Full wwPDB X-ray Structure Validation Report (i)

Mar 25, 2026 – 08:24 AM UTC

PDB ID	:	3I4M / pdb_00003i4m
Title	:	8-oxoguanine containing RNA polymerase II elongation complex D
Authors	:	Damsma, G.E.; Cramer, P.
Deposited on	:	2009-07-02
Resolution	:	3.70 Å(reported)

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

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
https://www.wwpdb.org/validation/2017/XrayValidationReportHelp
with specific help available everywhere you see the (i) symbol.

The types of validation reports are described at
http://www.wwpdb.org/validation/2017/FAQs#types.

The following versions of software and data (see references (1)) were used in the production of this report:

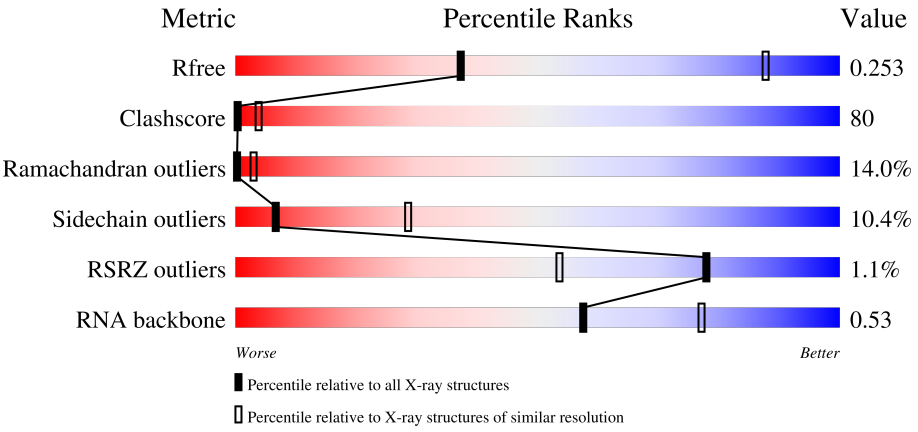
MolProbity	:	4-5-2 with Phenix2.0
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	2.0
EDS	:	3.0
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4	:	9.0.010 (Gargrove)
Density-Fitness	:	1.0.12
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.49

1 Overall quality at a glance

The following experimental techniques were used to determine the structure:
X-RAY DIFFRACTION

The reported resolution of this entry is 3.70 Å.

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



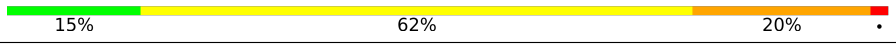
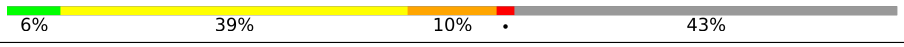
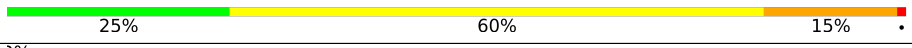
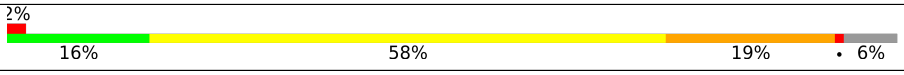
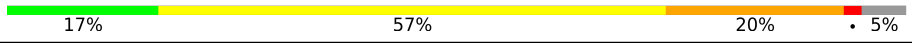
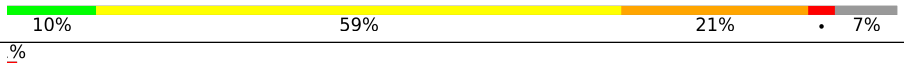
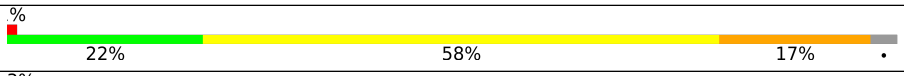
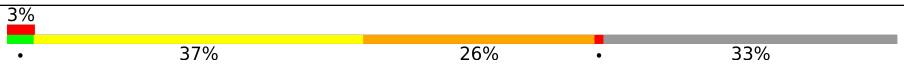
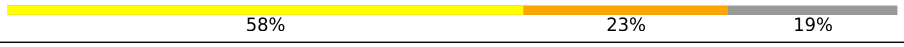
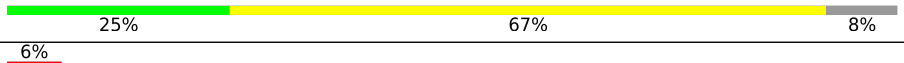
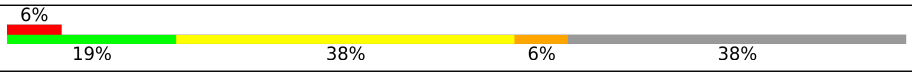
Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	180053	1131 (3.80-3.60)
Clashscore	190562	1171 (3.80-3.60)
Ramachandran outliers	187476	1129 (3.80-3.60)
Sidechain outliers	187428	1126 (3.80-3.60)
RSRZ outliers	180081	1130 (3.80-3.60)
RNA backbone	3983	1007 (4.30-3.08)

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	1733	12% 51% 17% • 18%
2	B	1224	15% 56% 18% • 8%
3	C	324	15% 51% 16% • 17%
4	D	221	15% 52% 15% • 15%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
5	E	215	
6	F	155	
7	G	171	
8	H	146	
9	I	122	
10	J	70	
11	K	120	
12	L	70	
13	T	26	
14	N	12	
15	P	16	

2 Entry composition

There are 17 unique types of molecules in this entry. The entry contains 32355 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a protein called DNA-directed RNA polymerase II subunit RPB1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	1429	Total	C	N	O	S	0	0	0
			11240	7079	1966	2133	62			

- Molecule 2 is a protein called DNA-directed RNA polymerase II subunit RPB2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	B	1125	Total	C	N	O	S	0	0	0
			8942	5659	1571	1657	55			

- Molecule 3 is a protein called DNA-directed RNA polymerase II subunit RPB3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	C	270	Total	C	N	O	S	0	0	0
			2125	1336	353	422	14			

There are 6 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
C	-5	HIS	-	expression tag	UNP P16370
C	-4	HIS	-	expression tag	UNP P16370
C	-3	HIS	-	expression tag	UNP P16370
C	-2	HIS	-	expression tag	UNP P16370
C	-1	HIS	-	expression tag	UNP P16370
C	0	HIS	-	expression tag	UNP P16370

- Molecule 4 is a protein called DNA-directed RNA polymerase II subunit RPB4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	D	187	Total	C	N	O	S	0	0	0
			1504	930	269	301	4			

- Molecule 5 is a protein called DNA-directed RNA polymerases I, II, and III subunit RPABC1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	E	214	Total	C	N	O	S	0	0	0
			1752	1111	309	321	11			

- Molecule 6 is a protein called DNA-directed RNA polymerases I, II, and III subunit RPABC2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	F	88	Total	C	N	O	S	0	0	0
			712	455	120	134	3			

- Molecule 7 is a protein called DNA-directed RNA polymerase II subunit RPB7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	G	171	Total	C	N	O	S	0	0	0
			1340	861	222	249	8			

- Molecule 8 is a protein called DNA-directed RNA polymerases I, II, and III subunit RPABC3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	H	137	Total	C	N	O	S	0	0	0
			1101	693	185	218	5			

- Molecule 9 is a protein called DNA-directed RNA polymerase II subunit RPB9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	I	116	Total	C	N	O	S	0	0	0
			944	581	172	181	10			

- Molecule 10 is a protein called DNA-directed RNA polymerases I, II, and III subunit RPABC5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	J	65	Total	C	N	O	S	0	0	0
			532	339	93	94	6			

- Molecule 11 is a protein called DNA-directed RNA polymerase II subunit RPB11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	K	116	Total	C	N	O	S	0	0	0
			929	596	158	173	2			

- Molecule 12 is a protein called DNA-directed RNA polymerases I, II, and III subunit RPABC4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	L	47	Total	C	N	O	S	0	0	0
			370	228	73	65	4			

- Molecule 13 is a DNA chain called DNA (5'-D(*AP*G*CP*TP*CP*AP*AP*GP*TP*AP*CP*TP*TP*AP*(8OG)P*GP*CP*CP*(BRU)P*GP*GP*TP*CP*AP*TP*T)-3').

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
13	T	21	Total	Br	C	N	O	P	0	0	0
			426	1	203	75	127	20			

- Molecule 14 is a DNA chain called DNA (5'-D(*AP*GP*TP*AP*CP*TP*TP*GP*AP*GP*CP*T)-3').

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	N	11	Total	C	N	O	P	0	0	0
			224	108	42	64	10			

- Molecule 15 is a RNA chain called RNA (5'-R(*UP*GP*CP*AP*UP*C*UP*UP*CP*CP*AP*GP*GP*CP*CP*U)-3').

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	P	10	Total	C	N	O	P	0	0	0
			205	93	33	70	9			

- Molecule 16 is MAGNESIUM ION (CCD ID: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
16	A	1	Total	Mg	0	0
			1	1		

- Molecule 17 is ZINC ION (CCD ID: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
17	A	2	Total	Zn	0	0
			2	2		
17	B	1	Total	Zn	0	0
			1	1		
17	C	1	Total	Zn	0	0
			1	1		
17	I	2	Total	Zn	0	0
			2	2		

Continued on next page...

Continued from previous page...

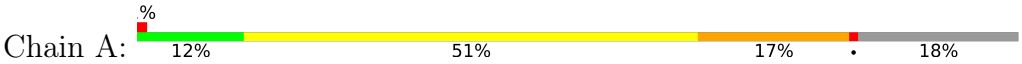
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
17	J	1	Total Zn 1 1	0	0
17	L	1	Total Zn 1 1	0	0

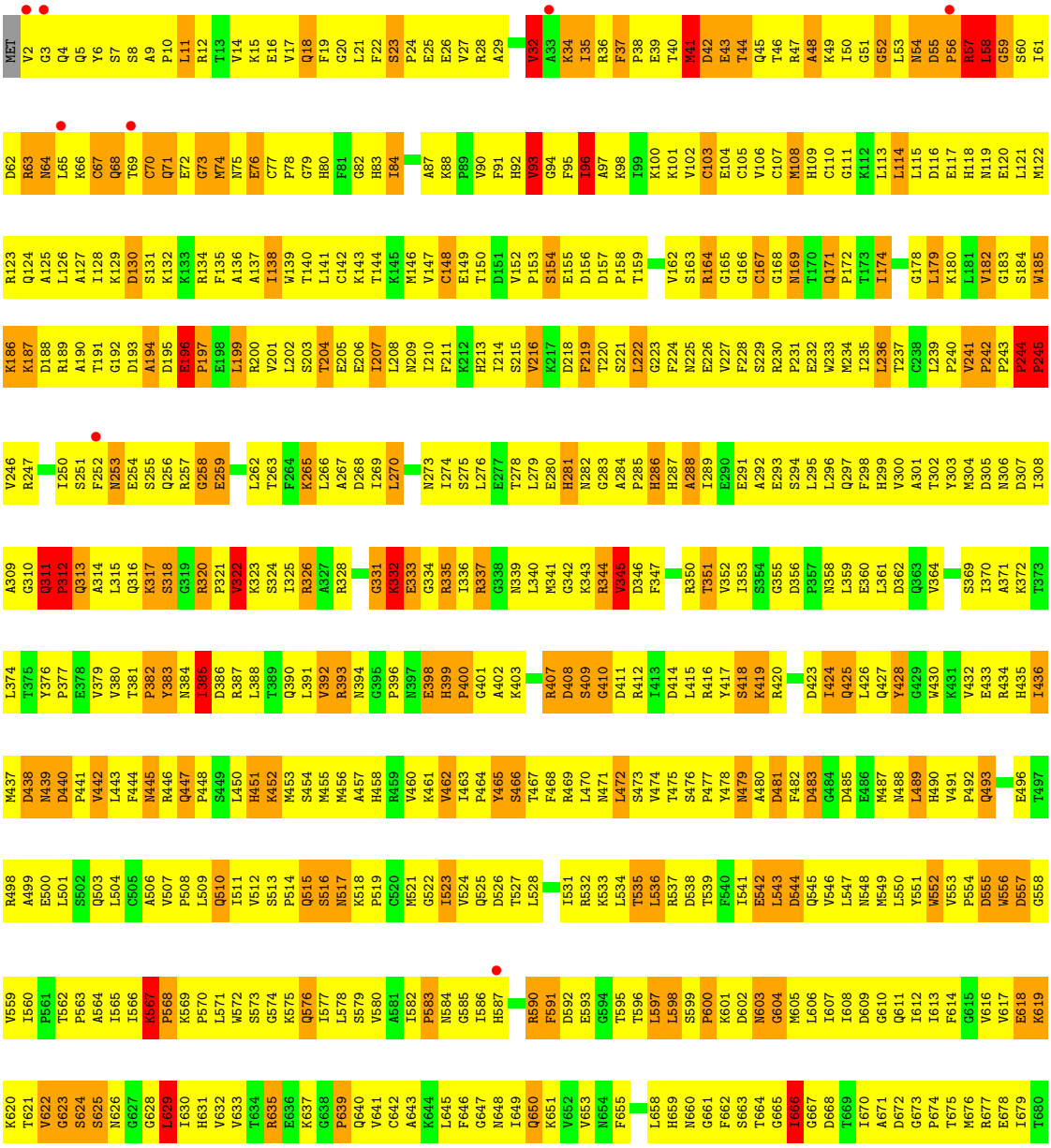
3 Residue-property plots (i)

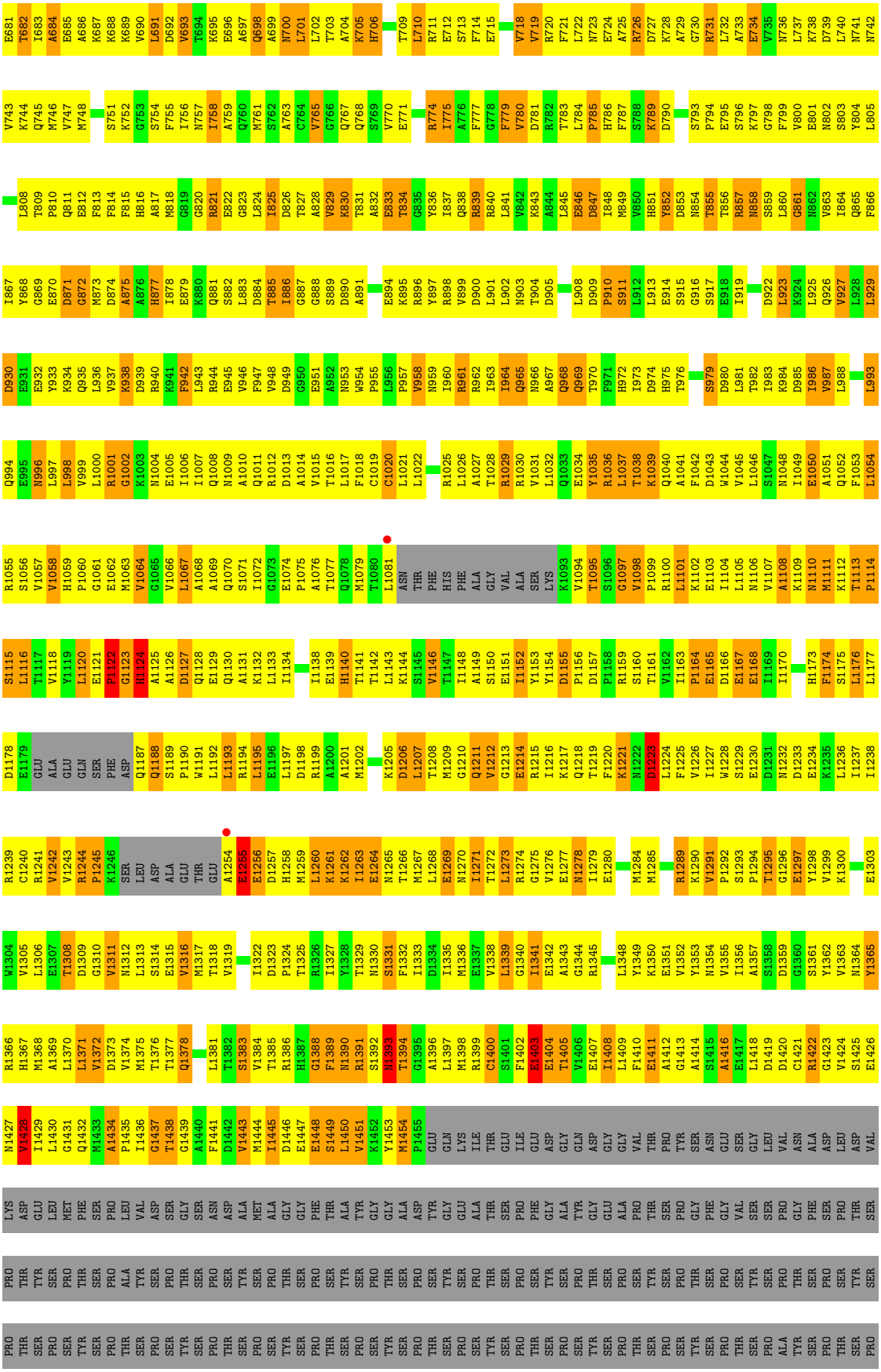
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density.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

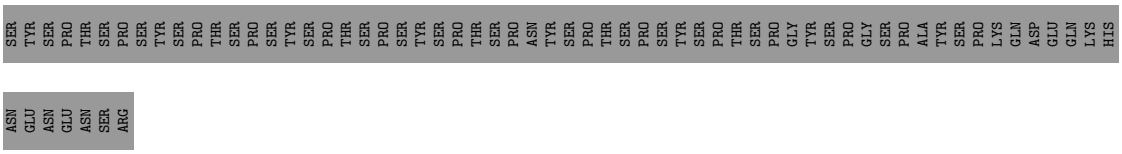
• Molecule 1: DNA-directed RNA polymerase II subunit RPB1

Chain A:





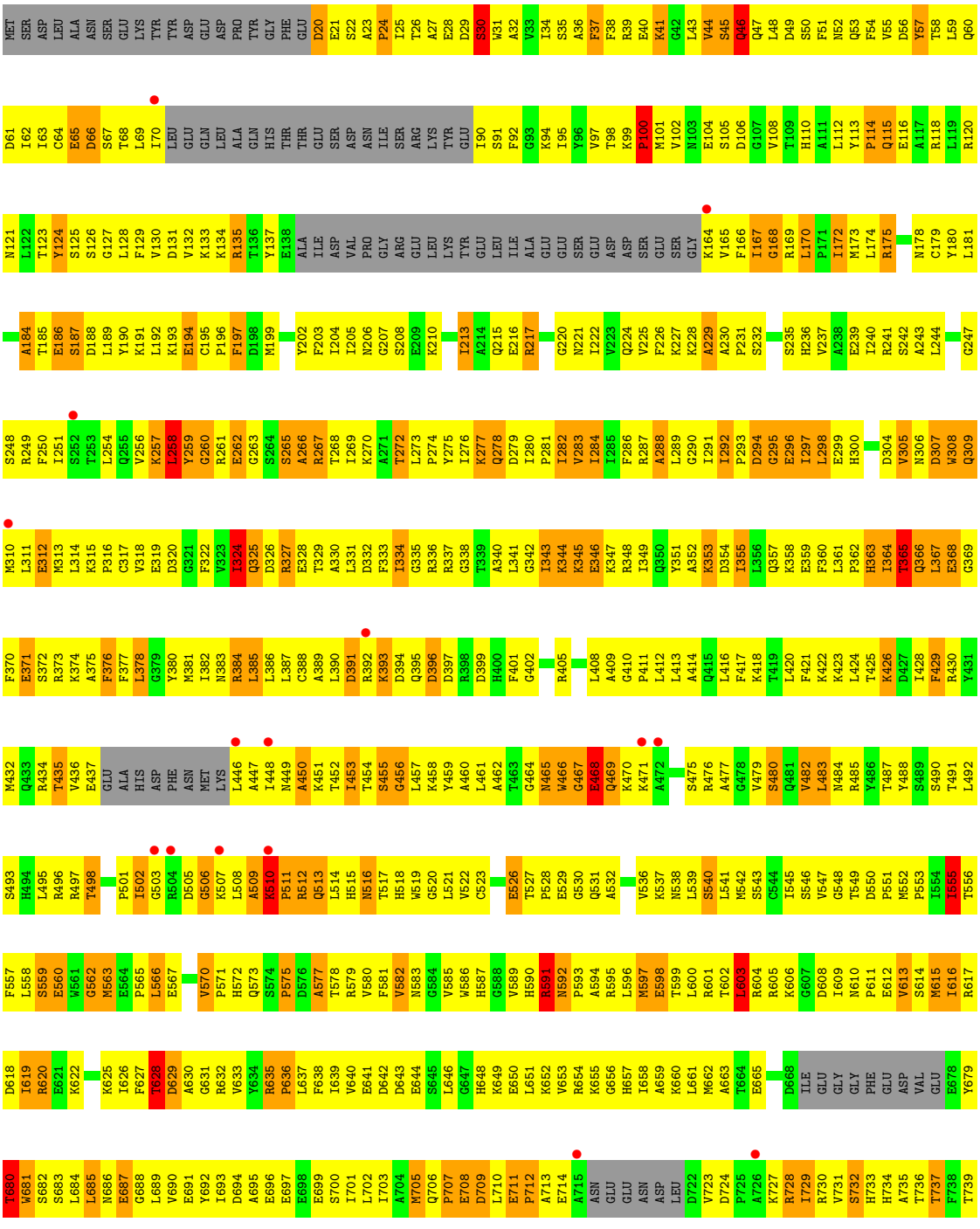


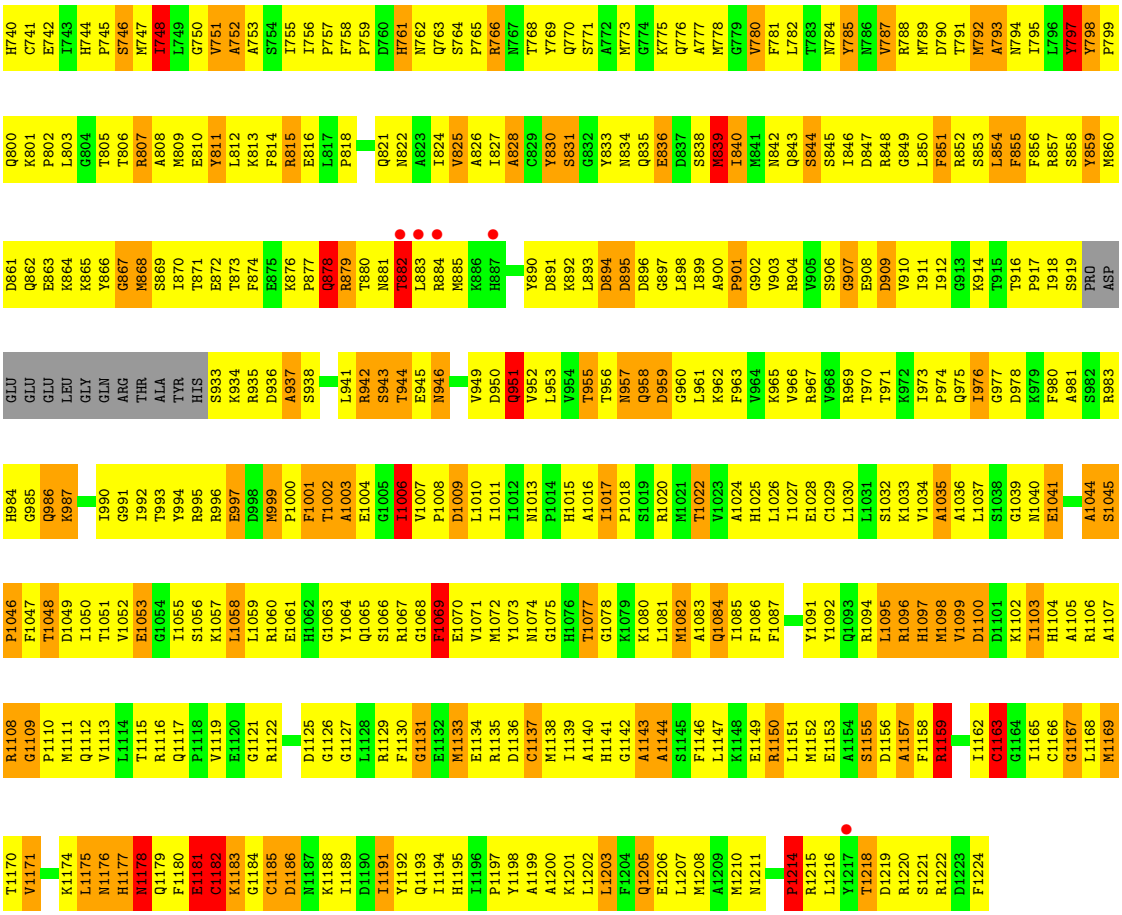


• Molecule 2: DNA-directed RNA polymerase II subunit RPB2

Chain B:



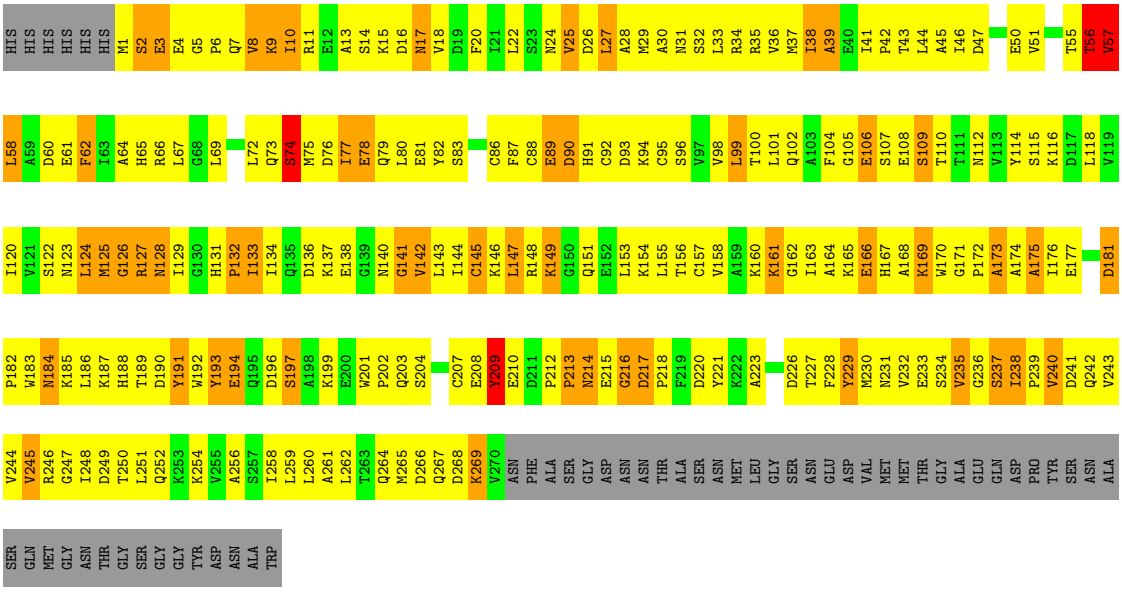




• Molecule 3: DNA-directed RNA polymerase II subunit RPB3

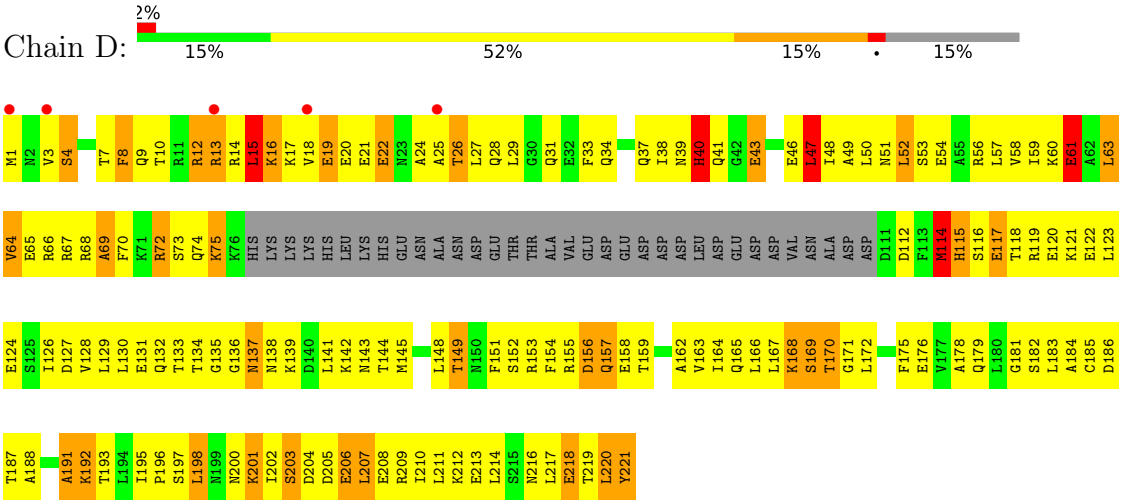
Chain C:





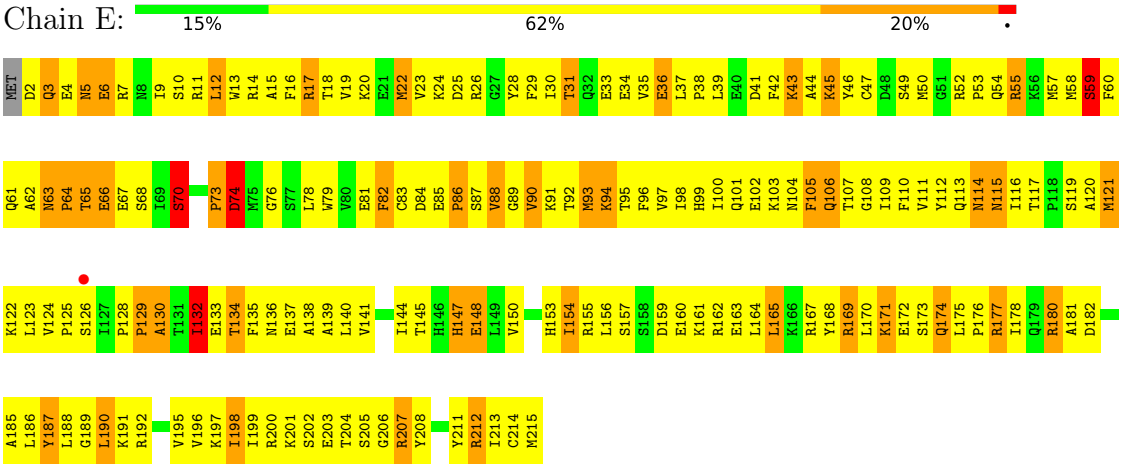
• Molecule 4: DNA-directed RNA polymerase II subunit RPB4

Chain D:



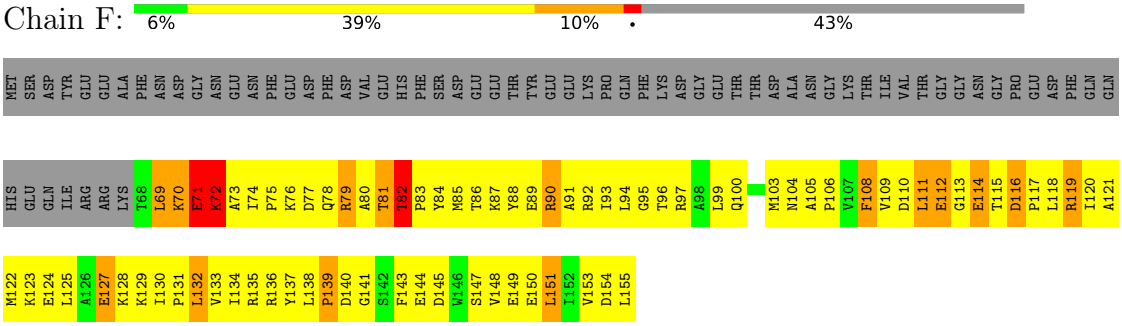
• Molecule 5: DNA-directed RNA polymerases I, II, and III subunit RPABC1

Chain E:



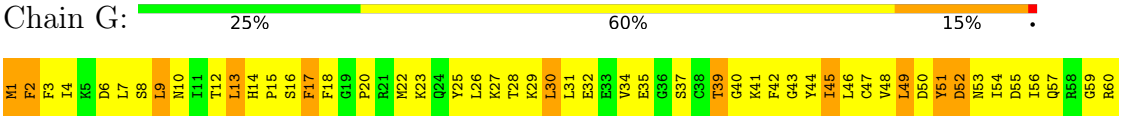
• Molecule 6: DNA-directed RNA polymerases I, II, and III subunit RPABC2

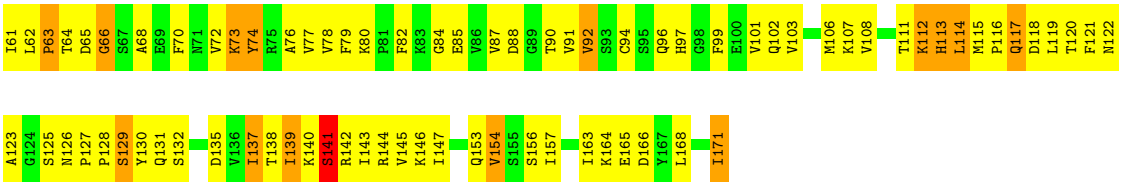
Chain F:



• Molecule 7: DNA-directed RNA polymerase II subunit RPB7

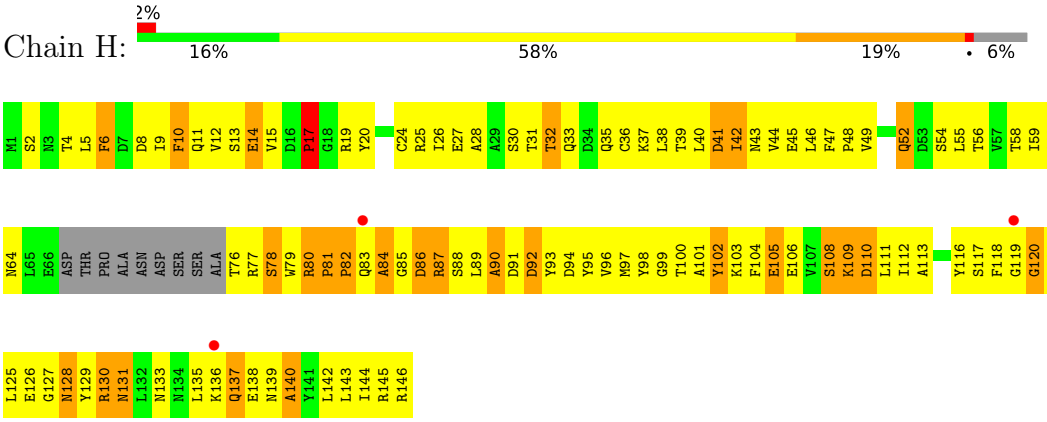
Chain G:





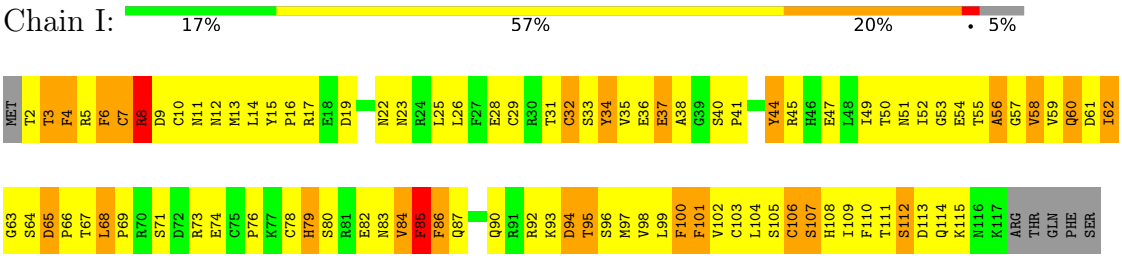
• Molecule 8: DNA-directed RNA polymerases I, II, and III subunit RPABC3

Chain H:



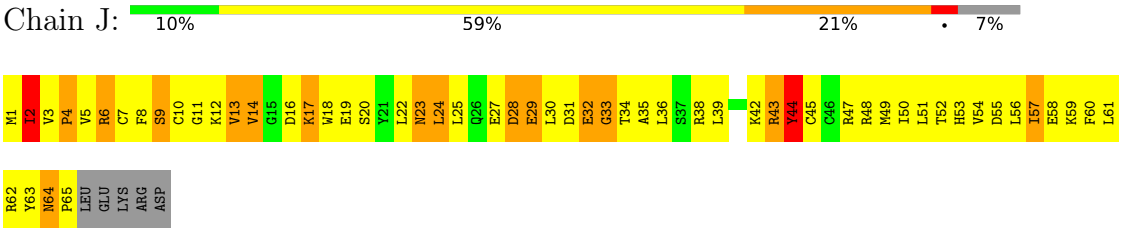
• Molecule 9: DNA-directed RNA polymerase II subunit RPB9

Chain I:



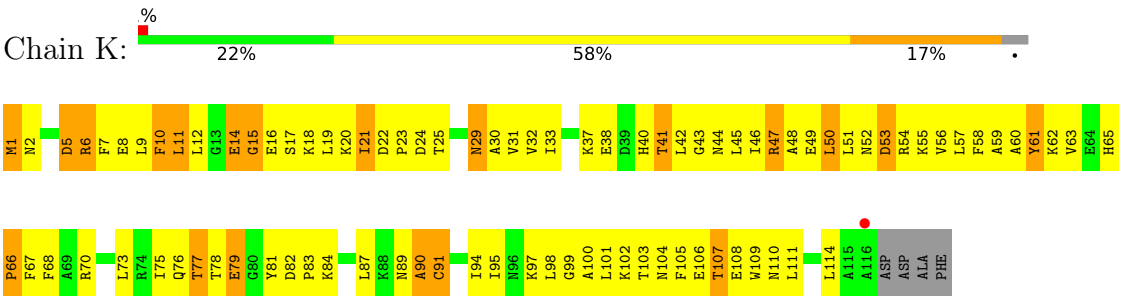
• Molecule 10: DNA-directed RNA polymerases I, II, and III subunit RPABC5

Chain J:



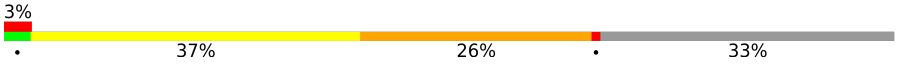
• Molecule 11: DNA-directed RNA polymerase II subunit RPB11

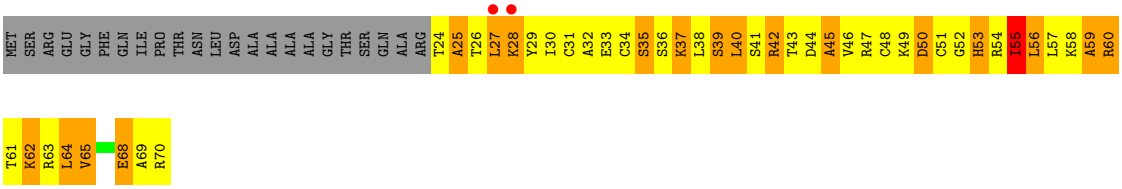
Chain K:



• Molecule 12: DNA-directed RNA polymerases I, II, and III subunit RPABC4

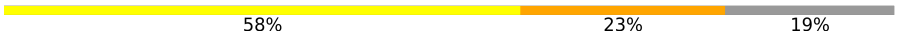
Chain L:

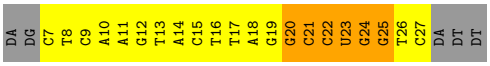




• Molecule 13: DNA (5'-D(*AP*G*CP*TP*CP*AP*AP*GP*TP*AP*CP*TP*TP*AP*(8OG)P*GP*CP*CP*(BRU)P*GP*GP*TP*CP*AP*TP*T)-3')

Chain T:

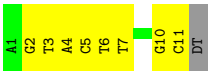




• Molecule 14: DNA (5'-D(*AP*GP*TP*AP*CP*TP*TP*GP*AP*GP*CP*T)-3')

Chain N:

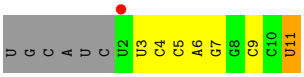




• Molecule 15: RNA (5'-R(*UP*GP*CP*AP*UP*C*UP*UP*CP*CP*AP*GP*GP*CP*CP*U)-3')

Chain P:





4 Data and refinement statistics (i)

Property	Value	Source
Space group	C 2 2 21	Depositor
Cell constants a, b, c, α, β, γ	220.65Å 392.00Å 281.45Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	50.00 – 3.70 50.00 – 3.70	Depositor EDS
% Data completeness (in resolution range)	99.6 (50.00-3.70) 99.9 (50.00-3.70)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	0.08	Depositor
$< I/\sigma(I) >$ [1]	1.93 (at 3.67Å)	Xtriage
Refinement program	CNS 1.2	Depositor
R, R_{free}	0.225 , 0.258 0.227 , 0.253	Depositor DCC
R_{free} test set	2439 reflections (1.88%)	wwPDB-VP
Wilson B-factor (Å^2)	114.2	Xtriage
Anisotropy	0.492	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.31 , 100.8	EDS
L-test for twinning[2]	$< \|L\| > = 0.45$, $< L^2 > = 0.27$	Xtriage
Estimated twinning fraction	0.029 for 1/2*h-1/2*k,-3/2*h-1/2*k,-l 0.034 for 1/2*h+1/2*k,3/2*h-1/2*k,-l	Xtriage
F_o,F_c correlation	0.93	EDS
Total number of atoms	32355	wwPDB-VP
Average B, all atoms (Å^2)	89.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.80% 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

Bond lengths and bond angles in the following residue types are not validated in this section: BRU, MG, ZN, 8OG

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	0.57	0/11441	1.13	94/15473 (0.6%)
2	B	0.51	0/9116	1.03	47/12291 (0.4%)
3	C	0.52	0/2163	1.05	12/2930 (0.4%)
4	D	0.45	0/1516	0.99	11/2031 (0.5%)
5	E	0.48	0/1788	1.01	11/2406 (0.5%)
6	F	0.66	0/724	1.29	11/977 (1.1%)
7	G	0.54	0/1368	1.03	5/1844 (0.3%)
8	H	0.44	0/1119	1.00	7/1514 (0.5%)
9	I	0.44	0/962	0.98	5/1295 (0.4%)
10	J	0.51	0/541	1.00	1/727 (0.1%)
11	K	0.54	0/947	1.01	1/1279 (0.1%)
12	L	0.45	0/372	0.92	1/495 (0.2%)
13	T	0.35	0/426	0.89	5/650 (0.8%)
14	N	0.31	0/251	0.72	0/386
15	P	0.34	0/227	0.74	0/351
All	All	0.53	0/32961	1.06	211/44649 (0.5%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	0	1
2	B	0	1
All	All	0	2

There are no bond length outliers.

All (211) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	56	PRO	N-CA-C	-12.28	101.91	114.68
1	A	55	ASP	CA-C-N	-11.82	108.78	120.83
1	A	55	ASP	C-N-CA	-11.82	108.78	120.83
5	E	5	ASN	N-CA-C	-11.41	99.32	113.01
2	B	1185	CYS	N-CA-C	-10.38	100.35	113.23
1	A	689	LYS	N-CA-C	-10.20	100.95	113.50
1	A	710	LEU	N-CA-C	-9.95	100.43	111.28
5	E	63	ASN	N-CA-C	9.63	119.42	108.25
4	D	188	ALA	N-CA-C	-9.28	101.22	112.54
2	B	1096	ARG	N-CA-C	-9.20	98.39	110.53
1	A	171	GLN	CA-C-N	9.03	129.06	119.76
1	A	171	GLN	C-N-CA	9.03	129.06	119.76
1	A	1422	ARG	N-CA-C	-9.02	102.41	113.50
4	D	26	THR	N-CA-C	-8.91	102.96	113.21
2	B	307	ASP	N-CA-C	-8.91	98.98	111.81
12	L	62	LYS	N-CA-C	-8.72	101.77	111.28
1	A	454	SER	N-CA-C	-8.56	100.77	113.61
1	A	513	SER	CA-C-N	8.48	129.20	120.04
1	A	513	SER	C-N-CA	8.48	129.20	120.04
6	F	70	LYS	N-CA-C	-8.48	102.94	113.20
1	A	513	SER	N-CA-C	8.33	120.56	110.07
1	A	440	ASP	N-CA-C	-8.31	97.77	110.32
1	A	1112	LYS	N-CA-C	-8.20	100.66	111.24
2	B	296	GLU	N-CA-C	-8.10	103.91	113.88
2	B	1009	ASP	N-CA-C	-8.03	103.28	113.72
1	A	344	ARG	N-CA-C	-7.99	98.70	110.52
1	A	472	LEU	N-CA-C	7.98	119.76	111.14
2	B	1177	HIS	N-CA-C	-7.88	101.83	112.94
2	B	807	ARG	N-CA-C	-7.78	103.05	112.54
2	B	628	THR	N-CA-C	-7.69	103.63	113.16
8	H	130	ARG	N-CA-C	-7.67	102.98	112.88
2	B	681	TRP	N-CA-C	-7.57	102.17	111.40
6	F	154	ASP	N-CA-C	-7.53	103.41	112.59
1	A	452	LYS	N-CA-C	-7.50	103.19	111.36
6	F	82	THR	CA-C-N	7.47	127.10	119.56
6	F	82	THR	C-N-CA	7.47	127.10	119.56
3	C	39	ALA	N-CA-C	7.41	123.35	113.72
3	C	57	VAL	N-CA-C	-7.39	104.78	113.42
1	A	861	GLY	N-CA-C	-7.35	105.08	115.30
8	H	45	GLU	N-CA-C	-7.35	104.56	113.97
1	A	567	LYS	CA-C-N	-7.33	110.68	119.84
1	A	567	LYS	C-N-CA	-7.33	110.68	119.84
8	H	62	SER	N-CA-C	7.30	118.17	107.88

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
13	T	25	DG	C2'-C3'-O3'	-7.29	100.56	111.50
10	J	44	TYR	N-CA-C	7.22	121.00	111.75
1	A	398	GLU	N-CA-C	-7.05	100.05	110.48
5	E	177	ARG	N-CA-C	7.03	121.03	110.14
1	A	1311	VAL	N-CA-C	7.00	118.13	107.77
1	A	911	SER	N-CA-C	-6.98	104.92	113.50
2	B	324	ILE	N-CA-C	-6.96	99.41	109.29
6	F	112	GLU	N-CA-C	-6.93	101.92	110.65
3	C	247	GLY	N-CA-C	-6.92	104.12	112.49
1	A	246	VAL	N-CA-C	-6.87	105.38	113.42
1	A	996	ASN	N-CA-C	6.85	121.72	112.88
2	B	1044	ALA	N-CA-C	-6.85	102.40	111.24
1	A	523	ILE	N-CA-C	6.84	118.61	109.37
2	B	1053	GLU	N-CA-C	-6.83	103.76	111.07
7	G	129	SER	N-CA-C	6.81	118.46	108.86
2	B	1163	CYS	N-CA-C	-6.79	98.19	109.46
2	B	831	SER	N-CA-C	-6.73	104.54	112.89
9	I	112	SER	N-CA-C	-6.70	104.42	112.59
2	B	366	GLN	N-CA-C	-6.69	104.69	112.92
1	A	629	LEU	N-CA-C	-6.67	103.26	111.33
1	A	244	PRO	N-CA-C	6.66	118.82	110.70
2	B	851	PHE	N-CA-C	6.62	120.93	112.86
1	A	598	LEU	N-CA-C	-6.59	102.88	111.71
2	B	498	THR	N-CA-C	6.58	119.18	108.26
5	E	132	ILE	N-CA-C	6.56	117.30	108.11
6	F	127	GLU	N-CA-C	-6.56	104.59	112.59
9	I	85	PHE	N-CA-C	6.52	120.47	110.36
2	B	1205	GLN	N-CA-C	-6.50	104.20	111.28
1	A	938	LYS	N-CA-C	-6.48	104.22	111.28
1	A	362	ASP	N-CA-C	6.41	120.58	113.21
2	B	208	SER	N-CA-C	6.39	119.18	110.55
2	B	839	MET	N-CA-C	6.39	119.53	110.14
1	A	32	VAL	N-CA-C	-6.37	106.59	112.96
1	A	1155	ASP	CA-C-N	6.35	126.47	119.87
1	A	1155	ASP	C-N-CA	6.35	126.47	119.87
2	B	66	ASP	N-CA-C	-6.33	102.94	111.87
1	A	23	SER	N-CA-C	-6.30	100.48	109.62
1	A	1113	THR	CA-C-N	-6.29	111.98	119.84
1	A	1113	THR	C-N-CA	-6.29	111.98	119.84
1	A	1404	GLU	N-CA-C	-6.27	105.45	113.23
7	G	52	ASP	N-CA-C	6.27	118.11	111.28
5	E	171	LYS	N-CA-C	-6.25	100.73	110.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	288	ALA	N-CA-C	-6.24	105.61	113.72
1	A	479	ASN	N-CA-C	-6.22	104.99	112.58
1	A	1389	PHE	N-CA-C	6.21	118.56	111.11
2	B	1078	GLY	N-CA-C	-6.18	106.09	115.00
1	A	311	GLN	N-CA-C	6.18	123.47	109.81
7	G	66	GLY	N-CA-C	6.15	122.94	115.31
2	B	297	ILE	N-CA-C	-6.15	103.43	112.04
6	F	119	ARG	N-CA-C	-6.13	103.32	111.96
3	C	81	GLU	N-CA-C	6.11	118.18	110.24
1	A	242	PRO	CA-C-N	6.10	126.67	120.38
1	A	242	PRO	C-N-CA	6.10	126.67	120.38
1	A	3	GLY	N-CA-C	-6.09	98.73	113.18
1	A	993	LEU	N-CA-C	-6.09	104.56	111.07
4	D	171	GLY	N-CA-C	-6.08	107.56	115.59
1	A	82	GLY	N-CA-C	-6.06	102.00	112.06
3	C	96	SER	N-CA-C	6.05	118.16	109.14
1	A	1262	LYS	N-CA-C	-6.05	104.02	111.40
9	I	68	LEU	CA-C-N	6.03	127.38	119.84
9	I	68	LEU	C-N-CA	6.03	127.38	119.84
7	G	45	ILE	N-CA-C	-6.03	99.89	108.58
1	A	682	THR	N-CA-C	-6.02	105.03	112.38
13	T	24	DG	C2'-C3'-O3'	-6.02	102.47	111.50
6	F	108	PHE	N-CA-C	6.01	119.37	112.57
1	A	1174	PHE	N-CA-C	-6.01	105.60	113.12
2	B	1100	ASP	N-CA-C	6.00	119.43	111.75
2	B	526	GLU	N-CA-C	6.00	119.26	108.17
1	A	1188	GLN	CB-CA-C	-5.99	107.80	116.54
8	H	41	ASP	N-CA-C	-5.97	103.06	110.41
1	A	639	PRO	N-CA-C	-5.96	105.24	113.53
2	B	1113	VAL	CB-CA-C	-5.94	105.59	111.30
4	D	38	ILE	N-CA-C	5.94	116.16	107.37
1	A	566	ILE	N-CA-C	-5.91	104.36	113.16
3	C	27	LEU	N-CA-C	-5.91	104.75	111.07
2	B	1001	PHE	N-CA-C	5.91	118.38	109.23
9	I	60	GLN	N-CA-C	-5.89	105.58	112.89
2	B	363	HIS	N-CA-C	-5.87	100.63	109.79
5	E	147	HIS	N-CA-C	5.87	118.84	110.10
1	A	1434	ALA	CA-C-N	5.81	127.10	119.84
1	A	1434	ALA	C-N-CA	5.81	127.10	119.84
1	A	964	ILE	N-CA-C	-5.77	106.84	111.81
2	B	292	ILE	N-CA-C	5.76	121.32	108.88
2	B	560	GLU	N-CA-C	-5.76	105.15	113.21

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	B	288	ALA	N-CA-C	-5.75	105.53	112.54
2	B	680	THR	N-CA-C	5.74	117.31	110.19
6	F	121	ALA	N-CA-C	-5.71	104.75	110.97
4	D	114	MET	N-CA-C	5.70	122.93	110.80
2	B	882	THR	N-CA-C	5.69	122.92	110.80
3	C	181	ASP	CA-C-N	5.63	126.88	119.84
3	C	181	ASP	C-N-CA	5.63	126.88	119.84
1	A	1434	ALA	N-CA-C	5.63	117.16	110.07
1	A	1261	LYS	N-CA-C	-5.61	107.07	114.31
2	B	1109	GLY	CA-C-N	5.61	126.85	119.84
2	B	1109	GLY	C-N-CA	5.61	126.85	119.84
1	A	855	THR	N-CA-C	-5.60	103.31	110.53
7	G	112	LYS	N-CA-C	-5.58	104.22	111.02
1	A	1039	LYS	N-CA-C	-5.57	104.85	111.03
1	A	383	TYR	N-CA-C	-5.54	105.31	112.68
1	A	582	ILE	CA-C-N	5.51	126.73	119.84
1	A	582	ILE	C-N-CA	5.51	126.73	119.84
2	B	1159	ARG	N-CA-C	5.51	118.07	108.76
3	C	194	GLU	N-CA-C	-5.50	104.80	112.45
6	F	69	LEU	N-CA-C	5.49	117.67	108.23
1	A	64	ASN	N-CA-C	5.47	117.14	107.61
3	C	173	ALA	N-CA-C	5.47	122.46	110.80
4	D	69	ALA	N-CA-C	-5.46	105.72	112.38
4	D	75	LYS	N-CA-C	-5.45	104.67	112.13
5	E	105	PHE	CB-CA-C	-5.45	109.23	117.07
1	A	942	PHE	N-CA-C	-5.44	104.29	111.96
1	A	436	ILE	N-CA-C	-5.41	102.06	109.37
2	B	748	ILE	N-CA-C	-5.38	104.24	111.44
2	B	555	ILE	N-CA-C	-5.37	105.09	110.30
4	D	65	GLU	N-CA-C	-5.37	105.36	112.34
1	A	251	SER	N-CA-C	5.36	117.44	109.25
1	A	468	PHE	N-CA-C	-5.35	100.37	108.67
1	A	624	SER	N-CA-C	-5.35	107.06	113.21
5	E	63	ASN	CA-C-N	5.35	126.52	119.84
5	E	63	ASN	C-N-CA	5.35	126.52	119.84
1	A	698	GLN	N-CA-C	-5.34	106.61	113.02
1	A	1256	GLU	N-CA-C	5.33	119.72	112.04
8	H	13	SER	N-CA-C	-5.32	106.04	112.54
1	A	515	GLN	N-CA-C	-5.32	106.82	113.15
1	A	793	SER	CA-C-N	5.32	125.13	119.28
1	A	793	SER	C-N-CA	5.32	125.13	119.28
1	A	345	VAL	N-CA-C	5.31	117.71	108.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	149	GLU	N-CA-C	5.30	117.97	110.50
2	B	840	ILE	N-CA-C	-5.30	100.82	108.71
2	B	732	SER	N-CA-C	5.29	117.65	110.35
3	C	2	SER	N-CA-C	5.29	116.33	108.60
1	A	576	GLN	N-CA-C	5.29	117.47	111.02
1	A	1289	ARG	N-CA-C	5.27	116.41	108.46
1	A	927	VAL	N-CA-C	-5.26	105.72	110.82
2	B	603	LEU	N-CA-C	-5.26	106.37	112.89
13	T	21	DC	C2'-C3'-O3'	-5.25	103.62	111.50
4	D	64	VAL	N-CA-C	-5.24	107.30	111.81
13	T	22	DC	C2'-C3'-O3'	-5.24	103.64	111.50
1	A	555	ASP	N-CA-C	5.24	116.84	111.03
1	A	886	ILE	N-CA-C	5.23	115.75	111.62
2	B	894	ASP	N-CA-C	-5.22	101.62	109.60
1	A	785	PRO	N-CA-C	-5.21	107.63	114.03
1	A	1403	GLU	N-CA-C	5.20	121.88	110.80
2	B	1182	CYS	N-CA-C	-5.19	106.90	113.23
13	T	20	DG	C2'-C3'-O3'	-5.18	103.73	111.50
5	E	180	ARG	N-CA-C	-5.17	106.48	112.89
1	A	199	LEU	N-CA-C	5.17	117.66	109.96
1	A	241	VAL	CA-C-N	-5.15	115.08	120.38
1	A	241	VAL	C-N-CA	-5.15	115.08	120.38
3	C	38	ILE	N-CA-C	5.14	115.28	110.30
2	B	1052	VAL	N-CA-C	-5.13	105.39	110.62
1	A	1391	ARG	N-CA-C	-5.12	108.29	114.75
1	A	1020	CYS	N-CA-C	-5.12	104.96	111.11
1	A	857	ARG	N-CA-C	5.12	118.12	108.65
1	A	1207	LEU	N-CA-C	5.12	116.59	108.96
1	A	829	VAL	N-CA-C	-5.09	107.84	112.12
8	H	80	ARG	CA-C-N	-5.09	115.14	120.38
8	H	80	ARG	C-N-CA	-5.09	115.14	120.38
5	E	55	ARG	N-CA-C	5.08	116.51	111.07
4	D	8	PHE	N-CA-C	5.07	119.19	113.15
2	B	836	GLU	N-CA-C	5.05	118.10	111.28
2	B	172	ILE	N-CA-C	5.04	116.51	109.55
2	B	976	ILE	N-CA-C	5.04	115.76	110.62
4	D	72	ARG	N-CA-C	-5.04	106.24	112.38
6	F	132	LEU	N-CA-C	5.03	118.01	109.76
11	K	77	THR	N-CA-C	5.03	116.83	109.24
1	A	480	ALA	N-CA-C	5.03	118.40	109.96
1	A	237	THR	N-CA-C	-5.02	106.00	112.68
1	A	1339	LEU	N-CA-C	5.00	119.09	112.89

There are no chirality outliers.

All (2) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	1035	TYR	Sidechain
2	B	797	TYR	Sidechain

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	11240	0	11311	1962	0
2	B	8942	0	8986	1564	0
3	C	2125	0	2090	364	0
4	D	1504	0	1518	222	0
5	E	1752	0	1776	297	0
6	F	712	0	738	149	0
7	G	1340	0	1357	226	0
8	H	1101	0	1075	217	0
9	I	944	0	901	169	0
10	J	532	0	542	133	0
11	K	929	0	939	149	0
12	L	370	0	394	93	0
13	T	426	0	236	37	0
14	N	224	0	126	11	0
15	P	205	0	109	8	0
16	A	1	0	0	0	0
17	A	2	0	0	0	0
17	B	1	0	0	0	0
17	C	1	0	0	0	0
17	I	2	0	0	0	0
17	J	1	0	0	0	0
17	L	1	0	0	0	0
All	All	32355	0	32098	5144	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 80.

All (5144) 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)
2:B:69:LEU:HD13	2:B:429:PHE:CD1	1.39	1.55
2:B:69:LEU:HD13	2:B:429:PHE:CE1	1.66	1.30
1:A:541:ILE:HD13	1:A:549:MET:HE1	1.23	1.20
2:B:577:ALA:HB1	2:B:589:VAL:HG11	1.24	1.17
2:B:806:THR:HG22	2:B:808:ALA:H	1.08	1.16
2:B:340:ALA:HB3	2:B:343:ILE:HG12	1.29	1.15
2:B:69:LEU:CD1	2:B:429:PHE:CD1	2.30	1.14
13:T:16:DT:H2"	13:T:17:DT:H5'	1.29	1.13
2:B:133:LYS:HE3	2:B:135:ARG:HH21	1.13	1.12
1:A:225:ASN:ND2	1:A:228:PHE:H	1.48	1.12
1:A:41:MET:HB2	1:A:49:LYS:HA	1.32	1.12
1:A:825:ILE:HD11	2:B:512:ARG:HB3	1.22	1.11
2:B:639:ILE:HD11	2:B:691:GLU:HG3	1.32	1.11
1:A:567:LYS:HG3	8:H:95:TYR:HA	1.11	1.10
2:B:637:LEU:HD12	2:B:693:ILE:HD12	1.32	1.10
2:B:622:LYS:HE2	9:I:59:VAL:HG22	1.28	1.10
3:C:43:THR:HG22	3:C:44:LEU:H	1.02	1.09
1:A:899:VAL:HB	1:A:929:LEU:HD11	1.14	1.09
1:A:768:GLN:HG2	1:A:816:HIS:HA	1.27	1.09
5:E:22:MET:HE1	5:E:26:ARG:HH11	1.13	1.09
7:G:138:THR:HG22	7:G:139:ILE:H	1.00	1.07
1:A:53:LEU:HD23	1:A:54:ASN:N	1.70	1.07
6:F:109:VAL:HG11	6:F:123:LYS:HD2	1.30	1.06
3:C:148:ARG:H	3:C:151:GLN:HG3	1.20	1.05
1:A:1244:ARG:HB3	1:A:1245:PRO:HA	1.28	1.05
2:B:244:LEU:HD11	2:B:366:GLN:HE22	1.20	1.05
2:B:506:GLY:HA2	2:B:512:ARG:HH21	1.21	1.05
1:A:666:ILE:H	2:B:1026:LEU:HD13	1.21	1.05
12:L:40:LEU:HD13	12:L:44:ASP:HB3	1.38	1.04
1:A:320:ARG:HB2	1:A:320:ARG:HH11	1.19	1.04
1:A:12:ARG:HB2	2:B:1218:THR:HG22	1.39	1.04
2:B:217:ARG:HE	2:B:405:ARG:HB2	1.20	1.04
8:H:12:VAL:HB	8:H:52:GLN:H	1.21	1.04
2:B:273:LEU:HB2	2:B:276:ILE:HD12	1.40	1.02
8:H:81:PRO:HB2	8:H:82:PRO:CD	1.89	1.02
8:H:64:ASN:HB2	8:H:88:SER:HB2	1.41	1.02
1:A:399:HIS:HB3	1:A:400:PRO:HD3	1.41	1.01
1:A:903:ASN:HD22	1:A:904:THR:N	1.57	1.01
2:B:69:LEU:HB3	2:B:429:PHE:HE1	1.22	1.01
5:E:78:LEU:HA	5:E:107:THR:HB	1.38	1.01
5:E:100:ILE:HG23	5:E:105:PHE:HB2	1.41	1.01
1:A:1445:ILE:H	1:A:1445:ILE:HD12	1.26	1.00

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:590:ARG:HB2	1:A:590:ARG:HH11	1.24	1.00
3:C:238:ILE:HG23	3:C:242:GLN:HB2	1.43	1.00
2:B:521:LEU:HD22	2:B:633:VAL:HG12	1.42	1.00
12:L:32:ALA:HB2	12:L:55:ILE:HG13	1.44	1.00
1:A:535:THR:HG21	1:A:616:VAL:HA	1.44	1.00
7:G:112:LYS:HA	7:G:115:MET:HE3	1.43	1.00
1:A:188:ASP:HB3	1:A:191:THR:HB	1.43	0.99
10:J:5:VAL:HG12	10:J:6:ARG:HG3	1.43	0.99
3:C:101:LEU:HD13	3:C:118:LEU:HD23	1.41	0.99
1:A:382:PRO:HD3	1:A:428:TYR:HD2	1.27	0.99
2:B:1065:GLN:HE21	2:B:1067:ARG:N	1.60	0.99
2:B:503:GLY:HA3	2:B:507:LYS:HE2	1.45	0.98
9:I:58:VAL:HG13	9:I:62:ILE:HD12	1.44	0.98
5:E:207:ARG:HB3	5:E:207:ARG:HH11	1.28	0.98
6:F:76:LYS:HA	6:F:79:ARG:HD3	1.45	0.98
2:B:69:LEU:CD1	2:B:429:PHE:CE1	2.45	0.98
3:C:148:ARG:N	3:C:151:GLN:HG3	1.78	0.98
1:A:567:LYS:HE2	8:H:47:PHE:HB2	1.44	0.97
2:B:583:ASN:HD21	2:B:628:THR:HG22	1.28	0.97
2:B:1097:HIS:H	2:B:1098:MET:HE2	1.26	0.97
2:B:810:GLU:HA	2:B:815:ARG:HH22	1.29	0.97
6:F:111:LEU:HD12	6:F:111:LEU:H	1.27	0.97
1:A:902:LEU:HG	1:A:926:GLN:HG3	1.45	0.97
1:A:683:ILE:HD13	1:A:801:GLU:HG3	1.46	0.97
2:B:800:GLN:HB3	10:J:52:THR:CG2	1.92	0.96
5:E:124:VAL:HG13	5:E:132:ILE:HG13	1.46	0.96
2:B:559:SER:HA	2:B:563:MET:HB3	1.47	0.96
7:G:138:THR:HG22	7:G:139:ILE:N	1.80	0.96
1:A:925:LEU:HD13	1:A:983:ILE:HD12	1.48	0.96
1:A:666:ILE:HD12	1:A:667:GLY:H	1.31	0.95
1:A:269:ILE:HG12	1:A:299:HIS:HB3	1.48	0.95
2:B:800:GLN:HB3	10:J:52:THR:HG21	1.49	0.95
2:B:1099:VAL:HG13	2:B:1100:ASP:H	1.32	0.95
5:E:22:MET:CE	5:E:26:ARG:HH11	1.80	0.95
9:I:85:PHE:H	9:I:85:PHE:HD2	1.08	0.95
1:A:74:MET:H	1:A:74:MET:HE2	1.28	0.95
2:B:515:HIS:HD2	2:B:517:THR:H	1.01	0.95
6:F:73:ALA:HB1	6:F:143:PHE:H	1.31	0.94
2:B:866:TYR:HB2	2:B:870:ILE:HB	1.49	0.94
8:H:100:THR:HG23	8:H:138:GLU:HA	1.48	0.94
5:E:16:PHE:CZ	5:E:20:LYS:HE2	2.02	0.94

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:153:HIS:O	5:E:154:ILE:HG13	1.66	0.94
1:A:308:ILE:HG22	1:A:309:ALA:H	1.33	0.94
10:J:64:ASN:HB3	10:J:65:PRO:CD	1.97	0.94
8:H:128:ASN:H	8:H:130:ARG:NH1	1.65	0.94
1:A:445:ASN:HB2	1:A:455:MET:HG2	1.49	0.94
1:A:754:SER:H	1:A:757:ASN:HD22	1.13	0.94
8:H:12:VAL:HB	8:H:52:GLN:N	1.83	0.94
1:A:320:ARG:HB2	1:A:320:ARG:NH1	1.83	0.94
8:H:81:PRO:HB2	8:H:82:PRO:HD3	1.48	0.93
1:A:567:LYS:CG	8:H:95:TYR:HA	1.97	0.93
3:C:114:TYR:CD2	3:C:140:ASN:HB3	2.02	0.93
12:L:27:LEU:HD23	12:L:27:LEU:H	1.34	0.93
2:B:1065:GLN:HE21	2:B:1067:ARG:H	0.96	0.93
1:A:1144:LYS:HB2	1:A:1268:LEU:O	1.68	0.93
4:D:39:ASN:ND2	4:D:41:GLN:HB2	1.83	0.93
10:J:44:TYR:HA	10:J:47:ARG:HB2	1.51	0.93
11:K:21:ILE:HG23	11:K:33:ILE:HG12	1.51	0.93
1:A:466:SER:HB3	2:B:1103:ILE:HG12	1.52	0.92
7:G:127:PRO:HG2	7:G:138:THR:HG21	1.50	0.92
4:D:114:MET:HE2	4:D:114:MET:HA	1.52	0.92
1:A:720:ARG:O	1:A:724:GLU:HB2	1.70	0.92
1:A:901:LEU:H	1:A:926:GLN:NE2	1.67	0.92
1:A:1424:VAL:HG13	1:A:1436:ILE:HD11	1.51	0.92
8:H:102:TYR:H	8:H:102:TYR:HD2	1.13	0.92
2:B:115:GLN:HG2	2:B:193:LYS:HB2	1.48	0.92
6:F:103:MET:HE3	7:G:66:GLY:H	1.35	0.92
1:A:1161:THR:HG22	1:A:1163:ILE:H	1.34	0.92
2:B:520:GLY:H	2:B:748:ILE:HG22	1.34	0.92
3:C:43:THR:HG22	3:C:44:LEU:N	1.85	0.92
8:H:33:GLN:HE21	8:H:35:GLN:HB2	1.31	0.92
7:G:122:ASN:HB2	7:G:131:GLN:HE21	1.34	0.91
2:B:911:ILE:HD11	2:B:941:LEU:HD13	1.52	0.91
1:A:897:TYR:HD2	1:A:936:LEU:HD13	1.34	0.91
2:B:69:LEU:HB3	2:B:429:PHE:CE1	2.05	0.91
1:A:1208:THR:HB	1:A:1211:GLN:HG3	1.52	0.91
1:A:1004:ASN:ND2	5:E:167:ARG:HD2	1.86	0.91
7:G:7:LEU:HB2	7:G:74:TYR:CE2	2.04	0.91
1:A:49:LYS:HZ1	1:A:61:ILE:HG13	1.34	0.91
1:A:441:PRO:HG3	1:A:498:ARG:HB2	1.51	0.91
3:C:203:GLN:HG2	3:C:207:CYS:SG	2.10	0.91
1:A:225:ASN:HD22	1:A:228:PHE:N	1.68	0.91

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:K:12:LEU:H	11:K:12:LEU:HD12	1.33	0.91
3:C:258:ILE:HD11	11:K:42:LEU:HD11	1.52	0.90
1:A:335:ARG:HD3	2:B:1202:LEU:HD23	1.54	0.90
5:E:22:MET:HE1	5:E:26:ARG:NH1	1.86	0.90
2:B:69:LEU:HD22	2:B:429:PHE:CE1	2.07	0.90
1:A:442:VAL:HG12	1:A:490:HIS:O	1.71	0.90
2:B:410:GLY:HA2	2:B:413:LEU:HD12	1.52	0.89
2:B:642:ASP:HA	2:B:649:LYS:HA	1.52	0.89
3:C:39:ALA:HA	3:C:164:ALA:HB3	1.54	0.89
1:A:1409:LEU:HD13	2:B:1207:LEU:HD11	1.54	0.89
4:D:40:HIS:CB	7:G:73:LYS:HZ2	1.85	0.89
11:K:47:ARG:HB3	11:K:47:ARG:HH11	1.34	0.89
2:B:515:HIS:CD2	2:B:517:THR:H	1.90	0.89
4:D:3:VAL:HG21	7:G:10:ASN:HB2	1.52	0.89
1:A:14:VAL:H	1:A:1432:GLN:HE22	1.14	0.89
1:A:1369:ALA:O	1:A:1372:VAL:HG12	1.72	0.89
2:B:384:ARG:HA	2:B:387:LEU:HD22	1.52	0.89
2:B:658:ILE:HG22	2:B:662:MET:HE2	1.54	0.89
2:B:999:MET:HG3	2:B:1000:PRO:HD2	1.55	0.89
5:E:117:THR:HG22	5:E:119:SER:H	1.37	0.89
3:C:57:VAL:HG11	10:J:60:PHE:HB3	1.53	0.89
3:C:77:ILE:H	3:C:129:ILE:HD11	1.36	0.89
1:A:1308:THR:HG23	1:A:1309:ASP:N	1.84	0.89
3:C:43:THR:CG2	3:C:44:LEU:H	1.85	0.88
7:G:138:THR:CG2	7:G:139:ILE:H	1.82	0.88
1:A:18:GLN:HG2	1:A:1418:LEU:HD13	1.55	0.88
1:A:537:ARG:HD2	8:H:20:TYR:HE1	1.37	0.88
1:A:1153:TYR:HB2	1:A:1192:LEU:HD23	1.55	0.88
2:B:193:LYS:NZ	12:L:32:ALA:HB1	1.88	0.88
1:A:335:ARG:HD2	2:B:1206:GLU:OE1	1.73	0.88
1:A:353:ILE:HD13	1:A:487:MET:HE2	1.55	0.88
1:A:1227:ILE:HG22	1:A:1228:TRP:H	1.37	0.88
1:A:568:PRO:HG2	8:H:46:LEU:HD22	1.55	0.88
1:A:946:VAL:HG13	5:E:201:LYS:HB3	1.55	0.88
5:E:17:ARG:NH1	5:E:17:ARG:HB2	1.88	0.88
2:B:880:THR:HB	2:B:934:LYS:CE	2.04	0.88
7:G:18:PHE:HA	7:G:22:MET:HE3	1.53	0.88
1:A:1420:ASP:CB	1:A:1422:ARG:HG3	2.02	0.88
5:E:171:LYS:HG2	5:E:174:GLN:OE1	1.74	0.88
1:A:71:GLN:HG3	1:A:72:GLU:HG2	1.56	0.88
4:D:164:ILE:HG23	4:D:168:LYS:HD2	1.56	0.88

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1030:ARG:HG3	1:A:1034:GLU:OE2	1.75	0.88
2:B:539:LEU:H	2:B:539:LEU:HD12	1.38	0.88
2:B:69:LEU:O	2:B:70:ILE:HG13	1.74	0.87
1:A:630:ILE:HD11	1:A:646:PHE:CZ	2.09	0.87
1:A:665:GLY:O	1:A:667:GLY:N	2.06	0.87
2:B:299:GLU:HB3	2:B:571:PRO:HG3	1.57	0.87
2:B:770:GLN:CD	2:B:983:ARG:HA	1.98	0.87
5:E:17:ARG:HB2	5:E:17:ARG:HH11	1.37	0.87
1:A:899:VAL:HB	1:A:929:LEU:CD1	2.04	0.87
1:A:1101:LEU:HB2	1:A:1355:VAL:HG11	1.55	0.87
2:B:1065:GLN:NE2	2:B:1067:ARG:H	1.73	0.87
1:A:901:LEU:H	1:A:926:GLN:HE21	1.19	0.87
12:L:61:THR:HG21	12:L:63:ARG:HE	1.38	0.87
3:C:175:ALA:HB2	10:J:10:CYS:HB2	1.57	0.87
1:A:899:VAL:HG13	1:A:908:LEU:HD21	1.55	0.87
1:A:182:VAL:HG22	1:A:201:VAL:HA	1.55	0.86
12:L:55:ILE:HD13	12:L:55:ILE:H	1.40	0.86
1:A:64:ASN:H	1:A:74:MET:HE3	1.40	0.86
6:F:103:MET:HE1	7:G:65:ASP:HB2	1.56	0.86
2:B:810:GLU:CA	2:B:815:ARG:HH22	1.88	0.86
1:A:1323:ASP:OD1	1:A:1325:THR:HG22	1.74	0.86
13:T:15:DC:H2"	13:T:16:DT:H72	1.55	0.86
1:A:40:THR:HG22	1:A:41:MET:HG3	1.54	0.86
1:A:1242:VAL:HG12	1:A:1243:VAL:H	1.39	0.86
2:B:278:GLN:HG2	2:B:279:ASP:H	1.38	0.86
9:I:82:GLU:HB3	9:I:104:LEU:HD12	1.58	0.86
1:A:567:LYS:HG3	8:H:95:TYR:CA	2.03	0.86
2:B:801:LYS:O	10:J:52:THR:HG23	1.75	0.86
12:L:34:CYS:HB3	12:L:51:CYS:SG	2.15	0.86
5:E:3:GLN:HG3	5:E:5:ASN:H	1.40	0.86
4:D:70:PHE:O	4:D:74:GLN:HG3	1.75	0.85
1:A:616:VAL:HG12	1:A:617:VAL:H	1.42	0.85
5:E:85:GLU:HB2	5:E:88:VAL:HG22	1.56	0.85
1:A:34:LYS:HZ1	1:A:57:ARG:NH2	1.74	0.85
2:B:287:ARG:HG2	2:B:292:ILE:HA	1.56	0.85
9:I:65:ASP:HB3	9:I:68:LEU:HD12	1.56	0.85
13:T:15:DC:C2'	13:T:16:DT:H72	2.05	0.85
1:A:298:PHE:HZ	1:A:314:ALA:HB2	1.39	0.85
1:A:390:GLN:O	1:A:394:ASN:HB2	1.75	0.85
1:A:738:LYS:HB2	1:A:740:LEU:HG	1.58	0.85
2:B:615:MET:O	2:B:615:MET:HE3	1.76	0.85

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:72:LYS:HA	6:F:72:LYS:HE3	1.59	0.85
8:H:100:THR:OG1	8:H:138:GLU:HG3	1.76	0.85
1:A:1261:LYS:O	1:A:1264:GLU:HB3	1.76	0.85
3:C:244:VAL:O	3:C:248:ILE:HG13	1.75	0.85
1:A:875:ALA:HB2	1:A:1366:ARG:HD2	1.58	0.85
2:B:193:LYS:HZ1	12:L:32:ALA:HB1	1.42	0.85
1:A:134:ARG:HG2	1:A:138:ILE:HD11	1.56	0.85
7:G:45:ILE:HA	7:G:78:VAL:HG12	1.58	0.85
2:B:882:THR:HG22	2:B:884:ARG:HB2	1.56	0.85
11:K:49:GLU:OE2	11:K:97:LYS:HE3	1.76	0.85
5:E:156:LEU:HD12	5:E:195:VAL:HB	1.57	0.84
1:A:913:LEU:HD12	1:A:914:GLU:H	1.40	0.84
2:B:640:VAL:HG22	2:B:651:LEU:HD23	1.57	0.84
6:F:103:MET:CE	7:G:66:GLY:H	1.89	0.84
1:A:42:ASP:O	1:A:44:THR:N	2.11	0.84
2:B:289:LEU:HD13	2:B:375:ALA:HB2	1.58	0.84
2:B:880:THR:HB	2:B:934:LYS:HD3	1.58	0.84
2:B:1119:VAL:O	2:B:1126:GLY:HA3	1.78	0.84
3:C:98:VAL:C	3:C:99:LEU:HD23	2.02	0.84
2:B:69:LEU:HD13	2:B:429:PHE:HD1	1.11	0.84
2:B:999:MET:HA	2:B:999:MET:HE3	1.59	0.84
11:K:65:HIS:CD2	11:K:67:PHE:H	1.96	0.84
2:B:604:ARG:HG3	2:B:611:PRO:HA	1.58	0.84
3:C:147:LEU:HB2	3:C:151:GLN:HB2	1.59	0.84
1:A:49:LYS:HZ1	1:A:61:ILE:N	1.75	0.84
3:C:32:SER:O	3:C:36:VAL:HG23	1.78	0.84
1:A:53:LEU:HD23	1:A:54:ASN:H	1.40	0.84
1:A:470:LEU:HD13	1:A:487:MET:HE1	1.59	0.84
6:F:73:ALA:CB	6:F:143:PHE:H	1.90	0.84
1:A:414:ASP:OD1	1:A:416:ARG:HG2	1.78	0.84
1:A:1404:GLU:HB2	1:A:1408:ILE:HD12	1.58	0.83
12:L:55:ILE:O	12:L:56:LEU:HB2	1.77	0.83
5:E:19:VAL:O	5:E:23:VAL:HG23	1.77	0.83
1:A:563:PRO:HG3	1:A:572:TRP:CZ2	2.13	0.83
1:A:981:LEU:HD21	1:A:1039:LYS:HA	1.59	0.83
1:A:1420:ASP:HB2	1:A:1422:ARG:HG3	1.59	0.83
2:B:882:THR:CG2	2:B:884:ARG:HB2	2.08	0.83
2:B:1180:PHE:HB3	2:B:1191:ILE:HD12	1.59	0.83
3:C:47:ASP:HA	12:L:69:ALA:HB3	1.60	0.83
8:H:64:ASN:HD22	8:H:88:SER:CB	1.90	0.83
1:A:738:LYS:H	1:A:738:LYS:HD2	1.42	0.83

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:526:GLU:HG2	2:B:538:ASN:HD22	1.43	0.83
2:B:652:LYS:O	2:B:689:LEU:HD22	1.78	0.83
2:B:1084:GLN:N	2:B:1084:GLN:NE2	2.26	0.83
8:H:129:TYR:H	8:H:130:ARG:HH11	1.27	0.83
1:A:32:VAL:O	1:A:57:ARG:HD3	1.78	0.83
1:A:332:LYS:HG3	1:A:333:GLU:OE2	1.77	0.83
2:B:593:PRO:HG2	2:B:617:ARG:CZ	2.09	0.83
2:B:121:ASN:HA	2:B:207:GLY:HA2	1.58	0.83
10:J:1:MET:H2	10:J:57:ILE:H	1.24	0.83
1:A:1189:SER:O	1:A:1241:ARG:HD3	1.79	0.82
2:B:101:MET:HB2	2:B:169:ARG:HH22	1.44	0.82
7:G:1:MET:SD	7:G:2:PHE:N	2.52	0.82
12:L:32:ALA:CB	12:L:55:ILE:HG13	2.09	0.82
5:E:114:ASN:O	5:E:115:ASN:HB3	1.76	0.82
1:A:1095:THR:HG22	1:A:1100:ARG:HB2	1.61	0.82
2:B:309:GLN:OE1	9:I:52:ILE:HD11	1.79	0.82
1:A:196:GLU:HB2	1:A:197:PRO:HD2	1.61	0.82
1:A:351:THR:HB	2:B:1103:ILE:CD1	2.09	0.82
1:A:590:ARG:HH11	1:A:590:ARG:CB	1.91	0.82
1:A:709:THR:HG22	1:A:711:ARG:H	1.45	0.82
2:B:277:LYS:HG3	2:B:338:GLY:HA2	1.60	0.82
2:B:1084:GLN:HE21	2:B:1084:GLN:H	1.24	0.82
7:G:62:LEU:HB3	7:G:63:PRO:HD2	1.61	0.82
1:A:69:THR:O	1:A:71:GLN:N	2.13	0.82
1:A:770:VAL:HA	1:A:822:GLU:OE1	1.79	0.82
2:B:815:ARG:HD3	2:B:1041:GLU:OE2	1.79	0.82
2:B:1095:LEU:H	2:B:1095:LEU:HD12	1.45	0.82
2:B:850:LEU:HD12	2:B:851:PHE:N	1.94	0.82
2:B:1099:VAL:HG13	2:B:1100:ASP:N	1.95	0.82
7:G:49:LEU:HD21	7:G:77:VAL:HG23	1.61	0.82
1:A:1244:ARG:HB3	1:A:1245:PRO:CA	2.08	0.82
2:B:65:GLU:HG3	2:B:66:ASP:H	1.45	0.82
2:B:515:HIS:HD2	2:B:517:THR:N	1.77	0.82
2:B:830:TYR:CE2	2:B:1000:PRO:HD3	2.15	0.82
2:B:542:MET:HE3	2:B:636:PRO:HG3	1.60	0.82
2:B:1084:GLN:N	2:B:1084:GLN:HE21	1.77	0.82
9:I:26:LEU:HD23	9:I:37:GLU:HA	1.59	0.82
3:C:142:VAL:H	10:J:16:ASP:HB3	1.45	0.82
1:A:855:THR:HG21	1:A:857:ARG:HE	1.44	0.81
1:A:1116:LEU:HB3	1:A:1308:THR:CG2	2.10	0.81
1:A:225:ASN:HD22	1:A:228:PHE:H	0.83	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:456:MET:HE2	1:A:507:VAL:HG22	1.63	0.81
1:A:1115:SER:C	1:A:1308:THR:HG22	2.04	0.81
3:C:133:ILE:HG21	3:C:236:GLY:HA3	1.62	0.81
7:G:87:VAL:HB	7:G:103:VAL:HG11	1.61	0.81
1:A:11:LEU:C	1:A:11:LEU:HD12	2.05	0.81
1:A:49:LYS:NZ	1:A:61:ILE:HG13	1.94	0.81
1:A:1260:LEU:HD12	1:A:1260:LEU:O	1.81	0.81
2:B:69:LEU:CB	2:B:429:PHE:HE1	1.93	0.81
1:A:567:LYS:CE	8:H:47:PHE:HB2	2.11	0.81
1:A:590:ARG:HB3	1:A:605:MET:H	1.46	0.81
1:A:873:MET:HE3	1:A:957:PRO:HG3	1.60	0.81
2:B:69:LEU:HD22	2:B:429:PHE:CZ	2.16	0.81
2:B:622:LYS:CE	9:I:59:VAL:HG22	2.11	0.81
5:E:128:PRO:HA	5:E:129:PRO:O	1.79	0.81
10:J:64:ASN:HB3	10:J:65:PRO:HD2	1.61	0.81
1:A:107:CYS:HA	1:A:171:GLN:OE1	1.79	0.81
1:A:1438:THR:HB	2:B:1144:ALA:HB3	1.63	0.81
3:C:33:LEU:HG	3:C:37:MET:HE2	1.60	0.81
2:B:289:LEU:HD13	2:B:375:ALA:CB	2.09	0.81
2:B:579:ARG:HB2	2:B:586:TRP:NE1	1.95	0.81
7:G:125:SER:OG	7:G:128:PRO:HA	1.80	0.81
1:A:1002:GLY:HA3	1:A:1007:ILE:HG21	1.60	0.81
2:B:1017:ILE:HB	2:B:1018:PRO:HD3	1.61	0.81
8:H:93:TYR:HB3	8:H:144:ILE:O	1.80	0.81
1:A:381:THR:C	1:A:383:TYR:H	1.88	0.80
1:A:866:PHE:C	1:A:867:ILE:HD12	2.06	0.80
2:B:637:LEU:O	2:B:690:VAL:HG13	1.81	0.80
9:I:35:VAL:HG12	9:I:36:GLU:N	1.96	0.80
1:A:180:LYS:HZ2	1:A:294:SER:HB3	1.46	0.80
1:A:1111:MET:HE2	1:A:1331:SER:HA	1.61	0.80
2:B:1182:CYS:O	2:B:1182:CYS:SG	2.38	0.80
2:B:882:THR:HG21	2:B:935:ARG:HA	1.63	0.80
1:A:321:PRO:O	1:A:322:VAL:HG12	1.81	0.80
2:B:597:MET:HA	2:B:597:MET:HE3	1.62	0.80
1:A:1315:GLU:C	1:A:1317:MET:H	1.88	0.80
2:B:365:THR:OG1	2:B:367:LEU:HG	1.81	0.80
2:B:1002:THR:HG23	2:B:1006:ILE:HG13	1.62	0.80
2:B:1150:ARG:HG3	2:B:1150:ARG:HH11	1.45	0.80
1:A:779:PHE:HE1	1:A:785:PRO:HD3	1.45	0.80
2:B:217:ARG:NE	2:B:405:ARG:HB2	1.97	0.80
6:F:77:ASP:O	6:F:78:GLN:HB2	1.79	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:101:ALA:HB2	8:H:116:TYR:CZ	2.15	0.80
1:A:600:PRO:HG2	1:A:601:LYS:H	1.44	0.80
2:B:336:ARG:HE	2:B:348:ARG:HH12	1.25	0.80
3:C:8:VAL:HG12	3:C:9:LYS:H	1.46	0.80
1:A:284:ALA:C	1:A:286:HIS:H	1.88	0.80
1:A:511:ILE:HA	1:A:521:MET:HE3	1.62	0.80
1:A:93:VAL:HG22	1:A:301:ALA:HA	1.62	0.80
2:B:957:ASN:HD22	2:B:961:LEU:HB2	1.47	0.80
2:B:1084:GLN:HG2	3:C:201:TRP:CZ2	2.17	0.80
2:B:1159:ARG:HB3	2:B:1159:ARG:HH11	1.46	0.80
7:G:15:PRO:HA	7:G:18:PHE:CD1	2.17	0.80
1:A:23:SER:HA	1:A:233:TRP:NE1	1.96	0.80
1:A:1130:GLN:HE21	1:A:1134:ILE:HD11	1.47	0.80
5:E:52:ARG:HB3	5:E:53:PRO:HD2	1.64	0.80
2:B:422:LYS:O	2:B:426:LYS:HG2	1.80	0.79
4:D:47:LEU:HD13	4:D:48:ILE:H	1.46	0.79
13:T:15:DC:H2"	13:T:16:DT:C7	2.12	0.79
1:A:115:LEU:O	1:A:122:MET:HG2	1.83	0.79
3:C:45:ALA:HA	3:C:72:LEU:HD12	1.64	0.79
12:L:61:THR:HG22	12:L:63:ARG:H	1.47	0.79
2:B:343:ILE:HG23	2:B:347:LYS:HE2	1.62	0.79
2:B:824:ILE:HG22	2:B:1087:PHE:CE2	2.18	0.79
10:J:9:SER:HB2	10:J:45:CYS:HB2	1.64	0.79
1:A:1206:ASP:HB3	1:A:1274:ARG:HH12	1.45	0.79
1:A:1254:ALA:O	1:A:1255:GLU:HB2	1.81	0.79
11:K:53:ASP:HB3	11:K:56:VAL:HG23	1.64	0.79
2:B:133:LYS:HE3	2:B:135:ARG:NH2	1.95	0.79
10:J:23:ASN:C	10:J:25:LEU:H	1.90	0.79
2:B:46:GLN:HB2	2:B:408:LEU:HD21	1.65	0.79
1:A:21:LEU:HD11	1:A:1414:ALA:HA	1.65	0.79
2:B:995:ARG:HH12	3:C:165:LYS:HG2	1.47	0.79
4:D:8:PHE:CD2	7:G:6:ASP:HB2	2.18	0.79
11:K:6:ARG:O	11:K:9:LEU:HG	1.81	0.79
1:A:144:THR:O	1:A:146:MET:HE2	1.83	0.79
7:G:7:LEU:HB2	7:G:74:TYR:HE2	1.43	0.79
11:K:12:LEU:HD12	11:K:12:LEU:N	1.97	0.79
1:A:148:CYS:O	1:A:168:GLY:HA2	1.82	0.78
2:B:35:SER:HA	2:B:811:TYR:HE2	1.48	0.78
3:C:39:ALA:CA	3:C:164:ALA:HB3	2.12	0.78
3:C:238:ILE:HD11	3:C:246:ARG:HH11	1.47	0.78
8:H:44:VAL:HG13	8:H:48:PRO:HA	1.63	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:L:30:ILE:O	12:L:56:LEU:HA	1.82	0.78
1:A:92:HIS:HB2	1:A:236:LEU:HD21	1.63	0.78
1:A:982:THR:H	1:A:985:ASP:HB2	1.47	0.78
3:C:73:GLN:HE21	3:C:74:SER:H	1.29	0.78
7:G:88:ASP:HB3	7:G:144:ARG:HA	1.66	0.78
1:A:372:LYS:HA	1:A:435:HIS:ND1	1.98	0.78
2:B:880:THR:CB	2:B:934:LYS:HD3	2.12	0.78
1:A:745:GLN:HA	1:A:748:MET:HE3	1.66	0.78
3:C:235:VAL:HG12	10:J:13:VAL:HG23	1.64	0.78
7:G:128:PRO:O	7:G:138:THR:HG23	1.83	0.78
2:B:1162:ILE:HD11	2:B:1194:ILE:HD13	1.64	0.78
5:E:207:ARG:HB3	5:E:207:ARG:NH1	1.98	0.78
8:H:27:GLU:HG2	8:H:39:THR:HA	1.66	0.78
12:L:28:LYS:HB2	12:L:39:SER:HB2	1.65	0.78
5:E:109:ILE:HG22	5:E:110:PHE:H	1.47	0.78
11:K:61:TYR:C	11:K:61:TYR:CD2	2.61	0.78
13:T:13:DT:H2"	13:T:14:DA:OP2	1.83	0.78
1:A:84:ILE:HD11	1:A:270:LEU:HD13	1.65	0.78
2:B:412:LEU:HB3	2:B:466:TRP:HE1	1.48	0.78
2:B:579:ARG:HB2	2:B:586:TRP:HE1	1.46	0.78
4:D:18:VAL:O	4:D:19:GLU:HB2	1.82	0.78
10:J:1:MET:N	10:J:57:ILE:H	1.82	0.78
1:A:567:LYS:HB3	1:A:568:PRO:HD3	1.65	0.78
2:B:549:THR:HB	2:B:628:THR:OG1	1.84	0.78
2:B:613:VAL:HG13	2:B:627:PHE:O	1.84	0.78
2:B:755:ILE:HG23	2:B:809:MET:HE3	1.66	0.78
8:H:41:ASP:O	8:H:42:ILE:HG13	1.84	0.78
1:A:1004:ASN:HD21	5:E:167:ARG:HD2	1.46	0.78
2:B:294:ASP:O	2:B:296:GLU:N	2.17	0.78
11:K:30:ALA:HB2	11:K:76:GLN:HG3	1.64	0.78
1:A:320:ARG:HH11	1:A:320:ARG:CB	1.97	0.78
1:A:1100:ARG:NH2	1:A:1351:GLU:HG2	1.99	0.78
2:B:70:ILE:O	2:B:137:TYR:HB2	1.84	0.78
2:B:244:LEU:HD11	2:B:366:GLN:NE2	1.97	0.78
2:B:880:THR:HB	2:B:934:LYS:CD	2.12	0.78
2:B:882:THR:HG22	2:B:884:ARG:H	1.49	0.78
1:A:696:GLU:OE2	1:A:702:LEU:HD21	1.83	0.77
8:H:25:ARG:HA	8:H:41:ASP:HA	1.65	0.77
8:H:80:ARG:HH11	11:K:57:LEU:HD21	1.49	0.77
2:B:1095:LEU:HD12	2:B:1095:LEU:N	1.99	0.77
5:E:109:ILE:HG22	5:E:110:PHE:N	1.99	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:128:ASN:H	8:H:130:ARG:HH11	1.30	0.77
1:A:56:PRO:O	1:A:57:ARG:HG3	1.84	0.77
1:A:567:LYS:HD3	1:A:568:PRO:HD3	1.65	0.77
1:A:629:LEU:O	1:A:633:VAL:HG23	1.83	0.77
1:A:635:ARG:HH11	1:A:635:ARG:HA	1.50	0.77
2:B:611:PRO:HG2	2:B:685:LEU:HD21	1.67	0.77
4:D:139:LYS:HE2	4:D:143:ASN:HD21	1.47	0.77
11:K:55:LYS:HB3	11:K:81:TYR:CD1	2.20	0.77
2:B:277:LYS:O	2:B:278:GLN:HB2	1.83	0.77
3:C:38:ILE:HA	3:C:173:ALA:HB2	1.66	0.77
3:C:46:ILE:HG13	3:C:72:LEU:HD11	1.66	0.77
1:A:1175:SER:O	1:A:1176:LEU:HB2	1.84	0.77
2:B:723:VAL:HG12	2:B:724:ASP:H	1.49	0.77
8:H:130:ARG:N	8:H:130:ARG:HD2	1.98	0.77
9:I:7:CYS:HB3	9:I:14:LEU:HD21	1.66	0.77
1:A:1325:THR:O	5:E:148:GLU:HB2	1.84	0.77
1:A:1444:MET:HG3	7:G:60:ARG:HA	1.66	0.77
1:A:189:ARG:HA	1:A:195:ASP:HA	1.65	0.77
1:A:477:PRO:HG2	1:A:521:MET:HG2	1.67	0.77
1:A:1343:ALA:HB2	5:E:150:VAL:HG22	1.64	0.77
1:A:49:LYS:NZ	1:A:61:ILE:H	1.82	0.77
1:A:1391:ARG:HD2	1:A:1391:ARG:C	2.08	0.77
11:K:31:VAL:HG12	11:K:32:VAL:H	1.50	0.77
11:K:55:LYS:HB3	11:K:81:TYR:HD1	1.49	0.77
11:K:107:THR:O	11:K:111:LEU:HG	1.85	0.77
1:A:590:ARG:HH21	1:A:620:LYS:HB3	1.48	0.77
1:A:899:VAL:HG22	1:A:1029:ARG:HG2	1.65	0.77
2:B:464:GLY:O	2:B:477:ALA:HA	1.85	0.77
15:P:3:U:H2'	15:P:4:C:C6	2.20	0.77
1:A:1160:SER:HA	1:A:1170:ILE:HD13	1.65	0.76
1:A:1308:THR:HG23	1:A:1310:GLY:H	1.50	0.76
2:B:506:GLY:HA2	2:B:512:ARG:NH2	1.99	0.76
2:B:906:SER:O	2:B:941:LEU:HD23	1.83	0.76
7:G:119:LEU:HD12	7:G:131:GLN:O	1.85	0.76
11:K:31:VAL:HG12	11:K:32:VAL:N	2.00	0.76
1:A:343:LYS:NZ	2:B:1151:LEU:HD12	2.00	0.76
2:B:800:GLN:HB3	10:J:52:THR:HG22	1.67	0.76
2:B:1069:PHE:H	2:B:1069:PHE:HD1	1.31	0.76
3:C:235:VAL:HG11	10:J:6:ARG:HH21	1.49	0.76
11:K:46:ILE:O	11:K:50:LEU:HB2	1.85	0.76
1:A:12:ARG:HD2	2:B:1218:THR:HB	1.67	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:837:ILE:HA	1:A:840:ARG:HD3	1.67	0.76
2:B:745:PRO:O	2:B:748:ILE:HG12	1.84	0.76
3:C:22:LEU:HD13	3:C:230:MET:HE1	1.67	0.76
4:D:8:PHE:HD2	7:G:6:ASP:HB2	1.50	0.76
13:T:16:DT:C2'	13:T:17:DT:H5'	2.14	0.76
1:A:577:ILE:O	1:A:580:VAL:HG23	1.85	0.76
1:A:869:GLY:O	5:E:204:THR:HG21	1.86	0.76
2:B:326:ASP:OD2	2:B:328:GLU:HB3	1.85	0.76
2:B:803:LEU:HD12	2:B:1032:SER:HB3	1.67	0.76
4:D:24:ALA:C	4:D:26:THR:H	1.92	0.76
1:A:115:LEU:HG	1:A:142:CYS:HB3	1.68	0.76
1:A:754:SER:N	1:A:757:ASN:HD22	1.83	0.76
2:B:314:LEU:O	2:B:318:VAL:HG23	1.84	0.76
2:B:563:MET:HE1	2:B:580:VAL:HB	1.66	0.76
8:H:40:LEU:HD22	8:H:123:MET:HE3	1.67	0.76
1:A:852:TYR:CD2	1:A:1060:PRO:HB2	2.21	0.76
2:B:789:MET:HE2	2:B:953:LEU:HD21	1.68	0.76
2:B:1072:MET:HE3	2:B:1085:ILE:HB	1.67	0.76
1:A:392:VAL:HG13	1:A:415:LEU:HD11	1.68	0.76
1:A:670:ILE:HG23	1:A:805:LEU:HD21	1.67	0.76
2:B:821:GLN:HE22	2:B:851:PHE:H	1.33	0.76
2:B:1224:PHE:CE1	5:E:171:LYS:HG3	2.21	0.76
3:C:92:CYS:SG	3:C:94:LYS:HB2	2.26	0.76
8:H:42:ILE:HG23	8:H:95:TYR:HE1	1.50	0.76
1:A:1101:LEU:O	1:A:1101:LEU:HD12	1.85	0.76
2:B:758:PHE:CE1	2:B:1027:ILE:HG22	2.21	0.75
10:J:57:ILE:HA	10:J:60:PHE:HD2	1.51	0.75
1:A:34:LYS:NZ	1:A:57:ARG:HH21	1.84	0.75
1:A:504:LEU:HD11	6:F:91:ALA:CB	2.15	0.75
1:A:836:TYR:CE2	1:A:840:ARG:HD2	2.22	0.75
2:B:757:PRO:HG3	2:B:1028:GLU:OE2	1.87	0.75
2:B:834:ASN:HA	2:B:838:SER:O	1.86	0.75
5:E:113:GLN:HA	5:E:137:GLU:HG3	1.68	0.75
1:A:35:ILE:HG22	1:A:84:ILE:HD12	1.68	0.75
1:A:117:GLU:H	1:A:117:GLU:CD	1.93	0.75
1:A:857:ARG:NH1	6:F:139:PRO:HB2	2.00	0.75
2:B:294:ASP:C	2:B:296:GLU:H	1.95	0.75
2:B:654:ARG:H	2:B:657:HIS:HD2	1.32	0.75
7:G:1:MET:SD	7:G:79:PHE:HD1	2.09	0.75
2:B:359:GLU:O	2:B:362:PRO:HD3	1.86	0.75
2:B:516:ASN:HD22	2:B:516:ASN:N	1.83	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:777:ALA:HA	2:B:1095:LEU:HA	1.66	0.75
5:E:212:ARG:HH11	5:E:212:ARG:HG3	1.50	0.75
1:A:34:LYS:NZ	1:A:57:ARG:NH2	2.35	0.75
2:B:806:THR:HG22	2:B:808:ALA:N	1.94	0.75
4:D:47:LEU:O	4:D:48:ILE:HD13	1.87	0.75
7:G:97:HIS:HA	7:G:112:LYS:HE2	1.68	0.75
1:A:43:GLU:HB2	1:A:46:THR:HB	1.67	0.75
1:A:115:LEU:HB2	1:A:122:MET:HE2	1.69	0.75
1:A:583:PRO:HG2	1:A:586:ILE:HG13	1.69	0.75
2:B:97:VAL:HG22	2:B:128:LEU:HG	1.68	0.75
2:B:336:ARG:HE	2:B:348:ARG:NH1	1.84	0.75
2:B:855:PHE:HD1	2:B:856:PHE:N	1.84	0.75
3:C:75:MET:HE1	3:C:239:PRO:HG2	1.67	0.75
4:D:144:THR:HG21	7:G:46:LEU:HD13	1.69	0.75
3:C:89:GLU:O	3:C:90:ASP:HB3	1.86	0.75
8:H:99:GLY:HA3	8:H:118:PHE:HA	1.69	0.75
13:T:26:DT:H2"	13:T:27:DC:OP2	1.87	0.75
1:A:335:ARG:CD	2:B:1202:LEU:HD23	2.16	0.74
1:A:809:THR:H	1:A:812:GLU:HB2	1.52	0.74
1:A:1444:MET:HE1	6:F:135:ARG:HB2	1.69	0.74
7:G:28:THR:O	7:G:32:GLU:HG3	1.88	0.74
1:A:463:ILE:HB	1:A:464:PRO:HD2	1.70	0.74
1:A:1394:THR:HG21	1:A:1398:MET:SD	2.26	0.74
5:E:92:THR:O	5:E:95:THR:HB	1.87	0.74
1:A:1255:GLU:OE1	1:A:1258:HIS:HB2	1.88	0.74
2:B:69:LEU:CG	2:B:429:PHE:CE1	2.69	0.74
2:B:773:MET:HE2	2:B:985:GLY:HA2	1.69	0.74
3:C:36:VAL:HG21	3:C:251:LEU:HB2	1.68	0.74
1:A:596:THR:C	1:A:598:LEU:H	1.95	0.74
3:C:242:GLN:HA	3:C:245:VAL:HG23	1.68	0.74
5:E:23:VAL:HG13	5:E:78:LEU:HD13	1.70	0.74
10:J:44:TYR:H	10:J:44:TYR:HD2	1.31	0.74
1:A:298:PHE:CZ	1:A:314:ALA:HB2	2.22	0.74
1:A:829:VAL:C	1:A:831:THR:H	1.93	0.74
1:A:940:ARG:HG2	1:A:940:ARG:HH11	1.51	0.74
2:B:850:LEU:HD12	2:B:851:PHE:H	1.52	0.74
2:B:957:ASN:O	2:B:959:ASP:N	2.20	0.74
3:C:93:ASP:OD1	3:C:122:SER:HB2	1.88	0.74
11:K:7:PHE:HB2	11:K:11:LEU:HD23	1.69	0.74
1:A:22:PHE:HB2	2:B:1211:ASN:OD1	1.88	0.74
1:A:1280:GLU:O	1:A:1309:ASP:HB3	1.88	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:132:LYS:HE2	1:A:1411:GLU:OE1	1.87	0.74
2:B:378:LEU:O	2:B:382:ILE:HG13	1.87	0.74
2:B:1180:PHE:HB3	2:B:1191:ILE:CD1	2.17	0.74
12:L:28:LYS:HD2	12:L:39:SER:OG	1.87	0.74
15:P:3:U:H2'	15:P:4:C:H6	1.53	0.74
1:A:868:TYR:CE1	1:A:1064:VAL:HG11	2.23	0.74
1:A:1006:ILE:HD11	5:E:163:GLU:HG3	1.70	0.73
1:A:464:PRO:HG2	1:A:465:TYR:HD1	1.52	0.73
1:A:483:ASP:OD2	15:P:11:U:H5"	1.88	0.73
2:B:526:GLU:HG2	2:B:538:ASN:ND2	2.03	0.73
1:A:7:SER:CB	2:B:1175:LEU:HD22	2.17	0.73
1:A:105:CYS:O	1:A:114:LEU:HG	1.88	0.73
1:A:889:SER:HB3	1:A:1297:GLU:HG3	1.70	0.73
5:E:180:ARG:HH21	5:E:192:ARG:HB2	1.52	0.73
1:A:239:LEU:HD12	1:A:240:PRO:HD2	1.70	0.73
1:A:825:ILE:HD11	2:B:512:ARG:CB	2.13	0.73
2:B:1006:ILE:HG22	10:J:45:CYS:HB3	1.69	0.73
3:C:50:GLU:HG2	12:L:64:LEU:HD22	1.71	0.73
1:A:341:MET:HE3	2:B:1135:ARG:NH1	2.03	0.73
1:A:450:LEU:HD13	1:A:1074:GLU:HG2	1.69	0.73
2:B:23:ALA:HB1	2:B:24:PRO:HD2	1.69	0.73
3:C:128:ASN:O	3:C:129:ILE:HG13	1.88	0.73
8:H:109:LYS:HD2	8:H:111:LEU:HD11	1.71	0.73
12:L:60:ARG:HH21	12:L:65:VAL:HG21	1.52	0.73
1:A:288:ALA:HA	1:A:291:GLU:OE2	1.87	0.73
1:A:14:VAL:N	1:A:1432:GLN:HE22	1.85	0.73
1:A:351:THR:HB	2:B:1103:ILE:HD12	1.69	0.73
1:A:591:PHE:HA	1:A:595:THR:HG21	1.70	0.73
1:A:1219:THR:HG21	1:A:1271:ILE:HD11	1.71	0.73
3:C:112:ASN:HB3	3:C:114:TYR:CE1	2.24	0.73
4:D:170:THR:C	4:D:172:LEU:H	1.97	0.73
9:I:111:THR:HG22	9:I:112:SER:H	1.54	0.73
1:A:10:PRO:HB3	4:D:3:VAL:HA	1.71	0.73
1:A:49:LYS:HZ1	1:A:61:ILE:H	1.32	0.73
3:C:22:LEU:HD13	3:C:230:MET:CE	2.19	0.73
6:F:79:ARG:NH2	6:F:150:GLU:OE1	2.22	0.73
1:A:90:VAL:HG13	1:A:297:GLN:CD	2.13	0.72
1:A:438:ASP:OD2	1:A:461:LYS:HD2	1.89	0.72
1:A:464:PRO:HG2	1:A:465:TYR:CD1	2.23	0.72
1:A:506:ALA:HB1	1:A:508:PRO:HD2	1.71	0.72
1:A:682:THR:CG2	1:A:728:LYS:HE3	2.19	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:100:THR:HG22	8:H:101:ALA:N	2.03	0.72
1:A:34:LYS:HB3	1:A:36:ARG:HH21	1.52	0.72
1:A:896:ARG:NH2	1:A:1030:ARG:HE	1.86	0.72
1:A:1116:LEU:N	1:A:1308:THR:HG22	2.03	0.72
2:B:708:GLU:HG3	2:B:709:ASP:H	1.53	0.72
11:K:65:HIS:HD2	11:K:67:PHE:H	1.36	0.72
1:A:335:ARG:HA	1:A:335:ARG:HE	1.54	0.72
1:A:535:THR:HG23	1:A:575:LYS:HG2	1.71	0.72
1:A:1015:VAL:HG12	1:A:1019:CYS:SG	2.29	0.72
2:B:29:ASP:CG	2:B:658:ILE:HD13	2.14	0.72
2:B:364:ILE:O	2:B:365:THR:HB	1.89	0.72
10:J:1:MET:N	10:J:56:LEU:N	2.36	0.72
1:A:534:LEU:O	1:A:574:GLY:HA3	1.90	0.72
1:A:802:ASN:ND2	2:B:728:ARG:HB2	2.04	0.72
1:A:1420:ASP:O	1:A:1421:CYS:HB2	1.88	0.72
2:B:852:ARG:HH22	12:L:70:ARG:C	1.97	0.72
2:B:855:PHE:HD1	2:B:855:PHE:C	1.97	0.72
5:E:190:LEU:HD12	5:E:214:CYS:HB2	1.72	0.72
1:A:50:ILE:O	1:A:52:GLY:N	2.23	0.72
1:A:903:ASN:HD22	1:A:903:ASN:C	1.97	0.72
1:A:967:ALA:HA	1:A:1044:TRP:CZ3	2.24	0.72
1:A:1101:LEU:HD11	1:A:1105:LEU:HD11	1.72	0.72
4:D:119:ARG:HD3	4:D:221:TYR:CD2	2.25	0.72
5:E:61:GLN:HG3	5:E:78:LEU:O	1.89	0.72
8:H:129:TYR:H	8:H:130:ARG:NH1	1.87	0.72
12:L:26:THR:HG23	12:L:62:LYS:HZ3	1.53	0.72
12:L:40:LEU:HD22	12:L:44:ASP:CG	2.15	0.72
1:A:399:HIS:CB	1:A:400:PRO:HD3	2.20	0.72
1:A:1127:ASP:CG	1:A:1130:GLN:HB2	2.15	0.72
1:A:1193:LEU:HB2	1:A:1260:LEU:HD11	1.71	0.72
2:B:1150:ARG:HH11	2:B:1150:ARG:CG	2.03	0.72
3:C:80:LEU:HD11	3:C:95:CYS:C	2.14	0.72
5:E:23:VAL:O	5:E:28:TYR:HB2	1.89	0.72
8:H:89:LEU:C	8:H:91:ASP:H	1.98	0.72
1:A:382:PRO:HB3	1:A:428:TYR:HE2	1.53	0.72
1:A:557:ASP:OD2	1:A:559:VAL:HB	1.88	0.72
1:A:890:ASP:H	1:A:1296:GLY:HA3	1.54	0.72
1:A:1262:LYS:C	1:A:1264:GLU:H	1.97	0.72
6:F:79:ARG:HG3	6:F:144:GLU:HG2	1.72	0.72
1:A:470:LEU:HD23	1:A:470:LEU:H	1.51	0.72
1:A:1152:ILE:HD11	9:I:44:TYR:CD2	2.25	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:44:LEU:HB2	3:C:77:ILE:HD11	1.71	0.72
2:B:269:ILE:HD11	2:B:386:LEU:HD21	1.72	0.72
2:B:810:GLU:HA	2:B:815:ARG:NH2	2.02	0.72
2:B:906:SER:HA	2:B:946:ASN:HB2	1.70	0.72
12:L:30:ILE:O	12:L:56:LEU:HD23	1.90	0.72
1:A:763:ALA:O	1:A:803:SER:HB3	1.90	0.71
2:B:547:VAL:HG12	2:B:612:GLU:OE2	1.89	0.71
4:D:119:ARG:HG2	4:D:120:GLU:N	2.04	0.71
3:C:236:GLY:O	3:C:238:ILE:N	2.23	0.71
6:F:99:LEU:O	6:F:103:MET:HG2	1.90	0.71
9:I:105:SER:O	9:I:106:CYS:HB3	1.89	0.71
1:A:722:LEU:H	1:A:722:LEU:HD12	1.53	0.71
2:B:383:ASN:C	2:B:387:LEU:HD13	2.15	0.71
2:B:1106:ARG:NH1	2:B:1110:PRO:HG2	2.05	0.71
5:E:195:VAL:HG12	5:E:196:VAL:H	1.54	0.71
1:A:356:ASP:HB2	1:A:469:ARG:NH1	2.05	0.71
1:A:903:ASN:HD22	1:A:904:THR:H	1.39	0.71
2:B:862:GLN:HG2	2:B:963:PHE:HD1	1.56	0.71
3:C:75:MET:HB3	3:C:128:ASN:HB3	1.72	0.71
9:I:74:GLU:HA	9:I:80:SER:O	1.90	0.71
13:T:9:DC:H2"	13:T:10:DA:C8	2.25	0.71
1:A:1116:LEU:HD13	1:A:1329:THR:HB	1.73	0.71
1:A:1436:ILE:HD13	2:B:1139:ILE:HG23	1.73	0.71
2:B:582:VAL:HB	2:B:587:HIS:HD2	1.54	0.71
8:H:64:ASN:OD1	8:H:90:ALA:N	2.20	0.71
12:L:61:THR:HG21	12:L:63:ARG:NE	2.05	0.71
1:A:32:VAL:HG23	1:A:57:ARG:HB2	1.71	0.71
1:A:567:LYS:HD2	8:H:95:TYR:CD2	2.26	0.71
2:B:60:GLN:O	2:B:63:ILE:HG22	1.90	0.71
2:B:412:LEU:HB3	2:B:466:TRP:NE1	2.06	0.71
3:C:147:LEU:HB2	3:C:151:GLN:CB	2.21	0.71
5:E:44:ALA:O	5:E:45:LYS:HB2	1.90	0.71
8:H:89:LEU:HB3	8:H:91:ASP:OD1	1.90	0.71
8:H:101:ALA:HB2	8:H:116:TYR:CE2	2.24	0.71
9:I:76:PRO:HD2	9:I:108:HIS:HD2	1.54	0.71
11:K:67:PHE:C	11:K:68:PHE:HD2	1.98	0.71
1:A:853:ASP:O	1:A:854:ASN:HB2	1.89	0.71
1:A:868:TYR:OH	1:A:1366:ARG:HD3	1.89	0.71
2:B:126:SER:OG	2:B:172:ILE:HD11	1.91	0.71
6:F:79:ARG:HB2	6:F:79:ARG:HH11	1.55	0.71
9:I:71:SER:OG	9:I:83:ASN:HB2	1.90	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:96:ILE:CG2	1:A:97:ALA:N	2.53	0.71
1:A:103:CYS:SG	1:A:108:MET:HE1	2.30	0.71
1:A:184:SER:HB3	1:A:199:LEU:HD23	1.73	0.71
1:A:524:VAL:HG12	1:A:525:GLN:N	2.04	0.71
1:A:816:HIS:CD2	2:B:764:SER:HB2	2.26	0.71
1:A:1032:LEU:O	1:A:1036:ARG:HD3	1.91	0.71
1:A:1076:ALA:HA	1:A:1079:MET:HE2	1.72	0.71
5:E:63:ASN:HB3	5:E:64:PRO:HD2	1.73	0.71
9:I:58:VAL:HG13	9:I:62:ILE:CD1	2.20	0.71
1:A:225:ASN:ND2	1:A:228:PHE:N	2.31	0.71
1:A:356:ASP:HB2	1:A:469:ARG:HH12	1.56	0.71
1:A:438:ASP:O	1:A:439:ASN:HB2	1.90	0.71
1:A:963:ILE:HD11	1:A:1048:ASN:CB	2.21	0.71
8:H:95:TYR:CE2	8:H:97:MET:HG3	2.26	0.71
12:L:61:THR:CG2	12:L:63:ARG:HE	2.03	0.71
14:N:3:DT:H1'	14:N:4:DA:C8	2.25	0.71
1:A:34:LYS:HZ1	1:A:57:ARG:HH21	1.34	0.71
2:B:701:ILE:HD11	2:B:703:ILE:HD11	1.71	0.71
2:B:713:ALA:HB1	2:B:714:GLU:OE1	1.91	0.71
3:C:73:GLN:NE2	3:C:74:SER:H	1.87	0.71
1:A:722:LEU:HD23	1:A:799:PHE:CD1	2.26	0.70
1:A:960:ILE:O	1:A:963:ILE:HG22	1.91	0.70
1:A:1006:ILE:CD1	5:E:163:GLU:HG3	2.21	0.70
2:B:291:ILE:HD13	2:B:300:HIS:NE2	2.05	0.70
2:B:583:ASN:ND2	2:B:628:THR:HG22	2.05	0.70
7:G:23:LYS:HG3	7:G:56:ILE:HD11	1.73	0.70
1:A:41:MET:HB2	1:A:49:LYS:CA	2.17	0.70
1:A:381:THR:O	1:A:383:TYR:N	2.24	0.70
1:A:515:GLN:HA	1:A:1367:HIS:HE2	1.57	0.70
1:A:616:VAL:HG12	1:A:617:VAL:N	2.05	0.70
1:A:903:ASN:ND2	1:A:904:THR:N	2.37	0.70
2:B:977:GLY:HA3	2:B:1099:VAL:HB	1.73	0.70
3:C:181:ASP:CG	3:C:186:LEU:HD13	2.15	0.70
4:D:9:GLN:NE2	4:D:31:GLN:HE21	1.89	0.70
8:H:64:ASN:HD22	8:H:88:SER:HB2	1.55	0.70
9:I:13:MET:CE	9:I:14:LEU:H	2.04	0.70
1:A:49:LYS:HZ1	1:A:61:ILE:CG1	2.04	0.70
1:A:144:THR:O	1:A:146:MET:HG3	1.90	0.70
1:A:535:THR:CG2	1:A:616:VAL:HA	2.20	0.70
1:A:567:LYS:CB	1:A:568:PRO:HD3	2.21	0.70
1:A:1027:ALA:O	1:A:1031:VAL:HG23	1.91	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:K:63:VAL:HG23	11:K:63:VAL:O	1.92	0.70
1:A:466:SER:HB2	2:B:1099:VAL:CG2	2.21	0.70
1:A:834:THR:HG21	1:A:1077:THR:HG23	1.72	0.70
4:D:119:ARG:HD3	4:D:221:TYR:CE2	2.26	0.70
1:A:896:ARG:NH2	1:A:1030:ARG:HH21	1.89	0.70
2:B:112:LEU:HD12	2:B:113:TYR:H	1.57	0.70
2:B:613:VAL:HG22	2:B:628:THR:HA	1.73	0.70
6:F:132:LEU:HD21	7:G:61:ILE:HD11	1.72	0.70
8:H:129:TYR:N	8:H:130:ARG:HH11	1.89	0.70
1:A:37:PHE:N	1:A:37:PHE:HD1	1.89	0.70
1:A:353:ILE:CD1	1:A:487:MET:HE2	2.22	0.70
1:A:382:PRO:HD3	1:A:428:TYR:CD2	2.19	0.70
1:A:885:THR:HG22	1:A:885:THR:O	1.91	0.70
2:B:229:ALA:HB1	2:B:231:PRO:HD2	1.72	0.70
2:B:603:LEU:HD13	2:B:608:ASP:HB3	1.74	0.70
9:I:35:VAL:HG12	9:I:36:GLU:H	1.56	0.70
9:I:85:PHE:HD2	9:I:85:PHE:N	1.87	0.70
10:J:24:LEU:HD12	10:J:39:LEU:HD11	1.73	0.70
11:K:7:PHE:C	11:K:9:LEU:H	2.00	0.70
12:L:38:LEU:O	12:L:39:SER:HB3	1.92	0.70
1:A:332:LYS:H	1:A:337:ARG:CB	2.05	0.70
1:A:1057:VAL:HG12	1:A:1058:VAL:N	2.06	0.70
1:A:1066:VAL:O	1:A:1070:GLN:HG3	1.91	0.70
2:B:69:LEU:CD2	2:B:429:PHE:CE1	2.74	0.70
2:B:244:LEU:HD21	2:B:366:GLN:HE21	1.56	0.70
3:C:5:GLY:O	3:C:7:GLN:HG3	1.92	0.70
3:C:107:SER:O	3:C:109:SER:N	2.23	0.70
5:E:28:TYR:C	5:E:65:THR:HG22	2.17	0.70
9:I:111:THR:HG22	9:I:112:SER:N	2.06	0.70
2:B:464:GLY:C	2:B:465:ASN:HD22	1.99	0.70
2:B:918:ILE:HD12	2:B:935:ARG:CZ	2.22	0.70
1:A:55:ASP:C	1:A:57:ARG:H	2.00	0.70
1:A:230:ARG:H	1:A:233:TRP:HE3	1.38	0.70
1:A:252:PHE:O	1:A:256:GLN:HB2	1.92	0.70
1:A:340:LEU:HD13	1:A:1429:ILE:HG23	1.74	0.70
1:A:774:ARG:NH1	1:A:797:LYS:HG3	2.07	0.70
1:A:1036:ARG:HG2	1:A:1036:ARG:HH11	1.56	0.70
1:A:1149:ALA:HB2	9:I:47:GLU:HA	1.74	0.70
1:A:1420:ASP:HB3	1:A:1422:ARG:HG3	1.72	0.70
3:C:73:GLN:HE21	3:C:75:MET:N	1.89	0.70
3:C:259:LEU:HD21	11:K:91:CYS:HB3	1.73	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:109:VAL:HG12	6:F:110:ASP:N	2.06	0.70
7:G:122:ASN:ND2	7:G:125:SER:HB3	2.07	0.70
8:H:118:PHE:O	8:H:120:GLY:N	2.25	0.70
8:H:125:LEU:HG	8:H:126:GLU:H	1.55	0.70
1:A:317:LYS:O	1:A:318:SER:HB3	1.92	0.69
2:B:172:ILE:HD13	2:B:178:ASN:HD22	1.56	0.69
5:E:7:ARG:HD2	5:E:7:ARG:C	2.17	0.69
1:A:35:ILE:HG22	1:A:35:ILE:O	1.92	0.69
1:A:96:ILE:HG22	1:A:97:ALA:H	1.57	0.69
1:A:332:LYS:H	1:A:337:ARG:HB2	1.57	0.69
1:A:567:LYS:HB2	8:H:96:VAL:H	1.56	0.69
1:A:885:THR:O	1:A:940:ARG:HD2	1.91	0.69
1:A:1116:LEU:HB3	1:A:1308:THR:HG21	1.73	0.69
2:B:1095:LEU:H	2:B:1095:LEU:CD1	2.03	0.69
5:E:153:HIS:HB3	5:E:196:VAL:CG1	2.22	0.69
6:F:147:SER:OG	6:F:150:GLU:HG3	1.91	0.69
12:L:53:HIS:HB3	12:L:55:ILE:CD1	2.22	0.69
1:A:12:ARG:HB2	2:B:1218:THR:CG2	2.20	0.69
1:A:202:LEU:HA	1:A:206:GLU:OE1	1.92	0.69
1:A:858:ASN:C	1:A:858:ASN:HD22	1.98	0.69
1:A:883:LEU:HD11	1:A:1017:LEU:HD11	1.75	0.69
2:B:405:ARG:NE	2:B:632:ARG:HG2	2.07	0.69
2:B:637:LEU:HD21	2:B:742:GLU:OE2	1.92	0.69
2:B:855:PHE:C	2:B:855:PHE:CD1	2.69	0.69
2:B:891:ASP:C	2:B:893:LEU:H	2.00	0.69
2:B:1007:VAL:CG2	2:B:1008:PRO:HD2	2.22	0.69
5:E:117:THR:HG22	5:E:119:SER:N	2.07	0.69
8:H:15:VAL:HG13	8:H:26:ILE:HG12	1.72	0.69
8:H:38:LEU:HD12	8:H:124:ARG:O	1.92	0.69
8:H:104:PHE:CZ	8:H:136:LYS:HA	2.27	0.69
2:B:189:LEU:HD13	2:B:196:PRO:HA	1.74	0.69
2:B:867:GLY:C	2:B:869:SER:H	1.99	0.69
2:B:1215:ARG:O	2:B:1216:LEU:HD23	1.91	0.69
8:H:106:GLU:HG2	8:H:112:ILE:HG12	1.71	0.69
1:A:1081:LEU:HD11	1:A:1097:GLY:HA3	1.73	0.69
2:B:175:ARG:HG2	2:B:175:ARG:HH11	1.56	0.69
2:B:654:ARG:H	2:B:657:HIS:CD2	2.10	0.69
2:B:746:SER:HB2	2:B:1046:PRO:HG2	1.74	0.69
1:A:1164:PRO:HG2	1:A:1165:GLU:H	1.55	0.69
2:B:911:ILE:HD11	2:B:941:LEU:CD1	2.23	0.69
2:B:999:MET:HB3	2:B:1007:VAL:HG21	1.73	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:155:ARG:HD3	4:D:221:TYR:CZ	2.27	0.69
5:E:173:SER:O	5:E:175:LEU:N	2.24	0.69
1:A:913:LEU:CD1	1:A:914:GLU:H	2.06	0.69
1:A:1107:VAL:HG12	1:A:1107:VAL:O	1.91	0.69
12:L:53:HIS:O	12:L:55:ILE:HD13	1.91	0.69
1:A:49:LYS:NZ	1:A:61:ILE:N	2.41	0.69
1:A:608:ILE:HB	1:A:613:ILE:HD11	1.73	0.69
2:B:497:ARG:HH22	2:B:775:LYS:CE	2.04	0.69
2:B:705:MET:HA	2:B:705:MET:HE3	1.73	0.69
2:B:1097:HIS:N	2:B:1098:MET:HE2	2.05	0.69
3:C:212:PRO:HB3	3:C:213:PRO:HD2	1.74	0.69
4:D:22:GLU:H	4:D:22:GLU:CD	2.01	0.69
7:G:30:LEU:HD13	7:G:72:VAL:HG11	1.73	0.69
12:L:26:THR:HG23	12:L:62:LYS:NZ	2.07	0.69
1:A:567:LYS:HZ3	8:H:95:TYR:CB	2.05	0.69
2:B:430:ARG:O	2:B:434:ARG:HD2	1.93	0.69
5:E:22:MET:HE3	5:E:26:ARG:HD2	1.74	0.69
1:A:552:TRP:HE3	1:A:651:LYS:HB3	1.57	0.69
1:A:567:LYS:CG	1:A:568:PRO:HD3	2.22	0.69
1:A:852:TYR:CD1	6:F:136:ARG:HB3	2.28	0.69
2:B:213:ILE:HD11	2:B:497:ARG:HB3	1.74	0.69
2:B:1000:PRO:O	2:B:1007:VAL:HG23	1.92	0.69
2:B:1142:GLY:HA3	6:F:88:TYR:HE2	1.58	0.69
3:C:137:LYS:HB2	3:C:138:GLU:OE1	1.92	0.69
7:G:127:PRO:HG3	7:G:139:ILE:CD1	2.23	0.69
7:G:139:ILE:HG22	7:G:140:LYS:HD3	1.75	0.69
1:A:709:THR:HB	1:A:712:GLU:H	1.58	0.68
1:A:870:GLU:O	5:E:205:SER:HB3	1.93	0.68
6:F:75:PRO:HG2	6:F:77:ASP:O	1.93	0.68
6:F:106:PRO:HG2	7:G:18:PHE:O	1.93	0.68
1:A:630:ILE:HD11	1:A:646:PHE:HZ	1.55	0.68
2:B:483:LEU:HD11	2:B:491:THR:HG23	1.75	0.68
2:B:1159:ARG:HB3	2:B:1159:ARG:NH1	2.08	0.68
3:C:235:VAL:HG11	10:J:6:ARG:NH2	2.07	0.68
4:D:134:THR:HG22	4:D:136:GLY:H	1.58	0.68
1:A:504:LEU:HD11	6:F:91:ALA:HB1	1.75	0.68
2:B:25:ILE:HD11	2:B:653:VAL:C	2.18	0.68
2:B:100:PRO:HA	2:B:125:SER:O	1.93	0.68
2:B:273:LEU:HD12	2:B:276:ILE:HD12	1.75	0.68
2:B:751:VAL:HG13	2:B:812:LEU:HD22	1.75	0.68
3:C:100:THR:HG22	3:C:101:LEU:H	1.57	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:475:THR:HG23	1:A:476:SER:N	2.08	0.68
1:A:866:PHE:HE1	5:E:211:TYR:H	1.41	0.68
2:B:256:VAL:HG21	2:B:381:MET:HE3	1.75	0.68
2:B:273:LEU:CB	2:B:276:ILE:HD12	2.21	0.68
2:B:364:ILE:HG12	2:B:585:VAL:HG13	1.76	0.68
2:B:604:ARG:C	2:B:606:LYS:H	1.98	0.68
2:B:879:ARG:NH1	2:B:883:LEU:HD22	2.07	0.68
2:B:955:THR:CG2	2:B:956:THR:N	2.56	0.68
3:C:184:ASN:ND2	3:C:187:LYS:HA	2.08	0.68
4:D:40:HIS:CG	7:G:73:LYS:HZ2	2.11	0.68
1:A:382:PRO:HB3	1:A:428:TYR:CE2	2.27	0.68
1:A:1100:ARG:HH21	1:A:1351:GLU:HG2	1.58	0.68
8:H:142:LEU:C	8:H:143:LEU:HD12	2.18	0.68
10:J:1:MET:H1	10:J:56:LEU:HB2	1.59	0.68
14:N:2:DG:H4'	14:N:3:DT:OP1	1.94	0.68
1:A:2:VAL:HG11	2:B:1157:ALA:HB1	1.74	0.68
1:A:883:LEU:HD23	1:A:1021:LEU:HD13	1.76	0.68
2:B:497:ARG:HH22	2:B:775:LYS:HE2	1.58	0.68
2:B:863:GLU:OE2	2:B:873:THR:HA	1.94	0.68
8:H:84:ALA:HB2	8:H:87:ARG:HD2	1.75	0.68
1:A:857:ARG:HD3	1:A:861:GLY:O	1.94	0.68
2:B:638:PHE:HA	2:B:690:VAL:HG22	1.74	0.68
5:E:111:VAL:HG12	5:E:137:GLU:HG2	1.76	0.68
1:A:285:PRO:HG2	1:A:288:ALA:HB3	1.75	0.68
1:A:427:GLN:HB2	1:A:430:TRP:CD1	2.28	0.68
1:A:658:LEU:HD23	1:A:659:HIS:CE1	2.29	0.68
1:A:852:TYR:CE2	1:A:1060:PRO:HB2	2.27	0.68
1:A:1339:LEU:HD13	5:E:147:HIS:CD2	2.29	0.68
2:B:423:LYS:HA	2:B:426:LYS:HE2	1.76	0.68
2:B:1007:VAL:HG22	2:B:1008:PRO:HD2	1.76	0.68
3:C:66:ARG:NH2	10:J:3:VAL:O	2.25	0.68
6:F:103:MET:HE3	7:G:66:GLY:N	2.07	0.68
6:F:109:VAL:HG11	6:F:123:LYS:CD	2.15	0.68
11:K:87:LEU:O	11:K:91:CYS:HB2	1.94	0.68
1:A:55:ASP:CG	1:A:55:ASP:O	2.36	0.68
1:A:528:LEU:O	1:A:531:ILE:HG22	1.93	0.68
2:B:60:GLN:NE2	2:B:95:ILE:HG22	2.08	0.68
2:B:167:ILE:HD12	2:B:167:ILE:N	2.09	0.68
2:B:217:ARG:HD2	2:B:217:ARG:C	2.19	0.68
2:B:520:GLY:N	2:B:748:ILE:HG22	2.09	0.68
5:E:93:MET:HE2	5:E:120:ALA:HB1	1.76	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:111:LEU:HA	8:H:127:GLY:O	1.93	0.68
2:B:114:PRO:HG3	2:B:181:LEU:HD11	1.76	0.68
2:B:582:VAL:HA	2:B:626:ILE:HB	1.74	0.68
7:G:102:GLN:HG3	7:G:106:MET:O	1.94	0.68
1:A:910:PRO:HB3	1:A:916:GLY:HA3	1.75	0.67
1:A:1308:THR:HG21	1:A:1310:GLY:O	1.94	0.67
1:A:84:ILE:O	1:A:84:ILE:HG23	1.93	0.67
1:A:402:ALA:CB	1:A:434:ARG:HA	2.25	0.67
1:A:447:GLN:NE2	13:T:20:DG:H4'	2.09	0.67
1:A:825:ILE:CG2	1:A:826:ASP:N	2.58	0.67
1:A:981:LEU:CD2	1:A:1039:LYS:HA	2.23	0.67
2:B:519:TRP:HE1	2:B:635:ARG:NH2	1.92	0.67
2:B:686:ASN:C	2:B:688:GLY:H	2.02	0.67
3:C:146:LYS:HB2	10:J:61:LEU:HD11	1.77	0.67
3:C:193:TYR:HD2	3:C:197:SER:HB3	1.60	0.67
1:A:216:VAL:O	1:A:219:PHE:HB2	1.94	0.67
1:A:744:LYS:HG2	1:A:748:MET:HE2	1.76	0.67
1:A:1364:ASN:HD22	1:A:1364:ASN:C	1.98	0.67
2:B:408:LEU:HD22	2:B:545:ILE:HD12	1.77	0.67
3:C:123:ASN:HD21	3:C:125:MET:HA	1.60	0.67
8:H:4:THR:HG22	8:H:5:LEU:H	1.59	0.67
1:A:332:LYS:C	1:A:334:GLY:H	2.02	0.67
1:A:1224:LEU:HD11	1:A:1240:CYS:HB2	1.75	0.67
2:B:1181:GLU:O	2:B:1182:CYS:HB3	1.93	0.67
3:C:77:ILE:N	3:C:129:ILE:HD11	2.08	0.67
3:C:99:LEU:HD22	3:C:120:ILE:HG12	1.75	0.67
1:A:1436:ILE:O	1:A:1437:GLY:C	2.37	0.67
2:B:98:THR:O	2:B:126:SER:HB2	1.95	0.67
2:B:168:GLY:HA2	2:B:454:THR:OG1	1.94	0.67
2:B:847:ASP:C	2:B:849:GLY:H	2.00	0.67
3:C:77:ILE:HG22	3:C:78:GLU:N	2.09	0.67
4:D:69:ALA:HA	4:D:72:ARG:HD2	1.77	0.67
5:E:15:ALA:O	5:E:19:VAL:HG23	1.94	0.67
7:G:96:GLN:O	7:G:112:LYS:HD3	1.94	0.67
1:A:446:ARG:HB2	1:A:487:MET:SD	2.33	0.67
2:B:288:ALA:HA	2:B:331:LEU:HD12	1.74	0.67
2:B:810:GLU:CB	2:B:815:ARG:HH22	2.06	0.67
3:C:238:ILE:CG2	3:C:242:GLN:HB2	2.20	0.67
4:D:39:ASN:HD22	4:D:41:GLN:HB2	1.60	0.67
5:E:154:ILE:H	5:E:196:VAL:HG13	1.58	0.67
5:E:195:VAL:HG12	5:E:196:VAL:N	2.09	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:17:ARG:HG3	9:I:28:GLU:OE1	1.95	0.67
1:A:416:ARG:NH1	1:A:417:TYR:HE2	1.93	0.67
2:B:25:ILE:HG23	2:B:658:ILE:HD11	1.76	0.67
2:B:449:ASN:O	2:B:450:ALA:C	2.38	0.67
2:B:515:HIS:H	2:B:518:HIS:CD2	2.12	0.67
2:B:596:LEU:O	2:B:600:LEU:HG	1.94	0.67
8:H:55:LEU:HB3	8:H:144:ILE:HG23	1.76	0.67
10:J:36:LEU:HB2	10:J:47:ARG:HH12	1.60	0.67
1:A:37:PHE:N	1:A:37:PHE:CD1	2.60	0.67
1:A:541:ILE:HD13	1:A:549:MET:CE	2.14	0.67
1:A:606:LEU:HG	1:A:613:ILE:HB	1.76	0.67
2:B:133:LYS:CE	2:B:135:ARG:HH21	2.01	0.67
3:C:56:THR:HG21	3:C:145:CYS:SG	2.34	0.67
1:A:11:LEU:HD12	1:A:11:LEU:O	1.94	0.67
1:A:552:TRP:CE3	1:A:651:LYS:HB3	2.29	0.67
1:A:855:THR:HG21	1:A:857:ARG:NE	2.08	0.67
2:B:546:SER:OG	2:B:631:GLY:N	2.27	0.67
2:B:616:ILE:HD12	2:B:616:ILE:N	2.10	0.67
2:B:744:HIS:HD2	2:B:746:SER:OG	1.78	0.67
2:B:1084:GLN:HG2	3:C:201:TRP:HZ2	1.59	0.67
7:G:48:VAL:HA	7:G:76:ALA:HB2	1.75	0.67
1:A:802:ASN:HD21	2:B:729:ILE:H	1.41	0.67
1:A:1148:ILE:HD11	1:A:1198:ASP:HA	1.76	0.67
1:A:1227:ILE:HG22	1:A:1228:TRP:N	2.07	0.67
2:B:1201:LYS:HE2	2:B:1205:GLN:OE1	1.94	0.67
3:C:35:ARG:NH1	11:K:41:THR:OG1	2.27	0.67
5:E:157:SER:OG	5:E:160:GLU:HG3	1.95	0.67
1:A:451:HIS:O	2:B:1137:CYS:SG	2.52	0.66
1:A:1151:GLU:OE2	9:I:45:ARG:HD2	1.96	0.66
1:A:1313:LEU:HD23	1:A:1338:VAL:HG21	1.75	0.66
2:B:822:ASN:HD21	10:J:52:THR:HG21	1.60	0.66
2:B:1177:HIS:C	2:B:1178:ASN:HD22	2.03	0.66
3:C:3:GLU:HG3	11:K:104:ASN:OD1	1.95	0.66
4:D:8:PHE:CZ	4:D:37:GLN:HB2	2.30	0.66
8:H:15:VAL:HA	8:H:26:ILE:HG23	1.76	0.66
9:I:73:ARG:HH12	9:I:112:SER:HB3	1.60	0.66
11:K:45:LEU:HG	11:K:94:ILE:HD13	1.77	0.66
2:B:593:PRO:HA	2:B:596:LEU:HB3	1.76	0.66
2:B:1080:LYS:HD2	3:C:188:HIS:HB2	1.77	0.66
3:C:238:ILE:CD1	3:C:246:ARG:HH11	2.08	0.66
4:D:208:GLU:HG3	4:D:212:LYS:HE3	1.77	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:124:VAL:CG1	5:E:132:ILE:HG13	2.23	0.66
1:A:868:TYR:HD2	1:A:1058:VAL:HG21	1.60	0.66
1:A:929:LEU:HD23	1:A:983:ILE:CG2	2.26	0.66
6:F:136:ARG:O	6:F:143:PHE:HB2	1.95	0.66
1:A:345:VAL:HG21	2:B:1150:ARG:HH22	1.61	0.66
1:A:524:VAL:HG12	1:A:525:GLN:H	1.59	0.66
1:A:698:GLN:HA	9:I:97:MET:O	1.96	0.66
1:A:833:GLU:HG2	1:A:1102:LYS:HD2	1.76	0.66
1:A:1191:TRP:HB3	1:A:1260:LEU:HD23	1.77	0.66
1:A:1291:VAL:HG13	1:A:1292:PRO:HD2	1.77	0.66
2:B:273:LEU:O	2:B:276:ILE:HB	1.95	0.66
2:B:527:THR:OG1	2:B:528:PRO:HD2	1.95	0.66
2:B:637:LEU:C	2:B:690:VAL:HG13	2.19	0.66
2:B:755:ILE:HG23	2:B:809:MET:CE	2.26	0.66
3:C:36:VAL:HG21	3:C:251:LEU:HD13	1.77	0.66
3:C:73:GLN:HE21	3:C:75:MET:H	1.43	0.66
4:D:40:HIS:HB2	7:G:73:LYS:CE	2.26	0.66
4:D:53:SER:HB3	4:D:152:SER:HB2	1.78	0.66
8:H:102:TYR:HD2	8:H:102:TYR:N	1.91	0.66
1:A:233:TRP:C	1:A:235:ILE:H	2.03	0.66
1:A:1057:VAL:HG12	1:A:1058:VAL:H	1.61	0.66
2:B:230:ALA:N	2:B:231:PRO:HD2	2.11	0.66
2:B:511:PRO:O	2:B:513:GLN:N	2.28	0.66
2:B:789:MET:HE1	2:B:967:ARG:HB2	1.78	0.66
11:K:61:TYR:C	11:K:61:TYR:HD2	2.02	0.66
1:A:116:ASP:OD2	1:A:164:ARG:HD2	1.95	0.66
1:A:1124:HIS:HB2	1:A:1130:GLN:HG2	1.78	0.66
2:B:487:THR:HG22	2:B:488:TYR:N	2.10	0.66
2:B:859:TYR:CZ	2:B:941:LEU:HD12	2.29	0.66
3:C:115:SER:O	3:C:118:LEU:HG	1.96	0.66
8:H:100:THR:HG23	8:H:138:GLU:CA	2.22	0.66
10:J:24:LEU:HA	10:J:28:ASP:HB2	1.77	0.66
1:A:106:VAL:HG12	1:A:107:CYS:H	1.58	0.66
1:A:903:ASN:ND2	1:A:905:ASP:H	1.93	0.66
2:B:102:VAL:HB	2:B:110:HIS:HB3	1.76	0.66
2:B:778:MET:HE2	2:B:1094:ARG:HG2	1.76	0.66
2:B:999:MET:HA	2:B:999:MET:CE	2.25	0.66
5:E:23:VAL:HG13	5:E:78:LEU:CD1	2.25	0.66
5:E:129:PRO:O	5:E:130:ALA:C	2.39	0.66
6:F:76:LYS:HA	6:F:79:ARG:CD	2.25	0.66
1:A:14:VAL:H	1:A:1432:GLN:NE2	1.92	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:276:ILE:HA	2:B:337:ARG:O	1.95	0.66
2:B:583:ASN:HD21	2:B:628:THR:CG2	2.08	0.66
2:B:651:LEU:C	2:B:653:VAL:H	2.03	0.66
2:B:1072:MET:CE	2:B:1085:ILE:HB	2.25	0.66
1:A:79:GLY:HA3	1:A:243:PRO:CG	2.26	0.66
1:A:265:LYS:HD3	1:A:302:THR:HG23	1.76	0.66
1:A:372:LYS:HA	1:A:435:HIS:HD1	1.57	0.66
1:A:567:LYS:CD	1:A:568:PRO:HD3	2.25	0.66
1:A:596:THR:O	1:A:598:LEU:N	2.28	0.66
1:A:899:VAL:CG1	1:A:908:LEU:HD21	2.25	0.66
1:A:979:SER:OG	1:A:980:ASP:N	2.28	0.66
1:A:1312:ASN:O	1:A:1316:VAL:HG23	1.95	0.66
2:B:648:HIS:CG	2:B:649:LYS:H	2.13	0.66
2:B:827:ILE:O	2:B:828:ALA:HB2	1.95	0.66
2:B:853:SER:O	2:B:854:LEU:HD23	1.96	0.66
2:B:860:MET:HG3	2:B:965:LYS:HG2	1.78	0.66
2:B:996:ARG:NH1	3:C:38:ILE:HG23	2.11	0.66
3:C:166:GLU:HG3	11:K:10:PHE:HZ	1.60	0.66
5:E:144:ILE:HG13	5:E:145:THR:N	2.10	0.66
7:G:27:LYS:HE2	7:G:54:ILE:HB	1.78	0.66
7:G:49:LEU:HG	7:G:76:ALA:HA	1.78	0.66
13:T:21:DC:H2"	13:T:22:DC:H5'	1.76	0.66
1:A:41:MET:CB	1:A:49:LYS:HA	2.18	0.66
1:A:129:LYS:O	1:A:130:ASP:HB2	1.95	0.66
1:A:442:VAL:O	1:A:457:ALA:HA	1.96	0.66
2:B:220:GLY:O	2:B:222:ILE:HG13	1.96	0.66
2:B:613:VAL:HG13	2:B:628:THR:HA	1.78	0.66
2:B:975:GLN:O	2:B:990:ILE:HD12	1.95	0.66
2:B:1108:ARG:HG2	2:B:1109:GLY:N	2.11	0.66
2:B:1202:LEU:O	2:B:1206:GLU:HG3	1.96	0.66
3:C:238:ILE:HG22	3:C:243:VAL:HG23	1.77	0.66
4:D:148:LEU:O	4:D:152:SER:HB3	1.95	0.66
6:F:111:LEU:H	6:F:111:LEU:CD1	2.07	0.66
8:H:135:LEU:HD22	8:H:137:GLN:HE21	1.61	0.66
10:J:48:ARG:HD2	10:J:49:MET:N	2.10	0.66
1:A:96:ILE:HG22	1:A:97:ALA:N	2.11	0.65
3:C:239:PRO:HB2	3:C:241:ASP:OD1	1.96	0.65
9:I:31:THR:O	9:I:32:CYS:HB3	1.96	0.65
10:J:9:SER:CB	10:J:45:CYS:HB2	2.25	0.65
1:A:38:PRO:HA	1:A:270:LEU:HD23	1.76	0.65
1:A:57:ARG:HG2	1:A:57:ARG:HH11	1.60	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:310:GLY:O	1:A:312:PRO:HD2	1.95	0.65
1:A:547:LEU:HD22	11:K:58:PHE:CE1	2.32	0.65
1:A:1198:ASP:HB3	1:A:1201:ALA:HB3	1.77	0.65
1:A:1438:THR:HB	2:B:1144:ALA:CB	2.25	0.65
2:B:345:LYS:O	2:B:348:ARG:HG2	1.96	0.65
2:B:515:HIS:CD2	2:B:516:ASN:N	2.64	0.65
3:C:83:SER:HA	3:C:95:CYS:HB2	1.78	0.65
4:D:130:LEU:O	4:D:132:GLN:N	2.28	0.65
1:A:7:SER:HB3	2:B:1175:LEU:HD22	1.78	0.65
1:A:253:ASN:HD22	1:A:256:GLN:NE2	1.94	0.65
1:A:1028:THR:O	1:A:1032:LEU:HD12	1.96	0.65
1:A:1237:ILE:HG22	1:A:1238:ILE:N	2.11	0.65
2:B:314:LEU:O	2:B:317:CYS:HB3	1.97	0.65
3:C:18:VAL:HG23	3:C:240:VAL:CG1	2.26	0.65
3:C:161:LYS:HG3	3:C:162:GLY:N	2.12	0.65
5:E:96:PHE:O	5:E:99:HIS:HB3	1.96	0.65
11:K:50:LEU:HD11	11:K:75:ILE:HD13	1.77	0.65
1:A:836:TYR:CD2	1:A:840:ARG:HD2	2.31	0.65
1:A:1225:PHE:CZ	1:A:1227:ILE:HD11	2.32	0.65
2:B:102:VAL:O	2:B:102:VAL:HG12	1.96	0.65
2:B:282:ILE:HD11	2:B:317:CYS:SG	2.36	0.65
2:B:605:ARG:NH1	2:B:639:ILE:HG21	2.10	0.65
10:J:1:MET:H1	10:J:56:LEU:N	1.94	0.65
1:A:108:MET:HE3	1:A:210:ILE:CD1	2.26	0.65
1:A:1392:SER:O	1:A:1394:THR:N	2.29	0.65
1:A:1447:GLU:OE2	7:G:23:LYS:HB2	1.97	0.65
2:B:773:MET:SD	2:B:987:LYS:HG2	2.37	0.65
2:B:978:ASP:OD2	2:B:1098:MET:HG2	1.96	0.65
7:G:1:MET:HG2	7:G:85:GLU:OE2	1.96	0.65
11:K:53:ASP:HB3	11:K:56:VAL:CG2	2.27	0.65
1:A:7:SER:HB2	2:B:1175:LEU:HD22	1.77	0.65
1:A:276:LEU:HD13	1:A:293:GLU:HA	1.79	0.65
2:B:20:ASP:C	2:B:22:SER:H	2.04	0.65
2:B:806:THR:HG23	2:B:1046:PRO:HD3	1.78	0.65
2:B:955:THR:HG22	2:B:956:THR:O	1.96	0.65
5:E:198:ILE:H	5:E:198:ILE:HD12	1.60	0.65
8:H:64:ASN:CB	8:H:88:SER:HB2	2.21	0.65
8:H:91:ASP:C	8:H:93:TYR:H	2.03	0.65
1:A:466:SER:HB2	2:B:1099:VAL:HG21	1.79	0.65
1:A:565:ILE:HG22	1:A:565:ILE:O	1.97	0.65
1:A:630:ILE:HG23	1:A:631:HIS:N	2.11	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:848:ILE:HA	1:A:857:ARG:O	1.95	0.65
2:B:508:LEU:O	2:B:509:ALA:HB2	1.97	0.65
2:B:1201:LYS:HE2	2:B:1205:GLN:CD	2.21	0.65
5:E:124:VAL:N	5:E:125:PRO:HD2	2.12	0.65
8:H:40:LEU:HD13	8:H:123:MET:HB2	1.77	0.65
9:I:8:ARG:HG3	9:I:34:TYR:CE1	2.32	0.65
11:K:18:LYS:NZ	11:K:38:GLU:HG2	2.11	0.65
1:A:91:PHE:HB3	1:A:96:ILE:HD12	1.79	0.65
1:A:544:ASP:CG	1:A:545:GLN:H	2.05	0.65
1:A:739:ASP:OD2	8:H:19:ARG:HD2	1.97	0.65
1:A:855:THR:CG2	1:A:857:ARG:HE	2.10	0.65
1:A:1264:GLU:HG3	1:A:1265:ASN:N	2.10	0.65
2:B:843:GLN:N	2:B:994:TYR:O	2.19	0.65
2:B:1162:ILE:HD11	2:B:1194:ILE:CD1	2.26	0.65
5:E:197:LYS:HG2	5:E:199:ILE:HG13	1.78	0.65
8:H:135:LEU:HD22	8:H:137:GLN:NE2	2.12	0.65
9:I:7:CYS:N	9:I:14:LEU:HD21	2.12	0.65
11:K:12:LEU:HD23	11:K:16:GLU:O	1.96	0.65
13:T:7:DC:H2"	13:T:8:DT:C5	2.32	0.65
1:A:35:ILE:HB	1:A:83:HIS:O	1.97	0.65
1:A:767:GLN:HB2	1:A:799:PHE:HD1	1.60	0.65
1:A:785:PRO:HG2	1:A:786:HIS:CD2	2.32	0.65
1:A:898:ARG:HD2	1:A:899:VAL:N	2.12	0.65
2:B:127:GLY:C	2:B:128:LEU:HD12	2.22	0.65
2:B:165:VAL:HG11	2:B:448:ILE:CD1	2.27	0.65
2:B:449:ASN:O	2:B:451:LYS:N	2.30	0.65
4:D:123:LEU:O	4:D:127:ASP:HB2	1.97	0.65
7:G:13:LEU:HD23	7:G:14:HIS:H	1.60	0.65
1:A:954:TRP:HB3	1:A:955:PRO:HD2	1.78	0.65
1:A:1208:THR:HB	1:A:1211:GLN:CG	2.26	0.65
2:B:38:PHE:HD1	2:B:811:TYR:CD2	2.15	0.65
3:C:167:HIS:ND1	3:C:169:LYS:HG2	2.11	0.65
5:E:198:ILE:HD12	5:E:198:ILE:N	2.12	0.65
6:F:70:LYS:O	6:F:72:LYS:HD2	1.96	0.65
8:H:40:LEU:HD22	8:H:123:MET:CE	2.27	0.65
1:A:35:ILE:CG2	1:A:84:ILE:HD12	2.27	0.64
1:A:565:ILE:O	1:A:570:PRO:HA	1.97	0.64
1:A:962:ARG:HA	1:A:965:GLN:HB2	1.77	0.64
2:B:26:THR:HA	2:B:708:GLU:OE1	1.96	0.64
2:B:100:PRO:HD2	2:B:180:TYR:CE1	2.32	0.64
2:B:541:LEU:HB2	2:B:747:MET:HE3	1.79	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:766:ARG:HG3	2:B:1022:THR:HG23	1.78	0.64
3:C:261:ALA:O	3:C:265:MET:HB2	1.97	0.64
5:E:111:VAL:CG1	5:E:137:GLU:HG2	2.27	0.64
5:E:202:SER:OG	5:E:204:THR:HG22	1.97	0.64
7:G:59:GLY:HA3	7:G:70:PHE:CD2	2.31	0.64
8:H:100:THR:HG22	8:H:101:ALA:H	1.60	0.64
11:K:21:ILE:CG2	11:K:33:ILE:HG12	2.26	0.64
1:A:34:LYS:CB	1:A:36:ARG:HH21	2.10	0.64
1:A:172:PRO:HD3	1:A:185:TRP:NE1	2.12	0.64
1:A:381:THR:HG23	1:A:382:PRO:HD2	1.78	0.64
1:A:469:ARG:HB3	1:A:469:ARG:HH11	1.60	0.64
1:A:967:ALA:HA	1:A:1044:TRP:HZ3	1.62	0.64
1:A:1315:GLU:C	1:A:1317:MET:N	2.55	0.64
11:K:102:LYS:O	11:K:106:GLU:HG3	1.97	0.64
1:A:474:VAL:HG22	1:A:474:VAL:O	1.96	0.64
1:A:828:ALA:HB2	2:B:530:GLY:HA2	1.79	0.64
1:A:1341:ILE:HG23	1:A:1342:GLU:N	2.11	0.64
2:B:1099:VAL:CG1	2:B:1100:ASP:H	2.08	0.64
6:F:79:ARG:HG3	6:F:144:GLU:CG	2.27	0.64
1:A:1157:ASP:C	1:A:1159:ARG:H	2.05	0.64
2:B:597:MET:HA	2:B:597:MET:CE	2.27	0.64
2:B:870:ILE:HG22	2:B:917:PRO:HG2	1.78	0.64
3:C:56:THR:HG22	3:C:57:VAL:H	1.61	0.64
8:H:44:VAL:O	8:H:44:VAL:HG12	1.96	0.64
11:K:68:PHE:HB3	11:K:70:ARG:NH1	2.12	0.64
12:L:28:LYS:CB	12:L:39:SER:HB2	2.27	0.64
1:A:106:VAL:HG12	1:A:107:CYS:N	2.13	0.64
1:A:172:PRO:HB3	1:A:185:TRP:CD2	2.33	0.64
1:A:315:LEU:HD13	2:B:471:LYS:HB3	1.78	0.64
1:A:370:ILE:HG12	2:B:1105:ALA:HB2	1.79	0.64
1:A:590:ARG:HB3	1:A:605:MET:N	2.12	0.64
1:A:809:THR:HG23	1:A:812:GLU:OE1	1.97	0.64
1:A:1242:VAL:HG12	1:A:1243:VAL:N	2.12	0.64
1:A:1438:THR:HG23	6:F:92:ARG:HB2	1.79	0.64
2:B:90:ILE:HD12	2:B:432:MET:SD	2.38	0.64
2:B:199:MET:HE2	2:B:492:LEU:HD21	1.79	0.64
5:E:55:ARG:C	5:E:57:MET:H	2.02	0.64
5:E:83:CYS:C	5:E:85:GLU:H	2.04	0.64
5:E:153:HIS:C	5:E:154:ILE:HG13	2.22	0.64
11:K:50:LEU:HD11	11:K:75:ILE:CD1	2.28	0.64
1:A:506:ALA:HB3	1:A:509:LEU:HD12	1.79	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:51:PHE:O	2:B:54:PHE:HB3	1.97	0.64
2:B:243:ALA:CB	2:B:251:ILE:HG12	2.28	0.64
2:B:865:LYS:HG3	2:B:961:LEU:HD21	1.77	0.64
2:B:1002:THR:HG21	2:B:1006:ILE:HD12	1.80	0.64
2:B:1186:ASP:O	4:D:17:LYS:HE2	1.97	0.64
1:A:675:THR:OG1	1:A:736:ASN:ND2	2.29	0.64
2:B:288:ALA:HA	2:B:331:LEU:CD1	2.27	0.64
2:B:642:ASP:CA	2:B:649:LYS:HG3	2.28	0.64
2:B:918:ILE:CG2	2:B:919:SER:N	2.61	0.64
7:G:13:LEU:HD21	7:G:17:PHE:CD1	2.33	0.64
1:A:135:PHE:CD1	1:A:222:LEU:HD22	2.33	0.64
1:A:185:TRP:HE3	1:A:185:TRP:H	1.46	0.64
1:A:637:LYS:HB3	1:A:641:VAL:HG21	1.79	0.64
1:A:845:LEU:O	1:A:846:GLU:C	2.41	0.64
2:B:123:THR:OG1	2:B:458:LYS:HE2	1.98	0.64
2:B:502:ILE:H	2:B:502:ILE:HD12	1.62	0.64
2:B:863:GLU:O	2:B:961:LEU:HD22	1.98	0.64
2:B:1174:LYS:O	2:B:1176:ASN:N	2.31	0.64
5:E:54:GLN:O	5:E:57:MET:HB3	1.97	0.64
8:H:91:ASP:O	8:H:93:TYR:N	2.25	0.64
9:I:2:THR:HG22	9:I:3:THR:N	2.13	0.64
1:A:39:GLU:OE1	1:A:50:ILE:HD12	1.98	0.64
1:A:90:VAL:HG13	1:A:297:GLN:OE1	1.97	0.64
1:A:666:ILE:HD12	1:A:667:GLY:N	2.08	0.64
1:A:666:ILE:N	2:B:1026:LEU:HD13	2.03	0.64
1:A:868:TYR:CD2	1:A:1058:VAL:HG21	2.33	0.64
1:A:900:ASP:HA	1:A:926:GLN:NE2	2.12	0.64
1:A:1030:ARG:HG3	1:A:1034:GLU:CD	2.23	0.64
2:B:235:SER:C	2:B:236:HIS:HD2	2.06	0.64
2:B:515:HIS:CD2	2:B:516:ASN:H	2.16	0.64
2:B:589:VAL:HG12	2:B:590:HIS:N	2.12	0.64
2:B:822:ASN:ND2	10:J:52:THR:HG21	2.13	0.64
2:B:899:ILE:HD11	2:B:911:ILE:HA	1.78	0.64
2:B:1110:PRO:HG3	2:B:1125:ASP:HB3	1.78	0.64
2:B:1159:ARG:HE	2:B:1193:GLN:HE21	1.44	0.64
11:K:82:ASP:OD1	11:K:84:LYS:HG3	1.98	0.64
1:A:69:THR:C	1:A:71:GLN:N	2.55	0.64
1:A:547:LEU:HD22	11:K:58:PHE:CD1	2.32	0.64
1:A:1130:GLN:O	1:A:1134:ILE:HG13	1.97	0.64
2:B:135:ARG:HB2	2:B:137:TYR:CE1	2.33	0.64
2:B:387:LEU:O	2:B:392:ARG:HB2	1.98	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:791:THR:HA	2:B:858:SER:HB2	1.79	0.64
2:B:953:LEU:HD23	2:B:965:LYS:O	1.98	0.64
3:C:8:VAL:O	3:C:9:LYS:HD2	1.98	0.64
4:D:60:LYS:CE	4:D:126:ILE:HD11	2.28	0.64
1:A:401:GLY:C	1:A:435:HIS:HD2	2.05	0.63
1:A:963:ILE:HD11	1:A:1048:ASN:HB2	1.78	0.63
1:A:1191:TRP:CE3	1:A:1191:TRP:HA	2.32	0.63
2:B:758:PHE:CZ	2:B:1044:ALA:HA	2.33	0.63
2:B:899:ILE:CD1	2:B:911:ILE:HA	2.28	0.63
2:B:1034:VAL:HG12	2:B:1035:ALA:N	2.14	0.63
4:D:9:GLN:HE21	4:D:31:GLN:NE2	1.95	0.63
11:K:47:ARG:HH11	11:K:47:ARG:CB	2.09	0.63
12:L:55:ILE:HG12	12:L:56:LEU:N	2.11	0.63
1:A:208:LEU:HD23	1:A:208:LEU:C	2.24	0.63
1:A:515:GLN:HA	1:A:1367:HIS:NE2	2.13	0.63
1:A:1308:THR:HG23	1:A:1309:ASP:H	1.62	0.63
1:A:1364:ASN:HD22	1:A:1365:TYR:N	1.97	0.63
2:B:1002:THR:CG2	2:B:1006:ILE:HG13	2.27	0.63
3:C:34:ARG:HA	3:C:37:MET:HE3	1.80	0.63
3:C:242:GLN:HA	3:C:245:VAL:CG2	2.28	0.63
4:D:9:GLN:HE21	4:D:31:GLN:HE21	1.43	0.63
4:D:56:ARG:NH2	4:D:155:ARG:HA	2.12	0.63
8:H:139:ASN:O	8:H:140:ALA:HB2	1.97	0.63
12:L:32:ALA:HB3	12:L:33:GLU:OE2	1.99	0.63
1:A:1142:THR:HA	1:A:1273:LEU:HD13	1.78	0.63
1:A:1187:GLN:HG3	1:A:1188:GLN:HG3	1.79	0.63
3:C:148:ARG:H	3:C:151:GLN:CG	2.06	0.63
10:J:14:VAL:O	10:J:14:VAL:HG12	1.96	0.63
2:B:653:VAL:HG22	2:B:689:LEU:HB3	1.80	0.63
3:C:265:MET:HE1	11:K:19:LEU:HB2	1.80	0.63
4:D:139:LYS:HE2	4:D:143:ASN:ND2	2.13	0.63
5:E:165:LEU:N	5:E:165:LEU:HD23	2.13	0.63
5:E:204:THR:HG23	5:E:205:SER:N	2.13	0.63
10:J:48:ARG:HE	10:J:49:MET:HE2	1.63	0.63
1:A:93:VAL:HG21	1:A:301:ALA:O	1.99	0.63
1:A:1100:ARG:HH22	1:A:1111:MET:CE	2.11	0.63
2:B:99:LYS:HA	2:B:178:ASN:HD21	1.63	0.63
2:B:114:PRO:HG2	2:B:115:GLN:H	1.63	0.63
2:B:343:ILE:HG23	2:B:347:LYS:CE	2.28	0.63
2:B:542:MET:SD	2:B:747:MET:HE2	2.39	0.63
2:B:1096:ARG:O	2:B:1097:HIS:CB	2.47	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:60:LYS:HE3	4:D:126:ILE:HD11	1.79	0.63
1:A:901:LEU:N	1:A:926:GLN:HE21	1.95	0.63
5:E:117:THR:HB	5:E:120:ALA:CB	2.29	0.63
5:E:180:ARG:NH2	5:E:192:ARG:HD2	2.14	0.63
1:A:1101:LEU:HD12	1:A:1101:LEU:C	2.23	0.63
5:E:116:ILE:HG22	5:E:117:THR:N	2.12	0.63
6:F:117:PRO:C	6:F:119:ARG:H	2.06	0.63
7:G:34:VAL:CG1	7:G:45:ILE:HG21	2.28	0.63
1:A:535:THR:HG22	1:A:575:LYS:HE2	1.81	0.63
1:A:877:HIS:ND1	1:A:1056:SER:HA	2.14	0.63
2:B:244:LEU:HD21	2:B:366:GLN:NE2	2.14	0.63
5:E:204:THR:HG23	5:E:205:SER:H	1.64	0.63
7:G:140:LYS:O	7:G:141:SER:C	2.42	0.63
12:L:30:ILE:C	12:L:56:LEU:HD23	2.24	0.63
1:A:87:ALA:HB3	1:A:276:LEU:HD23	1.79	0.63
1:A:774:ARG:O	1:A:775:ILE:C	2.41	0.63
2:B:276:ILE:HD13	2:B:280:ILE:HD11	1.80	0.63
2:B:383:ASN:O	2:B:387:LEU:HD13	1.98	0.63
2:B:857:ARG:HD2	2:B:945:GLU:OE1	1.97	0.63
2:B:1096:ARG:O	2:B:1097:HIS:HB2	1.98	0.63
3:C:13:ALA:O	11:K:114:LEU:HD13	1.99	0.63
5:E:159:ASP:HA	5:E:162:ARG:NH2	2.13	0.63
5:E:167:ARG:O	5:E:168:TYR:HD2	1.82	0.63
5:E:198:ILE:HD11	5:E:212:ARG:HB2	1.81	0.63
7:G:27:LYS:O	7:G:31:LEU:HG	1.98	0.63
8:H:40:LEU:HD13	8:H:123:MET:HE3	1.80	0.63
1:A:41:MET:SD	1:A:42:ASP:N	2.71	0.62
1:A:278:THR:HG23	1:A:282:ASN:HD22	1.63	0.62
1:A:343:LYS:HE2	2:B:1156:ASP:HB2	1.81	0.62
1:A:451:HIS:CD2	1:A:1074:GLU:HG3	2.33	0.62
1:A:1094:VAL:HG12	1:A:1113:THR:HG21	1.80	0.62
1:A:1353:TYR:HD1	1:A:1368:MET:HE1	1.64	0.62
2:B:90:ILE:HG23	2:B:133:LYS:O	1.99	0.62
2:B:357:GLN:O	2:B:366:GLN:HA	1.98	0.62
2:B:363:HIS:O	2:B:364:ILE:HB	1.98	0.62
3:C:209:TYR:HD1	3:C:209:TYR:H	1.47	0.62
6:F:118:LEU:O	6:F:122:MET:HG3	1.99	0.62
8:H:36:CYS:HA	8:H:126:GLU:O	1.98	0.62
8:H:144:ILE:HG22	8:H:145:ARG:N	2.14	0.62
1:A:1161:THR:C	1:A:1163:ILE:H	2.07	0.62
2:B:326:ASP:C	2:B:328:GLU:H	2.06	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:345:LYS:C	2:B:348:ARG:HG2	2.24	0.62
2:B:578:THR:H	2:B:589:VAL:CG1	2.12	0.62
2:B:596:LEU:HD11	2:B:600:LEU:HD11	1.81	0.62
3:C:238:ILE:HD13	3:C:246:ARG:HD2	1.80	0.62
7:G:142:ARG:HB3	7:G:171:ILE:HD11	1.80	0.62
1:A:7:SER:C	1:A:9:ALA:H	2.07	0.62
1:A:266:LEU:HD21	1:A:303:TYR:CE1	2.35	0.62
1:A:645:LEU:O	1:A:649:ILE:HG13	2.00	0.62
1:A:847:ASP:O	1:A:858:ASN:HA	2.00	0.62
2:B:351:TYR:O	2:B:355:ILE:HG13	2.00	0.62
5:E:168:TYR:HB3	5:E:170:LEU:HG	1.81	0.62
8:H:105:GLU:O	8:H:112:ILE:HG23	1.99	0.62
1:A:79:GLY:HA3	1:A:243:PRO:HG3	1.80	0.62
1:A:335:ARG:O	1:A:339:ASN:HB2	1.97	0.62
2:B:614:SER:HB3	2:B:694:ASP:HB2	1.81	0.62
2:B:797:TYR:HE1	2:B:971:THR:HG23	1.64	0.62
2:B:862:GLN:HG2	2:B:963:PHE:CD1	2.34	0.62
3:C:31:ASN:O	3:C:35:ARG:HG3	2.00	0.62
4:D:60:LYS:HZ3	4:D:115:HIS:CE1	2.16	0.62
9:I:86:PHE:CE1	9:I:100:PHE:HB2	2.34	0.62
1:A:427:GLN:HG3	1:A:430:TRP:CZ2	2.33	0.62
1:A:470:LEU:CD1	1:A:487:MET:HE1	2.27	0.62
1:A:1035:TYR:O	1:A:1036:ARG:C	2.41	0.62
2:B:69:LEU:CB	2:B:429:PHE:CE1	2.74	0.62
3:C:65:HIS:CE1	3:C:69:LEU:HD11	2.35	0.62
5:E:145:THR:HG21	5:E:187:TYR:CE2	2.34	0.62
8:H:4:THR:HG22	8:H:5:LEU:N	2.15	0.62
8:H:32:THR:HG22	8:H:33:GLN:H	1.65	0.62
12:L:55:ILE:O	12:L:56:LEU:CB	2.48	0.62
1:A:108:MET:HE3	1:A:210:ILE:HD13	1.81	0.62
1:A:466:SER:O	2:B:1103:ILE:HD11	1.98	0.62
1:A:472:LEU:O	1:A:475:THR:HB	1.99	0.62
1:A:475:THR:CG2	1:A:476:SER:N	2.62	0.62
1:A:646:PHE:O	1:A:650:GLN:HB2	1.99	0.62
1:A:873:MET:C	1:A:1058:VAL:HG23	2.24	0.62
2:B:232:SER:O	2:B:261:ARG:HD3	1.99	0.62
8:H:30:SER:HB2	8:H:36:CYS:HB3	1.81	0.62
1:A:1152:ILE:HD11	9:I:44:TYR:HD2	1.64	0.62
1:A:1424:VAL:HG11	2:B:1139:ILE:HD13	1.79	0.62
2:B:105:SER:O	2:B:106:ASP:HB2	1.99	0.62
2:B:221:ASN:N	2:B:241:ARG:O	2.31	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:284:ILE:HD13	2:B:333:PHE:CD2	2.35	0.62
2:B:510:LYS:CB	2:B:511:PRO:HD3	2.30	0.62
2:B:768:THR:O	2:B:771:SER:HB2	1.99	0.62
2:B:871:THR:O	2:B:917:PRO:HG3	1.98	0.62
2:B:898:LEU:HD13	2:B:952:VAL:HG11	1.80	0.62
2:B:1178:ASN:O	2:B:1179:GLN:C	2.43	0.62
7:G:23:LYS:HG3	7:G:56:ILE:CD1	2.30	0.62
9:I:80:SER:OG	9:I:105:SER:HB2	2.00	0.62
1:A:62:ASP:O	1:A:63:ARG:C	2.42	0.62
1:A:247:ARG:NH1	1:A:263:THR:HG23	2.15	0.62
1:A:399:HIS:HB3	1:A:400:PRO:CD	2.25	0.62
1:A:1161:THR:HG22	1:A:1163:ILE:N	2.11	0.62
2:B:640:VAL:HG13	2:B:650:GLU:C	2.24	0.62
4:D:25:ALA:C	4:D:27:LEU:H	2.08	0.62
7:G:145:VAL:HG12	7:G:146:LYS:N	2.15	0.62
1:A:40:THR:HB	1:A:41:MET:HE2	1.80	0.62
1:A:110:CYS:HB3	1:A:167:CYS:SG	2.40	0.62
1:A:268:ASP:HB3	1:A:299:HIS:CE1	2.35	0.62
1:A:899:VAL:CG2	1:A:1029:ARG:HG2	2.29	0.62
1:A:1118:VAL:HG12	1:A:1327:ILE:HG13	1.81	0.62
2:B:99:LYS:HB3	2:B:100:PRO:HD2	1.81	0.62
2:B:196:PRO:HG2	2:B:197:PHE:H	1.65	0.62
2:B:204:ILE:C	2:B:205:ILE:HD12	2.24	0.62
2:B:258:LEU:HG	2:B:258:LEU:O	2.00	0.62
2:B:282:ILE:HD12	2:B:382:ILE:HD13	1.82	0.62
2:B:916:THR:HB	2:B:935:ARG:CG	2.30	0.62
5:E:85:GLU:C	5:E:87:SER:H	2.08	0.62
6:F:72:LYS:HE3	6:F:72:LYS:CA	2.30	0.62
11:K:21:ILE:HG22	11:K:31:VAL:CG1	2.29	0.62
1:A:67:CYS:C	1:A:68:GLN:HG3	2.23	0.62
1:A:188:ASP:CB	1:A:191:THR:HB	2.25	0.62
1:A:1329:THR:CG2	1:A:1335:ILE:HG13	2.30	0.62
1:A:1345:ARG:NH1	5:E:200:ARG:HH22	1.98	0.62
1:A:1371:LEU:O	1:A:1375:MET:HG3	2.00	0.62
2:B:128:LEU:HB2	2:B:167:ILE:O	2.00	0.62
2:B:549:THR:HG22	2:B:550:ASP:H	1.64	0.62
2:B:794:ASN:C	2:B:795:ILE:HD12	2.24	0.62
2:B:801:LYS:O	10:J:52:THR:CG2	2.47	0.62
8:H:40:LEU:HG	8:H:41:ASP:O	1.98	0.62
8:H:82:PRO:HG3	11:K:54:ARG:HH11	1.65	0.62
9:I:78:CYS:O	9:I:80:SER:N	2.32	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:847:ASP:HB3	1:A:1424:VAL:HG23	1.81	0.61
2:B:351:TYR:CZ	2:B:355:ILE:HD11	2.35	0.61
2:B:593:PRO:HG2	2:B:617:ARG:NH1	2.15	0.61
4:D:130:LEU:C	4:D:132:GLN:H	2.08	0.61
5:E:89:GLY:HA2	5:E:117:THR:OG1	1.99	0.61
8:H:4:THR:HA	8:H:60:ALA:HB2	1.80	0.61
11:K:41:THR:HG22	11:K:42:LEU:N	2.14	0.61
11:K:60:ALA:O	11:K:73:LEU:HD12	1.99	0.61
12:L:55:ILE:HG12	12:L:56:LEU:H	1.65	0.61
1:A:523:ILE:HG23	1:A:527:THR:HB	1.82	0.61
1:A:929:LEU:HD23	1:A:983:ILE:HG23	1.82	0.61
1:A:1100:ARG:HH21	1:A:1351:GLU:CG	2.12	0.61
2:B:243:ALA:HA	2:B:250:PHE:O	2.00	0.61
2:B:807:ARG:HG2	2:B:1045:SER:OG	1.99	0.61
5:E:100:ILE:CG2	5:E:105:PHE:HB2	2.25	0.61
6:F:86:THR:OG1	6:F:89:GLU:HG3	2.00	0.61
9:I:6:PHE:HB3	9:I:12:ASN:O	2.00	0.61
10:J:7:CYS:HA	10:J:49:MET:HE3	1.82	0.61
11:K:7:PHE:O	11:K:9:LEU:N	2.33	0.61
1:A:541:ILE:HG22	1:A:546:VAL:HG23	1.83	0.61
1:A:986:ILE:HD12	1:A:1032:LEU:HD11	1.83	0.61
1:A:1018:PHE:O	1:A:1021:LEU:HB3	2.01	0.61
1:A:1276:VAL:HG12	1:A:1277:GLU:H	1.65	0.61
1:A:1315:GLU:O	1:A:1317:MET:N	2.33	0.61
2:B:286:PHE:HA	2:B:289:LEU:HD12	1.83	0.61
2:B:378:LEU:O	2:B:378:LEU:HD12	2.00	0.61
2:B:393:LYS:HA	2:B:393:LYS:HE3	1.81	0.61
2:B:510:LYS:HG3	2:B:511:PRO:HD3	1.81	0.61
2:B:1169:MET:HE1	2:B:1201:LYS:HA	1.82	0.61
4:D:214:LEU:C	4:D:216:ASN:H	2.09	0.61
8:H:14:GLU:HG2	8:H:15:VAL:N	2.13	0.61
9:I:53:GLY:HA2	9:I:56:ALA:HB2	1.82	0.61
11:K:12:LEU:H	11:K:12:LEU:CD1	2.10	0.61
1:A:456:MET:HE2	1:A:507:VAL:HG13	1.82	0.61
1:A:1155:ASP:OD2	1:A:1161:THR:HA	2.01	0.61
2:B:56:ASP:HB2	2:B:57:TYR:HD1	1.65	0.61
2:B:273:LEU:HB2	2:B:276:ILE:CD1	2.24	0.61
2:B:750:GLY:O	2:B:751:VAL:C	2.42	0.61
4:D:63:LEU:HD13	4:D:133:THR:OG1	2.00	0.61
4:D:144:THR:O	4:D:148:LEU:HB2	2.00	0.61
5:E:103:LYS:HB3	5:E:105:PHE:CE2	2.35	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:K:1:MET:HG3	11:K:2:ASN:N	2.15	0.61
13:T:15:DC:H2"	13:T:16:DT:OP2	2.01	0.61
1:A:830:LYS:HE2	1:A:1081:LEU:HB2	1.82	0.61
1:A:1199:ARG:NH2	1:A:1234:GLU:HA	2.16	0.61
2:B:190:TYR:CE2	10:J:62:ARG:HB3	2.34	0.61
2:B:497:ARG:NH2	2:B:775:LYS:HE2	2.14	0.61
2:B:737:THR:CG2	9:I:66:PRO:HA	2.31	0.61
9:I:13:MET:HE3	9:I:14:LEU:H	1.65	0.61
9:I:69:PRO:HG2	9:I:85:PHE:CD2	2.36	0.61
10:J:64:ASN:HD22	10:J:65:PRO:HD3	1.64	0.61
11:K:44:ASN:N	11:K:61:TYR:CE1	2.68	0.61
1:A:18:GLN:NE2	1:A:228:PHE:HE1	1.99	0.61
1:A:98:LYS:HE2	1:A:224:PHE:CZ	2.35	0.61
1:A:196:GLU:CB	1:A:197:PRO:HD2	2.29	0.61
1:A:584:ASN:C	1:A:586:ILE:H	2.07	0.61
1:A:901:LEU:N	1:A:926:GLN:NE2	2.44	0.61
1:A:1035:TYR:HD1	1:A:1037:LEU:HD23	1.64	0.61
1:A:1214:GLU:OE1	1:A:1214:GLU:HA	2.01	0.61
1:A:1450:LEU:O	1:A:1450:LEU:HG	2.01	0.61
2:B:559:SER:CA	2:B:563:MET:HB3	2.26	0.61
2:B:997:GLU:CD	2:B:997:GLU:H	2.06	0.61
2:B:1080:LYS:HB2	3:C:188:HIS:HB3	1.80	0.61
2:B:1201:LYS:HE2	2:B:1205:GLN:NE2	2.15	0.61
7:G:112:LYS:O	7:G:115:MET:HG2	2.00	0.61
8:H:118:PHE:C	8:H:120:GLY:H	2.07	0.61
11:K:7:PHE:HA	11:K:10:PHE:CE2	2.35	0.61
1:A:43:GLU:HG3	1:A:48:ALA:HB3	1.82	0.61
1:A:225:ASN:ND2	1:A:227:VAL:H	1.99	0.61
1:A:1154:TYR:HD1	1:A:1191:TRP:CZ3	2.19	0.61
2:B:604:ARG:C	2:B:606:LYS:N	2.55	0.61
2:B:944:THR:HG21	2:B:1122:ARG:NH2	2.14	0.61
2:B:1065:GLN:HB3	2:B:1069:PHE:O	2.00	0.61
3:C:66:ARG:HH21	10:J:5:VAL:H	1.49	0.61
1:A:152:VAL:CG1	1:A:153:PRO:HD2	2.31	0.61
1:A:590:ARG:HB2	1:A:590:ARG:NH1	2.08	0.61
1:A:882:SER:H	1:A:1025:ARG:NH2	1.98	0.61
1:A:1039:LYS:HE3	1:A:1043:ASP:OD2	2.01	0.61
1:A:1149:ALA:CB	9:I:47:GLU:HA	2.31	0.61
2:B:259:TYR:HB2	2:B:268:THR:HG23	1.83	0.61
2:B:261:ARG:HH11	2:B:262:GLU:H	1.48	0.61
2:B:573:GLN:O	2:B:575:PRO:HD3	2.00	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:776:GLN:OE1	15:P:9:C:H4'	2.01	0.61
2:B:957:ASN:O	2:B:957:ASN:CG	2.42	0.61
2:B:999:MET:HB3	2:B:1007:VAL:CG2	2.30	0.61
3:C:177:GLU:HG3	3:C:231:ASN:HB3	1.83	0.61
6:F:94:LEU:HD21	6:F:122:MET:HA	1.81	0.61
1:A:382:PRO:CD	1:A:428:TYR:HD2	2.09	0.61
1:A:403:LYS:O	1:A:415:LEU:HB2	2.00	0.61
4:D:56:ARG:HB2	4:D:148:LEU:HD22	1.82	0.61
1:A:573:SER:O	1:A:576:GLN:HB3	2.01	0.61
1:A:665:GLY:O	1:A:666:ILE:HD12	2.00	0.61
1:A:741:ASN:ND2	1:A:744:LYS:H	1.99	0.61
2:B:352:ALA:HA	2:B:355:ILE:HD12	1.83	0.61
4:D:53:SER:H	4:D:148:LEU:CD2	2.13	0.61
4:D:126:ILE:HD13	4:D:145:MET:HE2	1.82	0.61
6:F:130:ILE:O	6:F:148:VAL:HG21	2.01	0.61
10:J:34:THR:O	10:J:35:ALA:C	2.44	0.61
1:A:69:THR:C	1:A:71:GLN:H	2.07	0.60
1:A:695:LYS:HG2	1:A:698:GLN:OE1	2.01	0.60
2:B:613:VAL:HG13	2:B:627:PHE:C	2.26	0.60
2:B:680:THR:OG1	2:B:681:TRP:N	2.33	0.60
2:B:1098:MET:HE3	2:B:1098:MET:H	1.65	0.60
3:C:66:ARG:NH1	10:J:2:ILE:HG21	2.16	0.60
7:G:17:PHE:N	7:G:17:PHE:CD2	2.68	0.60
8:H:26:ILE:HG22	8:H:27:GLU:H	1.66	0.60
10:J:12:LYS:O	10:J:14:VAL:HG23	2.00	0.60
1:A:20:GLY:O	1:A:21:LEU:HD23	2.01	0.60
1:A:332:LYS:HG3	1:A:333:GLU:CD	2.26	0.60
1:A:1427:ASN:HD22	1:A:1427:ASN:H	1.50	0.60
2:B:236:HIS:CE1	2:B:389:ALA:HA	2.35	0.60
2:B:582:VAL:HB	2:B:587:HIS:CD2	2.35	0.60
2:B:653:VAL:HA	2:B:657:HIS:CD2	2.35	0.60
2:B:1072:MET:HG3	2:B:1085:ILE:HD13	1.81	0.60
4:D:119:ARG:HG2	4:D:120:GLU:H	1.64	0.60
8:H:32:THR:HG22	8:H:33:GLN:N	2.16	0.60
1:A:154:SER:HB3	1:A:162:VAL:HG23	1.82	0.60
1:A:679:ILE:HG12	1:A:732:LEU:HD12	1.83	0.60
1:A:903:ASN:C	1:A:903:ASN:ND2	2.58	0.60
1:A:930:ASP:O	1:A:934:LYS:HG2	2.01	0.60
1:A:1173:HIS:CD2	1:A:1227:ILE:HG23	2.36	0.60
2:B:327:ARG:O	2:B:331:LEU:HD13	2.02	0.60
2:B:900:ALA:HB3	12:L:61:THR:OG1	2.02	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:154:ILE:O	5:E:196:VAL:HA	2.01	0.60
5:E:182:ASP:HB3	5:E:185:ALA:HB2	1.83	0.60
6:F:125:LEU:HG	6:F:125:LEU:O	2.01	0.60
7:G:56:ILE:O	7:G:57:GLN:HB2	2.01	0.60
9:I:35:VAL:CG1	9:I:36:GLU:N	2.65	0.60
1:A:512:VAL:HA	1:A:519:PRO:HA	1.83	0.60
1:A:857:ARG:NH2	6:F:139:PRO:HG3	2.16	0.60
2:B:277:LYS:CG	2:B:338:GLY:HA2	2.31	0.60
2:B:1147:LEU:C	2:B:1147:LEU:HD23	2.26	0.60
3:C:98:VAL:O	3:C:99:LEU:HD23	2.00	0.60
3:C:242:GLN:C	3:C:244:VAL:H	2.07	0.60
1:A:1313:LEU:O	1:A:1315:GLU:N	2.34	0.60
2:B:314:LEU:HD21	2:B:386:LEU:HD11	1.83	0.60
2:B:446:LEU:O	2:B:447:ALA:HB3	2.02	0.60
2:B:579:ARG:CB	2:B:586:TRP:HE1	2.13	0.60
2:B:611:PRO:CG	2:B:685:LEU:HD11	2.31	0.60
5:E:46:TYR:O	5:E:54:GLN:HG2	2.02	0.60
5:E:128:PRO:HA	5:E:129:PRO:C	2.25	0.60
7:G:14:HIS:ND1	7:G:15:PRO:HD2	2.17	0.60
8:H:24:CYS:HB2	8:H:44:VAL:HG21	1.83	0.60
8:H:30:SER:CB	8:H:36:CYS:HB3	2.31	0.60
9:I:14:LEU:HA	9:I:28:GLU:O	2.01	0.60
1:A:125:ALA:C	1:A:127:ALA:H	2.08	0.60
1:A:343:LYS:HZ2	2:B:1151:LEU:HD12	1.65	0.60
1:A:666:ILE:HD11	2:B:1067:ARG:O	2.00	0.60
1:A:722:LEU:HD12	1:A:722:LEU:N	2.16	0.60
1:A:731:ARG:O	1:A:734:GLU:HB3	2.00	0.60
1:A:746:MET:CE	2:B:1018:PRO:HG2	2.32	0.60
1:A:832:ALA:HA	13:T:18:DA:N7	2.15	0.60
1:A:1109:LYS:O	1:A:1110:ASN:HB3	2.00	0.60
2:B:639:ILE:HD11	2:B:691:GLU:CG	2.22	0.60
2:B:941:LEU:HD21	2:B:946:ASN:HA	1.82	0.60
3:C:101:LEU:CD1	3:C:118:LEU:HD23	2.26	0.60
5:E:46:TYR:CD2	5:E:58:MET:HG2	2.36	0.60
12:L:68:GLU:OE1	12:L:68:GLU:N	2.31	0.60
1:A:18:GLN:NE2	1:A:228:PHE:CE1	2.70	0.60
1:A:186:LYS:O	1:A:194:ALA:HB1	2.02	0.60
1:A:1319:VAL:O	1:A:1322:ILE:HG12	2.02	0.60
1:A:1453:TYR:O	1:A:1454:MET:HB3	2.01	0.60
2:B:361:LEU:HD21	2:B:377:PHE:CD2	2.36	0.60
2:B:723:VAL:HG12	2:B:724:ASP:N	2.14	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:999:MET:HE3	2:B:999:MET:CA	2.31	0.60
3:C:173:ALA:O	3:C:174:ALA:HB3	2.01	0.60
5:E:173:SER:C	5:E:175:LEU:H	2.09	0.60
7:G:1:MET:SD	7:G:79:PHE:CD1	2.93	0.60
7:G:51:TYR:C	7:G:51:TYR:CD2	2.80	0.60
12:L:44:ASP:O	12:L:45:ALA:HB3	2.02	0.60
1:A:91:PHE:HB3	1:A:96:ILE:CD1	2.31	0.60
1:A:150:THR:HG23	1:A:165:GLY:O	2.01	0.60
1:A:154:SER:HB3	1:A:162:VAL:CG2	2.31	0.60
1:A:154:SER:C	1:A:156:ASP:H	2.10	0.60
1:A:369:SER:CB	11:K:2:ASN:HD21	2.15	0.60
1:A:420:ARG:HG2	1:A:423:ASP:HB3	1.84	0.60
1:A:441:PRO:CG	1:A:498:ARG:HB2	2.30	0.60
1:A:1152:ILE:HG23	1:A:1193:LEU:HD13	1.84	0.60
2:B:344:LYS:O	2:B:345:LYS:C	2.44	0.60
2:B:616:ILE:HD13	2:B:625:LYS:HB2	1.83	0.60
4:D:195:ILE:HG22	4:D:198:LEU:HG	1.83	0.60
8:H:40:LEU:CD1	8:H:123:MET:HB2	2.32	0.60
1:A:339:ASN:O	1:A:343:LYS:HG2	2.01	0.60
2:B:654:ARG:N	2:B:657:HIS:HD2	1.98	0.60
3:C:183:TRP:CZ2	3:C:207:CYS:HB3	2.37	0.60
9:I:2:THR:HG22	9:I:3:THR:H	1.66	0.60
1:A:172:PRO:HG3	1:A:185:TRP:CZ2	2.37	0.60
1:A:946:VAL:HG22	5:E:201:LYS:HD2	1.82	0.60
2:B:135:ARG:HB2	2:B:137:TYR:HE1	1.67	0.60
2:B:642:ASP:N	2:B:649:LYS:HG3	2.16	0.60
2:B:789:MET:HE2	2:B:953:LEU:CD2	2.31	0.60
3:C:261:ALA:HA	3:C:264:GLN:OE1	2.02	0.60
11:K:21:ILE:HG22	11:K:31:VAL:HG11	1.84	0.60
1:A:784:LEU:HB3	1:A:785:PRO:HD2	1.84	0.59
1:A:845:LEU:HD12	1:A:1069:ALA:HB2	1.84	0.59
3:C:3:GLU:CB	11:K:104:ASN:HD21	2.15	0.59
4:D:56:ARG:HA	4:D:148:LEU:HD13	1.83	0.59
5:E:79:TRP:HE1	5:E:81:GLU:HB2	1.67	0.59
5:E:136:ASN:O	5:E:140:LEU:HG	2.01	0.59
7:G:132:SER:HB3	7:G:135:ASP:HB2	1.83	0.59
1:A:1187:GLN:O	1:A:1244:ARG:HG3	2.02	0.59
1:A:1193:LEU:HD12	1:A:1194:ARG:N	2.17	0.59
2:B:35:SER:O	2:B:39:ARG:HG3	2.02	0.59
2:B:510:LYS:CG	2:B:511:PRO:HD3	2.31	0.59
2:B:758:PHE:CE2	2:B:1044:ALA:HA	2.37	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:903:VAL:HG12	2:B:904:ARG:N	2.15	0.59
2:B:944:THR:HG21	2:B:1122:ARG:CZ	2.32	0.59
2:B:1047:PHE:O	2:B:1048:THR:HG23	2.01	0.59
4:D:50:LEU:HD11	7:G:4:ILE:HD11	1.83	0.59
4:D:63:LEU:HD12	4:D:129:LEU:HG	1.84	0.59
1:A:56:PRO:O	1:A:57:ARG:CG	2.49	0.59
1:A:714:PHE:CG	9:I:97:MET:HE1	2.37	0.59
1:A:1342:GLU:CD	5:E:198:ILE:HG21	2.26	0.59
2:B:65:GLU:HG3	2:B:66:ASP:OD1	2.03	0.59
2:B:67:SER:HB2	2:B:92:PHE:HD1	1.67	0.59
2:B:842:ASN:HD22	2:B:845:SER:CB	2.15	0.59
3:C:18:VAL:HG23	3:C:240:VAL:HG12	1.82	0.59
5:E:177:ARG:C	5:E:212:ARG:HD3	2.27	0.59
6:F:103:MET:O	6:F:104:ASN:HB2	2.02	0.59
8:H:42:ILE:O	8:H:44:VAL:HG23	2.02	0.59
12:L:34:CYS:O	12:L:34:CYS:SG	2.60	0.59
1:A:49:LYS:HE2	1:A:61:ILE:HD12	1.84	0.59
1:A:115:LEU:CG	1:A:142:CYS:HB3	2.32	0.59
1:A:115:LEU:CD1	1:A:142:CYS:HB3	2.32	0.59
1:A:697:ALA:HB2	1:A:702:LEU:HD12	1.84	0.59
1:A:986:ILE:HG22	1:A:987:VAL:N	2.16	0.59
1:A:1277:GLU:O	1:A:1279:ILE:N	2.34	0.59
2:B:258:LEU:HB2	2:B:385:LEU:HD21	1.85	0.59
2:B:992:ILE:CD1	11:K:66:PRO:HB2	2.32	0.59
4:D:40:HIS:CB	7:G:73:LYS:NZ	2.63	0.59
4:D:134:THR:HG22	4:D:135:GLY:N	2.16	0.59
4:D:207:LEU:HA	4:D:210:ILE:HD12	1.85	0.59
5:E:190:LEU:HD13	5:E:191:LYS:H	1.68	0.59
7:G:143:ILE:HG22	7:G:144:ARG:N	2.17	0.59
1:A:337:ARG:HD3	1:A:839:ARG:NH2	2.18	0.59
1:A:511:ILE:HA	1:A:521:MET:CE	2.32	0.59
1:A:564:ALA:O	8:H:97:MET:HA	2.02	0.59
1:A:590:ARG:HH11	1:A:590:ARG:CG	2.15	0.59
1:A:756:ILE:O	1:A:759:ALA:HB3	2.01	0.59
1:A:1121:GLU:HG2	1:A:1122:PRO:HD2	1.84	0.59
2:B:798:TYR:N	2:B:798:TYR:HD2	2.01	0.59
2:B:893:LEU:HD22	2:B:897:GLY:C	2.27	0.59
2:B:1097:HIS:H	2:B:1098:MET:CE	2.09	0.59
4:D:47:LEU:HD11	7:G:3:PHE:CD2	2.38	0.59
5:E:4:GLU:C	5:E:6:GLU:H	2.08	0.59
7:G:13:LEU:CD2	7:G:17:PHE:HB2	2.32	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:22:MET:O	7:G:23:LYS:C	2.46	0.59
11:K:7:PHE:HB2	11:K:11:LEU:CD2	2.31	0.59
1:A:409:SER:O	1:A:411:ASP:N	2.36	0.59
1:A:456:MET:CE	1:A:507:VAL:HG13	2.32	0.59
1:A:537:ARG:HD2	8:H:20:TYR:CE1	2.28	0.59
1:A:666:ILE:CD1	1:A:667:GLY:H	2.10	0.59
2:B:31:TRP:CE3	2:B:31:TRP:HA	2.37	0.59
2:B:652:LYS:HD3	2:B:688:GLY:O	2.01	0.59
2:B:830:TYR:HE2	2:B:1000:PRO:HD3	1.66	0.59
2:B:992:ILE:HD11	11:K:66:PRO:HB2	1.84	0.59
3:C:147:LEU:N	3:C:147:LEU:HD23	2.17	0.59
7:G:30:LEU:HD13	7:G:72:VAL:CG1	2.32	0.59
11:K:11:LEU:HD22	11:K:11:LEU:N	2.17	0.59
1:A:55:ASP:C	1:A:57:ARG:N	2.58	0.59
1:A:785:PRO:HG2	1:A:786:HIS:HD2	1.68	0.59
1:A:853:ASP:OD1	1:A:855:THR:HB	2.03	0.59
2:B:172:ILE:HD13	2:B:178:ASN:ND2	2.18	0.59
2:B:331:LEU:CD2	2:B:353:LYS:HG2	2.33	0.59
2:B:483:LEU:HD11	2:B:491:THR:CG2	2.32	0.59
2:B:891:ASP:O	2:B:893:LEU:N	2.35	0.59
4:D:3:VAL:HG12	4:D:4:SER:N	2.17	0.59
8:H:128:ASN:N	8:H:130:ARG:NH1	2.45	0.59
12:L:27:LEU:HD23	12:L:27:LEU:N	2.13	0.59
1:A:323:LYS:H	1:A:323:LYS:HD2	1.68	0.59
1:A:523:ILE:HB	1:A:622:VAL:CG2	2.33	0.59
1:A:700:ASN:ND2	9:I:115:LYS:HD2	2.17	0.59
1:A:898:ARG:HD3	1:A:933:TYR:CD1	2.37	0.59
2:B:123:THR:O	2:B:125:SER:N	2.35	0.59
2:B:333:PHE:CE1	2:B:337:ARG:NH2	2.70	0.59
2:B:360:PHE:O	2:B:361:LEU:C	2.46	0.59
2:B:498:THR:O	2:B:536:VAL:HA	2.03	0.59
2:B:516:ASN:N	2:B:516:ASN:ND2	2.49	0.59
6:F:82:THR:CG2	6:F:84:TYR:H	2.16	0.59
9:I:64:SER:O	9:I:66:PRO:HD3	2.01	0.59
1:A:316:GLN:O	1:A:317:LYS:C	2.45	0.59
1:A:475:THR:CG2	1:A:476:SER:H	2.15	0.59
1:A:1130:GLN:HG3	1:A:1134:ILE:HD11	1.84	0.59
1:A:1317:MET:HE1	1:A:1338:VAL:HG11	1.85	0.59
2:B:455:SER:O	2:B:456:GLY:C	2.46	0.59
2:B:557:PHE:HZ	2:B:603:LEU:HD21	1.67	0.59
2:B:732:SER:HB2	2:B:734:HIS:CE1	2.38	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:124:LEU:HD21	3:C:129:ILE:O	2.03	0.59
5:E:4:GLU:C	5:E:6:GLU:N	2.55	0.59
5:E:89:GLY:C	5:E:91:LYS:H	2.10	0.59
6:F:138:LEU:HB3	6:F:139:PRO:HD2	1.84	0.59
10:J:35:ALA:O	10:J:38:ARG:HB3	2.02	0.59
1:A:528:LEU:O	1:A:528:LEU:HD12	2.02	0.59
1:A:567:LYS:HD2	8:H:95:TYR:CG	2.38	0.59
1:A:731:ARG:HG3	1:A:755:PHE:CE1	2.38	0.59
1:A:867:ILE:HG22	1:A:872:GLY:H	1.66	0.59
2:B:180:TYR:H	2:B:180:TYR:HD1	1.51	0.59
2:B:308:TRP:HA	2:B:311:LEU:HD12	1.84	0.59
2:B:956:THR:HG22	2:B:957:ASN:H	1.68	0.59
2:B:1215:ARG:CZ	4:D:15:LEU:HD21	2.33	0.59
3:C:112:ASN:CB	3:C:114:TYR:HE1	2.15	0.59
4:D:40:HIS:HB3	7:G:6:ASP:HB3	1.85	0.59
5:E:182:ASP:O	5:E:185:ALA:HB3	2.03	0.59
8:H:95:TYR:O	8:H:143:LEU:HA	2.03	0.59
9:I:95:THR:HG22	9:I:96:SER:O	2.03	0.59
1:A:340:LEU:HD21	2:B:1199:ALA:HB3	1.85	0.58
1:A:471:ASN:OD1	1:A:472:LEU:N	2.36	0.58
1:A:1445:ILE:HD12	7:G:59:GLY:O	2.03	0.58
2:B:170:LEU:C	2:B:170:LEU:HD12	2.27	0.58
2:B:864:LYS:HB2	2:B:872:GLU:HG3	1.85	0.58
4:D:24:ALA:C	4:D:26:THR:N	2.60	0.58
4:D:207:LEU:C	4:D:207:LEU:HD23	2.28	0.58
8:H:64:ASN:ND2	8:H:88:SER:HB2	2.18	0.58
8:H:110:ASP:HB2	8:H:128:ASN:ND2	2.17	0.58
9:I:4:PHE:HD1	9:I:4:PHE:C	2.11	0.58
1:A:164:ARG:HG3	1:A:165:GLY:H	1.68	0.58
1:A:567:LYS:HZ1	8:H:47:PHE:HB2	1.68	0.58
1:A:1173:HIS:ND1	1:A:1173:HIS:O	2.36	0.58
1:A:1224:LEU:HG	1:A:1226:VAL:HG23	1.85	0.58
2:B:553:PRO:O	2:B:557:PHE:HB2	2.03	0.58
2:B:797:TYR:HB3	2:B:798:TYR:CD2	2.39	0.58
2:B:847:ASP:C	2:B:849:GLY:N	2.59	0.58
2:B:1006:ILE:HG23	10:J:43:ARG:HG3	1.85	0.58
3:C:82:TYR:CE1	3:C:161:LYS:HG2	2.37	0.58
3:C:232:VAL:HG21	3:C:244:VAL:HG22	1.84	0.58
4:D:59:ILE:O	4:D:63:LEU:HB2	2.03	0.58
5:E:67:GLU:O	5:E:70:SER:HB2	2.03	0.58
1:A:23:SER:HA	1:A:233:TRP:CD1	2.38	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:523:ILE:HB	1:A:622:VAL:HG22	1.85	0.58
1:A:590:ARG:O	1:A:591:PHE:HB2	2.03	0.58
2:B:25:ILE:HD11	2:B:653:VAL:O	2.03	0.58
2:B:164:LYS:N	2:B:164:LYS:HD3	2.18	0.58
2:B:274:PRO:CG	2:B:359:GLU:HB3	2.32	0.58
2:B:827:ILE:O	2:B:1085:ILE:HG23	2.03	0.58
4:D:127:ASP:OD2	4:D:142:LYS:HE3	2.02	0.58
5:E:85:GLU:O	5:E:88:VAL:HG23	2.03	0.58
7:G:106:MET:HG2	7:G:107:LYS:N	2.18	0.58
1:A:525:GLN:OE1	2:B:836:GLU:HG2	2.02	0.58
1:A:709:THR:HG22	1:A:710:LEU:N	2.18	0.58
1:A:1446:ASP:O	1:A:1447:GLU:C	2.45	0.58
2:B:20:ASP:O	2:B:22:SER:N	2.35	0.58
2:B:56:ASP:HB2	2:B:57:TYR:CD1	2.38	0.58
2:B:357:GLN:HG2	2:B:366:GLN:O	2.04	0.58
2:B:515:HIS:H	2:B:518:HIS:HD2	1.49	0.58
2:B:558:LEU:C	2:B:560:GLU:H	2.12	0.58
4:D:116:SER:O	4:D:118:THR:HG23	2.03	0.58
5:E:22:MET:HG3	5:E:187:TYR:CD1	2.38	0.58
7:G:51:TYR:C	7:G:51:TYR:HD2	2.12	0.58
7:G:91:VAL:HG23	7:G:141:SER:O	2.03	0.58
8:H:5:LEU:O	8:H:133:ASN:HB3	2.03	0.58
1:A:164:ARG:HG3	1:A:165:GLY:N	2.18	0.58
1:A:295:LEU:O	1:A:298:PHE:HB3	2.03	0.58
1:A:853:ASP:OD1	1:A:855:THR:N	2.33	0.58
1:A:901:LEU:HG	1:A:926:GLN:HE21	1.67	0.58
1:A:901:LEU:HD11	1:A:983:ILE:HD13	1.85	0.58
7:G:106:MET:HE3	7:G:108:VAL:HG22	1.85	0.58
1:A:64:ASN:O	1:A:65:LEU:C	2.46	0.58
1:A:278:THR:HG23	1:A:282:ASN:ND2	2.19	0.58
1:A:401:GLY:C	1:A:435:HIS:CD2	2.82	0.58
1:A:1036:ARG:HG2	1:A:1036:ARG:NH1	2.19	0.58
2:B:603:LEU:HB3	2:B:609:ILE:HD11	1.86	0.58
2:B:615:MET:HA	2:B:625:LYS:O	2.04	0.58
2:B:811:TYR:N	2:B:811:TYR:CD1	2.71	0.58
2:B:916:THR:HB	2:B:935:ARG:HG3	1.86	0.58
2:B:1115:THR:HG22	2:B:1117:GLN:HG3	1.85	0.58
2:B:1163:CYS:HB2	2:B:1182:CYS:SG	2.43	0.58
4:D:49:ALA:HB1	4:D:178:ALA:HB2	1.86	0.58
9:I:50:THR:HB	9:I:92:ARG:NH1	2.18	0.58
1:A:427:GLN:HB2	1:A:430:TRP:CG	2.39	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:583:PRO:O	1:A:610:GLY:HA3	2.03	0.58
1:A:814:PHE:CE1	2:B:519:TRP:HA	2.38	0.58
1:A:998:LEU:H	1:A:998:LEU:HD12	1.69	0.58
1:A:1230:GLU:C	1:A:1232:ASN:H	2.11	0.58
2:B:563:MET:CE	2:B:580:VAL:HB	2.32	0.58
2:B:641:GLU:HB2	2:B:643:ASP:OD2	2.03	0.58
2:B:798:TYR:N	2:B:798:TYR:CD2	2.72	0.58
5:E:98:ILE:HG22	5:E:102:GLU:HG3	1.86	0.58
8:H:64:ASN:ND2	8:H:88:SER:C	2.61	0.58
10:J:39:LEU:HD12	10:J:39:LEU:N	2.18	0.58
1:A:2:VAL:HG11	2:B:1157:ALA:CB	2.33	0.58
1:A:335:ARG:HA	1:A:339:ASN:HD22	1.69	0.58
1:A:714:PHE:CB	9:I:97:MET:HE1	2.33	0.58
1:A:860:LEU:HD11	1:A:1393:ASN:ND2	2.18	0.58
1:A:860:LEU:O	2:B:1224:PHE:HE2	1.86	0.58
1:A:984:LYS:O	1:A:988:LEU:HB2	2.04	0.58
1:A:1143:LEU:HD23	1:A:1267:MET:HB3	1.85	0.58
2:B:39:ARG:HH21	2:B:665:GLU:CD	2.11	0.58
2:B:274:PRO:HG2	2:B:359:GLU:HB3	1.85	0.58
2:B:562:GLY:HA3	2:B:590:HIS:HD1	1.69	0.58
2:B:918:ILE:HG22	2:B:919:SER:N	2.19	0.58
2:B:1177:HIS:CB	2:B:1179:GLN:HE21	2.17	0.58
5:E:99:HIS:CE1	5:E:103:LYS:HG3	2.39	0.58
7:G:88:ASP:CB	7:G:144:ARG:HA	2.33	0.58
1:A:17:VAL:HB	1:A:1419:ASP:HB3	1.84	0.58
1:A:180:LYS:NZ	1:A:294:SER:HB3	2.16	0.58
1:A:311:GLN:O	1:A:312:PRO:C	2.46	0.58
1:A:317:LYS:HA	2:B:471:LYS:HE2	1.86	0.58
1:A:568:PRO:CG	8:H:46:LEU:HD22	2.29	0.58
2:B:1006:ILE:HD13	10:J:44:TYR:CE2	2.39	0.58
2:B:1159:ARG:HD2	2:B:1159:ARG:C	2.29	0.58
1:A:829:VAL:C	1:A:831:THR:N	2.56	0.58
1:A:947:PHE:CE2	1:A:954:TRP:CE2	2.92	0.58
1:A:1197:LEU:HD11	1:A:1238:ILE:HD11	1.86	0.58
2:B:95:ILE:HB	2:B:130:VAL:HG22	1.85	0.58
2:B:310:MET:HE1	2:B:387:LEU:HD12	1.86	0.58
2:B:479:VAL:HG12	2:B:480:SER:H	1.69	0.58
2:B:708:GLU:O	2:B:710:LEU:N	2.36	0.58
2:B:770:GLN:OE1	2:B:983:ARG:HA	2.04	0.58
2:B:899:ILE:CG2	2:B:949:VAL:HG21	2.34	0.58
2:B:918:ILE:HD12	2:B:935:ARG:NH1	2.19	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:85:GLU:HB3	7:G:147:ILE:HD12	1.86	0.58
13:T:7:DC:H2"	13:T:8:DT:C7	2.34	0.58
1:A:178:GLY:C	1:A:179:LEU:HD23	2.28	0.57
1:A:265:LYS:O	1:A:269:ILE:HG13	2.04	0.57
1:A:302:THR:HA	1:A:305:ASP:O	2.04	0.57
1:A:353:ILE:HG21	1:A:487:MET:HG3	1.84	0.57
1:A:825:ILE:CD1	2:B:512:ARG:HB3	2.15	0.57
2:B:216:GLU:OE1	2:B:537:LYS:HE3	2.04	0.57
2:B:265:SER:O	2:B:266:ALA:C	2.47	0.57
2:B:615:MET:O	2:B:697:GLU:HG3	2.04	0.57
2:B:1181:GLU:H	2:B:1188:LYS:HG3	1.69	0.57
3:C:34:ARG:O	3:C:38:ILE:HG13	2.04	0.57
3:C:112:ASN:CB	3:C:114:TYR:CE1	2.87	0.57
3:C:189:THR:HG22	3:C:190:ASP:N	2.19	0.57
6:F:85:MET:HB3	6:F:155:LEU:HD11	1.86	0.57
9:I:51:ASN:O	9:I:54:GLU:HG3	2.03	0.57
10:J:31:ASP:O	10:J:32:GLU:C	2.47	0.57
10:J:44:TYR:CD2	10:J:44:TYR:N	2.69	0.57
1:A:147:VAL:HG13	1:A:168:GLY:O	2.04	0.57
1:A:434:ARG:HG2	1:A:434:ARG:HH11	1.69	0.57
1:A:704:ALA:O	1:A:705:LYS:C	2.46	0.57
2:B:309:GLN:CD	9:I:52:ILE:HD11	2.29	0.57
2:B:745:PRO:C	2:B:747:MET:H	2.13	0.57
2:B:953:LEU:HB3	12:L:57:LEU:HD23	1.86	0.57
8:H:95:TYR:CZ	8:H:97:MET:HE2	2.39	0.57
1:A:469:ARG:NH1	1:A:469:ARG:HB3	2.19	0.57
1:A:523:ILE:CG2	1:A:527:THR:HB	2.34	0.57
1:A:1053:PHE:O	1:A:1056:SER:N	2.37	0.57
1:A:1111:MET:CE	1:A:1331:SER:HA	2.31	0.57
1:A:1427:ASN:O	1:A:1430:LEU:N	2.37	0.57
2:B:1165:ILE:CD1	4:D:17:LYS:HD3	2.34	0.57
3:C:66:ARG:NH1	10:J:2:ILE:CG2	2.67	0.57
3:C:167:HIS:CD2	12:L:70:ARG:HB3	2.39	0.57
6:F:85:MET:HB3	6:F:155:LEU:CD1	2.34	0.57
1:A:233:TRP:C	1:A:235:ILE:N	2.61	0.57
1:A:598:LEU:O	1:A:599:SER:C	2.47	0.57
1:A:826:ASP:HB2	1:A:830:LYS:HD3	1.86	0.57
1:A:864:ILE:HG21	1:A:1374:VAL:HG22	1.85	0.57
1:A:897:TYR:CD2	1:A:936:LEU:HD13	2.27	0.57
1:A:1272:THR:C	1:A:1273:LEU:HD12	2.30	0.57
2:B:39:ARG:HG2	2:B:39:ARG:HH11	1.69	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:487:THR:CG2	2:B:488:TYR:N	2.66	0.57
3:C:24:ASN:O	3:C:25:VAL:HG13	2.04	0.57
3:C:100:THR:HG22	3:C:101:LEU:N	2.19	0.57
3:C:123:ASN:CG	3:C:125:MET:H	2.11	0.57
9:I:76:PRO:HD2	9:I:108:HIS:CD2	2.36	0.57
11:K:49:GLU:HG3	11:K:94:ILE:HG12	1.87	0.57
1:A:41:MET:O	1:A:42:ASP:O	2.23	0.57
1:A:168:GLY:O	1:A:169:ASN:C	2.46	0.57
1:A:618:GLU:O	1:A:620:LYS:N	2.38	0.57
1:A:701:LEU:O	1:A:702:LEU:HG	2.03	0.57
1:A:709:THR:HG21	9:I:93:LYS:O	2.04	0.57
1:A:775:ILE:HD12	1:A:818:MET:SD	2.44	0.57
1:A:896:ARG:HH21	1:A:1030:ARG:NE	2.01	0.57
1:A:1017:LEU:HD23	5:E:204:THR:O	2.05	0.57
1:A:1100:ARG:O	1:A:1103:GLU:HB3	2.04	0.57
1:A:1142:THR:HB	1:A:1271:ILE:O	2.04	0.57
2:B:318:VAL:C	2:B:320:ASP:N	2.62	0.57
2:B:640:VAL:CG2	2:B:651:LEU:HD23	2.32	0.57
2:B:642:ASP:HB3	2:B:649:LYS:HG3	1.86	0.57
2:B:1167:GLY:HA3	2:B:1216:LEU:H	1.68	0.57
5:E:93:MET:HE3	5:E:123:LEU:HB2	1.87	0.57
5:E:106:GLN:HA	5:E:130:ALA:CB	2.35	0.57
6:F:74:ILE:HD12	6:F:144:GLU:HG3	1.85	0.57
7:G:91:VAL:HB	7:G:139:ILE:O	2.05	0.57
1:A:734:GLU:C	1:A:736:ASN:H	2.10	0.57
1:A:1445:ILE:HD12	1:A:1445:ILE:N	2.09	0.57
2:B:265:SER:O	2:B:267:ARG:N	2.37	0.57
2:B:351:TYR:CE1	2:B:355:ILE:HD11	2.40	0.57
2:B:1121:GLY:HA2	13:T:22:DC:OP2	2.05	0.57
3:C:18:VAL:HG12	3:C:20:PHE:HD2	1.70	0.57
5:E:10:SER:O	5:E:13:TRP:HB3	2.04	0.57
5:E:178:ILE:HB	5:E:212:ARG:HD2	1.86	0.57
6:F:132:LEU:CD2	7:G:61:ILE:HD11	2.34	0.57
7:G:44:TYR:HE1	7:G:157:ILE:H	1.52	0.57
1:A:334:GLY:O	1:A:335:ARG:C	2.48	0.57
1:A:590:ARG:HG2	1:A:591:PHE:N	2.19	0.57
1:A:1322:ILE:O	1:A:1324:PRO:HD3	2.05	0.57
2:B:603:LEU:CD1	2:B:608:ASP:HB3	2.34	0.57
2:B:950:ASP:O	2:B:951:GLN:HB3	2.04	0.57
3:C:164:ALA:HA	3:C:167:HIS:O	2.04	0.57
4:D:31:GLN:O	4:D:34:GLN:HG3	2.03	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:51:TYR:O	7:G:54:ILE:HG13	2.04	0.57
7:G:146:LYS:HB2	7:G:168:LEU:HD11	1.84	0.57
13:T:25:DG:H2"	13:T:26:DT:H5'	1.86	0.57
1:A:11:LEU:HB2	2:B:1193:GLN:O	2.04	0.57
1:A:189:ARG:O	1:A:190:ALA:HB3	2.05	0.57
1:A:356:ASP:OD2	11:K:65:HIS:HE1	1.87	0.57
1:A:416:ARG:HG3	1:A:417:TYR:CE2	2.39	0.57
3:C:82:TYR:CD1	3:C:161:LYS:HG2	2.40	0.57
5:E:134:THR:C	5:E:135:PHE:HD1	2.13	0.57
6:F:109:VAL:HG12	6:F:110:ASP:H	1.67	0.57
8:H:11:GLN:O	8:H:28:ALA:HB1	2.05	0.57
8:H:26:ILE:HD13	8:H:49:VAL:HG11	1.87	0.57
13:T:24:DG:H2'	13:T:25:DG:C8	2.40	0.57
1:A:860:LEU:HD11	1:A:1393:ASN:HD22	1.69	0.57
1:A:898:ARG:HD2	1:A:899:VAL:H	1.68	0.57
1:A:1313:LEU:C	1:A:1315:GLU:H	2.13	0.57
1:A:1453:TYR:CE2	6:F:129:LYS:HA	2.39	0.57
2:B:558:LEU:HD21	2:B:600:LEU:HD11	1.87	0.57
2:B:1072:MET:HE3	2:B:1085:ILE:CB	2.33	0.57
3:C:132:PRO:O	3:C:133:ILE:C	2.47	0.57
4:D:159:THR:O	4:D:163:VAL:HG23	2.05	0.57
7:G:115:MET:HB2	7:G:116:PRO:HD2	1.86	0.57
9:I:58:VAL:O	9:I:58:VAL:HG12	2.03	0.57
1:A:236:LEU:N	1:A:236:LEU:HD23	2.20	0.57
1:A:331:GLY:O	1:A:332:LYS:HB3	2.05	0.57
1:A:336:ILE:HD13	1:A:340:LEU:HD12	1.86	0.57
1:A:682:THR:HG23	1:A:728:LYS:HE3	1.85	0.57
1:A:1106:ASN:O	1:A:1107:VAL:HB	2.04	0.57
2:B:186:GLU:CG	10:J:62:ARG:HH22	2.18	0.57
2:B:648:HIS:CG	2:B:649:LYS:N	2.71	0.57
2:B:653:VAL:CG2	2:B:689:LEU:HB3	2.33	0.57
2:B:864:LYS:HG3	2:B:872:GLU:OE1	2.04	0.57
3:C:36:VAL:HG21	3:C:251:LEU:CD1	2.35	0.57
3:C:214:ASN:HB3	3:C:217:ASP:OD2	2.04	0.57
6:F:87:LYS:HA	6:F:155:LEU:HD22	1.87	0.57
7:G:15:PRO:HA	7:G:18:PHE:CE1	2.39	0.57
7:G:127:PRO:HG3	7:G:139:ILE:HG13	1.86	0.57
1:A:567:LYS:NZ	8:H:47:PHE:HB2	2.20	0.56
1:A:768:GLN:CG	1:A:816:HIS:HA	2.17	0.56
1:A:1293:SER:OG	1:A:1295:THR:HG23	2.05	0.56
2:B:126:SER:CB	2:B:172:ILE:HD11	2.34	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:165:VAL:HG12	2:B:166:PHE:N	2.20	0.56
2:B:1116:ARG:HG3	2:B:1198:TYR:CE2	2.40	0.56
2:B:1130:PHE:CE1	2:B:1134:GLU:HB3	2.40	0.56
3:C:132:PRO:O	3:C:134:ILE:HG13	2.05	0.56
3:C:229:TYR:N	3:C:229:TYR:CD1	2.72	0.56
5:E:59:SER:HB3	5:E:81:GLU:HA	1.85	0.56
5:E:180:ARG:HH21	5:E:192:ARG:HD2	1.70	0.56
6:F:71:GLU:O	6:F:72:LYS:C	2.48	0.56
6:F:75:PRO:O	6:F:77:ASP:O	2.23	0.56
12:L:49:LYS:O	12:L:50:ASP:HB2	2.03	0.56
1:A:157:ASP:C	1:A:159:THR:H	2.13	0.56
1:A:167:CYS:HB2	1:A:169:ASN:ND2	2.20	0.56
1:A:542:GLU:O	1:A:546:VAL:HG23	2.05	0.56
1:A:858:ASN:C	1:A:858:ASN:ND2	2.62	0.56
2:B:309:GLN:O	2:B:310:MET:C	2.47	0.56
3:C:212:PRO:CB	3:C:213:PRO:HD2	2.35	0.56
6:F:70:LYS:C	6:F:72:LYS:H	2.13	0.56
9:I:4:PHE:CE1	9:I:6:PHE:HE2	2.23	0.56
1:A:37:PHE:HB2	1:A:52:GLY:HA3	1.86	0.56
1:A:134:ARG:HG2	1:A:138:ILE:CD1	2.31	0.56
1:A:388:LEU:O	1:A:392:VAL:HG23	2.05	0.56
1:A:481:ASP:CG	1:A:485:ASP:OD2	2.49	0.56
1:A:503:GLN:HE21	6:F:90:ARG:HH21	1.54	0.56
1:A:605:MET:HE2	1:A:607:ILE:HD11	1.87	0.56
1:A:639:PRO:HG2	1:A:640:GLN:N	2.20	0.56
1:A:794:PRO:HG2	1:A:795:GLU:OE2	2.06	0.56
1:A:798:GLY:HA2	1:A:815:PHE:HD1	1.69	0.56
1:A:828:ALA:CB	2:B:530:GLY:HA2	2.36	0.56
1:A:865:GLN:HE21	1:A:1370:LEU:HA	1.71	0.56
1:A:881:GLN:NE2	1:A:958:VAL:O	2.39	0.56
1:A:1226:VAL:HG22	1:A:1240:CYS:HB3	1.87	0.56
2:B:299:GLU:CB	2:B:571:PRO:HG3	2.32	0.56
2:B:343:ILE:HD12	2:B:347:LYS:NZ	2.21	0.56
2:B:465:ASN:HB3	2:B:475:SER:OG	2.05	0.56
2:B:604:ARG:NH2	2:B:613:VAL:O	2.35	0.56
2:B:658:ILE:CG2	2:B:662:MET:HE2	2.31	0.56
2:B:839:MET:HG3	2:B:1010:LEU:HD11	1.87	0.56
2:B:1017:ILE:CB	2:B:1018:PRO:HD3	2.33	0.56
3:C:61:GLU:HA	3:C:64:ALA:HB3	1.86	0.56
3:C:242:GLN:C	3:C:244:VAL:N	2.63	0.56
4:D:3:VAL:CG2	7:G:10:ASN:HB2	2.32	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:9:ILE:HD11	5:E:53:PRO:HD3	1.88	0.56
5:E:91:LYS:C	5:E:93:MET:H	2.11	0.56
5:E:156:LEU:HD12	5:E:195:VAL:CB	2.31	0.56
7:G:34:VAL:HG12	7:G:45:ILE:HG21	1.85	0.56
7:G:35:GLU:HG2	7:G:48:VAL:HG23	1.88	0.56
7:G:125:SER:C	7:G:126:ASN:HD22	2.13	0.56
7:G:127:PRO:HG3	7:G:139:ILE:HD11	1.85	0.56
9:I:71:SER:HG	9:I:101:PHE:HD2	1.53	0.56
9:I:106:CYS:O	9:I:107:SER:HB2	2.05	0.56
10:J:36:LEU:HD12	10:J:47:ARG:NH1	2.20	0.56
10:J:48:ARG:HD2	10:J:48:ARG:C	2.30	0.56
12:L:33:GLU:C	12:L:35:SER:H	2.13	0.56
12:L:60:ARG:NH2	12:L:65:VAL:HG21	2.20	0.56
13:T:21:DC:H2"	13:T:22:DC:C5'	2.35	0.56
1:A:35:ILE:HA	1:A:52:GLY:O	2.06	0.56
1:A:108:MET:N	1:A:108:MET:SD	2.78	0.56
1:A:140:THR:HA	1:A:143:LYS:HE2	1.87	0.56
1:A:477:PRO:CG	1:A:521:MET:HG2	2.35	0.56
1:A:503:GLN:HE21	6:F:90:ARG:NH2	2.04	0.56
1:A:711:ARG:O	1:A:714:PHE:HB3	2.05	0.56
1:A:849:MET:CE	1:A:1061:GLY:HA2	2.35	0.56
2:B:542:MET:HE3	2:B:636:PRO:CG	2.34	0.56
2:B:879:ARG:O	2:B:934:LYS:HE2	2.05	0.56
4:D:40:HIS:HB3	7:G:73:LYS:HZ2	1.69	0.56
4:D:155:ARG:HD3	4:D:221:TYR:CE1	2.40	0.56
5:E:17:ARG:HH11	5:E:17:ARG:CB	2.14	0.56
5:E:65:THR:O	5:E:66:GLU:C	2.48	0.56
9:I:101:PHE:N	9:I:101:PHE:CD1	2.73	0.56
1:A:40:THR:CG2	1:A:41:MET:HE2	2.35	0.56
2:B:616:ILE:HG12	2:B:697:GLU:HA	1.85	0.56
2:B:1102:LYS:O	2:B:1103:ILE:C	2.48	0.56
3:C:243:VAL:O	3:C:243:VAL:HG12	2.05	0.56
9:I:4:PHE:C	9:I:4:PHE:CD1	2.82	0.56
11:K:109:TRP:C	11:K:111:LEU:H	2.13	0.56
1:A:993:LEU:HD22	1:A:1046:LEU:HD22	1.86	0.56
1:A:1050:GLU:O	1:A:1053:PHE:HB3	2.05	0.56
1:A:1322:ILE:O	1:A:1322:ILE:HG13	2.06	0.56
2:B:235:SER:HB3	2:B:258:LEU:HG	1.88	0.56
2:B:603:LEU:HB3	2:B:609:ILE:CD1	2.35	0.56
2:B:792:MET:HA	2:B:856:PHE:O	2.05	0.56
2:B:942:ARG:O	2:B:943:SER:C	2.48	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:89:GLU:O	3:C:90:ASP:CB	2.54	0.56
3:C:169:LYS:HE3	3:C:170:TRP:CH2	2.40	0.56
4:D:217:LEU:O	4:D:219:THR:N	2.39	0.56
7:G:29:LYS:HD2	7:G:32:GLU:OE1	2.06	0.56
8:H:99:GLY:HA3	8:H:117:SER:O	2.06	0.56
1:A:544:ASP:CG	1:A:545:GLN:N	2.62	0.56
1:A:821:ARG:HB2	1:A:821:ARG:NH1	2.20	0.56
3:C:2:SER:O	3:C:3:GLU:HB2	2.05	0.56
3:C:39:ALA:HA	3:C:164:ALA:CB	2.31	0.56
9:I:50:THR:CG2	9:I:52:ILE:HG12	2.35	0.56
1:A:57:ARG:O	1:A:58:LEU:O	2.23	0.56
1:A:93:VAL:CG2	1:A:301:ALA:HA	2.34	0.56
1:A:500:GLU:OE2	1:A:1438:THR:HG21	2.06	0.56
1:A:593:GLU:C	1:A:595:THR:H	2.14	0.56
1:A:715:GLU:OE1	1:A:774:ARG:HD3	2.05	0.56
1:A:1029:ARG:HH11	1:A:1029:ARG:HG3	1.71	0.56
1:A:1356:ILE:HD12	1:A:1368:MET:SD	2.46	0.56
2:B:785:TYR:CE1	2:B:795:ILE:HG12	2.41	0.56
2:B:824:ILE:HG22	2:B:1087:PHE:HE2	1.71	0.56
3:C:3:GLU:HG3	11:K:104:ASN:CG	2.31	0.56
3:C:138:GLU:OE1	3:C:138:GLU:N	2.39	0.56
8:H:84:ALA:O	8:H:89:LEU:HD21	2.06	0.56
8:H:98:TYR:HE1	8:H:139:ASN:HA	1.69	0.56
11:K:7:PHE:C	11:K:9:LEU:N	2.62	0.56
1:A:230:ARG:O	1:A:231:PRO:C	2.49	0.56
1:A:269:ILE:CG1	1:A:299:HIS:HB3	2.31	0.56
1:A:432:VAL:O	1:A:433:GLU:C	2.47	0.56
1:A:574:GLY:O	1:A:575:LYS:C	2.49	0.56
1:A:1220:PHE:O	1:A:1221:LYS:HB2	2.06	0.56
2:B:707:PRO:HA	2:B:741:CYS:SG	2.46	0.56
2:B:973:ILE:CG2	2:B:974:PRO:HD2	2.36	0.56
5:E:117:THR:HB	5:E:120:ALA:HB2	1.86	0.56
6:F:86:THR:HG23	6:F:89:GLU:OE1	2.05	0.56
1:A:172:PRO:HB3	1:A:185:TRP:CE3	2.41	0.56
1:A:340:LEU:CD2	2:B:1199:ALA:HB3	2.36	0.56
1:A:677:ARG:HD2	1:A:677:ARG:C	2.31	0.56
1:A:899:VAL:HG13	1:A:908:LEU:CD2	2.32	0.56
1:A:1289:ARG:HD2	1:A:1303:GLU:OE2	2.06	0.56
1:A:1437:GLY:O	1:A:1439:GLY:N	2.39	0.56
2:B:562:GLY:HA3	2:B:590:HIS:ND1	2.21	0.56
2:B:834:ASN:CA	2:B:838:SER:O	2.54	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:J:24:LEU:O	10:J:30:LEU:HB2	2.06	0.56
11:K:68:PHE:HB3	11:K:70:ARG:HH11	1.70	0.56
1:A:61:ILE:HG22	1:A:62:ASP:N	2.21	0.55
1:A:567:LYS:HB3	1:A:568:PRO:CD	2.36	0.55
1:A:567:LYS:HZ3	8:H:95:TYR:HB2	1.70	0.55
1:A:919:ILE:HG21	1:A:983:ILE:HD11	1.88	0.55
2:B:310:MET:HE2	2:B:386:LEU:HB2	1.88	0.55
2:B:402:GLY:HA2	2:B:695:ALA:HB3	1.87	0.55
2:B:467:GLY:O	2:B:469:GLN:N	2.39	0.55
3:C:58:LEU:HD22	3:C:58:LEU:N	2.21	0.55
3:C:77:ILE:HG23	3:C:161:LYS:NZ	2.21	0.55
4:D:64:VAL:C	4:D:66:ARG:N	2.62	0.55
5:E:114:ASN:O	5:E:115:ASN:CB	2.47	0.55
5:E:136:ASN:OD1	5:E:137:GLU:N	2.38	0.55
8:H:100:THR:CG2	8:H:101:ALA:N	2.70	0.55
12:L:36:SER:O	12:L:37:LYS:C	2.48	0.55
1:A:150:THR:HG22	1:A:150:THR:O	2.05	0.55
1:A:818:MET:HG2	2:B:514:LEU:HG	1.87	0.55
1:A:849:MET:HB2	1:A:1062:GLU:O	2.05	0.55
1:A:1317:MET:O	1:A:1322:ILE:HD11	2.06	0.55
2:B:662:MET:HA	2:B:665:GLU:HB2	1.88	0.55
2:B:855:PHE:CD1	2:B:856:PHE:N	2.73	0.55
2:B:1109:GLY:O	2:B:1111:MET:HG2	2.06	0.55
4:D:137:ASN:HD22	4:D:137:ASN:N	2.03	0.55
5:E:181:ALA:O	5:E:182:ASP:C	2.49	0.55
8:H:104:PHE:CE2	8:H:136:LYS:HG2	2.41	0.55
8:H:129:TYR:HA	8:H:131:ASN:ND2	2.21	0.55
11:K:44:ASN:N	11:K:61:TYR:HE1	2.03	0.55
11:K:65:HIS:CD2	11:K:67:PHE:HB2	2.41	0.55
12:L:27:LEU:HB3	12:L:37:LYS:HB3	1.88	0.55
1:A:107:CYS:SG	1:A:148:CYS:HB2	2.47	0.55
1:A:913:LEU:HD12	1:A:914:GLU:N	2.18	0.55
4:D:170:THR:C	4:D:172:LEU:N	2.61	0.55
10:J:64:ASN:CB	10:J:65:PRO:CD	2.80	0.55
1:A:605:MET:HE2	1:A:607:ILE:CG1	2.36	0.55
1:A:915:SER:O	1:A:919:ILE:HG13	2.07	0.55
1:A:1155:ASP:OD2	1:A:1161:THR:HG23	2.06	0.55
2:B:594:ALA:HB2	9:I:61:ASP:OD1	2.06	0.55
2:B:685:LEU:C	2:B:685:LEU:HD12	2.31	0.55
2:B:797:TYR:C	2:B:798:TYR:HD2	2.15	0.55
4:D:53:SER:HA	4:D:56:ARG:HB3	1.88	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:154:ILE:HG22	5:E:155:ARG:O	2.05	0.55
8:H:108:SER:O	8:H:110:ASP:N	2.39	0.55
9:I:50:THR:HB	9:I:92:ARG:HH12	1.71	0.55
9:I:61:ASP:C	9:I:63:GLY:H	2.13	0.55
12:L:68:GLU:H	12:L:68:GLU:CD	2.15	0.55
1:A:21:LEU:HD12	1:A:229:SER:HB2	1.89	0.55
1:A:104:GLU:HG3	1:A:174:ILE:HD12	1.88	0.55
1:A:639:PRO:HG2	1:A:640:GLN:H	1.72	0.55
1:A:886:ILE:HG23	1:A:887:GLY:N	2.21	0.55
2:B:877:PRO:C	2:B:878:GLN:HG3	2.31	0.55
3:C:252:GLN:HG3	11:K:95:ILE:HG23	1.87	0.55
4:D:40:HIS:HD2	7:G:73:LYS:CG	2.19	0.55
4:D:114:MET:HA	4:D:114:MET:CE	2.32	0.55
5:E:109:ILE:CG2	5:E:110:PHE:H	2.16	0.55
9:I:34:TYR:CD2	9:I:35:VAL:N	2.75	0.55
1:A:35:ILE:HG13	1:A:241:VAL:HG21	1.88	0.55
1:A:286:HIS:C	1:A:288:ALA:H	2.15	0.55
1:A:1187:GLN:CD	1:A:1188:GLN:HE21	2.15	0.55
2:B:243:ALA:HB2	2:B:251:ILE:HG12	1.89	0.55
2:B:244:LEU:HD12	2:B:250:PHE:H	1.71	0.55
2:B:284:ILE:HG23	2:B:324:ILE:HD13	1.89	0.55
2:B:464:GLY:C	2:B:465:ASN:ND2	2.63	0.55
2:B:549:THR:HG22	2:B:550:ASP:N	2.22	0.55
3:C:196:ASP:HB3	3:C:199:LYS:HB2	1.87	0.55
9:I:52:ILE:HG13	9:I:52:ILE:O	2.05	0.55
9:I:73:ARG:HH12	9:I:112:SER:CB	2.19	0.55
10:J:6:ARG:HB3	10:J:11:GLY:O	2.07	0.55
11:K:18:LYS:HZ3	11:K:38:GLU:HG2	1.70	0.55
1:A:535:THR:HG21	1:A:616:VAL:CA	2.28	0.55
1:A:935:GLN:HE22	1:A:938:LYS:HD2	1.71	0.55
1:A:1284:MET:HA	1:A:1306:LEU:HD23	1.89	0.55
1:A:1373:ASP:O	1:A:1377:THR:HG23	2.07	0.55
1:A:1423:GLY:HA3	1:A:1426:GLU:HG2	1.88	0.55
3:C:6:PRO:HB2	11:K:101:LEU:HD12	1.89	0.55
3:C:18:VAL:HG12	3:C:18:VAL:O	2.05	0.55
3:C:88:CYS:SG	3:C:91:HIS:C	2.90	0.55
4:D:40:HIS:HB2	7:G:73:LYS:HD3	1.88	0.55
5:E:38:PRO:HG2	5:E:41:ASP:HB2	1.87	0.55
5:E:133:GLU:HG2	5:E:135:PHE:HE1	1.70	0.55
9:I:99:LEU:O	9:I:111:THR:HG23	2.07	0.55
1:A:98:LYS:O	1:A:102:VAL:HG23	2.06	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:224:PHE:CD2	1:A:231:PRO:HG3	2.42	0.55
2:B:526:GLU:OE1	2:B:752:ALA:HB3	2.07	0.55
2:B:579:ARG:HD2	2:B:586:TRP:CZ2	2.42	0.55
2:B:1115:THR:O	2:B:1116:ARG:HB2	2.06	0.55
4:D:163:VAL:O	4:D:166:LEU:HB3	2.06	0.55
5:E:52:ARG:HB3	5:E:53:PRO:CD	2.35	0.55
5:E:90:VAL:CA	5:E:120:ALA:HB2	2.37	0.55
5:E:153:HIS:HB3	5:E:196:VAL:HG11	1.87	0.55
5:E:206:GLY:O	5:E:207:ARG:HG2	2.07	0.55
6:F:116:ASP:O	6:F:120:ILE:HG13	2.06	0.55
8:H:10:PHE:N	8:H:10:PHE:CD1	2.75	0.55
8:H:127:GLY:O	8:H:128:ASN:HB2	2.05	0.55
1:A:418:SER:C	1:A:420:ARG:H	2.14	0.55
1:A:567:LYS:HZ3	8:H:95:TYR:CA	2.20	0.55
1:A:929:LEU:O	1:A:929:LEU:HD13	2.06	0.55
1:A:1161:THR:C	1:A:1163:ILE:N	2.61	0.55
1:A:1318:THR:HB	5:E:141:VAL:HG11	1.87	0.55
1:A:1341:ILE:HG23	1:A:1342:GLU:H	1.70	0.55
2:B:69:LEU:CD1	2:B:429:PHE:HD1	1.89	0.55
2:B:842:ASN:HD22	2:B:845:SER:HB3	1.71	0.55
2:B:873:THR:O	2:B:914:LYS:HA	2.07	0.55
2:B:891:ASP:C	2:B:893:LEU:N	2.64	0.55
4:D:8:PHE:CE1	4:D:37:GLN:HB2	2.41	0.55
6:F:99:LEU:O	6:F:103:MET:CG	2.55	0.55
7:G:153:GLN:O	7:G:154:VAL:C	2.50	0.55
8:H:5:LEU:O	8:H:6:PHE:HB2	2.06	0.55
1:A:590:ARG:CD	1:A:604:GLY:HA2	2.37	0.55
1:A:1141:THR:OG1	1:A:1205:LYS:HD3	2.07	0.55
1:A:1262:LYS:C	1:A:1264:GLU:N	2.59	0.55
1:A:1375:MET:HE3	1:A:1384:VAL:HG23	1.89	0.55
2:B:278:GLN:CG	2:B:279:ASP:H	2.13	0.55
2:B:620:ARG:NH1	9:I:68:LEU:HD21	2.23	0.55
2:B:696:GLU:O	2:B:699:GLU:HB2	2.07	0.55
2:B:708:GLU:HG3	2:B:709:ASP:N	2.22	0.55
3:C:82:TYR:O	3:C:83:SER:C	2.49	0.55
7:G:7:LEU:O	7:G:73:LYS:HE2	2.07	0.55
1:A:65:LEU:O	1:A:66:LYS:C	2.49	0.54
1:A:134:ARG:O	1:A:138:ILE:HG13	2.07	0.54
1:A:1074:GLU:HB3	1:A:1075:PRO:CD	2.36	0.54
1:A:1152:ILE:HG22	1:A:1192:LEU:O	2.06	0.54
1:A:1330:ASN:O	1:A:1332:PHE:N	2.40	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:390:LEU:O	2:B:392:ARG:N	2.40	0.54
2:B:613:VAL:CG2	2:B:628:THR:HA	2.35	0.54
2:B:807:ARG:NH1	2:B:807:ARG:HB3	2.22	0.54
3:C:249:ASP:O	3:C:250:THR:C	2.48	0.54
4:D:14:ARG:O	4:D:16:LYS:HG2	2.07	0.54
5:E:121:MET:C	5:E:123:LEU:H	2.15	0.54
7:G:18:PHE:HA	7:G:22:MET:CE	2.30	0.54
9:I:35:VAL:CG1	9:I:36:GLU:H	2.18	0.54
11:K:31:VAL:CG1	11:K:32:VAL:H	2.18	0.54
1:A:41:MET:CB	1:A:50:ILE:H	2.19	0.54
1:A:220:THR:O	1:A:221:SER:C	2.50	0.54
1:A:1259:MET:C	1:A:1261:LYS:H	2.15	0.54
1:A:1308:THR:CG2	1:A:1309:ASP:N	2.57	0.54
2:B:788:ARG:NH1	2:B:790:ASP:OD1	2.41	0.54
3:C:146:LYS:C	3:C:147:LEU:HD23	2.32	0.54
5:E:39:LEU:O	5:E:42:PHE:HB3	2.07	0.54
5:E:124:VAL:N	5:E:125:PRO:CD	2.70	0.54
7:G:1:MET:HE1	7:G:3:PHE:HE1	1.72	0.54
9:I:55:THR:HG21	9:I:109:ILE:HD13	1.88	0.54
1:A:9:ALA:HB3	2:B:1193:GLN:HB2	1.88	0.54
1:A:95:PHE:O	1:A:96:ILE:C	2.51	0.54
1:A:658:LEU:HD23	1:A:659:HIS:HE1	1.69	0.54
1:A:1001:ARG:O	1:A:1002:GLY:O	2.25	0.54
1:A:1081:LEU:HD12	1:A:1098:VAL:HG23	1.89	0.54
2:B:205:ILE:HD12	2:B:205:ILE:N	2.23	0.54
2:B:305:VAL:O	2:B:305:VAL:HG12	2.07	0.54
3:C:148:ARG:HG2	3:C:149:LYS:N	2.23	0.54
4:D:203:SER:OG	4:D:206:GLU:HB2	2.08	0.54
5:E:185:ALA:O	5:E:190:LEU:HB2	2.08	0.54
9:I:59:VAL:HG12	9:I:60:GLN:H	1.72	0.54
10:J:27:GLU:C	10:J:29:GLU:H	2.15	0.54
1:A:427:GLN:HB2	1:A:430:TRP:CE2	2.42	0.54
1:A:427:GLN:HG3	1:A:430:TRP:CE2	2.42	0.54
1:A:967:ALA:CA	1:A:1044:TRP:HZ3	2.21	0.54
1:A:1114:PRO:O	1:A:1115:SER:O	2.24	0.54
2:B:118:ARG:HH22	2:B:194:GLU:CD	2.16	0.54
2:B:193:LYS:HZ2	12:L:32:ALA:HB1	1.69	0.54
2:B:936:ASP:OD1	2:B:937:ALA:N	2.40	0.54
3:C:7:GLN:HG2	11:K:104:ASN:ND2	2.23	0.54
3:C:236:GLY:O	3:C:237:SER:C	2.51	0.54
7:G:96:GLN:HA	7:G:121:PHE:CZ	2.41	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:185:TRP:CZ3	1:A:200:ARG:HB3	2.43	0.54
1:A:284:ALA:C	1:A:286:HIS:N	2.59	0.54
1:A:728:LYS:CA	1:A:731:ARG:HH21	2.20	0.54
1:A:1019:CYS:O	1:A:1022:LEU:HB3	2.07	0.54
1:A:1223:ASP:HA	1:A:1243:VAL:HG11	1.88	0.54
2:B:68:THR:HG23	2:B:91:SER:HB3	1.88	0.54
2:B:235:SER:C	2:B:236:HIS:CD2	2.86	0.54
2:B:707:PRO:HG2	2:B:708:GLU:H	1.72	0.54
2:B:958:GLN:C	2:B:960:GLY:H	2.15	0.54
2:B:1215:ARG:C	2:B:1216:LEU:HD23	2.31	0.54
5:E:55:ARG:C	5:E:57:MET:N	2.60	0.54
5:E:153:HIS:O	5:E:154:ILE:CG1	2.48	0.54
8:H:76:THR:O	8:H:77:ARG:HB2	2.08	0.54
9:I:7:CYS:HB3	9:I:14:LEU:CD2	2.38	0.54
9:I:12:ASN:OD1	9:I:31:THR:HG21	2.08	0.54
10:J:60:PHE:O	10:J:63:TYR:HD1	1.90	0.54
12:L:55:ILE:CG1	12:L:56:LEU:H	2.21	0.54
1:A:254:GLU:HB2	2:B:935:ARG:NH2	2.23	0.54
1:A:343:LYS:HZ3	2:B:1151:LEU:HD12	1.69	0.54
1:A:543:LEU:O	1:A:544:ASP:C	2.50	0.54
1:A:688:LYS:HA	1:A:691:LEU:HB3	1.88	0.54
3:C:91:HIS:ND1	3:C:158:VAL:HG11	2.22	0.54
3:C:124:LEU:C	3:C:126:GLY:H	2.14	0.54
3:C:184:ASN:HD21	3:C:187:LYS:HA	1.72	0.54
5:E:85:GLU:HB2	5:E:88:VAL:CG2	2.35	0.54
5:E:93:MET:O	5:E:95:THR:N	2.41	0.54
7:G:34:VAL:HG11	7:G:74:TYR:HE1	1.72	0.54
7:G:112:LYS:CA	7:G:115:MET:HE3	2.29	0.54
8:H:62:SER:OG	8:H:63:LEU:N	2.41	0.54
1:A:111:GLY:O	1:A:214:ILE:HA	2.07	0.54
1:A:578:LEU:HD23	1:A:612:ILE:CD1	2.38	0.54
1:A:602:ASP:HB3	1:A:616:VAL:HG23	1.88	0.54
1:A:795:GLU:CD	1:A:795:GLU:H	2.15	0.54
1:A:852:TYR:CD2	1:A:1060:PRO:CB	2.89	0.54
1:A:898:ARG:HA	1:A:933:TYR:CD1	2.42	0.54
1:A:1254:ALA:O	1:A:1255:GLU:CB	2.54	0.54
2:B:68:THR:HG22	2:B:69:LEU:H	1.71	0.54
2:B:616:ILE:CG2	2:B:700:SER:OG	2.56	0.54
2:B:711:GLU:HB2	2:B:712:PRO:CD	2.38	0.54
3:C:177:GLU:CG	3:C:231:ASN:HB3	2.37	0.54
4:D:66:ARG:HD2	4:D:133:THR:HB	1.90	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:19:ARG:O	8:H:20:TYR:HD2	1.91	0.54
8:H:38:LEU:HD12	8:H:39:THR:H	1.73	0.54
1:A:105:CYS:SG	1:A:139:TRP:HA	2.48	0.54
1:A:152:VAL:HG12	1:A:153:PRO:HD2	1.90	0.54
1:A:681:GLU:C	1:A:683:ILE:N	2.65	0.54
1:A:1418:LEU:HB3	2:B:1222:ARG:NH1	2.23	0.54
2:B:63:ILE:HA	2:B:421:PHE:CE2	2.43	0.54
2:B:802:PRO:HG2	2:B:805:THR:HG22	1.89	0.54
3:C:14:SER:HA	11:K:114:LEU:HD22	1.89	0.54
8:H:145:ARG:O	8:H:146:ARG:HB2	2.08	0.54
1:A:23:SER:O	1:A:24:PRO:C	2.49	0.54
1:A:407:ARG:HG2	1:A:430:TRP:CH2	2.42	0.54
1:A:556:TRP:CE3	1:A:558:GLY:HA2	2.42	0.54
1:A:590:ARG:HH21	1:A:620:LYS:CB	2.19	0.54
1:A:729:ALA:HA	1:A:732:LEU:HD12	1.88	0.54
1:A:738:LYS:H	1:A:738:LYS:CD	2.15	0.54
1:A:874:ASP:N	1:A:1058:VAL:HG23	2.23	0.54
1:A:884:ASP:C	1:A:886:ILE:H	2.16	0.54
1:A:968:GLN:HE22	1:A:1035:TYR:HB2	1.72	0.54
1:A:1156:PRO:HA	1:A:1190:PRO:CB	2.38	0.54
2:B:38:PHE:CD1	2:B:811:TYR:CD2	2.96	0.54
2:B:230:ALA:N	2:B:231:PRO:CD	2.70	0.54
2:B:326:ASP:O	2:B:328:GLU:N	2.41	0.54
3:C:176:ILE:HG22	3:C:177:GLU:N	2.22	0.54
3:C:213:PRO:O	3:C:214:ASN:CB	2.55	0.54
8:H:81:PRO:CB	8:H:82:PRO:CD	2.74	0.54
1:A:18:GLN:HG2	1:A:1418:LEU:CD1	2.34	0.54
1:A:551:TYR:CZ	11:K:62:LYS:HE2	2.43	0.54
1:A:730:GLY:O	1:A:731:ARG:C	2.50	0.54
1:A:974:ASP:OD2	1:A:976:THR:OG1	2.26	0.54
1:A:1063:MET:CG	1:A:1436:ILE:HG23	2.38	0.54
1:A:1125:ALA:C	1:A:1127:ASP:H	2.14	0.54
1:A:1138:ILE:C	1:A:1275:GLY:HA2	2.32	0.54
1:A:1153:TYR:CD2	1:A:1163:ILE:HD11	2.43	0.54
1:A:1386:ARG:HB2	1:A:1403:GLU:OE1	2.08	0.54
2:B:60:GLN:NE2	2:B:94:LYS:HA	2.23	0.54
2:B:95:ILE:CG1	2:B:130:VAL:HG22	2.38	0.54
2:B:101:MET:HE2	2:B:127:GLY:H	1.72	0.54
2:B:850:LEU:CD2	2:B:1009:ASP:HB3	2.38	0.54
5:E:13:TRP:CZ3	5:E:39:LEU:HB2	2.43	0.54
10:J:27:GLU:O	10:J:29:GLU:HG3	2.07	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:K:31:VAL:CG1	11:K:32:VAL:N	2.69	0.54
1:A:11:LEU:C	1:A:11:LEU:CD1	2.75	0.53
1:A:262:LEU:HD12	1:A:328:ARG:NH2	2.23	0.53
1:A:269:ILE:HD13	1:A:300:VAL:HG22	1.89	0.53
1:A:444:PHE:HB3	1:A:458:HIS:HD2	1.73	0.53
1:A:567:LYS:CB	1:A:568:PRO:CD	2.86	0.53
1:A:583:PRO:HG2	1:A:586:ILE:CG1	2.38	0.53
1:A:884:ASP:O	1:A:886:ILE:N	2.41	0.53
2:B:97:VAL:CG2	2:B:128:LEU:HG	2.38	0.53
2:B:1171:VAL:HA	2:B:1182:CYS:HB2	1.90	0.53
3:C:75:MET:HE1	3:C:239:PRO:CG	2.37	0.53
3:C:102:GLN:HG2	3:C:154:LYS:HG2	1.90	0.53
3:C:165:LYS:O	11:K:6:ARG:NH1	2.39	0.53
6:F:85:MET:C	6:F:155:LEU:HD11	2.32	0.53
6:F:119:ARG:HH11	6:F:119:ARG:HG3	1.72	0.53
11:K:23:PRO:HA	11:K:31:VAL:HG13	1.90	0.53
13:T:22:DC:H2'	13:T:23:BRU:H6	1.90	0.53
1:A:371:ALA:HB2	1:A:462:VAL:HG13	1.90	0.53
1:A:396:PRO:HB3	1:A:403:LYS:HA	1.90	0.53
1:A:1120:LEU:HD22	1:A:1124:HIS:O	2.09	0.53
2:B:57:TYR:CD1	2:B:57:TYR:N	2.76	0.53
3:C:235:VAL:HG12	10:J:13:VAL:CG2	2.37	0.53
4:D:139:LYS:HG3	4:D:143:ASN:ND2	2.23	0.53
7:G:99:PHE:HZ	7:G:163:ILE:HD13	1.73	0.53
1:A:384:ASN:OD1	1:A:388:LEU:HD12	2.07	0.53
1:A:825:ILE:HG22	1:A:826:ASP:N	2.22	0.53
1:A:1103:GLU:O	1:A:1108:ALA:HB2	2.08	0.53
1:A:1211:GLN:O	1:A:1212:VAL:C	2.52	0.53
2:B:44:VAL:O	2:B:45:SER:C	2.51	0.53
2:B:685:LEU:HG	2:B:686:ASN:N	2.24	0.53
2:B:899:ILE:HG23	2:B:903:VAL:HG21	1.89	0.53
2:B:1073:TYR:CE2	2:B:1080:LYS:HG2	2.43	0.53
3:C:74:SER:OG	3:C:237:SER:HB2	2.07	0.53
5:E:121:MET:O	5:E:124:VAL:HG23	2.09	0.53
8:H:91:ASP:C	8:H:93:TYR:N	2.66	0.53
10:J:23:ASN:C	10:J:25:LEU:N	2.58	0.53
1:A:340:LEU:HD21	2:B:1200:ALA:N	2.23	0.53
1:A:384:ASN:O	1:A:385:ILE:C	2.52	0.53
1:A:463:ILE:HD11	1:A:469:ARG:HG3	1.89	0.53
1:A:525:GLN:O	1:A:528:LEU:N	2.42	0.53
1:A:591:PHE:HA	1:A:595:THR:CG2	2.37	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:831:THR:HG23	1:A:832:ALA:N	2.23	0.53
1:A:1008:GLN:O	1:A:1011:GLN:HB3	2.09	0.53
2:B:377:PHE:O	2:B:380:TYR:N	2.42	0.53
2:B:465:ASN:ND2	2:B:465:ASN:N	2.55	0.53
2:B:616:ILE:HG23	2:B:700:SER:OG	2.08	0.53
2:B:751:VAL:O	2:B:752:ALA:C	2.52	0.53
2:B:753:ALA:HA	2:B:756:ILE:CD1	2.39	0.53
2:B:880:THR:HB	2:B:934:LYS:HE2	1.88	0.53
2:B:900:ALA:CB	12:L:61:THR:OG1	2.56	0.53
2:B:1106:ARG:HH12	2:B:1110:PRO:HG2	1.72	0.53
3:C:193:TYR:HD1	3:C:193:TYR:O	1.91	0.53
3:C:245:VAL:O	3:C:249:ASP:N	2.40	0.53
4:D:52:LEU:O	4:D:54:GLU:N	2.39	0.53
4:D:60:LYS:O	4:D:64:VAL:HG23	2.08	0.53
8:H:58:THR:C	8:H:59:ILE:HG13	2.34	0.53
1:A:70:CYS:O	1:A:72:GLU:HG2	2.08	0.53
1:A:92:HIS:O	1:A:94:GLY:N	2.42	0.53
1:A:310:GLY:C	1:A:312:PRO:HD2	2.34	0.53
1:A:556:TRP:C	1:A:558:GLY:H	2.15	0.53
1:A:676:MET:O	1:A:679:ILE:HB	2.08	0.53
1:A:1397:LEU:O	1:A:1400:CYS:HB3	2.09	0.53
2:B:284:ILE:HG23	2:B:324:ILE:CD1	2.38	0.53
2:B:469:GLN:CG	2:B:470:LYS:H	2.22	0.53
2:B:637:LEU:CD1	2:B:693:ILE:HD12	2.22	0.53
2:B:899:ILE:O	2:B:952:VAL:HG21	2.09	0.53
2:B:984:HIS:NE2	2:B:1025:HIS:HA	2.23	0.53
5:E:178:ILE:HG13	5:E:182:ASP:OD2	2.08	0.53
8:H:89:LEU:C	8:H:91:ASP:N	2.62	0.53
12:L:24:THR:O	12:L:25:ALA:HB3	2.08	0.53
1:A:182:VAL:CG2	1:A:201:VAL:HA	2.32	0.53
1:A:473:SER:HG	1:A:646:PHE:HD2	1.56	0.53
1:A:613:ILE:O	1:A:614:PHE:HB3	2.08	0.53
1:A:682:THR:HG22	1:A:728:LYS:HE3	1.91	0.53
1:A:687:LYS:O	1:A:690:VAL:HB	2.08	0.53
1:A:896:ARG:NH2	1:A:1030:ARG:NH2	2.56	0.53
1:A:963:ILE:HD11	1:A:1048:ASN:HB3	1.89	0.53
1:A:997:LEU:HD13	1:A:1018:PHE:CE2	2.43	0.53
1:A:1074:GLU:C	1:A:1076:ALA:H	2.16	0.53
2:B:802:PRO:HG2	2:B:805:THR:CG2	2.39	0.53
2:B:955:THR:HG23	2:B:956:THR:H	1.74	0.53
2:B:1058:LEU:N	2:B:1058:LEU:HD23	2.23	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1178:ASN:O	2:B:1180:PHE:CD1	2.61	0.53
3:C:168:ALA:O	3:C:169:LYS:C	2.50	0.53
3:C:209:TYR:CD1	3:C:209:TYR:N	2.76	0.53
4:D:22:GLU:CD	4:D:22:GLU:N	2.65	0.53
4:D:214:LEU:C	4:D:216:ASN:N	2.64	0.53
5:E:212:ARG:HH11	5:E:212:ARG:CG	2.20	0.53
1:A:408:ASP:O	1:A:410:GLY:N	2.42	0.53
1:A:740:LEU:HD12	1:A:741:ASN:N	2.24	0.53
1:A:940:ARG:HG2	1:A:940:ARG:NH1	2.20	0.53
1:A:947:PHE:N	1:A:947:PHE:CD1	2.76	0.53
1:A:1163:ILE:HG22	1:A:1165:GLU:HG2	1.91	0.53
1:A:1187:GLN:HA	1:A:1244:ARG:HD2	1.91	0.53
2:B:222:ILE:O	2:B:240:ILE:HA	2.08	0.53
2:B:326:ASP:C	2:B:328:GLU:N	2.66	0.53
2:B:1169:MET:HE1	2:B:1201:LYS:HG2	1.90	0.53
4:D:66:ARG:HG3	7:G:51:TYR:CD1	2.43	0.53
5:E:110:PHE:HE2	5:E:112:TYR:HB3	1.72	0.53
7:G:13:LEU:HD22	7:G:17:PHE:HB2	1.90	0.53
8:H:64:ASN:CG	8:H:90:ALA:H	2.14	0.53
9:I:44:TYR:CD1	9:I:45:ARG:N	2.77	0.53
1:A:193:ASP:O	1:A:194:ALA:HB3	2.08	0.53
1:A:280:GLU:C	1:A:282:ASN:H	2.16	0.53
1:A:343:LYS:HD3	2:B:1155:SER:OG	2.09	0.53
1:A:427:GLN:O	1:A:428:TYR:C	2.51	0.53
1:A:798:GLY:HA2	1:A:815:PHE:CD1	2.44	0.53
1:A:1015:VAL:CG1	1:A:1019:CYS:SG	2.96	0.53
2:B:294:ASP:HB2	9:I:12:ASN:HA	1.91	0.53
2:B:450:ALA:O	2:B:451:LYS:C	2.51	0.53
2:B:506:GLY:CA	2:B:512:ARG:HH21	2.07	0.53
2:B:896:ASP:OD2	12:L:58:LYS:HE3	2.09	0.53
4:D:51:ASN:O	4:D:52:LEU:O	2.27	0.53
4:D:126:ILE:HD13	4:D:145:MET:CE	2.39	0.53
4:D:137:ASN:ND2	4:D:137:ASN:H	2.06	0.53
5:E:112:TYR:CZ	5:E:136:ASN:HB2	2.44	0.53
1:A:135:PHE:HD1	1:A:222:LEU:HD22	1.74	0.53
1:A:224:PHE:CG	1:A:231:PRO:HG3	2.43	0.53
1:A:278:THR:CG2	1:A:282:ASN:HD22	2.21	0.53
1:A:675:THR:O	1:A:679:ILE:HG13	2.09	0.53
1:A:1100:ARG:O	1:A:1104:ILE:HG13	2.08	0.53
1:A:1336:MET:HE3	1:A:1381:LEU:HG	1.91	0.53
1:A:1446:ASP:HB2	6:F:133:VAL:CG2	2.38	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:62:ILE:HG23	2:B:418:LYS:HG3	1.91	0.53
2:B:63:ILE:HD12	2:B:421:PHE:CE2	2.43	0.53
2:B:215:GLN:HA	2:B:215:GLN:NE2	2.24	0.53
2:B:273:LEU:HD12	2:B:276:ILE:CD1	2.37	0.53
2:B:882:THR:HG21	2:B:934:LYS:O	2.09	0.53
3:C:62:PHE:HD2	3:C:62:PHE:C	2.17	0.53
3:C:181:ASP:OD2	3:C:184:ASN:HA	2.08	0.53
4:D:7:THR:HB	7:G:42:PHE:CZ	2.43	0.53
4:D:50:LEU:HD11	7:G:4:ILE:CD1	2.38	0.53
5:E:9:ILE:CD1	5:E:53:PRO:HD3	2.38	0.53
5:E:14:ARG:HA	5:E:17:ARG:HG2	1.91	0.53
5:E:22:MET:O	5:E:26:ARG:HB2	2.09	0.53
5:E:164:LEU:C	5:E:165:LEU:HD23	2.34	0.53
6:F:85:MET:O	6:F:155:LEU:HD21	2.08	0.53
7:G:17:PHE:N	7:G:17:PHE:HD2	2.07	0.53
8:H:118:PHE:C	8:H:120:GLY:N	2.67	0.53
10:J:16:ASP:OD1	10:J:17:LYS:HD2	2.09	0.53
1:A:75:ASN:O	1:A:76:GLU:CB	2.56	0.53
1:A:334:GLY:C	1:A:336:ILE:N	2.64	0.53
1:A:1067:LEU:O	1:A:1068:ALA:C	2.51	0.53
1:A:1206:ASP:HB3	1:A:1274:ARG:NH1	2.19	0.53
1:A:1276:VAL:HG12	1:A:1277:GLU:N	2.23	0.53
1:A:1351:GLU:O	1:A:1355:VAL:HG23	2.09	0.53
2:B:133:LYS:HG3	2:B:135:ARG:HE	1.73	0.53
2:B:221:ASN:OD1	2:B:242:SER:HA	2.09	0.53
2:B:272:THR:O	2:B:273:LEU:HD23	2.09	0.53
2:B:589:VAL:HG12	2:B:590:HIS:H	1.73	0.53
2:B:710:LEU:HA	2:B:733:HIS:HB3	1.90	0.53
2:B:879:ARG:CZ	2:B:883:LEU:HD22	2.38	0.53
2:B:955:THR:OG1	12:L:55:ILE:HA	2.09	0.53
3:C:101:LEU:C	3:C:102:GLN:HG3	2.33	0.53
3:C:148:ARG:HG2	3:C:149:LYS:H	1.74	0.53
5:E:63:ASN:HB3	5:E:64:PRO:CD	2.38	0.53
5:E:86:PRO:HA	5:E:113:GLN:HB2	1.90	0.53
8:H:100:THR:CG2	8:H:101:ALA:H	2.22	0.53
8:H:135:LEU:HD13	8:H:137:GLN:HE21	1.73	0.53
12:L:43:THR:C	12:L:45:ALA:H	2.16	0.53
1:A:107:CYS:N	1:A:114:LEU:HD21	2.24	0.52
1:A:867:ILE:HG13	1:A:1000:LEU:HD21	1.91	0.52
2:B:345:LYS:O	2:B:346:GLU:C	2.51	0.52
2:B:605:ARG:CZ	2:B:639:ILE:HD13	2.38	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:687:GLU:HB3	2:B:689:LEU:HG	1.90	0.52
2:B:895:ASP:C	2:B:897:GLY:H	2.16	0.52
2:B:1065:GLN:NE2	2:B:1066:SER:N	2.57	0.52
2:B:1085:ILE:N	2:B:1085:ILE:HD12	2.23	0.52
3:C:69:LEU:N	3:C:69:LEU:HD12	2.24	0.52
4:D:60:LYS:NZ	4:D:115:HIS:CE1	2.76	0.52
5:E:94:LYS:HG3	5:E:98:ILE:CD1	2.39	0.52
8:H:80:ARG:NH1	11:K:57:LEU:HD21	2.20	0.52
1:A:21:LEU:HG	1:A:1413:GLY:O	2.09	0.52
1:A:23:SER:HB3	1:A:233:TRP:CZ2	2.45	0.52
1:A:434:ARG:HE	1:A:437:MET:HE2	1.74	0.52
1:A:509:LEU:C	1:A:511:ILE:H	2.17	0.52
1:A:523:ILE:HD12	1:A:622:VAL:HG21	1.91	0.52
1:A:668:ASP:CG	1:A:742:ASN:HD22	2.18	0.52
1:A:1193:LEU:HD12	1:A:1193:LEU:C	2.34	0.52
1:A:1376:THR:O	1:A:1377:THR:C	2.52	0.52
2:B:273:LEU:CD1	2:B:276:ILE:HD12	2.39	0.52
2:B:313:MET:CE	2:B:390:LEU:HD21	2.39	0.52
2:B:859:TYR:HD1	2:B:859:TYR:H	1.57	0.52
5:E:116:ILE:HB	5:E:121:MET:HE2	1.91	0.52
5:E:162:ARG:CZ	5:E:162:ARG:HB3	2.39	0.52
14:N:3:DT:H3'	14:N:3:DT:OP2	2.09	0.52
1:A:322:VAL:O	1:A:322:VAL:CG1	2.58	0.52
1:A:452:LYS:HG3	2:B:1140:ALA:HB1	1.90	0.52
1:A:618:GLU:OE2	1:A:620:LYS:HB2	2.09	0.52
1:A:677:ARG:HD2	1:A:678:GLU:N	2.25	0.52
1:A:825:ILE:HG22	1:A:826:ASP:H	1.73	0.52
1:A:954:TRP:CZ3	5:E:203:GLU:HB2	2.43	0.52
2:B:192:LEU:O	2:B:193:LYS:HB2	2.09	0.52
2:B:460:ALA:HB1	2:B:466:TRP:CZ3	2.44	0.52
2:B:578:THR:C	2:B:589:VAL:HG13	2.34	0.52
2:B:955:THR:HG23	2:B:956:THR:N	2.24	0.52
2:B:1167:GLY:O	2:B:1215:ARG:HA	2.10	0.52
3:C:91:HIS:C	3:C:91:HIS:CD2	2.86	0.52
3:C:189:THR:HG22	3:C:190:ASP:H	1.73	0.52
9:I:7:CYS:SG	9:I:8:ARG:O	2.67	0.52
1:A:507:VAL:N	1:A:508:PRO:CD	2.72	0.52
1:A:514:PRO:C	1:A:516:SER:H	2.16	0.52
1:A:777:PHE:C	1:A:779:PHE:H	2.17	0.52
1:A:884:ASP:HB3	1:A:896:ARG:HH12	1.74	0.52
1:A:1074:GLU:HB3	1:A:1075:PRO:HD3	1.90	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1394:THR:CG2	1:A:1398:MET:SD	2.97	0.52
2:B:175:ARG:HG2	2:B:175:ARG:NH1	2.23	0.52
2:B:260:GLY:O	2:B:267:ARG:NH1	2.43	0.52
2:B:368:GLU:O	2:B:370:PHE:N	2.38	0.52
2:B:542:MET:HG2	2:B:747:MET:HB3	1.91	0.52
2:B:613:VAL:CG1	2:B:628:THR:HA	2.39	0.52
2:B:805:THR:HB	2:B:809:MET:SD	2.49	0.52
2:B:952:VAL:HG12	2:B:953:LEU:N	2.24	0.52
2:B:956:THR:HG22	2:B:960:GLY:HA2	1.91	0.52
2:B:1030:LEU:HD11	2:B:1059:LEU:HD22	1.92	0.52
2:B:1053:GLU:HB3	2:B:1057:LYS:HE3	1.90	0.52
4:D:34:GLN:O	4:D:47:LEU:HD23	2.09	0.52
6:F:90:ARG:HB2	6:F:90:ARG:HH11	1.73	0.52
7:G:34:VAL:HG11	7:G:74:TYR:CE1	2.45	0.52
1:A:63:ARG:HG3	1:A:63:ARG:O	2.09	0.52
1:A:179:LEU:O	1:A:180:LYS:HG3	2.09	0.52
1:A:219:PHE:CE2	1:A:231:PRO:HD2	2.45	0.52
1:A:555:ASP:O	1:A:556:TRP:O	2.27	0.52
1:A:575:LYS:HB3	1:A:612:ILE:HG21	1.92	0.52
1:A:853:ASP:OD1	1:A:853:ASP:C	2.52	0.52
1:A:853:ASP:OD1	1:A:855:THR:CB	2.58	0.52
1:A:913:LEU:CG	1:A:914:GLU:N	2.72	0.52
1:A:913:LEU:HG	1:A:914:GLU:N	2.23	0.52
1:A:1063:MET:HG3	1:A:1436:ILE:HG23	1.92	0.52
2:B:376:PHE:O	2:B:586:TRP:HZ3	1.93	0.52
2:B:485:ARG:CZ	2:B:782:LEU:HD11	2.40	0.52
2:B:648:HIS:CD2	2:B:649:LYS:H	2.28	0.52
2:B:745:PRO:O	2:B:747:MET:N	2.43	0.52
2:B:763:GLN:HG2	2:B:765:PRO:HD2	1.92	0.52
4:D:179:GLN:O	4:D:183:LEU:HB2	2.10	0.52
5:E:178:ILE:HG23	5:E:178:ILE:O	2.08	0.52
8:H:64:ASN:OD1	8:H:90:ALA:CB	2.58	0.52
8:H:135:LEU:HD13	8:H:137:GLN:NE2	2.24	0.52
10:J:27:GLU:C	10:J:29:GLU:N	2.67	0.52
1:A:333:GLU:OE2	1:A:333:GLU:N	2.43	0.52
1:A:808:LEU:HD23	1:A:813:PHE:HA	1.90	0.52
1:A:919:ILE:HG21	1:A:983:ILE:CD1	2.39	0.52
1:A:1225:PHE:HZ	1:A:1227:ILE:HD11	1.73	0.52
1:A:1299:VAL:HG12	1:A:1300:LYS:N	2.23	0.52
2:B:306:ASN:C	2:B:308:TRP:H	2.17	0.52
2:B:724:ASP:HB3	2:B:727:LYS:HG3	1.91	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:745:PRO:C	2:B:747:MET:N	2.67	0.52
2:B:755:ILE:O	2:B:755:ILE:HG22	2.09	0.52
2:B:1150:ARG:NH1	2:B:1150:ARG:HB3	2.25	0.52
3:C:154:LYS:O	3:C:155:LEU:HD23	2.10	0.52
4:D:159:THR:O	4:D:162:ALA:HB3	2.09	0.52
9:I:82:GLU:O	9:I:104:LEU:HG	2.09	0.52
9:I:85:PHE:N	9:I:85:PHE:CD2	2.57	0.52
9:I:95:THR:HG22	9:I:96:SER:N	2.25	0.52
1:A:567:LYS:HG3	8:H:94:ASP:O	2.10	0.52
1:A:606:LEU:HG	1:A:613:ILE:HD12	1.90	0.52
1:A:608:ILE:C	1:A:610:GLY:N	2.66	0.52
1:A:919:ILE:HG23	1:A:925:LEU:HD12	1.91	0.52
1:A:1224:LEU:HD12	1:A:1225:PHE:N	2.25	0.52
1:A:1316:VAL:O	1:A:1316:VAL:HG12	2.10	0.52
1:A:1438:THR:O	1:A:1438:THR:HG22	2.10	0.52
2:B:120:ARG:HE	2:B:955:THR:HG21	1.73	0.52
2:B:686:ASN:C	2:B:688:GLY:N	2.68	0.52
2:B:1106:ARG:HD3	2:B:1127:GLY:CA	2.40	0.52
3:C:136:ASP:CB	3:C:141:GLY:H	2.23	0.52
3:C:174:ALA:O	3:C:175:ALA:HB2	2.08	0.52
5:E:65:THR:O	5:E:68:SER:N	2.42	0.52
8:H:15:VAL:HG21	8:H:49:VAL:HG12	1.91	0.52
13:T:11:DA:H2"	13:T:12:DG:C8	2.45	0.52
14:N:6:DT:H2"	14:N:7:DT:OP2	2.10	0.52
1:A:244:PRO:HB2	1:A:245:PRO:HD3	1.92	0.52
1:A:298:PHE:O	1:A:301:ALA:HB3	2.10	0.52
1:A:671:ALA:O	1:A:676:MET:HE2	2.10	0.52
1:A:1129:GLU:O	1:A:1130:GLN:C	2.51	0.52
1:A:1263:ILE:O	1:A:1263:ILE:HG22	2.09	0.52
1:A:1434:ALA:O	1:A:1436:ILE:N	2.42	0.52
2:B:203:PHE:HB3	2:B:205:ILE:CD1	2.39	0.52
2:B:496:ARG:HD2	2:B:751:VAL:CG2	2.40	0.52
2:B:661:LEU:C	2:B:663:ALA:N	2.66	0.52
2:B:995:ARG:NH1	3:C:165:LYS:HA	2.25	0.52
3:C:123:ASN:ND2	3:C:125:MET:HA	2.25	0.52
3:C:190:ASP:O	3:C:191:TYR:C	2.52	0.52
5:E:11:ARG:C	5:E:13:TRP:N	2.66	0.52
5:E:85:GLU:O	5:E:87:SER:N	2.43	0.52
9:I:82:GLU:HB3	9:I:104:LEU:CD1	2.37	0.52
12:L:29:TYR:HA	12:L:57:LEU:O	2.10	0.52
1:A:369:SER:HB3	11:K:2:ASN:HD21	1.75	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1001:ARG:HG2	1:A:1001:ARG:HH11	1.73	0.52
1:A:1038:THR:HG23	1:A:1041:ALA:HB2	1.92	0.52
1:A:1389:PHE:CD1	1:A:1390:ASN:N	2.78	0.52
1:A:1423:GLY:CA	1:A:1426:GLU:HG2	2.39	0.52
2:B:31:TRP:CZ3	2:B:34:ILE:HD12	2.45	0.52
2:B:124:TYR:HH	2:B:179:CYS:HG	1.57	0.52
2:B:616:ILE:CG1	2:B:697:GLU:HA	2.40	0.52
3:C:11:ARG:NH2	3:C:229:TYR:HD2	2.08	0.52
3:C:66:ARG:NH2	10:J:5:VAL:HG23	2.24	0.52
3:C:73:GLN:HG3	3:C:74:SER:N	2.25	0.52
3:C:136:ASP:HB2	3:C:141:GLY:H	1.74	0.52
4:D:157:GLN:O	4:D:158:GLU:C	2.53	0.52
5:E:124:VAL:H	5:E:125:PRO:HD2	1.74	0.52
6:F:140:ASP:OD1	6:F:141:GLY:N	2.43	0.52
9:I:40:SER:OG	9:I:41:PRO:HD2	2.10	0.52
14:N:5:DC:H2"	14:N:6:DT:O5'	2.10	0.52
1:A:61:ILE:HG22	1:A:62:ASP:H	1.74	0.52
1:A:134:ARG:C	1:A:136:ALA:N	2.68	0.52
1:A:865:GLN:NE2	1:A:1370:LEU:HA	2.24	0.52
1:A:942:PHE:HZ	5:E:207:ARG:CG	2.23	0.52
1:A:1121:GLU:HB3	1:A:1124:HIS:NE2	2.24	0.52
1:A:1448:GLU:O	1:A:1449:SER:C	2.51	0.52
2:B:114:PRO:O	2:B:115:GLN:C	2.53	0.52
8:H:63:LEU:HD13	8:H:64:ASN:H	1.74	0.52
8:H:80:ARG:NH1	11:K:57:LEU:HD11	2.25	0.52
10:J:8:PHE:H	10:J:49:MET:CE	2.23	0.52
10:J:16:ASP:CG	10:J:17:LYS:HD2	2.34	0.52
10:J:53:HIS:CD2	10:J:54:VAL:N	2.78	0.52
1:A:445:ASN:CB	1:A:455:MET:HG2	2.29	0.51
1:A:698:GLN:O	9:I:98:VAL:HG13	2.10	0.51
1:A:700:ASN:HB2	9:I:98:VAL:HG21	1.92	0.51
1:A:947:PHE:N	1:A:947:PHE:HD1	2.08	0.51
2:B:60:GLN:HE22	2:B:94:LYS:HA	1.75	0.51
2:B:68:THR:HG22	2:B:69:LEU:N	2.25	0.51
2:B:331:LEU:HD23	2:B:353:LYS:HG2	1.91	0.51
2:B:1039:GLY:HA2	10:J:51:LEU:HD21	1.92	0.51
3:C:107:SER:C	3:C:109:SER:N	2.65	0.51
4:D:206:GLU:O	4:D:210:ILE:HG13	2.11	0.51
9:I:58:VAL:CG1	9:I:62:ILE:HD12	2.29	0.51
1:A:343:LYS:HZ2	2:B:1151:LEU:CD1	2.23	0.51
1:A:489:LEU:C	1:A:489:LEU:HD12	2.35	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:630:ILE:CG2	1:A:631:HIS:N	2.72	0.51
1:A:722:LEU:H	1:A:722:LEU:CD1	2.22	0.51
1:A:743:VAL:O	1:A:747:VAL:HG23	2.10	0.51
1:A:767:GLN:HA	1:A:799:PHE:HA	1.92	0.51
2:B:120:ARG:NH1	12:L:54:ARG:HH11	2.08	0.51
2:B:298:LEU:HD22	2:B:298:LEU:N	2.26	0.51
2:B:318:VAL:C	2:B:320:ASP:H	2.18	0.51
2:B:638:PHE:HB3	2:B:651:LEU:HD22	1.90	0.51
2:B:952:VAL:HG13	2:B:966:VAL:HG22	1.92	0.51
2:B:1002:THR:HG21	2:B:1006:ILE:CD1	2.40	0.51
3:C:31:ASN:OD1	3:C:34:ARG:HD3	2.10	0.51
3:C:77:ILE:O	3:C:79:GLN:N	2.43	0.51
4:D:56:ARG:HD3	4:D:149:THR:HA	1.92	0.51
4:D:118:THR:OG1	4:D:121:LYS:HB2	2.10	0.51
5:E:157:SER:C	5:E:159:ASP:N	2.67	0.51
8:H:14:GLU:O	8:H:26:ILE:HG23	2.10	0.51
8:H:110:ASP:HB2	8:H:128:ASN:HD22	1.76	0.51
10:J:7:CYS:SG	10:J:49:MET:HE3	2.50	0.51
1:A:450:LEU:HB2	1:A:838:GLN:HE21	1.74	0.51
1:A:817:ALA:O	1:A:820:GLY:N	2.43	0.51
1:A:953:ASN:C	1:A:954:TRP:CD1	2.89	0.51
1:A:1017:LEU:HD12	1:A:1017:LEU:O	2.10	0.51
1:A:1098:VAL:HB	1:A:1099:PRO:CD	2.40	0.51
1:A:1263:ILE:O	1:A:1267:MET:HE2	2.11	0.51
2:B:100:PRO:HD2	2:B:180:TYR:HE1	1.72	0.51
2:B:120:ARG:NH1	12:L:54:ARG:NH1	2.58	0.51
2:B:244:LEU:O	2:B:249:ARG:HG2	2.10	0.51
2:B:508:LEU:O	2:B:509:ALA:CB	2.57	0.51
4:D:63:LEU:HD23	7:G:47:CYS:SG	2.50	0.51
5:E:22:MET:HE3	5:E:187:TYR:O	2.10	0.51
9:I:82:GLU:HB3	9:I:104:LEU:HB2	1.91	0.51
10:J:27:GLU:O	10:J:29:GLU:N	2.43	0.51
10:J:36:LEU:HB2	10:J:47:ARG:NH1	2.24	0.51
11:K:78:THR:O	11:K:81:TYR:HB3	2.10	0.51
1:A:40:THR:HB	1:A:41:MET:CE	2.40	0.51
1:A:284:ALA:O	1:A:286:HIS:N	2.41	0.51
1:A:306:ASN:ND2	1:A:322:VAL:HG12	2.26	0.51
1:A:343:LYS:NZ	2:B:1151:LEU:CD1	2.70	0.51
1:A:463:ILE:HB	1:A:464:PRO:CD	2.40	0.51
1:A:466:SER:HB2	2:B:1099:VAL:HG22	1.91	0.51
1:A:567:LYS:CG	1:A:568:PRO:CD	2.87	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:877:HIS:N	1:A:877:HIS:CD2	2.78	0.51
1:A:896:ARG:HH21	1:A:1030:ARG:HE	1.53	0.51
1:A:1102:LYS:O	1:A:1106:ASN:ND2	2.43	0.51
1:A:1167:GLU:HA	1:A:1170:ILE:HD12	1.92	0.51
1:A:1236:LEU:C	1:A:1237:ILE:HG13	2.36	0.51
2:B:185:THR:O	2:B:186:GLU:C	2.53	0.51
2:B:453:ILE:O	2:B:454:THR:C	2.53	0.51
2:B:746:SER:CB	2:B:1046:PRO:HG2	2.39	0.51
3:C:31:ASN:ND2	3:C:35:ARG:HD2	2.26	0.51
3:C:124:LEU:O	3:C:126:GLY:N	2.44	0.51
4:D:145:MET:O	4:D:149:THR:HB	2.11	0.51
5:E:5:ASN:O	5:E:9:ILE:HG13	2.10	0.51
9:I:62:ILE:HD13	9:I:102:VAL:HG11	1.93	0.51
13:T:12:DG:H2"	13:T:13:DT:O5'	2.09	0.51
1:A:104:GLU:CG	1:A:174:ILE:HD12	2.41	0.51
1:A:284:ALA:HB1	1:A:289:ILE:HD11	1.91	0.51
1:A:477:PRO:HG2	1:A:521:MET:CG	2.40	0.51
1:A:543:LEU:O	1:A:546:VAL:N	2.44	0.51
1:A:562:THR:HG21	8:H:98:TYR:CD2	2.46	0.51
1:A:591:PHE:HA	1:A:595:THR:CB	2.41	0.51
1:A:725:ALA:HA	1:A:728:LYS:HE2	1.93	0.51
1:A:767:GLN:NE2	1:A:797:LYS:O	2.42	0.51
1:A:901:LEU:HD13	1:A:919:ILE:CG2	2.41	0.51
1:A:1102:LYS:HG2	1:A:1106:ASN:HD21	1.75	0.51
1:A:1118:VAL:CG2	1:A:1306:LEU:HB2	2.41	0.51
1:A:1120:LEU:H	1:A:1120:LEU:HD12	1.75	0.51
2:B:311:LEU:O	2:B:312:GLU:C	2.53	0.51
2:B:458:LYS:O	2:B:459:TYR:C	2.53	0.51
2:B:730:ARG:NH2	2:B:1047:PHE:HB3	2.26	0.51
2:B:737:THR:HG21	9:I:66:PRO:HA	1.91	0.51
2:B:781:PHE:O	2:B:782:LEU:HG	2.10	0.51
2:B:866:TYR:O	2:B:868:MET:N	2.41	0.51
2:B:884:ARG:O	2:B:936:ASP:HB2	2.10	0.51
2:B:899:ILE:HG21	2:B:949:VAL:HG21	1.92	0.51
3:C:82:TYR:CZ	3:C:161:LYS:HG2	2.45	0.51
4:D:40:HIS:HB2	7:G:73:LYS:HZ2	1.70	0.51
5:E:117:THR:HG22	5:E:120:ALA:H	1.74	0.51
7:G:119:LEU:HA	7:G:131:GLN:O	2.09	0.51
8:H:10:PHE:O	8:H:54:SER:HA	2.09	0.51
9:I:6:PHE:HA	9:I:14:LEU:HG	1.93	0.51
13:T:8:DT:H2"	13:T:9:DC:OP2	2.10	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:556:TRP:CZ3	1:A:558:GLY:HA2	2.45	0.51
1:A:584:ASN:C	1:A:586:ILE:N	2.69	0.51
1:A:598:LEU:O	1:A:598:LEU:HD23	2.11	0.51
1:A:765:VAL:HG23	1:A:802:ASN:O	2.11	0.51
1:A:830:LYS:HG3	1:A:1098:VAL:HG11	1.91	0.51
1:A:1040:GLN:O	1:A:1041:ALA:C	2.54	0.51
1:A:1446:ASP:HB2	6:F:133:VAL:HG21	1.91	0.51
2:B:186:GLU:HG3	10:J:62:ARG:NH2	2.26	0.51
2:B:391:ASP:HB2	9:I:92:ARG:HG3	1.91	0.51
2:B:510:LYS:HB2	2:B:511:PRO:HD3	1.92	0.51
2:B:582:VAL:HG22	2:B:626:ILE:HG21	1.92	0.51
2:B:797:TYR:HB3	2:B:798:TYR:HD2	1.76	0.51
2:B:882:THR:HG22	2:B:884:ARG:CB	2.35	0.51
2:B:1044:ALA:O	2:B:1045:SER:O	2.29	0.51
2:B:1072:MET:HE3	2:B:1085:ILE:HD13	1.92	0.51
3:C:168:ALA:O	3:C:171:GLY:N	2.43	0.51
10:J:23:ASN:O	10:J:25:LEU:N	2.43	0.51
1:A:76:GLU:O	1:A:78:PRO:HD3	2.11	0.51
1:A:387:ARG:O	1:A:390:GLN:HB3	2.10	0.51
1:A:498:ARG:HG3	1:A:499:ALA:N	2.26	0.51
1:A:535:THR:CG2	1:A:575:LYS:HE2	2.39	0.51
1:A:637:LYS:HB3	1:A:641:VAL:HG11	1.93	0.51
1:A:843:LYS:HD3	1:A:846:GLU:OE2	2.11	0.51
1:A:898:ARG:O	1:A:1029:ARG:NH1	2.44	0.51
1:A:1001:ARG:HH11	1:A:1001:ARG:CG	2.24	0.51
1:A:1345:ARG:NH1	1:A:1373:ASP:OD1	2.44	0.51
1:A:1451:VAL:C	1:A:1453:TYR:H	2.17	0.51
2:B:69:LEU:CD1	2:B:429:PHE:HE1	2.19	0.51
2:B:509:ALA:O	2:B:510:LYS:C	2.54	0.51
2:B:515:HIS:O	2:B:518:HIS:HB2	2.11	0.51
2:B:798:TYR:CE1	10:J:4:PRO:HA	2.46	0.51
4:D:137:ASN:N	4:D:137:ASN:ND2	2.58	0.51
6:F:93:ILE:HD13	6:F:148:VAL:HG12	1.93	0.51
6:F:117:PRO:C	6:F:119:ARG:N	2.69	0.51
9:I:6:PHE:N	9:I:6:PHE:CD2	2.75	0.51
1:A:83:HIS:C	1:A:83:HIS:CD2	2.89	0.51
1:A:427:GLN:HB2	1:A:430:TRP:CD2	2.46	0.51
1:A:524:VAL:CG1	1:A:525:GLN:N	2.73	0.51
1:A:623:GLY:C	1:A:625:SER:H	2.17	0.51
1:A:832:ALA:HA	13:T:18:DA:C8	2.45	0.51
1:A:1048:ASN:O	1:A:1052:GLN:HB2	2.11	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1425:SER:HA	1:A:1428:VAL:CG2	2.40	0.51
2:B:307:ASP:C	2:B:309:GLN:N	2.69	0.51
2:B:326:ASP:CG	2:B:328:GLU:HB3	2.36	0.51
2:B:842:ASN:O	2:B:846:ILE:HG13	2.11	0.51
2:B:857:ARG:HH21	2:B:942:ARG:NH2	2.09	0.51
3:C:36:VAL:CG2	3:C:251:LEU:HD13	2.41	0.51
3:C:51:VAL:HB	12:L:65:VAL:HG23	1.93	0.51
4:D:8:PHE:CD2	7:G:6:ASP:O	2.64	0.51
5:E:153:HIS:HB3	5:E:196:VAL:HG13	1.93	0.51
7:G:55:ASP:OD1	7:G:57:GLN:HG3	2.10	0.51
8:H:101:ALA:HB2	8:H:116:TYR:CE1	2.46	0.51
9:I:50:THR:HG22	9:I:51:ASN:N	2.26	0.51
9:I:69:PRO:HB2	9:I:85:PHE:CE2	2.46	0.51
9:I:74:GLU:O	9:I:74:GLU:HG3	2.10	0.51
10:J:25:LEU:O	10:J:29:GLU:HA	2.10	0.51
1:A:42:ASP:OD1	1:A:47:ARG:HA	2.10	0.51
1:A:130:ASP:O	1:A:132:LYS:N	2.44	0.51
1:A:218:ASP:O	1:A:219:PHE:C	2.54	0.51
1:A:391:LEU:HD22	1:A:401:GLY:O	2.10	0.51
1:A:900:ASP:HA	1:A:926:GLN:HE22	1.75	0.51
1:A:1015:VAL:O	1:A:1017:LEU:N	2.44	0.51
1:A:1151:GLU:HG2	9:I:45:ARG:HB2	1.93	0.51
2:B:95:ILE:CB	2:B:130:VAL:HG22	2.40	0.51
2:B:114:PRO:O	2:B:116:GLU:N	2.44	0.51
2:B:521:LEU:HD22	2:B:633:VAL:CG1	2.27	0.51
2:B:601:ARG:HH11	2:B:605:ARG:NH2	2.08	0.51
2:B:912:ILE:O	2:B:938:SER:HA	2.10	0.51
2:B:990:ILE:HG22	2:B:991:GLY:N	2.25	0.51
2:B:1166:CYS:O	2:B:1168:LEU:N	2.33	0.51
5:E:98:ILE:HA	5:E:101:GLN:HB3	1.93	0.51
5:E:124:VAL:HA	5:E:132:ILE:CD1	2.40	0.51
6:F:114:GLU:HA	6:F:114:GLU:OE2	2.11	0.51
7:G:48:VAL:HA	7:G:76:ALA:CB	2.40	0.51
9:I:61:ASP:C	9:I:63:GLY:N	2.68	0.51
1:A:19:PHE:O	1:A:1416:ALA:HA	2.11	0.51
1:A:172:PRO:HD3	1:A:185:TRP:CE2	2.45	0.51
1:A:1067:LEU:HD13	1:A:1067:LEU:C	2.36	0.51
1:A:1272:THR:HG22	1:A:1273:LEU:N	2.26	0.51
1:A:1388:GLY:O	1:A:1391:ARG:HG3	2.11	0.51
1:A:1445:ILE:HD13	7:G:70:PHE:CZ	2.46	0.51
2:B:95:ILE:HG13	2:B:129:PHE:O	2.11	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:190:TYR:HD2	10:J:62:ARG:O	1.92	0.51
2:B:276:ILE:O	2:B:278:GLN:N	2.37	0.51
2:B:293:PRO:O	2:B:297:ILE:HG13	2.11	0.51
2:B:641:GLU:C	2:B:643:ASP:H	2.18	0.51
2:B:969:ARG:HG2	2:B:970:THR:N	2.25	0.51
3:C:124:LEU:C	3:C:126:GLY:N	2.66	0.51
5:E:16:PHE:HE2	5:E:37:LEU:HD23	1.76	0.51
5:E:35:VAL:C	5:E:37:LEU:H	2.19	0.51
13:T:11:DA:H2"	13:T:12:DG:H8	1.76	0.51
1:A:531:ILE:HD11	1:A:578:LEU:HD21	1.93	0.50
1:A:787:PHE:CE1	1:A:796:SER:HA	2.46	0.50
1:A:896:ARG:HH22	1:A:1030:ARG:HH21	1.57	0.50
1:A:1402:PHE:O	1:A:1403:GLU:HB2	2.09	0.50
2:B:229:ALA:CB	2:B:231:PRO:HD2	2.39	0.50
2:B:606:LYS:HD3	2:B:608:ASP:HB2	1.93	0.50
2:B:1158:PHE:CG	2:B:1159:ARG:N	2.79	0.50
2:B:1182:CYS:O	2:B:1183:LYS:O	2.29	0.50
3:C:168:ALA:O	3:C:170:TRP:N	2.44	0.50
5:E:116:ILE:CG2	5:E:117:THR:N	2.74	0.50
7:G:39:THR:O	7:G:43:GLY:HA2	2.11	0.50
7:G:127:PRO:HG3	7:G:139:ILE:CG1	2.40	0.50
7:G:142:ARG:CB	7:G:171:ILE:HD11	2.41	0.50
7:G:143:ILE:CG2	7:G:144:ARG:N	2.74	0.50
12:L:38:LEU:O	12:L:39:SER:CB	2.60	0.50
1:A:7:SER:C	1:A:9:ALA:N	2.70	0.50
1:A:37:PHE:CD2	1:A:50:ILE:HG21	2.46	0.50
1:A:40:THR:C	1:A:41:MET:HG3	2.34	0.50
2:B:189:LEU:O	2:B:192:LEU:N	2.45	0.50
2:B:258:LEU:O	2:B:258:LEU:CG	2.59	0.50
2:B:307:ASP:O	2:B:309:GLN:N	2.44	0.50
2:B:469:GLN:HG3	2:B:470:LYS:H	1.74	0.50
2:B:619:ILE:O	2:B:622:LYS:N	2.44	0.50
2:B:644:GLU:OE2	2:B:646:LEU:HB2	2.11	0.50
2:B:785:TYR:N	2:B:785:TYR:HD2	2.09	0.50
2:B:1115:THR:HG22	2:B:1117:GLN:CG	2.41	0.50
3:C:248:ILE:HD13	11:K:102:LYS:HA	1.94	0.50
6:F:116:ASP:C	6:F:116:ASP:OD1	2.54	0.50
8:H:84:ALA:HA	8:H:87:ARG:HG3	1.92	0.50
10:J:7:CYS:CA	10:J:49:MET:HE3	2.40	0.50
1:A:42:ASP:C	1:A:44:THR:N	2.69	0.50
1:A:125:ALA:O	1:A:127:ALA:N	2.45	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:332:LYS:C	1:A:334:GLY:N	2.69	0.50
1:A:699:ALA:HB3	1:A:701:LEU:HG	1.92	0.50
1:A:877:HIS:C	1:A:878:ILE:HG13	2.37	0.50
1:A:1191:TRP:CB	1:A:1260:LEU:HD23	2.40	0.50
2:B:334:ILE:C	2:B:336:ARG:H	2.20	0.50
2:B:591:ARG:O	2:B:592:ASN:C	2.55	0.50
2:B:654:ARG:C	2:B:656:GLY:N	2.68	0.50
2:B:811:TYR:H	2:B:811:TYR:HD1	1.58	0.50
2:B:864:LYS:O	2:B:871:THR:HG23	2.11	0.50
2:B:1081:LEU:C	2:B:1083:ALA:N	2.69	0.50
3:C:8:VAL:HG12	3:C:9:LYS:N	2.22	0.50
4:D:51:ASN:O	4:D:52:LEU:C	2.54	0.50
7:G:50:ASP:O	7:G:51:TYR:C	2.53	0.50
7:G:88:ASP:HB3	7:G:144:ARG:CA	2.40	0.50
1:A:25:GLU:OE1	1:A:25:GLU:N	2.20	0.50
1:A:58:LEU:HA	1:A:80:HIS:HB2	1.93	0.50
1:A:282:ASN:O	1:A:284:ALA:N	2.44	0.50
1:A:506:ALA:CB	1:A:508:PRO:HD2	2.39	0.50
1:A:590:ARG:NH1	1:A:590:ARG:CG	2.74	0.50
1:A:1230:GLU:C	1:A:1232:ASN:N	2.67	0.50
2:B:459:TYR:C	2:B:459:TYR:CD2	2.88	0.50
2:B:516:ASN:C	2:B:518:HIS:H	2.20	0.50
2:B:593:PRO:O	2:B:596:LEU:N	2.44	0.50
2:B:654:ARG:O	2:B:656:GLY:N	2.45	0.50
2:B:706:GLN:NE2	2:B:730:ARG:HH11	2.09	0.50
2:B:847:ASP:O	2:B:849:GLY:N	2.44	0.50
2:B:895:ASP:C	2:B:897:GLY:N	2.69	0.50
2:B:969:ARG:HD3	3:C:61:GLU:OE2	2.11	0.50
2:B:983:ARG:HD2	2:B:1091:TYR:HB3	1.92	0.50
3:C:169:LYS:HE3	3:C:170:TRP:CZ2	2.47	0.50
4:D:14:ARG:O	4:D:16:LYS:N	2.42	0.50
4:D:54:GLU:O	4:D:58:VAL:HG23	2.11	0.50
5:E:186:LEU:O	5:E:187:TYR:C	2.53	0.50
7:G:45:ILE:HD13	7:G:78:VAL:CG1	2.41	0.50
8:H:44:VAL:CG1	8:H:48:PRO:HA	2.38	0.50
9:I:111:THR:HG22	9:I:113:ASP:H	1.76	0.50
10:J:16:ASP:O	10:J:18:TRP:N	2.45	0.50
12:L:34:CYS:O	12:L:35:SER:C	2.52	0.50
1:A:74:MET:H	1:A:74:MET:CE	2.13	0.50
1:A:345:VAL:HG21	2:B:1150:ARG:NH2	2.24	0.50
1:A:402:ALA:HB2	1:A:434:ARG:HA	1.94	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:461:LYS:O	1:A:463:ILE:HG23	2.12	0.50
1:A:767:GLN:OE1	1:A:799:PHE:HB2	2.12	0.50
1:A:909:ASP:O	1:A:911:SER:N	2.42	0.50
1:A:1110:ASN:CG	1:A:1110:ASN:O	2.55	0.50
1:A:1396:ALA:HA	1:A:1399:ARG:NH2	2.27	0.50
2:B:54:PHE:O	2:B:58:THR:HB	2.11	0.50
2:B:57:TYR:HD1	2:B:57:TYR:N	2.10	0.50
2:B:278:GLN:HG2	2:B:279:ASP:N	2.18	0.50
2:B:331:LEU:HD12	2:B:331:LEU:N	2.26	0.50
2:B:656:GLY:O	2:B:657:HIS:C	2.53	0.50
2:B:660:LYS:HB3	2:B:679:TYR:CE2	2.46	0.50
2:B:785:TYR:N	2:B:785:TYR:CD2	2.80	0.50
2:B:860:MET:CG	2:B:965:LYS:HG2	2.41	0.50
2:B:1050:ILE:HD12	2:B:1050:ILE:N	2.26	0.50
3:C:174:ALA:O	10:J:10:CYS:O	2.29	0.50
5:E:186:LEU:O	5:E:189:GLY:N	2.41	0.50
9:I:33:SER:O	9:I:35:VAL:HG23	2.11	0.50
10:J:56:LEU:O	10:J:57:ILE:C	2.55	0.50
11:K:7:PHE:O	11:K:11:LEU:HD23	2.11	0.50
11:K:110:ASN:C	11:K:111:LEU:HD23	2.36	0.50
1:A:87:ALA:CB	1:A:276:LEU:HD23	2.42	0.50
1:A:125:ALA:HA	1:A:128:ILE:HG13	1.93	0.50
1:A:699:ALA:O	1:A:700:ASN:HB3	2.11	0.50
1:A:767:GLN:HE22	1:A:797:LYS:C	2.20	0.50
1:A:1453:TYR:O	1:A:1454:MET:CB	2.59	0.50
2:B:68:THR:CG2	2:B:91:SER:HB3	2.41	0.50
2:B:914:LYS:HD3	2:B:937:ALA:O	2.11	0.50
3:C:215:GLU:O	3:C:216:GLY:C	2.54	0.50
4:D:59:ILE:HG21	4:D:145:MET:SD	2.52	0.50
7:G:106:MET:HE3	7:G:108:VAL:CG2	2.41	0.50
10:J:5:VAL:HG12	10:J:6:ARG:CG	2.29	0.50
1:A:244:PRO:HG2	1:A:245:PRO:HD3	1.94	0.50
1:A:441:PRO:HD2	1:A:498:ARG:CZ	2.41	0.50
1:A:523:ILE:CD1	1:A:649:ILE:HG21	2.41	0.50
1:A:575:LYS:HB3	1:A:612:ILE:CG2	2.42	0.50
1:A:728:LYS:HB3	1:A:731:ARG:HH21	1.77	0.50
1:A:929:LEU:HD23	1:A:983:ILE:HG21	1.94	0.50
1:A:1012:ARG:O	1:A:1013:ASP:C	2.54	0.50
1:A:1218:GLN:O	1:A:1221:LYS:HE3	2.12	0.50
1:A:1443:VAL:CG1	6:F:132:LEU:HD13	2.42	0.50
2:B:170:LEU:O	2:B:172:ILE:HG13	2.11	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:193:LYS:HD3	2:B:787:VAL:HG11	1.93	0.50
2:B:313:MET:O	2:B:316:PRO:HD2	2.11	0.50
2:B:529:GLU:CD	2:B:769:TYR:HE1	2.18	0.50
2:B:637:LEU:HD22	2:B:741:CYS:O	2.12	0.50
2:B:800:GLN:CB	10:J:52:THR:HG22	2.39	0.50
2:B:839:MET:HG3	2:B:1010:LEU:CD1	2.41	0.50
2:B:1069:PHE:HA	2:B:1085:ILE:O	2.11	0.50
3:C:101:LEU:O	3:C:102:GLN:HG3	2.11	0.50
3:C:166:GLU:O	3:C:167:HIS:HB2	2.12	0.50
3:C:268:ASP:O	3:C:269:LYS:HB2	2.11	0.50
4:D:153:ARG:NH2	4:D:184:ALA:HA	2.27	0.50
7:G:1:MET:HE2	7:G:1:MET:HA	1.93	0.50
8:H:26:ILE:O	8:H:27:GLU:HG3	2.12	0.50
11:K:40:HIS:O	11:K:41:THR:C	2.55	0.50
14:N:4:DA:H2"	14:N:5:DC:C5	2.46	0.50
1:A:219:PHE:CD2	1:A:231:PRO:HD2	2.47	0.50
1:A:262:LEU:HD22	1:A:303:TYR:HE1	1.77	0.50
1:A:265:LYS:HG2	1:A:303:TYR:HA	1.94	0.50
1:A:424:ILE:C	1:A:425:GLN:OE1	2.55	0.50
1:A:608:ILE:C	1:A:610:GLY:H	2.19	0.50
1:A:741:ASN:HD22	1:A:744:LYS:HB2	1.75	0.50
1:A:960:ILE:HA	1:A:963:ILE:HG22	1.91	0.50
1:A:1131:ALA:O	1:A:1132:LYS:C	2.54	0.50
1:A:1141:THR:CG2	1:A:1205:LYS:HD3	2.42	0.50
2:B:390:LEU:O	2:B:392:ARG:HG3	2.12	0.50
2:B:547:VAL:N	2:B:612:GLU:OE2	2.38	0.50
2:B:744:HIS:CG	2:B:745:PRO:HD2	2.47	0.50
2:B:810:GLU:CA	2:B:815:ARG:NH2	2.66	0.50
2:B:826:ALA:HB2	2:B:1008:PRO:HB3	1.92	0.50
3:C:112:ASN:HB2	3:C:114:TYR:HE1	1.76	0.50
4:D:3:VAL:HG12	4:D:4:SER:H	1.77	0.50
6:F:70:LYS:O	6:F:72:LYS:NZ	2.42	0.50
8:H:89:LEU:O	8:H:91:ASP:N	2.45	0.50
8:H:101:ALA:HA	8:H:116:TYR:HA	1.94	0.50
9:I:82:GLU:C	9:I:104:LEU:HG	2.37	0.50
1:A:347:PHE:CE2	1:A:493:GLN:OE1	2.65	0.50
1:A:491:VAL:HG12	1:A:492:PRO:O	2.12	0.50
1:A:548:ASN:HA	11:K:60:ALA:HB1	1.92	0.50
1:A:870:GLU:HB2	5:E:204:THR:HG21	1.94	0.50
2:B:244:LEU:HB2	2:B:249:ARG:HA	1.93	0.50
2:B:558:LEU:O	2:B:560:GLU:N	2.30	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:731:VAL:HG12	2:B:732:SER:N	2.27	0.50
2:B:785:TYR:CD1	2:B:795:ILE:HG12	2.47	0.50
2:B:882:THR:C	2:B:884:ARG:H	2.20	0.50
2:B:1138:MET:HE3	2:B:1143:ALA:CB	2.41	0.50
3:C:62:PHE:C	3:C:62:PHE:CD2	2.88	0.50
4:D:57:LEU:O	4:D:61:GLU:HB2	2.11	0.50
4:D:153:ARG:HB3	4:D:154:PHE:CE1	2.47	0.50
4:D:153:ARG:HB3	4:D:154:PHE:CD1	2.46	0.50
4:D:155:ARG:HH11	4:D:155:ARG:HG3	1.77	0.50
5:E:197:LYS:HE2	5:E:199:ILE:HD11	1.94	0.50
7:G:111:THR:O	7:G:112:LYS:C	2.55	0.50
9:I:5:ARG:HG3	9:I:14:LEU:HD12	1.92	0.50
12:L:61:THR:HG22	12:L:63:ARG:N	2.24	0.50
1:A:600:PRO:C	1:A:602:ASP:H	2.20	0.49
1:A:786:HIS:NE2	2:B:742:GLU:OE1	2.45	0.49
1:A:1111:MET:HB2	1:A:1113:THR:O	2.12	0.49
1:A:1114:PRO:HB2	1:A:1311:VAL:HG23	1.93	0.49
1:A:1125:ALA:C	1:A:1127:ASP:N	2.70	0.49
1:A:1341:ILE:O	1:A:1344:GLY:N	2.45	0.49
1:A:1402:PHE:CD1	1:A:1403:GLU:HG3	2.47	0.49
2:B:20:ASP:C	2:B:22:SER:N	2.70	0.49
2:B:49:ASP:HA	2:B:52:ASN:HD22	1.77	0.49
2:B:243:ALA:HB1	2:B:251:ILE:HG12	1.92	0.49
2:B:298:LEU:N	2:B:298:LEU:CD2	2.75	0.49
2:B:661:LEU:HD11	2:B:684:LEU:HD11	1.93	0.49
2:B:814:PHE:C	2:B:816:GLU:N	2.68	0.49
2:B:863:GLU:OE1	2:B:962:LYS:HB2	2.11	0.49
2:B:1169:MET:HE1	2:B:1201:LYS:CA	2.42	0.49
3:C:76:ASP:OD2	3:C:127:ARG:HB2	2.11	0.49
3:C:77:ILE:C	3:C:79:GLN:H	2.20	0.49
3:C:105:GLY:HA3	3:C:149:LYS:O	2.12	0.49
3:C:114:TYR:HB2	3:C:116:LYS:HG2	1.94	0.49
4:D:47:LEU:CD1	4:D:48:ILE:H	2.20	0.49
4:D:136:GLY:C	4:D:138:ASN:H	2.20	0.49
4:D:138:ASN:HD21	7:G:35:GLU:HB3	1.76	0.49
9:I:34:TYR:CD2	9:I:34:TYR:C	2.89	0.49
1:A:280:GLU:C	1:A:282:ASN:N	2.69	0.49
1:A:452:LYS:HG3	2:B:1140:ALA:CB	2.42	0.49
1:A:679:ILE:HG23	1:A:729:ALA:HB1	1.94	0.49
1:A:843:LYS:HZ3	2:B:1135:ARG:HH12	1.59	0.49
1:A:1141:THR:HA	1:A:1205:LYS:HZ3	1.76	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:49:ASP:HA	2:B:52:ASN:ND2	2.27	0.49
2:B:405:ARG:CZ	2:B:632:ARG:HG2	2.41	0.49
2:B:455:SER:O	2:B:458:LYS:N	2.44	0.49
2:B:821:GLN:HE22	2:B:851:PHE:N	2.06	0.49
5:E:26:ARG:HA	5:E:188:LEU:HD23	1.93	0.49
5:E:78:LEU:HD23	5:E:78:LEU:C	2.37	0.49
9:I:28:GLU:HG3	9:I:29:CYS:N	2.27	0.49
9:I:73:ARG:NH1	9:I:112:SER:HB3	2.27	0.49
1:A:345:VAL:HG23	1:A:346:ASP:O	2.13	0.49
1:A:402:ALA:HB1	1:A:433:GLU:O	2.12	0.49
1:A:665:GLY:C	1:A:666:ILE:HD12	2.37	0.49
1:A:741:ASN:ND2	1:A:744:LYS:N	2.60	0.49
1:A:866:PHE:O	1:A:867:ILE:HD12	2.10	0.49
1:A:889:SER:HA	1:A:1297:GLU:N	2.27	0.49
1:A:1273:LEU:HD12	1:A:1273:LEU:N	2.27	0.49
1:A:1291:VAL:HG13	1:A:1292:PRO:CD	2.40	0.49
2:B:274:PRO:C	2:B:276:ILE:H	2.20	0.49
2:B:291:ILE:HG22	2:B:291:ILE:O	2.11	0.49
2:B:529:GLU:CD	2:B:769:TYR:CE1	2.91	0.49
2:B:609:ILE:HG13	2:B:609:ILE:O	2.12	0.49
2:B:641:GLU:HB2	2:B:643:ASP:CG	2.37	0.49
2:B:654:ARG:O	2:B:657:HIS:N	2.45	0.49
3:C:33:LEU:O	3:C:34:ARG:C	2.54	0.49
5:E:161:LYS:HG3	5:E:195:VAL:HG21	1.94	0.49
7:G:138:THR:HG22	7:G:139:ILE:HG13	1.95	0.49
8:H:82:PRO:HG3	11:K:54:ARG:NH1	2.26	0.49
8:H:84:ALA:C	8:H:86:ASP:N	2.68	0.49
8:H:84:ALA:CB	8:H:87:ARG:HD2	2.42	0.49
1:A:334:GLY:O	1:A:336:ILE:N	2.46	0.49
1:A:511:ILE:HD11	1:A:646:PHE:HE1	1.76	0.49
1:A:655:PHE:O	1:A:658:LEU:HB3	2.12	0.49
1:A:741:ASN:HD22	1:A:744:LYS:CB	2.26	0.49
1:A:761:MET:HA	1:A:804:TYR:HB2	1.94	0.49
1:A:836:TYR:HB2	13:T:18:DA:H5'	1.93	0.49
1:A:982:THR:C	1:A:984:LYS:N	2.66	0.49
1:A:1120:LEU:O	1:A:1323:ASP:HB2	2.12	0.49
1:A:1313:LEU:HD11	1:A:1317:MET:CE	2.43	0.49
1:A:1437:GLY:C	1:A:1439:GLY:H	2.21	0.49
2:B:65:GLU:HG3	2:B:66:ASP:N	2.19	0.49
2:B:102:VAL:N	2:B:110:HIS:O	2.45	0.49
2:B:205:ILE:O	2:B:207:GLY:N	2.44	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:266:ALA:C	2:B:268:THR:H	2.20	0.49
2:B:542:MET:HB3	2:B:636:PRO:CD	2.42	0.49
2:B:562:GLY:O	2:B:590:HIS:ND1	2.43	0.49
2:B:579:ARG:N	2:B:589:VAL:HG13	2.27	0.49
2:B:1156:ASP:OD2	2:B:1199:ALA:HB2	2.12	0.49
3:C:124:LEU:O	3:C:127:ARG:HG2	2.12	0.49
5:E:190:LEU:CD1	5:E:214:CYS:HB2	2.42	0.49
8:H:62:SER:OG	8:H:63:LEU:HD12	2.13	0.49
9:I:10:CYS:O	9:I:10:CYS:SG	2.70	0.49
1:A:288:ALA:HA	1:A:291:GLU:CD	2.37	0.49
1:A:344:ARG:HA	2:B:1129:ARG:HA	1.94	0.49
1:A:416:ARG:NH1	1:A:417:TYR:CE2	2.76	0.49
1:A:492:PRO:HB3	1:A:501:LEU:CD1	2.42	0.49
1:A:731:ARG:HA	1:A:734:GLU:HB3	1.95	0.49
1:A:1118:VAL:HG23	1:A:1306:LEU:HB2	1.95	0.49
1:A:1447:GLU:O	1:A:1448:GLU:C	2.56	0.49
2:B:102:VAL:CG2	2:B:112:LEU:HB2	2.43	0.49
2:B:240:ILE:CG2	2:B:254:LEU:HB3	2.42	0.49
2:B:281:PRO:O	2:B:283:VAL:N	2.46	0.49
2:B:451:LYS:O	2:B:452:THR:C	2.55	0.49
2:B:485:ARG:NH1	2:B:782:LEU:HD11	2.28	0.49
2:B:1084:GLN:NE2	2:B:1084:GLN:H	1.91	0.49
4:D:64:VAL:C	4:D:66:ARG:H	2.21	0.49
5:E:31:THR:HG23	5:E:34:GLU:HB2	1.94	0.49
5:E:61:GLN:NE2	5:E:105:PHE:CZ	2.79	0.49
8:H:17:PRO:HB3	8:H:24:CYS:SG	2.52	0.49
8:H:144:ILE:HG22	8:H:145:ARG:H	1.77	0.49
9:I:33:SER:O	9:I:34:TYR:C	2.55	0.49
9:I:61:ASP:O	9:I:63:GLY:N	2.45	0.49
1:A:189:ARG:O	1:A:190:ALA:CB	2.61	0.49
1:A:325:ILE:CG2	2:B:1210:MET:HE2	2.43	0.49
1:A:412:ARG:HH22	2:B:1108:ARG:NH2	2.10	0.49
1:A:780:VAL:O	1:A:780:VAL:HG12	2.12	0.49
1:A:1054:LEU:O	1:A:1057:VAL:HG23	2.12	0.49
2:B:37:PHE:CE1	2:B:41:LYS:HG3	2.47	0.49
2:B:244:LEU:HD13	2:B:247:GLY:O	2.13	0.49
2:B:254:LEU:HD23	2:B:381:MET:HE1	1.94	0.49
2:B:343:ILE:HG23	2:B:347:LYS:CD	2.42	0.49
2:B:348:ARG:HG3	2:B:349:ILE:N	2.28	0.49
2:B:372:SER:O	2:B:376:PHE:HB2	2.13	0.49
2:B:614:SER:HB3	2:B:694:ASP:CB	2.42	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1096:ARG:O	2:B:1097:HIS:CG	2.66	0.49
2:B:1178:ASN:N	2:B:1178:ASN:ND2	2.59	0.49
4:D:40:HIS:HB2	7:G:73:LYS:NZ	2.27	0.49
5:E:42:PHE:CZ	5:E:58:MET:HE3	2.48	0.49
5:E:109:ILE:CG2	5:E:110:PHE:N	2.69	0.49
6:F:69:LEU:C	6:F:71:GLU:H	2.21	0.49
9:I:61:ASP:O	9:I:64:SER:N	2.43	0.49
10:J:64:ASN:HB3	10:J:65:PRO:HD3	1.92	0.49
15:P:5:C:O2'	15:P:6:A:H5'	2.12	0.49
1:A:116:ASP:C	1:A:118:HIS:N	2.68	0.49
1:A:208:LEU:HD23	1:A:209:ASN:N	2.28	0.49
1:A:270:LEU:O	1:A:273:ASN:HB3	2.13	0.49
1:A:412:ARG:NH2	2:B:1108:ARG:NH2	2.60	0.49
1:A:639:PRO:CG	1:A:640:GLN:N	2.76	0.49
1:A:1148:ILE:HG12	1:A:1198:ASP:HB2	1.95	0.49
2:B:203:PHE:HB3	2:B:205:ILE:HD11	1.94	0.49
2:B:210:LYS:HG3	2:B:461:LEU:O	2.12	0.49
2:B:531:GLN:HG3	2:B:532:ALA:H	1.77	0.49
2:B:952:VAL:HG22	2:B:966:VAL:HG13	1.94	0.49
2:B:992:ILE:HG12	2:B:993:THR:N	2.26	0.49
2:B:1221:SER:HB3	4:D:12:ARG:HE	1.77	0.49
4:D:204:ASP:O	4:D:208:GLU:HB2	2.12	0.49
5:E:11:ARG:C	5:E:13:TRP:H	2.20	0.49
5:E:89:GLY:CA	5:E:117:THR:OG1	2.60	0.49
7:G:138:THR:O	7:G:139:ILE:C	2.56	0.49
11:K:45:LEU:HG	11:K:94:ILE:CD1	2.41	0.49
11:K:89:ASN:C	11:K:91:CYS:N	2.68	0.49
13:T:7:DC:H2"	13:T:8:DT:H71	1.94	0.49
1:A:6:TYR:CD1	1:A:7:SER:N	2.81	0.49
1:A:49:LYS:HD2	1:A:55:ASP:HB3	1.94	0.49
1:A:374:LEU:O	1:A:436:ILE:HG12	2.13	0.49
1:A:381:THR:CG2	1:A:382:PRO:HD2	2.42	0.49
1:A:456:MET:HE2	1:A:507:VAL:CG2	2.40	0.49
1:A:1364:ASN:C	1:A:1364:ASN:ND2	2.71	0.49
1:A:1392:SER:C	1:A:1394:THR:H	2.21	0.49
2:B:22:SER:HA	2:B:654:ARG:CB	2.43	0.49
2:B:95:ILE:HG13	2:B:130:VAL:HG22	1.95	0.49
2:B:529:GLU:OE1	2:B:769:TYR:HE1	1.96	0.49
2:B:579:ARG:HG2	2:B:579:ARG:HH11	1.77	0.49
2:B:882:THR:HG22	2:B:884:ARG:N	2.23	0.49
5:E:100:ILE:HG22	5:E:100:ILE:O	2.13	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:156:LEU:HA	5:E:160:GLU:OE1	2.13	0.49
7:G:50:ASP:O	7:G:50:ASP:OD1	2.30	0.49
7:G:117:GLN:OE1	7:G:117:GLN:N	2.46	0.49
8:H:143:LEU:HD12	8:H:143:LEU:N	2.27	0.49
10:J:14:VAL:CG1	10:J:50:ILE:HD11	2.42	0.49
12:L:53:HIS:HB3	12:L:55:ILE:HD12	1.92	0.49
1:A:40:THR:CB	1:A:41:MET:HE2	2.42	0.49
1:A:500:GLU:OE1	2:B:1143:ALA:C	2.56	0.49
1:A:670:ILE:HA	1:A:805:LEU:HD22	1.94	0.49
1:A:774:ARG:CZ	1:A:797:LYS:HG3	2.42	0.49
1:A:1053:PHE:O	1:A:1055:ARG:N	2.46	0.49
2:B:115:GLN:HG2	2:B:193:LYS:CB	2.33	0.49
2:B:190:TYR:CD2	10:J:62:ARG:HB3	2.48	0.49
2:B:259:TYR:HD1	2:B:259:TYR:H	1.61	0.49
2:B:592:ASN:HD21	2:B:595:ARG:NH1	2.11	0.49
2:B:601:ARG:NH1	2:B:605:ARG:NH2	2.61	0.49
2:B:880:THR:HG22	2:B:880:THR:O	2.13	0.49
6:F:120:ILE:O	6:F:124:GLU:HG3	2.13	0.49
6:F:138:LEU:CB	6:F:139:PRO:HD2	2.43	0.49
8:H:102:TYR:N	8:H:102:TYR:CD2	2.63	0.49
9:I:25:LEU:HB3	9:I:38:ALA:HB2	1.93	0.49
11:K:67:PHE:C	11:K:68:PHE:CD2	2.87	0.49
1:A:391:LEU:O	1:A:394:ASN:HB3	2.13	0.49
1:A:528:LEU:HA	1:A:531:ILE:HG22	1.94	0.49
1:A:535:THR:HG22	1:A:536:LEU:N	2.28	0.49
1:A:811:GLN:O	1:A:812:GLU:C	2.55	0.49
1:A:914:GLU:C	1:A:916:GLY:H	2.21	0.49
1:A:1348:LEU:HG	1:A:1372:VAL:HG23	1.95	0.49
2:B:276:ILE:HG22	2:B:278:GLN:O	2.13	0.49
2:B:361:LEU:N	2:B:362:PRO:CD	2.75	0.49
2:B:792:MET:O	2:B:793:ALA:HB2	2.13	0.49
3:C:38:ILE:HA	3:C:173:ALA:CB	2.40	0.49
3:C:83:SER:HA	3:C:95:CYS:CB	2.43	0.49
5:E:161:LYS:HD2	5:E:195:VAL:HG23	1.95	0.49
5:E:202:SER:C	5:E:204:THR:H	2.19	0.49
7:G:37:SER:OG	7:G:45:ILE:HG13	2.12	0.49
7:G:138:THR:CG2	7:G:139:ILE:N	2.53	0.49
9:I:111:THR:CG2	9:I:112:SER:H	2.25	0.49
13:T:18:DA:H8	13:T:18:DA:O5'	1.95	0.49
1:A:16:GLU:CD	2:B:1220:ARG:HA	2.37	0.48
1:A:55:ASP:N	1:A:56:PRO:HD3	2.28	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:605:MET:HG2	1:A:621:THR:CG2	2.43	0.48
1:A:728:LYS:HG3	1:A:729:ALA:N	2.28	0.48
1:A:868:TYR:CZ	1:A:1064:VAL:HG11	2.48	0.48
1:A:1120:LEU:HD12	1:A:1120:LEU:N	2.27	0.48
1:A:1134:ILE:O	1:A:1138:ILE:HG12	2.13	0.48
1:A:1197:LEU:O	1:A:1236:LEU:HD12	2.12	0.48
1:A:1237:ILE:CG2	1:A:1238:ILE:N	2.75	0.48
1:A:1389:PHE:CG	1:A:1390:ASN:N	2.80	0.48
1:A:1450:LEU:HD11	6:F:108:PHE:CZ	2.48	0.48
2:B:46:GLN:HG3	2:B:47:GLN:H	1.78	0.48
2:B:225:VAL:HA	2:B:237:VAL:O	2.13	0.48
2:B:295:GLY:N	2:B:298:LEU:HD23	2.28	0.48
2:B:558:LEU:C	2:B:560:GLU:N	2.70	0.48
2:B:865:LYS:HE3	2:B:961:LEU:HD21	1.94	0.48
2:B:956:THR:CG2	2:B:960:GLY:HA2	2.43	0.48
3:C:22:LEU:HD23	3:C:22:LEU:C	2.38	0.48
3:C:76:ASP:OD2	3:C:128:ASN:N	2.46	0.48
4:D:7:THR:HB	7:G:42:PHE:CE2	2.48	0.48
5:E:137:GLU:C	5:E:139:ALA:H	2.21	0.48
5:E:173:SER:C	5:E:175:LEU:N	2.67	0.48
6:F:130:ILE:O	6:F:148:VAL:CG2	2.61	0.48
7:G:44:TYR:OH	7:G:156:SER:HA	2.12	0.48
10:J:9:SER:OG	10:J:48:ARG:NH2	2.46	0.48
11:K:48:ALA:O	11:K:51:LEU:N	2.45	0.48
1:A:114:LEU:N	1:A:114:LEU:HD23	2.28	0.48
1:A:130:ASP:C	1:A:132:LYS:H	2.21	0.48
1:A:187:LYS:O	1:A:194:ALA:HB3	2.13	0.48
1:A:543:LEU:O	1:A:545:GLN:N	2.46	0.48
1:A:560:ILE:HG13	8:H:79:TRP:H	1.78	0.48
1:A:794:PRO:C	1:A:796:SER:H	2.20	0.48
2:B:120:ARG:NE	2:B:955:THR:HG21	2.28	0.48
2:B:343:ILE:CG2	2:B:347:LYS:HG3	2.43	0.48
2:B:451:LYS:O	2:B:455:SER:OG	2.30	0.48
2:B:802:PRO:HA	2:B:822:ASN:OD1	2.13	0.48
2:B:873:THR:CG2	2:B:874:PHE:N	2.76	0.48
2:B:1007:VAL:HG22	2:B:1008:PRO:CD	2.43	0.48
2:B:1077:THR:HG22	11:K:44:ASN:ND2	2.28	0.48
2:B:1082:MET:HA	3:C:189:THR:HA	1.95	0.48
2:B:1215:ARG:NH1	4:D:15:LEU:HD21	2.28	0.48
3:C:238:ILE:HG22	3:C:243:VAL:CG2	2.40	0.48
4:D:53:SER:H	4:D:148:LEU:HD22	1.78	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:33:GLU:OE1	5:E:33:GLU:N	2.41	0.48
6:F:71:GLU:OE1	6:F:71:GLU:N	2.46	0.48
1:A:55:ASP:O	1:A:55:ASP:OD2	2.31	0.48
1:A:57:ARG:O	1:A:68:GLN:HG2	2.13	0.48
1:A:380:VAL:HG21	1:A:430:TRP:HB2	1.94	0.48
1:A:1191:TRP:HA	1:A:1191:TRP:HE3	1.76	0.48
1:A:1265:ASN:C	1:A:1267:MET:N	2.68	0.48
1:A:1271:ILE:O	1:A:1271:ILE:HG22	2.13	0.48
2:B:34:ILE:O	2:B:37:PHE:HB3	2.14	0.48
2:B:294:ASP:C	2:B:296:GLU:N	2.62	0.48
2:B:410:GLY:O	2:B:411:PRO:C	2.56	0.48
2:B:798:TYR:HD1	10:J:4:PRO:HB3	1.78	0.48
2:B:890:TYR:CE2	2:B:910:VAL:HG21	2.49	0.48
2:B:1055:ILE:O	2:B:1058:LEU:N	2.46	0.48
2:B:1064:TYR:O	2:B:1065:GLN:C	2.56	0.48
5:E:42:PHE:O	5:E:43:LYS:C	2.56	0.48
5:E:168:TYR:CB	5:E:170:LEU:HG	2.42	0.48
5:E:173:SER:OG	5:E:174:GLN:N	2.46	0.48
9:I:90:GLN:HE21	9:I:92:ARG:HB2	1.77	0.48
1:A:121:LEU:O	1:A:124:GLN:HB2	2.14	0.48
1:A:247:ARG:HH11	1:A:263:THR:HG23	1.77	0.48
1:A:639:PRO:CG	1:A:640:GLN:H	2.26	0.48
1:A:679:ILE:HG12	1:A:732:LEU:CD1	2.43	0.48
1:A:730:GLY:O	1:A:732:LEU:N	2.46	0.48
1:A:1105:LEU:HD22	1:A:1384:VAL:HG21	1.96	0.48
1:A:1115:SER:O	1:A:1311:VAL:HG22	2.13	0.48
1:A:1187:GLN:HA	1:A:1244:ARG:CD	2.44	0.48
2:B:909:ASP:OD1	2:B:909:ASP:N	2.47	0.48
2:B:1098:MET:O	2:B:1099:VAL:C	2.55	0.48
3:C:260:LEU:O	3:C:264:GLN:HG3	2.13	0.48
8:H:84:ALA:HA	8:H:87:ARG:CG	2.43	0.48
11:K:63:VAL:O	11:K:63:VAL:CG2	2.61	0.48
13:T:10:DA:H2"	13:T:11:DA:C8	2.47	0.48
1:A:88:LYS:HD2	1:A:293:GLU:OE2	2.13	0.48
1:A:244:PRO:CB	1:A:245:PRO:HD3	2.43	0.48
1:A:266:LEU:HD21	1:A:303:TYR:CZ	2.48	0.48
1:A:289:ILE:C	1:A:291:GLU:N	2.71	0.48
1:A:308:ILE:HG22	1:A:309:ALA:N	2.12	0.48
1:A:358:ASN:ND2	2:B:833:TYR:OH	2.46	0.48
1:A:481:ASP:OD2	1:A:481:ASP:N	2.45	0.48
1:A:595:THR:C	1:A:596:THR:HG23	2.38	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:666:ILE:CD1	1:A:667:GLY:N	2.75	0.48
1:A:710:LEU:N	1:A:710:LEU:HD12	2.28	0.48
1:A:849:MET:HE1	1:A:1061:GLY:HA2	1.95	0.48
2:B:50:SER:OG	2:B:411:PRO:HD3	2.13	0.48
2:B:319:GLU:HA	2:B:322:PHE:HB2	1.96	0.48
2:B:651:LEU:C	2:B:653:VAL:N	2.71	0.48
2:B:660:LYS:C	2:B:679:TYR:HD2	2.22	0.48
2:B:792:MET:HE2	2:B:857:ARG:CZ	2.44	0.48
2:B:797:TYR:O	10:J:1:MET:HG2	2.12	0.48
2:B:1030:LEU:CD1	2:B:1059:LEU:HD22	2.44	0.48
2:B:1033:LYS:NZ	2:B:1070:GLU:OE1	2.45	0.48
2:B:1177:HIS:HB2	2:B:1179:GLN:HE21	1.77	0.48
2:B:1202:LEU:C	2:B:1206:GLU:HG3	2.37	0.48
3:C:79:GLN:HG3	3:C:127:ARG:HD2	1.94	0.48
8:H:43:ASN:OD1	8:H:46:LEU:N	2.45	0.48
8:H:129:TYR:C	8:H:130:ARG:HD2	2.38	0.48
10:J:2:ILE:HG12	10:J:57:ILE:HD12	1.95	0.48
10:J:24:LEU:CD1	10:J:38:ARG:HG2	2.44	0.48
1:A:79:GLY:CA	1:A:243:PRO:HG3	2.44	0.48
1:A:106:VAL:C	1:A:114:LEU:HD21	2.38	0.48
1:A:142:CYS:C	1:A:144:THR:H	2.22	0.48
1:A:444:PHE:HB3	1:A:458:HIS:CD2	2.48	0.48
1:A:587:HIS:CE1	1:A:609:ASP:H	2.31	0.48
1:A:785:PRO:O	2:B:702:LEU:HD12	2.14	0.48
1:A:1057:VAL:CG1	1:A:1058:VAL:N	2.76	0.48
1:A:1329:THR:HG23	1:A:1335:ILE:HG13	1.95	0.48
2:B:39:ARG:NH2	2:B:665:GLU:HG2	2.27	0.48
2:B:653:VAL:O	2:B:654:ARG:HD3	2.14	0.48
2:B:731:VAL:HG12	2:B:732:SER:H	1.79	0.48
2:B:864:LYS:HD2	2:B:872:GLU:OE2	2.14	0.48
2:B:1072:MET:CG	2:B:1085:ILE:HD13	2.43	0.48
2:B:1166:CYS:O	2:B:1166:CYS:SG	2.71	0.48
3:C:77:ILE:C	3:C:79:GLN:N	2.72	0.48
4:D:134:THR:CG2	4:D:135:GLY:N	2.75	0.48
7:G:144:ARG:HG2	7:G:168:LEU:HD23	1.96	0.48
10:J:36:LEU:HD11	10:J:51:LEU:HB2	1.95	0.48
14:N:4:DA:H2"	14:N:5:DC:C6	2.48	0.48
1:A:29:ALA:HB1	2:B:1184:GLY:CA	2.43	0.48
1:A:356:ASP:OD1	1:A:358:ASN:N	2.35	0.48
1:A:586:ILE:HD11	1:A:633:VAL:HA	1.95	0.48
1:A:943:LEU:C	1:A:945:GLU:H	2.20	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:993:LEU:HD23	1:A:1022:LEU:HD11	1.94	0.48
2:B:35:SER:HA	2:B:811:TYR:CE2	2.38	0.48
2:B:38:PHE:O	2:B:39:ARG:C	2.56	0.48
2:B:595:ARG:HG3	2:B:595:ARG:HH11	1.78	0.48
2:B:687:GLU:CB	2:B:689:LEU:HG	2.43	0.48
2:B:707:PRO:O	2:B:708:GLU:O	2.32	0.48
2:B:1040:ASN:O	2:B:1041:GLU:C	2.57	0.48
4:D:40:HIS:CD2	7:G:73:LYS:HZ2	2.30	0.48
5:E:198:ILE:H	5:E:198:ILE:CD1	2.27	0.48
8:H:100:THR:HG1	8:H:138:GLU:HG3	1.75	0.48
8:H:139:ASN:O	8:H:140:ALA:CB	2.61	0.48
10:J:1:MET:H1	10:J:56:LEU:CB	2.24	0.48
11:K:42:LEU:HD21	11:K:46:ILE:HD12	1.94	0.48
12:L:61:THR:CG2	12:L:63:ARG:HB2	2.44	0.48
1:A:134:ARG:C	1:A:136:ALA:H	2.20	0.48
1:A:466:SER:CB	2:B:1103:ILE:HG12	2.35	0.48
1:A:573:SER:O	1:A:574:GLY:C	2.57	0.48
1:A:746:MET:HE3	2:B:1018:PRO:HG2	1.96	0.48
1:A:866:PHE:N	5:E:208:TYR:OH	2.43	0.48
2:B:373:ARG:HG2	2:B:566:LEU:HD23	1.96	0.48
2:B:502:ILE:HD12	2:B:502:ILE:N	2.26	0.48
2:B:526:GLU:CD	2:B:752:ALA:HB3	2.39	0.48
2:B:597:MET:O	2:B:599:THR:N	2.46	0.48
2:B:705:MET:N	2:B:710:LEU:HD12	2.28	0.48
2:B:1174:LYS:O	2:B:1175:LEU:C	2.56	0.48
3:C:88:CYS:O	3:C:90:ASP:N	2.47	0.48
5:E:4:GLU:HA	5:E:4:GLU:OE1	2.14	0.48
9:I:102:VAL:HA	9:I:108:HIS:O	2.14	0.48
1:A:787:PHE:CZ	1:A:796:SER:HA	2.49	0.48
1:A:859:SER:HB2	1:A:1422:ARG:HB2	1.96	0.48
1:A:865:GLN:NE2	1:A:1370:LEU:HD13	2.29	0.48
1:A:909:ASP:C	1:A:911:SER:H	2.21	0.48
1:A:1123:GLY:O	1:A:1125:ALA:N	2.47	0.48
1:A:1130:GLN:HE21	1:A:1134:ILE:CD1	2.21	0.48
1:A:1224:LEU:HD12	1:A:1241:ARG:O	2.13	0.48
2:B:123:THR:CB	2:B:458:LYS:HE2	2.44	0.48
2:B:262:GLU:HA	2:B:267:ARG:NH2	2.29	0.48
2:B:1016:ALA:HA	2:B:1020:ARG:NH1	2.29	0.48
3:C:6:PRO:CB	11:K:101:LEU:HD12	2.44	0.48
3:C:15:LYS:HG2	3:C:15:LYS:O	2.14	0.48
3:C:66:ARG:HH21	10:J:5:VAL:HG23	1.77	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:47:LEU:HD13	4:D:48:ILE:N	2.22	0.48
4:D:151:PHE:HZ	7:G:90:THR:HG1	1.60	0.48
5:E:83:CYS:C	5:E:85:GLU:N	2.70	0.48
5:E:90:VAL:O	5:E:90:VAL:HG22	2.14	0.48
6:F:85:MET:HE2	6:F:93:ILE:HD12	1.96	0.48
1:A:150:THR:OG1	1:A:166:GLY:HA2	2.13	0.48
1:A:441:PRO:HD2	1:A:498:ARG:NH2	2.29	0.48
1:A:509:LEU:O	1:A:511:ILE:N	2.47	0.48
1:A:725:ALA:O	1:A:726:ARG:C	2.56	0.48
1:A:966:ASN:O	1:A:967:ALA:C	2.57	0.48
1:A:1161:THR:HG22	1:A:1163:ILE:HG13	1.95	0.48
1:A:1290:LYS:O	1:A:1291:VAL:HG23	2.14	0.48
1:A:1425:SER:O	1:A:1426:GLU:C	2.57	0.48
1:A:1450:LEU:HD13	6:F:131:PRO:HG3	1.95	0.48
2:B:254:LEU:CD2	2:B:381:MET:HE1	2.44	0.48
2:B:358:LYS:HA	2:B:366:GLN:HB3	1.96	0.48
2:B:430:ARG:O	2:B:434:ARG:CD	2.62	0.48
2:B:539:LEU:H	2:B:539:LEU:CD1	2.17	0.48
2:B:899:ILE:HD11	2:B:910:VAL:O	2.14	0.48
2:B:1084:GLN:OE1	3:C:189:THR:CG2	2.61	0.48
2:B:1156:ASP:O	2:B:1157:ALA:O	2.32	0.48
2:B:1163:CYS:SG	2:B:1165:ILE:HB	2.54	0.48
4:D:164:ILE:CG2	4:D:168:LYS:HD2	2.38	0.48
6:F:106:PRO:HG2	7:G:18:PHE:C	2.38	0.48
6:F:113:GLY:O	6:F:114:GLU:C	2.57	0.48
1:A:64:ASN:H	1:A:74:MET:CE	2.19	0.47
1:A:107:CYS:HB2	1:A:171:GLN:NE2	2.29	0.47
1:A:331:GLY:O	1:A:332:LYS:O	2.31	0.47
1:A:392:VAL:HG21	1:A:426:LEU:HD11	1.96	0.47
1:A:734:GLU:C	1:A:736:ASN:N	2.70	0.47
1:A:1422:ARG:HH12	2:B:1224:PHE:HD2	1.62	0.47
1:A:1424:VAL:HG13	1:A:1436:ILE:CD1	2.35	0.47
2:B:174:LEU:HD22	2:B:202:TYR:CE1	2.49	0.47
2:B:340:ALA:C	2:B:342:GLY:H	2.21	0.47
2:B:345:LYS:O	2:B:347:LYS:N	2.47	0.47
2:B:405:ARG:HA	2:B:631:GLY:O	2.14	0.47
2:B:519:TRP:NE1	2:B:635:ARG:NH2	2.61	0.47
2:B:603:LEU:HD12	2:B:609:ILE:HG12	1.96	0.47
2:B:642:ASP:C	2:B:644:GLU:H	2.22	0.47
2:B:708:GLU:CG	2:B:709:ASP:H	2.19	0.47
2:B:976:ILE:O	2:B:990:ILE:HB	2.13	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1197:PRO:C	2:B:1199:ALA:N	2.71	0.47
3:C:8:VAL:HG21	11:K:105:PHE:HA	1.96	0.47
4:D:10:THR:HG23	4:D:10:THR:O	2.13	0.47
4:D:198:LEU:HA	4:D:201:LYS:HD2	1.95	0.47
5:E:137:GLU:C	5:E:139:ALA:N	2.72	0.47
7:G:115:MET:SD	7:G:119:LEU:HD23	2.53	0.47
11:K:17:SER:O	11:K:18:LYS:C	2.56	0.47
11:K:46:ILE:O	11:K:46:ILE:HG22	2.14	0.47
1:A:409:SER:O	1:A:410:GLY:C	2.56	0.47
1:A:592:ASP:N	1:A:595:THR:OG1	2.46	0.47
1:A:596:THR:C	1:A:597:LEU:HD12	2.38	0.47
1:A:700:ASN:C	1:A:701:LEU:HD23	2.39	0.47
1:A:1038:THR:HG23	1:A:1041:ALA:CB	2.44	0.47
1:A:1198:ASP:HB3	1:A:1201:ALA:CB	2.43	0.47
1:A:1293:SER:O	1:A:1294:PRO:C	2.54	0.47
1:A:1313:LEU:CD1	1:A:1327:ILE:HD13	2.44	0.47
2:B:52:ASN:O	2:B:55:VAL:N	2.44	0.47
2:B:128:LEU:HD12	2:B:128:LEU:N	2.29	0.47
2:B:186:GLU:HG3	10:J:62:ARG:NH1	2.29	0.47
2:B:324:ILE:HD11	2:B:329:THR:O	2.14	0.47
2:B:328:GLU:C	2:B:330:ALA:N	2.71	0.47
2:B:476:ARG:O	2:B:477:ALA:C	2.57	0.47
2:B:516:ASN:C	2:B:518:HIS:N	2.71	0.47
2:B:613:VAL:HG13	2:B:628:THR:CA	2.43	0.47
2:B:642:ASP:CB	2:B:649:LYS:HG3	2.43	0.47
2:B:1058:LEU:O	2:B:1061:GLU:HB2	2.14	0.47
5:E:33:GLU:O	5:E:36:GLU:N	2.47	0.47
7:G:62:LEU:CB	7:G:63:PRO:HD2	2.33	0.47
12:L:43:THR:HG22	12:L:43:THR:O	2.13	0.47
1:A:44:THR:O	1:A:45:GLN:HB2	2.15	0.47
1:A:90:VAL:CG1	1:A:297:GLN:HA	2.43	0.47
1:A:93:VAL:HG23	1:A:304:MET:HE3	1.96	0.47
1:A:185:TRP:CE3	1:A:185:TRP:N	2.82	0.47
1:A:518:LYS:HE2	1:A:624:SER:O	2.14	0.47
1:A:555:ASP:O	1:A:556:TRP:C	2.56	0.47
1:A:600:PRO:CG	1:A:601:LYS:H	2.20	0.47
1:A:714:PHE:HB2	9:I:97:MET:HE1	1.95	0.47
1:A:826:ASP:C	1:A:828:ALA:N	2.68	0.47
1:A:1054:LEU:HD13	6:F:84:TYR:OH	2.13	0.47
1:A:1159:ARG:HD3	1:A:1174:PHE:CZ	2.49	0.47
1:A:1199:ARG:HH21	1:A:1234:GLU:HA	1.78	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:239:GLU:HA	2:B:254:LEU:O	2.14	0.47
2:B:605:ARG:HB3	2:B:688:GLY:CA	2.45	0.47
2:B:708:GLU:O	2:B:709:ASP:C	2.57	0.47
2:B:762:ASN:HD21	2:B:1024:ALA:HB3	1.79	0.47
2:B:994:TYR:CD1	2:B:999:MET:HE1	2.50	0.47
2:B:1033:LYS:NZ	2:B:1068:GLY:O	2.47	0.47
2:B:1167:GLY:HA3	2:B:1215:ARG:HB3	1.95	0.47
3:C:76:ASP:O	3:C:78:GLU:N	2.44	0.47
5:E:49:SER:OG	5:E:50:MET:HE3	2.14	0.47
5:E:117:THR:CG2	5:E:119:SER:HB2	2.43	0.47
7:G:8:SER:O	7:G:9:LEU:HB2	2.14	0.47
7:G:96:GLN:HA	7:G:121:PHE:CE2	2.49	0.47
8:H:36:CYS:HB2	8:H:130:ARG:HH22	1.79	0.47
8:H:130:ARG:N	8:H:130:ARG:CD	2.73	0.47
1:A:332:LYS:C	1:A:333:GLU:HG2	2.39	0.47
1:A:447:GLN:HE22	13:T:20:DG:H4'	1.79	0.47
1:A:506:ALA:O	1:A:509:LEU:HB2	2.14	0.47
1:A:509:LEU:C	1:A:511:ILE:N	2.70	0.47
1:A:536:LEU:O	1:A:537:ARG:C	2.58	0.47
1:A:628:GLY:O	1:A:632:VAL:HG23	2.14	0.47
1:A:645:LEU:HG	1:A:649:ILE:HD11	1.95	0.47
1:A:725:ALA:O	1:A:728:LYS:HG2	2.14	0.47
1:A:958:VAL:CG2	1:A:1053:PHE:HA	2.44	0.47
1:A:1273:LEU:N	1:A:1273:LEU:CD1	2.76	0.47
1:A:1430:LEU:HB3	1:A:1432:GLN:HG3	1.95	0.47
2:B:39:ARG:HG2	2:B:39:ARG:NH1	2.29	0.47
2:B:226:PHE:HA	2:B:395:GLN:HG3	1.97	0.47
2:B:435:THR:C	2:B:437:GLU:H	2.22	0.47
2:B:635:ARG:HB2	2:B:636:PRO:HD2	1.96	0.47
2:B:766:ARG:HG3	2:B:1022:THR:CG2	2.41	0.47
2:B:1081:LEU:O	2:B:1083:ALA:N	2.48	0.47
3:C:86:CYS:SG	3:C:87:PHE:N	2.87	0.47
3:C:183:TRP:O	3:C:184:ASN:HB3	2.14	0.47
4:D:47:LEU:HD11	7:G:3:PHE:HD2	1.78	0.47
4:D:68:ARG:O	4:D:72:ARG:HG3	2.14	0.47
5:E:138:ALA:HA	5:E:141:VAL:HG23	1.96	0.47
6:F:109:VAL:CG1	6:F:110:ASP:N	2.76	0.47
9:I:25:LEU:CB	9:I:38:ALA:HB2	2.45	0.47
1:A:381:THR:HG22	1:A:383:TYR:CD2	2.49	0.47
1:A:556:TRP:C	1:A:558:GLY:N	2.73	0.47
1:A:728:LYS:O	1:A:732:LEU:HG	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1243:VAL:HG22	1:A:1244:ARG:H	1.80	0.47
1:A:1243:VAL:HG22	1:A:1244:ARG:N	2.28	0.47
1:A:1332:PHE:N	1:A:1332:PHE:CD2	2.83	0.47
1:A:1443:VAL:HG11	6:F:132:LEU:HD13	1.96	0.47
2:B:261:ARG:NH1	2:B:262:GLU:H	2.13	0.47
2:B:288:ALA:N	2:B:330:ALA:HB1	2.29	0.47
2:B:370:PHE:HD2	2:B:373:ARG:HD2	1.79	0.47
2:B:412:LEU:HD13	2:B:479:VAL:HG11	1.96	0.47
2:B:604:ARG:O	2:B:606:LYS:N	2.47	0.47
5:E:30:ILE:HG23	5:E:34:GLU:OE1	2.15	0.47
5:E:90:VAL:HB	5:E:120:ALA:HB2	1.96	0.47
5:E:93:MET:C	5:E:95:THR:N	2.71	0.47
6:F:135:ARG:HG2	6:F:137:TYR:CE1	2.48	0.47
9:I:111:THR:CG2	9:I:112:SER:N	2.76	0.47
1:A:69:THR:O	1:A:70:CYS:C	2.58	0.47
1:A:230:ARG:HG3	1:A:233:TRP:CZ3	2.49	0.47
1:A:399:HIS:CB	1:A:400:PRO:CD	2.84	0.47
1:A:605:MET:HG2	1:A:621:THR:HG23	1.97	0.47
1:A:852:TYR:HD2	1:A:1060:PRO:CB	2.27	0.47
2:B:192:LEU:C	2:B:194:GLU:H	2.22	0.47
2:B:572:HIS:O	2:B:573:GLN:C	2.58	0.47
2:B:778:MET:HE1	2:B:853:SER:HB3	1.97	0.47
2:B:1104:HIS:CG	2:B:1122:ARG:HB2	2.50	0.47
4:D:40:HIS:HB2	7:G:73:LYS:CD	2.44	0.47
4:D:116:SER:O	4:D:117:GLU:C	2.57	0.47
5:E:45:LYS:HB3	5:E:46:TYR:CD1	2.49	0.47
5:E:73:PRO:HB2	5:E:74:ASP:OD1	2.15	0.47
7:G:1:MET:HE1	7:G:80:LYS:O	2.14	0.47
8:H:26:ILE:HG22	8:H:27:GLU:N	2.28	0.47
8:H:79:TRP:O	8:H:80:ARG:C	2.57	0.47
1:A:207:ILE:O	1:A:208:LEU:C	2.58	0.47
1:A:233:TRP:O	1:A:235:ILE:N	2.47	0.47
1:A:322:VAL:O	1:A:322:VAL:HG13	2.13	0.47
1:A:392:VAL:C	1:A:394:ASN:N	2.73	0.47
1:A:526:ASP:HB2	2:B:835:GLN:CD	2.40	0.47
1:A:572:TRP:HA	1:A:576:GLN:OE1	2.14	0.47
1:A:746:MET:HE1	2:B:1018:PRO:HG2	1.97	0.47
1:A:822:GLU:O	1:A:825:ILE:HG22	2.15	0.47
1:A:890:ASP:OD2	1:A:1296:GLY:HA2	2.14	0.47
1:A:1037:LEU:HD13	1:A:1041:ALA:CB	2.43	0.47
1:A:1378:GLN:OE1	1:A:1378:GLN:HA	2.15	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1389:PHE:O	1:A:1391:ARG:N	2.44	0.47
1:A:1423:GLY:O	1:A:1424:VAL:C	2.57	0.47
2:B:54:PHE:HE1	2:B:414:ALA:HA	1.79	0.47
2:B:336:ARG:NE	2:B:348:ARG:HH12	2.03	0.47
2:B:496:ARG:HD2	2:B:751:VAL:HG23	1.97	0.47
2:B:515:HIS:CD2	2:B:517:THR:HG23	2.49	0.47
2:B:539:LEU:HD12	2:B:539:LEU:N	2.17	0.47
2:B:557:PHE:CZ	2:B:603:LEU:HD21	2.49	0.47
2:B:591:ARG:O	2:B:593:PRO:HD3	2.15	0.47
2:B:618:ASP:O	2:B:622:LYS:N	2.47	0.47
2:B:898:LEU:HD13	2:B:952:VAL:CG1	2.44	0.47
2:B:955:THR:HG22	2:B:956:THR:N	2.30	0.47
2:B:1053:GLU:O	2:B:1057:LYS:HG3	2.15	0.47
3:C:27:LEU:O	3:C:28:ALA:C	2.56	0.47
4:D:12:ARG:HG3	4:D:14:ARG:NH2	2.30	0.47
5:E:78:LEU:HD23	5:E:79:TRP:N	2.29	0.47
6:F:75:PRO:C	6:F:77:ASP:N	2.70	0.47
7:G:1:MET:O	7:G:2:PHE:C	2.58	0.47
8:H:11:GLN:O	8:H:28:ALA:CB	2.63	0.47
1:A:7:SER:O	1:A:9:ALA:N	2.48	0.47
1:A:38:PRO:HG2	1:A:39:GLU:N	2.30	0.47
1:A:635:ARG:HA	1:A:635:ARG:NH1	2.24	0.47
1:A:755:PHE:O	1:A:758:ILE:HG13	2.15	0.47
1:A:933:TYR:O	1:A:937:VAL:HG23	2.15	0.47
1:A:1063:MET:SD	1:A:1436:ILE:HG12	2.55	0.47
1:A:1209:MET:SD	1:A:1236:LEU:HB3	2.55	0.47
1:A:1362:TYR:CD1	1:A:1363:VAL:N	2.83	0.47
1:A:1399:ARG:HB3	1:A:1408:ILE:CD1	2.44	0.47
1:A:1399:ARG:HB3	1:A:1408:ILE:HD13	1.97	0.47
2:B:130:VAL:HG23	2:B:167:ILE:HD13	1.95	0.47
2:B:203:PHE:N	2:B:203:PHE:CD1	2.83	0.47
2:B:911:ILE:O	2:B:911:ILE:HG22	2.14	0.47
3:C:238:ILE:CD1	3:C:246:ARG:HD2	2.44	0.47
5:E:87:SER:O	5:E:88:VAL:C	2.58	0.47
5:E:138:ALA:HA	5:E:141:VAL:CG2	2.45	0.47
8:H:40:LEU:HB2	8:H:123:MET:HE3	1.97	0.47
9:I:14:LEU:HD22	9:I:28:GLU:O	2.15	0.47
1:A:9:ALA:CB	2:B:1193:GLN:HB2	2.44	0.47
1:A:352:VAL:O	1:A:467:THR:HG22	2.15	0.47
1:A:531:ILE:HD11	1:A:578:LEU:CD2	2.44	0.47
1:A:783:THR:HB	1:A:787:PHE:CD1	2.50	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:802:ASN:CG	2:B:728:ARG:HB2	2.39	0.47
1:A:829:VAL:O	1:A:831:THR:N	2.48	0.47
1:A:1035:TYR:CD1	1:A:1037:LEU:HD23	2.47	0.47
1:A:1366:ARG:HG2	1:A:1366:ARG:HH11	1.79	0.47
1:A:1409:LEU:O	1:A:1410:PHE:C	2.58	0.47
2:B:373:ARG:HA	2:B:566:LEU:HD23	1.97	0.47
3:C:105:GLY:HA3	3:C:148:ARG:O	2.15	0.47
6:F:82:THR:HG23	6:F:84:TYR:H	1.79	0.47
9:I:101:PHE:N	9:I:101:PHE:HD1	2.13	0.47
1:A:108:MET:HB3	1:A:210:ILE:CD1	2.45	0.47
1:A:120:GLU:O	1:A:121:LEU:C	2.58	0.47
1:A:146:MET:HB3	1:A:171:GLN:O	2.15	0.47
1:A:162:VAL:HG12	1:A:163:SER:N	2.29	0.47
1:A:191:THR:HG22	1:A:192:GLY:N	2.30	0.47
1:A:929:LEU:CD1	1:A:929:LEU:O	2.63	0.47
1:A:1345:ARG:HD2	1:A:1373:ASP:OD1	2.14	0.47
1:A:1375:MET:HE3	1:A:1384:VAL:CG2	2.45	0.47
2:B:540:SER:HB3	2:B:747:MET:O	2.15	0.47
2:B:705:MET:H	2:B:710:LEU:CD1	2.27	0.47
2:B:973:ILE:HG23	2:B:974:PRO:HD2	1.96	0.47
2:B:1156:ASP:O	2:B:1157:ALA:C	2.58	0.47
3:C:29:MET:HA	11:K:45:LEU:HD13	1.96	0.47
3:C:187:LYS:C	3:C:189:THR:H	2.22	0.47
3:C:258:ILE:O	3:C:262:LEU:HG	2.14	0.47
5:E:47:CYS:HA	5:E:52:ARG:O	2.15	0.47
5:E:108:GLY:HA3	5:E:132:ILE:HG22	1.96	0.47
5:E:169:ARG:HB3	6:F:140:ASP:OD2	2.14	0.47
8:H:103:LYS:HG2	8:H:104:PHE:N	2.29	0.47
8:H:113:ALA:HB1	8:H:125:LEU:O	2.14	0.47
9:I:16:PRO:HB2	9:I:25:LEU:HD11	1.97	0.47
10:J:56:LEU:O	10:J:59:LYS:N	2.48	0.47
1:A:342:GLY:HA3	2:B:1131:GLY:HA2	1.97	0.46
1:A:567:LYS:HZ1	8:H:47:PHE:CB	2.27	0.46
1:A:606:LEU:CG	1:A:613:ILE:HD12	2.44	0.46
1:A:690:VAL:O	1:A:691:LEU:C	2.59	0.46
1:A:777:PHE:C	1:A:779:PHE:N	2.71	0.46
1:A:826:ASP:O	1:A:827:THR:C	2.57	0.46
1:A:896:ARG:HD3	1:A:897:TYR:HE1	1.79	0.46
1:A:1030:ARG:O	1:A:1034:GLU:HB2	2.15	0.46
1:A:1140:HIS:HA	1:A:1275:GLY:HA3	1.97	0.46
1:A:1259:MET:O	1:A:1263:ILE:HD12	2.14	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1444:MET:HE2	1:A:1444:MET:HB2	1.70	0.46
2:B:505:ASP:O	2:B:506:GLY:C	2.57	0.46
2:B:810:GLU:CB	2:B:815:ARG:NH2	2.77	0.46
2:B:843:GLN:O	2:B:844:SER:C	2.57	0.46
2:B:1055:ILE:O	2:B:1057:LYS:N	2.48	0.46
3:C:104:PHE:HB3	3:C:106:GLU:OE1	2.14	0.46
3:C:125:MET:HG3	3:C:127:ARG:NH2	2.30	0.46
4:D:29:LEU:HD22	7:G:82:PHE:CE2	2.50	0.46
5:E:4:GLU:HB3	5:E:7:ARG:HE	1.80	0.46
6:F:89:GLU:HB3	6:F:134:ILE:CD1	2.45	0.46
7:G:139:ILE:HG22	7:G:140:LYS:N	2.29	0.46
8:H:82:PRO:HG2	8:H:83:GLN:N	2.30	0.46
11:K:65:HIS:HD2	11:K:67:PHE:N	2.07	0.46
11:K:110:ASN:O	11:K:111:LEU:HD23	2.15	0.46
12:L:55:ILE:H	12:L:55:ILE:CD1	2.19	0.46
12:L:60:ARG:HG2	12:L:61:THR:H	1.80	0.46
1:A:84:ILE:O	1:A:84:ILE:CG2	2.63	0.46
1:A:695:LYS:HA	1:A:698:GLN:HB2	1.97	0.46
1:A:728:LYS:O	1:A:729:ALA:C	2.58	0.46
1:A:993:LEU:CD2	1:A:1022:LEU:HD11	2.45	0.46
1:A:1011:GLN:NE2	1:A:1015:VAL:HG21	2.31	0.46
1:A:1143:LEU:O	1:A:1146:VAL:HG23	2.15	0.46
2:B:235:SER:HB2	2:B:267:ARG:HH12	1.80	0.46
2:B:309:GLN:HG3	9:I:52:ILE:CD1	2.44	0.46
2:B:483:LEU:CD1	2:B:491:THR:HG23	2.45	0.46
2:B:566:LEU:O	2:B:567:GLU:C	2.58	0.46
2:B:611:PRO:O	2:B:692:TYR:HB2	2.16	0.46
2:B:871:THR:HG22	2:B:872:GLU:O	2.15	0.46
2:B:1065:GLN:NE2	2:B:1067:ARG:N	2.43	0.46
2:B:1068:GLY:O	2:B:1069:PHE:O	2.33	0.46
3:C:115:SER:HB3	3:C:142:VAL:HB	1.96	0.46
5:E:178:ILE:HG22	5:E:213:ILE:O	2.15	0.46
7:G:13:LEU:HD21	7:G:17:PHE:HB2	1.97	0.46
7:G:88:ASP:HA	7:G:144:ARG:HA	1.97	0.46
9:I:100:PHE:N	9:I:100:PHE:CD1	2.83	0.46
1:A:289:ILE:O	1:A:292:ALA:N	2.32	0.46
1:A:575:LYS:HD2	8:H:120:GLY:HA2	1.95	0.46
1:A:877:HIS:C	1:A:878:ILE:CG1	2.89	0.46
1:A:1441:PHE:CE1	6:F:92:ARG:HG2	2.50	0.46
1:A:1445:ILE:HD11	7:G:68:ALA:HB1	1.96	0.46
2:B:53:GLN:HG2	2:B:547:VAL:CG2	2.46	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:126:SER:HB3	2:B:172:ILE:HD11	1.98	0.46
2:B:397:ASP:OD1	2:B:399:ASP:N	2.38	0.46
2:B:498:THR:N	2:B:537:LYS:O	2.49	0.46
2:B:547:VAL:HG13	2:B:548:GLY:N	2.30	0.46
2:B:654:ARG:C	2:B:656:GLY:H	2.23	0.46
2:B:806:THR:HB	2:B:809:MET:HG3	1.98	0.46
2:B:864:LYS:HD2	2:B:872:GLU:CD	2.40	0.46
2:B:934:LYS:O	2:B:934:LYS:HG2	2.14	0.46
2:B:1060:ARG:HA	2:B:1060:ARG:HD2	1.68	0.46
2:B:1125:ASP:O	2:B:1125:ASP:OD1	2.34	0.46
3:C:228:PHE:CD1	3:C:228:PHE:N	2.83	0.46
4:D:46:GLU:HG2	4:D:47:LEU:N	2.31	0.46
11:K:77:THR:HG21	11:K:83:PRO:HA	1.97	0.46
1:A:705:LYS:O	1:A:706:HIS:C	2.58	0.46
1:A:874:ASP:CA	1:A:1058:VAL:HG23	2.46	0.46
1:A:889:SER:CB	1:A:1297:GLU:HG3	2.44	0.46
1:A:949:ASP:OD2	1:A:951:GLU:HB2	2.15	0.46
1:A:1152:ILE:HD11	9:I:44:TYR:CE2	2.50	0.46
2:B:261:ARG:O	2:B:263:GLY:N	2.48	0.46
2:B:287:ARG:HH11	2:B:324:ILE:HG22	1.81	0.46
2:B:435:THR:CG2	2:B:437:GLU:HB2	2.45	0.46
2:B:467:GLY:O	2:B:468:GLU:C	2.58	0.46
2:B:581:PHE:O	2:B:626:ILE:HB	2.16	0.46
2:B:1001:PHE:CE2	3:C:34:ARG:CZ	2.99	0.46
2:B:1065:GLN:HB2	3:C:201:TRP:CZ3	2.50	0.46
4:D:4:SER:O	7:G:9:LEU:HD13	2.15	0.46
4:D:119:ARG:HD3	4:D:221:TYR:HE2	1.80	0.46
6:F:82:THR:HG22	6:F:84:TYR:H	1.80	0.46
8:H:83:GLN:C	8:H:85:GLY:H	2.23	0.46
1:A:159:THR:O	1:A:159:THR:HG22	2.16	0.46
1:A:203:SER:O	1:A:206:GLU:HB3	2.16	0.46
1:A:226:GLU:O	1:A:226:GLU:HG2	2.14	0.46
1:A:360:GLU:O	1:A:361:LEU:C	2.59	0.46
1:A:369:SER:HB2	11:K:2:ASN:HD21	1.81	0.46
1:A:427:GLN:HB2	1:A:430:TRP:NE1	2.31	0.46
1:A:516:SER:O	1:A:517:ASN:C	2.58	0.46
1:A:608:ILE:CB	1:A:613:ILE:HD11	2.42	0.46
1:A:802:ASN:HD21	2:B:728:ARG:HB2	1.76	0.46
1:A:857:ARG:CZ	6:F:139:PRO:CB	2.93	0.46
1:A:1284:MET:O	1:A:1285:MET:HG2	2.15	0.46
1:A:1341:ILE:CG2	1:A:1342:GLU:N	2.76	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:8:PHE:HZ	4:D:37:GLN:HB2	1.79	0.46
5:E:29:PHE:N	5:E:65:THR:HG22	2.31	0.46
6:F:111:LEU:HD12	6:F:111:LEU:N	2.10	0.46
7:G:18:PHE:HZ	7:G:68:ALA:HB2	1.80	0.46
9:I:25:LEU:CG	9:I:38:ALA:HB2	2.46	0.46
1:A:50:ILE:C	1:A:52:GLY:N	2.73	0.46
1:A:393:ARG:CB	1:A:393:ARG:HH11	2.27	0.46
1:A:642:CYS:O	1:A:645:LEU:HB3	2.16	0.46
1:A:751:SER:O	1:A:752:LYS:HG2	2.15	0.46
1:A:870:GLU:O	1:A:871:ASP:HB3	2.15	0.46
1:A:1111:MET:HE1	1:A:1332:PHE:CE2	2.51	0.46
2:B:205:ILE:N	2:B:205:ILE:CD1	2.79	0.46
2:B:529:GLU:OE2	2:B:769:TYR:CE1	2.68	0.46
2:B:597:MET:O	2:B:598:GLU:C	2.58	0.46
2:B:610:ASN:C	2:B:612:GLU:H	2.23	0.46
2:B:753:ALA:O	2:B:756:ILE:HG13	2.15	0.46
2:B:762:ASN:OD1	2:B:1022:THR:HA	2.14	0.46
2:B:1168:LEU:HD22	2:B:1208:MET:HE2	1.97	0.46
3:C:13:ALA:O	11:K:114:LEU:HD22	2.14	0.46
3:C:82:TYR:CG	3:C:161:LYS:HG2	2.51	0.46
5:E:145:THR:HG21	5:E:187:TYR:CD2	2.50	0.46
6:F:114:GLU:OE2	6:F:119:ARG:HG2	2.15	0.46
7:G:15:PRO:HG3	7:G:66:GLY:C	2.40	0.46
7:G:59:GLY:CA	7:G:70:PHE:CD2	2.97	0.46
7:G:145:VAL:HG12	7:G:146:LYS:H	1.80	0.46
9:I:25:LEU:HG	9:I:38:ALA:HB2	1.97	0.46
9:I:62:ILE:O	9:I:62:ILE:HG12	2.15	0.46
10:J:14:VAL:O	10:J:14:VAL:CG1	2.63	0.46
1:A:79:GLY:H	2:B:1205:GLN:HE22	1.64	0.46
1:A:184:SER:HB3	1:A:199:LEU:CD2	2.44	0.46
1:A:372:LYS:HA	1:A:435:HIS:CE1	2.50	0.46
1:A:516:SER:O	1:A:518:LYS:HB3	2.16	0.46
1:A:672:ASP:OD2	1:A:674:PRO:HG2	2.16	0.46
1:A:720:ARG:HB3	1:A:720:ARG:CZ	2.46	0.46
1:A:852:TYR:CE1	6:F:136:ARG:HG2	2.51	0.46
1:A:939:ASP:O	1:A:940:ARG:C	2.59	0.46
1:A:1140:HIS:HB2	1:A:1276:VAL:O	2.16	0.46
1:A:1176:LEU:C	1:A:1176:LEU:HD23	2.41	0.46
1:A:1340:GLY:O	1:A:1342:GLU:N	2.48	0.46
1:A:1438:THR:O	6:F:92:ARG:NH1	2.49	0.46
1:A:1444:MET:HG3	7:G:59:GLY:O	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:827:ILE:HD12	2:B:1086:PHE:CD2	2.51	0.46
2:B:844:SER:O	2:B:847:ASP:HB2	2.16	0.46
2:B:860:MET:HG2	2:B:861:ASP:H	1.80	0.46
2:B:1001:PHE:CD1	2:B:1001:PHE:C	2.93	0.46
3:C:58:LEU:N	3:C:58:LEU:CD2	2.79	0.46
10:J:32:GLU:CD	10:J:32:GLU:H	2.24	0.46
11:K:61:TYR:HD2	11:K:61:TYR:O	1.98	0.46
1:A:718:VAL:O	1:A:721:PHE:HB2	2.16	0.46
1:A:875:ALA:HA	1:A:878:ILE:CD1	2.45	0.46
1:A:897:TYR:N	1:A:897:TYR:CD1	2.83	0.46
1:A:932:GLU:O	1:A:936:LEU:HG	2.16	0.46
1:A:947:PHE:C	1:A:949:ASP:N	2.74	0.46
1:A:1258:HIS:HB3	1:A:1259:MET:CE	2.46	0.46
1:A:1345:ARG:NH1	5:E:200:ARG:NH2	2.64	0.46
1:A:1449:SER:C	1:A:1451:VAL:H	2.23	0.46
1:A:1451:VAL:C	1:A:1453:TYR:N	2.73	0.46
2:B:100:PRO:HD3	2:B:172:ILE:HD13	1.98	0.46
2:B:199:MET:HE2	2:B:492:LEU:CD2	2.44	0.46
2:B:240:ILE:HG23	2:B:240:ILE:O	2.15	0.46
2:B:292:ILE:HG23	2:B:326:ASP:HA	1.98	0.46
2:B:333:PHE:CD2	2:B:333:PHE:O	2.69	0.46
2:B:390:LEU:O	2:B:391:ASP:C	2.58	0.46
2:B:834:ASN:O	2:B:838:SER:O	2.32	0.46
2:B:879:ARG:NH1	2:B:885:MET:HE2	2.31	0.46
2:B:890:TYR:O	2:B:893:LEU:HB2	2.16	0.46
3:C:35:ARG:HH11	11:K:41:THR:CA	2.29	0.46
3:C:226:ASP:O	3:C:227:THR:HB	2.16	0.46
4:D:29:LEU:HD22	7:G:82:PHE:CD2	2.51	0.46
4:D:39:ASN:C	4:D:41:GLN:H	2.23	0.46
4:D:155:ARG:HB2	4:D:155:ARG:CZ	2.45	0.46
4:D:185:CYS:HB2	4:D:211:LEU:HD21	1.96	0.46
5:E:64:PRO:O	5:E:65:THR:C	2.59	0.46
5:E:82:PHE:CD1	5:E:82:PHE:N	2.83	0.46
9:I:55:THR:HG22	9:I:55:THR:O	2.16	0.46
10:J:64:ASN:ND2	10:J:65:PRO:HD3	2.31	0.46
11:K:89:ASN:O	11:K:91:CYS:N	2.49	0.46
1:A:377:PRO:HG3	1:A:493:GLN:HG3	1.98	0.46
1:A:407:ARG:HA	1:A:430:TRP:CD2	2.51	0.46
1:A:896:ARG:HH21	1:A:1030:ARG:CZ	2.29	0.46
2:B:291:ILE:HD13	2:B:300:HIS:CD2	2.51	0.46
2:B:552:MET:N	2:B:553:PRO:HD2	2.30	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:579:ARG:HA	2:B:589:VAL:HG22	1.98	0.46
2:B:1020:ARG:HH11	2:B:1020:ARG:HG3	1.80	0.46
2:B:1106:ARG:HD3	2:B:1126:GLY:C	2.41	0.46
2:B:1106:ARG:HD3	2:B:1127:GLY:N	2.31	0.46
2:B:1133:MET:HE2	2:B:1133:MET:HA	1.98	0.46
3:C:10:ILE:HG13	11:K:108:GLU:HB3	1.98	0.46
3:C:245:VAL:HA	3:C:248:ILE:HD12	1.98	0.46
5:E:93:MET:O	5:E:94:LYS:C	2.59	0.46
6:F:148:VAL:HA	6:F:151:LEU:HD12	1.96	0.46
8:H:25:ARG:HB2	8:H:41:ASP:OD1	2.15	0.46
11:K:82:ASP:OD1	11:K:84:LYS:N	2.46	0.46
12:L:39:SER:O	12:L:40:LEU:HG	2.15	0.46
1:A:616:VAL:CG1	1:A:617:VAL:H	2.19	0.46
1:A:619:LYS:O	1:A:623:GLY:HA3	2.16	0.46
1:A:1018:PHE:O	1:A:1021:LEU:N	2.49	0.46
1:A:1118:VAL:O	1:A:1305:VAL:HG13	2.16	0.46
1:A:1261:LYS:HE3	9:I:44:TYR:CE2	2.51	0.46
1:A:1372:VAL:O	1:A:1376:THR:HG23	2.16	0.46
1:A:1402:PHE:O	1:A:1402:PHE:CG	2.67	0.46
1:A:1418:LEU:HB3	2:B:1222:ARG:HH11	1.79	0.46
2:B:47:GLN:O	2:B:173:MET:HE1	2.16	0.46
2:B:756:ILE:O	2:B:759:PRO:HD3	2.16	0.46
2:B:1065:GLN:HG3	2:B:1067:ARG:H	1.80	0.46
2:B:1221:SER:HB3	4:D:12:ARG:NE	2.30	0.46
3:C:46:ILE:HD12	3:C:67:LEU:O	2.16	0.46
4:D:119:ARG:HD3	4:D:221:TYR:HD2	1.76	0.46
5:E:89:GLY:C	5:E:91:LYS:N	2.72	0.46
5:E:167:ARG:HA	5:E:167:ARG:HD3	1.66	0.46
5:E:190:LEU:HD12	5:E:214:CYS:CB	2.45	0.46
5:E:195:VAL:CG1	5:E:196:VAL:N	2.78	0.46
7:G:26:LEU:O	7:G:27:LYS:C	2.59	0.46
7:G:34:VAL:HG13	7:G:45:ILE:HG21	1.98	0.46
7:G:51:TYR:HD2	7:G:51:TYR:O	1.98	0.46
7:G:127:PRO:HG2	7:G:138:THR:CG2	2.34	0.46
8:H:15:VAL:HG22	8:H:26:ILE:CG2	2.45	0.46
8:H:37:LYS:HD2	8:H:126:GLU:OE1	2.16	0.46
8:H:40:LEU:CD2	8:H:123:MET:HE3	2.41	0.46
11:K:68:PHE:CD2	11:K:68:PHE:N	2.84	0.46
12:L:30:ILE:HG22	12:L:31:CYS:N	2.31	0.46
1:A:503:GLN:NE2	6:F:90:ARG:HH21	2.12	0.45
1:A:560:ILE:CG1	8:H:79:TRP:H	2.29	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:590:ARG:HD3	1:A:592:ASP:OD2	2.16	0.45
1:A:699:ALA:O	1:A:700:ASN:CB	2.64	0.45
1:A:944:ARG:NE	1:A:1298:TYR:HE1	2.14	0.45
1:A:1239:ARG:C	1:A:1240:CYS:SG	2.98	0.45
1:A:1239:ARG:NH1	1:A:1239:ARG:HB3	2.30	0.45
1:A:1427:ASN:H	1:A:1427:ASN:ND2	2.14	0.45
2:B:25:ILE:HG23	2:B:658:ILE:CD1	2.43	0.45
2:B:128:LEU:O	2:B:167:ILE:HD12	2.16	0.45
2:B:235:SER:OG	2:B:236:HIS:CD2	2.69	0.45
2:B:286:PHE:HE1	2:B:382:ILE:HD12	1.81	0.45
2:B:479:VAL:HG12	2:B:480:SER:N	2.31	0.45
2:B:601:ARG:NH1	2:B:605:ARG:HH22	2.14	0.45
2:B:601:ARG:O	2:B:605:ARG:HG3	2.16	0.45
2:B:680:THR:HG23	2:B:683:SER:H	1.81	0.45
2:B:693:ILE:HD13	2:B:701:ILE:HD13	1.97	0.45
2:B:1007:VAL:HG23	2:B:1008:PRO:HD2	1.97	0.45
2:B:1072:MET:HE2	2:B:1087:PHE:HB2	1.98	0.45
3:C:35:ARG:NH1	11:K:41:THR:CA	2.79	0.45
3:C:254:LYS:C	3:C:256:ALA:N	2.74	0.45
5:E:164:LEU:HD11	5:E:211:TYR:CE1	2.51	0.45
6:F:77:ASP:O	6:F:78:GLN:CB	2.55	0.45
7:G:13:LEU:HD23	7:G:14:HIS:N	2.27	0.45
8:H:4:THR:HG22	8:H:6:PHE:H	1.81	0.45
9:I:2:THR:O	9:I:3:THR:C	2.59	0.45
11:K:100:ALA:O	11:K:103:THR:HB	2.17	0.45
1:A:88:LYS:HG3	1:A:276:LEU:HD21	1.98	0.45
1:A:150:THR:O	1:A:163:SER:HA	2.16	0.45
1:A:239:LEU:HA	1:A:240:PRO:HD2	1.81	0.45
1:A:728:LYS:HA	1:A:731:ARG:HH21	1.80	0.45
1:A:896:ARG:HH21	1:A:1030:ARG:NH2	2.14	0.45
1:A:1051:ALA:O	1:A:1055:ARG:HG3	2.16	0.45
1:A:1262:LYS:O	1:A:1264:GLU:N	2.49	0.45
2:B:59:LEU:HD12	2:B:417:PHE:CD2	2.51	0.45
2:B:102:VAL:HG23	2:B:110:HIS:O	2.16	0.45
2:B:265:SER:C	2:B:267:ARG:N	2.74	0.45
2:B:1181:GLU:HG2	2:B:1188:LYS:HD2	1.98	0.45
3:C:133:ILE:HG13	3:C:237:SER:H	1.80	0.45
4:D:137:ASN:C	4:D:139:LYS:H	2.24	0.45
7:G:123:ALA:C	7:G:125:SER:H	2.24	0.45
8:H:93:TYR:CD1	8:H:143:LEU:HD23	2.51	0.45
11:K:107:THR:HG22	11:K:108:GLU:N	2.30	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:54:ASN:HA	1:A:247:ARG:HH22	1.82	0.45
1:A:332:LYS:H	1:A:337:ARG:HB3	1.81	0.45
1:A:514:PRO:C	1:A:516:SER:N	2.72	0.45
1:A:684:ALA:O	1:A:687:LYS:HB2	2.16	0.45
1:A:966:ASN:C	1:A:968:GLN:N	2.73	0.45
1:A:1141:THR:HG23	1:A:1205:LYS:HZ2	1.80	0.45
1:A:1332:PHE:H	1:A:1332:PHE:HD2	1.61	0.45
2:B:128:LEU:HD11	2:B:170:LEU:HB3	1.98	0.45
2:B:469:GLN:O	2:B:470:LYS:HB2	2.16	0.45
2:B:570:VAL:HB	2:B:573:GLN:HB3	1.99	0.45
2:B:834:ASN:ND2	2:B:1013:ASN:HA	2.31	0.45
2:B:1039:GLY:HA2	10:J:51:LEU:CD2	2.47	0.45
3:C:56:THR:CG2	3:C:58:LEU:HD23	2.46	0.45
4:D:196:PRO:O	4:D:197:SER:C	2.57	0.45
5:E:91:LYS:C	5:E:93:MET:N	2.72	0.45
7:G:1:MET:CE	7:G:80:LYS:O	2.64	0.45
12:L:52:GLY:O	12:L:53:HIS:C	2.59	0.45
1:A:26:GLU:O	1:A:27:VAL:C	2.58	0.45
1:A:447:GLN:HA	1:A:448:PRO:C	2.41	0.45
1:A:524:VAL:CG1	1:A:525:GLN:H	2.28	0.45
1:A:714:PHE:O	1:A:715:GLU:C	2.60	0.45
1:A:731:ARG:O	1:A:732:LEU:C	2.59	0.45
1:A:821:ARG:HB2	1:A:821:ARG:HH11	1.81	0.45
1:A:964:ILE:O	1:A:967:ALA:N	2.48	0.45
1:A:1166:ASP:OD2	1:A:1239:ARG:NE	2.40	0.45
1:A:1191:TRP:HD1	1:A:1256:GLU:HB3	1.80	0.45
1:A:1197:LEU:HD12	1:A:1209:MET:HE1	1.97	0.45
1:A:1402:PHE:O	1:A:1403:GLU:CB	2.64	0.45
2:B:324:ILE:HG23	2:B:325:GLN:N	2.30	0.45
2:B:435:THR:C	2:B:437:GLU:N	2.73	0.45
2:B:487:THR:H	2:B:490:SER:HB3	1.79	0.45
2:B:782:LEU:HB3	2:B:784:ASN:OD1	2.16	0.45
2:B:1149:GLU:HA	2:B:1153:GLU:OE1	2.16	0.45
3:C:77:ILE:HG23	3:C:161:LYS:HZ2	1.80	0.45
3:C:91:HIS:HA	3:C:95:CYS:SG	2.56	0.45
4:D:51:ASN:C	4:D:52:LEU:O	2.57	0.45
4:D:191:ALA:O	4:D:193:THR:N	2.49	0.45
4:D:208:GLU:O	4:D:212:LYS:HG3	2.16	0.45
5:E:11:ARG:O	5:E:13:TRP:N	2.49	0.45
5:E:50:MET:HB3	5:E:52:ARG:NH1	2.32	0.45
9:I:15:TYR:CD1	9:I:15:TYR:N	2.83	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:99:LEU:C	9:I:100:PHE:HD1	2.24	0.45
13:T:10:DA:H2"	13:T:11:DA:OP2	2.16	0.45
1:A:108:MET:SD	1:A:210:ILE:HD13	2.56	0.45
1:A:896:ARG:NH2	1:A:1030:ARG:NE	2.55	0.45
1:A:996:ASN:HB3	1:A:1050:GLU:OE2	2.17	0.45
1:A:1100:ARG:NH2	1:A:1351:GLU:CG	2.72	0.45
1:A:1279:ILE:C	1:A:1280:GLU:HG3	2.42	0.45
1:A:1313:LEU:CD2	1:A:1338:VAL:HG21	2.43	0.45
2:B:131:ASP:HA	2:B:164:LYS:N	2.32	0.45
2:B:180:TYR:CD1	2:B:180:TYR:N	2.78	0.45
2:B:383:ASN:ND2	2:B:387:LEU:HD11	2.32	0.45
2:B:457:LEU:O	2:B:458:LYS:C	2.58	0.45
2:B:502:ILE:HG22	2:B:507:LYS:CG	2.47	0.45
2:B:503:GLY:HA3	2:B:507:LYS:CE	2.32	0.45
2:B:661:LEU:C	2:B:663:ALA:H	2.22	0.45
2:B:766:ARG:HG2	2:B:766:ARG:NH1	2.30	0.45
2:B:880:THR:HB	2:B:934:LYS:HE3	1.95	0.45
3:C:29:MET:HE2	11:K:98:LEU:HD23	1.98	0.45
6:F:116:ASP:OD1	6:F:119:ARG:HB2	2.17	0.45
7:G:94:CYS:HA	7:G:99:PHE:HA	1.98	0.45
8:H:58:THR:HG22	8:H:59:ILE:N	2.31	0.45
15:P:6:A:H2'	15:P:7:G:C8	2.51	0.45
15:P:6:A:H2'	15:P:7:G:H8	1.82	0.45
1:A:241:VAL:O	1:A:242:PRO:C	2.58	0.45
1:A:254:GLU:O	1:A:255:SER:OG	2.32	0.45
1:A:402:ALA:HB1	1:A:434:ARG:HA	1.96	0.45
1:A:531:ILE:HG23	1:A:532:ARG:N	2.32	0.45
1:A:703:THR:C	1:A:705:LYS:H	2.24	0.45
1:A:867:ILE:CG2	1:A:872:GLY:H	2.30	0.45
1:A:1019:CYS:O	1:A:1020:CYS:C	2.59	0.45
1:A:1176:LEU:HD23	1:A:1176:LEU:O	2.17	0.45
1:A:1384:VAL:C	1:A:1385:THR:CG2	2.89	0.45
1:A:1441:PHE:HE1	6:F:92:ARG:HG2	1.81	0.45
2:B:186:GLU:HG3	10:J:62:ARG:HH22	1.80	0.45
2:B:361:LEU:O	2:B:363:HIS:O	2.35	0.45
2:B:408:LEU:HD12	2:B:408:LEU:HA	1.74	0.45
2:B:975:GLN:HG2	2:B:976:ILE:H	1.82	0.45
3:C:6:PRO:HB3	3:C:25:VAL:HG12	1.98	0.45
4:D:210:ILE:HG13	4:D:210:ILE:H	1.42	0.45
4:D:218:GLU:O	4:D:219:THR:C	2.60	0.45
6:F:93:ILE:CD1	6:F:148:VAL:HG12	2.47	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:92:VAL:CG2	7:G:102:GLN:HB2	2.46	0.45
9:I:13:MET:HE2	9:I:14:LEU:H	1.78	0.45
9:I:50:THR:HG22	9:I:52:ILE:H	1.81	0.45
9:I:90:GLN:NE2	9:I:92:ARG:HD2	2.31	0.45
11:K:83:PRO:O	11:K:84:LYS:C	2.60	0.45
1:A:7:SER:O	4:D:1:MET:HG3	2.17	0.45
1:A:11:LEU:HD22	2:B:1195:HIS:CD2	2.52	0.45
1:A:418:SER:O	1:A:420:ARG:N	2.45	0.45
1:A:700:ASN:HD22	9:I:115:LYS:HD2	1.81	0.45
1:A:1140:HIS:N	1:A:1275:GLY:HA3	2.32	0.45
1:A:1349:TYR:C	1:A:1349:TYR:CD2	2.94	0.45
1:A:1427:ASN:O	1:A:1431:GLY:N	2.47	0.45
2:B:38:PHE:HD1	2:B:811:TYR:HD2	1.60	0.45
2:B:199:MET:SD	2:B:199:MET:N	2.88	0.45
2:B:290:GLY:HA2	2:B:327:ARG:HD2	1.98	0.45
2:B:383:ASN:CG	2:B:387:LEU:HD11	2.42	0.45
2:B:530:GLY:C	2:B:531:GLN:HG2	2.41	0.45
2:B:792:MET:HE2	2:B:857:ARG:NH2	2.31	0.45
2:B:806:THR:HG21	2:B:808:ALA:HB3	1.99	0.45
2:B:876:LYS:HD2	2:B:893:LEU:O	2.17	0.45
2:B:1081:LEU:O	2:B:1083:ALA:O	2.34	0.45
3:C:64:ALA:HA	3:C:67:LEU:HD12	1.97	0.45
4:D:8:PHE:HD2	7:G:6:ASP:O	1.99	0.45
5:E:45:LYS:HD3	5:E:46:TYR:HE1	1.81	0.45
6:F:116:ASP:OD1	6:F:119:ARG:N	2.50	0.45
7:G:27:LYS:HG2	7:G:54:ILE:HD12	1.98	0.45
1:A:345:VAL:CG2	2:B:1150:ARG:HH22	2.29	0.45
1:A:350:ARG:O	1:A:351:THR:HG22	2.17	0.45
1:A:786:HIS:CE1	2:B:705:MET:SD	3.10	0.45
1:A:1194:ARG:HG3	1:A:1237:ILE:CG2	2.46	0.45
1:A:1350:LYS:O	1:A:1354:ASN:ND2	2.50	0.45
1:A:1436:ILE:O	1:A:1439:GLY:N	2.39	0.45
1:A:1444:MET:HG3	7:G:60:ARG:CA	2.41	0.45
2:B:205:ILE:C	2:B:207:GLY:N	2.73	0.45
2:B:638:PHE:HB2	2:B:741:CYS:HB3	1.99	0.45
2:B:785:TYR:HE2	10:J:60:PHE:CE1	2.35	0.45
2:B:806:THR:HG22	2:B:807:ARG:N	2.32	0.45
2:B:814:PHE:C	2:B:816:GLU:H	2.24	0.45
2:B:906:SER:O	2:B:907:GLY:O	2.33	0.45
3:C:241:ASP:O	3:C:245:VAL:HG22	2.16	0.45
6:F:82:THR:HA	6:F:83:PRO:HD3	1.71	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:K:42:LEU:HD23	11:K:42:LEU:C	2.42	0.45
12:L:60:ARG:HG2	12:L:61:THR:N	2.32	0.45
1:A:41:MET:HB2	1:A:50:ILE:H	1.82	0.45
1:A:323:LYS:HD2	1:A:323:LYS:N	2.30	0.45
1:A:369:SER:HB2	11:K:2:ASN:OD1	2.17	0.45
2:B:29:ASP:HB3	2:B:658:ILE:CD1	2.46	0.45
2:B:100:PRO:CG	2:B:180:TYR:HE1	2.30	0.45
2:B:383:ASN:O	2:B:385:LEU:N	2.49	0.45
2:B:547:VAL:HG13	2:B:548:GLY:H	1.82	0.45
2:B:1138:MET:HE2	2:B:1146:PHE:CD2	2.51	0.45
2:B:1152:MET:C	2:B:1157:ALA:HB2	2.42	0.45
2:B:1159:ARG:HD3	2:B:1193:GLN:HG3	1.97	0.45
5:E:2:ASP:O	5:E:3:GLN:C	2.59	0.45
5:E:17:ARG:HG3	5:E:18:THR:N	2.31	0.45
5:E:74:ASP:OD1	5:E:74:ASP:N	2.49	0.45
5:E:180:ARG:HB2	5:E:215:MET:OXT	2.16	0.45
6:F:93:ILE:O	6:F:94:LEU:C	2.60	0.45
7:G:9:LEU:HD12	7:G:9:LEU:C	2.41	0.45
7:G:14:HIS:ND1	7:G:15:PRO:CD	2.80	0.45
7:G:27:LYS:HD3	7:G:51:TYR:CE2	2.52	0.45
8:H:98:TYR:CE1	8:H:139:ASN:HA	2.51	0.45
11:K:10:PHE:N	11:K:10:PHE:CD2	2.84	0.45
11:K:49:GLU:HA	11:K:52:ASN:ND2	2.31	0.45
1:A:21:LEU:CD1	1:A:229:SER:HB2	2.47	0.45
1:A:28:ARG:O	1:A:29:ALA:C	2.59	0.45
1:A:29:ALA:HB1	2:B:1184:GLY:HA3	1.98	0.45
1:A:154:SER:C	1:A:156:ASP:N	2.75	0.45
1:A:273:ASN:O	1:A:274:ILE:C	2.59	0.45
1:A:293:GLU:C	1:A:295:LEU:N	2.75	0.45
1:A:306:ASN:HB2	1:A:324:SER:HB3	1.98	0.45
1:A:341:MET:CE	2:B:1135:ARG:NH1	2.77	0.45
1:A:608:ILE:HD12	1:A:613:ILE:CD1	2.47	0.45
1:A:645:LEU:CG	1:A:649:ILE:HD11	2.47	0.45
1:A:647:GLY:O	1:A:651:LYS:HG3	2.17	0.45
1:A:675:THR:O	1:A:675:THR:HG22	2.17	0.45
1:A:677:ARG:C	1:A:679:ILE:N	2.74	0.45
1:A:681:GLU:C	1:A:683:ILE:H	2.24	0.45
1:A:1155:ASP:CG	1:A:1161:THR:HA	2.41	0.45
1:A:1161:THR:OG1	1:A:1239:ARG:NH2	2.50	0.45
1:A:1167:GLU:O	1:A:1170:ILE:HG13	2.17	0.45
1:A:1175:SER:O	1:A:1176:LEU:CB	2.59	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:304:ASP:OD1	2:B:306:ASN:N	2.51	0.45
2:B:570:VAL:HA	2:B:571:PRO:HD2	1.85	0.45
2:B:593:PRO:CA	2:B:596:LEU:HB3	2.46	0.45
2:B:826:ALA:O	2:B:1011:ILE:HA	2.17	0.45
2:B:1034:VAL:O	2:B:1037:LEU:N	2.36	0.45
2:B:1055:ILE:C	2:B:1057:LYS:N	2.74	0.45
3:C:80:LEU:O	3:C:80:LEU:HG	2.16	0.45
3:C:208:GLU:C	3:C:210:GLU:H	2.25	0.45
4:D:124:GLU:O	4:D:128:VAL:HG23	2.17	0.45
4:D:191:ALA:C	4:D:193:THR:H	2.24	0.45
6:F:70:LYS:C	6:F:72:LYS:N	2.75	0.45
7:G:39:THR:HG22	7:G:40:GLY:H	1.82	0.45
9:I:68:LEU:HB3	9:I:84:VAL:HG23	1.99	0.45
10:J:1:MET:H1	10:J:56:LEU:CA	2.30	0.45
11:K:49:GLU:HG3	11:K:94:ILE:CG1	2.47	0.45
12:L:44:ASP:O	12:L:45:ALA:CB	2.65	0.45
13:T:12:DG:N2	14:N:6:DT:C2	2.85	0.45
13:T:25:DG:H2"	13:T:26:DT:C5'	2.47	0.45
1:A:41:MET:CE	1:A:42:ASP:HB2	2.47	0.44
1:A:108:MET:HE3	1:A:210:ILE:HD12	1.96	0.44
1:A:567:LYS:CB	8:H:96:VAL:H	2.26	0.44
1:A:661:GLY:O	1:A:662:PHE:HB2	2.16	0.44
1:A:794:PRO:C	1:A:796:SER:N	2.75	0.44
1:A:871:ASP:O	1:A:873:MET:N	2.50	0.44
1:A:1151:GLU:HG2	9:I:45:ARG:CB	2.47	0.44
1:A:1341:ILE:CG2	1:A:1342:GLU:H	2.29	0.44
1:A:1359:ASP:C	1:A:1361:SER:H	2.25	0.44
2:B:834:ASN:HB3	2:B:840:ILE:HG13	1.99	0.44
3:C:114:TYR:OH	10:J:19:GLU:OE1	2.34	0.44
3:C:220:ASP:OD1	3:C:223:ALA:N	2.50	0.44
3:C:239:PRO:O	3:C:241:ASP:N	2.50	0.44
4:D:185:CYS:CB	4:D:211:LEU:HD21	2.47	0.44
5:E:84:ASP:O	5:E:86:PRO:HD3	2.17	0.44
5:E:92:THR:O	5:E:92:THR:HG22	2.17	0.44
8:H:128:ASN:OD1	8:H:128:ASN:O	2.35	0.44
10:J:3:VAL:HG21	10:J:18:TRP:CB	2.47	0.44
12:L:40:LEU:HB3	12:L:41:SER:H	1.56	0.44
1:A:186:LYS:O	1:A:187:LYS:HB3	2.16	0.44
1:A:618:GLU:O	1:A:621:THR:N	2.44	0.44
1:A:722:LEU:HB3	1:A:799:PHE:CE1	2.52	0.44
1:A:853:ASP:OD1	1:A:855:THR:HG22	2.17	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:968:GLN:O	1:A:970:THR:N	2.51	0.44
1:A:1053:PHE:O	1:A:1054:LEU:C	2.60	0.44
1:A:1383:SER:O	1:A:1388:GLY:HA3	2.17	0.44
2:B:318:VAL:O	2:B:320:ASP:N	2.50	0.44
2:B:335:GLY:HA3	2:B:348:ARG:HB2	1.99	0.44
2:B:693:ILE:HD11	2:B:740:HIS:CD2	2.52	0.44
2:B:701:ILE:HB	2:B:739:THR:OG1	2.17	0.44
2:B:980:PHE:HE1	2:B:990:ILE:HD11	1.82	0.44
2:B:986:GLN:OE1	2:B:986:GLN:HA	2.18	0.44
2:B:1201:LYS:HE2	2:B:1205:GLN:HE22	1.80	0.44
3:C:5:GLY:O	3:C:6:PRO:C	2.60	0.44
3:C:6:PRO:HB3	3:C:25:VAL:CG1	2.47	0.44
3:C:9:LYS:O	3:C:10:ILE:C	2.60	0.44
3:C:173:ALA:O	3:C:174:ALA:CB	2.65	0.44
5:E:13:TRP:CH2	5:E:39:LEU:HB2	2.52	0.44
6:F:97:ARG:HG3	6:F:124:GLU:OE1	2.17	0.44
10:J:2:ILE:HG23	10:J:3:VAL:O	2.18	0.44
11:K:29:ASN:O	11:K:76:GLN:HG3	2.16	0.44
1:A:47:ARG:O	1:A:48:ALA:HB2	2.17	0.44
1:A:525:GLN:O	1:A:526:ASP:C	2.60	0.44
1:A:666:ILE:HD11	2:B:1086:PHE:HE1	1.83	0.44
1:A:683:ILE:O	1:A:686:ALA:N	2.44	0.44
1:A:700:ASN:HB2	9:I:98:VAL:CG2	2.48	0.44
1:A:770:VAL:O	1:A:771:GLU:HB2	2.16	0.44
1:A:858:ASN:ND2	1:A:860:LEU:H	2.15	0.44
1:A:1220:PHE:O	1:A:1221:LYS:CB	2.65	0.44
1:A:1404:GLU:HB2	1:A:1408:ILE:CD1	2.40	0.44
1:A:1409:LEU:O	1:A:1412:ALA:HB3	2.17	0.44
2:B:172:ILE:HG22	2:B:173:MET:O	2.17	0.44
2:B:827:ILE:O	2:B:828:ALA:CB	2.61	0.44
3:C:181:ASP:OD2	3:C:185:LYS:N	2.50	0.44
3:C:258:ILE:HD12	3:C:258:ILE:N	2.32	0.44
4:D:22:GLU:N	4:D:22:GLU:OE1	2.38	0.44
5:E:22:MET:CE	5:E:26:ARG:HD2	2.46	0.44
5:E:26:ARG:HG2	5:E:28:TYR:HE1	1.82	0.44
5:E:212:ARG:CG	5:E:212:ARG:NH1	2.78	0.44
6:F:70:LYS:HA	6:F:72:LYS:HZ1	1.82	0.44
6:F:85:MET:CB	6:F:155:LEU:HD11	2.46	0.44
7:G:163:ILE:HA	7:G:168:LEU:HD13	2.00	0.44
9:I:55:THR:O	9:I:56:ALA:C	2.59	0.44
11:K:21:ILE:HG22	11:K:31:VAL:HG12	1.98	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:L:47:ARG:HG2	12:L:54:ARG:HG2	1.99	0.44
14:N:5:DC:H2'	14:N:6:DT:H72	1.98	0.44
1:A:6:TYR:CE1	4:D:1:MET:HG3	2.52	0.44
1:A:75:ASN:O	1:A:76:GLU:HB2	2.18	0.44
1:A:119:ASN:O	1:A:122:MET:HB3	2.17	0.44
1:A:315:LEU:HD13	2:B:471:LYS:O	2.18	0.44
1:A:341:MET:HE1	1:A:1425:SER:CB	2.47	0.44
1:A:843:LYS:HD3	1:A:843:LYS:HA	1.82	0.44
1:A:879:GLU:OE2	1:A:959:ASN:ND2	2.48	0.44
1:A:1159:ARG:HD3	1:A:1174:PHE:HZ	1.81	0.44
2:B:312:GLU:O	2:B:315:LYS:HB2	2.17	0.44
2:B:425:THR:O	2:B:428:ILE:HD12	2.17	0.44
2:B:953:LEU:HB3	12:L:57:LEU:CD2	2.47	0.44
2:B:1001:PHE:CD2	3:C:34:ARG:NH2	2.85	0.44
3:C:143:LEU:HD21	3:C:146:LYS:HE3	1.99	0.44
3:C:166:GLU:C	11:K:6:ARG:NH1	2.76	0.44
4:D:60:LYS:HZ1	4:D:122:GLU:CD	2.25	0.44
4:D:167:LEU:O	4:D:169:SER:N	2.50	0.44
5:E:124:VAL:C	5:E:126:SER:H	2.26	0.44
7:G:63:PRO:HG2	7:G:64:THR:H	1.82	0.44
9:I:22:ASN:O	9:I:23:ASN:HB2	2.15	0.44
10:J:44:TYR:O	10:J:45:CYS:C	2.60	0.44
10:J:48:ARG:HE	10:J:49:MET:CE	2.30	0.44
12:L:40:LEU:CD1	12:L:44:ASP:HB3	2.28	0.44
1:A:34:LYS:HD3	1:A:34:LYS:N	2.33	0.44
1:A:106:VAL:HG21	1:A:214:ILE:HD13	2.00	0.44
1:A:134:ARG:CG	1:A:138:ILE:HD11	2.37	0.44
1:A:280:GLU:O	1:A:282:ASN:N	2.50	0.44
1:A:590:ARG:NH2	1:A:620:LYS:C	2.76	0.44
1:A:1107:VAL:O	1:A:1107:VAL:CG1	2.63	0.44
1:A:1120:LEU:H	1:A:1120:LEU:CD1	2.29	0.44
2:B:353:LYS:O	2:B:354:ASP:C	2.59	0.44
2:B:401:PHE:HB2	2:B:517:THR:OG1	2.17	0.44
2:B:784:ASN:O	2:B:788:ARG:HG3	2.17	0.44
2:B:827:ILE:HD12	2:B:1086:PHE:HD2	1.83	0.44
2:B:995:ARG:O	2:B:996:ARG:C	2.60	0.44
2:B:1107:ALA:O	2:B:1108:ARG:O	2.36	0.44
2:B:1200:ALA:HA	2:B:1203:LEU:HB3	1.99	0.44
3:C:83:SER:OG	3:C:160:LYS:HD3	2.18	0.44
3:C:268:ASP:O	3:C:269:LYS:CB	2.65	0.44
5:E:55:ARG:O	5:E:57:MET:N	2.51	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:157:SER:C	5:E:159:ASP:H	2.26	0.44
6:F:110:ASP:O	6:F:111:LEU:C	2.58	0.44
7:G:26:LEU:HD23	7:G:26:LEU:HA	1.85	0.44
7:G:39:THR:HB	7:G:42:PHE:H	1.83	0.44
7:G:41:LYS:HD3	7:G:42:PHE:CE1	2.52	0.44
7:G:91:VAL:HA	7:G:101:VAL:HA	2.00	0.44
8:H:77:ARG:O	8:H:78:SER:O	2.34	0.44
8:H:92:ASP:C	8:H:93:TYR:CD1	2.96	0.44
9:I:83:ASN:OD1	9:I:103:CYS:HA	2.17	0.44
9:I:100:PHE:N	9:I:100:PHE:HD1	2.15	0.44
11:K:18:LYS:NZ	11:K:37:LYS:O	2.51	0.44
1:A:7:SER:OG	2:B:1193:GLN:NE2	2.51	0.44
1:A:472:LEU:HD11	2:B:835:GLN:NE2	2.33	0.44
1:A:605:MET:HE2	1:A:607:ILE:CD1	2.48	0.44
1:A:608:ILE:CG1	1:A:613:ILE:HD11	2.47	0.44
1:A:1217:LYS:O	1:A:1221:LYS:N	2.50	0.44
2:B:129:PHE:CE2	2:B:166:PHE:HD1	2.36	0.44
2:B:304:ASP:OD1	2:B:306:ASN:HB2	2.17	0.44
2:B:426:LYS:O	2:B:429:PHE:HB2	2.18	0.44
2:B:522:VAL:HG12	2:B:523:CYS:N	2.33	0.44
2:B:797:TYR:HE2	3:C:62:PHE:HA	1.82	0.44
2:B:797:TYR:CE1	2:B:971:THR:HG23	2.48	0.44
2:B:798:TYR:HE1	10:J:4:PRO:HA	1.83	0.44
2:B:1084:GLN:C	2:B:1085:ILE:HD12	2.43	0.44
2:B:1142:GLY:HA3	6:F:88:TYR:CE2	2.46	0.44
4:D:115:HIS:H	4:D:115:HIS:CD2	2.36	0.44
5:E:159:ASP:HA	5:E:162:ARG:HH22	1.80	0.44
6:F:103:MET:CE	7:G:66:GLY:N	2.68	0.44
10:J:20:SER:O	10:J:24:LEU:HG	2.18	0.44
10:J:24:LEU:HD12	10:J:39:LEU:CD1	2.44	0.44
10:J:24:LEU:CD1	10:J:39:LEU:HD11	2.45	0.44
11:K:99:GLY:O	11:K:100:ALA:C	2.60	0.44
12:L:40:LEU:HD11	12:L:49:LYS:NZ	2.32	0.44
1:A:49:LYS:HZ2	1:A:60:SER:HA	1.82	0.44
1:A:79:GLY:HA3	1:A:243:PRO:HG2	1.96	0.44
1:A:447:GLN:H	1:A:447:GLN:HG3	1.55	0.44
1:A:492:PRO:HB3	1:A:501:LEU:HD11	1.99	0.44
1:A:693:VAL:HG21	1:A:721:PHE:HE1	1.83	0.44
1:A:857:ARG:CZ	6:F:139:PRO:HB2	2.47	0.44
1:A:1100:ARG:HH12	1:A:1111:MET:CE	2.30	0.44
1:A:1329:THR:HG22	1:A:1335:ILE:HG13	2.00	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1381:LEU:HA	1:A:1381:LEU:HD23	1.71	0.44
2:B:53:GLN:HG2	2:B:547:VAL:HG23	2.00	0.44
2:B:276:ILE:O	2:B:276:ILE:HG22	2.18	0.44
2:B:650:GLU:HG3	2:B:651:LEU:N	2.32	0.44
2:B:791:THR:O	2:B:792:MET:CB	2.66	0.44
2:B:825:VAL:HG21	2:B:1092:TYR:CE1	2.53	0.44
2:B:871:THR:HG22	2:B:872:GLU:N	2.32	0.44
2:B:903:VAL:CG1	2:B:904:ARG:N	2.79	0.44
2:B:975:GLN:HE22	2:B:1100:ASP:CG	2.26	0.44
2:B:1080:LYS:HD2	3:C:188:HIS:CB	2.46	0.44
2:B:1167:GLY:CA	2:B:1216:LEU:H	2.30	0.44
3:C:14:SER:C	3:C:16:ASP:N	2.74	0.44
3:C:72:LEU:O	3:C:237:SER:HB3	2.17	0.44
4:D:40:HIS:HD2	7:G:73:LYS:HG3	1.81	0.44
4:D:56:ARG:HH21	4:D:155:ARG:HA	1.79	0.44
4:D:73:SER:C	4:D:75:LYS:H	2.26	0.44
7:G:92:VAL:HG21	7:G:102:GLN:HB2	1.99	0.44
8:H:64:ASN:ND2	8:H:88:SER:O	2.50	0.44
8:H:82:PRO:HG2	8:H:83:GLN:H	1.82	0.44
9:I:86:PHE:CD1	9:I:86:PHE:C	2.96	0.44
1:A:203:SER:OG	1:A:206:GLU:HB2	2.18	0.44
1:A:258:GLY:O	1:A:259:GLU:O	2.36	0.44
1:A:266:LEU:O	1:A:267:ALA:C	2.61	0.44
1:A:299:HIS:C	1:A:301:ALA:N	2.75	0.44
1:A:446:ARG:HB3	1:A:478:TYR:HB3	1.99	0.44
1:A:532:ARG:NH1	1:A:532:ARG:HG2	2.33	0.44
1:A:910:PRO:HB3	1:A:917:SER:N	2.33	0.44
1:A:982:THR:HB	1:A:985:ASP:H	1.83	0.44
1:A:1208:THR:HG22	1:A:1210:GLY:N	2.32	0.44
1:A:1220:PHE:CD1	1:A:1224:LEU:HD23	2.53	0.44
1:A:1244:ARG:CB	1:A:1245:PRO:CA	2.89	0.44
2:B:40:GLU:OE1	2:B:682:SER:HB2	2.17	0.44
2:B:132:VAL:H	2:B:164:LYS:N	2.16	0.44
2:B:186:GLU:O	2:B:187:SER:C	2.60	0.44
2:B:620:ARG:HD2	9:I:68:LEU:HD11	1.99	0.44
2:B:758:PHE:HB3	2:B:761:HIS:HD2	1.82	0.44
2:B:846:ILE:HG23	2:B:974:PRO:HG2	2.00	0.44
3:C:181:ASP:OD2	3:C:186:LEU:HD13	2.18	0.44
4:D:166:LEU:HG	4:D:167:LEU:HD23	2.00	0.44
6:F:94:LEU:CD2	6:F:122:MET:HA	2.46	0.44
9:I:76:PRO:HG2	9:I:110:PHE:HB3	1.99	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:86:PHE:HE1	9:I:100:PHE:HB2	1.80	0.44
1:A:103:CYS:C	1:A:105:CYS:H	2.26	0.44
1:A:258:GLY:O	1:A:259:GLU:C	2.61	0.44
1:A:313:GLN:O	1:A:314:ALA:C	2.59	0.44
1:A:320:ARG:HG2	1:A:322:VAL:H	1.83	0.44
1:A:332:LYS:HG3	1:A:333:GLU:HG2	2.00	0.44
1:A:496:GLU:O	1:A:499:ALA:HB3	2.18	0.44
1:A:994:GLN:HG2	1:A:1022:LEU:HD23	2.00	0.44
1:A:1100:ARG:HH12	1:A:1111:MET:HE3	1.83	0.44
1:A:1265:ASN:O	1:A:1267:MET:N	2.51	0.44
2:B:188:ASP:O	2:B:192:LEU:HD12	2.18	0.44
2:B:210:LYS:HE2	2:B:461:LEU:O	2.17	0.44
2:B:346:GLU:HG2	2:B:347:LYS:N	2.32	0.44
2:B:519:TRP:CD1	2:B:519:TRP:C	2.96	0.44
2:B:616:ILE:CD1	2:B:625:LYS:HB2	2.48	0.44
2:B:766:ARG:HH21	2:B:1020:ARG:HG2	1.83	0.44
2:B:890:TYR:O	2:B:891:ASP:C	2.60	0.44
2:B:893:LEU:C	2:B:894:ASP:O	2.56	0.44
3:C:29:MET:O	3:C:30:ALA:C	2.59	0.44
3:C:88:CYS:SG	3:C:91:HIS:CA	3.06	0.44
4:D:25:ALA:C	4:D:27:LEU:N	2.76	0.44
5:E:90:VAL:HA	5:E:93:MET:HB2	1.99	0.44
5:E:108:GLY:O	5:E:132:ILE:HG22	2.18	0.44
1:A:15:LYS:O	1:A:1420:ASP:O	2.35	0.43
1:A:67:CYS:O	1:A:68:GLN:C	2.61	0.43
1:A:71:GLN:CG	1:A:72:GLU:N	2.80	0.43
1:A:137:ALA:O	1:A:138:ILE:C	2.60	0.43
1:A:262:LEU:CD2	1:A:303:TYR:CE1	3.01	0.43
1:A:350:ARG:C	1:A:351:THR:CG2	2.90	0.43
1:A:543:LEU:CD1	1:A:547:LEU:HG	2.48	0.43
1:A:632:VAL:O	1:A:633:VAL:C	2.61	0.43
1:A:1377:THR:OG1	1:A:1378:GLN:N	2.51	0.43
2:B:224:GLN:HA	2:B:396:ASP:OD2	2.18	0.43
2:B:257:LYS:N	2:B:270:LYS:O	2.51	0.43
3:C:20:PHE:CE1	3:C:230:MET:HB2	2.52	0.43
1:A:71:GLN:HG3	1:A:72:GLU:N	2.32	0.43
1:A:276:LEU:HD11	1:A:293:GLU:HB2	2.00	0.43
1:A:377:PRO:HD3	1:A:493:GLN:OE1	2.18	0.43
1:A:384:ASN:HB3	1:A:387:ARG:HH21	1.82	0.43
1:A:614:PHE:CD1	1:A:614:PHE:C	2.97	0.43
1:A:658:LEU:HD12	2:B:830:TYR:CD1	2.53	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:784:LEU:HD11	1:A:815:PHE:CE2	2.53	0.43
1:A:883:LEU:CD2	1:A:1021:LEU:HB2	2.48	0.43
1:A:946:VAL:C	1:A:947:PHE:HD1	2.26	0.43
1:A:1157:ASP:O	1:A:1159:ARG:N	2.51	0.43
1:A:1194:ARG:HG3	1:A:1237:ILE:HG23	2.00	0.43
2:B:205:ILE:HG12	2:B:461:LEU:HB3	2.00	0.43
2:B:258:LEU:O	2:B:259:TYR:O	2.36	0.43
2:B:283:VAL:O	2:B:284:ILE:C	2.60	0.43
2:B:446:LEU:O	2:B:447:ALA:CB	2.66	0.43
2:B:562:GLY:HA3	2:B:590:HIS:CE1	2.53	0.43
2:B:570:VAL:CG2	2:B:573:GLN:HB3	2.48	0.43
2:B:825:VAL:CG2	2:B:1010:LEU:HD23	2.48	0.43
2:B:865:LYS:CG	2:B:961:LEU:HD21	2.46	0.43
2:B:1063:GLY:O	3:C:202:PRO:HG2	2.18	0.43
3:C:99:LEU:HD23	3:C:99:LEU:N	2.30	0.43
5:E:204:THR:CG2	5:E:205:SER:N	2.79	0.43
7:G:112:LYS:HE3	7:G:113:HIS:CE1	2.53	0.43
8:H:56:THR:HB	8:H:145:ARG:HG2	2.00	0.43
8:H:108:SER:O	8:H:109:LYS:C	2.61	0.43
11:K:5:ASP:O	11:K:6:ARG:C	2.60	0.43
12:L:53:HIS:C	12:L:55:ILE:HD13	2.42	0.43
1:A:113:LEU:C	1:A:114:LEU:HD23	2.43	0.43
1:A:481:ASP:OD1	1:A:485:ASP:OD2	2.37	0.43
1:A:596:THR:C	1:A:598:LEU:N	2.62	0.43
1:A:1005:GLU:O	1:A:1009:ASN:HB2	2.18	0.43
2:B:46:GLN:CG	2:B:47:GLN:H	2.31	0.43
2:B:205:ILE:C	2:B:207:GLY:H	2.26	0.43
2:B:498:THR:O	2:B:498:THR:HG22	2.15	0.43
2:B:827:ILE:O	2:B:1085:ILE:CG2	2.66	0.43
2:B:843:GLN:NE2	2:B:847:ASP:OD1	2.43	0.43
2:B:865:LYS:HE3	2:B:961:LEU:CD2	2.49	0.43
2:B:1084:GLN:OE1	3:C:189:THR:HG22	2.18	0.43
2:B:1116:ARG:HD2	2:B:1198:TYR:CD1	2.53	0.43
4:D:9:GLN:HE22	4:D:31:GLN:HG2	1.83	0.43
4:D:130:LEU:C	4:D:132:GLN:N	2.71	0.43
6:F:80:ALA:H	6:F:144:GLU:CD	2.27	0.43
6:F:119:ARG:HG3	6:F:119:ARG:NH1	2.33	0.43
8:H:24:CYS:HB2	8:H:44:VAL:CG2	2.46	0.43
8:H:144:ILE:CG2	8:H:145:ARG:N	2.81	0.43
9:I:7:CYS:HB2	9:I:34:TYR:CD2	2.53	0.43
11:K:22:ASP:O	11:K:31:VAL:HG13	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:17:VAL:HG23	1:A:1421:CYS:SG	2.58	0.43
1:A:602:ASP:C	1:A:603:ASN:O	2.57	0.43
1:A:877:HIS:O	1:A:878:ILE:HG12	2.17	0.43
1:A:877:HIS:O	1:A:878:ILE:CG1	2.66	0.43
1:A:1011:GLN:HE21	1:A:1015:VAL:HG21	1.82	0.43
1:A:1166:ASP:O	1:A:1167:GLU:C	2.60	0.43
1:A:1168:GLU:C	1:A:1170:ILE:N	2.76	0.43
1:A:1258:HIS:O	1:A:1262:LYS:HG3	2.18	0.43
1:A:1269:GLU:C	1:A:1271:ILE:H	2.27	0.43
1:A:1308:THR:CG2	1:A:1310:GLY:O	2.65	0.43
1:A:1450:LEU:CD1	6:F:108:PHE:CZ	3.01	0.43
2:B:510:LYS:CB	2:B:511:PRO:CD	2.96	0.43
2:B:597:MET:C	2:B:599:THR:N	2.77	0.43
2:B:612:GLU:O	2:B:613:VAL:C	2.61	0.43
2:B:766:ARG:NH1	2:B:769:TYR:HE2	2.16	0.43
2:B:766:ARG:HD2	2:B:984:HIS:O	2.18	0.43
2:B:860:MET:HE3	2:B:860:MET:HB3	1.82	0.43
2:B:890:TYR:CZ	2:B:910:VAL:HG21	2.54	0.43
2:B:1106:ARG:HD2	2:B:1125:ASP:O	2.17	0.43
2:B:1150:ARG:CG	2:B:1150:ARG:NH1	2.70	0.43
3:C:66:ARG:NH1	3:C:144:ILE:O	2.51	0.43
3:C:221:TYR:CD1	3:C:221:TYR:C	2.96	0.43
4:D:52:LEU:N	4:D:182:SER:HB3	2.34	0.43
4:D:53:SER:O	4:D:54:GLU:C	2.60	0.43
5:E:93:MET:HG3	5:E:94:LYS:N	2.33	0.43
6:F:95:GLY:O	6:F:96:THR:C	2.61	0.43
8:H:15:VAL:HG22	8:H:26:ILE:HG21	1.99	0.43
8:H:109:LYS:HD2	8:H:111:LEU:CD1	2.45	0.43
12:L:52:GLY:O	12:L:54:ARG:N	2.51	0.43
1:A:299:HIS:HA	1:A:302:THR:HG22	2.00	0.43
1:A:353:ILE:O	1:A:353:ILE:HG13	2.17	0.43
1:A:528:LEU:HD12	1:A:528:LEU:C	2.42	0.43
1:A:683:ILE:O	1:A:684:ALA:C	2.61	0.43
1:A:715:GLU:OE2	1:A:774:ARG:NH1	2.51	0.43
1:A:779:PHE:CE1	1:A:785:PRO:HD3	2.37	0.43
1:A:783:THR:HB	1:A:787:PHE:HD1	1.84	0.43
1:A:795:GLU:CD	1:A:795:GLU:N	2.76	0.43
1:A:839:ARG:O	1:A:840:ARG:C	2.61	0.43
1:A:885:THR:O	1:A:885:THR:CG2	2.60	0.43
1:A:923:LEU:O	1:A:927:VAL:HG23	2.18	0.43
1:A:999:VAL:HG12	1:A:1000:LEU:HG	1.99	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1105:LEU:CD2	1:A:1384:VAL:HG21	2.48	0.43
1:A:1124:HIS:ND1	1:A:1124:HIS:N	2.51	0.43
1:A:1157:ASP:C	1:A:1159:ARG:N	2.70	0.43
1:A:1225:PHE:O	1:A:1240:CYS:CB	2.67	0.43
2:B:23:ALA:O	2:B:654:ARG:HD2	2.19	0.43
2:B:482:VAL:O	2:B:483:LEU:C	2.61	0.43
2:B:595:ARG:NH1	2:B:595:ARG:HG3	2.33	0.43
2:B:658:ILE:HG22	2:B:659:ALA:N	2.33	0.43
2:B:687:GLU:O	2:B:688:GLY:C	2.60	0.43
2:B:846:ILE:CG2	2:B:974:PRO:HG2	2.49	0.43
2:B:958:GLN:C	2:B:960:GLY:N	2.76	0.43
3:C:123:ASN:C	3:C:125:MET:H	2.25	0.43
3:C:143:LEU:HD21	3:C:146:LYS:CE	2.48	0.43
4:D:138:ASN:ND2	7:G:35:GLU:HB3	2.33	0.43
4:D:202:ILE:HD11	4:D:206:GLU:OE1	2.19	0.43
5:E:102:GLU:C	5:E:104:ASN:N	2.76	0.43
6:F:123:LYS:O	6:F:124:GLU:C	2.61	0.43
7:G:51:TYR:CD2	7:G:51:TYR:O	2.71	0.43
7:G:122:ASN:HB3	7:G:129:SER:OG	2.18	0.43
9:I:2:THR:CG2	9:I:3:THR:N	2.80	0.43
9:I:7:CYS:CB	9:I:14:LEU:HD21	2.41	0.43
11:K:18:LYS:HZ2	11:K:38:GLU:HG2	1.84	0.43
14:N:10:DG:H2"	14:N:11:DC:OP2	2.18	0.43
1:A:49:LYS:CD	1:A:55:ASP:HB3	2.48	0.43
1:A:115:LEU:CD1	1:A:141:LEU:HB3	2.49	0.43
1:A:172:PRO:HB2	1:A:183:GLY:HA3	2.00	0.43
1:A:325:ILE:HG21	2:B:1210:MET:HE2	2.01	0.43
1:A:817:ALA:O	1:A:818:MET:C	2.60	0.43
1:A:942:PHE:C	1:A:942:PHE:CD2	2.97	0.43
1:A:961:ARG:NH1	1:A:961:ARG:HG3	2.34	0.43
1:A:1074:GLU:C	1:A:1076:ALA:N	2.77	0.43
1:A:1108:ALA:C	1:A:1110:ASN:H	2.26	0.43
1:A:1154:TYR:CE2	1:A:1156:PRO:HD3	2.53	0.43
1:A:1223:ASP:HA	1:A:1243:VAL:CG1	2.47	0.43
2:B:785:TYR:HD2	2:B:785:TYR:H	1.66	0.43
2:B:800:GLN:HB2	2:B:821:GLN:HA	2.01	0.43
2:B:867:GLY:O	2:B:869:SER:N	2.46	0.43
2:B:1116:ARG:HG3	2:B:1198:TYR:CD2	2.54	0.43
3:C:41:ILE:CG2	3:C:172:PRO:HG3	2.49	0.43
3:C:55:THR:O	3:C:55:THR:HG22	2.17	0.43
3:C:186:LEU:O	3:C:187:LYS:HB2	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:73:PRO:HB2	5:E:74:ASP:H	1.66	0.43
7:G:111:THR:HG22	7:G:112:LYS:N	2.33	0.43
7:G:119:LEU:HD11	7:G:137:ILE:HD11	2.00	0.43
9:I:86:PHE:C	9:I:86:PHE:HD1	2.26	0.43
9:I:111:THR:HG22	9:I:113:ASP:N	2.32	0.43
11:K:109:TRP:C	11:K:111:LEU:N	2.75	0.43
12:L:48:CYS:O	12:L:50:ASP:N	2.44	0.43
1:A:58:LEU:O	1:A:59:GLY:C	2.61	0.43
1:A:66:LYS:O	1:A:67:CYS:HB2	2.19	0.43
1:A:123:ARG:O	1:A:124:GLN:C	2.62	0.43
1:A:342:GLY:O	2:B:1129:ARG:NH1	2.52	0.43
1:A:663:SER:OG	1:A:664:THR:N	2.48	0.43
1:A:754:SER:O	1:A:755:PHE:C	2.61	0.43
1:A:1011:GLN:O	1:A:1012:ARG:C	2.60	0.43
1:A:1037:LEU:HD12	1:A:1042:PHE:CA	2.48	0.43
2:B:23:ALA:O	2:B:654:ARG:HB3	2.18	0.43
2:B:29:ASP:OD1	2:B:658:ILE:HD13	2.17	0.43
2:B:37:PHE:CZ	2:B:41:LYS:HG3	2.54	0.43
2:B:99:LYS:HA	2:B:178:ASN:ND2	2.32	0.43
2:B:100:PRO:CD	2:B:180:TYR:HE1	2.31	0.43
2:B:261:ARG:NH1	2:B:261:ARG:HG3	2.33	0.43
2:B:784:ASN:ND2	2:B:788:ARG:HD2	2.33	0.43
2:B:996:ARG:HH21	3:C:175:ALA:HA	1.84	0.43
3:C:146:LYS:HD2	10:J:57:ILE:HD13	2.00	0.43
3:C:148:ARG:CG	3:C:149:LYS:H	2.31	0.43
4:D:176:GLU:C	4:D:178:ALA:N	2.71	0.43
4:D:191:ALA:C	4:D:193:THR:N	2.75	0.43
5:E:117:THR:C	5:E:119:SER:N	2.75	0.43
7:G:29:LYS:O	7:G:30:LEU:C	2.61	0.43
8:H:36:CYS:HB2	8:H:130:ARG:NH2	2.33	0.43
10:J:16:ASP:CG	10:J:17:LYS:H	2.25	0.43
10:J:35:ALA:O	10:J:39:LEU:CD1	2.67	0.43
12:L:39:SER:OG	12:L:40:LEU:N	2.51	0.43
1:A:25:GLU:O	1:A:26:GLU:C	2.61	0.43
1:A:101:LYS:HE2	1:A:139:TRP:CZ2	2.54	0.43
1:A:156:ASP:O	1:A:157:ASP:C	2.61	0.43
1:A:364:VAL:O	1:A:364:VAL:HG13	2.17	0.43
1:A:435:HIS:O	1:A:437:MET:HG3	2.19	0.43
1:A:458:HIS:CE1	1:A:507:VAL:HG21	2.53	0.43
1:A:774:ARG:NH2	1:A:797:LYS:HB2	2.33	0.43
1:A:779:PHE:HD1	1:A:784:LEU:HA	1.82	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:855:THR:HG23	1:A:857:ARG:HG3	2.00	0.43
1:A:875:ALA:HA	1:A:878:ILE:HD12	2.01	0.43
1:A:997:LEU:HD13	1:A:1018:PHE:HE2	1.82	0.43
1:A:1029:ARG:HG3	1:A:1029:ARG:NH1	2.34	0.43
1:A:1100:ARG:HH22	1:A:1111:MET:HE3	1.83	0.43
1:A:1213:GLY:O	1:A:1216:ILE:N	2.51	0.43
1:A:1257:ASP:OD1	1:A:1257:ASP:C	2.62	0.43
1:A:1279:ILE:O	1:A:1280:GLU:HG3	2.19	0.43
1:A:1418:LEU:HD23	2:B:1222:ARG:HD2	2.01	0.43
2:B:277:LYS:HE3	2:B:338:GLY:O	2.18	0.43
2:B:290:GLY:CA	2:B:327:ARG:HD2	2.48	0.43
2:B:361:LEU:HD21	2:B:364:ILE:HD12	1.99	0.43
2:B:492:LEU:O	2:B:495:LEU:N	2.51	0.43
2:B:872:GLU:HA	2:B:917:PRO:HD3	2.00	0.43
2:B:952:VAL:HG12	2:B:953:LEU:H	1.83	0.43
2:B:1122:ARG:HB3	13:T:22:DC:OP1	2.18	0.43
2:B:1167:GLY:HA3	2:B:1216:LEU:N	2.32	0.43
2:B:1178:ASN:HD22	2:B:1178:ASN:N	2.15	0.43
5:E:135:PHE:HD2	5:E:140:LEU:HD21	1.83	0.43
5:E:161:LYS:O	5:E:164:LEU:N	2.52	0.43
8:H:4:THR:HA	8:H:60:ALA:CB	2.49	0.43
1:A:279:LEU:O	1:A:289:ILE:HD11	2.19	0.43
1:A:386:ASP:O	1:A:387:ARG:C	2.61	0.43
1:A:445:ASN:HB3	1:A:455:MET:HE2	1.99	0.43
1:A:549:MET:O	1:A:550:LEU:C	2.62	0.43
1:A:626:ASN:O	1:A:631:HIS:CD2	2.72	0.43
1:A:723:ASN:O	1:A:724:GLU:C	2.62	0.43
1:A:825:ILE:HD12	1:A:825:ILE:HA	1.70	0.43
1:A:894:GLU:C	1:A:896:ARG:N	2.77	0.43
1:A:943:LEU:C	1:A:945:GLU:N	2.77	0.43
1:A:1299:VAL:CG1	1:A:1300:LYS:N	2.82	0.43
1:A:1330:ASN:OD1	1:A:1331:SER:N	2.52	0.43
1:A:1343:ALA:HB2	5:E:150:VAL:CG2	2.41	0.43
2:B:186:GLU:HB3	2:B:187:SER:H	1.49	0.43
2:B:355:ILE:HG13	2:B:355:ILE:H	1.68	0.43
2:B:402:GLY:CA	2:B:695:ALA:HB3	2.49	0.43
2:B:562:GLY:CA	2:B:590:HIS:HD1	2.32	0.43
2:B:615:MET:HE2	2:B:697:GLU:OE2	2.18	0.43
2:B:660:LYS:HB3	2:B:679:TYR:CD2	2.54	0.43
2:B:681:TRP:O	2:B:684:LEU:N	2.52	0.43
2:B:1177:HIS:HB3	2:B:1179:GLN:HE21	1.83	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:64:VAL:HG22	4:D:129:LEU:CD2	2.49	0.43
5:E:15:ALA:HA	5:E:140:LEU:O	2.18	0.43
5:E:115:ASN:C	5:E:116:ILE:HG13	2.44	0.43
5:E:204:THR:CG2	5:E:205:SER:H	2.28	0.43
7:G:114:LEU:HD12	7:G:114:LEU:HA	1.89	0.43
1:A:275:SER:O	1:A:279:LEU:HG	2.18	0.43
1:A:286:HIS:O	1:A:288:ALA:N	2.52	0.43
1:A:350:ARG:HB2	1:A:488:ASN:OD1	2.18	0.43
1:A:515:GLN:HB2	1:A:1071:SER:HB3	2.00	0.43
1:A:526:ASP:HB2	2:B:835:GLN:OE1	2.18	0.43
1:A:645:LEU:HG	1:A:649:ILE:CD1	2.48	0.43
1:A:648:ASN:O	1:A:649:ILE:C	2.61	0.43
1:A:826:ASP:O	1:A:830:LYS:N	2.37	0.43
1:A:899:VAL:O	1:A:929:LEU:HD12	2.19	0.43
1:A:1202:MET:HE1	1:A:1212:VAL:CG2	2.48	0.43
1:A:1344:GLY:O	1:A:1345:ARG:C	2.61	0.43
2:B:165:VAL:CG1	2:B:166:PHE:N	2.82	0.43
2:B:383:ASN:O	2:B:384:ARG:C	2.62	0.43
2:B:426:LYS:HG2	2:B:426:LYS:H	1.51	0.43
2:B:484:ASN:O	2:B:485:ARG:HD2	2.19	0.43
2:B:619:ILE:O	2:B:622:LYS:HG3	2.19	0.43
2:B:879:ARG:HD3	2:B:879:ARG:HA	1.46	0.43
2:B:1050:ILE:HG22	2:B:1051:THR:N	2.34	0.43
3:C:3:GLU:HG3	11:K:104:ASN:ND2	2.34	0.43
3:C:17:ASN:H	3:C:240:VAL:HG21	1.84	0.43
3:C:35:ARG:HH11	11:K:41:THR:HA	1.83	0.43
3:C:136:ASP:OD1	3:C:137:LYS:N	2.52	0.43
4:D:13:ARG:O	4:D:13:ARG:CD	2.67	0.43
4:D:52:LEU:C	4:D:53:SER:HG	2.18	0.43
4:D:214:LEU:O	4:D:216:ASN:N	2.51	0.43
5:E:94:LYS:HE2	5:E:98:ILE:HD11	2.01	0.43
6:F:105:ALA:HB1	6:F:106:PRO:CD	2.49	0.43
7:G:44:TYR:HE1	7:G:157:ILE:N	2.16	0.43
13:T:15:DC:C6	13:T:16:DT:H72	2.53	0.43
1:A:296:LEU:C	1:A:298:PHE:N	2.76	0.42
1:A:460:VAL:HG12	1:A:461:LYS:N	2.34	0.42
1:A:728:LYS:HA	1:A:731:ARG:HE	1.84	0.42
1:A:849:MET:HE3	1:A:1061:GLY:C	2.43	0.42
1:A:869:GLY:O	1:A:870:GLU:HB2	2.19	0.42
1:A:998:LEU:H	1:A:998:LEU:CD1	2.29	0.42
1:A:1048:ASN:O	1:A:1049:ILE:C	2.60	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1259:MET:HE3	1:A:1262:LYS:HE3	2.00	0.42
1:A:1437:GLY:C	1:A:1439:GLY:N	2.75	0.42
1:A:1451:VAL:O	1:A:1454:MET:HG2	2.19	0.42
2:B:61:ASP:O	2:B:64:CYS:O	2.36	0.42
2:B:65:GLU:CG	2:B:66:ASP:H	2.25	0.42
2:B:282:ILE:CD1	2:B:382:ILE:HD13	2.48	0.42
2:B:363:HIS:C	2:B:365:THR:H	2.25	0.42
2:B:637:LEU:CD1	2:B:703:ILE:HD13	2.48	0.42
2:B:659:ALA:HA	2:B:662:MET:HE3	2.01	0.42
2:B:860:MET:HG2	2:B:861:ASP:N	2.33	0.42
2:B:871:THR:CG2	2:B:872:GLU:N	2.81	0.42
2:B:908:GLU:O	2:B:909:ASP:C	2.62	0.42
2:B:1020:ARG:NH1	2:B:1020:ARG:HG3	2.32	0.42
2:B:1135:ARG:O	2:B:1136:ASP:C	2.61	0.42
2:B:1146:PHE:CE1	2:B:1150:ARG:HD3	2.54	0.42
3:C:187:LYS:C	3:C:189:THR:N	2.77	0.42
4:D:39:ASN:HB3	4:D:43:GLU:O	2.19	0.42
4:D:52:LEU:H	4:D:182:SER:HB3	1.84	0.42
6:F:85:MET:CE	6:F:93:ILE:HD12	2.49	0.42
7:G:84:GLY:N	7:G:147:ILE:O	2.47	0.42
7:G:116:PRO:HB2	7:G:118:ASP:OD1	2.19	0.42
10:J:2:ILE:HG12	10:J:57:ILE:CD1	2.48	0.42
11:K:89:ASN:O	11:K:90:ALA:C	2.62	0.42
12:L:36:SER:O	12:L:37:LYS:O	2.37	0.42
1:A:15:LYS:O	1:A:1421:CYS:HB2	2.19	0.42
1:A:103:CYS:HB3	1:A:174:ILE:CD1	2.49	0.42
1:A:185:TRP:CH2	1:A:200:ARG:HB3	2.54	0.42
1:A:265:LYS:HZ3	1:A:302:THR:HG21	1.84	0.42
1:A:384:ASN:O	1:A:386:ASP:N	2.52	0.42
1:A:392:VAL:C	1:A:394:ASN:H	2.25	0.42
1:A:522:GLY:HA2	1:A:646:PHE:HE2	1.84	0.42
1:A:681:GLU:O	1:A:685:GLU:HG3	2.18	0.42
1:A:831:THR:CG2	1:A:832:ALA:N	2.82	0.42
1:A:882:SER:H	1:A:1025:ARG:HH21	1.67	0.42
1:A:910:PRO:HB3	1:A:917:SER:H	1.84	0.42
1:A:1010:ALA:O	1:A:1011:GLN:C	2.59	0.42
2:B:27:ALA:O	2:B:29:ASP:N	2.52	0.42
2:B:284:ILE:HD13	2:B:333:PHE:HD2	1.82	0.42
2:B:293:PRO:C	2:B:294:ASP:O	2.61	0.42
2:B:296:GLU:C	2:B:298:LEU:N	2.75	0.42
2:B:307:ASP:O	2:B:308:TRP:C	2.62	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:465:ASN:HD22	2:B:465:ASN:N	2.13	0.42
2:B:565:PRO:O	2:B:566:LEU:C	2.61	0.42
2:B:593:PRO:O	2:B:594:ALA:C	2.61	0.42
2:B:831:SER:CB	2:B:994:TYR:OH	2.67	0.42
3:C:31:ASN:O	3:C:32:SER:C	2.60	0.42
5:E:31:THR:CG2	5:E:34:GLU:HB2	2.49	0.42
8:H:41:ASP:HB2	8:H:121:LEU:HB3	1.99	0.42
8:H:63:LEU:CD1	8:H:64:ASN:H	2.32	0.42
9:I:54:GLU:HB3	9:I:100:PHE:CE2	2.54	0.42
12:L:27:LEU:CB	12:L:37:LYS:HB3	2.48	0.42
1:A:108:MET:O	1:A:109:HIS:HB2	2.19	0.42
1:A:213:HIS:O	1:A:214:ILE:C	2.61	0.42
1:A:262:LEU:CD2	1:A:303:TYR:HE1	2.32	0.42
1:A:352:VAL:HG23	1:A:467:THR:HG22	1.99	0.42
1:A:473:SER:C	1:A:475:THR:H	2.26	0.42
1:A:600:PRO:HG2	1:A:601:LYS:HG3	2.00	0.42
1:A:711:ARG:NH2	9:I:87:GLN:OE1	2.51	0.42
1:A:728:LYS:CB	1:A:731:ARG:HH21	2.32	0.42
1:A:733:ALA:O	1:A:736:ASN:HB3	2.19	0.42
1:A:894:GLU:O	1:A:896:ARG:N	2.52	0.42
1:A:1100:ARG:NH2	1:A:1111:MET:HE3	2.33	0.42
1:A:1242:VAL:CG1	1:A:1243:VAL:H	2.13	0.42
1:A:1369:ALA:O	1:A:1370:LEU:C	2.60	0.42
1:A:1424:VAL:O	1:A:1428:VAL:HG23	2.18	0.42
1:A:1450:LEU:HD11	6:F:108:PHE:HZ	1.84	0.42
2:B:170:LEU:O	2:B:170:LEU:HG	2.20	0.42
2:B:186:GLU:HG3	10:J:62:ARG:HH12	1.84	0.42
2:B:370:PHE:O	2:B:371:GLU:C	2.62	0.42
2:B:589:VAL:CG1	2:B:590:HIS:N	2.80	0.42
2:B:711:GLU:CB	2:B:712:PRO:CD	2.98	0.42
2:B:714:GLU:OE1	2:B:714:GLU:N	2.52	0.42
2:B:744:HIS:CD2	2:B:746:SER:OG	2.67	0.42
2:B:1162:ILE:HG22	2:B:1163:CYS:O	2.19	0.42
3:C:50:GLU:HB3	3:C:156:THR:HB	2.01	0.42
4:D:186:ASP:O	4:D:211:LEU:HD13	2.18	0.42
5:E:24:LYS:O	5:E:25:ASP:C	2.62	0.42
5:E:187:TYR:C	5:E:189:GLY:H	2.27	0.42
6:F:108:PHE:HE1	6:F:131:PRO:HG3	1.85	0.42
8:H:9:ILE:HG21	8:H:54:SER:HB2	2.01	0.42
9:I:61:ASP:HB3	9:I:64:SER:OG	2.19	0.42
12:L:27:LEU:H	12:L:27:LEU:CD2	2.14	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:107:CYS:HB2	1:A:171:GLN:HE22	1.83	0.42
1:A:167:CYS:HB2	1:A:169:ASN:HD22	1.84	0.42
1:A:383:TYR:N	1:A:383:TYR:CD2	2.87	0.42
1:A:418:SER:C	1:A:420:ARG:N	2.77	0.42
1:A:475:THR:HG23	1:A:476:SER:H	1.79	0.42
1:A:537:ARG:NH1	8:H:120:GLY:O	2.52	0.42
1:A:579:SER:HB3	1:A:611:GLN:HA	2.00	0.42
1:A:591:PHE:HD2	1:A:595:THR:HB	1.84	0.42
1:A:642:CYS:O	1:A:643:ALA:C	2.62	0.42
1:A:726:ARG:NH2	1:A:727:ASP:OD1	2.51	0.42
1:A:740:LEU:HD12	1:A:740:LEU:C	2.43	0.42
1:A:926:GLN:O	1:A:930:ASP:HB2	2.19	0.42
1:A:1215:ARG:NH1	1:A:1272:THR:O	2.52	0.42
1:A:1364:ASN:CG	1:A:1366:ARG:HH11	2.28	0.42
2:B:69:LEU:O	2:B:70:ILE:CG1	2.58	0.42
2:B:120:ARG:HH12	12:L:54:ARG:NH1	2.16	0.42
2:B:121:ASN:HA	2:B:207:GLY:CA	2.41	0.42
2:B:278:GLN:CG	2:B:279:ASP:N	2.80	0.42
2:B:327:ARG:O	2:B:327:ARG:HG2	2.19	0.42
2:B:348:ARG:O	2:B:351:TYR:HB3	2.19	0.42
2:B:436:VAL:O	2:B:436:VAL:HG12	2.18	0.42
2:B:822:ASN:HD21	10:J:52:THR:CG2	2.30	0.42
2:B:847:ASP:OD2	3:C:167:HIS:HA	2.20	0.42
2:B:952:VAL:O	12:L:57:LEU:HD22	2.20	0.42
2:B:1029:CYS:HB3	2:B:1086:PHE:CE2	2.55	0.42
3:C:91:HIS:HD2	3:C:91:HIS:O	2.02	0.42
4:D:63:LEU:CD1	4:D:133:THR:OG1	2.65	0.42
4:D:141:LEU:O	4:D:145:MET:HG2	2.19	0.42
5:E:12:LEU:HD22	5:E:55:ARG:CZ	2.49	0.42
5:E:195:VAL:CG1	5:E:196:VAL:H	2.27	0.42
7:G:62:LEU:HB3	7:G:63:PRO:CD	2.42	0.42
11:K:98:LEU:O	11:K:99:GLY:C	2.60	0.42
1:A:276:LEU:HD13	1:A:293:GLU:CA	2.47	0.42
1:A:317:LYS:HG3	2:B:471:LYS:NZ	2.34	0.42
1:A:398:GLU:O	1:A:399:HIS:C	2.61	0.42
1:A:533:LYS:O	1:A:534:LEU:C	2.62	0.42
1:A:568:PRO:CB	3:C:221:TYR:CZ	3.03	0.42
1:A:601:LYS:HB2	1:A:603:ASN:OD1	2.19	0.42
1:A:786:HIS:CE1	2:B:519:TRP:CZ2	3.08	0.42
1:A:1001:ARG:CG	1:A:1001:ARG:NH1	2.82	0.42
1:A:1100:ARG:NH1	1:A:1111:MET:HE3	2.34	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1157:ASP:OD1	1:A:1159:ARG:HB2	2.19	0.42
1:A:1278:ASN:O	1:A:1279:ILE:C	2.61	0.42
1:A:1377:THR:O	1:A:1378:GLN:C	2.62	0.42
2:B:365:THR:O	2:B:374:LYS:HE3	2.19	0.42
2:B:557:PHE:CE1	2:B:603:LEU:HD11	2.53	0.42
2:B:825:VAL:HG21	2:B:1092:TYR:HE1	1.85	0.42
2:B:1109:GLY:HA3	2:B:1110:PRO:HD2	1.75	0.42
2:B:1203:LEU:O	2:B:1207:LEU:HG	2.20	0.42
3:C:133:ILE:HG13	3:C:237:SER:N	2.34	0.42
3:C:234:SER:OG	3:C:235:VAL:N	2.52	0.42
6:F:138:LEU:O	6:F:140:ASP:N	2.53	0.42
7:G:14:HIS:CE1	7:G:15:PRO:HD2	2.54	0.42
11:K:20:LYS:O	11:K:33:ILE:HA	2.20	0.42
1:A:72:GLU:O	1:A:73:GLY:C	2.62	0.42
1:A:90:VAL:HG11	1:A:297:GLN:HA	2.01	0.42
1:A:102:VAL:O	1:A:105:CYS:HB2	2.19	0.42
1:A:157:ASP:C	1:A:159:THR:N	2.78	0.42
1:A:456:MET:HE3	1:A:510:GLN:HB2	2.01	0.42
1:A:507:VAL:O	1:A:508:PRO:C	2.61	0.42
1:A:556:TRP:CD2	1:A:558:GLY:HA2	2.55	0.42
1:A:618:GLU:O	1:A:619:LYS:C	2.62	0.42
1:A:1037:LEU:HD13	1:A:1041:ALA:HB3	2.01	0.42
1:A:1431:GLY:HA3	2:B:1197:PRO:HD3	2.00	0.42
1:A:1446:ASP:HB3	1:A:1449:SER:OG	2.20	0.42
2:B:32:ALA:O	2:B:35:SER:HB2	2.20	0.42
2:B:60:GLN:HE22	2:B:95:ILE:HG22	1.80	0.42
2:B:98:THR:O	2:B:126:SER:CB	2.64	0.42
2:B:104:GLU:OE1	12:L:54:ARG:CZ	2.67	0.42
2:B:190:TYR:CE1	2:B:196:PRO:HG3	2.54	0.42
2:B:367:LEU:O	2:B:368:GLU:HB2	2.20	0.42
2:B:604:ARG:HA	2:B:609:ILE:HG13	2.01	0.42
2:B:801:LYS:HD2	2:B:815:ARG:HB3	2.01	0.42
2:B:996:ARG:NH2	3:C:175:ALA:HA	2.34	0.42
2:B:1071:VAL:HG12	2:B:1072:MET:N	2.33	0.42
2:B:1183:LYS:C	2:B:1185:CYS:H	2.27	0.42
2:B:1192:TYR:CD2	2:B:1218:THR:HG21	2.55	0.42
3:C:46:ILE:HD13	3:C:157:CYS:SG	2.60	0.42
3:C:138:GLU:HB2	3:C:140:ASN:ND2	2.35	0.42
3:C:166:GLU:HG3	11:K:10:PHE:CZ	2.46	0.42
4:D:166:LEU:O	4:D:169:SER:OG	2.38	0.42
5:E:117:THR:HB	5:E:120:ALA:HB3	2.00	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:156:LEU:HD12	5:E:195:VAL:CG1	2.50	0.42
6:F:74:ILE:H	6:F:74:ILE:HG13	1.64	0.42
8:H:98:TYR:C	8:H:118:PHE:HD2	2.27	0.42
8:H:109:LYS:HB3	8:H:110:ASP:OD1	2.20	0.42
10:J:1:MET:HG3	10:J:1:MET:O	2.19	0.42
11:K:65:HIS:HD2	11:K:67:PHE:HB2	1.84	0.42
1:A:47:ARG:NH1	1:A:254:GLU:OE1	2.51	0.42
1:A:355:GLY:HA3	1:A:482:PHE:CZ	2.55	0.42
1:A:417:TYR:O	1:A:418:SER:C	2.63	0.42
1:A:524:VAL:HG12	1:A:525:GLN:CG	2.50	0.42
1:A:584:ASN:O	1:A:586:ILE:N	2.53	0.42
1:A:701:LEU:HD21	9:I:114:GLN:HB2	2.02	0.42
1:A:1044:TRP:O	1:A:1045:VAL:C	2.61	0.42
1:A:1139:GLU:O	1:A:1140:HIS:C	2.62	0.42
1:A:1142:THR:O	1:A:1143:LEU:C	2.63	0.42
1:A:1329:THR:HG23	1:A:1329:THR:O	2.19	0.42
1:A:1389:PHE:C	1:A:1391:ARG:H	2.26	0.42
1:A:1427:ASN:O	1:A:1428:VAL:C	2.62	0.42
2:B:126:SER:O	2:B:169:ARG:HA	2.20	0.42
2:B:428:ILE:H	2:B:428:ILE:HG13	1.72	0.42
2:B:806:THR:CG2	2:B:808:ALA:HB3	2.49	0.42
2:B:840:ILE:CG2	2:B:994:TYR:HD1	2.33	0.42
2:B:857:ARG:NH2	2:B:942:ARG:CZ	2.83	0.42
2:B:859:TYR:OH	2:B:941:LEU:HD12	2.18	0.42
2:B:860:MET:HG3	2:B:965:LYS:HE2	2.01	0.42
2:B:1115:THR:HG22	2:B:1117:GLN:CB	2.50	0.42
3:C:56:THR:CG2	3:C:145:CYS:SG	3.07	0.42
3:C:73:GLN:NE2	3:C:75:MET:H	2.14	0.42
3:C:174:ALA:O	10:J:10:CYS:HB2	2.20	0.42
7:G:88:ASP:OD2	7:G:88:ASP:N	2.47	0.42
8:H:32:THR:CG2	8:H:33:GLN:H	2.27	0.42
11:K:24:ASP:H	11:K:31:VAL:HA	1.85	0.42
11:K:65:HIS:CD2	11:K:65:HIS:C	2.97	0.42
1:A:57:ARG:HG2	1:A:57:ARG:NH1	2.32	0.42
1:A:326:ARG:C	1:A:326:ARG:HD3	2.45	0.42
1:A:332:LYS:O	1:A:333:GLU:HG2	2.19	0.42
1:A:341:MET:HE2	1:A:843:LYS:HZ1	1.84	0.42
1:A:556:TRP:O	1:A:558:GLY:N	2.53	0.42
1:A:637:LYS:HA	1:A:637:LYS:HD3	1.89	0.42
1:A:675:THR:HG21	1:A:736:ASN:CG	2.45	0.42
1:A:712:GLU:O	1:A:714:PHE:N	2.53	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:733:ALA:HA	1:A:736:ASN:HB3	2.01	0.42
1:A:781:ASP:O	1:A:790:ASP:N	2.52	0.42
1:A:839:ARG:CG	1:A:840:ARG:N	2.83	0.42
1:A:846:GLU:OE1	1:A:1425:SER:OG	2.34	0.42
1:A:919:ILE:HD13	1:A:983:ILE:CD1	2.49	0.42
1:A:1011:GLN:NE2	1:A:1015:VAL:CG2	2.82	0.42
1:A:1297:GLU:N	1:A:1297:GLU:OE1	2.52	0.42
1:A:1340:GLY:O	1:A:1341:ILE:C	2.62	0.42
1:A:1349:TYR:O	1:A:1350:LYS:C	2.63	0.42
1:A:1422:ARG:NH1	2:B:1224:PHE:HD2	2.18	0.42
2:B:25:ILE:CD1	2:B:653:VAL:O	2.68	0.42
2:B:247:GLY:O	2:B:248:SER:HB3	2.20	0.42
2:B:281:PRO:O	2:B:282:ILE:C	2.63	0.42
2:B:309:GLN:O	2:B:312:GLU:N	2.52	0.42
2:B:384:ARG:HD2	2:B:387:LEU:HD22	2.01	0.42
2:B:1197:PRO:O	2:B:1199:ALA:N	2.53	0.42
3:C:82:TYR:CE2	3:C:161:LYS:HG2	2.55	0.42
3:C:118:LEU:HD12	3:C:132:PRO:HG3	2.02	0.42
4:D:119:ARG:CG	4:D:221:TYR:HE2	2.33	0.42
4:D:175:PHE:CZ	7:G:85:GLU:HG3	2.55	0.42
5:E:164:LEU:HD11	5:E:211:TYR:CD1	2.54	0.42
6:F:127:GLU:C	6:F:129:LYS:N	2.77	0.42
8:H:100:THR:HG23	8:H:138:GLU:CB	2.49	0.42
8:H:145:ARG:O	8:H:146:ARG:CB	2.68	0.42
1:A:53:LEU:CD2	1:A:54:ASN:N	2.61	0.42
1:A:231:PRO:C	1:A:233:TRP:H	2.28	0.42
1:A:335:ARG:HD2	2:B:1206:GLU:CD	2.43	0.42
1:A:818:MET:HA	2:B:514:LEU:HB3	2.01	0.42
1:A:1059:HIS:ND1	6:F:86:THR:HA	2.35	0.42
1:A:1138:ILE:CA	1:A:1275:GLY:HA2	2.50	0.42
1:A:1150:SER:HA	1:A:1195:LEU:HA	2.01	0.42
2:B:388:CYS:C	2:B:390:LEU:N	2.72	0.42
2:B:479:VAL:O	2:B:480:SER:C	2.62	0.42
2:B:529:GLU:OE1	2:B:769:TYR:CE1	2.72	0.42
2:B:661:LEU:HD23	2:B:679:TYR:O	2.20	0.42
2:B:995:ARG:HH11	3:C:165:LYS:HA	1.84	0.42
2:B:1002:THR:O	2:B:1003:ALA:C	2.62	0.42
2:B:1002:THR:O	2:B:1004:GLU:N	2.52	0.42
3:C:88:CYS:SG	3:C:91:HIS:HA	2.60	0.42
4:D:26:THR:O	4:D:26:THR:HG22	2.20	0.42
4:D:47:LEU:CD1	7:G:3:PHE:HD2	2.31	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:64:VAL:CG2	4:D:129:LEU:HD21	2.50	0.42
4:D:164:ILE:O	4:D:165:GLN:C	2.62	0.42
6:F:70:LYS:O	6:F:72:LYS:N	2.43	0.42
6:F:99:LEU:HD11	6:F:103:MET:HE2	2.02	0.42
7:G:1:MET:HE1	7:G:3:PHE:CE1	2.53	0.42
7:G:45:ILE:HD13	7:G:78:VAL:HG11	2.01	0.42
8:H:138:GLU:O	8:H:139:ASN:C	2.62	0.42
9:I:19:ASP:CG	9:I:22:ASN:HD22	2.28	0.42
9:I:82:GLU:CB	9:I:104:LEU:HD12	2.40	0.42
11:K:101:LEU:C	11:K:101:LEU:HD23	2.45	0.42
1:A:179:LEU:HD23	1:A:179:LEU:N	2.35	0.42
1:A:452:LYS:HE3	2:B:1141:HIS:CE1	2.55	0.42
1:A:595:THR:O	1:A:596:THR:HG23	2.20	0.42
1:A:597:LEU:HD12	1:A:597:LEU:N	2.35	0.42
1:A:752:LYS:HD3	1:A:752:LYS:HA	1.87	0.42
1:A:965:GLN:O	1:A:968:GLN:HB2	2.20	0.42
1:A:1277:GLU:OE1	1:A:1277:GLU:HA	2.19	0.42
2:B:36:ALA:O	2:B:39:ARG:HB2	2.20	0.42
2:B:195:CYS:SG	2:B:196:PRO:HD2	2.60	0.42
3:C:73:GLN:CG	3:C:74:SER:N	2.82	0.42
3:C:100:THR:HG22	3:C:102:GLN:NE2	2.35	0.42
4:D:138:ASN:O	4:D:139:LYS:C	2.62	0.42
5:E:105:PHE:O	5:E:106:GLN:HB2	2.18	0.42
6:F:125:LEU:HB2	6:F:130:ILE:HD11	2.02	0.42
7:G:52:ASP:C	7:G:53:ASN:HD22	2.28	0.42
11:K:47:ARG:C	11:K:47:ARG:HD2	2.44	0.42
1:A:52:GLY:O	1:A:56:PRO:HG2	2.20	0.41
1:A:65:LEU:O	1:A:71:GLN:HA	2.20	0.41
1:A:525:GLN:CD	2:B:836:GLU:HG2	2.45	0.41
1:A:790:ASP:OD2	9:I:87:GLN:HG3	2.20	0.41
1:A:874:ASP:C	1:A:874:ASP:OD1	2.63	0.41
1:A:922:ASP:C	1:A:922:ASP:OD1	2.63	0.41
1:A:1192:LEU:HD13	1:A:1239:ARG:NH1	2.35	0.41
1:A:1230:GLU:O	1:A:1232:ASN:N	2.53	0.41
1:A:1425:SER:HA	1:A:1428:VAL:HG23	2.02	0.41
2:B:210:LYS:HE2	2:B:462:ALA:HA	2.01	0.41
2:B:287:ARG:NH1	2:B:324:ILE:O	2.52	0.41
2:B:810:GLU:HB3	2:B:811:TYR:CD1	2.54	0.41
2:B:818:PRO:HB2	2:B:1091:TYR:OH	2.20	0.41
2:B:830:TYR:HB3	2:B:831:SER:H	1.68	0.41
2:B:879:ARG:NH1	2:B:883:LEU:CD2	2.81	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:11:ARG:H	3:C:20:PHE:HA	1.85	0.41
4:D:168:LYS:O	4:D:169:SER:HB3	2.20	0.41
6:F:127:GLU:O	6:F:129:LYS:N	2.53	0.41
10:J:32:GLU:O	10:J:33:GLY:C	2.63	0.41
11:K:30:ALA:HB2	11:K:76:GLN:CG	2.41	0.41
11:K:78:THR:O	11:K:79:GLU:C	2.63	0.41
1:A:164:ARG:CG	1:A:165:GLY:N	2.82	0.41
1:A:562:THR:HA	1:A:563:PRO:HD3	1.87	0.41
1:A:685:GLU:OE2	1:A:686:ALA:HB2	2.20	0.41
1:A:733:ALA:O	1:A:737:LEU:HG	2.20	0.41
1:A:744:LYS:CG	1:A:748:MET:HE2	2.47	0.41
1:A:767:GLN:NE2	1:A:774:ARG:CB	2.83	0.41
1:A:841:LEU:HD22	1:A:1371:LEU:HD13	2.01	0.41
1:A:884:ASP:C	1:A:886:ILE:N	2.78	0.41
1:A:1101:LEU:CD1	1:A:1105:LEU:HD11	2.46	0.41
1:A:1400:CYS:O	1:A:1405:THR:HA	2.20	0.41
2:B:236:HIS:CD2	2:B:236:HIS:N	2.87	0.41
2:B:492:LEU:O	2:B:493:SER:C	2.63	0.41
2:B:503:GLY:CA	2:B:507:LYS:HE2	2.31	0.41
2:B:551:PRO:C	2:B:553:PRO:HD2	2.45	0.41
2:B:601:ARG:HH11	2:B:605:ARG:HH22	1.66	0.41
2:B:831:SER:HB3	2:B:994:TYR:OH	2.20	0.41
2:B:894:ASP:HB2	12:L:58:LYS:HZ1	1.84	0.41
2:B:1068:GLY:O	2:B:1069:PHE:C	2.64	0.41
3:C:14:SER:C	3:C:16:ASP:H	2.28	0.41
3:C:47:ASP:HA	3:C:169:LYS:NZ	2.35	0.41
4:D:178:ALA:O	4:D:181:GLY:N	2.53	0.41
4:D:205:ASP:O	4:D:209:ARG:HG3	2.20	0.41
5:E:33:GLU:O	5:E:34:GLU:C	2.63	0.41
8:H:55:LEU:HB3	8:H:144:ILE:CG2	2.48	0.41
9:I:78:CYS:O	9:I:79:HIS:C	2.62	0.41
10:J:18:TRP:CH2	10:J:22:LEU:HD11	2.55	0.41
12:L:41:SER:O	12:L:42:ARG:C	2.62	0.41
1:A:54:ASN:HD21	1:A:61:ILE:HD11	1.85	0.41
1:A:108:MET:O	1:A:109:HIS:CB	2.69	0.41
1:A:166:GLY:O	1:A:167:CYS:C	2.63	0.41
1:A:346:ASP:CG	2:B:1108:ARG:HA	2.45	0.41
1:A:451:HIS:NE2	1:A:1074:GLU:HG3	2.35	0.41
1:A:469:ARG:NH2	2:B:991:GLY:O	2.46	0.41
1:A:789:LYS:HE3	9:I:67:THR:OG1	2.21	0.41
1:A:863:VAL:C	1:A:864:ILE:HG13	2.44	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:958:VAL:HG13	1:A:1052:GLN:HB3	2.02	0.41
1:A:1038:THR:OG1	1:A:1039:LYS:N	2.54	0.41
1:A:1305:VAL:HG12	1:A:1306:LEU:N	2.34	0.41
1:A:1313:LEU:HD11	1:A:1317:MET:HE2	2.02	0.41
1:A:1317:MET:HE1	1:A:1338:VAL:CG1	2.49	0.41
1:A:1425:SER:HA	1:A:1428:VAL:HG21	2.02	0.41
2:B:261:ARG:HH11	2:B:261:ARG:HG3	1.85	0.41
2:B:304:ASP:C	2:B:306:ASN:H	2.28	0.41
2:B:306:ASN:C	2:B:308:TRP:N	2.78	0.41
2:B:373:ARG:HD2	2:B:567:GLU:OE2	2.19	0.41
2:B:416:LEU:O	2:B:420:LEU:HG	2.20	0.41
2:B:529:GLU:OE2	2:B:769:TYR:HE1	2.03	0.41
2:B:593:PRO:C	2:B:595:ARG:N	2.76	0.41
2:B:736:THR:O	2:B:736:THR:HG22	2.21	0.41
2:B:828:ALA:HB2	2:B:1085:ILE:HG23	2.02	0.41
2:B:879:ARG:O	2:B:934:LYS:CE	2.69	0.41
2:B:1162:ILE:HG22	2:B:1163:CYS:N	2.35	0.41
2:B:1214:PRO:O	2:B:1214:PRO:HG2	2.19	0.41
3:C:176:ILE:HG22	3:C:177:GLU:O	2.20	0.41
3:C:204:SER:H	3:C:207:CYS:HG	1.69	0.41
3:C:254:LYS:O	3:C:256:ALA:N	2.53	0.41
6:F:135:ARG:NH2	6:F:145:ASP:OD2	2.52	0.41
7:G:14:HIS:C	7:G:16:SER:N	2.75	0.41
7:G:137:ILE:HG21	7:G:143:ILE:HD11	2.03	0.41
8:H:64:ASN:ND2	8:H:88:SER:CB	2.68	0.41
8:H:84:ALA:C	8:H:86:ASP:H	2.27	0.41
9:I:49:ILE:O	9:I:49:ILE:HG22	2.20	0.41
9:I:50:THR:CG2	9:I:51:ASN:N	2.83	0.41
13:T:7:DC:H2"	13:T:8:DT:C6	2.54	0.41
1:A:23:SER:CA	1:A:233:TRP:NE1	2.76	0.41
1:A:24:PRO:O	1:A:27:VAL:HB	2.20	0.41
1:A:92:HIS:O	1:A:93:VAL:C	2.63	0.41
1:A:269:ILE:CD1	1:A:300:VAL:HA	2.49	0.41
1:A:567:LYS:HG2	1:A:568:PRO:CD	2.49	0.41
1:A:593:GLU:C	1:A:595:THR:N	2.77	0.41
1:A:598:LEU:HA	8:H:122:LEU:HD13	2.03	0.41
1:A:836:TYR:O	1:A:837:ILE:C	2.62	0.41
1:A:1002:GLY:HA3	1:A:1007:ILE:CG2	2.42	0.41
1:A:1390:ASN:OD1	1:A:1399:ARG:HA	2.20	0.41
2:B:186:GLU:HG2	10:J:62:ARG:HH22	1.85	0.41
2:B:311:LEU:O	2:B:314:LEU:N	2.53	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:312:GLU:O	2:B:315:LYS:N	2.45	0.41
2:B:424:LEU:HD23	2:B:453:ILE:HD11	2.03	0.41
2:B:555:ILE:HG22	2:B:556:THR:N	2.35	0.41
2:B:593:PRO:CG	2:B:617:ARG:CZ	2.91	0.41
2:B:687:GLU:O	2:B:689:LEU:HD23	2.20	0.41
2:B:834:ASN:ND2	2:B:1013:ASN:CA	2.83	0.41
2:B:936:ASP:CG	2:B:937:ALA:N	2.78	0.41
2:B:1072:MET:HE3	2:B:1085:ILE:CG1	2.51	0.41
3:C:20:PHE:CD1	3:C:20:PHE:C	2.98	0.41
5:E:102:GLU:C	5:E:104:ASN:H	2.26	0.41
10:J:44:TYR:HD2	10:J:44:TYR:N	2.05	0.41
1:A:102:VAL:HG11	1:A:211:PHE:CE2	2.55	0.41
1:A:103:CYS:C	1:A:105:CYS:N	2.76	0.41
1:A:211:PHE:HA	1:A:214:ILE:HG13	2.01	0.41
1:A:309:ALA:O	1:A:311:GLN:N	2.49	0.41
1:A:563:PRO:HG2	8:H:79:TRP:CZ2	2.55	0.41
1:A:590:ARG:O	1:A:591:PHE:CB	2.69	0.41
1:A:860:LEU:O	2:B:1224:PHE:CE2	2.70	0.41
1:A:1072:ILE:HD11	1:A:1368:MET:HA	2.01	0.41
1:A:1104:ILE:HD12	1:A:1355:VAL:HG21	2.02	0.41
1:A:1142:THR:CA	1:A:1273:LEU:HD13	2.48	0.41
1:A:1146:VAL:HG11	1:A:1207:LEU:HD12	2.02	0.41
1:A:1151:GLU:HB2	1:A:1153:TYR:HE1	1.86	0.41
1:A:1384:VAL:C	1:A:1385:THR:HG23	2.45	0.41
2:B:184:ALA:HB1	2:B:188:ASP:HB2	2.03	0.41
2:B:361:LEU:CD2	2:B:364:ILE:HD12	2.51	0.41
2:B:577:ALA:HB1	2:B:589:VAL:CG1	2.18	0.41
2:B:582:VAL:HG23	2:B:626:ILE:HD12	2.02	0.41
2:B:620:ARG:H	2:B:620:ARG:HG3	1.70	0.41
2:B:637:LEU:CD2	2:B:742:GLU:HA	2.51	0.41
2:B:825:VAL:HG22	2:B:1010:LEU:HB3	2.02	0.41
2:B:969:ARG:CD	3:C:61:GLU:OE2	2.69	0.41
3:C:66:ARG:NH1	10:J:2:ILE:HG23	2.35	0.41
3:C:254:LYS:C	3:C:256:ALA:H	2.29	0.41
5:E:45:LYS:HD3	5:E:46:TYR:CE1	2.55	0.41
5:E:52:ARG:CB	5:E:53:PRO:HD2	2.45	0.41
5:E:114:ASN:HD22	5:E:114:ASN:HA	1.58	0.41
6:F:69:LEU:C	6:F:71:GLU:N	2.76	0.41
6:F:70:LYS:C	6:F:72:LYS:HZ2	2.27	0.41
6:F:90:ARG:HG3	6:F:91:ALA:N	2.34	0.41
6:F:148:VAL:HG23	6:F:149:GLU:N	2.34	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:122:ASN:HB2	7:G:131:GLN:NE2	2.17	0.41
7:G:145:VAL:CG1	7:G:146:LYS:N	2.83	0.41
7:G:166:ASP:C	7:G:168:LEU:N	2.78	0.41
9:I:68:LEU:HB3	9:I:84:VAL:CG2	2.50	0.41
10:J:14:VAL:HG12	10:J:50:ILE:HD11	2.01	0.41
1:A:38:PRO:CG	1:A:39:GLU:N	2.83	0.41
1:A:142:CYS:C	1:A:144:THR:N	2.76	0.41
1:A:346:ASP:OD1	2:B:1108:ARG:HA	2.20	0.41
1:A:440:ASP:O	1:A:460:VAL:HG23	2.20	0.41
1:A:531:ILE:HD13	1:A:653:VAL:HG21	2.01	0.41
1:A:841:LEU:HD23	1:A:841:LEU:HA	1.93	0.41
1:A:964:ILE:O	1:A:967:ALA:HB3	2.21	0.41
1:A:1074:GLU:N	1:A:1075:PRO:HD2	2.35	0.41
1:A:1094:VAL:O	1:A:1095:THR:C	2.62	0.41
1:A:1409:LEU:O	1:A:1412:ALA:N	2.51	0.41
1:A:1449:SER:O	1:A:1453:TYR:CD1	2.73	0.41
2:B:22:SER:HA	2:B:654:ARG:HB2	2.01	0.41
2:B:43:LEU:HD23	2:B:43:LEU:HA	1.90	0.41
2:B:187:SER:O	2:B:188:ASP:C	2.64	0.41
2:B:190:TYR:CE2	10:J:62:ARG:HD3	2.55	0.41
2:B:344:LYS:O	2:B:347:LYS:HG2	2.20	0.41
2:B:377:PHE:O	2:B:378:LEU:C	2.64	0.41
2:B:654:ARG:HH11	2:B:654:ARG:HG3	1.84	0.41
2:B:799:PRO:HD3	10:J:1:MET:HG2	2.02	0.41
2:B:834:ASN:C	2:B:838:SER:O	2.64	0.41
2:B:900:ALA:HA	2:B:901:PRO:HD3	1.90	0.41
3:C:77:ILE:CA	3:C:129:ILE:HD11	2.50	0.41
4:D:52:LEU:HA	4:D:148:LEU:HD21	2.03	0.41
5:E:13:TRP:O	5:E:16:PHE:HB3	2.21	0.41
5:E:177:ARG:C	5:E:212:ARG:CD	2.93	0.41
6:F:72:LYS:HB3	6:F:73:ALA:H	1.64	0.41
6:F:109:VAL:CG2	6:F:124:GLU:HA	2.51	0.41
7:G:121:PHE:HA	7:G:130:TYR:HA	2.02	0.41
10:J:57:ILE:HG23	10:J:58:GLU:N	2.35	0.41
12:L:49:LYS:O	12:L:50:ASP:CB	2.69	0.41
1:A:101:LYS:HE2	1:A:139:TRP:CH2	2.55	0.41
1:A:289:ILE:C	1:A:291:GLU:H	2.28	0.41
1:A:532:ARG:HG2	1:A:532:ARG:HH11	1.86	0.41
1:A:577:ILE:C	1:A:579:SER:N	2.75	0.41
1:A:637:LYS:HB3	1:A:641:VAL:CG2	2.47	0.41
1:A:710:LEU:HD12	1:A:710:LEU:H	1.84	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:722:LEU:HD23	1:A:799:PHE:CG	2.55	0.41
1:A:779:PHE:HD2	1:A:779:PHE:HA	1.71	0.41
1:A:809:THR:O	1:A:810:PRO:C	2.62	0.41
1:A:947:PHE:CE2	1:A:954:TRP:CD2	3.09	0.41
1:A:1063:MET:HE3	1:A:1063:MET:HB3	1.85	0.41
2:B:287:ARG:O	2:B:327:ARG:HA	2.21	0.41
2:B:324:ILE:HG12	2:B:329:THR:HB	2.03	0.41
2:B:798:TYR:CE2	3:C:62:PHE:CE2	3.07	0.41
2:B:865:LYS:CD	2:B:961:LEU:HD21	2.51	0.41
2:B:981:ALA:HB3	2:B:1095:LEU:HD11	2.03	0.41
3:C:42:PRO:HA	3:C:163:ILE:HG22	2.02	0.41
3:C:43:THR:CG2	3:C:44:LEU:N	2.57	0.41
3:C:183:TRP:CH2	3:C:203:GLN:NE2	2.88	0.41
4:D:153:ARG:CZ	4:D:184:ALA:HA	2.50	0.41
6:F:70:LYS:HA	6:F:72:LYS:NZ	2.35	0.41
6:F:96:THR:O	6:F:100:GLN:HG3	2.20	0.41
7:G:8:SER:O	7:G:9:LEU:CB	2.68	0.41
7:G:125:SER:HB2	7:G:127:PRO:O	2.21	0.41
8:H:33:GLN:C	8:H:35:GLN:H	2.28	0.41
9:I:35:VAL:O	9:I:36:GLU:HB3	2.21	0.41
10:J:11:GLY:O	10:J:12:LYS:C	2.63	0.41
11:K:55:LYS:HB3	11:K:81:TYR:CE1	2.55	0.41
1:A:37:PHE:HD1	1:A:37:PHE:H	1.63	0.41
1:A:630:ILE:CG2	1:A:631:HIS:H	2.34	0.41
1:A:1227:ILE:CG2	1:A:1228:TRP:H	2.20	0.41
2:B:63:ILE:HA	2:B:63:ILE:HD12	1.89	0.41
2:B:487:THR:CG2	2:B:488:TYR:H	2.33	0.41
2:B:581:PHE:O	2:B:626:ILE:N	2.53	0.41
2:B:605:ARG:HB3	2:B:688:GLY:HA3	2.02	0.41
2:B:693:ILE:HD13	2:B:701:ILE:CD1	2.50	0.41
2:B:859:TYR:CD1	2:B:859:TYR:N	2.88	0.41
2:B:996:ARG:HH12	3:C:38:ILE:HG23	1.86	0.41
3:C:77:ILE:HD13	3:C:77:ILE:HA	1.89	0.41
3:C:104:PHE:HD2	3:C:105:GLY:H	1.68	0.41
3:C:131:HIS:O	3:C:133:ILE:N	2.53	0.41
4:D:3:VAL:CG1	4:D:4:SER:N	2.83	0.41
1:A:12:ARG:HD2	2:B:1218:THR:CB	2.43	0.41
1:A:15:LYS:HB2	2:B:1219:ASP:O	2.21	0.41
1:A:16:GLU:HB3	1:A:1418:LEU:HD11	2.03	0.41
1:A:34:LYS:HZ3	1:A:34:LYS:HG2	1.77	0.41
1:A:38:PRO:HG2	1:A:39:GLU:H	1.86	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:244:PRO:HG2	1:A:245:PRO:CD	2.50	0.41
1:A:265:LYS:O	1:A:265:LYS:HG3	2.21	0.41
1:A:376:TYR:HB3	1:A:434:ARG:NH1	2.36	0.41
1:A:445:ASN:ND2	1:A:446:ARG:N	2.68	0.41
1:A:800:VAL:HG13	1:A:812:GLU:OE2	2.21	0.41
1:A:868:TYR:CZ	1:A:1366:ARG:HD3	2.56	0.41
1:A:1037:LEU:HD12	1:A:1042:PHE:N	2.36	0.41
1:A:1067:LEU:C	1:A:1067:LEU:CD1	2.94	0.41
1:A:1098:VAL:HB	1:A:1099:PRO:HD3	2.03	0.41
1:A:1144:LYS:HD2	1:A:1269:GLU:HG3	2.02	0.41
1:A:1239:ARG:HB3	1:A:1239:ARG:HH11	1.86	0.41
1:A:1343:ALA:CB	5:E:150:VAL:HG22	2.43	0.41
1:A:1402:PHE:C	1:A:1403:GLU:HG3	2.46	0.41
2:B:29:ASP:O	2:B:30:SER:C	2.63	0.41
2:B:112:LEU:HD12	2:B:113:TYR:N	2.32	0.41
2:B:186:GLU:HG3	10:J:62:ARG:CZ	2.51	0.41
2:B:227:LYS:HB2	2:B:395:GLN:OE1	2.21	0.41
2:B:273:LEU:HD12	2:B:280:ILE:HD12	2.03	0.41
2:B:275:TYR:HB3	2:B:351:TYR:OH	2.21	0.41
2:B:276:ILE:C	2:B:278:GLN:H	2.27	0.41
2:B:368:GLU:O	2:B:371:GLU:OE1	2.38	0.41
2:B:526:GLU:CD	2:B:752:ALA:CB	2.93	0.41
2:B:541:LEU:HB2	2:B:747:MET:CE	2.48	0.41
2:B:1110:PRO:O	2:B:1119:VAL:HG22	2.21	0.41
3:C:56:THR:HG22	3:C:58:LEU:HD23	2.02	0.41
3:C:77:ILE:CG2	3:C:78:GLU:N	2.76	0.41
3:C:82:TYR:CD2	3:C:161:LYS:HG2	2.56	0.41
3:C:102:GLN:HA	3:C:153:LEU:O	2.21	0.41
3:C:183:TRP:O	3:C:184:ASN:CB	2.69	0.41
4:D:60:LYS:HE2	4:D:126:ILE:HD11	2.03	0.41
4:D:155:ARG:O	4:D:156:ASP:HB2	2.20	0.41
4:D:175:PHE:O	4:D:179:GLN:HG2	2.21	0.41
7:G:25:TYR:O	7:G:26:LEU:C	2.63	0.41
8:H:82:PRO:O	8:H:84:ALA:N	2.41	0.41
8:H:100:THR:N	8:H:117:SER:O	2.45	0.41
10:J:3:VAL:HA	10:J:4:PRO:HD3	1.87	0.41
11:K:14:GLU:O	11:K:15:GLY:O	2.39	0.41
12:L:33:GLU:H	12:L:33:GLU:CD	2.28	0.41
1:A:49:LYS:NZ	1:A:61:ILE:CG1	2.72	0.41
1:A:152:VAL:HG12	1:A:153:PRO:CD	2.51	0.41
1:A:390:GLN:O	1:A:394:ASN:N	2.54	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:553:VAL:HA	1:A:554:PRO:HD2	1.89	0.41
1:A:568:PRO:HB2	3:C:221:TYR:CZ	2.56	0.41
1:A:674:PRO:C	1:A:676:MET:N	2.78	0.41
1:A:866:PHE:HB2	5:E:208:TYR:OH	2.21	0.41
1:A:986:ILE:O	1:A:987:VAL:C	2.64	0.41
1:A:1143:LEU:CD2	1:A:1267:MET:HB3	2.48	0.41
1:A:1259:MET:C	1:A:1261:LYS:N	2.79	0.41
1:A:1308:THR:HG23	1:A:1310:GLY:N	2.28	0.41
2:B:133:LYS:CG	2:B:135:ARG:HE	2.34	0.41
2:B:187:SER:O	2:B:191:LYS:HG3	2.21	0.41
2:B:343:ILE:CG2	2:B:347:LYS:HE2	2.42	0.41
2:B:413:LEU:O	2:B:416:LEU:HB2	2.21	0.41
2:B:488:TYR:CE2	2:B:813:LYS:HB2	2.55	0.41
2:B:601:ARG:HD3	2:B:605:ARG:HH21	1.85	0.41
2:B:1017:ILE:CB	2:B:1018:PRO:CD	2.99	0.41
3:C:26:ASP:O	3:C:27:LEU:C	2.63	0.41
3:C:47:ASP:O	3:C:47:ASP:CG	2.64	0.41
3:C:192:TRP:CZ3	3:C:194:GLU:HG3	2.56	0.41
4:D:33:PHE:CE1	7:G:80:LYS:HD3	2.56	0.41
4:D:67:ARG:HH21	4:D:129:LEU:HD13	1.86	0.41
4:D:128:VAL:O	4:D:129:LEU:C	2.64	0.41
5:E:89:GLY:O	5:E:91:LYS:N	2.54	0.41
5:E:116:ILE:CG2	5:E:117:THR:H	2.34	0.41
5:E:136:ASN:OD1	5:E:136:ASN:C	2.64	0.41
5:E:145:THR:HG21	5:E:187:TYR:CZ	2.56	0.41
6:F:79:ARG:HH11	6:F:79:ARG:CB	2.29	0.41
6:F:81:THR:HG23	6:F:144:GLU:CD	2.46	0.41
7:G:164:LYS:O	7:G:164:LYS:HG2	2.21	0.41
8:H:31:THR:HG22	8:H:31:THR:O	2.20	0.41
12:L:33:GLU:C	12:L:35:SER:N	2.79	0.41
1:A:106:VAL:CG1	1:A:107:CYS:N	2.82	0.40
1:A:108:MET:CE	1:A:210:ILE:HD13	2.48	0.40
1:A:472:LEU:CD1	2:B:835:GLN:NE2	2.84	0.40
1:A:568:PRO:HB3	3:C:221:TYR:OH	2.21	0.40
1:A:569:LYS:O	1:A:571:LEU:HD13	2.20	0.40
1:A:595:THR:O	1:A:596:THR:CG2	2.68	0.40
1:A:718:VAL:O	1:A:719:VAL:C	2.63	0.40
1:A:767:GLN:HE21	1:A:774:ARG:HB3	1.87	0.40
1:A:814:PHE:CD2	1:A:814:PHE:O	2.74	0.40
1:A:1348:LEU:O	1:A:1352:VAL:HG23	2.20	0.40
1:A:1356:ILE:O	1:A:1356:ILE:HG22	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:556:THR:O	2:B:557:PHE:C	2.64	0.40
2:B:610:ASN:HA	2:B:611:PRO:HD3	1.89	0.40
2:B:809:MET:O	2:B:810:GLU:C	2.64	0.40
2:B:980:PHE:CE2	2:B:1094:ARG:HB2	2.56	0.40
3:C:22:LEU:HD13	3:C:230:MET:HE3	1.96	0.40
3:C:29:MET:HE2	11:K:98:LEU:CD2	2.51	0.40
3:C:116:LYS:HD3	3:C:140:ASN:HA	2.02	0.40
3:C:252:GLN:CG	11:K:95:ILE:HG23	2.50	0.40
3:C:256:ALA:C	3:C:258:ILE:N	2.78	0.40
3:C:266:ASP:O	3:C:267:GLN:C	2.64	0.40
4:D:60:LYS:NZ	4:D:122:GLU:OE2	2.53	0.40
5:E:124:VAL:HB	5:E:125:PRO:HD3	2.03	0.40
5:E:197:LYS:HG2	5:E:199:ILE:CG1	2.50	0.40
6:F:82:THR:HG22	6:F:84:TYR:N	2.35	0.40
6:F:90:ARG:CG	6:F:91:ALA:N	2.84	0.40
7:G:53:ASN:HD22	7:G:53:ASN:N	2.18	0.40
7:G:127:PRO:CG	7:G:139:ILE:HG13	2.50	0.40
8:H:4:THR:CG2	8:H:5:LEU:N	2.84	0.40
9:I:7:CYS:C	9:I:8:ARG:O	2.63	0.40
9:I:94:ASP:O	9:I:95:THR:O	2.40	0.40
10:J:47:ARG:NH1	10:J:47:ARG:HG2	2.35	0.40
1:A:49:LYS:HZ1	1:A:61:ILE:CB	2.34	0.40
1:A:100:LYS:O	1:A:104:GLU:HG3	2.20	0.40
1:A:204:THR:O	1:A:205:GLU:C	2.64	0.40
1:A:253:ASN:ND2	1:A:256:GLN:NE2	2.67	0.40
1:A:606:LEU:HD11	1:A:608:ILE:HG13	2.03	0.40
1:A:659:HIS:O	1:A:660:ASN:C	2.63	0.40
1:A:779:PHE:CD1	1:A:784:LEU:HA	2.56	0.40
1:A:877:HIS:HD1	1:A:1056:SER:HA	1.82	0.40
1:A:1026:LEU:HD23	1:A:1026:LEU:HA	1.89	0.40
1:A:1219:THR:HG21	1:A:1271:ILE:CD1	2.45	0.40
1:A:1265:ASN:O	1:A:1266:THR:C	2.64	0.40
1:A:1342:GLU:OE2	5:E:212:ARG:NH1	2.53	0.40
1:A:1354:ASN:HA	1:A:1357:ALA:HB3	2.03	0.40
1:A:1425:SER:O	1:A:1428:VAL:HG23	2.22	0.40
2:B:26:THR:O	2:B:29:ASP:HB2	2.22	0.40
2:B:259:TYR:N	2:B:259:TYR:CD1	2.89	0.40
2:B:287:ARG:NH1	2:B:325:GLN:HA	2.36	0.40
2:B:381:MET:C	2:B:383:ASN:N	2.76	0.40
2:B:605:ARG:HB3	2:B:688:GLY:HA2	2.03	0.40
2:B:856:PHE:N	2:B:856:PHE:CD1	2.89	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:980:PHE:CD2	2:B:1094:ARG:HA	2.56	0.40
2:B:1015:HIS:C	2:B:1017:ILE:H	2.28	0.40
2:B:1034:VAL:C	2:B:1036:ALA:N	2.79	0.40
3:C:17:ASN:C	3:C:240:VAL:HG11	2.46	0.40
3:C:191:TYR:HD2	3:C:201:TRP:CD1	2.39	0.40
3:C:249:ASP:O	3:C:252:GLN:HB3	2.21	0.40
4:D:68:ARG:C	4:D:70:PHE:N	2.77	0.40
4:D:138:ASN:OD1	4:D:141:LEU:HB2	2.21	0.40
5:E:28:TYR:CE2	5:E:78:LEU:HB2	2.56	0.40
6:F:78:GLN:O	6:F:79:ARG:C	2.63	0.40
7:G:1:MET:CE	7:G:3:PHE:CE1	3.05	0.40
7:G:88:ASP:HB3	7:G:144:ARG:CB	2.51	0.40
9:I:95:THR:CG2	9:I:96:SER:N	2.84	0.40
10:J:13:VAL:C	10:J:14:VAL:HG23	2.46	0.40
13:T:9:DC:H2"	13:T:10:DA:H8	1.78	0.40
1:A:359:LEU:HA	1:A:359:LEU:HD23	1.87	0.40
1:A:474:VAL:O	1:A:474:VAL:CG2	2.68	0.40
1:A:524:VAL:HG12	1:A:525:GLN:HG3	2.02	0.40
1:A:600:PRO:HA	8:H:25:ARG:CZ	2.51	0.40
1:A:683:ILE:HG22	1:A:684:ALA:N	2.35	0.40
1:A:712:GLU:C	1:A:714:PHE:N	2.76	0.40
1:A:1072:ILE:O	1:A:1075:PRO:HD2	2.21	0.40
1:A:1165:GLU:OE1	1:A:1194:ARG:NH2	2.54	0.40
2:B:172:ILE:HG22	2:B:173:MET:N	2.36	0.40
2:B:222:ILE:N	2:B:240:ILE:HG13	2.36	0.40
2:B:289:LEU:O	2:B:371:GLU:HB3	2.21	0.40
2:B:324:ILE:HD13	2:B:330:ALA:HA	2.03	0.40
2:B:363:HIS:C	2:B:365:THR:N	2.79	0.40
2:B:378:LEU:HD12	2:B:378:LEU:C	2.46	0.40
2:B:465:ASN:O	2:B:467:GLY:N	2.54	0.40
2:B:578:THR:HG23	2:B:622:LYS:C	2.47	0.40
2:B:790:ASP:N	2:B:790:ASP:OD2	2.52	0.40
2:B:878:GLN:O	2:B:934:LYS:HE2	2.21	0.40
2:B:906:SER:HA	2:B:946:ASN:CB	2.44	0.40
3:C:259:LEU:O	3:C:262:LEU:N	2.53	0.40
4:D:39:ASN:C	4:D:41:GLN:N	2.78	0.40
4:D:54:GLU:CD	4:D:164:ILE:HD11	2.46	0.40
4:D:205:ASP:O	4:D:208:GLU:HB3	2.21	0.40
7:G:26:LEU:O	7:G:29:LYS:N	2.54	0.40
7:G:144:ARG:O	7:G:168:LEU:HD22	2.22	0.40
8:H:87:ARG:O	8:H:89:LEU:HG	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:143:LEU:C	8:H:144:ILE:HG13	2.46	0.40
11:K:11:LEU:CD2	11:K:11:LEU:N	2.82	0.40
1:A:129:LYS:O	1:A:130:ASP:CB	2.66	0.40
1:A:132:LYS:C	1:A:134:ARG:N	2.79	0.40
1:A:215:SER:HB3	1:A:218:ASP:HB2	2.03	0.40
1:A:265:LYS:HA	1:A:265:LYS:HE3	2.03	0.40
1:A:296:LEU:C	1:A:298:PHE:H	2.28	0.40
1:A:823:GLY:O	1:A:824:LEU:C	2.63	0.40
1:A:851:HIS:C	1:A:853:ASP:H	2.29	0.40
1:A:975:HIS:HA	1:A:1036:ARG:HG3	2.02	0.40
1:A:994:GLN:C	1:A:996:ASN:N	2.78	0.40
1:A:1006:ILE:HD12	5:E:163:GLU:HG3	2.00	0.40
1:A:1126:ALA:O	1:A:1128:GLN:N	2.55	0.40
2:B:102:VAL:HB	2:B:110:HIS:H	1.86	0.40
2:B:391:ASP:CB	9:I:92:ARG:HG3	2.52	0.40
2:B:416:LEU:O	2:B:417:PHE:C	2.65	0.40
2:B:737:THR:HG22	9:I:66:PRO:HA	2.02	0.40
2:B:901:PRO:HD2	12:L:59:ALA:O	2.22	0.40
3:C:123:ASN:C	3:C:125:MET:N	2.80	0.40
4:D:39:ASN:HD21	4:D:41:GLN:HB2	1.79	0.40
4:D:139:LYS:HG3	4:D:143:ASN:HD22	1.87	0.40
4:D:175:PHE:HZ	7:G:85:GLU:HG3	1.87	0.40
5:E:62:ALA:O	5:E:63:ASN:CG	2.64	0.40
5:E:117:THR:CG2	5:E:120:ALA:H	2.34	0.40
5:E:164:LEU:HD21	5:E:211:TYR:CG	2.57	0.40
6:F:75:PRO:O	6:F:77:ASP:N	2.54	0.40
7:G:113:HIS:O	7:G:114:LEU:HB2	2.21	0.40
7:G:117:GLN:C	7:G:119:LEU:N	2.78	0.40
9:I:2:THR:CG2	9:I:3:THR:H	2.31	0.40
9:I:4:PHE:HD1	9:I:4:PHE:O	2.05	0.40
9:I:5:ARG:NE	9:I:36:GLU:OE2	2.55	0.40
12:L:27:LEU:HD13	12:L:37:LYS:HG2	2.03	0.40
12:L:58:LYS:O	12:L:59:ALA:O	2.39	0.40
1:A:110:CYS:SG	1:A:111:GLY:N	2.94	0.40
1:A:683:ILE:HG21	1:A:801:GLU:CD	2.46	0.40
1:A:767:GLN:NE2	1:A:774:ARG:HB3	2.37	0.40
1:A:947:PHE:HE2	1:A:954:TRP:CD1	2.40	0.40
1:A:1001:ARG:O	1:A:1002:GLY:C	2.65	0.40
1:A:1208:THR:HG22	1:A:1210:GLY:H	1.85	0.40
2:B:31:TRP:HA	2:B:31:TRP:HE3	1.85	0.40
2:B:228:LYS:HD3	2:B:228:LYS:HA	1.94	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:293:PRO:CG	2:B:296:GLU:OE1	2.70	0.40
2:B:351:TYR:CE2	2:B:355:ILE:HD11	2.55	0.40
2:B:359:GLU:C	2:B:362:PRO:HD3	2.47	0.40
2:B:469:GLN:CG	2:B:470:LYS:N	2.84	0.40
2:B:595:ARG:O	2:B:596:LEU:C	2.64	0.40
2:B:629:ASP:CG	2:B:630:ALA:N	2.79	0.40
2:B:766:ARG:HH21	15:P:11:U:H3	1.70	0.40
2:B:816:GLU:N	2:B:816:GLU:OE1	2.55	0.40
2:B:900:ALA:C	2:B:902:GLY:H	2.30	0.40
2:B:1045:SER:O	2:B:1046:PRO:O	2.39	0.40
4:D:122:GLU:C	4:D:124:GLU:N	2.78	0.40
5:E:176:PRO:O	5:E:212:ARG:HA	2.21	0.40
6:F:89:GLU:HB3	6:F:134:ILE:HD11	2.03	0.40
6:F:138:LEU:HD23	6:F:138:LEU:HA	1.99	0.40
7:G:12:THR:HA	7:G:68:ALA:O	2.22	0.40
8:H:128:ASN:N	8:H:130:ARG:HH11	2.10	0.40
11:K:47:ARG:HD3	11:K:59:ALA:C	2.47	0.40
13:T:12:DG:N2	14:N:6:DT:O2	2.55	0.40

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
1	A	1421/1733 (82%)	909 (64%)	310 (22%)	202 (14%)	0 3
2	B	1111/1224 (91%)	694 (62%)	257 (23%)	160 (14%)	0 3
3	C	268/324 (83%)	164 (61%)	66 (25%)	38 (14%)	0 3
4	D	183/221 (83%)	108 (59%)	49 (27%)	26 (14%)	0 3
5	E	212/215 (99%)	134 (63%)	49 (23%)	29 (14%)	0 3
6	F	86/155 (56%)	60 (70%)	20 (23%)	6 (7%)	1 12

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
7	G	169/171 (99%)	127 (75%)	32 (19%)	10 (6%)	1 15
8	H	133/146 (91%)	72 (54%)	37 (28%)	24 (18%)	0 1
9	I	114/122 (93%)	73 (64%)	26 (23%)	15 (13%)	0 3
10	J	63/70 (90%)	34 (54%)	13 (21%)	16 (25%)	0 0
11	K	114/120 (95%)	79 (69%)	26 (23%)	9 (8%)	1 10
12	L	45/70 (64%)	19 (42%)	11 (24%)	15 (33%)	0 0
All	All	3919/4571 (86%)	2473 (63%)	896 (23%)	550 (14%)	0 3

All (550) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	4	GLN
1	A	41	MET
1	A	43	GLU
1	A	48	ALA
1	A	58	LEU
1	A	63	ARG
1	A	67	CYS
1	A	70	CYS
1	A	74	MET
1	A	76	GLU
1	A	93	VAL
1	A	130	ASP
1	A	154	SER
1	A	167	CYS
1	A	259	GLU
1	A	311	GLN
1	A	312	PRO
1	A	317	LYS
1	A	318	SER
1	A	399	HIS
1	A	409	SER
1	A	410	GLY
1	A	535	THR
1	A	536	LEU
1	A	543	LEU
1	A	544	ASP
1	A	556	TRP
1	A	567	LYS
1	A	583	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	619	LYS
1	A	666	ILE
1	A	705	LYS
1	A	846	GLU
1	A	871	ASP
1	A	885	THR
1	A	968	GLN
1	A	986	ILE
1	A	1002	GLY
1	A	1016	THR
1	A	1110	ASN
1	A	1114	PRO
1	A	1115	SER
1	A	1116	LEU
1	A	1122	PRO
1	A	1124	HIS
1	A	1177	LEU
1	A	1178	ASP
1	A	1206	ASP
1	A	1212	VAL
1	A	1244	ARG
1	A	1255	GLU
1	A	1314	SER
1	A	1341	ILE
1	A	1393	ASN
1	A	1448	GLU
2	B	21	GLU
2	B	41	LYS
2	B	65	GLU
2	B	108	VAL
2	B	124	TYR
2	B	134	LYS
2	B	184	ALA
2	B	206	ASN
2	B	259	TYR
2	B	262	GLU
2	B	265	SER
2	B	266	ALA
2	B	278	GLN
2	B	282	ILE
2	B	295	GLY
2	B	343	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	B	344	LYS
2	B	345	LYS
2	B	346	GLU
2	B	365	THR
2	B	367	LEU
2	B	391	ASP
2	B	409	ALA
2	B	450	ALA
2	B	468	GLU
2	B	469	GLN
2	B	509	ALA
2	B	511	PRO
2	B	512	ARG
2	B	577	ALA
2	B	705	MET
2	B	708	GLU
2	B	709	ASP
2	B	751	VAL
2	B	878	GLN
2	B	879	ARG
2	B	892	LYS
2	B	958	GLN
2	B	987	LYS
2	B	1045	SER
2	B	1046	PRO
2	B	1069	PHE
2	B	1097	HIS
2	B	1099	VAL
2	B	1143	ALA
2	B	1144	ALA
2	B	1157	ALA
2	B	1175	LEU
2	B	1183	LYS
3	C	4	GLU
3	C	56	THR
3	C	60	ASP
3	C	74	SER
3	C	90	ASP
3	C	141	GLY
3	C	149	LYS
3	C	161	LYS
3	C	213	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	C	214	ASN
3	C	237	SER
4	D	19	GLU
4	D	21	GLU
4	D	52	LEU
4	D	114	MET
4	D	131	GLU
4	D	169	SER
4	D	198	LEU
4	D	218	GLU
5	E	45	LYS
5	E	88	VAL
5	E	93	MET
5	E	97	VAL
5	E	106	GLN
5	E	115	ASN
5	E	129	PRO
5	E	174	GLN
6	F	72	LYS
6	F	81	THR
6	F	114	GLU
7	G	2	PHE
7	G	63	PRO
7	G	114	LEU
7	G	120	THR
7	G	139	ILE
7	G	141	SER
7	G	154	VAL
8	H	78	SER
8	H	81	PRO
8	H	82	PRO
8	H	87	ARG
8	H	109	LYS
8	H	128	ASN
8	H	131	ASN
8	H	140	ALA
9	I	32	CYS
9	I	79	HIS
9	I	95	THR
9	I	106	CYS
10	J	2	ILE
10	J	64	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
11	K	8	GLU
12	L	40	LEU
12	L	42	ARG
12	L	50	ASP
12	L	55	ILE
12	L	59	ALA
12	L	60	ARG
1	A	5	GLN
1	A	8	SER
1	A	42	ASP
1	A	57	ARG
1	A	84	ILE
1	A	96	ILE
1	A	126	LEU
1	A	131	SER
1	A	148	CYS
1	A	283	GLY
1	A	287	HIS
1	A	392	VAL
1	A	439	ASN
1	A	516	SER
1	A	517	ASN
1	A	591	PHE
1	A	604	GLY
1	A	625	SER
1	A	706	HIS
1	A	726	ARG
1	A	775	ILE
1	A	852	TYR
1	A	872	GLY
1	A	958	VAL
1	A	969	GLN
1	A	1036	ARG
1	A	1054	LEU
1	A	1095	THR
1	A	1097	GLY
1	A	1123	GLY
1	A	1127	ASP
1	A	1133	LEU
1	A	1140	HIS
1	A	1167	GLU
1	A	1176	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	1221	LYS
1	A	1229	SER
1	A	1233	ASP
1	A	1278	ASN
1	A	1316	VAL
1	A	1331	SER
1	A	1365	TYR
1	A	1390	ASN
1	A	1405	THR
1	A	1438	THR
1	A	1450	LEU
1	A	1454	MET
2	B	46	GLN
2	B	115	GLN
2	B	168	GLY
2	B	229	ALA
2	B	257	LYS
2	B	258	LEU
2	B	260	GLY
2	B	277	LYS
2	B	294	ASP
2	B	308	TRP
2	B	312	GLU
2	B	327	ARG
2	B	368	GLU
2	B	466	TRP
2	B	480	SER
2	B	483	LEU
2	B	506	GLY
2	B	575	PRO
2	B	598	GLU
2	B	629	ASP
2	B	655	LYS
2	B	711	GLU
2	B	712	PRO
2	B	728	ARG
2	B	735	ALA
2	B	752	ALA
2	B	882	THR
2	B	907	GLY
2	B	943	SER
2	B	951	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	B	1003	ALA
2	B	1006	ILE
2	B	1041	GLU
2	B	1075	GLY
2	B	1103	ILE
2	B	1108	ARG
2	B	1112	GLN
2	B	1155	SER
2	B	1167	GLY
2	B	1171	VAL
2	B	1176	ASN
2	B	1181	GLU
2	B	1186	ASP
3	C	17	ASN
3	C	78	GLU
3	C	89	GLU
3	C	110	THR
3	C	132	PRO
3	C	175	ALA
4	D	12	ARG
4	D	16	LYS
4	D	20	GLU
4	D	112	ASP
4	D	117	GLU
4	D	168	LYS
4	D	201	LYS
4	D	220	LEU
5	E	3	GLN
5	E	43	LYS
5	E	66	GLU
5	E	70	SER
5	E	73	PRO
5	E	76	GLY
5	E	94	LYS
5	E	130	ALA
6	F	128	LYS
7	G	9	LEU
8	H	2	SER
8	H	6	PHE
8	H	84	ALA
8	H	92	ASP
8	H	110	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
8	H	119	GLY
8	H	137	GLN
9	I	3	THR
9	I	56	ALA
10	J	6	ARG
10	J	17	LYS
10	J	24	LEU
10	J	42	LYS
11	K	15	GLY
12	L	37	LYS
12	L	45	ALA
12	L	53	HIS
12	L	56	LEU
1	A	54	ASN
1	A	187	LYS
1	A	194	ALA
1	A	219	PHE
1	A	222	LEU
1	A	257	ARG
1	A	286	HIS
1	A	331	GLY
1	A	332	LYS
1	A	382	PRO
1	A	419	LYS
1	A	465	TYR
1	A	483	ASP
1	A	510	GLN
1	A	538	ASP
1	A	557	ASP
1	A	568	PRO
1	A	597	LEU
1	A	600	PRO
1	A	731	ARG
1	A	734	GLU
1	A	789	LYS
1	A	875	ALA
1	A	895	LYS
1	A	910	PRO
1	A	979	SER
1	A	1098	VAL
1	A	1168	GLU
1	A	1211	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	1223	ASP
1	A	1270	ASN
1	A	1388	GLY
1	A	1416	ALA
1	A	1435	PRO
2	B	28	GLU
2	B	48	LEU
2	B	100	PRO
2	B	135	ARG
2	B	186	GLU
2	B	197	PHE
2	B	267	ARG
2	B	305	VAL
2	B	384	ARG
2	B	385	LEU
2	B	394	ASP
2	B	510	LYS
2	B	543	SER
2	B	591	ARG
2	B	707	PRO
2	B	746	SER
2	B	793	ALA
2	B	797	TYR
2	B	848	ARG
2	B	942	ARG
2	B	957	ASN
2	B	1017	ILE
2	B	1056	SER
2	B	1074	ASN
2	B	1082	MET
3	C	9	LYS
3	C	10	ILE
3	C	25	VAL
3	C	109	SER
3	C	127	ARG
3	C	128	ASN
3	C	191	TYR
3	C	209	TYR
3	C	218	PRO
3	C	240	VAL
3	C	269	LYS
4	D	4	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	D	47	LEU
4	D	61	GLU
4	D	156	ASP
4	D	192	LYS
5	E	36	GLU
5	E	64	PRO
5	E	74	ASP
5	E	86	PRO
5	E	148	GLU
6	F	71	GLU
8	H	14	GLU
8	H	32	THR
8	H	63	LEU
8	H	90	ALA
9	I	8	ARG
9	I	57	GLY
9	I	62	ILE
10	J	14	VAL
10	J	28	ASP
10	J	57	ILE
11	K	29	ASN
12	L	28	LYS
1	A	35	ILE
1	A	51	GLY
1	A	71	GLN
1	A	169	ASN
1	A	186	LYS
1	A	232	GLU
1	A	253	ASN
1	A	281	HIS
1	A	418	SER
1	A	424	ILE
1	A	684	ALA
1	A	692	ASP
1	A	830	LYS
1	A	847	ASP
1	A	891	ALA
1	A	972	HIS
1	A	973	ILE
1	A	1067	LEU
1	A	1111	MET
1	A	1165	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	1242	VAL
1	A	1403	GLU
2	B	24	PRO
2	B	45	SER
2	B	114	PRO
2	B	309	GLN
2	B	341	LEU
2	B	369	GLY
2	B	456	GLY
2	B	559	SER
2	B	761	HIS
2	B	828	ALA
2	B	867	GLY
2	B	868	MET
2	B	881	ASN
2	B	901	PRO
2	B	937	ALA
2	B	1035	ALA
2	B	1203	LEU
3	C	125	MET
3	C	133	ILE
3	C	169	LYS
3	C	184	ASN
3	C	216	GLY
4	D	15	LEU
4	D	157	GLN
4	D	203	SER
5	E	6	GLU
5	E	90	VAL
5	E	122	LYS
5	E	187	TYR
8	H	17	PRO
8	H	52	GLN
8	H	108	SER
9	I	9	ASP
9	I	34	TYR
9	I	58	VAL
10	J	9	SER
10	J	29	GLU
10	J	55	ASP
11	K	14	GLU
12	L	35	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	L	39	SER
1	A	44	THR
1	A	155	GLU
1	A	164	ARG
1	A	196	GLU
1	A	234	MET
1	A	322	VAL
1	A	700	ASN
1	A	713	SER
1	A	718	VAL
1	A	1014	ALA
1	A	1108	ALA
1	A	1378	GLN
2	B	30	SER
2	B	37	PHE
2	B	325	GLN
2	B	334	ILE
2	B	353	LYS
2	B	467	GLY
2	B	566	LEU
2	B	613	VAL
2	B	687	GLU
2	B	792	MET
2	B	946	ASN
2	B	1178	ASN
2	B	1214	PRO
3	C	3	GLU
3	C	108	GLU
3	C	142	VAL
4	D	40	HIS
5	E	12	LEU
5	E	59	SER
5	E	121	MET
6	F	139	PRO
8	H	105	GLU
9	I	65	ASP
9	I	107	SER
11	K	53	ASP
11	K	90	ALA
12	L	25	ALA
1	A	52	GLY
1	A	73	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	197	PRO
1	A	313	GLN
1	A	400	PRO
1	A	603	ASN
1	A	650	GLN
1	A	673	GLY
1	A	780	VAL
1	A	987	VAL
1	A	1164	PRO
2	B	187	SER
2	B	435	THR
2	B	540	SER
2	B	620	ARG
2	B	780	VAL
2	B	1131	GLY
4	D	191	ALA
9	I	11	ASN
10	J	13	VAL
10	J	32	GLU
11	K	79	GLU
12	L	46	VAL
1	A	59	GLY
1	A	138	ILE
1	A	250	ILE
1	A	623	GLY
1	A	1437	GLY
3	C	126	GLY
7	G	20	PRO
11	K	43	GLY
1	A	77	CYS
1	A	223	GLY
1	A	245	PRO
1	A	258	GLY
1	A	719	VAL
1	A	765	VAL
1	A	1263	ILE
2	B	283	VAL
2	B	501	PRO
8	H	120	GLY
10	J	33	GLY
1	A	158	PRO
1	A	207	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	244	PRO
1	A	585	GLY
1	A	693	VAL
1	A	888	GLY
1	A	1428	VAL
2	B	284	ILE
2	B	355	ILE
2	B	562	GLY
2	B	729	ILE
3	C	182	PRO
10	J	4	PRO
11	K	66	PRO
1	A	385	ILE
2	B	592	ASN
7	G	92	VAL
1	A	948	VAL
5	E	154	ILE

5.3.2 Protein sidechains (i)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
1	A	1249/1520 (82%)	1119 (90%)	130 (10%)	7 28
2	B	974/1061 (92%)	871 (89%)	103 (11%)	6 27
3	C	238/280 (85%)	215 (90%)	23 (10%)	8 31
4	D	167/200 (84%)	146 (87%)	21 (13%)	4 21
5	E	196/197 (100%)	177 (90%)	19 (10%)	8 31
6	F	78/137 (57%)	67 (86%)	11 (14%)	3 18
7	G	152/152 (100%)	137 (90%)	15 (10%)	7 30
8	H	121/128 (94%)	114 (94%)	7 (6%)	18 45
9	I	110/116 (95%)	98 (89%)	12 (11%)	6 26
10	J	60/65 (92%)	56 (93%)	4 (7%)	15 42
11	K	99/102 (97%)	86 (87%)	13 (13%)	4 20

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
12	L	41/57 (72%)	36 (88%)	5 (12%)	5 22
All	All	3485/4015 (87%)	3122 (90%)	363 (10%)	7 28

All (363) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	11	LEU
1	A	18	GLN
1	A	32	VAL
1	A	34	LYS
1	A	37	PHE
1	A	41	MET
1	A	57	ARG
1	A	58	LEU
1	A	68	GLN
1	A	93	VAL
1	A	96	ILE
1	A	103	CYS
1	A	108	MET
1	A	114	LEU
1	A	174	ILE
1	A	179	LEU
1	A	182	VAL
1	A	185	TRP
1	A	196	GLU
1	A	204	THR
1	A	216	VAL
1	A	236	LEU
1	A	245	PRO
1	A	265	LYS
1	A	270	LEU
1	A	281	HIS
1	A	307	ASP
1	A	312	PRO
1	A	320	ARG
1	A	322	VAL
1	A	326	ARG
1	A	332	LYS
1	A	333	GLU
1	A	335	ARG
1	A	337	ARG
1	A	345	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	351	THR
1	A	379	VAL
1	A	385	ILE
1	A	393	ARG
1	A	407	ARG
1	A	408	ASP
1	A	419	LYS
1	A	425	GLN
1	A	428	TYR
1	A	438	ASP
1	A	442	VAL
1	A	443	LEU
1	A	445	ASN
1	A	447	GLN
1	A	451	HIS
1	A	453	MET
1	A	462	VAL
1	A	466	SER
1	A	479	ASN
1	A	481	ASP
1	A	489	LEU
1	A	493	GLN
1	A	539	THR
1	A	542	GLU
1	A	552	TRP
1	A	590	ARG
1	A	618	GLU
1	A	622	VAL
1	A	629	LEU
1	A	635	ARG
1	A	666	ILE
1	A	691	LEU
1	A	701	LEU
1	A	758	ILE
1	A	774	ARG
1	A	779	PHE
1	A	821	ARG
1	A	825	ILE
1	A	833	GLU
1	A	834	THR
1	A	839	ARG
1	A	856	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	858	ASN
1	A	877	HIS
1	A	923	LEU
1	A	929	LEU
1	A	930	ASP
1	A	961	ARG
1	A	965	GLN
1	A	969	GLN
1	A	998	LEU
1	A	1001	ARG
1	A	1029	ARG
1	A	1037	LEU
1	A	1038	THR
1	A	1050	GLU
1	A	1058	VAL
1	A	1064	VAL
1	A	1101	LEU
1	A	1120	LEU
1	A	1122	PRO
1	A	1124	HIS
1	A	1146	VAL
1	A	1152	ILE
1	A	1193	LEU
1	A	1195	LEU
1	A	1214	GLU
1	A	1223	ASP
1	A	1245	PRO
1	A	1255	GLU
1	A	1260	LEU
1	A	1264	GLU
1	A	1269	GLU
1	A	1271	ILE
1	A	1273	LEU
1	A	1291	VAL
1	A	1295	THR
1	A	1297	GLU
1	A	1308	THR
1	A	1333	ILE
1	A	1371	LEU
1	A	1372	VAL
1	A	1383	SER
1	A	1393	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	1394	THR
1	A	1400	CYS
1	A	1407	GLU
1	A	1408	ILE
1	A	1411	GLU
1	A	1428	VAL
1	A	1443	VAL
1	A	1445	ILE
1	A	1449	SER
1	A	1451	VAL
2	B	20	ASP
2	B	30	SER
2	B	44	VAL
2	B	46	GLN
2	B	57	TYR
2	B	100	PRO
2	B	167	ILE
2	B	170	LEU
2	B	175	ARG
2	B	194	GLU
2	B	213	ILE
2	B	217	ARG
2	B	258	LEU
2	B	272	THR
2	B	298	LEU
2	B	324	ILE
2	B	332	ASP
2	B	364	ILE
2	B	365	THR
2	B	371	GLU
2	B	376	PHE
2	B	378	LEU
2	B	393	LYS
2	B	396	ASP
2	B	426	LYS
2	B	429	PHE
2	B	453	ILE
2	B	455	SER
2	B	465	ASN
2	B	468	GLU
2	B	482	VAL
2	B	502	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	B	510	LYS
2	B	513	GLN
2	B	516	ASN
2	B	555	ILE
2	B	563	MET
2	B	570	VAL
2	B	582	VAL
2	B	591	ARG
2	B	597	MET
2	B	602	THR
2	B	603	LEU
2	B	615	MET
2	B	616	ILE
2	B	619	ILE
2	B	628	THR
2	B	635	ARG
2	B	636	PRO
2	B	680	THR
2	B	685	LEU
2	B	737	THR
2	B	748	ILE
2	B	766	ARG
2	B	780	VAL
2	B	785	TYR
2	B	787	VAL
2	B	798	TYR
2	B	811	TYR
2	B	815	ARG
2	B	825	VAL
2	B	830	TYR
2	B	839	MET
2	B	844	SER
2	B	854	LEU
2	B	855	PHE
2	B	859	TYR
2	B	878	GLN
2	B	895	ASP
2	B	909	ASP
2	B	933	SER
2	B	944	THR
2	B	951	GLN
2	B	955	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	B	959	ASP
2	B	986	GLN
2	B	997	GLU
2	B	999	MET
2	B	1002	THR
2	B	1006	ILE
2	B	1022	THR
2	B	1048	THR
2	B	1049	ASP
2	B	1058	LEU
2	B	1069	PHE
2	B	1077	THR
2	B	1084	GLN
2	B	1095	LEU
2	B	1098	MET
2	B	1133	MET
2	B	1137	CYS
2	B	1150	ARG
2	B	1159	ARG
2	B	1163	CYS
2	B	1169	MET
2	B	1170	THR
2	B	1178	ASN
2	B	1181	GLU
2	B	1182	CYS
2	B	1189	ILE
2	B	1191	ILE
2	B	1214	PRO
2	B	1218	THR
3	C	1	MET
3	C	8	VAL
3	C	56	THR
3	C	57	VAL
3	C	58	LEU
3	C	62	PHE
3	C	74	SER
3	C	77	ILE
3	C	99	LEU
3	C	106	GLU
3	C	124	LEU
3	C	145	CYS
3	C	147	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	C	166	GLU
3	C	193	TYR
3	C	197	SER
3	C	209	TYR
3	C	217	ASP
3	C	229	TYR
3	C	233	GLU
3	C	235	VAL
3	C	238	ILE
3	C	245	VAL
4	D	13	ARG
4	D	15	LEU
4	D	22	GLU
4	D	28	GLN
4	D	40	HIS
4	D	43	GLU
4	D	47	LEU
4	D	61	GLU
4	D	63	LEU
4	D	115	HIS
4	D	137	ASN
4	D	149	THR
4	D	170	THR
4	D	187	THR
4	D	192	LYS
4	D	200	ASN
4	D	206	GLU
4	D	207	LEU
4	D	213	GLU
4	D	220	LEU
4	D	221	TYR
5	E	17	ARG
5	E	22	MET
5	E	31	THR
5	E	59	SER
5	E	60	PHE
5	E	65	THR
5	E	70	SER
5	E	74	ASP
5	E	82	PHE
5	E	114	ASN
5	E	132	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	E	134	THR
5	E	165	LEU
5	E	169	ARG
5	E	172	GLU
5	E	190	LEU
5	E	198	ILE
5	E	207	ARG
5	E	212	ARG
6	F	71	GLU
6	F	72	LYS
6	F	79	ARG
6	F	82	THR
6	F	90	ARG
6	F	111	LEU
6	F	112	GLU
6	F	115	THR
6	F	116	ASP
6	F	151	LEU
6	F	153	VAL
7	G	1	MET
7	G	13	LEU
7	G	17	PHE
7	G	30	LEU
7	G	39	THR
7	G	49	LEU
7	G	51	TYR
7	G	73	LYS
7	G	74	TYR
7	G	113	HIS
7	G	117	GLN
7	G	137	ILE
7	G	141	SER
7	G	165	GLU
7	G	171	ILE
8	H	8	ASP
8	H	10	PHE
8	H	17	PRO
8	H	42	ILE
8	H	63	LEU
8	H	86	ASP
8	H	102	TYR
9	I	4	PHE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
9	I	6	PHE
9	I	7	CYS
9	I	8	ARG
9	I	37	GLU
9	I	44	TYR
9	I	84	VAL
9	I	85	PHE
9	I	86	PHE
9	I	94	ASP
9	I	100	PHE
9	I	101	PHE
10	J	2	ILE
10	J	23	ASN
10	J	43	ARG
10	J	44	TYR
11	K	1	MET
11	K	5	ASP
11	K	6	ARG
11	K	10	PHE
11	K	11	LEU
11	K	21	ILE
11	K	25	THR
11	K	41	THR
11	K	47	ARG
11	K	50	LEU
11	K	61	TYR
11	K	91	CYS
11	K	107	THR
12	L	27	LEU
12	L	55	ILE
12	L	64	LEU
12	L	65	VAL
12	L	68	GLU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (153) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	54	ASN
1	A	68	GLN
1	A	75	ASN
1	A	83	HIS
1	A	118	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	169	ASN
1	A	213	HIS
1	A	225	ASN
1	A	256	GLN
1	A	282	ASN
1	A	299	HIS
1	A	339	ASN
1	A	358	ASN
1	A	394	ASN
1	A	435	HIS
1	A	439	ASN
1	A	445	ASN
1	A	503	GLN
1	A	517	ASN
1	A	584	ASN
1	A	611	GLN
1	A	650	GLN
1	A	659	HIS
1	A	700	ASN
1	A	736	ASN
1	A	741	ASN
1	A	742	ASN
1	A	745	GLN
1	A	757	ASN
1	A	767	GLN
1	A	768	GLN
1	A	786	HIS
1	A	802	ASN
1	A	858	ASN
1	A	865	GLN
1	A	877	HIS
1	A	903	ASN
1	A	926	GLN
1	A	935	GLN
1	A	968	GLN
1	A	969	GLN
1	A	975	HIS
1	A	1106	ASN
1	A	1130	GLN
1	A	1140	HIS
1	A	1187	GLN
1	A	1188	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	1203	ASN
1	A	1258	HIS
1	A	1265	ASN
1	A	1278	ASN
1	A	1364	ASN
1	A	1387	HIS
1	A	1393	ASN
1	A	1427	ASN
1	A	1432	GLN
2	B	52	ASN
2	B	60	GLN
2	B	178	ASN
2	B	215	GLN
2	B	236	HIS
2	B	366	GLN
2	B	383	ASN
2	B	415	GLN
2	B	433	GLN
2	B	465	ASN
2	B	469	GLN
2	B	484	ASN
2	B	499	ASN
2	B	513	GLN
2	B	515	HIS
2	B	516	ASN
2	B	518	HIS
2	B	538	ASN
2	B	572	HIS
2	B	573	GLN
2	B	587	HIS
2	B	734	HIS
2	B	744	HIS
2	B	763	GLN
2	B	794	ASN
2	B	821	GLN
2	B	834	ASN
2	B	835	GLN
2	B	842	ASN
2	B	951	GLN
2	B	957	ASN
2	B	975	GLN
2	B	1062	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	B	1065	GLN
2	B	1076	HIS
2	B	1084	GLN
2	B	1117	GLN
2	B	1141	HIS
2	B	1178	ASN
2	B	1179	GLN
2	B	1193	GLN
2	B	1195	HIS
3	C	24	ASN
3	C	65	HIS
3	C	73	GLN
3	C	79	GLN
3	C	102	GLN
3	C	112	ASN
3	C	123	ASN
3	C	140	ASN
3	C	151	GLN
3	C	203	GLN
3	C	231	ASN
4	D	2	ASN
4	D	9	GLN
4	D	23	ASN
4	D	28	GLN
4	D	39	ASN
4	D	40	HIS
4	D	74	GLN
4	D	115	HIS
4	D	132	GLN
4	D	137	ASN
4	D	143	ASN
4	D	179	GLN
5	E	99	HIS
5	E	101	GLN
5	E	104	ASN
5	E	114	ASN
5	E	147	HIS
6	F	78	GLN
6	F	100	GLN
7	G	53	ASN
7	G	57	GLN
7	G	97	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	G	126	ASN
7	G	131	GLN
7	G	153	GLN
7	G	158	HIS
8	H	3	ASN
8	H	33	GLN
8	H	35	GLN
8	H	131	ASN
8	H	133	ASN
8	H	137	GLN
9	I	22	ASN
9	I	79	HIS
9	I	89	GLN
9	I	90	GLN
9	I	108	HIS
10	J	53	HIS
10	J	64	ASN
11	K	44	ASN
11	K	65	HIS
11	K	76	GLN
11	K	104	ASN
12	L	53	HIS

5.3.3 RNA (i)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
15	P	9/16 (56%)	1 (11%)	0

All (1) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
15	P	11	U

There are no RNA pucker outliers to report.

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

2 non-standard protein/DNA/RNA residues are modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
13	BRU	T	23	13,15	18,21,22	3.94	1 (5%)	25,30,33	0.99	2 (8%)
13	8OG	T	19	13,15	22,25,26	1.03	1 (4%)	26,37,40	1.63	3 (11%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
13	BRU	T	23	13,15	-	1/7/21/22	0/2/2/2
13	8OG	T	19	13,15	-	0/7/21/22	0/3/3/3

All (2) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
13	T	23	BRU	BR-C5	-16.68	1.49	1.88
13	T	19	8OG	C8-N7	-3.93	1.31	1.38

All (5) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
13	T	19	8OG	N7-C8-N9	5.81	113.07	106.61
13	T	19	8OG	C5-N7-C8	-3.60	104.51	109.47
13	T	23	BRU	C6-C5-C4	-2.59	118.04	120.67
13	T	19	8OG	C4-C5-N7	2.55	110.73	106.06
13	T	23	BRU	O3'-C3'-C2'	-2.26	103.03	110.88

There are no chirality outliers.

All (1) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
13	T	23	BRU	C2'-C1'-N1-C2

There are no ring outliers.

1 monomer is involved in 1 short contact:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
13	T	23	BRU	1	0

5.5 Carbohydrates (i)

There are no oligosaccharides in this entry.

5.6 Ligand geometry (i)

Of 9 ligands modelled in this entry, 9 are monoatomic - leaving 0 for Mogul analysis.

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

6 Fit of model and data

6.1 Protein, DNA and RNA chains

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
1	A	1429/1733 (82%)	-0.28	10 (0%) 84 63	15, 72, 135, 195	0
2	B	1125/1224 (91%)	-0.03	20 (1%) 67 42	11, 88, 154, 194	0
3	C	270/324 (83%)	-0.36	0 100 100	34, 73, 131, 174	0
4	D	187/221 (84%)	-0.09	5 (2%) 56 35	58, 98, 152, 197	0
5	E	214/215 (99%)	-0.17	1 (0%) 87 69	42, 112, 155, 161	0
6	F	88/155 (56%)	-0.49	0 100 100	24, 48, 91, 122	0
7	G	171/171 (100%)	-0.31	0 100 100	48, 74, 117, 128	0
8	H	137/146 (93%)	0.20	3 (2%) 62 39	91, 125, 152, 157	0
9	I	116/122 (95%)	-0.02	0 100 100	65, 121, 152, 153	0
10	J	65/70 (92%)	-0.39	0 100 100	48, 67, 106, 121	0
11	K	116/120 (96%)	-0.53	1 (0%) 81 58	32, 79, 108, 160	0
12	L	47/70 (67%)	0.31	2 (4%) 40 25	73, 124, 147, 159	0
13	T	19/26 (73%)	0.59	0 100 100	128, 194, 200, 200	0
14	N	11/12 (91%)	0.57	0 100 100	186, 198, 200, 200	0
15	P	10/16 (62%)	0.64	1 (10%) 12 13	177, 193, 199, 200	0
All	All	4005/4625 (86%)	-0.18	43 (1%) 78 53	11, 83, 152, 200	0

All (43) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	A	2	VAL	4.9
2	B	446	LEU	4.2
1	A	1081	LEU	4.1
2	B	471	LYS	3.8
4	D	1	MET	3.5
11	K	116	ALA	3.4
1	A	3	GLY	3.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	B	883	LEU	3.4
1	A	252	PHE	3.2
2	B	448	ILE	3.2
2	B	472	ALA	3.2
15	P	2	U	3.2
2	B	507	LYS	3.1
1	A	56	PRO	3.1
4	D	18	VAL	2.9
2	B	715	ALA	2.9
2	B	882	THR	2.8
2	B	504	ARG	2.6
4	D	13	ARG	2.6
2	B	510	LYS	2.5
1	A	1254	ALA	2.5
4	D	25	ALA	2.5
2	B	70	ILE	2.4
4	D	3	VAL	2.4
2	B	310	MET	2.4
2	B	887	HIS	2.3
2	B	252	SER	2.3
8	H	119	GLY	2.3
2	B	392	ARG	2.3
1	A	33	ALA	2.2
12	L	27	LEU	2.2
2	B	164	LYS	2.2
12	L	28	LYS	2.2
1	A	69	THR	2.2
2	B	726	ALA	2.1
1	A	587	HIS	2.1
2	B	503	GLY	2.1
8	H	83	GLN	2.1
1	A	65	LEU	2.1
8	H	136	LYS	2.1
2	B	884	ARG	2.1
5	E	126	SER	2.0
2	B	1217	TYR	2.0

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

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column

labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
13	BRU	T	23	20/21	0.58	0.17	153,162,167,170	0
13	8OG	T	19	23/24	0.93	0.10	131,141,154,155	0

6.3 Carbohydrates (i)

There are no oligosaccharides in this entry.

6.4 Ligands (i)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
16	MG	A	2458	1/1	0.97	0.05	69,69,69,69	0
17	ZN	I	1122	1/1	0.97	0.04	134,134,134,134	0
17	ZN	A	2456	1/1	0.98	0.03	96,96,96,96	0
17	ZN	L	1071	1/1	0.99	0.02	111,111,111,111	0
17	ZN	C	1269	1/1	1.00	0.03	39,39,39,39	0
17	ZN	I	1121	1/1	1.00	0.02	70,70,70,70	0
17	ZN	A	2457	1/1	1.00	0.01	38,38,38,38	0
17	ZN	J	1066	1/1	1.00	0.01	47,47,47,47	0
17	ZN	B	2225	1/1	1.00	0.03	43,43,43,43	0

6.5 Other polymers (i)

There are no such residues in this entry.