
1	C	4039	MET
1	C	4082	THR
1	C	4106	PRO
1	C	4207	MET
1	C	4215	ARG
2	D	34	LYS
1	E	454	PRO
1	E	806	PRO
1	E	865	PRO
1	E	892	THR
1	E	914	PRO
1	E	916	PRO
1	E	928	THR
1	E	939	VAL
1	E	978	THR
1	E	979	PRO
1	E	1055	PRO
1	E	1211	LEU
1	E	1458	HIS
1	E	1459	GLN
1	E	1513	ASP
1	E	1659	LEU
1	E	1929	MET
1	E	2135	LEU
1	E	2518	LEU
1	E	2555	CYS
1	E	2914	LYS
1	E	3814	GLN
1	E	3835	LEU
1	E	3987	ASP
1	E	4039	MET

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Mol	Chain	Res	Type
1	E	4082	THR
1	E	4106	PRO
1	E	4207	MET
1	E	4215	ARG
2	F	34	LYS
1	G	454	PRO
1	G	806	PRO
1	G	859	VAL
1	G	865	PRO
1	G	892	THR
1	G	914	PRO
1	G	916	PRO
1	G	928	THR
1	G	939	VAL
1	G	978	THR
1	G	979	PRO
1	G	1055	PRO
1	G	1211	LEU
1	G	1458	HIS
1	G	1459	GLN
1	G	1513	ASP
1	G	1929	MET
1	G	2135	LEU
1	G	2139	PRO
1	G	2518	LEU
1	G	2555	CYS
1	G	3824	LYS
1	G	4039	MET
1	G	4082	THR
1	G	4106	PRO
1	G	4207	MET
1	G	4215	ARG
2	H	34	LYS

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (155) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	113	HIS
1	A	201	ASN
1	A	224	HIS
1	A	278	GLN
1	A	379	HIS

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Mol	Chain	Res	Type
1	A	380	GLN
1	A	405	HIS
1	A	536	ASN
1	A	543	ASN
1	A	596	ASN
1	A	678	GLN
1	A	725	HIS
1	A	1127	HIS
1	A	1130	GLN
1	A	1201	HIS
1	A	1203	ASN
1	A	1459	GLN
1	A	1532	ASN
1	A	1631	GLN
1	A	1719	HIS
1	A	2184	ASN
1	A	2196	ASN
1	A	2253	HIS
1	A	2260	ASN
1	A	2498	HIS
1	A	2856	ASN
1	A	3771	HIS
1	A	3837	GLN
1	A	3882	GLN
1	A	3895	HIS
1	A	3896	ASN
1	A	3900	GLN
1	A	3906	GLN
1	A	3970	GLN
1	A	3994	HIS
1	A	3998	HIS
1	A	4857	ASN
1	A	4947	GLN
2	B	87	HIS
1	C	113	HIS
1	C	201	ASN
1	C	224	HIS
1	C	278	GLN
1	C	379	HIS
1	C	380	GLN
1	C	405	HIS
1	C	536	ASN

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Mol	Chain	Res	Type
1	C	543	ASN
1	C	596	ASN
1	C	678	GLN
1	C	725	HIS
1	C	1127	HIS
1	C	1130	GLN
1	C	1201	HIS
1	C	1203	ASN
1	C	1459	GLN
1	C	1532	ASN
1	C	1631	GLN
1	C	1719	HIS
1	C	2184	ASN
1	C	2196	ASN
1	C	2253	HIS
1	C	2260	ASN
1	C	2498	HIS
1	C	2856	ASN
1	C	3699	HIS
1	C	3771	HIS
1	C	3837	GLN
1	C	3882	GLN
1	C	3895	HIS
1	C	3896	ASN
1	C	3900	GLN
1	C	3906	GLN
1	C	3970	GLN
1	C	3994	HIS
1	C	3998	HIS
1	C	4947	GLN
2	D	87	HIS
1	E	113	HIS
1	E	201	ASN
1	E	224	HIS
1	E	278	GLN
1	E	379	HIS
1	E	380	GLN
1	E	405	HIS
1	E	536	ASN
1	E	543	ASN
1	E	596	ASN
1	E	678	GLN

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Mol	Chain	Res	Type
1	E	725	HIS
1	E	1127	HIS
1	E	1130	GLN
1	E	1201	HIS
1	E	1203	ASN
1	E	1459	GLN
1	E	1631	GLN
1	E	1719	HIS
1	E	2184	ASN
1	E	2196	ASN
1	E	2253	HIS
1	E	2260	ASN
1	E	2498	HIS
1	E	2856	ASN
1	E	3699	HIS
1	E	3771	HIS
1	E	3837	GLN
1	E	3882	GLN
1	E	3895	HIS
1	E	3896	ASN
1	E	3900	GLN
1	E	3906	GLN
1	E	3970	GLN
1	E	3994	HIS
1	E	3998	HIS
1	E	4857	ASN
1	E	4947	GLN
2	F	87	HIS
1	G	113	HIS
1	G	201	ASN
1	G	224	HIS
1	G	278	GLN
1	G	379	HIS
1	G	380	GLN
1	G	405	HIS
1	G	536	ASN
1	G	543	ASN
1	G	596	ASN
1	G	678	GLN
1	G	725	HIS
1	G	1127	HIS
1	G	1130	GLN

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Mol	Chain	Res	Type
1	G	1201	HIS
1	G	1203	ASN
1	G	1459	GLN
1	G	1631	GLN
1	G	1719	HIS
1	G	2184	ASN
1	G	2196	ASN
1	G	2253	HIS
1	G	2260	ASN
1	G	2498	HIS
1	G	2856	ASN
1	G	3771	HIS
1	G	3809	ASN
1	G	3896	ASN
1	G	3970	GLN
1	G	3994	HIS
1	G	3998	HIS
1	G	4034	ASN
1	G	4142	ASN
1	G	4728	HIS
1	G	4886	HIS
1	G	4947	GLN
1	G	4984	ASN
2	H	87	HIS

5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates ⓘ

There are no carbohydrates in this entry.

5.6 Ligand geometry ⓘ

Of 4 ligands modelled in this entry, 4 are monoatomic - leaving 0 for Mogul analysis.

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.

No monomer is involved in short contacts.

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.