



# Full wwPDB X-ray Structure Validation Report ⓘ

Dec 6, 2023 – 06:19 am GMT

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](mailto:validation@mail.wwpdb.org)

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

---

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 : 2.36  
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) : 2.36

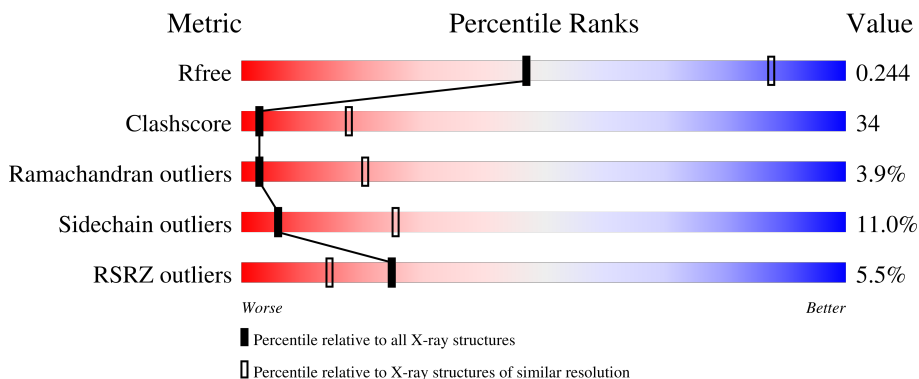
# 1 Overall quality at a glance

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

Mol	Chain	Length	Quality of chain
1	A	2512	
1	B	2512	

## 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

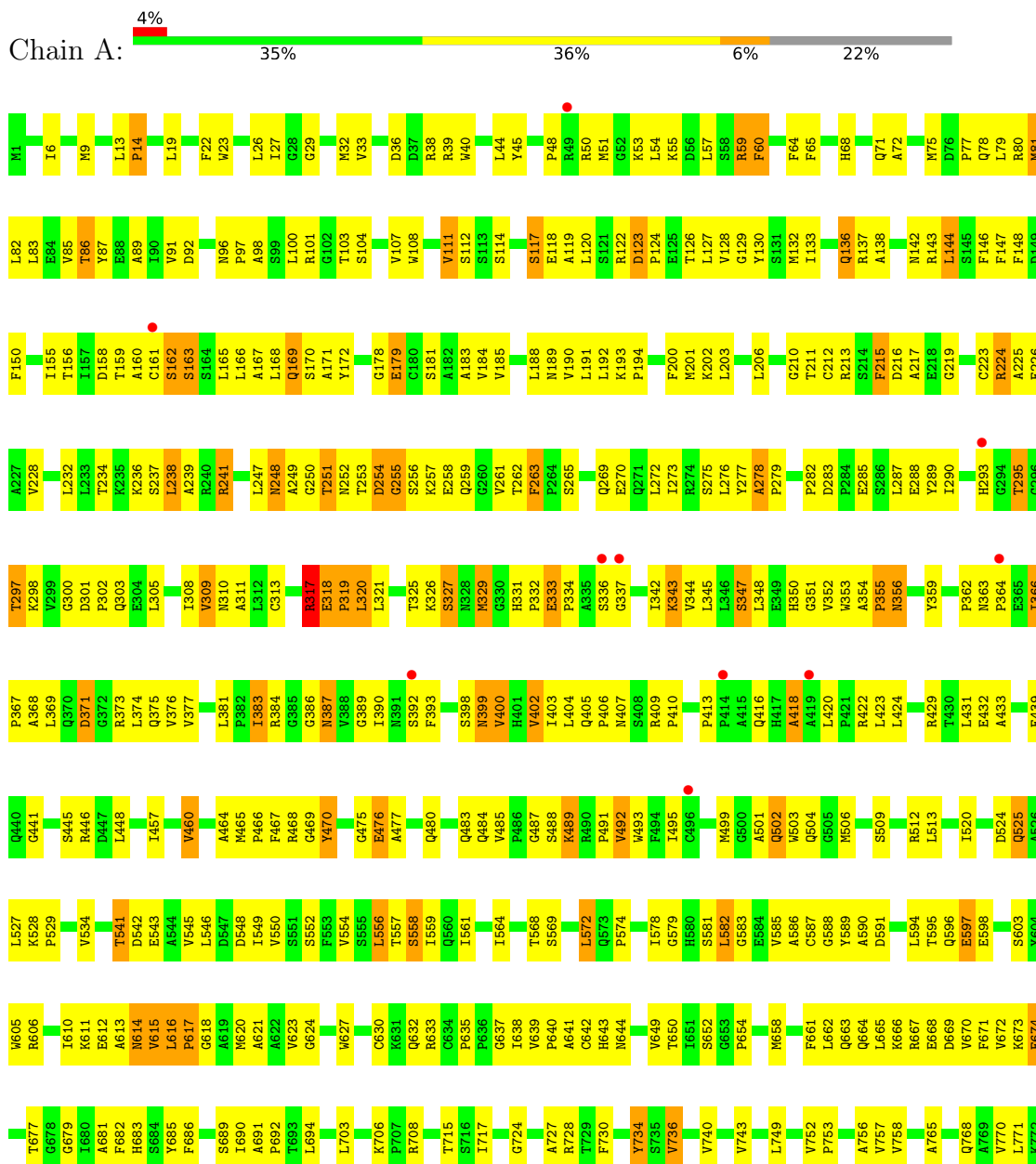
There are 2 discrepancies between the modelled and reference sequences:

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

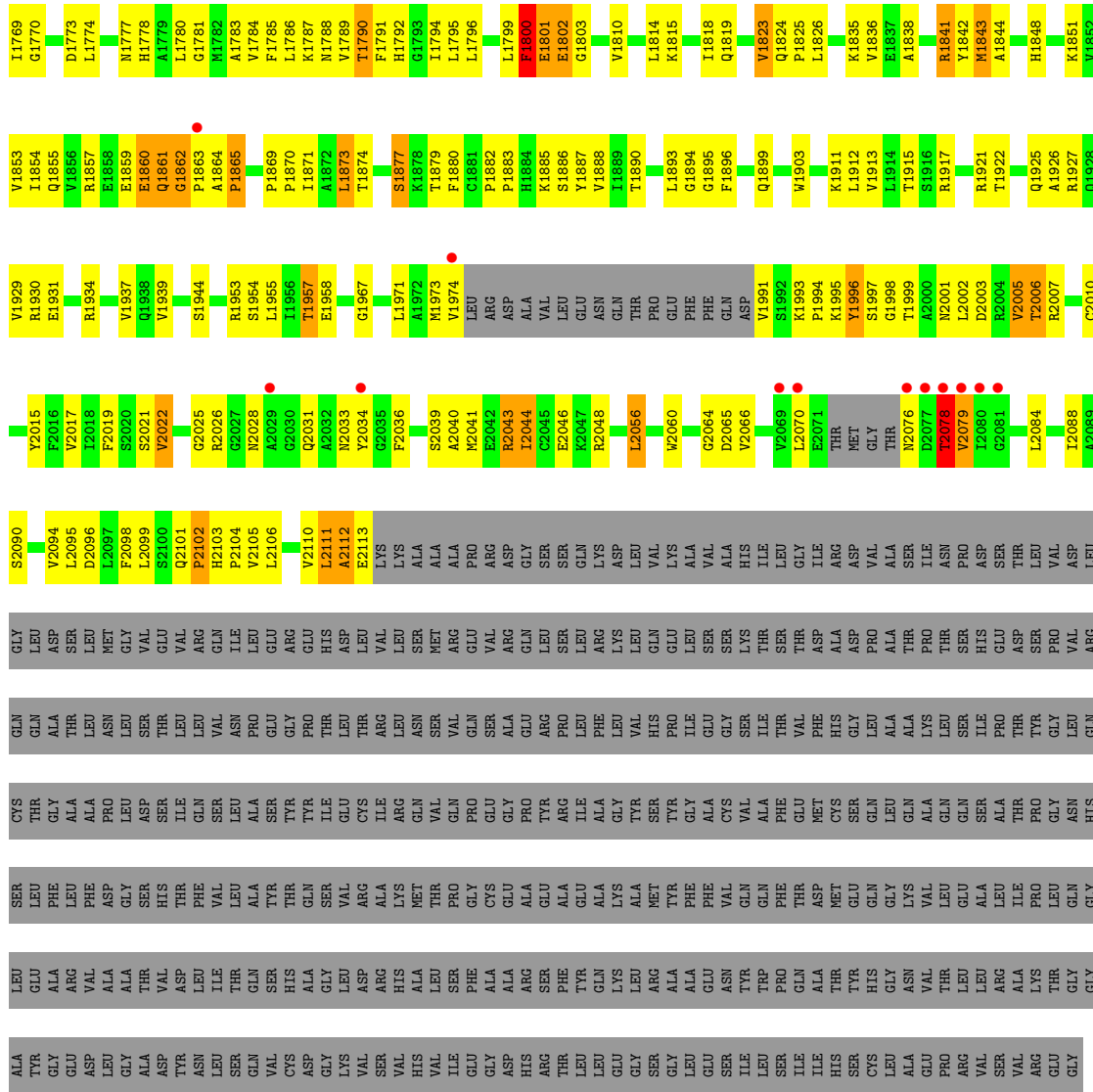
### 3 Residue-property plots

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

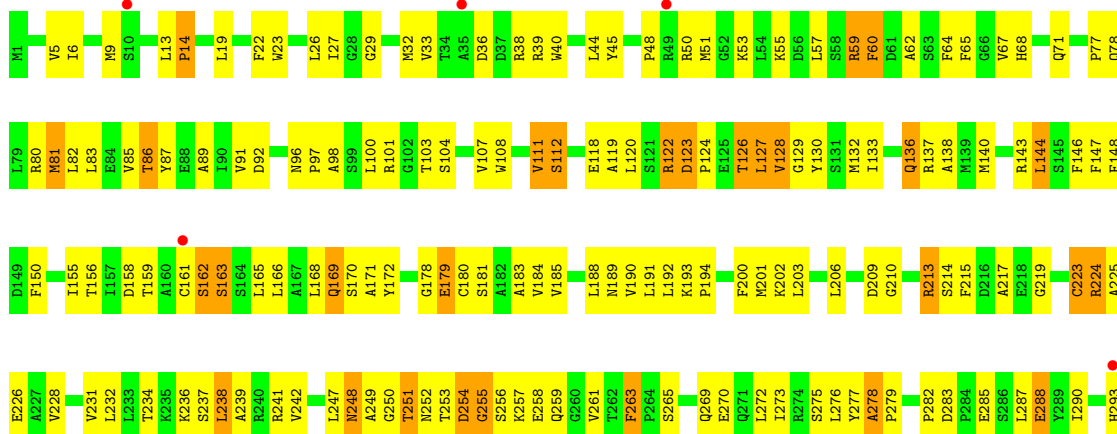
#### • Molecule 1: FATTY ACID SYNTHASE

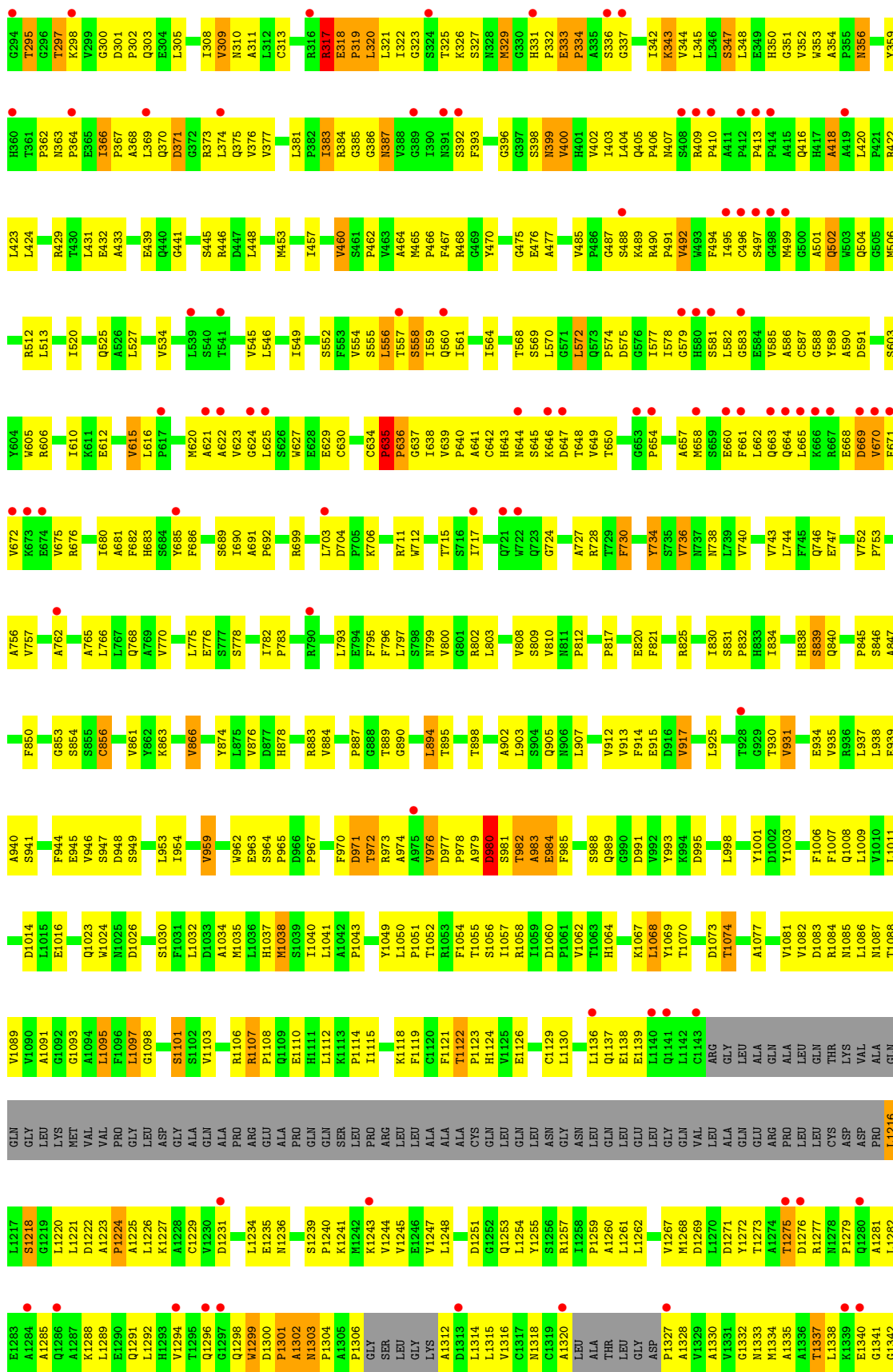


L1689	V1617	S1542	L1477	L1416	L1292	A1223	G1098	Q1023	S941	G853	R773
P1618	P1618	S1543	T1480	S1417	H1293	P1224	S1101	Q1024	S944	S854	F777
A1619	A1619	I1544	S1481	E1419	V1294	A1225	S1102	M1025	F945	S855	E944
R1620	R1620	R1545	P1482	D1420	T1295	L1226	V1103	D1026	F946	S856	S778
V1695	G1621	S1549	P1483	G1297	Q1296	K1227	A1104	S1030	S947	S857	S778
F1696	L1622	S1549	A1483	Q1298	Q1298	C1229	A1105	S1031	D948	S858	I782
T1697	A1623	E1484	P1484	M1299	M1299	C1229	R1106	F1031	S949	V851	F763
T1698	S1625	E1486	E1486	D1300	D1300	V1230	R1107	F1032		Y862	L784
E1703	V1626	M1486	M1486	P1301	P1301	D1231	P1108	D1033		K863	K757
R1704	P1488	H1487	PHE	A1302	A1302	T1232	Q1109	A1034			
K1705	S1489	T1488	LEU	M1303	M1303	A1233	E1110	M1035			
R1706	S1490	SER	THR	P1304	P1304	L1234	H1111	L1036			
R1711	S1491	PRO	PRO	A1305	A1305	E1235	L1112	H1037			
F1720	Q1589	GLU	GLU	P1306	P1306	M1237	R1113	M1038			
A1721	E1492	GLN	GLN	GLY	GLY	A1238	R1114	S1039			
N1722	L1493	LEU	LEU	SER	SER	P1239	I1115	I1040			
S1723	L1497	GLY	GLY	LEU	LEU	S1240	L1116	I1040			
T1724	D1500	ARG	ARG	GLY	GLY	K1241	L1117	P1043			
R1725	L1501	HIS	HIS	A1312	A1312	M1242	K1118	P1043			
T1726	L1501	LEU	LEU	D1313	D1313	K1243	F1119	Y1049			
S1727	M1502	LEU	LEU	L1314	L1314	V1244	T1122	L1050			
F1728	M1503	SER	SER	L1315	L1315	V1245	P1123	P1051			
E1729	M1504	GLN	GLN	L1316	L1316	A1248	H1124	T1052			
V1732	Y1505	D1376	D1376	G1317	G1317	A1249	Y1125	F1054			
G1733	Y1506	W1378	W1378	M1318	M1318	G1250	E1126	F1054			
R1734	R1507	F1382	F1382	C1319	C1319	G1251	C1129	S1056			
F1735	D1508	L1443	L1443	LEU	LEU	G1252	L1130	L1057			
S1736	G1509	M1444	M1444	ALA	ALA	Q1253	L1131	R1058			
T1737	M1510	V1446	V1446	THR	THR	L1254	L1133	R1058			
R1738	Y1512	G1447	G1447	LEU	LEU	Y1255	T1134	R1066			
E1739	G1513	C1448	C1448	GLY	GLY	S1256	T1134	L1068			
V1739	R1514	F1396	F1396	ASP	ASP	R1257	A1135	K1067			
G1740	R1515	L1387	L1387	PRO	PRO	I1258	LEU	Y1069			
V1741	H1516	L1389	L1389	ALA	ALA	A1260	GLU	Y1069			
D1742	F1517	S1451	S1451	VAL	VAL	L1261	LEU	T1070			
L1743	P1518	G1452	G1452	ALA	ALA	L1262	LEU	D1073			
N1746	A1519	V1453	V1453	VAL	VAL	V1267	GLN	T1074			
S1747	E1520	V1454	V1454	VAL	VAL	M1268	LEU	A1077			
L1748	R1523	M1456	M1456	GLY	GLY	D1269	VAL	Y1082			
A1749	P1524	Y1457	Y1457	ASN	ASN		VAL	R1083			
L1753	E1525	L1460	L1460	MET	MET		ARG	R1084			
Q1754	K1526	R1461	R1461	ALA	ALA	Y1272	GLY	L998			
V1757	Q1527	K1462	K1462	ALA	ALA	T1273	ALA	D1083			
R1758	E1529	E1463	E1463	THR	THR	A1274	ALA	R1084			
C1759	E1530	P1464	P1464	LYS	LYS	T1275	ALA	N1085			
L1760	H1530	G1465	G1465	GLU	GLU	D1276	LEU	L1086			
G1761	A1531	G1466	G1466	G1341	G1341	R1277	LEU	N1087			
H1762	F1532	H1467	H1467	G1342	G1342	M1278	THR	T1088			
H1763	V1533	R1468	R1468	F1343	F1343	P1279	LYS	V1089			
V1764	M1534	I1469	I1469	L1344	L1344	A1285	VAL	V1090			
R1765	G1601	R1470	R1470	L1345	L1345	A1286	VAL	Q1008			
F1766	R1611	C1471	C1471	L1346	L1346	Q1286	ALA	E934			
L1767	V1472	H1471	H1471	H1347	H1347	A1287	GLN	V955			
E1768	R1613	S1412	S1412	T1348	T1348	K1288	GLN	R936			
R1769	M1614	V1474	V1474	L1349	L1349	L1289	GLY	L937			
L1769	G1615	L1475	L1475	LEU	LEU	E1290	LYS	L938			
G1769	L1541	F1415	F1415	ALA	ALA	Q1291	MET	E939			
L1769	L1541	F1415	F1415	ALA	ALA			A940			



• Molecule 1: FATTY ACID SYNTHASE





F1343	L1473	F1696	G1770	I1854	R1930	T2006	G2081	LEU	THR	LEU	GLN	
L1344	V1474	T1697	D1773	Q1855	E1931	R2007	G2082	ASP	GLY	ASP	ALA	
L1346	S1476	T1698	L1774	R1856	W1932	W2007	I2088	SER	ALA	SER	THR	
H1347	N1476	E1703	M1777	R1857	R1933	C2010	I2089	ASN	ALA	ASP	THR	
L1348	L1477	K1704	H1778	E1858	R1934	L2013	D2096	MET	LEU	GLY	ASN	
L1349	T1480	R1705	H1779	E1859	V1937	L2014	L2097	VAL	LEU	VAL	SER	
LEU	S1481	A1706	L1780	E1860	Q1938	V2015	F2098	GLU	GLU	THR	THR	
ALA	E1419	Y1707	L1781	Q1861	L1939	F2016	L2099	VAL	ILE	LEU	PRO	
GLY	A1483	A1783	M1782	P1863	L1940	V2017	S2100	VAL	GLN	VAL	GLN	
HIS	T1420	P1712	M1783	P1864	V1941	L2018	Q2101	VAL	GLN	VAL	VAL	
PRO	F1422	P1713	V1784	P1865	S1944	L2019	S2102	ASN	ILE	ASN	PRO	
LEU	M1486	F1713	F1785	P1866	S1944	S2020	H2103	LEU	LEU	LEU	ALA	
GLY	H1487	T1641	F1786	L1868	G1951	S2021	P2104	GLU	GLU	GLU	GLU	
GLU	P1488	L1642	L1786	P1869	G1952	W2022	V2105	ARG	TYR	TYR	GLY	
MET	S1428	L1643	K1787	L1870	A1952	W2023	L2106	ARG	TYR	THR	GLY	
VAL	L1429	C1564	M1788	A1871	L1953	S2024	L2106	PRO	TYR	THR	PRO	
GLY	L1430	S1565	V1789	A1872	S1954	G2025	L2111	HIS	ILE	SER	THR	
PHE	D1431	V1566	V1790	L1873	S1954	G2026	L2112	THR	GLU	LEU	LEU	
LEU	D1432	Y1567	F1791	L1874	L1955	G2027	X2114	VAL	LEU	VAL	ARG	
THR	L1433	Y1568	H1792	G1875	L1956	N2028	LYS	LEU	LEU	ARG	ARG	
SER	A1434	T1569	H1793	G1876	E1958	Q2031	ALA	ALA	ALA	ALA	ALA	
PRO	M1504	S1570	G1794	L1877	E1958	A2032	ALA	ALA	ALA	ALA	ALA	
GLN	V1505	F1573	F1728	K1878	G1966	N2033	ALA	ALA	ALA	ALA	ALA	
GLY	Y1506	R1507	E1729	L1879	G1967	W2034	ARG	ARG	ARG	ARG	ARG	
GLY	R1439	Y1576	V1732	E1800	L1971	G2035	ASP	ASP	ASP	ASP	ASP	
ARG	P1440	Y1576	L1733	E1801	L1972	F2036	GLY	GLY	GLY	GLY	GLY	
HIS	V1441	T1580	R1734	E1802	A1973	G2039	GLY	GLY	GLY	GLY	GLY	
LEU	W1442	G1512	H1735	G1803	M1973	S2039	SER	SER	SER	SER	SER	
L1443	L1443	A1513	T1736	G1804	S1974	A2040	SER	SER	SER	SER	SER	
L1444	M1444	K1582	L1736	G1804	S1886	W2041	GLN	GLN	GLN	GLN	GLN	
L1445	R1515	L1583	K1739	V1810	Y1887	R1976	GLN	GLN	GLN	GLN	GLN	
L1446	R1516	L1583	G1740	V1811	Y1888	D1977	LYS	LYS	LYS	LYS	LYS	
L1448	F1517	P1585	L1741	L1813	L1889	E2042	ASP	ASP	ASP	ASP	ASP	
C1448	L1518	D1586	D1742	L1814	L1890	R2043	LEU	LEU	LEU	LEU	LEU	
S1449	L1519	S1587	L1743	K1815	G1894	L2044	LEU	LEU	LEU	LEU	LEU	
T1450	E1520	S1587	V1744	L1818	G1895	R2048	ALA	ALA	ALA	ALA	ALA	
S1451	R1523	L1589	L1745	Q1819	G1895	R2049	ALA	ALA	ALA	ALA	ALA	
G1452	P1524	T1594	N1746	V1823	L1898	L2056	ALA	ALA	ALA	ALA	ALA	
V1453	E1525	D1596	L1747	V1824	Q1899	W2060	ILE	ILE	ILE	ILE	ILE	
V1454	K1526	C1597	A1749	P1825	L1900	W2069	LEU	LEU	LEU	LEU	LEU	
G1455	K1527	M1598	L1753	K1835	W1903	F1987	LEU	LEU	LEU	LEU	LEU	
M1456	T1528	M1598	Q1754	V1836	L1904	F1988	ASP	ASP	ASP	ASP	ASP	
V1457	E1529	E1602	A1755	E1837	K1911	Q1988	ALA	ALA	ALA	ALA	ALA	
M1458	H1530	F1603	G1756	E1837	L1912	Q1989	ARG	ARG	ARG	ARG	ARG	
C1459	A1531	F1603	V1757	E1838	L1913	D1990	ASP	ASP	ASP	ASP	ASP	
L1460	F1532	R1606	R1758	A1838	V1913	V1991	VAL	VAL	VAL	VAL	VAL	
R1461	V1533	R1606	C1758	A1839	L1914	S1992	ALA	ALA	ALA	ALA	ALA	
X1462	L1462	D1607	G1759	L1840	T1915	K1994	THR	THR	THR	THR	THR	
E1463	E1463	R1611	L1760	R1841	S1916	K1995	ASN	ASN	ASN	ASN	ASN	
P1464	P1464	R1612	A1761	R1842	R1917	Y1996	PRO	PRO	PRO	PRO	PRO	
G1465	G1465	V1613	Q1762	M1843	R1917	Y1996	PRO	PRO	PRO	PRO	PRO	
G1466	G1466	M1614	H1763	M1844	G1921	G1997	ASP	ASP	ASP	ASP	ASP	
H1467	H1467	D1540	H1633	A1844	R1921	G1998	GLY	GLY	GLY	GLY	GLY	
R1406	R1406	G1615	G1765	H1848	T1922	W2001	THR	THR	THR	THR	THR	
Q1407	Q1407	M1616	F1766	H1885	Q1925	L2002	LEU	LEU	LEU	LEU	LEU	
T1408	T1408	S1542	P1617	K1851	A1926	L2003	VAL	VAL	VAL	VAL	VAL	
L1409	L1409	P1618	P1618	V1852	R1927	D2003	ASP	ASP	ASP	ASP	ASP	
Q1410	Q1410	L1622	L1622	V1853	I1769	W2005	GLY	GLY	GLY	GLY	GLY	



GLU	GLU
ALA	GLY
ARG	GLU
VAL	ASP
ALA	LEU
ALA	GLY
THR	ALA
VAL	ASP
ASP	TYR
LEU	ASN
ILE	LEU
THR	SER
GLN	GLN
SER	VAL
HIS	CYS
GLY	ASP
ALA	ASP
LEU	GLY
ASP	LYS
ARG	VAL
HIS	SER
ALA	VAL
ALA	HIS
LEU	VAL
LEU	VAL
SER	ILE
PHE	GLU
ALA	GLY
ALA	ASP
ARG	HIS
SER	ARG
PHE	THR
SER	THR
TYR	LEU
GLN	LEU
LEU	LEU
LYS	GLU
LEU	GLY
ARG	SER
ALA	GLY
ALA	LEU
GLU	GLU
ASN	SER
TYR	ILE
TRP	LEU
PRO	SER
PRO	SER
GLN	ILE
ALA	ILE
THR	HIS
TYR	SER
HIS	CYS
GLY	LEU
ASN	ALA
VAL	GLU
THR	PRO
THR	ARG
LEU	VAL
ARG	SER
ALA	SER
ALA	VAL
LYS	ARG
THR	GLU
GLY	GLY
ALA	ALA

## 4 Data and refinement statistics

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	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
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	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 <sup>2</sup> )	95.2	Xtrriage
Anisotropy	0.218	Xtrriage
Bulk solvent $k_{sol}$ (e/Å <sup>3</sup> ), $B_{sol}$ (Å <sup>2</sup> )	0.27 , 73.0	EDS
L-test for twinning <sup>2</sup>	$\langle  L  \rangle = 0.42$ , $\langle L^2 \rangle = 0.25$	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 <sup>2</sup> )	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.*

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

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

## 5 Model quality [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:CG	1:B:1662:ARG:HH11	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

*Continued on next page...*

*Continued from previous page...*

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:384:ARG:HH11	1:A:384:ARG:HG3	1.39	0.87
1:A:1348:THR:HG22	1:A:1349:LEU:H	1.37	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:50:ARG:HD3	1:A:210:GLY:O	1.75	0.86
1:A:1662:ARG:HH11	1:A:1662:ARG:HG3	1.40	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:616:LEU:HD23	1:A:617:PRO:HD2	1.58	0.83
1:A:1082:VAL:HG22	1:A:1089:VAL:HG22	1.60	0.83
1:A:1289:LEU:HD22	1:A:1294:VAL:HB	1.60	0.83
1:A:319:PRO:HD2	1:A:373:ARG:O	1.78	0.83
1:A:1528:THR:HG22	1:A:1530:HIS:H	1.43	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:319:PRO:HD2	1:B:373:ARG:O	1.79	0.82
1:B:1732:VAL:O	1:B:1736:THR:HB	1.78	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

*Continued on next page...*

*Continued from previous page...*

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:333:GLU:HB2	1:A:334:PRO:CD	2.09	0.81
1:A:1616:MET:HE3	1:A:1650:ILE:HA	1.62	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:278:ALA:HB3	1:B:279:PRO:HD3	1.61	0.80
1:B:1662:ARG:HH11	1:B:1662:ARG:HG3	1.44	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:118:GLU:HG3	1:B:118:GLU:CG	2.14	0.78
1:A:856:CYS:SG	1:B:856:CYS:HB2	2.23	0.78
1:A:1034:ALA:HA	1:A:1037:HIS:CD2	2.19	0.78
1:B:333:GLU:HB2	1:B:334:PRO:CD	2.12	0.78
1:A:14:PRO:HG2	1:A:329:MET:HG3	1.64	0.78
1:A:1466:GLY:HA2	1:A:1469:ILE:HG13	1.65	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

*Continued on next page...*

*Continued from previous page...*

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:254:ASP:HB3	1:B:257:LYS:HE2	1.67	0.76
1:B:1538:ARG:HH22	1:B:1585:PRO:HG2	1.50	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:H	1:B:1735:HIS:CD2	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:938:LEU:HB3	1:B:945:GLU:OE1	1.86	0.74
1:A:1130:LEU:HD11	1:A:1221:LEU:HD13	1.69	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:581:SER:HB2	1:A:683:HIS:NE2	2.03	0.73
1:A:1736:THR:HG23	1:A:1739:LYS:N	2.01	0.73
1:B:622:ALA:HA	1:B:650:THR:HA	1.69	0.73
1:B:1227:LYS:HB2	1:B:1261:LEU:HD22	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

*Continued on next page...*

*Continued from previous page...*

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:82:LEU:HD22	1:A:188:LEU:HD11	1.72	0.72
1:A:1234:LEU:HD22	1:A:1262:LEU:HD22	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:87:TYR:CE2	1:A:97:PRO:HG2	2.26	0.71
1:A:1535:VAL:HG12	1:A:1537:SER:H	1.55	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:23:TRP:HA	1:B:26:LEU:HD12	1.73	0.70
1:B:1234:LEU:HD22	1:B:1262:LEU:HD22	1.73	0.70

*Continued on next page...*



*Continued from previous page...*

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:136:GLN:C	1:B:136:GLN:HE21	1.95	0.70
1:B:1254:LEU:HD21	1:B:1318:ASN:HB2	1.72	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:254:ASP:HB3	1:A:257:LYS:HE2	1.72	0.70
1:A:1991:VAL:O	1:A:1994:PRO:HD2	1.91	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:H	1:A:1735:HIS:HD2	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:87:TYR:O	1:B:91:VAL:HG22	1.92	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: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:HE21	1:A:136:GLN:C	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:87:TYR:CE2	1:B:97:PRO:HG2	2.28	0.68
1:B:1653:THR:HG22	1:B:1810:VAL:HG12	1.73	0.68
1:A:111:VAL:CG2	1:A:188:LEU:HB2	2.23	0.68
1:A:252:ASN:ND2	1:A:272:LEU:HB2	2.07	0.68
1:A:1477:LEU:CD1	1:A:2043:ARG:HD2	2.22	0.68
1:B:627:TRP:HB2	1:B:643:HIS:ND1	2.08	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:A:23:TRP:HA	1:A:26:LEU:HD12	1.75	0.68
1:A:2070:LEU:HD21	1:A:2076:ASN:N	2.08	0.68
1:A:1348:THR:HG21	1:A:1378:TRP:CZ2	2.29	0.68
1:A:506:MET:HE3	1:A:559:ILE:HD12	1.74	0.68

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1126:GLU:HB3	1:A:1129:CYS:SG	2.34	0.68
1:A:1254:LEU:HD13	1:A:1316:VAL:HG12	1.75	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:CD2	1:A:1735:HIS:N	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: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:1814:LEU:O	1:B:1818:ILE:HG13	1.94	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:288:GLU:OE1	1:B:383:ILE:HG13	1.95	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:643:HIS:CD2	1:B:746:GLN:HB3	2.30	0.67
1:B:1666:GLN:O	1:B:1669:GLU:HB2	1.95	0.67
1:B:1735:HIS:CD2	1:B:1735:HIS:N	2.62	0.67
1:A:277:TYR:CE2	1:A:287:LEU:HD11	2.30	0.67
1:A:581:SER:HB2	1:A:683:HIS:CE1	2.30	0.67
1:A:1226:LEU:HD23	1:A:1401:LEU:HD21	1.77	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

*Continued on next page...*

*Continued from previous page...*

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:503:TRP:CD1	1:A:787:LYS:HB2	2.31	0.66
1:A:1644:GLU:HB3	1:A:1825:PRO:CB	2.24	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:HG3	1:B:1694:ARG:NH1	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: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:A:1252:GLY:HA3	1:A:1318:ASN:HB3	1.77	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:982:THR:C	1:B:984:GLU:H	2.00	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: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:502:GLN:HB2	1:A:546:LEU:HD22	1.78	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: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:399:ASN:HD22	1:A:399:ASN:H	1.43	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:889:THR:HG21	1:A:1032:LEU:HB2	1.78	0.65
1:A:1244:VAL:HG13	1:A:1314:LEU:HD23	1.79	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:615:VAL:HG22	1:B:686:PHE: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:A:44:LEU:HG	1:A:45:TYR:CD1	2.32	0.64
1:A:302:PRO:HA	1:A:366:ILE:HG21	1.79	0.64
1:A:325:THR:OG1	1:A:343:LYS:HG2	1.97	0.64
1:A:1395:SER:HB3	1:A:1399:SER:O	1.97	0.64
1:B:64:PHE:HB2	1:B:429:ARG:NH2	2.11	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: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: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:B:1472:VAL:HG12	1:B:1473:LEU:H	1.62	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:64:PHE:CE2	1:B:464:ALA:HB1	2.32	0.64
1:B:2102:PRO:HD2	1:B:2103:HIS:HD2	1.62	0.64
1:A:59:ARG:HG3	1:A:838:HIS:HB3	1.79	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:B:168:LEU:HB2	1:B:185:VAL:HG11	1.78	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:A:137:ARG:NH1	1:B:137:ARG:HD2	2.12	0.64
1:B:127:LEU:O	1:B:127:LEU:HG	1.97	0.64
1:B:570:LEU:HB3	1:B:810:VAL:HB	1.78	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1285:ALA:O	1:B:1289:LEU:N	2.29	0.64
1:A:1564:CYS:SG	1:A:1628:LEU:HD21	2.38	0.64
1:B:302:PRO:HA	1:B:366:ILE:HG21	1.80	0.64
1:B:2002:LEU:O	1:B:2006:THR:HB	1.97	0.64
1:A:132:MET:HE1	1:B:200:PHE:CE2	2.33	0.64
1:B:319:PRO:HB2	1:B:320:LEU:HD23	1.79	0.64
1:B:2098:PHE:CE2	1:B:2106:LEU:HB2	2.33	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:112:SER:HB3	1:A:334:PRO:HG3	1.79	0.63
1:A:1442:TRP:CZ2	1:A:1497:LEU:HD23	2.32	0.63
1:B:44:LEU:HG	1:B:45:TYR:CD1	2.33	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:A:1746:ASN:HD21	1:A:1753:LEU:HD12	1.62	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:1303:ASN:N	1:B:1304:PRO:CD	2.61	0.63
1:B:9:MET:HE3	1:B:345:LEU:HD12	1.80	0.63
1:B:1475:SER:HB3	1:B:1505:VAL:HG13	1.81	0.63
1:B:1735:HIS:H	1:B:1735:HIS:HD2	1.43	0.63
1:A:501:ALA:HB3	1:A:556:LEU:HD21	1.80	0.63
1:A:1954:SER:O	1:A:1958:GLU:HG3	1.97	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: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:1460:LEU:HD13	1:B:2032:ALA:HB2	1.81	0.63
1:B:460:VAL:HG21	1:B:465:MET:HG3	1.79	0.62
1:B:1268:MET:HE2	1:B:1268:MET:HA	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: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:A:1545:ARG:HG3	1:A:1545:ARG:NH1	2.12	0.62
1:B:251:THR:HB	1:B:399:ASN:O	2.00	0.62
1:B:1433:LEU:HD13	1:B:1469:ILE:HD11	1.79	0.62

*Continued on next page...*

Continued from previous page...

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: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:B:1857:ARG:NH1	1:B:1871:ILE:HD11	2.15	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:77:PRO:O	1:B:81:MET:HG2	1.99	0.62
1:B:399:ASN:H	1:B:399:ASN:HD22	1.47	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:A:159:THR:HB	1:A:162:SER:OG	1.99	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:A:1734:ARG:O	1:A:1736:THR:N	2.32	0.62
1:B:752:VAL:HG11	1:B:775:LEU:HD21	1.81	0.62
1:A:542:ASP:H	1:A:545:VAL:HG12	1.63	0.62
1:A:1009:LEU:HD13	1:A:1023:GLN:O	2.00	0.62
1:B:9:MET:HE1	1:B:345:LEU:HB2	1.82	0.62
1:A:251:THR:HB	1:A:399:ASN:O	2.00	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:B:570:LEU:HD13	1:B:800:VAL:HG13	1.82	0.62
1:B:1454:VAL:HG13	1:B:1503:MET:HE1	1.80	0.62
1:B:420:LEU:HD11	1:B:512:ARG:HB3	1.82	0.62
1:B:972:THR:HG22	1:B:1081:VAL:CG2	2.29	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:A:874:TYR:HB2	1:A:1006:PHE:CD2	2.34	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:23:TRP:CE2	1:A:350:HIS:CD2	2.88	0.61
1:A:123:ASP:HB3	1:A:126:THR:CB	2.28	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:317:ARG:O	1:A:319:PRO:HD3	1.99	0.61
1:A:1095:LEU:C	1:A:1095:LEU:HD12	2.20	0.61
1:A:1420:ASP:O	1:A:1425:TRP:CH2	2.54	0.61

Continued on next page...

*Continued from previous page...*

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:384:ARG:HH11	1:A:384:ARG:CG	2.13	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: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:331:HIS:CE1	1:A:333:GLU:HA	2.35	0.61
1:A:1454:VAL:HG13	1:A:1503:MET:HE1	1.82	0.61
1:B:347:SER:HB2	1:B:352:VAL:O	2.00	0.61
1:B:889:THR:HG21	1:B:1032:LEU:HB2	1.80	0.61
1:A:368:ALA:CA	1:A:371:ASP:HB3	2.31	0.61
1:A:1466:GLY:HA2	1:A:1469:ILE:CG1	2.29	0.61
1:B:248:ASN:ND2	1:B:249:ALA:H	1.98	0.61
1:B:1838:ALA:HA	1:B:1841:ARG:HG3	1.80	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:B:1647:SER:HA	1:B:1851:LYS:HG3	1.81	0.61
1:B:1703:GLU:O	1:B:1706:ALA:HB3	2.01	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:98:ALA:HA	1:A:101:ARG:HG3	1.82	0.60
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: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: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:B:1408:THR:H	1:B:1409:PRO:HD3	1.65	0.60
1:A:1656:TYR:CD2	1:A:1687:ILE:HD13	2.35	0.60
1:B:123:ASP:HB3	1:B:126:THR:HB	1.81	0.60
1:B:327:SER:OG	1:B:356:ASN:ND2	2.34	0.60
1:B:1035:MET:SD	1:B:1091:ALA:HB3	2.42	0.60
1:B:1299:TRP:CZ2	1:B:1304:PRO:O	2.54	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:247:LEU:HD11	1:A:405:GLN:HB2	1.82	0.60
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: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:45:TYR:HE2	1:B:124:PRO:HB2	1.66	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: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:368:ALA:HA	1:A:371:ASP:HB3	1.82	0.60
1:A:1575:ASP:HA	1:A:1599:LEU:HD23	1.83	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:143:ARG:HG2	1:A:143:ARG:HH11	1.67	0.60
1:A:1279:PRO:HG3	1:A:1298:GLN:NE2	2.16	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: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:A:586:ALA:O	1:A:589:TYR:HB3	2.02	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:A:883:ARG:HH21	1:A:1107:ARG:HD3	1.67	0.60
1:A:1038:MET:HA	1:A:1038:MET:CE	2.32	0.60
1:A:1549:SER:O	1:A:1552:HIS:HB3	2.01	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:B:1657:TYR:HA	1:B:1661:VAL:CG2	2.32	0.60
1:A:36:ASP:CB	1:A:38:ARG:HG3	2.32	0.60
1:A:1086:LEU:N	1:A:1086:LEU:HD23	2.17	0.60
1:B:1396:PHE:CE2	1:B:1397:TYR:HD2	2.20	0.60
1:B:14:PRO:HD3	1:B:226:GLU:O	2.02	0.59
1:B:646:LYS:HG2	1:B:746:GLN:HE21	1.67	0.59
1:B:1466:GLY:HA2	1:B:1469:ILE:CG1	2.32	0.59
1:B:1625:SER:O	1:B:1626:VAL:HG23	2.02	0.59
1:A:327:SER:OG	1:A:356:ASN:ND2	2.35	0.59
1:A:1580:THR:HG22	1:A:1582:LYS:N	2.17	0.59
1:B:384:ARG:HH11	1:B:384:ARG:CG	2.12	0.59

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1035:MET:HE3	1:B:1089:VAL:CG1	2.32	0.59
1:A:166:LEU:HD12	1:A:251:THR:HG21	1.83	0.59
1:B:1662:ARG:CG	1:B:1662:ARG:NH1	2.49	0.59
1:A:1857:ARG:NH1	1:A:1869:PRO:CB	2.66	0.59
1:B:662:LEU:HD22	1:B:672:VAL:CG1	2.29	0.59
1:B:1657:TYR:HA	1:B:1661:VAL:HG23	1.84	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:322:ILE:HD12	1:B:374:LEU:HD13	1.85	0.59
1:B:366:ILE:HG12	1:B:366:ILE:O	2.02	0.59
1:B:630:CYS:HB3	1:B:640:PRO:HG3	1.85	0.59
1:A:9:MET:HE3	1:A:345:LEU:HD12	1.85	0.59
1:A:1736:THR:HG23	1:A:1740:GLY:H	1.66	0.59
1:B:1662:ARG:HH11	1:B:1662:ARG:HG2	1.67	0.59
1:A:615:VAL:HG22	1:A:616:LEU:H	1.68	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:B:288:GLU:HG3	1:B:385:GLY:O	2.02	0.59
1:B:317:ARG:O	1:B:319:PRO:HD3	2.02	0.59
1:B:399:ASN:N	1:B:399:ASN:ND2	2.51	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:A:1118:LYS:HD2	1:A:2103:HIS:CE1	2.38	0.59
1:B:646:LYS:HG2	1:B:746:GLN:NE2	2.18	0.59
1:B:1454:VAL:HG13	1:B:1503:MET:CE	2.33	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:B:128:VAL:HG11	1:B:130:TYR:CZ	2.37	0.59
1:A:165:LEU:HB2	1:A:337:GLY:HA3	1.85	0.58
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:B:13:LEU:HB3	1:B:14:PRO:HD2	1.84	0.58
1:B:878:HIS:HB2	1:B:1007:PHE:CE1	2.38	0.58
1:A:64:PHE:HB2	1:A:429:ARG:NH2	2.13	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:B:165:LEU:HB2	1:B:337:GLY:HA3	1.85	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:B:1472:VAL:HG12	1:B:1473:LEU:N	2.17	0.58
1:B:1539:GLY:HA2	1:B:1580:THR:O	2.02	0.58
1:B:1736:THR:O	1:B:1739:LYS:HB2	2.03	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:612:GLU:O	1:B:612:GLU:HG2	2.04	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: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: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: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:297:THR:HB	1:B:300:GLY:N	2.19	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:A:155:ILE:HD11	1:B:166:LEU:HD11	1.85	0.58
1:A:595:THR:CG2	1:A:597:GLU:HG2	2.33	0.58
1:A:1122:THR:HG21	1:A:1517:PHE:HZ	1.68	0.58
1:A:1248:LEU:HD21	1:A:1277:ARG:HH21	1.69	0.58
1:B:1300:ASP:O	1:B:1302:ALA:N	2.36	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:23:TRP:CE2	1:B:350:HIS:CD2	2.92	0.58
1:B:1003:TYR:CE1	1:B:1037:HIS:HE1	2.21	0.58
1:A:13:LEU:HB3	1:A:14:PRO:HD2	1.85	0.57
1:A:112:SER:HB2	1:A:334:PRO:CG	2.31	0.57
1:A:1068:LEU:HD12	1:A:1077:ALA:O	2.04	0.57
1:A:1580:THR:HG22	1:A:1582:LYS:H	1.69	0.57
1:B:1241:LYS:HG3	1:B:1241:LYS:O	2.03	0.57
1:A:103:THR:HG22	1:A:104:SER:N	2.19	0.57
1:A:945:GLU:OE1	1:B:938:LEU:HB3	2.03	0.57
1:B:1277:ARG:HD3	1:B:1300:ASP:OD2	2.04	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

*Continued on next page...*

*Continued from previous page...*

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: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: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:B:234:THR:HG21	1:B:239:ALA:HB2	1.84	0.57
1:B:1953:ARG:HG2	1:B:2005:VAL:CG1	2.34	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:91:VAL:O	1:B:457:ILE:HD11	2.04	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: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: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: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:B:1538:ARG:HH12	1:B:1585:PRO:CG	2.17	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:A:1672:LEU:HD12	1:A:1696:PHE:O	2.04	0.57
1:B:368:ALA:CA	1:B:371:ASP:HB3	2.34	0.57
1:B:1996:TYR:C	1:B:1996:TYR:CD2	2.78	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: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:B:123:ASP:HB3	1:B:126:THR:CB	2.34	0.57
1:B:466:PRO:HG2	1:B:467:PHE:HD1	1.70	0.57
1:B:1720:PHE:N	1:B:1720:PHE:HD1	2.01	0.57
1:A:399:ASN:H	1:A:399:ASN:ND2	2.00	0.57
1:A:1657:TYR:CZ	1:A:1799:LEU:HD11	2.40	0.57
1:B:22:PHE:CD2	1:B:26:LEU:HD11	2.40	0.57
1:B:247:LEU:HD11	1:B:405:GLN:HB2	1.85	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:799:ASN:HA	1:B:802:ARG:HG3	1.86	0.57
1:B:1277:ARG:HD3	1:B:1300:ASP:CG	2.24	0.57
1:A:1485:GLU:HB3	1:A:1506:TYR:OH	2.05	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:B:1320:ALA:HA	1:B:1349:LEU:HD11	1.85	0.57
1:B:1565:SER:HB2	1:B:1857:ARG:HH22	1.63	0.57
1:B:1580:THR:HG22	1:B:1582:LYS:H	1.70	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: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:A:1457:VAL:CG2	1:A:1473:LEU:HD22	2.32	0.56
1:B:980:ASP:CB	1:B:982:THR:HG22	2.33	0.56
1:A:19:LEU:HD11	1:A:342:ILE:HD13	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: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:B:166:LEU:HD12	1:B:251:THR:HG21	1.87	0.56
1:B:970:PHE:O	1:B:1067:LYS:HE2	2.05	0.56
1:A:248:ASN:ND2	1:A:249:ALA:H	2.03	0.56
1:A:1545:ARG:HH11	1:A:1545:ARG:CG	2.17	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:68:HIS:HB3	1:A:71:GLN:HG3	1.88	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: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:278:ALA:CB	1:B:279:PRO:CD	2.83	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

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1423:PHE:CD1	1:B:1989:GLN:HB3	2.41	0.56
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: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:CD1	1:A:1720:PHE:N	2.74	0.56
1:B:19:LEU:HD11	1:B:342:ILE:HD13	1.88	0.56
1:B:309:VAL:HG12	1:B:313:CYS:HB2	1.88	0.56
1:B:993:TYR:CZ	1:B:1008:GLN:HA	2.40	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:1669:GLU:HG2	1:B:1742:ASP:OD2	2.06	0.56
1:B:1720:PHE:N	1:B:1720:PHE:CD1	2.71	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:9:MET:HE1	1:A:345:LEU:HB2	1.88	0.55
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:C	1:A:1996:TYR:CD2	2.79	0.55
1:B:424:LEU:CD2	1:B:441:GLY:HA3	2.36	0.55
1:B:1746:ASN:HD21	1:B:1753:LEU:HD12	1.71	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:A:1570:SER:OG	1:A:1602:GLU:HB3	2.07	0.55
1:B:22:PHE:CE2	1:B:26:LEU:HD11	2.40	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:A:1569:THR:HG23	1:A:1602:GLU:O	2.06	0.55
1:B:371:ASP:CG	1:B:371:ASP:O	2.43	0.55
1:B:1893:LEU:HB3	1:B:1925:GLN:NE2	2.20	0.55
1:A:36:ASP:HB3	1:A:38:ARG:CG	2.37	0.55
1:B:36:ASP:CB	1:B:38:ARG:HG3	2.35	0.55
1:B:278:ALA:HB3	1:B:279:PRO:CD	2.34	0.55
1:B:621:ALA:CB	1:B:662:LEU:HD11	2.36	0.55
1:B:1996:TYR:CD1	1:B:2040:ALA:HB1	2.41	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

*Continued on next page...*

*Continued from previous page...*

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:CD2	1:B:2103:HIS:H	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:22:PHE:CD2	1:A:26:LEU:HD11	2.41	0.55
1:A:81:MET:HG3	1:A:228:VAL:HG11	1.89	0.55
1:A:386:GLY:O	1:A:387:ASN:HB2	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: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:146:PHE:O	1:B:256:SER:HB3	2.07	0.55
1:A:429:ARG:HB3	1:A:429:ARG:HH11	1.70	0.55
1:A:1470:ARG:O	1:A:1470:ARG:HG3	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:40:TRP:CH2	1:A:194:PRO:HA	2.42	0.55
1:A:111:VAL:HG22	1:A:188:LEU:HB2	1.88	0.55
1:A:297:THR:HB	1:A:300:GLY:N	2.20	0.55
1:A:1857:ARG:HH11	1:A:1869:PRO:CB	2.19	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:98:ALA:O	1:B:101:ARG:HG3	2.07	0.55
1:B:393:PHE:CD1	1:B:399:ASN:HB3	2.42	0.55
1:B:615:VAL:HG22	1:B:686:PHE:CD2	2.42	0.55
1:B:644:ASN:HB2	1:B:648:THR:O	2.06	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:A:878:HIS:HB2	1:A:1007:PHE:CE1	2.42	0.54
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: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

*Continued on next page...*

*Continued from previous page...*

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: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: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: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:A:1115:ILE:CD1	1:A:2111:LEU:HG	2.31	0.54
1:B:228:VAL:O	1:B:228:VAL:HG23	2.07	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: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: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: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: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:1470:ARG:O	1:B:1472:VAL:HG23	2.07	0.54
1:B:1472:VAL:HG13	1:B:1502:VAL:O	2.08	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: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: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:343:LYS:HG3	1:B:344:VAL:N	2.22	0.54
1:B:1229:CYS:HB3	1:B:1403:LEU:HD22	1.90	0.54
1:A:359:TYR:OH	1:A:362:PRO:HG3	2.08	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:851:PRO:CB	1:B:122:ARG:HB3	2.37	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:856:CYS:SG	1:B:856:CYS:CB	2.96	0.54
1:A:1003:TYR:CE1	1:A:1037:HIS:HE1	2.26	0.54
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: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:96:ASN:ND2	1:B:98:ALA:HB3	2.19	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:A:48:PRO:HD3	1:A:201:MET:HE3	1.89	0.53
1:A:162:SER:OG	1:A:163:SER:N	2.41	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: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: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:642:CYS:HA	1:B:743:VAL:CG2	2.37	0.53
1:B:1068:LEU:HD12	1:B:1077:ALA:O	2.08	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: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: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:B:120:LEU:HD21	1:B:845:PRO:HG3	1.89	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:B:1394:ARG:HA	1:B:1400:VAL:HG22	1.88	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:A:945:GLU:OE2	1:B:940:ALA:HB3	2.09	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: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:A:1315:LEU:HB3	1:A:1344:LEU:CD1	2.38	0.53

*Continued on next page...*



*Continued from previous page...*

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: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: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: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:159:THR:CG2	1:B:398:SER:HB3	2.39	0.53
1:B:301:ASP:HB2	1:B:302:PRO:HD3	1.90	0.53
1:B:1418:VAL:HG13	1:B:1425:TRP:CH2	2.41	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:A:1656:TYR:HD2	1:A:1660:VAL:HG21	1.72	0.53
1:B:495:ILE:CD1	1:B:578:ILE:HB	2.39	0.53
1:B:972:THR:CG2	1:B:1081:VAL:HG23	2.38	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:963:GLU:OE1	1:B:963:GLU:HA	2.09	0.53
1:B:1338:LEU:CD1	1:B:1406:GLN:HG3	2.38	0.53
1:A:91:VAL:O	1:A:457:ILE:HD11	2.09	0.53
1:A:423:LEU:HD23	1:A:812:PRO:HG3	1.89	0.53
1:A:963:GLU:O	1:A:965:PRO:HD3	2.09	0.53
1:A:963:GLU:OE1	1:A:963:GLU:HA	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:B:1136:LEU:HD21	1:B:1218:SER:HA	1.89	0.53
1:B:1418:VAL:O	1:B:1418:VAL:HG12	2.08	0.53
1:B:1607:ASP:OD1	1:B:1611:ARG:HB3	2.09	0.53
1:A:252:ASN:HD21	1:A:272:LEU:HB2	1.74	0.53
1:A:254:ASP:O	1:A:255:GLY:O	2.26	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:A:1416:LEU:HD11	1:A:1425:TRP:HB3	1.90	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:765:ALA:HB1	1:B:768:GLN:HG2	1.89	0.53
1:B:1413:PRO:HA	1:B:1440:PRO:HB2	1.91	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1461:ARG:HG3	1:B:1461:ARG:O	2.09	0.53
1:B:1554:ALA:CB	1:B:1882:PRO:HB3	2.39	0.53
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: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:O	1:B:1874:THR:HG22	2.09	0.52
1:A:91:VAL:HG21	1:A:834:ILE:HD13	1.92	0.52
1:A:132:MET:HE1	1:B:200:PHE:HE2	1.73	0.52
1:A:159:THR:CG2	1:A:398:SER:HB3	2.40	0.52
1:A:429:ARG:HB3	1:A:429:ARG:NH1	2.23	0.52
1:A:1648:VAL:HB	1:A:1649:PRO:HD3	1.91	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:CD2	1:A:2103:HIS:H	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:39:ARG:NH1	1:A:57:LEU:HD22	2.24	0.52
1:A:166:LEU:HD11	1:B:155:ILE:HD11	1.90	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: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:166:LEU:O	1:B:166:LEU:HD23	2.09	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:B:1338:LEU:HG	1:B:1342:GLY:H	1.75	0.52
1:B:2103:HIS:HB2	1:B:2106:LEU:HD21	1.90	0.52
1:A:796:PHE:O	1:A:800:VAL:HG23	2.09	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

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1917:ARG:NH1	1:A:1974:VAL:HG12	2.25	0.52
1:B:808:VAL:HG12	1:B:809:SER:N	2.25	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:A:112:SER:O	1:A:137:ARG:NH2	2.43	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: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:1736:THR:HG21	1:A:1740:GLY:H	1.71	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:993:TYR:CZ	1:A:1008:GLN:HA	2.45	0.52
1:A:1001:TYR:HB3	1:A:1003:TYR:CD1	2.44	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:326:LYS:HE3	1:A:336:SER:HB2	1.91	0.51
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: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: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:A:1422:SER:HB2	1:A:1424:ARG:HG3	1.92	0.51
1:B:191:LEU:HD22	1:B:224:ARG:CZ	2.40	0.51
1:B:399:ASN:H	1:B:399:ASN:ND2	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: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:2102:PRO:HD2	1:B:2103:HIS:CD2	2.42	0.51
1:A:130:TYR:HA	1:B:203:LEU:HD21	1.92	0.51

*Continued on next page...*

*Continued from previous page...*

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:1456:MET:HG2	1:A:2036:PHE:HB2	1.92	0.51
1:B:506:MET:HE1	1:B:555:SER:HB3	1.92	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:A:1570:SER:HB3	1:A:1853:VAL:HG22	1.92	0.51
1:A:1674:HIS:CE1	1:A:1698:THR:HG21	2.45	0.51
1:A:2101:GLN:HG3	1:A:2102:PRO:HD2	1.93	0.51
1:B:169:GLN:OE1	1:B:250:GLY:HA2	2.10	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: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: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:CG	1:A:1662:ARG:NH1	2.55	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: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: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: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:1526:LYS:HD3	1:A:1552:HIS:NE2	2.25	0.51
1:B:81:MET:HG3	1:B:228:VAL:HG11	1.92	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: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:183:ALA:O	1:B:232:LEU:HD12	2.11	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:A:122:ARG:HG3	1:A:123:ASP:H	1.76	0.51
1:A:620:MET:HE3	1:A:682:PHE:O	2.11	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:941:SER:N	1:B:945:GLU:OE2	2.44	0.51
1:A:1411:ASP:HB2	1:A:1440:PRO:CD	2.41	0.51
1:B:111:VAL:HG22	1:B:188:LEU:HB2	1.93	0.51
1:B:321:LEU:H	1:B:321:LEU:HD12	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:2006:THR:O	1:B:2010:CYS:HB2	2.11	0.51
1:B:416:GLN:C	1:B:418:ALA:H	2.15	0.51
1:B:1473:LEU:HD21	1:B:1503:MET:CG	2.32	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:248:ASN:HD22	1:B:249:ALA:H	1.56	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:A:321:LEU:CD2	1:A:381:LEU:HD13	2.41	0.50
1:A:1223:ALA:HB1	1:A:1224:PRO:HD2	1.93	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: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:A:165:LEU:HD22	1:A:392:SER:HB2	1.93	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:HD2	1:A:1800:PHE:C	2.15	0.50
1:A:1861:GLN:O	1:A:1865:PRO:HG3	2.11	0.50
1:B:36:ASP:HB3	1:B:38:ARG:CG	2.40	0.50
1:B:1674:HIS:HE1	1:B:1756:SER:OG	1.94	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:776:GLU:HB3	1:A:778:SER:OG	2.12	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: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:B:1333:ASN:C	1:B:1335:ALA:H	2.14	0.50
1:A:59:ARG:N	1:A:59:ARG:HD2	2.26	0.50
1:A:495:ILE:CD1	1:A:578:ILE:HB	2.41	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1038:MET:HA	1:A:1038:MET:HE2	1.92	0.50
1:B:9:MET:HE1	1:B:342:ILE:HA	1.93	0.50
1:B:225:ALA:O	1:B:332:PRO:HA	2.12	0.50
1:B:579:GLY:O	1:B:715:THR:HG21	2.11	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:HG3	1:A:384:ARG:NH1	2.17	0.50
1:A:1657:TYR:CZ	1:A:1662:ARG:HD2	2.47	0.50
1:B:420:LEU:HG	1:B:793:LEU:HD21	1.94	0.50
1:B:1024:TRP:HB2	1:B:1068:LEU:HD11	1.94	0.50
1:A:96:ASN:ND2	1:A:98:ALA:HB3	2.18	0.50
1:A:241:ARG:NH2	1:A:827:THR:O	2.45	0.50
1:A:290:ILE:HD13	1:A:308:ILE:HD13	1.94	0.50
1:A:946:VAL:O	1:A:954:ILE:HB	2.12	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:B:136:GLN:NE2	1:B:138:ALA:H	2.10	0.50
1:B:965:PRO:O	1:B:967:PRO:HD3	2.12	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:A:621:ALA:O	1:A:650:THR:HG23	2.12	0.50
1:A:1229:CYS:HB3	1:A:1403:LEU:HD22	1.94	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: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:C	1:A:734:TYR:CD2	2.86	0.49
1:A:1461:ARG:O	1:A:1461:ARG:HG3	2.12	0.49
1:A:2006:THR:CG2	1:A:2048:ARG:HH22	2.25	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:295:THR:HG22	1:B:331:HIS:HD2	1.77	0.49
1:B:348:LEU:HD13	1:B:406:PRO:HB3	1.94	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:706:LYS:HD2	1:B:706:LYS:N	2.27	0.49
1:B:866:VAL:HG13	1:B:876:VAL:HG22	1.95	0.49
1:B:1429:LEU:CD1	1:B:1443:LEU:HD11	2.42	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: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:B:82:LEU:HG	1:B:144:LEU:CD1	2.42	0.49
1:B:554:VAL:O	1:B:558: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: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:O	1:A:1874:THR:HG22	2.11	0.49
1:B:527:LEU:HD12	1:B:534:VAL:CG2	2.43	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: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: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: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:B:831:SER:OG	1:B:832:PRO:HD3	2.13	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:A:475:GLY:C	1:A:477:ALA:H	2.15	0.49
1:A:1415:PHE:CD2	1:A:1444:MET:HE1	2.48	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:HG23	1:B:1974:VAL:O	2.13	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:A:1050:LEU:O	1:A:1101:SER:CB	2.60	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: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:A:136:GLN:NE2	1:A:138:ALA:H	2.10	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:156:THR:OG1	1:B:158:ASP:O	2.31	0.49
1:A:527:LEU:HD12	1:A:534:VAL:CG2	2.43	0.49
1:A:1245:VAL:HG13	1:A:1273:THR:CB	2.38	0.49
1:B:305:LEU:O	1:B:309:VAL:HG23	2.13	0.49
1:B:384:ARG:CG	1:B:384:ARG:NH1	2.74	0.49
1:B:717:ILE:HD13	1:B:727:ALA:HB2	1.95	0.49
1:B:1430:LYS:HE3	1:B:1981:GLU:CA	2.42	0.49
1:B:1603:PHE:CD2	1:B:1603:PHE:N	2.80	0.49
1:A:348:LEU:HD13	1:A:406:PRO:HB3	1.95	0.48
1:A:1602:GLU:CD	1:A:1650:ILE:HG12	2.34	0.48
1:A:82:LEU:HG	1:A:144:LEU:CD1	2.44	0.48
1:A:359:TYR:OH	1:A:369:LEU:HD22	2.12	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:1528:THR:HG23	1:A:1552:HIS:ND1	2.28	0.48
1:A:1541:LEU:N	1:A:1541:LEU:HD23	2.29	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:B:78:GLN:HB3	1:B:188:LEU:HD13	1.95	0.48
1:B:287:LEU:HA	1:B:387:ASN:O	2.13	0.48
1:B:1086:LEU:HD23	1:B:1086:LEU:N	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:1996:TYR:HD1	1:B:2040:ALA:CB	2.25	0.48
1:A:130:TYR:CA	1:B:203:LEU:HD21	2.43	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:A:1452:GLY:HA2	1:A:2039:SER:HB3	1.96	0.48
1:A:1523:ARG:HH12	1:A:1536:LEU:HD12	1.78	0.48
1:B:111:VAL:HG23	1:B:188:LEU:HB2	1.94	0.48
1:B:290:ILE:HD13	1:B:308:ILE:HD13	1.96	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: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:39:ARG:NH1	1:B:57:LEU:HD22	2.28	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:581:SER:OG	1:B:582:LEU:N	2.42	0.48

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1083:ASP:O	1:B:1086:LEU:N	2.46	0.48
1:A:469:GLY:HA2	1:A:805:LEU:HD21	1.94	0.48
1:A:856:CYS:HB3	1:B:856:CYS:SG	2.54	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: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:B:1001:TYR:HB3	1:B:1003:TYR:CD1	2.48	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: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: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: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:A:1519:LEU:HD12	1:A:1520:GLU:H	1.78	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:B:2098:PHE:CD2	1:B:2106:LEU:HD12	2.48	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:A:1432:ILE:O	1:A:1432:ILE:HG22	2.14	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:HD23	1:B:1898:LEU:HA	1.70	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:A:1457:VAL:HG11	1:A:1473:LEU:HD22	1.96	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:B:1882:PRO:HD2	1:B:1887:TYR:OH	2.13	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

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:642:CYS:CB	1:A:650:THR:HB	2.29	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
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:B:81:MET:O	1:B:85:VAL:HG22	2.14	0.48
1:B:1038:MET:HA	1:B:1038:MET:HE2	1.96	0.48
1:B:1124:HIS:CD2	1:B:1512:GLY:HA2	2.48	0.48
1:B:1248:LEU:HD21	1:B:1277:ARG:HH21	1.79	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:639:VAL:HG12	1:B:640:PRO:O	2.14	0.47
1:B:1995:LYS:HB3	1:B:2041:MET:SD	2.54	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:621:ALA:O	1:B:623:VAL:HG23	2.14	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:259:GLN:H	1:B:259:GLN:CD	2.18	0.47
1:A:499:MET:HE2	1:A:582:LEU:HD22	1.95	0.47
1:A:1123:PRO:HB3	1:A:1510:ALA:HB1	1.95	0.47
1:B:1656:TYR:CZ	1:B:1687:ILE:HD13	2.49	0.47
1:B:1800:PHE:C	1:B:1800:PHE:CD2	2.88	0.47
1:A:856:CYS:CB	1:B:856:CYS:HG	2.27	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: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:B:1723:SER:C	1:B:1725:ASP:H	2.18	0.47
1:B:1800:PHE:C	1:B:1800:PHE:HD2	2.17	0.47
1:A:262:THR:O	1:A:262:THR:CG2	2.63	0.47
1:A:1544:ILE:O	1:A:1545:ARG:HG3	2.15	0.47
1:B:321:LEU:HD23	1:B:381:LEU:HD12	1.95	0.47
1:B:326:LYS:CE	1:B:336:SER:HB2	2.44	0.47
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

*Continued on next page...*

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:O	1:B:2022:VAL:CG1	2.62	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:432:GLU:HG3	1:A:433:ALA:N	2.29	0.47
1:A:503:TRP:CG	1:A:787:LYS:HB2	2.50	0.47
1:A:1774:LEU:O	1:B:1783:ALA:HB2	2.14	0.47
1:A:2001:ASN:O	1:A:2005:VAL:HG23	2.14	0.47
1:B:48:PRO:HD3	1:B:201:MET:HE3	1.97	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: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:B:1418:VAL:HG22	1:B:1425:TRP:CG	2.50	0.47
1:B:1981:GLU:C	1:B:1983:GLN:H	2.18	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: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:A:1592:TRP:HB2	1:A:1595:ARG:HD3	1.97	0.47
1:B:59:ARG:N	1:B:59:ARG:HD2	2.29	0.47
1:B:128:VAL:CG1	1:B:130:TYR:CZ	2.98	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:261:VAL:HG22	1:B:146:PHE:CZ	2.50	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:1711:ARG:HH22	1:A:1826:LEU:CD2	2.28	0.47
1:A:1794:ILE:C	1:A:1795:LEU:HD23	2.35	0.47
1:B:610:ILE:HA	1:B:690:ILE:HD13	1.96	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: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:HD23	1:B:1733:LEU:HA	1.70	0.47
1:B:1894:GLY:O	1:B:1895:GLY:C	2.54	0.47

Continued on next page...

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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: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:B:983:ALA:O	1:B:985:PHE:N	2.43	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:A:65:PHE:CE2	1:A:83:LEU:HB3	2.49	0.46
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:B:776:GLU:HB3	1:B:778:SER:OG	2.15	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:A:92:ASP:HA	1:A:830:ILE:HB	1.97	0.46
1:A:111:VAL:HG21	1:A:188:LEU:HD12	1.98	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:668:GLU:O	1:B:669:ASP:CB	2.62	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:A:249:ALA:HB2	1:A:402:VAL:HB	1.97	0.46
1:A:269:GLN:OE1	1:A:393:PHE:CE2	2.68	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: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:B:39:ARG:NH1	1:B:226:GLU:OE2	2.47	0.46
1:B:384:ARG:HG3	1:B:384:ARG:NH1	2.16	0.46
1:B:577:ILE:HG22	1:B:712:TRP:CD1	2.50	0.46
1:B:1616:MET:CE	1:B:1650:ILE:HD13	2.46	0.46
1:A:60:PHE:CD2	1:A:80:ARG:HD3	2.50	0.46
1:A:1226:LEU:CD2	1:A:1401:LEU:HD21	2.43	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:743:VAL:HG23	1:B:743:VAL:O	2.15	0.46
1:B:1119:PHE:HB3	1:B:2105:VAL:HB	1.98	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: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:B:65:PHE:HA	1:B:147:PHE:CE1	2.50	0.46
1:B:359:TYR:CG	1:B:376:VAL:HG11	2.50	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:A:416:GLN:C	1:A:418:ALA:N	2.69	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:B:107:VAL:HG13	1:B:184:VAL:HB	1.96	0.46
1:B:765:ALA:HB1	1:B:768:GLN:CG	2.46	0.46
1:B:1443:LEU:HD23	1:B:1443:LEU:HA	1.78	0.46
1:B:1586:ASP:HA	1:B:1595:ARG:HH12	1.81	0.46
1:A:200:PHE:HE2	1:B:132:MET:HE1	1.80	0.46
1:A:717:ILE:HD13	1:A:727:ALA:HB2	1.97	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:B:377:VAL:HG13	1:B:381:LEU:CD1	2.46	0.46
1:B:1254:LEU:HD13	1:B:1316:VAL:HG12	1.98	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:A:856:CYS:HB3	1:B:856:CYS:HG	1.80	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: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: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

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:627:TRP:CZ3	1:A:640:PRO:HB2	2.50	0.46
1:A:706:LYS:N	1:A:706:LYS:HD2	2.31	0.46
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:B:1469:ILE:CG2	1:B:1469:ILE:O	2.64	0.46
1:A:9:MET:HE2	1:A:342:ILE:HG12	1.97	0.46
1:A:203:LEU:HD21	1:B:130:TYR:HA	1.98	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:B:81:MET:HG2	1:B:81:MET:H	1.62	0.46
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: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: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: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: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:A:1390:VAL:HG13	1:A:1501:LEU:HD21	1.98	0.45
1:A:1419:GLU:OE2	1:A:1447:GLY:HA3	2.15	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: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:N	1:B:1603:PHE:HD2	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:A:23:TRP:NE1	1:A:350:HIS:CD2	2.84	0.45
1:A:133:ILE:HD12	1:A:143:ARG:HH21	1.80	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:142:ASN:HD22	1:B:396:GLY:HA3	1.81	0.45
1:A:1112:LEU:HD22	1:A:2110:VAL:HG11	1.98	0.45
1:A:1428:SER:O	1:A:1432:ILE:HG13	2.15	0.45
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: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: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:557:THR:HG21	1:A:603:SER:OG	2.16	0.45
1:A:1124:HIS:NE2	1:A:1501:LEU:HD13	2.31	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: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:B:65:PHE:CE2	1:B:83:LEU:HB3	2.51	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: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: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:B:159:THR:HB	1:B:162:SER:HG	1.81	0.45
1:B:623:VAL:HG13	1:B:672:VAL:HG22	1.97	0.45
1:B:1107:ARG:HG3	1:B:1107:ARG:O	2.17	0.45
1:B:1456:MET:CE	1:B:2032:ALA:HB1	2.46	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:A:493:TRP:CD2	1:A:752:VAL:HG22	2.52	0.45
1:A:1545:ARG:NH1	1:A:1545:ARG:CG	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:O	1:A:2022:VAL:CG1	2.64	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:HD23	1:B:1904:LEU:HA	1.62	0.45
1:B:1931:GLU:O	1:B:1934:ARG:N	2.50	0.45
1:A:124:PRO:HB2	1:B:45:TYR:CE2	2.52	0.45
1:A:1231:ASP:O	1:A:1232:THR:C	2.55	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1235:GLU:OE2	1:A:1515:ARG:NH1	2.50	0.45
1:A:1786:LEU:HA	1:A:1786:LEU:HD23	1.73	0.45
1:A:1882:PRO:HD2	1:A:1887:TYR:OH	2.17	0.45
1:B:169:GLN:HE21	1:B:169:GLN:C	2.19	0.45
1:B:838:HIS:O	1:B:840:GLN:N	2.50	0.45
1:B:1541:LEU:HD13	1:B:1840:PHE:HB3	1.97	0.45
1:B:2098:PHE:CD2	1:B:2106:LEU:HB2	2.51	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: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:B:98:ALA:HA	1:B:101:ARG:CG	2.46	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: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:A:1001:TYR:CE2	1:A:1040:ILE:HD13	2.52	0.45
1:A:1248:LEU:HD21	1:A:1277:ARG:NE	2.30	0.45
1:A:1259:PRO:HG2	1:A:1292:LEU:HD22	1.99	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: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: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:B:699:ARG:O	1:B:703:LEU:HD23	2.17	0.45
1:B:1123:PRO:O	1:B:1393:LYS:NZ	2.50	0.45
1:B:1343:PHE:HE2	1:B:1390:VAL:HG21	1.82	0.45
1:B:1449:SER:C	1:B:1477:LEU:HD22	2.37	0.45
1:B:1567:TYR:O	1:B:1856:VAL:HG23	2.16	0.45
1:B:1689:LEU:HD23	1:B:1689:LEU:HA	1.70	0.45
1:B:2036:PHE:CD2	1:B:2036:PHE:C	2.91	0.45
1:A:75:MET:SD	1:A:79:LEU:HD23	2.56	0.44

*Continued on next page...*



*Continued from previous page...*

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:159:THR:HG22	1:B:398:SER:HB3	1.99	0.44
1:B:581:SER:HB2	1:B:683:HIS:NE2	2.32	0.44
1:B:1541:LEU:O	1:B:1837:GLU:HG3	2.17	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:A:158:ASP:O	1:B:156:THR:OG1	2.34	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:620:MET:HE1	1:A:682:PHE:HB2	1.99	0.44
1:A:627:TRP:CH2	1:A:640:PRO:HB2	2.52	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: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:B:108:TRP:CD1	1:B:171:ALA:HB2	2.52	0.44
1:B:111:VAL:O	1:B:111:VAL:HG12	2.17	0.44
1:B:581:SER:HB2	1:B:683:HIS:CE1	2.52	0.44
1:B:647:ASP:N	1:B:647:ASP:OD1	2.50	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:A:118:GLU:HG3	1:B:118:GLU:CD	2.37	0.44
1:A:643:HIS:HA	1:A:649:VAL:HG22	1.99	0.44
1:A:1617:VAL:HG12	1:A:1619:ALA:H	1.82	0.44
1:A:2015:TYR:HD2	1:A:2099:LEU:HD22	1.78	0.44
1:A:2043:ARG:HA	1:A:2043:ARG:HD3	1.69	0.44
1:B:321:LEU:H	1:B:321:LEU:CD1	2.31	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:HD23	1:B:2111:LEU:HA	1.83	0.44
1:A:166:LEU:HD23	1:A:166:LEU:C	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: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:B:831:SER:N	1:B:832:PRO:CD	2.80	0.44
1:B:1567:TYR:C	1:B:1856:VAL:HG23	2.37	0.44
1:A:305:LEU:O	1:A:309:VAL:HG23	2.17	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1112:LEU:O	1:A:1114:PRO:HD3	2.17	0.44
1:A:1456:MET:CG	1:A:2036:PHE:HB2	2.46	0.44
1:B:13:LEU:HD13	1:B:22:PHE:CD1	2.53	0.44
1:B:62:ALA:HB1	1:B:67:VAL:HG23	2.00	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:907:LEU:HD12	1:B:907:LEU:HA	1.87	0.44
1:A:6:ILE:HG21	1:A:345:LEU:HD11	2.00	0.44
1:A:81:MET:O	1:A:85:VAL:HG22	2.18	0.44
1:A:815:LEU:HB2	1:A:816:PHE:CD1	2.53	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:HA	1:A:1515:ARG:HD3	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:B:9:MET:CE	1:B:342:ILE:HA	2.48	0.44
1:B:582:LEU:O	1:B:585:VAL:HG23	2.18	0.44
1:B:1445:ALA:O	1:B:1476:ASN:ND2	2.51	0.44
1:B:1768:GLU:OE1	1:B:1768:GLU:CA	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:A:213:ARG:HH11	1:A:213:ARG:HG3	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: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: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:B:1221:LEU:HG	1:B:1221:LEU:O	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: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:A:1657:TYR:CE1	1:A:1799:LEU:HD11	2.53	0.44
1:B:19:LEU:HD23	1:B:19:LEU:HA	1.70	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:895:THR:HA	1:B:935:VAL:HG11	2.00	0.44
1:B:1416:LEU:CD2	1:B:1429:LEU:HG	2.47	0.44
1:B:1475:SER:HB3	1:B:1505:VAL:CG1	2.47	0.44
1:A:27:ILE:C	1:A:29:GLY:H	2.20	0.44
1:A:120:LEU:C	1:A:127:LEU:HD13	2.38	0.44
1:A:169:GLN:OE1	1:A:250:GLY:HA2	2.17	0.44
1:A:189:ASN:O	1:A:226:GLU:HB2	2.17	0.44
1:A:259:GLN:CD	1:A:259:GLN: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:A:1231:ASP:HB3	1:A:1515:ARG:HD2	2.00	0.44
1:A:1754:GLN:OE1	1:A:1754:GLN:HA	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:1955:LEU:O	1:A:1958:GLU:HB2	2.17	0.44
1:B:587:CYS:O	1:B:591:ASP:N	2.51	0.44
1:B:1971:LEU:HD21	1:B:2019:PHE:CD2	2.52	0.44
1:A:123:ASP:CB	1:A:126:THR:HB	2.42	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:A:1216:LEU:HD13	1:A:1217:LEU:H	1.83	0.43
1:A:1953:ARG:HA	1:A:2005:VAL:HG11	1.99	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:143:ARG:HG2	1:B:143:ARG:NH1	2.33	0.43
1:B:190:VAL:HG12	1:B:192:LEU:HG	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:B:1118:LYS:HD2	1:B:2103:HIS:ND1	2.33	0.43
1:B:1338:LEU:HD13	1:B:1406:GLN:CG	2.48	0.43
1:B:1466:GLY:HA2	1:B:1469:ILE:CD1	2.48	0.43
1:A:143:ARG:HG2	1:A:143:ARG:NH1	2.31	0.43
1:A:470:TYR:CD1	1:A:470:TYR:C	2.90	0.43
1:A:525:GLN:NE2	1:A:525:GLN:HA	2.32	0.43
1:A:579:GLY:O	1:A:715:THR:HG21	2.19	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:B:302:PRO:HG3	1:B:363:ASN:ND2	2.33	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:416:GLN:C	1:B:418:ALA:N	2.70	0.43
1:B:1553:TYR:O	1:B:1554:ALA:HB2	2.18	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:948:ASP:C	1:B:948:ASP:OD1	2.57	0.43
1:B:1769:ILE:HG22	1:B:1770:GLY:N	2.32	0.43
1:B:2043:ARG:HD3	1:B:2043:ARG:HA	1.71	0.43
1:A:343:LYS:HE3	1:A:354:ALA:HB3	2.00	0.43
1:A:366:ILE:O	1:A:366:ILE:CG1	2.66	0.43
1:A:542:ASP:C	1:A:542:ASP:OD1	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:A:1036:LEU:O	1:A:1037:HIS:C	2.57	0.43
1:A:1238:ALA:O	1:A:1462:LYS:HG3	2.17	0.43
1:A:1299:TRP:NE1	1:A:1304:PRO:O	2.51	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:B:627:TRP:CZ3	1:B:640:PRO:HB2	2.53	0.43
1:A:870:SER:HA	1:A:871:PRO:HD3	1.88	0.43
1:A:1049:TYR:CZ	1:A:1103:VAL:HG23	2.54	0.43
1:A:1469:ILE:O	1:A:1469:ILE:CG2	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:B:98:ALA:CA	1:B:101:ARG:HG3	2.47	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: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:A:54:LEU:HD23	1:A:54:LEU:HA	1.62	0.43
1:A:336:SER:OG	1:A:337:GLY:N	2.51	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

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1929:VAL:HG13	1:A:1939:VAL:HG11	1.99	0.43
1:B:23:TRP:CE2	1:B:27:ILE:HG12	2.53	0.43
1:B:228:VAL:O	1:B:228:VAL:CG2	2.67	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:B:1112:LEU:O	1:B:1114:PRO:HD3	2.17	0.43
1:A:51:MET:HB2	1:A:53:LYS:HE3	2.01	0.43
1:A:78:GLN:HB3	1:A:188:LEU:HD13	2.01	0.43
1:A:782:ILE:HA	1:A:783:PRO:HD3	1.88	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:B:6:ILE:HG21	1:B:345:LEU:HD11	2.01	0.43
1:B:14:PRO:HA	1:B:53:LYS:O	2.19	0.43
1:B:161:CYS:HB3	1:B:331:HIS:CE1	2.53	0.43
1:B:283:ASP:C	1:B:285:GLU:H	2.22	0.43
1:B:654:PRO:HG3	1:B:685:TYR:OH	2.18	0.43
1:B:752:VAL:HA	1:B:753:PRO:HD3	1.89	0.43
1:B:1333:ASN:C	1:B:1335:ALA:N	2.72	0.43
1:B:1995:LYS:HA	1:B:2041:MET:HE3	2.01	0.43
1:A:23:TRP:CH2	1:A:347:SER:HA	2.54	0.43
1:A:108:TRP:CD1	1:A:171:ALA:HB2	2.54	0.43
1:A:129:GLY:HA3	1:B:202:LYS:HB2	2.00	0.43
1:A:524:ASP:OD1	1:A:534:VAL:N	2.52	0.43
1:A:1083:ASP:O	1:A:1086:LEU:N	2.51	0.43
1:A:2031:GLN:HB3	1:A:2034:TYR:HB3	1.99	0.43
1:B:137:ARG:O	1:B:140:MET:HG2	2.19	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:416:GLN:OE1	1:B:817:PRO:HG2	2.18	0.43
1:B:499:MET:HG3	1:B:502:GLN:NE2	2.34	0.43
1:B:1984:THR:C	1:B:1986:GLU:H	2.22	0.43
1:B:2066:VAL:HG22	1:B:2088:ILE:HD12	2.00	0.43
1:A:206:LEU:HA	1:A:206:LEU:HD23	1.64	0.43
1:A:1235:GLU:H	1:A:1235:GLU:HG2	1.58	0.43
1:A:1390:VAL:HG22	1:A:1501:LEU:HD21	2.00	0.43
1:B:161:CYS:HB3	1:B:331:HIS:HE1	1.84	0.43
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

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1137:GLN:NE2	1:B:1396:PHE:CE1	2.86	0.43
1:B:1389:LEU:HD23	1:B:1389:LEU:HA	1.83	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: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:B:23:TRP:CZ2	1:B:27:ILE:HG12	2.54	0.43
1:B:200:PHE:HB3	1:B:206:LEU:CG	2.48	0.43
1:B:470:TYR:C	1:B:470:TYR:CD1	2.92	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:1525:GLU:OE1	1:B:1874:THR:HG23	2.19	0.43
1:B:1555:LEU:HD12	1:B:1555:LEU:HA	1.93	0.43
1:B:1921:ARG:HE	1:B:1921:ARG:HB2	1.65	0.43
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: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: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:B:1085:ASN:C	1:B:1086:LEU:HD23	2.40	0.42
1:B:1119:PHE:CZ	1:B:1514:PHE:HB3	2.54	0.42
1:B:1469:ILE:CG2	1:B:1471:CYS:SG	3.07	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:A:119:ALA:HB2	1:A:850:PHE:CE2	2.53	0.42
1:A:470:TYR:CD2	1:A:801:GLY:HA3	2.55	0.42
1:A:1032:LEU:O	1:A:1035:MET:HB2	2.19	0.42
1:A:1468:ARG:HD3	1:A:1468:ARG:HA	1.85	0.42
1:A:1661:VAL:HG21	1:A:1810:VAL:HG22	2.01	0.42
1:B:111:VAL:HG21	1:B:188:LEU:HD12	2.01	0.42
1:B:178:GLY:O	1:B:179:GLU:C	2.58	0.42
1:B:863:LYS:HB3	1:B:930:THR:HG21	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:1818:ILE:HG12	1:B:1823:VAL:HG11	2.00	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1977:ASP:O	1:B:1978:ALA:HB2	2.19	0.42
1:A:708:ARG:HD3	1:A:727:ALA:O	2.19	0.42
1:A:743:VAL:HG23	1:A:743:VAL:O	2.20	0.42
1:A:808:VAL:HG12	1:A:809:SER:H	1.84	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: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:B:1315:LEU:HD23	1:B:1344:LEU:HD11	2.00	0.42
1:B:1636:VAL:O	1:B:1636:VAL:HG22	2.19	0.42
1:B:1786:LEU:HD23	1:B:1786:LEU:HA	1.82	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:A:202:LYS:HB2	1:B:129:GLY:HA3	2.02	0.42
1:A:1411:ASP:OD2	1:A:1439:ARG:HB2	2.19	0.42
1:A:1598:MET:HG2	1:A:1598:MET:O	2.20	0.42
1:A:2095:LEU:CD1	1:A:2099:LEU:HG	2.49	0.42
1:B:27:ILE:C	1:B:29:GLY:H	2.21	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:A:289:TYR:C	1:A:289:TYR:CD2	2.93	0.42
1:A:321:LEU:H	1:A:321:LEU:HD12	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: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:B:40:TRP:CZ3	1:B:194:PRO:HA	2.55	0.42
1:B:40:TRP:HB3	1:B:847:ALA:CB	2.49	0.42
1:B:263:PHE:HE2	1:B:303:GLN:HE21	1.66	0.42
1:B:895:THR:O	1:B:898:THR:HB	2.20	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:A:189:ASN:HB2	1:A:334:PRO:HD2	1.99	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

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:644:ASN:HB3	1:A:770:VAL:HG11	2.01	0.42
1:A:765:ALA:HB1	1:A:768:GLN:CG	2.49	0.42
1:A:1119:PHE:HB3	1:A:2105:VAL:HB	2.01	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
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:B:55:LYS:HB3	1:B:55:LYS:HE2	1.69	0.42
1:B:82:LEU:HG	1:B:144:LEU:HD13	2.02	0.42
1:B:165:LEU:HD23	1:B:400:VAL:CG2	2.31	0.42
1:B:367:PRO:O	1:B:368:ALA:HB3	2.20	0.42
1:B:423:LEU:HB2	1:B:797:LEU:HD22	2.01	0.42
1:B:462:PRO:HA	1:B:465:MET:O	2.19	0.42
1:B:1222:ASP:OD1	1:B:1222:ASP:N	2.49	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:A:27:ILE:HD13	1:A:27:ILE:HA	1.81	0.42
1:A:98:ALA:HA	1:A:101:ARG:CG	2.49	0.42
1:A:163:SER:O	1:A:167:ALA:N	2.47	0.42
1:A:228:VAL:O	1:A:228:VAL:CG2	2.67	0.42
1:A:257:LYS:NZ	1:A:261:VAL:O	2.51	0.42
1:A:353:TRP:O	1:A:355:PRO:HD3	2.19	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:B:305:LEU:HD22	1:B:322:ILE:CD1	2.50	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:A:620:MET:CE	1:A:682:PHE:O	2.66	0.42
1:A:672:VAL:O	1:A:672:VAL:HG12	2.18	0.42
1:A:948:ASP:C	1:A:948:ASP:OD1	2.58	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:B:5:VAL:HG21	1:B:242:VAL:HG22	2.01	0.42
1:B:193:LYS:HA	1:B:194:PRO:HD3	1.85	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:O	1:B:876:VAL:HG12	2.20	0.42
1:A:166:LEU:CD1	1:A:251:THR:HG21	2.49	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:CG	1:A:384:ARG:NH1	2.75	0.42
1:A:495:ILE:HG12	1:A:758:VAL:HG13	2.02	0.42
1:A:595:THR:HG22	1:A:596:GLN:N	2.35	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:A:1451:SER:O	1:A:2036:PHE:CE1	2.73	0.42
1:B:527:LEU:HD11	1:B:554:VAL:HG11	2.01	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:O	1:B:1941:VAL:HG12	2.18	0.42
1:A:19:LEU:HD23	1:A:19:LEU:HA	1.68	0.42
1:A:114:SER:O	1:A:117:SER:HB3	2.19	0.42
1:A:178:GLY:O	1:A:179:GLU:C	2.57	0.42
1:A:420:LEU:HD11	1:A:512:ARG:HB3	2.01	0.42
1:A:1116:LEU:HD22	1:A:2098:PHE:CE1	2.55	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:1862:GLY:O	1:A:1863:PRO:C	2.59	0.42
1:B:270:GLU:HG3	1:B:311:ALA:HB2	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: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:A:1480:THR:CG2	1:A:1482:PRO:HD2	2.50	0.41
1:B:119:ALA:HB2	1:B:850:PHE:CZ	2.55	0.41
1:B:147:PHE:CD2	1:B:147:PHE:C	2.93	0.41
1:B:1303:ASN:C	1:B:1333:ASN:HB2	2.41	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:A:9:MET:CE	1:A:342:ILE:HA	2.50	0.41
1:A:254:ASP:HB2	1:A:257:LYS:HE2	2.02	0.41
1:A:359:TYR:CD2	1:A:376:VAL:HG11	2.55	0.41
1:A:366:ILE:HD11	1:A:369:LEU:HD11	2.01	0.41
1:A:630:CYS:C	1:A:632:GLN:N	2.73	0.41
1:A:776:GLU:HB3	1:A:778:SER:H	1.84	0.41
1:A:1656:TYR:CE2	1:A:1687:ILE:HD13	2.55	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:B:128:VAL:HG12	1:B:130:TYR:CE2	2.54	0.41
1:B:979:ALA:O	1:B:980:ASP:C	2.58	0.41
1:B:1966:GLY:HA2	1:B:2013:LEU:HA	2.02	0.41
1:A:111:VAL:CG2	1:A:188:LEU:HD12	2.50	0.41
1:A:118:GLU:OE2	1:B:118:GLU:HG3	2.20	0.41
1:A:894:LEU:HD12	1:A:894:LEU:HA	1.81	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: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:B:1049:TYR:CZ	1:B:1103:VAL:HG23	2.55	0.41
1:B:1060:ASP:OD1	1:B:1062:VAL:HG23	2.20	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:A:23:TRP:CE2	1:A:27:ILE:HG12	2.55	0.41
1:A:40:TRP:CZ3	1:A:194:PRO:HA	2.55	0.41
1:A:259:GLN:CD	1:A:259:GLN:N	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: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:B:162:SER:OG	1:B:163:SER:N	2.50	0.41
1:B:889:THR:CG2	1:B:1032:LEU:CB	2.98	0.41
1:B:894:LEU:HD12	1:B:894:LEU:HA	1.83	0.41
1:B:1405:ARG:HH22	1:B:1470:ARG:NH2	2.19	0.41
1:B:1766:PHE:O	1:B:1792:HIS:HB2	2.20	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:A:1277:ARG:HD3	1:A:1300:ASP:OD2	2.19	0.41
1:A:1296:GLN:H	1:A:1296:GLN:HG2	1.64	0.41
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:B:1115:ILE:HD11	1:B:2111:LEU:HD12	2.02	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

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:A:111:VAL:O	1:A:111:VAL:HG12	2.20	0.41
1:A:257:LYS:H	1:A:257:LYS:HG3	1.68	0.41
1:A:469:GLY:CA	1:A:805:LEU:HD21	2.51	0.41
1:A:527:LEU:HD11	1:A:554:VAL:HG11	2.02	0.41
1:A:749:LEU:HD23	1:A:749:LEU:HA	1.88	0.41
1:A:1568:TYR:CE2	1:A:1855:GLN:HB2	2.56	0.41
1:A:1921:ARG:HE	1:A:1921:ARG:HB2	1.67	0.41
1:A:1998:GLY:O	1:A:2002:LEU:HD12	2.20	0.41
1:B:13:LEU:HB2	1:B:22:PHE:CD1	2.55	0.41
1:B:178:GLY:O	1:B:180:CYS:N	2.53	0.41
1:B:1122:THR:HA	1:B:1123:PRO:HD3	1.92	0.41
1:B:1836:VAL:HG13	1:B:1854:ILE:HD13	2.03	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:HD23	1:A:513:LEU:HA	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: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:1669:GLU:CG	1:A:1742:ASP:OD2	2.69	0.41
1:A:1671:VAL:HG23	1:A:1743:LEU:HB2	2.02	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: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:A:55:LYS:HB3	1:A:55:LYS:HE2	1.68	0.41
1:A:147:PHE:CD2	1:A:147:PHE:C	2.94	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: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
1:A:1011:LEU:HD12	1:A:1011:LEU:HA	1.85	0.41
1:A:1096:PHE:N	1:A:1096:PHE:CD2	2.89	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

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:214:SER:O	1:B:301:ASP:OD2	2.38	0.41
1:B:513:LEU:HD23	1:B:513:LEU:HA	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: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:A:64:PHE:CB	1:A:429:ARG:HH21	2.23	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: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:528:LYS:HB3	1:A:529:PRO:HD3	2.03	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:A:1583:LEU:HD23	1:A:1583:LEU:HA	1.88	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:B:33:VAL:HB	1:B:50:ARG:NH1	2.34	0.41
1:B:277:TYR:HB3	1:B:278:ALA:H	1.58	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:494:PHE:O	1:B:495:ILE:HD13	2.20	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: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:1429:LEU:HD11	1:B:1443:LEU:HD21	2.03	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: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:2006:THR:CG2	1:B:2048:ARG:HH12	2.34	0.41
1:A:674:GLU:H	1:A:674:GLU:HG2	1.28	0.41
1:A:907:LEU:HD12	1:A:907:LEU:HA	1.88	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

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1766:PHE:O	1:A:1792:HIS:HB2	2.21	0.41
1:B:6:ILE:HG21	1:B:345:LEU:CD1	2.51	0.41
1:B:429:ARG:HA	1:B:429:ARG:HD2	1.91	0.41
1:B:634:CYS:HA	1:B:635:PRO:HD3	1.89	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:A:270:GLU:HG3	1:A:311:ALA:HB2	2.03	0.40
1:A:1240:PRO:HD2	1:A:1462:LYS:HZ1	1.87	0.40
1:A:1243:LYS:HD2	1:A:1312:ALA:N	2.37	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: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:O	1:B:366:ILE:CG1	2.68	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:A:23:TRP:CZ2	1:A:27:ILE:HG12	2.57	0.40
1:A:82:LEU:HG	1:A:144:LEU:HD13	2.02	0.40
1:A:161:CYS:HB3	1:A:331:HIS:CE1	2.56	0.40
1:A:305:LEU:HD23	1:A:308:ILE:HD12	2.03	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: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:B:122:ARG:O	1:B:123:ASP:C	2.58	0.40
1:B:641:ALA:HB1	1:B:683:HIS:CB	2.49	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:A:81:MET:HG2	1:A:81:MET:H	1.62	0.40
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

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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:588:GLY:HA3	1:B:730:PHE:CE1	2.57	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: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:A:159:THR:O	1:A:160:ALA:HB3	2.21	0.40
1:A:588:GLY:O	1:A:594:LEU:HB2	2.21	0.40
1:A:654:PRO:HD3	1:A:686:PHE:HE1	1.86	0.40
1:A:666:LYS:O	1:A:668:GLU:N	2.55	0.40
1:A:825:ARG:HG2	1:A:826:GLY:N	2.36	0.40
1:A:1238:ALA:HB1	1:A:1467:HIS:CD2	2.56	0.40
1:A:1733:LEU:HA	1:A:1733:LEU:HD23	1.68	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: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:1553:TYR:O	1:B:1882:PRO:HG3	2.21	0.40
1:B:1617:VAL:HG21	1:B:1626:VAL:HG11	2.04	0.40
1:B:2017:VAL:HG12	1:B:2018:ILE:N	2.37	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: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
1:B:1726:THR:O	1:B:1726:THR:CG2	2.70	0.40
1:B:2022:VAL:HG13	1:B:2026:ARG:HG2	2.04	0.40

There are no symmetry-related clashes.

## 5.3 Torsion angles

### 5.3.1 Protein backbone

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all 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

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
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

*Continued on next page...*



*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
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

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
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

*Continued on next page...*

*Continued from previous page...*

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

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
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

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
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

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
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

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
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

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
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

*Continued on next page...*



*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
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

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
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

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
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

*Continued on next page...*

*Continued from previous page...*

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

Sometimes 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

*Continued on next page...*

*Continued from previous page...*

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

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 monosaccharides 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, 95<sup>th</sup> percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled ‘Q < 0.9’ lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
1	A	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

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
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

*Continued on next page...*



*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
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

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
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

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
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

*Continued on next page...*

*Continued from previous page...*

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 monosaccharides in this entry.

## 6.4 Ligands [i](#)

There are no ligands in this entry.

## 6.5 Other polymers [i](#)

There are no such residues in this entry.