Full wwPDB X-ray Structure Validation Report (i)

Feb 14, 2024 – 12:03 PM EST

|		
PDB ID	:	3LVG
Title	:	Crystal structure of a clathrin heavy chain and clathrin light chain complex
Authors	:	Wilbur, J.D.; Hwang, P.K.; Ybe, J.A.; Lane, M.; Sellers, B.D.; Jacobson, M.P.; Fletterick, R.J.; Brodsky, F.M.
Deposited on	:	2010-02-20
Resolution	:	7.94 Å(reported)

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 7.94 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	Percentile Ranks	Value
Rfree		0.441
Clashscore		135
Ramachandran outliers		13.9%
Sidechain outliers		18.5%
RSRZ outliers		57.8%

Worse   *Better*

■ Percentile relative to all X-ray structures

▯ Percentile relative to X-ray structures of similar resolution
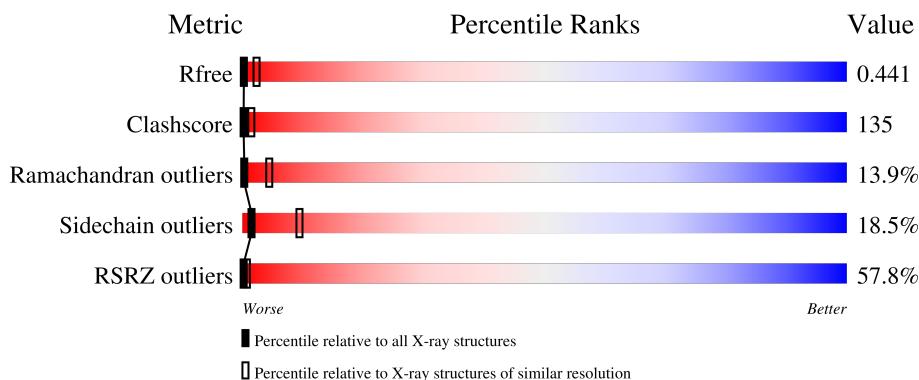
Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	130704	1005 (11.50-3.90)
Clashscore	141614	1070 (11.50-3.90)
Ramachandran outliers	138981	1003 (11.50-3.90)
Sidechain outliers	138945	1003 (11.50-3.86)
RSRZ outliers	127900	1004 (9.50-3.80)

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 >=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 <=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	624	57% / 14% 49% 21% 6% 11%
1	B	624	58% / 12% 52% 20% 5% 11%
1	C	624	39% / 13% 50% 20% 6% 11%
2	D	190	33% / 35% 46% 12% • 5%
2	E	190	16% / 16% 32% 9% • 39%
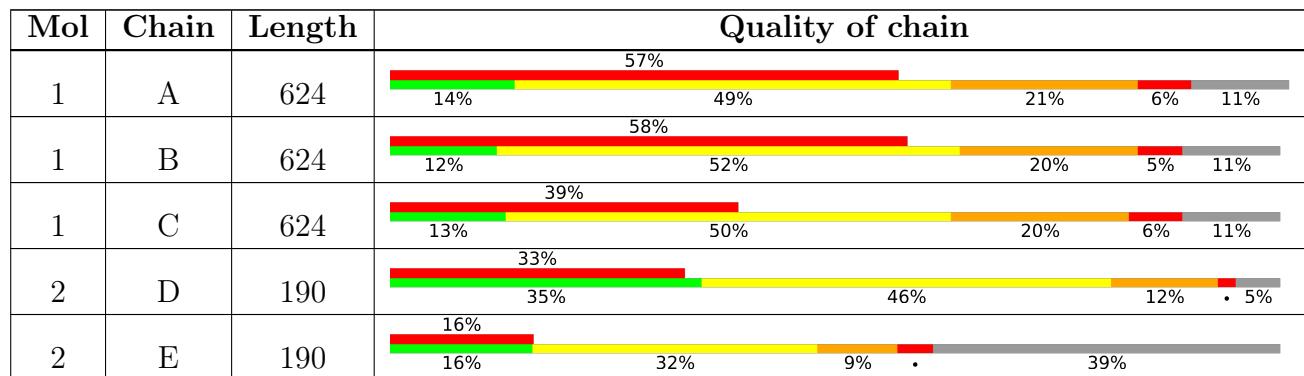
Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
2	F	190	

2 Entry composition ⓘ

There are 2 unique types of molecules in this entry. The entry contains 16504 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 Clathrin heavy chain 1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	553	Total	C	N	O	S	0	0	0
			4543	2896	767	855	25			
1	B	553	Total	C	N	O	S	0	0	0
			4543	2896	767	855	25			
1	C	553	Total	C	N	O	S	0	0	0
			4543	2896	767	855	25			

There are 66 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	1052	MET	-	expression tag	UNP P49951
A	1053	GLY	-	expression tag	UNP P49951
A	1054	SER	-	expression tag	UNP P49951
A	1055	SER	-	expression tag	UNP P49951
A	1056	HIS	-	expression tag	UNP P49951
A	1057	HIS	-	expression tag	UNP P49951
A	1058	HIS	-	expression tag	UNP P49951
A	1059	HIS	-	expression tag	UNP P49951
A	1060	HIS	-	expression tag	UNP P49951
A	1061	HIS	-	expression tag	UNP P49951
A	1062	SER	-	expression tag	UNP P49951
A	1063	SER	-	expression tag	UNP P49951
A	1064	GLY	-	expression tag	UNP P49951
A	1065	LEU	-	expression tag	UNP P49951
A	1066	VAL	-	expression tag	UNP P49951
A	1067	PRO	-	expression tag	UNP P49951
A	1068	ARG	-	expression tag	UNP P49951
A	1069	GLY	-	expression tag	UNP P49951
A	1070	SER	-	expression tag	UNP P49951
A	1071	HIS	-	expression tag	UNP P49951
A	1072	MET	-	expression tag	UNP P49951
A	1073	LEU	-	expression tag	UNP P49951
B	1052	MET	-	expression tag	UNP P49951

Continued on next page...

Continued from previous page...

Chain	Residue	Modelled	Actual	Comment	Reference
B	1053	GLY	-	expression tag	UNP P49951
B	1054	SER	-	expression tag	UNP P49951
B	1055	SER	-	expression tag	UNP P49951
B	1056	HIS	-	expression tag	UNP P49951
B	1057	HIS	-	expression tag	UNP P49951
B	1058	HIS	-	expression tag	UNP P49951
B	1059	HIS	-	expression tag	UNP P49951
B	1060	HIS	-	expression tag	UNP P49951
B	1061	HIS	-	expression tag	UNP P49951
B	1062	SER	-	expression tag	UNP P49951
B	1063	SER	-	expression tag	UNP P49951
B	1064	GLY	-	expression tag	UNP P49951
B	1065	LEU	-	expression tag	UNP P49951
B	1066	VAL	-	expression tag	UNP P49951
B	1067	PRO	-	expression tag	UNP P49951
B	1068	ARG	-	expression tag	UNP P49951
B	1069	GLY	-	expression tag	UNP P49951
B	1070	SER	-	expression tag	UNP P49951
B	1071	HIS	-	expression tag	UNP P49951
B	1072	MET	-	expression tag	UNP P49951
B	1073	LEU	-	expression tag	UNP P49951
C	1052	MET	-	expression tag	UNP P49951
C	1053	GLY	-	expression tag	UNP P49951
C	1054	SER	-	expression tag	UNP P49951
C	1055	SER	-	expression tag	UNP P49951
C	1056	HIS	-	expression tag	UNP P49951
C	1057	HIS	-	expression tag	UNP P49951
C	1058	HIS	-	expression tag	UNP P49951
C	1059	HIS	-	expression tag	UNP P49951
C	1060	HIS	-	expression tag	UNP P49951
C	1061	HIS	-	expression tag	UNP P49951
C	1062	SER	-	expression tag	UNP P49951
C	1063	SER	-	expression tag	UNP P49951
C	1064	GLY	-	expression tag	UNP P49951
C	1065	LEU	-	expression tag	UNP P49951
C	1066	VAL	-	expression tag	UNP P49951
C	1067	PRO	-	expression tag	UNP P49951
C	1068	ARG	-	expression tag	UNP P49951
C	1069	GLY	-	expression tag	UNP P49951
C	1070	SER	-	expression tag	UNP P49951
C	1071	HIS	-	expression tag	UNP P49951
C	1072	MET	-	expression tag	UNP P49951

Continued on next page...

Continued from previous page...

Chain	Residue	Modelled	Actual	Comment	Reference
C	1073	LEU	-	expression tag	UNP P49951

- Molecule 2 is a protein called Clathrin light chain B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	D	180	Total 1146	C 690	N 227	O 228	S 1	0	0	0
2	E	116	Total 823	C 497	N 163	O 162	S 1	0	0	0
2	F	132	Total 906	C 546	N 179	O 180	S 1	0	0	0

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: Clathrin heavy chain 1
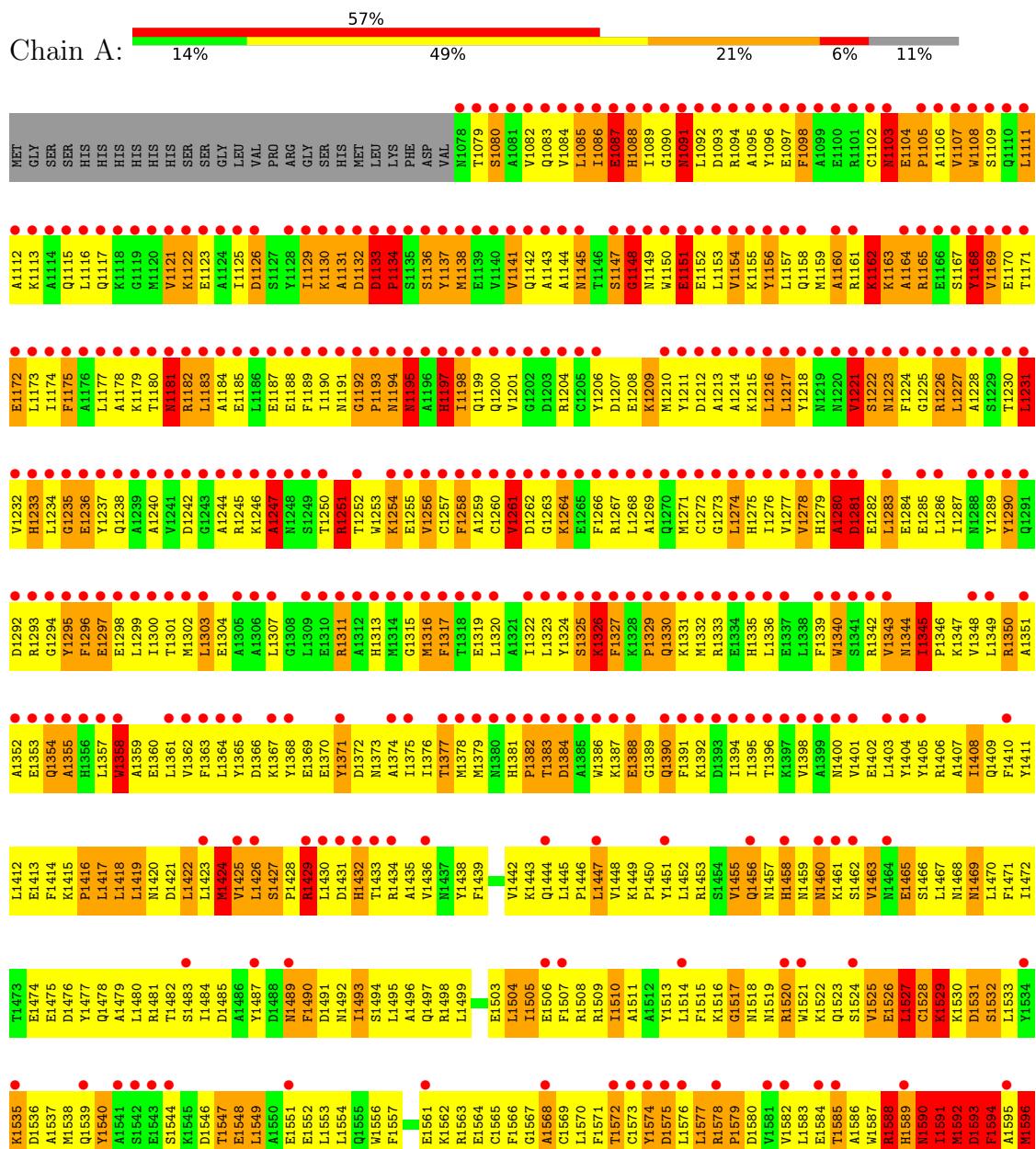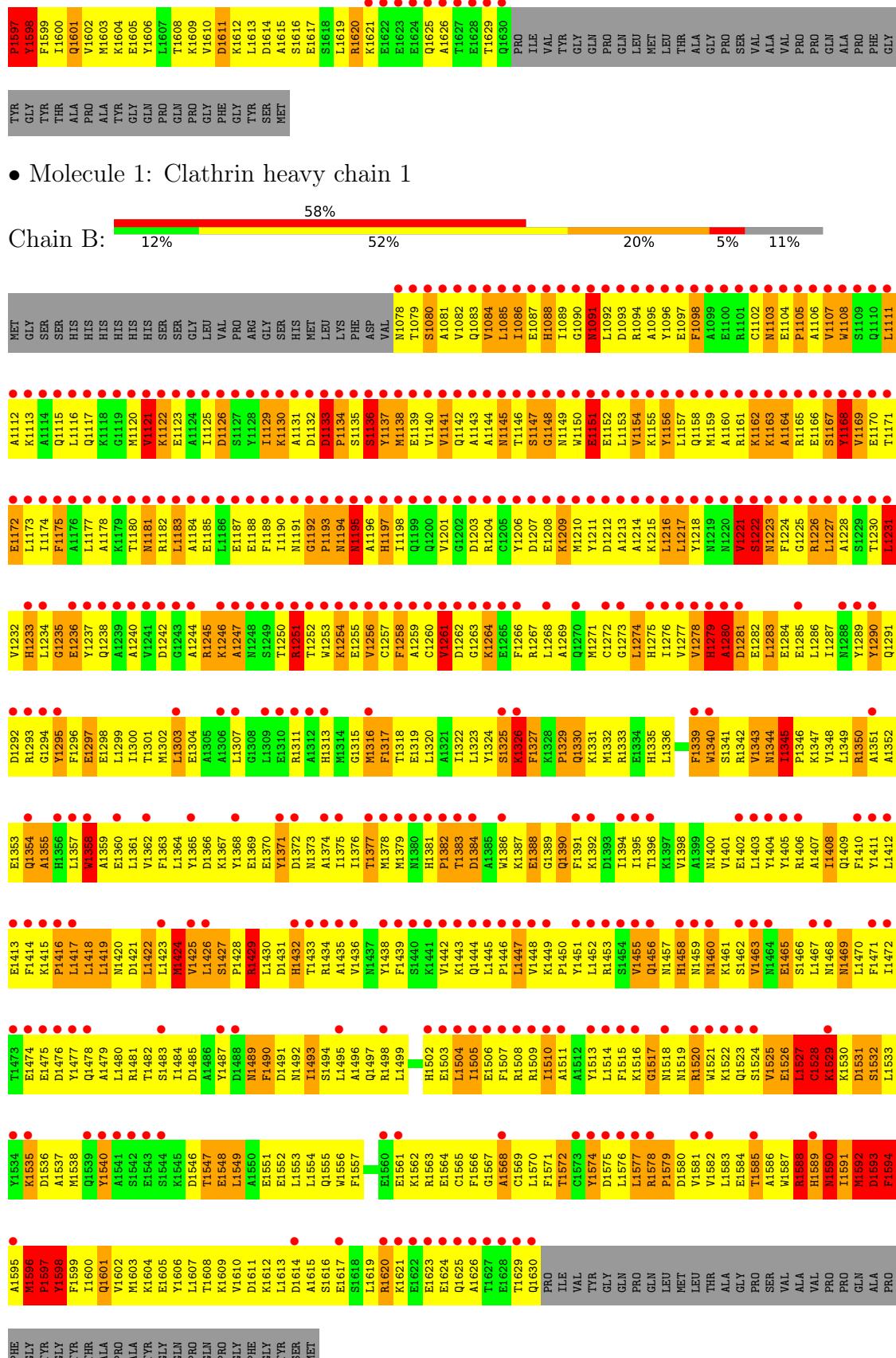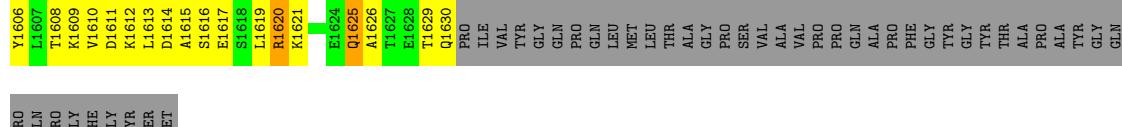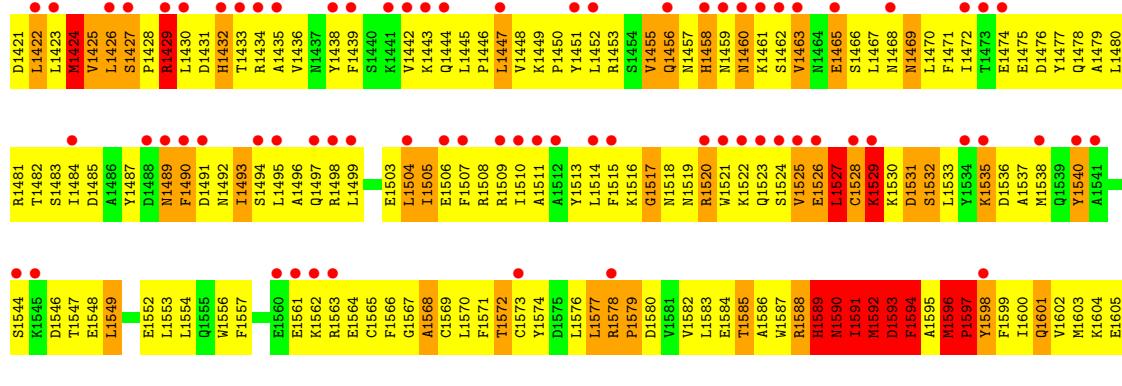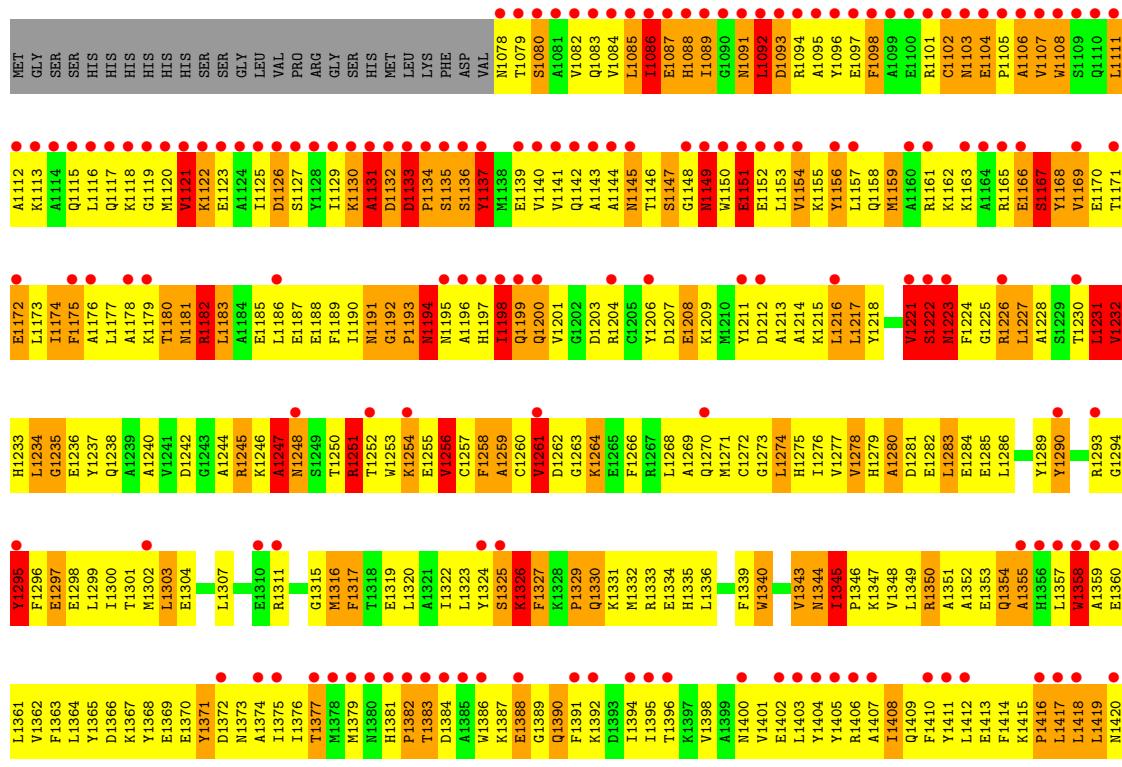
• Molecule 1: Clathrin heavy chain 1

• Molecule 1: Clathrin heavy chain 1

Chain C:

• Molecule 2: Clathrin light chain B

Chain D:

- Molecule 2: Clathrin light chain B

Chain E:

16%

16%　　　　32%　　　　9%　・　　39%

- Molecule 2: Clathrin light chain B

Chain F:

19%

18%　　　　36%　　　13%　・　　31%
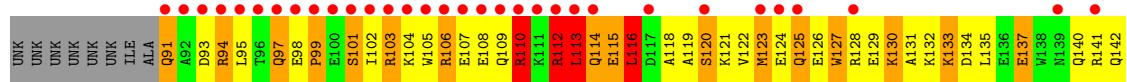
4 Data and refinement statistics ⓘ

Property	Value	Source
Space group	I 41 2 2	Depositor
Cell constants a, b, c, α, β, γ	228.56Å　228.56Å　710.32Å 90.00°　　90.00°　　90.00°	Depositor
Resolution (Å)	100.00　–　7.94 82.22　–　4.99	Depositor EDS
% Data completeness (in resolution range)	99.6 (100.00-7.94) 63.0 (82.22-4.99)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	0.07	Depositor
$< I/\sigma(I) >$ [1]	0.97 (at 5.12Å)	Xtriage
Refinement program	CNS	Depositor
R, R_{free}	0.419　,　0.425 0.431　,　0.441	Depositor DCC
R_{free} test set	1304 reflections (5.00%)	wwPDB-VP
Wilson B-factor (Å^2)	310.7	Xtriage
Anisotropy	0.082	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.41 , 472.4	EDS
L-test for twinning[2]	$< |L| > = 0.30, < L^2 > = 0.15$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.83	EDS
Total number of atoms	16504	wwPDB-VP
Average B, all atoms (Å^2)	295.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 4.39% of the height of the origin peak. No significant pseudotranslation is detected.*

---

[1]Intensities estimated from amplitudes.
[2]Theoretical values of $< |L| >$, $< L^2 >$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

5 Model quality ⓘ

5.1 Standard geometry ⓘ

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	0.83	20/4638 (0.4%)	1.27	83/6266 (1.3%)
1	B	0.80	17/4638 (0.4%)	1.26	83/6266 (1.3%)
1	C	0.77	13/4638 (0.3%)	1.20	73/6266 (1.2%)
2	D	0.75	0/647	1.15	8/866 (0.9%)
2	E	0.69	0/589	1.24	5/785 (0.6%)
2	F	0.77	0/642	1.20	8/859 (0.9%)
All	All	0.79	50/15792 (0.3%)	1.24	260/21308 (1.2%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	1	8
1	B	0	3
1	C	2	3
2	F	0	1
All	All	3	15

All (50) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	1162	LYS	C-O	-19.68	0.85	1.23
1	A	1222	SER	C-O	18.12	1.57	1.23
1	C	1182	ARG	C-O	17.19	1.56	1.23
1	C	1136	SER	C-O	-17.10	0.90	1.23
1	C	1248	ASN	N-CA	17.04	1.80	1.46
1	B	1280	ALA	C-O	16.13	1.54	1.23
1	C	1247	ALA	CA-C	15.76	1.94	1.52
1	B	1279	HIS	C-O	-14.82	0.95	1.23
1	B	1222	SER	C-O	13.06	1.48	1.23
1	A	1162	LYS	CA-C	12.83	1.86	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	1162	LYS	C-O	-12.35	0.99	1.23
1	A	1223	ASN	N-CA	11.85	1.70	1.46
1	A	1103	ASN	C-O	11.51	1.45	1.23
1	A	1281	ASP	N-CA	11.32	1.69	1.46
1	B	1280	ALA	N-CA	10.12	1.66	1.46
1	B	1223	ASN	N-CA	9.84	1.66	1.46
1	B	1281	ASP	N-CA	9.80	1.66	1.46
1	C	1247	ALA	C-O	-9.61	1.05	1.23
1	A	1163	LYS	N-CA	8.97	1.64	1.46
1	A	1222	SER	C-N	8.76	1.54	1.34
1	A	1280	ALA	CA-C	8.58	1.75	1.52
1	B	1279	HIS	CA-C	8.50	1.75	1.52
1	A	1575	ASP	N-CA	8.40	1.63	1.46
1	C	1136	SER	CA-C	8.29	1.74	1.52
1	B	1592	MET	C-O	-8.01	1.08	1.23
1	C	1118	LYS	C-O	8.00	1.38	1.23
1	C	1592	MET	C-O	-7.84	1.08	1.23
1	A	1148	GLY	N-CA	-7.73	1.34	1.46
1	A	1592	MET	C-O	-7.72	1.08	1.23
1	B	1280	ALA	C-N	7.61	1.51	1.34
1	A	1574	TYR	CA-C	7.59	1.72	1.52
1	A	1104	GLU	C-N	7.19	1.48	1.34
1	B	1197	HIS	C-O	7.06	1.36	1.23
1	B	1221	VAL	C-O	6.98	1.36	1.23
1	B	1134	PRO	N-CD	-6.69	1.38	1.47
1	A	1104	GLU	N-CA	-6.67	1.33	1.46
1	B	1222	SER	C-N	6.65	1.49	1.34
1	A	1134	PRO	N-CD	-6.54	1.38	1.47
1	A	1222	SER	CA-C	6.30	1.69	1.52
1	C	1137	TYR	CA-CB	-6.21	1.40	1.53
1	A	1223	ASN	CA-CB	-6.14	1.37	1.53
1	C	1136	SER	C-N	6.11	1.48	1.34
1	B	1592	MET	CA-CB	-5.79	1.41	1.53
1	B	1223	ASN	CA-CB	-5.76	1.38	1.53
1	B	1280	ALA	CA-C	5.74	1.67	1.52
1	A	1103	ASN	CA-C	-5.54	1.38	1.52
1	C	1592	MET	CA-CB	-5.46	1.42	1.53
1	C	1223	ASN	CA-CB	-5.42	1.39	1.53
1	A	1592	MET	CA-CB	-5.42	1.42	1.53
1	C	1132	ASP	N-CA	-5.11	1.36	1.46

All (260) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	B	1162	LYS	CA-C-O	22.12	166.55	120.10
1	B	1279	HIS	O-C-N	-22.04	87.43	122.70
1	C	1223	ASN	N-CA-C	18.52	161.00	111.00
1	A	1103	ASN	C-N-CA	-17.51	77.93	121.70
1	A	1162	LYS	O-C-N	-16.77	95.87	122.70
1	A	1103	ASN	CA-C-N	-16.07	81.83	117.20
1	C	1137	TYR	N-CA-CB	15.54	138.57	110.60
1	C	1247	ALA	CA-C-N	15.38	151.02	117.20
1	C	1131	ALA	CA-C-N	-15.29	83.57	117.20
1	B	1429	ARG	CB-CA-C	-14.96	80.47	110.40
1	A	1429	ARG	CB-CA-C	-14.94	80.53	110.40
1	C	1429	ARG	CB-CA-C	-14.93	80.53	110.40
1	B	1162	LYS	CA-C-N	-14.30	85.73	117.20
1	B	1091	ASN	CB-CA-C	-14.29	81.83	110.40
1	A	1091	ASN	CB-CA-C	-14.23	81.94	110.40
1	B	1162	LYS	C-N-CA	-14.04	86.60	121.70
1	C	1182	ARG	O-C-N	13.92	144.97	122.70
1	B	1121	VAL	CB-CA-C	-13.18	86.35	111.40
1	C	1131	ALA	C-N-CA	-12.97	89.28	121.70
1	B	1223	ASN	N-CA-C	12.96	145.99	111.00
1	C	1223	ASN	CB-CA-C	-12.88	84.64	110.40
1	A	1103	ASN	O-C-N	12.77	143.12	122.70
1	B	1223	ASN	CB-CA-C	-12.42	85.57	110.40
1	A	1223	ASN	CB-CA-C	-12.35	85.70	110.40
1	A	1104	GLU	C-N-CA	-12.32	70.27	122.00
1	A	1147	SER	CA-C-N	-12.18	91.84	116.20
1	A	1593	ASP	N-CA-CB	12.13	132.44	110.60
1	C	1247	ALA	C-N-CA	12.13	152.03	121.70
1	A	1223	ASN	N-CA-C	12.10	143.67	111.00
1	C	1593	ASP	N-CA-CB	12.04	132.27	110.60
1	B	1593	ASP	N-CA-CB	11.98	132.17	110.60
1	A	1222	SER	CA-C-O	-11.96	94.98	120.10
1	C	1222	SER	C-N-CA	-11.49	92.97	121.70
1	A	1222	SER	O-C-N	11.40	140.94	122.70
1	B	1280	ALA	CA-C-O	-11.33	96.31	120.10
1	B	1280	ALA	CB-CA-C	-11.26	93.20	110.10
1	A	1598	TYR	CB-CA-C	11.14	132.69	110.40
1	B	1598	TYR	CB-CA-C	11.14	132.69	110.40
1	C	1598	TYR	CB-CA-C	11.08	132.55	110.40
1	B	1456	GLN	CB-CA-C	-11.05	88.31	110.40
1	A	1592	MET	CB-CA-C	-11.01	88.39	110.40
1	A	1456	GLN	CB-CA-C	-10.98	88.44	110.40
1	C	1456	GLN	CB-CA-C	-10.98	88.45	110.40

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	1592	MET	CB-CA-C	-10.84	88.72	110.40
1	B	1418	LEU	CB-CA-C	-10.68	89.90	110.20
1	A	1418	LEU	CB-CA-C	-10.65	89.96	110.20
1	C	1418	LEU	CB-CA-C	-10.63	90.01	110.20
1	B	1592	MET	CB-CA-C	-10.60	89.20	110.40
1	C	1247	ALA	O-C-N	-10.32	106.19	122.70
1	A	1104	GLU	N-CA-C	10.20	138.54	111.00
1	B	1532	SER	N-CA-C	-10.14	83.62	111.00
1	C	1532	SER	N-CA-C	-10.13	83.64	111.00
1	A	1532	SER	N-CA-C	-10.07	83.82	111.00
1	B	1528	CYS	CB-CA-C	9.91	130.21	110.40
1	B	1162	LYS	O-C-N	-9.89	106.88	122.70
1	C	1183	LEU	N-CA-C	9.78	137.40	111.00
1	C	1086	ILE	N-CA-C	-9.67	84.88	111.00
1	A	1147	SER	C-N-CA	-9.57	102.19	122.30
1	B	1280	ALA	O-C-N	9.49	137.89	122.70
1	B	1281	ASP	N-CA-CB	9.38	127.48	110.60
1	C	1136	SER	CA-C-N	-9.30	96.73	117.20
2	E	113	LEU	CA-CB-CG	9.28	136.65	115.30
1	B	1251	ARG	CB-CA-C	-9.28	91.85	110.40
1	B	1222	SER	O-C-N	9.27	137.53	122.70
1	C	1355	ALA	N-CA-C	-9.26	86.00	111.00
1	C	1251	ARG	CB-CA-C	-9.23	91.94	110.40
2	F	113	LEU	CA-CB-CG	9.23	136.52	115.30
1	A	1251	ARG	CB-CA-C	-9.22	91.96	110.40
1	A	1355	ALA	N-CA-C	-9.22	86.11	111.00
1	B	1355	ALA	N-CA-C	-9.19	86.17	111.00
2	D	113	LEU	CA-CB-CG	9.11	136.26	115.30
1	B	1222	SER	CA-C-O	-9.00	101.20	120.10
1	A	1231	LEU	CB-CA-C	8.95	127.20	110.20
1	B	1231	LEU	CB-CA-C	8.92	127.15	110.20
1	B	1210	MET	N-CA-C	-8.84	87.15	111.00
1	A	1210	MET	N-CA-C	-8.73	87.44	111.00
1	C	1598	TYR	N-CA-C	-8.72	87.45	111.00
1	A	1598	TYR	N-CA-C	-8.71	87.48	111.00
1	B	1598	TYR	N-CA-C	-8.69	87.53	111.00
1	C	1247	ALA	CA-C-O	-8.56	102.13	120.10
1	C	1223	ASN	O-C-N	8.43	136.19	122.70
1	A	1223	ASN	O-C-N	8.42	136.17	122.70
1	C	1131	ALA	O-C-N	8.38	136.11	122.70
1	B	1223	ASN	O-C-N	8.35	136.06	122.70
2	E	92	ALA	N-CA-C	8.35	133.54	111.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1325	SER	N-CA-C	8.33	133.50	111.00
1	C	1528	CYS	CB-CA-C	8.27	126.95	110.40
1	A	1528	CYS	CB-CA-C	8.26	126.92	110.40
1	B	1325	SER	N-CA-C	8.26	133.30	111.00
1	C	1325	SER	N-CA-C	8.26	133.30	111.00
1	A	1134	PRO	N-CA-C	8.24	133.53	112.10
1	B	1134	PRO	N-CA-C	8.06	133.06	112.10
1	A	1326	LYS	N-CA-C	-7.90	89.67	111.00
1	C	1326	LYS	N-CA-C	-7.90	89.67	111.00
1	C	1222	SER	O-C-N	-7.89	110.08	122.70
1	B	1326	LYS	N-CA-C	-7.87	89.76	111.00
1	A	1590	ASN	N-CA-C	7.74	131.91	111.00
1	C	1136	SER	CB-CA-C	7.71	124.74	110.10
1	A	1181	ASN	CB-CA-C	-7.67	95.07	110.40
1	A	1222	SER	CB-CA-C	-7.66	95.54	110.10
1	A	1574	TYR	CA-C-O	-7.63	104.07	120.10
1	B	1256	VAL	N-CA-C	7.58	131.46	111.00
1	A	1162	LYS	CA-C-N	7.57	133.85	117.20
1	C	1256	VAL	N-CA-C	7.56	131.41	111.00
1	A	1256	VAL	N-CA-C	7.56	131.40	111.00
1	C	1182	ARG	CA-C-N	-7.53	100.64	117.20
1	B	1576	LEU	N-CA-C	-7.52	90.69	111.00
1	C	1576	LEU	N-CA-C	-7.51	90.73	111.00
1	A	1576	LEU	N-CA-C	-7.45	90.88	111.00
1	B	1590	ASN	CB-CA-C	-7.38	95.64	110.40
1	C	1592	MET	O-C-N	-7.27	111.06	122.70
1	C	1590	ASN	CB-CA-C	-7.26	95.88	110.40
1	B	1592	MET	O-C-N	-7.23	111.13	122.70
1	A	1104	GLU	O-C-N	-7.20	107.42	121.10
1	A	1280	ALA	CA-C-O	-7.18	105.02	120.10
1	C	1424	MET	N-CA-C	7.18	130.39	111.00
1	A	1424	MET	N-CA-C	7.18	130.38	111.00
1	A	1256	VAL	CB-CA-C	-7.14	97.83	111.40
1	B	1424	MET	N-CA-C	7.14	130.28	111.00
1	B	1223	ASN	C-N-CA	7.14	139.55	121.70
1	A	1590	ASN	CB-CA-C	-7.13	96.13	110.40
1	A	1527	LEU	N-CA-C	7.08	130.11	111.00
1	A	1592	MET	O-C-N	-7.07	111.39	122.70
1	B	1256	VAL	CB-CA-C	-7.07	97.97	111.40
1	A	1223	ASN	C-N-CA	7.07	139.36	121.70
1	B	1527	LEU	N-CA-C	7.07	130.08	111.00
1	C	1256	VAL	CB-CA-C	-7.06	97.99	111.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	C	1223	ASN	C-N-CA	7.06	139.34	121.70
1	C	1527	LEU	N-CA-C	7.05	130.03	111.00
1	B	1134	PRO	N-CA-CB	-7.01	94.89	103.30
1	A	1572	THR	N-CA-C	6.99	129.86	111.00
1	B	1572	THR	N-CA-C	6.99	129.86	111.00
1	C	1181	ASN	CB-CA-C	-6.93	96.54	110.40
1	C	1572	THR	N-CA-C	6.92	129.70	111.00
1	C	1182	ARG	CA-C-O	-6.90	105.61	120.10
1	A	1134	PRO	N-CA-CB	-6.85	95.07	102.60
1	B	1457	ASN	N-CA-C	-6.78	92.69	111.00
1	C	1457	ASN	N-CA-C	-6.75	92.77	111.00
1	A	1457	ASN	N-CA-C	-6.74	92.80	111.00
1	B	1197	HIS	O-C-N	6.72	133.45	122.70
1	B	1590	ASN	N-CA-C	6.71	129.11	111.00
1	C	1222	SER	CA-C-N	-6.70	102.45	117.20
1	C	1520	ARG	CB-CA-C	-6.68	97.04	110.40
1	B	1520	ARG	CB-CA-C	-6.61	97.18	110.40
1	A	1520	ARG	CB-CA-C	-6.60	97.21	110.40
1	A	1133	ASP	N-CA-C	-6.58	93.24	111.00
1	C	1358	TRP	CB-CA-C	-6.56	97.28	110.40
1	A	1358	TRP	CB-CA-C	-6.56	97.29	110.40
1	B	1358	TRP	CB-CA-C	-6.50	97.39	110.40
1	A	1231	LEU	N-CA-C	-6.35	93.86	111.00
1	B	1231	LEU	N-CA-C	-6.35	93.87	111.00
1	B	1163	LYS	N-CA-CB	6.32	121.97	110.60
1	B	1133	ASP	N-CA-C	-6.31	93.95	111.00
2	D	113	LEU	N-CA-CB	-6.27	97.85	110.40
1	A	1197	HIS	N-CA-C	-6.26	94.11	111.00
2	F	164	PRO	N-CA-CB	6.20	110.75	103.30
2	E	112	ARG	N-CA-C	-6.19	94.30	111.00
1	C	1465	GLU	CB-CA-C	-6.18	98.04	110.40
2	F	112	ARG	N-CA-C	-6.18	94.32	111.00
2	F	110	ARG	NE-CZ-NH2	-6.16	117.22	120.30
1	B	1465	GLU	CB-CA-C	-6.14	98.12	110.40
1	A	1465	GLU	CB-CA-C	-6.14	98.13	110.40
1	C	1248	ASN	N-CA-CB	-6.08	99.66	110.60
1	B	1233	HIS	N-CA-C	-6.07	94.62	111.00
1	C	1167	SER	N-CA-C	6.06	127.36	111.00
1	A	1233	HIS	N-CA-C	-6.03	94.72	111.00
1	C	1531	ASP	CB-CA-C	-6.00	98.40	110.40
1	B	1531	ASP	CB-CA-C	-5.97	98.46	110.40
1	A	1531	ASP	CB-CA-C	-5.96	98.48	110.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	B	1151	GLU	CB-CA-C	-5.95	98.50	110.40
1	A	1261	VAL	CB-CA-C	-5.95	100.10	111.40
1	B	1222	SER	CB-CA-C	-5.93	98.83	110.10
1	C	1130	LYS	N-CA-C	-5.93	95.00	111.00
1	C	1261	VAL	CB-CA-C	-5.91	100.17	111.40
1	A	1235	GLY	N-CA-C	-5.91	98.33	113.10
1	B	1235	GLY	N-CA-C	-5.90	98.36	113.10
1	B	1261	VAL	CB-CA-C	-5.88	100.23	111.40
2	E	110	ARG	NE-CZ-NH2	-5.87	117.36	120.30
2	D	110	ARG	NE-CZ-NH2	-5.86	117.37	120.30
1	B	1162	LYS	N-CA-C	-5.86	95.17	111.00
1	C	1151	GLU	CB-CA-C	-5.86	98.69	110.40
1	A	1151	GLU	CB-CA-C	-5.85	98.70	110.40
2	D	164	PRO	N-CA-CB	5.84	110.31	103.30
1	C	1118	LYS	O-C-N	5.78	133.03	123.20
1	B	1589	HIS	N-CA-C	5.75	126.51	111.00
1	A	1183	LEU	N-CA-C	5.74	126.49	111.00
1	A	1465	GLU	N-CA-C	5.73	126.46	111.00
1	B	1465	GLU	N-CA-C	5.70	126.38	111.00
1	B	1529	LYS	N-CA-CB	-5.69	100.35	110.60
1	A	1529	LYS	N-CA-CB	-5.68	100.37	110.60
1	C	1465	GLU	N-CA-C	5.67	126.30	111.00
1	A	1455	VAL	CB-CA-C	-5.66	100.64	111.40
1	B	1576	LEU	CB-CA-C	5.64	120.92	110.20
1	C	1455	VAL	CB-CA-C	-5.62	100.73	111.40
1	C	1529	LYS	N-CA-CB	-5.62	100.49	110.60
1	B	1455	VAL	CB-CA-C	-5.60	100.77	111.40
1	A	1572	THR	CB-CA-C	-5.56	96.59	111.60
1	A	1576	LEU	CB-CA-C	5.55	120.74	110.20
1	B	1572	THR	CB-CA-C	-5.55	96.63	111.60
1	A	1574	TYR	CA-C-N	5.54	129.38	117.20
1	C	1535	LYS	N-CA-C	5.53	125.94	111.00
1	A	1325	SER	CB-CA-C	-5.51	99.64	110.10
1	C	1572	THR	CB-CA-C	-5.50	96.74	111.60
1	C	1355	ALA	CB-CA-C	5.50	118.36	110.10
1	C	1576	LEU	CB-CA-C	5.49	120.64	110.20
1	A	1535	LYS	N-CA-C	5.49	125.81	111.00
1	B	1355	ALA	CB-CA-C	5.49	118.33	110.10
1	C	1325	SER	CB-CA-C	-5.47	99.70	110.10
1	C	1590	ASN	N-CA-C	5.47	125.77	111.00
1	B	1325	SER	CB-CA-C	-5.46	99.73	110.10
1	B	1535	LYS	N-CA-C	5.46	125.74	111.00

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	B	1192	GLY	C-N-CD	-5.45	108.61	120.60
2	F	157	ASP	N-CA-C	5.43	125.67	111.00
2	D	157	ASP	N-CA-C	5.43	125.67	111.00
1	A	1192	GLY	C-N-CD	-5.41	108.70	120.60
1	A	1463	VAL	CB-CA-C	-5.40	101.13	111.40
2	F	156	ALA	N-CA-C	-5.40	96.41	111.00
1	A	1355	ALA	CB-CA-C	5.40	118.20	110.10
2	D	156	ALA	N-CA-C	-5.39	96.45	111.00
1	B	1463	VAL	CB-CA-C	-5.37	101.20	111.40
1	A	1223	ASN	CA-C-O	-5.36	108.85	120.10
1	C	1463	VAL	CB-CA-C	-5.35	101.23	111.40
1	A	1107	VAL	N-CA-C	5.34	125.42	111.00
1	B	1107	VAL	N-CA-C	5.33	125.39	111.00
1	C	1593	ASP	CB-CA-C	-5.28	99.84	110.40
1	A	1593	ASP	CB-CA-C	-5.24	99.92	110.40
1	B	1133	ASP	CB-CA-C	5.22	120.85	110.40
1	A	1426	LEU	CB-CA-C	-5.22	100.28	110.20
1	C	1426	LEU	CB-CA-C	-5.21	100.30	110.20
1	B	1221	VAL	O-C-N	5.21	131.03	122.70
2	F	143	SER	N-CA-C	5.20	125.05	111.00
2	D	143	SER	N-CA-C	5.20	125.05	111.00
1	B	1593	ASP	CB-CA-C	-5.20	100.01	110.40
1	A	1425	VAL	CB-CA-C	-5.19	101.54	111.40
2	E	156	ALA	N-CA-C	-5.19	96.99	111.00
2	F	156	ALA	C-N-CA	5.18	134.64	121.70
1	B	1223	ASN	CA-C-O	-5.17	109.24	120.10
1	C	1169	VAL	CB-CA-C	-5.17	101.58	111.40
1	A	1371	TYR	CB-CA-C	-5.16	100.07	110.40
1	C	1371	TYR	CB-CA-C	-5.16	100.08	110.40
2	D	156	ALA	C-N-CA	5.16	134.59	121.70
1	A	1133	ASP	CB-CA-C	5.15	120.71	110.40
1	B	1426	LEU	CB-CA-C	-5.15	100.42	110.20
1	C	1182	ARG	CB-CA-C	5.14	120.69	110.40
1	B	1371	TYR	CB-CA-C	-5.14	100.11	110.40
1	C	1425	VAL	CB-CA-C	-5.13	101.66	111.40
1	B	1425	VAL	CB-CA-C	-5.11	101.69	111.40
1	B	1169	VAL	CB-CA-C	-5.11	101.69	111.40
1	A	1104	GLU	CA-C-O	-5.08	109.43	120.10
1	B	1134	PRO	CA-C-N	5.08	128.38	117.20
1	C	1180	THR	N-CA-C	5.08	124.70	111.00
1	A	1169	VAL	CB-CA-C	-5.04	101.82	111.40
1	B	1122	LYS	CB-CA-C	-5.03	100.34	110.40

Continued on next page...

Full wwPDB X-ray Structure Validation Report

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	B	1129	ILE	C-N-CA	-5.03	109.13	121.70
1	A	1129	ILE	C-N-CA	-5.03	109.14	121.70
1	B	1358	TRP	N-CA-C	5.02	124.56	111.00
1	B	1195	ASN	CB-CA-C	-5.02	100.37	110.40
1	A	1195	ASN	CB-CA-C	-5.01	100.38	110.40
1	A	1573	CYS	CB-CA-C	-5.01	100.39	110.40
1	C	1573	CYS	CB-CA-C	-5.00	100.39	110.40

All (3) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
1	A	1104	GLU	CA
1	C	1137	TYR	CA
1	C	1223	ASN	CA

All (15) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	1103	ASN	Mainchain
1	A	1104	GLU	Mainchain
1	A	1133	ASP	Mainchain
1	A	1147	SER	Mainchain
1	A	1162	LYS	Mainchain
1	A	1197	HIS	Mainchain
1	A	1247	ALA	Mainchain
1	A	1280	ALA	Mainchain
1	B	1133	ASP	Mainchain
1	B	1279	HIS	Mainchain
1	B	1280	ALA	Mainchain
1	C	1131	ALA	Mainchain
1	C	1182	ARG	Mainchain
1	C	1222	SER	Mainchain
2	F	196	UNK	Peptide

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	4543	0	4454	1296	1
1	B	4543	0	4456	1248	3
1	C	4543	0	4455	1291	4
2	D	1146	0	735	252	0
2	E	823	0	633	246	0
2	F	906	0	669	239	0
All	All	16504	0	15402	4313	5

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 135.

All (4313) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1258:PHE:HB2	1:A:1289:TYR:CD2	1.19	1.69
1:A:1253:TRP:CZ3	1:A:1276:ILE:HG22	1.25	1.64
1:C:1253:TRP:CZ3	1:C:1276:ILE:HG22	1.25	1.64
1:A:1258:PHE:CB	1:A:1289:TYR:CE2	1.75	1.63
1:B:1253:TRP:CZ3	1:B:1276:ILE:HG22	1.25	1.63
1:A:1258:PHE:HB3	1:A:1289:TYR:CE2	1.28	1.61
2:E:203:UNK:C	2:E:203:UNK:CA	1.76	1.60
1:B:1264:LYS:CE	1:B:1268:LEU:HD12	1.17	1.58
1:C:1211:TYR:CD1	1:C:1231:LEU:HD22	1.29	1.58
1:C:1264:LYS:CE	1:C:1268:LEU:HD12	1.17	1.57
1:A:1264:LYS:CE	1:A:1268:LEU:HD12	1.17	1.56
1:A:1223:ASN:N	1:A:1223:ASN:CA	1.70	1.55
1:C:1136:SER:CA	1:C:1136:SER:C	1.74	1.54
1:A:1281:ASP:N	1:A:1281:ASP:CA	1.69	1.54
1:A:1280:ALA:CA	1:A:1280:ALA:C	1.75	1.53
1:B:1279:HIS:CA	1:B:1279:HIS:C	1.75	1.51
1:B:1358:TRP:CH2	1:B:1381:HIS:CE1	1.98	1.50
1:C:1358:TRP:CH2	1:C:1381:HIS:CE1	1.98	1.50
1:C:1409:GLN:CG	1:C:1413:GLU:HG3	1.41	1.50
1:A:1409:GLN:CG	1:A:1413:GLU:HG3	1.41	1.49
1:A:1358:TRP:CH2	1:A:1381:HIS:CE1	1.98	1.48
1:B:1290:TYR:CD2	1:B:1299:LEU:HD13	1.46	1.47
1:B:1409:GLN:CG	1:B:1413:GLU:HG3	1.41	1.46
1:A:1258:PHE:N	1:A:1289:TYR:CZ	1.77	1.44
1:C:1248:ASN:N	1:C:1248:ASN:CA	1.80	1.43
1:A:1244:ALA:HB3	1:A:1275:HIS:ND1	1.13	1.43
1:B:1244:ALA:HB3	1:B:1275:HIS:ND1	1.20	1.43
1:C:1211:TYR:CD1	1:C:1231:LEU:CD2	2.01	1.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1244:ALA:HB3	1:B:1275:HIS:CE1	1.53	1.42
1:A:1244:ALA:HB3	1:A:1275:HIS:CE1	1.55	1.42
1:A:1162:LYS:C	1:A:1162:LYS:CA	1.86	1.42
1:B:1253:TRP:CE3	1:B:1276:ILE:CG2	2.04	1.40
2:F:21:UNK:CA	2:F:21:UNK:C	1.97	1.40
1:C:1253:TRP:CE3	1:C:1276:ILE:CG2	2.04	1.39
1:C:1602:VAL:HG13	2:E:203:UNK:C	1.50	1.39
1:A:1253:TRP:CE3	1:A:1276:ILE:CG2	2.04	1.38
1:C:1247:ALA:CA	1:C:1247:ALA:C	1.93	1.37
1:C:1092:LEU:O	1:C:1094:ARG:N	1.59	1.35
1:B:1601:GLN:NE2	1:C:1587:TRP:CZ3	1.91	1.35
1:C:1504:LEU:HD11	2:E:149:ASN:ND2	1.06	1.35
1:A:1264:LYS:CE	1:A:1268:LEU:CD1	2.05	1.35
1:A:1414:PHE:O	1:A:1416:PRO:HD3	1.27	1.35
1:B:1264:LYS:CE	1:B:1268:LEU:CD1	2.04	1.34
1:A:1279:HIS:NE2	1:A:1283:LEU:CD1	1.89	1.34
1:A:1279:HIS:NE2	1:A:1283:LEU:HD13	1.40	1.34
1:A:1258:PHE:CB	1:A:1289:TYR:CD2	2.01	1.33
1:C:1264:LYS:CE	1:C:1268:LEU:CD1	2.05	1.33
1:B:1250:THR:O	1:B:1251:ARG:HG2	1.25	1.33
1:B:1414:PHE:O	1:B:1416:PRO:HD3	1.27	1.33
1:C:1167:SER:O	1:C:1171:THR:HB	1.26	1.33
1:B:1253:TRP:CZ3	1:B:1276:ILE:CG2	2.13	1.31
1:C:1253:TRP:CZ3	1:C:1276:ILE:CG2	2.13	1.31
1:B:1371:TYR:CD1	1:B:1394:ILE:HG23	1.66	1.31
1:C:1290:TYR:CE2	1:C:1299:LEU:HD13	1.65	1.30
1:A:1371:TYR:CD1	1:A:1394:ILE:HG23	1.66	1.30
1:C:1222:SER:O	1:C:1223:ASN:CB	1.65	1.30
1:C:1371:TYR:HD1	1:C:1394:ILE:CG2	1.45	1.30
1:C:1414:PHE:O	1:C:1416:PRO:HD3	1.27	1.30
1:A:1244:ALA:CB	1:A:1275:HIS:ND1	1.94	1.29
1:C:1409:GLN:HG3	1:C:1413:GLU:CG	1.62	1.29
2:E:104:LYS:O	2:E:108:GLU:CG	1.79	1.29
1:B:1409:GLN:HG3	1:B:1413:GLU:CG	1.63	1.29
1:A:1371:TYR:HD1	1:A:1394:ILE:CG2	1.45	1.28
1:C:1371:TYR:CD1	1:C:1394:ILE:HG23	1.66	1.28
1:A:1253:TRP:CZ3	1:A:1276:ILE:CG2	2.13	1.28
1:A:1409:GLN:HG3	1:A:1413:GLU:CG	1.62	1.28
1:B:1371:TYR:HD1	1:B:1394:ILE:CG2	1.45	1.28
2:D:112:ARG:C	2:D:112:ARG:HD3	1.50	1.28
1:A:1250:THR:O	1:A:1251:ARG:HG2	1.24	1.28

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1395:ILE:HG13	1:C:1404:TYR:CE2	1.68	1.28
1:C:1250:THR:O	1:C:1251:ARG:HG2	1.24	1.28
1:B:1137:TYR:CB	1:B:1138:MET:HB2	1.65	1.27
1:B:1598:TYR:HE2	2:D:201:UNK:N	1.31	1.27
1:C:1588:ARG:HH22	2:D:193:UNK:C	1.48	1.27
1:A:1475:GLU:OE1	2:F:145:GLN:HB3	1.21	1.27
2:E:119:ALA:O	2:E:123:MET:HG2	1.28	1.26
1:A:1253:TRP:CE3	1:A:1276:ILE:HG22	1.66	1.26
1:A:1395:ILE:HG13	1:A:1404:TYR:CE2	1.68	1.26
2:D:119:ALA:O	2:D:123:MET:HG2	1.28	1.26
1:B:1395:ILE:HG13	1:B:1404:TYR:CE2	1.68	1.26
1:B:1244:ALA:CB	1:B:1275:HIS:ND1	1.98	1.25
1:B:1409:GLN:HA	1:B:1413:GLU:CG	1.66	1.25
1:C:1409:GLN:HA	1:C:1413:GLU:CG	1.65	1.25
1:C:1409:GLN:CA	1:C:1413:GLU:HG2	1.66	1.25
2:D:112:ARG:HD3	2:D:112:ARG:O	1.35	1.25
1:C:1504:LEU:CD1	2:E:149:ASN:ND2	1.99	1.25
1:B:1419:LEU:O	1:B:1422:LEU:HB3	1.36	1.25
1:C:1107:VAL:CG1	1:C:1111:LEU:HB2	1.67	1.24
1:A:1409:GLN:CA	1:A:1413:GLU:HG2	1.65	1.24
1:B:1279:HIS:CD2	1:B:1280:ALA:H	1.54	1.24
1:B:1409:GLN:CA	1:B:1413:GLU:HG2	1.65	1.24
1:C:1434:ARG:NE	2:E:5:UNK:HA	1.53	1.24
1:A:1258:PHE:N	1:A:1289:TYR:CE1	2.06	1.24
1:B:1463:VAL:O	1:B:1467:LEU:HB2	1.06	1.24
1:A:1409:GLN:HA	1:A:1413:GLU:CG	1.65	1.23
1:C:1419:LEU:O	1:C:1422:LEU:HB3	1.36	1.23
1:C:1270:GLN:CD	1:C:1298:GLU:HG3	1.57	1.22
1:C:1412:LEU:CD1	1:C:1419:LEU:HD21	1.70	1.22
1:C:1429:ARG:CG	1:C:1429:ARG:O	1.78	1.21
2:F:114:GLN:CG	2:F:115:GLU:H	1.48	1.21
2:F:119:ALA:O	2:F:123:MET:HG2	1.36	1.21
2:F:162:GLN:HA	2:F:166:ALA:CB	1.70	1.21
1:B:1395:ILE:CG1	1:B:1404:TYR:CE2	2.24	1.21
1:B:1587:TRP:O	1:B:1589:HIS:N	1.71	1.21
1:A:1412:LEU:CD1	1:A:1419:LEU:HD21	1.70	1.21
1:A:1137:TYR:CB	1:A:1138:MET:HB2	1.71	1.21
1:B:1412:LEU:CD1	1:B:1419:LEU:HD21	1.70	1.21
1:B:1475:GLU:OE1	2:D:145:GLN:HB3	1.05	1.21
1:A:1254:LYS:O	1:A:1289:TYR:CD2	1.94	1.20
1:A:1279:HIS:CE1	1:A:1283:LEU:CD1	2.23	1.20

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1463:VAL:O	1:C:1467:LEU:HB2	1.06	1.20
1:A:1395:ILE:CG1	1:A:1404:TYR:CE2	2.23	1.20
2:E:114:GLN:CG	2:E:115:GLU:H	1.48	1.20
1:A:1463:VAL:O	1:A:1467:LEU:HB2	1.06	1.20
1:B:1358:TRP:CZ2	1:B:1381:HIS:CE1	2.30	1.20
1:B:1588:ARG:CZ	2:F:192:UNK:HA	1.69	1.20
1:A:1258:PHE:HB2	1:A:1289:TYR:CG	1.76	1.19
1:A:1419:LEU:O	1:A:1422:LEU:HB3	1.36	1.19
1:A:1254:LYS:CG	1:A:1285:GLU:OE2	1.86	1.19
1:A:1358:TRP:CZ2	1:A:1381:HIS:CE1	2.30	1.19
1:C:1198:ILE:HB	1:C:1221:VAL:CG2	1.71	1.19
1:C:1253:TRP:CE3	1:C:1276:ILE:HG22	1.66	1.19
1:C:1358:TRP:CZ2	1:C:1381:HIS:CE1	2.30	1.19
1:C:1395:ILE:CG1	1:C:1404:TYR:CE2	2.24	1.19
2:D:114:GLN:CG	2:D:115:GLU:H	1.48	1.19
1:B:1253:TRP:CE3	1:B:1276:ILE:HG22	1.66	1.19
1:A:1409:GLN:O	1:A:1413:GLU:HB2	1.42	1.18
1:C:1434:ARG:HE	2:E:5:UNK:CA	1.56	1.18
2:E:114:GLN:HG3	2:E:115:GLU:N	1.46	1.18
1:B:1409:GLN:O	1:B:1413:GLU:HB2	1.41	1.18
1:B:1598:TYR:CE2	2:D:201:UNK:N	2.11	1.18
2:D:174:UNK:HA	2:D:176:UNK:N	1.58	1.18
1:B:1429:ARG:CG	1:B:1429:ARG:O	1.78	1.18
1:C:1408:ILE:HG22	1:C:1412:LEU:HB3	1.20	1.18
1:A:1411:TYR:O	1:A:1415:LYS:O	1.62	1.17
1:B:1245:ARG:O	1:B:1246:LYS:HG3	1.39	1.17
1:C:1221:VAL:HG13	1:C:1222:SER:N	1.59	1.17
1:B:1551:GLU:CG	1:B:1582:VAL:HG22	1.76	1.16
1:C:1409:GLN:O	1:C:1413:GLU:HB2	1.41	1.16
1:A:1326:LYS:CG	1:A:1326:LYS:O	1.93	1.16
1:B:1408:ILE:HG22	1:B:1412:LEU:HB3	1.20	1.16
1:B:1361:LEU:CD2	1:B:1365:TYR:CE2	2.28	1.16
1:B:1427:SER:HB2	1:B:1428:PRO:HD3	1.22	1.16
1:B:1509:ARG:HH22	2:D:163:GLN:HA	1.08	1.16
1:C:1326:LYS:CG	1:C:1326:LYS:O	1.93	1.15
1:B:1358:TRP:HE3	1:B:1377:THR:CG2	1.60	1.15
1:A:1427:SER:CB	1:A:1428:PRO:HD3	1.77	1.15
1:C:1277:VAL:O	1:C:1279:HIS:N	1.80	1.15
1:B:1605:GLU:HA	1:B:1608:THR:HB	1.29	1.15
2:F:183:UNK:HA	2:F:188:UNK:N	1.61	1.15
1:A:1361:LEU:CD2	1:A:1365:TYR:CE2	2.29	1.15

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1427:SER:CB	1:B:1428:PRO:HD3	1.76	1.15
1:C:1427:SER:CB	1:C:1428:PRO:HD3	1.77	1.15
1:C:1361:LEU:CD2	1:C:1365:TYR:CE2	2.28	1.14
1:A:1429:ARG:CG	1:A:1429:ARG:O	1.78	1.14
1:C:1188:GLU:OE2	1:C:1191:ASN:HB2	1.44	1.14
1:C:1222:SER:C	1:C:1223:ASN:OD1	1.85	1.14
1:B:1327:PHE:HD1	2:D:104:LYS:HE2	0.99	1.14
1:C:1358:TRP:HE3	1:C:1377:THR:CG2	1.60	1.14
1:C:1492:ASN:O	1:C:1493:ILE:HG12	1.45	1.14
1:B:1588:ARG:NH1	2:F:192:UNK:HA	1.62	1.14
1:A:1258:PHE:CB	1:A:1289:TYR:CZ	2.30	1.13
1:A:1492:ASN:O	1:A:1493:ILE:HG13	1.47	1.13
1:C:1490:PHE:CE1	1:C:1492:ASN:OD1	2.01	1.13
1:C:1602:VAL:HG13	2:E:203:UNK:O	1.45	1.13
1:B:1492:ASN:O	1:B:1493:ILE:HG13	1.47	1.13
1:B:1551:GLU:HG2	1:B:1582:VAL:HG22	1.20	1.13
1:A:1258:PHE:CA	1:A:1289:TYR:CZ	2.31	1.13
1:B:1326:LYS:O	1:B:1326:LYS:CG	1.93	1.13
1:B:1490:PHE:CE1	1:B:1492:ASN:OD1	2.01	1.12
2:F:114:GLN:HG3	2:F:115:GLU:N	1.46	1.12
1:A:1358:TRP:HE3	1:A:1377:THR:CG2	1.60	1.12
1:C:1198:ILE:HA	1:C:1201:VAL:HG21	1.29	1.12
1:C:1411:TYR:HA	1:C:1415:LYS:HB3	1.31	1.12
1:B:1412:LEU:HD13	1:B:1419:LEU:HD21	1.12	1.12
1:C:1107:VAL:HG12	1:C:1111:LEU:CB	1.79	1.12
1:A:1490:PHE:CE1	1:A:1492:ASN:OD1	2.01	1.12
1:B:1137:TYR:HB2	1:B:1138:MET:CB	1.78	1.12
1:B:1588:ARG:NH2	2:F:192:UNK:HA	1.64	1.12
1:B:1601:GLN:NE2	1:C:1587:TRP:CH2	2.15	1.12
1:A:1221:VAL:HG13	1:A:1222:SER:N	1.59	1.12
1:A:1326:LYS:O	1:A:1326:LYS:HG2	1.33	1.12
1:C:1463:VAL:O	1:C:1467:LEU:CB	1.98	1.11
1:C:1253:TRP:CE3	1:C:1276:ILE:HG21	1.81	1.11
1:A:1427:SER:HB2	1:A:1428:PRO:HD3	1.22	1.11
1:B:1463:VAL:O	1:B:1467:LEU:CB	1.98	1.11
1:C:1326:LYS:O	1:C:1326:LYS:HG2	1.33	1.11
2:F:162:GLN:C	2:F:166:ALA:HB3	1.70	1.11
1:A:1427:SER:HB2	1:A:1428:PRO:CD	1.81	1.10
1:C:1427:SER:HB2	1:C:1428:PRO:CD	1.81	1.10
1:A:1578:ARG:CZ	1:A:1583:LEU:HD23	1.81	1.10
1:B:1326:LYS:O	1:B:1326:LYS:HG2	1.33	1.10

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1221:VAL:HG13	1:B:1222:SER:N	1.53	1.10
2:F:195:UNK:CA	2:F:197:UNK:CB	2.29	1.10
1:A:1358:TRP:CH2	1:A:1381:HIS:NE2	2.20	1.10
1:B:1427:SER:HB2	1:B:1428:PRO:CD	1.81	1.10
1:B:1455:VAL:HG12	1:B:1456:GLN:H	1.14	1.10
1:A:1264:LYS:HE2	1:A:1268:LEU:HD12	1.13	1.10
1:A:1463:VAL:O	1:A:1467:LEU:CB	1.98	1.10
1:B:1358:TRP:CZ3	1:B:1381:HIS:NE2	2.20	1.10
1:B:1475:GLU:OE1	2:D:145:GLN:CB	2.00	1.10
1:C:1358:TRP:CZ3	1:C:1381:HIS:NE2	2.20	1.10
2:D:114:GLN:HG3	2:D:115:GLU:N	1.46	1.10
1:A:1221:VAL:HG13	1:A:1222:SER:H	1.14	1.09
1:C:1361:LEU:HD21	1:C:1365:TYR:CE2	1.85	1.09
1:C:1427:SER:HB2	1:C:1428:PRO:HD3	1.22	1.09
1:A:1258:PHE:HB2	1:A:1289:TYR:CE2	1.58	1.09
1:B:1358:TRP:O	1:B:1362:VAL:HG23	1.52	1.09
1:C:1190:ILE:HD13	1:C:1216:LEU:HG	1.34	1.09
1:C:1358:TRP:CH2	1:C:1381:HIS:NE2	2.20	1.09
1:C:1504:LEU:HG	2:E:149:ASN:OD1	1.51	1.09
1:C:1578:ARG:CZ	1:C:1583:LEU:HD23	1.81	1.09
1:B:1411:TYR:CA	1:B:1415:LYS:HB3	1.81	1.09
1:B:1588:ARG:NH2	2:F:192:UNK:CA	2.15	1.09
1:A:1279:HIS:CE1	1:A:1283:LEU:HD11	1.88	1.09
1:A:1416:PRO:CD	2:F:130:LYS:HD3	1.83	1.09
1:B:1327:PHE:CD1	2:D:104:LYS:HE2	1.87	1.09
1:B:1358:TRP:CH2	1:B:1381:HIS:NE2	2.20	1.09
1:B:1411:TYR:HA	1:B:1415:LYS:HB3	1.31	1.09
1:B:1578:ARG:CZ	1:B:1583:LEU:HD23	1.81	1.09
1:C:1174:ILE:HG13	1:C:1196:ALA:HA	1.29	1.09
1:C:1230:THR:O	1:C:1231:LEU:HD23	1.53	1.09
1:C:1270:GLN:OE1	1:C:1298:GLU:HB3	1.51	1.09
2:D:181:UNK:CA	2:D:183:UNK:CB	2.30	1.09
1:A:1137:TYR:HB2	1:A:1138:MET:CB	1.84	1.08
1:A:1408:ILE:HG22	1:A:1412:LEU:HB3	1.21	1.08
1:B:1107:VAL:O	1:B:1107:VAL:HG12	1.28	1.08
1:B:1414:PHE:O	2:D:130:LYS:HD3	1.52	1.08
1:A:1295:TYR:CD2	1:A:1299:LEU:HB2	1.89	1.08
1:A:1411:TYR:CA	1:A:1415:LYS:HB3	1.82	1.08
1:A:1358:TRP:CZ3	1:A:1381:HIS:NE2	2.20	1.08
1:C:1411:TYR:CA	1:C:1415:LYS:HB3	1.82	1.08
1:C:1504:LEU:CD1	2:E:149:ASN:HD21	1.58	1.08

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1416:PRO:HG2	2:F:130:LYS:HG2	1.08	1.08
1:A:1416:PRO:HG2	2:F:130:LYS:CG	1.82	1.08
2:D:119:ALA:O	2:D:123:MET:CG	2.02	1.08
1:B:1144:ALA:HB1	1:B:1149:ASN:HB3	1.36	1.07
1:B:1279:HIS:CD2	1:B:1282:GLU:HB3	1.88	1.07
1:B:1361:LEU:HD21	1:B:1365:TYR:CE2	1.86	1.07
1:C:1412:LEU:HD13	1:C:1419:LEU:HD21	1.12	1.07
2:E:104:LYS:O	2:E:108:GLU:HG3	1.51	1.07
2:E:119:ALA:O	2:E:123:MET:CG	2.01	1.07
1:A:1358:TRP:O	1:A:1362:VAL:HG23	1.52	1.07
1:B:1122:LYS:HA	1:B:1125:ILE:HG22	1.36	1.07
1:B:1416:PRO:HD3	2:D:130:LYS:HD3	1.34	1.07
1:C:1234:LEU:HD23	1:C:1264:LYS:NZ	1.68	1.07
1:C:1264:LYS:HE2	1:C:1268:LEU:HD12	1.13	1.07
1:A:1605:GLU:HA	1:A:1608:THR:HB	1.29	1.07
1:C:1177:LEU:HD13	1:C:1189:PHE:HZ	1.07	1.07
1:C:1270:GLN:OE1	1:C:1298:GLU:CB	2.02	1.07
1:A:1253:TRP:CE3	1:A:1276:ILE:HG21	1.82	1.07
1:A:1361:LEU:HD21	1:A:1365:TYR:CE2	1.86	1.07
1:A:1412:LEU:HD13	1:A:1419:LEU:HD21	1.12	1.07
1:B:1490:PHE:CZ	1:B:1492:ASN:OD1	2.08	1.07
2:D:137:GLU:O	2:D:141:ARG:NH2	1.88	1.07
2:F:162:GLN:CA	2:F:166:ALA:CB	2.33	1.07
1:B:1253:TRP:CE3	1:B:1276:ILE:HG21	1.82	1.06
1:C:1198:ILE:O	1:C:1201:VAL:HB	1.54	1.06
1:A:1490:PHE:CZ	1:A:1492:ASN:OD1	2.09	1.06
1:C:1221:VAL:HG13	1:C:1222:SER:H	1.13	1.06
2:D:174:UNK:CB	2:D:177:UNK:CB	2.33	1.06
1:A:1455:VAL:HG12	1:A:1456:GLN:H	1.14	1.06
1:C:1290:TYR:CD2	1:C:1299:LEU:HD22	1.90	1.06
1:C:1358:TRP:O	1:C:1362:VAL:HG23	1.53	1.06
1:C:1455:VAL:HG12	1:C:1456:GLN:H	1.14	1.06
2:F:195:UNK:HA	2:F:197:UNK:CB	1.84	1.06
1:B:1416:PRO:HG2	2:D:130:LYS:HG2	1.30	1.06
1:C:1167:SER:O	1:C:1171:THR:CB	2.02	1.06
1:B:1264:LYS:HE2	1:B:1268:LEU:HD12	1.12	1.06
1:C:1082:VAL:HG22	1:C:1107:VAL:HG21	1.38	1.06
2:F:163:GLN:N	2:F:166:ALA:HB3	1.70	1.06
1:A:1283:LEU:HD22	1:A:1313:HIS:NE2	1.70	1.05
1:C:1167:SER:C	1:C:1171:THR:HB	1.75	1.05
1:C:1605:GLU:HA	1:C:1608:THR:HB	1.29	1.05

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1588:ARG:NH2	2:D:193:UNK:CA	2.19	1.05
1:B:1264:LYS:HE2	1:B:1268:LEU:CD1	1.77	1.05
1:B:1417:LEU:O	1:B:1418:LEU:HB2	1.53	1.05
1:B:1509:ARG:HH22	2:D:163:GLN:CA	1.68	1.05
1:B:1588:ARG:HH22	2:F:192:UNK:CA	1.67	1.05
1:C:1414:PHE:HE1	2:E:127:TRP:CZ3	1.74	1.05
2:E:155:ILE:HD12	2:E:155:ILE:H	1.19	1.05
1:C:1382:PRO:HD2	2:E:115:GLU:OE2	1.56	1.04
1:A:1411:TYR:HA	1:A:1415:LYS:HB3	1.35	1.04
1:C:1387:LYS:HB2	1:C:1390:GLN:CB	1.88	1.04
1:A:1111:LEU:HD11	1:A:1125:ILE:CG1	1.87	1.04
1:B:1387:LYS:HB2	1:B:1390:GLN:CB	1.87	1.04
1:B:1416:PRO:HG2	2:D:130:LYS:CG	1.86	1.04
1:C:1264:LYS:HE3	1:C:1268:LEU:CD1	1.80	1.04
1:C:1115:GLN:HB3	1:C:1125:ILE:HG12	1.35	1.04
2:D:181:UNK:HA	2:D:183:UNK:CB	1.85	1.04
1:A:1250:THR:O	1:A:1251:ARG:CG	2.06	1.04
1:A:1361:LEU:CD2	1:A:1365:TYR:HE2	1.70	1.04
1:A:1411:TYR:O	1:A:1415:LYS:HB3	1.56	1.04
1:A:1588:ARG:NH2	2:E:192:UNK:HA	1.72	1.04
1:B:1290:TYR:CD2	1:B:1299:LEU:CD1	2.39	1.04
1:C:1122:LYS:HA	1:C:1125:ILE:HG22	1.40	1.04
1:C:1490:PHE:CZ	1:C:1492:ASN:OD1	2.09	1.04
2:E:189:UNK:O	2:E:195:UNK:CB	2.06	1.04
1:A:1107:VAL:HG12	1:A:1107:VAL:O	1.28	1.03
1:A:1387:LYS:HB2	1:A:1390:GLN:CB	1.88	1.03
1:A:1408:ILE:HG22	1:A:1412:LEU:CB	1.87	1.03
1:B:1408:ILE:HG22	1:B:1412:LEU:CB	1.87	1.03
1:C:1456:GLN:CG	1:C:1456:GLN:O	1.97	1.03
1:A:1563:ARG:HH22	2:F:181:UNK:HA	1.19	1.03
2:D:174:UNK:H	2:D:175:UNK:CB	1.70	1.03
1:B:1279:HIS:NE2	1:B:1283:LEU:HD12	1.73	1.03
1:B:1416:PRO:CD	2:D:130:LYS:HD3	1.88	1.03
1:C:1429:ARG:O	1:C:1429:ARG:HG2	1.22	1.03
1:B:1279:HIS:NE2	1:B:1283:LEU:CD1	2.21	1.03
1:C:1408:ILE:HG22	1:C:1412:LEU:CB	1.87	1.03
1:A:1300:ILE:HG22	1:A:1323:LEU:HD13	1.39	1.02
1:C:1199:GLN:O	1:C:1201:VAL:N	1.92	1.02
1:B:1250:THR:O	1:B:1251:ARG:CG	2.07	1.02
1:B:1521:TRP:CE3	1:B:1522:LYS:HD2	1.95	1.02
1:C:1417:LEU:O	1:C:1418:LEU:HB2	1.53	1.02

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:98:GLU:HB3	2:D:99:PRO:HD3	1.40	1.02
1:A:1417:LEU:O	1:A:1418:LEU:HB2	1.53	1.02
1:B:1300:ILE:HG22	1:B:1323:LEU:HD13	1.40	1.02
1:B:1411:TYR:O	1:B:1415:LYS:HB3	1.60	1.02
1:C:1234:LEU:HD23	1:C:1264:LYS:HZ2	1.25	1.02
1:A:1122:LYS:HA	1:A:1125:ILE:HG22	1.40	1.02
1:A:1429:ARG:O	1:A:1429:ARG:HG2	1.22	1.02
1:C:1198:ILE:HA	1:C:1201:VAL:CG2	1.88	1.02
1:C:1596:MET:H	1:C:1597:PRO:HD2	1.23	1.02
1:B:1261:VAL:HG13	1:B:1295:TYR:CZ	1.95	1.01
1:B:1509:ARG:NH2	2:D:163:GLN:HA	1.72	1.01
1:C:1211:TYR:CG	1:C:1231:LEU:HD22	1.94	1.01
1:C:1521:TRP:CE3	1:C:1522:LYS:HD2	1.95	1.01
1:A:1408:ILE:O	1:A:1412:LEU:N	1.94	1.01
1:C:1250:THR:O	1:C:1251:ARG:CG	2.06	1.01
1:C:1300:ILE:HG22	1:C:1323:LEU:HD13	1.39	1.01
1:A:1107:VAL:O	1:A:1107:VAL:CG1	2.04	1.01
1:A:1456:GLN:O	1:A:1456:GLN:HG2	1.60	1.01
1:A:1596:MET:H	1:A:1597:PRO:HD2	1.26	1.01
1:B:1429:ARG:O	1:B:1429:ARG:HG2	1.22	1.01
1:A:1358:TRP:CE3	1:A:1377:THR:HG23	1.96	1.01
1:A:1521:TRP:CE3	1:A:1522:LYS:HD2	1.95	1.01
1:C:1358:TRP:CE3	1:C:1377:THR:HG23	1.96	1.01
1:A:1620:ARG:CB	1:A:1620:ARG:HH11	1.74	1.00
1:B:1358:TRP:CE3	1:B:1377:THR:HG23	1.96	1.00
1:B:1361:LEU:HD23	1:B:1361:LEU:O	1.61	1.00
1:C:1361:LEU:O	1:C:1361:LEU:HD23	1.61	1.00
1:C:1620:ARG:HB2	1:C:1620:ARG:HH11	1.25	1.00
1:C:1414:PHE:CE1	2:E:123:MET:HB3	1.97	1.00
1:A:1167:SER:C	1:A:1168:TYR:CD1	2.34	1.00
1:B:1107:VAL:O	1:B:1107:VAL:CG1	2.04	1.00
2:F:119:ALA:O	2:F:123:MET:CG	2.08	1.00
1:A:1253:TRP:HE3	1:A:1276:ILE:HG21	1.26	1.00
1:A:1280:ALA:HB2	1:A:1311:ARG:NE	1.75	1.00
1:C:1411:TYR:O	1:C:1415:LYS:HB3	1.60	1.00
1:B:1129:ILE:O	1:B:1131:ALA:N	1.95	1.00
1:C:1361:LEU:CD2	1:C:1365:TYR:HE2	1.70	1.00
1:B:1244:ALA:CB	1:B:1275:HIS:CE1	2.41	1.00
1:B:1620:ARG:HH11	1:B:1620:ARG:CB	1.74	1.00
2:F:162:GLN:HA	2:F:166:ALA:HB2	1.03	1.00
1:A:1361:LEU:O	1:A:1361:LEU:HD23	1.61	0.99

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1411:TYR:C	1:A:1415:LYS:HB3	1.81	0.99
1:C:1296:PHE:O	1:C:1299:LEU:N	1.95	0.99
1:A:1129:ILE:O	1:A:1131:ALA:N	1.94	0.99
1:A:1579:PRO:HB3	1:C:1605:GLU:OE2	1.62	0.99
1:B:1150:TRP:CE3	2:D:5:UNK:HA	1.95	0.99
1:B:1296:PHE:O	1:B:1299:LEU:N	1.95	0.99
1:B:1620:ARG:HH11	1:B:1620:ARG:HB2	1.25	0.99
1:C:1326:LYS:O	1:C:1327:PHE:CD1	2.15	0.99
1:A:1358:TRP:HE3	1:A:1377:THR:HG23	1.28	0.99
1:C:1408:ILE:O	1:C:1412:LEU:N	1.95	0.99
1:C:1264:LYS:HE2	1:C:1268:LEU:CD1	1.77	0.99
1:A:1620:ARG:HH11	1:A:1620:ARG:HB2	1.24	0.99
1:A:1326:LYS:O	1:A:1327:PHE:CD1	2.15	0.99
1:A:1358:TRP:CZ3	1:A:1381:HIS:CD2	2.51	0.99
1:C:1620:ARG:HH11	1:C:1620:ARG:CB	1.75	0.99
1:C:1358:TRP:CZ3	1:C:1381:HIS:CD2	2.51	0.99
1:C:1198:ILE:HB	1:C:1221:VAL:HG22	1.42	0.99
1:A:1296:PHE:O	1:A:1299:LEU:N	1.95	0.98
1:B:1326:LYS:O	1:B:1327:PHE:CD1	2.15	0.98
1:B:1563:ARG:NH2	2:D:183:UNK:O	1.96	0.98
1:C:1358:TRP:CE3	1:C:1377:THR:CG2	2.46	0.98
1:B:1358:TRP:CE3	1:B:1377:THR:CG2	2.46	0.98
1:B:1586:ALA:O	1:B:1590:ASN:OD1	1.80	0.98
1:B:1596:MET:H	1:B:1597:PRO:HD2	1.27	0.98
1:C:1198:ILE:O	1:C:1199:GLN:O	1.81	0.98
1:C:1602:VAL:CG1	2:E:203:UNK:C	2.41	0.98
1:B:1411:TYR:HA	1:B:1415:LYS:CB	1.93	0.98
1:B:1456:GLN:CG	1:B:1456:GLN:O	1.97	0.98
1:C:1358:TRP:HE3	1:C:1377:THR:HG23	1.28	0.98
1:A:1264:LYS:HE2	1:A:1268:LEU:CD1	1.77	0.98
1:A:1358:TRP:CE3	1:A:1377:THR:CG2	2.46	0.98
1:B:1408:ILE:O	1:B:1412:LEU:N	1.95	0.98
1:B:1456:GLN:O	1:B:1456:GLN:HG2	1.60	0.98
1:C:1411:TYR:HA	1:C:1415:LYS:CB	1.93	0.98
1:A:1280:ALA:HB2	1:A:1311:ARG:HE	1.27	0.98
1:A:1371:TYR:CD1	1:A:1394:ILE:CG2	2.36	0.98
1:A:1371:TYR:HD1	1:A:1394:ILE:HG23	0.81	0.97
1:A:1588:ARG:HD3	2:E:195:UNK:CB	1.94	0.97
1:B:1358:TRP:CZ3	1:B:1381:HIS:CD2	2.51	0.97
1:C:1177:LEU:HD13	1:C:1189:PHE:CZ	1.98	0.97
1:A:1223:ASN:N	1:A:1223:ASN:HA	1.77	0.97

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1456:GLN:O	1:A:1456:GLN:CG	1.97	0.97
1:B:1232:VAL:HG22	1:B:1233:HIS:H	1.27	0.97
1:B:1597:PRO:HG3	1:B:1600:ILE:HD12	1.43	0.97
2:D:181:UNK:C	2:D:183:UNK:CB	2.41	0.97
1:B:1358:TRP:CZ2	1:B:1381:HIS:ND1	2.33	0.97
1:C:1456:GLN:O	1:C:1456:GLN:HG2	1.60	0.97
1:A:1372:ASP:O	1:A:1376:ILE:HG13	1.65	0.97
2:E:108:GLU:OE2	2:E:109:GLN:HG2	1.62	0.97
1:C:1371:TYR:HD1	1:C:1394:ILE:HG23	0.81	0.97
2:F:162:GLN:CA	2:F:166:ALA:HB2	1.92	0.97
1:B:1395:ILE:HG12	1:B:1404:TYR:CE2	1.99	0.97
1:C:1382:PRO:HD2	2:E:115:GLU:CD	1.84	0.97
1:C:1411:TYR:C	1:C:1415:LYS:HB3	1.84	0.97
1:B:1264:LYS:HE3	1:B:1268:LEU:CD1	1.80	0.96
2:F:151:ILE:O	2:F:154:ARG:HB2	1.65	0.96
1:C:1244:ALA:N	1:C:1275:HIS:CE1	2.31	0.96
2:F:195:UNK:C	2:F:197:UNK:CB	2.42	0.96
1:A:1254:LYS:O	1:A:1289:TYR:HD2	1.45	0.96
1:A:1395:ILE:HG12	1:A:1404:TYR:CE2	1.99	0.96
1:B:1301:THR:HA	1:B:1304:GLU:HG3	1.47	0.96
1:B:1587:TRP:C	1:B:1589:HIS:H	1.66	0.96
1:C:1301:THR:HA	1:C:1304:GLU:HG3	1.47	0.96
1:C:1588:ARG:NH2	2:D:193:UNK:N	2.13	0.96
2:D:151:ILE:O	2:D:154:ARG:HB2	1.65	0.96
2:D:174:UNK:HA	2:D:177:UNK:N	1.80	0.96
1:A:1111:LEU:HD11	1:A:1125:ILE:HG12	1.47	0.96
1:A:1409:GLN:CA	1:A:1413:GLU:CG	2.35	0.96
1:A:1597:PRO:HG3	1:A:1600:ILE:HD12	1.43	0.96
2:E:202:UNK:O	2:E:203:UNK:C	2.14	0.96
1:A:1282:GLU:HG3	1:A:1283:LEU:H	1.30	0.96
1:A:1358:TRP:CZ2	1:A:1381:HIS:ND1	2.33	0.96
1:B:1371:TYR:HD1	1:B:1394:ILE:HG23	0.81	0.96
1:B:1221:VAL:HG13	1:B:1222:SER:H	1.29	0.96
1:B:1290:TYR:HB3	1:B:1299:LEU:HD22	1.47	0.96
1:B:1411:TYR:C	1:B:1415:LYS:HB3	1.84	0.96
2:E:151:ILE:O	2:E:154:ARG:HB2	1.65	0.96
1:A:1232:VAL:HG22	1:A:1233:HIS:H	1.26	0.96
1:B:1372:ASP:O	1:B:1376:ILE:HG13	1.65	0.96
1:A:1111:LEU:O	1:A:1111:LEU:HD22	1.65	0.96
1:C:1368:TYR:CD1	1:C:1370:GLU:HG2	2.01	0.95
1:C:1597:PRO:HG3	1:C:1600:ILE:HD12	1.44	0.95

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1174:ILE:HG21	1:A:1201:VAL:HG22	1.47	0.95
1:A:1264:LYS:HE3	1:A:1268:LEU:CD1	1.80	0.95
1:B:1111:LEU:O	1:B:1111:LEU:HD22	1.66	0.95
1:B:1267:ARG:NH2	1:B:1298:GLU:OE2	1.99	0.95
1:B:1174:ILE:HG21	1:B:1201:VAL:HG22	1.48	0.95
1:B:1167:SER:C	1:B:1168:TYR:CD1	2.40	0.95
1:B:1282:GLU:HG3	1:B:1283:LEU:H	1.30	0.95
1:C:1358:TRP:CZ2	1:C:1381:HIS:ND1	2.33	0.95
1:B:1414:PHE:O	2:D:130:LYS:CD	2.14	0.95
1:C:1234:LEU:CD2	1:C:1264:LYS:NZ	2.29	0.95
1:A:1279:HIS:CD2	1:A:1282:GLU:H	1.84	0.95
1:B:1358:TRP:HE3	1:B:1377:THR:HG23	1.28	0.95
1:C:1111:LEU:O	1:C:1111:LEU:HD22	1.65	0.95
1:A:1258:PHE:N	1:A:1289:TYR:OH	1.76	0.95
1:A:1282:GLU:O	1:A:1283:LEU:HB2	1.67	0.95
1:A:1368:TYR:CD1	1:A:1370:GLU:HG2	2.02	0.95
1:C:1395:ILE:HG12	1:C:1404:TYR:CE2	1.99	0.95
1:B:1368:TYR:CD1	1:B:1370:GLU:HG2	2.02	0.94
1:C:1254:LYS:HD2	1:C:1285:GLU:CG	1.96	0.94
2:E:133:LYS:HA	2:E:133:LYS:NZ	1.82	0.94
2:F:133:LYS:HA	2:F:133:LYS:NZ	1.82	0.94
1:B:1472:ILE:HA	1:B:1507:PHE:HE1	1.32	0.94
1:A:1411:TYR:HA	1:A:1415:LYS:CB	1.97	0.94
2:E:198:UNK:O	2:E:202:UNK:CB	2.15	0.94
1:B:1361:LEU:CD2	1:B:1365:TYR:HE2	1.70	0.94
1:A:1116:LEU:CD1	1:A:1122:LYS:HD3	1.98	0.94
1:B:1412:LEU:HB2	1:B:1419:LEU:CD1	1.97	0.94
2:D:133:LYS:HA	2:D:133:LYS:NZ	1.82	0.94
2:E:104:LYS:O	2:E:108:GLU:HG2	1.66	0.94
1:A:1412:LEU:HB2	1:A:1419:LEU:CD1	1.97	0.94
1:A:1472:ILE:HA	1:A:1507:PHE:HE1	1.32	0.94
1:C:1588:ARG:NH2	2:D:193:UNK:C	2.30	0.94
1:B:1551:GLU:HG2	1:B:1582:VAL:CG2	1.96	0.94
1:C:1253:TRP:HE3	1:C:1276:ILE:HG21	1.25	0.94
2:D:185:UNK:HA	2:D:189:UNK:O	1.68	0.94
2:D:174:UNK:CA	2:D:177:UNK:N	2.31	0.94
2:E:189:UNK:HA	2:E:195:UNK:N	1.83	0.94
1:C:1434:ARG:HE	2:E:5:UNK:HA	0.79	0.93
1:A:1290:TYR:CD2	1:A:1299:LEU:HD13	2.04	0.93
1:A:1301:THR:HA	1:A:1304:GLU:HG3	1.48	0.93
1:A:1409:GLN:CG	1:A:1413:GLU:CG	2.34	0.93

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1253:TRP:HE3	1:B:1276:ILE:HG21	1.26	0.93
1:C:1107:VAL:HG12	1:C:1111:LEU:HB2	0.94	0.93
1:C:1186:LEU:HD22	1:C:1213:ALA:CB	1.99	0.93
1:A:1244:ALA:CB	1:A:1275:HIS:CE1	2.42	0.93
1:A:1258:PHE:CA	1:A:1289:TYR:CE1	2.50	0.93
1:B:1408:ILE:CG2	1:B:1412:LEU:CB	2.46	0.93
1:C:1412:LEU:HB2	1:C:1419:LEU:CD1	1.97	0.93
1:B:1280:ALA:O	1:B:1313:HIS:CE1	2.22	0.93
1:B:1362:VAL:HG22	1:B:1377:THR:CB	1.99	0.93
2:D:181:UNK:C	2:D:183:UNK:N	2.20	0.93
1:A:1257:CYS:N	1:A:1289:TYR:OH	2.02	0.93
1:B:1405:TYR:CD2	1:B:1434:ARG:NH1	2.37	0.93
1:B:1412:LEU:CD1	1:B:1419:LEU:CD2	2.47	0.93
1:A:1254:LYS:C	1:A:1289:TYR:CE2	2.41	0.93
1:A:1408:ILE:CG2	1:A:1412:LEU:CB	2.46	0.93
1:C:1412:LEU:CD1	1:C:1419:LEU:CD2	2.47	0.93
1:A:1258:PHE:H	1:A:1289:TYR:HH	1.03	0.93
1:C:1450:PRO:HA	1:C:1453:ARG:HG2	1.51	0.93
2:F:162:GLN:CA	2:F:166:ALA:HB3	1.95	0.93
1:B:1408:ILE:CG2	1:B:1412:LEU:CD2	2.47	0.93
1:B:1409:GLN:CA	1:B:1413:GLU:CG	2.35	0.93
1:A:1412:LEU:CD1	1:A:1419:LEU:CD2	2.47	0.92
1:B:1587:TRP:C	1:B:1589:HIS:N	2.17	0.92
1:C:1221:VAL:CG1	1:C:1222:SER:N	2.31	0.92
1:A:1362:VAL:HG22	1:A:1377:THR:CB	1.99	0.92
1:C:1405:TYR:CD2	1:C:1434:ARG:NH1	2.37	0.92
2:F:195:UNK:C	2:F:197:UNK:N	2.19	0.92
1:C:1620:ARG:HH11	1:C:1620:ARG:CG	1.83	0.92
1:A:1264:LYS:HE3	1:A:1268:LEU:HD12	0.92	0.92
1:A:1408:ILE:CG2	1:A:1412:LEU:CD2	2.47	0.92
1:B:1222:SER:OG	1:B:1223:ASN:N	1.96	0.92
2:D:112:ARG:O	2:D:113:LEU:O	1.86	0.92
1:A:1405:TYR:CD2	1:A:1434:ARG:NH1	2.37	0.92
1:B:1264:LYS:HE3	1:B:1268:LEU:HD12	0.92	0.92
1:B:1279:HIS:HD2	1:B:1280:ALA:H	1.16	0.92
1:C:1362:VAL:HG22	1:C:1377:THR:CB	1.99	0.92
1:C:1408:ILE:CG2	1:C:1412:LEU:CB	2.46	0.92
1:C:1408:ILE:CG2	1:C:1412:LEU:CD2	2.47	0.92
1:C:1409:GLN:CA	1:C:1413:GLU:CG	2.35	0.92
1:C:1472:ILE:HA	1:C:1507:PHE:HE1	1.32	0.92
1:A:1258:PHE:HB3	1:A:1289:TYR:HE2	1.27	0.92

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:174:UNK:N	2:D:175:UNK:CB	2.32	0.92
1:B:1282:GLU:O	1:B:1283:LEU:HB2	1.67	0.91
1:C:1190:ILE:CD1	1:C:1216:LEU:HG	2.00	0.91
1:A:1116:LEU:HD11	1:A:1122:LYS:HD3	1.50	0.91
1:B:1333:ARG:HB2	1:B:1360:GLU:OE2	1.70	0.91
1:B:1416:PRO:CG	2:D:130:LYS:HG2	1.99	0.91
1:C:1256:VAL:O	1:C:1260:CYS:SG	2.28	0.91
1:A:1333:ARG:HB2	1:A:1360:GLU:OE2	1.70	0.91
1:B:1279:HIS:CD2	1:B:1280:ALA:N	2.38	0.91
1:B:1371:TYR:CD1	1:B:1394:ILE:CG2	2.35	0.91
1:B:1409:GLN:CG	1:B:1413:GLU:CG	2.34	0.91
2:E:98:GLU:HA	2:E:101:SER:HB3	1.52	0.91
1:A:1136:SER:N	1:A:1141:VAL:HG21	1.85	0.91
1:A:1303:LEU:HD12	1:A:1320:LEU:HD13	1.52	0.91
1:C:1115:GLN:CB	1:C:1125:ILE:HG12	2.01	0.91
1:A:1416:PRO:CG	2:F:130:LYS:HG2	1.99	0.91
1:A:1256:VAL:O	1:A:1260:CYS:SG	2.29	0.91
1:C:1224:PHE:CZ	1:C:1246:LYS:NZ	2.39	0.91
1:B:1290:TYR:HD2	1:B:1299:LEU:CD1	1.80	0.91
1:C:1253:TRP:HZ3	1:C:1276:ILE:HG22	1.34	0.91
1:A:1395:ILE:HG13	1:A:1404:TYR:CZ	2.06	0.91
1:C:1586:ALA:HB1	1:C:1590:ASN:HD21	1.34	0.91
2:D:174:UNK:HA	2:D:175:UNK:C	2.00	0.91
1:B:1395:ILE:HG13	1:B:1404:TYR:CZ	2.05	0.91
2:D:174:UNK:CB	2:D:177:UNK:N	2.33	0.91
1:A:1450:PRO:HA	1:A:1453:ARG:HG2	1.51	0.90
1:A:1261:VAL:HG11	1:A:1295:TYR:CD1	2.05	0.90
1:A:1620:ARG:HH11	1:A:1620:ARG:CG	1.83	0.90
1:B:1256:VAL:O	1:B:1260:CYS:SG	2.28	0.90
1:B:1620:ARG:HB2	1:B:1620:ARG:NH1	1.86	0.90
1:A:1408:ILE:CG2	1:A:1412:LEU:HB3	2.01	0.90
1:B:1620:ARG:HH11	1:B:1620:ARG:CG	1.83	0.90
1:B:1412:LEU:HB2	1:B:1419:LEU:HD11	1.54	0.90
1:C:1620:ARG:HB2	1:C:1620:ARG:NH1	1.87	0.90
1:C:1154:VAL:HG21	1:C:1180:THR:HG23	1.52	0.90
1:C:1264:LYS:HE3	1:C:1268:LEU:HD12	0.92	0.90
1:C:1333:ARG:HB2	1:C:1360:GLU:OE2	1.70	0.90
1:C:1395:ILE:HG13	1:C:1404:TYR:CZ	2.06	0.90
1:C:1290:TYR:HE2	1:C:1299:LEU:HD13	1.05	0.90
1:C:1412:LEU:HA	1:C:1419:LEU:HD22	1.54	0.90
1:B:1391:PHE:CG	1:B:1411:TYR:OH	2.24	0.90

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1391:PHE:CG	1:C:1411:TYR:OH	2.24	0.90
1:C:1408:ILE:CG2	1:C:1412:LEU:HB3	2.00	0.90
1:A:1391:PHE:CG	1:A:1411:TYR:OH	2.24	0.90
1:B:1450:PRO:HA	1:B:1453:ARG:HG2	1.51	0.90
1:B:1601:GLN:HG2	1:C:1587:TRP:HH2	1.37	0.90
1:C:1290:TYR:CD2	1:C:1299:LEU:HD13	2.07	0.89
1:A:1171:THR:HA	1:A:1174:ILE:HD12	1.54	0.89
1:A:1412:LEU:HB2	1:A:1419:LEU:HD11	1.54	0.89
1:B:1596:MET:SD	1:B:1597:PRO:HD3	2.12	0.89
1:A:1224:PHE:O	1:A:1227:LEU:HB3	1.72	0.89
1:B:1303:LEU:HD12	1:B:1320:LEU:HD13	1.52	0.89
1:C:1270:GLN:CD	1:C:1298:GLU:CG	2.40	0.89
2:D:112:ARG:C	2:D:112:ARG:CD	2.38	0.89
1:A:1620:ARG:HB2	1:A:1620:ARG:NH1	1.86	0.89
1:B:1224:PHE:O	1:B:1227:LEU:HB3	1.72	0.89
1:C:1154:VAL:HG21	1:C:1180:THR:CG2	2.02	0.89
1:C:1224:PHE:O	1:C:1227:LEU:HB3	1.73	0.89
1:C:1409:GLN:CB	1:C:1413:GLU:HG3	2.02	0.89
1:B:1150:TRP:CZ3	2:D:5:UNK:HA	2.07	0.89
1:C:1218:TYR:HA	1:C:1221:VAL:HG12	1.55	0.89
2:E:202:UNK:C	2:E:203:UNK:C	2.50	0.89
1:A:1258:PHE:HB3	1:A:1289:TYR:CZ	1.99	0.89
1:A:1264:LYS:HE2	1:A:1268:LEU:HB2	1.54	0.89
1:A:1584:GLU:HG3	1:A:1587:TRP:CE3	2.08	0.89
1:A:1521:TRP:HE3	1:A:1522:LYS:HD2	1.32	0.89
1:B:1218:TYR:HA	1:B:1221:VAL:HG12	1.54	0.89
1:B:1584:GLU:HG3	1:B:1587:TRP:CE3	2.08	0.89
1:B:1588:ARG:NH2	2:F:192:UNK:N	2.21	0.89
1:C:1198:ILE:O	1:C:1201:VAL:CB	2.20	0.89
1:C:1412:LEU:HB2	1:C:1419:LEU:HD11	1.53	0.89
1:C:1521:TRP:HE3	1:C:1522:LYS:HD2	1.32	0.89
1:C:1409:GLN:CG	1:C:1413:GLU:CG	2.34	0.89
1:C:1411:TYR:O	1:C:1415:LYS:CA	2.21	0.89
2:E:114:GLN:HG3	2:E:115:GLU:H	0.72	0.89
1:B:1408:ILE:CG2	1:B:1412:LEU:HB3	2.00	0.88
1:A:1412:LEU:HA	1:A:1419:LEU:HD22	1.54	0.88
1:B:1412:LEU:HA	1:B:1419:LEU:HD22	1.55	0.88
1:C:1270:GLN:CG	1:C:1298:GLU:HG3	2.02	0.88
1:C:1303:LEU:HD12	1:C:1320:LEU:HD13	1.52	0.88
1:C:1427:SER:CB	1:C:1428:PRO:CD	2.44	0.88
1:B:1253:TRP:HZ3	1:B:1276:ILE:HG22	1.33	0.88

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1584:GLU:HG3	1:C:1587:TRP:CE3	2.08	0.88
2:D:155:ILE:HG12	2:D:161:TYR:CB	2.02	0.88
1:A:1188:GLU:OE2	1:A:1191:ASN:O	1.92	0.88
1:B:1409:GLN:CB	1:B:1413:GLU:HG3	2.03	0.88
2:D:112:ARG:O	2:D:112:ARG:CD	2.21	0.88
1:B:1171:THR:HA	1:B:1174:ILE:HD12	1.54	0.88
1:B:1521:TRP:HE3	1:B:1522:LYS:HD2	1.32	0.88
1:B:1601:GLN:CG	1:C:1587:TRP:HH2	1.87	0.88
1:C:1211:TYR:HD1	1:C:1231:LEU:CD2	1.56	0.88
1:A:1108:TRP:NE1	1:A:1131:ALA:HB3	1.89	0.88
1:C:1192:GLY:H	1:C:1193:PRO:HD3	1.37	0.88
1:C:1222:SER:O	1:C:1223:ASN:CG	2.12	0.88
1:C:1505:ILE:HA	1:C:1508:ARG:HB2	1.55	0.88
1:C:1234:LEU:CD2	1:C:1264:LYS:HZ3	1.86	0.88
1:B:1221:VAL:CG1	1:B:1222:SER:N	2.31	0.88
1:B:1411:TYR:O	1:B:1415:LYS:CA	2.21	0.88
1:C:1211:TYR:CD1	1:C:1231:LEU:HD21	2.05	0.88
1:C:1222:SER:O	1:C:1223:ASN:HB2	1.07	0.88
2:F:198:UNK:HA	2:F:201:UNK:CB	2.01	0.88
1:A:1221:VAL:CG1	1:A:1222:SER:N	2.31	0.88
1:A:1409:GLN:CB	1:A:1413:GLU:HG3	2.03	0.88
1:C:1372:ASP:O	1:C:1376:ILE:HG12	1.73	0.88
2:D:65:UNK:O	2:D:69:UNK:CB	2.22	0.88
1:B:1333:ARG:HB2	1:B:1360:GLU:CG	2.04	0.87
1:B:1264:LYS:HE2	1:B:1268:LEU:HB2	1.54	0.87
1:B:1425:VAL:HG23	1:B:1426:LEU:H	1.38	0.87
1:B:1572:THR:HG21	1:B:1599:PHE:CD2	2.10	0.87
1:C:1254:LYS:NZ	1:C:1285:GLU:O	2.05	0.87
2:F:114:GLN:HG3	2:F:115:GLU:H	0.72	0.87
1:C:1371:TYR:CD1	1:C:1394:ILE:CG2	2.36	0.87
1:C:1521:TRP:HZ3	1:C:1522:LYS:HZ2	0.90	0.87
1:C:1181:ASN:O	1:C:1182:ARG:HD3	1.73	0.87
1:C:1264:LYS:HE2	1:C:1268:LEU:HB2	1.54	0.87
1:C:1425:VAL:HG23	1:C:1426:LEU:H	1.38	0.87
1:A:1333:ARG:HB2	1:A:1360:GLU:CG	2.05	0.87
1:C:1270:GLN:OE1	1:C:1298:GLU:CG	2.23	0.87
2:D:185:UNK:HA	2:D:189:UNK:C	2.03	0.87
1:B:1198:ILE:HG23	1:B:1201:VAL:HB	1.57	0.87
1:B:1505:ILE:HA	1:B:1508:ARG:HB2	1.56	0.87
1:A:1218:TYR:HA	1:A:1221:VAL:HG12	1.55	0.87
1:A:1505:ILE:HA	1:A:1508:ARG:HB2	1.56	0.87

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1232:VAL:C	1:B:1234:LEU:H	1.78	0.87
1:B:1149:ASN:O	1:B:1153:LEU:HB2	1.74	0.87
1:C:1127:SER:HA	1:C:1156:TYR:OH	1.75	0.87
2:E:126:GLU:HG3	2:E:130:LYS:NZ	1.90	0.86
1:A:1472:ILE:HG21	1:A:1498:ARG:HE	1.40	0.86
1:A:1254:LYS:HG3	1:A:1285:GLU:OE2	1.04	0.86
1:A:1425:VAL:HG23	1:A:1426:LEU:H	1.38	0.86
1:B:1411:TYR:O	1:B:1415:LYS:CB	2.22	0.86
1:C:1082:VAL:HG13	1:C:1083:GLN:H	1.41	0.86
1:C:1412:LEU:HD13	1:C:1419:LEU:CD2	2.03	0.86
2:D:114:GLN:HG3	2:D:115:GLU:H	0.72	0.86
1:A:1408:ILE:CG2	1:A:1412:LEU:HD23	2.06	0.86
1:C:1333:ARG:HB2	1:C:1360:GLU:CG	2.05	0.86
1:C:1411:TYR:O	1:C:1415:LYS:CB	2.23	0.86
1:C:1472:ILE:HG21	1:C:1498:ARG:HE	1.40	0.86
2:D:126:GLU:HG3	2:D:130:LYS:NZ	1.90	0.86
1:A:1253:TRP:HZ3	1:A:1276:ILE:HG22	1.33	0.86
1:A:1475:GLU:OE1	2:F:145:GLN:CB	2.17	0.86
1:B:1588:ARG:HG3	1:B:1588:ARG:HH11	1.38	0.86
1:C:1588:ARG:HH22	2:D:193:UNK:CA	1.82	0.86
1:A:1232:VAL:C	1:A:1234:LEU:H	1.78	0.86
1:B:1508:ARG:NH2	1:B:1530:LYS:HD3	1.91	0.86
1:C:1244:ALA:C	1:C:1275:HIS:CE1	2.46	0.86
1:C:1317:PHE:H	1:C:1317:PHE:HD2	1.24	0.86
2:F:126:GLU:HG3	2:F:130:LYS:NZ	1.90	0.86
1:A:1137:TYR:HB2	1:A:1138:MET:HB2	0.87	0.86
1:A:1551:GLU:HG2	1:A:1582:VAL:HG22	1.55	0.86
1:C:1188:GLU:HA	1:C:1191:ASN:ND2	1.90	0.86
1:C:1190:ILE:HD13	1:C:1216:LEU:O	1.75	0.86
1:C:1508:ARG:NH2	1:C:1530:LYS:HD3	1.91	0.86
1:A:1401:VAL:HG22	1:A:1429:ARG:HE	1.41	0.86
1:B:1362:VAL:HG22	1:B:1377:THR:HB	1.57	0.86
1:B:1596:MET:N	1:B:1597:PRO:HD2	1.91	0.86
1:B:1082:VAL:HG13	1:B:1083:GLN:H	1.40	0.85
1:B:1601:GLN:HG2	1:C:1587:TRP:CH2	2.09	0.85
1:A:1254:LYS:O	1:A:1289:TYR:CE2	2.28	0.85
1:A:1521:TRP:HZ3	1:A:1522:LYS:HZ2	0.90	0.85
1:A:1535:LYS:HZ1	1:A:1563:ARG:HH12	1.18	0.85
1:B:1588:ARG:HH22	2:F:192:UNK:CB	1.89	0.85
1:B:1408:ILE:CG2	1:B:1412:LEU:HD23	2.06	0.85
1:C:1401:VAL:HG22	1:C:1429:ARG:HE	1.41	0.85

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1252:THR:O	1:A:1256:VAL:HG23	1.76	0.85
1:A:1345:ILE:H	1:A:1346:PRO:HD2	1.40	0.85
1:C:1198:ILE:HB	1:C:1221:VAL:HG21	1.56	0.85
1:C:1408:ILE:CG2	1:C:1412:LEU:HD23	2.06	0.85
1:B:1427:SER:CB	1:B:1428:PRO:CD	2.44	0.85
1:C:1260:CYS:O	1:C:1263:GLY:O	1.95	0.85
2:D:148:LYS:O	2:D:151:ILE:HG12	1.77	0.85
2:F:142:GLN:O	2:F:146:VAL:HG13	1.76	0.85
2:F:194:UNK:O	2:F:197:UNK:CB	2.24	0.85
1:A:1260:CYS:O	1:A:1263:GLY:O	1.94	0.85
1:A:1274:LEU:H	1:A:1274:LEU:HD12	1.41	0.85
1:A:1596:MET:N	1:A:1597:PRO:HD2	1.90	0.85
1:B:1129:ILE:O	1:B:1130:LYS:C	2.12	0.85
1:A:1082:VAL:HG13	1:A:1083:GLN:H	1.41	0.85
1:A:1572:THR:HG21	1:A:1599:PHE:CD2	2.11	0.85
1:B:1345:ILE:H	1:B:1346:PRO:HD2	1.40	0.85
1:B:1472:ILE:HG21	1:B:1498:ARG:HE	1.40	0.85
1:C:1252:THR:O	1:C:1256:VAL:HG23	1.76	0.85
1:B:1375:ILE:HD11	1:B:1394:ILE:HB	1.59	0.85
1:A:1408:ILE:HG21	1:A:1412:LEU:CD2	2.07	0.85
1:B:1085:LEU:HB3	1:B:1095:ALA:HB1	1.58	0.85
1:B:1283:LEU:HD22	1:B:1313:HIS:NE2	1.91	0.85
1:C:1362:VAL:HG22	1:C:1377:THR:HB	1.57	0.85
2:D:142:GLN:O	2:D:146:VAL:HG13	1.76	0.85
2:D:180:UNK:O	2:D:183:UNK:CB	2.25	0.85
1:A:1206:TYR:O	1:A:1230:THR:HG21	1.76	0.85
1:A:1264:LYS:HE2	1:A:1268:LEU:CB	2.07	0.84
1:A:1439:PHE:O	1:A:1442:VAL:HB	1.77	0.84
1:C:1274:LEU:H	1:C:1274:LEU:HD12	1.41	0.84
1:A:1361:LEU:HD23	1:A:1365:TYR:CE2	2.13	0.84
1:B:1290:TYR:HD2	1:B:1299:LEU:HD13	1.09	0.84
1:B:1521:TRP:HZ3	1:B:1522:LYS:NZ	1.75	0.84
2:E:148:LYS:O	2:E:151:ILE:HG12	1.77	0.84
2:F:148:LYS:O	2:F:151:ILE:HG12	1.76	0.84
1:A:1412:LEU:HD13	1:A:1419:LEU:CD2	2.03	0.84
1:A:1427:SER:CB	1:A:1428:PRO:CD	2.44	0.84
1:A:1475:GLU:OE2	2:F:149:ASN:OD1	1.94	0.84
1:C:1345:ILE:H	1:C:1346:PRO:HD2	1.41	0.84
1:A:1317:PHE:H	1:A:1317:PHE:HD2	1.24	0.84
1:A:1387:LYS:HB2	1:A:1390:GLN:HB2	1.59	0.84
1:A:1411:TYR:O	1:A:1415:LYS:CB	2.25	0.84

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1598:TYR:CE1	1:B:1584:GLU:OE2	2.31	0.84
1:A:1080:SER:O	1:A:1084:VAL:HG23	1.78	0.84
1:A:1129:ILE:O	1:A:1130:LYS:C	2.12	0.84
1:A:1508:ARG:NH2	1:A:1530:LYS:HD3	1.91	0.84
1:B:1264:LYS:HE2	1:B:1268:LEU:CB	2.07	0.84
1:B:1401:VAL:HG22	1:B:1429:ARG:HE	1.41	0.84
1:B:1387:LYS:HB2	1:B:1390:GLN:HB2	1.59	0.84
1:B:1601:GLN:NE2	1:C:1587:TRP:HZ3	1.49	0.84
1:A:1282:GLU:HG3	1:A:1283:LEU:N	1.93	0.84
1:B:1332:MET:SD	1:B:1360:GLU:HG2	2.18	0.84
1:A:1472:ILE:HB	1:A:1498:ARG:HH21	1.43	0.84
1:B:1136:SER:HB3	1:B:1141:VAL:HG11	1.57	0.84
1:B:1282:GLU:HG3	1:B:1283:LEU:N	1.93	0.84
1:B:1317:PHE:H	1:B:1317:PHE:HD2	1.24	0.84
1:C:1264:LYS:HE2	1:C:1268:LEU:CB	2.07	0.84
2:D:174:UNK:CA	2:D:176:UNK:N	2.39	0.84
1:A:1108:TRP:CD1	1:A:1131:ALA:HB3	2.13	0.84
1:B:1430:LEU:HG	1:B:1432:HIS:H	1.43	0.84
1:C:1107:VAL:O	1:C:1108:TRP:CE3	2.31	0.84
1:C:1504:LEU:HD11	2:E:149:ASN:CG	1.96	0.84
1:A:1430:LEU:HG	1:A:1432:HIS:H	1.42	0.83
1:A:1492:ASN:O	1:A:1493:ILE:CG1	2.26	0.83
1:B:1408:ILE:HG21	1:B:1412:LEU:CD2	2.07	0.83
1:B:1439:PHE:O	1:B:1442:VAL:HB	1.78	0.83
1:C:1465:GLU:O	1:C:1465:GLU:CD	2.16	0.83
1:A:1416:PRO:HD3	2:F:130:LYS:HD3	1.60	0.83
1:B:1465:GLU:O	1:B:1465:GLU:CD	2.16	0.83
1:B:1551:GLU:CG	1:B:1582:VAL:CG2	2.56	0.83
1:A:1375:ILE:HD11	1:A:1394:ILE:HB	1.59	0.83
1:B:1260:CYS:O	1:B:1263:GLY:O	1.95	0.83
1:B:1409:GLN:CB	1:B:1413:GLU:CG	2.56	0.83
1:B:1521:TRP:HZ3	1:B:1522:LYS:HZ2	0.90	0.83
1:C:1439:PHE:O	1:C:1442:VAL:HB	1.77	0.83
1:B:1167:SER:HB3	1:B:1168:TYR:CD1	2.14	0.83
1:C:1409:GLN:CB	1:C:1413:GLU:CG	2.56	0.83
2:E:142:GLN:O	2:E:146:VAL:HG13	1.77	0.83
2:F:195:UNK:O	2:F:197:UNK:CB	2.27	0.83
1:A:1295:TYR:CE2	1:A:1299:LEU:HB2	2.12	0.83
1:B:1085:LEU:HD13	1:B:1125:ILE:HD11	1.61	0.83
1:C:1191:ASN:HD22	1:C:1191:ASN:N	1.75	0.83
1:C:1361:LEU:HD23	1:C:1365:TYR:CE2	2.12	0.83

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1448:VAL:HB	1:A:1451:TYR:CD2	2.14	0.83
1:A:1465:GLU:O	1:A:1465:GLU:CD	2.17	0.83
2:E:104:LYS:O	2:E:108:GLU:CB	2.25	0.83
1:A:1587:TRP:HH2	1:C:1601:GLN:HG2	1.43	0.83
1:B:1290:TYR:CE2	1:B:1299:LEU:HD13	2.13	0.83
1:A:1332:MET:SD	1:A:1360:GLU:HG2	2.18	0.83
1:A:1362:VAL:HG22	1:A:1377:THR:HB	1.57	0.83
1:A:1521:TRP:HZ3	1:A:1522:LYS:NZ	1.75	0.83
1:B:1252:THR:O	1:B:1256:VAL:HG23	1.76	0.83
1:C:1122:LYS:HZ3	1:C:1147:SER:CB	1.92	0.83
1:C:1387:LYS:HB2	1:C:1390:GLN:HB2	1.59	0.83
1:A:1605:GLU:OE2	1:B:1579:PRO:HA	1.79	0.82
1:A:1611:ASP:OD2	1:B:1607:LEU:HD22	1.79	0.82
1:B:1136:SER:CA	1:B:1141:VAL:HG21	2.09	0.82
1:B:1420:ASN:OD1	1:B:1447:LEU:HD22	1.78	0.82
1:C:1332:MET:SD	1:C:1360:GLU:HG2	2.17	0.82
1:C:1375:ILE:HD11	1:C:1394:ILE:HB	1.59	0.82
1:C:1420:ASN:OD1	1:C:1447:LEU:HD22	1.78	0.82
1:A:1167:SER:O	1:A:1168:TYR:CD1	2.31	0.82
1:C:1136:SER:CA	1:C:1137:TYR:N	2.41	0.82
1:C:1408:ILE:HG21	1:C:1412:LEU:CD2	2.07	0.82
2:E:105:TRP:O	2:E:108:GLU:HG3	1.79	0.82
1:B:1448:VAL:HB	1:B:1451:TYR:CD2	2.13	0.82
1:C:1259:ALA:HA	1:C:1293:ARG:HH12	1.44	0.82
2:E:90:ALA:H	2:E:91:GLN:CB	1.92	0.82
1:A:1258:PHE:N	1:A:1289:TYR:HH	1.66	0.82
1:A:1420:ASN:OD1	1:A:1447:LEU:HD22	1.78	0.82
1:B:1408:ILE:HG21	1:B:1412:LEU:HD23	1.61	0.82
2:D:181:UNK:O	2:D:183:UNK:CB	2.26	0.82
1:C:1419:LEU:O	1:C:1422:LEU:CB	2.25	0.82
1:C:1448:VAL:HB	1:C:1451:TYR:CD2	2.13	0.82
1:C:1596:MET:N	1:C:1597:PRO:HD2	1.90	0.82
2:D:180:UNK:C	2:D:183:UNK:CA	2.57	0.82
1:B:1274:LEU:H	1:B:1274:LEU:HD12	1.41	0.82
1:B:1325:SER:O	1:B:1355:ALA:HB1	1.79	0.82
2:D:180:UNK:O	2:D:183:UNK:CA	2.27	0.82
1:C:1290:TYR:CE2	1:C:1299:LEU:CD1	2.59	0.82
1:C:1577:LEU:O	1:C:1579:PRO:HD3	1.80	0.82
2:D:66:UNK:O	2:D:70:UNK:CB	2.28	0.82
1:B:1245:ARG:O	1:B:1246:LYS:CG	2.24	0.82
1:B:1472:ILE:HB	1:B:1498:ARG:HH21	1.43	0.82

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:21:UNK:C	2:F:21:UNK:O	0.52	0.82
1:A:1596:MET:SD	1:A:1597:PRO:HD3	2.20	0.82
1:C:1395:ILE:HG12	1:C:1404:TYR:CD2	2.14	0.82
1:C:1472:ILE:HB	1:C:1498:ARG:HH21	1.42	0.82
2:F:190:UNK:O	2:F:192:UNK:N	2.13	0.82
1:B:1361:LEU:HD23	1:B:1365:TYR:CE2	2.12	0.82
1:B:1419:LEU:O	1:B:1422:LEU:CB	2.26	0.82
1:B:1588:ARG:HH12	2:F:192:UNK:HA	1.40	0.82
1:C:1115:GLN:HG3	1:C:1125:ILE:HD11	1.61	0.82
1:C:1521:TRP:HZ3	1:C:1522:LYS:NZ	1.75	0.82
2:D:180:UNK:C	2:D:183:UNK:HA	2.09	0.82
1:A:1401:VAL:HG22	1:A:1429:ARG:NE	1.94	0.81
1:C:1108:TRP:CZ3	1:C:1129:ILE:HG22	2.15	0.81
1:B:1438:TYR:O	1:B:1442:VAL:HG23	1.80	0.81
1:B:1598:TYR:HA	1:C:1584:GLU:OE2	1.80	0.81
1:C:1198:ILE:CA	1:C:1201:VAL:CG2	2.58	0.81
1:A:1122:LYS:O	1:A:1126:ASP:HB2	1.80	0.81
1:A:1325:SER:O	1:A:1355:ALA:HB1	1.79	0.81
1:A:1404:TYR:O	1:A:1407:ALA:HB3	1.79	0.81
1:B:1535:LYS:HE2	1:B:1535:LYS:HA	1.63	0.81
1:B:1598:TYR:CD1	1:C:1584:GLU:OE2	2.33	0.81
1:C:1198:ILE:CB	1:C:1221:VAL:CG2	2.58	0.81
1:C:1244:ALA:N	1:C:1275:HIS:HE1	1.77	0.81
1:C:1414:PHE:CE1	2:E:127:TRP:CZ3	2.65	0.81
2:F:194:UNK:O	2:F:197:UNK:CA	2.29	0.81
1:A:1177:LEU:HA	1:A:1180:THR:OG1	1.81	0.81
1:A:1438:TYR:O	1:A:1442:VAL:HG23	1.80	0.81
1:B:1206:TYR:O	1:B:1230:THR:HG21	1.80	0.81
1:B:1404:TYR:O	1:B:1407:ALA:HB3	1.79	0.81
1:B:1492:ASN:O	1:B:1493:ILE:CG1	2.26	0.81
1:C:1230:THR:O	1:C:1231:LEU:CD2	2.28	0.81
1:C:1404:TYR:O	1:C:1407:ALA:HB3	1.80	0.81
1:A:1395:ILE:HG12	1:A:1404:TYR:CD2	2.14	0.81
1:A:1408:ILE:HG21	1:A:1412:LEU:HD23	1.61	0.81
1:A:1222:SER:OG	1:A:1223:ASN:N	2.13	0.81
1:A:1412:LEU:HD12	1:A:1419:LEU:CD2	2.11	0.81
1:B:1245:ARG:O	1:B:1245:ARG:HG2	1.81	0.81
1:B:1395:ILE:HG12	1:B:1404:TYR:CD2	2.14	0.81
1:B:1401:VAL:HG22	1:B:1429:ARG:NE	1.94	0.81
1:A:1326:LYS:O	1:A:1327:PHE:CG	2.34	0.81
1:B:1149:ASN:O	1:B:1153:LEU:CB	2.29	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1180:THR:HB	1:C:1185:GLU:OE2	1.79	0.81
1:C:1325:SER:O	1:C:1355:ALA:HB1	1.79	0.81
1:C:1401:VAL:HG22	1:C:1429:ARG:NE	1.94	0.81
1:C:1411:TYR:O	1:C:1415:LYS:N	2.14	0.81
1:C:1430:LEU:HG	1:C:1432:HIS:H	1.43	0.81
1:C:1492:ASN:O	1:C:1493:ILE:CG1	2.25	0.81
2:D:155:ILE:H	2:D:155:ILE:HD13	1.45	0.81
2:E:203:UNK:C	2:E:203:UNK:N	2.42	0.81
1:A:1387:LYS:CB	1:A:1390:GLN:HB2	2.11	0.81
1:B:1279:HIS:C	1:B:1279:HIS:CB	2.48	0.81
1:B:1332:MET:HE2	1:B:1357:LEU:HD13	1.60	0.81
1:C:1405:TYR:CG	1:C:1434:ARG:NH1	2.49	0.81
1:C:1412:LEU:HD12	1:C:1419:LEU:CD2	2.10	0.81
1:C:1438:TYR:O	1:C:1442:VAL:HG23	1.80	0.81
1:C:1605:GLU:HA	1:C:1608:THR:CB	2.10	0.81
1:A:1296:PHE:HE2	2:F:101:SER:HG	1.25	0.81
1:A:1577:LEU:O	1:A:1579:PRO:HD3	1.80	0.81
1:C:1122:LYS:O	1:C:1126:ASP:HB2	1.80	0.81
1:A:1409:GLN:CB	1:A:1413:GLU:CG	2.56	0.80
1:A:1566:PHE:HE2	2:F:180:UNK:CB	1.94	0.80
1:B:1412:LEU:HD12	1:B:1419:LEU:CD2	2.10	0.80
1:C:1387:LYS:CB	1:C:1390:GLN:HB2	2.11	0.80
2:E:90:ALA:H	2:E:91:GLN:CA	1.94	0.80
1:C:1191:ASN:HD22	1:C:1191:ASN:H	1.27	0.80
2:E:126:GLU:O	2:E:129:GLU:HG2	1.81	0.80
1:A:1264:LYS:HE2	1:A:1268:LEU:CG	2.12	0.80
1:B:1405:TYR:CG	1:B:1434:ARG:NH1	2.49	0.80
1:B:1412:LEU:HD13	1:B:1419:LEU:CD2	2.03	0.80
1:C:1161:ARG:NH2	1:C:1174:ILE:HD11	1.97	0.80
1:C:1408:ILE:HG21	1:C:1412:LEU:HD23	1.61	0.80
1:A:1122:LYS:HG3	1:A:1123:GLU:H	1.46	0.80
1:A:1254:LYS:C	1:A:1289:TYR:CD2	2.54	0.80
1:C:1282:GLU:OE2	1:C:1285:GLU:HB3	1.80	0.80
1:C:1326:LYS:O	1:C:1327:PHE:CG	2.34	0.80
2:D:126:GLU:O	2:D:129:GLU:HG2	1.81	0.80
1:B:1336:LEU:HD13	1:B:1364:LEU:HD21	1.63	0.80
1:C:1122:LYS:HG3	1:C:1123:GLU:H	1.46	0.80
1:C:1186:LEU:HD22	1:C:1213:ALA:HB3	1.63	0.80
1:C:1278:VAL:O	1:C:1278:VAL:HG12	1.81	0.80
1:C:1382:PRO:CD	2:E:115:GLU:OE2	2.30	0.80
2:E:155:ILE:H	2:E:155:ILE:CD1	1.95	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1264:LYS:HE2	1:C:1268:LEU:CG	2.12	0.80
1:C:1438:TYR:O	1:C:1442:VAL:CG2	2.29	0.80
1:B:1086:ILE:HB	1:B:1089:ILE:HD13	1.64	0.80
1:B:1577:LEU:O	1:B:1579:PRO:HD3	1.80	0.80
1:B:1605:GLU:HG3	1:C:1580:ASP:OD2	1.80	0.80
1:C:1504:LEU:CG	2:E:149:ASN:OD1	2.30	0.80
2:F:180:UNK:O	2:F:182:UNK:N	2.15	0.80
1:A:1292:ASP:O	2:F:97:GLN:HG2	1.82	0.80
1:B:1326:LYS:O	1:B:1327:PHE:CG	2.34	0.80
1:B:1598:TYR:HE2	2:D:200:UNK:C	1.94	0.80
1:B:1601:GLN:HE21	1:C:1587:TRP:HZ3	0.80	0.80
1:C:1596:MET:SD	1:C:1597:PRO:HD3	2.21	0.80
1:A:1431:ASP:O	1:A:1433:THR:N	2.15	0.80
1:A:1583:LEU:O	1:A:1587:TRP:NE1	2.15	0.80
1:B:1122:LYS:O	1:B:1126:ASP:HB2	1.80	0.80
1:B:1136:SER:N	1:B:1141:VAL:HG21	1.97	0.80
1:C:1336:LEU:HD13	1:C:1364:LEU:HD21	1.63	0.80
1:C:1504:LEU:CG	2:E:149:ASN:CG	2.49	0.80
2:F:133:LYS:HA	2:F:133:LYS:HZ1	1.43	0.80
1:A:1358:TRP:O	1:A:1362:VAL:CG2	2.30	0.79
1:A:1535:LYS:HA	1:A:1535:LYS:HE2	1.63	0.79
1:A:1336:LEU:HD13	1:A:1364:LEU:HD21	1.63	0.79
1:A:1509:ARG:HH22	2:F:162:GLN:CB	1.96	0.79
1:B:1362:VAL:HG22	1:B:1377:THR:CG2	2.12	0.79
1:B:1438:TYR:O	1:B:1442:VAL:CG2	2.29	0.79
1:B:1583:LEU:O	1:B:1587:TRP:NE1	2.15	0.79
1:C:1588:ARG:NH2	2:D:192:UNK:C	2.45	0.79
1:A:1405:TYR:CG	1:A:1434:ARG:NH1	2.49	0.79
1:A:1580:ASP:CG	1:C:1605:GLU:HG3	2.02	0.79
1:B:1494:SER:HA	1:B:1497:GLN:CD	2.03	0.79
1:C:1362:VAL:HG22	1:C:1377:THR:CG2	2.12	0.79
1:A:1438:TYR:O	1:A:1442:VAL:CG2	2.29	0.79
1:A:1551:GLU:CG	1:A:1582:VAL:HG22	2.13	0.79
1:A:1605:GLU:HA	1:A:1608:THR:CB	2.10	0.79
1:A:1605:GLU:CA	1:A:1608:THR:HB	2.12	0.79
1:C:1445:LEU:N	1:C:1446:PRO:HD2	1.97	0.79
1:A:1361:LEU:HD21	1:A:1365:TYR:CZ	2.18	0.79
1:B:1411:TYR:O	1:B:1415:LYS:N	2.14	0.79
1:B:1538:MET:HE3	1:B:1566:PHE:HB3	1.65	0.79
1:C:1154:VAL:HG11	1:C:1180:THR:OG1	1.80	0.79
1:B:1122:LYS:HG3	1:B:1123:GLU:H	1.47	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1264:LYS:HE2	1:B:1268:LEU:CG	2.11	0.79
1:B:1358:TRP:O	1:B:1362:VAL:CG2	2.31	0.79
1:B:1387:LYS:CB	1:B:1390:GLN:HB2	2.11	0.79
1:C:1167:SER:O	1:C:1171:THR:CA	2.31	0.79
1:C:1494:SER:HA	1:C:1497:GLN:CD	2.03	0.79
1:A:1234:LEU:HG	1:A:1235:GLY:H	1.48	0.79
2:E:127:TRP:HA	2:E:130:LYS:HE3	1.65	0.79
2:F:126:GLU:O	2:F:129:GLU:HG2	1.81	0.79
1:A:1082:VAL:HG11	1:A:1105:PRO:HB2	1.63	0.79
1:A:1445:LEU:N	1:A:1446:PRO:HD2	1.98	0.79
1:C:1583:LEU:O	1:C:1587:TRP:NE1	2.15	0.79
1:A:1514:LEU:HD23	1:A:1514:LEU:O	1.83	0.79
1:C:1082:VAL:HG13	1:C:1083:GLN:N	1.98	0.79
1:C:1514:LEU:HD23	1:C:1514:LEU:O	1.83	0.79
1:A:1494:SER:HA	1:A:1497:GLN:CD	2.03	0.78
1:B:1108:TRP:NE1	1:B:1131:ALA:HB3	1.98	0.78
1:B:1514:LEU:O	1:B:1514:LEU:HD23	1.83	0.78
1:C:1414:PHE:CD1	2:E:123:MET:HB3	2.18	0.78
1:C:1455:VAL:HG12	1:C:1456:GLN:N	1.95	0.78
2:E:133:LYS:HA	2:E:133:LYS:HZ1	1.44	0.78
2:F:194:UNK:C	2:F:197:UNK:CA	2.61	0.78
1:B:1079:THR:HG22	1:B:1079:THR:O	1.83	0.78
1:B:1455:VAL:HG12	1:B:1456:GLN:N	1.95	0.78
1:C:1481:ARG:NH1	1:C:1510:ILE:HG12	1.97	0.78
1:B:1082:VAL:HG13	1:B:1083:GLN:N	1.98	0.78
2:D:181:UNK:O	2:D:182:UNK:C	2.28	0.78
1:A:1253:TRP:C	1:A:1255:GLU:H	1.87	0.78
1:A:1412:LEU:CA	1:A:1419:LEU:HD13	2.14	0.78
1:B:1234:LEU:HG	1:B:1235:GLY:H	1.48	0.78
1:B:1277:VAL:HG23	1:B:1278:VAL:H	1.48	0.78
1:B:1361:LEU:HD21	1:B:1365:TYR:CZ	2.18	0.78
1:C:1108:TRP:CE3	1:C:1108:TRP:HA	2.19	0.78
1:C:1535:LYS:HE2	1:C:1535:LYS:HA	1.63	0.78
2:F:150:LYS:O	2:F:152:ASN:O	2.02	0.78
1:A:1136:SER:CA	1:A:1141:VAL:HG21	2.13	0.78
1:A:1271:MET:O	1:A:1275:HIS:HB2	1.84	0.78
1:A:1358:TRP:CE3	1:A:1381:HIS:CD2	2.72	0.78
1:A:1079:THR:O	1:A:1079:THR:HG22	1.84	0.78
1:A:1279:HIS:CE1	1:A:1283:LEU:HD12	2.18	0.78
1:B:1445:LEU:N	1:B:1446:PRO:HD2	1.98	0.78
1:C:1079:THR:O	1:C:1079:THR:HG22	1.83	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1244:ALA:C	1:C:1275:HIS:HE1	1.86	0.78
2:D:172:UNK:O	2:D:175:UNK:CB	2.31	0.78
1:A:1621:LYS:O	1:A:1625:GLN:HG3	1.83	0.78
1:B:1431:ASP:O	1:B:1433:THR:N	2.15	0.78
1:B:1469:ASN:HA	1:B:1472:ILE:HD12	1.66	0.78
1:C:1149:ASN:O	1:C:1153:LEU:HB2	1.84	0.78
1:C:1206:TYR:CD1	1:C:1226:ARG:HD2	2.19	0.78
1:C:1621:LYS:O	1:C:1625:GLN:HG3	1.83	0.78
2:D:150:LYS:O	2:D:152:ASN:O	2.02	0.78
2:E:202:UNK:O	2:E:203:UNK:O	2.01	0.78
1:A:1455:VAL:HG12	1:A:1456:GLN:N	1.96	0.78
1:B:1271:MET:O	1:B:1275:HIS:HB2	1.83	0.78
1:B:1409:GLN:HA	1:B:1413:GLU:HG2	0.81	0.78
1:B:1412:LEU:HD12	1:B:1419:LEU:HD21	1.66	0.78
1:A:1214:ALA:O	1:A:1218:TYR:HB2	1.84	0.78
1:B:1167:SER:HB3	1:B:1168:TYR:CE1	2.19	0.78
1:B:1246:LYS:O	1:B:1247:ALA:CB	2.32	0.78
1:C:1175:PHE:CE1	1:C:1200:GLN:HB3	2.18	0.78
1:C:1270:GLN:OE1	1:C:1298:GLU:HG3	1.84	0.78
1:C:1358:TRP:O	1:C:1362:VAL:CG2	2.31	0.78
1:C:1499:LEU:HB2	1:C:1511:ALA:HB2	1.66	0.78
1:C:1264:LYS:HZ1	1:C:1268:LEU:HD13	1.47	0.78
1:C:1605:GLU:CA	1:C:1608:THR:HB	2.12	0.78
2:D:180:UNK:O	2:D:183:UNK:HA	1.84	0.78
1:A:1082:VAL:HG13	1:A:1083:GLN:N	1.98	0.77
1:A:1149:ASN:O	1:A:1153:LEU:HB2	1.84	0.77
1:A:1279:HIS:HD2	1:A:1282:GLU:H	1.28	0.77
1:A:1362:VAL:HG22	1:A:1377:THR:CG2	2.12	0.77
1:B:1499:LEU:HB2	1:B:1511:ALA:HB2	1.66	0.77
1:B:1605:GLU:HA	1:B:1608:THR:CB	2.10	0.77
1:C:1168:TYR:H	1:C:1168:TYR:HD1	1.32	0.77
1:C:1198:ILE:HG12	1:C:1199:GLN:N	1.99	0.77
1:C:1361:LEU:HD21	1:C:1365:TYR:CZ	2.17	0.77
1:C:1361:LEU:HD23	1:C:1361:LEU:C	2.04	0.77
1:C:1586:ALA:CB	1:C:1594:PHE:CE1	2.67	0.77
2:E:108:GLU:OE2	2:E:109:GLN:CG	2.32	0.77
1:A:1107:VAL:HG12	1:A:1111:LEU:HB2	1.67	0.77
1:A:1116:LEU:HD11	1:A:1122:LYS:CD	2.13	0.77
1:B:1412:LEU:CA	1:B:1419:LEU:HD13	2.14	0.77
2:E:151:ILE:HA	2:E:154:ARG:HD3	1.66	0.77
1:B:1144:ALA:O	1:B:1153:LEU:HD13	1.83	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:126:GLU:HG3	2:D:130:LYS:HZ3	1.49	0.77
2:E:150:LYS:O	2:E:152:ASN:O	2.02	0.77
1:A:1471:PHE:HB3	1:A:1480:LEU:HB2	1.66	0.77
1:A:1538:MET:HE3	1:A:1566:PHE:HB3	1.65	0.77
1:B:1471:PHE:HA	1:B:1474:GLU:HG2	1.67	0.77
1:B:1525:VAL:HG13	1:B:1526:GLU:OE2	1.85	0.77
1:C:1161:ARG:HE	1:C:1170:GLU:HB2	1.48	0.77
2:E:146:VAL:HA	2:E:149:ASN:OD1	1.85	0.77
1:A:1277:VAL:HG23	1:A:1278:VAL:H	1.48	0.77
1:A:1469:ASN:HA	1:A:1472:ILE:HD12	1.66	0.77
1:B:1135:SER:OG	1:B:1160:ALA:HA	1.84	0.77
1:A:1161:ARG:HG2	1:A:1173:LEU:CD2	2.14	0.77
1:B:1180:THR:O	1:B:1181:ASN:HB3	1.82	0.77
1:B:1253:TRP:C	1:B:1255:GLU:H	1.87	0.77
1:C:1245:ARG:N	1:C:1275:HIS:HE1	1.82	0.77
1:C:1271:MET:O	1:C:1275:HIS:HB2	1.83	0.77
1:A:1174:ILE:CG2	1:A:1201:VAL:HG22	2.15	0.77
1:B:1358:TRP:CE3	1:B:1381:HIS:CD2	2.72	0.77
1:B:1605:GLU:CA	1:B:1608:THR:HB	2.12	0.77
1:C:1472:ILE:HA	1:C:1507:PHE:CE1	2.19	0.77
2:F:151:ILE:HA	2:F:154:ARG:HD3	1.66	0.77
1:A:1279:HIS:CD2	1:A:1282:GLU:HB3	2.20	0.77
1:B:1214:ALA:O	1:B:1218:TYR:HB2	1.84	0.77
1:C:1412:LEU:CA	1:C:1419:LEU:HD13	2.14	0.77
1:C:1471:PHE:HB3	1:C:1480:LEU:HB2	1.67	0.77
1:C:1513:TYR:O	1:C:1516:LYS:HG2	1.85	0.77
1:C:1609:LYS:HG2	1:C:1612:LYS:HD2	1.66	0.77
2:F:127:TRP:HA	2:F:130:LYS:HE3	1.66	0.77
2:F:194:UNK:O	2:F:197:UNK:HA	1.85	0.77
1:A:1232:VAL:C	1:A:1234:LEU:N	2.38	0.77
1:A:1332:MET:HE2	1:A:1357:LEU:HD13	1.66	0.77
1:A:1492:ASN:C	1:A:1493:ILE:HG13	2.05	0.77
1:B:1387:LYS:HB2	1:B:1390:GLN:HB3	1.65	0.77
1:B:1471:PHE:HB3	1:B:1480:LEU:HB2	1.67	0.77
1:C:1113:LYS:HG3	1:C:1139:GLU:OE1	1.84	0.77
1:C:1277:VAL:HG23	1:C:1278:VAL:H	1.49	0.77
2:D:127:TRP:HA	2:D:130:LYS:HE3	1.65	0.77
1:A:1535:LYS:NZ	2:F:181:UNK:CB	2.48	0.76
1:C:1358:TRP:CE3	1:C:1381:HIS:CD2	2.72	0.76
1:C:1525:VAL:HG13	1:C:1526:GLU:OE2	1.85	0.76
1:A:1499:LEU:HB2	1:A:1511:ALA:HB2	1.66	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1361:LEU:HD23	1:B:1361:LEU:C	2.05	0.76
1:B:1408:ILE:HG23	1:B:1412:LEU:HB2	1.68	0.76
2:F:118:ALA:HA	2:F:121:LYS:CE	2.15	0.76
1:A:1122:LYS:HG3	1:A:1123:GLU:N	2.01	0.76
1:A:1409:GLN:HA	1:A:1413:GLU:HG2	0.81	0.76
1:A:1525:VAL:HG13	1:A:1526:GLU:OE2	1.85	0.76
1:A:1609:LYS:HG2	1:A:1612:LYS:HD2	1.66	0.76
1:C:1108:TRP:HA	1:C:1108:TRP:HE3	1.51	0.76
2:D:118:ALA:HA	2:D:121:LYS:CE	2.15	0.76
1:B:1513:TYR:O	1:B:1516:LYS:HG2	1.85	0.76
1:C:1211:TYR:CE1	1:C:1231:LEU:HD21	2.20	0.76
1:C:1427:SER:HB3	1:C:1428:PRO:HD3	1.67	0.76
1:C:1492:ASN:C	1:C:1493:ILE:HG12	2.04	0.76
2:F:146:VAL:HA	2:F:149:ASN:OD1	1.85	0.76
2:F:190:UNK:O	2:F:191:UNK:C	2.33	0.76
1:A:1116:LEU:CD1	1:A:1122:LYS:HB3	2.15	0.76
1:A:1403:LEU:O	1:A:1403:LEU:HD13	1.86	0.76
1:B:1277:VAL:HG23	1:B:1278:VAL:N	2.01	0.76
1:C:1572:THR:HG21	1:C:1599:PHE:CD2	2.20	0.76
1:C:1596:MET:O	1:C:1598:TYR:CE2	2.38	0.76
2:D:151:ILE:HA	2:D:154:ARG:HD3	1.66	0.76
1:A:1086:ILE:HD12	1:A:1089:ILE:HG12	1.67	0.76
1:A:1403:LEU:HD13	1:A:1403:LEU:C	2.06	0.76
2:D:146:VAL:HA	2:D:149:ASN:OD1	1.85	0.76
1:B:1107:VAL:HG12	1:B:1111:LEU:HB2	1.67	0.76
1:B:1232:VAL:C	1:B:1234:LEU:N	2.38	0.76
1:C:1387:LYS:HB2	1:C:1390:GLN:HB3	1.65	0.76
1:C:1504:LEU:HD21	2:E:149:ASN:CB	2.15	0.76
2:F:118:ALA:HA	2:F:121:LYS:HE3	1.68	0.76
1:A:1257:CYS:HA	1:A:1260:CYS:SG	2.26	0.76
1:A:1419:LEU:O	1:A:1422:LEU:CB	2.25	0.76
1:B:1403:LEU:O	1:B:1403:LEU:HD13	1.86	0.76
1:B:1492:ASN:C	1:B:1493:ILE:HG13	2.04	0.76
1:C:1214:ALA:O	1:C:1218:TYR:HB2	1.84	0.76
1:C:1253:TRP:C	1:C:1255:GLU:H	1.86	0.76
1:A:1361:LEU:HD23	1:A:1361:LEU:C	2.05	0.76
1:B:1358:TRP:HE3	1:B:1377:THR:HG22	1.50	0.76
1:C:1082:VAL:CG2	1:C:1107:VAL:HG21	2.14	0.76
1:C:1222:SER:C	1:C:1223:ASN:CG	2.23	0.76
1:C:1277:VAL:HG23	1:C:1278:VAL:N	2.01	0.76
1:C:1403:LEU:O	1:C:1403:LEU:HD13	1.86	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1469:ASN:HA	1:C:1472:ILE:HD12	1.67	0.76
1:C:1617:GLU:HA	1:C:1620:ARG:NH1	2.01	0.76
1:A:1513:TYR:O	1:A:1516:LYS:HG2	1.85	0.76
1:B:1137:TYR:HB2	1:B:1138:MET:HB2	0.81	0.76
1:C:1211:TYR:HD1	1:C:1231:LEU:HD22	0.95	0.76
1:C:1431:ASP:O	1:C:1433:THR:N	2.15	0.76
1:C:1601:GLN:HG3	1:C:1604:LYS:HD2	1.69	0.76
1:B:1161:ARG:HH11	1:B:1194:ASN:HB2	1.50	0.75
1:C:1414:PHE:HE1	2:E:127:TRP:CE3	2.04	0.75
1:C:1471:PHE:HA	1:C:1474:GLU:HG2	1.67	0.75
1:A:1277:VAL:HG23	1:A:1278:VAL:N	2.01	0.75
1:A:1601:GLN:HG3	1:A:1604:LYS:HD2	1.68	0.75
1:B:1136:SER:CB	1:B:1141:VAL:HG11	2.15	0.75
1:B:1472:ILE:HA	1:B:1507:PHE:CE1	2.19	0.75
1:C:1290:TYR:HD2	1:C:1299:LEU:HD22	1.50	0.75
1:C:1475:GLU:HB2	2:E:145:GLN:HG3	1.69	0.75
2:F:91:GLN:NE2	2:F:94:ARG:HG2	2.01	0.75
1:A:1471:PHE:HA	1:A:1474:GLU:HG2	1.67	0.75
1:B:1144:ALA:HB1	1:B:1149:ASN:CB	2.14	0.75
1:B:1609:LYS:HG2	1:B:1612:LYS:HD2	1.66	0.75
1:C:1257:CYS:HA	1:C:1260:CYS:SG	2.26	0.75
1:C:1538:MET:HE3	1:C:1566:PHE:HB3	1.67	0.75
2:E:118:ALA:O	2:E:122:VAL:HG22	1.87	0.75
1:B:1082:VAL:HG11	1:B:1105:PRO:CB	2.16	0.75
1:C:1198:ILE:CA	1:C:1201:VAL:HG21	2.14	0.75
1:C:1475:GLU:OE1	2:E:145:GLN:HG3	1.85	0.75
1:A:1358:TRP:HE3	1:A:1377:THR:HG22	1.50	0.75
1:B:1584:GLU:HA	1:B:1587:TRP:CD2	2.21	0.75
1:B:1617:GLU:HA	1:B:1620:ARG:NH1	2.01	0.75
2:E:118:ALA:HA	2:E:121:LYS:CE	2.15	0.75
1:A:1387:LYS:HB2	1:A:1390:GLN:HB3	1.65	0.75
1:A:1584:GLU:HA	1:A:1587:TRP:CD2	2.21	0.75
1:B:1535:LYS:NZ	1:B:1563:ARG:HH12	1.85	0.75
1:C:1198:ILE:O	1:C:1199:GLN:C	2.23	0.75
1:A:1144:ALA:O	1:A:1153:LEU:HD13	1.87	0.75
1:A:1535:LYS:NZ	1:A:1563:ARG:HH12	1.85	0.75
1:B:1218:TYR:HE2	1:B:1227:LEU:HB2	1.52	0.75
1:C:1261:VAL:HG13	1:C:1295:TYR:CE1	2.22	0.75
1:C:1584:GLU:HA	1:C:1587:TRP:CD2	2.21	0.75
1:C:1591:ILE:HG23	1:C:1592:MET:H	1.52	0.75
1:A:1445:LEU:O	1:A:1448:VAL:HG22	1.87	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1122:LYS:HG3	1:B:1123:GLU:N	2.01	0.75
1:C:1403:LEU:HD13	1:C:1403:LEU:C	2.06	0.75
2:F:118:ALA:O	2:F:122:VAL:HG22	1.87	0.75
1:A:1274:LEU:C	1:A:1277:VAL:HG22	2.08	0.74
1:C:1190:ILE:CD1	1:C:1216:LEU:O	2.35	0.74
1:C:1408:ILE:HG23	1:C:1412:LEU:HB2	1.69	0.74
1:C:1444:GLN:C	1:C:1446:PRO:HD2	2.07	0.74
1:A:1427:SER:HB3	1:A:1428:PRO:HD3	1.67	0.74
1:B:1192:GLY:N	1:B:1193:PRO:HD3	2.01	0.74
1:B:1403:LEU:HD13	1:B:1403:LEU:C	2.06	0.74
1:B:1598:TYR:CE2	2:D:201:UNK:CA	2.69	0.74
1:C:1521:TRP:O	1:C:1525:VAL:HG12	1.87	0.74
2:F:21:UNK:C	2:F:21:UNK:N	2.49	0.74
1:A:1161:ARG:CZ	1:A:1170:GLU:HB2	2.17	0.74
1:A:1535:LYS:HZ3	2:F:181:UNK:CB	1.99	0.74
1:A:1602:VAL:O	1:A:1606:TYR:HB2	1.87	0.74
1:A:1617:GLU:HA	1:A:1620:ARG:NH1	2.01	0.74
1:B:1274:LEU:HA	1:B:1277:VAL:CG2	2.17	0.74
1:B:1521:TRP:O	1:B:1525:VAL:HG12	1.87	0.74
1:B:1566:PHE:HE2	2:D:182:UNK:CB	1.99	0.74
1:C:1412:LEU:HD21	1:C:1439:PHE:CE1	2.22	0.74
1:C:1504:LEU:HD21	2:E:149:ASN:CG	2.07	0.74
1:A:1416:PRO:HD2	2:F:130:LYS:HD3	1.69	0.74
1:B:1412:LEU:HD21	1:B:1439:PHE:CE1	2.23	0.74
1:B:1605:GLU:HB2	1:C:1580:ASP:OD1	1.86	0.74
1:C:1274:LEU:HA	1:C:1277:VAL:CG2	2.18	0.74
1:A:1116:LEU:CD2	1:A:1122:LYS:HB3	2.17	0.74
1:A:1412:LEU:HD21	1:A:1439:PHE:CE1	2.23	0.74
1:A:1444:GLN:C	1:A:1446:PRO:HD2	2.08	0.74
1:B:1444:GLN:C	1:B:1446:PRO:HD2	2.08	0.74
1:C:1412:LEU:HB2	1:C:1419:LEU:HD13	1.70	0.74
1:C:1412:LEU:HD12	1:C:1419:LEU:HD21	1.66	0.74
1:C:1602:VAL:O	1:C:1606:TYR:HB2	1.88	0.74
1:C:1617:GLU:HG2	1:C:1621:LYS:HZ3	1.51	0.74
2:E:118:ALA:HA	2:E:121:LYS:HE3	1.68	0.74
1:A:1274:LEU:HA	1:A:1277:VAL:CG2	2.18	0.74
1:A:1332:MET:CE	1:A:1357:LEU:HD13	2.18	0.74
1:A:1611:ASP:OD2	1:B:1607:LEU:CD2	2.36	0.74
1:B:1588:ARG:NH1	1:B:1588:ARG:HG3	2.00	0.74
1:C:1362:VAL:HG22	1:C:1377:THR:HG21	1.70	0.74
1:C:1409:GLN:HA	1:C:1413:GLU:HG2	0.81	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1445:LEU:O	1:C:1448:VAL:HG22	1.88	0.74
1:A:1521:TRP:O	1:A:1525:VAL:HG12	1.87	0.74
1:A:1579:PRO:CB	1:C:1605:GLU:OE2	2.36	0.74
1:B:1257:CYS:HA	1:B:1260:CYS:SG	2.27	0.74
1:B:1274:LEU:C	1:B:1277:VAL:HG22	2.07	0.74
1:C:1177:LEU:HA	1:C:1180:THR:OG1	1.87	0.74
1:C:1597:PRO:HB3	1:C:1601:GLN:HE22	1.53	0.74
2:E:146:VAL:O	2:E:149:ASN:HB2	1.87	0.74
1:A:1554:LEU:HA	1:A:1557:PHE:HD2	1.53	0.74
1:B:1445:LEU:O	1:B:1448:VAL:HG22	1.88	0.74
2:F:146:VAL:O	2:F:149:ASN:HB2	1.87	0.74
1:B:1554:LEU:HA	1:B:1557:PHE:HD2	1.53	0.74
1:A:1513:TYR:HD1	1:A:1516:LYS:HE2	1.53	0.74
1:A:1587:TRP:O	1:A:1588:ARG:C	2.26	0.74
1:B:1209:LYS:HB3	1:B:1230:THR:HG22	1.69	0.74
1:B:1601:GLN:HG3	1:B:1604:LYS:HD2	1.68	0.74
1:C:1115:GLN:HG3	1:C:1125:ILE:CD1	2.17	0.74
1:C:1122:LYS:HG3	1:C:1123:GLU:N	2.01	0.74
1:C:1296:PHE:O	1:C:1297:GLU:C	2.26	0.74
1:A:1282:GLU:CG	1:A:1283:LEU:H	2.00	0.73
1:A:1408:ILE:HG23	1:A:1412:LEU:HB2	1.68	0.73
1:B:1455:VAL:CG1	1:B:1456:GLN:H	1.95	0.73
1:C:1198:ILE:HG12	1:C:1199:GLN:H	1.52	0.73
2:E:192:UNK:O	2:E:193:UNK:C	2.35	0.73
2:F:152:ASN:O	2:F:153:ASN:HB2	1.88	0.73
1:A:1255:GLU:CA	1:A:1289:TYR:HE2	2.01	0.73
1:A:1412:LEU:HB2	1:A:1419:LEU:HD13	1.69	0.73
1:B:1427:SER:HB3	1:B:1428:PRO:HD3	1.67	0.73
1:B:1597:PRO:HB3	1:B:1601:GLN:HE22	1.53	0.73
1:C:1177:LEU:CD1	1:C:1189:PHE:HZ	1.96	0.73
1:C:1332:MET:CE	1:C:1357:LEU:HD13	2.17	0.73
1:C:1535:LYS:NZ	1:C:1563:ARG:HH12	1.85	0.73
1:B:1162:LYS:O	1:B:1163:LYS:HB2	1.88	0.73
1:B:1282:GLU:CG	1:B:1283:LEU:H	2.00	0.73
1:B:1509:ARG:CZ	2:D:163:GLN:HA	2.17	0.73
1:B:1513:TYR:HD1	1:B:1516:LYS:HE2	1.54	0.73
1:B:1602:VAL:O	1:B:1606:TYR:HB2	1.88	0.73
1:C:1261:VAL:HG13	1:C:1295:TYR:CZ	2.23	0.73
2:D:118:ALA:O	2:D:122:VAL:HG22	1.87	0.73
2:D:129:GLU:HB2	2:D:132:LYS:HZ2	1.53	0.73
1:A:1371:TYR:HB3	1:A:1394:ILE:HG22	1.69	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1279:HIS:NE2	1:B:1283:LEU:HD11	2.02	0.73
2:D:146:VAL:O	2:D:149:ASN:HB2	1.87	0.73
2:E:129:GLU:HB2	2:E:132:LYS:HZ2	1.54	0.73
1:B:1134:PRO:HD2	1:B:1156:TYR:HE1	1.54	0.73
1:B:1264:LYS:NZ	1:B:1268:LEU:CD1	2.51	0.73
1:C:1332:MET:HE2	1:C:1357:LEU:HD13	1.69	0.73
1:C:1428:PRO:O	1:C:1429:ARG:CB	2.33	0.73
2:F:162:GLN:C	2:F:166:ALA:CB	2.51	0.73
1:A:1472:ILE:HA	1:A:1507:PHE:CE1	2.19	0.73
1:B:1167:SER:O	1:B:1169:VAL:N	2.20	0.73
1:B:1362:VAL:HG22	1:B:1377:THR:HG21	1.70	0.73
1:C:1198:ILE:CG1	1:C:1199:GLN:N	2.51	0.73
1:C:1264:LYS:NZ	1:C:1268:LEU:CD1	2.51	0.73
1:C:1290:TYR:CD2	1:C:1299:LEU:CD2	2.71	0.73
1:B:1084:VAL:HG13	1:B:1089:ILE:HG22	1.70	0.73
1:B:1332:MET:CE	1:B:1357:LEU:HD13	2.18	0.73
2:F:183:UNK:O	2:F:187:UNK:N	2.21	0.73
1:A:1332:MET:HG3	1:A:1357:LEU:CD1	2.19	0.73
1:A:1586:ALA:O	1:A:1590:ASN:OD1	2.06	0.73
1:B:1371:TYR:HB3	1:B:1394:ILE:HG22	1.69	0.73
1:C:1554:LEU:HA	1:C:1557:PHE:HD2	1.53	0.73
2:D:118:ALA:HA	2:D:121:LYS:HE3	1.68	0.73
2:D:152:ASN:O	2:D:153:ASN:HB2	1.88	0.73
1:A:1597:PRO:HB3	1:A:1601:GLN:HE22	1.53	0.73
1:B:1296:PHE:O	1:B:1297:GLU:C	2.26	0.73
1:C:1414:PHE:HE1	2:E:127:TRP:HZ3	1.34	0.73
2:E:152:ASN:O	2:E:153:ASN:HB2	1.89	0.73
2:E:155:ILE:HD12	2:E:155:ILE:N	2.02	0.73
1:A:1264:LYS:NZ	1:A:1268:LEU:CD1	2.51	0.73
1:B:1292:ASP:O	2:D:97:GLN:HA	1.87	0.73
1:C:1414:PHE:O	1:C:1416:PRO:CD	2.23	0.73
1:C:1513:TYR:HD1	1:C:1516:LYS:HE2	1.54	0.73
1:A:1159:MET:SD	1:A:1162:LYS:HB3	2.29	0.72
1:A:1198:ILE:HG23	1:A:1201:VAL:HG21	1.71	0.72
1:B:1261:VAL:HG13	1:B:1295:TYR:CE2	2.24	0.72
1:B:1274:LEU:HA	1:B:1277:VAL:HG21	1.71	0.72
1:B:1293:ARG:HG2	2:D:97:GLN:HE22	1.54	0.72
1:B:1428:PRO:O	1:B:1429:ARG:CB	2.34	0.72
1:C:1122:LYS:HZ3	1:C:1147:SER:HB3	1.52	0.72
1:C:1254:LYS:HA	1:C:1289:TYR:CD2	2.24	0.72
1:C:1257:CYS:HB3	1:C:1289:TYR:OH	1.89	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1434:ARG:HG3	2:E:4:UNK:O	1.89	0.72
1:B:1206:TYR:CD1	1:B:1226:ARG:O	2.42	0.72
1:C:1387:LYS:CB	1:C:1390:GLN:CB	2.67	0.72
1:C:1496:ALA:HB2	1:C:1514:LEU:HD22	1.70	0.72
1:B:1412:LEU:HB2	1:B:1419:LEU:HD13	1.70	0.72
1:C:1274:LEU:C	1:C:1277:VAL:HG22	2.08	0.72
2:E:134:ASP:O	2:E:137:GLU:HB2	1.89	0.72
1:A:1588:ARG:HH11	1:A:1588:ARG:HG3	1.54	0.72
1:B:1330:GLN:HG3	1:B:1331:LYS:H	1.55	0.72
1:B:1419:LEU:C	1:B:1422:LEU:HB3	2.09	0.72
1:C:1332:MET:HG3	1:C:1357:LEU:CD1	2.19	0.72
1:C:1358:TRP:HE3	1:C:1377:THR:HG22	1.51	0.72
1:C:1444:GLN:NE2	2:E:130:LYS:HD2	2.03	0.72
1:C:1215:LYS:O	1:C:1217:LEU:N	2.22	0.72
1:C:1371:TYR:HB3	1:C:1394:ILE:HG22	1.69	0.72
1:A:1296:PHE:O	1:A:1297:GLU:C	2.27	0.72
1:B:1496:ALA:HB2	1:B:1514:LEU:HD22	1.70	0.72
1:B:1592:MET:HG2	1:B:1593:ASP:H	1.53	0.72
1:C:1274:LEU:HA	1:C:1277:VAL:HG21	1.71	0.72
1:C:1588:ARG:NH1	2:D:197:UNK:CB	2.53	0.72
1:A:1324:TYR:HD2	1:A:1332:MET:HA	1.55	0.72
1:B:1167:SER:C	1:B:1169:VAL:H	1.93	0.72
1:B:1215:LYS:O	1:B:1217:LEU:N	2.23	0.72
1:C:1330:GLN:HG3	1:C:1331:LYS:H	1.55	0.72
1:C:1358:TRP:CE3	1:C:1377:THR:HG22	2.24	0.72
2:D:127:TRP:CD1	2:D:128:ARG:HG3	2.24	0.72
1:A:1282:GLU:O	1:A:1283:LEU:CB	2.38	0.72
1:C:1253:TRP:O	1:C:1289:TYR:CE2	2.41	0.72
2:D:106:ARG:HH21	2:D:106:ARG:HA	1.55	0.72
1:A:1215:LYS:O	1:A:1217:LEU:N	2.22	0.72
1:A:1411:TYR:O	1:A:1415:LYS:C	2.27	0.72
1:C:1175:PHE:HE1	1:C:1200:GLN:HB3	1.52	0.72
2:E:127:TRP:CD1	2:E:128:ARG:HG3	2.25	0.72
2:F:200:UNK:C	2:F:202:UNK:H	2.00	0.72
1:A:1209:LYS:HB2	1:A:1231:LEU:HB3	1.71	0.71
1:A:1258:PHE:HE1	1:A:1293:ARG:HG3	1.55	0.71
1:B:1332:MET:HG3	1:B:1357:LEU:CD1	2.18	0.71
1:C:1119:GLY:O	1:C:1120:MET:SD	2.48	0.71
1:C:1149:ASN:O	1:C:1153:LEU:CB	2.38	0.71
2:F:106:ARG:HA	2:F:106:ARG:HH21	1.55	0.71
2:F:194:UNK:C	2:F:197:UNK:CB	2.68	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1588:ARG:HH21	2:D:192:UNK:C	2.03	0.71
1:A:1161:ARG:NE	1:A:1173:LEU:HD23	2.05	0.71
1:A:1419:LEU:C	1:A:1422:LEU:HB3	2.09	0.71
1:A:1496:ALA:HB2	1:A:1514:LEU:HD22	1.70	0.71
1:B:1598:TYR:OH	2:D:197:UNK:O	2.06	0.71
1:B:1409:GLN:O	1:B:1413:GLU:CB	2.31	0.71
1:B:1587:TRP:O	1:B:1588:ARG:C	2.29	0.71
2:E:105:TRP:C	2:E:108:GLU:HG3	2.10	0.71
1:B:1112:ALA:HB1	1:B:1140:VAL:HG21	1.72	0.71
1:B:1282:GLU:O	1:B:1283:LEU:CB	2.38	0.71
1:C:1586:ALA:HB3	1:C:1594:PHE:CZ	2.24	0.71
2:E:90:ALA:H	2:E:91:GLN:HA	1.55	0.71
2:F:126:GLU:HG3	2:F:130:LYS:HZ1	1.53	0.71
1:A:1149:ASN:O	1:A:1153:LEU:CB	2.39	0.71
1:A:1150:TRP:O	1:A:1153:LEU:N	2.24	0.71
1:A:1159:MET:CE	1:A:1162:LYS:HD2	2.20	0.71
1:A:1180:THR:HG22	1:A:1181:ASN:ND2	2.05	0.71
1:A:1362:VAL:CG2	1:A:1377:THR:HG21	2.21	0.71
1:B:1572:THR:HG21	1:B:1599:PHE:HD2	1.55	0.71
1:C:1122:LYS:NZ	1:C:1147:SER:HB3	2.05	0.71
1:C:1130:LYS:HD2	1:C:1156:TYR:CD1	2.26	0.71
1:C:1136:SER:CB	1:C:1140:VAL:HG23	2.21	0.71
1:C:1324:TYR:HD2	1:C:1332:MET:HA	1.55	0.71
2:F:127:TRP:CD1	2:F:128:ARG:HG3	2.25	0.71
1:A:1358:TRP:CE3	1:A:1377:THR:HG22	2.24	0.71
1:B:1279:HIS:HD2	1:B:1282:GLU:HB3	1.55	0.71
1:B:1411:TYR:O	1:B:1415:LYS:O	2.09	0.71
1:C:1244:ALA:H	1:C:1275:HIS:CE1	2.07	0.71
1:C:1554:LEU:HD11	1:C:1568:ALA:HB2	1.73	0.71
1:A:1136:SER:CB	1:A:1141:VAL:HG11	2.21	0.71
1:A:1463:VAL:HG12	1:A:1467:LEU:HD22	1.73	0.71
1:B:1116:LEU:HD11	1:B:1122:LYS:HD3	1.71	0.71
1:B:1266:PHE:HB2	1:B:1268:LEU:HG	1.72	0.71
1:B:1333:ARG:HB2	1:B:1360:GLU:CD	2.11	0.71
1:C:1247:ALA:CA	1:C:1247:ALA:O	2.39	0.71
2:E:118:ALA:HA	2:E:121:LYS:NZ	2.06	0.71
1:A:1266:PHE:HB2	1:A:1268:LEU:HG	1.72	0.71
1:A:1554:LEU:HD11	1:A:1568:ALA:HB2	1.73	0.71
1:C:1259:ALA:HA	1:C:1293:ARG:NH1	2.05	0.71
1:C:1411:TYR:O	1:C:1415:LYS:O	2.09	0.71
1:A:1362:VAL:HG22	1:A:1377:THR:HG21	1.70	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1161:ARG:NE	1:B:1173:LEU:HD23	2.06	0.71
1:B:1554:LEU:HD11	1:B:1568:ALA:HB2	1.73	0.71
1:C:1168:TYR:N	1:C:1168:TYR:CD1	2.55	0.71
2:F:118:ALA:HA	2:F:121:LYS:NZ	2.06	0.71
1:A:1086:ILE:HB	1:A:1089:ILE:HB	1.73	0.70
1:A:1116:LEU:HD11	1:A:1122:LYS:HB3	1.73	0.70
1:A:1274:LEU:HA	1:A:1277:VAL:HG21	1.71	0.70
1:A:1368:TYR:CD1	1:A:1370:GLU:CG	2.75	0.70
1:A:1598:TYR:CZ	1:B:1584:GLU:OE2	2.44	0.70
1:C:1150:TRP:O	1:C:1153:LEU:N	2.24	0.70
2:F:134:ASP:O	2:F:137:GLU:HB2	1.90	0.70
1:A:1161:ARG:HE	1:A:1173:LEU:HD23	1.55	0.70
1:B:1084:VAL:HB	1:B:1098:PHE:CZ	2.26	0.70
1:B:1324:TYR:HD2	1:B:1332:MET:HA	1.55	0.70
1:B:1358:TRP:CE3	1:B:1377:THR:HG22	2.24	0.70
1:C:1425:VAL:HG23	1:C:1426:LEU:N	2.06	0.70
1:A:1218:TYR:HE2	1:A:1227:LEU:HB2	1.56	0.70
1:B:1475:GLU:CD	2:D:145:GLN:HB3	2.06	0.70
1:C:1266:PHE:HB2	1:C:1268:LEU:HG	1.72	0.70
1:C:1295:TYR:O	1:C:1296:PHE:CG	2.44	0.70
1:C:1620:ARG:HH11	1:C:1620:ARG:HG3	1.57	0.70
1:B:1358:TRP:HH2	1:B:1381:HIS:CE1	2.05	0.70
1:B:1463:VAL:HG12	1:B:1467:LEU:HD22	1.73	0.70
1:C:1419:LEU:C	1:C:1422:LEU:HB3	2.09	0.70
1:C:1481:ARG:HH11	1:C:1510:ILE:HG12	1.55	0.70
2:D:118:ALA:HA	2:D:121:LYS:NZ	2.06	0.70
1:A:1588:ARG:HG3	1:A:1588:ARG:NH1	2.07	0.70
1:B:1206:TYR:CD2	1:B:1226:ARG:HG3	2.26	0.70
1:B:1368:TYR:CD1	1:B:1370:GLU:CG	2.75	0.70
1:C:1368:TYR:CD1	1:C:1370:GLU:CG	2.74	0.70
2:F:129:GLU:HB2	2:F:132:LYS:HZ2	1.56	0.70
1:A:1428:PRO:O	1:A:1429:ARG:CB	2.34	0.70
1:B:1598:TYR:CE2	2:D:200:UNK:CB	2.74	0.70
1:A:1466:SER:O	1:A:1470:LEU:HG	1.92	0.70
1:A:1608:THR:HG23	1:B:1607:LEU:CD1	2.22	0.70
1:B:1362:VAL:CG2	1:B:1377:THR:HG21	2.21	0.70
1:C:1479:ALA:O	1:C:1483:SER:N	2.23	0.70
1:C:1594:PHE:O	1:C:1596:MET:HG3	1.91	0.70
2:F:191:UNK:O	2:F:192:UNK:C	2.39	0.70
1:A:1588:ARG:NH2	2:E:192:UNK:CA	2.51	0.70
1:B:1253:TRP:CE3	1:B:1276:ILE:CB	2.75	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1425:VAL:HG23	1:B:1426:LEU:N	2.06	0.70
1:B:1466:SER:O	1:B:1470:LEU:HG	1.92	0.70
1:C:1253:TRP:CE3	1:C:1276:ILE:CB	2.75	0.70
2:F:194:UNK:C	2:F:197:UNK:HA	2.20	0.70
1:A:1281:ASP:N	1:A:1281:ASP:CB	2.54	0.70
1:A:1333:ARG:HB2	1:A:1360:GLU:CD	2.12	0.70
1:A:1425:VAL:HG23	1:A:1426:LEU:N	2.05	0.70
1:B:1116:LEU:CD1	1:B:1122:LYS:HD3	2.21	0.70
1:C:1192:GLY:H	1:C:1193:PRO:CD	2.03	0.70
2:D:180:UNK:C	2:D:183:UNK:CB	2.69	0.70
2:E:189:UNK:CA	2:E:195:UNK:N	2.55	0.70
1:A:1587:TRP:CH2	1:C:1601:GLN:HG2	2.27	0.69
1:C:1362:VAL:CG2	1:C:1377:THR:HG21	2.21	0.69
1:A:1157:LEU:HD13	1:A:1177:LEU:HD23	1.73	0.69
1:A:1496:ALA:HB3	1:A:1515:PHE:CZ	2.28	0.69
1:C:1290:TYR:HE2	1:C:1299:LEU:CD1	1.96	0.69
1:C:1412:LEU:N	1:C:1419:LEU:HD13	2.07	0.69
2:F:98:GLU:HB2	2:F:99:PRO:HD3	1.74	0.69
1:A:1330:GLN:HG3	1:A:1331:LYS:H	1.55	0.69
1:A:1382:PRO:HG3	1:A:1410:PHE:HE1	1.57	0.69
1:B:1496:ALA:HB3	1:B:1515:PHE:CZ	2.28	0.69
1:C:1615:ALA:O	1:C:1619:LEU:HD23	1.93	0.69
2:E:180:UNK:O	2:E:181:UNK:C	2.40	0.69
1:A:1232:VAL:HG22	1:A:1233:HIS:N	2.06	0.69
1:A:1258:PHE:CE1	1:A:1293:ARG:HG3	2.27	0.69
1:C:1182:ARG:H	1:C:1183:LEU:HG	1.57	0.69
1:C:1215:LYS:C	1:C:1217:LEU:H	1.96	0.69
1:A:1111:LEU:HD11	1:A:1125:ILE:HG13	1.72	0.69
1:A:1448:VAL:HB	1:A:1451:TYR:HD2	1.58	0.69
1:B:1303:LEU:O	1:B:1307:LEU:HD13	1.92	0.69
1:C:1333:ARG:HB2	1:C:1360:GLU:CD	2.12	0.69
1:C:1377:THR:HA	1:C:1381:HIS:HD2	1.56	0.69
1:A:1566:PHE:CE2	2:F:180:UNK:CB	2.74	0.69
1:B:1190:ILE:HD13	1:B:1216:LEU:HD11	1.73	0.69
1:B:1448:VAL:HB	1:B:1451:TYR:HD2	1.57	0.69
1:C:1382:PRO:HG3	1:C:1410:PHE:HE1	1.57	0.69
2:D:189:UNK:O	2:D:190:UNK:C	2.40	0.69
2:F:195:UNK:C	2:F:197:UNK:H2	2.06	0.69
1:A:1103:ASN:O	1:A:1105:PRO:HD3	1.91	0.69
1:A:1253:TRP:CE3	1:A:1276:ILE:CB	2.75	0.69
1:B:1168:TYR:CD1	1:B:1168:TYR:N	2.59	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1317:PHE:HD2	1:C:1317:PHE:N	1.91	0.69
1:C:1409:GLN:O	1:C:1413:GLU:CB	2.31	0.69
1:C:1494:SER:HA	1:C:1497:GLN:CG	2.22	0.69
1:A:1290:TYR:CD2	1:A:1295:TYR:HE2	2.10	0.69
1:A:1386:TRP:CZ2	1:A:1388:GLU:HA	2.28	0.69
1:A:1387:LYS:CB	1:A:1390:GLN:CB	2.67	0.69
1:A:1615:ALA:O	1:A:1619:LEU:HD23	1.92	0.69
1:A:1620:ARG:HH11	1:A:1620:ARG:HG3	1.57	0.69
1:B:1085:LEU:HD22	1:B:1125:ILE:HD11	1.73	0.69
1:B:1377:THR:HA	1:B:1381:HIS:HD2	1.57	0.69
1:B:1412:LEU:N	1:B:1419:LEU:HD13	2.08	0.69
1:B:1416:PRO:CG	2:D:130:LYS:CG	2.63	0.69
1:B:1509:ARG:NH1	2:D:163:GLN:HA	2.08	0.69
1:B:1521:TRP:CZ3	1:B:1522:LYS:HD2	2.28	0.69
1:B:1588:ARG:CZ	2:F:190:UNK:O	2.40	0.69
1:C:1098:PHE:O	1:C:1102:CYS:HB3	1.91	0.69
1:C:1113:LYS:HG3	1:C:1139:GLU:CD	2.13	0.69
1:C:1167:SER:O	1:C:1171:THR:N	2.26	0.69
1:C:1463:VAL:HG12	1:C:1467:LEU:HD22	1.73	0.69
1:C:1482:THR:HA	1:C:1485:ASP:OD2	1.93	0.69
1:C:1596:MET:CE	1:C:1597:PRO:HD3	2.23	0.69
2:D:174:UNK:N	2:D:176:UNK:N	2.41	0.69
2:E:108:GLU:OE1	2:E:108:GLU:C	2.31	0.69
1:A:1303:LEU:O	1:A:1307:LEU:HD13	1.92	0.69
1:A:1409:GLN:O	1:A:1413:GLU:CB	2.31	0.69
1:A:1209:LYS:HB3	1:A:1230:THR:HG22	1.73	0.69
1:A:1279:HIS:NE2	1:A:1283:LEU:HD11	1.87	0.69
1:A:1402:GLU:C	1:A:1402:GLU:OE1	2.32	0.69
1:A:1482:THR:HA	1:A:1485:ASP:OD2	1.93	0.69
1:A:1586:ALA:O	1:A:1590:ASN:CG	2.31	0.69
1:B:1615:ALA:O	1:B:1619:LEU:HD23	1.92	0.69
1:C:1279:HIS:NE2	1:C:1283:LEU:CD1	2.56	0.69
1:C:1303:LEU:O	1:C:1307:LEU:HD13	1.92	0.69
1:C:1496:ALA:HB3	1:C:1515:PHE:CZ	2.28	0.69
1:A:1130:LYS:HZ3	1:A:1155:LYS:HB3	1.57	0.68
1:A:1159:MET:HE1	1:A:1162:LYS:HD2	1.73	0.68
1:A:1494:SER:HA	1:A:1497:GLN:CG	2.23	0.68
1:A:1521:TRP:CZ3	1:A:1522:LYS:HD2	2.28	0.68
1:A:1605:GLU:HB2	1:B:1580:ASP:OD1	1.93	0.68
1:B:1085:LEU:HD12	1:B:1085:LEU:O	1.93	0.68
1:B:1122:LYS:O	1:B:1126:ASP:CB	2.41	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1327:PHE:HE1	2:D:104:LYS:HG3	1.58	0.68
1:B:1414:PHE:HD1	2:D:127:TRP:CB	2.06	0.68
1:C:1120:MET:O	1:C:1121:VAL:HG13	1.93	0.68
1:C:1234:LEU:HD21	1:C:1264:LYS:HZ3	1.58	0.68
1:C:1465:GLU:CD	1:C:1465:GLU:C	2.52	0.68
1:C:1466:SER:O	1:C:1470:LEU:HG	1.92	0.68
2:D:127:TRP:HA	2:D:130:LYS:CE	2.23	0.68
1:A:1157:LEU:HD13	1:A:1177:LEU:CD2	2.23	0.68
1:A:1168:TYR:CD1	1:A:1168:TYR:N	2.60	0.68
1:B:1174:ILE:CG2	1:B:1201:VAL:HG22	2.23	0.68
1:B:1382:PRO:HG3	1:B:1410:PHE:HE1	1.57	0.68
1:B:1617:GLU:HG2	1:B:1621:LYS:HZ3	1.58	0.68
1:C:1113:LYS:HG3	1:C:1139:GLU:OE2	1.94	0.68
1:C:1349:LEU:HA	1:C:1352:ALA:HB3	1.76	0.68
1:A:1290:TYR:CD2	1:A:1295:TYR:CE2	2.80	0.68
1:B:1386:TRP:CZ2	1:B:1388:GLU:HA	2.28	0.68
1:B:1494:SER:HA	1:B:1497:GLN:CG	2.23	0.68
1:C:1142:GLN:C	1:C:1142:GLN:OE1	2.31	0.68
1:C:1402:GLU:C	1:C:1402:GLU:OE1	2.31	0.68
1:A:1192:GLY:N	1:A:1193:PRO:HD3	2.07	0.68
1:B:1170:GLU:CD	1:B:1196:ALA:HB2	2.14	0.68
1:B:1209:LYS:HB2	1:B:1231:LEU:HB3	1.75	0.68
1:C:1270:GLN:HG3	1:C:1298:GLU:HG3	1.75	0.68
2:E:127:TRP:HA	2:E:130:LYS:CE	2.23	0.68
1:A:1142:GLN:OE1	1:A:1142:GLN:C	2.32	0.68
1:A:1263:GLY:O	1:A:1264:LYS:HB3	1.94	0.68
1:B:1537:ALA:HA	1:B:1540:TYR:CZ	2.28	0.68
1:C:1191:ASN:ND2	1:C:1191:ASN:N	2.42	0.68
2:E:110:ARG:CZ	2:E:110:ARG:HB2	2.24	0.68
1:A:1377:THR:HA	1:A:1381:HIS:HD2	1.57	0.68
1:B:1317:PHE:HD2	1:B:1317:PHE:N	1.91	0.68
1:B:1327:PHE:CE1	2:D:104:LYS:HG3	2.28	0.68
1:B:1384:ASP:OD1	2:D:115:GLU:OE1	2.11	0.68
1:B:1408:ILE:CG2	1:B:1412:LEU:HB2	2.23	0.68
1:B:1509:ARG:HH12	2:D:163:GLN:HA	1.58	0.68
1:C:1087:GLU:O	1:C:1088:HIS:HB2	1.93	0.68
1:C:1122:LYS:O	1:C:1126:ASP:CB	2.41	0.68
1:C:1157:LEU:HB2	1:C:1173:LEU:HD13	1.75	0.68
1:C:1386:TRP:CZ2	1:C:1388:GLU:HA	2.28	0.68
1:C:1537:ALA:HA	1:C:1540:TYR:CZ	2.28	0.68
2:E:100:GLU:OE2	2:E:103:ARG:HD2	1.94	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:104:LYS:O	2:E:108:GLU:HB3	1.92	0.68
2:F:195:UNK:O	2:F:196:UNK:C	2.38	0.68
1:A:1082:VAL:HG21	1:A:1105:PRO:HG3	1.76	0.68
1:B:1349:LEU:HA	1:B:1352:ALA:HB3	1.76	0.68
1:B:1566:PHE:CE2	2:D:182:UNK:CB	2.77	0.68
1:B:1594:PHE:O	1:B:1596:MET:HG3	1.94	0.68
1:B:1620:ARG:HH11	1:B:1620:ARG:HG3	1.57	0.68
1:C:1168:TYR:HA	1:C:1172:GLU:OE2	1.93	0.68
1:C:1566:PHE:CE2	2:E:181:UNK:HA	2.28	0.68
1:C:1588:ARG:HH21	2:D:193:UNK:CA	2.03	0.68
2:D:110:ARG:HB2	2:D:110:ARG:CZ	2.23	0.68
2:E:110:ARG:HB2	2:E:110:ARG:NH2	2.09	0.68
1:A:1197:HIS:C	1:A:1199:GLN:H	1.96	0.68
1:A:1349:LEU:HA	1:A:1352:ALA:HB3	1.76	0.68
1:B:1420:ASN:HA	1:B:1423:LEU:HG	1.76	0.68
1:C:1136:SER:HB2	1:C:1140:VAL:HG23	1.76	0.68
1:C:1455:VAL:CG1	1:C:1456:GLN:H	1.95	0.68
1:A:1327:PHE:O	1:A:1329:PRO:HD3	1.94	0.68
1:B:1122:LYS:HA	1:B:1125:ILE:CG2	2.20	0.68
1:B:1218:TYR:CD2	1:B:1227:LEU:HD12	2.29	0.68
1:B:1263:GLY:O	1:B:1264:LYS:HB3	1.93	0.68
1:B:1568:ALA:HB1	1:B:1578:ARG:NH2	2.09	0.68
2:E:90:ALA:HB3	2:E:91:GLN:HA	1.75	0.68
1:A:1246:LYS:O	1:A:1247:ALA:HB3	1.92	0.68
1:A:1588:ARG:CD	2:E:195:UNK:CB	2.70	0.68
1:A:1617:GLU:HG2	1:A:1621:LYS:HZ3	1.59	0.68
1:C:1199:GLN:OE1	1:C:1199:GLN:HA	1.92	0.68
1:C:1376:ILE:HD13	1:C:1379:MET:SD	2.34	0.68
2:F:110:ARG:CZ	2:F:110:ARG:HB2	2.24	0.68
1:A:1279:HIS:CG	1:A:1282:GLU:HB3	2.29	0.67
1:B:1402:GLU:C	1:B:1402:GLU:OE1	2.32	0.67
1:C:1161:ARG:HH22	1:C:1174:ILE:HD11	1.58	0.67
1:A:1122:LYS:O	1:A:1126:ASP:CB	2.41	0.67
1:A:1223:ASN:N	1:A:1223:ASN:CB	2.55	0.67
1:B:1107:VAL:CG1	1:B:1111:LEU:HB2	2.24	0.67
1:A:1174:ILE:HG21	1:A:1201:VAL:CG2	2.24	0.67
1:A:1326:LYS:HZ3	1:A:1354:GLN:HG2	1.59	0.67
1:B:1475:GLU:OE2	2:D:149:ASN:OD1	2.12	0.67
1:A:1167:SER:C	1:A:1169:VAL:H	1.97	0.67
1:A:1279:HIS:CD2	1:A:1282:GLU:N	2.60	0.67
1:A:1317:PHE:HD2	1:A:1317:PHE:N	1.91	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1327:PHE:O	1:B:1329:PRO:HD3	1.94	0.67
1:B:1482:THR:HA	1:B:1485:ASP:OD2	1.93	0.67
1:C:1527:LEU:HD21	1:C:1540:TYR:OH	1.95	0.67
1:C:1584:GLU:HA	1:C:1587:TRP:CE2	2.30	0.67
1:A:1537:ALA:HA	1:A:1540:TYR:CZ	2.29	0.67
1:B:1082:VAL:HG11	1:B:1105:PRO:HB2	1.77	0.67
1:B:1215:LYS:C	1:B:1217:LEU:H	1.96	0.67
1:C:1188:GLU:OE2	1:C:1191:ASN:CB	2.34	0.67
1:C:1211:TYR:CE1	1:C:1231:LEU:CD2	2.72	0.67
1:C:1420:ASN:HA	1:C:1423:LEU:HG	1.76	0.67
2:F:110:ARG:HB2	2:F:110:ARG:NH2	2.09	0.67
1:A:1107:VAL:CG1	1:A:1111:LEU:HB2	2.24	0.67
1:A:1465:GLU:CD	1:A:1465:GLU:C	2.52	0.67
1:B:1142:GLN:C	1:B:1142:GLN:OE1	2.31	0.67
1:C:1263:GLY:O	1:C:1264:LYS:HB3	1.94	0.67
1:C:1296:PHE:CD2	1:C:1297:GLU:HG2	2.29	0.67
1:A:1257:CYS:SG	1:A:1269:ALA:HB1	2.35	0.67
1:B:1257:CYS:SG	1:B:1269:ALA:HB1	2.35	0.67
1:B:1465:GLU:CD	1:B:1465:GLU:C	2.52	0.67
1:B:1584:GLU:HA	1:B:1587:TRP:CE2	2.30	0.67
1:C:1448:VAL:HB	1:C:1451:TYR:HD2	1.57	0.67
1:B:1333:ARG:CB	1:B:1360:GLU:CG	2.73	0.67
1:B:1596:MET:CE	1:B:1597:PRO:HD3	2.23	0.67
1:C:1414:PHE:CE1	2:E:127:TRP:CE3	2.83	0.67
2:D:133:LYS:HA	2:D:133:LYS:HZ2	1.59	0.67
1:A:1167:SER:O	1:A:1168:TYR:CG	2.47	0.67
1:A:1572:THR:HG21	1:A:1599:PHE:HD2	1.59	0.67
1:B:1232:VAL:HG22	1:B:1233:HIS:N	2.06	0.67
1:B:1551:GLU:CD	1:B:1582:VAL:HG22	2.15	0.67
2:D:110:ARG:HB2	2:D:110:ARG:NH2	2.09	0.67
2:E:119:ALA:C	2:E:123:MET:HG2	2.15	0.67
1:A:1083:GLN:NE2	1:A:1107:VAL:HG23	2.09	0.67
1:C:1199:GLN:C	1:C:1201:VAL:H	1.97	0.67
2:F:127:TRP:HA	2:F:130:LYS:CE	2.23	0.67
1:C:1327:PHE:O	1:C:1329:PRO:HD3	1.94	0.66
1:C:1372:ASP:OD1	1:C:1373:ASN:N	2.28	0.66
1:C:1474:GLU:O	2:E:141:ARG:HD3	1.95	0.66
2:E:181:UNK:O	2:E:183:UNK:N	2.28	0.66
1:A:1136:SER:HA	1:A:1141:VAL:HG21	1.78	0.66
1:A:1420:ASN:HA	1:A:1423:LEU:HG	1.76	0.66
1:A:1479:ALA:O	1:A:1483:SER:N	2.23	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1479:ALA:O	1:B:1483:SER:N	2.23	0.66
1:B:1527:LEU:HD21	1:B:1540:TYR:OH	1.95	0.66
1:C:1521:TRP:CZ3	1:C:1522:LYS:HD2	2.29	0.66
1:A:1215:LYS:C	1:A:1217:LEU:H	1.96	0.66
1:B:1180:THR:HG22	1:B:1181:ASN:OD1	1.95	0.66
1:C:1594:PHE:O	1:C:1596:MET:HE3	1.95	0.66
2:D:133:LYS:HA	2:D:133:LYS:HZ1	1.59	0.66
1:A:1384:ASP:OD1	2:F:115:GLU:CD	2.32	0.66
1:B:1083:GLN:NE2	1:B:1106:ALA:HB3	2.10	0.66
1:B:1372:ASP:OD1	1:B:1373:ASN:N	2.28	0.66
1:B:1600:ILE:O	1:B:1604:LYS:HG3	1.95	0.66
1:C:1092:LEU:C	1:C:1094:ARG:N	2.46	0.66
1:C:1257:CYS:SG	1:C:1269:ALA:HB1	2.35	0.66
1:C:1379:MET:HE1	1:C:1406:ARG:HD3	1.77	0.66
2:E:112:ARG:O	2:E:113:LEU:C	2.32	0.66
1:A:1362:VAL:CG2	1:A:1377:THR:CG2	2.74	0.66
1:C:1091:ASN:O	1:C:1092:LEU:HD12	1.95	0.66
1:C:1199:GLN:C	1:C:1201:VAL:N	2.46	0.66
1:C:1215:LYS:HD3	1:C:1216:LEU:N	2.11	0.66
2:D:103:ARG:NH1	2:D:106:ARG:HG3	2.11	0.66
2:E:89:ILE:N	2:E:90:ALA:HA	2.08	0.66
1:A:1206:TYR:CD1	1:A:1226:ARG:O	2.48	0.66
1:A:1333:ARG:CB	1:A:1360:GLU:CG	2.73	0.66
1:A:1584:GLU:HA	1:A:1587:TRP:CE2	2.30	0.66
1:B:1253:TRP:C	1:B:1255:GLU:N	2.47	0.66
1:B:1387:LYS:CB	1:B:1390:GLN:CB	2.67	0.66
1:B:1547:THR:HG23	1:B:1577:LEU:HB2	1.78	0.66
2:F:154:ARG:NH1	2:F:154:ARG:HB3	2.11	0.66
1:A:1161:ARG:NH2	1:A:1174:ILE:HG13	2.11	0.66
1:A:1234:LEU:CG	1:A:1235:GLY:H	2.09	0.66
1:A:1253:TRP:C	1:A:1255:GLU:N	2.48	0.66
1:A:1280:ALA:CA	1:A:1280:ALA:O	2.40	0.66
1:A:1447:LEU:O	1:A:1450:PRO:HD2	1.96	0.66
1:B:1198:ILE:O	1:B:1198:ILE:CG2	2.44	0.66
1:B:1572:THR:HG21	1:B:1599:PHE:CE2	2.31	0.66
1:B:1601:GLN:CD	1:C:1587:TRP:CH2	2.69	0.66
1:C:1277:VAL:O	1:C:1278:VAL:C	2.34	0.66
1:C:1371:TYR:CD1	1:C:1394:ILE:HG22	2.30	0.66
2:D:154:ARG:HB3	2:D:154:ARG:NH1	2.11	0.66
2:E:134:ASP:O	2:E:137:GLU:CB	2.43	0.66
1:A:1332:MET:SD	1:A:1360:GLU:CG	2.84	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1122:LYS:CA	1:B:1125:ILE:HG22	2.21	0.66
1:B:1371:TYR:CD1	1:B:1394:ILE:HG22	2.30	0.66
1:B:1447:LEU:O	1:B:1450:PRO:HD2	1.96	0.66
1:B:1588:ARG:NH2	2:F:192:UNK:H2	1.93	0.66
1:B:1624:GLU:C	1:B:1626:ALA:H	1.98	0.66
1:C:1230:THR:O	1:C:1231:LEU:CB	2.44	0.66
1:C:1332:MET:SD	1:C:1360:GLU:CG	2.83	0.66
1:C:1333:ARG:CB	1:C:1360:GLU:CG	2.74	0.66
1:C:1336:LEU:HD12	1:C:1360:GLU:HB3	1.78	0.66
1:C:1600:ILE:O	1:C:1604:LYS:HG3	1.95	0.66
2:F:112:ARG:O	2:F:113:LEU:C	2.32	0.66
1:A:1116:LEU:HD21	1:A:1122:LYS:HB3	1.77	0.66
1:A:1130:LYS:HG2	1:A:1156:TYR:CZ	2.31	0.66
1:A:1136:SER:HB3	1:A:1141:VAL:HG11	1.76	0.66
1:A:1336:LEU:HD12	1:A:1360:GLU:HB3	1.78	0.66
1:A:1358:TRP:CE2	1:A:1381:HIS:ND1	2.64	0.66
1:A:1527:LEU:HD21	1:A:1540:TYR:OH	1.95	0.66
1:A:1578:ARG:HD3	1:A:1582:VAL:HB	1.78	0.66
1:B:1168:TYR:HA	1:B:1172:GLU:OE2	1.95	0.66
1:B:1192:GLY:N	1:B:1193:PRO:CD	2.59	0.66
1:C:1406:ARG:O	1:C:1409:GLN:HB3	1.95	0.66
1:A:1372:ASP:OD1	1:A:1373:ASN:N	2.28	0.66
1:A:1406:ARG:O	1:A:1409:GLN:HB3	1.95	0.66
1:A:1539:GLN:NE2	2:F:177:UNK:CB	2.59	0.66
1:A:1596:MET:CE	1:A:1597:PRO:HD3	2.26	0.66
1:B:1167:SER:O	1:B:1168:TYR:CD1	2.49	0.66
1:C:1082:VAL:HG22	1:C:1107:VAL:CG2	2.20	0.66
1:C:1588:ARG:NH2	2:D:193:UNK:O	2.27	0.66
1:A:1255:GLU:N	1:A:1289:TYR:CE2	2.65	0.65
1:B:1414:PHE:HD1	2:D:127:TRP:HB2	1.61	0.65
1:C:1258:PHE:CE1	1:C:1293:ARG:CZ	2.80	0.65
1:C:1279:HIS:NE2	1:C:1283:LEU:HD11	2.10	0.65
1:C:1358:TRP:CZ3	1:C:1381:HIS:CE1	2.70	0.65
1:C:1362:VAL:CG2	1:C:1377:THR:CG2	2.74	0.65
2:D:98:GLU:HB3	2:D:99:PRO:CD	2.23	0.65
2:E:93:ASP:OD2	2:E:97:GLN:HG2	1.95	0.65
2:F:134:ASP:O	2:F:137:GLU:CB	2.44	0.65
1:A:1121:VAL:O	1:A:1123:GLU:N	2.29	0.65
1:A:1160:ALA:O	1:A:1164:ALA:HB3	1.95	0.65
1:B:1165:ARG:O	1:B:1165:ARG:HG3	1.96	0.65
1:B:1234:LEU:CG	1:B:1235:GLY:H	2.09	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1362:VAL:CG2	1:C:1377:THR:HB	2.26	0.65
1:C:1514:LEU:HD23	1:C:1514:LEU:C	2.16	0.65
1:A:1290:TYR:CE2	1:A:1295:TYR:HE2	2.14	0.65
1:A:1600:ILE:O	1:A:1604:LYS:HG3	1.95	0.65
1:B:1336:LEU:HD12	1:B:1360:GLU:HB3	1.79	0.65
1:C:1161:ARG:NH2	1:C:1195:ASN:HB3	2.11	0.65
1:C:1253:TRP:C	1:C:1255:GLU:N	2.47	0.65
1:C:1326:LYS:HZ3	1:C:1354:GLN:HG2	1.59	0.65
1:A:1605:GLU:HG3	1:B:1580:ASP:OD2	1.96	0.65
1:B:1277:VAL:O	1:B:1278:VAL:C	2.34	0.65
1:B:1332:MET:SD	1:B:1360:GLU:CG	2.84	0.65
1:C:1428:PRO:O	1:C:1429:ARG:HB3	1.96	0.65
1:C:1578:ARG:HD3	1:C:1582:VAL:HB	1.78	0.65
1:A:1409:GLN:CB	1:A:1413:GLU:HG2	2.25	0.65
1:A:1598:TYR:CD2	2:F:198:UNK:CB	2.80	0.65
1:B:1157:LEU:HD13	1:B:1177:LEU:HD23	1.77	0.65
1:A:1257:CYS:SG	1:A:1290:TYR:CE1	2.89	0.65
1:B:1358:TRP:CE2	1:B:1381:HIS:ND1	2.64	0.65
1:B:1406:ARG:O	1:B:1409:GLN:HB3	1.95	0.65
1:B:1578:ARG:HD3	1:B:1582:VAL:HB	1.78	0.65
1:B:1588:ARG:NH2	2:F:190:UNK:O	2.28	0.65
1:C:1112:ALA:O	1:C:1116:LEU:HB2	1.97	0.65
1:C:1198:ILE:CB	1:C:1221:VAL:HG22	2.25	0.65
1:C:1447:LEU:O	1:C:1450:PRO:HD2	1.95	0.65
2:D:155:ILE:HD13	2:D:155:ILE:N	2.12	0.65
1:A:1295:TYR:CE1	1:A:1298:GLU:HB2	2.31	0.65
1:B:1215:LYS:HD3	1:B:1216:LEU:N	2.11	0.65
1:B:1362:VAL:CG2	1:B:1377:THR:CG2	2.74	0.65
1:C:1358:TRP:CE2	1:C:1381:HIS:ND1	2.65	0.65
2:D:60:UNK:O	2:D:61:UNK:C	2.44	0.65
2:F:162:GLN:O	2:F:164:PRO:N	2.30	0.65
1:A:1112:ALA:O	1:A:1116:LEU:HB2	1.97	0.65
1:A:1162:LYS:O	1:A:1163:LYS:HE2	1.97	0.65
1:B:1379:MET:HE1	1:B:1406:ARG:HD3	1.79	0.65
1:B:1514:LEU:HD23	1:B:1514:LEU:C	2.17	0.65
2:F:109:GLN:O	2:F:112:ARG:HB3	1.97	0.65
1:A:1108:TRP:NE1	1:A:1131:ALA:CB	2.59	0.65
1:A:1572:THR:HG21	1:A:1599:PHE:CE2	2.31	0.65
1:B:1475:GLU:CD	2:D:149:ASN:HD21	2.00	0.65
1:C:1232:VAL:HG13	1:C:1233:HIS:N	2.11	0.65
1:A:1086:ILE:HB	1:A:1089:ILE:HD13	1.79	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1379:MET:HE1	1:A:1406:ARG:HD3	1.78	0.65
1:C:1409:GLN:HG3	1:C:1413:GLU:HG3	0.67	0.65
1:C:1504:LEU:CD2	2:E:149:ASN:CG	2.66	0.65
2:D:109:GLN:O	2:D:112:ARG:HB3	1.96	0.65
2:F:143:SER:O	2:F:147:GLU:HB2	1.97	0.65
2:F:184:UNK:O	2:F:185:UNK:C	2.44	0.65
1:A:1085:LEU:CD1	1:A:1111:LEU:HG	2.28	0.64
1:A:1578:ARG:CZ	1:A:1583:LEU:CD2	2.69	0.64
1:B:1409:GLN:HG3	1:B:1413:GLU:HG3	0.68	0.64
1:C:1588:ARG:NH2	2:D:193:UNK:HA	2.12	0.64
1:B:1277:VAL:O	1:B:1279:HIS:ND1	2.31	0.64
1:C:1174:ILE:CG1	1:C:1196:ALA:HA	2.18	0.64
1:C:1295:TYR:C	1:C:1296:PHE:CG	2.71	0.64
1:A:1215:LYS:HD3	1:A:1216:LEU:N	2.11	0.64
1:B:1082:VAL:HG11	1:B:1105:PRO:HB3	1.78	0.64
1:C:1248:ASN:N	1:C:1248:ASN:CB	2.59	0.64
1:C:1358:TRP:HH2	1:C:1381:HIS:CE1	2.05	0.64
1:C:1412:LEU:CB	1:C:1419:LEU:HD13	2.27	0.64
2:E:154:ARG:HB3	2:E:154:ARG:NH1	2.11	0.64
1:A:1218:TYR:CD2	1:A:1227:LEU:HD12	2.32	0.64
1:A:1277:VAL:O	1:A:1278:VAL:C	2.34	0.64
1:B:1112:ALA:O	1:B:1116:LEU:HB2	1.97	0.64
1:B:1245:ARG:O	1:B:1245:ARG:CG	2.45	0.64
1:B:1620:ARG:NH1	1:B:1620:ARG:CG	2.53	0.64
1:C:1504:LEU:HD11	2:E:149:ASN:HD21	0.81	0.64
1:A:1168:TYR:HA	1:A:1172:GLU:OE2	1.97	0.64
1:A:1514:LEU:HD23	1:A:1514:LEU:C	2.17	0.64
1:B:1347:LYS:HD3	1:B:1348:VAL:N	2.12	0.64
1:C:1295:TYR:C	1:C:1296:PHE:CD1	2.71	0.64
2:E:116:LEU:O	2:E:119:ALA:HB3	1.98	0.64
2:F:191:UNK:O	2:F:193:UNK:N	2.30	0.64
1:A:1296:PHE:O	1:A:1298:GLU:N	2.30	0.64
1:A:1347:LYS:HD3	1:A:1348:VAL:N	2.12	0.64
1:A:1409:GLN:C	1:A:1413:GLU:HB2	2.18	0.64
1:A:1412:LEU:N	1:A:1419:LEU:HD13	2.12	0.64
1:A:1443:LYS:O	1:A:1443:LYS:HG2	1.97	0.64
1:B:1136:SER:HA	1:B:1141:VAL:HG21	1.79	0.64
1:B:1554:LEU:HD23	1:B:1582:VAL:CG1	2.28	0.64
1:C:1402:GLU:OE1	1:C:1403:LEU:N	2.31	0.64
1:C:1417:LEU:O	1:C:1418:LEU:CB	2.35	0.64
2:E:112:ARG:O	2:E:113:LEU:O	2.16	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1428:PRO:O	1:A:1429:ARG:HB3	1.97	0.64
1:B:1080:SER:O	1:B:1084:VAL:HG23	1.97	0.64
1:B:1264:LYS:HG3	1:B:1266:PHE:CD2	2.32	0.64
1:B:1409:GLN:C	1:B:1413:GLU:HB2	2.18	0.64
1:C:1254:LYS:HD2	1:C:1285:GLU:CD	2.17	0.64
1:C:1401:VAL:HA	1:C:1404:TYR:CD1	2.32	0.64
1:C:1408:ILE:HG22	1:C:1412:LEU:HD23	1.80	0.64
1:C:1414:PHE:CE1	2:E:127:TRP:HZ3	2.12	0.64
1:A:1108:TRP:HA	1:A:1108:TRP:CE3	2.33	0.64
1:A:1108:TRP:HA	1:A:1108:TRP:HE3	1.63	0.64
1:B:1135:SER:HB3	1:B:1159:MET:O	1.97	0.64
1:B:1350:ARG:HH21	1:B:1353:GLU:HB3	1.62	0.64
1:B:1360:GLU:OE1	1:B:1360:GLU:N	2.31	0.64
1:B:1362:VAL:CG2	1:B:1377:THR:HB	2.26	0.64
1:B:1401:VAL:HA	1:B:1404:TYR:CD1	2.32	0.64
1:B:1402:GLU:OE1	1:B:1403:LEU:N	2.31	0.64
1:B:1408:ILE:HG22	1:B:1412:LEU:CD2	2.28	0.64
1:B:1601:GLN:CD	1:C:1587:TRP:HH2	2.01	0.64
1:C:1122:LYS:HA	1:C:1125:ILE:CG2	2.24	0.64
1:C:1360:GLU:N	1:C:1360:GLU:OE1	2.31	0.64
2:D:66:UNK:O	2:D:70:UNK:N	2.31	0.64
2:D:143:SER:O	2:D:147:GLU:HB2	1.97	0.64
2:E:108:GLU:OE2	2:E:109:GLN:NE2	2.31	0.64
2:F:16:UNK:C	2:F:18:UNK:H	2.09	0.64
1:A:1401:VAL:HA	1:A:1404:TYR:CD1	2.32	0.64
1:C:1264:LYS:HG3	1:C:1266:PHE:CD2	2.32	0.64
1:C:1401:VAL:HA	1:C:1404:TYR:CE1	2.33	0.64
1:C:1408:ILE:HG22	1:C:1412:LEU:CD2	2.28	0.64
1:C:1443:LYS:O	1:C:1443:LYS:HG2	1.97	0.64
2:D:116:LEU:O	2:D:119:ALA:HB3	1.98	0.64
1:A:1091:ASN:ND2	1:A:1092:LEU:HG	2.12	0.64
1:A:1264:LYS:HG3	1:A:1266:PHE:CD2	2.33	0.64
1:A:1350:ARG:HH21	1:A:1353:GLU:HB3	1.62	0.64
1:B:1142:GLN:OE1	1:B:1143:ALA:N	2.31	0.64
1:B:1401:VAL:HA	1:B:1404:TYR:CE1	2.33	0.64
1:B:1471:PHE:HB2	1:B:1480:LEU:HD13	1.80	0.64
1:B:1296:PHE:O	1:B:1298:GLU:N	2.30	0.63
1:C:1142:GLN:OE1	1:C:1143:ALA:N	2.31	0.63
1:C:1296:PHE:O	1:C:1298:GLU:N	2.31	0.63
1:C:1350:ARG:HH21	1:C:1353:GLU:HB3	1.62	0.63
1:C:1468:ASN:O	1:C:1472:ILE:HG13	1.98	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:124:GLU:HG3	2:D:125:GLN:N	2.12	0.63
2:E:98:GLU:CA	2:E:101:SER:HB3	2.27	0.63
2:F:112:ARG:O	2:F:113:LEU:O	2.16	0.63
1:A:1142:GLN:OE1	1:A:1143:ALA:N	2.31	0.63
1:A:1360:GLU:OE1	1:A:1360:GLU:N	2.31	0.63
1:A:1408:ILE:HG22	1:A:1412:LEU:HD23	1.80	0.63
1:B:1412:LEU:CB	1:B:1419:LEU:HD13	2.27	0.63
1:B:1428:PRO:O	1:B:1429:ARG:HB3	1.97	0.63
1:C:1145:ASN:O	1:C:1150:TRP:NE1	2.31	0.63
1:C:1175:PHE:CE2	1:C:1204:ARG:NH2	2.66	0.63
1:C:1349:LEU:HB3	1:C:1353:GLU:OE1	1.99	0.63
1:C:1516:LYS:HB3	1:C:1523:GLN:HB2	1.80	0.63
1:A:1279:HIS:HE1	1:A:1283:LEU:HD11	1.60	0.63
1:A:1412:LEU:CB	1:A:1419:LEU:CD1	2.76	0.63
1:B:1443:LYS:HG2	1:B:1443:LYS:O	1.97	0.63
1:B:1468:ASN:O	1:B:1472:ILE:HG13	1.99	0.63
2:F:124:GLU:HG3	2:F:125:GLN:N	2.12	0.63
1:A:1130:LYS:NZ	1:A:1155:LYS:HG2	2.13	0.63
1:A:1412:LEU:CB	1:A:1419:LEU:HD13	2.27	0.63
1:B:1092:LEU:O	1:B:1094:ARG:N	2.29	0.63
1:B:1161:ARG:HH12	1:B:1193:PRO:C	2.02	0.63
1:B:1326:LYS:HZ3	1:B:1354:GLN:HG2	1.62	0.63
1:B:1412:LEU:CB	1:B:1419:LEU:CD1	2.76	0.63
1:B:1419:LEU:HD12	1:B:1422:LEU:HD12	1.81	0.63
1:C:1475:GLU:OE1	2:E:145:GLN:CG	2.46	0.63
2:D:204:UNK:O	2:D:205:UNK:C	2.47	0.63
2:F:119:ALA:C	2:F:123:MET:HG2	2.17	0.63
1:B:1293:ARG:HA	2:D:97:GLN:OE1	1.99	0.63
1:B:1414:PHE:CD1	2:D:127:TRP:CB	2.81	0.63
1:B:1626:ALA:O	1:B:1630:GLN:HB2	1.98	0.63
1:C:1188:GLU:C	1:C:1190:ILE:H	2.02	0.63
1:C:1258:PHE:CZ	1:C:1293:ARG:NH2	2.67	0.63
2:D:129:GLU:O	2:D:132:LYS:HG2	1.99	0.63
1:A:1547:THR:HG23	1:A:1577:LEU:HB2	1.79	0.63
1:B:1264:LYS:NZ	1:B:1268:LEU:HD13	2.13	0.63
1:C:1181:ASN:C	1:C:1182:ARG:HD3	2.19	0.63
1:C:1594:PHE:O	1:C:1596:MET:CE	2.46	0.63
2:E:89:ILE:CB	2:E:90:ALA:HA	2.27	0.63
1:A:1264:LYS:NZ	1:A:1268:LEU:HD13	2.14	0.63
1:A:1401:VAL:HA	1:A:1404:TYR:CE1	2.33	0.63
1:A:1416:PRO:CD	2:F:130:LYS:CD	2.70	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1605:GLU:OE2	1:B:1579:PRO:CA	2.46	0.63
1:B:1108:TRP:CE3	1:B:1108:TRP:HA	2.33	0.63
1:B:1108:TRP:HA	1:B:1108:TRP:HE3	1.63	0.63
1:B:1170:GLU:OE2	1:B:1196:ALA:HB2	1.99	0.63
1:B:1198:ILE:O	1:B:1198:ILE:HG22	1.99	0.63
1:B:1258:PHE:HB2	1:B:1289:TYR:CE2	2.34	0.63
1:B:1349:LEU:HB3	1:B:1353:GLU:OE1	1.99	0.63
1:B:1516:LYS:HB3	1:B:1523:GLN:HB2	1.80	0.63
1:C:1347:LYS:HD3	1:C:1348:VAL:N	2.12	0.63
1:C:1409:GLN:C	1:C:1413:GLU:HB2	2.18	0.63
2:F:129:GLU:O	2:F:132:LYS:HG2	1.99	0.63
2:F:182:UNK:O	2:F:184:UNK:N	2.31	0.63
1:A:1362:VAL:CG2	1:A:1377:THR:HB	2.27	0.63
1:A:1409:GLN:HG3	1:A:1413:GLU:HG3	0.67	0.63
1:A:1419:LEU:HD12	1:A:1422:LEU:HD12	1.81	0.63
1:B:1434:ARG:O	1:B:1434:ARG:HG2	1.99	0.63
1:C:1419:LEU:HD12	1:C:1422:LEU:HD12	1.81	0.63
1:C:1450:PRO:HA	1:C:1453:ARG:CG	2.28	0.63
1:C:1475:GLU:CB	2:E:145:GLN:HG3	2.29	0.63
2:E:130:LYS:O	2:E:133:LYS:HB2	1.99	0.63
1:A:1407:ALA:O	1:A:1409:GLN:N	2.32	0.63
1:A:1459:ASN:ND2	1:A:1489:ASN:HB2	2.14	0.63
1:A:1471:PHE:HB2	1:A:1480:LEU:HD13	1.80	0.63
1:B:1198:ILE:HG23	1:B:1201:VAL:CB	2.29	0.63
1:B:1408:ILE:HG22	1:B:1412:LEU:HD23	1.80	0.63
1:C:1381:HIS:N	1:C:1382:PRO:HD3	2.14	0.63
1:C:1407:ALA:O	1:C:1409:GLN:N	2.32	0.63
1:C:1412:LEU:CB	1:C:1419:LEU:CD1	2.76	0.63
1:A:1116:LEU:HD11	1:A:1122:LYS:CB	2.29	0.62
1:A:1468:ASN:O	1:A:1472:ILE:HG13	1.99	0.62
1:B:1459:ASN:ND2	1:B:1489:ASN:HB2	2.14	0.62
1:B:1578:ARG:CZ	1:B:1583:LEU:CD2	2.70	0.62
1:C:1496:ALA:HB3	1:C:1515:PHE:CE1	2.34	0.62
2:E:129:GLU:O	2:E:132:LYS:HG2	1.99	0.62
1:A:1349:LEU:HB3	1:A:1353:GLU:OE1	1.98	0.62
1:A:1402:GLU:OE1	1:A:1403:LEU:N	2.31	0.62
1:A:1594:PHE:O	1:A:1596:MET:CE	2.47	0.62
1:B:1144:ALA:CB	1:B:1149:ASN:HB3	2.23	0.62
1:B:1503:GLU:HG3	1:B:1504:LEU:N	2.14	0.62
1:B:1572:THR:CG2	1:B:1599:PHE:CD2	2.83	0.62
1:C:1584:GLU:O	1:C:1587:TRP:N	2.29	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:116:LEU:O	2:F:119:ALA:HB3	1.98	0.62
1:A:1408:ILE:CG2	1:A:1412:LEU:HD22	2.28	0.62
1:B:1078:ASN:HB2	1:B:1102:CYS:SG	2.39	0.62
1:B:1496:ALA:HB3	1:B:1515:PHE:CE1	2.34	0.62
1:C:1078:ASN:HB2	1:C:1098:PHE:CZ	2.34	0.62
1:C:1434:ARG:HG2	1:C:1434:ARG:O	1.99	0.62
1:A:1411:TYR:O	1:A:1415:LYS:CA	2.46	0.62
1:B:1407:ALA:O	1:B:1409:GLN:N	2.32	0.62
1:B:1442:VAL:HG12	1:B:1444:GLN:HB2	1.82	0.62
1:C:1186:LEU:HB3	1:C:1213:ALA:HB2	1.81	0.62
1:C:1190:ILE:CG1	1:C:1216:LEU:HG	2.30	0.62
1:C:1218:TYR:CE2	1:C:1223:ASN:HB3	2.34	0.62
1:C:1351:ALA:HA	1:C:1354:GLN:HG2	1.81	0.62
1:C:1609:LYS:HA	1:C:1612:LYS:HG3	1.80	0.62
1:A:1280:ALA:HB2	1:A:1311:ARG:CZ	2.29	0.62
1:A:1395:ILE:CG1	1:A:1404:TYR:HE2	2.07	0.62
1:B:1395:ILE:CG1	1:B:1404:TYR:HE2	2.07	0.62
1:B:1408:ILE:CG2	1:B:1412:LEU:HD22	2.28	0.62
1:C:1395:ILE:CG1	1:C:1404:TYR:CD2	2.76	0.62
1:C:1442:VAL:HG12	1:C:1444:GLN:HB2	1.82	0.62
1:A:1083:GLN:HE21	1:A:1106:ALA:HB3	1.64	0.62
1:B:1085:LEU:HD22	1:B:1125:ILE:CD1	2.30	0.62
1:B:1450:PRO:HA	1:B:1453:ARG:CG	2.28	0.62
1:C:1326:LYS:O	1:C:1327:PHE:CE1	2.52	0.62
1:C:1408:ILE:CG2	1:C:1412:LEU:HD22	2.29	0.62
1:A:1594:PHE:O	1:A:1596:MET:HG3	2.00	0.62
1:B:1332:MET:SD	1:B:1357:LEU:HD13	2.40	0.62
1:B:1350:ARG:HH21	1:B:1353:GLU:CB	2.13	0.62
1:B:1414:PHE:CD1	2:D:127:TRP:HB3	2.35	0.62
1:B:1594:PHE:O	1:B:1596:MET:CE	2.48	0.62
1:C:1317:PHE:N	1:C:1317:PHE:CD2	2.63	0.62
2:E:124:GLU:HG3	2:E:125:GLN:N	2.13	0.62
1:A:1296:PHE:HE2	2:F:101:SER:OG	1.83	0.62
1:A:1402:GLU:HA	1:A:1405:TYR:CE2	2.35	0.62
1:A:1442:VAL:HG12	1:A:1444:GLN:HB2	1.82	0.62
1:B:1279:HIS:O	1:B:1280:ALA:HB2	1.97	0.62
1:B:1326:LYS:O	1:B:1327:PHE:CE1	2.53	0.62
1:B:1600:ILE:HG22	1:B:1604:LYS:HE3	1.82	0.62
1:C:1290:TYR:CD2	1:C:1299:LEU:CD1	2.82	0.62
1:C:1344:ASN:O	1:C:1345:ILE:HD13	1.99	0.62
1:A:1277:VAL:O	1:A:1279:HIS:ND1	2.31	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1408:ILE:HG21	1:A:1412:LEU:HD22	1.82	0.62
1:A:1434:ARG:HG2	1:A:1434:ARG:O	1.99	0.62
1:A:1496:ALA:HB3	1:A:1515:PHE:CE1	2.34	0.62
1:B:1351:ALA:HA	1:B:1354:GLN:HG2	1.81	0.62
1:B:1417:LEU:O	1:B:1418:LEU:CB	2.36	0.62
1:C:1180:THR:HG22	1:C:1181:ASN:N	2.14	0.62
1:C:1459:ASN:ND2	1:C:1489:ASN:HB2	2.14	0.62
1:C:1471:PHE:HB2	1:C:1480:LEU:HD13	1.80	0.62
1:C:1503:GLU:HG3	1:C:1504:LEU:N	2.14	0.62
1:C:1578:ARG:CZ	1:C:1583:LEU:CD2	2.69	0.62
1:C:1600:ILE:HG22	1:C:1604:LYS:HE3	1.82	0.62
1:C:1174:ILE:HG13	1:C:1196:ALA:CA	2.19	0.62
1:C:1402:GLU:HA	1:C:1405:TYR:CE2	2.35	0.62
1:A:1159:MET:SD	1:A:1163:LYS:NZ	2.73	0.61
1:A:1381:HIS:N	1:A:1382:PRO:HD3	2.15	0.61
1:A:1578:ARG:NH1	1:A:1583:LEU:HA	2.15	0.61
1:C:1234:LEU:CD2	1:C:1264:LYS:HZ2	2.00	0.61
1:C:1350:ARG:HH21	1:C:1353:GLU:CB	2.13	0.61
2:D:49:UNK:C	2:D:51:UNK:N	2.61	0.61
2:E:146:VAL:HA	2:E:149:ASN:CG	2.20	0.61
1:A:1250:THR:O	1:A:1251:ARG:CB	2.47	0.61
1:A:1516:LYS:HB3	1:A:1523:GLN:HB2	1.80	0.61
1:B:1381:HIS:N	1:B:1382:PRO:HD3	2.14	0.61
1:B:1509:ARG:HB3	1:B:1510:ILE:HD13	1.82	0.61
2:E:126:GLU:HG3	2:E:130:LYS:HZ3	1.65	0.61
2:F:130:LYS:O	2:F:133:LYS:HB2	2.00	0.61
1:A:1122:LYS:CA	1:A:1125:ILE:HG22	2.25	0.61
1:A:1282:GLU:OE2	1:A:1285:GLU:HB3	2.00	0.61
1:A:1358:TRP:HH2	1:A:1381:HIS:CE1	2.05	0.61
1:A:1584:GLU:O	1:A:1586:ALA:N	2.33	0.61
1:B:1130:LYS:NZ	1:B:1155:LYS:HG2	2.15	0.61
1:B:1250:THR:O	1:B:1251:ARG:CB	2.47	0.61
1:B:1402:GLU:HA	1:B:1405:TYR:CE2	2.35	0.61
1:B:1584:GLU:O	1:B:1586:ALA:N	2.33	0.61
1:B:1617:GLU:HA	1:B:1620:ARG:HB2	1.82	0.61
1:A:1167:SER:HB3	1:A:1168:TYR:CD1	2.35	0.61
1:A:1290:TYR:CG	1:A:1295:TYR:CE2	2.89	0.61
1:A:1350:ARG:HH21	1:A:1353:GLU:CB	2.13	0.61
1:A:1600:ILE:HG22	1:A:1604:LYS:HE3	1.82	0.61
1:B:1164:ALA:HB1	1:B:1169:VAL:HG11	1.83	0.61
1:B:1398:VAL:HG12	1:B:1400:ASN:H	1.66	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1505:ILE:O	1:B:1509:ARG:N	2.34	0.61
1:B:1593:ASP:O	1:B:1594:PHE:HB2	2.01	0.61
1:C:1332:MET:SD	1:C:1357:LEU:HD13	2.40	0.61
2:F:121:LYS:O	2:F:124:GLU:HB3	2.01	0.61
1:A:1092:LEU:O	1:A:1094:ARG:N	2.29	0.61
1:A:1365:TYR:HB2	1:A:1374:ALA:HB2	1.83	0.61
2:E:90:ALA:N	2:E:91:GLN:HA	2.13	0.61
1:A:1587:TRP:O	1:A:1589:HIS:N	2.34	0.61
1:C:1264:LYS:NZ	1:C:1268:LEU:HD13	2.13	0.61
1:C:1411:TYR:O	1:C:1415:LYS:C	2.39	0.61
2:D:112:ARG:C	2:D:113:LEU:O	2.38	0.61
2:D:130:LYS:O	2:D:133:LYS:HB2	1.99	0.61
2:F:112:ARG:C	2:F:112:ARG:HD3	2.20	0.61
1:A:1351:ALA:HA	1:A:1354:GLN:HG2	1.81	0.61
1:A:1503:GLU:HG3	1:A:1504:LEU:N	2.14	0.61
1:A:1580:ASP:OD1	1:C:1605:GLU:HG3	1.99	0.61
1:B:1161:ARG:NH1	1:B:1194:ASN:HB2	2.15	0.61
1:B:1274:LEU:CA	1:B:1277:VAL:HG22	2.31	0.61
1:C:1121:VAL:O	1:C:1123:GLU:N	2.34	0.61
1:C:1158:GLN:HG2	1:C:1159:MET:SD	2.40	0.61
1:C:1365:TYR:HB2	1:C:1374:ALA:HB2	1.82	0.61
1:C:1504:LEU:HG	2:E:149:ASN:CG	2.12	0.61
1:C:1504:LEU:HD21	2:E:149:ASN:HB3	1.82	0.61
1:C:1505:ILE:O	1:C:1509:ARG:N	2.34	0.61
1:C:1584:GLU:O	1:C:1586:ALA:N	2.34	0.61
2:D:102:ILE:O	2:D:106:ARG:N	2.34	0.61
2:D:174:UNK:HA	2:D:176:UNK:CA	2.30	0.61
2:E:90:ALA:H	2:E:91:GLN:HB3	1.64	0.61
2:E:126:GLU:HG3	2:E:130:LYS:HZ1	1.65	0.61
1:A:1082:VAL:HG21	1:A:1105:PRO:CG	2.30	0.61
1:A:1177:LEU:HA	1:A:1180:THR:HG1	1.66	0.61
1:A:1274:LEU:CA	1:A:1277:VAL:HG22	2.31	0.61
1:A:1332:MET:SD	1:A:1357:LEU:HD13	2.40	0.61
1:B:1297:GLU:O	1:B:1300:ILE:HG13	2.01	0.61
1:B:1408:ILE:HG21	1:B:1412:LEU:HD22	1.83	0.61
1:B:1578:ARG:NH1	1:B:1583:LEU:HA	2.16	0.61
1:C:1274:LEU:CA	1:C:1277:VAL:HG22	2.31	0.61
1:C:1414:PHE:CD1	2:E:123:MET:CB	2.84	0.61
2:E:189:UNK:CB	2:E:195:UNK:N	2.63	0.61
1:A:1188:GLU:C	1:A:1190:ILE:H	2.02	0.61
1:A:1297:GLU:O	1:A:1300:ILE:HG13	2.01	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1371:TYR:CD1	1:A:1394:ILE:HG22	2.30	0.61
1:A:1587:TRP:CH2	1:C:1601:GLN:NE2	2.69	0.61
1:B:1137:TYR:CB	1:B:1138:MET:CB	2.58	0.61
1:B:1163:LYS:O	1:B:1164:ALA:HB2	1.99	0.61
1:B:1261:VAL:CG1	1:B:1295:TYR:CE2	2.84	0.61
1:C:1230:THR:O	1:C:1231:LEU:CG	2.48	0.61
1:C:1562:LYS:C	1:C:1564:GLU:H	2.04	0.61
2:E:184:UNK:O	2:E:186:UNK:N	2.33	0.61
1:A:1198:ILE:HG23	1:A:1201:VAL:CG2	2.30	0.61
1:B:1150:TRP:O	1:B:1153:LEU:N	2.34	0.61
1:B:1282:GLU:OE2	1:B:1285:GLU:HB3	2.00	0.61
1:B:1414:PHE:O	1:B:1416:PRO:CD	2.23	0.61
1:C:1078:ASN:HB3	1:C:1098:PHE:CE2	2.35	0.61
2:D:173:UNK:O	2:D:176:UNK:CB	2.49	0.61
1:B:1134:PRO:HD2	1:B:1156:TYR:CE1	2.34	0.60
1:B:1188:GLU:C	1:B:1190:ILE:H	2.02	0.60
1:B:1609:LYS:HA	1:B:1612:LYS:HG3	1.82	0.60
1:C:1254:LYS:HD2	1:C:1285:GLU:HG2	1.80	0.60
2:E:143:SER:O	2:E:147:GLU:HB2	2.00	0.60
1:B:1401:VAL:CG2	1:B:1429:ARG:HE	2.13	0.60
1:B:1584:GLU:O	1:B:1587:TRP:N	2.29	0.60
1:B:1596:MET:O	1:B:1597:PRO:O	2.19	0.60
1:C:1144:ALA:HB1	1:C:1153:LEU:HD13	1.82	0.60
2:E:112:ARG:C	2:E:112:ARG:HD3	2.20	0.60
1:A:1261:VAL:CG1	1:A:1295:TYR:CD1	2.81	0.60
1:A:1290:TYR:CE2	1:A:1295:TYR:CE2	2.90	0.60
1:A:1326:LYS:O	1:A:1327:PHE:CE1	2.52	0.60
1:A:1563:ARG:NH2	2:F:181:UNK:HA	2.04	0.60
1:B:1173:LEU:O	1:B:1177:LEU:HG	2.02	0.60
1:C:1596:MET:O	1:C:1597:PRO:O	2.19	0.60
1:C:1602:VAL:CG1	2:E:203:UNK:O	2.36	0.60
2:D:121:LYS:O	2:D:124:GLU:HB3	2.00	0.60
1:A:1173:LEU:O	1:A:1177:LEU:HG	2.01	0.60
1:A:1509:ARG:HB3	1:A:1510:ILE:HD13	1.82	0.60
1:A:1596:MET:O	1:A:1597:PRO:O	2.19	0.60
1:A:1609:LYS:HA	1:A:1612:LYS:HG3	1.81	0.60
1:B:1333:ARG:CA	1:B:1360:GLU:HG2	2.32	0.60
1:B:1358:TRP:CZ3	1:B:1377:THR:HG23	2.37	0.60
1:B:1562:LYS:C	1:B:1564:GLU:H	2.04	0.60
1:C:1395:ILE:O	1:C:1404:TYR:OH	2.18	0.60
2:E:95:LEU:O	2:E:95:LEU:HD13	2.01	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1416:PRO:CG	2:F:130:LYS:HD3	2.31	0.60
1:A:1451:TYR:O	1:A:1455:VAL:CG2	2.49	0.60
1:A:1490:PHE:CD1	1:A:1492:ASN:OD1	2.54	0.60
1:B:1279:HIS:O	1:B:1280:ALA:CB	2.45	0.60
1:B:1572:THR:OG1	1:B:1599:PHE:CD2	2.50	0.60
1:C:1149:ASN:HD22	1:C:1149:ASN:N	1.99	0.60
1:C:1377:THR:HA	1:C:1381:HIS:CD2	2.36	0.60
1:B:1261:VAL:CG1	1:B:1295:TYR:CZ	2.81	0.60
1:B:1279:HIS:CD2	1:B:1283:LEU:CD1	2.85	0.60
1:B:1326:LYS:O	1:B:1326:LYS:HG3	1.99	0.60
1:C:1167:SER:HA	1:C:1171:THR:H	1.67	0.60
1:C:1617:GLU:HA	1:C:1620:ARG:HB2	1.82	0.60
2:F:146:VAL:HA	2:F:149:ASN:CG	2.21	0.60
1:A:1333:ARG:HA	1:A:1360:GLU:HG2	1.84	0.60
1:B:1246:LYS:O	1:B:1247:ALA:HB2	2.01	0.60
1:B:1412:LEU:HD12	1:B:1419:LEU:HD22	1.84	0.60
1:B:1416:PRO:CG	2:D:130:LYS:HD3	2.32	0.60
1:B:1592:MET:HG2	1:B:1593:ASP:N	2.16	0.60
1:C:1173:LEU:O	1:C:1177:LEU:HG	2.01	0.60
1:C:1358:TRP:CZ3	1:C:1377:THR:HG23	2.37	0.60
1:C:1578:ARG:NH1	1:C:1583:LEU:HA	2.15	0.60
2:D:146:VAL:HA	2:D:149:ASN:CG	2.21	0.60
1:A:1255:GLU:C	1:A:1289:TYR:HE2	2.05	0.60
1:A:1280:ALA:CB	1:A:1311:ARG:HE	2.09	0.60
1:A:1377:THR:HA	1:A:1381:HIS:CD2	2.37	0.60
1:A:1398:VAL:HG12	1:A:1400:ASN:H	1.66	0.60
1:A:1417:LEU:O	1:A:1418:LEU:CB	2.35	0.60
1:A:1472:ILE:HB	1:A:1498:ARG:NH2	2.16	0.60
1:B:1162:LYS:O	1:B:1163:LYS:C	2.13	0.60
1:B:1325:SER:O	1:B:1355:ALA:CB	2.50	0.60
1:C:1245:ARG:N	1:C:1275:HIS:CE1	2.65	0.60
1:A:1325:SER:O	1:A:1355:ALA:CB	2.50	0.60
1:A:1333:ARG:CA	1:A:1360:GLU:HG2	2.32	0.60
1:A:1505:ILE:O	1:A:1509:ARG:N	2.33	0.60
1:B:1171:THR:OG1	1:B:1196:ALA:HB1	2.02	0.60
1:B:1350:ARG:NE	1:B:1350:ARG:HA	2.17	0.60
1:C:1250:THR:O	1:C:1251:ARG:CB	2.47	0.60
1:C:1333:ARG:CA	1:C:1360:GLU:HG2	2.32	0.60
1:C:1572:THR:HG21	1:C:1599:PHE:CE2	2.37	0.60
1:C:1593:ASP:O	1:C:1594:PHE:HB2	2.01	0.60
1:C:1620:ARG:NH1	1:C:1620:ARG:HG3	2.16	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1414:PHE:O	2:F:130:LYS:CD	2.50	0.60
1:A:1416:PRO:HG2	2:F:130:LYS:CD	2.31	0.60
1:C:1290:TYR:HD2	1:C:1299:LEU:CD2	2.12	0.60
2:F:195:UNK:N	2:F:197:UNK:CB	2.65	0.60
1:A:1617:GLU:HA	1:A:1620:ARG:HB2	1.83	0.59
1:B:1451:TYR:O	1:B:1455:VAL:CG2	2.50	0.59
1:C:1082:VAL:CG1	1:C:1083:GLN:H	2.15	0.59
2:D:186:UNK:N	2:D:190:UNK:CB	2.65	0.59
1:A:1111:LEU:CD1	1:A:1125:ILE:HG12	2.29	0.59
1:A:1152:GLU:N	1:A:1152:GLU:OE2	2.35	0.59
1:A:1326:LYS:O	1:A:1326:LYS:HG3	1.99	0.59
1:A:1395:ILE:O	1:A:1404:TYR:OH	2.17	0.59
1:A:1459:ASN:HD21	1:A:1489:ASN:HB2	1.67	0.59
1:A:1513:TYR:CD1	1:A:1516:LYS:HE2	2.37	0.59
1:A:1572:THR:CG2	1:A:1599:PHE:CD2	2.85	0.59
1:B:1180:THR:O	1:B:1181:ASN:CB	2.49	0.59
1:B:1188:GLU:OE2	1:B:1191:ASN:O	2.20	0.59
1:C:1152:GLU:N	1:C:1152:GLU:OE2	2.35	0.59
1:C:1168:TYR:O	1:C:1172:GLU:HG2	2.02	0.59
1:C:1533:LEU:HG	1:C:1535:LYS:H	1.67	0.59
1:A:1358:TRP:CZ3	1:A:1377:THR:HG23	2.37	0.59
1:A:1620:ARG:NH1	1:A:1620:ARG:HG3	2.16	0.59
1:B:1152:GLU:OE2	1:B:1152:GLU:N	2.35	0.59
1:B:1578:ARG:HD3	1:B:1582:VAL:CG1	2.32	0.59
1:B:1617:GLU:HG2	1:B:1621:LYS:NZ	2.18	0.59
2:F:188:UNK:O	2:F:189:UNK:C	2.50	0.59
1:A:1416:PRO:CG	2:F:130:LYS:CD	2.81	0.59
1:A:1505:ILE:O	1:A:1509:ARG:HB2	2.02	0.59
1:C:1372:ASP:O	1:C:1376:ILE:CG1	2.48	0.59
1:C:1398:VAL:HG12	1:C:1400:ASN:H	1.66	0.59
1:C:1459:ASN:HD21	1:C:1489:ASN:HB2	1.67	0.59
2:D:173:UNK:O	2:D:174:UNK:CB	2.45	0.59
1:A:1445:LEU:N	1:A:1446:PRO:CD	2.66	0.59
1:B:1190:ILE:CD1	1:B:1216:LEU:HD11	2.32	0.59
1:B:1365:TYR:HB2	1:B:1374:ALA:HB2	1.83	0.59
1:B:1459:ASN:HD21	1:B:1489:ASN:HB2	1.67	0.59
1:C:1451:TYR:O	1:C:1455:VAL:CG2	2.49	0.59
2:D:119:ALA:C	2:D:123:MET:HG2	2.15	0.59
1:A:1510:ILE:HD13	1:A:1510:ILE:N	2.18	0.59
1:A:1562:LYS:C	1:A:1564:GLU:H	2.06	0.59
1:B:1089:ILE:HG12	2:D:19:UNK:O	2.02	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1136:SER:H	1:B:1141:VAL:HG21	1.66	0.59
1:C:1254:LYS:HD2	1:C:1285:GLU:HG3	1.82	0.59
1:C:1409:GLN:CB	1:C:1413:GLU:HG2	2.24	0.59
1:C:1438:TYR:HD1	2:E:1:UNK:H2	1.49	0.59
2:E:121:LYS:O	2:E:124:GLU:HB3	2.01	0.59
2:F:197:UNK:C	2:F:199:UNK:N	2.64	0.59
1:A:1185:GLU:O	1:A:1185:GLU:HG2	2.03	0.59
1:A:1215:LYS:C	1:A:1217:LEU:N	2.55	0.59
1:A:1277:VAL:O	1:A:1279:HIS:N	2.36	0.59
1:B:1592:MET:CG	1:B:1593:ASP:N	2.61	0.59
1:C:1472:ILE:HB	1:C:1498:ARG:NH2	2.15	0.59
2:D:60:UNK:O	2:D:63:UNK:N	2.36	0.59
2:D:99:PRO:O	2:D:102:ILE:HG12	2.02	0.59
2:E:120:SER:HA	2:E:123:MET:HB2	1.85	0.59
1:A:1126:ASP:CG	1:A:1156:TYR:OH	2.41	0.59
1:A:1401:VAL:CG2	1:A:1429:ARG:HE	2.13	0.59
1:A:1608:THR:HG23	1:B:1607:LEU:HD11	1.85	0.59
1:B:1510:ILE:HD13	1:B:1510:ILE:N	2.18	0.59
1:C:1141:VAL:HG11	1:C:1172:GLU:HG2	1.84	0.59
1:C:1412:LEU:HD12	1:C:1419:LEU:HD22	1.84	0.59
2:D:101:SER:O	2:D:105:TRP:HB2	2.03	0.59
2:E:95:LEU:O	2:E:99:PRO:HG2	2.01	0.59
1:A:1162:LYS:HG2	1:A:1163:LYS:HE2	1.84	0.59
1:A:1188:GLU:OE2	1:A:1191:ASN:C	2.41	0.59
1:A:1319:GLU:HA	1:A:1322:ILE:HD12	1.85	0.59
1:A:1350:ARG:NE	1:A:1350:ARG:HA	2.17	0.59
1:A:1395:ILE:CG1	1:A:1404:TYR:CD2	2.75	0.59
1:A:1438:TYR:O	1:A:1442:VAL:HG21	2.03	0.59
1:A:1530:LYS:HG2	1:A:1531:ASP:OD1	2.03	0.59
1:B:1166:GLU:O	1:B:1167:SER:O	2.21	0.59
1:B:1411:TYR:O	1:B:1415:LYS:C	2.39	0.59
1:C:1445:LEU:N	1:C:1446:PRO:CD	2.65	0.59
1:C:1546:ASP:OD2	1:C:1549:LEU:HD23	2.03	0.59
1:C:1600:ILE:HA	1:C:1603:MET:HE3	1.85	0.59
2:D:174:UNK:HA	2:D:176:UNK:C	2.32	0.59
1:A:1145:ASN:OD1	1:A:1179:LYS:O	2.21	0.59
1:A:1546:ASP:OD2	1:A:1549:LEU:HD23	2.03	0.59
1:B:1280:ALA:O	1:B:1313:HIS:NE2	2.36	0.59
1:B:1333:ARG:HA	1:B:1360:GLU:HG2	1.84	0.59
1:B:1505:ILE:O	1:B:1509:ARG:HB2	2.03	0.59
1:B:1620:ARG:NH1	1:B:1620:ARG:HG3	2.16	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:120:SER:HA	2:F:123:MET:HB2	1.85	0.59
1:A:1145:ASN:ND2	1:A:1153:LEU:CD2	2.66	0.58
1:A:1168:TYR:O	1:A:1172:GLU:HG2	2.03	0.58
1:A:1358:TRP:CZ3	1:A:1381:HIS:CE1	2.70	0.58
1:B:1445:LEU:N	1:B:1446:PRO:CD	2.65	0.58
1:B:1472:ILE:CB	1:B:1498:ARG:HH21	2.14	0.58
1:C:1401:VAL:CG2	1:C:1429:ARG:HE	2.13	0.58
1:C:1571:PHE:O	1:C:1577:LEU:HD21	2.02	0.58
2:F:195:UNK:C	2:F:197:UNK:CA	2.81	0.58
1:A:1375:ILE:CD1	1:A:1394:ILE:HB	2.33	0.58
1:A:1412:LEU:HD12	1:A:1419:LEU:HD22	1.85	0.58
1:B:1279:HIS:CG	1:B:1280:ALA:H	2.16	0.58
1:B:1319:GLU:HA	1:B:1322:ILE:HD12	1.84	0.58
1:B:1377:THR:HA	1:B:1381:HIS:CD2	2.37	0.58
1:B:1384:ASP:OD1	2:D:115:GLU:CD	2.41	0.58
1:C:1224:PHE:CE1	1:C:1246:LYS:NZ	2.69	0.58
1:C:1401:VAL:HG22	1:C:1429:ARG:CZ	2.33	0.58
1:C:1408:ILE:HG21	1:C:1412:LEU:HD22	1.83	0.58
1:C:1490:PHE:CD1	1:C:1492:ASN:OD1	2.54	0.58
1:C:1530:LYS:HG2	1:C:1531:ASP:OD1	2.03	0.58
2:D:174:UNK:CB	2:D:177:UNK:CA	2.81	0.58
2:F:182:UNK:C	2:F:184:UNK:N	2.64	0.58
1:A:1206:TYR:CD2	1:A:1226:ARG:HG3	2.37	0.58
1:A:1283:LEU:HD22	1:A:1313:HIS:CE1	2.35	0.58
1:A:1588:ARG:HH11	1:A:1588:ARG:CG	2.16	0.58
1:B:1530:LYS:HG2	1:B:1531:ASP:OD1	2.03	0.58
1:C:1471:PHE:CB	1:C:1480:LEU:HB2	2.32	0.58
1:A:1145:ASN:HA	1:A:1153:LEU:HD22	1.85	0.58
1:A:1190:ILE:CD1	1:A:1216:LEU:HD11	2.33	0.58
1:A:1198:ILE:HA	1:A:1201:VAL:HG23	1.85	0.58
1:A:1471:PHE:CB	1:A:1480:LEU:HB2	2.32	0.58
1:A:1533:LEU:HG	1:A:1535:LYS:HB2	1.85	0.58
1:A:1578:ARG:HD3	1:A:1582:VAL:CG1	2.33	0.58
1:A:1157:LEU:HB3	1:A:1173:LEU:CD1	2.34	0.58
1:A:1533:LEU:HG	1:A:1535:LYS:H	1.67	0.58
1:A:1617:GLU:HG2	1:A:1621:LYS:NZ	2.18	0.58
1:B:1161:ARG:HG2	1:B:1173:LEU:CD2	2.33	0.58
1:B:1215:LYS:C	1:B:1217:LEU:N	2.55	0.58
1:B:1407:ALA:O	1:B:1408:ILE:C	2.42	0.58
1:B:1533:LEU:HG	1:B:1535:LYS:HB2	1.84	0.58
1:C:1185:GLU:O	1:C:1185:GLU:HG2	2.03	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1350:ARG:HA	1:C:1350:ARG:NE	2.17	0.58
1:C:1578:ARG:HD3	1:C:1582:VAL:CG1	2.32	0.58
1:A:1157:LEU:CD1	1:A:1177:LEU:HD23	2.34	0.58
1:A:1163:LYS:O	1:A:1164:ALA:HB2	2.02	0.58
1:C:1130:LYS:HA	1:C:1133:ASP:O	2.02	0.58
1:C:1537:ALA:HA	1:C:1540:TYR:CE2	2.39	0.58
2:D:186:UNK:O	2:D:187:UNK:C	2.51	0.58
1:A:1162:LYS:CA	1:A:1162:LYS:O	2.41	0.58
1:A:1181:ASN:CG	1:A:1182:ARG:H	1.98	0.58
1:A:1251:ARG:O	1:A:1252:THR:OG1	2.20	0.58
1:B:1490:PHE:CD1	1:B:1492:ASN:OD1	2.54	0.58
1:C:1148:GLY:O	1:C:1149:ASN:HB3	2.03	0.58
1:C:1208:GLU:OE1	1:C:1208:GLU:HA	2.01	0.58
2:D:120:SER:HA	2:D:123:MET:HB2	1.85	0.58
1:A:1088:HIS:C	1:A:1089:ILE:HD12	2.23	0.58
1:A:1122:LYS:HA	1:A:1125:ILE:CG2	2.24	0.58
1:B:1404:TYR:OH	1:B:1429:ARG:NH1	2.37	0.58
1:B:1471:PHE:CB	1:B:1480:LEU:HB2	2.32	0.58
2:D:119:ALA:O	2:D:123:MET:CB	2.52	0.58
2:E:189:UNK:C	2:E:195:UNK:CB	2.82	0.58
1:B:1168:TYR:O	1:B:1172:GLU:HG2	2.03	0.58
1:B:1206:TYR:HD1	1:B:1226:ARG:O	1.82	0.58
1:B:1277:VAL:O	1:B:1279:HIS:N	2.37	0.58
1:C:1505:ILE:O	1:C:1509:ARG:HB2	2.03	0.58
2:E:90:ALA:N	2:E:91:GLN:HB3	2.18	0.58
1:A:1258:PHE:HA	1:A:1289:TYR:CE1	2.39	0.58
1:A:1407:ALA:C	1:A:1409:GLN:N	2.56	0.58
1:A:1608:THR:HG23	1:B:1607:LEU:HD13	1.85	0.58
1:B:1185:GLU:HG2	1:B:1185:GLU:O	2.03	0.58
1:B:1375:ILE:CD1	1:B:1394:ILE:HB	2.33	0.58
1:B:1395:ILE:CG1	1:B:1404:TYR:CD2	2.76	0.58
1:C:1198:ILE:CA	1:C:1201:VAL:HG23	2.34	0.58
1:C:1215:LYS:C	1:C:1217:LEU:N	2.55	0.58
1:C:1333:ARG:HA	1:C:1360:GLU:HG2	1.85	0.58
1:C:1358:TRP:HA	1:C:1361:LEU:HB3	1.86	0.58
2:F:150:LYS:O	2:F:154:ARG:HG3	2.04	0.58
1:A:1401:VAL:HG22	1:A:1429:ARG:CZ	2.33	0.57
1:A:1407:ALA:O	1:A:1408:ILE:C	2.42	0.57
1:A:1537:ALA:HA	1:A:1540:TYR:CE2	2.39	0.57
1:A:1587:TRP:NE1	1:A:1594:PHE:CE2	2.66	0.57
1:B:1150:TRP:CZ3	2:D:5:UNK:CA	2.85	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1513:TYR:CD1	1:B:1516:LYS:HE2	2.37	0.57
1:B:1528:CYS:O	1:B:1532:SER:HB2	2.04	0.57
1:B:1533:LEU:HG	1:B:1535:LYS:H	1.67	0.57
1:C:1253:TRP:O	1:C:1255:GLU:N	2.37	0.57
1:C:1472:ILE:CB	1:C:1498:ARG:HH21	2.14	0.57
2:E:119:ALA:O	2:E:123:MET:CB	2.51	0.57
1:A:1317:PHE:N	1:A:1317:PHE:CD2	2.64	0.57
1:B:1358:TRP:HA	1:B:1361:LEU:HB3	1.86	0.57
1:C:1395:ILE:CG1	1:C:1404:TYR:HE2	2.07	0.57
1:C:1404:TYR:OH	1:C:1429:ARG:NH1	2.37	0.57
2:D:181:UNK:C	2:D:183:UNK:CA	2.82	0.57
2:E:105:TRP:O	2:E:109:GLN:HG2	2.04	0.57
2:E:191:UNK:O	2:E:192:UNK:CB	2.52	0.57
1:A:1255:GLU:O	1:A:1258:PHE:HB3	2.04	0.57
1:A:1332:MET:CG	1:A:1357:LEU:HD13	2.35	0.57
1:A:1382:PRO:HG3	1:A:1410:PHE:CE1	2.38	0.57
1:A:1404:TYR:OH	1:A:1429:ARG:NH1	2.37	0.57
1:A:1504:LEU:HD13	1:A:1506:GLU:HG3	1.86	0.57
1:B:1382:PRO:HG3	1:B:1410:PHE:CE1	2.39	0.57
1:B:1391:PHE:CD2	1:B:1411:TYR:OH	2.54	0.57
1:B:1401:VAL:HG22	1:B:1429:ARG:CZ	2.33	0.57
1:B:1537:ALA:HA	1:B:1540:TYR:CE2	2.39	0.57
1:C:1161:ARG:NE	1:C:1170:GLU:HB2	2.19	0.57
1:C:1198:ILE:O	1:C:1201:VAL:N	2.37	0.57
1:C:1382:PRO:CG	2:E:115:GLU:OE2	2.52	0.57
1:C:1407:ALA:O	1:C:1408:ILE:C	2.42	0.57
1:C:1617:GLU:HG2	1:C:1621:LYS:NZ	2.18	0.57
2:F:151:ILE:HG13	2:F:152:ASN:N	2.18	0.57
1:A:1192:GLY:N	1:A:1193:PRO:CD	2.68	0.57
1:B:1253:TRP:O	1:B:1255:GLU:N	2.37	0.57
1:B:1546:ASP:OD2	1:B:1549:LEU:HD23	2.03	0.57
1:B:1610:VAL:O	1:B:1614:ASP:OD1	2.22	0.57
1:C:1344:ASN:C	1:C:1345:ILE:HD13	2.25	0.57
1:C:1504:LEU:CD1	2:E:149:ASN:CG	2.57	0.57
1:C:1504:LEU:HD13	1:C:1506:GLU:HG3	1.85	0.57
2:D:114:GLN:CG	2:D:115:GLU:N	2.26	0.57
2:E:108:GLU:CD	2:E:109:GLN:HG2	2.24	0.57
1:B:1598:TYR:HD1	1:C:1584:GLU:OE2	1.85	0.57
1:C:1533:LEU:HG	1:C:1535:LYS:HB2	1.85	0.57
1:A:1218:TYR:HD2	1:A:1227:LEU:HD12	1.68	0.57
1:B:1160:ALA:CB	1:B:1173:LEU:HD13	2.34	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1319:GLU:HA	1:C:1322:ILE:HD12	1.86	0.57
1:C:1407:ALA:C	1:C:1409:GLN:N	2.56	0.57
2:E:141:ARG:HB2	2:E:141:ARG:NH2	2.20	0.57
1:A:1083:GLN:O	1:A:1086:ILE:HG12	2.05	0.57
1:A:1290:TYR:HD2	1:A:1299:LEU:HD13	1.62	0.57
1:B:1111:LEU:HD21	1:B:1115:GLN:CG	2.35	0.57
1:B:1218:TYR:HD2	1:B:1227:LEU:HD12	1.68	0.57
1:C:1122:LYS:CA	1:C:1125:ILE:HG22	2.25	0.57
1:C:1513:TYR:CD1	1:C:1516:LYS:HE2	2.37	0.57
2:D:151:ILE:HG13	2:D:152:ASN:N	2.20	0.57
2:F:170:UNK:O	2:F:171:UNK:C	2.53	0.57
1:A:1130:LYS:HD2	1:A:1156:TYR:HA	1.86	0.57
1:B:1206:TYR:CG	1:B:1226:ARG:HG3	2.39	0.57
1:B:1284:GLU:O	1:B:1287:ILE:HG13	2.04	0.57
1:C:1136:SER:C	1:C:1136:SER:HA	2.09	0.57
1:C:1192:GLY:N	1:C:1193:PRO:HD3	2.12	0.57
1:C:1382:PRO:HG3	1:C:1410:PHE:CE1	2.38	0.57
1:A:1594:PHE:O	1:A:1596:MET:HE3	2.04	0.57
1:A:1620:ARG:CG	1:A:1620:ARG:NH1	2.53	0.57
1:B:1257:CYS:HB3	1:B:1289:TYR:OH	2.04	0.57
1:B:1407:ALA:C	1:B:1409:GLN:N	2.56	0.57
1:B:1438:TYR:O	1:B:1442:VAL:HG21	2.03	0.57
1:B:1586:ALA:O	1:B:1590:ASN:CG	2.41	0.57
1:C:1434:ARG:HG3	2:E:4:UNK:C	2.34	0.57
1:C:1434:ARG:CG	2:E:4:UNK:O	2.53	0.57
1:C:1438:TYR:O	1:C:1442:VAL:HG21	2.04	0.57
2:D:141:ARG:HH21	2:D:141:ARG:HB2	1.70	0.57
2:F:141:ARG:HH21	2:F:141:ARG:HB2	1.70	0.57
1:A:1090:GLY:O	1:A:1091:ASN:HB2	2.04	0.57
1:A:1450:PRO:HA	1:A:1453:ARG:CG	2.28	0.57
1:A:1494:SER:HA	1:A:1497:GLN:HG3	1.86	0.57
1:B:1167:SER:CB	1:B:1168:TYR:CD1	2.87	0.57
1:B:1494:SER:HA	1:B:1497:GLN:HG3	1.86	0.57
1:C:1326:LYS:O	1:C:1326:LYS:HG3	1.99	0.57
2:D:127:TRP:HD1	2:D:128:ARG:N	2.03	0.57
2:D:181:UNK:N	2:D:183:UNK:CB	2.67	0.57
1:A:1253:TRP:O	1:A:1255:GLU:N	2.38	0.56
1:B:1472:ILE:HB	1:B:1498:ARG:NH2	2.16	0.56
1:C:1414:PHE:CG	2:E:123:MET:HG3	2.40	0.56
1:C:1456:GLN:HG2	1:C:1487:TYR:CE2	2.40	0.56
1:C:1533:LEU:C	1:C:1535:LYS:H	2.08	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:90:ALA:N	2:E:91:GLN:CA	2.59	0.56
2:E:108:GLU:OE2	2:E:109:GLN:CD	2.42	0.56
2:E:127:TRP:HD1	2:E:128:ARG:N	2.03	0.56
2:E:150:LYS:O	2:E:154:ARG:HG3	2.04	0.56
2:E:151:ILE:HG13	2:E:152:ASN:N	2.20	0.56
1:A:1157:LEU:O	1:A:1160:ALA:N	2.38	0.56
1:A:1358:TRP:HA	1:A:1361:LEU:HB3	1.86	0.56
1:A:1602:VAL:HG13	2:F:202:UNK:O	2.05	0.56
1:B:1300:ILE:HD12	1:B:1300:ILE:O	2.05	0.56
1:B:1601:GLN:CG	1:C:1587:TRP:CH2	2.74	0.56
1:C:1104:GLU:CD	1:C:1104:GLU:N	2.57	0.56
1:C:1134:PRO:O	1:C:1135:SER:C	2.44	0.56
1:C:1361:LEU:CD2	1:C:1361:LEU:C	2.72	0.56
1:A:1111:LEU:HD21	1:A:1115:GLN:CG	2.35	0.56
1:A:1180:THR:HG22	1:A:1181:ASN:CG	2.25	0.56
1:A:1277:VAL:CG2	1:A:1278:VAL:H	2.17	0.56
1:A:1284:GLU:O	1:A:1287:ILE:HG13	2.04	0.56
1:A:1368:TYR:HD1	1:A:1370:GLU:HG2	1.66	0.56
1:A:1387:LYS:HB3	1:A:1390:GLN:HB2	1.87	0.56
1:A:1586:ALA:O	1:A:1590:ASN:ND2	2.38	0.56
1:B:1277:VAL:CG2	1:B:1278:VAL:H	2.17	0.56
1:B:1504:LEU:HD13	1:B:1506:GLU:HG3	1.86	0.56
1:B:1509:ARG:HH22	2:D:163:GLN:CB	2.18	0.56
1:B:1533:LEU:C	1:B:1535:LYS:H	2.08	0.56
1:C:1111:LEU:HD12	1:C:1129:ILE:HG21	1.87	0.56
1:C:1277:VAL:CG2	1:C:1278:VAL:H	2.17	0.56
1:C:1296:PHE:HD2	1:C:1297:GLU:HG2	1.67	0.56
1:C:1465:GLU:O	1:C:1465:GLU:OE2	2.23	0.56
2:E:184:UNK:C	2:E:186:UNK:N	2.68	0.56
2:F:141:ARG:HB2	2:F:141:ARG:NH2	2.20	0.56
1:A:1159:MET:SD	1:A:1162:LYS:HD2	2.46	0.56
1:A:1183:LEU:HG	1:A:1184:ALA:H	1.71	0.56
1:B:1317:PHE:N	1:B:1317:PHE:CD2	2.64	0.56
1:B:1361:LEU:CD2	1:B:1361:LEU:C	2.73	0.56
1:B:1594:PHE:O	1:B:1596:MET:HE3	2.04	0.56
1:B:1623:GLU:O	1:B:1626:ALA:HB3	2.05	0.56
1:C:1107:VAL:O	1:C:1108:TRP:HE3	1.86	0.56
1:C:1258:PHE:CE1	1:C:1293:ARG:NE	2.74	0.56
1:C:1510:ILE:O	1:C:1514:LEU:N	2.34	0.56
1:C:1610:VAL:O	1:C:1614:ASP:OD1	2.23	0.56
1:A:1105:PRO:HG2	1:A:1108:TRP:CZ2	2.41	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1290:TYR:O	1:A:1295:TYR:CB	2.54	0.56
1:A:1361:LEU:CD2	1:A:1361:LEU:C	2.73	0.56
1:A:1414:PHE:O	2:F:130:LYS:HD2	2.05	0.56
1:A:1596:MET:HE3	1:A:1597:PRO:HD3	1.86	0.56
1:B:1167:SER:HB3	1:B:1168:TYR:HD1	1.68	0.56
1:B:1404:TYR:O	1:B:1407:ALA:CB	2.52	0.56
1:B:1476:ASP:OD1	1:B:1479:ALA:HB3	2.05	0.56
1:C:1133:ASP:HB2	1:C:1134:PRO:HD2	1.88	0.56
1:C:1325:SER:O	1:C:1355:ALA:CB	2.50	0.56
1:C:1387:LYS:O	1:C:1390:GLN:N	2.31	0.56
1:C:1391:PHE:CD2	1:C:1411:TYR:OH	2.54	0.56
1:C:1476:ASP:OD1	1:C:1479:ALA:HB3	2.06	0.56
1:A:1358:TRP:CD2	1:A:1381:HIS:CG	2.94	0.56
1:A:1465:GLU:O	1:A:1465:GLU:OE2	2.23	0.56
1:B:1332:MET:CG	1:B:1357:LEU:HD13	2.34	0.56
1:C:1161:ARG:HH21	1:C:1170:GLU:HG3	1.71	0.56
1:C:1174:ILE:HD13	1:C:1174:ILE:N	2.20	0.56
1:C:1179:LYS:C	1:C:1182:ARG:HH12	2.08	0.56
1:C:1494:SER:HA	1:C:1497:GLN:HG3	1.86	0.56
2:E:105:TRP:O	2:E:108:GLU:CG	2.51	0.56
1:A:1257:CYS:C	1:A:1289:TYR:CE1	2.78	0.56
1:A:1524:SER:O	1:A:1527:LEU:HD13	2.06	0.56
1:A:1533:LEU:C	1:A:1535:LYS:H	2.08	0.56
1:B:1144:ALA:HA	1:B:1149:ASN:HB2	1.87	0.56
1:B:1188:GLU:OE2	1:B:1191:ASN:C	2.43	0.56
1:B:1198:ILE:HG12	1:B:1201:VAL:HG21	1.87	0.56
1:B:1602:VAL:HG13	2:D:205:UNK:O	2.06	0.56
1:C:1108:TRP:NE1	1:C:1131:ALA:HB2	2.20	0.56
1:C:1161:ARG:CZ	1:C:1195:ASN:HB3	2.36	0.56
1:C:1167:SER:C	1:C:1171:THR:CB	2.60	0.56
1:B:1130:LYS:HZ3	1:B:1155:LYS:HD3	1.71	0.56
1:B:1258:PHE:CD1	1:B:1293:ARG:HD2	2.41	0.56
1:B:1332:MET:HG3	1:B:1357:LEU:HD13	1.87	0.56
1:B:1395:ILE:O	1:B:1404:TYR:OH	2.17	0.56
1:B:1509:ARG:CZ	2:D:166:ALA:HB3	2.36	0.56
1:C:1279:HIS:NE2	1:C:1283:LEU:HD12	2.21	0.56
1:C:1332:MET:CG	1:C:1357:LEU:HD13	2.35	0.56
2:D:134:ASP:OD1	2:D:135:LEU:N	2.39	0.56
2:E:127:TRP:O	2:E:130:LYS:HB2	2.06	0.56
2:E:184:UNK:C	2:E:186:UNK:H	2.19	0.56
2:F:184:UNK:O	2:F:186:UNK:N	2.39	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1456:GLN:HG2	1:A:1487:TYR:CE2	2.41	0.56
1:A:1472:ILE:CB	1:A:1498:ARG:HH21	2.14	0.56
1:A:1476:ASP:OD1	1:A:1479:ALA:HB3	2.06	0.56
1:B:1108:TRP:NE1	1:B:1131:ALA:CB	2.67	0.56
1:B:1387:LYS:HD2	1:B:1390:GLN:NE2	2.21	0.56
1:C:1253:TRP:O	1:C:1289:TYR:HE2	1.85	0.56
1:C:1295:TYR:O	1:C:1296:PHE:CD2	2.59	0.56
2:D:150:LYS:O	2:D:154:ARG:HG3	2.05	0.56
1:A:1255:GLU:C	1:A:1289:TYR:CE2	2.79	0.56
1:A:1332:MET:HG3	1:A:1357:LEU:HD13	1.87	0.56
1:A:1529:LYS:O	1:A:1532:SER:HB3	2.06	0.56
1:B:1160:ALA:HB3	1:B:1173:LEU:HD22	1.88	0.56
1:C:1167:SER:HA	1:C:1171:THR:OG1	2.06	0.56
1:A:1206:TYR:CE1	1:A:1230:THR:HB	2.42	0.55
1:A:1300:ILE:HD12	1:A:1300:ILE:O	2.05	0.55
1:A:1610:VAL:O	1:A:1614:ASP:OD1	2.23	0.55
1:B:1333:ARG:CB	1:B:1360:GLU:HG3	2.36	0.55
1:C:1111:LEU:HD21	1:C:1115:GLN:CG	2.35	0.55
1:C:1387:LYS:HD2	1:C:1390:GLN:NE2	2.21	0.55
1:C:1414:PHE:CD1	2:E:123:MET:HG3	2.40	0.55
1:C:1499:LEU:CB	1:C:1511:ALA:HB2	2.36	0.55
1:A:1193:PRO:O	1:A:1194:ASN:C	2.44	0.55
1:A:1255:GLU:CA	1:A:1289:TYR:CE2	2.88	0.55
1:B:1387:LYS:HB3	1:B:1390:GLN:HB2	1.88	0.55
1:B:1572:THR:CB	1:B:1599:PHE:CD2	2.89	0.55
1:C:1092:LEU:O	1:C:1093:ASP:C	2.36	0.55
1:C:1194:ASN:HD22	1:C:1195:ASN:N	2.04	0.55
1:C:1254:LYS:HA	1:C:1289:TYR:CE2	2.40	0.55
1:C:1255:GLU:O	1:C:1258:PHE:HB3	2.06	0.55
2:E:184:UNK:O	2:E:185:UNK:C	2.53	0.55
1:A:1116:LEU:HD21	1:A:1122:LYS:CB	2.36	0.55
1:A:1451:TYR:O	1:A:1455:VAL:HG21	2.07	0.55
1:A:1510:ILE:O	1:A:1514:LEU:N	2.34	0.55
1:B:1244:ALA:O	1:B:1246:LYS:N	2.39	0.55
2:D:141:ARG:NH2	2:D:141:ARG:HB2	2.20	0.55
2:F:102:ILE:HG13	2:F:103:ARG:N	2.22	0.55
2:F:127:TRP:HD1	2:F:128:ARG:N	2.03	0.55
1:A:1290:TYR:O	1:A:1295:TYR:HB2	2.06	0.55
1:B:1451:TYR:O	1:B:1455:VAL:HG21	2.07	0.55
1:B:1510:ILE:O	1:B:1514:LEU:N	2.34	0.55
1:B:1524:SER:O	1:B:1527:LEU:HD13	2.06	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1333:ARG:CB	1:C:1360:GLU:HG3	2.36	0.55
2:E:98:GLU:HA	2:E:101:SER:CB	2.31	0.55
1:B:1206:TYR:CE2	1:B:1226:ARG:HG3	2.40	0.55
1:B:1255:GLU:O	1:B:1258:PHE:HB3	2.06	0.55
1:B:1395:ILE:CD1	1:B:1403:LEU:HD12	2.37	0.55
1:B:1456:GLN:HG2	1:B:1487:TYR:CE2	2.41	0.55
1:B:1596:MET:HE3	1:B:1597:PRO:HD3	1.88	0.55
1:C:1375:ILE:CD1	1:C:1394:ILE:HB	2.32	0.55
2:E:141:ARG:HB2	2:E:141:ARG:HH21	1.70	0.55
2:F:151:ILE:CA	2:F:154:ARG:HD3	2.36	0.55
1:A:1584:GLU:O	1:A:1587:TRP:N	2.29	0.55
1:B:1426:LEU:O	1:B:1427:SER:C	2.45	0.55
1:C:1179:LYS:O	1:C:1182:ARG:NH2	2.40	0.55
1:C:1434:ARG:HG3	2:E:4:UNK:CB	2.36	0.55
2:D:118:ALA:HA	2:D:121:LYS:HZ2	1.70	0.55
2:D:186:UNK:O	2:D:188:UNK:N	2.40	0.55
2:E:134:ASP:OD1	2:E:135:LEU:N	2.39	0.55
2:F:127:TRP:O	2:F:130:LYS:HB2	2.07	0.55
2:F:134:ASP:OD1	2:F:135:LEU:N	2.39	0.55
1:A:1256:VAL:C	1:A:1289:TYR:OH	2.44	0.55
1:A:1414:PHE:HD1	2:F:127:TRP:HB2	1.70	0.55
1:B:1358:TRP:CD2	1:B:1381:HIS:CG	2.94	0.55
1:B:1481:ARG:HH11	1:B:1510:ILE:HG13	1.72	0.55
1:C:1108:TRP:HE1	1:C:1131:ALA:HB2	1.71	0.55
1:C:1130:LYS:HG3	1:C:1133:ASP:HA	1.89	0.55
1:C:1451:TYR:O	1:C:1455:VAL:HG21	2.07	0.55
2:F:119:ALA:O	2:F:123:MET:CB	2.55	0.55
1:A:1409:GLN:HA	1:A:1413:GLU:CB	2.35	0.55
1:A:1481:ARG:HH12	1:A:1510:ILE:HD12	1.72	0.55
1:B:1149:ASN:O	1:B:1153:LEU:HB3	2.03	0.55
1:B:1587:TRP:O	1:B:1589:HIS:CA	2.54	0.55
1:C:1141:VAL:CG1	1:C:1172:GLU:HG2	2.36	0.55
1:C:1358:TRP:CD2	1:C:1381:HIS:CG	2.94	0.55
1:C:1404:TYR:O	1:C:1407:ALA:CB	2.53	0.55
1:C:1412:LEU:CD2	1:C:1439:PHE:CE1	2.89	0.55
2:E:94:ARG:O	2:E:96:THR:N	2.40	0.55
1:A:1082:VAL:CG1	1:A:1083:GLN:N	2.69	0.55
1:A:1154:VAL:HG13	1:A:1180:THR:CG2	2.37	0.55
1:B:1448:VAL:O	1:B:1452:LEU:HG	2.07	0.55
1:B:1465:GLU:O	1:B:1465:GLU:OE2	2.23	0.55
1:B:1600:ILE:HA	1:B:1603:MET:HE3	1.88	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1175:PHE:HE2	1:C:1204:ARG:NH2	2.05	0.55
1:C:1480:LEU:O	1:C:1484:ILE:HG12	2.06	0.55
2:D:127:TRP:O	2:D:130:LYS:HB2	2.06	0.55
2:E:170:UNK:O	2:E:171:UNK:C	2.54	0.55
1:A:1246:LYS:O	1:A:1247:ALA:CB	2.55	0.55
1:B:1277:VAL:CG2	1:B:1278:VAL:N	2.70	0.55
1:B:1387:LYS:O	1:B:1390:GLN:N	2.31	0.55
1:A:1333:ARG:CB	1:A:1360:GLU:HG3	2.36	0.54
1:A:1426:LEU:O	1:A:1427:SER:C	2.45	0.54
1:B:1190:ILE:HG23	1:B:1191:ASN:ND2	2.22	0.54
1:B:1206:TYR:CE1	1:B:1226:ARG:HA	2.42	0.54
1:C:1395:ILE:CD1	1:C:1403:LEU:HD12	2.36	0.54
1:C:1528:CYS:O	1:C:1532:SER:HB2	2.07	0.54
1:A:1253:TRP:O	1:A:1289:TYR:CZ	2.60	0.54
1:A:1319:GLU:HA	1:A:1322:ILE:CD1	2.38	0.54
1:A:1387:LYS:HD2	1:A:1390:GLN:NE2	2.21	0.54
1:A:1448:VAL:O	1:A:1452:LEU:HG	2.07	0.54
1:C:1111:LEU:HD21	1:C:1115:GLN:HG3	1.89	0.54
1:C:1122:LYS:CG	1:C:1123:GLU:H	2.19	0.54
1:C:1524:SER:O	1:C:1527:LEU:HD13	2.06	0.54
1:C:1554:LEU:HA	1:C:1557:PHE:CD2	2.41	0.54
1:A:1162:LYS:O	1:A:1163:LYS:HB2	2.06	0.54
1:A:1449:LYS:HB3	1:A:1450:PRO:CD	2.37	0.54
1:A:1467:LEU:HG	1:A:1471:PHE:CE2	2.43	0.54
1:A:1601:GLN:HA	1:A:1604:LYS:HD2	1.89	0.54
1:B:1596:MET:N	1:B:1597:PRO:CD	2.69	0.54
1:C:1154:VAL:CG1	1:C:1177:LEU:HD23	2.38	0.54
1:C:1192:GLY:N	1:C:1193:PRO:CD	2.66	0.54
1:C:1389:GLY:O	1:C:1392:LYS:N	2.40	0.54
1:C:1448:VAL:O	1:C:1452:LEU:HG	2.07	0.54
1:A:1387:LYS:O	1:A:1390:GLN:N	2.31	0.54
1:A:1403:LEU:C	1:A:1403:LEU:CD1	2.75	0.54
1:A:1493:ILE:HG22	1:A:1494:SER:N	2.23	0.54
1:B:1102:CYS:O	1:B:1103:ASN:HB2	2.06	0.54
1:B:1130:LYS:NZ	1:B:1155:LYS:CG	2.70	0.54
1:C:1585:THR:O	1:C:1589:HIS:HB2	2.08	0.54
2:D:51:UNK:C	2:D:53:UNK:N	2.69	0.54
1:A:1111:LEU:HD21	1:A:1115:GLN:HG3	1.89	0.54
1:A:1150:TRP:O	1:A:1153:LEU:HB3	2.07	0.54
1:A:1359:ALA:HB3	1:A:1360:GLU:OE1	2.08	0.54
1:B:1190:ILE:HD13	1:B:1216:LEU:CD1	2.37	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1404:TYR:O	1:B:1407:ALA:N	2.41	0.54
1:B:1414:PHE:CE1	2:D:127:TRP:CE3	2.96	0.54
1:B:1469:ASN:HD22	1:B:1498:ARG:NH2	2.05	0.54
1:B:1535:LYS:HE2	1:B:1535:LYS:CA	2.36	0.54
1:B:1551:GLU:OE1	1:B:1582:VAL:HG22	2.08	0.54
1:C:1225:GLY:C	1:C:1227:LEU:H	2.10	0.54
1:C:1227:LEU:HD23	1:C:1228:ALA:N	2.23	0.54
1:C:1277:VAL:CG2	1:C:1278:VAL:N	2.70	0.54
1:C:1529:LYS:O	1:C:1532:SER:HB3	2.06	0.54
2:E:94:ARG:C	2:E:96:THR:H	2.11	0.54
1:A:1159:MET:O	1:A:1162:LYS:HB3	2.08	0.54
1:A:1282:GLU:O	1:A:1283:LEU:HD13	2.07	0.54
1:A:1317:PHE:HD1	1:A:1339:PHE:HB3	1.71	0.54
1:A:1395:ILE:CD1	1:A:1403:LEU:HD12	2.37	0.54
1:B:1234:LEU:HG	1:B:1235:GLY:N	2.20	0.54
1:B:1376:ILE:HA	1:B:1379:MET:SD	2.48	0.54
1:B:1412:LEU:CD2	1:B:1439:PHE:CE1	2.90	0.54
1:B:1529:LYS:O	1:B:1532:SER:HB3	2.07	0.54
1:C:1414:PHE:CD1	2:E:123:MET:CG	2.91	0.54
1:C:1469:ASN:HD22	1:C:1498:ARG:NH2	2.05	0.54
1:A:1122:LYS:CG	1:A:1123:GLU:H	2.18	0.54
1:A:1162:LYS:O	1:A:1163:LYS:CB	2.55	0.54
1:A:1404:TYR:O	1:A:1407:ALA:N	2.40	0.54
1:B:1086:ILE:HG22	1:B:1087:GLU:N	2.21	0.54
1:B:1403:LEU:C	1:B:1403:LEU:CD1	2.75	0.54
1:B:1605:GLU:OE2	1:C:1579:PRO:HB3	2.07	0.54
1:C:1251:ARG:O	1:C:1252:THR:OG1	2.20	0.54
2:D:27:UNK:C	2:D:29:UNK:H	2.21	0.54
1:A:1290:TYR:CG	1:A:1295:TYR:CD2	2.96	0.54
1:A:1376:ILE:HA	1:A:1379:MET:SD	2.48	0.54
1:A:1469:ASN:HD22	1:A:1498:ARG:NH2	2.05	0.54
1:B:1225:GLY:C	1:B:1227:LEU:H	2.10	0.54
1:B:1274:LEU:CA	1:B:1277:VAL:CG2	2.86	0.54
1:B:1467:LEU:HG	1:B:1471:PHE:CE2	2.43	0.54
1:C:1332:MET:HG3	1:C:1357:LEU:HD13	1.87	0.54
1:C:1596:MET:N	1:C:1597:PRO:CD	2.68	0.54
2:E:93:ASP:HB3	2:E:97:GLN:CG	2.38	0.54
1:A:1274:LEU:O	1:A:1277:VAL:HG22	2.08	0.54
1:A:1408:ILE:HG22	1:A:1412:LEU:CD2	2.28	0.54
1:C:1111:LEU:CD2	1:C:1115:GLN:HG2	2.38	0.54
1:C:1359:ALA:HB3	1:C:1360:GLU:OE1	2.07	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1368:TYR:HD1	1:C:1370:GLU:HG2	1.66	0.54
1:C:1596:MET:HE3	1:C:1597:PRO:HD3	1.90	0.54
1:A:1111:LEU:CD2	1:A:1115:GLN:HG2	2.38	0.54
1:A:1227:LEU:HD23	1:A:1228:ALA:N	2.23	0.54
1:A:1377:THR:CA	1:A:1381:HIS:HD2	2.21	0.54
1:B:1103:ASN:C	1:B:1105:PRO:HD3	2.28	0.54
1:B:1227:LEU:HD23	1:B:1228:ALA:N	2.22	0.54
1:B:1236:GLU:C	1:B:1238:GLN:H	2.12	0.54
1:C:1535:LYS:HE2	1:C:1535:LYS:CA	2.36	0.54
2:D:49:UNK:O	2:D:51:UNK:N	2.40	0.54
2:D:151:ILE:CA	2:D:154:ARG:HD3	2.36	0.54
2:F:127:TRP:HD1	2:F:128:ARG:HG3	1.72	0.54
1:A:1085:LEU:HB3	1:A:1095:ALA:HB1	1.90	0.53
1:A:1087:GLU:C	1:A:1089:ILE:H	2.10	0.53
1:A:1225:GLY:C	1:A:1227:LEU:H	2.10	0.53
1:A:1283:LEU:CD2	1:A:1313:HIS:NE2	2.58	0.53
1:A:1572:THR:OG1	1:A:1599:PHE:CD2	2.56	0.53
1:A:1598:TYR:HD2	2:F:198:UNK:CB	2.20	0.53
1:B:1144:ALA:CB	1:B:1149:ASN:CB	2.84	0.53
1:B:1372:ASP:O	1:B:1376:ILE:CG1	2.49	0.53
1:B:1493:ILE:HG22	1:B:1494:SER:N	2.22	0.53
1:B:1535:LYS:HZ3	1:B:1563:ARG:HH12	1.55	0.53
1:C:1277:VAL:C	1:C:1279:HIS:N	2.53	0.53
1:C:1317:PHE:HD1	1:C:1339:PHE:HB3	1.71	0.53
1:C:1586:ALA:CB	1:C:1594:PHE:CZ	2.90	0.53
2:E:93:ASP:HB3	2:E:97:GLN:HG3	1.90	0.53
1:A:1082:VAL:CG1	1:A:1083:GLN:H	2.15	0.53
1:A:1167:SER:O	1:A:1169:VAL:N	2.37	0.53
1:A:1274:LEU:CA	1:A:1277:VAL:CG2	2.86	0.53
1:B:1111:LEU:CD2	1:B:1115:GLN:HG2	2.38	0.53
1:B:1190:ILE:HD13	1:B:1216:LEU:CG	2.38	0.53
1:B:1319:GLU:HA	1:B:1322:ILE:CD1	2.37	0.53
1:B:1409:GLN:CB	1:B:1413:GLU:HG2	2.25	0.53
1:C:1084:VAL:O	1:C:1086:ILE:O	2.25	0.53
1:C:1144:ALA:O	1:C:1145:ASN:HB2	2.08	0.53
1:C:1274:LEU:O	1:C:1277:VAL:HG22	2.08	0.53
1:C:1376:ILE:HA	1:C:1379:MET:SD	2.48	0.53
1:C:1426:LEU:O	1:C:1427:SER:C	2.45	0.53
1:C:1449:LYS:HB3	1:C:1450:PRO:CD	2.38	0.53
1:C:1493:ILE:HG22	1:C:1494:SER:N	2.23	0.53
1:C:1584:GLU:O	1:C:1585:THR:C	2.46	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:89:ILE:N	2:E:90:ALA:CA	2.70	0.53
1:A:1469:ASN:HD22	1:A:1498:ARG:HH22	1.55	0.53
1:A:1535:LYS:HE2	1:A:1535:LYS:CA	2.36	0.53
1:B:1111:LEU:HD21	1:B:1115:GLN:HG3	1.89	0.53
1:B:1449:LYS:HB3	1:B:1450:PRO:CD	2.38	0.53
1:C:1387:LYS:HB3	1:C:1390:GLN:HB2	1.87	0.53
1:C:1467:LEU:HG	1:C:1471:PHE:CE2	2.43	0.53
2:E:178:UNK:C	2:E:180:UNK:N	2.70	0.53
2:F:166:ALA:O	2:F:167:ASP:CB	2.55	0.53
1:A:1144:ALA:O	1:A:1145:ASN:HB2	2.08	0.53
1:A:1211:TYR:HB2	1:A:1231:LEU:CD1	2.38	0.53
1:A:1360:GLU:O	1:A:1364:LEU:HG	2.09	0.53
1:A:1528:CYS:O	1:A:1532:SER:HB2	2.08	0.53
1:B:1148:GLY:HA2	1:B:1150:TRP:CZ3	2.44	0.53
1:B:1282:GLU:O	1:B:1283:LEU:HD13	2.08	0.53
1:B:1449:LYS:HB3	1:B:1450:PRO:HD3	1.90	0.53
1:B:1572:THR:CG2	1:B:1599:PHE:HD2	2.21	0.53
1:B:1574:TYR:O	1:B:1575:ASP:C	2.46	0.53
1:C:1434:ARG:CD	2:E:4:UNK:O	2.57	0.53
1:A:1368:TYR:O	1:A:1369:GLU:HB2	2.09	0.53
1:A:1412:LEU:CD2	1:A:1439:PHE:CE1	2.90	0.53
1:A:1578:ARG:NH1	1:A:1583:LEU:HD23	2.21	0.53
1:A:1584:GLU:C	1:A:1586:ALA:N	2.62	0.53
1:B:1317:PHE:HD1	1:B:1339:PHE:HB3	1.72	0.53
1:B:1578:ARG:NH1	1:B:1583:LEU:HD23	2.21	0.53
1:C:1608:THR:O	1:C:1612:LYS:HG3	2.09	0.53
1:A:1084:VAL:O	1:A:1089:ILE:HG22	2.09	0.53
1:A:1091:ASN:HD21	1:A:1092:LEU:HG	1.72	0.53
1:B:1092:LEU:C	1:B:1094:ARG:H	2.12	0.53
1:B:1161:ARG:NH2	1:B:1192:GLY:C	2.62	0.53
1:B:1251:ARG:O	1:B:1252:THR:OG1	2.20	0.53
1:B:1330:GLN:CG	1:B:1331:LYS:H	2.22	0.53
1:B:1596:MET:SD	1:B:1597:PRO:CD	2.92	0.53
1:C:1148:GLY:O	1:C:1149:ASN:CB	2.56	0.53
1:C:1247:ALA:O	1:C:1247:ALA:CB	2.56	0.53
1:A:1130:LYS:HZ3	1:A:1155:LYS:CB	2.21	0.53
1:A:1236:GLU:C	1:A:1238:GLN:H	2.12	0.53
1:A:1278:VAL:O	1:A:1278:VAL:HG12	2.09	0.53
1:A:1416:PRO:CG	2:F:130:LYS:CG	2.70	0.53
1:A:1481:ARG:HH11	1:A:1510:ILE:HG13	1.72	0.53
1:B:1122:LYS:CG	1:B:1123:GLU:H	2.19	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1279:HIS:CG	1:B:1280:ALA:N	2.75	0.53
1:B:1601:GLN:HA	1:B:1604:LYS:HD2	1.90	0.53
1:C:1150:TRP:O	1:C:1153:LEU:HB3	2.07	0.53
1:C:1235:GLY:O	1:C:1238:GLN:HB2	2.08	0.53
1:C:1254:LYS:NZ	1:C:1285:GLU:HG2	2.24	0.53
1:C:1404:TYR:O	1:C:1407:ALA:N	2.40	0.53
1:A:1414:PHE:O	1:A:1416:PRO:CD	2.23	0.53
1:A:1578:ARG:HH11	1:A:1582:VAL:HG12	1.74	0.53
1:B:1409:GLN:HA	1:B:1413:GLU:CB	2.35	0.53
1:B:1469:ASN:HD22	1:B:1498:ARG:HH22	1.56	0.53
1:B:1481:ARG:HH12	1:B:1510:ILE:HD12	1.72	0.53
1:C:1572:THR:HG21	1:C:1599:PHE:HD2	1.69	0.53
1:A:1126:ASP:OD1	1:A:1156:TYR:OH	2.27	0.53
1:A:1421:ASP:HA	1:A:1424:MET:SD	2.49	0.53
1:A:1449:LYS:HB3	1:A:1450:PRO:HD3	1.90	0.53
1:A:1572:THR:CB	1:A:1599:PHE:CD2	2.92	0.53
1:B:1150:TRP:HE3	2:D:5:UNK:HA	1.64	0.53
1:B:1359:ALA:HB3	1:B:1360:GLU:OE1	2.08	0.53
1:B:1360:GLU:O	1:B:1364:LEU:HG	2.09	0.53
1:C:1230:THR:O	1:C:1231:LEU:HB3	2.08	0.53
1:C:1535:LYS:HZ3	1:C:1563:ARG:HH12	1.55	0.53
2:E:90:ALA:N	2:E:91:GLN:CB	2.67	0.53
1:A:1596:MET:N	1:A:1597:PRO:CD	2.68	0.53
1:B:1144:ALA:O	1:B:1145:ASN:HB2	2.07	0.53
1:B:1588:ARG:CZ	2:F:192:UNK:CA	2.59	0.53
1:C:1199:GLN:O	1:C:1200:GLN:C	2.44	0.53
1:C:1471:PHE:CA	1:C:1474:GLU:HG2	2.38	0.53
1:A:1535:LYS:HZ2	2:F:181:UNK:CB	2.22	0.52
1:A:1601:GLN:CG	1:A:1604:LYS:HD2	2.39	0.52
1:B:1414:PHE:O	2:D:130:LYS:HD2	2.03	0.52
1:C:1360:GLU:O	1:C:1364:LEU:HG	2.09	0.52
1:C:1620:ARG:CG	1:C:1620:ARG:NH1	2.53	0.52
2:F:180:UNK:O	2:F:181:UNK:C	2.57	0.52
1:A:1085:LEU:HD12	1:A:1085:LEU:O	2.08	0.52
1:A:1103:ASN:O	1:A:1105:PRO:CD	2.56	0.52
1:A:1137:TYR:CB	1:A:1138:MET:CB	2.64	0.52
1:A:1170:GLU:HG2	1:A:1171:THR:N	2.25	0.52
1:A:1471:PHE:CA	1:A:1474:GLU:HG2	2.38	0.52
1:A:1584:GLU:O	1:A:1585:THR:C	2.46	0.52
1:A:1608:THR:O	1:A:1612:LYS:HG3	2.09	0.52
1:B:1085:LEU:CD1	1:B:1125:ILE:HD11	2.35	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1174:ILE:HG21	1:B:1201:VAL:CG2	2.30	0.52
1:B:1354:GLN:HG3	1:B:1354:GLN:O	2.09	0.52
1:B:1419:LEU:HD23	1:B:1447:LEU:CD1	2.40	0.52
1:B:1554:LEU:HA	1:B:1557:PHE:CD2	2.40	0.52
1:C:1170:GLU:HG2	1:C:1171:THR:N	2.24	0.52
1:C:1301:THR:CA	1:C:1304:GLU:HG3	2.32	0.52
2:D:98:GLU:CB	2:D:99:PRO:HD3	2.26	0.52
2:E:155:ILE:O	2:E:156:ALA:HB3	2.09	0.52
2:F:155:ILE:O	2:F:156:ALA:HB3	2.09	0.52
1:A:1136:SER:OG	1:A:1141:VAL:HG11	2.09	0.52
1:A:1167:SER:C	1:A:1168:TYR:CG	2.81	0.52
1:A:1570:LEU:HD23	1:A:1570:LEU:O	2.08	0.52
1:A:1597:PRO:HB3	1:A:1601:GLN:NE2	2.24	0.52
1:B:1274:LEU:O	1:B:1277:VAL:HG22	2.08	0.52
1:B:1420:ASN:OD1	1:B:1447:LEU:O	2.27	0.52
1:B:1445:LEU:HD23	1:B:1448:VAL:HG22	1.91	0.52
1:B:1608:THR:O	1:B:1612:LYS:HG3	2.09	0.52
1:C:1127:SER:CA	1:C:1156:TYR:OH	2.54	0.52
1:C:1345:ILE:H	1:C:1346:PRO:CD	2.18	0.52
1:C:1354:GLN:HG3	1:C:1354:GLN:O	2.09	0.52
1:C:1409:GLN:HA	1:C:1413:GLU:CB	2.35	0.52
1:C:1584:GLU:C	1:C:1586:ALA:N	2.62	0.52
2:D:112:ARG:O	2:D:112:ARG:NH1	2.42	0.52
2:D:155:ILE:O	2:D:156:ALA:HB3	2.09	0.52
2:E:98:GLU:H	2:E:99:PRO:CD	2.21	0.52
2:E:151:ILE:CA	2:E:154:ARG:HD3	2.36	0.52
1:A:1354:GLN:O	1:A:1354:GLN:HG3	2.09	0.52
1:A:1404:TYR:O	1:A:1407:ALA:CB	2.52	0.52
1:A:1420:ASN:OD1	1:A:1447:LEU:O	2.27	0.52
1:B:1090:GLY:HA2	1:B:1094:ARG:NH2	2.24	0.52
1:B:1170:GLU:C	1:B:1172:GLU:N	2.63	0.52
1:B:1254:LYS:NZ	1:B:1285:GLU:HG2	2.25	0.52
1:B:1471:PHE:CA	1:B:1474:GLU:HG2	2.38	0.52
1:B:1583:LEU:O	1:B:1587:TRP:CE2	2.63	0.52
1:B:1588:ARG:HD3	2:F:195:UNK:CB	2.40	0.52
1:C:1082:VAL:HG22	1:C:1107:VAL:HG11	1.90	0.52
1:C:1234:LEU:HD21	1:C:1264:LYS:NZ	2.15	0.52
1:C:1421:ASP:HA	1:C:1424:MET:SD	2.49	0.52
1:C:1525:VAL:O	1:C:1525:VAL:HG22	2.09	0.52
1:C:1601:GLN:HA	1:C:1604:LYS:HD2	1.90	0.52
2:D:102:ILE:O	2:D:106:ARG:HB2	2.09	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1164:ALA:O	1:A:1165:ARG:HB3	2.10	0.52
1:A:1267:ARG:NH2	1:A:1298:GLU:OE1	2.42	0.52
1:A:1510:ILE:N	1:A:1510:ILE:CD1	2.73	0.52
1:A:1525:VAL:HG22	1:A:1525:VAL:O	2.09	0.52
1:A:1587:TRP:HE1	1:A:1594:PHE:HE2	1.46	0.52
1:B:1170:GLU:HG2	1:B:1171:THR:N	2.24	0.52
1:B:1510:ILE:N	1:B:1510:ILE:CD1	2.73	0.52
1:B:1570:LEU:O	1:B:1570:LEU:HD23	2.08	0.52
1:B:1578:ARG:HH11	1:B:1582:VAL:HG12	1.74	0.52
1:B:1584:GLU:O	1:B:1585:THR:C	2.46	0.52
1:B:1624:GLU:O	1:B:1626:ALA:N	2.42	0.52
1:C:1449:LYS:HB3	1:C:1450:PRO:HD3	1.91	0.52
1:C:1570:LEU:O	1:C:1570:LEU:HD23	2.09	0.52
2:D:14:UNK:C	2:D:16:UNK:H	2.21	0.52
2:E:154:ARG:NH1	2:E:154:ARG:CB	2.73	0.52
1:A:1588:ARG:CZ	2:E:192:UNK:HA	2.38	0.52
1:B:1278:VAL:O	1:B:1278:VAL:HG12	2.09	0.52
1:B:1421:ASP:HA	1:B:1424:MET:SD	2.49	0.52
1:C:1240:ALA:C	1:C:1242:ASP:H	2.12	0.52
1:C:1303:LEU:HD12	1:C:1320:LEU:CD1	2.34	0.52
1:C:1613:LEU:O	1:C:1616:SER:HB2	2.10	0.52
2:D:154:ARG:NH1	2:D:154:ARG:CB	2.73	0.52
1:A:1121:VAL:HG12	1:A:1125:ILE:HB	1.91	0.52
1:A:1382:PRO:CG	1:A:1410:PHE:HE1	2.23	0.52
1:B:1167:SER:O	1:B:1168:TYR:CG	2.61	0.52
1:B:1368:TYR:HD1	1:B:1370:GLU:HG2	1.66	0.52
1:C:1154:VAL:HG13	1:C:1176:ALA:HB1	1.90	0.52
1:C:1368:TYR:O	1:C:1369:GLU:HB2	2.09	0.52
1:C:1377:THR:CA	1:C:1381:HIS:HD2	2.21	0.52
1:C:1469:ASN:HD22	1:C:1498:ARG:HH22	1.56	0.52
1:A:1083:GLN:HG2	1:A:1107:VAL:HB	1.91	0.52
1:A:1086:ILE:CB	1:A:1089:ILE:HB	2.40	0.52
1:A:1419:LEU:HD23	1:A:1447:LEU:CD1	2.40	0.52
1:A:1595:ALA:C	1:A:1596:MET:HG3	2.30	0.52
1:B:1345:ILE:H	1:B:1346:PRO:CD	2.18	0.52
1:B:1597:PRO:HB3	1:B:1601:GLN:NE2	2.23	0.52
1:C:1111:LEU:HD22	1:C:1111:LEU:C	2.29	0.52
1:C:1236:GLU:C	1:C:1238:GLN:H	2.12	0.52
1:C:1297:GLU:HA	1:C:1300:ILE:HG12	1.92	0.52
1:C:1353:GLU:OE2	1:C:1361:LEU:HD11	2.10	0.52
2:D:127:TRP:HD1	2:D:128:ARG:HG3	1.72	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:181:UNK:C	2:E:183:UNK:N	2.71	0.52
2:F:154:ARG:NH1	2:F:154:ARG:CB	2.73	0.52
1:A:1235:GLY:O	1:A:1236:GLU:HB2	2.10	0.52
1:A:1292:ASP:O	2:F:97:GLN:CG	2.56	0.52
1:A:1358:TRP:CE3	1:A:1381:HIS:CG	2.98	0.52
1:B:1136:SER:OG	1:B:1141:VAL:HG11	2.09	0.52
1:C:1206:TYR:HB2	1:C:1226:ARG:HG3	1.91	0.52
1:C:1207:ASP:CG	1:C:1207:ASP:O	2.48	0.52
1:C:1279:HIS:CD2	1:C:1283:LEU:CD1	2.93	0.52
1:C:1319:GLU:HA	1:C:1322:ILE:CD1	2.39	0.52
1:C:1403:LEU:C	1:C:1403:LEU:CD1	2.75	0.52
1:C:1419:LEU:HD23	1:C:1447:LEU:CD1	2.40	0.52
1:C:1423:LEU:HD12	1:C:1451:TYR:HB2	1.92	0.52
1:A:1161:ARG:NE	1:A:1170:GLU:HB2	2.25	0.52
1:A:1234:LEU:HG	1:A:1235:GLY:N	2.20	0.52
1:A:1363:PHE:O	1:A:1366:ASP:HB3	2.10	0.52
1:A:1391:PHE:CD2	1:A:1411:TYR:OH	2.54	0.52
1:A:1445:LEU:HD23	1:A:1448:VAL:HG22	1.91	0.52
1:A:1587:TRP:HH2	1:C:1601:GLN:CG	2.19	0.52
1:B:1150:TRP:O	1:B:1153:LEU:HB3	2.10	0.52
1:B:1368:TYR:O	1:B:1369:GLU:HB2	2.09	0.52
1:C:1129:ILE:C	1:C:1129:ILE:HD12	2.31	0.52
1:C:1208:GLU:O	1:C:1209:LYS:HG2	2.10	0.52
1:C:1461:LYS:HG2	1:C:1489:ASN:HD21	1.74	0.52
1:C:1566:PHE:HE2	2:E:181:UNK:HA	1.71	0.52
1:A:1240:ALA:C	1:A:1242:ASP:H	2.12	0.51
1:A:1295:TYR:C	1:A:1296:PHE:CG	2.81	0.51
1:A:1353:GLU:OE2	1:A:1361:LEU:HD11	2.10	0.51
1:B:1082:VAL:CG1	1:B:1083:GLN:H	2.15	0.51
1:B:1177:LEU:O	1:B:1180:THR:OG1	2.24	0.51
1:B:1588:ARG:HH12	2:F:192:UNK:CA	2.17	0.51
1:B:1605:GLU:HG3	1:C:1580:ASP:CG	2.30	0.51
1:C:1151:GLU:O	1:C:1151:GLU:HG2	2.10	0.51
1:C:1358:TRP:CE3	1:C:1381:HIS:CG	2.98	0.51
1:A:1282:GLU:C	1:A:1283:LEU:HD13	2.31	0.51
1:A:1361:LEU:HD21	1:A:1365:TYR:OH	2.10	0.51
1:A:1389:GLY:O	1:A:1392:LYS:N	2.40	0.51
1:A:1445:LEU:O	1:A:1445:LEU:HD23	2.10	0.51
1:A:1549:LEU:O	1:A:1552:GLU:HB2	2.10	0.51
1:A:1583:LEU:O	1:A:1587:TRP:CE2	2.63	0.51
1:B:1079:THR:O	1:B:1079:THR:CG2	2.56	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1190:ILE:HD13	1:B:1216:LEU:HD21	1.92	0.51
1:B:1416:PRO:CG	2:D:130:LYS:CD	2.87	0.51
1:B:1420:ASN:HD21	1:B:1447:LEU:HD13	1.76	0.51
1:C:1122:LYS:O	1:C:1126:ASP:N	2.44	0.51
1:C:1286:LEU:HG	1:C:1286:LEU:O	2.11	0.51
1:C:1420:ASN:OD1	1:C:1447:LEU:O	2.28	0.51
1:C:1578:ARG:HH11	1:C:1582:VAL:HG12	1.74	0.51
2:E:127:TRP:HD1	2:E:128:ARG:HG3	1.72	0.51
1:A:1112:ALA:O	1:A:1116:LEU:HD23	2.10	0.51
1:A:1455:VAL:O	1:A:1456:GLN:HB3	2.11	0.51
1:B:1170:GLU:CG	1:B:1196:ALA:HB2	2.40	0.51
1:B:1244:ALA:HB2	1:B:1275:HIS:ND1	2.15	0.51
1:B:1361:LEU:HD21	1:B:1365:TYR:OH	2.10	0.51
1:B:1525:VAL:HG22	1:B:1525:VAL:O	2.09	0.51
1:C:1122:LYS:HD2	1:C:1149:ASN:OD1	2.10	0.51
1:C:1157:LEU:HD12	1:C:1173:LEU:HD13	1.92	0.51
1:C:1167:SER:CA	1:C:1171:THR:CB	2.88	0.51
1:C:1455:VAL:O	1:C:1456:GLN:HB3	2.11	0.51
1:C:1494:SER:O	1:C:1497:GLN:HB2	2.11	0.51
2:E:154:ARG:HB3	2:E:154:ARG:CZ	2.40	0.51
2:F:103:ARG:HG3	2:F:103:ARG:O	2.10	0.51
2:F:124:GLU:HA	2:F:127:TRP:CE2	2.45	0.51
1:A:1170:GLU:C	1:A:1172:GLU:N	2.63	0.51
1:A:1286:LEU:HG	1:A:1286:LEU:O	2.11	0.51
1:A:1412:LEU:HA	1:A:1419:LEU:CD2	2.33	0.51
1:B:1122:LYS:O	1:B:1126:ASP:N	2.44	0.51
1:B:1377:THR:CA	1:B:1381:HIS:HD2	2.21	0.51
2:D:53:UNK:C	2:D:55:UNK:N	2.72	0.51
2:D:154:ARG:HB3	2:D:154:ARG:CZ	2.40	0.51
2:E:152:ASN:O	2:E:153:ASN:CB	2.59	0.51
1:A:1108:TRP:HE1	1:A:1131:ALA:CB	2.23	0.51
1:A:1145:ASN:ND2	1:A:1153:LEU:HD21	2.26	0.51
1:A:1258:PHE:CG	1:A:1289:TYR:CD2	2.89	0.51
1:A:1274:LEU:O	1:A:1278:VAL:HG23	2.10	0.51
1:A:1613:LEU:O	1:A:1616:SER:HB2	2.10	0.51
1:B:1420:ASN:ND2	1:B:1447:LEU:HD13	2.26	0.51
1:B:1595:ALA:C	1:B:1596:MET:HG3	2.30	0.51
1:C:1274:LEU:HA	1:C:1277:VAL:HG22	1.90	0.51
1:C:1578:ARG:NH1	1:C:1583:LEU:HD23	2.21	0.51
2:D:51:UNK:O	2:D:53:UNK:N	2.44	0.51
2:F:188:UNK:O	2:F:191:UNK:N	2.43	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1151:GLU:O	1:A:1151:GLU:HG2	2.10	0.51
1:A:1159:MET:CE	1:A:1163:LYS:HZ1	2.23	0.51
1:A:1548:GLU:H	1:A:1548:GLU:CD	2.14	0.51
1:B:1412:LEU:HA	1:B:1419:LEU:CD2	2.33	0.51
1:B:1445:LEU:O	1:B:1445:LEU:HD23	2.11	0.51
1:B:1584:GLU:C	1:B:1586:ALA:N	2.62	0.51
2:D:124:GLU:HA	2:D:127:TRP:CE2	2.45	0.51
1:A:1206:TYR:CE2	1:A:1226:ARG:HG3	2.46	0.51
1:A:1232:VAL:CG2	1:A:1233:HIS:H	2.09	0.51
1:B:1083:GLN:O	1:B:1085:LEU:N	2.44	0.51
1:B:1401:VAL:HG22	1:B:1429:ARG:NH2	2.26	0.51
1:B:1494:SER:O	1:B:1497:GLN:HB2	2.11	0.51
1:B:1598:TYR:CE2	2:D:200:UNK:C	2.79	0.51
1:C:1130:LYS:HD2	1:C:1156:TYR:CE1	2.46	0.51
1:C:1233:HIS:O	1:C:1234:LEU:O	2.29	0.51
1:C:1401:VAL:HG22	1:C:1429:ARG:NH2	2.26	0.51
1:C:1586:ALA:HB2	1:C:1594:PHE:CE1	2.46	0.51
2:D:188:UNK:C	2:D:190:UNK:H2	2.24	0.51
1:A:1092:LEU:C	1:A:1094:ARG:H	2.12	0.51
1:A:1395:ILE:HD11	1:A:1403:LEU:HD12	1.93	0.51
1:A:1554:LEU:HA	1:A:1557:PHE:CD2	2.40	0.51
1:B:1363:PHE:O	1:B:1366:ASP:HB3	2.11	0.51
1:B:1578:ARG:HD3	1:B:1582:VAL:CB	2.40	0.51
1:C:1082:VAL:CG1	1:C:1083:GLN:N	2.69	0.51
1:C:1420:ASN:HD21	1:C:1447:LEU:HD13	1.76	0.51
1:C:1578:ARG:HD3	1:C:1582:VAL:CB	2.40	0.51
1:C:1583:LEU:O	1:C:1587:TRP:CE2	2.63	0.51
1:A:1499:LEU:CB	1:A:1511:ALA:HB2	2.36	0.51
1:B:1151:GLU:O	1:B:1151:GLU:HG2	2.11	0.51
1:B:1235:GLY:O	1:B:1236:GLU:HB2	2.10	0.51
1:B:1240:ALA:C	1:B:1242:ASP:H	2.12	0.51
1:B:1382:PRO:CG	1:B:1410:PHE:HE1	2.23	0.51
1:B:1549:LEU:O	1:B:1552:GLU:HB2	2.10	0.51
1:C:1144:ALA:CB	1:C:1153:LEU:HD13	2.39	0.51
1:C:1145:ASN:HD22	1:C:1150:TRP:HE1	1.58	0.51
1:C:1231:LEU:O	1:C:1231:LEU:HD12	2.11	0.51
1:C:1411:TYR:HA	1:C:1415:LYS:HB2	1.89	0.51
1:C:1445:LEU:HD23	1:C:1448:VAL:HG22	1.92	0.51
1:C:1549:LEU:O	1:C:1552:GLU:HB2	2.10	0.51
1:C:1592:MET:HG2	1:C:1593:ASP:H	1.76	0.51
1:C:1609:LYS:O	1:C:1612:LYS:HB2	2.11	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:91:GLN:OE1	2:F:95:LEU:HG	2.11	0.51
2:F:98:GLU:C	2:F:102:ILE:HG23	2.31	0.51
2:F:129:GLU:HB2	2:F:132:LYS:NZ	2.24	0.51
1:A:1122:LYS:O	1:A:1126:ASP:N	2.44	0.51
1:A:1161:ARG:HH22	1:A:1174:ILE:HG13	1.76	0.51
1:A:1206:TYR:HD1	1:A:1226:ARG:O	1.92	0.51
1:A:1343:VAL:HG22	1:A:1344:ASN:N	2.26	0.51
1:A:1420:ASN:ND2	1:A:1447:LEU:HD13	2.26	0.51
1:A:1461:LYS:HG2	1:A:1489:ASN:HD21	1.75	0.51
1:B:1108:TRP:CD1	1:B:1131:ALA:HB3	2.46	0.51
1:B:1272:CYS:HA	1:B:1275:HIS:CB	2.41	0.51
1:B:1274:LEU:O	1:B:1278:VAL:HG23	2.10	0.51
1:B:1353:GLU:OE2	1:B:1361:LEU:HD11	2.10	0.51
1:B:1461:LYS:HG2	1:B:1489:ASN:HD21	1.75	0.51
1:B:1548:GLU:H	1:B:1548:GLU:CD	2.14	0.51
1:C:1136:SER:HB2	1:C:1140:VAL:CG2	2.41	0.51
1:C:1343:VAL:HG22	1:C:1344:ASN:N	2.26	0.51
1:C:1434:ARG:CZ	2:E:5:UNK:HA	2.36	0.51
2:D:133:LYS:HA	2:D:133:LYS:CE	2.41	0.51
2:D:203:UNK:O	2:D:204:UNK:C	2.59	0.51
2:F:162:GLN:O	2:F:163:GLN:C	2.48	0.51
1:A:1261:VAL:CG1	1:A:1295:TYR:CE1	2.94	0.50
1:B:1105:PRO:O	1:B:1106:ALA:HB2	2.11	0.50
1:B:1189:PHE:O	1:B:1217:LEU:HD23	2.10	0.50
1:B:1273:GLY:C	1:B:1275:HIS:N	2.64	0.50
1:C:1218:TYR:CE2	1:C:1223:ASN:O	2.64	0.50
1:C:1333:ARG:HB2	1:C:1360:GLU:HG3	1.91	0.50
1:C:1361:LEU:HD21	1:C:1365:TYR:OH	2.11	0.50
1:C:1395:ILE:HD11	1:C:1403:LEU:HD12	1.93	0.50
1:C:1412:LEU:HA	1:C:1419:LEU:CD2	2.33	0.50
2:D:129:GLU:HB2	2:D:132:LYS:NZ	2.24	0.50
2:E:133:LYS:HA	2:E:133:LYS:CE	2.41	0.50
2:E:203:UNK:C	2:E:203:UNK:CB	2.79	0.50
2:F:154:ARG:HB3	2:F:154:ARG:CZ	2.40	0.50
1:A:1079:THR:O	1:A:1079:THR:CG2	2.56	0.50
1:A:1125:ILE:O	1:A:1129:ILE:HD13	2.10	0.50
1:A:1234:LEU:O	1:A:1236:GLU:OE1	2.29	0.50
1:A:1578:ARG:HD3	1:A:1582:VAL:CB	2.41	0.50
1:A:1578:ARG:NE	1:A:1583:LEU:HD23	2.24	0.50
1:B:1159:MET:SD	1:B:1162:LYS:HD3	2.51	0.50
1:B:1168:TYR:O	1:B:1172:GLU:CG	2.60	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1198:ILE:HA	1:B:1201:VAL:HG23	1.92	0.50
1:B:1395:ILE:HD11	1:B:1403:LEU:HD12	1.93	0.50
1:B:1499:LEU:CB	1:B:1511:ALA:HB2	2.36	0.50
1:B:1533:LEU:C	1:B:1535:LYS:N	2.65	0.50
1:C:1272:CYS:HA	1:C:1275:HIS:CB	2.41	0.50
1:C:1332:MET:O	1:C:1336:LEU:HG	2.11	0.50
1:C:1469:ASN:HD21	1:C:1498:ARG:HH12	1.59	0.50
1:C:1597:PRO:O	1:C:1598:TYR:CD2	2.64	0.50
1:A:1089:ILE:HD11	2:F:13:UNK:CB	2.42	0.50
1:A:1157:LEU:HB3	1:A:1173:LEU:HD11	1.92	0.50
1:A:1197:HIS:C	1:A:1199:GLN:N	2.64	0.50
1:B:1112:ALA:O	1:B:1116:LEU:HD23	2.10	0.50
1:B:1343:VAL:HG22	1:B:1344:ASN:N	2.26	0.50
1:C:1167:SER:CA	1:C:1171:THR:HB	2.41	0.50
1:C:1269:ALA:HB3	1:C:1295:TYR:OH	2.12	0.50
2:D:127:TRP:CD1	2:D:128:ARG:N	2.80	0.50
2:F:118:ALA:HA	2:F:121:LYS:HZ2	1.73	0.50
1:B:1116:LEU:HD11	1:B:1122:LYS:CD	2.41	0.50
1:B:1336:LEU:CD1	1:B:1360:GLU:HB3	2.41	0.50
1:C:1387:LYS:HB2	1:C:1390:GLN:CG	2.41	0.50
1:C:1420:ASN:ND2	1:C:1447:LEU:HD13	2.26	0.50
2:E:124:GLU:HA	2:E:127:TRP:CE2	2.46	0.50
2:F:94:ARG:NE	2:F:98:GLU:OE2	2.39	0.50
1:A:1189:PHE:O	1:A:1217:LEU:HD23	2.11	0.50
1:A:1190:ILE:HD13	1:A:1216:LEU:HD21	1.94	0.50
1:A:1273:GLY:C	1:A:1275:HIS:N	2.65	0.50
1:A:1301:THR:CA	1:A:1304:GLU:HG3	2.32	0.50
1:A:1336:LEU:CD1	1:A:1360:GLU:HB3	2.41	0.50
1:B:1282:GLU:C	1:B:1283:LEU:HD13	2.31	0.50
1:B:1286:LEU:O	1:B:1286:LEU:HG	2.10	0.50
1:B:1358:TRP:CE3	1:B:1381:HIS:CG	2.98	0.50
1:B:1469:ASN:HD21	1:B:1498:ARG:HH12	1.59	0.50
1:B:1469:ASN:ND2	1:B:1498:ARG:HH22	2.09	0.50
1:C:1247:ALA:C	1:C:1247:ALA:CB	2.74	0.50
1:C:1270:GLN:HG3	1:C:1298:GLU:CG	2.42	0.50
1:C:1317:PHE:CD1	1:C:1339:PHE:HB3	2.47	0.50
1:C:1345:ILE:N	1:C:1346:PRO:HD2	2.20	0.50
1:C:1445:LEU:O	1:C:1445:LEU:HD23	2.11	0.50
1:C:1513:TYR:HA	1:C:1516:LYS:HE2	1.93	0.50
2:E:118:ALA:HA	2:E:121:LYS:HZ2	1.76	0.50
2:F:127:TRP:CD1	2:F:128:ARG:N	2.80	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1125:ILE:O	1:A:1129:ILE:CD1	2.60	0.50
1:A:1161:ARG:HG2	1:A:1173:LEU:HD23	1.91	0.50
1:B:1165:ARG:O	1:B:1165:ARG:CG	2.59	0.50
1:B:1234:LEU:O	1:B:1236:GLU:OE1	2.29	0.50
1:B:1402:GLU:HA	1:B:1405:TYR:CD2	2.47	0.50
1:B:1554:LEU:HD23	1:B:1582:VAL:HG12	1.93	0.50
1:B:1613:LEU:O	1:B:1616:SER:HB2	2.11	0.50
1:C:1112:ALA:O	1:C:1116:LEU:HD23	2.10	0.50
1:C:1414:PHE:CE1	2:E:123:MET:CB	2.82	0.50
1:C:1514:LEU:C	1:C:1514:LEU:CD2	2.80	0.50
1:C:1586:ALA:O	1:C:1590:ASN:ND2	2.44	0.50
1:C:1602:VAL:HG22	2:E:203:UNK:C	2.42	0.50
2:E:118:ALA:CA	2:E:121:LYS:HE3	2.41	0.50
2:F:192:UNK:O	2:F:195:UNK:CB	2.60	0.50
1:A:1130:LYS:HG2	1:A:1156:TYR:CE2	2.46	0.50
1:A:1272:CYS:HA	1:A:1275:HIS:CB	2.41	0.50
1:A:1384:ASP:OD1	2:F:115:GLU:OE1	2.30	0.50
1:A:1420:ASN:HD21	1:A:1447:LEU:HD13	1.76	0.50
1:A:1494:SER:O	1:A:1497:GLN:HB2	2.11	0.50
1:A:1533:LEU:C	1:A:1535:LYS:N	2.65	0.50
1:B:1083:GLN:HE21	1:B:1106:ALA:C	2.14	0.50
1:B:1088:HIS:N	1:B:1089:ILE:HD12	2.26	0.50
1:B:1332:MET:O	1:B:1336:LEU:HG	2.11	0.50
1:B:1428:PRO:O	1:B:1429:ARG:HB2	2.11	0.50
1:C:1122:LYS:NZ	1:C:1147:SER:CB	2.68	0.50
1:C:1170:GLU:C	1:C:1172:GLU:N	2.63	0.50
1:C:1363:PHE:O	1:C:1366:ASP:HB3	2.11	0.50
1:C:1597:PRO:O	1:C:1598:TYR:CG	2.65	0.50
2:D:152:ASN:O	2:D:153:ASN:CB	2.58	0.50
1:A:1214:ALA:O	1:A:1218:TYR:CB	2.57	0.50
1:A:1361:LEU:HD21	1:A:1365:TYR:HH	1.76	0.50
1:A:1401:VAL:HG22	1:A:1429:ARG:NH2	2.26	0.50
1:B:1513:TYR:HA	1:B:1516:LYS:HE2	1.94	0.50
1:C:1149:ASN:N	1:C:1149:ASN:ND2	2.60	0.50
1:C:1382:PRO:CG	1:C:1410:PHE:HE1	2.23	0.50
1:C:1422:LEU:O	1:C:1422:LEU:HD22	2.12	0.50
1:C:1469:ASN:ND2	1:C:1498:ARG:HH22	2.09	0.50
1:C:1533:LEU:C	1:C:1535:LYS:N	2.64	0.50
1:A:1148:GLY:HA2	1:A:1150:TRP:CH2	2.47	0.50
1:A:1448:VAL:CA	1:A:1451:TYR:HB3	2.42	0.50
1:A:1469:ASN:ND2	1:A:1498:ARG:HH22	2.09	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1580:ASP:OD1	1:C:1605:GLU:HB2	2.12	0.50
1:B:1414:PHE:C	1:B:1416:PRO:HD3	2.21	0.50
1:B:1551:GLU:OE1	1:B:1581:VAL:HG12	2.11	0.50
1:C:1194:ASN:N	1:C:1194:ASN:ND2	2.59	0.50
1:C:1273:GLY:C	1:C:1275:HIS:N	2.65	0.50
1:C:1377:THR:O	1:C:1381:HIS:HB2	2.12	0.50
1:A:1130:LYS:HZ1	1:A:1155:LYS:HG2	1.77	0.49
1:A:1208:GLU:OE1	1:A:1208:GLU:HA	2.12	0.49
1:A:1227:LEU:HD23	1:A:1227:LEU:C	2.33	0.49
1:A:1375:ILE:HA	1:A:1378:MET:HE3	1.94	0.49
1:A:1402:GLU:HA	1:A:1405:TYR:CD2	2.47	0.49
1:A:1423:LEU:HD12	1:A:1451:TYR:HB2	1.93	0.49
1:A:1435:ALA:O	1:A:1439:PHE:CD2	2.65	0.49
1:A:1587:TRP:O	1:A:1589:HIS:O	2.30	0.49
1:A:1609:LYS:O	1:A:1612:LYS:HB2	2.12	0.49
1:B:1125:ILE:O	1:B:1129:ILE:CD1	2.60	0.49
1:B:1125:ILE:O	1:B:1129:ILE:HD13	2.10	0.49
1:B:1455:VAL:O	1:B:1456:GLN:HB3	2.11	0.49
1:B:1496:ALA:HB2	1:B:1514:LEU:HD13	1.94	0.49
1:C:1167:SER:CA	1:C:1171:THR:OG1	2.60	0.49
1:C:1330:GLN:CG	1:C:1331:LYS:H	2.22	0.49
2:D:178:UNK:O	2:D:181:UNK:CB	2.60	0.49
1:A:1256:VAL:C	1:A:1289:TYR:HH	2.16	0.49
1:A:1317:PHE:CD1	1:A:1339:PHE:HB3	2.47	0.49
1:A:1513:TYR:HA	1:A:1516:LYS:HE2	1.94	0.49
1:A:1514:LEU:C	1:A:1514:LEU:CD2	2.81	0.49
1:A:1593:ASP:O	1:A:1594:PHE:HB2	2.11	0.49
1:B:1211:TYR:HB2	1:B:1231:LEU:CD1	2.42	0.49
1:B:1389:GLY:O	1:B:1392:LYS:N	2.40	0.49
1:B:1448:VAL:CA	1:B:1451:TYR:HB3	2.42	0.49
1:B:1513:TYR:HD1	1:B:1516:LYS:CE	2.23	0.49
1:C:1082:VAL:CG2	1:C:1107:VAL:HG11	2.42	0.49
1:C:1149:ASN:O	1:C:1153:LEU:HB3	2.12	0.49
1:C:1301:THR:O	1:C:1304:GLU:HB2	2.12	0.49
1:C:1600:ILE:HA	1:C:1603:MET:CE	2.42	0.49
1:A:1111:LEU:CD1	1:A:1125:ILE:CG1	2.77	0.49
1:A:1234:LEU:CG	1:A:1235:GLY:N	2.74	0.49
1:A:1258:PHE:HB2	1:A:1289:TYR:CD1	2.40	0.49
1:A:1295:TYR:O	1:A:1296:PHE:CD2	2.65	0.49
1:A:1330:GLN:CG	1:A:1331:LYS:H	2.22	0.49
1:A:1598:TYR:CE2	2:F:198:UNK:CB	2.95	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1246:LYS:O	1:B:1247:ALA:HB3	2.09	0.49
1:B:1377:THR:O	1:B:1381:HIS:HB2	2.12	0.49
1:B:1609:LYS:O	1:B:1612:LYS:HB2	2.12	0.49
2:F:98:GLU:O	2:F:102:ILE:N	2.45	0.49
1:A:1332:MET:O	1:A:1336:LEU:HG	2.11	0.49
1:A:1345:ILE:N	1:A:1346:PRO:HD2	2.20	0.49
1:B:1144:ALA:O	1:B:1153:LEU:HD22	2.12	0.49
1:B:1408:ILE:CD1	1:B:1422:LEU:HD11	2.42	0.49
1:B:1416:PRO:HG2	2:D:130:LYS:HG3	1.89	0.49
1:B:1423:LEU:HD12	1:B:1451:TYR:HB2	1.93	0.49
1:C:1188:GLU:C	1:C:1190:ILE:N	2.66	0.49
1:C:1197:HIS:O	1:C:1199:GLN:N	2.45	0.49
1:C:1402:GLU:HA	1:C:1405:TYR:CD2	2.47	0.49
1:C:1435:ALA:O	1:C:1439:PHE:CD2	2.65	0.49
1:C:1578:ARG:CD	1:C:1582:VAL:HB	2.43	0.49
2:D:155:ILE:O	2:D:156:ALA:CB	2.60	0.49
2:E:112:ARG:HD3	2:E:113:LEU:N	2.27	0.49
2:E:127:TRP:CD1	2:E:128:ARG:N	2.80	0.49
2:F:167:ASP:O	2:F:168:ILE:O	2.31	0.49
1:A:1137:TYR:CA	1:A:1138:MET:HB2	2.38	0.49
1:A:1168:TYR:O	1:A:1172:GLU:CG	2.60	0.49
1:A:1257:CYS:SG	1:A:1290:TYR:CZ	3.05	0.49
1:A:1263:GLY:O	1:A:1264:LYS:CB	2.61	0.49
1:A:1358:TRP:CE2	1:A:1381:HIS:CG	3.01	0.49
1:A:1596:MET:H	1:A:1597:PRO:CD	2.12	0.49
1:B:1108:TRP:HE1	1:B:1131:ALA:CB	2.25	0.49
1:B:1263:GLY:O	1:B:1264:LYS:CB	2.60	0.49
1:C:1168:TYR:O	1:C:1172:GLU:CG	2.59	0.49
1:C:1274:LEU:O	1:C:1278:VAL:HG23	2.12	0.49
1:C:1336:LEU:CD1	1:C:1360:GLU:HB3	2.41	0.49
2:F:95:LEU:O	2:F:99:PRO:HD2	2.13	0.49
2:F:131:ALA:HA	2:F:134:ASP:OD2	2.13	0.49
1:A:1253:TRP:CE3	1:A:1276:ILE:HB	2.48	0.49
1:A:1279:HIS:CD2	1:A:1282:GLU:CB	2.95	0.49
1:A:1422:LEU:O	1:A:1422:LEU:HD22	2.13	0.49
1:A:1496:ALA:HB2	1:A:1514:LEU:HD13	1.95	0.49
1:B:1170:GLU:OE2	1:B:1195:ASN:O	2.30	0.49
1:B:1208:GLU:OE1	1:B:1208:GLU:HA	2.12	0.49
1:C:1132:ASP:O	1:C:1163:LYS:HE2	2.12	0.49
1:C:1145:ASN:ND2	1:C:1150:TRP:HE1	2.09	0.49
1:C:1358:TRP:CE2	1:C:1381:HIS:CG	3.01	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1428:PRO:O	1:C:1429:ARG:HB2	2.11	0.49
1:C:1596:MET:O	1:C:1598:TYR:CD2	2.65	0.49
2:F:99:PRO:HA	2:F:102:ILE:HG12	1.93	0.49
1:A:1273:GLY:O	1:A:1277:VAL:HG13	2.12	0.49
1:A:1301:THR:O	1:A:1304:GLU:HB2	2.12	0.49
1:A:1408:ILE:CD1	1:A:1422:LEU:HD11	2.42	0.49
1:A:1513:TYR:HA	1:A:1516:LYS:HG2	1.95	0.49
1:A:1592:MET:CG	1:A:1593:ASP:N	2.75	0.49
1:B:1081:ALA:O	1:B:1098:PHE:CD1	2.65	0.49
1:B:1227:LEU:HD23	1:B:1227:LEU:C	2.33	0.49
1:C:1389:GLY:O	1:C:1392:LYS:HB2	2.13	0.49
1:C:1448:VAL:CA	1:C:1451:TYR:HB3	2.42	0.49
1:C:1513:TYR:HD1	1:C:1516:LYS:CE	2.23	0.49
2:E:131:ALA:HA	2:E:134:ASP:OD2	2.13	0.49
2:F:154:ARG:CB	2:F:154:ARG:HH11	2.26	0.49
1:A:1372:ASP:O	1:A:1376:ILE:CG1	2.49	0.49
1:A:1414:PHE:HD1	2:F:127:TRP:CB	2.25	0.49
1:A:1600:ILE:HA	1:A:1603:MET:CE	2.43	0.49
1:B:1137:TYR:CG	1:B:1138:MET:HB2	2.42	0.49
1:B:1422:LEU:O	1:B:1422:LEU:HD22	2.13	0.49
1:B:1435:ALA:O	1:B:1439:PHE:CD2	2.65	0.49
1:C:1227:LEU:HD23	1:C:1227:LEU:C	2.32	0.49
1:C:1261:VAL:HG11	1:C:1294:GLY:O	2.13	0.49
1:C:1361:LEU:HD22	1:C:1365:TYR:HE2	1.72	0.49
1:C:1601:GLN:CG	1:C:1604:LYS:HD2	2.40	0.49
1:A:1188:GLU:C	1:A:1190:ILE:N	2.66	0.49
1:A:1292:ASP:HA	2:F:97:GLN:CG	2.42	0.49
1:A:1377:THR:O	1:A:1381:HIS:HB2	2.12	0.49
1:B:1150:TRP:HA	1:B:1153:LEU:HB3	1.94	0.49
1:B:1167:SER:C	1:B:1169:VAL:N	2.62	0.49
1:B:1601:GLN:CG	1:B:1604:LYS:HD2	2.39	0.49
1:C:1154:VAL:HG11	1:C:1177:LEU:HA	1.94	0.49
1:C:1496:ALA:HB2	1:C:1514:LEU:HD13	1.95	0.49
2:D:154:ARG:CB	2:D:154:ARG:HH11	2.26	0.49
2:F:182:UNK:O	2:F:183:UNK:C	2.61	0.49
1:A:1198:ILE:O	1:A:1198:ILE:HG22	2.12	0.49
1:A:1277:VAL:CG2	1:A:1278:VAL:N	2.70	0.49
1:A:1428:PRO:O	1:A:1429:ARG:HB2	2.12	0.49
1:A:1580:ASP:OD1	1:C:1605:GLU:CB	2.61	0.49
1:B:1137:TYR:CA	1:B:1138:MET:HB2	2.38	0.49
1:C:1166:GLU:HB2	1:C:1168:TYR:CZ	2.48	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1231:LEU:O	1:C:1232:VAL:O	2.31	0.49
1:C:1405:TYR:CE2	1:C:1434:ARG:NH1	2.81	0.49
2:E:105:TRP:CA	2:E:108:GLU:HG3	2.41	0.49
1:B:1130:LYS:O	1:B:1133:ASP:O	2.31	0.48
1:B:1193:PRO:HG2	1:B:1194:ASN:H	1.78	0.48
1:B:1234:LEU:C	1:B:1236:GLU:H	2.10	0.48
1:B:1578:ARG:NE	1:B:1583:LEU:HD23	2.24	0.48
1:C:1182:ARG:C	1:C:1183:LEU:HD23	2.33	0.48
1:C:1278:VAL:O	1:C:1278:VAL:CG1	2.54	0.48
1:C:1572:THR:CG2	1:C:1599:PHE:CD2	2.94	0.48
1:C:1597:PRO:HB3	1:C:1601:GLN:NE2	2.23	0.48
2:D:125:GLN:CD	2:D:125:GLN:C	2.72	0.48
1:A:1414:PHE:O	2:F:130:LYS:HD3	2.12	0.48
1:A:1587:TRP:C	1:A:1589:HIS:N	2.66	0.48
1:B:1203:ASP:HB3	2:D:60:UNK:CB	2.43	0.48
1:B:1273:GLY:O	1:B:1277:VAL:HG13	2.12	0.48
1:B:1335:HIS:ND1	1:B:1335:HIS:C	2.66	0.48
1:B:1389:GLY:O	1:B:1392:LYS:HB2	2.13	0.48
1:B:1513:TYR:HA	1:B:1516:LYS:HG2	1.95	0.48
1:C:1273:GLY:O	1:C:1277:VAL:HG13	2.13	0.48
2:D:131:ALA:HA	2:D:134:ASP:OD2	2.13	0.48
2:E:114:GLN:CG	2:E:115:GLU:N	2.26	0.48
2:E:154:ARG:CB	2:E:154:ARG:HH11	2.26	0.48
2:E:180:UNK:O	2:E:181:UNK:O	2.30	0.48
2:F:155:ILE:O	2:F:156:ALA:CB	2.61	0.48
1:B:1111:LEU:O	1:B:1115:GLN:HB2	2.14	0.48
1:B:1272:CYS:O	1:B:1276:ILE:HG23	2.14	0.48
1:B:1624:GLU:C	1:B:1626:ALA:N	2.64	0.48
1:C:1620:ARG:CB	1:C:1620:ARG:NH1	2.54	0.48
2:E:155:ILE:O	2:E:156:ALA:CB	2.61	0.48
1:A:1345:ILE:H	1:A:1346:PRO:CD	2.18	0.48
1:A:1469:ASN:HD21	1:A:1498:ARG:HH12	1.59	0.48
1:B:1167:SER:C	1:B:1168:TYR:CG	2.85	0.48
1:B:1193:PRO:O	1:B:1194:ASN:O	2.30	0.48
1:B:1317:PHE:CD1	1:B:1339:PHE:HB3	2.47	0.48
1:B:1461:LYS:HG2	1:B:1489:ASN:ND2	2.29	0.48
1:C:1198:ILE:O	1:C:1201:VAL:CG2	2.61	0.48
1:C:1335:HIS:C	1:C:1335:HIS:ND1	2.66	0.48
1:C:1461:LYS:HG2	1:C:1489:ASN:ND2	2.28	0.48
1:C:1577:LEU:N	1:C:1577:LEU:HD23	2.29	0.48
1:C:1578:ARG:NE	1:C:1583:LEU:HD23	2.24	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1586:ALA:HB1	1:C:1590:ASN:ND2	2.17	0.48
2:D:102:ILE:O	2:D:106:ARG:CB	2.61	0.48
2:F:125:GLN:C	2:F:125:GLN:CD	2.72	0.48
1:A:1295:TYR:O	1:A:1296:PHE:CG	2.67	0.48
1:A:1414:PHE:C	1:A:1416:PRO:HD3	2.22	0.48
1:B:1161:ARG:HE	1:B:1173:LEU:HD23	1.76	0.48
1:B:1188:GLU:C	1:B:1190:ILE:N	2.66	0.48
1:B:1358:TRP:CE2	1:B:1381:HIS:CG	3.01	0.48
1:B:1452:LEU:HD13	1:B:1467:LEU:CD1	2.43	0.48
1:B:1577:LEU:HD23	1:B:1577:LEU:N	2.29	0.48
1:B:1588:ARG:NE	2:F:190:UNK:O	2.47	0.48
1:C:1214:ALA:O	1:C:1218:TYR:CB	2.57	0.48
1:C:1569:CYS:O	1:C:1572:THR:OG1	2.32	0.48
1:C:1595:ALA:C	1:C:1596:MET:HG3	2.32	0.48
1:A:1083:GLN:HE21	1:A:1106:ALA:CB	2.27	0.48
1:A:1121:VAL:CG1	1:A:1125:ILE:HB	2.43	0.48
1:A:1150:TRP:HA	1:A:1153:LEU:HB3	1.96	0.48
1:A:1234:LEU:C	1:A:1236:GLU:H	2.10	0.48
1:A:1389:GLY:O	1:A:1392:LYS:HB2	2.13	0.48
1:A:1572:THR:CG2	1:A:1599:PHE:HD2	2.26	0.48
1:B:1254:LYS:HD2	1:B:1285:GLU:CG	2.43	0.48
1:B:1284:GLU:OE2	1:B:1284:GLU:C	2.52	0.48
1:B:1301:THR:O	1:B:1304:GLU:HB2	2.12	0.48
1:B:1569:CYS:O	1:B:1572:THR:OG1	2.32	0.48
1:C:1168:TYR:CA	1:C:1172:GLU:OE2	2.61	0.48
1:C:1175:PHE:CD1	1:C:1200:GLN:HB3	2.48	0.48
2:F:133:LYS:HA	2:F:133:LYS:CE	2.41	0.48
1:B:1129:ILE:HG13	1:B:1130:LYS:N	2.28	0.48
1:B:1598:TYR:CZ	2:D:201:UNK:CB	2.97	0.48
1:C:1253:TRP:CE3	1:C:1276:ILE:HB	2.48	0.48
1:C:1279:HIS:CD2	1:C:1280:ALA:N	2.81	0.48
1:C:1329:PRO:O	1:C:1332:MET:HB3	2.14	0.48
1:C:1452:LEU:HD13	1:C:1467:LEU:CD1	2.43	0.48
1:C:1513:TYR:HA	1:C:1516:LYS:HG2	1.96	0.48
2:E:129:GLU:HB2	2:E:132:LYS:NZ	2.24	0.48
2:F:112:ARG:HD3	2:F:113:LEU:N	2.28	0.48
1:A:1167:SER:O	1:A:1168:TYR:CE1	2.66	0.48
1:A:1551:GLU:HG2	1:A:1582:VAL:CG2	2.35	0.48
1:B:1230:THR:O	1:B:1231:LEU:CB	2.61	0.48
1:C:1365:TYR:CB	1:C:1374:ALA:HB2	2.44	0.48
1:C:1416:PRO:O	1:C:1419:LEU:HB3	2.14	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1592:MET:CG	1:C:1593:ASP:N	2.73	0.48
1:A:1111:LEU:O	1:A:1115:GLN:HB2	2.14	0.48
1:A:1446:PRO:O	1:A:1449:LYS:HB2	2.14	0.48
1:A:1452:LEU:HD13	1:A:1467:LEU:CD1	2.43	0.48
1:B:1301:THR:CA	1:B:1304:GLU:HG3	2.32	0.48
1:B:1329:PRO:O	1:B:1332:MET:HB3	2.14	0.48
2:D:124:GLU:OE1	2:D:128:ARG:CZ	2.62	0.48
1:A:1149:ASN:O	1:A:1153:LEU:HB3	2.13	0.48
1:A:1395:ILE:HG23	1:A:1396:THR:N	2.29	0.48
1:B:1421:ASP:O	1:B:1424:MET:HB2	2.14	0.48
1:C:1133:ASP:HB2	1:C:1134:PRO:CD	2.44	0.48
1:C:1190:ILE:HG12	1:C:1216:LEU:HD11	1.94	0.48
1:C:1284:GLU:C	1:C:1284:GLU:OE2	2.52	0.48
1:C:1446:PRO:O	1:C:1449:LYS:HB2	2.14	0.48
1:C:1596:MET:H	1:C:1597:PRO:CD	2.09	0.48
2:F:124:GLU:OE1	2:F:128:ARG:CZ	2.62	0.48
1:A:1167:SER:HB3	1:A:1168:TYR:HD1	1.78	0.47
1:A:1206:TYR:CE1	1:A:1230:THR:CB	2.97	0.47
1:A:1375:ILE:HG23	1:A:1391:PHE:CZ	2.49	0.47
1:A:1387:LYS:HB2	1:A:1390:GLN:CG	2.41	0.47
1:A:1524:SER:C	1:A:1526:GLU:H	2.17	0.47
1:A:1577:LEU:N	1:A:1577:LEU:HD23	2.28	0.47
1:A:1602:VAL:CG1	2:F:202:UNK:O	2.62	0.47
1:A:1602:VAL:HG21	2:F:202:UNK:CB	2.44	0.47
1:B:1254:LYS:HD2	1:B:1285:GLU:CD	2.34	0.47
1:B:1361:LEU:HD21	1:B:1365:TYR:HE2	1.40	0.47
1:B:1420:ASN:HA	1:B:1423:LEU:CG	2.44	0.47
1:B:1524:SER:C	1:B:1526:GLU:H	2.17	0.47
1:B:1600:ILE:HA	1:B:1603:MET:CE	2.43	0.47
1:C:1137:TYR:O	1:C:1141:VAL:HG23	2.14	0.47
1:C:1208:GLU:OE1	1:C:1208:GLU:CA	2.62	0.47
1:C:1408:ILE:HG22	1:C:1412:LEU:CG	2.43	0.47
2:E:124:GLU:OE1	2:E:128:ARG:CZ	2.62	0.47
2:F:193:UNK:C	2:F:195:UNK:N	2.76	0.47
1:A:1091:ASN:ND2	1:A:1092:LEU:N	2.61	0.47
1:A:1272:CYS:O	1:A:1276:ILE:HG23	2.14	0.47
1:A:1569:CYS:O	1:A:1572:THR:OG1	2.32	0.47
1:B:1387:LYS:HB2	1:B:1390:GLN:CG	2.41	0.47
1:B:1405:TYR:CE2	1:B:1434:ARG:NH1	2.81	0.47
1:C:1175:PHE:HE1	1:C:1200:GLN:CB	2.26	0.47
1:C:1253:TRP:HZ3	1:C:1276:ILE:CG2	2.05	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1513:TYR:HD1	1:A:1516:LYS:CE	2.23	0.47
1:B:1234:LEU:CG	1:B:1235:GLY:N	2.75	0.47
1:B:1375:ILE:HG23	1:B:1391:PHE:CZ	2.49	0.47
1:B:1578:ARG:CD	1:B:1582:VAL:HB	2.43	0.47
1:C:1092:LEU:O	1:C:1094:ARG:CA	2.54	0.47
1:C:1329:PRO:O	1:C:1332:MET:N	2.45	0.47
1:C:1495:LEU:O	1:C:1499:LEU:HG	2.15	0.47
2:D:127:TRP:CA	2:D:130:LYS:HE3	2.41	0.47
2:F:98:GLU:O	2:F:102:ILE:HG23	2.14	0.47
2:F:127:TRP:CA	2:F:130:LYS:HE3	2.42	0.47
1:A:1113:LYS:HG2	1:A:1117:GLN:NE2	2.30	0.47
1:A:1335:HIS:C	1:A:1335:HIS:ND1	2.67	0.47
1:A:1362:VAL:CG2	1:A:1377:THR:CB	2.83	0.47
1:A:1416:PRO:O	1:A:1419:LEU:HB3	2.14	0.47
1:A:1469:ASN:ND2	1:A:1498:ARG:NH2	2.62	0.47
1:A:1475:GLU:CD	2:F:149:ASN:HD21	2.18	0.47
1:B:1083:GLN:HE21	1:B:1106:ALA:HB3	1.76	0.47
1:B:1253:TRP:CE3	1:B:1276:ILE:HB	2.48	0.47
1:B:1375:ILE:HA	1:B:1378:MET:HE3	1.96	0.47
1:B:1408:ILE:HG22	1:B:1412:LEU:CG	2.43	0.47
1:C:1368:TYR:CE1	1:C:1370:GLU:OE2	2.68	0.47
1:C:1504:LEU:CG	2:E:149:ASN:ND2	2.69	0.47
2:D:102:ILE:HG13	2:D:103:ARG:N	2.30	0.47
2:D:191:UNK:O	2:D:193:UNK:N	2.48	0.47
1:A:1129:ILE:HG13	1:A:1130:LYS:N	2.29	0.47
1:A:1408:ILE:O	1:A:1412:LEU:HB3	2.15	0.47
1:A:1461:LYS:HG2	1:A:1489:ASN:ND2	2.29	0.47
1:A:1567:GLY:O	1:A:1571:PHE:CD1	2.67	0.47
1:B:1564:GLU:O	1:B:1568:ALA:N	2.46	0.47
1:C:1078:ASN:CB	1:C:1098:PHE:CZ	2.97	0.47
1:C:1085:LEU:C	1:C:1086:ILE:O	2.45	0.47
1:C:1111:LEU:O	1:C:1115:GLN:HB2	2.14	0.47
1:C:1324:TYR:CD2	1:C:1332:MET:HA	2.44	0.47
1:C:1553:LEU:O	1:C:1556:TRP:HB3	2.15	0.47
1:C:1567:GLY:O	1:C:1571:PHE:CD1	2.67	0.47
1:C:1588:ARG:CG	1:C:1589:HIS:N	2.77	0.47
1:A:1082:VAL:O	1:A:1085:LEU:HG	2.14	0.47
1:B:1113:LYS:HG2	1:B:1117:GLN:NE2	2.30	0.47
1:B:1610:VAL:O	1:B:1614:ASP:CG	2.53	0.47
1:C:1448:VAL:O	1:C:1451:TYR:HB3	2.14	0.47
1:C:1461:LYS:O	1:C:1465:GLU:HB2	2.15	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:153:ASN:ND2	2:D:158:LYS:CB	2.77	0.47
2:F:178:UNK:C	2:F:180:UNK:N	2.74	0.47
1:A:1168:TYR:CA	1:A:1172:GLU:OE2	2.63	0.47
1:A:1193:PRO:HG2	1:A:1194:ASN:H	1.80	0.47
1:A:1230:THR:O	1:A:1231:LEU:CB	2.61	0.47
1:A:1258:PHE:CA	1:A:1289:TYR:CD1	2.96	0.47
1:A:1279:HIS:HE1	1:A:1283:LEU:CD1	2.09	0.47
1:A:1284:GLU:OE2	1:A:1284:GLU:C	2.52	0.47
1:A:1295:TYR:O	1:A:1296:PHE:CB	2.61	0.47
1:A:1301:THR:O	1:A:1301:THR:HG22	2.15	0.47
1:A:1329:PRO:O	1:A:1332:MET:HB3	2.14	0.47
1:A:1365:TYR:CB	1:A:1374:ALA:HB2	2.44	0.47
1:A:1368:TYR:CE1	1:A:1370:GLU:OE2	2.68	0.47
1:A:1448:VAL:O	1:A:1451:TYR:HB3	2.14	0.47
1:A:1561:GLU:OE2	1:A:1561:GLU:HA	2.14	0.47
1:A:1599:PHE:CE2	1:A:1600:ILE:HG13	2.50	0.47
1:B:1214:ALA:O	1:B:1218:TYR:CB	2.57	0.47
1:B:1335:HIS:ND1	1:B:1336:LEU:N	2.63	0.47
1:B:1401:VAL:O	1:B:1404:TYR:HD1	1.98	0.47
1:B:1448:VAL:O	1:B:1451:TYR:HB3	2.15	0.47
1:B:1491:ASP:O	1:B:1493:ILE:N	2.48	0.47
1:B:1509:ARG:CZ	2:D:166:ALA:CB	2.93	0.47
1:B:1598:TYR:HE2	2:D:200:UNK:CB	2.23	0.47
1:C:1126:ASP:O	1:C:1156:TYR:CE1	2.68	0.47
1:C:1145:ASN:O	1:C:1150:TRP:CE2	2.68	0.47
1:C:1171:THR:HG21	1:C:1200:GLN:OE1	2.14	0.47
1:C:1197:HIS:O	1:C:1198:ILE:C	2.53	0.47
1:C:1272:CYS:O	1:C:1276:ILE:HG23	2.14	0.47
1:C:1421:ASP:O	1:C:1424:MET:HB2	2.15	0.47
1:C:1561:GLU:HA	1:C:1561:GLU:OE2	2.15	0.47
1:C:1572:THR:HG22	1:C:1578:ARG:HB3	1.96	0.47
2:D:173:UNK:C	2:D:176:UNK:CB	2.92	0.47
2:E:122:VAL:HG23	2:E:123:MET:SD	2.54	0.47
2:E:125:GLN:C	2:E:125:GLN:CD	2.72	0.47
2:F:133:LYS:CE	2:F:133:LYS:CA	2.93	0.47
2:F:183:UNK:N	2:F:188:UNK:CB	2.77	0.47
1:A:1258:PHE:HA	1:A:1289:TYR:CD1	2.50	0.47
1:A:1421:ASP:O	1:A:1424:MET:HB2	2.14	0.47
1:B:1085:LEU:CD2	1:B:1125:ILE:HD11	2.43	0.47
1:B:1490:PHE:CE2	1:B:1492:ASN:OD1	2.65	0.47
1:B:1599:PHE:CE2	1:B:1600:ILE:HG13	2.50	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1605:GLU:O	1:B:1609:LYS:N	2.48	0.47
1:C:1335:HIS:ND1	1:C:1336:LEU:N	2.63	0.47
1:C:1408:ILE:O	1:C:1412:LEU:HB3	2.15	0.47
1:A:1145:ASN:HD22	1:A:1153:LEU:CD2	2.28	0.47
1:A:1290:TYR:CD1	1:A:1295:TYR:CE2	3.03	0.47
1:A:1405:TYR:CE2	1:A:1434:ARG:NH1	2.81	0.47
1:A:1412:LEU:HD12	1:A:1419:LEU:HD21	1.66	0.47
1:A:1414:PHE:CD1	2:F:127:TRP:CE3	3.03	0.47
1:A:1495:LEU:O	1:A:1499:LEU:HG	2.15	0.47
1:B:1135:SER:O	1:B:1136:SER:C	2.53	0.47
1:B:1371:TYR:CB	1:B:1394:ILE:HG22	2.43	0.47
1:B:1495:LEU:O	1:B:1499:LEU:HG	2.15	0.47
1:C:1091:ASN:O	1:C:1092:LEU:CB	2.62	0.47
1:C:1113:LYS:HG2	1:C:1117:GLN:NE2	2.30	0.47
1:C:1150:TRP:HA	1:C:1153:LEU:HB3	1.97	0.47
1:C:1274:LEU:CA	1:C:1277:VAL:CG2	2.86	0.47
1:C:1301:THR:O	1:C:1301:THR:HG22	2.15	0.47
1:C:1375:ILE:HG23	1:C:1391:PHE:CZ	2.49	0.47
1:C:1475:GLU:OE1	2:E:145:GLN:HB2	2.15	0.47
1:C:1524:SER:C	1:C:1526:GLU:H	2.16	0.47
1:C:1564:GLU:O	1:C:1568:ALA:N	2.46	0.47
2:F:118:ALA:CA	2:F:121:LYS:HE3	2.41	0.47
2:F:122:VAL:HG23	2:F:123:MET:SD	2.55	0.47
2:F:187:UNK:O	2:F:188:UNK:C	2.62	0.47
1:A:1553:LEU:O	1:A:1556:TRP:HB3	2.15	0.47
1:A:1605:GLU:O	1:A:1609:LYS:N	2.48	0.47
1:A:1610:VAL:O	1:A:1614:ASP:CG	2.54	0.47
1:B:1553:LEU:O	1:B:1556:TRP:HB3	2.15	0.47
1:B:1596:MET:H	1:B:1597:PRO:CD	2.13	0.47
1:C:1098:PHE:O	1:C:1102:CYS:CB	2.62	0.47
1:C:1456:GLN:O	1:C:1456:GLN:HG3	2.07	0.47
1:C:1588:ARG:O	1:C:1589:HIS:O	2.32	0.47
1:A:1107:VAL:HG12	1:A:1111:LEU:CB	2.43	0.46
1:A:1408:ILE:HG22	1:A:1412:LEU:CG	2.42	0.46
1:A:1561:GLU:HG3	1:A:1562:LYS:N	2.30	0.46
1:B:1365:TYR:CB	1:B:1374:ALA:HB2	2.44	0.46
1:B:1450:PRO:O	1:B:1453:ARG:HB2	2.15	0.46
1:B:1561:GLU:HA	1:B:1561:GLU:OE2	2.14	0.46
1:B:1587:TRP:NE1	1:B:1594:PHE:CE2	2.75	0.46
1:C:1106:ALA:O	1:C:1107:VAL:C	2.53	0.46
1:C:1244:ALA:HB1	1:C:1275:HIS:C	2.35	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1395:ILE:HG23	1:C:1396:THR:N	2.29	0.46
1:C:1474:GLU:O	2:E:141:ARG:HG2	2.15	0.46
1:C:1605:GLU:O	1:C:1609:LYS:N	2.48	0.46
2:E:133:LYS:CE	2:E:133:LYS:CA	2.93	0.46
1:A:1232:VAL:O	1:A:1233:HIS:CB	2.63	0.46
1:A:1451:TYR:O	1:A:1455:VAL:HG23	2.16	0.46
1:B:1408:ILE:O	1:B:1412:LEU:HB3	2.16	0.46
1:B:1461:LYS:O	1:B:1465:GLU:HB2	2.15	0.46
1:B:1472:ILE:CG2	1:B:1498:ARG:HE	2.21	0.46
1:B:1561:GLU:HG3	1:B:1562:LYS:N	2.30	0.46
1:C:1297:GLU:CA	1:C:1300:ILE:HG12	2.45	0.46
2:D:122:VAL:HG23	2:D:123:MET:SD	2.55	0.46
2:D:133:LYS:CE	2:D:133:LYS:CA	2.93	0.46
2:D:179:UNK:C	2:D:181:UNK:N	2.78	0.46
2:E:144:GLU:O	2:E:148:LYS:N	2.45	0.46
1:A:1167:SER:C	1:A:1169:VAL:N	2.66	0.46
1:A:1461:LYS:O	1:A:1465:GLU:HB2	2.15	0.46
1:A:1491:ASP:O	1:A:1493:ILE:N	2.48	0.46
1:A:1563:ARG:O	1:A:1565:CYS:N	2.48	0.46
1:B:1111:LEU:HD22	1:B:1111:LEU:C	2.29	0.46
1:B:1368:TYR:CE1	1:B:1370:GLU:OE2	2.68	0.46
1:B:1514:LEU:C	1:B:1514:LEU:CD2	2.81	0.46
1:B:1567:GLY:O	1:B:1571:PHE:CD1	2.68	0.46
1:C:1167:SER:HA	1:C:1171:THR:CB	2.45	0.46
1:C:1469:ASN:ND2	1:C:1498:ARG:NH2	2.62	0.46
1:C:1530:LYS:HG2	1:C:1531:ASP:N	2.30	0.46
2:D:95:LEU:HA	2:D:99:PRO:HD2	1.97	0.46
2:F:102:ILE:O	2:F:104:LYS:N	2.49	0.46
2:F:114:GLN:CG	2:F:115:GLU:N	2.26	0.46
1:A:1108:TRP:CD1	1:A:1131:ALA:CB	2.93	0.46
1:A:1161:ARG:HH22	1:A:1174:ILE:CG1	2.28	0.46
1:B:1303:LEU:HD12	1:B:1320:LEU:CD1	2.35	0.46
1:B:1358:TRP:CZ3	1:B:1381:HIS:CE1	2.70	0.46
1:B:1395:ILE:HG23	1:B:1396:THR:N	2.29	0.46
1:B:1448:VAL:HA	1:B:1451:TYR:HB3	1.98	0.46
1:C:1137:TYR:HB2	1:C:1169:VAL:CG2	2.46	0.46
1:C:1425:VAL:CG2	1:C:1426:LEU:H	2.19	0.46
1:C:1450:PRO:O	1:C:1453:ARG:HB2	2.15	0.46
1:C:1600:ILE:HB	1:C:1601:GLN:OE1	2.16	0.46
1:A:1307:LEU:HD11	1:A:1316:MET:HB3	1.97	0.46
1:A:1335:HIS:ND1	1:A:1336:LEU:N	2.63	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1301:THR:O	1:B:1301:THR:HG22	2.15	0.46
1:C:1147:SER:OG	1:C:1148:GLY:N	2.48	0.46
1:C:1414:PHE:C	1:C:1416:PRO:HD3	2.21	0.46
1:C:1448:VAL:HA	1:C:1451:TYR:HB3	1.97	0.46
1:C:1491:ASP:O	1:C:1493:ILE:N	2.48	0.46
1:C:1610:VAL:O	1:C:1614:ASP:CG	2.53	0.46
2:E:101:SER:O	2:E:105:TRP:HE3	1.99	0.46
2:F:148:LYS:O	2:F:151:ILE:HG23	2.16	0.46
2:F:183:UNK:HA	2:F:188:UNK:CB	2.45	0.46
2:F:191:UNK:O	2:F:194:UNK:N	2.49	0.46
1:A:1132:ASP:C	1:A:1133:ASP:O	2.52	0.46
1:A:1578:ARG:CD	1:A:1582:VAL:HB	2.43	0.46
1:A:1578:ARG:NH2	1:A:1583:LEU:HD23	2.28	0.46
1:B:1307:LEU:HD11	1:B:1316:MET:HB3	1.97	0.46
1:B:1446:PRO:O	1:B:1449:LYS:HB2	2.15	0.46
1:C:1254:LYS:CD	1:C:1285:GLU:HG2	2.45	0.46
2:E:94:ARG:NH2	2:E:98:GLU:HG2	2.30	0.46
1:A:1111:LEU:CD2	1:A:1115:GLN:CG	2.94	0.46
1:A:1167:SER:HB3	1:A:1168:TYR:CE1	2.50	0.46
1:A:1244:ALA:HB2	1:A:1275:HIS:ND1	2.14	0.46
1:A:1315:GLY:O	1:A:1319:GLU:HG2	2.16	0.46
1:A:1401:VAL:O	1:A:1404:TYR:HD1	1.98	0.46
1:A:1420:ASN:HA	1:A:1423:LEU:CG	2.44	0.46
1:B:1460:ASN:HB3	1:B:1463:VAL:HG23	1.98	0.46
1:C:1263:GLY:O	1:C:1264:LYS:CB	2.61	0.46
1:C:1362:VAL:CG2	1:C:1377:THR:CB	2.83	0.46
1:C:1499:LEU:HB2	1:C:1511:ALA:CB	2.42	0.46
1:C:1561:GLU:HG3	1:C:1562:LYS:N	2.30	0.46
2:D:147:GLU:OE1	2:D:147:GLU:HA	2.05	0.46
2:D:185:UNK:CA	2:D:189:UNK:C	2.86	0.46
2:E:137:GLU:HG3	2:E:141:ARG:NH2	2.31	0.46
2:E:147:GLU:OE1	2:E:147:GLU:HA	2.05	0.46
2:E:148:LYS:O	2:E:151:ILE:HG23	2.16	0.46
1:A:1450:PRO:O	1:A:1453:ARG:HB2	2.15	0.46
1:A:1564:GLU:O	1:A:1568:ALA:N	2.46	0.46
1:B:1214:ALA:O	1:B:1218:TYR:CG	2.69	0.46
1:B:1416:PRO:O	1:B:1419:LEU:HB3	2.14	0.46
1:B:1451:TYR:O	1:B:1455:VAL:HG23	2.16	0.46
1:B:1596:MET:SD	1:B:1599:PHE:CZ	3.09	0.46
1:C:1126:ASP:O	1:C:1156:TYR:CZ	2.68	0.46
1:C:1401:VAL:O	1:C:1404:TYR:HD1	1.98	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1427:SER:HB2	1:C:1428:PRO:HD2	1.88	0.46
1:C:1474:GLU:O	2:E:141:ARG:CD	2.63	0.46
1:C:1475:GLU:OE1	2:E:141:ARG:O	2.34	0.46
1:C:1565:CYS:O	1:C:1569:CYS:SG	2.74	0.46
1:C:1599:PHE:CE2	1:C:1600:ILE:HG13	2.50	0.46
2:D:155:ILE:N	2:D:155:ILE:CD1	2.78	0.46
2:E:192:UNK:O	2:E:193:UNK:O	2.33	0.46
2:F:133:LYS:HA	2:F:133:LYS:HZ2	1.75	0.46
1:A:1273:GLY:C	1:A:1275:HIS:H	2.20	0.46
1:A:1345:ILE:HB	1:A:1368:TYR:CE2	2.51	0.46
1:A:1600:ILE:HB	1:A:1601:GLN:OE1	2.16	0.46
1:B:1111:LEU:CD2	1:B:1115:GLN:CG	2.94	0.46
1:B:1136:SER:HB3	1:B:1141:VAL:CG1	2.39	0.46
1:B:1161:ARG:NH1	1:B:1193:PRO:C	2.68	0.46
1:B:1273:GLY:C	1:B:1275:HIS:H	2.19	0.46
1:B:1315:GLY:O	1:B:1319:GLU:HG2	2.16	0.46
1:B:1577:LEU:C	1:B:1579:PRO:HD3	2.37	0.46
1:C:1078:ASN:CB	1:C:1098:PHE:CE2	2.99	0.46
1:C:1080:SER:C	1:C:1082:VAL:H	2.19	0.46
1:C:1444:GLN:HE21	2:E:130:LYS:HD2	1.79	0.46
2:D:118:ALA:CA	2:D:121:LYS:HE3	2.41	0.46
2:D:148:LYS:O	2:D:151:ILE:HG23	2.16	0.46
2:D:204:UNK:O	2:D:205:UNK:O	2.34	0.46
2:E:107:GLU:HA	2:E:107:GLU:OE1	2.16	0.46
2:F:184:UNK:C	2:F:186:UNK:N	2.79	0.46
1:A:1290:TYR:CZ	1:A:1295:TYR:CE2	3.04	0.46
1:A:1490:PHE:CZ	1:A:1492:ASN:CG	2.87	0.46
1:B:1482:THR:HA	1:B:1485:ASP:CG	2.37	0.46
1:B:1530:LYS:HG2	1:B:1531:ASP:N	2.31	0.46
1:B:1572:THR:CB	1:B:1599:PHE:HD2	2.28	0.46
1:B:1588:ARG:CZ	2:F:195:UNK:CB	2.94	0.46
1:C:1211:TYR:CB	1:C:1231:LEU:HD22	2.43	0.46
1:C:1307:LEU:HD11	1:C:1316:MET:HB3	1.97	0.46
2:F:137:GLU:HG3	2:F:141:ARG:NH2	2.31	0.46
1:A:1161:ARG:HG2	1:A:1173:LEU:HD22	1.97	0.45
1:A:1326:LYS:HG3	1:A:1327:PHE:CE1	2.51	0.45
1:B:1206:TYR:CE1	1:B:1230:THR:HB	2.50	0.45
1:B:1340:TRP:CD1	1:B:1340:TRP:N	2.84	0.45
1:B:1579:PRO:O	1:B:1583:LEU:HG	2.16	0.45
1:C:1079:THR:O	1:C:1079:THR:CG2	2.56	0.45
1:C:1111:LEU:CD2	1:C:1115:GLN:CG	2.94	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1111:LEU:CD1	1:C:1129:ILE:HG21	2.45	0.45
1:C:1277:VAL:O	1:C:1279:HIS:CB	2.65	0.45
1:C:1358:TRP:CH2	1:C:1381:HIS:ND1	2.61	0.45
1:C:1629:THR:HG22	1:C:1629:THR:O	2.16	0.45
1:A:1214:ALA:O	1:A:1218:TYR:CG	2.69	0.45
1:A:1244:ALA:N	1:A:1275:HIS:HE1	2.13	0.45
1:A:1279:HIS:CE1	1:A:1282:GLU:HB3	2.51	0.45
1:A:1469:ASN:ND2	1:A:1469:ASN:O	2.49	0.45
1:B:1167:SER:CB	1:B:1168:TYR:HD1	2.28	0.45
1:B:1232:VAL:O	1:B:1233:HIS:CB	2.63	0.45
1:B:1588:ARG:HH11	1:B:1588:ARG:CG	2.14	0.45
1:B:1600:ILE:HB	1:B:1601:GLN:OE1	2.16	0.45
1:C:1181:ASN:CG	1:C:1185:GLU:HB2	2.37	0.45
1:C:1482:THR:HA	1:C:1485:ASP:CG	2.37	0.45
1:C:1490:PHE:CZ	1:C:1492:ASN:CG	2.88	0.45
1:C:1572:THR:CB	1:C:1599:PHE:CD2	2.99	0.45
1:C:1579:PRO:O	1:C:1583:LEU:HG	2.16	0.45
2:D:123:MET:O	2:D:127:TRP:CD2	2.70	0.45
2:E:127:TRP:CA	2:E:130:LYS:HE3	2.41	0.45
1:A:1361:LEU:HD22	1:A:1365:TYR:HE2	1.72	0.45
1:A:1408:ILE:CG2	1:A:1412:LEU:HB2	2.23	0.45
1:A:1408:ILE:HD13	1:A:1422:LEU:HD11	1.98	0.45
1:A:1455:VAL:CG1	1:A:1456:GLN:H	1.95	0.45
1:B:1230:THR:O	1:B:1231:LEU:CG	2.64	0.45
1:B:1345:ILE:N	1:B:1346:PRO:HD2	2.20	0.45
1:B:1469:ASN:ND2	1:B:1498:ARG:NH2	2.63	0.45
1:B:1518:ASN:CG	1:B:1518:ASN:O	2.55	0.45
1:B:1588:ARG:HA	1:B:1588:ARG:HD2	1.41	0.45
1:C:1315:GLY:O	1:C:1319:GLU:HG2	2.15	0.45
1:C:1340:TRP:CD1	1:C:1340:TRP:N	2.84	0.45
1:C:1561:GLU:HG3	1:C:1563:ARG:H	1.82	0.45
1:C:1601:GLN:HA	1:C:1604:LYS:CG	2.47	0.45
2:F:103:ARG:HA	2:F:106:ARG:HB2	1.98	0.45
1:A:1255:GLU:C	1:A:1289:TYR:OH	2.55	0.45
1:A:1340:TRP:CD1	1:A:1340:TRP:N	2.84	0.45
1:A:1458:HIS:C	1:A:1460:ASN:H	2.20	0.45
1:A:1490:PHE:CE2	1:A:1492:ASN:OD1	2.66	0.45
1:A:1617:GLU:CG	1:A:1621:LYS:NZ	2.80	0.45
1:C:1406:ARG:O	1:C:1409:GLN:CB	2.65	0.45
1:A:1181:ASN:O	1:A:1182:ARG:HG2	2.16	0.45
1:A:1244:ALA:H	1:A:1275:HIS:CE1	2.35	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1295:TYR:CE2	1:A:1299:LEU:CB	2.94	0.45
1:A:1455:VAL:O	1:A:1456:GLN:CB	2.65	0.45
1:A:1456:GLN:O	1:A:1456:GLN:HG3	2.08	0.45
1:A:1565:CYS:O	1:A:1569:CYS:SG	2.75	0.45
1:A:1579:PRO:O	1:A:1583:LEU:HG	2.16	0.45
1:B:1080:SER:C	1:B:1082:VAL:H	2.19	0.45
1:B:1474:GLU:C	1:B:1475:GLU:HG3	2.37	0.45
1:B:1601:GLN:HA	1:B:1604:LYS:CG	2.46	0.45
1:C:1146:THR:O	1:C:1147:SER:O	2.34	0.45
1:C:1214:ALA:O	1:C:1218:TYR:CG	2.69	0.45
1:C:1617:GLU:CG	1:C:1621:LYS:NZ	2.80	0.45
1:A:1162:LYS:HE3	1:A:1162:LYS:HB2	1.71	0.45
1:A:1400:ASN:OD1	1:A:1402:GLU:HB3	2.17	0.45
1:A:1530:LYS:HG2	1:A:1531:ASP:N	2.31	0.45
1:A:1561:GLU:CG	1:A:1562:LYS:N	2.80	0.45
1:A:1601:GLN:HA	1:A:1604:LYS:CG	2.46	0.45
1:B:1333:ARG:HB2	1:B:1360:GLU:HG2	1.94	0.45
1:C:1154:VAL:HG21	1:C:1180:THR:HG21	1.95	0.45
1:C:1408:ILE:O	1:C:1412:LEU:CA	2.64	0.45
1:A:1122:LYS:CG	1:A:1123:GLU:N	2.70	0.45
1:A:1333:ARG:HB2	1:A:1360:GLU:HG3	1.90	0.45
1:A:1474:GLU:C	1:A:1475:GLU:HG3	2.37	0.45
1:A:1598:TYR:HE2	2:F:199:UNK:N	2.15	0.45
1:B:1090:GLY:HA2	1:B:1094:ARG:CZ	2.46	0.45
1:B:1095:ALA:HA	1:B:1098:PHE:CZ	2.52	0.45
1:B:1113:LYS:HG3	1:B:1139:GLU:OE1	2.17	0.45
1:B:1274:LEU:H	1:B:1274:LEU:CD1	2.20	0.45
1:B:1324:TYR:CD2	1:B:1332:MET:HA	2.44	0.45
1:B:1326:LYS:HG3	1:B:1327:PHE:CE1	2.51	0.45
1:B:1329:PRO:O	1:B:1332:MET:N	2.45	0.45
1:B:1408:ILE:HD13	1:B:1422:LEU:HD11	1.98	0.45
1:C:1198:ILE:CG2	1:C:1221:VAL:HG23	2.46	0.45
1:C:1230:THR:O	1:C:1230:THR:HG22	2.17	0.45
1:C:1326:LYS:HG3	1:C:1327:PHE:CE1	2.52	0.45
1:C:1451:TYR:O	1:C:1455:VAL:HG23	2.16	0.45
1:A:1080:SER:C	1:A:1082:VAL:N	2.70	0.45
1:A:1204:ARG:O	1:A:1208:GLU:N	2.49	0.45
1:A:1460:ASN:HB3	1:A:1463:VAL:HG23	1.98	0.45
1:A:1482:THR:HA	1:A:1485:ASP:CG	2.36	0.45
1:A:1601:GLN:OE1	1:A:1601:GLN:N	2.50	0.45
1:B:1254:LYS:HD2	1:B:1285:GLU:OE2	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1467:LEU:HG	1:B:1471:PHE:HE2	1.82	0.45
1:B:1565:CYS:O	1:B:1569:CYS:SG	2.75	0.45
1:B:1591:ILE:HG12	1:B:1592:MET:N	2.31	0.45
1:C:1106:ALA:O	1:C:1107:VAL:O	2.35	0.45
1:C:1145:ASN:OD1	1:C:1179:LYS:NZ	2.36	0.45
1:C:1232:VAL:O	1:C:1233:HIS:CB	2.65	0.45
1:C:1332:MET:SD	1:C:1360:GLU:CB	3.05	0.45
1:A:1123:GLU:OE1	2:F:7:UNK:CB	2.65	0.45
1:A:1206:TYR:CE1	1:A:1226:ARG:HA	2.52	0.45
1:A:1230:THR:HG22	1:A:1230:THR:O	2.17	0.45
1:A:1230:THR:O	1:A:1231:LEU:CG	2.65	0.45
1:B:1332:MET:SD	1:B:1360:GLU:CB	3.05	0.45
1:B:1413:GLU:OE1	1:B:1413:GLU:HA	2.17	0.45
1:B:1466:SER:O	1:B:1469:ASN:HB3	2.17	0.45
1:B:1518:ASN:O	1:B:1518:ASN:ND2	2.50	0.45
1:B:1601:GLN:OE1	1:B:1601:GLN:N	2.50	0.45
1:C:1161:ARG:HH21	1:C:1170:GLU:CG	2.30	0.45
1:C:1270:GLN:CD	1:C:1298:GLU:CB	2.78	0.45
1:C:1277:VAL:C	1:C:1279:HIS:H	2.17	0.45
1:C:1400:ASN:OD1	1:C:1402:GLU:HB3	2.17	0.45
1:C:1444:GLN:HE22	2:E:130:LYS:HD2	1.77	0.45
1:A:1087:GLU:H	1:A:1087:GLU:HG2	1.52	0.45
1:A:1089:ILE:HD12	1:A:1089:ILE:N	2.31	0.45
1:A:1145:ASN:HD22	1:A:1153:LEU:HD22	1.82	0.45
1:A:1332:MET:SD	1:A:1360:GLU:CB	3.05	0.45
1:A:1448:VAL:HA	1:A:1451:TYR:HB3	1.98	0.45
1:A:1503:GLU:HG3	1:A:1504:LEU:H	1.82	0.45
1:B:1083:GLN:C	1:B:1085:LEU:N	2.70	0.45
1:B:1161:ARG:HG2	1:B:1173:LEU:HD22	1.97	0.45
1:B:1204:ARG:O	1:B:1208:GLU:N	2.48	0.45
1:B:1332:MET:HG3	1:B:1357:LEU:HD12	1.99	0.45
1:B:1333:ARG:HA	1:B:1360:GLU:CG	2.47	0.45
1:B:1456:GLN:O	1:B:1456:GLN:HG3	2.07	0.45
1:B:1561:GLU:CG	1:B:1562:LYS:N	2.80	0.45
1:B:1598:TYR:CA	1:C:1584:GLU:OE2	2.61	0.45
1:C:1458:HIS:C	1:C:1460:ASN:H	2.19	0.45
2:F:123:MET:O	2:F:127:TRP:CD2	2.70	0.45
1:A:1237:TYR:CG	1:A:1237:TYR:O	2.70	0.44
1:A:1261:VAL:HG13	1:A:1295:TYR:CE1	2.52	0.44
1:A:1362:VAL:HG23	1:A:1377:THR:HG21	1.99	0.44
1:B:1277:VAL:C	1:B:1279:HIS:HD1	2.20	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1282:GLU:C	1:B:1283:LEU:CD1	2.86	0.44
1:B:1617:GLU:CG	1:B:1621:LYS:NZ	2.80	0.44
1:C:1166:GLU:HB2	1:C:1168:TYR:OH	2.17	0.44
1:C:1167:SER:CA	1:C:1171:THR:H	2.28	0.44
1:C:1561:GLU:CG	1:C:1562:LYS:N	2.80	0.44
2:D:174:UNK:CA	2:D:175:UNK:CB	2.95	0.44
2:E:189:UNK:CA	2:E:194:UNK:CB	2.96	0.44
1:A:1085:LEU:HD11	1:A:1111:LEU:HG	1.99	0.44
1:A:1111:LEU:CD1	1:A:1125:ILE:HG13	2.44	0.44
1:A:1302:MET:C	1:A:1304:GLU:N	2.69	0.44
1:A:1333:ARG:HB2	1:A:1360:GLU:HG2	1.94	0.44
1:A:1408:ILE:O	1:A:1412:LEU:CA	2.64	0.44
1:A:1452:LEU:HD13	1:A:1467:LEU:HD13	1.99	0.44
1:A:1592:MET:HG2	1:A:1593:ASP:H	1.81	0.44
1:B:1080:SER:C	1:B:1082:VAL:N	2.70	0.44
1:B:1137:TYR:HB3	1:B:1172:GLU:HG2	1.99	0.44
1:B:1235:GLY:O	1:B:1238:GLN:HB2	2.17	0.44
1:B:1455:VAL:O	1:B:1456:GLN:CB	2.65	0.44
1:B:1458:HIS:C	1:B:1460:ASN:H	2.19	0.44
2:D:91:GLN:NE2	2:D:94:ARG:HD2	2.32	0.44
2:F:112:ARG:C	2:F:113:LEU:O	2.54	0.44
1:A:1084:VAL:O	1:A:1086:ILE:N	2.49	0.44
1:A:1324:TYR:CD2	1:A:1332:MET:HA	2.43	0.44
1:A:1395:ILE:CG2	1:A:1396:THR:N	2.81	0.44
1:A:1611:ASP:CG	1:B:1607:LEU:HD22	2.34	0.44
1:B:1130:LYS:HZ3	1:B:1155:LYS:CG	2.29	0.44
1:B:1144:ALA:CA	1:B:1149:ASN:HB2	2.46	0.44
1:B:1245:ARG:O	1:B:1246:LYS:CB	2.66	0.44
1:B:1274:LEU:O	1:B:1277:VAL:CG2	2.65	0.44
1:B:1345:ILE:HB	1:B:1368:TYR:CE2	2.51	0.44
1:C:1274:LEU:O	1:C:1277:VAL:CG2	2.65	0.44
1:C:1420:ASN:HA	1:C:1423:LEU:CG	2.44	0.44
2:D:48:UNK:C	2:D:50:UNK:N	2.80	0.44
2:D:94:ARG:NE	2:D:98:GLU:OE1	2.47	0.44
1:A:1095:ALA:HA	1:A:1098:PHE:CZ	2.52	0.44
1:A:1136:SER:HB2	1:A:1172:GLU:HB3	1.99	0.44
1:A:1162:LYS:C	1:A:1162:LYS:CB	2.80	0.44
1:A:1274:LEU:O	1:A:1277:VAL:CG2	2.65	0.44
1:A:1580:ASP:OD2	1:C:1605:GLU:HG3	2.17	0.44
1:B:1086:ILE:HG22	1:B:1087:GLU:HG3	1.99	0.44
1:B:1133:ASP:HA	1:B:1134:PRO:HA	1.57	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1163:LYS:O	2:D:38:UNK:N	2.48	0.44
1:B:1181:ASN:CG	1:B:1182:ARG:N	2.71	0.44
1:B:1333:ARG:HB2	1:B:1360:GLU:HG3	1.90	0.44
1:B:1588:ARG:NH1	2:F:195:UNK:CB	2.81	0.44
1:C:1258:PHE:CZ	1:C:1293:ARG:CZ	3.01	0.44
1:C:1297:GLU:HA	1:C:1297:GLU:OE1	2.18	0.44
1:C:1460:ASN:HB3	1:C:1463:VAL:HG23	1.98	0.44
1:C:1518:ASN:CG	1:C:1518:ASN:O	2.55	0.44
1:C:1566:PHE:CE2	2:E:181:UNK:CA	3.00	0.44
1:C:1577:LEU:C	1:C:1579:PRO:HD3	2.36	0.44
2:E:123:MET:O	2:E:127:TRP:CD2	2.70	0.44
2:F:7:UNK:O	2:F:8:UNK:C	2.66	0.44
2:F:94:ARG:HH21	2:F:94:ARG:CG	2.30	0.44
1:A:1206:TYR:CD1	1:A:1230:THR:HB	2.52	0.44
1:A:1407:ALA:C	1:A:1409:GLN:H	2.21	0.44
1:A:1474:GLU:HG3	1:A:1476:ASP:H	1.82	0.44
1:B:1254:LYS:HA	1:B:1289:TYR:CE2	2.52	0.44
1:B:1291:GLN:O	1:B:1294:GLY:N	2.43	0.44
1:B:1400:ASN:OD1	1:B:1402:GLU:HB3	2.17	0.44
1:B:1481:ARG:NH1	1:B:1510:ILE:HD12	2.31	0.44
1:C:1085:LEU:HD12	1:C:1085:LEU:O	2.18	0.44
1:C:1127:SER:HA	1:C:1156:TYR:HH	1.79	0.44
1:C:1237:TYR:CG	1:C:1237:TYR:O	2.70	0.44
1:C:1254:LYS:CD	1:C:1285:GLU:CG	2.83	0.44
1:C:1452:LEU:HD13	1:C:1467:LEU:HD13	1.99	0.44
1:C:1474:GLU:C	1:C:1475:GLU:HG3	2.37	0.44
1:A:1206:TYR:CG	1:A:1226:ARG:HG3	2.52	0.44
1:A:1297:GLU:OE1	1:A:1297:GLU:HA	2.18	0.44
1:A:1371:TYR:CB	1:A:1394:ILE:HG22	2.43	0.44
1:A:1518:ASN:O	1:A:1518:ASN:ND2	2.50	0.44
1:A:1561:GLU:HG3	1:A:1563:ARG:H	1.82	0.44
1:B:1279:HIS:HD2	1:B:1280:ALA:N	1.96	0.44
1:B:1330:GLN:HG3	1:B:1331:LYS:HG3	2.00	0.44
1:B:1474:GLU:HG3	1:B:1476:ASP:H	1.83	0.44
1:B:1561:GLU:HG3	1:B:1563:ARG:H	1.82	0.44
1:C:1132:ASP:O	1:C:1133:ASP:CB	2.65	0.44
1:C:1174:ILE:N	1:C:1174:ILE:CD1	2.81	0.44
1:C:1198:ILE:CG2	1:C:1221:VAL:CG2	2.95	0.44
1:C:1302:MET:C	1:C:1304:GLU:N	2.69	0.44
1:C:1455:VAL:O	1:C:1456:GLN:CB	2.65	0.44
1:C:1459:ASN:O	1:C:1489:ASN:HB3	2.18	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1601:GLN:OE1	1:C:1601:GLN:N	2.50	0.44
2:E:112:ARG:C	2:E:113:LEU:O	2.54	0.44
1:A:1154:VAL:HG13	1:A:1181:ASN:HD21	1.82	0.44
1:A:1165:ARG:HG3	1:A:1165:ARG:O	2.18	0.44
1:A:1411:TYR:HA	1:A:1415:LYS:HB2	1.90	0.44
1:A:1480:LEU:HA	1:A:1483:SER:HB3	2.00	0.44
1:B:1237:TYR:O	1:B:1237:TYR:CG	2.70	0.44
1:B:1480:LEU:HA	1:B:1483:SER:HB3	2.00	0.44
1:C:1095:ALA:HA	1:C:1098:PHE:CZ	2.52	0.44
1:C:1187:GLU:O	1:C:1190:ILE:HG22	2.18	0.44
2:D:103:ARG:CZ	2:D:106:ARG:HG3	2.48	0.44
2:E:105:TRP:HA	2:E:108:GLU:CG	2.48	0.44
1:A:1090:GLY:HA2	1:A:1094:ARG:CZ	2.48	0.44
1:A:1155:LYS:O	1:A:1158:GLN:HB3	2.18	0.44
1:A:1333:ARG:CB	1:A:1360:GLU:HG2	2.48	0.44
1:A:1469:ASN:ND2	1:A:1498:ARG:HH12	2.16	0.44
1:A:1481:ARG:NH1	1:A:1510:ILE:HD12	2.32	0.44
1:A:1562:LYS:C	1:A:1564:GLU:N	2.70	0.44
1:B:1163:LYS:O	1:B:1164:ALA:CB	2.64	0.44
1:B:1177:LEU:O	1:B:1180:THR:N	2.51	0.44
1:B:1297:GLU:OE1	1:B:1297:GLU:HA	2.18	0.44
1:B:1407:ALA:C	1:B:1409:GLN:H	2.21	0.44
1:B:1469:ASN:ND2	1:B:1498:ARG:HH12	2.15	0.44
1:C:1345:ILE:HB	1:C:1368:TYR:CE2	2.52	0.44
1:C:1413:GLU:OE1	1:C:1413:GLU:HA	2.18	0.44
1:C:1518:ASN:O	1:C:1518:ASN:ND2	2.50	0.44
1:C:1548:GLU:CD	1:C:1548:GLU:H	2.21	0.44
2:F:196:UNK:O	2:F:197:UNK:O	2.36	0.44
1:A:1235:GLY:O	1:A:1238:GLN:HB2	2.18	0.44
1:A:1416:PRO:O	1:A:1417:LEU:C	2.56	0.44
1:A:1430:LEU:HD12	1:A:1431:ASP:H	1.83	0.44
1:A:1459:ASN:O	1:A:1489:ASN:HB3	2.18	0.44
1:B:1546:ASP:O	1:B:1547:THR:C	2.56	0.44
1:C:1273:GLY:C	1:C:1275:HIS:H	2.20	0.44
1:C:1609:LYS:HG2	1:C:1612:LYS:CD	2.44	0.44
1:A:1080:SER:C	1:A:1082:VAL:H	2.19	0.43
1:A:1159:MET:SD	1:A:1162:LYS:CB	3.04	0.43
1:A:1175:PHE:HE1	1:A:1200:GLN:HB3	1.82	0.43
1:A:1204:ARG:NH1	1:A:1207:ASP:OD2	2.51	0.43
1:A:1416:PRO:HD3	2:F:130:LYS:CD	2.37	0.43
1:A:1425:VAL:CG2	1:A:1426:LEU:H	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1577:LEU:C	1:A:1579:PRO:HD3	2.36	0.43
1:B:1390:GLN:HB2	1:B:1390:GLN:HE21	1.64	0.43
1:C:1155:LYS:O	1:C:1158:GLN:HB3	2.18	0.43
1:C:1469:ASN:ND2	1:C:1498:ARG:HH12	2.16	0.43
1:C:1477:TYR:O	1:C:1481:ARG:HB2	2.19	0.43
1:C:1566:PHE:CD2	2:E:181:UNK:HA	2.52	0.43
2:D:191:UNK:C	2:D:196:UNK:CB	2.95	0.43
1:A:1083:GLN:NE2	1:A:1106:ALA:HB3	2.32	0.43
1:A:1092:LEU:C	1:A:1094:ARG:N	2.72	0.43
1:A:1181:ASN:O	1:A:1182:ARG:NE	2.52	0.43
1:A:1187:GLU:O	1:A:1190:ILE:HG22	2.18	0.43
1:A:1413:GLU:OE1	1:A:1413:GLU:HA	2.18	0.43
1:A:1546:ASP:O	1:A:1547:THR:C	2.56	0.43
1:B:1082:VAL:CG1	1:B:1083:GLN:N	2.69	0.43
1:B:1085:LEU:H	1:B:1085:LEU:HG	1.69	0.43
1:B:1154:VAL:HG11	1:B:1183:LEU:HB3	2.01	0.43
1:B:1406:ARG:O	1:B:1409:GLN:CB	2.64	0.43
1:B:1435:ALA:O	1:B:1439:PHE:HD2	2.01	0.43
1:C:1395:ILE:CG2	1:C:1396:THR:N	2.81	0.43
1:C:1434:ARG:HB2	2:E:7:UNK:CB	2.48	0.43
1:C:1467:LEU:HG	1:C:1471:PHE:HE2	1.82	0.43
1:C:1474:GLU:HG3	1:C:1476:ASP:H	1.82	0.43
1:C:1562:LYS:C	1:C:1564:GLU:N	2.71	0.43
1:C:1619:LEU:HD22	1:C:1619:LEU:N	2.33	0.43
2:F:147:GLU:OE1	2:F:147:GLU:HA	2.05	0.43
1:A:1177:LEU:CA	1:A:1180:THR:HG1	2.29	0.43
1:A:1282:GLU:C	1:A:1283:LEU:CD1	2.86	0.43
1:A:1466:SER:O	1:A:1469:ASN:HB3	2.18	0.43
1:A:1477:TYR:O	1:A:1481:ARG:HB2	2.19	0.43
1:A:1477:TYR:CD1	1:A:1478:GLN:N	2.87	0.43
1:B:1230:THR:HG22	1:B:1230:THR:O	2.17	0.43
1:C:1080:SER:C	1:C:1082:VAL:N	2.70	0.43
1:C:1407:ALA:C	1:C:1409:GLN:H	2.21	0.43
1:C:1563:ARG:NH2	2:E:182:UNK:N	2.66	0.43
1:A:1333:ARG:HA	1:A:1360:GLU:CG	2.47	0.43
1:B:1395:ILE:CG2	1:B:1396:THR:N	2.81	0.43
1:B:1435:ALA:HB1	1:B:1439:PHE:HE2	1.84	0.43
1:C:1329:PRO:O	1:C:1330:GLN:C	2.56	0.43
1:C:1416:PRO:O	1:C:1417:LEU:C	2.57	0.43
1:C:1572:THR:OG1	1:C:1599:PHE:CD2	2.61	0.43
1:C:1578:ARG:NH2	1:C:1583:LEU:HD23	2.28	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1193:PRO:O	1:A:1194:ASN:O	2.36	0.43
1:A:1345:ILE:HG21	1:A:1368:TYR:HD2	1.83	0.43
1:A:1414:PHE:CD1	2:F:127:TRP:CB	3.01	0.43
1:A:1469:ASN:HD22	1:A:1469:ASN:C	2.21	0.43
1:A:1563:ARG:C	1:A:1565:CYS:N	2.72	0.43
1:A:1580:ASP:OD1	1:C:1605:GLU:CG	2.67	0.43
1:B:1111:LEU:HD21	1:B:1115:GLN:HG2	2.00	0.43
1:B:1190:ILE:CD1	1:B:1216:LEU:HG	2.49	0.43
1:B:1298:GLU:OE1	1:B:1298:GLU:HA	2.19	0.43
1:B:1408:ILE:O	1:B:1412:LEU:CA	2.64	0.43
1:B:1477:TYR:CD1	1:B:1478:GLN:N	2.87	0.43
1:C:1333:ARG:HA	1:C:1360:GLU:CG	2.48	0.43
1:C:1419:LEU:HD23	1:C:1447:LEU:HD13	2.01	0.43
1:C:1455:VAL:CG1	1:C:1456:GLN:N	2.64	0.43
1:C:1480:LEU:HA	1:C:1483:SER:HB3	2.00	0.43
2:D:185:UNK:CA	2:D:189:UNK:O	2.54	0.43
2:E:91:GLN:O	2:E:92:ALA:HB2	2.18	0.43
1:A:1298:GLU:OE1	1:A:1298:GLU:HA	2.19	0.43
1:A:1436:VAL:HG11	1:A:1462:SER:HB2	2.00	0.43
1:A:1467:LEU:HG	1:A:1471:PHE:HE2	1.82	0.43
1:B:1083:GLN:NE2	1:B:1107:VAL:HG23	2.34	0.43
1:B:1145:ASN:HA	1:B:1153:LEU:HD22	2.01	0.43
1:B:1155:LYS:O	1:B:1158:GLN:HB3	2.18	0.43
1:B:1181:ASN:CG	1:B:1182:ARG:H	2.21	0.43
1:B:1459:ASN:O	1:B:1489:ASN:HB3	2.18	0.43
1:B:1503:GLU:HG3	1:B:1504:LEU:H	1.82	0.43
1:C:1190:ILE:HG12	1:C:1216:LEU:CG	2.49	0.43
1:C:1430:LEU:HD12	1:C:1431:ASP:H	1.84	0.43
1:C:1477:TYR:CD1	1:C:1478:GLN:N	2.87	0.43
1:A:1183:LEU:CG	1:A:1184:ALA:N	2.82	0.43
1:A:1329:PRO:O	1:A:1330:GLN:C	2.57	0.43
1:A:1590:ASN:HB2	1:A:1592:MET:O	2.19	0.43
1:A:1626:ALA:O	1:A:1629:THR:O	2.36	0.43
1:B:1135:SER:O	1:B:1136:SER:O	2.36	0.43
1:B:1189:PHE:O	1:B:1217:LEU:CD2	2.66	0.43
1:B:1329:PRO:O	1:B:1330:GLN:C	2.56	0.43
1:B:1411:TYR:HA	1:B:1415:LYS:HB2	1.89	0.43
1:B:1452:LEU:HD13	1:B:1467:LEU:HD13	1.99	0.43
1:B:1578:ARG:NH2	1:B:1583:LEU:HD23	2.28	0.43
1:B:1619:LEU:HD22	1:B:1619:LEU:N	2.32	0.43
1:C:1091:ASN:HD22	1:C:1091:ASN:HA	1.51	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1122:LYS:CG	1:C:1123:GLU:N	2.71	0.43
1:C:1157:LEU:HD12	1:C:1173:LEU:CD1	2.48	0.43
1:C:1159:MET:HA	1:C:1162:LYS:HD3	2.00	0.43
1:C:1193:PRO:O	1:C:1194:ASN:CB	2.67	0.43
1:C:1198:ILE:C	1:C:1201:VAL:HG23	2.38	0.43
1:C:1344:ASN:CG	1:C:1345:ILE:N	2.72	0.43
1:C:1348:VAL:O	1:C:1352:ALA:N	2.52	0.43
1:C:1467:LEU:O	1:C:1470:LEU:HB2	2.19	0.43
1:C:1596:MET:SD	1:C:1597:PRO:CD	3.01	0.43
2:E:145:GLN:O	2:E:149:ASN:ND2	2.52	0.43
1:A:1348:VAL:O	1:A:1352:ALA:N	2.52	0.43
1:A:1376:ILE:HA	1:A:1379:MET:HG3	2.01	0.43
1:A:1435:ALA:O	1:A:1439:PHE:HD2	2.01	0.43
1:A:1505:ILE:O	1:A:1506:GLU:C	2.57	0.43
1:B:1168:TYR:CA	1:B:1172:GLU:OE2	2.63	0.43
1:B:1204:ARG:NH1	1:B:1207:ASP:OD2	2.51	0.43
1:B:1244:ALA:N	1:B:1275:HIS:HE1	2.16	0.43
1:B:1416:PRO:O	1:B:1417:LEU:C	2.56	0.43
1:B:1477:TYR:O	1:B:1481:ARG:HB2	2.19	0.43
1:B:1520:ARG:CD	1:B:1520:ARG:H	2.32	0.43
1:B:1583:LEU:O	1:B:1594:PHE:CZ	2.70	0.43
1:C:1142:GLN:C	1:C:1142:GLN:CD	2.78	0.43
1:C:1190:ILE:HG22	1:C:1191:ASN:ND2	2.34	0.43
1:C:1332:MET:SD	1:C:1360:GLU:HB2	2.59	0.43
1:C:1376:ILE:HA	1:C:1379:MET:HG3	2.01	0.43
1:C:1469:ASN:ND2	1:C:1469:ASN:O	2.49	0.43
2:D:201:UNK:O	2:D:202:UNK:C	2.66	0.43
1:A:1085:LEU:HG	1:A:1085:LEU:H	1.63	0.43
1:A:1332:MET:HG3	1:A:1357:LEU:HD12	1.99	0.43
1:A:1609:LYS:HA	1:A:1612:LYS:CG	2.48	0.43
1:A:1619:LEU:N	1:A:1619:LEU:HD22	2.32	0.43
1:B:1132:ASP:C	1:B:1133:ASP:O	2.56	0.43
1:B:1198:ILE:HG23	1:B:1201:VAL:CG2	2.49	0.43
1:B:1436:VAL:HG11	1:B:1462:SER:HB2	2.00	0.43
1:B:1484:ILE:C	1:B:1484:ILE:HD12	2.39	0.43
1:C:1190:ILE:HG21	1:C:1216:LEU:HD21	2.01	0.43
1:C:1505:ILE:O	1:C:1506:GLU:C	2.57	0.43
1:C:1588:ARG:HH21	2:D:193:UNK:HA	1.75	0.43
2:D:173:UNK:C	2:D:176:UNK:N	2.82	0.43
2:E:108:GLU:OE1	2:E:108:GLU:O	2.37	0.43
2:F:91:GLN:HE21	2:F:91:GLN:HB3	1.67	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1111:LEU:HD21	1:A:1115:GLN:HG2	1.99	0.43
1:A:1230:THR:O	1:A:1231:LEU:HG	2.19	0.43
1:A:1279:HIS:NE2	1:A:1282:GLU:HB3	2.34	0.43
1:A:1467:LEU:O	1:A:1470:LEU:HB2	2.18	0.43
1:A:1484:ILE:HD12	1:A:1484:ILE:C	2.39	0.43
1:A:1517:GLY:C	1:A:1519:ASN:N	2.72	0.43
1:A:1554:LEU:HD23	1:A:1582:VAL:CG1	2.49	0.43
1:B:1253:TRP:HZ3	1:B:1276:ILE:CG2	2.04	0.43
1:B:1362:VAL:HG23	1:B:1377:THR:HG21	1.99	0.43
1:B:1420:ASN:C	1:B:1422:LEU:N	2.73	0.43
1:B:1562:LYS:C	1:B:1564:GLU:N	2.71	0.43
1:B:1590:ASN:HB2	1:B:1592:MET:O	2.19	0.43
1:C:1230:THR:C	1:C:1231:LEU:CG	2.86	0.43
1:C:1371:TYR:CB	1:C:1394:ILE:HG22	2.43	0.43
1:C:1466:SER:O	1:C:1469:ASN:HB3	2.18	0.43
2:D:126:GLU:HG3	2:D:130:LYS:HZ1	1.80	0.43
2:F:195:UNK:O	2:F:197:UNK:N	2.49	0.43
1:A:1157:LEU:HD13	1:A:1177:LEU:HD21	2.00	0.42
1:A:1283:LEU:CD2	1:A:1313:HIS:CE1	3.00	0.42
1:B:1142:GLN:C	1:B:1142:GLN:CD	2.78	0.42
1:B:1206:TYR:CE1	1:B:1226:ARG:CA	3.02	0.42
1:B:1535:LYS:HZ1	1:B:1563:ARG:HH12	1.63	0.42
1:C:1298:GLU:OE1	1:C:1298:GLU:HA	2.19	0.42
1:C:1329:PRO:HB2	1:C:1330:GLN:H	1.62	0.42
1:C:1330:GLN:HG3	1:C:1331:LYS:HG3	2.01	0.42
1:A:1344:ASN:OD1	1:A:1345:ILE:N	2.52	0.42
1:A:1388:GLU:CG	1:A:1389:GLY:N	2.82	0.42
1:A:1443:LYS:O	1:A:1444:GLN:HG3	2.20	0.42
1:A:1520:ARG:H	1:A:1520:ARG:CD	2.32	0.42
1:B:1302:MET:C	1:B:1304:GLU:N	2.69	0.42
1:B:1332:MET:SD	1:B:1360:GLU:HB2	2.59	0.42
1:B:1333:ARG:CG	1:B:1360:GLU:HG3	2.49	0.42
1:B:1467:LEU:O	1:B:1470:LEU:HB2	2.19	0.42
1:B:1505:ILE:O	1:B:1506:GLU:C	2.57	0.42
1:C:1435:ALA:O	1:C:1439:PHE:HD2	2.01	0.42
2:F:190:UNK:C	2:F:192:UNK:N	2.79	0.42
1:A:1167:SER:CB	1:A:1168:TYR:CD1	3.03	0.42
1:A:1258:PHE:HB2	1:A:1289:TYR:CZ	2.27	0.42
1:A:1481:ARG:NH1	1:A:1510:ILE:HG13	2.35	0.42
1:B:1130:LYS:HZ3	1:B:1155:LYS:CD	2.31	0.42
1:B:1187:GLU:O	1:B:1190:ILE:HG22	2.19	0.42

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1401:VAL:HA	1:B:1404:TYR:HD1	1.83	0.42
1:C:1141:VAL:HG11	1:C:1168:TYR:O	2.19	0.42
1:C:1276:ILE:HG13	1:C:1277:VAL:N	2.34	0.42
1:C:1520:ARG:H	1:C:1520:ARG:CD	2.32	0.42
1:C:1587:TRP:N	1:C:1587:TRP:CD1	2.86	0.42
2:D:137:GLU:HG3	2:D:141:ARG:HH12	1.84	0.42
2:F:145:GLN:O	2:F:149:ASN:ND2	2.52	0.42
1:A:1175:PHE:O	1:A:1178:ALA:HB3	2.20	0.42
1:A:1303:LEU:H	1:A:1303:LEU:HD23	1.85	0.42
1:A:1594:PHE:O	1:A:1596:MET:HE2	2.20	0.42
1:B:1136:SER:HA	1:B:1137:TYR:C	2.38	0.42
1:B:1340:TRP:CZ3	1:B:1367:LYS:HD2	2.54	0.42
1:B:1345:ILE:HG21	1:B:1368:TYR:HD2	1.83	0.42
1:B:1430:LEU:HD12	1:B:1431:ASP:H	1.84	0.42
1:C:1282:GLU:OE2	1:C:1285:GLU:CB	2.62	0.42
1:C:1344:ASN:OD1	1:C:1345:ILE:N	2.52	0.42
1:C:1370:GLU:HA	1:C:1370:GLU:OE1	2.19	0.42
1:C:1401:VAL:HG22	1:C:1429:ARG:HH21	1.84	0.42
1:C:1436:VAL:HG11	1:C:1462:SER:HB2	2.00	0.42
1:C:1535:LYS:HZ1	1:C:1563:ARG:HH12	1.63	0.42
2:E:1:UNK:C	2:E:3:UNK:N	2.80	0.42
2:E:105:TRP:O	2:E:108:GLU:CD	2.58	0.42
2:E:106:ARG:C	2:E:108:GLU:H	2.23	0.42
1:A:1160:ALA:C	1:A:1162:LYS:N	2.72	0.42
1:A:1244:ALA:CA	1:A:1275:HIS:CE1	3.02	0.42
1:A:1330:GLN:HG3	1:A:1331:LYS:HG3	2.00	0.42
1:A:1340:TRP:CZ3	1:A:1367:LYS:HD2	2.54	0.42
1:A:1370:GLU:OE1	1:A:1370:GLU:HA	2.20	0.42
1:A:1590:ASN:O	1:A:1591:ILE:C	2.58	0.42
1:B:1083:GLN:O	1:B:1086:ILE:HG13	2.19	0.42
1:B:1112:ALA:CB	1:B:1140:VAL:HG21	2.46	0.42
1:B:1344:ASN:CG	1:B:1345:ILE:N	2.72	0.42
1:C:1136:SER:C	1:C:1136:SER:N	2.58	0.42
1:C:1161:ARG:HH22	1:C:1195:ASN:HB3	1.81	0.42
1:C:1204:ARG:NH1	1:C:1207:ASP:OD2	2.52	0.42
1:C:1254:LYS:HD2	1:C:1285:GLU:OE2	2.18	0.42
1:C:1503:GLU:HG3	1:C:1504:LEU:H	1.82	0.42
1:C:1599:PHE:H	1:C:1599:PHE:HD1	1.62	0.42
2:E:104:LYS:C	2:E:108:GLU:HG2	2.36	0.42
2:F:94:ARG:HG2	2:F:94:ARG:HH21	1.84	0.42
2:F:162:GLN:CB	2:F:166:ALA:CB	2.96	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1256:VAL:CA	1:A:1289:TYR:OH	2.68	0.42
1:A:1332:MET:SD	1:A:1360:GLU:HB2	2.59	0.42
1:A:1420:ASN:C	1:A:1422:LEU:N	2.72	0.42
1:A:1517:GLY:C	1:A:1519:ASN:H	2.22	0.42
1:A:1521:TRP:CZ3	1:A:1525:VAL:HG11	2.55	0.42
1:A:1592:MET:O	1:A:1593:ASP:OD1	2.37	0.42
1:B:1333:ARG:CA	1:B:1360:GLU:CG	2.98	0.42
1:B:1370:GLU:OE1	1:B:1370:GLU:HA	2.20	0.42
1:B:1412:LEU:HA	1:B:1419:LEU:HD13	2.00	0.42
1:B:1431:ASP:C	1:B:1433:THR:N	2.73	0.42
1:B:1466:SER:O	1:B:1470:LEU:N	2.52	0.42
1:B:1469:ASN:ND2	1:B:1498:ARG:NH1	2.68	0.42
1:B:1513:TYR:O	1:B:1516:LYS:N	2.53	0.42
1:B:1590:ASN:O	1:B:1591:ILE:C	2.57	0.42
1:C:1517:GLY:C	1:C:1519:ASN:N	2.73	0.42
1:C:1517:GLY:C	1:C:1519:ASN:H	2.23	0.42
1:C:1592:MET:HG2	1:C:1593:ASP:N	2.34	0.42
1:C:1596:MET:SD	1:C:1599:PHE:CZ	3.12	0.42
2:F:102:ILE:C	2:F:104:LYS:H	2.23	0.42
1:A:1142:GLN:C	1:A:1142:GLN:CD	2.78	0.42
1:A:1165:ARG:NH2	1:A:1194:ASN:OD1	2.52	0.42
1:A:1344:ASN:CG	1:A:1345:ILE:N	2.72	0.42
1:A:1518:ASN:O	1:A:1518:ASN:CG	2.55	0.42
1:B:1175:PHE:O	1:B:1178:ALA:HB3	2.19	0.42
1:B:1340:TRP:H	1:B:1340:TRP:HD1	1.68	0.42
1:B:1555:GLN:OE1	1:B:1585:THR:CG2	2.68	0.42
1:B:1609:LYS:HA	1:B:1612:LYS:CG	2.49	0.42
1:C:1161:ARG:NH1	1:C:1195:ASN:HB3	2.34	0.42
1:C:1332:MET:HG3	1:C:1357:LEU:HD12	1.99	0.42
1:C:1345:ILE:HG21	1:C:1368:TYR:HD2	1.84	0.42
1:C:1414:PHE:CD2	2:E:123:MET:HG3	2.55	0.42
1:C:1469:ASN:ND2	1:C:1498:ARG:NH1	2.68	0.42
1:C:1609:LYS:HA	1:C:1612:LYS:CG	2.48	0.42
2:D:144:GLU:O	2:D:148:LYS:N	2.45	0.42
1:A:1109:SER:HA	1:A:1134:PRO:HG3	2.02	0.42
1:A:1194:ASN:O	1:A:1195:ASN:C	2.58	0.42
1:A:1274:LEU:H	1:A:1274:LEU:CD1	2.20	0.42
1:A:1295:TYR:HD2	1:A:1299:LEU:HD22	1.83	0.42
1:A:1435:ALA:HB1	1:A:1439:PHE:HE2	1.84	0.42
1:B:1258:PHE:C	1:B:1260:CYS:H	2.23	0.42
1:B:1329:PRO:HB2	1:B:1330:GLN:H	1.62	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1476:ASP:CG	1:B:1479:ALA:HB3	2.39	0.42
1:C:1325:SER:OG	1:C:1326:LYS:HE3	2.20	0.42
1:C:1626:ALA:O	1:C:1630:GLN:HB2	2.19	0.42
1:A:1326:LYS:C	1:A:1327:PHE:CG	2.93	0.42
1:A:1456:GLN:HE22	1:A:1467:LEU:CD2	2.33	0.42
1:A:1466:SER:O	1:A:1470:LEU:N	2.52	0.42
1:A:1592:MET:HG2	1:A:1593:ASP:N	2.34	0.42
1:B:1147:SER:OG	1:B:1148:GLY:N	2.53	0.42
1:B:1368:TYR:HD1	1:B:1368:TYR:O	2.03	0.42
1:C:1189:PHE:O	1:C:1193:PRO:HG3	2.20	0.42
1:C:1193:PRO:C	1:C:1194:ASN:CG	2.76	0.42
1:C:1521:TRP:CZ3	1:C:1525:VAL:HG11	2.55	0.42
1:A:1276:ILE:HG13	1:A:1277:VAL:N	2.34	0.42
1:A:1513:TYR:O	1:A:1516:LYS:N	2.53	0.42
1:B:1213:ALA:O	1:B:1217:LEU:HB2	2.20	0.42
1:C:1333:ARG:CB	1:C:1360:GLU:HG2	2.48	0.42
2:D:145:GLN:O	2:D:149:ASN:ND2	2.52	0.42
2:E:105:TRP:CA	2:E:108:GLU:CG	2.98	0.42
1:A:1170:GLU:O	1:A:1173:LEU:N	2.53	0.41
1:A:1206:TYR:CZ	1:A:1230:THR:OG1	2.67	0.41
1:A:1431:ASP:C	1:A:1433:THR:N	2.73	0.41
1:B:1280:ALA:C	1:B:1282:GLU:H	2.22	0.41
1:B:1325:SER:OG	1:B:1326:LYS:HE3	2.20	0.41
1:B:1376:ILE:HA	1:B:1379:MET:HG3	2.01	0.41
1:B:1469:ASN:ND2	1:B:1469:ASN:O	2.49	0.41
1:B:1569:CYS:C	1:B:1571:PHE:N	2.74	0.41
1:C:1162:LYS:H	1:C:1162:LYS:HD2	1.85	0.41
1:C:1170:GLU:CG	1:C:1171:THR:N	2.83	0.41
1:C:1175:PHE:O	1:C:1178:ALA:HB3	2.19	0.41
1:C:1270:GLN:OE1	1:C:1270:GLN:HA	2.19	0.41
1:C:1431:ASP:C	1:C:1433:THR:N	2.73	0.41
1:C:1443:LYS:O	1:C:1444:GLN:HG3	2.20	0.41
1:C:1474:GLU:O	1:C:1475:GLU:CB	2.68	0.41
1:C:1490:PHE:CE2	1:C:1492:ASN:OD1	2.66	0.41
1:C:1492:ASN:O	1:C:1493:ILE:CD1	2.68	0.41
2:F:107:GLU:O	2:F:110:ARG:HG2	2.20	0.41
2:F:126:GLU:HG3	2:F:130:LYS:HZ3	1.76	0.41
1:A:1161:ARG:HE	1:A:1173:LEU:CD2	2.29	0.41
1:A:1325:SER:OG	1:A:1326:LYS:HE3	2.20	0.41
1:A:1333:ARG:CA	1:A:1360:GLU:CG	2.98	0.41
1:A:1387:LYS:O	1:A:1389:GLY:N	2.53	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1412:LEU:HA	1:A:1419:LEU:HD13	1.98	0.41
1:A:1471:PHE:HD1	1:A:1476:ASP:HB3	1.85	0.41
1:B:1094:ARG:O	1:B:1097:GLU:HB2	2.20	0.41
1:B:1230:THR:O	1:B:1231:LEU:HG	2.19	0.41
1:B:1283:LEU:CD2	1:B:1313:HIS:NE2	2.74	0.41
1:B:1345:ILE:HB	1:B:1368:TYR:HE2	1.85	0.41
1:B:1348:VAL:O	1:B:1352:ALA:N	2.52	0.41
1:B:1419:LEU:HD23	1:B:1447:LEU:HD13	2.01	0.41
1:B:1443:LYS:O	1:B:1444:GLN:HG3	2.20	0.41
1:B:1517:GLY:C	1:B:1519:ASN:N	2.73	0.41
1:C:1194:ASN:HD22	1:C:1194:ASN:C	2.24	0.41
1:C:1254:LYS:CA	1:C:1289:TYR:CE2	3.02	0.41
1:C:1270:GLN:CG	1:C:1298:GLU:CG	2.87	0.41
1:C:1362:VAL:HG23	1:C:1377:THR:HG21	1.99	0.41
1:C:1387:LYS:HD2	1:C:1390:GLN:CD	2.41	0.41
2:F:102:ILE:C	2:F:104:LYS:N	2.73	0.41
1:A:1167:SER:OG	1:A:1168:TYR:N	2.53	0.41
1:A:1255:GLU:O	1:A:1289:TYR:CE2	2.72	0.41
1:A:1292:ASP:HA	2:F:97:GLN:HG2	2.00	0.41
1:A:1499:LEU:HB2	1:A:1511:ALA:CB	2.42	0.41
1:B:1170:GLU:CG	1:B:1171:THR:N	2.83	0.41
1:B:1323:LEU:O	1:B:1327:PHE:CD2	2.73	0.41
1:B:1387:LYS:O	1:B:1389:GLY:N	2.54	0.41
1:B:1425:VAL:CG2	1:B:1426:LEU:H	2.18	0.41
1:B:1493:ILE:O	1:B:1494:SER:C	2.59	0.41
1:B:1499:LEU:HB2	1:B:1511:ALA:CB	2.43	0.41
1:B:1521:TRP:CZ3	1:B:1525:VAL:HG11	2.55	0.41
1:C:1145:ASN:O	1:C:1150:TRP:CZ2	2.73	0.41
1:C:1170:GLU:O	1:C:1173:LEU:N	2.53	0.41
1:C:1258:PHE:C	1:C:1260:CYS:H	2.24	0.41
1:C:1422:LEU:HD13	1:C:1422:LEU:C	2.40	0.41
1:C:1434:ARG:HH21	2:E:5:UNK:CB	2.33	0.41
1:C:1476:ASP:CG	1:C:1479:ALA:HB3	2.39	0.41
1:C:1599:PHE:HA	1:C:1602:VAL:CG2	2.50	0.41
2:E:189:UNK:N	2:E:194:UNK:CB	2.83	0.41
1:A:1181:ASN:C	1:A:1182:ARG:HG2	2.40	0.41
1:A:1323:LEU:O	1:A:1327:PHE:CD2	2.73	0.41
1:A:1406:ARG:O	1:A:1409:GLN:CB	2.64	0.41
1:A:1469:ASN:ND2	1:A:1498:ARG:NH1	2.68	0.41
1:A:1471:PHE:HA	1:A:1474:GLU:CG	2.44	0.41
1:A:1476:ASP:CG	1:A:1479:ALA:HB3	2.40	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1580:ASP:OD1	1:C:1605:GLU:N	2.54	0.41
1:B:1166:GLU:C	1:B:1167:SER:O	2.59	0.41
1:B:1481:ARG:O	1:B:1484:ILE:HG13	2.20	0.41
1:B:1517:GLY:C	1:B:1519:ASN:H	2.22	0.41
1:B:1521:TRP:CZ3	1:B:1522:LYS:CD	3.02	0.41
1:C:1368:TYR:HD1	1:C:1368:TYR:O	2.03	0.41
1:C:1417:LEU:HD22	1:C:1417:LEU:HA	1.90	0.41
1:C:1561:GLU:CG	1:C:1562:LYS:H	2.34	0.41
2:D:148:LYS:C	2:D:151:ILE:HG23	2.41	0.41
2:F:144:GLU:O	2:F:148:LYS:N	2.45	0.41
1:A:1183:LEU:HD12	1:A:1184:ALA:N	2.35	0.41
1:A:1209:LYS:CB	1:A:1231:LEU:HB3	2.48	0.41
1:A:1258:PHE:C	1:A:1260:CYS:H	2.23	0.41
1:A:1329:PRO:HB2	1:A:1330:GLN:H	1.63	0.41
1:A:1333:ARG:CG	1:A:1360:GLU:HG3	2.50	0.41
1:A:1340:TRP:H	1:A:1340:TRP:HD1	1.67	0.41
1:A:1387:LYS:HD2	1:A:1390:GLN:CD	2.41	0.41
1:A:1561:GLU:CG	1:A:1562:LYS:H	2.34	0.41
1:A:1598:TYR:CE2	2:F:199:UNK:N	2.89	0.41
1:B:1318:THR:HG22	1:B:1347:LYS:NZ	2.36	0.41
1:B:1344:ASN:OD1	1:B:1345:ILE:N	2.53	0.41
1:C:1333:ARG:CG	1:C:1360:GLU:HG3	2.49	0.41
1:C:1340:TRP:CZ3	1:C:1367:LYS:HD2	2.55	0.41
1:C:1340:TRP:H	1:C:1340:TRP:HD1	1.68	0.41
1:C:1412:LEU:HA	1:C:1419:LEU:HD13	1.99	0.41
1:C:1435:ALA:HB1	1:C:1439:PHE:HE2	1.83	0.41
1:C:1472:ILE:CG2	1:C:1498:ARG:HE	2.21	0.41
1:C:1513:TYR:O	1:C:1516:LYS:N	2.53	0.41
1:C:1533:LEU:O	1:C:1535:LYS:N	2.53	0.41
2:D:103:ARG:HA	2:D:103:ARG:HD2	1.59	0.41
2:D:107:GLU:O	2:D:110:ARG:HG2	2.20	0.41
2:D:186:UNK:C	2:D:188:UNK:N	2.83	0.41
2:E:98:GLU:HA	2:E:98:GLU:OE1	2.21	0.41
2:E:134:ASP:HA	2:E:137:GLU:OE1	2.21	0.41
1:A:1105:PRO:CG	1:A:1108:TRP:CZ2	3.04	0.41
1:A:1253:TRP:HZ3	1:A:1276:ILE:CG2	2.04	0.41
1:A:1290:TYR:CD2	1:A:1299:LEU:CD1	2.92	0.41
1:A:1401:VAL:HG22	1:A:1429:ARG:HH21	1.84	0.41
1:A:1554:LEU:HB2	1:A:1571:PHE:CE2	2.56	0.41
1:A:1596:MET:SD	1:A:1599:PHE:CZ	3.13	0.41
1:B:1170:GLU:O	1:B:1173:LEU:N	2.53	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1276:ILE:HG13	1:B:1277:VAL:N	2.34	0.41
1:B:1342:ARG:O	1:B:1343:VAL:HB	2.21	0.41
1:B:1456:GLN:HE22	1:B:1467:LEU:CD2	2.33	0.41
1:B:1602:VAL:HG13	2:D:205:UNK:C	2.51	0.41
1:B:1605:GLU:CB	1:C:1580:ASP:OD1	2.62	0.41
1:C:1094:ARG:O	1:C:1097:GLU:HB2	2.20	0.41
1:C:1213:ALA:O	1:C:1217:LEU:HB2	2.20	0.41
1:C:1345:ILE:HB	1:C:1368:TYR:HE2	1.85	0.41
2:E:94:ARG:C	2:E:96:THR:N	2.73	0.41
2:E:148:LYS:C	2:E:151:ILE:HG23	2.41	0.41
1:A:1211:TYR:HB2	1:A:1231:LEU:HD11	2.02	0.41
1:A:1303:LEU:HD12	1:A:1320:LEU:CD1	2.34	0.41
1:A:1420:ASN:HA	1:A:1423:LEU:CD1	2.51	0.41
1:A:1472:ILE:CG2	1:A:1498:ARG:HH21	2.34	0.41
1:A:1474:GLU:O	1:A:1475:GLU:HB2	2.21	0.41
1:A:1481:ARG:NH1	1:A:1510:ILE:CD1	2.84	0.41
1:B:1083:GLN:NE2	1:B:1106:ALA:CB	2.81	0.41
1:B:1137:TYR:HB2	1:B:1138:MET:CE	2.51	0.41
1:B:1422:LEU:C	1:B:1422:LEU:HD13	2.40	0.41
1:B:1496:ALA:CB	1:B:1515:PHE:CZ	3.02	0.41
1:B:1504:LEU:HD23	1:B:1504:LEU:HA	1.79	0.41
1:B:1587:TRP:N	1:B:1587:TRP:CD1	2.87	0.41
1:C:1303:LEU:HD23	1:C:1303:LEU:H	1.84	0.41
1:C:1323:LEU:O	1:C:1327:PHE:CD2	2.73	0.41
1:C:1472:ILE:CG2	1:C:1498:ARG:HH21	2.34	0.41
2:E:133:LYS:HA	2:E:133:LYS:HZ2	1.74	0.41
1:A:1094:ARG:O	1:A:1097:GLU:HB2	2.20	0.41
1:A:1295:TYR:HE2	1:A:1299:LEU:HD13	1.85	0.41
1:A:1419:LEU:HD23	1:A:1447:LEU:HD13	2.01	0.41
1:A:1493:ILE:O	1:A:1494:SER:C	2.59	0.41
1:A:1504:LEU:HD23	1:A:1504:LEU:HA	1.79	0.41
1:B:1130:LYS:NZ	1:B:1155:LYS:HD3	2.35	0.41
1:B:1211:TYR:HB2	1:B:1231:LEU:HD11	2.01	0.41
1:B:1244:ALA:H	1:B:1275:HIS:CE1	2.39	0.41
1:B:1401:VAL:HG22	1:B:1429:ARG:HH21	1.85	0.41
1:B:1469:ASN:HD22	1:B:1469:ASN:C	2.21	0.41
1:B:1471:PHE:HD1	1:B:1476:ASP:HB3	1.86	0.41
1:B:1481:ARG:NH1	1:B:1510:ILE:CD1	2.83	0.41
1:B:1508:ARG:CZ	1:B:1530:LYS:HD3	2.50	0.41
1:B:1561:GLU:CG	1:B:1562:LYS:H	2.34	0.41
1:C:1151:GLU:HB3	1:C:1152:GLU:OE2	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1167:SER:O	1:C:1172:GLU:N	2.54	0.41
1:C:1224:PHE:HA	1:C:1227:LEU:HB3	2.03	0.41
1:C:1521:TRP:CH2	1:C:1525:VAL:HG11	2.56	0.41
2:E:134:ASP:HA	2:E:137:GLU:HB2	2.03	0.41
2:F:182:UNK:C	2:F:188:UNK:CB	2.99	0.41
2:F:196:UNK:O	2:F:199:UNK:CB	2.69	0.41
1:A:1154:VAL:HG13	1:A:1180:THR:HG21	2.02	0.41
1:A:1161:ARG:O	1:A:1164:ALA:O	2.38	0.41
1:A:1236:GLU:HB3	1:A:1237:TYR:H	1.77	0.41
1:A:1261:VAL:HG11	1:A:1295:TYR:CE1	2.53	0.41
1:A:1280:ALA:C	1:A:1280:ALA:N	2.59	0.41
1:A:1422:LEU:HD13	1:A:1422:LEU:C	2.41	0.41
1:A:1474:GLU:O	1:A:1475:GLU:CB	2.69	0.41
1:A:1481:ARG:O	1:A:1484:ILE:HG13	2.21	0.41
1:A:1521:TRP:CZ3	1:A:1522:LYS:CD	3.02	0.41
1:A:1584:GLU:C	1:A:1586:ALA:H	2.25	0.41
1:A:1599:PHE:HA	1:A:1602:VAL:CG2	2.51	0.41
1:A:1621:LYS:HB3	1:A:1625:GLN:NE2	2.36	0.41
1:B:1092:LEU:C	1:B:1094:ARG:N	2.71	0.41
1:B:1115:GLN:OE1	1:B:1121:VAL:HG21	2.21	0.41
1:B:1126:ASP:OD1	1:B:1156:TYR:OH	2.38	0.41
1:B:1258:PHE:CE1	1:B:1293:ARG:HD2	2.56	0.41
1:B:1361:LEU:HD22	1:B:1365:TYR:HE2	1.72	0.41
1:B:1387:LYS:HD2	1:B:1390:GLN:CD	2.41	0.41
1:B:1388:GLU:CG	1:B:1389:GLY:N	2.82	0.41
1:B:1427:SER:HB2	1:B:1428:PRO:HD2	1.88	0.41
1:B:1509:ARG:NH2	2:D:163:GLN:CA	2.50	0.41
1:B:1533:LEU:O	1:B:1535:LYS:N	2.54	0.41
1:C:1108:TRP:CE3	1:C:1108:TRP:CA	2.98	0.41
1:C:1136:SER:CB	1:C:1140:VAL:CG2	2.97	0.41
1:C:1379:MET:SD	1:C:1403:LEU:HD21	2.61	0.41
1:C:1387:LYS:O	1:C:1389:GLY:N	2.53	0.41
1:C:1456:GLN:HE22	1:C:1467:LEU:CD2	2.34	0.41
1:C:1466:SER:O	1:C:1470:LEU:N	2.52	0.41
1:C:1617:GLU:HA	1:C:1620:ARG:CZ	2.51	0.41
1:C:1621:LYS:HB3	1:C:1625:GLN:NE2	2.36	0.41
2:D:126:GLU:OE2	2:D:129:GLU:CD	2.59	0.41
2:D:151:ILE:CG1	2:D:152:ASN:N	2.84	0.41
2:E:91:GLN:OE1	2:E:92:ALA:HA	2.21	0.41
2:E:105:TRP:HA	2:E:108:GLU:OE2	2.20	0.41
2:E:178:UNK:O	2:E:180:UNK:N	2.54	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:134:ASP:HA	2:F:137:GLU:OE1	2.21	0.41
1:A:1082:VAL:HG11	1:A:1105:PRO:CB	2.44	0.41
1:A:1161:ARG:HD3	1:A:1161:ARG:HA	1.84	0.41
1:A:1213:ALA:O	1:A:1217:LEU:HB2	2.20	0.41
1:A:1277:VAL:C	1:A:1279:HIS:HD1	2.20	0.41
1:A:1329:PRO:O	1:A:1332:MET:N	2.45	0.41
1:A:1342:ARG:O	1:A:1343:VAL:HB	2.21	0.41
1:A:1345:ILE:HB	1:A:1368:TYR:HE2	1.85	0.41
1:A:1563:ARG:O	1:A:1564:GLU:C	2.59	0.41
1:B:1481:ARG:NH1	1:B:1510:ILE:HG13	2.35	0.41
1:B:1567:GLY:O	1:B:1569:CYS:N	2.54	0.41
1:C:1151:GLU:O	1:C:1151:GLU:CG	2.69	0.41
1:C:1198:ILE:C	1:C:1201:VAL:CG2	2.90	0.41
1:C:1253:TRP:O	1:C:1289:TYR:CZ	2.74	0.41
1:C:1381:HIS:N	1:C:1382:PRO:CD	2.82	0.41
1:C:1471:PHE:HD1	1:C:1476:ASP:HB3	1.85	0.41
1:C:1554:LEU:HB2	1:C:1571:PHE:CE2	2.56	0.41
2:D:12:UNK:C	2:D:14:UNK:N	2.84	0.41
2:D:103:ARG:HA	2:D:106:ARG:HB2	2.03	0.41
2:F:134:ASP:HA	2:F:137:GLU:HB2	2.03	0.41
1:A:1137:TYR:HB2	1:A:1138:MET:CE	2.51	0.40
1:A:1151:GLU:HB3	1:A:1152:GLU:OE2	2.21	0.40
1:A:1163:LYS:O	1:A:1164:ALA:CB	2.68	0.40
1:A:1251:ARG:C	1:A:1253:TRP:H	2.25	0.40
1:A:1257:CYS:SG	1:A:1290:TYR:HE1	2.41	0.40
1:A:1378:MET:SD	1:A:1391:PHE:HD2	2.45	0.40
1:A:1381:HIS:N	1:A:1382:PRO:CD	2.83	0.40
1:A:1601:GLN:HA	1:A:1604:LYS:CD	2.51	0.40
1:A:1619:LEU:O	1:A:1620:ARG:C	2.59	0.40
1:B:1146:THR:OG1	1:B:1147:SER:N	2.54	0.40
1:B:1170:GLU:C	1:B:1172:GLU:H	2.25	0.40
1:B:1224:PHE:HA	1:B:1227:LEU:HB3	2.03	0.40
1:B:1533:LEU:CD2	1:B:1535:LYS:HB2	2.51	0.40
1:C:1599:PHE:HA	1:C:1602:VAL:HG23	2.03	0.40
1:C:1619:LEU:O	1:C:1620:ARG:C	2.59	0.40
2:D:126:GLU:HG3	2:D:130:LYS:CE	2.52	0.40
2:F:151:ILE:CG1	2:F:152:ASN:N	2.84	0.40
1:A:1157:LEU:CD1	1:A:1177:LEU:CD2	2.95	0.40
1:A:1206:TYR:CE1	1:A:1230:THR:OG1	2.70	0.40
1:A:1209:LYS:H	1:A:1209:LYS:HG3	1.65	0.40
1:A:1244:ALA:N	1:A:1275:HIS:CE1	2.89	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1368:TYR:HD1	1:A:1368:TYR:O	2.03	0.40
1:A:1551:GLU:CG	1:A:1582:VAL:CG2	2.93	0.40
1:A:1551:GLU:OE1	1:A:1582:VAL:HG22	2.21	0.40
1:A:1587:TRP:N	1:A:1587:TRP:CD1	2.87	0.40
1:B:1107:VAL:HG12	1:B:1111:LEU:CB	2.43	0.40
1:B:1379:MET:SD	1:B:1403:LEU:HD21	2.61	0.40
1:B:1472:ILE:CG2	1:B:1498:ARG:HH21	2.34	0.40
1:B:1474:GLU:O	1:B:1475:GLU:CB	2.69	0.40
1:C:1134:PRO:O	1:C:1135:SER:O	2.39	0.40
1:C:1167:SER:CB	1:C:1171:THR:HG1	2.34	0.40
1:C:1234:LEU:HD23	1:C:1264:LYS:HZ3	1.51	0.40
1:C:1240:ALA:C	1:C:1242:ASP:N	2.74	0.40
1:C:1280:ALA:C	1:C:1282:GLU:N	2.74	0.40
1:C:1376:ILE:CD1	1:C:1403:LEU:HD23	2.50	0.40
1:C:1388:GLU:CG	1:C:1389:GLY:N	2.82	0.40
1:C:1474:GLU:O	1:C:1475:GLU:HB2	2.21	0.40
1:C:1567:GLY:O	1:C:1569:CYS:N	2.55	0.40
2:D:95:LEU:O	2:D:99:PRO:HD2	2.21	0.40
1:A:1151:GLU:O	1:A:1151:GLU:CG	2.69	0.40
1:A:1170:GLU:CG	1:A:1171:THR:N	2.83	0.40
1:A:1401:VAL:O	1:A:1401:VAL:HG12	2.22	0.40
1:A:1414:PHE:CE1	2:F:127:TRP:CE3	3.09	0.40
1:B:1102:CYS:O	1:B:1103:ASN:CB	2.69	0.40
1:B:1456:GLN:NE2	1:B:1467:LEU:CD2	2.85	0.40
1:B:1517:GLY:O	1:B:1519:ASN:N	2.55	0.40
1:B:1554:LEU:HB2	1:B:1571:PHE:CE2	2.56	0.40
1:C:1251:ARG:C	1:C:1253:TRP:H	2.25	0.40
1:C:1469:ASN:HD22	1:C:1469:ASN:C	2.21	0.40
1:C:1475:GLU:OE1	2:E:145:GLN:CB	2.70	0.40
1:C:1493:ILE:O	1:C:1494:SER:C	2.59	0.40
1:C:1521:TRP:CZ3	1:C:1522:LYS:CD	3.03	0.40
1:C:1533:LEU:CD2	1:C:1535:LYS:HB2	2.51	0.40
2:D:186:UNK:C	2:D:188:UNK:H	2.34	0.40
2:E:126:GLU:OE2	2:E:129:GLU:CD	2.59	0.40
1:A:1130:LYS:HZ3	1:A:1155:LYS:CG	2.34	0.40
1:A:1132:ASP:O	1:A:1133:ASP:O	2.39	0.40
1:A:1402:GLU:C	1:A:1402:GLU:CD	2.80	0.40
1:B:1170:GLU:OE1	1:B:1194:ASN:HB3	2.22	0.40
1:B:1240:ALA:C	1:B:1242:ASP:N	2.74	0.40
1:B:1402:GLU:C	1:B:1402:GLU:CD	2.80	0.40
1:B:1474:GLU:O	1:B:1475:GLU:HB2	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1521:TRP:CH2	1:B:1525:VAL:HG11	2.56	0.40
1:B:1599:PHE:HA	1:B:1602:VAL:CG2	2.51	0.40
1:C:1108:TRP:NE1	1:C:1131:ALA:CB	2.84	0.40
1:C:1333:ARG:CA	1:C:1360:GLU:CG	2.98	0.40
1:C:1449:LYS:O	1:C:1453:ARG:NH1	2.55	0.40
1:C:1584:GLU:C	1:C:1586:ALA:H	2.25	0.40
2:E:151:ILE:CG1	2:E:152:ASN:N	2.84	0.40
2:F:148:LYS:C	2:F:151:ILE:HG23	2.41	0.40
1:A:1224:PHE:HA	1:A:1227:LEU:HB3	2.03	0.40
1:A:1232:VAL:O	1:A:1233:HIS:HB3	2.22	0.40
1:A:1517:GLY:O	1:A:1519:ASN:N	2.54	0.40
1:A:1596:MET:SD	1:A:1597:PRO:CD	3.00	0.40
1:B:1166:GLU:O	1:B:1169:VAL:HB	2.21	0.40
1:B:1333:ARG:CB	1:B:1360:GLU:HG2	2.48	0.40
1:B:1401:VAL:O	1:B:1401:VAL:HG12	2.22	0.40
1:B:1502:HIS:O	1:B:1508:ARG:HD2	2.22	0.40
1:B:1561:GLU:CD	1:B:1562:LYS:H	2.25	0.40
1:B:1596:MET:SD	1:B:1599:PHE:HZ	2.43	0.40
1:C:1233:HIS:ND1	1:C:1236:GLU:CD	2.75	0.40
1:C:1420:ASN:C	1:C:1422:LEU:N	2.73	0.40
1:C:1578:ARG:HH12	1:C:1594:PHE:HZ	1.69	0.40

All (5) symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1340:TRP:CZ2	1:C:1222:SER:OG[12_655]	1.80	0.40
1:C:1304:GLU:OE2	1:C:1334:GLU:OE2[15_645]	1.98	0.22
1:A:1199:GLN:NE2	1:A:1431:ASP:OD2[10_555]	2.13	0.07
1:B:1340:TRP:CZ2	1:C:1222:SER:CB[12_655]	2.15	0.05
1:B:1341:SER:OG	1:C:1203:ASP:OD2[12_655]	2.18	0.02

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	551/624 (88%)	322 (58%)	152 (28%)	77 (14%)	0	4
1	B	551/624 (88%)	319 (58%)	161 (29%)	71 (13%)	0	5
1	C	551/624 (88%)	309 (56%)	164 (30%)	78 (14%)	0	4
2	D	77/190 (40%)	50 (65%)	16 (21%)	11 (14%)	0	4
2	E	66/190 (35%)	35 (53%)	21 (32%)	10 (15%)	0	4
2	F	76/190 (40%)	42 (55%)	20 (26%)	14 (18%)	0	2
All	All	1872/2442 (77%)	1077 (58%)	534 (28%)	261 (14%)	0	4

All (261) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	1087	GLU
1	A	1091	ASN
1	A	1105	PRO
1	A	1122	LYS
1	A	1130	LYS
1	A	1165	ARG
1	A	1168	TYR
1	A	1181	ASN
1	A	1193	PRO
1	A	1194	ASN
1	A	1198	ILE
1	A	1231	LEU
1	A	1251	ARG
1	A	1278	VAL
1	A	1283	LEU
1	A	1297	GLU
1	A	1327	PHE
1	A	1329	PRO
1	A	1330	GLN
1	A	1427	SER
1	A	1493	ILE
1	A	1547	THR
1	A	1590	ASN
1	A	1594	PHE
1	A	1596	MET
1	A	1597	PRO
1	B	1105	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	B	1121	VAL
1	B	1130	LYS
1	B	1164	ALA
1	B	1167	SER
1	B	1168	TYR
1	B	1181	ASN
1	B	1184	ALA
1	B	1193	PRO
1	B	1194	ASN
1	B	1231	LEU
1	B	1246	LYS
1	B	1247	ALA
1	B	1251	ARG
1	B	1278	VAL
1	B	1280	ALA
1	B	1283	LEU
1	B	1297	GLU
1	B	1327	PHE
1	B	1329	PRO
1	B	1330	GLN
1	B	1427	SER
1	B	1493	ILE
1	B	1547	THR
1	B	1588	ARG
1	B	1594	PHE
1	B	1596	MET
1	B	1597	PRO
1	B	1625	GLN
1	C	1088	HIS
1	C	1093	ASP
1	C	1105	PRO
1	C	1106	ALA
1	C	1107	VAL
1	C	1122	LYS
1	C	1133	ASP
1	C	1137	TYR
1	C	1147	SER
1	C	1149	ASN
1	C	1167	SER
1	C	1194	ASN
1	C	1198	ILE
1	C	1199	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	C	1200	GLN
1	C	1223	ASN
1	C	1231	LEU
1	C	1232	VAL
1	C	1234	LEU
1	C	1235	GLY
1	C	1251	ARG
1	C	1278	VAL
1	C	1280	ALA
1	C	1283	LEU
1	C	1297	GLU
1	C	1327	PHE
1	C	1329	PRO
1	C	1330	GLN
1	C	1427	SER
1	C	1493	ILE
1	C	1547	THR
1	C	1589	HIS
1	C	1591	ILE
1	C	1594	PHE
1	C	1596	MET
1	C	1597	PRO
2	D	113	LEU
2	D	156	ALA
2	D	157	ASP
2	E	95	LEU
2	F	156	ALA
2	F	157	ASP
2	F	163	GLN
2	F	167	ASP
1	A	1093	ASP
1	A	1145	ASN
1	A	1151	GLU
1	A	1160	ALA
1	A	1164	ALA
1	A	1195	ASN
1	A	1294	GLY
1	A	1296	PHE
1	A	1358	TRP
1	A	1382	PRO
1	A	1416	PRO
1	A	1517	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	1588	ARG
1	B	1086	ILE
1	B	1093	ASP
1	B	1103	ASN
1	B	1136	SER
1	B	1145	ASN
1	B	1358	TRP
1	B	1382	PRO
1	B	1416	PRO
1	B	1517	GLY
1	B	1585	THR
1	C	1089	ILE
1	C	1092	LEU
1	C	1103	ASN
1	C	1121	VAL
1	C	1145	ASN
1	C	1151	GLU
1	C	1358	TRP
1	C	1382	PRO
1	C	1416	PRO
1	C	1517	GLY
1	C	1585	THR
1	C	1590	ASN
2	D	94	ARG
2	D	115	GLU
2	D	160	PHE
2	E	113	LEU
2	E	115	GLU
2	F	113	LEU
2	F	115	GLU
1	A	1088	HIS
1	A	1138	MET
1	A	1148	GLY
1	A	1182	ARG
1	A	1216	LEU
1	A	1236	GLU
1	A	1254	LYS
1	A	1281	ASP
1	A	1345	ILE
1	A	1383	THR
1	A	1388	GLU
1	A	1432	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	1505	ILE
1	A	1568	ALA
1	A	1585	THR
1	A	1591	ILE
1	B	1091	ASN
1	B	1138	MET
1	B	1151	GLU
1	B	1195	ASN
1	B	1216	LEU
1	B	1221	VAL
1	B	1236	GLU
1	B	1254	LYS
1	B	1345	ILE
1	B	1383	THR
1	B	1388	GLU
1	B	1432	HIS
1	B	1505	ILE
1	B	1528	CYS
1	B	1568	ALA
1	C	1134	PRO
1	C	1135	SER
1	C	1216	LEU
1	C	1221	VAL
1	C	1254	LYS
1	C	1345	ILE
1	C	1383	THR
1	C	1388	GLU
1	C	1432	HIS
1	C	1505	ILE
1	C	1568	ALA
2	D	95	LEU
2	D	98	GLU
2	E	107	GLU
2	F	101	SER
2	F	162	GLN
1	A	1221	VAL
1	A	1264	LYS
1	A	1429	ARG
1	A	1548	GLU
1	A	1589	HIS
1	B	1084	VAL
1	B	1264	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	B	1429	ARG
1	B	1548	GLU
1	B	1590	ASN
1	C	1165	ARG
1	C	1247	ALA
1	C	1264	LYS
1	C	1295	TYR
1	C	1429	ARG
2	E	94	ARG
2	F	103	ARG
1	A	1132	ASP
1	A	1247	ALA
1	A	1316	MET
1	A	1408	ILE
1	A	1424	MET
1	A	1575	ASP
1	B	1080	SER
1	B	1259	ALA
1	B	1316	MET
1	B	1408	ILE
1	B	1424	MET
1	C	1080	SER
1	C	1166	GLU
1	C	1259	ALA
1	C	1316	MET
1	C	1408	ILE
1	C	1424	MET
1	C	1625	GLN
2	D	116	LEU
2	E	92	ALA
2	E	98	GLU
2	E	112	ARG
2	E	116	LEU
2	F	112	ARG
2	F	116	LEU
2	F	149	ASN
1	A	1080	SER
1	A	1121	VAL
1	A	1131	ALA
1	A	1259	ALA
1	A	1544	SER
1	B	1088	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	B	1147	SER
1	C	1192	GLY
1	C	1544	SER
2	D	149	ASN
2	E	149	ASN
2	F	164	PRO
1	A	1134	PRO
1	A	1141	VAL
1	A	1525	VAL
1	B	1141	VAL
1	B	1525	VAL
1	C	1525	VAL
1	A	1133	ASP
2	F	99	PRO
1	A	1343	VAL
1	A	1579	PRO
1	B	1343	VAL
1	B	1579	PRO
1	C	1343	VAL
1	C	1579	PRO
1	B	1148	GLY
2	D	99	PRO
1	C	1193	PRO
1	C	1256	VAL

5.3.2　Protein sidechains ⓘ

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	485/541 (90%)	409 (84%)	76 (16%)	2	14
1	B	485/541 (90%)	404 (83%)	81 (17%)	2	12
1	C	485/541 (90%)	395 (81%)	90 (19%)	1	9
2	D	62/73 (85%)	45 (73%)	17 (27%)	0	3
2	E	61/73 (84%)	42 (69%)	19 (31%)	0	2

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
2	F	62/73 (85%)	42 (68%)	20 (32%)	0	2
All	All	1640/1842 (89%)	1337 (82%)	303 (18%)	1	9

All (303) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	1085	LEU
1	A	1086	ILE
1	A	1087	GLU
1	A	1096	TYR
1	A	1098	PHE
1	A	1102	CYS
1	A	1108	TRP
1	A	1111	LEU
1	A	1126	ASP
1	A	1133	ASP
1	A	1136	SER
1	A	1137	TYR
1	A	1154	VAL
1	A	1156	TYR
1	A	1168	TYR
1	A	1172	GLU
1	A	1175	PHE
1	A	1181	ASN
1	A	1209	LYS
1	A	1212	ASP
1	A	1217	LEU
1	A	1221	VAL
1	A	1226	ARG
1	A	1227	LEU
1	A	1245	ARG
1	A	1258	PHE
1	A	1261	VAL
1	A	1262	ASP
1	A	1274	LEU
1	A	1290	TYR
1	A	1295	TYR
1	A	1303	LEU
1	A	1311	ARG
1	A	1317	PHE
1	A	1326	LYS
1	A	1340	TRP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	1344	ASN
1	A	1345	ILE
1	A	1350	ARG
1	A	1354	GLN
1	A	1377	THR
1	A	1383	THR
1	A	1384	ASP
1	A	1390	GLN
1	A	1417	LEU
1	A	1419	LEU
1	A	1422	LEU
1	A	1424	MET
1	A	1447	LEU
1	A	1458	HIS
1	A	1460	ASN
1	A	1469	ASN
1	A	1489	ASN
1	A	1490	PHE
1	A	1504	LEU
1	A	1510	ILE
1	A	1526	GLU
1	A	1527	LEU
1	A	1529	LYS
1	A	1536	ASP
1	A	1540	TYR
1	A	1549	LEU
1	A	1574	TYR
1	A	1577	LEU
1	A	1578	ARG
1	A	1588	ARG
1	A	1591	ILE
1	A	1592	MET
1	A	1593	ASP
1	A	1594	PHE
1	A	1596	MET
1	A	1597	PRO
1	A	1598	TYR
1	A	1601	GLN
1	A	1611	ASP
1	A	1620	ARG
1	B	1085	LEU
1	B	1091	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	B	1096	TYR
1	B	1098	PHE
1	B	1104	GLU
1	B	1108	TRP
1	B	1111	LEU
1	B	1120	MET
1	B	1121	VAL
1	B	1126	ASP
1	B	1136	SER
1	B	1137	TYR
1	B	1154	VAL
1	B	1156	TYR
1	B	1168	TYR
1	B	1172	GLU
1	B	1175	PHE
1	B	1183	LEU
1	B	1197	HIS
1	B	1209	LYS
1	B	1212	ASP
1	B	1217	LEU
1	B	1221	VAL
1	B	1222	SER
1	B	1226	ARG
1	B	1227	LEU
1	B	1245	ARG
1	B	1258	PHE
1	B	1261	VAL
1	B	1262	ASP
1	B	1274	LEU
1	B	1281	ASP
1	B	1290	TYR
1	B	1295	TYR
1	B	1303	LEU
1	B	1311	ARG
1	B	1317	PHE
1	B	1326	LYS
1	B	1339	PHE
1	B	1340	TRP
1	B	1344	ASN
1	B	1345	ILE
1	B	1350	ARG
1	B	1354	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	B	1377	THR
1	B	1383	THR
1	B	1384	ASP
1	B	1390	GLN
1	B	1417	LEU
1	B	1419	LEU
1	B	1422	LEU
1	B	1424	MET
1	B	1447	LEU
1	B	1458	HIS
1	B	1460	ASN
1	B	1469	ASN
1	B	1489	ASN
1	B	1490	PHE
1	B	1504	LEU
1	B	1510	ILE
1	B	1526	GLU
1	B	1527	LEU
1	B	1529	LYS
1	B	1536	ASP
1	B	1540	TYR
1	B	1549	LEU
1	B	1574	TYR
1	B	1577	LEU
1	B	1578	ARG
1	B	1588	ARG
1	B	1591	ILE
1	B	1592	MET
1	B	1593	ASP
1	B	1594	PHE
1	B	1596	MET
1	B	1597	PRO
1	B	1598	TYR
1	B	1601	GLN
1	B	1611	ASP
1	B	1620	ARG
1	B	1629	THR
1	C	1085	LEU
1	C	1086	ILE
1	C	1087	GLU
1	C	1089	ILE
1	C	1091	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	C	1092	LEU
1	C	1096	TYR
1	C	1098	PHE
1	C	1101	ARG
1	C	1102	CYS
1	C	1103	ASN
1	C	1104	GLU
1	C	1108	TRP
1	C	1111	LEU
1	C	1121	VAL
1	C	1126	ASP
1	C	1133	ASP
1	C	1137	TYR
1	C	1149	ASN
1	C	1154	VAL
1	C	1156	TYR
1	C	1159	MET
1	C	1168	TYR
1	C	1172	GLU
1	C	1174	ILE
1	C	1175	PHE
1	C	1191	ASN
1	C	1194	ASN
1	C	1198	ILE
1	C	1208	GLU
1	C	1212	ASP
1	C	1217	LEU
1	C	1221	VAL
1	C	1226	ARG
1	C	1227	LEU
1	C	1231	LEU
1	C	1232	VAL
1	C	1245	ARG
1	C	1258	PHE
1	C	1261	VAL
1	C	1262	ASP
1	C	1274	LEU
1	C	1281	ASP
1	C	1290	TYR
1	C	1295	TYR
1	C	1303	LEU
1	C	1311	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	C	1317	PHE
1	C	1326	LYS
1	C	1340	TRP
1	C	1344	ASN
1	C	1345	ILE
1	C	1350	ARG
1	C	1354	GLN
1	C	1377	THR
1	C	1383	THR
1	C	1384	ASP
1	C	1390	GLN
1	C	1417	LEU
1	C	1419	LEU
1	C	1422	LEU
1	C	1424	MET
1	C	1447	LEU
1	C	1458	HIS
1	C	1460	ASN
1	C	1469	ASN
1	C	1489	ASN
1	C	1490	PHE
1	C	1504	LEU
1	C	1526	GLU
1	C	1527	LEU
1	C	1529	LYS
1	C	1536	ASP
1	C	1540	TYR
1	C	1549	LEU
1	C	1574	TYR
1	C	1577	LEU
1	C	1578	ARG
1	C	1588	ARG
1	C	1589	HIS
1	C	1590	ASN
1	C	1591	ILE
1	C	1592	MET
1	C	1593	ASP
1	C	1594	PHE
1	C	1596	MET
1	C	1597	PRO
1	C	1601	GLN
1	C	1611	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	C	1620	ARG
2	D	103	ARG
2	D	105	TRP
2	D	106	ARG
2	D	108	GLU
2	D	110	ARG
2	D	112	ARG
2	D	114	GLN
2	D	116	LEU
2	D	120	SER
2	D	123	MET
2	D	125	GLN
2	D	127	TRP
2	D	130	LYS
2	D	133	LYS
2	D	137	GLU
2	D	153	ASN
2	D	155	ILE
2	E	91	GLN
2	E	93	ASP
2	E	94	ARG
2	E	98	GLU
2	E	100	GLU
2	E	110	ARG
2	E	112	ARG
2	E	114	GLN
2	E	116	LEU
2	E	120	SER
2	E	123	MET
2	E	125	GLN
2	E	127	TRP
2	E	130	LYS
2	E	133	LYS
2	E	137	GLU
2	E	140	GLN
2	E	153	ASN
2	E	155	ILE
2	F	91	GLN
2	F	93	ASP
2	F	94	ARG
2	F	97	GLN
2	F	105	TRP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	F	106	ARG
2	F	108	GLU
2	F	110	ARG
2	F	112	ARG
2	F	114	GLN
2	F	116	LEU
2	F	120	SER
2	F	123	MET
2	F	125	GLN
2	F	127	TRP
2	F	130	LYS
2	F	133	LYS
2	F	137	GLU
2	F	140	GLN
2	F	153	ASN

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (63) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	1083	GLN
1	A	1091	ASN
1	A	1103	ASN
1	A	1117	GLN
1	A	1145	ASN
1	A	1191	ASN
1	A	1354	GLN
1	A	1380	ASN
1	A	1381	HIS
1	A	1390	GLN
1	A	1456	GLN
1	A	1457	ASN
1	A	1468	ASN
1	A	1469	ASN
1	A	1489	ASN
1	A	1518	ASN
1	A	1523	GLN
1	A	1539	GLN
1	A	1630	GLN
1	B	1083	GLN
1	B	1091	ASN
1	B	1117	GLN
1	B	1145	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	B	1191	ASN
1	B	1194	ASN
1	B	1354	GLN
1	B	1380	ASN
1	B	1381	HIS
1	B	1390	GLN
1	B	1456	GLN
1	B	1457	ASN
1	B	1468	ASN
1	B	1469	ASN
1	B	1489	ASN
1	B	1518	ASN
1	B	1523	GLN
1	B	1539	GLN
1	B	1630	GLN
1	C	1091	ASN
1	C	1149	ASN
1	C	1191	ASN
1	C	1194	ASN
1	C	1354	GLN
1	C	1380	ASN
1	C	1381	HIS
1	C	1390	GLN
1	C	1444	GLN
1	C	1456	GLN
1	C	1457	ASN
1	C	1468	ASN
1	C	1469	ASN
1	C	1489	ASN
1	C	1518	ASN
1	C	1523	GLN
1	C	1539	GLN
1	C	1590	ASN
2	D	91	GLN
2	D	149	ASN
2	D	153	ASN
2	E	149	ASN
2	E	153	ASN
2	F	149	ASN
2	F	153	ASN

5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates ⓘ

There are no monosaccharides in this entry.

5.6 Ligand geometry ⓘ

There are no ligands in this entry.

5.7 Other polymers ⓘ

There are no such residues in this entry.

5.8 Polymer linkage issues ⓘ

There are no chain breaks in this entry.

6　Fit of model and data ⓘ

6.1　Protein, DNA and RNA chains ⓘ

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å^2)	Q<0.9
1	A	553/624 (88%)	4.14	356 (64%)	0	0	306, 348, 348, 348	0
1	B	553/624 (88%)	4.69	361 (65%)	0	0	257, 257, 318, 319	0
1	C	553/624 (88%)	2.70	241 (43%)	0	1	232, 232, 308, 309	0
2	D	79/190 (41%)	4.35	63 (79%)	0	0	298, 298, 298, 298	0
2	E	68/190 (35%)	2.31	31 (45%)	0	1	314, 314, 314, 314	0
2	F	78/190 (41%)	3.34	37 (47%)	0	1	339, 339, 339, 339	0
All	All	1884/2442 (77%)	3.79	1089 (57%)	0	1	232, 307, 348, 348	0

All (1089) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	C	1091	ASN	35.2
1	C	1078	ASN	33.8
1	C	1079	THR	31.8
1	C	1090	GLY	29.1
1	B	1105	PRO	27.6
1	C	1088	HIS	25.4
1	B	1106	ALA	24.8
1	C	1080	SER	24.2
1	A	1079	THR	24.0
1	C	1087	GLU	23.2
1	C	1089	ILE	22.9
1	A	1080	SER	22.4
1	B	1123	GLU	21.8
1	B	1083	GLN	20.9
1	A	1629	THR	20.8
1	B	1223	ASN	20.7
1	B	1104	GLU	19.9
1	B	1088	HIS	19.6
1	A	1094	ARG	19.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	A	1083	GLN	19.2
1	C	1081	ALA	18.8
1	B	1078	ASN	18.4
1	A	1109	SER	18.3
1	B	1182	ARG	18.1
1	B	1096	TYR	17.4
1	C	1109	SER	17.4
1	B	1087	GLU	17.2
1	B	1134	PRO	16.9
1	B	1093	ASP	16.6
1	B	1089	ILE	16.1
1	B	1132	ASP	15.9
1	B	1133	ASP	15.7
1	A	1134	PRO	15.7
1	B	1086	ILE	15.7
1	B	1128	TYR	15.4
1	B	1212	ASP	15.3
1	A	1082	VAL	15.3
1	B	1085	LEU	15.2
1	A	1088	HIS	15.1
1	B	1082	VAL	15.1
1	B	1103	ASN	15.1
1	B	1125	ILE	14.9
1	B	1122	LYS	14.9
1	A	1628	GLU	14.7
1	B	1126	ASP	14.6
1	B	1121	VAL	14.5
1	B	1129	ILE	14.5
1	B	1214	ALA	14.5
1	A	1093	ASP	14.4
1	B	1079	THR	14.4
1	A	1136	SER	14.3
1	A	1262	ASP	14.2
1	A	1078	ASN	13.9
1	B	1181	ASN	13.9
1	A	1081	ALA	13.9
1	B	1130	LYS	13.9
1	B	1080	SER	13.8
1	B	1115	GLN	13.7
1	B	1091	ASN	13.7
1	B	1165	ARG	13.7
1	B	1151	GLU	13.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	B	1213	ALA	13.5
1	B	1137	TYR	13.5
2	F	101	SER	13.3
1	A	1135	SER	13.3
1	C	1110	GLN	13.3
1	A	1330	GLN	13.2
1	B	1099	ALA	13.1
1	B	1222	SER	13.1
1	B	1161	ARG	13.0
1	A	1096	TYR	13.0
1	B	1156	TYR	12.9
1	B	1230	THR	12.9
1	A	1152	GLU	12.9
1	B	1131	ALA	12.8
1	B	1120	MET	12.7
1	A	1261	VAL	12.7
1	C	1086	ILE	12.5
1	A	1097	GLU	12.5
1	B	1189	PHE	12.5
1	A	1087	GLU	12.5
1	B	1107	VAL	12.4
1	A	1270	GLN	12.3
1	B	1095	ALA	12.3
1	A	1165	ARG	12.2
1	C	1098	PHE	12.1
1	B	1226	ARG	12.1
1	B	1124	ALA	12.1
1	B	1210	MET	12.1
2	D	163	GLN	12.0
1	A	1212	ASP	12.0
1	B	1211	TYR	11.9
1	B	1108	TRP	11.9
1	B	1109	SER	11.5
2	E	112	ARG	11.5
1	A	1151	GLU	11.5
1	A	1095	ALA	11.5
2	F	104	LYS	11.5
1	B	1157	LEU	11.4
2	D	162	GLN	11.4
1	B	1148	GLY	11.3
2	D	91	GLN	11.3
1	B	1136	SER	11.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	A	1329	PRO	11.3
1	B	1147	SER	11.2
1	C	1105	PRO	11.2
2	F	102	ILE	11.1
1	A	1265	GLU	11.1
1	A	1084	VAL	11.1
1	C	1094	ARG	11.1
2	F	107	GLU	11.1
1	A	1223	ASN	11.1
1	A	1112	ALA	11.1
1	A	1298	GLU	11.1
1	A	1110	GLN	11.1
1	B	1100	GLU	11.1
1	A	1085	LEU	11.0
1	B	1262	ASP	11.0
1	A	1098	PHE	11.0
1	A	1386	TRP	10.9
1	A	1211	TYR	10.9
1	B	1183	LEU	10.9
1	A	1091	ASN	10.9
1	A	1196	ALA	10.8
1	B	1264	LYS	10.8
2	F	93	ASP	10.7
2	D	93	ASP	10.7
1	B	1164	ALA	10.7
1	C	1134	PRO	10.7
1	B	1081	ALA	10.6
1	B	1102	CYS	10.6
1	B	1139	GLU	10.6
1	B	1094	ARG	10.5
1	C	1101	ARG	10.4
1	B	1160	ALA	10.4
1	A	1120	MET	10.4
1	B	1092	LEU	10.4
1	B	1140	VAL	10.4
1	C	1114	ALA	10.3
1	B	1192	GLY	10.3
1	B	1184	ALA	10.1
1	B	1216	LEU	10.0
2	F	112	ARG	9.9
2	F	108	GLU	9.9
1	C	1082	VAL	9.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	B	1188	GLU	9.9
2	F	103	ARG	9.9
1	C	1097	GLU	9.9
1	B	1185	GLU	9.8
1	C	1083	GLN	9.8
1	B	1169	VAL	9.7
1	B	1191	ASN	9.7
1	B	1162	LYS	9.7
1	A	1149	ASN	9.7
1	A	1331	LYS	9.7
1	B	1111	LEU	9.6
1	A	1148	GLY	9.6
2	F	110	ARG	9.6
1	B	1149	ASN	9.6
1	C	1462	SER	9.5
1	A	1092	LEU	9.4
1	C	1085	LEU	9.4
1	C	1093	ASP	9.4
2	E	113	LEU	9.4
1	B	1158	GLN	9.4
1	B	1506	GLU	9.3
1	B	1197	HIS	9.3
1	C	1120	MET	9.3
1	A	1627	THR	9.3
1	B	1135	SER	9.3
1	A	1113	LYS	9.3
2	F	109	GLN	9.2
1	C	1113	LYS	9.2
1	B	1118	LYS	9.2
1	B	1127	SER	9.1
1	A	1267	ARG	9.1
1	B	1380	ASN	9.1
1	B	1097	GLU	9.1
1	B	1090	GLY	9.1
1	A	1630	GLN	9.1
1	A	1086	ILE	9.1
1	B	1084	VAL	9.0
1	C	1118	LYS	9.0
1	A	1396	THR	9.0
1	C	1128	TYR	9.0
1	A	1280	ALA	9.0
1	B	1152	GLU	9.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	A	1431	ASP	9.0
1	B	1163	LYS	9.0
1	C	1489	ASN	9.0
1	B	1254	LYS	8.9
1	C	1115	GLN	8.9
1	A	1192	GLY	8.9
1	A	1626	ALA	8.9
2	D	164	PRO	8.8
1	B	1190	ILE	8.8
1	A	1239	ALA	8.8
1	B	1458	HIS	8.7
1	A	1327	PHE	8.7
1	A	1395	ILE	8.7
2	D	165	ASP	8.7
1	A	1156	TYR	8.7
2	E	110	ARG	8.7
2	E	115	GLU	8.7
1	A	1385	ALA	8.7
1	B	1206	TYR	8.6
1	A	1106	ALA	8.6
1	B	1187	GLU	8.6
1	B	1278	VAL	8.6
2	F	111	LYS	8.6
2	F	106	ARG	8.5
1	C	1107	VAL	8.5
1	B	1251	ARG	8.5
1	A	1105	PRO	8.5
1	A	1123	GLU	8.5
1	B	1110	GLN	8.5
1	A	1248	ASN	8.5
1	B	1218	TYR	8.5
1	A	1222	SER	8.5
1	A	1193	PRO	8.4
1	B	1168	TYR	8.4
2	D	94	ARG	8.4
1	B	1252	THR	8.4
1	A	1266	PHE	8.4
1	A	1247	ALA	8.3
1	C	1095	ALA	8.3
1	A	1230	THR	8.3
1	B	1215	LYS	8.3
1	C	1092	LEU	8.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	A	1099	ALA	8.3
2	E	114	GLN	8.2
1	A	1197	HIS	8.2
1	B	1198	ILE	8.2
1	A	1189	PHE	8.1
1	A	1229	SER	8.1
1	A	1306	ALA	8.1
1	A	1242	ASP	8.1
1	C	1520	ARG	8.1
1	A	1328	LYS	8.1
1	C	1129	ILE	8.1
1	B	1138	MET	8.1
1	B	1154	VAL	8.1
2	F	96	THR	8.1
1	B	1263	GLY	8.0
1	B	1625	GLN	8.0
1	B	1159	MET	8.0
1	C	1130	LYS	8.0
1	A	1313	HIS	8.0
1	A	1153	LEU	7.9
1	A	1622	GLU	7.9
1	A	1240	ALA	7.9
1	B	1414	PHE	7.9
1	B	1280	ALA	7.9
1	A	1179	LYS	7.9
1	A	1264	LYS	7.9
1	B	1279	HIS	7.9
1	C	1112	ALA	7.8
1	A	1111	LEU	7.8
1	C	1126	ASP	7.8
1	A	1178	ALA	7.8
1	B	1443	LYS	7.8
1	A	1326	LYS	7.8
1	C	1104	GLU	7.7
1	B	1166	GLU	7.7
1	B	1200	GLN	7.7
1	B	1225	GLY	7.7
2	D	115	GLU	7.7
1	B	1573	CYS	7.7
1	A	1311	ARG	7.7
1	B	1504	LEU	7.6
1	A	1121	VAL	7.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	B	1520	ARG	7.6
1	A	1107	VAL	7.6
1	A	1180	THR	7.6
1	B	1204	ARG	7.5
1	B	1293	ARG	7.5
1	A	1231	LEU	7.5
1	A	1225	GLY	7.5
1	A	1118	LYS	7.5
1	C	1096	TYR	7.5
1	B	1203	ASP	7.5
1	C	1108	TRP	7.5
1	B	1523	GLN	7.5
1	B	1193	PRO	7.5
1	A	1224	PHE	7.4
1	C	1135	SER	7.4
1	C	1434	ARG	7.4
1	A	1213	ALA	7.4
2	E	109	GLN	7.4
2	F	105	TRP	7.4
1	B	1444	GLN	7.4
2	D	134	ASP	7.3
1	A	1214	ALA	7.3
1	B	1542	SER	7.3
1	A	1356	HIS	7.3
2	D	166	ALA	7.3
1	B	1277	VAL	7.3
1	B	1261	VAL	7.3
1	A	1140	VAL	7.3
1	B	1155	LYS	7.2
1	A	1573	CYS	7.2
1	A	1108	TRP	7.2
2	E	111	LYS	7.2
1	C	1099	ALA	7.2
1	A	1263	GLY	7.1
1	A	1128	TYR	7.1
1	A	1254	LYS	7.1
1	A	1154	VAL	7.1
1	B	1186	LEU	7.1
1	A	1089	ILE	7.1
1	B	1112	ALA	7.0
1	B	1475	GLU	7.0
1	C	1149	ASN	7.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	A	1397	LYS	7.0
1	A	1133	ASP	7.0
1	B	1379	MET	7.0
2	D	136	GLU	7.0
1	A	1115	GLN	7.0
1	B	1201	VAL	6.9
1	B	1141	VAL	6.9
1	A	1275	HIS	6.9
1	A	1226	ARG	6.9
1	A	1141	VAL	6.9
1	A	1357	LEU	6.9
1	A	1300	ILE	6.9
1	C	1111	LEU	6.9
2	D	92	ALA	6.9
1	B	1208	GLU	6.9
1	B	1250	THR	6.9
1	C	1144	ALA	6.9
1	A	1293	ARG	6.8
1	C	1197	HIS	6.8
1	B	1153	LEU	6.8
1	A	1398	VAL	6.8
1	B	1217	LEU	6.8
1	A	1241	VAL	6.8
1	B	1224	PHE	6.8
1	A	1101	ARG	6.8
1	A	1297	GLU	6.8
1	A	1271	MET	6.7
1	B	1326	LYS	6.7
1	A	1243	GLY	6.7
1	B	1628	GLU	6.7
1	A	1394	ILE	6.7
1	A	1228	ALA	6.6
1	A	1382	PRO	6.6
1	A	1623	GLU	6.6
1	B	1150	TRP	6.6
1	C	1175	PHE	6.6
1	A	1210	MET	6.6
1	A	1150	TRP	6.6
2	E	155	ILE	6.6
1	A	1147	SER	6.6
1	A	1290	TYR	6.5
1	A	1335	HIS	6.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	E	107	GLU	6.5
1	A	1625	GLN	6.5
2	D	132	LYS	6.5
2	E	106	ARG	6.5
1	B	1265	GLU	6.5
1	C	1156	TYR	6.5
1	A	1227	LEU	6.4
1	B	1116	LEU	6.4
1	B	1101	ARG	6.4
1	C	1100	GLU	6.4
2	D	159	ALA	6.4
1	A	1100	GLU	6.4
1	A	1160	ALA	6.3
1	C	1119	GLY	6.3
1	A	1384	ASP	6.3
1	B	1179	LYS	6.3
1	B	1114	ALA	6.3
1	A	1090	GLY	6.3
2	F	113	LEU	6.3
1	A	1268	LEU	6.3
2	D	98	GLU	6.2
1	A	1339	PHE	6.2
1	A	1246	LYS	6.2
1	A	1119	GLY	6.2
1	B	1575	ASP	6.2
1	C	1179	LYS	6.2
1	A	1432	HIS	6.2
1	B	1384	ASP	6.2
1	A	1195	ASN	6.2
1	C	1106	ALA	6.1
1	A	1274	LEU	6.1
1	A	1400	ASN	6.1
1	B	1456	GLN	6.1
2	D	131	ALA	6.1
1	A	1340	TRP	6.1
1	A	1199	GLN	6.1
1	A	1277	VAL	6.1
1	B	1382	PRO	6.1
1	C	1136	SER	6.0
1	A	1358	TRP	6.0
1	B	1202	GLY	6.0
1	A	1273	GLY	6.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	A	1117	GLN	6.0
1	A	1175	PHE	6.0
1	A	1200	GLN	5.9
1	C	1523	GLN	5.9
1	B	1180	THR	5.9
1	A	1218	TYR	5.9
1	A	1238	GLN	5.9
1	A	1157	LEU	5.9
1	B	1209	LYS	5.9
1	C	1169	VAL	5.9
1	C	1458	HIS	5.9
2	F	92	ALA	5.8
1	B	1227	LEU	5.8
1	C	1141	VAL	5.8
1	C	1395	ILE	5.8
2	D	97	GLN	5.8
1	A	1383	THR	5.8
1	A	1237	TYR	5.8
2	D	117	ASP	5.8
1	C	1102	CYS	5.8
1	A	1342	ARG	5.8
2	D	107	GLU	5.8
1	A	1332	MET	5.8
1	C	1116	LEU	5.8
1	B	1098	PHE	5.8
1	B	1220	ASN	5.8
1	A	1433	THR	5.7
1	A	1575	ASP	5.7
1	C	1133	ASP	5.7
1	B	1231	LEU	5.7
1	A	1198	ILE	5.7
1	B	1248	ASN	5.7
1	A	1302	MET	5.6
1	A	1130	LYS	5.6
1	B	1178	ALA	5.6
1	A	1399	ALA	5.6
2	D	99	PRO	5.6
1	B	1255	GLU	5.6
1	A	1139	GLU	5.5
1	A	1542	SER	5.5
1	A	1278	VAL	5.5
1	A	1171	THR	5.5

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	B	1199	GLN	5.5
1	A	1137	TYR	5.5
1	B	1375	ILE	5.5
1	B	1629	THR	5.5
1	B	1113	LYS	5.5
1	C	1461	LYS	5.5
1	A	1354	GLN	5.5
1	A	1430	LEU	5.5
2	D	138	TRP	5.5
1	A	1194	ASN	5.5
1	B	1228	ALA	5.4
1	B	1416	PRO	5.4
1	C	1140	VAL	5.4
1	A	1337	GLU	5.4
1	C	1084	VAL	5.4
1	C	1121	VAL	5.4
1	C	1122	LYS	5.4
1	C	1514	LEU	5.4
1	B	1306	ALA	5.4
2	D	127	TRP	5.4
1	C	1515	PHE	5.4
1	C	1382	PRO	5.4
2	F	91	GLN	5.4
2	D	116	LEU	5.4
1	A	1315	GLY	5.3
2	D	167	ASP	5.3
1	C	1222	SER	5.3
1	B	1295	TYR	5.3
1	A	1292	ASP	5.3
1	C	1153	LEU	5.3
1	B	1381	HIS	5.3
1	A	1272	CYS	5.3
1	A	1388	GLU	5.3
1	B	1410	PHE	5.3
1	A	1125	ILE	5.3
1	B	1205	CYS	5.3
1	B	1462	SER	5.3
1	B	1289	TYR	5.2
1	B	1474	GLU	5.2
1	B	1515	PHE	5.2
1	C	1125	ILE	5.2
2	D	133	LYS	5.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	A	1289	TYR	5.2
1	B	1119	GLY	5.2
2	D	145	GLN	5.2
1	C	1438	TYR	5.2
1	A	1333	ARG	5.2
1	A	1279	HIS	5.2
1	A	1164	ALA	5.2
1	B	1275	HIS	5.2
1	B	1244	ALA	5.2
1	A	1216	LEU	5.1
1	B	1242	ASP	5.1
1	B	1194	ASN	5.1
1	A	1188	GLU	5.1
1	A	1380	ASN	5.1
1	A	1181	ASN	5.1
1	C	1628	GLU	5.1
1	A	1355	ALA	5.1
2	F	99	PRO	5.1
1	B	1207	ASP	5.1
1	C	1103	ASN	5.1
1	C	1385	ALA	5.0
1	B	1266	PHE	5.0
1	A	1316	MET	5.0
1	A	1429	ARG	5.0
1	A	1220	ASN	5.0
1	B	1524	SER	5.0
1	C	1154	VAL	5.0
1	A	1202	GLY	5.0
2	D	114	GLN	5.0
1	C	1145	ASN	5.0
1	A	1122	LYS	5.0
1	A	1324	TYR	5.0
1	B	1173	LEU	5.0
1	B	1219	ASN	5.0
1	A	1387	LYS	5.0
1	A	1161	ARG	5.0
1	A	1334	GLU	5.0
1	B	1256	VAL	5.0
2	D	137	GLU	5.0
1	C	1165	ARG	4.9
1	B	1413	GLU	4.9
2	D	141	ARG	4.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	A	1351	ALA	4.9
1	C	1196	ALA	4.9
1	C	1460	ASN	4.9
1	C	1137	TYR	4.9
1	C	1521	TRP	4.9
2	D	149	ASN	4.9
2	F	98	GLU	4.9
1	B	1412	LEU	4.9
1	A	1462	SER	4.9
2	D	130	LYS	4.9
2	E	156	ALA	4.9
1	C	1150	TRP	4.8
1	A	1116	LEU	4.8
1	C	1506	GLU	4.8
1	A	1245	ARG	4.8
1	A	1244	ALA	4.8
1	C	1204	ARG	4.8
1	B	1442	VAL	4.8
1	C	1375	ILE	4.8
1	A	1403	LEU	4.8
1	B	1472	ILE	4.8
1	A	1381	HIS	4.8
1	B	1145	ASN	4.8
2	F	114	GLN	4.8
1	B	1473	THR	4.8
1	B	1521	TRP	4.8
1	C	1534	TYR	4.8
1	B	1229	SER	4.8
1	C	1498	ARG	4.8
1	A	1191	ASN	4.7
1	A	1323	LEU	4.7
1	B	1543	GLU	4.7
1	B	1403	LEU	4.7
1	A	1155	LYS	4.7
1	A	1233	HIS	4.7
1	B	1170	GLU	4.7
1	C	1384	ASP	4.7
1	B	1358	TRP	4.7
2	D	152	ASN	4.7
1	A	1325	SER	4.7
2	D	135	LEU	4.7
1	C	1172	GLU	4.7

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	A	1102	CYS	4.7
1	B	1539	GLN	4.7
1	A	1520	ARG	4.7
1	B	1507	PHE	4.6
1	B	1395	ILE	4.6
1	A	1169	VAL	4.6
1	C	1164	ALA	4.6
1	B	1438	TYR	4.6
1	B	1505	ILE	4.6
1	C	1378	MET	4.6
2	F	100	GLU	4.6
2	D	169	ILE	4.6
2	D	112	ARG	4.6
1	A	1317	PHE	4.6
1	B	1514	LEU	4.6
1	C	1406	ARG	4.6
1	C	1544	SER	4.6
1	A	1183	LEU	4.6
1	B	1167	SER	4.6
1	C	1490	PHE	4.6
1	A	1319	GLU	4.6
1	A	1166	GLU	4.5
1	A	1114	ALA	4.5
2	D	139	ASN	4.5
1	B	1249	SER	4.5
1	C	1403	LEU	4.5
2	F	95	LEU	4.5
1	A	1391	PHE	4.5
1	A	1215	LYS	4.5
1	B	1383	THR	4.5
1	A	1201	VAL	4.5
1	C	1538	MET	4.4
1	A	1269	ALA	4.4
1	B	1292	ASP	4.4
1	A	1460	ASN	4.4
2	D	120	SER	4.4
1	A	1585	THR	4.4
1	C	1139	GLU	4.4
1	A	1185	GLU	4.4
1	B	1247	ALA	4.4
1	C	1226	ARG	4.4
1	A	1288	ASN	4.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	A	1177	LEU	4.4
2	D	140	GLN	4.3
1	A	1572	THR	4.3
1	B	1451	TYR	4.3
1	A	1276	ILE	4.3
1	B	1221	VAL	4.3
1	B	1434	ARG	4.3
2	D	160	PHE	4.3
1	A	1142	GLN	4.3
2	D	128	ARG	4.3
2	D	168	ILE	4.3
1	A	1312	ALA	4.3
1	B	1624	GLU	4.3
1	B	1253	TRP	4.3
1	A	1206	TYR	4.3
1	B	1378	MET	4.3
1	B	1391	PHE	4.3
1	C	1540	TYR	4.3
1	A	1203	ASP	4.3
1	B	1142	GLN	4.2
1	C	1356	HIS	4.2
1	B	1146	THR	4.2
1	A	1368	TYR	4.2
1	A	1336	LEU	4.2
1	B	1630	GLN	4.2
1	B	1503	GLU	4.2
1	C	1124	ALA	4.2
1	C	1441	LYS	4.1
1	A	1174	ILE	4.1
1	B	1285	GLU	4.1
1	C	1379	MET	4.1
1	B	1238	GLN	4.1
1	A	1167	SER	4.1
1	C	1512	ALA	4.1
1	C	1507	PHE	4.1
1	A	1126	ASP	4.1
1	A	1124	ALA	4.1
1	B	1509	ARG	4.1
1	B	1174	ILE	4.1
1	B	1394	ILE	4.1
1	B	1623	GLU	4.1
1	B	1268	LEU	4.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	B	1578	ARG	4.1
1	A	1483	SER	4.1
1	B	1311	ARG	4.1
2	F	124	GLU	4.1
1	C	1380	ASN	4.0
1	B	1196	ALA	4.0
2	D	100	GLU	4.0
1	C	1200	GLN	4.0
1	B	1175	PHE	4.0
1	A	1221	VAL	4.0
1	C	1383	THR	4.0
1	B	1290	TYR	4.0
1	A	1320	LEU	4.0
1	A	1434	ARG	4.0
1	B	1411	TYR	4.0
1	A	1506	GLU	4.0
1	B	1386	TRP	4.0
2	E	137	GLU	4.0
1	C	1310	GLU	4.0
1	A	1309	LEU	4.0
1	A	1176	ALA	4.0
1	A	1378	MET	4.0
1	A	1296	PHE	3.9
1	B	1313	HIS	3.9
1	C	1377	THR	3.9
1	A	1299	LEU	3.9
2	D	108	GLU	3.9
1	A	1257	CYS	3.9
1	B	1460	ASN	3.9
1	A	1392	LYS	3.9
1	B	1117	GLN	3.9
1	A	1132	ASP	3.9
1	C	1456	GLN	3.9
1	B	1417	LEU	3.9
1	C	1511	ALA	3.9
1	B	1627	THR	3.9
1	B	1294	GLY	3.9
1	B	1177	LEU	3.8
1	B	1577	LEU	3.8
2	D	95	LEU	3.8
1	B	1259	ALA	3.8
1	C	1359	ALA	3.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	C	1444	GLN	3.8
1	A	1250	THR	3.8
1	C	1451	TYR	3.8
1	B	1574	TYR	3.8
2	D	113	LEU	3.8
1	C	1452	LEU	3.8
1	B	1195	ASN	3.8
1	A	1375	ILE	3.8
1	C	1261	VAL	3.8
1	B	1307	LEU	3.8
1	B	1576	LEU	3.8
1	B	1340	TRP	3.8
1	B	1463	VAL	3.8
1	C	1117	GLN	3.8
1	B	1240	ALA	3.8
1	B	1368	TYR	3.7
1	C	1410	PHE	3.7
1	B	1502	HIS	3.7
1	C	1357	LEU	3.7
1	C	1524	SER	3.7
1	C	1488	ASP	3.7
1	C	1148	GLY	3.7
1	A	1205	CYS	3.7
1	B	1144	ALA	3.7
1	A	1322	ILE	3.7
1	C	1157	LEU	3.7
1	C	1358	TRP	3.7
1	B	1535	LYS	3.7
1	A	1295	TYR	3.7
1	C	1381	HIS	3.7
1	C	1473	THR	3.7
1	B	1518	ASN	3.7
2	D	129	GLU	3.7
1	A	1234	LEU	3.6
1	C	1541	ALA	3.6
1	C	1629	THR	3.6
1	A	1281	ASP	3.6
1	A	1352	ALA	3.6
2	D	105	TRP	3.6
2	E	121	LYS	3.6
1	A	1285	GLU	3.6
1	B	1143	ALA	3.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	C	1178	ALA	3.6
1	A	1168	TYR	3.6
1	A	1534	TYR	3.6
2	D	148	LYS	3.6
2	F	161	TYR	3.6
1	C	1132	ASP	3.6
2	E	117	ASP	3.6
2	E	108	GLU	3.6
2	F	117	ASP	3.6
1	A	1301	THR	3.5
1	B	1541	ALA	3.5
1	A	1401	VAL	3.5
1	C	1432	HIS	3.5
1	B	1276	ILE	3.5
1	B	1288	ASN	3.5
1	B	1445	LEU	3.5
1	B	1415	LYS	3.5
2	F	159	ALA	3.5
1	C	1459	ASN	3.5
1	B	1432	HIS	3.5
1	B	1495	LEU	3.5
1	C	1396	THR	3.5
1	A	1217	LEU	3.5
2	D	142	GLN	3.5
1	A	1589	HIS	3.5
1	C	1171	THR	3.4
1	C	1430	LEU	3.4
1	C	1151	GLU	3.4
1	C	1416	PRO	3.4
2	D	96	THR	3.4
1	C	1573	CYS	3.4
1	A	1353	GLU	3.4
1	A	1260	CYS	3.4
1	A	1578	ARG	3.4
1	B	1406	ARG	3.4
1	A	1144	ALA	3.3
1	A	1255	GLU	3.3
1	A	1138	MET	3.3
1	B	1172	GLU	3.3
1	B	1439	PHE	3.3
2	E	104	LYS	3.3
2	F	94	ARG	3.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	A	1318	THR	3.3
1	A	1314	MET	3.3
2	F	152	ASN	3.3
1	C	1560	GLU	3.3
1	B	1354	GLN	3.3
2	E	95	LEU	3.3
2	F	162	GLN	3.3
1	C	1230	THR	3.2
1	A	1305	ALA	3.2
1	A	1236	GLU	3.2
2	F	97	GLN	3.2
1	B	1453	ARG	3.2
2	D	109	GLN	3.2
1	C	1216	LEU	3.2
1	A	1219	ASN	3.2
1	B	1258	PHE	3.2
1	B	1589	HIS	3.2
1	C	1495	LEU	3.2
1	B	1351	ALA	3.2
1	A	1361	LEU	3.2
1	C	1386	TRP	3.2
1	A	1377	THR	3.2
1	B	1488	ASP	3.2
1	A	1393	ASP	3.2
1	A	1624	GLU	3.2
1	A	1256	VAL	3.2
1	B	1171	THR	3.2
1	B	1467	LEU	3.2
2	E	139	ASN	3.2
1	A	1249	SER	3.1
1	A	1390	GLN	3.1
1	C	1627	THR	3.1
1	B	1377	THR	3.1
1	B	1582	VAL	3.1
1	C	1402	GLU	3.1
1	B	1357	LEU	3.1
1	C	1465	GLU	3.1
1	C	1223	ASN	3.1
2	D	144	GLU	3.1
1	C	1563	ARG	3.1
1	B	1436	VAL	3.1
1	B	1621	LYS	3.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	A	1184	ALA	3.1
1	B	1243	GLY	3.1
1	C	1412	LEU	3.1
1	C	1472	ILE	3.1
1	B	1471	PHE	3.1
1	A	1461	LYS	3.1
1	C	1176	ALA	3.1
1	C	1293	ARG	3.1
2	D	124	GLU	3.1
1	C	1163	LYS	3.1
1	B	1356	HIS	3.1
1	B	1425	VAL	3.0
1	C	1420	ASN	3.0
2	F	139	ASN	3.0
1	A	1258	PHE	3.0
1	A	1371	TYR	3.0
1	C	1392	LYS	3.0
1	C	1522	LYS	3.0
1	C	1186	LEU	3.0
1	C	1248	ASN	3.0
2	D	161	TYR	3.0
1	C	1143	ALA	3.0
2	E	154	ARG	3.0
1	A	1145	ASN	3.0
1	A	1173	LEU	3.0
1	B	1568	ALA	3.0
1	B	1452	LEU	3.0
1	B	1510	ILE	3.0
1	A	1259	ALA	3.0
1	A	1436	VAL	3.0
1	B	1273	GLY	3.0
1	C	1468	ASN	3.0
1	A	1303	LEU	3.0
1	C	1131	ALA	3.0
1	B	1508	ARG	2.9
1	A	1172	GLU	2.9
1	C	1526	GLU	2.9
1	B	1468	ASN	2.9
1	C	1161	ARG	2.9
1	B	1446	PRO	2.9
1	A	1294	GLY	2.9
1	C	1391	PHE	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	D	106	ARG	2.9
1	C	1525	VAL	2.9
1	C	1610	VAL	2.9
1	A	1341	SER	2.9
1	B	1534	TYR	2.9
2	D	101	SER	2.9
1	C	1433	THR	2.9
1	B	1316	MET	2.9
1	A	1444	GLN	2.9
1	C	1127	SER	2.9
1	C	1423	LEU	2.9
1	C	1417	LEU	2.9
1	C	1504	LEU	2.9
1	A	1286	LEU	2.9
1	A	1524	SER	2.9
1	B	1626	ALA	2.9
1	A	1190	ILE	2.9
1	A	1582	VAL	2.8
1	A	1307	LEU	2.8
1	B	1476	ASP	2.8
1	C	1152	GLU	2.8
1	A	1364	LEU	2.8
1	B	1459	ASN	2.8
2	D	123	MET	2.8
1	C	1290	TYR	2.8
1	A	1362	VAL	2.8
1	C	1405	TYR	2.8
1	B	1614	ASP	2.8
1	A	1451	TYR	2.8
1	C	1199	GLN	2.8
1	A	1343	VAL	2.8
1	A	1405	TYR	2.8
1	C	1630	GLN	2.8
2	D	125	GLN	2.8
2	E	120	SER	2.8
2	E	116	LEU	2.8
1	A	1568	ALA	2.8
1	A	1186	LEU	2.8
1	B	1544	SER	2.8
1	B	1371	TYR	2.8
1	B	1372	ASP	2.7
1	C	1422	LEU	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	B	1374	ALA	2.7
1	C	1561	GLU	2.7
1	C	1528	CYS	2.7
1	A	1576	LEU	2.7
1	C	1394	ILE	2.7
1	B	1516	LYS	2.7
1	C	1160	ALA	2.7
1	A	1283	LEU	2.7
1	A	1426	LEU	2.7
1	B	1404	TYR	2.7
1	B	1441	LYS	2.7
1	A	1232	VAL	2.7
1	B	1483	SER	2.7
1	C	1123	GLU	2.7
1	A	1374	ALA	2.6
1	A	1514	LEU	2.6
1	A	1187	GLU	2.6
1	B	1339	PHE	2.6
1	B	1560	GLU	2.6
1	B	1561	GLU	2.6
1	C	1212	ASP	2.6
1	A	1507	PHE	2.6
1	C	1142	GLN	2.6
1	B	1392	LYS	2.6
1	C	1418	LEU	2.6
1	C	1435	ALA	2.6
1	B	1585	THR	2.6
1	A	1543	GLU	2.6
1	B	1272	CYS	2.6
1	A	1291	GLN	2.6
1	B	1435	ALA	2.6
1	C	1447	LEU	2.6
1	C	1620	ARG	2.6
1	B	1325	SER	2.6
1	C	1404	TYR	2.6
1	A	1131	ALA	2.6
1	A	1464	ASN	2.6
1	B	1362	VAL	2.6
1	A	1252	THR	2.6
1	C	1535	LYS	2.6
1	C	1311	ARG	2.6
1	A	1458	HIS	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	B	1447	LEU	2.6
1	B	1511	ALA	2.6
1	C	1166	GLU	2.6
1	A	1423	LEU	2.6
1	B	1270	GLN	2.6
1	C	1529	LYS	2.6
1	B	1241	VAL	2.5
2	E	94	ARG	2.5
2	D	119	ALA	2.5
1	A	1521	TRP	2.5
1	A	1535	LYS	2.5
2	D	111	LYS	2.5
2	E	134	ASP	2.5
1	C	1429	ARG	2.5
1	C	1302	MET	2.5
1	B	1303	LEU	2.5
1	A	1129	ILE	2.5
1	C	1360	GLU	2.5
1	C	1545	LYS	2.5
2	F	120	SER	2.5
1	C	1614	ASP	2.5
2	D	143	SER	2.5
1	A	1158	GLN	2.5
1	B	1477	TYR	2.5
1	A	1425	VAL	2.4
1	C	1374	ALA	2.4
1	C	1325	SER	2.4
1	B	1365	TYR	2.4
1	B	1522	LYS	2.4
1	C	1474	GLU	2.4
1	C	1598	TYR	2.4
1	B	1513	TYR	2.4
1	A	1367	LYS	2.4
1	B	1236	GLU	2.4
1	A	1182	ARG	2.4
1	C	1442	VAL	2.4
1	C	1426	LEU	2.4
2	E	96	THR	2.4
2	E	93	ASP	2.4
1	C	1578	ARG	2.4
1	B	1455	VAL	2.4
1	C	1497	GLN	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	A	1404	TYR	2.4
1	B	1449	LYS	2.3
2	F	123	MET	2.3
1	B	1440	SER	2.3
1	B	1402	GLU	2.3
1	A	1539	GLN	2.3
1	C	1509	ARG	2.3
1	C	1499	LEU	2.3
2	E	125	GLN	2.3
1	B	1312	ALA	2.3
1	A	1544	SER	2.3
1	C	1510	ILE	2.3
1	C	1617	GLU	2.3
1	A	1143	ALA	2.3
2	E	138	TRP	2.3
1	A	1349	LEU	2.3
1	C	1221	VAL	2.3
1	C	1491	ASP	2.3
1	A	1456	GLN	2.3
1	B	1176	ALA	2.3
1	A	1595	ALA	2.3
2	F	128	ARG	2.3
1	A	1581	VAL	2.3
1	A	1310	GLU	2.3
1	A	1574	TYR	2.3
1	C	1295	TYR	2.3
2	F	141	ARG	2.3
1	B	1405	TYR	2.3
1	C	1324	TYR	2.3
1	B	1423	LEU	2.3
1	B	1617	GLU	2.3
2	F	125	GLN	2.3
1	A	1410	PHE	2.3
1	A	1541	ALA	2.3
2	F	160	PHE	2.3
1	C	1411	TYR	2.2
1	B	1237	TYR	2.2
1	C	1254	LYS	2.2
1	C	1562	LYS	2.2
1	A	1621	LYS	2.2
1	A	1379	MET	2.2
1	A	1551	GLU	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	C	1198	ILE	2.2
1	C	1439	PHE	2.2
2	E	151	ILE	2.2
1	A	1489	ASN	2.2
1	B	1234	LEU	2.2
1	C	1206	TYR	2.2
1	B	1239	ALA	2.2
1	A	1487	TYR	2.2
1	B	1529	LYS	2.2
1	C	1463	VAL	2.2
1	B	1487	TYR	2.2
1	C	1211	TYR	2.2
1	C	1400	ASN	2.2
1	B	1595	ALA	2.2
1	B	1433	THR	2.2
1	C	1252	THR	2.2
1	A	1584	GLU	2.2
1	C	1407	ALA	2.2
2	D	158	LYS	2.2
1	B	1310	GLU	2.2
1	C	1372	ASP	2.2
1	B	1257	CYS	2.2
1	C	1443	LYS	2.2
1	A	1363	PHE	2.1
1	A	1204	ARG	2.1
1	A	1348	VAL	2.1
1	B	1309	LEU	2.1
1	B	1454	SER	2.1
1	C	1494	SER	2.1
2	E	122	VAL	2.1
1	A	1235	GLY	2.1
1	B	1620	ARG	2.1
1	A	1447	LEU	2.1
1	A	1103	ASN	2.1
1	B	1246	LYS	2.1
1	B	1622	GLU	2.1
1	B	1396	THR	2.1
2	D	121	LYS	2.1
1	A	1561	GLU	2.1
1	C	1270	GLN	2.1
1	B	1233	HIS	2.1
1	C	1388	GLU	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	C	1624	GLU	2.1
1	C	1427	SER	2.1
1	A	1365	TYR	2.1
1	B	1498	ARG	2.1
1	B	1448	VAL	2.1
1	B	1464	ASN	2.1
1	B	1478	GLN	2.1
2	E	103	ARG	2.1
1	B	1540	TYR	2.1
1	B	1360	GLU	2.1
2	E	119	ALA	2.1
1	B	1581	VAL	2.1
1	C	1195	ASN	2.1
1	B	1260	CYS	2.0
1	B	1281	ASP	2.0
1	C	1484	ILE	2.0
1	B	1426	LEU	2.0
1	C	1355	ALA	2.0
1	C	1606	TYR	2.0
1	A	1170	GLU	2.0

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

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

6.3 Carbohydrates ⓘ

There are no monosaccharides in this entry.

6.4 Ligands ⓘ

There are no ligands in this entry.

6.5 Other polymers ⓘ

There are no such residues in this entry.