



Full wwPDB X-ray Structure Validation Report ⓘ

May 14, 2020 – 04:15 am BST

PDB ID : 2VZ8
Title : Crystal Structure of Mammalian Fatty Acid Synthase
Authors : Maier, T.; Leibundgut, M.; Ban, N.
Deposited on : 2008-07-31
Resolution : 3.22 Å(reported)

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

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

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

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

MolProbity : 4.02b-467
Xtriage (Phenix) : 1.13
EDS : 2.11
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac : 5.8.0158
CCP4 : 7.0.044 (Gargrove)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.11

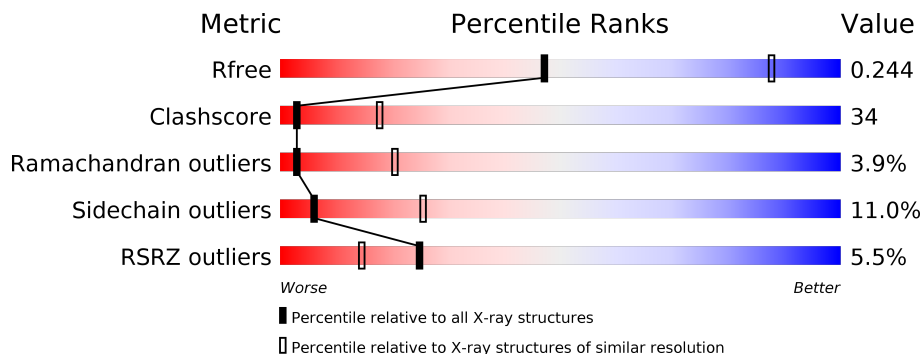
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 3.22 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	130704	1335 (3.24-3.20)
Clashscore	141614	1460 (3.24-3.20)
Ramachandran outliers	138981	1437 (3.24-3.20)
Sidechain outliers	138945	1436 (3.24-3.20)
RSRZ outliers	127900	1291 (3.24-3.20)

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

Mol	Chain	Length	Quality of chain
1	A	2512	 4% 35% 36% 6% 22%
1	B	2512	 5% 36% 37% 6% 20%

2 Entry composition

There is only 1 type of molecule in this entry. The entry contains 30281 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a protein called FATTY ACID SYNTHASE.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
1	A	1962	14977	9466	2630	2803	78	0	0	0
1	B	2004	15304	9671	2684	2869	80	0	0	0

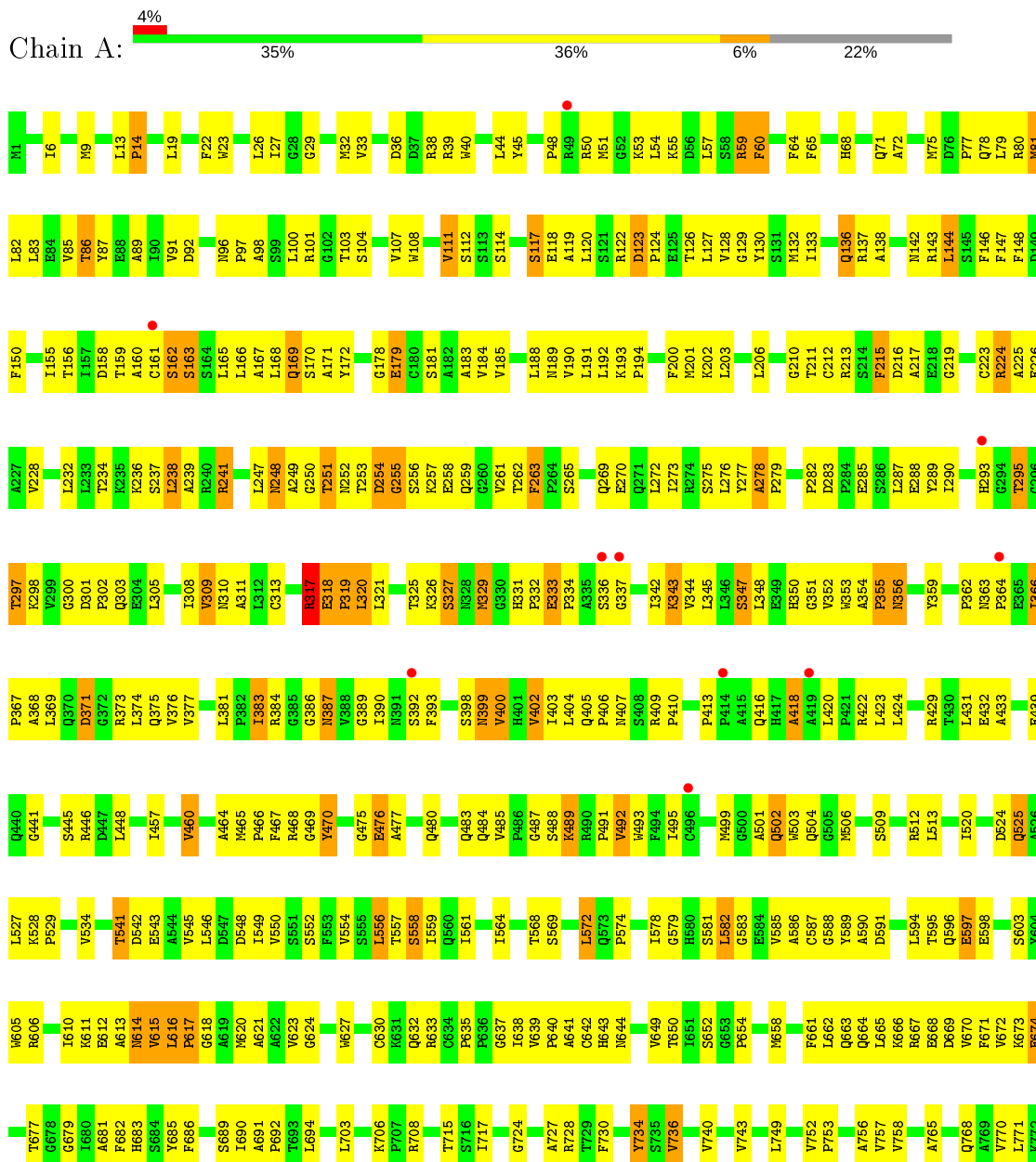
There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	834	ILE	UNK	conflict	UNP A5YV76
B	834	ILE	UNK	conflict	UNP A5YV76

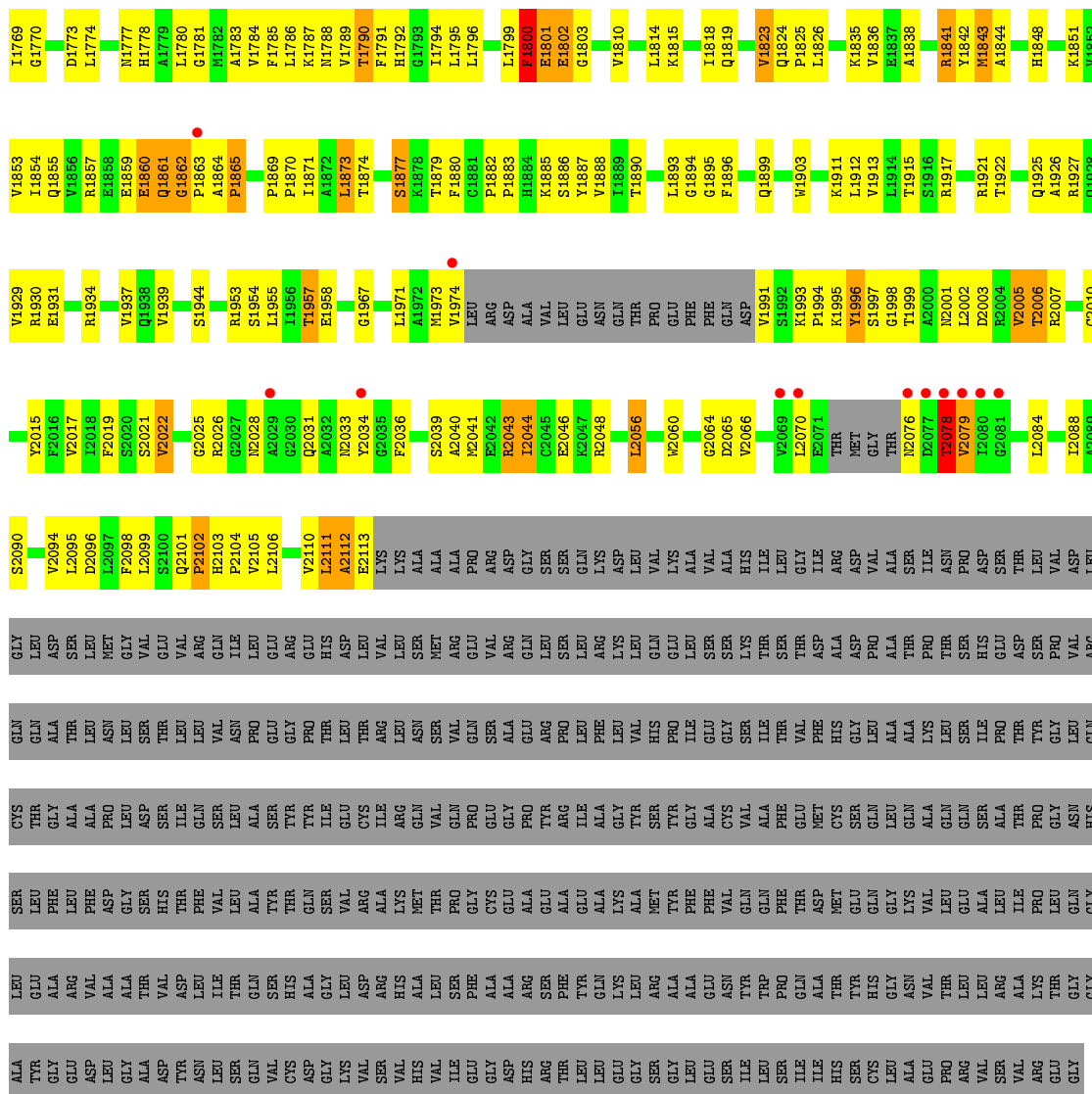
3 Residue-property plots [i](#)

These plots are drawn for all protein, RNA and DNA chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red dot above a residue indicates a poor fit to the electron density ($RSRZ > 2$). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

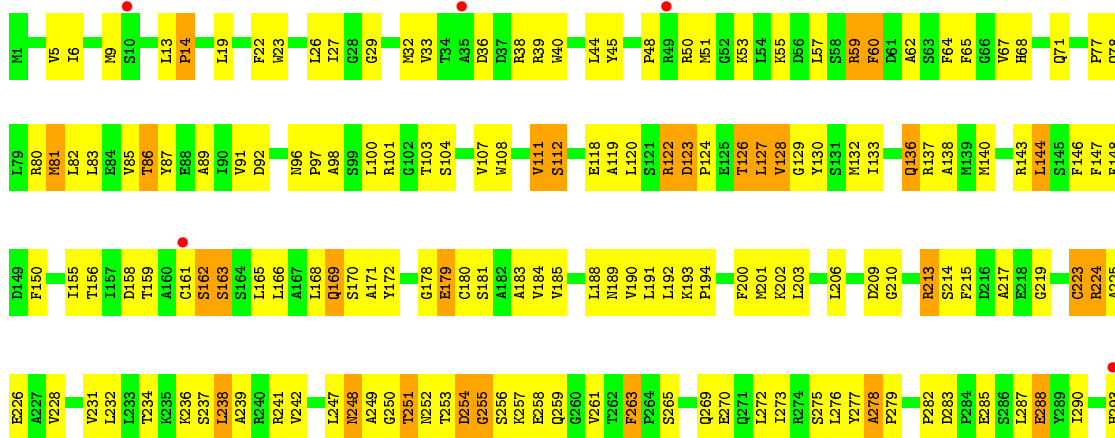
• Molecule 1: FATTY ACID SYNTHASE

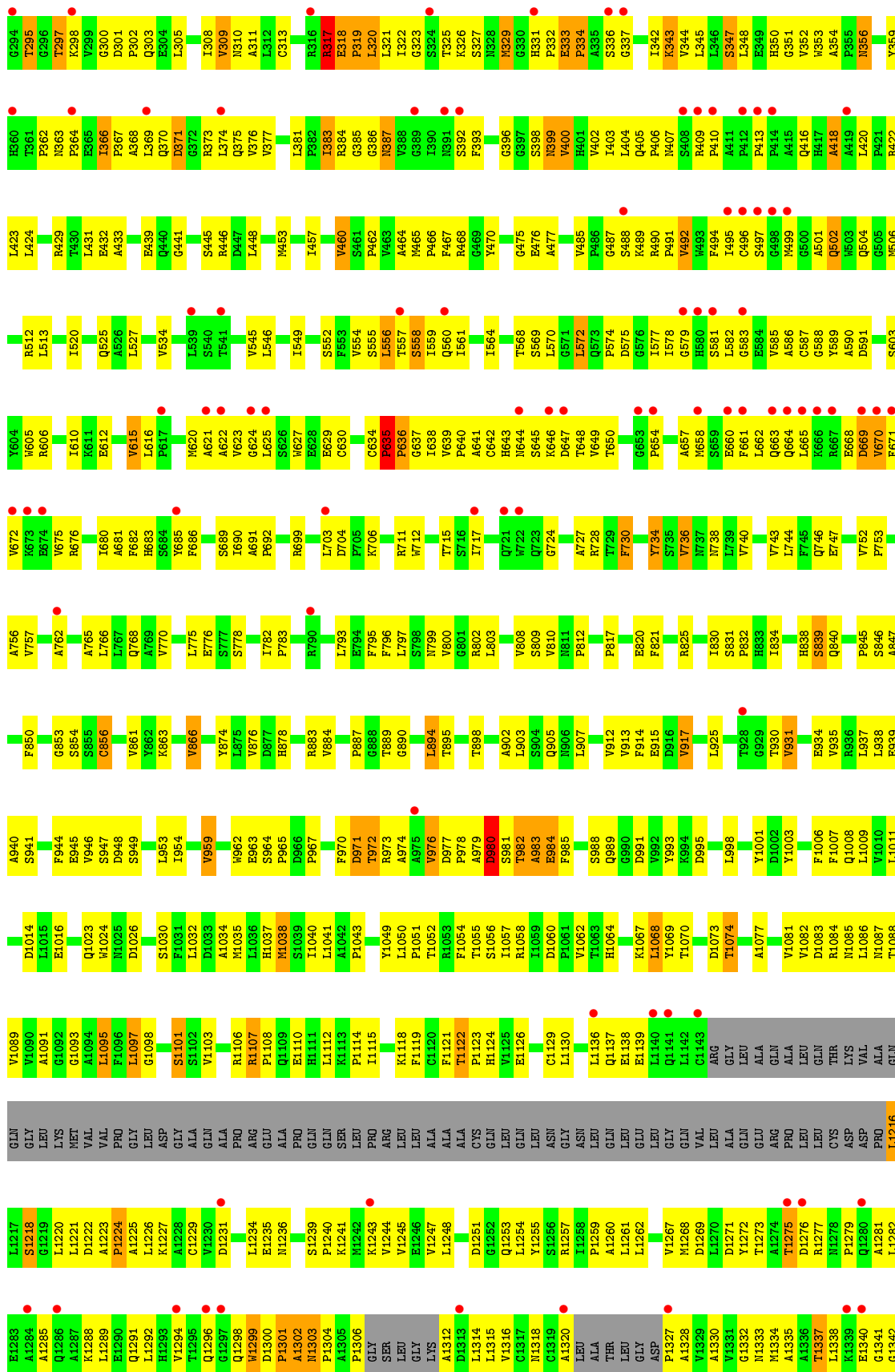


L1689	V1617	S1542	L1416	L1292	L1223	G1098	Q1023	S941	G853	R173
G1682	P1618	S1543	S1417	H1293	P1224	VAL	Q1024	F944	S854	R773
C1683	A1619	I1544	E1418	V1294	A1225	VAL	I1025	F945	S855	E777
R1694	S1481	R1545	E1419	T1295	A1226	GLY	L1226	E945	C856	S778
F1696	P1482	P1546	D1420	Q1296	K1227	LEU	D1026	V946	S857	S778
T1697	A1483	S1549	T1421	G1297	A1228	ASP	S1030	D948	S858	I782
T1698	P1484	H1552	S1422	Q1298	G1229	GLY	F1031	S949	V861	F783
Y1553	E1485	H1553	F1423	M1299	V1230	ALA	L1032		Y862	L784
A1554	M1486	Y1553	R1424	D1300	D1231	GLN	L1033		K863	K787
P1488	H1487	A1554	W1425	P1301	T1232	ALA	D1033		L953	
S1489	P1488	L1555	W1426	A1302	A1233	PRO	A1034		I954	
S1490	S1489	P1556	D1427	M1303	L1234	ARG	L1035		V866	
S1491	S1489	A1557	R1428	P1304	E1235	GLU	L1036		S870	
Q1599	P1489	S1558	L1429	A1305	M1236	ALA	H1037		P871	
Q1560	K1430	Q1559	D1431	GLY	M1237	PRO	M1038		P871	
L1493	D1432	L1493	L1432	GLY	A1238	GLY	S1039		F796	
L1497	L1433	L1497	L1433	LEU	S1239	GLN	I1040		F796	
D1500	A1434	D1500	A1434	GLY	P1240	SER	S964		Y874	
L1501	D1435	L1501	D1435	ARG	K1241	LEU	P965		L797	
V1502	D1436	V1502	D1436	HIS	M1242	LEU	P965		S798	
M1503	D1437	M1503	S1437	LEU	V1244	LEU	P966		N799	
N1504	S1438	N1504	S1438	LEU	W1245	ARG	D967		G801	
V1505	R1439	V1505	P1440	GLN	L1248	ALA	T1052		R802	
Y1506	P1440	Y1506	V1441	ALA	A1249	ALA	R1053		L803	
R1507	V1442	R1507	W1442	THR	G1250	ASN	F1054		R804	
D1508	W1443	D1508	W1443	GLY	G1251	CYS	F1054		L805	
M1509	M1444	M1509	M1444	LEU	D1251	GLN	F1056		G888	
A1510	V1446	A1510	V1446	LEU	G1252	LEU	S1056		R889	
G1511	A1445	G1511	A1445	ALA	Q1253	LEU	I1057		S809	
A1512	G1447	A1512	G1447	ALA	L1254	LEU	R1058		V810	
A1513	G1448	A1513	G1448	THR	Y1255	ASN	R1064		N811	
F1514	G1448	F1514	G1448	LEU	S1256	GLY	R1065		P812	
R1515	L1449	R1515	L1449	GLY	R1257	ASN	Q1066		L815	
F1516	T1450	F1516	T1450	ASP	I1258	LEU	L1068		F816	
F1517	S1451	F1517	S1451	PRO	P1259	LEU	K1067		P817	
P1518	G1452	P1518	G1452	ALA	A1260	LEU	A983		P818	
L1519	V1453	L1519	V1453	VAL	L1261	GLU	F985		A902	
E1520	V1454	E1520	V1454	VAL	L1262	LEU	L903		Q905	
R1523	M1456	R1523	M1456	GLY	V1267	GLY	D1073		S904	
P1524	Y1457	P1524	Y1457	ASN	M1268	VAL	T1074		G826	
K1526	L1460	K1526	L1460	MET	D1269	LEU	A1077		T827	
Q1527	K1461	Q1527	K1461	ALA	Y1272	ALA	Y1082		V913	
E1528	E1462	E1528	E1462	THR	T1273	GLU	D1083		F914	
E1529	P1464	E1529	P1464	LEU	A1274	ARG	R1084		E915	
H1530	G1465	H1530	G1465	LYS	T1275	PRO	L1085		D916	
A1531	G1466	A1531	G1466	GLU	D1276	LEU	L1086		V917	
F1532	H1467	F1532	H1467	G1341	R1277	LEU	M1087		L925	
V1533	H1468	V1533	H1468	G1342	M1278	THR	T1088		T930	
M1534	T1468	M1534	T1468	P1279	P1279	LYS	V1089		V931	
V1535	R1470	V1535	R1470	L1344	A1285	VAL	V1090		W842	
R1536	C1471	R1536	C1471	L1345	A1285	ALA	A1091		S846	
S1537	V1472	S1537	V1472	L1346	Q1286	GLN	A1092		E934	
A1538	L1473	A1538	L1473	H1347	A1287	GLN	G1093		V935	
D1540	V1474	D1540	V1474	T1348	K1288	GLY	G1094		R936	
L1541	M1476	L1541	M1476	L1349	L1289	GLY	A1095		A848	
				LEU	E1290	LYS	F1096		D849	
				ALA	D1222	MET	L1097		F850	
									P851	
									E939	
									A940	



• Molecule 1: FATTY ACID SYNTHASE





LEU	F1343	D1411	L1473	F1696	G1770	L1854	R1930	T2006	G2081	THR	GLN	LEU
PHE	L1344	S1412	V1474	T1697	L1770	Q1855	E1931	R2007	G2082	GLY	ALA	ASP
LEU	L1346	P1413	N1476	T1698	D1774	R1857	V1932	C2010	I2088	LEU	THR	SER
GLY	H1347	V1414	M1477	E1703	M1777	E1858	R1933	R1934	D2096	ASP	ASN	PRO
LEU	L1349	F1415	L1477	K1705	H1778	E1860	V1937	L2013	D2097	LEU	LEU	GLY
ALA	L1481	L1416	T1480	R1706	A1779	Q1861	Q1938	Y2015	I2097	VAL	SER	ASP
GLY	E1482	S1417	S1481	A1707	L1778	P1862	V1939	Y2016	F2098	GLU	THR	SER
HIS	D1420	E1419	A1483	Y1707	A1781	P1863	L1940	V2017	L2099	VAL	LEU	ILE
PRO	P1421	E1420	P1484	R1711	M1782	A1864	V1941	I2018	Q2100	GLN	ARG	GLN
LEU	S1422	F1423	E1485	F1712	H1783	P1865	V1944	L2019	S2102	LEU	ASN	LEU
GLY	A1424	A1425	H1487	P1713	V1784	L1868	S1944	S2020	R2103	LEU	PRO	ALA
GLU	M1425	M1425	P1488	F1720	F1785	P1869	G1951	S2021	S2104	GLU	GLU	SER
MET	S1428	S1428	S1491	A1721	L1786	R1869	G1952	W2022	L2105	ARG	GLY	ARG
VAL	L1429	C1564	S1491	K1787	L1787	A1871	A1952	S2023	L2106	THR	GLY	ARG
PHE	K1430	S1565	S1491	M1788	N1788	E1872	L1953	C2024	L2106	THR	PRO	THR
LEU	D1431	V1566	L1497	F1789	S1723	A1873	S1954	G2025	L2111	THR	THR	ILE
THR	D1432	V1567	L1497	R1790	S1723	L1873	L1955	G2026	L2111	THR	THR	ILE
SER	L1433	Y1568	L1501	F1791	T1726	T1874	L1956	R2027	K2114	THR	THR	ILE
PRO	A1434	T1569	V1502	H1792	H1792	G1875	E1958	T2028	L2114	THR	THR	ILE
GLN	M1504	S1570	M1503	G1793	G1793	L1876	E1958	Q2031	LYS	THR	THR	ILE
GLU	V1505	S1570	M1504	F1794	L1794	K1878	G1966	A2032	ALA	THR	THR	ILE
GLN	V1506	F1573	Y1506	E1729	L1795	T1879	G1967	N2033	ALA	THR	THR	ILE
GLY	R1507	Y1576	R1507	V1732	F1800	P1882	L1971	N2034	ASP	THR	THR	ILE
ARG	P1440	Y1576	R1507	R1733	E1801	P1882	L1972	G2035	ASP	THR	THR	ILE
HIS	P1440	Y1576	R1507	R1734	E1802	P1882	A1972	F2036	GLY	THR	THR	ILE
LEU	V1441	T1580	G1512	K1736	G1803	K1885	M1973	G2036	GLY	THR	THR	ILE
LEU	W1442	G1581	G1512	H1736	G1804	S1886	V1974	S2039	SER	THR	THR	ILE
L1373	L1443	K1582	G1514	T1736	G1804	Y1887	L1975	A2040	SER	THR	THR	ILE
L1381	M1444	L1583	R1515	K1739	V1810	L1888	R1976	N2041	GLN	THR	THR	ILE
F1382	A1445	L1583	R1516	G1740	L1810	L1888	R1977	E2042	ASP	THR	THR	ILE
A1383	V1446	P1585	H1516	L1741	L1813	T1890	D1977	R2043	LEU	THR	THR	ILE
G1384	G1447	D1586	F1517	D1742	L1814	L1893	A1978	L2044	LEU	THR	THR	ILE
L1387	C1448	L1519	F1517	L1743	K1815	G1894	L1979	R2044	VAL	THR	THR	ILE
H1388	S1449	E1520	E1520	V1744	L1818	G1895	E1981	R2048	ALA	THR	THR	ILE
L1389	T1450	E1520	E1520	L1745	Q1819	G1895	R1982	R2049	ALA	THR	THR	ILE
V1390	S1451	R1523	R1523	M1746	L1823	L1898	Q1983	L2056	ALA	THR	THR	ILE
K1393	G1452	P1524	P1524	S1747	V1823	Q1899	T1984	W2060	ALA	THR	THR	ILE
L1394	V1454	E1525	E1525	L1749	Q1824	L1898	P1985	W2060	ALA	THR	THR	ILE
S1395	M1455	K1526	K1526	A1749	P1825	Q1899	E1986	G2064	ALA	THR	THR	ILE
F1396	M1456	M1528	M1528	L1753	K1835	L1904	F1987	D2065	ALA	THR	THR	ILE
Y1397	V1457	E1529	E1529	Q1794	V1836	L1904	Q1988	V2066	ALA	THR	THR	ILE
G1398	M1458	H1530	H1530	A1755	L1912	K1911	Q1989	G2067	ALA	THR	THR	ILE
L1400	C1459	A1531	A1531	V1756	A1913	K1911	V1991	V2068	ALA	THR	THR	ILE
L1401	L1460	F1532	F1532	R1757	A1938	L1912	S1992	V2069	ALA	THR	THR	ILE
L1403	R1461	V1533	V1533	C1758	L1939	L1914	P1994	L2070	ALA	THR	THR	ILE
L1404	X1462	L1536	L1536	C1759	F1940	T1915	K1995	E2071	ASN	THR	THR	ILE
L1405	E1463	S1537	S1537	Q1760	A1841	S1916	K1996	THR	ASN	THR	THR	ILE
L1406	F1464	R1538	R1538	A1761	V1842	R1917	Y1996	THR	PRO	THR	THR	ILE
R1406	G1465	R1538	R1538	Q1762	M1843	R1917	S1997	THR	PRO	THR	THR	ILE
Q1407	G1466	G1539	G1539	H1763	A1944	R1921	G1998	THR	ASP	THR	THR	ILE
T1408	H1467	D1540	D1540	G1764	L1948	T1922	G1998	THR	GLY	THR	THR	ILE
P1409	R1468	L1541	L1541	R1765	H1848	Q1925	W2001	THR	LEU	THR	THR	ILE
L1409	Q1407	S1542	S1542	F1766	K1851	A1926	L2002	THR	VAL	THR	THR	ILE
Q1410	T1469	S1544	S1544	F1768	V1852	R1927	L2003	THR	ASP	THR	THR	ILE
	R1470	I1544	I1544	E1768	V1853	A1927	D2005	THR	LEU	THR	THR	ILE
	C1471	I1544	I1544	E1768	V1853	A1927	D2005	THR	LEU	THR	THR	ILE
	V1472	R1545	R1545	I1769	V1853	A1927	D2005	THR	LEU	THR	THR	ILE

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4 Data and refinement statistics

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α , β , γ	96.32Å 244.70Å 135.25Å 90.00° 101.65° 90.00°	Depositor
Resolution (Å)	29.50 – 3.22 29.50 – 3.22	Depositor EDS
% Data completeness (in resolution range)	94.8 (29.50-3.22) 97.6 (29.50-3.22)	Depositor EDS
R_{merge}	0.17	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.63 (at 3.24Å)	Xtrriage
Refinement program	PHENIX (PHENIX.REFINE)	Depositor
R, R_{free}	0.217 , 0.259 0.204 , 0.244	Depositor DCC
R_{free} test set	4839 reflections (5.02%)	wwPDB-VP
Wilson B-factor (Å ²)	95.2	Xtrriage
Anisotropy	0.218	Xtrriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.27 , 73.0	EDS
L-test for twinning ²	$\langle L \rangle = 0.42$, $\langle L^2 \rangle = 0.25$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
F_o, F_c correlation	0.94	EDS
Total number of atoms	30281	wwPDB-VP
Average B, all atoms (Å ²)	143.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.74% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

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

5 Model quality [i](#)

5.1 Standard geometry [i](#)

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
1	A	0.45	1/15302 (0.0%)	0.63	0/20792
1	B	0.41	0/15634	0.60	1/21243 (0.0%)
All	All	0.43	1/30936 (0.0%)	0.61	1/42035 (0.0%)

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	1759	CYS	CB-SG	-5.79	1.72	1.81

All (1) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	1694	ARG	NE-CZ-NH1	6.90	123.75	120.30

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts [i](#)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	14977	0	14938	1049	0
1	B	15304	0	15266	1083	0
All	All	30281	0	30204	2085	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 34.

All (2085) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1694:ARG:HH11	1:B:1694:ARG:HG3	1.17	1.10
1:B:1303:ASN:H	1:B:1304:PRO:HD3	1.25	1.02
1:A:1473:LEU:HD21	1:A:1503:MET:HG2	1.36	1.02
1:A:165:LEU:HD23	1:A:400:VAL:HG22	1.37	1.02
1:B:1456:MET:HG2	1:B:2036:PHE:HB2	1.41	1.01
1:A:1736:THR:HG23	1:A:1739:LYS:H	1.26	1.00
1:B:1003:TYR:CZ	1:B:1037:HIS:HE1	1.79	1.00
1:A:1539:GLY:HA2	1:A:1580:THR:O	1.62	0.99
1:A:333:GLU:HB2	1:A:334:PRO:HD3	1.42	0.98
1:A:642:CYS:HB2	1:A:650:THR:HB	1.42	0.98
1:A:118:GLU:HG3	1:B:118:GLU:HG3	1.43	0.98
1:B:1338:LEU:HD13	1:B:1406:GLN:HE21	1.27	0.98
1:B:1387:LEU:HD22	1:B:1404:CYS:HB3	1.43	0.98
1:B:1651:VAL:HG13	1:B:1680:VAL:HA	1.45	0.97
1:B:1348:THR:HG22	1:B:1349:LEU:H	1.27	0.97
1:A:1003:TYR:CZ	1:A:1037:HIS:HE1	1.83	0.97
1:A:368:ALA:H	1:A:371:ASP:HB3	1.31	0.96
1:B:1418:VAL:HG13	1:B:1425:TRP:CZ2	1.99	0.96
1:B:165:LEU:HD23	1:B:400:VAL:HG22	1.43	0.96
1:B:333:GLU:HB2	1:B:334:PRO:HD3	1.44	0.96
1:B:1457:VAL:HG21	1:B:1473:LEU:HD22	1.47	0.95
1:B:368:ALA:H	1:B:371:ASP:HB3	1.31	0.95
1:B:1473:LEU:HD21	1:B:1503:MET:HG2	1.49	0.95
1:B:1299:TRP:HZ3	1:B:1301:PRO:HA	1.29	0.95
1:B:1335:ALA:HA	1:B:1406:GLN:HE22	1.30	0.94
1:B:1330:ALA:O	1:B:1334:MET:HG2	1.67	0.93
1:B:616:LEU:HB2	1:B:686:PHE:HE2	1.30	0.93
1:B:1565:SER:HB2	1:B:1857:ARG:NH2	1.84	0.93
1:B:1312:ALA:HB2	1:B:1337:THR:HG22	1.48	0.91
1:B:1736:THR:HG23	1:B:1739:LYS:H	1.33	0.91
1:A:1115:ILE:HD11	1:A:2111:LEU:HG	1.51	0.91
1:A:1457:VAL:HG21	1:A:1473:LEU:HD22	1.51	0.90
1:A:1418:VAL:HG13	1:A:1425:TRP:CZ2	2.06	0.90
1:B:1662:ARG:HH11	1:B:1662:ARG:CG	1.82	0.90
1:B:662:LEU:HD22	1:B:672:VAL:HG11	1.54	0.89
1:B:1446:VAL:HA	1:B:1476:ASN:ND2	1.87	0.89
1:A:82:LEU:O	1:A:86:THR:HG23	1.74	0.88
1:B:50:ARG:HD3	1:B:210:GLY:O	1.74	0.88
1:B:1446:VAL:HA	1:B:1476:ASN:HD21	1.37	0.88
1:A:1644:GLU:HB3	1:A:1825:PRO:HB3	1.52	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:976:VAL:HG22	1:A:977:ASP:H	1.38	0.88
1:B:384:ARG:HH11	1:B:384:ARG:HG3	1.38	0.88
1:A:1662:ARG:HH11	1:A:1662:ARG:CG	1.87	0.88
1:B:616:LEU:HB2	1:B:686:PHE:CE2	2.09	0.87
1:B:82:LEU:O	1:B:86:THR:HG23	1.75	0.87
1:B:1299:TRP:CZ3	1:B:1301:PRO:HA	2.09	0.87
1:A:1348:THR:HG22	1:A:1349:LEU:H	1.37	0.87
1:A:384:ARG:HH11	1:A:384:ARG:HG3	1.39	0.87
1:A:1477:LEU:HD11	1:A:2043:ARG:HD2	1.56	0.86
1:A:1545:ARG:HH11	1:A:1545:ARG:HG3	1.39	0.86
1:A:1662:ARG:HG3	1:A:1662:ARG:HH11	1.40	0.86
1:A:50:ARG:HD3	1:A:210:GLY:O	1.75	0.86
1:B:64:PHE:HB2	1:B:429:ARG:HH21	1.40	0.86
1:A:861:VAL:HG22	1:A:934:GLU:HB3	1.58	0.85
1:B:643:HIS:HA	1:B:649:VAL:HG22	1.59	0.84
1:B:1530:HIS:HB2	1:B:1552:HIS:HB2	1.60	0.84
1:A:64:PHE:HB2	1:A:429:ARG:HH21	1.41	0.83
1:A:96:ASN:HD21	1:A:98:ALA:HB3	1.41	0.83
1:B:1312:ALA:CB	1:B:1337:THR:HG22	2.08	0.83
1:B:112:SER:CB	1:B:334:PRO:HG3	2.09	0.83
1:A:112:SER:HB2	1:A:334:PRO:HG3	1.59	0.83
1:A:944:PHE:CD2	1:A:959:VAL:HG22	2.14	0.83
1:A:1245:VAL:HG13	1:A:1273:THR:HB	1.57	0.83
1:B:1082:VAL:HG22	1:B:1089:VAL:HG22	1.61	0.83
1:A:1082:VAL:HG22	1:A:1089:VAL:HG22	1.60	0.83
1:A:616:LEU:HD23	1:A:617:PRO:HD2	1.58	0.83
1:A:1289:LEU:HD22	1:A:1294:VAL:HB	1.60	0.83
1:A:1528:THR:HG22	1:A:1530:HIS:H	1.43	0.83
1:A:319:PRO:HD2	1:A:373:ARG:O	1.78	0.83
1:A:112:SER:CB	1:A:334:PRO:HG3	2.07	0.83
1:B:96:ASN:HD21	1:B:98:ALA:HB3	1.42	0.82
1:A:468:ARG:HD3	1:A:485:VAL:HG21	1.59	0.82
1:A:663:GLN:O	1:A:667:ARG:HD2	1.79	0.82
1:A:123:ASP:HB3	1:A:126:THR:HB	1.62	0.82
1:B:1732:VAL:O	1:B:1736:THR:HB	1.78	0.82
1:B:319:PRO:HD2	1:B:373:ARG:O	1.79	0.82
1:B:944:PHE:CD2	1:B:959:VAL:HG22	2.15	0.82
1:B:982:THR:HG23	1:B:983:ALA:H	1.45	0.82
1:B:1416:LEU:HD21	1:B:1425:TRP:HB2	1.59	0.82
1:B:112:SER:HB2	1:B:334:PRO:HG3	1.60	0.81
1:A:1222:ASP:HB3	1:A:1257:ARG:CZ	2.09	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1285:ALA:HB1	1:A:1289:LEU:HG	1.61	0.81
1:A:1341:GLY:HA2	1:A:1406:GLN:O	1.80	0.81
1:A:278:ALA:HB3	1:A:279:PRO:HD3	1.63	0.81
1:A:1616:MET:HE3	1:A:1650:ILE:HA	1.62	0.81
1:A:333:GLU:HB2	1:A:334:PRO:CD	2.09	0.81
1:B:980:ASP:HB2	1:B:982:THR:HG22	1.63	0.81
1:B:861:VAL:HG22	1:B:934:GLU:HB3	1.63	0.81
1:B:1662:ARG:HH11	1:B:1662:ARG:HG3	1.44	0.80
1:B:278:ALA:HB3	1:B:279:PRO:HD3	1.61	0.80
1:B:1003:TYR:CZ	1:B:1037:HIS:CE1	2.67	0.80
1:B:1222:ASP:HB3	1:B:1257:ARG:CZ	2.11	0.80
1:B:1456:MET:CG	1:B:2036:PHE:HB2	2.11	0.80
1:A:368:ALA:N	1:A:371:ASP:HB3	1.96	0.80
1:B:14:PRO:HG2	1:B:329:MET:HG3	1.64	0.79
1:A:215:PHE:CD2	1:A:305:LEU:HD11	2.18	0.79
1:A:416:GLN:O	1:A:420:LEU:HB2	1.82	0.79
1:B:1285:ALA:HB1	1:B:1289:LEU:HG	1.64	0.79
1:B:1303:ASN:N	1:B:1304:PRO:HD3	1.96	0.79
1:B:416:GLN:O	1:B:420:LEU:HB2	1.81	0.79
1:B:368:ALA:N	1:B:371:ASP:HB3	1.98	0.79
1:A:1735:HIS:CD2	1:A:1735:HIS:H	2.00	0.79
1:B:1545:ARG:HD2	1:B:1876:LEU:HD11	1.63	0.79
1:A:642:CYS:HB2	1:A:650:THR:CB	2.12	0.78
1:B:1245:VAL:HG13	1:B:1273:THR:HB	1.64	0.78
1:A:1003:TYR:CZ	1:A:1037:HIS:CE1	2.70	0.78
1:A:1034:ALA:HA	1:A:1037:HIS:CD2	2.19	0.78
1:A:118:GLU:HG3	1:B:118:GLU:CG	2.14	0.78
1:B:333:GLU:HB2	1:B:334:PRO:CD	2.12	0.78
1:A:856:CYS:SG	1:B:856:CYS:HB2	2.23	0.78
1:A:1466:GLY:HA2	1:A:1469:ILE:HG13	1.65	0.78
1:A:14:PRO:HG2	1:A:329:MET:HG3	1.64	0.78
1:B:1034:ALA:HA	1:B:1037:HIS:CD2	2.19	0.78
1:A:118:GLU:CG	1:B:118:GLU:HG3	2.13	0.78
1:B:1888:VAL:HG22	1:B:1913:VAL:HB	1.66	0.77
1:B:1407:GLN:CG	1:B:1409:PRO:HD2	2.14	0.77
1:A:1732:VAL:O	1:A:1736:THR:HB	1.82	0.77
1:A:903:LEU:HD22	1:A:905:GLN:NE2	1.99	0.77
1:B:1338:LEU:HD21	1:B:1341:GLY:HA2	1.64	0.77
1:A:1003:TYR:CE2	1:A:1037:HIS:HE1	2.02	0.77
1:A:1736:THR:CG2	1:A:1740:GLY:H	1.98	0.77
1:B:1641:THR:HG23	1:B:1644:GLU:OE1	1.85	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1736:THR:CG2	1:B:1740:GLY:H	1.98	0.76
1:A:1890:THR:HA	1:A:1915:THR:HB	1.66	0.76
1:B:1538:ARG:HH22	1:B:1585:PRO:HG2	1.50	0.76
1:B:254:ASP:HB3	1:B:257:LYS:HE2	1.67	0.76
1:A:627:TRP:HB2	1:A:643:HIS:CD2	2.21	0.76
1:B:297:THR:HB	1:B:300:GLY:H	1.51	0.76
1:B:1259:PRO:HB2	1:B:1292:LEU:HD22	1.68	0.76
1:B:1407:GLN:HG3	1:B:1409:PRO:HD2	1.66	0.76
1:B:1735:HIS:CD2	1:B:1735:HIS:H	2.02	0.76
1:B:1890:THR:HA	1:B:1915:THR:HB	1.66	0.76
1:A:278:ALA:CB	1:A:279:PRO:HD3	2.16	0.76
1:B:278:ALA:CB	1:B:279:PRO:HD3	2.16	0.76
1:B:642:CYS:HB2	1:B:650:THR:HB	1.66	0.76
1:B:903:LEU:HD22	1:B:905:GLN:NE2	2.01	0.76
1:B:1003:TYR:CE2	1:B:1037:HIS:HE1	2.03	0.76
1:B:1289:LEU:HD22	1:B:1294:VAL:HB	1.69	0.75
1:B:506:MET:HE3	1:B:559:ILE:HD12	1.68	0.75
1:A:502:GLN:HG3	1:A:556:LEU:HD11	1.67	0.75
1:B:1674:HIS:CD2	1:B:1698:THR:HG21	2.22	0.75
1:B:1477:LEU:HD11	1:B:2043:ARG:HD2	1.68	0.75
1:B:1541:LEU:HD22	1:B:1544:ILE:HD11	1.68	0.75
1:A:200:PHE:HB3	1:A:206:LEU:HG	1.67	0.75
1:B:1533:VAL:CG1	1:B:1622:LEU:HB3	2.17	0.75
1:A:297:THR:HB	1:A:300:GLY:H	1.52	0.75
1:A:217:ALA:HB2	1:A:364:PRO:HD3	1.69	0.74
1:A:1222:ASP:HB3	1:A:1257:ARG:NH1	2.03	0.74
1:A:1130:LEU:HD11	1:A:1221:LEU:HD13	1.69	0.74
1:A:938:LEU:HB3	1:B:945:GLU:OE1	1.86	0.74
1:B:1618:PRO:HD3	1:B:1629:LEU:HD11	1.68	0.74
1:A:36:ASP:HB3	1:A:38:ARG:HG3	1.69	0.74
1:B:1418:VAL:HG13	1:B:1425:TRP:CE2	2.22	0.74
1:A:1387:LEU:HD22	1:A:1404:CYS:HB3	1.70	0.73
1:A:1736:THR:HG23	1:A:1739:LYS:N	2.01	0.73
1:A:581:SER:HB2	1:A:683:HIS:NE2	2.03	0.73
1:B:1227:LYS:HB2	1:B:1261:LEU:HD22	1.69	0.73
1:B:622:ALA:HA	1:B:650:THR:HA	1.69	0.73
1:A:1445:ALA:O	1:A:1476:ASN:ND2	2.20	0.73
1:A:1818:ILE:HA	1:A:1823:VAL:HG13	1.68	0.73
1:B:44:LEU:HG	1:B:45:TYR:CE1	2.24	0.73
1:A:1227:LYS:HB2	1:A:1261:LEU:HD22	1.71	0.73
1:A:1612:ARG:O	1:A:1636:VAL:HG12	1.89	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1953:ARG:HG2	1:A:2005:VAL:HG13	1.70	0.73
1:B:1533:VAL:HG12	1:B:1622:LEU:HB3	1.70	0.73
1:B:1694:ARG:HH11	1:B:1694:ARG:CG	2.01	0.73
1:B:682:PHE:HB3	1:B:683:HIS:CD2	2.24	0.73
1:B:1338:LEU:HD13	1:B:1406:GLN:NE2	2.03	0.73
1:B:1818:ILE:HA	1:B:1823:VAL:HG13	1.71	0.73
1:A:333:GLU:CB	1:A:334:PRO:HD3	2.17	0.72
1:B:1439:ARG:HB3	1:B:1440:PRO:HD3	1.71	0.72
1:A:1859:GLU:HG2	1:A:1860:GLU:N	2.04	0.72
1:B:123:ASP:O	1:B:127:LEU:HB3	1.89	0.72
1:B:1327:PRO:O	1:B:1381:LEU:HD21	1.90	0.72
1:A:1678:GLY:O	1:A:1682:GLN:HG3	1.89	0.72
1:B:1345:LEU:HD12	1:B:1402:PHE:O	1.89	0.72
1:A:1824:GLN:HG3	1:A:1825:PRO:HD2	1.70	0.72
1:A:1234:LEU:HD22	1:A:1262:LEU:HD22	1.72	0.72
1:A:82:LEU:HD22	1:A:188:LEU:HD11	1.72	0.72
1:B:82:LEU:HD22	1:B:188:LEU:HD11	1.71	0.72
1:A:1299:TRP:HE1	1:A:1306:PRO:HD2	1.53	0.72
1:B:265:SER:O	1:B:269:GLN:HG3	1.90	0.72
1:A:137:ARG:HD2	1:B:137:ARG:NH1	2.05	0.72
1:B:668:GLU:O	1:B:669:ASP:HB2	1.90	0.71
1:B:1222:ASP:HB3	1:B:1257:ARG:NH1	2.04	0.71
1:B:1408:THR:N	1:B:1409:PRO:HD3	2.05	0.71
1:A:633:ARG:NH2	1:A:668:GLU:OE1	2.23	0.71
1:B:1953:ARG:HG2	1:B:2005:VAL:HG13	1.70	0.71
1:A:1419:GLU:CD	1:A:1447:GLY:HA3	2.10	0.71
1:B:36:ASP:HB3	1:B:38:ARG:HG3	1.72	0.71
1:A:1418:VAL:HG13	1:A:1425:TRP:CE2	2.25	0.71
1:B:502:GLN:HG3	1:B:556:LEU:HD11	1.70	0.71
1:A:2105:VAL:O	1:A:2106:LEU:HD23	1.91	0.71
1:B:1926:ALA:O	1:B:1930:ARG:HB2	1.90	0.71
1:A:1472:VAL:HG12	1:A:1473:LEU:H	1.56	0.71
1:A:1569:THR:HG21	1:A:1622:LEU:HA	1.72	0.71
1:A:1576:VAL:HG21	1:A:1843:MET:HG2	1.71	0.71
1:A:1535:VAL:HG12	1:A:1537:SER:H	1.55	0.71
1:A:87:TYR:CE2	1:A:97:PRO:HG2	2.26	0.71
1:A:1888:VAL:HG22	1:A:1913:VAL:HB	1.70	0.70
1:A:44:LEU:HG	1:A:45:TYR:CE1	2.26	0.70
1:B:627:TRP:HB2	1:B:643:HIS:CE1	2.27	0.70
1:B:1234:LEU:HD22	1:B:1262:LEU:HD22	1.73	0.70
1:B:23:TRP:HA	1:B:26:LEU:HD12	1.73	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1669:GLU:O	1:A:1693:CYS:HB3	1.91	0.70
1:B:575:ASP:O	1:B:711:ARG:HG2	1.91	0.70
1:B:1670:SER:O	1:B:1742:ASP:HB2	1.91	0.70
1:A:944:PHE:HD2	1:A:959:VAL:HG22	1.55	0.70
1:B:1254:LEU:HD21	1:B:1318:ASN:HB2	1.72	0.70
1:B:136:GLN:HE21	1:B:136:GLN:C	1.95	0.70
1:A:1887:TYR:HD2	1:A:1967:GLY:HA3	1.57	0.70
1:B:1477:LEU:CD1	1:B:2043:ARG:HD2	2.21	0.70
1:A:1991:VAL:O	1:A:1994:PRO:HD2	1.91	0.70
1:A:254:ASP:HB3	1:A:257:LYS:HE2	1.72	0.70
1:B:1975:LEU:HD22	1:B:1977:ASP:OD2	1.91	0.70
1:B:641:ALA:HB1	1:B:683:HIS:HB2	1.74	0.70
1:A:77:PRO:O	1:A:81:MET:HG2	1.91	0.69
1:B:944:PHE:HD2	1:B:959:VAL:HG22	1.55	0.69
1:A:1735:HIS:HD2	1:A:1735:HIS:H	1.40	0.69
1:B:1335:ALA:HA	1:B:1406:GLN:NE2	2.07	0.69
1:B:1671:VAL:HG23	1:B:1743:LEU:HB2	1.73	0.69
1:B:1338:LEU:CD1	1:B:1406:GLN:HE21	2.05	0.69
1:B:1651:VAL:CG1	1:B:1680:VAL:HA	2.19	0.69
1:B:87:TYR:O	1:B:91:VAL:HG22	1.92	0.69
1:A:610:ILE:HG12	1:A:690:ILE:HG21	1.74	0.69
1:A:917:VAL:HG13	1:A:1054:PHE:HB2	1.74	0.69
1:B:1887:TYR:HD2	1:B:1967:GLY:HA3	1.56	0.69
1:A:2015:TYR:CD2	1:A:2099:LEU:HD22	2.28	0.69
1:B:1288:LYS:O	1:B:1291:GLN:HG2	1.92	0.69
1:B:1736:THR:HG23	1:B:1739:LYS:N	2.07	0.69
1:A:136:GLN:C	1:A:136:GLN:HE21	1.96	0.69
1:B:1382:PHE:HB3	1:B:1387:LEU:HB2	1.73	0.69
1:A:504:GLN:HA	1:A:541:THR:HG21	1.75	0.68
1:B:1653:THR:HG22	1:B:1810:VAL:HG12	1.73	0.68
1:B:87:TYR:CE2	1:B:97:PRO:HG2	2.28	0.68
1:A:111:VAL:CG2	1:A:188:LEU:HB2	2.23	0.68
1:A:1477:LEU:CD1	1:A:2043:ARG:HD2	2.22	0.68
1:A:252:ASN:ND2	1:A:272:LEU:HB2	2.07	0.68
1:B:917:VAL:HG13	1:B:1054:PHE:HB2	1.75	0.68
1:B:1303:ASN:O	1:B:1333:ASN:HB2	1.93	0.68
1:B:627:TRP:HB2	1:B:643:HIS:ND1	2.08	0.68
1:A:2070:LEU:HD21	1:A:2076:ASN:N	2.08	0.68
1:A:23:TRP:HA	1:A:26:LEU:HD12	1.75	0.68
1:A:1348:THR:HG21	1:A:1378:TRP:CZ2	2.29	0.68
1:A:1126:GLU:HB3	1:A:1129:CYS:SG	2.34	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1254:LEU:HD13	1:A:1316:VAL:HG12	1.75	0.68
1:A:506:MET:HE3	1:A:559:ILE:HD12	1.74	0.68
1:B:333:GLU:CB	1:B:334:PRO:HD3	2.22	0.68
1:A:1489:SER:H	1:A:1493:LEU:HD22	1.58	0.68
1:A:1606:ARG:HH21	1:A:1860:GLU:HG3	1.59	0.68
1:B:1227:LYS:HE3	1:B:1231:ASP:OD2	1.94	0.68
1:B:1460:LEU:HD13	1:B:2032:ALA:CB	2.23	0.68
1:A:1416:LEU:HD21	1:A:1425:TRP:HB2	1.76	0.67
1:B:1576:VAL:HG21	1:B:1843:MET:HG2	1.76	0.67
1:B:1477:LEU:O	1:B:1507:ARG:HG2	1.94	0.67
1:A:1651:VAL:HG12	1:A:1680:VAL:HA	1.77	0.67
1:A:1735:HIS:N	1:A:1735:HIS:CD2	2.61	0.67
1:B:1035:MET:HE3	1:B:1089:VAL:HG12	1.77	0.67
1:B:1139:GLU:CD	1:B:1218:SER:HB2	2.14	0.67
1:B:2015:TYR:CD2	1:B:2099:LEU:HD22	2.30	0.67
1:A:460:VAL:HG21	1:A:465:MET:HG3	1.76	0.67
1:B:1814:LEU:O	1:B:1818:ILE:HG13	1.94	0.67
1:B:111:VAL:CG2	1:B:188:LEU:HB2	2.25	0.67
1:B:635:PRO:HD2	1:B:638:ILE:HB	1.77	0.67
1:B:1430:LYS:HE3	1:B:1981:GLU:HA	1.75	0.67
1:A:614:ASN:O	1:A:615:VAL:O	2.13	0.67
1:B:1279:PRO:HG3	1:B:1298:GLN:NE2	2.10	0.67
1:B:1341:GLY:HA3	1:B:1407:GLN:HA	1.76	0.67
1:B:1954:SER:O	1:B:1958:GLU:HG3	1.95	0.67
1:B:288:GLU:OE1	1:B:383:ILE:HG13	1.95	0.67
1:B:1666:GLN:O	1:B:1669:GLU:HB2	1.95	0.67
1:B:1735:HIS:N	1:B:1735:HIS:CD2	2.62	0.67
1:B:643:HIS:CD2	1:B:746:GLN:HB3	2.30	0.67
1:A:277:TYR:CE2	1:A:287:LEU:HD11	2.30	0.67
1:A:1226:LEU:HD23	1:A:1401:LEU:HD21	1.77	0.67
1:A:581:SER:HB2	1:A:683:HIS:CE1	2.30	0.67
1:B:1126:GLU:HB3	1:B:1129:CYS:SG	2.35	0.67
1:B:1433:LEU:HD21	1:B:1465:GLY:HA3	1.77	0.67
1:B:1824:GLN:HG3	1:B:1825:PRO:HD2	1.76	0.67
1:B:1991:VAL:O	1:B:1994:PRO:HD2	1.95	0.67
1:B:1538:ARG:HH22	1:B:1585:PRO:CG	2.08	0.66
1:A:1285:ALA:O	1:A:1289:LEU:N	2.27	0.66
1:A:1618:PRO:HD3	1:A:1629:LEU:HD11	1.77	0.66
1:A:1814:LEU:O	1:A:1818:ILE:HG13	1.95	0.66
1:A:2098:PHE:CE2	1:A:2106:LEU:HB2	2.30	0.66
1:B:252:ASN:ND2	1:B:272:LEU:HB2	2.11	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:265:SER:O	1:A:269:GLN:HG3	1.95	0.66
1:A:976:VAL:O	1:A:978:PRO:HD3	1.94	0.66
1:B:1034:ALA:O	1:B:1037:HIS:HB2	1.95	0.66
1:A:1564:CYS:CB	1:A:1628:LEU:HD21	2.25	0.66
1:B:98:ALA:HA	1:B:101:ARG:HG3	1.78	0.66
1:B:1671:VAL:CG2	1:B:1743:LEU:HB2	2.25	0.66
1:A:1644:GLU:HB3	1:A:1825:PRO:CB	2.24	0.66
1:A:503:TRP:CD1	1:A:787:LYS:HB2	2.31	0.66
1:B:1395:SER:HB3	1:B:1399:SER:O	1.95	0.66
1:B:1673:ILE:O	1:B:1697:THR:HA	1.95	0.66
1:B:1694:ARG:NH1	1:B:1694:ARG:HG3	1.95	0.66
1:A:1470:ARG:O	1:A:1472:VAL:HG23	1.96	0.66
1:B:680:ILE:HG12	1:B:681:ALA:N	2.11	0.66
1:B:620:MET:SD	1:B:682:PHE:HB2	2.35	0.66
1:A:1411:ASP:HB2	1:A:1440:PRO:HD3	1.76	0.66
1:A:1857:ARG:HH11	1:A:1869:PRO:HB3	1.61	0.66
1:B:1244:VAL:HB	1:B:1272:TYR:HD1	1.61	0.66
1:B:1244:VAL:HG13	1:B:1314:LEU:HD23	1.77	0.66
1:A:1252:GLY:HA3	1:A:1318:ASN:HB3	1.77	0.66
1:A:168:LEU:HB2	1:A:185:VAL:HG11	1.77	0.66
1:A:254:ASP:CB	1:A:257:LYS:HE2	2.26	0.66
1:B:123:ASP:CB	1:B:126:THR:HB	2.25	0.66
1:A:87:TYR:O	1:A:91:VAL:HG22	1.96	0.65
1:B:59:ARG:HG3	1:B:838:HIS:HB3	1.78	0.65
1:A:1653:THR:HG22	1:A:1796:LEU:HD21	1.78	0.65
1:A:1974:VAL:HG22	1:A:1994:PRO:HG2	1.77	0.65
1:B:1095:LEU:HD12	1:B:1095:LEU:C	2.17	0.65
1:B:2003:ASP:O	1:B:2007:ARG:HG3	1.95	0.65
1:B:982:THR:C	1:B:984:GLU:H	2.00	0.65
1:A:2003:ASP:O	1:A:2007:ARG:HG3	1.96	0.65
1:B:496:CYS:O	1:B:583:GLY:HA3	1.96	0.65
1:B:645:SER:HB3	1:B:770:VAL:HG13	1.77	0.65
1:A:1035:MET:HE3	1:A:1089:VAL:HG12	1.78	0.65
1:B:1247:VAL:HG11	1:B:1301:PRO:HG3	1.76	0.65
1:A:1268:MET:HA	1:A:1268:MET:HE2	1.79	0.65
1:A:1439:ARG:HB3	1:A:1440:PRO:HD3	1.79	0.65
1:A:502:GLN:HB2	1:A:546:LEU:HD22	1.78	0.65
1:B:1282:LEU:HD21	1:B:1296:GLN:HB2	1.78	0.65
1:B:1486:MET:O	1:B:1488:PRO:HD3	1.97	0.65
1:B:2070:LEU:HD21	1:B:2076:ASN:N	2.11	0.65
1:A:889:THR:HG21	1:A:1032:LEU:HB2	1.78	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1244:VAL:HG13	1:A:1314:LEU:HD23	1.79	0.65
1:A:399:ASN:H	1:A:399:ASN:HD22	1.43	0.65
1:B:1220:LEU:HB3	1:B:1257:ARG:HH22	1.61	0.65
1:B:1279:PRO:HG3	1:B:1298:GLN:HE22	1.61	0.65
1:B:1528:THR:HG22	1:B:1530:HIS:H	1.61	0.65
1:A:1628:LEU:HD13	1:A:1633:THR:HG21	1.79	0.65
1:B:1569:THR:HG21	1:B:1622:LEU:HA	1.79	0.65
1:B:1736:THR:HG23	1:B:1740:GLY:H	1.61	0.65
1:A:1838:ALA:HA	1:A:1841:ARG:HG3	1.77	0.64
1:A:2102:PRO:HD2	1:A:2103:HIS:HD2	1.63	0.64
1:B:1532:PHE:HD2	1:B:1549:SER:HA	1.61	0.64
1:B:2105:VAL:O	1:B:2106:LEU:HD23	1.97	0.64
1:B:615:VAL:HG22	1:B:686:PHE:HD2	1.63	0.64
1:A:1395:SER:HB3	1:A:1399:SER:O	1.97	0.64
1:A:325:THR:OG1	1:A:343:LYS:HG2	1.97	0.64
1:A:302:PRO:HA	1:A:366:ILE:HG21	1.79	0.64
1:A:44:LEU:HG	1:A:45:TYR:CD1	2.32	0.64
1:B:1408:THR:N	1:B:1409:PRO:CD	2.61	0.64
1:B:1433:LEU:HD11	1:B:1465:GLY:O	1.97	0.64
1:B:1466:GLY:HA2	1:B:1469:ILE:HG13	1.77	0.64
1:B:64:PHE:HB2	1:B:429:ARG:NH2	2.11	0.64
1:B:217:ALA:HB2	1:B:364:PRO:HD3	1.79	0.64
1:A:1001:TYR:HB3	1:A:1003:TYR:CE1	2.32	0.64
1:A:1227:LYS:HE3	1:A:1231:ASP:OD2	1.98	0.64
1:B:1472:VAL:HG12	1:B:1473:LEU:H	1.62	0.64
1:B:660:GLU:HG2	1:B:663:GLN:NE2	2.12	0.64
1:B:736:VAL:O	1:B:740:VAL:HG23	1.98	0.64
1:A:1532:PHE:CE1	1:A:1597:CYS:HB3	2.32	0.64
1:A:1594:THR:OG1	1:A:1596:ASP:HB2	1.98	0.64
1:B:2102:PRO:HD2	1:B:2103:HIS:HD2	1.62	0.64
1:B:64:PHE:CE2	1:B:464:ALA:HB1	2.32	0.64
1:A:1220:LEU:HB3	1:A:1257:ARG:HH22	1.63	0.64
1:A:1859:GLU:HG2	1:A:1860:GLU:H	1.59	0.64
1:A:2002:LEU:O	1:A:2006:THR:HB	1.97	0.64
1:A:59:ARG:HG3	1:A:838:HIS:HB3	1.79	0.64
1:B:1348:THR:HG22	1:B:1349:LEU:N	2.06	0.64
1:B:1449:SER:O	1:B:1477:LEU:HD22	1.98	0.64
1:B:168:LEU:HB2	1:B:185:VAL:HG11	1.78	0.64
1:B:127:LEU:HG	1:B:127:LEU:O	1.97	0.64
1:B:1285:ALA:O	1:B:1289:LEU:N	2.29	0.64
1:A:137:ARG:NH1	1:B:137:ARG:HD2	2.12	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:570:LEU:HB3	1:B:810:VAL:HB	1.78	0.64
1:A:1564:CYS:SG	1:A:1628:LEU:HD21	2.38	0.64
1:B:2002:LEU:O	1:B:2006:THR:HB	1.97	0.64
1:B:302:PRO:HA	1:B:366:ILE:HG21	1.80	0.64
1:A:132:MET:HE1	1:B:200:PHE:CE2	2.33	0.64
1:B:2098:PHE:CE2	1:B:2106:LEU:HB2	2.33	0.64
1:B:319:PRO:HB2	1:B:320:LEU:HD23	1.79	0.64
1:B:1836:VAL:HG13	1:B:1854:ILE:CD1	2.28	0.63
1:A:1411:ASP:O	1:A:1413:PRO:HD3	1.98	0.63
1:A:1926:ALA:O	1:A:1930:ARG:HB2	1.98	0.63
1:B:1991:VAL:HG21	1:B:2033:ASN:ND2	2.13	0.63
1:A:1442:TRP:CZ2	1:A:1497:LEU:HD23	2.32	0.63
1:A:112:SER:HB3	1:A:334:PRO:HG3	1.79	0.63
1:B:44:LEU:HG	1:B:45:TYR:CD1	2.33	0.63
1:A:1746:ASN:HD21	1:A:1753:LEU:HD12	1.62	0.63
1:A:736:VAL:O	1:A:740:VAL:HG23	1.99	0.63
1:A:984:GLU:O	1:A:985:PHE:HB2	1.96	0.63
1:B:1303:ASN:N	1:B:1304:PRO:CD	2.61	0.63
1:B:159:THR:HB	1:B:162:SER:OG	1.99	0.63
1:B:351:GLY:C	1:B:383:ILE:HG22	2.19	0.63
1:B:1475:SER:HB3	1:B:1505:VAL:HG13	1.81	0.63
1:B:1735:HIS:HD2	1:B:1735:HIS:H	1.43	0.63
1:B:9:MET:HE3	1:B:345:LEU:HD12	1.80	0.63
1:A:1954:SER:O	1:A:1958:GLU:HG3	1.97	0.63
1:A:501:ALA:HB3	1:A:556:LEU:HD21	1.80	0.63
1:B:1139:GLU:OE2	1:B:1218:SER:HB2	1.99	0.63
1:A:1472:VAL:HG12	1:A:1473:LEU:N	2.13	0.63
1:B:1460:LEU:HD13	1:B:2032:ALA:HB2	1.81	0.63
1:B:254:ASP:CB	1:B:257:LYS:HE2	2.28	0.63
1:B:853:GLY:O	1:B:854:SER:HB3	1.97	0.63
1:B:1268:MET:HA	1:B:1268:MET:HE2	1.79	0.62
1:B:460:VAL:HG21	1:B:465:MET:HG3	1.79	0.62
1:A:1302:ALA:O	1:A:1303:ASN:HB2	1.97	0.62
1:A:1486:MET:HE1	1:A:1506:TYR:HB3	1.81	0.62
1:A:1616:MET:HB3	1:A:1800:PHE:CZ	2.33	0.62
1:B:2006:THR:HG21	1:B:2048:ARG:HH22	1.62	0.62
1:A:1545:ARG:HG3	1:A:1545:ARG:NH1	2.12	0.62
1:A:399:ASN:N	1:A:399:ASN:ND2	2.46	0.62
1:A:641:ALA:HB1	1:A:683:HIS:HB2	1.81	0.62
1:B:1433:LEU:HD13	1:B:1469:ILE:HD11	1.79	0.62
1:B:251:THR:HB	1:B:399:ASN:O	2.00	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:581:SER:O	1:A:583:GLY:N	2.33	0.62
1:B:1857:ARG:NH1	1:B:1871:ILE:HD11	2.15	0.62
1:B:200:PHE:HB3	1:B:206:LEU:HG	1.81	0.62
1:B:325:THR:OG1	1:B:343:LYS:HG2	1.99	0.62
1:B:643:HIS:HD2	1:B:746:GLN:HB3	1.65	0.62
1:A:1484:PRO:O	1:A:1485:GLU:HB2	2.00	0.62
1:A:1762:GLN:HG2	1:A:1787:LYS:O	1.99	0.62
1:B:1857:ARG:CZ	1:B:1871:ILE:HD11	2.30	0.62
1:B:1917:ARG:HH12	1:B:1974:VAL:HG12	1.63	0.62
1:B:399:ASN:HD22	1:B:399:ASN:H	1.47	0.62
1:B:77:PRO:O	1:B:81:MET:HG2	1.99	0.62
1:A:159:THR:HB	1:A:162:SER:OG	1.99	0.62
1:A:1734:ARG:O	1:A:1736:THR:N	2.32	0.62
1:A:319:PRO:HB2	1:A:320:LEU:HD23	1.82	0.62
1:A:542:ASP:O	1:A:545:VAL:HG12	1.99	0.62
1:B:752:VAL:HG11	1:B:775:LEU:HD21	1.81	0.62
1:A:1009:LEU:HD13	1:A:1023:GLN:O	2.00	0.62
1:A:542:ASP:H	1:A:545:VAL:HG12	1.63	0.62
1:B:9:MET:HE1	1:B:345:LEU:HB2	1.82	0.62
1:A:1429:LEU:HD11	1:A:1443:LEU:HD11	1.80	0.62
1:A:1836:VAL:HG13	1:A:1854:ILE:CD1	2.29	0.62
1:A:251:THR:HB	1:A:399:ASN:O	2.00	0.62
1:B:1454:VAL:HG13	1:B:1503:MET:HE1	1.80	0.62
1:B:570:LEU:HD13	1:B:800:VAL:HG13	1.82	0.62
1:B:972:THR:HG22	1:B:1081:VAL:CG2	2.29	0.62
1:B:420:LEU:HD11	1:B:512:ARG:HB3	1.82	0.62
1:A:874:TYR:HB2	1:A:1006:PHE:CD2	2.34	0.62
1:A:353:TRP:NE1	1:A:383:ILE:HB	2.14	0.62
1:A:817:PRO:O	1:A:818:PRO:O	2.18	0.62
1:B:1001:TYR:HB3	1:B:1003:TYR:CE1	2.35	0.62
1:B:1139:GLU:OE2	1:B:1216:LEU:HD12	1.99	0.62
1:B:1335:ALA:CA	1:B:1406:GLN:HE22	2.09	0.62
1:A:123:ASP:HB3	1:A:126:THR:CB	2.28	0.61
1:A:23:TRP:CE2	1:A:350:HIS:CD2	2.88	0.61
1:A:808:VAL:HG12	1:A:809:SER:N	2.15	0.61
1:A:976:VAL:HG13	1:A:977:ASP:N	2.14	0.61
1:B:112:SER:HB3	1:B:334:PRO:HG3	1.82	0.61
1:B:1580:THR:HG22	1:B:1581:GLY:N	2.14	0.61
1:A:1095:LEU:HD12	1:A:1095:LEU:C	2.20	0.61
1:A:317:ARG:O	1:A:319:PRO:HD3	1.99	0.61
1:A:1420:ASP:O	1:A:1425:TRP:CH2	2.54	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:103:THR:HG22	1:B:104:SER:N	2.15	0.61
1:B:277:TYR:CE2	1:B:287:LEU:HD11	2.34	0.61
1:B:331:HIS:CE1	1:B:333:GLU:HA	2.35	0.61
1:A:1124:HIS:CD2	1:A:1512:GLY:HA2	2.35	0.61
1:A:1765:ARG:HG3	1:A:1790:THR:HG23	1.83	0.61
1:A:384:ARG:HH11	1:A:384:ARG:CG	2.13	0.61
1:B:1768:GLU:HA	1:B:1768:GLU:OE1	2.00	0.61
1:B:1974:VAL:HG22	1:B:1994:PRO:HG2	1.81	0.61
1:A:1454:VAL:HG13	1:A:1503:MET:HE1	1.82	0.61
1:A:331:HIS:CE1	1:A:333:GLU:HA	2.35	0.61
1:B:889:THR:HG21	1:B:1032:LEU:HB2	1.80	0.61
1:B:347:SER:HB2	1:B:352:VAL:O	2.00	0.61
1:A:1466:GLY:HA2	1:A:1469:ILE:CG1	2.29	0.61
1:A:368:ALA:CA	1:A:371:ASP:HB3	2.31	0.61
1:B:1838:ALA:HA	1:B:1841:ARG:HG3	1.80	0.61
1:B:248:ASN:ND2	1:B:249:ALA:H	1.98	0.61
1:B:1703:GLU:O	1:B:1706:ALA:HB3	2.01	0.61
1:B:1647:SER:HA	1:B:1851:LYS:HG3	1.81	0.61
1:B:322:ILE:CD1	1:B:374:LEU:HD13	2.31	0.61
1:B:416:GLN:HG3	1:B:422:ARG:HH21	1.65	0.61
1:A:2078:THR:O	1:A:2079:VAL:HG13	2.01	0.61
1:B:89:ALA:O	1:B:92:ASP:HB3	2.01	0.61
1:A:366:ILE:O	1:A:366:ILE:HG12	2.00	0.61
1:A:416:GLN:HG3	1:A:422:ARG:HH21	1.64	0.61
1:B:1455:GLY:HA3	1:B:2039:SER:HB2	1.82	0.61
1:B:1841:ARG:O	1:B:1844:ALA:HB3	2.00	0.61
1:A:64:PHE:CE2	1:A:464:ALA:HB1	2.36	0.61
1:A:913:VAL:HG23	1:A:962:TRP:HB2	1.83	0.61
1:A:1343:PHE:O	1:A:1344:LEU:HD22	2.01	0.60
1:A:1746:ASN:ND2	1:A:1753:LEU:HD12	2.16	0.60
1:A:98:ALA:HA	1:A:101:ARG:HG3	1.82	0.60
1:B:1442:TRP:CZ2	1:B:1497:LEU:HD23	2.36	0.60
1:A:1248:LEU:HD21	1:A:1277:ARG:HE	1.66	0.60
1:B:1408:THR:H	1:B:1409:PRO:HD3	1.65	0.60
1:B:403:ILE:O	1:B:404:LEU:HD23	2.00	0.60
1:B:981:SER:HA	1:B:984:GLU:HG3	1.82	0.60
1:A:1656:TYR:CD2	1:A:1687:ILE:HD13	2.35	0.60
1:B:1035:MET:SD	1:B:1091:ALA:HB3	2.42	0.60
1:B:123:ASP:HB3	1:B:126:THR:HB	1.81	0.60
1:B:1299:TRP:CZ2	1:B:1304:PRO:O	2.54	0.60
1:B:327:SER:OG	1:B:356:ASN:ND2	2.34	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1439:ARG:O	1:A:1470:ARG:HB3	2.01	0.60
1:A:2006:THR:HG21	1:A:2048:ARG:HH22	1.66	0.60
1:A:247:LEU:HD11	1:A:405:GLN:HB2	1.82	0.60
1:B:215:PHE:CD2	1:B:305:LEU:HD11	2.37	0.60
1:B:501:ALA:HB3	1:B:556:LEU:HD21	1.83	0.60
1:A:665:LEU:HD22	1:A:670:VAL:HB	1.83	0.60
1:B:1073:ASP:O	1:B:1074:THR:HG22	2.02	0.60
1:A:45:TYR:HE2	1:B:124:PRO:HB2	1.66	0.60
1:B:1429:LEU:HD11	1:B:1443:LEU:HD11	1.82	0.60
1:B:1652:TYR:CD1	1:B:1823:VAL:HB	2.37	0.60
1:A:1575:ASP:HA	1:A:1599:LEU:HD23	1.83	0.60
1:A:368:ALA:HA	1:A:371:ASP:HB3	1.82	0.60
1:B:112:SER:HB2	1:B:334:PRO:CG	2.32	0.60
1:B:1119:PHE:CE1	1:B:1516:HIS:CE1	2.89	0.60
1:A:1279:PRO:HG3	1:A:1298:GLN:NE2	2.16	0.60
1:A:143:ARG:HG2	1:A:143:ARG:HH11	1.67	0.60
1:B:1580:THR:HG22	1:B:1582:LYS:N	2.16	0.60
1:B:1672:LEU:HD12	1:B:1696:PHE:O	2.02	0.60
1:B:2078:THR:O	1:B:2079:VAL:HG13	2.01	0.60
1:B:359:TYR:OH	1:B:362:PRO:HG3	2.02	0.60
1:B:468:ARG:HD3	1:B:485:VAL:HG21	1.83	0.60
1:A:586:ALA:O	1:A:589:TYR:HB3	2.02	0.60
1:A:1038:MET:HA	1:A:1038:MET:CE	2.32	0.60
1:A:883:ARG:HH21	1:A:1107:ARG:HD3	1.67	0.60
1:A:1549:SER:O	1:A:1552:HIS:HB3	2.01	0.60
1:A:582:LEU:O	1:A:585:VAL:HG23	2.01	0.60
1:A:595:THR:HB	1:A:598:GLU:H	1.66	0.60
1:A:670:VAL:HG12	1:A:671:PHE:N	2.16	0.60
1:B:1657:TYR:HA	1:B:1661:VAL:CG2	2.32	0.60
1:B:343:LYS:HE3	1:B:354:ALA:HB3	1.84	0.60
1:B:654:PRO:O	1:B:658:MET:HB2	2.01	0.60
1:A:1086:LEU:N	1:A:1086:LEU:HD23	2.17	0.60
1:A:36:ASP:CB	1:A:38:ARG:HG3	2.32	0.60
1:B:1396:PHE:CE2	1:B:1397:TYR:HD2	2.20	0.60
1:B:1466:GLY:HA2	1:B:1469:ILE:CG1	2.32	0.59
1:B:14:PRO:HD3	1:B:226:GLU:O	2.02	0.59
1:B:1625:SER:O	1:B:1626:VAL:HG23	2.02	0.59
1:B:646:LYS:HG2	1:B:746:GLN:HE21	1.67	0.59
1:A:1580:THR:HG22	1:A:1582:LYS:N	2.17	0.59
1:A:327:SER:OG	1:A:356:ASN:ND2	2.35	0.59
1:B:1035:MET:HE3	1:B:1089:VAL:CG1	2.32	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:384:ARG:HH11	1:B:384:ARG:CG	2.12	0.59
1:A:166:LEU:HD12	1:A:251:THR:HG21	1.83	0.59
1:B:1662:ARG:NH1	1:B:1662:ARG:CG	2.49	0.59
1:A:1857:ARG:NH1	1:A:1869:PRO:CB	2.66	0.59
1:B:1657:TYR:HA	1:B:1661:VAL:HG23	1.84	0.59
1:B:662:LEU:HD22	1:B:672:VAL:CG1	2.29	0.59
1:A:1475:SER:O	1:A:1486:MET:HE1	2.01	0.59
1:A:1703:GLU:O	1:A:1706:ALA:HB3	2.02	0.59
1:B:1097:LEU:HD12	1:B:1098:GLY:N	2.17	0.59
1:B:1765:ARG:HG3	1:B:1790:THR:HG23	1.85	0.59
1:A:1774:LEU:HD22	1:B:1785:PHE:HB2	1.85	0.59
1:B:143:ARG:HG2	1:B:143:ARG:HH11	1.68	0.59
1:B:366:ILE:HG12	1:B:366:ILE:O	2.02	0.59
1:B:322:ILE:HD12	1:B:374:LEU:HD13	1.85	0.59
1:B:630:CYS:HB3	1:B:640:PRO:HG3	1.85	0.59
1:A:1736:THR:HG23	1:A:1740:GLY:H	1.66	0.59
1:A:9:MET:HE3	1:A:345:LEU:HD12	1.85	0.59
1:B:1662:ARG:HG2	1:B:1662:ARG:HH11	1.67	0.59
1:A:1034:ALA:O	1:A:1037:HIS:HB2	2.02	0.59
1:A:1397:TYR:CE1	1:A:1399:SER:HB2	2.37	0.59
1:A:615:VAL:HG22	1:A:616:LEU:H	1.68	0.59
1:B:1003:TYR:CE1	1:B:1037:HIS:CE1	2.90	0.59
1:B:2101:GLN:HG3	1:B:2102:PRO:CD	2.33	0.59
1:B:317:ARG:O	1:B:319:PRO:HD3	2.02	0.59
1:B:288:GLU:HG3	1:B:385:GLY:O	2.02	0.59
1:B:399:ASN:N	1:B:399:ASN:ND2	2.51	0.59
1:A:1118:LYS:HD2	1:A:2103:HIS:CE1	2.38	0.59
1:B:1454:VAL:HG13	1:B:1503:MET:CE	2.33	0.59
1:B:646:LYS:HG2	1:B:746:GLN:NE2	2.18	0.59
1:B:128:VAL:HG11	1:B:130:TYR:CZ	2.37	0.59
1:A:200:PHE:CE2	1:B:132:MET:HE1	2.38	0.59
1:A:1785:PHE:HB2	1:B:1774:LEU:HD22	1.83	0.59
1:A:1248:LEU:CD2	1:A:1277:ARG:HE	2.16	0.58
1:A:1580:THR:HG22	1:A:1581:GLY:N	2.17	0.58
1:A:165:LEU:HB2	1:A:337:GLY:HA3	1.85	0.58
1:B:878:HIS:HB2	1:B:1007:PHE:CE1	2.38	0.58
1:B:13:LEU:HB3	1:B:14:PRO:HD2	1.84	0.58
1:A:1122:THR:HG1	1:A:1517:PHE:HE1	1.49	0.58
1:A:1528:THR:HG22	1:A:1530:HIS:N	2.15	0.58
1:A:64:PHE:HB2	1:A:429:ARG:NH2	2.13	0.58
1:B:1472:VAL:HG12	1:B:1473:LEU:N	2.17	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1539:GLY:HA2	1:B:1580:THR:O	2.02	0.58
1:B:165:LEU:HB2	1:B:337:GLY:HA3	1.85	0.58
1:B:1736:THR:O	1:B:1739:LYS:HB2	2.03	0.58
1:B:527:LEU:HD12	1:B:534:VAL:HG22	1.85	0.58
1:B:680:ILE:HG12	1:B:681:ALA:H	1.67	0.58
1:A:1073:ASP:O	1:A:1074:THR:HG22	2.03	0.58
1:B:68:HIS:HB3	1:B:71:GLN:HG3	1.85	0.58
1:B:1007:PHE:HE2	1:B:1030:SER:HA	1.67	0.58
1:B:1299:TRP:HE1	1:B:1306:PRO:HD2	1.68	0.58
1:B:612:GLU:HG2	1:B:612:GLU:O	2.04	0.58
1:A:1236:ASN:HA	1:A:1502:VAL:HG21	1.86	0.58
1:A:1991:VAL:HG21	1:A:2033:ASN:ND2	2.18	0.58
1:A:23:TRP:CE2	1:A:350:HIS:HD2	2.22	0.58
1:A:466:PRO:HG2	1:A:467:PHE:HD1	1.68	0.58
1:B:1694:ARG:CG	1:B:1694:ARG:NH1	2.65	0.58
1:A:917:VAL:CG1	1:A:1054:PHE:HB2	2.34	0.58
1:B:1662:ARG:NH2	1:B:1793:GLY:O	2.36	0.58
1:B:1674:HIS:CD2	1:B:1698:THR:CG2	2.87	0.58
1:B:297:THR:HB	1:B:300:GLY:N	2.19	0.58
1:A:1248:LEU:HD21	1:A:1277:ARG:HH21	1.69	0.58
1:A:1122:THR:HG21	1:A:1517:PHE:HZ	1.68	0.58
1:A:595:THR:CG2	1:A:597:GLU:HG2	2.33	0.58
1:B:1300:ASP:O	1:B:1302:ALA:N	2.36	0.58
1:A:155:ILE:HD11	1:B:166:LEU:HD11	1.85	0.58
1:B:1860:GLU:HB2	1:B:1865:PRO:HG2	1.84	0.58
1:A:321:LEU:HD23	1:A:381:LEU:HD13	1.86	0.58
1:B:386:GLY:O	1:B:387:ASN:HB2	2.03	0.58
1:A:1299:TRP:NE1	1:A:1306:PRO:HD2	2.19	0.58
1:B:1003:TYR:CE1	1:B:1037:HIS:HE1	2.21	0.58
1:B:23:TRP:CE2	1:B:350:HIS:CD2	2.92	0.58
1:A:1068:LEU:HD12	1:A:1077:ALA:O	2.04	0.57
1:A:112:SER:HB2	1:A:334:PRO:CG	2.31	0.57
1:A:13:LEU:HB3	1:A:14:PRO:HD2	1.85	0.57
1:A:1580:THR:HG22	1:A:1582:LYS:H	1.69	0.57
1:B:1241:LYS:O	1:B:1241:LYS:HG3	2.03	0.57
1:A:103:THR:HG22	1:A:104:SER:N	2.19	0.57
1:B:1277:ARG:HD3	1:B:1300:ASP:OD2	2.04	0.57
1:A:945:GLU:OE1	1:B:938:LEU:HB3	2.03	0.57
1:A:1953:ARG:HG2	1:A:2005:VAL:CG1	2.33	0.57
1:B:889:THR:CG2	1:B:1032:LEU:HB2	2.34	0.57
1:B:1138:GLU:HG3	1:B:1138:GLU:O	2.03	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1456:MET:HG3	1:B:2036:PHE:HD1	1.70	0.57
1:B:1762:GLN:HG2	1:B:1787:LYS:O	2.05	0.57
1:A:1007:PHE:HE2	1:A:1030:SER:HA	1.70	0.57
1:A:1616:MET:HE2	1:A:1650:ILE:HD13	1.87	0.57
1:A:1917:ARG:HH12	1:A:1974:VAL:HG12	1.69	0.57
1:A:333:GLU:CB	1:A:334:PRO:CD	2.79	0.57
1:A:476:GLU:HB2	1:A:790:ARG:HH12	1.68	0.57
1:A:883:ARG:HE	1:A:1107:ARG:HD3	1.69	0.57
1:B:1953:ARG:HG2	1:B:2005:VAL:CG1	2.34	0.57
1:B:234:THR:HG21	1:B:239:ALA:HB2	1.84	0.57
1:A:1647:SER:O	1:A:1651:VAL:HG21	2.04	0.57
1:A:1736:THR:O	1:A:1739:LYS:HB2	2.04	0.57
1:B:1097:LEU:HD12	1:B:1097:LEU:C	2.24	0.57
1:B:1616:MET:HB3	1:B:1800:PHE:CZ	2.39	0.57
1:B:492:VAL:HG11	1:B:572:LEU:HD21	1.87	0.57
1:B:883:ARG:HH21	1:B:1107:ARG:HD3	1.68	0.57
1:B:91:VAL:O	1:B:457:ILE:HD11	2.04	0.57
1:A:1734:ARG:C	1:A:1736:THR:H	2.08	0.57
1:A:1773:ASP:OD1	1:A:1778:HIS:HD2	1.88	0.57
1:A:1841:ARG:O	1:A:1844:ALA:HB3	2.03	0.57
1:B:1538:ARG:HH12	1:B:1585:PRO:CG	2.17	0.57
1:B:234:THR:CG2	1:B:239:ALA:HB2	2.34	0.57
1:B:257:LYS:HD3	1:B:263:PHE:O	2.04	0.57
1:A:1672:LEU:HD12	1:A:1696:PHE:O	2.04	0.57
1:A:393:PHE:CD1	1:A:399:ASN:HB3	2.40	0.57
1:A:652:SER:OG	1:A:681:ALA:HB1	2.04	0.57
1:B:1996:TYR:C	1:B:1996:TYR:CD2	2.78	0.57
1:B:368:ALA:CA	1:B:371:ASP:HB3	2.34	0.57
1:A:889:THR:CG2	1:A:1032:LEU:HB2	2.35	0.57
1:A:1448:CYS:C	1:A:1450:THR:H	2.08	0.57
1:A:1653:THR:CG2	1:A:1796:LEU:HD21	2.35	0.57
1:A:293:HIS:O	1:A:326:LYS:HD2	2.04	0.57
1:A:403:ILE:O	1:A:404:LEU:HD23	2.04	0.57
1:A:638:ILE:O	1:A:638:ILE:HG22	2.05	0.57
1:B:123:ASP:HB3	1:B:126:THR:CB	2.34	0.57
1:B:1720:PHE:HD1	1:B:1720:PHE:N	2.01	0.57
1:B:466:PRO:HG2	1:B:467:PHE:HD1	1.70	0.57
1:A:1657:TYR:CZ	1:A:1799:LEU:HD11	2.40	0.57
1:A:399:ASN:H	1:A:399:ASN:ND2	2.00	0.57
1:B:1277:ARG:HD3	1:B:1300:ASP:CG	2.24	0.57
1:B:22:PHE:CD2	1:B:26:LEU:HD11	2.40	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:247:LEU:HD11	1:B:405:GLN:HB2	1.85	0.57
1:B:799:ASN:HA	1:B:802:ARG:HG3	1.86	0.57
1:A:1485:GLU:HB3	1:A:1506:TYR:OH	2.05	0.57
1:B:1320:ALA:HA	1:B:1349:LEU:HD11	1.85	0.57
1:B:1580:THR:HG22	1:B:1582:LYS:H	1.70	0.57
1:B:1565:SER:HB2	1:B:1857:ARG:HH22	1.63	0.57
1:B:362:PRO:HB3	1:B:369:LEU:HB3	1.87	0.57
1:B:913:VAL:HG23	1:B:962:TRP:HB2	1.86	0.57
1:A:14:PRO:HD3	1:A:226:GLU:O	2.04	0.56
1:A:343:LYS:HG3	1:A:344:VAL:N	2.19	0.56
1:A:371:ASP:CG	1:A:371:ASP:O	2.43	0.56
1:B:1651:VAL:HG23	1:B:1851:LYS:HZ1	1.70	0.56
1:A:1457:VAL:CG2	1:A:1473:LEU:HD22	2.32	0.56
1:A:148:PHE:HB3	1:A:150:PHE:CZ	2.40	0.56
1:A:309:VAL:HG12	1:A:313:CYS:HB2	1.87	0.56
1:A:527:LEU:HD12	1:A:534:VAL:HG22	1.86	0.56
1:B:980:ASP:CB	1:B:982:THR:HG22	2.33	0.56
1:A:1279:PRO:HG3	1:A:1298:GLN:HE22	1.70	0.56
1:A:1425:TRP:HA	1:A:1428:SER:HB2	1.87	0.56
1:A:492:VAL:HG11	1:A:572:LEU:HD21	1.88	0.56
1:A:615:VAL:HG22	1:A:616:LEU:N	2.20	0.56
1:B:166:LEU:HD12	1:B:251:THR:HG21	1.87	0.56
1:A:19:LEU:HD11	1:A:342:ILE:HD13	1.87	0.56
1:B:970:PHE:O	1:B:1067:LYS:HE2	2.05	0.56
1:A:1545:ARG:CG	1:A:1545:ARG:HH11	2.17	0.56
1:A:248:ASN:ND2	1:A:249:ALA:H	2.03	0.56
1:B:506:MET:HE3	1:B:559:ILE:CD1	2.36	0.56
1:B:903:LEU:O	1:B:905:GLN:HG3	2.05	0.56
1:A:1486:MET:CE	1:A:1506:TYR:HB3	2.35	0.56
1:B:326:LYS:HE3	1:B:336:SER:HB2	1.87	0.56
1:B:642:CYS:HA	1:B:743:VAL:HG22	1.86	0.56
1:A:1299:TRP:HE1	1:A:1305:ALA:HA	1.71	0.56
1:A:1765:ARG:HD3	1:A:1765:ARG:N	2.21	0.56
1:A:68:HIS:HB3	1:A:71:GLN:HG3	1.88	0.56
1:B:1222:ASP:HA	1:B:1226:LEU:CD1	2.35	0.56
1:B:1373:LEU:N	1:B:1373:LEU:HD23	2.20	0.56
1:B:1662:ARG:NH1	1:B:1662:ARG:HG2	2.18	0.56
1:A:1348:THR:HG22	1:A:1349:LEU:N	2.14	0.56
1:B:1407:GLN:HG2	1:B:1409:PRO:HD2	1.83	0.56
1:B:1422:SER:O	1:B:1423:PHE:HB2	2.06	0.56
1:B:1423:PHE:CD1	1:B:1989:GLN:HB3	2.41	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1514:PHE:O	1:B:1515:ARG:NH1	2.39	0.56
1:B:1765:ARG:HD3	1:B:1765:ARG:N	2.21	0.56
1:B:278:ALA:CB	1:B:279:PRO:CD	2.83	0.56
1:A:1244:VAL:HB	1:A:1272:TYR:HD1	1.69	0.56
1:A:1662:ARG:NH1	1:A:1792:HIS:ND1	2.54	0.56
1:A:1720:PHE:N	1:A:1720:PHE:CD1	2.74	0.56
1:B:993:TYR:CZ	1:B:1008:GLN:HA	2.40	0.56
1:B:309:VAL:HG12	1:B:313:CYS:HB2	1.88	0.56
1:B:19:LEU:HD11	1:B:342:ILE:HD13	1.88	0.56
1:A:89:ALA:O	1:A:92:ASP:HB3	2.05	0.56
1:B:1451:SER:O	1:B:2036:PHE:CE1	2.59	0.56
1:B:1656:TYR:O	1:B:1661:VAL:HG23	2.06	0.56
1:B:1720:PHE:N	1:B:1720:PHE:CD1	2.71	0.56
1:B:1669:GLU:HG2	1:B:1742:ASP:OD2	2.06	0.56
1:A:799:ASN:HA	1:A:802:ARG:HG3	1.88	0.56
1:A:903:LEU:O	1:A:905:GLN:HG3	2.06	0.56
1:A:1275:THR:CG2	1:A:1299:TRP:HB2	2.36	0.55
1:A:1720:PHE:N	1:A:1720:PHE:HD1	2.04	0.55
1:A:1996:TYR:CD2	1:A:1996:TYR:C	2.79	0.55
1:A:9:MET:HE1	1:A:345:LEU:HB2	1.88	0.55
1:B:1746:ASN:HD21	1:B:1753:LEU:HD12	1.71	0.55
1:B:424:LEU:CD2	1:B:441:GLY:HA3	2.36	0.55
1:A:1570:SER:OG	1:A:1602:GLU:HB3	2.07	0.55
1:A:257:LYS:HD3	1:A:263:PHE:O	2.05	0.55
1:A:670:VAL:HG12	1:A:671:PHE:H	1.72	0.55
1:B:1007:PHE:CE2	1:B:1030:SER:HA	2.41	0.55
1:B:1038:MET:HA	1:B:1038:MET:CE	2.36	0.55
1:B:22:PHE:CE2	1:B:26:LEU:HD11	2.40	0.55
1:A:1569:THR:HG23	1:A:1602:GLU:O	2.06	0.55
1:B:1893:LEU:HB3	1:B:1925:GLN:NE2	2.20	0.55
1:B:371:ASP:O	1:B:371:ASP:CG	2.43	0.55
1:A:36:ASP:HB3	1:A:38:ARG:CG	2.37	0.55
1:B:1996:TYR:CD1	1:B:2040:ALA:HB1	2.41	0.55
1:B:278:ALA:HB3	1:B:279:PRO:CD	2.34	0.55
1:B:36:ASP:CB	1:B:38:ARG:HG3	2.35	0.55
1:B:621:ALA:CB	1:B:662:LEU:HD11	2.36	0.55
1:A:1003:TYR:CE1	1:A:1037:HIS:CE1	2.94	0.55
1:A:1418:VAL:HG13	1:A:1425:TRP:CH2	2.42	0.55
1:A:1484:PRO:O	1:A:1485:GLU:CB	2.53	0.55
1:A:1674:HIS:ND1	1:A:1698:THR:HG21	2.21	0.55
1:A:1777:ASN:HD22	1:B:1783:ALA:H	1.54	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1996:TYR:CD1	1:A:2040:ALA:HB1	2.41	0.55
1:B:1736:THR:HG21	1:B:1740:GLY:H	1.72	0.55
1:B:2103:HIS:H	1:B:2103:HIS:CD2	2.23	0.55
1:A:1097:LEU:HD12	1:A:1098:GLY:N	2.22	0.55
1:A:1443:LEU:O	1:A:1473:LEU:HA	2.06	0.55
1:A:1563:LEU:HD12	1:A:1564:CYS:H	1.72	0.55
1:B:1414:VAL:HG11	1:B:1432:ILE:HD13	1.89	0.55
1:B:1470:ARG:HG3	1:B:1470:ARG:O	2.05	0.55
1:A:1616:MET:HB3	1:A:1800:PHE:HZ	1.72	0.55
1:A:1768:GLU:OE1	1:A:1768:GLU:HA	2.06	0.55
1:A:81:MET:HG3	1:A:228:VAL:HG11	1.89	0.55
1:A:22:PHE:CD2	1:A:26:LEU:HD11	2.41	0.55
1:A:386:GLY:O	1:A:387:ASN:HB2	2.05	0.55
1:B:1299:TRP:CH2	1:B:1333:ASN:ND2	2.75	0.55
1:B:1473:LEU:HG	1:B:1503:MET:HA	1.88	0.55
1:B:1560:GLN:HA	1:B:1563:LEU:HB3	1.87	0.55
1:A:1470:ARG:HG3	1:A:1470:ARG:O	2.07	0.55
1:A:1482:PRO:C	1:A:1484:PRO:HD3	2.26	0.55
1:A:1530:HIS:HB2	1:A:1552:HIS:HB2	1.87	0.55
1:A:429:ARG:HH11	1:A:429:ARG:HB3	1.70	0.55
1:A:146:PHE:O	1:B:256:SER:HB3	2.07	0.55
1:A:1857:ARG:HH11	1:A:1869:PRO:CB	2.19	0.55
1:A:111:VAL:HG22	1:A:188:LEU:HB2	1.88	0.55
1:A:40:TRP:CH2	1:A:194:PRO:HA	2.42	0.55
1:A:297:THR:HB	1:A:300:GLY:N	2.20	0.55
1:B:98:ALA:O	1:B:101:ARG:HG3	2.07	0.55
1:B:23:TRP:CE2	1:B:350:HIS:HD2	2.25	0.55
1:B:82:LEU:HD13	1:B:188:LEU:HD21	1.88	0.55
1:B:1416:LEU:HD23	1:B:1429:LEU:HG	1.88	0.55
1:B:1448:CYS:C	1:B:1450:THR:H	2.11	0.55
1:B:393:PHE:CD1	1:B:399:ASN:HB3	2.42	0.55
1:B:644:ASN:HB2	1:B:648:THR:O	2.06	0.55
1:B:615:VAL:HG22	1:B:686:PHE:CD2	2.42	0.55
1:A:1035:MET:SD	1:A:1091:ALA:HB3	2.47	0.54
1:A:1097:LEU:HD12	1:A:1097:LEU:C	2.27	0.54
1:A:1300:ASP:O	1:A:1302:ALA:N	2.38	0.54
1:A:1476:ASN:HA	1:A:1486:MET:SD	2.47	0.54
1:A:878:HIS:HB2	1:A:1007:PHE:CE1	2.42	0.54
1:B:1570:SER:OG	1:B:1602:GLU:HB3	2.07	0.54
1:B:1917:ARG:NH1	1:B:1974:VAL:HG12	2.23	0.54
1:A:166:LEU:HD23	1:A:166:LEU:O	2.07	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1766:PHE:CD2	1:A:1791:PHE:CE1	2.95	0.54
1:B:1223:ALA:HB1	1:B:1224:PRO:HD2	1.89	0.54
1:B:1227:LYS:HE2	1:B:1516:HIS:O	2.07	0.54
1:B:1766:PHE:CD2	1:B:1791:PHE:CE1	2.96	0.54
1:A:1783:ALA:H	1:B:1777:ASN:HD22	1.54	0.54
1:B:40:TRP:CH2	1:B:194:PRO:HA	2.42	0.54
1:B:420:LEU:HD11	1:B:512:ARG:HD2	1.89	0.54
1:A:1115:ILE:CD1	1:A:2111:LEU:HG	2.31	0.54
1:A:278:ALA:CB	1:A:279:PRO:CD	2.84	0.54
1:A:506:MET:HE3	1:A:559:ILE:CD1	2.37	0.54
1:B:917:VAL:CG1	1:B:1054:PHE:HB2	2.37	0.54
1:B:1051:PRO:HA	1:B:1101:SER:HB3	1.90	0.54
1:B:1802:GLU:O	1:B:1804:GLY:N	2.39	0.54
1:B:228:VAL:O	1:B:228:VAL:HG23	2.07	0.54
1:A:1801:GLU:O	1:A:1803:GLY:N	2.41	0.54
1:A:1996:TYR:HD1	1:A:2040:ALA:HB1	1.72	0.54
1:B:1563:LEU:HD12	1:B:1564:CYS:H	1.72	0.54
1:B:1734:ARG:O	1:B:1736:THR:N	2.40	0.54
1:B:293:HIS:O	1:B:326:LYS:HD2	2.06	0.54
1:B:420:LEU:HD11	1:B:512:ARG:CB	2.37	0.54
1:A:1222:ASP:HA	1:A:1226:LEU:CD1	2.38	0.54
1:A:1857:ARG:CG	1:A:1871:ILE:HD11	2.38	0.54
1:A:2101:GLN:HG3	1:A:2102:PRO:CD	2.38	0.54
1:B:1472:VAL:HG13	1:B:1502:VAL:O	2.08	0.54
1:B:1470:ARG:O	1:B:1472:VAL:HG23	2.07	0.54
1:A:1606:ARG:NH2	1:A:1860:GLU:HG3	2.20	0.54
1:A:1698:THR:OG1	1:A:1723:SER:HB3	2.06	0.54
1:A:1973:MET:HB3	1:A:1995:LYS:HE3	1.89	0.54
1:A:215:PHE:HD2	1:A:305:LEU:HD11	1.68	0.54
1:A:940:ALA:HB3	1:B:945:GLU:OE2	2.07	0.54
1:B:1422:SER:HB2	1:B:1424:ARG:HG3	1.90	0.54
1:B:1570:SER:HB3	1:B:1853:VAL:HG22	1.89	0.54
1:A:353:TRP:CZ2	1:A:383:ILE:HD12	2.43	0.54
1:B:1229:CYS:HB3	1:B:1403:LEU:HD22	1.90	0.54
1:B:343:LYS:HG3	1:B:344:VAL:N	2.22	0.54
1:A:1769:ILE:HG22	1:A:1770:GLY:N	2.22	0.54
1:A:1996:TYR:HD2	1:A:1997:SER:N	2.06	0.54
1:A:2019:PHE:CD1	1:A:2060:TRP:NE1	2.76	0.54
1:A:2102:PRO:HD2	1:A:2103:HIS:CD2	2.42	0.54
1:A:359:TYR:OH	1:A:362:PRO:HG3	2.08	0.54
1:A:1003:TYR:CE1	1:A:1037:HIS:HE1	2.26	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1446:VAL:HA	1:A:1476:ASN:ND2	2.23	0.54
1:A:1893:LEU:HB3	1:A:1925:GLN:NE2	2.22	0.54
1:A:856:CYS:SG	1:B:856:CYS:CB	2.96	0.54
1:A:851:PRO:CB	1:B:122:ARG:HB3	2.37	0.54
1:A:228:VAL:HG23	1:A:228:VAL:O	2.08	0.54
1:A:295:THR:HG22	1:A:331:HIS:HD2	1.72	0.54
1:B:1656:TYR:CE2	1:B:1687:ILE:HD13	2.43	0.54
1:B:1773:ASP:OD1	1:B:1778:HIS:HD2	1.91	0.54
1:B:96:ASN:ND2	1:B:98:ALA:HB3	2.19	0.54
1:A:1035:MET:HE3	1:A:1089:VAL:CG1	2.38	0.53
1:A:1408:THR:HB	1:A:1439:ARG:HH12	1.72	0.53
1:A:162:SER:OG	1:A:163:SER:N	2.41	0.53
1:A:48:PRO:HD3	1:A:201:MET:HE3	1.89	0.53
1:A:278:ALA:HB3	1:A:279:PRO:CD	2.35	0.53
1:A:502:GLN:HG3	1:A:556:LEU:CD1	2.35	0.53
1:B:1068:LEU:HD12	1:B:1077:ALA:O	2.08	0.53
1:B:123:ASP:HB3	1:B:126:THR:OG1	2.09	0.53
1:B:148:PHE:HB3	1:B:150:PHE:CZ	2.43	0.53
1:B:1538:ARG:NH2	1:B:1585:PRO:HG2	2.21	0.53
1:B:1996:TYR:HD2	1:B:1997:SER:N	2.06	0.53
1:B:642:CYS:HA	1:B:743:VAL:CG2	2.37	0.53
1:A:1275:THR:HG21	1:A:1299:TRP:HB2	1.90	0.53
1:A:1748:LEU:O	1:A:1749:ALA:O	2.26	0.53
1:A:22:PHE:CE2	1:A:26:LEU:HD11	2.43	0.53
1:A:685:TYR:CD1	1:A:686:PHE:N	2.76	0.53
1:B:120:LEU:HD21	1:B:845:PRO:HG3	1.89	0.53
1:B:1394:ARG:HA	1:B:1400:VAL:HG22	1.88	0.53
1:B:254:ASP:O	1:B:255:GLY:O	2.27	0.53
1:B:368:ALA:HA	1:B:371:ASP:HB3	1.90	0.53
1:B:621:ALA:HB2	1:B:662:LEU:HD11	1.90	0.53
1:B:691:ALA:HB3	1:B:692:PRO:HD3	1.91	0.53
1:A:234:THR:CG2	1:A:239:ALA:HB2	2.38	0.53
1:A:351:GLY:C	1:A:383:ILE:HG22	2.28	0.53
1:B:1333:ASN:ND2	1:B:1334:MET:SD	2.82	0.53
1:B:1618:PRO:CD	1:B:1629:LEU:HD11	2.38	0.53
1:B:201:MET:HA	1:B:206:LEU:HB2	1.89	0.53
1:B:586:ALA:O	1:B:589:TYR:HB3	2.07	0.53
1:B:623:VAL:HG12	1:B:624:GLY:N	2.23	0.53
1:B:874:TYR:HB2	1:B:1006:PHE:CD2	2.43	0.53
1:A:945:GLU:OE2	1:B:940:ALA:HB3	2.09	0.53
1:A:1315:LEU:HB3	1:A:1344:LEU:CD1	2.38	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1394:ARG:HA	1:A:1400:VAL:HG22	1.90	0.53
1:B:1248:LEU:HD21	1:B:1277:ARG:HE	1.74	0.53
1:B:1390:VAL:HG13	1:B:1501:LEU:HD21	1.89	0.53
1:B:2101:GLN:HG3	1:B:2102:PRO:HD2	1.89	0.53
1:B:209:ASP:OD2	1:B:213:ARG:NE	2.42	0.53
1:B:432:GLU:HG3	1:B:433:ALA:N	2.24	0.53
1:A:100:LEU:O	1:A:103:THR:OG1	2.24	0.53
1:A:2006:THR:O	1:A:2010:CYS:HB2	2.08	0.53
1:B:1418:VAL:HG13	1:B:1425:TRP:CH2	2.41	0.53
1:B:301:ASP:HB2	1:B:302:PRO:HD3	1.90	0.53
1:B:159:THR:CG2	1:B:398:SER:HB3	2.39	0.53
1:A:1656:TYR:HD2	1:A:1660:VAL:HG21	1.72	0.53
1:A:234:THR:HG21	1:A:239:ALA:HB2	1.89	0.53
1:A:275:SER:C	1:A:276:LEU:HD23	2.29	0.53
1:A:542:ASP:H	1:A:545:VAL:CG1	2.22	0.53
1:B:972:THR:CG2	1:B:1081:VAL:HG23	2.38	0.53
1:B:495:ILE:CD1	1:B:578:ILE:HB	2.39	0.53
1:A:165:LEU:HD23	1:A:400:VAL:CG2	2.25	0.53
1:A:2103:HIS:HB2	1:A:2106:LEU:HD21	1.90	0.53
1:B:1338:LEU:CD1	1:B:1406:GLN:HG3	2.38	0.53
1:B:963:GLU:HA	1:B:963:GLU:OE1	2.09	0.53
1:A:423:LEU:HD23	1:A:812:PRO:HG3	1.89	0.53
1:A:91:VAL:O	1:A:457:ILE:HD11	2.09	0.53
1:A:963:GLU:O	1:A:965:PRO:HD3	2.09	0.53
1:A:963:GLU:HA	1:A:963:GLU:OE1	2.09	0.53
1:B:1136:LEU:HD21	1:B:1218:SER:HA	1.89	0.53
1:B:1418:VAL:HG12	1:B:1418:VAL:O	2.08	0.53
1:B:1607:ASP:OD1	1:B:1611:ARG:HB3	2.09	0.53
1:B:214:SER:HB3	1:B:327:SER:HB3	1.91	0.53
1:B:963:GLU:O	1:B:965:PRO:HD3	2.08	0.53
1:A:1416:LEU:HD11	1:A:1425:TRP:HB3	1.90	0.53
1:A:254:ASP:O	1:A:255:GLY:O	2.26	0.53
1:A:252:ASN:HD21	1:A:272:LEU:HB2	1.74	0.53
1:A:542:ASP:N	1:A:545:VAL:HG12	2.23	0.53
1:A:887:PRO:HB2	1:A:890:GLY:H	1.73	0.53
1:B:1469:ILE:HG22	1:B:1471:CYS:SG	2.49	0.53
1:A:1252:GLY:CA	1:A:1318:ASN:HD22	2.22	0.53
1:A:1348:THR:HG21	1:A:1378:TRP:HZ2	1.70	0.53
1:A:1640:TRP:CZ2	1:A:1825:PRO:HD3	2.44	0.53
1:B:1413:PRO:HA	1:B:1440:PRO:HB2	1.91	0.53
1:B:1461:ARG:HG3	1:B:1461:ARG:O	2.09	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1669:GLU:O	1:B:1693:CYS:HB3	2.09	0.53
1:B:1734:ARG:C	1:B:1736:THR:H	2.11	0.53
1:B:1554:ALA:CB	1:B:1882:PRO:HB3	2.39	0.53
1:B:765:ALA:HB1	1:B:768:GLN:HG2	1.89	0.53
1:A:856:CYS:SG	1:B:856:CYS:SG	3.06	0.52
1:B:1996:TYR:HD1	1:B:2040:ALA:HB1	1.74	0.52
1:A:98:ALA:O	1:A:101:ARG:HG3	2.08	0.52
1:B:1276:ASP:O	1:B:1298:GLN:HA	2.09	0.52
1:B:1874:THR:HG22	1:B:1874:THR:O	2.09	0.52
1:A:132:MET:HE1	1:B:200:PHE:HE2	1.73	0.52
1:A:1648:VAL:HB	1:A:1649:PRO:HD3	1.91	0.52
1:A:159:THR:CG2	1:A:398:SER:HB3	2.40	0.52
1:A:429:ARG:NH1	1:A:429:ARG:HB3	2.23	0.52
1:A:91:VAL:HG21	1:A:834:ILE:HD13	1.92	0.52
1:B:1121:PHE:HE1	1:B:1512:GLY:C	2.13	0.52
1:B:2019:PHE:CD1	1:B:2060:TRP:NE1	2.78	0.52
1:A:1051:PRO:HA	1:A:1101:SER:HB3	1.90	0.52
1:A:1418:VAL:O	1:A:1418:VAL:HG12	2.09	0.52
1:A:2103:HIS:H	1:A:2103:HIS:CD2	2.27	0.52
1:B:165:LEU:HD22	1:B:392:SER:HB2	1.91	0.52
1:B:219:GLY:O	1:B:298:LYS:HB2	2.09	0.52
1:B:429:ARG:HB3	1:B:429:ARG:HH11	1.73	0.52
1:B:502:GLN:HG3	1:B:556:LEU:CD1	2.37	0.52
1:B:638:ILE:HD11	1:B:657:ALA:O	2.09	0.52
1:B:765:ALA:HB2	1:B:783:PRO:HB3	1.91	0.52
1:A:1252:GLY:HA2	1:A:1318:ASN:HD22	1.73	0.52
1:A:1553:TYR:CD1	1:A:1880:PHE:HB2	2.45	0.52
1:A:166:LEU:HD11	1:B:155:ILE:HD11	1.90	0.52
1:A:39:ARG:NH1	1:A:57:LEU:HD22	2.24	0.52
1:B:1009:LEU:HD13	1:B:1023:GLN:O	2.10	0.52
1:B:1855:GLN:NE2	1:B:1858:GLU:HA	2.24	0.52
1:A:1616:MET:CE	1:A:1650:ILE:HD13	2.40	0.52
1:B:1338:LEU:HG	1:B:1342:GLY:H	1.75	0.52
1:B:166:LEU:O	1:B:166:LEU:HD23	2.09	0.52
1:B:2103:HIS:HB2	1:B:2106:LEU:HD21	1.90	0.52
1:B:275:SER:C	1:B:276:LEU:HD23	2.30	0.52
1:B:506:MET:HB3	1:B:559:ILE:CD1	2.39	0.52
1:B:564:ILE:HD13	1:B:590:ALA:HB2	1.92	0.52
1:A:1221:LEU:HG	1:A:1221:LEU:O	2.10	0.52
1:A:1677:SER:HB2	1:A:1704:LYS:HE2	1.92	0.52
1:A:1917:ARG:NH1	1:A:1974:VAL:HG12	2.25	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:796:PHE:O	1:A:800:VAL:HG23	2.09	0.52
1:B:1973:MET:HB3	1:B:1995:LYS:HE3	1.91	0.52
1:B:2006:THR:CG2	1:B:2048:ARG:HH22	2.22	0.52
1:B:2019:PHE:CE1	1:B:2060:TRP:NE1	2.77	0.52
1:B:808:VAL:HG12	1:B:809:SER:N	2.25	0.52
1:A:1003:TYR:CE2	1:A:1037:HIS:CE1	2.92	0.52
1:A:1007:PHE:CE2	1:A:1030:SER:HA	2.44	0.52
1:A:112:SER:O	1:A:137:ARG:NH2	2.43	0.52
1:A:1736:THR:HG21	1:A:1740:GLY:H	1.71	0.52
1:A:424:LEU:CD2	1:A:441:GLY:HA3	2.40	0.52
1:A:691:ALA:HB3	1:A:692:PRO:HD3	1.91	0.52
1:A:765:ALA:HB1	1:A:768:GLN:HG2	1.92	0.52
1:B:1568:TYR:CZ	1:B:1643:GLU:HG3	2.45	0.52
1:B:1585:PRO:HB3	1:B:1598:MET:HE1	1.92	0.52
1:A:1001:TYR:HB3	1:A:1003:TYR:CD1	2.44	0.52
1:A:993:TYR:CZ	1:A:1008:GLN:HA	2.45	0.52
1:A:1241:LYS:HG3	1:A:1241:LYS:O	2.10	0.52
1:B:100:LEU:O	1:B:103:THR:OG1	2.20	0.52
1:B:1222:ASP:HA	1:B:1226:LEU:HD11	1.92	0.52
1:B:1255:TYR:O	1:B:1292:LEU:HD13	2.10	0.52
1:B:1416:LEU:HD11	1:B:1425:TRP:HB3	1.92	0.52
1:B:1698:THR:OG1	1:B:1723:SER:HB3	2.09	0.52
1:A:1899:GLN:HG2	1:A:2088:ILE:HG21	1.92	0.52
1:B:1748:LEU:O	1:B:1749:ALA:O	2.28	0.52
1:A:1302:ALA:O	1:A:1304:PRO:HD3	2.10	0.51
1:A:1524:PRO:O	1:A:1877:SER:HB2	2.10	0.51
1:A:326:LYS:HE3	1:A:336:SER:HB2	1.91	0.51
1:B:269:GLN:O	1:B:273:ILE:HG13	2.08	0.51
1:B:665:LEU:HD22	1:B:670:VAL:HG21	1.92	0.51
1:A:1422:SER:HB2	1:A:1424:ARG:HG3	1.92	0.51
1:A:831:SER:OG	1:A:832:PRO:HD3	2.10	0.51
1:A:851:PRO:HB2	1:B:122:ARG:HB3	1.90	0.51
1:B:1466:GLY:O	1:B:1469:ILE:HB	2.10	0.51
1:B:1593:LEU:HD23	1:B:1594:THR:HG22	1.92	0.51
1:B:191:LEU:HD22	1:B:224:ARG:CZ	2.40	0.51
1:B:2102:PRO:HD2	1:B:2103:HIS:CD2	2.42	0.51
1:B:399:ASN:ND2	1:B:399:ASN:H	2.07	0.51
1:B:429:ARG:HB3	1:B:429:ARG:NH1	2.26	0.51
1:B:724:GLY:O	1:B:728:ARG:HB2	2.10	0.51
1:B:914:PHE:O	1:B:915:GLU:HG3	2.09	0.51
1:A:1456:MET:HG2	1:A:2036:PHE:HB2	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1119:PHE:CE1	1:A:1516:HIS:CE1	2.98	0.51
1:A:130:TYR:HA	1:B:203:LEU:HD21	1.92	0.51
1:B:506:MET:HE1	1:B:555:SER:HB3	1.92	0.51
1:A:1674:HIS:CE1	1:A:1698:THR:HG21	2.45	0.51
1:A:1570:SER:HB3	1:A:1853:VAL:HG22	1.92	0.51
1:A:2101:GLN:HG3	1:A:2102:PRO:HD2	1.93	0.51
1:A:416:GLN:C	1:A:418:ALA:H	2.13	0.51
1:A:765:ALA:HB2	1:A:783:PRO:HB3	1.92	0.51
1:B:1227:LYS:HB2	1:B:1261:LEU:CD2	2.39	0.51
1:B:1275:THR:CG2	1:B:1299:TRP:HB2	2.39	0.51
1:B:2070:LEU:HD11	1:B:2076:ASN:ND2	2.26	0.51
1:B:169:GLN:OE1	1:B:250:GLY:HA2	2.10	0.51
1:A:1289:LEU:HD22	1:A:1294:VAL:CB	2.36	0.51
1:A:1461:ARG:NH1	1:A:1502:VAL:HG22	2.26	0.51
1:A:1662:ARG:NH1	1:A:1662:ARG:CG	2.55	0.51
1:A:605:TRP:O	1:A:606:ARG:C	2.49	0.51
1:A:662:LEU:O	1:A:666:LYS:HG2	2.09	0.51
1:B:1302:ALA:HB3	1:B:1304:PRO:HD3	1.92	0.51
1:B:1460:LEU:HD12	1:B:1463:GLU:OE1	2.11	0.51
1:B:1677:SER:HB2	1:B:1704:LYS:HE2	1.93	0.51
1:B:1746:ASN:ND2	1:B:1753:LEU:HD12	2.25	0.51
1:B:333:GLU:CB	1:B:334:PRO:CD	2.84	0.51
1:B:887:PRO:HB2	1:B:890:GLY:H	1.76	0.51
1:A:1528:THR:HG21	1:A:1530:HIS:O	2.11	0.51
1:A:1763:HIS:HA	1:A:1788:ASN:O	2.10	0.51
1:A:82:LEU:HD13	1:A:188:LEU:HD21	1.91	0.51
1:A:976:VAL:CG2	1:A:977:ASP:H	2.17	0.51
1:A:1526:LYS:HD3	1:A:1552:HIS:NE2	2.25	0.51
1:B:1276:ASP:OD2	1:B:1281:ALA:HB3	2.11	0.51
1:B:1501:LEU:HB2	1:B:1504:ASN:OD1	2.10	0.51
1:B:1544:ILE:HD12	1:B:1837:GLU:HA	1.92	0.51
1:B:81:MET:HG3	1:B:228:VAL:HG11	1.92	0.51
1:A:1639:THR:O	1:A:1640:TRP:HD1	1.93	0.51
1:A:2019:PHE:CE1	1:A:2060:TRP:NE1	2.79	0.51
1:B:1001:TYR:CE2	1:B:1040:ILE:HD13	2.46	0.51
1:B:1418:VAL:HG22	1:B:1425:TRP:CD2	2.45	0.51
1:B:1470:ARG:O	1:B:1470:ARG:CG	2.58	0.51
1:B:1585:PRO:HB3	1:B:1598:MET:CE	2.41	0.51
1:B:183:ALA:O	1:B:232:LEU:HD12	2.11	0.51
1:A:122:ARG:HG3	1:A:123:ASP:H	1.76	0.51
1:A:1411:ASP:HB2	1:A:1440:PRO:CD	2.41	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:620:MET:HE3	1:A:682:PHE:O	2.11	0.51
1:A:941:SER:N	1:B:945:GLU:OE2	2.44	0.51
1:B:111:VAL:HG22	1:B:188:LEU:HB2	1.93	0.51
1:B:2006:THR:O	1:B:2010:CYS:HB2	2.11	0.51
1:B:321:LEU:HD12	1:B:321:LEU:H	1.75	0.51
1:B:625:LEU:HD22	1:B:629:GLU:OE1	2.11	0.51
1:B:982:THR:HG23	1:B:983:ALA:N	2.19	0.51
1:B:1473:LEU:HD21	1:B:1503:MET:CG	2.32	0.51
1:B:416:GLN:C	1:B:418:ALA:H	2.15	0.51
1:A:45:TYR:CE2	1:B:124:PRO:HB2	2.45	0.50
1:A:970:PHE:O	1:A:1067:LYS:HE2	2.10	0.50
1:B:1439:ARG:O	1:B:1470:ARG:HB3	2.11	0.50
1:B:1457:VAL:CG2	1:B:1473:LEU:HD22	2.33	0.50
1:B:1554:ALA:HB2	1:B:1882:PRO:HG3	1.93	0.50
1:B:248:ASN:HD22	1:B:249:ALA:H	1.56	0.50
1:A:1223:ALA:HB1	1:A:1224:PRO:HD2	1.93	0.50
1:A:321:LEU:CD2	1:A:381:LEU:HD13	2.41	0.50
1:B:1560:GLN:HA	1:B:1563:LEU:CB	2.41	0.50
1:B:1651:VAL:HG23	1:B:1851:LYS:NZ	2.26	0.50
1:B:416:GLN:NE2	1:B:422:ARG:HH22	2.09	0.50
1:B:642:CYS:O	1:B:649:VAL:HG13	2.11	0.50
1:B:883:ARG:HE	1:B:1107:ARG:HD3	1.76	0.50
1:A:1314:LEU:HG	1:A:1315:LEU:N	2.25	0.50
1:A:1470:ARG:HD3	1:A:1472:VAL:CG2	2.41	0.50
1:A:1723:SER:C	1:A:1725:ASP:H	2.15	0.50
1:A:1800:PHE:C	1:A:1800:PHE:HD2	2.15	0.50
1:A:1861:GLN:O	1:A:1865:PRO:HG3	2.11	0.50
1:A:165:LEU:HD22	1:A:392:SER:HB2	1.93	0.50
1:B:1674:HIS:HE1	1:B:1756:SER:OG	1.94	0.50
1:B:36:ASP:HB3	1:B:38:ARG:CG	2.40	0.50
1:A:1606:ARG:HH21	1:A:1860:GLU:CG	2.23	0.50
1:B:309:VAL:HG22	1:B:374:LEU:HD11	1.94	0.50
1:B:972:THR:HG22	1:B:1081:VAL:HG21	1.92	0.50
1:A:1422:SER:O	1:A:1423:PHE:HB2	2.11	0.50
1:A:1996:TYR:HD1	1:A:2040:ALA:CB	2.24	0.50
1:A:776:GLU:HB3	1:A:778:SER:OG	2.12	0.50
1:B:1333:ASN:C	1:B:1335:ALA:H	2.14	0.50
1:B:925:LEU:HD22	1:B:931:VAL:HG21	1.94	0.50
1:B:995:ASP:O	1:B:998:LEU:HB2	2.10	0.50
1:A:1038:MET:HE2	1:A:1038:MET:HA	1.92	0.50
1:A:495:ILE:CD1	1:A:578:ILE:HB	2.41	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:59:ARG:HD2	1:A:59:ARG:N	2.26	0.50
1:B:225:ALA:O	1:B:332:PRO:HA	2.12	0.50
1:B:9:MET:HE1	1:B:342:ILE:HA	1.93	0.50
1:B:579:GLY:O	1:B:715:THR:HG21	2.11	0.50
1:A:1657:TYR:CZ	1:A:1662:ARG:HD2	2.47	0.50
1:A:169:GLN:HE21	1:A:169:GLN:C	2.15	0.50
1:A:191:LEU:HD22	1:A:224:ARG:NH1	2.27	0.50
1:A:256:SER:HB3	1:B:146:PHE:O	2.12	0.50
1:A:269:GLN:O	1:A:273:ILE:HG13	2.11	0.50
1:A:287:LEU:HA	1:A:387:ASN:O	2.12	0.50
1:A:384:ARG:NH1	1:A:384:ARG:HG3	2.17	0.50
1:B:1024:TRP:HB2	1:B:1068:LEU:HD11	1.94	0.50
1:B:420:LEU:HG	1:B:793:LEU:HD21	1.94	0.50
1:A:1064:HIS:HB2	1:A:1093:GLY:HA3	1.94	0.50
1:A:1241:LYS:HA	1:A:1269:ASP:HB3	1.93	0.50
1:A:1800:PHE:C	1:A:1800:PHE:CD2	2.85	0.50
1:A:290:ILE:HD13	1:A:308:ILE:HD13	1.94	0.50
1:A:241:ARG:NH2	1:A:827:THR:O	2.45	0.50
1:A:946:VAL:O	1:A:954:ILE:HB	2.12	0.50
1:A:96:ASN:ND2	1:A:98:ALA:HB3	2.18	0.50
1:B:136:GLN:NE2	1:B:138:ALA:H	2.10	0.50
1:B:1981:GLU:HG3	1:B:1982:ASN:OD1	2.12	0.50
1:B:2001:ASN:O	1:B:2005:VAL:HG23	2.10	0.50
1:B:965:PRO:O	1:B:967:PRO:HD3	2.12	0.50
1:A:1229:CYS:HB3	1:A:1403:LEU:HD22	1.94	0.50
1:A:621:ALA:O	1:A:650:THR:HG23	2.12	0.50
1:B:9:MET:HE2	1:B:342:ILE:HG12	1.94	0.50
1:A:301:ASP:HB2	1:A:302:PRO:HD3	1.94	0.49
1:A:838:HIS:O	1:A:839:SER:C	2.50	0.49
1:B:366:ILE:HD11	1:B:369:LEU:HD11	1.94	0.49
1:B:638:ILE:HG22	1:B:638:ILE:O	2.11	0.49
1:A:1461:ARG:HG3	1:A:1461:ARG:O	2.12	0.49
1:A:2006:THR:CG2	1:A:2048:ARG:HH22	2.25	0.49
1:A:9:MET:HE1	1:A:342:ILE:HA	1.93	0.49
1:A:668:GLU:O	1:A:669:ASP:HB3	2.11	0.49
1:A:734:TYR:CD2	1:A:734:TYR:C	2.86	0.49
1:B:1459:CYS:CB	1:B:2032:ALA:HA	2.43	0.49
1:B:1858:GLU:HG3	1:B:1859:GLU:N	2.26	0.49
1:A:1533:VAL:HG23	1:A:1545:ARG:O	2.12	0.49
1:B:1429:LEU:CD1	1:B:1443:LEU:HD11	2.42	0.49
1:B:295:THR:HG22	1:B:331:HIS:HD2	1.77	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:348:LEU:HD13	1:B:406:PRO:HB3	1.94	0.49
1:B:706:LYS:N	1:B:706:LYS:HD2	2.27	0.49
1:B:866:VAL:HG13	1:B:876:VAL:HG22	1.95	0.49
1:A:1130:LEU:HD22	1:A:1133:ASN:ND2	2.28	0.49
1:A:2017:VAL:HG21	1:A:2099:LEU:HD21	1.93	0.49
1:A:554:VAL:O	1:A:558:SER:HB2	2.13	0.49
1:A:853:GLY:O	1:A:854:SER:HB2	2.12	0.49
1:B:1312:ALA:HB1	1:B:1337:THR:O	2.12	0.49
1:B:1423:PHE:O	1:B:1985:PRO:HB3	2.12	0.49
1:B:554:VAL:O	1:B:558:SER:HB2	2.12	0.49
1:B:82:LEU:HG	1:B:144:LEU:CD1	2.42	0.49
1:A:1483:ALA:N	1:A:1484:PRO:HD3	2.27	0.49
1:A:1780:LEU:HD12	1:A:1781:GLY:H	1.78	0.49
1:A:1874:THR:HG22	1:A:1874:THR:O	2.11	0.49
1:B:1328:ALA:HB2	1:B:1381:LEU:HD11	1.94	0.49
1:B:1887:TYR:CD2	1:B:1967:GLY:HA3	2.44	0.49
1:B:527:LEU:HD12	1:B:534:VAL:CG2	2.43	0.49
1:A:595:THR:HG21	1:A:597:GLU:HG2	1.94	0.49
1:B:60:PHE:CD2	1:B:80:ARG:HD3	2.48	0.49
1:A:1345:LEU:O	1:A:1346:LEU:HD23	2.13	0.49
1:A:1390:VAL:HG13	1:A:1501:LEU:CD2	2.42	0.49
1:A:1766:PHE:HD2	1:A:1791:PHE:CE1	2.30	0.49
1:A:309:VAL:HG22	1:A:374:LEU:HD11	1.95	0.49
1:A:416:GLN:NE2	1:A:422:ARG:HH22	2.10	0.49
1:B:1032:LEU:O	1:B:1035:MET:HB2	2.13	0.49
1:B:1106:ARG:O	1:B:1108:PRO:HD3	2.13	0.49
1:B:831:SER:OG	1:B:832:PRO:HD3	2.13	0.49
1:A:1415:PHE:CD2	1:A:1444:MET:HE1	2.48	0.49
1:A:475:GLY:C	1:A:477:ALA:H	2.15	0.49
1:B:1460:LEU:HD11	1:B:1980:LEU:HD13	1.95	0.49
1:B:1882:PRO:HG2	1:B:1885:LYS:HD2	1.95	0.49
1:B:1974:VAL:O	1:B:1974:VAL:HG23	2.13	0.49
1:A:1050:LEU:O	1:A:1101:SER:CB	2.60	0.49
1:A:236:LYS:C	1:A:238:LEU:H	2.16	0.49
1:A:635:PRO:HD3	1:A:661:PHE:CE2	2.48	0.49
1:B:1244:VAL:HB	1:B:1272:TYR:CD1	2.43	0.49
1:B:1532:PHE:CD2	1:B:1549:SER:HA	2.45	0.49
1:B:491:PRO:HD2	1:B:756:ALA:HA	1.95	0.49
1:B:838:HIS:O	1:B:839:SER:C	2.51	0.49
1:B:913:VAL:HG22	1:B:1058:ARG:HG2	1.95	0.49
1:A:1245:VAL:HG13	1:A:1273:THR:CB	2.38	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:136:GLN:NE2	1:A:138:ALA:H	2.10	0.49
1:A:527:LEU:HD12	1:A:534:VAL:CG2	2.43	0.49
1:B:1430:LYS:HE3	1:B:1981:GLU:CA	2.42	0.49
1:A:156:THR:OG1	1:B:158:ASP:O	2.31	0.49
1:B:1603:PHE:CD2	1:B:1603:PHE:N	2.80	0.49
1:B:305:LEU:O	1:B:309:VAL:HG23	2.13	0.49
1:B:384:ARG:NH1	1:B:384:ARG:CG	2.74	0.49
1:B:717:ILE:HD13	1:B:727:ALA:HB2	1.95	0.49
1:A:1602:GLU:CD	1:A:1650:ILE:HG12	2.34	0.48
1:A:348:LEU:HD13	1:A:406:PRO:HB3	1.95	0.48
1:A:1085:ASN:C	1:A:1086:LEU:HD23	2.33	0.48
1:A:1405:ARG:HH22	1:A:1470:ARG:NH2	2.11	0.48
1:A:1470:ARG:O	1:A:1470:ARG:CG	2.61	0.48
1:A:1541:LEU:HD23	1:A:1541:LEU:N	2.29	0.48
1:A:1528:THR:HG23	1:A:1552:HIS:ND1	2.28	0.48
1:A:1593:LEU:HD23	1:A:1594:THR:HG22	1.95	0.48
1:A:1666:GLN:HG2	1:A:1667:PRO:HD2	1.94	0.48
1:A:359:TYR:OH	1:A:369:LEU:HD22	2.12	0.48
1:A:82:LEU:HG	1:A:144:LEU:CD1	2.44	0.48
1:B:1086:LEU:N	1:B:1086:LEU:HD23	2.27	0.48
1:B:1551:LEU:HD21	1:B:1627:LEU:HD21	1.95	0.48
1:B:1653:THR:HG22	1:B:1810:VAL:CG1	2.40	0.48
1:B:78:GLN:HB3	1:B:188:LEU:HD13	1.95	0.48
1:B:1996:TYR:HD1	1:B:2040:ALA:CB	2.25	0.48
1:B:287:LEU:HA	1:B:387:ASN:O	2.13	0.48
1:A:130:TYR:CA	1:B:203:LEU:HD21	2.43	0.48
1:A:1523:ARG:HH12	1:A:1536:LEU:HD12	1.78	0.48
1:A:1452:GLY:HA2	1:A:2039:SER:HB3	1.96	0.48
1:A:377:VAL:HG13	1:A:381:LEU:CD1	2.44	0.48
1:A:782:ILE:CD1	1:A:803:LEU:HD23	2.43	0.48
1:B:111:VAL:HG23	1:B:188:LEU:HB2	1.94	0.48
1:B:1428:SER:O	1:B:1432:ILE:HG13	2.13	0.48
1:B:1672:LEU:HB3	1:B:1744:VAL:HG22	1.95	0.48
1:B:1899:GLN:HG2	1:B:2088:ILE:HG21	1.94	0.48
1:B:290:ILE:HD13	1:B:308:ILE:HD13	1.96	0.48
1:A:1670:SER:O	1:A:1742:ASP:HB2	2.13	0.48
1:A:2056:LEU:HA	1:A:2104:PRO:O	2.13	0.48
1:B:1083:ASP:O	1:B:1086:LEU:N	2.46	0.48
1:B:191:LEU:HD22	1:B:224:ARG:NH1	2.29	0.48
1:B:236:LYS:HG3	1:B:237:SER:N	2.27	0.48
1:B:39:ARG:NH1	1:B:57:LEU:HD22	2.28	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:581:SER:OG	1:B:582:LEU:N	2.42	0.48
1:A:1024:TRP:HB2	1:A:1068:LEU:HD11	1.96	0.48
1:A:1418:VAL:HG22	1:A:1425:TRP:CD2	2.49	0.48
1:A:1666:GLN:O	1:A:1669:GLU:HB2	2.13	0.48
1:A:469:GLY:HA2	1:A:805:LEU:HD21	1.94	0.48
1:A:902:ALA:HB1	1:A:939:GLU:OE2	2.14	0.48
1:A:913:VAL:HG22	1:A:1058:ARG:HG2	1.95	0.48
1:A:914:PHE:O	1:A:915:GLU:HG3	2.14	0.48
1:B:1001:TYR:HB3	1:B:1003:TYR:CD1	2.48	0.48
1:A:856:CYS:HB3	1:B:856:CYS:SG	2.54	0.48
1:A:1507:ARG:HH22	1:A:2046:GLU:CD	2.16	0.48
1:A:2070:LEU:HD11	1:A:2076:ASN:ND2	2.28	0.48
1:A:215:PHE:O	1:A:363:ASN:HB2	2.14	0.48
1:A:541:THR:HA	1:A:545:VAL:HG11	1.95	0.48
1:A:856:CYS:C	1:A:858:SER:H	2.17	0.48
1:B:133:ILE:HD12	1:B:143:ARG:HH21	1.79	0.48
1:B:782:ILE:CD1	1:B:803:LEU:HD23	2.43	0.48
1:A:1519:LEU:HD12	1:A:1520:GLU:H	1.78	0.48
1:A:183:ALA:O	1:A:232:LEU:HD12	2.14	0.48
1:A:261:VAL:HG22	1:B:146:PHE:CE1	2.48	0.48
1:A:612:GLU:C	1:A:614:ASN:N	2.67	0.48
1:B:2098:PHE:CD2	1:B:2106:LEU:HD12	2.48	0.48
1:B:504:GLN:N	1:B:546:LEU:HD11	2.28	0.48
1:B:988:SER:O	1:B:991:ASP:N	2.47	0.48
1:A:1432:ILE:HG22	1:A:1432:ILE:O	2.14	0.48
1:A:225:ALA:O	1:A:332:PRO:HA	2.13	0.48
1:A:475:GLY:O	1:A:477:ALA:N	2.45	0.48
1:A:861:VAL:HG22	1:A:934:GLU:CB	2.39	0.48
1:B:1302:ALA:HB3	1:B:1304:PRO:CD	2.44	0.48
1:B:1442:TRP:CZ3	1:B:1472:VAL:HG11	2.48	0.48
1:B:1898:LEU:HA	1:B:1898:LEU:HD23	1.70	0.48
1:A:1457:VAL:HG11	1:A:1473:LEU:HD22	1.96	0.48
1:A:564:ILE:HD13	1:A:590:ALA:HB2	1.95	0.48
1:A:612:GLU:C	1:A:614:ASN:H	2.16	0.48
1:B:1882:PRO:HD2	1:B:1887:TYR:OH	2.13	0.48
1:B:321:LEU:HD12	1:B:321:LEU:N	2.28	0.48
1:B:638:ILE:HD11	1:B:657:ALA:C	2.34	0.48
1:B:902:ALA:HB1	1:B:939:GLU:OE2	2.13	0.48
1:A:1016:GLU:HA	1:A:1043:PRO:HG3	1.96	0.48
1:A:1106:ARG:O	1:A:1108:PRO:HD3	2.13	0.48
1:A:1315:LEU:HB3	1:A:1344:LEU:HD13	1.96	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1536:LEU:HB2	1:A:1543:SER:HB3	1.95	0.48
1:A:1567:TYR:HA	1:A:1857:ARG:HB2	1.96	0.48
1:A:423:LEU:HB2	1:A:797:LEU:HD22	1.96	0.48
1:A:431:LEU:HD23	1:A:431:LEU:C	2.34	0.48
1:A:506:MET:HB3	1:A:559:ILE:CD1	2.44	0.48
1:A:642:CYS:CB	1:A:650:THR:HB	2.29	0.48
1:B:1038:MET:HE2	1:B:1038:MET:HA	1.96	0.48
1:B:1248:LEU:HD21	1:B:1277:ARG:HH21	1.79	0.48
1:B:1124:HIS:CD2	1:B:1512:GLY:HA2	2.48	0.48
1:B:1554:ALA:HB3	1:B:1882:PRO:HB3	1.96	0.48
1:B:1912:LEU:HB2	1:B:1939:VAL:HG22	1.96	0.48
1:B:81:MET:O	1:B:85:VAL:HG22	2.14	0.48
1:B:1995:LYS:HB3	1:B:2041:MET:SD	2.54	0.47
1:B:639:VAL:HG12	1:B:640:PRO:O	2.14	0.47
1:A:1476:ASN:O	1:A:1477:LEU:HD23	2.14	0.47
1:A:1647:SER:O	1:A:1651:VAL:CG2	2.61	0.47
1:A:1729:GLU:OE1	1:A:1758:ARG:HD2	2.14	0.47
1:A:1886:SER:HA	1:A:1911:LYS:HB2	1.95	0.47
1:B:1236:ASN:HA	1:B:1502:VAL:HG21	1.95	0.47
1:B:1554:ALA:C	1:B:1556:PRO:HD3	2.34	0.47
1:B:621:ALA:O	1:B:623:VAL:HG23	2.14	0.47
1:B:259:GLN:CD	1:B:259:GLN:H	2.18	0.47
1:A:1123:PRO:HB3	1:A:1510:ALA:HB1	1.95	0.47
1:A:499:MET:HE2	1:A:582:LEU:HD22	1.95	0.47
1:B:1656:TYR:CZ	1:B:1687:ILE:HD13	2.49	0.47
1:B:1800:PHE:CD2	1:B:1800:PHE:C	2.88	0.47
1:A:1556:PRO:O	1:A:1558:SER:N	2.47	0.47
1:A:1912:LEU:HB2	1:A:1939:VAL:HG22	1.95	0.47
1:A:2098:PHE:CD2	1:A:2106:LEU:HB2	2.48	0.47
1:B:1723:SER:C	1:B:1725:ASP:H	2.18	0.47
1:B:1800:PHE:HD2	1:B:1800:PHE:C	2.17	0.47
1:B:51:MET:HB2	1:B:53:LYS:HE3	1.95	0.47
1:B:557:THR:HG21	1:B:603:SER:OG	2.14	0.47
1:A:856:CYS:CB	1:B:856:CYS:HG	2.27	0.47
1:A:1544:ILE:O	1:A:1545:ARG:HG3	2.15	0.47
1:A:262:THR:O	1:A:262:THR:CG2	2.63	0.47
1:B:1486:MET:SD	1:B:1506:TYR:CD1	3.08	0.47
1:B:1983:GLN:HG2	1:B:1988:PHE:HE1	1.78	0.47
1:B:2022:VAL:CG1	1:B:2022:VAL:O	2.62	0.47
1:B:326:LYS:CE	1:B:336:SER:HB2	2.44	0.47
1:B:321:LEU:HD23	1:B:381:LEU:HD12	1.95	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:525:GLN:NE2	1:B:525:GLN:HA	2.30	0.47
1:B:972:THR:HG22	1:B:1081:VAL:HG23	1.97	0.47
1:B:982:THR:C	1:B:984:GLU:N	2.68	0.47
1:A:2001:ASN:O	1:A:2005:VAL:HG23	2.14	0.47
1:A:432:GLU:HG3	1:A:433:ALA:N	2.29	0.47
1:B:1003:TYR:CE2	1:B:1037:HIS:CE1	2.92	0.47
1:B:1050:LEU:O	1:B:1101:SER:CB	2.63	0.47
1:A:1774:LEU:O	1:B:1783:ALA:HB2	2.14	0.47
1:B:1981:GLU:C	1:B:1983:GLN:H	2.18	0.47
1:B:359:TYR:CD2	1:B:376:VAL:HG11	2.50	0.47
1:B:685:TYR:CD1	1:B:686:PHE:N	2.83	0.47
1:A:107:VAL:HG13	1:A:184:VAL:HB	1.96	0.47
1:A:111:VAL:HG23	1:A:188:LEU:HB2	1.97	0.47
1:A:503:TRP:CG	1:A:787:LYS:HB2	2.50	0.47
1:B:1418:VAL:HG22	1:B:1425:TRP:CG	2.50	0.47
1:B:2006:THR:HG21	1:B:2048:ARG:NH2	2.29	0.47
1:B:2017:VAL:HG21	1:B:2099:LEU:HD21	1.97	0.47
1:B:48:PRO:HD3	1:B:201:MET:HE3	1.97	0.47
1:A:1592:TRP:HB2	1:A:1595:ARG:HD3	1.97	0.47
1:A:618:GLY:N	1:A:679:GLY:O	2.47	0.47
1:A:838:HIS:O	1:A:840:GLN:N	2.48	0.47
1:B:128:VAL:CG1	1:B:130:TYR:CZ	2.98	0.47
1:B:59:ARG:N	1:B:59:ARG:HD2	2.29	0.47
1:B:670:VAL:HG12	1:B:671:PHE:H	1.79	0.47
1:B:796:PHE:O	1:B:800:VAL:HG23	2.14	0.47
1:A:1107:ARG:HG3	1:A:1107:ARG:O	2.15	0.47
1:A:1416:LEU:HD23	1:A:1429:LEU:HG	1.96	0.47
1:A:1636:VAL:HA	1:A:1637:PRO:HD3	1.73	0.47
1:A:1669:GLU:HG2	1:A:1742:ASP:CB	2.45	0.47
1:A:1794:ILE:C	1:A:1795:LEU:HD23	2.35	0.47
1:A:1711:ARG:HH22	1:A:1826:LEU:CD2	2.28	0.47
1:B:1236:ASN:CG	1:B:1502:VAL:HG23	2.36	0.47
1:B:1239:SER:C	1:B:1241:LYS:H	2.18	0.47
1:B:1411:ASP:HB2	1:B:1440:PRO:HG3	1.95	0.47
1:A:261:VAL:HG22	1:B:146:PHE:CZ	2.50	0.47
1:B:1656:TYR:CD2	1:B:1813:LEU:HB3	2.49	0.47
1:B:1685:ILE:HG22	1:B:1686:ALA:N	2.30	0.47
1:B:1725:ASP:OD2	1:B:1727:SER:HB3	2.15	0.47
1:B:1733:LEU:HA	1:B:1733:LEU:HD23	1.70	0.47
1:B:1894:GLY:O	1:B:1895:GLY:C	2.54	0.47
1:B:610:ILE:HA	1:B:690:ILE:HD13	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1130:LEU:HD11	1:A:1221:LEU:CD1	2.44	0.47
1:A:1248:LEU:HD21	1:A:1277:ARG:NH2	2.30	0.47
1:A:1553:TYR:O	1:A:1554:ALA:HB2	2.15	0.47
1:A:1748:LEU:HD23	1:A:1748:LEU:HA	1.69	0.47
1:A:866:VAL:HG13	1:A:876:VAL:HG22	1.97	0.47
1:A:976:VAL:HG22	1:A:977:ASP:N	2.18	0.47
1:B:1129:CYS:O	1:B:1130:LEU:HB2	2.14	0.47
1:B:1239:SER:OG	1:B:1241:LYS:HG2	2.15	0.47
1:B:1303:ASN:HA	1:B:1333:ASN:HB2	1.96	0.47
1:B:1443:LEU:O	1:B:1473:LEU:HA	2.15	0.47
1:B:1729:GLU:OE1	1:B:1758:ARG:HD2	2.15	0.47
1:B:983:ALA:O	1:B:985:PHE:N	2.43	0.47
1:A:1460:LEU:HD12	1:A:1463:GLU:OE1	2.15	0.46
1:A:2098:PHE:CD2	1:A:2106:LEU:HD12	2.50	0.46
1:A:65:PHE:CE2	1:A:83:LEU:HB3	2.49	0.46
1:B:1275:THR:HG21	1:B:1299:TRP:HB2	1.96	0.46
1:B:1390:VAL:HG13	1:B:1501:LEU:CD2	2.45	0.46
1:B:1415:PHE:HD2	1:B:1444:MET:HE1	1.79	0.46
1:B:776:GLU:HB3	1:B:778:SER:OG	2.15	0.46
1:A:111:VAL:HG21	1:A:188:LEU:HD12	1.98	0.46
1:A:92:ASP:HA	1:A:830:ILE:HB	1.97	0.46
1:A:118:GLU:CD	1:B:118:GLU:HG3	2.34	0.46
1:B:112:SER:O	1:B:137:ARG:NH2	2.48	0.46
1:B:1411:ASP:HB2	1:B:1440:PRO:CG	2.44	0.46
1:B:1794:ILE:C	1:B:1795:LEU:HD23	2.36	0.46
1:B:2031:GLN:HB3	1:B:2034:TYR:HB3	1.98	0.46
1:B:668:GLU:O	1:B:669:ASP:CB	2.62	0.46
1:A:1234:LEU:HD12	1:A:1234:LEU:O	2.16	0.46
1:A:1480:THR:HB	1:A:1482:PRO:HD2	1.97	0.46
1:A:1573:PHE:O	1:A:1576:VAL:HB	2.15	0.46
1:A:1999:THR:HG22	1:A:2044:ILE:HD12	1.98	0.46
1:A:269:GLN:OE1	1:A:393:PHE:CE2	2.68	0.46
1:A:249:ALA:HB2	1:A:402:VAL:HB	1.97	0.46
1:A:483:GLN:HG2	1:A:484:GLN:N	2.30	0.46
1:A:831:SER:N	1:A:832:PRO:CD	2.79	0.46
1:B:1616:MET:CE	1:B:1650:ILE:HD13	2.46	0.46
1:B:39:ARG:NH1	1:B:226:GLU:OE2	2.47	0.46
1:B:384:ARG:NH1	1:B:384:ARG:HG3	2.16	0.46
1:B:577:ILE:HG22	1:B:712:TRP:CD1	2.50	0.46
1:A:1226:LEU:CD2	1:A:1401:LEU:HD21	2.43	0.46
1:A:60:PHE:CD2	1:A:80:ARG:HD3	2.50	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1119:PHE:HB3	1:B:2105:VAL:HB	1.98	0.46
1:B:743:VAL:O	1:B:743:VAL:HG23	2.15	0.46
1:A:1231:ASP:O	1:A:1234:LEU:N	2.47	0.46
1:A:1414:VAL:HG11	1:A:1432:ILE:HD13	1.96	0.46
1:A:1556:PRO:O	1:A:1557:ALA:C	2.53	0.46
1:A:2098:PHE:CE2	1:A:2106:LEU:CB	2.98	0.46
1:A:749:LEU:HD11	1:A:771:LEU:HD23	1.96	0.46
1:A:925:LEU:HD22	1:A:931:VAL:HG21	1.97	0.46
1:B:1016:GLU:HA	1:B:1043:PRO:HG3	1.96	0.46
1:B:1220:LEU:HB3	1:B:1257:ARG:NH2	2.30	0.46
1:B:1786:LEU:C	1:B:1788:ASN:H	2.18	0.46
1:B:2098:PHE:CE2	1:B:2106:LEU:CB	2.98	0.46
1:B:359:TYR:CG	1:B:376:VAL:HG11	2.50	0.46
1:B:65:PHE:HA	1:B:147:PHE:CE1	2.50	0.46
1:A:1262:LEU:HB3	1:A:1268:MET:SD	2.56	0.46
1:A:1602:GLU:OE2	1:A:1650:ILE:N	2.49	0.46
1:A:416:GLN:C	1:A:418:ALA:N	2.69	0.46
1:B:107:VAL:HG13	1:B:184:VAL:HB	1.96	0.46
1:B:1443:LEU:HA	1:B:1443:LEU:HD23	1.78	0.46
1:B:1586:ASP:HA	1:B:1595:ARG:HH12	1.81	0.46
1:B:765:ALA:HB1	1:B:768:GLN:CG	2.46	0.46
1:A:1220:LEU:HB3	1:A:1257:ARG:NH2	2.31	0.46
1:A:1418:VAL:HG22	1:A:1425:TRP:CG	2.51	0.46
1:A:717:ILE:HD13	1:A:727:ALA:HB2	1.97	0.46
1:B:1254:LEU:HD13	1:B:1316:VAL:HG12	1.98	0.46
1:A:200:PHE:HE2	1:B:132:MET:HE1	1.80	0.46
1:B:1338:LEU:CD2	1:B:1406:GLN:HG3	2.46	0.46
1:B:1531:ALA:HA	1:B:1549:SER:H	1.81	0.46
1:B:1617:VAL:HG21	1:B:1626:VAL:CG1	2.46	0.46
1:B:1995:LYS:O	1:B:2041:MET:HE3	2.15	0.46
1:B:377:VAL:HG13	1:B:381:LEU:CD1	2.46	0.46
1:A:1415:PHE:HD2	1:A:1444:MET:HE1	1.81	0.46
1:A:1532:PHE:HE1	1:A:1597:CYS:HB3	1.81	0.46
1:A:1676:GLY:HA2	1:A:1681:GLY:HA3	1.98	0.46
1:A:1689:LEU:O	1:A:1692:GLY:HA2	2.16	0.46
1:A:1725:ASP:OD2	1:A:1727:SER:HB3	2.15	0.46
1:B:1239:SER:HA	1:B:1240:PRO:HD3	1.85	0.46
1:B:1651:VAL:HG13	1:B:1680:VAL:CA	2.31	0.46
1:B:166:LEU:HD23	1:B:166:LEU:C	2.36	0.46
1:B:657:ALA:O	1:B:661:PHE:HB2	2.16	0.46
1:A:856:CYS:HB3	1:B:856:CYS:HG	1.80	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1222:ASP:HA	1:A:1226:LEU:HD11	1.96	0.46
1:A:1347:HIS:HD2	1:A:1348:THR:O	1.99	0.46
1:A:1472:VAL:CG1	1:A:1473:LEU:H	2.25	0.46
1:A:1528:THR:CG2	1:A:1530:HIS:H	2.22	0.46
1:A:627:TRP:CZ3	1:A:640:PRO:HB2	2.50	0.46
1:A:706:LYS:HD2	1:A:706:LYS:N	2.31	0.46
1:B:1469:ILE:CG2	1:B:1469:ILE:O	2.64	0.46
1:A:1345:LEU:HD12	1:A:1402:PHE:O	2.16	0.46
1:A:1481:SER:N	1:A:1482:PRO:CD	2.79	0.46
1:A:203:LEU:HD21	1:B:130:TYR:HA	1.98	0.46
1:A:9:MET:HE2	1:A:342:ILE:HG12	1.97	0.46
1:B:81:MET:HG2	1:B:81:MET:H	1.62	0.46
1:A:1257:ARG:O	1:A:1260:ALA:HB3	2.17	0.45
1:A:2070:LEU:HD11	1:A:2076:ASN:CG	2.36	0.45
1:A:2084:LEU:HD12	1:A:2111:LEU:O	2.15	0.45
1:A:33:VAL:HB	1:A:50:ARG:NH1	2.32	0.45
1:A:491:PRO:HD2	1:A:756:ALA:HA	1.97	0.45
1:A:965:PRO:O	1:A:967:PRO:HD3	2.16	0.45
1:B:1338:LEU:HD22	1:B:1406:GLN:NE2	2.31	0.45
1:B:1432:ILE:O	1:B:1432:ILE:HG22	2.16	0.45
1:B:1931:GLU:O	1:B:1933:ARG:N	2.50	0.45
1:B:420:LEU:CD1	1:B:512:ARG:HD2	2.46	0.45
1:B:431:LEU:C	1:B:431:LEU:HD23	2.36	0.45
1:B:976:VAL:O	1:B:977:ASP:C	2.54	0.45
1:B:988:SER:O	1:B:989:GLN:C	2.54	0.45
1:A:1419:GLU:OE2	1:A:1447:GLY:HA3	2.15	0.45
1:A:1390:VAL:HG13	1:A:1501:LEU:HD21	1.98	0.45
1:A:65:PHE:HA	1:A:147:PHE:CE1	2.51	0.45
1:A:72:ALA:HB3	1:A:842:TRP:CZ3	2.51	0.45
1:A:856:CYS:O	1:A:858:SER:N	2.46	0.45
1:B:1064:HIS:HB2	1:B:1093:GLY:HA3	1.97	0.45
1:B:1420:ASP:O	1:B:1425:TRP:CH2	2.70	0.45
1:B:1603:PHE:HD2	1:B:1603:PHE:N	2.15	0.45
1:B:1754:GLN:OE1	1:B:1754:GLN:HA	2.16	0.45
1:B:1886:SER:HA	1:B:1911:LYS:HB2	1.97	0.45
1:B:236:LYS:C	1:B:238:LEU:H	2.20	0.45
1:B:269:GLN:OE1	1:B:393:PHE:CE2	2.69	0.45
1:B:460:VAL:CG2	1:B:465:MET:HG3	2.46	0.45
1:B:501:ALA:HA	1:B:766:LEU:HD11	1.98	0.45
1:A:1428:SER:O	1:A:1432:ILE:HG13	2.15	0.45
1:A:133:ILE:HD12	1:A:143:ARG:HH21	1.80	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1476:ASN:HB3	1:A:1486:MET:SD	2.56	0.45
1:A:1953:ARG:O	1:A:1957:THR:HB	2.16	0.45
1:A:1112:LEU:HD22	1:A:2110:VAL:HG11	1.98	0.45
1:A:23:TRP:NE1	1:A:350:HIS:CD2	2.84	0.45
1:B:1418:VAL:HA	1:B:1425:TRP:CE3	2.51	0.45
1:B:1527:GLN:OE1	1:B:1872:ALA:HB1	2.15	0.45
1:A:142:ASN:HD22	1:B:396:GLY:HA3	1.81	0.45
1:B:635:PRO:O	1:B:637:GLY:N	2.50	0.45
1:B:979:ALA:HB1	1:B:983:ALA:HB3	1.98	0.45
1:A:1254:LEU:HD21	1:A:1318:ASN:HB2	1.98	0.45
1:A:1466:GLY:O	1:A:1469:ILE:HB	2.17	0.45
1:A:1124:HIS:NE2	1:A:1501:LEU:HD13	2.31	0.45
1:A:1624:THR:HG22	1:A:1857:ARG:HH21	1.82	0.45
1:A:1857:ARG:NH1	1:A:1869:PRO:HB3	2.30	0.45
1:A:557:THR:HG21	1:A:603:SER:OG	2.16	0.45
1:B:1095:LEU:HD12	1:B:1095:LEU:O	2.16	0.45
1:B:1456:MET:HE3	1:B:2032:ALA:O	2.16	0.45
1:B:1977:ASP:OD1	1:B:2031:GLN:HG2	2.15	0.45
1:B:65:PHE:CE2	1:B:83:LEU:HB3	2.51	0.45
1:A:1780:LEU:HD12	1:A:1781:GLY:N	2.32	0.45
1:A:1802:GLU:O	1:A:1802:GLU:HG2	2.17	0.45
1:A:618:GLY:O	1:A:679:GLY:O	2.34	0.45
1:A:963:GLU:C	1:A:965:PRO:HD3	2.37	0.45
1:B:1107:ARG:O	1:B:1107:ARG:HG3	2.17	0.45
1:B:159:THR:HB	1:B:162:SER:HG	1.81	0.45
1:B:1748:LEU:HD23	1:B:1748:LEU:HA	1.66	0.45
1:B:1953:ARG:HA	1:B:2005:VAL:HG11	1.98	0.45
1:B:1953:ARG:O	1:B:1957:THR:HB	2.16	0.45
1:B:1456:MET:CE	1:B:2032:ALA:HB1	2.46	0.45
1:B:623:VAL:HG13	1:B:672:VAL:HG22	1.97	0.45
1:A:1545:ARG:CG	1:A:1545:ARG:NH1	2.76	0.45
1:A:1629:LEU:O	1:A:1630:GLN:C	2.55	0.45
1:A:1694:ARG:NH2	1:A:1735:HIS:HB3	2.31	0.45
1:A:2022:VAL:CG1	1:A:2022:VAL:O	2.64	0.45
1:A:493:TRP:CD2	1:A:752:VAL:HG22	2.52	0.45
1:B:1248:LEU:CD2	1:B:1277:ARG:HE	2.30	0.45
1:B:1629:LEU:HB3	1:B:1631:HIS:CE1	2.51	0.45
1:B:1904:LEU:HA	1:B:1904:LEU:HD23	1.62	0.45
1:B:1931:GLU:O	1:B:1934:ARG:N	2.50	0.45
1:A:1231:ASP:O	1:A:1232:THR:C	2.55	0.45
1:A:1235:GLU:OE2	1:A:1515:ARG:NH1	2.50	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1786:LEU:HD23	1:A:1786:LEU:HA	1.73	0.45
1:A:1882:PRO:HD2	1:A:1887:TYR:OH	2.17	0.45
1:B:1541:LEU:HD13	1:B:1840:PHE:HB3	1.97	0.45
1:B:169:GLN:C	1:B:169:GLN:HE21	2.19	0.45
1:B:2098:PHE:CD2	1:B:2106:LEU:HB2	2.51	0.45
1:A:124:PRO:HB2	1:B:45:TYR:CE2	2.52	0.45
1:B:838:HIS:O	1:B:840:GLN:N	2.50	0.45
1:A:1095:LEU:HD12	1:A:1095:LEU:O	2.17	0.45
1:A:1599:LEU:O	1:A:1622:LEU:HD12	2.16	0.45
1:A:191:LEU:HD22	1:A:224:ARG:CZ	2.47	0.45
1:A:548:ASP:OD2	1:A:611:LYS:NZ	2.50	0.45
1:A:724:GLY:O	1:A:728:ARG:HB2	2.16	0.45
1:A:752:VAL:HA	1:A:753:PRO:HD3	1.87	0.45
1:A:995:ASP:O	1:A:998:LEU:HB2	2.16	0.45
1:B:1137:GLN:HG2	1:B:1396:PHE:CZ	2.52	0.45
1:B:1481:SER:N	1:B:1482:PRO:CD	2.80	0.45
1:B:1973:MET:CB	1:B:1995:LYS:HE3	2.46	0.45
1:B:2056:LEU:HA	1:B:2104:PRO:O	2.16	0.45
1:B:258:GLU:HB2	1:B:259:GLN:NE2	2.32	0.45
1:B:475:GLY:C	1:B:477:ALA:H	2.20	0.45
1:B:734:TYR:C	1:B:734:TYR:CD2	2.89	0.45
1:B:98:ALA:HA	1:B:101:ARG:CG	2.46	0.45
1:A:1001:TYR:CE2	1:A:1040:ILE:HD13	2.52	0.45
1:A:1259:PRO:HG2	1:A:1292:LEU:HD22	1.99	0.45
1:A:1248:LEU:HD21	1:A:1277:ARG:NE	2.30	0.45
1:A:1757:VAL:O	1:A:1760:LEU:HB2	2.17	0.45
1:A:1818:ILE:HG12	1:A:1823:VAL:CG1	2.46	0.45
1:B:1890:THR:O	1:B:1971:LEU:HB2	2.17	0.45
1:A:1474:VAL:HA	1:A:1504:ASN:O	2.17	0.45
1:A:1931:GLU:O	1:A:1934:ARG:N	2.50	0.45
1:A:2064:GLY:O	1:A:2066:VAL:N	2.50	0.45
1:A:217:ALA:HB2	1:A:363:ASN:HA	1.99	0.45
1:A:895:THR:HA	1:A:935:VAL:HG11	1.99	0.45
1:B:1343:PHE:HE2	1:B:1390:VAL:HG21	1.82	0.45
1:B:1123:PRO:O	1:B:1393:LYS:NZ	2.50	0.45
1:B:1449:SER:C	1:B:1477:LEU:HD22	2.37	0.45
1:B:1689:LEU:HD23	1:B:1689:LEU:HA	1.70	0.45
1:B:1567:TYR:O	1:B:1856:VAL:HG23	2.16	0.45
1:B:2036:PHE:CD2	1:B:2036:PHE:C	2.91	0.45
1:B:699:ARG:O	1:B:703:LEU:HD23	2.17	0.45
1:A:75:MET:SD	1:A:79:LEU:HD23	2.56	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:103:THR:CG2	1:B:104:SER:N	2.80	0.44
1:B:1541:LEU:O	1:B:1837:GLU:HG3	2.17	0.44
1:B:159:THR:HG22	1:B:398:SER:HB3	1.99	0.44
1:B:1567:TYR:CE1	1:B:1606:ARG:HG3	2.52	0.44
1:B:1678:GLY:O	1:B:1682:GLN:HG3	2.16	0.44
1:B:581:SER:HB2	1:B:683:HIS:NE2	2.32	0.44
1:A:1065:ARG:HD3	1:A:1065:ARG:HA	1.82	0.44
1:A:1262:LEU:O	1:A:1268:MET:HG3	2.17	0.44
1:A:1449:SER:O	1:A:1477:LEU:HD22	2.17	0.44
1:A:1473:LEU:HG	1:A:1503:MET:HA	2.00	0.44
1:A:158:ASP:O	1:B:156:THR:OG1	2.34	0.44
1:A:1781:GLY:O	1:A:1784:VAL:HG23	2.17	0.44
1:A:1971:LEU:HD21	1:A:2019:PHE:CD2	2.53	0.44
1:A:326:LYS:CE	1:A:336:SER:HB2	2.47	0.44
1:A:595:THR:HG22	1:A:597:GLU:HG2	1.98	0.44
1:A:627:TRP:CH2	1:A:640:PRO:HB2	2.52	0.44
1:A:620:MET:HE1	1:A:682:PHE:HB2	1.99	0.44
1:B:111:VAL:O	1:B:111:VAL:HG12	2.17	0.44
1:B:1251:ASP:O	1:B:1253:GLN:HG3	2.17	0.44
1:B:1442:TRP:CH2	1:B:1497:LEU:HD23	2.52	0.44
1:B:108:TRP:CD1	1:B:171:ALA:HB2	2.52	0.44
1:B:581:SER:HB2	1:B:683:HIS:CE1	2.52	0.44
1:B:647:ASP:OD1	1:B:647:ASP:N	2.50	0.44
1:A:118:GLU:HG3	1:B:118:GLU:CD	2.37	0.44
1:A:1617:VAL:HG12	1:A:1619:ALA:H	1.82	0.44
1:A:2043:ARG:HD3	1:A:2043:ARG:HA	1.69	0.44
1:A:2015:TYR:HD2	1:A:2099:LEU:HD22	1.78	0.44
1:A:643:HIS:HA	1:A:649:VAL:HG22	1.99	0.44
1:B:1245:VAL:O	1:B:1315:LEU:HD12	2.16	0.44
1:B:1818:ILE:HG12	1:B:1823:VAL:CG1	2.48	0.44
1:B:1893:LEU:HB3	1:B:1925:GLN:CD	2.38	0.44
1:B:2111:LEU:HA	1:B:2111:LEU:HD23	1.83	0.44
1:B:321:LEU:H	1:B:321:LEU:CD1	2.31	0.44
1:A:1250:GLY:N	1:A:1276:ASP:OD2	2.50	0.44
1:A:1476:ASN:HA	1:A:1486:MET:CE	2.47	0.44
1:A:166:LEU:C	1:A:166:LEU:HD23	2.38	0.44
1:A:409:ARG:HA	1:A:410:PRO:HD3	1.73	0.44
1:A:850:PHE:HB3	1:A:851:PRO:HD2	2.00	0.44
1:B:1567:TYR:C	1:B:1856:VAL:HG23	2.37	0.44
1:B:831:SER:N	1:B:832:PRO:CD	2.80	0.44
1:A:1112:LEU:O	1:A:1114:PRO:HD3	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1456:MET:CG	1:A:2036:PHE:HB2	2.46	0.44
1:A:305:LEU:O	1:A:309:VAL:HG23	2.17	0.44
1:B:13:LEU:HD13	1:B:22:PHE:CD1	2.53	0.44
1:B:189:ASN:HB2	1:B:334:PRO:HD2	1.98	0.44
1:B:605:TRP:O	1:B:606:ARG:C	2.56	0.44
1:B:62:ALA:HB1	1:B:67:VAL:HG23	2.00	0.44
1:B:907:LEU:HA	1:B:907:LEU:HD12	1.87	0.44
1:A:1487:HIS:O	1:A:1487:HIS:CD2	2.71	0.44
1:A:1487:HIS:HA	1:A:1488:PRO:HD3	1.80	0.44
1:A:1515:ARG:HD3	1:A:1515:ARG:HA	1.55	0.44
1:A:1571:LEU:O	1:A:1851:LYS:HD2	2.17	0.44
1:A:1995:LYS:O	1:A:2041:MET:HE3	2.17	0.44
1:A:6:ILE:HG21	1:A:345:LEU:HD11	2.00	0.44
1:A:815:LEU:HB2	1:A:816:PHE:CD1	2.53	0.44
1:A:81:MET:O	1:A:85:VAL:HG22	2.18	0.44
1:B:1445:ALA:O	1:B:1476:ASN:ND2	2.51	0.44
1:B:1768:GLU:CA	1:B:1768:GLU:OE1	2.64	0.44
1:B:1986:GLU:HA	1:B:1989:GLN:HG2	2.00	0.44
1:B:2070:LEU:HD11	1:B:2076:ASN:CG	2.37	0.44
1:B:2103:HIS:HA	1:B:2104:PRO:HD3	1.78	0.44
1:B:582:LEU:O	1:B:585:VAL:HG23	2.18	0.44
1:B:9:MET:CE	1:B:342:ILE:HA	2.48	0.44
1:A:1052:THR:HG22	1:A:1053:ARG:HG3	1.98	0.44
1:A:1249:ALA:N	1:A:1276:ASP:OD1	2.40	0.44
1:A:1290:GLU:HG2	1:A:1291:GLN:N	2.33	0.44
1:A:1973:MET:CB	1:A:1995:LYS:HE3	2.47	0.44
1:A:2036:PHE:C	1:A:2036:PHE:CD2	2.90	0.44
1:A:2066:VAL:HG22	1:A:2088:ILE:HD12	2.00	0.44
1:A:213:ARG:HG3	1:A:213:ARG:HH11	1.81	0.44
1:A:309:VAL:HG13	1:A:313:CYS:SG	2.58	0.44
1:A:309:VAL:C	1:A:311:ALA:H	2.21	0.44
1:B:1221:LEU:O	1:B:1221:LEU:HG	2.18	0.44
1:B:1766:PHE:HD2	1:B:1791:PHE:CE1	2.36	0.44
1:B:1993:LYS:N	1:B:1994:PRO:CD	2.81	0.44
1:B:353:TRP:CZ2	1:B:383:ILE:HD12	2.53	0.44
1:B:963:GLU:C	1:B:965:PRO:HD3	2.38	0.44
1:A:1657:TYR:CE1	1:A:1799:LEU:HD11	2.53	0.44
1:A:190:VAL:HG12	1:A:192:LEU:HG	2.00	0.44
1:A:359:TYR:CG	1:A:376:VAL:HG11	2.53	0.44
1:A:587:CYS:O	1:A:591:ASP:N	2.50	0.44
1:B:1416:LEU:CD2	1:B:1429:LEU:HG	2.47	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1475:SER:HB3	1:B:1505:VAL:CG1	2.47	0.44
1:B:19:LEU:HA	1:B:19:LEU:HD23	1.70	0.44
1:B:895:THR:HA	1:B:935:VAL:HG11	2.00	0.44
1:A:120:LEU:C	1:A:127:LEU:HD13	2.38	0.44
1:A:1231:ASP:HB3	1:A:1515:ARG:HD2	2.00	0.44
1:A:169:GLN:OE1	1:A:250:GLY:HA2	2.17	0.44
1:A:1754:GLN:HA	1:A:1754:GLN:OE1	2.17	0.44
1:A:1762:GLN:O	1:A:1763:HIS:HB2	2.18	0.44
1:A:1818:ILE:HG12	1:A:1823:VAL:HG11	1.99	0.44
1:A:1882:PRO:HA	1:A:1883:PRO:HD3	1.85	0.44
1:A:189:ASN:O	1:A:226:GLU:HB2	2.17	0.44
1:A:1955:LEU:O	1:A:1958:GLU:HB2	2.17	0.44
1:A:259:GLN:H	1:A:259:GLN:CD	2.20	0.44
1:A:27:ILE:C	1:A:29:GLY:H	2.20	0.44
1:A:331:HIS:HE1	1:A:333:GLU:HA	1.83	0.44
1:A:499:MET:HG3	1:A:502:GLN:NE2	2.32	0.44
1:A:642:CYS:HA	1:A:743:VAL:CG2	2.48	0.44
1:A:889:THR:CG2	1:A:1032:LEU:CB	2.96	0.44
1:B:1971:LEU:HD21	1:B:2019:PHE:CD2	2.52	0.44
1:B:587:CYS:O	1:B:591:ASP:N	2.51	0.44
1:A:1216:LEU:HD13	1:A:1217:LEU:H	1.83	0.43
1:A:123:ASP:CB	1:A:126:THR:HB	2.42	0.43
1:A:1953:ARG:HA	1:A:2005:VAL:HG11	1.99	0.43
1:A:159:THR:HG22	1:A:398:SER:HB3	2.00	0.43
1:A:984:GLU:O	1:A:985:PHE:CB	2.64	0.43
1:B:1338:LEU:HD13	1:B:1406:GLN:CG	2.48	0.43
1:B:143:ARG:HG2	1:B:143:ARG:NH1	2.33	0.43
1:B:1466:GLY:HA2	1:B:1469:ILE:CD1	2.48	0.43
1:B:190:VAL:HG12	1:B:192:LEU:HG	1.99	0.43
1:B:1118:LYS:HD2	1:B:2103:HIS:ND1	2.33	0.43
1:B:23:TRP:NE1	1:B:350:HIS:CD2	2.86	0.43
1:B:91:VAL:HG21	1:B:834:ILE:HD13	1.99	0.43
1:B:914:PHE:HB2	1:B:1057:ILE:HB	2.00	0.43
1:B:925:LEU:CD2	1:B:931:VAL:HG21	2.48	0.43
1:A:143:ARG:NH1	1:A:143:ARG:HG2	2.31	0.43
1:A:1609:SER:C	1:A:1611:ARG:H	2.21	0.43
1:A:1887:TYR:CD2	1:A:1967:GLY:HA3	2.46	0.43
1:A:470:TYR:C	1:A:470:TYR:CD1	2.90	0.43
1:A:525:GLN:HA	1:A:525:GLN:NE2	2.32	0.43
1:A:579:GLY:O	1:A:715:THR:HG21	2.19	0.43
1:B:1553:TYR:O	1:B:1554:ALA:HB2	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:302:PRO:HG3	1:B:363:ASN:ND2	2.33	0.43
1:B:416:GLN:C	1:B:418:ALA:N	2.70	0.43
1:A:1483:ALA:HB1	1:A:1508:ASP:HA	2.01	0.43
1:A:1786:LEU:C	1:A:1788:ASN:H	2.21	0.43
1:A:1857:ARG:NH1	1:A:1869:PRO:HB2	2.33	0.43
1:A:1995:LYS:HB3	1:A:2041:MET:SD	2.58	0.43
1:B:1769:ILE:HG22	1:B:1770:GLY:N	2.32	0.43
1:B:2043:ARG:HA	1:B:2043:ARG:HD3	1.71	0.43
1:B:948:ASP:OD1	1:B:948:ASP:C	2.57	0.43
1:A:1036:LEU:O	1:A:1037:HIS:C	2.57	0.43
1:A:1299:TRP:NE1	1:A:1304:PRO:O	2.51	0.43
1:A:1238:ALA:O	1:A:1462:LYS:HG3	2.17	0.43
1:A:1442:TRP:CH2	1:A:1497:LEU:HD23	2.54	0.43
1:A:1619:ALA:O	1:A:1620:GLU:HB2	2.18	0.43
1:A:1624:THR:HG22	1:A:1857:ARG:NH2	2.33	0.43
1:A:1993:LYS:H	1:A:1994:PRO:CD	2.32	0.43
1:A:343:LYS:HE3	1:A:354:ALA:HB3	2.00	0.43
1:A:366:ILE:CG1	1:A:366:ILE:O	2.66	0.43
1:A:542:ASP:OD1	1:A:542:ASP:C	2.56	0.43
1:A:639:VAL:HG12	1:A:640:PRO:O	2.18	0.43
1:A:811:ASN:HA	1:A:812:PRO:HD3	1.82	0.43
1:A:830:ILE:O	1:A:831:SER:C	2.56	0.43
1:A:856:CYS:C	1:A:858:SER:N	2.72	0.43
1:B:627:TRP:CZ3	1:B:640:PRO:HB2	2.53	0.43
1:A:1049:TYR:CZ	1:A:1103:VAL:HG23	2.54	0.43
1:A:1469:ILE:CG2	1:A:1469:ILE:O	2.66	0.43
1:A:1662:ARG:NH1	1:A:1662:ARG:HG2	2.33	0.43
1:A:2006:THR:HG21	1:A:2048:ARG:NH2	2.32	0.43
1:A:870:SER:HA	1:A:871:PRO:HD3	1.88	0.43
1:B:98:ALA:CA	1:B:101:ARG:HG3	2.47	0.43
1:B:1234:LEU:HD21	1:B:1268:MET:HE3	2.01	0.43
1:B:1569:THR:HG23	1:B:1602:GLU:O	2.19	0.43
1:B:1648:VAL:HB	1:B:1649:PRO:HD3	1.99	0.43
1:B:1675:SER:O	1:B:1681:GLY:HA3	2.19	0.43
1:B:185:VAL:HB	1:B:231:VAL:HG23	2.00	0.43
1:B:259:GLN:CD	1:B:259:GLN:N	2.72	0.43
1:A:1118:LYS:HA	1:A:2106:LEU:HD22	2.01	0.43
1:A:1864:ALA:HA	1:A:1865:PRO:HD3	1.82	0.43
1:A:1882:PRO:HG2	1:A:1885:LYS:HD2	2.01	0.43
1:A:1929:VAL:HG13	1:A:1939:VAL:HG11	1.99	0.43
1:A:336:SER:OG	1:A:337:GLY:N	2.51	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:54:LEU:HD23	1:A:54:LEU:HA	1.62	0.43
1:B:1112:LEU:O	1:B:1114:PRO:HD3	2.17	0.43
1:B:228:VAL:CG2	1:B:228:VAL:O	2.67	0.43
1:B:23:TRP:CE2	1:B:27:ILE:HG12	2.53	0.43
1:B:290:ILE:CG2	1:B:322:ILE:HG12	2.49	0.43
1:B:637:GLY:O	1:B:685:TYR:HE2	2.00	0.43
1:B:946:VAL:O	1:B:954:ILE:HB	2.18	0.43
1:B:982:THR:O	1:B:984:GLU:N	2.49	0.43
1:A:1251:ASP:O	1:A:1253:GLN:HG3	2.19	0.43
1:A:1476:ASN:CB	1:A:1486:MET:SD	3.06	0.43
1:A:1757:VAL:HG11	1:A:1784:VAL:HG21	2.01	0.43
1:A:78:GLN:HB3	1:A:188:LEU:HD13	2.01	0.43
1:A:51:MET:HB2	1:A:53:LYS:HE3	2.01	0.43
1:A:782:ILE:HA	1:A:783:PRO:HD3	1.88	0.43
1:B:1333:ASN:C	1:B:1335:ALA:N	2.72	0.43
1:B:14:PRO:HA	1:B:53:LYS:O	2.19	0.43
1:B:1995:LYS:HA	1:B:2041:MET:HE3	2.01	0.43
1:B:283:ASP:C	1:B:285:GLU:H	2.22	0.43
1:B:161:CYS:HB3	1:B:331:HIS:CE1	2.53	0.43
1:B:654:PRO:HG3	1:B:685:TYR:OH	2.18	0.43
1:B:6:ILE:HG21	1:B:345:LEU:HD11	2.01	0.43
1:B:752:VAL:HA	1:B:753:PRO:HD3	1.89	0.43
1:A:1083:ASP:O	1:A:1086:LEU:N	2.51	0.43
1:A:108:TRP:CD1	1:A:171:ALA:HB2	2.54	0.43
1:A:2031:GLN:HB3	1:A:2034:TYR:HB3	1.99	0.43
1:A:23:TRP:CH2	1:A:347:SER:HA	2.54	0.43
1:A:524:ASP:OD1	1:A:534:VAL:N	2.52	0.43
1:B:137:ARG:O	1:B:140:MET:HG2	2.19	0.43
1:B:1984:THR:C	1:B:1986:GLU:H	2.22	0.43
1:A:129:GLY:HA3	1:B:202:LYS:HB2	2.00	0.43
1:B:2066:VAL:HG22	1:B:2088:ILE:HD12	2.00	0.43
1:B:252:ASN:N	1:B:272:LEU:HD13	2.33	0.43
1:B:363:ASN:HA	1:B:364:PRO:HD3	1.81	0.43
1:B:499:MET:HG3	1:B:502:GLN:NE2	2.34	0.43
1:B:416:GLN:OE1	1:B:817:PRO:HG2	2.18	0.43
1:A:1235:GLU:HG2	1:A:1235:GLU:H	1.58	0.43
1:A:1390:VAL:HG22	1:A:1501:LEU:HD21	2.00	0.43
1:A:206:LEU:HA	1:A:206:LEU:HD23	1.64	0.43
1:B:1389:LEU:HD23	1:B:1389:LEU:HA	1.83	0.43
1:B:1137:GLN:NE2	1:B:1396:PHE:CE1	2.86	0.43
1:B:161:CYS:HB3	1:B:331:HIS:HE1	1.84	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:309:VAL:C	1:B:311:ALA:H	2.22	0.43
1:B:953:LEU:HD12	1:B:954:ILE:N	2.34	0.43
1:A:1345:LEU:HD13	1:A:1403:LEU:HD13	2.01	0.43
1:A:1842:TYR:CE2	1:A:1848:HIS:HB3	2.53	0.43
1:A:217:ALA:C	1:A:219:GLY:H	2.21	0.43
1:A:295:THR:HG22	1:A:331:HIS:CD2	2.53	0.43
1:A:548:ASP:OD1	1:A:550:VAL:N	2.50	0.43
1:A:863:LYS:HB3	1:A:930:THR:HG21	2.01	0.43
1:B:1477:LEU:HD11	1:B:2043:ARG:CD	2.43	0.43
1:B:1515:ARG:HD3	1:B:1515:ARG:HA	1.30	0.43
1:B:1555:LEU:HA	1:B:1555:LEU:HD12	1.93	0.43
1:B:1525:GLU:OE1	1:B:1874:THR:HG23	2.19	0.43
1:B:1921:ARG:HB2	1:B:1921:ARG:HE	1.65	0.43
1:B:200:PHE:HB3	1:B:206:LEU:CG	2.48	0.43
1:B:23:TRP:CZ2	1:B:27:ILE:HG12	2.54	0.43
1:B:470:TYR:C	1:B:470:TYR:CD1	2.92	0.43
1:A:1420:ASP:O	1:A:1425:TRP:CZ3	2.71	0.42
1:A:1657:TYR:CZ	1:A:1662:ARG:CD	3.02	0.42
1:A:1815:LYS:O	1:A:1819:GLN:HG3	2.18	0.42
1:A:248:ASN:HD22	1:A:249:ALA:H	1.65	0.42
1:A:262:THR:O	1:A:262:THR:HG22	2.18	0.42
1:A:662:LEU:C	1:A:664:GLN:N	2.71	0.42
1:B:1085:ASN:C	1:B:1086:LEU:HD23	2.40	0.42
1:B:1469:ILE:CG2	1:B:1471:CYS:SG	3.07	0.42
1:B:1119:PHE:CZ	1:B:1514:PHE:HB3	2.54	0.42
1:B:1536:LEU:HG	1:B:1543:SER:O	2.19	0.42
1:B:1780:LEU:HD12	1:B:1781:GLY:H	1.83	0.42
1:B:1955:LEU:O	1:B:1958:GLU:HB2	2.19	0.42
1:B:259:GLN:HB2	1:B:263:PHE:CD1	2.54	0.42
1:B:497:SER:HB2	1:B:762:ALA:HB2	2.00	0.42
1:A:1032:LEU:O	1:A:1035:MET:HB2	2.19	0.42
1:A:119:ALA:HB2	1:A:850:PHE:CE2	2.53	0.42
1:A:1468:ARG:HA	1:A:1468:ARG:HD3	1.85	0.42
1:A:1661:VAL:HG21	1:A:1810:VAL:HG22	2.01	0.42
1:A:470:TYR:CD2	1:A:801:GLY:HA3	2.55	0.42
1:B:111:VAL:HG21	1:B:188:LEU:HD12	2.01	0.42
1:B:1468:ARG:HD3	1:B:1468:ARG:HA	1.71	0.42
1:B:1477:LEU:O	1:B:1507:ARG:CG	2.67	0.42
1:B:178:GLY:O	1:B:179:GLU:C	2.58	0.42
1:B:1818:ILE:HG12	1:B:1823:VAL:HG11	2.00	0.42
1:B:1977:ASP:O	1:B:1978:ALA:HB2	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:863:LYS:HB3	1:B:930:THR:HG21	2.01	0.42
1:A:1090:VAL:HG22	1:A:1095:LEU:HB2	2.02	0.42
1:A:1894:GLY:O	1:A:1895:GLY:C	2.57	0.42
1:A:1896:PHE:CE2	1:A:2019:PHE:CE1	3.07	0.42
1:A:2041:MET:HA	1:A:2044:ILE:HG13	2.02	0.42
1:A:708:ARG:HD3	1:A:727:ALA:O	2.19	0.42
1:A:743:VAL:O	1:A:743:VAL:HG23	2.20	0.42
1:A:808:VAL:HG12	1:A:809:SER:H	1.84	0.42
1:B:1315:LEU:HD23	1:B:1344:LEU:HD11	2.00	0.42
1:B:1636:VAL:HG22	1:B:1636:VAL:O	2.19	0.42
1:B:1786:LEU:HD23	1:B:1786:LEU:HA	1.82	0.42
1:B:475:GLY:O	1:B:477:ALA:N	2.51	0.42
1:B:557:THR:HA	1:B:560:GLN:HE21	1.84	0.42
1:A:1411:ASP:OD2	1:A:1439:ARG:HB2	2.19	0.42
1:A:1598:MET:O	1:A:1598:MET:HG2	2.20	0.42
1:A:202:LYS:HB2	1:B:129:GLY:HA3	2.02	0.42
1:A:2095:LEU:CD1	1:A:2099:LEU:HG	2.49	0.42
1:A:39:ARG:NH1	1:A:226:GLU:OE2	2.51	0.42
1:A:48:PRO:HD3	1:A:201:MET:CE	2.50	0.42
1:B:972:THR:CG2	1:B:1081:VAL:CG2	2.96	0.42
1:B:1551:LEU:HD21	1:B:1627:LEU:CD2	2.48	0.42
1:B:1676:GLY:O	1:B:1682:GLN:HG2	2.20	0.42
1:B:1993:LYS:H	1:B:1994:PRO:CD	2.31	0.42
1:B:27:ILE:C	1:B:29:GLY:H	2.21	0.42
1:A:1585:PRO:HB3	1:A:1598:MET:CE	2.49	0.42
1:A:1787:LYS:HB2	1:A:1789:VAL:HG23	2.01	0.42
1:A:289:TYR:CD2	1:A:289:TYR:C	2.93	0.42
1:A:321:LEU:HD12	1:A:321:LEU:H	1.84	0.42
1:A:347:SER:HB2	1:A:352:VAL:O	2.19	0.42
1:A:606:ARG:HA	1:A:694:LEU:HD11	2.00	0.42
1:A:925:LEU:CD2	1:A:931:VAL:HG21	2.49	0.42
1:A:988:SER:O	1:A:989:GLN:C	2.56	0.42
1:B:1670:SER:OG	1:B:1741:VAL:HA	2.19	0.42
1:B:1757:VAL:O	1:B:1760:LEU:HB2	2.19	0.42
1:B:40:TRP:CZ3	1:B:194:PRO:HA	2.55	0.42
1:B:263:PHE:HE2	1:B:303:GLN:HE21	1.66	0.42
1:B:40:TRP:HB3	1:B:847:ALA:CB	2.49	0.42
1:B:895:THR:O	1:B:898:THR:HB	2.20	0.42
1:A:1245:VAL:HB	1:A:1315:LEU:CD1	2.49	0.42
1:A:1433:LEU:HD11	1:A:1465:GLY:C	2.40	0.42
1:A:1656:TYR:O	1:A:1657:TYR:C	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1734:ARG:C	1:A:1736:THR:N	2.72	0.42
1:A:1996:TYR:CD2	1:A:1997:SER:N	2.85	0.42
1:A:1119:PHE:HB3	1:A:2105:VAL:HB	2.01	0.42
1:A:211:THR:HG22	1:A:212:CYS:N	2.34	0.42
1:A:321:LEU:HD23	1:A:381:LEU:CD1	2.48	0.42
1:A:189:ASN:HB2	1:A:334:PRO:HD2	1.99	0.42
1:A:765:ALA:HB1	1:A:768:GLN:CG	2.49	0.42
1:A:644:ASN:HB3	1:A:770:VAL:HG11	2.01	0.42
1:B:1222:ASP:N	1:B:1222:ASP:OD1	2.49	0.42
1:B:165:LEU:HD23	1:B:400:VAL:CG2	2.31	0.42
1:B:1815:LYS:O	1:B:1819:GLN:HG3	2.20	0.42
1:B:2049:ARG:HD2	1:B:2049:ARG:HA	1.84	0.42
1:B:367:PRO:O	1:B:368:ALA:HB3	2.20	0.42
1:B:462:PRO:HA	1:B:465:MET:O	2.19	0.42
1:B:55:LYS:HB3	1:B:55:LYS:HE2	1.69	0.42
1:B:423:LEU:HB2	1:B:797:LEU:HD22	2.01	0.42
1:B:82:LEU:HG	1:B:144:LEU:HD13	2.02	0.42
1:A:1240:PRO:HB3	1:A:1267:VAL:O	2.20	0.42
1:A:1603:PHE:HZ	1:A:1628:LEU:HD22	1.84	0.42
1:A:1637:PRO:O	1:A:1639:THR:N	2.52	0.42
1:A:163:SER:O	1:A:167:ALA:N	2.47	0.42
1:A:228:VAL:CG2	1:A:228:VAL:O	2.67	0.42
1:A:257:LYS:NZ	1:A:261:VAL:O	2.51	0.42
1:A:27:ILE:HD13	1:A:27:ILE:HA	1.81	0.42
1:A:353:TRP:O	1:A:355:PRO:HD3	2.19	0.42
1:A:98:ALA:HA	1:A:101:ARG:CG	2.49	0.42
1:B:1382:PHE:HA	1:B:1387:LEU:HD12	2.01	0.42
1:B:1711:ARG:HG2	1:B:1712:PHE:CE1	2.55	0.42
1:B:305:LEU:HD22	1:B:322:ILE:CD1	2.50	0.42
1:A:1239:SER:C	1:A:1241:LYS:H	2.23	0.42
1:A:1514:PHE:O	1:A:1515:ARG:NH1	2.53	0.42
1:A:1879:THR:HG1	1:A:1903:TRP:HH2	1.65	0.42
1:A:672:VAL:HG12	1:A:672:VAL:O	2.18	0.42
1:A:620:MET:CE	1:A:682:PHE:O	2.66	0.42
1:A:948:ASP:OD1	1:A:948:ASP:C	2.58	0.42
1:B:193:LYS:HA	1:B:194:PRO:HD3	1.85	0.42
1:B:5:VAL:HG21	1:B:242:VAL:HG22	2.01	0.42
1:B:409:ARG:HA	1:B:410:PRO:HD3	1.74	0.42
1:B:416:GLN:HE21	1:B:448:LEU:CD1	2.33	0.42
1:B:876:VAL:HG12	1:B:876:VAL:O	2.20	0.42
1:A:1451:SER:O	1:A:2036:PHE:CE1	2.73	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:166:LEU:CD1	1:A:251:THR:HG21	2.49	0.42
1:A:283:ASP:C	1:A:285:GLU:H	2.23	0.42
1:A:302:PRO:HA	1:A:366:ILE:CG2	2.49	0.42
1:A:384:ARG:NH1	1:A:384:ARG:CG	2.75	0.42
1:A:595:THR:HG22	1:A:596:GLN:N	2.35	0.42
1:A:495:ILE:HG12	1:A:758:VAL:HG13	2.02	0.42
1:A:795:PHE:CE1	1:A:799:ASN:ND2	2.86	0.42
1:A:899:LEU:HA	1:A:899:LEU:HD12	1.82	0.42
1:B:1763:HIS:HA	1:B:1788:ASN:O	2.20	0.42
1:B:1801:GLU:O	1:B:1803:GLY:N	2.53	0.42
1:B:1941:VAL:HG12	1:B:1941:VAL:O	2.18	0.42
1:B:527:LEU:HD11	1:B:554:VAL:HG11	2.01	0.42
1:A:1116:LEU:HD22	1:A:2098:PHE:CE1	2.55	0.42
1:A:114:SER:O	1:A:117:SER:HB3	2.19	0.42
1:A:1123:PRO:HA	1:A:1512:GLY:HA3	2.01	0.42
1:A:1557:ALA:O	1:A:1560:GLN:HB3	2.20	0.42
1:A:178:GLY:O	1:A:179:GLU:C	2.57	0.42
1:A:1862:GLY:O	1:A:1863:PRO:C	2.59	0.42
1:A:19:LEU:HA	1:A:19:LEU:HD23	1.68	0.42
1:A:420:LEU:HD11	1:A:512:ARG:HB3	2.01	0.42
1:B:1038:MET:CE	1:B:1041:LEU:HD23	2.50	0.42
1:B:1234:LEU:HD12	1:B:1234:LEU:O	2.19	0.42
1:B:1303:ASN:OD1	1:B:1332:GLY:HA3	2.19	0.42
1:B:1671:VAL:HG23	1:B:1743:LEU:HD13	2.02	0.42
1:B:1757:VAL:HG11	1:B:1784:VAL:HG21	2.01	0.42
1:B:270:GLU:HG3	1:B:311:ALA:HB2	2.01	0.42
1:A:1480:THR:CG2	1:A:1482:PRO:HD2	2.50	0.41
1:A:253:THR:O	1:A:254:ASP:C	2.59	0.41
1:A:503:TRP:HB3	1:A:787:LYS:HD2	2.02	0.41
1:B:1303:ASN:C	1:B:1333:ASN:HB2	2.41	0.41
1:B:147:PHE:C	1:B:147:PHE:CD2	2.93	0.41
1:B:1537:SER:H	1:B:1543:SER:HB2	1.85	0.41
1:B:2064:GLY:O	1:B:2066:VAL:N	2.53	0.41
1:B:119:ALA:HB2	1:B:850:PHE:CZ	2.55	0.41
1:A:1656:TYR:CE2	1:A:1687:ILE:HD13	2.55	0.41
1:A:1873:LEU:HD22	1:A:1874:THR:N	2.34	0.41
1:A:1993:LYS:N	1:A:1994:PRO:CD	2.82	0.41
1:A:254:ASP:HB2	1:A:257:LYS:HE2	2.02	0.41
1:A:366:ILE:HD11	1:A:369:LEU:HD11	2.01	0.41
1:A:359:TYR:CD2	1:A:376:VAL:HG11	2.55	0.41
1:A:630:CYS:C	1:A:632:GLN:N	2.73	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:776:GLU:HB3	1:A:778:SER:H	1.84	0.41
1:A:9:MET:CE	1:A:342:ILE:HA	2.50	0.41
1:B:128:VAL:HG12	1:B:130:TYR:CE2	2.54	0.41
1:B:1966:GLY:HA2	1:B:2013:LEU:HA	2.02	0.41
1:B:979:ALA:O	1:B:980:ASP:C	2.58	0.41
1:A:118:GLU:OE2	1:B:118:GLU:HG3	2.20	0.41
1:A:1272:TYR:HB3	1:A:1294:VAL:HG22	2.01	0.41
1:A:1413:PRO:HA	1:A:1440:PRO:O	2.21	0.41
1:A:111:VAL:CG2	1:A:188:LEU:HD12	2.50	0.41
1:A:894:LEU:HD12	1:A:894:LEU:HA	1.81	0.41
1:B:1060:ASP:OD1	1:B:1062:VAL:HG23	2.20	0.41
1:B:1049:TYR:CZ	1:B:1103:VAL:HG23	2.55	0.41
1:B:1241:LYS:HA	1:B:1269:ASP:HB3	2.02	0.41
1:B:1996:TYR:CD2	1:B:1997:SER:N	2.85	0.41
1:B:273:ILE:O	1:B:277:TYR:HD1	2.01	0.41
1:B:322:ILE:HD11	1:B:374:LEU:HD13	2.01	0.41
1:B:830:ILE:O	1:B:831:SER:C	2.59	0.41
1:A:1242:MET:HG3	1:A:1313:ASP:HB3	2.02	0.41
1:A:1442:TRP:CZ3	1:A:1472:VAL:HG11	2.55	0.41
1:A:40:TRP:CZ3	1:A:194:PRO:HA	2.55	0.41
1:A:23:TRP:CE2	1:A:27:ILE:HG12	2.55	0.41
1:A:259:GLN:N	1:A:259:GLN:CD	2.74	0.41
1:A:302:PRO:HG3	1:A:363:ASN:ND2	2.35	0.41
1:A:367:PRO:O	1:A:368:ALA:HB3	2.20	0.41
1:A:795:PHE:O	1:A:798:SER:HB2	2.20	0.41
1:A:896:TRP:CG	1:A:907:LEU:HD11	2.56	0.41
1:B:1405:ARG:HH22	1:B:1470:ARG:NH2	2.19	0.41
1:B:162:SER:OG	1:B:163:SER:N	2.50	0.41
1:B:1766:PHE:O	1:B:1792:HIS:HB2	2.20	0.41
1:B:889:THR:CG2	1:B:1032:LEU:CB	2.98	0.41
1:B:894:LEU:HA	1:B:894:LEU:HD12	1.83	0.41
1:A:1296:GLN:H	1:A:1296:GLN:HG2	1.64	0.41
1:A:1277:ARG:HD3	1:A:1300:ASP:OD2	2.19	0.41
1:A:13:LEU:HD13	1:A:22:PHE:CD1	2.55	0.41
1:A:489:LYS:HE2	1:A:489:LYS:HB3	1.77	0.41
1:A:954:ILE:HD13	1:A:954:ILE:HA	1.91	0.41
1:B:1519:LEU:HD12	1:B:1520:GLU:H	1.85	0.41
1:B:1706:ALA:O	1:B:1707:TYR:C	2.59	0.41
1:B:1712:PHE:HA	1:B:1713:PRO:HD3	1.84	0.41
1:B:1879:THR:HG1	1:B:1903:TRP:HH2	1.67	0.41
1:B:1115:ILE:HD11	1:B:2111:LEU:HD12	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:33:VAL:HG11	1:B:223:CYS:SG	2.60	0.41
1:B:423:LEU:HD23	1:B:812:PRO:HG3	2.02	0.41
1:A:111:VAL:HG12	1:A:111:VAL:O	2.20	0.41
1:A:1568:TYR:CE2	1:A:1855:GLN:HB2	2.56	0.41
1:A:1921:ARG:HB2	1:A:1921:ARG:HE	1.67	0.41
1:A:1998:GLY:O	1:A:2002:LEU:HD12	2.20	0.41
1:A:257:LYS:HG3	1:A:257:LYS:H	1.68	0.41
1:A:527:LEU:HD11	1:A:554:VAL:HG11	2.02	0.41
1:A:749:LEU:HA	1:A:749:LEU:HD23	1.88	0.41
1:A:469:GLY:CA	1:A:805:LEU:HD21	2.51	0.41
1:B:1122:THR:HA	1:B:1123:PRO:HD3	1.92	0.41
1:B:178:GLY:O	1:B:180:CYS:N	2.53	0.41
1:B:1836:VAL:HG13	1:B:1854:ILE:HD13	2.03	0.41
1:B:13:LEU:HB2	1:B:22:PHE:CD1	2.55	0.41
1:A:1216:LEU:O	1:A:1220:LEU:HD12	2.21	0.41
1:A:1234:LEU:CD2	1:A:1262:LEU:HD22	2.48	0.41
1:A:1671:VAL:HG23	1:A:1743:LEU:HB2	2.02	0.41
1:A:1669:GLU:CG	1:A:1742:ASP:OD2	2.69	0.41
1:A:252:ASN:N	1:A:272:LEU:HD13	2.36	0.41
1:A:258:GLU:HB2	1:A:259:GLN:NE2	2.36	0.41
1:A:263:PHE:HE2	1:A:303:GLN:HE21	1.68	0.41
1:A:460:VAL:CG2	1:A:465:MET:HG3	2.46	0.41
1:A:513:LEU:HA	1:A:513:LEU:HD23	1.79	0.41
1:A:561:ILE:HG23	1:A:589:TYR:CE2	2.56	0.41
1:A:953:LEU:HD12	1:A:954:ILE:N	2.35	0.41
1:B:1538:ARG:HH12	1:B:1585:PRO:HG2	1.86	0.41
1:B:1617:VAL:N	1:B:1800:PHE:HZ	2.19	0.41
1:B:257:LYS:NZ	1:B:261:VAL:O	2.49	0.41
1:B:322:ILE:CG2	1:B:323:GLY:N	2.83	0.41
1:B:744:LEU:HA	1:B:747:GLU:OE1	2.21	0.41
1:A:1011:LEU:HA	1:A:1011:LEU:HD12	1.85	0.41
1:A:1096:PHE:CD2	1:A:1096:PHE:N	2.89	0.41
1:A:147:PHE:CD2	1:A:147:PHE:C	2.94	0.41
1:A:1789:VAL:CG1	1:A:1790:THR:N	2.83	0.41
1:A:2112:ALA:O	1:A:2113:GLU:HG2	2.21	0.41
1:A:288:GLU:OE2	1:A:383:ILE:HG13	2.21	0.41
1:A:541:THR:O	1:A:542:ASP:HB3	2.20	0.41
1:A:55:LYS:HB3	1:A:55:LYS:HE2	1.68	0.41
1:A:623:VAL:HA	1:A:671:PHE:O	2.21	0.41
1:A:637:GLY:O	1:A:654:PRO:HD2	2.20	0.41
1:A:857:SER:O	1:A:902:ALA:CB	2.68	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1315:LEU:O	1:B:1344:LEU:HD13	2.21	0.41
1:B:1433:LEU:HD12	1:B:1433:LEU:HA	1.79	0.41
1:B:214:SER:O	1:B:301:ASP:OD2	2.38	0.41
1:B:513:LEU:HA	1:B:513:LEU:HD23	1.77	0.41
1:B:581:SER:HA	1:B:738:ASN:HD21	1.85	0.41
1:B:635:PRO:O	1:B:636:PRO:C	2.59	0.41
1:B:980:ASP:OD1	1:B:980:ASP:N	2.53	0.41
1:A:1669:GLU:HG2	1:A:1742:ASP:OD2	2.21	0.41
1:A:1893:LEU:HB3	1:A:1925:GLN:CD	2.41	0.41
1:A:193:LYS:HA	1:A:194:PRO:HD3	1.86	0.41
1:A:300:GLY:O	1:A:301:ASP:C	2.59	0.41
1:A:64:PHE:CB	1:A:429:ARG:HH21	2.23	0.41
1:A:528:LYS:HB3	1:A:529:PRO:HD3	2.03	0.41
1:B:1243:LYS:HA	1:B:1271:ASP:HB2	2.02	0.41
1:B:1312:ALA:HB1	1:B:1337:THR:HG22	2.00	0.41
1:B:1343:PHE:CZ	1:B:1405:ARG:HD2	2.56	0.41
1:B:1457:VAL:HG11	1:B:1473:LEU:HD22	2.02	0.41
1:B:1567:TYR:HA	1:B:1857:ARG:HG3	2.02	0.41
1:B:1755:ALA:HA	1:B:1758:ARG:NH1	2.36	0.41
1:B:2006:THR:CG2	1:B:2048:ARG:HH12	2.34	0.41
1:B:333:GLU:O	1:B:336:SER:HB3	2.21	0.41
1:B:453:MET:HE2	1:B:453:MET:HB3	1.89	0.41
1:B:561:ILE:HG23	1:B:589:TYR:CE2	2.56	0.41
1:B:704:ASP:O	1:B:706:LYS:HD2	2.20	0.41
1:B:795:PHE:CE1	1:B:799:ASN:ND2	2.87	0.41
1:A:1583:LEU:HD23	1:A:1583:LEU:HA	1.88	0.41
1:A:389:GLY:O	1:A:390:ILE:HG13	2.21	0.41
1:A:416:GLN:HE21	1:A:448:LEU:CD1	2.34	0.41
1:A:598:GLU:OE1	1:A:706:LYS:NZ	2.48	0.41
1:A:624:GLY:H	1:A:671:PHE:HB3	1.86	0.41
1:A:639:VAL:HG12	1:A:640:PRO:HD2	2.02	0.41
1:B:1429:LEU:HD11	1:B:1443:LEU:HD21	2.03	0.41
1:B:1842:TYR:CE2	1:B:1848:HIS:HB3	2.56	0.41
1:B:1998:GLY:O	1:B:2002:LEU:HD12	2.20	0.41
1:B:277:TYR:HB3	1:B:278:ALA:H	1.58	0.41
1:B:494:PHE:O	1:B:495:ILE:HD13	2.20	0.41
1:B:33:VAL:HB	1:B:50:ARG:NH1	2.34	0.41
1:A:1408:THR:HG22	1:A:1409:PRO:HD2	2.03	0.41
1:A:1480:THR:HG22	1:A:1482:PRO:HD2	2.02	0.41
1:A:1766:PHE:O	1:A:1792:HIS:HB2	2.21	0.41
1:A:674:GLU:HG2	1:A:674:GLU:H	1.28	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:907:LEU:HD12	1:A:907:LEU:HA	1.88	0.41
1:B:1257:ARG:O	1:B:1260:ALA:HB3	2.21	0.41
1:B:1951:GLY:O	1:B:1954:SER:HB2	2.20	0.41
1:B:1991:VAL:HG21	1:B:2033:ASN:HD22	1.84	0.41
1:B:429:ARG:HD2	1:B:429:ARG:HA	1.91	0.41
1:B:634:CYS:HA	1:B:635:PRO:HD3	1.89	0.41
1:B:6:ILE:HG21	1:B:345:LEU:CD1	2.51	0.41
1:A:1243:LYS:HD2	1:A:1312:ALA:N	2.37	0.40
1:A:1240:PRO:HD2	1:A:1462:LYS:HZ1	1.87	0.40
1:A:1514:PHE:O	1:A:1515:ARG:HD3	2.21	0.40
1:A:1689:LEU:O	1:A:1692:GLY:N	2.48	0.40
1:A:1857:ARG:HG3	1:A:1871:ILE:HD11	2.03	0.40
1:A:1974:VAL:HG23	1:A:1974:VAL:O	2.21	0.40
1:A:270:GLU:HG3	1:A:311:ALA:HB2	2.03	0.40
1:B:1139:GLU:OE2	1:B:1216:LEU:CD1	2.68	0.40
1:B:1453:VAL:HG12	1:B:1457:VAL:HG23	2.03	0.40
1:B:1456:MET:HE2	1:B:1460:LEU:HD22	2.02	0.40
1:B:1473:LEU:CG	1:B:1503:MET:HA	2.51	0.40
1:B:1643:GLU:O	1:B:1644:GLU:C	2.60	0.40
1:B:1741:VAL:CG1	1:B:1742:ASP:N	2.84	0.40
1:B:1780:LEU:HD12	1:B:1781:GLY:N	2.36	0.40
1:B:1931:GLU:OE1	1:B:1931:GLU:HA	2.21	0.40
1:B:253:THR:O	1:B:254:ASP:C	2.59	0.40
1:B:295:THR:HG22	1:B:331:HIS:CD2	2.55	0.40
1:B:366:ILE:CG1	1:B:366:ILE:O	2.68	0.40
1:A:1315:LEU:HB3	1:A:1344:LEU:HD11	2.02	0.40
1:A:1433:LEU:HD21	1:A:1465:GLY:HA3	2.03	0.40
1:A:23:TRP:CZ2	1:A:27:ILE:HG12	2.57	0.40
1:A:305:LEU:HD23	1:A:308:ILE:HD12	2.03	0.40
1:A:161:CYS:HB3	1:A:331:HIS:CE1	2.56	0.40
1:A:612:GLU:O	1:A:614:ASN:N	2.54	0.40
1:A:734:TYR:CD2	1:A:734:TYR:O	2.74	0.40
1:A:82:LEU:HG	1:A:144:LEU:HD13	2.02	0.40
1:B:122:ARG:O	1:B:123:ASP:C	2.58	0.40
1:B:1118:LYS:N	1:B:1517:PHE:O	2.47	0.40
1:B:1659:LEU:HD23	1:B:1767:LEU:CD1	2.51	0.40
1:B:641:ALA:HB1	1:B:683:HIS:CB	2.49	0.40
1:A:1118:LYS:HD2	1:A:2103:HIS:ND1	2.35	0.40
1:A:1347:HIS:CD2	1:A:1348:THR:O	2.74	0.40
1:A:1674:HIS:ND1	1:A:1698:THR:CG2	2.83	0.40
1:A:2090:SER:O	1:A:2094:VAL:HG23	2.22	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:219:GLY:O	1:A:298:LYS:HB2	2.20	0.40
1:A:429:ARG:HA	1:A:429:ARG:HD2	1.94	0.40
1:A:784:LEU:HD23	1:A:784:LEU:HA	1.68	0.40
1:A:81:MET:HG2	1:A:81:MET:H	1.62	0.40
1:B:1573:PHE:O	1:B:1576:VAL:HB	2.21	0.40
1:B:1636:VAL:HG23	1:B:1640:TRP:HB2	2.03	0.40
1:B:1863:PRO:O	1:B:1865:PRO:HD3	2.21	0.40
1:B:2041:MET:HA	1:B:2044:ILE:HG13	2.03	0.40
1:B:420:LEU:HD12	1:B:512:ARG:HH11	1.86	0.40
1:B:490:ARG:HA	1:B:491:PRO:HD3	1.96	0.40
1:B:623:VAL:CG1	1:B:624:GLY:N	2.85	0.40
1:B:654:PRO:O	1:B:658:MET:CB	2.68	0.40
1:B:588:GLY:HA3	1:B:730:PHE:CE1	2.57	0.40
1:A:1238:ALA:HB1	1:A:1467:HIS:CD2	2.56	0.40
1:A:159:THR:O	1:A:160:ALA:HB3	2.21	0.40
1:A:1733:LEU:HD23	1:A:1733:LEU:HA	1.68	0.40
1:A:588:GLY:O	1:A:594:LEU:HB2	2.21	0.40
1:A:666:LYS:O	1:A:668:GLU:N	2.55	0.40
1:A:654:PRO:HD3	1:A:686:PHE:HE1	1.86	0.40
1:A:825:ARG:HG2	1:A:826:GLY:N	2.36	0.40
1:B:1122:THR:HG1	1:B:1517:PHE:HE1	1.68	0.40
1:B:1314:LEU:HG	1:B:1315:LEU:N	2.36	0.40
1:B:1456:MET:CE	1:B:1460:LEU:HD22	2.52	0.40
1:B:1617:VAL:HG21	1:B:1626:VAL:HG11	2.04	0.40
1:B:1553:TYR:O	1:B:1882:PRO:HG3	2.21	0.40
1:B:2017:VAL:HG12	1:B:2018:ILE:N	2.37	0.40
1:B:189:ASN:O	1:B:226:GLU:HB2	2.21	0.40
1:B:252:ASN:HD21	1:B:272:LEU:HB2	1.81	0.40
1:B:300:GLY:O	1:B:301:ASP:C	2.59	0.40
1:B:876:VAL:HA	1:B:884:VAL:HG11	2.03	0.40
1:A:273:ILE:O	1:A:277:TYR:HD1	2.05	0.40
1:A:509:SER:O	1:A:512:ARG:HG3	2.22	0.40
1:B:1726:THR:CG2	1:B:1726:THR:O	2.70	0.40
1:B:2022:VAL:HG13	1:B:2026:ARG:HG2	2.04	0.40
1:B:912:VAL:HG22	1:B:913:VAL:N	2.36	0.40
1:B:971:ASP:OD1	1:B:973:ARG:HB2	2.21	0.40

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	1948/2512 (78%)	1586 (81%)	282 (14%)	80 (4%)	3	19
1	B	1992/2512 (79%)	1622 (81%)	296 (15%)	74 (4%)	3	21
All	All	3940/5024 (78%)	3208 (81%)	578 (15%)	154 (4%)	3	20

All (154) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	179	GLU
1	A	255	GLY
1	A	278	ALA
1	A	333	GLU
1	A	413	PRO
1	A	418	ALA
1	A	582	LEU
1	A	615	VAL
1	A	818	PRO
1	A	839	SER
1	A	976	VAL
1	A	1224	PRO
1	A	1303	ASN
1	A	1485	GLU
1	A	1611	ARG
1	A	1638	SER
1	A	1749	ALA
1	A	1802	GLU
1	A	1862	GLY
1	B	179	GLU
1	B	255	GLY
1	B	278	ALA
1	B	333	GLU
1	B	418	ALA
1	B	636	PRO

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Mol	Chain	Res	Type
1	B	669	ASP
1	B	839	SER
1	B	978	PRO
1	B	980	ASP
1	B	1224	PRO
1	B	1749	ALA
1	B	1800	PHE
1	B	1862	GLY
1	A	163	SER
1	A	282	PRO
1	A	318	GLU
1	A	387	ASN
1	A	476	GLU
1	A	488	SER
1	A	984	GLU
1	A	985	PHE
1	A	1056	SER
1	A	1301	PRO
1	A	1593	LEU
1	A	1735	HIS
1	A	1801	GLU
1	A	1870	PRO
1	A	2025	GLY
1	A	2079	VAL
1	A	2112	ALA
1	B	163	SER
1	B	282	PRO
1	B	318	GLU
1	B	370	GLN
1	B	387	ASN
1	B	413	PRO
1	B	476	GLU
1	B	856	CYS
1	B	974	ALA
1	B	983	ALA
1	B	984	GLU
1	B	1225	ALA
1	B	1301	PRO
1	B	1302	ALA
1	B	1593	LEU
1	B	1735	HIS
1	B	1802	GLU

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Mol	Chain	Res	Type
1	B	1858	GLU
1	B	2025	GLY
1	B	2079	VAL
1	A	216	ASP
1	A	254	ASP
1	A	310	ASN
1	A	317	ARG
1	A	319	PRO
1	A	613	ALA
1	A	854	SER
1	A	1014	ASP
1	A	1110	GLU
1	A	1225	ALA
1	A	1596	ASP
1	A	1649	PRO
1	A	1706	ALA
1	A	2021	SER
1	B	213	ARG
1	B	254	ASP
1	B	317	ARG
1	B	319	PRO
1	B	488	SER
1	B	820	GLU
1	B	1056	SER
1	B	1560	GLN
1	B	1596	ASP
1	B	1706	ALA
1	B	1863	PRO
1	B	2065	ASP
1	A	14	PRO
1	A	237	SER
1	A	238	LEU
1	A	445	SER
1	A	848	ALA
1	A	857	SER
1	A	1389	LEU
1	A	1409	PRO
1	A	1557	ALA
1	A	1734	ARG
1	A	1800	PHE
1	A	1835	LYS
1	A	2065	ASP

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Mol	Chain	Res	Type
1	A	2078	THR
1	B	14	PRO
1	B	60	PHE
1	B	162	SER
1	B	238	LEU
1	B	310	ASN
1	B	445	SER
1	B	1014	ASP
1	B	1110	GLU
1	B	1449	SER
1	B	1464	PRO
1	B	1491	SER
1	B	1548	CYS
1	B	1734	ARG
1	B	1932	TRP
1	B	1982	ASN
1	B	2021	SER
1	B	2078	THR
1	B	2102	PRO
1	A	60	PHE
1	A	162	SER
1	A	215	PHE
1	A	617	PRO
1	A	1464	PRO
1	A	1471	CYS
1	A	1597	CYS
1	A	1692	GLY
1	A	1865	PRO
1	A	2056	LEU
1	A	2102	PRO
1	B	1835	LYS
1	B	1978	ALA
1	B	1979	VAL
1	B	2056	LEU
1	A	1500	ASP
1	B	635	PRO
1	B	1467	HIS
1	A	487	GLY
1	A	853	GLY
1	B	1303	ASN
1	B	1409	PRO
1	B	487	GLY

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Mol	Chain	Res	Type
1	A	355	PRO
1	A	1240	PRO
1	B	1408	THR

5.3.2 Protein sidechains [i](#)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	1624/2072 (78%)	1450 (89%)	174 (11%)	6	26
1	B	1660/2072 (80%)	1473 (89%)	187 (11%)	6	24
All	All	3284/4144 (79%)	2923 (89%)	361 (11%)	6	25

All (361) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	32	MET
1	A	59	ARG
1	A	81	MET
1	A	86	THR
1	A	111	VAL
1	A	117	SER
1	A	123	ASP
1	A	128	VAL
1	A	136	GLN
1	A	144	LEU
1	A	169	GLN
1	A	170	SER
1	A	172	TYR
1	A	181	SER
1	A	223	CYS
1	A	224	ARG
1	A	241	ARG
1	A	248	ASN
1	A	251	THR
1	A	263	PHE

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Mol	Chain	Res	Type
1	A	295	THR
1	A	297	THR
1	A	309	VAL
1	A	317	ARG
1	A	318	GLU
1	A	320	LEU
1	A	327	SER
1	A	329	MET
1	A	343	LYS
1	A	347	SER
1	A	356	ASN
1	A	366	ILE
1	A	371	ASP
1	A	375	GLN
1	A	383	ILE
1	A	399	ASN
1	A	400	VAL
1	A	402	VAL
1	A	407	ASN
1	A	439	GLU
1	A	446	ARG
1	A	460	VAL
1	A	470	TYR
1	A	480	GLN
1	A	489	LYS
1	A	492	VAL
1	A	502	GLN
1	A	520	ILE
1	A	525	GLN
1	A	541	THR
1	A	543	GLU
1	A	549	ILE
1	A	552	SER
1	A	556	LEU
1	A	558	SER
1	A	568	THR
1	A	569	SER
1	A	572	LEU
1	A	574	PRO
1	A	597	GLU
1	A	614	ASN
1	A	616	LEU

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Mol	Chain	Res	Type
1	A	658	MET
1	A	673	LYS
1	A	674	GLU
1	A	677	THR
1	A	689	SER
1	A	703	LEU
1	A	730	PHE
1	A	734	TYR
1	A	736	VAL
1	A	757	VAL
1	A	773	ARG
1	A	825	ARG
1	A	846	SER
1	A	849	ASP
1	A	857	SER
1	A	866	VAL
1	A	894	LEU
1	A	917	VAL
1	A	931	VAL
1	A	937	LEU
1	A	941	SER
1	A	947	SER
1	A	949	SER
1	A	953	LEU
1	A	959	VAL
1	A	972	THR
1	A	1011	LEU
1	A	1026	ASP
1	A	1038	MET
1	A	1052	THR
1	A	1055	THR
1	A	1068	LEU
1	A	1069	TYR
1	A	1070	THR
1	A	1074	THR
1	A	1084	ARG
1	A	1087	ASN
1	A	1088	THR
1	A	1095	LEU
1	A	1097	LEU
1	A	1101	SER
1	A	1105	PRO

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Mol	Chain	Res	Type
1	A	1107	ARG
1	A	1112	LEU
1	A	1122	THR
1	A	1216	LEU
1	A	1267	VAL
1	A	1275	THR
1	A	1299	TRP
1	A	1346	LEU
1	A	1376	ASP
1	A	1408	THR
1	A	1421	THR
1	A	1428	SER
1	A	1456	MET
1	A	1460	LEU
1	A	1468	ARG
1	A	1473	LEU
1	A	1476	ASN
1	A	1480	THR
1	A	1481	SER
1	A	1491	SER
1	A	1505	VAL
1	A	1525	GLU
1	A	1527	GLN
1	A	1541	LEU
1	A	1542	SER
1	A	1573	PHE
1	A	1583	LEU
1	A	1596	ASP
1	A	1597	CYS
1	A	1614	MET
1	A	1626	VAL
1	A	1638	SER
1	A	1639	THR
1	A	1651	VAL
1	A	1660	VAL
1	A	1662	ARG
1	A	1669	GLU
1	A	1697	THR
1	A	1698	THR
1	A	1722	ASN
1	A	1735	HIS
1	A	1736	THR

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Mol	Chain	Res	Type
1	A	1760	LEU
1	A	1762	GLN
1	A	1768	GLU
1	A	1790	THR
1	A	1800	PHE
1	A	1823	VAL
1	A	1841	ARG
1	A	1843	MET
1	A	1860	GLU
1	A	1861	GLN
1	A	1873	LEU
1	A	1877	SER
1	A	1922	THR
1	A	1927	ARG
1	A	1937	VAL
1	A	1944	SER
1	A	1957	THR
1	A	1996	TYR
1	A	2005	VAL
1	A	2006	THR
1	A	2022	VAL
1	A	2026	ARG
1	A	2028	ASN
1	A	2043	ARG
1	A	2044	ILE
1	A	2078	THR
1	A	2096	ASP
1	A	2111	LEU
1	B	32	MET
1	B	59	ARG
1	B	81	MET
1	B	86	THR
1	B	111	VAL
1	B	112	SER
1	B	122	ARG
1	B	123	ASP
1	B	126	THR
1	B	127	LEU
1	B	128	VAL
1	B	136	GLN
1	B	144	LEU
1	B	169	GLN

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Mol	Chain	Res	Type
1	B	170	SER
1	B	172	TYR
1	B	181	SER
1	B	223	CYS
1	B	224	ARG
1	B	241	ARG
1	B	248	ASN
1	B	251	THR
1	B	263	PHE
1	B	288	GLU
1	B	295	THR
1	B	297	THR
1	B	309	VAL
1	B	317	ARG
1	B	318	GLU
1	B	320	LEU
1	B	329	MET
1	B	334	PRO
1	B	343	LYS
1	B	347	SER
1	B	356	ASN
1	B	366	ILE
1	B	371	ASP
1	B	375	GLN
1	B	383	ILE
1	B	399	ASN
1	B	400	VAL
1	B	402	VAL
1	B	407	ASN
1	B	439	GLU
1	B	446	ARG
1	B	460	VAL
1	B	489	LYS
1	B	492	VAL
1	B	502	GLN
1	B	520	ILE
1	B	545	VAL
1	B	549	ILE
1	B	552	SER
1	B	556	LEU
1	B	558	SER
1	B	568	THR

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Mol	Chain	Res	Type
1	B	569	SER
1	B	572	LEU
1	B	574	PRO
1	B	615	VAL
1	B	635	PRO
1	B	664	GLN
1	B	670	VAL
1	B	675	VAL
1	B	676	ARG
1	B	689	SER
1	B	730	PHE
1	B	734	TYR
1	B	736	VAL
1	B	757	VAL
1	B	821	PHE
1	B	825	ARG
1	B	846	SER
1	B	866	VAL
1	B	894	LEU
1	B	917	VAL
1	B	931	VAL
1	B	937	LEU
1	B	941	SER
1	B	947	SER
1	B	949	SER
1	B	959	VAL
1	B	964	SER
1	B	971	ASP
1	B	972	THR
1	B	976	VAL
1	B	980	ASP
1	B	982	THR
1	B	1011	LEU
1	B	1026	ASP
1	B	1038	MET
1	B	1052	THR
1	B	1055	THR
1	B	1068	LEU
1	B	1069	TYR
1	B	1070	THR
1	B	1074	THR
1	B	1084	ARG

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Mol	Chain	Res	Type
1	B	1087	ASN
1	B	1088	THR
1	B	1095	LEU
1	B	1097	LEU
1	B	1101	SER
1	B	1107	ARG
1	B	1122	THR
1	B	1216	LEU
1	B	1218	SER
1	B	1235	GLU
1	B	1267	VAL
1	B	1275	THR
1	B	1299	TRP
1	B	1337	THR
1	B	1340	GLU
1	B	1346	LEU
1	B	1373	LEU
1	B	1395	SER
1	B	1421	THR
1	B	1428	SER
1	B	1456	MET
1	B	1460	LEU
1	B	1473	LEU
1	B	1480	THR
1	B	1481	SER
1	B	1486	MET
1	B	1487	HIS
1	B	1505	VAL
1	B	1515	ARG
1	B	1525	GLU
1	B	1528	THR
1	B	1548	CYS
1	B	1551	LEU
1	B	1558	SER
1	B	1573	PHE
1	B	1583	LEU
1	B	1595	ARG
1	B	1597	CYS
1	B	1598	MET
1	B	1603	PHE
1	B	1612	ARG
1	B	1614	MET

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Mol	Chain	Res	Type
1	B	1636	VAL
1	B	1639	THR
1	B	1653	THR
1	B	1661	VAL
1	B	1662	ARG
1	B	1669	GLU
1	B	1671	VAL
1	B	1687	ILE
1	B	1694	ARG
1	B	1697	THR
1	B	1698	THR
1	B	1722	ASN
1	B	1735	HIS
1	B	1736	THR
1	B	1760	LEU
1	B	1762	GLN
1	B	1768	GLU
1	B	1790	THR
1	B	1800	PHE
1	B	1823	VAL
1	B	1841	ARG
1	B	1843	MET
1	B	1856	VAL
1	B	1860	GLU
1	B	1868	LEU
1	B	1873	LEU
1	B	1877	SER
1	B	1904	LEU
1	B	1922	THR
1	B	1927	ARG
1	B	1937	VAL
1	B	1940	LEU
1	B	1944	SER
1	B	1957	THR
1	B	1979	VAL
1	B	1982	ASN
1	B	1988	PHE
1	B	1996	TYR
1	B	2005	VAL
1	B	2006	THR
1	B	2022	VAL
1	B	2026	ARG

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Mol	Chain	Res	Type
1	B	2028	ASN
1	B	2043	ARG
1	B	2044	ILE
1	B	2078	THR
1	B	2096	ASP

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (70) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	25	ASN
1	A	96	ASN
1	A	136	GLN
1	A	248	ASN
1	A	306	ASN
1	A	350	HIS
1	A	356	ASN
1	A	399	ASN
1	A	425	GLN
1	A	444	HIS
1	A	525	GLN
1	A	560	GLN
1	A	632	GLN
1	A	644	ASN
1	A	697	GLN
1	A	737	ASN
1	A	833	HIS
1	A	1023	GLN
1	A	1037	HIS
1	A	1111	HIS
1	A	1133	ASN
1	A	1298	GLN
1	A	1318	ASN
1	A	1388	HIS
1	A	1467	HIS
1	A	1487	HIS
1	A	1735	HIS
1	A	1777	ASN
1	A	1778	HIS
1	A	1855	GLN
1	A	2076	ASN
1	A	2086	GLN
1	A	2103	HIS

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Mol	Chain	Res	Type
1	B	25	ASN
1	B	96	ASN
1	B	136	GLN
1	B	199	GLN
1	B	248	ASN
1	B	306	ASN
1	B	350	HIS
1	B	356	ASN
1	B	399	ASN
1	B	425	GLN
1	B	502	GLN
1	B	525	GLN
1	B	560	GLN
1	B	632	GLN
1	B	643	HIS
1	B	663	GLN
1	B	697	GLN
1	B	737	ASN
1	B	738	ASN
1	B	833	HIS
1	B	1023	GLN
1	B	1037	HIS
1	B	1111	HIS
1	B	1133	ASN
1	B	1298	GLN
1	B	1333	ASN
1	B	1406	GLN
1	B	1458	ASN
1	B	1467	HIS
1	B	1674	HIS
1	B	1735	HIS
1	B	1777	ASN
1	B	1778	HIS
1	B	1855	GLN
1	B	2076	ASN
1	B	2086	GLN
1	B	2103	HIS

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates [i](#)

There are no carbohydrates in this entry.

5.6 Ligand geometry [i](#)

There are no ligands in this entry.

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

6 Fit of model and data

6.1 Protein, DNA and RNA chains

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	A	1962/2512 (78%)	-0.12	88 (4%) 33 21	63, 118, 226, 276	0
1	B	2004/2512 (79%)	0.09	131 (6%) 18 11	54, 158, 230, 276	0
All	All	3966/5024 (78%)	-0.01	219 (5%) 25 14	54, 136, 229, 276	0

All (219) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	B	581	SER	7.9
1	A	1297	GLY	7.7
1	B	496	CYS	7.4
1	B	579	GLY	7.3
1	B	672	VAL	7.1
1	B	498	GLY	7.0
1	A	1387	LEU	6.5
1	B	580	HIS	6.1
1	A	1406	GLN	6.0
1	B	2078	THR	5.9
1	B	497	SER	5.9
1	B	583	GLY	5.3
1	B	671	PHE	5.2
1	A	2078	THR	5.2
1	B	1863	PRO	5.1
1	A	1415	PHE	5.0
1	A	1398	GLY	4.9
1	A	1407	GLN	4.9
1	A	1386	SER	4.9
1	A	2079	VAL	4.8
1	B	703	LEU	4.7
1	A	1486	MET	4.6
1	B	2069	VAL	4.4
1	B	622	ALA	4.4

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Mol	Chain	Res	Type	RSRZ
1	B	674	GLU	4.4
1	A	1441	VAL	4.3
1	B	410	PRO	4.2
1	B	673	LYS	4.2
1	B	2076	ASN	4.2
1	B	392	SER	4.1
1	A	1269	ASP	4.1
1	B	667	ARG	4.0
1	A	419	ALA	3.9
1	B	2080	ILE	3.9
1	B	1140	LEU	3.9
1	B	1297	GLY	3.8
1	A	414	PRO	3.8
1	B	1296	GLN	3.8
1	A	982	THR	3.8
1	B	1136	LEU	3.8
1	B	1286	GLN	3.7
1	A	2029	ALA	3.7
1	B	1437	SER	3.7
1	B	10	SER	3.7
1	A	336	SER	3.6
1	B	1276	ASP	3.6
1	B	928	THR	3.6
1	A	1468	ARG	3.6
1	B	1486	MET	3.6
1	B	1384	GLY	3.6
1	B	717	ILE	3.5
1	B	414	PRO	3.5
1	A	1385	ALA	3.5
1	B	617	PRO	3.5
1	A	983	ALA	3.5
1	A	1135	ALA	3.5
1	A	2080	ILE	3.5
1	A	1384	GLY	3.4
1	A	1442	TRP	3.4
1	A	1296	GLN	3.4
1	A	1464	PRO	3.3
1	B	670	VAL	3.3
1	B	669	ASP	3.3
1	B	161	CYS	3.3
1	B	2068	VAL	3.3
1	B	1439	ARG	3.3

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Mol	Chain	Res	Type	RSRZ
1	B	391	ASN	3.3
1	A	1437	SER	3.2
1	B	1143	CYS	3.2
1	B	2079	VAL	3.2
1	B	1869	PRO	3.2
1	B	413	PRO	3.2
1	A	1465	GLY	3.1
1	A	981	SER	3.1
1	A	2081	GLY	3.1
1	B	408	SER	3.1
1	B	1340	GLU	3.1
1	A	293	HIS	3.1
1	B	1864	ALA	3.1
1	B	646	LYS	3.1
1	A	1382	PHE	3.0
1	B	1523	ARG	3.0
1	B	2077	ASP	3.0
1	B	1441	VAL	3.0
1	B	1275	THR	3.0
1	B	293	HIS	3.0
1	A	1510	ALA	2.9
1	B	560	GLN	2.9
1	B	1458	ASN	2.9
1	A	1305	ALA	2.9
1	B	661	PHE	2.9
1	B	336	SER	2.9
1	B	1455	GLY	2.9
1	A	1388	HIS	2.9
1	B	316	ARG	2.9
1	B	1876	LEU	2.9
1	A	1509	GLY	2.8
1	A	364	PRO	2.8
1	A	392	SER	2.8
1	B	666	LYS	2.8
1	B	624	GLY	2.8
1	A	1482	PRO	2.8
1	A	2034	TYR	2.8
1	A	978	PRO	2.8
1	B	1987	PHE	2.7
1	B	298	LYS	2.7
1	A	2077	ASP	2.7
1	B	2071	GLU	2.7

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Mol	Chain	Res	Type	RSRZ
1	B	653	GLY	2.7
1	A	975	ALA	2.7
1	B	658	MET	2.7
1	A	1426	VAL	2.7
1	B	324	SER	2.7
1	B	664	GLN	2.7
1	A	49	ARG	2.6
1	B	665	LEU	2.6
1	B	488	SER	2.6
1	A	976	VAL	2.6
1	A	2070	LEU	2.6
1	A	1491	SER	2.6
1	A	1430	LYS	2.6
1	A	1429	LEU	2.6
1	B	1280	GLN	2.6
1	A	1349	LEU	2.5
1	A	1134	THR	2.5
1	B	539	LEU	2.5
1	B	337	GLY	2.5
1	B	1979	VAL	2.5
1	B	1586	ASP	2.5
1	B	360	HIS	2.5
1	A	2076	ASN	2.5
1	A	2069	VAL	2.5
1	B	647	ASP	2.5
1	A	1467	HIS	2.5
1	A	980	ASP	2.5
1	B	419	ALA	2.5
1	B	1243	LYS	2.5
1	A	496	CYS	2.4
1	B	625	LEU	2.4
1	B	2070	LEU	2.4
1	B	541	THR	2.4
1	A	1484	PRO	2.4
1	B	1231	ASP	2.4
1	A	1436	ALA	2.4
1	B	762	ALA	2.4
1	B	1412	SER	2.4
1	A	1286	GLN	2.4
1	B	663	GLN	2.4
1	B	644	ASN	2.4
1	B	499	MET	2.4

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Mol	Chain	Res	Type	RSRZ
1	A	1487	HIS	2.4
1	B	1981	GLU	2.4
1	B	790	ARG	2.4
1	B	1284	ALA	2.3
1	B	389	GLY	2.3
1	B	1468	ARG	2.3
1	A	1300	ASP	2.3
1	A	1383	ALA	2.3
1	A	1278	ASN	2.3
1	A	1287	ALA	2.3
1	B	1978	ALA	2.3
1	B	721	GLN	2.3
1	B	495	ILE	2.3
1	A	1304	PRO	2.3
1	B	1484	PRO	2.3
1	A	1255	TYR	2.3
1	A	977	ASP	2.3
1	A	1348	THR	2.3
1	A	1513	ALA	2.3
1	B	369	LEU	2.3
1	A	1306	PRO	2.3
1	B	621	ALA	2.3
1	A	1974	VAL	2.2
1	B	1320	ALA	2.2
1	B	1313	ASP	2.2
1	B	1327	PRO	2.2
1	B	975	ALA	2.2
1	B	374	LEU	2.2
1	A	1298	GLN	2.2
1	B	35	ALA	2.2
1	B	409	ARG	2.2
1	B	660	GLU	2.2
1	A	1033	ASP	2.2
1	A	161	CYS	2.2
1	B	1570	SER	2.2
1	B	294	GLY	2.2
1	A	1434	ALA	2.2
1	A	1291	GLN	2.2
1	A	337	GLY	2.2
1	B	2082	GLY	2.2
1	B	1141	GLN	2.2
1	B	1294	VAL	2.2

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Mol	Chain	Res	Type	RSRZ
1	B	364	PRO	2.1
1	B	654	PRO	2.1
1	B	1339	LYS	2.1
1	A	1408	THR	2.1
1	A	1235	GLU	2.1
1	B	1485	GLU	2.1
1	B	49	ARG	2.1
1	B	331	HIS	2.1
1	B	722	TRP	2.1
1	A	1341	GLY	2.1
1	A	1397	TYR	2.1
1	B	1408	THR	2.1
1	B	1587	SER	2.1
1	B	412	PRO	2.1
1	B	1602	GLU	2.1
1	B	1976	ARG	2.1
1	A	1681	GLY	2.1
1	A	1377	GLN	2.0
1	A	1238	ALA	2.0
1	A	1240	PRO	2.0
1	B	557	THR	2.0
1	A	1863	PRO	2.0
1	B	1557	ALA	2.0
1	B	2024	CYS	2.0
1	B	1434	ALA	2.0
1	A	1279	PRO	2.0
1	B	685	TYR	2.0

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

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

6.3 Carbohydrates [i](#)

There are no carbohydrates in this entry.

6.4 Ligands [i](#)

There are no ligands in this entry.

6.5 Other polymers

There are no such residues in this entry.