



Full wwPDB X-ray Structure Validation Report ⓘ

Feb 27, 2014 – 07:49 PM GMT

PDB ID : 2CW0
Title : Crystal structure of Thermus thermophilus RNA polymerase holoenzyme at 3.3 angstroms resolution
Authors : Tuske, S.; Sarafianos, S.G.; Wang, X.; Hudson, B.; Sineva, E.; Mukhopadhyay, J.; Birktoft, J.J.; Leroy, O.; Ismail, S.; Clark Jr., A.D.; Dharia, C.; Napoli, A.; Laptenko, O.; Lee, J.; Borukhov, S.; Ebright, R.H.; Arnold, E.
Deposited on : 2005-06-15
Resolution : 3.30 Å(reported)

This is a full wwPDB validation report for a publicly released PDB entry.
We welcome your comments at validation@mail.wwpdb.org
A user guide is available at <http://wwpdb.org/ValidationPDFNotes.html>

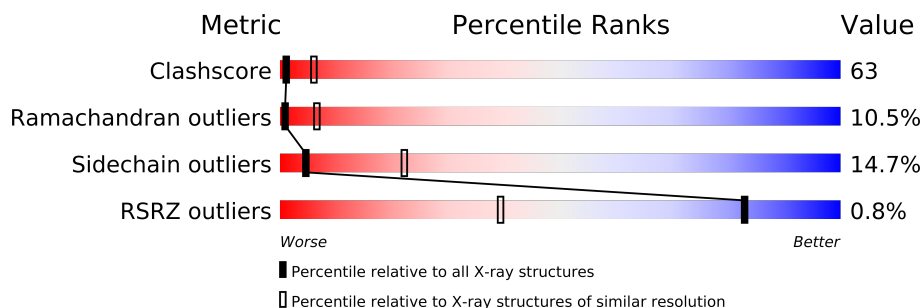
The following versions of software and data (see [references](#)) were used in the production of this report:

MolProbity : 4.02b-467
Mogul : 1.15 2013
Xtriage (Phenix) : dev-1323
EDS : stable22639
Percentile statistics : 21963
Refmac : 5.8.0049
CCP4 : 6.3.0 (Settle)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et. al. (1996)
Validation Pipeline (wwPDB-VP) : stable22683

1 Overall quality at a glance

The reported resolution of this entry is 3.30 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))
Clashscore	79885	1696 (3.40-3.20)
Ramachandran outliers	78287	1664 (3.40-3.20)
Sidechain outliers	78261	1662 (3.40-3.20)
RSRZ outliers	66119	1342 (3.40-3.20)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments on the lower bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria. The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density.

Mol	Chain	Length	Quality of chain
1	A	315	
1	B	315	
1	K	315	
1	L	315	
2	C	1119	
2	M	1119	
3	D	1524	
3	N	1524	
4	E	99	
4	O	99	
5	F	423	
5	P	423	

The following table lists non-polymeric compounds that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Geometry	Electron density
6	ZN	D	1525	-	X
6	ZN	N	1525	-	X

2 Entry composition

There are 7 unique types of molecules in this entry. The entry contains 53962 atoms, of which 0 are hydrogen and 0 are deuterium.

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 alpha chain.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	229	Total	C	N	O	S	0	0	0
			1806	1153	313	337	3			
1	B	229	Total	C	N	O	S	0	0	0
			1806	1153	313	337	3			
1	K	229	Total	C	N	O	S	0	0	0
			1806	1153	313	337	3			
1	L	229	Total	C	N	O	S	0	0	0
			1806	1153	313	337	3			

- Molecule 2 is a protein called DNA-directed RNA polymerase beta chain.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	C	1119	Total	C	N	O	S	0	0	0
			8829	5581	1577	1647	24			
2	M	1119	Total	C	N	O	S	0	0	0
			8829	5581	1577	1647	24			

- Molecule 3 is a protein called DNA-directed RNA polymerase beta' chain.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	D	1392	Total	C	N	O	S	0	0	0
			10975	6953	1941	2048	33			
3	N	1392	Total	C	N	O	S	0	0	0
			10975	6953	1941	2048	33			

- Molecule 4 is a protein called RNA polymerase omega chain.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	E	95	Total	C	N	O	S	0	0	0
			769	488	133	144	4			
4	O	95	Total	C	N	O	S	0	0	0
			769	488	133	144	4			

- Molecule 5 is a protein called RNA polymerase sigma factor rpoD.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	F	345	Total	C	N	O	S	0	0	0
			2793	1762	504	523	4			
5	P	345	Total	C	N	O	S	0	0	0
			2793	1762	504	523	4			

- Molecule 6 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
6	D	2	Total	Zn	0	0
			2	2		
6	N	2	Total	Zn	0	0
			2	2		

- Molecule 7 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

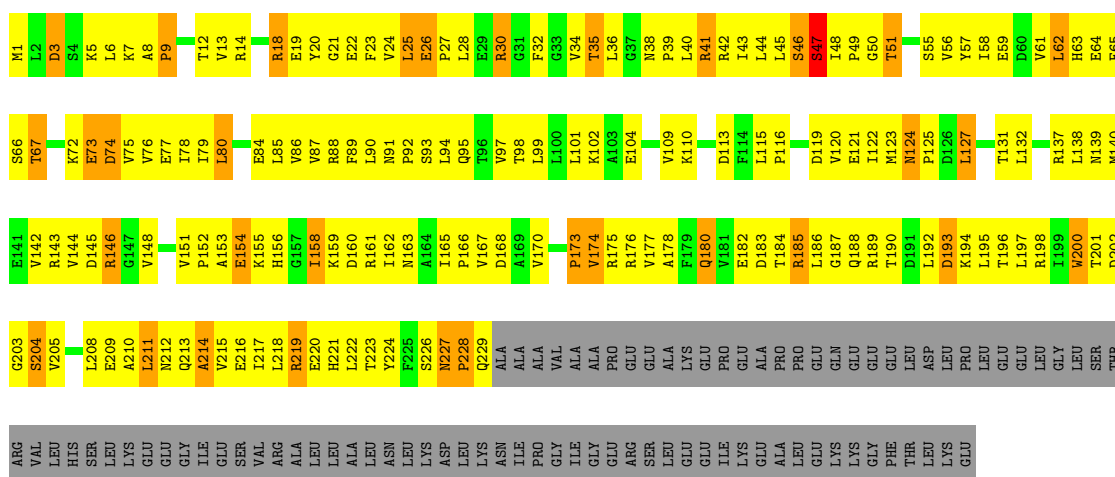
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
7	D	1	Total	Mg	0	0
			1	1		
7	N	1	Total	Mg	0	0
			1	1		

3 Residue-property plots

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

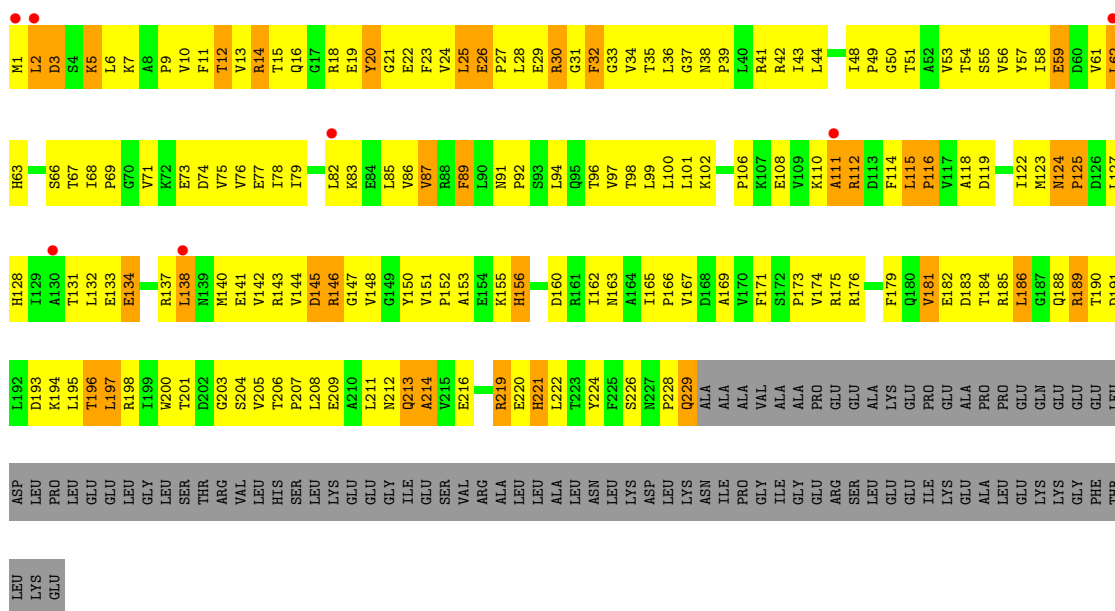
- Molecule 1: DNA-directed RNA polymerase alpha chain

Chain A:



- Molecule 1: DNA-directed RNA polymerase alpha chain

Chain B:



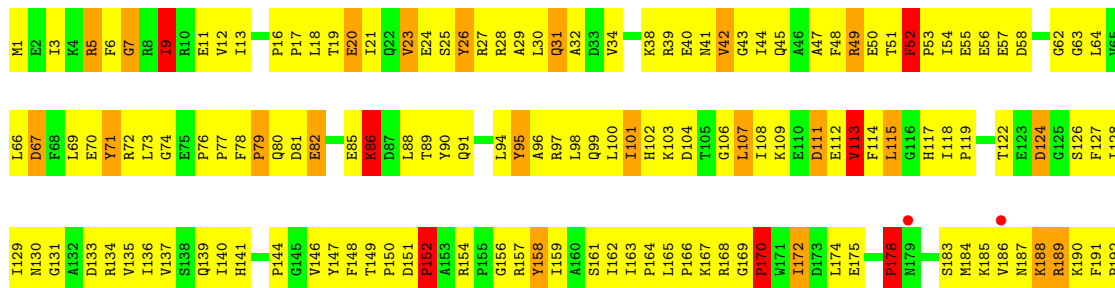
Chain K:

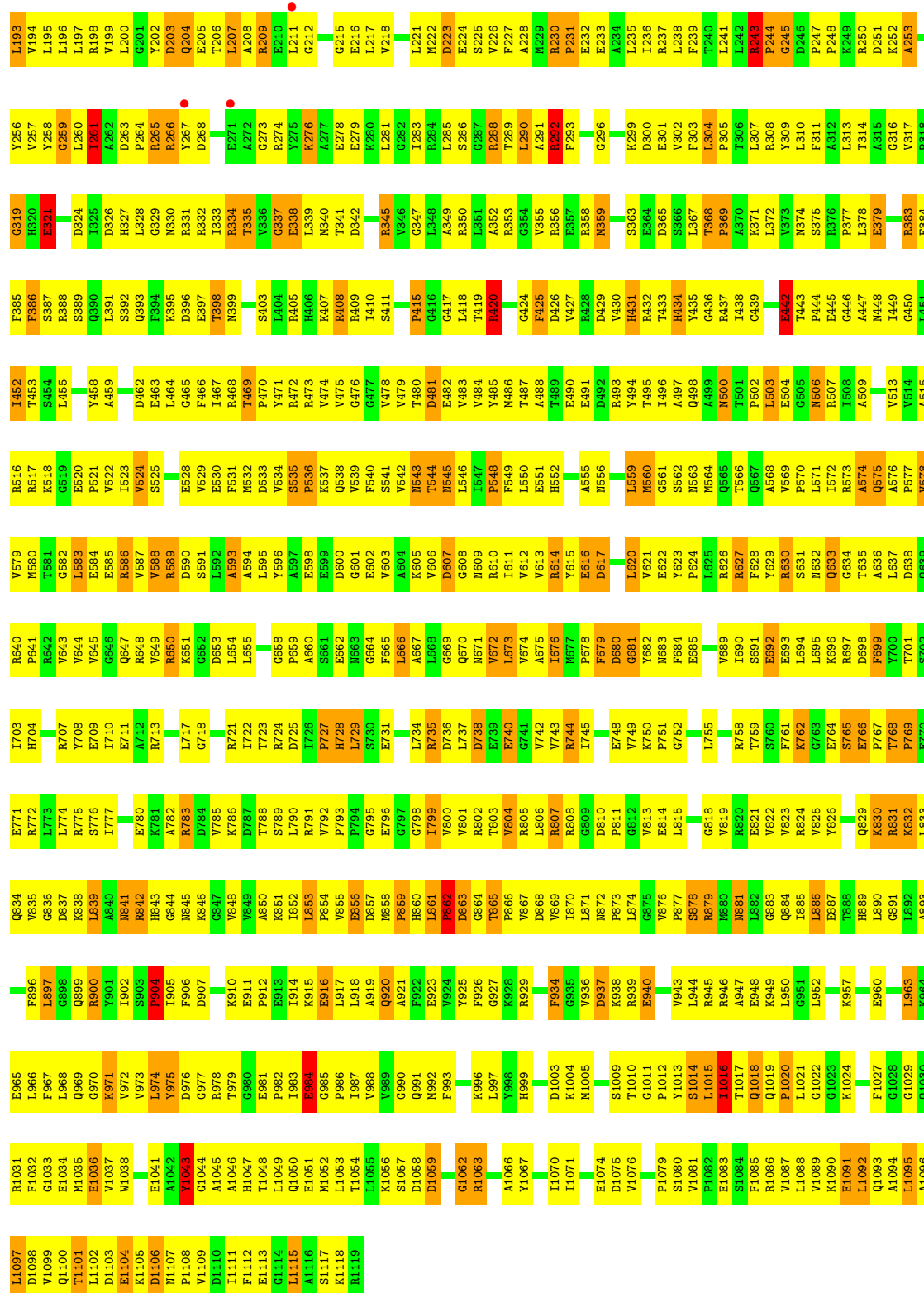


Chain L:



Chain C:

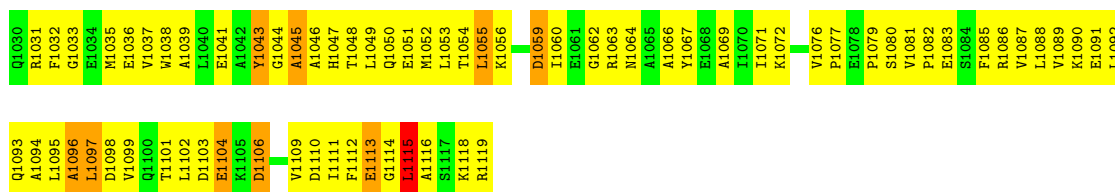




● Molecule 2: DNA-directed RNA polymerase beta chain

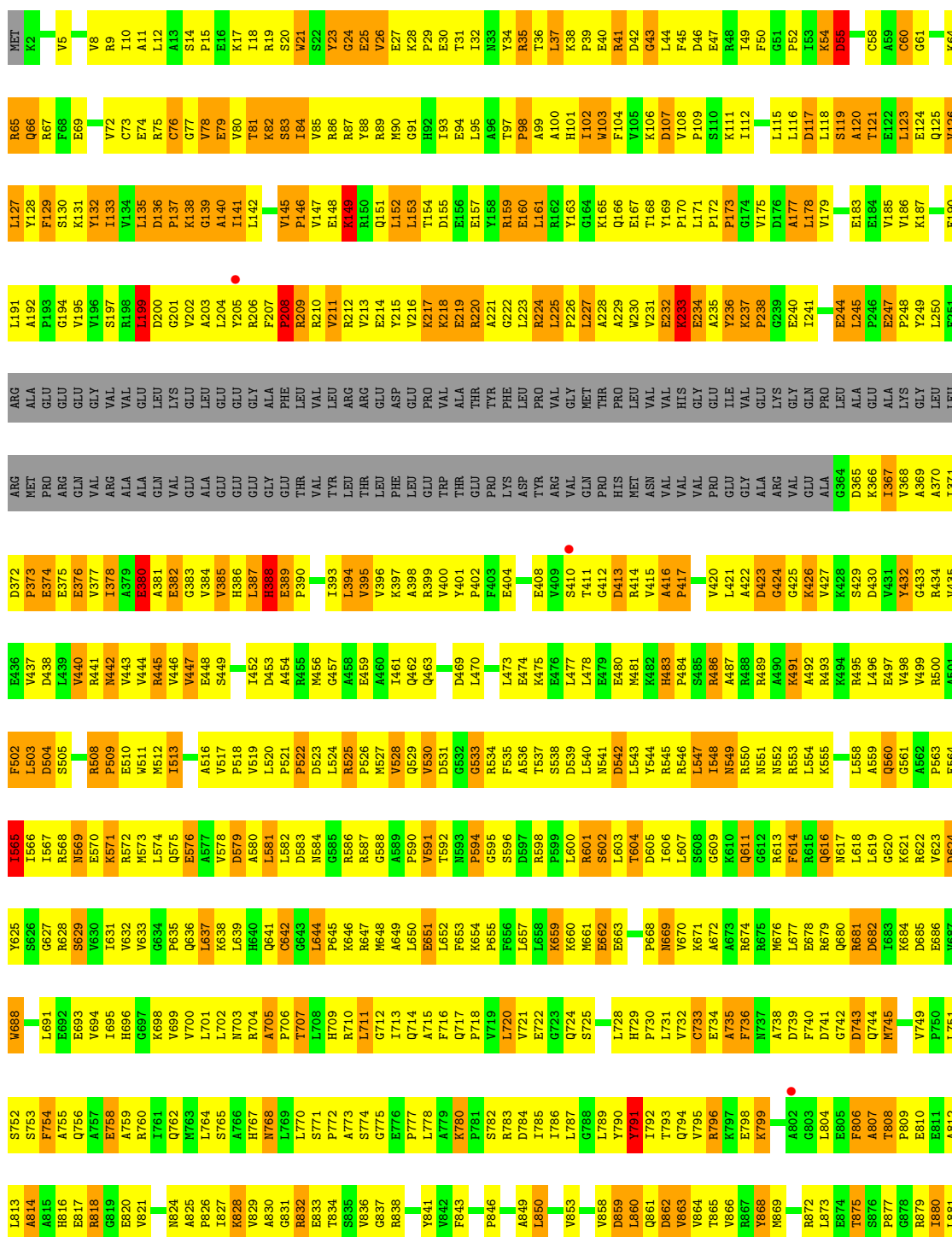
Chain M:

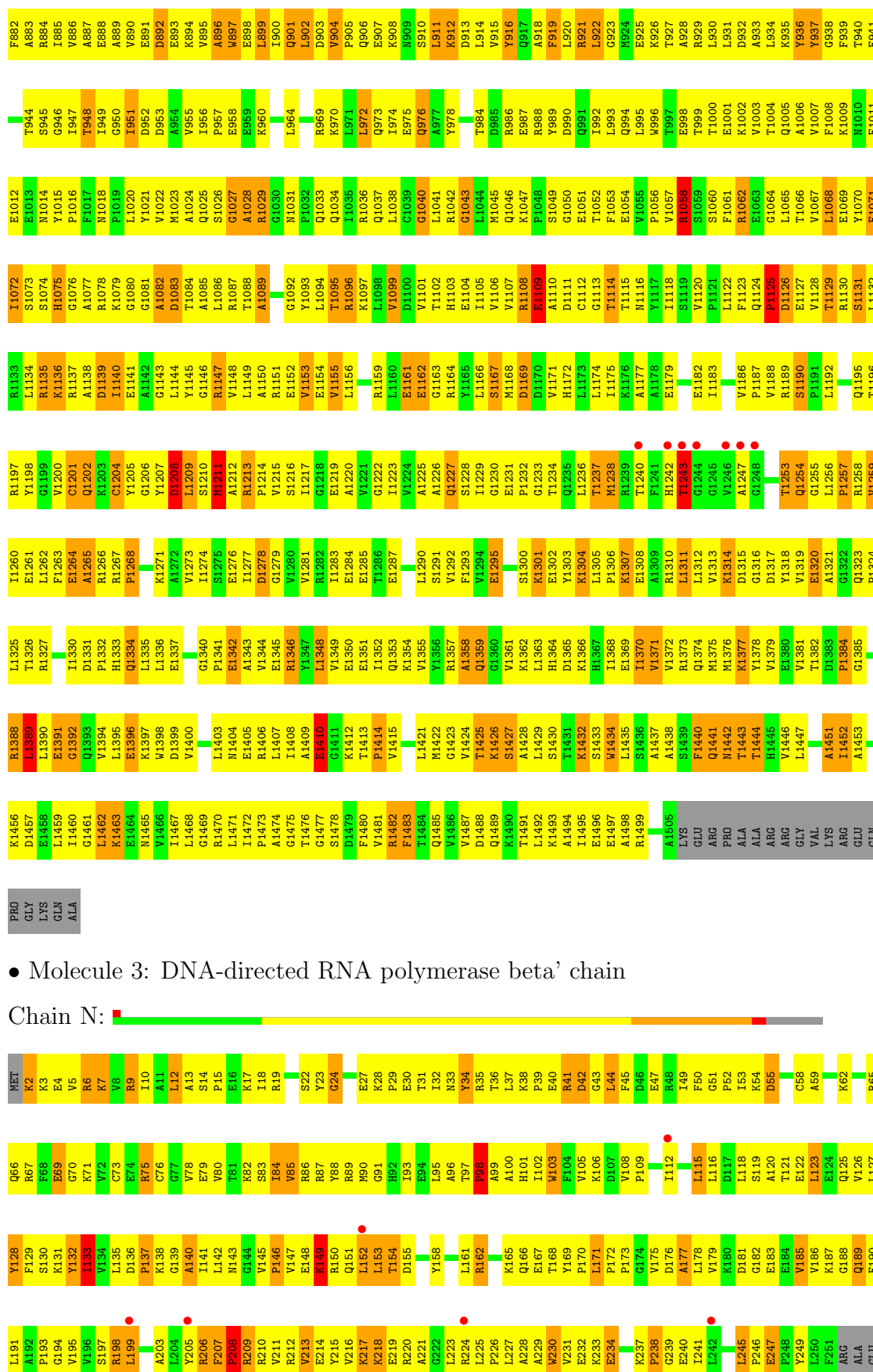




• Molecule 3: DNA-directed RNA polymerase beta' chain

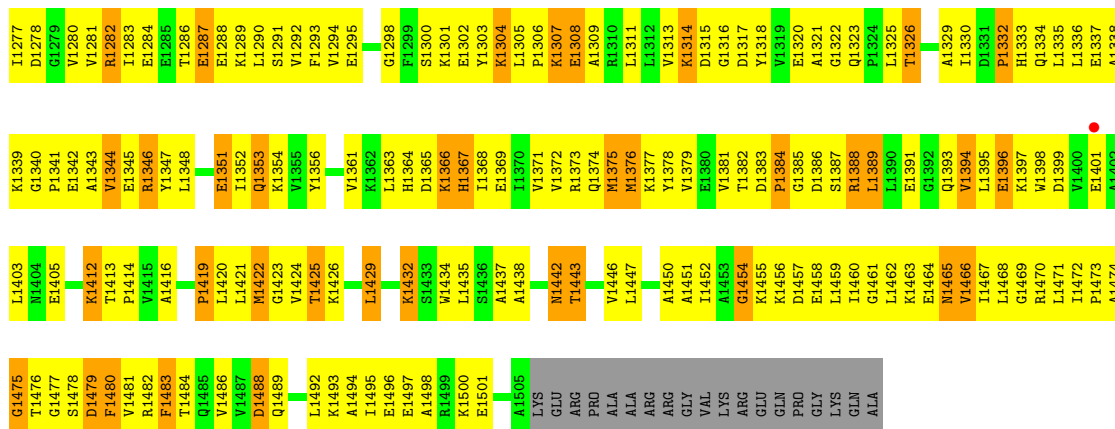
Chain D:





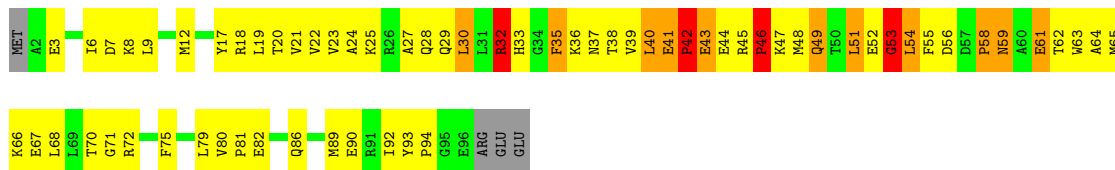


WORLD WIDE
PDB
PROTEIN DATA BANK



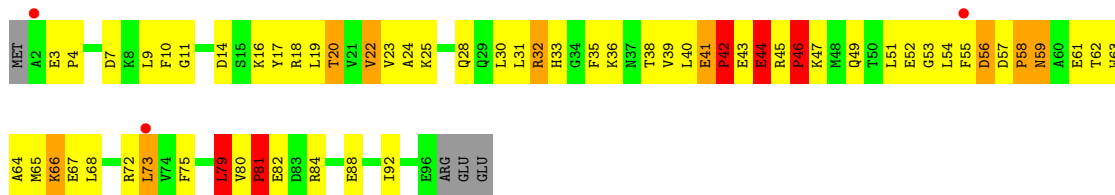
• Molecule 4: RNA polymerase omega chain

Chain E:



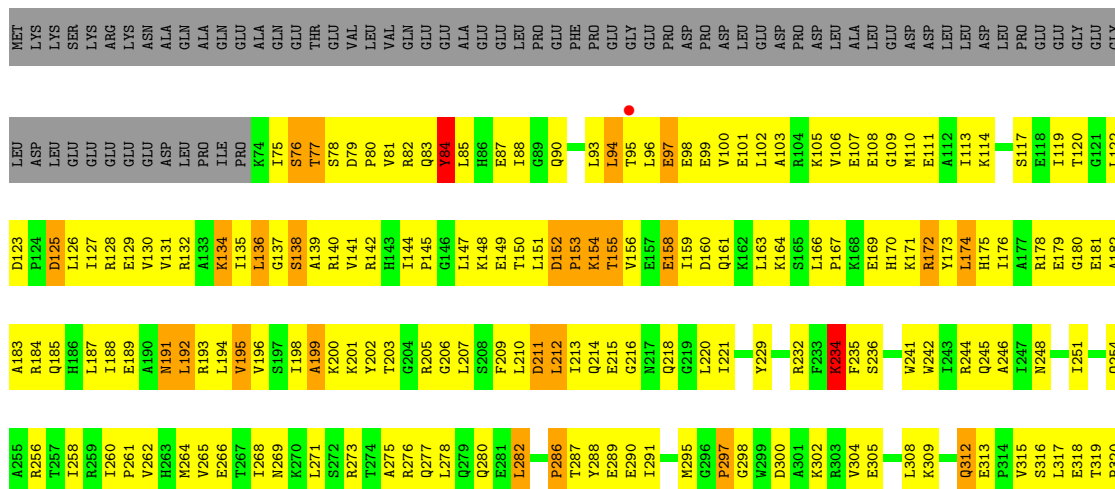
• Molecule 4: RNA polymerase omega chain

Chain O:



• Molecule 5: RNA polymerase sigma factor rpoD

Chain F:



4 Data and refinement statistics

Property	Value	Source
Space group	P 32	Depositor
Cell constants a, b, c, α , β , γ	236.15Å 236.15Å 249.88Å 90.00° 90.00° 120.00°	Depositor
Resolution (Å)	30.00 – 3.30 29.87 – 3.30	Depositor EDS
% Data completeness (in resolution range)	84.1 (30.00-3.30) 47.2 (29.87-3.30)	Depositor EDS
R_{merge}	0.14	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.71 (at 3.31Å)	Xtriage
Refinement program	CNS 1.1	Depositor
R, R_{free}	0.282 , 0.320 0.282 , (Not available)	Depositor DCC
R_{free} test set	No test flags present.	DCC
Wilson B-factor (Å ²)	92.6	Xtriage
Anisotropy	0.321	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.24 , -20.0	EDS
Estimated twinning fraction	0.499 for -h,-k,l 0.499 for h,-h-k,-l 0.086 for -k,-h,-l	Xtriage
L-test for twinning	$\langle L \rangle = 0.40$, $\langle L^2 \rangle = 0.23$	Xtriage
Outliers	0 of 115957 reflections	Xtriage
F_o, F_c correlation	0.89	EDS
Total number of atoms	53962	wwPDB-VP
Average B, all atoms (Å ²)	73.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 6.25% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

5 Model quality ⓘ

5.1 Standard geometry ⓘ

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

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	0.46	0/1838	0.75	0/2498
1	B	0.36	0/1838	0.64	0/2498
1	K	0.46	0/1838	0.75	0/2498
1	L	0.39	0/1838	0.68	0/2498
2	C	0.45	0/8997	0.79	8/12164 (0.1%)
2	M	0.46	0/8997	0.79	8/12164 (0.1%)
3	D	0.48	0/11165	0.83	16/15088 (0.1%)
3	N	0.46	0/11165	0.81	15/15088 (0.1%)
4	E	0.42	0/783	0.80	3/1054 (0.3%)
4	O	0.42	0/783	0.80	1/1054 (0.1%)
5	F	0.40	0/2836	0.73	0/3812
5	P	0.41	0/2836	0.72	0/3812
All	All	0.45	0/54914	0.78	51/74228 (0.1%)

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
3	D	0	1
3	N	0	3
5	F	0	1
All	All	0	5

There are no bond length outliers.

All (51) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	D	1209	LEU	N-CA-C	-10.12	83.67	111.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	M	728	HIS	N-CA-C	7.66	131.69	111.00
2	C	728	HIS	N-CA-C	7.62	131.58	111.00
3	N	1209	LEU	N-CA-C	-7.26	91.39	111.00
2	M	319	GLY	N-CA-C	-7.22	95.05	113.10
3	N	198	ARG	N-CA-C	7.01	129.94	111.00
4	O	49	GLN	N-CA-C	6.85	129.51	111.00
3	N	1126	ASP	N-CA-C	6.70	129.09	111.00
4	E	49	GLN	N-CA-C	6.62	128.87	111.00
3	D	448	GLU	N-CA-C	6.56	128.72	111.00
4	E	51	LEU	N-CA-C	-6.51	93.43	111.00
3	D	1043	GLY	N-CA-C	6.44	129.20	113.10
3	D	644	LEU	CA-CB-CG	6.33	129.86	115.30
3	N	208	PRO	N-CA-C	6.29	128.46	112.10
3	D	380	GLU	N-CA-C	-6.07	94.62	111.00
3	D	1064	GLY	N-CA-C	5.98	128.04	113.10
3	D	209	ARG	N-CA-C	5.92	126.98	111.00
2	C	319	GLY	N-CA-C	-5.89	98.39	113.10
2	M	729	LEU	N-CA-C	5.84	126.77	111.00
3	N	199	LEU	N-CA-C	5.82	126.71	111.00
2	C	729	LEU	N-CA-C	5.80	126.67	111.00
3	D	1126	ASP	N-CA-C	5.73	126.47	111.00
3	D	208	PRO	N-CA-C	5.72	126.98	112.10
2	M	795	GLY	N-CA-C	-5.63	99.04	113.10
2	C	178	PRO	N-CA-C	5.61	126.68	112.10
3	D	201	GLY	N-CA-C	-5.54	99.25	113.10
2	C	9	ILE	N-CA-C	-5.53	96.06	111.00
3	D	1127	GLU	N-CA-C	-5.51	96.12	111.00
3	D	81	THR	N-CA-C	-5.46	96.26	111.00
2	M	243	ARG	N-CA-C	5.45	125.71	111.00
3	N	527	MET	N-CA-C	-5.43	96.35	111.00
2	C	261	ILE	N-CA-C	5.42	125.63	111.00
3	N	209	ARG	N-CA-C	5.37	125.50	111.00
3	D	1125	PRO	N-CA-C	5.31	125.90	112.10
3	N	207	PHE	C-N-CD	-5.28	108.98	120.60
3	N	247	GLU	N-CA-C	5.26	125.21	111.00
2	M	442	GLU	N-CA-C	5.25	125.18	111.00
3	N	406	ASP	N-CA-C	5.24	125.16	111.00
3	D	595	GLY	N-CA-C	-5.22	100.04	113.10
3	N	1110	ALA	N-CA-C	-5.22	96.90	111.00
2	C	243	ARG	N-CA-C	5.20	125.05	111.00
2	M	260	LEU	N-CA-C	5.20	125.03	111.00
3	D	1348	LEU	CA-CB-CG	5.15	127.14	115.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	D	199	LEU	CA-CB-CG	-5.14	103.47	115.30
3	N	378	ILE	N-CA-C	5.14	124.88	111.00
2	C	591	SER	N-CA-C	-5.11	97.21	111.00
4	E	53	GLY	N-CA-C	5.05	125.72	113.10
3	N	1243	THR	N-CA-C	5.04	124.60	111.00
2	M	262	ALA	N-CA-C	5.03	124.57	111.00
3	N	1288	GLU	N-CA-C	5.02	124.55	111.00
3	N	736	PHE	N-CA-C	-5.01	97.46	111.00

There are no chirality outliers.

All (5) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
3	D	132	TYR	Sidechain
5	F	84	TYR	Sidechain
3	N	1015	TYR	Sidechain
3	N	1318	TYR	Sidechain
3	N	132	TYR	Sidechain

5.2 Close contacts ⓘ

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogens added by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, and the number in parentheses is this value normalized per 1000 atoms of the molecule in the chain. The Symm-Clashes column gives symmetry related clashes, in the same way as for the Clashes column.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	1806	0	1861	249	0
1	B	1806	0	1861	193	0
1	K	1806	0	1861	190	0
1	L	1806	0	1861	208	0
2	C	8829	0	8933	1143	0
2	M	8829	0	8933	1183	0
3	D	10975	0	11211	1723	0
3	N	10975	0	11210	1681	0
4	E	769	0	775	94	0
4	O	769	0	775	83	0
5	F	2793	0	2873	301	0
5	P	2793	0	2873	364	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
6	D	2	0	0	0	0
6	N	2	0	0	0	0
7	D	1	0	0	0	0
7	N	1	0	0	0	0
All	All	53962	0	55027	6830	0

Clashscore is defined as the number of clashes calculated for the entry per 1000 atoms (including hydrogens) of the entry. The overall clashscore for this entry is 63.

All (6830) close contacts within the same asymmetric unit are listed below.

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:1101:VAL:HG21	3:D:1424:VAL:HG22	1.21	1.20
2:C:1016:ILE:HD13	2:C:1016:ILE:H	1.06	1.16
3:D:907:GLU:HG2	3:D:1027:GLY:H	1.02	1.16
3:D:136:ASP:HB3	3:D:137:PRO:HD3	1.22	1.15
3:D:145:VAL:HG22	3:D:146:PRO:HD2	1.27	1.15
4:E:51:LEU:HG	4:E:53:GLY:H	1.07	1.12
3:N:1144:LEU:HD22	3:N:1166:LEU:HD11	1.29	1.12
3:N:887:ALA:HB1	3:N:893:GLU:HG3	1.30	1.11
3:D:131:LYS:HA	3:D:456:MET:HG3	1.21	1.10
2:C:1015:LEU:HB3	2:C:1016:ILE:HD13	1.33	1.10
3:D:789:LEU:HD12	3:D:911:LEU:HD21	1.32	1.09
5:F:120:THR:HG22	5:F:122:LEU:HD13	1.29	1.09
3:D:1331:ASP:HB3	3:D:1334:GLN:HE21	1.14	1.09
3:N:136:ASP:HB3	3:N:137:PRO:HD3	1.35	1.09
3:D:598:ARG:HH12	5:F:319:THR:HA	1.11	1.08
2:M:1055:LEU:HD21	2:M:1079:PRO:HG3	1.34	1.08
4:O:54:LEU:HG	4:O:58:PRO:HG2	1.13	1.07
2:C:1109:VAL:HG11	3:D:5:VAL:HG22	1.36	1.06
3:D:218:LYS:HZ1	3:D:370:ALA:HA	1.19	1.06
3:N:31:THR:HG22	3:N:32:ILE:HG13	1.36	1.06
4:E:54:LEU:HG	4:E:58:PRO:HG2	1.32	1.06
3:D:32:ILE:HD12	3:D:527:MET:HG2	1.37	1.06
2:M:157:ARG:HD2	2:M:314:THR:HG22	1.38	1.05
3:D:26:VAL:HG11	3:D:44:LEU:HD23	1.36	1.05
3:D:798:GLU:HG2	3:D:799:LYS:H	1.19	1.05
3:D:138:LYS:H	3:D:138:LYS:HD2	1.18	1.05
3:D:119:SER:HB2	3:D:123:LEU:H	1.17	1.04
2:C:516:ARG:CZ	3:D:1068:LEU:HD22	1.87	1.04
5:P:139:ALA:HB1	5:P:152:ASP:HB3	1.38	1.04
5:P:163:LEU:HD22	5:P:174:LEU:HG	1.38	1.04
2:C:194:VAL:HG22	2:C:221:LEU:HD12	1.39	1.04

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:1314:LYS:NZ	3:D:1317:ASP:HB2	1.71	1.04
2:C:1081:VAL:HB	2:C:1086:ARG:HE	1.14	1.04
2:C:952:LEU:HD12	2:C:969:GLN:HE22	1.23	1.04
2:C:443:THR:HG21	2:C:450:GLY:H	1.17	1.03
3:D:152:LEU:HD23	3:D:152:LEU:H	1.23	1.03
2:C:854:PRO:HB2	2:C:856:GLU:HG2	1.39	1.03
5:F:210:LEU:HA	5:F:213:ILE:HD12	1.37	1.03
3:D:808:THR:HB	3:D:809:PRO:HD3	1.34	1.03
2:C:738:ASP:OD2	2:C:744:ARG:HG2	1.58	1.03
5:F:269:ASN:HB3	5:F:273:ARG:HH21	1.19	1.03
3:D:616:GLN:HA	3:D:619:LEU:HB3	1.40	1.02
3:N:1031:ASN:HB3	3:N:1034:GLN:HB2	1.41	1.02
3:D:237:LYS:HB3	3:D:238:PRO:HD3	1.40	1.02
3:N:1320:GLU:HG3	3:N:1323:GLN:HE21	1.24	1.02
3:D:108:VAL:HB	3:D:109:PRO:HD3	1.41	1.02
3:D:542:ASP:O	3:D:546:ARG:HG2	1.58	1.02
3:D:1129:THR:HG23	3:D:1130:ARG:H	1.18	1.02
3:N:217:LYS:HE3	3:N:217:LYS:H	1.23	1.02
2:C:410:ILE:HD11	2:C:455:LEU:HD23	1.40	1.02
1:L:59:GLU:HG3	1:L:60:ASP:H	1.25	1.02
2:M:897:LEU:HB3	2:M:899:GLN:HE21	1.24	1.01
3:D:770:LEU:HD23	3:D:777:PRO:HA	1.38	1.01
3:N:1258:ARG:HH21	3:N:1351:GLU:HG2	1.21	1.01
3:D:908:LYS:HB3	3:D:1027:GLY:HA3	1.43	1.00
3:D:1264:GLU:HG2	3:D:1266:ARG:CZ	1.91	1.00
3:N:845:ASN:H	3:N:848:GLU:HG3	1.23	1.00
2:C:49:ARG:HH11	2:C:49:ARG:HB2	1.27	0.99
4:O:54:LEU:HG	4:O:58:PRO:CG	1.92	0.99
4:E:82:GLU:CD	4:E:82:GLU:H	1.64	0.99
3:D:1304:LYS:H	3:D:1304:LYS:HE2	1.27	0.99
2:M:30:LEU:HD22	2:M:118:ILE:HD12	1.39	0.99
1:K:150:TYR:HE2	1:K:152:PRO:HG3	1.27	0.99
3:N:1065:LEU:O	3:N:1065:LEU:HD23	1.60	0.99
3:D:119:SER:HB2	3:D:123:LEU:N	1.77	0.99
5:F:79:ASP:HB3	5:F:80:PRO:HD3	1.45	0.99
3:D:210:ARG:HD2	3:D:398:ALA:HB3	1.45	0.99
3:N:12:LEU:HB2	3:N:507:ASN:HD22	1.27	0.98
5:P:98:GLU:HA	5:P:101:GLU:OE2	1.63	0.98
2:C:897:LEU:HD13	2:C:921:ALA:HB2	1.45	0.98
3:D:218:LYS:NZ	3:D:370:ALA:HA	1.78	0.98
2:C:577:PRO:HA	2:C:671:ASN:HD21	1.27	0.98
3:N:1393:GLN:HB3	3:N:1398:TRP:HE1	1.30	0.97

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:710:ILE:HB	2:C:790:LEU:HD22	1.46	0.97
2:M:578:VAL:HG23	2:M:579:VAL:HG12	1.44	0.97
2:M:697:ARG:O	2:M:699:PHE:N	1.96	0.97
3:D:136:ASP:HB3	3:D:137:PRO:CD	1.93	0.97
2:M:1016:ILE:HD13	2:M:1016:ILE:H	1.26	0.97
4:O:51:LEU:HG	4:O:53:GLY:H	1.27	0.97
2:C:799:ILE:H	2:C:799:ILE:HD13	1.30	0.97
3:D:1046:GLN:HB3	3:D:1052:THR:HG22	1.47	0.97
2:C:480:THR:HG22	2:C:482:GLU:H	1.30	0.97
2:C:1049:LEU:O	2:C:1053:LEU:HD23	1.64	0.97
3:D:986:ARG:HG3	3:D:990:ASP:OD1	1.65	0.97
3:D:103:TRP:HZ2	3:D:604:THR:HG1	1.07	0.96
2:M:384:GLU:HG3	2:M:388:ARG:HH21	1.24	0.96
3:N:705:ALA:HB3	3:N:706:PRO:HD3	1.47	0.96
3:D:553:ARG:HH12	5:F:211:ASP:HA	1.29	0.96
2:C:694:LEU:HD23	2:C:697:ARG:HH21	1.28	0.96
3:N:9:ARG:HD2	3:N:1456:LYS:HG2	1.47	0.96
2:M:650:ARG:H	2:M:650:ARG:HD3	1.31	0.96
3:D:705:ALA:HB3	3:D:706:PRO:HD3	1.42	0.96
2:M:1018:GLN:HG3	2:M:1060:ILE:HD11	1.48	0.96
3:D:582:LEU:HA	3:D:603:LEU:HD12	1.47	0.96
3:D:609:GLY:HA2	3:D:613:ARG:HB3	1.46	0.96
2:M:86:LYS:HG3	2:M:813:VAL:HG12	1.47	0.96
1:K:91:ASN:ND2	1:K:92:PRO:HD2	1.81	0.96
3:N:175:VAL:HG13	3:N:217:LYS:HD3	1.47	0.95
3:N:590:PRO:HB2	3:N:600:LEU:HD11	1.45	0.95
3:N:558:LEU:HD22	5:P:145:PRO:HB3	1.48	0.95
1:L:137:ARG:HH12	1:L:139:ASN:HB3	1.31	0.95
3:N:455:ARG:HE	3:N:463:GLN:NE2	1.64	0.95
4:E:54:LEU:HG	4:E:58:PRO:CG	1.96	0.95
3:D:907:GLU:HG2	3:D:1027:GLY:N	1.81	0.95
2:C:49:ARG:NH1	2:C:49:ARG:HB2	1.82	0.95
3:N:231:VAL:HA	3:N:378:ILE:HG12	1.48	0.95
3:N:546:ARG:NH1	3:N:550:ARG:HH22	1.65	0.95
1:L:77:GLU:HG2	3:N:872:ARG:HH21	1.30	0.94
3:D:1314:LYS:HZ3	3:D:1317:ASP:HB2	1.29	0.94
2:C:420:ARG:HD2	2:C:420:ARG:H	1.28	0.94
2:C:1081:VAL:HB	2:C:1086:ARG:NE	1.82	0.94
5:P:169:GLU:H	5:P:169:GLU:CD	1.66	0.94
5:P:350:LEU:HA	5:P:422:LEU:HD13	1.50	0.94
3:D:133:ILE:HG21	3:D:454:ALA:HB1	1.48	0.94
5:P:141:VAL:O	5:P:145:PRO:HD2	1.68	0.94

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:M:1009:SER:HB2	3:N:651:GLU:OE1	1.67	0.94
2:M:279:GLU:HG3	2:M:280:LYS:HG3	1.49	0.94
2:C:695:LEU:HD13	2:C:832:LYS:HE3	1.50	0.94
1:L:86:VAL:HG12	1:L:124:ASN:HB2	1.50	0.93
2:M:683:ASN:HB2	2:M:687:ALA:O	1.68	0.93
2:C:1033:GLY:O	2:C:1037:VAL:HG23	1.68	0.93
1:B:55:SER:HB3	1:B:143:ARG:HB3	1.50	0.93
3:N:616:GLN:HB2	5:P:326:ASP:HB2	1.51	0.93
3:D:1207:TYR:H	3:D:1366:LYS:HZ1	1.08	0.93
3:D:945:SER:OG	3:D:947:ILE:HG23	1.66	0.93
3:N:141:ILE:H	3:N:141:ILE:HD12	1.30	0.93
3:D:809:PRO:HB2	3:D:812:ALA:HB2	1.49	0.93
2:C:289:THR:HG22	2:C:290:LEU:HD23	1.49	0.93
3:D:374:GLU:HG2	3:D:386:HIS:HA	1.51	0.92
3:N:427:VAL:HB	3:N:435:VAL:HB	1.51	0.92
2:M:265:ARG:HE	2:M:267:TYR:HA	1.35	0.92
2:M:183:SER:HB2	2:M:190:LYS:HG2	1.51	0.92
2:M:810:ASP:HB3	2:M:813:VAL:HG22	1.49	0.92
3:D:711:LEU:HG	3:D:778:LEU:HD23	1.52	0.92
2:C:711:GLU:HG2	2:C:822:VAL:HG12	1.52	0.92
3:N:897:TRP:CH2	3:N:902:LEU:HD21	2.03	0.92
3:N:148:GLU:HB3	3:N:151:GLN:HB2	1.50	0.92
1:K:2:LEU:HA	1:K:6:LEU:HD22	1.52	0.92
2:C:438:ILE:HD13	2:C:453:THR:HG21	1.49	0.92
2:C:34:VAL:HB	2:C:38:LYS:HG3	1.52	0.92
2:C:334:ARG:HB3	2:C:338:GLU:OE2	1.69	0.91
3:N:984:THR:HG22	3:N:987:GLU:HG3	1.51	0.91
3:D:1311:LEU:HD23	3:D:1311:LEU:H	1.33	0.91
3:N:1040:GLY:O	3:N:1060:SER:HB3	1.69	0.91
3:N:764:LEU:HG	3:N:765:SER:H	1.34	0.91
3:N:792:ILE:HD11	3:N:881:LEU:HD23	1.51	0.91
3:D:1457:ASP:OD1	3:D:1459:LEU:HD23	1.69	0.91
3:N:890:VAL:HG11	3:N:922:LEU:HD13	1.52	0.91
2:M:1083:GLU:O	2:M:1087:VAL:HG23	1.70	0.91
3:D:1095:THR:O	3:D:1099:VAL:HG23	1.71	0.91
2:C:516:ARG:NH1	2:C:521:PRO:HB3	1.86	0.91
5:P:364:ARG:O	5:P:368:VAL:HG23	1.69	0.91
2:C:197:LEU:HA	2:C:200:LEU:HD12	1.52	0.90
5:F:161:GLN:HA	5:F:164:LYS:HE3	1.52	0.90
3:N:1201:CYS:SG	3:N:1204:CYS:HB2	2.11	0.90
3:N:692:GLU:HG2	3:N:720:LEU:HD12	1.52	0.90
2:M:137:VAL:HG21	2:M:393:GLN:HE22	1.36	0.90

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:F:138:SER:O	5:F:141:VAL:HG12	1.70	0.90
3:D:911:LEU:O	3:D:913:ASP:N	2.04	0.90
2:M:578:VAL:HG13	2:M:671:ASN:ND2	1.87	0.90
2:M:491:GLU:HB2	2:M:496:ILE:HD11	1.50	0.90
3:D:1046:GLN:HA	3:D:1052:THR:HA	1.51	0.90
3:D:217:LYS:HB2	3:D:217:LYS:NZ	1.86	0.90
3:N:1219:GLU:HG2	3:N:1221:VAL:HG22	1.52	0.90
3:D:10:ILE:HG13	3:D:1434:TRP:CZ2	2.06	0.90
2:M:680:ASP:OD1	3:N:943:THR:HG21	1.72	0.90
2:C:676:ILE:O	3:D:948:THR:HB	1.72	0.90
1:K:206:THR:HG22	1:K:209:GLU:H	1.36	0.90
4:O:79:LEU:HD12	4:O:80:VAL:HG23	1.54	0.90
3:D:422:ALA:HB3	3:D:427:VAL:HG22	1.51	0.90
3:N:1372:VAL:O	3:N:1375:MET:HG3	1.71	0.90
3:N:1258:ARG:HG3	3:N:1258:ARG:HH11	1.36	0.89
2:M:269:LEU:HA	2:M:288:ARG:HE	1.36	0.89
1:B:56:VAL:HG22	1:B:142:VAL:HG12	1.52	0.89
5:P:123:ASP:HB3	5:P:125:ASP:OD1	1.71	0.89
1:A:86:VAL:HG12	1:A:124:ASN:HD22	1.37	0.89
2:M:194:VAL:HG22	2:M:221:LEU:HD12	1.52	0.89
3:N:1129:THR:HG23	3:N:1130:ARG:H	1.37	0.89
3:D:65:ARG:HD2	3:D:66:GLN:HE21	1.38	0.89
1:K:86:VAL:HG12	1:K:124:ASN:HD22	1.37	0.89
3:D:699:VAL:H	3:D:756:GLN:HE22	1.15	0.89
3:N:101:HIS:HD2	3:N:582:LEU:HD13	1.38	0.89
3:D:932:ASP:OD1	3:D:935:LYS:HD3	1.72	0.89
3:D:601:ARG:HD3	3:D:613:ARG:HH21	1.35	0.89
2:C:426:ASP:HA	2:C:429:ASP:OD2	1.72	0.89
3:N:1271:LYS:NZ	3:N:1273:VAL:HA	1.88	0.89
3:N:126:VAL:HG13	3:N:132:TYR:HB2	1.54	0.89
3:D:116:LEU:HB3	3:D:118:LEU:HD13	1.53	0.89
1:K:156:HIS:HD2	1:K:158:ILE:HG12	1.38	0.89
3:N:1213:ARG:HB2	3:N:1214:PRO:HD2	1.52	0.88
1:A:152:PRO:HD2	1:A:155:LYS:HD2	1.55	0.88
2:C:879:ARG:H	2:C:879:ARG:HD2	1.38	0.88
1:K:150:TYR:CE2	1:K:152:PRO:HG3	2.08	0.88
3:D:646:LYS:HG3	3:D:647:ARG:H	1.38	0.88
3:N:55:ASP:HB3	3:N:82:LYS:HE2	1.53	0.88
2:C:1115:LEU:HD23	3:D:85:VAL:HG13	1.56	0.88
2:M:516:ARG:NH1	3:N:1068:LEU:HD22	1.88	0.88
3:N:965:GLU:HA	3:N:968:ASP:HB2	1.56	0.88
3:N:1426:LYS:O	3:N:1429:LEU:HB2	1.74	0.88

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:650:ARG:HD3	2:C:650:ARG:N	1.88	0.87
2:C:1016:ILE:HD13	2:C:1016:ILE:N	1.89	0.87
1:L:77:GLU:CG	3:N:872:ARG:HH21	1.87	0.87
2:C:734:LEU:HA	2:C:737:LEU:HD13	1.54	0.87
2:C:949:LYS:HD3	3:D:796:ARG:CZ	2.03	0.87
3:N:1466:VAL:HG23	3:N:1472:ILE:HD11	1.57	0.87
3:D:1076:GLY:HA2	3:D:1079:LYS:HG2	1.56	0.87
3:D:1101:VAL:HG21	3:D:1424:VAL:CG2	2.04	0.87
2:C:64:LEU:HD22	2:C:359:MET:HG3	1.56	0.87
3:D:1231:GLU:HB3	3:D:1232:PRO:HD3	1.56	0.87
5:F:81:VAL:O	5:F:85:LEU:HG	1.74	0.87
2:C:857:ASP:HB2	2:C:978:ARG:HG2	1.54	0.87
3:N:502:PHE:CZ	3:N:1452:ILE:HG13	2.10	0.87
3:N:521:PRO:O	3:N:525:ARG:NH1	2.08	0.87
2:M:420:ARG:HD2	2:M:420:ARG:H	1.38	0.87
3:D:907:GLU:CG	3:D:1027:GLY:H	1.87	0.87
2:M:516:ARG:NE	3:N:1068:LEU:HD13	1.90	0.87
2:C:447:ALA:HA	3:D:1085:ALA:HB1	1.54	0.87
2:M:715:THR:HG22	2:M:717:LEU:H	1.40	0.87
1:L:5:LYS:HA	1:L:5:LYS:HE3	1.56	0.87
2:C:200:LEU:HD22	2:C:300:ASP:HB3	1.57	0.86
2:C:952:LEU:HD12	2:C:969:GLN:NE2	1.91	0.86
2:C:101:ILE:HG22	2:C:102:HIS:H	1.40	0.86
3:N:194:GLY:H	3:N:206:ARG:HA	1.39	0.86
2:M:979:THR:HG23	2:M:981:GLU:H	1.38	0.86
5:P:152:ASP:HB2	5:P:153:PRO:HD3	1.57	0.86
3:D:570:GLU:HB2	5:F:214:GLN:HE21	1.41	0.86
3:D:637:LEU:HD11	3:D:642:CYS:HA	1.57	0.86
5:P:402:ASN:HB3	5:P:406:ARG:CZ	2.05	0.86
3:N:1320:GLU:H	3:N:1323:GLN:NE2	1.72	0.86
2:C:549:PHE:CE2	2:C:886:LEU:HB3	2.10	0.86
3:N:22:SER:HA	3:N:90:MET:O	1.74	0.86
3:N:1023:MET:O	3:N:1028:ALA:HB3	1.73	0.86
1:A:87:VAL:HG21	1:A:144:VAL:HG11	1.57	0.86
4:E:51:LEU:HG	4:E:53:GLY:N	1.90	0.86
2:C:682:TYR:HD1	3:D:635:PRO:HG2	1.41	0.86
3:D:149:LYS:HD3	3:D:149:LYS:H	1.38	0.86
5:F:163:LEU:HD13	5:F:174:LEU:HG	1.57	0.86
3:D:950:GLY:N	3:D:953:ASP:OD1	2.07	0.86
1:L:97:VAL:HG11	1:L:120:VAL:HG21	1.57	0.86
2:C:1087:VAL:O	2:C:1091:GLU:HB2	1.74	0.86
3:D:1331:ASP:HB3	3:D:1334:GLN:NE2	1.90	0.86

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:764:LEU:HB3	3:D:767:HIS:HD2	1.39	0.86
2:M:551:GLU:CD	2:M:551:GLU:H	1.74	0.86
3:D:583:ASP:OD1	3:D:604:THR:HG22	1.75	0.86
2:C:1083:GLU:O	2:C:1087:VAL:HG23	1.74	0.85
2:M:413:LEU:HD11	2:M:451:LEU:HD22	1.57	0.85
3:D:1047:LYS:HG2	3:D:1053:PHE:CE1	2.11	0.85
3:D:1310:ARG:NE	3:D:1327:ARG:HB3	1.91	0.85
5:F:164:LYS:HA	5:F:171:LYS:NZ	1.91	0.85
3:D:1345:GLU:O	3:D:1349:VAL:HG23	1.76	0.85
3:D:1313:VAL:HG22	3:D:1314:LYS:H	1.41	0.85
5:F:152:ASP:OD2	5:F:153:PRO:HD3	1.75	0.85
3:N:149:LYS:HD3	3:N:149:LYS:H	1.42	0.85
1:A:18:ARG:NH1	1:A:88:ARG:HE	1.74	0.85
1:K:224:TYR:CD1	1:L:9:PRO:HD2	2.11	0.85
4:O:40:LEU:HB2	4:O:45:ARG:HD2	1.58	0.85
3:N:374:GLU:HG2	3:N:386:HIS:HA	1.59	0.85
3:D:1292:VAL:HG11	3:D:1325:LEU:HD21	1.58	0.85
1:B:132:LEU:HD21	1:B:138:LEU:HD22	1.58	0.85
2:M:759:THR:HB	2:M:785:VAL:HG11	1.57	0.85
3:N:1396:GLU:HA	3:N:1399:ASP:OD2	1.77	0.85
3:D:1264:GLU:OE2	3:D:1424:VAL:HG12	1.75	0.85
3:D:584:ASN:OD1	3:D:590:PRO:HD2	1.77	0.85
3:D:704:ARG:HB2	3:D:736:PHE:HB3	1.59	0.85
2:C:470:PRO:HG3	2:C:485:TYR:CE2	2.12	0.85
3:N:12:LEU:H	3:N:507:ASN:ND2	1.75	0.85
1:K:26:GLU:HB3	1:K:27:PRO:HD2	1.58	0.85
1:A:12:THR:HG22	1:B:229:GLN:HB3	1.57	0.85
3:D:568:ARG:HA	3:D:571:LYS:NZ	1.91	0.84
3:N:95:LEU:HD12	3:N:515:GLU:HA	1.59	0.84
1:L:107:LYS:HE2	1:L:109:VAL:HG22	1.58	0.84
2:M:405:ARG:NH2	2:M:409:ARG:HH21	1.75	0.84
3:D:916:TYR:HE2	3:D:920:LEU:HD22	1.42	0.84
2:M:290:LEU:H	2:M:290:LEU:HD23	1.41	0.84
2:C:101:ILE:HG23	2:C:107:LEU:HD22	1.59	0.84
3:D:715:ALA:HB3	3:D:764:LEU:HA	1.60	0.84
3:D:661:MET:HE2	3:D:677:LEU:HD11	1.60	0.84
2:C:95:TYR:CD2	2:C:114:PHE:HB3	2.11	0.84
2:C:200:LEU:HD13	2:C:300:ASP:CG	1.98	0.84
1:B:108:GLU:HG2	1:B:131:THR:HG22	1.58	0.84
5:P:367:MET:HG3	5:P:370:LYS:HE2	1.59	0.84
5:F:287:THR:HG23	5:F:289:GLU:H	1.42	0.84
1:A:34:VAL:HB	1:B:42:ARG:HH21	1.41	0.84

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:M:874:LEU:HD23	3:N:1023:MET:SD	2.18	0.84
2:M:630:ARG:HH21	2:M:707:ARG:H	1.24	0.84
2:M:545:ASN:OD1	2:M:905:ILE:HD13	1.77	0.84
3:N:483:HIS:HB2	3:N:484:PRO:HD3	1.59	0.84
2:M:385:PHE:O	2:M:389:SER:HB3	1.78	0.84
5:F:368:VAL:O	5:F:372:ARG:HB2	1.77	0.84
3:N:368:VAL:HG22	3:N:369:ALA:H	1.43	0.84
3:N:436:GLU:HB2	3:N:445:ARG:HB3	1.58	0.83
1:B:86:VAL:HG12	1:B:124:ASN:HD22	1.43	0.83
3:N:1295:GLU:HB3	3:N:1300:SER:HA	1.60	0.83
5:P:163:LEU:HB3	5:P:174:LEU:CD1	2.07	0.83
3:N:126:VAL:HG11	3:N:152:LEU:HD13	1.59	0.83
3:N:468:LEU:HD12	3:N:468:LEU:O	1.78	0.83
2:M:197:LEU:HD13	2:M:207:LEU:HD11	1.59	0.83
1:L:156:HIS:CD2	1:L:157:GLY:H	1.96	0.83
5:P:196:VAL:HG22	5:P:213:ILE:CD1	2.07	0.83
3:D:1333:HIS:O	3:D:1336:LEU:HB3	1.77	0.83
2:C:1014:SER:HB3	2:C:1017:THR:O	1.79	0.83
3:D:911:LEU:O	3:D:914:LEU:N	2.12	0.83
3:N:1320:GLU:H	3:N:1323:GLN:HE21	1.23	0.83
1:A:184:THR:O	1:A:192:LEU:HB2	1.79	0.83
2:C:710:ILE:HD12	2:C:790:LEU:HB2	1.59	0.83
1:L:89:PHE:HB3	1:L:94:LEU:HD13	1.59	0.83
2:M:910:LYS:H	2:M:913:GLU:HG3	1.42	0.83
3:N:556:LYS:NZ	5:P:218:GLN:HE22	1.76	0.83
2:C:841:ASN:C	2:C:841:ASN:HD22	1.76	0.83
2:M:535:SER:O	2:M:538:GLN:HG2	1.78	0.83
3:N:76:CYS:SG	3:N:78:VAL:HG23	2.19	0.83
3:N:814:ALA:O	3:N:818:ARG:HG3	1.78	0.83
2:M:1037:VAL:HG12	2:M:1041:GLU:OE1	1.78	0.83
2:M:103:LYS:HA	2:M:103:LYS:HE2	1.60	0.83
3:D:1149:LEU:HG	3:D:1166:LEU:HD21	1.61	0.83
2:M:350:ARG:HB2	2:M:377:PRO:HB3	1.59	0.83
2:M:859:PRO:O	2:M:867:VAL:HG22	1.78	0.83
3:D:546:ARG:NH2	3:D:550:ARG:HH22	1.77	0.83
3:N:1065:LEU:HG	3:N:1069:GLU:OE2	1.79	0.83
2:M:1039:ALA:HB3	3:N:713:ILE:HD12	1.60	0.83
3:D:421:LEU:HD12	3:D:435:VAL:HG11	1.61	0.82
1:A:123:MET:C	1:A:125:PRO:HD3	1.98	0.82
3:N:1311:LEU:H	3:N:1311:LEU:HD23	1.43	0.82
1:A:72:LYS:HB3	1:A:131:THR:OG1	1.77	0.82
3:D:477:LEU:HA	3:D:480:GLU:HB3	1.61	0.82

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:12:LEU:HB2	3:N:507:ASN:ND2	1.93	0.82
2:M:376:ARG:HH21	2:M:379:GLU:HG2	1.41	0.82
5:P:120:THR:HG22	5:P:122:LEU:HD13	1.58	0.82
2:M:176:VAL:HG12	2:M:182:VAL:HG13	1.60	0.82
5:P:354:LEU:HA	5:P:418:LEU:HD11	1.59	0.82
3:N:603:LEU:O	3:N:606:ILE:HB	1.79	0.82
2:M:683:ASN:HA	2:M:687:ALA:HB3	1.60	0.82
3:D:382:GLU:HG2	3:D:383:GLY:H	1.43	0.82
4:O:45:ARG:HH12	4:O:72:ARG:HH21	1.22	0.82
3:D:377:VAL:HG13	3:D:382:GLU:HG2	1.58	0.82
2:M:328:LEU:HB2	2:M:433:THR:HB	1.62	0.82
3:N:976:GLN:O	3:N:979:GLU:HB2	1.79	0.82
3:N:540:LEU:HA	3:N:543:LEU:HD12	1.62	0.82
2:M:336:VAL:HA	2:M:339:LEU:HD12	1.61	0.82
2:C:1003:ASP:HA	3:D:744:GLN:HE22	1.44	0.82
3:D:1342:GLU:HA	3:D:1345:GLU:OE1	1.79	0.82
2:C:1118:LYS:HA	3:D:23:TYR:CE1	2.13	0.82
3:D:699:VAL:HA	3:D:718:PRO:HD3	1.60	0.82
3:D:235:ALA:HB2	3:D:241:ILE:HB	1.61	0.82
3:N:212:ARG:HB3	3:N:394:LEU:HD13	1.62	0.82
2:C:679:PHE:O	2:C:681:GLY:N	2.12	0.82
2:M:65:VAL:HG23	2:M:101:ILE:HB	1.60	0.82
2:M:676:ILE:CG2	2:M:988:VAL:HG13	2.09	0.82
1:A:66:SER:O	1:A:75:VAL:HG23	1.78	0.82
3:D:1049:SER:OG	3:D:1051:GLU:HG2	1.80	0.82
2:M:162:ILE:HD11	2:M:306:THR:HG21	1.61	0.82
1:A:86:VAL:HG12	1:A:124:ASN:ND2	1.94	0.82
3:D:679:ARG:HH22	3:D:681:ARG:NE	1.77	0.82
2:C:1081:VAL:CB	2:C:1086:ARG:HE	1.93	0.82
3:D:1206:GLY:HA3	3:D:1366:LYS:NZ	1.95	0.82
3:D:609:GLY:CA	3:D:613:ARG:HB3	2.09	0.81
2:C:987:ILE:HG23	3:D:948:THR:HG21	1.61	0.81
1:K:219:ARG:HB3	1:K:219:ARG:HH11	1.45	0.81
3:N:388:HIS:HB2	5:P:94:LEU:HD21	1.59	0.81
3:D:528:VAL:HB	3:D:536:ALA:HB3	1.61	0.81
1:B:219:ARG:HH21	1:B:220:GLU:HB2	1.43	0.81
2:C:1045:ALA:HB1	2:C:1048:THR:HB	1.60	0.81
3:D:1262:LEU:HD23	3:D:1352:ILE:HG12	1.61	0.81
2:M:91:GLN:HA	2:M:119:PRO:HA	1.63	0.81
3:N:798:GLU:HG2	3:N:799:LYS:H	1.45	0.81
3:D:654:LYS:HB3	3:D:655:PRO:HD3	1.62	0.81
5:P:214:GLN:HA	5:P:217:ASN:HD22	1.45	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:217:LYS:HZ3	3:D:217:LYS:HB2	1.43	0.81
1:K:189:ARG:HG2	1:K:190:THR:H	1.45	0.81
2:M:815:LEU:HG	2:M:819:VAL:HB	1.60	0.81
3:N:1389:LEU:H	3:N:1389:LEU:HD23	1.45	0.81
3:N:1330:ILE:HG21	3:N:1335:LEU:HD12	1.62	0.81
4:E:54:LEU:O	4:E:54:LEU:HD23	1.80	0.81
2:C:695:LEU:HD22	2:C:832:LYS:HG2	1.62	0.81
2:C:1045:ALA:HA	3:D:758:GLU:OE1	1.79	0.81
3:D:783:ARG:NH2	3:D:1029:ARG:NH1	2.28	0.81
3:N:217:LYS:HD2	3:N:218:LYS:H	1.43	0.81
1:L:91:ASN:H	1:L:94:LEU:HD12	1.45	0.81
3:N:397:LYS:HE2	3:N:399:ARG:HE	1.44	0.81
2:C:1043:TYR:CE2	3:D:710:ARG:HD3	2.16	0.81
3:N:1307:LYS:HG3	3:N:1308:GLU:H	1.45	0.81
3:D:426:LYS:HB3	5:F:134:LYS:O	1.79	0.81
2:C:100:LEU:HD21	2:C:368:THR:HA	1.62	0.81
2:C:146:VAL:HG22	2:C:162:ILE:HA	1.63	0.81
2:C:1067:TYR:CZ	2:C:1071:ILE:HD11	2.16	0.81
2:C:878:SER:HB2	3:D:1029:ARG:HD3	1.60	0.80
3:D:704:ARG:HG3	3:D:705:ALA:N	1.95	0.80
2:M:554:ASP:HB2	2:M:880:MET:HB2	1.63	0.80
2:M:260:LEU:HB2	2:M:291:ALA:HB1	1.63	0.80
2:C:710:ILE:CD1	2:C:790:LEU:HB2	2.11	0.80
3:N:984:THR:HG23	3:N:987:GLU:H	1.47	0.80
3:D:705:ALA:CB	3:D:706:PRO:HD3	2.11	0.80
2:C:21:ILE:HD12	2:C:21:ILE:H	1.45	0.80
3:D:774:SER:HB3	3:D:1362:LYS:O	1.81	0.80
3:D:1154:GLU:HG3	3:D:1159:ARG:HH11	1.46	0.80
3:D:570:GLU:HB2	5:F:214:GLN:NE2	1.97	0.80
3:D:1262:LEU:HD23	3:D:1352:ILE:CG1	2.09	0.80
1:B:2:LEU:O	1:B:6:LEU:HB3	1.80	0.80
3:D:1003:VAL:O	3:D:1006:ALA:HB3	1.81	0.80
2:M:1014:SER:HB3	2:M:1017:THR:O	1.81	0.80
3:D:234:GLU:HB3	3:D:240:GLU:HB2	1.64	0.80
2:M:474:VAL:HG11	2:M:529:VAL:HG12	1.61	0.80
5:P:196:VAL:CG1	5:P:200:LYS:HE3	2.12	0.80
3:D:709:HIS:CD2	3:D:711:LEU:HB2	2.17	0.80
2:C:670:GLN:HG2	2:C:699:PHE:CD2	2.16	0.80
3:N:136:ASP:CB	3:N:137:PRO:HD3	2.12	0.80
2:C:474:VAL:HG23	2:C:478:VAL:O	1.82	0.80
1:A:1:MET:O	1:A:6:LEU:HD22	1.81	0.80
2:M:1055:LEU:N	2:M:1055:LEU:HD23	1.97	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:M:89:THR:HA	2:M:129:ILE:O	1.81	0.80
2:C:915:LYS:NZ	3:D:952:ASP:OD1	2.15	0.80
1:A:58:ILE:HB	1:A:61:VAL:HB	1.61	0.80
5:P:132:ARG:O	5:P:136:LEU:HG	1.82	0.80
2:M:674:VAL:HG21	2:M:992:MET:HE1	1.64	0.80
3:N:486:ARG:HH21	3:N:489:ARG:CZ	1.95	0.80
2:M:21:ILE:HD12	2:M:21:ILE:H	1.45	0.80
2:M:910:LYS:H	2:M:913:GLU:CG	1.94	0.79
5:P:105:LYS:HB3	5:P:105:LYS:NZ	1.98	0.79
3:N:1271:LYS:HZ3	3:N:1273:VAL:HA	1.44	0.79
2:M:1109:VAL:HG22	3:N:3:LYS:HB2	1.64	0.79
2:M:1115:LEU:HB3	3:N:85:VAL:HG12	1.62	0.79
1:K:33:GLY:HA2	1:K:195:LEU:HB2	1.64	0.79
5:F:386:VAL:HG13	5:F:387:GLY:H	1.47	0.79
1:L:133:GLU:HG3	1:L:134:GLU:H	1.47	0.79
2:C:1076:VAL:HG22	3:D:752:SER:HB3	1.63	0.79
3:N:1115:THR:HB	3:N:1151:ARG:NH2	1.97	0.79
1:A:195:LEU:HD12	1:A:196:THR:N	1.97	0.79
2:M:1018:GLN:HG3	2:M:1060:ILE:CD1	2.12	0.79
2:M:145:GLY:HA3	2:M:276:LYS:HD2	1.64	0.79
1:L:201:THR:HG21	1:L:205:VAL:O	1.82	0.79
3:N:36:THR:HG22	3:N:38:LYS:HG3	1.62	0.79
1:L:137:ARG:NH1	1:L:139:ASN:HB3	1.97	0.79
3:D:1154:GLU:HG2	3:D:1159:ARG:HG2	1.63	0.79
3:N:195:VAL:HB	3:N:205:TYR:HB2	1.64	0.79
1:A:1:MET:HB2	1:A:6:LEU:HD13	1.65	0.79
3:N:1450:ALA:HA	3:N:1455:LYS:HG3	1.63	0.79
1:K:224:TYR:CE1	1:L:9:PRO:HD2	2.17	0.79
4:O:54:LEU:CG	4:O:58:PRO:HG2	2.06	0.79
1:L:151:VAL:HB	1:L:169:ALA:HB3	1.65	0.79
3:N:1156:LEU:HD12	3:N:1177:ALA:HB2	1.65	0.79
2:M:205:GLU:O	2:M:209:ARG:HD2	1.83	0.79
2:C:1052:MET:HA	2:C:1056:LYS:HD2	1.63	0.79
2:M:1055:LEU:HD21	2:M:1079:PRO:CG	2.12	0.79
2:C:436:GLY:HA2	2:C:538:GLN:O	1.83	0.79
3:N:461:ILE:HG22	3:N:465:LEU:HD12	1.65	0.79
3:N:710:ARG:HH11	3:N:772:PRO:HG2	1.48	0.79
3:D:1481:VAL:HG11	4:E:18:ARG:HA	1.65	0.79
4:E:45:ARG:NH2	4:E:72:ARG:HH21	1.81	0.78
3:N:422:ALA:HB3	3:N:427:VAL:HG22	1.64	0.78
2:M:93:PRO:HG3	2:M:117:HIS:HE1	1.48	0.78
1:B:151:VAL:HB	1:B:169:ALA:HB3	1.65	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:1462:LEU:HD13	3:D:1472:ILE:HG23	1.63	0.78
3:D:691:LEU:HD23	3:D:720:LEU:HD21	1.64	0.78
1:K:189:ARG:HD2	1:K:191:ASP:OD1	1.83	0.78
2:M:432:ARG:HH22	3:N:1047:LYS:CD	1.97	0.78
2:C:1050:GLN:HG2	2:C:1079:PRO:HG2	1.66	0.78
3:D:148:GLU:HB3	3:D:151:GLN:HB2	1.65	0.78
3:N:387:LEU:HD12	5:P:96:LEU:HD12	1.63	0.78
3:D:843:PHE:CD1	3:D:849:ALA:HA	2.18	0.78
2:M:534:VAL:H	2:M:538:GLN:HE22	1.28	0.78
2:M:1101:THR:C	2:M:1102:LEU:HD12	2.04	0.78
3:N:9:ARG:HB2	3:N:1456:LYS:HA	1.64	0.78
3:N:1472:ILE:O	3:N:1477:GLY:HA3	1.84	0.78
2:C:399:ASN:ND2	2:C:568:ALA:O	2.16	0.78
3:D:10:ILE:HG22	3:D:1451:ALA:HA	1.65	0.78
3:D:1129:THR:HG23	3:D:1130:ARG:N	1.97	0.78
3:D:1304:LYS:CE	3:D:1304:LYS:H	1.95	0.78
3:N:584:ASN:ND2	3:N:590:PRO:HD2	1.97	0.78
3:D:1364:HIS:CE1	3:D:1366:LYS:HG3	2.18	0.78
3:N:954:ALA:HA	3:N:1039:CYS:SG	2.24	0.78
3:N:502:PHE:CE2	3:N:1452:ILE:HG13	2.17	0.78
3:D:1087:ARG:HE	3:D:1238:MET:HB2	1.48	0.78
3:N:23:TYR:CE2	3:N:89:ARG:HD3	2.19	0.78
1:K:91:ASN:CG	1:K:92:PRO:HD2	2.04	0.78
3:D:40:GLU:HG3	3:D:41:ARG:H	1.48	0.78
5:F:278:LEU:HB3	5:F:286:PRO:HG2	1.64	0.78
2:C:504:GLU:HB2	2:C:507:ARG:HB3	1.63	0.78
2:C:291:ALA:O	2:C:299:LYS:HE2	1.83	0.78
2:C:769:PRO:HB2	3:D:65:ARG:HH22	1.49	0.78
3:N:1281:VAL:HG22	3:N:1294:VAL:HG22	1.66	0.78
5:P:321:ILE:HD11	5:P:329:TYR:HB2	1.65	0.78
1:A:201:THR:HG22	1:A:203:GLY:H	1.46	0.78
5:P:144:ILE:HB	5:P:145:PRO:HD3	1.65	0.78
2:M:502:PRO:HB2	2:M:509:ALA:HB3	1.65	0.78
2:C:1094:ALA:CB	3:D:603:LEU:HD22	2.14	0.77
2:M:882:LEU:HD12	3:N:1061:PHE:HB3	1.66	0.77
2:M:432:ARG:CZ	3:N:1048:PRO:HD2	2.14	0.77
2:M:18:LEU:HD22	2:M:590:ASP:OD2	1.85	0.77
3:D:1198:TYR:OH	3:D:1394:VAL:HG21	1.84	0.77
3:D:145:VAL:CG2	3:D:146:PRO:HD2	2.13	0.77
2:C:420:ARG:CD	2:C:420:ARG:H	1.98	0.77
1:A:94:LEU:HD11	1:A:119:ASP:HB3	1.65	0.77
5:P:74:LYS:HE2	5:P:74:LYS:HA	1.67	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:P:389:PHE:CD2	5:P:397:ILE:HD11	2.18	0.77
2:C:863:ASP:OD2	2:C:864:GLY:N	2.16	0.77
2:M:351:LEU:HD11	2:M:373:VAL:HG13	1.66	0.77
2:M:726:ILE:HD11	2:M:754:ILE:HG21	1.66	0.77
3:D:1229:ILE:HD11	3:D:1368:ILE:HG12	1.66	0.77
2:C:468:ARG:HG2	2:C:487:THR:HA	1.66	0.77
3:D:773:ALA:O	3:D:1363:LEU:HA	1.84	0.77
3:N:1191:PRO:HD2	3:N:1369:GLU:OE1	1.85	0.77
3:D:131:LYS:CA	3:D:456:MET:HG3	2.10	0.77
2:C:854:PRO:HB2	2:C:856:GLU:CG	2.14	0.77
1:L:71:VAL:HG22	1:L:132:LEU:HG	1.65	0.77
3:N:101:HIS:CD2	3:N:582:LEU:HD13	2.19	0.77
5:F:395:GLU:O	5:F:399:GLN:HB2	1.83	0.77
3:D:906:GLN:HB3	3:D:911:LEU:HD11	1.65	0.77
3:N:1271:LYS:NZ	3:N:1334:GLN:HE22	1.82	0.77
2:M:553:ASP:OD2	2:M:881:ASN:HB2	1.84	0.77
2:C:474:VAL:HG23	2:C:478:VAL:C	2.05	0.77
3:D:194:GLY:H	3:D:206:ARG:HA	1.50	0.77
3:N:37:LEU:HD11	3:N:529:GLN:HE21	1.49	0.77
2:C:966:LEU:HD21	2:C:986:PRO:HG3	1.66	0.77
2:C:874:LEU:HD21	3:D:787:LEU:HD22	1.65	0.77
3:N:792:ILE:HG23	3:N:793:THR:HG23	1.65	0.77
5:P:196:VAL:HG12	5:P:200:LYS:HE3	1.67	0.77
5:F:271:LEU:HD12	5:F:308:LEU:HD21	1.65	0.77
5:F:346:THR:HG23	5:F:422:LEU:HB3	1.67	0.77
5:F:373:LYS:HA	5:F:378:GLY:HA2	1.67	0.77
3:D:1109:GLU:HG2	3:D:1202:GLN:H	1.47	0.77
2:M:328:LEU:H	2:M:433:THR:HG21	1.48	0.77
2:M:1109:VAL:HG12	2:M:1110:ASP:H	1.50	0.77
3:N:1364:HIS:CE1	3:N:1366:LYS:HG3	2.20	0.77
3:D:609:GLY:HA3	3:D:614:PHE:H	1.48	0.77
3:N:709:HIS:NE2	3:N:711:LEU:HB2	1.99	0.77
3:D:937:TYR:HD1	3:D:937:TYR:H	1.33	0.77
3:D:1398:TRP:CZ3	3:D:1415:VAL:HG21	2.20	0.77
5:P:85:LEU:HA	5:P:88:ILE:HD12	1.66	0.77
3:D:705:ALA:HB3	3:D:706:PRO:CD	2.15	0.77
3:N:387:LEU:HD21	5:P:97:GLU:OE2	1.85	0.77
2:M:795:GLY:O	2:M:796:GLU:HG2	1.85	0.77
3:N:1136:LYS:HB2	3:N:1139:ASP:OD1	1.83	0.77
3:N:1321:ALA:O	3:N:1339:LYS:HD3	1.84	0.77
5:P:95:THR:O	5:P:96:LEU:HD23	1.86	0.77
2:C:775:ARG:NH1	2:C:782:ALA:HB1	2.00	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:627:ARG:HG3	2:C:628:PHE:H	1.49	0.77
3:D:119:SER:HB2	3:D:123:LEU:HB2	1.67	0.76
2:C:1032:PHE:O	3:D:620:GLY:HA2	1.84	0.76
2:M:1016:ILE:HD13	2:M:1016:ILE:N	1.98	0.76
2:M:56:GLU:H	2:M:64:LEU:HB3	1.50	0.76
1:B:85:LEU:HD12	1:B:124:ASN:HB3	1.67	0.76
5:F:102:LEU:O	5:F:106:VAL:HG23	1.85	0.76
3:D:525:ARG:N	3:D:526:PRO:HD3	1.98	0.76
1:B:152:PRO:HB2	1:B:155:LYS:HB2	1.67	0.76
5:P:88:ILE:HD13	5:P:193:ARG:HD2	1.66	0.76
3:N:840:LYS:HZ3	3:N:840:LYS:HB2	1.49	0.76
1:B:22:GLU:HG2	1:B:198:ARG:HG2	1.66	0.76
3:N:1042:ARG:HH12	3:N:1045:MET:CE	1.98	0.76
1:A:158:ILE:HD13	1:A:159:LYS:N	2.00	0.76
3:N:376:GLU:HB3	3:N:384:VAL:HG13	1.66	0.76
3:D:549:ASN:ND2	5:F:254:GLN:HE21	1.83	0.76
3:D:1155:VAL:HG13	3:D:1183:ILE:HD11	1.66	0.76
1:L:221:HIS:HA	1:L:224:TYR:CD2	2.19	0.76
3:D:1101:VAL:CG2	3:D:1424:VAL:HG22	2.10	0.76
4:O:51:LEU:HG	4:O:52:GLU:H	1.51	0.76
3:D:1471:LEU:HD23	3:D:1482:ARG:NH1	2.01	0.76
3:D:90:MET:HE2	3:D:519:VAL:H	1.49	0.76
2:C:870:ILE:O	2:C:871:LEU:HD12	1.86	0.76
2:C:1099:VAL:HG12	3:D:10:ILE:HG12	1.66	0.76
3:D:131:LYS:HA	3:D:456:MET:CG	2.11	0.76
3:N:1252:ILE:HG22	3:N:1253:THR:H	1.50	0.76
3:D:1304:LYS:N	3:D:1304:LYS:HE2	2.00	0.76
3:D:714:GLN:HE22	3:D:735:ALA:CB	1.99	0.76
3:D:628:ARG:HG2	3:D:629:SER:H	1.51	0.76
2:C:650:ARG:HD3	2:C:650:ARG:H	1.50	0.76
2:C:102:HIS:HE1	2:C:367:LEU:HD21	1.50	0.76
1:L:156:HIS:HD2	1:L:157:GLY:H	1.30	0.76
2:C:504:GLU:OE1	2:C:507:ARG:HD2	1.83	0.76
3:D:1020:LEU:HA	3:D:1023:MET:HE2	1.68	0.76
4:E:54:LEU:CG	4:E:58:PRO:HG2	2.14	0.76
3:N:881:LEU:HD21	3:N:941:PHE:CZ	2.21	0.76
1:K:86:VAL:HG12	1:K:124:ASN:ND2	2.01	0.76
1:L:38:ASN:HB3	1:L:39:PRO:HD3	1.66	0.76
3:D:28:LYS:O	3:D:43:GLY:HA2	1.86	0.76
3:D:646:LYS:HG3	3:D:647:ARG:N	2.00	0.76
1:K:219:ARG:NH1	1:K:220:GLU:N	2.33	0.76
1:K:26:GLU:CB	1:K:27:PRO:HD2	2.16	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:M:798:GLY:C	2:M:799:ILE:HD13	2.07	0.76
3:D:79:GLU:HG2	3:D:80:VAL:H	1.50	0.76
3:D:112:ILE:HD11	3:D:124:GLU:HG2	1.66	0.76
4:O:45:ARG:NH1	4:O:72:ARG:HH21	1.83	0.76
4:O:45:ARG:HH12	4:O:72:ARG:NH2	1.83	0.76
3:D:868:TYR:CD1	3:D:869:MET:HG3	2.20	0.76
5:P:416:ARG:HD3	5:P:419:ARG:HG3	1.68	0.76
3:N:950:GLY:O	3:N:953:ASP:HB2	1.84	0.76
3:N:1183:ILE:HG22	3:N:1184:GLN:H	1.51	0.76
3:D:724:GLN:HG2	3:D:724:GLN:O	1.85	0.76
2:M:42:VAL:HG12	2:M:43:GLY:H	1.51	0.76
3:N:455:ARG:HE	3:N:463:GLN:HE21	1.33	0.76
2:M:1000:MET:SD	2:M:1001:VAL:HG22	2.25	0.76
3:N:1320:GLU:HG3	3:N:1323:GLN:NE2	1.98	0.75
3:D:425:GLY:O	3:D:427:VAL:HG23	1.85	0.75
2:C:578:VAL:HG11	2:C:991:GLN:OE1	1.85	0.75
2:M:622:GLU:HG2	2:M:624:PRO:HD3	1.68	0.75
4:O:22:VAL:HG11	4:O:68:LEU:HD21	1.68	0.75
3:D:897:TRP:CZ2	3:D:902:LEU:HD11	2.21	0.75
3:D:234:GLU:CD	3:D:234:GLU:H	1.89	0.75
2:M:366:SER:O	2:M:371:LYS:HE3	1.86	0.75
2:M:64:LEU:HD22	2:M:359:MET:HG3	1.67	0.75
1:A:67:THR:HG21	2:C:609:ASN:HD21	1.51	0.75
3:D:711:LEU:HG	3:D:778:LEU:CD2	2.16	0.75
5:P:406:ARG:HA	5:P:409:LYS:HE2	1.68	0.75
2:M:798:GLY:O	2:M:799:ILE:HD13	1.86	0.75
3:D:1472:ILE:O	3:D:1477:GLY:HA3	1.85	0.75
3:D:947:ILE:O	3:D:947:ILE:HD12	1.87	0.75
2:M:1044:GLY:CA	3:N:762:GLN:HE22	2.00	0.75
2:M:910:LYS:HB2	2:M:913:GLU:HG3	1.69	0.75
1:A:23:PHE:HE1	1:A:208:LEU:HD13	1.51	0.75
3:D:1437:ALA:O	3:D:1446:VAL:HG21	1.86	0.75
1:K:64:GLU:HG2	1:K:76:VAL:HG22	1.69	0.75
1:A:46:SER:O	1:A:47:SER:HB2	1.86	0.75
2:C:1090:LYS:HE2	2:C:1112:PHE:CZ	2.21	0.75
3:D:804:LEU:HD21	3:D:829:VAL:HG11	1.66	0.75
3:N:699:VAL:H	3:N:756:GLN:NE2	1.83	0.75
5:P:123:ASP:HB3	5:P:125:ASP:CG	2.07	0.75
1:A:25:LEU:HD23	1:A:25:LEU:O	1.87	0.75
2:M:863:ASP:O	2:M:865:THR:N	2.19	0.75
2:M:445:GLU:OE2	2:M:560:MET:HG2	1.86	0.75
3:D:592:THR:OG1	3:D:600:LEU:HD21	1.87	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:62:LEU:HA	1:B:163:ASN:HB3	1.68	0.75
3:N:834:THR:HB	3:N:838:ARG:HB2	1.68	0.75
1:K:218:LEU:HD23	1:L:222:LEU:HD11	1.68	0.75
3:D:1314:LYS:HZ1	3:D:1317:ASP:HB2	1.52	0.75
2:C:470:PRO:HB2	2:C:534:VAL:HG21	1.68	0.75
2:M:137:VAL:HG21	2:M:393:GLN:NE2	2.00	0.75
5:F:131:VAL:HG13	5:F:178:ARG:HD3	1.69	0.75
3:D:161:LEU:O	3:D:449:SER:HB2	1.86	0.75
3:D:1396:GLU:HG2	3:D:1399:ASP:HB2	1.69	0.75
3:D:119:SER:CB	3:D:123:LEU:HB2	2.16	0.75
2:M:957:LYS:HD3	2:M:961:GLU:HB3	1.69	0.75
2:C:632:ASN:HB2	2:C:633:GLN:NE2	2.02	0.75
3:D:783:ARG:HE	3:D:1029:ARG:NE	1.84	0.75
3:N:984:THR:CG2	3:N:987:GLU:H	2.00	0.75
2:M:886:LEU:HD11	3:N:951:ILE:HG13	1.69	0.75
5:F:179:GLU:O	5:F:182:ALA:HB3	1.87	0.75
3:N:853:VAL:HG11	3:N:860:LEU:HG	1.67	0.75
2:M:775:ARG:HD2	2:M:782:ALA:HB3	1.68	0.75
3:D:73:CYS:HB3	3:D:76:CYS:O	1.87	0.75
2:C:1095:LEU:HA	3:D:582:LEU:HD22	1.69	0.74
3:D:1370:ILE:HG22	3:D:1371:VAL:N	2.01	0.74
5:P:105:LYS:HE3	5:P:179:GLU:HG2	1.68	0.74
3:N:1042:ARG:NH1	3:N:1045:MET:SD	2.60	0.74
2:C:682:TYR:CZ	2:C:851:LYS:HE2	2.22	0.74
2:M:876:VAL:HG22	2:M:884:GLN:NE2	2.02	0.74
3:N:988:ARG:NH1	3:N:992:ILE:HD11	2.01	0.74
3:D:734:GLU:HG2	3:D:780:LYS:HE2	1.67	0.74
3:D:102:ILE:HD12	3:D:579:ASP:HB3	1.68	0.74
2:C:1091:GLU:OE2	3:D:606:ILE:HG21	1.87	0.74
5:F:142:ARG:NH1	5:F:150:THR:HG21	2.02	0.74
3:N:1336:LEU:HB2	3:N:1344:VAL:HG21	1.69	0.74
1:L:108:GLU:HB3	1:L:128:HIS:HE1	1.52	0.74
2:C:471:TYR:CD2	2:C:496:ILE:HD13	2.23	0.74
1:K:143:ARG:HD3	1:K:158:ILE:HG21	1.67	0.74
2:M:1015:LEU:HB3	2:M:1016:ILE:HD13	1.68	0.74
2:C:674:VAL:HG23	2:C:869:VAL:HG13	1.69	0.74
2:M:549:PHE:HE2	2:M:887:GLU:HA	1.52	0.74
2:C:672:VAL:CG2	2:C:868:ASP:HB2	2.18	0.74
3:D:1489:GLN:O	3:D:1493:LYS:HG2	1.87	0.74
5:F:88:ILE:HD13	5:F:193:ARG:HB2	1.69	0.74
2:M:430:VAL:HG23	3:N:1078:ARG:NH1	2.02	0.74
2:M:292:ARG:HB2	2:M:299:LYS:HE2	1.69	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:E:51:LEU:HG	4:E:52:GLU:N	2.03	0.74
2:M:1008:ARG:HD2	2:M:1029:GLY:N	2.02	0.74
2:C:95:TYR:HD2	2:C:114:PHE:HB3	1.49	0.74
5:P:369:LEU:HD12	5:P:401:GLU:HG3	1.68	0.74
3:D:729:HIS:CE1	3:D:731:LEU:H	2.05	0.74
3:N:678:GLU:HG3	3:N:679:ARG:HG3	1.70	0.74
3:N:139:GLY:HA2	3:N:452:ILE:HG13	1.70	0.74
3:D:1095:THR:OG1	3:D:1230:GLY:HA3	1.86	0.74
1:A:226:SER:O	1:A:228:PRO:HD3	1.87	0.74
3:D:1065:LEU:HD23	3:D:1070:TYR:CD2	2.22	0.74
2:M:565:GLN:C	2:M:567:GLN:H	1.89	0.74
2:C:694:LEU:HD23	2:C:697:ARG:NH2	2.03	0.74
3:N:576:GLU:HA	3:N:579:ASP:OD2	1.88	0.74
2:M:1071:ILE:HG23	3:N:670:VAL:HG21	1.68	0.74
3:D:1207:TYR:O	3:D:1208:ASP:O	2.06	0.74
4:O:24:ALA:O	4:O:28:GLN:HG3	1.87	0.74
1:K:224:TYR:HB3	1:L:9:PRO:HB2	1.69	0.74
2:C:771:GLU:O	2:C:771:GLU:HG2	1.87	0.74
3:D:570:GLU:OE2	5:F:214:GLN:HG3	1.87	0.74
2:M:1008:ARG:HH12	2:M:1010:THR:HA	1.52	0.74
3:N:396:VAL:HG13	3:N:447:VAL:HA	1.70	0.74
2:M:259:GLY:O	2:M:291:ALA:HB2	1.87	0.74
1:K:194:LYS:HG2	1:K:194:LYS:O	1.88	0.74
3:N:959:GLU:HB2	3:N:963:TYR:CE1	2.22	0.74
2:C:332:ARG:HG3	2:C:465:GLY:HA3	1.69	0.74
3:D:139:GLY:HA3	3:D:452:ILE:HD12	1.70	0.74
2:C:844:GLY:O	2:C:846:LYS:N	2.21	0.74
2:M:1088:LEU:O	2:M:1091:GLU:HB2	1.88	0.74
3:N:231:VAL:HA	3:N:378:ILE:CG1	2.18	0.74
2:M:545:ASN:HB3	2:M:583:LEU:HD12	1.67	0.74
3:N:1167:SER:N	3:N:1170:ASP:OD2	2.16	0.74
3:D:367:ILE:CD1	3:D:368:VAL:H	2.01	0.74
3:D:770:LEU:CD2	3:D:777:PRO:HA	2.18	0.74
1:K:189:ARG:NH1	1:L:155:LYS:NZ	2.36	0.74
3:N:438:ASP:HB3	3:N:443:VAL:HB	1.70	0.74
1:B:133:GLU:HG3	1:B:134:GLU:H	1.52	0.74
3:D:224:ARG:H	3:D:224:ARG:HD3	1.52	0.74
3:D:1331:ASP:OD1	3:D:1334:GLN:HG3	1.88	0.73
1:A:152:PRO:HB3	1:A:154:GLU:OE1	1.88	0.73
3:N:1356:TYR:CD1	3:N:1363:LEU:HD21	2.23	0.73
2:C:79:PRO:HG2	2:C:82:GLU:HB2	1.70	0.73
1:K:56:VAL:HG21	1:K:79:ILE:HG22	1.70	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:P:362:SER:O	5:P:366:ALA:HB3	1.88	0.73
3:D:619:LEU:O	3:D:619:LEU:HG	1.88	0.73
3:N:385:VAL:HB	3:N:387:LEU:HD11	1.70	0.73
5:P:79:ASP:HB3	5:P:80:PRO:HD3	1.68	0.73
2:M:516:ARG:CZ	3:N:1068:LEU:HD13	2.18	0.73
3:D:225:LEU:HD12	3:D:440:VAL:HG21	1.70	0.73
3:D:1340:GLY:O	3:D:1343:ALA:HB3	1.87	0.73
2:C:884:GLN:HG2	2:C:885:ILE:HD13	1.70	0.73
5:P:166:LEU:HB3	5:P:170:HIS:HB2	1.70	0.73
3:D:584:ASN:ND2	3:D:590:PRO:HD2	2.03	0.73
3:D:601:ARG:HD3	3:D:613:ARG:NH2	2.03	0.73
3:D:616:GLN:CA	3:D:619:LEU:HB3	2.18	0.73
2:M:838:LYS:HD3	2:M:846:LYS:HZ1	1.54	0.73
3:D:1206:GLY:HA3	3:D:1366:LYS:HZ3	1.50	0.73
2:C:682:TYR:CD1	3:D:635:PRO:HG2	2.24	0.73
3:D:1376:MET:O	3:D:1378:TYR:N	2.18	0.73
2:C:869:VAL:HG22	2:C:870:ILE:H	1.54	0.73
3:N:133:ILE:HG23	3:N:456:MET:SD	2.27	0.73
3:D:775:GLY:HA3	3:D:1145:TYR:HE1	1.52	0.73
2:C:183:SER:HB2	2:C:190:LYS:HD3	1.68	0.73
3:N:423:ASP:H	5:P:178:ARG:HH12	1.35	0.73
2:C:207:LEU:HD22	2:C:221:LEU:HD21	1.71	0.73
2:C:738:ASP:HB2	2:C:744:ARG:HB3	1.71	0.73
3:N:764:LEU:CG	3:N:765:SER:H	2.00	0.73
5:P:88:ILE:HD11	5:P:193:ARG:HB2	1.68	0.73
3:N:1116:ASN:HD22	3:N:1116:ASN:N	1.85	0.73
3:N:473:LEU:HD12	3:N:476:GLU:OE1	1.89	0.73
3:D:1130:ARG:HD2	3:D:1131:SER:H	1.54	0.73
3:N:215:TYR:OH	5:P:101:GLU:HB2	1.89	0.73
5:F:287:THR:HG22	5:F:290:GLU:OE1	1.89	0.73
3:N:1047:LYS:HA	3:N:1053:PHE:CE1	2.24	0.73
2:C:606:VAL:HG21	2:C:645:VAL:HG22	1.71	0.73
2:C:235:LEU:O	2:C:239:PHE:HB2	1.88	0.73
1:B:188:GLN:HG3	1:B:189:ARG:HD2	1.71	0.73
1:A:35:THR:HG21	1:B:43:ILE:HD11	1.69	0.73
2:C:562:SER:C	2:C:563:ASN:HD22	1.92	0.73
2:M:534:VAL:H	2:M:538:GLN:NE2	1.86	0.73
3:N:679:ARG:NH1	3:N:682:ASP:OD1	2.22	0.73
2:C:63:GLY:HA3	2:C:103:LYS:HG3	1.69	0.73
2:C:874:LEU:O	3:D:1029:ARG:HD2	1.89	0.73
2:C:1031:ARG:HD3	3:D:619:LEU:O	1.89	0.73
1:L:100:LEU:HD12	1:L:115:LEU:HD11	1.70	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:P:88:ILE:HD13	5:P:193:ARG:HH11	1.52	0.73
3:D:820:GLU:HB2	3:D:836:VAL:HG21	1.68	0.73
2:C:226:VAL:HG13	2:C:227:PHE:H	1.53	0.73
5:F:234:LYS:HD2	5:F:236:SER:H	1.54	0.73
5:F:205:ARG:NE	5:F:251:ILE:HD13	2.03	0.73
1:B:181:VAL:HG12	1:B:193:ASP:HB3	1.70	0.73
1:K:87:VAL:HG21	1:K:144:VAL:HG11	1.70	0.73
3:D:1109:GLU:CD	3:D:1110:ALA:N	2.41	0.73
3:D:616:GLN:HA	3:D:619:LEU:CB	2.19	0.73
2:M:565:GLN:O	2:M:567:GLN:N	2.20	0.73
2:M:630:ARG:HH21	2:M:707:ARG:N	1.87	0.73
3:D:1353:GLN:HB3	3:D:1357:ARG:CZ	2.19	0.73
3:D:598:ARG:NH1	5:F:320:PRO:HD3	2.04	0.73
2:M:901:TYR:HE2	2:M:917:LEU:CD1	2.02	0.73
3:N:601:ARG:HG2	3:N:606:ILE:HG13	1.68	0.73
5:P:169:GLU:N	5:P:169:GLU:CD	2.39	0.73
2:C:769:PRO:HG2	3:D:65:ARG:HH12	1.51	0.73
3:D:423:ASP:OD1	5:F:175:HIS:CE1	2.42	0.73
3:N:1066:THR:HG23	3:N:1069:GLU:HG3	1.71	0.72
2:C:988:VAL:HG12	3:D:948:THR:OG1	1.88	0.72
5:P:416:ARG:NH1	5:P:419:ARG:HD2	2.04	0.72
3:D:679:ARG:HH22	3:D:681:ARG:CD	2.02	0.72
2:C:966:LEU:HD11	2:C:986:PRO:HG2	1.71	0.72
3:D:918:ALA:O	3:D:922:LEU:HB2	1.89	0.72
3:N:515:GLU:HG3	3:N:515:GLU:O	1.89	0.72
3:N:228:ALA:O	3:N:231:VAL:HG22	1.88	0.72
3:D:679:ARG:HH22	3:D:681:ARG:HE	1.37	0.72
2:C:593:ALA:HB1	2:C:659:PRO:CD	2.19	0.72
5:F:394:ARG:HA	5:F:397:ILE:HD12	1.70	0.72
3:D:783:ARG:HH21	3:D:1029:ARG:NH1	1.85	0.72
2:M:537:LYS:HA	2:M:905:ILE:HD11	1.69	0.72
2:C:98:LEU:HD12	2:C:113:VAL:HG21	1.68	0.72
3:D:1279:GLY:O	3:D:1318:TYR:HA	1.89	0.72
5:P:234:LYS:HE3	5:P:236:SER:HB3	1.71	0.72
3:D:1382:THR:O	3:D:1384:PRO:HD3	1.89	0.72
3:N:560:GLN:HE21	3:N:560:GLN:HA	1.53	0.72
3:D:416:ALA:H	3:D:417:PRO:CD	2.02	0.72
3:D:8:VAL:HG12	3:D:1434:TRP:HH2	1.53	0.72
3:D:783:ARG:NH2	3:D:1029:ARG:CZ	2.52	0.72
5:P:181:GLU:O	5:P:184:ARG:HB3	1.88	0.72
2:C:695:LEU:HD21	2:C:833:LEU:HB3	1.70	0.72
3:N:675:ARG:HB3	3:N:675:ARG:HH11	1.54	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:K:62:LEU:HD12	1:K:62:LEU:H	1.54	0.72
1:A:5:LYS:HE2	1:A:5:LYS:HA	1.71	0.72
2:M:95:TYR:CD2	2:M:114:PHE:HB3	2.25	0.72
3:D:1331:ASP:CB	3:D:1334:GLN:HE21	1.98	0.72
3:D:367:ILE:HD13	3:D:368:VAL:H	1.54	0.72
3:D:826:PRO:HB2	3:D:829:VAL:HG22	1.71	0.72
2:M:575:GLN:HE21	2:M:900:ARG:HH22	1.36	0.72
1:K:2:LEU:HA	1:K:6:LEU:CD2	2.20	0.72
2:M:95:TYR:CE2	2:M:114:PHE:HB3	2.25	0.72
3:D:185:VAL:HG12	3:D:191:LEU:HD21	1.72	0.72
2:M:640:ARG:HD3	2:M:642:ARG:HH22	1.52	0.72
3:D:18:ILE:HG23	3:D:518:PRO:HG3	1.72	0.72
5:P:163:LEU:HB3	5:P:174:LEU:HD12	1.72	0.72
3:N:175:VAL:HG13	3:N:217:LYS:CD	2.20	0.72
2:M:949:LYS:HZ3	3:N:796:ARG:HH21	1.37	0.72
3:N:35:ARG:HB3	3:N:35:ARG:HH11	1.54	0.72
3:N:701:LEU:HD21	3:N:763:MET:CE	2.19	0.72
2:M:1103:ASP:OD1	3:N:3:LYS:HB3	1.89	0.72
2:C:966:LEU:HD21	2:C:986:PRO:CG	2.19	0.72
2:C:605:LYS:HB3	2:C:610:ARG:NH1	2.04	0.72
3:N:216:VAL:HG11	3:N:221:ALA:HA	1.72	0.72
3:D:994:GLN:HE21	3:D:998:GLU:CG	2.02	0.72
5:F:128:ARG:HG2	5:F:132:ARG:HH12	1.54	0.72
2:C:1009:SER:HB2	3:D:651:GLU:O	1.90	0.72
1:K:205:VAL:HG23	1:K:206:THR:N	2.05	0.72
3:D:387:LEU:CB	5:F:97:GLU:HG2	2.20	0.72
3:D:911:LEU:O	3:D:912:LYS:C	2.28	0.72
3:N:385:VAL:HG13	5:P:232:ARG:NH1	2.04	0.72
2:M:1008:ARG:NH1	2:M:1010:THR:HA	2.05	0.72
3:N:150:ARG:HH12	3:N:464:LEU:HD22	1.55	0.72
2:M:432:ARG:HH22	3:N:1047:LYS:HD3	1.55	0.72
3:N:975:GLU:CD	3:N:988:ARG:HH12	1.92	0.72
3:N:1087:ARG:HB3	3:N:1234:THR:HG23	1.72	0.72
3:N:880:ILE:O	3:N:883:ALA:HB3	1.90	0.72
2:M:1055:LEU:HD23	2:M:1055:LEU:H	1.53	0.71
3:N:673:ALA:O	3:N:676:MET:N	2.22	0.71
1:A:18:ARG:HH12	1:A:88:ARG:HE	1.36	0.71
2:M:862:PRO:HA	2:M:975:TYR:HE1	1.54	0.71
3:N:1498:ALA:HA	3:N:1501:GLU:CD	2.10	0.71
2:C:497:ALA:HA	2:C:515:ALA:HA	1.71	0.71
5:F:77:THR:O	5:F:81:VAL:HG23	1.89	0.71
2:C:587:VAL:HG11	2:C:666:LEU:HD22	1.72	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:19:THR:HG21	2:C:124:ASP:O	1.91	0.71
2:C:905:ILE:HG23	2:C:906:PHE:N	2.05	0.71
2:C:516:ARG:HH11	2:C:521:PRO:HB3	1.55	0.71
2:M:73:LEU:HD11	2:M:118:ILE:HD11	1.72	0.71
2:M:79:PRO:HG2	2:M:82:GLU:HB2	1.71	0.71
2:M:910:LYS:N	2:M:913:GLU:HG3	2.05	0.71
3:D:1149:LEU:HD23	3:D:1187:PRO:O	1.90	0.71
3:N:137:PRO:HD2	3:N:453:ASP:HB3	1.71	0.71
2:M:436:GLY:HA2	2:M:538:GLN:O	1.89	0.71
2:C:158:TYR:O	2:C:310:LEU:HD11	1.90	0.71
1:A:162:ILE:HG13	1:A:163:ASN:ND2	2.05	0.71
3:D:1101:VAL:HG12	3:D:1374:GLN:HB3	1.70	0.71
3:D:1346:ARG:NH1	3:D:1346:ARG:HA	2.05	0.71
3:N:569:ASN:O	3:N:572:ARG:HB3	1.90	0.71
2:C:430:VAL:CG1	3:D:1075:HIS:HA	2.21	0.71
3:N:840:LYS:NZ	3:N:840:LYS:HB2	2.05	0.71
2:C:693:GLU:OE1	2:C:696:LYS:HD2	1.90	0.71
1:K:65:PHE:HE2	2:M:830:LYS:HG3	1.55	0.71
3:D:960:LYS:HG2	3:D:964:LEU:HD12	1.71	0.71
2:M:749:VAL:HG11	2:M:755:LEU:CD2	2.20	0.71
2:C:728:HIS:C	2:C:729:LEU:HD22	2.11	0.71
4:O:39:VAL:HG22	4:O:67:GLU:CD	2.11	0.71
2:M:838:LYS:CE	2:M:846:LYS:HZ1	2.04	0.71
2:C:983:ILE:HG21	2:C:987:ILE:HD11	1.71	0.71
2:M:1049:LEU:O	2:M:1053:LEU:HD23	1.89	0.71
3:D:1341:PRO:O	3:D:1345:GLU:HG3	1.89	0.71
5:F:164:LYS:HA	5:F:171:LYS:HZ2	1.54	0.71
2:C:731:GLU:HA	2:C:734:LEU:HD23	1.71	0.71
1:K:219:ARG:NH1	1:K:220:GLU:H	1.88	0.71
2:M:909:ALA:C	2:M:910:LYS:HD2	2.11	0.71
3:N:1183:ILE:HG22	3:N:1184:GLN:N	2.06	0.71
3:N:1036:ARG:HB3	3:N:1036:ARG:NH1	2.05	0.71
3:N:864:VAL:HG12	3:N:865:THR:H	1.56	0.71
3:D:1381:VAL:HB	3:D:1389:LEU:O	1.91	0.71
2:C:801:VAL:HG22	2:C:826:TYR:O	1.90	0.71
2:C:349:ALA:O	2:C:353:ARG:HG3	1.91	0.71
3:D:86:ARG:O	3:D:522:PRO:HD2	1.90	0.71
3:D:808:THR:HB	3:D:809:PRO:CD	2.17	0.71
3:N:84:ILE:O	3:N:86:ARG:N	2.23	0.71
5:P:191:ASN:O	5:P:220:LEU:HD22	1.91	0.71
2:M:181:VAL:HG12	2:M:182:VAL:H	1.56	0.71
1:B:201:THR:HG21	1:B:205:VAL:O	1.90	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:M:1054:THR:HG21	2:M:1079:PRO:HB3	1.73	0.71
2:C:516:ARG:NH1	3:D:1068:LEU:HD22	2.06	0.71
1:K:219:ARG:NH2	1:K:220:GLU:HA	2.06	0.71
3:D:90:MET:HE2	3:D:519:VAL:N	2.03	0.71
2:C:593:ALA:HB1	2:C:659:PRO:HD3	1.73	0.71
2:C:1105:LYS:O	2:C:1107:ASN:N	2.24	0.71
2:M:943:VAL:HG13	2:M:985:GLY:H	1.55	0.71
3:N:1479:ASP:OD1	3:N:1482:ARG:HD3	1.90	0.71
2:C:785:VAL:HG22	2:C:786:LYS:H	1.56	0.71
1:K:13:VAL:HG12	1:K:14:ARG:N	2.05	0.71
1:B:185:ARG:HB2	1:B:190:THR:HG23	1.72	0.71
3:D:1103:HIS:CD2	3:D:1463:LYS:H	2.09	0.71
2:C:877:PRO:HG3	3:D:1023:MET:HE3	1.71	0.71
3:D:130:SER:HG	3:D:132:TYR:HE1	1.38	0.71
3:N:1364:HIS:ND1	3:N:1365:ASP:N	2.39	0.71
3:N:1124:GLN:OE1	3:N:1135:ARG:HG3	1.91	0.71
5:F:88:ILE:HG21	5:F:193:ARG:HD3	1.73	0.71
3:N:224:ARG:C	3:N:224:ARG:HD2	2.11	0.71
2:M:1066:ALA:O	2:M:1069:ALA:HB3	1.91	0.70
2:M:269:LEU:CA	2:M:288:ARG:HE	2.03	0.70
2:C:549:PHE:CD2	2:C:886:LEU:HB3	2.25	0.70
2:C:549:PHE:HE2	2:C:887:GLU:N	1.89	0.70
2:C:172:ILE:H	2:C:172:ILE:HD12	1.55	0.70
2:C:332:ARG:HH21	2:C:464:LEU:HD11	1.56	0.70
1:K:109:VAL:HG23	1:K:132:LEU:HD13	1.73	0.70
3:N:590:PRO:O	3:N:600:LEU:HD21	1.91	0.70
3:N:983:LEU:HA	3:N:987:GLU:OE2	1.90	0.70
2:C:957:LYS:HD2	2:C:965:GLU:OE2	1.91	0.70
2:M:760:SER:O	2:M:785:VAL:HG13	1.90	0.70
2:C:368:THR:HB	2:C:369:PRO:HD3	1.74	0.70
3:N:387:LEU:CD2	5:P:97:GLU:HB2	2.21	0.70
3:N:546:ARG:HH12	3:N:550:ARG:HH22	1.39	0.70
1:B:87:VAL:HG12	1:B:122:ILE:HG12	1.72	0.70
3:D:387:LEU:HB3	5:F:97:GLU:HG2	1.73	0.70
3:N:171:LEU:HB3	3:N:390:PRO:HA	1.74	0.70
3:D:25:GLU:OE1	3:D:27:GLU:HB3	1.91	0.70
2:C:1044:GLY:O	2:C:1045:ALA:C	2.28	0.70
3:D:234:GLU:C	3:D:238:PRO:HD2	2.12	0.70
2:C:893:ALA:O	2:C:897:LEU:HB2	1.92	0.70
1:K:1:MET:SD	1:K:5:LYS:HB3	2.30	0.70
2:M:537:LYS:HA	2:M:905:ILE:CD1	2.22	0.70
2:C:1059:ASP:OD1	2:C:1080:SER:HB2	1.90	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:644:LEU:O	3:D:721:VAL:HG22	1.91	0.70
3:N:1122:LEU:HG	3:N:1140:ILE:HD13	1.72	0.70
5:F:142:ARG:HH12	5:F:150:THR:HG21	1.56	0.70
3:D:798:GLU:HG2	3:D:799:LYS:N	2.00	0.70
3:N:701:LEU:HD21	3:N:763:MET:HE3	1.74	0.70
2:M:469:THR:O	2:M:485:TYR:HA	1.90	0.70
2:M:176:VAL:HG12	2:M:182:VAL:HG22	1.73	0.70
3:D:952:ASP:HA	3:D:1062:ARG:HH22	1.56	0.70
3:N:1165:TYR:OH	3:N:1203:LYS:HA	1.92	0.70
2:M:198:ARG:HH22	2:M:203:ASP:HB3	1.57	0.70
3:N:478:LEU:CD2	3:N:1388:ARG:HH12	2.05	0.70
5:F:271:LEU:O	5:F:271:LEU:HD13	1.91	0.70
2:M:953:VAL:HA	2:M:965:GLU:OE1	1.92	0.70
2:M:167:LYS:HD3	2:M:167:LYS:C	2.12	0.70
2:C:195:LEU:HG	2:C:238:LEU:HD12	1.72	0.70
2:C:1096:ALA:HB3	3:D:101:HIS:ND1	2.07	0.70
3:D:87:ARG:HG3	3:D:88:TYR:CD2	2.27	0.70
2:C:263:ASP:HB2	2:C:264:PRO:HD3	1.73	0.70
3:D:969:ARG:O	3:D:972:LEU:HB3	1.92	0.70
2:C:829:GLN:OE1	2:C:831:ARG:NH1	2.25	0.70
2:M:1071:ILE:CG2	3:N:670:VAL:HG21	2.21	0.70
1:K:1:MET:O	1:K:6:LEU:HD22	1.92	0.70
1:B:86:VAL:HG12	1:B:124:ASN:ND2	2.06	0.70
2:C:1054:THR:HG22	2:C:1059:ASP:HB2	1.73	0.70
2:C:1054:THR:HG21	2:C:1079:PRO:HB3	1.74	0.70
3:D:52:PRO:HG3	3:D:78:VAL:HG13	1.74	0.70
2:C:1010:THR:HG22	2:C:1011:GLY:N	2.07	0.70
3:N:1459:LEU:HD11	3:N:1468:LEU:HD13	1.73	0.70
3:N:40:GLU:HG3	3:N:41:ARG:H	1.54	0.70
3:D:1103:HIS:HD2	3:D:1462:LEU:N	1.89	0.70
3:D:907:GLU:HG2	3:D:908:LYS:H	1.56	0.70
3:N:1069:GLU:O	3:N:1073:SER:HB2	1.91	0.70
2:M:568:ALA:CB	2:M:668:LEU:HB3	2.21	0.70
3:N:1106:VAL:HG13	3:N:1219:GLU:O	1.91	0.70
1:A:34:VAL:HB	1:B:42:ARG:NH2	2.06	0.70
3:N:1314:LYS:HD3	3:N:1314:LYS:H	1.56	0.70
1:B:189:ARG:HH11	1:B:189:ARG:HG3	1.57	0.70
2:C:134:ARG:HH12	2:C:392:SER:C	1.94	0.70
2:C:877:PRO:HG3	3:D:1023:MET:CE	2.22	0.69
3:N:138:LYS:N	3:N:138:LYS:HD2	2.06	0.69
2:M:380:ALA:O	2:M:384:GLU:HB2	1.92	0.69
2:C:690:ILE:HB	2:C:852:ILE:HD13	1.73	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:984:THR:HG22	3:N:987:GLU:CG	2.22	0.69
5:P:402:ASN:HB3	5:P:406:ARG:NH2	2.07	0.69
3:D:1310:ARG:HE	3:D:1327:ARG:HB3	1.57	0.69
3:D:1312:LEU:CD1	3:D:1327:ARG:HG3	2.22	0.69
3:D:214:GLU:HB2	3:D:390:PRO:HD2	1.74	0.69
3:N:834:THR:OG1	3:N:839:LEU:HD21	1.92	0.69
3:D:994:GLN:HE21	3:D:998:GLU:CD	1.95	0.69
3:N:115:LEU:HD13	3:N:499:VAL:HG22	1.73	0.69
3:N:187:LYS:HZ1	3:N:213:VAL:HG12	1.56	0.69
2:C:807:ARG:HH21	2:C:808:ARG:HB2	1.57	0.69
3:D:1207:TYR:N	3:D:1366:LYS:HZ1	1.87	0.69
3:N:1213:ARG:HB2	3:N:1214:PRO:CD	2.21	0.69
3:D:951:ILE:HG23	3:D:1062:ARG:HH21	1.57	0.69
5:F:234:LYS:HD2	5:F:236:SER:N	2.06	0.69
1:K:106:PRO:HD3	1:K:134:GLU:HA	1.74	0.69
3:D:1290:LEU:HD23	3:D:1291:SER:H	1.56	0.69
3:N:416:ALA:HB3	3:N:417:PRO:HD3	1.73	0.69
2:C:701:THR:HG21	2:C:830:LYS:HD2	1.75	0.69
3:D:1264:GLU:HG2	3:D:1266:ARG:NH2	2.07	0.69
2:C:1115:LEU:HD22	3:D:88:TYR:CD1	2.28	0.69
4:O:47:LYS:HA	4:O:54:LEU:HB3	1.74	0.69
4:E:40:LEU:HD22	4:E:45:ARG:NH1	2.06	0.69
4:O:51:LEU:HG	4:O:52:GLU:N	2.07	0.69
3:N:699:VAL:H	3:N:756:GLN:HE21	1.38	0.69
3:D:841:TYR:HB3	3:D:843:PHE:CE2	2.27	0.69
3:D:382:GLU:O	3:D:384:VAL:HG23	1.92	0.69
2:C:1066:ALA:O	2:C:1070:ILE:HG13	1.92	0.69
1:A:218:LEU:O	1:A:222:LEU:HD23	1.91	0.69
1:A:224:TYR:HB3	1:B:9:PRO:HB2	1.75	0.69
2:C:5:ARG:HB3	2:C:902:ILE:HB	1.74	0.69
3:D:1139:ASP:OD2	3:D:1357:ARG:HD3	1.92	0.69
3:D:584:ASN:HD21	3:D:590:PRO:HD2	1.56	0.69
3:D:910:SER:O	3:D:913:ASP:HB2	1.92	0.69
3:N:423:ASP:OD2	5:P:178:ARG:HG3	1.92	0.69
3:D:714:GLN:HE22	3:D:735:ALA:HB1	1.57	0.69
3:N:1155:VAL:HG22	3:N:1183:ILE:HD11	1.72	0.69
3:D:994:GLN:HG3	3:D:998:GLU:CD	2.12	0.69
2:M:722:ILE:HD12	2:M:823:VAL:HG21	1.75	0.69
2:C:358:ARG:HH22	2:C:374:ASN:HB3	1.58	0.69
3:D:228:ALA:O	3:D:231:VAL:HG22	1.92	0.69
3:D:457:GLY:HA3	3:D:568:ARG:HH12	1.55	0.69
4:E:48:MET:HG2	4:E:49:GLN:H	1.57	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:420:ARG:HD2	2:C:420:ARG:N	2.05	0.69
1:L:111:ALA:HB2	1:L:127:LEU:HB3	1.75	0.69
2:C:842:ARG:HH21	2:C:887:GLU:CD	1.96	0.69
3:N:486:ARG:O	3:N:489:ARG:HG2	1.92	0.69
3:D:205:TYR:HA	3:D:393:ILE:HD13	1.75	0.69
2:C:265:ARG:HG3	2:C:288:ARG:HG3	1.75	0.69
2:C:42:VAL:HG12	2:C:43:GLY:H	1.57	0.69
5:P:151:LEU:HB2	5:P:155:THR:OG1	1.92	0.69
5:F:209:PHE:O	5:F:213:ILE:HG13	1.93	0.69
2:C:49:ARG:HH11	2:C:49:ARG:CB	2.02	0.69
3:N:461:ILE:O	3:N:465:LEU:HD12	1.91	0.69
5:F:363:GLU:O	5:F:367:MET:HG2	1.92	0.69
2:C:139:GLN:HA	2:C:411:SER:O	1.92	0.69
2:C:1102:LEU:HD23	2:C:1106:ASP:HA	1.75	0.69
1:L:44:LEU:HB3	1:L:177:VAL:HG21	1.75	0.69
2:C:622:GLU:O	2:C:624:PRO:HD3	1.91	0.69
3:D:1433:SER:HB2	3:D:1457:ASP:OD2	1.92	0.69
3:N:32:ILE:HG22	3:N:33:ASN:H	1.56	0.69
2:C:848:VAL:HB	3:D:740:PHE:O	1.92	0.69
3:N:1258:ARG:HG3	3:N:1258:ARG:NH1	2.05	0.69
2:M:137:VAL:O	2:M:391:LEU:HG	1.92	0.69
2:C:612:VAL:HA	2:C:621:VAL:O	1.93	0.69
3:N:105:VAL:HG22	3:N:112:ILE:HG12	1.73	0.69
3:N:1277:ILE:HG22	3:N:1278:ASP:N	2.07	0.69
2:C:86:LYS:HG3	2:C:813:VAL:HG12	1.75	0.69
3:D:1346:ARG:NH2	3:D:1369:GLU:OE2	2.26	0.69
5:F:152:ASP:CG	5:F:153:PRO:HD3	2.13	0.69
3:N:96:ALA:HB1	3:N:554:LEU:HD12	1.73	0.69
1:K:219:ARG:HH22	1:K:220:GLU:HG3	1.58	0.69
1:A:55:SER:HB2	1:A:158:ILE:HG23	1.75	0.69
2:C:326:ASP:HA	2:C:331:ARG:HD2	1.74	0.69
3:D:474:GLU:HG3	3:D:496:LEU:HD11	1.73	0.69
2:M:253:ALA:O	2:M:256:TYR:HB2	1.93	0.69
2:M:1003:ASP:O	2:M:1005:MET:N	2.26	0.69
2:M:692:GLU:O	2:M:696:LYS:HG3	1.93	0.69
3:N:225:LEU:HD22	3:N:440:VAL:HG21	1.75	0.69
2:C:601:GLY:HA2	2:C:616:GLU:HG2	1.75	0.69
3:N:1256:LEU:HB3	3:N:1257:PRO:HD3	1.75	0.69
3:N:546:ARG:NH1	3:N:550:ARG:NH2	2.39	0.69
3:N:135:LEU:HD21	3:N:452:ILE:HD11	1.74	0.69
2:M:676:ILE:O	2:M:676:ILE:HG23	1.92	0.69
2:M:432:ARG:NH2	3:N:1047:LYS:HZ2	1.90	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:1155:VAL:CG1	3:D:1183:ILE:HD11	2.22	0.69
4:E:33:HIS:HB2	4:E:37:ASN:HD21	1.58	0.69
2:M:946:ARG:NH1	2:M:984:GLU:OE2	2.26	0.69
3:D:1147:ARG:NH1	3:D:1190:SER:HB2	2.07	0.69
3:D:368:VAL:HG12	3:D:369:ALA:N	2.08	0.69
3:N:699:VAL:HG12	3:N:717:GLN:HG2	1.74	0.69
2:M:139:GLN:HE22	2:M:414:GLY:HA3	1.56	0.69
3:N:1047:LYS:HD2	3:N:1051:GLU:O	1.93	0.69
1:B:201:THR:HG22	1:B:203:GLY:H	1.58	0.69
3:N:794:GLN:NE2	3:N:795:VAL:N	2.41	0.69
1:L:74:ASP:O	1:L:78:ILE:HG13	1.93	0.69
5:F:300:ASP:OD2	5:F:302:LYS:HB3	1.93	0.69
2:C:290:LEU:H	2:C:290:LEU:HD23	1.58	0.68
3:D:245:LEU:HD21	3:D:249:TYR:HB2	1.74	0.68
2:M:86:LYS:HB3	2:M:88:LEU:HG	1.74	0.68
3:D:711:LEU:O	3:D:714:GLN:NE2	2.26	0.68
1:L:94:LEU:HD21	1:L:119:ASP:HB2	1.74	0.68
2:M:518:LYS:O	2:M:518:LYS:HG3	1.92	0.68
3:N:15:PRO:CB	3:N:19:ARG:HH12	2.07	0.68
2:C:636:ALA:O	2:C:637:LEU:HD23	1.93	0.68
3:D:584:ASN:CG	3:D:590:PRO:HD2	2.13	0.68
4:O:40:LEU:HB2	4:O:45:ARG:CD	2.23	0.68
3:N:218:LYS:HB3	3:N:373:PRO:HA	1.75	0.68
2:M:340:MET:C	2:M:340:MET:SD	2.71	0.68
3:D:179:VAL:HG11	3:D:217:LYS:HZ1	1.58	0.68
1:L:201:THR:HG22	1:L:203:GLY:H	1.56	0.68
1:A:14:ARG:O	1:A:21:GLY:HA2	1.92	0.68
2:C:1102:LEU:HD23	2:C:1106:ASP:CA	2.23	0.68
2:M:252:LYS:HD2	2:M:252:LYS:H	1.56	0.68
3:N:18:ILE:HG23	3:N:518:PRO:HG3	1.74	0.68
3:D:244:GLU:OE1	3:D:366:LYS:HG3	1.93	0.68
2:C:328:LEU:HD11	2:C:434:HIS:CD2	2.28	0.68
2:M:285:LEU:HD13	2:M:302:VAL:HG23	1.76	0.68
1:A:50:GLY:O	1:A:51:THR:HG23	1.94	0.68
4:E:17:TYR:O	4:E:21:VAL:HG23	1.93	0.68
3:N:586:ARG:O	3:N:587:ARG:HG2	1.92	0.68
3:D:1175:ILE:O	3:D:1179:GLU:HG3	1.94	0.68
3:D:601:ARG:HH22	3:D:611:GLN:HB2	1.58	0.68
2:M:1092:LEU:O	2:M:1095:LEU:O	2.12	0.68
3:N:660:LYS:HG2	3:N:694:VAL:HG22	1.74	0.68
3:N:658:LEU:HD11	3:N:674:ARG:NH1	2.07	0.68
3:D:1344:VAL:O	3:D:1348:LEU:HD13	1.93	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:333:ILE:CD1	2:C:467:ILE:HD11	2.24	0.68
3:N:224:ARG:HD2	3:N:224:ARG:O	1.93	0.68
3:N:1223:ILE:O	3:N:1227:GLN:HG3	1.94	0.68
3:D:807:ALA:HB2	3:D:833:GLU:HB3	1.75	0.68
1:L:26:GLU:HG2	1:L:27:PRO:HA	1.75	0.68
1:K:59:GLU:HG3	1:K:60:ASP:H	1.58	0.68
2:C:502:PRO:HB2	2:C:509:ALA:HB3	1.74	0.68
3:N:769:LEU:HD23	3:N:927:THR:HG22	1.75	0.68
3:N:34:TYR:HE2	5:P:260:ILE:HG13	1.58	0.68
5:P:135:ILE:HD11	5:P:178:ARG:HD2	1.74	0.68
5:P:222:ARG:HD2	5:P:242:TRP:HE3	1.59	0.68
3:N:890:VAL:HG12	3:N:926:LYS:HG2	1.75	0.68
2:M:139:GLN:O	2:M:334:ARG:HG2	1.92	0.68
3:D:1076:GLY:CA	3:D:1079:LYS:HG2	2.22	0.68
3:D:81:THR:O	3:D:82:LYS:O	2.12	0.68
2:M:964:LYS:O	2:M:968:LEU:HG	1.94	0.68
1:B:19:GLU:HG3	1:B:201:THR:O	1.94	0.68
2:C:129:ILE:HG12	2:C:386:PHE:O	1.93	0.68
2:M:1004:LYS:HE3	2:M:1027:PHE:HZ	1.58	0.68
3:N:444:VAL:O	3:N:446:VAL:HG23	1.94	0.68
3:D:539:ASP:HB2	5:F:318:GLU:OE2	1.94	0.68
2:M:1047:HIS:O	2:M:1050:GLN:N	2.27	0.68
1:A:88:ARG:HH12	1:A:90:LEU:CD2	2.07	0.68
1:A:30:ARG:HG3	2:C:938:LYS:NZ	2.08	0.68
3:D:1137:ARG:O	3:D:1141:GLU:HG3	1.94	0.68
3:D:247:GLU:H	3:D:248:PRO:HD2	1.59	0.68
3:N:1185:GLU:O	3:N:1186:VAL:HG23	1.93	0.68
3:N:1144:LEU:HD21	3:N:1186:VAL:HG11	1.74	0.68
2:M:1051:GLU:OE2	3:N:752:SER:HB3	1.94	0.68
3:D:172:PRO:HD2	3:D:389:GLU:O	1.94	0.68
2:M:193:LEU:HG	2:M:307:LEU:HD22	1.76	0.68
3:N:123:LEU:HD21	3:N:152:LEU:HD22	1.76	0.68
5:F:181:GLU:OE2	5:F:184:ARG:HD3	1.94	0.68
2:C:1024:LYS:NZ	2:C:1024:LYS:HB2	2.09	0.68
5:F:405:LEU:O	5:F:408:LEU:HB3	1.92	0.68
3:D:890:VAL:HG12	3:D:926:LYS:HG2	1.75	0.68
3:N:1320:GLU:CG	3:N:1323:GLN:HE21	2.04	0.68
5:P:389:PHE:HD2	5:P:397:ILE:HD11	1.56	0.68
1:B:36:LEU:O	1:B:39:PRO:HD2	1.94	0.68
1:L:56:VAL:HG21	1:L:79:ILE:HG22	1.76	0.68
3:N:422:ALA:HB1	5:P:178:ARG:HH22	1.58	0.68
5:F:287:THR:HG23	5:F:289:GLU:HB2	1.76	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:M:352:ALA:HA	2:M:355:VAL:HG12	1.75	0.68
2:M:640:ARG:HB3	2:M:640:ARG:HH11	1.58	0.68
2:C:574:ALA:O	2:C:575:GLN:HG3	1.94	0.68
1:B:77:GLU:HB2	3:D:872:ARG:HH22	1.58	0.68
3:N:172:PRO:HB3	3:N:178:LEU:HD13	1.76	0.68
2:M:199:VAL:HG13	2:M:235:LEU:HG	1.76	0.68
3:N:1481:VAL:HG11	4:O:18:ARG:HA	1.75	0.68
2:C:724:ARG:HB2	2:C:740:GLU:HA	1.76	0.68
2:C:188:LYS:C	2:C:188:LYS:HE2	2.14	0.68
3:N:658:LEU:HD11	3:N:674:ARG:HH11	1.58	0.68
1:A:13:VAL:HG12	1:A:14:ARG:N	2.09	0.68
3:N:1078:ARG:NH1	3:N:1078:ARG:HG3	2.06	0.68
2:M:690:ILE:O	2:M:852:ILE:HA	1.94	0.68
1:B:7:LYS:HE3	1:B:186:LEU:HD22	1.73	0.68
3:D:899:LEU:HD13	3:D:899:LEU:H	1.59	0.67
4:E:45:ARG:HB3	4:E:46:PRO:HD2	1.75	0.67
3:D:704:ARG:CG	3:D:705:ALA:N	2.56	0.67
5:P:94:LEU:HB2	5:P:98:GLU:OE1	1.94	0.67
3:N:12:LEU:H	3:N:507:ASN:HD21	1.41	0.67
1:A:153:ALA:HA	1:A:156:HIS:CE1	2.29	0.67
2:M:1082:PRO:HG2	3:N:1469:GLY:HA3	1.74	0.67
1:K:27:PRO:HG3	1:K:186:LEU:HD22	1.75	0.67
3:N:1135:ARG:O	3:N:1136:LYS:O	2.12	0.67
2:C:9:ILE:O	2:C:9:ILE:HG13	1.95	0.67
2:C:490:GLU:HG3	2:C:493:ARG:HD2	1.75	0.67
2:M:111:ASP:HB3	2:M:112:GLU:OE2	1.93	0.67
3:D:955:VAL:HG11	3:D:1015:TYR:CE2	2.28	0.67
2:M:1091:GLU:O	2:M:1094:ALA:HB3	1.94	0.67
3:D:1092:GLY:O	3:D:1096:ARG:HB2	1.93	0.67
2:M:215:GLY:O	2:M:218:VAL:HG23	1.94	0.67
3:D:637:LEU:HD11	3:D:642:CYS:CA	2.23	0.67
3:N:1078:ARG:HH11	3:N:1078:ARG:HG3	1.58	0.67
2:C:227:PHE:HA	2:C:230:ARG:NE	2.09	0.67
2:C:158:TYR:HE1	2:C:314:THR:HA	1.59	0.67
3:N:1227:GLN:O	3:N:1229:ILE:N	2.22	0.67
3:D:470:LEU:HD12	3:D:508:ARG:HH12	1.57	0.67
2:M:30:LEU:HD12	2:M:30:LEU:O	1.94	0.67
2:C:670:GLN:HG2	2:C:699:PHE:CE2	2.30	0.67
3:N:654:LYS:O	3:N:657:LEU:N	2.27	0.67
4:O:23:VAL:HG21	4:O:65:MET:HG2	1.75	0.67
3:N:39:PRO:HB3	3:N:45:PHE:O	1.94	0.67
2:C:802:ARG:NH1	2:C:804:VAL:HG22	2.10	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:27:PRO:HG2	1:B:186:LEU:HD12	1.76	0.67
5:P:376:ILE:HG22	5:P:377:ASP:H	1.60	0.67
1:K:73:GLU:OE1	1:K:130:ALA:HA	1.94	0.67
3:D:10:ILE:HD11	3:D:1434:TRP:NE1	2.08	0.67
4:O:39:VAL:HG22	4:O:67:GLU:OE2	1.95	0.67
2:C:281:LEU:HD23	2:C:281:LEU:H	1.59	0.67
3:N:1031:ASN:HB3	3:N:1034:GLN:CB	2.23	0.67
5:P:396:ARG:HA	5:P:399:GLN:HB2	1.77	0.67
1:L:57:TYR:HE1	1:L:163:ASN:HB2	1.60	0.67
2:C:1085:PHE:O	2:C:1088:LEU:N	2.28	0.67
2:M:352:ALA:O	2:M:356:ARG:HG3	1.95	0.67
1:B:57:TYR:HE1	1:B:163:ASN:HB2	1.60	0.67
2:C:139:GLN:OE1	2:C:415:PRO:HD3	1.95	0.67
3:D:994:GLN:HG3	3:D:998:GLU:OE1	1.94	0.67
2:C:89:THR:O	2:C:91:GLN:HG3	1.93	0.67
3:N:794:GLN:C	3:N:794:GLN:HE21	1.96	0.67
3:N:232:GLU:OE2	3:N:234:GLU:HB2	1.93	0.67
3:D:197:SER:HB3	3:D:203:ALA:HB3	1.76	0.67
2:C:329:GLY:HA2	2:C:488:ALA:HB3	1.77	0.67
3:N:736:PHE:O	3:N:737:ASN:C	2.29	0.67
5:F:319:THR:O	5:F:329:TYR:HB2	1.94	0.67
5:P:181:GLU:CD	5:P:185:GLN:HE21	1.98	0.67
3:N:1262:LEU:HD23	3:N:1352:ILE:HG13	1.75	0.67
1:K:143:ARG:CD	1:K:158:ILE:HG21	2.25	0.67
1:L:117:VAL:HB	1:L:120:VAL:HB	1.75	0.67
3:D:1310:ARG:HG3	3:D:1327:ARG:HB2	1.74	0.67
3:N:486:ARG:HA	3:N:489:ARG:CD	2.25	0.67
1:A:195:LEU:HD12	1:A:196:THR:H	1.58	0.67
3:D:231:VAL:HA	3:D:378:ILE:CD1	2.24	0.67
2:C:603:VAL:HG21	2:C:643:VAL:HG11	1.76	0.67
3:N:1041:LEU:HD12	3:N:1058:ARG:HA	1.76	0.67
3:D:1403:LEU:O	3:D:1407:LEU:HB2	1.95	0.67
2:C:1094:ALA:HB1	3:D:603:LEU:HD22	1.76	0.67
3:D:789:LEU:HD12	3:D:911:LEU:CD2	2.20	0.67
2:M:897:LEU:HB3	2:M:899:GLN:NE2	2.04	0.67
3:N:609:GLY:CA	3:N:613:ARG:HB3	2.24	0.67
2:C:250:ARG:CZ	2:C:253:ALA:HB1	2.24	0.67
3:D:138:LYS:N	3:D:138:LYS:HD2	2.03	0.67
2:M:486:MET:HE3	2:M:491:GLU:HA	1.77	0.67
2:M:458:TYR:HB3	2:M:470:PRO:HG2	1.77	0.67
3:D:1493:LYS:O	3:D:1497:GLU:HG2	1.95	0.67
2:C:115:LEU:HA	2:C:375:SER:OG	1.93	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:224:TYR:CD2	1:B:9:PRO:HG2	2.30	0.67
2:M:441:VAL:O	2:M:559:LEU:HD13	1.95	0.67
2:M:834:GLN:O	2:M:837:ASP:HB2	1.95	0.67
2:C:443:THR:HG21	2:C:450:GLY:N	2.01	0.67
5:F:200:LYS:HD2	5:F:209:PHE:HZ	1.59	0.67
1:L:59:GLU:HG3	1:L:60:ASP:N	2.04	0.67
3:N:569:ASN:HD21	5:P:80:PRO:HG3	1.60	0.67
5:P:137:GLY:HA3	5:P:141:VAL:HG21	1.75	0.67
5:F:287:THR:CG2	5:F:289:GLU:HB2	2.25	0.67
3:D:1171:VAL:O	3:D:1175:ILE:HG13	1.95	0.67
3:N:1437:ALA:O	3:N:1446:VAL:HG21	1.93	0.67
3:N:1031:ASN:CB	3:N:1034:GLN:HB2	2.22	0.67
3:N:218:LYS:NZ	3:N:218:LYS:HB2	2.10	0.67
3:D:1364:HIS:ND1	3:D:1366:LYS:HG3	2.10	0.67
3:N:1148:VAL:CG1	3:N:1189:ARG:HG3	2.25	0.67
3:D:1074:SER:O	3:D:1077:ALA:N	2.27	0.67
3:D:194:GLY:N	3:D:206:ARG:HA	2.10	0.67
2:C:480:THR:HG22	2:C:482:GLU:N	2.06	0.66
2:M:682:TYR:CE1	2:M:851:LYS:HD2	2.30	0.66
2:M:953:VAL:HA	2:M:965:GLU:CD	2.15	0.66
3:D:827:ILE:HG23	3:D:837:GLY:HA3	1.77	0.66
2:C:444:PRO:O	2:C:449:ILE:HG12	1.96	0.66
5:F:200:LYS:HD2	5:F:209:PHE:CZ	2.29	0.66
3:D:553:ARG:NH1	5:F:211:ASP:HA	2.07	0.66
3:N:764:LEU:HG	3:N:765:SER:N	2.08	0.66
3:N:481:MET:O	3:N:489:ARG:HB2	1.95	0.66
3:N:1486:VAL:HG22	4:O:75:PHE:HB3	1.76	0.66
2:M:397:GLU:HG3	2:M:632:ASN:H	1.60	0.66
3:N:646:LYS:HA	3:N:720:LEU:HD22	1.77	0.66
2:M:1043:TYR:C	2:M:1045:ALA:H	1.98	0.66
3:N:709:HIS:CD2	3:N:711:LEU:HB2	2.31	0.66
3:D:177:ALA:C	3:D:199:LEU:HD13	2.14	0.66
1:K:18:ARG:HH22	1:K:88:ARG:NH2	1.91	0.66
3:N:1295:GLU:CB	3:N:1300:SER:HA	2.25	0.66
3:D:1424:VAL:HG13	3:D:1425:THR:N	2.10	0.66
3:N:1171:VAL:O	3:N:1175:ILE:HG13	1.96	0.66
5:F:151:LEU:HG	5:F:155:THR:OG1	1.95	0.66
2:M:838:LYS:O	2:M:838:LYS:HG3	1.94	0.66
1:K:203:GLY:O	1:K:204:SER:C	2.32	0.66
1:L:133:GLU:CG	1:L:134:GLU:H	2.07	0.66
2:M:170:PRO:HD2	2:M:263:ASP:HB3	1.78	0.66
3:D:1225:ALA:O	3:D:1228:SER:OG	2.13	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:1492:LEU:HD13	3:N:1492:LEU:O	1.95	0.66
3:N:845:ASN:N	3:N:848:GLU:HG3	2.04	0.66
2:M:579:VAL:O	2:M:579:VAL:HG22	1.95	0.66
2:M:1071:ILE:O	3:N:659:LYS:HD3	1.96	0.66
5:P:368:VAL:O	5:P:371:LEU:HB2	1.96	0.66
1:A:154:GLU:H	1:A:154:GLU:CD	1.97	0.66
3:N:478:LEU:HD23	3:N:1388:ARG:HH12	1.59	0.66
3:D:1154:GLU:HG3	3:D:1159:ARG:NH1	2.10	0.66
2:C:19:THR:HG22	2:C:23:VAL:HG23	1.77	0.66
3:D:1412:LYS:HG3	3:D:1414:PRO:HD3	1.78	0.66
3:D:890:VAL:HG11	3:D:922:LEU:HD13	1.78	0.66
3:D:897:TRP:CH2	3:D:902:LEU:HD21	2.31	0.66
3:D:135:LEU:HD11	3:D:452:ILE:HD11	1.78	0.66
3:N:1258:ARG:O	3:N:1262:LEU:HD13	1.95	0.66
5:F:367:MET:O	5:F:371:LEU:HG	1.95	0.66
1:A:51:THR:HG22	1:A:146:ARG:HA	1.78	0.66
1:K:219:ARG:HB3	1:K:219:ARG:NH1	2.11	0.66
3:D:377:VAL:CG1	3:D:382:GLU:HG2	2.25	0.66
3:D:679:ARG:NH2	3:D:681:ARG:HG2	2.11	0.66
2:C:552:HIS:CE1	3:D:1062:ARG:O	2.49	0.66
5:F:393:THR:O	5:F:397:ILE:HG13	1.96	0.66
1:A:41:ARG:HA	1:A:177:VAL:HG11	1.77	0.66
3:N:777:PRO:HG2	3:N:915:VAL:HB	1.76	0.66
2:C:435:TYR:OH	2:C:498:GLN:NE2	2.29	0.66
2:M:1032:PHE:HB2	3:N:623:VAL:HG23	1.78	0.66
3:N:976:GLN:HA	3:N:979:GLU:OE1	1.96	0.66
3:N:1087:ARG:CZ	3:N:1238:MET:HG3	2.25	0.66
5:P:205:ARG:HB3	5:P:251:ILE:HD13	1.76	0.66
3:D:1106:VAL:HG21	3:D:1474:ALA:HB2	1.78	0.66
3:D:1475:GLY:C	3:D:1477:GLY:H	1.98	0.66
3:D:907:GLU:HG3	3:D:1025:GLN:O	1.95	0.66
2:C:290:LEU:HD22	2:C:302:VAL:HG21	1.78	0.66
3:N:553:ARG:HD3	5:P:214:GLN:HB3	1.77	0.66
3:D:756:GLN:O	3:D:760:ARG:HG2	1.96	0.66
3:D:225:LEU:HD22	3:D:225:LEU:H	1.61	0.66
2:C:612:VAL:HG22	2:C:622:GLU:HA	1.78	0.66
3:N:1015:TYR:O	3:N:1017:PHE:N	2.28	0.66
5:F:352:GLU:O	5:F:356:LYS:HG3	1.96	0.66
3:D:404:GLU:HB3	3:D:414:ARG:NE	2.10	0.66
3:N:955:VAL:HB	3:N:1011:PHE:CE1	2.30	0.66
3:D:1192:LEU:HD22	3:D:1345:GLU:HB3	1.76	0.66
3:D:546:ARG:CZ	3:D:550:ARG:HH22	2.09	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:1014:SER:OG	5:F:331:ASP:HA	1.95	0.66
2:M:578:VAL:N	2:M:671:ASN:HD21	1.94	0.66
2:C:480:THR:HG22	2:C:481:ASP:N	2.10	0.66
2:C:988:VAL:HG11	3:D:949:ILE:O	1.96	0.66
3:D:715:ALA:O	3:D:716:PHE:CG	2.49	0.66
3:N:426:LYS:HB3	5:P:134:LYS:O	1.96	0.66
1:K:176:ARG:NH2	2:M:865:THR:HB	2.11	0.66
2:C:572:ILE:HD13	2:C:701:THR:HB	1.78	0.66
2:M:700:TYR:CB	2:M:833:LEU:HD22	2.26	0.66
3:D:694:VAL:O	3:D:694:VAL:HG12	1.94	0.66
5:F:129:GLU:HB3	5:F:142:ARG:NH2	2.11	0.66
5:P:94:LEU:O	5:P:96:LEU:N	2.28	0.66
2:M:1097:LEU:HD13	2:M:1097:LEU:H	1.59	0.66
3:N:554:LEU:HD23	3:N:570:GLU:HG3	1.77	0.66
1:L:77:GLU:HG2	3:N:872:ARG:NH2	2.09	0.66
2:M:759:THR:HG21	2:M:783:ARG:HH12	1.61	0.66
2:C:979:THR:C	2:C:981:GLU:H	1.99	0.66
3:D:1336:LEU:HB2	3:D:1344:VAL:HG11	1.78	0.66
2:C:691:SER:HB3	2:C:868:ASP:HA	1.78	0.66
5:F:108:GLU:HG3	5:F:176:ILE:HG21	1.78	0.66
2:C:17:PRO:HA	2:C:586:ARG:HH12	1.61	0.66
1:L:87:VAL:HG21	1:L:144:VAL:HG11	1.77	0.66
5:P:273:ARG:HA	5:P:276:ARG:HG3	1.78	0.66
3:D:792:ILE:HG23	3:D:793:THR:HG23	1.78	0.65
3:D:900:ILE:HG22	3:D:914:LEU:HG	1.77	0.65
3:D:245:LEU:HD22	3:D:245:LEU:O	1.96	0.65
3:N:455:ARG:NE	3:N:463:GLN:NE2	2.41	0.65
5:F:137:GLY:HA2	5:F:140:ARG:NH2	2.11	0.65
2:M:738:ASP:HB2	2:M:744:ARG:HB3	1.77	0.65
2:M:263:ASP:HB2	2:M:264:PRO:HD3	1.79	0.65
2:M:325:ILE:HD12	2:M:325:ILE:H	1.61	0.65
3:N:958:GLU:OE2	3:N:961:LYS:NZ	2.29	0.65
3:D:452:ILE:HG23	3:D:452:ILE:O	1.96	0.65
3:N:214:GLU:HB3	3:N:215:TYR:CD1	2.31	0.65
3:N:1260:ILE:C	3:N:1262:LEU:H	1.99	0.65
3:N:465:LEU:O	3:N:468:LEU:HG	1.96	0.65
2:C:682:TYR:CE2	2:C:851:LYS:HG2	2.32	0.65
3:N:813:LEU:HD12	3:N:814:ALA:N	2.11	0.65
2:C:73:LEU:H	2:C:73:LEU:HD12	1.60	0.65
3:N:10:ILE:HG22	3:N:1451:ALA:HA	1.79	0.65
3:D:879:ARG:HD3	3:D:902:LEU:O	1.97	0.65
2:M:1046:ALA:CB	3:N:1476:THR:HB	2.27	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:531:ASP:H	3:D:534:ARG:HB2	1.61	0.65
2:M:749:VAL:HG11	2:M:755:LEU:HD21	1.78	0.65
3:D:739:ASP:O	3:D:740:PHE:CD2	2.49	0.65
2:C:496:ILE:O	2:C:515:ALA:HB1	1.96	0.65
3:N:525:ARG:N	3:N:526:PRO:HD3	2.12	0.65
2:M:1018:GLN:NE2	5:P:338:LEU:HD13	2.11	0.65
3:N:598:ARG:NH2	5:P:318:GLU:HG3	2.12	0.65
5:P:361:LEU:HD11	5:P:408:LEU:HD12	1.78	0.65
5:P:196:VAL:HG22	5:P:213:ILE:HD13	1.77	0.65
2:M:1109:VAL:HG13	3:N:3:LYS:HG2	1.79	0.65
1:A:67:THR:HG21	2:C:609:ASN:ND2	2.12	0.65
3:N:733:CYS:SG	3:N:738:ALA:O	2.54	0.65
2:C:523:ILE:HG23	2:C:523:ILE:O	1.95	0.65
3:D:559:ALA:O	3:D:561:GLY:N	2.29	0.65
1:B:153:ALA:HB1	1:B:166:PRO:HB2	1.76	0.65
2:M:577:PRO:HB3	2:M:842:ARG:NH2	2.11	0.65
3:N:427:VAL:HB	3:N:435:VAL:CB	2.26	0.65
2:C:304:LEU:HB3	2:C:305:PRO:HD3	1.78	0.65
1:A:14:ARG:HH22	1:A:24:VAL:HG23	1.60	0.65
3:N:30:GLU:HG3	3:N:41:ARG:NE	2.10	0.65
5:F:154:LYS:O	5:F:158:GLU:HB2	1.95	0.65
4:O:54:LEU:CD2	4:O:63:TRP:HE1	2.09	0.65
5:P:160:ASP:O	5:P:164:LYS:HG3	1.97	0.65
1:L:59:GLU:OE1	1:L:138:LEU:HA	1.97	0.65
3:N:1465:ASN:ND2	3:N:1473:PRO:HG3	2.12	0.65
3:D:925:GLU:OE1	4:E:6:ILE:HG22	1.96	0.65
2:M:676:ILE:HG22	2:M:988:VAL:HG13	1.79	0.65
2:C:403:SER:HB2	2:C:407:LYS:HZ3	1.61	0.65
3:N:106:LYS:HB3	3:N:586:ARG:HD3	1.78	0.65
2:C:943:VAL:HG11	2:C:973:VAL:HG22	1.78	0.65
3:D:907:GLU:CG	3:D:1027:GLY:N	2.55	0.65
5:F:120:THR:HG21	5:F:122:LEU:HD22	1.79	0.65
5:P:105:LYS:HZ3	5:P:105:LYS:HB3	1.62	0.65
1:L:94:LEU:HD11	1:L:119:ASP:HB3	1.78	0.65
2:M:695:LEU:HD21	2:M:833:LEU:HB3	1.77	0.65
3:D:223:LEU:N	3:D:365:ASP:HB2	2.12	0.65
5:P:115:LYS:O	5:P:118:GLU:HB3	1.97	0.65
4:O:41:GLU:H	4:O:42:PRO:HD2	1.61	0.65
1:B:194:LYS:HG2	1:B:194:LYS:O	1.95	0.65
2:M:495:THR:HG23	2:M:517:ARG:HE	1.61	0.65
2:C:1016:ILE:CD1	2:C:1016:ILE:H	1.79	0.65
2:M:376:ARG:NH2	2:M:379:GLU:HG2	2.11	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:828:LYS:HD2	3:N:862:ASP:OD2	1.97	0.65
3:D:1478:SER:O	3:D:1482:ARG:N	2.29	0.65
1:K:42:ARG:HH12	2:M:857:ASP:HB3	1.60	0.65
2:C:313:LEU:HD13	2:C:321:GLU:HB2	1.79	0.65
3:D:493:ARG:HH21	3:D:1389:LEU:HD21	1.61	0.65
4:E:51:LEU:CG	4:E:53:GLY:H	1.97	0.65
3:N:422:ALA:HB3	3:N:427:VAL:CG2	2.27	0.65
3:N:604:THR:C	3:N:606:ILE:H	1.98	0.65
2:M:1048:THR:HG23	3:N:750:PRO:HB3	1.78	0.65
2:M:516:ARG:CZ	3:N:1068:LEU:HD22	2.27	0.65
1:A:124:ASN:N	1:A:125:PRO:HD3	2.12	0.65
3:N:486:ARG:HH21	3:N:489:ARG:NE	1.94	0.65
2:C:605:LYS:HD3	2:C:610:ARG:NH1	2.11	0.65
3:D:228:ALA:HA	3:D:231:VAL:HG13	1.77	0.65
3:N:112:ILE:HG22	3:N:512:MET:SD	2.37	0.65
3:N:108:VAL:HB	3:N:109:PRO:HD3	1.79	0.65
3:D:39:PRO:HB3	3:D:45:PHE:O	1.97	0.65
3:D:36:THR:HG22	3:D:38:LYS:HG3	1.79	0.65
2:C:577:PRO:HA	2:C:671:ASN:ND2	2.09	0.65
1:L:86:VAL:CG1	1:L:124:ASN:HB2	2.26	0.65
2:M:137:VAL:CG2	2:M:393:GLN:HE22	2.08	0.65
1:K:88:ARG:HD3	1:K:89:PHE:O	1.97	0.65
2:M:675:ALA:HB2	2:M:867:VAL:HG11	1.79	0.65
5:F:386:VAL:HG13	5:F:387:GLY:N	2.12	0.65
3:D:40:GLU:O	3:D:41:ARG:O	2.15	0.65
2:C:1090:LYS:HE2	2:C:1112:PHE:CE1	2.32	0.65
3:D:225:LEU:HB2	3:D:227:LEU:HD23	1.78	0.65
2:C:288:ARG:NE	2:C:288:ARG:HA	2.11	0.65
2:M:226:VAL:HG13	2:M:227:PHE:H	1.62	0.65
3:D:828:LYS:HD3	3:D:828:LYS:N	2.11	0.65
3:D:491:LYS:HD3	3:D:492:ALA:N	2.11	0.65
3:D:127:LEU:HD21	3:D:461:ILE:HD11	1.78	0.65
3:N:1275:SER:HB2	3:N:1325:LEU:HD11	1.79	0.65
3:N:371:ILE:HD12	3:N:372:ASP:N	2.12	0.65
3:D:1465:ASN:HD21	3:D:1470:ARG:NH1	1.95	0.64
3:D:563:PRO:HB2	5:F:189:GLU:HG2	1.79	0.64
2:M:838:LYS:CD	2:M:846:LYS:HZ1	2.09	0.64
3:N:131:LYS:HD2	5:P:83:GLN:NE2	2.12	0.64
2:C:841:ASN:C	2:C:841:ASN:ND2	2.50	0.64
3:D:1336:LEU:HD22	3:D:1421:LEU:HB2	1.79	0.64
2:C:722:ILE:CD1	2:C:823:VAL:HG21	2.27	0.64
2:C:493:ARG:O	2:C:494:TYR:CD2	2.50	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:M:841:ASN:CG	2:M:843:HIS:H	2.00	0.64
2:C:317:VAL:HG13	2:C:319:GLY:O	1.96	0.64
3:N:629:SER:CB	3:N:726:ILE:HG13	2.27	0.64
3:N:809:PRO:HB2	3:N:812:ALA:HB2	1.79	0.64
3:D:1426:LYS:HB2	3:D:1426:LYS:NZ	2.12	0.64
3:D:8:VAL:HG12	3:D:1434:TRP:CH2	2.31	0.64
3:D:916:TYR:C	3:D:916:TYR:CD2	2.71	0.64
1:A:42:ARG:HH12	2:C:857:ASP:HB3	1.61	0.64
3:N:820:GLU:HA	3:N:825:ALA:O	1.97	0.64
3:D:970:LYS:HA	3:D:973:GLN:HE21	1.62	0.64
2:M:441:VAL:HG11	2:M:544:THR:HG21	1.78	0.64
2:M:807:ARG:HA	2:M:821:GLU:HB2	1.78	0.64
2:M:52:PHE:CE2	2:M:98:LEU:HD21	2.33	0.64
3:N:1166:LEU:HD23	3:N:1166:LEU:H	1.62	0.64
3:D:733:CYS:HG	3:D:740:PHE:HZ	1.42	0.64
3:N:569:ASN:ND2	3:N:572:ARG:NH1	2.45	0.64
3:D:1207:TYR:H	3:D:1366:LYS:NZ	1.89	0.64
1:L:206:THR:HG22	1:L:209:GLU:CD	2.16	0.64
2:C:766:GLU:CD	3:D:54:LYS:HD2	2.18	0.64
2:M:511:GLU:O	2:M:526:PRO:HD3	1.97	0.64
3:D:502:PHE:CE2	3:D:509:PRO:HB3	2.31	0.64
3:D:1130:ARG:HH21	3:D:1132:LEU:HG	1.62	0.64
3:D:441:ARG:O	3:D:443:VAL:HG23	1.97	0.64
2:C:1003:ASP:HA	3:D:744:GLN:NE2	2.11	0.64
2:C:672:VAL:HG23	2:C:868:ASP:HB2	1.77	0.64
3:D:459:GLU:O	3:D:463:GLN:HG2	1.96	0.64
1:K:38:ASN:O	1:K:39:PRO:C	2.34	0.64
3:N:58:CYS:SG	3:N:59:ALA:N	2.70	0.64
3:D:932:ASP:O	3:D:935:LYS:N	2.30	0.64
4:E:45:ARG:HH22	4:E:72:ARG:HH21	1.45	0.64
3:D:1292:VAL:CG1	3:D:1325:LEU:HD21	2.26	0.64
3:D:1292:VAL:O	3:D:1303:TYR:HB2	1.98	0.64
5:F:144:ILE:HB	5:F:145:PRO:HD3	1.79	0.64
3:D:486:ARG:HA	3:D:489:ARG:HD3	1.79	0.64
3:N:1314:LYS:HE2	3:N:1317:ASP:OD2	1.98	0.64
3:D:970:LYS:HA	3:D:973:GLN:NE2	2.11	0.64
3:N:629:SER:HB3	3:N:726:ILE:HG13	1.79	0.64
5:P:394:ARG:HB2	5:P:394:ARG:HH11	1.61	0.64
3:N:237:LYS:HB3	3:N:238:PRO:HD3	1.80	0.64
2:M:839:LEU:HD21	2:M:849:VAL:HG22	1.77	0.64
3:D:208:PRO:HB2	3:D:395:VAL:HG13	1.79	0.64
3:D:1424:VAL:CG1	3:D:1425:THR:N	2.60	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:613:ARG:HH11	3:N:613:ARG:HG3	1.62	0.64
2:M:1071:ILE:HD12	3:N:670:VAL:HG13	1.80	0.64
2:M:882:LEU:CD1	3:N:1061:PHE:HB3	2.27	0.64
3:D:1066:THR:HG23	3:D:1069:GLU:OE1	1.97	0.64
2:C:536:PRO:HB3	2:C:906:PHE:HD1	1.62	0.64
5:F:353:GLU:HG3	5:F:417:LYS:HD3	1.78	0.64
3:N:807:ALA:HB2	3:N:833:GLU:HB2	1.79	0.64
3:D:1102:THR:HG22	3:D:1222:GLY:HA2	1.80	0.64
1:K:97:VAL:HG11	1:K:120:VAL:HG21	1.79	0.64
3:N:197:SER:HB3	3:N:203:ALA:HB3	1.80	0.64
4:O:54:LEU:O	4:O:54:LEU:HD23	1.97	0.64
2:C:516:ARG:NE	3:D:1068:LEU:HD22	2.12	0.64
5:P:160:ASP:HA	5:P:163:LEU:HD12	1.78	0.64
3:D:768:ASN:ND2	3:D:1210:SER:CB	2.60	0.64
2:C:676:ILE:O	2:C:676:ILE:HG12	1.97	0.64
3:D:868:TYR:HD1	3:D:869:MET:HG3	1.63	0.64
2:M:881:ASN:ND2	2:M:884:GLN:NE2	2.46	0.64
3:D:534:ARG:HH21	5:F:315:VAL:HG21	1.62	0.64
1:A:9:PRO:HD2	1:B:224:TYR:CD1	2.33	0.64
2:C:572:ILE:HG13	2:C:573:ARG:HG2	1.78	0.64
2:M:20:GLU:HG3	2:M:460:ARG:NH2	2.13	0.64
5:P:340:SER:O	5:P:342:VAL:N	2.31	0.64
2:M:129:ILE:HG22	2:M:130:ASN:N	2.12	0.64
3:N:584:ASN:CG	3:N:590:PRO:HD2	2.18	0.64
5:P:367:MET:O	5:P:370:LYS:HG2	1.97	0.64
3:N:1274:ILE:HD11	3:N:1334:GLN:HE21	1.61	0.64
3:D:646:LYS:HA	3:D:720:LEU:HD23	1.79	0.64
3:D:1389:LEU:H	3:D:1389:LEU:HD23	1.61	0.64
3:D:1174:LEU:HD13	3:D:1186:VAL:HG21	1.78	0.64
5:P:163:LEU:HB3	5:P:174:LEU:HD11	1.78	0.64
3:N:1336:LEU:HD11	3:N:1341:PRO:HG3	1.80	0.64
3:N:493:ARG:HD3	3:N:1388:ARG:HB3	1.80	0.64
3:N:959:GLU:HB2	3:N:963:TYR:HE1	1.62	0.64
2:C:328:LEU:HD11	2:C:434:HIS:HD2	1.63	0.64
2:C:470:PRO:HG3	2:C:485:TYR:CZ	2.33	0.64
5:P:222:ARG:HD2	5:P:242:TRP:CE3	2.33	0.64
2:M:1036:GLU:O	2:M:1039:ALA:HB3	1.97	0.64
3:D:421:LEU:HG	3:D:422:ALA:O	1.97	0.64
3:D:767:HIS:CE1	4:E:6:ILE:HG12	2.33	0.64
2:M:1033:GLY:O	2:M:1037:VAL:HG23	1.98	0.64
2:C:332:ARG:HE	2:C:464:LEU:HG	1.62	0.64
2:C:576:ALA:H	2:C:662:GLU:CD	2.00	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:573:ARG:HG3	2:C:698:ASP:O	1.97	0.64
1:L:2:LEU:HD12	1:L:3:ASP:N	2.13	0.64
2:C:408:ARG:NH1	2:C:542:VAL:CG2	2.61	0.64
3:N:1379:VAL:HG11	3:N:1395:LEU:HD23	1.79	0.63
4:O:53:GLY:HA2	4:O:55:PHE:CD2	2.32	0.63
3:N:455:ARG:NE	3:N:463:GLN:HE21	1.96	0.63
3:N:605:ASP:HB3	3:N:610:LYS:HB3	1.79	0.63
2:M:65:VAL:CG2	2:M:101:ILE:HB	2.28	0.63
2:M:502:PRO:CB	2:M:509:ALA:HB3	2.28	0.63
2:C:273:GLY:HA2	2:C:276:LYS:NZ	2.13	0.63
3:D:807:ALA:HB2	3:D:833:GLU:CB	2.28	0.63
3:N:962:GLN:O	3:N:966:GLU:HG3	1.98	0.63
3:D:118:LEU:HD23	3:D:123:LEU:HD22	1.78	0.63
2:M:1059:ASP:O	2:M:1063:ARG:HG2	1.99	0.63
2:M:838:LYS:NZ	2:M:846:LYS:HZ1	1.97	0.63
3:N:103:TRP:CH2	3:N:1447:LEU:HD23	2.33	0.63
1:L:190:THR:HG22	1:L:190:THR:O	1.98	0.63
2:M:713:ARG:O	2:M:720:GLU:HG3	1.99	0.63
2:M:18:LEU:HD23	2:M:404:LEU:HD21	1.80	0.63
1:B:13:VAL:HG22	1:B:23:PHE:HD1	1.63	0.63
1:L:26:GLU:HG2	1:L:27:PRO:CA	2.28	0.63
2:C:517:ARG:HG3	2:C:517:ARG:HH11	1.63	0.63
1:A:62:LEU:HD12	1:A:62:LEU:H	1.63	0.63
2:C:204:GLN:NE2	2:C:222:MET:HA	2.13	0.63
1:K:53:VAL:HG12	1:K:167:VAL:HG21	1.81	0.63
3:D:1011:PHE:O	3:D:1015:TYR:O	2.15	0.63
4:E:47:LYS:HA	4:E:54:LEU:HB3	1.80	0.63
3:N:1378:TYR:HB3	3:N:1420:LEU:HD23	1.79	0.63
3:N:98:PRO:HG3	3:N:515:GLU:HB3	1.79	0.63
2:M:720:GLU:HB3	2:M:758:ARG:HD2	1.78	0.63
1:L:158:ILE:HG22	1:L:159:LYS:H	1.64	0.63
2:C:333:ILE:HG12	2:C:467:ILE:HD11	1.80	0.63
5:F:191:ASN:H	5:F:191:ASN:HD22	1.45	0.63
5:F:194:LEU:HD13	5:F:194:LEU:O	1.98	0.63
4:E:23:VAL:HG13	4:E:64:ALA:HB3	1.80	0.63
3:D:1462:LEU:HD13	3:D:1472:ILE:CG2	2.29	0.63
2:C:469:THR:O	2:C:485:TYR:HA	1.98	0.63
3:N:590:PRO:CB	3:N:600:LEU:HD11	2.26	0.63
3:D:711:LEU:CG	3:D:778:LEU:HD23	2.27	0.63
3:N:792:ILE:CG2	3:N:793:THR:HG23	2.28	0.63
5:P:408:LEU:O	5:P:412:GLU:HG2	1.98	0.63
2:M:536:PRO:O	2:M:539:VAL:HG23	1.98	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:M:1004:LYS:O	2:M:1005:MET:C	2.37	0.63
3:D:533:GLY:HA3	5:F:309:LYS:HB3	1.78	0.63
1:B:5:LYS:HE3	1:B:5:LYS:HA	1.80	0.63
3:N:1412:LYS:C	3:N:1414:PRO:HD3	2.19	0.63
3:D:1103:HIS:HD2	3:D:1462:LEU:H	1.44	0.63
2:C:259:GLY:HA2	2:C:290:LEU:O	1.99	0.63
3:N:1336:LEU:CB	3:N:1344:VAL:HG21	2.28	0.63
3:N:455:ARG:HH22	5:P:140:ARG:CB	2.11	0.63
3:N:758:GLU:HG2	4:O:20:THR:HG21	1.80	0.63
2:M:25:SER:OG	2:M:335:THR:HB	1.99	0.63
2:M:1031:ARG:HD3	3:N:621:LYS:O	1.99	0.63
5:F:99:GLU:OE1	5:F:235:PHE:HB3	1.98	0.63
3:N:648:MET:O	3:N:652:LEU:HD23	1.98	0.63
3:N:794:GLN:NE2	3:N:794:GLN:C	2.52	0.63
3:D:1140:ILE:O	3:D:1141:GLU:C	2.37	0.63
1:L:62:LEU:HD13	1:L:63:HIS:ND1	2.13	0.63
2:C:1094:ALA:HB1	3:D:603:LEU:CD2	2.28	0.63
3:D:540:LEU:HD12	3:D:606:ILE:HD11	1.78	0.63
4:E:18:ARG:O	4:E:22:VAL:HG23	1.99	0.63
1:A:13:VAL:HG12	1:A:14:ARG:H	1.63	0.63
2:M:744:ARG:NH2	2:M:747:ALA:HA	2.13	0.63
1:B:133:GLU:HG3	1:B:134:GLU:N	2.13	0.63
2:C:1097:LEU:HD11	3:D:1451:ALA:HB2	1.81	0.63
2:C:952:LEU:CD1	2:C:969:GLN:HE22	2.06	0.63
3:N:556:LYS:CE	5:P:218:GLN:HE22	2.12	0.63
2:M:1071:ILE:HG23	3:N:670:VAL:CG2	2.28	0.63
2:M:1047:HIS:ND1	3:N:754:PHE:HB3	2.14	0.63
3:D:216:VAL:HG12	3:D:217:LYS:H	1.63	0.63
1:K:219:ARG:HH12	1:K:220:GLU:HB2	1.64	0.63
2:M:13:ILE:HD11	2:M:470:PRO:HB3	1.80	0.63
3:N:1314:LYS:HD3	3:N:1314:LYS:N	2.13	0.63
3:D:159:ARG:HG3	3:D:159:ARG:HH11	1.63	0.63
1:K:20:TYR:CD2	1:K:21:GLY:N	2.63	0.63
1:K:11:PHE:HE1	1:L:225:PHE:CD2	2.16	0.63
2:C:1044:GLY:HA3	3:D:762:GLN:OE1	1.98	0.63
2:M:901:TYR:HE2	2:M:917:LEU:HD12	1.64	0.63
2:M:1046:ALA:HB3	3:N:758:GLU:OE1	1.99	0.63
3:N:1267:ARG:CZ	3:N:1271:LYS:HG3	2.28	0.63
2:C:949:LYS:NZ	3:D:862:ASP:OD1	2.31	0.63
2:M:886:LEU:CD1	3:N:951:ILE:HG13	2.29	0.63
3:N:486:ARG:NE	3:N:489:ARG:HD3	2.13	0.63
2:C:238:LEU:HA	2:C:241:LEU:HD12	1.80	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:470:LEU:HD12	3:D:508:ARG:NH1	2.14	0.63
3:D:1491:THR:HG21	4:E:89:MET:CE	2.29	0.63
3:D:1036:ARG:HG2	3:D:1036:ARG:O	1.98	0.63
2:C:383:ARG:HH11	2:C:383:ARG:HB2	1.63	0.63
3:N:1176:LYS:O	3:N:1179:GLU:HB2	1.99	0.63
2:M:304:LEU:HB3	2:M:305:PRO:HD3	1.80	0.63
3:N:139:GLY:C	3:N:147:VAL:HG22	2.20	0.63
2:C:611:ILE:HD11	2:C:641:PRO:HG3	1.81	0.63
2:M:422:ARG:HG3	2:M:423:ALA:H	1.62	0.63
3:D:1487:VAL:HG12	3:D:1488:ASP:N	2.13	0.63
3:D:10:ILE:CD1	3:D:1434:TRP:CE2	2.82	0.62
3:D:1130:ARG:HD2	3:D:1131:SER:N	2.14	0.62
3:D:1306:PRO:O	3:D:1308:GLU:N	2.32	0.62
3:N:97:THR:HG21	3:N:571:LYS:HD3	1.80	0.62
3:D:729:HIS:ND1	3:D:731:LEU:N	2.43	0.62
3:D:1232:PRO:O	3:D:1234:THR:N	2.32	0.62
2:C:589:ARG:HD3	2:C:596:TYR:CE2	2.33	0.62
1:A:44:LEU:HA	1:A:48:ILE:HD11	1.80	0.62
5:F:78:SER:O	5:F:82:ARG:HB2	1.99	0.62
3:D:601:ARG:NH2	3:D:611:GLN:HB2	2.14	0.62
2:C:259:GLY:O	2:C:291:ALA:HB2	1.98	0.62
2:C:829:GLN:CD	2:C:831:ARG:HH11	2.03	0.62
3:N:461:ILE:HG22	3:N:465:LEU:CD1	2.28	0.62
2:M:1056:LYS:O	3:N:624:ASP:HB2	1.99	0.62
3:N:661:MET:HB3	3:N:667:ALA:HB3	1.81	0.62
3:N:1129:THR:HG23	3:N:1130:ARG:N	2.13	0.62
3:D:628:ARG:HG2	3:D:629:SER:N	2.12	0.62
3:N:368:VAL:HG22	3:N:369:ALA:N	2.14	0.62
2:M:691:SER:HB2	2:M:858:MET:SD	2.39	0.62
3:N:976:GLN:HG2	3:N:979:GLU:OE1	1.99	0.62
2:M:51:THR:HG21	2:M:348:LEU:HB3	1.79	0.62
5:F:403:LYS:O	5:F:407:LYS:HB2	1.97	0.62
2:C:516:ARG:HH11	2:C:521:PRO:CB	2.12	0.62
3:D:1281:VAL:HG21	3:D:1313:VAL:HG21	1.81	0.62
3:N:591:VAL:HA	3:N:600:LEU:HD21	1.81	0.62
1:A:153:ALA:HB2	1:A:167:VAL:C	2.18	0.62
2:C:67:ASP:HB2	2:C:99:GLN:HG3	1.81	0.62
3:N:486:ARG:HA	3:N:489:ARG:HD3	1.81	0.62
2:C:63:GLY:HA3	2:C:103:LYS:CG	2.30	0.62
2:C:148:PHE:HB3	2:C:313:LEU:HD22	1.81	0.62
3:D:1031:ASN:O	3:D:1034:GLN:N	2.33	0.62
3:D:400:VAL:C	3:D:402:PRO:HD3	2.19	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:28:ARG:HG2	2:C:40:GLU:OE1	1.98	0.62
2:C:12:VAL:HG13	2:C:13:ILE:H	1.65	0.62
2:C:1087:VAL:HG12	2:C:1091:GLU:OE1	2.00	0.62
2:C:678:PRO:HG3	2:C:873:PRO:HD2	1.81	0.62
3:D:906:GLN:HB3	3:D:911:LEU:CD1	2.29	0.62
3:N:590:PRO:HB2	3:N:600:LEU:CD1	2.25	0.62
3:D:729:HIS:CE1	3:D:731:LEU:HB2	2.34	0.62
3:N:141:ILE:H	3:N:141:ILE:CD1	2.07	0.62
2:C:971:LYS:HA	2:C:988:VAL:HA	1.81	0.62
5:P:354:LEU:HD23	5:P:418:LEU:HD11	1.81	0.62
2:C:129:ILE:HG22	2:C:130:ASN:CG	2.20	0.62
2:C:1:MET:SD	2:C:900:ARG:HD3	2.38	0.62
2:M:712:ALA:O	2:M:820:ARG:HB2	1.99	0.62
3:D:1379:VAL:HG11	3:D:1395:LEU:HD23	1.80	0.62
2:M:603:VAL:HG21	2:M:643:VAL:CG1	2.29	0.62
2:C:301:GLU:O	2:C:305:PRO:HG2	2.00	0.62
3:N:13:ALA:HA	3:N:17:LYS:HD2	1.81	0.62
2:M:1051:GLU:CD	3:N:752:SER:H	2.02	0.62
5:F:164:LYS:CA	5:F:171:LYS:NZ	2.62	0.62
3:D:426:LYS:HD3	5:F:134:LYS:O	1.99	0.62
3:N:69:GLU:O	3:N:80:VAL:HG13	1.99	0.62
5:F:340:SER:O	5:F:342:VAL:N	2.33	0.62
2:C:274:ARG:N	2:C:288:ARG:HH12	1.97	0.62
2:M:700:TYR:HB2	2:M:833:LEU:HD22	1.81	0.62
3:D:166:GLN:HB3	3:D:395:VAL:HG23	1.80	0.62
2:C:588:VAL:HG21	2:C:664:GLY:HA2	1.81	0.62
3:N:1119:SER:O	3:N:1346:ARG:NH2	2.33	0.62
3:N:387:LEU:HD21	5:P:97:GLU:HB2	1.81	0.62
5:F:77:THR:CA	5:F:80:PRO:HD2	2.29	0.62
3:N:642:CYS:HB3	3:N:716:PHE:CD2	2.33	0.62
2:C:946:ARG:HD2	2:C:984:GLU:HB2	1.81	0.62
2:M:288:ARG:HA	2:M:288:ARG:NE	2.13	0.62
5:P:406:ARG:HA	5:P:409:LYS:HG2	1.80	0.62
1:A:9:PRO:HD2	1:B:224:TYR:CE1	2.34	0.62
2:C:100:LEU:HD12	2:C:100:LEU:O	1.99	0.62
5:P:398:ARG:HD3	5:P:399:GLN:N	2.14	0.62
2:C:3:ILE:HD13	2:C:900:ARG:HG3	1.80	0.62
3:D:1140:ILE:HG22	3:D:1141:GLU:N	2.13	0.62
2:C:47:ALA:O	2:C:50:GLU:HB3	2.00	0.62
1:L:143:ARG:HD2	1:L:160:ASP:OD1	2.00	0.62
3:N:545:ARG:HB3	3:N:545:ARG:NH1	2.14	0.62
3:N:1108:ARG:HG3	3:N:1108:ARG:O	1.99	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:137:PRO:CD	3:N:453:ASP:HB3	2.29	0.62
3:D:234:GLU:O	3:D:238:PRO:HD2	1.99	0.62
1:L:170:VAL:HG11	3:N:848:GLU:OE1	1.99	0.62
2:C:799:ILE:H	2:C:799:ILE:CD1	2.10	0.62
3:N:195:VAL:CB	3:N:205:TYR:HB2	2.29	0.62
5:P:406:ARG:HG2	5:P:409:LYS:NZ	2.15	0.62
2:M:413:LEU:N	2:M:413:LEU:HD12	2.14	0.62
2:M:328:LEU:N	2:M:433:THR:HG21	2.12	0.62
2:C:860:HIS:NE2	2:C:975:TYR:HB2	2.15	0.62
3:N:367:ILE:HD13	3:N:367:ILE:H	1.65	0.62
3:D:1140:ILE:O	3:D:1143:GLY:N	2.20	0.62
5:P:276:ARG:HH11	5:P:276:ARG:HG3	1.65	0.62
3:D:659:LYS:HE2	3:D:663:GLU:CD	2.19	0.62
2:M:599:GLU:HA	2:M:651:LYS:HG3	1.81	0.62
2:C:713:ARG:HA	2:C:818:GLY:O	2.00	0.62
1:A:7:LYS:NZ	1:A:188:GLN:HE21	1.97	0.62
3:N:1291:SER:HB3	3:N:1293:PHE:HE1	1.65	0.62
3:D:525:ARG:HG3	3:D:525:ARG:O	1.98	0.62
3:D:908:LYS:CB	3:D:1027:GLY:HA3	2.26	0.62
3:N:385:VAL:HG13	5:P:232:ARG:HH12	1.62	0.62
2:C:486:MET:CE	2:C:496:ILE:HD11	2.30	0.62
2:M:1111:ILE:HG13	2:M:1112:PHE:CD1	2.35	0.62
2:C:841:ASN:ND2	2:C:843:HIS:H	1.98	0.62
2:M:918:LEU:HD23	2:M:968:LEU:HA	1.82	0.62
3:D:1168:MET:HE1	3:D:1171:VAL:HB	1.82	0.62
2:C:6:PHE:O	2:C:7:GLY:O	2.17	0.62
2:M:242:LEU:HD22	2:M:242:LEU:N	2.15	0.62
3:D:186:VAL:HG21	3:D:213:VAL:HB	1.81	0.62
3:N:70:GLY:C	3:N:71:LYS:HD2	2.19	0.62
3:D:638:LYS:HB2	3:D:641:GLN:OE1	1.98	0.62
2:M:442:GLU:HG3	2:M:442:GLU:O	1.99	0.62
4:E:68:LEU:HD11	4:E:75:PHE:HE2	1.63	0.62
3:D:139:GLY:HA2	3:D:452:ILE:HA	1.82	0.62
3:D:100:ALA:HB3	3:D:128:TYR:HE2	1.65	0.62
4:O:40:LEU:HD13	4:O:45:ARG:HD2	1.82	0.62
3:D:367:ILE:HG23	3:D:368:VAL:N	2.14	0.62
1:A:42:ARG:NH1	2:C:978:ARG:HA	2.15	0.62
3:N:522:PRO:HA	3:N:525:ARG:NH1	2.15	0.62
3:N:570:GLU:C	3:N:572:ARG:H	2.03	0.62
2:C:1043:TYR:HE2	3:D:710:ARG:HD3	1.64	0.62
3:D:729:HIS:HE1	3:D:731:LEU:HG	1.65	0.62
2:M:534:VAL:N	2:M:538:GLN:HE22	1.97	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:380:GLU:O	3:D:382:GLU:N	2.33	0.62
3:D:528:VAL:CB	3:D:536:ALA:HB3	2.28	0.62
5:F:180:GLY:O	5:F:183:ALA:N	2.33	0.62
1:K:176:ARG:HH22	2:M:865:THR:HB	1.64	0.62
1:A:170:VAL:HG11	2:C:696:LYS:HD3	1.81	0.62
3:D:192:ALA:O	3:D:195:VAL:HG23	2.00	0.62
3:D:493:ARG:HE	3:D:1389:LEU:HD21	1.64	0.62
1:L:12:THR:HG23	1:L:24:VAL:HB	1.82	0.62
5:P:289:GLU:O	5:P:293:GLU:HG3	2.00	0.62
3:D:498:VAL:HG13	3:D:499:VAL:H	1.64	0.62
2:C:795:GLY:O	2:C:796:GLU:HG2	2.00	0.62
2:M:880:MET:HE3	3:N:1034:GLN:HG2	1.81	0.62
3:N:1242:HIS:HB3	3:N:1269:LYS:NZ	2.14	0.62
3:D:572:ARG:NH2	5:F:83:GLN:NE2	2.47	0.62
2:C:690:ILE:HG21	2:C:833:LEU:HD21	1.81	0.62
2:M:1109:VAL:CG2	3:N:3:LYS:HB2	2.29	0.62
2:C:1054:THR:CG2	2:C:1059:ASP:HB2	2.29	0.62
5:F:394:ARG:O	5:F:397:ILE:HB	2.00	0.62
1:A:57:TYR:HE1	1:A:163:ASN:HB2	1.64	0.62
5:F:413:SER:O	5:F:416:ARG:HD3	1.99	0.62
2:C:191:PHE:CE2	2:C:238:LEU:HD11	2.35	0.62
2:C:589:ARG:HD3	2:C:596:TYR:CZ	2.34	0.62
3:D:136:ASP:CB	3:D:137:PRO:CD	2.76	0.61
4:E:54:LEU:HD21	4:E:63:TRP:HE1	1.65	0.61
2:C:194:VAL:HG22	2:C:221:LEU:CD1	2.23	0.61
3:D:1126:ASP:OD2	3:D:1129:THR:HA	2.00	0.61
3:N:609:GLY:HA2	3:N:613:ARG:HB3	1.81	0.61
3:N:601:ARG:HB3	5:P:318:GLU:OE2	2.00	0.61
3:D:422:ALA:HB3	3:D:427:VAL:CG2	2.27	0.61
2:M:413:LEU:HD21	2:M:451:LEU:HD13	1.82	0.61
2:C:911:GLU:HB3	2:C:912:PRO:HD3	1.82	0.61
1:A:158:ILE:C	1:A:158:ILE:HD13	2.20	0.61
3:N:675:ARG:O	3:N:678:GLU:HG2	1.99	0.61
2:C:722:ILE:O	2:C:722:ILE:HG12	2.00	0.61
3:N:413:ASP:HB2	3:N:444:VAL:HG11	1.82	0.61
3:D:659:LYS:HE3	3:D:662:GLU:OE2	2.00	0.61
3:N:168:THR:HG22	3:N:170:PRO:HD3	1.82	0.61
3:N:728:LEU:HD22	3:N:745:MET:SD	2.40	0.61
3:D:396:VAL:HG13	3:D:446:VAL:C	2.21	0.61
3:N:669:ASN:OD1	3:N:672:ALA:HB2	1.99	0.61
3:D:1105:ILE:HD11	3:D:1374:GLN:OE1	1.99	0.61
2:C:1015:LEU:HB3	2:C:1016:ILE:CD1	2.21	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:601:ARG:HH12	3:D:611:GLN:CB	2.13	0.61
4:O:40:LEU:HD12	4:O:40:LEU:O	2.00	0.61
2:C:300:ASP:C	2:C:302:VAL:H	2.02	0.61
3:N:1271:LYS:CE	3:N:1334:GLN:HE22	2.13	0.61
3:N:1281:VAL:HG21	3:N:1313:VAL:HG21	1.81	0.61
2:M:744:ARG:HG3	2:M:744:ARG:O	1.99	0.61
2:M:794:PRO:O	2:M:1004:LYS:HD2	2.00	0.61
3:D:1031:ASN:HB3	3:D:1034:GLN:CD	2.20	0.61
4:E:25:LYS:HA	4:E:28:GLN:CD	2.20	0.61
2:C:675:ALA:HB2	2:C:867:VAL:HG11	1.82	0.61
3:N:1389:LEU:HD23	3:N:1389:LEU:N	2.15	0.61
3:N:216:VAL:HG11	3:N:221:ALA:CA	2.29	0.61
2:M:250:ARG:HB3	2:M:253:ALA:CB	2.30	0.61
3:D:923:GLY:O	3:D:927:THR:OG1	2.15	0.61
2:M:904:PRO:HD2	2:M:908:GLY:HA2	1.82	0.61
1:A:28:LEU:HB2	1:A:193:ASP:O	2.00	0.61
3:D:1188:VAL:HG22	3:D:1189:ARG:N	2.15	0.61
3:D:1353:GLN:HG3	3:D:1365:ASP:OD2	1.99	0.61
3:D:650:LEU:HD22	3:D:688:TRP:CH2	2.35	0.61
2:M:1063:ARG:HG3	2:M:1064:ASN:N	2.15	0.61
4:E:48:MET:N	4:E:54:LEU:HB2	2.15	0.61
3:N:565:ILE:H	3:N:565:ILE:HD12	1.65	0.61
3:N:218:LYS:O	3:N:370:ALA:HB1	2.01	0.61
3:N:1148:VAL:HG12	3:N:1189:ARG:HB2	1.83	0.61
3:D:1076:GLY:O	3:D:1079:LYS:HG2	2.00	0.61
3:D:1078:ARG:C	3:D:1080:GLY:N	2.52	0.61
2:C:682:TYR:OH	2:C:851:LYS:HE2	2.00	0.61
3:N:643:GLY:O	3:N:726:ILE:HG23	2.00	0.61
3:N:957:PRO:HG2	3:N:1007:VAL:HG12	1.83	0.61
2:C:755:LEU:HD11	2:C:792:VAL:HG22	1.81	0.61
5:P:102:LEU:O	5:P:105:LYS:N	2.31	0.61
3:N:1330:ILE:HB	3:N:1347:TYR:CE2	2.35	0.61
2:M:1009:SER:N	3:N:651:GLU:OE2	2.34	0.61
2:C:1043:TYR:CE2	3:D:710:ARG:HB2	2.35	0.61
3:N:764:LEU:HD23	3:N:767:HIS:NE2	2.15	0.61
2:M:8:ARG:HD2	2:M:10:ARG:HH12	1.64	0.61
2:M:110:GLU:HG2	2:M:369:PRO:HA	1.82	0.61
5:F:271:LEU:CD1	5:F:308:LEU:HD21	2.29	0.61
3:N:34:TYR:CE2	5:P:260:ILE:HG13	2.36	0.61
3:N:1488:ASP:O	3:N:1492:LEU:HB2	2.00	0.61
3:D:1102:THR:HG22	3:D:1102:THR:O	2.01	0.61
2:M:244:PRO:HG2	2:M:246:ASP:H	1.65	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:817:GLU:HA	3:N:836:VAL:HG23	1.83	0.61
2:M:15:LEU:HB2	2:M:586:ARG:HH22	1.65	0.61
3:D:1459:LEU:HD12	3:D:1470:ARG:NH1	2.15	0.61
2:C:196:LEU:HD11	2:C:303:PHE:CE1	2.36	0.61
3:N:1065:LEU:CD2	3:N:1065:LEU:O	2.44	0.61
5:P:187:LEU:O	5:P:190:ALA:HB3	2.00	0.61
5:P:93:LEU:HD13	5:P:99:GLU:HG2	1.81	0.61
3:N:1495:ILE:HG12	4:O:80:VAL:CG1	2.31	0.61
2:C:367:LEU:H	2:C:367:LEU:HD23	1.65	0.61
3:D:528:VAL:N	3:D:536:ALA:O	2.33	0.61
1:L:209:GLU:O	1:L:212:ASN:HB2	2.00	0.61
3:D:1065:LEU:HD23	3:D:1070:TYR:HD2	1.64	0.61
3:D:387:LEU:HD13	5:F:97:GLU:H	1.66	0.61
2:M:159:ILE:HG22	2:M:175:GLU:HG3	1.82	0.61
3:D:1148:VAL:HA	3:D:1164:ARG:O	1.99	0.61
3:D:1190:SER:OG	3:D:1369:GLU:OE1	2.11	0.61
5:F:333:ILE:HD12	5:F:333:ILE:N	2.15	0.61
5:P:163:LEU:CD2	5:P:174:LEU:HG	2.21	0.61
3:D:573:MET:SD	5:F:210:LEU:HB3	2.41	0.61
2:M:129:ILE:HD12	2:M:129:ILE:N	2.15	0.61
2:M:1071:ILE:HD11	3:N:658:LEU:HD12	1.81	0.61
2:M:1047:HIS:N	3:N:758:GLU:OE1	2.30	0.61
2:C:69:LEU:HD12	2:C:97:ARG:HB3	1.83	0.61
2:M:949:LYS:HZ3	3:N:796:ARG:NH2	1.99	0.61
2:C:589:ARG:HH11	2:C:589:ARG:HB2	1.66	0.61
3:D:1451:ALA:O	3:D:1453:ALA:N	2.33	0.61
3:N:564:GLU:HG2	3:N:565:ILE:HD12	1.83	0.61
2:C:260:LEU:HB2	2:C:291:ALA:HB1	1.82	0.61
2:M:3:ILE:CD1	2:M:900:ARG:HB2	2.31	0.61
3:D:1476:THR:CG2	4:E:21:VAL:HG22	2.31	0.61
3:N:1468:LEU:HD22	3:N:1470:ARG:HB2	1.83	0.61
5:F:260:ILE:HG12	5:F:264:MET:HB2	1.83	0.61
2:M:422:ARG:HG3	2:M:423:ALA:N	2.16	0.61
3:D:1118:ILE:HG21	3:D:1190:SER:HB3	1.83	0.61
3:D:783:ARG:HH21	3:D:1029:ARG:CZ	2.14	0.61
3:D:108:VAL:CB	3:D:109:PRO:HD3	2.25	0.61
3:N:1344:VAL:O	3:N:1348:LEU:HD23	2.00	0.61
3:D:552:ASN:O	3:D:555:LYS:N	2.34	0.61
5:P:406:ARG:CB	5:P:409:LYS:HE2	2.30	0.61
2:M:881:ASN:ND2	2:M:881:ASN:H	1.98	0.61
1:A:94:LEU:CD1	1:A:119:ASP:HB3	2.31	0.61
2:M:534:VAL:N	2:M:538:GLN:NE2	2.49	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:171:LEU:HB3	3:D:390:PRO:HA	1.81	0.61
2:C:869:VAL:HG22	2:C:870:ILE:N	2.15	0.61
3:D:434:ARG:CB	3:D:447:VAL:HG13	2.31	0.61
2:C:1029:GLY:HA3	3:D:622:ARG:HB3	1.83	0.61
3:N:245:LEU:O	3:N:245:LEU:HD13	2.00	0.61
3:D:1365:ASP:O	3:D:1369:GLU:HG3	2.00	0.61
1:L:137:ARG:HG2	1:L:137:ARG:HH11	1.65	0.61
3:D:421:LEU:H	3:D:421:LEU:HD23	1.65	0.61
2:M:203:ASP:O	2:M:207:LEU:HB2	2.01	0.61
2:M:971:LYS:HD2	2:M:986:PRO:HB2	1.83	0.61
3:N:149:LYS:N	3:N:149:LYS:HD3	2.13	0.61
5:F:93:LEU:HD22	5:F:98:GLU:HB3	1.82	0.61
2:M:430:VAL:HG23	3:N:1078:ARG:CZ	2.31	0.61
5:F:277:GLN:O	5:F:280:GLN:HB3	2.01	0.61
3:D:1114:THR:HG21	3:D:1195:GLN:N	2.16	0.60
3:N:433:GLY:H	3:N:448:GLU:HA	1.66	0.60
1:L:131:THR:C	1:L:132:LEU:HD12	2.21	0.60
3:N:1242:HIS:HB3	3:N:1269:LYS:HZ1	1.65	0.60
1:K:50:GLY:O	1:K:146:ARG:HA	2.01	0.60
2:M:500:ASN:HD21	3:N:1067:VAL:HG23	1.66	0.60
2:C:345:ARG:HB3	2:C:345:ARG:NH1	2.16	0.60
3:D:1311:LEU:HD23	3:D:1311:LEU:N	2.13	0.60
2:M:1044:GLY:O	2:M:1046:ALA:N	2.34	0.60
3:N:765:SER:O	3:N:767:HIS:N	2.33	0.60
3:N:799:LYS:O	3:N:799:LYS:HD3	2.01	0.60
1:A:228:PRO:O	1:A:229:GLN:HG2	2.00	0.60
1:B:100:LEU:HD12	1:B:115:LEU:HD21	1.82	0.60
3:N:804:LEU:O	3:N:830:ALA:O	2.19	0.60
3:D:783:ARG:CZ	3:D:1029:ARG:CZ	2.79	0.60
5:P:130:VAL:HG13	5:P:156:VAL:HG23	1.82	0.60
3:N:1336:LEU:CD1	3:N:1341:PRO:HA	2.30	0.60
3:N:583:ASP:OD1	3:N:604:THR:CB	2.49	0.60
3:N:984:THR:O	3:N:987:GLU:N	2.34	0.60
3:N:1112:CYS:HB3	3:N:1201:CYS:SG	2.42	0.60
2:C:430:VAL:HB	3:D:1078:ARG:NH1	2.16	0.60
2:M:432:ARG:HH12	3:N:1047:LYS:HG2	1.66	0.60
3:N:167:GLU:CD	5:P:90:GLN:HE21	2.04	0.60
2:M:751:PRO:HG3	2:M:796:GLU:HA	1.83	0.60
3:D:142:LEU:O	3:D:142:LEU:HD12	2.01	0.60
2:C:274:ARG:H	2:C:288:ARG:HH12	1.49	0.60
3:D:1267:ARG:HH21	3:D:1271:LYS:HG3	1.66	0.60
3:D:1278:ASP:OD1	3:D:1321:ALA:HB2	2.01	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:926:PHE:HE2	2:C:960:GLU:OE1	1.84	0.60
4:E:86:GLN:O	4:E:90:GLU:HG3	2.01	0.60
3:D:14:SER:O	3:D:17:LYS:N	2.33	0.60
3:D:1472:ILE:HG22	3:D:1474:ALA:H	1.65	0.60
3:D:601:ARG:HD2	5:F:318:GLU:OE1	2.01	0.60
5:P:160:ASP:O	5:P:163:LEU:HB2	2.02	0.60
2:M:575:GLN:O	2:M:667:ALA:HB1	2.02	0.60
2:M:332:ARG:HG3	2:M:465:GLY:O	2.00	0.60
2:M:207:LEU:HD22	2:M:221:LEU:CD2	2.32	0.60
1:K:42:ARG:NH1	2:M:856:GLU:O	2.35	0.60
3:N:808:THR:HB	3:N:809:PRO:HD3	1.83	0.60
2:M:610:ARG:HG3	2:M:610:ARG:HH11	1.66	0.60
2:M:1114:GLY:C	2:M:1116:ALA:H	2.03	0.60
2:C:1013:TYR:CE1	2:C:1020:PRO:HG3	2.35	0.60
2:C:497:ALA:O	2:C:532:MET:HG3	2.01	0.60
1:K:170:VAL:O	1:K:170:VAL:HG23	2.01	0.60
3:N:558:LEU:O	3:N:561:GLY:N	2.32	0.60
3:N:691:LEU:O	3:N:694:VAL:HB	2.01	0.60
2:M:683:ASN:HA	2:M:687:ALA:CB	2.31	0.60
3:D:843:PHE:HD1	3:D:849:ALA:HA	1.64	0.60
3:N:1384:PRO:HG2	3:N:1389:LEU:N	2.16	0.60
3:D:30:GLU:OE1	3:D:40:GLU:HG2	2.00	0.60
2:M:1000:MET:SD	2:M:1001:VAL:N	2.74	0.60
1:B:162:ILE:HG23	1:B:163:ASN:ND2	2.17	0.60
3:N:1225:ALA:O	3:N:1226:ALA:C	2.40	0.60
3:N:858:VAL:HG12	3:N:859:ASP:O	2.00	0.60
3:D:98:PRO:HG2	3:D:462:GLN:HE22	1.67	0.60
2:M:838:LYS:NZ	2:M:846:LYS:NZ	2.49	0.60
3:N:616:GLN:CB	5:P:326:ASP:HB2	2.29	0.60
1:K:26:GLU:CD	1:K:27:PRO:HD2	2.22	0.60
1:K:64:GLU:HB2	1:K:165:ILE:HG21	1.83	0.60
3:D:223:LEU:CA	3:D:365:ASP:HB2	2.31	0.60
2:M:603:VAL:HG21	2:M:643:VAL:HG11	1.83	0.60
3:N:366:LYS:HB2	3:N:366:LYS:NZ	2.16	0.60
3:D:785:ILE:HD11	3:D:939:PHE:CZ	2.37	0.60
3:N:32:ILE:HG23	3:N:38:LYS:O	2.00	0.60
3:N:953:ASP:OD2	3:N:1019:PRO:HD2	2.00	0.60
3:D:423:ASP:HB2	5:F:178:ARG:HG3	1.83	0.60
1:K:26:GLU:HB3	1:K:27:PRO:CD	2.30	0.60
3:D:678:GLU:HG3	3:D:679:ARG:HG3	1.82	0.60
2:C:912:PRO:HA	2:C:915:LYS:HB2	1.83	0.60
5:P:88:ILE:CD1	5:P:193:ARG:HH11	2.15	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:F:205:ARG:HE	5:F:251:ILE:HD13	1.65	0.60
5:F:128:ARG:HG2	5:F:132:ARG:NH1	2.15	0.60
3:N:182:GLY:O	3:N:186:VAL:HB	2.02	0.60
2:C:1102:LEU:HD22	3:D:9:ARG:HD3	1.81	0.60
3:N:1277:ILE:HD12	3:N:1301:LYS:HB2	1.82	0.60
3:N:106:LYS:HE2	3:N:587:ARG:HD3	1.84	0.60
2:C:1081:VAL:HB	2:C:1086:ARG:CZ	2.31	0.60
3:N:601:ARG:CG	3:N:606:ILE:HG13	2.31	0.60
2:M:516:ARG:HD2	3:N:1068:LEU:HD22	1.83	0.60
3:D:633:VAL:C	3:D:635:PRO:HD3	2.22	0.60
2:M:1109:VAL:HG13	3:N:3:LYS:H	1.66	0.60
2:C:860:HIS:CD2	2:C:975:TYR:HB2	2.37	0.60
2:C:144:PRO:HA	2:C:163:ILE:O	2.01	0.60
2:C:571:LEU:HD13	2:C:669:GLY:HA2	1.83	0.60
5:F:288:TYR:CE2	5:F:305:GLU:HG3	2.37	0.60
1:K:100:LEU:HB2	1:K:115:LEU:HD11	1.83	0.60
3:N:1090:ASP:HB3	3:N:1093:TYR:HB2	1.82	0.60
2:C:1074:GLU:HG2	2:C:1075:ASP:N	2.16	0.60
3:D:1101:VAL:HG12	3:D:1374:GLN:CB	2.32	0.60
3:D:1459:LEU:HD12	3:D:1470:ARG:HH11	1.67	0.60
3:D:602:SER:O	3:D:606:ILE:HG13	2.02	0.60
5:F:79:ASP:HB3	5:F:80:PRO:CD	2.28	0.60
2:M:553:ASP:OD2	2:M:881:ASN:CB	2.50	0.60
1:A:14:ARG:HH22	1:A:24:VAL:CG2	2.14	0.60
2:M:690:ILE:HB	2:M:852:ILE:HD13	1.84	0.60
5:F:166:LEU:HB3	5:F:170:HIS:HB2	1.83	0.60
1:B:89:PHE:HB3	1:B:94:LEU:HD22	1.82	0.60
3:N:1008:PHE:CZ	3:N:1032:PRO:HA	2.37	0.60
3:D:1114:THR:HG22	3:D:1195:GLN:HB2	1.82	0.60
5:F:150:THR:HB	5:F:155:THR:HG21	1.83	0.60
2:M:554:ASP:OD1	2:M:555:ALA:N	2.35	0.60
2:C:328:LEU:HD13	2:C:433:THR:HG22	1.83	0.60
3:N:1258:ARG:HG2	3:N:1262:LEU:HD13	1.84	0.60
2:C:695:LEU:HD13	2:C:832:LYS:CE	2.28	0.60
5:P:196:VAL:HG13	5:P:209:PHE:HZ	1.66	0.60
3:N:1314:LYS:NZ	3:N:1317:ASP:HB2	2.17	0.60
3:N:560:GLN:O	3:N:560:GLN:HG3	2.02	0.60
3:N:1459:LEU:CD1	3:N:1470:ARG:HH11	2.15	0.60
1:B:153:ALA:O	1:B:156:HIS:HD2	1.84	0.60
1:L:62:LEU:HD12	1:L:62:LEU:H	1.66	0.60
2:C:859:PRO:HB3	2:C:974:LEU:HD23	1.84	0.60
2:C:209:ARG:N	2:C:209:ARG:HD2	2.17	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:1265:ALA:HB1	3:N:1333:HIS:CE1	2.36	0.60
2:C:1096:ALA:HB3	3:D:101:HIS:CE1	2.37	0.60
3:D:783:ARG:NE	3:D:1029:ARG:CZ	2.65	0.60
2:C:838:LYS:HG3	2:C:997:LEU:HB2	1.84	0.60
3:N:175:VAL:O	3:N:179:VAL:HG21	2.02	0.60
3:N:1260:ILE:O	3:N:1262:LEU:N	2.34	0.60
3:D:1209:LEU:CD1	3:D:1219:GLU:OE1	2.50	0.60
3:N:890:VAL:HG23	3:N:890:VAL:O	2.02	0.60
2:M:484:VAL:O	2:M:484:VAL:HG12	2.01	0.60
2:M:516:ARG:HH11	3:N:1068:LEU:HD22	1.65	0.60
2:M:877:PRO:HG2	3:N:1023:MET:HE1	1.82	0.60
2:M:350:ARG:HG2	2:M:350:ARG:HH11	1.67	0.60
2:M:66:LEU:HD13	2:M:100:LEU:HB3	1.84	0.60
1:A:14:ARG:HH21	1:A:22:GLU:HB3	1.67	0.60
5:F:392:VAL:HG11	5:F:396:ARG:HD2	1.84	0.60
3:N:1233:GLY:O	3:N:1236:LEU:HB2	2.02	0.60
2:C:728:HIS:HB3	2:C:729:LEU:HD22	1.84	0.60
2:C:807:ARG:NH2	2:C:808:ARG:HB2	2.16	0.60
3:N:629:SER:HB3	3:N:726:ILE:CD1	2.32	0.60
1:K:38:ASN:O	1:K:41:ARG:N	2.35	0.60
3:D:237:LYS:HE3	3:D:237:LYS:HA	1.84	0.59
2:M:650:ARG:HE	2:M:653:ASP:CG	2.05	0.59
3:N:601:ARG:HD2	3:N:613:ARG:HH21	1.66	0.59
5:F:164:LYS:CA	5:F:171:LYS:HZ2	2.14	0.59
2:C:650:ARG:N	2:C:650:ARG:CD	2.61	0.59
3:D:637:LEU:O	3:D:637:LEU:HD23	2.02	0.59
3:D:834:THR:HA	3:D:838:ARG:HE	1.67	0.59
5:P:372:ARG:NE	5:P:388:ALA:HA	2.17	0.59
5:P:300:ASP:CG	5:P:301:ALA:H	2.06	0.59
3:D:1459:LEU:CD1	3:D:1470:ARG:HH11	2.15	0.59
3:D:542:ASP:OD2	3:D:545:ARG:NH2	2.34	0.59
1:A:178:ALA:O	1:A:197:LEU:HD23	2.01	0.59
1:A:42:ARG:HH12	2:C:857:ASP:CB	2.15	0.59
5:P:77:THR:O	5:P:81:VAL:HG23	2.01	0.59
3:N:754:PHE:HA	4:O:24:ALA:HB1	1.83	0.59
5:F:136:LEU:HD12	5:F:137:GLY:H	1.67	0.59
3:N:786:ILE:HD13	3:N:1027:GLY:HA3	1.83	0.59
3:D:681:ARG:HH11	3:D:681:ARG:HB2	1.67	0.59
2:M:755:LEU:O	2:M:756:VAL:HG23	2.03	0.59
2:C:660:ALA:HB1	2:C:667:ALA:O	2.01	0.59
5:F:408:LEU:HD23	5:F:409:LYS:N	2.17	0.59
3:N:806:PHE:HD1	3:N:812:ALA:HB3	1.67	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:208:ALA:O	2:C:218:VAL:HG21	2.01	0.59
5:P:266:GLU:O	5:P:270:LYS:HG3	2.03	0.59
1:K:215:VAL:HG23	1:K:216:GLU:N	2.18	0.59
3:N:1147:ARG:O	3:N:1165:TYR:HA	2.01	0.59
3:D:598:ARG:NH1	5:F:319:THR:HA	1.97	0.59
1:A:42:ARG:NH1	2:C:857:ASP:HB3	2.17	0.59
3:N:525:ARG:N	3:N:526:PRO:CD	2.66	0.59
2:M:470:PRO:HG3	2:M:485:TYR:CZ	2.37	0.59
2:M:91:GLN:HG2	2:M:119:PRO:HG3	1.84	0.59
1:K:222:LEU:HD12	1:L:215:VAL:HB	1.82	0.59
3:N:15:PRO:HB3	3:N:19:ARG:HH12	1.67	0.59
3:N:125:GLN:OE1	3:N:587:ARG:NH2	2.36	0.59
2:M:325:ILE:N	2:M:325:ILE:HD12	2.17	0.59
2:M:557:ARG:HD3	2:M:879:ARG:HG2	1.83	0.59
3:D:1397:LYS:O	3:D:1400:VAL:HB	2.02	0.59
3:D:10:ILE:CD1	3:D:1434:TRP:NE1	2.65	0.59
3:D:755:ALA:HA	3:D:758:GLU:HG2	1.84	0.59
3:N:550:ARG:HH11	3:N:550:ARG:HG3	1.67	0.59
3:N:715:ALA:O	3:N:764:LEU:HD12	2.02	0.59
2:C:946:ARG:NH1	2:C:984:GLU:HG3	2.16	0.59
3:D:642:CYS:HB3	3:D:716:PHE:HB3	1.83	0.59
2:C:66:LEU:HD13	2:C:100:LEU:HB3	1.84	0.59
3:D:1154:GLU:CG	3:D:1159:ARG:HG2	2.32	0.59
5:P:398:ARG:HG2	5:P:398:ARG:HH11	1.66	0.59
3:N:795:VAL:HG11	3:N:863:VAL:HG13	1.85	0.59
4:O:40:LEU:HD21	4:O:67:GLU:HA	1.83	0.59
4:E:40:LEU:HD22	4:E:45:ARG:CZ	2.32	0.59
2:M:44:ILE:HD11	2:M:340:MET:CE	2.33	0.59
3:D:553:ARG:HD3	5:F:214:GLN:HB3	1.83	0.59
3:N:571:LYS:NZ	3:N:571:LYS:HB2	2.18	0.59
3:N:231:VAL:HG12	3:N:378:ILE:HG23	1.84	0.59
3:D:177:ALA:CA	3:D:199:LEU:HD13	2.32	0.59
1:L:206:THR:HG22	1:L:209:GLU:CG	2.32	0.59
3:N:710:ARG:NH1	3:N:772:PRO:HG2	2.15	0.59
3:N:681:ARG:HG3	3:N:682:ASP:OD1	2.03	0.59
3:N:1277:ILE:HG22	3:N:1278:ASP:H	1.67	0.59
2:M:252:LYS:NZ	2:M:296:GLY:HA3	2.17	0.59
3:D:1412:LYS:C	3:D:1414:PRO:HD3	2.23	0.59
5:F:169:GLU:CD	5:F:169:GLU:H	2.02	0.59
2:M:710:ILE:HD12	2:M:790:LEU:HB2	1.84	0.59
2:M:710:ILE:HB	2:M:790:LEU:HD22	1.84	0.59
3:N:1161:GLU:HG3	3:N:1164:ARG:HB2	1.83	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:1324:PRO:HG3	3:D:1330:ILE:HD11	1.83	0.59
3:D:1240:THR:O	3:D:1257:PRO:HB3	2.02	0.59
3:D:163:TYR:CZ	3:D:394:LEU:HD21	2.38	0.59
3:D:762:GLN:NE2	4:E:20:THR:OG1	2.34	0.59
3:N:427:VAL:CB	3:N:435:VAL:HB	2.31	0.59
5:P:181:GLU:OE2	5:P:184:ARG:HG2	2.01	0.59
2:C:203:ASP:O	2:C:207:LEU:HB2	2.03	0.59
3:N:12:LEU:CB	3:N:507:ASN:HD22	2.09	0.59
2:C:897:LEU:HD11	2:C:920:GLN:HG2	1.85	0.59
2:C:697:ARG:O	2:C:699:PHE:N	2.36	0.59
2:M:1097:LEU:HD21	3:N:103:TRP:HZ3	1.68	0.59
3:N:128:TYR:CE1	3:N:461:ILE:HG13	2.37	0.59
3:N:558:LEU:HD13	5:P:145:PRO:CA	2.32	0.59
3:D:709:HIS:O	3:D:710:ARG:C	2.41	0.59
3:D:925:GLU:HG2	4:E:7:ASP:OD2	2.03	0.59
1:B:62:LEU:HD13	1:B:63:HIS:CD2	2.37	0.59
2:M:15:LEU:HB2	2:M:586:ARG:NH2	2.18	0.59
2:C:1029:GLY:O	3:D:622:ARG:HD3	2.01	0.59
5:P:229:TYR:H	5:P:229:TYR:HD1	1.51	0.59
2:M:742:VAL:HG12	2:M:743:VAL:H	1.66	0.59
3:N:1096:ARG:NH1	3:N:1096:ARG:HG2	2.16	0.59
3:D:1229:ILE:CD1	3:D:1368:ILE:HG12	2.30	0.59
3:D:583:ASP:OD2	3:D:604:THR:HB	2.03	0.59
3:D:795:VAL:CG1	3:D:863:VAL:HG22	2.33	0.59
2:C:455:LEU:HD13	2:C:459:ALA:HB3	1.83	0.59
2:C:99:GLN:HG3	2:C:99:GLN:O	2.03	0.59
2:M:674:VAL:HG11	2:M:992:MET:CE	2.33	0.59
2:C:227:PHE:HA	2:C:230:ARG:CZ	2.32	0.59
5:F:309:LYS:O	5:F:312:GLN:HG3	2.02	0.59
5:F:76:SER:O	5:F:78:SER:N	2.36	0.59
1:A:161:ARG:HH11	1:A:161:ARG:HG3	1.67	0.59
1:A:77:GLU:HB2	2:C:640:ARG:NH2	2.18	0.59
2:C:673:LEU:HG	2:C:990:GLY:O	2.02	0.59
2:M:801:VAL:O	2:M:802:ARG:HB2	2.00	0.59
2:M:626:ARG:HG2	2:M:629:TYR:CD1	2.38	0.59
5:P:403:LYS:O	5:P:407:LYS:HG2	2.02	0.59
1:A:180:GLN:NE2	2:C:934:PHE:HB2	2.17	0.59
3:D:521:PRO:O	3:D:525:ARG:NH1	2.36	0.59
3:D:789:LEU:HD13	3:D:882:PHE:HE1	1.67	0.59
3:D:118:LEU:O	3:D:120:ALA:N	2.36	0.59
1:L:115:LEU:O	1:L:115:LEU:HD12	2.03	0.59
2:M:64:LEU:O	2:M:65:VAL:HG13	2.03	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:140:ILE:HA	2:C:332:ARG:O	2.02	0.59
2:C:192:PRO:HB2	2:C:195:LEU:HB2	1.85	0.59
3:N:172:PRO:HB3	3:N:178:LEU:HD22	1.84	0.59
3:N:411:THR:HG22	3:N:412:GLY:H	1.67	0.59
2:C:1021:LEU:HG	2:C:1022:GLY:H	1.67	0.59
3:D:785:ILE:HG13	3:D:939:PHE:CE2	2.38	0.59
3:N:899:LEU:HD22	3:N:900:ILE:N	2.17	0.59
5:F:130:VAL:HG21	5:F:159:ILE:HG21	1.85	0.59
3:D:739:ASP:OD2	3:D:741:ASP:OD2	2.20	0.59
5:F:269:ASN:HB3	5:F:273:ARG:NH2	2.04	0.59
3:N:1377:LYS:HE2	3:N:1394:VAL:HG22	1.85	0.59
3:N:99:ALA:HB1	3:N:575:GLN:OE1	2.03	0.59
2:M:183:SER:CB	2:M:190:LYS:HG2	2.29	0.59
3:D:1258:ARG:O	3:D:1260:ILE:N	2.35	0.59
3:N:1046:GLN:HG3	3:N:1047:LYS:O	2.03	0.59
5:P:401:GLU:O	5:P:405:LEU:HB2	2.03	0.59
3:N:769:LEU:C	3:N:770:LEU:HD23	2.23	0.59
2:C:907:ASP:O	2:C:907:ASP:CG	2.41	0.59
2:M:244:PRO:CG	2:M:245:GLY:H	2.15	0.59
3:D:875:THR:HG22	3:D:879:ARG:HD2	1.84	0.59
3:D:916:TYR:C	3:D:916:TYR:HD2	2.07	0.59
3:D:609:GLY:HA3	3:D:614:PHE:N	2.16	0.59
2:C:289:THR:HG22	2:C:290:LEU:H	1.67	0.59
3:D:237:LYS:HB3	3:D:238:PRO:CD	2.25	0.59
2:M:565:GLN:C	2:M:567:GLN:N	2.57	0.59
3:N:84:ILE:C	3:N:86:ARG:N	2.55	0.59
2:M:276:LYS:O	2:M:279:GLU:HG2	2.02	0.59
2:M:368:THR:HB	2:M:369:PRO:HD3	1.85	0.59
2:M:949:LYS:NZ	3:N:796:ARG:HH21	2.01	0.59
3:N:1389:LEU:H	3:N:1389:LEU:CD2	2.15	0.59
2:M:200:LEU:HD22	2:M:300:ASP:OD1	2.03	0.59
3:N:947:ILE:O	3:N:947:ILE:HG13	2.02	0.59
3:D:93:ILE:CD1	3:D:547:LEU:HD23	2.32	0.59
2:C:1091:GLU:CD	3:D:606:ILE:HG21	2.24	0.58
5:F:139:ALA:HB1	5:F:152:ASP:HB3	1.85	0.58
4:E:82:GLU:N	4:E:82:GLU:CD	2.45	0.58
1:K:156:HIS:CD2	1:K:158:ILE:HG12	2.27	0.58
3:N:646:LYS:HG2	3:N:721:VAL:O	2.02	0.58
3:D:1209:LEU:HD23	3:D:1211:MET:SD	2.43	0.58
2:M:1039:ALA:CB	3:N:713:ILE:HD12	2.32	0.58
2:C:108:ILE:HD11	2:C:365:ASP:OD1	2.03	0.58
2:M:432:ARG:HH22	3:N:1047:LYS:CG	2.15	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:M:432:ARG:HD3	3:N:1048:PRO:HG2	1.84	0.58
2:M:404:LEU:O	2:M:404:LEU:HG	2.02	0.58
1:B:14:ARG:HH11	1:B:14:ARG:HG3	1.68	0.58
2:M:703:ILE:HG12	2:M:830:LYS:HG2	1.84	0.58
2:C:408:ARG:HH11	2:C:542:VAL:CG2	2.16	0.58
3:N:702:LEU:HD12	3:N:747:VAL:HB	1.84	0.58
5:F:261:PRO:O	5:F:265:VAL:HG23	2.02	0.58
5:F:355:GLU:O	5:F:358:LEU:HB3	2.03	0.58
3:D:19:ARG:NE	3:D:94:GLU:OE2	2.34	0.58
3:N:188:GLY:HA2	3:N:210:ARG:HH11	1.67	0.58
5:P:247:ILE:O	5:P:250:ALA:HB3	2.03	0.58
3:D:790:TYR:CD2	3:D:1026:SER:HB3	2.37	0.58
3:N:845:ASN:ND2	3:N:846:PRO:HD2	2.18	0.58
3:N:1273:VAL:HG21	3:N:1305:LEU:HD21	1.85	0.58
2:C:1005:MET:CE	3:D:645:PRO:HG2	2.33	0.58
3:D:646:LYS:O	3:D:649:ALA:HB3	2.03	0.58
3:D:1262:LEU:HD21	3:D:1351:GLU:HG3	1.85	0.58
2:M:1102:LEU:O	3:N:4:GLU:O	2.20	0.58
3:D:1065:LEU:CD1	3:D:1069:GLU:HB3	2.33	0.58
2:C:575:GLN:O	2:C:576:ALA:C	2.40	0.58
2:C:572:ILE:CD1	2:C:701:THR:HB	2.33	0.58
3:N:1058:ARG:HH11	3:N:1058:ARG:CG	2.16	0.58
1:L:47:SER:HB3	1:L:217:ILE:HD13	1.85	0.58
3:D:119:SER:O	3:D:121:THR:N	2.35	0.58
3:D:530:VAL:HB	3:D:534:ARG:CB	2.33	0.58
3:D:820:GLU:HG2	3:D:825:ALA:O	2.03	0.58
2:C:89:THR:HG23	2:C:129:ILE:HA	1.84	0.58
2:C:722:ILE:HD11	2:C:823:VAL:HG21	1.85	0.58
1:A:62:LEU:HD22	2:C:745:ILE:HG21	1.86	0.58
1:A:99:LEU:N	1:A:99:LEU:HD12	2.18	0.58
4:E:51:LEU:HG	4:E:52:GLU:H	1.67	0.58
2:C:256:TYR:HE1	2:C:293:PHE:HB2	1.67	0.58
3:D:704:ARG:HH11	3:D:738:ALA:HB2	1.68	0.58
3:N:978:TYR:HE1	3:N:985:ASP:HA	1.68	0.58
3:N:119:SER:HB2	3:N:123:LEU:HB2	1.86	0.58
3:N:126:VAL:HG13	3:N:132:TYR:CB	2.30	0.58
2:C:101:ILE:HG22	2:C:102:HIS:N	2.17	0.58
5:P:196:VAL:HG22	5:P:213:ILE:HD11	1.83	0.58
3:N:1479:ASP:HA	3:N:1482:ARG:HB2	1.86	0.58
3:N:1292:VAL:HG11	3:N:1325:LEU:HD23	1.85	0.58
3:D:911:LEU:C	3:D:913:ASP:N	2.53	0.58
1:L:132:LEU:HD21	1:L:138:LEU:CB	2.34	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:1304:LYS:CD	3:D:1304:LYS:H	2.17	0.58
3:N:792:ILE:HG23	3:N:793:THR:CG2	2.32	0.58
2:C:430:VAL:HG13	3:D:1075:HIS:HA	1.86	0.58
2:C:122:THR:HG22	2:C:124:ASP:H	1.68	0.58
5:P:376:ILE:HG22	5:P:377:ASP:N	2.18	0.58
3:N:233:LYS:HD2	3:N:237:LYS:HZ3	1.68	0.58
2:C:1104:GLU:OE1	2:C:1104:GLU:N	2.36	0.58
3:D:860:LEU:HB2	3:D:861:GLN:HE21	1.69	0.58
3:D:1109:GLU:HG2	3:D:1202:GLN:N	2.15	0.58
3:D:1018:ASN:O	3:D:1022:VAL:HG23	2.04	0.58
3:D:26:VAL:CG1	3:D:44:LEU:HD23	2.24	0.58
3:D:710:ARG:HG3	3:D:711:LEU:N	2.19	0.58
3:N:1219:GLU:HG2	3:N:1221:VAL:CG2	2.31	0.58
3:N:1495:ILE:CD1	4:O:88:GLU:HG3	2.34	0.58
2:C:976:ASP:HB3	2:C:979:THR:HG22	1.86	0.58
2:M:376:ARG:HB3	2:M:377:PRO:HD3	1.85	0.58
3:D:1262:LEU:HD23	3:D:1352:ILE:HG13	1.85	0.58
3:N:434:ARG:HB2	3:N:447:VAL:CG2	2.34	0.58
2:M:751:PRO:HA	2:M:792:VAL:HB	1.85	0.58
1:A:175:ARG:O	1:A:176:ARG:HG3	2.03	0.58
3:D:223:LEU:HA	3:D:365:ASP:HB2	1.86	0.58
5:F:358:LEU:HD11	5:F:370:LYS:CD	2.34	0.58
5:P:243:ILE:O	5:P:247:ILE:HG13	2.03	0.58
3:D:1156:LEU:HD11	3:D:1177:ALA:HA	1.85	0.58
2:M:47:ALA:HB1	2:M:345:ARG:HB2	1.84	0.58
3:D:669:ASN:O	3:D:672:ALA:HB3	2.04	0.58
3:N:1088:THR:O	3:N:1089:ALA:C	2.41	0.58
3:N:906:GLN:HA	3:N:906:GLN:OE1	2.03	0.58
3:D:502:PHE:CD2	3:D:509:PRO:HB3	2.39	0.58
2:C:679:PHE:CE2	2:C:853:LEU:HD21	2.38	0.58
3:D:97:THR:HG21	3:D:571:LYS:HD3	1.86	0.58
3:N:137:PRO:CB	3:N:138:LYS:HD2	2.34	0.58
2:M:1032:PHE:CZ	2:M:1052:MET:HG2	2.38	0.58
2:M:288:ARG:HA	2:M:288:ARG:CZ	2.33	0.58
3:N:191:LEU:HB3	3:N:195:VAL:HG21	1.85	0.58
2:M:909:ALA:HA	2:M:913:GLU:OE1	2.03	0.58
1:K:189:ARG:HH11	1:L:155:LYS:HZ1	1.52	0.58
2:C:172:ILE:HA	2:C:185:LYS:O	2.02	0.58
2:C:605:LYS:HD3	2:C:610:ARG:CZ	2.33	0.58
3:N:807:ALA:CB	3:N:833:GLU:HB2	2.33	0.58
5:P:343:ASP:O	5:P:346:THR:HB	2.04	0.58
5:F:78:SER:HB2	5:F:82:ARG:NH2	2.19	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:1215:VAL:HG22	3:N:1216:SER:N	2.19	0.58
3:N:996:TRP:CE2	3:N:1056:PRO:HG2	2.38	0.58
2:M:124:ASP:HB2	2:M:407:LYS:HZ2	1.68	0.58
2:C:286:SER:HB2	2:C:299:LYS:NZ	2.19	0.58
1:K:50:GLY:O	1:K:146:ARG:HG2	2.02	0.58
3:N:601:ARG:HH22	3:N:611:GLN:N	2.02	0.58
3:D:65:ARG:HG3	3:D:66:GLN:H	1.67	0.58
3:D:1231:GLU:HB3	3:D:1232:PRO:CD	2.31	0.58
1:A:51:THR:CG2	1:A:146:ARG:HA	2.34	0.58
1:K:225:PHE:HE2	1:L:211:LEU:HD11	1.68	0.58
1:K:194:LYS:O	1:K:196:THR:HG22	2.02	0.58
2:M:722:ILE:O	2:M:722:ILE:HG12	2.04	0.58
2:M:841:ASN:OD1	2:M:843:HIS:HB2	2.04	0.58
3:D:1031:ASN:HD21	3:D:1033:GLN:HB3	1.69	0.58
3:D:434:ARG:HB2	3:D:447:VAL:HG22	1.85	0.58
2:C:749:VAL:HG23	2:C:749:VAL:O	2.03	0.58
1:K:50:GLY:HA3	1:K:171:PHE:O	2.04	0.58
3:N:625:TYR:CE2	3:N:751:LEU:HD21	2.38	0.58
5:P:367:MET:O	5:P:371:LEU:HG	2.04	0.58
3:N:1383:ASP:N	3:N:1384:PRO:HD3	2.19	0.58
3:D:1087:ARG:CZ	3:D:1236:LEU:O	2.52	0.58
3:N:1122:LEU:HD23	3:N:1178:ALA:HB2	1.85	0.58
2:C:1010:THR:HG22	2:C:1011:GLY:H	1.66	0.58
2:C:517:ARG:NH2	2:C:524:VAL:HG23	2.19	0.58
1:K:39:PRO:HA	1:L:35:THR:HG23	1.86	0.58
2:M:599:GLU:HA	2:M:651:LYS:CG	2.33	0.58
1:B:115:LEU:O	1:B:115:LEU:HD12	2.04	0.58
2:M:173:ASP:HB2	2:M:185:LYS:HE3	1.86	0.58
2:M:69:LEU:HB2	2:M:97:ARG:HB2	1.84	0.58
3:D:906:GLN:OE1	3:D:906:GLN:HA	2.04	0.58
2:C:302:VAL:O	2:C:305:PRO:HD2	2.03	0.58
2:M:846:LYS:NZ	3:N:741:ASP:O	2.37	0.58
3:N:553:ARG:CD	5:P:214:GLN:HB3	2.33	0.58
3:D:947:ILE:C	3:D:947:ILE:HD12	2.23	0.58
2:M:1047:HIS:CD2	3:N:754:PHE:CD2	2.91	0.58
5:P:406:ARG:CA	5:P:409:LYS:HE2	2.32	0.58
2:M:344:PHE:HD2	2:M:382:ILE:HD11	1.68	0.58
2:C:162:ILE:HD12	2:C:172:ILE:HD13	1.86	0.58
2:C:869:VAL:O	2:C:870:ILE:HG13	2.03	0.58
5:P:398:ARG:HD3	5:P:399:GLN:H	1.67	0.58
2:M:749:VAL:HG11	2:M:755:LEU:HD23	1.86	0.58
2:C:91:GLN:CD	2:C:117:HIS:HB3	2.24	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:M:160:ALA:HB3	2:M:174:LEU:HB2	1.85	0.58
3:N:1260:ILE:C	3:N:1262:LEU:N	2.57	0.57
3:N:434:ARG:HB2	3:N:447:VAL:HG22	1.86	0.57
3:N:166:GLN:NE2	3:N:167:GLU:H	2.02	0.57
5:F:416:ARG:NH2	5:F:419:ARG:HD3	2.18	0.57
2:C:802:ARG:HH12	2:C:804:VAL:HG22	1.68	0.57
3:D:231:VAL:HA	3:D:378:ILE:HG13	1.86	0.57
3:N:1220:ALA:O	3:N:1223:ILE:HG22	2.03	0.57
2:C:494:TYR:HB3	2:C:530:GLU:OE2	2.04	0.57
5:P:273:ARG:O	5:P:276:ARG:HB2	2.04	0.57
3:N:170:PRO:HD2	3:N:391:ALA:O	2.04	0.57
5:F:358:LEU:HD11	5:F:370:LYS:HD2	1.85	0.57
2:M:449:ILE:HG23	2:M:449:ILE:O	2.03	0.57
5:P:257:THR:HB	5:P:314:PRO:HG2	1.86	0.57
3:N:185:VAL:HA	3:N:189:GLN:HG3	1.86	0.57
2:C:1095:LEU:HA	3:D:582:LEU:CD2	2.35	0.57
2:C:1094:ALA:C	3:D:603:LEU:HD13	2.25	0.57
3:D:929:ARG:HH11	3:D:929:ARG:HG3	1.69	0.57
2:C:328:LEU:HD13	2:C:433:THR:CG2	2.34	0.57
3:N:1336:LEU:HD22	3:N:1421:LEU:HB2	1.85	0.57
2:C:799:ILE:N	2:C:799:ILE:HD13	2.11	0.57
5:P:365:GLU:O	5:P:368:VAL:HB	2.04	0.57
3:D:178:LEU:HD23	3:D:178:LEU:O	2.03	0.57
3:N:1267:ARG:NE	3:N:1271:LYS:HG3	2.19	0.57
2:M:705:ILE:HG12	2:M:828:ALA:HB2	1.86	0.57
3:N:1281:VAL:HG23	3:N:1317:ASP:O	2.04	0.57
5:F:94:LEU:HD13	5:F:95:THR:N	2.19	0.57
2:C:192:PRO:HB2	2:C:195:LEU:CB	2.35	0.57
2:C:1049:LEU:HD23	3:D:1472:ILE:HD11	1.85	0.57
4:E:70:THR:O	4:E:72:ARG:N	2.37	0.57
3:D:527:MET:HE1	3:D:535:PHE:HB3	1.86	0.57
2:M:1097:LEU:H	2:M:1097:LEU:CD1	2.16	0.57
1:A:152:PRO:HD2	1:A:155:LYS:CD	2.32	0.57
2:M:910:LYS:O	2:M:913:GLU:N	2.37	0.57
3:N:826:PRO:HD2	3:N:829:VAL:CG1	2.34	0.57
2:M:737:LEU:HD11	2:M:754:ILE:HG21	1.85	0.57
3:D:964:LEU:HD22	3:D:1058:ARG:HG3	1.85	0.57
3:N:224:ARG:HH12	3:N:229:ALA:HB2	1.69	0.57
2:C:250:ARG:NH2	2:C:253:ALA:HB1	2.20	0.57
1:A:211:LEU:HG	1:A:211:LEU:O	2.03	0.57
4:E:9:LEU:HB3	4:E:19:LEU:HD21	1.85	0.57
3:D:1346:ARG:HH22	3:D:1349:VAL:HG11	1.67	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:1166:LEU:CD2	3:N:1166:LEU:H	2.17	0.57
3:N:896:ALA:O	3:N:899:LEU:HD13	2.04	0.57
5:P:77:THR:O	5:P:80:PRO:HD2	2.03	0.57
4:O:23:VAL:HG13	4:O:64:ALA:HB3	1.86	0.57
3:N:785:ILE:HD11	3:N:939:PHE:CE2	2.39	0.57
2:M:583:LEU:O	2:M:587:VAL:HG23	2.03	0.57
5:F:98:GLU:HA	5:F:101:GLU:HB2	1.86	0.57
3:D:1065:LEU:HD11	3:D:1069:GLU:HB3	1.87	0.57
2:C:3:ILE:CD1	2:C:900:ARG:HG3	2.33	0.57
2:M:700:TYR:CG	2:M:833:LEU:HD22	2.40	0.57
5:P:376:ILE:CG2	5:P:377:ASP:H	2.13	0.57
1:A:7:LYS:NZ	1:A:188:GLN:NE2	2.52	0.57
5:P:287:THR:HG23	5:P:290:GLU:H	1.70	0.57
2:C:193:LEU:HG	2:C:307:LEU:HD22	1.86	0.57
3:D:1104:GLU:HA	3:D:1461:GLY:HA2	1.87	0.57
2:C:1081:VAL:HB	2:C:1086:ARG:HH21	1.70	0.57
3:D:806:PHE:O	3:D:808:THR:N	2.37	0.57
2:M:683:ASN:CA	2:M:687:ALA:HB3	2.33	0.57
2:C:334:ARG:HB3	2:C:338:GLU:CD	2.24	0.57
3:D:699:VAL:H	3:D:756:GLN:NE2	1.95	0.57
3:D:699:VAL:N	3:D:756:GLN:HE22	1.94	0.57
3:N:1466:VAL:HG12	3:N:1467:ILE:N	2.18	0.57
3:D:388:HIS:NE2	5:F:94:LEU:HG	2.20	0.57
2:C:593:ALA:HB1	2:C:659:PRO:HD2	1.87	0.57
2:C:810:ASP:HB3	2:C:813:VAL:HG22	1.85	0.57
3:D:1168:MET:CE	3:D:1171:VAL:HB	2.34	0.57
4:E:25:LYS:HA	4:E:28:GLN:OE1	2.04	0.57
5:F:291:ILE:HD13	5:F:304:VAL:HG11	1.86	0.57
2:C:30:LEU:HD12	2:C:30:LEU:O	2.04	0.57
2:C:846:LYS:NZ	3:D:741:ASP:O	2.38	0.57
3:D:740:PHE:C	3:D:742:GLY:H	2.07	0.57
3:N:604:THR:C	3:N:606:ILE:N	2.57	0.57
2:M:709:GLU:OE2	2:M:824:ARG:NH1	2.38	0.57
2:M:470:PRO:HG3	2:M:485:TYR:OH	2.05	0.57
1:A:30:ARG:HG3	2:C:938:LYS:HZ1	1.69	0.57
5:F:105:LYS:O	5:F:180:GLY:HA2	2.05	0.57
2:C:140:ILE:HG21	2:C:331:ARG:NH1	2.19	0.57
3:D:387:LEU:HD13	5:F:97:GLU:HB2	1.87	0.57
3:N:517:VAL:HG12	3:N:518:PRO:O	2.04	0.57
3:N:812:ALA:O	3:N:816:HIS:HB2	2.05	0.57
3:D:1036:ARG:HH21	3:D:1037:GLN:HG2	1.69	0.57
1:A:227:ASN:H	1:A:227:ASN:HD22	1.50	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:74:ASP:O	1:B:78:ILE:HG13	2.05	0.57
3:N:414:ARG:HB2	3:N:418:GLY:O	2.05	0.57
3:D:1001:GLU:C	3:D:1001:GLU:OE2	2.42	0.57
3:D:1201:CYS:SG	3:D:1204:CYS:HB2	2.44	0.57
3:D:1341:PRO:C	3:D:1343:ALA:H	2.08	0.57
2:C:1046:ALA:HB1	3:D:1472:ILE:HB	1.86	0.57
3:D:1008:PHE:O	3:D:1009:LYS:C	2.43	0.57
3:N:423:ASP:H	5:P:178:ARG:NH1	2.03	0.57
2:C:569:VAL:HG23	2:C:635:THR:HG22	1.86	0.57
3:D:1071:PHE:O	3:D:1071:PHE:HD1	1.87	0.57
3:N:1399:ASP:O	3:N:1403:LEU:HD12	2.05	0.57
2:C:748:GLU:HA	2:C:799:ILE:HA	1.85	0.57
3:N:131:LYS:HD2	5:P:83:GLN:HE22	1.69	0.57
2:M:302:VAL:C	2:M:305:PRO:HD2	2.24	0.57
2:M:498:GLN:CG	2:M:516:ARG:HE	2.18	0.57
3:N:1106:VAL:HG12	3:N:1107:VAL:N	2.18	0.57
2:C:548:PRO:HG2	2:C:842:ARG:NH2	2.20	0.57
2:C:979:THR:O	2:C:981:GLU:N	2.34	0.57
3:D:530:VAL:N	3:D:534:ARG:O	2.35	0.57
2:M:893:ALA:HB2	2:M:918:LEU:HD12	1.87	0.57
1:A:35:THR:HG22	1:A:35:THR:O	2.04	0.57
2:C:805:ARG:HG3	2:C:823:VAL:HG22	1.87	0.57
3:D:833:GLU:HG2	3:D:834:THR:HG23	1.87	0.57
3:N:423:ASP:OD2	5:P:174:LEU:HD22	2.04	0.57
3:D:714:GLN:HB3	3:D:765:SER:HB3	1.86	0.57
3:N:135:LEU:HG	3:N:153:LEU:HD21	1.86	0.57
1:B:189:ARG:NH1	1:B:189:ARG:HG3	2.20	0.57
1:A:44:LEU:HA	1:A:48:ILE:CD1	2.35	0.57
5:F:241:TRP:O	5:F:245:GLN:OE1	2.21	0.57
2:M:184:MET:HE1	2:M:186:VAL:HG22	1.87	0.57
1:A:210:ALA:O	1:A:212:ASN:N	2.38	0.57
3:N:1286:THR:HG22	3:N:1287:GLU:N	2.19	0.57
2:C:1045:ALA:HB2	3:D:758:GLU:OE2	2.05	0.57
2:M:1063:ARG:O	2:M:1066:ALA:N	2.36	0.57
3:D:572:ARG:NE	5:F:80:PRO:HG3	2.20	0.57
3:N:96:ALA:N	3:N:551:ASN:HD21	2.03	0.57
5:P:138:SER:C	5:P:140:ARG:H	2.06	0.57
3:D:771:SER:HB2	3:D:778:LEU:HD22	1.86	0.57
2:M:1047:HIS:H	3:N:758:GLU:CD	2.06	0.57
2:M:208:ALA:CB	2:M:218:VAL:HG11	2.35	0.57
2:M:211:LEU:HD11	2:M:308:ARG:HB2	1.86	0.57
3:N:1271:LYS:HZ1	3:N:1273:VAL:HA	1.70	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:1005:MET:SD	3:D:648:MET:HB2	2.44	0.57
2:M:355:VAL:HG23	2:M:372:LEU:HB3	1.87	0.57
3:N:1314:LYS:CD	3:N:1314:LYS:H	2.18	0.57
5:P:88:ILE:O	5:P:92:PRO:HG3	2.04	0.57
1:L:154:GLU:OE1	3:N:840:LYS:HG3	2.05	0.57
2:C:395:LYS:O	2:C:397:GLU:HG2	2.04	0.57
5:F:393:THR:HG22	5:F:394:ARG:H	1.70	0.57
3:D:111:LYS:HE2	3:D:1452:ILE:HG12	1.86	0.57
2:M:838:LYS:HD3	2:M:846:LYS:NZ	2.18	0.57
3:N:579:ASP:O	3:N:583:ASP:N	2.34	0.57
2:M:269:LEU:HA	2:M:288:ARG:NE	2.14	0.57
2:C:549:PHE:HE2	2:C:887:GLU:CA	2.18	0.57
3:N:1383:ASP:HB2	3:N:1416:ALA:HB3	1.86	0.57
3:N:486:ARG:CZ	3:N:489:ARG:HD3	2.35	0.57
3:N:37:LEU:CD1	3:N:529:GLN:HE21	2.15	0.57
3:D:72:VAL:HG22	3:D:73:CYS:N	2.19	0.57
1:K:24:VAL:HG22	1:K:196:THR:HB	1.87	0.57
3:D:1267:ARG:NH2	3:D:1271:LYS:HE3	2.19	0.57
2:M:184:MET:HE1	2:M:186:VAL:N	2.19	0.57
3:N:1113:GLY:O	3:N:1114:THR:C	2.44	0.57
3:D:790:TYR:O	3:D:791:TYR:C	2.42	0.56
3:D:907:GLU:HG3	3:D:1026:SER:HA	1.87	0.56
5:P:171:LYS:O	5:P:175:HIS:HD2	1.88	0.56
5:P:101:GLU:HG2	5:P:102:LEU:N	2.20	0.56
2:C:469:THR:HG23	2:C:471:TYR:HE1	1.69	0.56
3:D:564:GLU:O	3:D:566:ILE:N	2.37	0.56
3:N:86:ARG:O	3:N:522:PRO:HD2	2.05	0.56
3:N:600:LEU:CD2	3:N:600:LEU:H	2.12	0.56
5:P:225:GLU:HG2	5:P:226:LYS:NZ	2.20	0.56
2:M:490:GLU:O	2:M:493:ARG:HB2	2.05	0.56
3:D:1258:ARG:C	3:D:1260:ILE:N	2.56	0.56
2:M:640:ARG:HB2	2:M:642:ARG:HH12	1.69	0.56
5:P:203:THR:HG22	5:P:204:GLY:N	2.20	0.56
3:D:498:VAL:HG13	3:D:499:VAL:N	2.19	0.56
5:P:286:PRO:HB3	5:P:290:GLU:HB3	1.86	0.56
1:L:142:VAL:HG23	1:L:142:VAL:O	2.05	0.56
3:D:571:LYS:HB2	3:D:571:LYS:NZ	2.20	0.56
2:C:433:THR:O	2:C:435:TYR:N	2.36	0.56
1:L:58:ILE:HG22	1:L:59:GLU:HG2	1.87	0.56
3:N:55:ASP:CB	3:N:82:LYS:HE2	2.32	0.56
3:N:583:ASP:OD1	3:N:604:THR:HB	2.05	0.56
5:P:214:GLN:HA	5:P:217:ASN:ND2	2.17	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:M:680:ASP:C	2:M:682:TYR:H	2.08	0.56
2:C:55:GLU:HA	2:C:64:LEU:O	2.05	0.56
1:B:108:GLU:O	1:B:110:LYS:HG3	2.05	0.56
3:D:1258:ARG:HH21	3:D:1351:GLU:HG2	1.69	0.56
2:C:78:PHE:HB3	2:C:79:PRO:HD2	1.88	0.56
3:D:36:THR:O	3:D:38:LYS:N	2.38	0.56
1:K:39:PRO:O	1:K:43:ILE:HG12	2.04	0.56
3:N:233:LYS:NZ	3:N:233:LYS:HB3	2.20	0.56
3:D:1031:ASN:HB3	3:D:1034:GLN:NE2	2.20	0.56
2:M:742:VAL:HG12	2:M:743:VAL:N	2.20	0.56
1:B:197:LEU:O	1:B:197:LEU:HD23	2.05	0.56
2:C:337:GLY:O	2:C:340:MET:N	2.37	0.56
3:D:111:LYS:CE	3:D:1452:ILE:HG12	2.35	0.56
3:D:650:LEU:HD12	3:D:657:LEU:HD22	1.88	0.56
3:D:688:TRP:HA	3:D:688:TRP:CE3	2.40	0.56
3:D:85:VAL:HG12	3:D:89:ARG:NE	2.21	0.56
3:D:218:LYS:HD3	3:D:370:ALA:HB1	1.87	0.56
3:D:221:ALA:H	3:D:367:ILE:HG22	1.69	0.56
3:N:436:GLU:HB2	3:N:445:ARG:CB	2.34	0.56
2:C:1081:VAL:HB	2:C:1086:ARG:NH2	2.21	0.56
3:D:704:ARG:HE	3:D:705:ALA:HB3	1.70	0.56
5:P:94:LEU:HD13	5:P:95:THR:N	2.20	0.56
3:D:566:ILE:HG13	5:F:192:LEU:HD11	1.87	0.56
3:N:1394:VAL:HB	3:N:1397:LYS:HD2	1.87	0.56
2:M:575:GLN:NE2	2:M:900:ARG:HH22	2.03	0.56
3:N:82:LYS:C	3:N:84:ILE:H	2.09	0.56
2:M:78:PHE:HB3	2:M:79:PRO:HD2	1.87	0.56
3:N:455:ARG:HH22	5:P:140:ARG:HB3	1.69	0.56
3:N:96:ALA:N	3:N:551:ASN:ND2	2.52	0.56
2:M:1047:HIS:CE1	3:N:754:PHE:CD1	2.94	0.56
3:N:785:ILE:HG13	3:N:939:PHE:CE2	2.40	0.56
3:D:1376:MET:C	3:D:1378:TYR:H	2.05	0.56
1:B:219:ARG:NH2	1:B:220:GLU:HB2	2.18	0.56
1:A:30:ARG:HA	2:C:938:LYS:NZ	2.20	0.56
2:C:861:LEU:O	2:C:863:ASP:O	2.23	0.56
2:C:126:SER:HB3	2:C:395:LYS:NZ	2.20	0.56
2:C:691:SER:CB	2:C:868:ASP:HA	2.34	0.56
5:F:95:THR:HG23	5:F:234:LYS:NZ	2.21	0.56
5:P:234:LYS:HE3	5:P:236:SER:CB	2.35	0.56
3:D:970:LYS:HD2	3:D:995:LEU:HD13	1.88	0.56
3:N:30:GLU:HG3	3:N:41:ARG:CD	2.35	0.56
2:C:374:ASN:O	2:C:377:PRO:HD2	2.05	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:34:TYR:HE2	5:F:260:ILE:HG13	1.70	0.56
3:N:1161:GLU:CG	3:N:1164:ARG:HB2	2.34	0.56
3:D:860:LEU:HB2	3:D:861:GLN:NE2	2.19	0.56
3:N:970:LYS:HD2	3:N:995:LEU:HD13	1.86	0.56
2:M:34:VAL:HB	2:M:38:LYS:HG3	1.87	0.56
1:A:38:ASN:HB3	1:A:39:PRO:HD3	1.85	0.56
2:C:384:GLU:O	2:C:384:GLU:HG2	2.05	0.56
2:M:434:HIS:O	2:M:435:TYR:HB2	2.05	0.56
5:F:321:ILE:HD13	5:F:322:GLY:H	1.69	0.56
5:F:333:ILE:HD12	5:F:333:ILE:H	1.70	0.56
2:C:200:LEU:CD2	2:C:300:ASP:HB3	2.31	0.56
3:D:1131:SER:O	3:D:1132:LEU:C	2.44	0.56
3:D:770:LEU:HD23	3:D:777:PRO:CA	2.27	0.56
2:M:26:TYR:CE2	2:M:30:LEU:HD21	2.40	0.56
3:D:572:ARG:HH21	5:F:83:GLN:NE2	2.03	0.56
5:F:188:ILE:HD13	5:F:221:ILE:HG12	1.87	0.56
3:N:127:LEU:O	3:N:127:LEU:HD12	2.04	0.56
5:P:226:LYS:HG3	5:P:242:TRP:CZ2	2.40	0.56
3:N:231:VAL:O	3:N:378:ILE:HD13	2.06	0.56
3:N:625:TYR:OH	3:N:655:PRO:HG2	2.05	0.56
2:M:1044:GLY:N	3:N:762:GLN:HE22	2.02	0.56
2:M:680:ASP:O	2:M:682:TYR:N	2.39	0.56
3:N:194:GLY:N	3:N:206:ARG:HA	2.17	0.56
1:A:88:ARG:HH12	1:A:90:LEU:HD21	1.70	0.56
1:B:112:ARG:NH1	1:B:112:ARG:HB3	2.20	0.56
1:L:156:HIS:CD2	1:L:157:GLY:N	2.69	0.56
3:N:426:LYS:HA	3:N:434:ARG:CD	2.35	0.56
2:M:960:GLU:O	2:M:962:GLN:N	2.37	0.56
3:N:1087:ARG:HD2	3:N:1087:ARG:N	2.21	0.56
2:C:804:VAL:HG23	2:C:824:ARG:HB2	1.87	0.56
1:K:13:VAL:CG1	1:K:14:ARG:N	2.67	0.56
3:D:9:ARG:NH1	3:D:11:ALA:HB2	2.21	0.56
3:D:1167:SER:O	3:D:1171:VAL:HG23	2.06	0.56
3:D:117:ASP:OD1	3:D:495:ARG:NE	2.39	0.56
2:C:944:LEU:HD21	2:C:963:LEU:CD2	2.35	0.56
3:N:930:LEU:O	3:N:933:ALA:HB3	2.05	0.56
3:D:914:LEU:O	3:D:914:LEU:HD23	2.06	0.56
3:D:785:ILE:HG23	3:D:938:GLY:HA3	1.86	0.56
3:N:893:GLU:O	3:N:896:ALA:HB3	2.04	0.56
4:E:54:LEU:HA	4:E:58:PRO:HG2	1.87	0.56
3:N:219:GLU:O	3:N:370:ALA:HB2	2.04	0.56
3:N:654:LYS:HB2	3:N:655:PRO:HD3	1.88	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:135:LEU:HD12	3:N:148:GLU:HB2	1.87	0.56
3:N:917:GLN:O	3:N:918:ALA:C	2.44	0.56
4:O:80:VAL:HG13	4:O:81:PRO:HD2	1.88	0.56
2:C:842:ARG:NH2	2:C:887:GLU:OE1	2.37	0.56
3:N:1027:GLY:O	3:N:1028:ALA:O	2.22	0.56
2:M:674:VAL:HG11	2:M:992:MET:HE1	1.87	0.56
3:N:1115:THR:CB	3:N:1151:ARG:HH22	2.19	0.56
3:D:1066:THR:O	3:D:1070:TYR:HB2	2.05	0.56
3:N:1459:LEU:HD12	3:N:1470:ARG:HH11	1.69	0.56
3:D:36:THR:C	3:D:38:LYS:H	2.08	0.56
3:D:1161:GLU:O	3:D:1164:ARG:HB2	2.04	0.56
3:N:1302:GLU:O	3:N:1303:TYR:CD2	2.59	0.56
3:D:996:TRP:CD2	3:D:1056:PRO:HG2	2.40	0.56
3:D:984:THR:HG23	3:D:987:GLU:H	1.69	0.56
2:C:24:GLU:O	2:C:27:ARG:HB3	2.06	0.56
2:C:923:GLU:O	2:C:927:GLY:N	2.38	0.56
2:C:837:ASP:OD1	2:C:996:LYS:HG3	2.04	0.56
2:C:854:PRO:HB2	2:C:856:GLU:OE2	2.06	0.56
2:C:435:TYR:HD1	3:D:1071:PHE:CD2	2.23	0.56
3:N:44:LEU:HB3	3:N:525:ARG:HH21	1.69	0.56
2:C:480:THR:HG22	2:C:481:ASP:H	1.70	0.56
3:N:1148:VAL:HG12	3:N:1189:ARG:HG3	1.87	0.56
2:M:551:GLU:CD	2:M:551:GLU:N	2.53	0.56
2:M:102:HIS:NE2	2:M:365:ASP:OD2	2.39	0.56
3:D:195:VAL:HB	3:D:205:TYR:HB2	1.86	0.56
2:C:158:TYR:CE1	2:C:314:THR:HA	2.39	0.56
3:N:1459:LEU:HD11	3:N:1468:LEU:CD1	2.35	0.56
2:C:603:VAL:HG21	2:C:643:VAL:CG1	2.35	0.56
3:D:1102:THR:HG22	3:D:1222:GLY:CA	2.35	0.56
1:A:142:VAL:O	1:A:142:VAL:HG23	2.04	0.56
5:F:244:ARG:HG3	5:F:244:ARG:HH11	1.70	0.56
3:D:1396:GLU:O	3:D:1399:ASP:N	2.39	0.56
3:D:525:ARG:N	3:D:526:PRO:CD	2.69	0.56
3:D:581:LEU:O	3:D:603:LEU:HG	2.05	0.56
2:C:1021:LEU:HG	2:C:1022:GLY:N	2.21	0.56
3:D:915:VAL:O	3:D:916:TYR:C	2.42	0.56
3:D:116:LEU:O	3:D:118:LEU:N	2.31	0.56
3:D:919:PHE:C	3:D:919:PHE:CD2	2.79	0.56
2:C:916:GLU:OE1	2:C:917:LEU:N	2.38	0.56
2:C:967:PHE:CD1	2:C:972:VAL:HG12	2.41	0.56
2:M:207:LEU:HD13	2:M:221:LEU:HD21	1.87	0.56
2:M:675:ALA:HA	2:M:989:VAL:HG12	1.88	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:L:221:HIS:HA	1:L:224:TYR:CE2	2.41	0.56
3:D:416:ALA:H	3:D:417:PRO:HD2	1.70	0.56
2:C:148:PHE:HB3	2:C:313:LEU:CD2	2.35	0.56
2:C:195:LEU:O	2:C:199:VAL:HG23	2.06	0.56
3:N:187:LYS:NZ	3:N:213:VAL:HG12	2.19	0.56
2:C:902:ILE:HG22	2:C:904:PRO:HD3	1.86	0.56
3:D:694:VAL:O	3:D:695:ILE:HD12	2.05	0.56
1:B:89:PHE:HZ	1:B:144:VAL:HG12	1.70	0.56
1:K:215:VAL:HG23	1:K:216:GLU:H	1.69	0.56
3:N:1141:GLU:HB3	3:N:1168:MET:HE1	1.87	0.56
3:N:177:ALA:HB1	3:N:199:LEU:HD13	1.88	0.56
2:C:854:PRO:CB	2:C:856:GLU:OE2	2.54	0.56
3:N:520:LEU:HD12	3:N:521:PRO:HD2	1.86	0.56
3:D:1046:GLN:CA	3:D:1052:THR:HA	2.32	0.56
2:M:89:THR:HG23	2:M:129:ILE:HA	1.88	0.56
5:P:138:SER:H	5:P:140:ARG:CZ	2.18	0.56
3:N:556:LYS:HZ1	5:P:218:GLN:HE22	1.53	0.56
5:P:222:ARG:O	5:P:225:GLU:HB3	2.06	0.56
3:D:1146:GLY:O	3:D:1207:TYR:HB2	2.06	0.56
2:C:106:GLY:O	2:C:107:LEU:HD23	2.05	0.56
1:A:91:ASN:H	1:A:94:LEU:HD12	1.70	0.56
2:M:535:SER:OG	2:M:536:PRO:HD2	2.05	0.56
2:C:54:ILE:HG23	2:C:54:ILE:O	2.06	0.56
3:D:951:ILE:O	3:D:951:ILE:HD13	2.05	0.56
2:M:695:LEU:HD21	2:M:833:LEU:O	2.06	0.56
3:N:996:TRP:CD2	3:N:1056:PRO:HG2	2.41	0.56
2:C:776:SER:OG	2:C:780:GLU:HB3	2.05	0.56
3:D:424:GLY:N	3:D:437:VAL:HG23	2.21	0.56
3:D:916:TYR:CE2	3:D:920:LEU:HD13	2.41	0.56
5:F:151:LEU:HD12	5:F:154:LYS:HB3	1.88	0.56
3:D:368:VAL:HG12	3:D:369:ALA:H	1.70	0.56
3:N:1335:LEU:HD22	3:N:1344:VAL:HG22	1.87	0.56
3:D:764:LEU:HB3	3:D:767:HIS:CD2	2.31	0.56
1:B:219:ARG:HH21	1:B:220:GLU:CB	2.15	0.56
2:M:432:ARG:CD	3:N:1048:PRO:HG2	2.36	0.56
2:C:333:ILE:CG1	2:C:467:ILE:HD11	2.36	0.56
3:D:387:LEU:HD23	3:D:388:HIS:H	1.70	0.56
3:N:560:GLN:NE2	3:N:560:GLN:HA	2.21	0.56
3:D:644:LEU:C	3:D:721:VAL:HG22	2.26	0.56
2:C:204:GLN:CD	2:C:222:MET:HA	2.26	0.56
3:D:984:THR:HG22	3:D:987:GLU:CG	2.36	0.56
3:N:1141:GLU:HB3	3:N:1168:MET:CE	2.36	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:619:LEU:O	3:N:619:LEU:HD23	2.06	0.56
2:C:654:LEU:HG	2:C:654:LEU:O	2.05	0.56
2:M:892:LEU:O	2:M:895:TYR:HB3	2.06	0.56
5:F:411:HIS:CE1	5:F:412:GLU:HG2	2.41	0.56
2:C:595:LEU:HD21	2:C:623:TYR:HB3	1.88	0.56
3:N:887:ALA:HB1	3:N:893:GLU:CG	2.21	0.56
3:D:568:ARG:HA	3:D:571:LYS:HZ2	1.67	0.56
3:D:601:ARG:HH12	3:D:611:GLN:HB2	1.69	0.56
5:P:163:LEU:HD13	5:P:174:LEU:HD21	1.88	0.56
3:N:141:ILE:HD11	3:N:450:TYR:H	1.69	0.56
3:N:1115:THR:HB	3:N:1151:ARG:HH22	1.69	0.56
3:N:1086:LEU:HD23	3:N:1238:MET:SD	2.45	0.56
3:N:1236:LEU:HD11	3:N:1356:TYR:CE2	2.41	0.56
3:N:795:VAL:HG23	3:N:879:ARG:NH1	2.20	0.56
3:D:1256:LEU:HB3	3:D:1257:PRO:HD3	1.87	0.56
4:E:61:GLU:C	4:E:61:GLU:CD	2.65	0.56
3:N:1474:ALA:O	3:N:1475:GLY:C	2.44	0.56
5:P:94:LEU:HB3	5:P:98:GLU:H	1.72	0.55
5:F:79:ASP:O	5:F:83:GLN:N	2.35	0.55
2:M:564:MET:O	2:M:567:GLN:HB2	2.05	0.55
3:N:95:LEU:HD12	3:N:515:GLU:CA	2.36	0.55
5:P:214:GLN:NE2	5:P:214:GLN:HA	2.21	0.55
5:F:141:VAL:O	5:F:145:PRO:HD2	2.06	0.55
3:N:936:TYR:O	3:N:937:TYR:C	2.42	0.55
3:N:485:SER:O	3:N:487:ALA:N	2.40	0.55
3:N:399:ARG:O	3:N:443:VAL:HA	2.06	0.55
1:B:151:VAL:HB	1:B:169:ALA:CB	2.35	0.55
1:A:170:VAL:CG1	2:C:696:LYS:HD3	2.36	0.55
2:C:139:GLN:O	2:C:333:ILE:HA	2.06	0.55
2:M:640:ARG:NH1	2:M:640:ARG:HB3	2.20	0.55
2:M:695:LEU:HD12	2:M:852:ILE:HG21	1.87	0.55
5:F:87:GLU:HA	5:F:90:GLN:NE2	2.21	0.55
3:D:112:ILE:HD11	3:D:124:GLU:CG	2.36	0.55
1:A:42:ARG:HH12	2:C:978:ARG:HA	1.71	0.55
2:C:468:ARG:HD3	2:C:485:TYR:O	2.05	0.55
3:N:1377:LYS:O	3:N:1395:LEU:HB2	2.06	0.55
2:M:1007:ALA:HB1	3:N:651:GLU:HB3	1.88	0.55
3:N:760:ARG:HH21	4:O:3:GLU:CD	2.09	0.55
3:N:1372:VAL:C	3:N:1375:MET:HG3	2.25	0.55
2:M:207:LEU:HD22	2:M:221:LEU:HD22	1.89	0.55
3:D:645:PRO:O	3:D:648:MET:N	2.39	0.55
2:M:108:ILE:HD11	2:M:365:ASP:OD2	2.06	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:40:GLU:O	3:N:41:ARG:O	2.23	0.55
3:N:18:ILE:HG21	3:N:516:ALA:O	2.07	0.55
2:M:1012:PRO:O	2:M:1013:TYR:CG	2.59	0.55
3:D:1122:LEU:HD11	3:D:1186:VAL:HG23	1.88	0.55
5:P:282:LEU:C	5:P:284:ARG:H	2.10	0.55
3:N:843:PHE:CD1	3:N:849:ALA:HA	2.42	0.55
2:C:1019:GLN:HA	2:C:1057:SER:O	2.06	0.55
2:C:679:PHE:HE2	2:C:853:LEU:HD21	1.72	0.55
3:D:902:LEU:HD23	3:D:902:LEU:H	1.71	0.55
3:D:112:ILE:O	3:D:116:LEU:HB2	2.06	0.55
2:M:3:ILE:HD11	2:M:900:ARG:HB2	1.88	0.55
2:M:890:LEU:HD11	2:M:901:TYR:CE2	2.42	0.55
3:D:1094:LEU:O	3:D:1096:ARG:N	2.38	0.55
2:M:268:ASP:O	2:M:288:ARG:HG2	2.05	0.55
1:A:26:GLU:HB2	1:A:27:PRO:HA	1.89	0.55
1:A:198:ARG:HD3	1:A:200:TRP:HH2	1.71	0.55
2:C:863:ASP:CG	2:C:864:GLY:N	2.58	0.55
2:M:738:ASP:CB	2:M:744:ARG:HB3	2.35	0.55
2:M:397:GLU:CG	2:M:632:ASN:H	2.20	0.55
3:D:1122:LEU:HD12	3:D:1122:LEU:N	2.22	0.55
3:D:1001:GLU:O	3:D:1004:THR:HB	2.06	0.55
2:C:437:ARG:NH2	2:C:491:GLU:OE2	2.39	0.55
2:C:203:ASP:OD1	2:C:206:THR:HG22	2.06	0.55
3:D:709:HIS:O	3:D:712:GLY:N	2.37	0.55
2:C:338:GLU:HA	2:C:341:THR:CG2	2.36	0.55
3:D:841:TYR:HB3	3:D:843:PHE:CZ	2.42	0.55
3:N:1384:PRO:HB3	3:N:1387:SER:O	2.05	0.55
3:N:1155:VAL:HG21	3:N:1174:LEU:HD21	1.87	0.55
2:M:1101:THR:HB	3:N:5:VAL:HG13	1.89	0.55
3:N:1365:ASP:O	3:N:1366:LYS:C	2.45	0.55
5:F:96:LEU:O	5:F:100:VAL:HG23	2.06	0.55
3:N:585:GLY:O	3:N:587:ARG:N	2.38	0.55
3:N:169:TYR:N	3:N:170:PRO:HD3	2.21	0.55
2:M:589:ARG:HD3	2:M:596:TYR:CZ	2.42	0.55
2:C:923:GLU:O	2:C:927:GLY:HA3	2.06	0.55
2:M:673:LEU:HD13	2:M:895:TYR:CZ	2.42	0.55
3:D:475:LYS:HA	3:D:478:LEU:HD12	1.86	0.55
3:N:573:MET:SD	5:P:210:LEU:HB3	2.47	0.55
2:C:233:GLU:HA	2:C:236:ILE:HD12	1.88	0.55
5:P:319:THR:HG22	5:P:320:PRO:HD2	1.88	0.55
2:C:154:ARG:O	2:C:156:GLY:N	2.38	0.55
3:D:1432:LYS:HD2	3:D:1433:SER:H	1.70	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:525:ARG:HA	3:D:538:SER:OG	2.07	0.55
2:M:157:ARG:CZ	2:M:314:THR:HA	2.36	0.55
3:D:704:ARG:CD	3:D:705:ALA:H	2.19	0.55
3:N:705:ALA:HB3	3:N:706:PRO:CD	2.31	0.55
2:C:694:LEU:CD2	2:C:697:ARG:HH21	2.11	0.55
5:P:138:SER:C	5:P:140:ARG:N	2.60	0.55
5:P:367:MET:HG2	5:P:371:LEU:HG	1.88	0.55
3:D:628:ARG:O	3:D:629:SER:HB2	2.06	0.55
2:C:102:HIS:C	2:C:104:ASP:H	2.10	0.55
3:N:475:LYS:HA	3:N:478:LEU:HD12	1.88	0.55
3:N:397:LYS:NZ	3:N:399:ARG:HH21	2.05	0.55
5:F:369:LEU:CD2	5:F:373:LYS:HE2	2.37	0.55
3:N:376:GLU:CD	3:N:376:GLU:H	2.10	0.55
3:D:388:HIS:HE2	5:F:94:LEU:HG	1.72	0.55
3:N:1018:ASN:O	3:N:1022:VAL:HG23	2.05	0.55
3:D:168:THR:HG22	3:D:170:PRO:HD3	1.88	0.55
2:C:31:GLN:NE2	2:C:40:GLU:HB2	2.22	0.55
2:C:252:LYS:HE2	2:C:296:GLY:HA3	1.89	0.55
1:L:184:THR:O	1:L:192:LEU:HB2	2.06	0.55
2:M:561:GLY:C	2:M:563:ASN:H	2.09	0.55
2:M:654:LEU:HD11	2:M:657:ASP:HA	1.87	0.55
2:C:1097:LEU:HD23	3:D:101:HIS:HE1	1.72	0.55
1:K:169:ALA:HB1	1:K:171:PHE:CE1	2.42	0.55
3:N:126:VAL:HG11	3:N:152:LEU:CD1	2.34	0.55
3:N:483:HIS:HB2	3:N:484:PRO:CD	2.36	0.55
2:M:99:GLN:NE2	2:M:101:ILE:HD11	2.21	0.55
3:D:387:LEU:CD1	5:F:97:GLU:H	2.20	0.55
2:C:905:ILE:CG2	2:C:906:PHE:N	2.70	0.55
5:F:358:LEU:O	5:F:358:LEU:HD23	2.06	0.55
5:P:163:LEU:HD13	5:P:174:LEU:CG	2.37	0.55
3:N:701:LEU:HD23	3:N:713:ILE:CG2	2.36	0.55
3:N:936:TYR:O	3:N:938:GLY:N	2.39	0.55
3:N:1289:LYS:HG2	3:N:1306:PRO:HA	1.89	0.55
3:D:1078:ARG:C	3:D:1080:GLY:H	2.09	0.55
2:M:458:TYR:HB3	2:M:470:PRO:CG	2.35	0.55
2:M:458:TYR:CB	2:M:470:PRO:HG2	2.36	0.55
2:C:896:PHE:CE2	2:C:925:TYR:HB2	2.41	0.55
1:K:63:HIS:CD2	1:K:66:SER:HG	2.24	0.55
2:C:238:LEU:HA	2:C:241:LEU:HB2	1.88	0.55
1:K:43:ILE:HD11	1:L:35:THR:HG21	1.87	0.55
5:P:346:THR:HB	5:P:347:GLN:OE1	2.06	0.55
3:N:527:MET:HE3	3:N:537:THR:HB	1.87	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:P:280:GLN:HG2	5:P:280:GLN:O	2.06	0.55
1:B:25:LEU:HD21	1:B:28:LEU:HD11	1.88	0.55
2:C:1012:PRO:O	2:C:1013:TYR:CD2	2.59	0.55
3:D:1147:ARG:CB	3:D:1188:VAL:HG21	2.37	0.55
3:D:1346:ARG:HA	3:D:1346:ARG:HH11	1.71	0.55
3:D:1372:VAL:HA	3:D:1375:MET:HE3	1.87	0.55
3:N:1258:ARG:CZ	3:N:1262:LEU:HD11	2.37	0.55
5:P:80:PRO:HA	5:P:83:GLN:HB2	1.87	0.55
3:N:1273:VAL:HG22	3:N:1326:THR:OG1	2.06	0.55
3:N:1462:LEU:CD2	3:N:1473:PRO:HD2	2.36	0.55
3:N:819:GLY:O	3:N:822:ALA:HB3	2.07	0.55
2:M:1005:MET:CE	3:N:648:MET:HB2	2.36	0.55
3:N:18:ILE:HD12	3:N:518:PRO:HG3	1.88	0.55
2:C:724:ARG:HG2	2:C:724:ARG:O	2.06	0.55
2:M:517:ARG:O	2:M:519:GLY:N	2.40	0.55
2:C:1004:LYS:HE3	2:C:1027:PHE:HE1	1.71	0.55
2:C:1091:GLU:HA	3:D:520:LEU:HD13	1.89	0.55
2:M:1054:THR:CB	2:M:1079:PRO:HB3	2.37	0.55
2:C:472:ARG:HD2	2:C:480:THR:O	2.07	0.55
2:C:697:ARG:HB2	2:C:699:PHE:HD1	1.72	0.55
3:N:676:MET:O	3:N:676:MET:SD	2.65	0.55
3:N:690:ALA:O	3:N:694:VAL:HG23	2.07	0.55
3:D:768:ASN:ND2	3:D:1210:SER:OG	2.40	0.55
3:N:918:ALA:HA	3:N:922:LEU:HD12	1.89	0.55
2:C:1035:MET:HG2	2:C:1038:TRP:CZ3	2.42	0.55
3:D:1159:ARG:HH11	3:D:1159:ARG:HG2	1.71	0.55
2:C:1050:GLN:NE2	3:D:1469:GLY:O	2.30	0.55
3:N:1314:LYS:HZ2	3:N:1314:LYS:H	1.55	0.55
3:N:795:VAL:HG23	3:N:879:ARG:HH12	1.72	0.55
5:F:194:LEU:HD13	5:F:194:LEU:C	2.28	0.55
3:N:702:LEU:HG	3:N:745:MET:HE2	1.88	0.55
3:N:804:LEU:O	3:N:831:GLY:HA2	2.06	0.55
3:N:740:PHE:CD1	3:N:740:PHE:N	2.74	0.55
2:M:1054:THR:CG2	2:M:1079:PRO:HB3	2.36	0.55
1:K:147:GLY:HA3	1:K:171:PHE:CD2	2.41	0.55
3:N:550:ARG:HG3	3:N:550:ARG:NH1	2.22	0.55
5:P:93:LEU:HG	5:P:190:ALA:HB1	1.89	0.55
5:P:350:LEU:HD12	5:P:422:LEU:HB2	1.89	0.55
2:C:690:ILE:HG21	2:C:833:LEU:CD2	2.36	0.55
2:M:1043:TYR:O	2:M:1045:ALA:N	2.40	0.55
2:M:486:MET:CG	2:M:490:GLU:HB3	2.37	0.55
3:D:179:VAL:HG11	3:D:217:LYS:HE3	1.89	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:F:371:LEU:HA	5:F:375:LEU:HB2	1.88	0.55
3:N:79:GLU:HG2	3:N:80:VAL:H	1.72	0.55
3:D:679:ARG:NH2	3:D:681:ARG:NE	2.51	0.55
2:M:734:LEU:HD13	2:M:737:LEU:HD12	1.87	0.55
2:M:292:ARG:HG2	2:M:297:GLU:O	2.07	0.55
2:M:984:GLU:OE1	3:N:945:SER:HA	2.07	0.55
1:L:25:LEU:CD2	1:L:28:LEU:HD11	2.37	0.55
3:D:396:VAL:HG22	3:D:447:VAL:HB	1.90	0.55
1:A:227:ASN:HD22	1:A:227:ASN:N	2.05	0.55
2:M:976:ASP:O	2:M:978:ARG:N	2.40	0.55
3:N:181:ASP:OD2	3:N:198:ARG:HB2	2.07	0.55
4:E:54:LEU:HA	4:E:58:PRO:CG	2.36	0.54
2:C:1036:GLU:HG2	3:D:703:ASN:OD1	2.06	0.54
3:N:1269:LYS:HA	3:N:1269:LYS:HE2	1.89	0.54
2:M:1047:HIS:CG	3:N:754:PHE:CD2	2.95	0.54
3:N:132:TYR:CD2	3:N:154:THR:HG22	2.41	0.54
2:C:949:LYS:HZ2	3:D:859:ASP:CG	2.10	0.54
2:M:375:SER:O	2:M:379:GLU:HB2	2.06	0.54
2:M:432:ARG:NH1	3:N:1053:PHE:CZ	2.75	0.54
2:M:730:SER:OG	2:M:731:GLU:N	2.39	0.54
2:C:139:GLN:HG2	2:C:140:ILE:N	2.21	0.54
2:C:332:ARG:CG	2:C:465:GLY:HA3	2.35	0.54
1:K:63:HIS:HD2	1:K:65:PHE:H	1.55	0.54
3:N:1228:SER:C	3:N:1229:ILE:HG13	2.27	0.54
3:N:1209:LEU:CD2	4:O:16:LYS:HD2	2.37	0.54
1:K:121:GLU:HG2	1:K:123:MET:SD	2.47	0.54
4:E:79:LEU:HG	4:E:80:VAL:HG23	1.89	0.54
3:N:1102:THR:O	3:N:1102:THR:HG22	2.07	0.54
3:D:457:GLY:CA	3:D:568:ARG:HH12	2.19	0.54
3:D:609:GLY:HA2	3:D:613:ARG:HD2	1.90	0.54
2:M:578:VAL:HG11	2:M:991:GLN:HB3	1.88	0.54
5:F:214:GLN:HA	5:F:214:GLN:OE1	2.06	0.54
5:P:76:SER:O	5:P:79:ASP:N	2.37	0.54
5:P:358:LEU:HD21	5:P:370:LYS:NZ	2.22	0.54
2:M:516:ARG:NH2	3:N:1068:LEU:HB2	2.21	0.54
3:N:1495:ILE:HD12	4:O:88:GLU:HG3	1.90	0.54
2:M:282:GLY:HA2	2:M:308:ARG:HH21	1.71	0.54
1:A:152:PRO:HB2	1:A:155:LYS:HB2	1.90	0.54
3:D:645:PRO:O	3:D:646:LYS:C	2.45	0.54
3:N:976:GLN:HA	3:N:979:GLU:CG	2.37	0.54
2:M:962:GLN:O	2:M:964:LYS:N	2.40	0.54
3:D:1290:LEU:HD23	3:D:1291:SER:N	2.22	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:573:ARG:O	2:C:574:ALA:O	2.25	0.54
1:B:25:LEU:HD22	1:B:195:LEU:HD23	1.88	0.54
3:D:569:ASN:O	3:D:569:ASN:ND2	2.39	0.54
2:M:921:ALA:O	2:M:924:VAL:N	2.41	0.54
3:D:813:LEU:O	3:D:817:GLU:HB2	2.06	0.54
1:L:73:GLU:HG3	1:L:130:ALA:CB	2.37	0.54
3:D:85:VAL:O	3:D:89:ARG:HG3	2.07	0.54
3:D:886:VAL:HG11	3:D:914:LEU:HD21	1.89	0.54
3:N:1171:VAL:HG12	3:N:1171:VAL:O	2.08	0.54
2:C:290:LEU:HB3	2:C:302:VAL:CG2	2.37	0.54
3:N:583:ASP:OD1	3:N:604:THR:HG21	2.07	0.54
1:B:53:VAL:HG13	1:B:142:VAL:HB	1.90	0.54
3:N:699:VAL:CG1	3:N:717:GLN:HG2	2.37	0.54
2:M:1044:GLY:N	3:N:762:GLN:NE2	2.56	0.54
3:N:918:ALA:O	3:N:922:LEU:N	2.39	0.54
3:D:422:ALA:HB3	3:D:427:VAL:HG13	1.88	0.54
1:A:146:ARG:HD3	1:A:146:ARG:O	2.07	0.54
2:C:682:TYR:HA	3:D:635:PRO:HG2	1.89	0.54
2:M:116:GLY:HA3	2:M:378:LEU:HD23	1.88	0.54
2:C:1067:TYR:O	2:C:1070:ILE:HB	2.06	0.54
5:F:386:VAL:C	5:F:388:ALA:H	2.10	0.54
3:D:752:SER:C	3:D:754:PHE:H	2.11	0.54
3:N:1155:VAL:HG13	3:N:1183:ILE:HD11	1.88	0.54
3:N:1156:LEU:HG	3:N:1182:GLU:OE2	2.07	0.54
3:D:1426:LYS:O	3:D:1428:ALA:N	2.40	0.54
1:L:223:THR:C	1:L:225:PHE:H	2.10	0.54
2:C:926:PHE:CD1	2:C:929:ARG:HG3	2.43	0.54
2:M:184:MET:SD	2:M:191:PHE:CZ	3.00	0.54
2:M:616:GLU:OE1	2:M:616:GLU:HA	2.08	0.54
5:F:256:ARG:NH2	5:F:258:ILE:O	2.41	0.54
2:C:424:GLY:O	2:C:427:VAL:N	2.40	0.54
3:D:229:ALA:O	3:D:236:TYR:HB2	2.08	0.54
3:D:932:ASP:HA	3:D:935:LYS:HB3	1.88	0.54
3:D:152:LEU:CD2	3:D:152:LEU:H	2.03	0.54
2:C:918:LEU:HD23	2:C:967:PHE:O	2.07	0.54
3:N:1396:GLU:O	3:N:1399:ASP:HB2	2.08	0.54
3:D:869:MET:CE	3:D:894:LYS:HE3	2.37	0.54
2:C:842:ARG:NH2	2:C:887:GLU:CD	2.61	0.54
2:M:535:SER:OG	2:M:536:PRO:CD	2.55	0.54
2:M:962:GLN:O	2:M:965:GLU:N	2.40	0.54
2:C:728:HIS:HB3	2:C:729:LEU:CD2	2.38	0.54
1:L:153:ALA:HB2	1:L:168:ASP:N	2.22	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:M:398:THR:CG2	2:M:635:THR:HG21	2.37	0.54
3:D:1054:GLU:O	3:D:1056:PRO:HD3	2.07	0.54
1:L:176:ARG:HH22	3:N:884:ARG:HD3	1.72	0.54
3:D:554:LEU:C	3:D:554:LEU:HD13	2.28	0.54
3:D:554:LEU:O	3:D:554:LEU:HD13	2.07	0.54
3:N:533:GLY:HA3	5:P:309:LYS:HB3	1.89	0.54
2:M:283:ILE:HG22	2:M:284:ARG:HG3	1.89	0.54
3:D:1107:VAL:HG12	3:D:1217:ILE:HA	1.90	0.54
4:E:52:GLU:HA	4:E:52:GLU:OE2	2.07	0.54
2:C:328:LEU:HB2	2:C:433:THR:HG21	1.87	0.54
3:N:1065:LEU:HA	3:N:1069:GLU:OE2	2.08	0.54
2:M:405:ARG:CZ	2:M:566:THR:HG21	2.38	0.54
3:D:671:LYS:HE3	5:F:421:PHE:O	2.07	0.54
2:C:674:VAL:HG11	2:C:992:MET:HB2	1.90	0.54
3:D:9:ARG:HH12	3:D:11:ALA:HB2	1.72	0.54
1:L:64:GLU:O	1:L:76:VAL:HG22	2.07	0.54
5:P:276:ARG:HG3	5:P:276:ARG:NH1	2.23	0.54
2:M:904:PRO:HD2	2:M:908:GLY:CA	2.37	0.54
3:N:1159:ARG:HB2	3:N:1159:ARG:CZ	2.38	0.54
3:D:160:GLU:HG3	3:D:165:LYS:HA	1.90	0.54
1:B:174:VAL:HG13	1:B:200:TRP:O	2.07	0.54
3:D:1023:MET:HA	3:D:1028:ALA:HB3	1.89	0.54
3:D:218:LYS:HD3	3:D:370:ALA:C	2.27	0.54
5:P:105:LYS:HE3	5:P:179:GLU:CG	2.38	0.54
3:N:1057:VAL:HG13	3:N:1069:GLU:CG	2.38	0.54
2:C:1038:TRP:HH2	3:D:1096:ARG:HD3	1.73	0.54
3:N:1466:VAL:CG1	3:N:1467:ILE:N	2.70	0.54
2:C:548:PRO:CG	2:C:842:ARG:CZ	2.86	0.54
2:M:1037:VAL:HG12	2:M:1041:GLU:CD	2.27	0.54
3:D:377:VAL:HG22	3:D:382:GLU:OE2	2.08	0.54
3:D:377:VAL:CG1	3:D:383:GLY:H	2.21	0.54
2:M:949:LYS:HZ3	3:N:828:LYS:NZ	2.06	0.54
3:N:826:PRO:HD2	3:N:829:VAL:CG2	2.37	0.54
2:C:884:GLN:HG2	2:C:885:ILE:CD1	2.37	0.54
2:C:1101:THR:C	2:C:1102:LEU:HD12	2.28	0.54
5:P:377:ASP:CG	5:P:378:GLY:H	2.10	0.54
2:M:397:GLU:O	2:M:631:SER:HB2	2.08	0.54
3:D:996:TRP:CG	3:D:1056:PRO:HG2	2.42	0.54
4:O:62:THR:HG22	4:O:62:THR:O	2.07	0.54
3:N:887:ALA:CB	3:N:893:GLU:HG3	2.22	0.54
3:D:568:ARG:HA	3:D:571:LYS:HZ3	1.68	0.54
2:M:683:ASN:CB	2:M:687:ALA:O	2.49	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:1078:ARG:O	3:D:1080:GLY:N	2.41	0.54
3:D:480:GLU:O	3:D:484:PRO:HD2	2.08	0.54
3:N:441:ARG:HG2	3:N:442:ASN:H	1.73	0.54
1:K:180:GLN:O	1:K:195:LEU:HA	2.08	0.54
3:D:1481:VAL:O	3:D:1483:PHE:N	2.39	0.54
1:A:55:SER:HB2	1:A:158:ILE:CG2	2.36	0.54
3:D:79:GLU:O	3:D:80:VAL:HB	2.08	0.54
5:F:88:ILE:HD13	5:F:193:ARG:CB	2.36	0.54
1:L:44:LEU:HD11	1:L:199:ILE:CD1	2.37	0.54
2:C:495:THR:CG2	2:C:517:ARG:HE	2.21	0.54
3:D:889:ALA:HB1	3:D:930:LEU:HA	1.90	0.54
2:C:252:LYS:HD3	2:C:296:GLY:HA2	1.90	0.54
3:N:190:GLU:CD	3:N:190:GLU:H	2.11	0.54
3:D:976:GLN:C	3:D:978:TYR:H	2.11	0.54
1:L:121:GLU:HG2	1:L:122:ILE:N	2.23	0.54
2:M:74:GLY:O	2:M:76:PRO:HD3	2.08	0.54
3:N:32:ILE:HG22	3:N:33:ASN:N	2.22	0.54
3:N:421:LEU:HD12	3:N:435:VAL:HG11	1.89	0.54
2:C:205:GLU:HG3	2:C:206:THR:N	2.22	0.54
2:C:257:VAL:HG13	2:C:263:ASP:OD2	2.07	0.54
2:C:290:LEU:CD2	2:C:302:VAL:HG21	2.37	0.54
3:N:218:LYS:HB3	3:N:373:PRO:CA	2.38	0.54
2:M:1083:GLU:O	2:M:1087:VAL:CG2	2.50	0.54
1:L:137:ARG:HG2	1:L:137:ARG:NH1	2.22	0.54
3:N:658:LEU:O	3:N:661:MET:HB2	2.08	0.54
2:C:21:ILE:HG22	2:C:335:THR:HG22	1.89	0.54
1:A:85:LEU:HB2	1:A:127:LEU:HD21	1.90	0.54
2:M:218:VAL:HG12	2:M:222:MET:HG3	1.90	0.54
3:N:1271:LYS:HE3	3:N:1334:GLN:OE1	2.08	0.54
3:D:648:MET:O	3:D:652:LEU:HB2	2.08	0.54
3:D:858:VAL:HG12	3:D:859:ASP:O	2.06	0.54
1:L:158:ILE:HG22	1:L:159:LYS:N	2.21	0.54
3:N:1078:ARG:O	3:N:1079:LYS:C	2.45	0.54
3:D:387:LEU:HD13	5:F:97:GLU:CB	2.38	0.54
1:K:133:GLU:HG2	1:K:134:GLU:H	1.72	0.54
3:D:378:ILE:H	3:D:378:ILE:CD1	2.21	0.54
3:N:545:ARG:HB3	3:N:545:ARG:HH11	1.73	0.54
2:M:427:VAL:C	2:M:429:ASP:H	2.11	0.54
1:B:49:PRO:HA	1:B:147:GLY:O	2.07	0.54
3:N:490:ALA:O	3:N:494:LYS:HG3	2.07	0.54
3:D:1357:ARG:O	3:D:1359:GLN:N	2.40	0.54
3:D:890:VAL:HG23	3:D:890:VAL:O	2.07	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:897:TRP:CH2	3:D:902:LEU:HD11	2.43	0.54
3:N:1241:PHE:O	3:N:1257:PRO:HB3	2.07	0.54
1:L:137:ARG:HH22	1:L:139:ASN:ND2	2.05	0.54
3:N:657:LEU:HD13	3:N:691:LEU:HA	1.90	0.54
3:N:792:ILE:HD11	3:N:881:LEU:CD2	2.31	0.54
2:C:983:ILE:HG23	3:D:944:THR:HA	1.88	0.54
3:D:435:VAL:HA	3:D:445:ARG:O	2.08	0.54
1:A:153:ALA:O	1:A:155:LYS:N	2.41	0.54
1:B:151:VAL:CB	1:B:169:ALA:HB3	2.36	0.54
3:D:560:GLN:O	5:F:184:ARG:NH2	2.41	0.54
1:L:36:LEU:O	1:L:39:PRO:HD2	2.07	0.54
5:F:414:ARG:O	5:F:416:ARG:N	2.40	0.54
5:F:244:ARG:O	5:F:248:ASN:ND2	2.41	0.54
2:C:762:LYS:NZ	2:C:762:LYS:HB2	2.22	0.54
3:D:1081:GLY:C	3:D:1083:ASP:H	2.12	0.54
3:D:1038:LEU:O	3:D:1060:SER:HB2	2.08	0.54
2:C:1056:LYS:HB3	3:D:624:ASP:H	1.71	0.54
3:D:1109:GLU:OE1	3:D:1110:ALA:C	2.46	0.54
3:D:1357:ARG:C	3:D:1359:GLN:N	2.62	0.54
5:P:163:LEU:HD22	5:P:174:LEU:CG	2.26	0.54
3:N:1243:THR:OG1	3:N:1253:THR:HB	2.07	0.54
3:N:1256:LEU:O	3:N:1259:VAL:N	2.39	0.54
3:N:22:SER:OG	3:N:91:GLY:HA2	2.08	0.54
3:N:701:LEU:HD21	3:N:763:MET:HE2	1.90	0.54
3:N:759:ALA:O	3:N:763:MET:HB3	2.08	0.54
2:M:139:GLN:HG3	2:M:411:SER:O	2.08	0.54
3:N:786:ILE:HG21	3:N:1028:ALA:H	1.73	0.54
3:D:149:LYS:H	3:D:149:LYS:CD	2.12	0.54
3:D:493:ARG:NH2	3:D:1389:LEU:HD21	2.22	0.54
5:P:151:LEU:HB2	5:P:155:THR:CB	2.38	0.54
5:F:415:THR:HG21	5:F:417:LYS:HZ1	1.73	0.54
3:D:127:LEU:HD12	3:D:127:LEU:C	2.28	0.54
3:D:127:LEU:HD11	3:D:461:ILE:HD11	1.90	0.54
3:N:482:LYS:HG2	3:N:482:LYS:O	2.07	0.54
3:D:1274:ILE:HD12	3:D:1274:ILE:O	2.08	0.54
1:L:88:ARG:HG2	1:L:88:ARG:HH11	1.73	0.54
2:C:347:GLY:HA2	2:C:350:ARG:HD2	1.90	0.54
2:M:926:PHE:O	2:M:930:LYS:HG3	2.08	0.54
3:D:85:VAL:CG1	3:D:89:ARG:HE	2.21	0.53
2:C:170:PRO:HD3	2:C:263:ASP:HB3	1.90	0.53
3:N:604:THR:O	3:N:606:ILE:N	2.41	0.53
3:N:97:THR:O	3:N:98:PRO:O	2.26	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:1094:LEU:O	3:D:1095:THR:C	2.47	0.53
3:D:558:LEU:HD13	5:F:145:PRO:HB3	1.90	0.53
3:N:785:ILE:CD1	3:N:939:PHE:CE2	2.91	0.53
3:N:1466:VAL:CG2	3:N:1472:ILE:HD11	2.34	0.53
3:N:195:VAL:HB	3:N:205:TYR:CD1	2.43	0.53
3:D:633:VAL:O	3:D:635:PRO:HD3	2.07	0.53
1:A:90:LEU:HD12	1:A:119:ASP:C	2.28	0.53
3:N:1047:LYS:HG3	3:N:1053:PHE:CD1	2.43	0.53
2:M:18:LEU:HD13	2:M:590:ASP:OD2	2.08	0.53
3:D:78:VAL:O	3:D:78:VAL:HG12	2.08	0.53
3:N:988:ARG:CZ	3:N:992:ILE:HD11	2.37	0.53
3:N:963:TYR:CD2	3:N:1002:LYS:HB3	2.43	0.53
3:D:225:LEU:N	3:D:225:LEU:HD22	2.22	0.53
3:N:1015:TYR:C	3:N:1017:PHE:H	2.12	0.53
2:C:383:ARG:HB2	2:C:383:ARG:NH1	2.23	0.53
3:N:669:ASN:ND2	3:N:672:ALA:H	2.06	0.53
2:M:561:GLY:O	2:M:563:ASN:N	2.41	0.53
2:M:444:PRO:HD2	2:M:448:ASN:O	2.08	0.53
1:B:68:ILE:HB	1:B:71:VAL:HG21	1.90	0.53
1:L:216:GLU:OE2	1:L:220:GLU:HG3	2.08	0.53
3:D:1188:VAL:HG22	3:D:1189:ARG:H	1.73	0.53
3:N:1065:LEU:O	3:N:1066:THR:O	2.26	0.53
2:M:516:ARG:HD2	3:N:1068:LEU:CD2	2.38	0.53
1:A:89:PHE:HD1	1:A:120:VAL:HG22	1.73	0.53
2:M:881:ASN:H	2:M:881:ASN:HD22	1.55	0.53
5:P:88:ILE:CD1	5:P:193:ARG:HB2	2.37	0.53
3:N:167:GLU:OE2	5:P:90:GLN:HG2	2.08	0.53
3:N:473:LEU:HD12	3:N:476:GLU:CD	2.29	0.53
2:C:973:VAL:HG12	2:C:973:VAL:O	2.07	0.53
3:D:1426:LYS:C	3:D:1428:ALA:H	2.12	0.53
5:F:309:LYS:HA	5:F:312:GLN:OE1	2.08	0.53
3:D:434:ARG:HB2	3:D:447:VAL:HG13	1.90	0.53
3:N:537:THR:HG22	5:P:314:PRO:HB3	1.90	0.53
2:M:921:ALA:O	2:M:923:GLU:N	2.42	0.53
2:M:927:GLY:HA2	2:M:930:LYS:NZ	2.22	0.53
3:D:1012:GLU:HG2	3:D:1012:GLU:O	2.08	0.53
5:F:276:ARG:HH11	5:F:276:ARG:HG3	1.72	0.53
1:B:226:SER:O	1:B:228:PRO:HD3	2.08	0.53
3:D:502:PHE:CE2	3:D:1452:ILE:HG13	2.44	0.53
3:D:624:ASP:HB3	3:D:625:TYR:CE1	2.43	0.53
2:M:669:GLY:O	2:M:670:GLN:HG3	2.08	0.53
2:M:145:GLY:O	2:M:146:VAL:HG13	2.08	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:839:LEU:N	2:C:839:LEU:HD23	2.23	0.53
3:D:947:ILE:O	3:D:947:ILE:CD1	2.56	0.53
2:M:302:VAL:O	2:M:305:PRO:HD2	2.09	0.53
2:M:553:ASP:OD1	2:M:883:GLY:HA3	2.08	0.53
2:M:537:LYS:CA	2:M:905:ILE:HD11	2.37	0.53
1:B:2:LEU:CD1	1:B:3:ASP:H	2.22	0.53
2:M:731:GLU:O	2:M:734:LEU:HB2	2.07	0.53
2:M:751:PRO:HD2	3:N:680:GLN:OE1	2.06	0.53
1:A:63:HIS:HD2	1:A:65:PHE:HB2	1.73	0.53
3:N:834:THR:HB	3:N:838:ARG:CB	2.38	0.53
3:N:1225:ALA:HB1	3:N:1367:HIS:O	2.08	0.53
2:C:517:ARG:HH21	2:C:524:VAL:HG23	1.73	0.53
3:D:163:TYR:OH	3:D:394:LEU:HD11	2.07	0.53
3:N:882:PHE:CZ	3:N:906:GLN:HG3	2.43	0.53
1:A:38:ASN:O	1:A:39:PRO:C	2.42	0.53
2:M:439:CYS:SG	2:M:541:SER:N	2.81	0.53
1:A:59:GLU:HB2	1:A:139:ASN:HB3	1.91	0.53
4:E:8:LYS:O	4:E:12:MET:HG3	2.08	0.53
2:C:1092:LEU:HD13	2:C:1099:VAL:HG11	1.91	0.53
3:D:1346:ARG:NH2	3:D:1349:VAL:HG11	2.23	0.53
3:D:85:VAL:HG12	3:D:89:ARG:HE	1.73	0.53
3:N:217:LYS:CE	3:N:217:LYS:H	2.09	0.53
3:N:1262:LEU:HD23	3:N:1352:ILE:CG1	2.39	0.53
3:N:1330:ILE:O	3:N:1332:PRO:HD3	2.09	0.53
1:K:49:PRO:HA	1:K:147:GLY:O	2.08	0.53
5:F:77:THR:HA	5:F:80:PRO:HD2	1.89	0.53
2:M:1086:ARG:HD3	2:M:1112:PHE:CD2	2.43	0.53
3:D:553:ARG:HH12	5:F:211:ASP:CA	2.14	0.53
2:M:80:GLN:O	2:M:83:CYS:N	2.35	0.53
3:D:945:SER:CB	3:D:947:ILE:HG23	2.37	0.53
2:C:20:GLU:OE2	2:C:21:ILE:HG13	2.07	0.53
3:N:637:LEU:O	3:N:638:LYS:HG3	2.08	0.53
3:D:149:LYS:HD3	3:D:149:LYS:N	2.17	0.53
3:D:1253:THR:HG23	3:D:1258:ARG:HH11	1.74	0.53
3:N:208:PRO:HB2	3:N:395:VAL:HG13	1.91	0.53
3:N:1135:ARG:O	3:N:1136:LYS:C	2.46	0.53
1:B:206:THR:HG23	1:B:207:PRO:HD2	1.89	0.53
1:L:108:GLU:O	1:L:110:LYS:HG3	2.07	0.53
2:C:749:VAL:HG22	2:C:798:GLY:O	2.09	0.53
5:F:201:LYS:C	5:F:203:THR:H	2.12	0.53
2:C:1056:LYS:HA	3:D:624:ASP:HB2	1.90	0.53
3:D:850:LEU:HD13	3:D:884:ARG:HH21	1.73	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:123:LEU:O	3:D:126:VAL:HG12	2.09	0.53
3:D:601:ARG:NH1	3:D:611:GLN:HB2	2.23	0.53
3:N:1376:MET:HE1	3:N:1421:LEU:HB2	1.90	0.53
3:D:1276:GLU:HG3	3:D:1303:TYR:OH	2.09	0.53
2:M:1087:VAL:HG12	2:M:1091:GLU:OE2	2.08	0.53
5:P:133:ALA:O	5:P:137:GLY:O	2.26	0.53
3:N:645:PRO:O	3:N:646:LYS:C	2.46	0.53
3:D:179:VAL:HG11	3:D:217:LYS:NZ	2.22	0.53
3:N:1271:LYS:HE3	3:N:1334:GLN:NE2	2.23	0.53
3:N:1283:ILE:HD13	3:N:1311:LEU:HD11	1.90	0.53
2:M:371:LYS:O	2:M:372:LEU:HD23	2.09	0.53
1:A:184:THR:HB	1:A:194:LYS:HB2	1.90	0.53
3:D:528:VAL:HG12	3:D:529:GLN:H	1.74	0.53
1:A:9:PRO:HA	1:A:26:GLU:O	2.08	0.53
3:N:840:LYS:HD2	3:N:841:TYR:CZ	2.44	0.53
2:C:765:SER:HB2	2:C:766:GLU:OE2	2.09	0.53
3:N:988:ARG:HH11	3:N:988:ARG:HG2	1.73	0.53
2:M:640:ARG:CB	2:M:640:ARG:HH11	2.21	0.53
5:F:415:THR:HG21	5:F:417:LYS:NZ	2.24	0.53
2:M:325:ILE:CD1	2:M:325:ILE:H	2.21	0.53
3:N:1275:SER:HB2	3:N:1325:LEU:CD1	2.38	0.53
5:P:346:THR:O	5:P:347:GLN:C	2.46	0.53
5:P:207:LEU:HD12	5:P:212:LEU:HD21	1.90	0.53
4:O:40:LEU:HB2	4:O:45:ARG:CZ	2.39	0.53
4:O:40:LEU:HD21	4:O:67:GLU:HG2	1.91	0.53
2:M:157:ARG:NH1	2:M:314:THR:HB	2.24	0.53
3:D:245:LEU:HD13	3:D:245:LEU:H	1.74	0.53
3:D:700:VAL:HG13	3:D:718:PRO:HG2	1.91	0.53
3:N:1283:ILE:HG22	3:N:1284:GLU:H	1.73	0.53
5:F:135:ILE:HD11	5:F:178:ARG:HD2	1.88	0.53
2:M:759:THR:HB	2:M:785:VAL:CG1	2.34	0.53
3:D:486:ARG:HH21	3:D:489:ARG:NE	2.06	0.53
2:C:100:LEU:HG	2:C:368:THR:HG23	1.89	0.53
2:M:1102:LEU:O	3:N:5:VAL:HA	2.09	0.53
2:C:175:GLU:HB3	2:C:183:SER:OG	2.08	0.53
3:D:207:PHE:HB3	3:D:395:VAL:HG21	1.90	0.53
3:D:429:SER:H	3:D:433:GLY:HA2	1.74	0.53
2:C:462:ASP:CG	2:C:463:GLU:H	2.11	0.53
3:D:1434:TRP:CZ3	3:D:1457:ASP:HB2	2.43	0.53
5:F:122:LEU:CD2	5:F:159:ILE:HG23	2.39	0.53
3:N:1256:LEU:O	3:N:1258:ARG:N	2.42	0.53
3:N:96:ALA:HB2	3:N:551:ASN:ND2	2.24	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:452:ILE:HG23	3:N:452:ILE:O	2.09	0.53
1:B:86:VAL:HG13	1:B:123:MET:HB2	1.91	0.53
3:D:1243:THR:HB	3:D:1253:THR:HB	1.89	0.53
2:M:988:VAL:O	2:M:989:VAL:CG1	2.57	0.53
3:D:141:ILE:HG22	3:D:142:LEU:N	2.24	0.53
3:N:1087:ARG:HA	3:N:1087:ARG:NE	2.24	0.53
2:C:183:SER:HB2	2:C:190:LYS:CD	2.39	0.53
2:C:583:LEU:O	2:C:587:VAL:HG23	2.09	0.53
2:C:1102:LEU:HD13	3:D:9:ARG:HB2	1.90	0.53
1:B:7:LYS:HE3	1:B:186:LEU:HD13	1.91	0.53
2:M:495:THR:HG23	2:M:517:ARG:NE	2.24	0.53
3:D:166:GLN:HE21	3:D:167:GLU:H	1.56	0.53
3:D:169:TYR:N	3:D:170:PRO:HD3	2.23	0.53
3:D:660:LYS:HA	3:D:663:GLU:CG	2.39	0.53
3:N:882:PHE:CE1	3:N:906:GLN:HG3	2.42	0.53
3:N:1231:GLU:N	3:N:1232:PRO:CD	2.71	0.53
3:N:1268:PRO:CB	3:N:1329:ALA:HB3	2.39	0.53
2:M:911:GLU:HB3	2:M:912:PRO:HD3	1.91	0.53
2:C:1009:SER:O	3:D:624:ASP:O	2.27	0.53
2:C:1058:ASP:HB2	3:D:621:LYS:NZ	2.23	0.53
3:D:907:GLU:CG	3:D:908:LYS:H	2.21	0.53
4:O:53:GLY:HA2	4:O:55:PHE:HD2	1.73	0.53
3:N:601:ARG:NE	3:N:605:ASP:HB2	2.24	0.53
5:P:318:GLU:O	5:P:318:GLU:HG3	2.07	0.53
2:M:1029:GLY:HA3	3:N:623:VAL:O	2.08	0.53
1:B:54:THR:O	1:B:167:VAL:HB	2.09	0.53
3:D:217:LYS:CB	3:D:217:LYS:NZ	2.67	0.53
5:P:416:ARG:HD3	5:P:419:ARG:CG	2.37	0.53
2:M:12:VAL:HG13	2:M:13:ILE:HG12	1.90	0.53
2:M:470:PRO:CB	2:M:534:VAL:HG21	2.38	0.53
3:N:78:VAL:HG12	3:N:79:GLU:O	2.09	0.53
2:M:674:VAL:HB	2:M:869:VAL:HG13	1.91	0.53
1:A:198:ARG:O	1:A:200:TRP:CZ3	2.61	0.53
2:M:549:PHE:CE2	2:M:887:GLU:HA	2.40	0.53
2:C:502:PRO:CB	2:C:509:ALA:HB3	2.38	0.53
2:M:124:ASP:HB2	2:M:407:LYS:NZ	2.23	0.53
3:N:1102:THR:HG22	3:N:1222:GLY:CA	2.38	0.53
2:M:944:LEU:HD21	2:M:963:LEU:HD23	1.90	0.53
3:N:1401:GLU:O	3:N:1405:GLU:HG3	2.09	0.53
2:C:602:GLU:HA	2:C:647:GLN:O	2.09	0.53
2:C:718:GLY:HA3	2:C:761:PHE:CE1	2.43	0.53
2:M:627:ARG:HG3	2:M:628:PHE:H	1.73	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:939:ARG:HB3	2:C:982:PRO:HG3	1.91	0.53
2:C:615:TYR:C	2:C:617:ASP:H	2.12	0.53
1:A:43:ILE:HD12	1:B:32:PHE:CZ	2.43	0.53
3:N:566:ILE:HD11	5:P:192:LEU:HD21	1.91	0.53
5:P:130:VAL:C	5:P:132:ARG:H	2.11	0.53
3:N:563:PRO:HG2	5:P:188:ILE:HG21	1.90	0.53
2:C:443:THR:O	2:C:559:LEU:HD11	2.09	0.53
1:K:150:TYR:HA	1:K:169:ALA:O	2.08	0.53
2:C:799:ILE:HG12	2:C:799:ILE:O	2.08	0.53
3:N:705:ALA:CB	3:N:706:PRO:HD3	2.32	0.53
2:M:1092:LEU:HD23	2:M:1099:VAL:HG13	1.91	0.53
3:N:568:ARG:O	3:N:571:LYS:N	2.42	0.53
3:N:609:GLY:HA3	3:N:613:ARG:HB3	1.89	0.53
3:D:374:GLU:HG2	3:D:386:HIS:CA	2.31	0.53
3:N:717:GLN:NE2	3:N:760:ARG:NH2	2.57	0.53
2:C:97:ARG:NH2	2:C:109:LYS:HD2	2.23	0.53
3:N:908:LYS:O	3:N:912:LYS:N	2.27	0.53
3:N:911:LEU:O	3:N:914:LEU:N	2.42	0.53
2:M:551:GLU:C	2:M:553:ASP:H	2.12	0.53
3:D:1310:ARG:HG3	3:D:1327:ARG:CB	2.38	0.53
2:M:1033:GLY:HA2	3:N:620:GLY:HA2	1.90	0.53
3:N:382:GLU:HG2	3:N:383:GLY:N	2.24	0.53
1:A:35:THR:HG21	1:B:43:ILE:CD1	2.36	0.53
2:C:517:ARG:HH21	2:C:524:VAL:CG2	2.22	0.53
3:D:34:TYR:OH	5:F:264:MET:HG3	2.09	0.53
3:N:197:SER:CB	3:N:203:ALA:HB3	2.39	0.53
3:N:1108:ARG:NH1	3:N:1198:TYR:O	2.42	0.53
2:C:776:SER:HA	2:C:780:GLU:CA	2.39	0.53
3:N:780:LYS:HG3	3:N:780:LYS:O	2.08	0.53
2:M:326:ASP:O	2:M:327:HIS:C	2.47	0.53
3:D:23:TYR:HE2	3:D:89:ARG:NH1	2.07	0.53
3:N:1144:LEU:CD2	3:N:1166:LEU:HD11	2.21	0.53
2:C:829:GLN:CG	2:C:831:ARG:HH11	2.22	0.53
2:C:498:GLN:NE2	2:C:533:ASP:OD2	2.41	0.53
3:N:1376:MET:CE	3:N:1421:LEU:HB2	2.38	0.53
3:N:86:ARG:NH1	3:N:522:PRO:HB2	2.24	0.53
3:N:558:LEU:O	3:N:559:ALA:C	2.48	0.53
3:N:150:ARG:NH1	3:N:464:LEU:HD22	2.23	0.53
3:N:954:ALA:CA	3:N:1039:CYS:SG	2.95	0.53
3:N:699:VAL:HB	3:N:716:PHE:O	2.08	0.53
3:N:1107:VAL:HG23	3:N:1221:VAL:HG21	1.91	0.53
3:D:1074:SER:O	3:D:1075:HIS:C	2.45	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:219:ARG:HE	1:B:220:GLU:N	2.07	0.53
2:M:432:ARG:HH22	3:N:1047:LYS:HZ2	1.54	0.53
3:D:141:ILE:HG22	3:D:142:LEU:H	1.74	0.53
3:D:495:ARG:O	3:D:499:VAL:HG23	2.09	0.53
3:N:1090:ASP:C	3:N:1092:GLY:N	2.61	0.53
1:B:212:ASN:HD22	1:B:212:ASN:N	2.06	0.53
2:C:936:VAL:HB	2:C:940:GLU:HB3	1.90	0.53
2:C:72:ARG:HH21	2:C:112:GLU:HG3	1.73	0.53
3:N:1150:ALA:N	3:N:1187:PRO:O	2.42	0.53
5:P:288:TYR:O	5:P:291:ILE:HG23	2.09	0.53
3:D:537:THR:HG23	3:D:537:THR:O	2.08	0.52
4:E:41:GLU:HB3	4:E:42:PRO:HD3	1.90	0.52
3:D:733:CYS:SG	3:D:740:PHE:HZ	2.32	0.52
3:N:1344:VAL:HG12	3:N:1344:VAL:O	2.07	0.52
5:F:77:THR:C	5:F:80:PRO:HD2	2.29	0.52
2:C:919:ALA:N	2:C:968:LEU:HD21	2.22	0.52
3:N:97:THR:CG2	3:N:571:LYS:HD3	2.39	0.52
3:N:481:MET:SD	3:N:1388:ARG:HG2	2.49	0.52
2:M:1017:THR:OG1	2:M:1019:GLN:HG2	2.09	0.52
5:P:389:PHE:CE2	5:P:397:ILE:HD11	2.43	0.52
3:D:91:GLY:O	3:D:519:VAL:N	2.42	0.52
2:C:266:ARG:HD3	2:C:288:ARG:HH11	1.73	0.52
2:M:692:GLU:HG2	2:M:692:GLU:O	2.08	0.52
2:C:795:GLY:O	2:C:796:GLU:CG	2.57	0.52
2:M:589:ARG:HD3	2:M:596:TYR:CE2	2.44	0.52
3:N:177:ALA:CB	3:N:199:LEU:HD13	2.39	0.52
1:K:197:LEU:HD23	1:K:197:LEU:H	1.74	0.52
3:N:145:VAL:HG13	3:N:146:PRO:HD2	1.91	0.52
3:N:1442:ASN:O	3:N:1443:THR:C	2.46	0.52
2:M:41:ASN:ND2	2:M:41:ASN:H	2.07	0.52
3:N:49:ILE:HG22	3:N:50:PHE:N	2.24	0.52
3:D:1331:ASP:HB3	3:D:1334:GLN:HG3	1.91	0.52
2:M:1054:THR:CG2	2:M:1059:ASP:HB2	2.39	0.52
3:N:162:ARG:HA	3:N:449:SER:HB3	1.91	0.52
5:F:210:LEU:HD23	5:F:213:ILE:HD12	1.91	0.52
3:N:388:HIS:CB	5:P:94:LEU:HD21	2.34	0.52
3:N:1330:ILE:HD12	3:N:1347:TYR:CD1	2.43	0.52
2:M:1056:LYS:HE2	3:N:623:VAL:CG1	2.40	0.52
3:N:656:PHE:CZ	3:N:751:LEU:HD23	2.44	0.52
3:N:660:LYS:HG2	3:N:694:VAL:CG2	2.39	0.52
2:M:1036:GLU:OE1	2:M:1036:GLU:N	2.30	0.52
1:A:198:ARG:HD3	1:A:200:TRP:CH2	2.44	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:862:PRO:HG3	2:C:975:TYR:HE1	1.74	0.52
3:D:141:ILE:CD1	3:D:449:SER:HA	2.39	0.52
3:D:191:LEU:HB3	3:D:195:VAL:HG21	1.90	0.52
3:D:994:GLN:O	3:D:998:GLU:HG3	2.08	0.52
2:C:575:GLN:H	2:C:667:ALA:HB1	1.75	0.52
2:C:273:GLY:HA2	2:C:276:LYS:HZ3	1.74	0.52
2:M:98:LEU:O	2:M:109:LYS:HG3	2.09	0.52
3:D:1102:THR:O	3:D:1222:GLY:HA3	2.09	0.52
3:N:1008:PHE:O	3:N:1012:GLU:HB2	2.09	0.52
1:B:29:GLU:O	1:B:32:PHE:HB2	2.08	0.52
3:D:1370:ILE:HG22	3:D:1371:VAL:H	1.73	0.52
3:D:1026:SER:O	3:D:1028:ALA:N	2.42	0.52
3:D:119:SER:HB2	3:D:123:LEU:CB	2.37	0.52
3:D:119:SER:N	3:D:123:LEU:HB2	2.24	0.52
3:N:525:ARG:O	3:N:526:PRO:O	2.28	0.52
3:N:84:ILE:C	3:N:86:ARG:H	2.10	0.52
3:D:1209:LEU:O	3:D:1210:SER:C	2.46	0.52
3:D:709:HIS:HD2	3:D:711:LEU:HB2	1.72	0.52
1:A:8:ALA:O	1:A:9:PRO:C	2.45	0.52
2:C:474:VAL:HG22	2:C:476:GLY:O	2.09	0.52
3:D:1152:GLU:O	3:D:1153:VAL:HG23	2.10	0.52
3:N:1479:ASP:HA	3:N:1482:ARG:CB	2.39	0.52
1:B:25:LEU:CD2	1:B:195:LEU:HD23	2.39	0.52
2:M:401:LEU:HD12	2:M:401:LEU:O	2.09	0.52
1:K:227:ASN:O	1:K:227:ASN:CG	2.48	0.52
3:N:871:LYS:HB3	3:N:873:LEU:HG	1.91	0.52
1:L:34:VAL:HG22	1:L:181:VAL:HG21	1.90	0.52
1:B:173:PRO:HB3	1:B:204:SER:HB3	1.90	0.52
3:D:579:ASP:O	3:D:581:LEU:N	2.43	0.52
3:D:218:LYS:NZ	3:D:370:ALA:CA	2.65	0.52
3:N:422:ALA:HB1	5:P:178:ARG:HH12	1.74	0.52
3:D:1129:THR:CG2	3:D:1130:ARG:H	1.98	0.52
3:N:1330:ILE:HD12	3:N:1347:TYR:CE1	2.43	0.52
3:D:572:ARG:NH2	5:F:79:ASP:OD1	2.42	0.52
3:N:84:ILE:O	3:N:85:VAL:C	2.46	0.52
3:N:116:LEU:HB2	3:N:118:LEU:HD13	1.92	0.52
2:M:276:LYS:HG2	2:M:280:LYS:HZ2	1.74	0.52
3:N:1283:ILE:HG22	3:N:1284:GLU:N	2.24	0.52
2:M:470:PRO:HB2	2:M:534:VAL:HG21	1.91	0.52
5:P:196:VAL:HG13	5:P:209:PHE:CZ	2.43	0.52
3:N:39:PRO:HG2	3:N:47:GLU:OE2	2.10	0.52
5:P:354:LEU:HG	5:P:418:LEU:HD21	1.91	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:1382:THR:C	3:N:1384:PRO:HD3	2.29	0.52
1:L:206:THR:HG22	1:L:209:GLU:CB	2.39	0.52
3:D:864:VAL:HG12	3:D:865:THR:N	2.24	0.52
2:M:195:LEU:O	2:M:199:VAL:HG23	2.10	0.52
3:D:203:ALA:O	3:D:204:LEU:HD23	2.10	0.52
2:M:395:LYS:HE2	2:M:397:GLU:HB3	1.91	0.52
3:D:223:LEU:H	3:D:365:ASP:HB2	1.74	0.52
2:M:808:ARG:HH21	2:M:820:ARG:NH2	2.08	0.52
1:L:2:LEU:O	1:L:6:LEU:HB3	2.10	0.52
3:N:93:ILE:HG13	3:N:519:VAL:CG2	2.40	0.52
3:D:1147:ARG:HH12	3:D:1190:SER:HB2	1.74	0.52
4:E:53:GLY:O	4:E:55:PHE:N	2.43	0.52
3:N:845:ASN:H	3:N:848:GLU:CG	2.11	0.52
3:N:1057:VAL:HG13	3:N:1069:GLU:HG2	1.91	0.52
2:M:1052:MET:SD	2:M:1056:LYS:NZ	2.81	0.52
1:L:85:LEU:HA	1:L:127:LEU:HD22	1.91	0.52
3:N:785:ILE:HD11	3:N:939:PHE:CZ	2.44	0.52
3:D:422:ALA:CB	3:D:427:VAL:HG22	2.32	0.52
2:C:71:TYR:HA	2:C:96:ALA:CB	2.39	0.52
5:P:134:LYS:HE3	5:P:134:LYS:HA	1.91	0.52
2:C:607:ASP:HB3	2:C:609:ASN:H	1.75	0.52
2:C:1102:LEU:HD13	3:D:9:ARG:CB	2.39	0.52
1:L:76:VAL:HG13	1:L:79:ILE:HD11	1.91	0.52
1:B:145:ASP:HB2	1:B:171:PHE:HZ	1.73	0.52
3:N:27:GLU:CG	3:N:42:ASP:HB2	2.39	0.52
3:N:541:ASN:HD22	3:N:541:ASN:N	2.07	0.52
2:C:1058:ASP:OD2	2:C:1083:GLU:HB2	2.10	0.52
2:C:1115:LEU:HB3	3:D:85:VAL:HG13	1.92	0.52
3:D:137:PRO:HD2	3:D:453:ASP:CB	2.40	0.52
2:M:579:VAL:HA	2:M:901:TYR:O	2.09	0.52
1:L:123:MET:C	1:L:125:PRO:HD3	2.29	0.52
3:D:65:ARG:HB2	5:F:375:LEU:O	2.10	0.52
2:C:876:VAL:O	2:C:879:ARG:O	2.28	0.52
1:A:94:LEU:HD11	1:A:119:ASP:CB	2.39	0.52
1:A:34:VAL:CB	1:B:42:ARG:NH2	2.72	0.52
1:L:22:GLU:HG2	1:L:198:ARG:HG2	1.91	0.52
1:A:20:TYR:CD1	1:A:21:GLY:N	2.78	0.52
2:M:700:TYR:HB2	2:M:833:LEU:HB2	1.91	0.52
2:C:495:THR:HB	2:C:530:GLU:HG3	1.91	0.52
2:M:599:GLU:HA	2:M:651:LYS:HB2	1.91	0.52
3:N:535:PHE:O	5:P:314:PRO:HA	2.09	0.52
3:N:771:SER:HB2	3:N:778:LEU:HD13	1.92	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:M:777:ILE:HG22	2:M:778:PHE:CD1	2.45	0.52
2:M:155:PRO:HG2	3:N:1246:VAL:HG12	1.92	0.52
3:D:154:THR:HG22	3:D:155:ASP:N	2.24	0.52
3:D:83:SER:O	3:D:85:VAL:N	2.43	0.52
3:D:139:GLY:O	3:D:147:VAL:HG22	2.09	0.52
3:D:601:ARG:HB2	5:F:318:GLU:OE1	2.10	0.52
3:N:423:ASP:N	5:P:178:ARG:HH12	2.06	0.52
2:C:410:ILE:HD12	2:C:455:LEU:HB3	1.91	0.52
2:M:129:ILE:CD1	2:M:129:ILE:N	2.73	0.52
3:N:574:LEU:O	3:N:578:VAL:HG23	2.10	0.52
3:N:691:LEU:HD21	3:N:720:LEU:HD21	1.91	0.52
3:D:796:ARG:HD3	3:D:862:ASP:OD1	2.10	0.52
2:C:69:LEU:HD21	2:C:99:GLN:OE1	2.10	0.52
3:D:633:VAL:HG13	3:D:635:PRO:HD3	1.92	0.52
2:M:1031:ARG:HA	3:N:621:LYS:O	2.09	0.52
1:A:44:LEU:O	1:A:48:ILE:HD12	2.10	0.52
2:M:736:ASP:HB3	2:M:743:VAL:HG23	1.92	0.52
1:L:176:ARG:H	1:L:200:TRP:HB2	1.74	0.52
3:N:62:LYS:HE2	3:N:75:ARG:HD3	1.92	0.52
1:A:209:GLU:O	1:A:213:GLN:HG3	2.10	0.52
5:P:322:GLY:O	5:P:324:GLU:N	2.41	0.52
3:D:1368:ILE:O	3:D:1372:VAL:HG23	2.09	0.52
3:D:1008:PHE:O	3:D:1011:PHE:N	2.43	0.52
2:C:194:VAL:HG21	2:C:221:LEU:O	2.10	0.52
5:F:269:ASN:CB	5:F:273:ARG:HH21	2.08	0.52
2:C:709:GLU:HG2	2:C:710:ILE:N	2.24	0.52
2:M:890:LEU:HD11	2:M:901:TYR:CD2	2.45	0.52
4:O:51:LEU:CG	4:O:52:GLU:H	2.16	0.52
3:N:455:ARG:HH11	3:N:455:ARG:HG2	1.73	0.52
3:N:556:LYS:NZ	5:P:218:GLN:NE2	2.55	0.52
3:N:570:GLU:OE2	5:P:214:GLN:HG3	2.09	0.52
3:D:1208:ASP:OD1	3:D:1209:LEU:O	2.27	0.52
1:K:122:ILE:HG22	1:K:124:ASN:H	1.74	0.52
3:N:1311:LEU:HA	3:N:1326:THR:HA	1.91	0.52
3:D:853:VAL:HA	3:D:858:VAL:O	2.10	0.52
3:N:502:PHE:HZ	3:N:1452:ILE:HG13	1.72	0.52
2:C:548:PRO:CG	2:C:842:ARG:NH2	2.73	0.52
2:M:545:ASN:HA	2:M:905:ILE:HG21	1.90	0.52
1:A:198:ARG:O	1:A:200:TRP:HZ3	1.92	0.52
3:D:72:VAL:HG22	3:D:73:CYS:H	1.75	0.52
3:D:474:GLU:OE1	3:D:500:ARG:HD3	2.10	0.52
3:N:545:ARG:O	3:N:549:ASN:HB2	2.09	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:1282:ARG:HB3	3:N:1282:ARG:CZ	2.38	0.52
2:C:944:LEU:O	2:C:947:ALA:HB3	2.09	0.52
1:B:12:THR:OG1	1:B:24:VAL:HB	2.08	0.52
2:M:418:LEU:N	2:M:418:LEU:HD22	2.25	0.52
2:C:243:ARG:O	2:C:243:ARG:HD2	2.10	0.52
3:D:604:THR:HA	3:D:607:LEU:HG	1.91	0.52
3:D:915:VAL:O	3:D:918:ALA:N	2.42	0.52
2:M:578:VAL:HG23	2:M:579:VAL:CG1	2.30	0.52
3:N:763:MET:O	3:N:764:LEU:O	2.28	0.52
3:N:760:ARG:HD3	4:O:61:GLU:OE1	2.10	0.52
5:F:136:LEU:HD12	5:F:137:GLY:N	2.25	0.52
2:C:841:ASN:O	2:C:841:ASN:ND2	2.25	0.52
1:L:94:LEU:HD11	1:L:119:ASP:CB	2.40	0.52
3:N:396:VAL:HG12	3:N:397:LYS:N	2.24	0.52
2:C:1098:ASP:HB2	3:D:21:TRP:CZ2	2.44	0.52
3:D:775:GLY:HA3	3:D:1145:TYR:CE1	2.39	0.52
2:M:196:LEU:HA	2:M:199:VAL:HG23	1.91	0.52
1:B:24:VAL:HG12	1:B:25:LEU:N	2.25	0.52
3:D:1103:HIS:CD2	3:D:1462:LEU:H	2.27	0.52
3:N:423:ASP:N	5:P:178:ARG:NH1	2.58	0.52
2:C:281:LEU:HD23	2:C:281:LEU:N	2.24	0.52
3:D:1304:LYS:O	3:D:1306:PRO:HD3	2.10	0.52
5:P:169:GLU:O	5:P:172:ARG:HB3	2.09	0.52
3:N:646:LYS:HD3	3:N:722:GLU:OE2	2.10	0.52
2:M:265:ARG:NE	2:M:267:TYR:HA	2.16	0.52
2:M:1043:TYR:CE2	3:N:763:MET:HG3	2.45	0.52
2:M:1043:TYR:C	2:M:1045:ALA:N	2.64	0.52
3:D:1099:VAL:HG22	3:D:1226:ALA:HB1	1.91	0.52
5:F:140:ARG:HG3	5:F:141:VAL:N	2.25	0.52
3:D:1361:VAL:O	3:D:1362:LYS:HD3	2.09	0.52
2:C:841:ASN:HD22	2:C:843:HIS:H	1.58	0.52
1:A:51:THR:HG22	1:A:146:ARG:CA	2.39	0.52
1:B:138:LEU:O	1:B:138:LEU:HD23	2.10	0.52
2:M:346:VAL:HG12	2:M:350:ARG:HE	1.74	0.52
2:M:374:ASN:O	2:M:377:PRO:HD2	2.10	0.52
1:B:150:TYR:HA	1:B:169:ALA:O	2.10	0.52
3:N:28:LYS:HB3	3:N:30:GLU:HG2	1.92	0.52
2:M:192:PRO:O	2:M:195:LEU:HB3	2.10	0.52
1:L:87:VAL:HG21	1:L:144:VAL:CG1	2.40	0.52
3:N:1096:ARG:HH11	3:N:1096:ARG:CG	2.23	0.52
1:B:73:GLU:HB2	1:B:78:ILE:HG12	1.92	0.52
3:N:466:LYS:HG2	3:N:510:GLU:HG2	1.90	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:1056:LYS:HD3	3:D:623:VAL:HG13	1.92	0.51
3:D:1465:ASN:ND2	3:D:1470:ARG:NH1	2.58	0.51
3:D:1475:GLY:C	3:D:1477:GLY:N	2.61	0.51
3:D:882:PHE:HA	3:D:885:ILE:HD12	1.91	0.51
5:P:102:LEU:O	5:P:103:ALA:C	2.47	0.51
3:N:759:ALA:HA	3:N:763:MET:HB2	1.91	0.51
3:N:1271:LYS:HD3	3:N:1271:LYS:C	2.31	0.51
3:N:912:LYS:HB3	3:N:912:LYS:HZ3	1.75	0.51
1:B:108:GLU:CG	1:B:131:THR:HG22	2.36	0.51
2:C:979:THR:C	2:C:981:GLU:N	2.63	0.51
3:N:47:GLU:OE1	3:N:52:PRO:HA	2.10	0.51
2:M:138:SER:HA	2:M:339:LEU:HD11	1.92	0.51
3:D:1442:ASN:HD22	3:D:1446:VAL:CG2	2.23	0.51
3:N:1116:ASN:N	3:N:1116:ASN:ND2	2.53	0.51
3:D:653:PHE:CG	3:D:695:ILE:HD11	2.44	0.51
2:M:495:THR:CG2	2:M:517:ARG:HE	2.21	0.51
3:N:668:PRO:HD2	3:N:672:ALA:HB1	1.91	0.51
1:A:210:ALA:C	1:A:212:ASN:H	2.12	0.51
2:C:644:VAL:HG22	2:C:647:GLN:OE1	2.10	0.51
1:B:58:ILE:HB	1:B:61:VAL:HB	1.93	0.51
3:N:504:ASP:O	3:N:506:GLY:N	2.43	0.51
3:D:940:THR:O	3:D:941:PHE:C	2.47	0.51
3:N:162:ARG:HA	3:N:449:SER:CB	2.40	0.51
3:N:217:LYS:NZ	3:N:219:GLU:HB3	2.25	0.51
3:N:1344:VAL:HG11	3:N:1421:LEU:HD22	1.92	0.51
3:N:1066:THR:HG23	3:N:1069:GLU:CG	2.39	0.51
2:M:580:MET:HE3	2:M:902:ILE:HD11	1.91	0.51
3:N:711:LEU:O	3:N:712:GLY:C	2.48	0.51
3:N:1495:ILE:HG12	4:O:80:VAL:HG11	1.92	0.51
3:N:1465:ASN:OD1	3:N:1465:ASN:O	2.28	0.51
2:M:1109:VAL:HG11	3:N:3:LYS:O	2.11	0.51
3:D:1088:THR:O	3:D:1089:ALA:C	2.47	0.51
3:N:560:GLN:CA	3:N:560:GLN:HE21	2.18	0.51
2:M:257:VAL:HG12	2:M:263:ASP:OD1	2.10	0.51
1:L:2:LEU:HA	1:L:6:LEU:HB2	1.92	0.51
3:D:659:LYS:C	3:D:659:LYS:HD3	2.30	0.51
2:M:605:LYS:HD3	2:M:610:ARG:HH22	1.74	0.51
2:C:149:THR:HG23	2:C:150:PRO:HD2	1.92	0.51
2:C:1044:GLY:O	3:D:1475:GLY:HA3	2.11	0.51
3:D:584:ASN:OD1	3:D:590:PRO:CD	2.54	0.51
5:F:152:ASP:CB	5:F:153:PRO:HD3	2.40	0.51
4:E:44:GLU:O	4:E:45:ARG:HD3	2.10	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:P:95:THR:HG22	5:P:96:LEU:HG	1.92	0.51
3:N:1340:GLY:O	3:N:1344:VAL:HG23	2.09	0.51
3:N:103:TRP:NE1	3:N:583:ASP:OD2	2.42	0.51
5:P:214:GLN:O	5:P:217:ASN:N	2.44	0.51
2:M:279:GLU:OE2	2:M:280:LYS:HE3	2.10	0.51
3:N:1109:GLU:HG2	3:N:1201:CYS:HA	1.92	0.51
2:C:987:ILE:CG2	3:D:948:THR:HG21	2.35	0.51
1:K:18:ARG:O	1:K:207:PRO:HD3	2.11	0.51
3:N:950:GLY:O	3:N:953:ASP:N	2.43	0.51
2:M:535:SER:OG	2:M:537:LYS:HD3	2.09	0.51
2:M:335:THR:O	2:M:339:LEU:HG	2.11	0.51
3:N:401:TYR:N	3:N:402:PRO:HD3	2.26	0.51
2:M:1101:THR:O	2:M:1102:LEU:HD12	2.10	0.51
3:D:1478:SER:O	3:D:1482:ARG:HG3	2.11	0.51
5:P:396:ARG:CA	5:P:399:GLN:HB2	2.40	0.51
2:C:7:GLY:HA3	2:C:907:ASP:O	2.11	0.51
2:M:544:THR:HG22	2:M:550:LEU:HD21	1.93	0.51
2:M:517:ARG:HH11	2:M:517:ARG:HG3	1.76	0.51
3:D:547:LEU:O	3:D:548:ILE:C	2.48	0.51
2:C:26:TYR:HA	2:C:29:ALA:CB	2.40	0.51
3:N:1478:SER:C	3:N:1480:PHE:N	2.63	0.51
3:D:1404:ASN:CG	3:D:1408:ILE:HD12	2.31	0.51
3:D:895:VAL:C	3:D:897:TRP:H	2.14	0.51
3:D:935:LYS:O	3:D:935:LYS:HG2	2.10	0.51
3:D:135:LEU:CD1	3:D:452:ILE:HD11	2.39	0.51
3:D:137:PRO:HD2	3:D:453:ASP:HB3	1.91	0.51
3:N:900:ILE:C	3:N:901:GLN:HG2	2.30	0.51
1:L:137:ARG:HH22	1:L:139:ASN:HD22	1.58	0.51
5:P:325:LYS:HB3	5:P:326:ASP:OD1	2.10	0.51
1:K:5:LYS:HE3	1:K:5:LYS:HA	1.93	0.51
5:P:365:GLU:HA	5:P:368:VAL:HB	1.91	0.51
2:C:983:ILE:O	2:C:985:GLY:N	2.43	0.51
3:N:1425:THR:HG22	3:N:1426:LYS:N	2.24	0.51
2:M:881:ASN:N	2:M:881:ASN:ND2	2.56	0.51
1:B:85:LEU:HD12	1:B:124:ASN:CB	2.40	0.51
3:N:477:LEU:HD22	3:N:492:ALA:O	2.10	0.51
2:C:1047:HIS:ND1	3:D:1471:LEU:HD13	2.25	0.51
2:M:1000:MET:CE	2:M:1001:VAL:HG22	2.39	0.51
1:K:23:PHE:O	1:K:196:THR:HA	2.10	0.51
3:N:1497:GLU:O	3:N:1501:GLU:HG3	2.10	0.51
2:C:759:THR:HB	2:C:785:VAL:HG21	1.91	0.51
3:D:159:ARG:HG3	3:D:159:ARG:NH1	2.24	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:P:300:ASP:CG	5:P:301:ALA:N	2.63	0.51
3:N:188:GLY:HA2	3:N:210:ARG:NH1	2.26	0.51
2:M:561:GLY:C	2:M:563:ASN:N	2.63	0.51
3:D:568:ARG:O	3:D:571:LYS:N	2.44	0.51
4:E:40:LEU:HD13	4:E:45:ARG:HD2	1.92	0.51
3:N:427:VAL:O	3:N:433:GLY:O	2.28	0.51
1:L:132:LEU:HD21	1:L:138:LEU:HB2	1.92	0.51
2:M:580:MET:HB2	2:M:902:ILE:HG12	1.92	0.51
3:N:987:GLU:O	3:N:991:GLN:HB2	2.10	0.51
2:M:393:GLN:OE1	2:M:393:GLN:N	2.40	0.51
2:M:288:ARG:O	2:M:288:ARG:HD3	2.11	0.51
3:D:65:ARG:CG	3:D:66:GLN:H	2.24	0.51
2:C:549:PHE:CE2	2:C:887:GLU:N	2.76	0.51
2:C:896:PHE:CZ	2:C:925:TYR:HB2	2.46	0.51
3:D:91:GLY:O	3:D:519:VAL:HB	2.11	0.51
2:C:266:ARG:HG2	2:C:273:GLY:HA3	1.93	0.51
2:M:599:GLU:HA	2:M:651:LYS:CB	2.40	0.51
2:M:244:PRO:CD	2:M:245:GLY:N	2.74	0.51
1:A:210:ALA:C	1:A:212:ASN:N	2.64	0.51
1:B:59:GLU:OE1	1:B:137:ARG:HG2	2.11	0.51
3:D:1000:THR:HG23	3:D:1041:LEU:HD21	1.92	0.51
1:A:132:LEU:N	1:A:132:LEU:HD12	2.25	0.51
5:P:261:PRO:O	5:P:265:VAL:HG23	2.11	0.51
3:D:541:ASN:O	3:D:545:ARG:HG3	2.11	0.51
3:D:625:TYR:CE1	3:D:751:LEU:HD11	2.45	0.51
3:D:98:PRO:HG2	3:D:462:GLN:NE2	2.25	0.51
3:D:596:SER:C	3:D:598:ARG:H	2.13	0.51
2:M:1059:ASP:OD2	2:M:1080:SER:HB2	2.11	0.51
4:O:40:LEU:HB2	4:O:45:ARG:NE	2.25	0.51
2:C:221:LEU:HG	2:C:221:LEU:O	2.10	0.51
2:C:559:LEU:O	2:C:562:SER:N	2.44	0.51
2:C:486:MET:HE2	2:C:496:ILE:HD11	1.93	0.51
1:L:132:LEU:N	1:L:132:LEU:HD12	2.25	0.51
3:N:1258:ARG:NH2	3:N:1351:GLU:HG2	2.07	0.51
3:N:660:LYS:O	3:N:664:LYS:HB2	2.10	0.51
3:D:700:VAL:HG22	3:D:718:PRO:HG3	1.92	0.51
3:D:679:ARG:NH2	3:D:681:ARG:HE	2.06	0.51
3:D:681:ARG:HG3	3:D:682:ASP:N	2.26	0.51
3:N:1280:VAL:O	3:N:1294:VAL:HA	2.10	0.51
3:N:1135:ARG:CB	3:N:1135:ARG:HH11	2.22	0.51
3:N:1135:ARG:C	3:N:1136:LYS:O	2.45	0.51
5:P:170:HIS:O	5:P:173:TYR:HB2	2.11	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:560:GLN:HG2	5:P:221:ILE:HG21	1.93	0.51
1:K:13:VAL:HG12	1:K:14:ARG:H	1.74	0.51
3:N:40:GLU:CG	3:N:41:ARG:H	2.19	0.51
3:D:1138:ALA:O	3:D:1140:ILE:N	2.43	0.51
3:N:172:PRO:CB	3:N:178:LEU:HD22	2.41	0.51
2:M:397:GLU:HG2	2:M:632:ASN:HB2	1.93	0.51
3:D:396:VAL:HG12	3:D:397:LYS:N	2.24	0.51
3:N:1478:SER:O	3:N:1480:PHE:N	2.44	0.51
2:C:18:LEU:HD12	2:C:18:LEU:H	1.75	0.51
2:M:494:TYR:CD1	2:M:531:PHE:CE1	2.99	0.51
2:M:456:ALA:HB3	2:M:459:ALA:HB2	1.92	0.51
2:M:745:ILE:HG22	2:M:746:GLY:H	1.75	0.51
3:D:1368:ILE:HG22	3:D:1368:ILE:O	2.11	0.51
3:D:783:ARG:HE	3:D:1029:ARG:CZ	2.24	0.51
5:F:120:THR:CG2	5:F:122:LEU:HD13	2.20	0.51
4:E:40:LEU:HB2	4:E:45:ARG:NE	2.25	0.51
2:C:704:HIS:CD2	2:C:831:ARG:HH22	2.28	0.51
3:N:1197:ARG:HD2	3:N:1396:GLU:HB2	1.92	0.51
1:A:91:ASN:CG	1:A:92:PRO:HD2	2.31	0.51
1:K:189:ARG:NH1	1:L:155:LYS:CE	2.74	0.51
3:N:1047:LYS:HB3	3:N:1048:PRO:HD2	1.92	0.51
3:N:1313:VAL:HG23	3:N:1314:LYS:NZ	2.25	0.51
3:N:35:ARG:CB	3:N:35:ARG:HH11	2.23	0.51
3:D:493:ARG:HE	3:D:1389:LEU:CD2	2.23	0.51
2:C:717:LEU:HD21	2:C:764:GLU:O	2.11	0.51
2:C:1117:SER:O	3:D:23:TYR:OH	2.19	0.51
3:D:1105:ILE:HD11	3:D:1374:GLN:CD	2.30	0.51
5:P:132:ARG:HB3	5:P:136:LEU:HD21	1.91	0.51
3:N:23:TYR:O	3:N:24:GLY:O	2.29	0.51
2:M:1018:GLN:CG	2:M:1060:ILE:HD11	2.30	0.51
3:N:553:ARG:NE	5:P:214:GLN:HB3	2.25	0.51
2:M:682:TYR:CG	3:N:635:PRO:HG2	2.45	0.51
2:C:734:LEU:CD1	2:C:737:LEU:HD22	2.41	0.51
5:P:360:LYS:O	5:P:361:LEU:HD23	2.10	0.51
2:C:1050:GLN:HG3	3:D:1469:GLY:O	2.11	0.51
1:A:20:TYR:OH	1:A:198:ARG:NH2	2.44	0.51
3:N:208:PRO:HB2	3:N:395:VAL:CG1	2.41	0.51
5:F:101:GLU:O	5:F:105:LYS:HG3	2.11	0.51
2:C:607:ASP:HB2	2:C:610:ARG:CG	2.41	0.51
1:K:109:VAL:CG2	1:K:132:LEU:HD13	2.39	0.51
2:C:1:MET:SD	2:C:900:ARG:NH1	2.84	0.51
4:O:14:ASP:OD1	4:O:18:ARG:NH1	2.44	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:724:ARG:C	2:C:725:ASP:OD2	2.49	0.51
3:D:186:VAL:HG13	3:D:187:LYS:N	2.26	0.51
2:M:686:ASP:O	3:N:740:PHE:HB2	2.11	0.51
1:K:110:LYS:N	1:K:113:ASP:OD2	2.41	0.51
1:A:101:LEU:HD12	1:A:102:LYS:N	2.26	0.51
2:M:766:GLU:OE1	3:N:54:LYS:HG2	2.11	0.51
3:D:1147:ARG:HB2	3:D:1188:VAL:HG21	1.93	0.51
3:D:1434:TRP:CE3	3:D:1457:ASP:HB2	2.46	0.51
3:D:517:VAL:HG11	3:D:581:LEU:HD21	1.93	0.51
5:P:152:ASP:CB	5:P:153:PRO:HD3	2.35	0.51
3:N:386:HIS:C	3:N:387:LEU:HD13	2.31	0.51
5:P:105:LYS:HZ2	5:P:105:LYS:HB3	1.73	0.51
3:N:553:ARG:O	3:N:554:LEU:C	2.49	0.51
3:N:750:PRO:HG2	3:N:756:GLN:OE1	2.11	0.51
3:N:1200:VAL:HG22	3:N:1373:ARG:NH1	2.26	0.51
1:A:124:ASN:OD1	1:A:127:LEU:HB3	2.10	0.51
3:D:877:PRO:O	3:D:880:ILE:HG22	2.10	0.51
2:M:99:GLN:HG3	2:M:99:GLN:O	2.10	0.51
5:F:368:VAL:HG11	5:F:389:PHE:HA	1.93	0.51
2:M:910:LYS:CB	2:M:913:GLU:HG3	2.39	0.51
3:N:426:LYS:HA	3:N:434:ARG:HD2	1.92	0.51
5:P:321:ILE:HG13	5:P:329:TYR:HA	1.93	0.51
2:C:1089:VAL:O	2:C:1093:GLN:HG3	2.11	0.51
3:N:679:ARG:HH11	3:N:682:ASP:CG	2.14	0.51
3:N:1083:ASP:OD1	3:N:1238:MET:HB3	2.11	0.51
2:M:226:VAL:O	2:M:230:ARG:HD3	2.11	0.51
3:D:1033:GLN:HE21	3:D:1036:ARG:NH1	2.09	0.51
2:M:585:GLU:HG2	2:M:665:PHE:HE2	1.76	0.51
3:D:1202:GLN:HG2	3:D:1215:VAL:HG13	1.93	0.51
3:D:1313:VAL:HG22	3:D:1314:LYS:N	2.19	0.51
3:D:703:ASN:ND2	3:D:704:ARG:N	2.59	0.51
5:P:214:GLN:O	5:P:215:GLU:C	2.48	0.51
2:M:1032:PHE:HB2	3:N:623:VAL:CG2	2.41	0.51
3:N:140:ALA:N	3:N:147:VAL:HG22	2.26	0.51
3:N:637:LEU:HD23	3:N:729:HIS:N	2.25	0.51
3:D:1227:GLN:O	3:D:1230:GLY:N	2.44	0.51
2:C:946:ARG:CD	2:C:984:GLU:HB2	2.40	0.51
1:B:86:VAL:H	1:B:124:ASN:HB2	1.75	0.51
3:N:1295:GLU:HB3	3:N:1300:SER:CA	2.35	0.51
2:C:774:LEU:HD13	2:C:775:ARG:N	2.26	0.51
3:N:675:ARG:CB	3:N:675:ARG:HH11	2.24	0.51
2:C:810:ASP:HB3	2:C:813:VAL:CG2	2.41	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:247:GLU:H	3:D:248:PRO:CD	2.22	0.51
3:D:93:ILE:CD1	3:D:548:ILE:HD11	2.40	0.51
3:D:1404:ASN:OD1	3:D:1408:ILE:HD12	2.11	0.51
2:C:889:HIS:CE1	2:C:970:GLY:HA3	2.46	0.51
3:D:1368:ILE:O	3:D:1372:VAL:CG2	2.58	0.50
3:D:581:LEU:HG	3:D:582:LEU:N	2.26	0.50
2:C:1021:LEU:HD22	5:F:331:ASP:O	2.11	0.50
3:D:884:ARG:HA	3:D:887:ALA:HB3	1.92	0.50
2:C:256:TYR:O	2:C:259:GLY:N	2.44	0.50
3:N:1243:THR:O	3:N:1269:LYS:HD3	2.11	0.50
2:M:575:GLN:O	2:M:667:ALA:CB	2.59	0.50
3:N:692:GLU:O	3:N:695:ILE:HG22	2.11	0.50
3:N:639:LEU:HD22	3:N:765:SER:OG	2.11	0.50
3:N:1461:GLY:O	3:N:1473:PRO:HG2	2.11	0.50
3:D:1312:LEU:HD11	3:D:1327:ARG:HG3	1.93	0.50
2:M:21:ILE:HD12	2:M:21:ILE:N	2.21	0.50
2:M:404:LEU:O	2:M:408:ARG:HG2	2.10	0.50
3:D:671:LYS:HG3	5:F:422:LEU:HA	1.92	0.50
2:C:226:VAL:HG13	2:C:227:PHE:N	2.22	0.50
3:N:187:LYS:HZ3	3:N:213:VAL:HB	1.75	0.50
3:D:378:ILE:H	3:D:378:ILE:HD13	1.76	0.50
2:M:196:LEU:O	2:M:199:VAL:HB	2.11	0.50
3:D:166:GLN:NE2	3:D:168:THR:OG1	2.43	0.50
3:N:930:LEU:HD11	3:N:934:LEU:CD1	2.41	0.50
2:C:154:ARG:HB2	2:C:154:ARG:NH1	2.26	0.50
2:M:777:ILE:HG22	2:M:778:PHE:HD1	1.76	0.50
3:N:142:LEU:HD12	3:N:142:LEU:O	2.11	0.50
1:L:152:PRO:HG3	3:N:857:ILE:HD12	1.93	0.50
1:K:178:ALA:HB2	2:M:864:GLY:H	1.76	0.50
3:N:65:ARG:HG3	3:N:66:GLN:N	2.27	0.50
3:D:221:ALA:HB3	3:D:367:ILE:HB	1.93	0.50
5:P:152:ASP:HB2	5:P:153:PRO:CD	2.36	0.50
2:C:838:LYS:HB3	2:C:848:VAL:HG22	1.93	0.50
3:N:387:LEU:HG	5:P:97:GLU:HB2	1.93	0.50
4:O:53:GLY:C	4:O:55:PHE:H	2.14	0.50
3:N:685:ASP:O	3:N:687:VAL:N	2.44	0.50
1:L:101:LEU:HB2	1:L:114:PHE:CD2	2.46	0.50
3:D:1074:SER:O	3:D:1077:ALA:CB	2.59	0.50
1:A:18:ARG:HH12	1:A:88:ARG:NE	2.06	0.50
2:M:705:ILE:HG22	2:M:705:ILE:O	2.10	0.50
2:M:176:VAL:CG1	2:M:182:VAL:HG13	2.37	0.50
2:M:949:LYS:NZ	3:N:796:ARG:NH2	2.59	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:959:GLU:O	3:N:963:TYR:HD1	1.94	0.50
2:C:333:ILE:HD13	2:C:467:ILE:HD11	1.93	0.50
2:C:1010:THR:CG2	2:C:1011:GLY:N	2.74	0.50
5:P:256:ARG:HG2	5:P:256:ARG:HH11	1.76	0.50
3:D:1487:VAL:HG12	3:D:1488:ASP:O	2.11	0.50
2:C:859:PRO:O	2:C:867:VAL:HG22	2.12	0.50
3:D:1278:ASP:N	3:D:1278:ASP:OD1	2.43	0.50
1:B:25:LEU:CD2	1:B:28:LEU:HD11	2.41	0.50
1:A:104:GLU:HG2	1:A:137:ARG:HD2	1.93	0.50
1:B:179:PHE:HA	1:B:196:THR:O	2.11	0.50
1:L:226:SER:O	1:L:228:PRO:HD3	2.11	0.50
3:D:23:TYR:CE2	3:D:89:ARG:NH1	2.79	0.50
3:N:1176:LYS:HA	3:N:1179:GLU:CD	2.31	0.50
3:D:1331:ASP:CG	3:D:1334:GLN:HG3	2.32	0.50
2:M:157:ARG:NE	2:M:314:THR:HA	2.26	0.50
3:N:421:LEU:HD11	3:N:437:VAL:HG22	1.93	0.50
3:N:1034:GLN:O	3:N:1038:LEU:HD13	2.12	0.50
1:K:146:ARG:NH2	1:K:148:VAL:HG13	2.26	0.50
3:N:119:SER:H	3:N:123:LEU:HD12	1.76	0.50
3:D:1074:SER:O	3:D:1077:ALA:HB3	2.12	0.50
2:C:101:ILE:HG23	2:C:107:LEU:CD2	2.36	0.50
2:M:545:ASN:OD1	2:M:905:ILE:HG21	2.11	0.50
3:D:484:PRO:O	3:D:489:ARG:HD2	2.11	0.50
3:N:493:ARG:NE	3:N:1389:LEU:HD21	2.26	0.50
1:L:133:GLU:CG	1:L:134:GLU:N	2.75	0.50
2:M:432:ARG:HH12	3:N:1047:LYS:HZ3	1.58	0.50
3:N:1234:THR:C	3:N:1236:LEU:H	2.14	0.50
3:N:133:ILE:HG21	3:N:454:ALA:HB1	1.92	0.50
1:B:156:HIS:CD2	1:B:156:HIS:H	2.29	0.50
1:K:11:PHE:O	1:K:12:THR:C	2.50	0.50
3:D:1033:GLN:NE2	3:D:1036:ARG:NH1	2.59	0.50
3:N:1346:ARG:HG3	3:N:1346:ARG:HH11	1.76	0.50
2:M:586:ARG:O	2:M:589:ARG:N	2.36	0.50
2:M:607:ASP:HB2	2:M:610:ARG:H	1.75	0.50
3:D:818:ARG:O	3:D:821:VAL:HB	2.11	0.50
5:F:148:LYS:HE3	5:F:148:LYS:O	2.11	0.50
3:D:1373:ARG:CG	3:D:1374:GLN:HE21	2.24	0.50
3:D:651:GLU:OE1	3:D:654:LYS:HE3	2.11	0.50
3:D:598:ARG:HH12	5:F:320:PRO:HD3	1.77	0.50
2:M:465:GLY:O	2:M:466:PHE:HD1	1.95	0.50
2:C:71:TYR:CD2	2:C:71:TYR:N	2.79	0.50
2:M:367:LEU:O	2:M:371:LYS:HB3	2.10	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:M:350:ARG:CB	2:M:377:PRO:HB3	2.38	0.50
3:D:382:GLU:HG2	3:D:383:GLY:N	2.18	0.50
1:L:18:ARG:C	1:L:19:GLU:OE1	2.49	0.50
1:B:34:VAL:HG22	1:B:181:VAL:HG21	1.94	0.50
2:C:115:LEU:HD12	2:C:378:LEU:HD22	1.93	0.50
3:D:972:LEU:HD23	3:D:973:GLN:N	2.25	0.50
3:N:1498:ALA:O	3:N:1501:GLU:HB2	2.12	0.50
2:C:805:ARG:O	2:C:806:LEU:HD23	2.11	0.50
3:D:9:ARG:HH22	3:D:11:ALA:CB	2.24	0.50
2:M:398:THR:HG22	2:M:635:THR:HG21	1.91	0.50
1:L:2:LEU:HD12	1:L:3:ASP:H	1.77	0.50
2:M:15:LEU:N	2:M:15:LEU:HD12	2.25	0.50
3:D:93:ILE:HD13	3:D:547:LEU:HD23	1.94	0.50
1:A:138:LEU:O	1:A:138:LEU:HG	2.11	0.50
5:F:155:THR:O	5:F:159:ILE:HG13	2.12	0.50
2:M:1059:ASP:OD1	2:M:1062:GLY:N	2.38	0.50
5:P:135:ILE:HG21	5:P:181:GLU:HB3	1.93	0.50
2:C:515:ALA:O	2:C:522:VAL:O	2.29	0.50
2:M:82:GLU:O	2:M:86:LYS:HB2	2.11	0.50
5:P:172:ARG:O	5:P:176:ILE:HG13	2.11	0.50
2:M:1052:MET:HG3	3:N:623:VAL:HG21	1.93	0.50
3:N:759:ALA:HA	3:N:763:MET:CB	2.42	0.50
2:C:1038:TRP:O	3:D:1223:ILE:HG21	2.12	0.50
3:D:843:PHE:HZ	3:D:858:VAL:HG21	1.76	0.50
1:A:90:LEU:HD12	1:A:119:ASP:HA	1.93	0.50
3:D:752:SER:C	3:D:754:PHE:N	2.65	0.50
1:A:200:TRP:O	1:A:201:THR:OG1	2.26	0.50
2:C:627:ARG:O	2:C:638:ASP:HA	2.11	0.50
3:D:724:GLN:CG	3:D:724:GLN:O	2.58	0.50
3:N:1494:ALA:HA	3:N:1497:GLU:HG2	1.94	0.50
3:D:493:ARG:NE	3:D:1389:LEU:HD21	2.26	0.50
2:M:196:LEU:HA	2:M:199:VAL:CG2	2.42	0.50
2:C:495:THR:HG23	2:C:517:ARG:HE	1.76	0.50
2:M:397:GLU:N	2:M:633:GLN:OE1	2.45	0.50
2:M:839:LEU:HD12	2:M:994:ILE:HG21	1.93	0.50
5:P:340:SER:O	5:P:343:ASP:N	2.43	0.50
3:D:659:LYS:HE2	3:D:663:GLU:OE1	2.12	0.50
3:N:404:GLU:OE1	3:N:414:ARG:NE	2.45	0.50
2:M:72:ARG:HH11	2:M:72:ARG:HG3	1.77	0.50
2:C:445:GLU:HG3	2:C:446:GLY:H	1.77	0.50
4:O:36:LYS:C	4:O:38:THR:H	2.14	0.50
1:B:175:ARG:HB2	1:B:200:TRP:HB3	1.94	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:689:VAL:HG11	2:C:853:LEU:HD22	1.93	0.50
4:E:46:PRO:CB	4:E:54:LEU:HD22	2.41	0.50
4:E:48:MET:H	4:E:54:LEU:HB2	1.76	0.50
2:C:207:LEU:HD22	2:C:221:LEU:CD2	2.41	0.50
3:D:804:LEU:HD12	3:D:831:GLY:HA3	1.93	0.50
2:M:1086:ARG:HD3	2:M:1112:PHE:CE2	2.47	0.50
2:M:1067:TYR:OH	3:N:674:ARG:NH1	2.44	0.50
3:N:698:LYS:HA	3:N:756:GLN:HE21	1.77	0.50
3:N:793:THR:O	3:N:905:PRO:HA	2.10	0.50
1:K:206:THR:HG22	1:K:209:GLU:HB2	1.94	0.50
5:P:410:TYR:O	5:P:414:ARG:HG3	2.12	0.50
2:M:413:LEU:HD11	2:M:451:LEU:HB3	1.92	0.50
1:A:201:THR:HG22	1:A:202:ASP:N	2.26	0.50
3:D:225:LEU:HB2	3:D:227:LEU:CD2	2.41	0.50
1:K:13:VAL:CG1	1:K:14:ARG:H	2.25	0.50
3:N:1277:ILE:CG2	3:N:1278:ASP:N	2.73	0.50
3:D:34:TYR:CE2	5:F:260:ILE:HG13	2.47	0.50
3:D:930:LEU:HA	3:D:933:ALA:HB3	1.93	0.50
3:N:1131:SER:O	3:N:1132:LEU:C	2.50	0.50
1:A:64:GLU:O	1:A:76:VAL:HG22	2.12	0.50
3:D:955:VAL:HG11	3:D:1015:TYR:HE2	1.72	0.50
3:D:218:LYS:HE3	3:D:371:ILE:H	1.77	0.50
2:C:630:ARG:HD2	2:C:634:GLY:HA2	1.93	0.50
2:C:534:VAL:O	2:C:535:SER:HB3	2.11	0.50
2:M:77:PRO:HD3	2:M:93:PRO:HD3	1.94	0.50
5:F:192:LEU:HD23	5:F:195:VAL:HG21	1.93	0.50
3:N:600:LEU:HD23	3:N:600:LEU:H	1.75	0.50
3:N:230:TRP:O	3:N:378:ILE:HD11	2.12	0.50
1:L:86:VAL:O	1:L:86:VAL:HG13	2.12	0.50
3:N:638:LYS:O	3:N:640:HIS:N	2.45	0.50
2:M:137:VAL:CG2	2:M:393:GLN:NE2	2.70	0.50
3:N:1274:ILE:H	3:N:1274:ILE:HD12	1.77	0.50
1:B:123:MET:C	1:B:125:PRO:HD3	2.32	0.50
1:B:124:ASN:OD1	1:B:127:LEU:HB2	2.12	0.50
2:C:911:GLU:O	2:C:915:LYS:HG2	2.12	0.50
1:B:23:PHE:CE1	1:B:208:LEU:HD13	2.47	0.50
4:O:19:LEU:O	4:O:22:VAL:HB	2.11	0.50
2:M:755:LEU:O	2:M:756:VAL:CG2	2.60	0.50
3:N:629:SER:HB3	3:N:726:ILE:CG1	2.41	0.50
5:F:167:PRO:HB2	5:F:170:HIS:HD2	1.77	0.50
3:N:1209:LEU:HD23	4:O:16:LYS:HD2	1.93	0.50
2:C:25:SER:O	2:C:29:ALA:HB2	2.11	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:944:LEU:HD21	2:C:963:LEU:HD23	1.94	0.50
2:C:128:ILE:HG22	2:C:128:ILE:O	2.10	0.50
3:D:1406:ARG:O	3:D:1406:ARG:HG2	2.10	0.50
1:L:15:THR:O	1:L:16:GLN:OE1	2.30	0.50
2:C:137:VAL:HG13	2:C:409:ARG:O	2.11	0.50
2:C:1092:LEU:HD11	3:D:1447:LEU:HD21	1.93	0.50
3:D:583:ASP:OD1	3:D:604:THR:CG2	2.55	0.50
3:D:135:LEU:HD11	3:D:452:ILE:CD1	2.41	0.50
1:L:132:LEU:HD21	1:L:138:LEU:HB3	1.94	0.50
2:M:838:LYS:HD3	2:M:846:LYS:HE2	1.92	0.50
2:M:276:LYS:HG2	2:M:280:LYS:NZ	2.27	0.50
2:C:819:VAL:HG11	2:C:822:VAL:HG13	1.94	0.50
2:M:207:LEU:CD2	2:M:211:LEU:HD22	2.42	0.50
1:A:90:LEU:HD12	1:A:119:ASP:O	2.12	0.50
3:N:1316:GLY:O	3:N:1317:ASP:OD1	2.30	0.50
3:D:671:LYS:O	3:D:674:ARG:HB2	2.12	0.50
2:C:884:GLN:HG3	2:C:992:MET:CE	2.42	0.50
3:D:1443:THR:O	3:D:1444:THR:C	2.50	0.50
2:C:1111:ILE:HG13	2:C:1112:PHE:H	1.77	0.50
3:N:1498:ALA:HA	3:N:1501:GLU:OE2	2.12	0.50
3:N:769:LEU:CD2	3:N:927:THR:HG22	2.42	0.50
3:N:172:PRO:HG3	3:N:178:LEU:HD22	1.93	0.50
5:P:205:ARG:CB	5:P:251:ILE:HD13	2.42	0.50
5:F:191:ASN:N	5:F:191:ASN:HD22	2.10	0.50
2:M:442:GLU:HG2	2:M:454:SER:HB2	1.93	0.50
2:C:881:ASN:N	2:C:881:ASN:ND2	2.58	0.50
1:A:185:ARG:C	1:A:186:LEU:HD12	2.32	0.50
2:M:769:PRO:O	2:M:772:ARG:HB3	2.12	0.50
3:D:1118:ILE:HD11	3:D:1346:ARG:CZ	2.42	0.50
5:P:135:ILE:CD1	5:P:178:ARG:HD2	2.42	0.50
5:P:101:GLU:O	5:P:104:ARG:HB3	2.11	0.50
2:M:491:GLU:HB2	2:M:496:ILE:CD1	2.32	0.50
3:N:1466:VAL:O	3:N:1467:ILE:C	2.50	0.50
3:D:1076:GLY:C	3:D:1079:LYS:HG2	2.33	0.50
2:C:884:GLN:HG3	2:C:992:MET:HE2	1.93	0.50
2:M:862:PRO:HA	2:M:975:TYR:CE1	2.41	0.50
2:C:403:SER:CB	2:C:407:LYS:HZ3	2.24	0.50
1:B:190:THR:O	1:B:190:THR:HG22	2.12	0.50
3:N:471:GLU:OE2	3:N:503:LEU:HD21	2.12	0.50
3:N:585:GLY:C	3:N:587:ARG:H	2.15	0.50
1:B:27:PRO:HG2	1:B:186:LEU:CD1	2.39	0.50
2:M:226:VAL:HG13	2:M:227:PHE:CD1	2.47	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:M:52:PHE:O	2:M:54:ILE:N	2.45	0.50
1:K:11:PHE:HE1	1:L:225:PHE:HD2	1.60	0.50
3:D:1487:VAL:CG1	3:D:1488:ASP:N	2.75	0.50
5:F:370:LYS:O	5:F:374:GLY:HA3	2.11	0.50
2:M:888:THR:O	2:M:892:LEU:N	2.39	0.50
3:N:462:GLN:HG3	3:N:466:LYS:HE3	1.94	0.50
1:K:181:VAL:HG12	2:M:938:LYS:HD2	1.94	0.50
2:M:512:ARG:HB3	2:M:523:ILE:HD11	1.93	0.50
3:D:899:LEU:CD1	3:D:899:LEU:H	2.23	0.49
1:K:146:ARG:HH21	1:K:147:GLY:HA2	1.76	0.49
1:K:147:GLY:O	1:K:148:VAL:HG13	2.12	0.49
2:C:897:LEU:CD1	2:C:921:ALA:HB2	2.30	0.49
3:N:601:ARG:NH1	3:N:605:ASP:O	2.45	0.49
3:N:658:LEU:HD22	3:N:673:ALA:HB3	1.94	0.49
3:D:714:GLN:NE2	3:D:735:ALA:HB1	2.26	0.49
3:N:765:SER:C	3:N:767:HIS:H	2.15	0.49
3:D:413:ASP:OD1	3:D:421:LEU:HD22	2.12	0.49
3:N:119:SER:HB2	3:N:123:LEU:H	1.77	0.49
5:F:287:THR:HG23	5:F:289:GLU:N	2.20	0.49
2:M:533:ASP:HB3	2:M:538:GLN:NE2	2.26	0.49
1:B:87:VAL:CG1	1:B:122:ILE:HG12	2.42	0.49
1:L:92:PRO:C	1:L:94:LEU:H	2.15	0.49
3:N:486:ARG:NH2	3:N:489:ARG:NE	2.59	0.49
3:D:951:ILE:HD12	3:D:1062:ARG:HE	1.77	0.49
2:C:774:LEU:HD13	2:C:774:LEU:C	2.32	0.49
3:D:77:GLY:O	3:D:78:VAL:HG23	2.12	0.49
3:D:225:LEU:HB3	3:D:226:PRO:CD	2.42	0.49
1:B:38:ASN:HB3	1:B:39:PRO:HD3	1.93	0.49
3:N:1470:ARG:HG2	3:N:1471:LEU:N	2.27	0.49
2:C:129:ILE:N	2:C:129:ILE:HD12	2.27	0.49
2:C:129:ILE:HG22	2:C:130:ASN:N	2.27	0.49
5:F:353:GLU:OE2	5:F:356:LYS:HD2	2.11	0.49
2:M:1013:TYR:HE2	5:P:341:PRO:HD2	1.77	0.49
3:N:668:PRO:HD2	3:N:672:ALA:CB	2.41	0.49
3:N:1102:THR:HG22	3:N:1222:GLY:HA3	1.94	0.49
3:D:1093:TYR:CD1	3:D:1093:TYR:C	2.85	0.49
3:D:1441:GLN:CA	3:D:1441:GLN:HE21	2.25	0.49
2:C:758:ARG:NH2	2:C:788:THR:O	2.45	0.49
2:M:313:LEU:HD13	2:M:321:GLU:O	2.12	0.49
3:D:1334:GLN:O	3:D:1335:LEU:C	2.51	0.49
2:C:631:SER:OG	2:C:635:THR:N	2.44	0.49
2:C:919:ALA:CA	2:C:968:LEU:HD21	2.42	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:664:LYS:HB3	3:N:666:ILE:HG13	1.94	0.49
3:D:1213:ARG:HB2	3:D:1214:PRO:CD	2.42	0.49
3:D:710:ARG:HG3	3:D:711:LEU:H	1.75	0.49
2:M:1043:TYR:CD2	3:N:763:MET:HA	2.47	0.49
2:M:470:PRO:HB2	2:M:534:VAL:CG2	2.42	0.49
2:M:382:ILE:O	2:M:385:PHE:HB3	2.11	0.49
3:N:212:ARG:HB3	3:N:394:LEU:HD22	1.94	0.49
3:D:951:ILE:HG23	3:D:1062:ARG:NH2	2.26	0.49
5:F:385:GLU:O	5:F:388:ALA:HB3	2.12	0.49
1:K:225:PHE:CD2	1:L:215:VAL:HG11	2.47	0.49
2:M:348:LEU:O	2:M:351:LEU:HB3	2.12	0.49
1:A:228:PRO:HA	1:B:11:PHE:O	2.11	0.49
1:A:143:ARG:HH21	1:A:158:ILE:HG13	1.76	0.49
2:M:250:ARG:HB3	2:M:253:ALA:HB2	1.94	0.49
2:C:1024:LYS:HZ2	2:C:1024:LYS:HB2	1.78	0.49
3:N:806:PHE:O	3:N:808:THR:N	2.45	0.49
3:D:660:LYS:HA	3:D:663:GLU:HG3	1.93	0.49
2:C:796:GLU:HA	2:C:796:GLU:OE2	2.12	0.49
5:P:284:ARG:O	5:P:286:PRO:HD3	2.11	0.49
3:D:988:ARG:NH2	3:D:1054:GLU:OE2	2.45	0.49
1:L:176:ARG:NH2	3:N:884:ARG:NE	2.60	0.49
2:M:944:LEU:HD21	2:M:963:LEU:CD2	2.41	0.49
2:M:814:GLU:HG3	2:M:814:GLU:O	2.12	0.49
1:L:66:SER:O	1:L:75:VAL:HG23	2.11	0.49
3:D:1107:VAL:CG1	3:D:1217:ILE:HA	2.42	0.49
3:D:1130:ARG:HG2	3:D:1130:ARG:HH11	1.76	0.49
3:N:215:TYR:HH	5:P:101:GLU:HB2	1.77	0.49
3:N:539:ASP:HB2	5:P:318:GLU:OE1	2.12	0.49
3:N:600:LEU:HD23	3:N:600:LEU:N	2.27	0.49
5:P:350:LEU:CA	5:P:422:LEU:HD13	2.33	0.49
2:M:265:ARG:HE	2:M:267:TYR:CA	2.14	0.49
3:N:1372:VAL:HA	3:N:1375:MET:SD	2.52	0.49
3:N:1304:LYS:O	3:N:1305:LEU:HG	2.12	0.49
2:C:67:ASP:HB2	2:C:99:GLN:CG	2.42	0.49
1:B:42:ARG:NH1	2:C:981:GLU:HG2	2.27	0.49
2:M:474:VAL:O	2:M:474:VAL:HG13	2.13	0.49
3:D:679:ARG:CZ	3:D:681:ARG:HG2	2.42	0.49
3:N:828:LYS:HB3	3:N:862:ASP:OD2	2.13	0.49
2:C:771:GLU:O	2:C:771:GLU:CG	2.58	0.49
3:N:1363:LEU:HD11	3:N:1368:ILE:HD11	1.93	0.49
3:D:1145:TYR:C	3:D:1145:TYR:CD2	2.84	0.49
2:C:385:PHE:HD2	2:C:386:PHE:CD1	2.30	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:L:2:LEU:HA	1:L:6:LEU:CB	2.42	0.49
2:M:603:VAL:HG23	2:M:647:GLN:O	2.11	0.49
2:M:677:MET:O	2:M:873:PRO:HD3	2.13	0.49
2:M:704:HIS:CE1	2:M:706:GLU:OE1	2.66	0.49
2:M:1118:LYS:O	2:M:1119:ARG:HB2	2.12	0.49
3:D:543:LEU:HA	3:D:546:ARG:HG3	1.94	0.49
3:D:85:VAL:CG1	3:D:89:ARG:NE	2.76	0.49
3:D:785:ILE:O	3:D:789:LEU:HG	2.11	0.49
3:D:564:GLU:C	3:D:566:ILE:H	2.16	0.49
3:N:9:ARG:O	3:N:9:ARG:HG2	2.12	0.49
3:N:661:MET:CE	3:N:673:ALA:HB1	2.43	0.49
2:C:338:GLU:HA	2:C:341:THR:HG22	1.93	0.49
3:N:729:HIS:CG	3:N:730:PRO:HD2	2.47	0.49
2:M:91:GLN:HE21	2:M:119:PRO:HG3	1.77	0.49
3:N:399:ARG:HB3	3:N:402:PRO:HG3	1.95	0.49
3:D:1153:VAL:HG12	3:D:1155:VAL:HG22	1.94	0.49
5:F:99:GLU:O	5:F:103:ALA:HB2	2.11	0.49
3:N:1343:ALA:O	3:N:1346:ARG:N	2.45	0.49
5:F:242:TRP:O	5:F:245:GLN:HB2	2.12	0.49
2:C:762:LYS:HZ1	2:C:762:LYS:HB2	1.75	0.49
2:M:417:GLY:O	2:M:418:LEU:HD13	2.12	0.49
1:K:44:LEU:HD23	1:K:48:ILE:HD11	1.94	0.49
1:B:44:LEU:HD23	1:B:48:ILE:CD1	2.42	0.49
3:D:654:LYS:HB3	3:D:655:PRO:CD	2.38	0.49
3:N:638:LYS:O	3:N:639:LEU:C	2.50	0.49
3:D:172:PRO:HB3	3:D:178:LEU:HB3	1.95	0.49
3:D:65:ARG:HG3	3:D:66:GLN:N	2.27	0.49
3:N:909:ASN:HA	3:N:912:LYS:HB3	1.94	0.49
2:M:713:ARG:NH1	3:N:531:ASP:HB3	2.27	0.49
2:M:260:LEU:O	2:M:260:LEU:HD12	2.12	0.49
1:B:15:THR:HG23	1:B:15:THR:O	2.11	0.49
2:C:693:GLU:OE1	2:C:696:LYS:CD	2.60	0.49
2:C:19:THR:CG2	2:C:23:VAL:HG23	2.42	0.49
2:C:729:LEU:HD11	5:F:419:ARG:HH21	1.76	0.49
2:M:946:ARG:HD2	2:M:984:GLU:HB2	1.93	0.49
3:N:15:PRO:O	3:N:19:ARG:HG3	2.13	0.49
3:D:559:ALA:C	3:D:561:GLY:N	2.63	0.49
3:N:1343:ALA:C	3:N:1345:GLU:H	2.16	0.49
3:D:928:ALA:HA	3:D:931:LEU:HD12	1.93	0.49
2:M:449:ILE:CG2	2:M:449:ILE:O	2.61	0.49
2:C:1045:ALA:CB	3:D:758:GLU:OE2	2.61	0.49
2:C:630:ARG:HH21	2:C:707:ARG:N	2.10	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:222:GLY:HA2	3:D:366:LYS:HA	1.94	0.49
3:N:1395:LEU:HD13	3:N:1399:ASP:OD2	2.13	0.49
3:N:613:ARG:NH1	3:N:613:ARG:HG3	2.28	0.49
2:M:1072:LYS:O	3:N:659:LYS:NZ	2.40	0.49
1:A:85:LEU:HD11	1:A:122:ILE:HG23	1.94	0.49
2:M:1082:PRO:HG2	3:N:1469:GLY:CA	2.39	0.49
2:M:971:LYS:CD	2:M:986:PRO:HB2	2.42	0.49
2:M:952:LEU:HG	2:M:986:PRO:HG2	1.93	0.49
3:N:1019:PRO:O	3:N:1023:MET:HG3	2.12	0.49
1:L:206:THR:CG2	1:L:209:GLU:CD	2.81	0.49
2:C:861:LEU:O	2:C:863:ASP:N	2.45	0.49
2:M:348:LEU:H	2:M:348:LEU:HD12	1.77	0.49
1:A:162:ILE:HG13	1:A:163:ASN:N	2.28	0.49
2:C:721:ARG:HE	2:C:783:ARG:NH2	2.10	0.49
3:D:838:ARG:HG2	3:D:865:THR:OG1	2.12	0.49
3:D:828:LYS:H	3:D:828:LYS:HD3	1.77	0.49
5:F:276:ARG:NH1	5:F:276:ARG:HG3	2.26	0.49
2:C:432:ARG:N	2:C:432:ARG:HD3	2.28	0.49
3:D:582:LEU:O	3:D:603:LEU:HB2	2.13	0.49
2:C:1092:LEU:HG	3:D:607:LEU:CD1	2.42	0.49
3:D:218:LYS:CD	3:D:370:ALA:HB1	2.43	0.49
2:C:300:ASP:C	2:C:302:VAL:N	2.65	0.49
2:C:857:ASP:O	2:C:978:ARG:HG2	2.12	0.49
2:M:73:LEU:HD21	2:M:118:ILE:HD11	1.95	0.49
2:M:1016:ILE:CD1	2:M:1016:ILE:H	1.94	0.49
2:M:1094:ALA:HB2	3:N:520:LEU:HD13	1.95	0.49
3:N:131:LYS:CG	3:N:568:ARG:HG2	2.42	0.49
5:P:141:VAL:O	5:P:145:PRO:CD	2.50	0.49
5:P:406:ARG:O	5:P:410:TYR:HB2	2.13	0.49
3:N:1027:GLY:O	3:N:1028:ALA:C	2.50	0.49
3:N:912:LYS:HB3	3:N:912:LYS:NZ	2.28	0.49
3:D:951:ILE:HD12	3:D:1062:ARG:NE	2.27	0.49
3:N:1078:ARG:O	3:N:1079:LYS:O	2.31	0.49
3:N:795:VAL:CG1	3:N:863:VAL:HG13	2.43	0.49
2:M:1038:TRP:CD1	3:N:1223:ILE:HD11	2.48	0.49
2:M:695:LEU:CD1	2:M:852:ILE:HG21	2.43	0.49
2:M:927:GLY:O	2:M:930:LYS:HB2	2.13	0.49
1:A:101:LEU:HD13	1:A:113:ASP:HB3	1.95	0.49
2:M:601:GLY:O	2:M:648:ARG:HA	2.11	0.49
3:N:136:ASP:CB	3:N:137:PRO:CD	2.86	0.49
4:O:39:VAL:O	4:O:72:ARG:NE	2.46	0.49
4:E:41:GLU:O	4:E:42:PRO:C	2.50	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:E:48:MET:HB2	4:E:54:LEU:HB2	1.95	0.49
2:C:285:LEU:HD21	2:C:289:THR:HA	1.94	0.49
2:C:443:THR:CG2	2:C:450:GLY:H	2.07	0.49
2:M:580:MET:CE	2:M:902:ILE:HD11	2.42	0.49
1:K:203:GLY:O	1:K:205:VAL:O	2.30	0.49
3:N:965:GLU:HA	3:N:968:ASP:CB	2.34	0.49
3:D:171:LEU:CB	3:D:390:PRO:HA	2.42	0.49
3:N:798:GLU:OE1	3:N:828:LYS:HE2	2.13	0.49
2:M:432:ARG:NH1	3:N:1047:LYS:HG2	2.27	0.49
3:N:528:VAL:HG12	3:N:529:GLN:N	2.27	0.49
5:P:88:ILE:O	5:P:92:PRO:CD	2.61	0.49
3:N:380:GLU:O	3:N:382:GLU:OE2	2.29	0.49
3:D:1152:GLU:O	3:D:1153:VAL:CG2	2.61	0.49
2:C:674:VAL:HG23	2:C:869:VAL:CG1	2.42	0.49
2:M:855:VAL:C	2:M:857:ASP:H	2.16	0.49
3:D:205:TYR:HA	3:D:393:ILE:CD1	2.42	0.49
3:D:231:VAL:HA	3:D:378:ILE:CG1	2.43	0.49
3:N:1437:ALA:C	3:N:1446:VAL:HG11	2.33	0.49
1:L:223:THR:O	1:L:225:PHE:N	2.46	0.49
3:N:704:ARG:HG2	3:N:745:MET:HG3	1.93	0.49
2:C:26:TYR:CE1	2:C:340:MET:HG3	2.47	0.49
5:F:207:LEU:O	5:F:212:LEU:HD12	2.13	0.49
3:D:131:LYS:O	3:D:133:ILE:HG13	2.13	0.49
2:C:469:THR:CG2	2:C:471:TYR:HE1	2.25	0.49
1:K:49:PRO:HA	1:K:148:VAL:HG12	1.94	0.49
1:K:150:TYR:HD1	1:K:170:VAL:HG12	1.78	0.49
3:N:1393:GLN:CB	3:N:1398:TRP:HE1	2.15	0.49
3:N:523:ASP:N	3:N:523:ASP:OD1	2.43	0.49
3:N:82:LYS:O	3:N:84:ILE:N	2.45	0.49
3:N:231:VAL:HA	3:N:378:ILE:CD1	2.42	0.49
3:N:625:TYR:HD1	3:N:625:TYR:H	1.61	0.49
3:D:1207:TYR:O	3:D:1208:ASP:C	2.51	0.49
2:M:1047:HIS:N	3:N:758:GLU:OE2	2.46	0.49
2:M:516:ARG:HH11	2:M:521:PRO:HB3	1.78	0.49
3:N:1462:LEU:HD22	3:N:1473:PRO:HD2	1.94	0.49
3:N:193:PRO:HB3	3:N:206:ARG:HH11	1.78	0.49
5:F:134:LYS:HD2	5:F:160:ASP:OD2	2.13	0.49
3:N:47:GLU:CB	3:N:78:VAL:HG22	2.42	0.49
3:D:486:ARG:HA	3:D:486:ARG:HE	1.77	0.49
5:P:354:LEU:HD23	5:P:418:LEU:CD1	2.42	0.49
1:B:220:GLU:O	1:B:220:GLU:HG2	2.11	0.49
1:B:221:HIS:HA	1:B:224:TYR:CD2	2.48	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:40:GLU:CG	3:D:41:ARG:H	2.20	0.49
3:D:79:GLU:HG2	3:D:80:VAL:N	2.25	0.49
2:C:607:ASP:HB2	2:C:610:ARG:HG3	1.95	0.49
2:M:953:VAL:CA	2:M:965:GLU:OE1	2.60	0.49
3:N:962:GLN:O	3:N:966:GLU:CG	2.60	0.49
3:D:187:LYS:HE2	3:D:213:VAL:HG12	1.94	0.49
2:C:653:ASP:OD1	2:C:654:LEU:HD23	2.13	0.49
1:A:76:VAL:O	1:A:76:VAL:HG12	2.13	0.49
3:D:153:LEU:HD23	3:D:153:LEU:N	2.28	0.49
2:M:165:LEU:HA	2:M:166:PRO:C	2.32	0.49
2:C:1087:VAL:O	2:C:1087:VAL:HG12	2.13	0.49
3:D:1369:GLU:O	3:D:1370:ILE:O	2.31	0.49
3:D:502:PHE:O	3:D:504:ASP:N	2.46	0.49
3:D:886:VAL:O	3:D:890:VAL:HG22	2.12	0.49
3:D:368:VAL:CG1	3:D:369:ALA:N	2.75	0.49
2:C:292:ARG:HD2	2:C:299:LYS:HD3	1.94	0.49
2:C:569:VAL:HG12	2:C:996:LYS:O	2.13	0.49
3:N:387:LEU:CG	5:P:97:GLU:HB2	2.43	0.49
3:N:550:ARG:NH1	3:N:577:ALA:HB2	2.28	0.49
3:N:591:VAL:CA	3:N:600:LEU:HD21	2.43	0.49
2:M:1051:GLU:OE1	3:N:751:LEU:N	2.46	0.49
3:D:1311:LEU:CD2	3:D:1311:LEU:H	2.12	0.49
2:M:1043:TYR:CE2	3:N:763:MET:HA	2.47	0.49
3:D:530:VAL:HB	3:D:534:ARG:HB2	1.93	0.49
2:C:1067:TYR:CE1	2:C:1071:ILE:HD11	2.46	0.49
1:L:206:THR:HG22	1:L:209:GLU:HB2	1.93	0.49
1:L:211:LEU:O	1:L:215:VAL:HG13	2.13	0.49
2:M:795:GLY:O	2:M:796:GLU:CG	2.58	0.49
3:N:1087:ARG:NH1	3:N:1238:MET:HG3	2.27	0.49
3:N:35:ARG:HB3	3:N:35:ARG:NH1	2.25	0.49
2:M:755:LEU:C	2:M:756:VAL:HG23	2.33	0.49
2:M:755:LEU:HD22	2:M:825:VAL:HG11	1.95	0.49
3:N:28:LYS:CB	3:N:41:ARG:HD2	2.42	0.49
2:C:42:VAL:HG13	2:C:268:ASP:OD2	2.13	0.49
2:M:398:THR:N	2:M:633:GLN:OE1	2.46	0.49
2:C:12:VAL:HG13	2:C:13:ILE:N	2.27	0.49
1:B:94:LEU:HD23	1:B:97:VAL:HG21	1.95	0.49
3:D:1081:GLY:O	3:D:1083:ASP:N	2.45	0.49
2:C:703:ILE:O	2:C:703:ILE:HG22	2.13	0.49
2:C:74:GLY:O	2:C:76:PRO:HD3	2.12	0.49
3:D:10:ILE:HG13	3:D:1434:TRP:CE2	2.46	0.48
3:D:1104:GLU:OE1	3:D:1377:LYS:HE3	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:152:LEU:HD23	3:D:152:LEU:N	2.08	0.48
2:M:86:LYS:C	2:M:88:LEU:H	2.15	0.48
2:M:1096:ALA:O	3:N:13:ALA:HB2	2.13	0.48
2:M:1052:MET:SD	2:M:1056:LYS:HD3	2.52	0.48
3:D:389:GLU:CD	3:D:389:GLU:N	2.66	0.48
3:N:1304:LYS:O	3:N:1305:LEU:HD23	2.13	0.48
3:N:1466:VAL:HG23	3:N:1472:ILE:CD1	2.36	0.48
3:D:642:CYS:SG	3:D:642:CYS:O	2.71	0.48
3:D:1376:MET:HG2	3:D:1421:LEU:HD12	1.95	0.48
3:D:1378:TYR:CD1	3:D:1422:MET:HE2	2.48	0.48
1:B:1:MET:HG3	1:B:6:LEU:HD13	1.94	0.48
3:N:186:VAL:HG21	3:N:213:VAL:HB	1.93	0.48
3:D:9:ARG:NH2	3:D:11:ALA:HB2	2.28	0.48
3:D:660:LYS:HD2	3:D:663:GLU:HG3	1.95	0.48
5:P:288:TYR:CE2	5:P:305:GLU:HG3	2.48	0.48
1:B:58:ILE:HG22	1:B:59:GLU:N	2.28	0.48
2:M:188:LYS:HE2	2:M:188:LYS:C	2.34	0.48
5:P:415:THR:O	5:P:417:LYS:HG3	2.12	0.48
2:C:874:LEU:HD13	3:D:783:ARG:HB3	1.94	0.48
3:D:907:GLU:HG2	3:D:908:LYS:N	2.26	0.48
3:D:563:PRO:HG3	5:F:188:ILE:HG22	1.94	0.48
3:N:520:LEU:HD12	3:N:521:PRO:CD	2.44	0.48
2:M:1018:GLN:HG3	2:M:1060:ILE:CG1	2.43	0.48
3:N:570:GLU:C	3:N:572:ARG:N	2.63	0.48
3:N:654:LYS:O	3:N:655:PRO:C	2.52	0.48
3:N:1476:THR:HG22	3:N:1476:THR:O	2.13	0.48
3:D:179:VAL:HG11	3:D:217:LYS:CE	2.43	0.48
3:N:939:PHE:O	3:N:942:SER:HB3	2.13	0.48
2:C:987:ILE:HA	3:D:948:THR:HG21	1.95	0.48
1:A:88:ARG:HH12	1:A:90:LEU:HD23	1.77	0.48
2:M:347:GLY:O	2:M:350:ARG:HD2	2.14	0.48
1:K:189:ARG:HH11	1:L:155:LYS:NZ	2.05	0.48
3:N:477:LEU:O	3:N:481:MET:HB2	2.12	0.48
3:D:951:ILE:HD12	3:D:1062:ARG:NH2	2.28	0.48
3:N:3:LYS:HD3	3:N:3:LYS:N	2.28	0.48
3:D:1478:SER:OG	3:D:1480:PHE:HB3	2.12	0.48
2:M:256:TYR:OH	2:M:293:PHE:HB2	2.13	0.48
3:N:1058:ARG:HH11	3:N:1058:ARG:HG3	1.77	0.48
4:O:41:GLU:HB3	4:O:42:PRO:HD3	1.94	0.48
1:B:66:SER:O	1:B:74:ASP:OD1	2.31	0.48
2:M:165:LEU:HA	2:M:166:PRO:O	2.13	0.48
3:N:1493:LYS:O	3:N:1496:GLU:HB3	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:540:PHE:CE1	2:C:550:LEU:HD23	2.47	0.48
2:M:939:ARG:HB3	2:M:982:PRO:HG3	1.94	0.48
3:N:223:LEU:HA	3:N:365:ASP:HB3	1.94	0.48
3:D:588:GLY:O	3:D:590:PRO:HD3	2.12	0.48
3:N:564:GLU:H	3:N:564:GLU:CD	2.17	0.48
3:N:1393:GLN:O	3:N:1394:VAL:C	2.51	0.48
2:C:710:ILE:HD13	2:C:790:LEU:HB2	1.94	0.48
2:M:1047:HIS:N	3:N:758:GLU:CD	2.67	0.48
3:N:949:ILE:HD11	3:N:1023:MET:HE1	1.94	0.48
5:F:174:LEU:HD22	5:F:178:ARG:HG2	1.94	0.48
3:N:481:MET:HG3	3:N:493:ARG:HB2	1.96	0.48
1:K:33:GLY:N	1:K:193:ASP:OD2	2.44	0.48
3:N:1115:THR:CB	3:N:1151:ARG:NH2	2.71	0.48
2:C:1059:ASP:HB3	2:C:1062:GLY:HA3	1.95	0.48
5:F:93:LEU:CD1	5:F:102:LEU:HD12	2.44	0.48
2:M:762:LYS:NZ	2:M:784:ASP:O	2.47	0.48
3:N:736:PHE:O	3:N:738:ALA:N	2.47	0.48
2:C:408:ARG:HH11	2:C:542:VAL:HG23	1.78	0.48
5:F:169:GLU:O	5:F:172:ARG:HB3	2.13	0.48
3:D:475:LYS:O	3:D:478:LEU:HB2	2.12	0.48
1:A:43:ILE:HD11	1:B:35:THR:HG21	1.95	0.48
3:D:1273:VAL:HG21	3:D:1305:LEU:HD21	1.95	0.48
3:D:783:ARG:NE	3:D:1029:ARG:NE	2.59	0.48
3:D:601:ARG:HH22	3:D:611:GLN:H	1.59	0.48
3:N:433:GLY:HA3	3:N:449:SER:O	2.13	0.48
3:D:810:GLU:C	3:D:812:ALA:H	2.16	0.48
5:P:138:SER:HB2	5:P:140:ARG:HG2	1.94	0.48
3:N:676:MET:HE1	3:N:684:LYS:H	1.79	0.48
1:K:124:ASN:N	1:K:125:PRO:HD3	2.28	0.48
3:N:1274:ILE:HD11	3:N:1334:GLN:NE2	2.29	0.48
2:M:910:LYS:H	2:M:913:GLU:CB	2.26	0.48
2:M:858:MET:HE2	2:M:867:VAL:HG23	1.96	0.48
3:D:486:ARG:HE	3:D:489:ARG:HD3	1.78	0.48
2:M:328:LEU:H	2:M:433:THR:CG2	2.22	0.48
3:D:951:ILE:HD12	3:D:1062:ARG:HH21	1.78	0.48
1:L:23:PHE:CZ	1:L:208:LEU:HA	2.48	0.48
3:N:1155:VAL:HG21	3:N:1174:LEU:CD2	2.43	0.48
1:A:14:ARG:HH12	1:A:24:VAL:HG23	1.78	0.48
5:F:396:ARG:HA	5:F:399:GLN:HB2	1.95	0.48
2:C:729:LEU:CD1	5:F:419:ARG:HH21	2.26	0.48
3:N:1225:ALA:O	3:N:1229:ILE:HG13	2.13	0.48
3:D:34:TYR:O	3:D:36:THR:N	2.46	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:584:GLU:O	2:C:588:VAL:HG13	2.13	0.48
3:D:444:VAL:HG13	3:D:444:VAL:O	2.13	0.48
3:N:411:THR:HG22	3:N:412:GLY:N	2.28	0.48
2:C:1004:LYS:HE3	2:C:1027:PHE:CE1	2.48	0.48
1:A:79:ILE:C	1:A:79:ILE:HD12	2.33	0.48
3:N:496:LEU:HD21	3:N:500:ARG:NE	2.27	0.48
2:M:123:GLU:OE2	2:M:592:LEU:CD1	2.62	0.48
2:M:728:HIS:O	2:M:729:LEU:HD22	2.14	0.48
2:M:49:ARG:HG2	2:M:68:PHE:CE2	2.47	0.48
2:C:1115:LEU:HD23	3:D:85:VAL:HA	1.95	0.48
2:C:680:ASP:OD1	3:D:636:GLN:NE2	2.47	0.48
3:D:782:SER:O	3:D:786:ILE:HD12	2.13	0.48
3:D:890:VAL:HG11	3:D:922:LEU:CD1	2.43	0.48
4:E:54:LEU:CD2	4:E:63:TRP:HE1	2.26	0.48
2:C:438:ILE:CD1	2:C:453:THR:HG21	2.33	0.48
2:C:535:SER:O	2:C:537:LYS:N	2.46	0.48
3:N:1253:THR:HG23	3:N:1258:ARG:HD2	1.95	0.48
3:D:1292:VAL:HG11	3:D:1325:LEU:CD2	2.39	0.48
3:D:553:ARG:NH1	5:F:214:GLN:HB2	2.28	0.48
3:N:455:ARG:HE	3:N:463:GLN:HE22	1.57	0.48
2:M:1008:ARG:C	3:N:651:GLU:OE2	2.52	0.48
3:N:984:THR:O	3:N:985:ASP:C	2.52	0.48
3:N:923:GLY:O	3:N:924:MET:C	2.51	0.48
2:C:1034:GLU:OE1	3:D:1096:ARG:CD	2.62	0.48
3:N:1189:ARG:HB3	3:N:1189:ARG:HH11	1.79	0.48
3:N:1372:VAL:HA	3:N:1375:MET:HG3	1.94	0.48
3:N:1305:LEU:HB3	3:N:1309:ALA:CB	2.44	0.48
3:D:646:LYS:HA	3:D:720:LEU:CD2	2.44	0.48
2:M:115:LEU:HA	2:M:375:SER:OG	2.13	0.48
1:K:33:GLY:O	1:K:195:LEU:HD13	2.14	0.48
2:M:724:ARG:HG2	2:M:734:LEU:HD12	1.95	0.48
1:B:206:THR:O	1:B:209:GLU:HB2	2.13	0.48
3:N:473:LEU:CD1	3:N:476:GLU:OE1	2.61	0.48
2:C:113:VAL:O	2:C:115:LEU:HD23	2.13	0.48
1:K:106:PRO:HA	1:K:132:LEU:O	2.14	0.48
3:N:1277:ILE:CG2	3:N:1278:ASP:H	2.26	0.48
2:M:946:ARG:HH11	2:M:984:GLU:HB2	1.77	0.48
2:M:684:PHE:HB2	3:N:633:VAL:HG21	1.94	0.48
3:D:1465:ASN:HD21	3:D:1470:ARG:HH12	1.59	0.48
3:D:578:VAL:O	3:D:582:LEU:HG	2.13	0.48
4:E:46:PRO:HB3	4:E:54:LEU:HD22	1.95	0.48
1:L:170:VAL:O	1:L:170:VAL:HG23	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:M:580:MET:N	2:M:901:TYR:O	2.47	0.48
2:M:669:GLY:C	2:M:670:GLN:HG3	2.33	0.48
3:N:86:ARG:NH1	3:N:522:PRO:CB	2.77	0.48
3:N:571:LYS:HZ2	3:N:571:LYS:HB2	1.77	0.48
2:M:1009:SER:HB2	3:N:651:GLU:CD	2.33	0.48
2:M:146:VAL:HG12	2:M:162:ILE:HG12	1.94	0.48
3:N:890:VAL:O	3:N:892:ASP:N	2.47	0.48
3:D:172:PRO:HG3	3:D:178:LEU:HD22	1.96	0.48
3:N:1271:LYS:CE	3:N:1334:GLN:NE2	2.76	0.48
2:M:551:GLU:O	2:M:553:ASP:N	2.46	0.48
5:F:287:THR:C	5:F:289:GLU:H	2.15	0.48
2:M:910:LYS:HD2	2:M:910:LYS:N	2.28	0.48
5:P:120:THR:CG2	5:P:122:LEU:HD13	2.35	0.48
2:C:910:LYS:O	2:C:911:GLU:C	2.52	0.48
3:D:1062:ARG:HD3	3:D:1062:ARG:C	2.34	0.48
2:M:854:PRO:O	2:M:857:ASP:OD2	2.31	0.48
1:L:27:PRO:O	1:L:28:LEU:HG	2.14	0.48
3:D:1137:ARG:H	3:D:1137:ARG:HD2	1.78	0.48
3:N:169:TYR:O	3:N:169:TYR:CG	2.66	0.48
1:A:213:GLN:O	1:A:217:ILE:HG13	2.13	0.48
1:A:109:VAL:HG23	1:A:132:LEU:HD13	1.96	0.48
2:M:122:THR:HG22	2:M:123:GLU:N	2.28	0.48
2:C:327:HIS:HA	2:C:431:HIS:CD2	2.49	0.48
2:C:1020:PRO:CD	2:C:1057:SER:HA	2.43	0.48
3:D:1114:THR:CG2	3:D:1195:GLN:HB2	2.42	0.48
2:C:1016:ILE:HG12	2:C:1017:THR:H	1.79	0.48
2:M:554:ASP:CB	2:M:880:MET:HB2	2.39	0.48
3:N:374:GLU:HG2	3:N:386:HIS:CA	2.37	0.48
3:D:1071:PHE:C	3:D:1071:PHE:CD1	2.87	0.48
3:D:553:ARG:HD2	3:D:570:GLU:OE1	2.14	0.48
5:P:326:ASP:N	5:P:326:ASP:OD1	2.46	0.48
2:C:768:THR:HG22	2:C:769:PRO:HD2	1.96	0.48
3:N:195:VAL:CG2	3:N:205:TYR:HB2	2.43	0.48
2:C:850:ALA:CB	3:D:633:VAL:HG12	2.43	0.48
3:N:37:LEU:HD11	3:N:529:GLN:HG3	1.95	0.48
3:D:1442:ASN:HD22	3:D:1446:VAL:HG21	1.78	0.48
2:C:572:ILE:HG23	2:C:701:THR:O	2.14	0.48
2:M:722:ILE:CD1	2:M:823:VAL:HG21	2.41	0.48
3:D:36:THR:CG2	3:D:38:LYS:HG3	2.43	0.48
2:M:736:ASP:O	2:M:743:VAL:HG23	2.14	0.48
3:D:1156:LEU:HD11	3:D:1177:ALA:CA	2.43	0.48
2:C:945:ARG:C	2:C:947:ALA:H	2.16	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:930:LEU:HD11	3:N:934:LEU:HD11	1.96	0.48
1:A:73:GLU:HB2	1:A:78:ILE:HG13	1.95	0.48
3:D:102:ILE:HD12	3:D:579:ASP:CB	2.40	0.48
3:D:1109:GLU:HG2	3:D:1201:CYS:HA	1.96	0.48
3:D:1377:LYS:O	3:D:1377:LYS:HG3	2.14	0.48
3:D:650:LEU:HD13	3:D:688:TRP:CZ3	2.48	0.48
2:M:1063:ARG:HG3	2:M:1064:ASN:H	1.79	0.48
2:C:516:ARG:CD	2:C:521:PRO:HA	2.43	0.48
2:C:197:LEU:CD1	2:C:207:LEU:HD11	2.44	0.48
2:C:256:TYR:CE1	2:C:293:PHE:HB2	2.49	0.48
2:M:1052:MET:SD	3:N:623:VAL:HG11	2.54	0.48
2:M:146:VAL:HG12	2:M:162:ILE:HA	1.95	0.48
3:D:1219:GLU:O	3:D:1220:ALA:C	2.52	0.48
1:A:153:ALA:C	1:A:155:LYS:N	2.64	0.48
3:N:191:LEU:CD1	3:N:211:VAL:HG21	2.43	0.48
5:P:406:ARG:HG2	5:P:409:LYS:HE2	1.96	0.48
2:C:843:HIS:NE2	2:C:887:GLU:OE2	2.47	0.48
1:A:91:ASN:OD1	1:A:92:PRO:HD2	2.14	0.48
2:C:355:VAL:HG13	2:C:356:ARG:N	2.28	0.48
3:N:1450:ALA:O	3:N:1454:GLY:N	2.45	0.48
3:D:1398:TRP:CH2	3:D:1415:VAL:HG11	2.49	0.48
3:N:860:LEU:HD23	3:N:877:PRO:HB2	1.96	0.48
1:A:80:LEU:HD21	2:C:698:ASP:HB2	1.96	0.48
3:N:1225:ALA:C	3:N:1229:ILE:HD12	2.34	0.48
2:C:1085:PHE:O	2:C:1088:LEU:CB	2.62	0.48
2:C:30:LEU:O	2:C:32:ALA:N	2.47	0.48
3:N:1478:SER:C	3:N:1480:PHE:H	2.17	0.48
2:M:757:GLY:HA2	2:M:789:SER:OG	2.14	0.48
1:B:91:ASN:HB2	1:B:92:PRO:HD2	1.94	0.48
3:N:919:PHE:HZ	3:N:1211:MET:HB3	1.79	0.48
2:C:1037:VAL:HG13	2:C:1049:LEU:HD11	1.96	0.48
3:D:625:TYR:O	3:D:749:VAL:HG23	2.13	0.48
3:D:1331:ASP:HB3	3:D:1334:GLN:CG	2.44	0.48
5:P:130:VAL:HG21	5:P:159:ILE:CD1	2.44	0.48
2:C:197:LEU:HD12	2:C:207:LEU:HD11	1.95	0.48
3:D:812:ALA:O	3:D:816:HIS:HB2	2.14	0.48
2:M:838:LYS:HD3	2:M:846:LYS:CE	2.43	0.48
2:M:1095:LEU:CD2	3:N:603:LEU:HD13	2.44	0.48
2:C:690:ILE:HD11	2:C:839:LEU:HD11	1.95	0.48
3:N:637:LEU:HD23	3:N:729:HIS:CA	2.44	0.48
3:N:1219:GLU:C	3:N:1221:VAL:H	2.16	0.48
2:M:630:ARG:NH2	2:M:707:ARG:H	2.03	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:1336:LEU:HD22	3:D:1421:LEU:CB	2.44	0.48
2:M:176:VAL:HG12	2:M:182:VAL:CG1	2.36	0.48
3:N:1047:LYS:HA	3:N:1053:PHE:HE1	1.75	0.48
1:A:24:VAL:HG12	1:A:25:LEU:N	2.29	0.48
2:M:404:LEU:HB2	2:M:591:SER:HB2	1.96	0.48
3:D:78:VAL:C	3:D:79:GLU:O	2.48	0.48
2:C:572:ILE:HG13	2:C:573:ARG:N	2.27	0.48
3:N:916:TYR:CZ	3:N:920:LEU:HD22	2.48	0.48
2:M:244:PRO:HD2	2:M:245:GLY:N	2.28	0.48
3:N:1094:LEU:HD23	3:N:1230:GLY:HA2	1.95	0.48
2:M:69:LEU:HD12	2:M:97:ARG:HB3	1.95	0.48
3:N:1231:GLU:HB3	3:N:1232:PRO:HD3	1.95	0.48
1:A:185:ARG:O	1:A:185:ARG:NE	2.47	0.48
1:B:211:LEU:O	1:B:214:ALA:HB3	2.13	0.48
3:N:779:ALA:HB1	3:N:931:LEU:HD13	1.95	0.48
3:D:104:PHE:HD1	3:D:512:MET:SD	2.37	0.48
3:D:829:VAL:HG12	3:D:830:ALA:N	2.29	0.48
3:D:1303:TYR:HA	3:D:1304:LYS:HE2	1.95	0.48
5:P:138:SER:HB2	5:P:140:ARG:NE	2.29	0.48
2:M:162:ILE:CD1	2:M:306:THR:HG21	2.39	0.48
1:L:100:LEU:O	1:L:114:PHE:HA	2.14	0.48
3:N:699:VAL:N	3:N:756:GLN:HE21	2.09	0.48
3:N:1271:LYS:HE3	3:N:1334:GLN:CD	2.34	0.48
3:N:1423:GLY:C	3:N:1425:THR:N	2.67	0.48
3:N:149:LYS:CD	3:N:149:LYS:H	2.20	0.48
2:M:10:ARG:O	2:M:12:VAL:N	2.47	0.48
1:K:189:ARG:NH1	1:L:155:LYS:HE2	2.29	0.48
3:D:1087:ARG:NH2	3:D:1237:THR:HA	2.28	0.48
2:M:737:LEU:HD11	2:M:754:ILE:CG2	2.44	0.48
5:P:88:ILE:HD13	5:P:193:ARG:CD	2.40	0.48
2:M:751:PRO:CG	2:M:796:GLU:HA	2.44	0.48
2:M:640:ARG:HB2	2:M:642:ARG:NH1	2.28	0.48
2:C:158:TYR:CD1	2:C:313:LEU:HG	2.48	0.48
2:C:572:ILE:HD11	2:C:698:ASP:HB3	1.95	0.48
2:C:490:GLU:HG3	2:C:493:ARG:HH11	1.78	0.48
3:N:1017:PHE:HA	3:N:1022:VAL:CG2	2.44	0.48
3:N:593:ASN:O	3:N:595:GLY:N	2.47	0.48
5:F:196:VAL:HA	5:F:199:ALA:HB3	1.96	0.48
2:C:141:HIS:HB2	2:C:418:LEU:HD12	1.96	0.48
2:C:439:CYS:SG	2:C:442:GLU:N	2.76	0.48
3:D:1162:GLU:HG2	3:D:1163:GLY:N	2.29	0.48
3:D:1346:ARG:HH12	3:D:1349:VAL:HG21	1.79	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:1353:GLN:HB3	3:D:1357:ARG:NH1	2.29	0.47
3:D:218:LYS:HD2	3:D:372:ASP:O	2.14	0.47
3:N:423:ASP:OD1	5:P:175:HIS:ND1	2.47	0.47
3:N:1045:MET:HG2	3:N:1073:SER:HA	1.95	0.47
2:M:578:VAL:O	2:M:900:ARG:HA	2.14	0.47
3:N:691:LEU:HD23	3:N:720:LEU:HD11	1.95	0.47
3:D:729:HIS:O	3:D:732:VAL:HG22	2.14	0.47
1:A:151:VAL:HG13	1:A:155:LYS:HD3	1.95	0.47
3:N:786:ILE:CG2	3:N:1028:ALA:H	2.27	0.47
2:M:497:ALA:HB2	2:M:529:VAL:HG13	1.96	0.47
2:M:64:LEU:HD13	2:M:359:MET:SD	2.54	0.47
3:N:426:LYS:HA	3:N:434:ARG:HD3	1.95	0.47
2:M:1109:VAL:HG22	3:N:3:LYS:CB	2.40	0.47
2:M:205:GLU:HA	2:M:209:ARG:HE	1.79	0.47
1:A:13:VAL:CG1	1:A:14:ARG:N	2.76	0.47
2:M:242:LEU:CD2	2:M:242:LEU:N	2.77	0.47
2:C:1074:GLU:HG2	2:C:1075:ASP:H	1.78	0.47
2:M:557:ARG:HD3	2:M:879:ARG:CG	2.44	0.47
3:N:1435:LEU:HD23	3:N:1464:GLU:HB2	1.96	0.47
1:A:173:PRO:O	1:A:174:VAL:C	2.52	0.47
3:D:1072:ILE:HG22	3:D:1073:SER:N	2.28	0.47
3:D:1108:ARG:O	3:D:1109:GLU:HB3	2.14	0.47
3:D:1192:LEU:CD2	3:D:1345:GLU:HB3	2.42	0.47
3:D:583:ASP:HA	3:D:602:SER:HB2	1.96	0.47
2:M:1063:ARG:CG	2:M:1064:ASN:N	2.77	0.47
3:D:619:LEU:O	3:D:619:LEU:CG	2.60	0.47
2:C:486:MET:HE1	2:C:496:ILE:HD11	1.96	0.47
2:C:11:GLU:HG2	2:C:537:LYS:NZ	2.29	0.47
1:K:146:ARG:HE	1:K:147:GLY:N	2.12	0.47
3:N:129:PHE:CE2	3:N:575:GLN:HG3	2.48	0.47
3:N:666:ILE:HG23	3:N:686:GLU:OE2	2.15	0.47
1:B:55:SER:O	1:B:142:VAL:HA	2.15	0.47
3:D:1207:TYR:CZ	3:D:1212:ALA:O	2.67	0.47
3:D:1207:TYR:N	3:D:1366:LYS:NZ	2.57	0.47
3:N:984:THR:HG23	3:N:987:GLU:N	2.23	0.47
3:N:757:ALA:CB	4:O:24:ALA:HB2	2.44	0.47
2:M:496:ILE:O	2:M:515:ALA:HB1	2.13	0.47
1:A:121:GLU:HG2	1:A:123:MET:SD	2.53	0.47
2:M:877:PRO:HG2	3:N:1023:MET:CE	2.44	0.47
3:N:478:LEU:HD23	3:N:1388:ARG:NH1	2.27	0.47
2:C:54:ILE:HG22	2:C:66:LEU:HB3	1.96	0.47
5:P:260:ILE:CD1	5:P:264:MET:HB3	2.44	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:1403:LEU:HD22	3:D:1407:LEU:CD2	2.44	0.47
2:C:250:ARG:NE	2:C:253:ALA:HB1	2.29	0.47
2:M:52:PHE:CZ	2:M:98:LEU:HD21	2.49	0.47
3:D:169:TYR:CG	3:D:169:TYR:O	2.67	0.47
3:D:659:LYS:O	3:D:662:GLU:HB3	2.13	0.47
3:D:93:ILE:HD12	3:D:547:LEU:HD23	1.96	0.47
1:B:10:VAL:HG12	1:B:12:THR:HG22	1.96	0.47
1:A:219:ARG:C	1:A:219:ARG:HD3	2.35	0.47
2:M:499:ALA:C	2:M:501:THR:H	2.17	0.47
1:K:184:THR:HG23	1:K:184:THR:O	2.14	0.47
3:N:1149:LEU:HD11	3:N:1160:LEU:HB3	1.96	0.47
3:N:1353:GLN:OE1	3:N:1353:GLN:HA	2.14	0.47
3:D:1254:GLN:OE1	3:D:1355:VAL:HG22	2.14	0.47
3:D:1109:GLU:OE1	3:D:1110:ALA:O	2.31	0.47
2:C:1095:LEU:HD23	3:D:582:LEU:HB3	1.96	0.47
3:D:916:TYR:HE2	3:D:920:LEU:CD2	2.19	0.47
3:D:137:PRO:HD2	3:D:453:ASP:CG	2.35	0.47
3:D:124:GLU:HB3	3:D:128:TYR:CE1	2.49	0.47
2:M:1054:THR:HB	2:M:1055:LEU:HD23	1.96	0.47
2:M:567:GLN:O	2:M:997:LEU:HD23	2.15	0.47
3:N:1107:VAL:HG22	3:N:1200:VAL:O	2.14	0.47
1:K:86:VAL:HG12	1:K:124:ASN:HB2	1.96	0.47
3:D:869:MET:HE1	3:D:894:LYS:HE3	1.96	0.47
3:D:423:ASP:OD2	5:F:174:LEU:HD22	2.13	0.47
1:A:92:PRO:O	1:A:94:LEU:N	2.48	0.47
2:C:95:TYR:HB3	2:C:114:PHE:N	2.28	0.47
2:M:102:HIS:HB2	2:M:105:THR:O	2.15	0.47
2:M:343:GLN:HG2	2:M:385:PHE:HB2	1.95	0.47
3:N:976:GLN:C	3:N:979:GLU:HB2	2.33	0.47
3:D:679:ARG:NH2	3:D:681:ARG:CD	2.76	0.47
2:C:352:ALA:HA	2:C:355:VAL:HG12	1.97	0.47
3:N:1155:VAL:CG2	3:N:1183:ILE:HD11	2.43	0.47
3:D:1481:VAL:C	3:D:1483:PHE:N	2.67	0.47
5:F:392:VAL:HG11	5:F:396:ARG:CD	2.43	0.47
3:N:207:PHE:HB3	3:N:395:VAL:HG21	1.97	0.47
3:N:221:ALA:C	3:N:367:ILE:HD12	2.34	0.47
3:D:994:GLN:NE2	3:D:998:GLU:OE2	2.47	0.47
2:C:785:VAL:HG22	2:C:786:LYS:N	2.27	0.47
3:N:115:LEU:CD1	3:N:499:VAL:HG22	2.43	0.47
1:L:25:LEU:HD22	1:L:28:LEU:HD11	1.96	0.47
2:M:442:GLU:HG2	2:M:454:SER:CB	2.45	0.47
3:N:702:LEU:CD1	3:N:747:VAL:HB	2.45	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:945:ARG:C	2:C:947:ALA:N	2.67	0.47
2:M:72:ARG:O	2:M:72:ARG:HG3	2.14	0.47
1:B:50:GLY:O	1:B:146:ARG:HA	2.15	0.47
3:N:1342:GLU:CD	3:N:1342:GLU:H	2.16	0.47
2:C:803:THR:HG22	2:C:825:VAL:HG13	1.95	0.47
1:K:168:ASP:OD2	2:M:832:LYS:NZ	2.46	0.47
3:N:895:VAL:O	3:N:898:GLU:HB2	2.14	0.47
3:D:104:PHE:CE1	3:D:1452:ILE:HD11	2.50	0.47
3:D:87:ARG:HB3	3:D:523:ASP:HB2	1.95	0.47
3:N:901:GLN:HB3	3:N:903:ASP:OD1	2.15	0.47
3:D:601:ARG:HH12	3:D:611:GLN:HB3	1.79	0.47
2:C:1036:GLU:HG3	3:D:707:THR:OG1	2.15	0.47
2:M:498:GLN:CD	2:M:516:ARG:HE	2.17	0.47
3:N:1106:VAL:CG1	3:N:1107:VAL:N	2.77	0.47
3:N:1495:ILE:HG12	4:O:80:VAL:HG13	1.96	0.47
2:C:99:GLN:HE21	2:C:101:ILE:HD11	1.78	0.47
2:M:881:ASN:HD21	2:M:884:GLN:NE2	2.13	0.47
2:M:100:LEU:HD12	2:M:100:LEU:O	2.14	0.47
3:D:168:THR:C	3:D:170:PRO:HD3	2.35	0.47
3:N:1343:ALA:C	3:N:1345:GLU:N	2.66	0.47
3:N:779:ALA:CB	3:N:931:LEU:HD13	2.45	0.47
2:C:391:LEU:O	2:C:391:LEU:HG	2.14	0.47
2:C:613:VAL:HG11	2:C:655:LEU:CD1	2.44	0.47
2:C:874:LEU:O	3:D:1029:ARG:CD	2.59	0.47
2:C:855:VAL:O	2:C:856:GLU:C	2.53	0.47
3:D:107:ASP:O	3:D:108:VAL:C	2.51	0.47
3:N:1197:ARG:HB2	3:N:1396:GLU:HG3	1.97	0.47
2:M:1044:GLY:HA3	4:O:17:TYR:CD1	2.50	0.47
3:N:1373:ARG:O	3:N:1373:ARG:HG2	2.13	0.47
1:K:206:THR:CB	1:K:209:GLU:HB2	2.44	0.47
5:P:123:ASP:HB2	5:P:126:LEU:HB2	1.97	0.47
3:N:1311:LEU:H	3:N:1311:LEU:CD2	2.18	0.47
3:N:911:LEU:O	3:N:913:ASP:N	2.47	0.47
2:M:949:LYS:CD	3:N:796:ARG:HH21	2.28	0.47
1:B:14:ARG:NH2	1:B:22:GLU:OE2	2.46	0.47
2:C:208:ALA:HA	2:C:218:VAL:CG2	2.44	0.47
2:M:673:LEU:CD1	2:M:895:TYR:CE2	2.98	0.47
3:N:1104:GLU:HG3	3:N:1105:ILE:HD13	1.96	0.47
5:P:107:GLU:O	5:P:111:GLU:HG3	2.15	0.47
3:D:684:LYS:C	3:D:686:GLU:H	2.18	0.47
3:D:1320:GLU:O	3:D:1323:GLN:HB2	2.14	0.47
5:F:113:ILE:HG23	5:F:127:ILE:HB	1.97	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:F:218:GLN:HG3	5:F:218:GLN:O	2.15	0.47
4:E:54:LEU:HG	4:E:58:PRO:CB	2.43	0.47
3:N:374:GLU:HB3	3:N:385:VAL:O	2.15	0.47
2:C:328:LEU:N	2:C:328:LEU:HD12	2.29	0.47
3:D:1071:PHE:C	3:D:1071:PHE:HD1	2.18	0.47
2:M:568:ALA:HB3	2:M:668:LEU:HD22	1.97	0.47
2:M:660:ALA:HB1	2:M:667:ALA:O	2.14	0.47
3:N:685:ASP:O	3:N:686:GLU:C	2.53	0.47
2:M:304:LEU:HD23	2:M:305:PRO:N	2.30	0.47
3:D:868:TYR:CD2	3:D:880:ILE:HD11	2.49	0.47
3:N:824:ASN:HB3	3:N:825:ALA:H	1.47	0.47
2:C:54:ILE:HG13	2:C:56:GLU:HG2	1.96	0.47
2:M:432:ARG:CZ	3:N:1048:PRO:CD	2.90	0.47
2:M:432:ARG:NH2	3:N:1047:LYS:HD3	2.28	0.47
2:C:870:ILE:C	2:C:871:LEU:HD12	2.35	0.47
1:A:67:THR:HG21	2:C:609:ASN:OD1	2.13	0.47
2:M:918:LEU:HD23	2:M:968:LEU:O	2.15	0.47
3:D:224:ARG:HD3	3:D:224:ARG:N	2.22	0.47
3:D:1381:VAL:HG12	3:D:1389:LEU:HA	1.96	0.47
5:P:202:TYR:O	5:P:203:THR:O	2.31	0.47
3:N:629:SER:OG	3:N:726:ILE:HG13	2.13	0.47
5:P:340:SER:O	5:P:341:PRO:C	2.53	0.47
3:N:70:GLY:O	3:N:71:LYS:HD2	2.14	0.47
4:E:68:LEU:HD11	4:E:75:PHE:CE2	2.46	0.47
3:D:996:TRP:CE2	3:D:1056:PRO:HG2	2.50	0.47
2:C:347:GLY:HA2	2:C:350:ARG:CD	2.45	0.47
2:M:684:PHE:CG	2:M:685:GLU:N	2.83	0.47
1:K:57:TYR:HB3	1:K:141:GLU:HB3	1.96	0.47
3:D:1397:LYS:NZ	3:D:1432:LYS:HB3	2.30	0.47
3:D:688:TRP:HE3	3:D:688:TRP:HA	1.78	0.47
3:D:1109:GLU:CG	3:D:1202:GLN:H	2.24	0.47
3:D:1424:VAL:CG1	3:D:1425:THR:H	2.28	0.47
3:D:546:ARG:HH21	3:D:550:ARG:HH12	1.63	0.47
3:D:792:ILE:HG23	3:D:793:THR:N	2.30	0.47
3:D:911:LEU:N	3:D:911:LEU:HD12	2.30	0.47
3:D:899:LEU:N	3:D:899:LEU:HD13	2.30	0.47
3:N:1147:ARG:H	3:N:1166:LEU:HD23	1.79	0.47
3:N:1147:ARG:O	3:N:1166:LEU:HD23	2.15	0.47
3:D:119:SER:HB2	3:D:123:LEU:CA	2.44	0.47
2:C:918:LEU:HB3	2:C:968:LEU:HD23	1.95	0.47
3:N:646:LYS:HD3	3:N:722:GLU:HA	1.97	0.47
2:M:1071:ILE:HD12	3:N:670:VAL:CG1	2.43	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:729:HIS:CE1	3:D:731:LEU:CB	2.98	0.47
4:O:61:GLU:OE1	4:O:65:MET:HE2	2.15	0.47
3:N:1109:GLU:HB2	3:N:1110:ALA:H	1.35	0.47
2:M:682:TYR:CD1	2:M:851:LYS:HD2	2.50	0.47
3:N:1273:VAL:O	3:N:1273:VAL:HG23	2.14	0.47
3:N:119:SER:HB2	3:N:123:LEU:N	2.29	0.47
3:D:628:ARG:O	3:D:629:SER:CB	2.62	0.47
3:D:649:ALA:CB	3:D:691:LEU:HD21	2.44	0.47
3:N:1463:LYS:O	3:N:1467:ILE:HG13	2.15	0.47
1:B:132:LEU:HD11	1:B:138:LEU:HD13	1.96	0.47
2:M:405:ARG:NH2	2:M:409:ARG:NH2	2.52	0.47
3:D:375:GLU:O	3:D:385:VAL:HG12	2.14	0.47
3:D:171:LEU:HD22	3:D:390:PRO:HG3	1.96	0.47
2:C:56:GLU:OE2	2:C:356:ARG:NE	2.48	0.47
2:C:352:ALA:HA	2:C:355:VAL:CG1	2.45	0.47
2:M:18:LEU:HB2	2:M:590:ASP:OD2	2.15	0.47
2:M:737:LEU:HD22	2:M:741:GLY:O	2.15	0.47
2:C:860:HIS:HA	2:C:866:PRO:HA	1.97	0.47
2:M:42:VAL:HG12	2:M:43:GLY:N	2.26	0.47
5:P:170:HIS:HA	5:P:173:TYR:HD1	1.80	0.47
3:D:820:GLU:CB	3:D:836:VAL:HG21	2.40	0.47
1:K:63:HIS:HD2	1:K:65:PHE:N	2.13	0.47
3:D:493:ARG:O	3:D:497:GLU:HG3	2.15	0.47
3:N:499:VAL:O	3:N:503:LEU:HB2	2.15	0.47
2:C:266:ARG:O	2:C:288:ARG:HD2	2.15	0.47
5:F:402:ASN:O	5:F:406:ARG:HB2	2.14	0.47
3:D:653:PHE:CD2	3:D:695:ILE:HD11	2.50	0.47
3:N:809:PRO:HB2	3:N:812:ALA:CB	2.44	0.47
3:D:187:LYS:HE2	3:D:213:VAL:CG1	2.44	0.47
2:C:762:LYS:CB	2:C:762:LYS:NZ	2.77	0.47
2:M:249:LYS:HB2	2:M:249:LYS:HE3	1.69	0.47
2:C:127:PHE:O	2:C:133:ASP:HA	2.14	0.47
3:N:850:LEU:N	3:N:850:LEU:HD12	2.30	0.47
2:C:174:LEU:HD23	2:C:184:MET:HG3	1.95	0.47
2:C:1045:ALA:HA	3:D:758:GLU:CD	2.34	0.47
3:D:1106:VAL:HG12	3:D:1107:VAL:N	2.29	0.47
3:D:130:SER:O	3:D:568:ARG:CZ	2.63	0.47
3:D:1314:LYS:O	3:D:1316:GLY:N	2.48	0.47
5:F:188:ILE:CD1	5:F:221:ILE:HG23	2.45	0.47
2:C:480:THR:CG2	2:C:481:ASP:N	2.78	0.47
3:N:130:SER:O	3:N:568:ARG:NH2	2.43	0.47
2:M:1052:MET:CE	2:M:1056:LYS:HZ3	2.27	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:M:275:TYR:CG	2:M:276:LYS:N	2.83	0.47
2:M:1047:HIS:CD2	3:N:754:PHE:CE2	3.03	0.47
5:P:358:LEU:HD21	5:P:370:LYS:HZ3	1.79	0.47
3:N:885:ILE:HD13	3:N:937:TYR:CB	2.44	0.47
3:N:195:VAL:HB	3:N:205:TYR:CB	2.40	0.47
5:F:175:HIS:O	5:F:179:GLU:HG3	2.15	0.47
3:D:1047:LYS:O	3:D:1050:GLY:N	2.48	0.47
3:N:483:HIS:O	3:N:484:PRO:O	2.33	0.47
2:M:355:VAL:HG13	2:M:356:ARG:N	2.30	0.47
2:C:52:PHE:O	2:C:54:ILE:N	2.48	0.47
1:B:6:LEU:O	1:B:6:LEU:HG	2.14	0.47
1:L:206:THR:CG2	1:L:209:GLU:H	2.28	0.47
3:N:1124:GLN:HA	3:N:1125:PRO:HD3	1.63	0.47
2:C:129:ILE:HD13	2:C:134:ARG:HB2	1.97	0.47
3:D:1284:GLU:HB2	3:D:1291:SER:OG	2.15	0.47
2:M:256:TYR:CZ	2:M:293:PHE:HB2	2.49	0.47
3:N:172:PRO:HA	3:N:173:PRO:HD3	1.69	0.47
1:L:223:THR:C	1:L:225:PHE:N	2.68	0.47
2:C:755:LEU:CD1	2:C:792:VAL:HG22	2.45	0.47
2:M:244:PRO:CD	2:M:245:GLY:H	2.28	0.47
3:D:988:ARG:HD3	3:D:992:ILE:HD11	1.97	0.47
3:N:1141:GLU:OE2	3:N:1168:MET:HE2	2.15	0.47
2:C:76:PRO:HA	2:C:77:PRO:HD3	1.78	0.47
2:M:122:THR:HG22	2:M:123:GLU:H	1.80	0.47
3:N:165:LYS:HD3	3:N:165:LYS:O	2.15	0.47
4:O:9:LEU:C	4:O:11:GLY:H	2.17	0.47
2:M:672:VAL:HG22	2:M:868:ASP:HB2	1.96	0.47
1:L:46:SER:O	1:L:148:VAL:HB	2.14	0.47
2:M:594:ALA:HB1	2:M:656:ALA:O	2.14	0.47
3:D:792:ILE:HD11	3:D:881:LEU:HD23	1.95	0.47
3:D:218:LYS:CG	3:D:370:ALA:HB1	2.45	0.47
2:C:1081:VAL:CB	2:C:1086:ARG:HH21	2.26	0.47
3:D:824:ASN:O	3:D:826:PRO:HD3	2.14	0.47
2:M:667:ALA:O	2:M:668:LEU:HD23	2.15	0.47
2:M:1008:ARG:HG2	2:M:1008:ARG:HH11	1.79	0.47
3:D:177:ALA:HB1	3:D:199:LEU:HD22	1.97	0.47
1:L:106:PRO:HG2	1:L:134:GLU:OE1	2.15	0.47
3:D:1481:VAL:C	3:D:1483:PHE:H	2.18	0.47
3:D:936:TYR:O	3:D:937:TYR:C	2.53	0.47
5:P:396:ARG:C	5:P:399:GLN:HB2	2.34	0.47
2:C:78:PHE:HB3	2:C:79:PRO:CD	2.45	0.47
5:P:162:LYS:O	5:P:166:LEU:HG	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:186:VAL:HG13	3:N:187:LYS:N	2.30	0.47
2:C:622:GLU:C	2:C:624:PRO:HD3	2.35	0.47
1:K:37:GLY:O	1:K:38:ASN:C	2.53	0.47
3:D:1031:ASN:ND2	3:D:1033:GLN:HB3	2.29	0.47
1:A:7:LYS:HZ3	1:A:188:GLN:NE2	2.13	0.47
5:P:287:THR:HG22	5:P:290:GLU:OE1	2.14	0.47
3:N:1001:GLU:OE1	3:N:1001:GLU:HA	2.12	0.47
3:N:547:LEU:O	3:N:548:ILE:C	2.53	0.47
3:D:1342:GLU:HA	3:D:1345:GLU:CD	2.33	0.47
5:P:132:ARG:HG2	5:P:181:GLU:HG3	1.96	0.47
3:D:1129:THR:CG2	3:D:1130:ARG:N	2.67	0.47
3:N:387:LEU:HB2	5:P:94:LEU:HD11	1.97	0.47
3:N:1045:MET:CG	3:N:1073:SER:HA	2.45	0.47
2:M:1092:LEU:CD2	2:M:1099:VAL:HG11	2.45	0.47
3:N:764:LEU:CG	3:N:765:SER:N	2.68	0.47
2:C:1034:GLU:HG3	2:C:1035:MET:N	2.30	0.47
2:M:515:ALA:O	2:M:516:ARG:HD3	2.15	0.47
3:N:1267:ARG:NH2	3:N:1271:LYS:HD2	2.30	0.47
3:D:767:HIS:HE1	4:E:6:ILE:HG12	1.79	0.47
2:C:682:TYR:CD2	2:C:851:LYS:HG2	2.50	0.47
2:M:410:ILE:HB	2:M:453:THR:O	2.14	0.47
3:D:1258:ARG:O	3:D:1259:VAL:C	2.53	0.47
3:D:528:VAL:O	3:D:536:ALA:N	2.43	0.47
3:N:825:ALA:HA	3:N:826:PRO:HD3	1.70	0.47
1:L:18:ARG:NH1	1:L:203:GLY:O	2.48	0.47
2:M:432:ARG:HH22	3:N:1047:LYS:NZ	2.12	0.47
3:D:80:VAL:HG22	3:D:81:THR:N	2.30	0.47
3:N:853:VAL:C	3:N:855:HIS:H	2.19	0.47
2:C:906:PHE:CD1	3:D:1067:VAL:HG22	2.50	0.47
2:C:1100:GLN:O	3:D:9:ARG:O	2.31	0.47
5:F:406:ARG:O	5:F:409:LYS:HG2	2.13	0.47
3:N:178:LEU:O	3:N:178:LEU:HD23	2.15	0.47
3:D:827:ILE:HG23	3:D:837:GLY:CA	2.44	0.47
2:M:632:ASN:HB3	2:M:633:GLN:NE2	2.30	0.47
3:D:19:ARG:HE	3:D:94:GLU:CD	2.18	0.47
3:N:1209:LEU:CD1	3:N:1216:SER:H	2.28	0.47
2:C:24:GLU:OE2	2:C:24:GLU:HA	2.14	0.47
3:N:1101:VAL:HG13	3:N:1102:THR:OG1	2.15	0.47
3:N:1268:PRO:HB3	3:N:1329:ALA:HB3	1.97	0.47
3:D:684:LYS:C	3:D:686:GLU:N	2.68	0.47
4:E:38:THR:HA	4:E:67:GLU:OE2	2.15	0.47
2:C:147:TYR:HE2	2:C:330:ASN:HB3	1.80	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:1095:LEU:O	2:C:1096:ALA:C	2.53	0.46
3:D:1370:ILE:O	3:D:1372:VAL:N	2.48	0.46
3:D:890:VAL:HG12	3:D:926:LYS:CG	2.44	0.46
3:N:136:ASP:HB3	3:N:137:PRO:CD	2.23	0.46
3:D:614:PHE:O	3:D:617:ASN:N	2.47	0.46
3:D:1281:VAL:HG21	3:D:1313:VAL:CG2	2.44	0.46
3:N:1396:GLU:HA	3:N:1399:ASP:HB2	1.97	0.46
3:N:127:LEU:HD11	3:N:461:ILE:HD11	1.96	0.46
5:P:238:TYR:CZ	5:P:242:TRP:NE1	2.75	0.46
5:P:239:ALA:O	5:P:240:THR:C	2.53	0.46
5:P:129:GLU:O	5:P:142:ARG:NH1	2.47	0.46
2:M:218:VAL:O	2:M:221:LEU:HB3	2.15	0.46
3:N:1129:THR:CG2	3:N:1130:ARG:H	2.20	0.46
3:D:67:ARG:NE	3:D:67:ARG:HA	2.29	0.46
5:P:406:ARG:HG2	5:P:409:LYS:CE	2.45	0.46
5:P:416:ARG:HD3	5:P:419:ARG:CB	2.45	0.46
1:A:51:THR:HA	1:A:145:ASP:O	2.14	0.46
3:D:384:VAL:HG12	3:D:385:VAL:N	2.30	0.46
3:N:399:ARG:HD3	3:N:402:PRO:HG3	1.97	0.46
2:C:66:LEU:CD1	2:C:100:LEU:HB3	2.44	0.46
3:N:376:GLU:N	3:N:376:GLU:OE1	2.43	0.46
3:D:55:ASP:HA	3:D:82:LYS:HG2	1.96	0.46
3:D:1437:ALA:C	3:D:1446:VAL:HG11	2.34	0.46
2:C:672:VAL:HG21	2:C:868:ASP:HB2	1.93	0.46
1:A:221:HIS:CE1	1:A:224:TYR:HE2	2.33	0.46
2:M:841:ASN:CG	2:M:842:ARG:N	2.68	0.46
2:C:582:GLY:N	2:C:584:GLU:OE2	2.47	0.46
3:D:473:LEU:HD11	3:D:495:ARG:NH2	2.29	0.46
3:D:1277:ILE:HG22	3:D:1278:ASP:N	2.30	0.46
3:D:1256:LEU:N	3:D:1257:PRO:CD	2.78	0.46
1:A:98:THR:C	1:A:99:LEU:HD12	2.34	0.46
2:C:923:GLU:O	2:C:927:GLY:CA	2.62	0.46
2:C:923:GLU:OE1	2:C:927:GLY:HA2	2.15	0.46
3:D:1169:ASP:HA	3:D:1172:HIS:HB2	1.97	0.46
1:L:33:GLY:HA2	1:L:195:LEU:HB2	1.97	0.46
3:D:1264:GLU:O	3:D:1265:ALA:C	2.54	0.46
3:D:926:LYS:O	3:D:929:ARG:HB3	2.15	0.46
3:D:128:TYR:O	3:D:568:ARG:NH2	2.48	0.46
3:D:233:LYS:NZ	3:D:237:LYS:HD2	2.30	0.46
2:M:1094:ALA:HA	3:N:90:MET:CE	2.45	0.46
3:N:540:LEU:O	3:N:543:LEU:HB2	2.15	0.46
3:N:556:LYS:C	3:N:558:LEU:H	2.19	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:598:ARG:HH22	5:P:318:GLU:HG3	1.79	0.46
2:M:1008:ARG:HD2	2:M:1029:GLY:H	1.76	0.46
2:M:290:LEU:HD22	2:M:302:VAL:HB	1.97	0.46
3:N:139:GLY:HA2	3:N:452:ILE:CG1	2.42	0.46
2:C:676:ILE:HG23	2:C:988:VAL:HG13	1.97	0.46
3:D:700:VAL:HG13	3:D:718:PRO:CG	2.46	0.46
3:D:1232:PRO:HB3	3:D:1361:VAL:CG2	2.46	0.46
2:M:537:LYS:O	2:M:539:VAL:N	2.48	0.46
1:B:111:ALA:HB3	1:B:124:ASN:O	2.15	0.46
3:N:441:ARG:HB3	3:N:443:VAL:HG23	1.97	0.46
3:N:2:LYS:HB3	3:N:3:LYS:HE2	1.96	0.46
1:A:203:GLY:O	1:A:205:VAL:N	2.49	0.46
2:C:861:LEU:O	2:C:862:PRO:C	2.54	0.46
2:M:744:ARG:HG2	2:M:744:ARG:HH11	1.80	0.46
1:A:228:PRO:HB3	1:B:13:VAL:CG2	2.46	0.46
2:M:1005:MET:HA	3:N:628:ARG:O	2.14	0.46
1:B:27:PRO:CG	1:B:186:LEU:HD12	2.44	0.46
1:L:57:TYR:CZ	1:L:161:ARG:HD3	2.50	0.46
3:D:399:ARG:HB3	3:D:402:PRO:HG3	1.97	0.46
3:D:401:TYR:CD2	3:D:415:VAL:HG13	2.51	0.46
2:M:39:ARG:O	2:M:41:ASN:N	2.48	0.46
3:D:1000:THR:HA	3:D:1041:LEU:HD21	1.96	0.46
3:D:1441:GLN:CA	3:D:1441:GLN:NE2	2.77	0.46
5:F:215:GLU:O	5:F:246:ALA:HB1	2.15	0.46
3:N:647:ARG:O	3:N:647:ARG:HG3	2.15	0.46
3:D:95:LEU:HA	3:D:551:ASN:HD21	1.80	0.46
2:C:1041:GLU:HB3	3:D:1462:LEU:HD12	1.96	0.46
2:C:1053:LEU:O	3:D:621:LYS:NZ	2.44	0.46
2:M:1055:LEU:CD2	2:M:1055:LEU:H	2.11	0.46
4:E:41:GLU:HA	4:E:45:ARG:HG3	1.97	0.46
2:M:1095:LEU:O	2:M:1096:ALA:C	2.53	0.46
2:M:1097:LEU:N	2:M:1097:LEU:CD1	2.77	0.46
2:M:1092:LEU:HD23	2:M:1099:VAL:CG1	2.46	0.46
3:N:455:ARG:HH22	5:P:140:ARG:HB2	1.78	0.46
3:N:574:LEU:O	3:N:577:ALA:HB3	2.15	0.46
3:N:102:ILE:HD12	3:N:579:ASP:HB3	1.96	0.46
2:M:1032:PHE:CE1	2:M:1052:MET:HG2	2.51	0.46
2:M:279:GLU:CD	2:M:280:LYS:HE3	2.35	0.46
3:N:153:LEU:HD23	3:N:153:LEU:N	2.30	0.46
1:A:154:GLU:OE2	1:A:168:ASP:OD1	2.34	0.46
3:N:908:LYS:HE3	3:N:908:LYS:HB2	1.60	0.46
1:K:189:ARG:HG2	1:K:190:THR:N	2.23	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:485:SER:O	3:N:486:ARG:C	2.53	0.46
2:M:1109:VAL:HG12	2:M:1110:ASP:N	2.26	0.46
2:M:205:GLU:HA	2:M:209:ARG:NE	2.31	0.46
3:D:1237:THR:HG22	3:D:1238:MET:N	2.30	0.46
2:C:1093:GLN:HB3	3:D:21:TRP:CZ3	2.51	0.46
3:D:54:LYS:O	3:D:55:ASP:O	2.33	0.46
2:C:332:ARG:HG3	2:C:465:GLY:CA	2.44	0.46
1:L:57:TYR:CE1	1:L:163:ASN:HB2	2.47	0.46
3:N:916:TYR:CE2	3:N:920:LEU:HD22	2.51	0.46
3:D:34:TYR:O	3:D:35:ARG:C	2.54	0.46
3:D:722:GLU:HA	3:D:722:GLU:OE1	2.15	0.46
2:M:92:ALA:HB2	2:M:120:LEU:HG	1.98	0.46
3:D:631:ILE:HD11	3:D:743:ASP:HB3	1.97	0.46
2:C:1115:LEU:H	2:C:1115:LEU:HD12	1.79	0.46
3:D:1396:GLU:O	3:D:1397:LYS:C	2.51	0.46
3:D:571:LYS:O	3:D:574:LEU:HB3	2.15	0.46
2:M:1054:THR:CG2	2:M:1055:LEU:HD23	2.45	0.46
2:M:840:ALA:O	2:M:995:MET:CE	2.64	0.46
2:M:337:GLY:O	2:M:338:GLU:C	2.54	0.46
3:N:1274:ILE:O	3:N:1274:ILE:HD12	2.16	0.46
1:K:221:HIS:HA	1:K:224:TYR:CD2	2.50	0.46
2:M:804:VAL:HB	2:M:824:ARG:HB2	1.97	0.46
5:F:368:VAL:HG21	5:F:389:PHE:CD1	2.50	0.46
1:B:122:ILE:HG22	1:B:124:ASN:H	1.80	0.46
3:N:43:GLY:O	3:N:45:PHE:N	2.49	0.46
2:M:176:VAL:CG1	2:M:182:VAL:HG22	2.44	0.46
2:C:915:LYS:NZ	3:D:952:ASP:CG	2.68	0.46
3:D:1478:SER:C	3:D:1482:ARG:HG3	2.36	0.46
1:L:177:VAL:HG22	1:L:199:ILE:HG23	1.98	0.46
2:M:559:LEU:HD12	2:M:559:LEU:O	2.16	0.46
1:A:44:LEU:HD23	1:A:48:ILE:CD1	2.45	0.46
2:M:626:ARG:HG2	2:M:629:TYR:CE1	2.50	0.46
3:D:93:ILE:HD11	3:D:548:ILE:HD11	1.97	0.46
3:D:1495:ILE:HG12	4:E:80:VAL:HG13	1.98	0.46
2:C:442:GLU:O	2:C:442:GLU:HG3	2.15	0.46
3:D:1391:GLU:O	3:D:1392:GLY:O	2.33	0.46
3:D:1451:ALA:O	3:D:1452:ILE:C	2.53	0.46
2:C:1115:LEU:CD2	3:D:85:VAL:HG13	2.36	0.46
3:D:568:ARG:CA	3:D:571:LYS:NZ	2.72	0.46
3:D:218:LYS:O	3:D:219:GLU:HB3	2.15	0.46
3:D:703:ASN:O	3:D:745:MET:HG3	2.16	0.46
2:C:1031:ARG:HG3	3:D:620:GLY:HA3	1.96	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:387:LEU:HD12	5:P:96:LEU:HB2	1.96	0.46
2:C:893:ALA:O	2:C:897:LEU:N	2.40	0.46
2:M:901:TYR:CE2	2:M:917:LEU:CD1	2.92	0.46
2:M:668:LEU:O	2:M:995:MET:HB3	2.16	0.46
2:C:748:GLU:HB2	2:C:799:ILE:HG22	1.97	0.46
3:N:1189:ARG:NH1	3:N:1204:CYS:HA	2.30	0.46
5:F:137:GLY:CA	5:F:140:ARG:NH2	2.78	0.46
2:C:430:VAL:O	2:C:430:VAL:HG13	2.16	0.46
2:M:376:ARG:N	2:M:377:PRO:CD	2.79	0.46
3:D:1376:MET:C	3:D:1378:TYR:N	2.68	0.46
2:M:176:VAL:C	2:M:178:PRO:HD3	2.36	0.46
1:B:2:LEU:HD13	1:B:3:ASP:H	1.79	0.46
3:D:1084:THR:O	3:D:1088:THR:N	2.49	0.46
1:K:35:THR:CG2	1:L:39:PRO:HB3	2.45	0.46
2:C:632:ASN:HB2	2:C:633:GLN:HE22	1.78	0.46
5:P:166:LEU:HB3	5:P:170:HIS:CB	2.42	0.46
1:K:133:GLU:HG2	1:K:134:GLU:N	2.29	0.46
2:C:1106:ASP:OD1	3:D:1456:LYS:HD3	2.16	0.46
5:P:260:ILE:HG12	5:P:264:MET:HB3	1.97	0.46
3:N:1489:GLN:HA	3:N:1492:LEU:CB	2.46	0.46
2:M:605:LYS:HD2	2:M:610:ARG:HH12	1.79	0.46
2:M:124:ASP:CB	2:M:407:LYS:HZ2	2.29	0.46
2:C:945:ARG:O	2:C:947:ALA:N	2.48	0.46
1:L:176:ARG:HD2	1:L:200:TRP:CZ3	2.51	0.46
2:C:579:VAL:O	2:C:579:VAL:HG13	2.16	0.46
3:D:420:VAL:HG12	3:D:420:VAL:O	2.15	0.46
1:K:214:ALA:O	1:K:217:ILE:HB	2.16	0.46
5:P:333:ILE:HA	5:P:334:PRO:HD3	1.70	0.46
2:C:1057:SER:OG	3:D:621:LYS:HE3	2.14	0.46
3:D:1200:VAL:HG22	3:D:1373:ARG:NH1	2.31	0.46
4:E:39:VAL:HG23	4:E:40:LEU:HG	1.97	0.46
5:F:84:TYR:CE1	5:F:192:LEU:HD22	2.51	0.46
3:N:1378:TYR:HB3	3:N:1420:LEU:CD2	2.44	0.46
3:N:14:SER:OG	3:N:511:TRP:NE1	2.31	0.46
5:P:137:GLY:HA2	5:P:140:ARG:NH2	2.30	0.46
5:P:138:SER:O	5:P:140:ARG:N	2.49	0.46
3:D:1211:MET:HG2	3:D:1213:ARG:NH1	2.31	0.46
2:M:139:GLN:HA	2:M:411:SER:O	2.16	0.46
2:M:521:PRO:HG3	3:N:1068:LEU:CD2	2.46	0.46
3:N:1107:VAL:HG12	3:N:1217:ILE:HA	1.97	0.46
3:D:647:ARG:HD2	3:D:680:GLN:NE2	2.31	0.46
3:N:1381:VAL:HG12	3:N:1382:THR:H	1.80	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:1154:GLU:CG	3:D:1159:ARG:HH11	2.24	0.46
3:D:674:ARG:CZ	5:F:342:VAL:HG11	2.46	0.46
3:D:1438:ALA:N	3:D:1446:VAL:HG11	2.30	0.46
3:N:853:VAL:C	3:N:855:HIS:N	2.68	0.46
2:C:576:ALA:HB3	2:C:900:ARG:HH21	1.80	0.46
3:D:500:ARG:NH1	3:D:500:ARG:HG3	2.30	0.46
3:N:1108:ARG:CG	3:N:1108:ARG:O	2.64	0.46
3:N:1102:THR:O	3:N:1105:ILE:HG12	2.16	0.46
3:D:1319:VAL:HA	3:D:1323:GLN:OE1	2.15	0.46
5:P:269:ASN:O	5:P:272:SER:OG	2.26	0.46
2:C:1092:LEU:HG	3:D:607:LEU:HD13	1.98	0.46
3:N:422:ALA:HB1	5:P:178:ARG:NH2	2.29	0.46
3:N:385:VAL:CG1	5:P:232:ARG:NH1	2.75	0.46
2:M:567:GLN:HB3	2:M:997:LEU:HD22	1.97	0.46
3:D:732:VAL:O	3:D:735:ALA:N	2.47	0.46
3:N:792:ILE:HD12	3:N:941:PHE:CD1	2.51	0.46
3:N:964:LEU:O	3:N:968:ASP:HB2	2.16	0.46
2:M:140:ILE:HD11	2:M:410:ILE:HG21	1.97	0.46
3:N:828:LYS:C	3:N:829:VAL:HG22	2.35	0.46
2:M:1049:LEU:O	2:M:1049:LEU:HG	2.14	0.46
1:B:26:GLU:HG3	1:B:184:THR:HG21	1.97	0.46
2:C:73:LEU:N	2:C:73:LEU:HD12	2.29	0.46
3:D:166:GLN:NE2	3:D:167:GLU:H	2.14	0.46
3:D:400:VAL:HA	3:D:442:ASN:O	2.15	0.46
3:D:662:GLU:OE1	3:D:663:GLU:N	2.48	0.46
3:N:245:LEU:C	3:N:245:LEU:HD22	2.36	0.46
3:D:984:THR:HG22	3:D:987:GLU:HB2	1.95	0.46
2:M:443:THR:HB	2:M:444:PRO:CD	2.46	0.46
3:D:154:THR:HB	3:D:157:GLU:HG3	1.96	0.46
2:C:835:VAL:HG22	3:D:632:VAL:HG21	1.96	0.46
2:M:446:GLY:O	2:M:447:ALA:C	2.54	0.46
3:N:1009:LYS:HD3	3:N:1009:LYS:HA	1.60	0.46
2:M:546:LEU:HA	2:M:581:THR:OG1	2.15	0.46
2:C:1056:LYS:HB3	3:D:624:ASP:N	2.31	0.46
3:D:24:GLY:HA3	3:D:49:ILE:HG12	1.98	0.46
2:C:678:PRO:HA	2:C:683:ASN:HD21	1.81	0.46
3:D:887:ALA:HA	3:D:896:ALA:HB1	1.97	0.46
4:O:57:ASP:N	4:O:58:PRO:HD3	2.30	0.46
2:C:560:MET:CE	2:C:846:LYS:HD2	2.45	0.46
3:N:217:LYS:O	3:N:373:PRO:HA	2.16	0.46
3:N:1258:ARG:HA	3:N:1261:GLU:HB3	1.98	0.46
3:N:103:TRP:CZ3	3:N:1447:LEU:HD23	2.50	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:M:1052:MET:SD	2:M:1056:LYS:CE	3.04	0.46
2:M:1036:GLU:O	2:M:1039:ALA:CB	2.64	0.46
3:N:123:LEU:CD2	3:N:152:LEU:HD22	2.45	0.46
2:C:106:GLY:C	2:C:107:LEU:HD23	2.36	0.46
2:M:413:LEU:CD1	2:M:451:LEU:HB3	2.46	0.46
3:D:1481:VAL:HG12	4:E:21:VAL:HG21	1.97	0.46
2:M:737:LEU:CD2	2:M:741:GLY:O	2.64	0.46
3:D:224:ARG:HG2	3:D:225:LEU:N	2.30	0.46
3:D:995:LEU:HA	3:D:998:GLU:OE1	2.16	0.46
2:C:783:ARG:C	2:C:785:VAL:H	2.19	0.46
2:C:358:ARG:NH2	2:C:374:ASN:HB3	2.27	0.46
5:P:203:THR:O	5:P:205:ARG:N	2.49	0.46
3:D:34:TYR:CD1	3:D:35:ARG:N	2.83	0.46
1:A:62:LEU:HD12	1:A:62:LEU:N	2.30	0.46
5:F:167:PRO:HD2	5:F:170:HIS:CD2	2.51	0.46
3:D:996:TRP:CD1	3:D:1056:PRO:HG2	2.50	0.46
3:N:49:ILE:HG22	3:N:50:PHE:CD2	2.51	0.46
2:M:585:GLU:O	2:M:588:VAL:HG22	2.16	0.46
3:N:1458:GLU:O	3:N:1460:ILE:HG13	2.16	0.46
4:O:30:LEU:O	4:O:35:PHE:CD1	2.68	0.46
2:C:1045:ALA:HB1	2:C:1048:THR:CB	2.40	0.46
3:D:544:TYR:O	3:D:545:ARG:C	2.51	0.46
3:D:1021:TYR:CZ	3:D:1025:GLN:HG3	2.51	0.46
3:N:137:PRO:CG	3:N:453:ASP:HB3	2.46	0.46
2:C:559:LEU:O	2:C:560:MET:C	2.54	0.46
3:N:218:LYS:HZ2	3:N:218:LYS:HB2	1.78	0.46
5:P:179:GLU:O	5:P:182:ALA:HB3	2.16	0.46
3:D:770:LEU:HD11	3:D:919:PHE:CD1	2.51	0.46
3:N:12:LEU:CB	3:N:507:ASN:ND2	2.74	0.46
3:N:583:ASP:OD1	3:N:604:THR:CG2	2.64	0.46
2:M:143:SER:CB	2:M:276:LYS:HZ3	2.28	0.46
3:N:940:THR:O	3:N:943:THR:HG22	2.15	0.46
3:N:1423:GLY:C	3:N:1425:THR:H	2.19	0.46
3:N:194:GLY:N	3:N:205:TYR:O	2.49	0.46
2:M:9:ILE:O	2:M:10:ARG:C	2.54	0.46
2:M:859:PRO:HB2	2:M:867:VAL:HG21	1.98	0.46
1:B:219:ARG:C	1:B:221:HIS:H	2.18	0.46
2:C:1059:ASP:CG	2:C:1080:SER:HB2	2.36	0.46
2:C:674:VAL:HA	2:C:869:VAL:CG1	2.46	0.46
1:A:67:THR:O	1:A:67:THR:HG23	2.16	0.46
1:L:56:VAL:HB	1:L:165:ILE:HG13	1.98	0.46
2:C:723:THR:OG1	2:C:724:ARG:N	2.49	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:16:PRO:O	2:C:17:PRO:C	2.51	0.46
2:M:495:THR:N	2:M:530:GLU:OE1	2.46	0.46
3:D:1491:THR:HG21	4:E:89:MET:SD	2.55	0.46
3:N:1282:ARG:HH12	3:N:1293:PHE:CB	2.28	0.46
3:N:411:THR:CG2	3:N:429:SER:HB2	2.46	0.46
2:M:69:LEU:C	2:M:70:GLU:HG3	2.36	0.46
2:C:26:TYR:HE1	2:C:340:MET:HG3	1.79	0.46
2:C:923:GLU:CD	2:C:927:GLY:CA	2.84	0.46
5:F:87:GLU:HA	5:F:90:GLN:HE21	1.81	0.46
3:D:901:GLN:C	3:D:903:ASP:H	2.19	0.46
2:M:572:ILE:HG13	2:M:573:ARG:HG2	1.98	0.46
5:F:329:TYR:O	5:F:332:PHE:HB2	2.15	0.46
2:M:311:PHE:O	2:M:314:THR:OG1	2.26	0.46
2:C:286:SER:HB2	2:C:299:LYS:HZ2	1.80	0.46
3:D:566:ILE:CG1	5:F:192:LEU:HD11	2.46	0.46
3:D:1209:LEU:HD12	3:D:1219:GLU:OE1	2.16	0.46
2:M:1047:HIS:CE1	3:N:754:PHE:CG	3.04	0.46
2:M:1047:HIS:CG	3:N:754:PHE:CG	3.04	0.46
3:N:1372:VAL:CA	3:N:1375:MET:HG3	2.46	0.46
2:C:850:ALA:HB1	3:D:633:VAL:HG12	1.98	0.46
3:D:382:GLU:CG	3:D:383:GLY:H	2.20	0.46
3:N:481:MET:HE1	3:N:1388:ARG:CG	2.45	0.46
3:N:6:ARG:C	3:N:7:LYS:HG3	2.37	0.46
2:M:734:LEU:HD13	2:M:737:LEU:CD1	2.46	0.46
1:B:14:ARG:O	1:B:21:GLY:HA2	2.16	0.46
2:M:865:THR:HA	2:M:866:PRO:HD3	1.64	0.46
2:C:19:THR:HG22	2:C:19:THR:O	2.16	0.46
3:N:1008:PHE:HZ	3:N:1032:PRO:HA	1.81	0.46
2:C:118:ILE:HG23	2:C:118:ILE:O	2.15	0.46
1:K:179:PHE:HA	1:K:197:LEU:HA	1.98	0.46
2:C:439:CYS:SG	2:C:442:GLU:HB2	2.56	0.46
3:D:904:VAL:HB	3:D:905:PRO:CD	2.46	0.46
5:P:94:LEU:HD13	5:P:94:LEU:C	2.37	0.45
2:C:458:TYR:O	2:C:470:PRO:HD3	2.15	0.45
1:K:169:ALA:HB1	1:K:171:PHE:CZ	2.51	0.45
3:N:539:ASP:OD2	3:N:598:ARG:NH2	2.43	0.45
3:N:661:MET:HE1	3:N:673:ALA:HB1	1.99	0.45
3:D:1211:MET:HB3	3:D:1213:ARG:CZ	2.46	0.45
2:M:521:PRO:HG3	3:N:1068:LEU:HD21	1.96	0.45
2:M:630:ARG:NE	2:M:705:ILE:O	2.48	0.45
3:N:368:VAL:CG2	3:N:369:ALA:H	2.23	0.45
3:N:810:GLU:O	3:N:813:LEU:HG	2.16	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:486:ARG:NE	3:N:486:ARG:HA	2.30	0.45
2:M:1019:GLN:O	2:M:1020:PRO:O	2.34	0.45
3:N:772:PRO:HG3	3:N:1210:SER:OG	2.15	0.45
2:M:754:ILE:HD11	2:M:791:ARG:HH11	1.81	0.45
3:D:1440:PHE:N	3:D:1440:PHE:CD1	2.84	0.45
5:F:100:VAL:O	5:F:103:ALA:HB3	2.17	0.45
5:F:128:ARG:HD3	5:F:132:ARG:HH22	1.81	0.45
2:C:807:ARG:HH21	2:C:808:ARG:CB	2.26	0.45
3:D:247:GLU:N	3:D:248:PRO:HD2	2.28	0.45
3:D:508:ARG:HG3	3:D:508:ARG:HH11	1.81	0.45
3:D:559:ALA:C	3:D:561:GLY:H	2.19	0.45
3:D:433:GLY:O	3:D:434:ARG:NH1	2.49	0.45
3:D:927:THR:O	3:D:930:LEU:N	2.48	0.45
1:K:115:LEU:O	1:K:117:VAL:HG23	2.16	0.45
3:N:404:GLU:OE1	3:N:414:ARG:CZ	2.63	0.45
2:M:673:LEU:HD11	2:M:895:TYR:CE2	2.51	0.45
1:B:68:ILE:O	1:B:71:VAL:HB	2.15	0.45
3:N:27:GLU:HG2	3:N:42:ASP:HB2	1.98	0.45
3:N:53:ILE:HG23	3:N:54:LYS:N	2.31	0.45
2:M:728:HIS:C	2:M:729:LEU:HD22	2.36	0.45
3:N:779:ALA:O	3:N:931:LEU:HD22	2.16	0.45
5:F:215:GLU:O	5:F:218:GLN:HB3	2.16	0.45
5:F:336:GLU:O	5:F:337:HIS:C	2.54	0.45
3:D:898:GLU:OE2	3:D:921:ARG:NH1	2.49	0.45
2:M:424:GLY:O	2:M:428:ARG:HG3	2.16	0.45
2:M:1054:THR:HG22	2:M:1055:LEU:HD23	1.97	0.45
2:C:207:LEU:HD13	2:C:221:LEU:HD11	1.98	0.45
1:K:52:ALA:HB3	1:K:171:PHE:HD1	1.81	0.45
3:N:97:THR:HG21	3:N:571:LYS:CE	2.46	0.45
5:P:239:ALA:O	5:P:242:TRP:N	2.48	0.45
3:N:691:LEU:CD2	3:N:720:LEU:HD11	2.45	0.45
3:N:1039:CYS:O	3:N:1040:GLY:O	2.35	0.45
3:D:173:PRO:HG2	3:D:200:ASP:HB2	1.97	0.45
2:M:1014:SER:CB	2:M:1017:THR:HG23	2.46	0.45
5:P:321:ILE:CD1	5:P:329:TYR:HB2	2.41	0.45
1:A:13:VAL:CG1	1:A:14:ARG:H	2.27	0.45
2:M:18:LEU:HB2	2:M:590:ASP:CG	2.37	0.45
3:D:191:LEU:HD22	3:D:195:VAL:HG21	1.98	0.45
1:A:218:LEU:HD23	1:B:222:LEU:HD11	1.97	0.45
3:D:228:ALA:HB1	3:D:231:VAL:CG2	2.46	0.45
3:D:1426:LYS:C	3:D:1428:ALA:N	2.68	0.45
4:E:9:LEU:HB3	4:E:19:LEU:CD2	2.46	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:227:ASN:H	1:A:227:ASN:ND2	2.14	0.45
3:N:375:GLU:HG3	3:N:375:GLU:O	2.17	0.45
1:L:171:PHE:O	1:L:172:SER:C	2.55	0.45
3:D:60:CYS:SG	3:D:61:GLY:N	2.89	0.45
1:L:7:LYS:HE3	1:L:186:LEU:HD22	1.97	0.45
3:N:137:PRO:HB2	3:N:138:LYS:HD2	1.98	0.45
4:O:63:TRP:O	4:O:67:GLU:N	2.49	0.45
2:C:1109:VAL:CG1	3:D:5:VAL:HG22	2.25	0.45
3:D:1223:ILE:HD12	3:D:1223:ILE:N	2.31	0.45
3:N:1304:LYS:HD3	3:N:1304:LYS:H	1.81	0.45
1:B:110:LYS:C	1:B:112:ARG:H	2.19	0.45
3:D:483:HIS:HB2	3:D:484:PRO:HD3	1.98	0.45
3:N:486:ARG:HA	3:N:489:ARG:HD2	1.95	0.45
2:C:385:PHE:C	2:C:387:SER:H	2.20	0.45
2:M:172:ILE:HD12	2:M:172:ILE:N	2.32	0.45
3:N:847:ASP:OD2	3:N:884:ARG:NH2	2.48	0.45
3:N:1006:ALA:O	3:N:1009:LYS:N	2.50	0.45
1:L:48:ILE:HD12	1:L:174:VAL:HG21	1.97	0.45
3:D:1229:ILE:O	3:D:1229:ILE:HG22	2.16	0.45
3:D:50:PHE:CD2	3:D:522:PRO:HD3	2.52	0.45
2:C:516:ARG:HD2	2:C:521:PRO:HA	1.98	0.45
2:C:516:ARG:NE	3:D:1068:LEU:HD13	2.31	0.45
3:N:424:GLY:HA2	3:N:435:VAL:O	2.17	0.45
3:N:562:ALA:O	3:N:567:ILE:HD11	2.17	0.45
3:D:704:ARG:CG	3:D:705:ALA:H	2.29	0.45
2:M:880:MET:CE	3:N:1034:GLN:HG2	2.46	0.45
5:P:105:LYS:CB	5:P:105:LYS:NZ	2.72	0.45
3:D:919:PHE:O	3:D:919:PHE:HD2	2.00	0.45
2:M:118:ILE:O	2:M:118:ILE:HG13	2.16	0.45
2:M:575:GLN:OE1	2:M:671:ASN:N	2.49	0.45
2:C:694:LEU:CD2	2:C:697:ARG:NH2	2.74	0.45
3:N:902:LEU:O	3:N:902:LEU:CD1	2.64	0.45
2:M:520:GLU:HA	2:M:521:PRO:HD3	1.83	0.45
2:C:987:ILE:HD11	3:D:946:GLY:HA2	1.96	0.45
1:A:124:ASN:HB3	1:A:127:LEU:HD23	1.98	0.45
2:M:967:PHE:HA	2:M:971:LYS:O	2.17	0.45
2:M:883:GLY:O	2:M:885:ILE:N	2.49	0.45
2:M:474:VAL:HG13	2:M:529:VAL:O	2.15	0.45
2:M:344:PHE:CE2	2:M:378:LEU:HD21	2.51	0.45
2:M:347:GLY:HA3	2:M:378:LEU:HD12	1.98	0.45
3:N:47:GLU:OE1	3:N:51:GLY:O	2.34	0.45
3:D:752:SER:O	3:D:754:PHE:N	2.49	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:22:GLU:C	1:A:23:PHE:CD2	2.90	0.45
3:D:674:ARG:HG2	3:D:674:ARG:HH11	1.82	0.45
3:D:937:TYR:CD1	3:D:937:TYR:N	2.73	0.45
2:C:126:SER:HB3	2:C:395:LYS:HZ1	1.80	0.45
2:C:148:PHE:CZ	2:C:309:TYR:HB3	2.51	0.45
2:C:759:THR:HB	2:C:785:VAL:CG2	2.46	0.45
2:M:556:ASN:O	2:M:559:LEU:HB3	2.17	0.45
3:N:1446:VAL:O	3:N:1446:VAL:HG12	2.16	0.45
5:P:394:ARG:H	5:P:394:ARG:CD	2.28	0.45
3:N:1343:ALA:O	3:N:1345:GLU:N	2.49	0.45
2:M:15:LEU:O	2:M:586:ARG:NH2	2.49	0.45
1:B:100:LEU:HB2	1:B:115:LEU:HD21	1.99	0.45
1:L:175:ARG:HG2	1:L:175:ARG:HH11	1.82	0.45
2:C:889:HIS:C	2:C:891:GLY:N	2.69	0.45
3:N:500:ARG:NH1	3:N:1386:ASP:O	2.50	0.45
1:B:79:ILE:O	1:B:83:LYS:HG3	2.15	0.45
3:D:1295:GLU:HB3	3:D:1300:SER:OG	2.16	0.45
2:C:1083:GLU:OE1	3:D:87:ARG:NH1	2.49	0.45
3:D:1331:ASP:OD2	3:D:1331:ASP:C	2.54	0.45
2:M:1054:THR:CG2	2:M:1059:ASP:OD2	2.63	0.45
4:E:45:ARG:HB3	4:E:46:PRO:CD	2.44	0.45
3:D:31:THR:HG22	3:D:32:ILE:HG13	1.99	0.45
2:C:470:PRO:O	2:C:538:GLN:OE1	2.35	0.45
5:F:192:LEU:HA	5:F:195:VAL:HG23	1.97	0.45
1:K:91:ASN:HA	1:K:91:ASN:HD22	1.59	0.45
3:N:103:TRP:HH2	3:N:1447:LEU:HD23	1.82	0.45
2:M:290:LEU:N	2:M:290:LEU:HD23	2.20	0.45
3:N:148:GLU:O	3:N:150:ARG:N	2.49	0.45
2:M:682:TYR:CE1	3:N:635:PRO:HD2	2.51	0.45
2:C:1005:MET:HE1	3:D:645:PRO:HG2	1.97	0.45
3:D:843:PHE:CZ	3:D:858:VAL:HG21	2.50	0.45
3:N:502:PHE:CE2	3:N:1452:ILE:HG23	2.52	0.45
2:M:881:ASN:N	2:M:881:ASN:HD22	2.13	0.45
2:M:406:HIS:HD2	2:M:409:ARG:NH2	2.15	0.45
2:M:497:ALA:O	2:M:533:ASP:OD1	2.35	0.45
3:D:1351:GLU:O	3:D:1354:LYS:HB2	2.16	0.45
3:N:1381:VAL:HG12	3:N:1382:THR:N	2.31	0.45
3:N:1383:ASP:O	3:N:1384:PRO:O	2.35	0.45
2:C:861:LEU:HG	2:C:862:PRO:HD2	1.98	0.45
3:N:1371:VAL:O	3:N:1371:VAL:HG12	2.16	0.45
3:N:1036:ARG:HH11	3:N:1036:ARG:CB	2.28	0.45
2:C:134:ARG:NH1	2:C:392:SER:OG	2.49	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:M:712:ALA:O	2:M:820:ARG:N	2.46	0.45
2:M:243:ARG:HA	2:M:244:PRO:HD3	1.45	0.45
3:N:817:GLU:O	3:N:821:VAL:HG23	2.16	0.45
1:K:111:ALA:O	1:K:114:PHE:HD1	1.99	0.45
2:C:247:PRO:HA	2:C:248:PRO:HD3	1.74	0.45
3:D:786:ILE:O	3:D:787:LEU:C	2.55	0.45
3:D:740:PHE:C	3:D:742:GLY:N	2.70	0.45
3:N:636:GLN:O	3:N:637:LEU:O	2.34	0.45
3:N:885:ILE:HD13	3:N:937:TYR:CG	2.52	0.45
2:M:344:PHE:CD2	2:M:382:ILE:HD11	2.51	0.45
1:L:91:ASN:H	1:L:94:LEU:CD1	2.24	0.45
3:N:1388:ARG:O	3:N:1391:GLU:HG2	2.17	0.45
2:C:397:GLU:HG3	2:C:633:GLN:NE2	2.32	0.45
2:C:288:ARG:HE	2:C:288:ARG:HA	1.80	0.45
1:L:26:GLU:HB2	1:L:194:LYS:HG3	1.97	0.45
2:M:690:ILE:HD13	2:M:690:ILE:HA	1.85	0.45
3:D:166:GLN:HG3	3:D:167:GLU:N	2.31	0.45
1:A:44:LEU:HD23	1:A:48:ILE:HD11	1.98	0.45
1:B:96:THR:HA	1:B:144:VAL:O	2.17	0.45
1:A:180:GLN:HE22	2:C:934:PHE:HB2	1.82	0.45
3:D:1001:GLU:CD	3:D:1001:GLU:C	2.75	0.45
2:M:443:THR:HG21	2:M:450:GLY:HA2	1.98	0.45
5:P:274:THR:O	5:P:278:LEU:HG	2.16	0.45
3:N:631:ILE:HD11	3:N:743:ASP:HB2	1.97	0.45
2:C:167:LYS:O	2:C:169:GLY:N	2.50	0.45
3:D:1198:TYR:OH	3:D:1397:LYS:HE3	2.16	0.45
3:D:601:ARG:CZ	3:D:611:GLN:HB2	2.47	0.45
2:M:1054:THR:HG23	2:M:1059:ASP:HB2	1.98	0.45
2:M:157:ARG:CZ	2:M:314:THR:CA	2.95	0.45
5:F:210:LEU:HD23	5:F:213:ILE:CD1	2.47	0.45
1:L:150:TYR:CE1	1:L:170:VAL:HG12	2.51	0.45
3:D:441:ARG:O	3:D:443:VAL:N	2.50	0.45
2:M:1088:LEU:O	2:M:1091:GLU:N	2.50	0.45
2:M:304:LEU:HD23	2:M:304:LEU:C	2.37	0.45
3:N:1040:GLY:O	3:N:1060:SER:CB	2.54	0.45
3:D:177:ALA:HA	3:D:199:LEU:HD13	1.99	0.45
1:K:124:ASN:O	1:K:126:ASP:N	2.49	0.45
1:K:10:VAL:H	1:K:26:GLU:HB2	1.82	0.45
2:C:95:TYR:HB3	2:C:114:PHE:CA	2.46	0.45
1:B:42:ARG:HH11	1:B:42:ARG:HG2	1.80	0.45
2:M:537:LYS:N	2:M:905:ILE:HD11	2.32	0.45
2:M:949:LYS:NZ	3:N:828:LYS:NZ	2.64	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:P:369:LEU:HD23	5:P:369:LEU:HA	1.85	0.45
2:C:332:ARG:HG3	2:C:465:GLY:O	2.17	0.45
3:N:1122:LEU:HD23	3:N:1178:ALA:CB	2.46	0.45
3:N:1015:TYR:N	3:N:1016:PRO:HD3	2.32	0.45
3:D:1426:LYS:HB2	3:D:1426:LYS:HZ3	1.82	0.45
2:M:643:VAL:HG23	2:M:655:LEU:O	2.16	0.45
2:C:1004:LYS:CE	2:C:1027:PHE:HE1	2.30	0.45
2:M:512:ARG:CG	2:M:523:ILE:HD11	2.47	0.45
5:P:131:VAL:O	5:P:131:VAL:HG12	2.16	0.45
3:D:1123:PHE:CD1	3:D:1134:LEU:HA	2.52	0.45
2:M:732:ALA:O	2:M:735:ARG:HG3	2.16	0.45
2:M:31:GLN:NE2	2:M:40:GLU:O	2.50	0.45
3:D:50:PHE:O	3:D:89:ARG:HD2	2.17	0.45
3:N:1165:TYR:OH	3:N:1203:LYS:CA	2.64	0.45
3:D:510:GLU:O	3:D:513:ILE:HG13	2.17	0.45
3:D:456:MET:HG2	3:D:568:ARG:NH1	2.32	0.45
3:D:527:MET:CE	3:D:535:PHE:HB3	2.46	0.45
5:P:181:GLU:OE1	5:P:185:GLN:NE2	2.42	0.45
2:C:537:LYS:CB	2:C:545:ASN:HD21	2.30	0.45
1:K:143:ARG:NE	1:K:158:ILE:HG21	2.32	0.45
2:C:918:LEU:CB	2:C:968:LEU:HD23	2.47	0.45
1:A:153:ALA:O	1:A:154:GLU:C	2.55	0.45
1:A:151:VAL:CG1	1:A:155:LYS:HB3	2.47	0.45
2:M:910:LYS:H	2:M:913:GLU:HB2	1.82	0.45
2:C:1093:GLN:OE1	3:D:90:MET:SD	2.75	0.45
2:M:861:LEU:HB3	2:M:862:PRO:CD	2.47	0.45
3:D:18:ILE:HG21	3:D:516:ALA:O	2.17	0.45
2:C:575:GLN:HA	2:C:662:GLU:HG3	1.99	0.45
2:C:575:GLN:HA	2:C:662:GLU:OE2	2.17	0.45
2:C:164:PRO:HB3	2:C:266:ARG:NH1	2.32	0.45
3:N:795:VAL:HG23	3:N:879:ARG:NH2	2.32	0.45
3:D:1143:GLY:O	3:D:1144:LEU:HD23	2.16	0.45
2:C:936:VAL:HA	2:C:940:GLU:OE2	2.17	0.45
2:C:626:ARG:HB3	2:C:629:TYR:CD1	2.52	0.45
3:D:1114:THR:O	3:D:1114:THR:HG23	2.16	0.45
3:D:755:ALA:O	3:D:759:ALA:HB2	2.17	0.45
1:B:176:ARG:HH22	3:D:884:ARG:NE	2.15	0.45
1:B:176:ARG:NH1	3:D:884:ARG:NH1	2.65	0.45
3:D:899:LEU:HD22	3:D:900:ILE:HG23	1.98	0.45
3:N:1175:ILE:O	3:N:1179:GLU:HG3	2.17	0.45
3:D:1281:VAL:HB	3:D:1314:LYS:O	2.17	0.45
3:D:232:GLU:O	3:D:234:GLU:N	2.49	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:385:VAL:CG1	5:P:232:ARG:HH12	2.29	0.45
1:L:150:TYR:CD1	1:L:170:VAL:HG12	2.52	0.45
2:C:918:LEU:O	2:C:921:ALA:N	2.50	0.45
2:M:265:ARG:N	2:M:289:THR:HG21	2.32	0.45
2:M:207:LEU:HD23	2:M:211:LEU:HD22	1.99	0.45
2:C:70:GLU:O	2:C:96:ALA:HB1	2.17	0.45
3:N:911:LEU:O	3:N:912:LYS:C	2.54	0.45
1:B:86:VAL:O	1:B:86:VAL:HG13	2.16	0.45
1:A:194:LYS:HG2	1:A:194:LYS:O	2.17	0.45
3:N:1049:SER:HB3	3:N:1050:GLY:H	1.60	0.45
1:A:13:VAL:O	1:A:14:ARG:HG3	2.17	0.45
5:F:93:LEU:HD11	5:F:102:LEU:HD12	1.99	0.45
2:C:1098:ASP:HB2	3:D:21:TRP:HZ2	1.78	0.45
2:C:674:VAL:HA	2:C:869:VAL:HG12	1.99	0.45
1:K:176:ARG:HG3	1:K:200:TRP:CE3	2.51	0.45
3:N:1233:GLY:HA2	3:N:1236:LEU:CD1	2.47	0.45
3:N:770:LEU:HD23	3:N:770:LEU:N	2.32	0.45
3:D:695:ILE:O	3:D:695:ILE:CG2	2.64	0.45
1:A:48:ILE:HA	1:A:49:PRO:HD3	1.68	0.45
2:C:708:TYR:HE2	2:C:793:PRO:HD3	1.82	0.45
2:M:1114:GLY:C	2:M:1116:ALA:N	2.70	0.45
3:N:1096:ARG:HH11	3:N:1096:ARG:HG2	1.79	0.45
3:N:527:MET:CE	3:N:537:THR:HB	2.46	0.45
2:M:512:ARG:CB	2:M:523:ILE:HD11	2.47	0.45
2:C:417:GLY:C	2:C:418:LEU:HD22	2.37	0.45
2:M:711:GLU:HG2	2:M:822:VAL:HG12	1.99	0.45
3:N:1396:GLU:HA	3:N:1399:ASP:CG	2.37	0.45
3:N:583:ASP:OD2	3:N:604:THR:OG1	2.34	0.45
5:P:140:ARG:HH11	5:P:140:ARG:HG3	1.82	0.45
3:N:654:LYS:CB	3:N:655:PRO:HD3	2.47	0.45
3:N:785:ILE:HG23	3:N:938:GLY:HA3	1.98	0.45
3:N:1267:ARG:NH1	3:N:1334:GLN:OE1	2.50	0.45
1:K:219:ARG:CZ	1:K:220:GLU:N	2.81	0.45
1:B:108:GLU:HG2	1:B:128:HIS:HE1	1.81	0.45
2:M:537:LYS:HA	2:M:905:ILE:HD13	1.99	0.45
1:A:182:GLU:O	1:A:194:LYS:HB3	2.16	0.45
2:M:949:LYS:HD3	3:N:828:LYS:HZ1	1.82	0.45
1:L:18:ARG:O	1:L:207:PRO:HD3	2.17	0.45
3:D:1442:ASN:O	3:D:1444:THR:N	2.50	0.45
1:B:39:PRO:O	1:B:43:ILE:HG12	2.17	0.45
3:N:1036:ARG:HH11	3:N:1036:ARG:HB3	1.78	0.45
2:C:385:PHE:CD1	2:C:389:SER:HB2	2.52	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:807:ARG:HA	2:C:821:GLU:HB3	1.99	0.45
3:N:1041:LEU:HD23	3:N:1041:LEU:O	2.16	0.45
3:N:233:LYS:HD2	3:N:237:LYS:NZ	2.32	0.45
5:P:343:ASP:O	5:P:346:THR:N	2.43	0.45
5:F:119:ILE:HD13	5:F:170:HIS:ND1	2.32	0.45
3:N:930:LEU:HG	3:N:934:LEU:HD13	1.99	0.45
3:D:554:LEU:C	3:D:554:LEU:CD1	2.85	0.45
1:L:121:GLU:HG2	1:L:122:ILE:H	1.81	0.45
3:N:541:ASN:ND2	3:N:541:ASN:N	2.65	0.45
2:C:445:GLU:HG3	2:C:446:GLY:N	2.31	0.45
3:D:1441:GLN:HA	3:D:1441:GLN:NE2	2.31	0.45
5:F:125:ASP:OD2	5:F:126:LEU:HD12	2.17	0.45
3:D:526:PRO:O	3:D:537:THR:HA	2.16	0.44
3:D:591:VAL:HG12	3:D:598:ARG:O	2.17	0.44
2:C:1081:VAL:CG2	2:C:1086:ARG:HH21	2.29	0.44
3:D:237:LYS:CB	3:D:238:PRO:HD3	2.20	0.44
3:N:1376:MET:CE	3:N:1421:LEU:HD13	2.47	0.44
2:M:1085:PHE:O	2:M:1088:LEU:HB3	2.16	0.44
3:N:87:ARG:HG3	3:N:88:TYR:CD2	2.52	0.44
1:B:56:VAL:HA	1:B:141:GLU:O	2.16	0.44
1:B:56:VAL:HG23	1:B:167:VAL:HG21	1.99	0.44
3:N:1148:VAL:HG22	3:N:1163:GLY:C	2.37	0.44
3:D:179:VAL:CG1	3:D:217:LYS:HE3	2.47	0.44
3:D:179:VAL:HG21	3:D:217:LYS:HE3	1.98	0.44
2:M:207:LEU:HD22	2:M:221:LEU:HD21	1.99	0.44
2:C:1005:MET:HE3	3:D:645:PRO:HG2	1.99	0.44
1:L:5:LYS:HA	1:L:5:LYS:CE	2.38	0.44
3:N:949:ILE:HG23	3:N:1020:LEU:HD13	1.99	0.44
2:M:13:ILE:HD11	2:M:534:VAL:HG21	1.99	0.44
2:M:342:ASP:O	2:M:346:VAL:HG23	2.17	0.44
3:D:1087:ARG:NE	3:D:1238:MET:HB2	2.24	0.44
5:F:105:LYS:NZ	5:F:105:LYS:HB3	2.32	0.44
5:P:398:ARG:NH1	5:P:398:ARG:HG2	2.32	0.44
2:C:464:LEU:O	2:C:466:PHE:CD2	2.70	0.44
2:C:91:GLN:OE1	2:C:117:HIS:HB3	2.17	0.44
2:C:722:ILE:HG21	2:C:821:GLU:OE2	2.18	0.44
3:N:1099:VAL:O	3:N:1100:ASP:C	2.56	0.44
1:A:176:ARG:O	1:A:177:VAL:HG23	2.16	0.44
3:N:806:PHE:O	3:N:809:PRO:HD2	2.17	0.44
3:N:1209:LEU:HA	3:N:1209:LEU:HD12	1.79	0.44
3:N:181:ASP:CG	3:N:198:ARG:HB2	2.38	0.44
3:N:1483:PHE:CD1	3:N:1483:PHE:N	2.84	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:483:VAL:HG12	2:C:484:VAL:N	2.32	0.44
1:A:214:ALA:O	1:A:216:GLU:N	2.50	0.44
3:D:540:LEU:CD1	3:D:606:ILE:HD11	2.44	0.44
3:N:1166:LEU:HB2	3:N:1170:ASP:HB2	1.99	0.44
3:D:119:SER:H	3:D:123:LEU:CD1	2.29	0.44
5:P:163:LEU:HD13	5:P:174:LEU:CD2	2.46	0.44
3:D:736:PHE:N	3:D:736:PHE:CD1	2.85	0.44
3:N:97:THR:HG21	3:N:571:LYS:CD	2.46	0.44
2:M:144:PRO:O	2:M:276:LYS:NZ	2.50	0.44
3:D:1207:TYR:HB3	3:D:1208:ASP:H	1.57	0.44
3:N:756:GLN:O	3:N:760:ARG:HG2	2.17	0.44
4:O:23:VAL:HG13	4:O:64:ALA:CB	2.48	0.44
3:D:1094:LEU:O	3:D:1097:LYS:N	2.50	0.44
3:N:1304:LYS:C	3:N:1305:LEU:HG	2.38	0.44
3:N:1311:LEU:N	3:N:1311:LEU:HD23	2.22	0.44
2:C:97:ARG:NH2	2:C:109:LYS:NZ	2.65	0.44
2:M:979:THR:HG23	2:M:981:GLU:HB2	1.98	0.44
2:M:971:LYS:NZ	3:N:950:GLY:HA3	2.31	0.44
3:N:950:GLY:O	3:N:951:ILE:C	2.55	0.44
1:B:229:GLN:HB2	1:B:229:GLN:HE21	1.47	0.44
2:M:374:ASN:ND2	2:M:377:PRO:HD3	2.32	0.44
2:M:674:VAL:CG2	2:M:992:MET:HE1	2.42	0.44
3:D:530:VAL:HG22	3:D:536:ALA:HB2	1.98	0.44
1:L:201:THR:O	1:L:203:GLY:N	2.49	0.44
5:F:180:GLY:O	5:F:181:GLU:C	2.55	0.44
4:O:22:VAL:HG11	4:O:68:LEU:CD2	2.44	0.44
3:N:975:GLU:OE2	3:N:988:ARG:NH2	2.49	0.44
3:D:191:LEU:HD12	3:D:211:VAL:CG1	2.47	0.44
1:A:221:HIS:C	1:A:223:THR:H	2.19	0.44
2:C:86:LYS:CG	2:C:813:VAL:HG12	2.46	0.44
2:M:252:LYS:HZ3	2:M:296:GLY:HA3	1.81	0.44
3:D:127:LEU:HD12	3:D:127:LEU:O	2.18	0.44
2:M:839:LEU:CD2	2:M:849:VAL:HG22	2.46	0.44
4:E:23:VAL:HG21	4:E:65:MET:SD	2.57	0.44
2:M:244:PRO:HG2	2:M:245:GLY:H	1.82	0.44
5:F:262:VAL:O	5:F:265:VAL:HB	2.17	0.44
4:E:9:LEU:HD22	4:E:19:LEU:HD11	1.98	0.44
1:A:217:ILE:O	1:A:220:GLU:HB3	2.16	0.44
3:D:1082:ALA:O	3:D:1086:LEU:HD13	2.18	0.44
2:C:217:LEU:HB2	2:C:311:PHE:CZ	2.53	0.44
3:D:1111:ASP:O	3:D:1112:CYS:C	2.55	0.44
3:D:1357:ARG:O	3:D:1358:ALA:C	2.56	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:1263:PHE:O	3:D:1424:VAL:HB	2.17	0.44
3:D:504:ASP:OD1	3:D:505:SER:N	2.44	0.44
3:D:583:ASP:O	3:D:586:ARG:HG3	2.17	0.44
3:N:564:GLU:O	3:N:567:ILE:HG13	2.17	0.44
3:N:176:ASP:O	3:N:179:VAL:HG23	2.16	0.44
3:N:1336:LEU:HD22	3:N:1421:LEU:CB	2.47	0.44
3:N:1336:LEU:C	3:N:1338:ALA:H	2.20	0.44
3:N:1378:TYR:HB2	3:N:1422:MET:SD	2.57	0.44
2:M:917:LEU:C	2:M:919:ALA:H	2.20	0.44
3:N:543:LEU:HD21	3:N:600:LEU:HB2	1.98	0.44
1:L:124:ASN:OD1	1:L:127:LEU:HB2	2.17	0.44
1:L:111:ALA:HB3	1:L:125:PRO:O	2.17	0.44
3:D:729:HIS:CE1	3:D:730:PRO:HG2	2.52	0.44
3:N:653:PHE:HE2	3:N:698:LYS:HD3	1.83	0.44
3:N:1189:ARG:HH12	3:N:1204:CYS:CA	2.30	0.44
5:P:123:ASP:HB3	5:P:125:ASP:OD2	2.17	0.44
2:M:346:VAL:O	2:M:349:ALA:HB3	2.16	0.44
2:M:110:GLU:HB3	2:M:368:THR:HG22	2.00	0.44
3:N:400:VAL:C	3:N:402:PRO:HD3	2.38	0.44
2:M:1031:ARG:HH21	3:N:622:ARG:CZ	2.30	0.44
1:A:14:ARG:HH21	1:A:22:GLU:CB	2.30	0.44
1:A:65:PHE:HD2	2:C:628:PHE:CE2	2.35	0.44
5:P:167:PRO:HD2	5:P:170:HIS:HD2	1.82	0.44
1:A:56:VAL:HG12	1:A:57:TYR:N	2.32	0.44
3:D:1291:SER:HB2	3:D:1293:PHE:HE1	1.81	0.44
2:M:700:TYR:CD1	2:M:700:TYR:N	2.85	0.44
3:N:1015:TYR:C	3:N:1017:PHE:N	2.70	0.44
5:F:173:TYR:O	5:F:176:ILE:HB	2.16	0.44
3:N:958:GLU:HG3	3:N:961:LYS:HE2	2.00	0.44
4:O:41:GLU:O	4:O:43:GLU:N	2.50	0.44
1:K:20:TYR:CG	1:K:21:GLY:N	2.85	0.44
3:N:1113:GLY:O	3:N:1114:THR:O	2.35	0.44
3:D:814:ALA:HB1	3:D:818:ARG:HH21	1.82	0.44
1:A:59:GLU:OE1	1:A:59:GLU:HA	2.17	0.44
2:M:512:ARG:HB3	2:M:523:ILE:CG1	2.47	0.44
3:N:1457:ASP:OD1	3:N:1458:GLU:O	2.36	0.44
3:N:618:LEU:HA	3:N:618:LEU:HD23	1.74	0.44
2:C:151:ASP:CG	2:C:152:PRO:HD2	2.37	0.44
5:F:107:GLU:C	5:F:109:GLY:H	2.20	0.44
3:D:104:PHE:CD2	3:D:104:PHE:N	2.86	0.44
3:D:899:LEU:N	3:D:899:LEU:CD1	2.79	0.44
5:F:122:LEU:HD23	5:F:159:ILE:HG23	1.98	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:264:PRO:HB3	2:C:289:THR:HG21	1.98	0.44
1:A:42:ARG:HH22	2:C:857:ASP:HB3	1.82	0.44
2:C:1031:ARG:HH11	3:D:619:LEU:C	2.20	0.44
2:M:340:MET:O	2:M:340:MET:SD	2.76	0.44
3:D:710:ARG:C	3:D:712:GLY:H	2.21	0.44
3:D:710:ARG:NH1	3:D:1210:SER:OG	2.50	0.44
3:N:717:GLN:NE2	3:N:760:ARG:HH21	2.15	0.44
2:M:1044:GLY:H	4:O:17:TYR:HE1	1.65	0.44
2:M:139:GLN:HE22	2:M:414:GLY:CA	2.28	0.44
2:M:515:ALA:HB3	2:M:524:VAL:CG1	2.48	0.44
3:N:119:SER:O	3:N:121:THR:N	2.50	0.44
1:K:219:ARG:HH22	1:K:220:GLU:CG	2.28	0.44
2:M:469:THR:OG1	2:M:470:PRO:HD2	2.17	0.44
2:M:352:ALA:HA	2:M:355:VAL:CG1	2.46	0.44
1:A:190:THR:O	1:A:192:LEU:N	2.45	0.44
3:D:1152:GLU:C	3:D:1153:VAL:HG23	2.38	0.44
2:M:959:PRO:O	2:M:960:GLU:O	2.35	0.44
5:P:398:ARG:HA	5:P:401:GLU:HB3	1.99	0.44
2:C:1106:ASP:CG	3:D:1456:LYS:HD3	2.38	0.44
3:D:207:PHE:HB3	3:D:395:VAL:CG2	2.47	0.44
3:D:930:LEU:O	3:D:933:ALA:HB3	2.17	0.44
2:M:499:ALA:O	2:M:501:THR:N	2.50	0.44
3:D:544:TYR:CE1	3:D:581:LEU:HD13	2.52	0.44
1:B:176:ARG:HG2	1:B:200:TRP:HB2	1.99	0.44
3:D:879:ARG:CD	3:D:902:LEU:O	2.64	0.44
3:D:932:ASP:C	3:D:934:LEU:N	2.71	0.44
3:D:119:SER:H	3:D:123:LEU:HD12	1.81	0.44
5:F:316:SER:HB3	5:F:319:THR:OG1	2.18	0.44
3:D:693:GLU:HG3	4:E:48:MET:CE	2.47	0.44
4:E:43:GLU:HG3	4:E:44:GLU:H	1.82	0.44
2:C:516:ARG:NH2	3:D:1068:LEU:CB	2.80	0.44
2:C:281:LEU:HD12	2:C:305:PRO:O	2.17	0.44
3:N:558:LEU:HD13	5:P:145:PRO:C	2.38	0.44
3:N:558:LEU:HD13	5:P:145:PRO:HA	1.99	0.44
3:N:683:ILE:HG23	3:N:687:VAL:HG21	1.99	0.44
1:B:98:THR:HA	1:B:143:ARG:HA	1.99	0.44
2:C:345:ARG:CB	2:C:345:ARG:HH11	2.30	0.44
2:M:486:MET:HG2	2:M:490:GLU:HB3	2.00	0.44
3:D:172:PRO:CG	3:D:178:LEU:HD22	2.47	0.44
1:A:152:PRO:CB	1:A:154:GLU:OE1	2.63	0.44
3:N:1472:ILE:HA	3:N:1473:PRO:HD3	1.74	0.44
2:C:691:SER:O	2:C:692:GLU:C	2.56	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:601:GLY:HA3	2:C:614:ARG:O	2.17	0.44
3:D:1385:GLY:HA3	3:D:1413:THR:HG21	1.99	0.44
2:M:841:ASN:ND2	2:M:842:ARG:N	2.65	0.44
2:C:317:VAL:C	2:C:319:GLY:N	2.69	0.44
3:N:245:LEU:HD11	3:N:249:TYR:HB2	1.99	0.44
3:D:1004:THR:O	3:D:1007:VAL:HG22	2.17	0.44
2:C:945:ARG:O	2:C:948:GLU:HG2	2.17	0.44
3:D:974:ILE:HD13	3:D:992:ILE:HG12	2.00	0.44
2:C:937:ASP:HB3	2:C:939:ARG:H	1.83	0.44
3:D:12:LEU:HD23	3:D:12:LEU:HA	1.76	0.44
2:C:1094:ALA:HB3	3:D:603:LEU:HD22	1.96	0.44
3:D:897:TRP:HZ2	3:D:902:LEU:HD11	1.77	0.44
3:D:116:LEU:C	3:D:118:LEU:H	2.19	0.44
3:N:137:PRO:HG2	3:N:453:ASP:HB3	2.00	0.44
3:D:219:GLU:O	3:D:369:ALA:O	2.36	0.44
3:N:562:ALA:HA	3:N:563:PRO:HD3	1.91	0.44
1:A:42:ARG:NH2	2:C:857:ASP:HB3	2.32	0.44
5:P:102:LEU:HD22	5:P:183:ALA:HA	1.99	0.44
3:D:210:ARG:HD2	3:D:398:ALA:CB	2.30	0.44
2:C:897:LEU:HD23	2:C:899:GLN:NE2	2.31	0.44
3:N:1396:GLU:HG2	3:N:1399:ASP:OD2	2.18	0.44
2:C:694:LEU:O	2:C:699:PHE:HB2	2.18	0.44
5:P:217:ASN:O	5:P:220:LEU:N	2.50	0.44
3:N:644:LEU:HA	3:N:645:PRO:HD3	1.69	0.44
2:M:285:LEU:HD21	2:M:289:THR:HA	2.00	0.44
2:M:136:ILE:HA	2:M:391:LEU:O	2.17	0.44
1:A:153:ALA:HB2	1:A:168:ASP:N	2.31	0.44
1:L:157:GLY:O	1:L:159:LYS:HE3	2.18	0.44
3:N:976:GLN:HA	3:N:979:GLU:HB2	1.99	0.44
3:N:1116:ASN:O	3:N:1116:ASN:ND2	2.51	0.44
2:C:777:ILE:HD13	5:F:408:LEU:HD21	1.99	0.44
1:L:153:ALA:HB2	1:L:168:ASP:CA	2.47	0.44
2:M:544:THR:HG22	2:M:550:LEU:CD2	2.47	0.44
2:M:184:MET:CE	2:M:186:VAL:HG13	2.47	0.44
2:M:427:VAL:O	2:M:429:ASP:N	2.50	0.44
2:M:72:ARG:NH1	2:M:72:ARG:HG3	2.32	0.44
2:M:548:PRO:HA	2:M:581:THR:CG2	2.47	0.44
1:L:7:LYS:HG2	1:L:7:LYS:O	2.18	0.44
1:K:173:PRO:O	1:K:174:VAL:C	2.56	0.44
1:L:180:GLN:HB3	1:L:196:THR:HG23	1.99	0.44
3:D:1263:PHE:HD2	3:D:1375:MET:HE2	1.82	0.44
2:C:679:PHE:O	2:C:680:ASP:C	2.56	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:1147:ARG:HB2	3:N:1188:VAL:HG21	2.00	0.44
3:D:733:CYS:O	3:D:736:PHE:O	2.35	0.44
3:D:702:LEU:O	3:D:736:PHE:HE2	2.00	0.44
3:D:240:GLU:O	3:D:244:GLU:N	2.51	0.44
3:N:1242:HIS:C	3:N:1269:LYS:HZ2	2.17	0.44
3:N:1336:LEU:CA	3:N:1344:VAL:HG21	2.47	0.44
2:M:671:ASN:OD1	2:M:900:ARG:NH2	2.51	0.44
3:N:569:ASN:HD22	3:N:569:ASN:HA	1.55	0.44
1:L:77:GLU:CB	3:N:872:ARG:HH21	2.31	0.44
2:C:345:ARG:HB3	2:C:345:ARG:HH11	1.82	0.44
3:D:216:VAL:HG12	3:D:217:LYS:N	2.31	0.44
3:D:67:ARG:HE	3:D:67:ARG:HA	1.81	0.44
3:D:868:TYR:HB2	3:D:873:LEU:HD12	1.99	0.44
2:C:97:ARG:HH21	2:C:109:LYS:HZ2	1.66	0.44
2:C:843:HIS:CD2	2:C:887:GLU:OE2	2.71	0.44
3:D:1258:ARG:C	3:D:1260:ILE:H	2.21	0.44
3:D:1258:ARG:O	3:D:1261:GLU:N	2.50	0.44
3:D:215:TYR:H	3:D:390:PRO:HD2	1.83	0.44
3:N:212:ARG:HB3	3:N:394:LEU:CD1	2.41	0.44
2:C:975:TYR:N	2:C:975:TYR:CD1	2.86	0.44
3:D:670:VAL:O	3:D:674:ARG:HG3	2.17	0.44
2:M:968:LEU:C	2:M:970:GLY:H	2.20	0.44
2:C:693:GLU:HA	2:C:693:GLU:OE1	2.17	0.44
2:C:226:VAL:HG13	2:C:227:PHE:CD1	2.53	0.44
2:C:129:ILE:N	2:C:129:ILE:CD1	2.80	0.44
1:L:167:VAL:HG12	1:L:168:ASP:N	2.32	0.44
2:C:490:GLU:O	2:C:493:ARG:HB2	2.18	0.44
3:N:776:GLU:HA	3:N:777:PRO:HD3	1.90	0.44
2:C:222:MET:O	2:C:223:ASP:C	2.55	0.44
2:C:379:GLU:O	2:C:383:ARG:HB3	2.18	0.44
2:M:247:PRO:HA	2:M:248:PRO:HD3	1.85	0.44
2:M:605:LYS:HD2	2:M:610:ARG:NH1	2.33	0.44
5:P:282:LEU:HD12	5:P:284:ARG:HD2	1.99	0.44
3:N:65:ARG:CG	3:N:66:GLN:N	2.80	0.44
2:C:211:LEU:HD11	2:C:308:ARG:HB2	2.00	0.44
3:D:989:TYR:CZ	3:D:993:LEU:HD11	2.53	0.44
3:D:1109:GLU:HG2	3:D:1201:CYS:CA	2.47	0.44
3:D:1112:CYS:HB2	3:D:1195:GLN:OE1	2.18	0.44
3:D:1147:ARG:HB3	3:D:1188:VAL:HG21	1.98	0.44
2:C:1013:TYR:OH	3:D:624:ASP:OD1	2.32	0.44
3:D:97:THR:O	3:D:98:PRO:O	2.36	0.44
5:P:160:ASP:OD1	5:P:164:LYS:HE3	2.18	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:196:LEU:HD23	2:C:197:LEU:N	2.32	0.44
2:C:1036:GLU:CD	3:D:707:THR:HG1	2.20	0.44
3:D:1128:VAL:O	3:D:1129:THR:CG2	2.65	0.44
3:N:387:LEU:HD23	3:N:388:HIS:N	2.33	0.44
2:C:468:ARG:CZ	2:C:487:THR:OG1	2.66	0.44
3:D:563:PRO:HD3	5:F:188:ILE:HG21	2.00	0.44
2:M:901:TYR:CE2	2:M:917:LEU:HD12	2.48	0.44
5:P:217:ASN:C	5:P:219:GLY:N	2.70	0.44
3:N:656:PHE:HZ	3:N:751:LEU:HD23	1.83	0.44
2:M:135:VAL:HG12	2:M:136:ILE:N	2.32	0.44
3:N:1200:VAL:HG22	3:N:1373:ARG:HH12	1.83	0.44
2:M:707:ARG:CZ	2:M:824:ARG:HH12	2.31	0.44
2:M:104:ASP:HB2	2:M:105:THR:H	1.64	0.44
3:D:1422:MET:CE	3:D:1427:SER:HA	2.48	0.44
3:N:79:GLU:HG2	3:N:80:VAL:N	2.33	0.44
2:M:1014:SER:HB3	2:M:1017:THR:HG23	2.00	0.44
3:N:1155:VAL:O	3:N:1182:GLU:HG2	2.18	0.44
1:A:20:TYR:HH	1:A:198:ARG:NH2	2.16	0.44
2:M:744:ARG:HG3	2:M:747:ALA:HB2	1.98	0.44
3:N:28:LYS:HA	3:N:29:PRO:HD3	1.68	0.44
2:M:1035:MET:HA	2:M:1038:TRP:CE3	2.52	0.44
1:A:41:ARG:O	1:A:45:LEU:HD12	2.17	0.44
3:N:1413:THR:O	3:N:1414:PRO:C	2.56	0.44
2:M:625:LEU:O	2:M:627:ARG:N	2.50	0.44
2:C:649:VAL:HG11	2:C:655:LEU:HD21	2.00	0.44
5:F:107:GLU:C	5:F:109:GLY:N	2.70	0.44
2:C:405:ARG:O	2:C:405:ARG:HG2	2.17	0.44
3:D:651:GLU:HA	3:D:654:LYS:HE3	1.99	0.44
3:D:910:SER:O	3:D:913:ASP:CB	2.63	0.44
3:D:1313:VAL:C	3:D:1314:LYS:HD3	2.38	0.44
2:C:630:ARG:HH21	2:C:707:ARG:H	1.65	0.44
3:D:919:PHE:C	3:D:919:PHE:HD2	2.19	0.44
2:M:1090:LYS:HA	2:M:1090:LYS:HD3	1.75	0.44
2:M:276:LYS:HB2	2:M:276:LYS:HE3	1.86	0.44
1:L:111:ALA:O	1:L:114:PHE:HD1	2.00	0.44
1:L:114:PHE:O	1:L:115:LEU:C	2.56	0.44
2:M:190:LYS:NZ	2:M:190:LYS:HB2	2.33	0.44
2:C:334:ARG:O	2:C:335:THR:O	2.36	0.44
2:M:1044:GLY:HA3	3:N:762:GLN:HE22	1.81	0.44
3:N:1495:ILE:HD13	4:O:88:GLU:HG3	2.00	0.44
3:D:445:ARG:HG2	3:D:445:ARG:NH1	2.33	0.44
2:M:193:LEU:HD12	2:M:197:LEU:HD11	1.99	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:600:ASP:OD1	2:C:651:LYS:N	2.43	0.44
1:A:51:THR:HG21	1:A:89:PHE:CE2	2.53	0.44
3:D:1344:VAL:HG21	3:D:1421:LEU:HD13	2.00	0.44
3:N:47:GLU:HB2	3:N:78:VAL:HG22	1.99	0.44
1:K:189:ARG:CZ	1:L:155:LYS:HE2	2.47	0.44
3:N:1384:PRO:CG	3:N:1389:LEU:N	2.80	0.44
2:M:432:ARG:NH2	3:N:1047:LYS:NZ	2.63	0.44
1:A:203:GLY:O	1:A:204:SER:C	2.56	0.44
1:A:221:HIS:ND1	1:A:224:TYR:HE2	2.15	0.44
2:C:1102:LEU:HD12	2:C:1102:LEU:N	2.33	0.44
3:N:1481:VAL:HG13	4:O:18:ARG:HE	1.83	0.44
2:M:605:LYS:CD	2:M:610:ARG:HH22	2.30	0.44
2:C:118:ILE:HD11	2:C:340:MET:CE	2.48	0.44
2:M:313:LEU:C	2:M:315:ALA:H	2.20	0.44
2:M:123:GLU:OE2	2:M:592:LEU:HD11	2.17	0.44
3:D:832:ARG:HG2	3:D:832:ARG:HH11	1.83	0.44
3:D:1200:VAL:HG12	3:D:1201:CYS:N	2.33	0.43
3:D:10:ILE:HD12	3:D:1434:TRP:CE2	2.52	0.43
3:D:1026:SER:O	3:D:1027:GLY:C	2.56	0.43
1:A:40:LEU:O	1:A:42:ARG:N	2.51	0.43
2:M:144:PRO:HA	2:M:163:ILE:HG23	1.98	0.43
3:D:729:HIS:HE1	3:D:731:LEU:CG	2.29	0.43
3:D:217:LYS:HA	3:D:373:PRO:O	2.18	0.43
3:D:389:GLU:OE1	3:D:389:GLU:N	2.47	0.43
2:M:420:ARG:HD2	2:M:420:ARG:N	2.18	0.43
3:N:908:LYS:HB3	3:N:1027:GLY:HA3	1.99	0.43
2:M:724:ARG:HG2	2:M:724:ARG:O	2.17	0.43
1:K:62:LEU:N	1:K:62:LEU:HD12	2.29	0.43
1:K:106:PRO:HG2	1:K:134:GLU:CD	2.37	0.43
5:P:256:ARG:HD3	5:P:260:ILE:CG2	2.48	0.43
1:L:56:VAL:HB	1:L:165:ILE:CG1	2.47	0.43
4:O:41:GLU:H	4:O:42:PRO:CD	2.30	0.43
3:N:960:LYS:C	3:N:962:GLN:H	2.21	0.43
1:B:89:PHE:HZ	1:B:144:VAL:CG1	2.30	0.43
1:A:180:GLN:NE2	2:C:934:PHE:CB	2.81	0.43
3:N:409:VAL:O	3:N:411:THR:N	2.51	0.43
3:N:1098:LEU:HD12	3:N:1098:LEU:N	2.33	0.43
3:D:569:ASN:C	3:D:569:ASN:HD22	2.19	0.43
1:A:110:LYS:N	1:A:113:ASP:OD2	2.40	0.43
3:N:1496:GLU:HG3	3:N:1500:LYS:HE3	1.99	0.43
3:N:787:LEU:O	3:N:787:LEU:HG	2.16	0.43
2:C:479:VAL:HB	2:C:506:ASN:HA	2.00	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:579:ASP:O	3:D:582:LEU:N	2.51	0.43
3:D:932:ASP:OD1	3:D:935:LYS:CD	2.57	0.43
3:D:932:ASP:OD2	3:D:935:LYS:NZ	2.44	0.43
3:D:136:ASP:O	3:D:137:PRO:O	2.36	0.43
3:N:158:TYR:O	3:N:161:LEU:HB2	2.19	0.43
5:P:102:LEU:C	5:P:104:ARG:N	2.68	0.43
5:P:94:LEU:O	5:P:95:THR:C	2.57	0.43
2:M:30:LEU:HB3	2:M:44:ILE:HD13	1.99	0.43
2:M:1090:LYS:HE3	3:N:88:TYR:O	2.18	0.43
3:N:116:LEU:CD2	3:N:468:LEU:HD21	2.48	0.43
3:N:127:LEU:HD12	3:N:127:LEU:C	2.38	0.43
2:M:276:LYS:CG	2:M:280:LYS:NZ	2.81	0.43
3:N:616:GLN:OE1	5:P:326:ASP:O	2.36	0.43
3:D:728:LEU:HG	3:D:729:HIS:H	1.82	0.43
3:D:945:SER:OG	3:D:947:ILE:CG2	2.53	0.43
2:C:711:GLU:HG2	2:C:822:VAL:CG1	2.37	0.43
3:N:984:THR:CG2	3:N:987:GLU:HG3	2.36	0.43
2:M:1048:THR:HG21	3:N:759:ALA:HB2	2.00	0.43
2:C:987:ILE:HG22	2:C:987:ILE:O	2.17	0.43
3:D:65:ARG:HG3	3:D:66:GLN:HG2	1.99	0.43
2:M:21:ILE:O	2:M:21:ILE:HG22	2.18	0.43
1:A:24:VAL:HG12	1:A:25:LEU:H	1.82	0.43
3:N:840:LYS:CD	3:N:841:TYR:CZ	3.01	0.43
1:K:218:LEU:HD23	1:L:222:LEU:HD21	2.00	0.43
3:D:205:TYR:CD2	3:D:393:ILE:HG12	2.53	0.43
3:D:972:LEU:C	3:D:972:LEU:HD23	2.38	0.43
3:N:187:LYS:NZ	3:N:213:VAL:CG1	2.81	0.43
1:L:78:ILE:HG23	1:L:129:ILE:HG22	2.00	0.43
3:N:1291:SER:HB3	3:N:1293:PHE:CE1	2.50	0.43
3:N:728:LEU:HD13	3:N:745:MET:CE	2.48	0.43
2:M:246:ASP:HA	2:M:247:PRO:HD3	1.80	0.43
1:B:115:LEU:HA	1:B:116:PRO:HD3	1.84	0.43
2:M:657:ASP:OD1	2:M:661:SER:OG	2.34	0.43
2:C:243:ARG:HA	2:C:244:PRO:HD3	1.40	0.43
2:M:313:LEU:CD1	2:M:321:GLU:O	2.66	0.43
2:M:501:THR:HG22	2:M:513:VAL:CG1	2.48	0.43
1:K:184:THR:O	1:K:192:LEU:HB2	2.19	0.43
1:K:127:LEU:O	1:K:129:ILE:HD13	2.17	0.43
5:P:158:GLU:O	5:P:161:GLN:HB2	2.17	0.43
2:C:1058:ASP:HB2	3:D:621:LYS:HE3	2.00	0.43
3:D:124:GLU:HB3	3:D:128:TYR:CD1	2.53	0.43
3:D:696:HIS:CD2	4:E:48:MET:HG3	2.52	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:32:ILE:CD1	3:D:527:MET:HG2	2.27	0.43
3:N:161:LEU:O	3:N:449:SER:HB2	2.17	0.43
5:P:76:SER:O	5:P:77:THR:C	2.57	0.43
2:M:520:GLU:O	2:M:522:VAL:HG23	2.17	0.43
3:D:179:VAL:HG22	3:D:389:GLU:HG3	2.00	0.43
3:D:1078:ARG:O	3:D:1079:LYS:C	2.54	0.43
3:D:1232:PRO:HB3	3:D:1361:VAL:HG21	2.00	0.43
2:C:70:GLU:OE1	2:C:97:ARG:HD3	2.18	0.43
5:P:406:ARG:CG	5:P:409:LYS:HE2	2.47	0.43
1:L:103:ALA:HB1	1:L:107:LYS:HZ3	1.83	0.43
2:M:140:ILE:HG12	2:M:333:ILE:HG13	2.01	0.43
2:M:906:PHE:HZ	3:N:1070:TYR:CB	2.31	0.43
1:A:183:ASP:HA	1:A:192:LEU:O	2.18	0.43
1:L:94:LEU:O	1:L:146:ARG:HD2	2.18	0.43
2:M:988:VAL:C	2:M:989:VAL:HG13	2.38	0.43
3:N:826:PRO:HD2	3:N:829:VAL:HG11	1.99	0.43
1:K:189:ARG:NH1	1:L:155:LYS:HZ3	2.11	0.43
2:C:966:LEU:HD21	2:C:986:PRO:HG2	1.98	0.43
2:M:43:GLY:O	2:M:46:ALA:HB3	2.19	0.43
3:N:1486:VAL:HG21	4:O:22:VAL:HG13	2.00	0.43
2:C:140:ILE:HG12	2:C:333:ILE:HG13	2.00	0.43
5:F:235:PHE:O	5:F:236:SER:C	2.57	0.43
2:C:115:LEU:HA	2:C:375:SER:HG	1.80	0.43
3:N:1227:GLN:C	3:N:1229:ILE:H	2.15	0.43
4:E:24:ALA:O	4:E:27:ALA:HB3	2.17	0.43
3:D:569:ASN:C	3:D:569:ASN:ND2	2.71	0.43
3:D:1081:GLY:C	3:D:1083:ASP:N	2.72	0.43
3:D:1492:LEU:HD13	3:D:1492:LEU:O	2.19	0.43
2:C:742:VAL:HG12	2:C:743:VAL:N	2.33	0.43
3:N:868:TYR:O	3:N:870:GLY:N	2.51	0.43
3:D:1496:GLU:O	3:D:1499:ARG:N	2.51	0.43
3:D:1042:ARG:HE	3:D:1042:ARG:HB2	1.56	0.43
1:L:218:LEU:O	1:L:219:ARG:C	2.57	0.43
2:C:1052:MET:SD	3:D:623:VAL:HG22	2.59	0.43
3:D:104:PHE:HD2	3:D:104:PHE:N	2.16	0.43
2:C:1046:ALA:CB	3:D:1472:ILE:HB	2.49	0.43
3:N:1147:ARG:HB3	3:N:1188:VAL:CG2	2.49	0.43
3:D:133:ILE:CG2	3:D:454:ALA:HB1	2.34	0.43
2:C:516:ARG:HH11	2:C:521:PRO:HA	1.82	0.43
2:M:1086:ARG:HD2	3:N:88:TYR:CZ	2.53	0.43
3:N:55:ASP:OD2	3:N:82:LYS:CE	2.66	0.43
1:L:111:ALA:CB	1:L:127:LEU:HB3	2.45	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:947:ILE:O	3:D:947:ILE:CG1	2.67	0.43
3:D:177:ALA:O	3:D:179:VAL:N	2.51	0.43
3:N:940:THR:C	3:N:942:SER:N	2.72	0.43
3:N:1271:LYS:HZ1	3:N:1334:GLN:HE22	1.59	0.43
2:M:882:LEU:O	2:M:883:GLY:C	2.57	0.43
2:M:106:GLY:O	2:M:107:LEU:HD23	2.19	0.43
2:M:737:LEU:O	2:M:738:ASP:C	2.56	0.43
5:F:93:LEU:CD1	5:F:187:LEU:HA	2.48	0.43
2:C:539:VAL:HG21	3:D:1067:VAL:CG1	2.48	0.43
2:C:783:ARG:HD3	2:C:785:VAL:HG11	2.00	0.43
1:K:134:GLU:HA	1:K:134:GLU:OE2	2.18	0.43
1:L:79:ILE:O	1:L:83:LYS:HG3	2.18	0.43
2:C:513:VAL:O	2:C:524:VAL:O	2.36	0.43
3:N:1058:ARG:CG	3:N:1058:ARG:NH1	2.77	0.43
3:N:915:VAL:O	3:N:916:TYR:C	2.55	0.43
2:C:317:VAL:HG12	2:C:317:VAL:O	2.18	0.43
5:P:347:GLN:O	5:P:348:SER:C	2.56	0.43
2:M:643:VAL:HG21	2:M:655:LEU:HA	2.00	0.43
1:L:143:ARG:HG3	1:L:143:ARG:HH11	1.83	0.43
1:A:97:VAL:HG12	1:A:98:THR:N	2.33	0.43
3:D:1495:ILE:O	3:D:1498:ALA:HB3	2.19	0.43
3:N:462:GLN:HA	3:N:513:ILE:HD12	1.99	0.43
2:C:418:LEU:N	2:C:418:LEU:HD22	2.34	0.43
3:N:869:MET:SD	3:N:894:LYS:HE3	2.58	0.43
3:D:1405:GLU:O	3:D:1409:ALA:O	2.36	0.43
2:C:525:SER:OG	2:C:528:GLU:HG3	2.18	0.43
2:C:165:LEU:HA	2:C:166:PRO:C	2.39	0.43
3:D:581:LEU:HD12	3:D:603:LEU:HD11	2.01	0.43
3:N:1147:ARG:O	3:N:1166:LEU:CD2	2.66	0.43
3:D:567:ILE:HG22	3:D:571:LYS:HE3	2.00	0.43
3:D:705:ALA:CB	3:D:706:PRO:CD	2.80	0.43
2:C:744:ARG:O	2:C:744:ARG:HG3	2.17	0.43
3:N:388:HIS:HB2	5:P:94:LEU:CD2	2.41	0.43
2:C:455:LEU:HD12	2:C:455:LEU:C	2.38	0.43
3:D:575:GLN:O	3:D:576:GLU:C	2.56	0.43
2:C:577:PRO:HG3	2:C:993:PHE:CD1	2.54	0.43
3:N:1397:LYS:NZ	3:N:1432:LYS:HB3	2.33	0.43
2:M:1089:VAL:HG13	2:M:1099:VAL:HG23	2.00	0.43
3:N:699:VAL:HG23	3:N:699:VAL:O	2.18	0.43
3:N:711:LEU:O	3:N:713:ILE:N	2.51	0.43
3:D:172:PRO:HA	3:D:173:PRO:HD3	1.68	0.43
3:D:175:VAL:O	3:D:179:VAL:HG21	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:1130:ARG:HH11	3:N:1130:ARG:HG2	1.83	0.43
1:L:117:VAL:HG12	1:L:118:ALA:N	2.34	0.43
2:M:720:GLU:HG2	2:M:760:SER:HB3	1.99	0.43
2:M:100:LEU:HD21	2:M:368:THR:OG1	2.19	0.43
1:B:123:MET:O	1:B:125:PRO:HD3	2.18	0.43
3:D:1422:MET:HE3	3:D:1427:SER:HA	2.01	0.43
1:L:207:PRO:O	1:L:208:LEU:C	2.56	0.43
5:F:396:ARG:HA	5:F:399:GLN:CB	2.48	0.43
5:P:88:ILE:O	5:P:92:PRO:HD3	2.18	0.43
2:M:752:GLY:H	2:M:792:VAL:HB	1.84	0.43
1:B:13:VAL:CG1	1:B:14:ARG:N	2.81	0.43
3:N:1413:THR:O	3:N:1413:THR:HG22	2.18	0.43
3:D:1040:GLY:O	3:D:1060:SER:HB3	2.18	0.43
3:N:65:ARG:HD3	3:N:66:GLN:H	1.83	0.43
3:N:1149:LEU:CD1	3:N:1160:LEU:HB3	2.49	0.43
4:E:93:TYR:HA	4:E:94:PRO:HD3	1.72	0.43
3:D:1118:ILE:HD11	3:D:1346:ARG:NE	2.34	0.43
3:D:1435:LEU:HB2	3:D:1457:ASP:OD2	2.19	0.43
3:D:23:TYR:O	3:D:24:GLY:O	2.37	0.43
4:E:51:LEU:CG	4:E:52:GLU:N	2.74	0.43
2:M:157:ARG:HG3	2:M:157:ARG:HH11	1.82	0.43
3:N:427:VAL:HB	3:N:435:VAL:CG2	2.48	0.43
3:D:245:LEU:HD12	3:D:366:LYS:NZ	2.33	0.43
3:D:108:VAL:HB	3:D:109:PRO:CD	2.28	0.43
3:N:385:VAL:HB	3:N:387:LEU:CD1	2.44	0.43
2:C:468:ARG:NH2	2:C:487:THR:OG1	2.52	0.43
3:N:1347:TYR:CE1	3:N:1351:GLU:OE2	2.71	0.43
2:C:916:GLU:O	2:C:919:ALA:HB3	2.18	0.43
2:M:578:VAL:HG23	2:M:579:VAL:N	2.32	0.43
3:N:55:ASP:HA	3:N:82:LYS:HG2	1.99	0.43
2:M:78:PHE:CD1	2:M:88:LEU:HD13	2.52	0.43
2:M:86:LYS:CG	2:M:813:VAL:HG12	2.34	0.43
5:P:238:TYR:O	5:P:239:ALA:C	2.56	0.43
2:M:143:SER:HB3	2:M:332:ARG:HB2	2.00	0.43
2:C:21:ILE:H	2:C:21:ILE:CD1	2.19	0.43
3:N:935:LYS:HE2	3:N:935:LYS:HB3	1.86	0.43
3:N:1462:LEU:HD23	3:N:1473:PRO:HD2	2.00	0.43
3:D:1076:GLY:HA2	3:D:1079:LYS:CG	2.38	0.43
3:N:786:ILE:HG21	3:N:1027:GLY:N	2.33	0.43
2:M:798:GLY:H	2:M:827:VAL:CG1	2.32	0.43
2:M:110:GLU:OE2	2:M:369:PRO:HG3	2.18	0.43
2:M:64:LEU:C	2:M:65:VAL:HG22	2.38	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:M:176:VAL:HG12	2:M:182:VAL:CG2	2.45	0.43
3:N:1050:GLY:O	3:N:1051:GLU:C	2.57	0.43
2:M:726:ILE:HA	2:M:727:PRO:HD3	1.83	0.43
3:N:167:GLU:CD	5:P:90:GLN:NE2	2.72	0.43
3:N:28:LYS:HB3	3:N:41:ARG:HD2	2.01	0.43
2:C:134:ARG:HH12	2:C:393:GLN:N	2.15	0.43
3:N:186:VAL:HG21	3:N:213:VAL:CG2	2.49	0.43
2:C:273:GLY:H	2:C:288:ARG:NH1	2.16	0.43
1:L:40:LEU:O	1:L:44:LEU:HB2	2.18	0.43
3:N:626:SER:CA	3:N:652:LEU:HD11	2.48	0.43
3:N:790:TYR:O	3:N:794:GLN:HB2	2.18	0.43
2:C:188:LYS:HD3	2:C:189:ARG:N	2.34	0.43
3:D:1379:VAL:CG2	3:D:1395:LEU:HA	2.48	0.43
2:M:743:VAL:HG13	2:M:743:VAL:O	2.18	0.43
1:A:227:ASN:O	1:A:227:ASN:ND2	2.52	0.43
3:N:1114:THR:CG2	3:N:1195:GLN:HB2	2.48	0.43
2:C:923:GLU:OE1	2:C:927:GLY:CA	2.67	0.43
3:D:898:GLU:HB3	3:D:921:ARG:NH2	2.34	0.43
2:M:620:LEU:HD23	2:M:620:LEU:H	1.84	0.43
2:C:594:ALA:HB2	2:C:658:GLY:H	1.83	0.43
1:B:16:GLN:N	1:B:20:TYR:O	2.49	0.43
1:L:213:GLN:O	1:L:214:ALA:C	2.57	0.43
3:D:1104:GLU:HG3	3:D:1105:ILE:HD13	2.01	0.43
3:D:850:LEU:HD13	3:D:884:ARG:NH2	2.32	0.43
4:O:54:LEU:HG	4:O:58:PRO:CB	2.47	0.43
3:N:424:GLY:HA2	3:N:436:GLU:HA	2.00	0.43
3:N:563:PRO:HG3	5:P:185:GLN:OE1	2.19	0.43
2:C:433:THR:C	2:C:435:TYR:H	2.20	0.43
3:N:1341:PRO:HG2	3:N:1419:PRO:HG2	2.00	0.43
2:M:564:MET:HG2	2:M:840:ALA:HB3	2.00	0.43
3:N:661:MET:HG2	3:N:666:ILE:HD12	2.01	0.43
2:M:1056:LYS:NZ	3:N:749:VAL:O	2.46	0.43
2:C:334:ARG:HE	2:C:338:GLU:CD	2.22	0.43
2:M:193:LEU:O	2:M:197:LEU:HD12	2.19	0.43
2:C:650:ARG:O	2:C:651:LYS:C	2.56	0.43
2:M:869:VAL:HG22	2:M:871:LEU:HD13	2.00	0.43
3:D:376:GLU:HA	3:D:383:GLY:O	2.18	0.43
1:A:21:GLY:O	1:A:198:ARG:HA	2.19	0.43
3:D:191:LEU:HD12	3:D:211:VAL:HG11	2.01	0.43
1:A:57:TYR:O	1:A:140:MET:HB2	2.19	0.43
3:D:964:LEU:HD22	3:D:1058:ARG:HH11	1.83	0.43
1:L:24:VAL:HG12	1:L:25:LEU:N	2.34	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:9:ILE:HG12	2:C:907:ASP:OD2	2.19	0.43
2:C:490:GLU:CG	2:C:493:ARG:HH11	2.32	0.43
3:D:827:ILE:CG2	3:D:837:GLY:HA3	2.46	0.43
3:D:396:VAL:CG1	3:D:397:LYS:N	2.81	0.43
2:C:212:GLY:C	2:C:215:GLY:H	2.20	0.43
1:B:67:THR:HB	1:B:74:ASP:OD1	2.19	0.43
3:N:1496:GLU:O	3:N:1496:GLU:OE2	2.36	0.43
3:N:593:ASN:ND2	5:P:206:GLY:O	2.49	0.43
3:N:491:LYS:HG2	3:N:491:LYS:O	2.19	0.43
3:N:122:GLU:OE1	3:N:122:GLU:HA	2.17	0.43
2:M:914:ILE:N	2:M:914:ILE:HD12	2.33	0.43
2:M:27:ARG:O	2:M:28:ARG:C	2.56	0.43
2:C:371:LYS:C	2:C:372:LEU:HD12	2.39	0.43
2:M:810:ASP:HB3	2:M:813:VAL:CG2	2.34	0.43
3:D:216:VAL:C	3:D:217:LYS:HD3	2.38	0.43
3:N:1306:PRO:O	3:N:1307:LYS:C	2.57	0.43
2:M:759:THR:HG21	2:M:783:ARG:NH1	2.29	0.43
2:M:409:ARG:HG2	2:M:410:ILE:N	2.34	0.43
1:A:34:VAL:C	1:A:36:LEU:H	2.22	0.43
3:D:486:ARG:HA	3:D:489:ARG:CD	2.45	0.43
3:D:375:GLU:HB3	3:D:385:VAL:HG13	2.01	0.43
3:D:528:VAL:HG12	3:D:529:GLN:N	2.33	0.43
1:A:201:THR:CG2	1:A:202:ASP:N	2.81	0.43
2:C:860:HIS:HE2	2:C:975:TYR:HB2	1.84	0.43
5:P:88:ILE:O	5:P:91:VAL:N	2.52	0.43
5:F:93:LEU:HD11	5:F:102:LEU:CD1	2.48	0.43
2:M:960:GLU:O	2:M:961:GLU:C	2.57	0.43
2:C:226:VAL:HG22	2:C:230:ARG:NH2	2.34	0.43
2:M:722:ILE:HG23	2:M:722:ILE:O	2.18	0.43
3:D:429:SER:HB2	3:D:432:TYR:O	2.19	0.43
2:C:665:PHE:N	2:C:665:PHE:CD2	2.85	0.43
2:C:750:LYS:HG3	2:C:751:PRO:HD2	2.01	0.43
2:C:789:SER:O	2:C:791:ARG:HG2	2.19	0.43
3:N:536:ALA:HA	5:P:315:VAL:O	2.18	0.43
3:D:1101:VAL:O	3:D:1101:VAL:HG12	2.18	0.43
3:D:1357:ARG:C	3:D:1359:GLN:H	2.22	0.43
3:D:584:ASN:H	3:D:602:SER:CB	2.32	0.43
3:D:790:TYR:O	3:D:793:THR:N	2.51	0.43
2:M:1059:ASP:CG	2:M:1062:GLY:H	2.20	0.43
3:D:218:LYS:NZ	3:D:219:GLU:H	2.17	0.43
4:E:41:GLU:H	4:E:42:PRO:HD2	1.84	0.43
5:F:213:ILE:O	5:F:216:GLY:N	2.50	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:P:215:GLU:O	5:P:218:GLN:HB3	2.18	0.43
3:N:978:TYR:CE1	3:N:985:ASP:HA	2.52	0.43
1:A:89:PHE:CD1	1:A:120:VAL:HG22	2.53	0.43
2:M:881:ASN:C	2:M:881:ASN:HD22	2.20	0.43
2:M:64:LEU:HB2	2:M:359:MET:SD	2.59	0.43
2:M:6:PHE:CE1	2:M:909:ALA:HB2	2.54	0.43
2:M:910:LYS:CA	2:M:913:GLU:HG3	2.48	0.43
3:D:549:ASN:CG	5:F:254:GLN:HE21	2.22	0.43
2:C:766:GLU:OE1	3:D:54:LYS:NZ	2.39	0.43
3:D:958:GLU:C	3:D:960:LYS:H	2.21	0.43
3:D:9:ARG:HH22	3:D:11:ALA:HB2	1.81	0.43
3:N:172:PRO:CG	3:N:178:LEU:HD22	2.48	0.43
3:D:1225:ALA:C	3:D:1228:SER:OG	2.56	0.43
3:N:1282:ARG:HB3	3:N:1282:ARG:NH1	2.34	0.43
3:D:163:TYR:OH	3:D:394:LEU:HD21	2.19	0.43
2:C:673:LEU:HA	2:C:990:GLY:O	2.18	0.43
3:D:984:THR:HG22	3:D:987:GLU:HG3	2.01	0.43
4:O:30:LEU:O	4:O:35:PHE:HA	2.18	0.43
4:O:59:ASN:HA	4:O:59:ASN:HD22	1.60	0.43
1:K:105:GLY:O	1:K:107:LYS:N	2.52	0.43
3:D:1103:HIS:C	3:D:1105:ILE:H	2.21	0.43
2:C:1057:SER:OG	3:D:621:LYS:CE	2.67	0.43
2:C:1014:SER:OG	2:C:1015:LEU:N	2.52	0.43
3:N:1111:ASP:HB3	3:N:1203:LYS:NZ	2.33	0.43
3:D:118:LEU:O	3:D:119:SER:C	2.57	0.43
3:D:100:ALA:CB	3:D:128:TYR:HE2	2.32	0.43
2:M:1055:LEU:HD21	2:M:1079:PRO:CB	2.49	0.43
2:C:516:ARG:HH11	2:C:521:PRO:CA	2.31	0.43
2:C:436:GLY:O	2:C:459:ALA:HB2	2.18	0.43
3:N:1379:VAL:N	3:N:1420:LEU:HD23	2.33	0.43
2:M:670:GLN:HB3	2:M:699:PHE:CE2	2.53	0.43
3:N:128:TYR:O	3:N:568:ARG:NH2	2.51	0.43
3:N:601:ARG:NH2	3:N:611:GLN:HB2	2.34	0.43
2:M:1022:GLY:H	2:M:1028:GLY:HA3	1.84	0.43
2:M:139:GLN:HB2	2:M:391:LEU:HD21	2.01	0.43
2:C:734:LEU:O	2:C:735:ARG:C	2.58	0.43
3:D:859:ASP:HB2	3:D:862:ASP:OD1	2.19	0.43
3:D:423:ASP:CG	5:F:175:HIS:ND1	2.73	0.43
1:A:184:THR:O	1:A:192:LEU:HD12	2.19	0.43
2:M:988:VAL:O	2:M:989:VAL:HG12	2.19	0.43
3:N:212:ARG:CB	3:N:394:LEU:HD22	2.48	0.43
1:B:219:ARG:C	1:B:221:HIS:N	2.72	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:1062:ARG:HG3	3:D:1062:ARG:HH11	1.83	0.43
1:A:196:THR:O	1:A:196:THR:HG23	2.18	0.43
2:C:766:GLU:N	2:C:766:GLU:CD	2.73	0.43
5:P:369:LEU:HD11	5:P:401:GLU:OE1	2.19	0.43
2:C:183:SER:CB	2:C:190:LYS:HD3	2.41	0.43
2:C:238:LEU:O	2:C:241:LEU:N	2.52	0.43
1:A:221:HIS:C	1:A:223:THR:N	2.72	0.43
2:M:999:HIS:CD2	2:M:1003:ASP:CG	2.93	0.43
1:B:7:LYS:CE	1:B:186:LEU:HD13	2.49	0.43
3:N:1489:GLN:HA	3:N:1492:LEU:HB2	2.00	0.43
1:B:182:GLU:OE1	1:B:194:LYS:HD3	2.19	0.43
1:B:66:SER:O	1:B:75:VAL:HG23	2.18	0.43
5:F:123:ASP:O	5:F:126:LEU:N	2.52	0.43
2:C:544:THR:C	2:C:546:LEU:H	2.22	0.43
3:D:1188:VAL:CG2	3:D:1189:ARG:N	2.82	0.42
3:D:654:LYS:O	3:D:657:LEU:HB3	2.19	0.42
3:D:897:TRP:CZ2	3:D:902:LEU:HD21	2.54	0.42
4:E:54:LEU:HG	4:E:58:PRO:CD	2.48	0.42
3:N:387:LEU:N	3:N:387:LEU:HD13	2.34	0.42
1:K:49:PRO:CA	1:K:148:VAL:HG12	2.48	0.42
3:D:99:ALA:HA	3:D:575:GLN:HE22	1.84	0.42
2:C:914:ILE:C	2:C:916:GLU:H	2.23	0.42
2:M:1115:LEU:HB3	3:N:85:VAL:CG1	2.41	0.42
3:N:521:PRO:C	3:N:525:ARG:NH1	2.71	0.42
3:N:82:LYS:C	3:N:84:ILE:N	2.71	0.42
2:M:650:ARG:HG2	2:M:653:ASP:HB2	2.01	0.42
3:N:128:TYR:HE1	3:N:461:ILE:HG13	1.81	0.42
3:N:691:LEU:HD23	3:N:720:LEU:CD1	2.49	0.42
3:N:984:THR:O	3:N:986:ARG:N	2.52	0.42
3:N:119:SER:CB	3:N:123:LEU:HB2	2.47	0.42
2:M:971:LYS:HD2	2:M:986:PRO:CB	2.47	0.42
2:M:721:ARG:HB3	2:M:759:THR:OG1	2.19	0.42
1:A:58:ILE:HG21	1:A:61:VAL:HG21	2.01	0.42
1:A:30:ARG:HH12	1:B:155:LYS:NZ	2.16	0.42
3:D:78:VAL:O	3:D:79:GLU:O	2.36	0.42
4:O:22:VAL:CG1	4:O:68:LEU:HD21	2.46	0.42
1:B:133:GLU:CG	1:B:134:GLU:H	2.25	0.42
2:C:957:LYS:HE3	2:C:957:LYS:HB2	1.85	0.42
3:N:15:PRO:HB2	3:N:19:ARG:HH12	1.82	0.42
2:C:1085:PHE:O	2:C:1088:LEU:HB3	2.18	0.42
3:D:434:ARG:HB3	3:D:447:VAL:HG13	1.99	0.42
3:N:210:ARG:HG3	3:N:398:ALA:H	1.83	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:L:43:ILE:HG23	1:L:47:SER:HB2	2.00	0.42
3:N:1209:LEU:HD13	3:N:1215:VAL:HA	2.01	0.42
3:N:1055:VAL:HA	3:N:1056:PRO:HD3	1.73	0.42
3:N:1286:THR:HG22	3:N:1287:GLU:H	1.83	0.42
2:C:776:SER:HA	2:C:780:GLU:N	2.34	0.42
5:P:274:THR:HG21	5:P:295:MET:HE3	2.01	0.42
2:M:1076:VAL:HA	2:M:1077:PRO:HD3	1.86	0.42
2:M:487:THR:HG22	2:M:488:ALA:H	1.84	0.42
3:D:1266:ARG:O	3:D:1268:PRO:HD3	2.20	0.42
3:D:623:VAL:HG12	3:D:624:ASP:N	2.34	0.42
2:C:1016:ILE:HD11	5:F:330:GLY:CA	2.49	0.42
3:D:895:VAL:O	3:D:899:LEU:HD12	2.18	0.42
3:D:135:LEU:O	3:D:136:ASP:O	2.37	0.42
3:D:1331:ASP:CB	3:D:1334:GLN:HG3	2.49	0.42
4:O:45:ARG:NH1	4:O:72:ARG:NH2	2.55	0.42
5:P:184:ARG:HG2	5:P:184:ARG:HH11	1.83	0.42
2:C:289:THR:CG2	2:C:290:LEU:HD23	2.36	0.42
3:D:701:LEU:HD23	3:D:713:ILE:CG2	2.50	0.42
3:D:707:THR:HG21	3:D:713:ILE:HG13	2.00	0.42
2:C:846:LYS:O	3:D:741:ASP:HB2	2.18	0.42
3:D:804:LEU:HD12	3:D:831:GLY:CA	2.48	0.42
5:F:269:ASN:O	5:F:273:ARG:N	2.47	0.42
3:D:245:LEU:H	3:D:245:LEU:CD1	2.31	0.42
2:C:471:TYR:CE2	2:C:496:ILE:HD13	2.54	0.42
1:K:151:VAL:HG11	1:K:156:HIS:HB3	2.01	0.42
5:F:185:GLN:O	5:F:189:GLU:HG3	2.19	0.42
3:N:44:LEU:HB3	3:N:525:ARG:NH2	2.35	0.42
2:M:650:ARG:HG2	2:M:653:ASP:CB	2.49	0.42
2:M:83:CYS:SG	2:M:89:THR:C	2.97	0.42
2:M:143:SER:O	2:M:276:LYS:NZ	2.46	0.42
1:B:82:LEU:HD13	1:B:142:VAL:HG11	2.01	0.42
2:M:1048:THR:N	3:N:758:GLU:OE2	2.50	0.42
3:N:881:LEU:HD21	3:N:941:PHE:HZ	1.76	0.42
1:K:18:ARG:HH22	1:K:88:ARG:HH21	1.63	0.42
2:M:979:THR:CG2	2:M:981:GLU:HB2	2.49	0.42
5:P:408:LEU:HD23	5:P:409:LYS:N	2.34	0.42
2:M:12:VAL:HG21	2:M:481:ASP:HA	2.01	0.42
2:M:105:THR:HG22	2:M:106:GLY:H	1.84	0.42
3:D:385:VAL:HG13	3:D:385:VAL:O	2.18	0.42
2:M:1019:GLN:HE22	3:N:621:LYS:CD	2.32	0.42
3:N:2:LYS:C	3:N:3:LYS:HD3	2.39	0.42
1:L:19:GLU:O	1:L:207:PRO:HG3	2.18	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:863:ASP:OD1	2:C:865:THR:HG23	2.19	0.42
3:N:1083:ASP:O	3:N:1087:ARG:HG2	2.19	0.42
5:P:362:SER:O	5:P:366:ALA:CB	2.65	0.42
2:C:159:ILE:HG21	2:C:175:GLU:OE1	2.19	0.42
1:B:38:ASN:O	1:B:41:ARG:HB3	2.19	0.42
2:C:551:GLU:HA	2:C:906:PHE:HE2	1.84	0.42
3:D:231:VAL:HA	3:D:378:ILE:HD11	1.99	0.42
3:D:1120:VAL:HB	3:D:1144:LEU:HD21	2.01	0.42
3:N:958:GLU:OE2	3:N:961:LYS:CE	2.66	0.42
3:D:1379:VAL:CG1	3:D:1395:LEU:HD23	2.48	0.42
2:C:580:MET:HB3	2:C:584:GLU:CD	2.40	0.42
2:C:48:PHE:C	2:C:50:GLU:N	2.72	0.42
2:M:598:GLU:O	2:M:651:LYS:HE3	2.18	0.42
3:N:996:TRP:O	3:N:1000:THR:OG1	2.28	0.42
3:D:437:VAL:HG12	3:D:438:ASP:N	2.34	0.42
3:N:1098:LEU:HD21	3:N:1263:PHE:CE1	2.54	0.42
1:L:175:ARG:O	3:N:851:LEU:HD11	2.19	0.42
1:K:227:ASN:O	1:K:227:ASN:OD1	2.36	0.42
2:C:483:VAL:HG12	2:C:484:VAL:H	1.85	0.42
1:K:127:LEU:O	1:K:127:LEU:HG	2.18	0.42
2:C:1097:LEU:HD23	3:D:101:HIS:CE1	2.51	0.42
2:C:1057:SER:CB	3:D:621:LYS:HB3	2.49	0.42
3:D:462:GLN:HG3	3:D:513:ILE:CD1	2.49	0.42
4:E:40:LEU:O	4:E:40:LEU:HD12	2.19	0.42
5:P:163:LEU:HD13	5:P:174:LEU:HG	2.01	0.42
2:C:856:GLU:HG3	2:C:857:ASP:N	2.34	0.42
1:B:31:GLY:HA3	2:C:856:GLU:OE1	2.18	0.42
5:F:209:PHE:CD2	5:F:213:ILE:HD11	2.54	0.42
5:P:100:VAL:O	5:P:101:GLU:C	2.58	0.42
1:L:59:GLU:OE1	1:L:138:LEU:CA	2.67	0.42
3:D:398:ALA:HB1	3:D:443:VAL:HG13	2.01	0.42
2:M:400:PRO:HD2	2:M:660:ALA:HB3	2.00	0.42
2:M:1022:GLY:HA3	2:M:1028:GLY:N	2.33	0.42
1:L:101:LEU:HD11	1:L:113:ASP:HB2	2.01	0.42
4:O:25:LYS:HA	4:O:28:GLN:HB2	2.00	0.42
2:C:983:ILE:O	2:C:984:GLU:C	2.58	0.42
2:M:881:ASN:ND2	2:M:881:ASN:O	2.52	0.42
2:M:799:ILE:HG12	2:M:828:ALA:O	2.20	0.42
2:M:350:ARG:HD2	2:M:350:ARG:H	1.84	0.42
1:K:30:ARG:HB2	1:K:191:ASP:OD2	2.19	0.42
3:N:481:MET:CE	3:N:1388:ARG:NE	2.82	0.42
2:M:432:ARG:NH2	3:N:1047:LYS:HB3	2.34	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:225:LEU:HD12	3:D:440:VAL:CG2	2.46	0.42
1:B:41:ARG:HH11	1:B:41:ARG:HG3	1.84	0.42
3:D:994:GLN:NE2	3:D:998:GLU:CD	2.70	0.42
1:A:218:LEU:O	1:A:222:LEU:CD2	2.64	0.42
3:N:626:SER:C	3:N:652:LEU:HD11	2.39	0.42
3:D:834:THR:HG22	3:D:838:ARG:NE	2.35	0.42
1:L:83:LYS:HE3	1:L:168:ASP:HB2	2.01	0.42
1:K:53:VAL:HG21	1:K:82:LEU:O	2.20	0.42
5:F:191:ASN:ND2	5:F:191:ASN:N	2.66	0.42
2:M:15:LEU:H	2:M:15:LEU:HD12	1.84	0.42
2:C:26:TYR:HA	2:C:29:ALA:HB2	2.00	0.42
3:D:565:ILE:HG13	5:F:87:GLU:OE2	2.19	0.42
2:M:923:GLU:HA	2:M:923:GLU:OE2	2.19	0.42
2:C:936:VAL:HG23	2:C:936:VAL:O	2.19	0.42
2:M:698:ASP:OD1	2:M:832:LYS:HE3	2.20	0.42
3:N:534:ARG:HG2	5:P:315:VAL:HG23	2.00	0.42
3:D:46:ASP:OD1	3:D:47:GLU:N	2.50	0.42
3:D:1150:ALA:C	3:D:1151:ARG:HG2	2.40	0.42
2:C:1057:SER:OG	3:D:621:LYS:HB3	2.19	0.42
3:D:537:THR:CG2	3:D:537:THR:O	2.68	0.42
1:B:176:ARG:NH2	3:D:884:ARG:CZ	2.83	0.42
3:D:1011:PHE:CD2	3:D:1021:TYR:HB2	2.54	0.42
2:C:516:ARG:HH12	2:C:521:PRO:HB3	1.74	0.42
2:C:543:ASN:ND2	2:C:562:SER:O	2.52	0.42
5:F:198:ILE:O	5:F:200:LYS:N	2.52	0.42
2:C:11:GLU:CG	2:C:537:LYS:HZ2	2.33	0.42
3:D:1071:PHE:O	3:D:1071:PHE:CD1	2.71	0.42
3:N:1336:LEU:HD12	3:N:1341:PRO:HA	1.99	0.42
2:M:44:ILE:HD12	2:M:44:ILE:H	1.84	0.42
3:N:23:TYR:H	3:N:91:GLY:HA2	1.83	0.42
3:N:575:GLN:O	3:N:576:GLU:C	2.58	0.42
5:P:79:ASP:HB3	5:P:80:PRO:CD	2.43	0.42
3:D:710:ARG:O	3:D:712:GLY:N	2.51	0.42
2:M:799:ILE:N	2:M:828:ALA:O	2.52	0.42
2:M:458:TYR:HE1	2:M:537:LYS:HE2	1.85	0.42
3:D:481:MET:O	3:D:489:ARG:HB2	2.19	0.42
3:D:679:ARG:NH2	3:D:681:ARG:CG	2.79	0.42
3:N:37:LEU:HD11	3:N:529:GLN:NE2	2.27	0.42
2:M:29:ALA:O	2:M:43:GLY:HA3	2.19	0.42
2:M:958:THR:O	2:M:962:GLN:HB2	2.19	0.42
3:D:1057:VAL:HG13	3:D:1069:GLU:HB3	2.02	0.42
2:C:583:LEU:C	2:C:585:GLU:N	2.73	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:M:984:GLU:HG3	3:N:945:SER:HA	2.00	0.42
1:L:79:ILE:HG13	1:L:80:LEU:N	2.35	0.42
2:M:695:LEU:CD2	2:M:833:LEU:HB3	2.48	0.42
3:D:694:VAL:O	3:D:694:VAL:CG1	2.66	0.42
3:D:694:VAL:O	3:D:698:LYS:HD2	2.19	0.42
2:M:586:ARG:HA	2:M:589:ARG:HB3	2.02	0.42
1:A:77:GLU:OE2	2:C:640:ARG:CZ	2.67	0.42
3:N:947:ILE:O	3:N:947:ILE:CG1	2.67	0.42
3:N:1209:LEU:HD13	3:N:1216:SER:H	1.84	0.42
2:C:749:VAL:N	2:C:798:GLY:O	2.52	0.42
2:M:944:LEU:HG	2:M:963:LEU:HD21	2.00	0.42
2:M:663:ASN:C	2:M:665:PHE:N	2.73	0.42
2:C:503:LEU:HD22	2:C:503:LEU:HA	1.83	0.42
2:M:438:ILE:HA	2:M:455:LEU:HA	2.01	0.42
5:F:110:MET:O	5:F:111:GLU:C	2.57	0.42
3:D:792:ILE:CD1	3:D:881:LEU:HD23	2.50	0.42
3:D:789:LEU:HD11	3:D:934:LEU:HD22	2.01	0.42
4:O:39:VAL:HB	4:O:72:ARG:HD2	2.02	0.42
3:D:563:PRO:CG	3:D:566:ILE:HD12	2.49	0.42
2:M:697:ARG:C	2:M:699:PHE:N	2.65	0.42
2:M:1111:ILE:HG13	2:M:1112:PHE:H	1.84	0.42
3:N:9:ARG:CB	3:N:1456:LYS:HA	2.42	0.42
3:N:603:LEU:O	3:N:606:ILE:CB	2.60	0.42
3:D:1207:TYR:CE1	3:D:1212:ALA:O	2.73	0.42
2:M:267:TYR:HE1	2:M:338:GLU:OE1	2.02	0.42
3:N:634:GLY:O	3:N:637:LEU:HD22	2.19	0.42
5:P:142:ARG:O	5:P:146:GLY:O	2.37	0.42
1:K:219:ARG:O	1:K:221:HIS:N	2.52	0.42
1:K:219:ARG:CZ	1:K:220:GLU:HA	2.49	0.42
2:M:824:ARG:HG2	2:M:824:ARG:NH1	2.35	0.42
1:B:99:LEU:HD21	1:B:122:ILE:HD11	2.02	0.42
2:C:752:GLY:O	3:D:679:ARG:HG2	2.18	0.42
3:N:477:LEU:HD11	3:N:495:ARG:HG2	2.01	0.42
1:A:14:ARG:HE	1:A:22:GLU:HB2	1.85	0.42
3:N:166:GLN:HB2	3:N:207:PHE:CD2	2.54	0.42
5:P:88:ILE:O	5:P:92:PRO:CG	2.67	0.42
3:D:1155:VAL:HG13	3:D:1183:ILE:CD1	2.45	0.42
1:B:62:LEU:HD12	1:B:62:LEU:H	1.84	0.42
2:C:175:GLU:O	2:C:183:SER:OG	2.32	0.42
5:F:205:ARG:HE	5:F:251:ILE:CD1	2.31	0.42
2:C:536:PRO:HB3	2:C:906:PHE:CD1	2.48	0.42
3:D:228:ALA:HB1	3:D:231:VAL:HG22	2.02	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:L:153:ALA:HB2	1:L:168:ASP:HA	2.00	0.42
1:K:38:ASN:OD1	2:M:980:GLY:N	2.53	0.42
1:K:54:THR:C	1:K:167:VAL:HG22	2.40	0.42
5:P:286:PRO:HB3	5:P:290:GLU:CB	2.50	0.42
5:F:322:GLY:O	5:F:324:GLU:N	2.53	0.42
2:M:473:ARG:NE	2:M:531:PHE:CZ	2.81	0.42
2:M:523:ILE:HG23	2:M:523:ILE:O	2.19	0.42
1:A:73:GLU:HB2	1:A:78:ILE:CG1	2.50	0.42
3:N:1434:TRP:O	3:N:1438:ALA:HB2	2.19	0.42
1:A:214:ALA:C	1:A:216:GLU:H	2.22	0.42
2:C:57:GLU:HG2	2:C:58:ASP:OD2	2.20	0.42
3:N:925:GLU:OE1	4:O:7:ASP:OD2	2.36	0.42
3:D:139:GLY:O	3:D:140:ALA:C	2.58	0.42
3:D:1331:ASP:O	3:D:1332:PRO:C	2.58	0.42
3:D:601:ARG:HH22	3:D:611:GLN:N	2.18	0.42
2:C:630:ARG:HG3	2:C:631:SER:O	2.19	0.42
2:C:854:PRO:HB2	2:C:856:GLU:CD	2.40	0.42
3:N:1393:GLN:O	3:N:1394:VAL:O	2.38	0.42
2:M:840:ALA:HB2	2:M:846:LYS:HG3	2.00	0.42
3:N:87:ARG:HB3	3:N:523:ASP:OD2	2.19	0.42
3:N:55:ASP:OD2	3:N:82:LYS:HE2	2.17	0.42
2:M:80:GLN:O	2:M:82:GLU:N	2.53	0.42
3:N:658:LEU:CD1	3:N:674:ARG:HH11	2.29	0.42
3:D:173:PRO:HG2	3:D:200:ASP:CB	2.50	0.42
1:K:206:THR:HG23	1:K:207:PRO:HD2	2.02	0.42
4:O:79:LEU:HB3	4:O:80:VAL:H	1.69	0.42
5:F:364:ARG:O	5:F:367:MET:N	2.52	0.42
2:M:383:ARG:C	2:M:385:PHE:H	2.22	0.42
1:A:23:PHE:CD2	1:A:23:PHE:N	2.87	0.42
1:K:196:THR:O	1:K:196:THR:OG1	2.37	0.42
3:N:963:TYR:CE2	3:N:1002:LYS:HB3	2.54	0.42
1:A:3:ASP:O	1:A:5:LYS:N	2.50	0.42
2:C:551:GLU:HB3	2:C:906:PHE:HD2	1.84	0.42
5:F:416:ARG:HD2	5:F:419:ARG:HB2	2.02	0.42
3:D:25:GLU:OE1	3:D:27:GLU:CB	2.64	0.42
3:D:202:VAL:O	3:D:203:ALA:C	2.57	0.42
2:M:807:ARG:HB2	2:M:808:ARG:H	1.67	0.42
2:M:586:ARG:HB3	2:M:586:ARG:HH11	1.83	0.42
3:N:805:GLU:HA	3:N:831:GLY:HA2	2.02	0.42
3:N:1215:VAL:HG22	3:N:1216:SER:H	1.85	0.42
3:N:970:LYS:HD2	3:N:995:LEU:CD1	2.50	0.42
1:L:176:ARG:HD2	1:L:200:TRP:CE3	2.55	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:K:44:LEU:HA	1:K:48:ILE:HD11	2.02	0.42
3:D:956:ILE:HA	3:D:957:PRO:HD3	1.92	0.42
3:D:1462:LEU:N	3:D:1462:LEU:HD23	2.35	0.42
2:C:1014:SER:HB2	5:F:331:ASP:OD1	2.20	0.42
3:N:899:LEU:HD13	3:N:899:LEU:H	1.84	0.42
3:D:462:GLN:HA	3:D:513:ILE:HD13	2.00	0.42
3:D:568:ARG:CA	3:D:571:LYS:HZ2	2.31	0.42
3:D:704:ARG:O	3:D:705:ALA:O	2.38	0.42
3:D:1126:ASP:CG	3:D:1129:THR:HA	2.39	0.42
5:P:94:LEU:HB2	5:P:98:GLU:HG3	2.02	0.42
3:D:572:ARG:O	3:D:575:GLN:N	2.53	0.42
2:C:917:LEU:O	2:C:920:GLN:HB3	2.20	0.42
3:N:1197:ARG:NH1	3:N:1377:LYS:HE3	2.34	0.42
5:P:137:GLY:HA2	5:P:140:ARG:HH22	1.84	0.42
3:D:729:HIS:CG	3:D:730:PRO:HD2	2.55	0.42
3:N:1219:GLU:CG	3:N:1221:VAL:HG22	2.37	0.42
2:M:680:ASP:C	2:M:682:TYR:N	2.71	0.42
3:D:421:LEU:N	3:D:421:LEU:HD23	2.34	0.42
2:C:735:ARG:HH11	2:C:735:ARG:HG2	1.83	0.42
3:D:1232:PRO:C	3:D:1234:THR:H	2.23	0.42
2:C:842:ARG:H	2:C:842:ARG:HG3	1.51	0.42
3:N:948:THR:O	3:N:1019:PRO:CB	2.68	0.42
2:M:720:GLU:OE2	2:M:758:ARG:NH1	2.53	0.42
2:M:405:ARG:HH22	2:M:409:ARG:HH21	1.61	0.42
2:M:816:LYS:O	2:M:819:VAL:HG23	2.19	0.42
3:N:486:ARG:CA	3:N:489:ARG:HD2	2.49	0.42
1:K:33:GLY:CA	1:K:195:LEU:HB2	2.42	0.42
3:N:1450:ALA:CA	3:N:1455:LYS:HG3	2.44	0.42
1:B:206:THR:HG22	1:B:208:LEU:H	1.85	0.42
2:C:126:SER:HB2	2:C:395:LYS:HD2	2.01	0.42
1:K:63:HIS:CD2	1:K:65:PHE:N	2.87	0.42
2:C:807:ARG:NE	2:C:808:ARG:O	2.52	0.42
1:A:221:HIS:ND1	1:A:224:TYR:CE2	2.88	0.42
1:A:224:TYR:CG	1:B:9:PRO:HG2	2.54	0.42
1:B:26:GLU:HG2	1:B:27:PRO:N	2.34	0.42
2:M:841:ASN:HD21	2:M:843:HIS:CD2	2.37	0.42
4:E:24:ALA:O	4:E:27:ALA:N	2.52	0.42
3:D:17:LYS:O	3:D:20:SER:N	2.53	0.42
3:D:19:ARG:NH2	3:D:94:GLU:OE2	2.48	0.42
1:A:99:LEU:N	1:A:99:LEU:CD1	2.83	0.42
1:B:137:ARG:HH11	1:B:137:ARG:HG2	1.85	0.42
3:D:1300:SER:O	3:D:1301:LYS:HB2	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:1409:ALA:O	3:D:1410:GLU:O	2.38	0.42
5:P:271:LEU:HD21	5:P:299:TRP:CH2	2.55	0.42
2:C:1057:SER:HB3	3:D:621:LYS:HE2	2.01	0.42
3:D:1011:PHE:CE1	3:D:1018:ASN:ND2	2.87	0.42
3:D:907:GLU:HG3	3:D:1026:SER:CA	2.50	0.42
2:C:520:GLU:HA	2:C:521:PRO:HD3	1.86	0.42
3:N:373:PRO:O	3:N:374:GLU:HG3	2.20	0.42
3:N:1258:ARG:C	3:N:1260:ILE:N	2.73	0.42
3:N:1259:VAL:HG12	3:N:1259:VAL:O	2.20	0.42
2:M:901:TYR:N	2:M:901:TYR:CD1	2.87	0.42
2:M:1016:ILE:HG23	3:N:526:PRO:HG2	2.01	0.42
3:N:569:ASN:HD21	3:N:572:ARG:NH1	2.18	0.42
3:N:575:GLN:O	3:N:577:ALA:N	2.53	0.42
3:D:846:PRO:O	3:D:849:ALA:HB3	2.19	0.42
3:D:858:VAL:CG1	3:D:877:PRO:HG2	2.50	0.42
2:C:365:ASP:O	2:C:367:LEU:HD23	2.20	0.42
1:K:26:GLU:CB	1:K:27:PRO:CD	2.92	0.42
1:L:54:THR:OG1	1:L:156:HIS:CE1	2.73	0.42
3:N:397:LYS:HE2	3:N:399:ARG:NE	2.24	0.42
2:C:52:PHE:CB	2:C:53:PRO:HD3	2.50	0.42
1:A:228:PRO:HB3	1:B:13:VAL:HB	2.01	0.42
3:D:81:THR:O	3:D:82:LYS:C	2.57	0.42
1:K:46:SER:OG	2:M:856:GLU:CD	2.58	0.42
2:C:583:LEU:O	2:C:585:GLU:N	2.53	0.42
2:C:148:PHE:CB	2:C:313:LEU:HD22	2.48	0.42
3:N:1099:VAL:HG13	3:N:1223:ILE:HD12	2.01	0.42
2:C:493:ARG:C	2:C:494:TYR:CG	2.93	0.42
3:N:1412:LYS:O	3:N:1412:LYS:HG3	2.19	0.42
3:D:1491:THR:HG21	4:E:89:MET:HE1	2.02	0.42
3:N:1346:ARG:HG3	3:N:1346:ARG:NH1	2.35	0.42
3:N:245:LEU:HB3	3:N:366:LYS:NZ	2.35	0.42
3:N:535:PHE:CD1	3:N:535:PHE:N	2.88	0.42
2:M:588:VAL:HG21	2:M:664:GLY:O	2.20	0.42
1:A:74:ASP:OD1	1:A:74:ASP:N	2.52	0.42
3:D:64:LYS:HE2	3:D:64:LYS:HB3	1.82	0.42
3:D:1435:LEU:HG	3:D:1467:ILE:HD12	2.02	0.42
3:D:115:LEU:HD22	3:D:502:PHE:CE1	2.54	0.42
3:N:1147:ARG:CB	3:N:1188:VAL:HG21	2.50	0.42
3:D:130:SER:OG	3:D:132:TYR:HE1	2.00	0.42
4:O:45:ARG:HB3	4:O:46:PRO:HD2	2.02	0.42
4:E:41:GLU:HB3	4:E:42:PRO:CD	2.50	0.42
2:C:561:GLY:C	2:C:563:ASN:H	2.22	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:1258:ARG:HG2	3:N:1258:ARG:O	2.19	0.42
3:D:1302:GLU:OE2	3:D:1304:LYS:HD3	2.20	0.42
3:N:741:ASP:C	3:N:741:ASP:OD1	2.58	0.42
3:D:552:ASN:O	3:D:553:ARG:C	2.56	0.42
5:P:190:ALA:C	5:P:191:ASN:ND2	2.73	0.42
3:N:661:MET:HB3	3:N:667:ALA:CB	2.49	0.42
2:M:143:SER:O	2:M:147:TYR:OH	2.31	0.42
2:M:1036:GLU:O	2:M:1039:ALA:N	2.52	0.42
2:M:486:MET:HE2	2:M:491:GLU:HB3	2.02	0.42
3:N:785:ILE:HG13	3:N:939:PHE:CD2	2.54	0.42
4:O:88:GLU:O	4:O:92:ILE:HG12	2.20	0.42
2:C:71:TYR:HD2	2:C:71:TYR:N	2.17	0.42
1:B:42:ARG:NH1	1:B:42:ARG:HG2	2.35	0.42
1:B:87:VAL:HG12	1:B:122:ILE:HA	2.02	0.42
5:F:386:VAL:CG1	5:F:387:GLY:H	2.26	0.42
5:P:389:PHE:HD2	5:P:397:ILE:CD1	2.29	0.42
3:N:1486:VAL:HG12	4:O:73:LEU:HD22	2.01	0.42
3:N:1078:ARG:HH11	3:N:1078:ARG:CG	2.24	0.42
1:B:36:LEU:C	1:B:39:PRO:HD2	2.40	0.42
3:N:560:GLN:OE1	5:P:221:ILE:HG22	2.20	0.42
2:C:157:ARG:HB3	2:C:158:TYR:H	1.72	0.42
3:N:224:ARG:NH1	3:N:229:ALA:N	2.68	0.42
3:N:791:TYR:CD2	3:N:945:SER:OG	2.62	0.42
1:L:25:LEU:O	1:L:25:LEU:HD23	2.20	0.42
2:M:712:ALA:HB3	2:M:821:GLU:H	1.85	0.42
5:P:393:THR:HG22	5:P:394:ARG:N	2.35	0.42
3:N:804:LEU:C	3:N:804:LEU:HD12	2.40	0.42
3:N:1302:GLU:HG2	3:N:1303:TYR:N	2.35	0.42
1:K:44:LEU:O	1:K:48:ILE:HD12	2.20	0.42
5:F:336:GLU:O	5:F:338:LEU:N	2.53	0.42
2:M:464:LEU:HA	2:M:464:LEU:HD12	1.87	0.42
2:C:1048:THR:O	2:C:1052:MET:HB2	2.20	0.42
3:D:521:PRO:C	3:D:525:ARG:NH1	2.74	0.42
3:D:84:ILE:HG13	3:D:85:VAL:N	2.35	0.42
2:C:872:ASN:HA	2:C:873:PRO:HD3	1.80	0.42
3:D:786:ILE:HD13	3:D:908:LYS:CB	2.50	0.42
4:E:54:LEU:HA	4:E:58:PRO:CD	2.49	0.42
2:C:260:LEU:HG	2:C:261:ILE:N	2.35	0.42
3:D:826:PRO:HB2	3:D:829:VAL:CG2	2.46	0.42
2:C:497:ALA:HB2	2:C:515:ALA:HB2	2.02	0.42
3:N:1336:LEU:CD1	3:N:1341:PRO:CA	2.98	0.42
3:N:1042:ARG:HH12	3:N:1045:MET:HE2	1.82	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:897:LEU:HD13	2:C:921:ALA:CB	2.32	0.42
2:M:846:LYS:HE2	2:M:997:LEU:HD12	2.02	0.42
3:N:455:ARG:CD	3:N:463:GLN:HE21	2.33	0.42
3:N:572:ARG:O	3:N:575:GLN:HB3	2.20	0.42
3:D:778:LEU:HA	3:D:778:LEU:HD12	1.78	0.42
2:M:1039:ALA:O	2:M:1043:TYR:CE1	2.73	0.42
2:C:768:THR:O	2:C:772:ARG:HB2	2.18	0.42
2:C:365:ASP:HA	2:C:367:LEU:HD22	2.00	0.42
1:A:88:ARG:HH11	1:A:88:ARG:HG2	1.84	0.42
2:M:910:LYS:O	2:M:913:GLU:HB2	2.19	0.42
2:M:432:ARG:NH2	3:N:1047:LYS:CG	2.83	0.42
1:B:18:ARG:O	1:B:207:PRO:HD3	2.20	0.42
2:C:1111:ILE:HG13	2:C:1112:PHE:N	2.35	0.42
2:M:958:THR:HG23	2:M:961:GLU:H	1.84	0.42
2:C:237:ARG:O	2:C:241:LEU:HG	2.20	0.42
3:D:9:ARG:CZ	3:D:11:ALA:HB2	2.50	0.42
2:M:396:ASP:OD1	2:M:398:THR:OG1	2.37	0.42
3:D:653:PHE:CD1	3:D:653:PHE:N	2.88	0.42
2:C:73:LEU:H	2:C:73:LEU:CD1	2.31	0.42
1:B:100:LEU:O	1:B:114:PHE:HA	2.20	0.42
3:N:1286:THR:CG2	3:N:1287:GLU:N	2.83	0.42
4:O:36:LYS:HD3	4:O:36:LYS:HA	1.66	0.42
1:A:64:GLU:O	1:A:64:GLU:HG2	2.20	0.42
2:C:327:HIS:HA	2:C:431:HIS:HD2	1.83	0.42
2:M:774:LEU:C	2:M:774:LEU:HD13	2.40	0.42
1:B:165:ILE:O	1:B:165:ILE:HG13	2.20	0.42
3:D:618:LEU:HD23	3:D:618:LEU:HA	1.75	0.42
2:M:503:LEU:HD22	2:M:508:ILE:HA	2.02	0.42
3:D:545:ARG:O	3:D:546:ARG:C	2.58	0.41
2:C:302:VAL:C	2:C:305:PRO:HD2	2.40	0.41
2:C:1081:VAL:CG1	2:C:1086:ARG:HE	2.32	0.41
2:C:837:ASP:OD2	2:C:838:LYS:N	2.52	0.41
3:D:809:PRO:HB2	3:D:812:ALA:CB	2.34	0.41
3:N:374:GLU:OE2	3:N:386:HIS:ND1	2.53	0.41
2:C:497:ALA:N	2:C:531:PHE:O	2.46	0.41
3:N:116:LEU:CB	3:N:118:LEU:HD13	2.50	0.41
3:N:575:GLN:O	3:N:578:VAL:N	2.53	0.41
3:D:714:GLN:HE22	3:D:735:ALA:HB3	1.78	0.41
2:M:1047:HIS:ND1	3:N:754:PHE:CB	2.83	0.41
3:N:767:HIS:HA	3:N:924:MET:SD	2.60	0.41
2:C:1034:GLU:OE1	3:D:1096:ARG:HD2	2.19	0.41
2:M:484:VAL:O	2:M:486:MET:N	2.53	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:984:GLU:HG2	3:D:944:THR:O	2.20	0.41
3:D:65:ARG:CG	3:D:66:GLN:N	2.82	0.41
3:N:1290:LEU:HD22	3:N:1311:LEU:HD22	2.01	0.41
3:N:1304:LYS:O	3:N:1305:LEU:CG	2.67	0.41
1:A:88:ARG:NH1	1:A:90:LEU:HD21	2.33	0.41
5:F:287:THR:C	5:F:289:GLU:N	2.74	0.41
5:P:196:VAL:HA	5:P:199:ALA:HB3	2.01	0.41
3:N:486:ARG:N	3:N:489:ARG:HD2	2.35	0.41
2:C:1067:TYR:OH	2:C:1071:ILE:HD11	2.18	0.41
2:M:1019:GLN:HE21	2:M:1019:GLN:HB3	1.60	0.41
3:D:951:ILE:O	3:D:951:ILE:CD1	2.68	0.41
5:P:166:LEU:HA	5:P:167:PRO:HD3	1.83	0.41
2:C:728:HIS:O	2:C:729:LEU:HD22	2.19	0.41
2:C:144:PRO:HB2	2:C:276:LYS:NZ	2.35	0.41
3:N:1225:ALA:O	3:N:1227:GLN:N	2.53	0.41
3:D:1403:LEU:HD22	3:D:1407:LEU:HD22	2.02	0.41
2:M:20:GLU:HG3	2:M:460:ARG:HH21	1.84	0.41
3:D:117:ASP:OD1	3:D:495:ARG:CZ	2.68	0.41
4:O:62:THR:O	4:O:66:LYS:HB2	2.19	0.41
1:A:220:GLU:HG2	1:A:220:GLU:O	2.20	0.41
2:C:473:ARG:NH2	2:C:484:VAL:HG21	2.35	0.41
2:C:135:VAL:HG12	2:C:136:ILE:N	2.34	0.41
5:P:302:LYS:HG3	5:P:303:ARG:N	2.35	0.41
3:D:1494:ALA:CB	4:E:92:ILE:HD11	2.50	0.41
3:D:1342:GLU:H	3:D:1342:GLU:CD	2.24	0.41
5:F:330:GLY:O	5:F:333:ILE:HD12	2.19	0.41
3:D:887:ALA:HA	3:D:896:ALA:CB	2.50	0.41
3:N:36:THR:CG2	3:N:38:LYS:HG3	2.40	0.41
2:C:848:VAL:HG21	3:D:742:GLY:CA	2.50	0.41
2:C:533:ASP:HB3	2:C:538:GLN:HE21	1.85	0.41
2:C:435:TYR:CD1	3:D:1071:PHE:CD2	3.06	0.41
5:F:80:PRO:O	5:F:84:TYR:CE2	2.73	0.41
2:M:578:VAL:HG11	2:M:991:GLN:CB	2.50	0.41
3:N:96:ALA:CB	3:N:554:LEU:HD12	2.47	0.41
2:M:1043:TYR:HB3	3:N:762:GLN:CD	2.41	0.41
2:M:515:ALA:HB3	2:M:524:VAL:HG12	2.02	0.41
3:N:785:ILE:HG12	3:N:935:LYS:HA	2.01	0.41
3:N:785:ILE:CG1	3:N:939:PHE:CE2	3.04	0.41
1:A:86:VAL:N	1:A:124:ASN:HD22	2.18	0.41
3:D:1348:LEU:O	3:D:1352:ILE:HG13	2.20	0.41
3:D:215:TYR:HE2	3:D:375:GLU:HG2	1.84	0.41
2:C:475:VAL:O	2:C:476:GLY:C	2.58	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:1153:VAL:O	3:N:1155:VAL:HG23	2.21	0.41
2:M:1102:LEU:HD23	2:M:1106:ASP:HA	2.01	0.41
3:N:1313:VAL:HG23	3:N:1314:LYS:HZ1	1.85	0.41
1:A:20:TYR:CE1	1:A:22:GLU:HG3	2.54	0.41
3:N:1366:LYS:O	3:N:1369:GLU:N	2.53	0.41
3:N:167:GLU:OE2	5:P:91:VAL:HG22	2.20	0.41
3:N:1233:GLY:HA2	3:N:1236:LEU:HD12	2.01	0.41
3:D:416:ALA:N	3:D:417:PRO:CD	2.72	0.41
3:D:1283:ILE:HG22	3:D:1284:GLU:N	2.35	0.41
2:C:572:ILE:CG1	2:C:701:THR:HB	2.50	0.41
3:D:378:ILE:CD1	3:D:378:ILE:N	2.81	0.41
2:C:274:ARG:HB2	2:C:288:ARG:HH22	1.84	0.41
3:N:795:VAL:HG23	3:N:879:ARG:CZ	2.50	0.41
3:N:71:LYS:N	3:N:71:LYS:HD2	2.35	0.41
2:M:1114:GLY:O	2:M:1116:ALA:N	2.52	0.41
3:D:988:ARG:O	3:D:988:ARG:HD2	2.19	0.41
5:P:207:LEU:HD12	5:P:212:LEU:CD2	2.50	0.41
2:C:889:HIS:O	2:C:891:GLY:N	2.53	0.41
3:N:142:LEU:HD12	3:N:142:LEU:C	2.39	0.41
3:N:868:TYR:HD1	3:N:869:MET:H	1.62	0.41
5:P:384:GLU:O	5:P:384:GLU:HG2	2.20	0.41
3:N:247:GLU:O	3:N:247:GLU:HG2	2.20	0.41
4:E:29:GLN:HA	4:E:32:ARG:HB3	2.02	0.41
2:C:1083:GLU:O	2:C:1087:VAL:CG2	2.58	0.41
3:D:1459:LEU:HD13	3:D:1468:LEU:HD12	2.03	0.41
3:D:650:LEU:HD12	3:D:657:LEU:CD2	2.50	0.41
3:D:1018:ASN:HB3	3:D:1021:TYR:HB3	2.02	0.41
3:D:1021:TYR:O	3:D:1024:ALA:HB3	2.20	0.41
3:D:218:LYS:HG3	3:D:370:ALA:HB1	2.01	0.41
2:C:516:ARG:CZ	3:D:1068:LEU:CD2	2.79	0.41
2:C:857:ASP:HA	2:C:977:GLY:O	2.19	0.41
1:K:146:ARG:C	1:K:146:ARG:HE	2.23	0.41
3:N:1395:LEU:O	3:N:1395:LEU:HD22	2.20	0.41
3:N:100:ALA:HB2	3:N:128:TYR:OH	2.20	0.41
1:K:2:LEU:O	1:K:6:LEU:HD23	2.20	0.41
3:N:984:THR:HG23	3:N:986:ARG:HB3	2.01	0.41
2:C:987:ILE:HA	3:D:948:THR:CG2	2.49	0.41
2:M:198:ARG:HH22	2:M:203:ASP:CB	2.31	0.41
3:N:195:VAL:O	3:N:205:TYR:HD1	2.03	0.41
5:P:413:SER:OG	5:P:419:ARG:NH2	2.43	0.41
3:N:1295:GLU:HB3	3:N:1300:SER:CB	2.50	0.41
5:F:386:VAL:CG1	5:F:387:GLY:N	2.82	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:1356:TYR:CG	3:N:1363:LEU:HD21	2.55	0.41
1:B:34:VAL:O	1:B:34:VAL:HG12	2.19	0.41
2:C:536:PRO:HB2	2:C:905:ILE:CG2	2.50	0.41
1:A:140:MET:HG3	1:A:140:MET:O	2.21	0.41
2:M:1053:LEU:HA	2:M:1053:LEU:HD13	1.77	0.41
1:L:177:VAL:HG13	1:L:197:LEU:HD11	2.02	0.41
3:D:653:PHE:CD1	3:D:695:ILE:HD11	2.55	0.41
3:N:237:LYS:H	3:N:238:PRO:HD3	1.86	0.41
2:C:223:ASP:O	2:C:225:SER:N	2.53	0.41
2:C:708:TYR:N	2:C:708:TYR:CD1	2.88	0.41
1:K:110:LYS:O	1:K:112:ARG:N	2.53	0.41
2:M:475:VAL:O	2:M:476:GLY:C	2.58	0.41
2:C:278:GLU:HG3	2:C:283:ILE:O	2.20	0.41
2:C:1115:LEU:HD22	3:D:88:TYR:HD1	1.82	0.41
3:D:23:TYR:HB3	3:D:49:ILE:O	2.19	0.41
3:D:762:GLN:NE2	4:E:20:THR:HG21	2.36	0.41
3:D:1022:VAL:O	3:D:1025:GLN:N	2.50	0.41
2:C:634:GLY:HA3	2:C:704:HIS:CE1	2.56	0.41
3:N:1336:LEU:C	3:N:1338:ALA:N	2.73	0.41
2:M:73:LEU:CD2	2:M:94:LEU:HD13	2.50	0.41
5:F:195:VAL:HG22	5:F:220:LEU:HD12	2.02	0.41
2:M:1088:LEU:HA	2:M:1091:GLU:OE2	2.20	0.41
3:N:539:ASP:O	3:N:540:LEU:C	2.56	0.41
2:M:145:GLY:H	2:M:163:ILE:HG23	1.84	0.41
2:C:338:GLU:CA	2:C:341:THR:HG22	2.50	0.41
2:M:1046:ALA:HB2	3:N:1476:THR:HB	2.01	0.41
5:P:367:MET:O	5:P:371:LEU:N	2.53	0.41
5:F:138:SER:OG	5:F:140:ARG:HG2	2.20	0.41
3:N:940:THR:O	3:N:943:THR:N	2.50	0.41
2:C:983:ILE:HG23	3:D:944:THR:CA	2.51	0.41
3:N:1307:LYS:O	3:N:1309:ALA:N	2.53	0.41
3:D:627:GLY:HA3	3:D:648:MET:HE2	2.01	0.41
4:E:6:ILE:HG23	4:E:7:ASP:N	2.35	0.41
3:D:1260:ILE:C	3:D:1262:LEU:N	2.72	0.41
2:M:674:VAL:O	2:M:989:VAL:HA	2.20	0.41
2:C:912:PRO:O	2:C:915:LYS:N	2.53	0.41
2:M:431:HIS:CG	2:M:432:ARG:N	2.88	0.41
3:D:1084:THR:O	3:D:1087:ARG:N	2.45	0.41
3:N:1322:GLY:HA3	3:N:1339:LYS:HE3	2.02	0.41
1:A:67:THR:HG21	2:C:609:ASN:CG	2.41	0.41
3:N:839:LEU:HG	3:N:839:LEU:H	1.67	0.41
1:K:218:LEU:CD2	1:L:222:LEU:HD11	2.45	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:1087:ARG:CD	3:N:1087:ARG:N	2.83	0.41
3:N:1116:ASN:H	3:N:1116:ASN:ND2	2.15	0.41
1:B:33:GLY:HA3	1:B:181:VAL:CG1	2.50	0.41
3:N:560:GLN:CG	5:P:221:ILE:HG21	2.50	0.41
3:D:994:GLN:HE21	3:D:998:GLU:HG2	1.83	0.41
3:D:207:PHE:HA	3:D:208:PRO:HD3	1.80	0.41
1:A:7:LYS:HZ3	1:A:188:GLN:HE21	1.64	0.41
5:F:323:ASP:O	5:F:325:LYS:HG3	2.20	0.41
4:E:59:ASN:CG	4:E:61:GLU:OE2	2.58	0.41
3:D:684:LYS:O	3:D:686:GLU:N	2.53	0.41
2:C:44:ILE:N	2:C:44:ILE:HD12	2.35	0.41
1:B:101:LEU:C	1:B:101:LEU:HD23	2.41	0.41
3:N:430:ASP:HB3	3:N:431:VAL:H	1.51	0.41
3:D:1014:ASN:O	3:D:1015:TYR:CD1	2.74	0.41
3:D:932:ASP:C	3:D:935:LYS:H	2.24	0.41
3:D:513:ILE:HG13	3:D:513:ILE:H	1.51	0.41
3:D:614:PHE:O	3:D:617:ASN:HB3	2.21	0.41
2:M:44:ILE:HD12	2:M:44:ILE:N	2.36	0.41
2:M:660:ALA:O	2:M:667:ALA:N	2.52	0.41
3:N:605:ASP:N	3:N:605:ASP:OD1	2.53	0.41
3:N:670:VAL:O	3:N:673:ALA:N	2.54	0.41
2:M:139:GLN:NE2	2:M:414:GLY:HA3	2.31	0.41
1:A:51:THR:HG21	1:A:89:PHE:CD2	2.55	0.41
3:D:423:ASP:OD2	5:F:174:LEU:HD13	2.19	0.41
1:K:224:TYR:CD2	1:L:9:PRO:HG2	2.56	0.41
2:M:824:ARG:HH11	2:M:824:ARG:HG2	1.85	0.41
2:M:56:GLU:OE2	2:M:356:ARG:HD3	2.20	0.41
3:D:678:GLU:CG	3:D:679:ARG:HG3	2.50	0.41
2:C:66:LEU:HD13	2:C:100:LEU:HD23	2.02	0.41
2:C:865:THR:HA	2:C:866:PRO:HD3	1.81	0.41
2:C:411:SER:HB2	2:C:452:ILE:HG23	2.02	0.41
5:F:97:GLU:O	5:F:100:VAL:HB	2.21	0.41
2:M:112:GLU:O	2:M:113:VAL:HG23	2.20	0.41
3:D:208:PRO:HB2	3:D:395:VAL:CG1	2.47	0.41
3:D:401:TYR:N	3:D:402:PRO:HD3	2.36	0.41
2:C:118:ILE:HA	2:C:119:PRO:HD3	1.92	0.41
5:F:202:TYR:HE2	5:F:248:ASN:OD1	2.04	0.41
3:D:1492:LEU:C	3:D:1492:LEU:HD13	2.41	0.41
3:N:1118:ILE:HA	3:N:1118:ILE:HD13	1.90	0.41
1:B:76:VAL:O	1:B:76:VAL:HG12	2.21	0.41
2:M:233:GLU:OE1	2:M:237:ARG:HD3	2.20	0.41
3:D:1372:VAL:O	3:D:1375:MET:HB2	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:1106:VAL:CG2	3:D:1474:ALA:HB2	2.49	0.41
2:C:1058:ASP:HB2	3:D:621:LYS:CE	2.50	0.41
3:D:623:VAL:CG1	3:D:624:ASP:N	2.83	0.41
2:C:1115:LEU:HD13	3:D:88:TYR:HD1	1.84	0.41
3:D:926:LYS:HE3	3:D:926:LYS:HB2	1.88	0.41
2:M:1054:THR:HG21	2:M:1079:PRO:CB	2.47	0.41
1:A:40:LEU:HD12	1:A:197:LEU:HD11	2.03	0.41
3:D:1307:LYS:HG3	3:D:1308:GLU:H	1.85	0.41
1:K:151:VAL:HB	1:K:169:ALA:HB3	2.02	0.41
3:N:1042:ARG:HD3	3:N:1065:LEU:HD11	2.02	0.41
2:M:400:PRO:HB3	2:M:593:ALA:HB2	2.03	0.41
3:N:84:ILE:O	3:N:87:ARG:HG2	2.21	0.41
2:M:78:PHE:HB3	2:M:79:PRO:CD	2.49	0.41
3:N:1447:LEU:HA	3:N:1447:LEU:HD12	1.84	0.41
3:N:575:GLN:HA	3:N:575:GLN:OE1	2.19	0.41
3:N:624:ASP:HB3	3:N:625:TYR:H	1.60	0.41
2:M:143:SER:OG	2:M:276:LYS:NZ	2.52	0.41
3:N:135:LEU:HD21	3:N:452:ILE:CD1	2.47	0.41
1:A:122:ILE:HG22	1:A:124:ASN:H	1.85	0.41
3:D:633:VAL:HG13	3:D:633:VAL:O	2.20	0.41
3:D:1312:LEU:HD21	3:D:1327:ARG:NH2	2.35	0.41
2:M:349:ALA:O	2:M:352:ALA:N	2.50	0.41
2:M:383:ARG:C	2:M:385:PHE:N	2.74	0.41
3:D:1336:LEU:CD2	3:D:1421:LEU:HB2	2.47	0.41
5:F:275:ALA:HA	5:F:278:LEU:HD12	2.03	0.41
1:B:15:THR:HA	1:B:21:GLY:HA2	2.02	0.41
3:D:1442:ASN:O	3:D:1443:THR:C	2.59	0.41
2:M:855:VAL:HG21	2:M:866:PRO:HG2	2.03	0.41
2:C:691:SER:O	2:C:693:GLU:N	2.53	0.41
3:N:1078:ARG:O	3:N:1082:ALA:HB3	2.21	0.41
2:C:230:ARG:HA	2:C:231:PRO:HD3	1.88	0.41
1:L:182:GLU:OE1	1:L:194:LYS:HD3	2.21	0.41
2:M:133:ASP:HB2	2:M:395:LYS:HB3	2.03	0.41
2:C:586:ARG:HD3	2:C:590:ASP:OD2	2.20	0.41
2:M:839:LEU:HD21	2:M:849:VAL:CG2	2.47	0.41
2:C:350:ARG:HH11	2:C:350:ARG:HG2	1.85	0.41
1:B:30:ARG:NE	1:B:191:ASP:HB2	2.35	0.41
5:P:323:ASP:O	5:P:324:GLU:C	2.59	0.41
2:M:319:GLY:O	2:M:321:GLU:CD	2.58	0.41
3:D:1319:VAL:HG23	3:D:1319:VAL:O	2.21	0.41
3:N:1137:ARG:CD	3:N:1137:ARG:N	2.83	0.41
3:D:999:THR:O	3:D:1002:LYS:HB2	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:1432:LYS:HD2	3:D:1433:SER:N	2.34	0.41
3:D:1472:ILE:HA	3:D:1473:PRO:HD3	1.86	0.41
3:D:526:PRO:HD2	5:F:317:LEU:HD13	2.03	0.41
3:D:112:ILE:O	3:D:112:ILE:HD12	2.21	0.41
2:M:1063:ARG:CG	2:M:1064:ASN:H	2.32	0.41
4:E:41:GLU:CA	4:E:45:ARG:HG3	2.51	0.41
2:C:516:ARG:NH2	3:D:1068:LEU:HB2	2.36	0.41
3:N:845:ASN:CB	3:N:848:GLU:HG2	2.51	0.41
3:N:1066:THR:OG1	3:N:1067:VAL:N	2.53	0.41
3:N:520:LEU:HD11	3:N:524:LEU:HD12	2.03	0.41
3:N:554:LEU:HD22	3:N:554:LEU:HA	1.91	0.41
5:P:214:GLN:HE21	5:P:214:GLN:HA	1.85	0.41
3:N:637:LEU:C	3:N:638:LYS:HG3	2.40	0.41
2:C:983:ILE:HG22	2:C:983:ILE:O	2.19	0.41
1:A:124:ASN:N	1:A:125:PRO:CD	2.83	0.41
3:D:646:LYS:O	3:D:649:ALA:N	2.53	0.41
3:N:1466:VAL:O	3:N:1469:GLY:N	2.50	0.41
5:F:163:LEU:HB3	5:F:174:LEU:HD12	2.03	0.41
2:M:101:ILE:HG22	2:M:102:HIS:N	2.36	0.41
2:C:185:LYS:HB2	2:C:185:LYS:HE3	1.90	0.41
2:C:407:LYS:HB2	2:C:407:LYS:HE2	1.83	0.41
5:F:234:LYS:HD2	5:F:236:SER:CB	2.51	0.41
1:K:133:GLU:CG	1:K:134:GLU:H	2.34	0.41
3:D:864:VAL:CG1	3:D:865:THR:N	2.83	0.41
2:C:31:GLN:CD	2:C:40:GLU:HB2	2.41	0.41
2:M:442:GLU:HG2	2:M:454:SER:OG	2.21	0.41
3:N:957:PRO:HG3	3:N:1007:VAL:HA	2.03	0.41
3:D:93:ILE:CD1	3:D:548:ILE:CD1	2.99	0.41
2:M:124:ASP:OD1	2:M:125:GLY:N	2.53	0.41
2:C:337:GLY:O	2:C:339:LEU:N	2.54	0.41
3:N:1101:VAL:HG13	3:N:1102:THR:N	2.35	0.41
3:N:1101:VAL:HG22	3:N:1374:GLN:HB3	2.02	0.41
1:B:29:GLU:O	1:B:30:ARG:C	2.57	0.41
1:B:91:ASN:HB2	1:B:92:PRO:CD	2.51	0.41
3:N:779:ALA:HB3	3:N:931:LEU:CD1	2.50	0.41
3:D:1072:ILE:HA	3:D:1072:ILE:HD13	1.79	0.41
3:N:1353:GLN:O	3:N:1354:LYS:C	2.59	0.41
5:F:336:GLU:C	5:F:338:LEU:N	2.74	0.41
1:K:104:GLU:O	1:K:105:GLY:O	2.39	0.41
2:M:239:PHE:CE1	2:M:254:VAL:HG21	2.56	0.41
3:D:891:GLU:O	3:D:893:GLU:N	2.53	0.41
2:C:1113:GLU:O	2:C:1115:LEU:HD12	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:680:ASP:OD2	3:D:939:PHE:HB3	2.20	0.41
2:C:873:PRO:O	2:C:877:PRO:HD2	2.21	0.41
3:N:1144:LEU:HB3	3:N:1171:VAL:HG22	2.03	0.41
3:N:1188:VAL:O	3:N:1188:VAL:HG13	2.19	0.41
3:D:130:SER:HB3	3:D:132:TYR:CD1	2.55	0.41
3:D:133:ILE:HG21	3:D:454:ALA:CB	2.34	0.41
5:F:316:SER:OG	5:F:318:GLU:O	2.22	0.41
2:C:443:THR:O	2:C:559:LEU:CD1	2.69	0.41
3:D:806:PHE:C	3:D:808:THR:H	2.24	0.41
3:D:1130:ARG:O	3:D:1131:SER:HB3	2.21	0.41
3:N:1243:THR:OG1	3:N:1253:THR:CB	2.69	0.41
3:N:1243:THR:HG21	3:N:1253:THR:OG1	2.20	0.41
2:C:577:PRO:HG3	2:C:993:PHE:CG	2.56	0.41
3:N:568:ARG:O	3:N:569:ASN:C	2.59	0.41
3:N:598:ARG:HA	3:N:599:PRO:HD3	1.84	0.41
5:P:225:GLU:HG2	5:P:226:LYS:HZ2	1.85	0.41
3:D:711:LEU:CD1	3:D:778:LEU:HD23	2.50	0.41
3:N:1148:VAL:HG12	3:N:1189:ARG:CG	2.50	0.41
3:N:1109:GLU:HG2	3:N:1202:GLN:H	1.85	0.41
3:N:1128:VAL:O	3:N:1130:ARG:N	2.53	0.41
3:N:1127:GLU:C	3:N:1129:THR:H	2.24	0.41
2:C:97:ARG:HH21	2:C:109:LYS:HD2	1.85	0.41
3:D:1243:THR:CB	3:D:1253:THR:HB	2.51	0.41
3:N:796:ARG:HE	3:N:828:LYS:NZ	2.17	0.41
1:A:58:ILE:HG21	1:A:61:VAL:CG2	2.51	0.41
1:L:208:LEU:O	1:L:211:LEU:N	2.53	0.41
3:N:1135:ARG:CZ	3:N:1139:ASP:HB3	2.51	0.41
3:D:1438:ALA:C	3:D:1440:PHE:H	2.22	0.41
2:M:853:LEU:HA	2:M:854:PRO:HD3	1.81	0.41
2:C:801:VAL:HG23	2:C:802:ARG:N	2.35	0.41
3:N:736:PHE:O	3:N:738:ALA:CB	2.68	0.41
3:N:168:THR:C	3:N:170:PRO:HD3	2.41	0.41
3:N:831:GLY:O	3:N:832:ARG:C	2.58	0.41
2:M:610:ARG:CG	2:M:610:ARG:HH11	2.33	0.41
3:N:884:ARG:O	3:N:888:GLU:N	2.53	0.41
3:D:160:GLU:CG	3:D:165:LYS:HD3	2.51	0.41
1:B:68:ILE:HA	1:B:69:PRO:HD3	1.87	0.41
3:N:93:ILE:HG13	3:N:519:VAL:HG21	2.02	0.41
2:C:613:VAL:O	2:C:620:LEU:HA	2.21	0.41
2:M:604:ALA:HB3	2:M:612:VAL:O	2.20	0.41
1:A:165:ILE:HA	1:A:166:PRO:HD3	1.83	0.41
5:F:114:LYS:O	5:F:117:SER:OG	2.39	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:F:398:ARG:O	5:F:401:GLU:HB3	2.21	0.41
3:D:1113:GLY:O	3:D:1114:THR:C	2.59	0.41
3:D:1202:GLN:HA	3:D:1215:VAL:CG1	2.51	0.41
4:E:51:LEU:HD23	4:E:51:LEU:N	2.36	0.41
5:F:153:PRO:HB2	5:F:154:LYS:H	1.51	0.41
3:D:1331:ASP:O	3:D:1334:GLN:HB2	2.20	0.41
2:C:516:ARG:HE	3:D:1068:LEU:HD13	1.86	0.41
2:C:291:ALA:O	2:C:292:ARG:HB2	2.21	0.41
5:P:105:LYS:CE	5:P:179:GLU:HG2	2.44	0.41
5:F:188:ILE:HD13	5:F:221:ILE:HG23	2.03	0.41
3:N:1394:VAL:O	3:N:1397:LYS:HB2	2.20	0.41
1:L:77:GLU:CG	3:N:872:ARG:NH2	2.70	0.41
2:M:1028:GLY:O	2:M:1029:GLY:O	2.39	0.41
2:M:276:LYS:HA	2:M:279:GLU:HG2	2.02	0.41
2:C:341:THR:HG23	2:C:345:ARG:NH2	2.34	0.41
3:N:984:THR:C	3:N:986:ARG:N	2.74	0.41
3:N:730:PRO:O	3:N:731:LEU:C	2.59	0.41
3:N:639:LEU:O	3:N:641:GLN:N	2.54	0.41
3:N:641:GLN:HA	3:N:716:PHE:HB3	2.03	0.41
3:N:711:LEU:C	3:N:713:ILE:N	2.73	0.41
3:N:761:ILE:HG22	3:N:762:GLN:N	2.36	0.41
3:N:1148:VAL:HG12	3:N:1189:ARG:CB	2.48	0.41
2:M:682:TYR:CD1	3:N:635:PRO:HG2	2.55	0.41
1:K:206:THR:HB	1:K:209:GLU:HB2	2.03	0.41
5:P:125:ASP:O	5:P:129:GLU:HG2	2.20	0.41
5:F:364:ARG:O	5:F:365:GLU:C	2.59	0.41
3:D:760:ARG:O	4:E:3:GLU:OE1	2.38	0.41
3:D:866:VAL:O	3:D:873:LEU:HB2	2.20	0.41
2:C:365:ASP:C	2:C:367:LEU:H	2.24	0.41
3:N:195:VAL:HB	3:N:205:TYR:CG	2.55	0.41
2:C:886:LEU:HD23	2:C:886:LEU:HA	1.89	0.41
2:M:874:LEU:O	2:M:877:PRO:HD2	2.21	0.41
3:N:908:LYS:HG3	3:N:909:ASN:N	2.36	0.41
2:M:413:LEU:CD1	2:M:413:LEU:N	2.83	0.41
1:L:103:ALA:CB	1:L:107:LYS:NZ	2.84	0.41
1:K:33:GLY:HA3	1:K:193:ASP:OD2	2.21	0.41
3:N:1183:ILE:CG2	3:N:1184:GLN:H	2.27	0.41
1:B:151:VAL:HA	1:B:152:PRO:HD3	1.97	0.41
2:M:432:ARG:NH1	3:N:1047:LYS:HZ3	2.18	0.41
2:M:1102:LEU:HD13	3:N:7:LYS:O	2.20	0.41
2:M:744:ARG:HH21	2:M:747:ALA:HA	1.84	0.41
2:C:896:PHE:CZ	2:C:925:TYR:CG	3.08	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:633:GLN:HE21	2:C:633:GLN:H	1.69	0.41
2:M:956:GLY:O	2:M:957:LYS:O	2.39	0.41
2:M:775:ARG:HH11	2:M:782:ALA:HB1	1.86	0.41
3:N:171:LEU:HD23	3:N:390:PRO:HG3	2.01	0.41
2:C:1010:THR:CG2	2:C:1011:GLY:H	2.29	0.41
3:N:183:GLU:HA	3:N:186:VAL:CG1	2.51	0.41
2:C:576:ALA:HB3	2:C:900:ARG:NH2	2.36	0.41
2:C:85:GLU:C	2:C:86:LYS:O	2.59	0.41
3:D:500:ARG:HH11	3:D:500:ARG:HG3	1.86	0.41
3:D:834:THR:HG22	3:D:838:ARG:HD2	2.02	0.41
3:N:444:VAL:HG22	3:N:444:VAL:O	2.19	0.41
1:L:76:VAL:O	1:L:80:LEU:HB2	2.20	0.41
2:C:188:LYS:HB3	2:C:189:ARG:H	1.75	0.41
2:M:394:PHE:CD1	2:M:632:ASN:OD1	2.74	0.41
2:C:73:LEU:HG	2:C:94:LEU:HD13	2.03	0.41
5:P:394:ARG:H	5:P:394:ARG:HD3	1.86	0.41
3:D:183:GLU:HA	3:D:186:VAL:HG12	2.03	0.41
3:D:444:VAL:O	3:D:446:VAL:HG23	2.21	0.41
3:D:927:THR:O	3:D:928:ALA:C	2.59	0.41
2:C:792:VAL:HA	2:C:793:PRO:HD3	1.92	0.41
3:N:1094:LEU:C	3:N:1096:ARG:H	2.23	0.41
3:N:404:GLU:OE2	3:N:414:ARG:NH2	2.54	0.41
3:N:1114:THR:HB	3:N:1195:GLN:OE1	2.20	0.41
5:F:323:ASP:O	5:F:324:GLU:C	2.59	0.41
3:D:988:ARG:C	3:D:988:ARG:HD2	2.41	0.41
4:E:59:ASN:HB3	4:E:62:THR:OG1	2.20	0.41
1:B:10:VAL:O	1:B:10:VAL:HG12	2.21	0.41
3:N:847:ASP:O	3:N:851:LEU:HG	2.21	0.41
3:N:1232:PRO:CB	3:N:1361:VAL:HG11	2.51	0.41
3:N:541:ASN:O	3:N:542:ASP:C	2.59	0.41
3:N:496:LEU:O	3:N:496:LEU:HD23	2.21	0.41
2:C:835:VAL:HG22	2:C:836:GLY:N	2.36	0.41
2:M:464:LEU:O	2:M:464:LEU:HG	2.20	0.41
5:F:343:ASP:O	5:F:347:GLN:NE2	2.53	0.41
3:D:37:LEU:HD23	3:D:37:LEU:N	2.36	0.41
3:N:227:LEU:H	3:N:227:LEU:HD22	1.86	0.41
2:M:266:ARG:HH11	2:M:266:ARG:HG3	1.86	0.41
2:M:776:SER:HA	2:M:780:GLU:HB2	2.02	0.41
1:L:11:PHE:CE2	1:L:13:VAL:HG22	2.56	0.41
5:F:266:GLU:C	5:F:268:ILE:N	2.74	0.41
2:C:1115:LEU:HD23	3:D:85:VAL:CG1	2.40	0.41
3:D:1215:VAL:HG22	3:D:1216:SER:N	2.36	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:1265:ALA:O	3:D:1266:ARG:HG3	2.21	0.41
3:D:85:VAL:HG12	3:D:85:VAL:O	2.21	0.41
3:D:87:ARG:HG3	3:D:88:TYR:CE2	2.56	0.41
3:D:881:LEU:O	3:D:882:PHE:C	2.58	0.41
4:E:53:GLY:C	4:E:55:PHE:N	2.75	0.41
3:D:703:ASN:HD22	3:D:704:ARG:N	2.18	0.41
2:C:857:ASP:CB	2:C:978:ARG:HG2	2.38	0.41
3:D:804:LEU:HB3	3:D:816:HIS:CE1	2.56	0.41
3:N:521:PRO:O	3:N:525:ARG:HG3	2.21	0.41
5:P:190:ALA:O	5:P:191:ASN:ND2	2.54	0.41
5:P:220:LEU:HD12	5:P:239:ALA:HB1	2.02	0.41
2:M:163:ILE:HA	2:M:164:PRO:HD3	1.69	0.41
3:D:1205:TYR:O	3:D:1366:LYS:HE2	2.20	0.41
2:M:1048:THR:OG1	3:N:755:ALA:O	2.37	0.41
2:M:498:GLN:O	2:M:532:MET:HG3	2.21	0.41
2:C:987:ILE:CB	3:D:948:THR:HG21	2.51	0.41
3:D:628:ARG:O	3:D:648:MET:HE1	2.20	0.41
2:C:650:ARG:H	2:C:650:ARG:CD	2.20	0.41
2:M:1081:VAL:HA	2:M:1082:PRO:HD3	1.85	0.41
1:L:91:ASN:OD1	1:L:94:LEU:CD1	2.68	0.41
1:L:206:THR:OG1	1:L:207:PRO:HD2	2.20	0.41
1:A:20:TYR:CG	1:A:21:GLY:N	2.89	0.41
2:M:861:LEU:HB2	2:M:865:THR:HG23	2.03	0.41
2:M:775:ARG:NH2	2:M:784:ASP:HA	2.35	0.41
2:C:79:PRO:CG	2:C:82:GLU:HB2	2.45	0.41
3:N:367:ILE:CD1	3:N:367:ILE:H	2.31	0.41
2:C:490:GLU:O	2:C:494:TYR:CE1	2.73	0.41
3:N:1090:ASP:O	3:N:1093:TYR:N	2.32	0.41
1:B:96:THR:HG23	1:B:96:THR:O	2.20	0.41
1:A:99:LEU:O	1:A:142:VAL:HG22	2.20	0.41
5:F:321:ILE:HD13	5:F:322:GLY:N	2.35	0.41
3:D:1485:GLN:NE2	4:E:80:VAL:O	2.55	0.41
1:L:149:GLY:O	1:L:171:PHE:HB2	2.21	0.41
5:P:271:LEU:HD12	5:P:307:THR:HG21	2.02	0.41
2:C:398:THR:O	2:C:570:PRO:HD3	2.20	0.41
3:D:129:PHE:CD2	3:D:587:ARG:CZ	3.03	0.41
1:K:71:VAL:HG11	1:K:78:ILE:HD11	2.03	0.41
3:D:1434:TRP:CD1	3:D:1434:TRP:C	2.94	0.40
2:M:150:PRO:HA	2:M:158:TYR:HB3	2.03	0.40
2:M:157:ARG:HD3	2:M:158:TYR:CE1	2.57	0.40
1:K:52:ALA:HB3	1:K:171:PHE:CD1	2.57	0.40
1:L:190:THR:HG21	3:N:722:GLU:OE1	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:M:304:LEU:N	2:M:305:PRO:CD	2.83	0.40
5:P:125:ASP:N	5:P:125:ASP:OD1	2.52	0.40
2:C:949:LYS:HD3	3:D:796:ARG:NH1	2.35	0.40
2:C:367:LEU:H	2:C:367:LEU:CD2	2.34	0.40
5:P:410:TYR:HA	5:P:413:SER:OG	2.20	0.40
5:F:131:VAL:O	5:F:135:ILE:HG12	2.22	0.40
2:M:108:ILE:HB	2:M:368:THR:OG1	2.22	0.40
3:N:1381:VAL:HG23	3:N:1391:GLU:HB2	2.03	0.40
2:M:1103:ASP:CG	2:M:1104:GLU:H	2.25	0.40
3:D:30:GLU:HG3	3:D:41:ARG:HG2	2.04	0.40
3:D:1398:TRP:CZ2	3:D:1415:VAL:HG11	2.56	0.40
2:M:860:HIS:O	2:M:861:LEU:O	2.39	0.40
1:L:44:LEU:HD11	1:L:199:ILE:HD11	2.04	0.40
2:M:999:HIS:CD2	2:M:1003:ASP:OD1	2.74	0.40
4:E:23:VAL:O	4:E:27:ALA:N	2.55	0.40
3:N:728:LEU:HD13	3:N:745:MET:HE1	2.03	0.40
3:N:668:PRO:HB2	3:N:669:ASN:OD1	2.21	0.40
3:D:889:ALA:HB1	3:D:930:LEU:HB2	2.03	0.40
1:B:30:ARG:HD3	1:B:191:ASP:HB2	2.02	0.40
2:M:768:THR:HA	2:M:769:PRO:HD3	1.76	0.40
4:E:36:LYS:HD3	4:E:36:LYS:HA	1.92	0.40
2:M:479:VAL:HG23	2:M:506:ASN:O	2.21	0.40
2:M:471:TYR:H	2:M:483:VAL:HG13	1.86	0.40
3:D:795:VAL:HG23	3:D:879:ARG:NH2	2.36	0.40
3:D:900:ILE:O	3:D:902:LEU:HD23	2.21	0.40
3:D:1130:ARG:NH2	3:D:1132:LEU:HG	2.32	0.40
3:N:219:GLU:HG3	3:N:220:ARG:HG3	2.03	0.40
2:C:434:HIS:HB3	2:C:438:ILE:HB	2.02	0.40
3:D:770:LEU:CD2	3:D:777:PRO:CA	2.93	0.40
2:M:44:ILE:HD11	2:M:340:MET:HE2	2.02	0.40
3:N:1197:ARG:CD	3:N:1396:GLU:HB2	2.51	0.40
1:K:91:ASN:ND2	1:K:92:PRO:CD	2.69	0.40
1:L:100:LEU:HB2	1:L:115:LEU:HD11	2.03	0.40
3:D:771:SER:HA	3:D:772:PRO:HD3	1.84	0.40
3:D:699:VAL:HA	3:D:718:PRO:CD	2.40	0.40
1:A:151:VAL:O	1:A:152:PRO:C	2.60	0.40
3:D:1232:PRO:C	3:D:1234:THR:N	2.75	0.40
3:D:149:LYS:CD	3:D:149:LYS:N	2.81	0.40
3:D:1422:MET:O	3:D:1427:SER:OG	2.38	0.40
2:C:395:LYS:HE2	2:C:403:SER:HB2	2.03	0.40
5:F:416:ARG:NH1	5:F:419:ARG:HB2	2.37	0.40
2:M:793:PRO:HA	2:M:794:PRO:HD3	1.93	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:794:GLN:NE2	3:N:794:GLN:CA	2.83	0.40
3:D:1138:ALA:C	3:D:1140:ILE:N	2.74	0.40
3:N:703:ASN:HD22	3:N:704:ARG:H	1.67	0.40
1:B:51:THR:HG22	1:B:89:PHE:CE2	2.56	0.40
2:M:38:LYS:HA	2:M:38:LYS:HD3	1.87	0.40
3:N:1231:GLU:N	3:N:1232:PRO:HD3	2.36	0.40
2:M:41:ASN:N	2:M:41:ASN:ND2	2.67	0.40
3:N:1434:TRP:CG	3:N:1435:LEU:N	2.89	0.40
1:K:127:LEU:O	1:K:129:ILE:CD1	2.69	0.40
3:D:1042:ARG:NH1	3:D:1061:PHE:CZ	2.89	0.40
1:B:101:LEU:HD23	1:B:102:LYS:N	2.37	0.40
1:K:159:LYS:HE2	1:K:159:LYS:HB2	1.90	0.40
1:L:188:GLN:HG3	1:L:189:ARG:N	2.36	0.40
2:C:1091:GLU:CD	3:D:606:ILE:CG2	2.89	0.40
3:D:502:PHE:CZ	3:D:509:PRO:HB3	2.55	0.40
3:D:913:ASP:O	3:D:914:LEU:C	2.59	0.40
4:O:40:LEU:CD1	4:O:45:ARG:HD2	2.50	0.40
3:N:557:LEU:O	3:N:562:ALA:HB2	2.21	0.40
2:C:202:TYR:CE2	2:C:304:LEU:HD13	2.56	0.40
2:C:200:LEU:HD22	2:C:299:LYS:O	2.22	0.40
3:D:1314:LYS:HZ1	3:D:1317:ASP:CB	2.27	0.40
2:C:846:LYS:O	3:D:741:ASP:CB	2.70	0.40
2:M:564:MET:O	2:M:567:GLN:N	2.55	0.40
2:M:593:ALA:O	2:M:658:GLY:HA3	2.21	0.40
3:N:13:ALA:O	3:N:511:TRP:HB3	2.21	0.40
2:M:1008:ARG:CD	2:M:1029:GLY:H	2.35	0.40
2:M:304:LEU:H	2:M:305:PRO:CD	2.34	0.40
3:N:897:TRP:CZ2	3:N:902:LEU:HD21	2.52	0.40
1:K:6:LEU:C	1:K:8:ALA:H	2.24	0.40
2:M:269:LEU:C	2:M:288:ARG:HE	2.24	0.40
3:D:646:LYS:CG	3:D:647:ARG:N	2.77	0.40
2:M:409:ARG:HD3	2:M:452:ILE:CG2	2.52	0.40
1:B:112:ARG:HB3	1:B:112:ARG:HH11	1.82	0.40
2:M:1037:VAL:O	2:M:1041:GLU:HG3	2.22	0.40
3:N:798:GLU:HB3	3:N:826:PRO:HG2	2.02	0.40
1:K:180:GLN:O	1:K:195:LEU:HD12	2.20	0.40
1:A:201:THR:HG22	1:A:202:ASP:OD2	2.22	0.40
3:N:376:GLU:HB2	3:N:383:GLY:O	2.21	0.40
2:C:607:ASP:HB2	2:C:610:ARG:HG2	2.04	0.40
2:C:608:GLY:C	2:C:609:ASN:HD22	2.24	0.40
1:K:176:ARG:O	1:K:200:TRP:HE3	2.05	0.40
3:D:142:LEU:C	3:D:142:LEU:HD12	2.42	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:853:VAL:O	3:N:855:HIS:N	2.54	0.40
2:C:235:LEU:HD23	2:C:235:LEU:O	2.21	0.40
3:N:1033:GLN:HA	3:N:1036:ARG:HH12	1.85	0.40
3:D:1283:ILE:O	3:D:1284:GLU:OE1	2.39	0.40
1:A:222:LEU:HA	1:A:222:LEU:HD13	1.81	0.40
3:D:474:GLU:HG3	3:D:496:LEU:CD1	2.46	0.40
2:M:1006:HIS:HA	2:M:1027:PHE:CE2	2.55	0.40
5:P:260:ILE:HG12	5:P:264:MET:CB	2.51	0.40
3:D:1428:ALA:C	3:D:1430:SER:H	2.24	0.40
2:M:244:PRO:CG	2:M:245:GLY:N	2.83	0.40
2:M:244:PRO:HG2	2:M:246:ASP:HB2	2.03	0.40
3:N:1093:TYR:CE2	3:N:1097:LYS:NZ	2.89	0.40
2:C:212:GLY:O	2:C:218:VAL:HB	2.21	0.40
2:M:172:ILE:HA	2:M:185:LYS:O	2.21	0.40
3:N:1263:PHE:O	3:N:1424:VAL:HB	2.22	0.40
2:C:244:PRO:CG	2:C:245:GLY:H	2.35	0.40
1:L:66:SER:HB3	1:L:67:THR:H	1.75	0.40
2:C:613:VAL:HG11	2:C:655:LEU:HD11	2.03	0.40
2:C:1018:GLN:HB3	2:C:1063:ARG:HH22	1.86	0.40
4:E:30:LEU:O	4:E:35:PHE:CD1	2.74	0.40
2:C:555:ALA:O	2:C:556:ASN:C	2.57	0.40
3:D:1124:GLN:HA	3:D:1125:PRO:HD3	1.75	0.40
2:C:1012:PRO:C	2:C:1013:TYR:CD2	2.95	0.40
2:C:1019:GLN:HB3	2:C:1019:GLN:HE21	1.60	0.40
3:D:525:ARG:HE	3:D:541:ASN:CG	2.25	0.40
3:D:882:PHE:O	3:D:884:ARG:N	2.55	0.40
3:N:1111:ASP:HB3	3:N:1203:LYS:HZ1	1.86	0.40
5:F:120:THR:C	5:F:122:LEU:H	2.23	0.40
4:O:44:GLU:O	4:O:45:ARG:HD3	2.22	0.40
3:D:367:ILE:HD13	3:D:368:VAL:N	2.31	0.40
3:D:367:ILE:CG2	3:D:368:VAL:N	2.84	0.40
5:P:163:LEU:HD13	5:P:174:LEU:HD11	2.03	0.40
3:D:806:PHE:CD1	3:D:812:ALA:O	2.74	0.40
2:M:554:ASP:C	2:M:554:ASP:OD1	2.60	0.40
2:M:73:LEU:HA	2:M:93:PRO:O	2.21	0.40
2:M:840:ALA:O	2:M:995:MET:HE2	2.22	0.40
5:P:144:ILE:CB	5:P:145:PRO:HD3	2.43	0.40
2:M:1032:PHE:CE2	2:M:1052:MET:HG2	2.57	0.40
3:N:691:LEU:HG	3:N:720:LEU:HD11	2.03	0.40
2:M:1043:TYR:HB3	3:N:762:GLN:OE1	2.21	0.40
2:M:1043:TYR:CZ	3:N:763:MET:HG3	2.55	0.40
2:M:516:ARG:CD	3:N:1068:LEU:HD22	2.51	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:D:217:LYS:N	3:D:217:LYS:HD3	2.36	0.40
2:M:270:GLY:N	2:M:288:ARG:NE	2.69	0.40
3:N:1283:ILE:O	3:N:1284:GLU:OE1	2.39	0.40
3:N:1304:LYS:O	3:N:1305:LEU:CD2	2.69	0.40
1:A:14:ARG:NE	1:A:22:GLU:HB2	2.37	0.40
1:A:14:ARG:NH2	1:A:24:VAL:HG23	2.32	0.40
2:C:862:PRO:HG2	2:C:925:TYR:OH	2.22	0.40
2:M:940:GLU:HG3	2:M:975:TYR:OH	2.21	0.40
3:D:141:ILE:HD11	3:D:449:SER:C	2.42	0.40
3:N:1087:ARG:CZ	3:N:1087:ARG:HA	2.50	0.40
3:N:1368:ILE:O	3:N:1371:VAL:N	2.45	0.40
2:C:157:ARG:HA	2:C:157:ARG:HD3	1.86	0.40
2:M:395:LYS:O	2:M:397:GLU:N	2.54	0.40
3:D:1413:THR:N	3:D:1414:PRO:HD3	2.37	0.40
3:N:1292:VAL:HG11	3:N:1325:LEU:CD2	2.51	0.40
5:P:386:VAL:O	5:P:388:ALA:N	2.53	0.40
3:D:29:PRO:HG3	3:D:548:ILE:HG22	2.03	0.40
5:F:366:ALA:O	5:F:370:LYS:HB2	2.21	0.40
3:D:813:LEU:HG	3:D:814:ALA:H	1.85	0.40
1:B:32:PHE:HA	1:B:35:THR:HB	2.03	0.40
2:M:585:GLU:O	2:M:588:VAL:CG2	2.70	0.40
2:C:881:ASN:C	2:C:883:GLY:H	2.25	0.40
2:M:872:ASN:HA	2:M:873:PRO:HD3	1.87	0.40
3:D:1254:GLN:CD	3:D:1255:GLY:H	2.23	0.40
5:P:295:MET:HA	5:P:295:MET:HE2	2.04	0.40
2:M:711:GLU:HA	2:M:822:VAL:HG12	2.03	0.40
5:F:341:PRO:C	5:F:343:ASP:H	2.25	0.40
2:M:1098:ASP:OD1	2:M:1098:ASP:C	2.59	0.40
2:M:611:ILE:O	2:M:623:TYR:HB2	2.21	0.40
3:D:106:LYS:HE2	3:D:125:GLN:OE1	2.21	0.40
2:M:1023:GLY:C	2:M:1024:LYS:HG3	2.41	0.40
3:D:10:ILE:HG13	3:D:1434:TRP:CH2	2.52	0.40
3:D:87:ARG:HB2	3:D:524:LEU:HG	2.02	0.40
3:D:119:SER:O	3:D:120:ALA:C	2.59	0.40
3:N:217:LYS:HD2	3:N:218:LYS:N	2.24	0.40
2:M:44:ILE:H	2:M:44:ILE:CD1	2.35	0.40
3:D:563:PRO:CB	5:F:189:GLU:HG2	2.51	0.40
2:C:709:GLU:CG	2:C:710:ILE:N	2.83	0.40
3:N:55:ASP:CA	3:N:82:LYS:HG2	2.52	0.40
2:C:670:GLN:HG2	2:C:699:PHE:HD2	1.76	0.40
2:M:1093:GLN:C	2:M:1095:LEU:N	2.74	0.40
3:N:103:TRP:CD1	3:N:583:ASP:OD2	2.74	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:N:141:ILE:CD1	3:N:450:TYR:H	2.33	0.40
2:C:342:ASP:O	2:C:345:ARG:HG2	2.22	0.40
3:D:65:ARG:HD2	3:D:66:GLN:HG2	2.03	0.40
3:D:67:ARG:HG2	5:F:375:LEU:HD21	2.04	0.40
3:D:858:VAL:HG12	3:D:877:PRO:HG2	2.02	0.40
2:C:101:ILE:CG2	2:C:102:HIS:H	2.21	0.40
1:A:89:PHE:CZ	1:A:144:VAL:HG12	2.57	0.40
5:F:160:ASP:OD2	5:F:178:ARG:NH2	2.52	0.40
2:M:536:PRO:CB	2:M:906:PHE:HB2	2.51	0.40
3:D:1243:THR:HG21	3:D:1253:THR:HA	2.03	0.40
2:M:6:PHE:CD2	2:M:913:GLU:OE1	2.74	0.40
3:N:78:VAL:C	3:N:79:GLU:O	2.56	0.40
2:M:691:SER:C	2:M:693:GLU:H	2.24	0.40
2:M:859:PRO:HD2	2:M:870:ILE:HD11	2.02	0.40
3:N:820:GLU:C	3:N:822:ALA:N	2.74	0.40
2:C:915:LYS:NZ	3:D:952:ASP:OD2	2.55	0.40
1:L:22:GLU:O	1:L:23:PHE:CG	2.74	0.40
2:M:432:ARG:HD3	3:N:1048:PRO:CG	2.50	0.40
2:C:1050:GLN:CG	2:C:1079:PRO:HG2	2.43	0.40
1:K:35:THR:HG22	1:L:39:PRO:HB3	2.04	0.40
3:N:999:THR:O	3:N:1002:LYS:N	2.54	0.40
3:N:456:MET:O	3:N:456:MET:HG2	2.21	0.40
3:N:221:ALA:O	3:N:367:ILE:HG21	2.21	0.40
3:N:171:LEU:HB3	3:N:390:PRO:CA	2.48	0.40
2:C:195:LEU:HD21	2:C:241:LEU:HD12	2.03	0.40
3:N:766:ALA:HA	3:N:769:LEU:HD11	2.03	0.40
1:L:83:LYS:NZ	3:N:842:VAL:O	2.54	0.40
2:M:1011:GLY:O	2:M:1012:PRO:O	2.39	0.40
3:N:740:PHE:H	3:N:740:PHE:HD1	1.69	0.40
3:N:1101:VAL:HG11	3:N:1424:VAL:CG2	2.51	0.40
2:M:427:VAL:C	2:M:429:ASP:N	2.72	0.40
3:N:496:LEU:O	3:N:500:ARG:HG3	2.22	0.40
2:C:324:ASP:HB3	2:C:327:HIS:HB2	2.03	0.40
5:P:274:THR:HG21	5:P:295:MET:CE	2.52	0.40
1:B:213:GLN:O	1:B:216:GLU:HB3	2.21	0.40
3:D:1135:ARG:O	3:D:1136:LYS:O	2.39	0.40
2:C:814:GLU:C	2:C:815:LEU:O	2.60	0.40

There are no symmetry-related clashes.

5.3 Torsion angles

5.3.1 Protein backbone ⓘ

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution. The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	227/315 (72%)	167 (74%)	39 (17%)	21 (9%)	1	9
1	B	227/315 (72%)	177 (78%)	37 (16%)	13 (6%)	3	24
1	K	227/315 (72%)	161 (71%)	39 (17%)	27 (12%)	1	4
1	L	227/315 (72%)	166 (73%)	44 (19%)	17 (8%)	2	15
2	C	1117/1119 (100%)	781 (70%)	226 (20%)	110 (10%)	1	8
2	M	1117/1119 (100%)	769 (69%)	215 (19%)	133 (12%)	1	4
3	D	1388/1524 (91%)	941 (68%)	293 (21%)	154 (11%)	1	5
3	N	1388/1524 (91%)	907 (65%)	332 (24%)	149 (11%)	1	6
4	E	93/99 (94%)	67 (72%)	17 (18%)	9 (10%)	1	8
4	O	93/99 (94%)	59 (63%)	20 (22%)	14 (15%)	0	1
5	F	341/423 (81%)	241 (71%)	67 (20%)	33 (10%)	1	8
5	P	341/423 (81%)	249 (73%)	57 (17%)	35 (10%)	1	7
All	All	6786/7590 (89%)	4685 (69%)	1386 (20%)	715 (10%)	1	6

All (715) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	47	SER
1	B	3	ASP
1	B	118	ALA
1	B	160	ASP
2	C	7	GLY
2	C	31	GLN
2	C	111	ASP
2	C	152	PRO
2	C	223	ASP
2	C	231	PRO
2	C	244	PRO
2	C	251	ASP
2	C	253	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	C	261	ILE
2	C	267	TYR
2	C	335	THR
2	C	363	SER
2	C	369	PRO
2	C	442	GLU
2	C	574	ALA
2	C	680	ASP
2	C	727	PRO
2	C	735	ARG
2	C	762	LYS
2	C	842	ARG
2	C	984	GLU
2	C	1016	ILE
2	C	1097	LEU
2	C	1106	ASP
3	D	37	LEU
3	D	41	ARG
3	D	43	GLY
3	D	55	ASP
3	D	82	LYS
3	D	84	ILE
3	D	98	PRO
3	D	119	SER
3	D	120	ALA
3	D	133	ILE
3	D	136	ASP
3	D	140	ALA
3	D	208	PRO
3	D	209	ARG
3	D	219	GLU
3	D	233	LYS
3	D	238	PRO
3	D	381	ALA
3	D	385	VAL
3	D	388	HIS
3	D	416	ALA
3	D	417	PRO
3	D	442	ASN
3	D	548	ILE
3	D	560	GLN
3	D	565	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	D	580	ALA
3	D	705	ALA
3	D	711	LEU
3	D	735	ALA
3	D	807	ALA
3	D	832	ARG
3	D	912	LYS
3	D	922	LEU
3	D	1028	ALA
3	D	1089	ALA
3	D	1131	SER
3	D	1208	ASP
3	D	1243	THR
3	D	1287	GLU
3	D	1307	LYS
3	D	1370	ILE
3	D	1371	VAL
3	D	1377	LYS
3	D	1388	ARG
3	D	1389	LEU
3	D	1390	LEU
3	D	1410	GLU
3	D	1443	THR
3	D	1452	ILE
3	D	1463	LYS
4	E	41	GLU
4	E	42	PRO
4	E	71	GLY
5	F	75	ILE
5	F	76	SER
5	F	77	THR
5	F	97	GLU
5	F	138	SER
5	F	153	PRO
5	F	286	PRO
5	F	297	PRO
5	F	341	PRO
5	F	363	GLU
5	F	364	ARG
5	F	390	PHE
5	F	414	ARG
5	F	416	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	F	421	PHE
1	K	12	THR
1	K	27	PRO
1	K	47	SER
1	K	106	PRO
1	K	118	ALA
1	K	188	GLN
1	L	3	ASP
1	L	89	PHE
2	M	7	GLY
2	M	57	GLU
2	M	65	VAL
2	M	178	PRO
2	M	190	LYS
2	M	244	PRO
2	M	251	ASP
2	M	253	ALA
2	M	264	PRO
2	M	265	ARG
2	M	379	GLU
2	M	415	PRO
2	M	419	THR
2	M	435	TYR
2	M	456	ALA
2	M	462	ASP
2	M	548	PRO
2	M	627	ARG
2	M	680	ASP
2	M	684	PHE
2	M	698	ASP
2	M	699	PHE
2	M	762	LYS
2	M	864	GLY
2	M	957	LYS
2	M	1004	LYS
2	M	1012	PRO
2	M	1020	PRO
2	M	1059	ASP
3	N	34	TYR
3	N	41	ARG
3	N	55	ASP
3	N	98	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	N	133	ILE
3	N	149	LYS
3	N	208	PRO
3	N	209	ARG
3	N	238	PRO
3	N	246	PRO
3	N	369	ALA
3	N	430	ASP
3	N	486	ARG
3	N	487	ALA
3	N	521	PRO
3	N	526	PRO
3	N	586	ARG
3	N	594	PRO
3	N	624	ASP
3	N	637	LEU
3	N	639	LEU
3	N	764	LEU
3	N	766	ALA
3	N	807	ALA
3	N	824	ASN
3	N	829	VAL
3	N	832	ARG
3	N	936	TYR
3	N	1028	ALA
3	N	1066	THR
3	N	1089	ALA
3	N	1125	PRO
3	N	1136	LYS
3	N	1208	ASP
3	N	1228	SER
3	N	1243	THR
3	N	1287	GLU
3	N	1307	LYS
3	N	1384	PRO
3	N	1394	VAL
3	N	1475	GLY
4	O	46	PRO
4	O	58	PRO
4	O	82	GLU
5	P	76	SER
5	P	77	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	P	95	THR
5	P	97	GLU
5	P	148	LYS
5	P	153	PRO
5	P	203	THR
5	P	341	PRO
5	P	364	ARG
5	P	376	ILE
5	P	416	ARG
1	A	9	PRO
1	B	30	ARG
1	B	111	ALA
1	B	125	PRO
2	C	67	ASP
2	C	113	VAL
2	C	170	PRO
2	C	187	ASN
2	C	434	HIS
2	C	545	ASN
2	C	627	ARG
2	C	666	LEU
2	C	807	ARG
2	C	845	ASN
2	C	878	SER
2	C	904	PRO
2	C	937	ASP
2	C	1020	PRO
2	C	1043	TYR
2	C	1062	GLY
3	D	24	GLY
3	D	74	GLU
3	D	79	GLU
3	D	117	ASP
3	D	137	PRO
3	D	149	LYS
3	D	177	ALA
3	D	178	LEU
3	D	190	GLU
3	D	227	LEU
3	D	234	GLU
3	D	247	GLU
3	D	373	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	D	410	SER
3	D	412	GLY
3	D	424	GLY
3	D	426	LYS
3	D	430	ASP
3	D	440	VAL
3	D	503	LEU
3	D	509	PRO
3	D	594	PRO
3	D	601	ARG
3	D	629	SER
3	D	799	LYS
3	D	806	PHE
3	D	1027	GLY
3	D	1043	GLY
3	D	1075	HIS
3	D	1082	ALA
3	D	1095	THR
3	D	1114	THR
3	D	1125	PRO
3	D	1136	LYS
3	D	1139	ASP
3	D	1153	VAL
3	D	1197	ARG
3	D	1202	GLN
3	D	1211	MET
3	D	1233	GLY
3	D	1268	PRO
3	D	1334	GLN
3	D	1358	ALA
3	D	1384	PRO
3	D	1392	GLY
3	D	1414	PRO
3	D	1423	GLY
3	D	1427	SER
3	D	1482	ARG
4	E	43	GLU
4	E	46	PRO
4	E	53	GLY
4	E	58	PRO
5	F	147	LEU
5	F	154	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	F	191	ASN
5	F	282	LEU
5	F	399	GLN
5	F	401	GLU
5	F	420	ASP
1	K	11	PHE
1	K	37	GLY
1	K	59	GLU
1	K	105	GLY
1	K	127	LEU
1	K	157	GLY
1	K	173	PRO
1	K	174	VAL
1	K	204	SER
1	L	46	SER
1	L	59	GLU
1	L	118	ALA
1	L	202	ASP
2	M	29	ALA
2	M	31	GLN
2	M	40	GLU
2	M	80	GLN
2	M	87	ASP
2	M	113	VAL
2	M	116	GLY
2	M	170	PRO
2	M	231	PRO
2	M	328	LEU
2	M	337	GLY
2	M	367	LEU
2	M	369	PRO
2	M	428	ARG
2	M	485	TYR
2	M	500	ASN
2	M	518	LYS
2	M	550	LEU
2	M	552	HIS
2	M	566	THR
2	M	600	ASP
2	M	681	GLY
2	M	735	ARG
2	M	738	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	M	742	VAL
2	M	765	SER
2	M	922	PHE
2	M	960	GLU
2	M	961	GLU
2	M	963	LEU
2	M	977	GLY
2	M	1029	GLY
2	M	1045	ALA
2	M	1113	GLU
3	N	24	GLY
3	N	44	LEU
3	N	73	CYS
3	N	83	SER
3	N	85	VAL
3	N	115	LEU
3	N	137	PRO
3	N	140	ALA
3	N	146	PRO
3	N	162	ARG
3	N	234	GLU
3	N	406	ASP
3	N	410	SER
3	N	412	GLY
3	N	417	PRO
3	N	422	ALA
3	N	447	VAL
3	N	484	PRO
3	N	505	SER
3	N	530	VAL
3	N	561	GLY
3	N	575	GLN
3	N	625	TYR
3	N	640	HIS
3	N	695	ILE
3	N	758	GLU
3	N	759	ALA
3	N	869	MET
3	N	891	GLU
3	N	924	MET
3	N	955	VAL
3	N	1016	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	N	1040	GLY
3	N	1049	SER
3	N	1051	GLU
3	N	1129	THR
3	N	1255	GLY
3	N	1261	GLU
3	N	1308	GLU
3	N	1385	GLY
3	N	1465	ASN
4	O	22	VAL
5	P	204	GLY
5	P	286	PRO
5	P	363	GLU
5	P	386	VAL
5	P	389	PHE
5	P	393	THR
5	P	421	PHE
1	A	25	LEU
1	A	35	THR
1	A	93	SER
1	A	154	GLU
1	A	189	ARG
1	A	211	LEU
1	A	214	ALA
1	B	119	ASP
2	C	86	LYS
2	C	131	GLY
2	C	161	SER
2	C	178	PRO
2	C	189	ARG
2	C	245	GLY
2	C	292	ARG
2	C	316	GLY
2	C	321	GLU
2	C	419	THR
2	C	506	ASN
2	C	518	LYS
2	C	559	LEU
2	C	560	MET
2	C	598	GLU
2	C	616	GLU
2	C	681	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	C	684	PHE
2	C	738	ASP
2	C	765	SER
2	C	811	PRO
2	C	832	LYS
2	C	1014	SER
2	C	1059	ASP
3	D	69	GLU
3	D	83	SER
3	D	146	PRO
3	D	502	PHE
3	D	808	THR
3	D	814	ALA
3	D	892	ASP
3	D	896	ALA
3	D	921	ARG
3	D	1040	GLY
3	D	1247	ALA
3	D	1259	VAL
3	D	1265	ALA
3	D	1444	THR
4	E	54	LEU
5	F	234	LYS
5	F	324	GLU
5	F	388	ALA
1	K	29	GLU
1	K	35	THR
1	K	38	ASN
1	K	46	SER
1	K	128	HIS
1	L	159	LYS
1	L	214	ALA
1	L	224	TYR
2	M	10	ARG
2	M	33	ASP
2	M	81	ASP
2	M	111	ASP
2	M	138	SER
2	M	153	ALA
2	M	187	ASN
2	M	261	ILE
2	M	267	TYR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	M	290	LEU
2	M	363	SER
2	M	416	GLY
2	M	465	GLY
2	M	538	GLN
2	M	626	ARG
2	M	736	ASP
2	M	802	ARG
2	M	856	GLU
2	M	906	PHE
2	M	940	GLU
2	M	1023	GLY
2	M	1115	LEU
3	N	67	ARG
3	N	69	GLU
3	N	120	ALA
3	N	154	THR
3	N	177	ALA
3	N	189	GLN
3	N	239	GLY
3	N	395	VAL
3	N	516	ALA
3	N	564	GLU
3	N	576	GLU
3	N	605	ASP
3	N	731	LEU
3	N	879	ARG
3	N	1111	ASP
3	N	1114	THR
3	N	1268	PRO
3	N	1367	HIS
3	N	1443	THR
3	N	1480	PHE
4	O	32	ARG
4	O	41	GLU
4	O	42	PRO
4	O	81	PRO
5	P	145	PRO
5	P	168	LYS
5	P	240	THR
5	P	314	PRO
5	P	326	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	P	377	ASP
1	A	116	PRO
1	A	204	SER
1	A	215	VAL
2	C	9	ILE
2	C	80	GLN
2	C	90	TYR
2	C	186	VAL
2	C	228	ALA
2	C	337	GLY
2	C	420	ARG
2	C	431	HIS
2	C	548	PRO
2	C	575	GLN
2	C	692	GLU
2	C	740	GLU
2	C	767	PRO
2	C	862	PRO
2	C	1018	GLN
2	C	1108	PRO
3	D	42	ASP
3	D	78	VAL
3	D	138	LYS
3	D	212	ARG
3	D	220	ARG
3	D	487	ALA
3	D	522	PRO
3	D	547	LEU
3	D	576	GLU
3	D	791	TYR
3	D	911	LEU
3	D	1016	PRO
3	D	1058	ARG
3	D	1196	THR
3	D	1425	THR
3	D	1451	ALA
4	E	32	ARG
5	F	199	ALA
5	F	206	GLY
5	F	232	ARG
5	F	329	TYR
1	K	183	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	K	220	GLU
1	L	53	VAL
1	L	126	ASP
2	M	106	GLY
2	M	129	ILE
2	M	223	ASP
2	M	377	PRO
2	M	424	GLY
2	M	443	THR
2	M	545	ASN
2	M	562	SER
2	M	574	ALA
2	M	807	ARG
2	M	849	VAL
2	M	857	ASP
2	M	861	LEU
2	M	876	VAL
2	M	1005	MET
2	M	1106	ASP
3	N	6	ARG
3	N	387	LEU
3	N	450	TYR
3	N	483	HIS
3	N	506	GLY
3	N	515	GLU
3	N	587	ARG
3	N	681	ARG
3	N	686	GLU
3	N	730	PRO
3	N	937	TYR
3	N	938	GLY
3	N	939	PHE
3	N	1062	ARG
3	N	1079	LYS
3	N	1132	LEU
3	N	1197	ARG
3	N	1298	GLY
3	N	1315	ASP
3	N	1366	LYS
3	N	1479	ASP
4	O	4	PRO
4	O	56	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	P	184	ARG
5	P	232	ARG
5	P	297	PRO
5	P	324	GLU
5	P	388	ALA
5	P	394	ARG
1	A	30	ARG
1	A	41	ARG
1	A	46	SER
1	A	160	ASP
1	A	173	PRO
1	A	174	VAL
1	B	106	PRO
1	B	116	PRO
1	B	214	ALA
2	C	265	ARG
2	C	338	GLU
2	C	396	ASP
2	C	535	SER
2	C	541	SER
2	C	593	ALA
2	C	736	ASP
2	C	769	PRO
2	C	783	ARG
2	C	856	GLU
2	C	859	PRO
3	D	35	ARG
3	D	129	PHE
3	D	141	ILE
3	D	237	LYS
3	D	504	ASP
3	D	533	GLY
3	D	668	PRO
3	D	733	CYS
3	D	883	ALA
3	D	1109	GLU
3	D	1129	THR
3	D	1237	THR
3	D	1301	LYS
3	D	1315	ASP
3	D	1342	GLU
5	F	327	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	F	350	LEU
1	K	30	ARG
1	K	39	PRO
1	K	138	LEU
1	K	214	ALA
1	L	92	PRO
1	L	172	SER
1	L	187	GLY
2	M	53	PRO
2	M	104	ASP
2	M	123	GLU
2	M	164	PRO
2	M	217	LEU
2	M	283	ILE
2	M	327	HIS
2	M	447	ALA
2	M	514	VAL
2	M	654	LEU
2	M	714	ASP
2	M	745	ILE
2	M	767	PRO
2	M	884	GLN
2	M	984	GLU
2	M	1000	MET
3	N	416	ALA
3	N	509	PRO
3	N	557	LEU
3	N	560	GLN
3	N	595	GLY
3	N	1006	ALA
3	N	1050	GLY
3	N	1127	GLU
3	N	1213	ARG
3	N	1229	ILE
3	N	1257	PRO
3	N	1269	LYS
3	N	1332	PRO
4	O	44	GLU
4	O	73	LEU
4	O	79	LEU
5	P	236	SER
1	B	59	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	C	23	VAL
2	C	52	PHE
2	C	62	GLY
2	C	101	ILE
2	C	224	GLU
2	C	232	GLU
2	C	368	THR
2	C	386	PHE
2	C	425	PHE
2	C	500	ASN
2	C	890	LEU
3	D	483	HIS
3	D	753	SER
5	F	155	THR
2	M	152	PRO
2	M	617	ASP
2	M	678	PRO
2	M	859	PRO
2	M	907	ASP
2	M	951	GLY
2	M	1096	ALA
3	N	373	PRO
3	N	522	PRO
3	N	565	ILE
3	N	912	LYS
4	O	33	HIS
5	P	387	GLY
2	C	42	VAL
2	C	259	GLY
2	C	415	PRO
2	C	529	VAL
3	D	15	PRO
3	D	26	VAL
3	D	525	ARG
3	D	530	VAL
1	K	125	PRO
2	M	44	ILE
2	M	74	GLY
2	M	201	GLY
2	M	270	GLY
2	M	812	GLY
3	N	226	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	N	415	VAL
3	N	1246	VAL
3	N	1252	ILE
5	P	75	ILE
5	P	131	VAL
1	A	228	PRO
1	B	37	GLY
2	C	800	VAL
1	L	215	VAL
2	M	245	GLY
2	M	644	VAL
3	N	1043	GLY
1	A	187	GLY
1	L	207	PRO
2	M	634	GLY
3	N	876	SER
3	N	1344	VAL
1	A	124	ASN
1	B	87	VAL
2	C	79	PRO
3	D	139	GLY
3	D	395	VAL
3	D	1155	VAL
5	F	298	GLY
1	L	136	GLY
3	N	670	VAL
3	N	1454	GLY
2	C	536	PRO
5	P	188	ILE
2	M	166	PRO

5.3.2 Protein sidechains ⓘ

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution. The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	202/273 (74%)	177 (88%)	25 (12%)	7	31
1	B	202/273 (74%)	172 (85%)	30 (15%)	4	21

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	K	202/273 (74%)	173 (86%)	29 (14%)	5	23
1	L	202/273 (74%)	182 (90%)	20 (10%)	11	44
2	C	941/941 (100%)	808 (86%)	133 (14%)	5	24
2	M	941/941 (100%)	805 (86%)	136 (14%)	5	23
3	D	1170/1279 (92%)	970 (83%)	200 (17%)	3	15
3	N	1170/1279 (92%)	980 (84%)	190 (16%)	3	17
4	E	83/87 (95%)	72 (87%)	11 (13%)	6	27
4	O	83/87 (95%)	70 (84%)	13 (16%)	4	19
5	F	300/370 (81%)	264 (88%)	36 (12%)	7	33
5	P	300/370 (81%)	269 (90%)	31 (10%)	10	41
All	All	5796/6446 (90%)	4942 (85%)	854 (15%)	4	22

All (854) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	3	ASP
1	A	18	ARG
1	A	19	GLU
1	A	26	GLU
1	A	32	PHE
1	A	47	SER
1	A	51	THR
1	A	62	LEU
1	A	67	THR
1	A	73	GLU
1	A	74	ASP
1	A	80	LEU
1	A	84	GLU
1	A	95	GLN
1	A	115	LEU
1	A	127	LEU
1	A	146	ARG
1	A	148	VAL
1	A	158	ILE
1	A	180	GLN
1	A	185	ARG
1	A	193	ASP
1	A	200	TRP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	219	ARG
1	A	227	ASN
1	B	2	LEU
1	B	5	LYS
1	B	12	THR
1	B	14	ARG
1	B	20	TYR
1	B	25	LEU
1	B	26	GLU
1	B	32	PHE
1	B	62	LEU
1	B	89	PHE
1	B	112	ARG
1	B	115	LEU
1	B	124	ASN
1	B	134	GLU
1	B	138	LEU
1	B	140	MET
1	B	145	ASP
1	B	146	ARG
1	B	148	VAL
1	B	156	HIS
1	B	181	VAL
1	B	183	ASP
1	B	186	LEU
1	B	189	ARG
1	B	196	THR
1	B	197	LEU
1	B	213	GLN
1	B	219	ARG
1	B	221	HIS
1	B	229	GLN
2	C	5	ARG
2	C	20	GLU
2	C	26	TYR
2	C	39	ARG
2	C	41	ASN
2	C	45	GLN
2	C	49	ARG
2	C	51	THR
2	C	52	PHE
2	C	71	TYR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	C	81	ASP
2	C	82	GLU
2	C	86	LYS
2	C	88	LEU
2	C	95	TYR
2	C	107	LEU
2	C	111	ASP
2	C	113	VAL
2	C	115	LEU
2	C	124	ASP
2	C	152	PRO
2	C	158	TYR
2	C	168	ARG
2	C	170	PRO
2	C	172	ILE
2	C	178	PRO
2	C	188	LYS
2	C	193	LEU
2	C	198	ARG
2	C	203	ASP
2	C	204	GLN
2	C	207	LEU
2	C	209	ARG
2	C	216	GLU
2	C	230	ARG
2	C	243	ARG
2	C	258	TYR
2	C	266	ARG
2	C	276	LYS
2	C	279	GLU
2	C	288	ARG
2	C	290	LEU
2	C	292	ARG
2	C	304	LEU
2	C	321	GLU
2	C	334	ARG
2	C	345	ARG
2	C	359	MET
2	C	379	GLU
2	C	383	ARG
2	C	388	ARG
2	C	398	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	C	408	ARG
2	C	420	ARG
2	C	425	PHE
2	C	442	GLU
2	C	448	ASN
2	C	452	ILE
2	C	469	THR
2	C	481	ASP
2	C	500	ASN
2	C	503	LEU
2	C	524	VAL
2	C	543	ASN
2	C	544	THR
2	C	564	MET
2	C	566	THR
2	C	578	VAL
2	C	583	LEU
2	C	586	ARG
2	C	588	VAL
2	C	589	ARG
2	C	607	ASP
2	C	614	ARG
2	C	617	ASP
2	C	620	LEU
2	C	630	ARG
2	C	633	GLN
2	C	648	ARG
2	C	650	ARG
2	C	672	VAL
2	C	673	LEU
2	C	676	ILE
2	C	679	PHE
2	C	685	GLU
2	C	699	PHE
2	C	727	PRO
2	C	744	ARG
2	C	766	GLU
2	C	768	THR
2	C	799	ILE
2	C	804	VAL
2	C	830	LYS
2	C	831	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	C	834	GLN
2	C	839	LEU
2	C	841	ASN
2	C	853	LEU
2	C	858	MET
2	C	861	LEU
2	C	862	PRO
2	C	863	ASP
2	C	865	THR
2	C	879	ARG
2	C	881	ASN
2	C	886	LEU
2	C	897	LEU
2	C	900	ARG
2	C	904	PRO
2	C	916	GLU
2	C	920	GLN
2	C	934	PHE
2	C	940	GLU
2	C	950	LEU
2	C	963	LEU
2	C	971	LYS
2	C	974	LEU
2	C	975	TYR
2	C	984	GLU
2	C	999	HIS
2	C	1015	LEU
2	C	1016	ILE
2	C	1036	GLU
2	C	1043	TYR
2	C	1051	GLU
2	C	1063	ARG
2	C	1091	GLU
2	C	1092	LEU
2	C	1095	LEU
2	C	1101	THR
2	C	1103	ASP
2	C	1104	GLU
2	C	1115	LEU
3	D	21	TRP
3	D	23	TYR
3	D	25	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	D	54	LYS
3	D	55	ASP
3	D	58	CYS
3	D	60	CYS
3	D	65	ARG
3	D	66	GLN
3	D	75	ARG
3	D	76	CYS
3	D	102	ILE
3	D	103	TRP
3	D	107	ASP
3	D	121	THR
3	D	123	LEU
3	D	126	VAL
3	D	127	LEU
3	D	135	LEU
3	D	145	VAL
3	D	149	LYS
3	D	152	LEU
3	D	153	LEU
3	D	159	ARG
3	D	160	GLU
3	D	161	LEU
3	D	173	PRO
3	D	199	LEU
3	D	208	PRO
3	D	211	VAL
3	D	217	LYS
3	D	218	LYS
3	D	220	ARG
3	D	224	ARG
3	D	225	LEU
3	D	230	TRP
3	D	232	GLU
3	D	233	LYS
3	D	236	TYR
3	D	244	GLU
3	D	245	LEU
3	D	250	LEU
3	D	367	ILE
3	D	374	GLU
3	D	376	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	D	378	ILE
3	D	380	GLU
3	D	382	GLU
3	D	387	LEU
3	D	388	HIS
3	D	389	GLU
3	D	394	LEU
3	D	408	GLU
3	D	411	THR
3	D	413	ASP
3	D	423	ASP
3	D	432	TYR
3	D	445	ARG
3	D	447	VAL
3	D	469	ASP
3	D	486	ARG
3	D	491	LYS
3	D	503	LEU
3	D	508	ARG
3	D	511	TRP
3	D	513	ILE
3	D	528	VAL
3	D	542	ASP
3	D	549	ASN
3	D	565	ILE
3	D	569	ASN
3	D	571	LYS
3	D	579	ASP
3	D	581	LEU
3	D	591	VAL
3	D	594	PRO
3	D	602	SER
3	D	604	THR
3	D	605	ASP
3	D	611	GLN
3	D	614	PHE
3	D	616	GLN
3	D	624	ASP
3	D	637	LEU
3	D	639	LEU
3	D	642	CYS
3	D	651	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	D	659	LYS
3	D	662	GLU
3	D	669	ASN
3	D	676	MET
3	D	681	ARG
3	D	682	ASP
3	D	685	ASP
3	D	688	TRP
3	D	707	THR
3	D	717	GLN
3	D	720	LEU
3	D	725	SER
3	D	736	PHE
3	D	743	ASP
3	D	745	MET
3	D	754	PHE
3	D	758	GLU
3	D	768	ASN
3	D	780	LYS
3	D	784	ASP
3	D	791	TYR
3	D	794	GLN
3	D	796	ARG
3	D	818	ARG
3	D	828	LYS
3	D	850	LEU
3	D	859	ASP
3	D	860	LEU
3	D	862	ASP
3	D	863	VAL
3	D	868	TYR
3	D	875	THR
3	D	880	ILE
3	D	888	GLU
3	D	892	ASP
3	D	897	TRP
3	D	899	LEU
3	D	901	GLN
3	D	902	LEU
3	D	904	VAL
3	D	916	TYR
3	D	919	PHE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	D	936	TYR
3	D	937	TYR
3	D	948	THR
3	D	951	ILE
3	D	972	LEU
3	D	975	GLU
3	D	976	GLN
3	D	1005	GLN
3	D	1029	ARG
3	D	1045	MET
3	D	1058	ARG
3	D	1062	ARG
3	D	1068	LEU
3	D	1071	PHE
3	D	1072	ILE
3	D	1083	ASP
3	D	1096	ARG
3	D	1099	VAL
3	D	1108	ARG
3	D	1109	GLU
3	D	1115	THR
3	D	1116	ASN
3	D	1135	ARG
3	D	1140	ILE
3	D	1147	ARG
3	D	1161	GLU
3	D	1162	GLU
3	D	1167	SER
3	D	1169	ASP
3	D	1182	GLU
3	D	1190	SER
3	D	1201	CYS
3	D	1204	CYS
3	D	1208	ASP
3	D	1211	MET
3	D	1213	ARG
3	D	1227	GLN
3	D	1238	MET
3	D	1242	HIS
3	D	1243	THR
3	D	1253	THR
3	D	1254	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	D	1257	PRO
3	D	1264	GLU
3	D	1278	ASP
3	D	1285	GLU
3	D	1295	GLU
3	D	1304	LYS
3	D	1311	LEU
3	D	1314	LYS
3	D	1320	GLU
3	D	1326	THR
3	D	1337	GLU
3	D	1346	ARG
3	D	1350	GLU
3	D	1359	GLN
3	D	1388	ARG
3	D	1389	LEU
3	D	1391	GLU
3	D	1396	GLU
3	D	1410	GLU
3	D	1426	LYS
3	D	1429	LEU
3	D	1432	LYS
3	D	1434	TRP
3	D	1440	PHE
3	D	1441	GLN
3	D	1442	ASN
3	D	1460	ILE
3	D	1462	LEU
3	D	1483	PHE
4	E	30	LEU
4	E	32	ARG
4	E	35	PHE
4	E	40	LEU
4	E	42	PRO
4	E	46	PRO
4	E	56	ASP
4	E	59	ASN
4	E	61	GLU
4	E	66	LYS
4	E	81	PRO
5	F	84	TYR
5	F	94	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	F	125	ASP
5	F	134	LYS
5	F	136	LEU
5	F	149	GLU
5	F	152	ASP
5	F	156	VAL
5	F	158	GLU
5	F	172	ARG
5	F	174	LEU
5	F	192	LEU
5	F	195	VAL
5	F	211	ASP
5	F	212	LEU
5	F	229	TYR
5	F	234	LYS
5	F	282	LEU
5	F	295	MET
5	F	297	PRO
5	F	312	GLN
5	F	313	GLU
5	F	321	ILE
5	F	324	GLU
5	F	328	PHE
5	F	341	PRO
5	F	347	GLN
5	F	353	GLU
5	F	375	LEU
5	F	384	GLU
5	F	393	THR
5	F	398	ARG
5	F	408	LEU
5	F	410	TYR
5	F	416	ARG
5	F	419	ARG
1	K	1	MET
1	K	5	LYS
1	K	16	GLN
1	K	19	GLU
1	K	27	PRO
1	K	38	ASN
1	K	62	LEU
1	K	66	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	K	77	GLU
1	K	88	ARG
1	K	91	ASN
1	K	95	GLN
1	K	96	THR
1	K	106	PRO
1	K	115	LEU
1	K	145	ASP
1	K	146	ARG
1	K	160	ASP
1	K	163	ASN
1	K	165	ILE
1	K	185	ARG
1	K	186	LEU
1	K	188	GLN
1	K	193	ASP
1	K	196	THR
1	K	206	THR
1	K	207	PRO
1	K	208	LEU
1	K	219	ARG
1	L	4	SER
1	L	5	LYS
1	L	12	THR
1	L	19	GLU
1	L	26	GLU
1	L	62	LEU
1	L	67	THR
1	L	77	GLU
1	L	89	PHE
1	L	95	GLN
1	L	138	LEU
1	L	139	ASN
1	L	140	MET
1	L	145	ASP
1	L	156	HIS
1	L	176	ARG
1	L	183	ASP
1	L	193	ASP
1	L	213	GLN
1	L	223	THR
2	M	2	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	M	9	ILE
2	M	24	GLU
2	M	41	ASN
2	M	48	PHE
2	M	52	PHE
2	M	57	GLU
2	M	65	VAL
2	M	68	PHE
2	M	81	ASP
2	M	82	GLU
2	M	83	CYS
2	M	99	GLN
2	M	104	ASP
2	M	105	THR
2	M	115	LEU
2	M	117	HIS
2	M	133	ASP
2	M	146	VAL
2	M	154	ARG
2	M	158	TYR
2	M	168	ARG
2	M	170	PRO
2	M	178	PRO
2	M	181	VAL
2	M	184	MET
2	M	186	VAL
2	M	188	LYS
2	M	190	LYS
2	M	193	LEU
2	M	198	ARG
2	M	207	LEU
2	M	209	ARG
2	M	216	GLU
2	M	219	GLN
2	M	230	ARG
2	M	237	ARG
2	M	239	PHE
2	M	246	ASP
2	M	252	LYS
2	M	256	TYR
2	M	266	ARG
2	M	268	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	M	269	LEU
2	M	275	TYR
2	M	290	LEU
2	M	301	GLU
2	M	303	PHE
2	M	321	GLU
2	M	350	ARG
2	M	358	ARG
2	M	359	MET
2	M	376	ARG
2	M	383	ARG
2	M	388	ARG
2	M	391	LEU
2	M	405	ARG
2	M	420	ARG
2	M	422	ARG
2	M	425	PHE
2	M	433	THR
2	M	455	LEU
2	M	471	TYR
2	M	480	THR
2	M	482	GLU
2	M	487	THR
2	M	492	ASP
2	M	503	LEU
2	M	511	GLU
2	M	523	ILE
2	M	551	GLU
2	M	564	MET
2	M	566	THR
2	M	579	VAL
2	M	586	ARG
2	M	626	ARG
2	M	630	ARG
2	M	633	GLN
2	M	637	LEU
2	M	640	ARG
2	M	645	VAL
2	M	650	ARG
2	M	665	PHE
2	M	674	VAL
2	M	680	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	M	686	ASP
2	M	689	VAL
2	M	699	PHE
2	M	722	ILE
2	M	724	ARG
2	M	738	ASP
2	M	739	GLU
2	M	744	ARG
2	M	762	LYS
2	M	764	GLU
2	M	766	GLU
2	M	768	THR
2	M	787	ASP
2	M	799	ILE
2	M	807	ARG
2	M	834	GLN
2	M	837	ASP
2	M	839	LEU
2	M	841	ASN
2	M	853	LEU
2	M	856	GLU
2	M	881	ASN
2	M	886	LEU
2	M	897	LEU
2	M	900	ARG
2	M	904	PRO
2	M	906	PHE
2	M	934	PHE
2	M	936	VAL
2	M	940	GLU
2	M	946	ARG
2	M	950	LEU
2	M	958	THR
2	M	959	PRO
2	M	960	GLU
2	M	974	LEU
2	M	988	VAL
2	M	999	HIS
2	M	1000	MET
2	M	1002	GLU
2	M	1005	MET
2	M	1016	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	M	1017	THR
2	M	1019	GLN
2	M	1020	PRO
2	M	1043	TYR
2	M	1055	LEU
2	M	1097	LEU
2	M	1104	GLU
2	M	1113	GLU
2	M	1115	LEU
3	N	2	LYS
3	N	7	LYS
3	N	9	ARG
3	N	12	LEU
3	N	42	ASP
3	N	75	ARG
3	N	84	ILE
3	N	98	PRO
3	N	103	TRP
3	N	123	LEU
3	N	128	TYR
3	N	133	ILE
3	N	143	ASN
3	N	149	LYS
3	N	152	LEU
3	N	153	LEU
3	N	155	ASP
3	N	171	LEU
3	N	185	VAL
3	N	206	ARG
3	N	208	PRO
3	N	213	VAL
3	N	217	LYS
3	N	218	LYS
3	N	230	TRP
3	N	240	GLU
3	N	241	ILE
3	N	245	LEU
3	N	366	LYS
3	N	367	ILE
3	N	374	GLU
3	N	376	GLU
3	N	385	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	N	387	LEU
3	N	389	GLU
3	N	406	ASP
3	N	413	ASP
3	N	430	ASP
3	N	432	TYR
3	N	451	ASP
3	N	453	ASP
3	N	456	MET
3	N	503	LEU
3	N	507	ASN
3	N	523	ASP
3	N	529	GLN
3	N	535	PHE
3	N	542	ASP
3	N	545	ARG
3	N	549	ASN
3	N	554	LEU
3	N	560	GLN
3	N	567	ILE
3	N	569	ASN
3	N	576	GLU
3	N	584	ASN
3	N	587	ARG
3	N	594	PRO
3	N	600	LEU
3	N	601	ARG
3	N	605	ASP
3	N	606	ILE
3	N	624	ASP
3	N	629	SER
3	N	631	ILE
3	N	637	LEU
3	N	639	LEU
3	N	641	GLN
3	N	642	CYS
3	N	651	GLU
3	N	652	LEU
3	N	662	GLU
3	N	666	ILE
3	N	675	ARG
3	N	676	MET

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	N	682	ASP
3	N	693	GLU
3	N	702	LEU
3	N	704	ARG
3	N	710	ARG
3	N	732	VAL
3	N	734	GLU
3	N	739	ASP
3	N	745	MET
3	N	747	VAL
3	N	753	SER
3	N	754	PHE
3	N	761	ILE
3	N	763	MET
3	N	770	LEU
3	N	783	ARG
3	N	794	GLN
3	N	796	ARG
3	N	799	LYS
3	N	820	GLU
3	N	828	LYS
3	N	829	VAL
3	N	832	ARG
3	N	833	GLU
3	N	838	ARG
3	N	841	TYR
3	N	842	VAL
3	N	859	ASP
3	N	861	GLN
3	N	862	ASP
3	N	863	VAL
3	N	879	ARG
3	N	892	ASP
3	N	899	LEU
3	N	901	GLN
3	N	902	LEU
3	N	903	ASP
3	N	911	LEU
3	N	914	LEU
3	N	917	GLN
3	N	929	ARG
3	N	940	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	N	947	ILE
3	N	951	ILE
3	N	952	ASP
3	N	953	ASP
3	N	988	ARG
3	N	990	ASP
3	N	1042	ARG
3	N	1045	MET
3	N	1046	GLN
3	N	1049	SER
3	N	1052	THR
3	N	1055	VAL
3	N	1058	ARG
3	N	1062	ARG
3	N	1063	GLU
3	N	1066	THR
3	N	1068	LEU
3	N	1096	ARG
3	N	1097	LYS
3	N	1109	GLU
3	N	1112	CYS
3	N	1116	ASN
3	N	1119	SER
3	N	1126	ASP
3	N	1127	GLU
3	N	1135	ARG
3	N	1147	ARG
3	N	1148	VAL
3	N	1156	LEU
3	N	1164	ARG
3	N	1166	LEU
3	N	1168	MET
3	N	1173	LEU
3	N	1182	GLU
3	N	1189	ARG
3	N	1190	SER
3	N	1197	ARG
3	N	1202	GLN
3	N	1204	CYS
3	N	1207	TYR
3	N	1211	MET
3	N	1213	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	N	1223	ILE
3	N	1231	GLU
3	N	1238	MET
3	N	1243	THR
3	N	1251	ASP
3	N	1264	GLU
3	N	1274	ILE
3	N	1282	ARG
3	N	1304	LYS
3	N	1314	LYS
3	N	1326	THR
3	N	1337	GLU
3	N	1346	ARG
3	N	1351	GLU
3	N	1353	GLN
3	N	1375	MET
3	N	1376	MET
3	N	1388	ARG
3	N	1389	LEU
3	N	1396	GLU
3	N	1412	LYS
3	N	1419	PRO
3	N	1422	MET
3	N	1425	THR
3	N	1429	LEU
3	N	1432	LYS
3	N	1442	ASN
3	N	1466	VAL
3	N	1483	PHE
3	N	1484	THR
3	N	1488	ASP
4	O	10	PHE
4	O	20	THR
4	O	31	LEU
4	O	32	ARG
4	O	42	PRO
4	O	44	GLU
4	O	46	PRO
4	O	56	ASP
4	O	59	ASN
4	O	66	LYS
4	O	79	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	O	81	PRO
4	O	84	ARG
5	P	83	GLN
5	P	84	TYR
5	P	86	HIS
5	P	91	VAL
5	P	101	GLU
5	P	105	LYS
5	P	134	LYS
5	P	148	LYS
5	P	161	GLN
5	P	169	GLU
5	P	174	LEU
5	P	181	GLU
5	P	184	ARG
5	P	186	HIS
5	P	194	LEU
5	P	229	TYR
5	P	264	MET
5	P	286	PRO
5	P	290	GLU
5	P	302	LYS
5	P	319	THR
5	P	324	GLU
5	P	338	LEU
5	P	341	PRO
5	P	364	ARG
5	P	372	ARG
5	P	394	ARG
5	P	398	ARG
5	P	399	GLN
5	P	410	TYR
5	P	418	LEU

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (168) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	63	HIS
1	A	95	GLN
1	A	124	ASN
1	A	163	ASN
1	A	180	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	188	GLN
1	A	227	ASN
1	B	81	ASN
1	B	124	ASN
1	B	156	HIS
1	B	163	ASN
1	B	212	ASN
1	B	229	GLN
2	C	22	GLN
2	C	41	ASN
2	C	102	HIS
2	C	179	ASN
2	C	320	HIS
2	C	343	GLN
2	C	431	HIS
2	C	434	HIS
2	C	498	GLN
2	C	538	GLN
2	C	543	ASN
2	C	545	ASN
2	C	552	HIS
2	C	563	ASN
2	C	567	GLN
2	C	609	ASN
2	C	633	GLN
2	C	671	ASN
2	C	704	HIS
2	C	834	GLN
2	C	841	ASN
2	C	889	HIS
2	C	899	GLN
2	C	969	GLN
2	C	1019	GLN
2	C	1100	GLN
3	D	66	GLN
3	D	101	HIS
3	D	166	GLN
3	D	462	GLN
3	D	507	ASN
3	D	549	ASN
3	D	560	GLN
3	D	569	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	D	575	GLN
3	D	611	GLN
3	D	669	ASN
3	D	680	GLN
3	D	703	ASN
3	D	714	GLN
3	D	717	GLN
3	D	727	GLN
3	D	744	GLN
3	D	756	GLN
3	D	762	GLN
3	D	767	HIS
3	D	794	GLN
3	D	816	HIS
3	D	824	ASN
3	D	861	GLN
3	D	973	GLN
3	D	991	GLN
3	D	994	GLN
3	D	1033	GLN
3	D	1034	GLN
3	D	1103	HIS
3	D	1172	HIS
3	D	1202	GLN
3	D	1334	GLN
3	D	1359	GLN
3	D	1374	GLN
3	D	1441	GLN
3	D	1442	ASN
3	D	1465	ASN
3	D	1485	GLN
3	D	1489	GLN
5	F	83	GLN
5	F	90	GLN
5	F	191	ASN
5	F	254	GLN
1	K	16	GLN
1	K	91	ASN
1	K	95	GLN
1	K	124	ASN
1	K	128	HIS
1	K	156	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	K	180	GLN
1	K	188	GLN
1	K	212	ASN
1	K	213	GLN
1	K	229	GLN
1	L	38	ASN
1	L	95	GLN
1	L	139	ASN
1	L	156	HIS
1	L	163	ASN
1	L	180	GLN
2	M	31	GLN
2	M	41	ASN
2	M	91	GLN
2	M	99	GLN
2	M	117	HIS
2	M	130	ASN
2	M	139	GLN
2	M	141	HIS
2	M	179	ASN
2	M	343	GLN
2	M	431	HIS
2	M	434	HIS
2	M	500	ASN
2	M	538	GLN
2	M	575	GLN
2	M	632	ASN
2	M	671	ASN
2	M	829	GLN
2	M	834	GLN
2	M	843	HIS
2	M	845	ASN
2	M	881	ASN
2	M	884	GLN
2	M	889	HIS
2	M	899	GLN
2	M	920	GLN
2	M	1018	GLN
2	M	1019	GLN
2	M	1100	GLN
3	N	101	HIS
3	N	166	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	N	388	HIS
3	N	462	GLN
3	N	463	GLN
3	N	507	ASN
3	N	529	GLN
3	N	541	ASN
3	N	549	ASN
3	N	551	ASN
3	N	569	ASN
3	N	636	GLN
3	N	703	ASN
3	N	744	GLN
3	N	748	HIS
3	N	756	GLN
3	N	768	ASN
3	N	794	GLN
3	N	845	ASN
3	N	962	GLN
3	N	1116	ASN
3	N	1202	GLN
3	N	1323	GLN
3	N	1333	HIS
3	N	1334	GLN
3	N	1359	GLN
3	N	1441	GLN
4	O	29	GLN
4	O	37	ASN
4	O	59	ASN
4	O	86	GLN
5	P	83	GLN
5	P	90	GLN
5	P	175	HIS
5	P	191	ASN
5	P	214	GLN
5	P	217	ASN
5	P	218	GLN
5	P	245	GLN

5.3.3 RNA ⓘ

There are no RNA chains in this entry.

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

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

5.5 Carbohydrates ⓘ

There are no carbohydrates in this entry.

5.6 Ligand geometry ⓘ

Of 6 ligands modelled in this entry, 6 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.

5.7 Other polymers ⓘ

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.

6 Fit of model and data ⓘ

6.1 Protein, DNA and RNA chains ⓘ

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	A	229/315 (72%)	-0.14	0 100 100	41, 64, 87, 113	0
1	B	229/315 (72%)	0.03	7 (3%) 47 11	47, 121, 143, 143	0
1	K	229/315 (72%)	-0.09	2 (0%) 81 37	28, 63, 88, 111	0
1	L	229/315 (72%)	-0.07	2 (0%) 81 37	41, 79, 99, 117	0
2	C	1119/1119 (100%)	-0.10	5 (0%) 90 57	12, 67, 133, 143	0
2	M	1119/1119 (100%)	-0.09	7 (0%) 86 46	6, 71, 122, 133	0
3	D	1392/1524 (91%)	-0.06	10 (0%) 84 42	7, 60, 125, 143	0
3	N	1392/1524 (91%)	-0.03	14 (1%) 79 33	5, 65, 134, 143	0
4	E	95/99 (95%)	-0.08	0 100 100	54, 84, 100, 106	0
4	O	95/99 (95%)	-0.03	3 (3%) 45 11	46, 86, 117, 121	0
5	F	345/423 (81%)	-0.09	2 (0%) 86 46	48, 81, 113, 121	0
5	P	345/423 (81%)	-0.09	2 (0%) 86 46	47, 73, 110, 123	0
All	All	6818/7590 (89%)	-0.07	54 (0%) 83 39	5, 70, 129, 143	0

All (54) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
3	D	1247	ALA	8.5
2	C	211	LEU	6.4
3	D	1246	VAL	4.9
1	B	1	MET	4.8
3	N	1246	VAL	4.7
3	D	205	TYR	4.5
3	N	199	LEU	4.2
3	N	1242	HIS	4.2
3	D	802	ALA	4.1
3	N	1241	PHE	3.6
1	B	111	ALA	3.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
3	D	1244	GLY	3.5
5	P	422	LEU	3.4
5	P	418	LEU	3.4
3	N	242	LEU	3.2
4	O	2	ALA	3.2
1	L	1	MET	3.1
4	O	55	PHE	3.1
5	F	423	ASP	3.0
3	N	112	ILE	2.9
3	D	1242	HIS	2.9
2	M	267	TYR	2.9
1	K	2	LEU	2.7
2	C	267	TYR	2.6
5	F	95	THR	2.6
3	D	1240	THR	2.6
3	N	398	ALA	2.6
2	M	211	LEU	2.5
3	D	1248	GLY	2.5
2	M	40	GLU	2.5
3	N	1401	GLU	2.4
1	B	82	LEU	2.4
1	B	138	LEU	2.4
1	K	1	MET	2.3
3	N	224	ARG	2.3
3	N	152	LEU	2.3
2	M	764	GLU	2.2
3	N	1174	LEU	2.2
2	M	109	LYS	2.2
1	L	25	LEU	2.2
1	B	62	LEU	2.1
2	C	186	VAL	2.1
3	N	381	ALA	2.1
1	B	2	LEU	2.1
3	N	205	TYR	2.1
2	C	179	ASN	2.1
4	O	73	LEU	2.1
3	N	1245	GLY	2.1
2	M	281	LEU	2.1
3	D	410	SER	2.1
1	B	130	ALA	2.1
3	D	1243	THR	2.1
2	M	372	LEU	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	C	271	GLU	2.0

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

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

6.3 Carbohydrates

There are no carbohydrates in this entry.

6.4 Ligands

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. LLDF column lists the quality of electron density of the group with respect to its neighbouring residues in protein, DNA or RNA chains. 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	RSR	LLDF	B-factors(Å ²)	Q<0.9
6	ZN	N	1525	1/1	0.31	3.84	108,108,108,108	0
6	ZN	D	1525	1/1	0.28	3.59	107,107,107,107	0
6	ZN	N	1526	1/1	0.27	1.76	72,72,72,72	0
6	ZN	D	1526	1/1	0.26	1.68	78,78,78,78	0
7	MG	N	1527	1/1	0.15	0.42	29,29,29,29	0
7	MG	D	1527	1/1	0.09	-7.21	19,19,19,19	0

6.5 Other polymers

There are no such residues in this entry.